## Callan

March 31, 2024 North Dakota State Investment Board Pension Funds

Investment Measurement Service Quarterly Review

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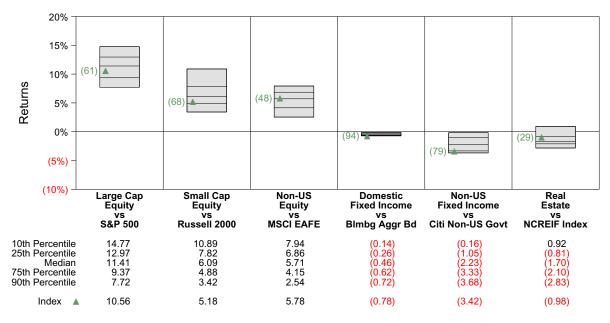
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## Market Overview Active Management vs Index Returns

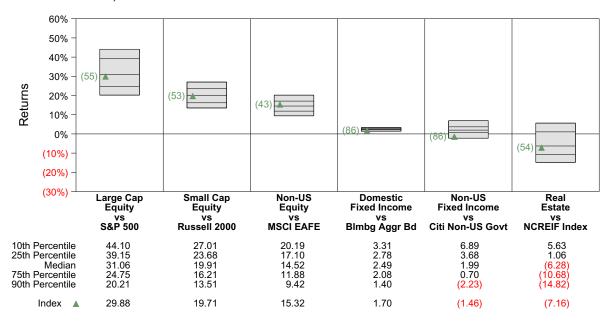
#### **Market Overview**

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.

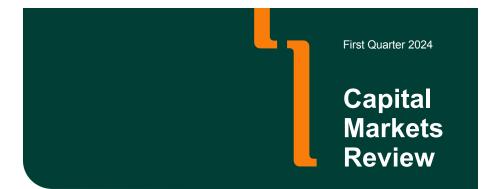
## Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2024



## Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2024









# Investors, Be Careful for What You Wish

**ECONOMY** 

Investors spent the 2010s wishing for a return to wishing for a return to normal in interest rates. The U.S. economy is not back to this mythical equilibrium but is close. So, we achieved the yearned-for goal of normal interest rates, and the markets should be happy about this achievement. Right? Not so.

# Agg Falls as Rates Rose; HY Benefits

FIXED INCOME

The Bloomberg US
Aggregate Bond Index
fell 0.8% as rates
rose. Investment grade corporates outperformed like-duration
Treasuries. Lower quality also outperformed, with high yield corporates and leveraged loans posting the highest returns.

# Long-term Returns Top Leveraged Loans

PRIVATE CREDIT

In 4Q23, private credit gained 3.1%, just above leveraged loans but well below a high yield benchmark. But over longer time periods it has handily outperformed both, with gains of 8.1% over the last 10 years. Investor interest in the asset class continues.

# Investors Show Gains but Lag Benchmark

INSTITUTIONAL INVESTORS

Nonprofits performed best, while risk-averse PAGE corporate DB plans lagged. Public DB plans are reviewing their fixed-income structures in the new yield environment. Corporate DB plans saw interest rate hedging work. DC plans continue to focus on fees.

## Private, Public Indices Fall on Rate Worries

REAL ESTATE/REAL ASSETS

Both the NCREIF Property Index and the ODCE dropped, although income returns were positive. REITs trailed equities both in the U.S. and globally. In the U.S., stronger equity returns hurt, while rate concerns led to underperformance in Europe. Asian REITs outperformed.

# Strong Start to Year and Optimism in '24

HEDGE FUNDS/MACs

All four major hedge fund types had positive performance, and the Callan Institutional Hedge Fund Peer Group rose 4.1%. MACs also saw gains. The market environment should remain positive for the asset class, especially for skilled long/short managers.

# Big Rally at the Start of Year in Stocks

**EQUITY** 

The U.S. equity markets were off to an exceptional start with the S&P 500 posting a YTD gain of 11%, its best first quarter since 2019. Broad global markets also delivered strong returns on the decreasing expected probability of a recession in the U.S. and continued optimism around AI.

## Huge Drop in Activity From 2021-22 Peak

PRIVATE EQUITY

Fundraising fell sharply in 2023 from the highs of 2021-22. Buyout activity also declined. There is a bifurcation in VC: An AI "supercycle" is accelerating early-stage deal activity and buoying valuations while late-stage companies struggle with slower growth.

# DC Index Rallies After Previous 3Q23 Loss

**DEFINED CONTRIBUTION** 

The Callan DC Index rose in 4Q23 by 9.5% after a loss in 3Q. Investment gains powered the increase. Exposure to equities in plans rose, as U.S. large cap equity saw a jump in allocations. Management fee data showed a drop in fees across the board.

# 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

## Be Careful for What You Wish

## **ECONOMY** | Jay Kloepfer

Since central bankers began the Zero Interest Rate Policy experiment following the Global Financial Crisis in 2008-09, including a revival of the policy in 2020 post-COVID, the market has bemoaned the lack of meaningful interest rates for debt investors. Investors spent the 2010s wishing for a "return to normal" in interest rates, which means a real return to investing in cash (a small premium over inflation); an upward sloping yield curve; and a 10-year Treasury rate that roughly equals nominal GDP growth.

What does that really mean? In a world of, say, 2% inflation (the Fed's target), and real GDP growth of 2.0%-3.0% (let's call it 2.5%), then cash would yield about 2.5%, 10-year Treasuries would yield about 4.5%, both savers and retirees would be satisfied with a positive real return to holding debt, and the economy could function on a real cost of capital that looks like the long-term average.

Today inflation is at 3.5% (March 2024), and economic growth has come in hotter than expected, meaning the Fed's inflation-fighting efforts may not yet be over. The U.S. economy and global capital markets are not back to this mythical equilibrium, but one could argue there is a decent chance of getting there within the next year or so.

So we achieved the yearned-for goal of normal interest rates, and the markets should be happy about this achievement. Right? Not so—almost from the moment we began raising rates in 2022, moving in quick steps toward normalization, the capital markets have priced in an imminent recession and a reversal of interest rates, the very counter to normalization. What gives? Are we (the market) a giant collection of irrational actors? Did we regret our wished-for goal of normal interest rates once we saw what the goal would mean for the cost of debt, for mortgages, for short-term borrowing?

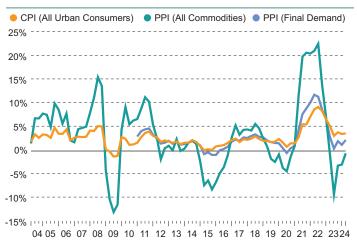
When I say the markets called for a reversal of rate hikes, it means the yield curve inverted, just three months after the Federal Reserve began raising rates. An inverted yield curve is simply the expression of market participants' belief that interest rates

### **Quarterly Real GDP Growth** (20 Years) 35% 30% 25% 20% 15% 10% 5% عالمعي أتأكل بالمستلسنة وتطأرنا اعظاء والماء 0% -5% -10% -15% -20% -25%

04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 2324

Source: Bureau of Economic Analysis

### Inflation Year-Over-Year



Source: Bureau of Labor Statistics

will come down at some point in the future, and it happens when bond investors move into longer-dated debt to pick up a bigger price gain when rates come down. This investor move drives up the price of longer bonds and drives down their yield. Why would investors expect rates to fall? They believe the rate hikes enacted by the Fed will slow the economy enough to cause recession and spur the Fed to start cutting rates to stimulate growth.

To the casual observer, this explanation of the path from investor expectations to an inverted yield curve to an economic forecast

looks like a long way to go. What makes the current situation particularly interesting is that many market participants, simply by virtue of the experience since 2009 and their age, have never lived through inflation greater than 2% and interest rates anywhere near their current level. We can talk about a return to normal, but for many, the 10-year plus period of ZIRP was their "normal."

All forecasters expected the rate hikes begun in 2022 to cause a slowdown and likely a recession by 2023, and most certainly by 2024. GDP growth defied all forecasters and got stronger as 2023 progressed, finishing the year 2.5% higher than 2022. Driving the growth was a phenomenal year in the job market, as almost every industry segment finally surpassed its pre-pandemic peak. 1Q24 GDP growth came in at 1.6%, which is softer than the forecasts that led up to its release, and the first time growth has been below 2% in seven quarters, all the way back to the anomalous GDP losses in 1Q and 2Q in 2022. The Fed's Open Market Committee voted on May 1 to hold the Fed Funds target at 5.25%-5.5%. The Fed directly referenced final sales to domestic purchasers as reason for holding rates steady, as these sales grew at 3%, 3.3%, and 3.1% over the last three quarters (through 1Q24). The Fed has also changed its tone regarding inflation, after inflation rose in the first quarter, with the CPI hitting 3.5% in March. CPI dropped to 3.0% in June 2023, bounced around in the fall and started 2024 at 3.1%, but the persistence of inflation is humbling to the Fed.

The logical conclusion is that the current strength of the economy is both a sign that there is no urgent need to lower rates, and that this strength and the current rate of inflation are not in alignment with the Fed's goal of 2% inflation. So long as progress on inflation remains stalled, it will take longer than expected before the FOMC believes it will be appropriate to lower rates.

## The Long-Term View

		Р	eriods	Ended	3/31/24
Index	1Q24	1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	10.0	29.3	14.3	12.3	8.0
S&P 500	10.6	29.9	15.0	13.0	7.8
Russell 2000	5.2	19.7	8.1	7.6	8.4
Global ex-U.S. Equity					
MSCI EAFE	5.8	15.3	7.3	4.8	4.6
MSCI ACWI ex USA	4.7	13.3	6.0	4.3	
MSCI Emerging Markets	2.4	8.2	2.2	2.9	
MSCI ACWI ex USA Small Cap	2.1	12.8	6.2	4.7	7.2
Fixed Income					
Bloomberg Agg	-0.8	1.7	0.4	1.5	3.8
90-Day T-Bill	1.3	5.2	2.0	1.4	1.9
Bloomberg Long G/C	-2.4	-1.1	-0.6	2.3	5.2
Bloomberg GI Agg ex US	-3.2	-0.7	-2.5	-1.4	2.3
Real Estate					
NCREIF Property	-1.0	-7.2	3.8	6.4	7.9
FTSE Nareit Equity	-0.2	10.5	4.1	6.6	9.5
Alternatives					
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Cambridge Senior Debt*	0.1	11.3	5.9	6.7	
HFRI Fund Weighted	4.5	11.7	6.9	4.9	6.3
Bloomberg Commodity	2.2	-0.6	6.4	-1.6	2.7
Inflation – CPI-U	1.8	3.5	4.2	2.8	2.6

<sup>\*</sup>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

## **Recent Quarterly Economic Indicators**

	1Q24	4Q23	3Q23	2Q23	1Q23	4Q22
Employment Cost: Total Compensation Growth	4.2%	4.2%	4.3%	4.5%	4.8%	5.1%
Nonfarm Business: Productivity Growth	0.3%	3.5%	4.6%	3.3%	-0.3%	2.1%
GDP Growth	1.6%	3.3%	4.9%	2.1%	2.2%	2.6%
Manufacturing Capacity Utilization	76.9%	77.2%	77.7%	78.0%	78.2%	78.5%
Consumer Sentiment Index (1966=100)	78.4	64.9	69.6	62.3	64.6	58.8

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

## **Investors Show Gains but Still Lag Benchmark**

## **INSTITUTIONAL INVESTORS**

- Strong equity gains and a modest rebound in bonds helped all investor types show gains in the one-year period ending 1Q24.
- Given their generally more aggressive portfolios, nonprofits performed best, while risk-averse corporate plans saw lower returns.
- But all investor types significantly lagged a benchmark consisting of 60% S&P 500/40% Bloomberg Aggregate.
- Over longer periods, public defined benefit (DB) plans have performed best.
- Over the last 20 years, investors have seen gains but still lag equities and the 60%/40% benchmark.

### Market environment issues of concern to investors

- On an annual-average over annual-average basis, forecasters from the Federal Reserve Bank of Philadelphia expect real GDP to increase 2.4% in 2024, up 0.7 percentage points from the estimate in the previous survey.
- The yield curve continues to be inverted, implying a recession is on the horizon.
  - Inversion started in July 2022 (20 months) or approximately 600+ days ago

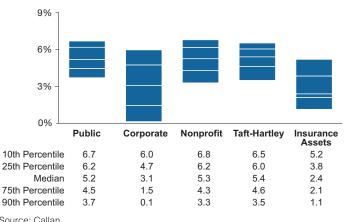
- Many now saying this indicator may not be as good as it was
- Election years also tend to do weird things to indicators

### **Public DB plans**

- The median discount rate, according to the most recent NASRA survey, is 7.0%.
- A 7.0% return expectation can be achieved with 50% in fixed income.

(3/31/24)

## **Quarterly Returns, Callan Database Groups**



Source: Callan

#### Callan Database Median and Index Returns\* for Periods Ended 3/31/24

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	5.2	13.9	4.9	8.3	7.3	7.1
Corporate Database	3.1	9.1	1.1	5.4	5.7	6.5
Nonprofit Database	5.3	14.3	4.8	8.2	6.9	6.9
Taft-Hartley Database	5.4	13.2	4.9	7.9	7.2	6.8
Insurance Assets Database	2.4	8.6	1.8	4.4	4.1	4.7
All Institutional Investors	4.9	13.0	4.3	7.7	6.8	6.9
Large (>\$1 billion)	4.4	11.8	4.7	8.0	7.2	7.1
Medium (\$100mm - \$1bn)	5.1	13.2	4.4	7.8	6.9	6.9
Small (<\$100 million)	5.2	14.2	4.2	7.5	6.6	6.6
60% S&P 500/40% Bloomberg Agg	6.0	18.1	5.9	9.4	8.6	7.6

<sup>\*</sup>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.

- Plans are starting to review their fixed income structures, specifically the need for risk in a higher-rate environment.
- More than a quarter of plans considered increasing their allocations to private real estate, a sharp jump from 3Q23, according to the Callan Consultant Survey.
- Interest in private credit took a big drop in 1Q24. At the same time, nearly 16% of clients are considering cutting allocations to the asset class, the most in survey history.
- There was also a big jump in the share of clients considering cuts to global ex-U.S. equity allocations.
- There was a smaller but still significant decrease in the share of clients considering reductions to U.S. equity.
- No clients planned changes to their fixed income allocations.

## **Corporate DB plans**

- Liabilities decreased as rates rose.
- Interest rate hedging continues to work.
- Funded ratios for some clients improved as the equity markets increased.
- As closed plans' liabilities shorten, intermediate fixed income will continue to gather interest.
- As credit spreads have tightened, it is important to manage or reduce any overweight to credit.
- Corporate DB plans are considering increasing private equity, up from 0% in 3Q23.
- According to the Consultant Survey, the share of plans with a funded status between 91% and 100% dropped dramatically.

- Both the share of clients with funded status under 80% and between 81% and 90% jumped.
- The share over 100% funded stayed relatively in line with previous quarters.

## Defined contribution (DC) plans

Fees are almost always the top concern for plan sponsors. This guarter, for the first time since 1Q18, they tied with another significant issue, in this case investment structure, in our Consultant Survey.

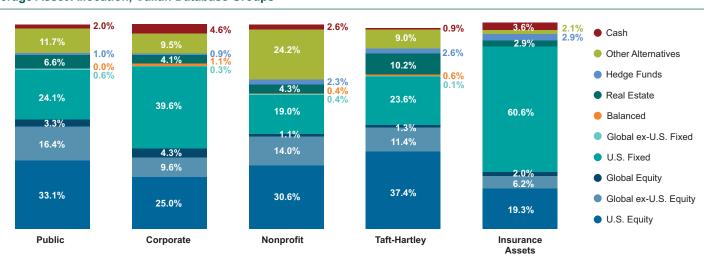
### **Nonprofits**

- For clients that had increased the risk in their fixed income sleeves to gain a higher yield (in the lower-rate environment), they too are reviewing the need for risk in a higherrate environment.
- Nonprofit clients indicated they planned small adjustments for most alternative asset classes, with the notable exception of hedge funds and private real estate.

#### Insurance assets

- Insurance companies are still benefiting from higher yields on short-term fixed income.
- Claim costs are higher from experienced inflation.
- Risk-based capital charges must be considered when investing in alternative investments.

## **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

## Best first quarter in 5 years

- The U.S. equity markets were off to an exceptional start with the S&P 500 posting a YTD gain of 11%, its best first quarter since 2019. Performance was buoyed by continued optimism around a "soft landing" scenario, strong corporate earnings, and the Fed's projected interest rate cuts in mid-2024.
- Almost all of the 11 S&P 500 sectors posted gains in 1Q24.
   Real estate was the only sector that posted losses, challenged by the interest rate environment and continued negative sentiment around office real estate.
- The best-performing sector was Communication Services, which generated a nearly 16% return during the quarter.
   Energy, Financials, Information Technology, and Industrials also posted double-digit returns.

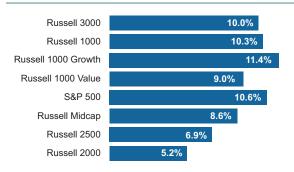
## Large cap stocks dominate again

- Growth outpaced value across the market cap spectrum once again, and large cap stocks continued to outperform small cap stocks.
- The "Magnificent Seven" in aggregate continues to outpace the other constituents of the S&P 500 in terms of earnings growth and total returns.
- However, signs point to the broadening of returns within the index including: 1) The narrowing of dispersion in the premium gap of returns/earnings growth; as of 3/31/24, the premium gap of returns/earnings growth between the "Magnificent Seven" and the other 493 stocks in the index was 10%. In

- recent periods, the gap has been >25%; 2) Only two stocks of the "Magnificent Seven" (Meta and NVIDIA) were among the top 10 performers within the index for the guarter.
- Returns within the "Magnificent Seven" cohort also show signs of disaggregation. Three stocks—Tesla, Apple, and Alphabet—exhibited negative to single-digit returns vs. other constituents, which generated low to high double-digit returns in 1Q24. In 2023, the entire cohort demonstrated positive double- and triple-digit returns.

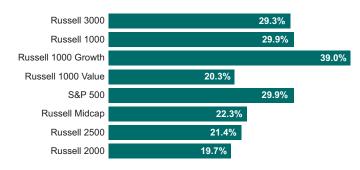
## **U.S. Equity: Quarterly Returns**

(3/31/24)



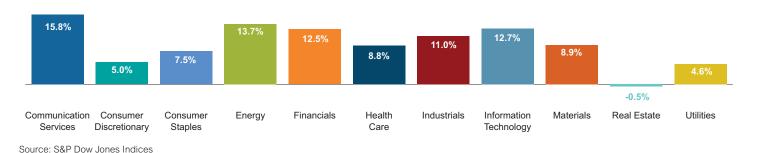
## U.S. Equity: One-Year Returns

(3/31/24)



Sources: FTSE Russell and S&P Dow Jones Indices

#### **Quarterly Performance of Industry Sectors** (3/31/24)



## **Global Equities**

## Another strong quarter for Japan

- Broad markets delivered strong returns on the decreasing expected probability of a recession in the U.S. and continued optimism around artificial intelligence.
- Small caps once again trailed large caps in a higher interest rate environment, which tends to more negatively impact smaller companies with more significant borrowing needs.
- Japan performed well yet again, beating the S&P 500 in 1Q24, driven by continued stock buybacks, economic resiliency, and a weakening yen, which helped exports.

## **Emerging markets struggle but exporters thrive**

- Emerging markets underperformed developed markets as China struggled with increased regulatory scrutiny and a continued economic slowdown.
- Exporting countries such as Peru and Colombia benefited from increasing commodity prices. Turkey also performed well with a return to orthodox monetary policies after experimenting with counterintuitive methodologies.

## Value benefits from rising commodity prices

- Energy's volatility continued; after struggling in 4Q23, energy rebounded and helped deliver stronger performance in the commodity-heavy value space.

## U.S. dollar gains as rate cut expectations fall

The U.S. dollar rose in 1Q as investors recalibrated their interest rate expectations, with conventional wisdom now indicating that the U.S. may only enact one rate cut in 2024.

## Positive tailwinds

- End of deflation
- Most prolonged stint of consumption gains since mid-1990s
- Increase in exports (positive impact to GDP)
- Reforms support the Japanese equity market through increased M&A and improved corporate governance

## Slow growth in China

Sluggish growth continues, with weak home sales and deflationary pressures.

#### Market valuation in China

 With Chinese markets now down 60% from a high-water mark in early 2021, Chinese equities are at decade-low allocations in global portfolios.

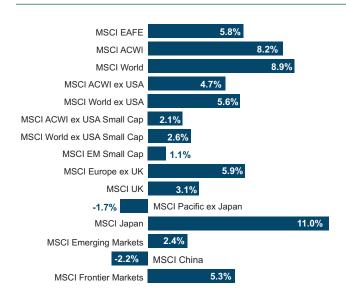
## Fast growth in India

Highest real GDP growth and one of the only major countries with accelerating GDP growth.

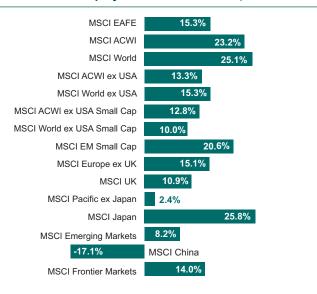
#### Market valuation in India

The MSCI India Index traded at 22.1 times forward earnings -above its 10-year average of 18.9 times.

## Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 3/31/24)



#### Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 3/31/24)



Source: MSCI

## **Fixed Income**

#### **U.S. Fixed Income**

## Big increase in 10-year Treasury yield

- Markets' enthusiasm for multiple rate cuts starting in early 2024 was tempered by stronger-than-expected economic data.
- 10-year U.S. Treasury yield rose from 3.88% as of year-end to close the quarter at 4.21%.
- The yield curve remained inverted but less so than one year ago (2-year/10-year 42 bps vs. 57 one year ago).

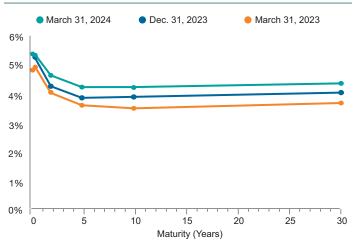
## Aggregate falls as rates climb

- The Bloomberg US Aggregate Bond Index fell 0.8% as rates rose.
- Investment grade corporates outperformed like-duration
   Treasuries, while mortgages underperformed.
- Lower quality also outperformed, with high yield corporates and leveraged loans posting the highest returns.
- Investment grade and high yield corporate spreads are now tighter than one standard deviation from the trailing 10-year average.

### Record corporate bond issuance

- Highest first quarter of new issuance on record, with \$529 billion in investment grade corporates, surpassing 2020's \$479 billion.
- High yield quarterly issuance was just as significant with a volume of \$85 billion, a level not seen since 2021.
- Both were met with strong investor demand.
- Corporate bond spreads continued to tighten across all qualities amid strong investor demand. Investment grade credit OAS declined 8 bps to 85 bps, while high yield corporates fell 24 bps, crossing the 300 bp level for the first time since January 2022.
- Investment grade credit spreads are now in the lowest 13th percentile over the last 20 years, while high yield bonds are in the 8th percentile. Bank loans are relatively more attractive, with spreads in the 42nd percentile since June 2008.
- However, all-in yields continue to provide high levels of income, with investment grade credit in the 77th percentile

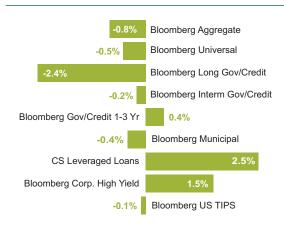
## **U.S. Treasury Yield Curves**



Source: Bloomberg

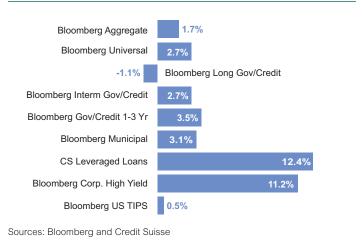
## **U.S. Fixed Income: Quarterly Returns**

(3/31/24)



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

(3/31/24)



## FIXED INCOME (Continued)

over the last 20 years, while high yield is in the 58th percentile. Bank loan yields, which are benefitting from the inverted yield curve, are in the 81st percentile since June 2008.

## **Municipal Bonds**

## Municipal bonds posted fairly flat returns in 1Q

- Yields rose, but less than for U.S. Treasuries.
- 10-year AAA municipal bond yield closed at 2.52%, up from 2.27% as of year-end.
- 10-year U.S. Treasury yield rose to 4.20% from 3.88%.
- Strong demand easily absorbed robust issuance.

## BBBs performed best for quarter and year

AAA: -0.8%

AA: -0.6%

A: +0.1%

BBB: +0.6%

High Yield: +1.5%

#### Valuations vs. U.S. Treasuries remained rich

- 10-year AAA Muni/10-year U.S. Treasury yield ratio 60%
- Well below 10-year median of 86%

### **Global Fixed Income**

### Central banks close to rate cuts

- Central banks largely kept rates on hold but are getting closer to rate cuts as inflation moderates.
- Switzerland was the first to raise rates with a 25 bps increase.
- Japan was the last to exit negative interest rate policy, raising rates from -0.1% to a range of 0.0%-0.1%.

## U.S. dollar strengthened

- Major currencies weakened relative to the dollar, a reversal of fortune from 4Q23.
- Hedged investors saw better returns.

## **Emerging markets were mixed**

Hard currency EM debt performed relatively well, especially high yield. The JPM EMBI Global Diversified Index rose 2.0%, with the high yield component up 4.9%.

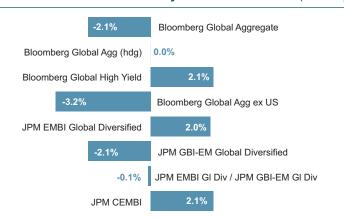
### Change in 10-Year Global Government Bond Yields



Source: Bloomberg

## **Global Fixed Income: Quarterly Returns**

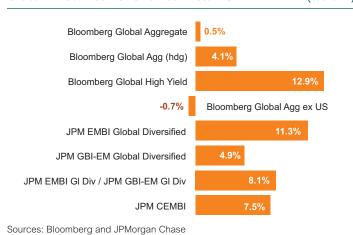
(3/31/24)



Sources: Bloomberg and JPMorgan Chase

## Global Fixed Income: One-Year Returns

(3/31/24)



Local currencies generally lost ground to the U.S. dollar, hurting returns for the JPM GBI-EM Global Diversified Index.

## **Private, Public Indices Fall on Rate Concerns**

## REAL ESTATE/REAL ASSETS | Munir Iman

## Appreciation returns drive NPI lower

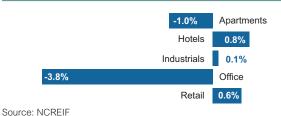
- The NCREIF Property Index, a measure of unlevered U.S. institutional real estate assets, fell 1.0% during 1Q24.
- The income return was 1.2% while the appreciation return was -2.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 0.8%. Office finished last with a loss of 3.8%.
- Regionally, the South led with a gain of 0.1%, while the West was the worst performer with a drop of 1.4%.
- The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 2.4% during 1Q, with an income return of 1.0% and an appreciation return of -3.4%.

#### U.S. real estate securities

- U.S. REITs (-0.2%) underperformed the S&P 500 (+10.6%).
   The underperformance was driven by optimism about the broader economy and excitement about artificial intelligence, which drew capital flows away from REITs.
- Earnings growth for U.S. REITs is expected to be in the low single digits due to conservatism and elevated interest rates.
- Cyclical sectors including malls and lodging led U.S. REITs in 1Q, while net lease and storage trailed due to higher interest rate sensitivity and weak pricing power, respectively.

## **Sector Quarterly Returns by Property Type**

(3/31/24)



 Dampening inflation, coupled with more dovish Federal Reserve sentiment, sparked a rally to close the year.

#### Asia/Pacific real estate securities

- The FTSE EPRA Nareit Developed Asia Index (USD) fell 0.2% during the quarter. Strength in higher beta, growthsensitive Japanese developers was a driver of the region's relative outperformance.
- Hong Kong was the primary underperformer due to concerns over a sustainable pickup in China growth momentum.

#### **European real estate securities**

- The FTSE EPRA Nareit Developed Europe Index (USD) dropped by 5.0% during the quarter.
- Europe was the lowest-performing region, driven by signs of stickier inflation driving a repricing of rate cut expectations.
- The less-indebted U.K. outperformed continental Europe.

### Callan Database Median and Index Returns\* for Periods Ended 3/31/24

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	20 Years
Real Estate ODCE Style	-1.8	-1.8	-11.6	2.9	3.2	6.4	6.0
NFI-ODCE (value-weighted, net)	-2.6	-2.6	-12.0	2.5	2.6	5.8	6.0
NCREIF Property	-1.0	-1.0	-7.2	3.6	3.8	6.4	7.5
NCREIF Farmland	0.7	0.7	3.6	7.4	6.0	7.1	12.2
NCREIF Timberland	2.1	2.1	9.8	11.0	7.0	5.8	7.1
Public Real Estate							
Global Real Estate Style	-0.7	-0.7	9.4	0.8	2.9	5.5	7.1
FTSE EPRA Nareit Developed	0.7	0.7	1.6	2.5	3.3	5.5	
Global ex-U.S. Real Estate Style	-1.0	-1.0	8.4	-4.2	-0.3	3.8	
FTSE EPRA Nareit Dev ex US	-2.0	-2.0	5.9	-5.8	-3.3	0.9	
U.S. REIT Style	-0.8	-0.8	9.9	3.7	5.3	7.3	8.3
FTSE EPRA Nareit Equity REITs	-0.2	-0.2	10.5	4.1	4.1	6.6	7.4

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

## Significant Drops in Activity From Peak Years of 2021-22

## PRIVATE EQUITY | Ashley Kahn

Fundraising ► In 2023, the number of funds raised declined sharply by ~50% from the highs of 2021-22. The 2023 vintage experienced the full impact of the denominator effect, which when combined with slower deal activity and exits, left minimal capital for new commitments.

Buyouts ▶ Buyout activity in 2023 declined by about a third compared to the highs of 2021-22, reflecting high interest rates, a wide bid-ask spread, and lingering effects from the slowdown in the public markets. 3Q23 appears to be the trough in buyout dealmaking, with early 2024 seeing improved liquidity conditions and higher public markets comps. Average deal size has declined; larger buyouts have been more difficult to finance, leading to greater activity for small/mid buyouts and add-on acquisitions.

Venture Capital and Growth Equity ▶ 2023 saw a substantial decline of ~50% in venture capital and growth equity activity, following the highs of 2021. There is a bifurcation by stage: An artificial intelligence "supercycle" is accelerating early-stage deal activity and buoying valuations, while late-stage companies struggle with slower growth, falling valuations, and lack of exit prospects.

A significant amount of capital is tied up in venture-backed companies waiting to go public, which is slowing down new investment activity (e.g., SpaceX, Databricks, Chime, Scale Al, etc.). 2023-24 has witnessed a few high-profile IPOs (Instacart, Klaviyo, and Reddit), but there has not been an IPO above \$10 billion since 2021.

**Exits** ► Exits in 2023 have declined dramatically by over 50% compared to their all-time record in 2021. Only 8% of total private equity AUM generated liquidity in 2023 (the lowest level ever, lower even than in the depths of the Global Financial Crisis).

**Returns** The strong recovery of the public equity market in 2023 (led by the "Magnificent Seven" technology stocks) has left private equity in its wake. Private equity doesn't recover as quickly as the public markets because the smoothing effect dampens private equity returns in both up and down markets.

#### 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%
Totals	1,472	552,402	100%

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

## 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
All Private Equity	-0.4	4.2	15.4	14.8	14.3	12.5	13.6	13.0
S&P 500	-3.3	21.6	10.2	9.9	11.9	11.3	9.7	7.9
Russell 3000	-3.3	20.5	9.4	9.1	11.3	11.1	9.7	8.1

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

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.

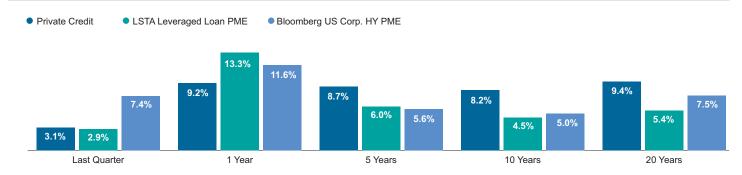
## **Long-term Returns Top Leveraged Loans**

## PRIVATE CREDIT | Cos Braswell

- Private credit performance varies across sub-asset class and underlying return drivers.
- In 4Q23, it gained 3.1%, slightly above a leveraged loan index and well below a high yield benchmark.
- Over the past 10 years, the asset class has generated a net IRR of 8.2%, outperforming leveraged loans and high yield bonds, as of Dec. 31, 2023.
- 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 assetbased 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 12/31/23\*)



## Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 12/31/23\*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	4.2	9.9	7.0	7.1	7.3
Mezzanine	3.3	12.3	11.7	11.1	11.1
Credit Opportunities	2.6	7.9	8.3	7.5	9.2
Total Private Credit	3.1	9.2	8.7	8.2	9.4

Source: LSEG/Cambridge

<sup>\*</sup>Most recent data available at time of publication

## **Strong Start to Year For Most Strategies**

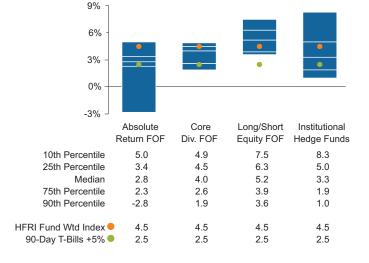
## HEDGE FUNDS/MACs | Joe McGuane

2024 started the year off on a strong note, as risk assets saw a second consecutive double-digit quarter for U.S. equities. Interest rate expectations stayed front-and-center throughout the quarter as lingering inflationary pressures in the U.S. led to a tempering of Fed rate cut expectations for 2024. Positive macroeconomic sentiment was further spurred by corporate earnings. and secular themes such as artificial intelligence (AI) growth and related efficiency gains helped move broad markets higher.

Hedge funds started the year off on a strong note, as macro strategies produced their strongest quarter in over 20 years. Macro managers were positioned for moderating inflation, interest rate volatility, and an improving economic outlook. Equity hedge strategies also performed well during 1Q, as managers saw performance coming from the Technology, Energy, and Health Care sectors. Event-driven had a positive quarter, as positions across special situations, distressed, and

## **Hedge Fund Style Group Returns**

(3/31/24)



Sources: Callan, Credit Suisse, Federal Reserve

## Callan Peer Group Median and Index Returns\* for Periods Ended 3/31/24

Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	3.3	9.3	5.8	7.2	6.1	7.6
Callan Fund-of-Funds Peer Group	3.9	10.1	4.2	5.6	4.4	5.6
Callan Absolute Return FOF Style	2.8	8.2	5.2	5.1	4.2	5.3
Callan Core Diversified FOF Style	4.0	10.2	4.3	5.6	3.8	5.4
Callan Long/Short Equity FOF Style	5.2	13.0	1.1	6.1	5.5	6.2
HFRI Fund Weighted Index	4.5	11.7	4.1	6.9	4.9	5.9
HFRI Fixed Convertible Arbitrage	4.0	7.5	3.9	6.6	5.0	7.7
HFRI Distressed/Restructuring	2.8	9.9	4.1	6.5	4.1	7.0
HFRI Emerging Markets	3.0	9.7	0.2	4.1	3.5	5.3
HFRI Equity Market Neutral	4.1	9.5	5.5	3.8	3.3	3.1
HFRI Event-Driven	2.5	11.7	4.1	6.4	4.7	6.8
HFRI Relative Value	2.5	8.2	4.1	4.6	4.0	6.1
HFRI Macro	6.2	8.5	6.1	6.4	3.7	3.0
HFRI Equity Hedge	5.2	14.3	3.2	7.9	5.7	6.9
HFRI Multi-Strategy	2.0	10.6	0.3	4.6	3.1	5.4
HFRI Merger Arbitrage	0.3	7.2	4.7	5.6	4.6	4.6
90-Day T-Bill + 5%	2.5	10.2	7.6	7.0	6.4	6.0

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

activist positions drove performance. Relative value strategies performed well, as managers profited off interest rate volatility throughout the quarter.

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 3.3%. Within this style group of 50 peers, the average hedged credit manager gained 6.4%, driven by interest rate volatility. Meanwhile, the average hedged equity manager added 5.0%, as those focused on technology, energy, and health care drove performance. The median Callan Institutional hedged rates manager rose 0.7%, largely driven by relative value fixed income trades.

Within the HFRI Indices, the best performing strategy was macro, which gained 6.2%, as managers were positioned for moderating inflation, interest rate volatility, and an improving economic outlook.

Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF ended 5.2% higher, as managers with a focus on the technology sector drove performance. Meanwhile, the median Callan Core Diversified FOF rose 4.0%, as equity and event-driven strategies drove performance. Callan Absolute Return FOF gained 2.8%, as higher equity beta strategies were behind this move higher.

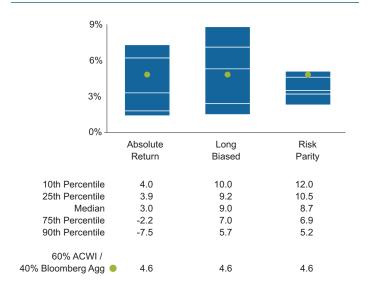
Since the Global Financial Crisis, liquid alternatives to hedge funds have become popular among investors for their attractive risk-adjusted returns that are similarly uncorrelated with traditional stock and bond investments but offered at a lower cost.

Within Callan's database of liquid alternative solutions, the Callan MAC Long Biased manager rose 9.0%, as the strong equity rally pushed 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 3.0%, as broad markets had a strong start to the year.

As it appears interest rates will be higher for longer, this will likely keep return expectations and opportunities for hedge funds elevated. In the current market environment, where both businesses and investors face higher capital costs, this causes a greater focus on capital allocation, rewarding skilled investors for identifying the highest and best uses of scarce capital. The potential for alpha generation through long-short strategies remains strong, as there has been significant dispersion across asset classes and sectors.

## **MAC Style Group Returns**

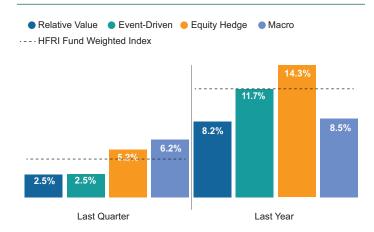
(3/31/24)



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

### **HFRI Hedge Fund-Weighted Strategy Returns**

(3/31/24)



Source: HFRI

## Index Rallies After Previous Quarter's Loss

## **DEFINED CONTRIBUTION | Scotty Lee**

## Performance: One-year gain of 17%

 The Callan DC Index™ gained 9.5% in 4Q23, which brought the Index's trailing one-year gain to 17.2%.

## **Growth Sources: Investment gains lead to rise in balances**

Balances within the DC Index rose by 9.0% after a 3.2% decrease in the previous quarter. Investment gains (9.5%) were the sole driver of the gain, while net flows (-0.5%) detracted.

#### Turnover: Net transfers decrease

 Turnover (i.e., net transfer activity levels within plans) slightly fell to 0.24% from the previous quarter's measure of 0.26%. The Index's historical average (0.55%) remained steady.

## Net Cash Flow Analysis: TDFs remain in top spot

Target date funds (TDFs) garnered 90.7% of quarterly net flows. Notably, stable value (-45.1%) saw relatively large outflows for the fifth consecutive quarter.

### **Equity Allocation: Exposure rises**

 The Index's overall allocation to equity (72.5%) rose slightly from the previous quarter's level (71.5%).

#### **Asset Allocation: Capital preservation declines**

 U.S. large cap equity (26.9%) and target date funds (34.8%) were among the asset classes with the largest percentage increases in allocation, while stable value (7.4%) had the largest decrease in allocation due to net outflows.

## Prevalence of Asset Class: Global equity rises

The prevalence of global equity funds (19.2%) rose by 3.4%. In contrast, the prevalence of U.S. small/mid cap funds (92.9%) fell by 3.3%.

## Management Fees: Decline for all plan sizes

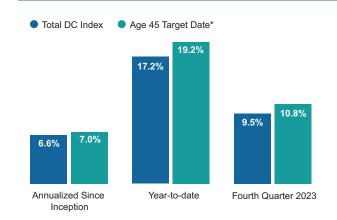
For plans with assets less than \$500 million in assets, the average asset-weighted fee decreased by 3 basis points. Plans with assets between \$500 million and \$1 billion saw the largest fee decrease of 9 bps, while the fee for plans with more than \$1 billion in assets had a decrease of 4 bps.

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.

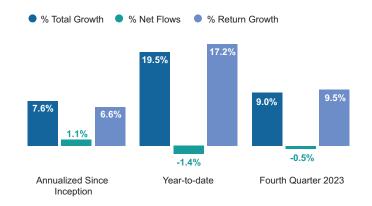
### **Investment Performance**

(12/31/23)

(12/31/2)



## **Growth Sources**



## **Net Cash Flow Analysis (4Q23)**

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	90.7%
Global ex-U.S. Equity	6.9%
U.S. Small/Mid Cap	-16.9%
Stable Value	-45.1%
Total Turnover**	0.2%

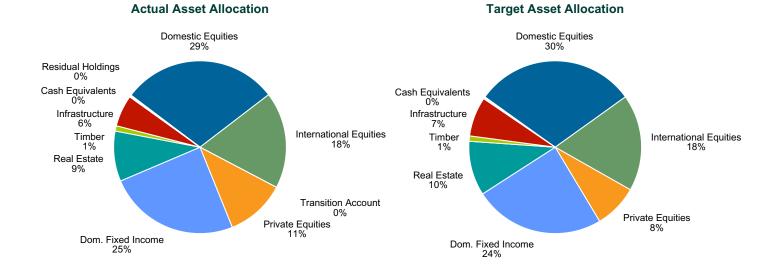
Data provided here is the most recent available at time of publication. Source: Callan DC Index

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.

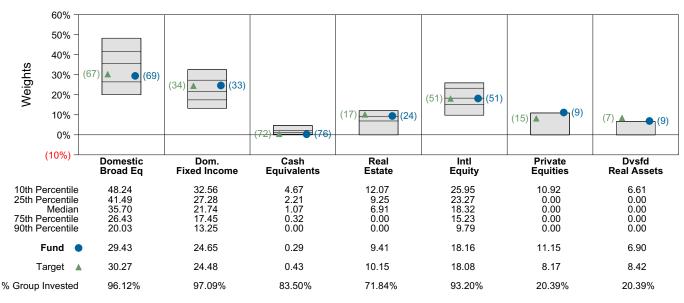
## Actual vs Target Asset Allocation As of March 31, 2024

The top left chart shows the Fund's asset allocation as of March 31, 2024. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equities	2,305,875	29.4%	30.3%	(0.8%)	(65,916)
International Equities	1,417,917	18.1%	18.1%	0.0%	`1,452′
Transition Account	266	0.0%	0.0%	0.0%	266
Private Equities	873,726	11.2%	8.2%	3.0%	233,734
Dom. Fixed Income	1,931,644	24.7%	24.5%	0.2%	13,369
Real Estate	737,264	9.4%	10.2%	(0.7%)	(57,977)
Timber	76,734	1.0%	1.0%	0.0%	0
Infrastructure	463,728	5.9%	7.4%	(1.5%)	(119,146)
Cash Equivalents	22,764	0.3%	0.4%	(0.1%)	(10,641)
Residual Holdings	4,858	0.1%	0.0%	0.1%	4,858
Total	7.834.777	100.0%	100.0%		

#### Asset Class Weights vs Callan Public Fund Sponsor Database

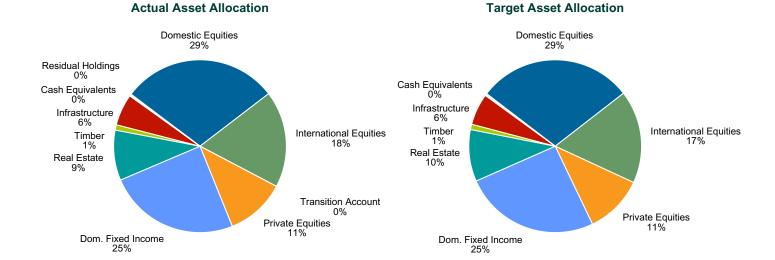


<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



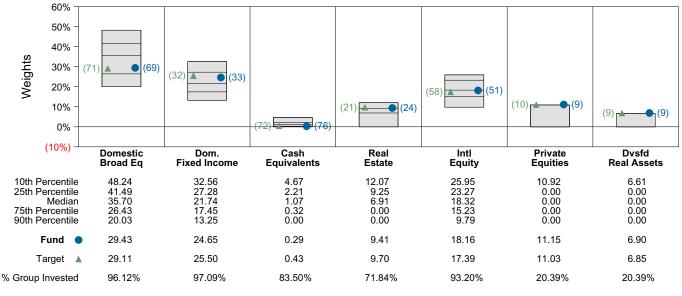
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	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equities	2,305,875	29.4%	29.1%	0.3%	24,884
International Equities	1,417,917	18.1%	17.4%	0.7%	55,665
Transition Account	266	0.0%	0.0%	0.0%	266
Private Equities	873,726	11.2%	11.0%	0.1%	9,404
Dom. Fixed Income	1,931,644	24.7%	25.5%	(0.8%)	(65,948)
Real Estate	737,264	9.4%	9.7%	(0.3%)	(22,480)
Timber	76,734	1.0%	1.0%	(0.0%)	`(1,162)
Infrastructure	463,728	5.9%	5.9%	0.1%	`5,153′
Cash Equivalents	22,764	0.3%	0.4%	(0.1%)	(10,641)
Residual Holdings	4,858	0.1%	0.0%	0.1%	4,858
Total	7.834.777	100.0%	100.0%		

#### Asset Class Weights vs Callan Public Fund Sponsor Database



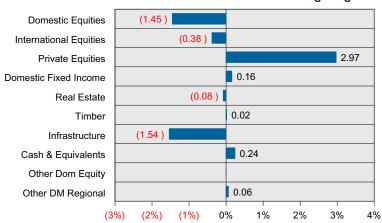
<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



## Quarterly Total Fund Relative Attribution - March 31, 2024

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.

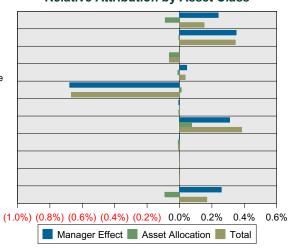




## **Actual vs Target Returns**

### **Domestic Equities** International Equities **Private Equities** Domestic Fixed Income Real Estate Timber Infrastructure Cash & Equivalents Other Dom Equity Other DM Regional Total (15%) (10%) (5%)0% 5% 10% 15% 20% Actual Target

## Relative Attribution by Asset Class



#### Relative Attribution Effects for Quarter ended March 31, 2024

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	29%	30%	10.42%	9.53%	0.24%	(0.09%)	0.15%
International Equities	18%	18%	6.29%	4.33%	0.35%	(0.00%)	0.35%
Private Equities	11%	8%	1.44%	1.44%	0.00%	(0.06%)	(0.06%)
Domestic Fixed Income	25%	24%	0.09%	(0.10%)	0.05%	(0.01%)	0.03%
Real Estate	10%	10%	(7.27%)	(0.98%)	(0.68%)	`0.01%´	(0.67%)
Timber	1%	1%	`1.55%´	2.12%	(0.01%)	(0.00%)	(0.01%)
Infrastructure	6%	7%	3.81%	(1.36%)	0.31%	`0.07%′	`0.38%
Cash & Equivalents	1%	0%	1.37%	1.29%	0.00%	(0.01%)	(0.01%)
Other Dom Equity	0%	0%	(3.43%)	(3.43%)	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	`3.55%	3.55%	0.00%	(0.00%)	(0.00%)
Total			3.69% =	3.53% +	+ 0.26% <b>+</b>	(0.09%)	0.17%

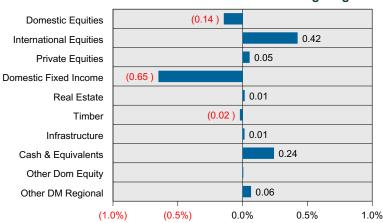
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



## Quarterly Total Fund Relative Attribution vs Corridor Target - March 31, 2024

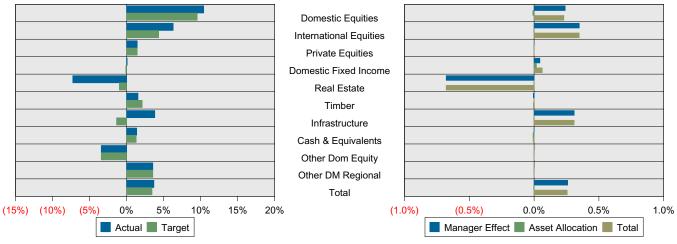
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation 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.





## **Actual vs Target Returns**

## Relative Attribution by Asset Class



#### Relative Attribution Effects for Quarter ended March 31, 2024

Asset Class	Effective Actual Weight	Effective Target	Actual Return	Target	Manager Effect	Asset Allocation	Total Relative Return
		Weight		Return			
Domestic Equities	29%	29%	10.42%	9.53%	0.24%	(0.01%)	0.23%
International Equities	18%	18%	6.29%	4.33%	0.35%	(0.00%)	0.35%
Private Equities	11%	11%	1.44%	1.44%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	25%	25%	0.09%	(0.10%)	0.05%	0.02%	0.06%
Real Estate	10%	10%	(7.27%)	(0.98%)	(0.68%)	(0.00%)	(0.68%)
Timber	1%	1%	1.55%	2.12%	(0.01%)	(0.00%)	(0.01%)
Infrastructure	6%	6%	3.81%	(1.36%)	0.31%	(0.00%)	0.31%
Cash & Equivalents	1%	0%	1.37%	1.29%	0.00%	(0.01%)	(0.01%)
Other Dom Equity	0%	0%	(3.43%)	(3.43%)	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	3.55%	3.55%	0.00%	(0.00%)	(0.00%)
Total			3.69% =	3.44% +	0.26% +	(0.00%)	0.25%

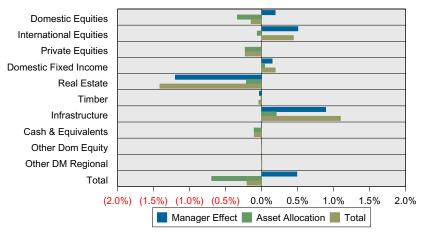
<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



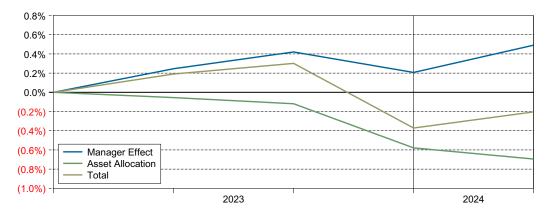
## Cumulative Total Fund Relative Attribution - March 31, 2024

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
Domestic Equities	28%	29%	29.19%	28.39%	0.19%	(0.34%)	(0.15%)
International Equities	18%	19%	16.18%	13.20%	0.50%	(0.06%)	0.44%
Private Equities	11%	8%	5.24%	5.24%	0.00%	(0.23%)	(0.23%)
Domestic Fixed Income	24%	24%	5.06%	4.48%	0.15%	0.04%	0.19%
Real Estate	11%	10%	(16.34%)	(7.16%)	(1.20%)	(0.21%)	(1.41%)
Timber	1%	1%	6.86%	`9.85%′	(0.03%)	(0.01%)	(0.04%)
Infrastructure	6%	7%	9.00%	(4.78%)	`0.89%´	0.20%	`1.10%´
Cash & Equivalents	1%	1%	5.42%	5.24%	0.00%	(0.11%)	(0.10%)
Other Dom Equity	0%	0%	(12.26%)	(12.26%)	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	18.73%	`18.73%′	0.00%	0.00%	0.00%
Total			10.94% =	11.15% +	- 0.49% +	(0.69%)	(0.20%)

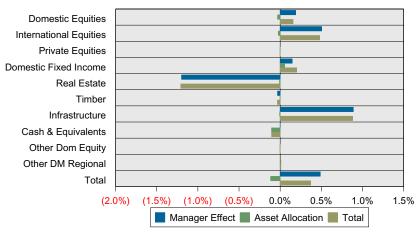
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



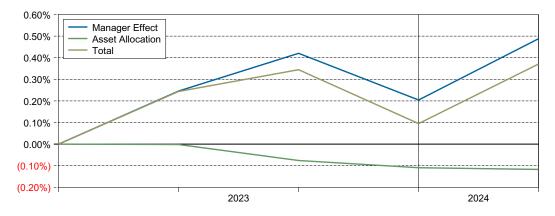
## Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	28%	28%	29.19%	28.39%	0.19%	(0.03%)	0.16%
International Equities	18%	18%	16.18%	13.20%	0.50%	(0.02%)	0.48%
Private Equities	11%	11%	5.24%	5.24%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	24%	24%	5.05%	4.48%	0.15%	0.06%	0.20%
Real Estate	11%	11%	(16.34%)	(7.16%)	(1.20%)	(0.01%)	(1.21%)
Timber	1%	1%	6.86%	9.85%	(0.03%)	(0.00%)	(0.03%)
Infrastructure	6%	6%	8.97%	(4.78%)	0.89%	(0.01%)	0.88%
Cash & Equivalents	1%	1%	5.42%	5.24%	0.00%	(0.11%)	(0.10%)
Other Dom Equity	0%	0%	(16.07%)	(16.07%)	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	32.61%	32.61%	0.00%	`0.01%′	`0.01%´
Total			10.94% =	10.57% -	· 0.49% +	(0.12%)	0.37%

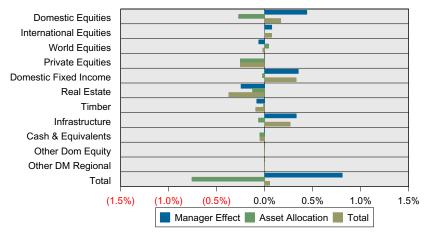
\* Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



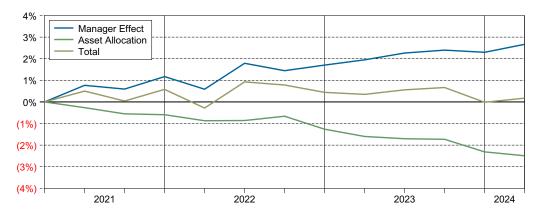
## Cumulative Total Fund Relative Attribution - March 31, 2024

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
Domestic Equities	26%	26%	10.40%	8.58%	0.44%	(0.27%)	0.17%
International Equities	16%	17%	2.34%	2.07%	0.07%	(0.00%)	0.07%
World Equities .	5%	5%	-	-	(0.06%)	0.04%	(0.02%)
Private Equities	9%	8%	14.74%	14.74%	0.00%	(0.25%)	(0.25%)
Domestic Fixed Income	24%	24%	0.27%	(1.04%)	0.35%	(0.02%)	0.33%
Real Estate	11%	10%	1.25%	`3.63%′	(0.25%)	(0.13%)	(0.37%)
Timber	1%	1%	4.44%	10.99%	(0.08%)	(0.01%)	(0.09%)
Infrastructure	5%	7%	9.39%	4.23%	0.33%	(0.06%)	0.27%
Cash & Equivalents	1%	1%	2.74%	2.58%	0.00%	(0.05%)	(0.05%)
Other Dom Equity	0%	0%	- '	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			5.18% =	5.13% +	- 0.81% +	(0.76%)	0.05%

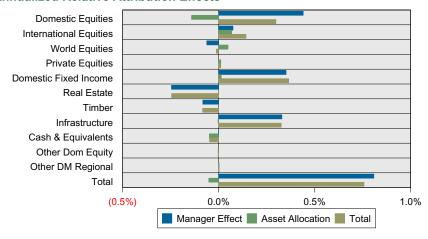
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



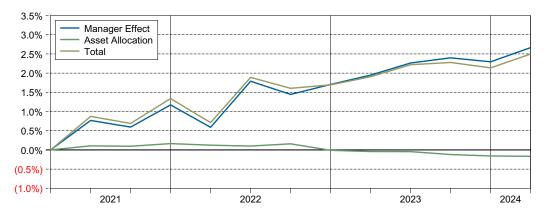
## Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	26%	25%	10.40%	8.58%	0.44%	(0.14%)	0.30%
International Equities	16%	17%	2.34%	2.07%	0.08%	0.07%	0.14%
World Equities '	5%	5%	-	-	(0.06%)	0.05%	(0.01%)
Private Equities	9%	9%	14.74%	14.74%	0.00%	0.01%	0.01%
Domestic Fixed Income	24%	25%	0.27%	(1.04%)	0.35%	0.01%	0.37%
Real Estate	11%	11%	1.25%	3.63%	(0.25%)	0.00%	(0.25%)
Timber	1%	1%	4.44%	10.99%	(0.08%)	(0.00%)	(0.08%)
Infrastructure	5%	5%	9.38%	4.23%	0.33%	(0.00%)	0.33%
Cash & Equivalents	1%	1%	2.74%	2.58%	0.00%	(0.05%)	(0.05%)
Other Dom Equity	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			5.18% =	4.42% +	0.81% +	(0.05%)	0.76%

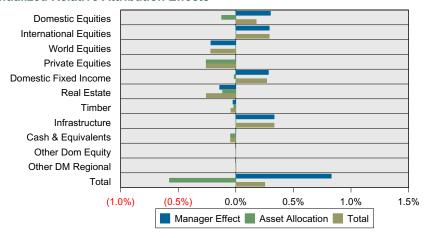
<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



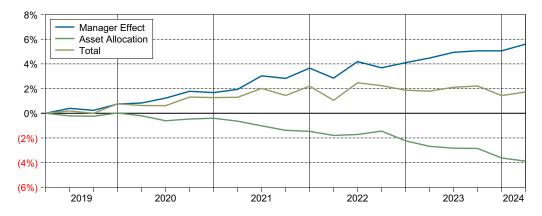
## Cumulative Total Fund Relative Attribution - March 31, 2024

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.

### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	24%	14.95%	13.57%	0.30%	(0.12%)	0.18%
International Equities	16%	16%	7.81%	5.99%	0.29%	0.00%	0.29%
World Equities .	9%	9%	-	-	(0.22%)	(0.00%)	(0.22%)
Private Equities	7%	8%	14.95%	14.95%	0.00%	(0.26%)	(0.26%)
Domestic Fixed Income	24%	24%	2.62%	1.57%	0.28%	(0.02%)	0.27%
Real Estate	11%	10%	2.40%	3.76%	(0.14%)	(0.12%)	(0.26%)
Timber	2%	2%	4.35%	7.04%	(0.02%)	(0.02%)	(0.04%)
Infrastructure	5%	7%	9.25%	3.55%	0.33%	(0.00%)	0.33%
Cash & Equivalents	1%	1%	2.06%	2.02%	0.00%	(0.05%)	(0.05%)
Other Dom Equity	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%′
Total			8.22% =	7.97%	+ 0.83% +	(0.58%)	0.25%

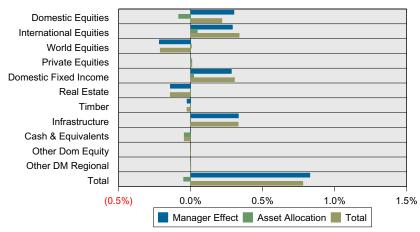
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



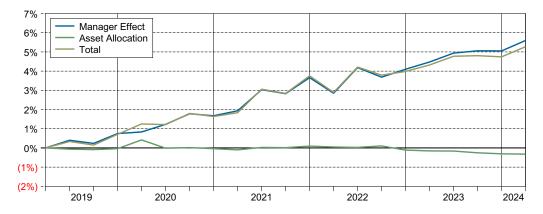
## Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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.

#### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	24%	14.95%	13.57%	0.30%	(0.08%)	0.22%
International Equities	16%	16%	7.81%	5.99%	0.29%	0.05%	0.34%
World Equities	9%	9%		-	(0.22%)	0.01%	(0.21%)
Private Equities	7%	7%	14.95%	14.95%	0.00%	0.01%	0.01%
Domestic Fixed Income	24%	24%	2.62%	1.57%	0.28%	0.02%	0.31%
Real Estate	11%	11%	2.40%	3.76%	(0.14%)	(0.00%)	(0.14%)
Timber	2%	2%	4.35%	7.04%	(0.02%)	(0.00%)	(0.03%)
Infrastructure	5%	5%	9.25%	3.55%	0.33%	(0.00%)	0.33%
Cash & Equivalents	1%	1%	2.06%	2.02%	0.00%	(0.04%)	(0.04%)
Other Dom Equity	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	`0.00%´
Total			8.22% =	7.44%	+ 0.83% +	(0.05%)	0.78%

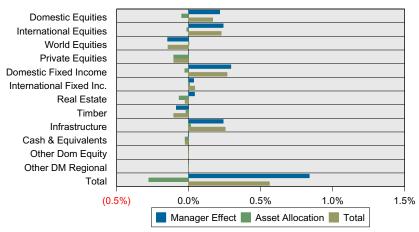
<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



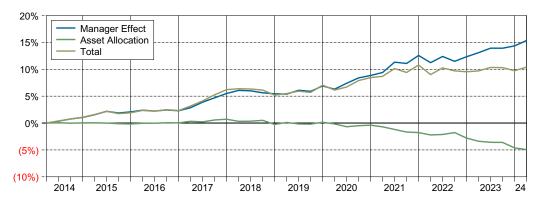
## **Cumulative Total Fund Relative Attribution - March 31, 2024**

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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Ten Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	23%	12.70%	11.71%	0.22%	(0.05%)	0.17%
International Equities	16%	15%	5.81%	4.30%	0.24%	(0.01%)	0.23%
World Equities	13%	12%	-	-	(0.15%)	0.00%	(0.14%)
Private Equities	6%	7%	7.65%	7.65%	0.00%	(0.10%)	(0.10%)
Domestic Fixed Income	22%	22%	3.73%	2.42%	0.29%	(0.03%)	0.27%
International Fixed Inc.	2%	2%	-	-	0.04%	0.01%	0.04%
Real Estate	11%	10%	6.83%	6.41%	0.04%	(0.07%)	(0.02%)
Timber	2%	3%	2.13%	5.83%	(0.09%)	(0.02%)	(0.10%)
Infrastructure	5%	6%	7.18%	2.61%	0.24%	0.01%	0.25%
Cash & Equivalents	1%	1%	1.45%	1.38%	0.00%	(0.02%)	(0.02%)
Other Dom Equity	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			7.37% =	6.81%	+ 0.84% +	(0.28%)	0.56%

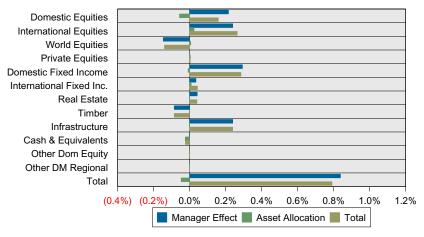
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



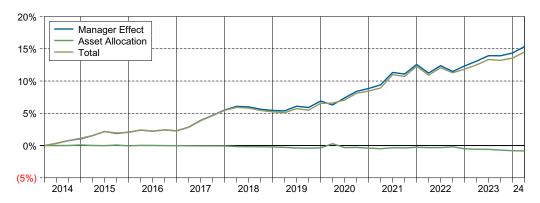
## Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	24%	12.70%	11.71%	0.22%	(0.06%)	0.16%
International Equities	16%	16%	5.81%	4.30%	0.24%	0.02%	0.16%
World Equities	13%	12%	3.0170	5070	(0.15%)	0.01%	(0.14%)
Private Equities	6%	5%	7.65%	7.65%	0.00%	0.00%	0.00%
Domestic Fixed Income	22%	22%	3.73%	2.42%	0.29%	(0.01%)	0.29%
International Fixed Inc.	2%	2%	-	-	0.04%	0.01%	0.04%
Real Estate	11%	11%	6.83%	6.41%	0.04%	(0.00%)	0.04%
Timber	2%	2%	2.13%	5.83%	(0.09%)	(0.00%)	(0.09%)
Infrastructure	5%	5%	7.17%	2.61%	0.24%	(0.00%)	0.24%
Cash & Equivalents	1%	1%	1.45%	1.38%	0.00%	(0.02%)	(0.02%)
Other Dom Equity	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			7.37% =	6.58% +	0.84% +	(0.05%)	0.79%

<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% BImbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% BImbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

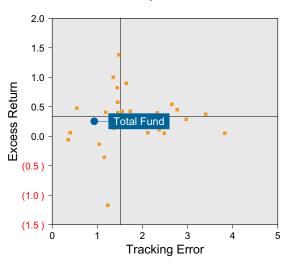


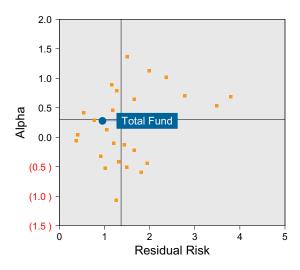
## Total Fund Total Fund vs Target Risk Analysis

#### **Risk Analysis**

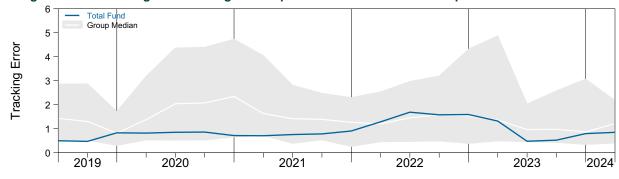
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return 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 Sponsor Database Five Years Ended March 31, 2024

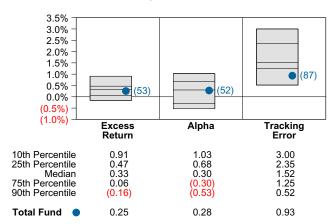


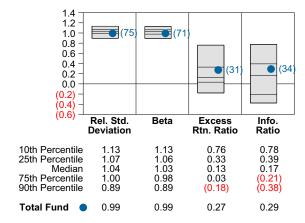


#### Rolling 4 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Five Years Ended March 31, 2024



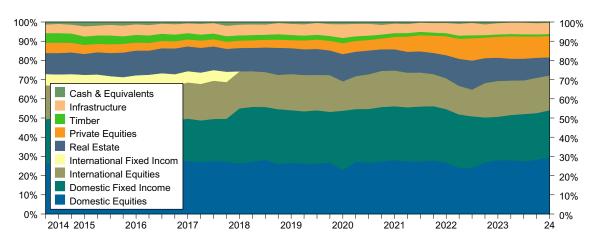




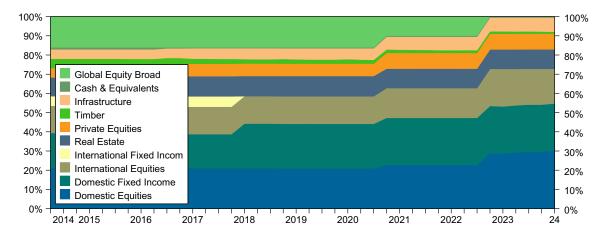
## **Actual vs Target Historical Asset Allocation**

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 Sponsor Database.

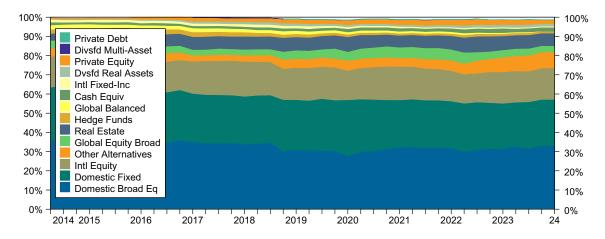
## **Actual Historical Asset Allocation**



## **Target Historical Asset Allocation**



#### Average Callan Public Fund Sponsor Database Historical Asset Allocation



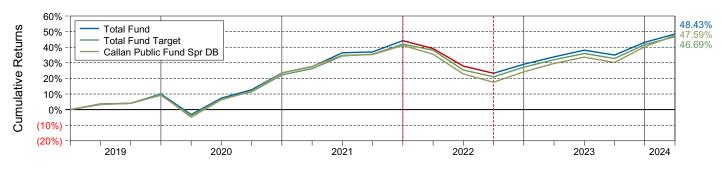
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



# Total Fund Drawdown Analysis for Five Years Ended March 31, 2024

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**

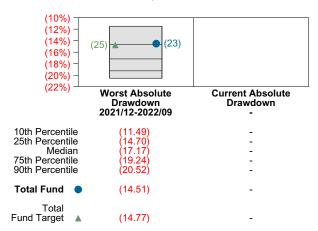


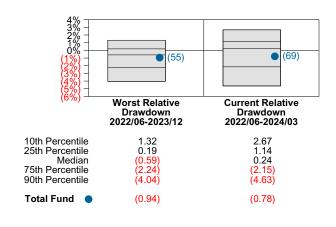
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(14.51)%	0.75	2021/12-2022/09	(14.77)%	(16.73)%	-	-	_	-	-
Recovery from Trough	20.41%	1.50+	2022/09-2024/03	21.22%	25.58%	-	-	-	-	-
Total Fund Target	(14.77)%	0.75	2021/12-2022/09			-	-	-		
Callan Public Fund Spr DB	(16.73)%	0.75	2021/12-2022/09			-	-	-		

#### Relative Cumulative Drawdown Analysis vs. Total Fund Target Cumulative Relative Returns 2.5% Peak Catch-up Rel Rtn: 0.78% Total Fund 2.0% 1.5% 1.18% 1.0% 0.5% 0.0% 2019 2021 2022 2024 2020 2023

	worst Relative Drawdown			Current Relative Drawdown			
	Rel Rtn	Years	Period	Rel Rtn	_Years_	Period	
Total Fund	(0.94)%	1.50	2022/06-2023/12	(0.78)%	1.75	2022/06-2024/03	
Recovery from Trough	0.16%	0.25+	2023/12-2024/03	0.16%	0.25+	2023/12-2024/03	

Drawdown Rankings vs. Total Fund Target Rankings against Callan Public Fund Sponsor Database Five Years Ended March 31, 2024



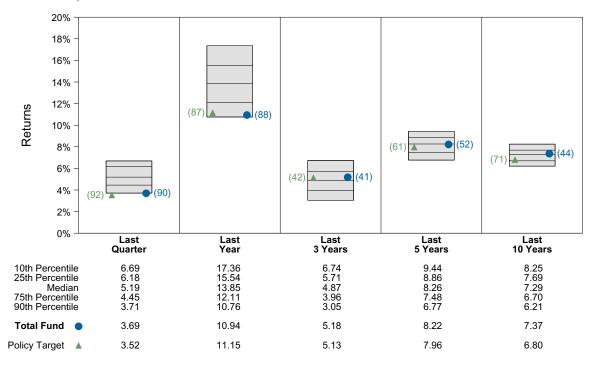




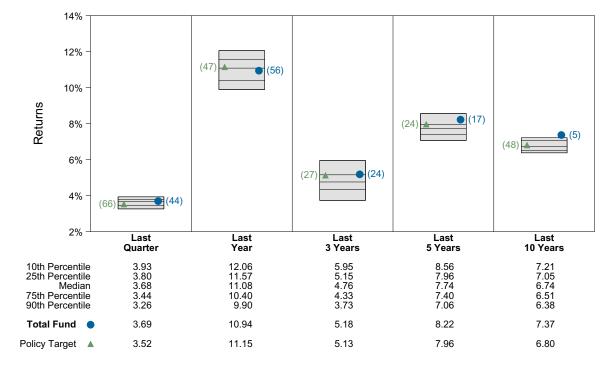
## **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended March 31, 2024. 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 Sponsor Database**



#### **Asset Allocation Adjusted Ranking**



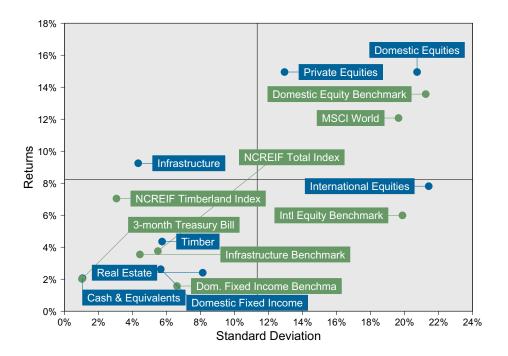
<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



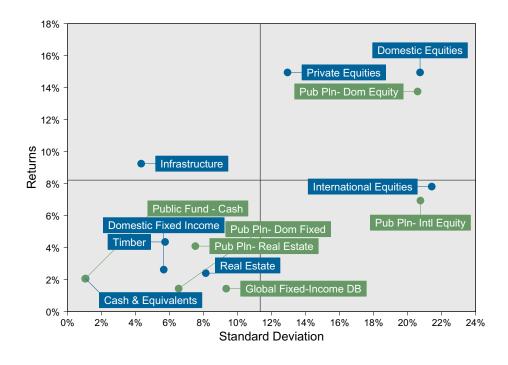
#### **Asset Class Risk and Return**

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



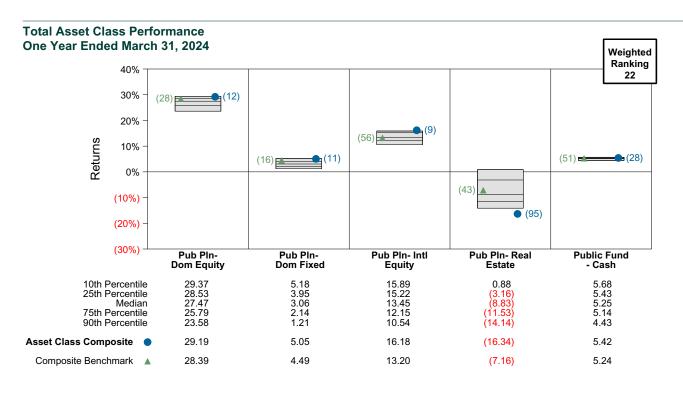
#### Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median

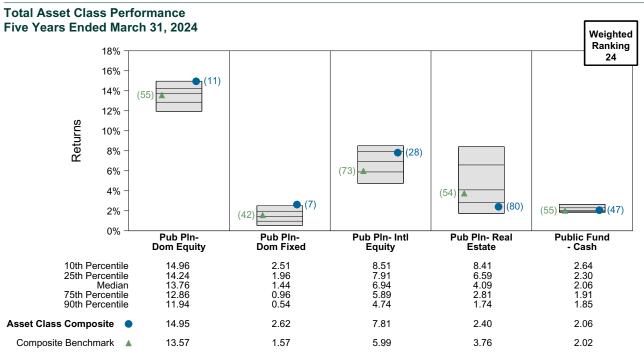




## **Asset Class Rankings**

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.





<sup>\*</sup> Current Quarter Target = 25.7% Russell 1000 Index, 18.1% MSCI ACWI xUS IMI, 17.1% Blmbg:Aggregate, 10.2% NCREIF Total Index, 8.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.5% Russell 2000 Index, 3.7% CPI All Urban Cons lagged 3 months, 3.7% NCREIF NFI-ODCE Eq Wt Net, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.



# **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2024, with the distribution as of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

## **Asset Distribution Across Investment Managers**

	March 31, 2024			December 31, 2023			
	larket Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Global Equities	\$4,597,784,735	58.68%	\$(102,924,534)	\$316,339,466	\$4,384,369,802	57.74%	
Public Equities	\$3,724,058,797	47.53%	\$(122,567,541)	\$304,081,930	\$3,542,544,408	46.65%	
Domestic Equities	\$2,305,874,863	29.43%	\$(60,920,292)	\$220,198,629	\$2,146,596,525	28.27%	
Large Cap	\$1,973,002,158	25.18%	\$(52,270,646)	\$208,440,437	\$1,816,832,367	23.93%	
LA Capital LCG	48,446,940	0.62%	(2,447,624)	6,237,717	44,656,847	0.59%	
LA Capital Enhanced	824,682,079	10.53%	(24,768,482)	91,936,968	757,513,593	9.98%	
NTAM Quant Enh R1000	308,948,378	3.94%	(8,067,767)	35,061,075	281,955,070	3.71%	
NTAM R1000 Index	484,203,048	6.18%	(10,294,303)	45,756,071	448,741,279	5.91%	
Parametric-Clifton Enh R1000	306,721,713	3.91%	(6,692,470)	29,448,605	283,965,578	3.74%	
Small Cap	\$332,872,705	4.25%	\$(8,649,646)	\$11,758,192	\$329,764,158	4.34%	
Atlanta Capital	104,804,196	1.34%	(1,407,924)	2,359,509	103,852,611	1.37%	
Riverbridge Small Cap Growth	103,074,279	1.32%	(4,997,256)	4,351,362	103,720,173	1.37%	
Sycamore Small Cap Value	106,089,124	1.35%	(1,483,132)	4,161,697	103,410,558	1.36%	
NTAM R2000 Index	18,905,106	0.24%	(761,334)	885,623	18,780,817	0.25%	
Total International Equity	\$1,417,917,445	18.10%	\$(61,647,250)	\$83,892,766	\$1,395,671,929	18.38%	
International All Cap	\$593,606,568	7.58%	\$4,030,160	\$49,071,607	\$540,504,801	7.12%	
William Blair Int'l Leaders	218,166,532	2.78%	4,295,363	14,536,250	199,334,919	2.62%	
Arrowstreet ACWI ex US	375,440,036	4.79%	(265,203)	34,535,357	341,169,882	4.49%	
Developed Intl Large Cap	\$518,807,783	6.62%	\$(45,449,852)	\$27,372,911	\$536,884,724	7.07%	
NTAM World Ex US	26,729,804	0.34%	(47,227,011)	810,444	73,146,371	0.96%	
State St MSCI World exUS	492,077,979	6.28%	1,777,159	26,562,467	463,738,354	6.11%	
Developed Intl Small Cap	\$81,244,882	1.04%	\$(2,858,773)	\$2,893,204	\$81,210,450	1.07%	
DFA Intl Small Cap Value	33,921,288	0.43%	(1,122,517)	1,683,019	33,360,786	0.44%	
Wellington Intl SM Cap	111,259	0.00%	(7,296)	0	118,554	0.00%	
State St MSCI exUS Small	47,212,335	0.60%	(1,728,960)	1,210,185	47,731,110	0.63%	
Emerging Markets	\$224,258,212	2.86%	\$(17,368,785)	\$4,555,044	\$237,071,954	3.12%	
DFA EM All Cap Core	110,096,816	1.41%	(11,147,427)	2,531,819	118,712,424	1.56%	
State St MSCI EM China	27,927,276	0.36%	(1,964,607)	(846,470)	30,738,353	0.40%	
State St MSCI EM ex China	86,234,120	1.10%	(4,256,751)	2,869,695	87,621,177	1.15%	
Transition Account	\$266,489	0.00%	\$0	\$(9,464)	\$275,953	0.00%	
Private Equity	\$873,725,937	11.15%	\$19,643,008	\$12,257,535	\$841,825,394	11.09%	
Total ASP (Brinson) Fds 1998-2003	349,852	0.00%	0	5,333	344,519	0.00%	
Total ASP (Brinson) Non-US Fds 1999-200		0.00%	0	3,986	179,076	0.00%	
Adams Street 2008 Non-US Partnership Fo	3,504,779	0.04%	0	97,569	3,407,210	0.04%	
Adams Street Direct Co-Invest Fund 2006	0	0.00%	0	(1)	1	0.00%	
Total Adams Street 2010 Funds	7,355,125	0.09%	(281,601)	27,241	7,609,485	0.10%	
Adams Street 2015 Global Fund	35,646,173	0.45%	(1,044,607)	994,870	35,695,910	0.47%	
Adams Street 2016 Global Fund	34,591,442	0.44%	(881,143)	620,312	34,852,273	0.46%	
Adams Street 2017 Global Fund	74,128,891	0.95%	(1,931,072)	838,659	75,221,304	0.99%	
Adams Street 2018 Global Fund	75,218,950	0.96%	383,781	1,625,243	73,209,926	0.96%	
Adams Street 2019 Global Fund	69,161,756	0.88%	0	1,488,887	67,672,869	0.89%	
Adams Street 2020 Global Fund	49,571,763	0.63%	1,035,000	1,477,870	47,058,893	0.62%	
Adams Street 2021 Global Fund	31,332,135	0.40%	2,310,000	750,283	28,271,852	0.37%	
Altor Fund VI	2,017,015	0.03%	1,611,691	2,179	403,145	0.01%	
BlackRock PEP	227,489,570	2.90%	0	0	227,489,570	3.00%	
Blackrock PEP 2020	113,542,175	1.45%	6,851,936	0	106,690,239	1.40%	
Sixth Street Partners - TAO	113,250,569	1.45%	2,909,790	3,243,059	107,097,720	1.41%	
Private Equity Misc Funds*	16,880,478	0.22%	(2,687,765)	(194,797)	19,763,040	0.26%	
, ,		•			, , , , , , , , , , , , , , , , , , , ,	•	

<sup>\*</sup> Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.



# **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2024, with the distribution as of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

## **Asset Distribution Across Investment Managers**

	March 31, 2024					1, 2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Fixed Income	\$1,931,643,887	24.65%	\$83,744,481	\$2,252,971	\$1,845,646,434	24.30%
Domestic Fixed Income	\$1,931,643,887	24.65%	\$83,744,481	\$2,252,971	\$1,845,646,434	24.30%
Investment Grade	\$1,374,498,449	17.54%	\$75,695,491	\$(4,818,332)	\$1,303,621,291	17.17%
Allspring Med Quality Credit	110,459,359	1.41%	41,073,394	783,509	68,602,456	0.90%
Manulife-Declaration TRBF	97,482,130	1.24%	(6,317,410)	(2,857,333)	106,656,873	1.40%
PIMCO DISCO II	57,351,347	0.73%	0	1,977,702	55,373,645	0.73%
PIMCO Core Plus Constrained	309,302,435	3.95%	6,771,506	504,314	302,026,616	3.98%
Prudential Core	308,715,428	3.94%	7,252,119	(1,076,749)	302,540,058	3.98%
State Street Gov Index	139,961,618	1.79%	14,384,749	(1,095,634)	126,672,503	1.67%
State Street Gov Index State Street Credit Index	42,539,667	0.54%	7,658,826	(4,815)	34,885,656	0.46%
Western Asset Core Plus	308,686,465	3.94%	4,872,308	(3,049,326)	306,863,483	4.04%
Fixed Income Transition	300,000,400	0.00%	4,072,300	(3,049,326)	300,003,403	4.04%
Tixed income transition	O	0.0076	O	U	-	_
Below Investment Grade	\$557,145,438	7.11%	\$8,048,991	\$7,071,303	\$542,025,144	7.14%
Ares ND Credit Strategies Fd	174,553,140	2.23%	0	0	174,553,140	2.30%
Cerberus ND Private Credit Fd	206,997,097	2.64%	8,250,000	4,777,347	193,969,750	2.55%
Goldman Sachs 2006 Offshore	1	0.00%	0	0	1	0.00%
Goldman Sachs Offshore V	0	0.00%	0	(1)	1	0.00%
Loomis Sayles	173,031,067	2.21%	(201,009)	2,160,194	171,071,882	2.25%
PIMCO Bravo Fund II	2,564,133	0.03%	Ò	133,763	2,430,370	0.03%
Clabel Beel Access	£4 077 700 000	40 240/	¢(4,004,700)	#/20 700 04E\	£4 240 450 757	17.36%
Global Real Assets	\$1,277,726,030	16.31%	\$(1,021,783)	\$(39,708,945)	\$1,318,456,757	17.36%
Real Estate	\$737,263,916	9.41%	\$1,721,526	\$(57,801,787)	\$793,344,177	10.45%
Invesco Core Real Estate	374,763,903	4.78%	(392,300)	(18,316,784)	393,472,987	5.18%
Invesco Asia RE Fund III	15,910,887	0.20%	Ó	336,253	15,574,634	0.21%
Invesco RE Fund VI	45,377,700	0.58%	2,114,017	(6,211,710)	49,475,393	0.65%
Invesco Value Added Fd IV	812,483	0.01%	, , 0	(197,268)	1,009,751	0.01%
Invesco Value Added Fd V	55,323,493	0.71%	0	(17,275,140)	72,598,633	0.96%
JP Morgan SPC & Strat RE	245,067,008	3.13%	0	(16,136,945)	261,203,953	3.44%
JP Morgan Greater European Opp Fd	8,443	0.00%	(190)	(193)	8,827	0.00%
Other Real Assets	\$540,462,113	6.90%	\$(2,743,309)	\$18,092,843	\$525,112,580	6.92%
Infrastructure	\$463,727,811	5.92%	\$3,836,691	\$16,901,985	\$442,989,136	5.83%
ISQ Global Infrastructure II	72,877,197	0.93%	(157,712)	2,198,292	70,836,617	0.93%
ISQ Global Infrastructure III	26,478,732	0.34%	0	2,946,376	23,532,356	0.31%
The Rohatyn Group	17,554,229	0.22%	0	2,540,010	17,554,229	0.23%
JP Morgan IIF Infrastructure	131,040,259	1.67%	(1,932,769)	7,325,973	125,647,055	1.65%
Grosvenor CIS Fund I	9,098,678	0.12%	(1,332,703)	337,121	8,761,557	0.12%
Grosvenor CIS Fund II	20,462,820	0.12%	(595,963)	879,436	20,179,347	0.12 %
Grosvenor CIS Fund III	38,107,019	0.49%	6,597,171	750,083	30,759,765	0.41%
Macquarie Infrastructure Fund IV	80,963,346	1.03%			80,244,769	1.06%
Macquarie Infrastructure Fund V  Macquarie Infrastructure Fund V	67,145,531	0.86%	(36,742) (37,295)	755,319 1,709,385	65,473,441	0.86%
Macquaile illifastructure Furid V	07,145,551	0.60%	(37,293)	1,709,363	05,473,441	0.00%
Timber	\$76,734,302	0.98%	\$(6,580,000)	\$1,190,858	\$82,123,444	1.08%
TIR Teredo	23,652,010	0.30%	(500,000)	939,010	23,213,000	0.31%
TIR Springbank	53,082,292	0.68%	(6,080,000)	251,848	58,910,444	0.78%
Cash	\$22,764,263	0.29%	\$(18,382,737)	\$652,900	\$40,494,101	0.53%
Northern TrustCash Account	11,299,652	0.14%	(18,382,737)	503,873	29,178,517	0.38%
BND Cash	11,464,611	0.15%	(10,302,737)	149,027	11,315,584	0.36%
			v			
Residual Holdings	\$4,857,738	0.06%	\$(77,718)	\$169,524	\$4,765,932	0.06%
Total Fund	\$7,834,776,653	100.00%	\$(38,662,290)	\$279,705,916	\$7,593,733,027	100.00%



Returns for Periods Ended March 31, 2024

	Last Quarter	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Equities	7.050/	00.040/	<b></b> 0/	44.700/	0.000/
Gross Net	7.35% 7.32%	20.04% 19.83%	7.77% 7.52%	11.70% 11.44%	9.28% 9.01%
Weighted Benchmark	6.64%	19.80%	7.76%	11.71%	9.03%
Public Equities					
Gross	8.80%	23.95%	7.31%	11.51%	_
Net	8.76%	23.68%	7.02%	11.23%	-
Weighted Benchmark	7.53%	22.30%	6.35%	10.76%	-
otal Domestic Equity	10.400/	00.400/	10.100/	4.4.050/	10.700/
Gross Net	10.42% 10.38%	29.19% 28.92%	10.40% 10.13%	14.95% 14.71%	12.70% 12.48%
Wtd Avg Domestic Equities Benchmark	9.53%	28.39%	8.58%	13.57%	11.71%
arge Cap					
Gross	11.63%	31.88%	11.92%	16.46%	13.93%
Net	11.61%	31.73%	11.74%	16.31%	13.78%
Large Cap Benchmark(1)	10.30%	29.87%	10.45%	14.76%	12.68%
LA Capital LCG - Gross	14.14%	42.58%	14.26%	19.67%	16.33%
LA Capital LCG - Net	14.08%	42.28%	13.86%	19.33%	16.05%
Russell 1000 Growth Index	11.41%	39.00%	12.50%	18.52%	15.98%
L.A. Capital Enhanced - Gross	12.36%	33.04%	12.19%	15.94%	13.30%
L.A. Capital Enhanced - Net	12.33%	32.88%	12.07%	15.82%	13.18%
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	12.68%
NTAM R1000 Index - Gross	10.29%	29.90%	-	-	-
NTAM R1000 Index - Net	10.29%	29.90%	-	-	40.000/
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	12.68%
NTAM Quant Enh R1000 - Gross	12.57%	31.81%	13.20%	14.79%	12.03%
NTAM Quant Enh R1000 - Net	12.53%	31.32%	12.86%	14.59%	11.87%
Benchmark(2)	10.30%	29.87%	11.37%	14.97%	12.92%
Parametric-Clifton Enh R1000 - Gross	10.47%	29.90%	10.63%	14.75%	12.80%
Parametric-Clifton Enh R1000 - Net	10.47%	29.90%	10.51%	14.73%	12.76%
Benchmark(3)	10.30%	29.87%	11.47%	15.04%	12.95%
mall Cap	3.69%	14.61%	3.51%	8.63%	7.96%
Gross Net	3.52%	13.76%	2.84%	8.01%	7.47%
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	7.58%
Atlanta Capital - Gross	2.31%	13.61%	6.71%	11.16%	_
Atlanta Capital - Net	2.15%	12.86%	6.04%	10.45%	-
S&P 600 Small Cap Index	2.46%	15.93%	2.28%	9.15%	8.80%
Riverbridge Small Cap Growth - Gross	4.25%	15.29%	(3.55%)	-	-
Riverbridge Small Cap Growth - Net	4.07%	14.20%	(4.28%)	- 7.000/	7.000/
Russell 2000 Growth Index	7.58%	20.35%	(2.68%)	7.38%	7.89%
Sycamore Small Cap Value - Gross	4.10%	13.87%	6.26%	-	-
Sycamore Small Cap Value - Net	3.94%	12.97%	5.60%	-	-
Russell 2000 Value Index	2.90%	18.75%	2.22%	8.17%	6.87%
NTAM R2000 Index - Gross	5.19%	19.84%	-	=	-
NTAM R2000 Index - Net	5.19%	19.83%	<u>-</u>		
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	7.58%



<sup>(1)</sup> S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter. (2) S&P 500 Index through 9/30/2022 and Russell 1000 Index thereafter. (3) S&P 500 Index through 6/30/2022 and Russell 1000 Index thereafter.

Returns for Periods Ended March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Total International Equity					
Gross	6.29%	16.18%	2.34%	7.81%	5.81%
Net	6.25%	15.92%	2.06%	7.54%	5.58%
MSCI ACWIxUS IMI(1)	4.33%	13.20%	2.07%	5.99%	4.30%
International All Cap					
Gross	8.89%	20.76%	-	-	-
Net	8.81%	20.23%	-	-	-
MSCI ACWI xUS IMI	4.33%	13.20%	1.72%	6.00%	4.32%
William Blair Int'l Leaders - Gross	6.91%	12.22%	(0.42%)	7.97%	_
William Blair Int'l Leaders - Net	6.82%	11.68%	(0.78%)	7.59%	-
MSCI ACWI xUS IMI	4.33%	13.20%	1.72%	6.00%	4.32%
Arrowstreet ACWI ex US - Gross	10.13%	26.39%	-	_	<u>-</u>
Arrowstreet ACWI ex US - Net	10.04%	25.86%	-	-	_
MSCI ACWI ex US IMI	4.33%	13.20%	1.72%	6.00%	4.32%
Davidana d Intl I anno Can					
Developed Intl Large Cap Gross	5.73%	15.60%	_	_	_
Net	5.73%	15.60%	-	-	-
MSCI World xUS	5.59%	15.29%	4.93%	7.48%	4.81%
NTAM World ex US - Gross	5.63%	15.39%	5.37%	7.88%	5.19%
NTAM World ex US - Net	5.62%	15.31%	5.31%	7.84%	5.15%
MSCI World xUS	5.59%	15.29%	4.93%	7.48%	4.81%
State St MSCI World exUS - Gross	5.71%	15.50%	_	_	_
State St MSCI World exUS - Net	5.71%	15.50%	-	-	_
MSCI World xUS	5.59%	15.29%	4.93%	7.48%	4.81%
Developed Intl Small Cap					
Gross	3.76%	12.04%	-	-	=
Net	3.72%	11.76%	-	-	-
MSCI World xUS Small	2.58%	10.04%	(0.93%)	5.39%	4.54%
DFA Intl Small Cap Value - Net	5.32%	16.24%	6.18%	7.77%	4.54%
MSCI World xUS Sm Value	2.89%	12.88%	2.22%	5.82%	4.09%
Olate OLMOOL - HO Owell - Owe	0.500/	40.000/			
State St MSCI exUS Small - Gross State St MSCI exUS Small - Net	2.58% 2.57%	10.38% 10.32%	-	=	-
MSCI World xUS Small	2.58%	10.04%	(0.93%)	5.39%	4.54%
			(3.33,0)	2.22,0	
Emerging Markets	0.000/	0.200/	(0.000/)	2.200/	2.000/
Gross Net	2.22% 2.18%	8.30% 8.11%	(6.09%) (6.47%)	3.26% 2.87%	3.99% 3.78%
MSCI EM	2.37%	8.15%	(5.05%)	2.22%	2.95%
			, ,		
DFA EM All Cap Core - Gross DFA EM All Cap Core - Net	2.45% 2.39%	-	-	-	-
MSCI EM	2.37%	- 8.15%	(5.05%)	2.22%	2.95%
WIGGI EIW	2.01 /0	0.1070	(0.0070)	2.2270	2.50 /0
State St MSCI EM China - Gross	(2.14%)	-	-	-	-
State St MSCI EM China - Net	(2.16%)	(47.050/)	(40.000/)	(C 220/)	- 4 0 4 0 /
MSCI China	(2.19%)	(17.05%)	(18.92%)	(6.33%)	1.24%
State St MSCI EM ex China - Gross	3.54%	-	-	-	-
State St MSCI EM ex China - Net	3.53%	-	-	-	-
MSCI EM x China	4.01%	20.51%	2.16%	6.38%	4.18%

<sup>(1)</sup> Prior to 10/1/2022, the benchmark is calculated based on the approved investment policy asset allocation target.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Private Equities*					
Net	1.44%	5.24%	14.74%	14.95%	7.65%
Total ASP (Brinson) Fds 1998-2003	1.55%	67.25%	14.32%	9.88%	5.65%
Total ASP (Brinson) Non-US 1999-2004	2.23%	3.64%	11.39%	8.21%	6.50%
Adams St 2008 Non-US P-ship Fd	2.86%	(0.02%)	0.93%	9.13%	10.99%
Adams St Direct Co-Invest Fd 2006	0.00%	2.17%	3.48%	(16.19%)	(9.38%)
Total Adams Street 2010 Funds	0.37%	(5.28%)	3.61%	13.25%	13.50%
Adams Street 2015 Global Fund	2.82%	1.08%	8.92%	16.56%	-
Adams Street 2016 Global Fund	1.79%	0.89%	13.06%	16.20%	-
Adams Street 2017 Global Fund	1.13%	1.05%	16.31%	17.86%	-
Adams Street 2018 Global Fund	2.21%	2.99%	16.71%	19.95%	-
Adams Street 2019 Global Fund	2.20%	2.48%	18.99%	-	-
Adams Street 2020 Global Fund	3.10%	3.93%	24.21%	-	-
Adams Street 2021 Global Fund	2.56%	6.45%	-	-	-
BlackRock PEP	0.00%	5.34%	19.43%	16.07%	-
Blackrock PEP 2020	0.00%	9.31%	10.36%	-	-
Sixth Street Partners - TAO	3.05%	13.29%	9.89%	-	-
Remaining Misc. Funds**	(1.11%)	0.31%	(4.36%)	(0.97%)	(3.77%)

<sup>\*</sup> Corsair III was taken out from the Private Equity Composite on July 1, 2009. It was then added back into the Private Equity Composite on October 1, 2011. At this time Corsair IV, Capital Intl and EIG were also added to this composite. \*\* Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.



Returns for Periods Ended March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Fixed Income					
Gross Net	0.09% 0.05%	5.06% 4.91%	0.27% 0.13%	2.62% 2.49%	3.52% 3.34%
Weighted Benchmark	(0.10%)	4.49%	(1.04%)	1.57%	2.23%
Domestic Fixed Income					
Gross	0.09%	5.05%	0.27%	2.62%	3.73%
Net Weighted Benchmark	0.05% ( <mark>0.10%)</mark>	4.91% 4.49%	0.13% (1.04%)	2.49% 1.57%	3.56% 2.42%
Investment Grade					
Gross	(0.41%)	3.35%	(1.75%)	1.26%	2.78%
Net Blmbg Aggregate	(0.44%) (0.78%)	3.22% 1.70%	(1.87%)	1.14% 0.36%	2.66% 1.54%
5 55 5	•		(2.46%)		
Manulife-Declaration TRBF - Net Libor-3 Month	<mark>(2.72%)</mark> 1.42%	4.64% 5.82%	0.30% 3.13%	2.36% 2.39%	3.34% 1.74%
PIMCO Core Plus Cons Gross(1)	0.14%	3.94%	(1.75%)	1.27%	2.41%
PIMCO Core Plus Cons Gross(1)	0.14%	3.67%	(1.75%)	1.05%	2.41%
Blended Benchmark(2)	(0.78%)	1.70%	(2.46%)	0.36%	0.99%
PIMCO DiSCO II - Net	3.57%	10.29%	5.51%	5.55%	6.95%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Prudential Core - Gross	(0.38%)	3.23%	(2.02%)	0.97%	-
Prudential Core - Net	(0.41%)	3.06%	(2.14%)	0.85%	-
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
State Street Gov Index - Gross	(0.90%)	0.08%	-	-	-
State Street Gov Index - Net Blmbg Government	(0.90%) (0.93%)	0.07% 0.13%	(2.68%)	(0.04%)	1.05%
· ·	, ,		(2.06%)	(0.04 %)	1.05%
State Street Credit Index - Gross	(0.27%)	4.32%	-	-	-
State Street Credit Index - Net Blmbg Credit	(0.27%) (0.41%)	4.31% 4.15%	(1.86%)	- 1.39%	2.49%
Western Asset Core Plus - Gross	(1.01%)	2.62%	- -	_	_
Western Asset Core Plus - Net	(1.04%)	2.54%	-	-	-
Blmbg:Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Below Investment Grade			/		
Gross Net	1.29% 1.25%	9.16% 9.00%	5.65% 5.48%	6.22% 6.04%	6.11% 5.82%
Blmbg HY Corp 2% Issue	1.47%	11.15%	2.19%	4.19%	4.44%
Ares ND Credit Strategies Fd - Net	0.00%	9.05%	8.85%	7.96%	-
Cerberus ND Private Credit Fd - Net	2.40%	8.47%	8.31%	8.58%	
Leveraged Loan B	2.45%	13.32%	6.42%	5.92%	4.84%
Goldman Sachs 2006 Offshore - Net	(0.00%)	2.84%	16.99%	12.47%	17.19%
Goldman Sachs Offshore V - Net PIMCO Bravo II Fund - Net	(0.00%) 5.50%	(99. <mark>87%)</mark> 0.11%	(88.96%) (6.37%)	(68.87%) (4.10%)	(42.38%) 1.79%
Blmbg HY Corp 2% Issue	1.47%	11.15%	2.19%	4.19%	4.44%
Loomis Sayles - Gross	1.26%	10.16%	0.95%	3.53%	4.33%
Loomis Sayles - Net	1.15%	9.65%	0.48%	3.04%	3.83%
Blmbg HY Corp 2% Issue	1.47%	11.15%	2.19%	4.19%	4.44%

<sup>(1)</sup> The product changed from Commingled Fund to Separate Account in March 2014. (2) Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month through June 30, 2018; Blmbg Aggregate thereafter.



Returns for Periods Ended March 31, 2024

	Last Last	Last 3	Last 5	Last 10	
	Quarter	Year	Years	Years	Years
Global Real Assets					
Gross	(3.02%)	(7.24%)	4.07%	4.65%	6.21%
Net	(3.13%)	(7.65%)	3.64%	4.21%	5.78%
Weighted Benchmark	(0.97%)	(5.28%)	4.28%	3.84%	5.03%
Real Estate					
Gross	(7.27%)	(16.34%)	1.25%	2.40%	6.83%
Net	(7.39%)	(16.83%)	0.72%	1.87%	6.30%
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
Invesco Core Real Estate - Gross	(4.66%)	(12.17%)	4.62%	3.73%	7.02%
Invesco Core Real Estate - Net	(4.75%)	(12.48%)	4.27%	3.39%	6.67%
Invesco Asia RE Fund III - Net	2.16%	(9.62%)	(5.67%)	4.49%	-
Invesco RE Fund VI - Net Invesco Value Added Fd IV - Net	(12.04%) (19.54%)	(2.25%) (60.33%)	(36.22%)	(20.96%)	-
Invesco Value Added Fd IV - Net	(23.80%)	(26.52%)	(2.02%)	0.46%	-
JP Morgan SPC & Strat RE - Gross	(6.18%)	(19.36%)	(1.47%)	0.74%	5.50%
JP Morgan SPC & Strat RE - Net	(6.39%)	(20.30%)	(2.44%)	(0.24%)	4.51%
JPM Greater European Opp Fd - Net	(2.21%)	1.35%	3.00%	(0.36%)	(0.73%)
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
Other Real Assets					
Gross	3.48%	8.65%	8.46%	8.14%	-
Net	3.40%	8.40%	8.21%	7.87%	-
Infrastructure					
Gross	3.81%	8.97%	9.38%	9.25%	7.17%
Net	3.72%	8.68%	9.07%	8.89%	6.72%
Weighted Benchmark	(1.36%)	(4.78%)	4.23%	3.55%	2.61%
ISQ Global Infrastructure II - Net	3.11%	6.89%	14.11%	15.54%	-
ISQ Global Infrastructure III - Net	12.52%	16.89%	-	-	-
The Rohatyn Group - Net	0.00%	9.67%	2.28%	(3.11%)	(1.88%)
JP Morgan IIF Infrastructure - Gross	5.83%	12.67%	7.44%	8.45%	6.78%
JP Morgan IIF Infrastructure - Net	5.50% 3.85%	11.66%	6.55%	7.60%	5.96%
Grosvenor CIS Fund I - Net Grosvenor CIS Fund II - Net	3.85% 4.38%	17.48% 11.44%	13.26% 12.56%	11.05% 13.26%	9.72%
Grosvenor CIS Fund III - Net	2.25%	8.19%	12.50 /0	13.20 /0	-
Benchmark(1)	(1.36%)	(4.78%)	4.23%	3.55%	2.61%
Manager of Infrared and English NV. Not	0.040/	0.000/	40.400/	0.500/	
Macquarie Infrastructure Fund IV - Net Macquarie Infrastructure Fund V - Net	0.94% 2.61%	3.20% 6.18%	10.18% 8.34%	9.50%	-
Benchmark(2)	(1.36%)	(4.78%)	4.23%	3.55%	-
· · ·	(110070)	( 575)	2070	0.0070	
Timber Net	1.54%	6.84%	4.43%	4.35%	2.13%
TIR Teredo - Net	4.11%	9.15%	14.17%	10.21%	7.27%
TIR Springbank - Net	0.46%	5.91%	1.57%	2.61%	0.22%
NCREIF Timberland Index	2.12%	9.85%	10.99%	7.04%	5.83%
Cash & Cash Equivalents - Net	1.37%	5.42%	2.74%	2.06%	1.45%
Cash Account - Net	1.39%	5.45%	2.74%	2.06%	1.45%
BND Cash	1.34%	5.40%	2.71%	2.06%	-
3-month Treasury Bill	1.29%	5.24%	2.58%	2.02%	1.38%
Total Fund					
Gross	3.69%	10.94%	5.18%	8.22%	7.37%
Net	3.65%	10.71%	4.94%	7.97%	7.09%
Target*	3.52%	11.15%	5.13%	7.96%	6.80%
Corridor Benchmark	3.44%	10.57%	4.42%	7.44%	6.57%

<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill. (1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter. (2) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.



	12/2023-				
	3/2024	2023	2022	2021	2020
Global Equities					
Gross	7.35%	18.33%	(15.90%)	24.06%	16.00%
Net	7.32%	18.14%	(16.13%)	23.73%	15.73%
Weighted Benchmark	6.64%	18.86%	(15.28%)	23.87%	16.54%
Public Equities					
Gross	8.80%	22.07%	(18.53%)	20.44%	16.54%
Net	8.76%	21.82%	(18.80%)	20.09%	16.24%
Weighted Benchmark	7.53%	21.35%	(17.89%)	18.57%	16.35%
Total Domestic Equity					
Gross	10.42%	25.35%	(19.55%)	28.00%	22.90%
Net	10.38%	25.12%	(19.78%)	27.68%	22.71%
Wtd Avg Domestic Equities Benchmark	9.53%	25.17%	(19.32%)	24.15%	20.74%
Large Cap					
Gross	11.63%	26.60%	(20.24%)	30.82%	25.94%
Net	11.61%	26.46%	(20.41%)	30.60%	25.88%
Large Cap Benchmark(1)	10.30%	26.53%	(19.13%)	26.45%	20.96%
LA Capital LCG - Gross	14.14%	39.23%	(27.03%)	31.80%	37.76%
LA Capital LCG - Net	14.08%	38.94%	(27.49%)	31.56%	37.49%
Russell 1000 Growth Index	11.41%	42.68%	(29.14%)	27.60%	38.49%
L.A. Capital Enhanced - Gross	12.36%	26.69%	(18.15%)	29.04%	21.77%
L.A. Capital Enhanced - Net	12.33%	26.54%	(18.23%)	28.91%	21.65%
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
NTAM R1000 Index - Gross	10.29%	26.58%	-	_	_
NTAM R1000 Index - Net	10.29%	26.57%	-	_	_
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
NTAM Quant Enh R1000 - Gross	12.57%	24.42%	(15.24%)	33.05%	11.72%
NTAM Quant Enh R1000 - Net	12.53%	24.00%	(15.69%)	33.05%	11.72%
Benchmark(2)	10.30%	26.53%	(18.35%)	28.71%	18.40%
Parametric-Clifton Enh R1000 - Gross	10.47%	26.10%	(19.84%)	28.33%	19.19%
Parametric-Clifton Enh R1000 - Net	10.47%	26.10%	(19.84%)	27.90%	19.47%
Benchmark(3)	10.30%	26.53%	(18.12%)	28.71%	18.40%
Small Cap					
Gross	3.69%	18.36%	(16.21%)	16.97%	12.31%
Net	3.52%	17.60%	(16.78%)	16.29%	11.71%
Russell 2000 Index	5.18%	16.93%	(20.44%)	14.82%	19.96%
Atlanta Capital - Gross	2.31%	21.73%	(11.54%)	20.10%	12.89%
Atlanta Capital - Oloss Atlanta Capital - Net	2.15%	20.93%	(12.12%)	19.40%	12.16%
S&P 600 Small Cap Index	2.46%	16.05%	(16.10%)	26.82%	11.29%
Riverbridge Small Cap Growth - Gross	4.25%	21.17%	(31.53%)	4.61%	_
Riverbridge Small Cap Growth - Net	4.25%	20.25%	(31.53%)	3.94%	-
Russell 2000 Growth Index	7.58%	18.66%	(26.36%)	2.83%	34.63%
Sycamore Small Cap Value - Gross	4.10%	12.55%	(6.29%)	26.65%	_
Sycamore Small Cap Value - Gloss	3.94%	11.83%	(6.29%)	25.98%	-
Russell 2000 Value Index	2.90%	14.65%	(14.48%)	28.27%	4.63%
NTAM R2000 Index - Gross	5.19%	17.15%			
NTAM R2000 Index - Gross NTAM R2000 Index - Net	5.19%	17.15%	-	-	
Russell 2000 Index	5.18%	16.93%	(20.44%)	14.82%	19.96%
Nussell 2000 IIIuex	5.1070	10.3370	(20.7770)	17.02/0	13.30 /0



<sup>(1)</sup> S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.
(2) S&P 500 Index through 9/30/2022 and Russell 1000 Index thereafter.
(3) S&P 500 Index through 6/30/2022 and Russell 1000 Index thereafter.

	12/2023- 3/2024	2023	2022	2021	2020
Total International Equity					
Gross	6.29%	17.14%	(19.41%)	9.40%	17.89%
Net	6.25%	16.87%	(19.64%)	9.05%	17.54%
MSCI ACWIXUS IMI(1)	4.33%	15.62%	(15.99%)	8.73%	10.12%
International All Cap					
Gross	8.89%	19.43%	-	-	-
Net	8.81%	18.92%	-	-	-
MSCI ACWI xUS IMI	4.33%	15.62%	(16.58%)	8.53%	11.12%
William Blair Int'l Leaders - Gross	6.91%	14.47%	(27.82%)	10.84%	28.54%
William Blair Int'l Leaders - Net	6.82%	14.01%	(28.09%)	10.48%	28.09%
MSCI ACWI xUS IMI	4.33%	15.62%	(16.58%)	8.53%	11.12%
Arrowstreet ACWI ex US - Gross	10.13%	22.67%	-	-	-
Arrowstreet ACWI ex US - Net	10.04%	22.11%	-	-	-
MSCI ACWI ex US IMI	4.33%	15.62%	(16.58%)	8.53%	11.12%
Developed Intl Large Cap					
Gross	5.73%	18.43%	-	-	-
Net	5.73%	18.42%	<b>-</b>	-	-
MSCI World xUS	5.59%	17.94%	(14.29%)	12.62%	7.59%
NTAM World ex US - Gross	5.63%	18.04%	(13.66%)	12.94%	8.16%
NTAM World ex US - Net	5.62%	17.97%	(13.72%)	12.91%	8.12%
MSCI World xUS	5.59%	17.94%	(14.29%)	12.62%	7.59%
State St MSCI World exUS - Gross	5.71%	18.43%	-	-	-
State St MSCI World exUS - Net	5.71%	18.43%	-	-	-
MSCI World xUS	5.59%	17.94%	(14.29%)	12.62%	7.59%
Developed Intl Small Cap					
Gross	3.76%	13.50%	-	-	-
Net	3.72%	13.15%	-	-	-
MSCI World xUS Small	2.58%	12.62%	(20.59%)	11.14%	12.78%
DFA Intl Small Cap Value - Net	5.32%	17.57%	(9.78%)	15.89%	0.81%
MSCI World xUS Sm Value	2.89%	14.70%	(14.00%)	13.27%	2.58%
State St MSCI exUS Small - Gross	2.58%	13.02%	-	-	-
State St MSCI exUS Small - Net	2.57%	12.96%	-	-	-
MSCI World xUS Small	2.58%	12.62%	(20.59%)	11.14%	12.78%
Emerging Markets					
Gross	2.22%	10.50%	(26.45%)	0.93%	26.36%
Net	2.18%	10.25%	(26.71%)	0.22%	25.63%
MSCI EM	2.37%	9.83%	(20.09%)	(2.54%)	18.31%

<sup>(1)</sup> Prior to 10/1/2022, the benchmark is calculated based on the approved investment policy asset allocation target.



•	12/2023-				
	3/2024	2023	2022	2021	2020
Private Equities					
Net	1.44%	4.13%	0.27%	57.24%	12.25%
Total ASP (Brinson) Fds 1998-2003	1.55%	60.55%	(1.68%)	(3.98%)	5.53%
Total ASP (Brinson) Non-US 1999-2004	2.23%	3.99%	33.28%	2.53%	(0.72%)
Adams St 2008 Non-US P-ship Fd	2.86%	3.31%	(20.14%)	36.02%	23.59%
Adams St Direct Co-Invest Fd 2006	0.00%	6.88%	19.12%	(13.01%)	(59.13%)
Total Adams Street 2010 Funds	0.37%	(7.09%)	(12.16%)	63.10%	26.66%
Adams Street 2015 Global Fund	2.82%	(3.24%)	(8.70%)	78.44%	19.12%
Adams Street 2016 Global Fund	1.79%	(0.24%)	(1.60%)	72.68%	15.42%
Adams Street 2017 Global Fund	1.13%	(0.38%)	3.15%	75.78%	18.27%
Adams Street 2018 Global Fund	2.21%	1.29%	3.21%	77.90%	21.47%
Adams Street 2019 Global Fund	2.20%	(0.36%)	(1.72%)	142.33%	93.33%
Adams Street 2020 Global Fund	3.10%	0.72%	0.03%	392.02%	-
Adams Street 2021 Global Fund	2.56%	5.00%	17.84%	-	-
BlackRock PEP	0.00%	5.34%	2.63%	57.57%	12.00%
Blackrock PEP 2020	0.00%	9.31%	5.94%	-	-
Sixth Street Partners - TAO	3.05%	12.23%	6.05%	13.50%	-
Remaining Misc. Funds*	(1.11%)	6.70%	(16.70%)	3.28%	(2.03%)

<sup>\*</sup> Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.



	12/2023- 3/2024	2023	2022	2021	2020
Global Fixed Income					
Gross	0.09%	7.74%	(10.31%)	2.12%	8.57%
Net	0.05%	7.60%	(10.43%)	1.99%	8.44%
Weighted Benchmark	(0.10%)	7.88%	(12.40%)	0.49%	7.59%
Domestic Fixed Income					
Gross	0.09%	7.73%	(10.31%)	2.12%	8.57%
Net	0.05%	7.60%	(10.43%)	1.99%	8.44%
Weighted Benchmark	(0.10%)	7.88%	(12.40%)	0.49%	7.59%
Investment Grade					
Gross	(0.41%)	6.86%	(13.86%)	(0.30%)	9.53%
Net	(0.44%)	6.74%	(13.97%)	(0.42%)	9.41%
Blmbg Aggregate	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
Manulife-Declaration TRBF - Net	(2.72%)	9.31%	(6.88%)	2.45%	5.75%
Libor-3 Month	1.42%	5.65%	2.25%	0.17%	0.78%
PIMCO Core Plus Cons Gross(1)	0.14%	6.87%	(13.54%)	(0.61%)	9.18%
PIMCO Core Plus Cons Net	0.11%	6.58%	(13.74%)	(0.85%)	9.02%
Blended Benchmark(2)	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
PIMCO DiSCO II - Net	3.57%	8.74%	(0.28%)	6.33%	4.31%
Blmbg Aggregate	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
Prudential Core - Gross	(0.38%)	6.87%	(13.69%)	(1.19%)	8.86%
Prudential Core - Net	(0.41%)	6.73%	(13.79%)	(1.29%)	8.74%
Blmbg Aggregate	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
Below Investment Grade					
Gross	1.29%	9.79%	(0.35%)	9.14%	5.74%
Net	1.25%	9.64%	(0.51%)	8.94%	5.53%
Blmbg HY Corp 2% Issue	1.47%	13.44%	(11.18%)	5.26%	7.05%
Ares ND Credit Strategies Fd - Net	0.00%	10.32%	7.79%	12.18%	3.29%
Cerberus ND Private Credit Fd - Net	2.40%	8.10%	6.89%	10.84%	8.58%
Leveraged Loan B	2.45%	14.82%	(1.07%)	5.22%	3.80%
Goldman Sachs 2006 Offshore - Net	(0.00%)	4.65%	45.10%	7.01%	7.96%
Goldman Sachs Offshore V - Net	(0.00%)	(99.86%)	(6.88%)	11.77%	37.27%
PIMCO Bravo II Fund - Net	5.50%	(12.62%)	(26.04%)	33.16%	(17.51%)
Blmbg HY Corp 2% Issue	1.47%	13.44%	(11.18%)	5.26%	7.05%
Loomis Sayles - Gross	1.26%	11.75%	(12.02%)	4.22%	9.48%
Loomis Sayles - Net	1.15%	11.24%	(12.44%)	3.74%	8.96%
Blmbg HY Corp 2% Issue	1.47%	13.44%	(11.18%)	5.26%	7.05%

<sup>(2)</sup> Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month through June 30, 2018; Blmbg Aggregate thereafter.



<sup>(1)</sup> The product changed from Commingled Fund to Separate Account in March 2014.

	12/2023-				
	3/2024	2023	2022	2021	2020
Global Real Assets					
Gross	(3.02%)	(5.43%)	8.88%	15.64%	3.53%
Net	(3.13%)	(5.86%)	8.52%	15.17%	3.03%
Weighted Benchmark	(0.97%)	(5.85%)	6.91%	15.34%	1.34%
Real Estate					
Gross	(7.27%)	(13.55%)	11.05%	19.15%	1.66%
Net	(7.39%)	(14.05%)	10.60%	18.56%	1.04%
NCREIF Total Index	(0.98%)	(7.94%)	5.53%	17.70%	1.60%
Invesco Core Real Estate - Gross	(4.66%)	(12.47%)	19.92%	16.28%	(0.94%)
Invesco Core Real Estate - Net	(4.75%)	(12.76%)	19.56%	15.90%	(1.27%)
Invesco Asia RE Fund III - Net	2.16%	(2.10%)	(17.80%)	5.07%	16.14%
Invesco RE Fund VI - Net	(12.04%)	9.82%	-	-	-
Invesco Value Added Fd IV - Net	(19.54%)	(51.91%)	(37.72%)	13.75%	1.65%
Invesco Value Added Fd V - Net	(23.80%)	(9.46%)	8.91%	31.80%	1.69%
JP Morgan SPC & Strat RE - Gross	`(6.18%)	(17.23%)	2.70%	22.17%	2.23%
JP Morgan SPC & Strat RE - Net	(6.39%)	(18.20%)	2.02%	21.07%	1.01%
JPM Greater European Opp Fd - Net	(2.21%)	9.29%	(10.65%)	(2.68%)	(8.99%)
NCREIF Total Index	(0.98%)	(7.94%)	5.53%	17.70%	1.60%
Other Real Assets					
Gross	3.48%	9.82%	5.15%	9.85%	6.37%
Net	3.40%	9.56%	4.96%	9.59%	6.05%
Weighted Benchmark	-	(3.28%)	8.58%	12.57%	1.01%
Infrastructure					
Gross	3.81%	10.26%	6.66%	11.51%	9.04%
Net	3.72%	9.94%	6.42%	11.14%	8.60%
Weighted Benchmark	(1.36%)	(5.16%)	7.91%	13.37%	1.07%
ISQ Global Infrastructure II - Net	3.11%	11.48%	8.77%	18.83%	9.58%
ISQ Global Infrastructure III - Net	12.52%	5.24%	(25.81%)	-	-
The Rohatyn Group - Net	0.00%	7.65%	(2.54%)	0.13%	(16.51%)
JP Morgan IIF Infrastructure - Gross	5.83%	15.55%	(1.27%)	8.51%	9.70%
JP Morgan IIF Infrastructure - Net	5.50%	14.45%	(1.91%)	7.68%	8.86%
Grosvenor CIS Fund I - Net	3.85%	25.63%	3.78%	13.31%	9.33%
Grosvenor CIS Fund II - Net	4.38%	12.95%	11.48%	17.74%	14.05%
Grosvenor CIS Fund III - Net	2.25%	11.50%	(4.23%)	-	-
Benchmark(1)	(1.36%)	(5.16%)	7.91%	13.37%	1.07%
Macquarie Infrastructure Fund IV - Net	0.94%	3.20%	18.38%	13.12%	11.16%
Macquarie Infrastructure Fund V - Net	2.61%	4.75%	16.47%	(2.23%)	-
Benchmark(2)	(1.36%)	(5.16%)	7.91%	13.37%	1.07%
Timber					
Net	1.54%	7.87%	(1.54%)	5.66%	(0.12%)
TIR Teredo - Net	4.11%	20.00%	14.61%	7.77%	1.54%
TIR Springbank - Net	0.46%	4.09%	(5.63%)	5.10%	(0.62%)
NCREIF Timberland Index	2.12%	9.45%	12.90%	9.17%	0.81%
Cash & Cash Equivalents - Net	1.37%	5.19%	1.65%	0.06%	0.54%
Cash Account - Net	1.39%	5.22%	1.63%	0.05%	0.54%
BND Cash	1.34%	5.15%	1.63%	0.08%	0.56%
3-month Treasury Bill	1.29%	5.01%	1.46%	0.05%	0.67%
Total Fund					
Gross	3.69%	10.90%	(10.49%)	16.72%	12.34%
Net	3.65%	10.67%	(10.71%)	16.43%	12.06%
Target*	3.52%	11.40%	(10.42%)	16.14%	11.96%
Corridor Benchmark	3.44%	10.64%	(10.93%)	15.21%	11.56%

<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

(2) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.



	6/2023-				
	3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Global Equities					
Gross	13.13%	15.76%	(12.35%)	43.41%	1.47%
Net	12.99%	15.49%	(12.59%)	43.04%	1.28%
Weighted Benchmark	13.23%	15.45%	(12.61%)	43.75%	1.73%
Public Equities					
Gross	16.72%	17.33%	(15.93%)	42.19%	1.44%
Net	16.54%	17.00%	(16.19%)	41.79%	1.23%
Weighted Benchmark	15.58%	16.26%	(16.35%)	41.41%	1.18%
Total Domestic Equity					
Gross	19.35%	19.85%	(13.32%)	42.76%	8.87%
Net	19.17%	19.57%	(13.58%)	42.49%	8.72%
Wtd Avg Domestic Equities Benchmark	18.79%	18.51%	(15.55%)	47.11%	4.13%
Large Cap					
Gross	20.88%	20.68%	(12.55%)	42.63%	13.02%
Net	20.79%	20.46%	(12.72%)	42.56%	12.90%
Large Cap Benchmark(1)	19.61%	19.36%	(13.04%)	43.07%	7.48%
LA Capital LCG - Gross	25.36%	26.61%	(16.03%)	43.58%	22.47%
LA Capital LCG - Net	25.09%	25.89%	(16.20%)	43.31%	22.23%
Russell 1000 Growth Index	23.21%	27.11%	(18.77%)	42.50%	23.28%
L.A. Capital Enhanced - Gross	21.13%	20.10%	(10.78%)	42.73%	8.31%
L.A. Capital Enhanced - Net	20.98%	20.02%	(10.88%)	42.59%	8.20%
Russell 1000 Index	19.61%	19.36%	(13.04%)	43.07%	7.48%
NTAM Quant Enh R1000 - Gross	22.48%	18.63%	(7.61%)	40.38%	3.12%
NTAM Quant Enh R1000 - Net	22.31%	17.88%	(7.73%)	40.38%	3.12%
Benchmark(2)	19.61%	19.02%	(10.62%)	40.79%	7.51%
Parametric-Clifton Enh R1000 - Gross	19.69%	19.20%	(12.79%)	42.04%	7.67%
Parametric-Clifton Enh R1000 - Net	19.69%	19.20%	(13.08%)	42.36%	7.67%
Benchmark(3)	19.61%	19.36%	(10.62%)	40.79%	7.51%
Small Cap					
Gross	10.75%	15.71%	(16.36%)	41.84%	(4.33%)
Net	10.11%	15.08%	(16.92%)	40.81%	(4.57%)
Russell 2000 Index	13.79%	12.31%	(25.20%)	62.03%	(6.63%)
Atlanta Capital - Gross	10.88%	16.47%	(7.04%)	37.18%	(2.76%)
Atlanta Capital - Net	10.15%	15.91%	(7.60%)	36.11%	(3.25%)
S&P 600 Small Cap Index	12.14%	9.75%	(16.81%)	67.40%	(11.29%)
Riverbridge Small Cap Growth - Gross	8.19%	18.61%	(34.53%)	-	-
Riverbridge Small Cap Growth - Net	7.57%	17.75%	(35.06%)	-	-
Russell 2000 Growth Index	12.42%	18.53%	(33.43%)	51.36%	3.48%
Sycamore Small Cap Value - Gross	12.41%	12.74%	(7.68%)	-	-
Sycamore Small Cap Value - Net	11.71%	12.16%	(8.25%)	-	-
Russell 2000 Value Index	15.09%	6.01%	(16.28%)	73.28%	(17.48%)



<sup>(1)</sup> S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.

<sup>(2)</sup> S&P 500 Index through 9/30/2022 and Russell 1000 Index thereafter.
(3) S&P 500 Index through 6/30/2022 and Russell 1000 Index thereafter.

otal International Equity Gross	3/2024	FY 2023	FY 2022		FY 2020
				FY 2021	
	12.67%	13.98%	(21.76%)	39.94%	(0.03%)
Net	12.49%	13.68%	(22.02%)	39.48%	(0.20%)
MSCI ACWIXUS IMI(1)	10.56%	12.40%	(18.90%)	35.39%	(4.91%)
International All Cap					
William Blair Int'l Leaders - Gross	8.89%	17.29%	(28.26%)	38.43%	8.68%
William Blair Int'l Leaders - Net	8.47%	16.97%	(28.52%)	37.99%	8.28%
MSCI ACWI xUS IMI	10.56%	12.47%	(19.86%)	37.18%	(4.74%)
Arrowstreet ACWI ex US - Gross	19.78%	17.75%	_	-	-
Arrowstreet ACWI ex US - Net	19.42%	17.26%	-	-	-
MSCI ACWI ex US IMI	10.56%	12.47%	(19.86%)	37.18%	(4.74%)
Developed Intl Large Cap					
NTAM World ex US - Gross	12.05%	17.59%	(16.20%)	33.94%	(4.94%)
NTAM World ex US - Net	11.99%	17.56%	(16.26%)	33.90%	(4.97%)
MSCI World xUS	11.90%	17.41%	(16.76%)	33.60%	(5.42%)
Developed Intl Small Cap					
	15.23%	15.25%	(13.72%)	43.90%	(11.98%)
MSCI World xUS Sm Value	12.08%	10.58%	(17.41%)	44.91%	(11.36%)
Emerging Markets					
Gross	7.99%	(1.53%)	(27.73%)	47.61%	1.41%
Net	7.93%			46.48%	1.41%
MSCI EM	7.19%	`1.75% <sup>´</sup>	(25.28%)	40.90%	(3.39%)
International All Cap William Blair Int'l Leaders - Gross William Blair Int'l Leaders - Net MSCI ACWI xUS IMI  Arrowstreet ACWI ex US - Gross Arrowstreet ACWI ex US - Net MSCI ACWI ex US IMI  Developed Intl Large Cap NTAM World ex US - Gross NTAM World ex US - Net MSCI World xUS  Developed Intl Small Cap DFA Intl Small Cap Value - Net MSCI World xUS Sm Value  Emerging Markets Gross Net	8.89% 8.47% 10.56% 19.78% 19.42% 10.56% 12.05% 11.99% 11.90%	17.29% 16.97% 12.47% 17.75% 17.26% 12.47% 17.59% 17.56% 17.41% 15.25% 10.58%	(28.26%) (28.52%) (19.86%) 	38.43% 37.99% 37.18% - - 37.18% 33.94% 33.90% 33.60% 44.91% 47.61% 46.48%	8.68% 8.28% (4.74% - - (4.74% (4.94% (4.97% (5.42% (11.98% (11.36%

<sup>(3)</sup> Axiom's performance are reported net of fees through 6/30/2020.



<sup>(1)</sup> Prior to 10/1/2022, the benchmark is calculated based on the approved investment policy asset allocation target.

<sup>(2)</sup> EPAC, Developed World, <\$2B through 2/28/2022; MSCI EAFE Small Cap Index thereafter.

	6/2023-				
	3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Private Equities					
Net	(0.47%)	9.25%	11.73%	48.81%	3.05%
Total ASP (Brinson) Fds 1998-2003	65.88%	1.04%	(13.50%)	9.93%	(3.51%)
Total ASP (Brinson) Non-US 1999-2004	(3.06%)	53.64%	(11.26%)	5.93%	0.06%
Adams St 2008 Non-US P-ship Fd	(5.94%)	12.63%	(15.96%)	49.77%	7.45%
Adams St Direct Co-Invest Fd 2006	0.00%	6.43%	(8.29%)	(15.59%)	(43.85%)
Total Adams Street 2010 Funds	(8.68%)	1.02%	1.86%	69.23%	9.62%
Adams Street 2015 Global Fund	(4.86%)	2.53%	11.91%	59.36%	16.99%
Adams Street 2016 Global Fund	(5.78%)	9.53%	19.13%	46.65%	11.93%
Adams Street 2017 Global Fund	(4.52%)	7.03%	28.72%	48.09%	11.40%
Adams Street 2018 Global Fund	(2.58%)	9.83%	21.47%	51.97%	18.93%
Adams Street 2019 Global Fund	(3.65%)	5.85%	28.10%	133.56%	-
Adams Street 2020 Global Fund	(2.10%)	10.53%	28.68%	-	-
Adams Street 2021 Global Fund	(2.36%)	21.99%	-	-	-
BlackRock PEP	0.52%	10.44%	8.55%	59.23%	1.34%
Blackrock PEP 2020	2.47%	15.97%	7.00%	-	-
Sixth Street Partners - TAO	5.53%	11.52%	6.80%	-	-
Remaining Misc. Funds*	1.08%	(3.17%)	(14.39%)	10.49%	(7.26%)

<sup>\*</sup> Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.



	6/2023- 3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Global Fixed Income	3/2024	F1 2023	F1 2022	F1 2021	F1 2020
Gross	4.68%	1.68%	(8.10%)	5.04%	7.36%
Net	4.56%	1.56%	(8.23%)	4.92%	7.22%
Weighted Benchmark	4.55%	2.03%	(11.03%)	4.20%	6.23%
Domestic Fixed Income					
Gross	4.68%	1.68%	(8.10%)	5.04%	7.36%
Net	4.56%	1.56%	(8.23%)	4.92%	7.22%
Weighted Benchmark	4.55%	2.03%	(11.03%)	4.20%	6.23%
Investment Grade					
Gross	3.96%	(0.63%)	(10.53%)	1.58%	9.79%
Net	3.84%	(0.74%)	(10.64%)	1.49%	9.68%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Manulife-Declaration TRBF - Net	3.74%	1.18%	(5.18%)	6.88%	3.19%
Libor-3 Month	4.37%	4.53%	0.48%	0.22%	1.74%
PIMCO Core Plus Cons Gross(1)	4.51%	(0.33%)	(10.93%)	1.76%	9.20%
PIMCO Core Plus Cons Net	4.28%	(0.57%)	(11.15%)	1.61%	9.07%
Blended Benchmark(2)	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
PIMCO DiSCO II - Net	7.98%	5.07%	1.64%	8.56%	2.93%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Prudential Core - Gross	3.80%	0.04%	(11.41%)	1.79%	8.62%
Prudential Core - Net	3.67%	(0.06%)	(11.51%)	1.68%	8.49%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Below Investment Grade					
Gross	6.32%	7.43%	(1.03%)	14.71%	1.20%
Net	6.20%	7.29%	(1.20%)	14.49%	0.98%
Blmbg HY Corp 2% Issue	9.24%	9.07%	(12.82%)	15.34%	(0.00%)
Ares ND Credit Strategies Fd - Net	3.87%	7.65%	8.95%	13.53%	1.72%
Cerberus ND Private Credit Fd - Net	6.25%	7.76%	7.08%	11.09%	8.93%
Leveraged Loan B	9.75%	11.48%	(2.97%)	11.68%	(1.14%)
Goldman Sachs 2006 Offshore - Net	(0.05%)	47.56%	6.99%	6.04%	6.28%
Goldman Sachs Offshore V - Net	(99.87%)	9.32%	(12.02%)	66.09%	25.90%
PIMCO Bravo II Fund - Net	11.31%	(35.44%)	(1.13%)	28.42%	(18.00%)
Blmbg HY Corp 2% Issue	9.24%	9.07%	(12.82%)	15.34%	(0.00%)
Loomis Sayles - Gross	9.12%	7.90%	(15.12%)	17.16%	(0.77%)
Loomis Sayles - Net	8.73%	7.42%	(15.52%)	16.61%	(1.28%)
Blmbg HY Corp 2% Issue	9.24%	9.07%	(12.82%)	15.34%	(0.00%)

<sup>(2)</sup> Libor-3 month through Feb. 28, 2014; Fund's performance through March 31, 2014; Libor-3 month through June 30, 2018; Blmbg Aggregate thereafter.



<sup>(1)</sup> The product changed from Commingled Fund to Separate Account in March 2014.

	6/2023-				
	3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Global Real Assets					
Gross	(5.81%)	(4.68%)	18.97%	10.50%	3.73%
Net	(6.10%)	(5.01%)	18.52%	9.98%	3.35%
Weighted Benchmark	(4.09%)	(4.13%)	19.51%	6.22%	2.08%
Real Estate					
Gross	(12.59%)	(10.50%)	25.59%	9.56%	2.66%
Net	(12.95%)	(10.87%)	24.96%	8.91%	2.20%
NCREIF Total Index	(5.29%)	(6.60%)	21.45%	7.37%	2.69%
Invesco Core Real Estate - Gross	(6.15%)	(9.82%)	27.19%	7.80%	1.32%
Invesco Core Real Estate - Net	(6.33%)	(10.10%)	26.79%	7.45%	0.98%
Invesco Asia RE Fund III - Net	(3.36%)	(5.38%)	(9.77%)	9.94%	16.93%
Invesco Value Added Fd IV - Net	(42.04%)	(58.61%)	3.60%	11.33%	5.79%
Invesco Value Added Fd V - Net	(26.84%)	(5.60%)	18.37%	20.44%	2.95%
JP Morgan SPC & Strat RE - Gross	(17.59%)	(12.92%)	28.76%	7.92%	3.15%
JP Morgan SPC & Strat RE - Net	(18.35%)	(13.54%)	27.63%	6.67%	2.40%
JPM Greater European Opp Fd - Net	1.76%	7.65%	(12.90%)	6.20%	(29.62%)
NCREIF Total Index	(5.29%)	(6.60%)	21.45%	7.37%	2.69%
Other Real Assets					
Gross	5.25%	6.26%	8.33%	11.99%	5.30%
Net	5.11%	6.01%	8.14%	11.65%	5.03%
Weighted Benchmark	-	(1.09%)	17.21%	4.82%	1.28%
Infrastructure					
Gross	4.84%	8.92%	8.50%	14.94%	4.84%
Net	4.68%	8.61%	8.26%	14.47%	4.46%
Weighted Benchmark	(4.11%)	(3.04%)	18.33%	5.27%	1.62%
ISQ Global Infrastructure II - Net	3.58%	10.04%	12.90%	19.91%	6.15%
ISQ Global Infrastructure III - Net	8.29%	1.78%	-	-	-
The Rohatyn Group - Net	7.54%	(0.08%)	1.33%	(3.24%)	(18.03%)
JP Morgan IIF Infrastructure - Gross	7.01%	12.50%	1.85%	11.91%	5.31%
JP Morgan IIF Infrastructure - Net	6.43%	11.49%	1.23%	10.93%	4.62%
Grosvenor CIS Fund I - Net	1.69%	28.49%	6.18%	15.73%	3.38%
Grosvenor CIS Fund II - Net	3.12%	16.63%	10.66%	25.15%	5.23%
Grosvenor CIS Fund III - Net	7.13%	5.19%	-	-	-
Benchmark(1)	(4.11%)	(3.04%)	18.33%	5.27%	1.62%
Macquarie Infrastructure Fund IV - Net	1.82%	2.67%	15.50%	20.58%	9.14%
Macquarie Infrastructure Fund V - Net	3.16%	6.21%	18.12%	20.0070	J. 14 /0
Benchmark(2)	(4.11%)	(3.04%)	18.33%	5.27%	1.62%
Timber					
Net	7.21%	(5.29%)	7.35%	4.87%	6.29%
TIR Teredo - Net	6.87%	17.95%	15.73%	7.30%	0.16%
TIR Springbank - Net	7.27%	(11.86%)	5.24%	4.25%	8.35%
NCREIF Timberland Index	8.00%	11.13%	12.01%	3.10%	0.34%
Cash & Cash Equivalents - Net	4.11%	3.92%	0.22%	0.11%	1.46%
Cash Account - Net	4.11% 4.12%	3.92% 3.93%	0.22%	0.11%	1.46%
BND Cash	4.12%	3.83%	0.22%	0.11%	1.49%
3-month Treasury Bill	4.03%	3.59%	0.22%	0.09%	1.63%
Total Fund					
Gross	7.48%	8.00%	(6.27%)	27.07%	3.64%
Net	7.32%	7.76%	(6.51%)	26.75%	3.42%
Target*	7.88%	8.44%	(6.70%)	25.92%	3.42 %
Corridor Benchmark	7.37%	7.82%	(7.28%)	25.64%	2.79%
Comdoi Denominark	1.51 /0	1.02/0	(1.2070)	20.07/0	2.10/0

<sup>\*</sup> Current Quarter Target = 24.7% Russell 1000 Index, 17.8% Blmbg:Aggregate, 17.4% MSCI ACWI xUS IMI, 11.0% Private Equity, 9.7% NCREIF Total Index, 7.7% Blmbg HY Corp 2% Iss Cap, 4.4% Russell 2000 Index, 2.9% NCREIF NFI-ODCE Eq Wt Net, 2.9% CPI All Urban Cons lagged 3 months, 1.0% NCREIF Timberland Index and 0.4% 3-month Treasury Bill.

(1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

(2) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

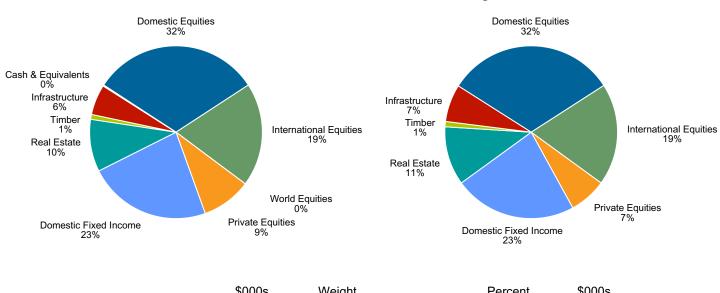


# Actual vs Target Asset Allocation As of March 31, 2024

**Actual Asset Allocation** 

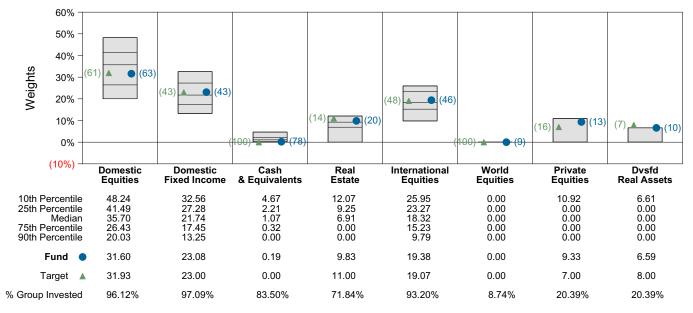
The top left chart shows the Fund's asset allocation as of March 31, 2024. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.

**Target Asset Allocation** 



	\$000s	Weight		Percent	\$000s
Asset Class	Actual	Actual	Target	Difference	Difference
Domestic Equities	1,359,582	31.6%	31.9%	(0.3%)	(14,453)
International Equities	833,891	19.4%	19.1%	0.3%	`13,496
World Equities .	26	0.0%	0.0%	0.0%	26
Private Equities	401,406	9.3%	7.0%	2.3%	100,209
Domestic Fixed Income	992,973	23.1%	23.0%	0.1%	3,328
Real Estate	423,055	9.8%	11.0%	(1.2%)	(50,254)
Timber	38,804	0.9%	1.0%	(0.1%)	(4,169)
Infrastructure	244,879	5.7%	7.0%	(1.3%)	(56,373)
Cash & Equivalents	8,190	0.2%	0.0%	0.2%	8,190
Total	4.302.807	100.0%	100.0%		

#### Asset Class Weights vs Callan Public Fund Sponsor Database

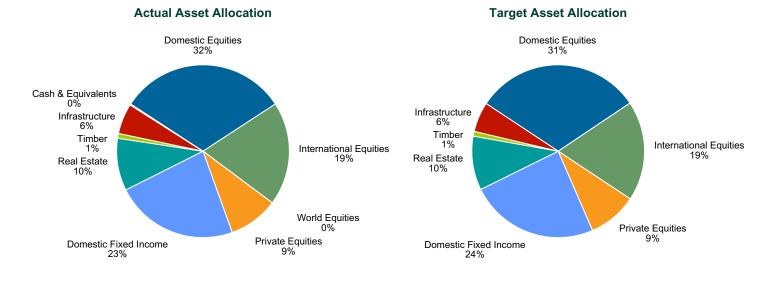


<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



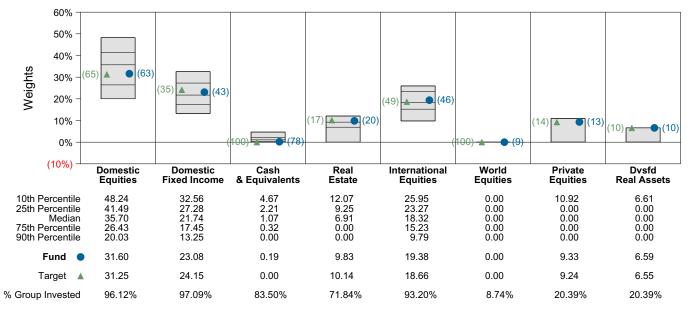
# Actual vs Corridor Target Asset Allocation As of March 31, 2024

The top left chart shows the Fund's asset allocation as of March 31, 2024. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	1,359,582	31.6%	31.3%	0.3%	14,806
International Equities	833,891	19.4%	18.7%	0.7%	30,965
World Equities .	26	0.0%	0.0%	0.0%	26
Private Equities	401,406	9.3%	9.2%	0.1%	3,871
Domestic Fixed Income	992,973	23.1%	24.2%	(1.1%)	(46,281)
Real Estate	423,055	9.8%	10.1%	(0.3%)	(13,392)
Timber	38,804	0.9%	0.9%	(0.0%)	(632) 2,447
Infrastructure	244,879	5.7%	5.6%	0.1%	2,447
Cash & Equivalents	8,190	0.2%	0.0%	0.2%	8,190
Total	4,302,807	100.0%	100.0%		

#### Asset Class Weights vs Callan Public Fund Sponsor Database



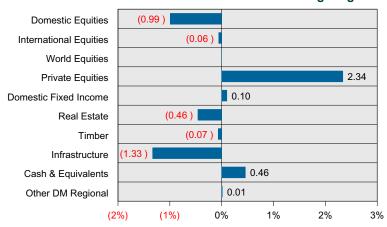
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



## Quarterly Total Fund Relative Attribution - March 31, 2024

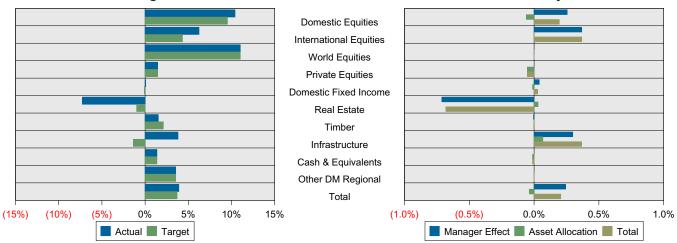
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation 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.





## **Actual vs Target Returns**

## **Relative Attribution by Asset Class**



#### Relative Attribution Effects for Quarter ended March 31, 2024

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	31%	32%	10.41%	9.53%	0.26%	(0.06%)	0.19%
International Equities	19%	19%	6.25%	4.33%	0.37%	0.00%	0.37%
World Equities	0%	0%	11.02%	11.02%	0.00%	0.00%	0.00%
Private Equities	9%	7%	1.45%	1.45%	0.00%	(0.05%)	(0.05%)
Domestic Fixed Income	23%	23%	0.08%	(0.09%)	0.04%	(0.01%)	0.03%
Real Estate	11%	11%	(7.27%)	(0.98%)	(0.71%)	0.03%	(0.68%)
Timber	1%	1%	1.53%	2.12%	(0.01%)	0.00%	(0.00%)
Infrastructure	6%	7%	3.81%	(1.36%)	0.30%	0.07%	0.37%
Cash & Equivalents	0%	0%	1.37%	1.37%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	3.55%	3.55%	0.00%	(0.00%)	(0.00%)
Total			3.91% =	3.70% +	0.24% +	(0.04%)	0.21%

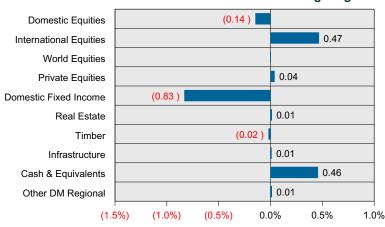
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



## Quarterly Total Fund Relative Attribution vs Corridor Target - March 31, 2024

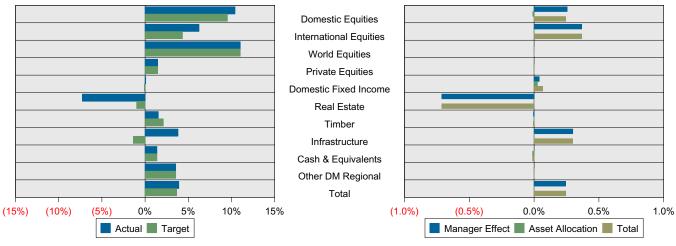
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation 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.





## **Actual vs Target Returns**

## Relative Attribution by Asset Class



#### Relative Attribution Effects for Quarter ended March 31, 2024

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	31%	31%	10.41%	9.53%	0.26%	(0.01%)	0.24%
International Equities	19%	19%	6.25%	4.33%	0.37%	(0.00%)	0.37%
World Equities '	0%	0%	11.02%	11.02%	0.00%	`0.00%	0.00%
Private Equities	9%	9%	1.45%	1.45%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	23%	24%	0.08%	(0.09%)	0.04%	`0.03%´	0.07%
Real Estate	11%	11%	(7.27%)	(0.98%)	(0.71%)	(0.00%)	(0.71%)
Timber	1%	1%	`1.53%´	2.12%	(0.01%)	(0.00%)	(0.01%)
Infrastructure	6%	6%	3.81%	(1.36%)	0.30%	(0.00%)	0.30%
Cash & Equivalents	0%	0%	1.37%	1.37%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	3.55%	3.55%	0.00%	(0.00%)	(0.00%)
Total			3.91% =	3.66% +	0.24% +	0.00%	0.24%

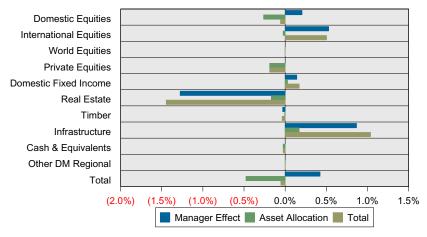
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



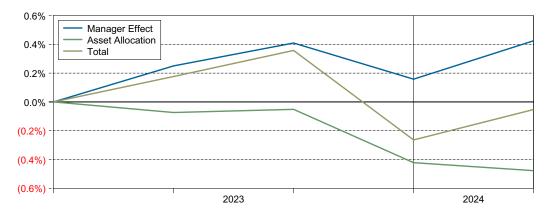
## **Cumulative Total Fund Relative Attribution - March 31, 2024**

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
Domestic Equities	30%	31%	29.21%	28.38%	0.21%	(0.26%)	(0.06%)
International Equities	19%	20%	16.09%	13.20%	0.53%	(0.03%)	0.50%
World Equities	0%	0%	(3.49%)	(3.49%)	0.00%	(0.00%)	(0.00%)
Private Equities	10%	7%	5.21%	5.21%	0.00%	(0.19%)	(0.19%)
Domestic Fixed Income	22%	23%	5.09%	4.50%	0.14%	0.03%	0.17%
Real Estate	12%	11%	(16.41%)	(7.16%)	(1.28%)	(0.17%)	(1.45%)
Timber	1%	1%	6.84%	9.85%	(0.03%)	(0.01%)	(0.04%)
Infrastructure	6%	7%	8.98%	(4.78%)	0.87%	0.17%	1.04%
Cash & Equivalents	0%	0%	5.43%	5.43%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	32.61%	32.61%	0.00%	0.00%	0.00%
Total			11.37% =	11.42% +	0.42% +	(0.48%)	(0.05%)

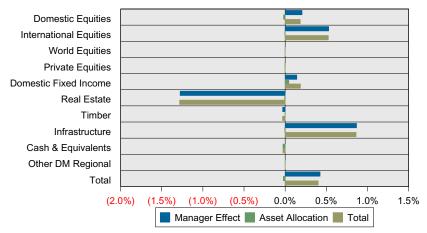
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



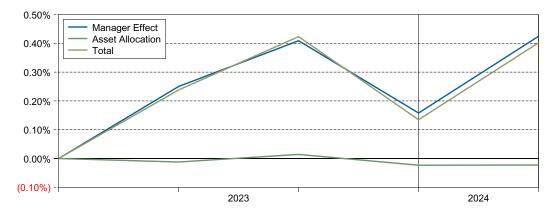
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	30%	30%	29.21%	28.38%	0.21%	(0.02%)	0.18%
International Equities	19%	19%	16.09%	13.20%	0.53%	(0.00%)	0.52%
World Equities	0%	0%	(3.49%)	(3.49%)	0.00%	(0.00%)	(0.00%)
Private Equities	10%	10%	`5.21%´	5.21%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	22%	23%	5.09%	4.50%	0.14%	0.04%	0.19%
Real Estate	12%	12%	(16.41%)	(7.16%)	(1.28%)	(0.01%)	(1.28%)
Timber	1%	1%	6.84%	9.85%	(0.03%)	(0.00%)	(0.03%)
Infrastructure	6%	6%	8.98%	(4.78%)	0.87%	(0.01%)	`0.86%
Cash & Equivalents	0%	0%	5.43%	5.43%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	32.61%	32.61%	0.00%	0.00%	0.00%
Total			11.37% =	10.97% +	0.42% +	(0.02%)	0.40%

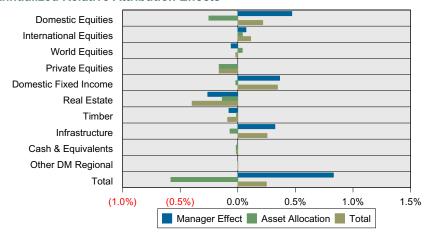
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



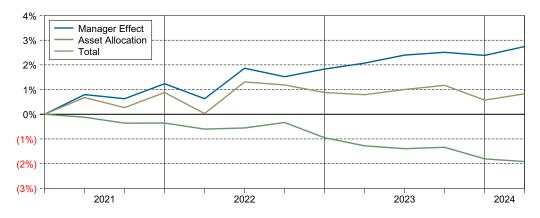
## **Cumulative Total Fund Relative Attribution - March 31, 2024**

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
Domestic Equities	27%	28%	10.43%	8.58%	0.47%	(0.25%)	0.22%
International Equities	18%	18%	2.31%	2.07%	0.07%	0.04%	0.11%
World Equities '	6%	5%	(8.97%)	(8.69%)	(0.06%)	0.04%	(0.02%)
Private Equities	8%	7%	14.73%	14.73%	0.00%	(0.16%)	(0.16%)
Domestic Fixed Income	23%	23%	0.41%	(1.03%)	0.36%	(0.02%)	0.35%
Real Estate	12%	11%	1.23%	3.63%	(0.26%)	(0.14%)	(0.40%)
Timber	1%	1%	4.44%	10.99%	(0.08%)	(0.01%)	(0.09%)
Infrastructure	5%	7%	9.39%	4.23%	0.32%	(0.07%)	0.25%
Cash & Equivalents	0%	0%	2.69%	2.69%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			5.34% =	5.09% +	0.83% +	(0.58%)	0.25%

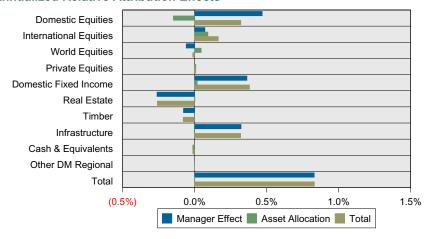
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



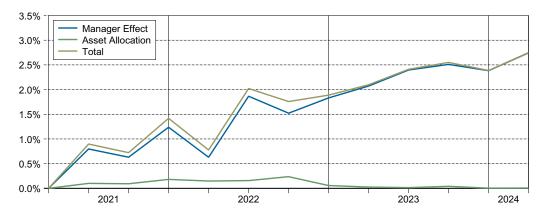
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	27%	27%	10.43%	8.58%	0.47%	(0.15%)	0.32%
International Equities	18%	18%	2.31%	2.07%	0.07%	0.09%	0.16%
World Equities	6%	5%	(8.97%)	(8.69%)	(0.06%)	0.05%	(0.01%)
Private Equities	8%	8%	14.73%	14.73%	0.00%	0.01%	0.01%
Domestic Fixed Income	23%	23%	0.41%	(1.03%)	0.36%	0.02%	0.38%
Real Estate	12%	12%	1.23%	3.63%	(0.26%)	0.00%	(0.26%)
Timber	1%	1%	4.44%	10.99%	(0.08%)	(0.00%)	(0.08%)
Infrastructure	5%	5%	9.39%	4.23%	0.32%	(0.00%)	0.32%
Cash & Equivalents	0%	0%	2.69%	2.69%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	=	0.00%	0.00%	0.00%
Total			5.34% =	4.50% +	0.83% +	0.00%	0.83%

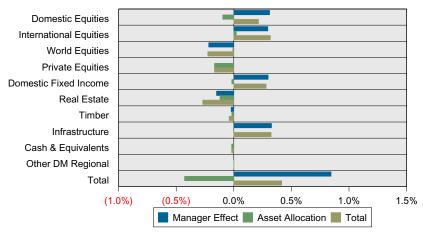
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



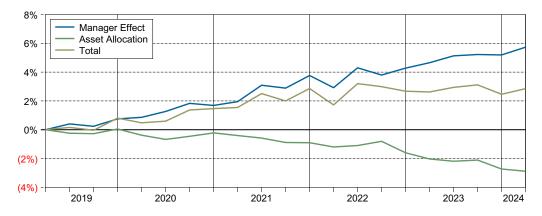
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The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of 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.

#### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	25%	14.96%	13.58%	0.31%	(0.10%)	0.21%
International Equities	17%	17%	7.83%	6.01%	0.30%	0.02%	0.32%
World Equities	9%	9%	(0.19%)	0.99%	(0.22%)	(0.01%)	(0.23%)
Private Equities	7%	7%	14.94%	14.94%	0.00%	(0.17%)	(0.17%)
Domestic Fixed Income	23%	23%	2.74%	1.58%	0.30%	(0.02%)	0.28%
Real Estate	12%	11%	2.39%	3.76%	(0.15%)	(0.12%)	(0.27%)
Timber	2%	2%	4.35%	7.04%	(0.02%)	(0.02%)	(0.04%)
Infrastructure	5%	6%	9.25%	3.55%	0.33%	(0.00%)	0.32%
Cash & Equivalents	0%	0%	2.05%	2.05%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	0.00%
Total			8.37% =	7.95%	+ 0.84% +	(0.43%)	0.42%

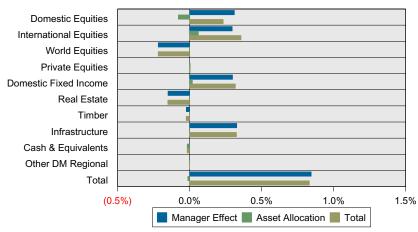
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



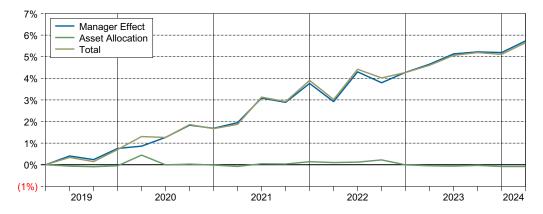
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The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of 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.

#### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	25%	25%	14.96%	13.58%	0.31%	(0.08%)	0.23%
International Equities	17%	17%	7.83%	6.01%	0.30%	0.06%	0.36%
World Equities	9%	9%	(0.19%)	0.99%	(0.22%)	(0.00%)	(0.22%)
Private Equities	7%	7%	14.94%	14.94%	0.00%	0.00%	0.00%
Domestic Fixed Income	23%	23%	2.74%	1.58%	0.30%	0.02%	0.32%
Real Estate	12%	12%	2.39%	3.76%	(0.15%)	(0.00%)	(0.15%)
Timber	2%	2%	4.35%	7.04%	(0.02%)	(0.00%)	(0.02%)
Infrastructure	5%	5%	9.25%	3.55%	0.33%	(0.00%)	0.33%
Cash & Equivalents	0%	0%	2.05%	2.05%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	-		0.00%	0.00%	0.00%
Total			8.37% =	7.54%	+ 0.84% +	(0.01%)	0.83%

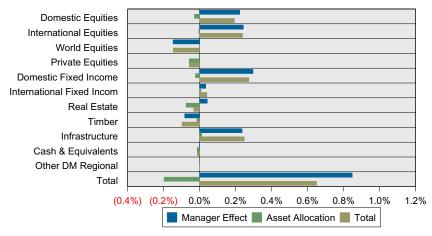
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



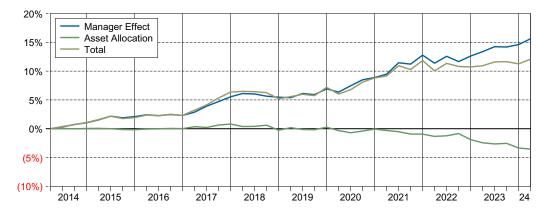
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The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of 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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Ten Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	23%	12.71%	11.71%	0.22%	(0.03%)	0.19%
International Equities	16%	16%	5.83%	4.33%	0.24%	(0.00%)	0.24%
World Equities	13%	12%	2.99%	3.85%	(0.15%)	`0.00%	(0.15%)
Private Equities	5%	7%	7.65%	7.65%	0.00%	(0.06%)	(0.06%)
Domestic Fixed Income	21%	21%	3.80%	2.44%	0.30%	(0.02%)	0.27%
International Fixed Incom	2%	2%	-	-	0.03%	`0.01%′	0.04%
Real Estate	11%	11%	6.84%	6.41%	0.04%	(0.08%)	(0.03%)
Timber	2%	3%	2.13%	5.83%	(0.08%)	(0.01%)	(0.10%)
Infrastructure	5%	6%	7.17%	2.61%	0.24%	0.01%	0.25%
Cash & Equivalents	1%	0%	1.45%	1.43%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	`0.00%′	0.00%′
Total			7.45% =	6.80% -	+ 0.85% +	(0.20%)	0.65%

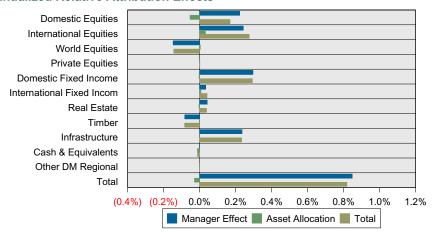
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



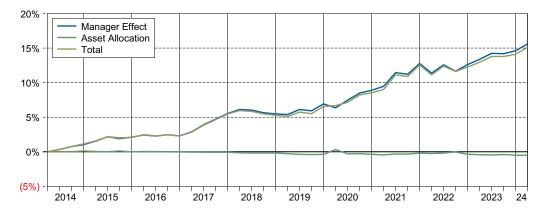
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## **Ten Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	24%	24%	12.71%	11.71%	0.22%	(0.05%)	0.17%
International Equities	16%	17%	5.83%	4.33%	0.24%	`0.03%′	0.28%
World Equities	13%	12%	2.99%	3.85%	(0.15%)	0.00%	(0.14%)
Private Equities	5%	5%	7.65%	7.65%	0.00%	0.00%	0.00%
Domestic Fixed Income	21%	21%	3.80%	2.44%	0.30%	(0.00%)	0.29%
International Fixed Incom	2%	2%	-	-	0.03%	`0.01%′	0.04%
Real Estate	11%	11%	6.84%	6.41%	0.04%	(0.00%)	0.04%
Timber	2%	2%	2.13%	5.83%	(0.08%)	(0.00%)	(0.08%)
Infrastructure	5%	5%	7.17%	2.61%	0.24%	(0.00%)	0.23%
Cash & Equivalents	1%	0%	1.45%	1.43%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%		-	0.00%	0.00%	0.00%
Total			7.45% =	6.64%	+ 0.85% +	(0.03%)	0.82%

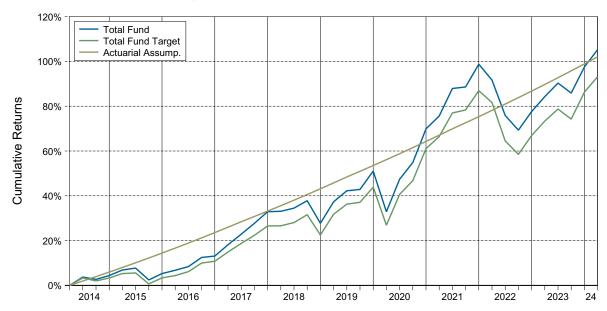
<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index.



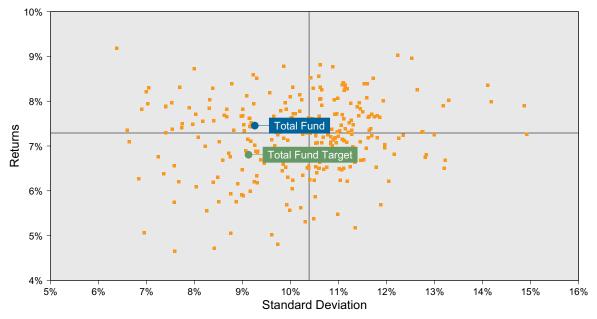
# **Cumulative Performance Relative to Target**

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 Sponsor Database.

### **Cumulative Returns Actual vs Target**



#### Ten Year Annualized Risk vs Return



Squares represent membership of the Callan Public Fund Sponsor Database

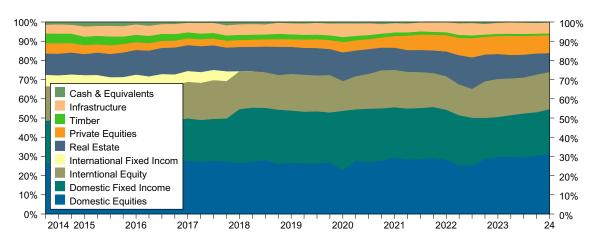
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



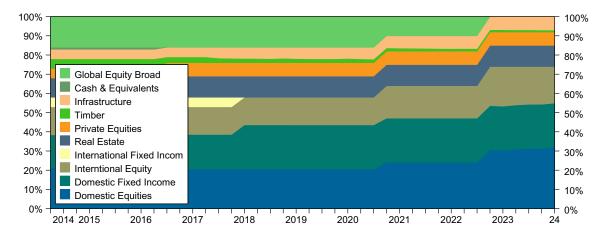
## **Actual vs Target Historical Asset Allocation**

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 Sponsor Database.

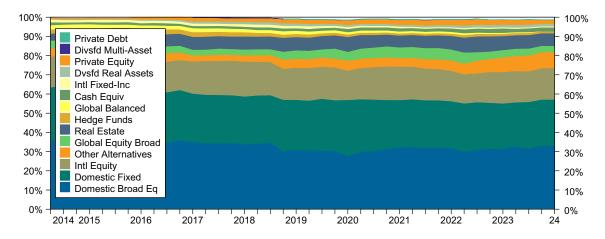
#### **Actual Historical Asset Allocation**



#### **Target Historical Asset Allocation**



#### Average Callan Public Fund Sponsor Database Historical Asset Allocation



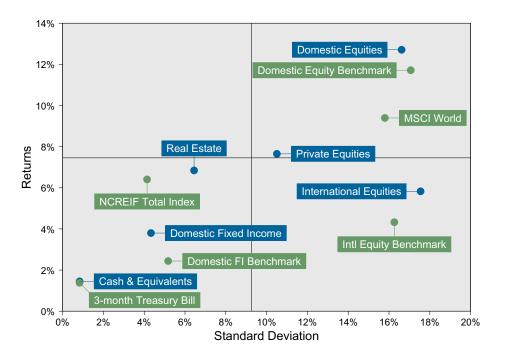
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



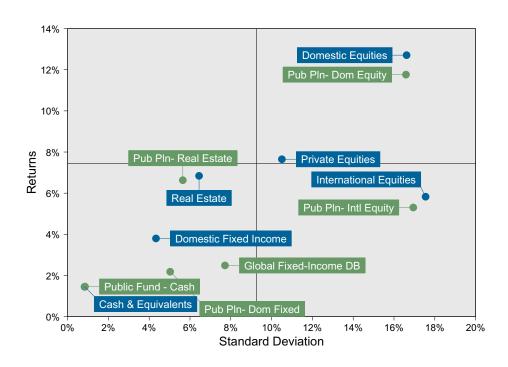
## **Asset Class Risk and Return**

The charts below show the ten 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.

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



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

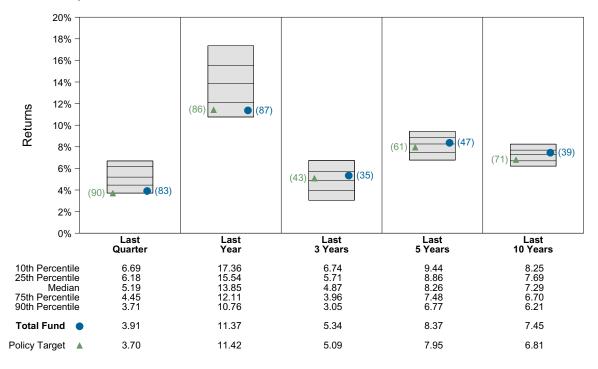




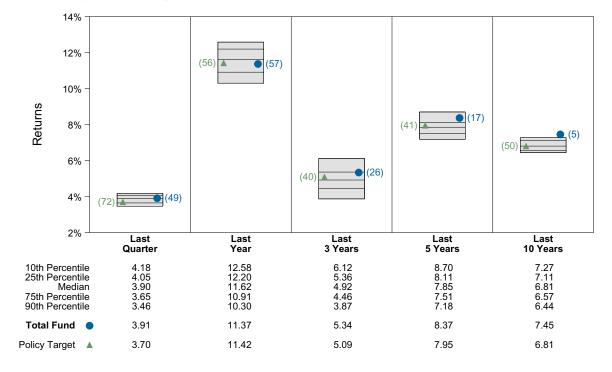
# **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended March 31, 2024. 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 Sponsor Database**



#### **Asset Allocation Adjusted Ranking**

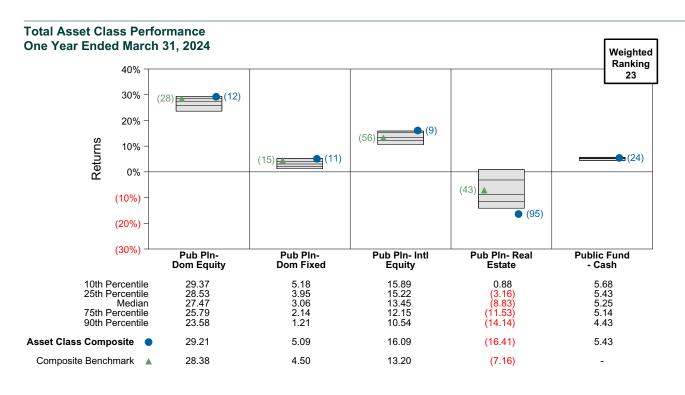


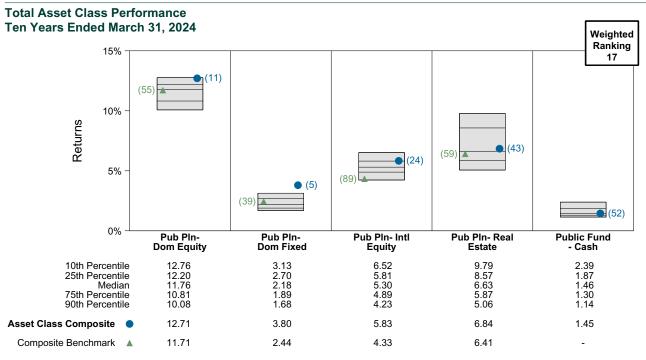
<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% Blmbg:Aggregate, 11.0% NCREIF Total Index, 7.0% Blmbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



# **Asset Class Rankings**

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.





<sup>\*</sup> Current Quarter Target = 27.1% Russell 1000 Index, 19.1% MSCI ACWI xUS IMI, 16.0% BImbg:Aggregate, 11.0% NCREIF Total Index, 7.0% BImbg HY Corp 2% Iss Cap, 7.0% Private Equity, 4.8% Russell 2000 Index, 3.5% NCREIF NFI-ODCE Eq Wt Net, 3.5% CPI All Urban Cons lagged 3 months and 1.0% NCREIF Timberland Index.



# **Asset Class Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2024, with the distribution as of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

# **Asset Class Allocation**

	March 31,	2024			December 31, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Global Equities	\$2,594,905,534	60.30%	\$(60,010,654)	\$185,040,717	\$2,469,875,471	59.40%	
Public Equities	\$2,193,499,899	50.97%	\$(69,012,703)	\$179,387,075	\$2,083,125,527	50.10%	
World Equities	\$26,165	0.00%	\$(3,930)	\$3,001	\$27,094	0.00%	
Domestic Equities	\$1,359,582,400	31.59%	\$(36,430,149)	\$129,810,179	\$1,266,202,370	30.45%	
Large Cap	1,163,518,362	27.04%	(31,280,852)	122,878,429	1,071,920,785	25.78%	
Small Cap	196,064,038	4.56%	(5,149,297)	6,931,750	194,281,585	4.67%	
International Equities	\$833,891,334	19.38%	\$(32,578,624)	\$49,573,895	\$816,896,063	19.65%	
International All Cap	348,725,268	8.10%	4,494,025	27,756,076	316,475,166	7.61%	
Developed Intl Large Cap	304,783,324	7.08%	(27,435,388)	17,863,165	314,355,547	7.56%	
Developed Intl Small Cap	47,728,823	1.11%	(1,060,951)	1,239,613	47,550,162	1.14%	
Emerging Markets	132,653,919	3.08%	(8,576,310)	2,715,041	138,515,188	3.33%	
Private Equities	\$401,405,635	9.33%	\$9,002,050	\$5,653,642	\$386,749,944	9.30%	
Global Fixed Income	\$992,973,332	23.07%	\$50,706,606	\$1,216,949	\$941,049,777	22.63%	
Domestic Fixed Income	\$992,973,332	23.07%	\$50,706,606	\$1,216,949	\$941,049,777	22.63%	
Investment Grade	708,407,833	16.46%	46,434,072	(2,387,351)	664,361,111	15.98%	
Below Investment Grade	284,565,500	6.61%	4,272,534	3,604,299	276,688,666	6.65%	
Global Real Assets	\$706,738,064	16.42%	\$(313,571)	\$(23,640,079)	\$730,691,715	17.57%	
Real Estate	\$423,054,818	9.83%	\$987,842	\$(33,167,668)	\$455,234,644	10.95%	
Other Real Assets	\$283,683,246	6.59%	\$(1,301,413)	\$9,527,589	\$275,457,070	6.62%	
Infrastructure	244,879,436	5.69%	2,026,031	8,925,383	233,928,022	5.63%	
Timber	38,803,810	0.90%	(3,327,444)	602,206	41,529,049	1.00%	
Cash	\$8,189,929	0.19%	\$(8,272,015)	\$287,142	\$16,174,801	0.39%	
Residual Holdings	\$476,946	0.01%	\$(7,631)	\$16,644	\$467,932	0.01%	
Total Fund	\$4,303,283,805	100.00%	\$(17,897,264)	\$162,921,373	\$4,158,259,696	100.00%	



# **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Global Equities	455.551				
Gross	7.61%	20.69%	7.77%	11.70%	9.29%
Net	7.56%	20.47%	7.52%	11.45%	9.02%
Weighted Benchmark	6.79%	20.21%	7.49%	11.48%	8.90%
Weighted Benchmark	0.7976	20.2176	7.4970	11.40 %	6.90 %
Public Equities					
Gross	8.79%	23.90%	7.27%	11.49%	-
Net	8.73%	23.63%	6.98%	11.21%	-
Weighted Benchmark	7.53%	22.30%	6.31%	10.73%	-
Namastia Equitios					
Oomestic Equities Gross	10.41%	29.21%	10.43%	14.96%	12.71%
Net	10.37%	28.94%	10.16%	14.73%	12.71%
Weighted Benchmark	9.53%	28.38%	8.58%	13.58%	11.71%
vveignieu benonnark	9.55%	20.30%	0.30%	13.30%	11.7176
Large Cap					
Gross	11.61%	31.90%	11.93%	16.49%	13.94%
Net	11.59%	31.75%	11.75%	16.34%	13.79%
Benchmark(1)	10.30%	29.87%	10.45%	14.76%	12.68%
Small Cap					
Gross	3.68%	14.59%	3.51%	8.65%	7.96%
Net					
	3.52%	13.75%	2.84%	8.03%	7.48%
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	7.58%
nternational Equities					
Gross	6.25%	16.09%	2.31%	7.83%	5.83%
Net	6.17%	15.80%	2.02%	7.55%	5.60%
Weighted Benchmark	4.33%	13.20%	2.07%	6.01%	4.33%
nternational All Cap					
Gross	8.89%	20.89%	_	_	_
Net	8.81%	20.37%	-	-	-
MSCI ACWI xUS IMI	4.33%	13.20%	- 1.72%	6.00%	4.32%
MSCI ACWI XOS IMI	4.33%	13.20%	1.7270	6.00%	4.32%
Developed Intl Large Cap					
Gross	5.73%	15.58%	-	-	-
Net	5.73%	15.57%	-	-	-
MSCI World xUS	5.59%	15.29%	4.93%	7.48%	4.81%
Developed Intl Small Cap					
Gross	3.72%	11.59%	-	_	_
Net	3.04%	10.61%	-	-	-
	3.04% 2.58%		(O O20/ )	- 5 200/	- 4.54%
MSCI World xUS Small	2.38%	10.04%	(0.93%)	5.39%	4.54%
Emerging Markets					
Gross	2.20%	8.26%	(6.10%)	3.25%	3.97%
Net	2.19%	8.13%	(6.46%)	2.87%	3.77%
Benchmark(2)	2.37%	8.15%	(5.05%)	2.22%	2.95%
Niverte Equities					
Private Equities Net	1.45%	5.21%	14.73%	14.94%	7.65%
INCL	1.40%	J.Z 1 70	14.7370	14.54 /0	7.00%

<sup>(2)</sup> MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.





<sup>(1)</sup> S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

# **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Fixed Income	Quartor	1001	10010	Touro	rouro
Gross	0.08%	5.09%	0.41%	2.74%	3.58%
Net	0.05%	4.97%	0.29%	2.61%	3.41%
Weighted Benchmark	(0.09%)	4.50%	(1.04%)	1.58%	2.23%
Weighted Benchmark	(0.0970)	4.50 /6	(1.0470)	1.30 /6	2.23 /0
Domestic Fixed Income					
Gross	0.08%	5.09%	0.41%	2.74%	3.80%
Net	0.05%	4.97%	0.29%	2.61%	3.63%
Weighted Benchmark	(0.09%)	4.50%	(1.03%)	1.58%	2.44%
nvestment Grade					
Gross	(0.42%)	3.39%	(1.74%)	1.26%	2.78%
Net	(0.45%)	3.27%	(1.86%)	1.15%	2.67%
Blmbg Aggregate Index	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Dimby Aggrogate index	(0.1070)	1.1070	(2.1070)	0.0070	1.0170
Below Investment Grade					
Gross	1.29%	9.07%	5.73%	6.26%	6.13%
Net	1.26%	8.94%	5.58%	6.09%	5.85%
Blmbg HY Corp 2% Issue	1.47%	11.15%	2.19%	4.19%	4.44%
Global Real Assets					
Gross	(3.24%)	(7.80%)	3.89%	4.53%	6.21%
Net	(3.35%)	(8.12%)	3.49%	4.11%	5.78%
Real Estate					
Gross	(7.27%)	(16.41%)	1.23%	2.39%	6.84%
Net	(7.39%)	(16.76%)	0.75%	1.88%	6.33%
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
NOILE Total Index	(0.3070)	(7.1070)	3.00 /0	3.7070	0.4170
Other Real Assets					
Gross	3.49%	8.66%	8.49%	8.18%	-
Net	3.41%	8.41%	8.24%	7.90%	-
nfrastructure					
Gross	3.81%	8.98%	9.39%	9.25%	7.17%
Net	3.72%	8.68%	9.07%	8.89%	6.72%
Benchmark(1)	(1.36%)	(4.78%)	4.23%	3.55%	2.61%
<b>Fimber</b>					
Net	1.53%	6.84%	4.44%	4.35%	2.13%
NCREIF Timberland Index	2.12%	9.85%	10.99%	7.04%	5.83%
Cash & Equivalents - Net	1.37%	5.43%	2.69%	2.05%	1.45%
3-month Treasury Bill	1.29%	5.24%	2.58%	2.02%	1.38%
Total Fund					
Gross	3.91%	11.37%	5.34%	8.37%	7.45%
Net	3.86%	11.15%	5.09%	8.11%	7.18%
Target*	3.70%	11.42%	5.09%	7.95%	6.81%
Corridor Target	3.66%	10.97%	4.50%	7.54%	6.64%

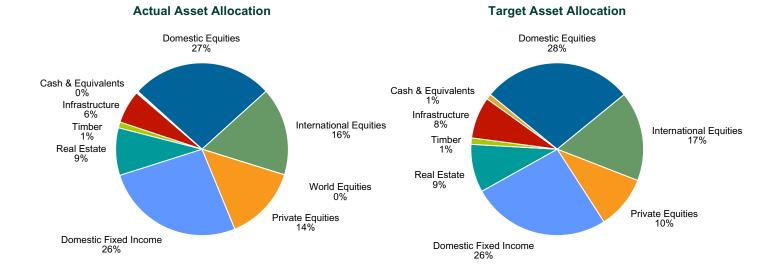
PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.



<sup>\*</sup> Current Quarter Target = 26.6% Russell 1000 Index, 18.7% MSCI ACWI xUS IMI, 16.8% Blmbg:Aggregate, 10.1% NCREIF Total Index, 9.2% Private Equity, 7.4% Blmbg HY Corp 2% Iss Cap, 4.7% Russell 2000 Index, 2.8% NCREIF NFI-ODCE Eq Wt Net, 2.8% CPI All Urban Cons lagged 3 months and 0.9% NCREIF Timberland Index. (1) CPI-W through June 30, 2018; 50 CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

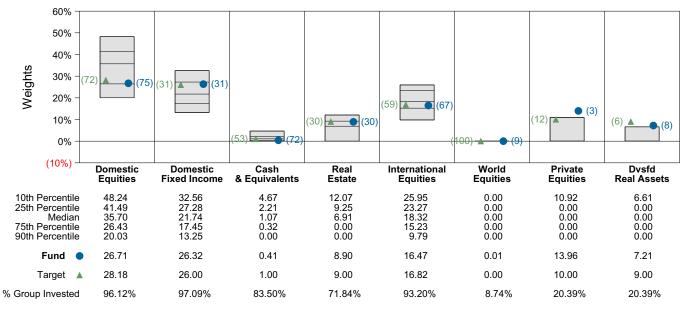
# Actual vs Target Asset Allocation As of March 31, 2024

The top left chart shows the Fund's asset allocation as of March 31, 2024. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	871,015	26.7%	28.2%	(1.5%)	(47,736)
International Equities	537,128	16.5%	16.8%	(0.4%)	(11,431)
World Equities •	238	0.0%	0.0%	0.0%	238
Private Equities	455,354	14.0%	10.0%	4.0%	129,286
Domestic Fixed Income	858,289	26.3%	26.0%	0.3%	10,510
Real Estate	290,197	8.9%	9.0%	(0.1%)	(3,265)
Timber	34,637	1.1%	1.2%	(0.1%)	(3,419)
Infrastructure	200,605	6.2%	7.8%	(1.7%)	(54,800)
Cash & Equivalents	13,224	0.4%	1.0%	(0.6%)	(19,383)
Total	3,260,687	100.0%	100.0%		

## Asset Class Weights vs Callan Public Fund Sponsor Database

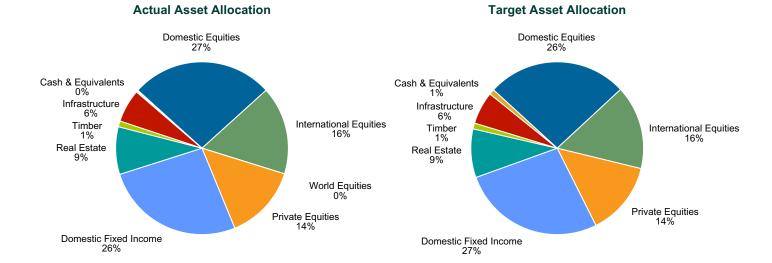


<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



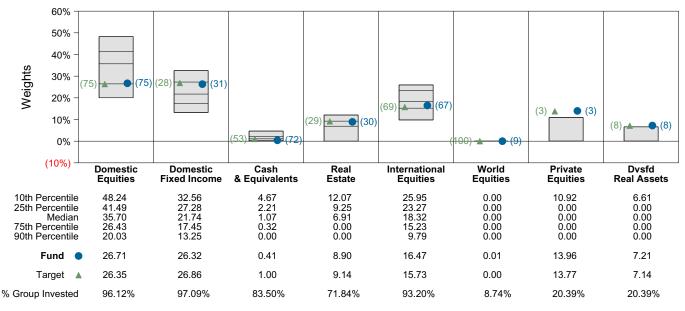
# Actual vs Corridor Target Asset Allocation As of March 31, 2024

The top left chart shows the Fund's asset allocation as of March 31, 2024. The top right chart shows the Fund's target asset allocation as outlined in the investment policy statement. The bottom chart ranks the fund's asset allocation and the target allocation versus the Callan Public Fund Sponsor Database.



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equities	871.015	26.7%	26.3%	0.4%	11.831
International Equities	537,128	16.5%	15.7%	0.7%	24,135
World Equities .	238	0.0%	0.0%	0.0%	238
Private Equities	455,354	14.0%	13.8%	0.2%	6,210
Domestic Fixed Income	858,289	26.3%	26.9%	(0.5%)	(17,434)
Real Estate	290,197	8.9%	9.1%	(0.2%)	`(7,980)
Timber	34,637	1.1%	1.1%	(0.0%)	( <mark>422</mark> ) 2,806
Infrastructure	200,605	6.2%	6.1%	0.1%	2,806
Cash & Equivalents	13,224	0.4%	1.0%	(0.6%)	(19,383)
Total	3,260,687	100.0%	100.0%		

## Asset Class Weights vs Callan Public Fund Sponsor Database



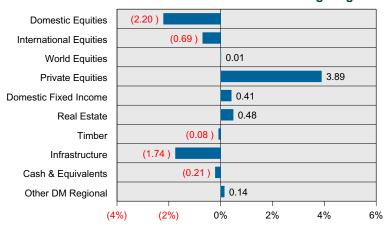
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



# Quarterly Total Fund Relative Attribution - March 31, 2024

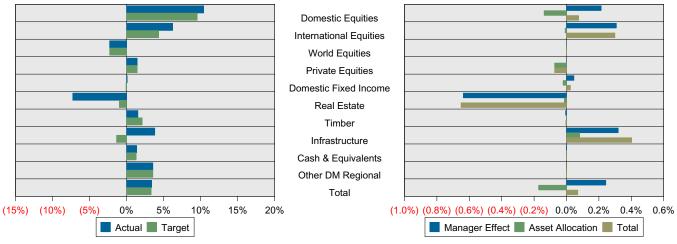
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation 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.





# **Actual vs Target Returns**

# Relative Attribution by Asset Class



#### Relative Attribution Effects for Quarter ended March 31, 2024

	Effective	Effective					Total
	Actual	Target	Actual	Target	Manager	Asset	Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	26%	28%	10.41%	9.53%	0.21%	(0.14%)	0.07%
International Equities	16%	17%	6.22%	4.33%	0.31%	(0.01%)	0.30%
World Equities ·	0%	0%	(2.30%)	(2.30%)	0.00%	(0.00%)	(0.00%)
Private Equities	14%	10%	1.42%	1.42%	0.00%	(0.07%)	(0.07%)
Domestic Fixed Income	26%	26%	0.09%	(0.09%)	0.05%	(0.02%)	0.02%
Real Estate	9%	9%	(7.27%)	(0.98%)	(0.64%)	(0.01%)	(0.65%)
Timber	1%	1%	1.53%	2.12%	(0.01%)	0.00%	(0.00%)
Infrastructure	6%	8%	3.81%	(1.36%)	0.32%	0.08%	0.40%
Cash & Equivalents	1%	1%	1.36%	1.29%	0.00%	0.00%	0.00%
Other DM Regional	0%	0%	3.55%	3.55%	0.00%	0.00%	0.00%
Total			3.39% =	3.32% +	0.24% +	(0.17%)	0.07%

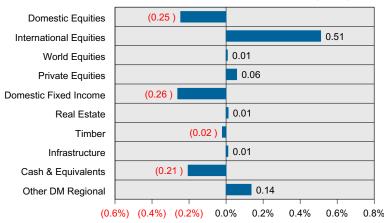
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



# Quarterly Total Fund Relative Attribution vs Corridor Target - March 31, 2024

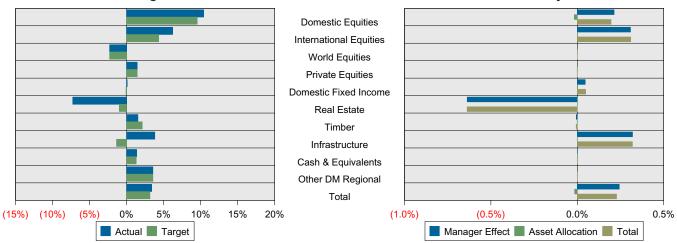
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation 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.





# **Actual vs Target Returns**

# Relative Attribution by Asset Class



#### Relative Attribution Effects for Quarter ended March 31, 2024

	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Domestic Equities	26%	26%	10.41%	9.53%	0.21%	(0.02%)	0.20%
International Equities	16%	16%	6.22%	4.33%	0.31%	0.00%	0.31%
World Equities .	0%	0%	(2.30%)	(2.30%)	0.00%	(0.00%)	(0.00%)
Private Equities	14%	14%	1.42%	1.42%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	26%	27%	0.09%	(0.09%)	0.05%	0.00%	0.05%
Real Estate	9%	9%	(7.27%)	(0.98%)	(0.64%)	(0.00%)	(0.64%)
Timber	1%	1%	1.53%	2.12%	(0.01%)	(0.00%)	(0.01%)
Infrastructure	6%	6%	3.81%	(1.36%)	0.32%	(0.00%)	0.32%
Cash & Equivalents	1%	1%	1.36%	1.29%	0.00%	0.00%	0.00%
Other DM Regional	0%	0%	3.55%	3.55%	0.00%	0.00%	0.00%
Total			3.39% =	3.16% +	0.24% +	(0.02%)	0.23%

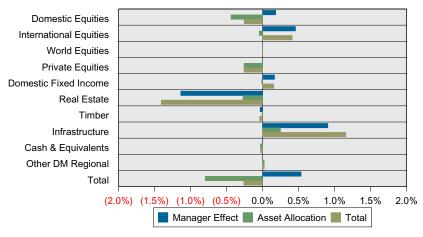
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



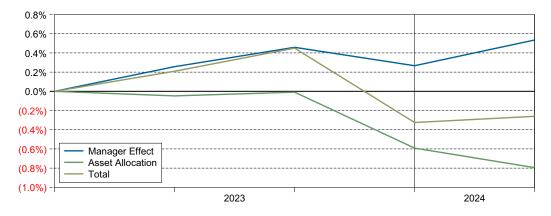
# Cumulative Total Fund Relative Attribution - March 31, 2024

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
Domestic Equities	25%	27%	29.26%	28.40%	0.18%	(0.44%)	(0.26%)
International Equities	16%	18%	16.17%	13.20%	0.46%	(0.05%)	0.41%
World Equities .	0%	0%	(15.07%)	(15.07%)	0.00%	(0.00%)	(0.00%)
Private Equities	14%	10%	5.22%	5.22%	0.00%	(0.26%)	(0.26%)
Domestic Fixed Income	26%	26%	5.14%	4.53%	0.17%	(0.01%)	0.15%
Real Estate	10%	9%	(16.48%)	(7.16%)	(1.14%)	(0.27%)	(1.41%)
Timber	1%	1%	6.84%	9.85%	(0.03%)	(0.01%)	(0.04%)
Infrastructure	6%	8%	8.98%	(4.78%)	`0.91%´	0.25%	`1.16%´
Cash & Equivalents	1%	1%	5.35%	5.24%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	=	0.00%	0.02%	0.02%
Total			10.34% =	10.60% +	0.53% +	(0.79%)	(0.26%)

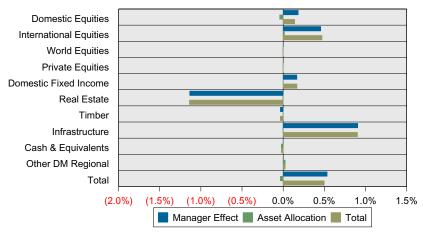
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



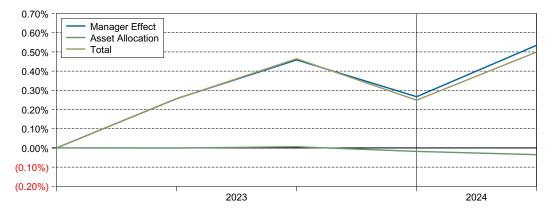
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	25%	25%	29.26%	28.40%	0.18%	(0.04%)	0.14%
International Equities	16%	16%	16.17%	13.20%	0.46%	0.02%	0.47%
World Equities	0%	0%	(15.07%)	(15.07%)	0.00%	(0.00%)	(0.00%)
Private Equities	14%	14%	5.22%	5.22%	0.00%	(0.00%)	(0.00%)
Domestic Fixed Income	26%	26%	5.14%	4.53%	0.17%	0.00%	0.17%
Real Estate	10%	10%	(16.48%)	(7.16%)	(1.14%)	(0.00%)	(1.14%)
Timber	1%	1%	6.84%	9.85%	(0.03%)	(0.00%)	(0.04%)
Infrastructure	6%	6%	8.98%	(4.78%)	0.91%	(0.00%)	0.90%
Cash & Equivalents	1%	1%	5.35%	5.24%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	32.62%	32.62%	0.00%	0.02%	0.02%
Total			10.34% =	9.84%	+ 0.53% +	(0.04%)	0.50%

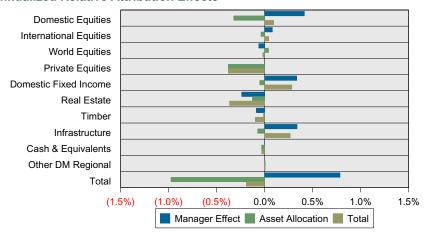
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



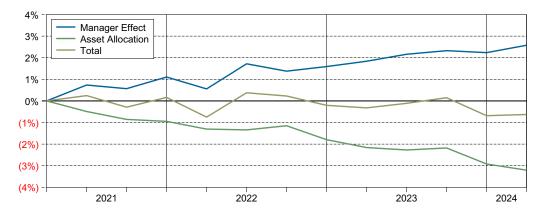
# Cumulative Total Fund Relative Attribution - March 31, 2024

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
Domestic Equities	24%	24%	10.41%	8.58%	0.41%	(0.32%)	0.09%
International Equities	15%	16%	2.43%	2.07%	0.08%	(0.04%)	0.04%
World Equities	5%	5%	(12.80%)	(12.54%)	(0.06%)	0.04%	(0.02%)
Private Equities	11%	10%	14.74%	14.74%	0.00%	(0.38%)	(0.38%)
Domestic Fixed Income	26%	26%	0.15%	(1.02%)	0.33%	(0.05%)	0.28%
Real Estate	10%	9%	1.20%	3.63%	(0.24%)	(0.13%)	(0.37%)
Timber	1%	1%	4.44%	10.99%	(0.09%)	(0.01%)	(0.10%)
Infrastructure	5%	8%	9.39%	4.23%	0.34%	(0.07%)	0.27%
Cash & Equivalents	1%	1%	2.72%	2.58%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%			0.00%	0.01%	0.01%
Total			4.97% =	5.16% +	0.79% +	(0.98%)	(0.19%)

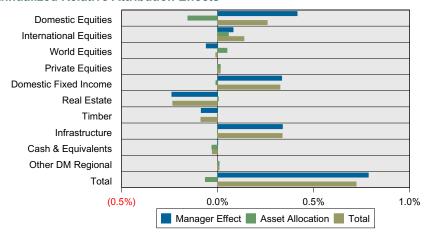
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



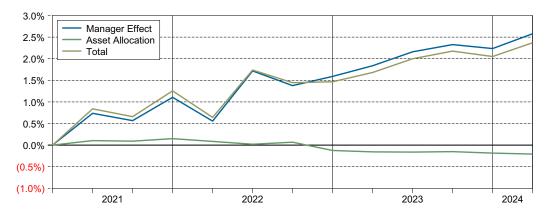
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Domestic Equities	24%	24%	10.41%	8.58%	0.41%	(0.16%)	0.26%
International Equities	15%	16%	2.43%	2.07%	0.08%	0.06%	0.14%
World Equities	5%	5%	(12.80%)	(12.54%)	(0.06%)	0.05%	(0.01%)
Private Equities	11%	11%	14.74%	14.74%	0.00%	0.01%	0.01%
Domestic Fixed Income	26%	26%	0.15%	(1.02%)	0.33%	(0.01%)	0.33%
Real Estate	10%	10%	1.20%	3.63%	(0.24%)	0.00%	(0.23%)
Timber	1%	1%	4.44%	10.99%	(0.09%)	(0.00%)	(0.09%)
Infrastructure	5%	5%	9.39%	4.23%	0.34%	(0.00%)	0.34%
Cash & Equivalents	1%	1%	2.72%	2.58%	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	0.01%	0.01%
Total			4.97% =	4.25% +	0.79% +	(0.06%)	0.72%

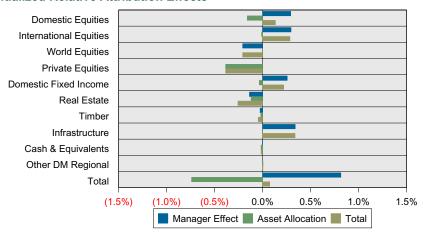
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



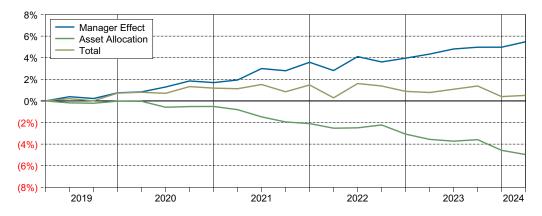
# Cumulative Total Fund Relative Attribution - March 31, 2024

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.

#### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



# **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	23%	14.99%	13.59%	0.29%	(0.16%)	0.13%
International Equities	15%	15%	7.84%	5.96%	0.30%	(0.01%)	0.29%
World Equities	9%	9%	(2.73%)	(1.58%)	(0.21%)	(0.00%)	(0.21%)
Private Equities	9%	9%	14.95%	14.95%	0.00%	(0.39%)	(0.39%)
Domestic Fixed Income	25%	25%	2.49%	1.59%	0.26%	(0.03%)	0.22%
Real Estate	10%	9%	2.37%	3.76%	(0.14%)	(0.12%)	(0.26%)
Timber	2%	2%	4.35%	7.04%	(0.03%)	(0.02%)	(0.04%)
Infrastructure	5%	7%	9.25%	3.55%	0.34%	(0.00%)	0.34%
Cash & Equivalents	1%	1%	2.06%	2.02%	0.00%	(0.02%)	(0.02%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	
Total			8.07% =	7.99% -	0.82% +	(0.74%)	0.08%

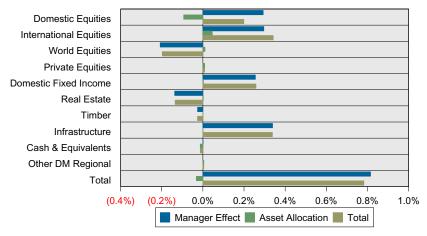
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



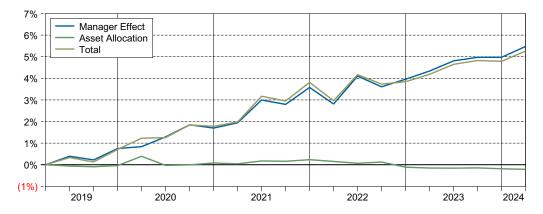
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The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of 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.

#### **Five Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



# **Five Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	23%	14.99%	13.59%	0.29%	(0.09%)	0.20%
International Equities	25% 15%	25% 15%	7.84%	5.96%	0.29%	0.05%	0.20%
World Equities	9%	9%	(2.73%)	(1.58%)	(0.21%)	0.03%	(0.20%)
Private Equities	9%	9%	14.95%	14.95%	0.00%	0.01%	0.01%
Domestic Fixed Income	25%	25%	2.49%	1.59%	0.26%	0.00%	0.26%
Real Estate	10%	10%	2.37%	3.76%	(0.14%)	0.00%	(0.14%)
Timber	2%	2%	4.35%	7.04%	(0.03%)	(0.00%)	(0.03%)
Infrastructure	5%	5%	9.25%	3.55%	0.34%	(0.00%)	0.34%
Cash & Equivalents	1%	1%	2.06%	2.02%	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	`0.00%′	
Total			8.07% =	7.28% +	0.82% +	(0.03%)	0.78%

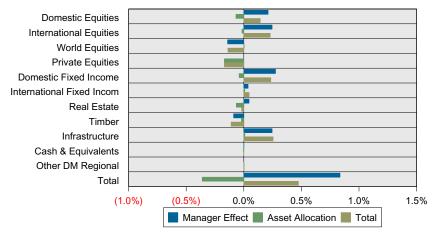
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



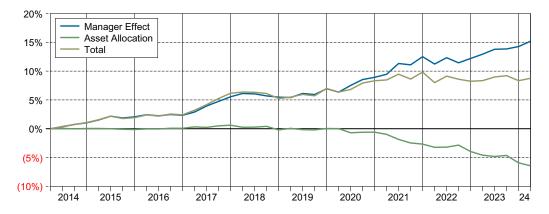
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The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of 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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



## Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	22%	12.72%	11.73%	0.21%	(0.07%)	0.14%
International Equities	15%	15%	5.80%	4.26%	0.25%	(0.02%)	0.23%
World Equities	13%	12%	1.68%	2.51%	(0.14%)	0.00%	(0.14%)
Private Equities	6%	7%	7.65%	7.65%	`0.00%	(0.17%)	(0.17%)
Domestic Fixed Income	22%	22%	3.62%	2.38%	0.28%	(0.04%)	0.23%
International Fixed Incom	2%	2%	-	-	0.04%	0.01%	0.05%
Real Estate	10%	10%	6.83%	6.41%	0.05%	(0.07%)	(0.02%)
Timber	2%	3%	2.13%	5.83%	(0.09%)	(0.02%)	(0.11%)
Infrastructure	5%	6%	7.17%	2.61%	0.25%	0.01%	0.25%
Cash & Equivalents	1%	1%	1.46%	1.38%	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	
Total			7.28% =	6.81%	+ 0.84% +	(0.36%)	0.47%

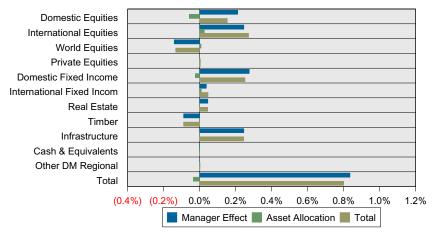
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



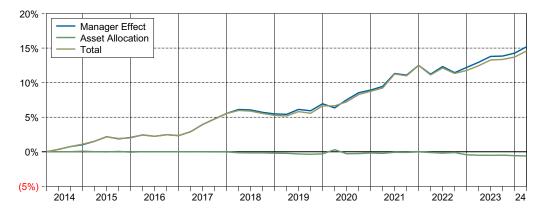
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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.

#### **Ten Year Annualized Relative Attribution Effects**



#### **Cumulative Relative Attribution Effects**



# **Ten Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equities	23%	23%	12.72%	11.73%	0.21%	(0.06%)	0.15%
International Equities	15%	16%	5.80%	4.26%	0.25%	0.03%	0.27%
World Equities	13%	12%	1.68%	2.51%	(0.14%)	0.01%	(0.13%)
Private Equities	6%	6%	7.65%	7.65%	0.00%	0.00%	`0.00%
Domestic Fixed Income	22%	22%	3.62%	2.38%	0.28%	(0.02%)	0.25%
International Fixed Incom	2%	2%	-	-	0.04%	0.01%	0.05%
Real Estate	10%	10%	6.83%	6.41%	0.05%	(0.00%)	0.05%
Timber	2%	2%	2.13%	5.83%	(0.09%)	(0.00%)	(0.09%)
Infrastructure	5%	5%	7.17%	2.61%	0.25%	(0.00%)	0.25%
Cash & Equivalents	1%	1%	1.46%	1.38%	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	-	-	0.00%	0.00%	
Total			7.28% =	6.48%	+ 0.84% +	(0.03%)	0.80%

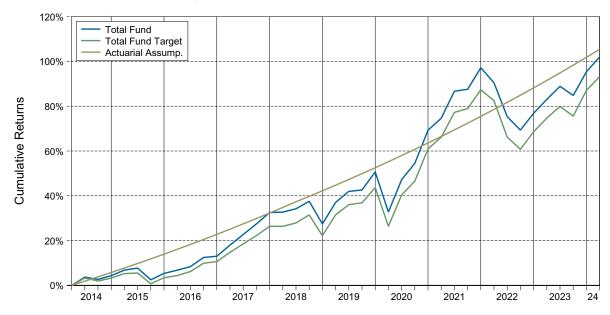
<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



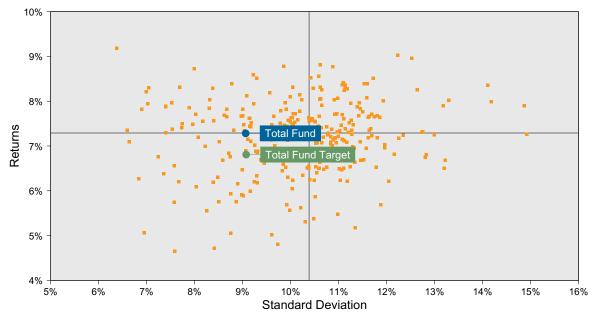
# **Cumulative Performance Relative to Target**

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 Sponsor Database.

## **Cumulative Returns Actual vs Target**



#### Ten Year Annualized Risk vs Return



Squares represent membership of the Callan Public Fund Sponsor Database

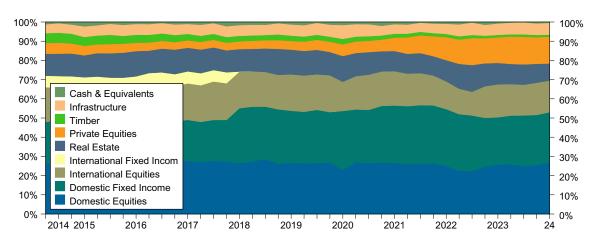
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



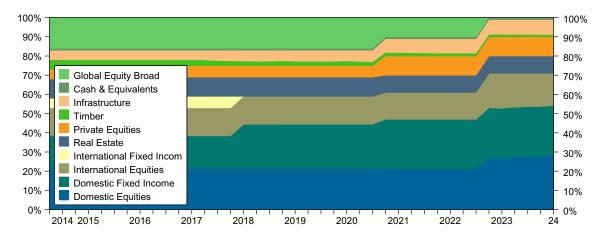
# **Actual vs Target Historical Asset Allocation**

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 Sponsor Database.

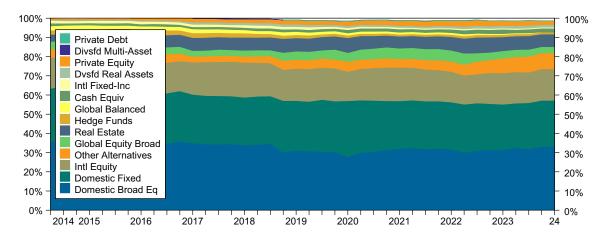
## **Actual Historical Asset Allocation**



### **Target Historical Asset Allocation**



#### Average Callan Public Fund Sponsor Database Historical Asset Allocation



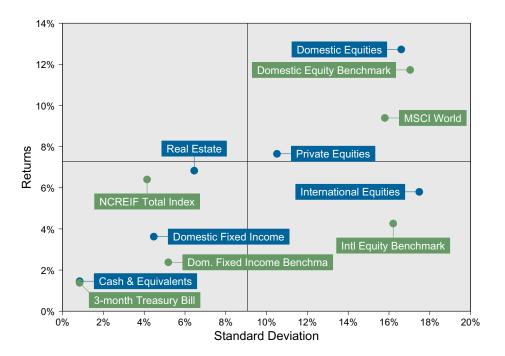
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



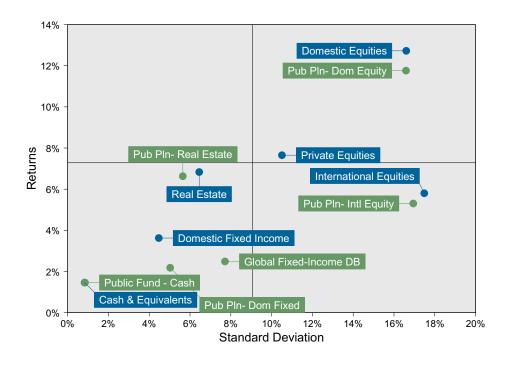
## **Asset Class Risk and Return**

The charts below show the ten 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.

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



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

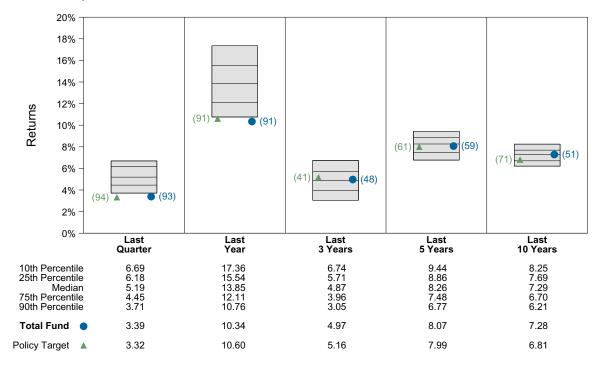




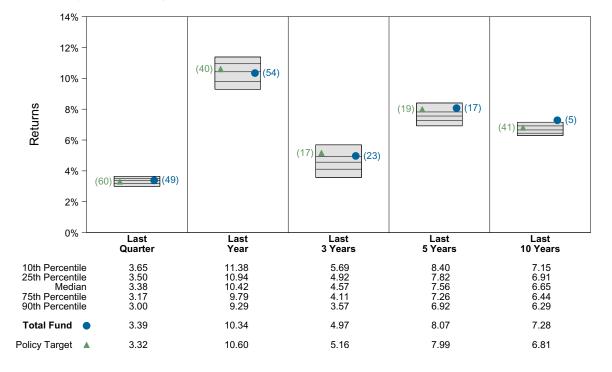
# **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Sponsor Database for periods ended March 31, 2024. 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 Sponsor Database**



#### **Asset Allocation Adjusted Ranking**

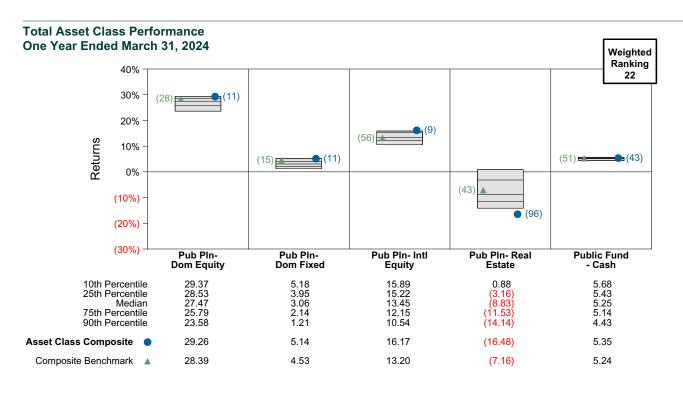


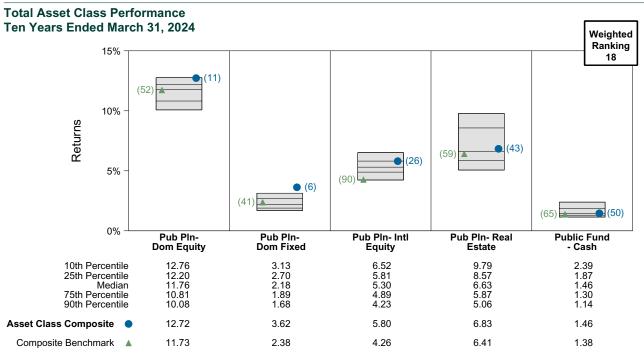
<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



# **Asset Class Rankings**

The charts below show the rankings of each asset class component of the Total Fund relative to appropriate comparative databases. In the upper right corner of each graph is the weighted average of the rankings across the different asset classes. The weights of the fund's actual asset allocation are used to make this calculation. The weighted average ranking can be viewed as a measure of the fund's overall success in picking managers and structuring asset classes.





<sup>\*</sup> Current Quarter Target = 24.0% Russell 1000 Index, 18.0% Blmbg:Aggregate, 16.8% MSCI ACWI xUS IMI, 10.0% Private Equity, 9.0% NCREIF Total Index, 8.0% Blmbg HY Corp 2% Iss Cap, 4.2% Russell 2000 Index, 3.9% CPI All Urban Cons lagged 3 months, 3.9% NCREIF NFI-ODCE Eq Wt Net, 1.2% NCREIF Timberland Index and 1.0% 3-month Treasury Bill.



# **Asset Class Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2024, with the distribution as of December 31, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

# **Asset Class Allocation**

	March 31,	2024		December 31, 20			
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Global Equities	\$1,863,735,343	57.08%	\$(38,663,531)	\$121,252,952	\$1,781,145,921	56.08%	
Public Equities	\$1,408,381,067	43.14%	\$(48,875,450)	\$114,954,540	\$1,342,301,976	42.26%	
World Equities	\$237,978	0.01%	\$(2,867)	\$(5,585)	\$246,429	0.01%	
Domestic Equities	\$871,015,053	26.68%	\$(21,452,584)	\$83,110,373	\$809,357,264	25.48%	
Large Cap	745,572,866	22.84%	(17,612,549)	78,682,216	684,503,200	21.55%	
Small Cap	125,442,187	3.84%	(3,840,035)	4,428,157	124,854,064	3.93%	
International Equities	\$537,128,036	16.45%	\$(27,419,999)	\$31,849,752	\$532,698,283	16.77%	
International All Cap	225,744,953	6.91%	401,634	18,863,744	206,479,575	6.50%	
Developed Intl Large Cap	197,299,432	6.04%	(17,278,535)	9,481,306	205,096,660	6.46%	
Developed Intl Small Cap	30,896,932	0.95%	(1,970,310)	1,843,837	31,023,405	0.98%	
Emerging Markets	83,186,719	2.55%	(8,572,789)	1,660,865	90,098,643	2.84%	
Private Equities	\$455,354,276	13.95%	\$10,211,919	\$6,298,412	\$438,843,945	13.82%	
Global Fixed Income	\$858,288,882	26.29%	\$29,338,518	\$1,005,304	\$827,945,059	26.07%	
Domestic Fixed Income	\$858,288,882	26.29%	\$29,338,518	\$1,005,304	\$827,945,059	26.07%	
Investment Grade	604,625,514	18.52%	26,266,100	(2,224,760)	580,584,174	18.28%	
Below Investment Grade	253,663,367	7.77%	3,072,418	3,230,064	247,360,885	7.79%	
Global Real Assets	\$525,439,402	16.09%	\$(632,832)	\$(14,902,318)	\$540,974,552	17.03%	
Real Estate	\$290,196,730	8.89%	\$677,615	\$(22,751,540)	\$312,270,655	9.83%	
Other Real Assets	\$235,242,672	7.20%	\$(1,310,447)	\$7,849,222	\$228,703,897	7.20%	
Infrastructure	200,605,279	6.14%	1,659,724	7,311,676	191,633,879	6.03%	
Timber	34,637,393	1.06%	(2,970,172)	537,546	37,070,018	1.17%	
Cash	\$13,223,548	0.41%	\$(9,045,034)	\$338,988	\$21,929,593	0.69%	
Residual Holdings	\$4,338,012	0.13%	\$(69,403)	\$151,386	\$4,256,029	0.13%	
Total Fund	\$3,265,025,186	100.00%	\$(19,072,280)	\$107,846,313	\$3,176,251,153	100.00%	



# **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

Quarter   Year		Last	Last	Last 3	Last 5	Last 10
Global Equities						
Gross		Quarter	rear	rears	rears	rears
Net Meighted Benchmark 6.84% 18.79% 7.46% 11.44% 9.90% Weighted Benchmark 6.41% 19.16% 8.13% 12.03% 9.17% 9.						
Public Equities						
Public Equities  Gross  8.76% 23.98% 7.31% 11.56% - Net 8.72% 22.30% 6.39% 10.79% Domestic Equities  Gross 10.41% 29.26% Net 10.41% 14.99% 12.72% Net 10.37% 28.99% 10.15% 14.75% 12.51% Net 10.37% 28.99% 10.15% 14.75% 12.51% Net 10.37% 28.99% 10.15% 14.75% 12.51% Net 11.60% 13.77% 11.55% Net 11.60% 11.77% 11.55% 12.68%  Small Cap Gross 3.68% 14.73% 3.52% 13.88% 28.88% 3.68% 3.39% 8.88% 3.39% 8.88% 14.76% 12.68%  Small Cap Gross 3.68% 14.73% 3.55% 8.88% 7.97% Net 10.45% 14.76% 12.68%  Small Cap Gross 3.68% 14.73% 13.88% 2.88% 8.06% 7.49% Russell 2000 Index 5.18% 19.71% (0.10%) 8.10% 7.55% International Equities Gross 6.22% 16.17% 2.17% 7.57% 5.55% Weighted Benchmark 4.33% 13.20% 2.07% 5.96% 4.26%  International All Cap Gross 8.89% 20.53% 2.17% 7.57% 5.55% Net 8.88% 7.48% 3.58% 4.28% 10.44% 4.34% 4.35% 4.28% 10.44% 4.35% 4.28% 10.44% 4.34% 4.34% 4.35% 4.28% 10.44% 4.34% 4.35% 4.26% 10.44% 4.3						
Gross   8.76%   29.98%   7.31%   11.56%	Weighted Benchmark	6.41%	19.16%	8.13%	12.03%	9.17%
Net	Public Equities					
Weighted Benchmark   7.53%   22.30%   6.39%   10.79%	Gross	8.76%	23.98%	7.31%	11.56%	-
Domestic Equities   Gross   10.41%   29.26%   10.41%   14.99%   12.72%   10.15%   14.75%   12.51%   10.37%   28.99%   10.15%   14.75%   12.51%   11.73%   12.51%   10.35%   28.39%   8.56%   13.59%   11.73%   11.73%   11.73%   11.73%   11.73%   11.73%   11.73%   11.73%   11.73%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   10.45%   14.76%   12.68%   12.68%   13.93%   13.79%   10.45%   14.76%   12.68%   12.68%   13.93%   13.79%   10.45%   14.76%   12.68%   12.68%   13.93%   13.79%   10.45%   14.76%   12.68%   13.93%   13.79%   10.45%   14.76%   12.68%   13.93%   13.25%   13.88%   2.88%   8.06%   7.49%   7.97%   7.57%   13.75%   13.88%   2.88%   8.06%   7.49%   7.88%   13.88%   2.88%   8.06%   7.49%   7.88%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.88%   2.88%   8.06%   7.49%   7.89%   13.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.89%   2.9	Net	8.72%	23.72%	7.03%	11.28%	-
Gross   10.41%   29.26%   10.41%   14.99%   12.72%   Net   10.37%   28.99%   10.15%   14.75%   12.51%   Weighted Benchmark   9.53%   28.39%   8.58%   13.59%   11.73%   11.73%   11.73%   11.73%   16.48%   13.393%   Net   11.60%   31.77%   11.75%   16.33%   13.79%   13.79%   10.45%   14.76%   12.66%   12.66%   10.30%   10.30%   29.87%   10.45%   14.76%   12.66%	Weighted Benchmark	7.53%	22.30%	6.39%	10.79%	-
Net   10.37%   28.99%   10.15%   14.75%   12.51%   Weighted Benchmark   9.53%   28.39%   8.58%   13.59%   11.73%   12.51%   Weighted Benchmark   9.53%   28.39%   8.58%   13.59%   11.73%   12.73%   Net   11.60%   31.77%   11.75%   16.33%   13.79%   13.93%   Net   11.60%   31.77%   11.75%   16.33%   13.79%   12.68%   Net   11.60%   31.77%   11.75%   16.33%   13.79%   12.68%   Net   12.68%   Net   13.93%   3.55%   8.68%   7.97%   Net   2.83%   3.68%   3.68%   3.68%   3.68%   3.52%   3.88%   3.88%   3.88%   3.88%   3.68%   7.49%   Net   3.52%   3.88%   3.88%   3.88%   3.68%   7.49%   Net   6.19%   15.92%   2.17%   7.57%   5.57%   Net   6.19%   3.20%   2.07%   5.96%   4.26%   Net   8.81%   20.01%   5.92%   2.17%   7.57%   5.57%   Net   8.81%   20.01%   5.90%   3.26%   3.28%	Domestic Equities					
Weighted Benchmark   9.53%   28.39%   8.58%   13.59%   11.73%   11.73%   11.73%   11.73%   11.73%   16.48%   13.93%   11.73%   11.93%   16.48%   13.93%   13.93%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   10.45%   14.76%   12.68%   12.68%   10.45%   14.76%   12.68%   12.68%   12.68%   14.73%   3.55%   8.68%   7.97%   7.97%   7.97%   12.68%   14.73%   3.55%   8.68%   7.97%   7.97%   12.68%   14.73%   3.55%   8.68%   7.97%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.49%   7.57%   7.57%   7.58%   15.92%   16.17%   2.43%   7.84%   5.80%   15.92%   2.17%   7.57%   5.57%   7.57%   15.92%   2.17%   7.57%   5.57%   7.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.96%   4.28%   10.48%		10.41%	29.26%	10.41%	14.99%	12.72%
Weighted Benchmark   9.53%   28.39%   8.58%   13.59%   11.73%   11.73%   11.73%   11.73%   16.48%   13.93%   11.73%   16.48%   13.93%   13.93%   11.75%   16.33%   13.97%   11.75%   16.33%   13.79%   11.75%   16.33%   13.79%   10.45%   14.76%   12.68%   12.68%   10.45%   14.76%   12.68%   12.68%   10.45%   14.76%   12.68%   12.68%   12.68%   13.59%   10.45%   14.76%   12.68%   12.68%   12.68%   13.59%   10.45%   14.76%   12.68%   12.68%   13.88%   2.88%   8.06%   7.97%   7.49%   13.88%   2.88%   8.06%   7.49%   13.88%   2.88%   8.06%   7.49%   13.88%   2.88%   8.06%   7.49%   15.82%   13.88%   2.43%   7.84%   5.80%   14.73%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   5.57%   15.92%   2.17%   7.57%   3.28%   1.						
Gross         11.62%         31.92%         11.93%         16.48%         13.33%           Net         11.60%         31.77%         11.75%         16.33%         13.79%           Benchmark(1)         10.30%         29.87%         10.45%         14.76%         12.68%           Small Cap           Gross         3.68%         14.73%         3.55%         8.68%         7.97%           Net         3.52%         13.88%         2.88%         8.06%         7.49%           Russell 2000 Index         5.18%         19.71%         (0.10%)         8.10%         7.58%           Net         3.52%         13.88%         2.88%         8.06%         7.49%           Russell 2000 Index         5.18%         19.71%         (0.10%)         8.10%         7.58%           Net Gross         6.22%         16.17%         2.43%         7.84%         5.80%           Net Weighted Benchmark         4.33%         13.20%         2.07%         5.96%         4.26%           International All Cap           Gross         8.89%         20.53%         -         -         -         -         -         -         -         -         -         <	Weighted Benchmark					
Gross         11.62%         31.92%         11.93%         16.48%         13.33%           Net         11.60%         31.77%         11.75%         16.33%         13.79%           Benchmark(1)         10.30%         29.87%         10.45%         14.76%         12.68%           Small Cap           Gross         3.68%         14.73%         3.55%         8.68%         7.97%           Net         3.52%         13.88%         2.88%         8.06%         7.49%           Russell 2000 Index         5.18%         19.71%         (0.10%)         8.10%         7.58%           Net         3.52%         13.88%         2.88%         8.06%         7.49%           Russell 2000 Index         5.18%         19.71%         (0.10%)         8.10%         7.58%           Net Gross         6.22%         16.17%         2.43%         7.84%         5.80%           Net Weighted Benchmark         4.33%         13.20%         2.07%         5.96%         4.26%           International All Cap           Gross         8.89%         20.53%         -         -         -         -         -         -         -         -         -         <	Large Cap					
Net		11.62%	31.92%	11.93%	16.48%	13.93%
Benchmark(1)						
Gross						
Gross 3,86% 14,73% 3,55% 8,68% 7,97% Net 3,52% 13,88% 2,88% 8,06% 7,49% Russell 2000 Index 5,18% 19,71% (0.10%) 8,10% 7,58% 7,49% 7,58% 19,71% (0.10%) 8,10% 7,58% 10,758% 10,	Small Can					
Net Russell 2000 Index 5.18% 13.88% 2.88% 8.06% 7.49% 7.58% 19.71% (0.10%) 8.10% 7.58% 7.59% 7.5		3 68%	1/1 73%	3 55%	8 68%	7 97%
Russell 2000 Index 5.18% 19.71% (0.10%) 8.10% 7.58%  International Equities  Gross 6.22% 16.17% 2.43% 7.84% 5.80% Net 6.19% 15.92% 2.17% 7.57% 5.57% Weighted Benchmark 4.33% 13.20% 2.07% 5.96% 4.26%  International All Cap  Gross 8.89% 20.53%  Net 8.81% 20.01%  MSCI ACWI xUS IMI 4.33% 13.20% 1.72% 6.00% 4.32%  Developed Intl Large Cap  Gross 5.73% 15.52%  Net 5.73% 15.52%  MSCI World xUS 5.59% 15.29% 4.93% 7.48% 4.81%  Developed Intl Small Cap  Gross 3.74% 12.02%  MSCI World xUS Small 2.58% 10.04% (0.93%) 5.39% 4.54%  Emerging Markets  Gross 2.21% 8.26% (6.10%) 3.25% 3.96% Net 2.20% 8.13% (6.46%) 2.87% 3.77% Benchmark(2) 2.37% 8.15% (5.05%) 2.22% 2.95%						
Gross 6.22% 16.17% 2.43% 7.84% 5.80% Net 6.19% 15.92% 2.17% 7.57% 5.57% Weighted Benchmark 4.33% 13.20% 2.07% 5.96% 4.26%  International All Cap  Gross 8.89% 20.53%						
Gross 6.22% 16.17% 2.43% 7.84% 5.80% Net 6.19% 15.92% 2.17% 7.57% 5.57% Weighted Benchmark 4.33% 13.20% 2.07% 5.96% 4.26%  International All Cap  Gross 8.89% 20.53%	nternational Equities					
Net		6 22%	16 17%	2 43%	7 84%	5 80%
Net						
International All Cap   Gross   8.89%   20.53%   -   -   -   -   -       Net   8.81%   20.01%   -   -   -       MSCI ACWI XUS IMI   4.33%   13.20%   1.72%   6.00%   4.32%      Developed Intl Large Cap   Gross   5.73%   15.52%   -     -     -       Net   5.73%   15.52%   -     -     -       MSCI World xUS   5.59%   15.29%   4.93%   7.48%   4.81%      Developed Intl Small Cap   Gross   3.74%   12.02%   -     -     -     MSCI World xUS Small   2.58%   10.04%   (0.93%)   5.39%   4.54%      Emerging Markets   Gross   2.21%   8.26%   (6.10%)   3.25%   3.96%     Net   2.20%   8.13%   (6.46%)   2.87%   3.77%     Benchmark(2)   2.37%   8.15%   (5.05%)   2.22%   2.95%      Private Equity						
Series   S	Weighted Benchmark	4.33%	13.20%	2.07 %	5.90%	4.20 /6
Net		0.000/	00.500/			
MSCI ACWI xUS IMI       4.33%       13.20%       1.72%       6.00%       4.32%         Developed Intl Large Cap         Gross       5.73%       15.52%       - <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td>				-	-	-
Developed Intl Large Cap Gross 5.73% 15.52%				- 	-	-
Gross 5.73% 15.52%	MSCI ACWI xUS IMI	4.33%	13.20%	1.72%	6.00%	4.32%
Net						
MSCI World xUS     5.59%     15.29%     4.93%     7.48%     4.81%       Developed Intl Small Cap       Gross     3.74%     12.02%     -     -     -     -       Net     3.74%     11.77%     -     -     -     -       MSCI World xUS Small     2.58%     10.04%     (0.93%)     5.39%     4.54%       Emerging Markets       Gross     2.21%     8.26%     (6.10%)     3.25%     3.96%       Net     2.20%     8.13%     (6.46%)     2.87%     3.77%       Benchmark(2)     2.37%     8.15%     (5.05%)     2.22%     2.95%       Private Equity	Gross		15.52%	-	-	-
Developed Intl Small Cap   Gross   3.74%   12.02%   -   -   -   -   -   -   -   -   -	Net	5.73%	15.52%	-	-	-
Gross Net Net 3.74%       12.02%	MSCI World xUS	5.59%	15.29%	4.93%	7.48%	4.81%
Net     3.74%     11.77%     -     -     -       MSCI World xUS Small     2.58%     10.04%     (0.93%)     5.39%     4.54%       Emerging Markets     60.00%     3.25%     3.96%       Net     2.20%     8.13%     (6.46%)     2.87%     3.77%       Benchmark(2)     2.37%     8.15%     (5.05%)     2.22%     2.95%						
MSCI World xUS Small 2.58% 10.04% (0.93%) 5.39% 4.54%  Emerging Markets  Gross 2.21% 8.26% (6.10%) 3.25% 3.96%  Net 2.20% 8.13% (6.46%) 2.87% 3.77%  Benchmark(2) 2.37% 8.15% (5.05%) 2.22% 2.95%  Private Equity	Gross	3.74%	12.02%	-	-	-
Emerging Markets Gross 2.21% 8.26% (6.10%) 3.25% 3.96% Net 2.20% 8.13% (6.46%) 2.87% 3.77% Benchmark(2) 2.37% 8.15% (5.05%) 2.22% 2.95%  Private Equity	Net	3.74%	11.77%	-	-	-
Gross       2.21%       8.26%       (6.10%)       3.25%       3.96%         Net       2.20%       8.13%       (6.46%)       2.87%       3.77%         Benchmark(2)       2.37%       8.15%       (5.05%)       2.22%       2.95%    Private Equity	MSCI World xUS Small	2.58%	10.04%	(0.93%)	5.39%	4.54%
Gross       2.21%       8.26%       (6.10%)       3.25%       3.96%         Net       2.20%       8.13%       (6.46%)       2.87%       3.77%         Benchmark(2)       2.37%       8.15%       (5.05%)       2.22%       2.95%    Private Equity	Emerging Markets					
Net       2.20%       8.13%       (6.46%)       2.87%       3.77%         Benchmark(2)       2.37%       8.15%       (5.05%)       2.22%       2.95%    Private Equity		2.21%	8.26%	(6.10%)	3.25%	3.96%
Benchmark(2) 2.37% 8.15% (5.05%) 2.22% 2.95%  Private Equity						
	Private Equity					
	Net	1.42%	5.22%	14.74%	14.95%	7.65%

PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.



<sup>(1)</sup> S&P 500 Index through 12/31/2011 and the Russell 1000 Index thereafter.

<sup>(2)</sup> MSCI Emerging Mkts Idx (Gross) through 6/30/2011 and MSCI Emerging Mkts Idx Net thereafter.

# **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Blobal Fixed Income					
Gross	0.09%	5.14%	0.15%	2.49%	3.41%
Net	0.06%	4.98%	0.01%	2.35%	3.22%
Weighted Benchmark	(0.09%)	4.53%	(1.02%)	1.59%	2.19%
Domestic Fixed Income					
Gross	0.09%	5.14%	0.15%	2.49%	3.62%
Net	0.06%	4.98%	0.01%	2.35%	3.45%
Weighted Benchmark	(0.09%)	4.53%	(1.02%)	1.59%	2.38%
Investment Grade					
Gross	(0.42%)	3.38%	(1.75%)	1.26%	2.78%
Net	(0.44%)	3.25%	(1.86%)	1.15%	2.66%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Below Investment Grade					
Gross	1.29%	9.29%	5.49%	6.15%	6.06%
Net	1.25%	9.10%	5.30%	5.94%	5.76%
Blmbg HY Corp 2% Issue	1.47%	11.15%	2.19%	4.19%	4.44%
Global Real Assets					
Gross	(2.76%)	(6.74%)	4.22%	4.75%	6.24%
Net	(2.87%)	(7.06%)	3.83%	4.33%	5.82%
Weighted Benchmark	(0.97%)	(5.09%)	4.34%	3.87%	5.04%
Real Estate					
Gross	(7.27%)	(16.48%)	1.20%	2.37%	6.83%
Net	(7.39%)	(16.83%)	0.72%	1.87%	6.32%
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
Other Real Assets					
Gross	3.47%	8.64%	8.43%	8.10%	-
Net	3.39%	8.39%	8.18%	7.84%	-
Weighted Benchmark	(0.95%)	(2.97%)	5.05%	3.91%	-
Infrastructure					
Gross	3.81%	8.98%	9.39%	9.25%	7.17%
Net	3.72%	8.68%	9.07%	8.89%	6.72%
Benchmark(1)	(1.36%)	(4.78%)	4.23%	3.55%	2.61%
Timber					
Net	1.53%	6.84%	4.44%	4.35%	2.13%
NCREIF Timberland Index	2.12%	9.85%	10.99%	7.04%	5.83%
Cash & Equivalents - Net	1.36%	5.35%	2.72%	2.06%	1.46%
3-month Treasury Bill	1.29%	5.24%	2.58%	2.02%	1.38%
Total Fund					
Gross	3.39%	10.34%	4.97%	8.07%	7.28%
Net	3.34%	10.14%	4.74%	7.83%	7.02%
Target*	3.32%	10.60%	5.16%	7.99%	6.81%
Corridor Target	3.16%	9.84%	4.25%	7.28%	6.48%

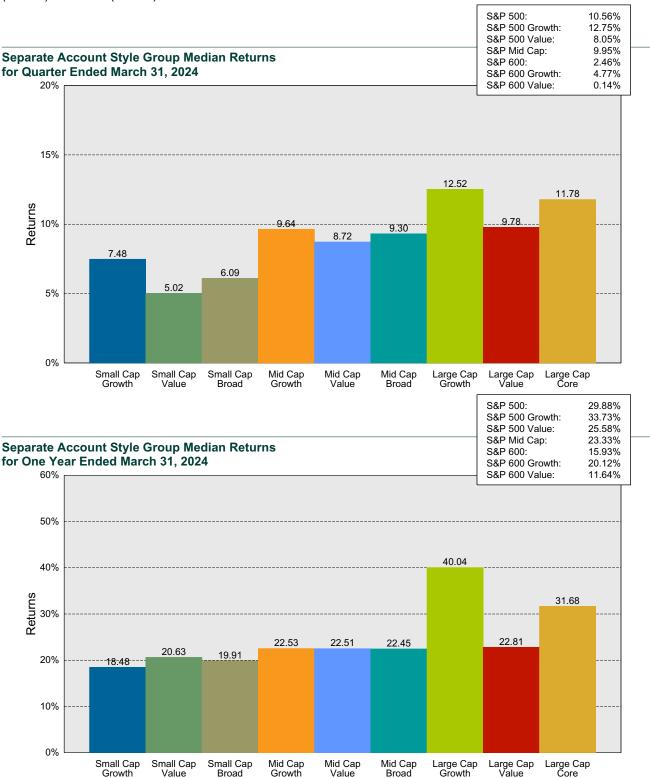
PLEASE REFER TO PAGES 39-43 FOR INVESTMENT MANAGER LEVEL RETURNS.



<sup>\*</sup> Current Quarter Target = 22.4% Russell 1000 Index, 18.6% Blmbg:Aggregate, 15.7% MSCI ACWI xUS IMI, 13.8% Private Equity, 9.1% NCREIF Total Index, 8.3% Blmbg HY Corp 2% Iss Cap, 4.0% Russell 2000 Index, 3.0% CPI All Urban Cons lagged 3 months, 3.0% NCREIF NFI-ODCE Eq Wt Net, 1.1% NCREIF Timberland Index and 1.0% 3-month Treasury Bill. (1) CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

# Domestic Equity Active Management Overview

U.S. stocks rallied sharply in 1Q with the S&P 500 Index (+10.6%) closing the quarter at a record high for the 22nd time during the quarter. Communication Services (+15.8%), Energy (+13.7%), and Technology (+12.7%) were the top-performing sectors with Real Estate (-1.1%) being at the bottom and the only sector to deliver a negative return. The equal-weighted version of the Index gained a more modest 7.9% as the largest stocks continued to outperform. The top 10 holdings hit another high at 33.5% of the Index on a cap-weighted basis. Growth (R1000 Growth: +11.4%) outperformed Value (R1000 Value: +9.0%) and large cap (R1000: +10.3%) outperformed small (Russell 2000: +5.2%). Of the Magnificent 7, only Apple (-10.8%) and Tesla (-29.2%) suffered losses.





# Domestic Equities Period Ended March 31, 2024

## **Quarterly Summary and Highlights**

- Domestic Equities's portfolio posted a 10.42% return for the quarter placing it in the 7 percentile of the Public Fund -Domestic Equity group for the quarter and in the 12 percentile for the last year.
- Domestic Equities's portfolio outperformed the Domestic Equity Target by 0.89% for the quarter and outperformed the Domestic Equity Target for the year by 0.80%.

#### **Quarterly Asset Growth**

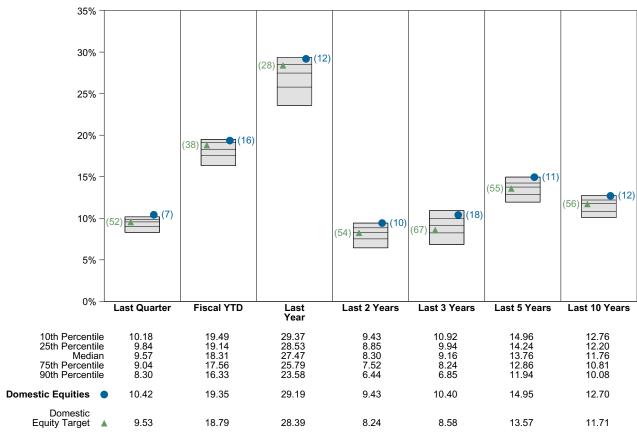
 Beginning Market Value
 \$2,146,596,525

 Net New Investment
 \$-60,920,292

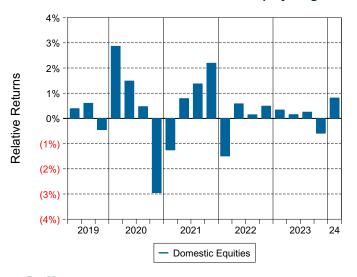
 Investment Gains/(Losses)
 \$220,198,629

Ending Market Value \$2,305,874,863

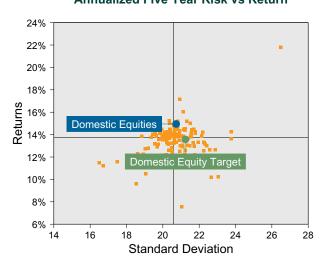
# Performance vs Public Fund - Domestic Equity (Gross)



# Relative Return vs Domestic Equity Target



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



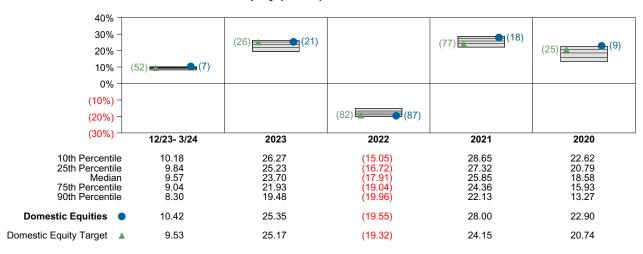


# Domestic Equities Return Analysis Summary

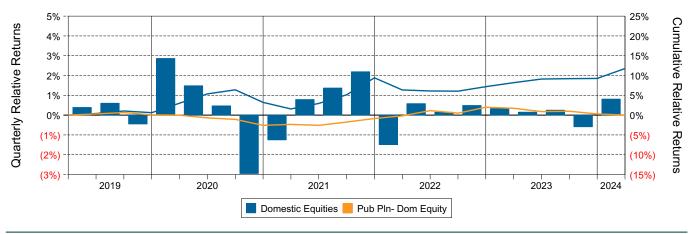
### **Return Analysis**

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.

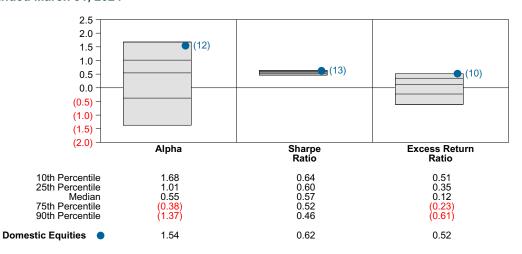
## Performance vs Public Fund - Domestic Equity (Gross)



## **Cumulative and Quarterly Relative Returns vs Domestic Equity Target**



Risk Adjusted Return Measures vs Domestic Equity Target Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2024



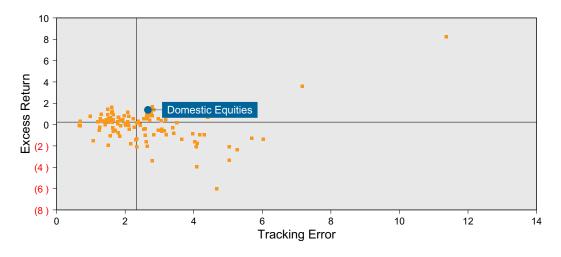


# **Domestic Equities Risk Analysis Summary**

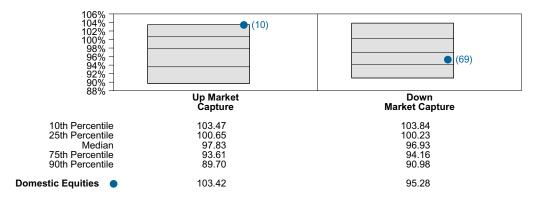
#### **Risk Analysis**

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.

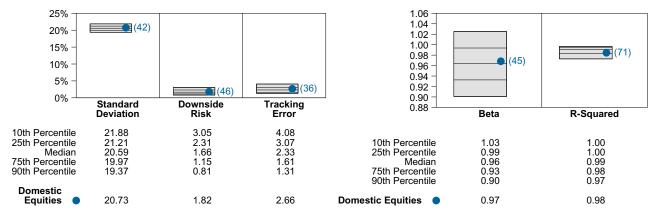
# Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2024



**Market Capture vs Domestic Equity Target** Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs Domestic Equity Target Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2024

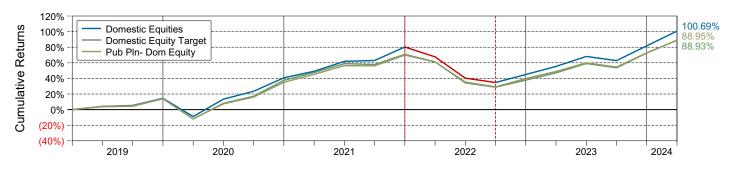




# Domestic Equities Drawdown Analysis for Five Years Ended March 31, 2024

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**

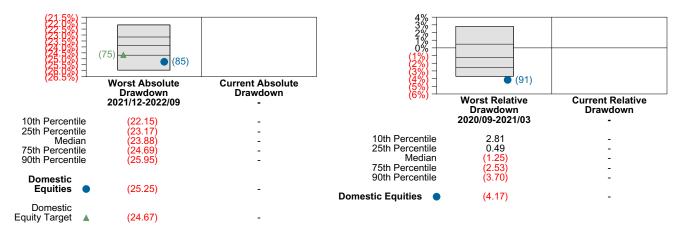


	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years_	Period	Index	Peers
Domestic Equities	(25.25)%	0.75	2021/12-2022/09	(24.67)%	(24.00)%	-	-	_	-	-
Recovery from Trough	34.91%	1.25	2022/09-2023/12	34.06%	33.77%	-	-	-	-	-
Domestic Equity Target	(24.67)%	0.75	2021/12-2022/09			-	-	-		
Pub Pln- Dom Equity	(24.00)%	0.75	2021/12-2022/09			-	-	-		



	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Domestic Equities	(4.17)%	0.50	2020/09-2021/03	(0.68)%	-	-	-	-	
Recovery from Trough	4.41%	0.75	2021/03-2021/12	1.10%	-	-	-	-	
Pub Pln- Dom Equity	(2.48)%	1.25	2019/09-2020/12		(1.41)%	1.25	2022/12-2024/03		

Drawdown Rankings vs. Domestic Equity Target Rankings against Public Fund - Domestic Equity Five Years Ended March 31, 2024

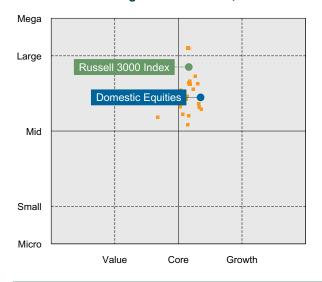




# **Current Holdings Based Style Analysis Domestic Equities** As of March 31, 2024

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.

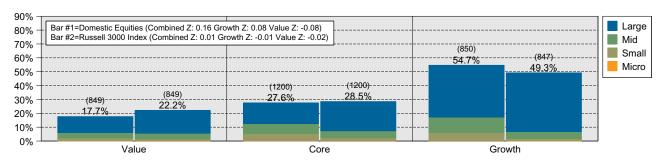
## Style Map vs Pub Pln- Dom Equity Holdings as of March 31, 2024



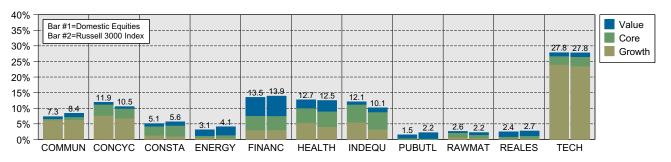
## **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	22.2% (849)	28.5% (1200)	49.3% (847)	100.0% (2896)
Total	17.7% (849)	27.6% (1200)	54.7% (850)	100.0% (2899)
	0.2% (328)	0.2% (391)	0.1% (148)	0.5% (867)
Micro	(020)	(55.1)	(1.12)	(331)
	0.0% (328)	0.1% (391)	0.2% (148)	0.4% (867)
Small	1.2% (277)	2.1% (504)	1.6% (379)	4.9% (1160)
0 "	2.1% (277)	5.2% (504)	5.8% (380)	13.1% (1161)
	4.2% (152)	5.0% (205)	5.0% (223)	14.1% (580)
Mid	3.9% (152)	7.1% (205)	11.2% (225)	22.2% (582)
	16.7% (92)	21.3% (100)	42.6% (97)	80.5% (289)
Large	, ,		, ,	, ,
	11.6% (92)	15.2% (100)	37.5% (97)	64.3% (289)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



# **Sector Weights Distribution** Holdings as of March 31, 2024

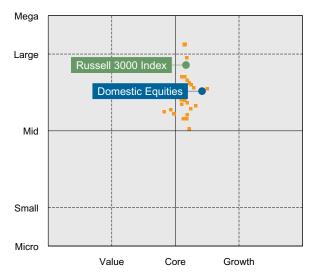




# **Historical Holdings Based Style Analysis Domestic Equities** For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

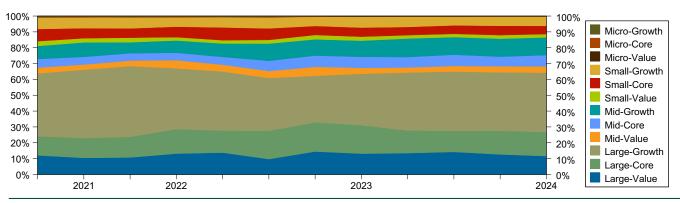
# Average Style Map vs Pub Pln- Dom Equity Holdings for Three Years Ended March 31, 2024



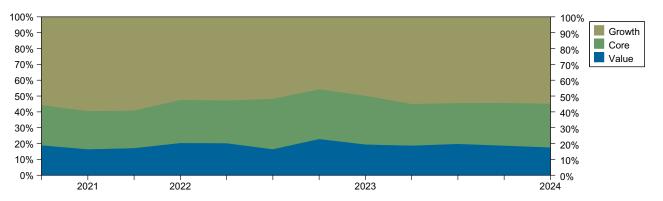
## **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

0.2% (292) 9.0% (551) 25.9% (854)	0.2% (217)  0.3% (435)  27.4% (769)  27.6% (1250)	0.2% (80) 0.1% (160) 53.6% (549) 46.5% (852)	0.5% (445) 0.7% (887) 100.0% (1869) 100.0% (2956)
0.2% (292)	0.3% (435)	0.1% (160)	<b>0.7%</b> (887)
, ,	, ,	, ,	` '
.1% (148)	0.2% (217)	0.2% (80)	0.5% (445)
.1% (148)	0.2% (217)	0.2% (80)	0.5% (445)
1.5% (297)	2.2% (508)	2.0% (378)	<b>5.7%</b> (1183)
.4% (166)	6.2% (297)	6.4% (216)	15.1% (679)
4.7% (166)	5.2% (213)	5.2% (212)	<b>15.1%</b> (591)
.0% (139)	6.0% (162)	9.8% (155)	19.8% (456)
19.5% (99)	19.8% (94)	39.2% (102)	<b>78.5%</b> (295)
2.070 (00)	11.070 (00)	07.270 (00)	041.070 (200)
2.5% (98)	14 9% (93)	37 2% (98)	64.6% (289)
	4.7% (166) 4.4% (166)	19.5% (99) 19.8% (94) 0% (139) 6.0% (162) 4.7% (166) 5.2% (213) 4.4% (166) 6.2% (297)	19.5% (99) 19.8% (94) 39.2% (102) 0% (139) 6.0% (162) 9.8% (155) 4.7% (166) 5.2% (213) 5.2% (212) 4.4% (166) 6.2% (297) 6.4% (216)

# **Domestic Equities Historical Cap/Style Exposures**



### **Domestic Equities Historical Style Only Exposures**

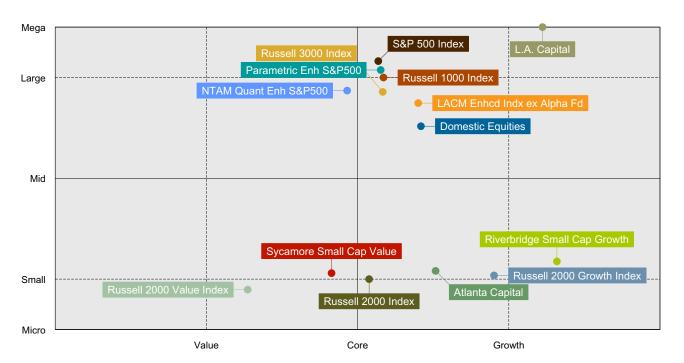




# **Historical Holdings Based Style Analysis** For Three Years Ended March 31, 2024

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.

# **Average Style Map** Holdings for Three Years Ended March 31, 2024



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	Diversification
Domestic Equities	53.33%	83.54	0.19	0.08	(0.11)	1896	70.09
Atlanta Capital	3.45%	3.75	0.26	0.07	(0.20)	61	20.17
L.A. Capital	9.50%	403.78	0.80	0.34	(0.46)	141	11.90
LACM Enhcd Indx ex Alpha Fo	I 9.16%	113.37	0.18	0.10	(0.08)	246	34.41
NTAM Quant Enh S&P500	8.89%	129.53	(0.18)	(0.03)	0.15	175	31.44
Parametric Enh S&P500	8.96%	164.16	(0.01)	(0.02)	(0.01)	799	46.52
Riverbridge Small Cap Growth	3.19%	5.04	0.87	0.22	(0.65)	51	15.39
Sycamore Small Cap Value	3.53%	3.45	(0.26)	(0.08)	0.18	109	39.34
Russell 3000 Index	-	127.80	0.00	(0.02)	(0.02)	2998	61.86
S&P 500 Index	-	185.13	(0.02)	(0.03)	(0.01)	504	39.64
Russell 1000 Index	-	146.38	0.00	(0.02)	(0.02)	1015	52.17
Russell 2000 Index	-	2.64	(0.07)	(0.11)	(0.04)	1982	332.74
Russell 2000 Growth Index	-	3.14	0.56	0.08	(0.48)	1138	155.06
Russell 2000 Value Index	-	2.19	(0.69)	(0.29)	0.40	1416	212.80

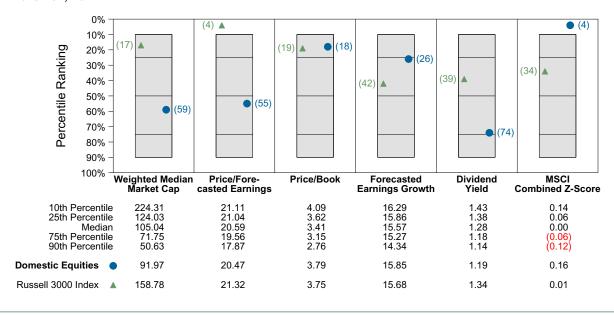


# **Domestic Equities Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

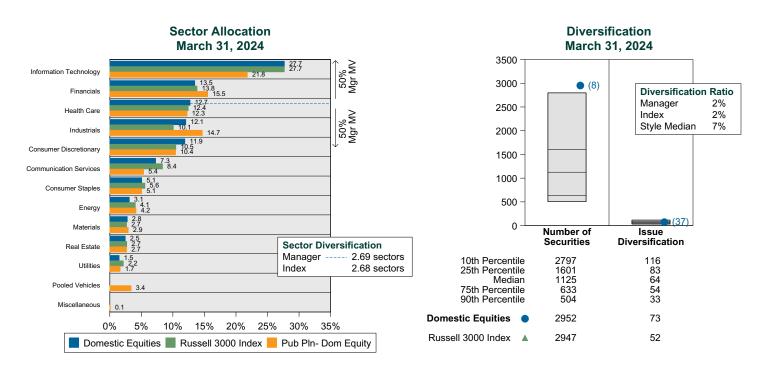
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Public Fund - Domestic Equity as of March 31, 2024



#### **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.

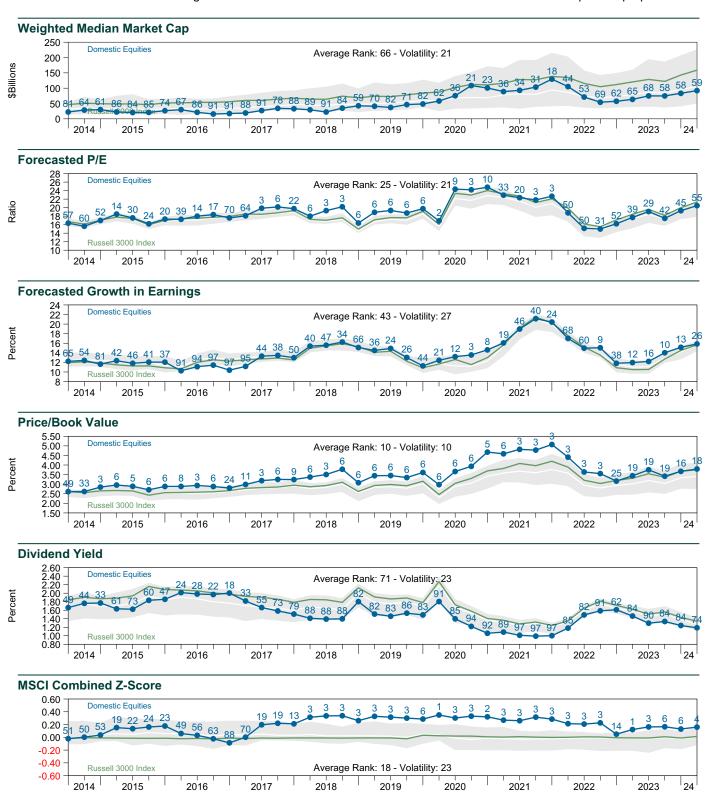




# **Portfolio Characteristics Analysis**

#### **Pub Pln- Dom Equity**

The charts below illustrate the behavior of the product over different portfolio characteristics through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Dom Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The Russell 3000 Index is shown for comparison purposes.

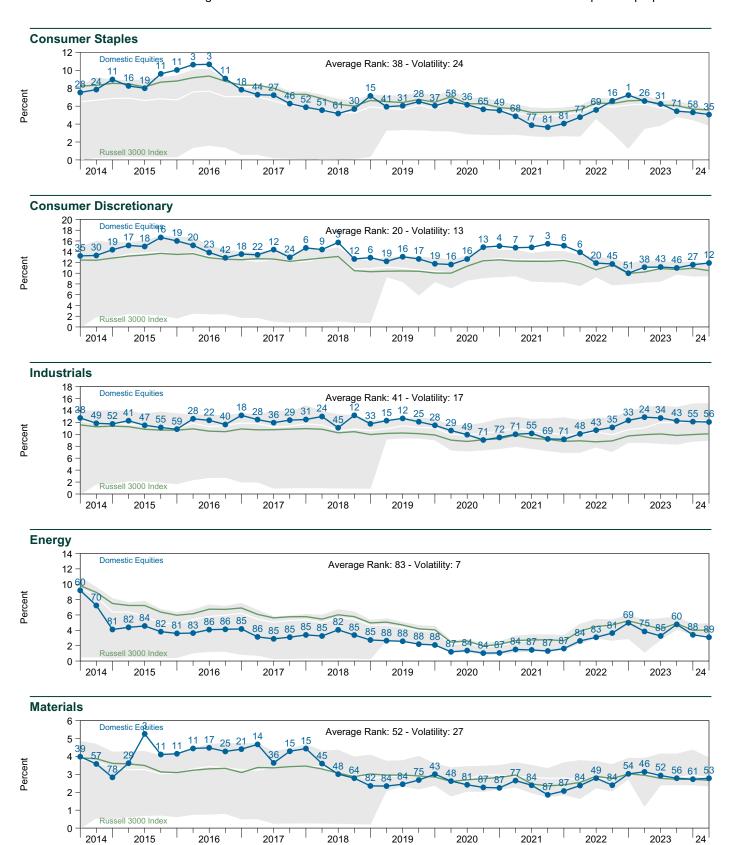


Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.



#### **Historical Sector Weight Analysis**

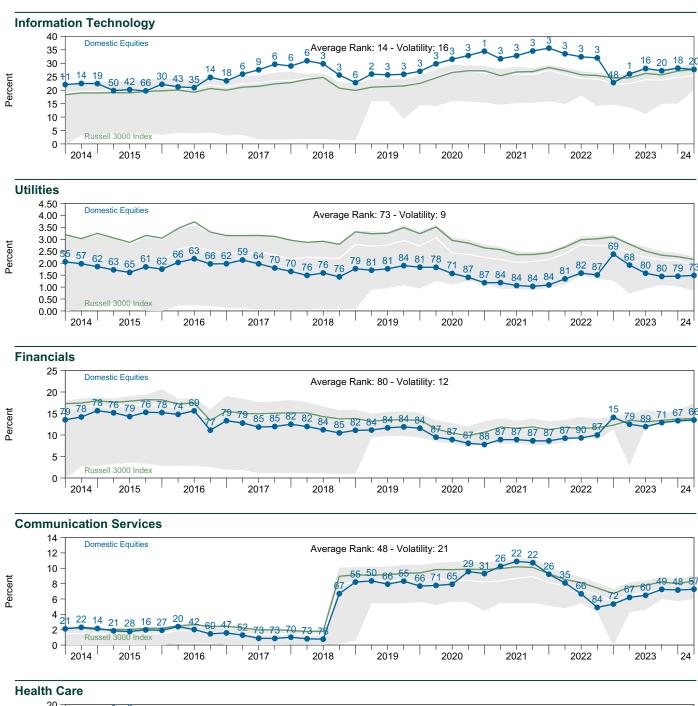
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Dom Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The Russell 3000 Index is shown for comparison purposes.





#### **Historical Sector Weight Analysis**

The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Dom Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The Russell 3000 Index is shown for comparison purposes.



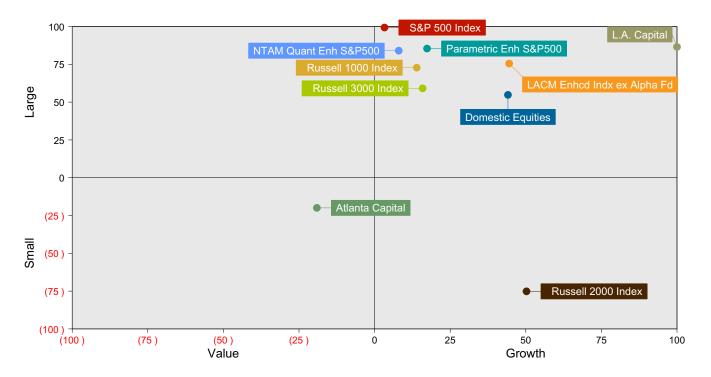




# **Historical Returns Based Style Analysis** For Three Years Ended March 31, 2024

This page analyzes and compares the investment styles of multiple portfolios using returns-based style analysis. The methodology utilizes a seven factor regression analysis to find the mix of equity style factors that best explains the past return patterns exhibited by each portfolio. The result is a determination of "implied" historical style exposures as implied by past performance patterns. The top "style map" chart illustrates the results in a two dimensional (market capitalization and growth vs. value) style format. The bottom table gives a more detailed breakdown of the regression results. It includes all seven implied style factor exposures, as well as the "R-squared" of the results, which is used to gauge the veracity of the analysis.

#### **Average Style Map** For Three Years Ended March 31, 2024



	Weight	R-							
	%	Squared	LCG	LCV	MCG	MCV	SCG	SCV	T-BILLS
Domestic Equities	60.25%	1.00	44.67%	27.95%	9.55%	0.00%	17.83%	0.00%	0.00%
Atlanta Capital	3.43%	0.84	2.32%	31.43%	0.00%	0.00%	31.86%	21.85%	12.54%
L.A. Capital	9.45%	0.98	92.87%	0.00%	0.78%	0.00%	6.35%	0.00%	0.00%
LACM Enhcd Indx ex Alpha Fd	9.12%	0.99	51.13%	24.39%	17.76%	0.00%	0.00%	0.00%	6.72%
NTAM Quant Enh S&P500	8.84%	0.99	38.02%	46.00%	15.98%	0.00%	0.00%	0.00%	0.00%
Parametric Enh S&P500	8.91%	1.00	51.14%	40.02%	3.12%	0.00%	4.42%	1.31%	0.00%
Russell 3000 Index	-	1.00	46.84%	27.25%	10.91%	0.00%	0.19%	14.81%	0.00%
S&P 500 Index	-	1.00	50.96%	48.36%	0.67%	0.00%	0.00%	0.00%	0.00%
Russell 1000 Index	-	1.00	49.57%	33.12%	7.40%	0.00%	0.00%	9.91%	0.00%
Russell 2000 Index	-	0.96	2.07%	0.00%	19.75%	0.00%	52.82%	24.40%	0.96%



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

# Return Based Risk Statistics for 3 Years Ended March 31, 2024 vs the Russell 3000 Index and the Pub Pln- Dom Equity PEER GROUP

(12)	Parametric Enh S&P 500	0.85	17.95% (7)	1.13	0.42%	0.45	0.75	0.57%	1.04	1.00
(12)	Northern Trust AM Enh S&P 500	3.43	17.17% (27)	2.67	0.79%	0.62	1.28	3.30%	0.98	0.97
(12)	LACM Enhcd Ind ex Alpha Fd	2.47	17.07% (32)	2.55 (26)	1.08%	0.57	0.97	2.45%	0.98	0.98
(12)	L.A. Capital	4.48 (1)	22.02% (1)	6.48	3.47%	0.53	0.69	2.97% (2)	1.25	0.95
(12)	Atlanta Capital	(3.07)	14.83% <b>(94)</b>	8.88	7.07% (1)	0.28	(0.35)	(1.06)% <b>(71)</b>	0.73	0.72 (100)
		Excess Return	Standard Deviation	Tracking Error	Downside Risk	Sharpe Ratio	Excess Return Ratio	Alpha	Beta	R-Squared



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

#### Excess Return Correlations for 3 Years Ended March 31, 2024 vs the Russell 3000 Index

(12)	Parametric Enh S&P 500	(0.13)	0.39	0.04	0.47	1.00
(12)	Northern Trust AM Enh S&P 500	0.45	(0.48)	0.08	1.00	0.47
(12)	LACM Enhcd Ind ex Alpha Fd	(0.10)	0.29	1.00	0.08	0.04
(12)	L.A. Capital	(0.52)	1.00	0.29	(0.48)	0.39
(12)	Atlanta Capital	1.00	(0.52)	(0.10)	0.45	(0.13)
'		Atlanta Capital	L.A. Capital	LACM Enhcd Ind ex Alpha Fd	Northern Trust AM Enh S&P 500	Parametric Enh S&P 500



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

# Average Equity Characteristics for 3 Years Ended March 31, 2024 **VS THE Pub Pln- Dom Equity Peer Group**

	Parametric											
(12)	Enh	164.16	799	46.52	(0.02)	(0.01)	(0.01)	19.04	15.13	1.32%	3.84	1.52%
	S&P 500	(12)	(74)	(85)	(45)	(54)	(48)	(17)	(49)	(28)	(16)	(25)
	Northern Trust											
(12)	AM Enh	129.53	175	31.44	(0.03)	0.15	(0.18)	15.69	13.68	1.17%	3.49	1.71%
	S&P 500	(22)	(100)	(100)	(57)	(9)	(89)	(94)	(88)	(67)	(35)	(4)
	LACM Enhcd Ind											
(12)	ex Alpha	113.37	246	34.41	0.10	(80.0)	0.18	17.44	16.08	1.10%	3.96	1.34%
	Fd	(27)	(100)	(99)	(5)	(72)	(19)	(64)	(35)	(87)	(15)	(63)
	L.A.					(0.40)						
(12)	Capital	403.78	141	11.90	0.34	(0.46)	0.80	23.20	18.72	1.26%	8.89	0.84%
	Capital	(3)	(100)	(100)	(1)	(100)	(1)	(2)	(3)	(42)	(1)	(100)
	Atlanta											
(12)	Capital	3.75	61	20.17	0.07	(0.20)	0.26	18.56	13.54	1.40%	3.10	0.89%
	Сарітаі	(99)	(100)	(100)	(6)	(98)	(2)	(42)	(69)	(23)	(65)	(100)
		Weighted	Number	Security	MSCI	MSCI	MSCI	Forecasted	Forecasted	P/E	Price/	Indicated
		Median	of	Divers-	Growth	Value	Combined	P/E	Growth	to	Book	Dividend
		Mkt Cap	Holdings	ification	Z-Score	Z-Score	Z-Score	F/C	Earnings	Growth	Value	Yield



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. The holding overlap matrices illustrate the degree of individual stock overlap between various portfolios' holdings. The number in parentheses in the lower left corner of each box is the number of stocks that a given portfolio pair hold in common. The number in the upper left corner is the total weight of these overlapping holdings in the y-axis (vertical) portfolio. The number in the lower right corner is the total weight of those same stocks in the x-axis (horizontal) portfolio.

#### Holding Overlap for Period Ended March 31, 2024

•						•												
NTAM R2000 Index	0% (1)	0%	0%	0%	0%	0%	0% (0)	0%	6% (51)	60%	3%	43%	8% (73)	48%	0%	0%		
NTAM R1000	42%		58%		57%		100%	)	0%		0%		0%		(0)		0%	
Index	(95)	86%	(209)	88%	(188)	31%	(1004)	100%	(14)	14%	(19)	50%	(31)	19%			(0)	0%
Sycamore Small Cap	33%	14%	33%	13%	35%	70%	19%	0%	41%	42%	32%	5%			19%	0%	48%	8%
Value	(4)	, ,	(5)	.0,0	(7)		(31)		(14)	,0	(2)				(31)		(73)	
Riverbridge Small	13%	16%	16%	14%	7%	69%	50%	0%	8%	28%			5%	32%	50%	0%	43%	3%
Cap Growth	(4)	10 /0	(5)	1-7-70	(2)	0370	(19)	0 70	(4)	20 /0			(2)	JZ /0	(19)	0 70	(26)	3 /0
Atlanta	27%	14%	29%	13%	27%	69%	14%	0%			28%	8%	42%	41%	14%	0%	60%	6%
Capital	(2)	14%	(4)	13%	(2)	09%	(14)	0%			(4)	0%	(14)	41%	(14)	0%	(51)	0%
Parametric Enh	42%	000/	58%	000/	57%	040/			0%	4.40/	0%	500/	0%	400/	100%		0%	00/
S&P 500	(95)	86%	(209)	88%	(188)	31%			(14)	14%	(19)	50%	(31)	19%	(1004)	100%	(0)	0%
Northern Trust AM Enh	82%	80%	89%	68%			31%	57%	69%	27%	69%	7%	70%	35%	31%	57%	0%	0%
S&P 500	(42)	00 /6	(87)	00 /6			(188)	31 /6	(2)	21 /0	(2)	1 /0	(7)	33 /6	(188)	31 /0	(0)	0 76
LACM Enhcd Ind ex Alpha	70%	98%			68%	89%	88%	58%	13%	29%	14%	16%	13%	33%	88%	58%	0%	0%
Fd	(85)	30 /6			(87)	09 /0	(209)	JO /6	(4)	25 /0	(5)	10 /6	(5)	33 /6	(209)	JO /6	(2)	0 76
L.A.			98%		80%		86%		14%		16%		14%		86%		0%	
Capital			(85)	70%	(42)	82%	(95)	42%	(2)	27%	(4)	13%	(4)	33%	(95)	42%	(1)	0%
	L.	A. I			Northe			metric	Atla	nta		oridge	, ,	more	1	AM	NTA	
	Cap			llpha d	AM S&P			nh 2 500	Car		Sn Cap G	nall Browth	Smal Va	l Cap lue	1	000 dex	R20 Ind	



# L.A. Capital Period Ended March 31, 2024

#### **Investment Philosophy**

The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are driven by Investor Preferences and thus recognize that when preferences shift a different posture related to that factor is warranted.

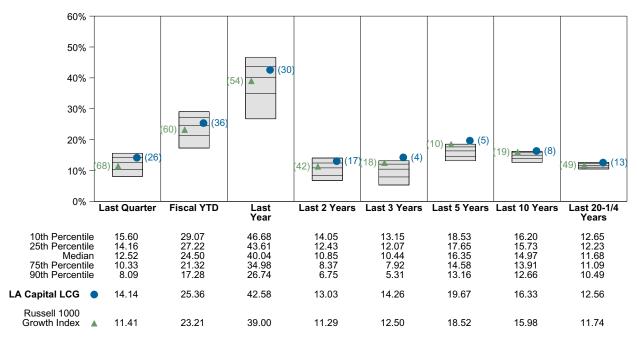
#### **Quarterly Summary and Highlights**

- LA Capital LCG's portfolio posted a 14.14% return for the quarter placing it in the 26 percentile of the Callan Large Cap Growth group for the quarter and in the 30 percentile for the last year.
- LA Capital LCG's portfolio outperformed the Russell 1000 Growth Index by 2.73% for the quarter and outperformed the Russell 1000 Growth Index for the year by 3.58%.

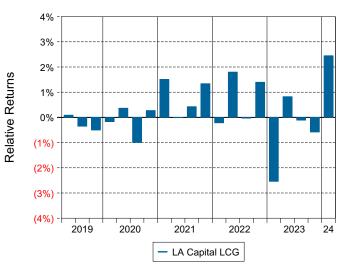
#### **Quarterly Asset Growth**

Beginning Market Value	\$44,656,847
Net New Investment	\$-2,447,624
Investment Gains/(Losses)	\$6,237,717
Ending Market Value	\$48.446.940

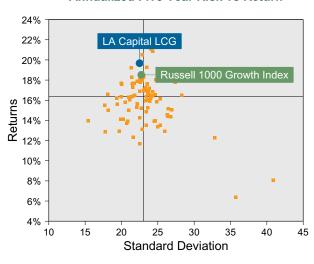
#### Performance vs Callan Large Cap Growth (Gross)



## Relative Return vs Russell 1000 Growth Index



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



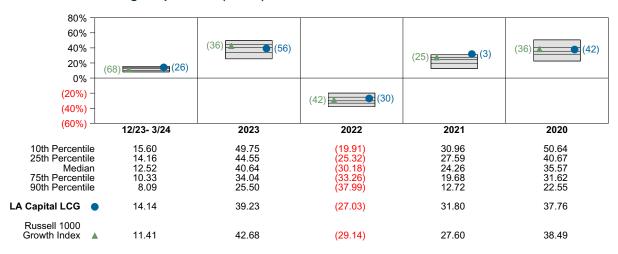


# **LA Capital LCG Return Analysis Summary**

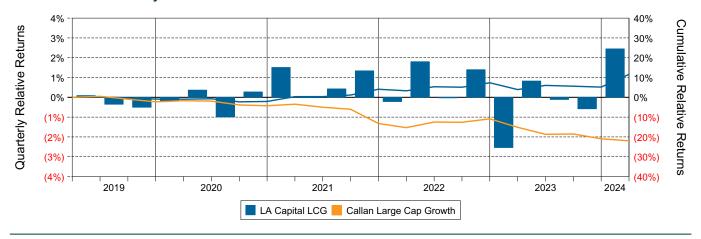
#### **Return Analysis**

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.

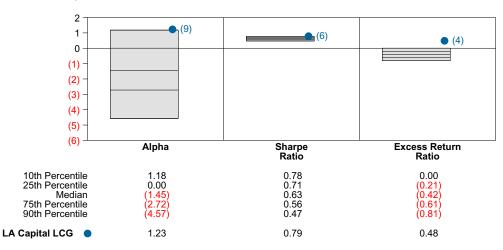
#### Performance vs Callan Large Cap Growth (Gross)



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



Risk Adjusted Return Measures vs Russell 1000 Growth Index Rankings Against Callan Large Cap Growth (Gross) Five Years Ended March 31, 2024



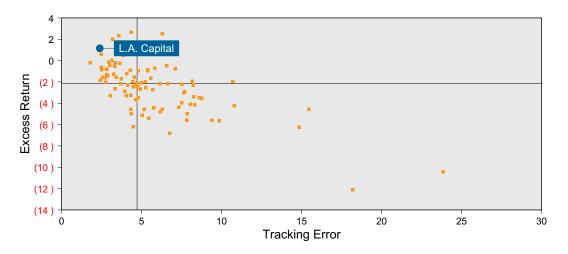


# L.A. Capital **Risk Analysis Summary**

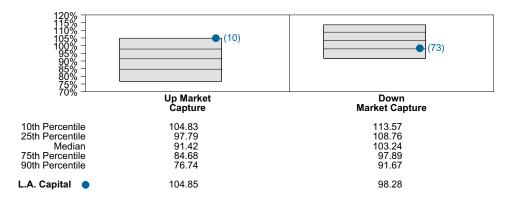
#### Risk Analysis

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.

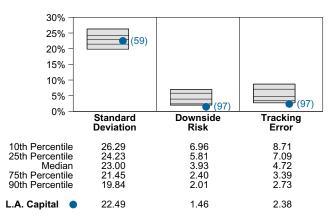
#### Risk Analysis vs Callan Large Cap Growth (Gross) Five Years Ended March 31, 2024

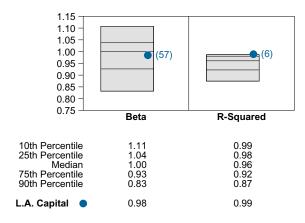


Market Capture vs Russell 1000 Growth Index Rankings Against Callan Large Cap Growth (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs Russell 1000 Growth Index Rankings Against Callan Large Cap Growth (Gross) Five Years Ended March 31, 2024





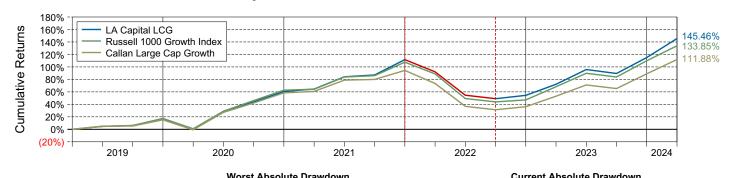


#### **LA Capital LCG**

# Drawdown Analysis for Five Years Ended March 31, 2024

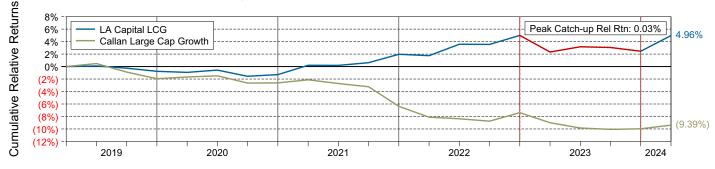
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute 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**



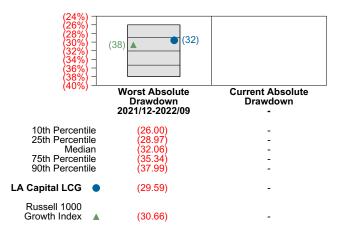
		****	St Absolute blune	104411			Guirci	it Absolute Dial	Vac Wii	
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
LA Capital LCG	(29.59)%	0.75	2021/12-2022/09	(30.66)%	(32.42)%	-	-	-	-	-
Recovery from Trough	44.27%	1.25	2022/09-2023/12	45.81%	43.86%	-	-	-	-	-
Russell 1000 Growth Index	(30.66)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Growth	(32.42)%	0.75	2021/12-2022/09			-	-	-		

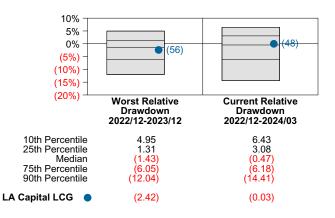
#### Relative Cumulative Drawdown Analysis vs. Russell 1000 Growth Index



	٧	vorst Kei	ative Drawdown		Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
LA Capital LCG	(2.42)%	1.00	2022/12-2023/12	(2.79)%	(0.03)%	1.25	2022/12-2024/03	(2.16)%			
Recovery from Trough	2.45%	0.25+	2023/12-2024/03	0.65%	2.58%	1.00+	2023/03-2024/03	(0.43)%			
Callan Large Cap Growth	(10.50)%	4.25	2019/06-2023/09		(9.82)%	4.75	2019/06-2024/03				

Drawdown Rankings vs. Russell 1000 Growth Index Rankings against Callan Large Cap Growth Five Years Ended March 31, 2024



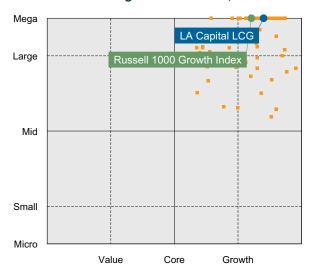




# **Current Holdings Based Style Analysis LA Capital LCG** As of March 31, 2024

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.

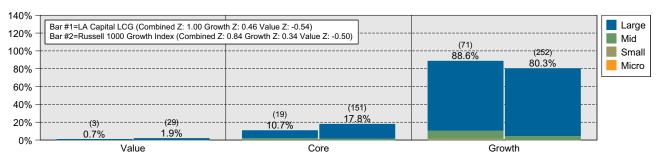
#### Style Map vs Callan Large Cap Growth Holdings as of March 31, 2024



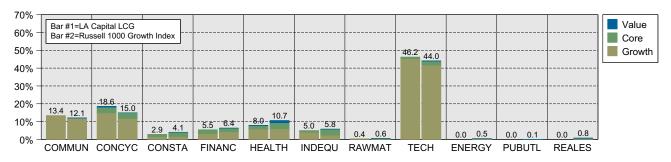
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	1.9% (29)	17.8% (151)	80.3% (252)	100.0% (432)
Total	0.7% (3)	10.7% (19)	88.6% (71)	100.0% (93)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (6)	0.1% (20)	0.2% (27)	0.3% (53)
Small	0.0% (0)	0.4% (1)	2.1% (5)	2.5% (6)
	0.0% (0)	· , ,	, ,	2.5% (6)
Mid	0.2% (14)	1.9% (68)	4.7% (136)	6.8% (218)
	0.5% (2)	2.1% (5)	8.8% (19)	11.4% (26)
Large	1.7% (9)	15.9% (63)	75.4% (89)	92.9% (161)
Large	0.2% (1)	8.2% (13)	77.6% (47)	86.1% (61)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024

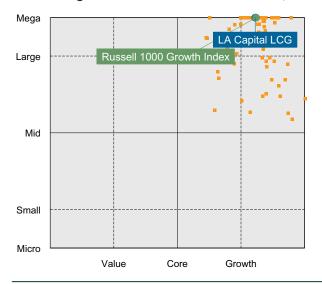




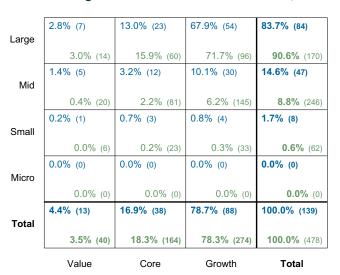
# Historical Holdings Based Style Analysis LA Capital LCG For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

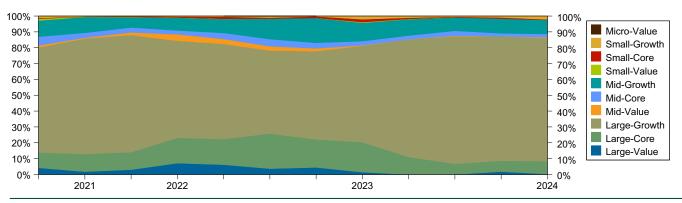
# Average Style Map vs Callan Large Cap Growth Holdings for Three Years Ended March 31, 2024



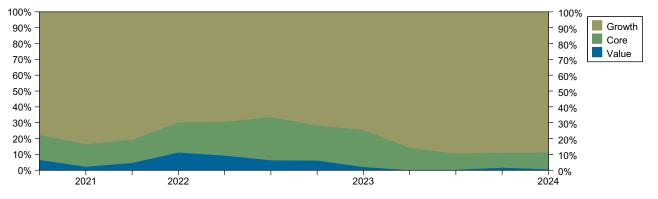
#### Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2024



#### LA Capital LCG Historical Cap/Style Exposures



LA Capital LCG Historical Style Only Exposures



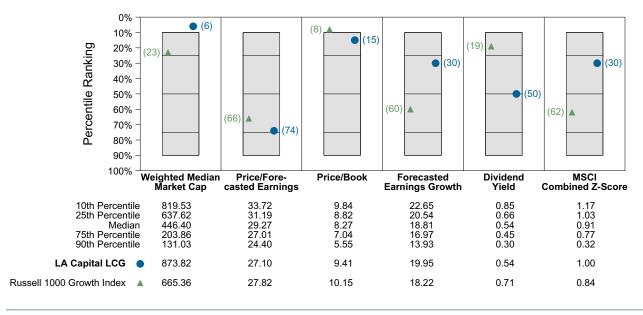


# **LA Capital LCG Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

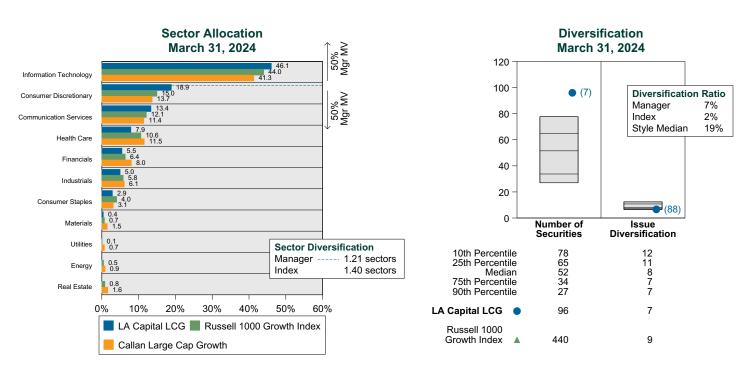
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Growth as of March 31, 2024



#### **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.





# **LA Capital LCG** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Information Technology	\$6,194,681	11.0%	12.09%	3126.13	32.52	0.71%	17.08%
Information Technology	\$4,848,597	8.6%	(10.82)%	2647.97	24.99	0.56%	11.00%
Information Technology	\$4,706,644	8.4%	82.46%	2258.90	35.53	0.02%	37.90%
Consumer Discretionary	\$3,352,543	6.0%	18.72%	1873.67	41.05	0.00%	10.21%
Communication Services	\$2,260,375	4.0%	37.33%	1068.30	23.35	0.41%	26.00%
Communication Services	\$1,848,742	3.3%	8.05%	889.43	21.35	0.00%	19.30%
Communication Services	\$1,569,801	2.8%	8.04%	863.47	21.59	0.00%	19.30%
Health Care	\$1,310,863	2.3%	33.69%	739.66	55.89	0.67%	49.75%
Information Technology	\$1,134,551	2.0%	19.23%	614.22	25.94	1.58%	14.40%
Health Care	\$878,218	1.6%	31.85%	12.43	36.29	0.00%	17.97%
	Information Technology Information Technology Information Technology Consumer Discretionary Communication Services Communication Services Communication Services Health Care Information Technology	Market   Value	Sector         Market Value         of Portfolio           Information Technology         \$6,194,681         11.0%           Information Technology         \$4,848,597         8.6%           Information Technology         \$4,706,644         8.4%           Consumer Discretionary         \$3,352,543         6.0%           Communication Services         \$2,260,375         4.0%           Communication Services         \$1,848,742         3.3%           Communication Services         \$1,569,801         2.8%           Health Care         \$1,310,863         2.3%           Information Technology         \$1,134,551         2.0%	Sector         Market Value         of Value         Qtrly Portfolio           Information Technology Information Technology Information Technology Information Technology Information Technology State	Market         of Value         Qtrly Portfolio         Market Return         Capital           Information Technology Information Technology Information Technology Information Technology Information Technology S4,848,597         8.6%         (10.82)%         2647.97           Information Technology Information Technology Information Technology S4,706,644         8.4%         82.46%         2258.90           Consumer Discretionary Communication Services Information Services S2,260,375         4.0%         37.33%         1068.30           Communication Services Information Services Information Technology S1,1310,863         2.3%         8.04%         863.47           Health Care Information Technology S1,134,551         2.0%         19.23%         614.22	Sector         Forecasted Value         Percent Portfolio         Qtrly Return         Market Capital Ratio           Information Technology Information Services Information	Sector         Forecasted Value         Percent Portfolio         Qtrly Return         Market Capital         Forecasted Earnings Poil Return         Dividend Part Capital           Information Technology Information Technology Information Technology Information Technology Information Technology S4,706,644         8.6%         (10.82)%         2647.97         24.99         0.56%           Consumer Discretionary Communication Services Information Services S2,260,375         4.0%         18.72%         1873.67         41.05         0.00%           Communication Services Communication Services S1,848,742         3.3%         8.05%         889.43         21.35         0.00%           Communication Services Health Care Information Technology S1,134,551         2.0%         19.23%         614.22         25.94         1.58%

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Nvidia Corp	Information Technology	\$4,706,644	8.4%	82.46%	2258.90	35.53	0.02%	37.90%
Applovin Corp	Information Technology	\$127,157	0.2%	73.71%	18.75	25.93	0.00%	65.80%
Emcor Group Inc	Industrials	\$648,921	1.2%	62.69%	16.48	23.73	0.21%	20.65%
Williams-Sonoma	Consumer Discretionary	\$38,421	0.1%	58.05%	20.36	20.66	1.42%	34.93%
Pure Storage Inc Cl A	Information Technology	\$31,558	0.1%	45.79%	16.89	32.43	0.00%	48.36%
Deckers Outdoor Corp	Consumer Discretionary	\$25,414	0.0%	40.82%	24.16	31.13	0.00%	19.00%
Doordash Inc Cl A Com Usd0.00001 Cla	Consumer Discretionary	\$390,298	0.7%	39.27%	51.89	279.92	0.00%	-
Meta Platforms Inc	Communication Services	\$2,260,375	4.0%	37.33%	1068.30	23.35	0.41%	26.00%
Eagle Materials Inc	Materials	\$197,562	0.4%	34.11%	9.36	16.94	0.37%	30.30%
Palantir Technologies Inc CI A	Information Technology	\$126,302	0.2%	34.01%	48.57	65.74	0.00%	85.19%

# **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Boeing Co	Industrials	\$177,937	0.3%	(25.96)%	117.75	173.40	0.00%	252.20%
Lululemon Athletica Inc	Consumer Discretionary	\$289,472	0.5%	(24.74)%	47.23	27.12	0.00%	12.30%
Smartsheet Inc Com Cl A	Information Technology	\$166,705	0.3%	(19.49)%	5.29	33.19	0.00%	-
Adobe Inc	Information Technology	\$513,178	0.9%	(15.42)%	226.06	26.83	0.00%	13.40%
Nike Inc CI B	Consumer Discretionary	\$161,552	0.3%	(13.12)%	114.39	24.06	1.57%	15.00%
Apple Inc	Information Technology	\$4,848,597	8.6%	(10.82)%	2647.97	24.99	0.56%	11.00%
Incyte Corp	Health Care	\$88,019	0.2%	(9.27)%	12.79	11.86	0.00%	22.50%
Unitedhealth Group	Health Care	\$746,502	1.3%	(5.66)%	456.08	17.26	1.52%	13.40%
Starbucks Corp	Consumer Discretionary	\$381,188	0.7%	(4.25)%	103.47	20.83	2.49%	15.81%
Workday Inc Cl A	Information Technology	\$184,106	0.3%	(1.20)%	57.55	39.71	0.00%	20.46%

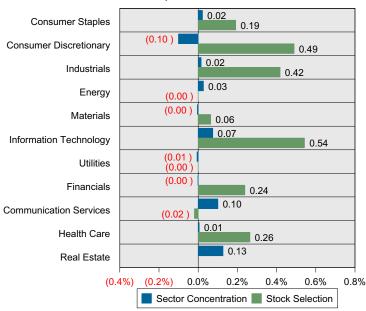


# LA Capital LCG vs Russell 1000 Growth Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Large Cap Growth over the same time period.

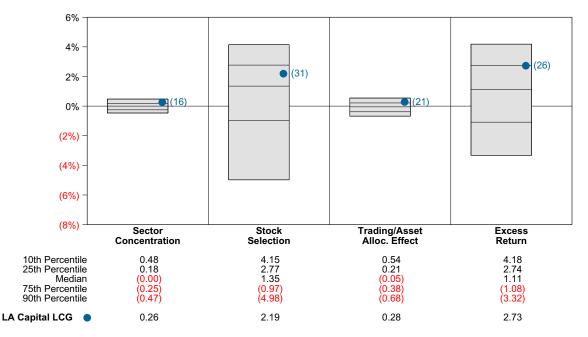
#### Attribution Effects by Sector vs Russell 1000 Growth Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.02%	0.19%
Consumer Discretionary	(0.10%)	0.49%
Industrials	0.02%	0.42%
Energy	0.03%	(0.00%)
Materials	(0.00%)	0.06%
Information Technology	0.07%	0.54%
Utilities	(0.01%)	(0.00%)
Financials	(0.00%)	0.24%
Communication Services	s 0.10%	(0.02%)
Health Care	0.01%	0.26%
Real Estate	0.13%	0.00%
Total	0.26%	2.19%

Manager Return	Index Return _	Sector Concen	_ Stock Select _	_ <u>Trading</u> _	⊥ Asset Alloc
14.14%	11.41%	0.26%	2.19%	0.32%	(0.04%)

#### **Equity Attribution Ranking vs Callan Large Cap Growth** Quarter ended March 31, 2024



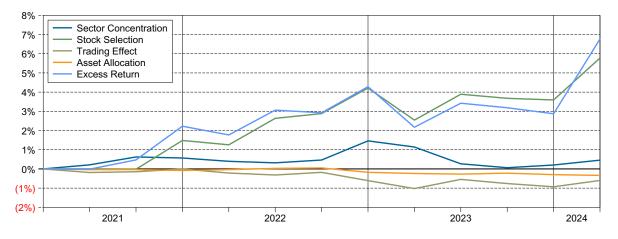


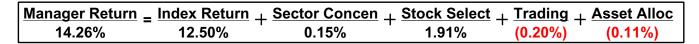
# LA Capital LCG vs Russell 1000 Growth Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

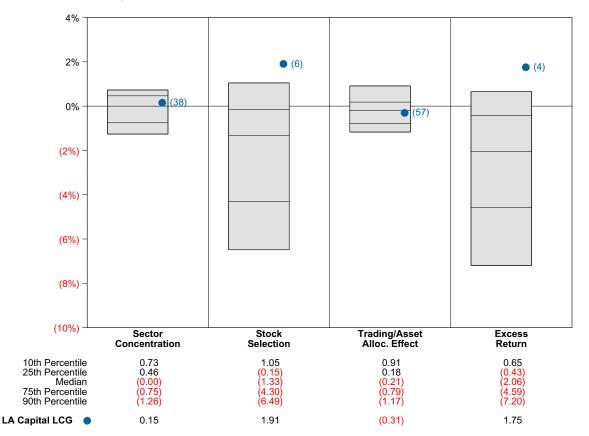
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Large Cap Growth over the same time period.

#### **Cumulative Attribution Effects vs Russell 1000 Growth Index**





#### **Equity Attribution Ranking vs Callan Large Cap Growth** Three Years Ended March 31, 2024





# L.A. Capital Enhanced Period Ended March 31, 2024

#### **Investment Philosophy**

The LA Capital Enhanced portfolio is a large core portfolio benchmarked to the Russell 1000 Index. Characterized as an enhanced index assignment, its objective is to track the benchmark with lower variability. The pension portfolio began in August of 2000 and the insurance portfolio was initiated in April of 2004. Since October of 2006 a small portion of each of the two core accounts was allocated into the Large Cap Alpha Fund with intent to add incremental alpha to the assignment given that the information ratio was expected to be higher.

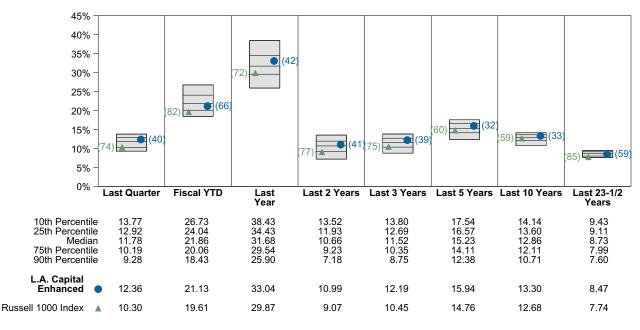
#### **Quarterly Summary and Highlights**

- L.A. Capital Enhanced's portfolio posted a 12.36% return for the quarter placing it in the 40 percentile of the Callan Large Cap Core group for the quarter and in the 42 percentile for the last year.
- L.A. Capital Enhanced's portfolio outperformed the Russell 1000 Index by 2.06% for the quarter and outperformed the Russell 1000 Index for the year by 3.17%.

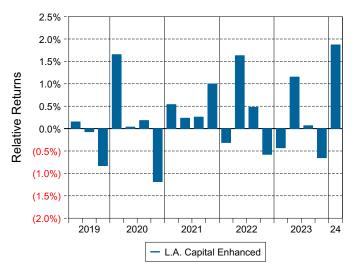
#### **Quarterly Asset Growth**

Beginning Market Value	\$757,513,593
Net New Investment	\$-24,768,482
Investment Gains/(Losses)	\$91,936,968
Ending Market Value	\$824 682 079

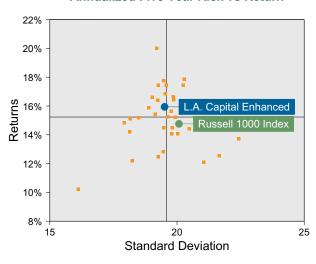
## Performance vs Callan Large Cap Core (Gross)



## Relative Return vs Russell 1000 Index



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



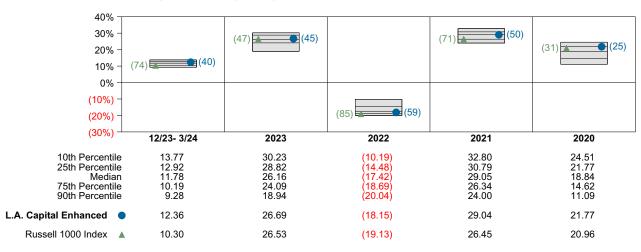


# L.A. Capital Enhanced **Return Analysis Summary**

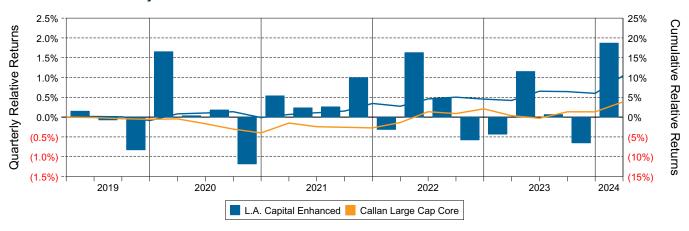
#### **Return Analysis**

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.

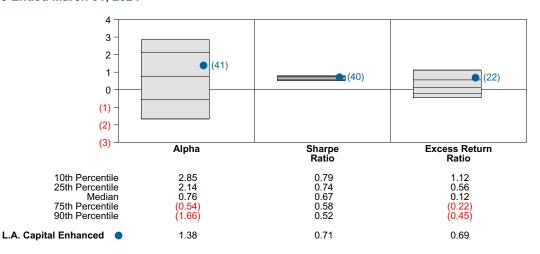
#### Performance vs Callan Large Cap Core (Gross)



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



Risk Adjusted Return Measures vs Russell 1000 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



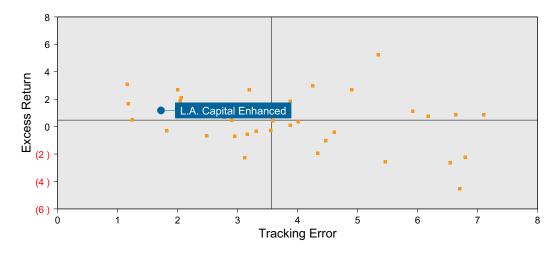


# L.A. Capital Enhanced **Risk Analysis Summary**

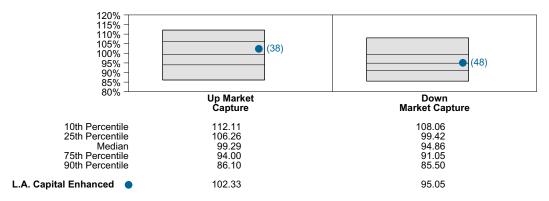
#### Risk Analysis

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.

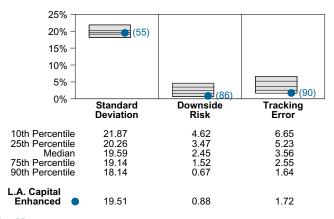
#### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended March 31, 2024

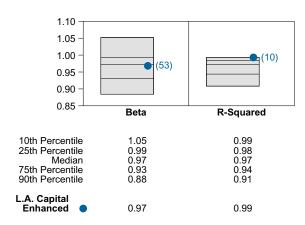


Market Capture vs Russell 1000 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs Russell 1000 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



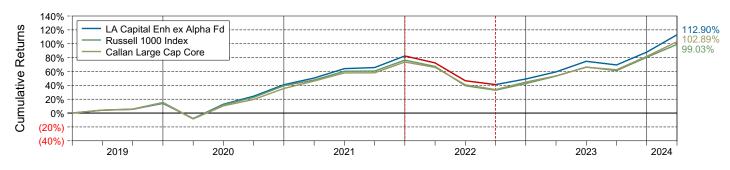




# LA Capital Enh ex Alpha Fd Drawdown Analysis for Five Years Ended March 31, 2024

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**

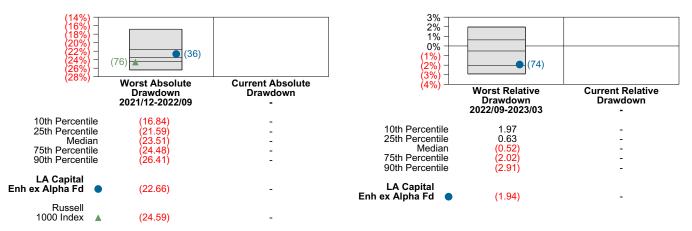


	worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers
LA Capital Enh ex Alpha Fd	(22.66)%	0.75	2021/12-2022/09	(24.59)%	(22.89)%	-	-	-	-	-
Recovery from Trough	33.24%	1.25	2022/09-2023/12	35.69%	35.79%	-	-	-	-	-
Russell 1000 Index	(24.59)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

# Relative Cumulative Drawdown Analysis vs. Russell 1000 Index 10% LA Capital Enh ex Alpha Fd Callan Large Cap Core 5% 0% 1.94%

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
LA Capital Enh ex Alpha Fd	(1.94)%	0.50	2022/09-2023/03	(0.43)%	-	-	-	-	
Recovery from Trough	2.85%	1.00+	2023/03-2024/03	1.70%	-	-	-	-	
Callan Large Cap Core	(2.86)%	1.75	2019/03-2020/12		-	-	-		

Drawdown Rankings vs. Russell 1000 Index Rankings against Callan Large Cap Core Five Years Ended March 31, 2024

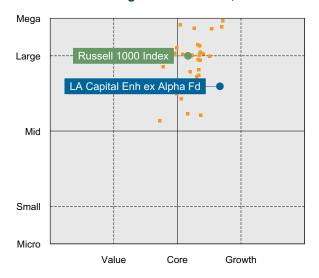




# **Current Holdings Based Style Analysis** LA Capital Enh ex Alpha Fd As of March 31, 2024

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.

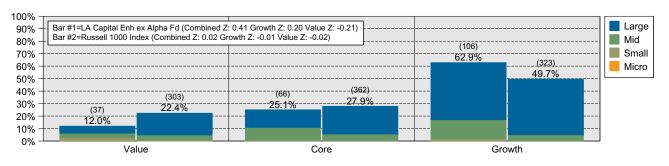
#### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



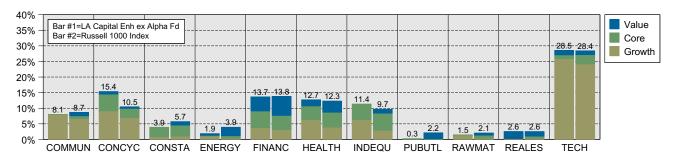
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
· otai	22.4% (303)	27.9% (362)	49.7% (323)	100.0% (988)
Total	12.0% (37)	25.1% (66)	62.9% (106)	100.0% (209)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	0.070 (0)	0.070 (0)	0.0 % (0)	0.0 /0 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Siliali	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
Small	2.6% (7)	0.7% (5)	1.8% (5)	5.1% (17)
	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Mid	, ,	, ,	, ,	` '
	3.6% (13)	10.1% (26)	15.2% (45)	28.9% (84)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)
	5.8% (17)	14.3% (35)	45.9% (56)	66.0% (108)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024

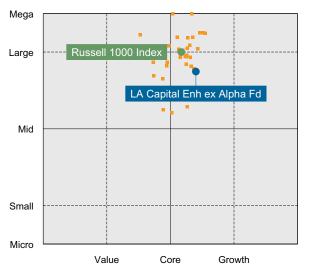




# **Historical Holdings Based Style Analysis** LA Capital Enh ex Alpha Fd For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented guarterly 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

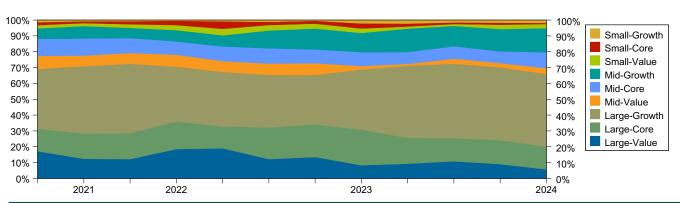
# Average Style Map vs Callan Large Cap Core Holdings for Three Years Ended March 31, 2024



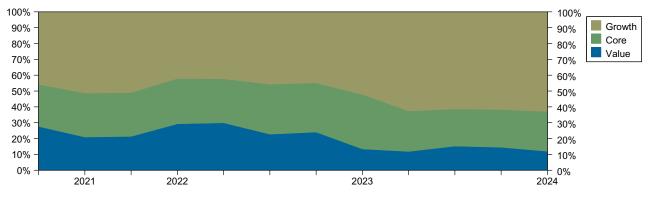
#### **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024



# LA Capital Enh ex Alpha Fd Historical Cap/Style Exposures



LA Capital Enh ex Alpha Fd Historical Style Only Exposures



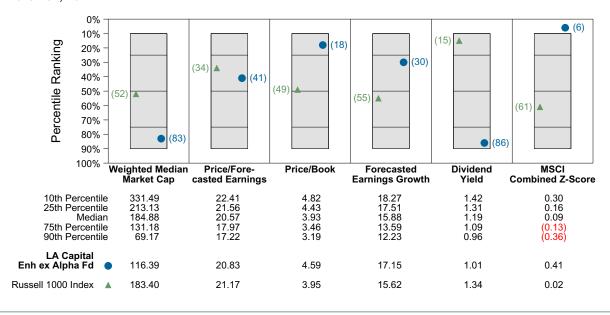


# LA Capital Enh ex Alpha Fd **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

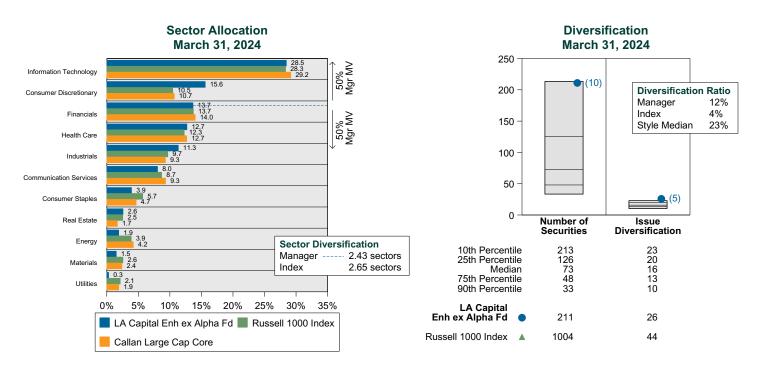
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of March 31, 2024



#### **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.





# LA Capital Enh ex Alpha Fd Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

Stock         Sector         Value         Portfolio         Return         Capital Capital         Ratio         Vield           Microsoft Corp         Information Technology         \$32,805,221         5.9%         12.09%         3126.13         32.52         0.71%           Nvidia Corp         Information Technology         \$23,876,591         4.3%         82.46%         2258.90         35.53         0.02%           Apple Inc         Information Technology         \$21,946,868         4.0%         (10.82)%         2647.97         24.99         0.56%           Amazon.Com         Consumer Discretionary         \$15,550,019         2.8%         18.72%         1873.67         41.05         0.00%           Meta Platforms Inc         Communication Services         \$11,792,310         2.1%         37,33%         1068.30         23.35         0.41%	Forecasted Growth in
Stock         Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Microsoft Corp         Information Technology         \$32,805,221         5.9%         12.09%         3126.13         32.52         0.71%           Nvidia Corp         Information Technology         \$23,576,591         4.3%         82.46%         2258.90         35.53         0.02%           Apple Inc         Information Technology         \$21,946,868         4.0%         (10.82)%         2647.97         24.99         0.56%           Amazon.Com         Consumer Discretionary         \$15,550,019         2.8%         18.72%         1873.67         41.05         0.00%	Growth in
Microsoft Corp         Information Technology         \$32,805,221         5.9%         12.09%         3126.13         32.52         0.71%           Nvidia Corp         Information Technology         \$23,576,591         4.3%         82.46%         2258.90         35.53         0.02%           Apple Inc         Information Technology         \$21,946,868         4.0%         (10.82)%         2647.97         24.99         0.56%           Amazon.Com         Consumer Discretionary         \$15,550,019         2.8%         18.72%         1873.67         41.05         0.00%	
Nvidia Corp         Information Technology         \$23,576,591         4.3%         82.46%         2258.90         35.53         0.02%           Apple Inc         Information Technology         \$21,946,868         4.0%         (10.82)%         2647.97         24.99         0.56%           Amazon.Com         Consumer Discretionary         \$15,550,019         2.8%         18.72%         1873.67         41.05         0.00%	Earnings
Apple Inc         Information Technology         \$21,946,868         4.0%         (10.82)%         2647.97         24.99         0.56%           Amazon.Com         Consumer Discretionary         \$15,550,019         2.8%         18.72%         1873.67         41.05         0.00%	17.08%
Amazon.Com Consumer Discretionary \$15,550,019 2.8% 18.72% 1873.67 41.05 0.00%	37.90%
	11.00%
Meta Platforms Inc. Communication Services \$11,792,310 2,1% 37,33% 1068,30 23,35 0,41%	10.21%
motal rationio inc	26.00%
Alphabet Inc CI A Communication Services \$10,528,877 1.9% 8.05% 889.43 21.35 0.00%	19.30%
Alphabet Inc CI C Communication Services \$9,439,511 1.7% 8.04% 863.47 21.59 0.00%	19.30%
Emcor Group Inc Industrials \$8,492,000 1.5% 62.69% 16.48 23.73 0.21%	20.65%
Berkshire Hathaway Inc Del CI B New Financials \$7,857,837 1.4% 17.91% 551.22 22.45 0.00%	13.69%
Medpace Hidgs Inc Health Care \$7,778,271 1.4% 31.85% 12.43 36.29 0.00%	17.97%

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Nvidia Corp	Information Technology	\$23,576,591	4.3%	82.46%	2258.90	35.53	0.02%	37.90%
Vistra Energy Corp	Utilities	\$1,432,700	0.3%	81.42%	24.23	14.77	1.23%	22.91%
Applovin Corp	Information Technology	\$730,271	0.1%	73.71%	18.75	25.93	0.00%	65.80%
Shockwave Med Inc	Health Care	\$306,092	0.1%	70.88%	12.18	62.83	0.00%	-
Emcor Group Inc	Industrials	\$8,492,000	1.5%	62.69%	16.48	23.73	0.21%	20.65%
Williams-Sonoma	Consumer Discretionary	\$320,705	0.1%	58.05%	20.36	20.66	1.42%	34.93%
Kinsale Cap Group Inc	Financials	\$245,054	0.0%	56.73%	12.17	33.42	0.11%	51.67%
Dicks Sporting Goods	Consumer Discretionary	\$1,126,549	0.2%	53.77%	13.24	16.74	1.96%	7.40%
Pure Storage Inc Cl A	Information Technology	\$432,557	0.1%	45.79%	16.89	32.43	0.00%	48.36%
Core & Main Inc	Industrials	\$1,092,788	0.2%	41.67%	11.00	22.15	0.00%	20.42%

# **10 Worst Performers**

Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Boeing Co	Industrials	\$1,022,075	0.2%	(25.96)%	117.75	173.40	0.00%	252.20%
Marketaxess Hldgs Inc	Financials	\$213,988	0.0%	(24.88)%	8.31	29.19	1.35%	9.28%
Lululemon Athletica Inc	Consumer Discretionary	\$1,433,686	0.3%	(24.74)%	47.23	27.12	0.00%	12.30%
Atlassian A	Information Technology	\$527,773	0.1%	(21.57)%	30.70	65.19	0.00%	22.74%
Insulet Corp	Health Care	\$1,424,334	0.3%	(21.01)%	11.99	53.76	0.00%	18.10%
Smartsheet Inc Com Cl A	Information Technology	\$2,658,887	0.5%	(19.49)%	5.29	33.19	0.00%	-
Playtika Hldg Corp Com	Communication Services	\$155,304	0.0%	(18.02)%	2.61	10.46	5.67%	8.90%
Adobe Inc	Information Technology	\$3,867,254	0.7%	(15.42)%	226.06	26.83	0.00%	13.40%
Sba Communications Corp New CI A	Real Estate	\$1,053,595	0.2%	(14.20)%	23.43	39.62	1.81%	12.98%
Zoetis Inc CI A	Health Care	\$953,498	0.2%	(14.07)%	77.48	28.34	1.02%	9.60%

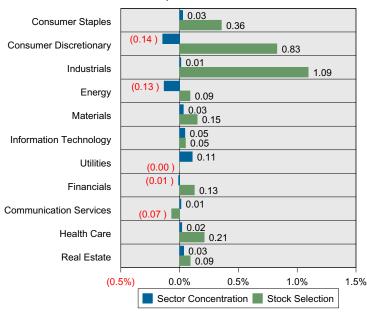


# LA Capital Enh ex Alpha Fd vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Large Cap Core over the same time period.

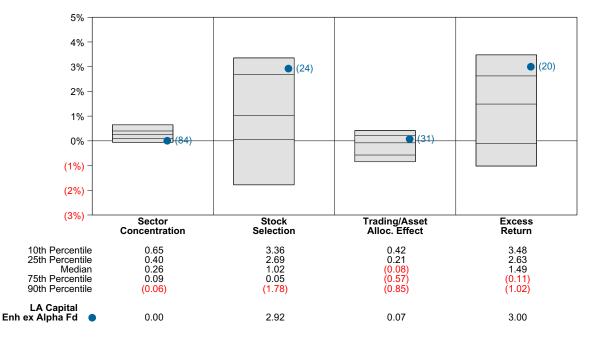
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.03%	0.36%
Consumer Discretionary	(0.14%)	0.83%
Industrials	0.01%	1.09%
Energy	(0.13%)	0.09%
Materials	0.03%	0.15%
Information Technology	0.05%	0.05%
Utilities	0.11%	(0.00%)
Financials	(0.01%)	0.13%
Communication Services	s 0.01%	(0.07%)
Health Care	0.02%	0.21%
Real Estate	0.03%	0.09%
Total	0.00%	2.92%

Manager Return _	Index Return	<b>L</b> Sector Concen _	Stock Select	<sub></sub> Trading _	Asset Alloc
13.29%	10.30%	0.00%	2.92%	່ 0.11%	(0.04%)

#### **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended March 31, 2024



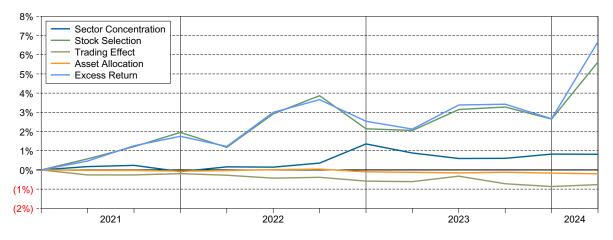


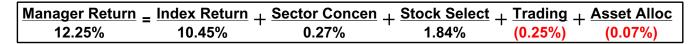
# LA Capital Enh ex Alpha Fd vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

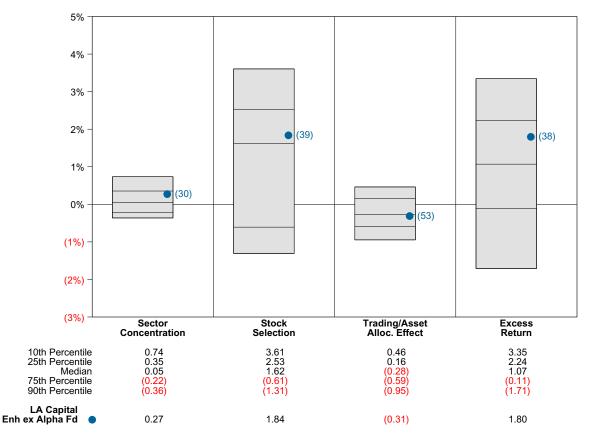
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Large Cap Core over the same time period.

#### **Cumulative Attribution Effects vs Russell 1000 Index**





#### **Equity Attribution Ranking vs Callan Large Cap Core** Three Years Ended March 31, 2024





# NTAM R1000 Index Period Ended March 31, 2024

#### **Investment Philosophy**

The primary objective of the Northern Trust Russell 1000 Index Fund is to approximate the risk and return characteristics of the Russell 1000 Index.

## **Quarterly Summary and Highlights**

- NTAM R1000 Index's portfolio posted a 10.29% return for the quarter placing it in the 74 percentile of the Callan Large Cap Core group for the quarter and in the 72 percentile for the last year.
- NTAM R1000 Index's portfolio underperformed the Russell 1000 Index by 0.00% for the quarter and outperformed the Russell 1000 Index for the year by 0.04%.

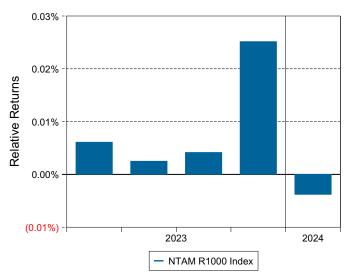
Quarterly As	set Growth
--------------	------------

Beginning Market Value	\$448,741,279
Net New Investment	\$-10,294,303
Investment Gains/(Losses)	\$45,756,071
Ending Market Value	\$484,203,048

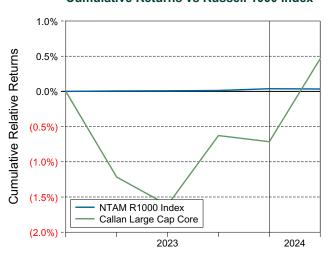
# Performance vs Callan Large Cap Core (Gross)



#### Relative Return vs Russell 1000 Index



#### **Cumulative Returns vs Russell 1000 Index**

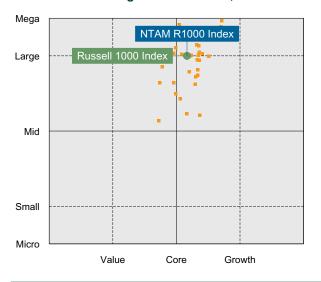




# **Current Holdings Based Style Analysis NTAM R1000 Index** As of March 31, 2024

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.

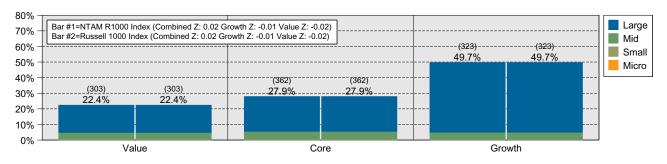
#### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



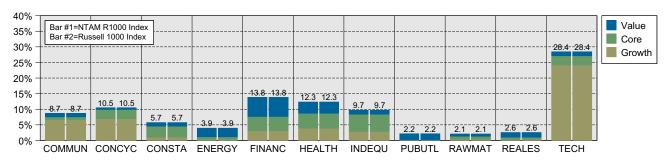
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	22.4% (303)	27.9% (362)	49.7% (323)	100.0% (988)
Total				
	22.4% (303)	27.9% (362)	49.7% (323)	100.0% (988)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro		, ,	, ,	, ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
Small	0.170 (00)	0.070 (70)	0.070 (40)	11270 (113)
	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Mid	, (,	(100)	, ()	1 110 70 (02.1)
	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024



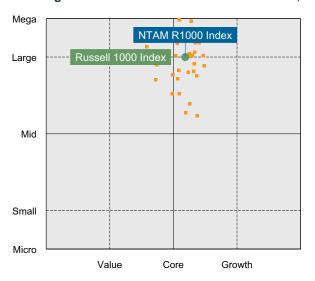


# **Historical Holdings Based Style Analysis** NTAM R1000 Index For One and 1/4 Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

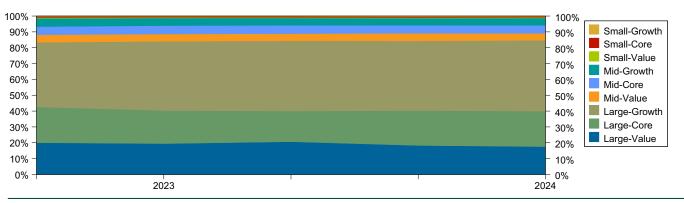
## Average Style Map vs Callan Large Cap Core Holdings for One and 1/4 Years Ended March 31, 2024

## **Average Style Exposure Matrix** Holdings for One and 1/4 Years Ended March 31, 2024

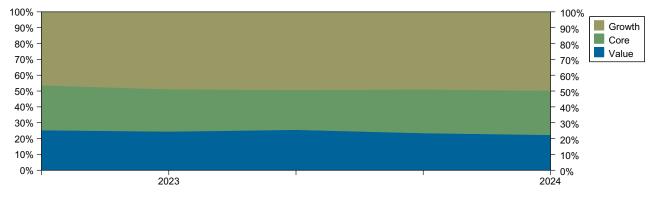




#### NTAM R1000 Index Historical Cap/Style Exposures



#### **NTAM R1000 Index Historical Style Only Exposures**



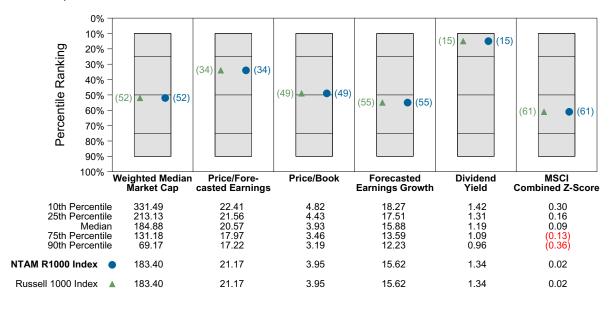


# NTAM R1000 Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

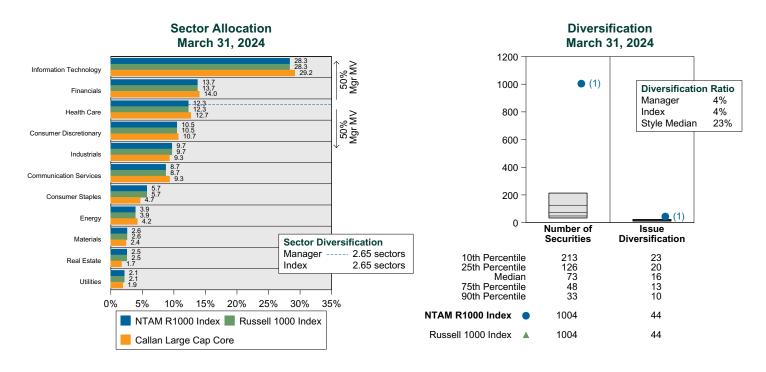
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of March 31, 2024



#### **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.





# NTAM R1000 Index Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		_
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Microsoft Corp	Information Technology	\$31,508,091	6.5%	12.09%	3126.13	32.52	0.71%	17.08%
Apple Inc	Information Technology	\$25,165,892	5.2%	(10.82)%	2647.97	24.99	0.56%	11.00%
Nvidia Corp	Information Technology	\$21,604,733	4.5%	82.46%	2258.90	35.53	0.02%	37.90%
Amazon.Com	Consumer Discretionary	\$16,353,446	3.4%	18.72%	1873.67	41.05	0.00%	10.21%
Meta Platforms Inc	Communication Services	\$10,807,974	2.2%	37.33%	1068.30	23.35	0.41%	26.00%
Alphabet Inc Cl A	Communication Services	\$9,025,427	1.9%	8.05%	889.43	21.35	0.00%	19.30%
Berkshire Hathaway Inc Del Cl B New	Financials	\$7,748,846	1.6%	17.91%	551.22	22.45	0.00%	13.69%
Alphabet Inc CI C	Communication Services	\$7,690,433	1.6%	8.04%	863.47	21.59	0.00%	19.30%
Lilly (Eli) & Co	Health Care	\$6,625,026	1.4%	33.69%	739.66	55.89	0.67%	49.75%
JPMorgan Chase & Co	Financials	\$5,818,201	1.2%	18.48%	576.99	12.50	2.30%	1.20%

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Nvidia Corp	Information Technology	\$21,604,733	4.5%	82.46%	2258.90	35.53	0.02%	37.90%
Vistra Energy Corp	Utilities	\$247,452	0.1%	81.42%	24.23	14.77	1.23%	22.91%
Applovin Corp	Information Technology	\$139,768	0.0%	73.71%	18.75	25.93	0.00%	65.80%
Shockwave Med Inc	Health Care	\$118,690	0.0%	70.88%	12.18	62.83	0.00%	-
Gs Acquisition Hldgs Corp Com Cl A	Industrials	\$281,814	0.1%	70.09%	31.20	33.68	0.12%	26.70%
Cava Group	Consumer Discretionary	\$33,817	0.0%	62.98%	7.99	282.46	0.00%	-
Emcor Group Inc	Industrials	\$163,300	0.0%	62.69%	16.48	23.73	0.21%	20.65%
Maplebear	Consumer Staples	\$7,953	0.0%	58.89%	9.94	57.72	0.00%	-
Constellation Energy Stock	Utilities	\$598,087	0.1%	58.45%	58.25	24.52	0.76%	-
Williams-Sonoma	Consumer Discretionary	\$203,444	0.0%	58.05%	20.36	20.66	1.42%	34.93%

# **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
New York Cmnty Bancorp Inc	Financials	\$23,049	0.0%	(68.18)%	2.57	32.20	6.21%	15.75%
Ssr Mng Inc	Materials	\$9,118	0.0%	(59.61)%	0.90	45.98	6.28%	14.91%
Rivian Automotive Inc A Common Stock	Consumer Discretionary	\$74,432	0.0%	(53.33)%	10.62	(2.99)	0.00%	-
Agilon Health Inc Com	Health Care	\$17,815	0.0%	(51.38)%	2.50	(22.43)	0.00%	-
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$9,207	0.0%	(39.20)%	0.79	(2.65)	0.00%	6.01%
Iridium Communications Inc	Communication Services	\$32,249	0.0%	(36.14)%	3.18	34.38	1.99%	(7.79)%
Viasat Inc	Information Technology	\$21,250	0.0%	(35.28)%	2.27	(31.14)	0.00%	167.37%
Quidelortho Corp	Health Care	\$25,742	0.0%	(34.95)%	3.20	16.48	0.00%	8.43%
Unity Software Inc	Information Technology	\$78,150	0.0%	(34.70)%	10.30	(17.02)	0.00%	-
10x Genomics Inc CI A Com	Health Care	\$34,631	0.0%	(32.93)%	3.94	(26.03)	0.00%	-

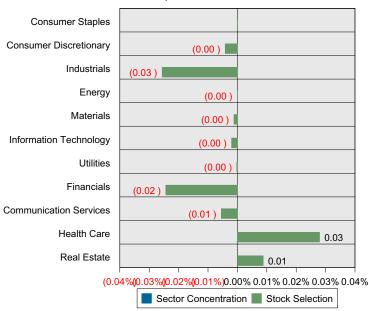


# NTAM R1000 Index vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Large Cap Core over the same time period.

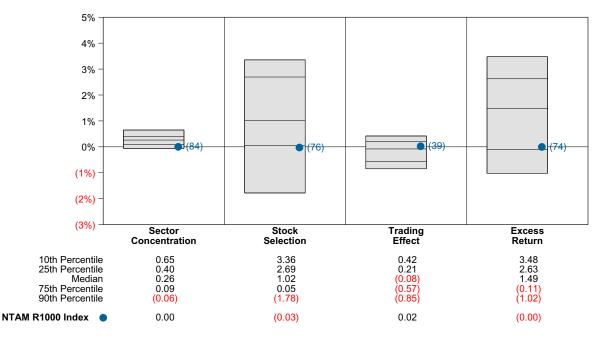
## Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	0.00%
Consumer Discretionary	0.00%	(0.00%)
Industrials	0.00%	(0.03%)
Energy	0.00%	(0.00%)
Materials	0.00%	(0.00%)
Information Technology	0.00%	(0.00%)
Utilities	0.00%	(0.00%)
Financials	0.00%	(0.02%)
Communication Services	s 0.00%	(0.01%)
Health Care	0.00%	0.03%
Real Estate	0.00%	0.01%
Total	0.00%	(0.03%)

Manager Return _	Index Return	Sector Concentration _	Stock Selection	<b>⊥</b> Trading
10.29%	10.30%	0.00%	(0.03%)	0.02%

#### **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended March 31, 2024



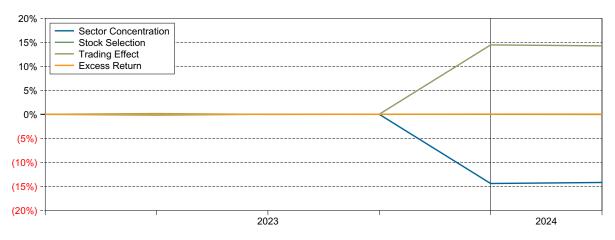


# NTAM R1000 Index vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

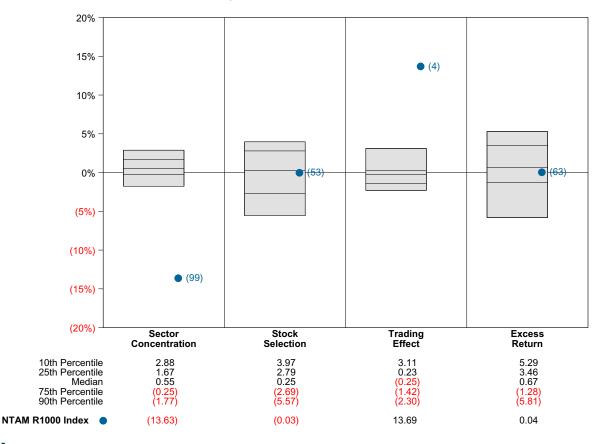
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Large Cap Core over the same time period.

#### **Cumulative Attribution Effects vs Russell 1000 Index**





## **Equity Attribution Ranking vs Callan Large Cap Core** One and One-Quarter Years Ended March 31, 2024





#### NTAM Quant Enh R1000 Period Ended March 31, 2024

#### **Investment Philosophy**

The Fund's Investment Objective is to exceed the total return of the Russell 1000 Index\* (the Benchmark) by 150 basis points on a gross of fee basis while targeting expected tracking error of no greater than 150-200 basis points. **Effective October 1, 2022, the benchmark changed from S&P500 to Russell 1000.** Benchmark returns for the S&P500 Index are linked to Russell 1000 Index.

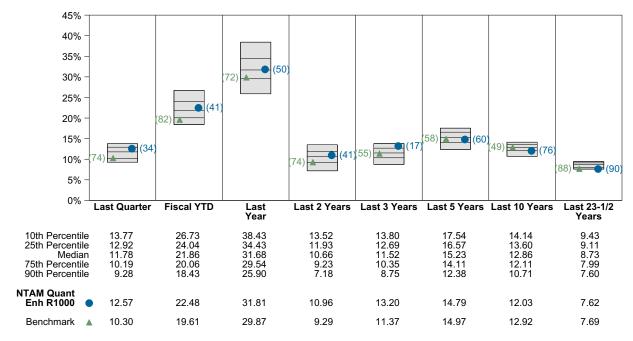
#### **Quarterly Summary and Highlights**

- NTAM Quant Enh R1000's portfolio posted a 12.57% return for the quarter placing it in the 34 percentile of the Callan Large Cap Core group for the quarter and in the 50 percentile for the last year.
- NTAM Quant Enh R1000's portfolio outperformed the Benchmark by 2.28% for the quarter and outperformed the Benchmark for the year by 1.95%.

#### **Quarterly Asset Growth**

Beginning Market Value	\$281,955,070
Net New Investment	\$-8,067,767
Investment Gains/(Losses)	\$35,061,075
Ending Market Value	\$308,948,378

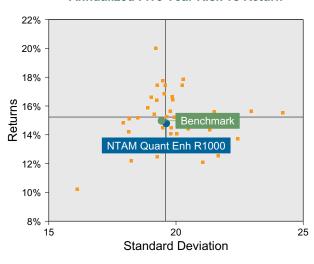
#### Performance vs Callan Large Cap Core (Gross)



#### Relative Return vs Benchmark



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



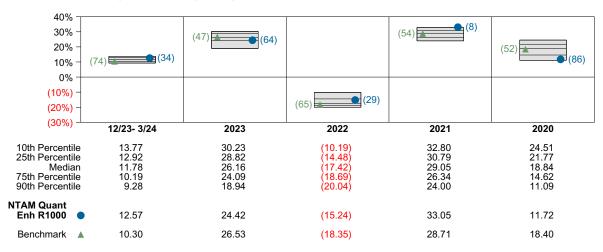


#### **NTAM Quant Enh R1000 Return Analysis Summary**

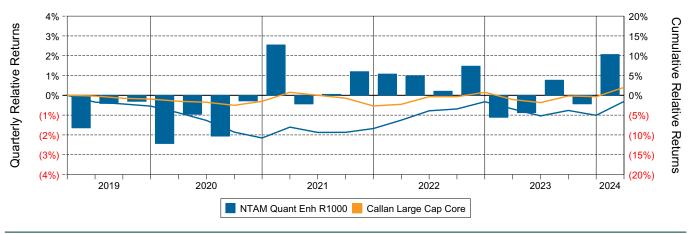
#### **Return Analysis**

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.

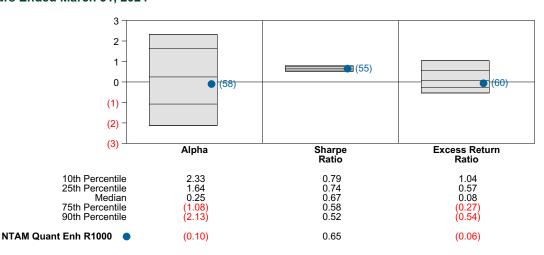
#### Performance vs Callan Large Cap Core (Gross)



#### **Cumulative and Quarterly Relative Returns vs Benchmark**



Risk Adjusted Return Measures vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



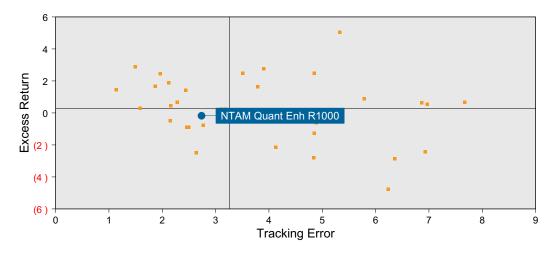


#### **NTAM Quant Enh R1000 Risk Analysis Summary**

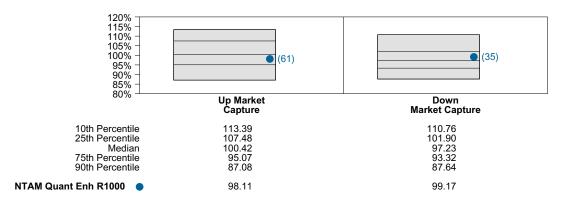
#### Risk Analysis

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.

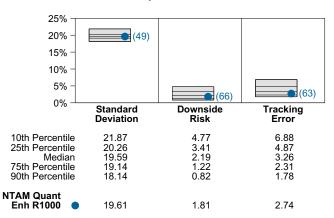
#### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended March 31, 2024

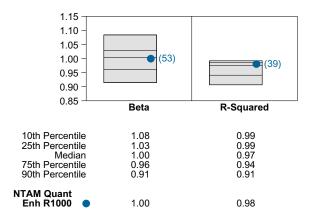


#### Market Capture vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



#### Risk Statistics Rankings vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



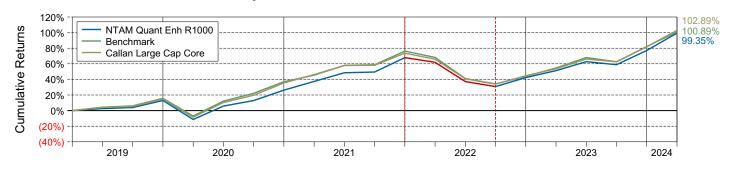




#### **NTAM Quant Enh R1000** Drawdown Analysis for Five Years Ended March 31, 2024

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
NTAM Quant Enh R1000	(22.12)%	0.75	2021/12-2022/09	(23.87)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.40%	1.25	2022/09-2023/12	35.69%	35.79%	-	-	-	-	-
Benchmark	(23.87)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

#### Relative Cumulative Drawdown Analysis vs. Benchmark **Cumulative Relative Returns** NTAM Quant Enh R1000 2% Callan Large Cap Core 1.00% (0.77%)(2%)(4%)(8%) (10%)

2022

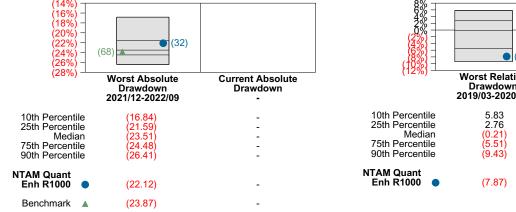
	Worst Relative Drawdown				Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
NTAM Quant Enh R1000	(7.87)%	1.75	2019/03-2020/12	(1.11)%	-	-	-	-		
Recovery from Trough	2.55%	0.25	2020/12-2021/03	1.65%	-	-	-	-		
Callan Large Cap Core	(2.06)%	1.50	2019/03-2020/09		-	-	-			

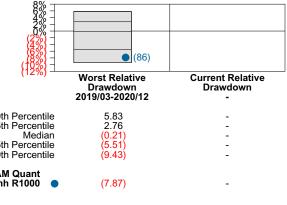
2021

Drawdown Rankings vs. Benchmark Rankings against Callan Large Cap Core Five Years Ended March 31, 2024

2020

2019





2023

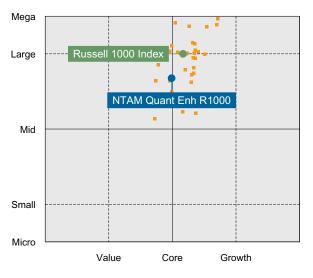
2024



#### **Current Holdings Based Style Analysis NTAM Quant Enh R1000** As of March 31, 2024

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.

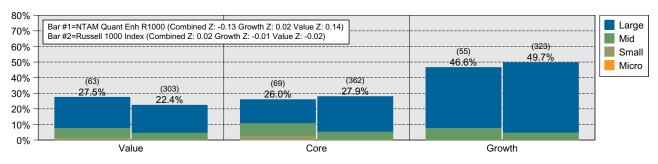
#### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



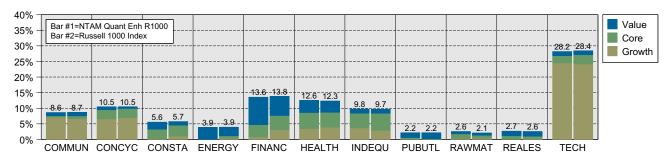
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	22.4% (303)	27.9% (362)	49.7% (323)	100.0% (988)
Total			40 =0/	
	27.5% (63)	26.0% (69)	46.6% (55)	100.0% (187)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	(3)	(3)	(0)	(5)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
Small	1.7 70 (10)	2.570 (9)	0.5 /0 (2)	4.3 /0 (21)
	1.7% (10)	2.9% (9)	0.3% (2)	4.9% (21)
IVIIU	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Mid	6.1% (20)	8.1% (27)	7.5% (23)	21.8% (70)
	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)
Large				
	19.6% (33)	15.0% (33)	38.7% (30)	73.3% (96)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024

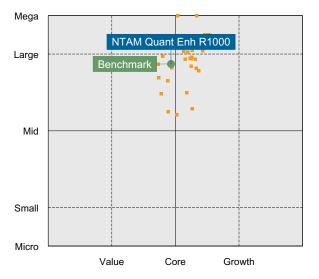




#### **Historical Holdings Based Style Analysis NTAM Quant Enh R1000** For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

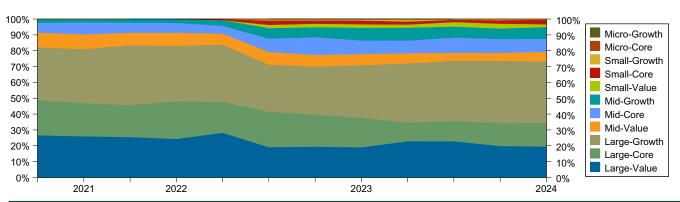
#### Average Style Map vs Callan Large Cap Core Holdings for Three Years Ended March 31, 2024



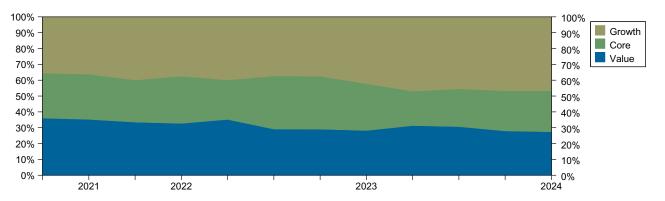
#### **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

	22.8% (39)	18.5% (32)	35.3% (30)	76.6% (101)
Large	. ,	` ′	` ,	, ,
_	22.8% (39)	18.5% (32)	35.3% (30)	<b>76.6%</b> (101)
	7.2% (23)	7.8% (23)	5.2% (15)	20.3% (61)
Mid				
	7.2% (23)	7.8% (23)	5.2% (15)	<b>20.3%</b> (61)
	1.3% (4)	1.3% (5)	0.5% (3)	3.1% (12)
Small				
	1.3% (4)	1.3% (5)	0.5% (3)	<b>3.1%</b> (12)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	31.4% (66)	27.7% (60)	40.9% (48)	100.0% (174)
Total				
	31.4% (66)	27.7% (60)	40.9% (48)	<b>100.0%</b> (174)
	Value	Core	Growth	Total

#### NTAM Quant Enh R1000 Historical Cap/Style Exposures



NTAM Quant Enh R1000 Historical Style Only Exposures



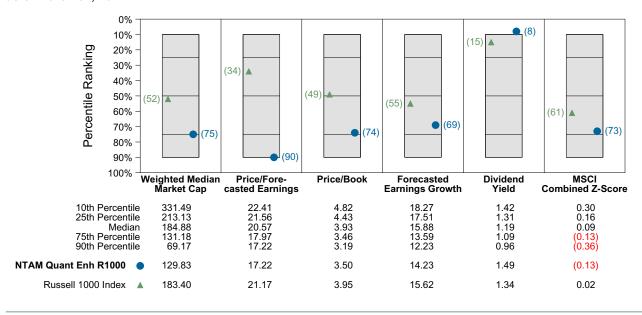


#### NTAM Quant Enh R1000 Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

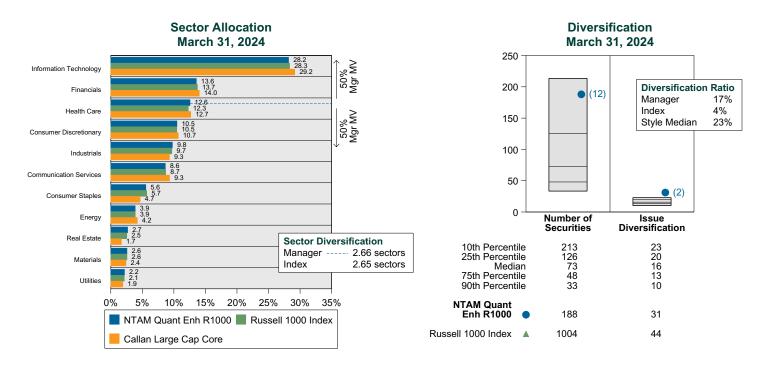
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Cap Core as of March 31, 2024



#### **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.





## NTAM Quant Enh R1000 Top 10 Portfolio Holdings Characteristics as of March 31, 2024

#### 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Information Technology	\$21,801,710	2.2%	12.09%	3126.13	32.52	0.71%	17.08%
Information Technology	\$17,260,491	1.8%	(10.82)%	2647.97	24.99	0.56%	11.00%
Information Technology	\$12,786,278	1.3%	82.46%	2258.90	35.53	0.02%	37.90%
Communication Services	\$12,541,981	1.3%	8.05%	889.43	21.35	0.00%	19.30%
Consumer Discretionary	\$9,397,618	1.0%	18.72%	1873.67	41.05	0.00%	10.21%
Communication Services	\$7,395,383	0.8%	37.33%	1068.30	23.35	0.41%	26.00%
Financials	\$5,482,612	0.6%	18.48%	576.99	12.50	2.30%	1.20%
Financials	\$3,851,963	0.4%	17.91%	551.22	22.45	0.00%	13.69%
Health Care	\$3,223,596	0.3%	1.69%	381.20	14.73	3.01%	4.70%
Industrials	\$3,148,367	0.3%	24.50%	182.99	17.00	1.42%	12.00%
	Information Technology Information Technology Information Technology Communication Services Consumer Discretionary Communication Services Financials Financials Health Care	Sector         Value           Information Technology         \$21,801,710           Information Technology         \$17,260,491           Information Technology         \$12,786,278           Communication Services         \$12,541,981           Consumer Discretionary         \$9,397,618           Communication Services         \$7,395,383           Financials         \$5,482,612           Financials         \$3,851,963           Health Care         \$3,223,596	Sector         Market Value         of Portfolio           Information Technology Information Services Information Information Services Information Information Information Informat	Sector         Market Value         of Value         Qtrly Portfolio           Information Technology Information Services Informat	Market         of Value         Qtrly Return         Market Capital           Information Technology Information Services I	Sector         Value         Percent of Value         Qtrly Return         Market Capital         Forecasted Earnings           Information Technology Information Services Information Service	Sector         Value         Percent Value         Return         Capital Capital         Forecasted Earnings Piolidend Portfolio         Dividend Part Ratio         Market Partinings Portfolio         Market Capital Ratio         Dividend Part Ratio           Information Technology Information Technology Information Technology Information Technology Information Technology Information Technology Information Services Infor

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Nvidia Corp	Information Technology	\$12,786,278	1.3%	82.46%	2258.90	35.53	0.02%	37.90%
Vistra Energy Corp	Utilities	\$59,899	0.0%	81.42%	24.23	14.77	1.23%	22.91%
Applovin Corp	Information Technology	\$945,407	0.1%	73.71%	18.75	25.93	0.00%	65.80%
Emcor Group Inc	Industrials	\$830,674	0.1%	62.69%	16.48	23.73	0.21%	20.65%
Constellation Energy Stock	Utilities	\$1,093,203	0.1%	58.45%	58.25	24.52	0.76%	-
Williams-Sonoma	Consumer Discretionary	\$1,634,644	0.2%	58.05%	20.36	20.66	1.42%	34.93%
Core & Main Inc	Industrials	\$1,992,644	0.2%	41.67%	11.00	22.15	0.00%	20.42%
Allison Transmission Hldgs I	Industrials	\$2,063,736	0.2%	40.03%	7.11	10.45	1.23%	14.23%
General Electric Co	Industrials	\$3,147,428	0.3%	37.53%	191.90	35.20	0.18%	37.33%
Meta Platforms Inc	Communication Services	\$7,395,383	0.8%	37.33%	1068.30	23.35	0.41%	26.00%

#### **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Tesla Mtrs Inc	Consumer Discretionary	\$1,096,754	0.1%	(29.25)%	559.85	55.45	0.00%	15.30%
Playtika Hldg Corp Com	Communication Services	\$413,955	0.0%	(18.02)%	2.61	10.46	5.67%	8.90%
Adobe Inc	Information Technology	\$2,956,451	0.3%	(15.42)%	226.06	26.83	0.00%	13.40%
Zoetis Inc CI A	Health Care	\$622,524	0.1%	(14.07)%	77.48	28.34	1.02%	9.60%
Boston Beer Inc CI A	Consumer Staples	\$515,079	0.1%	(11.91)%	3.03	28.50	0.00%	15.69%
Carnival Corp	Consumer Discretionary	\$212,910	0.0%	(11.87)%	18.34	14.55	0.00%	271.70%
C H Robinson Worldwide Inc	Industrials	\$229,562	0.0%	(11.14)%	8.91	22.16	3.20%	(1.33)%
Teradata Corp Del	Information Technology	\$460,830	0.0%	(11.12)%	3.78	16.60	0.00%	12.70%
Apple Inc	Information Technology	\$17,260,491	1.8%	(10.82)%	2647.97	24.99	0.56%	11.00%
Expedia Group Inc	Consumer Discretionary	\$562,433	0.1%	(9.25)%	18.12	10.51	0.00%	21.30%

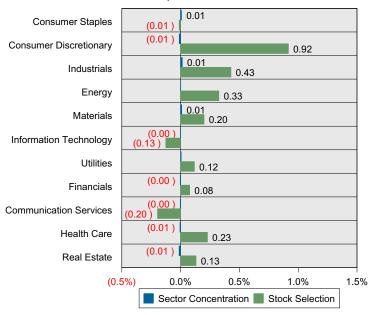


#### NTAM Quant Enh R1000 vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Large Cap Core over the same time period.

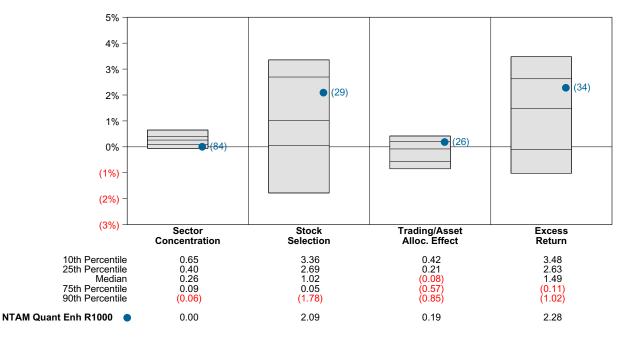
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



	Sector	Stock
Sector	Concentration	Selection
Consumer Staples	0.01%	(0.01%)
Consumer Discretionary	(0.01%)	0.92%
Industrials	0.01%	0.43%
Energy	0.00%	0.33%
Materials	0.01%	0.20%
Information Technology	(0.00%)	(0.13%)
Utilities	0.00%	0.12%
Financials	(0.00%)	0.08%
Communication Services	s (0.00%)	(0.20%)
Health Care	(0.01%)	0.23%
Real Estate	(0.01%)	0.13%
Total	0.00%	2.09%

Manager Return _	Index Return	Sector Concen	Stock Select	<sub>∔</sub> <u>Trading</u> _	Asset Alloc
12.57%	10.30%	0.00%	2.09%	່ 0.11%	0.07%

#### **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended March 31, 2024



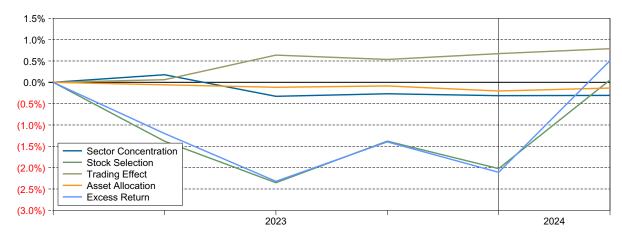


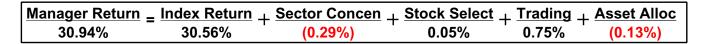
#### NTAM Quant Enh R1000 vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

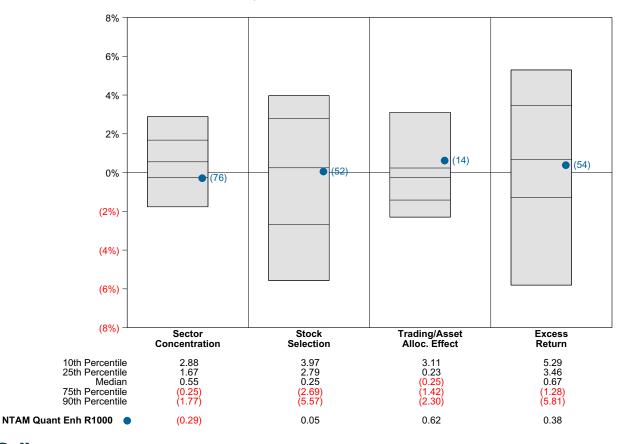
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Large Cap Core over the same time period.

#### Cumulative Attribution Effects vs Russell 1000 Index





#### **Equity Attribution Ranking vs Callan Large Cap Core** One and One-Quarter Years Ended March 31, 2024





#### Parametric-Clifton Enh R1000 Period Ended March 31, 2024

#### **Investment Philosophy**

The Enhanced US Large Cap strategy seeks to outperform the Russell 1000 Index by 50-100 basis points annually. The strategy seeks to exhibit risk levels similar to the Russell Index and achieve a modest level of outperformance consistency relative to the Russell Index. Effective July 1, 2022, the strategy benchmark changed from S&P500 to Russell 1000. Benchmark returns for the S&P500 Index are linked to Russell 1000 Index.

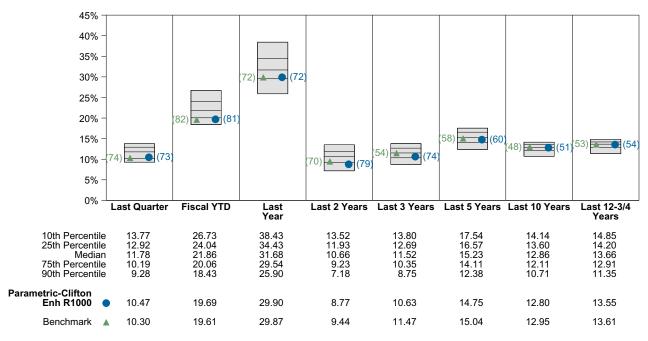
#### **Quarterly Summary and Highlights**

- Parametric-Clifton Enh R1000's portfolio posted a 10.47% return for the quarter placing it in the 73 percentile of the Callan Large Cap Core group for the quarter and in the 72 percentile for the last year.
- Parametric-Clifton Enh R1000's portfolio outperformed the Benchmark by 0.17% for the quarter and outperformed the Benchmark for the year by 0.04%.

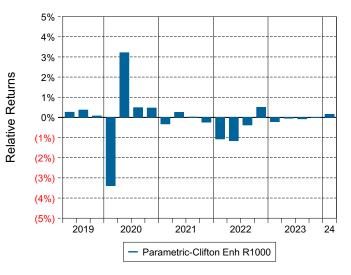
#### **Quarterly Asset Growth**

Beginning Market Value	\$283,965,578
Net New Investment	\$-6,692,470
Investment Gains/(Losses)	\$29,448,605
Ending Market Value	\$306,721,713

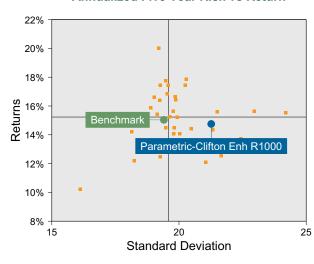
#### Performance vs Callan Large Cap Core (Gross)



#### Relative Return vs Benchmark



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



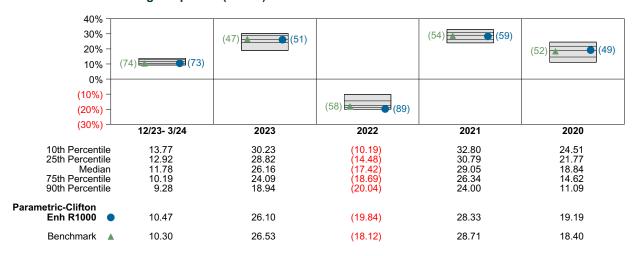


#### Parametric-Clifton Enh R1000 **Return Analysis Summary**

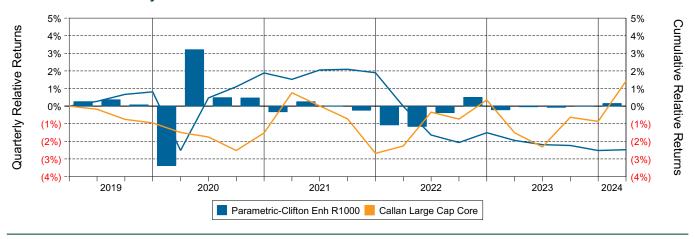
#### **Return Analysis**

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.

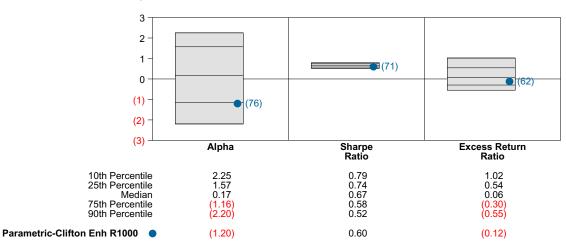
#### Performance vs Callan Large Cap Core (Gross)



#### **Cumulative and Quarterly Relative Returns vs Benchmark**



Risk Adjusted Return Measures vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



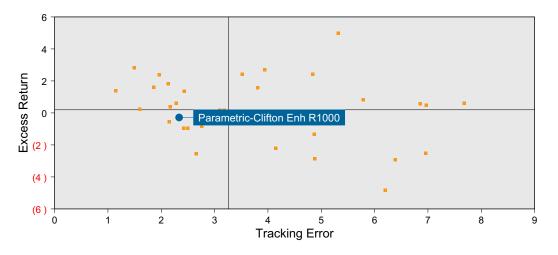


#### Parametric-Clifton Enh R1000 **Risk Analysis Summary**

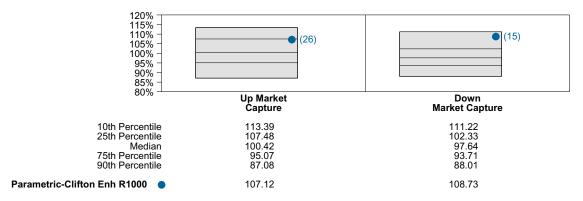
#### Risk Analysis

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.

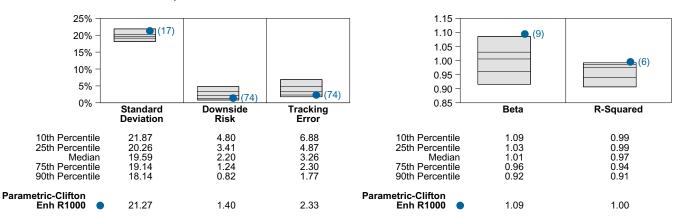
#### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



#### Market Capture vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



#### Risk Statistics Rankings vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024

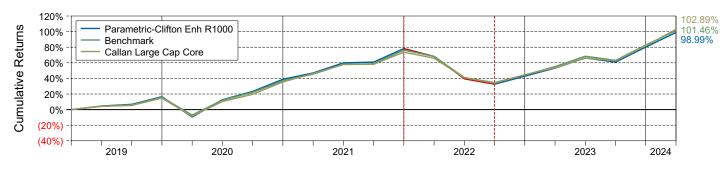




#### Parametric-Clifton Enh R1000 Drawdown Analysis for Five Years Ended March 31, 2024

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**

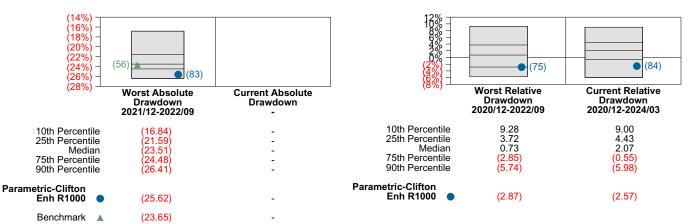


	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers
Parametric-Clifton Enh R100	0 (25.62)%	0.75	2021/12-2022/09	(23.65)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.91%	1.25	2022/09-2023/12	35.69%	35.79%	-	-	-	-	-
Benchmark	(23.65)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

## Relative Cumulative Drawdown Analysis vs. Benchmark 2% Parametric-Clifton Enh R1000 1% Callan Large Cap Core 0% (1%) (2%) (3%) (4%) 2019 2020 2021 2022 2023 2024

	V	Vorst Rela	ative Drawdown		Cu	rrent Rel	ative Drawdown	
	Rel Rtn	Years	Period	Peers_	Rel Rtn	Years	Period	Peers
Parametric-Clifton Enh R1000	(2.87)%	1.75	2020/12-2022/09	0.57%	(2.57)%	3.25	2020/12-2024/03	1.84%
Recovery from Trough	0.31%	1.50+	2022/09-2024/03	1.26%	0.31%	1.50+	2022/09-2024/03	1.26%
Callan Large Cap Core	(2.06)%	1.50	2019/03-2020/09		-	-	-	

Drawdown Rankings vs. Benchmark Rankings against Callan Large Cap Core Five Years Ended March 31, 2024

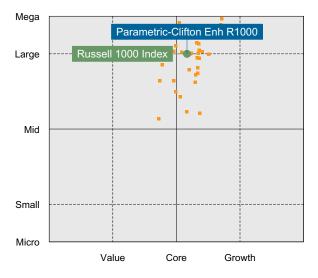




#### **Current Holdings Based Style Analysis** Parametric-Clifton Enh R1000 As of March 31, 2024

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.

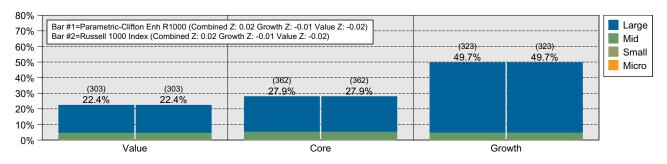
#### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



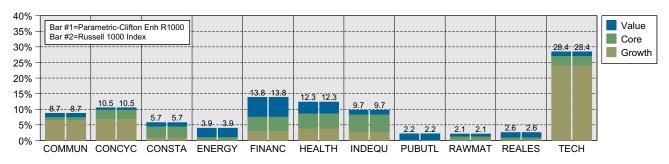
#### **Style Exposure Matrix** Holdings as of March 31, 2024

Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179) 0.0% (0)
Small	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Mid	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024



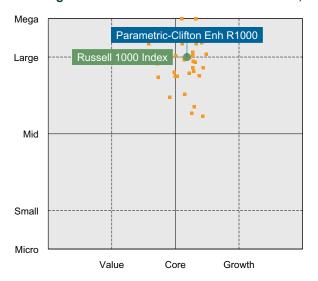


#### **Historical Holdings Based Style Analysis** Parametric-Clifton Enh R1000 For One and 3/4 Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

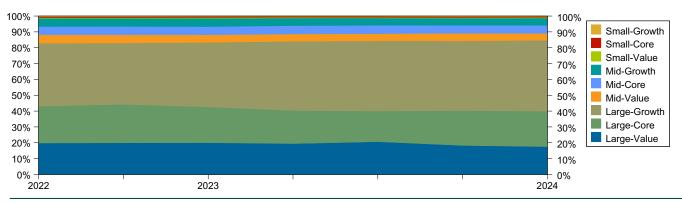
#### Average Style Map vs Callan Large Cap Core Holdings for One and 3/4 Years Ended March 31, 2024

#### **Average Style Exposure Matrix** Holdings for One and 3/4 Years Ended March 31, 2024

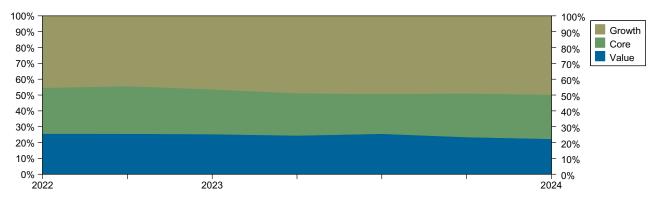




#### Parametric-Clifton Enh R1000 Historical Cap/Style Exposures



#### Parametric-Clifton Enh R1000 Historical Style Only Exposures



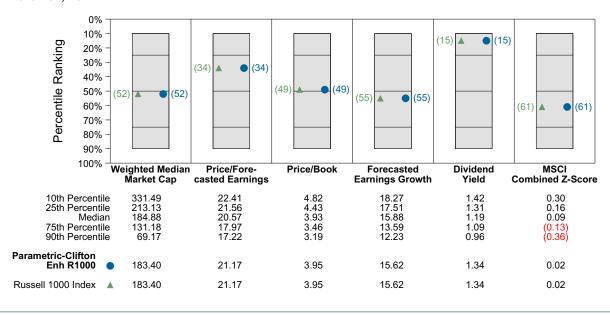


#### Parametric-Clifton Enh R1000 **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

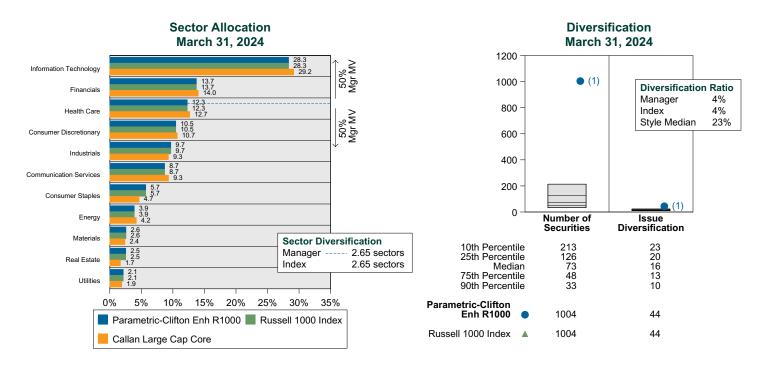
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of March 31, 2024



#### **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.





## Parametric-Clifton Enh R1000 Top 10 Portfolio Holdings Characteristics as of March 31, 2024

#### 10 Largest Holdings

						Price/			
		Ending	Percent			Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Microsoft Corp	Information Technology	\$19,959,014	6.5%	12.09%	3126.13	32.52	0.71%	17.08%	
Apple Inc	Information Technology	\$15,941,505	5.2%	(10.82)%	2647.97	24.99	0.56%	11.00%	
Nvidia Corp	Information Technology	\$13,685,665	4.5%	82.46%	2258.90	35.53	0.02%	37.90%	
Amazon.Com	Consumer Discretionary	\$10,359,201	3.4%	18.72%	1873.67	41.05	0.00%	10.21%	
Meta Platforms Inc	Communication Services	\$6,846,385	2.2%	37.33%	1068.30	23.35	0.41%	26.00%	
Alphabet Inc CI A	Communication Services	\$5,717,218	1.9%	8.05%	889.43	21.35	0.00%	19.30%	
Berkshire Hathaway Inc Del Cl B New	Financials	\$4,908,559	1.6%	17.91%	551.22	22.45	0.00%	13.69%	
Alphabet Inc CI C	Communication Services	\$4,871,557	1.6%	8.04%	863.47	21.59	0.00%	19.30%	
Lilly (Eli) & Co	Health Care	\$4,196,668	1.4%	33.69%	739.66	55.89	0.67%	49.75%	
JPMorgan Chase & Co	Financials	\$3,685,579	1.2%	18.48%	576.99	12.50	2.30%	1.20%	

#### **10 Best Performers**

				Price/					
		Ending	Percent			Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Nvidia Corp	Information Technology	\$13,685,665	4.5%	82.46%	2258.90	35.53	0.02%	37.90%	
Vistra Energy Corp	Utilities	\$156,750	0.1%	81.42%	24.23	14.77	1.23%	22.91%	
Applovin Corp	Information Technology	\$88,537	0.0%	73.71%	18.75	25.93	0.00%	65.80%	
Shockwave Med Inc	Health Care	\$75,185	0.0%	70.88%	12.18	62.83	0.00%	-	
Gs Acquisition Hldgs Corp Com Cl A	Industrials	\$178,517	0.1%	70.09%	31.20	33.68	0.12%	26.70%	
Cava Group	Consumer Discretionary	\$21,421	0.0%	62.98%	7.99	282.46	0.00%	-	
Emcor Group Inc	Industrials	\$103,444	0.0%	62.69%	16.48	23.73	0.21%	20.65%	
Maplebear	Consumer Staples	\$5,038	0.0%	58.89%	9.94	57.72	0.00%	-	
Constellation Energy Stock	Utilities	\$378,862	0.1%	58.45%	58.25	24.52	0.76%	-	
Williams-Sonoma	Consumer Discretionary	\$128,873	0.0%	58.05%	20.36	20.66	1.42%	34.93%	

#### **10 Worst Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
New York Cmnty Bancorp Inc	Financials	\$14,600	0.0%	(68.18)%	2.57	32.20	6.21%	15.75%
Ssr Mng Inc	Materials	\$5,776	0.0%	(59.61)%	0.90	45.98	6.28%	14.91%
Rivian Automotive Inc A Common Stock	Consumer Discretionary	\$47,150	0.0%	(53.33)%	10.62	(2.99)	0.00%	-
Agilon Health Inc Com	Health Care	\$11,285	0.0%	(51.38)%	2.50	(22.43)	0.00%	-
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$5,832	0.0%	(39.20)%	0.79	(2.65)	0.00%	6.01%
Iridium Communications Inc	Communication Services	\$20,428	0.0%	(36.14)%	3.18	34.38	1.99%	(7.79)%
Viasat Inc	Information Technology	\$13,461	0.0%	(35.28)%	2.27	(31.14)	0.00%	167.37%
Quidelortho Corp	Health Care	\$16,306	0.0%	(34.95)%	3.20	16.48	0.00%	8.43%
Unity Software Inc	Information Technology	\$49,504	0.0%	(34.70)%	10.30	(17.02)	0.00%	-
10x Genomics Inc CI A Com	Health Care	\$21,937	0.0%	(32.93)%	3.94	(26.03)	0.00%	-

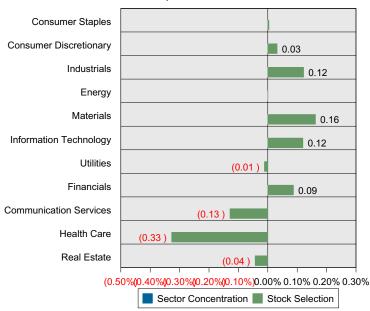


#### Parametric-Clifton Enh R1000 vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Large Cap Core over the same time period.

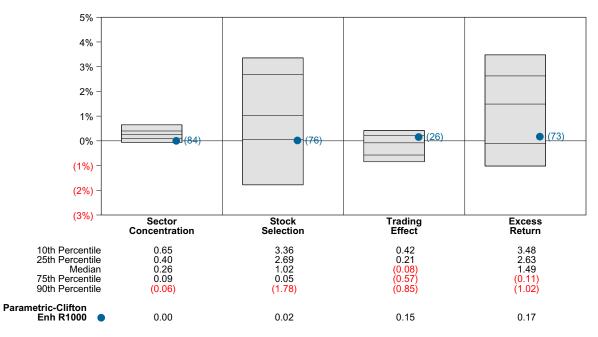
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	0.00%
Consumer Discretionary	0.00%	0.03%
Industrials	0.00%	0.12%
Energy	0.00%	0.00%
Materials	0.00%	0.16%
Information Technology	0.00%	0.12%
Utilities	0.00%	(0.01%)
Financials	0.00%	0.09%
Communication Services	s 0.00%	(0.13%)
Health Care	0.00%	(0.33%)
Real Estate	0.00%	(0.04%)
Total	0.00%	0.02%

Manager Return _	Index Return _	Sector Concentration _	Stock Selection       □	<b>∟</b> Trading
10.47%	10.30%	0.00%	0.02%	0.15%

#### **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended March 31, 2024



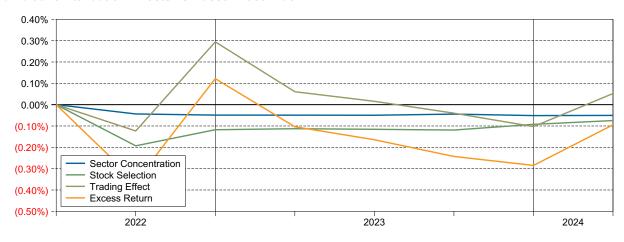


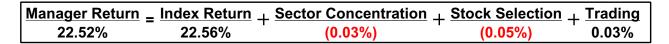
#### Parametric-Clifton Enh R1000 vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

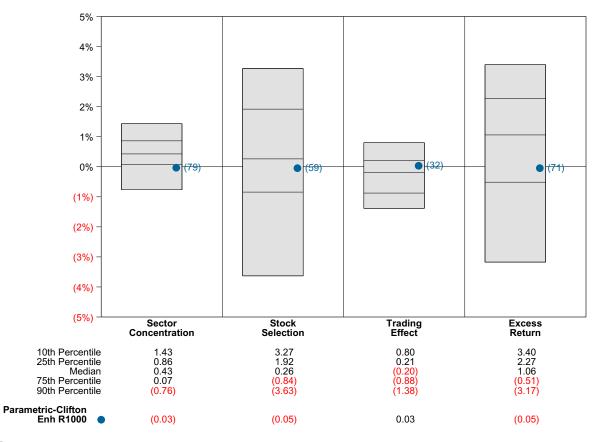
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Large Cap Core over the same time period.

#### **Cumulative Attribution Effects vs Russell 1000 Index**





#### **Equity Attribution Ranking vs Callan Large Cap Core** One and Three-Quarter Years Ended March 31, 2024



#### Atlanta Capital Period Ended March 31, 2024

#### **Investment Philosophy**

Atlanta Capital Management focuses on high quality companies and seeks to develop portfolios with an overall risk profile similar to the Russell 2000 Index. Atlanta screens for stocks rated B+ or better by S&P and with at least five years of financial history. Portfolio managers screen stocks, primarily those in the Russell 2000 Index, to identify companies based on what Atlanta considers a favorable combination of valuation and stable earnings and dividend growth. Atlanta's analyst team also strives to identify companies with a "purchase catalyst" or something that differentiates the company from its industry peers.

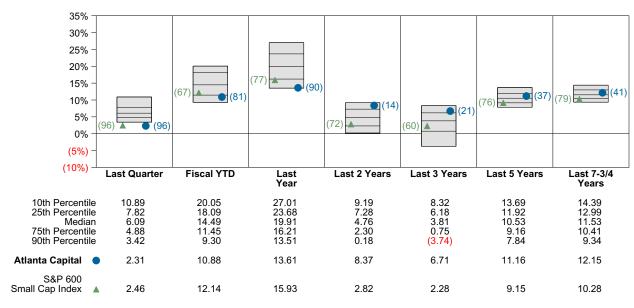
#### **Quarterly Summary and Highlights**

- Atlanta Capital's portfolio posted a 2.31% return for the quarter placing it in the 96 percentile of the Callan Small Capitalization group for the quarter and in the 90 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 0.15% for the quarter and underperformed the S&P 600 Small Cap Index for the year by 2.32%.

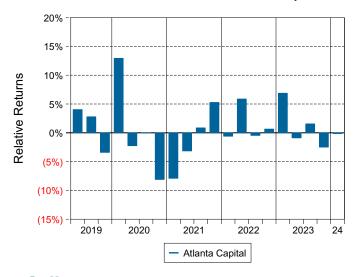
#### **Quarterly Asset Growth**

Beginning Market Value	\$103,852,611
Net New Investment	\$-1,407,924
Investment Gains/(Losses)	\$2,359,509
Ending Market Value	\$104.804.196

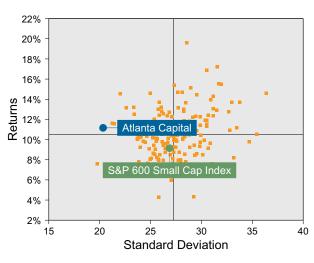
#### Performance vs Callan Small Capitalization (Gross)



#### Relative Return vs S&P 600 Small Cap Index



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



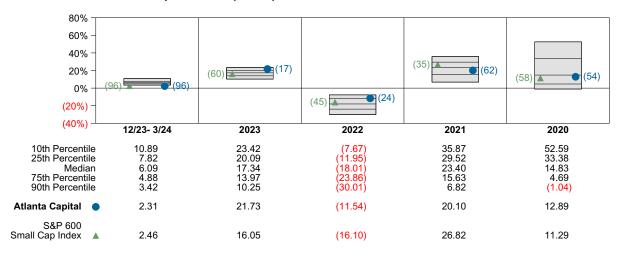


#### **Atlanta Capital Return Analysis Summary**

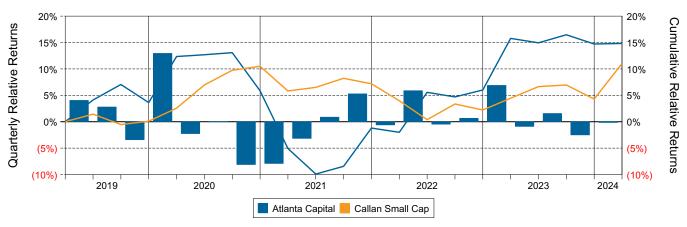
#### **Return Analysis**

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.

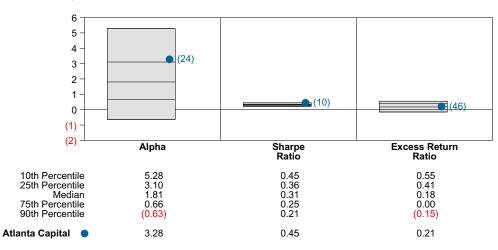
#### Performance vs Callan Small Capitalization (Gross)



#### Cumulative and Quarterly Relative Returns vs S&P 600 Small Cap Index



Risk Adjusted Return Measures vs S&P 600 Small Cap Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended March 31, 2024



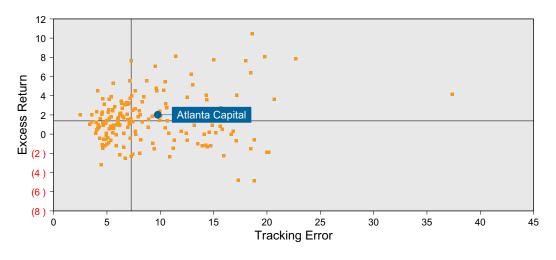


#### **Atlanta Capital Risk Analysis Summary**

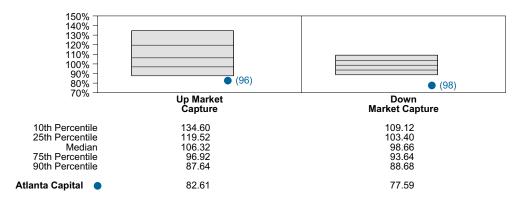
#### Risk Analysis

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.

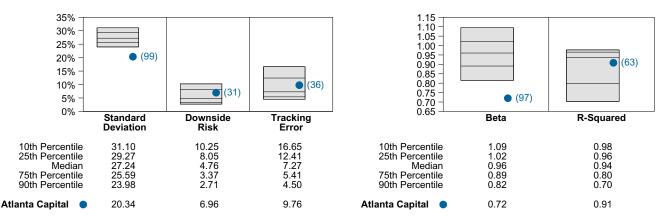
#### Risk Analysis vs Callan Small Capitalization (Gross) Five Years Ended March 31, 2024



#### Market Capture vs S&P 600 Small Cap Idx Rankings Against Callan Small Capitalization (Gross) Five Years Ended March 31, 2024



#### Risk Statistics Rankings vs S&P 600 Small Cap Idx Rankings Against Callan Small Capitalization (Gross) Five Years Ended March 31, 2024

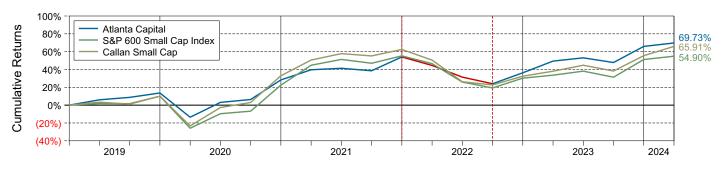




## Atlanta Capital Drawdown Analysis for Five Years Ended March 31, 2024

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**

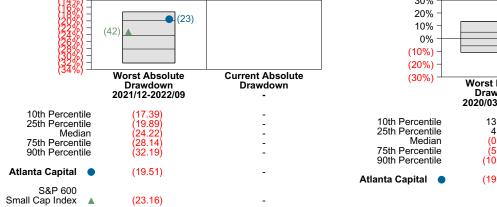


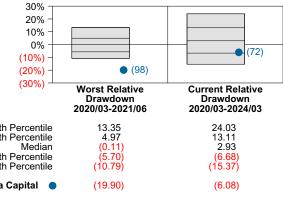
		Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
Atlanta Capital	(19.51)%	0.75	2021/12-2022/09	(23.16)%	(24.49)%	-	-	-	-	-	
Recovery from Trough	33.79%	1.25	2022/09-2023/12	26.72%	26.75%	-	-	-	-	-	
S&P 600 Small Cap Index	(23.16)%	0.75	2021/12-2022/09			(0.23)%	2.25	2021/12-2024/03			
Callan Small Cap	(24.49)%	0.75	2021/12-2022/09			-	-	-			

# Relative Cumulative Drawdown Analysis vs. S&P 600 Small Cap Index 20% Atlanta Capital Callan Small Cap 10% 0% (5%) 2019 2020 2021 2022 2023 2024

	\	Vorst Rela	ative Drawdown		Cu	Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
Atlanta Capital	(19.90)%	1.25	2020/03-2021/06	0.82%	(6.08)%	4.00	2020/03-2024/03	3.53%			
Recovery from Trough	17.25%	2.75+	2021/06-2024/03	2.69%	17.25%	2.75+	2021/06-2024/03	2.69%			
Callan Small Cap	(9.19)%	1.75	2020/09-2022/06		(3.03)%	3.50	2020/09-2024/03				

Drawdown Rankings vs. S&P 600 Small Cap Index Rankings against Callan Small Capitalization Five Years Ended March 31, 2024



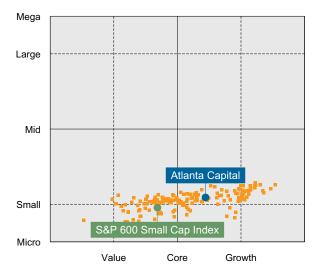




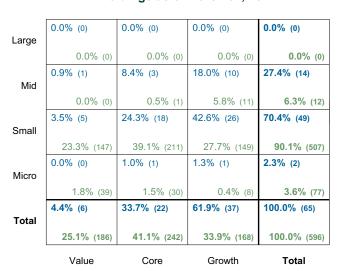
#### **Current Holdings Based Style Analysis Atlanta Capital** As of March 31, 2024

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.

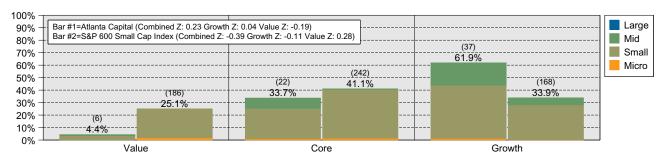
#### Style Map vs Callan Small Cap Holdings as of March 31, 2024



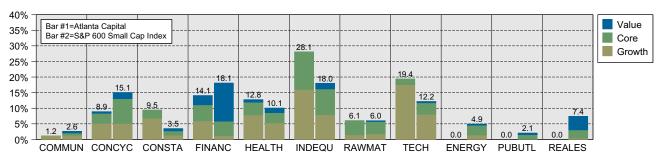
#### **Style Exposure Matrix** Holdings as of March 31, 2024



#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024





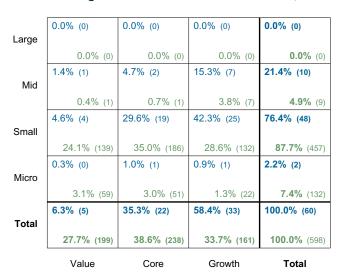
#### Historical Holdings Based Style Analysis Atlanta Capital For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

#### Average Style Map vs Callan Small Cap Holdings for Three Years Ended March 31, 2024



#### Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2024

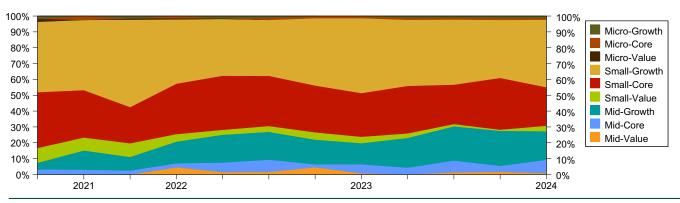


#### Atlanta Capital Historical Cap/Style Exposures

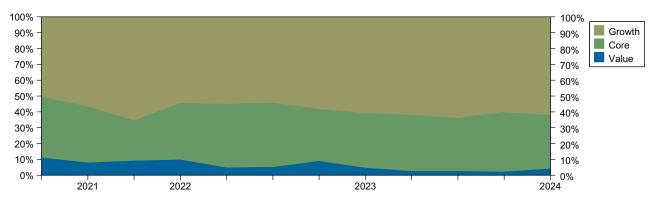
Core

Growth

Value



**Atlanta Capital Historical Style Only Exposures** 





Small

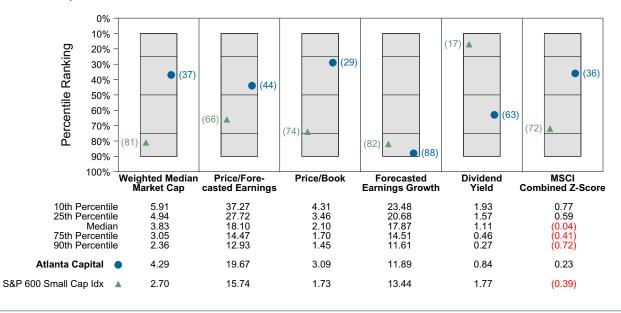
Micro

#### **Atlanta Capital Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

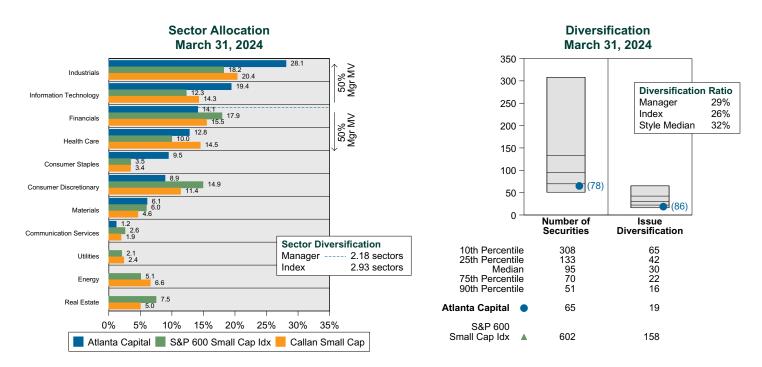
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization** as of March 31, 2024



#### **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.





## **Atlanta Capital** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

#### 10 Largest Holdings

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Inter Parfums Inc	Consumer Staples	\$4,615,472	3.4%	(1.88)%	4.50	26.47	2.14%	24.76%
Beacon Roofing Supply Inc	Industrials	\$4,097,236	3.0%	12.64%	6.22	12.46	0.00%	23.48%
Cbiz Inc	Industrials	\$4,016,766	2.9%	25.42%	3.93	27.89	0.00%	19.52%
Insight Enterprises Inc	Information Technology	\$3,906,866	2.8%	4.70%	6.05	16.83	0.00%	17.51%
Selective Insurance Grp	Financials	\$3,785,579	2.7%	10.11%	6.64	13.74	1.28%	18.10%
Moog Inc Cl A	Industrials	\$3,424,652	2.5%	10.49%	4.59	21.25	0.70%	4.60%
Qualys Inc	Information Technology	\$2,799,578	2.0%	(14.98)%	6.17	31.43	0.00%	20.99%
Blackbaud Inc	Information Technology	\$2,797,673	2.0%	(14.49)%	3.96	16.74	0.00%	9.80%
Dorman Products Inc	Consumer Discretionary	\$2,682,919	1.9%	15.56%	3.00	16.92	0.00%	10.01%
Perficient Inc	Information Technology	\$2,054,078	1.5%	(14.48)%	1.97	13.48	0.00%	21.26%

#### **10 Best Performers**

				Price/						
		Ending	Percent			Forecasted		Forecasted		
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in		
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings		
Ufp Technologies Inc	Health Care	\$799,222	0.6%	46.59%	1.93	41.08	0.00%	27.43%		
Sprouts Fmrs Mkt Inc	Consumer Staples	\$1,617,545	1.2%	34.02%	6.53	21.70	0.00%	8.58%		
Commvault Systems Inc	Information Technology	\$1,792,572	1.3%	27.03%	4.43	31.64	0.00%	14.27%		
Cbiz Inc	Industrials	\$4,016,766	2.9%	25.42%	3.93	27.89	0.00%	19.52%		
Lancaster Colony Corp	Consumer Staples	\$714,455	0.5%	25.33%	5.71	30.66	1.73%	(3.43)%		
Atrion Corp	Health Care	\$1,079,608	0.8%	23.02%	0.82	51.25	1.90%	(6.49)%		
Kirby Corp	Industrials	\$1,996,668	1.5%	21.46%	5.57	18.24	0.00%	4.14%		
Aaon Inc Com Par \$0.004	Industrials	\$1,063,719	0.8%	19.38%	7.19	36.51	0.36%	27.17%		
Prestige Consumer Health	Health Care	\$1,065,471	0.8%	18.52%	3.60	15.68	0.00%	10.66%		
Kadant Inc	Industrials	\$562,692	0.4%	17.18%	3.85	32.49	0.35%	17.86%		

#### **10 Worst Performers**

						Price/		
		Ending Percent			Forecasted			
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Columbia Banking System	Financials	\$570,554	0.4%	(26.03)%	4.05	8.12	7.44%	3.64%
Omnicell Inc	Health Care	\$381,422	0.3%	(22.32)%	1.34	25.20	0.00%	(4.95)%
Integra Lifesciences Hldgs C	Health Care	\$1,192,042	0.9%	(18.60)%	2.77	10.75	0.00%	8.80%
Qualys Inc	Information Technology	\$2,799,578	2.0%	(14.98)%	6.17	31.43	0.00%	20.99%
Blackbaud Inc	Information Technology	\$2,797,673	2.0%	(14.49)%	3.96	16.74	0.00%	9.80%
Perficient Inc	Information Technology	\$2,054,078	1.5%	(14.48)%	1.97	13.48	0.00%	21.26%
Winmark Corp	Consumer Discretionary	\$1,008,781	0.7%	(13.19)%	1.27	42.33	3.48%	13.33%
J & J Snack Foods Corp	Consumer Staples	\$1,657,670	1.2%	(13.06)%	2.80	26.24	2.03%	(2.44)%
Power Integrations Inc	Information Technology	\$1,312,656	1.0%	(12.61)%	4.07	50.53	1.12%	(14.55)%
Westamerica Bancorporation	Financials	\$793,322	0.6%	(12.53)%	1.30	9.45	3.60%	19.27%

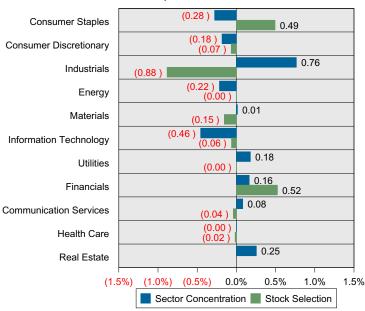


#### Atlanta Capital vs S&P 600 Small Cap Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Small Capitalization over the same time period.

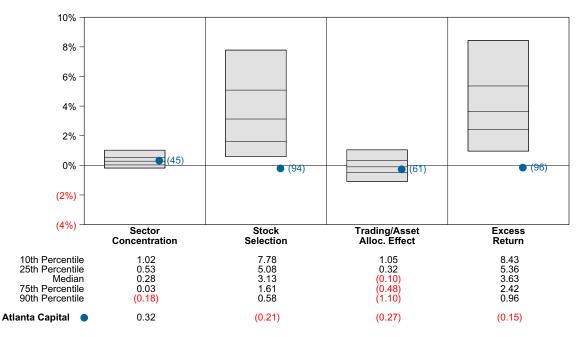
#### Attribution Effects by Sector vs S&P 600 Small Cap Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.28%)	0.49%
Consumer Discretionary	(0.18%)	(0.07%)
Industrials	0.76%	(0.88%)
Energy	(0.22%)	(0.00%)
Materials	0.01%	(0.15%)
Information Technology	(0.46%)	(0.06%)
Utilities	0.18%	(0.00%)
Financials	0.16%	0.52%
Communication Services	s 0.08%	(0.04%)
Health Care	(0.00%)	(0.02%)
Real Estate	0.25%	0.00%
Total	0.32%	(0.21%)

Manager Return	Index Return _	Sector Concen _	∟ Stock Select <sub>→</sub>	_ <u>Trading</u> _	⊥ Asset Alloc
2.31%	2.46%	0.32%	(0.21%)	1.89%	(2.15%)

#### **Equity Attribution Ranking vs Callan Small Capitalization** Quarter ended March 31, 2024



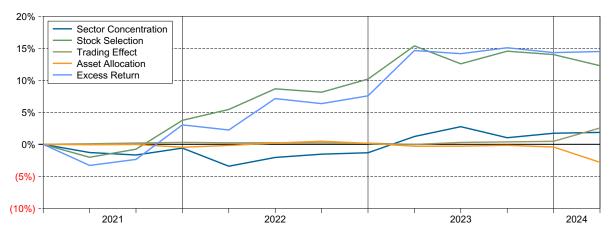


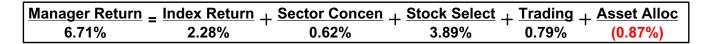
#### Atlanta Capital vs S&P 600 Small Cap Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

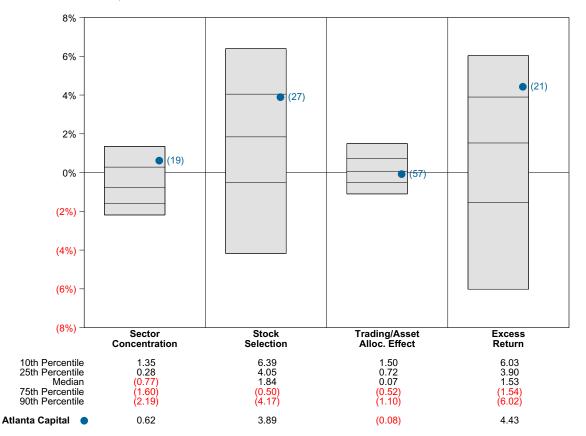
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Small Capitalization over the same time period.

#### Cumulative Attribution Effects vs S&P 600 Small Cap Index





#### **Equity Attribution Ranking vs Callan Small Capitalization** Three Years Ended March 31, 2024





## Riverbridge Small Cap Growth Period Ended March 31, 2024

#### **Investment Philosophy**

Riverbridge believes earnings power determines the value of a franchise. They focus on companies that are building earnings power and intrinsic value of the company over long periods of time. They also look for high-quality growth companies that demonstrate the ability to sustain strong secular earnings growth, regardless of overall economic conditions.

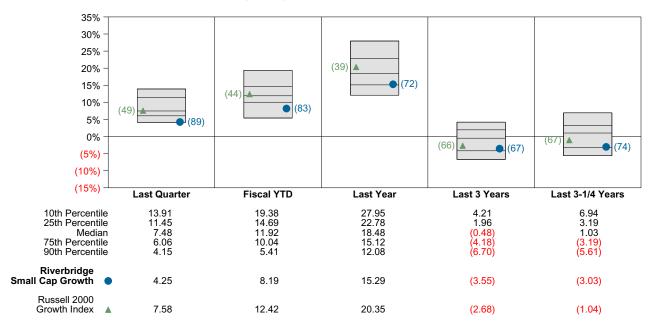
#### **Quarterly Summary and Highlights**

- Riverbridge Small Cap Growth's portfolio posted a 4.25% return for the quarter placing it in the 89 percentile of the Callan Small Cap Growth group for the quarter and in the 72 percentile for the last year.
- Riverbridge Small Cap Growth's portfolio underperformed the Russell 2000 Growth Index by 3.33% for the quarter and underperformed the Russell 2000 Growth Index for the year by 5.06%.

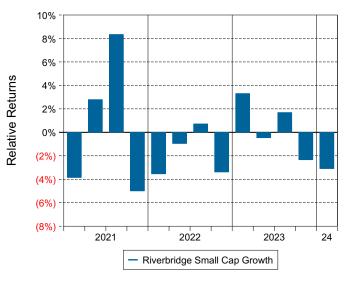
#### **Quarterly Asset Growth**

Beginning Market Value	\$103,720,173
Net New Investment	\$-4,997,256
Investment Gains/(Losses)	\$4,351,362
Ending Market Value	\$103,074,279

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



#### Relative Return vs Russell 2000 Growth Index



## Callan Small Cap Growth (Gross) Annualized Three and One-Quarter Year Risk vs Return

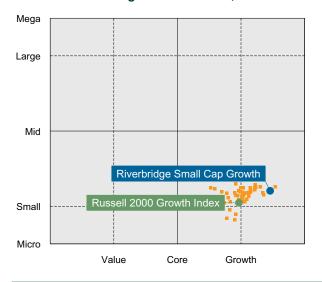




#### **Current Holdings Based Style Analysis Riverbridge Small Cap Growth** As of March 31, 2024

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.

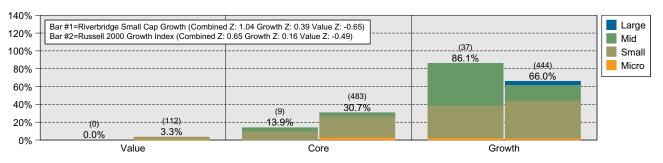
#### Style Map vs Callan Small Cap Growth Holdings as of March 31, 2024



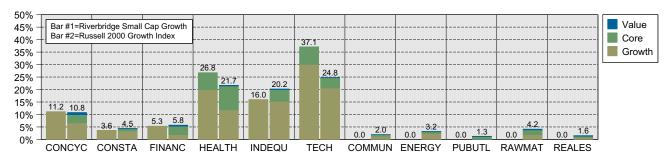
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	3.3% (112)	30.7% (483)	66.0% (444)	100.0% (1039)
Total	0.070 (0)	13.370 (9)	00.176 (37)	100.076 (40)
	0.0% (0)	13.9% (9)	86.1% (37)	100.0% (46)
	0.8% (73)	3.0% (209)	2.0% (104)	5.8% (386)
Micro	, ,	, ,	, ,	. ,
	0.0% (0)	0.0% (0)	2.5% (3)	2.5% (3)
	2.5% (39)	23.7% (264)	42.3% (302)	68.6% (605)
Small	0.070 (0)	101070 (1)	331170 (13)	(20)
	0.0% (0)	10.0% (7)	36.4% (19)	46.4% (26)
	0.0% (0)	4.0% (10)	17.7% (37)	21.7% (47)
Mid				
	0.0% (0)	3.9% (2)	47.2% (15)	51.1% (17)
J	0.0% (0)	0.0% (0)	3.9% (1)	3.9% (1)
Large	0.070 (0)	0.070 (0)	0.070 (0)	0.0 /0 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



#### **Sector Weights Distribution** Holdings as of March 31, 2024



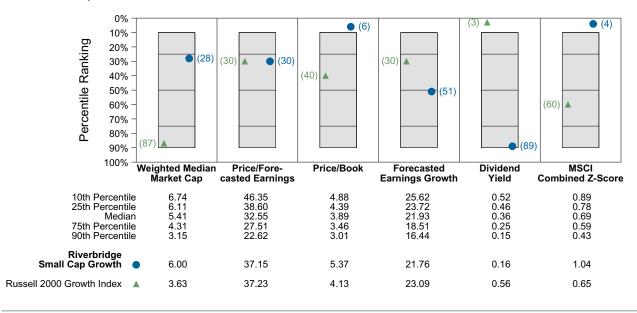


#### **Riverbridge Small Cap Growth Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

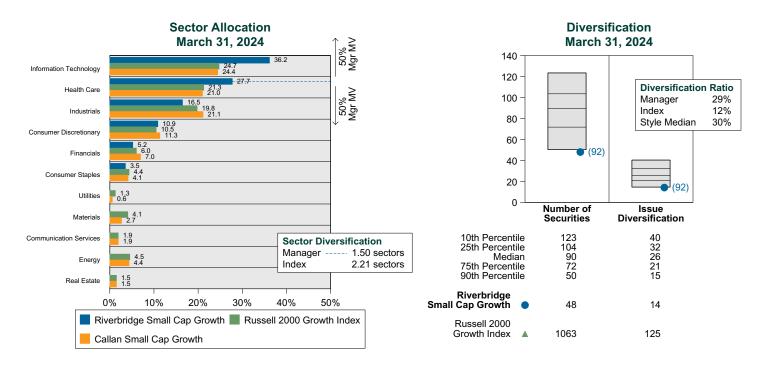
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Small Cap Growth as of March 31, 2024



#### **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.





## Riverbridge Small Cap Growth Top 10 Portfolio Holdings Characteristics as of March 31, 2024

#### 10 Largest Holdings

				Price/			
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Health Care	\$4,955,687	4.8%	31.85%	12.43	36.29	0.00%	17.97%
Information Technology	\$4,351,806	4.2%	(4.61)%	6.84	55.98	0.00%	22.59%
Industrials	\$4,188,131	4.1%	11.40%	13.92	23.25	1.42%	23.62%
Information Technology	\$3,951,991	3.8%	(20.01)%	8.70	29.36	0.00%	28.86%
Consumer Discretionary	\$3,759,941	3.6%	3.16%	4.09	17.31	0.00%	4.53%
Consumer Discretionary	\$3,745,497	3.6%	(14.91)%	10.02	28.99	0.00%	18.05%
Consumer Staples	\$3,572,427	3.5%	33.54%	5.60	549.10	0.00%	-
Consumer Discretionary	\$3,463,576	3.4%	16.19%	13.87	61.55	0.00%	3.70%
Financials	\$3,389,820	3.3%	56.73%	12.17	33.42	0.11%	51.67%
Information Technology	\$3,134,038	3.0%	12.15%	3.62	33.44	0.00%	9.25%
	Health Care Information Technology Industrials Information Technology Consumer Discretionary Consumer Discretionary Consumer Staples Consumer Discretionary Financials	Sector         Market Value           Health Care         \$4,955,687           Information Technology         \$4,351,806           Industrials         \$4,188,131           Information Technology         \$3,951,991           Consumer Discretionary         \$3,759,941           Consumer Staples         \$3,572,427           Consumer Discretionary         \$3,463,576           Financials         \$3,389,820	Sector         Market Value         of Value           Health Care         \$4,955,687         4.8%           Information Technology         \$4,351,806         4.2%           Industrials         \$4,188,131         4.1%           Information Technology         \$3,951,991         3.8%           Consumer Discretionary         \$3,759,941         3.6%           Consumer Discretionary         \$3,745,497         3.6%           Consumer Staples         \$3,572,427         3.5%           Consumer Discretionary         \$3,463,576         3.4%           Financials         \$3,389,820         3.3%	Sector         Market Value         of Portfolio         Qtrly Return           Health Care         \$4,955,687         4.8%         31.85%           Information Technology Industrials         \$4,351,806         4.2%         (4.61)%           Information Technology Information Technology Information Technology Sa,951,991         3.8%         (20.01)%           Consumer Discretionary Consumer Discretionary Sa,759,941         3.6%         3.16%           Consumer Staples Consumer Staples Sa,572,427         3.5%         33.54%           Consumer Discretionary Financials         \$3,463,576         3.4%         16.19%           \$3,389,820         3.3%         56.73%	Market Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital           Health Care         \$4,955,687         4.8%         31.85%         12.43           Information Technology         \$4,351,806         4.2%         (4.61)%         6.84           Industrials         \$4,188,131         4.1%         11.40%         13.92           Information Technology         \$3,951,991         3.8%         (20.01)%         8.70           Consumer Discretionary         \$3,759,941         3.6%         3.16%         4.09           Consumer Discretionary         \$3,745,497         3.6%         (14.91)%         10.02           Consumer Staples         \$3,572,427         3.5%         33.54%         5.60           Consumer Discretionary         \$3,463,576         3.4%         16.19%         13.87           Financials         \$3,389,820         3.3%         56.73%         12.17	Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital Pation         Ratio           Health Care         \$4,955,687         4.8%         31.85%         12.43         36.29           Information Technology         \$4,351,806         4.2%         (4.61)%         6.84         55.98           Industrials         \$4,188,131         4.1%         11.40%         13.92         23.25           Information Technology         \$3,951,991         3.8%         (20.01)%         8.70         29.36           Consumer Discretionary         \$3,759,941         3.6%         3.16%         4.09         17.31           Consumer Discretionary         \$3,745,497         3.6%         (14.91)%         10.02         28.99           Consumer Staples         \$3,572,427         3.5%         33.54%         5.60         549.10           Consumer Discretionary         \$3,463,576         3.4%         16.19%         13.87         61.55           Financials         \$3,389,820         3.3%         56.73%         12.17         33.42	Bending Market         Percent Value         Qtrly Portfolio         Market Return         Earnings Capital         Dividend Ratio           Health Care         \$4,955,687         4.8%         31.85%         12.43         36.29         0.00%           Information Technology         \$4,351,806         4.2%         (4.61)%         6.84         55.98         0.00%           Industrials         \$4,188,131         4.1%         11.40%         13.92         23.25         1.42%           Information Technology         \$3,951,991         3.8%         (20.01)%         8.70         29.36         0.00%           Consumer Discretionary         \$3,759,941         3.6%         3.16%         4.09         17.31         0.00%           Consumer Discretionary         \$3,745,497         3.6%         (14.91)%         10.02         28.99         0.00%           Consumer Staples         \$3,572,427         3.5%         33.54%         5.60         549.10         0.00%           Consumer Discretionary         \$3,463,576         3.4%         16.19%         13.87         61.55         0.00%           Financials         \$3,389,820         3.3%         56.73%         12.17         33.42         0.11%

#### **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Kinsale Cap Group Inc	Financials	\$3,389,820	3.3%	56.73%	12.17	33.42	0.11%	51.67%
Pennant Group	Health Care	\$969,271	0.9%	41.02%	0.59	21.50	0.00%	0.68%
Freshpet Inc	Consumer Staples	\$3,572,427	3.5%	33.54%	5.60	549.10	0.00%	-
Medpace Hldgs Inc	Health Care	\$4,955,687	4.8%	31.85%	12.43	36.29	0.00%	17.97%
Acv Auctions Inc Com Cl A	Industrials	\$1,731,213	1.7%	23.89%	2.65	(78.54)	0.00%	-
U S Physical Therapy Inc	Health Care	\$1,640,453	1.6%	21.69%	1.70	39.55	1.56%	7.60%
Glaukos Corp	Health Care	\$2,013,469	2.0%	18.62%	4.66	(49.97)	0.00%	-
Kadant Inc	Industrials	\$2,860,376	2.8%	17.18%	3.85	32.49	0.35%	17.86%
Floor & Decor Hldgs Inc Cl A	Consumer Discretionary	\$3,463,576	3.4%	16.19%	13.87	61.55	0.00%	3.70%
Alarm Com Hldgs Inc	Information Technology	\$3,134,038	3.0%	12.15%	3.62	33.44	0.00%	9.25%

#### **10 Worst Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Neogen Corp	Health Care	\$655,044	0.6%	(21.53)%	3.42	22.87	0.00%	(8.13)%
Five9 Inc	Information Technology	\$1,199,034	1.2%	(21.07)%	4.59	27.24	0.00%	23.55%
Globant S A	Information Technology	\$3,951,991	3.8%	(20.01)%	8.70	29.36	0.00%	28.86%
Definitive Healthcare Corp Common St	Health Care	\$568,257	0.6%	(18.82)%	0.95	20.85	0.00%	-
Amn Healthcare Services Inc	Health Care	\$976,781	0.9%	(16.52)%	2.37	15.04	0.00%	32.97%
Workiva Inc Com Cl A	Information Technology	\$2,844,277	2.8%	(16.48)%	4.26	118.44	0.00%	42.28%
Privia Health Group Inc	Health Care	\$1,619,349	1.6%	(14.94)%	2.32	74.20	0.00%	-
Five Below Inc	Consumer Discretionary	\$3,745,497	3.6%	(14.91)%	10.02	28.99	0.00%	18.05%
Power Integrations Inc	Information Technology	\$1,797,479	1.7%	(12.61)%	4.07	50.53	1.12%	(14.55)%
Goosehead Ins Inc Com Cl A	Financials	\$983,245	1.0%	(12.11)%	1.68	37.94	0.00%	16.30%

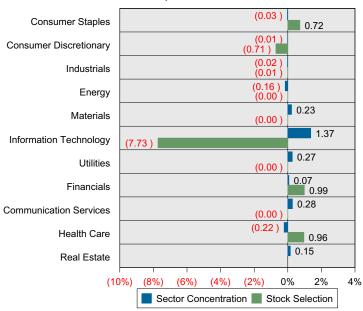


#### Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Small Cap Growth over the same time period.

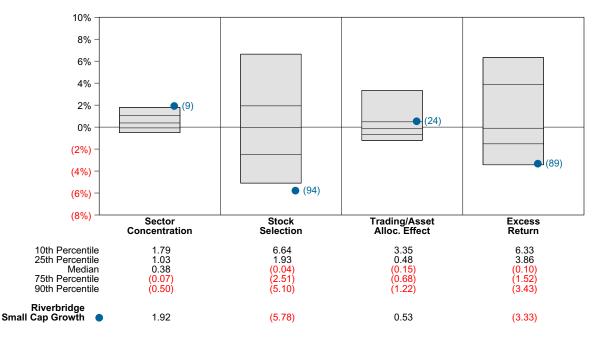
#### Attribution Effects by Sector vs Russell 2000 Growth Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.03%)	0.72%
Consumer Discretionary	(0.01%)	(0.71%)
Industrials	(0.02%)	(0.01%)
Energy	(0.16%)	(0.00%)
Materials	0.23%	(0.00%)
Information Technology	1.37%	(7.73%)
Utilities	0.27%	(0.00%)
Financials	0.07%	0.99%
Communication Services	s 0.28%	(0.00%)
Health Care	(0.22%)	0.96%
Real Estate	0.15%	0.00%
Total	1.92%	(5.78%)

Manager Return	Index Return	Sector Concen _	Stock Select _	<sub>⊢</sub> <u>Trading</u> _	Asset Alloc
4.25%	7.58%	1.92%	(5.78%)	0.55%	(0.02%)

#### **Equity Attribution Ranking vs Callan Small Cap Growth** Quarter ended March 31, 2024



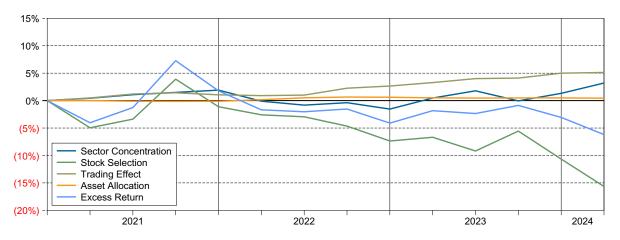


#### Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

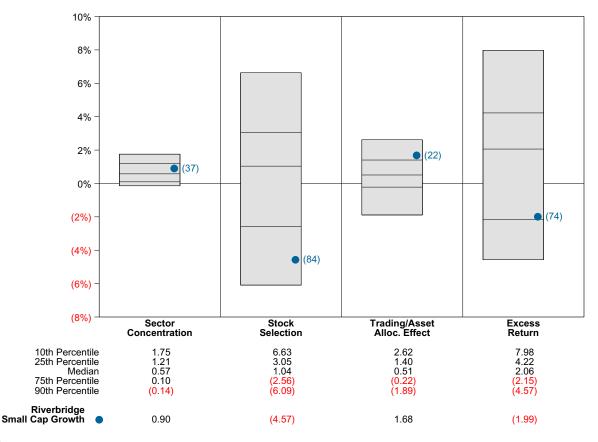
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Small Cap Growth over the same time period.

#### **Cumulative Attribution Effects vs Russell 2000 Growth Index**



Manager Return	Index Return _	Sector Concen	_ Stock Select _	_ <u>Trading</u> _	Asset Alloc
(3.03%)	(1.04%)	0.90%	(4.57%)	1.55%	0.13%

#### **Equity Attribution Ranking vs Callan Small Cap Growth** Three and One-Quarter Years Ended March 31, 2024





## Sycamore Small Cap Value Period Ended March 31, 2024

#### **Investment Philosophy**

The Sycamore Small Cap Value Equity investment approach focuses on companies with market capitalizations between \$100 million and \$2 billion that are believed offer above-average total return potential with limited risk. The Small Cap Value Equity investment process seeks to identify high quality, low expectation small cap companies that appear poised for continued or improved earnings. Portfolios typically hold 100-125 stocks with average annual portfolio turnover of 40%. The team will begin to sell when a company's market capitalization exceeds \$4 billion, however they focus on the weighted average market capitalization of the total portfolio and thus may retain exposure to some mid cap companies.

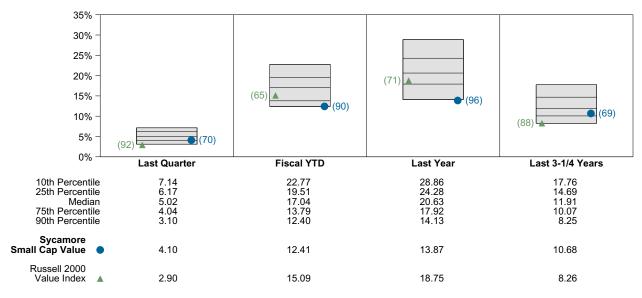
#### **Quarterly Summary and Highlights**

- Sycamore Small Cap Value's portfolio posted a 4.10% return for the quarter placing it in the 70 percentile of the Callan Small Cap Value group for the quarter and in the 96 percentile for the last year.
- Sycamore Small Cap Value's portfolio outperformed the Russell 2000 Value Index by 1.19% for the quarter and underperformed the Russell 2000 Value Index for the year by 4.88%.

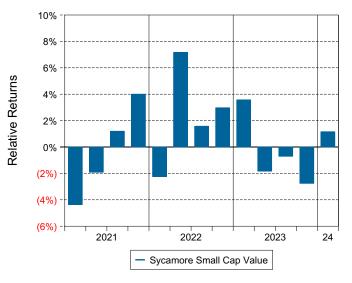
Quarterly	V Asset	Growth
Qualteri	y Abbei	GIOWIII

Beginning Market Value	\$103,410,558
Net New Investment	\$-1,483,132
Investment Gains/(Losses)	\$4,161,698
Ending Market Value	\$106,089,124

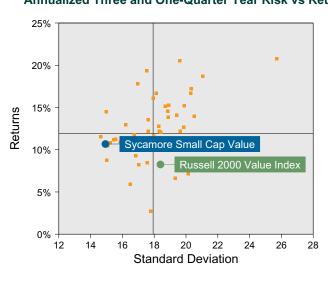
## Performance vs Callan Small Cap Value (Gross)



## Relative Return vs Russell 2000 Value Index



## Callan Small Cap Value (Gross) Annualized Three and One-Quarter Year Risk vs Return

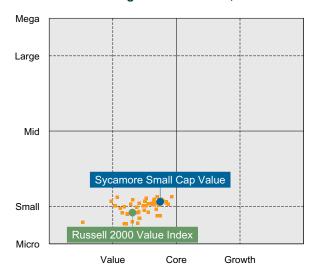




## **Current Holdings Based Style Analysis Sycamore Small Cap Value** As of March 31, 2024

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.

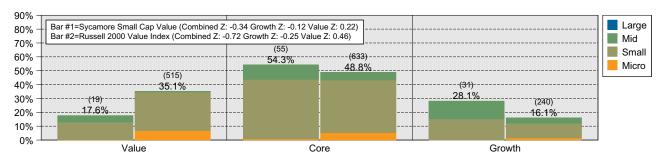
## Style Map vs Callan Small Cap Value Holdings as of March 31, 2024



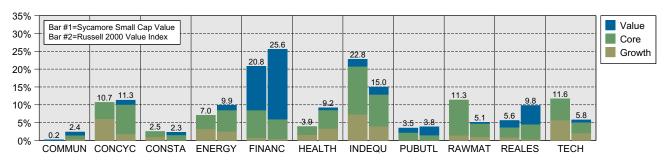
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	35.1% (515)	48.8% (633)	16.1% (240)	100.0% (1388)
Total	111070 (10)	0 110 /0 (00)	2011/0 (01)	(100)
	17.6% (19)	54.3% (55)	28.1% (31)	100.0% (105)
	6.8% (304)	5.4% (291)	1.5% (88)	13.7% (683)
Micro				
	0.2% (1)	0.8% (1)	0.0% (0)	1.0% (2)
	27.9% (210)	37.9% (329)	10.6% (139)	76.3% (678)
Small				
	12.8% (15)	42.9% (42)	15.2% (17)	70.8% (74)
	0.5% (1)	5.6% (13)	3.9% (13)	10.0% (27)
Mid				
	4.7% (3)	10.6% (12)	12.9% (14)	28.2% (29)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large		, ,	, ,	` '
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



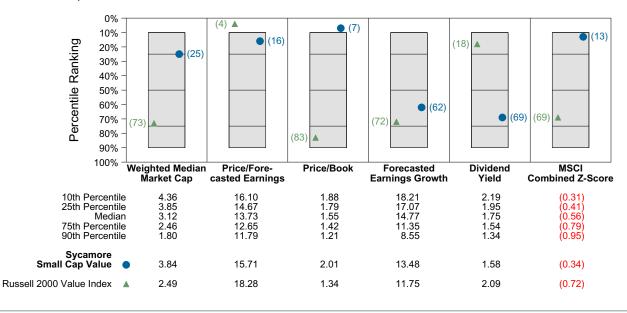


## **Sycamore Small Cap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

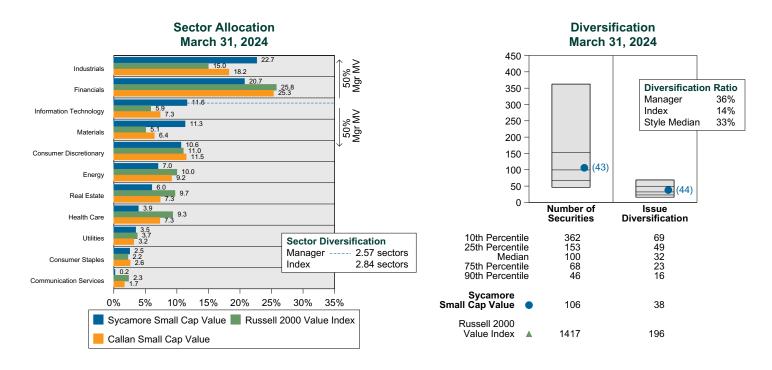
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Small Cap Value as of March 31, 2024



#### **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.





# Sycamore Small Cap Value Top 10 Portfolio Holdings Characteristics as of March 31, 2024

## 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Civitas Resources Inc	Energy	\$1,730,748	1.1%	13.40%	7.67	6.31	2.63%	23.21%
South St Corp	Financials	\$1,726,109	1.1%	1.34%	6.48	12.62	2.45%	8.50%
Magnolia Oil & Gas Corp Cl A	Energy	\$1,725,675	1.1%	22.63%	4.73	12.04	2.00%	71.96%
Wintrust Finl Corp	Financials	\$1,701,557	1.1%	13.10%	6.42	10.39	1.72%	15.81%
Umb Finl Corp	Financials	\$1,696,305	1.1%	4.61%	4.24	11.80	1.79%	17.09%
Matador Res Co	Energy	\$1,622,511	1.1%	17.82%	8.33	9.18	1.20%	72.54%
Hanover Ins Group Inc	Financials	\$1,565,955	1.0%	12.89%	4.89	12.22	2.50%	111.00%
Werner Enterprises Inc	Industrials	\$1,533,504	1.0%	(7.67)%	2.48	17.63	1.43%	9.85%
Hillenbrand Inc	Industrials	\$1,513,729	1.0%	5.60%	3.53	12.82	1.77%	10.29%
Hub Group Inc CI A	Industrials	\$1,488,929	1.0%	(5.71)%	2.69	17.84	1.16%	(8.10)%

## **10 Best Performers**

							Price/			
		Ending	Percent			Forecasted		Forecasted		
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in		
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings		
Core & Main Inc	Industrials	\$360,675	0.2%	41.67%	11.00	22.15	0.00%	20.42%		
Eagle Materials Inc	Materials	\$699,756	0.5%	34.11%	9.36	16.94	0.37%	30.30%		
Ryan Specialty Group Holdings	Financials	\$1,021,200	0.7%	29.55%	6.59	29.97	0.79%	8.57%		
Kaiser Aluminum Corp Com Par \$0.01	Materials	\$1,000,832	0.7%	26.99%	1.43	20.59	3.45%	(20.81)%		
Texas Roadhouse Inc	Consumer Discretionary	\$741,456	0.5%	26.89%	10.32	26.66	1.58%	15.90%		
Verint Sys Inc	Information Technology	\$1,096,436	0.7%	22.64%	2.07	11.36	0.00%	9.95%		
Magnolia Oil & Gas Corp Cl A	Energy	\$1,725,675	1.1%	22.63%	4.73	12.04	2.00%	71.96%		
Myr Group Inc Del	Industrials	\$547,925	0.4%	22.21%	2.96	25.91	0.00%	24.13%		
Delek Us Hldgs Inc New	Energy	\$866,868	0.6%	20.29%	1.97	30.56	3.19%	(10.08)%		
Nextracker Inc-Cl A	Information Technology	\$869,372	0.6%	20.10%	7.68	18.16	0.00%	37.70%		

## **10 Worst Performers**

	Ending Market	Percent			Forecasted		
	Mouleat				rorecasteu		Forecasted
	warket	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Communication Services	\$190,703	0.1%	(50.81)%	0.29	5.14	0.00%	43.98%
Materials	\$377,520	0.2%	(27.96)%	2.55	52.00	0.00%	32.30%
Information Technology	\$569,613	0.4%	(25.31)%	1.82	11.26	0.00%	6.45%
Industrials	\$598,560	0.4%	(21.86)%	0.90	17.51	0.00%	1.85%
Financials	\$660,654	0.4%	(20.09)%	2.21	11.10	4.38%	4.95%
Industrials	\$610,650	0.4%	(19.33)%	1.75	121.40	0.00%	(14.78)%
Financials	\$632,000	0.4%	(18.69)%	1.42	5.63	0.00%	-
Information Technology	\$652,964	0.4%	(14.48)%	1.97	13.48	0.00%	21.26%
Financials	\$630,139	0.4%	(12.87)%	2.48	16.52	4.49%	(3.45)%
Industrials	\$814,968	0.5%	(11.63)%	1.50	20.13	1.30%	7.23%
	Communication Services Materials Information Technology Industrials Financials Industrials Financials Information Technology Financials	Sector         Value           Communication Services Materials         \$190,703           Information Technology Industrials         \$569,613           Industrials         \$598,560           Financials         \$660,654           Industrials         \$610,650           Financials         \$632,000           Information Technology Financials         \$652,964           Financials         \$630,139	Sector         Value         Portfolio           Communication Services Materials         \$190,703         0.1%           Information Technology Industrials         \$569,613         0.4%           Financials         \$598,560         0.4%           Financials         \$660,654         0.4%           Industrials         \$610,650         0.4%           Financials         \$632,000         0.4%           Information Technology Financials         \$652,964         0.4%           \$630,139         0.4%	Sector         Value         Portfolio         Return           Communication Services         \$190,703         0.1%         (50.81)%           Materials         \$377,520         0.2%         (27.96)%           Information Technology         \$569,613         0.4%         (25.31)%           Industrials         \$598,560         0.4%         (21.86)%           Financials         \$660,654         0.4%         (20.09)%           Industrials         \$610,650         0.4%         (19.33)%           Financials         \$632,000         0.4%         (18.69)%           Information Technology         \$652,964         0.4%         (14.48)%           Financials         \$630,139         0.4%         (12.87)%	Sector         Value         Portfolio         Return         Capital           Communication Services Materials         \$190,703         0.1%         (50.81)%         0.29           Materials         \$377,520         0.2%         (27.96)%         2.55           Information Technology Industrials         \$569,613         0.4%         (25.31)%         1.82           Financials         \$598,560         0.4%         (21.86)%         0.90           Financials         \$660,654         0.4%         (20.09)%         2.21           Industrials         \$610,650         0.4%         (19.33)%         1.75           Financials         \$632,000         0.4%         (18.69)%         1.42           Information Technology         \$652,964         0.4%         (14.48)%         1.97           Financials         \$630,139         0.4%         (12.87)%         2.48	Sector         Value         Portfolio         Return         Capital         Ratio           Communication Services         \$190,703         0.1%         (50.81)%         0.29         5.14           Materials         \$377,520         0.2%         (27.96)%         2.55         52.00           Information Technology         \$569,613         0.4%         (25.31)%         1.82         11.26           Industrials         \$598,560         0.4%         (21.86)%         0.90         17.51           Financials         \$660,654         0.4%         (20.09)%         2.21         11.10           Industrials         \$610,650         0.4%         (19.33)%         1.75         121.40           Financials         \$632,000         0.4%         (18.69)%         1.42         5.63           Information Technology         \$652,964         0.4%         (14.48)%         1.97         13.48           Financials         \$630,139         0.4%         (12.87)%         2.48         16.52	Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Communication Services Materials         \$190,703         0.1%         (50.81)%         0.29         5.14         0.00%           Information Technology Industrials         \$569,613         0.4%         (25.31)%         1.82         11.26         0.00%           Industrials         \$598,560         0.4%         (21.86)%         0.90         17.51         0.00%           Financials         \$660,654         0.4%         (20.09)%         2.21         11.10         4.38%           Industrials         \$610,650         0.4%         (19.33)%         1.75         121.40         0.00%           Financials         \$632,000         0.4%         (18.69)%         1.42         5.63         0.00%           Information Technology         \$652,964         0.4%         (14.48)%         1.97         13.48         0.00%           Financials         \$630,139         0.4%         (12.87)%         2.48         16.52         4.49%

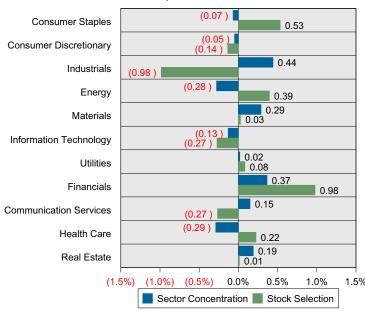


## Sycamore Small Cap Value vs Russell 2000 Value Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Small Cap Value over the same time period.

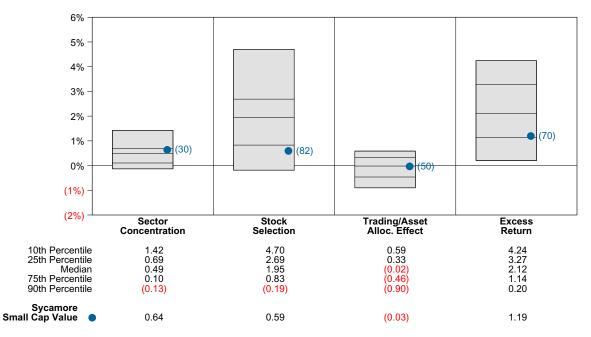
## Attribution Effects by Sector vs Russell 2000 Value Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.07%)	0.53%
Consumer Discretionary	(0.05%)	(0.14%)
Industrials	0.44%	(0.98%)
Energy	(0.28%)	0.39%
Materials	0.29%	0.03%
Information Technology	(0.13%)	(0.27%)
Utilities	0.02%	0.08%
Financials	0.37%	0.98%
Communication Services	s 0.15%	(0.27%)
Health Care	(0.29%)	0.22%
Real Estate	0.19%	0.01%
Total	0.64%	0.59%

N	lanager Return _	Index Return _	Sector Concen	L Stock Select	<sub>⊥</sub> Trading _	Asset Alloc
	4.10%	2.90%	0.64%	0.59%	(0.00%)	(0.03%)

## **Equity Attribution Ranking vs Callan Small Cap Value** Quarter ended March 31, 2024



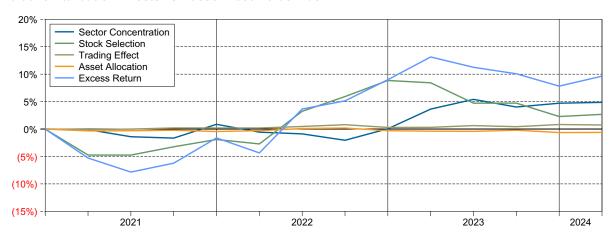


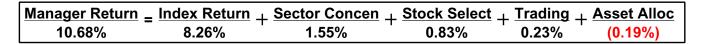
## Sycamore Small Cap Value vs Russell 2000 Value Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

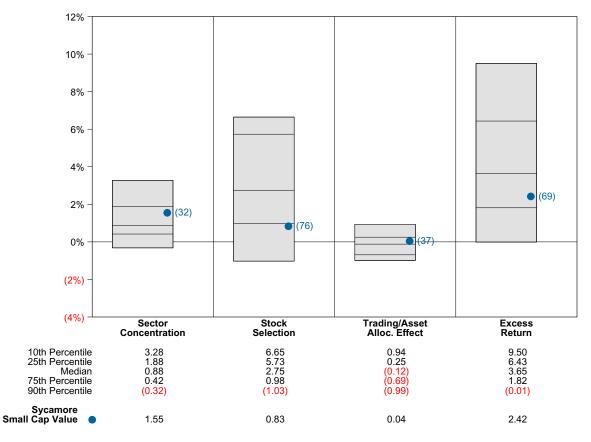
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Small Cap Value over the same time period.

#### Cumulative Attribution Effects vs Russell 2000 Value Index





## **Equity Attribution Ranking vs Callan Small Cap Value** Three and One-Quarter Years Ended March 31, 2024





## NTAM R2000 Index Period Ended March 31, 2024

#### **Investment Philosophy**

The primary objective of the Northern Trust Russell 2000 Equity Index Fund is to approximate the risk and return characteristics of the Russell 2000 Index.

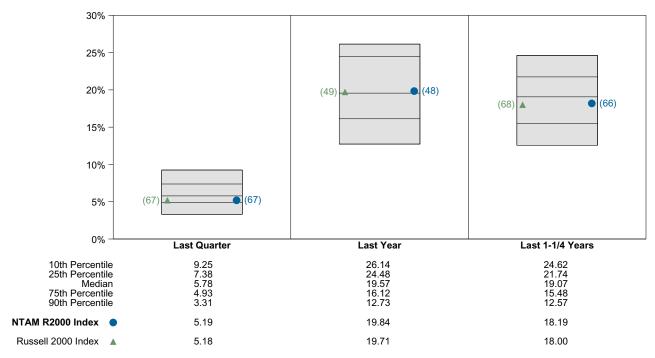
## **Quarterly Summary and Highlights**

- NTAM R2000 Index's portfolio posted a 5.19% return for the quarter placing it in the 67 percentile of the Callan Small Cap Core group for the quarter and in the 48 percentile for the last year.
- NTAM R2000 Index's portfolio outperformed the Russell 2000 Index by 0.01% for the quarter and outperformed the Russell 2000 Index for the year by 0.13%.

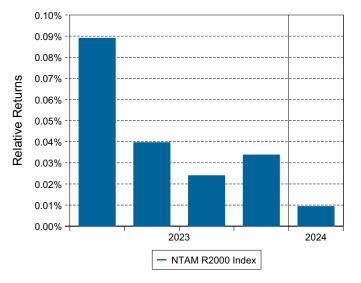
Quarterly A	sset Gro	wth
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Beginning Market Value	\$18,780,817
Net New Investment	\$-761,334
Investment Gains/(Losses)	\$885,623
Ending Market Value	\$18,905,106

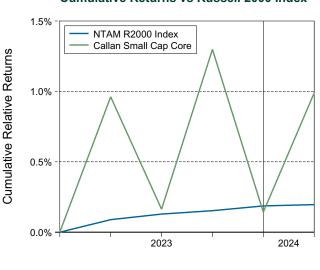
## Performance vs Callan Small Cap Core (Gross)



#### Relative Return vs Russell 2000 Index



## **Cumulative Returns vs Russell 2000 Index**

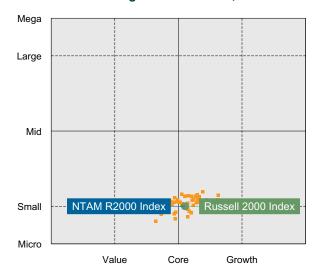




## **Current Holdings Based Style Analysis** NTAM R2000 Index As of March 31, 2024

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.

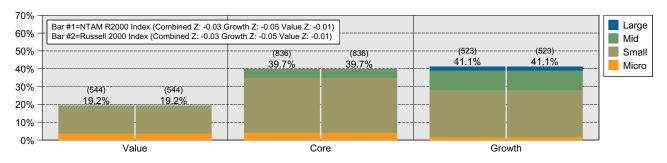
#### Style Map vs Callan Small Cap Core Holdings as of March 31, 2024



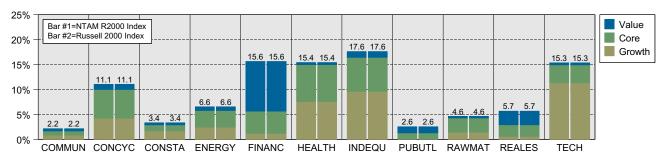
## **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	19.2% (544)	39.7% (836)	41.1% (523)	100.0% (1903)
Total	19.2% (544)	39.7% (836)	41.1% (523)	100.0% (1903)
	3.8% (326)	4.2% (389)	1.8% (147)	9.7% (862)
Micro				
	3.8% (326)	4.2% (389)	1.8% (147)	9.7% (862)
	15.2% (217)	30.8% (428)	26.5% (336)	72.4% (981)
Small	10.270 (217)	(420)	20.070 (000)	121470 (001)
	15.2% (217)	30.8% (428)	26.5% (336)	72.4% (981)
iviiu	0.2% (1)	4.8% (19)	10.8% (39)	15.9% (59)
Mid	0.2% (1)	4.8% (19)	10.8% (39)	15.9% (59)
	0.0% (0)	0.0% (0)	2.0% (1)	2.0% (1)
Large	. ,	, ,	, ,	, ,
	0.0% (0)	0.0% (0)	2.0% (1)	2.0% (1)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



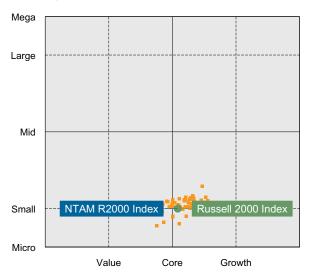


## **Historical Holdings Based Style Analysis** NTAM R2000 Index For One and 1/4 Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

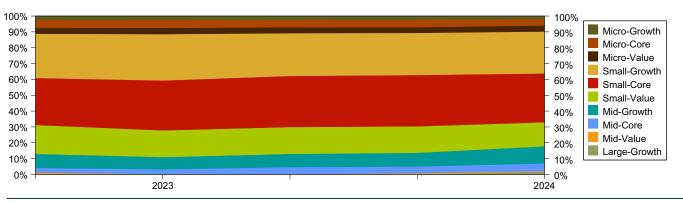
## Average Style Map vs Callan Small Cap Core Holdings for One and 1/4 Years Ended March 31, 2024

## **Average Style Exposure Matrix** Holdings for One and 1/4 Years Ended March 31, 2024

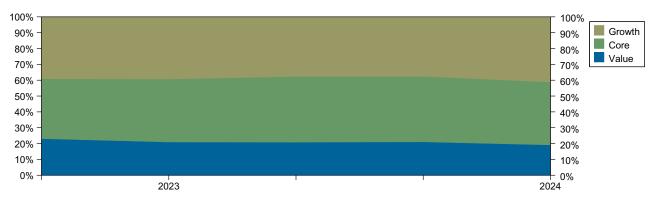




## NTAM R2000 Index Historical Cap/Style Exposures



NTAM R2000 Index Historical Style Only Exposures



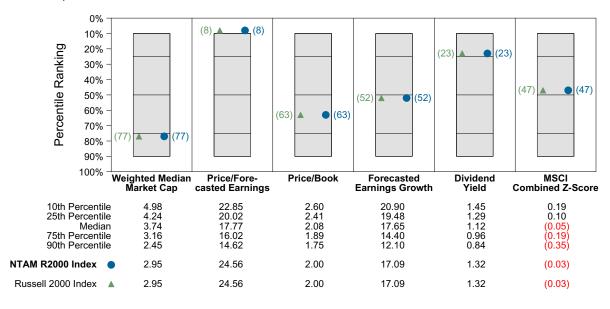


## NTAM R2000 Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

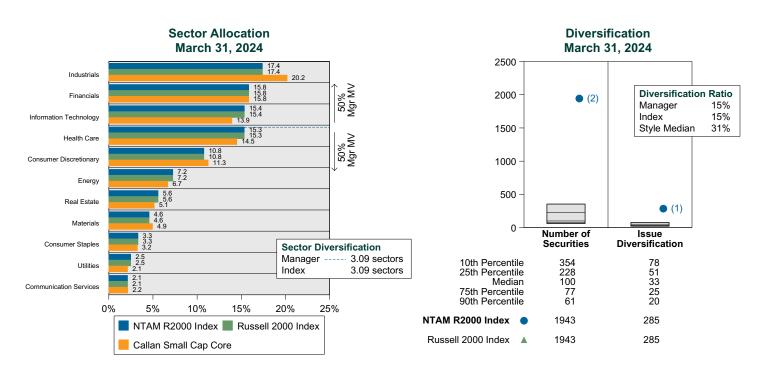
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Core** as of March 31, 2024



#### **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.





## NTAM R2000 Index Top 10 Portfolio Holdings Characteristics as of March 31, 2024

## 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Information Technology	\$364,005	1.9%	255.32%	59.14	35.26	0.00%	48.20%
Information Technology	\$179,358	0.9%	169.87%	25.58	2563.25	0.00%	107.62%
Industrials	\$79,677	0.4%	54.60%	11.34	27.89	0.31%	28.28%
Consumer Staples	\$74,940	0.4%	35.81%	10.88	54.82	0.00%	35.80%
Consumer Discretionary	\$65,361	0.3%	24.33%	9.17	24.86	0.00%	2.57%
Consumer Discretionary	\$64,235	0.3%	66.05%	10.24	(29.90)	0.00%	-
Information Technology	\$62,825	0.3%	18.43%	8.90	36.35	0.00%	39.15%
Industrials	\$62,394	0.3%	3.79%	8.71	22.93	0.53%	31.61%
Health Care	\$59,441	0.3%	340.63%	8.94	(67.21)	0.00%	-
Industrials	\$58,197	0.3%	13.50%	10.26	20.20	0.00%	19.20%
	Information Technology Information Technology Industrials Consumer Staples Consumer Discretionary Consumer Discretionary Information Technology Industrials Health Care	Sector         Market Value           Information Technology         \$364,005           Information Technology         \$179,358           Industrials         \$79,677           Consumer Staples         \$74,940           Consumer Discretionary         \$65,361           Consumer Discretionary         \$64,235           Information Technology         \$62,825           Industrials         \$62,394           Health Care         \$59,441	Sector         Market Value         of Value           Information Technology Information Technology Industrials         \$364,005         1.9%           Information Technology Industrials         \$79,677         0.4%           Consumer Staples         \$74,940         0.4%           Consumer Discretionary Consumer Discretionary Information Technology Industrials Industrials Health Care         \$62,825         0.3%           Health Care         \$59,441         0.3%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Information Technology Information Technology Information Technology Industrials Sectionary Industrials Section	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Information Technology Information Technology Information Technology Industrials Information Technology Industrials Information Technology Industrials Information Technology Industrials Information Technology Information Technology Information Technology Industrials Information I	Sector         Value         Percent Value         Qtrly Return         Market Capital         Forecasted Earnings Ratio           Information Technology Information Technology Information Technology Information Technology Industrials Information Technology Information Technology Information Technology Information Technology Information Technology Information Technology Industrials Industrial Industrials Industrial Indus	Sector         Value         Percent Value         Return         Capital Capital         Ratio Ratio Ratio         Dividend Yield Yeld           Information Technology Information Technology Information Technology Industrials         \$79,677         0.4%         54.60%         11.34         27.89         0.31%           Consumer Staples Consumer Discretionary Information Technology Information Staples         \$74,940         0.4%         35.81%         10.88         54.82         0.00%           Consumer Discretionary Consumer Discretionary Information Technology Information Technology Information Technology Industrials Staples St

## **10 Best Performers**

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Health Care	\$232	0.0%	473.60%	0.13	(4.25)	0.00%	-
Health Care	\$59,441	0.3%	340.63%	8.94	(67.21)	0.00%	-
Health Care	\$3,811	0.0%	258.20%	0.73	(10.07)	0.00%	-
Information Technology	\$364,005	1.9%	255.32%	59.14	35.26	0.00%	48.20%
Health Care	\$4,610	0.0%	250.95%	1.95	(26.00)	0.00%	-
Health Care	\$5,548	0.0%	206.75%	1.14	(4.41)	0.00%	-
Information Technology	\$986	0.0%	190.54%	0.20	(17.89)	0.00%	-
Health Care	\$13,363	0.1%	182.02%	2.42	(7.78)	0.00%	-
Health Care	\$12,242	0.1%	180.36%	2.35	(19.59)	0.00%	-
Information Technology	\$5,756	0.0%	177.75%	1.61	(21.34)	0.00%	-
	Health Care Health Care Health Care Health Care Information Technology Health Care Health Care Information Technology Health Care Health Care	Sector         Market Value           Health Care         \$232           Health Care         \$59,441           Health Care         \$3,811           Information Technology         \$364,005           Health Care         \$4,610           Health Care         \$5,548           Information Technology         \$986           Health Care         \$13,363           Health Care         \$12,242	Sector         Market Value         of Portfolio           Health Care         \$232         0.0%           Health Care         \$59,441         0.3%           Health Care         \$3,811         0.0%           Information Technology         \$364,005         1.9%           Health Care         \$4,610         0.0%           Health Care         \$5,548         0.0%           Information Technology         \$986         0.0%           Health Care         \$13,363         0.1%           Health Care         \$12,242         0.1%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Health Care         \$232         0.0%         473.60%           Health Care         \$59,441         0.3%         340.63%           Health Care         \$3,811         0.0%         258.20%           Information Technology         \$364,005         1.9%         255.32%           Health Care         \$4,610         0.0%         250.95%           Health Care         \$5,548         0.0%         206.75%           Information Technology         \$986         0.0%         190.54%           Health Care         \$13,363         0.1%         182.02%           Health Care         \$12,242         0.1%         180.36%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Health Care         \$232         0.0%         473.60%         0.13           Health Care         \$59,441         0.3%         340.63%         8.94           Health Care         \$3,811         0.0%         258.20%         0.73           Information Technology         \$364,005         1.9%         255.32%         59.14           Health Care         \$4,610         0.0%         250.95%         1.95           Health Care         \$5,548         0.0%         206.75%         1.14           Information Technology         \$986         0.0%         190.54%         0.20           Health Care         \$13,363         0.1%         182.02%         2.42           Health Care         \$12,242         0.1%         180.36%         2.35	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital         Ratio           Health Care         \$232         0.0%         473.60%         0.13         (4.25)           Health Care         \$59,441         0.3%         340.63%         8.94         (67.21)           Health Care         \$3,811         0.0%         258.20%         0.73         (10.07)           Information Technology         \$364,005         1.9%         255.32%         59.14         35.26           Health Care         \$4,610         0.0%         250.95%         1.95         (26.00)           Health Care         \$5,548         0.0%         206.75%         1.14         (4.41)           Information Technology         \$986         0.0%         190.54%         0.20         (17.89)           Health Care         \$13,363         0.1%         182.02%         2.42         (7.78)           Health Care         \$12,242         0.1%         180.36%         2.35         (19.59)	Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Health Care         \$232         0.0%         473.60%         0.13         (4.25)         0.00%           Health Care         \$59,441         0.3%         340.63%         8.94         (67.21)         0.00%           Health Care         \$3,811         0.0%         258.20%         0.73         (10.07)         0.00%           Information Technology         \$364,005         1.9%         255.32%         59.14         35.26         0.00%           Health Care         \$4,610         0.0%         250.95%         1.95         (26.00)         0.00%           Health Care         \$5,548         0.0%         206.75%         1.14         (4.41)         0.00%           Information Technology         \$986         0.0%         190.54%         0.20         (17.89)         0.00%           Health Care         \$13,363         0.1%         182.02%         2.42         (7.78)         0.00%           Health Care         \$12,242         0.1%         180.36%         2.35         (19.59)         0.00%

## **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Amylyx Pharmaceuticals Inc Common St	Health Care	\$1,021	0.0%	(80.70)%	0.19	(2.55)	0.00%	-
Bakkt Holdings Inc Com Cl A	Financials	\$232	0.0%	(79.37)%	0.07	(1.78)	0.00%	-
Ww Intl Inc	Consumer Discretionary	\$714	0.0%	(78.87)%	0.15	108.82	0.00%	(22.00)%
Irobot Corp	Consumer Discretionary	\$1,701	0.0%	(77.36)%	0.24	(2.84)	0.00%	4.64%
Liveperson Inc	Information Technology	\$556	0.0%	(73.68)%	0.09	(1.31)	0.00%	15.00%
Office Pptys Income Tr Com Shs Ben I	Real Estate	\$696	0.0%	(72.06)%	0.10	(0.96)	1.96%	(18.35)%
Spirit Airls Inc	Industrials	\$3,761	0.0%	(69.59)%	0.53	(2.07)	0.00%	(46.81)%
2u Inc	Consumer Discretionary	\$221	0.0%	(68.30)%	0.03	(2.31)	0.00%	15.00%
Caremax Inc Com Cl A	Health Care	\$74	0.0%	(67.79)%	0.02	(0.41)	0.00%	-
Presto Automation Inc	Information Technology	\$5	0.0%	(67.18)%	0.02	(0.47)	0.00%	-

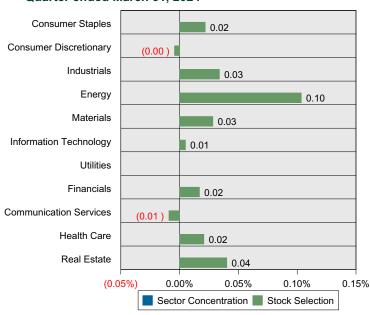


## NTAM R2000 Index vs Russell 2000 Index **Quarterly Equity Buy and Hold Attribution**

#### **Attribution Ranking and Sector Detail**

The first table and chart below break the manager's Sector Concentration and Stock Selection factors down to the sector level. The table in the center shows these factors for the total portfolio and includes the Trading and Asset Allocation Effects. The bottom chart ranks the excess return and the four attribution factors for the manager vs the factors generated by members of the Callan Small Cap Core over the same time period.

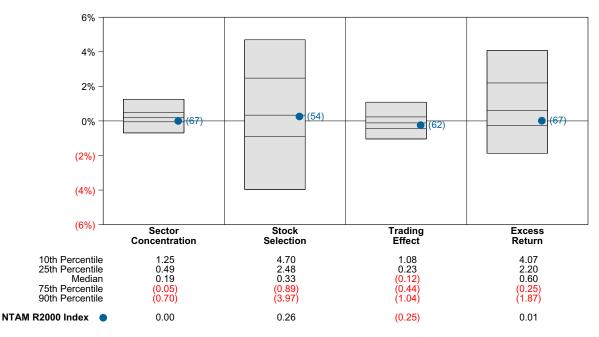
## Attribution Effects by Sector vs Russell 2000 Index Quarter ended March 31, 2024



	Sector	Stock
Sector	Concentration	Selection
Consumer Staples	0.00%	0.02%
Consumer Discretionary	0.00%	(0.00%)
Industrials	0.00%	0.03%
Energy	0.00%	0.10%
Materials	0.00%	0.03%
Information Technology	0.00%	0.01%
Utilities	0.00%	0.00%
Financials	0.00%	0.02%
Communication Services	s 0.00%	(0.01%)
Health Care	0.00%	0.02%
Real Estate	0.00%	0.04%
Total	0.00%	0.26%

Manager Return _	Index Return _	Sector Concentration	L Stock Selection +	<b>Trading</b>
5.19%	5.18%	0.00%	0.26%	(0.25%)

## **Equity Attribution Ranking vs Callan Small Cap Core** Quarter ended March 31, 2024



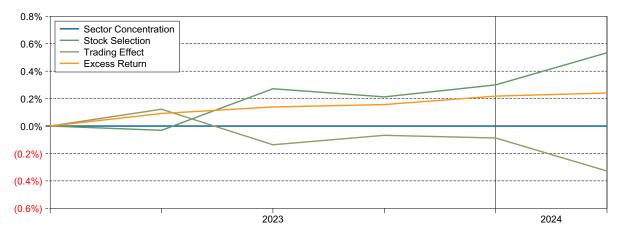


## NTAM R2000 Index vs Russell 2000 Index **Cumulative Equity Buy and Hold Attribution**

#### **Cumulative Attribution and Ranking**

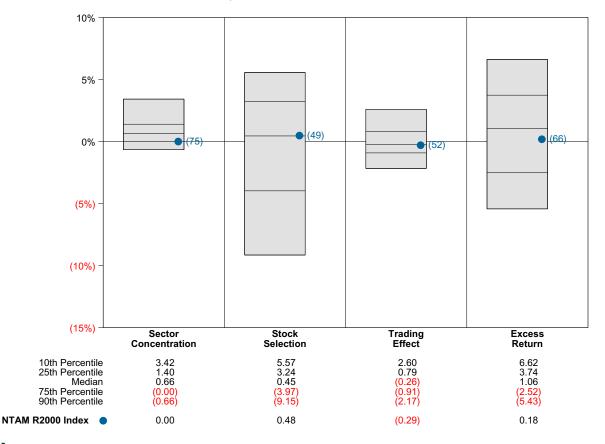
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs the values generated by members of the Callan Small Cap Core over the same time period.

#### **Cumulative Attribution Effects vs Russell 2000 Index**



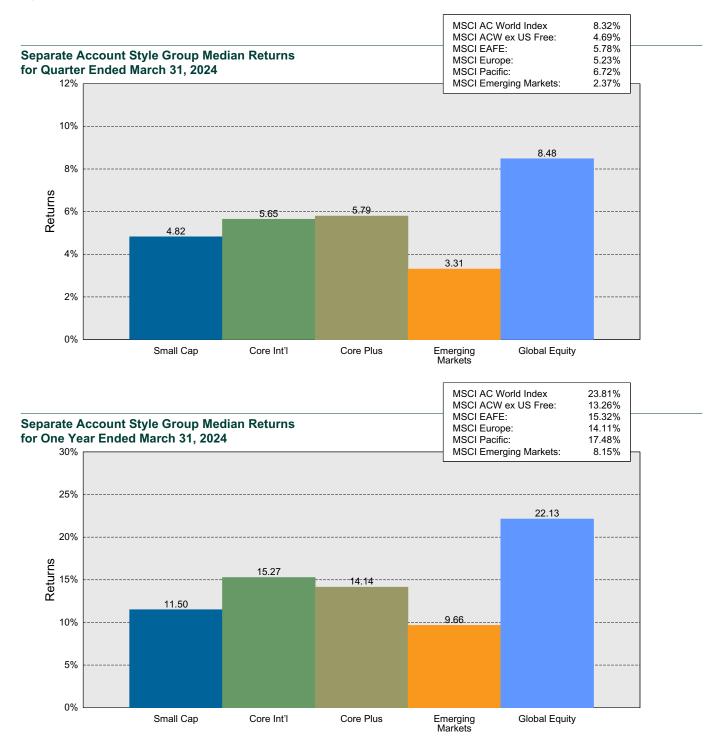
Manager Return .	Index Return	Sector Concentration _	L Stock Selection L	Trading
18.19%	18.00%	0.00%	0.48%	(0.29%)

## **Equity Attribution Ranking vs Callan Small Cap Core** One and One-Quarter Years Ended March 31, 2024



## International Equity Active Management Overview

The MSCI ACWI ex USA trailed U.S. stock indices and posted a 4.7% gain (Local: +8.2%). The U.S dollar strengthened against most currencies, most notably the Japanese yen (-7%). As in the U.S., Information Technology (+10.7%) was the best-performing sector. Financials (+8.7%), the largest sector in the index, also bolstered results. Pacific ex-Japan (-1.7%) was hurt by weak performance from Hong Kong (-11.7%). In contrast, Japan (+11.0%) saw double-digit gains that were even better in local terms (+19.2%). Emerging Markets (MSCI EM: +2.4%) were up modestly but trailed developed market returns. As elsewhere, Information Technology was the best performing sector with Taiwan Semiconductor (+26.6%), at over 7% of the MSCI EM Index, being a key contributor to EM performance. Latin America (-4.0%) was dragged down by poor results from Brazil (-7.4%). Emerging Asia (+3.4%) was helped by India (+6.1%) and Taiwan (+12.5%) but hurt by China (-2.2%). In China, factory output and retail sales beat expectations in January and February, but the property sector remained under significant pressure.





## **Total International Equity** Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

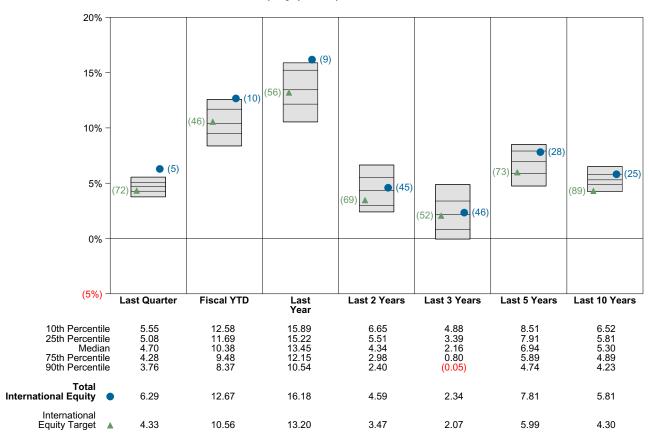
- Total International Equity's portfolio posted a 6.29% return for the guarter placing it in the 5 percentile of the Public Fund - International Equity group for the quarter and in the 9 percentile for the last year.
- Total International Equity's portfolio outperformed the International Equity Target by 1.96% for the quarter and outperformed the International Equity Target for the year by 2.98%.

#### **Quarterly Asset Growth**

\$1,395,671,929 Beginning Market Value Net New Investment \$-61,647,250 Investment Gains/(Losses) \$83,892,766

**Ending Market Value** \$1,417,917,445

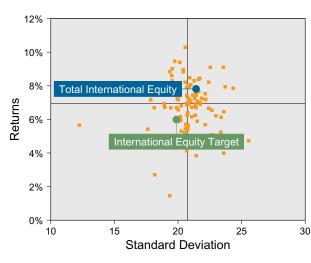
## Performance vs Public Fund - International Equity (Gross)



#### Relative Return vs International Equity Target



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



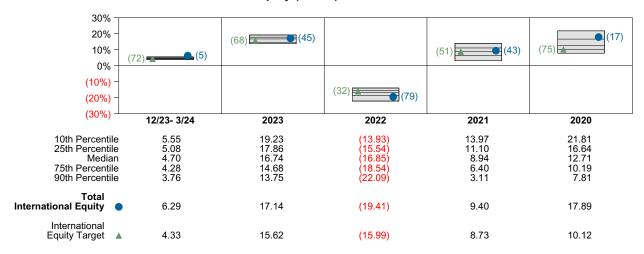


## **Total International Equity Return Analysis Summary**

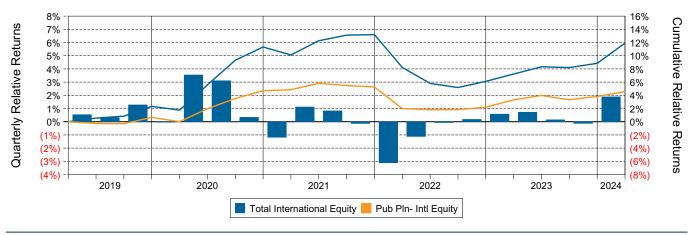
#### **Return Analysis**

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.

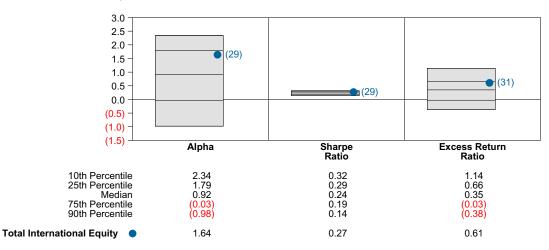
#### Performance vs Public Fund - International Equity (Gross)



#### **Cumulative and Quarterly Relative Returns vs International Equity Target**



Risk Adjusted Return Measures vs International Equity Target Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2024



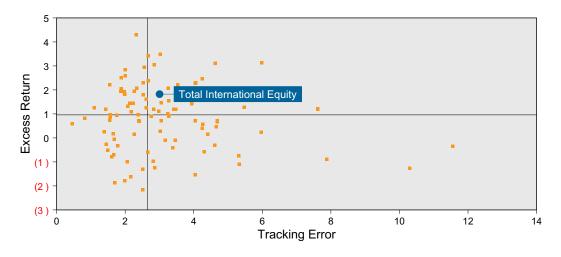


## **Total International Equity Risk Analysis Summary**

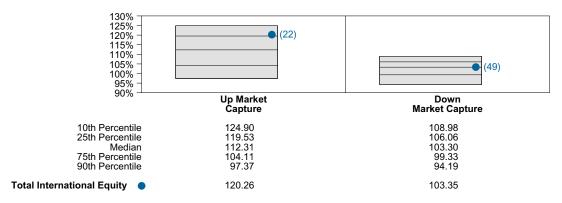
#### Risk Analysis

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.

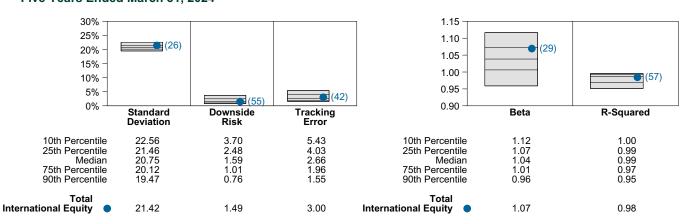
## Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended March 31, 2024



#### **Market Capture vs International Equity Target** Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2024



## Risk Statistics Rankings vs International Equity Target Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2024



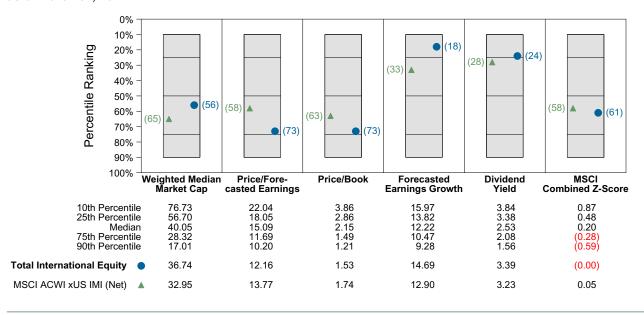


## **Total International Equity Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

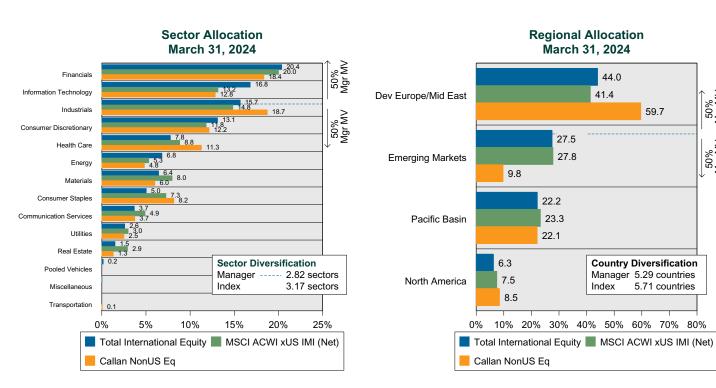
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US Equity as of March 31, 2024



#### **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.

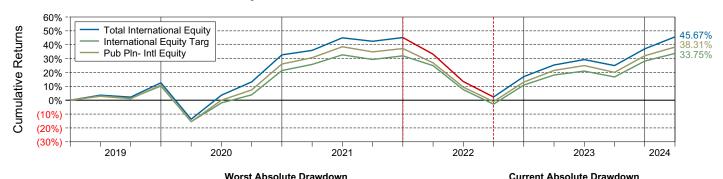




## Total International Equity Drawdown Analysis for Five Years Ended March 31, 2024

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**

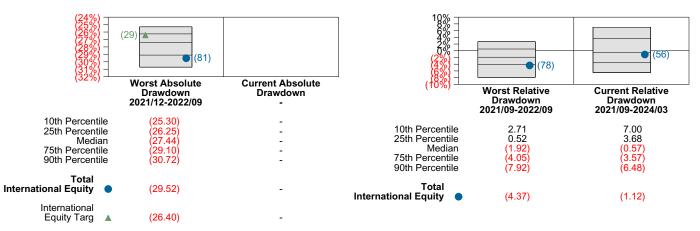


	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total International Equity	(29.52)%	0.75	2021/12-2022/09	(26.40)%	(27.88)%	-	-	-	-	-
Recovery from Trough	42.37%	1.50+	2022/09-2024/03	37.69%	39.74%	-	-	-	-	-
International Equity Targ	(26.80)%	1.25	2021/06-2022/09			-	-	-		
Pub Pln- Intl Equity	(28.55)%	1.25	2021/06-2022/09			(0.16)%	2.75	2021/06-2024/03		

#### Relative Cumulative Drawdown Analysis vs. International Equity Targ **Cumulative Relative Returns** Peak Catch-up Rel Rtn: 1.13% Total International Equity 10% Pub Pln- Intl Equity 8.91% 6% 3.41% 2% 0% 2019 2021 2022 2023 2024 2020

	V	Vorst Rela	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Total International Equity	(4.37)%	1.00	2021/09-2022/09	(2.26)%	(1.12)%	2.50	2021/09-2024/03	(0.80)%		
Recovery from Trough	3.40%	1.50+	2022/09-2024/03	1.49%	3.40%	1.50+	2022/09-2024/03	1.49%		
Pub Pln- Intl Equity	(2.67)%	0.75	2021/06-2022/03		(0.93)%	2.75	2021/06-2024/03			

Drawdown Rankings vs. International Equity Targ Rankings against Public Fund - International Equity Five Years Ended March 31, 2024

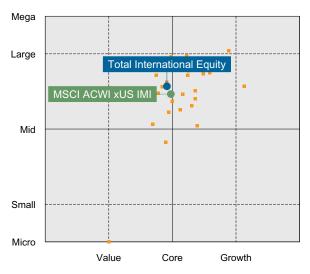




## **Current Holdings Based Style Analysis Total International Equity** As of March 31, 2024

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.

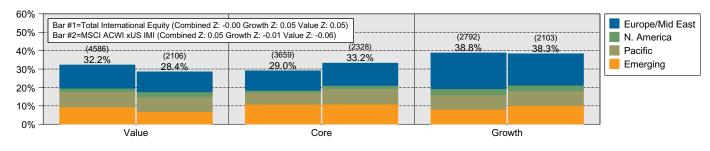
## Style Map vs Pub Pln- Intl Equity Holdings as of March 31, 2024



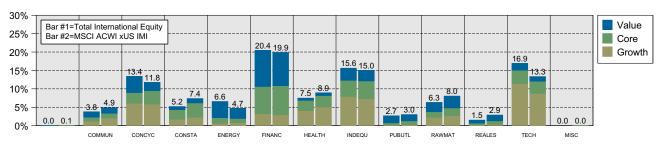
## **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	28.4% (2106)	33.2% (2328)	38.3% (2103)	100.0% (6537)
Total				
	32.2% (4586)	29.0% (3659)	38.8% (2792)	100.0% (11037)
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
Emerging				
	9.3% (2711)	10.8% (2398)	8.1% (1750)	28.2% (6859)
	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
Pacific	, ,		, ,	, ,
	8.3% (1111)	6.6% (620)	7.9% (514)	22.9% (2245)
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
N. America				
	1.8% (102)	0.9% (85)	3.2% (56)	6.0% (243)
Europe/ Mid East	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
Europo/	12.7% (662)	10.7% (556)	19.5% (472)	42.9% (1690)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024

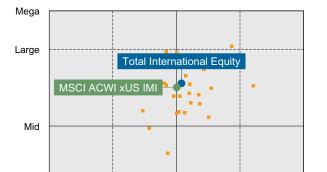




## **Historical Holdings Based Style Analysis Total International Equity** For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

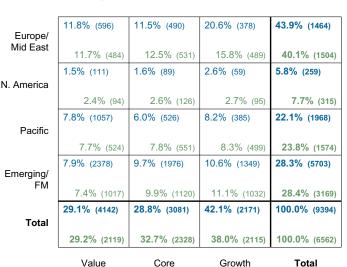
## Average Style Map vs Pub Pln- Intl Equity Holdings for Three Years Ended March 31, 2024



Small

Micro

## **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

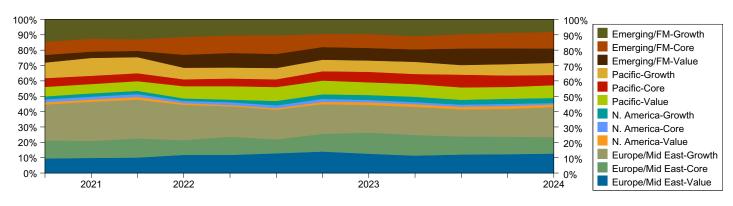


## **Total International Equity Historical Region/Style Exposures**

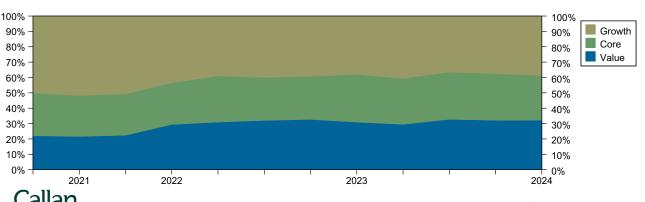
Growth

Core

Value



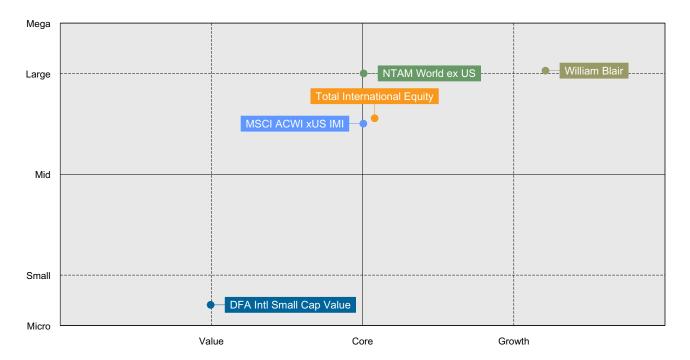
#### **Total International Equity Historical Style Only Exposures**



## **International Historical Holdings Based Style Analysis** For Three Years Ended March 31, 2024

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.

## **Average Style Map** Holdings for Three Years Ended March 31, 2024



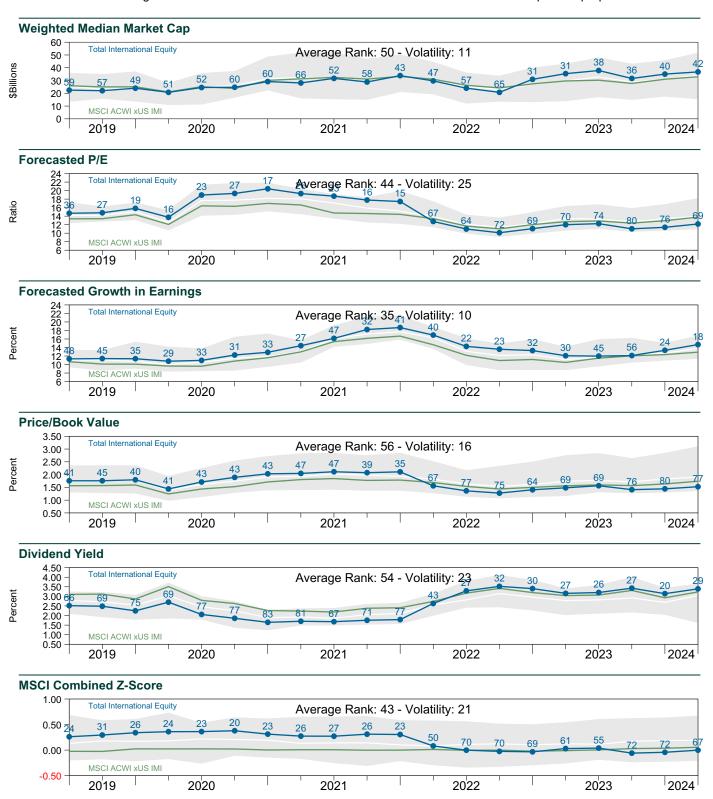
	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities I	Diversification
DFA Intl Small Cap Value	5.00%	1.74	(0.89)	(0.18)	0.71	1908	161.16
NTAM World ex US	14.86%	44.89	0.01	(0.04)	(0.05)	892	107.15
William Blair	18.13%	52.55	1.04	0.33	(0.71)	64	21.47
Total International Equity	100.00%	31.36	0.07	0.03	(0.04)	9611	144.10
MSCI ACWI xUS IMI	-	29.77	0.01	(0.03)	(0.04)	6678	240.14



## **Portfolio Characteristics Analysis**

## **Pub Pln-Intl Equity**

The charts below illustrate the behavior of the product over different portfolio characteristics through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Intl Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The MSCI ACWI xUS IMI is shown for comparison purposes.

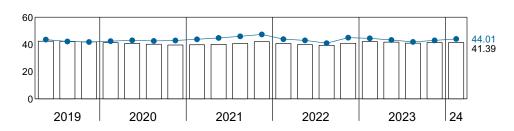


Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.

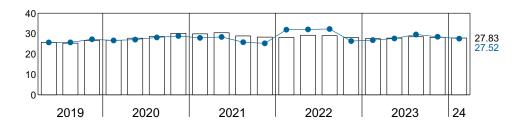


## **North Dakota State Investment Board Pension Funds** History of Ending Regional Weights Period Ended March 31, 2024

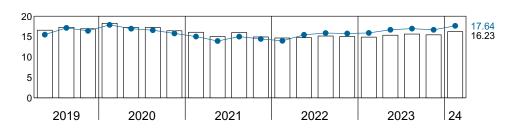




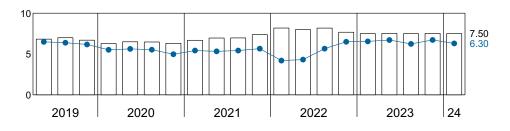
## **Emerging Markets**



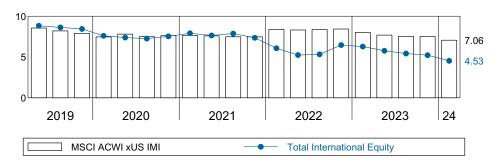
## Japan



## **North America**



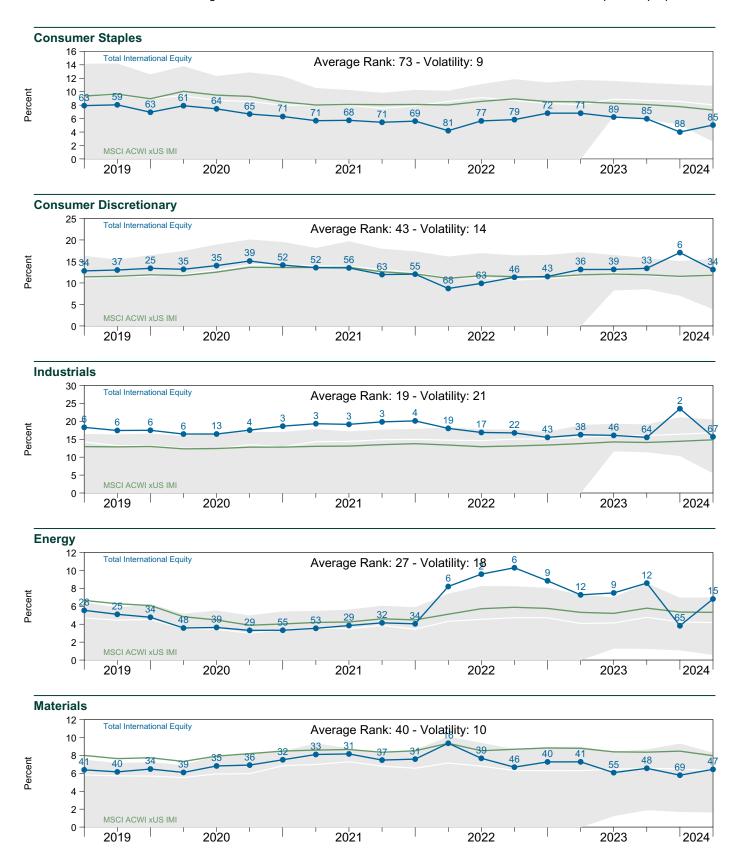
## **Pacific Basin**





#### **Historical Sector Weight Analysis**

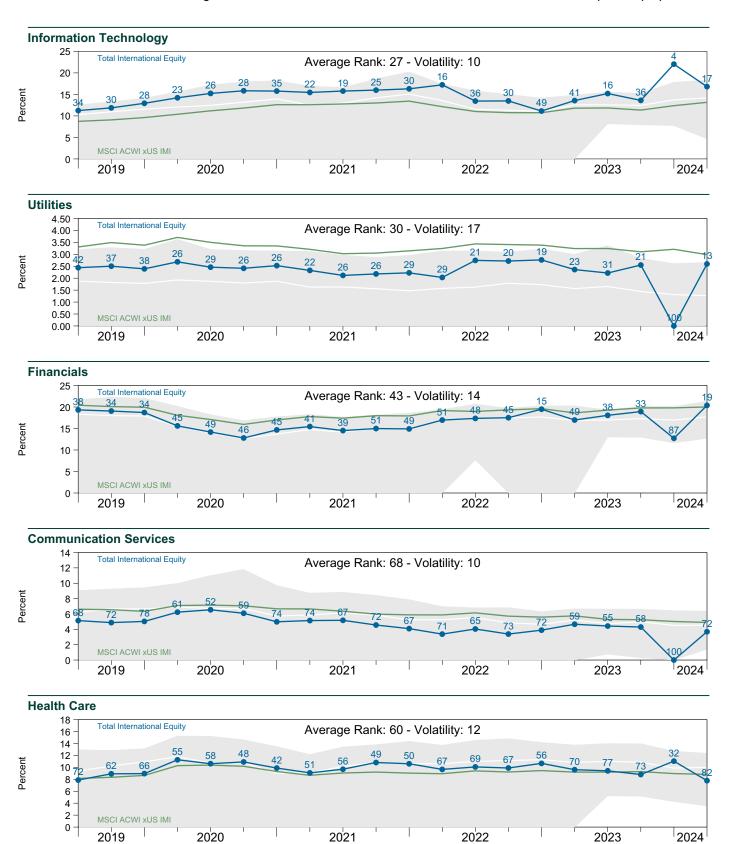
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Intl Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The MSCI ACWI xUS IMI is shown for comparison purposes.





#### **Historical Sector Weight Analysis**

The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Intl Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking of the product and, if there are at least 12 data points, the standard deviation of that ranking is also shown on the chart. The MSCI ACWI xUS IMI is shown for comparison purposes.

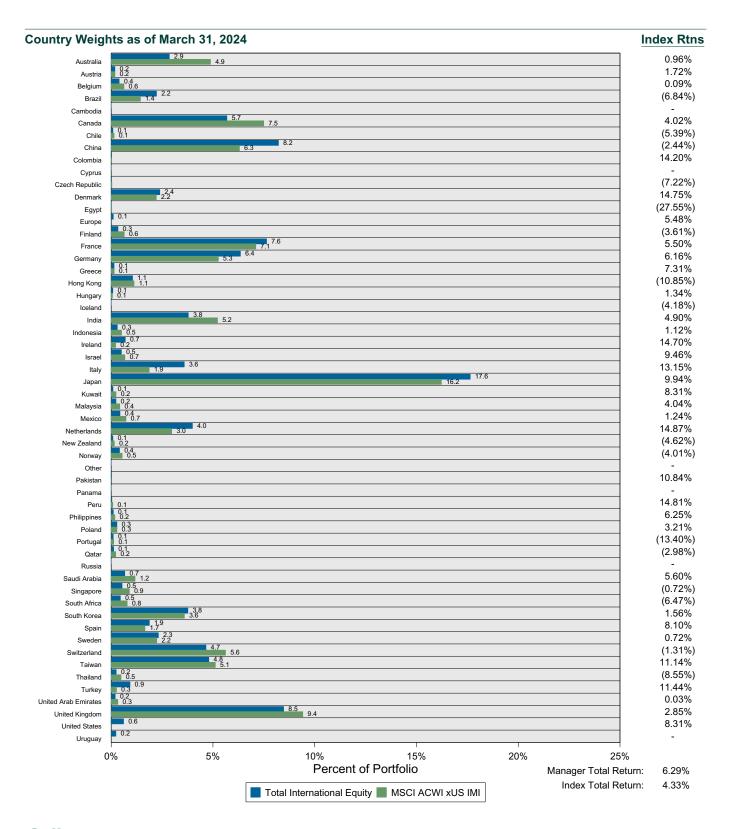




## **Country Allocation** Total International Equity VS MSCI ACWI xUS IMI (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.

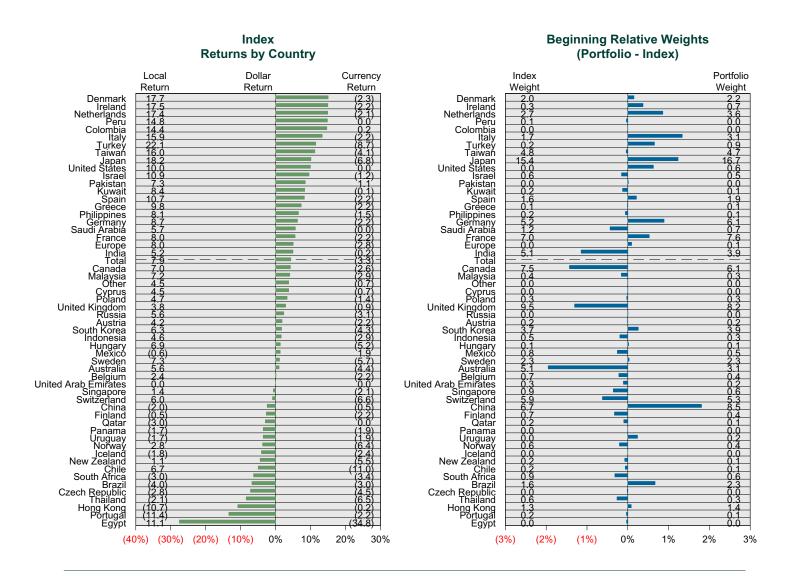


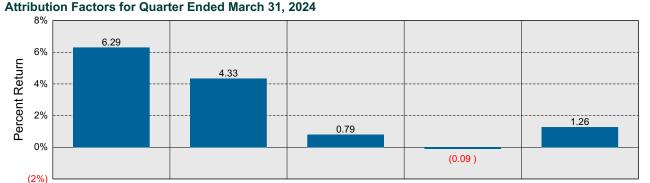


## Total International Equity vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.





Country

Currency



Portfolio

Index

Security

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

## Return Based Risk Statistics for 3 Years Ended March 31, 2024 vs the International Equity Targ and the Pub PIn- Intl Equity PEER GROUP

(4.0)	NTAM World	0.00	47.000/	0.05	0.050/	0.40	4.04	0.400/	4.00	0.00
(12)	Ex	3.30	17.69%	2.05	0.35%	0.16	1.61	3.40%	1.09	0.99
	US	(6)	(28)	(59)	(98)	(8)	(8)	(6)	(23)	(15)
	William Blair									
(12)	Int'l	(2.48)	21.55%	8.34	7.00%	(0.14)	(0.30)	(1.63)%	1.26	0.88
	Leaders	(91)	(1)	(2)	(3)	(83)	(67)	(83)	(1)	(97)
	DFA Intl Small									
(12)	Cap	4.14	17.16%	4.19	1.10%	0.21	0.99	4.18%	1.03	0.94
	Value	(2)	(44)	(19)	(73)	(2)	(12)	(2)	(58)	(87)
		Excess	Standard	Tracking	Downside	Sharpe	Excess			
							Return	Alpha	Beta	R-Squared
		Return	Deviation	Error	Risk	Ratio	Ratio			



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

## Excess Return Correlations for 3 Years Ended March 31, 2024 vs the International Equity Targ

(12)	NTAM World Ex US	0.33	0.40	1.00
(12)	William Blair Int'l Leaders	(0.43)	1.00	0.40
(12)	DFA Intl Small Cap Value	1.00	(0.43)	0.33
		DFA Intl Small Cap Value	William Blair Int'l Leaders	NTAM World Ex US



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

## Average Equity Characteristics for 3 Years Ended March 31, 2024 VS THE Pub Pln- Intl Equity Peer Group

	NTAM World											
(12)	Ex	44.89	892	107.15	(0.04)	(0.05)	0.01	13.54	11.93	1.16%	1.78	2.95%
	US	(10)	(59)	(23)	(75)	(41)	(66)	(53)	(85)	(19)	(50)	(30)
	William Blair											
(12)	Int'l	52.55	64	21.47	0.33	(0.71)	1.04	25.59	17.13	1.48%	5.07	1.31%
	Leaders	(6)	(97)	(97)	(4)	(96)	(4)	(4)	(10)	(6)	(1)	(95)
	DFA Intl Small											
(12)	Сар	1.74	1908	161.16	(0.18)	0.71	(0.89)	9.57	9.43	1.02%	0.77	3.49%
	Value	(99)	(31)	(8)	(98)	(1)	(99)	(98)	(96)	(46)	(100)	(9)
		Weighted	Number	Security	MSCI	MSCI	MSCI	Forecasted	Forecasted	P/E	Price/	Indicated
		Median	of	Divers-	Growth	Value	Combined	P/E	Growth	to	Book	Dividend
		Mkt Cap	Holdings	ification	Z-Score	Z-Score	Z-Score	F/E	Earnings	Growth	Value	Yield



This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. The holding overlap matrices illustrate the degree of individual stock overlap between various portfolios' holdings. The number in parentheses in the lower left corner of each box is the number of stocks that a given portfolio pair hold in common. The number in the upper left corner is the total weight of these overlapping holdings in the y-axis (vertical) portfolio. The number in the lower right corner is the total weight of those same stocks in the x-axis (horizontal) portfolio.

## Holding Overlap for Period Ended March 31, 2024

State St MSCI exUS Small	29% (715)	65%	0% (0)	0%	0% (1)	0%	11% (191)	4%	0% (1)	0%	0% (4)	0%	0% (0)	0%	0% (0)	0%	11% (191)	4%		
Arrowstreet ACWI ex US	2% (129)	20%	7% (10)	17%	56% (200)	34%	100% (808)	100%	56% (200)	34%	30% (300)	22%	17% (95)	32%	13% (90)	34%			4% (191)	11%
State St MSCI EM China	0% (0)	0%	5% (2)	2%	0% (0)	0%	34% (90)	13%	0% (0)	0%	90% ( <b>506</b> )	15%	0% (0)	0%			34% (90)	13%	0% (0)	0%
State St MSCI EM ex China	0% (0)	0%	0% (0)	0%	0% (0)	0%	32% (95)	17%	0% (0)	0%	95% (606)	44%			0% (0)	0%	32% (95)	17%	0% (0)	0%
DFA EM All Cap Core	1% (4)	1%	3% (6)	11%	0% (1)	0%	22%	30%	0%	0%			44% (606)	95%	15% ( <b>506</b> )	90%	22% (300)	30%	0% (4)	0%
State St MSCI World exUS	1% (28)	8%	16% (46)	69%	100% (855)	100%	34% (200)	56%			0% (1)	0%	0% (0)	0%	0% (0)	0%	34% (200)	56%	0% (1)	0%
Arrowstreet ACWI ex US	2% (129)	20%	7% (10)	17%	56% (200)	34%			56% (200)	34%	30% (300)	22%	17% (95)	32%	13% (90)	34%	100% (808)	100%	4% (191)	11%
NTAM World Ex US	1% (28)	8%	16% ( <b>46</b> )	69%			34% (200)	56%	100% (855)	100%	0% (1)	0%	0% (0)	0%	0% (0)	0%	34% (200)	56%	0% (1)	0%
William Blair Int'l Leaders	2% (1)	1%			69% (46)	16%	17% (10)	7%	69% (46)	16%	11% (6)	3%	0% (0)	0%	2% (2)	5%	17% (10)	7%	0% (0)	0%
DFA Intl Small Cap Value			1% (1)	2%	8% (28)	1%	20% (129)	2%	8% (28)	1%	1% (4)	1%	0% (0)	0%	0% (0)	0%	20% (129)	2%	65% (715)	29%
	DFA Intl Small Cap Value		William Blair Int'l Leaders		NTAM World Ex US		Arrowstreet ACWI ex US		State St MSCI World exUS		DFA EM All Cap Core		State St MSCI EM ex China		State St MSCI EM China		Arrowstreet ACWI ex US		State St MSCI exUS Small	



## William Blair Period Ended March 31, 2024

#### **Investment Philosophy**

One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates the durability and rate of growth in companies that have the following characteristics: strong management with a unique vision, competitive advantages that prolong the duration and size of earnings growth, and conservative financing. Internationally, they believe that this philosophy can be combined with strategic flexibility in managing geographic exposure, capitalization, sector emphasis, and relative growth and valuation at the portfolio level in order to provide an appropriate degree of adaptability to cyclical conditions.

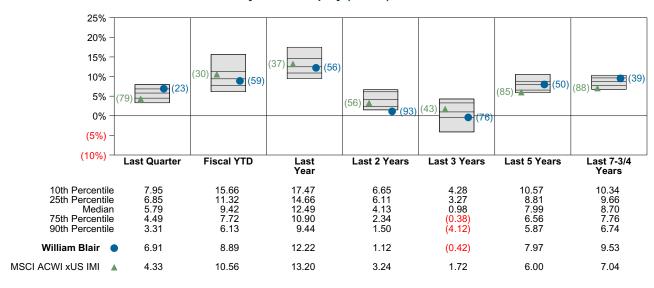
#### **Quarterly Summary and Highlights**

- William Blair's portfolio posted a 6.91% return for the quarter placing it in the 23 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 56 percentile for the last year.
- William Blair's portfolio outperformed the MSCI ACWI xUS IMI by 2.58% for the quarter and underperformed the MSCI ACWI xUS IMI for the year by 0.98%.

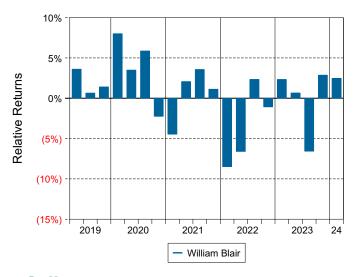
#### **Quarterly Asset Growth**

Beginning Market Value	\$199,334,919
Net New Investment	\$4,295,363
Investment Gains/(Losses)	\$14,536,250
Ending Market Value	\$218,166,532

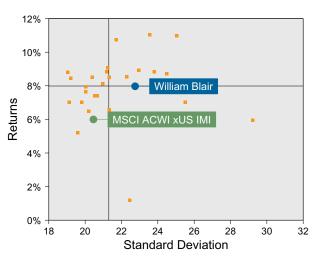
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



#### Relative Return vs MSCI ACWI xUS IMI



#### Callan Non-US All Country Growth Equity (Gross) Annualized Five Year Risk vs Return



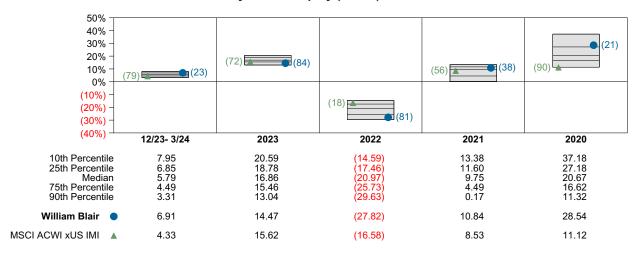


## William Blair **Return Analysis Summary**

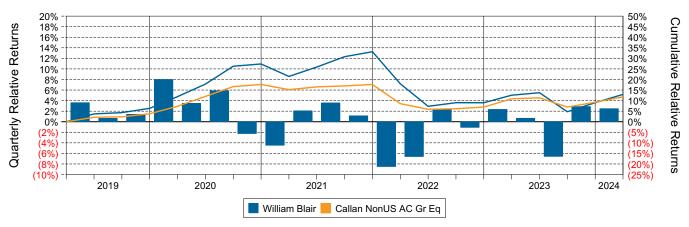
#### **Return Analysis**

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.

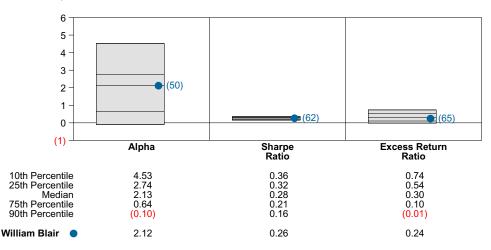
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



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



Risk Adjusted Return Measures vs MSCI ACWI xUS IMI Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024



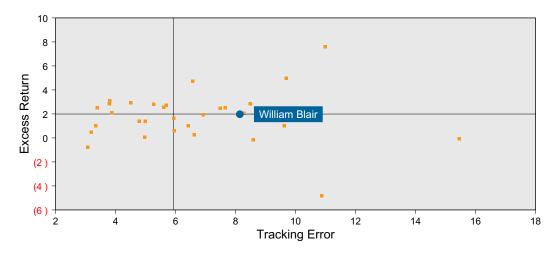


## William Blair **Risk Analysis Summary**

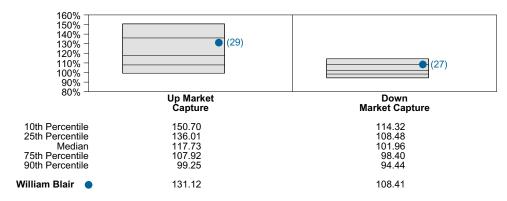
#### Risk Analysis

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.

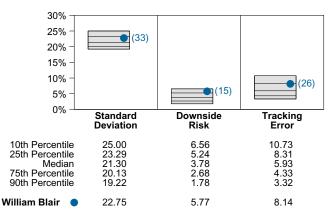
## Risk Analysis vs Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024

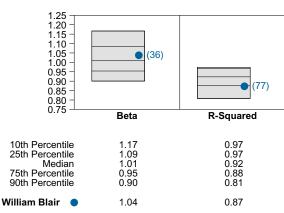


Market Capture vs MSCI ACWI xUS IMI (Net) Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs MSCI ACWI xUS IMI (Net) Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024





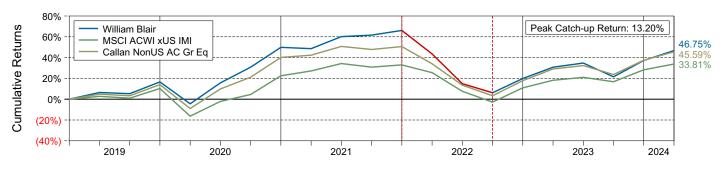


#### William Blair

# Drawdown Analysis for Five Years Ended March 31, 2024

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**



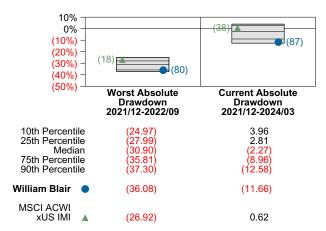
				. •						
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
William Blair	(36.08)%	0.75	2021/12-2022/09	(26.92)%	(31.40)%	(11.66)%	2.25	2021/12-2024/03	0.62%	(3.33)%
Recovery from Trough	38.19%	1.50+	2022/09-2024/03	37.69%	40.92%	38.19%	1.50+	2022/09-2024/03	37.69%	40.92%
MSCI ACWI xUS IMI	(27.62)%	1.25	2021/06-2022/09			(0.34)%	2.75	2021/06-2024/03		
Callan NonUS AC Gr Eq	(31.47)%	1.25	2021/06-2022/09			(3.43)%	2.75	2021/06-2024/03		

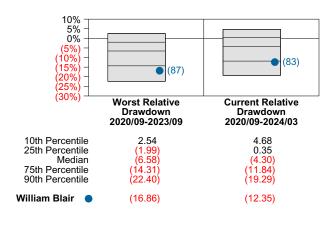
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. MSCI ACWI xUS IMI Cumulative Relative Returns 30% Peak Catch-up Rel Rtn: 14.10% William Blair 25% Callan NonUS AC Gr Eq 15% 9.67% 10% 8.81% 5% 0% (5%)2019 2021 2022 2023 2024 2020

		Vorst Rela	ative Drawdown		Cu	rrent Rel	ative Drawdown	
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
William Blair	(16.86)%	3.00	2020/09-2023/09	(8.60)%	(12.35)%	3.50	2020/09-2024/03	(6.13)%
Recovery from Trough	5.42%	0.50+	2023/09-2024/03	2.71%	5.42%	0.50+	2023/09-2024/03	2.71%
Callan NonUS AC Gr Eq	(9.01)%	1.75	2020/09-2022/06		(6.13)%	3.50	2020/09-2024/03	

Drawdown Rankings vs. MSCI ACWI xUS IMI Rankings against Callan Non-US All Country Growth Equity Five Years Ended March 31, 2024





Current Absolute Drawdown



# **Current Holdings Based Style Analysis** William Blair As of March 31, 2024

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.

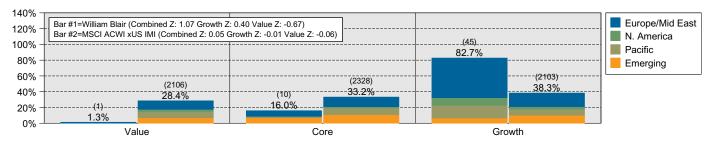
## Style Map vs Callan NonUS AC Gr Eq Holdings as of March 31, 2024



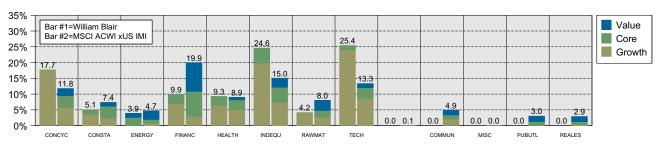
## **Style Exposure Matrix** Holdings as of March 31, 2024

	1.3% (1)	7.3% (4)	50.4% (27)	59.0% (32)
Europe/ Mid East				
IVIIU Last	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
	0.0% (0)	0.0% (0)	9.6% (6)	9.6% (6)
N. America				
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
	0.0% (0)	1.8% (2)	16.1% (9)	17.9% (11)
Pacific				
	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
	0.0% (0)	6.9% (4)	6.6% (3)	13.5% (7)
Emerging				
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
	1.3% (1)	16.0% (10)	82.7% (45)	100.0% (56)
Total				
	28.4% (2106)	33.2% (2328)	38.3% (2103)	100.0% (6537)
	Value	Core	Growth	Total

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



# **Sector Weights Distribution** Holdings as of March 31, 2024





# **Historical Holdings Based Style Analysis** William Blair For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

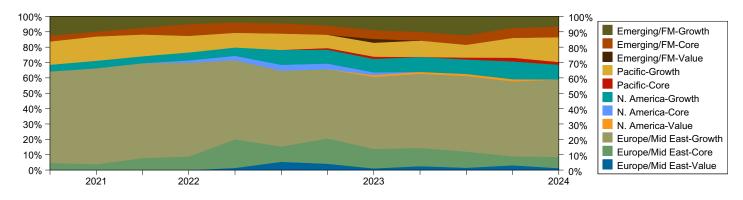
## Average Style Map vs Callan NonUS AC Gr Eq Holdings for Three Years Ended March 31, 2024



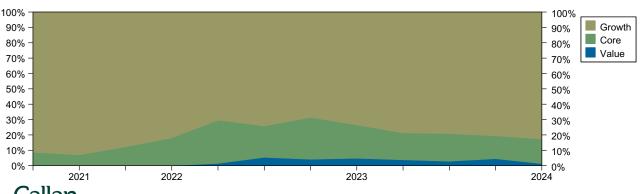
## **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

	<u></u>			
	1.7% (1)	9.9% (6)	52.8% (32)	64.5% (39)
Europe/				
Mid East	11.7% (484)	12.5% (531)	15.8% (489)	40.1% (1504)
	0.4% (0)	1.1% (1)	7.7% (4)	9.3% (5)
N. America				
	2.4% (94)	2.6% (126)	2.7% (95)	7.7% (315)
	0.0% (0)	0.7% (1)	11.8% (8)	12.5% (9)
Pacific				
	7.7% (524)	7.8% (551)	8.3% (499)	23.8% (1574)
	0.2% (0)	5.8% (3)	7.8% (6)	13.8% (9)
Emerging/				
FM	7.4% (1017)	9.9% (1120)	11.1% (1032)	28.4% (3169)
	2.4% (1)	17.5% (11)	80.1% (50)	100.0% (62)
Total				
	29.2% (2119)	32.7% (2328)	38.0% (2115)	100.0% (6562)
	Value	Core	Growth	Total

## William Blair Historical Region/Style Exposures



## William Blair Historical Style Only Exposures



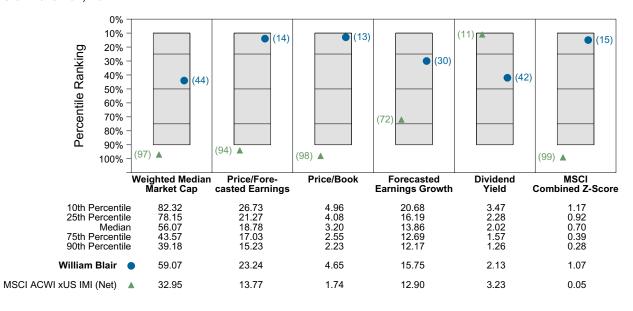
#### William Blair

# **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

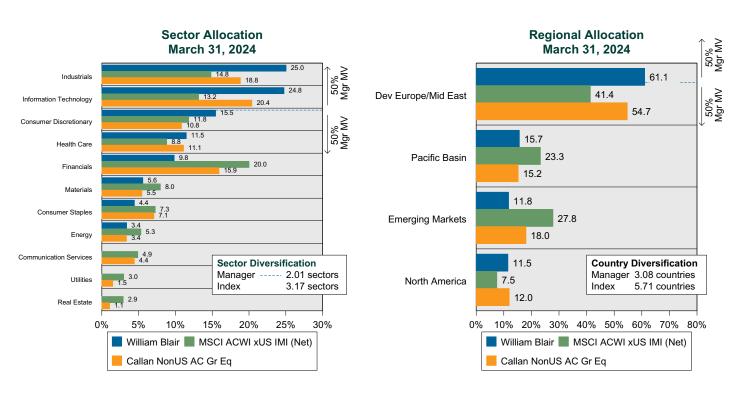
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US All Country Growth Equity as of March 31, 2024



#### **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.

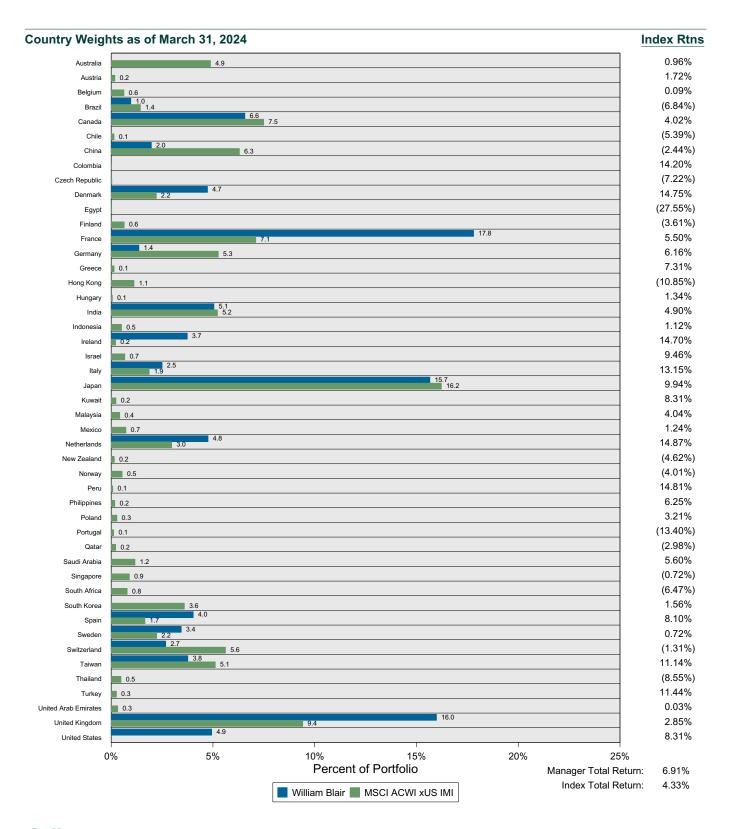




# **Country Allocation** William Blair VS MSCI ACWI xUS IMI (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.





# William Blair Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$8,114,274	3.7%	28.18%	385.04	41.98	0.68%	19.60%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$8,034,025	3.7%	26.06%	631.29	19.14	1.67%	11.74%
Tokyo Electron	Information Technology	\$6,301,080	2.9%	46.77%	123.31	40.72	0.93%	21.44%
Icon	Health Care	\$5,253,586	2.4%	16.03%	27.71	21.72	0.00%	14.23%
Industria De Diseno Textil I Shs New	Consumer Discretionary	\$4,985,219	2.3%	15.72%	157.09	24.31	2.57%	8.80%
Reliance Inds Ltd Global Dep Rct	Energy	\$4,777,731	2.2%	14.07%	241.07	24.06	0.30%	17.60%
Hoya Corp Shs	Health Care	\$4,742,423	2.2%	(0.96)%	43.46	33.22	0.59%	15.10%
Airbus Se Shs	Industrials	\$4,627,509	2.1%	19.76%	146.08	24.26	1.05%	1.76%
London Stk Exchange Grp Plc Ord	Financials	\$4,612,117	2.1%	1.40%	64.21	25.56	121.18%	13.00%
Shin Etsu Chemical Co Ltd Shs	Materials	\$4,606,995	2.1%	4.44%	87.08	21.00	1.52%	21.69%

## **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Tokyo Electron	Information Technology	\$6,301,080	2.9%	46.77%	123.31	40.72	0.93%	21.44%
Safran Sa	Industrials	\$4,358,319	2.0%	28.79%	96.93	28.64	1.05%	34.67%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$8,114,274	3.7%	28.18%	385.04	41.98	0.68%	19.60%
Mitsui & Co Ltd Ord	Industrials	\$1,826,446	0.8%	26.45%	71.07	11.69	2.39%	39.74%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$8,034,025	3.7%	26.06%	631.29	19.14	1.67%	11.74%
Ferrari N V	Consumer Discretionary	\$2,858,895	1.3%	25.94%	79.72	50.57	0.45%	24.30%
Tokio Marine Holdings Inc Shs	Financials	\$2,296,420	1.1%	25.73%	61.47	14.36	2.35%	27.93%
Crh Plc Ord	Materials	\$3,153,493	1.5%	24.11%	59.38	15.79	1.66%	10.24%
Moncler (Otc)	Consumer Discretionary	\$2,476,259	1.1%	21.43%	20.53	27.91	1.66%	6.20%
Bae Sys Plc Ord	Industrials	\$2,773,314	1.3%	20.42%	51.62	19.38	222.27%	11.63%

# **10 Worst Performers**

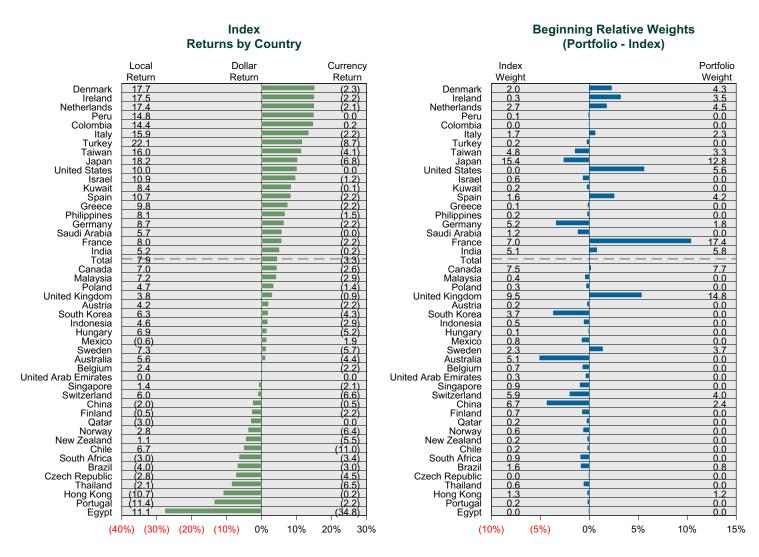
	Pri						ice/		
		Ending	Percent	Percent		Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Lululemon Athletica Inc	Consumer Discretionary	\$3,112,699	1.4%	(24.74)%	47.23	27.12	0.00%	12.30%	
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$1,515,784	0.7%	(22.08)%	154.45	12.28	0.00%	26.58%	
Infineon Technologies Ag Namens Akt	Information Technology	\$2,912,035	1.3%	(17.74)%	44.32	13.36	1.11%	4.24%	
Hdfc Bank Ltd Adr Reps 3 Shs	Financials	\$3,495,662	1.6%	(16.53)%	131.89	15.23	1.32%	14.30%	
Stmicroelectronics N V Shs	Information Technology	\$3,707,265	1.7%	(13.64)%	39.29	12.81	0.56%	42.14%	
Amadeus It Group S A Ord Shs	Consumer Discretionary	\$3,615,474	1.7%	(9.93)%	28.92	19.96	1.24%	13.68%	
Dsv As Shs	Industrials	\$2,912,180	1.3%	(6.91)%	35.58	19.16	0.62%	6.50%	
Spirax Sarco Engineering Plc Shs New	Industrials	\$1,809,767	0.8%	(5.20)%	9.37	29.50	159.20%	3.20%	
Loreal	Consumer Staples	\$3,943,902	1.8%	(4.83)%	253.33	33.19	1.50%	8.30%	
Mercadolibre Inc	Consumer Discretionary	\$3,274,905	1.5%	(3.79)%	76.65	40.50	0.00%	45.25%	

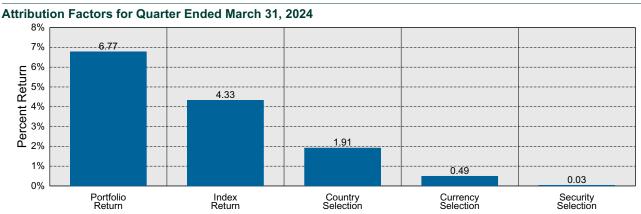


# William Blair Int'l Leaders vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.





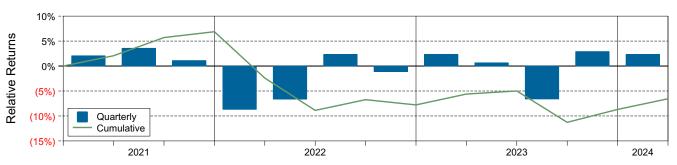


# William Blair Int'l Leaders vs MSCI ACWI xUS IMI Attribution for Three years Ended March 31, 2024

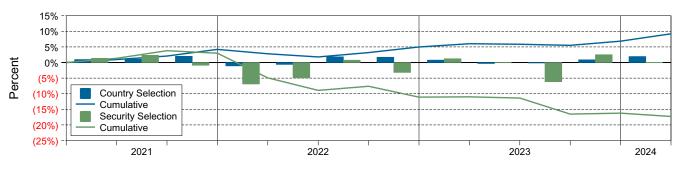
#### **Cumulative International Attribution**

The first chart below illustrates the quarterly and cumulative return of the portfolio relative to the index. The second chart shows the cumulative and quarterly impact of the manager's country selection and security selection decisions. The third chart shows the cumulative and quarterly impact of the managers currency selection decisions. The last chart shows the annualized cumulative returns for the manager and the index, as well as the attribution factors that explain the difference in return.

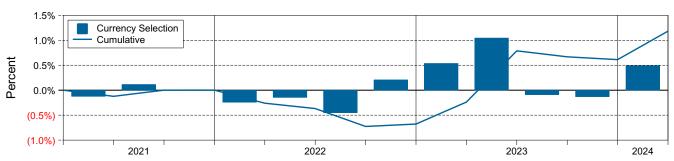
# Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



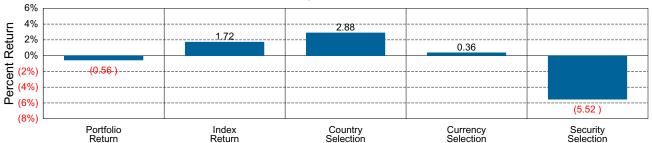
## **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



# Attribution Factors for Three Years Ended March 31, 2024





# **Arrowstreet ACWI ex US** Period Ended March 31, 2024

#### **Investment Philosophy**

Arrowstreet is a 100% employed-owned firm whose strategies are team-managed by a deep and experienced group of individuals. The firm employs a quantitative process that identifies direct and indirect relationships to forecast stock price returns. The investment approach seeks to provide a risk controlled, core exposure to Non-US developed and emerging countries. The portfolio is diversified with 150 to 775 holdings (typically 300-475) across countries and sectors. The firm's dedication to research has led to a model that has adapted to multiple market environments and provided consistent results over time.

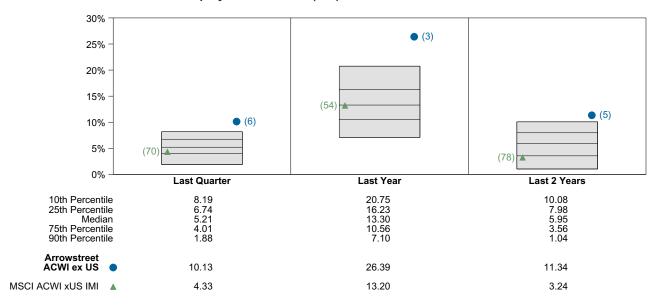
#### **Quarterly Summary and Highlights**

- Arrowstreet ACWI ex US's portfolio posted a 10.13% return for the quarter placing it in the 6 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 3 percentile for the last year.
- Arrowstreet ACWI ex US's portfolio outperformed the MSCI ACWI xUS IMI by 5.80% for the guarter and outperformed the MSCI ACWI xUS IMI for the year by 13.19%.

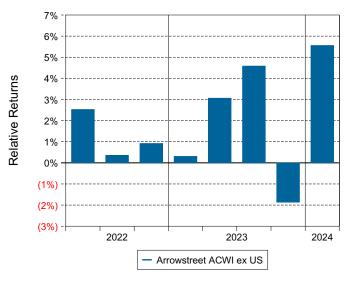
Quart	erly	Asset	Growth	
<b>Q</b> uui i	CITY	ASSCE	CIOWLII	

Beginning Market Value	\$341,169,882
Net New Investment	\$-265,203
Investment Gains/(Losses)	\$34,535,357
Ending Market Value	\$375,440,036

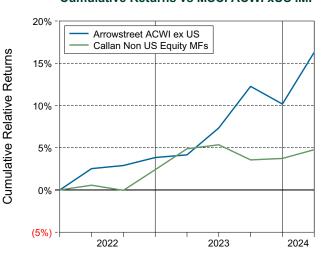
#### Performance vs Callan Non US Equity Mutual Funds (Net)



### Relative Return vs MSCI ACWI xUS IMI



## **Cumulative Returns vs MSCI ACWI xUS IMI**

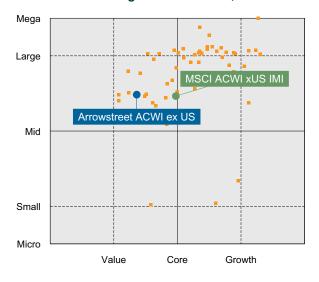




# **Current Holdings Based Style Analysis** Arrowstreet ACWI ex US As of March 31, 2024

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.

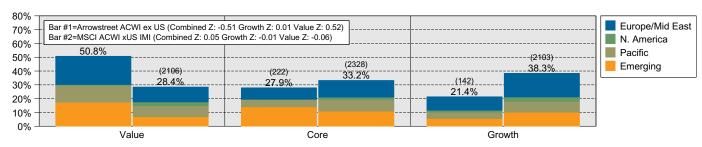
### Style Map vs Callan Non US Equity MFs Holdings as of March 31, 2024



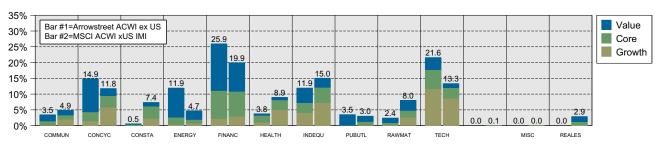
## **Style Exposure Matrix** Holdings as of March 31, 2024

Mid East	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
	, ,	` '	, ,	, ,
NI A	0.6% (7)	0.2% (6)	1.4% (7)	2.1% (20)
N. America				
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
	12.2% (133)	5.3% (64)	4.6% (38)	22.2% (235)
Pacific				
	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
	17.3% (194)	14.0% (107)	5.6% (53)	36.9% (354)
Emerging				
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
	50.8% (432)	27.9% (222)	21.4% (142)	100.0% (796)
Total	, ,	, ,	, ,	, ,
Total	28.4% (2106)	33.2% (2328)	38.3% (2103)	100.0% (6537)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



# **Sector Weights Distribution** Holdings as of March 31, 2024

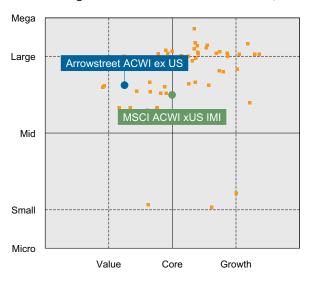




# **Historical Holdings Based Style Analysis** Arrowstreet ACWI ex US For Two Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

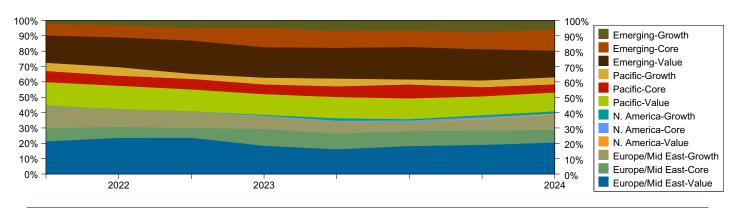
## Average Style Map vs Callan Non US Equity MFs Holdings for Two Years Ended March 31, 2024



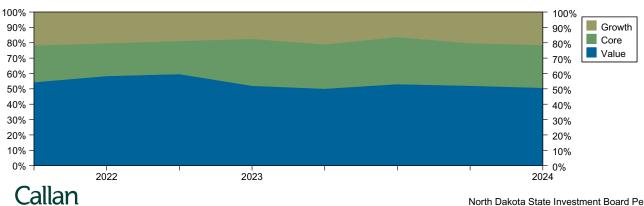
### **Average Style Exposure Matrix** Holdings for Two Years Ended March 31, 2024

	<u></u>			
	20.2% (84)	8.8% (42)	9.4% (29)	38.4% (155)
Europe/				
Mid East	11.4% (480)	12.4% (523)	16.1% (477)	39.9% (1480)
	0.2% (4)	0.5% (4)	0.7% (5)	1.3% (13)
N. America				
	2.6% (94)	2.4% (128)	2.8% (97)	7.8% (319)
	13.8% (145)	6.8% (77)	4.5% (43)	25.0% (265)
Pacific				
	7.9% (515)	8.1% (539)	8.1% (488)	<b>24.0</b> % (1542)
	19.7% (184)	10.5% (82)	5.0% (37)	35.2% (303)
Emerging				
	7.5% (1015)	10.0% (1140)	10.8% (1039)	28.3% (3194)
	53.9% (417)	26.6% (205)	19.6% (114)	100.0% (736)
Total				
	29.3% (2104)	32.9% (2330)	37.8% (2101)	100.0% (6535)
	Value	Core	Growth	Total

## Arrowstreet ACWI ex US Historical Region/Style Exposures



## Arrowstreet ACWI ex US Historical Style Only Exposures

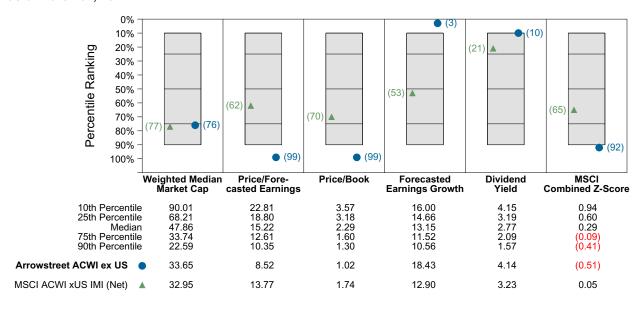


# **Arrowstreet ACWI ex US Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

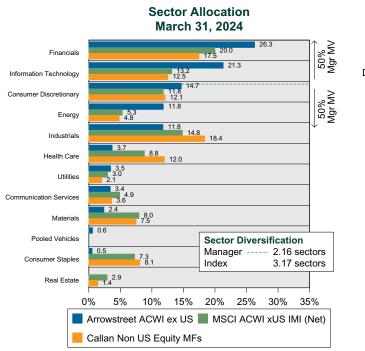
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

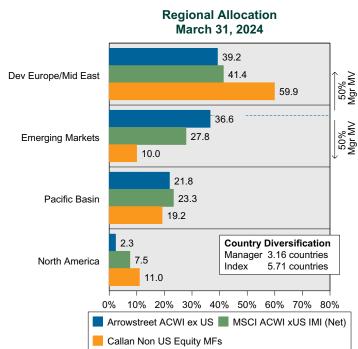
## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non US Equity Mutual Funds as of March 31, 2024



#### **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.



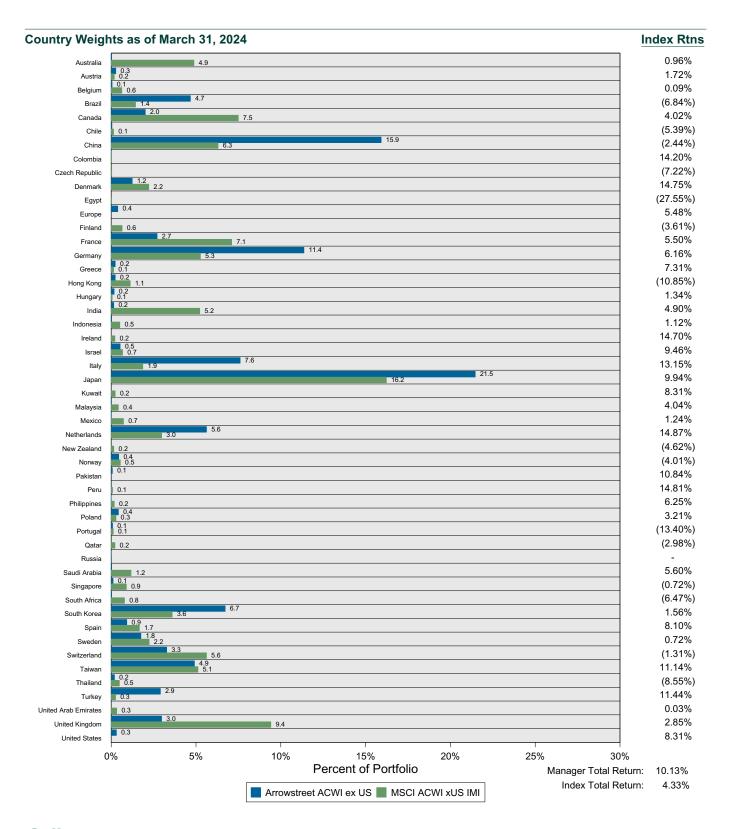




# **Country Allocation** Arrowstreet ACWI ex US VS MSCI ACWI xUS IMI (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.





# **Arrowstreet ACWI ex US Top 10 Portfolio Holdings Characteristics** as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$10,146,225	2.7%	28.18%	385.04	41.98	0.68%	19.60%
Stellantis N.V Shs	Consumer Discretionary	\$9,934,893	2.6%	21.78%	90.06	4.75	5.88%	5.50%
Samsung Electronics Co Ltd Ord	Information Technology	\$9,081,041	2.4%	0.88%	365.39	16.40	1.75%	54.00%
Tokyo Electric Power Co	Utilities	\$6,236,297	1.7%	19.07%	10.02	5.61	0.00%	(7.49)%
Bmw Stamm	Consumer Discretionary	\$5,718,811	1.5%	3.88%	67.06	6.53	5.60%	(16.06)%
Daimler Ag Reg Shs	Consumer Discretionary	\$5,663,044	1.5%	15.71%	85.61	6.17	7.15%	(1.90)%
Volkswagen Vorzug	Consumer Discretionary	\$5,506,029	1.5%	7.41%	27.34	3.92	7.38%	9.69%
Intesa Sanpaolo Spa Shs	Financials	\$5,375,017	1.4%	24.38%	66.40	7.38	8.81%	29.10%
Sap Se Shs	Information Technology	\$4,685,247	1.2%	26.43%	239.51	34.25	1.22%	22.20%
Tokyo Electron	Information Technology	\$4,473,678	1.2%	46.77%	123.31	40.72	0.93%	21.44%

## **10 Best Performers**

						Forecasted		
		Ending	Percent					
		Market	of Portfolio	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value		Return	Capital	Ratio	Yield	Earnings
Arm Hdg.Amer.Depy.Shs. 1:1	Information Technology	\$39,769	0.0%	66.34%	128.50	81.53	0.00%	44.70%
Mitsubishi Heavy Industries Shs	Industrials	\$4,300,755	1.1%	64.69%	32.29	19.10	1.10%	30.56%
Oil India	Energy	\$23,482	0.0%	63.44%	7.80	8.63	2.91%	42.79%
Sdic Xinji Energy 'a'	Energy	\$203,981	0.1%	62.08%	3.12	9.17	1.26%	35.83%
Samsung Techwin Co	Industrials	\$261,098	0.1%	59.41%	7.69	16.79	0.88%	5.00%
Doosan Corp	Industrials	\$378,370	0.1%	58.42%	1.91	9.71	1.29%	1.30%
Screen Hldgs Co Ltd Shs New	Information Technology	\$283,489	0.1%	56.32%	13.40	26.00	1.01%	16.40%
Socionext	Information Technology	\$98,774	0.0%	55.15%	5.00	29.84	1.08%	-
Celestica Sv	Information Technology	\$836,598	0.2%	52.80%	5.35	15.10	0.00%	38.78%
Disco Corp	Information Technology	\$391,345	0.1%	52.79%	40.95	51.31	0.45%	14.40%

# **10 Worst Performers**

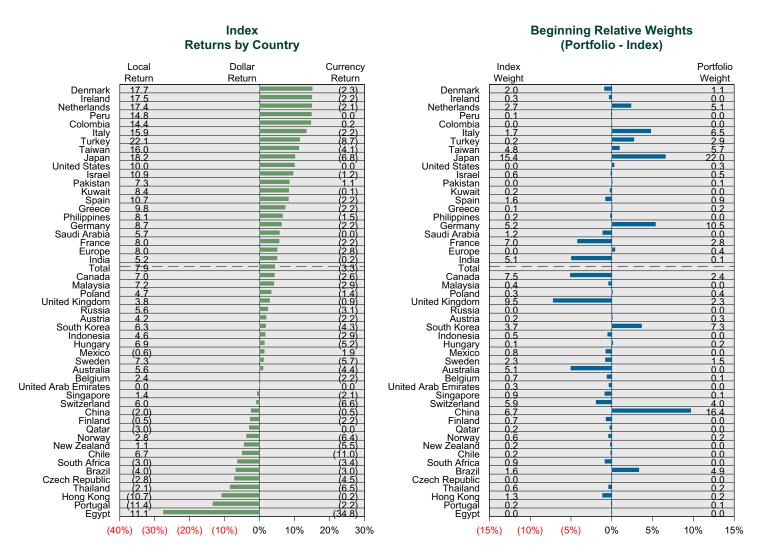
						Price/		
	Ending Percent					Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$7,061	0.0%	(34.66)%	2.05	5.59	3.78%	12.38%
Orient Res. Gp.	Energy	\$6,761	0.0%	(34.29)%	1.86	3.43	0.00%	55.78%
X-Fab Silicon Foundries	Information Technology	\$5,388	0.0%	(32.63)%	0.99	7.44	0.00%	-
Tong Ren Tang Technologies C Ord	Health Care	\$2,381	0.0%	(27.08)%	0.39	8.64	3.54%	95.97%
Cosco Pacific Ltd Ord	Industrials	\$5,002	0.0%	(25.23)%	1.96	5.38	5.86%	(3.28)%
Rwe Ag Neu Essen Germany Act A	Utilities	\$416,236	0.1%	(25.03)%	25.31	12.05	3.17%	(21.90)%
Hwa Shin Mnfg.	Consumer Discretionary	\$81,987	0.0%	(24.24)%	0.28	4.01	1.38%	(41.49)%
Joyy Inc Ads Repstg Com A	Communication Services	\$11,974	0.0%	(24.04)%	1.37	7.88	3.97%	(5.85)%
Bitfarms	Information Technology	\$13,771	0.0%	(23.82)%	0.74	15.86	0.00%	-
Ap Moller Maersk A	Industrials	\$42,118	0.0%	(23.77)%	12.93	(19.67)	5.83%	-

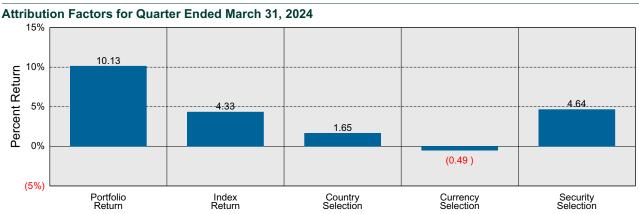


# Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.





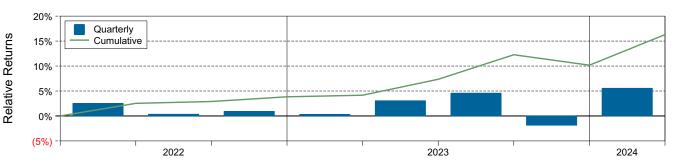


# Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for Two years Ended March 31, 2024

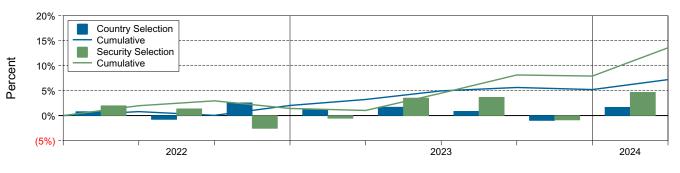
#### **Cumulative International Attribution**

The first chart below illustrates the quarterly and cumulative return of the portfolio relative to the index. The second chart shows the cumulative and quarterly impact of the manager's country selection and security selection decisions. The third chart shows the cumulative and quarterly impact of the managers currency selection decisions. The last chart shows the annualized cumulative returns for the manager and the index, as well as the attribution factors that explain the difference in return.

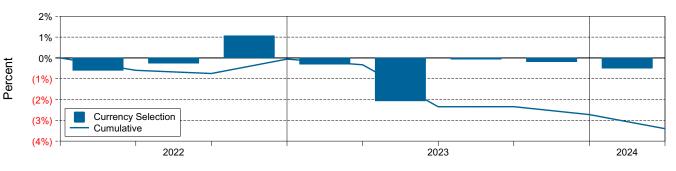
# Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



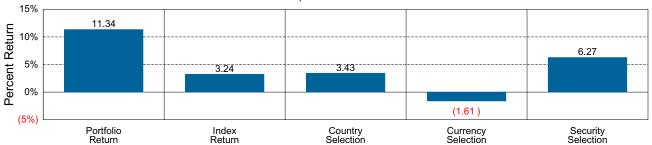
## **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**









# **DFA Intl Small Cap Value** Period Ended March 31, 2024

#### **Investment Philosophy**

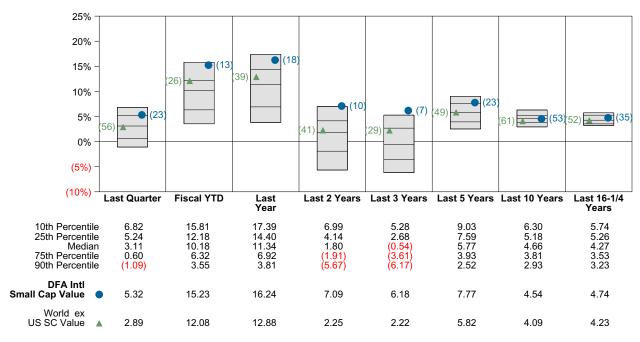
The International Small Cap Value Portfolio invests in the stocks of small, non-US developed markets companies that Dimensional believes to be value stocks at the time of purchase. Specifically, it looks at companies that fall within the smallest 8-10% of each country's market capitalization, and who's shares have a high book value in relation to their market value (BtM). It does not invest in emerging markets.

## **Quarterly Summary and Highlights**

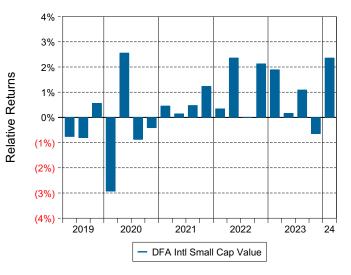
- DFA Intl Small Cap Value's portfolio posted a 5.32% return for the quarter placing it in the 23 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 18 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 2.43% for the guarter and outperformed the World ex US SC Value for the year by 3.35%.

Beginning Market Value	\$33,360,786
Net New Investment	\$-1,122,517
Investment Gains/(Losses)	\$1,683,019
Ending Market Value	\$33,921,288

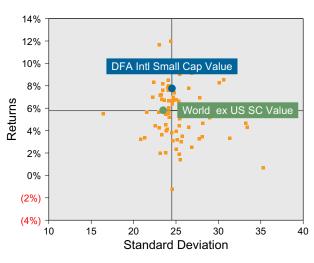
## Performance vs Callan International Small Cap Mut Funds (Net)



#### Relative Return vs World ex US SC Value



#### Callan International Small Cap Mut Funds (Net) Annualized Five Year Risk vs Return



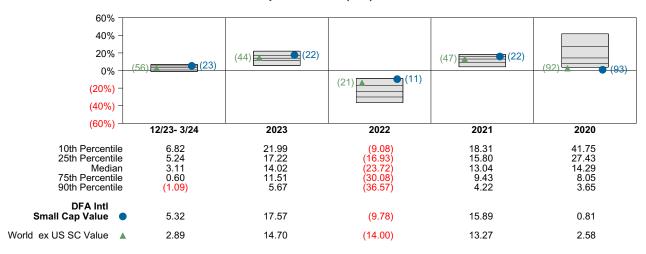


# **DFA Intl Small Cap Value Return Analysis Summary**

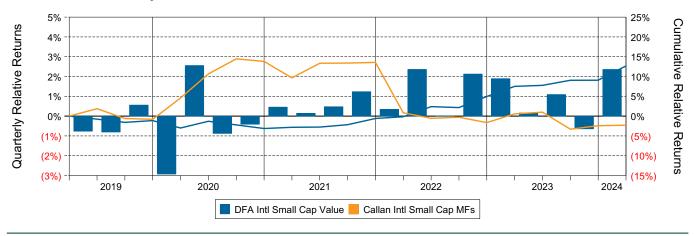
#### **Return Analysis**

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.

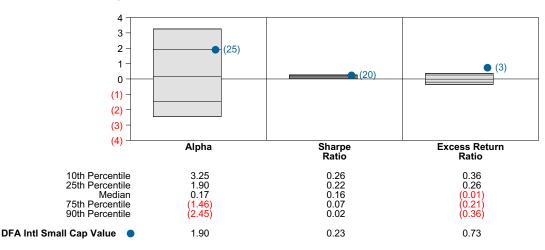
#### Performance vs Callan International Small Cap Mut Funds (Net)



## Cumulative and Quarterly Relative Returns vs World ex US SC Value



Risk Adjusted Return Measures vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



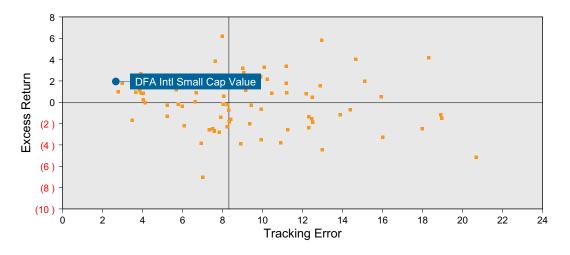


# **DFA Intl Small Cap Value Risk Analysis Summary**

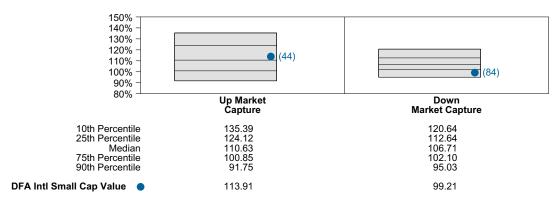
#### Risk Analysis

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.

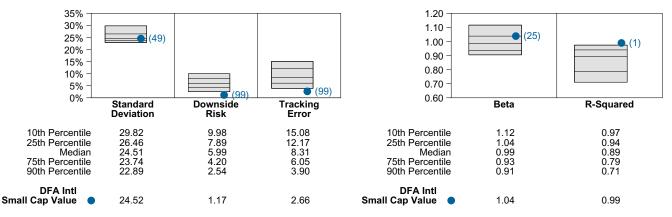
## Risk Analysis vs Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



Market Capture vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



Risk Statistics Rankings vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024

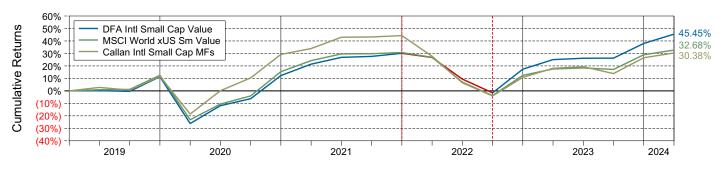




# **DFA Intl Small Cap Value** Drawdown Analysis for Five Years Ended March 31, 2024

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**



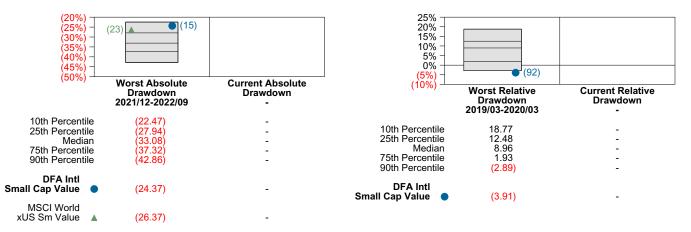
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers
DFA Intl Small Cap Value	(24.37)%	0.75	2021/12-2022/09	(26.37)%	(33.49)%	-	-	-	-	-
Recovery from Trough	40.25%	1.25	2022/09-2023/12	33.98%	31.85%	-	-	-	-	-
MSCI World xUS Sm Value	(26.37)%	0.75	2021/12-2022/09			-	-	-		
Callan Intl Small Cap MFs	(33.49)%	0.75	2021/12-2022/09			(9.63)%	2.25	2021/12-2024/03		

Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. MSCI World xUS Sm Value Cumulative Relative Returns 20% DFA Intl Small Cap Value Callan Intl Small Cap MFs 10% 9.63% 5% (1.73%)2019 2020 2021 2023 2024 2022

	Worst Relative Drawdown			Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
DFA Intl Small Cap Value	(3.91)%	1.00	2019/03-2020/03	5.98%	-	-	-	-	
Recovery from Trough	2.56%	0.25	2020/03-2020/06	5.60%	-	-	-	-	
Callan Intl Small Cap MFs	(15.55)%	3.00	2020/09-2023/09		(14.61)%	3.50	2020/09-2024/03		

Drawdown Rankings vs. MSCI World xUS Sm Value Rankings against Callan International Small Cap Mut Funds Five Years Ended March 31, 2024





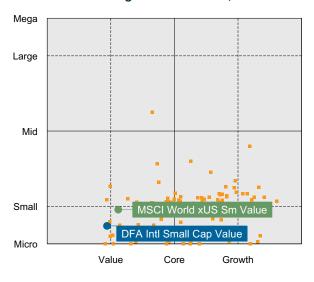
Current Absolute Drawdown

# **Current Holdings Based Style Analysis DFA Intl Small Cap Value** As of March 31, 2024

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.

N.

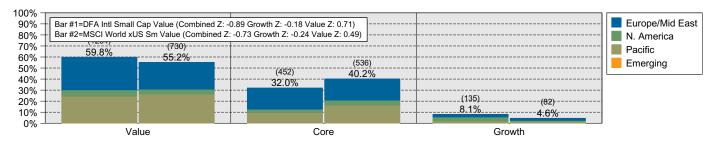
## Style Map vs Callan Intl Small Cap MFs Holdings as of March 31, 2024



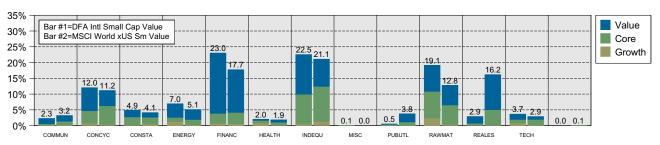
## **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	55.2% (730)	40.2% (536)	4.6% (82)	100.0% (1348)
Total				
	59.8% (1234)	32.0% (452)	8.1% (135)	100.0% (1821)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (2)	0.0% (1)	0.0% (0)	0.0% (3)
	26.2% (369)	16.2% (238)	2.0% (40)	44.4% (647)
Pacific				
	24.5% (780)	9.5% (218)	2.1% (55)	36.1% (1053)
	4.5% (60)	4.7% (64)	0.5% (9)	9.6% (133)
N. America				
	5.6% (70)	3.3% (42)	3.5% (18)	12.3% (130)
Mid East	24.5% (301)	19.4% (234)	2.1% (33)	46.0% (568)
Europe/	29.7% (382)	19.2% (191)	2.6% (62)	51.5% (635)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



# **Sector Weights Distribution** Holdings as of March 31, 2024

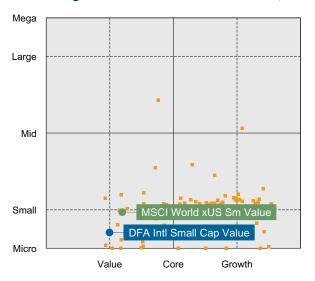




# **Historical Holdings Based Style Analysis DFA Intl Small Cap Value** For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

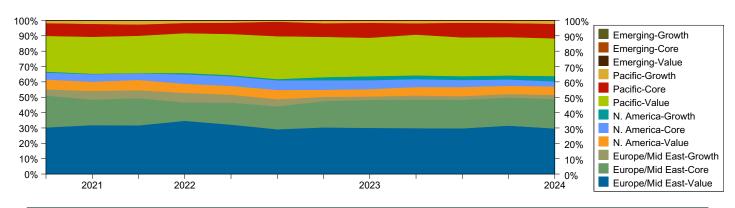
## Average Style Map vs Callan Intl Small Cap MFs Holdings for Three Years Ended March 31, 2024



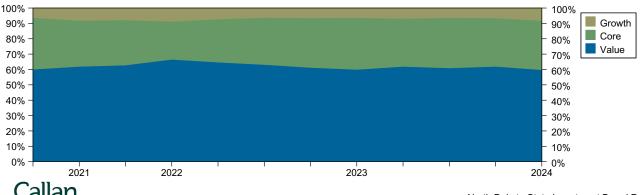
### **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

	31.0% (381)	17.2% (225)	3.8% (69)	52.0% (675)
Europe/				
Mid East	25.6% (323)	20.4% (270)	2.6% (38)	48.7% (631)
	5.8% (74)	5.1% (43)	1.6% (13)	12.4% (130)
N. America				
	4.8% (65)	4.5% (62)	0.6% (10)	9.9% (137)
	25.4% (816)	8.5% (225)	1.7% (54)	35.5% (1095)
Pacific				
	24.1% (377)	15.5% (267)	1.8% (43)	41.4% (687)
	0.0% (3)	0.0% (1)	0.0% (1)	0.0% (5)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	62.2% (1274)	30.8% (494)	7.0% (137)	100.0% (1905)
Total				
	54.6% (765)	40.4% (599)	5.0% (91)	100.0% (1455)
	Value	Core	Growth	Total

## **DFA Intl Small Cap Value Historical Region/Style Exposures**



## **DFA Intl Small Cap Value Historical Style Only Exposures**

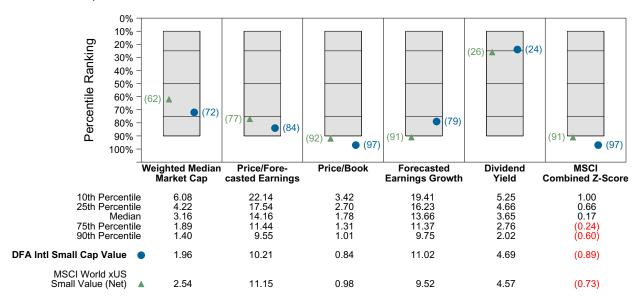


# **DFA Intl Small Cap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

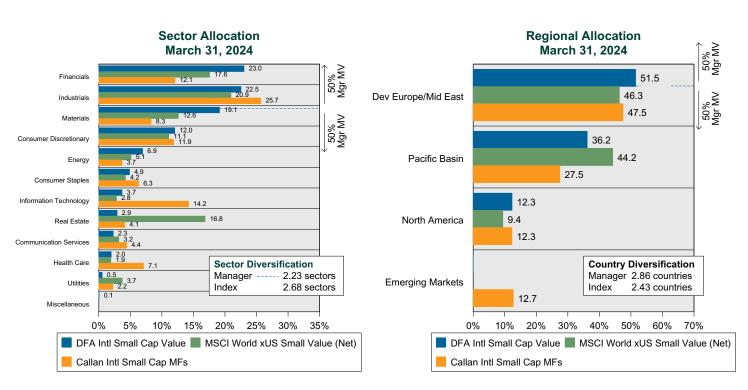
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap Mut Funds as of March 31, 2024



#### **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.

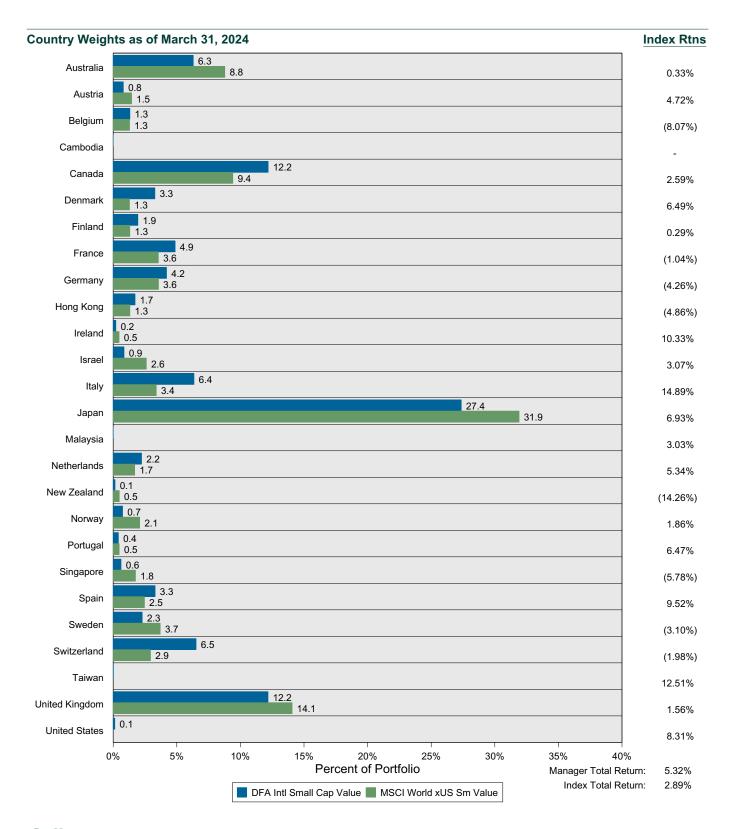




# **Country Allocation** DFA Intl Small Cap Value VS MSCI World xUS Small Value (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





# **DFA Intl Small Cap Value** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

		Percent			Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Banco De Sabadell Sa Shs	Financials	\$444,073	1.3%	27.81%	8.55	6.21	3.82%	14.68%
Leonardo Spa Shs	Industrials	\$387,628	1.1%	52.40%	14.54	15.23	1.20%	15.98%
Alamos Gold Inc Inc New	Materials	\$281,915	0.8%	9.39%	5.86	25.27	0.68%	30.47%
Celestica Sv	Information Technology	\$263,476	0.8%	52.80%	5.35	15.10	0.00%	38.78%
Crescent Pt Energy Corp	Energy	\$258,318	0.8%	18.77%	5.08	6.07	4.15%	7.00%
Vistry Group Plc Shs	Consumer Discretionary	\$255,555	0.8%	32.84%	5.30	12.96	260.13%	11.54%
Jyske Bank	Financials	\$255,245	0.8%	19.21%	5.42	7.31	1.34%	30.91%
Banco Popolare Societa Coope Shs New	Financials	\$255,061	0.8%	26.08%	10.09	6.76	9.01%	8.52%
Helvetia Patria Holding	Financials	\$252,755	0.7%	0.22%	7.32	14.28	4.75%	7.72%
Asr Nederland	Financials	\$230,640	0.7%	3.93%	10.36	8.29	6.36%	1.90%

## **10 Best Performers**

						Price/			
		Ending Percent				Forecasted			
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Mitsui Engr & Shipbldg Co Lt Shs	Industrials	\$13,148	0.0%	153.06%	1.30	9.98	0.16%	20.15%	
Cmc Markets	Financials	\$594	0.0%	105.26%	0.77	13.89	225.09%	5.84%	
Chilled & Frozen Logis	Industrials	\$4,849	0.0%	99.69%	0.52	19.13	1.27%	4.51%	
Midland Holdings Ltd Shs	Real Estate	\$622	0.0%	99.54%	0.09	17.86	0.00%	4.41%	
Softlaw Corp.	Communication Services	\$7,421	0.0%	92.65%	0.44	28.41	0.00%	-	
Calima Energy Ltd Shs New	Energy	\$145	0.0%	83.47%	0.05	1.38	0.00%	-	
Dai-Ichi Kogyo Seiyaku	Materials	\$6,294	0.0%	76.53%	0.26	15.27	1.77%	(34.06)%	
Alps Logistics Co	Industrials	\$11,557	0.0%	66.69%	0.69	28.29	1.49%	15.64%	
Iveco Group Nv	Industrials	\$106,640	0.3%	66.05%	4.04	8.63	1.59%	30.45%	
Dai-Dan	Industrials	\$22,083	0.1%	65.89%	0.76	15.71	2.91%	5.54%	

# **10 Worst Performers**

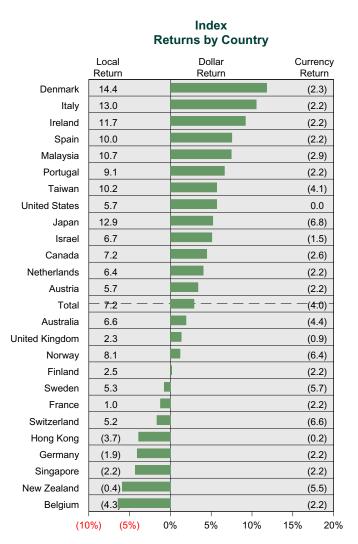
						Price/		
		Ending	Percent	04.1		Forecasted		Forecasted
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Ssr Mng Inc	Materials	\$29,429	0.1%	(59.61)%	0.90	45.98	6.28%	14.91%
Provident Financial Plc Shs	Financials	\$1,102	0.0%	(59.58)%	0.17	6.26	2884.74%	(9.39)%
Hellofresh	Consumer Staples	\$1,511	0.0%	(55.28)%	1.23	11.72	0.00%	37.07%
Ams Ag Shs New	Information Technology	\$20,956	0.1%	(53.69)%	1.16	14.18	0.00%	17.48%
Ferrexpo Plc London Shs	Materials	\$710	0.0%	(52.06)%	0.33	3.87	6.00%	11.69%
Close Brothers Group Inc Shs	Financials	\$41,335	0.1%	(47.81)%	0.80	5.23	16.10%	5.56%
Terracom	Energy	\$234	0.0%	(45.37)%	0.13	0.71	5624.14%	-
Nexity Shs	Real Estate	\$14,485	0.0%	(45.02)%	0.57	20.43	26.38%	18.35%
Petra Diamonds Limited Shs	Materials	\$83	0.0%	(42.40)%	0.10	5.26	0.00%	(60.12)%
Storskogen Group	Industrials	\$4,848	0.0%	(42.33)%	0.81	6.79	1.89%	51.61%

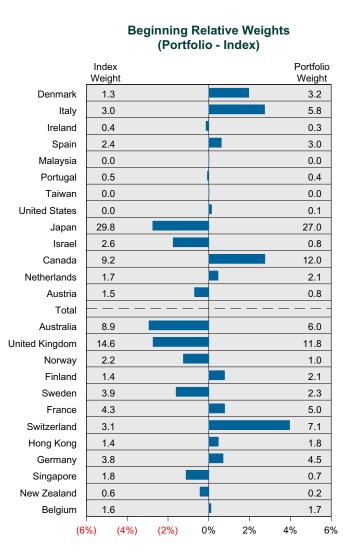


# DFA Intl Small Cap Value vs MSCI World xUS Sm Value Attribution for Quarter Ended March 31, 2024

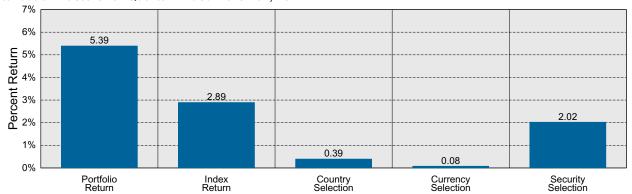
#### International Attribution

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 March 31, 2024



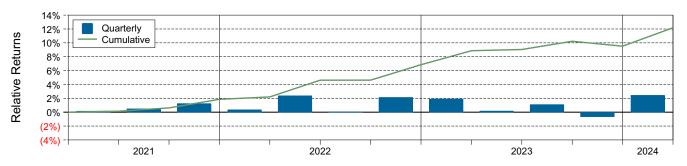


# DFA Intl Small Cap Value vs MSCI World xUS Sm Value Attribution for Three years Ended March 31, 2024

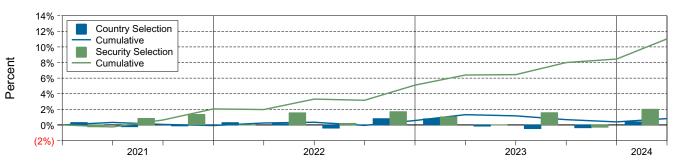
#### **Cumulative International Attribution**

The first chart below illustrates the quarterly and cumulative return of the portfolio relative to the index. The second chart shows the cumulative and quarterly impact of the manager's country selection and security selection decisions. The third chart shows the cumulative and quarterly impact of the managers currency selection decisions. The last chart shows the annualized cumulative returns for the manager and the index, as well as the attribution factors that explain the difference in return.

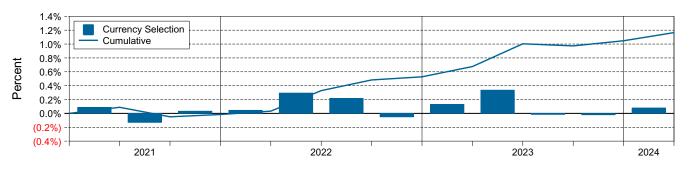
#### Cumulative and Quarterly Return vs MSCI World xUS Sm Value



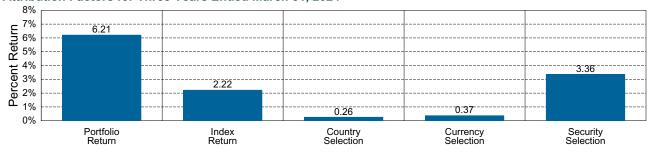
## **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for Three Years Ended March 31, 2024





# **NTAM World Ex US** Period Ended March 31, 2024

#### **Investment Philosophy**

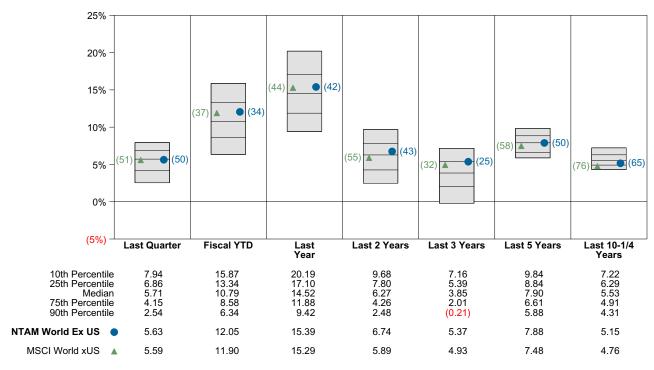
The Fund's objective is to provide investment results that approximate the overall performance of the MSCI World ex-US Equity Index.

# **Quarterly Summary and Highlights**

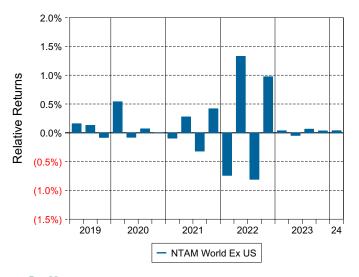
- NTAM World Ex US's portfolio posted a 5.63% return for the quarter placing it in the 50 percentile of the Callan Non-US Equity group for the quarter and in the 42 percentile for the last year.
- NTAM World Ex US's portfolio outperformed the MSCI World xUS by 0.04% for the quarter and outperformed the MSCI World xUS for the year by 0.10%.

Beginning Market Value	\$73,146,371
Net New Investment	\$-47,227,011
Investment Gains/(Losses)	\$810,444
Ending Market Value	\$26,729,804

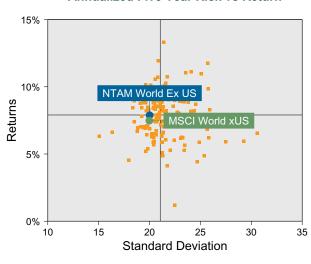
# Performance vs Callan Non-US Equity (Gross)



#### Relative Return vs MSCI World xUS



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



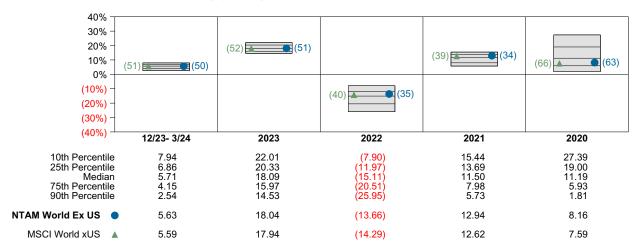


# **NTAM World Ex US Return Analysis Summary**

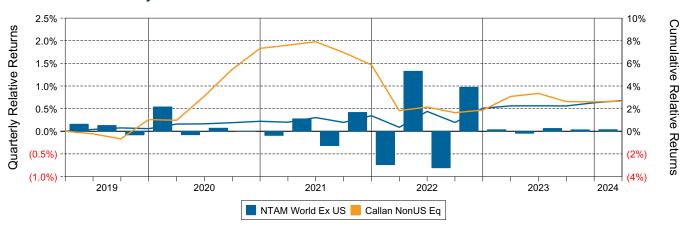
#### **Return Analysis**

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.

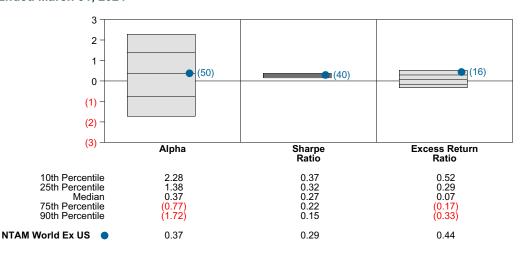
## Performance vs Callan Non-US Equity (Gross)



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



Risk Adjusted Return Measures vs MSCI World xUS Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



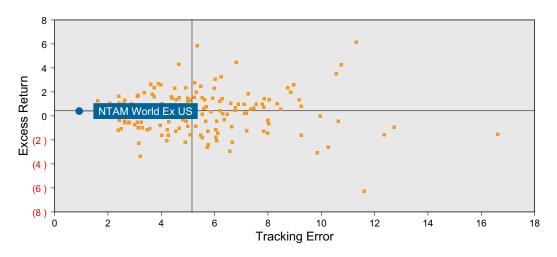


# **NTAM World Ex US Risk Analysis Summary**

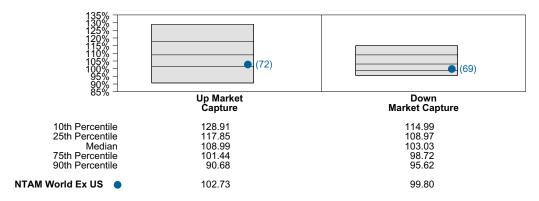
#### Risk Analysis

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.

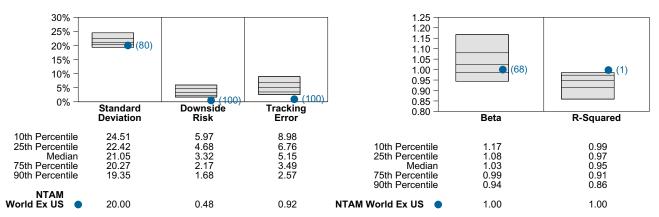
## Risk Analysis vs Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



Market Capture vs MSCI World xUS (Net) Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs MSCI World xUS (Net) Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024

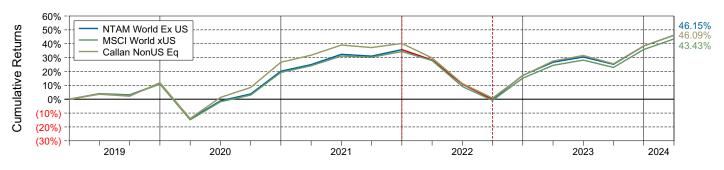




# **NTAM World Ex US** Drawdown Analysis for Five Years Ended March 31, 2024

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**



	Wordt / Ibddiato Brawadwii					Garront / tocolate Brawaewiii					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
NTAM World Ex US	(26.40)%	0.75	2021/12-2022/09	(26.23)%	(28.14)%	-	-	-	-	-	
Recovery from Trough	38.48%	1.25	2022/09-2023/12	37.03%	37.37%	-	-	-	-	-	
MSCI World xUS	(26.23)%	0.75	2021/12-2022/09			-	-	-			
Callan NonUS Eq	(28.14)%	0.75	2021/12-2022/09			-	-	-			

Worst Absolute Drawdown

Relative Cumulative Drawdown Analysis vs. MSCI World xUS

2020

# **Cumulative Relative Returns** NTAM World Ex US Callan NonUS Eq 3% 1.89% 1.85% 1% 0%

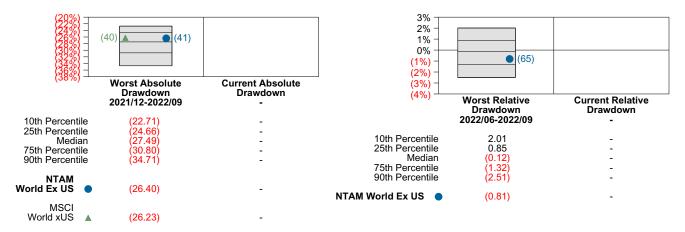
	Worst Relative Drawdown			Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
NTAM World Ex US	(0.81)%	0.25	2022/06-2022/09	(0.30)%	-	-	-	-	
Recovery from Trough	0.97%	0.25	2022/09-2022/12	(0.03)%	-	-	-	-	
Callan NonUS Eq	(4.45)%	1.25	2020/12-2022/03		(4.04)%	3.25	2020/12-2024/03		

2021

2022

Drawdown Rankings vs. MSCI World xUS Rankings against Callan Non-US Equity Five Years Ended March 31, 2024

2019





(1%)(2%) Current Absolute Drawdown

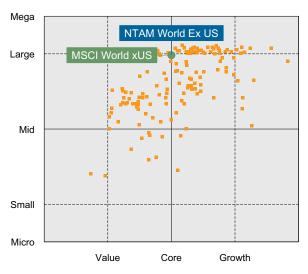
2023

2024

# **Current Holdings Based Style Analysis NTAM World Ex US** As of March 31, 2024

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.

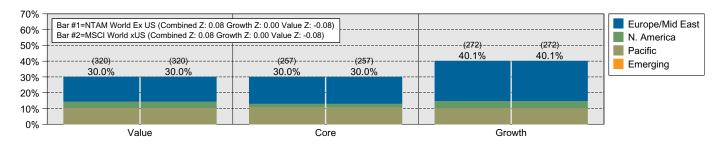
# Style Map vs Callan NonUS Eq Holdings as of March 31, 2024



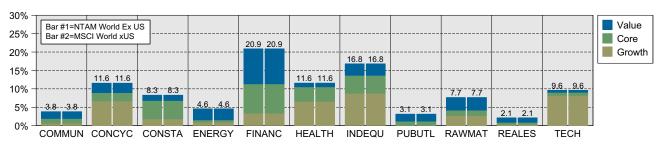
## **Style Exposure Matrix** Holdings as of March 31, 2024

	15.4% (156)	16.8% (135)	25.1% (138)	57.4% (429)
Europe/				
Mid East	15.4% (156)	16.8% (135)	25.1% (138)	57.4% (429)
	4.1% (30)	2.1% (20)	4.6% (37)	10.7% (87)
N. America	, ,	, ,	, ,	, ,
	4.1% (30)	2.1% (20)	4.6% (37)	10.7% (87)
	10.5% (134)	11.1% (102)	10.3% (97)	31.9% (333)
Pacific				
	10.5% (134)	11.1% (102)	10.3% (97)	31.9% (333)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	30.0% (320)	30.0% (257)	40.1% (272)	100.0% (849)
Total				
	30.0% (320)	30.0% (257)	40.1% (272)	100.0% (849)
	Value	Core	Growth	Total

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



# **Sector Weights Distribution** Holdings as of March 31, 2024

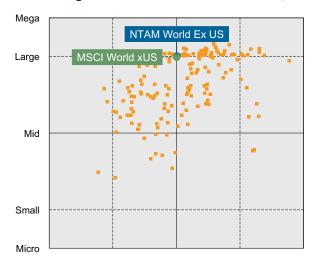




# **Historical Holdings Based Style Analysis NTAM World Ex US** For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

## Average Style Map vs Callan NonUS Eq Holdings for Three Years Ended March 31, 2024



## **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

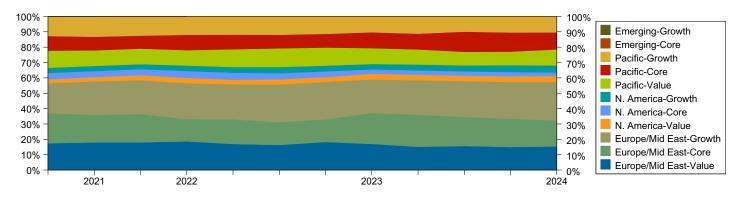
<b>-</b> /	16.9% (148)	17.6% (129)	22.9% (152)	57.4% (429)
Europe/ Mid East				
IVIIU East	16.9% (153)	17.3% (129)	23.0% (156)	57.2% (438)
	3.4% (27)	3.5% (26)	3.8% (32)	10.6% (85)
N. America				
	3.5% (28)	3.5% (28)	3.9% (33)	10.9% (89)
	10.4% (134)	10.1% (112)	11.5% (117)	32.0% (363)
Pacific				
	10.5% (135)	10.1% (111)	11.4% (118)	31.9% (364)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	30.7% (309)	31.2% (267)	38.1% (301)	100.0% (877)
Total				
	30.9% (316)	30.9% (268)	38.2% (307)	100.0% (891)
	Value	Core	Growth	Total

## NTAM World Ex US Historical Region/Style Exposures

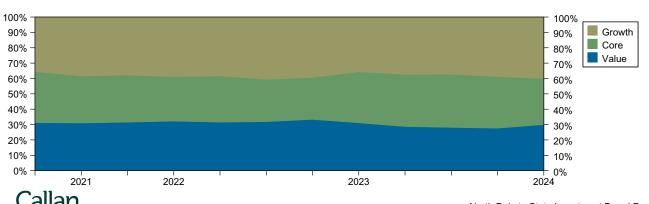
Core

Growth

Value



## NTAM World Ex US Historical Style Only Exposures

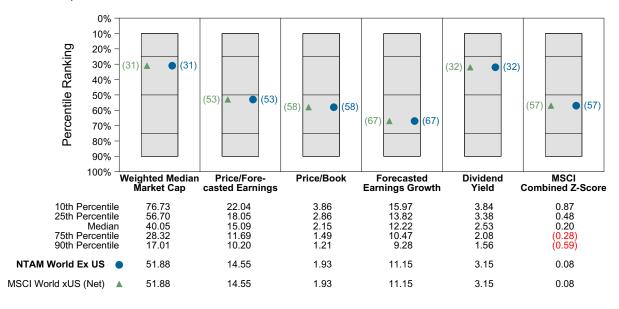


# **NTAM World Ex US Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

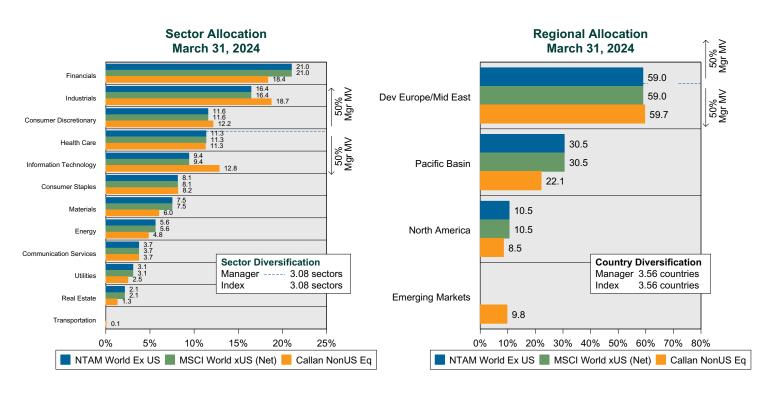
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US Equity as of March 31, 2024



#### **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.

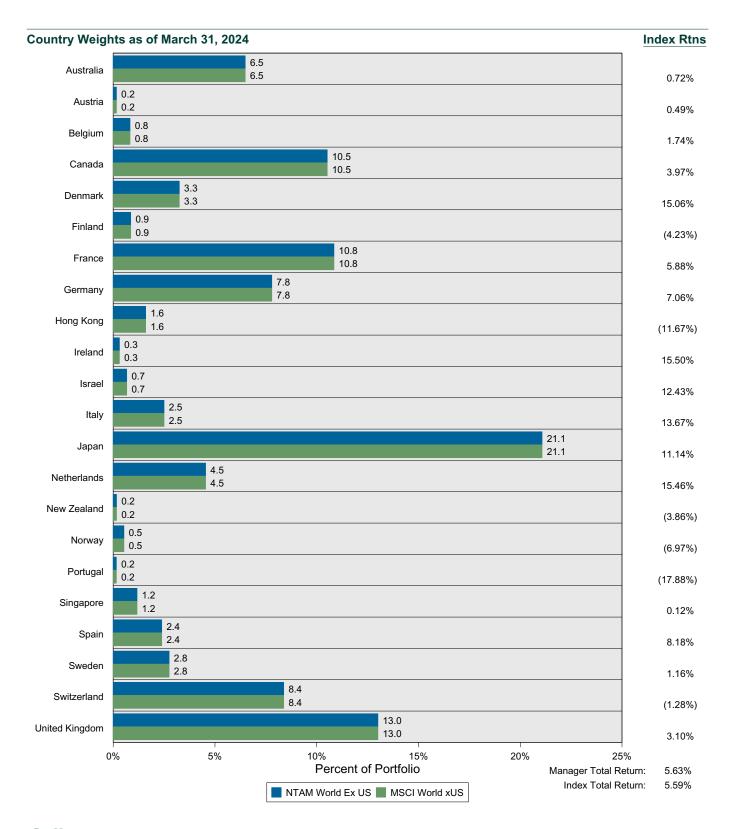




# **Country Allocation** NTAM World Ex US VS MSCI World xUS (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.





# **NTAM World Ex US** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Novo-Nordisk A S Almindelig Aktie	Health Care	\$588,621	2.2%	24.24%	438.34	35.58	1.07%	19.15%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$549,090	2.1%	28.18%	385.04	41.98	0.68%	19.60%
Nestle S A Shs Nom New	Consumer Staples	\$401,211	1.5%	(8.24)%	283.84	18.82	3.13%	6.10%
Toyota Motor Corp	Consumer Discretionary	\$375,581	1.4%	36.36%	408.78	11.08	1.71%	29.00%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$351,435	1.3%	11.11%	451.47	25.20	1.56%	7.03%
Astrazeneca Plc Ord	Health Care	\$295,570	1.1%	1.37%	209.11	16.04	2.15%	10.30%
Sap Se Shs	Information Technology	\$287,676	1.1%	26.43%	239.51	34.25	1.22%	22.20%
Novartis	Health Care	\$281,049	1.1%	(0.19)%	212.43	13.43	3.78%	8.20%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$253,262	0.9%	(8.59)%	179.17	12.45	4.18%	3.45%
Hsbc Holdings (Gb)	Financials	\$211,750	0.8%	2.50%	148.23	6.37	5.37%	(1.86)%

## **10 Best Performers**

	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Industrials	\$34,645	0.1%	76.47%	24.46	22.57	1.10%	37.90%
Industrials	\$43,359	0.2%	64.69%	32.29	19.10	1.10%	30.56%
Industrials	\$12,149	0.0%	57.32%	10.11	19.54	1.17%	12.00%
Information Technology	\$15,155	0.1%	56.32%	13.40	26.00	1.01%	16.40%
Information Technology	\$49,196	0.2%	52.79%	40.95	51.31	0.45%	14.40%
Industrials	\$14,383	0.1%	52.40%	14.54	15.23	1.20%	15.98%
Industrials	\$8,590	0.0%	50.76%	12.15	29.07	1.60%	15.80%
Industrials	\$10,078	0.0%	47.63%	11.88	29.12	0.67%	25.60%
Information Technology	\$174,303	0.7%	46.77%	123.31	40.72	0.93%	21.44%
Industrials	\$11,296	0.0%	46.25%	8.88	18.57	3.86%	2.40%
	Industrials Industrials Industrials Information Technology Information Technology Industrials Industrials Industrials Information Technology	Sector         Market Value           Industrials         \$34,645           Industrials         \$43,359           Industrials         \$12,149           Information Technology         \$15,155           Information Technology         \$49,196           Industrials         \$14,383           Industrials         \$8,590           Information Technology         \$174,303	Sector         Market Value         of Portfolio           Industrials         \$34,645         0.1%           Industrials         \$43,359         0.2%           Industrials         \$12,149         0.0%           Information Technology         \$15,155         0.1%           Information Technology         \$49,196         0.2%           Industrials         \$14,383         0.1%           Industrials         \$8,590         0.0%           Industrials         \$10,078         0.0%           Information Technology         \$174,303         0.7%	Sector         Market Value         of Value         Qtrly Return           Industrials         \$34,645         0.1%         76.47%           Industrials         \$43,359         0.2%         64.69%           Industrials         \$12,149         0.0%         57.32%           Information Technology         \$15,155         0.1%         56.32%           Information Technology         \$49,196         0.2%         52.79%           Industrials         \$14,383         0.1%         52.40%           Industrials         \$8,590         0.0%         50.76%           Industrials         \$10,078         0.0%         47.63%           Information Technology         \$174,303         0.7%         46.77%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital           Industrials         \$34,645         0.1%         76.47%         24.46           Industrials         \$43,359         0.2%         64.69%         32.29           Industrials         \$12,149         0.0%         57.32%         10.11           Information Technology         \$15,155         0.1%         56.32%         13.40           Information Technology         \$49,196         0.2%         52.79%         40.95           Industrials         \$14,383         0.1%         52.40%         14.54           Industrials         \$8,590         0.0%         50.76%         12.15           Industrials         \$10,078         0.0%         47.63%         11.88           Information Technology         \$174,303         0.7%         46.77%         123.31	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital         Earnings Ratio           Industrials         \$34,645         0.1%         76.47%         24.46         22.57           Industrials         \$43,359         0.2%         64.69%         32.29         19.10           Industrials         \$12,149         0.0%         57.32%         10.11         19.54           Information Technology         \$15,155         0.1%         56.32%         13.40         26.00           Information Technology         \$49,196         0.2%         52.79%         40.95         51.31           Industrials         \$14,383         0.1%         52.40%         14.54         15.23           Industrials         \$8,590         0.0%         50.76%         12.15         29.07           Industrials         \$10,078         0.0%         47.63%         11.88         29.12           Information Technology         \$174,303         0.7%         46.77%         123.31         40.72	Sector         Value         Percent Portfolio         Return         Capital Capital         Ratio         Yield           Industrials         \$34,645         0.1%         76.47%         24.46         22.57         1.10%           Industrials         \$43,359         0.2%         64.69%         32.29         19.10         1.10%           Industrials         \$12,149         0.0%         57.32%         10.11         19.54         1.17%           Information Technology         \$15,155         0.1%         56.32%         13.40         26.00         1.01%           Information Technology         \$49,196         0.2%         52.79%         40.95         51.31         0.45%           Industrials         \$14,383         0.1%         52.40%         14.54         15.23         1.20%           Industrials         \$8,590         0.0%         50.76%         12.15         29.07         1.60%           Industrials         \$10,078         0.0%         47.63%         11.88         29.12         0.67%           Information Technology         \$174,303         0.7%         46.77%         123.31         40.72         0.93%

# **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted	d	Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Grifols Sa Barcelona Acciones Por De	Health Care	\$3,797	0.0%	(47.25)%	3.84	8.53	6.33%	2.43%
Koninklijke Dsm NV Shs	Materials	\$29,924	0.1%	(43.93)%	0.29	-	6.35%	(6.68)%
Ocado Group Plc W/I	Consumer Staples	\$4,713	0.0%	(40.54)%	4.76	(12.29)	0.00%	23.60%
Sembcorp Marine Ltd Shs	Industrials	\$3,670	0.0%	(34.56)%	3.99	19.67	0.00%	(60.02)%
Edp Renovaveis	Utilities	\$5,883	0.0%	(33.79)%	13.87	22.43	2.11%	18.05%
Teleperformance Shs	Industrials	\$7,852	0.0%	(33.31)%	6.17	5.85	4.27%	8.12%
St James S Place Cap Plc New Ord	Financials	\$4,550	0.0%	(32.67)%	3.22	6.71	512.83%	(1.50)%
Nibe Industrier Ab Markaryd Shs B	Industrials	\$10,530	0.0%	(30.05)%	8.76	24.48	1.24%	(3.90)%
Worldline	Financials	\$4,215	0.0%	(28.37)%	3.51	5.52	0.00%	11.29%
Z Hldgs Corp Shs	Communication Services	\$9,675	0.0%	(26.70)%	19.56	22.07	1.44%	6.91%

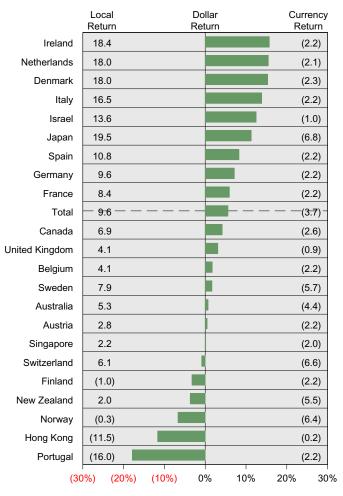


# NTAM World Ex US vs MSCI World xUS Attribution for Quarter Ended March 31, 2024

#### **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.

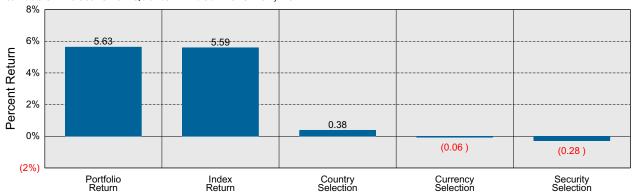




## **Beginning Relative Weights** (Portfolio - Index)

	Index Weight					Portfolio Weight
Ireland	0.5					0.5
Netherlands	4.1					4.1
Denmark	3.0					3.0
Italy	2.3					2.3
Israel	0.6					0.6
Japan	20.1					20.1
Spain	2.4					2.4
Germany	7.7					7.7
France	10.8					10.8
Total						
Canada	10.7					10.7
United Kingdom	13.2					13.2
Belgium	0.9					0.9
Sweden	2.9					2.9
Australia	6.8					6.8
Austria	0.2					0.2
Singapore	1.2					1.2
Switzerland	8.9					8.9
Finland	1.0					1.0
New Zealand	0.2					0.2
Norway	0.6					0.6
Hong Kong	1.9					1.9
Portugal	0.2					0.2
	) )%)	(0.5%)	0.0	)%	0.5%	1.0

#### Attribution Factors for Quarter Ended March 31, 2024



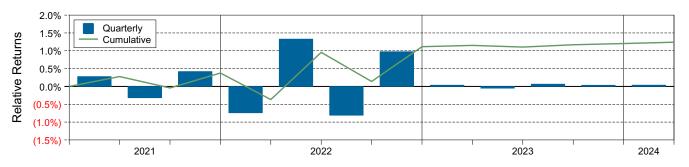


# NTAM World Ex US vs MSCI World xUS Attribution for Three years Ended March 31, 2024

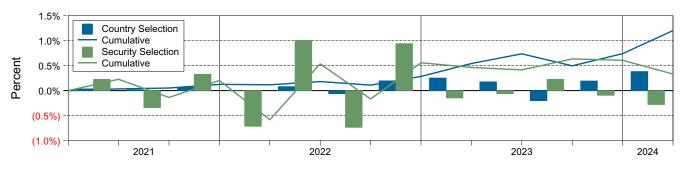
#### **Cumulative International Attribution**

The first chart below illustrates the quarterly and cumulative return of the portfolio relative to the index. The second chart shows the cumulative and quarterly impact of the manager's country selection and security selection decisions. The third chart shows the cumulative and quarterly impact of the managers currency selection decisions. The last chart shows the annualized cumulative returns for the manager and the index, as well as the attribution factors that explain the difference in return.

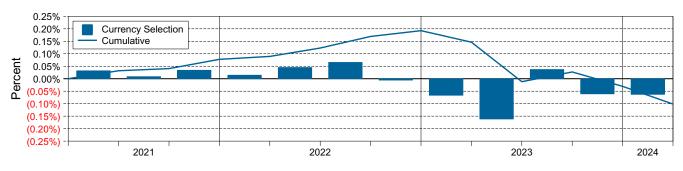
#### Cumulative and Quarterly Return vs MSCI World xUS



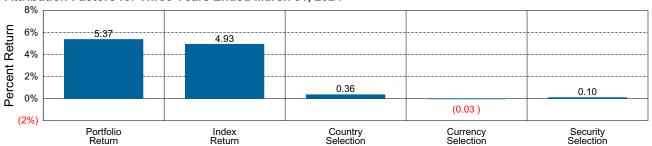
## **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for Three Years Ended March 31, 2024





## State St MSCI World exUS Period Ended March 31, 2024

#### **Investment Philosophy**

SSGA's investment process is built on meeting the clients objectives, minimizing transaction costs and making decisions through a team framework. To determine which indexing methodology to use, they begin by considering the following factors: size of the portfolio, breadth of the benchmark, liquidity of constituents, custody costs, tracking error tolerance, availability of data, and the seasoning of the portfolio. Most often, full replication is used due to their belief in efficient markets.

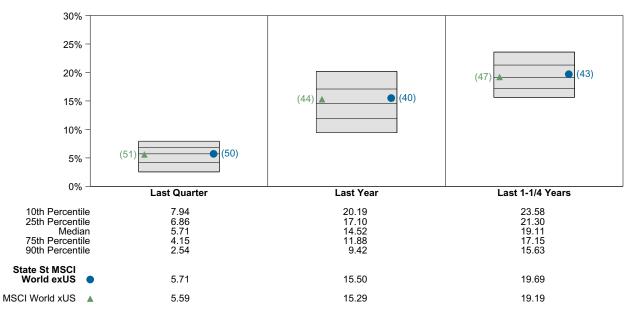
## **Quarterly Summary and Highlights**

- State St MSCI World exUS's portfolio posted a 5.71% return for the quarter placing it in the 50 percentile of the Callan Non-US Equity group for the quarter and in the 40 percentile for the last year.
- State St MSCI World exUS's portfolio outperformed the MSCI World xUS by 0.12% for the guarter and outperformed the MSCI World xUS for the year by 0.21%.

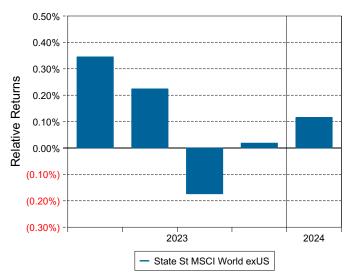
## **Quarterly Asset Growth**

Beginning Market Value	\$463,738,354
Net New Investment	\$1,777,159
Investment Gains/(Losses)	\$26,562,467
Ending Market Value	\$492,077,979

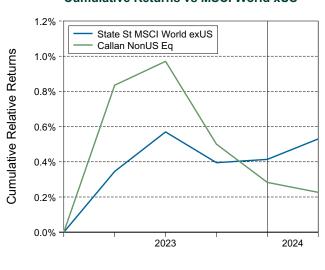
## Performance vs Callan Non-US Equity (Gross)



#### Relative Return vs MSCI World xUS



## **Cumulative Returns vs MSCI World xUS**

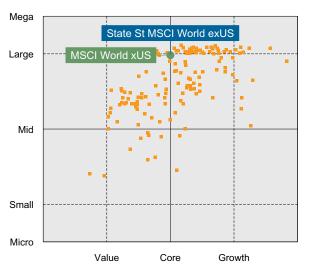




# **Current Holdings Based Style Analysis** State St MSCI World exUS As of March 31, 2024

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.

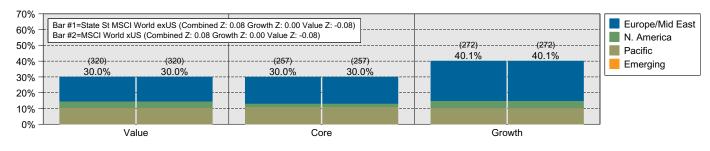
## Style Map vs Callan NonUS Eq Holdings as of March 31, 2024



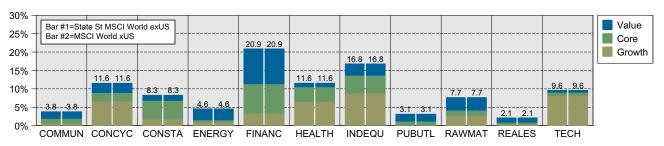
## **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	30.0% (320)	30.0% (257)	40.1% (272)	100.0% (849)
Total				
	30.0% (320)	30.0% (257)	40.1% (272)	100.0% (849)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	10.5% (134)	11.1% (102)	10.3% (97)	31.9% (333)
Pacific				
	10.5% (134)	11.1% (102)	10.3% (97)	31.9% (333)
	4.1% (30)	2.1% (20)	4.6% (37)	10.7% (87)
N. America				
	4.1% (30)	2.1% (20)	4.6% (37)	10.7% (87)
Mid East	15.4% (156)	16.8% (135)	25.1% (138)	57.4% (429)
Europe/	15.4% (156)	16.8% (135)	25.1% (138)	57.4% (429)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



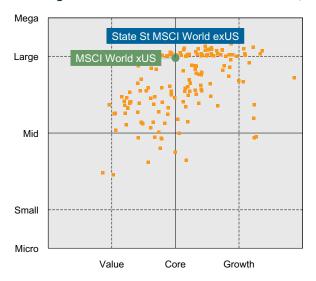


## Historical Holdings Based Style Analysis State St MSCI World exUS For One and 1/4 Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region 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 average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

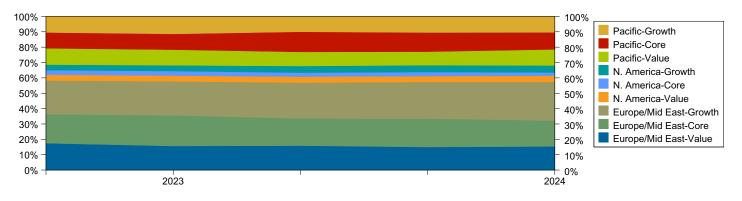
## Average Style Map vs Callan NonUS Eq Holdings for One and 1/4 Years Ended March 31, 2024

## Average Style Exposure Matrix Holdings for One and 1/4 Years Ended March 31, 2024

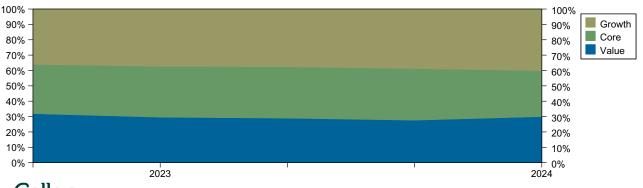




## State St MSCI World exUS Historical Region/Style Exposures



State St MSCI World exUS Historical Style Only Exposures

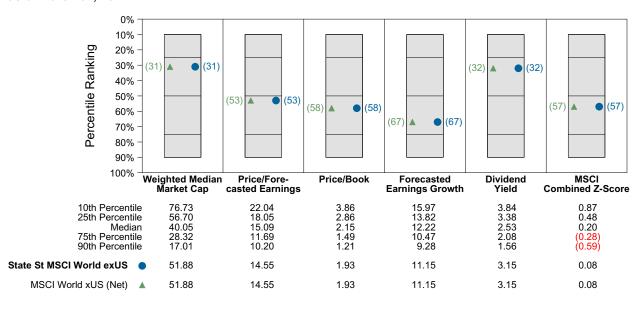


# State St MSCI World exUS **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

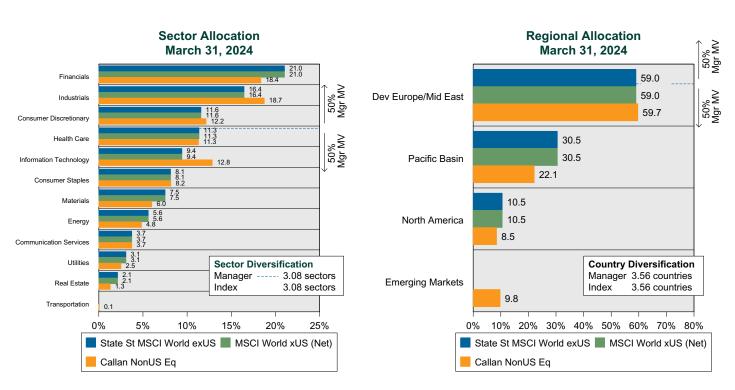
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US Equity as of March 31, 2024



#### **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.

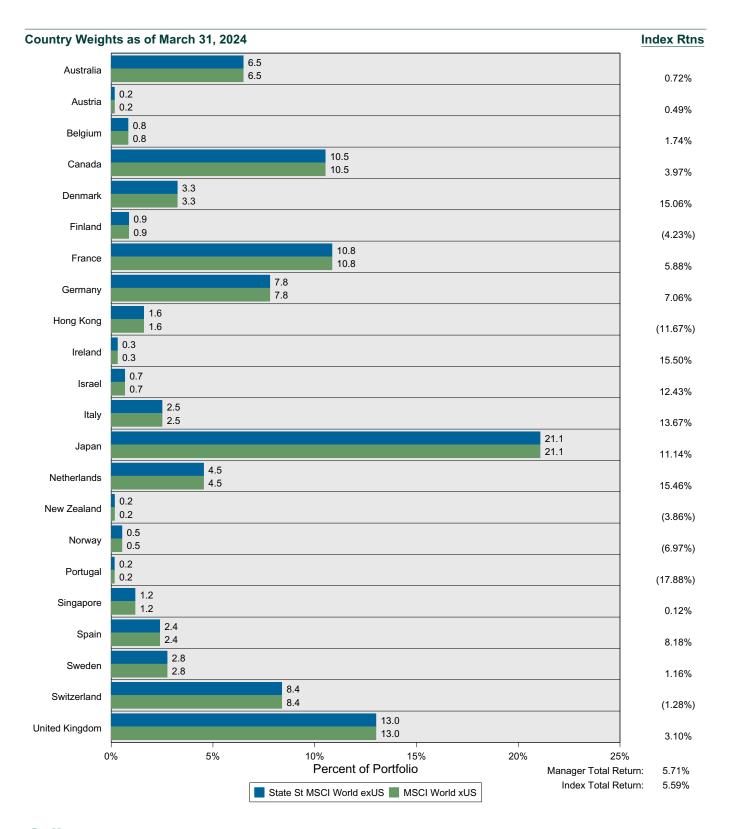




# **Country Allocation** State St MSCI World exUS VS MSCI World xUS (Net)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.





# State St MSCI World exUS Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Novo-Nordisk A S Almindelig Aktie	Health Care	\$10,836,121	2.2%	24.24%	438.34	35.58	1.07%	19.15%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$10,108,375	2.1%	28.18%	385.04	41.98	0.68%	19.60%
Nestle S A Shs Nom New	Consumer Staples	\$7,386,037	1.5%	(8.24)%	283.84	18.82	3.13%	6.10%
Toyota Motor Corp	Consumer Discretionary	\$6,914,200	1.4%	36.36%	408.78	11.08	1.71%	29.00%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$6,469,689	1.3%	11.11%	451.47	25.20	1.56%	7.03%
Astrazeneca Plc Ord	Health Care	\$5,441,242	1.1%	1.37%	209.11	16.04	2.15%	10.30%
Sap Se Shs	Information Technology	\$5,295,925	1.1%	26.43%	239.51	34.25	1.22%	22.20%
Novartis	Health Care	\$5,173,928	1.1%	(0.19)%	212.43	13.43	3.78%	8.20%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$4,662,378	0.9%	(8.59)%	179.17	12.45	4.18%	3.45%
Hsbc Holdings (Gb)	Financials	\$3,898,173	0.8%	2.50%	148.23	6.37	5.37%	(1.86)%

## **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Rheinmetall Ag Ord	Industrials	\$637,793	0.1%	76.47%	24.46	22.57	1.10%	37.90%
Mitsubishi Heavy Industries Shs	Industrials	\$798,207	0.2%	64.69%	32.29	19.10	1.10%	30.56%
Fuji Electric Co Ltd Shs	Industrials	\$223,649	0.0%	57.32%	10.11	19.54	1.17%	12.00%
Screen Hldgs Co Ltd Shs New	Information Technology	\$278,986	0.1%	56.32%	13.40	26.00	1.01%	16.40%
Disco Corp	Information Technology	\$905,673	0.2%	52.79%	40.95	51.31	0.45%	14.40%
Leonardo Spa Shs	Industrials	\$264,781	0.1%	52.40%	14.54	15.23	1.20%	15.98%
Kongsberg Gruppen Asa Shs	Industrials	\$158,135	0.0%	50.76%	12.15	29.07	1.60%	15.80%
Saab Ab Shs B	Industrials	\$185,526	0.0%	47.63%	11.88	29.12	0.67%	25.60%
Tokyo Electron	Information Technology	\$3,208,806	0.7%	46.77%	123.31	40.72	0.93%	21.44%
Obayashi Corp Ord	Industrials	\$207,948	0.0%	46.25%	8.88	18.57	3.86%	2.40%

## **10 Worst Performers**

		Ending Percent					Price/ Forecasted		
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings	
Grifols Sa Barcelona Acciones Por De	Health Care	\$69.898	0.0%	(47.25)%	3.84	8.53	6.33%	2.43%	
		,		. ,					
Koninklijke Dsm NV Shs	Materials	\$550,880	0.1%	(43.93)%	0.29	-	6.35%	(6.68)%	
Ocado Group Plc W/I	Consumer Staples	\$86,772	0.0%	(40.54)%	4.76	(12.29)	0.00%	23.60%	
Sembcorp Marine Ltd Shs	Industrials	\$67,561	0.0%	(34.56)%	3.99	19.67	0.00%	(60.02)%	
Edp Renovaveis	Utilities	\$108,305	0.0%	(33.79)%	13.87	22.43	2.11%	18.05%	
Teleperformance Shs	Industrials	\$144,551	0.0%	(33.31)%	6.17	5.85	4.27%	8.12%	
St James S Place Cap Plc New Ord	Financials	\$83,768	0.0%	(32.67)%	3.22	6.71	512.83%	(1.50)%	
Nibe Industrier Ab Markaryd Shs B	Industrials	\$193,851	0.0%	(30.05)%	8.76	24.48	1.24%	(3.90)%	
Worldline	Financials	\$77,602	0.0%	(28.37)%	3.51	5.52	0.00%	11.29%	
Z Hldgs Corp Shs	Communication Services	\$178,116	0.0%	(26.70)%	19.56	22.07	1.44%	6.91%	

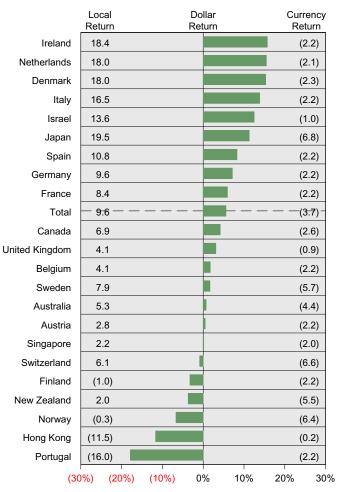


# State St MSCI World exUS vs MSCI World xUS Attribution for Quarter Ended March 31, 2024

#### **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.

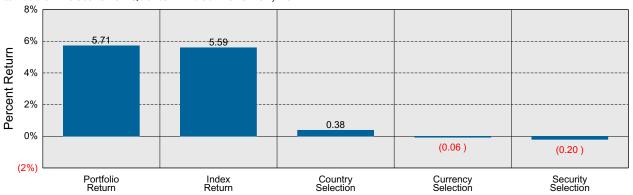




## **Beginning Relative Weights** (Portfolio - Index)

	Index Weight				Portfolio Weight
Ireland	0.5				0.5
Netherlands	4.1				4.1
Denmark	3.0				3.0
Italy	2.3				2.3
Israel	0.6				0.6
Japan	20.1				20.1
Spain	2.4				2.4
Germany	7.7				7.7
France	10.8				10.8
Total					
Canada	10.7				10.7
United Kingdom	13.2				13.2
Belgium	0.9				0.9
Sweden	2.9				2.9
Australia	6.8				6.8
Austria	0.2				0.2
Singapore	1.2				1.2
Switzerland	8.9				8.9
Finland	1.0				1.0
New Zealand	0.2				0.2
Norway	0.6				0.6
Hong Kong	1.9				1.9
Portugal	0.2				0.2
(1.0	0%)	(0.5%)	0.0%	0.5%	1.0%

#### Attribution Factors for Quarter Ended March 31, 2024



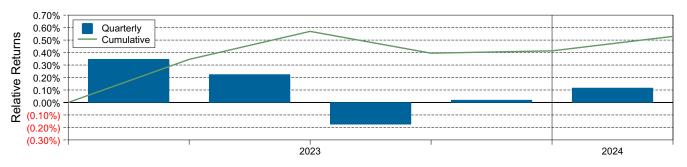


# State St MSCI World exUS vs MSCI World xUS Attribution for One and One-Quarter years Ended March 31, 2024

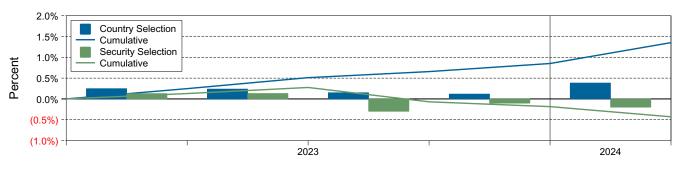
#### **Cumulative International Attribution**

The first chart below illustrates the quarterly and cumulative return of the portfolio relative to the index. The second chart shows the cumulative and quarterly impact of the manager's country selection and security selection decisions. The third chart shows the cumulative and quarterly impact of the managers currency selection decisions. The last chart shows the annualized cumulative returns for the manager and the index, as well as the attribution factors that explain the difference in return.

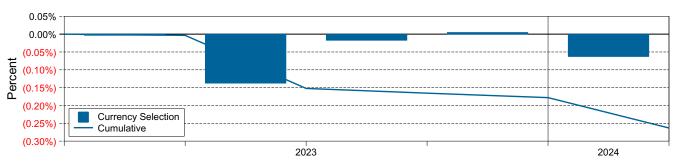
## Cumulative and Quarterly Return vs MSCI World xUS



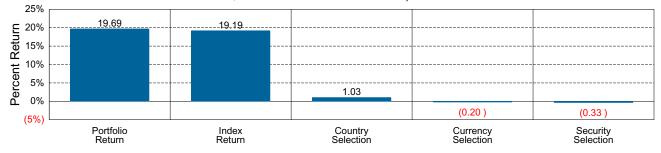
## **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**









## **DFA EM All Cap Core** Period Ended March 31, 2024

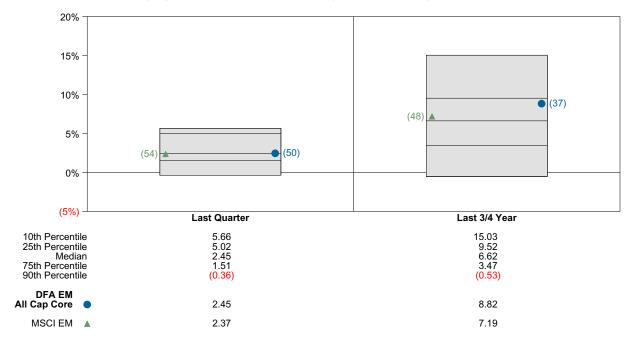
#### **Investment Philosophy**

Dimensional Fund Advisors (DFA) is an independent asset management firm founded by David Booth and Rex Singuefield in 1981. The firm is headquartered in Austin, Texas with regional offices in Santa Monica, Vancouver, Toronto, Charlotte, London, Amsterdam, Berlin, Tokyo, Singapore, Melbourne, and Sydney. The Emerging Markets All Cap Core strategy is managed by a five-member portfolio management team, supported by 89 research professionals and 17 equity traders. The product employs a systematic process leveraging size, value and profitability factors to construct a diversified and risk-controlled portfolio. The strategy consists of approximately 6,600 securities. The expected annual turnover for the portfolio is around 5%-15%. The Fund has consistently performed within expectations over multiple market cycles.

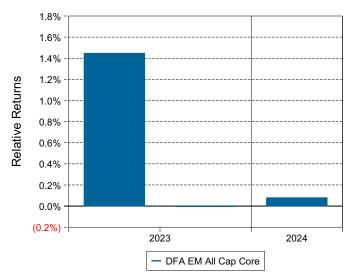
#### **Quarterly Summary and Highlights**

- DFA EM All Cap Core's portfolio posted a 2.45% return for the quarter placing it in the 50 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 37 percentile for the last three-quarter year.
- DFA EM All Cap Core's portfolio outperformed the MSCI EM by 0.08% for the guarter and outperformed the MSCI EM for the three-quarter year by 1.63%.

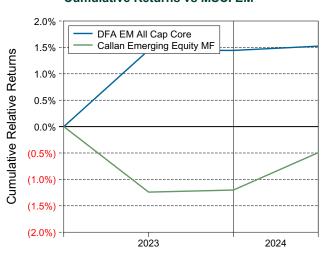
#### Performance vs Callan Emerging Markets Equity Mut Funds (Institutional Net)



#### Relative Return vs MSCI EM



## **Cumulative Returns vs MSCI EM**

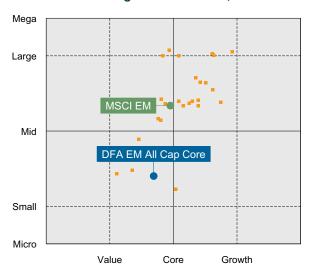




## **Current Holdings Based Style Analysis DFA EM All Cap Core** As of March 31, 2024

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.

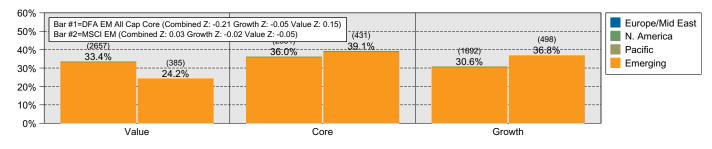
## Style Map vs Callan Emerging Equity MF Holdings as of March 31, 2024



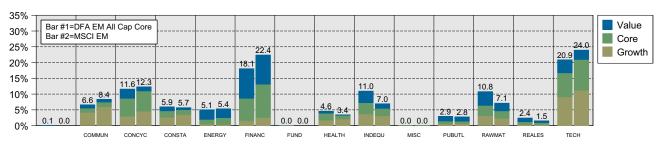
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	24.2% (385)	39.1% (431)	36.8% (498)	100.0% (1314)
Total				
	33.4% (2657)	36.0% (2351)	30.6% (1692)	100.0% (6700)
	24.2% (385)	38.9% (427)	36.8% (498)	99.9% (1310)
Emerging	,	, ,	,	, ,
	33.3% (2634)	35.9% (2299)	30.5% (1669)	99.7% (6602)
	0.0% (0)	0.1% (3)	0.0% (0)	0.1% (3)
Pacific	0.0 /0 (22)	3.170 (33)	0.170 (21)	0.270 (70)
	0.0% (22)	0.1% (35)	0.1% (21)	0.2% (78)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
N. America	( )		( )	
	0.0% (1)	0.1% (17)	0.0% (2)	0.1% (20)
Europe/ Mid East	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Europo/	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



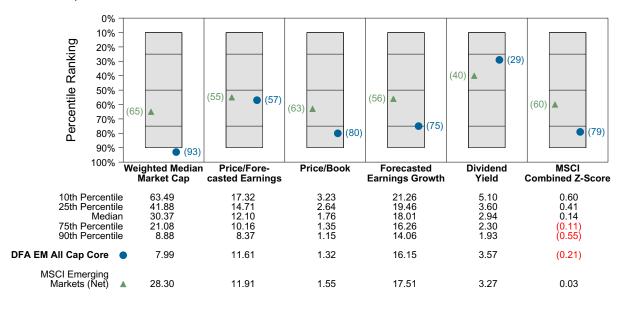


# **DFA EM All Cap Core Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

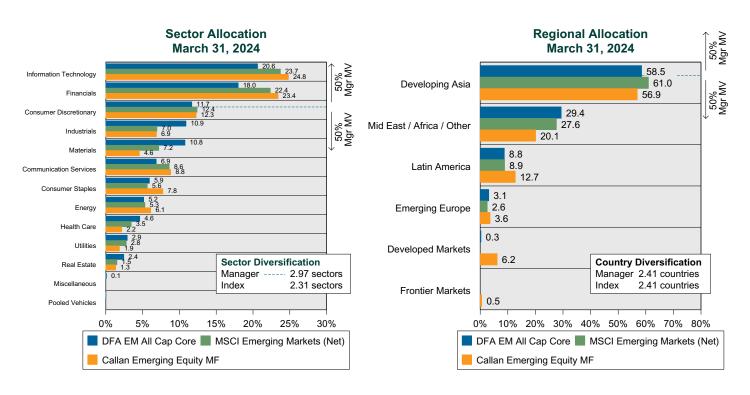
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Markets Equity Mut Funds as of March 31, 2024



#### **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.

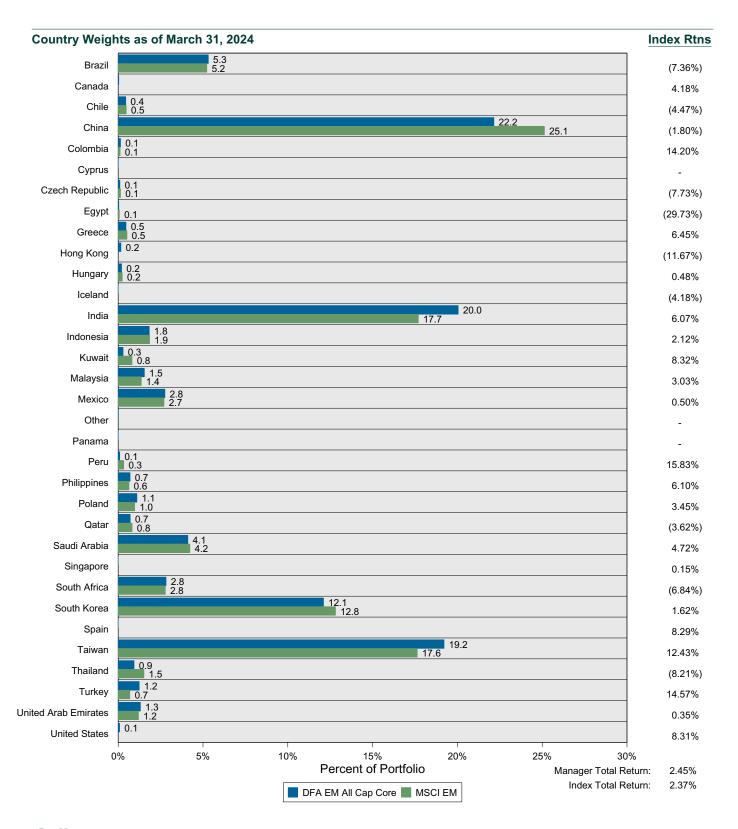




# **Country Allocation DFA EM All Cap Core VS MSCI Emerging Markets (Net)**

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





# **DFA EM All Cap Core** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

Sector Information Technology	Ending Market Value	Percent of Portfolio	Qtrly Return	Market	Forecasted Earnings	Dividend	Forecasted Growth in
	Value				Earnings	Dividend	Growth in
		Portfolio	Doturn				
Information Technology			Return	Capital	Ratio	Yield	Earnings
	\$4,231,531	3.8%	26.55%	631.29	19.14	1.67%	11.74%
Communication Services	\$2,692,655	2.4%	1.48%	367.29	14.15	0.79%	20.87%
Information Technology	\$2,656,484	2.4%	0.88%	365.39	16.40	1.75%	54.00%
Information Technology	\$1,687,592	1.5%	26.06%	631.29	19.14	1.67%	11.74%
Consumer Discretionary	\$1,030,114	0.9%	(8.87)%	182.88	8.03	1.34%	1.47%
Energy	\$735,107	0.7%	14.70%	241.07	24.06	0.30%	17.60%
Financials	\$693,839	0.6%	(0.45)%	144.99	3.17	9.95%	2.30%
Energy	\$674,609	0.6%	(2.57)%	41.81	4.44	19.61%	47.65%
Information Technology	\$588,594	0.5%	(3.13)%	74.35	22.37	2.37%	12.18%
Energy	\$502,789	0.5%	(4.64)%	56.92	4.60	19.12%	47.67%
	Communication Services Information Technology Information Technology Consumer Discretionary Energy Financials Energy Information Technology	Communication Services         \$2,692,655           Information Technology         \$2,656,484           Information Technology         \$1,687,592           Consumer Discretionary         \$1,030,114           Energy         \$735,107           Financials         \$693,839           Energy         \$674,609           Information Technology         \$588,594	Communication Services         \$2,692,655         2.4%           Information Technology         \$2,656,484         2.4%           Information Technology         \$1,687,592         1.5%           Consumer Discretionary         \$1,030,114         0.9%           Energy         \$735,107         0.7%           Financials         \$693,839         0.6%           Energy         \$674,609         0.6%           Information Technology         \$588,594         0.5%	Communication Services         \$2,692,655         2.4%         1.48%           Information Technology         \$2,656,484         2.4%         0.88%           Information Technology         \$1,687,592         1.5%         26.06%           Consumer Discretionary         \$1,030,114         0.9%         (8.87)%           Energy         \$735,107         0.7%         14.70%           Financials         \$693,839         0.6%         (0.45)%           Energy         \$674,609         0.6%         (2.57)%           Information Technology         \$588,594         0.5%         (3.13)%	Communication Services         \$2,692,655         2.4%         1.48%         367.29           Information Technology         \$2,656,484         2.4%         0.88%         365.39           Information Technology         \$1,687,592         1.5%         26.06%         631.29           Consumer Discretionary         \$1,030,114         0.9%         (8.87)%         182.88           Energy         \$735,107         0.7%         14.70%         241.07           Financials         \$693,839         0.6%         (0.45)%         144.99           Energy         \$674,609         0.6%         (2.57)%         41.81           Information Technology         \$588,594         0.5%         (3.13)%         74.35	Communication Services         \$2,692,655         2.4%         1.48%         367.29         14.15           Information Technology         \$2,656,484         2.4%         0.88%         365.39         16.40           Information Technology         \$1,687,592         1.5%         26.06%         631.29         19.14           Consumer Discretionary         \$1,030,114         0.9%         (8.87)%         182.88         8.03           Energy         \$735,107         0.7%         14.70%         241.07         24.06           Financials         \$693,839         0.6%         (0.45)%         144.99         3.17           Energy         \$674,609         0.6%         (2.57)%         41.81         4.44           Information Technology         \$588,594         0.5%         (3.13)%         74.35         22.37	Communication Services         \$2,692,655         2.4%         1.48%         367.29         14.15         0.79%           Information Technology         \$2,656,484         2.4%         0.88%         365.39         16.40         1.75%           Information Technology         \$1,687,592         1.5%         26.06%         631.29         19.14         1.67%           Consumer Discretionary         \$1,030,114         0.9%         (8.87)%         182.88         8.03         1.34%           Energy         \$735,107         0.7%         14.70%         241.07         24.06         0.30%           Financials         \$693,839         0.6%         (0.45)%         144.99         3.17         9.95%           Energy         \$674,609         0.6%         (2.57)%         41.81         4.44         19.61%           Information Technology         \$588,594         0.5%         (3.13)%         74.35         22.37         2.37%

## **10 Best Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Zhej.Wanfeng Auto Wheel 'a'	Consumer Discretionary	\$11,570	0.0%	235.52%	4.96	32.05	0.59%	24.59%
Digital Aria	Health Care	\$5,660	0.0%	194.94%	0.78	(10040.00)	0.00%	-
Techwing	Information Technology	\$19,062	0.0%	192.38%	0.96	21.13	0.39%	20.57%
Enchem	Materials	\$6,260	0.0%	173.15%	3.10	(72.28)	0.00%	-
New Era Eltn.Co.	Information Technology	\$5,116	0.0%	164.66%	0.26	196.43	0.00%	-
Shinsung Delta Tech	Industrials	\$22,802	0.0%	152.97%	2.13	559.65	0.11%	(2.61)%
Angels Tech.Co.Ltd.	Industrials	\$29	0.0%	152.28%	0.12	(29.00)	0.00%	-
Shihlin Electr. & Eng	Industrials	\$34,363	0.0%	136.30%	4.75	37.38	0.69%	9.74%
Egis Technology	Information Technology	\$3,804	0.0%	118.67%	0.63	607.86	0.00%	(49.76)%
Bajaj Tempo	Industrials	\$8,073	0.0%	115.60%	1.14	43.50	0.14%	(25.53)%

## **10 Worst Performers**

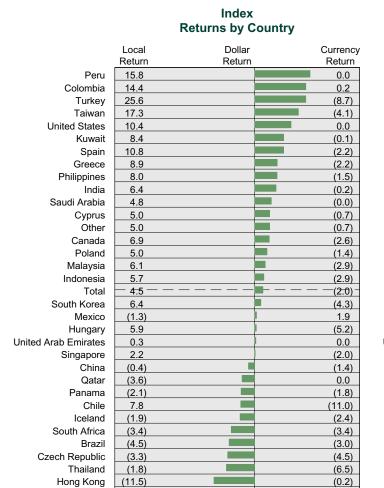
		Ending		Percent		Forecasted		
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Abdullah Saad Moati Stationaries	Consumer Discretionary	\$2,562	0.0%	(89.98)%	0.16	149.25	1.64%	12.29%
Yu Neh Huat	Real Estate	\$2,055	0.0%	(87.89)%	0.06	(28.00)	0.00%	-
Ssangyong Motor Co Shs	Consumer Discretionary	\$3,190	0.0%	(77.27)%	0.90	(133.61)	0.00%	-
Sunshine 100 China Hdg.	Real Estate	\$1	0.0%	(72.64)%	0.01	(0.05)	0.00%	-
Cosmopolitan Intl Holdings L Shs	Real Estate	\$31	0.0%	(72.44)%	0.14	(2.68)	0.00%	-
Gome Elctrcl Applins Hldgs L Shs	Consumer Discretionary	\$694	0.0%	(72.17)%	0.11	(0.18)	0.00%	-
China Fordoo Holdings	Consumer Discretionary	\$101	0.0%	(67.12)%	0.10	(12.33)	0.00%	-
Pt M Cash	Financials	\$37	0.0%	(65.17)%	0.09	33.33	0.00%	(46.14)%
Central China Management	Real Estate	\$377	0.0%	(64.66)%	0.05	1.17	71.43%	-
China Motion Telecom	Real Estate	\$19	0.0%	(64.41)%	0.06	1.00	0.00%	-



## DFA EM All Cap Core vs MSCI EM Attribution for Quarter Ended March 31, 2024

#### 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.



#### (Portfolio - Index) Index Portfolio Weight Weight Peru 0.3 0.1 Colombia 0.1 0.1 Turkev 0.6 1.1 Taiwan 16.0 18.1 **United States** 0.1 0.0 Kuwait 0.8 0.2 Spain 0.0 0.0 Greece 0.5 0.4 Philippines 0.7 0.6 19.5 India 16.7 Saudi Arabia 4.2 4.0 Cyprus 0.0 0.0 Other 0.0 0.0 Canada 0.0 0.0 Poland 1.0 1.1 Malaysia 1.3 1.5 Indonesia 1.9 1.8 Total South Korea 13.0 12.3 Mexico 2.7 2.8 Hungary 0.2 0.3 United Arab Emirates 1.3 1.3 Singapore 0.0 0.0 China 26.5 23.1 Qatar 0.9 0.7 Panama 0.0 0.0 Chile 0.5 0.5 Iceland 0.0 0.0 South Africa 3.1 3.1 Brazil 5.8 5.7

**Beginning Relative Weights** 

#### Attribution Factors for Quarter Ended March 31, 2024 4% 3% 2.45 2.37 Percent Return 2% 1.11 1% 0% (0.29)(1%)(0.73)(2%)Portfolio Index **Currency** Selection Country Security

(34.8)

30%

20%

Czech Republic

Thailand

Egypt

Hong Kong

0.2

1.8

0.0

0.1

(4%)

(2%)

0%

(6%)



Egypt

7.7

(40%) (30%) (20%) (10%)

0%

10%

0.1

1.0

0.2

0.0

4%

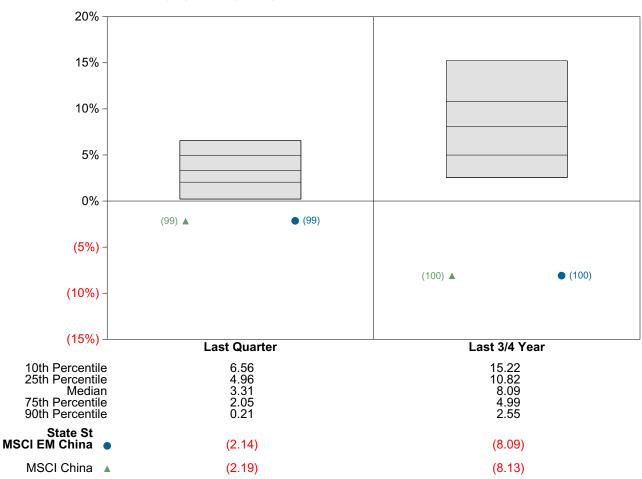
2%

# State St MSCI EM China Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

- State St MSCI EM China's portfolio posted a (2.14)% return for the quarter placing it in the 99 percentile of the Callan Emerging Broad group for the quarter and in the 100 percentile for the last three-quarter year.
- State St MSCI EM China's portfolio outperformed the MSCI China by 0.05% for the quarter and outperformed the MSCI China for the three-quarter year by 0.04%.

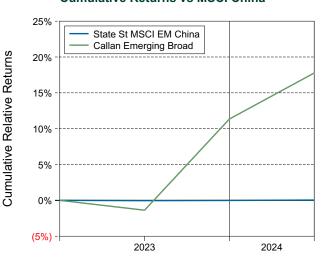
## Performance vs Callan Emerging Broad (Gross)



#### Relative Return vs MSCI China

# 0.08% 0.06% 0.04% Relative Returns 0.02% 0.00% (0.02%)(0.04%)(0.06%)2023 2024 State St MSCI EM China

## **Cumulative Returns vs MSCI China**





# **Current Holdings Based Style Analysis** State St MSCI EM China As of March 31, 2024

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.

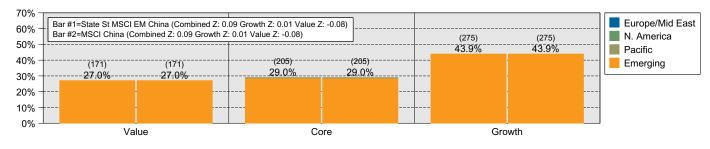
## Style Map vs Callan Emerging Broad Holdings as of March 31, 2024



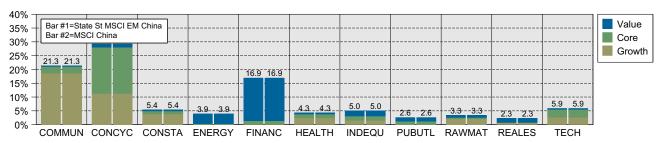
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	27.0% (171)	29.0% (205)	43.9% (275)	100.0% (651)
Total		, ,	` ,	, ,
	27.0% (171)	29.0% (205)	43.9% (275)	100.0% (651)
	27.0% (171)	28.6% (202)	43.9% (275)	99.6% (648)
Emerging				
	27.0% (171)	28.6% (202)	43.9% (275)	99.6% (648)
	0.0% (0)	0.4% (3)	0.0% (0)	0.4% (3)
Pacific				
	0.0% (0)	0.4% (3)	0.0% (0)	0.4% (3)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
N. America				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Mid East	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Europe/	(5)	(5)	(3)	(0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



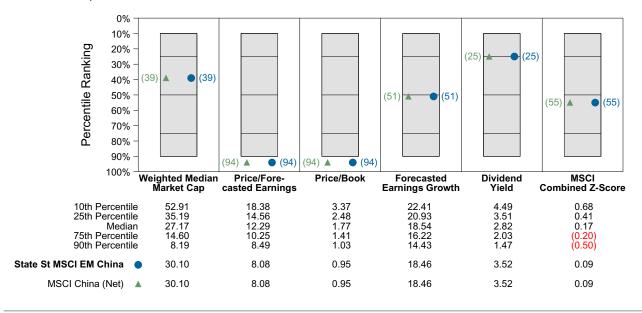


# State St MSCI EM China **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

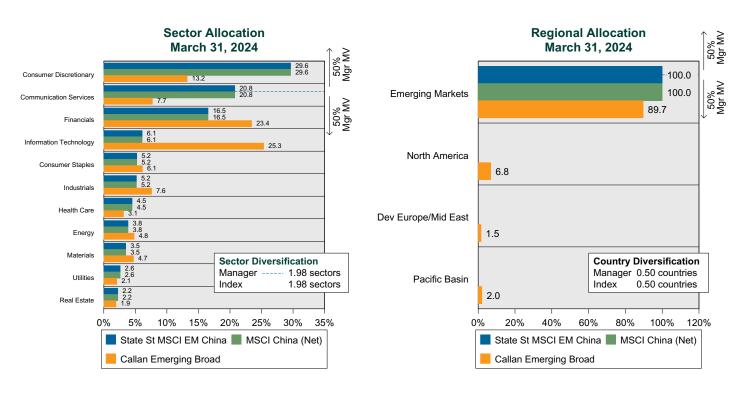
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2024



#### **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.

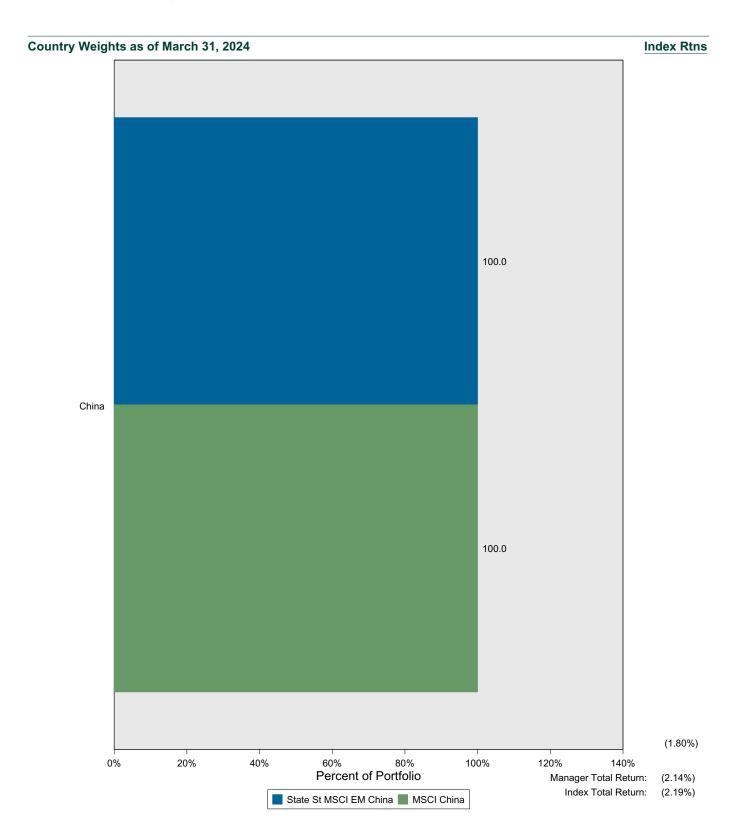




# **Country Allocation** State St MSCI EM China VS MSCI China (Net)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. 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.



# State St MSCI EM China Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$3,963,166	14.2%	1.48%	367.29	14.15	0.79%	20.87%
Alibaba Group Hldg Ltd Sponsored Ads	Consumer Discretionary	\$2,254,549	8.1%	(8.44)%	184.04	8.25	0.17%	8.32%
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$1,072,445	3.8%	(22.08)%	154.45	12.28	0.00%	26.58%
Meituan Dianping Hk/03690	Consumer Discretionary	\$968,759	3.5%	15.92%	69.69	16.36	0.00%	134.10%
China Construction Bank Shs H	Financials	\$894,916	3.2%	(0.45)%	144.99	3.17	9.95%	2.30%
Netease Inc Sponsored Adr	Communication Services	\$621,037	2.2%	10.00%	66.73	13.97	0.50%	24.92%
Bank of China Ltd Shs	Financials	\$505,898	1.8%	6.30%	34.51	3.82	7.26%	2.10%
Industrial and Comm Bk of Cn Hkd Shs	Financials	\$505,664	1.8%	1.15%	43.69	3.57	7.95%	4.83%
Jd Com Inc Spon Adr Cl A	Consumer Discretionary	\$498,466	1.8%	(7.02)%	38.51	7.47	2.76%	9.39%
Baidu Inc Spon Adr Rep A	Communication Services	\$456,676	1.6%	(13.30)%	30.01	9.30	0.00%	10.17%

## **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Suzhou Tfc Optc.Comm.'a'	Information Technology	\$7,617	0.0%	62.10%	8.26	48.56	0.33%	34.65%
China Molybdenum 'a'	Materials	\$18,742	0.1%	56.92%	20.34	16.91	1.02%	31.65%
China Molybdenum Co Ltd H	Materials	\$48,993	0.2%	52.74%	3.34	12.14	1.38%	22.80%
Zhejiang Lsh.Auto Parts 'a'	Industrials	\$6,130	0.0%	48.04%	6.65	59.42	0.60%	46.08%
Foxconn Industrial Internet A	Information Technology	\$38,451	0.1%	47.69%	62.58	16.41	2.40%	23.40%
Zhengzen Yutong Coach A	Industrials	\$5,610	0.0%	47.08%	6.09	18.71	5.01%	(15.67)%
Inner Mongolia Yitai B	Energy	\$31,311	0.1%	45.72%	5.59	13.26	14.76%	-
Zhejiang Zheneng Elec. Power 'a'	Utilities	\$9,504	0.0%	41.90%	12.37	10.34	0.00%	(12.44)%
Flat Glass Group H	Information Technology	\$16,031	0.1%	41.53%	1.09	11.20	1.35%	19.00%
Zhejiang Juhua Co. A	Materials	\$8,145	0.0%	40.72%	8.84	23.53	1.14%	3.85%

## **10 Worst Performers**

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Health Care	\$25,482	0.1%	(54.20)%	1.83	9.17	259.39%	14.95%
Health Care	\$108,041	0.4%	(52.62)%	7.78	11.42	0.00%	34.61%
Consumer Discretionary	\$93,881	0.3%	(51.34)%	8.69	(4.29)	0.00%	-
Consumer Discretionary	\$73,008	0.3%	(48.38)%	5.91	(7.39)	0.00%	-
Information Technology	\$56,152	0.2%	(44.70)%	5.60	19.19	0.55%	(18.95)%
Information Technology	\$2,195	0.0%	(42.71)%	2.38	(47.82)	0.00%	- '
Health Care	\$23,971	0.1%	(42.51)%	1.59	(8.02)	0.00%	-
Utilities	\$19,431	0.1%	(42.16)%	2.80	5.63	926.64%	5.22%
Health Care	\$21,856	0.1%	(41.75)%	2.58	5.36	7.28%	14.84%
Real Estate	\$12,043	0.0%	(39.01)%	1.73	(1.09)	0.00%	10.00%
	Health Care Health Care Consumer Discretionary Consumer Discretionary Information Technology Information Technology Health Care Utilities Health Care	Sector         Market Value           Health Care         \$25,482           Health Care         \$108,041           Consumer Discretionary         \$93,881           Consumer Discretionary         \$73,008           Information Technology         \$56,152           Information Technology         \$2,195           Health Care         \$23,971           Utilities         \$19,431           Health Care         \$21,856	Sector         Market Value         of Portfolio           Health Care         \$25,482         0.1%           Health Care         \$108,041         0.4%           Consumer Discretionary         \$93,881         0.3%           Consumer Discretionary         \$73,008         0.3%           Information Technology         \$56,152         0.2%           Information Technology         \$2,195         0.0%           Health Care         \$23,971         0.1%           Utilities         \$19,431         0.1%           Health Care         \$21,856         0.1%	Sector         Market Value         of Portfolio         Qtrly Return           Health Care         \$25,482         0.1%         (54.20)%           Health Care         \$108,041         0.4%         (52.62)%           Consumer Discretionary         \$93,881         0.3%         (51.34)%           Consumer Discretionary         \$73,008         0.3%         (48.38)%           Information Technology         \$56,152         0.2%         (44.70)%           Information Technology         \$2,195         0.0%         (42.71)%           Health Care         \$23,971         0.1%         (42.51)%           Utilities         \$19,431         0.1%         (42.16)%           Health Care         \$21,856         0.1%         (41.75)%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital           Health Care         \$25,482         0.1%         (54.20)%         1.83           Health Care         \$108,041         0.4%         (52.62)%         7.78           Consumer Discretionary         \$93,881         0.3%         (51.34)%         8.69           Consumer Discretionary         \$73,008         0.3%         (48.38)%         5.91           Information Technology         \$56,152         0.2%         (44.70)%         5.60           Information Technology         \$2,195         0.0%         (42.71)%         2.38           Health Care         \$23,971         0.1%         (42.51)%         1.59           Utilities         \$19,431         0.1%         (42.16)%         2.80           Health Care         \$21,856         0.1%         (41.75)%         2.58	Sector         Value         Portfolio Portfolio         Return         Capital Capital Portfolio         Return         Forecasted Earnings Ratio           Health Care         \$25,482         0.1%         (54.20)%         1.83         9.17           Health Care         \$108,041         0.4%         (52.62)%         7.78         11.42           Consumer Discretionary         \$93,881         0.3%         (51.34)%         8.69         (4.29)           Consumer Discretionary         \$73,008         0.3%         (48.38)%         5.91         (7.39)           Information Technology         \$56,152         0.2%         (44.70)%         5.60         19.19           Information Technology         \$2,195         0.0%         (42.71)%         2.38         (47.82)           Health Care         \$23,971         0.1%         (42.51)%         1.59         (8.02)           Utilities         \$19,431         0.1%         (42.16)%         2.80         5.63           Health Care         \$21,856         0.1%         (41.75)%         2.58         5.36	Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Health Care         \$25,482         0.1%         (54.20)%         1.83         9.17         259.39%           Health Care         \$108,041         0.4%         (52.62)%         7.78         11.42         0.00%           Consumer Discretionary         \$93,881         0.3%         (51.34)%         8.69         (4.29)         0.00%           Consumer Discretionary         \$73,008         0.3%         (48.38)%         5.91         (7.39)         0.00%           Information Technology         \$56,152         0.2%         (44.70)%         5.60         19.19         0.55%           Information Technology         \$2,195         0.0%         (42.71)%         2.38         (47.82)         0.00%           Health Care         \$23,971         0.1%         (42.51)%         1.59         (8.02)         0.00%           Utilities         \$19,431         0.1%         (42.16)%         2.80         5.63         926.64%           Health Care         \$21,856         0.1%         (41.75)%         2.58         5.36         7.28%

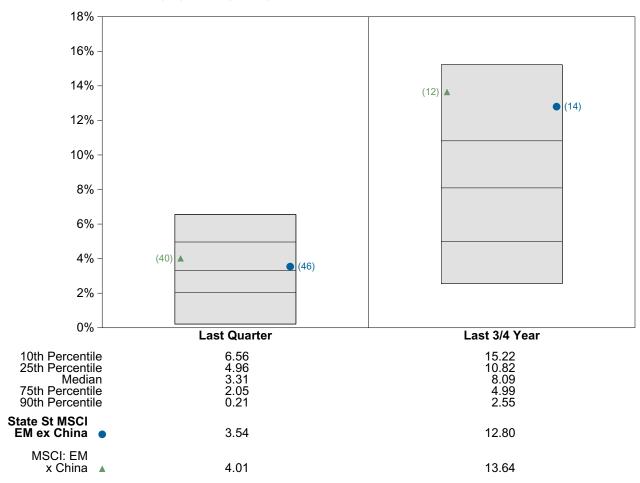


## State St MSCI EM ex China Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

- State St MSCI EM ex China's portfolio posted a 3.54% return for the quarter placing it in the 46 percentile of the Callan Emerging Broad group for the quarter and in the 14 percentile for the last three-quarter year.
- State St MSCI EM ex China's portfolio underperformed the MSCI: EM x China by 0.47% for the quarter and underperformed the MSCI: EM x China for the three-quarter year by 0.84%.

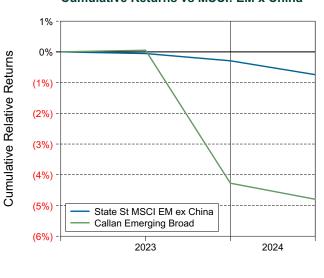
## Performance vs Callan Emerging Broad (Gross)



## Relative Return vs MSCI: EM x China

# 0.40% 0.30% 0.20% 0.10% Relative Returns 0.00% (0.10%)(0.20%)(0.30%)(0.40%)(0.50%)(0.60%)2023 2024 State St MSCI EM ex China

## Cumulative Returns vs MSCI: EM x China

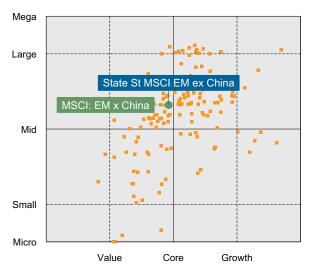




# **Current Holdings Based Style Analysis** State St MSCI EM ex China As of March 31, 2024

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.

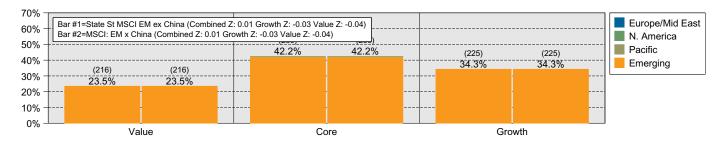
## Style Map vs Callan Emerging Broad Holdings as of March 31, 2024



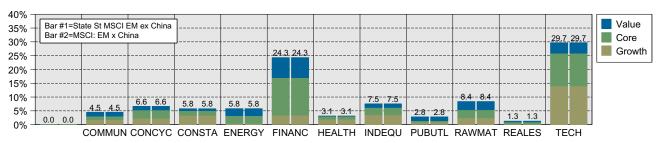
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	23.5% (216)	42.2% (230)	34.3% (225)	100.0% (671)
Total				
	23.5% (216)	42.2% (230)	34.3% (225)	100.0% (671)
	23.5% (216)	42.2% (229)	34.3% (225)	100.0% (670)
Emerging			, ,	, ,
	23.5% (216)	42.2% (229)	34.3% (225)	100.0% (670)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Pacific	3.3 /3 (3)	0.070 (0)	0.0 /0 (0)	0.0 /0 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
N. America	0.070 (0)	0.070 (.)	0.070 (0)	0.070 (.)
	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
Europe/ Mid East	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Europo/	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2024



## **Sector Weights Distribution** Holdings as of March 31, 2024



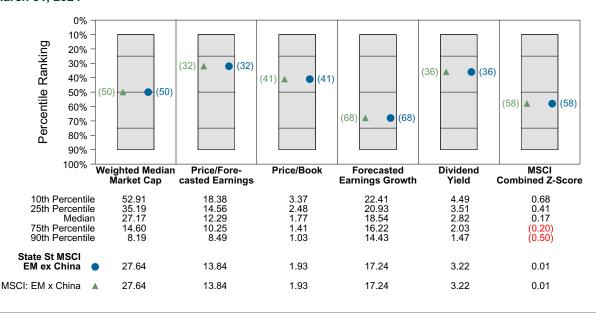


# State St MSCI EM ex China **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

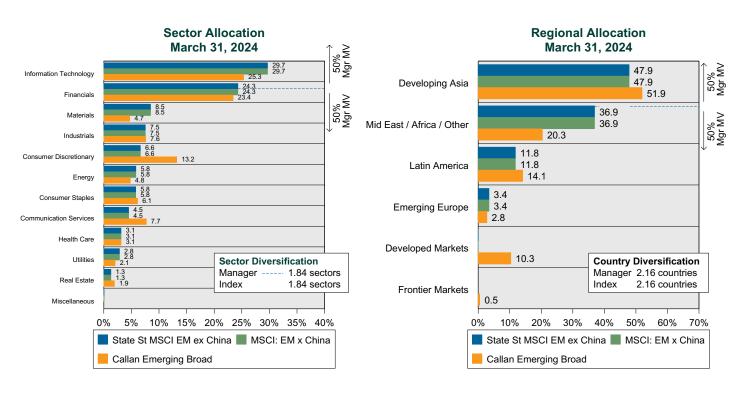
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2024



#### **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.

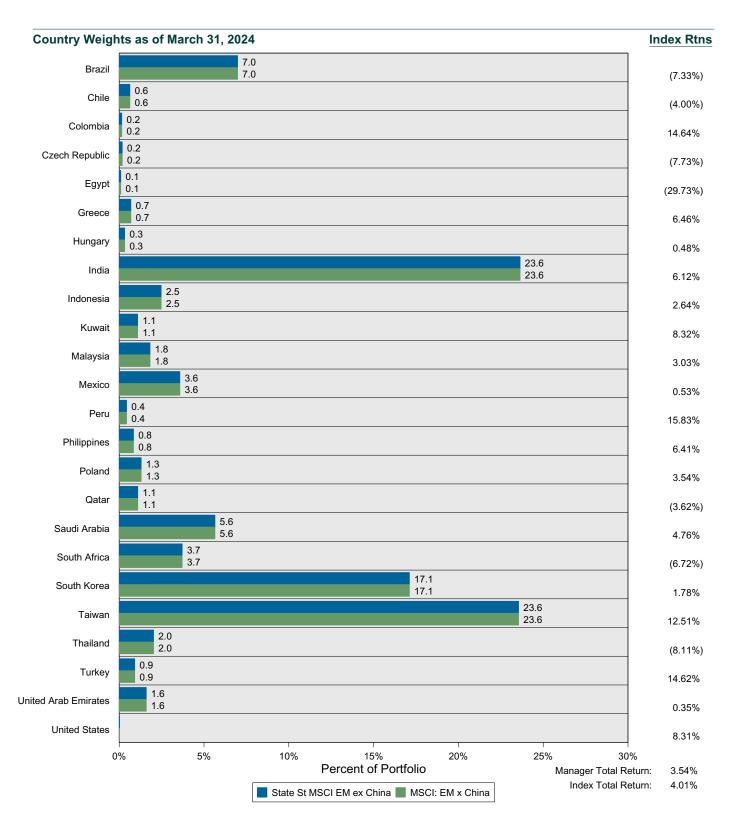




## **Country Allocation** State St MSCI EM ex China VS MSCI: EM x China

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. 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.





# State St MSCI EM ex China Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Taiwan Semicond Manufac Co L Shs	Information Technology	\$9,591,639	11.1%	26.55%	631.29	19.14	1.67%	11.74%
Samsung Electronics Co Ltd Ord	Information Technology	\$4,675,647	5.4%	0.88%	365.39	16.40	1.75%	54.00%
Reliance Industries Ltd Shs Demateri	Energy	\$1,735,169	2.0%	14.70%	241.07	24.06	0.30%	17.60%
Sk Hynix Inc Shs	Information Technology	\$1,187,166	1.4%	23.97%	98.96	12.27	0.66%	4.00%
Icici Bank Limited Shs Dematerial	Financials	\$1,088,499	1.3%	9.45%	92.05	17.72	0.76%	52.00%
Infosys Technologies	Information Technology	\$953,948	1.1%	(3.13)%	74.35	22.37	2.37%	12.18%
Hon Hai Precision Inds Ltd Ord	Information Technology	\$935,374	1.1%	37.65%	64.98	12.61	3.53%	11.22%
Media Tek Incorporation Shs	Information Technology	\$907,633	1.1%	15.90%	59.73	18.94	4.60%	9.00%
H D F C Bank Ltd Shs	Financials	\$780,077	0.9%	(15.48)%	131.89	15.23	1.32%	14.30%
Al-Rajhi Bkg.&inv.	Financials	\$694,640	0.8%	(3.58)%	87.77	17.82	2.78%	3.80%

## **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Hanmi Semiconductor	Information Technology	\$69,582	0.1%	108.16%	9.67	98.33	0.31%	(11.16)%
Kukje Precision	Health Care	\$146,636	0.2%	107.28%	10.22	(72.82)	0.00%	-
Samsung Techwin Co	Industrials	\$86,112	0.1%	59.41%	7.69	16.79	0.88%	5.00%
Cummins India (Kirloskar	Industrials	\$79,910	0.1%	53.78%	9.99	50.35	1.03%	28.67%
Jio Financial Services Limited	Financials	\$193,964	0.2%	51.52%	26.95	706.67	0.00%	-
Saudi Resh.& Mktg.Gp.	Communication Services	\$44,218	0.1%	51.21%	5.53	26.18	0.00%	133.45%
Savola Group	Consumer Staples	\$63,048	0.1%	50.31%	8.02	30.76	1.17%	25.37%
Ytl Power International Bhd Shs	Utilities	\$32,010	0.0%	47.92%	6.67	10.35	1.55%	(17.93)%
Zomato	Consumer Discretionary	\$212,954	0.2%	46.88%	18.94	114.74	0.00%	-
Sk Square Co Ltd Common Stock Krw500	Industrials	\$91,316	0.1%	43.69%	8.16	9.93	0.00%	-

## **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Eastern Tobacco	Consumer Staples	\$9,430	0.0%	(41.74)%	1.19	6.21	14.65%	36.49%
Posdata Company	Information Technology	\$30,916	0.0%	(36.82)%	5.52	110.06	0.20%	6.00%
One 97 Communications	Financials	\$19,617	0.0%	(36.77)%	3.07	(73.18)	0.00%	-
Silergy	Information Technology	\$53,536	0.1%	(36.71)%	3.94	41.16	0.60%	(2.14)%
Ecopro Materials	Materials	\$21,442	0.0%	(33.62)%	6.70	(97160.00)	0.00%	-
Pepco Group	Consumer Discretionary	\$12,477	0.0%	(31.89)%	2.60	11.42	0.00%	-
Global Unichip	Information Technology	\$58,372	0.1%	(31.38)%	5.21	41.47	1.12%	27.80%
Barito Pacific Timber	Materials	\$26,812	0.0%	(31.00)%	5.59	-	0.00%	(32.73)%
Commercial InternationI Bk L Shs	Financials	\$68,439	0.1%	(30.87)%	4.90	5.36	0.62%	22.45%
Hanwha Chemical Corp	Materials	\$37,635	0.0%	(30.80)%	3.62	14.61	1.06%	(45.02)%



## **Investment Manager Returns**

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2024. 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 March 31, 2024

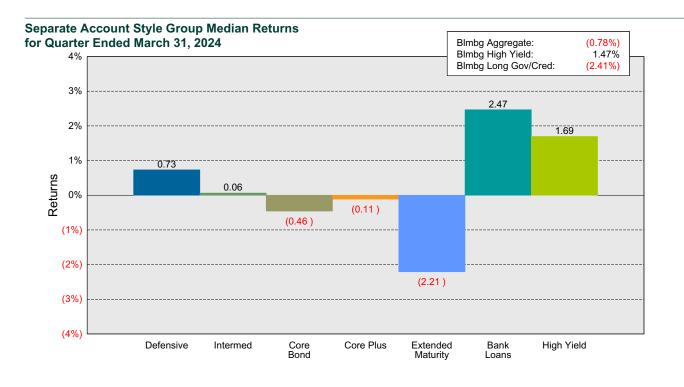
	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 23-1/4 Years
Private Equity	1.44%	5.24%	14.74%	14.95%	5.04%
Total ASP (Brinson) Fds 1998-2003	1.55%	67.25%	14.32%	9.88%	-
Total ASP (Brinson) Non-US 1999-2004	1 2.23%	3.64%	11.39%	8.21%	-
Adams St 2008 Non-US P-ship Fd	2.86%	(0.02%)	0.93%	9.13%	-
Adams St Direct Co-Invest Fund 2006	0.00%	2.17%	3.48%	(16.19%)	-
Total Adams Street 2010 Funds	0.37%	(5.28%)	3.61%	13.25%	-
Adams Street 2015 Global Fund	2.82%	1.08%	8.92%	16.56%	-
Adams Street 2016 Global Fund	1.79%	0.89%	13.06%	16.20%	-
Adams Street 2017 Global Fund	1.13%	1.05%	16.31%	17.86%	-
Adams Street 2018 Global Fund	2.21%	2.99%	16.71%	19.95%	-
Adams Street 2019 Global Fund	2.20%	2.48%	18.99%	-	-
Adams Street 2020 Global Fund	3.10%	3.93%	24.21%	-	-
Adams Street 2021 Global Fund	2.56%	6.45%	-	-	-
BlackRock PEP	0.00%	5.34%	19.43%	16.07%	-
Blackrock PEP 2020	0.00%	9.31%	10.36%	-	-
Sixth Street Partners - TAO	3.05%	13.29%	9.89%	-	-
Remaining Misc. Funds*	(1.11%)	0.31%	(4.36%)	(0.97%)	-
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	8.27%
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	8.01%

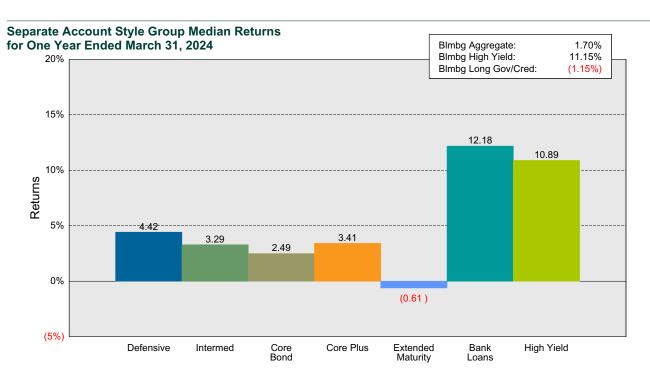
<sup>\*</sup> Comprised of Matlin Patterson II, Matlin Patterson III, InvestAmerica Lewis & Clark, InvestAmerica L&C II, Corsair III, Capital Intl Fd V, Capital Intl Fd VI, EIG, Quantum Energy Partners, Hearthstone MSII, Hearthstone MSIII.



# **Domestic Fixed Income Active Management Overview**

Bond yields rose modestly in 1Q as expectations dwindled for aggressive rate cuts amid stubbornly high inflation. The U.S. Treasury 10-year yield rose from 3.88% as of year-end 2023 to 4.20% at the end of 1Q 2024. The Bloomberg US Aggregate Bond Index fell 0.8% for the quarter. Ten-year breakeven spreads, a measure of the markets expectation for inflation over the next decade, rose from 2.16% to 2.32%. Investment grade corporate bonds outperformed U.S. Treasuries by 89 bps on a duration-adjusted basis, fueled by strong demand that easily absorbed record supply for a first quarter and the second largest quarterly issuance ever. High yield corporates (Bloomberg HY: +1.5%) outperformed the investment grade market and leveraged loans performed even better (CS Leveraged Loan: +2.3%).





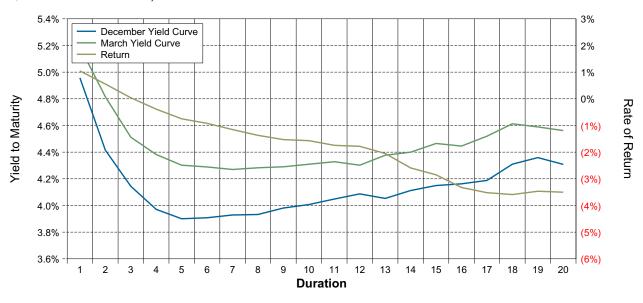


## **Bond Market Environment**

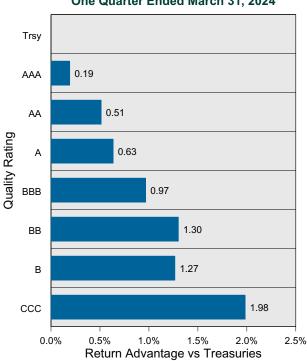
#### **Factors Influencing Bond Returns**

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.

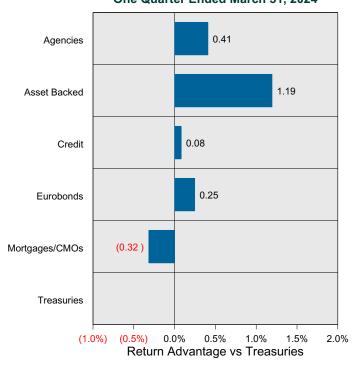
#### Yield Curve Change and Rate of Return One Quarter Ended March 31, 2024



**Duration Adjusted Return Premium to Quality** One Quarter Ended March 31, 2024



**Quality and Duration Adjusted Return Premium by Sector** One Quarter Ended March 31, 2024



## **Domestic Fixed Income** Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

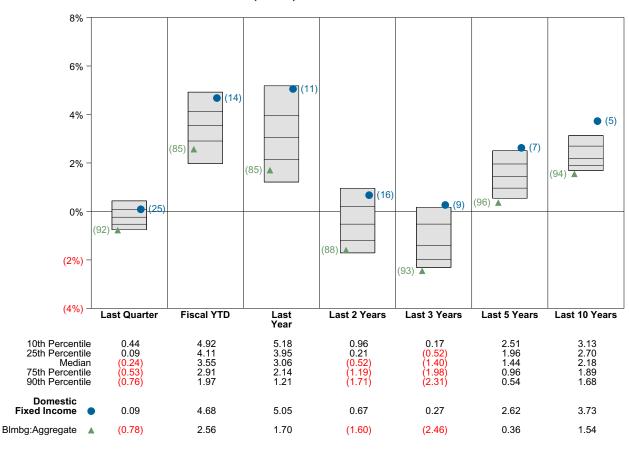
- Domestic Fixed Income's portfolio posted a 0.09% return for the quarter placing it in the 25 percentile of the Public Fund -Domestic Fixed group for the quarter and in the 11 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Blmbg:Aggregate by 0.86% for the quarter outperformed the Blmbg:Aggregate for the year by 3.36%.

#### **Quarterly Asset Growth**

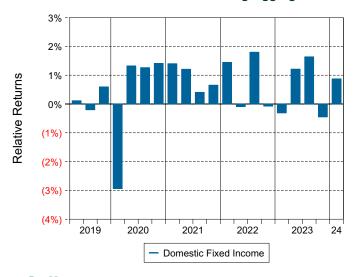
Beginning Market Value \$1,845,646,434 Net New Investment \$83,744,481 Investment Gains/(Losses) \$2,252,971

**Ending Market Value** \$1,931,643,887

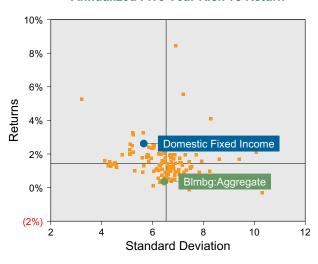
#### Performance vs Public Fund - Domestic Fixed (Gross)



#### Relative Return vs Blmbg:Aggregate



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



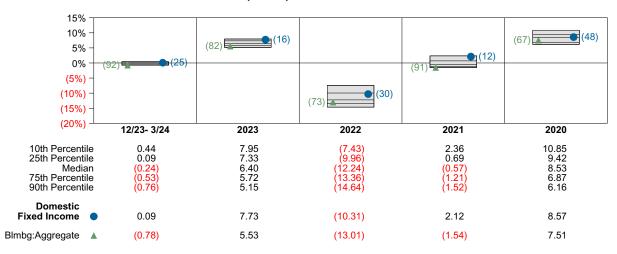


# **Domestic Fixed Income Return Analysis Summary**

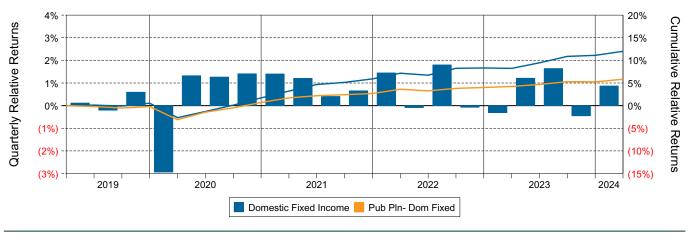
#### **Return Analysis**

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.

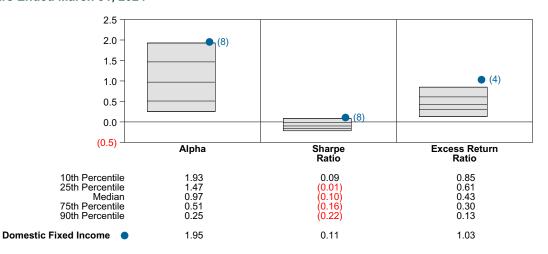
#### Performance vs Public Fund - Domestic Fixed (Gross)



## 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 March 31, 2024



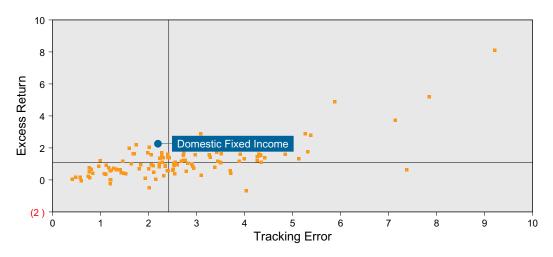


# **Domestic Fixed Income Risk Analysis Summary**

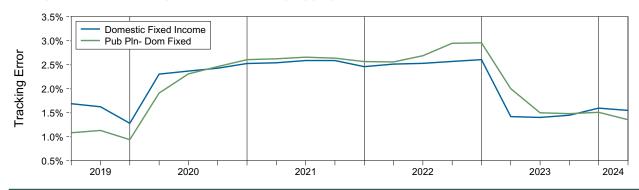
#### Risk Analysis

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.

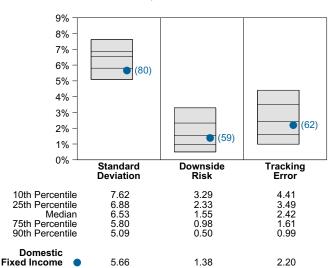
## Risk Analysis vs Public Fund - Domestic Fixed (Gross) Five Years Ended March 31, 2024

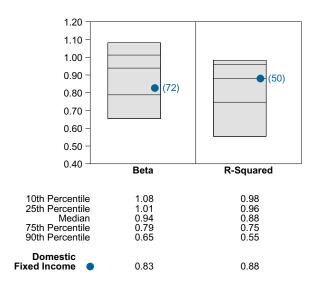


Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended March 31, 2024





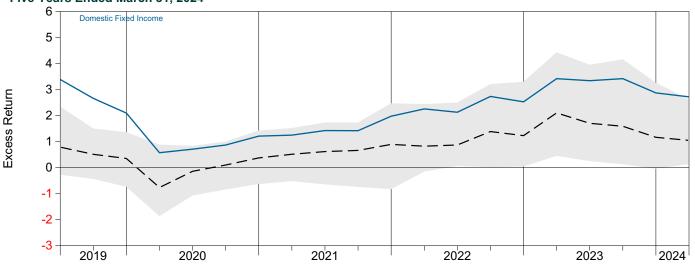


# **Domestic Fixed Income Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

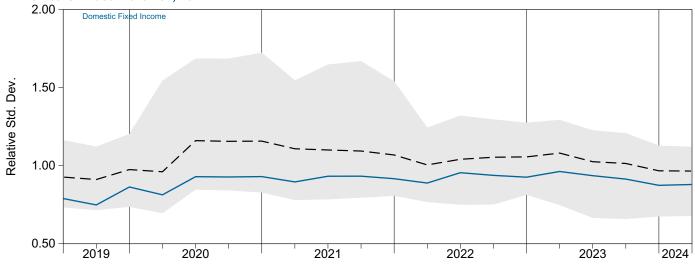
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Pub Pln- Dom Fixed. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

## Rolling Three Year Excess Return Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.79%	2.15%
% Positive Periods	90%	100%
Average Ranking	50	15

## Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.04%	0.90%
% Positive Periods	100%	100%
Average Ranking	50	76

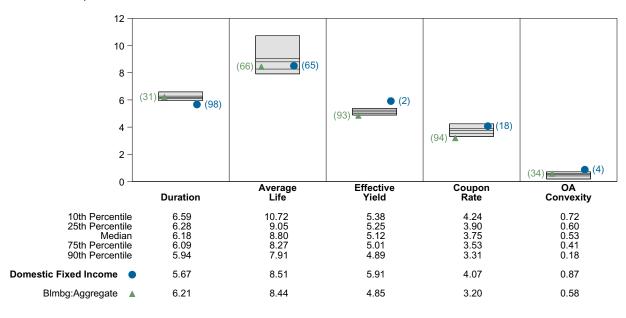


# **Domestic Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

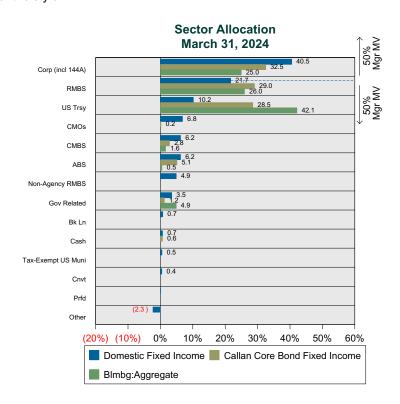
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

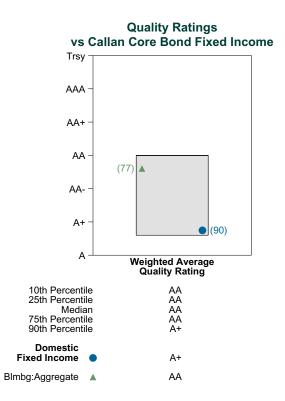
## **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of March 31, 2024



#### **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.



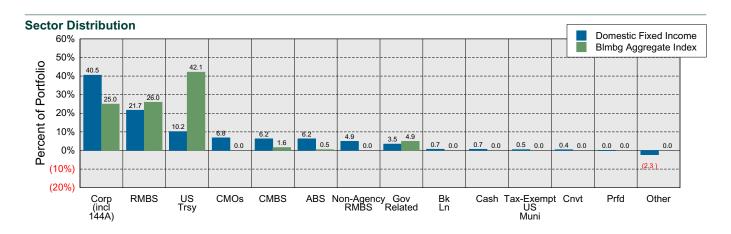


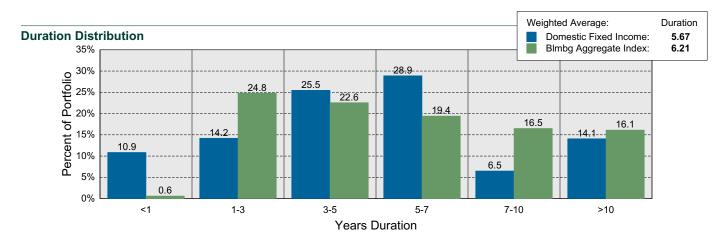


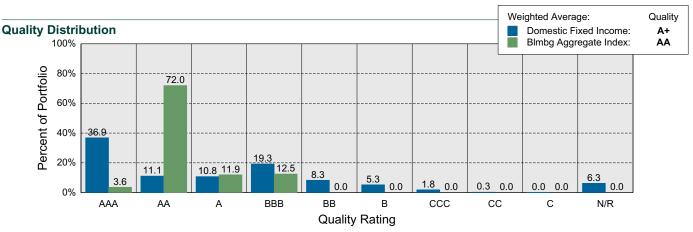
# **Domestic Fixed Income Portfolio Characteristics Summary** As of March 31, 2024

# **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.

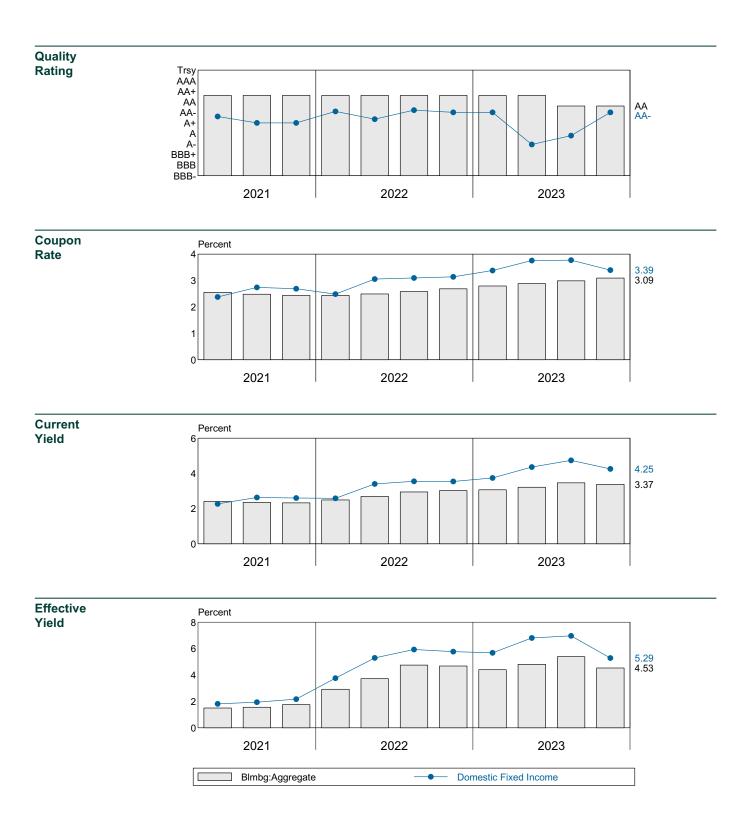






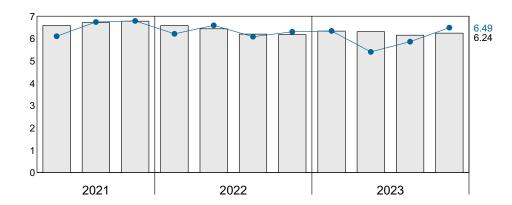


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

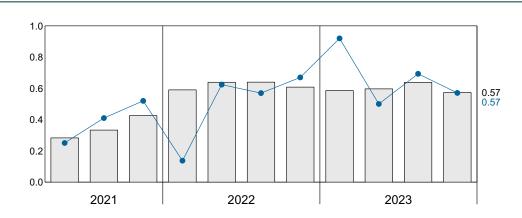


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

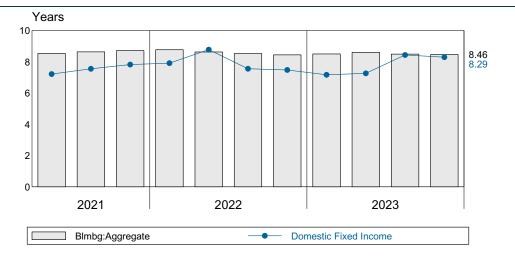
### **Duration**



### OA Convexity

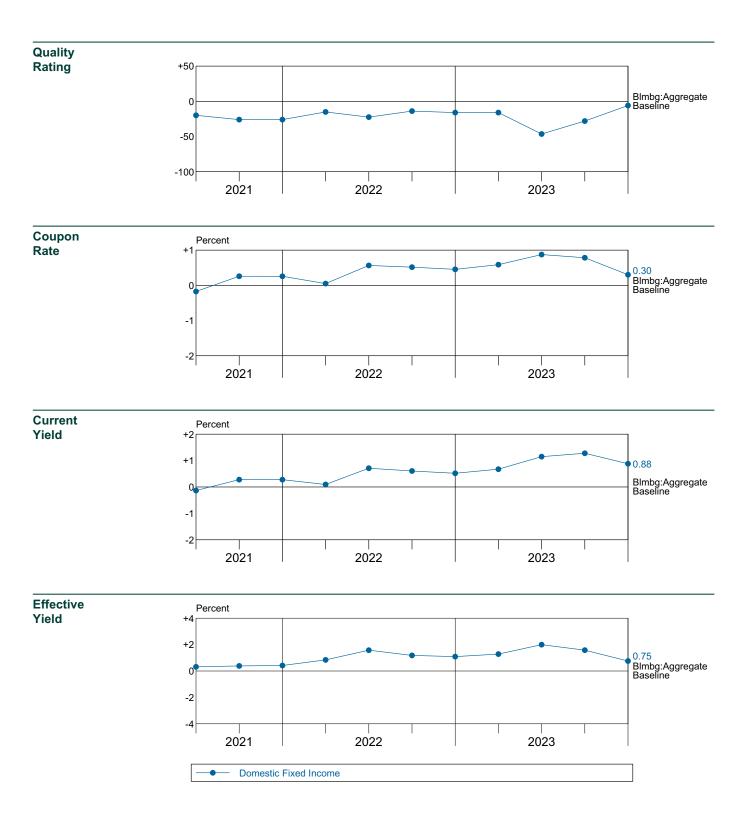


# Average Life



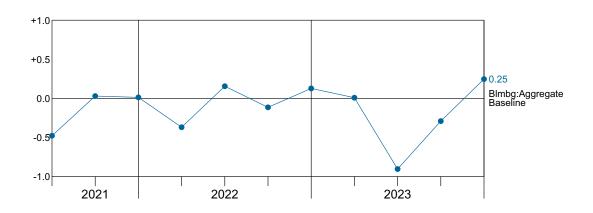


# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024

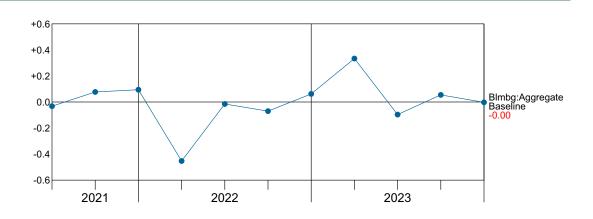


# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024

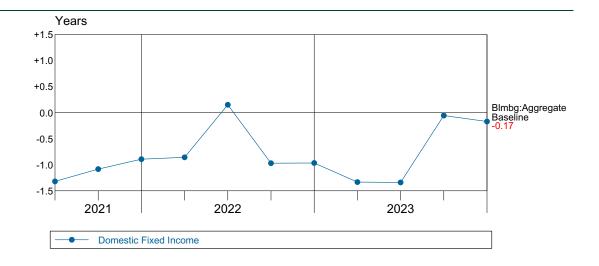




### OA Convexity



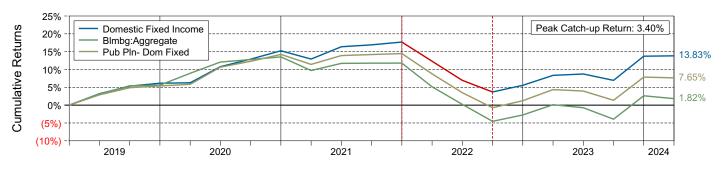
# Average Life



# **Domestic Fixed Income** Drawdown Analysis for Five Years Ended March 31, 2024

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**



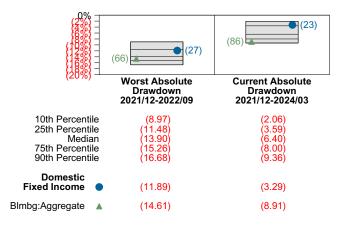
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Domestic Fixed Income	(11.89)%	0.75	2021/12-2022/09	(14.61)%	(13.28)%	(3.29)%	2.25	2021/12-2024/03	(8.91)%	(5.95)%
Recovery from Trough	9.77%	1.50+	2022/09-2024/03	6.67%	8.45%	9.77%	1.50+	2022/09-2024/03	6.67%	8.45%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.32)%	3.25	2020/12-2024/03		
Pub Pln- Dom Fixed	(13.28)%	0.75	2021/12-2022/09			(5.95)%	2.25	2021/12-2024/03		

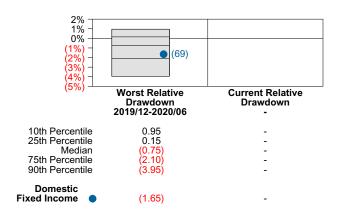
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate **Sumulative Relative Returns** 14% 12% Domestic Fixed Income 11 79% 10% Pub Pln- Dom Fixed 8% 6% 5.72% 4% 2% 0% (2%) (4%) (6%)2019 2021 2022 2023 2024 2020

		vorst Kei	ative Drawdown		Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Domestic Fixed Income	(1.65)%	0.50	2019/12-2020/06	(1.08)%	-	-	-	-	
Recovery from Trough	2.69%	0.50	2020/06-2020/12	1.92%	-	-	-	-	
Pub Pln- Dom Fixed	(2.85)%	1.00	2019/03-2020/03		-	-	-		

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Public Fund - Domestic Fixed Five Years Ended March 31, 2024





Current Absolute Drawdown



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

### Average Bond Characteristics for 3 Years Ended March 31, 2024 **VS THE Pub Pln- Dom Fixed Peer Group**

(11)	Domestic Fixed Income	A+	3.08%	3.42%	4.67%	6.26	0.53	7.77
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

		Return Correlations for 3 Years Ended March 31, 2024 Imbg:Aggregate
(12)	Domestic Fixed	1.00
	Income	
		Domestic
		Fixed

Income



### **PIMCO Core Plus Constrained** Period Ended March 31, 2024

#### **Investment Philosophy**

PIMCO's investment process utilizes both "top-down" and "bottom-up" strategies. Top-down strategies focus on duration, yield curve postioning, volatility, and sector rotation. These stretegies are deployed from a macro view of the portfolio driven by their secular outlook of the forces likely to influence the economy and financial markets over the next three to five years and their cyclical views of two- to four-quarter trends. Implementation in portfolios is effected by selecting securities that achieve the designated objectives. Bottom-up strategies drive their security selection process and facilitate the indentification and analysis of undervalued securities. The product changed from Commingled Fund to Separate Account in March 2014. \*Libor-3 month through February 28, 2017; Fund's performance through March 31, 2014; Libor-3 month through June 30, 2018; Bloomberg Aggregate thereafter.

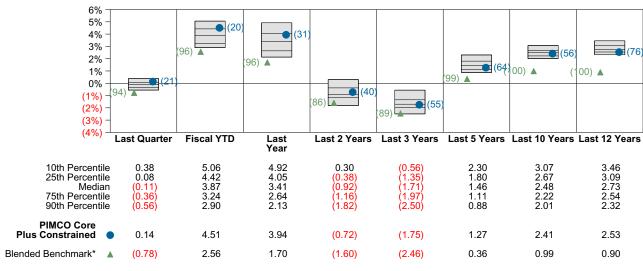
### **Quarterly Summary and Highlights**

- PIMCO Core Plus Constrained's portfolio posted a 0.14% return for the quarter placing it in the 21 percentile of the Callan Core Plus Fixed Income group for the guarter and in the 31 percentile for the last year.
- PIMCO Core Plus Constrained's portfolio outperformed the Blended Benchmark\* by 0.91% for the quarter and outperformed the Blended Benchmark\* for the year by 2.25%.

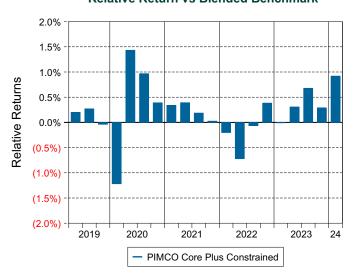
### **Quarterly Asset Growth**

Beginning Market Value	\$302,026,616
Net New Investment	\$6,771,506
Investment Gains/(Losses)	\$504,314
Ending Market Value	\$309,302,435

### Performance vs Callan Core Plus Fixed Income (Gross)



### Relative Return vs Blended Benchmark\*



### Callan Core Plus Fixed Income (Gross) Annualized Five Year Risk vs Return



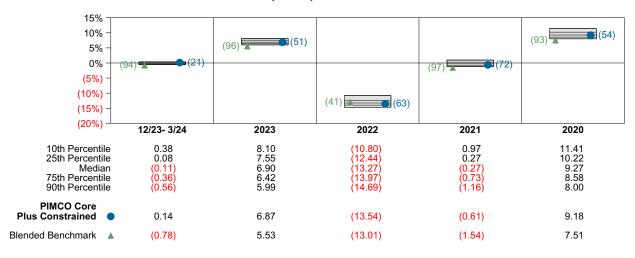


# **PIMCO Core Plus Constrained Return Analysis Summary**

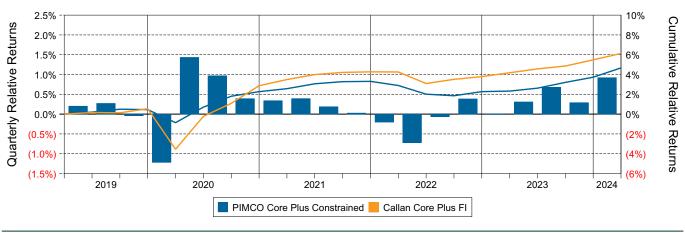
### **Return Analysis**

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.

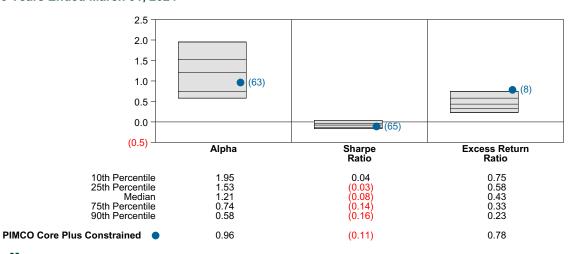
### Performance vs Callan Core Plus Fixed Income (Gross)



### **Cumulative and Quarterly Relative Returns vs Blended Benchmark**



Risk Adjusted Return Measures vs Blended Benchmark Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



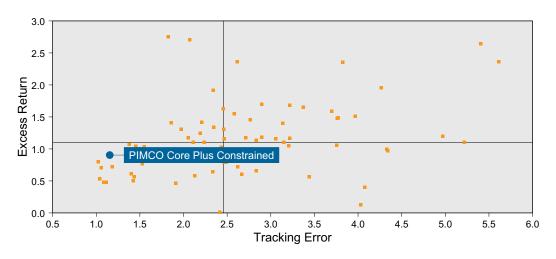


# **PIMCO Core Plus Constrained Risk Analysis Summary**

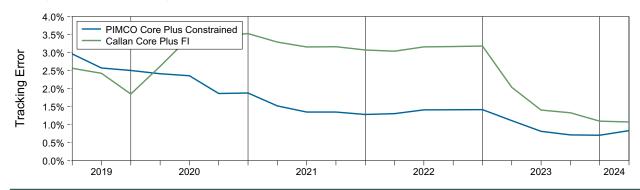
#### **Risk Analysis**

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.

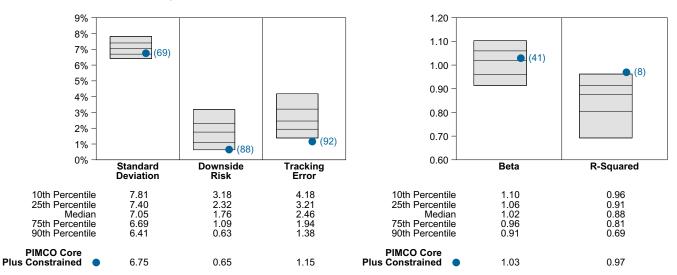
### Risk Analysis vs Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



### Rolling 12 Quarter Tracking Error vs Blended Benchmark



Risk Statistics Rankings vs Blended Benchmark Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



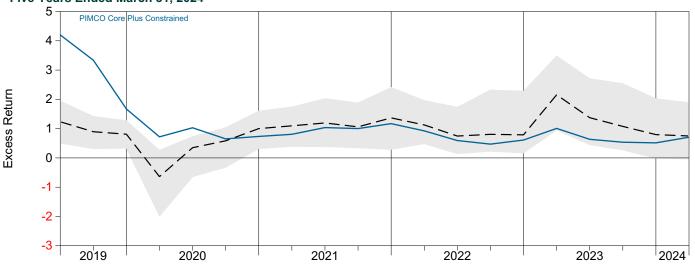


# **PIMCO Core Plus Constrained Historical Consistency Analysis**

### Consistency of Excess Return and Relative Std. Dev.

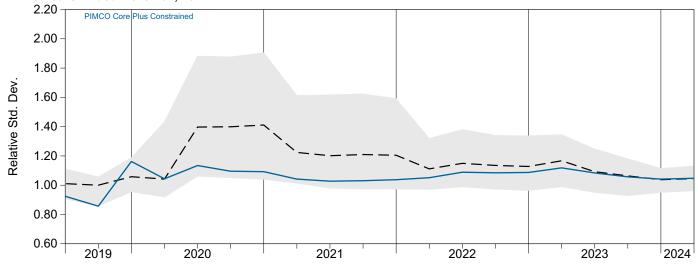
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

### Rolling Three Year Excess Return Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.93%	1.12%
% Positive Periods	95%	100%
Average Ranking	50	51

### Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.15%	1.06%
% Positive Periods	100%	100%
Average Ranking	50	68

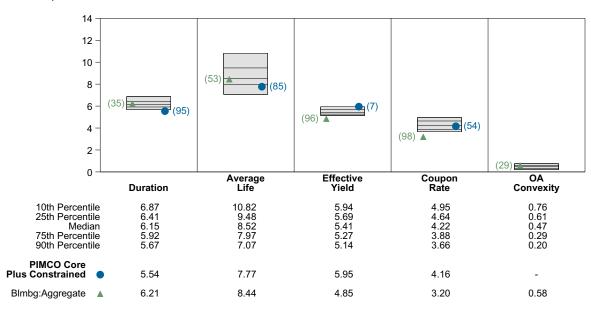


# **PIMCO Core Plus Constrained Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

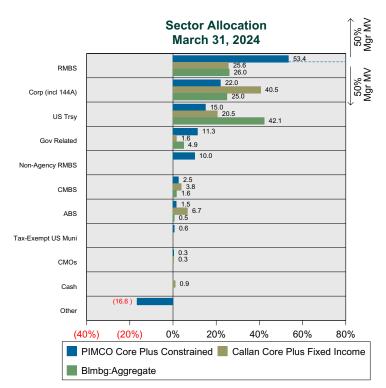
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

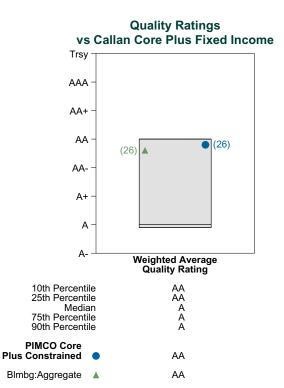
### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of March 31, 2024



### **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.



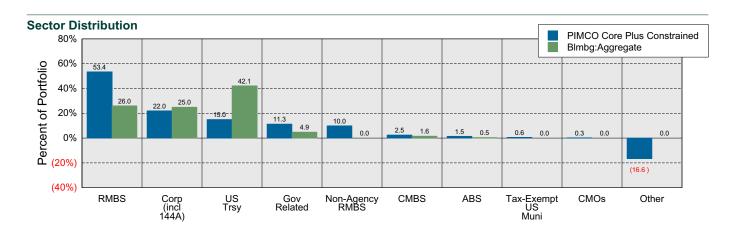


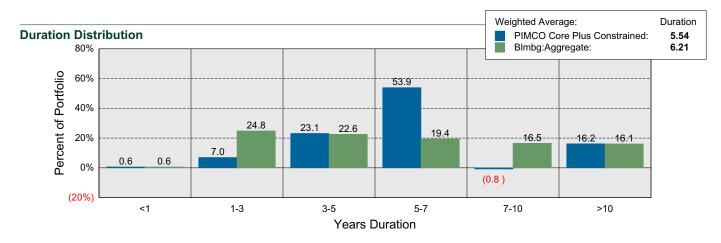


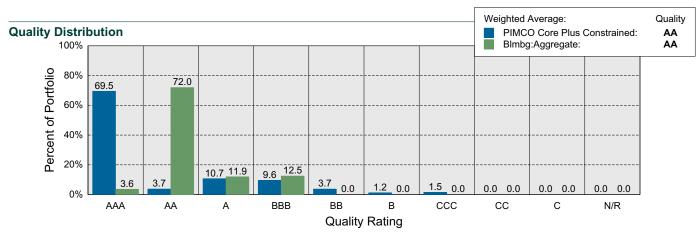
# **PIMCO Core Plus Constrained Portfolio Characteristics Summary** As of March 31, 2024

# **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.

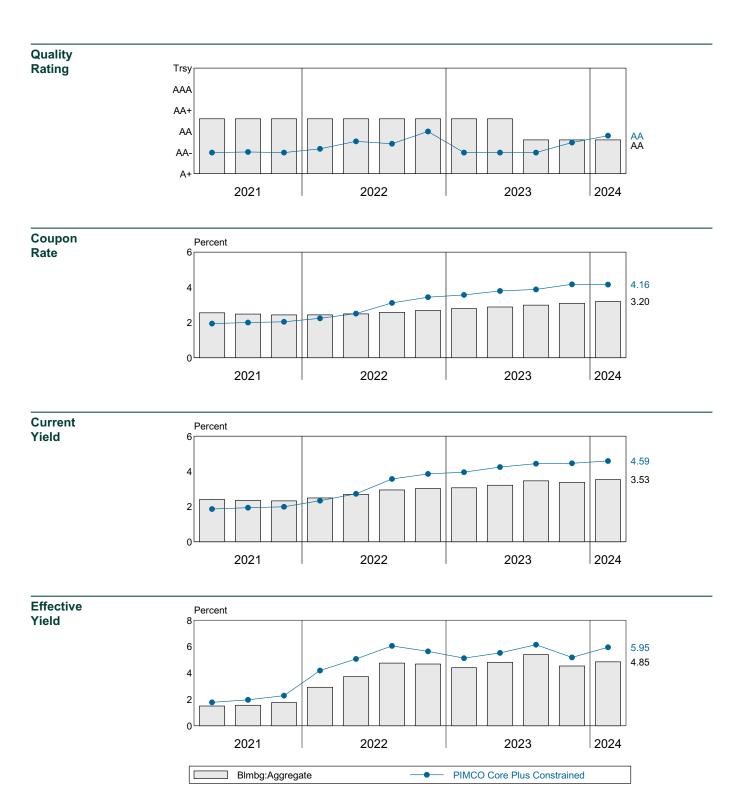






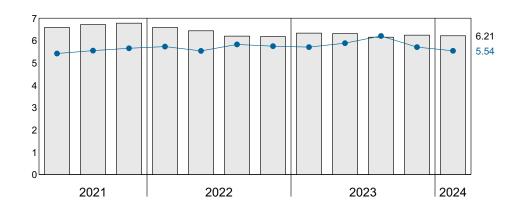


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

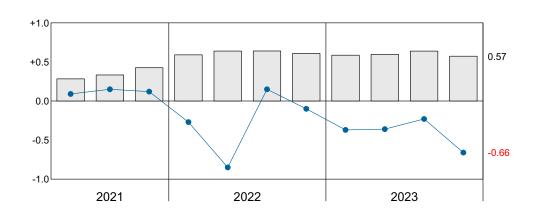


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

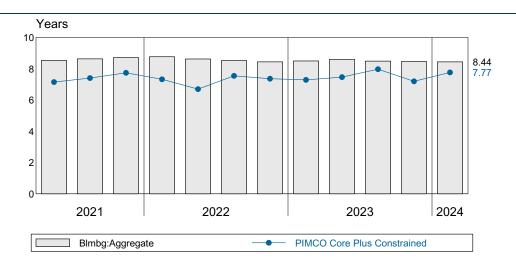
### **Duration**



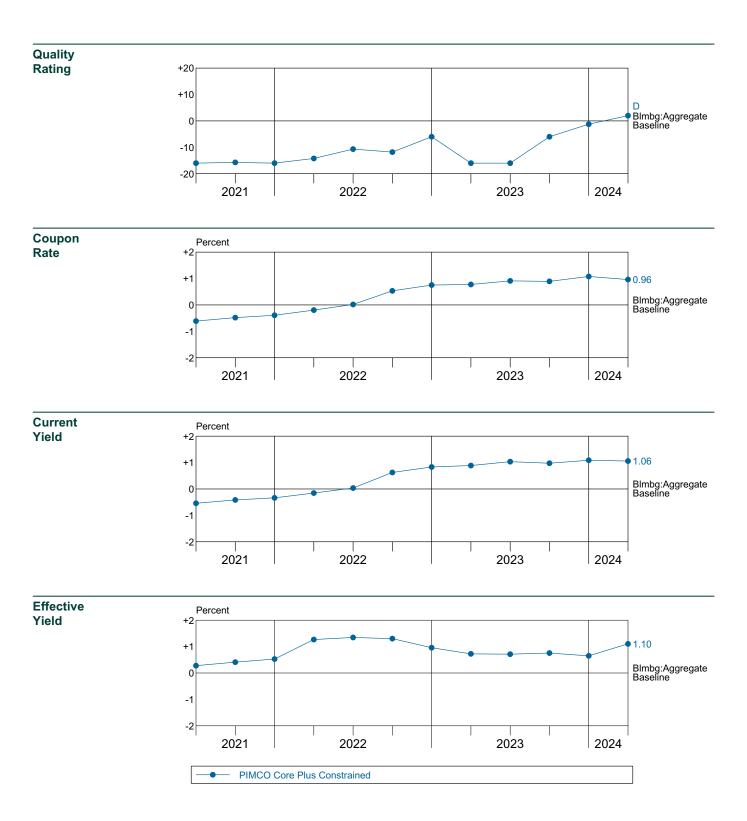
### OA Convexity



### **Average** Life

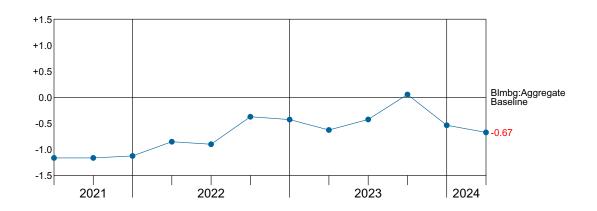


# North Dakota State Investment Board Pension Funds **Consistency of Fixed Income Characteristics** Period March 31, 2024

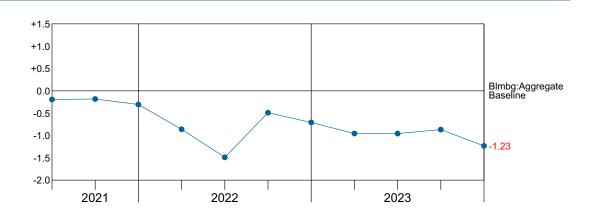


# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024

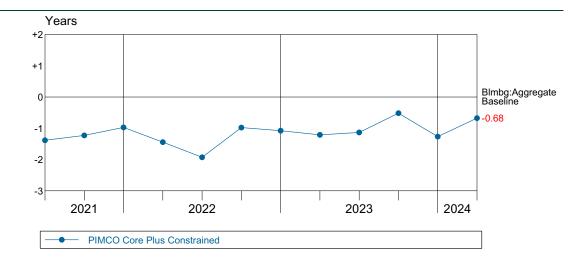




### OA Convexity



# Average Life

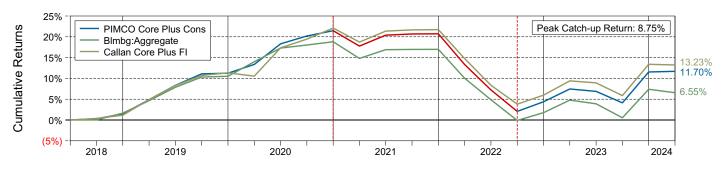




# **PIMCO Core Plus Cons** Drawdown Analysis for Five and Three-Quarter Years Ended March 31, 2024

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**

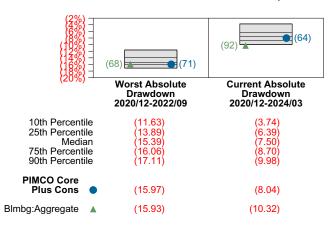


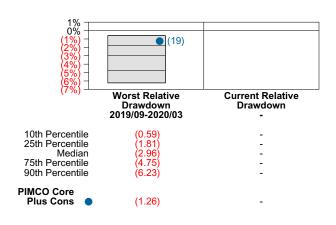
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
PIMCO Core Plus Cons	(15.97)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(8.04)%	3.25	2020/12-2024/03	(10.32)%	(7.26)%
Recovery from Trough	9.44%	1.50+	2022/09-2024/03	6.67%	9.08%	9.44%	1.50+	2022/09-2024/03	6.67%	9.08%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.32)%	3.25	2020/12-2024/03		
Callan Core Plus FI	(14.98)%	1.75	2020/12-2022/09			(7.26)%	3.25	2020/12-2024/03		

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns PIMCO Core Plus Cons 6.27% Callan Core Plus FI 4.83% 2% (4%)(6%)2018 2019 2021 2024 2020 2022 2023

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
PIMCO Core Plus Cons	(1.26)%	0.50	2019/09-2020/03	(3.37)%	-	-	-	-	
Recovery from Trough	1.43%	0.25	2020/03-2020/06	3.16%	-	-	-	-	
Callan Core Plus FI	(0.71)%	0.50	2019/12-2020/06		-	-	-		

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Callan Core Plus Fixed Income Five and Three-Quarter Years Ended March 31, 2024







# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

### Average Bond Characteristics for 3 Years Ended March 31, 2024 **VS THE Callan Core Plus FI Peer Group**

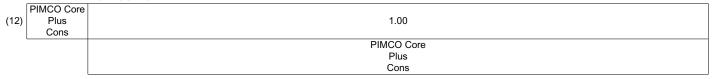
(7)	PIMCO Core Plus	AA-	2.45%	2.62%	4.27%	5.63	(0.22)	7.26
	Cons	(27)	(93)	(94)	(47)	(82)	(90)	(90)
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

### Excess Return Correlations for 3 Years Ended March 31, 2024 vs the Blmbg:Aggregate





### **Prudential Core** Period Ended March 31, 2024

#### **Investment Philosophy**

The PGIM Fixed Income Core Fixed Income strategy seeks to provide +60 bps over the Bloomberg Barclays Aggregate Index over a market cycle. The strategy tends to generate its excess return from fairly equal increments of both sector allocation and subsector/security allocation. Duration and yield curve positioning is generally de-emphasized, but will be considered when market opportunities dictate. The primary way they add value is through intensive research-based sector, industry, and security selection. The strategy is predominately investment grade, but may also invest nominally in crossover/high yield bonds and emerging markets debt, when guidelines permit.

### **Quarterly Summary and Highlights**

- Prudential Core's portfolio posted a (0.38)% return for the quarter placing it in the 39 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 12 percentile for the last year.
- Prudential Core's portfolio outperformed the Blmbg:Aggregate by 0.39% for the quarter and outperformed the Blmbg:Aggregate for the year by 1.53%.

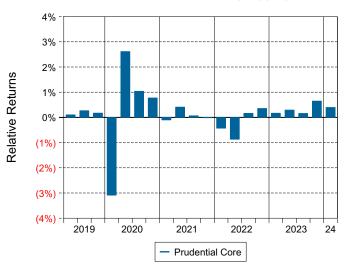
### **Quarterly Asset Growth**

Beginning Market Value	\$302,540,058
Net New Investment	\$7,252,119
Investment Gains/(Losses)	\$-1,076,749
Ending Market Value	\$308,715,428

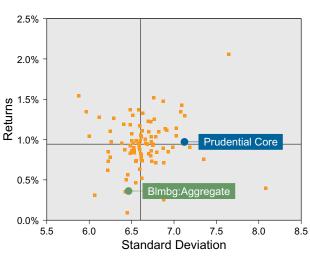
### Performance vs Callan Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



### Callan Core Bond Fixed Income (Gross) Annualized Five Year Risk vs Return



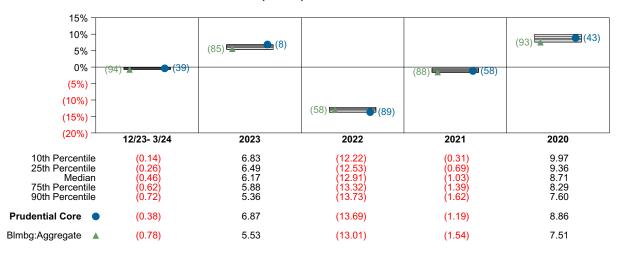


# **Prudential Core Return Analysis Summary**

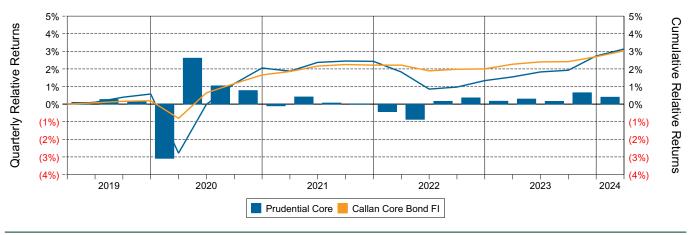
### **Return Analysis**

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.

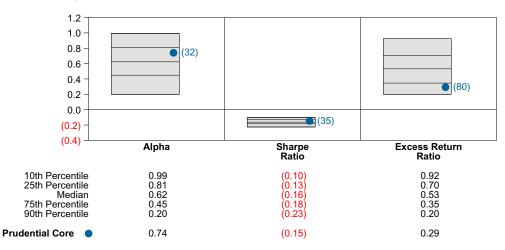
### Performance vs Callan Core Bond Fixed Income (Gross)



### 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 March 31, 2024



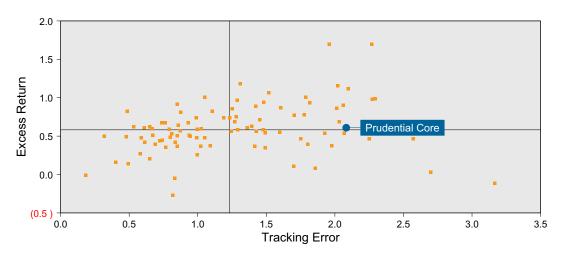


# **Prudential Core Risk Analysis Summary**

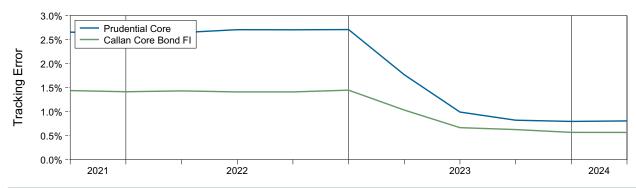
#### **Risk Analysis**

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.

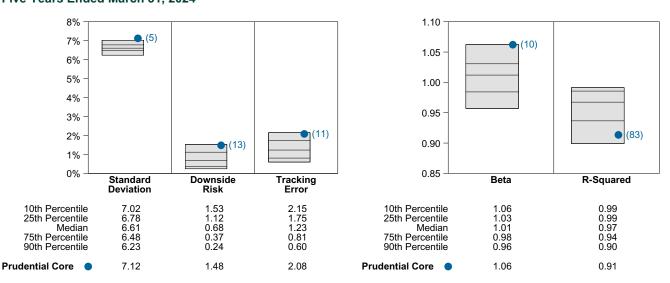
### Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2024



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 March 31, 2024

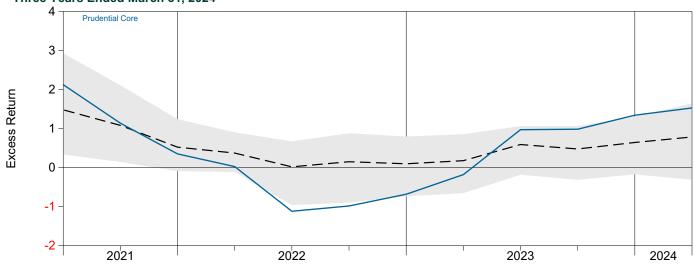


# **Prudential Core Historical Consistency Analysis**

### Consistency of Excess Return and Relative Std. Dev.

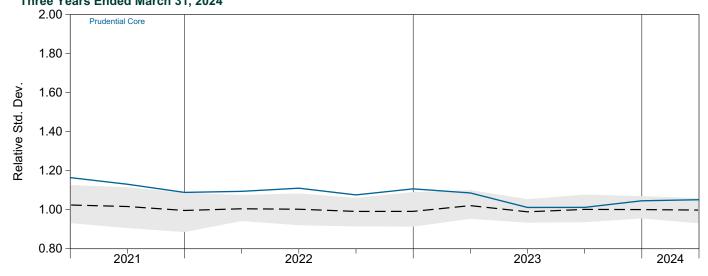
The first chart below illustrates the consistency of excess return over rolling one year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Bond FI. The second chart below illustrates the consistency of relative std. dev. over rolling one year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

### Rolling One Year Excess Return Relative to Blmbg:Aggregate Three Years Ended March 31, 2024



Median	Portfolio
0.53%	0.46%
100%	67%
50	52
	0.53% 100%

### Rolling One Year Relative Std. Dev. Relative to Blmbg:Aggregate Three Years Ended March 31, 2024



Rolling One Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.00%	1.08%
% Positive Periods	100%	100%
Average Ranking	50	13

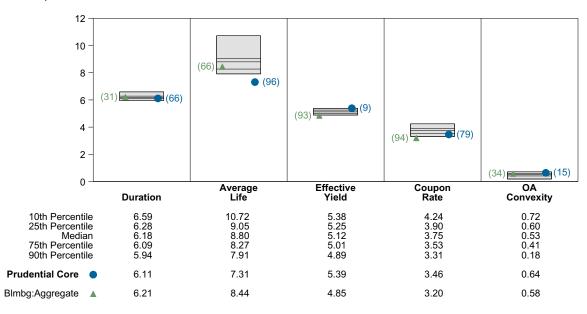


# **Prudential Core Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

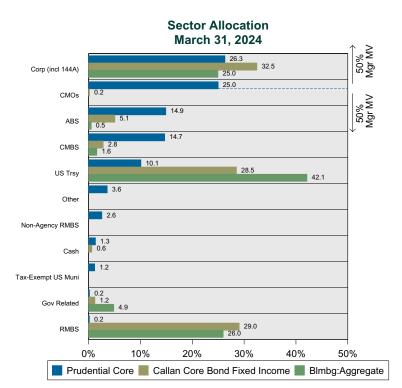
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

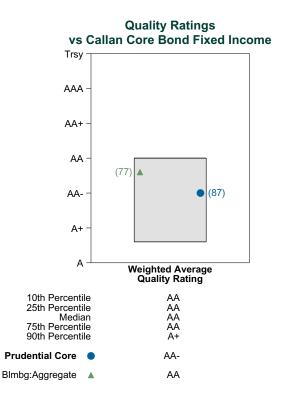
### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of March 31, 2024



### **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.



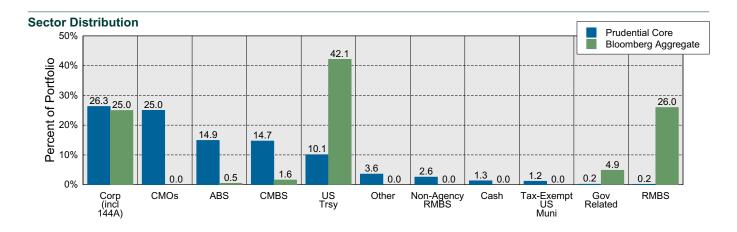


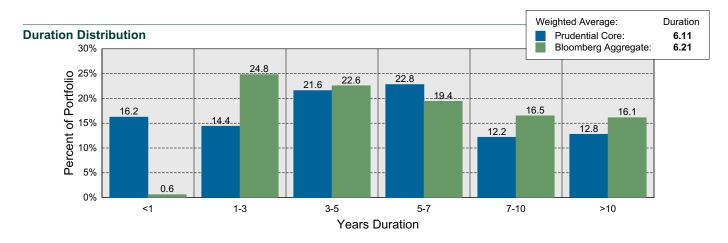


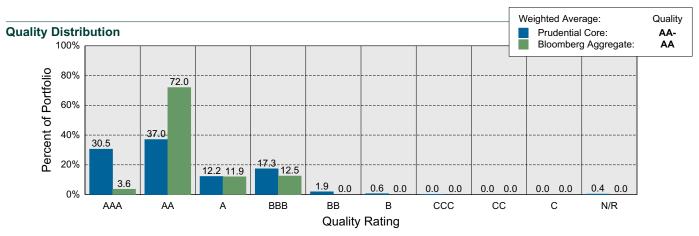
# **Prudential Core Portfolio Characteristics Summary** As of March 31, 2024

# **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.

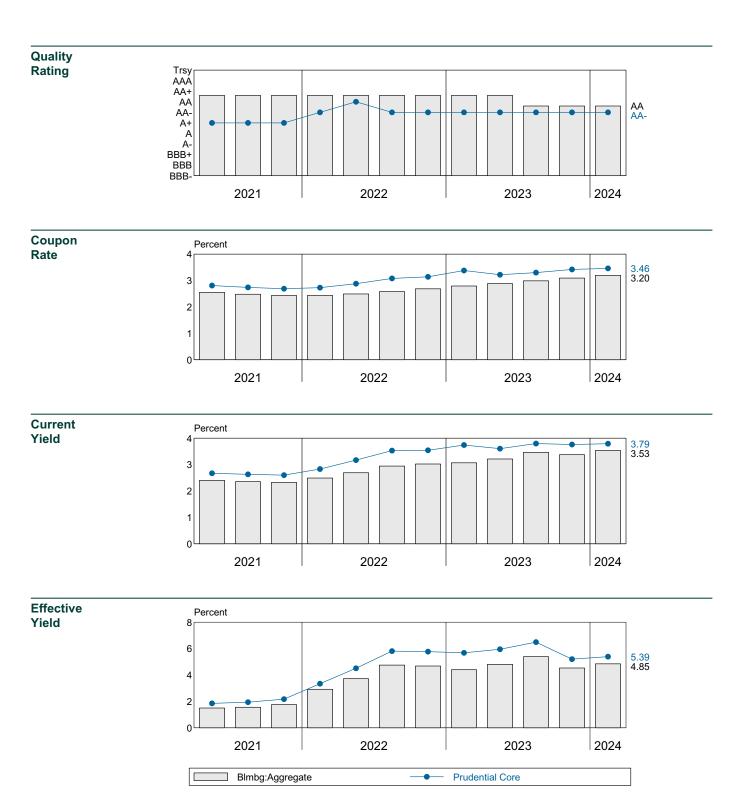






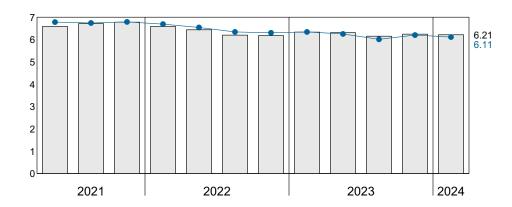


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

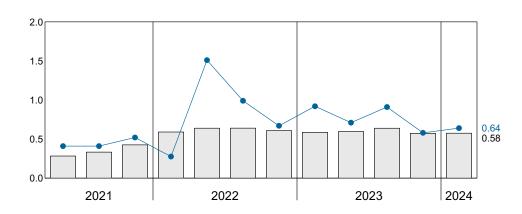


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

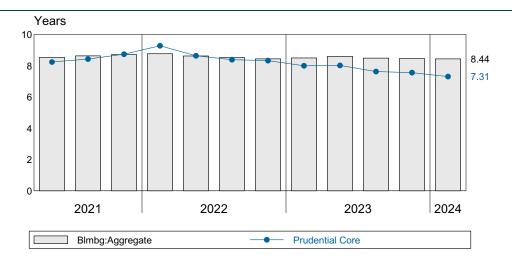
### **Duration**



### OA Convexity

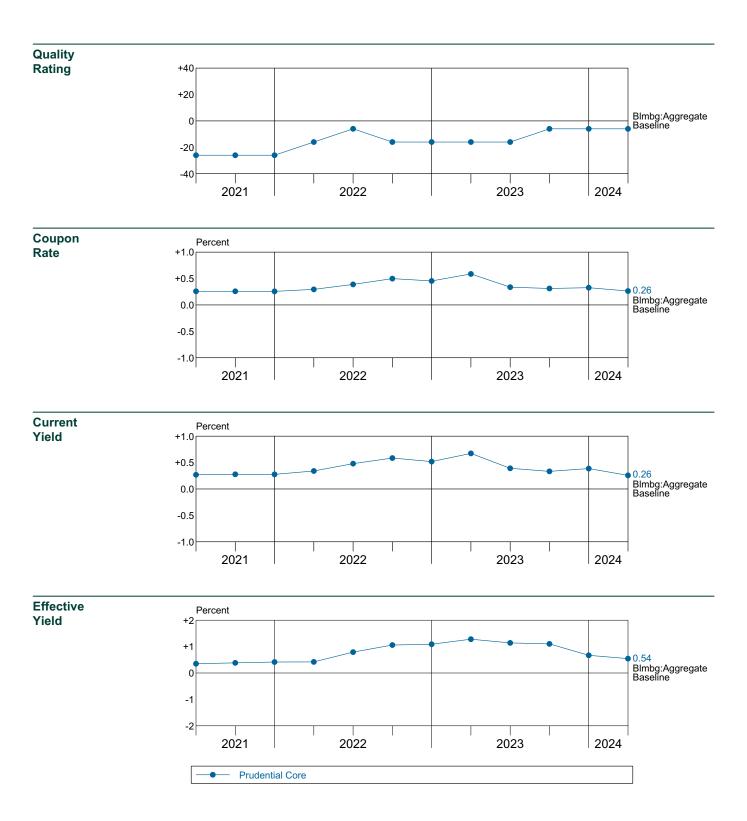


# Average Life



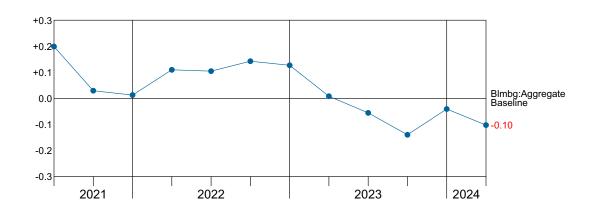


# North Dakota State Investment Board Pension Funds **Consistency of Fixed Income Characteristics** Period March 31, 2024

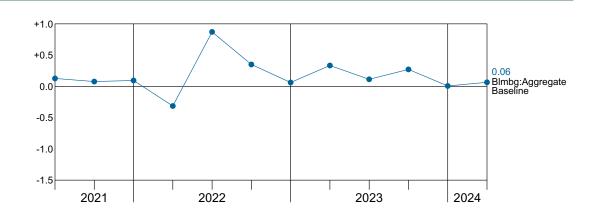


# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024

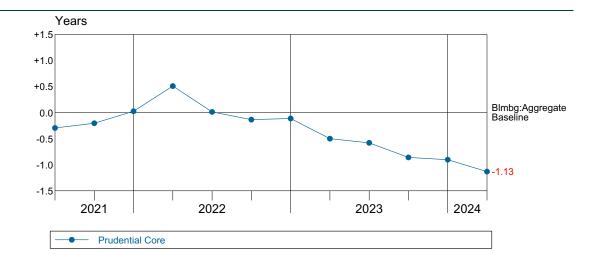




### OA Convexity



# Average Life

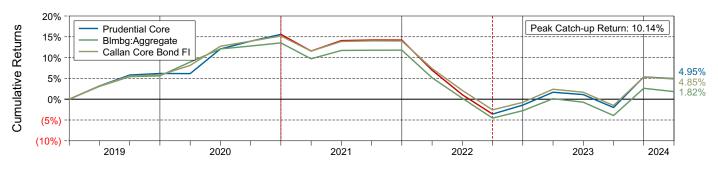




# **Prudential Core** Drawdown Analysis for Five Years Ended March 31, 2024

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**

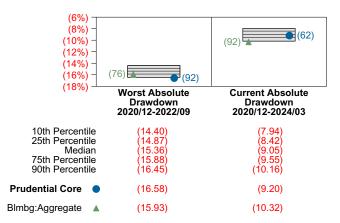


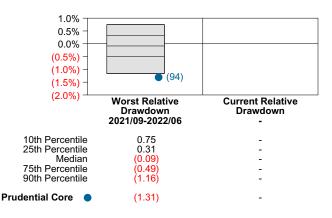
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Prudential Core	(16.58)%	1.75	2020/12-2022/09	(15.93)%	(15.42)%	(9.20)%	3.25	2020/12-2024/03	(10.32)%	(8.98)%
Recovery from Trough	8.84%	1.50+	2022/09-2024/03	6.67%	7.61%	8.84%	1.50+	2022/09-2024/03	6.67%	7.61%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.32)%	3.25	2020/12-2024/03		
Callan Core Bond FI	(15.42)%	1.75	2020/12-2022/09			(8.98)%	3.25	2020/12-2024/03		

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate **Cumulative Relative Returns** 3.07% **Prudential Core** 3% Callan Core Bond Fl 2% 1% 0% (1%)(2%)(3%)(4%)2019 2021 2022 2023 2024 2020

	Worst Relative Drawdown				Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Prudential Core	(1.31)%	0.75	2021/09-2022/06	(0.12)%	-	-	-	-
Recovery from Trough	1.80%	1.50	2022/06-2023/12	0.73%	-	-	-	-
Callan Core Bond FI	(0.92)%	0.25	2019/12-2020/03		-	-	-	

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Callan Core Bond Fixed Income Five Years Ended March 31, 2024







# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

### Average Bond Characteristics for 3 Years Ended March 31, 2024 **VS THE Callan Core Bond FI Peer Group**

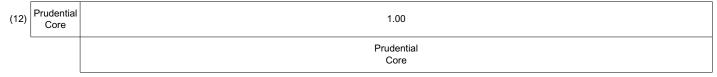
(12)	Prudential Core	AA- (85)	3.07% (57)	3.30% (58)	4.51% (11)	6.42 (36)	0.71 (27)	8.21 ( <b>62</b> )	
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life	



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

### Excess Return Correlations for 3 Years Ended March 31, 2024 vs the Blmbg:Aggregate





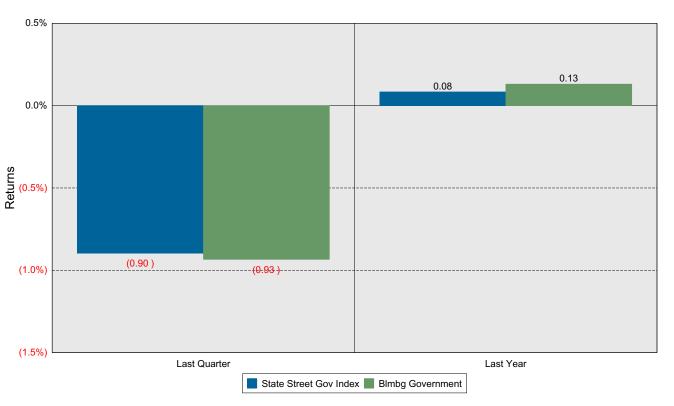
# **State Street Gov Index** Period Ended March 31, 2024

### **Quarterly Summary and Highlights**

• State Street Gov Index's portfolio outperformed the Blmbg Government by 0.04% for the quarter and underperformed the Blmbg Government for the year by 0.05%.

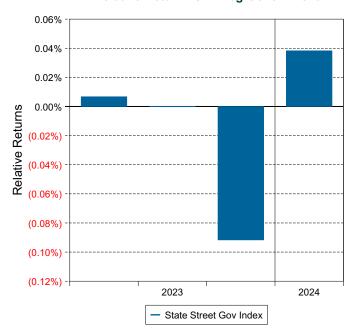
#### **Quarterly Asset Growth**

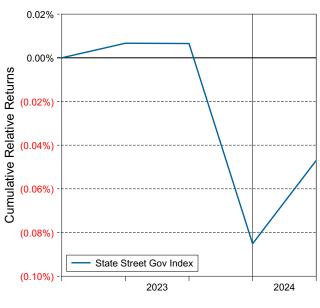
Beginning Market Value	\$126,672,503
Net New Investment	\$14,384,749
Investment Gains/(Losses)	\$-1,095,634
Ending Market Value	\$139 961 618



### Relative Return vs Blmbg Government

# **Cumulative Returns vs Blmbg Government**







# **State Street Credit Index** Period Ended March 31, 2024

### **Quarterly Summary and Highlights**

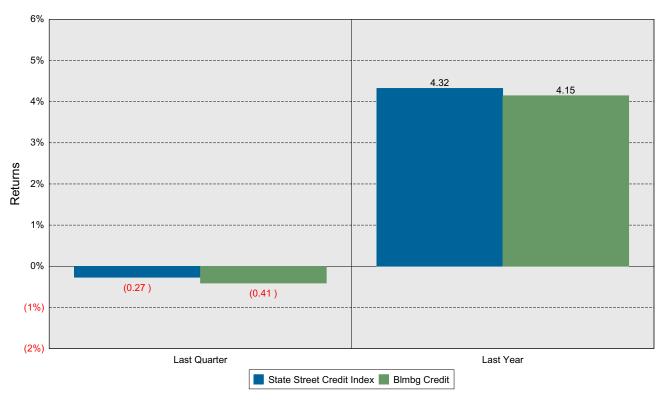
 State Street Credit Index's portfolio outperformed the Blmbg Credit by 0.14% for the quarter and outperformed the Blmbg Credit for the year by 0.18%.

### **Quarterly Asset Growth**

Beginning Market Value Net New Investment Investment Gains/(Losses) \$34,885,656 \$7,658,826 \$-4,815

**Ending Market Value** 

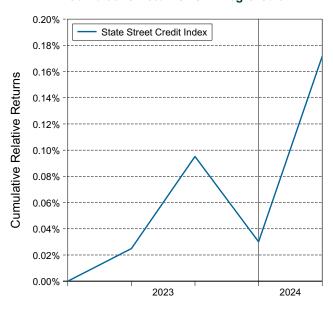
\$42,539,667



### Relative Return vs Blmbg Credit

# 0.20% 0.15% Relative Returns 0.10% 0.05% 0.00% (0.05%)(0.10%)2023 2024 State Street Credit Index

### **Cumulative Returns vs Blmbg Credit**



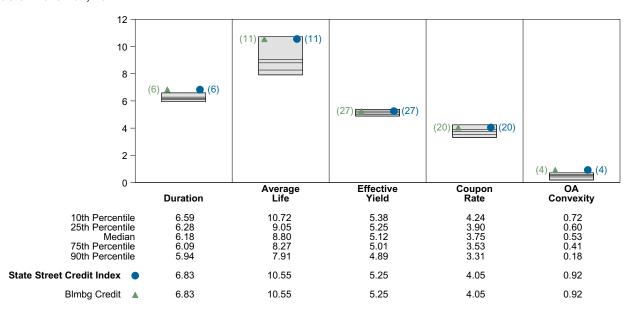


# **State Street Credit Index Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

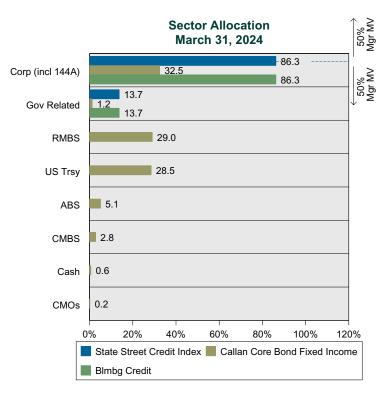
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

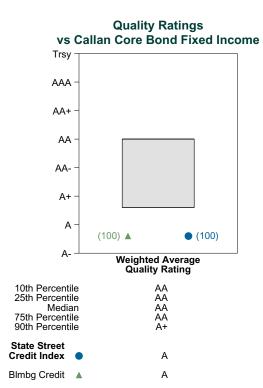
#### **Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income** as of March 31, 2024



#### 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.



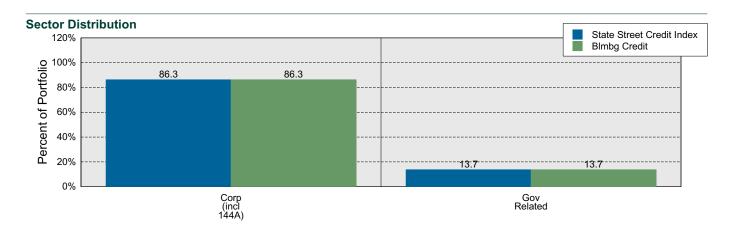


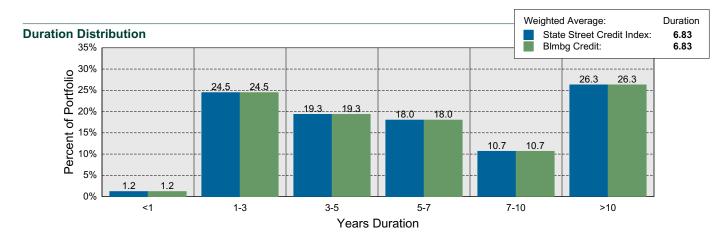


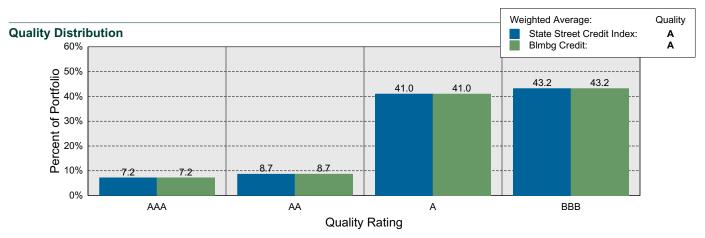
# **State Street Credit Index Portfolio Characteristics Summary** As of March 31, 2024

### **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.









# **Western Asset Core Plus** Period Ended March 31, 2024

#### **Investment Philosophy**

Western Asset designs this portfolio using all major fixed-income sectors with a bias towards non-Treasuries, especially corporate, mortgage-backed and asset-backed securities. Value can be added through sector rotation, issue selection, duration and term structure weighting.

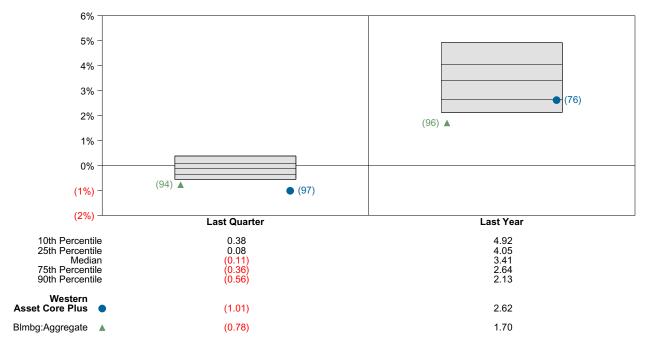
#### **Quarterly Summary and Highlights**

- Western Asset Core Plus's portfolio posted a (1.01)% return for the quarter placing it in the 97 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 76 percentile for the last year.
- Western Asset Core Plus's portfolio underperformed the Blmbg:Aggregate by 0.24% for the guarter and outperformed the Blmbg:Aggregate for the year by 0.92%.

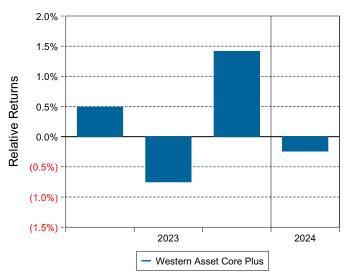
#### **Quarterly Asset Growth**

Beginning Market Value	\$306,863,483
Net New Investment	\$4,872,308
Investment Gains/(Losses)	\$-3,049,326
Ending Market Value	\$308,686,465

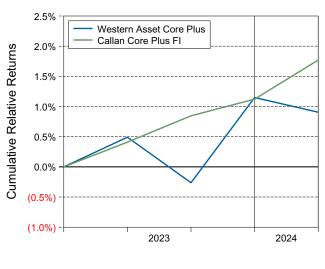
## Performance vs Callan Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



#### **Cumulative Returns vs Blmbg:Aggregate**



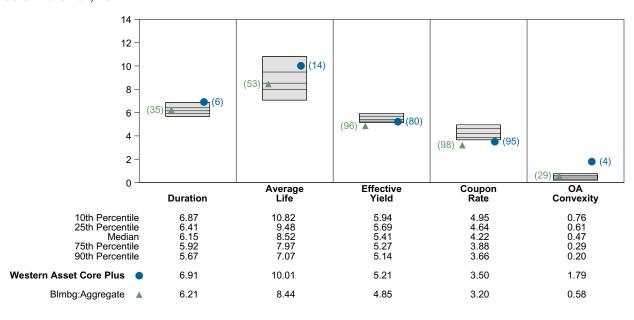


# **Western Asset Core Plus Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

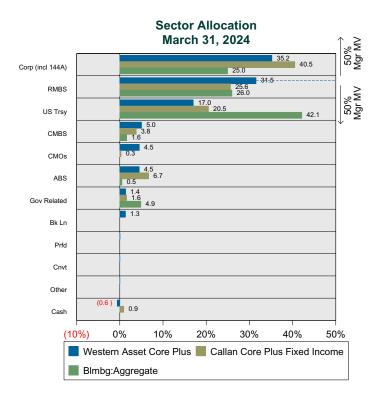
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

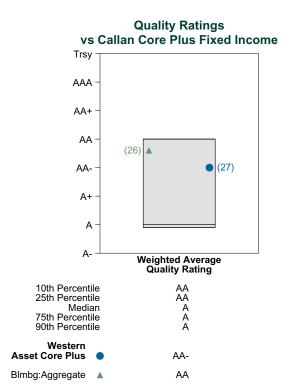
#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of March 31, 2024



#### 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.



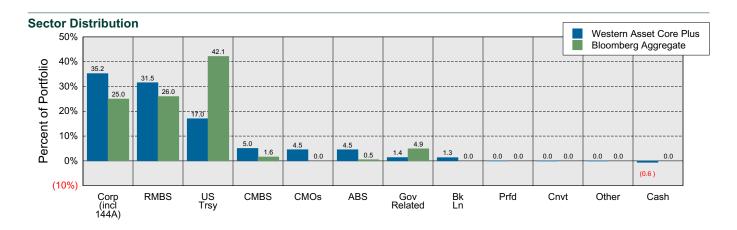


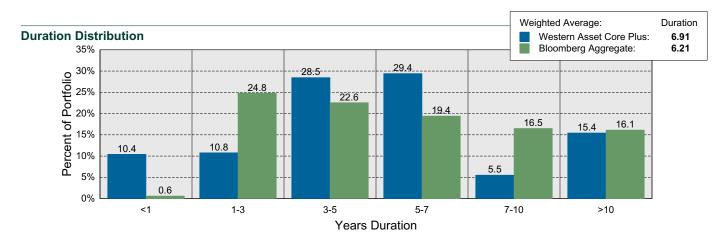


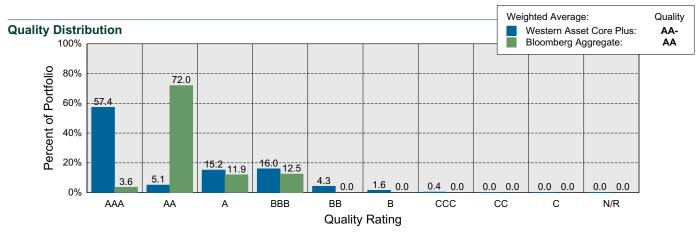
# **Western Asset Core Plus Portfolio Characteristics Summary** As of March 31, 2024

#### **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.









# **Manulife-Declaration TRBF** Period Ended March 31, 2024

#### **Investment Philosophy**

The Fund's portfolio holdings consist primarily of RMBS issued by private sector companies (Non-Agency RMBS) and government agencies (Agency MBS) and CMBS issued by private sector companies. Agency MBS includes securities issued by the Federal National Mortgage Association (Fannie Mae), the Federal Home Loan Mortgage Corporation (Freddie Mac) and the Government National Mortgage Association (Ginnie Mae). Portfolio holdings may range from short tenure senior classes to stressed issues or subordinated securities with substantial risk of non-payment and correspondingly higher yields. Smaller portfolio allocations may include consumer asset-backed securities (ABS), or other structured credit securities and corporate bonds. As a diversification strategy and a potential hedge to credit risk, the Fund may invest in securities which tend to benefit from slow mortgage prepayments and economic growth, such as interest only (IO) MBS.

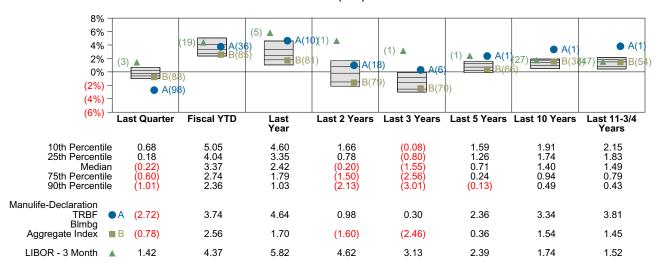
#### **Quarterly Summary and Highlights**

- Manulife-Declaration TRBF's portfolio posted a (2.72)% return for the guarter placing it in the 98 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 10 percentile for the last year.
- Manulife-Declaration TRBF's portfolio underperformed the LIBOR - 3 Month by 4.14% for the quarter and underperformed the LIBOR - 3 Month for the year by 1.18%.

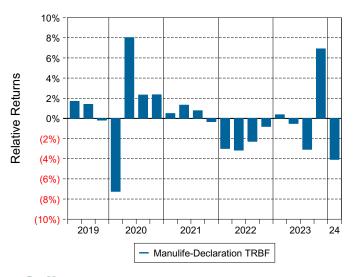
#### **Quarterly Asset Growth**

Beginning Market Value	\$106,656,873
Net New Investment	\$-6,317,410
Investment Gains/(Losses)	\$-2,857,333
Ending Market Value	\$97,482,130

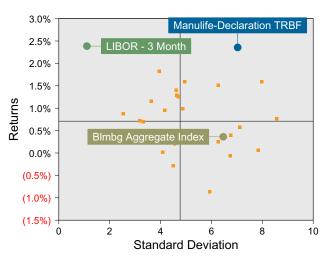
#### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



## Relative Return vs LIBOR - 3 Month



#### Callan Intermediate Fixed Inc Mut Funds (Net) Annualized Five Year Risk vs Return



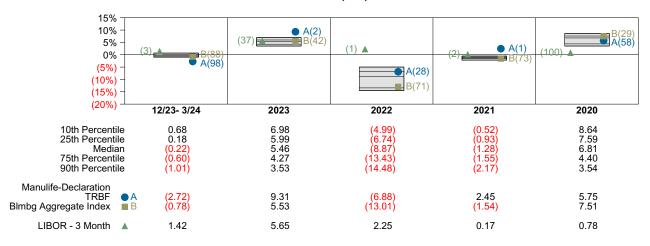


# **Manulife-Declaration TRBF Return Analysis Summary**

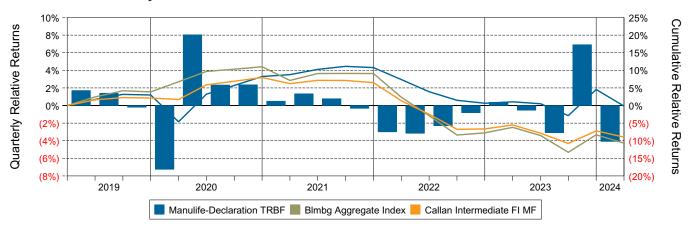
#### **Return Analysis**

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.

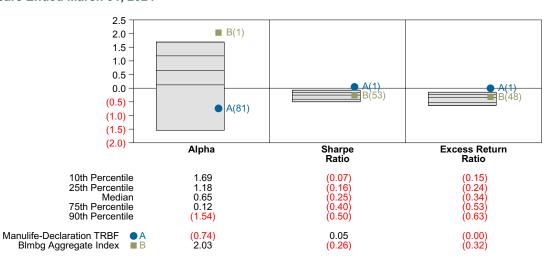
#### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



#### Cumulative and Quarterly Relative Returns vs LIBOR - 3 Month



Risk Adjusted Return Measures vs LIBOR - 3 Month Rankings Against Callan Intermediate Fixed Inc Mut Funds (Net) Five Years Ended March 31, 2024



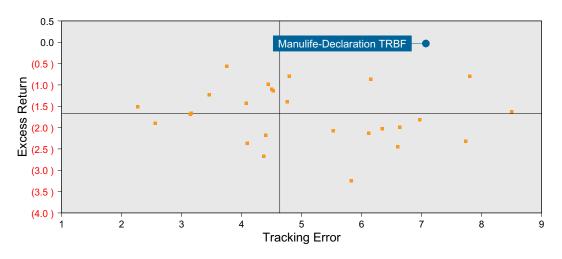


# **Manulife-Declaration TRBF Risk Analysis Summary**

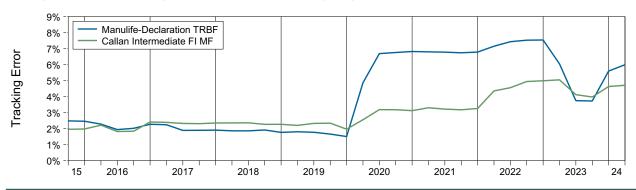
#### Risk Analysis

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.

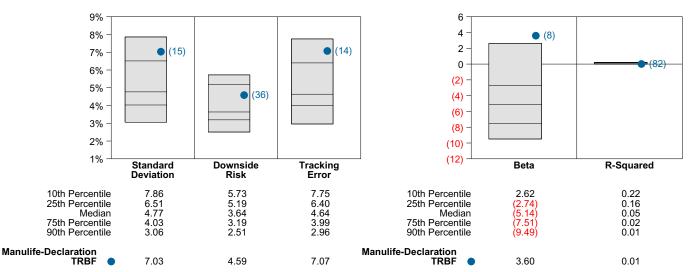
### Risk Analysis vs Callan Intermediate Fixed Inc Mut Funds (Net) Five Years Ended March 31, 2024



## Rolling 12 Quarter Tracking Error vs LIBOR - 3 Month (USD)



Risk Statistics Rankings vs LIBOR - 3 Month (USD) Rankings Against Callan Intermediate Fixed Inc Mut Funds (Net) Five Years Ended March 31, 2024



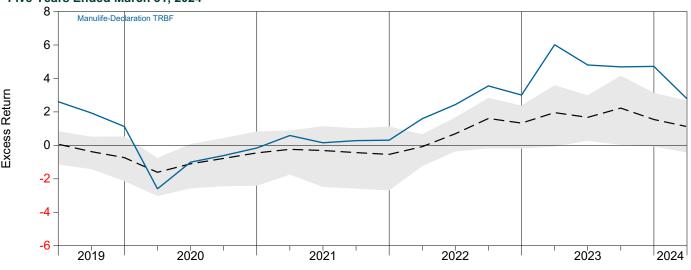


# **Manulife-Declaration TRBF Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

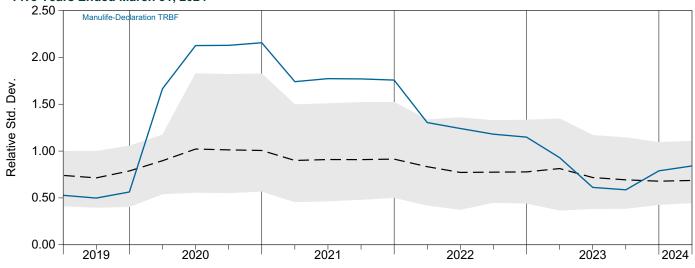
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Intermediate FI MF. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

### Rolling Three Year Excess Return Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Median	Portfolio
0.28%	1.81%
45%	80%
50	15
	0.28% 45%

### Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	0.83%	1.27%
% Positive Periods	100%	100%
Average Ranking	50	28

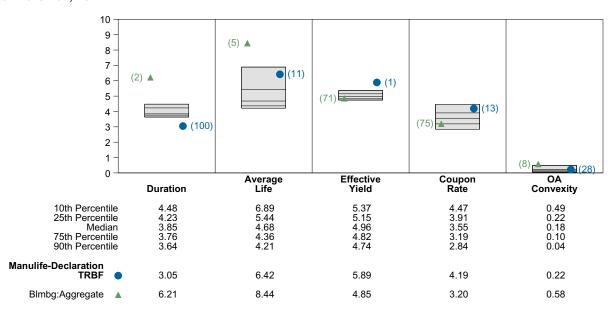


# **Manulife-Declaration TRBF Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

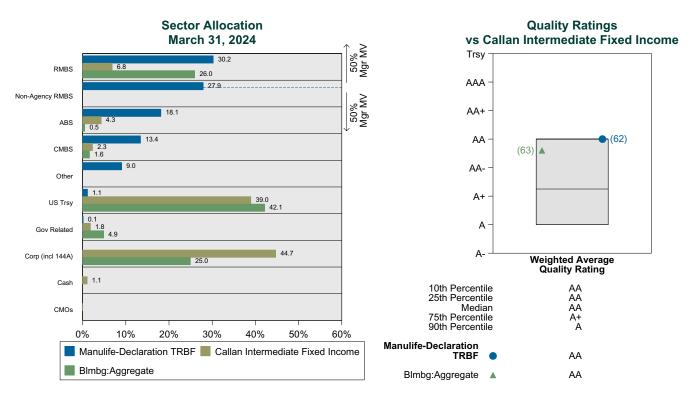
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Intermediate Fixed Income as of March 31, 2024



# **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.

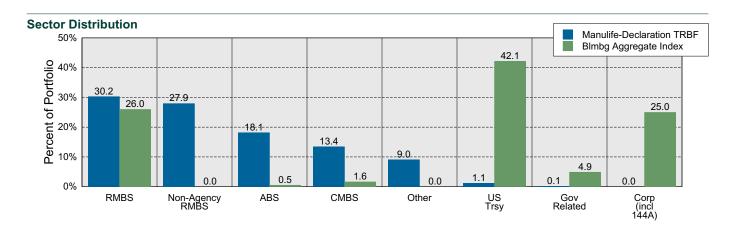


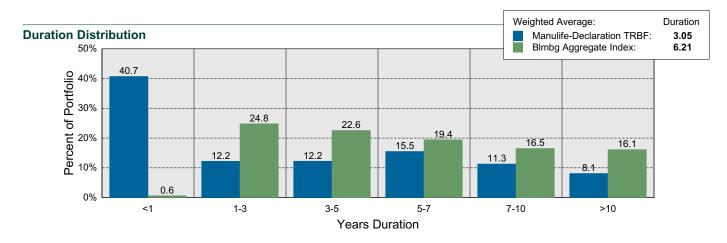


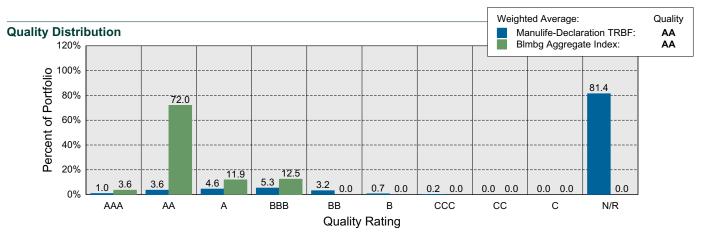
# **Manulife-Declaration TRBF Portfolio Characteristics Summary** As of March 31, 2024

# **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.



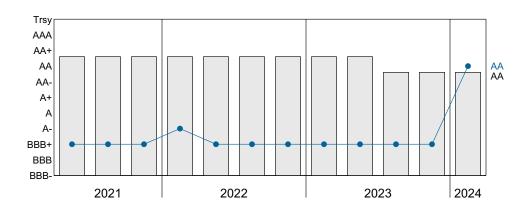




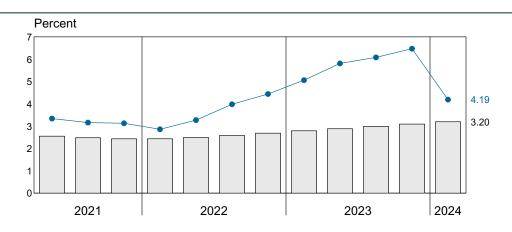


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

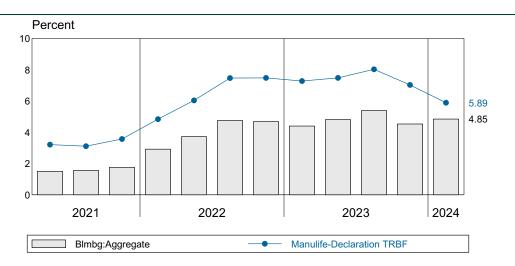








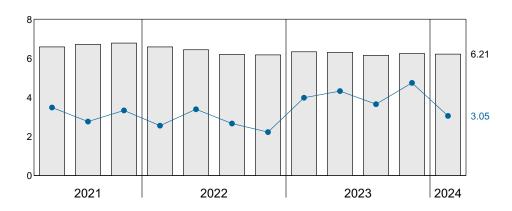




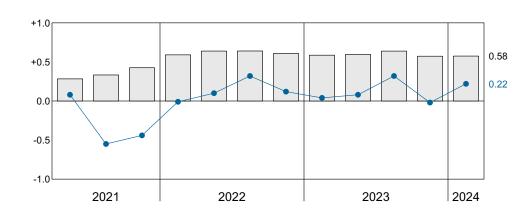


# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

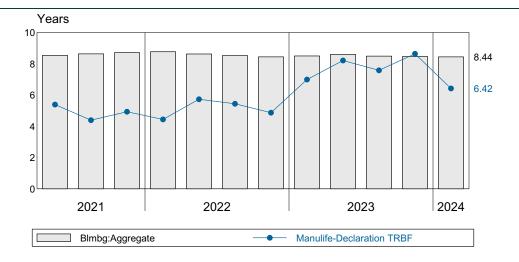
### **Duration**



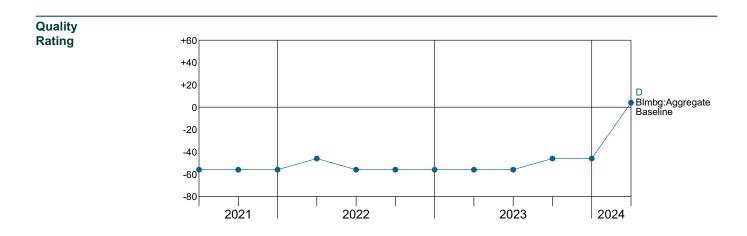
# OA Convexity

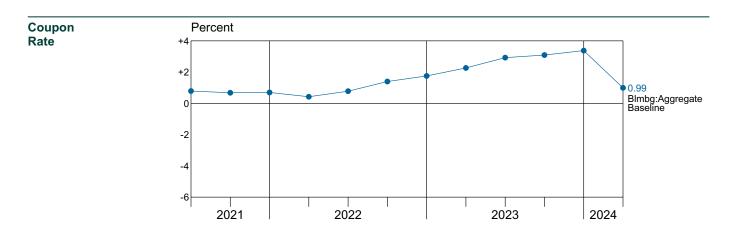


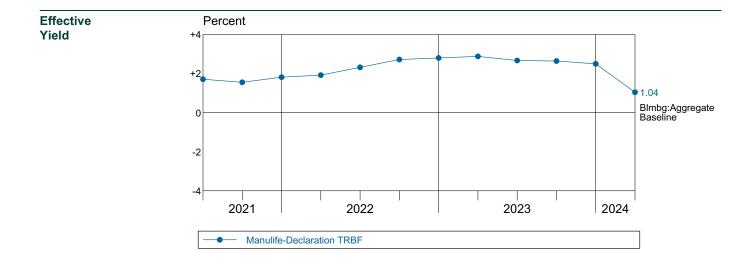
# **Average** Life



# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024



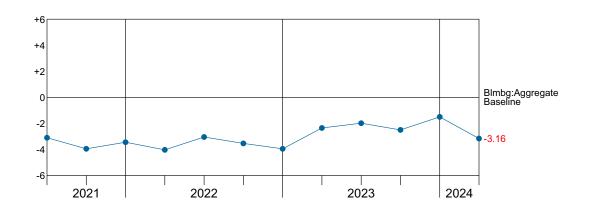




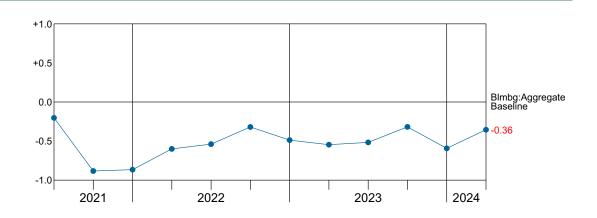


# North Dakota State Investment Board Pension Funds **Consistency of Fixed Income Characteristics** Period March 31, 2024

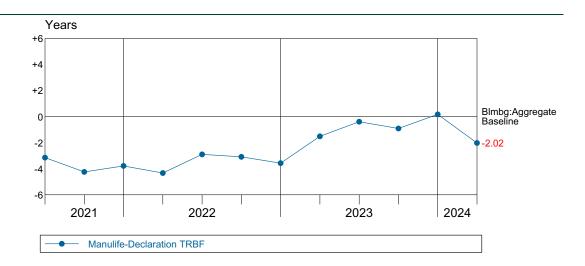




# OA Convexity





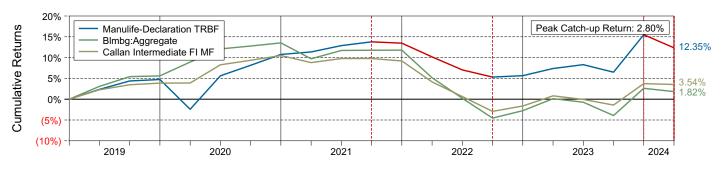




# **Manulife-Declaration TRBF** Drawdown Analysis for Five Years Ended March 31, 2024

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**

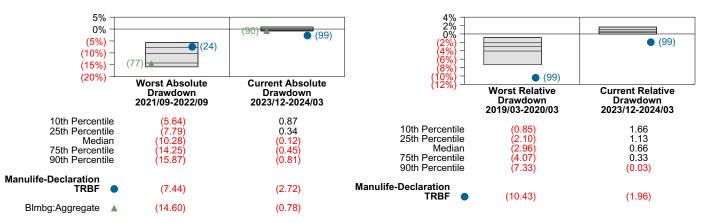


	Worst Absolute Drawdown					Curr	ent Absolute Draw	down		
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Manulife-Declaration TRBF	(7.44)%	1.00	2021/09-2022/09	(14.60)%	(11.57)%	(2.72)%	0.25	2023/12-2024/03	(0.78)%	(0.20)%
Recovery from Trough	9.66%	1.25	2022/09-2023/12	7.51%	6.87%	-	-	-	-	-
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.32)%	3.25	2020/12-2024/03		
Callan Intermediate FI MF	(12.15)%	1.75	2020/12-2022/09			(6.30)%	3.25	2020/12-2024/03		

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate **Cumulative Relative Returns** 20% Peak Catch-up Rel Rtn: 2.00% Manulife-Declaration TRBF 15% Callan Intermediate FI MF 10.34% 10% 5% 1.69% 0% (10%) 2019 2020 2021 2022 2023 2024

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Manulife-Declaration TRBF	(10.43)%	1.00	2019/03-2020/03	(4.63)%	(1.96)%	0.25	2023/12-2024/03	0.58%	
Recovery from Trough	5.20%	0.25	2020/03-2020/06	1.28%	-	-	-	-	
Callan Intermediate FI MF	(4.63)%	1.00	2019/03-2020/03		(0.92)%	0.50	2023/09-2024/03		

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Callan Intermediate Fixed Inc Mut Funds Five Years Ended March 31, 2024





# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

# Average Bond Characteristics for 3 Years Ended March 31, 2024 **VS THE Callan Intermediate FI MF Peer Group**

(12)	Manulife- Declaration TR	BBB+ (92)	4.32% (19)	158.53% (7)	5.95% (7)	3.34 (68)	0.02	6.09 <b>(42)</b>
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

# Excess Return Correlations for 3 Years Ended March 31, 2024 vs the Blmbg:Aggregate

(12)	Manulife- Declaration TR	1.00
		Manulife- Declaration TR



# **Loomis Sayles** Period Ended March 31, 2024

#### **Investment Philosophy**

The High Yield Full Discretion Strategy seeks to identify attractive sectors and specific investment opportunities primarily within the global fixed income market through a global economic and interest rate framework. Portfolio managers incorporate a long-term macroeconomic view along with a stringent bottom-up investment evaluation process that drives security selection and resulting sector allocations. Opportunistic investments in non-benchmark sectors including investment grade corporate, emerging market, and non-US dollar debt and convertible bonds help to manage overall portfolio risk and enhance total return potential.

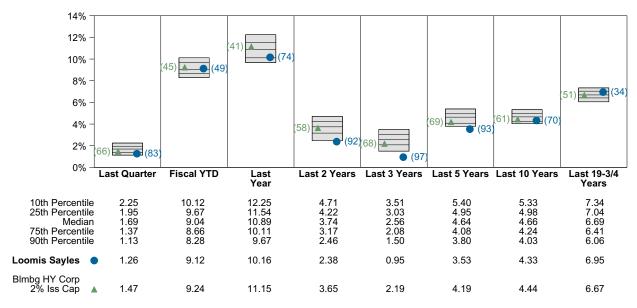
#### **Quarterly Summary and Highlights**

- Loomis Sayles's portfolio posted a 1.26% return for the quarter placing it in the 83 percentile of the Callan High Yield Fixed Income group for the quarter and in the 74 percentile for the last year.
- Loomis Sayles's portfolio underperformed the Blmbg HY Corp 2% Iss Cap by 0.21% for the quarter and underperformed the Blmbg HY Corp 2% Iss Cap for the year by 0.99%.

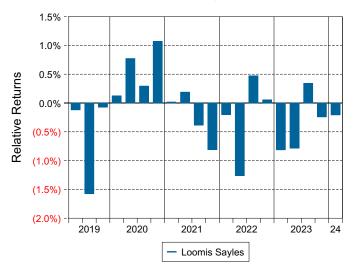
#### **Quarterly Asset Growth**

Beginning Market Value	\$171,071,882
Net New Investment	\$-201,009
Investment Gains/(Losses)	\$2,160,194
Ending Market Value	\$173 031 067

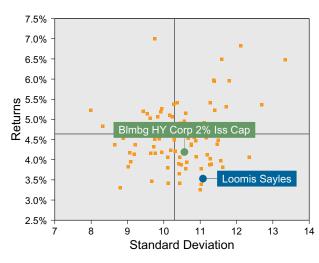
## Performance vs Callan High Yield Fixed Income (Gross)



#### Relative Return vs Blmbg HY Corp 2% Iss Cap



#### Callan High Yield Fixed Income (Gross) Annualized Five Year Risk vs Return



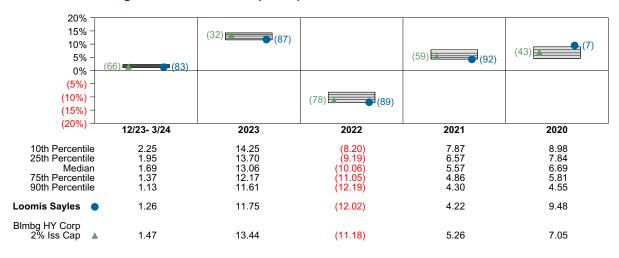


# **Loomis Sayles Return Analysis Summary**

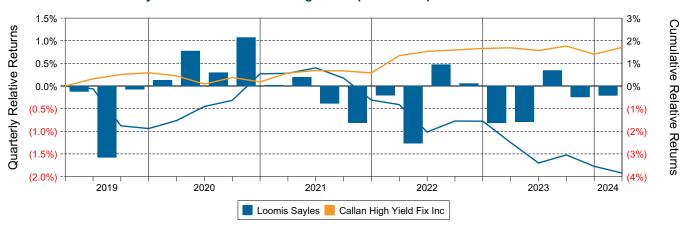
#### **Return Analysis**

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.

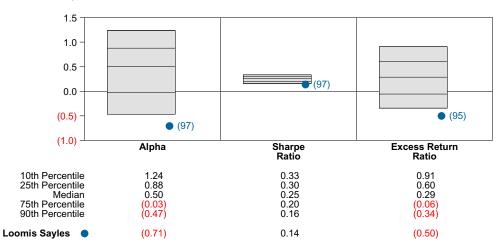
#### Performance vs Callan High Yield Fixed Income (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg HY Corp 2% Iss Cap



Risk Adjusted Return Measures vs Blmbg HY Corp 2% lss Cap Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2024



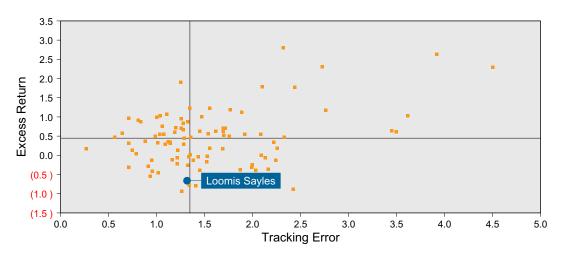


# **Loomis Sayles Risk Analysis Summary**

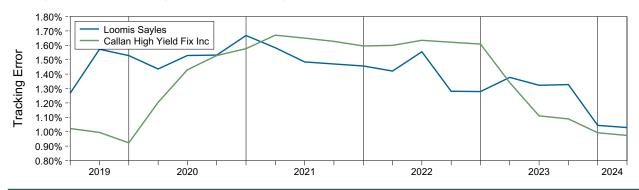
#### **Risk Analysis**

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.

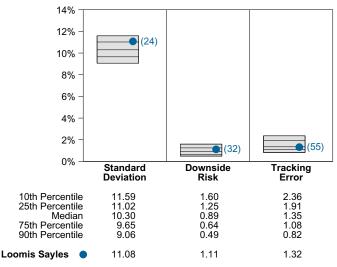
### Risk Analysis vs Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2024

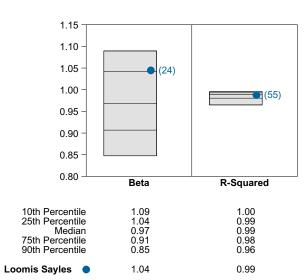


Rolling 12 Quarter Tracking Error vs Bloomberg HY 2% Iss Cap



Risk Statistics Rankings vs Bloomberg HY 2% Iss Cap Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2024





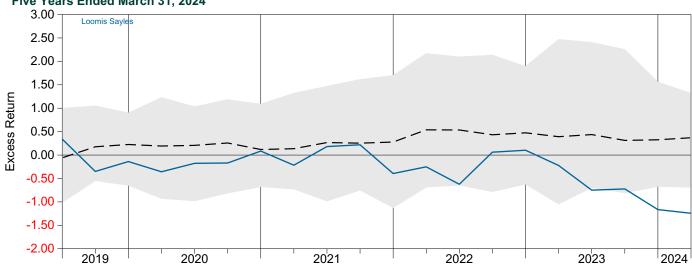


# **Loomis Sayles Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

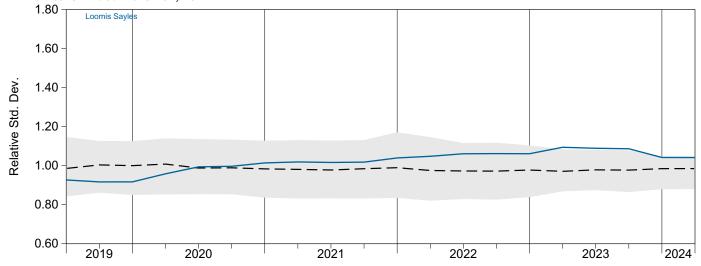
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg HY Corp 2% Iss Cap. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan High Yield Fix Inc. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

### Rolling Three Year Excess Return Relative to Blmbg HY Corp 2% Iss Cap Five Years Ended March 31, 2024



Median	Portfolio
0.29%	(0.29)
95%	30%
50	73
	0.29% 95%

### Rolling Three Year Relative Std. Dev. Relative to Blmbg HY Corp 2% Iss Cap Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	0.98%	1.02%
% Positive Periods	100%	100%
Average Ranking	50	36

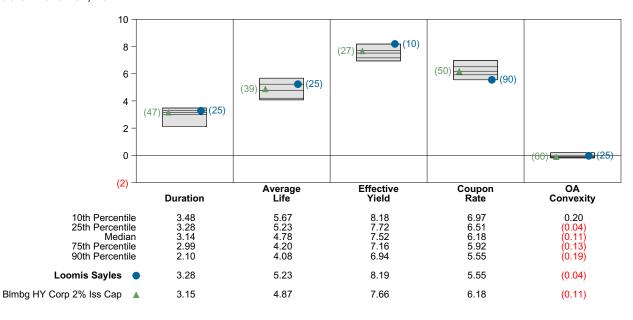


# **Loomis Sayles Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

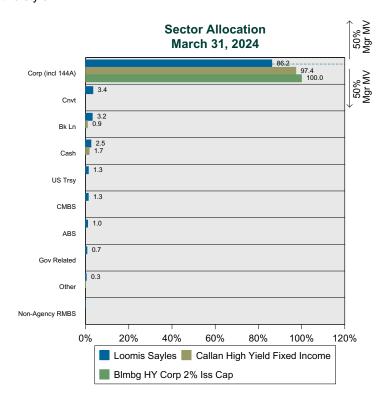
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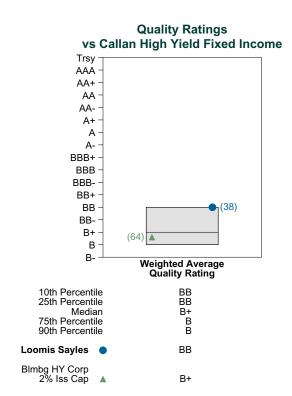
#### **Fixed Income Portfolio Characteristics** Rankings Against Callan High Yield Fixed Income as of March 31, 2024



#### **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.



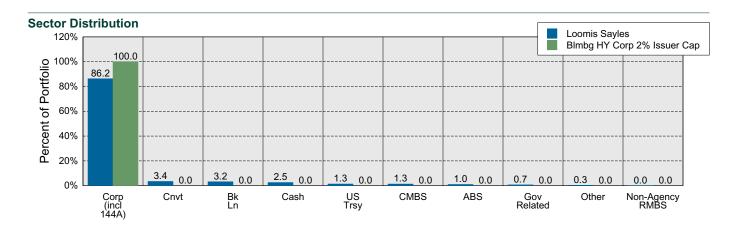


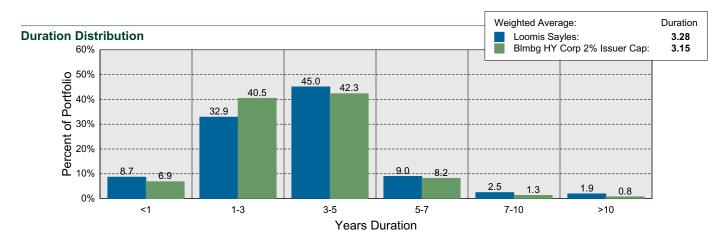


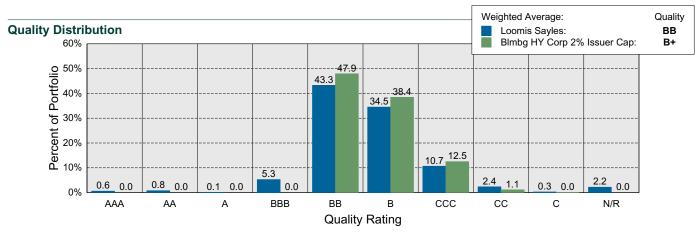
# **Loomis Sayles Portfolio Characteristics Summary** As of March 31, 2024

#### **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.





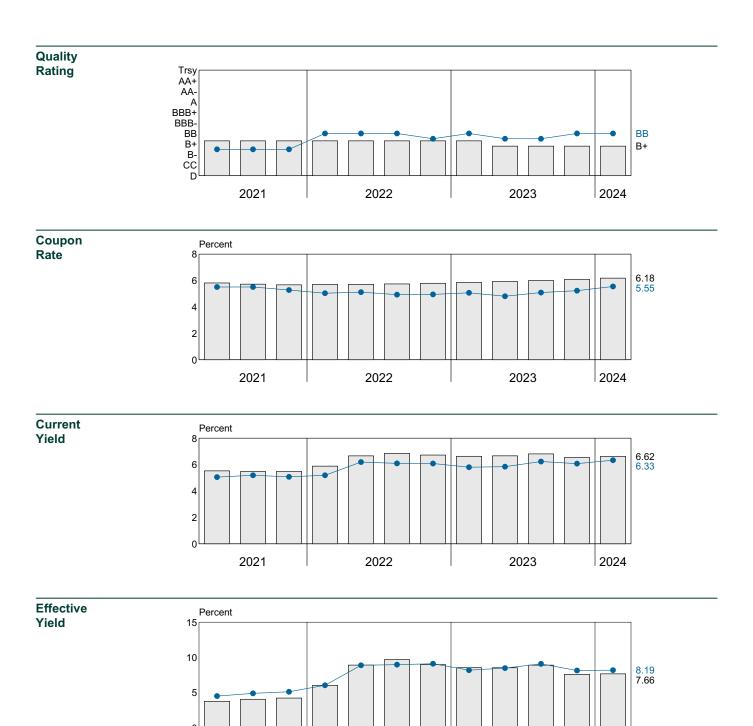




# North Dakota State Investment Board Pension Funds **History of Fixed Income Characteristics** Period March 31, 2024

2021

■ Blmbg HY Corp 2% Iss



2022

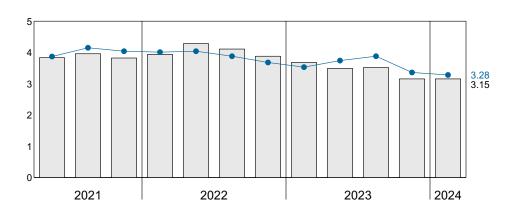
2024

2023

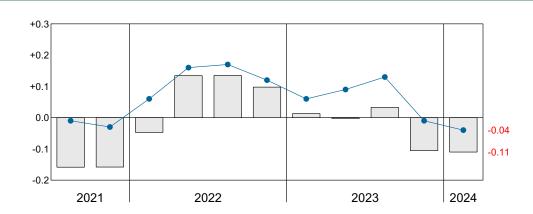
**Loomis Sayles** 

# **North Dakota State Investment Board Pension Funds History of Fixed Income Characteristics** Period March 31, 2024

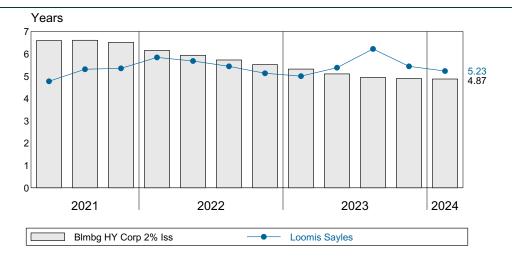
### **Duration**



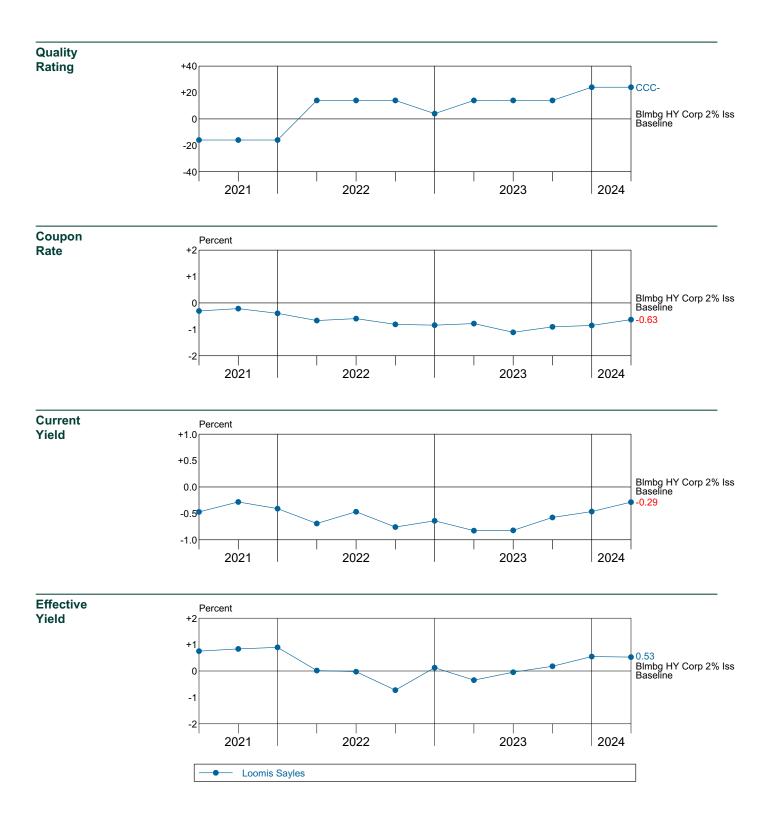
# OA Convexity



# Average Life

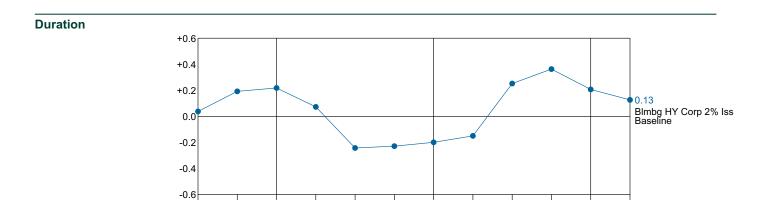


# North Dakota State Investment Board Pension Funds **Consistency of Fixed Income Characteristics** Period March 31, 2024



# **North Dakota State Investment Board Pension Funds Consistency of Fixed Income Characteristics** Period March 31, 2024

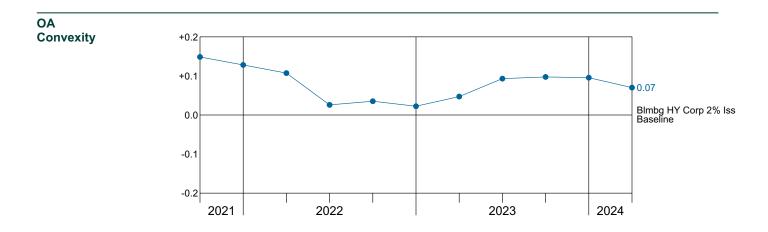
2021

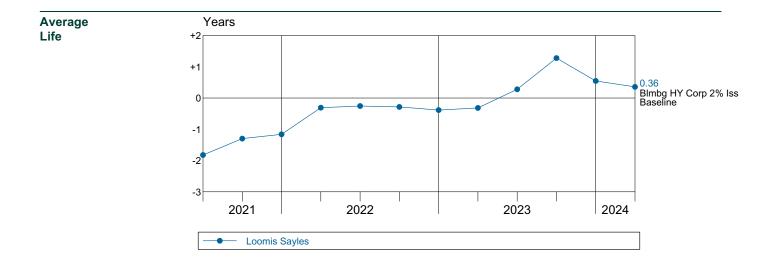


2022

2023

2024

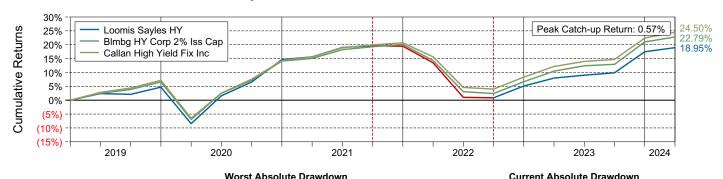




# **Loomis Sayles HY** Drawdown Analysis for Five Years Ended March 31, 2024

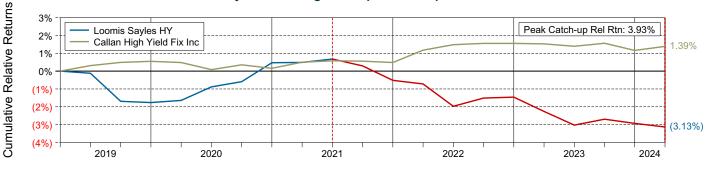
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute 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**



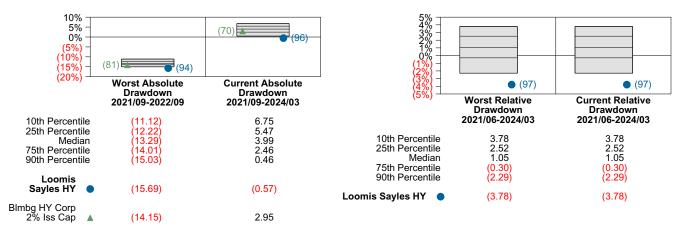
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Loomis Sayles HY	(15.69)%	1.00	2021/09-2022/09	(14.15)%	(13.30)%	(0.57)%	2.50	2021/09-2024/03	2.95%	3.80%
Recovery from Trough	17.94%	1.50+	2022/09-2024/03	19.91%	19.71%	17.94%	1.50+	2022/09-2024/03	19.91%	19.71%
Blmbg HY Corp 2% Iss Cap	(14.73)%	0.75	2021/12-2022/09			-	-	-		
Callan High Yield Fix Inc	(13.82)%	0.75	2021/12-2022/09			-	-	-		

# Relative Cumulative Drawdown Analysis vs. Blmbg HY Corp 2% Iss Cap Loomis Sayles HY



	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Loomis Sayles HY	(3.78)%	2.75	2021/06-2024/03	0.80%	(3.78)%	2.75	2021/06-2024/03	0.80%
Recovery from Trough	-	-	-	-	-	-	-	-
Callan High Yield Fix Inc	(0.46)%	0.50	2019/12-2020/06		(0.17)%	0.50	2023/09-2024/03	

Drawdown Rankings vs. Blmbg HY Corp 2% Iss Cap Rankings against Callan High Yield Fixed Income Five Years Ended March 31, 2024





# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can involve various types of performance statistics and holdings-based portfolio analysis over multiple time periods. The number in the middle of each box is the relevant value for a given portfolio, and the smaller number in the lower right corner is the relevant peer group ranking of that value.

# Average Bond Characteristics for 3 Years Ended March 31, 2024 VS THE Callan High Yield Fix Inc Peer Group

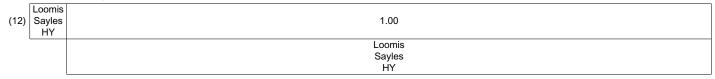
(12)	, ,	BB-	5.17%	5.76%	7.47%	3.79	0.06	5.40
	HY	(54)	(87)	(78)	(33)	(40)	(36)	(52)
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **Comparative Manager Matrix**

This page allows for detailed comparisons of multiple managers against each other, as well as versus market indices and peer groups. This comparative analysis can evaluate, for each portfolio pair, one portfolio's performance and risk patterns relative to the other portfolio's performance patterns. The excess return correlation matrices illustrate the extent to which various manager's excess returns versus the appropriate index are correlated to each other. Managers whose excess returns are less correlated with each other tend to diversify each other's active risk. This complementary type of manager mix can have a beneficial effect on the resulting active risk/return tradeoff.

## Excess Return Correlations for 3 Years Ended March 31, 2024 vs the Blmbg HY Corp 2% Iss Cap





# Ares ND Credit Strategies Fd Period Ended March 31, 2024

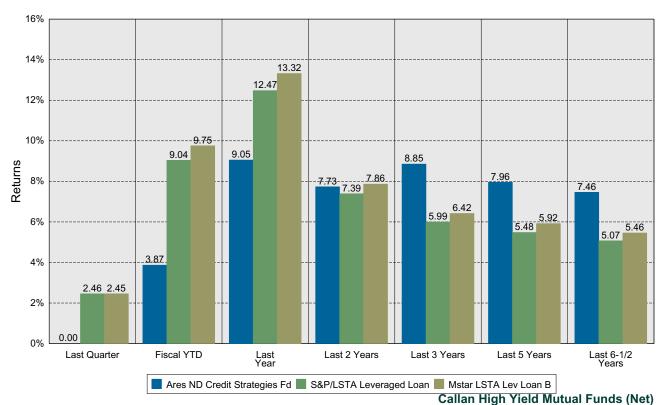
#### **Quarterly Summary and Highlights**

- Ares ND Credit Strategies Fd's portfolio posted a 0.00% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 75 percentile for the last year.
- Ares ND Credit Strategies Fd's portfolio underperformed the Mstar LSTA Lev Loan B by 2.45% for the quarter and underperformed the Mstar LSTA Lev Loan B for the year by 4.27%.

#### **Quarterly Asset Growth**

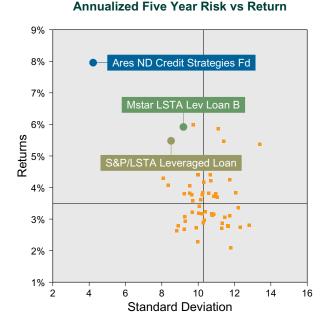
Beginning Market Value	\$174,553,140
Net New Investment	\$0
Investment Gains/(Losses)	\$0

**Ending Market Value** \$174,553,140



#### Relative Return vs Mstar LSTA Lev Loan B

25% 20% 15% Relative Returns 10% 5% 0% (5%) (10%)(15%)(20%)2019 2020 2021 2022 2023 24 - Ares ND Credit Strategies Fd





# **Cerberus ND Private Credit Fd** Period Ended March 31, 2024

#### **Investment Philosophy**

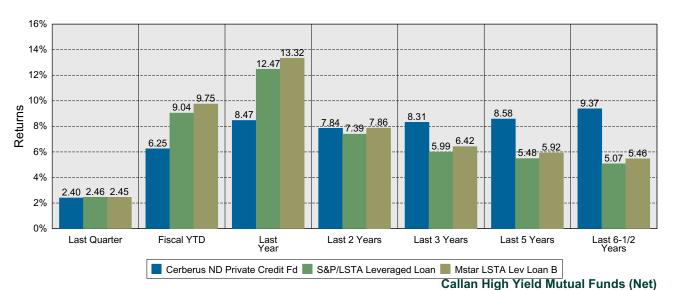
The investment objective of the LLC is to achieve superior risk-adjusted rates of return primarily through origination of, and investment in, secured debt assets consistent with the Loan Opportunities Strategy of the Cerberus Business Finance lending platform ("CBF", "Cerberus Business Finance" or the "Cerberus Lending Platform"). The Cerberus Lending Platform is a direct origination and lending business focused on providing secured debt primarily to U.S. middle-market companies. The LLC expects to generate both current income and capital appreciation.

#### **Quarterly Summary and Highlights**

- Cerberus ND Private Credit Fd's portfolio posted a 2.40% return for the quarter placing it in the 11 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 90 percentile for the last year.
- Cerberus ND Private Credit Fd's portfolio underperformed the Mstar LSTA Lev Loan B by 0.05% for the guarter and underperformed the Mstar LSTA Lev Loan B for the year by 4.85%.

#### **Quarterly Asset Growth**

Beginning Market Value	\$193,969,750
Net New Investment	\$8,250,000
Investment Gains/(Losses)	\$4,777,347
Ending Market Value	\$206,997,097



#### Relative Return vs Mstar LSTA Lev Loan B

25% 20% 15% Relative Returns 10% 5% 0% (5%)(10%)(15%)2019 2020 2021 2022 2023 24 Cerberus ND Private Credit Fd

# 10% 9% Cerberus ND Private Credit Fd 8% 7% Returns 6% Mstar LSTA Lev Loan 5% 4% 3% 2% 1% 0 5 10 15 Standard Deviation

**Annualized Five Year Risk vs Return** 



# **Goldman Sachs 2006 Offshore** Period Ended March 31, 2024

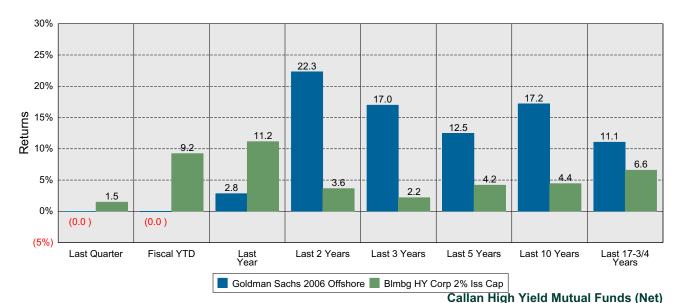
#### **Investment Philosophy**

GS Mezzanine Partners seeks large-sized mezzanine investments comprised generally of fixed income securities and an associated equity component. They focus on providing "private high yield" capital for mid- to large-sized leveraged and management buyout transactions, recapitalizations, financings, re-financings, acquisitions and restructurings for private equity firms, private family companies and corporate issuers.

#### **Quarterly Summary and Highlights**

- Goldman Sachs 2006 Offshore's portfolio posted a (0.00)% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 100 percentile for the last year.
- Goldman Sachs 2006 Offshore's portfolio underperformed the Blmbg HY Corp 2% Iss Cap by 1.48% for the guarter and underperformed the Blmbg HY Corp 2% Iss Cap for the year by 8.32%.

<b>Quarterly Asset Growth</b>	
Beginning Market Value	\$1
Net New Investment	\$0
Investment Gains/(Losses)	\$0
Ending Market Value	\$1



## Relative Return vs Blmbg HY Corp 2% Iss Cap

# 100% 60% Relative Returns 40% 20% (20%)(40%) 2019 2020 2021 2022 2023 24 Goldman Sachs 2006 Offshore

# 14% Goldman Sachs 2006 Offshore 12% 10% 8% Returns 6% Blmbg HY Corp 2% Iss Cap 2% 0% 30 10 15 20 25 35 40

**Annualized Five Year Risk vs Return** 



Standard Deviation

# **PIMCO Bravo II Fund** Period Ended March 31, 2024

#### **Investment Philosophy**

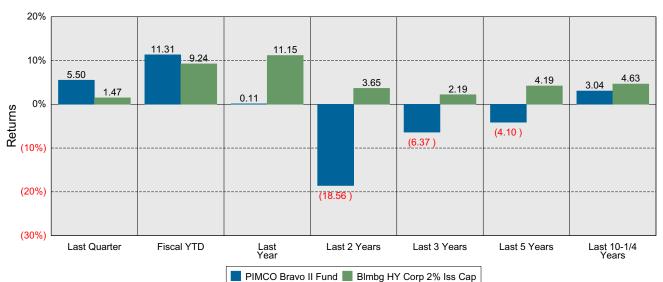
The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

#### **Quarterly Summary and Highlights**

- PIMCO Bravo II Fund's portfolio posted a 5.50% return for the quarter placing it in the 1 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO Bravo II Fund's portfolio outperformed the Blmbg HY Corp 2% Iss Cap by 4.03% for the guarter and underperformed the Blmbg HY Corp 2% Iss Cap for the year by 11.05%.

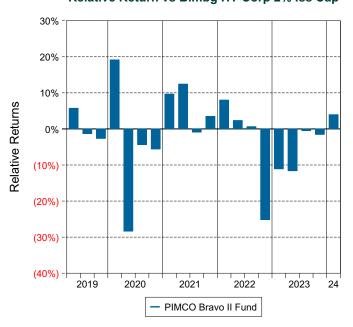
Quarterly	Asset	Growth
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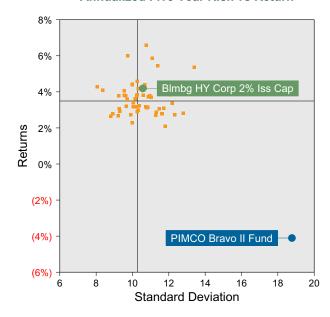
Beginning Market Value	\$2,430,370
Net New Investment	\$0
Investment Gains/(Losses)	\$133,763
Ending Market Value	\$2.564.133



## Relative Return vs Blmbg HY Corp 2% Iss Cap

# Callan High Yield Mutual Funds (Net) **Annualized Five Year Risk vs Return**







# **PIMCO DISCO II** Period Ended March 31, 2024

#### **Investment Philosophy**

The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

#### **Quarterly Summary and Highlights**

- PIMCO DiSCO II's portfolio posted a 3.57% return for the quarter placing it in the 1 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 1 percentile for the last year.
- PIMCO **DiSCO** II's portfolio outperformed Blmbq:Aggregate bγ 4.35% for the quarter outperformed the Blmbg:Aggregate for the year by 8.59%.

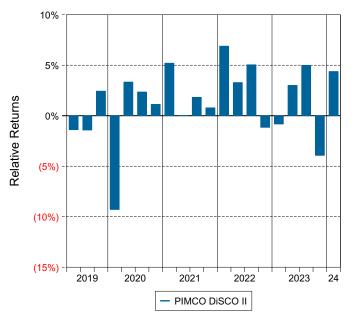
Quarterly	Asset	Growt	h
N 4 I 4 \ / - I.			Ф.Г.Г

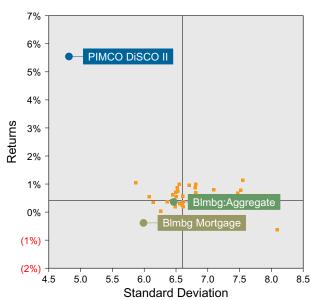
Beginning Market Value	\$55,373,645
Net New Investment	\$0
Investment Gains/(Losses)	\$1,977,702
Ending Market Value	\$57.351.347



## Relative Return vs Blmbg:Aggregate

# Callan Core Bond Mutual Funds (Net) **Annualized Five Year Risk vs Return**



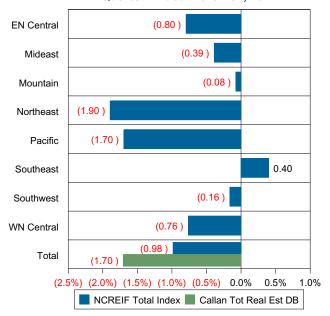




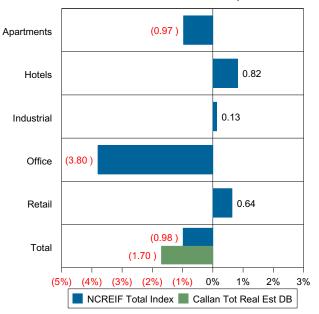
## **Real Estate Market Overview**

The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 1.0% during 1Q24. The income return was 1.2% while the appreciation return was 2.1%. Hotels, which represent a small portion of the index, led property sector performance with a gain of 0.8%. Office finished last with a loss of 3.8%. Regionally, the South led with a gain of 0.1%, while the West was the worst performer with a drop of 1.4%. The NCREIF Open-End Diversified Core Equity (ODCE) Index, representing equity ownership positions in U.S. core real estate, fell 2.4% during 1Q, with an income return of 1.0% and an appreciation return of -3.4%.

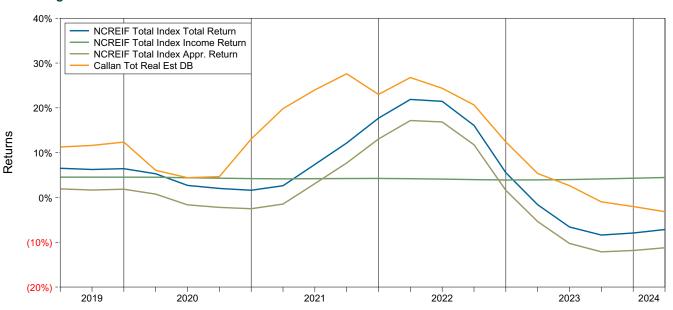
## **NCREIF Total Index Returns by Geographic Area** Quarter Ended March 31, 2024



#### **NCREIF Total Index Returns by Property Type** Quarter Ended March 31, 2024



#### **Rolling 1 Year Returns**





# **Global Real Estate** Period Ended March 31, 2024

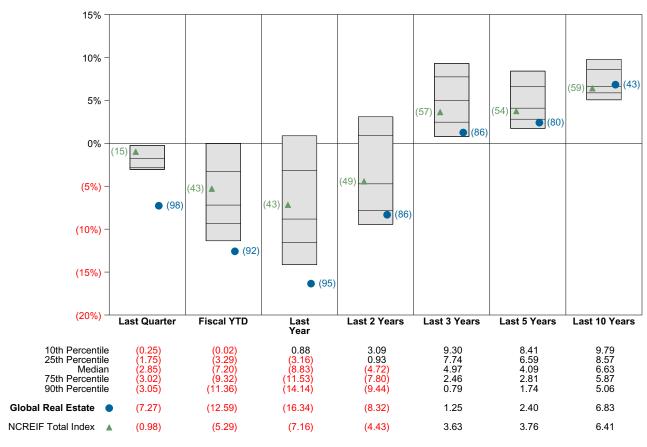
#### **Quarterly Summary and Highlights**

- Global Real Estate's portfolio posted a (7.27)% return for the quarter placing it in the 98 percentile of the Public Fund -Real Estate group for the quarter and in the 95 percentile for the last year.
- Global Real Estate's portfolio underperformed the NCREIF Total Index by 6.29% for the guarter and underperformed the NCREIF Total Index for the year by 9.18%.

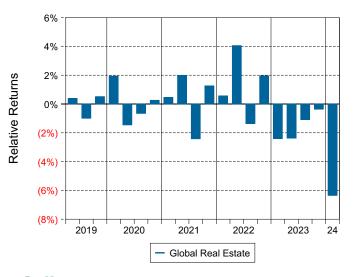
#### **Quarterly Asset Growth**

Beginning Market Value	\$793,344,177
Net New Investment	\$1,721,526
Investment Gains/(Losses)	\$-57,801,787
Ending Market Value	\$737,263,916

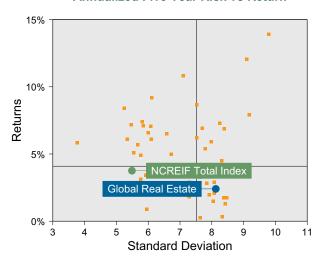
# Performance vs Public Fund - Real Estate (Gross)



#### **Relative Return vs NCREIF Total Index**



#### Public Fund - Real Estate (Gross) Annualized Five Year Risk vs Return



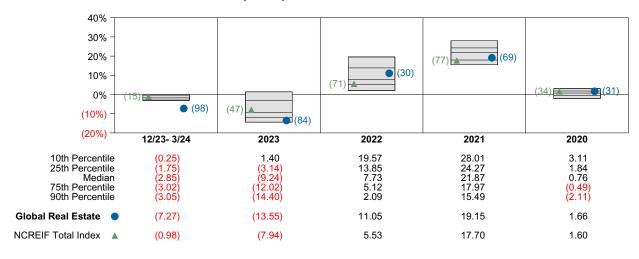


# **Global Real Estate Return Analysis Summary**

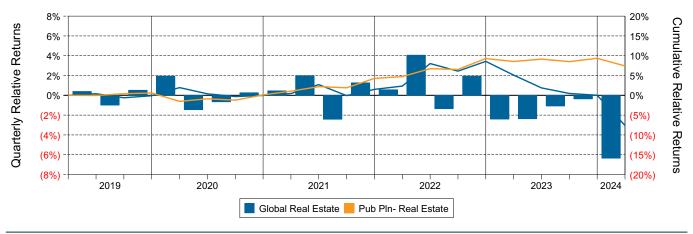
#### **Return Analysis**

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.

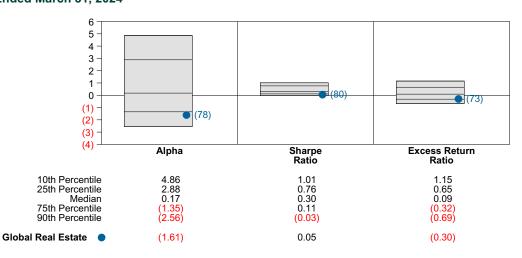
#### Performance vs Public Fund - Real Estate (Gross)



## **Cumulative and Quarterly Relative Returns vs NCREIF Total Index**



Risk Adjusted Return Measures vs NCREIF Total Index Rankings Against Public Fund - Real Estate (Gross) Five Years Ended March 31, 2024



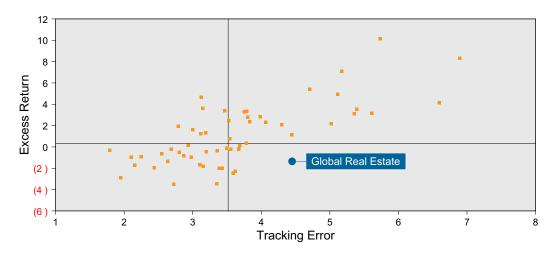


# **Global Real Estate Risk Analysis Summary**

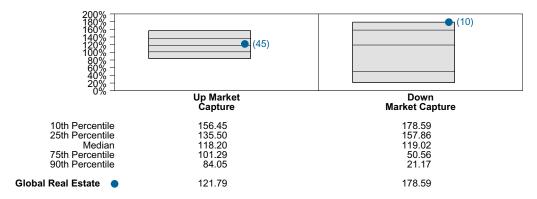
#### Risk Analysis

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.

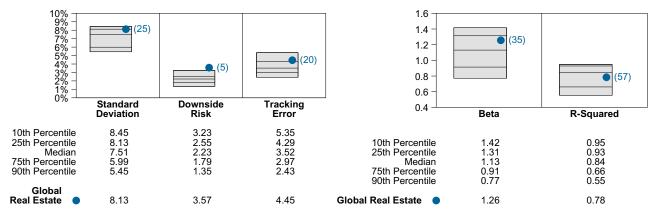
#### Risk Analysis vs Public Fund - Real Estate (Gross) Five Years Ended March 31, 2024



#### **Market Capture vs NCREIF Property Index** Rankings Against Public Fund - Real Estate (Gross) Five Years Ended March 31, 2024



## Risk Statistics Rankings vs NCREIF Property Index Rankings Against Public Fund - Real Estate (Gross) Five Years Ended March 31, 2024





## **Invesco Core Real Estate** Period Ended March 31, 2024

#### **Investment Philosophy**

Invesco will invest in core properties with a focus on investments with stable income and quality locations. Core style investments include existing, substantially leased (typically 70% or greater occupancy at the time of investment) income-producing industrial, multifamily, retail and office properties located principally in metropolitan areas that exhibit reasonable economic diversification

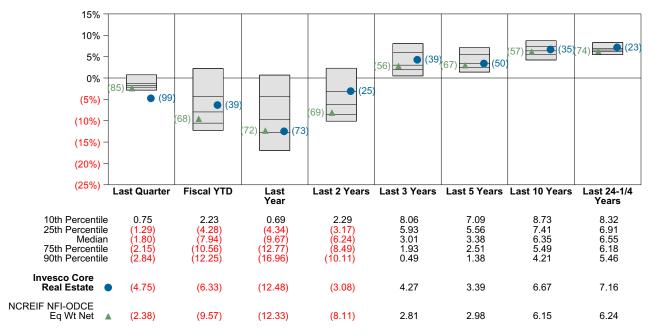
#### **Quarterly Summary and Highlights**

- Invesco Core Real Estate's portfolio posted a (4.75)% return for the quarter placing it in the 99 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 73 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF NFI-ODCE Eg Wt Net by 2.37% for the guarter and underperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 0.15%.

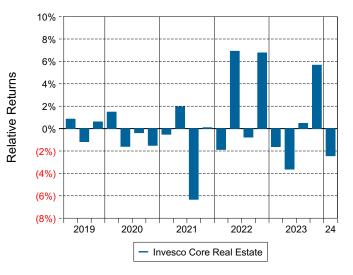
#### **Quarterly Asset Growth**

Beginning Market Value	\$393,472,987
Net New Investment	\$0
Investment Gains/(Losses)	\$-18,709,084
Ending Market Value	\$374,763,903

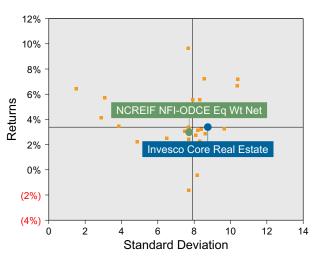
#### Performance vs Callan Open End Core Cmmingled Real Est (Net)



#### Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



#### Callan Open End Core Cmmingled Real Est (Net) Annualized Five Year Risk vs Return





# **Invesco Core Real Estate Return Analysis Summary**

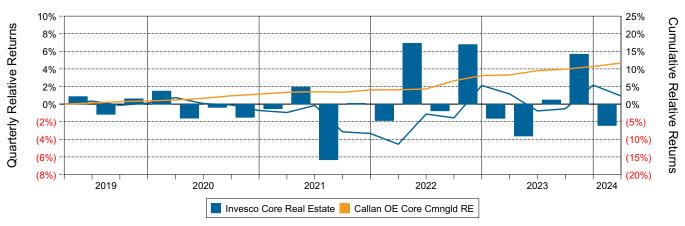
#### **Return Analysis**

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.

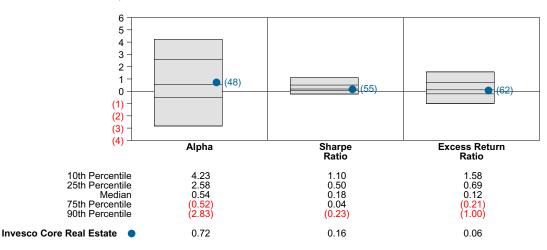
#### Performance vs Callan Open End Core Cmmingled Real Est (Net)



# Cumulative and Quarterly Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



Risk Adjusted Return Measures vs NCREIF NFI-ODCE Eq Wt Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024



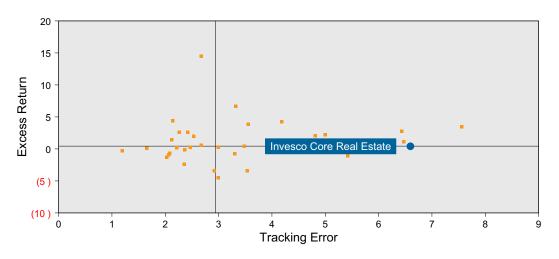


# **Invesco Core Real Estate Risk Analysis Summary**

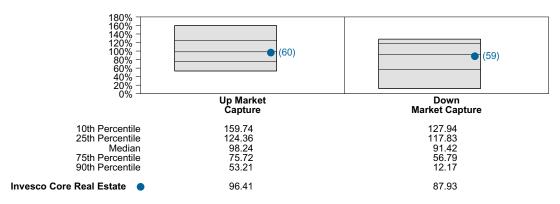
#### Risk Analysis

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.

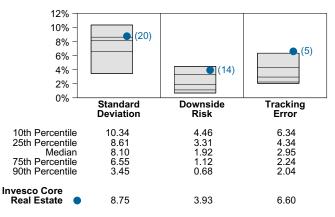
#### Risk Analysis vs Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024

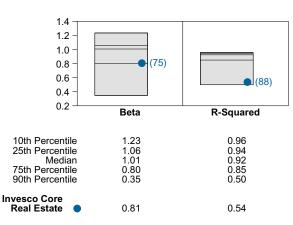


#### Market Capture vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024



## Risk Statistics Rankings vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024





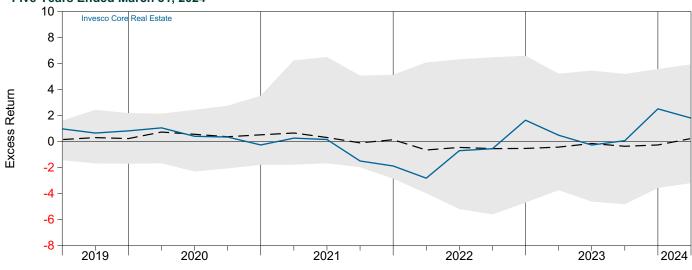


# **Invesco Core Real Estate Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

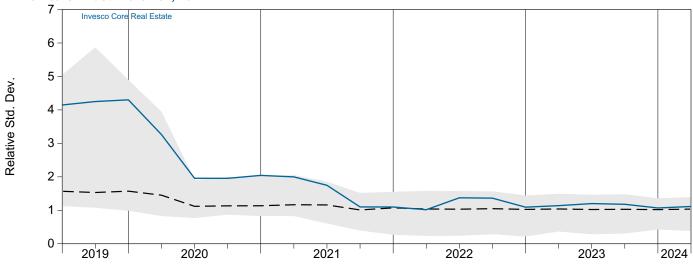
The first chart below illustrates the consistency of excess return over rolling three year periods versus the NCREIF NFI-ODCE Eq Wt Net. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan OE Core Cmngld RE. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

## Rolling Three Year Excess Return Relative to NCREIF NFI-ODCE Eq Wt Net Five Years Ended March 31, 2024



Median	Portfolio
0.04%	0.17%
55%	65%
50	49
	0.04% 55%

#### Rolling Three Year Relative Std. Dev. Relative to NCREIF NFI-ODCE Eq Wt Net Five Years Ended March 31, 2024



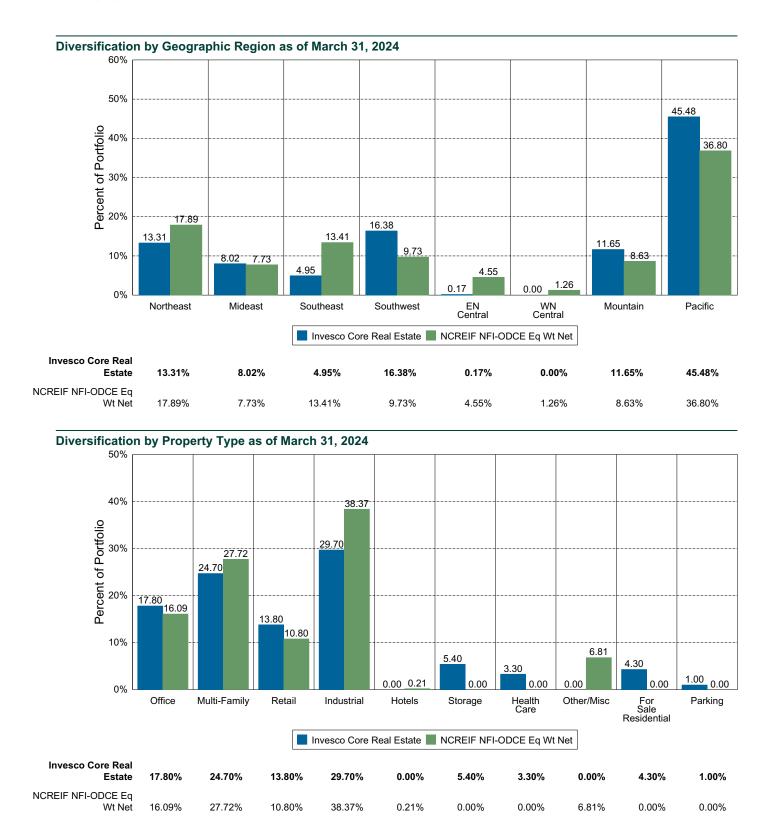
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.16%	1.92%
% Positive Periods	100%	100%
Average Ranking	50	22



# **Invesco Core Real Estate** Diversification Analysis as of March 31, 2024

#### **Diversification Analysis**

The following charts provide information on the diversification of the portfolio with regards to both Geographic Region and Property Type. Similar information is provided on the relevant market index for comparison.





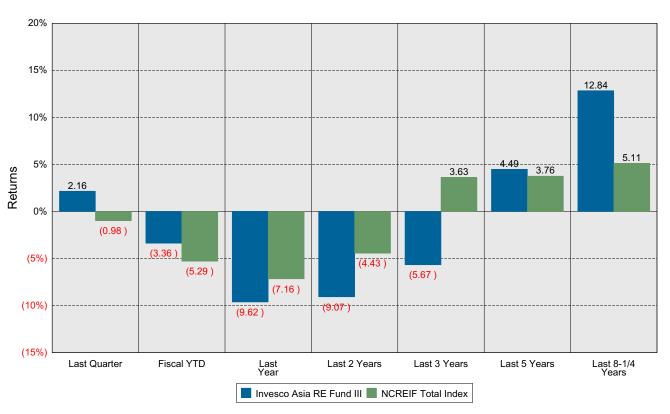
# Invesco Asia RE Fund III Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

• Invesco Asia RE Fund III's portfolio outperformed the NCREIF Total Index by 3.14% for the quarter and underperformed the NCREIF Total Index for the year by 2.46%.

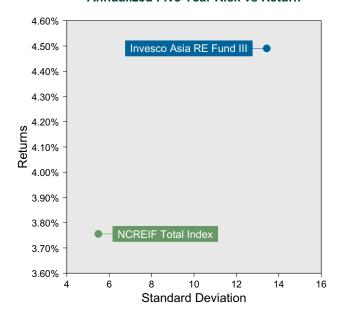
#### **Quarterly Asset Growth**

Beginning Market Value	\$15,574,634
Net New Investment	\$0
Investment Gains/(Losses)	\$336,253
Ending Market Value	\$15,910,887



#### **Relative Return vs NCREIF Total Index**

# 20% 15% 10% Relative Returns 5% 0% (5%) (10%)(15%)(20%) -2019 2020 2022 2021 2023 24 Invesco Asia RE Fund III





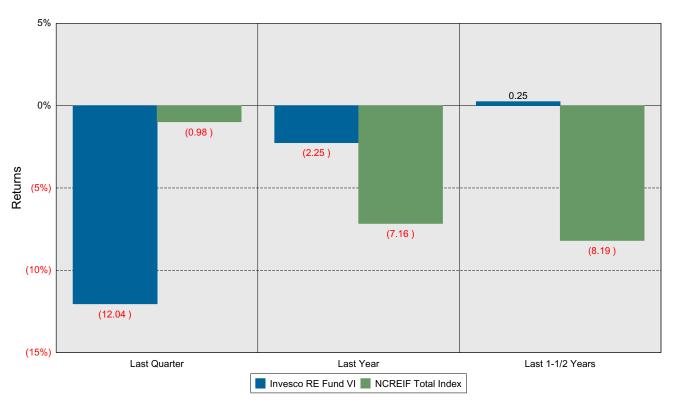
# **Invesco RE Fund VI** Period Ended March 31, 2024

# **Quarterly Summary and Highlights**

• Invesco RE Fund VI's portfolio underperformed the NCREIF Total Index by 11.06% for the quarter and outperformed the NCREIF Total Index for the year by 4.91%.

## **Quarterly Asset Growth**

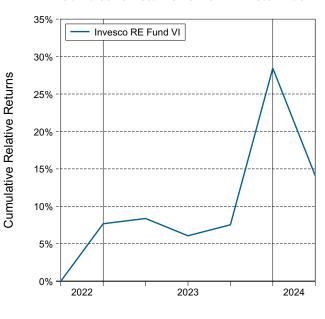
Beginning Market Value	\$49,475,393
Net New Investment	\$2,114,017
Investment Gains/(Losses)	\$-6,211,710
Ending Market Value	\$45,377,700



#### **Relative Return vs NCREIF Total Index**

# 25% 20% 15% Relative Returns 10% 5% 0% (10%) (15%)2022 2023 2024 Invesco RE Fund VI

#### **Cumulative Returns vs NCREIF Total Index**





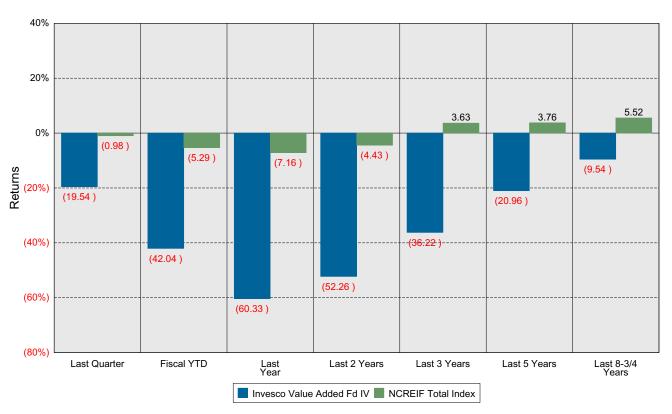
# Invesco Value Added Fd IV Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

• Invesco Value Added Fd IV's portfolio underperformed the NCREIF Total Index by 18.55% for the quarter and underperformed the NCREIF Total Index for the year by 53.17%.

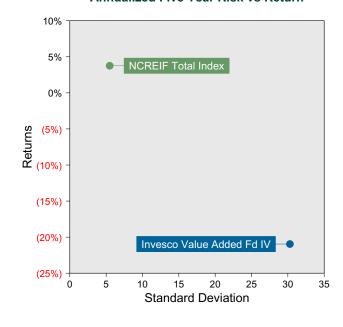
#### **Quarterly Asset Growth**

Beginning Market Value	\$1,009,751
Net New Investment	\$0
Investment Gains/(Losses)	\$-197,268
Ending Market Value	\$812.483



## **Relative Return vs NCREIF Total Index**

# 30% 20% 10% Relative Returns 0% (10%) (20%)(30%)(40%)(50%)2019 2020 2022 2021 2023 24 Invesco Value Added Fd IV





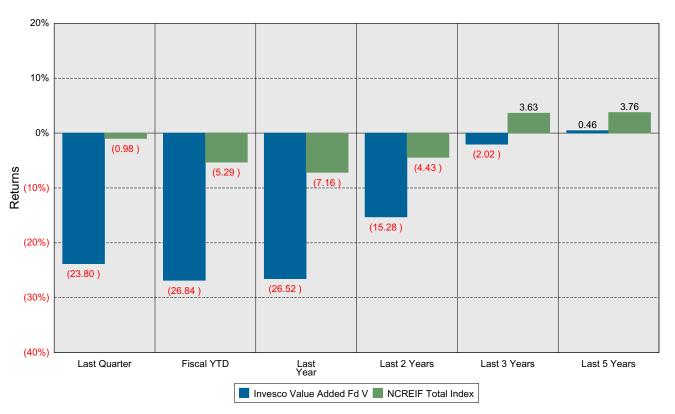
# Invesco Value Added Fd V Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

• Invesco Value Added Fd V's portfolio underperformed the NCREIF Total Index by 22.81% for the quarter and underperformed the NCREIF Total Index for the year by 19.36%.

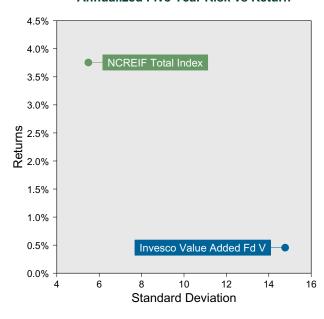
#### **Quarterly Asset Growth**

Beginning Market Value	\$72,598,633
Net New Investment	\$0
Investment Gains/(Losses)	\$-17,275,140
Ending Market Value	\$55,323,493



# **Relative Return vs NCREIF Total Index**

# 20% 15% 10% 5% Relative Returns 0% (5%) (10%)(15%)(20%)(25%)(30%)2019 2020 2022 2021 2023 24 Invesco Value Added Fd V





# JP Morgan SPC & Strat RE Period Ended March 31, 2024

#### **Investment Philosophy**

Our investment philosophy for Special Situation Property Fund is based on our belief that consistently excellent investment results can be achieved by focusing on value-added investment opportunities while maintaining an optimum leverage ratio. The investment process is designed to continuously add value throughout the acquisition, ownership and disposition of an asset. The Fund is focused on generating a total return premium in excess of 300 basis points (gross) over the NCREIF Index. Therefore, Special Situation Property Fund seeks value-added investments rather than focusing on certain geographic or property types.

Investment Gains/(Losses)

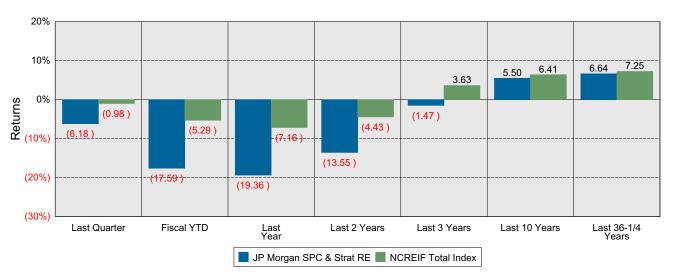
#### **Quarterly Summary and Highlights**

• JP Morgan SPC & Strat RE's portfolio underperformed the NCREIF Total Index by 5.19% for the quarter and underperformed the NCREIF Total Index for the year by 12.20%.

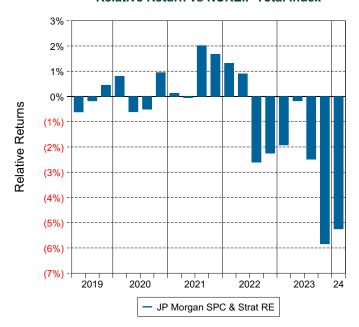
Quarterly Asset Growth		
Beginning Market Value	\$261,203,953	
Net New Investment	\$0	

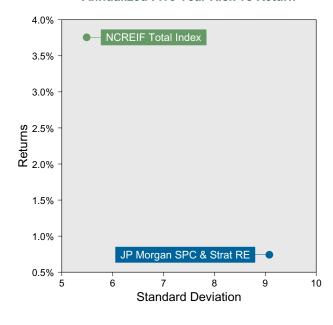
\$-16,136,945

\$245,067,008 **Ending Market Value** 



#### Relative Return vs NCREIF Total Index





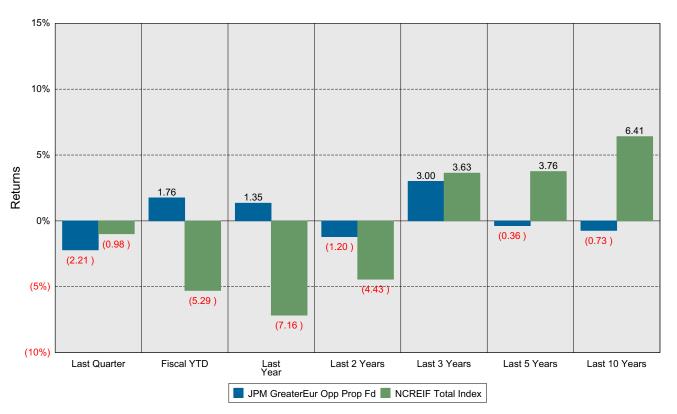


# JPM GreaterEur Opp Prop Fd Period Ended March 31, 2024

#### **Quarterly Summary and Highlights**

• JPM GreaterEur Opp Prop Fd's portfolio underperformed the NCREIF Total Index by 1.22% for the quarter and outperformed the NCREIF Total Index for the year by 8.51%.

Quarterly Asset Growth	
Beginning Market Value	\$8,827
Net New Investment	\$-190
Investment Gains/(Losses)	\$-193
Ending Market Value	\$8,443



## **Relative Return vs NCREIF Total Index**

# 50% 40% 30% Relative Returns 20% 10% 0% (10%)(20%)(30%) -2019 2020 2022 2023 2021 24 JPM GreaterEur Opp Prop Fd





# **TIR Teredo** Period Ended March 31, 2024

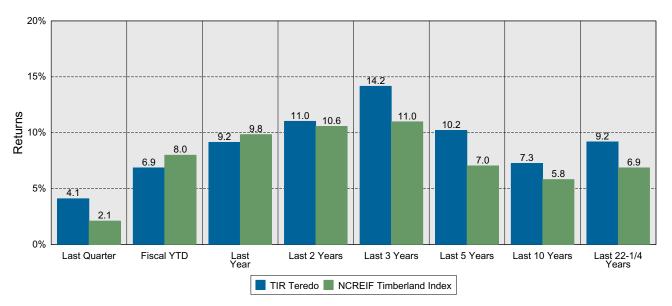
#### **Investment Philosophy**

Teredo Timber LLC - The investment objective of Teredo is to provide competitive investment returns from increasing saw timber production through the 20 year term of the partnership. TIR's management strategy is to maximize saw timber volume by applying intensive forest management techniques which accelerate growth through the diameter class distribution. Periodic cash flows are produced from thinning and final harvests of the individual timber stands.

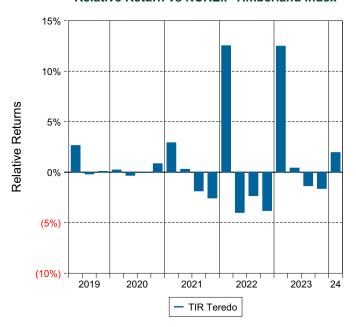
#### **Quarterly Summary and Highlights**

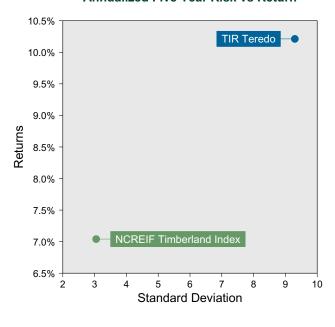
• TIR Teredo's portfolio outperformed the NCREIF Timberland Index by 1.99% for the quarter and underperformed the NCREIF Timberland Index for the year by 0.69%.

Quarterly Asset Growth		
Beginning Market Value	\$23,213,000	
Net New Investment	\$-500,000	
Investment Gains/(Losses)	\$939,010	
Ending Market Value	\$23,652,010	



#### Relative Return vs NCREIF Timberland Index







# **TIR Springbank** Period Ended March 31, 2024

#### **Investment Philosophy**

Springbank LLC - The investment objective of Springbank is to maximize long-term investment potential by means of the formation of a dedicated land management group, intensive timber management to increase timber production, the coordination of timber harvesting with land management activities and direct marketing and selective real estate partnerships.

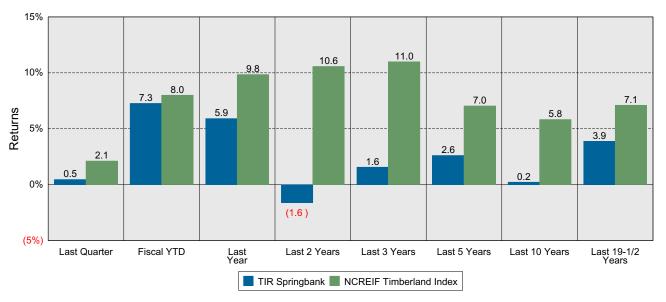
#### **Quarterly Summary and Highlights**

• TIR Springbank's portfolio underperformed the NCREIF Timberland Index by 1.66% for the quarter and underperformed the NCREIF Timberland Index for the year by 3.94%.

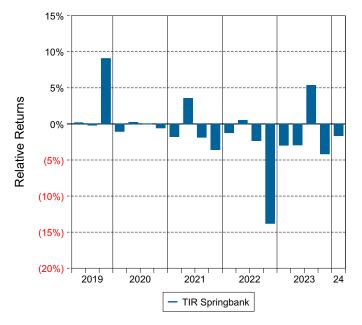
Quarterly Asse	et Growth
Beginning Market Value	\$58,910,444

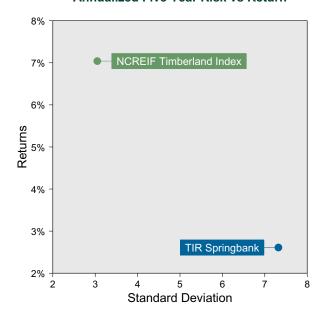
Net New Investment \$-6,080,000 Investment Gains/(Losses) \$251,848

\$53,082,292 **Ending Market Value** 



#### Relative Return vs NCREIF Timberland Index







# ISQ Global Infrastructure II Period Ended March 31, 2024

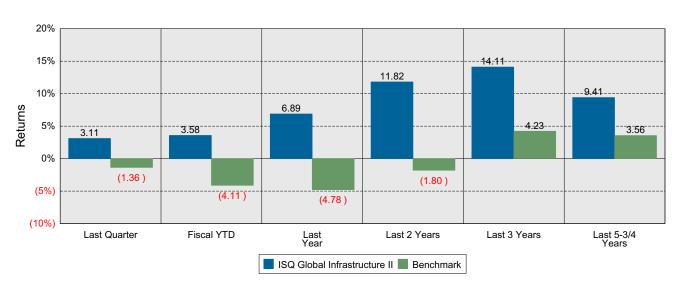
#### **Investment Philosophy**

The ISQ Global Infrastructure Fund II seeks to achieve long-term capital appreciation as well as current income through equity and equity related investments in infrastructure and infrastructure related assets located globally, with a focus on North America, Europe, and selected growth economies in Asia and Latin America. The Fund may also invest in debt Securities that have equity-like returns or an equity component, or are related to its equity investments, including without limitation convertible debt, bank loans and participations and other similar instruments. The Benchmark is comprised of 50% CPI-U lagged one guarter and 50% NFI-ODCE Equal Weight Net.

#### **Quarterly Summary and Highlights**

 ISQ Global Infrastructure II's portfolio outperformed the Benchmark by 4.47% for the quarter and outperformed the Benchmark for the year by 11.67%.

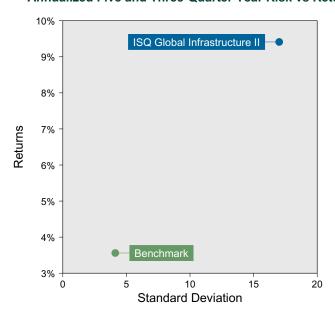
Quarterly Asset Gro	owth
Beginning Market Value	\$70,836,617
Net New Investment	\$-157,712
Investment Gains/(Losses)	\$2,198,292
Ending Market Value	\$72,877,197



#### Relative Return vs Benchmark

# 40% 30% 20% Relative Returns 10% 0% (10%)(20%)(30%) 2018 2019 2020 2021 2022 2023 ISQ Global Infrastructure II

#### Annualized Five and Three-Quarter Year Risk vs Return





# ISQ Global Infrastructure III Period Ended March 31, 2024

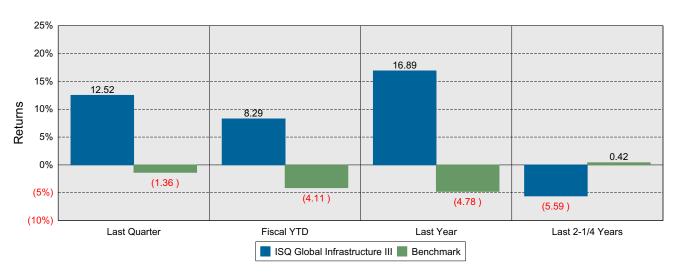
#### **Investment Philosophy**

The ISQ Global Infrastructure Fund II seeks to achieve long-term capital appreciation as well as current income through equity and equity related investments in infrastructure and infrastructure related assets located globally, with a focus on North America, Europe, and selected growth economies in Asia and Latin America. The Fund may also invest in debt Securities that have equity-like returns or an equity component, or are related to its equity investments, including without limitation convertible debt, bank loans and participations and other similar instruments. The Benchmark is comprised of 50% CPI-U lagged one guarter and 50% NFI-ODCE Equal Weight Net.

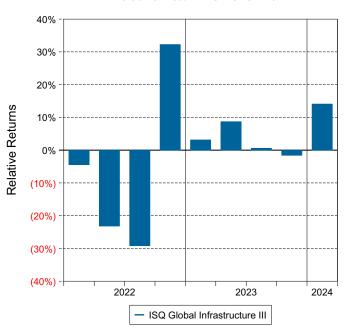
#### **Quarterly Summary and Highlights**

 ISQ Global Infrastructure III's portfolio outperformed the Benchmark by 13.88% for the quarter and outperformed the Benchmark for the year by 21.67%.

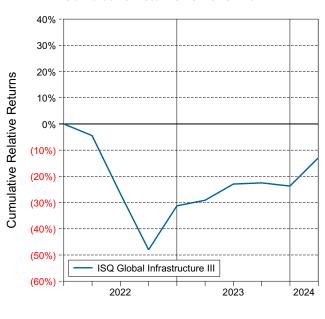
Quarterly Asset Gro	owth
Beginning Market Value	\$23,532,356
Net New Investment	\$0
Investment Gains/(Losses)	\$2,946,376
Ending Market Value	\$26,478,732



#### **Relative Return vs Benchmark**



#### **Cumulative Returns vs Benchmark**





# The Rohatyn Group Period Ended March 31, 2024

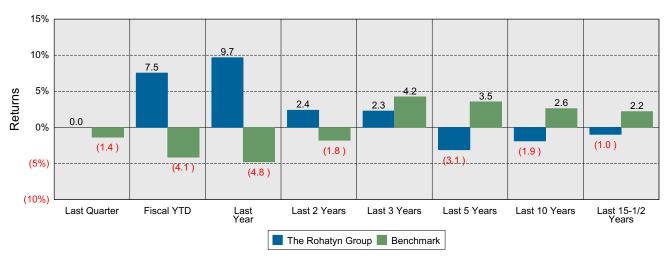
#### **Investment Philosophy**

The Rohatyn Group's Asian Infrastructure & Related Resources Opportunity (AIRRO) Fund seeks to invest in infrastructure and related resources opportunities across the greater Asia Pacific region. The Fund seeks to invest in a broad range of assets, including: core infrastructure, power both from conventional and renewable sources, communications, water and waste-water, public works, urban development and other "social" infrastructure assets and related resources. The management of the AIRRO Fund was transferred from JP Morgan to The Rohatyn Group in May, 2018. The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

#### **Quarterly Summary and Highlights**

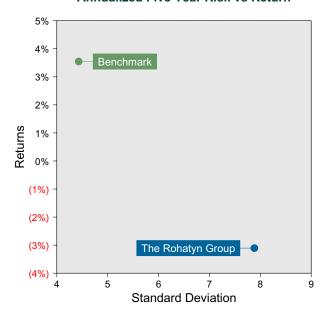
• The Rohatyn Group's portfolio outperformed the Benchmark by 1.36% for the quarter and outperformed the Benchmark for the year by 14.45%.

Quarterly Asset Grow	th
Beginning Market Value	\$17,554,229
Net New Investment	\$0
Investment Gains/(Losses)	\$0
Ending Market Value	\$17,554,229



#### Relative Return vs Benchmark

# 15% 5% Relative Returns 0% (5%)(10%)(15%)(20%)2020 2019 2021 2022 2023 24 The Rohatyn Group





# JP Morgan Infrastructure Fund Period Ended March 31, 2024

#### **Investment Philosophy**

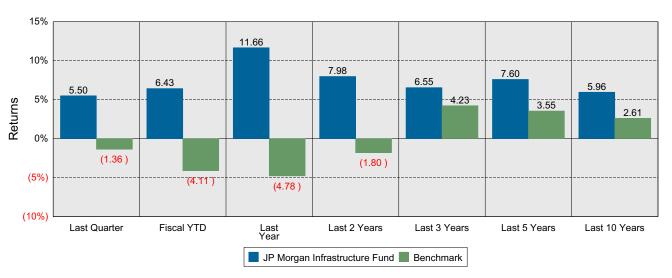
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports. The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one guarter and 50% NFI-ODCE Equal Weight Net thereafter.

#### **Quarterly Summary and Highlights**

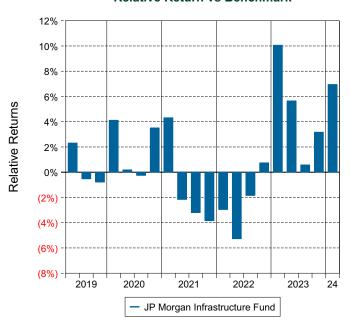
• JP Morgan Infrastructure Fund's portfolio outperformed the Benchmark by 6.86% for the quarter and outperformed the Benchmark for the year by 16.44%.

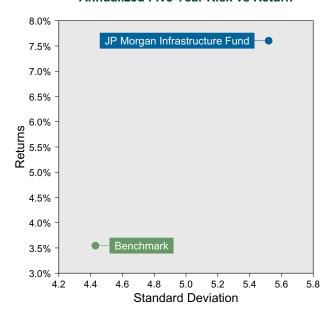
Quarterly Asset	Growth
Market Value	\$125.647

Beginning Market Value	\$125,647,055
Net New Investment	\$-1,932,769
Investment Gains/(Losses)	\$7,325,973
Ending Market Value	\$131,040,259



#### Relative Return vs Benchmark







# **Grosvenor CIS Fund I** Period Ended March 31, 2024

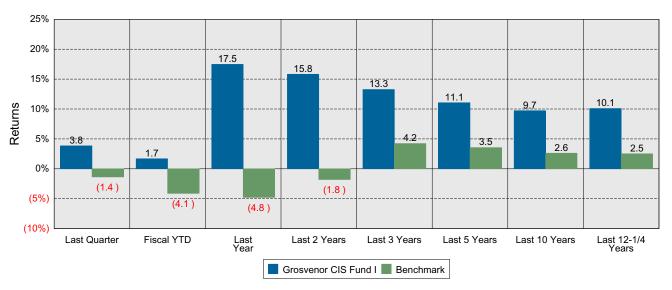
#### **Investment Philosophy**

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

#### **Quarterly Summary and Highlights**

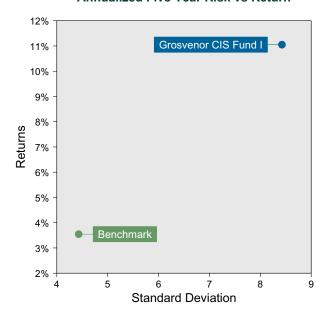
• Grosvenor CIS Fund I's portfolio outperformed the Benchmark by 5.21% for the quarter and outperformed the Benchmark for the year by 22.26%.

Quarterly Asset Gro	wth
Beginning Market Value	\$8,761,557
Net New Investment	\$0
Investment Gains/(Losses)	\$337,121
Ending Market Value	\$9,098,678



#### Relative Return vs Benchmark

# 20% 15% Relative Returns 10% 5% (5%) (10%) 2020 2021 2019 2022 2023 24 Grosvenor CIS Fund I





# **Grosvenor CIS Fund II** Period Ended March 31, 2024

#### **Investment Philosophy**

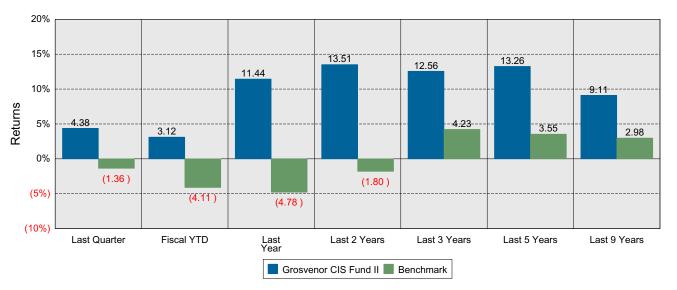
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

#### **Quarterly Summary and Highlights**

• Grosvenor CIS Fund II's portfolio outperformed the Benchmark by 5.74% for the quarter and outperformed the Benchmark for the year by 16.22%.

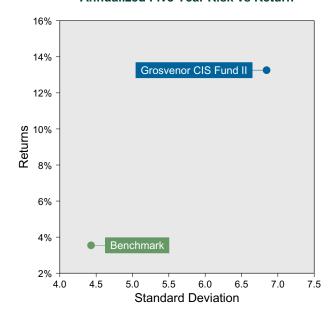
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$20,179,347
Net New Investment	\$-595,963
Investment Gains/(Losses)	\$879,436
Ending Market Value	\$20,462,820



#### Relative Return vs Benchmark

# 12% 10% 8% 6% Relative Returns 4% 2% (2%)(4%)(6%)2019 2020 2021 2022 2023 24 Grosvenor CIS Fund II





# **Grosvenor CIS Fund III** Period Ended March 31, 2024

#### **Investment Philosophy**

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

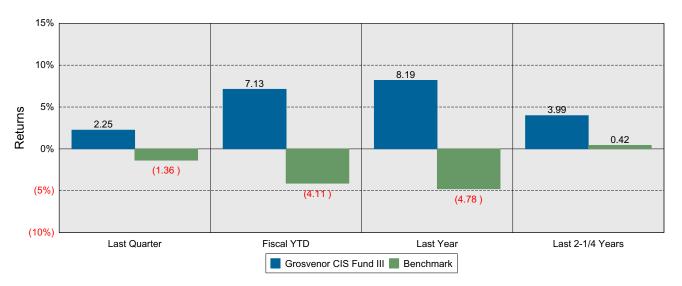
#### **Quarterly Summary and Highlights**

• Grosvenor CIS Fund III's portfolio outperformed the Benchmark by 3.62% for the quarter and outperformed the Benchmark for the year by 12.97%.

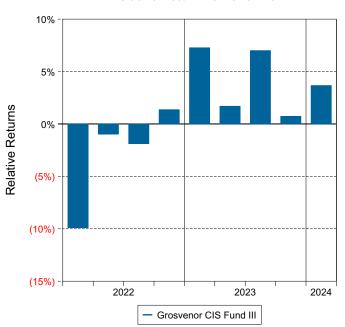
Quarterly Asset Gr	owth
Beginning Market Value	\$30,759,765
Net New Investment	\$6,597,171
Investment Gains/(Losses)	\$750,083

\$38,107,019

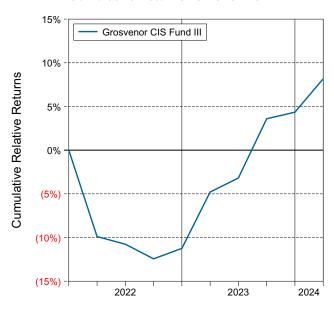
**Ending Market Value** 



#### **Relative Return vs Benchmark**



#### **Cumulative Returns vs Benchmark**





# **Macquarie Infrastructure Fund IV** Period Ended March 31, 2024

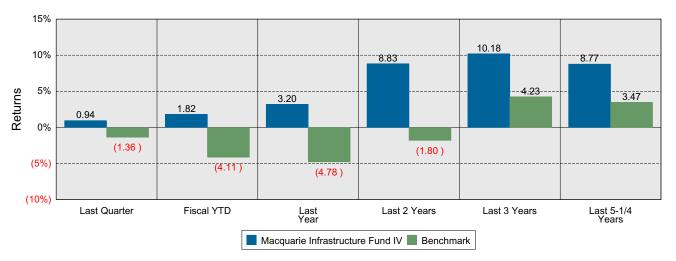
#### **Investment Philosophy**

Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience will provide a competitive advantage in sourcing and due diligence. Furthermore, the manager will also continue to focus on opportunities where its active management capabilities can add value for investors in terms of enhancing returns and the substantial mitigation and/or elimination of material operational risks. The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

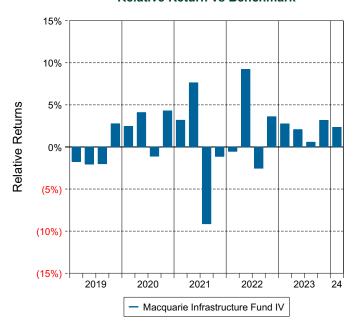
#### **Quarterly Summary and Highlights**

 Macquarie Infrastructure Fund IV's portfolio outperformed the Benchmark by 2.30% for the quarter and outperformed the Benchmark for the year by 7.98%.

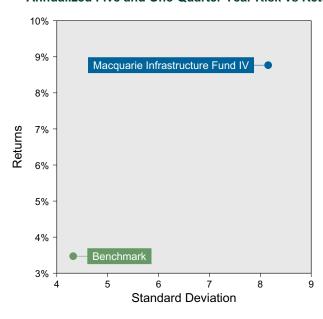
Quarterly Asset Gro	owth
Beginning Market Value	\$80,244,769
Net New Investment	\$-36,742
Investment Gains/(Losses)	\$755,319
Ending Market Value	\$80,963,346



#### Relative Return vs Benchmark



#### Annualized Five and One-Quarter Year Risk vs Return





# Macquarie Infrastructure Fund V Period Ended March 31, 2024

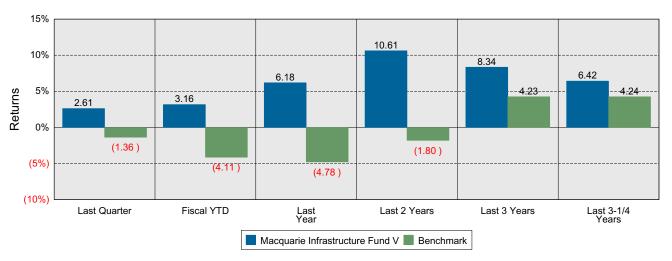
#### **Investment Philosophy**

Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience will provide a competitive advantage in sourcing and due diligence. Furthermore, the manager will also continue to focus on opportunities where its active management capabilities can add value for investors in terms of enhancing returns and the substantial mitigation and/or elimination of material operational risks. The Benchmark is comprised of 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

#### **Quarterly Summary and Highlights**

 Macquarie Infrastructure Fund V's portfolio outperformed the Benchmark by 3.98% for the quarter and outperformed the Benchmark for the year by 10.96%.

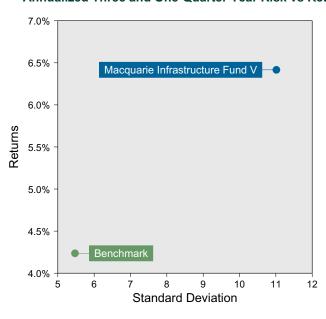
Quarterly Asset Gr	owth
Beginning Market Value	\$65,473,441
Net New Investment	\$-37,295
Investment Gains/(Losses)	\$1,709,385
Ending Market Value	\$67,145,531



#### Relative Return vs Benchmark

# 15% 10% Relative Returns 5% 0% (5%) (10%) (15%)24 2021 2022 2023 Macquarie Infrastructure Fund V

#### Annualized Three and One-Quarter Year Risk vs Return









1st Quarter 2024

# **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 to see all of our publications, and www.callan.com/blog to view our blog. For more information contact Barb Gerraty at 415-274-3093 / institute@callan.com.

# **New Research from Callan's Experts**

**2024-2033 Capital Markets Assumptions** | View our interactive webpage and charticle outlining our 10-year assumptions. Our white paper and associated webinar also detail the process involved in creating our assumptions and the reasoning behind them.

#### Callan Periodic Table of Investment Returns: Year-end 2023 |

The Periodic Table of Investment Returns depicts annual returns for key asset classes, ranked from best to worst performance for each calendar year.

Rental Housing Primer: 1Q24 RAR | Callan's Aaron Quach provides analysis of the key subsectors within the rental housing sector.

**STAR Report Executive Summary: Year-End 2023** | The Style, Trend, Analysis & Research (STAR) report provides in-depth analysis of asset flows across public strategies and discussion of alternatives.

#### **Webinar Replays**

Research Café: ESG Interview Series | This session features Tom Shingler, Callan ESG practice leader, interviewing Chris Fidler, from the Codes & Standards team at the CFA Institute.

## **Blog Highlights**

<u>SEC Releases Final Climate Disclosure Rule</u> | The objective for these rules is to aid investors in making relatable comparisons of companies by providing transparency into the potential financial effects of climate-related risks.

#### A Strong Finish to 2023 Bodes Well for Hedge Funds in 2024 |

Hedge funds finished off 2023 on a strong note with the HFRI Fund Weighted Composite ending 8.1% higher and the Callan Institutional Hedge Fund Peer Group gaining 7.5%.

The Magnificent Seven and Large Cap Portfolios | The Seven's presence, both in weight and attribution, affected just about every investment managers' large cap portfolio.

# **Quarterly Updates**

<u>Private Equity Update, 4Q23</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 4Q23 | A comparison of active managers alongside relevant benchmarks over the long term

<u>Market Pulse</u>, <u>4Q23</u> | 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, 4Q23 | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

<u>Hedge Fund Update, 4Q23</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Update, 4Q23 | A summary of market activity for real assets and private real estate during the quarter

<u>Private Credit Update</u>, <u>4Q23</u> | A review of performance and fundraising activity for private credit during the quarter

Callan Target Date Index™, 4Q23 | Tracks the performance and asset allocation of available target date mutual funds and CITs

<u>Callan DC Index™</u>, <u>4Q23</u> | Provides underlying fund performance, asset allocation, and cash flows of more than 100 large defined contribution plans representing approximately \$400 billion in assets.

#### **Events**

A complete list of all upcoming events can be found on our website: callan.com/events-education.

Please mark your calendar and look forward to upcoming invitations:

#### 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

#### **Education: By the Numbers**

Unique pieces of research the Institute generates each year

Attendees (on average) of the Institute's annual National Conference

**4,845** Total attendees of the "Callan College" since 1994

#### **Education**

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

# Introduction to Investments June 11-12, 2024 – Chicago

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.

# Alternative Investments Aug. 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.

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



"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

# List of Callan's Investment Manager Clients

Confidential - For Callan Client Use Only

Callan takes its fiduciary and disclosure responsibilities to clients very seriously. We recognize that there are numerous potential conflicts of interest encountered in the investment consulting industry, and that it is our responsibility to manage those conflicts effectively and in the best interest of our clients. At Callan, we employ a robust process to identify, manage, monitor, and disclose potential conflicts on an ongoing basis.

The list below is an important component of our conflicts management and disclosure process. It identifies those investment managers that pay Callan fees for educational, consulting, software, database, or reporting products and services. We update the list quarterly because we believe that our fund sponsor clients should know the investment managers that do business with Callan, particularly those investment manager clients that the fund sponsor clients may be using or considering using. Please note that if an investment manager receives a product or service on a complimentary basis (e.g., attending an educational event), they are not included in the list below. Callan is committed to ensuring that we do not consider an investment manager's business relationship with Callan, or lack thereof, in performing evaluations for or making suggestions or recommendations to its other clients. Please refer to Callan's ADV Part 2A for a more detailed description of the services and products that Callan makes available to investment manager clients through our Institutional Consulting Group, Independent Adviser Group, and Fund Sponsor Consulting Group. Due to the complex corporate and organizational ownership structures of many investment management firms, parent and affiliate firm relationships are not indicated on our list.

Fund sponsor clients may request a copy of the most currently available list at any time. Fund sponsor clients may also request specific information regarding the fees paid to Callan by particular fund manager clients. Per company policy, information requests regarding fees are handled exclusively by Callan's Compliance department.

Manager Name
abrdn
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AllianceBernstein
Allspring Global Investments, LLC
Altrinsic Global Advisors, LLC
American Century Investments
Amundi US, Inc.
Antares Capital LP
Apollo Global Management, Inc.
AQR Capital Management
Ares Management LLC
ARGA Investment Management, LP
Ariel Investments, LLC
Aristotle Capital Management, LLC
Artemis Real Estate Partners
Atlanta Capital Management Co., LLC

Manager Name
Audax Private Debt
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Belle Haven Investment L.P.
BentallGreenOak
Beutel, Goodman & Company Ltd.
Black Creek Investment Management Inc.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC

**Manager Name** 

Brookfield Asset Management Inc.

Brown Brothers Harriman & Company

Brown Investment Advisory & Trust Company

Capital Group

CastleArk Management, LLC

Cercano Management LLC

CIBC Asset Management Inc.

CIM Group, LP

Clarion Partners

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments NA

**Comvest Partners** 

CQS

Crescent Capital Group LP

Dana Investment Advisors, Inc.

D.E. Shaw Investment Management, LLC

DePrince, Race & Zollo, Inc.

Diamond Hill Capital Management, Inc.

Dimensional Fund Advisors L.P.

Doubleline

**DWS** 

**EARNEST Partners. LLC** 

Fayez Sarofim & Company

Federated Hermes, Inc.

Fidelity Institutional Asset Management

Fiera Capital Corporation

First Eagle Investment Management, LLC

First Hawaiian Bank Wealth Management Division

Fisher Investments

Franklin Templeton

Fred Alger Management, LLC

GAMCO Investors, Inc.

GlobeFlex Capital, L.P.

Goldman Sachs

Golub Capital

**GW&K Investment Management** 

Harbor Capital Group Trust

Hardman Johnston Global Advisors LLC

Haven Global Partners, LLC

**Manager Name** 

Heitman LLC

Hotchkis & Wiley Capital Management, LLC

HPS Investment Partners, LLC

IFM Investors

Impax Asset Management LLC

Income Research + Management

Insight Investment

Intercontinental Real Estate Corporation

Invesco

J.P. Morgan

Janus

Jennison Associates LLC

Jensen Investment Management

Jobs Peak Advisors

Kayne Anderson Rudnick Investment Management, LLC

King Street Capital Management, L.P.

Kohlberg Kravis Roberts & Co. L.P. (KKR)

Lazard Asset Management

LGIM America

Lincoln National Corporation

Longview Partners

Loomis, Sayles & Company, L.P.

Lord, Abbett & Company

Los Angeles Capital Management

LSV Asset Management

MacKay Shields LLC

Macquarie Asset Management

Manulife Investment Management

Marathon Asset Management, L.P.

Mawer Investment Management Ltd.

MetLife Investment Management

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MFS Investment Management

Mondrian Investment Partners Limited

Montag & Caldwell, LLC

Morgan Stanley Investment Management

MUFG Bank, Ltd.

Natixis Investment Managers

Neuberger Berman

Newton Investment Management

Northern Trust Asset Management



**Manager Name** 

Nuveen

Oaktree Capital Management, L.P.

Orbis Investment Management Limited

P/E Investments

Pacific Investment Management Company

Parametric Portfolio Associates LLC

Parnassus Investments

Partners Group (USA) Inc.

Pathway Capital Management, LP

Peregrine Capital Management, LLC

**PGIM DC Solutions** 

**PGIM Fixed Income** 

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

PPM America, Inc.

Pretium Partners, LLC

Principal Asset Management

Pzena Investment Management, LLC

Raymond James Investment Management

**RBC Global Asset Management** 

Regions Financial Corporation

S&P Dow Jones Indices

Sands Capital Management

Schroder Investment Management North America Inc.

**Manager Name** 

Segall Bryant & Hamill

SLC Management

Sprucegrove Investment Management Ltd.

Star Mountain Capital, LLC

State Street Global Advisors

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TA Realty

TD Global Investment Solutions

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

TPG Angelo Gordon

**UBS Asset Management** 

VanEck

Versus Capital Group

Victory Capital Management Inc.

Virtus Investment Partners, Inc.

Vontobel Asset Management

Voya

Walter Scott & Partners Limited

WCM Investment Management

Wellington Management Company LLP

Western Asset Management Company LLC

Westfield Capital Management Company, LP

William Blair & Company LLC

Xponance, Inc.



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CLIENT: North Dakota State Invest	REPORT TYPE: EMAIL	
ORGID: 966	REPORT ID: 20	REPORT DATE: Mar 31, 2024
CONSULTANT	OFFICE	MAILING DUE DATE
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