# Callan

March 31, 2024

North Dakota State Investment

Board Legacy Fund

**Investment Measurement Service** 

**Quarterly Review** 

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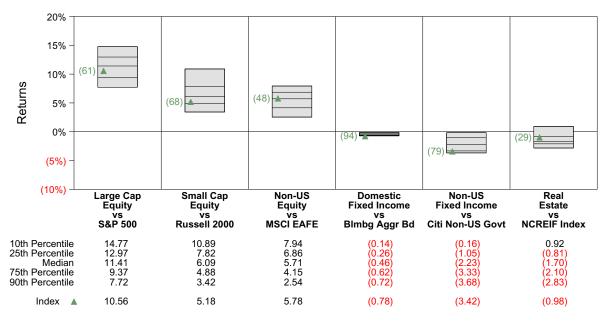
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# Market Overview Active Management vs Index Returns

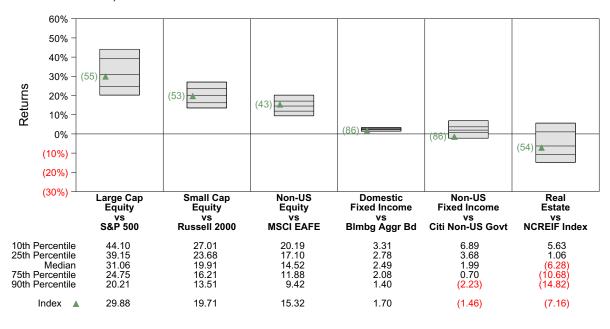
#### **Market Overview**

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.

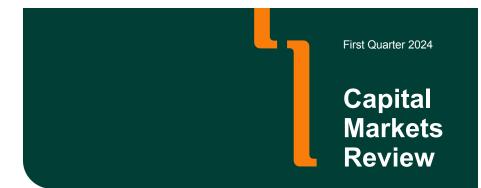
# Range of Separate Account Manager Returns by Asset Class One Quarter Ended March 31, 2024



# 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

# 35% 30% 25% 20% 15% 10% -5% -10% -15%

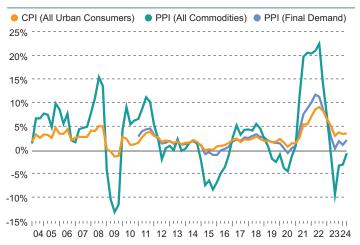
04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 2324

Source: Bureau of Economic Analysis

#### Inflation Year-Over-Year

-20%

-25%



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 Gl 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

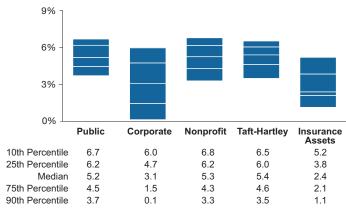
- Many now saying this indicator may not be as good as it was
- Election years also tend to do weird things to indicators

# **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.

# Quarterly Returns, Callan Database Groups

(3/31/24)



# 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.

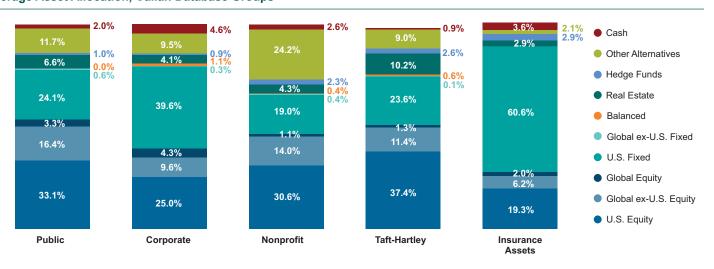
## **Nonprofits**

- 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.

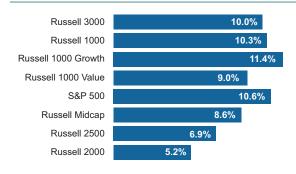
# Large cap stocks dominate again

- 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.

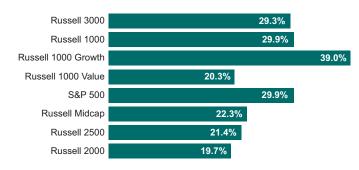
# **U.S. Equity: Quarterly Returns**

(3/31/24)



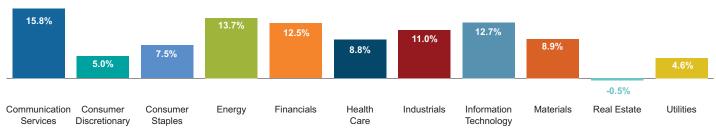
# U.S. Equity: One-Year Returns

(3/31/24)



#### Sources: FTSE Russell and S&P Dow Jones Indices

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



Source: S&P Dow Jones Indices

# **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.

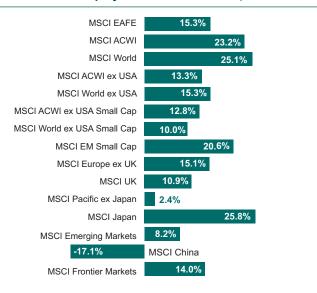
#### Market valuation in India

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 guarter 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).

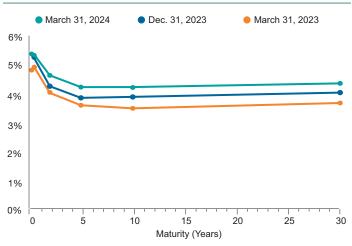
# Aggregate falls as rates climb

- 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

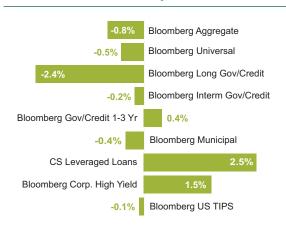
### **U.S. Treasury Yield Curves**



Source: Bloomberg

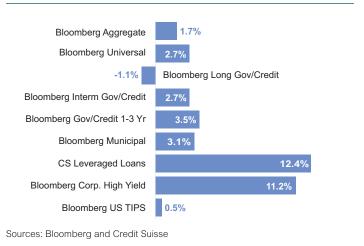
# **U.S. Fixed Income: Quarterly Returns**

(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%.

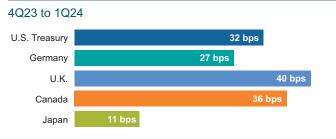
# U.S. dollar strengthened

- 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%.

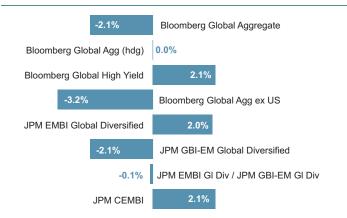
### Change in 10-Year Global Government Bond Yields



Source: Bloomberg

# **Global Fixed Income: Quarterly Returns**

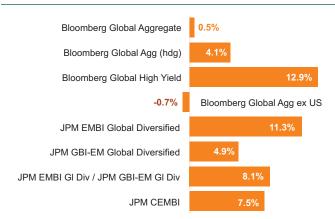
(3/31/24)



Sources: Bloomberg and JPMorgan Chase

# Global Fixed Income: One-Year Returns

(3/31/24)



Sources: Bloomberg and JPMorgan Chase

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

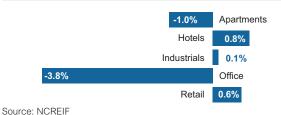
- The NCREIF Property Index, a measure of unlevered U.S. institutional real estate assets, fell 1.0% during 1Q24.
- The income return was 1.2% while the appreciation return was -2.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 0.8%. Office finished 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

 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**

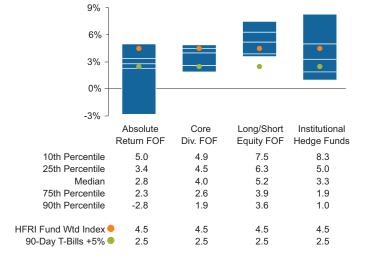
# HEDGE FUNDS/MACs | Joe McGuane

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

<sup>\*</sup>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.

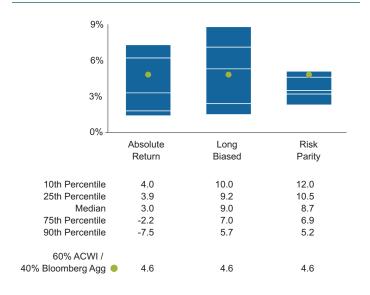
Since the Global Financial Crisis, liquid alternatives to hedge funds have become popular among investors for their attractive risk-adjusted returns that are similarly uncorrelated with traditional stock and bond investments but offered at a lower cost.

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**

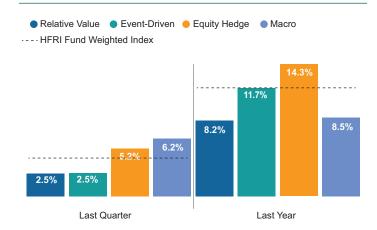
(3/31/24)



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

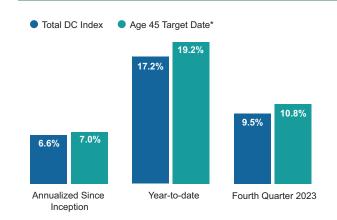
For plans with assets less than \$500 million in assets, the average asset-weighted fee decreased by 3 basis points. Plans with assets between \$500 million and \$1 billion saw the largest fee decrease of 9 bps, while the fee for plans with more than \$1 billion in assets had a decrease of 4 bps.

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.

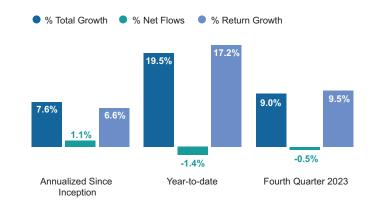
#### **Investment Performance**

(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

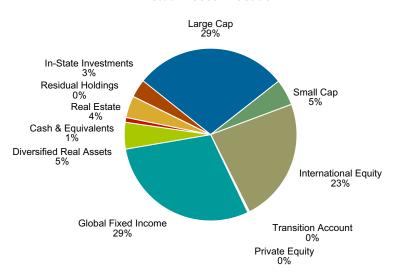
Note: DC Index inception date is January 2006.

- 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.

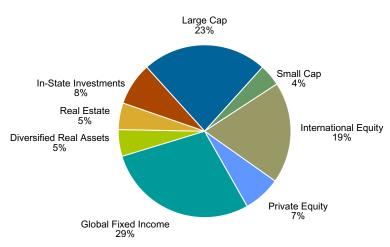
# **Actual vs Target Asset Allocation** As of March 31, 2024

The first chart below shows the Fund's asset allocation as of March 31, 2024. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

#### **Actual Asset Allocation**



# **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	3,039,654	28.8%	23.4%	5.4%	571,843
Small Cap	514,995	4.9%	4.1%	0.8%	79,499
International Equity	2,458,896	23.3%	19.0%	4.3%	452,975
Transition Account	45	0.0%	0.0%	0.0%	45
Private Equity	26,622	0.3%	7.0%	(6.7%)	(712,402)
Global Fixed Income	3,107,383	29.4%	28.5%	`0.9%´	98,501
Diversified Real Assets	527,202	5.0%	5.0%	(0.0%)	(672)
Cash & Equivalents	96,542	0.9%	0.0%	`0.9%	96,542
Real Estate	428,299	4.1%	5.0%	(0.9%)	(99,575)
Residual Holdings	1,961	0.0%	0.0%	`0.0%´	1,961
In-State Investments	355,882	3.4%	8.0%	(4.6%)	(488,716)
Total	10,557,479	100.0%	100.0%		

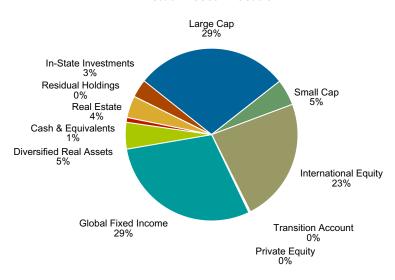
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



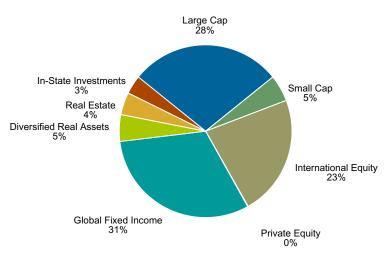
# Actual vs Corridor Target Asset Allocation As of March 31, 2024

The first chart below shows the Fund's asset allocation as of March 31, 2024. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

#### **Actual Asset Allocation**



# **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	3.039.654	28.8%	28.5%	0.3%	33.075
Small Cap	514.995	4.9%	5.0%	(0.1%)	(15,578)
International Equity	2,458,896	23.3%	22.6%	0.7%	74,525
Transition Account	45	0.0%	0.0%	0.0%	45
Private Equity	26,622	0.3%	0.1%	0.1%	14,601
Global Fixed Income	3,107,383	29.4%	31.2%	(1.8%)	(186,791)
Diversified Real Assets	527.202	5.0%	5.0%	`0.0%	2.143
Cash & Equivalents	96.542	0.9%	0.0%	0.9%	96,542
Real Estate	428.299	4.1%	4.2%	(0.1%)	(11,644)
Residual Holdings	1.961	0.0%	0.0%	0.0%	1.961
In-State Investments	355,882	3.4%	3.5%	(0.1%)	(8,879)
Total	10,557,479	100.0%	100.0%		

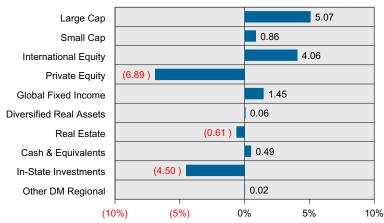
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



# 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.

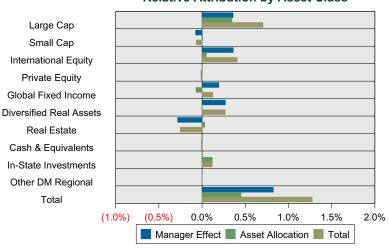




# **Actual vs Target Returns**

# 15% (15%) (10%) (5%)0% 10% 20% Actual Target

### **Relative Attribution by Asset Class**



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

Large Cap Small Cap

Private Equity

Real Estate

Total

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	28%	23%	11.62%	10.30%	0.36%	0.35%	0.70%
Small Cap	5%	4%	3.66%	5.18%	(0.08%)	0.01%	(0.07%)
International Equity	23%	19%	5.92%	4.33%	0.36%	0.05%	0.41%
Private Equity	0%	7%	1.20%	1.20%	0.00%	(0.01%)	(0.01%)
Global Fixed Income	30%	29%	(0.14%)	(0.78%)	0.19%	(0.07%)	0.12%
Diversified Real Assets	5%	5%	`3.90%	(1.36%)	0.27%	(0.00%)	0.27%
Real Estate	4%	5%	(6.82%)	(0.98%)	(0.28%)	0.03%	(0.25%)
Cash & Equivalents	0%	0%	1.32%	1.32%	0.00%	(0.01%)	(0.01%)
In-State Investments	4%	8%	0.73%	0.73%	0.00%	0.12%	0.12%
Other DM Regional	0%	0%	(2.15%)	(2.15%)	0.00%	(0.00%)	(0.00%)
Total			4.64% =	3.36% +	0.82% +	0.45%	1.28%

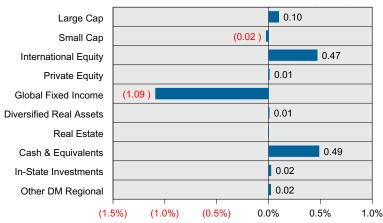
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



# 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.

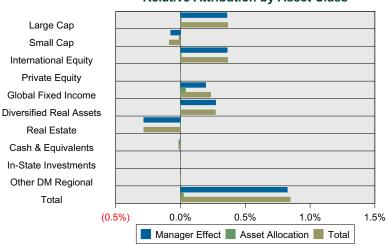




# **Actual vs Target Returns**

# 15% (15%) (10%) (5%)0% 5% 10% 20% Actual Target

# **Relative Attribution by Asset Class**



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

Large Cap Small Cap

Real Estate

Total

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	28%	28%	11.62%	10.30%	0.36%	0.01%	0.37%
Small Cap	5%	5%	3.66%	5.18%	(0.08%)	(0.01%)	(0.09%)
International Equity	23%	23%	5.92%	4.33%	0.36%	0.01%	0.36%
Private Equity	0%	0%	1.20%	1.20%	0.00%	(0.00%)	(0.00%)
Global Fixed Income	30%	31%	(0.14%)	(0.78%)	0.19%	`0.04%	0.23%
Diversified Real Assets	5%	5%	`3.90%	(1.36%)	0.27%	(0.00%)	0.27%
Real Estate	4%	4%	(6.82%)	(0.98%)	(0.28%)	`0.00%	(0.28%)
Cash & Equivalents	0%	0%	1.32%	1.32%	0.00%	(0.01%)	(0.01%)
In-State Investments	4%	3%	0.73%	0.73%	0.00%	(0.00%)	(0.00%)
Other DM Regional	0%	0%	(2.15%)	(2.15%)	0.00%	(0.00%)	(0.00%)
Total			4.64% =	3.79% +	0.82% +	0.02%	0.85%

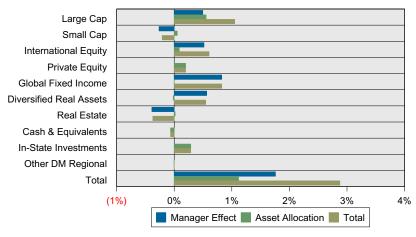
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



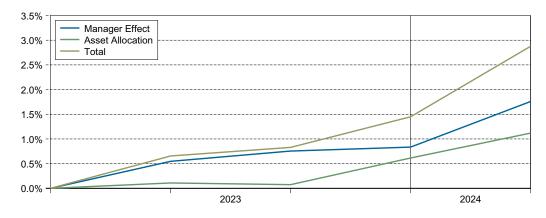
# Cumulative Total Fund Relative Attribution - March 31, 2024

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
Large Cap	26%	24%	31.97%	29.87%	0.50%	0.55%	1.05%
Small Cap	5%	4%	14.27%	19.71%	(0.26%)	0.05%	(0.21%)
International Equity	21%	19%	15.67%	13.20%	0.52%	0.09%	0.61%
Private Equity	1%	4%	5.51%	5.51%	0.00%	0.20%	0.20%
Global Fixed Income	33%	33%	4.05%	1.70%	0.83%	(0.00%)	0.83%
Diversified Real Assets	8%	8%	5.16%	(2.99%)	0.56%	(0.02%)	0.55%
Real Estate	5%	5%	(13.79%)	(7.16%)	(0.39%)	0.02%	(0.37%)
Cash & Equivalents	1%	0%	5.32%	`5.32%´	`0.00%	(0.06%)	(0.06%)
In-State Investments	1%	3%	-	-	0.00%	0.29%	0.29%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			13.17% =	10.29% +	1.76% +	1.12%	2.88%

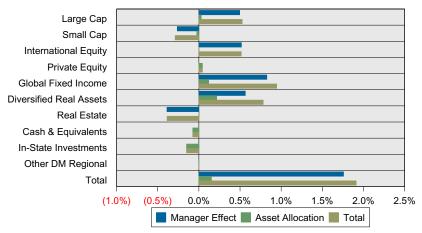
\* Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



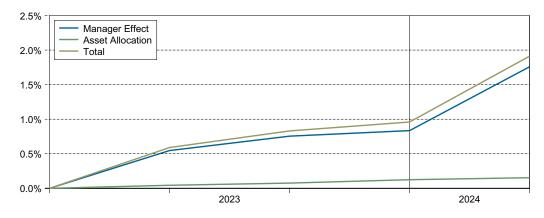
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Large Cap	26%	26%	31.97%	29.87%	0.50%	0.03%	0.53%
Small Cap	5%	5%	14.27%	19.71%	(0.26%)	(0.03%)	(0.29%)
International Equity	21%	21%	15.67%	13.20%	0.52%	(0.00%)	0.52%
Private Equity	1%	1%	5.51%	5.51%	0.00%	0.04%	0.04%
Global Fixed Income	33%	34%	4.05%	1.70%	0.83%	0.12%	0.95%
Diversified Real Assets	8%	8%	5.16%	(2.99%)	0.56%	0.22%	0.78%
Real Estate	5%	5%	(13.79%)	(7.16%)	(0.39%)	0.00%	(0.39%)
Cash & Equivalents	1%	0%	5.32%	5.32%	0.00%	(0.08%)	(0.08%)
In-State Investments	1%	1%	-	-	0.00%	(0.15%)	(0.15%)
Other DM Regional	0%	0%	(1.93%)	(1.93%)	0.00%	(0.00%)	(0.00%)
Total			13.17% =	11.26% +	1.76% +	0.15%	1.91%

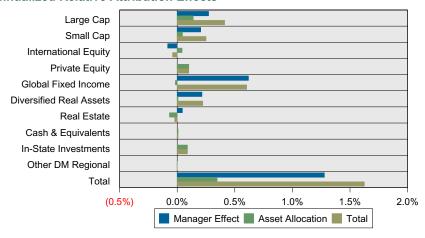
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



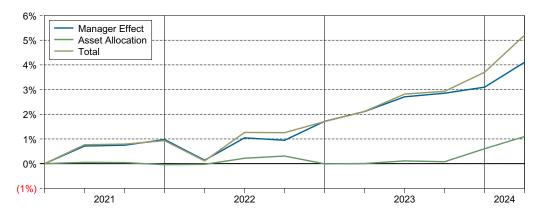
# Cumulative Total Fund Relative Attribution - March 31, 2024

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
Large Cap	24%	23%	11.64%	10.45%	0.27%	0.14%	0.41%
Small Cap	6%	6%	2.95%	(0.10%)	0.20%	0.05%	0.25%
International Equity	20%	19%	2.65%	3.21%	(0.08%)	0.04%	(0.04%)
Private Equity	1%	2%	4.40%	4.40%	`0.00%	0.10%	0.10%
Global Fixed Income	34%	34%	(0.67%)	(2.46%)	0.62%	(0.02%)	0.60%
Diversified Real Assets	9%	9%	4.67%	1.32%	0.21%	0.01%	0.22%
Real Estate	5%	5%	4.04%	3.63%	0.05%	(0.07%)	(0.02%)
Cash & Equivalents	1%	0%	2.59%	2.59%	0.00%	`0.01%´	0.01%
In-State Investments	0%	1%	-	-	0.00%	0.09%	0.09%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			4.15% =	2.52% +	1.28% +	0.35%	1.62%

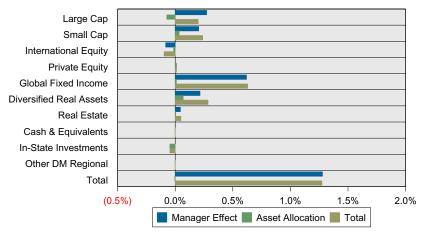
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



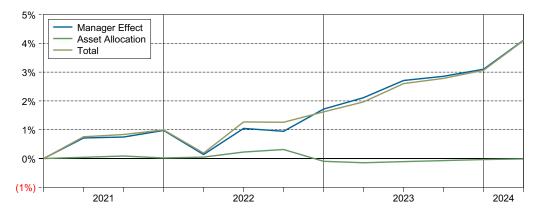
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Large Cap	24%	24%	11.64%	10.45%	0.27%	(0.07%)	0.20%
Small Cap	6%	6%	2.95%	(0.10%)	0.20%	0.03%	0.24%
International Equity	20%	20%	2.65%	3.21%	(0.08%)	(0.01%)	(0.10%)
Private Equity	1%	1%	4.40%	4.40%	0.00%	0.01%	0.01%
Global Fixed Income	34%	35%	(0.67%)	(2.46%)	0.62%	0.01%	0.63%
Diversified Real Assets	9%	9%	4.67%	`1.32%′	0.22%	0.07%	0.29%
Real Estate	5%	5%	4.04%	3.63%	0.05%	0.00%	0.05%
Cash & Equivalents	1%	0%	2.59%	2.59%	0.00%	(0.00%)	(0.00%)
In-State Investments	0%	0%	-	-	0.00%	(0.05%)	(0.05%)
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			4.15% =	2.87% +	1.28% +	(0.00%)	1.27%

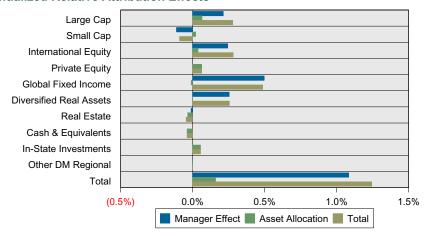
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



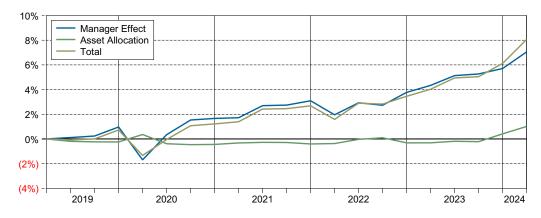
# Cumulative Total Fund Relative Attribution - March 31, 2024

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
Large Cap	23%	23%	15.65%	14.76%	0.21%	0.07%	0.28%
Small Cap	7%	7%	7.23%	8.10%	(0.11%)	0.02%	(0.09%)
International Equity	20%	20%	7.53%	6.42%	0.24%	0.04%	0.28%
Private Equity	0%	1%	-	-	0.00%	0.06%	0.06%
Global Fixed Income	34%	35%	1.89%	0.36%	0.50%	(0.01%)	0.49%
Diversified Real Assets	10%	10%	6.25%	2.97%	0.25%	`0.00%	0.26%
Real Estate	5%	5%	3.12%	3.76%	(0.01%)	(0.03%)	(0.04%)
Cash & Equivalents	1%	0%	1.94%	1.94%	`0.00%	(0.04%)	(0.04%)
In-State Investments	0%	1%	-	-	0.00%	0.06%	0.06%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			7.31% =	6.07%	+ 1.08% +	0.16%	1.24%

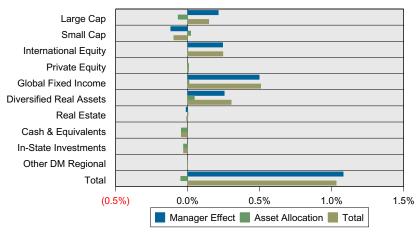
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



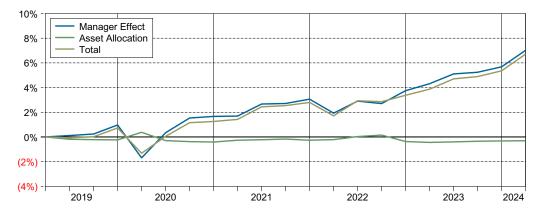
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Large Cap	23%	23%	15.65%	14.76%	0.21%	(0.07%)	0.15%
Small Cap	7%	7%	7.23%	8.10%	(0.12%)	`0.02%´	(0.10%)
International Equity	20%	20%	7.53%	6.42%	0.24%	0.00%	0.25%
Private Equity	0%	0%	-	-	0.00%	0.01%	0.01%
Global Fixed Income	34%	35%	1.89%	0.36%	0.50%	0.01%	0.51%
Diversified Real Assets	10%	10%	6.25%	2.97%	0.25%	0.05%	0.30%
Real Estate	5%	5%	3.12%	3.76%	(0.01%)	0.00%	(0.01%)
Cash & Equivalents	1%	0%	1.94%	1.94%	`0.00%´	(0.04%)	(0.04%)
In-State Investments	0%	0%	-	-	0.00%	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			7.31% =	6.28%	+ 1.08% +	(0.05%)	1.03%

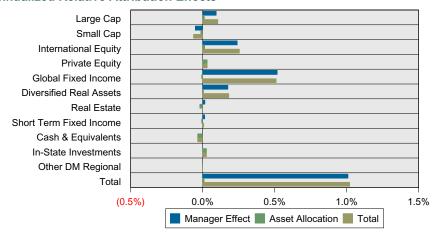
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



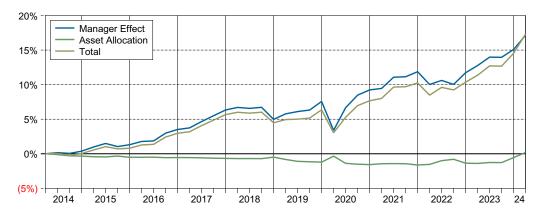
# Cumulative Total Fund Relative Attribution - March 31, 2024

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#### **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
Large Cap	22%	22%	13.06%	12.68%	0.09%	0.01%	0.11%
Small Cap	7%	7%	7.24%	7.58%	(0.05%)	(0.01%)	(0.06%)
International Equity	20%	20%	5.39%	4.32%	0.24%	0.01%	0.26%
Private Equity '	0%	1%	-	-	0.00%	0.03%	0.03%
Global Fixed Income	34%	34%	3.12%	1.54%	0.52%	(0.01%)	0.51%
Diversified Real Assets	9%	9%	4.46%	2.29%	0.18%	0.01%	0.18%
Real Estate	5%	5%	6.49%	6.41%	0.02%	(0.02%)	(0.00%)
Short Term Fixed Income	1%	1%	-	-	0.02%	(0.01%)	0.01%
Cash & Equivalents	1%	0%	1.30%	1.30%	0.00%	(0.03%)	(0.03%)
In-State Investments	0%	0%	-	-	0.00%	0.03%	0.03%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			6.56% =	5.54%	+ 1.01% +	0.01%	1.02%

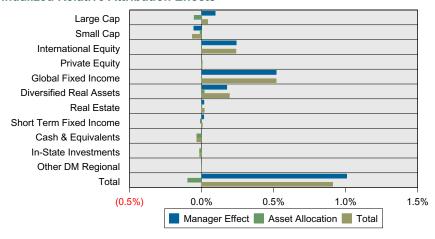
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



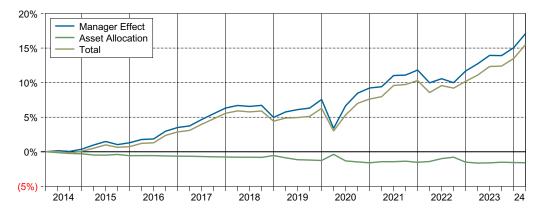
# Cumulative Total Fund Relative Attribution vs Corridor Target - March 31, 2024

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
Large Cap	22%	22%	13.06%	12.68%	0.09%	(0.05%)	0.04%
Small Cap	7%	7%	7.24%	7.58%	(0.05%)	(0.01%)	(0.06%)
International Equity	20%	20%	5.39%	4.32%	0.24%	(0.00%)	0.24%
Private Equity	0%	0%	-	-	0.00%	0.00%	0.00%
Global Fixed Income	34%	34%	3.12%	1.54%	0.52%	(0.00%)	0.52%
Diversified Real Assets	9%	9%	4.46%	2.29%	0.18%	`0.02%´	0.19%
Real Estate	5%	5%	6.49%	6.41%	0.02%	0.00%	0.02%
Short Term Fixed Income	1%	1%	-	-	0.02%	(0.01%)	0.01%
Cash & Equivalents	1%	0%	1.30%	1.30%	0.00%	(0.03%)	(0.03%)
In-State Investments	0%	0%	-	-	0.00%	(0.01%)	(0.01%)
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			6.56% =	5.65% +	- 1.01% +	(0.10%)	0.91%

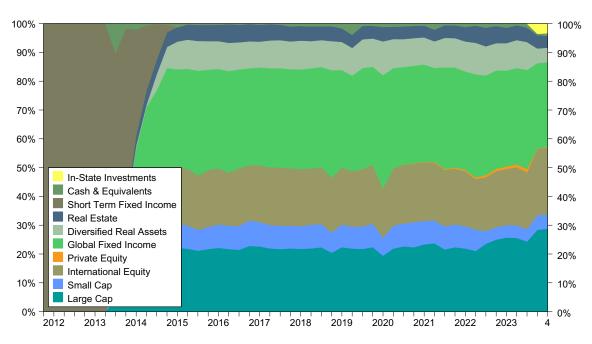
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.



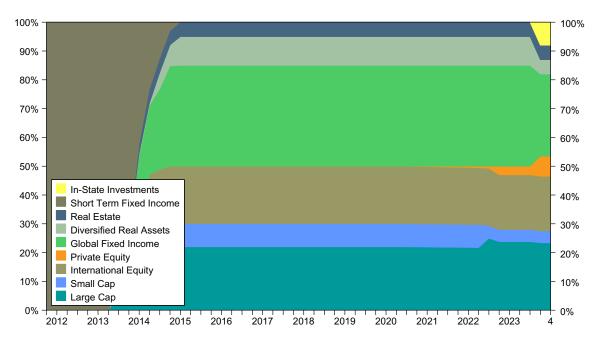
# **Actual vs Target Historical Asset Allocation**

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, and the fund's historical target asset allocation.

# **Actual Historical Asset Allocation**



# **Target Historical Asset Allocation**

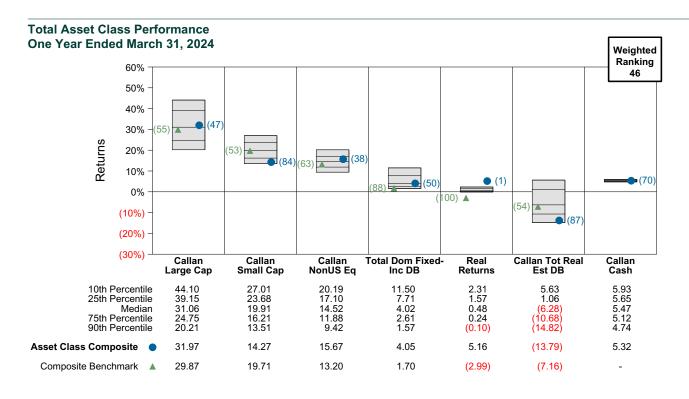


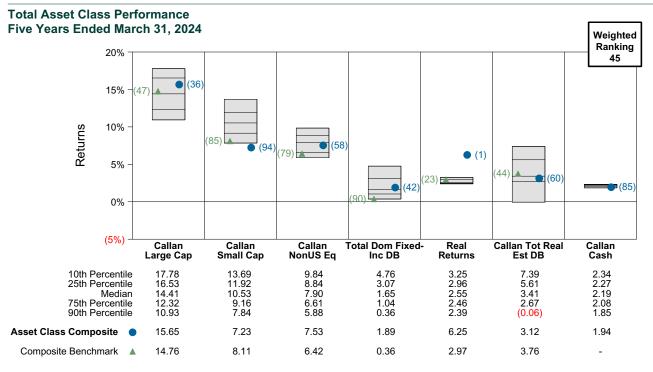
<sup>\*</sup> Current Quarter Target = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



# **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 = 28.5% Blmbg:Aggregate, 23.4% Russell 1000 Index, 19.0% MSCI ACWI xUS IMI, 8.0% In-State Investments, 7.0% Private Equity, 5.0% NCREIF Total Index, 4.1% Russell 2000 Index, 2.5% CPI All Urban Cons lagged 3 months and 2.5% NCREIF NFI-ODCE Eq Wt Net.



# **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 3	1, 2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equity	\$6,040,211,159	57.21%	\$(23,338,063)	\$475,857,356	\$5,587,691,865	56.62%
Public Equity	\$6,013,589,460	56.96%	\$(42,025,995)	\$475,888,617	\$5,579,726,837	56.54%
Domestic Equity	\$3,554,648,694	33.67%	\$(94,778,612)	\$339,364,122	\$3,310,063,184	33.54%
Large Cap	\$3,039,654,106	28.79%	\$(85,705,578)	\$321,568,936	\$2,803,790,748	28.41%
LA Capital Large Cap Growth	77,908,163	0.74%	(38,809)	9,657,576	68,289,396	0.69%
L.A. Capital Enhanced	1,289,122,186	12.21%	(34,731,003)	143,717,965	1,180,135,224	11.96%
Parametric-Clifton Enh R1000	473,375,427	4.48%	(5,231,722)	44,707,350	433,899,798	4.40%
NTAM Quant Enhanced R1000	477,977,396	4.53%	(8,936,115)	54,007,001	432,906,510	4.39%
NTAM R1000 Index	721,270,933	6.83%	(36,767,929)	69,479,044	688,559,819	6.98%
Small Cap	\$514,994,588	4.88%	\$(9,073,034)	\$17,795,185	\$506,272,437	5.13%
Atlanta Capital SmallCap	154,396,326	1.46%	(7,068,355)	2,859,395	158,605,286	1.61%
Riverbridge Small Cap Growth	158,734,685	1.50%	(7,020,654)	6,193,599	159,561,740	1.62%
Sycamore Small Cap Value	158.153.583	1.50%	(6,704,623)	6,042,245	158,815,960	1.61%
NTAM Russell 2000 Index	43,709,995	0.41%	11,720,598	2,699,946	29,289,451	0.30%
Total International Equity	\$2,458,896,243	23.29%	\$52,752,618	\$136,524,902	\$2,269,618,723	23.00%
International All Cap	\$895,646,537	8.48%	\$(2,686,106)	\$70,515,035	\$827,817,609	8.39%
William Blair Int'l Leaders	406,928,677	3.85%	(2,340,886)	25,559,665	383,709,899	3.89%
Arrowstreet ACWI ex US	488,717,860	4.63%	(345,220)	44,955,370	444,107,710	4.50%
Developed Intl Large Cap	\$984,196,419	9.32%	\$42,971,552	\$51,372,252	\$889,852,615	9.02%
LSV Intl LargeCap Value	6,610	0.00%	(20)	(857)	7,486	0.00%
State St MSCI World exUS	984,189,809	9.32%	42,971,571	51,373,109	889,845,129	9.02%
Developed Intl Small Cap	\$154,170,752	1.46%	\$8,688,341	\$5,539,890	\$139,942,520	1.42%
DFA Intl SmallCap Value	62,769,894	0.59%	3,655,538	3,176,260	55,938,096	0.57%
Wellington Intl SM Cap	0	0.00%	(12,246)	4,932	7.314	0.00%
State St MSCI exUS Small	91,400,857	0.87%	5,045,048	2,358,699	83,997,110	0.85%
Emerging Markets	\$424,882,535	4.02%	\$3,778,832	\$9,097,725	\$412,005,979	4.18%
DFA EM All Cap Core	208,766,905	1.98%	2,728,306	5,049,227	200,989,372	2.04%
State St MSCI EM China	52,819,234	0.50%	(1,369,896)	(1,384,334)	55,573,464	0.56%
State St MSCI EM ex China	163,296,396	1.55%	2,420,422	5,432,832	155,443,143	1.58%
Transition Account	\$44,523	0.00%	\$0	\$(407)	\$44,930	0.00%
Private Equity	\$26,621,699	0.25%	\$18,687,932	\$(31,261)	\$7,965,028	0.08%
Altor Fund VI	866,628	0.01%	1,745,999	(1,414,505)	535,134	0.01%
Kelso	9,095,392	0.09%	282,254	1,383,244	7,429,894	0.08%
Portfolio Advisors GP Solutions	16,659,679	0.16%	16,659,679	0	-	-



# **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 3	1, 2023
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Fixed Income	\$3,107,382,598	29.43%	\$184,642,202	\$(2,462,795)	\$2,925,203,191	29.64%
Core Fixed Income	\$2,628,669,766	24.90%	\$175,952,340	\$(12,475,732)	\$2,465,193,158	24.98%
Allspring Med Quality Credit	209,658,426	1.99%	15,589,000	930,171	193,139,254	1.96%
Manulife-Declaration TRBF	142,252,542	1.35%	(9,213,609)	(4,076,400)	155,542,551	1.58%
PIMCO Core Plus Constrained	644,928,131	6.11%	58,941,365	309,301	585,677,464	5.94%
Prudential Core Plus	643,234,313	6.09%	56,631,922	(1,733,600)	588,335,991	5.96%
State Street Credit Index	58,734,336	0.56%	(13,078,858)	(228,831)	72,042,024	0.73%
State Street Gov Index	286.094.931	2.71%	12.355.587	(2,337,449)	276.076.793	2.80%
Western Asset Core Plus	643,767,087	6.10%	54,726,932	(5,338,925)	594,379,080	6.02%
Private Credit	\$478,712,832	4.53%	\$8,689,862	\$10,012,937	\$460,010,033	4.66%
Ares ND Credit Strategies	122,670,750	1.16%	0	0	122,670,750	1.24%
Cerberus ND Private Credit	166,867,242	1.58%	6,750,000	3,908,739	156,208,503	1.58%
PIMCO DISCO II	112,421,415	1.06%	0	3,876,737	108,544,678	1.10%
PIMCO Bravo II	1,254,149	0.01%	0	65,424	1,188,725	0.01%
Sixth Street TAO	75,499,276	0.72%	1,939,862	2,162,037	71,397,377	0.72%
Global Real Assets	\$955,500,662	9.05%	\$7,005,987	\$(11,687,908)	\$960,182,583	9.73%
Real Estate	\$428,298,785	4.06%	\$1,780,146	\$(31,284,484)	\$457,803,124	4.64%
Invesco Core Real Estate	198,097,796	1.88%	0	(9,889,877)	207,987,673	2.11%
Invesco RE Fund VI	45,377,700	0.43%	2,114,017	(6,211,710)	49,475,393	0.50%
JP Morgan RE Inc & Growth	184,823,289	1.75%	(333,871)	(15,182,897)	200,340,058	2.03%
Diversified	\$527,201,878	4.99%	\$5,225,842	\$19,596,576	\$502,379,460	5.09%
Western Asset TIPS	422,290	0.00%	(74,767)	2,854	494,203	0.01%
ISQ Global Infrastructure II	84,089,070	0.80%	(181,976)	2,536,492	81,734,554	0.83%
ISQ Global Infrastructure III	39,718,098	0.38%	Ó	4,419,566	35,298,532	0.36%
JP Morgan IIF Infrastructure	107,662,365	1.02%	(1,587,958)	6,019,002	103,231,321	1.05%
Grosvenor CIS Fund II	51,157,051	0.48%	(1,489,907)	2,198,590	50,448,368	0.51%
Grosvenor CIS Fund III	50,015,462	0.47%	8,658,787	984,473	40,372,202	0.41%
Macquarie Infrastructure Fund IV	93,419,245	0.88%	(42,395)	871,522	92,590,118	0.94%
Macquarie Infrastructure Fund V	100,718,297	0.95%	(55,943)	2,564,078	98,210,162	1.00%
In-State Investments	\$355,882,053	3.37%	\$7,182,943	\$2,585,507	\$346,113,602	3.51%
In-State Fixed Income	\$310,137,664	2.94%	\$(127,057)	\$2,585,507	\$307,679,214	3.12%
BND Legacy CDs	260,321,195	2.47%	(127,057)	2,339,660	258,108,592	2.62%
BND Legacy Infrastructure Loan Fund	49,816,469	0.47%	Ó	245,847	49,570,622	0.50%
In-State Equity	\$45,744,389	0.43%	\$7,310,000	\$0	\$38,434,389	0.39%
50 South Capital	45,744,389	0.43%	7,310,000	0	38,434,389	0.39%
Cash	\$96,541,708	0.91%	\$49,041,268	\$847,971	\$46,652,468	0.47%
Northern Trust Cash Account	9,146,457	0.09%	914,212	382,798	7,849,448	0.08%
Bank of ND	87,395,250	0.83%	48,127,057	465,174	38,803,020	0.39%
Residual Holdings	\$1,960,796	0.02%	\$(207,197)	\$(45,859)	\$2,213,852	0.02%
Total Fund	\$10,557,478,977	100.00%	\$224,327,141	\$465,094,273	\$9,868,057,562	100.00%



Returns for Periods Ended March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Equity					
Gross	8.55%	23.49%	6.85%	11.19%	-
Net	8.51%	23.27%	6.58%	10.92%	-
Weighted Benchmark	6.83%	20.42%	5.51%	10.17%	-
Public Equity					
Gross	8.57%	23.63%	-	-	-
Net	8.53%	23.41%	-	-	-
Weighted Benchmark	7.39%	22.05%	-	-	-
Domestic Equity					
Gross	10.41%	29.23%	9.78%	13.70%	11.68%
Net	10.37%	29.04%	9.51%	13.44%	11.44%
Weighted Benchmark	9.53%	28.39%	8.08%	13.35%	11.53%
Large Cap					
Gross	11.62%	31.97%	11.64%	15.65%	13.06%
Net Russell 1000 Index	11.60% 10.30%	31.89% 29.87%	11.47% 10.45%	15.49% 14.76%	12.88% 12.68%
Nussell 1000 Illuex	10.30 /6	29.07 /0	10.4376	14.7070	12.00 /0
L.A. Capital Enhanced - Gross	12.35%	33.49%	12.18%	15.99%	13.27%
L.A. Capital Enhanced - Net	12.32%	33.38%	12.06%	15.86%	13.13%
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	12.68%
L.A. Capital LargeCap Growth - Gross	14.15%	42.38%	13.98%	19.38%	16.03%
L.A. Capital LargeCap Growth - Net	14.09%	42.17%	13.61%	19.06%	15.76%
Russell 1000 Growth Index	11.41%	39.00%	12.50%	18.52%	15.98%
Parametric-Clifton Enh R1000 - Gross	10.35%	29.70%	10.84%	14.79%	12.91%
Parametric-Clifton Enh R1000 - Net	10.35%	29.70%	10.67%	14.72%	12.84%
Benchmark(1)	10.30%	29.87%	11.47%	15.04%	12.95%
NTAM R1000 Index - Gross	10.29%	29.86%	-	-	_
NTAM R1000 Index - Net	10.29%	29.86%	-	-	-
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	12.68%
NTAM Quant Enh R1000 - Gross	12.58%	31.87%	_	_	_
NTAM Quant Enh R1000 - Net	12.58%	31.87%	-	-	-
Russell 1000 Index	10.30%	29.87%	10.45%	14.76%	12.68%
Small Cap					
Gross	3.66%	14.27%	2.95%	7.23%	7.24%
Net	3.52%	13.50%	2.28%	6.65%	6.81%
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	7.58%
Atlanta Capital - Gross	2.04%	12.57%	6.47%	-	-
Atlanta Capital - Net	1.89%	11.87%	5.79%	-	=
S&P 600 Small Cap Index	2.46%	15.93%	2.28%	9.15%	8.80%
Riverbridge Small Cap Growth - Gross	4.24%	15.52%	(3.93%)	-	-
Riverbridge Small Cap Growth - Net	4.07%	14.46%	(4.68%)	-	=
Russell 2000 Growth Index	7.58%	20.35%	(2.68%)	7.38%	7.89%
Sycamore Small Cap Value - Gross	4.11%	13.55%	6.23%	-	-
Sycamore Small Cap Value - Net	3.96%	12.65%	5.53%	-	-
Russell 2000 Value Index	2.90%	18.75%	2.22%	8.17%	6.87%
NTAM R2000 Index - Gross	5.20%	19.81%	_	_	_
NTAM R2000 Index - Net	5.20%	19.81%	-	-	-
Russell 2000 Index	5.18%	19.71%	(0.10%)	8.10%	7.58%



Returns for Periods Ended March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years		Years
Total International Equity Gross Net Benchmark(1)	5.92% 5.88% 4.33%	15.67% 15.39% 13.20%	2.65% 2.38% 3.21%	7.23%	5.39% 5.09% 4.32%
International All Cap Gross Net	8.51% 8.43%	20.20% 19.59%	<u>-</u>		<u>-</u> -
MSCI ACWI xUS IMI	4.33%	13.20%	1.72%	6.00%	4.32%
William Blair Int'l Leaders - Gross William Blair Int'l Leaders - Net MSCI ACWI xUS IMI	6.63% 6.54% 4.33%	11.90% 11.31% 13.20%	(0.67%) (1.10%) 1.72%	7.37%	- - 4.32%
Arrowstreet ACWI ex US - Gross Arrowstreet ACWI ex US - Net MSCI ACWI ex US IMI	10.13% 10.04% 4.33%	26.39% 25.86% 13.20%	- - 1.72%		- - 4.32%
Developed Intl Large Cap Gross Net MSCI World xUS	5.55% 5.55% 5.59%	15.21% 15.19% 15.29%	- - 4.93%	-	- - 4.81%
State St MSCI World exUS - Gross State St MSCI World exUS - Net MSCI World xUS	5.55% 5.55% 5.59%	15.21% 15.19% 15.29%	- 4.93%	- - 7.48%	- - 4.81%
Developed Intl Small Cap Gross Net MSCI World xUS Small	3.63% 3.60% 2.58%	11.94% 11.67% 10.04%	- (0.93%)	-	- - 4.54%
DFA Intl Small Cap Value - Net World ex US SC Va	5.32% 2.89%	16.41% 12.88%	6.24% 2.22%		4.56% 4.09%
State St MSCI exUS Small - Gross State St MSCI exUS Small - Net MSCI World xUS Small	2.49% 2.48% 2.58%	9.89% 9.85% 10.04%	- (0.93%)	-	- - 4.54%
Emerging Markets Gross Net MSCI EM	2.24% 2.20% 2.37%	8.17% 8.03% 8.15%	- (5.05%)	- - 2.22%	- - 2.95%
DFA EM All Cap Core - Gross DFA EM All Cap Core - Net MSCI EM	2.44% 2.37% 2.37%	- - 8.15%	- (5.05%)	-	- - 2.95%
State St MSCI EM China - Gross State St MSCI EM China - Net MSCI China	(2.15%) (2.16%) (2.19%)	- (17.05%)	- (18.92%)	-	- - 1.24%
State St MSCI EM ex China - Gross State St MSCI EM ex China - Net MSCI EM x China	3.54% 3.53% 4.01%	- - 20.51%	- - 2.16%	-	- - 4.18%
Private Equity Net Benchmark(2)	1.20% 1.96%	5.51% 12.26%	4.40% 4.34%	- -	<del>-</del>
Altor Fund VI	(62.13%)	-	-	-	-
Kelso	17.94%	-	-	-	-



<sup>(1)</sup> MSCI EAFE through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter. (2) 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.

Returns for Periods Ended March 31, 2024

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Global Fixed Income					
Gross	(0.14%)	4.05%	(0.67%)	1.89%	3.12%
Net	(0.17%)	3.94%	(0.77%)	1.79%	3.01%
Blmbg Aggregate Index	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Allspring Med Quality Credit - Gross	0.36%	6.84%	(0.78%)	3.23%	3.91%
Allspring Med Quality Credit - Net	0.27%	6.63%	(0.97%)	3.03%	3.72%
Blmbg Credit Baa	(0.20%)	5.43%	(1.51%)	1.94%	2.92%
Manulife-Declaration TRBF - Net	(2.65%)	4.65%	0.30%	2.36%	3.33%
Libor-3 Month	1.42%	5.82%	3.13%	2.39%	1.74%
PIMCO Core Plus Constrained - Gross	(/	3.09%	-	-	-
PIMCO Core Plus Constrained - Net	(0.09%)	3.00%	-	-	-
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Prudential Core Plus - Gross	(0.37%)	3.12%	(1.87%)	1.19%	2.76%
Prudential Core Plus - Net	(0.40%)	2.92%	(2.05%)	1.00%	2.53%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
State Street Gov Index - Gross	(0.88%)	0.10%	-	-	-
State Street Gov Index - Net	(0.88%)	0.10%	-	-	-
Blmbg Government	(0.93%)	0.13%	(2.68%)	(0.04%)	1.05%
State Street Credit Index - Gross	(0.27%)	4.32%	-	-	-
State Street Credit Index - Net	(0.27%)	4.31%	-	-	-
Blmbg Credit	(0.41%)	4.15%	(1.86%)	1.39%	2.49%
Western Asset Core Plus - Gross	(0.98%)	2.62%	(2.65%)	0.41%	2.24%
Western Asset Core Plus - Net	(1.01%)	2.50%	(2.76%)	0.30%	2.11%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Private Credit					
Net	2.16%	-	-	-	-
Ares ND Credit Strategies Fd - Net	0.00%	9.16%	8.88%	7.98%	-
Cerberus ND Private Credit Fd - Net	2.43%	8.60%	8.47%	8.73%	-
S&P/LSTA Leveraged Loan B	2.45%	13.32%	6.42%	5.92%	4.84%
PIMCO Bravo II(1)	5.50%	0.11%	(6.46%)	(4.16%)	1.76%
PIMCO DISCO II(1)	3.57%	10.29%	5.51%	5.52%	6.94%
Blmbg Aggregate	(0.78%)	1.70%	(2.46%)	0.36%	1.54%
Sixth Street TAO - Net	3.05%	-	-	-	-

<sup>(1)</sup> Prior to 7/1/2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning 7/1/2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the insurance pool.



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

		14	Last	5	Last
	Last	Last	3		10
	Quarter	Year	Years	Years	Years
Other Real Assets					
Gross	(1.22%)	(3.07%)	3.73%	4.81%	-
Net	(1.29%)	(3.32%)	3.46%	4.53%	-
Weighted Benchmark	(2.25%)	(5.47%)	1.73%	3.02%	-
Real Estate					
Gross	(6.82%)	(13.79%)	4.04%	3.12%	6.49%
Net	(6.87%)	(14.18%)	3.59%	2.65%	5.91%
NCREIF Total Index	(0.98%)	`(7.16%)	3.63%	3.76%	6.41%
Invesco Core Real Estate - Gross	(4.76%)	(12.26%)	4.58%	3.71%	7.01%
Invesco Core Real Estate - Net	(4.76%)	(12.48%)	4.27%	3.39%	6.67%
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
JP Morgan RE Inc & Growth - Gross	(7.58%)	(14.16%)	3.55%	2.56%	6.05%
JP Morgan RE Inc & Growth - Net	(7.71%)	(14.81%)	2.90%	1.92%	5.24%
NCREIF Total Index	(0.98%)	(7.16%)	3.63%	3.76%	6.41%
nfrastructure					
Gross	3.90%	5.16%	4.67%	6.25%	4.46%
Net	3.81%	4.99%	4.49%	6.07%	4.25%
Weighted Benchmark	(1.36%)	(2.99%)	1.32%	2.97%	2.29%
JP Morgan Infrastructure - Gross	5.83%	12.41%	7.36%	8.27%	_
JP Morgan Infrastructure - Net	5.50%	11.66%	6.55%	7.47%	_
Grosvenor CIS Fund II - Net	4.38%	11.14%	12.46%	13.19%	_
Grosvenor CIS Fund III - Net	2.25%	8.19%	12.4070	13.1370	_
Benchmark(1)	(1.36%)	(4.78%)	4.23%	3.55%	2.61%
Macquarie Infrastructure Fund IV - Net	0.94%	3.20%	10.18%	9.50%	
Macquarie Infrastructure Fund V - Net	2.61%	6.18%	8.34%	9.50 /6	-
ISQ Global Infrastructure II - Net	3.11%	6.89%	14.11%	15.54%	_
ISQ Global Infrastructure III - Net	12.52%	16.89%	-	13.54 /0	_
Benchmark(2)	(1.36%)	(4.78%)	4.23%	3.55%	-
n-State Equity					
50 South Capital - Net	0.00%	-	-	-	-
Cash & Equivalents - Net	1.32%	5.32%	2.59%	1.94%	1.30%
NT Cash Account - Net	1.28%	5.34%	2.54%	-	-
Bank of ND - Net	1.34%	5.37%	2.70%	_	_
90 Day Treasury Bills	1.29%	5.24%	2.58%	2.02%	1.38%
otal Fund					
Gross	4.64%	13.17%	4.15%	7.31%	6.56%
Net	4.60%	12.99%	3.95%	7.11%	6.34%
Target*	3.36%	10.29%	2.52%	6.07%	5.54%
Corridor Benchmark	3.79%	11.26%	2.87%	6.28%	5.65%

<sup>(2) 50%</sup> CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.
(3) Blmbg Global Inflation-Linked through 10/31/2018 and Blmbg US Govt Inflation Linked Bond Index thereafter.



<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell  $2000\ \text{Index},\ 4.2\%\ \text{NCREIF}\ \text{Total Index},\ 3.5\%\ \text{In-State Investments},\ 2.5\%\ \text{CPI}\ \text{All Urban Cons lagged 3 months},\ 2.5\%\ \text{CPI}$ NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.

<sup>(1)</sup> CPI-W through March 31, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

	12/2023-				
	3/2024	2023	2022	2021	2020
Global Equity					
Gross	8.55%	21.72%	(18.43%)	20.07%	15.72%
Net .	8.51%	21.51%	(18.66%)	19.68%	15.41%
Weighted Benchmark	6.83%	19.94%	(18.14%)	18.98%	15.48%
Public Equity					
Gross	8.57%	21.95%	-	-	-
Net	8.53%	21.74%	-	-	-
Weighted Benchmark	7.39%	21.27%	-	-	-
Domestic Equity					
Gross	10.41%	25.32%	(17.99%)	25.91%	17.08%
Net	10.37%	25.15%	(18.22%)	25.48%	16.81%
Weighted Benchmark	9.53%	25.18%	(19.59%)	23.36%	20.94%
Large Cap					
Gross	11.62%	26.61%	(17.89%)	29.25%	19.81%
Net	11.60%	26.54%	(18.02%)	28.93%	19.67%
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
L.A. Capital Enhanced - Gross	12.35%	26.90%	(18.20%)	29.09%	22.07%
L.A. Capital Enhanced - Net	12.32%	26.78%	(18.28%)	28.93%	21.93%
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
I A Capital Large Cap Crowth Cross	14.15%	39.13%	(27.44%)	31.52%	37.68%
L.A. Capital LargeCap Growth - Gross L.A. Capital LargeCap Growth - Net	14.15%	38.93%	(27.44%)	31.26%	37.41%
Russell 1000 Growth Index	11.41%	42.68%	(27.89%)	27.60%	38.49%
			,		
Parametric-Clifton Enh R1000 - Gross	10.35%	26.11%	(19.31%)	28.43%	18.77%
Parametric-Clifton Enh R1000 - Net	10.35%	26.11%	(19.31%)	27.84%	18.98%
Benchmark(1)	10.30%	26.53%	(18.12%)	28.71%	18.40%
NTAM R1000 Index - Gross	10.29%	26.53%	-	-	_
NTAM R1000 Index - Net	10.29%	26.53%	-	-	-
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
NTAM Quant Enh R1000 - Gross	12.58%	24.47%	-	-	-
NTAM Quant Enh R1000 - Net	12.58%	24.47%	-	-	-
Russell 1000 Index	10.30%	26.53%	(19.13%)	26.45%	20.96%
Small Cap					
Gross	3.66%	17.97%	(17.09%)	16.70%	9.63%
Net	3.52%	17.28%	(17.73%)	16.01%	9.05%
Russell 2000 Index	5.18%	16.93%	(20.44%)	14.82%	19.96%
Atlanta Capital - Gross	2.04%	20.80%	(11.34%)	20.30%	13.78%
Atlanta Capital - Gross Atlanta Capital - Net	1.89%	20.04%	(11.99%)	19.61%	13.41%
S&P 600 Small Cap Index	2.46%	16.05%	(16.10%)	26.82%	11.29%
Picateida a Oscall Occa Oscalla C	4.040/	04 440/	(00 50%)	4.500/	
Riverbridge Small Cap Growth - Gross	4.24% 4.07%	21.44% 20.52%	(32.50%)	4.59% 3.91%	-
Riverbridge Small Cap Growth - Net			(33.11%)		
Russell 2000 Growth Index	7.58%	18.66%	(26.36%)	2.83%	34.63%
Sycamore Small Cap Value - Gross Sycamore Small Cap Value - Net	4.11%	12.20%	(5.88%)	26.40%	-
Sycamore Small Cap Value - Net	3.96%	11.47%	(6.56%)	25.69%	-
Russell 2000 Value Index	2.90%	14.65%	(14.48%)	28.27%	4.63%
NTAM R2000 Index - Gross	5.20%	17.08%	-	-	_
NTAM R2000 Index - Net	5.20%	17.08%	_	-	_
Russell 2000 Index	5.18%	16.93%	(20.44%)	14.82%	19.96%
			V		

<sup>(1)</sup> 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	5.92%	16.97%	(19.26%)	11.59%	13.68%		
Net	5.88%	16.68%	(19.50%)	11.29%	13.35%		
Benchmark(1)	4.33%	15.62%	(15.79%)	12.62%	7.59%		
`,			( 1 117)				
International All Cap Gross	8.51%	19.35%	-		-		
Net			-	-	-		
	8.43%	18.77%		-			
MSCI ACWI xUS IMI	4.33%	15.62%	(16.58%)	8.53%	11.12%		
William Blair Int'l Leaders - Gross	6.63%	14.46%	(28.14%)	10.77%	28.49%		
William Blair Int'l Leaders - Net	6.54%	13.95%	(28.48%)	10.38%	28.03%		
MSCI ACWI xUS IMI	4.33%	15.62%	(16.58%)	8.53%	11.12%		
MOCI ACVITAGO IIVII	4.5570	13.02 /0	(10.5070)	0.0070	11.12/0		
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	5.55%	17.87%	_	_	_		
Net	5.55%	17.84%	_	_	<del>-</del>		
			(4.4.000/.)	-	7.500/		
MSCI World xUS	5.59%	17.94%	(14.29%)	12.62%	7.59%		
State St MSCI World exUS - Gross	5.55%	17.86%	=	-	-		
State St MSCI World exUS - Net	5.55%	17.84%	-	-	-		
MSCI World xUS	5.59%	17.94%	(14.29%)	12.62%	7.59%		
Developed Intl Small Cap							
Gross	3.63%	13.47%	_	_	_		
Net	3.60%	13.16%	_	_	_		
MSCI World xUS Small	2.58%	12.62%	(20.59%)	- 11.14%	12.78%		
MSCI World XOS Small	2.50%	12.02%	(20.59%)	11.14%	12.70%		
DFA Intl Small Cap Value - Net	5.32%	17.76%	(9.78%)	15.89%	0.81%		
World ex US SC Va	2.89%	14.70%	(14.00%)	13.27%	2.58%		
State St MSCI exUS Small - Gross	2.49%	12.54%		_			
			-	-	-		
State St MSCI exUS Small - Net	2.48%	12.50%	-	-	-		
MSCI World xUS Small	2.58%	12.62%	(20.59%)	11.14%	12.78%		
Emerging Markets							
Gross	2.24%	10.34%	-	-	-		
Net	2.20%	10.13%	-	_	-		
MSCI EM	2.37%	9.83%	(20.09%)	(2.54%)	18.31%		
Private Equity							
Net	1.20%	5.88%	0.85%	10.46%	_		
Benchmark(2)	1.96%	14.17%	(6.15%)	5.24%	- -		
		, ,	(00,0)	3.2 . 70			
Altor Fund VI	(62.13%)	-	-	-	-		
Kelso	17.94%	-	-	-	_		



<sup>(1)</sup> MSCI EAFE through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter. (2) 50% S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.

	12/2023- 3/2024	2023	2022	2021	2020
Global Fixed Income	0/2024	2020	LULL	2021	2020
Gross	(0.14%)	7.32%	(11.82%)	0.41%	8.32%
Net	(0.17%)	7.22%	(11.91%)	0.31%	8.21%
Blmbg Aggregate Index	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
0 00 0	,		,	,	
Ares ND Credit Strategies Fd - Net	0.00%	10.45%	7.85%	12.08%	3.29%
Cerberus ND Private Credit Fd - Net	2.43%	8.23%	7.02%	11.08%	8.81%
S&P/LSTA Leveraged Loan B	2.45%	14.82%	(1.07%)	5.22%	3.80%
Allspring Med Quality Credit - Gross	0.36%	10.49%	(16.18%)	1.51%	12.23%
Allspring Med Quality Credit - Net	0.27%	10.32%	(16.34%)	1.32%	12.02%
Blmbg Credit Baa	(0.20%)	9.41%	(15.94%)	(0.40%)	9.43%
	(3.2373)		(1212172)	(311373)	
Manulife-Declaration TRBF - Net	(2.65%)	9.25%	(6.88%)	2.45%	5.75%
Libor-3 Month	1.42%	5.65%	2.25%	0.17%	0.78%
PIMCO Bravo II(1)	5.50%	(12.62%)	(26.24%)	33.16%	(17.51%)
PIMCO DISCO II(1)	3.57%	8.74%	(0.28%)	6.33%	4.18%
Blmbg Aggregate	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
Prudential Core Plus - Gross	(0.37%)	6.79%	(14.40%)	(1.08%)	10.03%
Prudential Core Plus - Net	(0.40%)	6.61%	(14.58%)	(1.27%)	9.81%
	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%
Blmbg Aggregate	(0.76%)	5.55%	(13.01%)	(1.34%)	1.5170
Western Asset Core Plus - Gross	(0.98%)	7.26%	(15.80%)	(1.19%)	8.29%
Western Asset Core Plus - Net	(1.01%)	7.13%	(15.90%)	(1.29%)	8.17%
Blmbg Aggregate	(0.78%)	5.53%	(13.01%)	(1.54%)	7.51%

<sup>(1)</sup> Prior to 7/1/2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning 7/1/2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the insurance pool.



	12/2023-				
	3/2024	2023	2022	2021	2020
Other Real Assets					
Gross	(1.22%)	(1.20%)	3.95%	10.32%	7.44%
Net	(1.29%)	(1.47%)	3.70%	10.04%	7.14%
Weighted Benchmark	(2.25%)	(3.35%)	(0.14%)	11.65%	5.41%
Real Estate					
Gross	(6.82%)	(12.27%)	20.97%	14.29%	(0.02%)
Net	(6.87%)	(12.73%)	20.47%	13.79%	(0.46%)
NCREIF Total Index	(0.98%)	(7.94%)	5.53%	17.70%	1.60%
Invesco Core Real Estate - Gross	(4.76%)	(12.47%)	19.92%	16.28%	(0.94%)
Invesco Core Real Estate - Net	(4.76%)	(12.76%)	19.56%	15.90%	(1.27%)
NCREIF Total Index	(0.98%)	(7.94%)	5.53%	17.70%	1.60%
JP Morgan RE Inc & Growth - Gross	(7.58%)	(12.67%)	21.40%	12.31%	0.89%
JP Morgan RE Inc & Growth - Net	(7.71%)	(13.39%)	20.75%	11.69%	0.34%
NCREIF Total Index	(0.98%)	(7.94%)	5.53%	17.70%	1.60%
Infrastructure					
Gross	3.90%	5.62%	(3.56%)	8.62%	10.97%
Net	3.81%	5.47%	(3.69%)	8.43%	10.75%
Weighted Benchmark	(1.36%)	(0.85%)	(2.92%)	8.72%	7.35%
JP Morgan Infrastructure - Gross	5.83%	15.28%	(1.27%)	8.51%	9.05%
JP Morgan Infrastructure - Net	5.50%	14.45%	(1.91%)	7.68%	8.18%
Grosvenor CIS Fund II - Net	4.38%	14.99%	9.19%	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%)	-
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%)	-	-
Benchmark(2)	(1.36%)	(5.16%)	7.91%	13.37%	1.07%
Cash & Equivalents - Net	1.32%	5.05%	1.42%	0.03%	0.42%
NT Cash Account - Net	1.28%	5.09%	1.29%	0.01%	0.34%
Bank of ND - Net	1.34%	5.12%	1.63%	0.08%	0.56%
90 Day Treasury Bills	1.29%	5.01%	1.46%	0.05%	0.67%
Total Fund					
Gross	4.64%	13.12%	(12.70%)	11.54%	12.44%
Net	4.60%	12.94%	(12.89%)	11.28%	12.22%
Target*	3.36%	11.22%	(13.52%)	10.45%	12.07%
Corridor Benchmark	3.79%	11.80%	(13.40%)	10.39%	12.05%

<sup>(3)</sup> Blmbg Global Inflation-Linked through 10/31/2018 and Blmbg US Govt Inflation Linked Bond Index thereafter.



<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.

<sup>(1)</sup> CPI-W through March 31, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

<sup>(2) 50%</sup> 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 Equity			-	-	
Gross	16.50%	16.74%	(16.04%)	42.77%	0.92%
Net	16.33%	16.51%	(16.32%)	42.35%	0.70%
Weighted Benchmark	14.02%	15.37%	(16.33%)	42.18%	(0.01%)
Domestic Equity					
Gross	19.51%	19.08%	(13.40%)	45.37%	2.71%
Net	19.35%	18.89%	(13.72%)	44.96%	2.55%
Weighted Benchmark	18.80%	18.36%	(16.40%)	48.11%	3.66%
Large Cap					
Gross	21.13%	20.11%	(12.00%)	46.02%	6.53%
Net	21.05%	20.01%	(12.23%)	45.85%	6.36%
Russell 1000 Index	19.61%	19.36%	(13.04%)	43.07%	7.48%
L.A. Capital Enhanced - Gross	21.71%	19.82%	(11.03%)	43.44%	8.26%
L.A. Capital Enhanced - Net	21.61%	19.74%	(11.15%)	43.28%	8.12%
Russell 1000 Index	19.61%	19.36%	(13.04%)	43.07%	7.48%
L.A. Capital LargeCap Growth - Gross	25.34%	26.06%	(16.21%)	43.46%	21.97%
L.A. Capital LargeCap Growth - Net	25.16%	25.34%	(16.39%)	43.18%	21.73%
Russell 1000 Growth Index	23.21%	27.11%	(18.77%)	42.50%	23.28%
Parametric-Clifton Enh R1000 - Gross	19.48%	19.33%	(12.20%)	42.20%	7.10%
Parametric-Clifton Enh R1000 - Net	19.48%	19.33%	(12.61%)	42.46%	7.10%
Benchmark(1)	19.61%	19.36%	(10.62%)	40.79%	7.50%
Small Cap					
Gross	10.53%	15.09%	(17.13%)	42.89%	(7.26%)
Net	9.91%	14.42%	(17.68%)	41.82%	(7.36%)
Russell 2000 Index	13.79%	12.31%	(25.20%)	62.03%	(6.63%)
Atlanta Capital - Gross	9.94%	16.57%	(6.97%)	36.91%	-
Atlanta Capital - Net	9.26%	15.91%	(7.54%)	36.09%	-
S&P 600 Small Cap Index	12.14%	9.75%	(16.81%)	67.40%	(11.29%)
Riverbridge Small Cap Growth - Gross	8.41%	16.91%	(34.52%)	-	-
Riverbridge Small Cap Growth - Net	7.81%	15.92%	(35.02%)	-	-
Russell 2000 Growth Index	12.42%	18.53%	(33.43%)	51.36%	3.48%
Sycamore Small Cap Value - Gross	12.10%	13.22%	(7.91%)	-	-
Sycamore Small Cap Value - Net	11.40%	12.58%	(8.49%)	-	-
Russell 2000 Value Index	15.09%	6.01%	(16.28%)	73.28%	(17.48%)

<sup>(1)</sup> S&P 500 Index through 6/30/2022 and Russell 1000 Index thereafter.



	6/2023-				
	3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Total International Equity					
Gross	12.35%	14.30%	(20.59%)	38.84%	(1.79%)
Net	12.15%	14.01%	(20.81%)	38.46%	(2.09%)
Benchmark(1)	10.56%	13.08%	(16.76%)	33.60%	(5.42%)
International All Cap					
William Blair Int'l Leaders - Gross	8.60%	17.15%	(28.53%)	38.38%	8.74%
William Blair Int'l Leaders - Net	8.14%	16.73%	(28.82%)	37.92%	8.33%
MSCI ACWI xUS IMI	10.56%	12.47%	(19.86%)	37.18%	(4.74%)
Arrowstreet ACWI ex US - Gross	19.78%	17.76%	-	-	-
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 Small Cap					
DFA Intl Small Cap Value - Net	15.41%	15.25%	(13.72%)	43.90%	(11.98%)
World ex US SC Va	12.08%	10.58%	(17.41%)	44.91%	(11.36%)
Private Equity					
Net	2.40%	4.30%	1.69%	-	-
Sixth Street TAO - Net	2.41%	11.52%	6.80%	-	-
Benchmark(2)	9.52%	10.33%	(7.96%)	-	-

<sup>(2) 50%</sup> S&P/LSTA Leveraged Loan B and 50% Blmbg HY Corp 2% Issue.



<sup>(1)</sup> MSCI EAFE through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter.

	6/2023-				
	3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Global Fixed Income					
Gross	3.91%	1.40%	(9.70%)	3.40%	7.86%
Net	3.82%	1.32%	(9.80%)	3.29%	7.74%
Blmbg Aggregate Index	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Ares ND Credit Strategies Fd - Net	3.91%	7.74%	8.90%	13.53%	1.72%
Cerberus ND Private Credit Fd - Net	6.35%	7.89%	7.23%	11.36%	9.05%
S&P/LSTA Leveraged Loan B	9.75%	11.48%	(2.97%)	11.68%	(1.14%)
Allspring Med Quality Credit - Gross	6.68%	3.11%	(14.89%)	9.20%	9.08%
Allspring Med Quality Credit - Net	6.47%	2.97%	(15.05%)	9.00%	8.87%
Blmbg Credit Baa	5.46%	2.64%	(14.89%)	5.41%	8.19%
Manulife-Declaration TRBF - Net	3.75%	1.18%	(5.18%)	6.88%	3.18%
Libor-3 Month	4.37%	4.53%	0.48%	0.22%	1.74%
PIMCO Bravo II(1)	11.31%	(35.97%)	(0.57%)	28.42%	(18.00%)
PIMCO DISCO II(1)	7.98%	5.07%	1.64%	8.47%	2.89%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Prudential Core Plus - Gross	3.60%	0.62%	(12.22%)	2.64%	9.00%
Prudential Core Plus - Net	3.46%	0.45%	(12.41%)	2.44%	8.79%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%
Western Asset Core Plus - Gross	3.16%	(0.55%)	(12.51%)	1.11%	8.89%
Western Asset Core Plus - Net	3.04%	(0.64%)	(12.61%)	1.00%	8.77%
Blmbg Aggregate	2.56%	(0.94%)	(10.29%)	(0.33%)	8.74%

<sup>(1)</sup> Prior to 7/1/2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning 7/1/2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the insurance pool.



	6/2023- 3/2024	FY 2023	FY 2022	FY 2021	FY 2020
Other Real Assets	3/2024	F1 2023	F1 2022	F1 2021	F 1 2020
Gross	(2.34%)	(0.98%)	9.55%	9.33%	5.81%
Net	(2.49%)	(1.24%)	9.29%	9.04%	5.52%
			9.83%		4.85%
Weighted Benchmark	(4.18%)	(3.22%)	9.83%	6.44%	4.85%
Real Estate					
Gross	(9.53%)	(9.57%)	29.96%	6.23%	1.41%
Net	(9.71%)	(9.99%)	29.41%	5.79%	0.92%
NCREIF Total Index	(5.29%)	(6.60%)	21.45%	7.37%	2.69%
Invesco Core Real Estate - Gross	(6.25%)	(9.83%)	27.19%	7.80%	1.32%
Invesco Core Real Estate - Net	(6.33%)	(10.10%)	26.79%	7.45%	0.98%
NCREIF Total Index	(5.29%)	(6.60%)	21.45%	7.37%	2.69%
JP Morgan RE Inc & Growth - Gross	(11.46%)	(10.47%)	32.84%	4.65%	1.50%
JP Morgan RE Inc & Growth - Net	(11.78%)	(11.10%)	32.12%	4.12%	0.86%
NCREIF Total Index	(5.29%)	(6.60%)	21.45%	7.37%	2.69%
NONEII Total Index	(3.2970)	(0.0070)	21.45/0	7.5770	2.0370
Infrastructure					
Gross	3.61%	4.33%	0.93%	10.81%	7.83%
Net	3.49%	4.16%	0.79%	10.59%	7.64%
Weighted Benchmark	(1.98%)	(1.52%)	4.39%	5.96%	5.93%
JP Morgan Infrastructure - Gross	6.77%	12.50%	1.85%	11.25%	5.29%
JP Morgan Infrastructure - Net	6.43%	11.49%	1.23%	10.24%	4.60%
Grosvenor CIS Fund II - Net	3.12%	16.30%	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 IV - Net	3.16%	6.21%	18.12%	20.36%	9.14%
ISQ Global Infrastructure II - Net				- 19.91%	- 6.15%
	3.58%	10.04%	12.90%	19.91%	0.13%
ISQ Global Infrastructure III - Net	8.29%	1.78%	-	- - 070/	4.000/
Benchmark(2)	(4.11%)	(3.04%)	18.33%	5.27%	1.62%
Cash & Equivalents - Net	4.07%	3.58%	0.16%	0.04%	1.34%
NT Cash Account - Net	4.11%	3.42%	0.13%	0.01%	1.24%
Bank of ND - Net	4.09%	3.82%	0.23%	0.10%	1.49%
90 Day Treasury Bills	4.03%	3.59%	0.17%	0.09%	1.63%
Total Fund					
Gross	9.92%	8.37%	(9.90%)	22.95%	4.41%
Net	9.79%	8.19%	(10.12%)	22.68%	4.23%
Target*	7.82%	6.82%	(10.45%)	20.65%	4.38%
Corridor Benchmark	8.69%	7.06%	(10.47%)	20.74%	4.29%
COMMON DEMONSTRATION	0.03/0	1.00/0	(10.41 /0)	20.14/0	7.∠3/0

<sup>(3)</sup> Blmbg Global Inflation-Linked through 10/31/2018 and Blmbg US Govt Inflation Linked Bond Index thereafter.



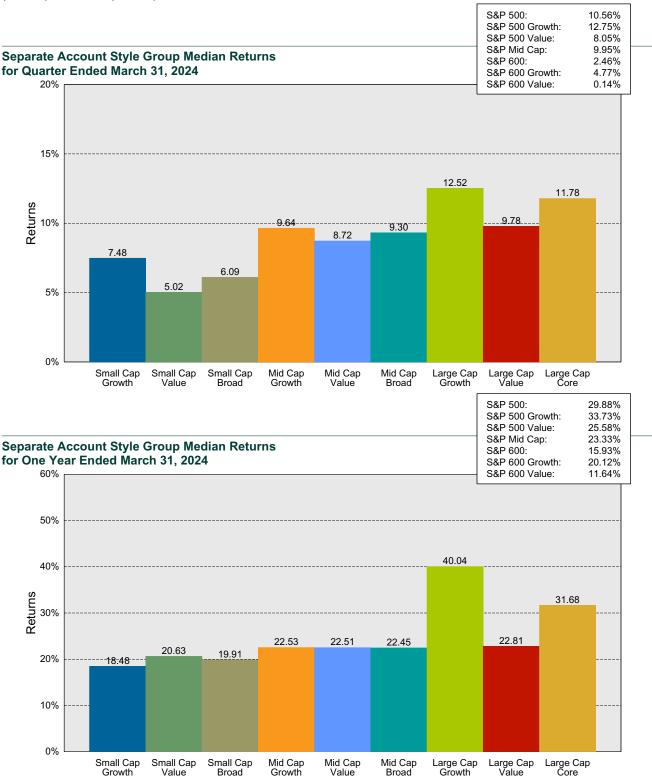
<sup>\*</sup> Current Quarter Target = 31.2% Blmbg:Aggregate, 28.5% Russell 1000 Index, 22.6% MSCI ACWI xUS IMI, 5.0% Russell 2000 Index, 4.2% NCREIF Total Index, 3.5% In-State Investments, 2.5% CPI All Urban Cons lagged 3 months, 2.5% NCREIF NFI-ODCE Eq Wt Net and 0.1% Private Equity.

<sup>(1)</sup> CPI-W through March 31, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

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

# 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 Equity Period Ended March 31, 2024

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

- Domestic Equity's portfolio posted a 10.41% return for the quarter placing it in the 50 percentile of the Callan All Cap Broad group for the quarter and in the 38 percentile for the last year.
- Domestic Equity's portfolio outperformed the Domestic Equity Target by 0.88% for the quarter and outperformed the Domestic Equity Target for the year by 0.84%.

#### **Quarterly Asset Growth**

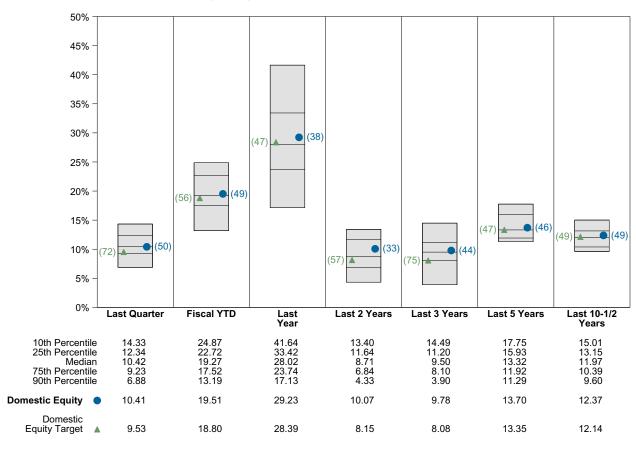
Beginning Market Value \$3,310,063,184

Net New Investment \$-94,778,612

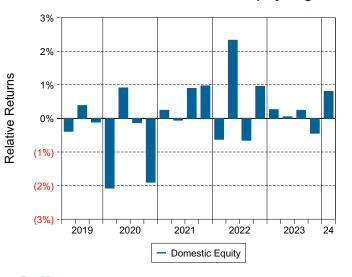
Investment Gains/(Losses) \$339,364,122

Ending Market Value \$3,554,648,694

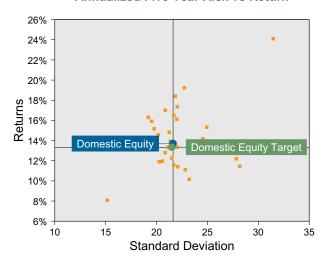
#### Performance vs Callan All Cap Broad (Gross)



# Relative Return vs Domestic Equity Target



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



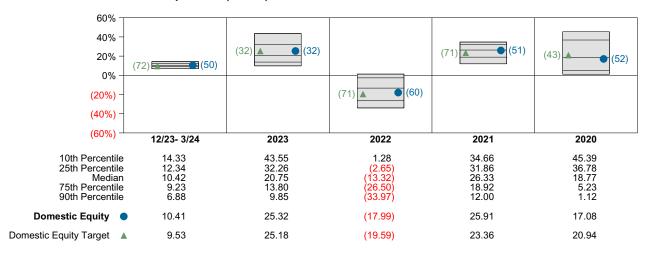


# Domestic Equity Return Analysis Summary

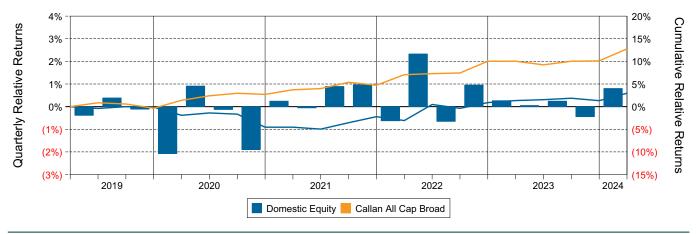
#### **Return Analysis**

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

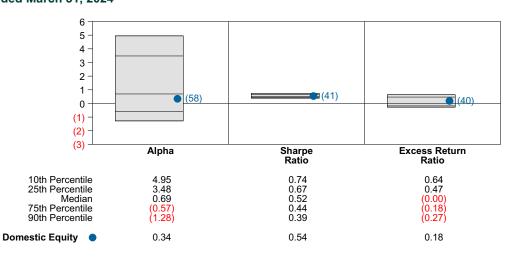
#### Performance vs Callan All Cap Broad (Gross)



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



Risk Adjusted Return Measures vs Domestic Equity Target Rankings Against Callan All Cap Broad (Gross) Five Years Ended March 31, 2024



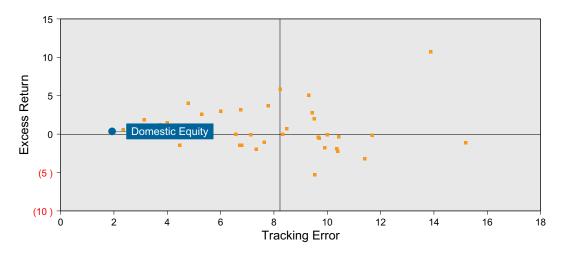


# Domestic Equity Risk Analysis Summary

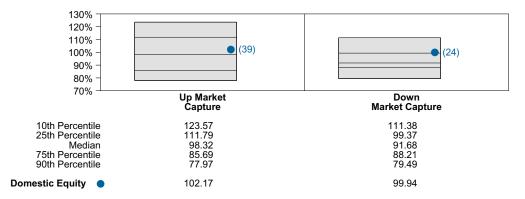
#### **Risk Analysis**

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

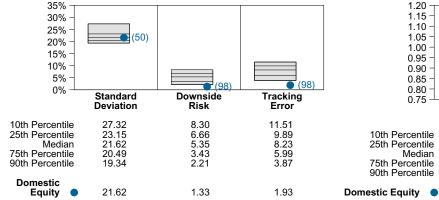
# Risk Analysis vs Callan All Cap Broad (Gross) Five Years Ended March 31, 2024

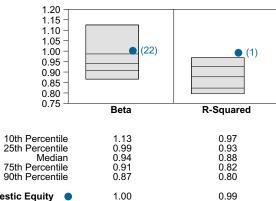


Market Capture vs Domestic Equity Target Rankings Against Callan All Cap Broad (Gross) Five Years Ended March 31, 2024



Risk Statistics Rankings vs Domestic Equity Target Rankings Against Callan All Cap Broad (Gross) Five Years Ended March 31, 2024



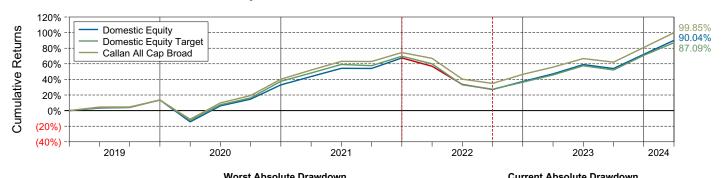




# Domestic Equity Drawdown Analysis for Five Years Ended March 31, 2024

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**

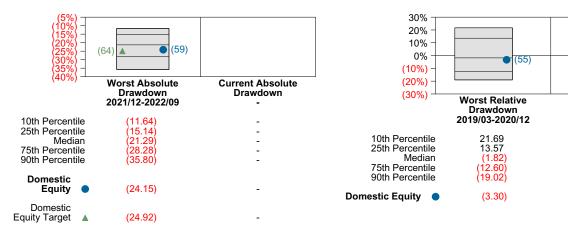


		****	31 Absolute blawt	AC WIII		Current Absolute Diawdown						
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers		
Domestic Equity	(24.15)%	0.75	2021/12-2022/09	(24.92)%	(22.69)%	-	-	-	-	-		
Recovery from Trough	35.50%	1.25	2022/09-2023/12	34.07%	34.17%	-	-	-	-	-		
Domestic Equity Target	(24.92)%	0.75	2021/12-2022/09			-	-	-				
Callan All Cap Broad	(22.69)%	0.75	2021/12-2022/09			-	-	-				

# Relative Cumulative Drawdown Analysis vs. Domestic Equity Target 10% Domestic Equity Callan All Cap Broad 5% 0% 1.58% 2019 2020 2021 2022 2023 2024

	\	Norst Rel	ative Drawdown		Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
Domestic Equity	(3.30)%	1.75	2019/03-2020/12	1.97%	-	-	-	-			
Recovery from Trough	0.24%	0.25	2020/12-2021/03	0.54%	-	-	-	-			
Callan All Cap Broad	(1.39)%	0.50	2022/12-2023/06		(0.49)%	1.25	2022/12-2024/03				

Drawdown Rankings vs. Domestic Equity Target Rankings against Callan All Cap Broad Five Years Ended March 31, 2024





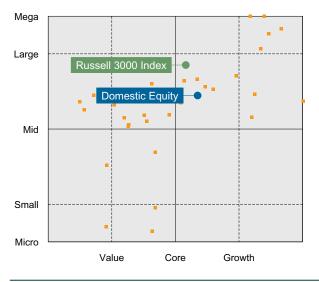
**Current Relative** 

Drawdown

# Current Holdings Based Style Analysis Domestic 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 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.

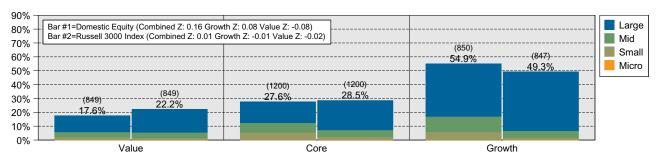
# Style Map vs Callan All Cap Broad Holdings as of March 31, 2024



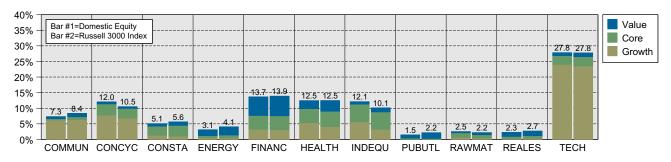
# Style Exposure Matrix Holdings as of March 31, 2024

Total	17.076 (649)	27.076 (1200)	34.9 /6 (650)	100.0 /6 (2699)
	0.2% (328) <b>17.6% (849)</b>	0.2% (391) <b>27.6% (1200)</b>	0.1% (148) <b>54.9% (850)</b>	0.5% (867) 100.0% (2899)
Micro				
	0.1% (328)	0.1% (391)	0.2% (148)	0.4% (867)
Siliali	1.2% (277)	2.1% (504)	1.6% (379)	4.9% (1160)
Small	2.1% (277)	5.3% (504)	5.7% (380)	13.1% (1161)
iviid	4.2% (152)	5.0% (205)	5.0% (223)	14.1% (580)
Mid	3.7% (152)	7.0% (205)	11.1% (225)	21.7% (582)
Large	16.7% (92)	21.3% (100)	42.6% (97)	80.5% (289)
Lorgo	11.7% (92)	15.2% (100)	37.9% (97)	64.7% (289)

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



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

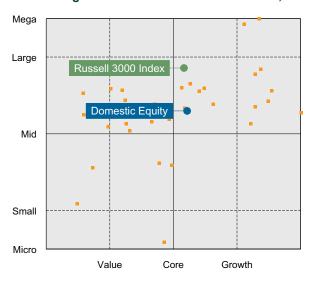




# Historical Holdings Based Style Analysis Domestic Equity For Three Years Ended March 31, 2024

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various 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.

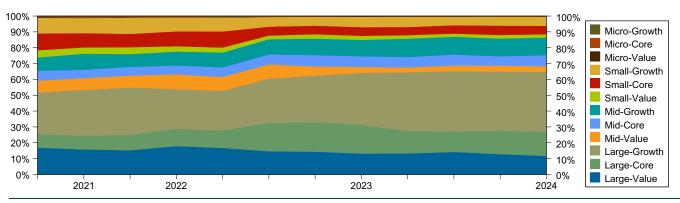
# Average Style Map vs Callan All Cap Broad Holdings for Three Years Ended March 31, 2024



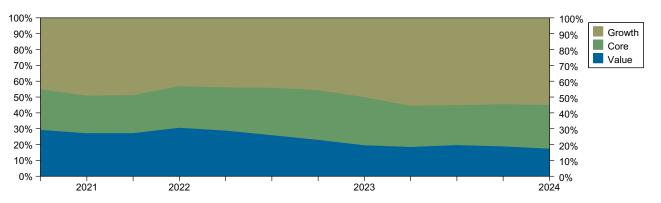
#### Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2024



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



**Domestic Equity Historical Style Only Exposures** 

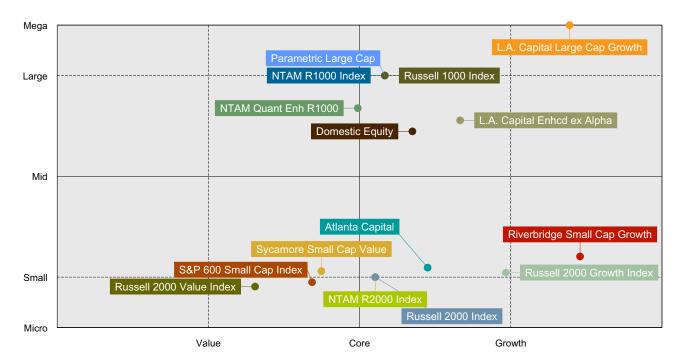




# **Holdings Based Style Analysis** For One Quarter Ended March 31, 2024

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.

Style Map Holdings for One Quarter Ended March 31, 2024



	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities	Security Diversification
NTAM R1000 Index	183.40	0.02	(0.01)	(0.02)	1004	43.89
NTAM Quant Enh R1000	129.82	(0.13)	0.02	0.14	188	31.11
L.A. Capital Enhcd ex Alpha	109.79	0.41	0.21	(0.20)	223	27.73
L.A. Capital Large Cap Grow	th 865.10	0.99	0.45	(0.54)	100	6.94
Parametric Large Cap	183.40	0.02	(0.01)	(0.02)	1004	43.89
Atlanta Capital	4.35	0.24	0.04	(0.20)	66	18.33
NTAM R2000 Index	2.95	(0.03)	(0.05)	(0.01)	1943	285.02
Riverbridge Small Cap Grow	th 6.00	1.04	0.39	(0.65)	48	14.13
Sycamore Small Cap Value	3.84	(0.34)	(0.11)	0.22	106	37.87
Domestic Equity	91.66	0.16	0.08	(80.0)	2952	74.64
S&P 600 Small Cap Index	2.70	(0.39)	(0.11)	0.28	602	157.70
Russell 1000 Index	183.40	0.02	(0.01)	(0.02)	1004	43.89
Russell 2000 Index	2.95	(0.03)	(0.05)	(0.01)	1943	285.02
Russell 2000 Growth Index	3.63	0.65	0.16	(0.49)	1063	124.70
Russell 2000 Value Index	2.49	(0.72)	(0.25)	0.46	1417	195.98

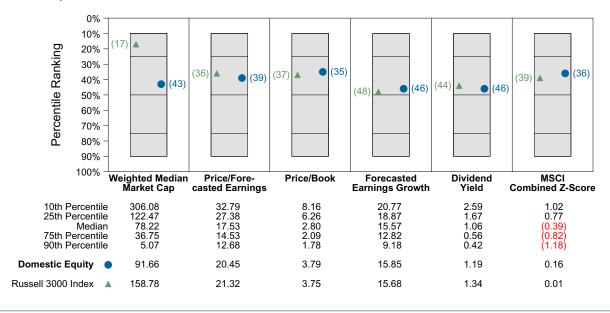


# Domestic Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

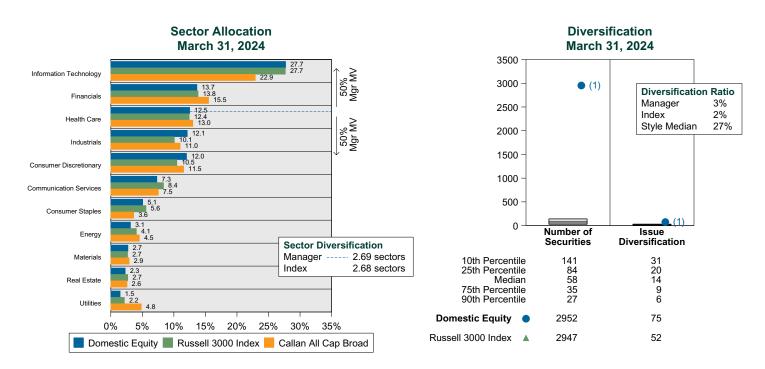
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### Portfolio Characteristics Percentile Rankings Rankings Against Callan All Cap 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. 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.

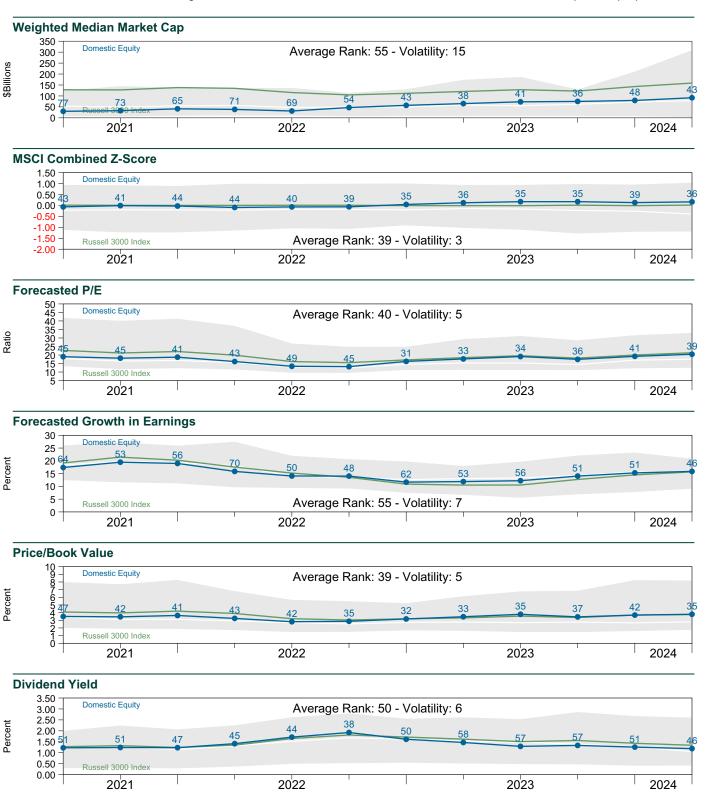




# **Portfolio Characteristics Analysis**

#### Callan All Cap Broad

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 Callan All Cap Broad 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.

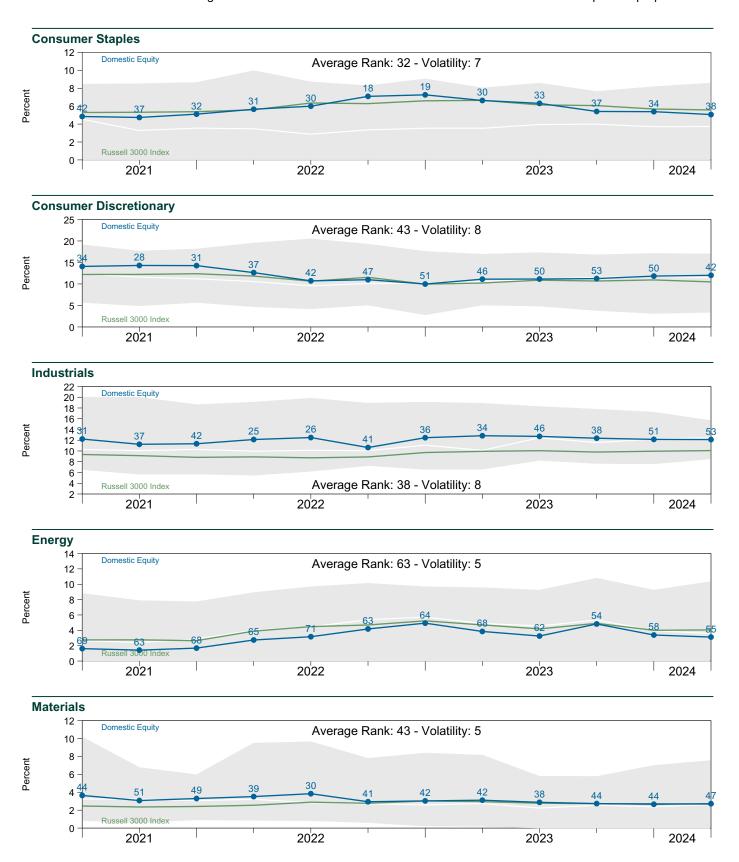


Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.



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

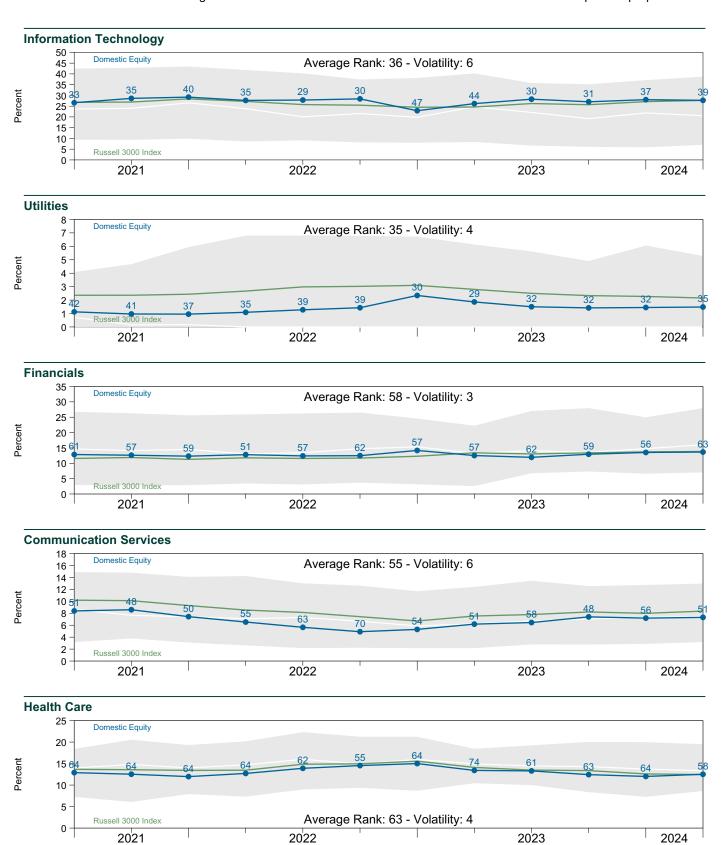
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Callan All Cap Broad Universe. The ranking of the product in this group is shown above each quarter end dot. The average 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 Callan All Cap Broad 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.

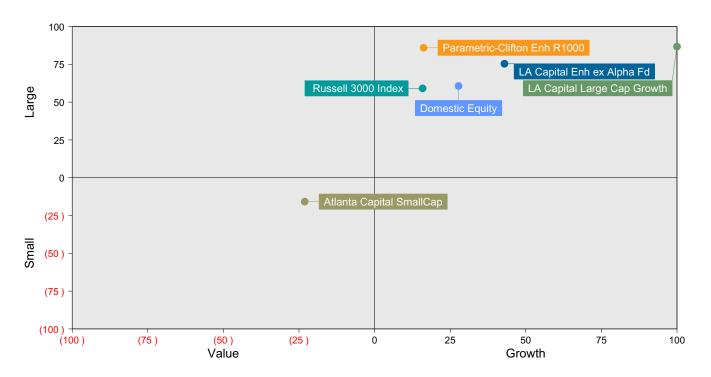




# Historical Returns Based Style Analysis For Three Years Ended March 31, 2024

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
LA Capital Enh ex Alpha Fd	18.06%	0.99	49.63%	25.72%	19.03%	0.00%	0.00%	0.00%	5.61%
LA Capital Large Cap Growth	13.55%	0.98	93.14%	0.00%	0.45%	0.00%	6.41%	0.00%	0.00%
Atlanta Capital SmallCap	7.11%	0.83	1.95%	33.88%	0.00%	0.00%	30.24%	21.42%	12.50%
Parametric-Clifton Enh R1000	16.35%	1.00	50.49%	41.71%	1.53%	0.00%	6.08%	0.18%	0.00%
Domestic Equity	100.00%	0.99	39.45%	33.58%	9.54%	0.00%	12.35%	0.00%	5.08%
Russell 3000 Index	-	1.00	46.84%	27.25%	10.91%	0.00%	0.19%	14.81%	0.00%



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 Callan All Cap Broad PEER GROUP

(12)	Parametric- Clifton Enh R1	1.06	17.70% ( <b>43</b> )	0.99 <b>(99)</b>	0.27% (99)	0.47 <b>(45)</b>	1.07	0.85% <b>(50)</b>	1.02 ( <b>36</b> )	1.00
	Atlanta									
(12)	Capital	(3.30)	14.83%	8.98	7.18%	0.26	(0.37)	(1.26)%	0.73	0.72
	SmallCap	(79)	(69)	(33)	(16)	(79)	(70)	(73)	(76)	(78)
	LA Capital									
(12)	Large Cap	4.21	22.07%	6.50	3.54%	0.52	0.65	2.70%	1.25	0.95
	Growth	(11)	(15)	(58)	(68)	(29)	(8)	(30)	(11)	(22)
	LA Capital Enh									
(12)	ex Alpha	2.42	17.14%	2.32	0.91%	0.56	1.04	2.36%	0.98	0.98
	Fd	(20)	(46)	(95)	(99)	(24)	(7)	(33)	(43)	(6)
		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- Clifton Enh R1	0.19	0.35	(0.01)	1.00
(12)	Atlanta Capital SmallCap	(0.13)	(0.52)	1.00	(0.01)
(12)	LA Capital Large Cap Growth	0.27	1.00	(0.52)	0.35
(12)	LA Capital Enh ex Alpha Fd	1.00	0.27	(0.13)	0.19
'		LA Capital Enh ex Alpha Fd	LA Capital Large Cap Growth	Atlanta Capital SmallCap	Parametric- Clifton Enh R1



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 Callan All Cap Broad Peer Group**

(12)	Parametric- Clifton Enh R1	166.15 ( <b>10</b> )	756 (2)	45.41 (3)	(0.02) (48)	(0.01) (61)	(0.01) (40)	19.04 (33)	15.10 ( <b>54</b> )	1.32% ( <b>34</b> )	3.85 (32)	1.52%
	Atlanta											
(12)	Capital	3.79	63	20.04	0.07	(0.20)	0.27	18.63	13.49	1.41%	3.12	0.90%
	SmallCap	(94)	(47)	(31)	(33)	(69)	(32)	(35)	(66)	(30)	(43)	(67)
	LA Capital											
(12)	Large Cap	400.97	143	12.13	0.34	(0.46)	0.80	23.21	18.84	1.25%	8.92	0.84%
	Growth	(5)	(11)	(68)	(13)	(78)	(17)	(27)	(28)	(42)	(3)	(72)
	LA Capital Enh											
(12)	ex Alpha	108.55	249	35.18	0.09	(80.0)	0.17	17.47	15.98	1.11%	3.97	1.35%
	Fd	(19)	(5)	(8)	(32)	(64)	(34)	(41)	(48)	(56)	(31)	(52)
		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.

#### Average Holding Overlap for 3 Years Ended March 31, 2024

(12)	Parametric- Clifton Enh R1	63%	87%	48°	% 91%	(7)	0% 9%		
(12)	Atlanta Capital SmallCap	12%	3%	8%	2%			(7)	9%
(12)	LA Capital Large Cap Growth	96%	66%			(3)	2% 8%	(115)	91%
(12)	LA Capital Enh ex Alpha Fd			66°	% 96%	(6)	3% 12%	(200)	63%
		ex A	oital Enh Alpha <sup>-</sup> d		A Capital arge Cap Growth		Atlanta Capital SmallCap		Parametric- Clifton Enh R1



## 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.

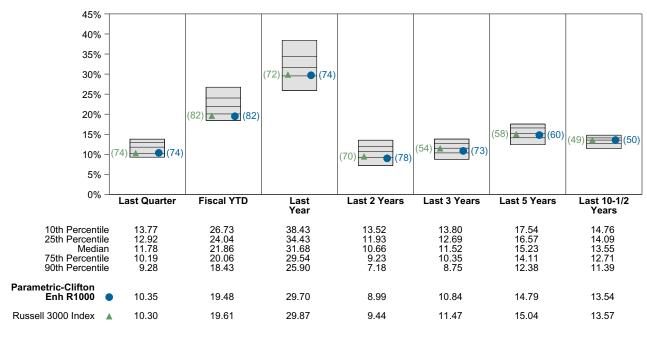
#### **Quarterly Summary and Highlights**

- Parametric-Clifton Enh R1000's portfolio posted a 10.35% return for the quarter placing it in the 74 percentile of the Callan Large Cap Core group for the quarter and in the 74 percentile for the last year.
- Parametric-Clifton Enh R1000's portfolio outperformed the Russell 3000 Index by 0.06% for the quarter and underperformed the Russell 3000 Index for the year by 0.17%.

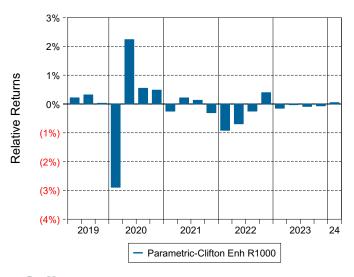
#### **Quarterly Asset Growth**

Beginning Market Value	\$433,899,798
Net New Investment	\$-5,231,722
Investment Gains/(Losses)	\$44,707,350
Ending Market Value	\$473 375 427

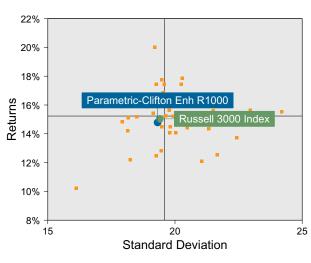
#### Performance vs Callan Large Cap Core (Gross)



## Relative Return vs Russell 3000 Index



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



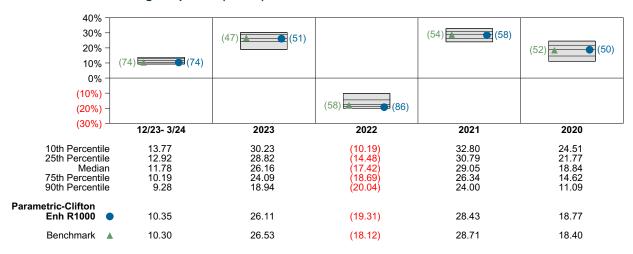


# Parametric-Clifton Enh R1000 Return Analysis Summary

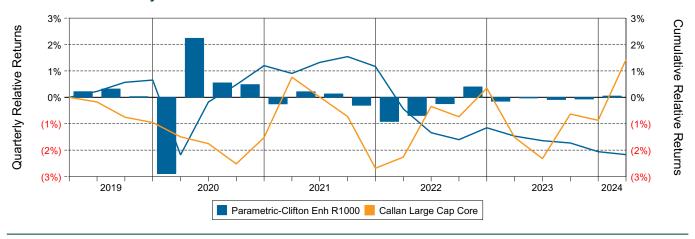
#### **Return Analysis**

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.

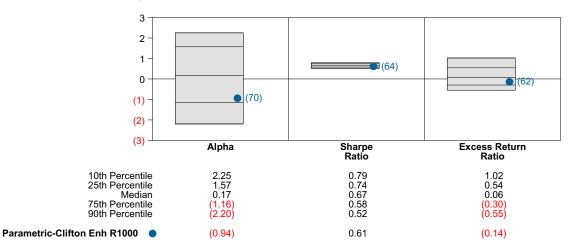
#### Performance vs Callan Large Cap Core (Gross)



#### **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



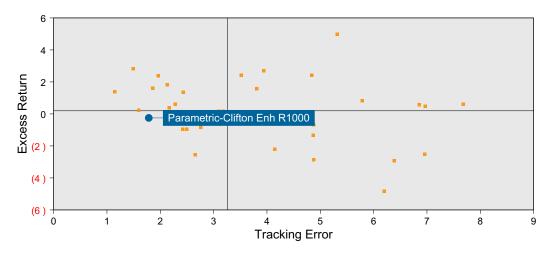


# Parametric-Clifton Enh R1000 Risk Analysis Summary

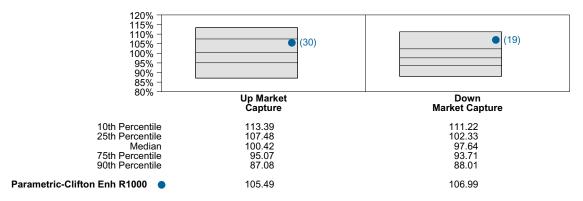
#### **Risk Analysis**

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.

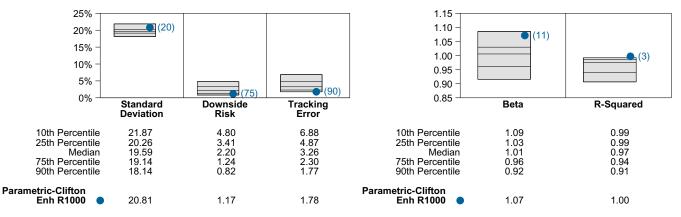
# Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



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

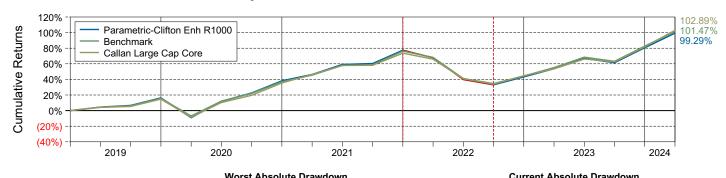




# Parametric-Clifton Enh R1000 Drawdown Analysis for Five Years Ended March 31, 2024

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**

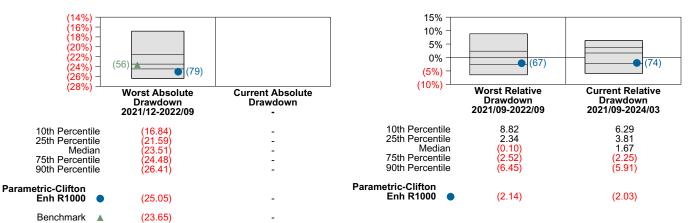


		****	31 Absolute blawe	IOWII	Current Absolute Diawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Parametric-Clifton Enh R1000	(25.05)%	0.75	2021/12-2022/09	(23.65)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.78%	1.25	2022/09-2023/12	35.69%	35.79%	-	-	-	-	-
Benchmark	(23.65)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

#### Relative Cumulative Drawdown Analysis vs. Benchmark **Cumulative Relative Returns** Peak Catch-up Rel Rtn: 2.07% Parametric-Clifton Enh R1000 1.0% 0.71% Callan Large Cap Core 0.5% 0.0% (0.5%)(1.0%)(1.08%)(1.5%)(2.0%)(2.5%)(3.0%)2019 2020 2021 2022 2023 2024

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers_	Rel Rtn	Years	Period	Peers
Parametric-Clifton Enh R1000	(2.14)%	1.00	2021/09-2022/09	(0.09)%	(2.03)%	2.50	2021/09-2024/03	1.17%
Recovery from Trough	0.12%	1.50+	2022/09-2024/03	1.26%	0.12%	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

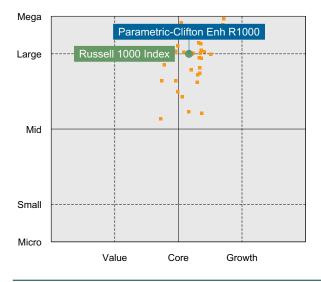




# Current Holdings Based Style Analysis Parametric-Clifton Enh R1000 As of March 31, 2024

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.

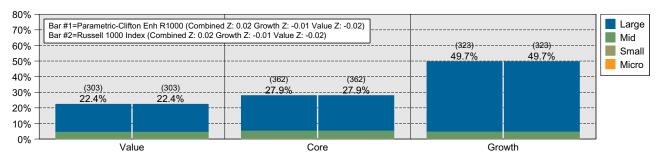
#### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



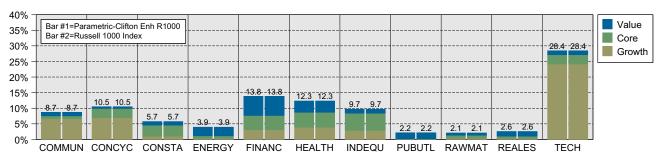
# Style Exposure Matrix Holdings as of March 31, 2024

0.5% (76) 0.5% (76) 0.5% (76) 0.0% (0) 0.0% (0) 27.9% (362) 27.9% (362)	0.3% (43) 0.3% (43) 0.0% (0) 0.0% (0) 49.7% (323)	1.2% (179) 1.2% (179) 0.0% (0) 0.0% (0) 100.0% (988) 100.0% (988)
0.5% (76) 0.5% (76) 0.0% (0) 0.0% (0)	0.3% (43) 0.0% (0) 0.0% (0)	1.2% (179) 0.0% (0) 0.0% (0)
0.5% (76) 0.5% (76) 0.0% (0)	0.3% (43)	1.2% (179) 0.0% (0)
0.5% (76)	0.3% (43)	1.2% (179)
0.5% (76)	0.3% (43)	1.2% (179)
0.5% (76)		, ,
` ` '	0.3% (43)	1.2% (179)
5.0% (186)		
F 00/	4.6% (184)	14.0% (521)
	, ,	, ,
5.0% (186)	4.6% (184)	14.0% (521)
22.4% (100)	44.8% (96)	84.7% (288)
	44.8% (96)	84.7% (288)
		22.4% (100) 44.8% (96)

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



# Sector Weights Distribution Holdings as of March 31, 2024



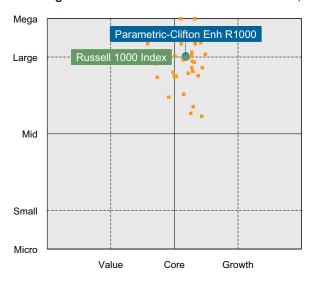


### Historical Holdings Based Style Analysis Parametric-Clifton Enh R1000 For One and 3/4 Years Ended March 31, 2024

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.

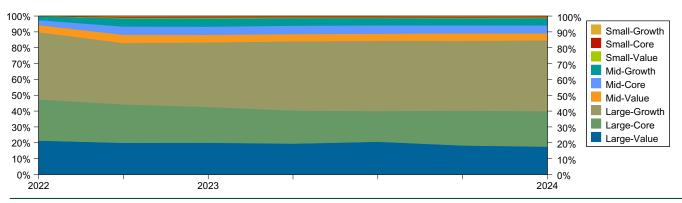
### Average Style Map vs Callan Large Cap Core Holdings for One and 3/4 Years Ended March 31, 2024

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

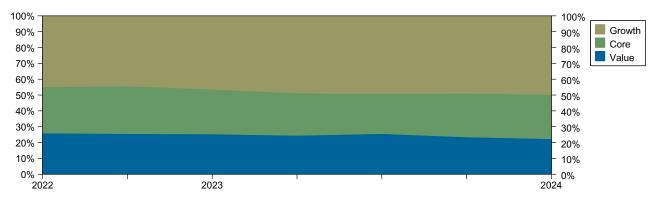




### Parametric-Clifton Enh R1000 Historical Cap/Style Exposures



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



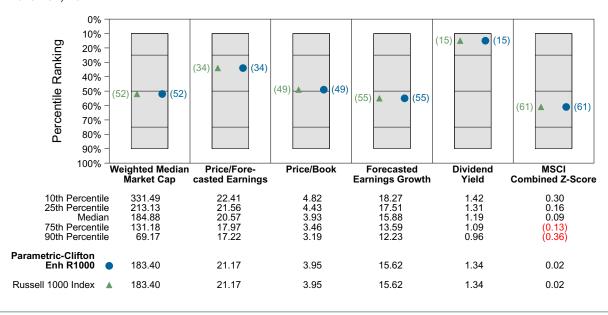


### Parametric-Clifton Enh R1000 Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

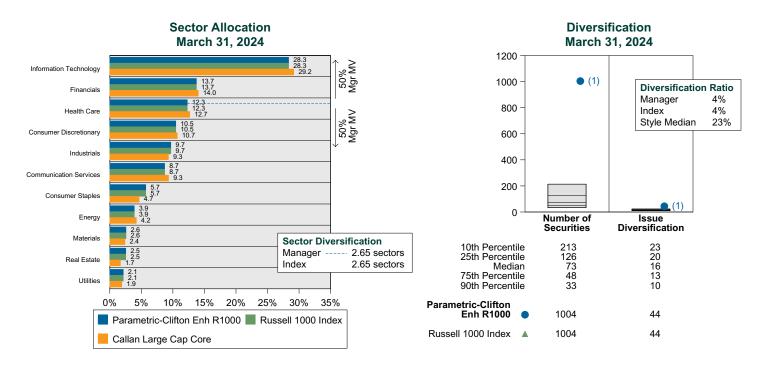
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### 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				
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings				
Information Technology	\$30,803,515	6.5%	12.09%	3126.13	32.52	0.71%	17.08%				
Information Technology	\$24,603,139	5.2%	(10.82)%	2647.97	24.99	0.56%	11.00%				
Information Technology	\$21,121,614	4.5%	82.46%	2258.90	35.53	0.02%	37.90%				
Consumer Discretionary	\$15,987,754	3.4%	18.72%	1873.67	41.05	0.00%	10.21%				
Communication Services	\$10,566,289	2.2%	37.33%	1068.30	23.35	0.41%	26.00%				
Communication Services	\$8,823,602	1.9%	8.05%	889.43	21.35	0.00%	19.30%				
Financials	\$7,575,568	1.6%	17.91%	551.22	22.45	0.00%	13.69%				
Communication Services	\$7,518,461	1.6%	8.04%	863.47	21.59	0.00%	19.30%				
Health Care	\$6,476,879	1.4%	33.69%	739.66	55.89	0.67%	49.75%				
Financials	\$5,688,096	1.2%	18.48%	576.99	12.50	2.30%	1.20%				
	Information Technology Information Technology Information Technology Consumer Discretionary Communication Services Communication Services Financials Communication Services Health Care	Sector         Market           Value           Information Technology         \$30,803,515           Information Technology         \$24,603,139           Information Technology         \$21,121,614           Consumer Discretionary         \$15,987,754           Communication Services         \$10,566,289           Communication Services         \$8,823,602           Financials         \$7,575,568           Communication Services         \$7,518,461           Health Care         \$6,476,879	Sector         Market Value         of Portfolio           Information Technology Information Technology Information Technology Information Technology Section 1.2 (August 1.2 (Aug	Market         of Value         Qtrly Portfolio           Information Technology Information Infor	Market         of Value         Qtrly Portfolio         Market Return           Information Technology Information I	Sector         Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings           Information Technology Information Info	Sector         Value         Percent Of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings         Dividend Yeld           Information Technology Information Informat				

### **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	\$21,121,614	4.5%	82.46%	2258.90	35.53	0.02%	37.90%				
Vistra Energy Corp	Utilities	\$241,918	0.1%	81.42%	24.23	14.77	1.23%	22.91%				
Applovin Corp	Information Technology	\$136,642	0.0%	73.71%	18.75	25.93	0.00%	65.80%				
Shockwave Med Inc	Health Care	\$116,036	0.0%	70.88%	12.18	62.83	0.00%	-				
Gs Acquisition Hldgs Corp Com Cl A	Industrials	\$275,512	0.1%	70.09%	31.20	33.68	0.12%	26.70%				
Cava Group	Consumer Discretionary	\$33,060	0.0%	62.98%	7.99	282.46	0.00%	-				
Emcor Group Inc	Industrials	\$159,649	0.0%	62.69%	16.48	23.73	0.21%	20.65%				
Maplebear	Consumer Staples	\$7,776	0.0%	58.89%	9.94	57.72	0.00%	-				
Constellation Energy Stock	Utilities	\$584,713	0.1%	58.45%	58.25	24.52	0.76%	-				
Williams-Sonoma	Consumer Discretionary	\$198,895	0.0%	58.05%	20.36	20.66	1.42%	34.93%				

### **10 Worst Performers**

						F		
		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	\$22,533	0.0%	(68.18)%	2.57	32.20	6.21%	15.75%
Ssr Mng Inc	Materials	\$8,914	0.0%	(59.61)%	0.90	45.98	6.28%	14.91%
Rivian Automotive Inc A Common Stock	Consumer Discretionary	\$72,768	0.0%	(53.33)%	10.62	(2.99)	0.00%	-
Agilon Health Inc Com	Health Care	\$17,417	0.0%	(51.38)%	2.50	(22.43)	0.00%	-
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$9,001	0.0%	(39.20)%	0.79	(2.65)	0.00%	6.01%
Iridium Communications Inc	Communication Services	\$31,528	0.0%	(36.14)%	3.18	34.38	1.99%	(7.79)%
Viasat Inc	Information Technology	\$20,775	0.0%	(35.28)%	2.27	(31.14)	0.00%	167.37%
Quidelortho Corp	Health Care	\$25,166	0.0%	(34.95)%	3.20	16.48	0.00%	8.43%
Unity Software Inc	Information Technology	\$76,402	0.0%	(34.70)%	10.30	(17.02)	0.00%	-
10x Genomics Inc CI A Com	Health Care	\$33,856	0.0%	(32.93)%	3.94	(26.03)	0.00%	-

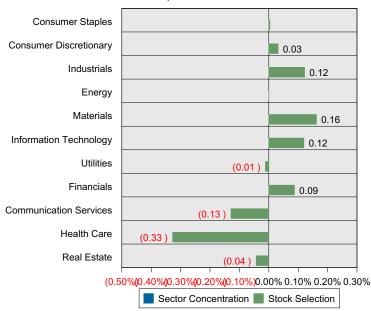


### Parametric-Clifton Enh R1000 vs Russell 1000 Index Quarterly Equity Buy and Hold Attribution

### **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.

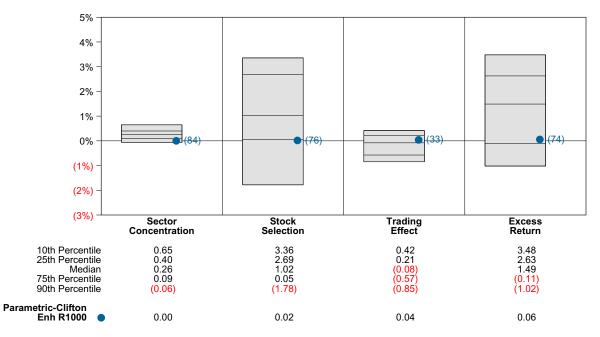
### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



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	∟ <u>Trading</u>
10.35%	10.30%	0.00%	0.02%	0.04%

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



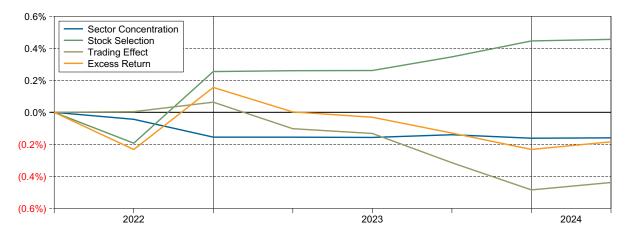


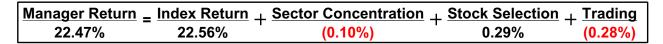
### Parametric-Clifton Enh R1000 vs Russell 1000 Index Cumulative Equity Buy and Hold Attribution

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

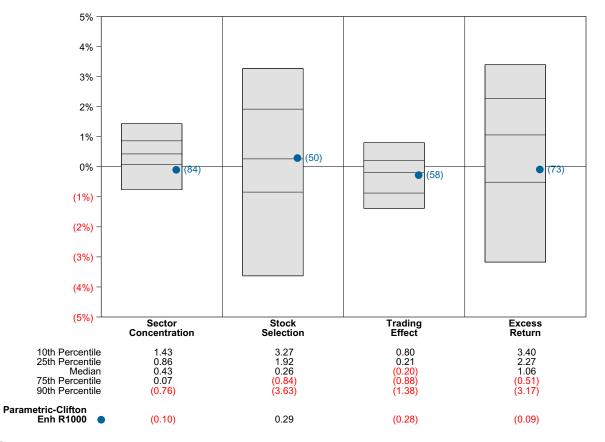
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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





### 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.

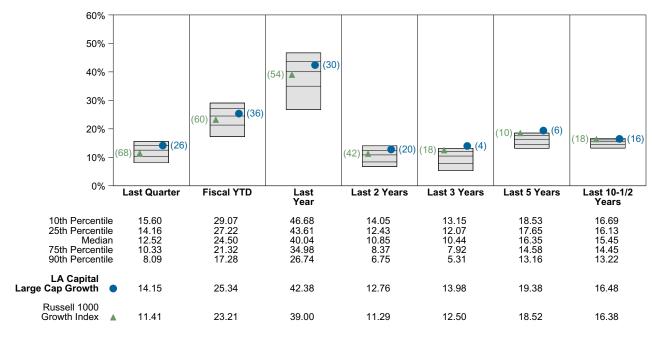
### **Quarterly Summary and Highlights**

- LA Capital Large Cap Growth's portfolio posted a 14.15% 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 Large Cap Growth'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 3.39%.

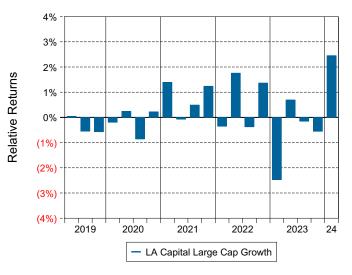
Quarterly	/ Asset	Growth
-----------	---------	--------

Beginning Market Value	\$68,289,396
Net New Investment	\$-38,809
Investment Gains/(Losses)	\$9,657,576
Ending Market Value	\$77,908,163

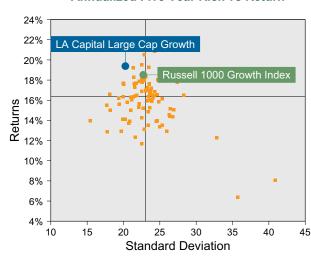
### Performance vs Callan Large Cap Growth (Gross)



#### Relative Return vs Russell 1000 Growth Index



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



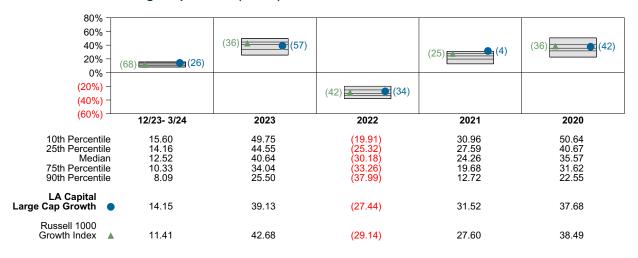


### LA Capital Large Cap Growth Return Analysis Summary

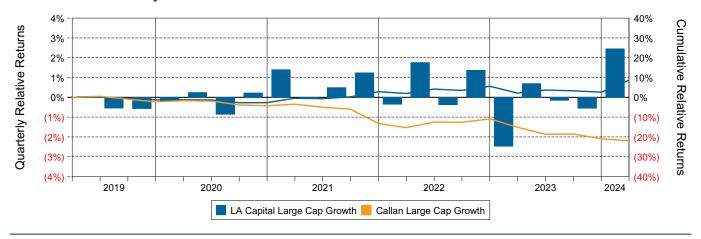
#### **Return Analysis**

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



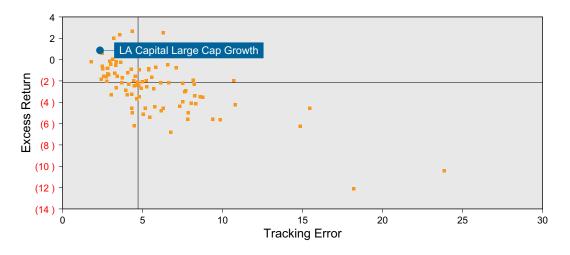


### LA Capital Large Cap Growth Risk Analysis Summary

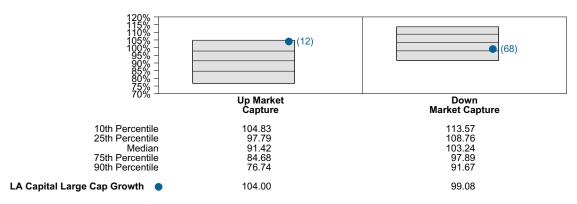
#### **Risk Analysis**

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.

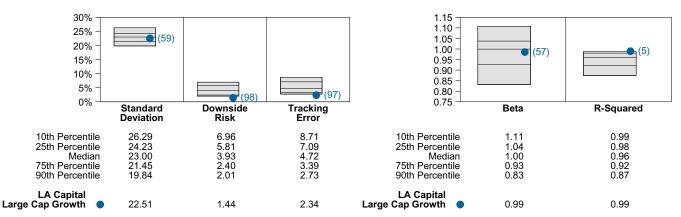
### Risk Analysis vs Callan Large Cap Growth (Gross) Five Years Ended March 31, 2024



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

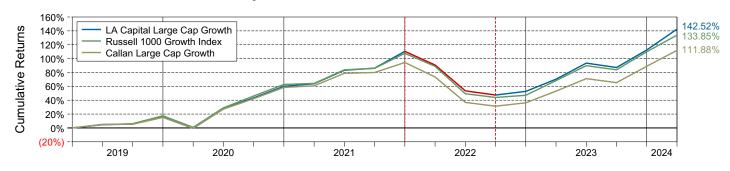




### LA Capital Large Cap Growth Drawdown Analysis for Five Years Ended March 31, 2024

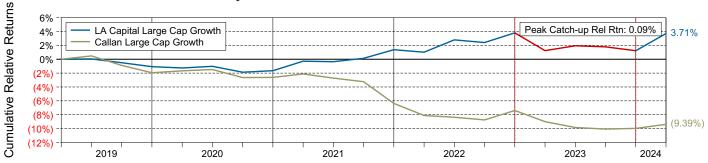
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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



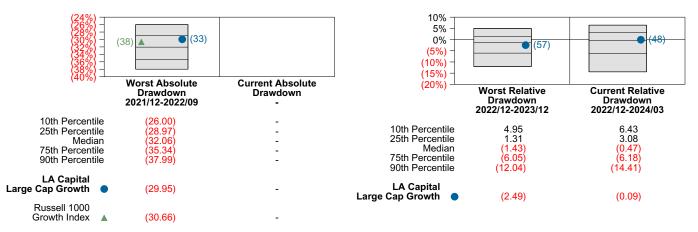
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers
LA Capital Large Cap Growth	(29.95)%	0.75	2021/12-2022/09	(30.66)%	(32.42)%	-	-	-	-	-
Recovery from Trough	44.13%	1.25	2022/09-2023/12	45.81%	43.86%	-	-	-	-	-
Russell 1000 Growth 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



	Worst Relative Drawdown				Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
LA Capital Large Cap Growth	(2.49)%	1.00	2022/12-2023/12	(2.79)%	(0.09)%	1.25	2022/12-2024/03	(2.16)%			
Recovery from Trough	2.45%	0.25+	2023/12-2024/03	0.65%	2.45%	0.25+	2023/12-2024/03	0.65%			
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

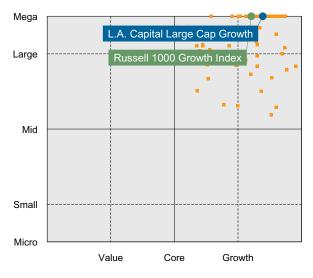




### Current Holdings Based Style Analysis L.A. Capital Large Cap Growth As of March 31, 2024

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.

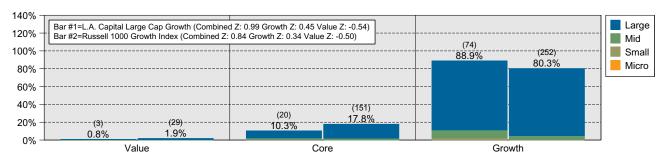
### Style Map vs Callan Large Cap Growth Holdings as of March 31, 2024



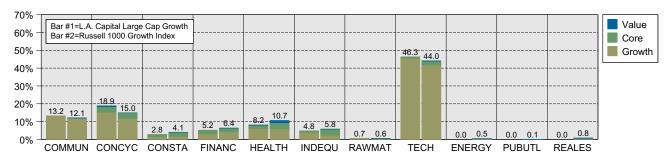
### Style Exposure Matrix Holdings as of March 31, 2024

	Value	Core	Growth	Total
iotai	1.9% (29)	17.8% (151)	80.3% (252)	100.0% (432)
Total	0.8% (3)	10.3% (20)	88.9% (74)	100.0% (97)
	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) 0.0% (0)
Small	0.00/ (a)	0.40/ (00)	0.00/ (07)	0.00/ (=0)
	0.0% (0)	0.3% (1)	2.4% (5)	2.7% (6)
	0.2% (14)	1.9% (68)	4.7% (136)	6.8% (218)
Mid	0.5 % (2)	2.0 % (6)	0.9 /6 (20)	11.470 (20)
	1.7% (9)	15.9% (63) 2.0% (6)	75.4% (89) 8.9% (20)	92.9% (161) 11.4% (28)
Large				
	0.2% (1)	8.0% (13)	77.7% (49)	85.9% (63)

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



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

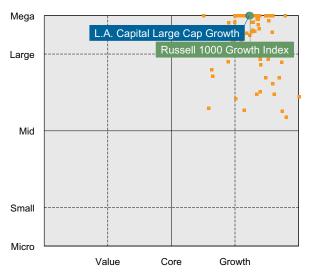




### Historical Holdings Based Style Analysis L.A. Capital Large Cap Growth For Three Years Ended March 31, 2024

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.

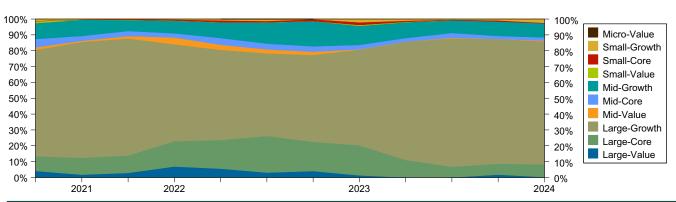
### Average Style Map vs Callan Large Cap Growth Holdings for Three Years Ended March 31, 2024



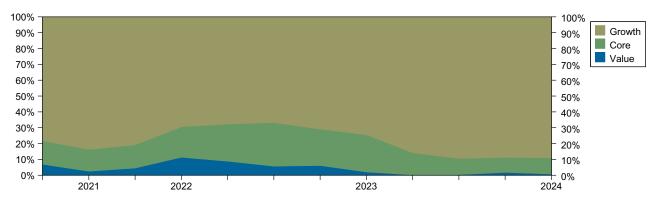
### Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2024



### L.A. Capital Large Cap Growth Historical Cap/Style Exposures



L.A. Capital Large Cap Growth Historical Style Only Exposures



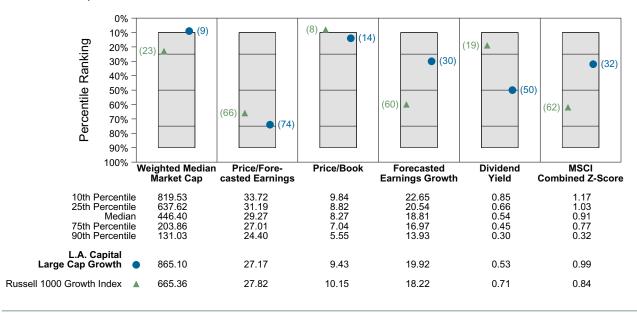


### L.A. Capital Large Cap Growth Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

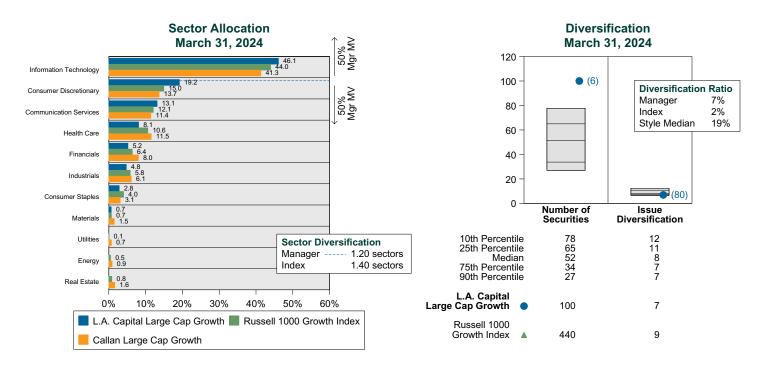
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Callan 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.





# L.A. Capital Large Cap Growth 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
Microsoft Corp	Information Technology	\$10,133,883	11.2%	12.09%	3126.13	32.52	0.71%	17.08%
Apple Inc	Information Technology	\$7,517,512	8.3%	(10.82)%	2647.97	24.99	0.56%	11.00%
Nvidia Corp	Information Technology	\$7,210,409	8.0%	82.46%	2258.90	35.53	0.02%	37.90%
Amazon.Com	Consumer Discretionary	\$5,462,808	6.0%	18.72%	1873.67	41.05	0.00%	10.21%
Meta Platforms Inc	Communication Services	\$3,488,407	3.9%	37.33%	1068.30	23.35	0.41%	26.00%
Alphabet Inc Cl A	Communication Services	\$2,801,865	3.1%	8.05%	889.43	21.35	0.00%	19.30%
Alphabet Inc CI C	Communication Services	\$2,374,951	2.6%	8.04%	863.47	21.59	0.00%	19.30%
Lilly (Eli) & Co	Health Care	\$2,000,135	2.2%	33.69%	739.66	55.89	0.67%	49.75%
Broadcom Ltd Shs	Information Technology	\$1,815,812	2.0%	19.23%	614.22	25.94	1.58%	14.40%
Medpace Hldgs Inc	Health Care	\$1,284,793	1.4%	31.85%	12.43	36.29	0.00%	17.97%

### **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	\$7,210,409	8.0%	82.46%	2258.90	35.53	0.02%	37.90%
Applovin Corp	Information Technology	\$198,592	0.2%	73.71%	18.75	25.93	0.00%	65.80%
Emcor Group Inc	Industrials	\$849,935	0.9%	62.69%	16.48	23.73	0.21%	20.65%
Williams-Sonoma	Consumer Discretionary	\$40,009	0.0%	58.05%	20.36	20.66	1.42%	34.93%
Pure Storage Inc CI A	Information Technology	\$68,159	0.1%	45.79%	16.89	32.43	0.00%	48.36%
Deckers Outdoor Corp	Consumer Discretionary	\$33,885	0.0%	40.82%	24.16	31.13	0.00%	19.00%
Doordash Inc Cl A Com Usd0.00001 Cla	Consumer Discretionary	\$584,208	0.6%	39.27%	51.89	279.92	0.00%	-
Meta Platforms Inc	Communication Services	\$3,488,407	3.9%	37.33%	1068.30	23.35	0.41%	26.00%
Eagle Materials Inc	Materials	\$508,716	0.6%	34.11%	9.36	16.94	0.37%	30.30%
Palantir Technologies Inc CI A	Information Technology	\$214,706	0.2%	34.01%	48.57	65.74	0.00%	85.19%

### **10 Worst Performers**

						Price/					
		Ending	Percent	Percent Forecasted			Forecasted				
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in			
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings			
Boeing Co	Industrials	\$281,572	0.3%	(25.96)%	117.75	173.40	0.00%	252.20%			
Lululemon Athletica Inc	Consumer Discretionary	\$476,984	0.5%	(24.74)%	47.23	27.12	0.00%	12.30%			
Smartsheet Inc Com Cl A	Information Technology	\$420,382	0.5%	(19.49)%	5.29	33.19	0.00%	-			
Adobe Inc	Information Technology	\$786,671	0.9%	(15.42)%	226.06	26.83	0.00%	13.40%			
Nike Inc CI B	Consumer Discretionary	\$237,957	0.3%	(13.12)%	114.39	24.06	1.57%	15.00%			
Apple Inc	Information Technology	\$7,517,512	8.3%	(10.82)%	2647.97	24.99	0.56%	11.00%			
Incyte Corp	Health Care	\$67,680	0.1%	(9.27)%	12.79	11.86	0.00%	22.50%			
Unitedhealth Group	Health Care	\$1,260,001	1.4%	(5.66)%	456.08	17.26	1.52%	13.40%			
Starbucks Corp	Consumer Discretionary	\$602,991	0.7%	(4.25)%	103.47	20.83	2.49%	15.81%			
Palo Alto Networks Inc	Information Technology	\$25,003	0.0%	(3.65)%	91.80	47.88	0.00%	16.60%			

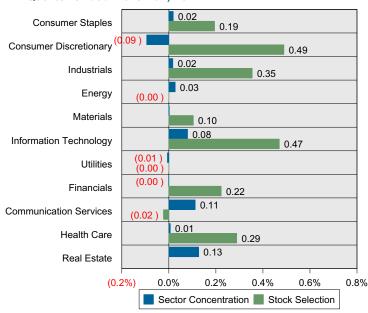


### L.A. Capital Large Cap Growth vs Russell 1000 Growth Index Quarterly Equity Buy and Hold Attribution

### **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.

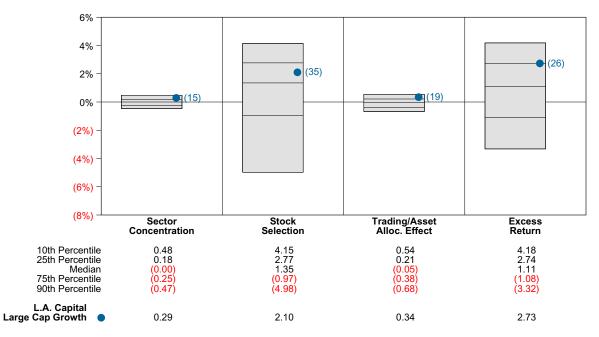
### Attribution Effects by Sector vs Russell 1000 Growth Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.02%	0.19%
Consumer Discretionary	(0.09%)	0.49%
Industrials	0.02%	0.35%
Energy	0.03%	(0.00%)
Materials	0.00%	0.10%
Information Technology	0.08%	0.47%
Utilities	(0.01%)	(0.00%)
Financials	(0.00%)	0.22%
Communication Services	s 0.11%	(0.02%)
Health Care	0.01%	0.29%
Real Estate	0.13%	0.00%
Total	0.29%	2.10%

Manager Return _	Index Return _	Sector Concen	_ Stock Select _	_ Trading _	Asset Alloc
14.15%	11.41%	0.29%	2.10%	0.38%	(0.04%)

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



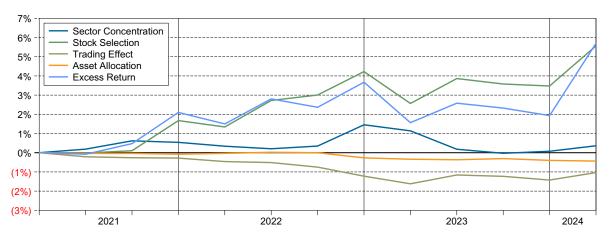


### L.A. Capital Large Cap Growth vs Russell 1000 Growth Index Cumulative Equity Buy and Hold Attribution

### **Cumulative Attribution and Ranking**

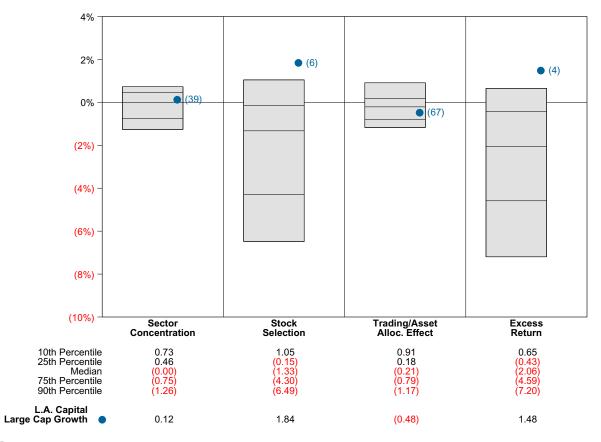
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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



Manager Return	Index Return	Sector Concen	Stock Select	∟ <u>Trading</u>	Asset Alloc
13.98%	12.50%	0.12%	1.84%	(0.34%)	(0.14%)

### **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.

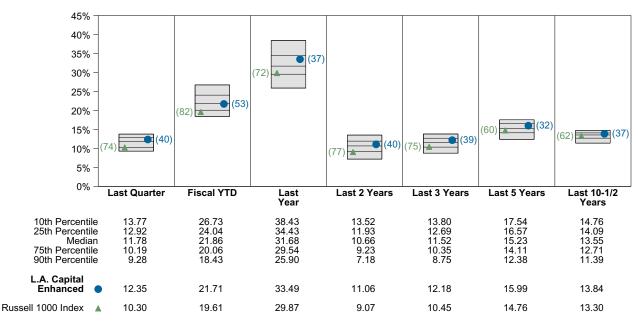
### **Quarterly Summary and Highlights**

- L.A. Capital Enhanced's portfolio posted a 12.35% return for the quarter placing it in the 40 percentile of the Callan Large Cap Core group for the quarter and in the 37 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 3.63%.

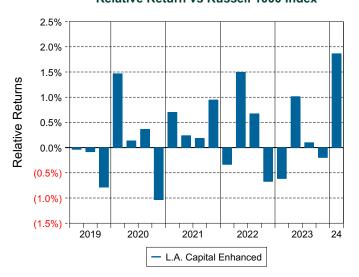
### **Quarterly Asset Growth**

Beginning Market Value	\$1,180,135,224
Net New Investment	\$-34,731,003
Investment Gains/(Losses)	\$143,717,965
Ending Market Value	\$1,289,122,186

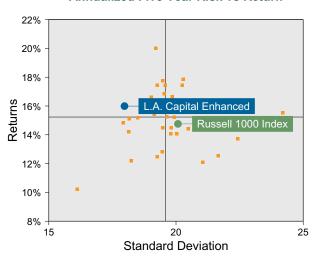
### Performance vs Callan Large Cap Core (Gross)



### Relative Return vs Russell 1000 Index



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



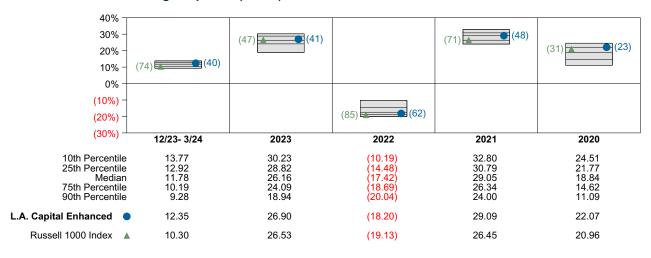


### L.A. Capital Enhanced Return Analysis Summary

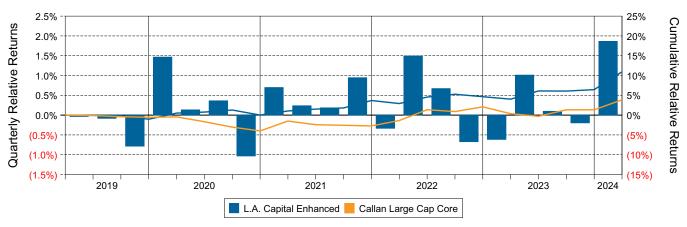
#### **Return Analysis**

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.

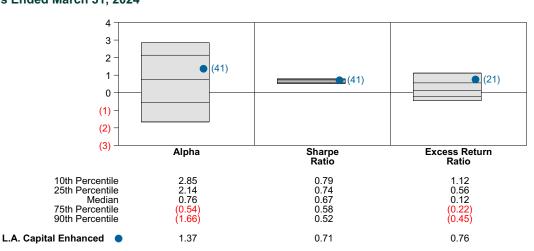
### Performance vs Callan Large Cap Core (Gross)



### **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



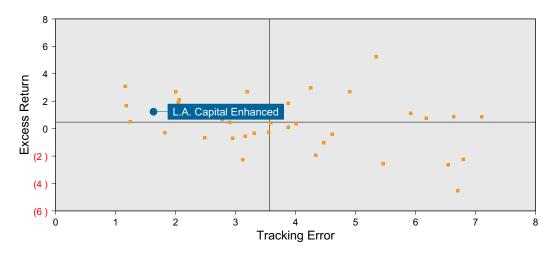


### L.A. Capital Enhanced Risk Analysis Summary

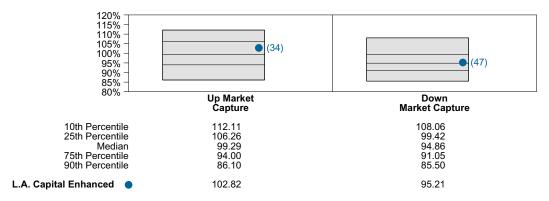
#### **Risk Analysis**

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.

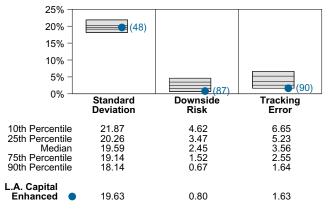
### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended March 31, 2024

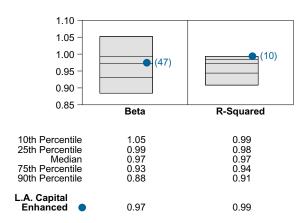


Market Capture vs Russell 1000 Index Rankings Against Callan Large Cap Core (Gross) Five Years Ended March 31, 2024



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



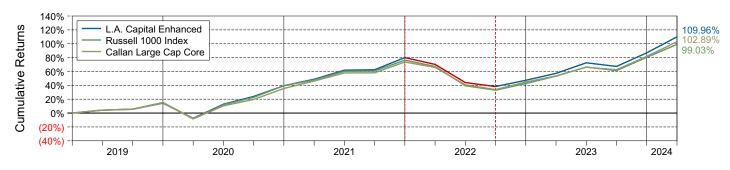




### L.A. Capital Enhanced Drawdown Analysis for Five Years Ended March 31, 2024

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**



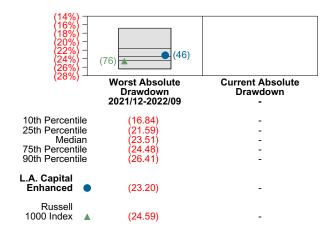
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
L.A. Capital Enhanced	(23.20)%	0.75	2021/12-2022/09	(24.59)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.17%	1.25	2022/09-2023/12	35.69%	35.79%	-	-	-	-	-
Russell 1000 Index	(24.59)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

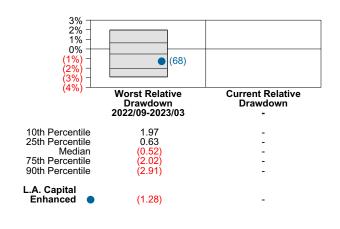
Worst Absolute Drawdown

# Relative Cumulative Drawdown Analysis vs. Russell 1000 Index 8% 6% Callan Large Cap Core 4% 0% (2%) (2%) (4%) 2019 2020 2021 2022 2023 2024

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
L.A. Capital Enhanced	(1.28)%	0.50	2022/09-2023/03	(0.43)%	-	-	-	-
Recovery from Trough	2.79%	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





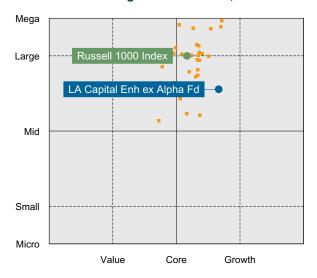
Current Absolute Drawdown



### 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.

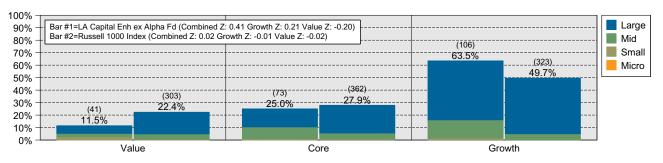
### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



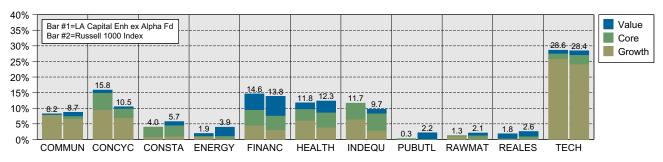
### Style Exposure Matrix Holdings as of March 31, 2024

	Value	Core	Growth	Total
Total	<b>22.4</b> % (303)	<b>27.9</b> % (362)	49.7% (323)	100.0% (988)
T.4.1	11.5% (41)	<b>25.0</b> % (73)	63.5% (106)	100.0% (220)
	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)	<b>1.2</b> % (179)
Small	2.4% (10)	0.8% (7)	1.5% (6)	4.8% (23)
	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
Mid	, ,	, ,	, ,	, ,
	2.8% (13)	9.6% (26)	14.6% (45)	26.9% (84)
Large	17.6% (92)	22.4% (100)	44.8% (96)	84.7% (288)
	6.4% (18)	14.6% (40)	47.4% (55)	68.3% (113)

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



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

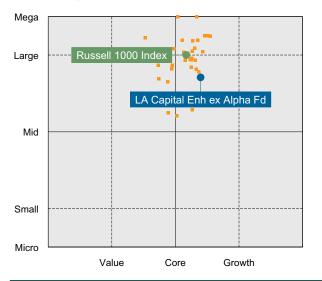




### Historical Holdings Based Style Analysis LA Capital Enh ex Alpha Fd For Three Years Ended March 31, 2024

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 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.

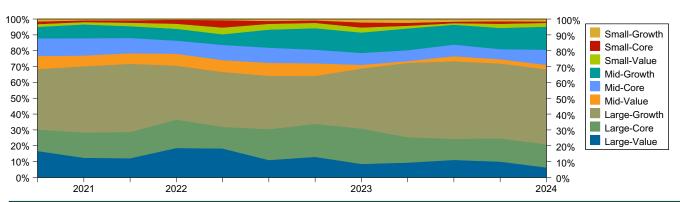
### Average Style Map vs Callan Large Cap Core Holdings for Three Years Ended March 31, 2024



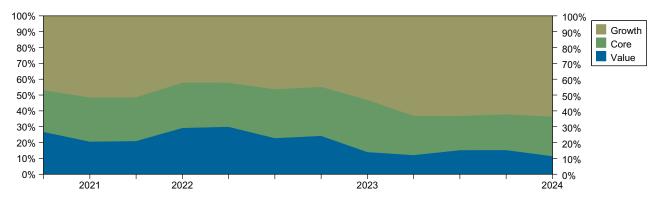
### Average Style Exposure Matrix Holdings for Three Years Ended March 31, 2024

	Value	Core	Growth	Total
	<b>26.1</b> % (313)	26.9% (360)	47.0% (330)	<b>100.0%</b> (1003)
Total	20.3% (66)	27.3% (83)	52.4% (97)	100.0% (246)
	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% (53)	0.5% (68)	0.4% (49)	<b>1.4%</b> (170)
Small	2.0 /0 (.2)	(0)	1.270 (0)	(2.7)
	2.6% (12)	1.9% (9)	1.2% (6)	5.7% (27)
	4.9% (161)	5.3% (198)	5.0% (179)	<b>15.3%</b> (538)
Mid	(=1)	(33)	(22)	(01)
	5.4% (24)	8.8% (35)	10.8% (38)	25.0% (97)
Large	20.7% (99)	21.0% (94)	41.6% (102)	<b>83.4%</b> (295)
1	12.3% (30)	16.6% (39)	40.3% (53)	69.2% (122)

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



LA Capital Enh ex Alpha Fd Historical Style Only Exposures



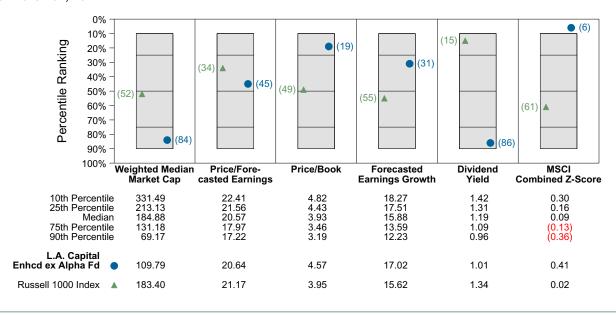


### L.A. Capital Enhcd ex Alpha Fd Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

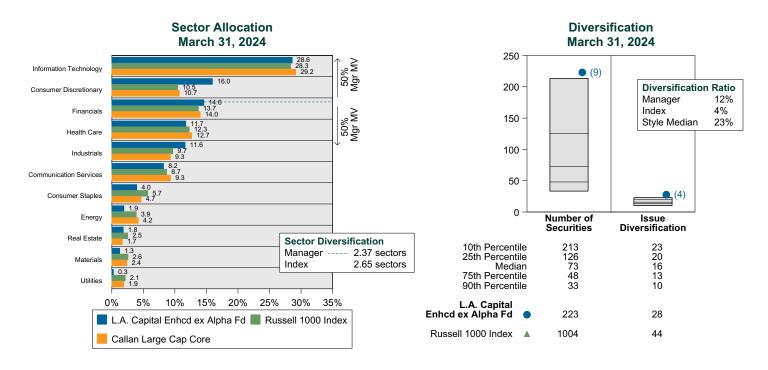
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### 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.





### L.A. Capital Enhcd ex Alpha Fd 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	\$48,829,605	5.6%	12.09%	3126.13	32.52	0.71%	17.08%
Nvidia Corp	Information Technology	\$35,846,032	4.1%	82.46%	2258.90	35.53	0.02%	37.90%
Apple Inc	Information Technology	\$33,312,219	3.9%	(10.82)%	2647.97	24.99	0.56%	11.00%
Amazon.Com	Consumer Discretionary	\$24,034,553	2.8%	18.72%	1873.67	41.05	0.00%	10.21%
Alphabet Inc CI A	Communication Services	\$18,907,605	2.2%	8.05%	889.43	21.35	0.00%	19.30%
Meta Platforms Inc	Communication Services	\$18,261,207	2.1%	37.33%	1068.30	23.35	0.41%	26.00%
Alphabet Inc CI C	Communication Services	\$16,591,468	1.9%	8.04%	863.47	21.59	0.00%	19.30%
Target Corp	Consumer Staples	\$12,922,153	1.5%	25.34%	81.82	18.49	2.48%	18.34%
Medpace Hldgs Inc	Health Care	\$12,000,426	1.4%	31.85%	12.43	36.29	0.00%	17.97%
Emcor Group Inc	Industrials	\$11,019,043	1.3%	62.69%	16.48	23.73	0.21%	20.65%

### **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	\$35,846,032	4.1%	82.46%	2258.90	35.53	0.02%	37.90%		
Vistra Energy Corp	Utilities	\$2,026,118	0.2%	81.42%	24.23	14.77	1.23%	22.91%		
Applovin Corp	Information Technology	\$180,872	0.0%	73.71%	18.75	25.93	0.00%	65.80%		
Shockwave Med Inc	Health Care	\$937,814	0.1%	70.88%	12.18	62.83	0.00%	-		
Emcor Group Inc	Industrials	\$11,019,043	1.3%	62.69%	16.48	23.73	0.21%	20.65%		
Williams-Sonoma	Consumer Discretionary	\$714,442	0.1%	58.05%	20.36	20.66	1.42%	34.93%		
Dicks Sporting Goods	Consumer Discretionary	\$1,641,478	0.2%	53.77%	13.24	16.74	1.96%	7.40%		
Pure Storage Inc CI A	Information Technology	\$338,455	0.0%	45.79%	16.89	32.43	0.00%	48.36%		
Core & Main Inc	Industrials	\$1,829,538	0.2%	41.67%	11.00	22.15	0.00%	20.42%		
Allison Transmission Hldgs I	Industrials	\$2,143,354	0.2%	40.03%	7.11	10.45	1.23%	14.23%		

### **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	\$1,606,449	0.2%	(25.96)%	117.75	173.40	0.00%	252.20%
Lululemon Athletica Inc	Consumer Discretionary	\$1,964,970	0.2%	(24.74)%	47.23	27.12	0.00%	12.30%
Humana	Health Care	\$530,482	0.1%	(24.07)%	41.80	18.84	1.02%	4.90%
Atlassian A	Information Technology	\$1,811,596	0.2%	(21.57)%	30.70	65.19	0.00%	22.74%
Insulet Corp	Health Care	\$1,787,702	0.2%	(21.01)%	11.99	53.76	0.00%	18.10%
Smartsheet Inc Com Cl A	Information Technology	\$3,006,118	0.3%	(19.49)%	5.29	33.19	0.00%	-
Playtika Hldg Corp Com	Communication Services	\$204,175	0.0%	(18.02)%	2.61	10.46	5.67%	8.90%
Adobe Inc	Information Technology	\$4,076,159	0.5%	(15.42)%	226.06	26.83	0.00%	13.40%
Sba Communications Corp New Cl A	Real Estate	\$1,958,101	0.2%	(14.20)%	23.43	39.62	1.81%	12.98%
Zoetis Inc CI A	Health Care	\$1,974,681	0.2%	(14.07)%	77.48	28.34	1.02%	9.60%

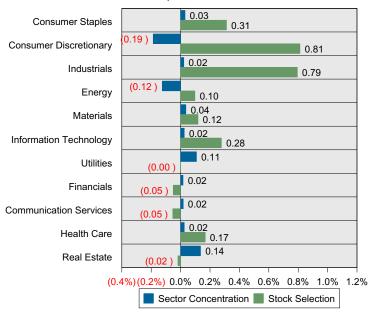


### LA Capital Enh ex Alpha Fd vs Russell 1000 Index Quarterly Equity Buy and Hold Attribution

### **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.

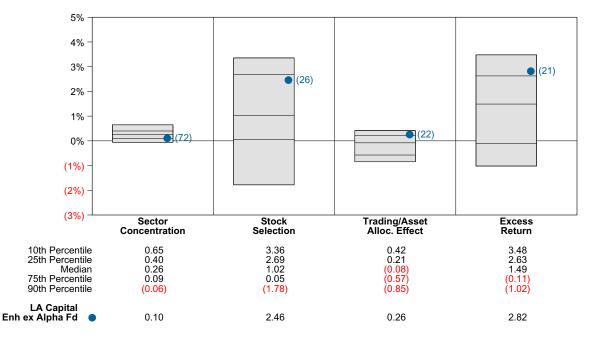
### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.03%	0.31%
Consumer Discretionary	(0.19%)	0.81%
Industrials	0.02%	0.79%
Energy	(0.12%)	0.10%
Materials	0.04%	0.12%
Information Technology	0.02%	0.28%
Utilities	0.11%	(0.00%)
Financials	0.02%	(0.05%)
Communication Services	s 0.02%	(0.05%)
Health Care	0.02%	0.17%
Real Estate	0.14%	(0.02%)
Total	0.10%	2.46%

Manager Return _	Index Return _	Sector Concen	_ Stock Select _	_ Trading _	Asset Alloc
13.11%	10.30%	0.10%	2.46%	0.37%	(0.12%)

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



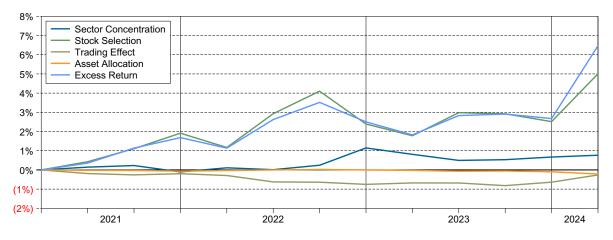


### LA Capital Enh ex Alpha Fd vs Russell 1000 Index Cumulative Equity Buy and Hold Attribution

### **Cumulative Attribution and Ranking**

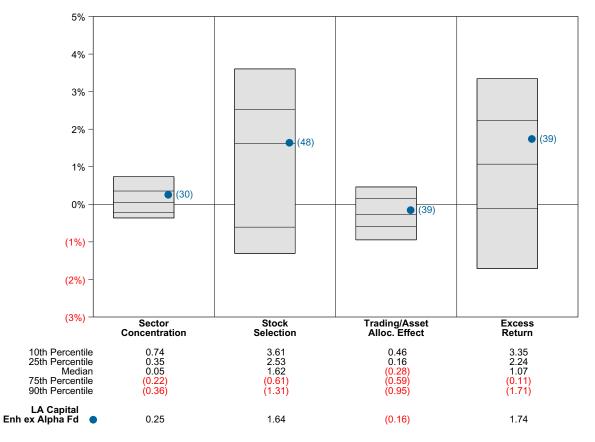
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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



Manager Return	Index Return _	L Sector Concen →	Stock Select	∟ <u>Trading</u> _	Asset Alloc
12.19%	10.45%	0.25%	1.64%	(0.08%)	(0.07%)

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



### NTAM R1000 Index Period Ended March 31, 2024

### **Investment Philosophy**

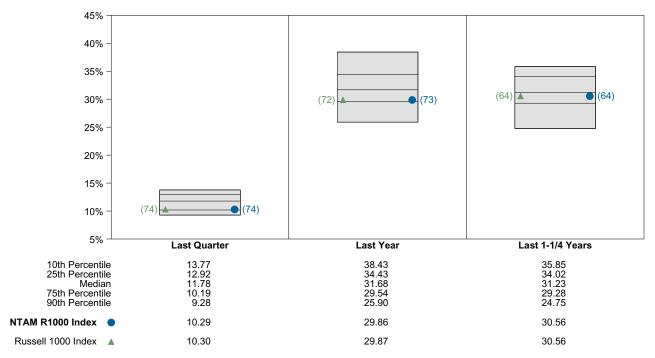
The primary objective of the Northern Trust Russell 1000 Index Fund is to approximate the risk and return characteristics of the Russell 1000 Index.

### **Quarterly Summary and Highlights**

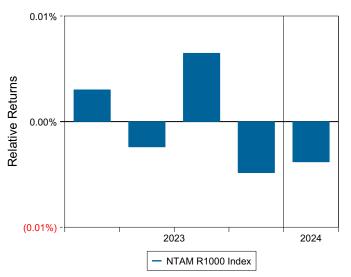
- NTAM R1000 Index's portfolio posted a 10.29% return for the quarter placing it in the 74 percentile of the Callan Large Cap Core group for the quarter and in the 73 percentile for the last year.
- NTAM R1000 Index's portfolio underperformed the Russell 1000 Index by 0.00% for the quarter and underperformed the Russell 1000 Index for the year by 0.01%.

Beginning Market Value	\$688,559,819
Net New Investment	\$-36,767,929
Investment Gains/(Losses)	\$69,479,044
Ending Market Value	\$721,270,933

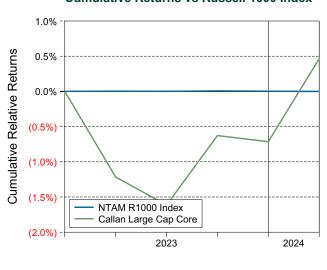
### Performance vs Callan Large Cap Core (Gross)



### Relative Return vs Russell 1000 Index



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

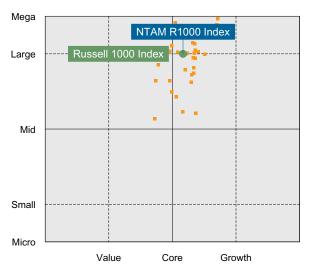




## Current Holdings Based Style Analysis NTAM R1000 Index As of March 31, 2024

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.

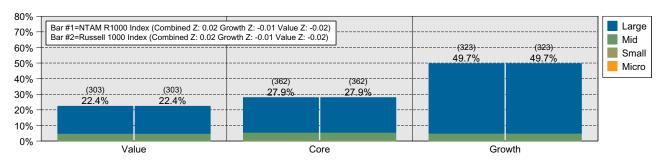
### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



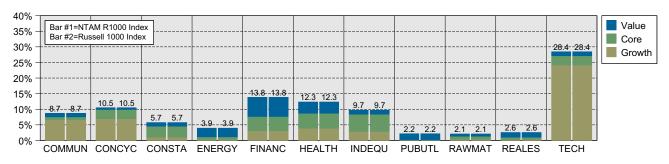
### Style Exposure Matrix Holdings as of March 31, 2024

	0.0% (0) <b>22.4% (303)</b>	0.0% (0) <b>27.9% (362)</b>	0.0% (0) <b>49.7% (323)</b>	0.0% (0) 100.0% (988)
Micro	, ,	, ,	, ,	. ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Small	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
	0.4% (60)	0.5% (76)	0.3% (43)	1.2% (179)
Mid	4.4% (151)	5.0% (186)	4.6% (184)	14.0% (521)
	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)
	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



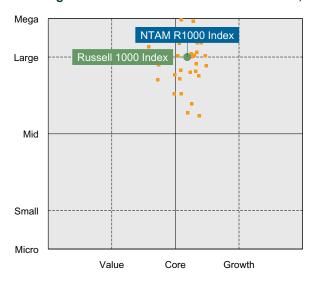


### Historical Holdings Based Style Analysis NTAM R1000 Index For One and 1/4 Years Ended March 31, 2024

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.

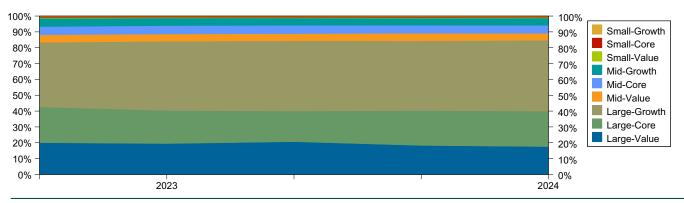
### Average Style Map vs Callan Large Cap Core Holdings for One and 1/4 Years Ended March 31, 2024

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

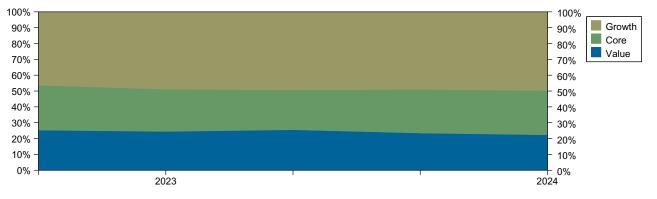




### NTAM R1000 Index Historical Cap/Style Exposures



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



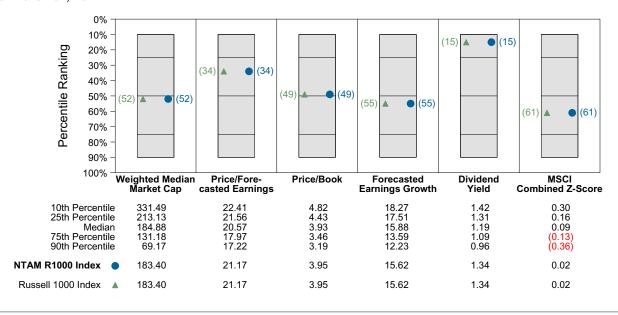


### NTAM R1000 Index Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

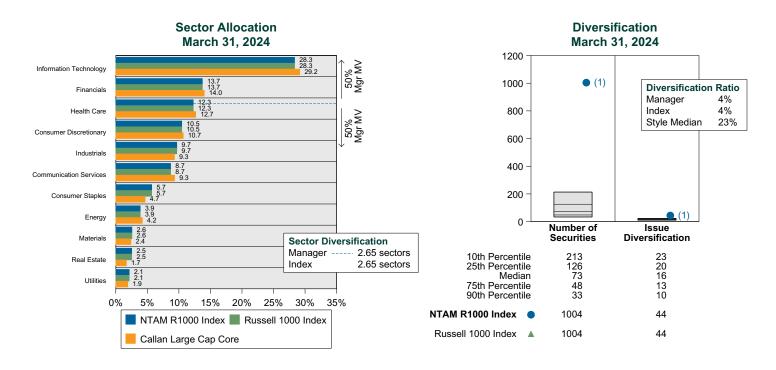
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### 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	<b>Earnings</b>	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Information Technology	\$46,934,587	6.5%	12.09%	3126.13	32.52	0.71%	17.08%
Information Technology	\$37,487,221	5.2%	(10.82)%	2647.97	24.99	0.56%	11.00%
Information Technology	\$32,182,503	4.5%	82.46%	2258.90	35.53	0.02%	37.90%
Consumer Discretionary	\$24,360,163	3.4%	18.72%	1873.67	41.05	0.00%	10.21%
Communication Services	\$16,099,604	2.2%	37.33%	1068.30	23.35	0.41%	26.00%
Communication Services	\$13,444,314	1.9%	8.05%	889.43	21.35	0.00%	19.30%
Financials	\$11,542,714	1.6%	17.91%	551.22	22.45	0.00%	13.69%
Communication Services	\$11,455,701	1.6%	8.04%	863.47	21.59	0.00%	19.30%
Health Care	\$9,868,667	1.4%	33.69%	739.66	55.89	0.67%	49.75%
Financials	\$8,666,818	1.2%	18.48%	576.99	12.50	2.30%	1.20%
	Information Technology Information Technology Information Technology Consumer Discretionary Communication Services Communication Services Financials Communication Services Health Care	Sector         Market           Value           Information Technology         \$46,934,587           Information Technology         \$37,487,221           Information Technology         \$32,182,503           Consumer Discretionary         \$24,360,163           Communication Services         \$16,099,604           Communication Services         \$13,444,314           Financials         \$11,542,714           Communication Services         \$11,455,701           Health Care         \$9,868,667	Sector         Market Value         of Portfolio           Information Technology Information Technology Information Technology Information Technology S37,487,221         5.2%           Information Technology S32,182,503         4.5%           Consumer Discretionary Communication Services S16,099,604         2.2%           Communication Services Financials S11,542,714         1.6%           Communication Services Health Care         \$9,868,667         1.4%	Market         of Value         Qtrly Portfolio           Information Technology Information Services Information Information Services Information Services Information	Market         of Value         Qtrly Portfolio         Market Return           Information Technology Information I	Sector         Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings           Information Technology Information Services Information Services Information Services Information Services Information Inform	Sector         Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings         Dividend Yeld           Information Technology Information Services Information Information Services Information Services Information Services Information

### **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	\$32,182,503	4.5%	82.46%	2258.90	35.53	0.02%	37.90%
Vistra Energy Corp	Utilities	\$368,605	0.1%	81.42%	24.23	14.77	1.23%	22.91%
Applovin Corp	Information Technology	\$208,199	0.0%	73.71%	18.75	25.93	0.00%	65.80%
Shockwave Med Inc	Health Care	\$176,802	0.0%	70.88%	12.18	62.83	0.00%	-
Gs Acquisition Hldgs Corp Com Cl A	Industrials	\$419,791	0.1%	70.09%	31.20	33.68	0.12%	26.70%
Cava Group	Consumer Discretionary	\$50,373	0.0%	62.98%	7.99	282.46	0.00%	-
Emcor Group Inc	Industrials	\$243,253	0.0%	62.69%	16.48	23.73	0.21%	20.65%
Maplebear	Consumer Staples	\$11,847	0.0%	58.89%	9.94	57.72	0.00%	-
Constellation Energy Stock	Utilities	\$890,913	0.1%	58.45%	58.25	24.52	0.76%	-
Williams-Sonoma	Consumer Discretionary	\$303,052	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	\$34,333	0.0%	(68.18)%	2.57	32.20	6.21%	15.75%
Ssr Mng Inc	Materials	\$13,582	0.0%	(59.61)%	0.90	45.98	6.28%	14.91%
Rivian Automotive Inc A Common Stock	Consumer Discretionary	\$110,875	0.0%	(53.33)%	10.62	(2.99)	0.00%	-
Agilon Health Inc Com	Health Care	\$26,538	0.0%	(51.38)%	2.50	(22.43)	0.00%	-
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$13,714	0.0%	(39.20)%	0.79	(2.65)	0.00%	6.01%
Iridium Communications Inc	Communication Services	\$48,038	0.0%	(36.14)%	3.18	34.38	1.99%	(7.79)%
Viasat Inc	Information Technology	\$31,655	0.0%	(35.28)%	2.27	(31.14)	0.00%	167.37%
Quidelortho Corp	Health Care	\$38,345	0.0%	(34.95)%	3.20	16.48	0.00%	8.43%
Unity Software Inc	Information Technology	\$116,412	0.0%	(34.70)%	10.30	(17.02)	0.00%	-
10x Genomics Inc CI A Com	Health Care	\$51,586	0.0%	(32.93)%	3.94	(26.03)	0.00%	-

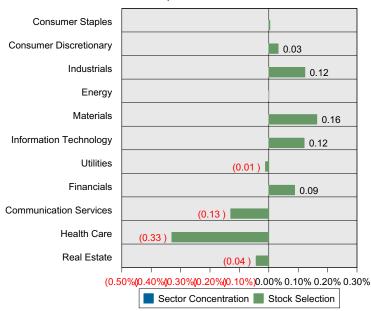


### NTAM R1000 Index vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

### **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.

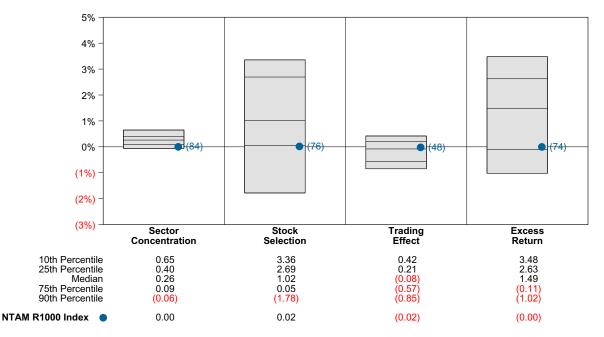
### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	0.00%
Consumer Discretionary	0.00%	0.03%
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
10.29%	10.30%	0.00%	0.02%	(0.02%)

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



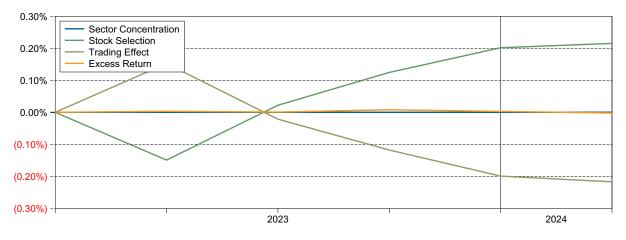


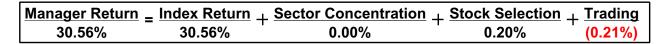
### NTAM R1000 Index vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

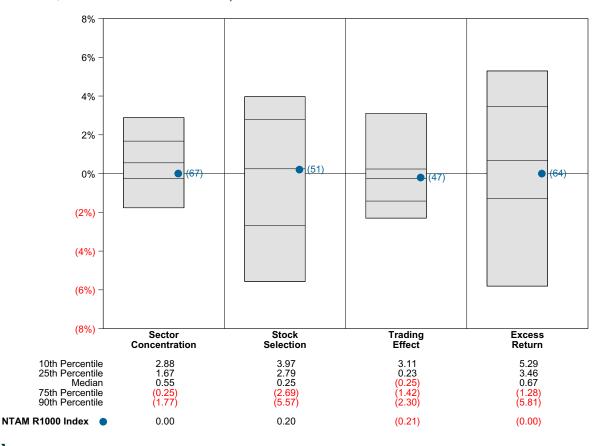
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

### **Quarterly Summary and Highlights**

- NTAM Quant Enh R1000's portfolio posted a 12.58% return for the quarter placing it in the 34 percentile of the Callan Large Cap Core group for the quarter and in the 49 percentile for the last year.
- NTAM Quant Enh R1000's portfolio outperformed the Russell 1000 Index by 2.28% for the quarter and outperformed the Russell 1000 Index for the year by 2.00%.

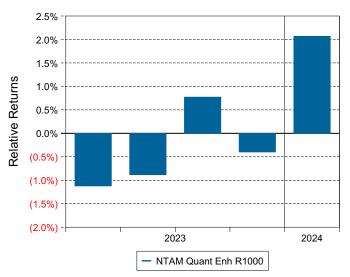
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$432,906,510		
Net New Investment	\$-8,936,115		
Investment Gains/(Losses)	\$54,007,001		
Ending Market Value	\$477,977,396		

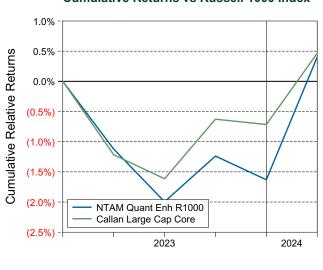
### Performance vs Callan Large Cap Core (Gross)



### Relative Return vs Russell 1000 Index



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

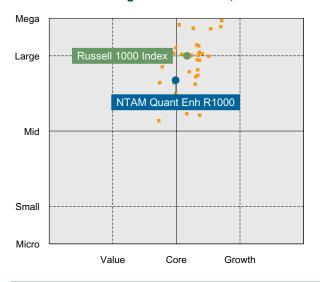




### **Current Holdings Based Style Analysis NTAM Quant Enh R1000** As of March 31, 2024

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.

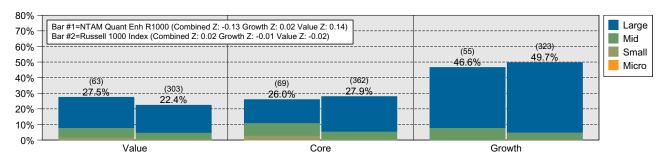
### Style Map vs Callan Large Cap Core Holdings as of March 31, 2024



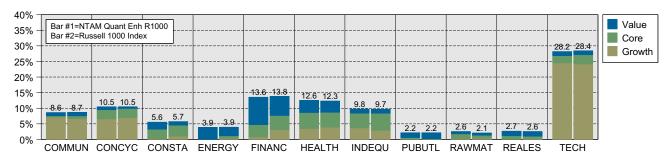
### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	22.4% (303)	27.9% (362)	49.7% (323)	100.0% (988)
Total	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				
	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 % (10)	2.976 (9)	0.3 /6 (2)	4.9 /0 (21)
	1.7% (10)	2.9% (9)	0.3% (2)	4.9% (21)
Mid	4.4% (151)	5.0% (186)	4.6% (184)	<b>14.0</b> % (521)
N 42 -4	6.1% (20)	8.1% (27)	7.5% (23)	21.8% (70)
Large	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



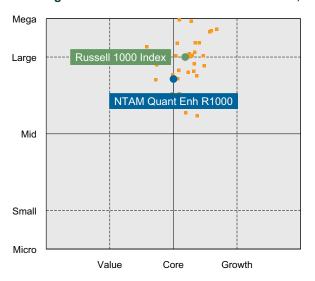


### **Historical Holdings Based Style Analysis NTAM Quant Enh R1000** For One and 1/4 Years Ended March 31, 2024

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.

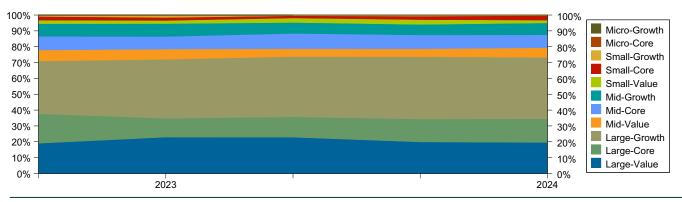
### Average Style Map vs Callan Large Cap Core Holdings for One and 1/4 Years Ended March 31, 2024

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

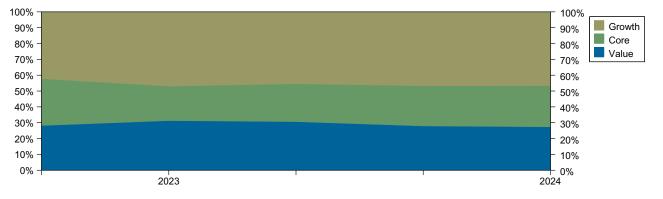




#### NTAM Quant Enh R1000 Historical Cap/Style Exposures



NTAM Quant Enh R1000 Historical Style Only Exposures



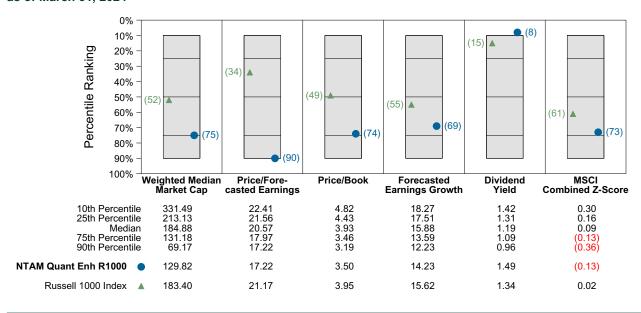


### **NTAM Quant Enh R1000 Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

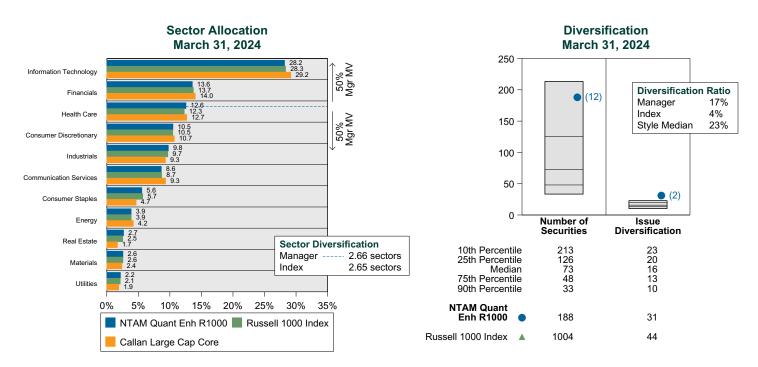
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **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

rice/	
casted	Forecasted
nings Dividend	I Growth in
atio Yield	Earnings
2.52 0.71%	17.08%
1.99 0.56%	11.00%
5.53 0.02%	37.90%
1.35 0.00%	19.30%
1.05 0.00%	10.21%
3.35 0.41%	26.00%
2.50 2.30%	1.20%
2.45 0.00%	13.69%
1.73 3.01%	4.70%
7.00 1.42%	12.00%
2	3.35     0.41%       2.50     2.30%       2.45     0.00%       4.73     3.01%       7.00     1.42%

#### **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	\$19,789,771	1.3%	82.46%	2258.90	35.53	0.02%	37.90%
Vistra Energy Corp	Utilities	\$92,704	0.0%	81.42%	24.23	14.77	1.23%	22.91%
Applovin Corp	Information Technology	\$1,463,242	0.1%	73.71%	18.75	25.93	0.00%	65.80%
Emcor Group Inc	Industrials	\$1,285,584	0.1%	62.69%	16.48	23.73	0.21%	20.65%
Constellation Energy Stock	Utilities	\$1,692,117	0.1%	58.45%	58.25	24.52	0.76%	-
Williams-Sonoma	Consumer Discretionary	\$2,530,079	0.2%	58.05%	20.36	20.66	1.42%	34.93%
Core & Main Inc	Industrials	\$3,084,115	0.2%	41.67%	11.00	22.15	0.00%	20.42%
Allison Transmission Hldgs I	Industrials	\$3,194,214	0.2%	40.03%	7.11	10.45	1.23%	14.23%
General Electric Co	Industrials	\$4,871,484	0.3%	37.53%	191.90	35.20	0.18%	37.33%
Meta Platforms Inc	Communication Services	\$11,446,092	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	\$1,697,428	0.1%	(29.25)%	559.85	55.45	0.00%	15.30%
Playtika Hldg Corp Com	Communication Services	\$640,704	0.0%	(18.02)%	2.61	10.46	5.67%	8.90%
Adobe Inc	Information Technology	\$4,575,713	0.3%	(15.42)%	226.06	26.83	0.00%	13.40%
Zoetis Inc CI A	Health Care	\$963,482	0.1%	(14.07)%	77.48	28.34	1.02%	9.60%
Boston Beer Inc CI A	Consumer Staples	\$797,276	0.1%	(11.91)%	3.03	28.50	0.00%	15.69%
Carnival Corp	Consumer Discretionary	\$329,529	0.0%	(11.87)%	18.34	14.55	0.00%	271.70%
C H Robinson Worldwide Inc	Industrials	\$355,269	0.0%	(11.14)%	8.91	22.16	3.20%	(1.33)%
Teradata Corp Del	Information Technology	\$713,268	0.0%	(11.12)%	3.78	16.60	0.00%	12.70%
Apple Inc	Information Technology	\$26,715,212	1.8%	(10.82)%	2647.97	24.99	0.56%	11.00%
Expedia Group Inc	Consumer Discretionary	\$870,718	0.1%	(9.25)%	18.12	10.51	0.00%	21.30%

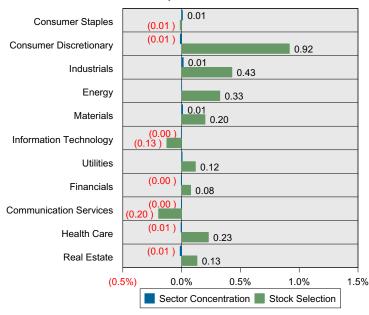


# NTAM Quant Enh R1000 vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

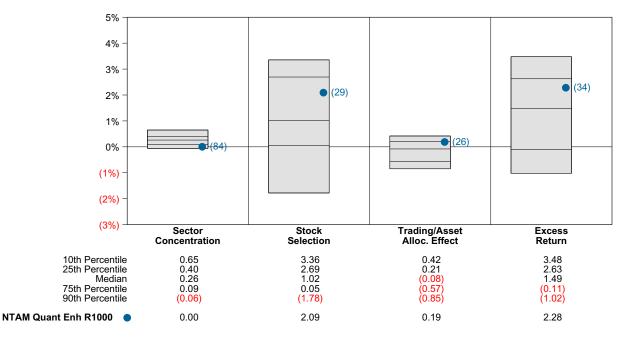
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock 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>	Asset Alloc
12.58%	10.30%	0.00%	2.09%	0.11%	0.08%

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



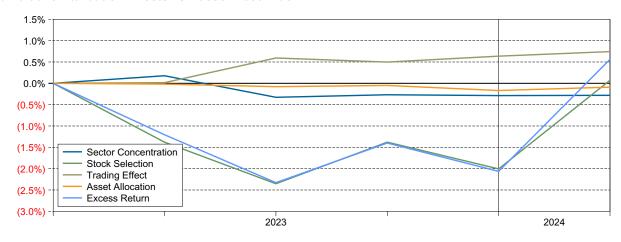


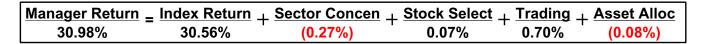
# NTAM Quant Enh R1000 vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

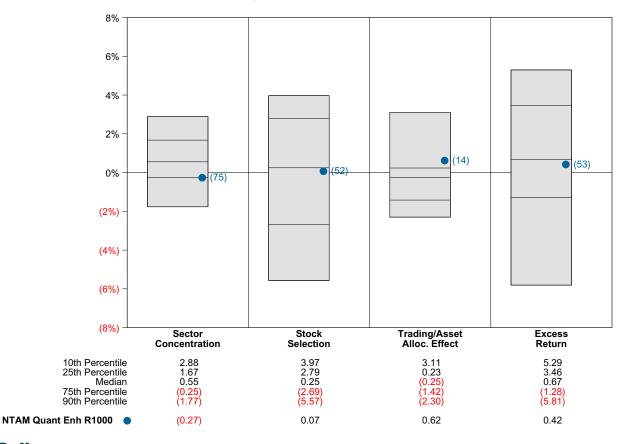
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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





# 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.

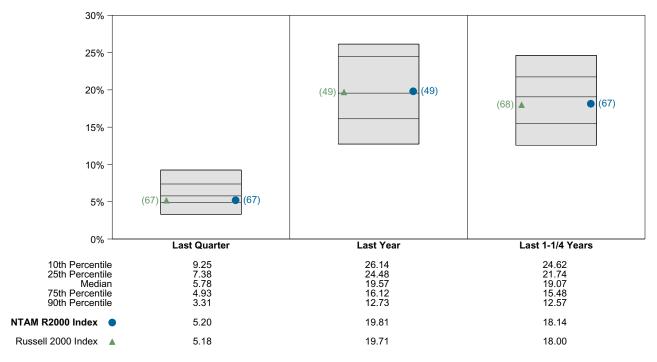
# **Quarterly Summary and Highlights**

- NTAM R2000 Index's portfolio posted a 5.20% return for the quarter placing it in the 67 percentile of the Callan Small Cap Core group for the quarter and in the 49 percentile for the last year.
- NTAM R2000 Index's portfolio outperformed the Russell 2000 Index by 0.02% for the quarter and outperformed the Russell 2000 Index for the year by 0.10%.

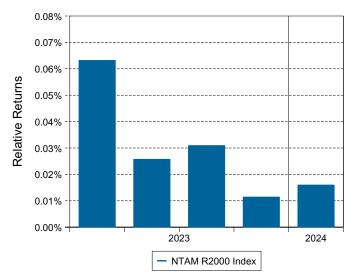
#### **Quarterly Asset Growth**

Beginning Market Value	\$29,289,451
Net New Investment	\$11,720,598
Investment Gains/(Losses)	\$2,699,946
Ending Market Value	\$43 709 995

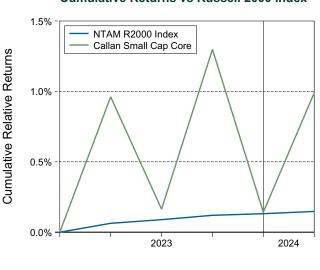
# Performance vs Callan Small Cap Core (Gross)



# Relative Return vs Russell 2000 Index



#### **Cumulative Returns vs Russell 2000 Index**

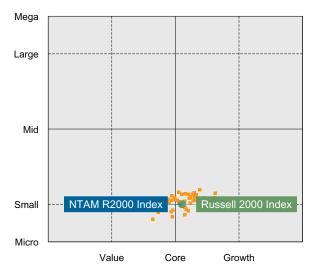




# **Current Holdings Based Style Analysis** NTAM R2000 Index As of March 31, 2024

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.

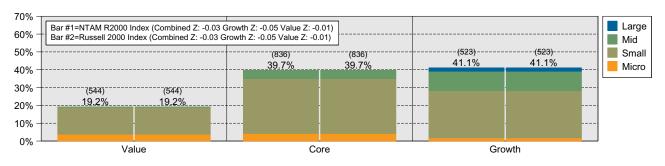
# Style Map vs Callan Small Cap Core Holdings as of March 31, 2024



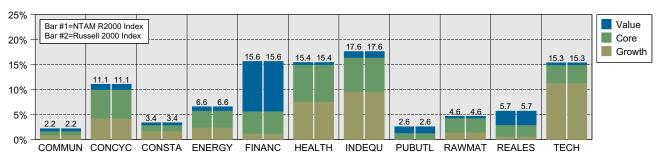
# **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
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	0.070 (020)	1.270 (000)	1.070 (147)	0.1 /0 (002)
	3.8% (326)	4.2% (389)	1.8% (147)	9.7% (862)
Small	15.2% (217)	30.8% (428)	26.5% (336)	<b>72.4</b> % (981)
	15.2% (217)	30.8% (428)	26.5% (336)	72.4% (981)
	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)
Large	0.0% (0)	0.0% (0)	2.0% (1)	2.0% (1)
Lorgo	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



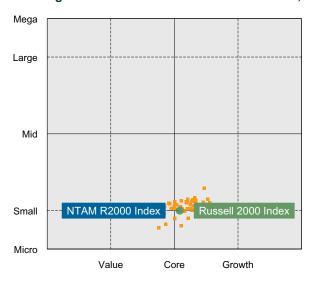


# Historical Holdings Based Style Analysis NTAM R2000 Index For One and 1/4 Years Ended March 31, 2024

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.

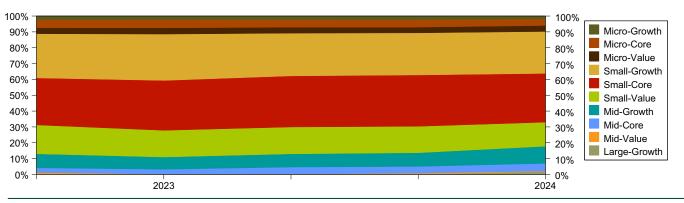
# Average Style Map vs Callan Small Cap Core Holdings for One and 1/4 Years Ended March 31, 2024

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

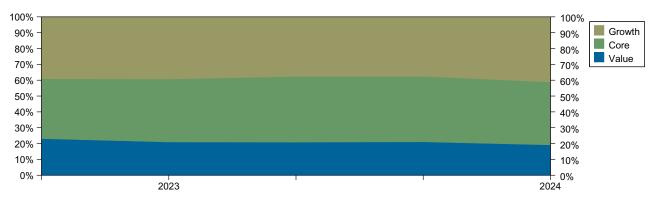




#### NTAM R2000 Index Historical Cap/Style Exposures



#### NTAM R2000 Index Historical Style Only Exposures



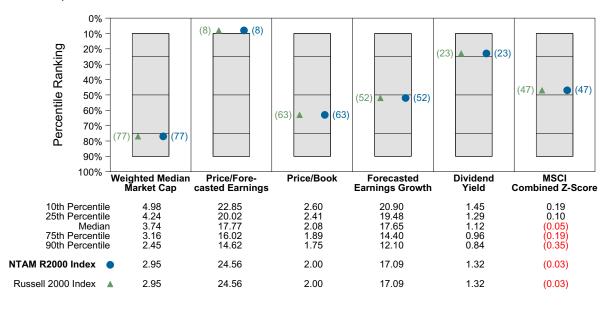


# NTAM R2000 Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

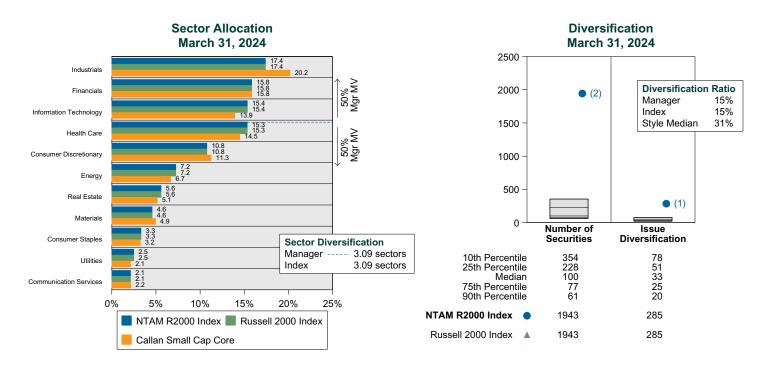
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **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	\$841,606	1.9%	255.32%	59.14	35.26	0.00%	48.20%
Information Technology	\$414,690	0.9%	169.87%	25.58	2563.25	0.00%	107.62%
Industrials	\$184,220	0.4%	54.60%	11.34	27.89	0.31%	28.28%
Consumer Staples	\$173,267	0.4%	35.81%	10.88	54.82	0.00%	35.80%
Consumer Discretionary	\$151,119	0.3%	24.33%	9.17	24.86	0.00%	2.57%
Consumer Discretionary	\$148,517	0.3%	66.05%	10.24	(29.90)	0.00%	-
Information Technology	\$145,256	0.3%	18.43%	8.90	36.35	0.00%	39.15%
Industrials	\$144,259	0.3%	3.79%	8.71	22.93	0.53%	31.61%
Health Care	\$137,432	0.3%	340.63%	8.94	(67.21)	0.00%	-
Industrials	\$134,557	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         \$841,606           Information Technology         \$414,690           Industrials         \$184,220           Consumer Staples         \$173,267           Consumer Discretionary         \$151,119           Consumer Discretionary         \$148,517           Information Technology         \$145,256           Industrials         \$144,259           Health Care         \$137,432	Sector         Market Value         of Portfolio           Information Technology Information Technology Industrials         \$414,690         0.9%           Consumer Staples         \$173,267         0.4%           Consumer Discretionary Consumer Discretionary Information Technology Industrials         \$145,256         0.3%           Health Care         \$137,432         0.3%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Information Technology Information Technology Industrials Industrials Consumer Staples Consumer Staples Consumer Discretionary Information Technology Information Technology Information Technology Information Technology Information Technology Industrials Industrial Industrials Industrial In	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 Industrials Industrial Indust	Sector         Value         Percent Value         Return         Capital Capital         Forecasted Earnings Pividend Partio         Dividend Partio           Information Technology Information Technology Information Technology Information Technology Industrials Information Technology Information Technology Information Technology Information Technology Information Technology Industrials Industrial Industrials Industrial Industriali

#### **10 Best Performers**

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Health Care	\$537	0.0%	473.60%	0.13	(4.25)	0.00%	-
Health Care	\$137,432	0.3%	340.63%	8.94	(67.21)	0.00%	-
Health Care	\$8,811	0.0%	258.20%	0.73	(10.07)	0.00%	-
Information Technology	\$841,606	1.9%	255.32%	59.14	35.26	0.00%	48.20%
Health Care	\$10,658	0.0%	250.95%	1.95	(26.00)	0.00%	-
Health Care	\$12,828	0.0%	206.75%	1.14	(4.41)	0.00%	-
Information Technology	\$2,280	0.0%	190.54%	0.20	(17.89)	0.00%	-
Health Care	\$30,897	0.1%	182.02%	2.42	(7.78)	0.00%	-
Health Care	\$28,304	0.1%	180.36%	2.35	(19.59)	0.00%	-
Information Technology	\$13,309	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         \$537           Health Care         \$137,432           Health Care         \$8,811           Information Technology         \$841,606           Health Care         \$10,658           Health Care         \$12,828           Information Technology         \$2,280           Health Care         \$30,897           Health Care         \$28,304	Sector         Market Value         of Portfolio           Health Care         \$537         0.0%           Health Care         \$137,432         0.3%           Health Care         \$8,811         0.0%           Information Technology         \$841,606         1.9%           Health Care         \$10,658         0.0%           Health Care         \$12,828         0.0%           Information Technology         \$2,280         0.0%           Health Care         \$30,897         0.1%           Health Care         \$28,304         0.1%	Sector         Market Value         of Portfolio Peturn         Qtrly Return           Health Care         \$537         0.0%         473.60%           Health Care         \$137,432         0.3%         340.63%           Health Care         \$8,811         0.0%         258.20%           Information Technology         \$841,606         1.9%         255.32%           Health Care         \$10,658         0.0%         250.95%           Health Care         \$12,828         0.0%         206.75%           Information Technology         \$2,280         0.0%         190.54%           Health Care         \$30,897         0.1%         182.02%           Health Care         \$28,304         0.1%         180.36%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital           Health Care         \$537         0.0%         473.60%         0.13           Health Care         \$137,432         0.3%         340.63%         8.94           Health Care         \$8,811         0.0%         258.20%         0.73           Information Technology         \$841,606         1.9%         255.32%         59.14           Health Care         \$10,658         0.0%         250.95%         1.95           Health Care         \$12,828         0.0%         206.75%         1.14           Information Technology         \$2,280         0.0%         190.54%         0.20           Health Care         \$30,897         0.1%         182.02%         2.42           Health Care         \$28,304         0.1%         180.36%         2.35	Sector         Forecasted Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings Ratio           Health Care         \$537         0.0%         473.60%         0.13         (4.25)           Health Care         \$137,432         0.3%         340.63%         8.94         (67.21)           Health Care         \$8,811         0.0%         258.20%         0.73         (10.07)           Information Technology         \$841,606         1.9%         255.32%         59.14         35.26           Health Care         \$10,658         0.0%         250.95%         1.95         (26.00)           Health Care         \$12,828         0.0%         206.75%         1.14         (4.41)           Information Technology         \$2,280         0.0%         190.54%         0.20         (17.89)           Health Care         \$30,897         0.1%         182.02%         2.42         (7.78)           Health Care         \$28,304         0.1%         180.36%         2.35         (19.59)	Sector         Market Value         of Value         Qtrly Return         Market Capital         Earnings Ratio         Dividend Yield           Health Care         \$537         0.0%         473.60%         0.13         (4.25)         0.00%           Health Care         \$137,432         0.3%         340.63%         8.94         (67.21)         0.00%           Health Care         \$8,811         0.0%         258.20%         0.73         (10.07)         0.00%           Information Technology         \$841,606         1.9%         255.32%         59.14         35.26         0.00%           Health Care         \$10,658         0.0%         250.95%         1.95         (26.00)         0.00%           Health Care         \$12,828         0.0%         206.75%         1.14         (4.41)         0.00%           Information Technology         \$2,280         0.0%         190.54%         0.20         (17.89)         0.00%           Health Care         \$30,897         0.1%         182.02%         2.42         (7.78)         0.00%           Health Care         \$28,304         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	\$2,361	0.0%	(80.70)%	0.19	(2.55)	0.00%	-
Bakkt Holdings Inc Com Cl A	Financials	\$536	0.0%	(79.37)%	0.07	(1.78)	0.00%	-
Ww Intl Inc	Consumer Discretionary	\$1,651	0.0%	(78.87)%	0.15	108.82	0.00%	(22.00)%
Irobot Corp	Consumer Discretionary	\$3,933	0.0%	(77.36)%	0.24	(2.84)	0.00%	4.64%
Liveperson Inc	Information Technology	\$1,285	0.0%	(73.68)%	0.09	(1.31)	0.00%	15.00%
Office Pptys Income Tr Com Shs Ben I	Real Estate	\$1,608	0.0%	(72.06)%	0.10	(0.96)	1.96%	(18.35)%
Spirit Airls Inc	Industrials	\$8,697	0.0%	(69.59)%	0.53	(2.07)	0.00%	(46.81)%
2u Inc	Consumer Discretionary	\$512	0.0%	(68.30)%	0.03	(2.31)	0.00%	15.00%
Caremax Inc Com Cl A	Health Care	\$172	0.0%	(67.79)%	0.02	(0.41)	0.00%	-
Presto Automation Inc	Information Technology	\$12	0.0%	(67.18)%	0.02	(0.47)	0.00%	-

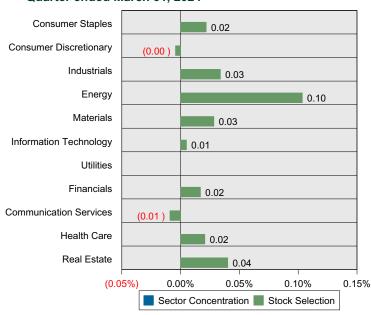


# NTAM R2000 Index vs Russell 2000 Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

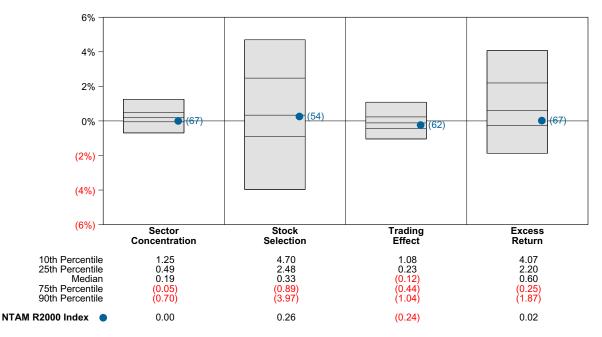
# Attribution Effects by Sector vs Russell 2000 Index Quarter ended March 31, 2024



	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	Stock Selection _	Trading
5.20%	5.18%	0.00%	0.26%	(0.24%)

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



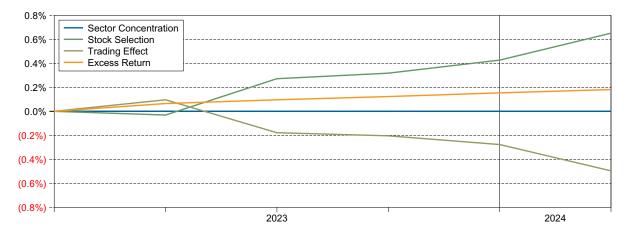


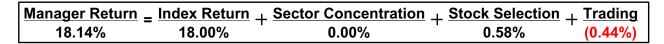
# NTAM R2000 Index vs Russell 2000 Index **Cumulative Equity Buy and Hold Attribution**

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

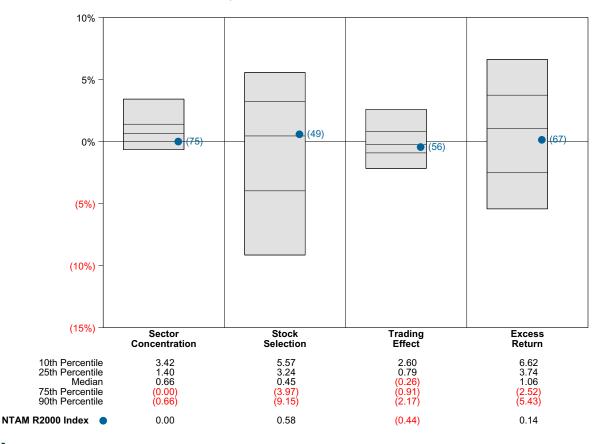
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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





# **Equity Attribution Ranking vs Callan Small Cap Core** One and One-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.

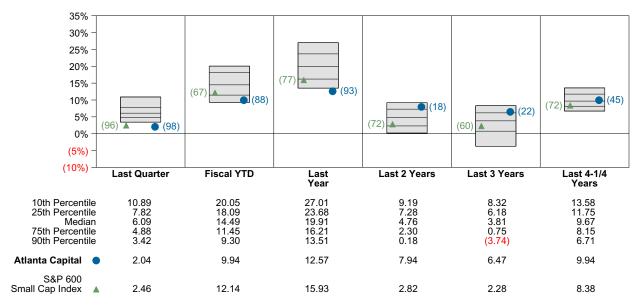
#### **Quarterly Summary and Highlights**

- Atlanta Capital's portfolio posted a 2.04% return for the quarter placing it in the 98 percentile of the Callan Small Capitalization group for the quarter and in the 93 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 0.42% for the quarter and underperformed the S&P 600 Small Cap Index for the year by 3.36%.

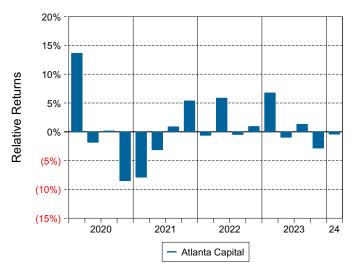
#### **Quarterly Asset Growth**

Beginning Market Value	\$158,605,286
Net New Investment	\$-7,068,355
Investment Gains/(Losses)	\$2,859,395
Ending Market Value	\$154,396,326

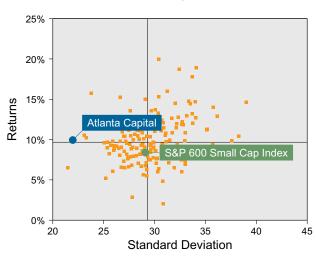
# Performance vs Callan Small Capitalization (Gross)



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



# Callan Small Capitalization (Gross) Annualized Four and One-Quarter Year Risk vs Return



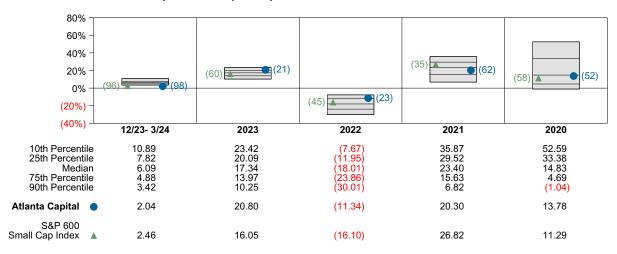


# **Atlanta Capital Return Analysis Summary**

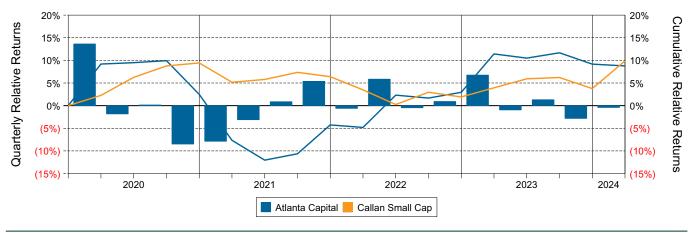
#### **Return Analysis**

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.

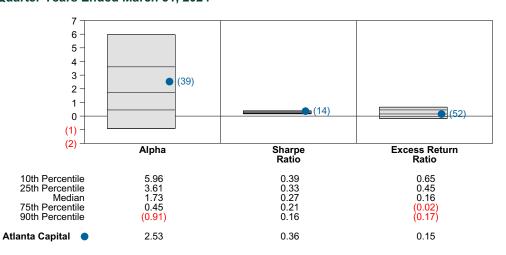
#### Performance vs Callan Small Capitalization (Gross)



#### 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) Four and One-Quarter Years Ended March 31, 2024



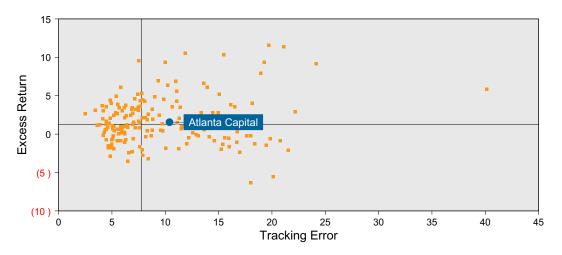


# **Atlanta Capital Risk Analysis Summary**

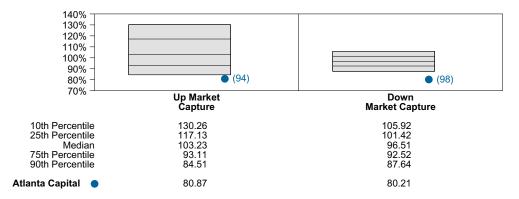
#### Risk Analysis

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.

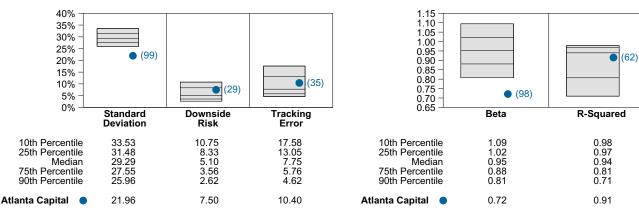
#### Risk Analysis vs Callan Small Capitalization (Gross) Four and One-Quarter Years Ended March 31, 2024



Market Capture vs S&P 600 Small Cap Idx Rankings Against Callan Small Capitalization (Gross) Four and One-Quarter Years Ended March 31, 2024



Risk Statistics Rankings vs S&P 600 Small Cap Idx Rankings Against Callan Small Capitalization (Gross) Four and One-Quarter Years Ended March 31, 2024

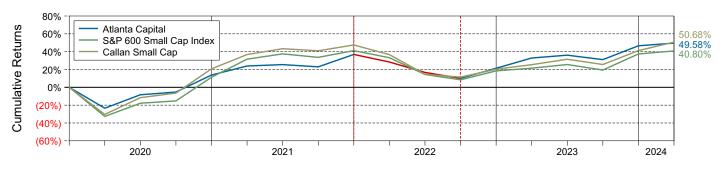




# **Atlanta Capital** Drawdown Analysis for Four and One-Quarter Years Ended March 31, 2024

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.

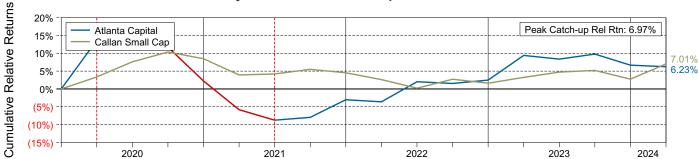
#### **Absolute Cumulative Drawdown Analysis**



					Current / tbcclute Brawacim					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Atlanta Capital	(19.55)%	0.75	2021/12-2022/09	(23.16)%	(24.49)%	-	-	-	-	-
Recovery from Trough	33.13%	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			-	-	-		

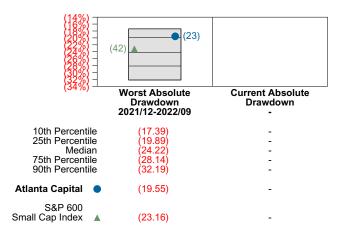
#### Relative Cumulative Drawdown Analysis vs. S&P 600 Small Cap Index 20% Atlanta Capital 15% Callan Small Cap 10%

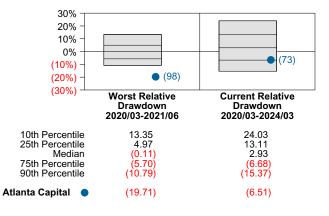
Worst Absolute Drawdown



	Worst Relative Drawdown				Cu	ırrent Rel	ative Drawdown	
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Atlanta Capital	(19.71)%	1.25	2020/03-2021/06	0.82%	(6.51)%	4.00	2020/03-2024/03	3.53%
Recovery from Trough	16.44%	2.75+	2021/06-2024/03	2.69%	16.44%	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** Four and One-Quarter Years Ended March 31, 2024





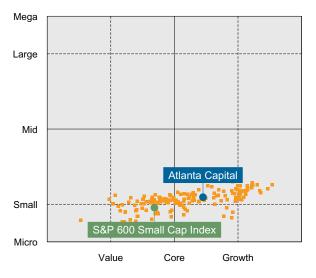
Current Absolute Drawdown



# **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.

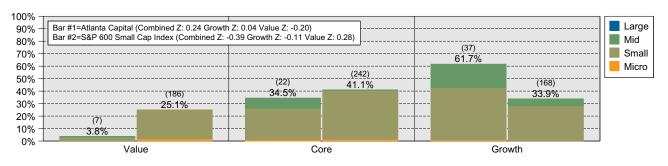
# Style Map vs Callan Small Cap Holdings as of March 31, 2024



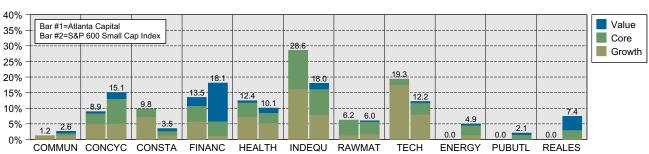
#### **Style Exposure Matrix** Holdings as of March 31, 2024

iotai	25.1% (186)	41.1% (242)	33.9% (168)	100.0% (596)
Total	3.8% (7)	34.5% (22)	61.7% (37)	100.0% (66)
	1.8% (39)	1.5% (30)	0.4% (8)	3.6% (77)
Micro	(3)	(1)	(1)	(=)
	0.0% (0)	0.8% (1)	0.8% (1)	1.6% (2)
Small	23.3% (147)	39.1% (211)	27.7% (149)	90.1% (507)
	3.0% (5)	25.4% (18)	41.9% (26)	70.3% (49)
	0.0% (0)	0.5% (1)	5.8% (11)	6.3% (12)
Mid	, ,	, ,	, ,	, ,
	0.8% (2)	8.3% (3)	19.0% (10)	28.1% (15)
Large	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



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

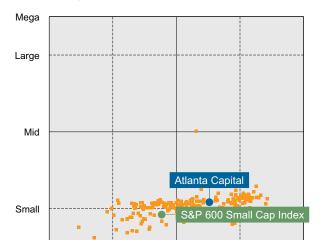




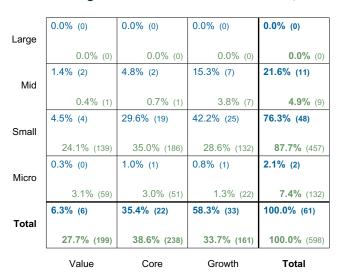
# **Historical Holdings Based Style Analysis Atlanta Capital** For Three Years Ended March 31, 2024

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

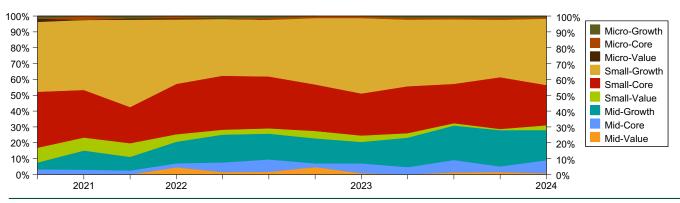


#### Atlanta Capital Historical Cap/Style Exposures

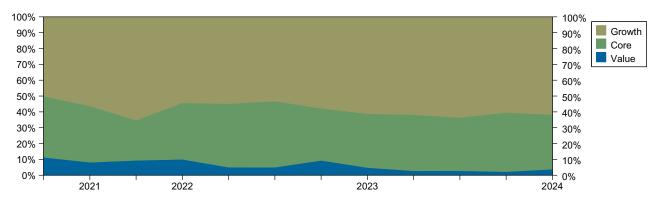
Core

Growth

Value



**Atlanta Capital Historical Style Only Exposures** 





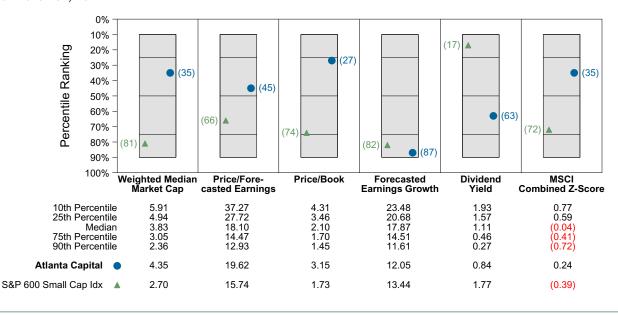
Micro

# **Atlanta Capital Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

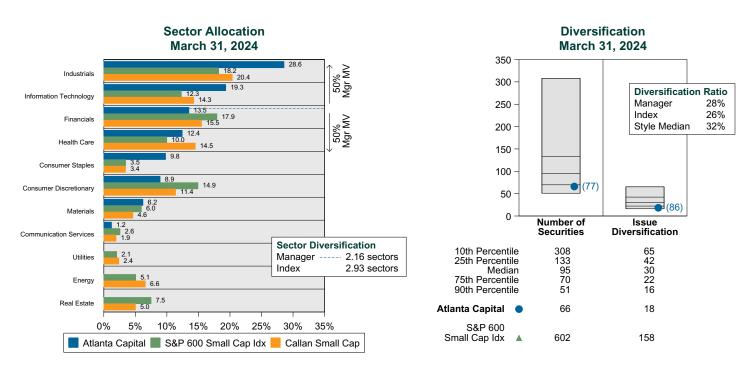
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **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

						Price/		
		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	\$7,121,749	3.5%	(1.88)%	4.50	26.47	2.14%	24.76%
Beacon Roofing Supply Inc	Industrials	\$5,964,419	2.9%	12.64%	6.22	12.46	0.00%	23.48%
Cbiz Inc	Industrials	\$5,730,500	2.8%	25.42%	3.93	27.89	0.00%	19.52%
Insight Enterprises Inc	Information Technology	\$5,558,736	2.7%	4.70%	6.05	16.83	0.00%	17.51%
Selective Insurance Grp	Financials	\$5,527,059	2.7%	10.11%	6.64	13.74	1.28%	18.10%
Moog Inc Cl A	Industrials	\$5,006,464	2.4%	10.49%	4.59	21.25	0.70%	4.60%
Qualys Inc	Information Technology	\$4,696,389	2.3%	(14.98)%	6.17	31.43	0.00%	20.99%
Blackbaud Inc	Information Technology	\$4,225,090	2.1%	(14.49)%	3.96	16.74	0.00%	9.80%
Dorman Products Inc	Consumer Discretionary	\$3,522,573	1.7%	15.56%	3.00	16.92	0.00%	10.01%
Silgan Holdings Inc	Materials	\$3,418,284	1.7%	7.77%	5.17	12.93	1.57%	5.00%

#### **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	\$1,047,134	0.5%	46.59%	1.93	41.08	0.00%	27.43%
Sprouts Fmrs Mkt Inc	Consumer Staples	\$2,503,178	1.2%	34.02%	6.53	21.70	0.00%	8.58%
Commvault Systems Inc	Information Technology	\$2,500,452	1.2%	27.03%	4.43	31.64	0.00%	14.27%
Cbiz Inc	Industrials	\$5,730,500	2.8%	25.42%	3.93	27.89	0.00%	19.52%
Lancaster Colony Corp	Consumer Staples	\$1,225,848	0.6%	25.33%	5.71	30.66	1.73%	(3.43)%
Atrion Corp	Health Care	\$1,571,898	0.8%	23.02%	0.82	51.25	1.90%	(6.49)%
Kirby Corp	Industrials	\$3,298,930	1.6%	21.46%	5.57	18.24	0.00%	4.14%
Aaon Inc Com Par \$0.004	Industrials	\$1,787,813	0.9%	19.38%	7.19	36.51	0.36%	27.17%
Prestige Consumer Health	Health Care	\$1,569,328	0.8%	18.52%	3.60	15.68	0.00%	10.66%
Kadant Inc	Industrials	\$820,250	0.4%	17.18%	3.85	32.49	0.35%	17.86%

# **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
Columbia Banking System	Financials	\$845,402	0.4%	(26.03)%	4.05	8.12	7.44%	3.64%
Omnicell Inc	Health Care	\$310,101	0.2%	(22.32)%	1.34	25.20	0.00%	(4.95)%
Integra Lifesciences Hldgs C	Health Care	\$1,930,004	0.9%	(18.60)%	2.77	10.75	0.00%	8.80%
Qualys Inc	Information Technology	\$4,696,389	2.3%	(14.98)%	6.17	31.43	0.00%	20.99%
Blackbaud Inc	Information Technology	\$4,225,090	2.1%	(14.49)%	3.96	16.74	0.00%	9.80%
Perficient Inc	Information Technology	\$2,647,656	1.3%	(14.48)%	1.97	13.48	0.00%	21.26%
Winmark Corp	Consumer Discretionary	\$1,555,672	0.8%	(13.19)%	1.27	42.33	3.48%	13.33%
J & J Snack Foods Corp	Consumer Staples	\$2,540,787	1.2%	(13.06)%	2.80	26.24	2.03%	(2.44)%
Power Integrations Inc	Information Technology	\$2,101,424	1.0%	(12.61)%	4.07	50.53	1.12%	(14.55)%
Westamerica Bancorporation	Financials	\$1,093,592	0.5%	(12.53)%	1.30	9.45	3.60%	19.27%

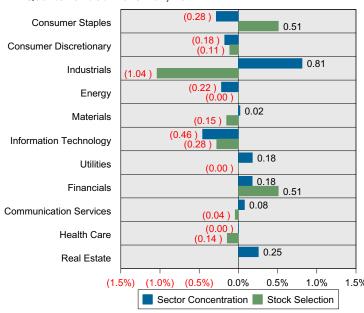


# Atlanta Capital vs S&P 600 Small Cap Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

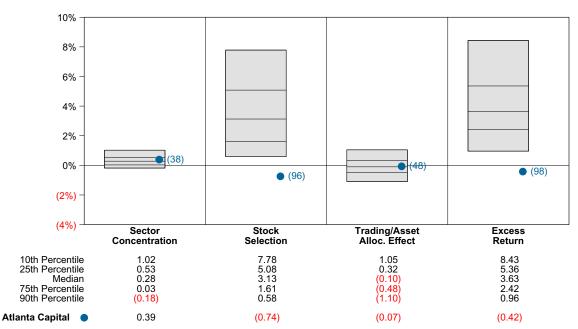
#### Attribution Effects by Sector vs S&P 600 Small Cap Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.28%)	0.51%
Consumer Discretionary	(0.18%)	(0.11%)
Industrials	0.81%	(1.04%)
Energy	(0.22%)	(0.00%)
Materials	0.02%	(0.15%)
Information Technology	(0.46%)	(0.28%)
Utilities	0.18%	(0.00%)
Financials	0.18%	0.51%
Communication Services	s 0.08%	(0.04%)
Health Care	(0.00%)	(0.14%)
Real Estate	0.25%	0.00%
Total	0.39%	(0.74%)

Manager Return _	Index Return	Sector Concen	Stock Select	<sub>∔</sub> Trading <sub>→</sub>	Asset Alloc
2.04%	2.46%	0.39%	(0.74%)	(0.16%)	0.09%

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



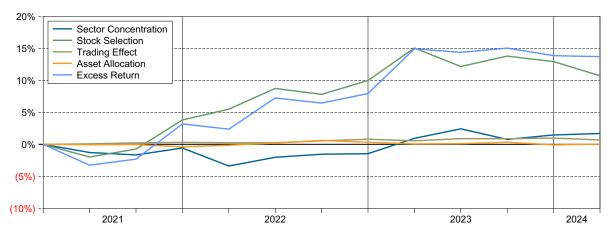


# Atlanta Capital vs S&P 600 Small Cap Index **Cumulative Equity Buy and Hold Attribution**

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

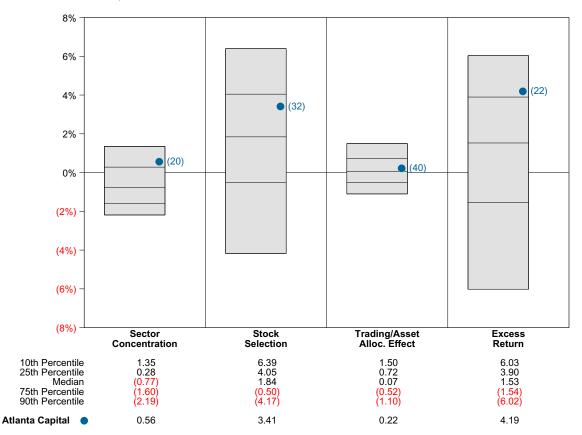
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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



Manager Return _	Index Return	Language	Stock Select _	<sub></sub> Trading _	Asset Alloc
6.47%	2.28%	0.56%	3.41%	0.21%	0.01%

#### **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.

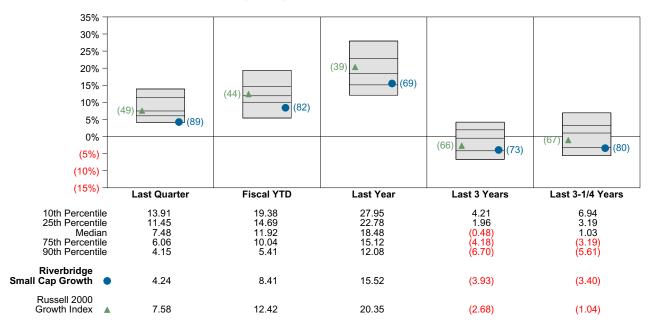
#### **Quarterly Summary and Highlights**

- Riverbridge Small Cap Growth's portfolio posted a 4.24% return for the quarter placing it in the 89 percentile of the Callan Small Cap Growth group for the quarter and in the 69 percentile for the last year.
- Riverbridge Small Cap Growth's portfolio underperformed the Russell 2000 Growth Index by 3.34% for the guarter and underperformed the Russell 2000 Growth Index for the year by 4.82%.

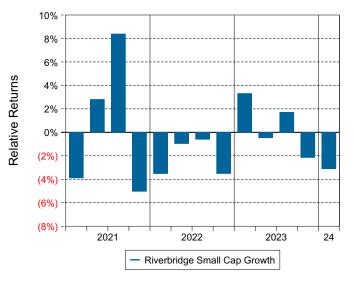
# **Quarterly Asset Growth**

Beginning Market Value	\$159,561,740
Net New Investment	\$-7,020,654
Investment Gains/(Losses)	\$6,193,599
Ending Market Value	\$158,734,685

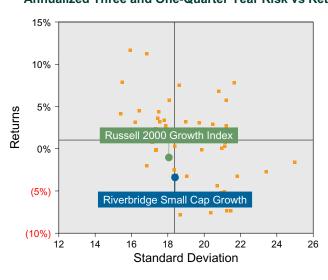
#### Performance vs Callan Small Cap Growth (Gross)



#### Relative Return vs Russell 2000 Growth Index



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

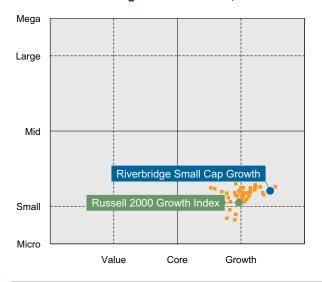




# **Current Holdings Based Style Analysis Riverbridge Small Cap Growth** As of March 31, 2024

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.

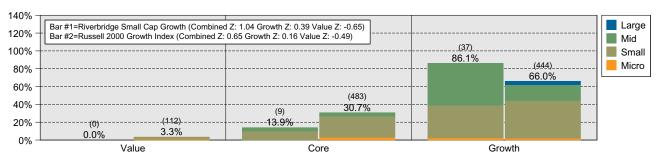
# Style Map vs Callan Small Cap Growth Holdings as of March 31, 2024



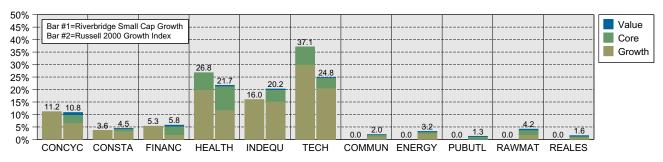
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	3.3% (112)	30.7% (483)	66.0% (444)	100.0% (1039)
Total	0.070 (0)	10.070 (0)	33.170 (31)	100.070 (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	0.0 % (0)	0.0 % (0)	0.0 % (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



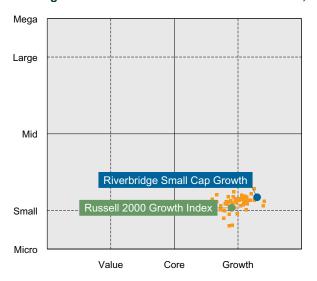


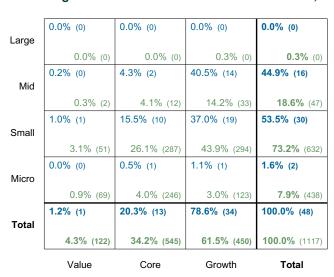
# **Historical Holdings Based Style Analysis Riverbridge Small Cap Growth** For Three and 1/4 Years Ended March 31, 2024

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.

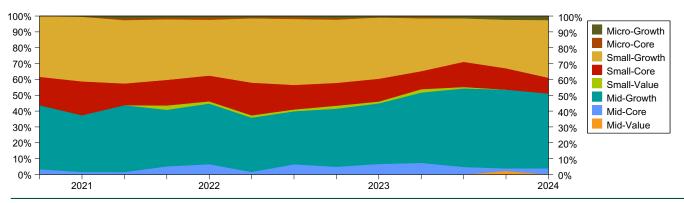
# Average Style Map vs Callan Small Cap Growth Holdings for Three and 1/4 Years Ended March 31, 2024

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

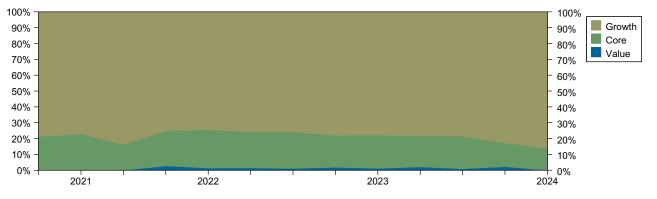




#### Riverbridge Small Cap Growth Historical Cap/Style Exposures



Riverbridge Small Cap Growth Historical Style Only Exposures



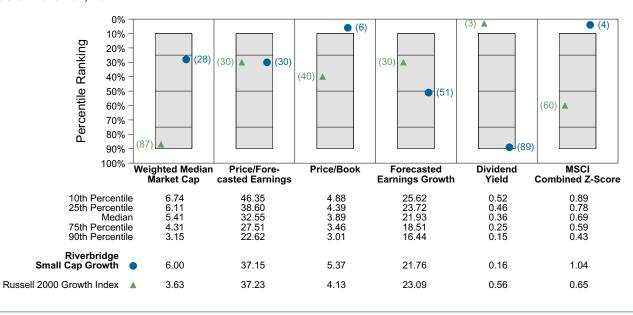


# **Riverbridge Small Cap Growth Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

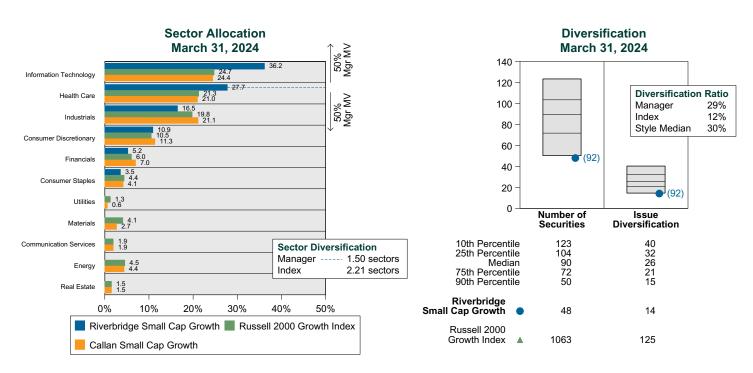
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **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
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Medpace Hldgs Inc	Health Care	\$7,635,606	4.8%	31.85%	12.43	36.29	0.00%	17.97%
Sps Comm Inc	Information Technology	\$6,705,953	4.2%	(4.61)%	6.84	55.98	0.00%	22.59%
Rb Global Inc	Industrials	\$6,453,427	4.1%	11.40%	13.92	23.25	1.42%	23.62%
Globant S A	Information Technology	\$6,089,506	3.8%	(20.01)%	8.70	29.36	0.00%	28.86%
Grand Canyon Ed Inc	Consumer Discretionary	\$5,793,829	3.7%	3.16%	4.09	17.31	0.00%	4.53%
Five Below Inc	Consumer Discretionary	\$5,771,693	3.6%	(14.91)%	10.02	28.99	0.00%	18.05%
Freshpet Inc	Consumer Staples	\$5,504,740	3.5%	33.54%	5.60	549.10	0.00%	-
Floor & Decor Hldgs Inc Cl A	Consumer Discretionary	\$5,337,233	3.4%	16.19%	13.87	61.55	0.00%	3.70%
Kinsale Cap Group Inc	Financials	\$5,223,262	3.3%	56.73%	12.17	33.42	0.11%	51.67%
Alarm Com Hldgs Inc	Information Technology	\$4,829,183	3.0%	12.15%	3.62	33.44	0.00%	9.25%

#### **10 Best Performers**

					Price/		
	Ending	Percent			Forecasted		
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Financials	\$5,223,262	3.3%	56.73%	12.17	33.42	0.11%	51.67%
Health Care	\$1,493,529	0.9%	41.02%	0.59	21.50	0.00%	0.68%
Consumer Staples	\$5,504,740	3.5%	33.54%	5.60	549.10	0.00%	-
Health Care	\$7,635,606	4.8%	31.85%	12.43	36.29	0.00%	17.97%
Industrials	\$2,667,611	1.7%	23.89%	2.65	(78.54)	0.00%	-
Health Care	\$2,527,949	1.6%	21.69%	1.70	39.55	1.56%	7.60%
Health Care	\$3,102,518	2.0%	18.62%	4.66	(49.97)	0.00%	-
Industrials	\$4,407,367	2.8%	17.18%	3.85	32.49	0.35%	17.86%
Consumer Discretionary	\$5,337,233	3.4%	16.19%	13.87	61.55	0.00%	3.70%
Information Technology	\$4,829,183	3.0%	12.15%	3.62	33.44	0.00%	9.25%
	Financials Health Care Consumer Staples Health Care Industrials Health Care Health Care Industrials Consumer Discretionary	Sector         Market Value           Financials         \$5,223,262           Health Care         \$1,493,529           Consumer Staples         \$5,504,740           Health Care         \$7,635,606           Industrials         \$2,667,611           Health Care         \$2,527,949           Health Care         \$3,102,518           Industrials         \$4,407,367           Consumer Discretionary         \$5,337,233	Sector         Market Value         of Portfolio           Financials         \$5,223,262         3.3%           Health Care         \$1,493,529         0.9%           Consumer Staples         \$5,504,740         3.5%           Health Care         \$7,635,606         4.8%           Industrials         \$2,667,611         1.7%           Health Care         \$2,527,949         1.6%           Health Care         \$3,102,518         2.0%           Industrials         \$4,407,367         2.8%           Consumer Discretionary         \$5,337,233         3.4%	Sector         Market Value         of Value         Qtrly Return           Financials         \$5,223,262         3.3%         56.73%           Health Care         \$1,493,529         0.9%         41.02%           Consumer Staples         \$5,504,740         3.5%         33.54%           Health Care         \$7,635,606         4.8%         31.85%           Industrials         \$2,667,611         1.7%         23.89%           Health Care         \$2,527,949         1.6%         21.69%           Health Care         \$3,102,518         2.0%         18.62%           Industrials         \$4,407,367         2.8%         17.18%           Consumer Discretionary         \$5,337,233         3.4%         16.19%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Financials         \$5,223,262         3.3%         56.73%         12.17           Health Care         \$1,493,529         0.9%         41.02%         0.59           Consumer Staples         \$5,504,740         3.5%         33.54%         5.60           Health Care         \$7,635,606         4.8%         31.85%         12.43           Industrials         \$2,667,611         1.7%         23.89%         2.65           Health Care         \$2,527,949         1.6%         21.69%         1.70           Health Care         \$3,102,518         2.0%         18.62%         4.66           Industrials         \$4,407,367         2.8%         17.18%         3.85           Consumer Discretionary         \$5,337,233         3.4%         16.19%         13.87	Sector         Value         Percent Value         Return         Capital Capital         Ratio           Financials         \$5,223,262         3.3%         56.73%         12.17         33.42           Health Care         \$1,493,529         0.9%         41.02%         0.59         21.50           Consumer Staples         \$5,504,740         3.5%         33.54%         5.60         549.10           Health Care         \$7,635,606         4.8%         31.85%         12.43         36.29           Industrials         \$2,667,611         1.7%         23.89%         2.65         (78.54)           Health Care         \$2,527,949         1.6%         21.69%         1.70         39.55           Health Care         \$3,102,518         2.0%         18.62%         4.66         (49.97)           Industrials         \$4,407,367         2.8%         17.18%         3.85         32.49           Consumer Discretionary         \$5,337,233         3.4%         16.19%         13.87         61.55	Sector         Value         Percent Value         Return         Capital Capital         Ratio         Piolidend Yield           Financials         \$5,223,262         3.3%         56.73%         12.17         33.42         0.11%           Health Care         \$1,493,529         0.9%         41.02%         0.59         21.50         0.00%           Consumer Staples         \$5,504,740         3.5%         33.54%         5.60         549.10         0.00%           Health Care         \$7,635,606         4.8%         31.85%         12.43         36.29         0.00%           Industrials         \$2,667,611         1.7%         23.89%         2.65         (78.54)         0.00%           Health Care         \$2,527,949         1.6%         21.69%         1.70         39.55         1.56%           Health Care         \$3,102,518         2.0%         18.62%         4.66         (49.97)         0.00%           Industrials         \$4,407,367         2.8%         17.18%         3.85         32.49         0.35%           Consumer Discretionary         \$5,337,233         3.4%         16.19%         13.87         61.55         0.00%

# **10 Worst Performers**

		Ending Market	Percent of	Qtrly	Market	Price/ Forecasted Earnings	Dividend	Forecasted Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Neogen Corp	Health Care	\$1,009,352	0.6%	(21.53)%	3.42	22.87	0.00%	(8.13)%
Five9 Inc	Information Technology	\$1,847,586	1.2%	(21.07)%	4.59	27.24	0.00%	23.55%
Globant S A	Information Technology	\$6,089,506	3.8%	(20.01)%	8.70	29.36	0.00%	28.86%
Definitive Healthcare Corp Common St	Health Care	\$875,627	0.6%	(18.82)%	0.95	20.85	0.00%	-
Amn Healthcare Services Inc	Health Care	\$1,505,178	0.9%	(16.52)%	2.37	15.04	0.00%	32.97%
Workiva Inc Com CI A	Information Technology	\$4,382,718	2.8%	(16.48)%	4.26	118.44	0.00%	42.28%
Privia Health Group Inc	Health Care	\$2,495,276	1.6%	(14.94)%	2.32	74.20	0.00%	-
Five Below Inc	Consumer Discretionary	\$5,771,693	3.6%	(14.91)%	10.02	28.99	0.00%	18.05%
Power Integrations Inc	Information Technology	\$2,769,772	1.7%	(12.61)%	4.07	50.53	1.12%	(14.55)%
Goosehead Ins Inc Com Cl A	Financials	\$1,515,072	1.0%	(12.11)%	1.68	37.94	0.00%	16.30%

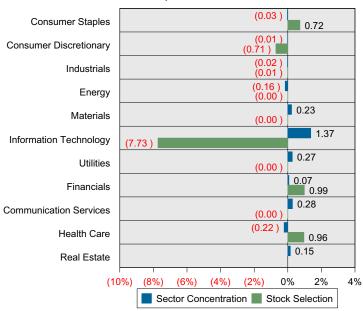


# Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

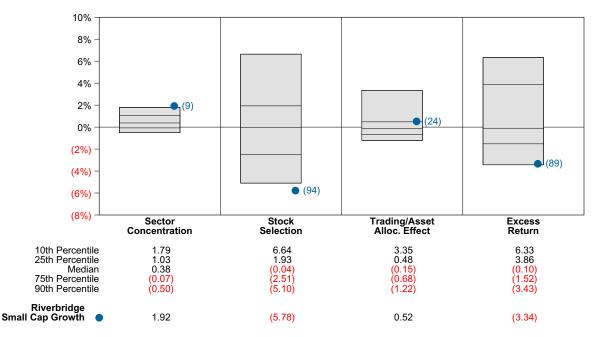
#### Attribution Effects by Sector vs Russell 2000 Growth Index Quarter ended March 31, 2024



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>	Asset Alloc
4.24%	7.58%	1.92%	(5.78%)	0.54%	(0.02%)

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



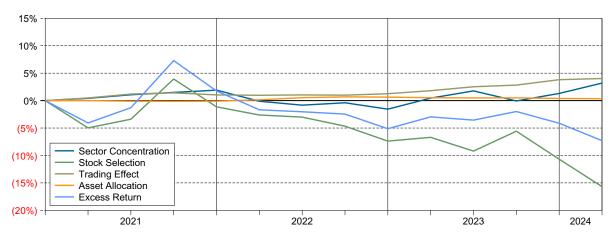


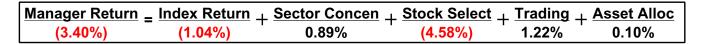
# Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Cumulative Equity Buy and Hold Attribution**

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

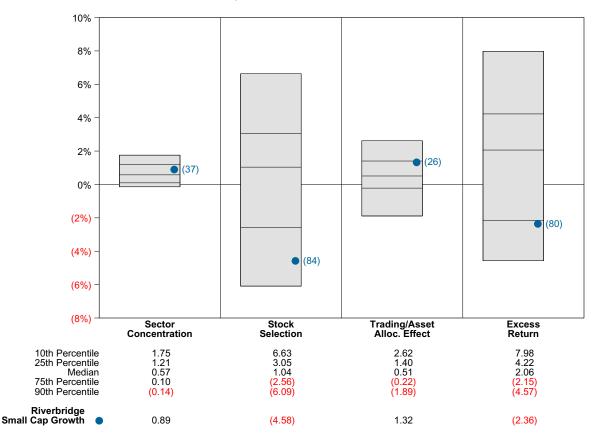
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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





#### **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.

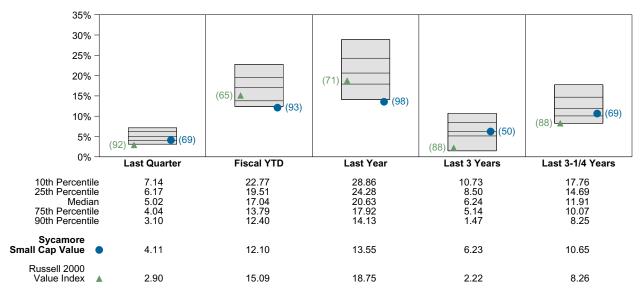
#### **Quarterly Summary and Highlights**

- Sycamore Small Cap Value's portfolio posted a 4.11% return for the quarter placing it in the 69 percentile of the Callan Small Cap Value group for the quarter and in the 98 percentile for the last year.
- Sycamore Small Cap Value's portfolio outperformed the Russell 2000 Value Index by 1.20% for the quarter and underperformed the Russell 2000 Value Index for the year by 5.20%.

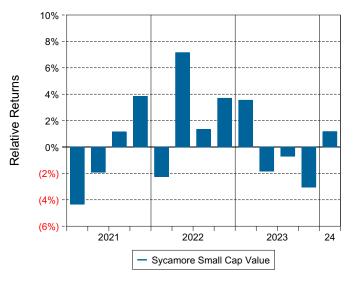
Quarterly	V Asset	Growth
Qualteri	y Abbei	GIOWIII

Beginning Market Value	\$158,815,960
Net New Investment	\$-6,704,623
Investment Gains/(Losses)	\$6,042,245
Ending Market Value	\$158,153,583

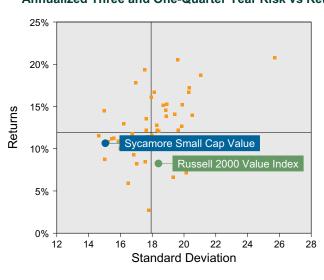
# Performance vs Callan Small Cap Value (Gross)



#### Relative Return vs Russell 2000 Value Index



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

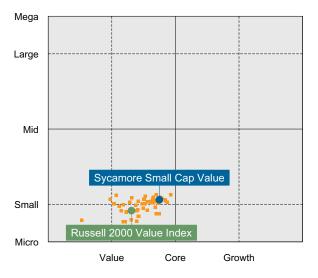




# **Current Holdings Based Style Analysis Sycamore Small Cap Value** As of March 31, 2024

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.

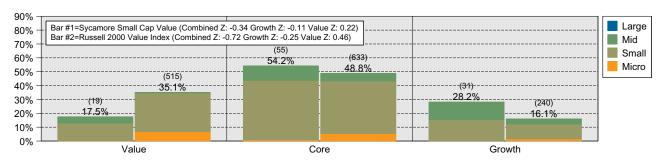
#### Style Map vs Callan Small Cap Value Holdings as of March 31, 2024



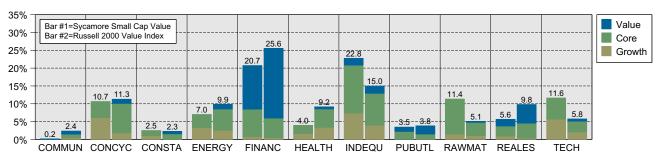
# **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	35.1% (515)	48.8% (633)	16.1% (240)	100.0% (1388)
Total	, ,	, ,	` ,	, ,
	17.5% (19)	54.2% (55)	28.2% (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				
	12.7% (15)	42.9% (42)	15.3% (17)	70.8% (74)
	0.5% (1)	5.6% (13)	3.9% (13)	10.0% (27)
Mid				
	4.7% (3)	10.6% (12)	13.0% (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



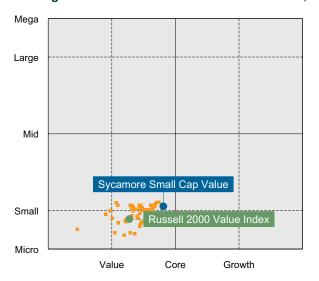


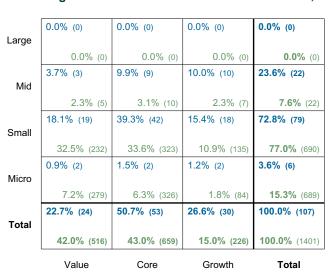
# **Historical Holdings Based Style Analysis Sycamore Small Cap Value** For Three and 1/4 Years Ended March 31, 2024

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.

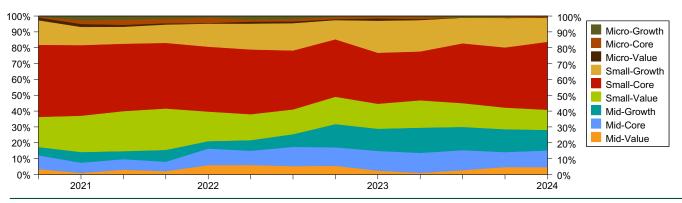
# Average Style Map vs Callan Small Cap Value Holdings for Three and 1/4 Years Ended March 31, 2024

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

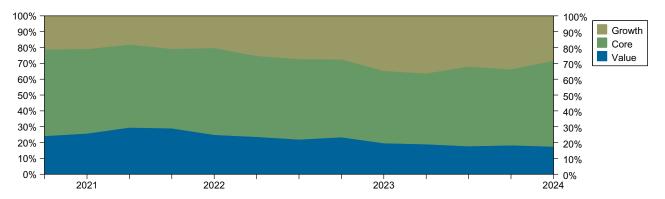




# Sycamore Small Cap Value Historical Cap/Style Exposures



Sycamore Small Cap Value Historical Style Only Exposures



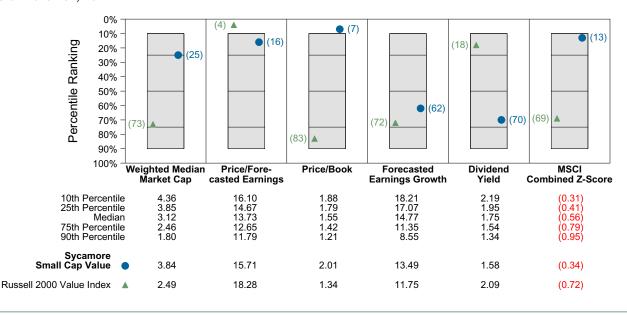


# **Sycamore Small Cap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

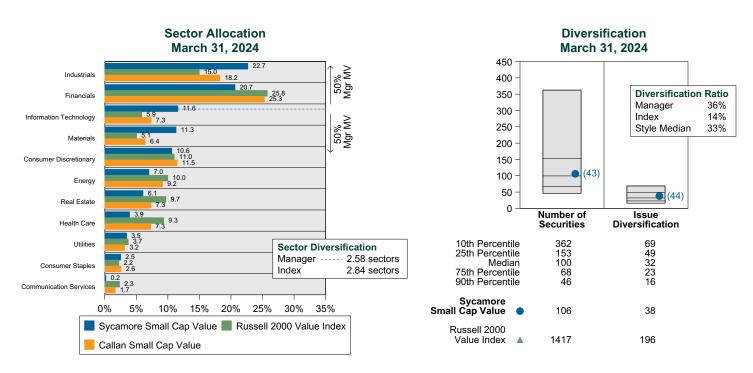
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **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
Magnolia Oil & Gas Corp Cl A	Energy	\$2,578,132	1.1%	22.63%	4.73	12.04	2.00%	71.96%
Civitas Resources Inc	Energy	\$2,550,576	1.1%	13.40%	7.67	6.31	2.63%	23.21%
South St Corp	Financials	\$2,540,271	1.1%	1.34%	6.48	12.62	2.45%	8.50%
Umb Finl Corp	Financials	\$2,531,409	1.1%	4.61%	4.24	11.80	1.79%	17.09%
Wintrust Finl Corp	Financials	\$2,526,238	1.1%	13.10%	6.42	10.39	1.72%	15.81%
Matador Res Co	Energy	\$2,427,090	1.1%	17.82%	8.33	9.18	1.20%	72.54%
Hanover Ins Group Inc	Financials	\$2,328,507	1.0%	12.89%	4.89	12.22	2.50%	111.00%
Werner Enterprises Inc	Industrials	\$2,284,608	1.0%	(7.67)%	2.48	17.63	1.43%	9.85%
Hillenbrand Inc	Industrials	\$2,259,278	1.0%	5.60%	3.53	12.82	1.77%	10.29%
Hub Group Inc Cl A	Industrials	\$2,225,830	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	\$538,150	0.2%	41.67%	11.00	22.15	0.00%	20.42%
Eagle Materials Inc	Materials	\$1,039,444	0.5%	34.11%	9.36	16.94	0.37%	30.30%
Ryan Specialty Group Holdings	Financials	\$1,526,250	0.7%	29.55%	6.59	29.97	0.79%	8.57%
Kaiser Aluminum Corp Com Par \$0.01	Materials	\$1,503,482	0.7%	26.99%	1.43	20.59	3.45%	(20.81)%
Texas Roadhouse Inc	Consumer Discretionary	\$1,112,184	0.5%	26.89%	10.32	26.66	1.58%	15.90%
Verint Sys Inc	Information Technology	\$1,632,638	0.7%	22.64%	2.07	11.36	0.00%	9.95%
Magnolia Oil & Gas Corp Cl A	Energy	\$2,578,132	1.1%	22.63%	4.73	12.04	2.00%	71.96%
Myr Group Inc Del	Industrials	\$813,050	0.4%	22.21%	2.96	25.91	0.00%	24.13%
Delek Us Hldgs Inc New	Energy	\$1,297,228	0.6%	20.29%	1.97	30.56	3.19%	(10.08)%
Nextracker Inc-Cl A	Information Technology	\$1,294,210	0.6%	20.10%	7.68	18.16	0.00%	37.70%

# **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
Scripps E W Co Ohio Cl A New	Communication Services	\$281,192	0.1%	(50.81)%	0.29	5.14	0.00%	43.98%
Mp Materials Corp Com Cl A	Materials	\$561,990	0.2%	(27.96)%	2.55	52.00	0.00%	32.30%
Ncr Corp New	Information Technology	\$849,999	0.4%	(25.31)%	1.82	11.26	0.00%	6.45%
Air Transport Services Grp I	Industrials	\$880,640	0.4%	(21.86)%	0.90	17.51	0.00%	1.85%
Independent Bank Corp Mass	Financials	\$983,178	0.4%	(20.09)%	2.21	11.10	4.38%	4.95%
Mercury Sys Inc	Industrials	\$911,550	0.4%	(19.33)%	1.75	121.40	0.00%	(14.78)%
Ncr Atmco LLC Com	Financials	\$942,075	0.4%	(18.69)%	1.42	5.63	0.00%	-
Perficient Inc	Information Technology	\$972,410	0.4%	(14.48)%	1.97	13.48	0.00%	21.26%
Bank Hawaii Corp	Financials	\$848,504	0.4%	(12.87)%	2.48	16.52	4.49%	(3.45)%
Marten Trans Ltd	Industrials	\$1,213,212	0.5%	(11.63)%	1.50	20.13	1.30%	7.23%

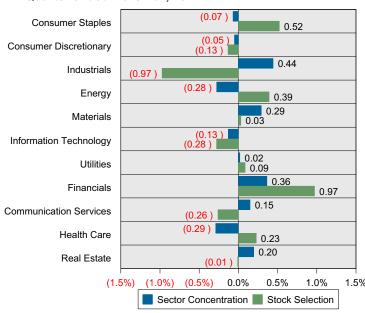


# Sycamore Small Cap Value vs Russell 2000 Value Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

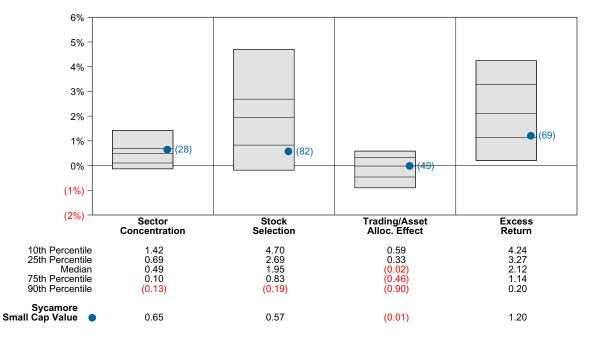
#### Attribution Effects by Sector vs Russell 2000 Value Index Quarter ended March 31, 2024



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.07%)	0.52%
Consumer Discretionary	(0.05%)	(0.13%)
Industrials	0.44%	(0.97%)
Energy	(0.28%)	0.39%
Materials	0.29%	0.03%
Information Technology	(0.13%)	(0.28%)
Utilities	0.02%	0.09%
Financials	0.36%	0.97%
Communication Services	s 0.15%	(0.26%)
Health Care	(0.29%)	0.23%
Real Estate	0.20%	(0.01%)
Total	0.65%	0.57%

Manager Return	Index Return _	Sector Concen	Stock Select	<sub>∔</sub> Trading _	Asset Alloc
4.11%	2.90%	0.65%	0.57%	0.05%	(0.06%)

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



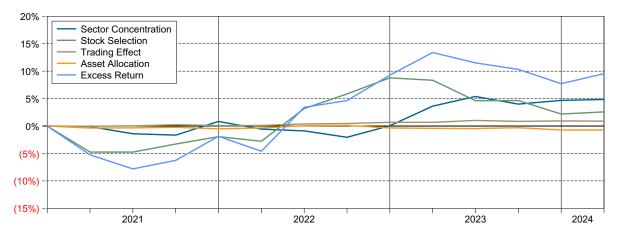


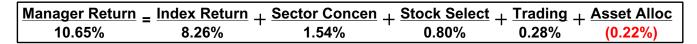
# Sycamore Small Cap Value vs Russell 2000 Value Index **Cumulative Equity Buy and Hold Attribution**

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

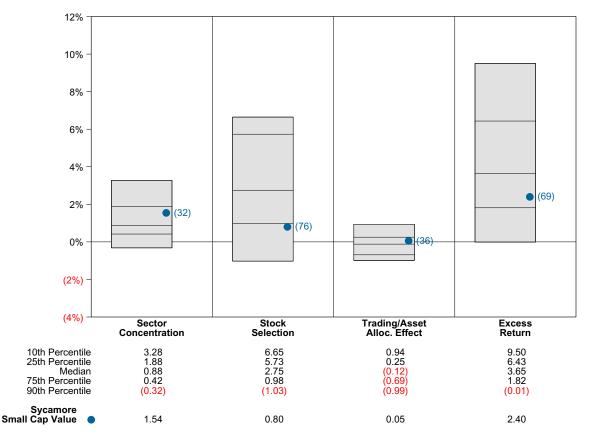
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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



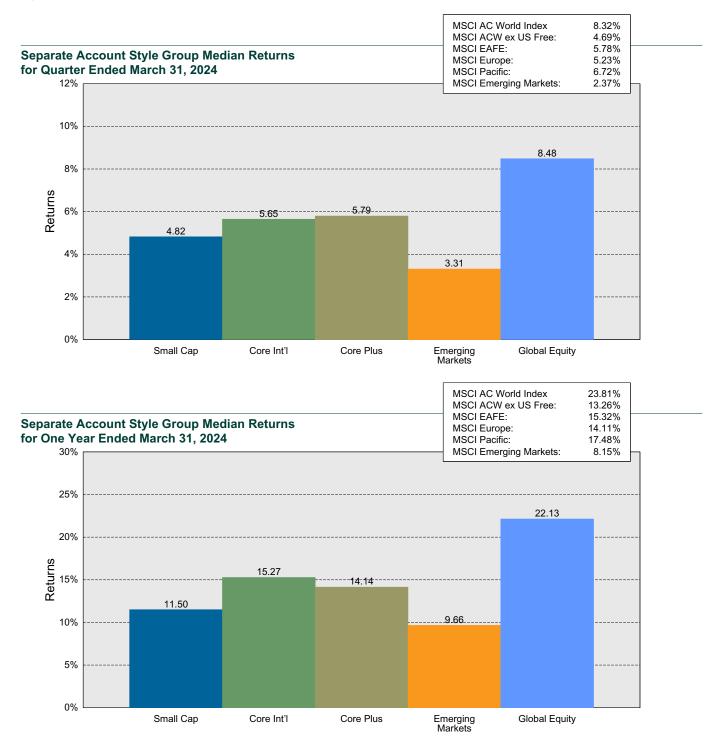


#### **Equity Attribution Ranking vs Callan Small Cap Value** Three and One-Quarter Years Ended March 31, 2024



# 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.





# **International Equity** Period Ended March 31, 2024

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

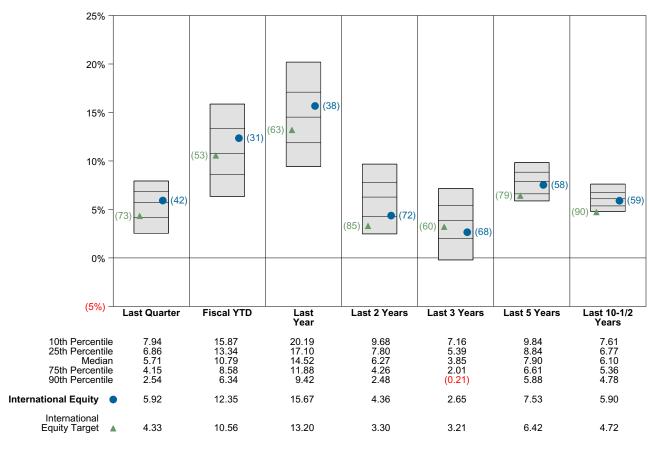
- International Equity's portfolio posted a 5.92% return for the quarter placing it in the 42 percentile of the Callan Non-US Equity group for the guarter and in the 38 percentile for the last year.
- International Equity's portfolio outperformed the International Equity Target by 1.59% for the guarter and outperformed the International Equity Target for the year by 2.47%.

#### **Quarterly Asset Growth**

Beginning Market Value \$2,269,618,723 Net New Investment \$52,752,618 Investment Gains/(Losses) \$136,524,902

**Ending Market Value** \$2,458,896,243

# Performance vs Callan Non-US Equity (Gross)



#### Relative Return vs International Equity Target



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



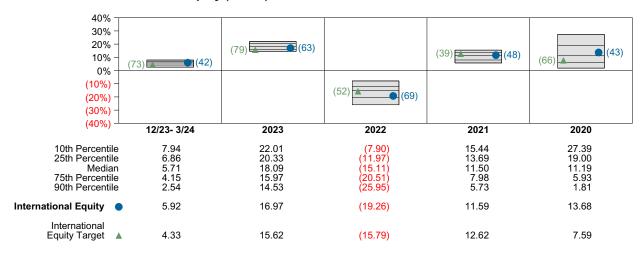


# **International Equity Return Analysis Summary**

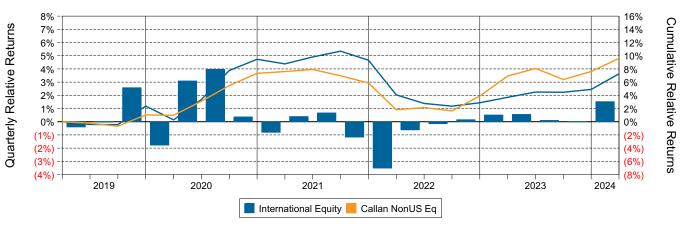
#### **Return Analysis**

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.

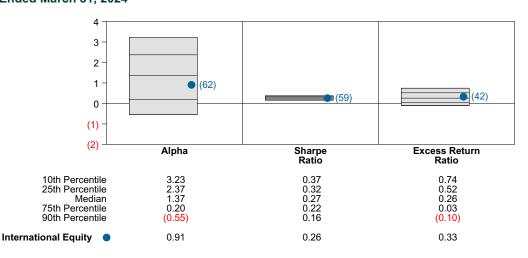
#### Performance vs Callan Non-US Equity (Gross)



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



Risk Adjusted Return Measures vs International Equity Target Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



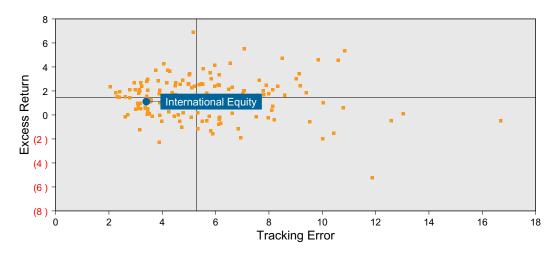


# **International Equity Risk Analysis Summary**

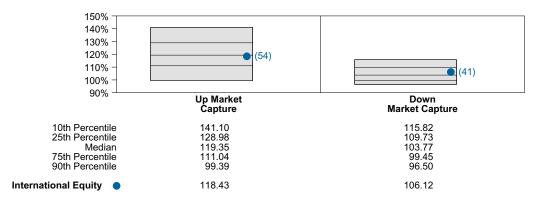
#### Risk Analysis

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.

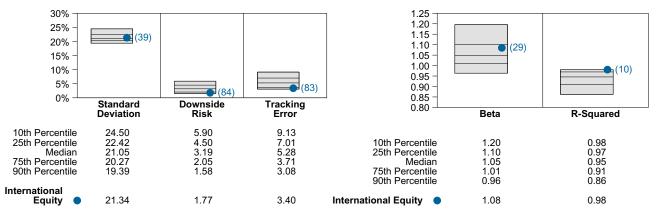
# Risk Analysis vs Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



#### Market Capture vs International Equity Target Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024



#### Risk Statistics Rankings vs International Equity Target Rankings Against Callan Non-US Equity (Gross) Five Years Ended March 31, 2024

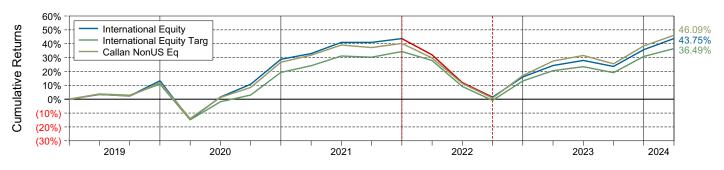




# International Equity Drawdown Analysis for Five Years Ended March 31, 2024

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**

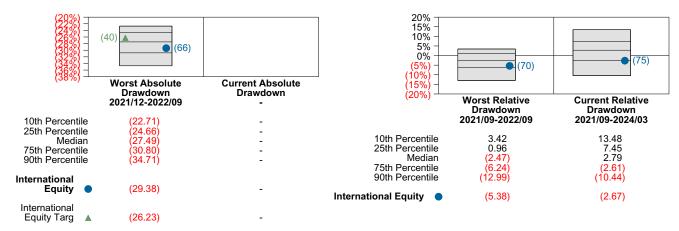


	Worst Absolute Drawdown					Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years_	Period	_Index_	Peers	
International Equity	(29.38)%	0.75	2021/12-2022/09	(26.23)%	(28.14)%	-	-	_	-	-	
Recovery from Trough	41.64%	1.50+	2022/09-2024/03	37.69%	44.97%	-	-	-	-	-	
International Equity Targ	(26.23)%	0.75	2021/12-2022/09			-	-	-			
Callan NonUS Eq	(28.14)%	0.75	2021/12-2022/09			-	-	-			

# Relative Cumulative Drawdown Analysis vs. International Equity Targ 10% 8% Callan NonUS Eq 6% 2% 0% 2019 2020 2021 2022 2023 2024

		Vorst Rel	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
International Equity	(5.38)%	1.00	2021/09-2022/09	(3.50)%	(2.67)%	2.50	2021/09-2024/03	1.60%		
Recovery from Trough	2.87%	1.50+	2022/09-2024/03	5.29%	2.87%	1.50+	2022/09-2024/03	5.29%		
Callan NonUS Eq	(4.45)%	1.25	2020/12-2022/03		-	-	-			

Drawdown Rankings vs. International Equity Targ Rankings against Callan Non-US Equity Five Years Ended March 31, 2024

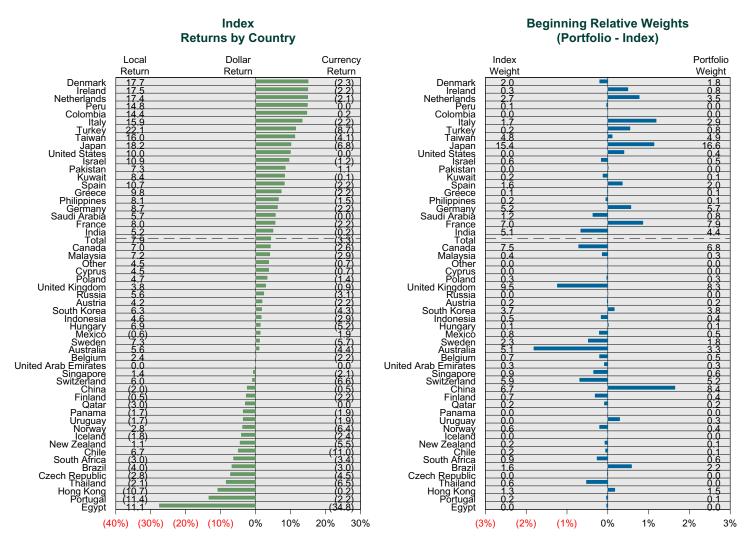




# International Equity vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.



#### Attribution Factors for Quarter Ended March 31, 2024 8% 5.92 6% Percent Return 4.33 4% 2% 0.92 0.72 0% (0.05)(2%)Portfolio Security Index Country Currency

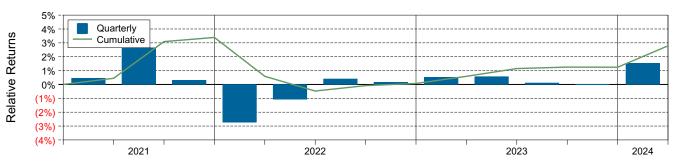


# International Equity vs MSCI ACWI xUS IMI Attribution for Three years Ended March 31, 2024

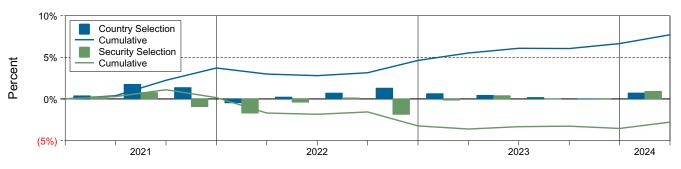
#### **Cumulative International Attribution**

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.

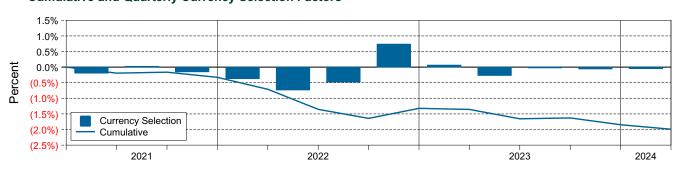
#### Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



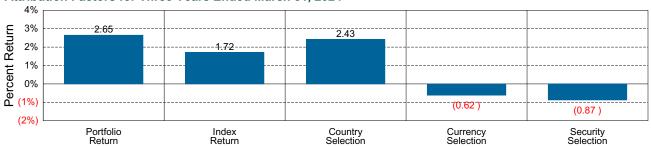
# **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for Three Years Ended March 31, 2024

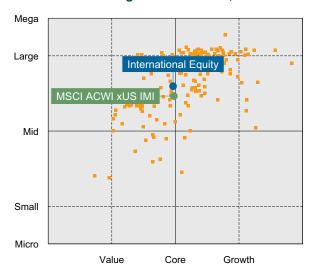




# **Current Holdings Based Style Analysis International Equity** As of March 31, 2024

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.

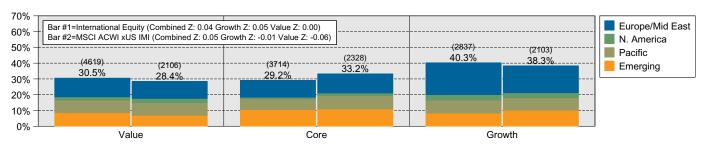
# Style Map vs Callan NonUS Eq Holdings as of March 31, 2024



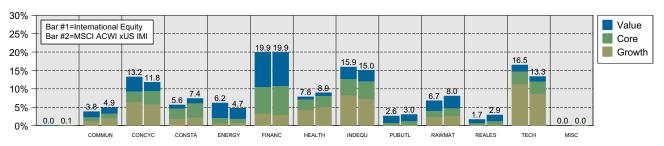
# **Style Exposure Matrix** Holdings as of March 31, 2024

	12.0% (662)	10.8% (556)	20.3% (472)	43.1% (1690)
Europe/				
Mid East	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
	2.0% (135)	1.1% (140)	3.5% (101)	6.7% (376)
N. America	, ,		, ,	, ,
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
	7.9% (1111)	6.7% (620)	8.1% (514)	22.8% (2245)
Pacific				
	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
	8.6% (2711)	10.5% (2398)	8.3% (1750)	27.4% (6859)
Emerging				
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
	30.5% (4619)	29.2% (3714)	40.3% (2837)	100.0% (11170)
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

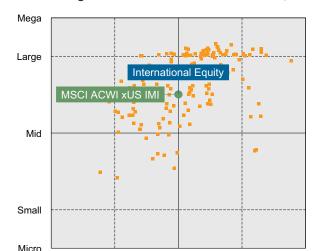




# **Historical Holdings Based Style Analysis International Equity** For Three Years Ended March 31, 2024

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 Callan NonUS Eq Holdings for Three Years Ended March 31, 2024



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

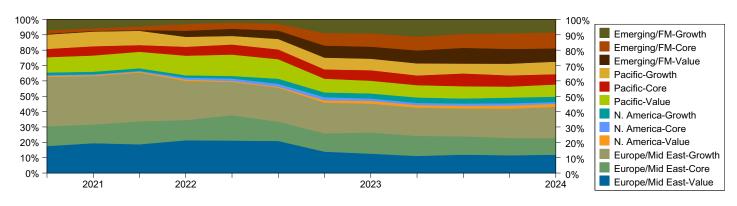
Furanc/	16.1% (574)	12.9% (474)	23.3% (355)	<b>52.3</b> % (1403)
Europe/ Mid East				
Wild Edst	11.7% (484)	12.5% (531)	15.8% (489)	40.1% (1504)
	1.3% (102)	1.3% (80)	2.7% (52)	5.2% (234)
N. America				
	2.4% (94)	2.6% (126)	2.7% (95)	7.7% (315)
	9.9% (1015)	6.3% (489)	7.7% (358)	23.9% (1862)
Pacific				
	7.7% (524)	7.8% (551)	8.3% (499)	23.8% (1574)
	5.7% (1341)	6.2% (1170)	6.7% (868)	18.6% (3379)
Emerging/				
FM	7.4% (1017)	9.9% (1120)	11.1% (1032)	28.4% (3169)
	33.0% (3032)	26.7% (2213)	40.3% (1633)	100.0% (6878)
Total				
	29.2% (2119)	32.7% (2328)	38.0% (2115)	100.0% (6562)
	Value	Core	Growth	Total

# International Equity Historical Region/Style Exposures

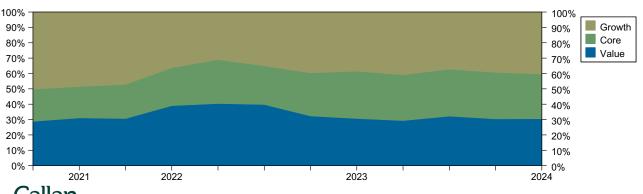
Core

Growth

Value



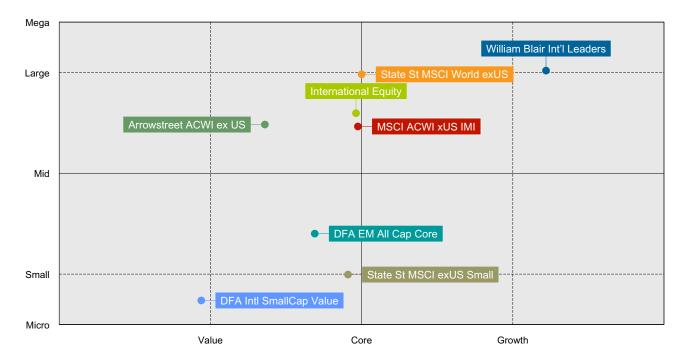
# **International Equity Historical Style Only Exposures**



# **International Holdings Based Style Analysis** For One Quarter 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.

Style Map Holdings for One Quarter Ended March 31, 2024



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities I	Security Diversification
William Blair Int'l Leaders	16.55%	59.08	1.07	0.40	(0.67)	63	22.04
Arrowstreet ACWI ex US	19.88%	33.65	(0.51)	0.01	0.52	806	51.44
State St MSCI exUS Small	3.72%	2.64	(0.00)	(0.01)	(0.01)	2371	465.90
State St MSCI World exUS	40.03%	51.88	0.08	0.00	(0.08)	855	97.66
DFA Intl SmallCap Value	2.55%	1.96	(0.89)	(0.18)	0.71	1822	147.89
DFA EM All Cap Core	8.49%	7.99	(0.21)	(0.05)	0.15	6846	319.09
International Equity	100.00%	37.77	0.04	0.05	0.00	11417	148.44
MSCI ACWI xUS IMI	-	32.95	0.05	(0.01)	(0.06)	6650	218.82

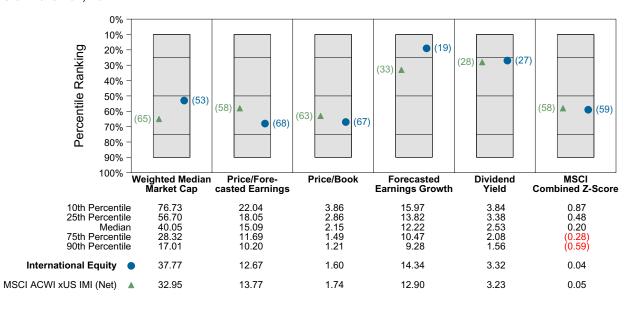


# International Equity **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

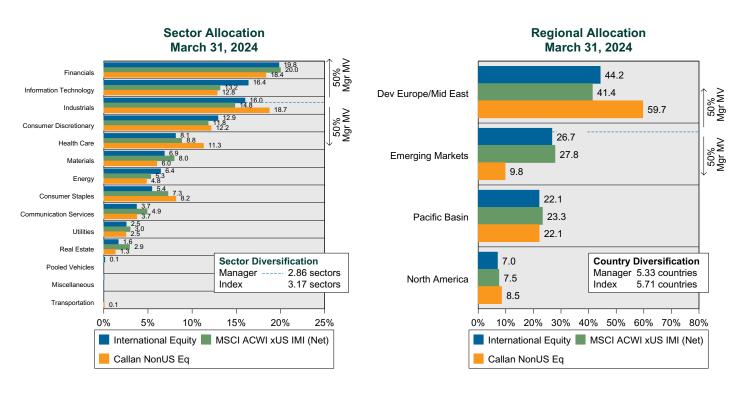
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **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.

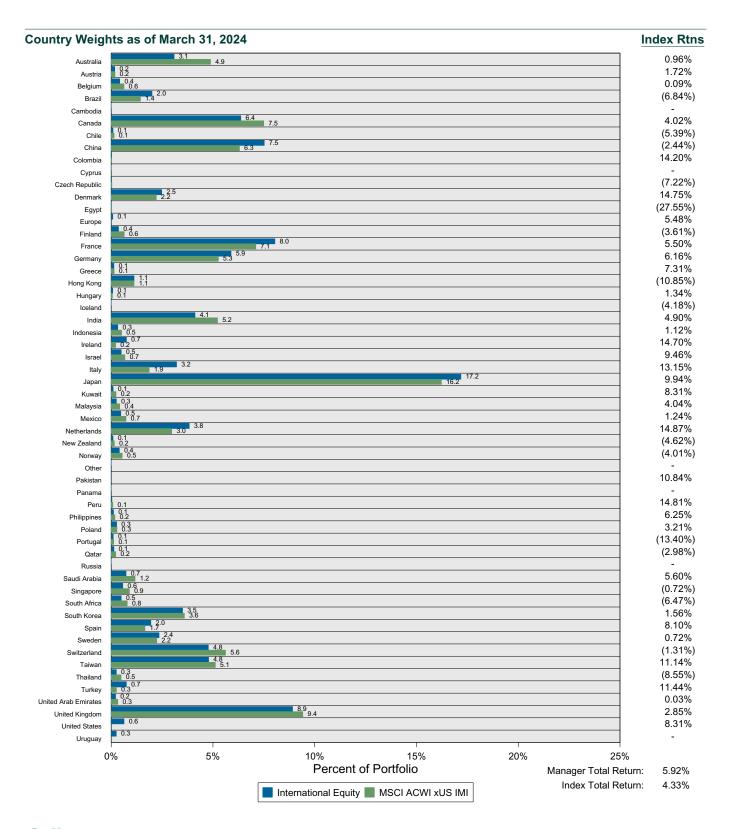




# **Country Allocation** International Equity VS MSCI ACWI xUS IMI (Net)

#### **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.

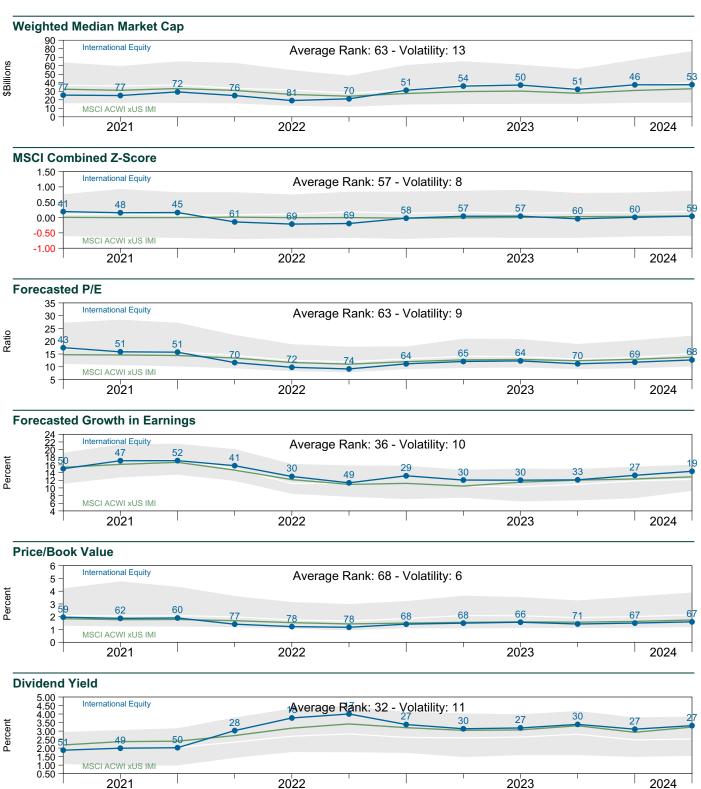




# **Portfolio Characteristics Analysis**

#### Callan NonUS Eq

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 Callan NonUS Eq 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.

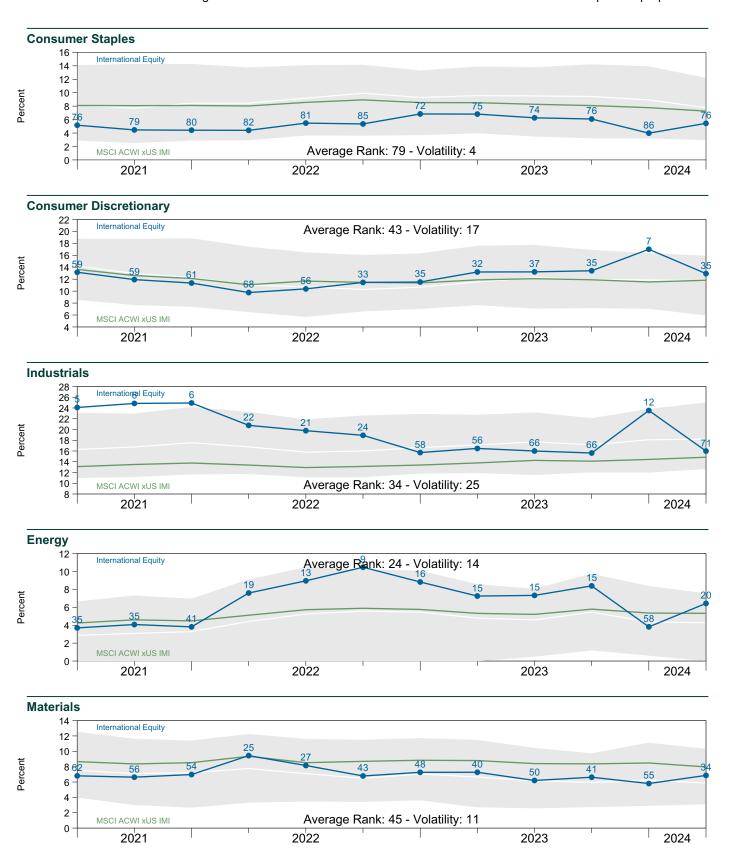


# North Dakota State Investment Board Legacy Fund History of Ending Regional Weights Period Ended March 31, 2024



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

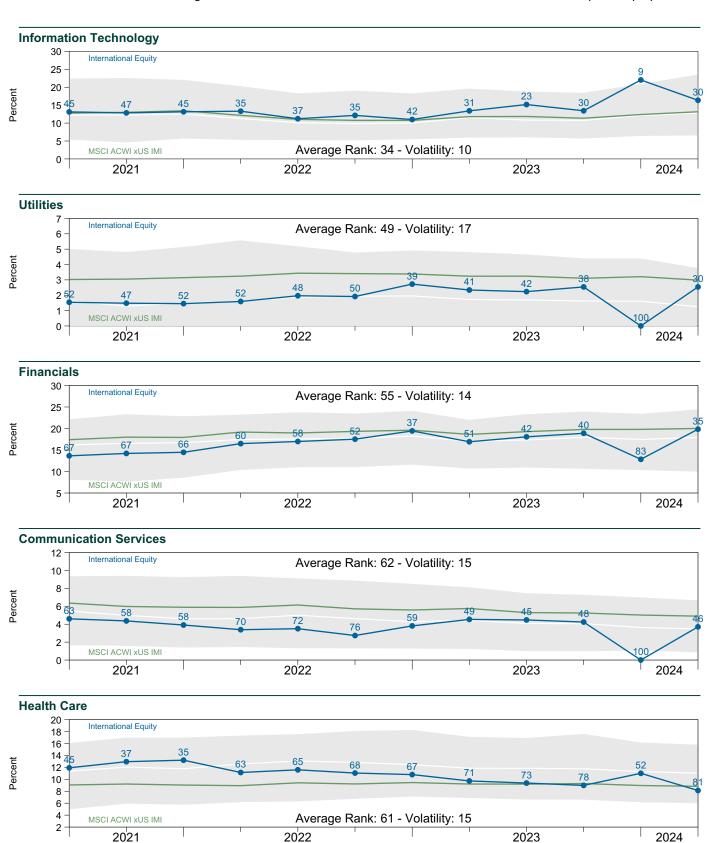
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Callan NonUS Eq Universe. The ranking of the product in this group is shown above each quarter end dot. The average ranking 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 Callan NonUS Eq 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.





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 Benc and the Callan NonUS Eq PEER GROUP

	DFA Intl										
(12)	SmallCap	3.05	17.18%	4.12	1.40%	0.21	0.74	3.04%	1.03	0.94	
	Value	(19)	(71)	(67)	(88)	(18)	(17)	(20)	(70)	(42)	
	William Blair										
(12)	Int'l	(3.89)	21.59%	8.05	7.13%	(0.15)	(0.48)	(3.29)%	1.27	0.89	
	Leaders	(92)	(10)	(11)	(8)	(91)	(86)	(92)	(8)	(76)	
		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 International Equity Targ

(12)	DFA Intl SmallCap Value	(0.57)	1.00
(12)	William Blair Int'l Leaders	1.00	(0.57)
		William Blair Int'l Leaders	DFA Intl SmallCap Value



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.

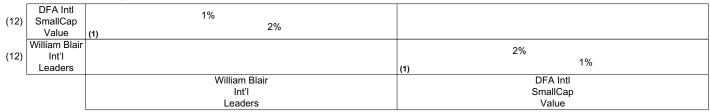
# Average Equity Characteristics for 3 Years Ended March 31, 2024 VS THE Callan NonUS Eq Peer Group

	DFA Intl											
(12)	SmallCap	1.74	1908	161.16	(0.18)	0.71	(0.89)	9.57	9.43	1.02%	0.77	3.49%
	Value	(100)	(1)	(1)	(84)	(3)	(97)	(90)	(83)	(65)	(100)	(18)
	William Blair											
(12)	Int'l	52.55	64	21.48	0.33	(0.71)	1.04	25.60	17.12	1.48%	5.07	1.31%
	Leaders	(21)	(63)	(54)	(5)	(95)	(5)	(5)	(11)	(23)	(2)	(92)
		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.

# Average Holding Overlap for 3 Years Ended March 31, 2024





# William Blair Int'l Leaders 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.

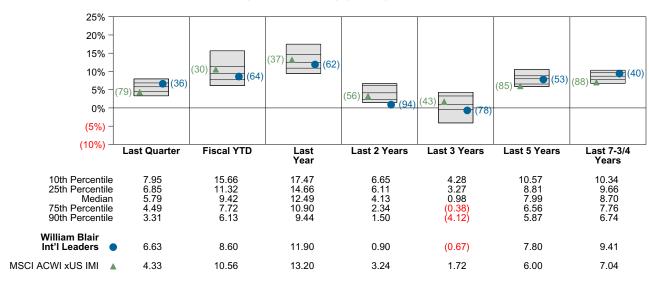
#### **Quarterly Summary and Highlights**

- William Blair Int'l Leaders's portfolio posted a 6.63% return for the quarter placing it in the 36 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 62 percentile for the last year.
- William Blair Int'l Leaders's portfolio outperformed the MSCI ACWI xUS IMI by 2.30% for the quarter and underperformed the MSCI ACWI xUS IMI for the year by 1.30%.

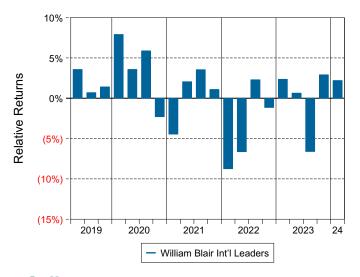
#### **Quarterly Asset Growth**

Beginning Market Value	\$383,709,899
Net New Investment	\$-2,340,886
Investment Gains/(Losses)	\$25,559,665
Ending Market Value	\$406,928,677

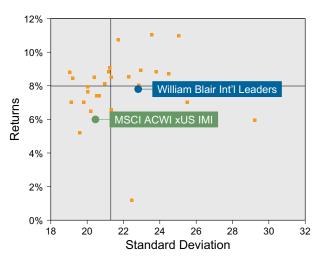
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



# Relative Return vs MSCI ACWI xUS IMI



#### Callan Non-US All Country Growth Equity (Gross) Annualized Five Year Risk vs Return



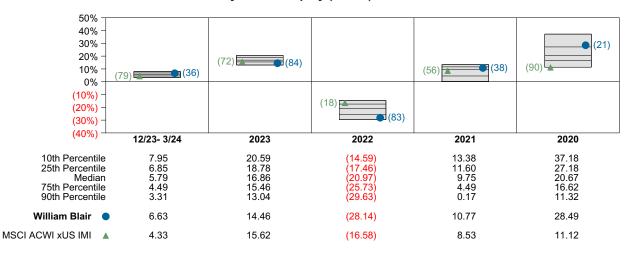


# William Blair **Return Analysis Summary**

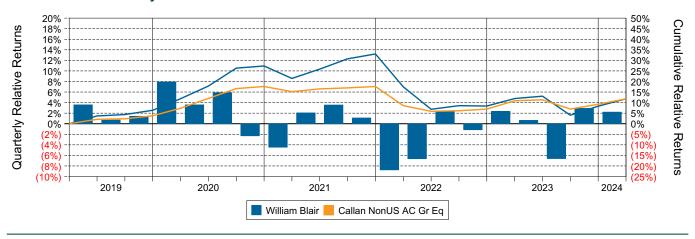
#### **Return Analysis**

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.

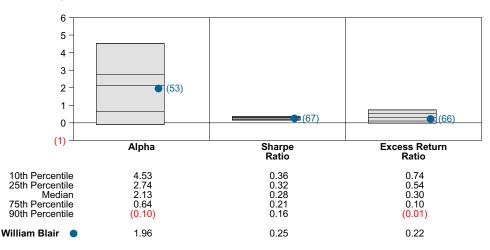
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



### 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



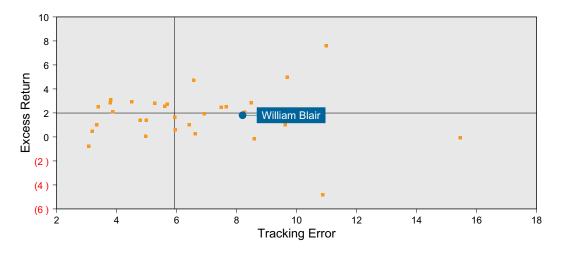


# William Blair **Risk Analysis Summary**

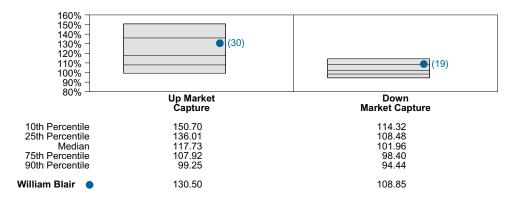
#### Risk Analysis

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.

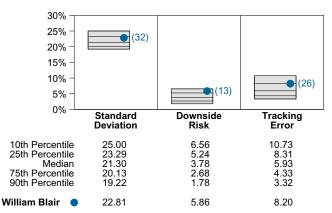
# Risk Analysis vs Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024

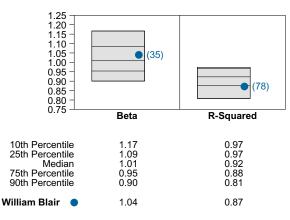


Market Capture vs MSCI ACWI xUS IMI (Net) Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended March 31, 2024



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



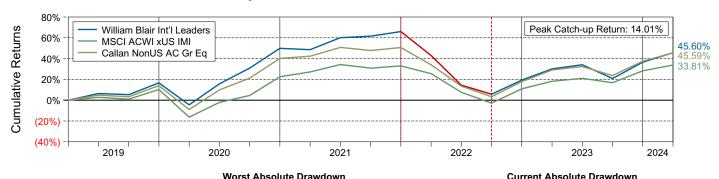




# William Blair Int'l Leaders Drawdown Analysis for Five Years Ended March 31, 2024

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**

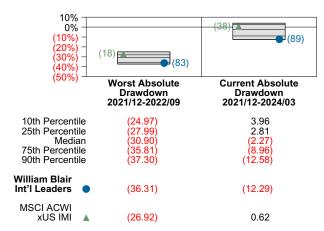


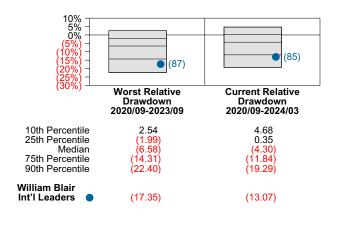
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers			
William Blair Int'l Leaders	(36.31)%	0.75	2021/12-2022/09	(26.92)%	(31.40)%	(12.29)%	2.25	2021/12-2024/03	0.62%	(3.33)%			
Recovery from Trough	37.71%	1.50+	2022/09-2024/03	37.69%	40.92%	37.71%	1.50+	2022/09-2024/03	37.69%	40.92%			
MSCI 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					

#### Relative Cumulative Drawdown Analysis vs. MSCI ACWI xUS IMI Cumulative Relative Returns 30% Peak Catch-up Rel Rtn: 15.04% William Blair Int'l Leaders 25% Callan NonUS AC Gr Eq 15% 8.82% 10% 8.81% 5% 0% 2019 2021 2022 2023 2024 2020

	\	Vorst Rela	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
William Blair Int'l Leaders	(17.35)%	3.00	2020/09-2023/09	(8.60)%	(13.07)%	3.50	2020/09-2024/03	(6.13)%		
Recovery from Trough	5.18%	0.50+	2023/09-2024/03	2.71%	5.18%	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 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.

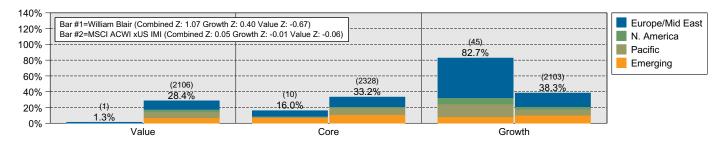
#### Style Map vs Callan NonUS AC Gr Eq Holdings as of March 31, 2024



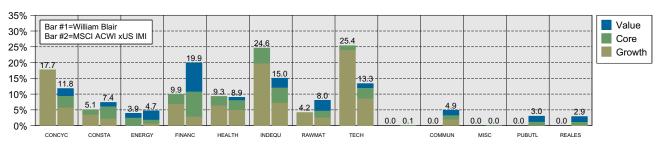
# **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	28.4% (2106)	33.2% (2328)	38.3% (2103)	100.0% (6537)
Total				
	1.3% (1)	16.0% (10)	82.7% (45)	100.0% (56)
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
Emerging				
	0.0% (0)	6.9% (4)	8.3% (4)	15.2% (8)
	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
Pacific				
	0.0% (0)	1.8% (2)	16.1% (9)	17.9% (11)
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
N. America				
	0.0% (0)	0.0% (0)	7.9% (5)	7.9% (5)
Mid East	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
Europe/	1.3% (1)	7.3% (4)	50.4% (27)	59.0% (32)

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



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

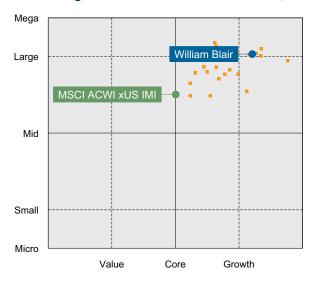




# **Historical Holdings Based Style Analysis** William Blair For Three Years Ended March 31, 2024

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.

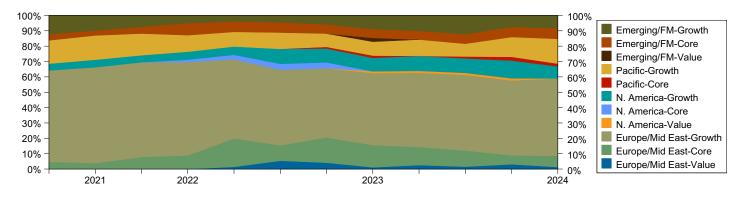
# Average Style Map vs Callan NonUS AC Gr Eq Holdings for Three Years Ended March 31, 2024



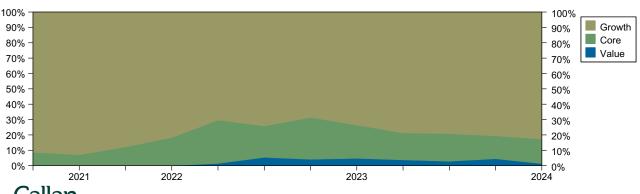
# **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

	29.2% (2119)	32.7% (2328)	38.0% (2115)	100.0% (6562)
Total	2.4% (1)	17.5% (11)	80.1% (50)	100.0% (62)
Emerging/ FM	7.4% (1017)	9.9% (1120)	11.1% (1032)	28.4% (3169)
	0.2% (0)	5.8% (3)	7.9% (6)	14.0% (9)
	7.7% (524)	7.8% (551)	8.3% (499)	23.8% (1574)
Pacific	0.0% (0)	0.7% (1)	11.8% (8)	12.5% (9)
	2.4% (94)	2.6% (126)	2.7% (95)	7.7% (315)
N. America				
	0.4% (0)	1.0% (1)	7.5% (4)	9.0% (5)
Europe/ Mid East	11.7% (484)	12.5% (531)	15.8% (489)	40.1% (1504)
_ ,	1.7% (1)	10.0% (6)	52.8% (32)	64.6% (39)

# William Blair Historical Region/Style Exposures



# William Blair Historical Style Only Exposures



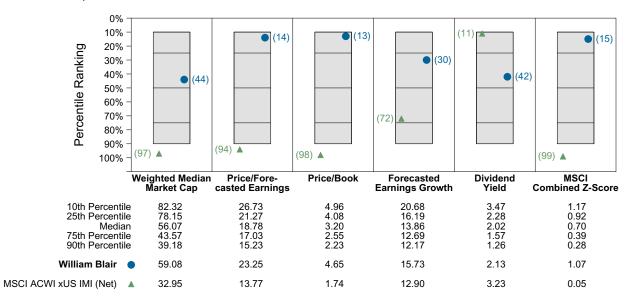
#### William Blair

# **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

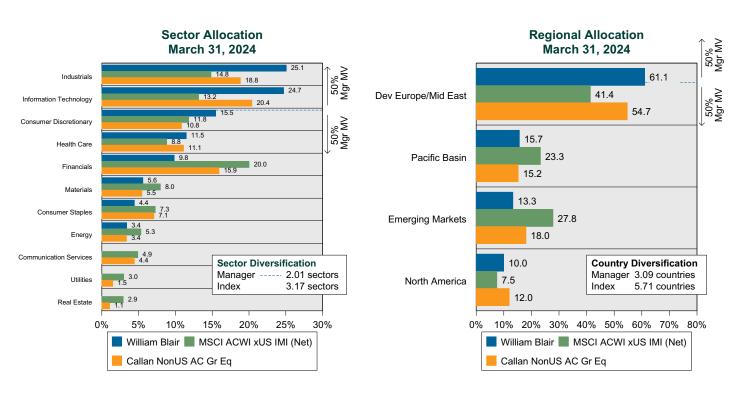
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **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.

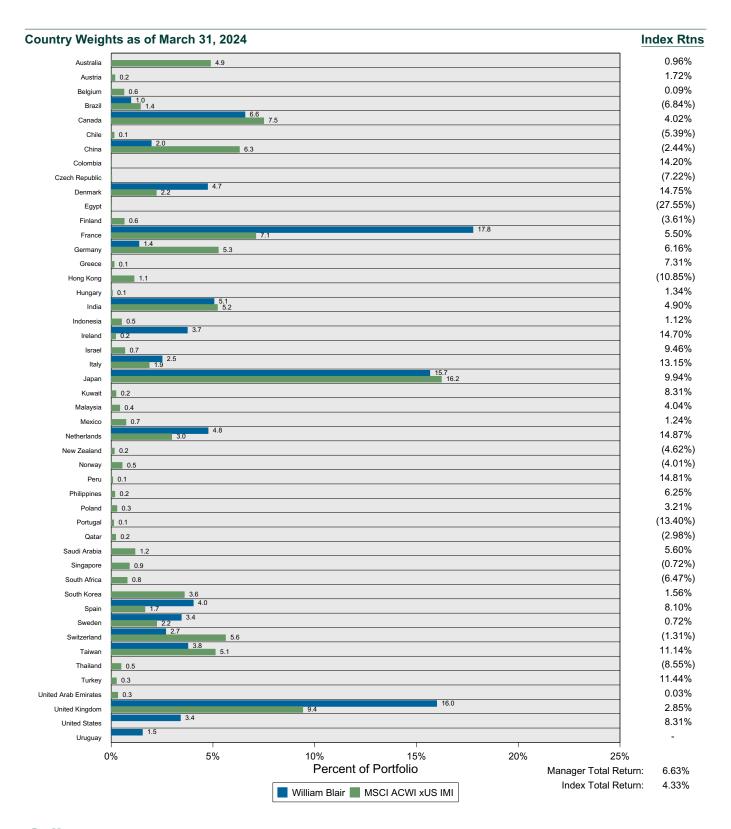




# **Country Allocation** William Blair VS MSCI ACWI xUS IMI (Net)

#### **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 Int'l Leaders 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	\$15,165,723	3.7%	28.18%	385.04	41.98	0.68%	19.60%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$15,015,975	3.7%	26.06%	631.29	19.14	1.67%	11.74%
Tokyo Electron	Information Technology	\$11,765,503	2.9%	46.77%	123.31	40.72	0.93%	21.44%
Icon	Health Care	\$9,819,483	2.4%	16.03%	27.71	21.72	0.00%	14.23%
Industria De Diseno Textil I Shs New	Consumer Discretionary	\$9,317,660	2.3%	15.72%	157.09	24.31	2.57%	8.80%
Reliance Inds Ltd Global Dep Rct	Energy	\$8,929,784	2.2%	14.07%	241.07	24.06	0.30%	17.60%
Hoya Corp Shs	Health Care	\$8,865,731	2.2%	(0.96)%	43.46	33.22	0.59%	15.10%
Airbus Se Shs	Industrials	\$8,649,153	2.1%	19.76%	146.08	24.26	1.05%	1.76%
London Stk Exchange Grp Plc Ord	Financials	\$8,620,266	2.1%	1.40%	64.21	25.56	121.18%	13.00%
Shin Etsu Chemical Co Ltd Shs	Materials	\$8,613,644	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	\$11,765,503	2.9%	46.77%	123.31	40.72	0.93%	21.44%
Safran Sa	Industrials	\$8,145,647	2.0%	28.79%	96.93	28.64	1.05%	34.67%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$15,165,723	3.7%	28.18%	385.04	41.98	0.68%	19.60%
Mitsui & Co Ltd Ord	Industrials	\$3,413,434	0.8%	26.45%	71.07	11.69	2.39%	39.74%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$15,015,975	3.7%	26.06%	631.29	19.14	1.67%	11.74%
Ferrari N V	Consumer Discretionary	\$5,343,317	1.3%	25.94%	79.72	50.57	0.45%	24.30%
Tokio Marine Holdings Inc Shs	Financials	\$4,294,523	1.1%	25.73%	61.47	14.36	2.35%	27.93%
Crh Plc Ord	Materials	\$5,894,146	1.5%	24.11%	59.38	15.79	1.66%	10.24%
Moncler (Otc)	Consumer Discretionary	\$4,628,333	1.1%	21.43%	20.53	27.91	1.66%	6.20%
Bae Sys Plc Ord	Industrials	\$5,183,481	1.3%	20.42%	51.62	19.38	222.27%	11.63%

# **10 Worst Performers**

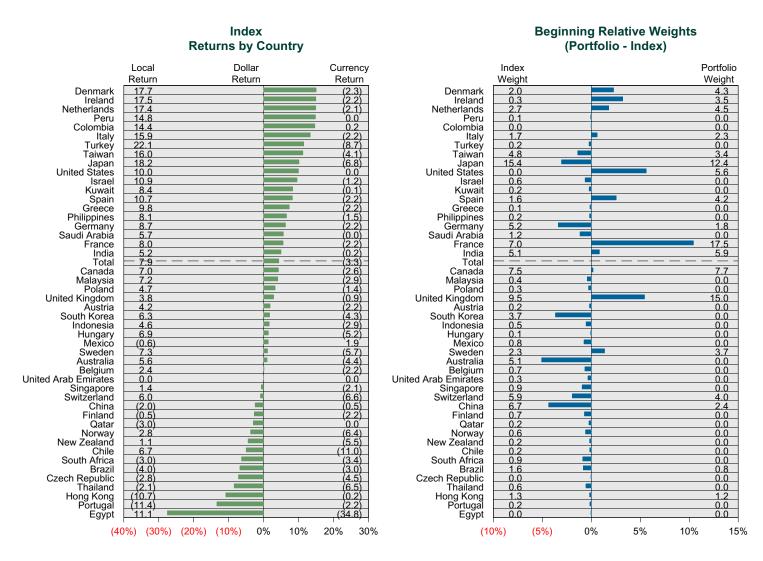
Stock	Sector	Ending Market Value	Percent of Portfolio	Qtrly Return	Market Capital	Price/ Forecasted Earnings Ratio	Dividend Yield	Forecasted Growth in Earnings
Lululemon Athletica Inc	Consumer Discretionary	\$5,817,950	1.4%	(24.74)%	47.23	27.12	0.00%	12.30%
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$2,833,012	0.7%	(22.08)%	154.45	12.28	0.00%	26.58%
Infineon Technologies Ag Namens Akt	Information Technology	\$5,442,729	1.3%	(17.74)%	44.32	13.36	1.11%	4.24%
Hdfc Bank Ltd Adr Reps 3 Shs	Financials	\$6,539,703	1.6%	(16.53)%	131.89	15.23	1.32%	14.30%
Stmicroelectronics N V Shs	Information Technology	\$6,752,315	1.7%	(13.64)%	39.29	12.81	0.56%	42.14%
Amadeus It Group S A Ord Shs	Consumer Discretionary	\$6,757,444	1.7%	(9.93)%	28.92	19.96	1.24%	13.68%
Dsv As Shs	Industrials	\$5,443,077	1.3%	(6.91)%	35.58	19.16	0.62%	6.50%
Spirax Sarco Engineering Plc Shs New	Industrials	\$3,382,506	0.8%	(5.20)%	9.37	29.50	159.20%	3.20%
Loreal	Consumer Staples	\$7,371,426	1.8%	(4.83)%	253.33	33.19	1.50%	8.30%
Mercadolibre Inc	Consumer Discretionary	\$6,120,414	1.5%	(3.79)%	76.65	40.50	0.00%	45.25%

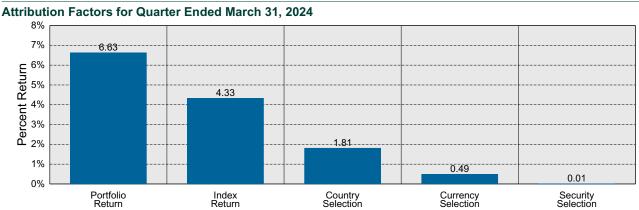


# William Blair vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.





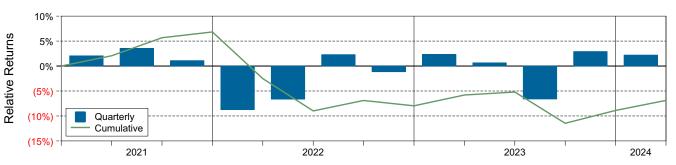


# William Blair vs MSCI ACWI xUS IMI Attribution for Three years Ended March 31, 2024

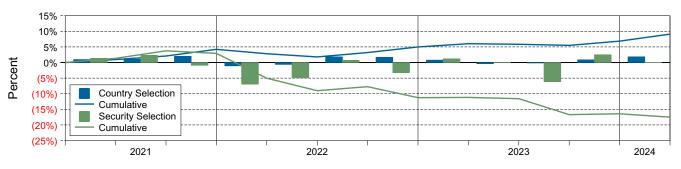
#### **Cumulative International Attribution**

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.

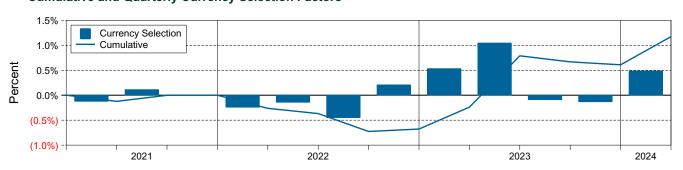
# Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



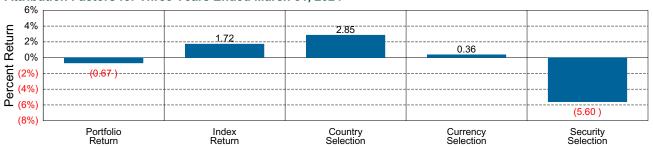
# **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **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.

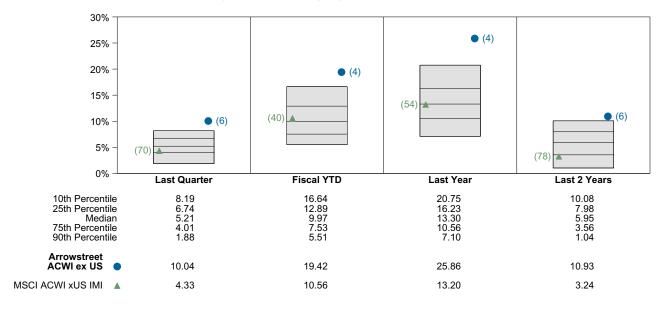
#### **Quarterly Summary and Highlights**

- Arrowstreet ACWI ex US's portfolio posted a 10.04% 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 4 percentile for the last year.
- Arrowstreet ACWI ex US's portfolio outperformed the MSCI ACWI xUS IMI by 5.72% for the quarter and outperformed the MSCI ACWI xUS IMI for the year by 12.66%.

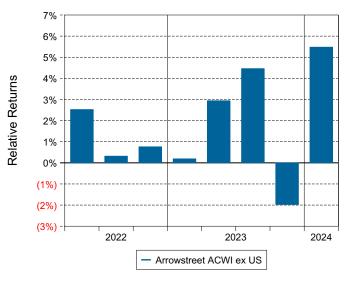
#### **Quarterly Asset Growth**

Beginning Market Value	\$444,107,710
Net New Investment	\$-175,546
Investment Gains/(Losses)	\$44,785,697
Ending Market Value	\$488.717.860

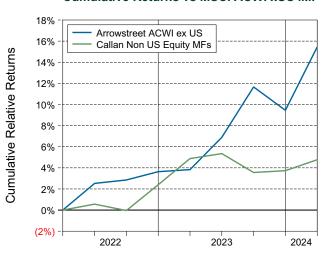
#### Performance vs Callan Non US Equity Mutual Funds (Net)



#### Relative Return vs MSCI ACWI xUS IMI



# **Cumulative Returns vs MSCI ACWI xUS IMI**



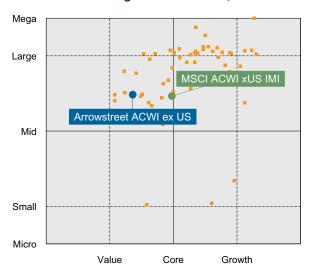


# **Current Holdings Based Style Analysis** Arrowstreet ACWI ex US As of March 31, 2024

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.

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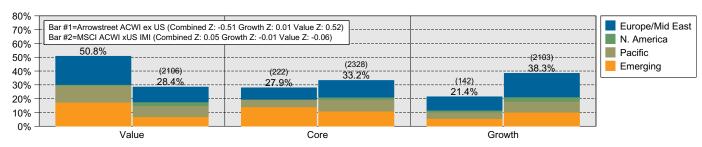
# Style Map vs Callan Non US Equity MFs Holdings as of March 31, 2024



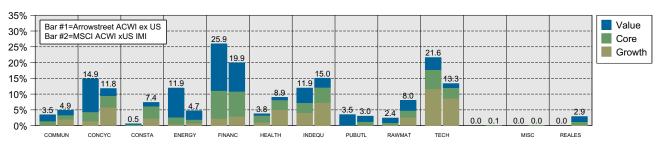
# **Style Exposure Matrix** Holdings as of March 31, 2024

	Value	Core	Growth	Total
	28.4% (2106)	33.2% (2328)	38.3% (2103)	100.0% (6537)
Total	50.8% (432)	27.9% (222)	21.4% (142)	100.0% (796)
	6.9% (1024)	10.9% (1192)	10.1% (1104)	27.9% (3320)
Emerging	17.570 (194)	14.0 % (107)	3.0 % (55)	30.9 /  (354)
	17.3% (194)	14.0% (107)	5.6% (53)	36.9% (354)
Pacific	7.9% (526)	8.4% (517)	7.9% (463)	24.2% (1506)
Pacific	12.2% (133)	5.3% (64)	4.6% (38)	22.2% (235)
	2.8% (90)	1.7% (124)	3.2% (95)	7.7% (309)
N. America	, ,	, ,	, ,	, ,
	0.6% (7)	0.2% (6)	1.4% (7)	2.1% (20)
Europe/ Mid East	10.9% (466)	12.2% (495)	17.2% (441)	40.3% (1402)
- ,	20.6% (98)	8.4% (45)	9.8% (44)	38.8% (187)

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



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

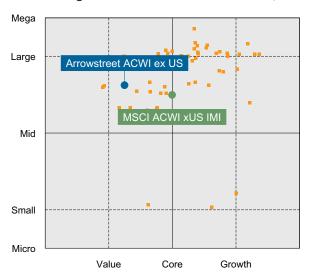




# **Historical Holdings Based Style Analysis** Arrowstreet ACWI ex US For Two Years Ended March 31, 2024

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.

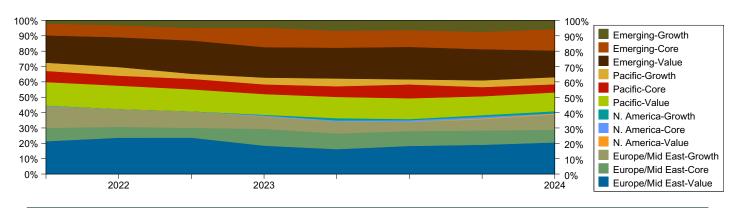
# Average Style Map vs Callan Non US Equity MFs Holdings for Two Years Ended March 31, 2024



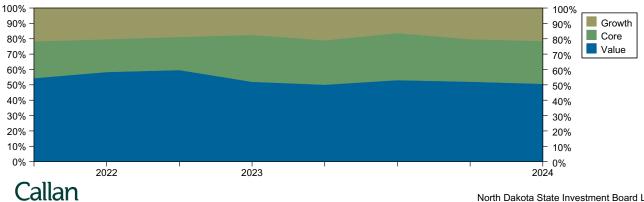
#### **Average Style Exposure Matrix** Holdings for Two Years Ended March 31, 2024

	<b>G</b>			
	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)	24.0% (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

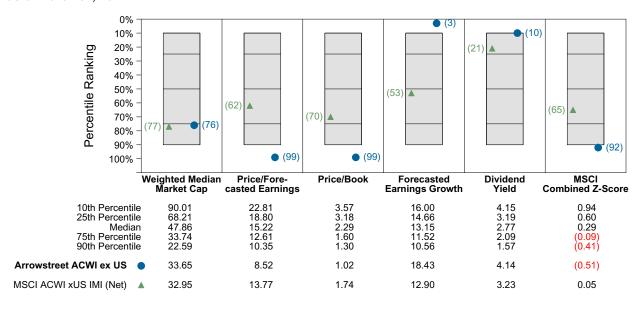


# **Arrowstreet ACWI ex US Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

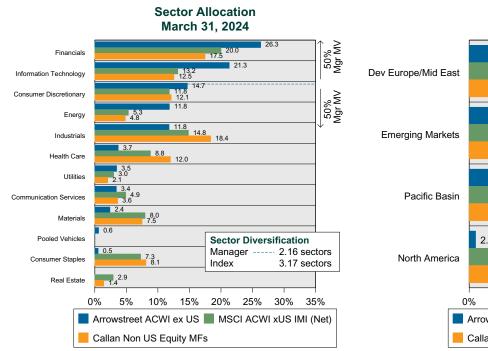
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

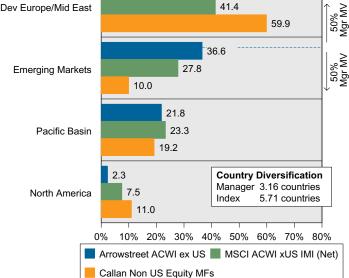
# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non US Equity Mutual Funds as of March 31, 2024



#### **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.





Regional Allocation

March 31, 2024

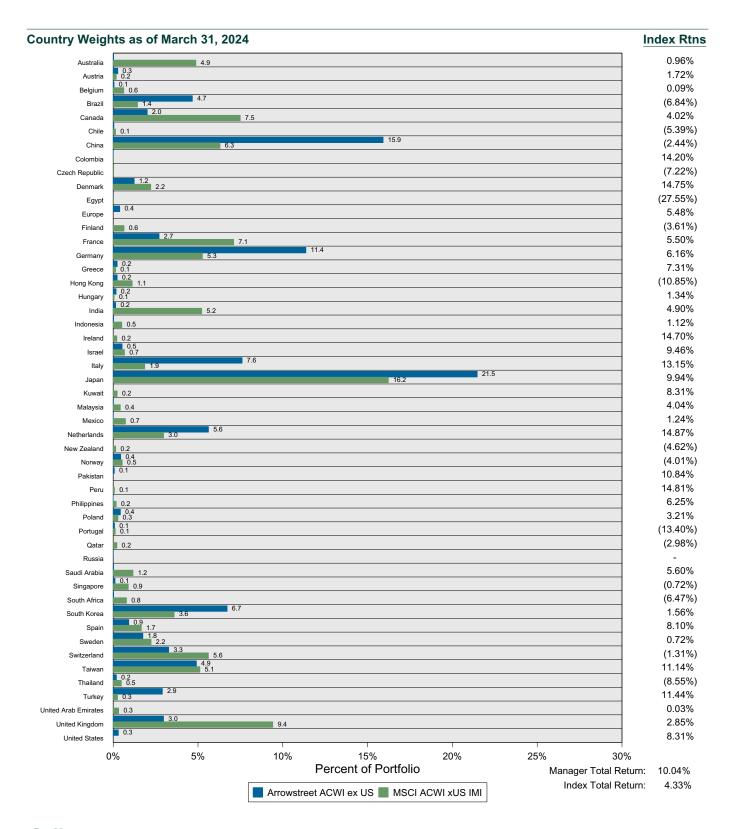
39.2



# **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

		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	\$13,207,546	2.7%	28.18%	385.04	41.98	0.68%	19.60%
Stellantis N.V Shs	Consumer Discretionary	\$12,932,450	2.6%	21.78%	90.06	4.75	5.88%	5.50%
Samsung Electronics Co Ltd Ord	Information Technology	\$11,820,974	2.4%	0.88%	365.39	16.40	1.75%	54.00%
Tokyo Electric Power Co	Utilities	\$8,117,914	1.7%	19.07%	10.02	5.61	0.00%	(7.49)%
Bmw Stamm	Consumer Discretionary	\$7,444,291	1.5%	3.88%	67.06	6.53	5.60%	(16.06)%
Daimler Ag Reg Shs	Consumer Discretionary	\$7,371,698	1.5%	15.71%	85.61	6.17	7.15%	(1.90)%
Volkswagen Vorzug	Consumer Discretionary	\$7,167,309	1.5%	7.41%	27.34	3.92	7.38%	9.69%
Intesa Sanpaolo Spa Shs	Financials	\$6,996,768	1.4%	24.38%	66.40	7.38	8.81%	29.10%
Sap Se Shs	Information Technology	\$6,098,880	1.2%	26.43%	239.51	34.25	1.22%	22.20%
Tokyo Electron	Information Technology	\$5,823,477	1.2%	46.77%	123.31	40.72	0.93%	21.44%
•	• •							

# **10 Best Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Arm Hdg.Amer.Depy.Shs. 1:1	Information Technology	\$51,768	0.0%	66.34%	128.50	81.53	0.00%	44.70%
Mitsubishi Heavy Industries Shs	Industrials	\$5,598,379	1.1%	64.69%	32.29	19.10	1.10%	30.56%
Oil India	Energy	\$30,567	0.0%	63.44%	7.80	8.63	2.91%	42.79%
Sdic Xinji Energy 'a'	Energy	\$265,526	0.1%	62.08%	3.12	9.17	1.26%	35.83%
Samsung Techwin Co	Industrials	\$339,877	0.1%	59.41%	7.69	16.79	0.88%	5.00%
Doosan Corp	Industrials	\$492,532	0.1%	58.42%	1.91	9.71	1.29%	1.30%
Screen Hldgs Co Ltd Shs New	Information Technology	\$369,023	0.1%	56.32%	13.40	26.00	1.01%	16.40%
Socionext	Information Technology	\$128,576	0.0%	55.15%	5.00	29.84	1.08%	-
Celestica Sv	Information Technology	\$1,089,016	0.2%	52.80%	5.35	15.10	0.00%	38.78%
Disco Corp	Information Technology	\$509,421	0.1%	52.79%	40.95	51.31	0.45%	14.40%

# **10 Worst Performers**

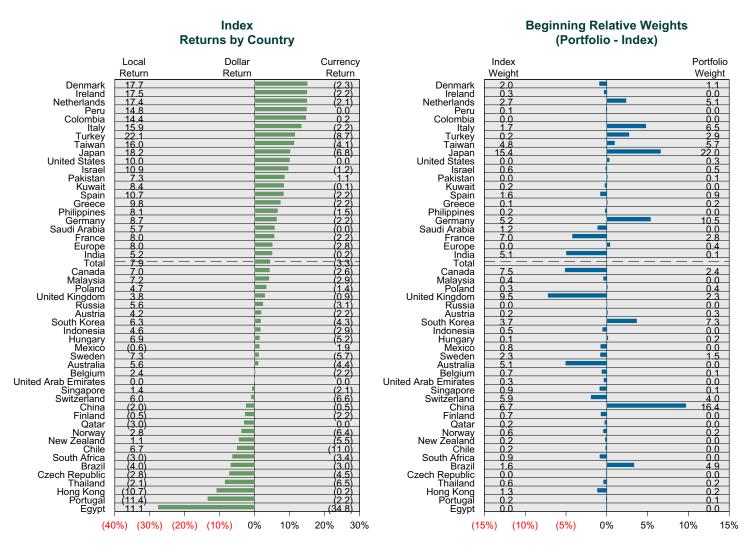
		Price/						
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$9,192	0.0%	(34.66)%	2.05	5.59	3.78%	12.38%
Orient Res. Gp.	Energy	\$8,800	0.0%	(34.29)%	1.86	3.43	0.00%	55.78%
X-Fab Silicon Foundries	Information Technology	\$7,014	0.0%	(32.63)%	0.99	7.44	0.00%	-
Tong Ren Tang Technologies C Ord	Health Care	\$3,099	0.0%	(27.08)%	0.39	8.64	3.54%	95.97%
Cosco Pacific Ltd Ord	Industrials	\$6,511	0.0%	(25.23)%	1.96	5.38	5.86%	(3.28)%
Rwe Ag Neu Essen Germany Act A	Utilities	\$541,823	0.1%	(25.03)%	25.31	12.05	3.17%	(21.90)%
Hwa Shin Mnfg.	Consumer Discretionary	\$106,724	0.0%	(24.24)%	0.28	4.01	1.38%	(41.49)%
Joyy Inc Ads Repstg Com A	Communication Services	\$15,586	0.0%	(24.04)%	1.37	7.88	3.97%	(5.85)%
Bitfarms	Information Technology	\$17,926	0.0%	(23.82)%	0.74	15.86	0.00%	-
Ap Moller Maersk A	Industrials	\$54,826	0.0%	(23.77)%	12.93	(19.67)	5.83%	-

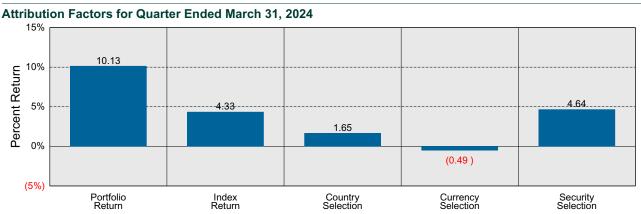


# Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for Quarter Ended March 31, 2024

#### **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.





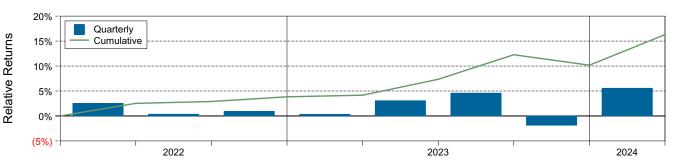


# Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for Two years Ended March 31, 2024

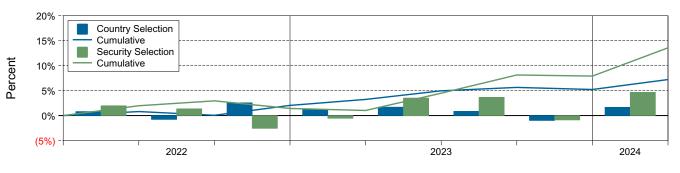
#### **Cumulative International Attribution**

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.

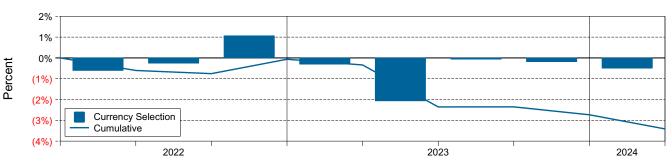
# Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for Two 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.

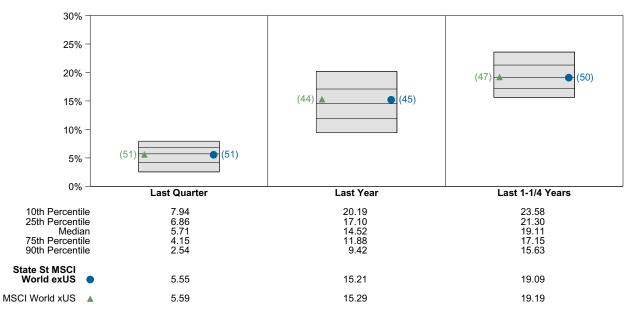
#### **Quarterly Summary and Highlights**

- State St MSCI World exUS's portfolio posted a 5.55% return for the quarter placing it in the 51 percentile of the Callan Non-US Equity group for the quarter and in the 45 percentile for the last year.
- State St MSCI World exUS's portfolio underperformed the MSCI World xUS by 0.04% for the guarter and underperformed the MSCI World xUS for the year by 0.08%.

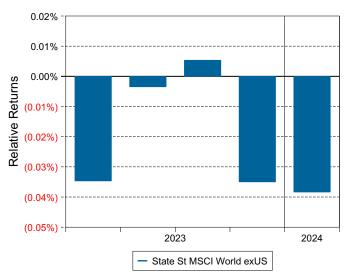
#### **Quarterly Asset Growth**

Beginning Market Value	\$889,845,129
Net New Investment	\$42,971,571
Investment Gains/(Losses)	\$51,373,109
Ending Market Value	\$984,189,809

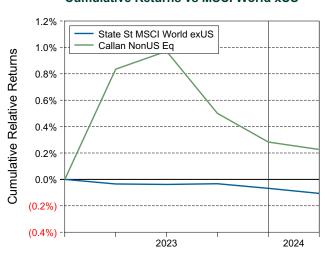
# Performance vs Callan Non-US Equity (Gross)



#### Relative Return vs MSCI World xUS



# **Cumulative Returns vs MSCI World xUS**

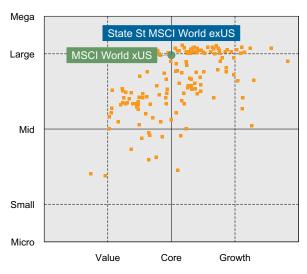




# **Current Holdings Based Style Analysis** State St MSCI World exUS As of March 31, 2024

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.

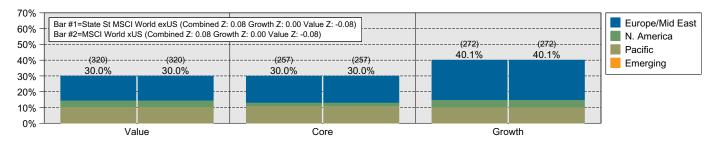
# Style Map vs Callan NonUS Eq Holdings as of March 31, 2024



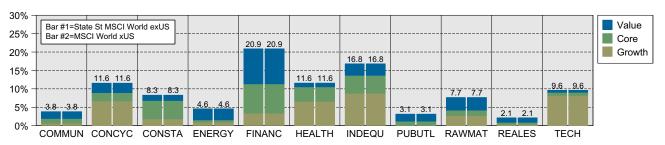
# **Style Exposure Matrix** Holdings as of March 31, 2024

	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



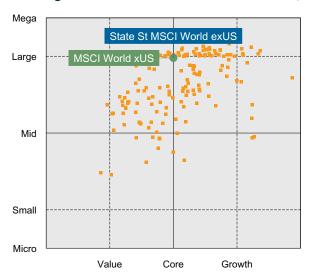


# **Historical Holdings Based Style Analysis** State St MSCI World exUS For One and 1/4 Years Ended March 31, 2024

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.

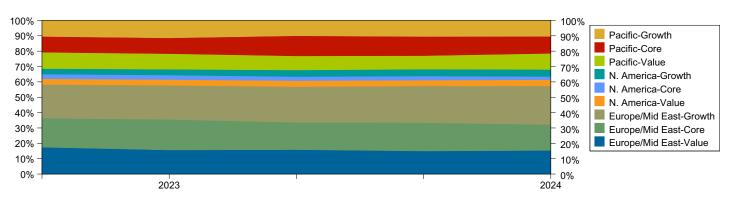
# Average Style Map vs Callan NonUS Eq Holdings for One and 1/4 Years Ended March 31, 2024

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

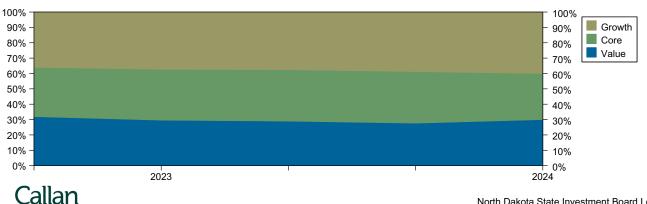




# State St MSCI World exUS Historical Region/Style Exposures



State St MSCI World exUS Historical Style Only Exposures

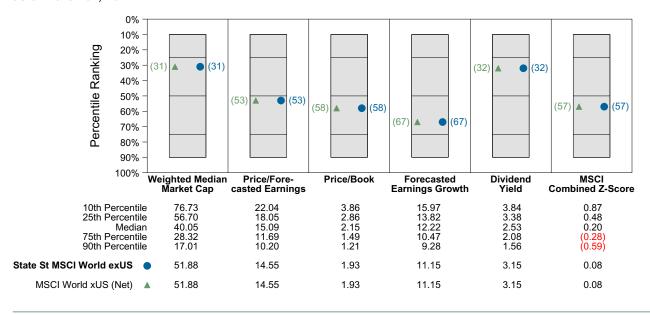


# State St MSCI World exUS **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

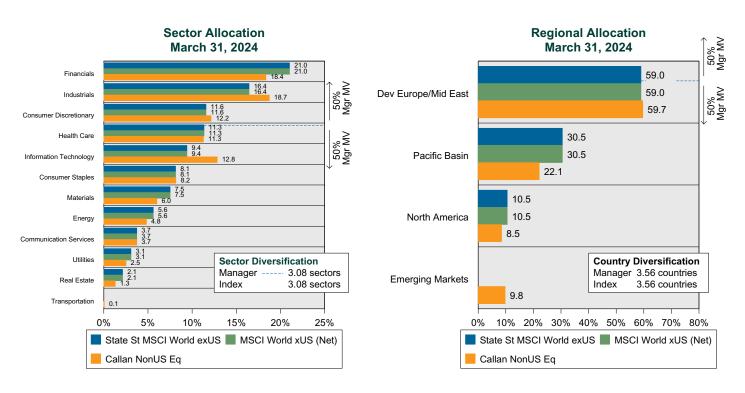
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **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.

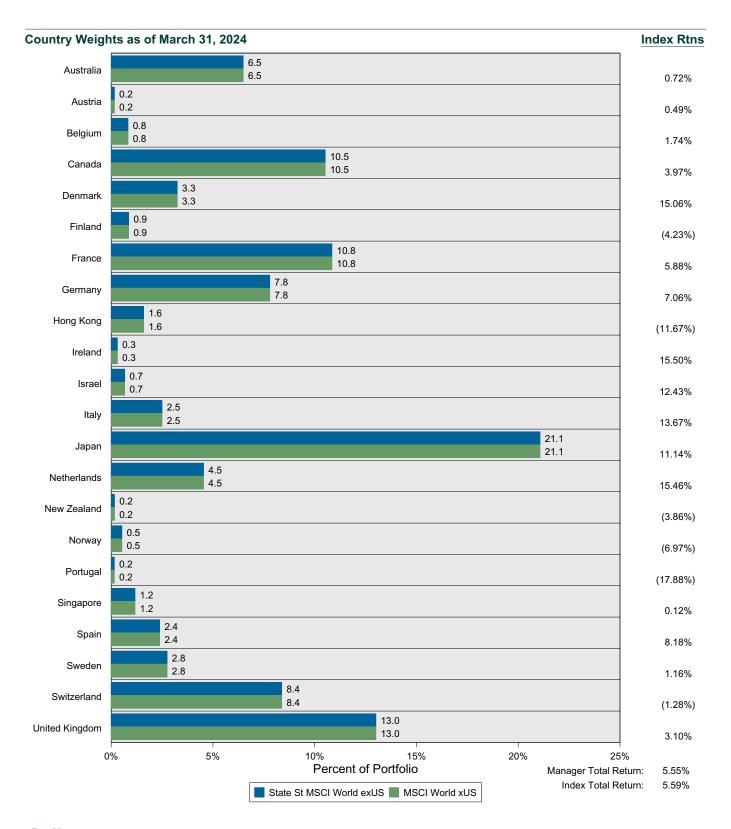




# **Country Allocation** State St MSCI World exUS VS MSCI World xUS (Net)

#### **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	\$21,672,988	2.2%	24.24%	438.34	35.58	1.07%	19.15%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$20,217,445	2.1%	28.18%	385.04	41.98	0.68%	19.60%
Nestle S A Shs Nom New	Consumer Staples	\$14,772,581	1.5%	(8.24)%	283.84	18.82	3.13%	6.10%
Toyota Motor Corp	Consumer Discretionary	\$13,828,875	1.4%	36.36%	408.78	11.08	1.71%	29.00%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$12,939,823	1.3%	11.11%	451.47	25.20	1.56%	7.03%
Astrazeneca Plc Ord	Health Care	\$10,882,859	1.1%	1.37%	209.11	16.04	2.15%	10.30%
Sap Se Shs	Information Technology	\$10,592,215	1.1%	26.43%	239.51	34.25	1.22%	22.20%
Novartis	Health Care	\$10,348,212	1.1%	(0.19)%	212.43	13.43	3.78%	8.20%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$9,325,077	0.9%	(8.59)%	179.17	12.45	4.18%	3.45%
Hsbc Holdings (Gb)	Financials	\$7,796,615	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
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Industrials	\$1,275,629	0.1%	76.47%	24.46	22.57	1.10%	37.90%
Industrials	\$1,596,468	0.2%	64.69%	32.29	19.10	1.10%	30.56%
Industrials	\$447,314	0.0%	57.32%	10.11	19.54	1.17%	12.00%
Information Technology	\$557,991	0.1%	56.32%	13.40	26.00	1.01%	16.40%
Information Technology	\$1,811,408	0.2%	52.79%	40.95	51.31	0.45%	14.40%
Industrials	\$529,581	0.1%	52.40%	14.54	15.23	1.20%	15.98%
Industrials	\$316,282	0.0%	50.76%	12.15	29.07	1.60%	15.80%
Industrials	\$371,064	0.0%	47.63%	11.88	29.12	0.67%	25.60%
Information Technology	\$6,417,833	0.7%	46.77%	123.31	40.72	0.93%	21.44%
Industrials	\$415,910	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         \$1,275,629           Industrials         \$1,596,468           Industrials         \$447,314           Information Technology         \$557,991           Information Technology         \$1,811,408           Industrials         \$529,581           Industrials         \$316,282           Industrials         \$371,064           Information Technology         \$6,417,833	Sector         Market Value         of Portfolio           Industrials         \$1,275,629         0.1%           Industrials         \$1,596,468         0.2%           Industrials         \$447,314         0.0%           Information Technology         \$557,991         0.1%           Information Technology         \$1,811,408         0.2%           Industrials         \$529,581         0.1%           Industrials         \$316,282         0.0%           Industrials         \$371,064         0.0%           Information Technology         \$6,417,833         0.7%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Industrials         \$1,275,629         0.1%         76.47%           Industrials         \$1,596,468         0.2%         64.69%           Industrials         \$447,314         0.0%         57.32%           Information Technology         \$557,991         0.1%         56.32%           Information Technology         \$1,811,408         0.2%         52.79%           Industrials         \$529,581         0.1%         52.40%           Industrials         \$316,282         0.0%         50.76%           Industrials         \$371,064         0.0%         47.63%           Information Technology         \$6,417,833         0.7%         46.77%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Industrials         \$1,275,629         0.1%         76.47%         24.46           Industrials         \$1,596,468         0.2%         64.69%         32.29           Industrials         \$447,314         0.0%         57.32%         10.11           Information Technology         \$557,991         0.1%         56.32%         13.40           Information Technology         \$1,811,408         0.2%         52.79%         40.95           Industrials         \$529,581         0.1%         52.40%         14.54           Industrials         \$316,282         0.0%         50.76%         12.15           Industrials         \$371,064         0.0%         47.63%         11.88           Information Technology         \$6,417,833         0.7%         46.77%         123.31	Sector         Value         Portfolio Portfolio         Return         Capital Capital Portfolio         Return         Forecasted Earnings Portfolio           Industrials         \$1,275,629         0.1%         76.47%         24.46         22.57           Industrials         \$1,596,468         0.2%         64.69%         32.29         19.10           Industrials         \$447,314         0.0%         57.32%         10.11         19.54           Information Technology         \$557,991         0.1%         56.32%         13.40         26.00           Information Technology         \$1,811,408         0.2%         52.79%         40.95         51.31           Industrials         \$529,581         0.1%         52.40%         14.54         15.23           Industrials         \$316,282         0.0%         50.76%         12.15         29.07           Industrials         \$371,064         0.0%         47.63%         11.88         29.12           Information Technology         \$6,417,833         0.7%         46.77%         123.31         40.72	Sector         Value         Portfolio         Return         Capital         Ratio         Yield           Industrials         \$1,275,629         0.1%         76.47%         24.46         22.57         1.10%           Industrials         \$1,596,468         0.2%         64.69%         32.29         19.10         1.10%           Industrials         \$447,314         0.0%         57.32%         10.11         19.54         1.17%           Information Technology         \$557,991         0.1%         56.32%         13.40         26.00         1.01%           Information Technology         \$1,811,408         0.2%         52.79%         40.95         51.31         0.45%           Industrials         \$529,581         0.1%         52.40%         14.54         15.23         1.20%           Industrials         \$316,282         0.0%         50.76%         12.15         29.07         1.60%           Industrials         \$371,064         0.0%         47.63%         11.88         29.12         0.67%           Information Technology         \$6,417,833         0.7%         46.77%         123.31         40.72         0.93%

# **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
Grifols Sa Barcelona Acciones Por De	Health Care	\$139,802	0.0%	(47.25)%	3.84	8.53	6.33%	2.43%
Koninklijke Dsm NV Shs	Materials	\$1,101,798	0.1%	(43.93)%	0.29	-	6.35%	(6.68)%
Ocado Group Plc W/I	Consumer Staples	\$173,550	0.0%	(40.54)%	4.76	(12.29)	0.00%	23.60%
Sembcorp Marine Ltd Shs	Industrials	\$135,127	0.0%	(34.56)%	3.99	19.67	0.00%	(60.02)%
Edp Renovaveis	Utilities	\$216,617	0.0%	(33.79)%	13.87	22.43	2.11%	18.05%
Teleperformance Shs	Industrials	\$289,111	0.0%	(33.31)%	6.17	5.85	4.27%	8.12%
St James S Place Cap Plc New Ord	Financials	\$167,541	0.0%	(32.67)%	3.22	6.71	512.83%	(1.50)%
Nibe Industrier Ab Markaryd Shs B	Industrials	\$387,716	0.0%	(30.05)%	8.76	24.48	1.24%	(3.90)%
Worldline	Financials	\$155,210	0.0%	(28.37)%	3.51	5.52	0.00%	11.29%
Z Hldgs Corp Shs	Communication Services	\$356,245	0.0%	(26.70)%	19.56	22.07	1.44%	6.91%

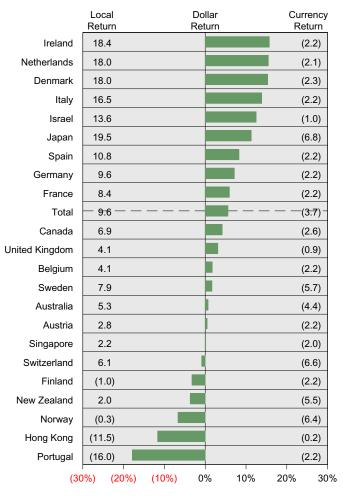


# State St MSCI World exUS vs MSCI World xUS Attribution for Quarter Ended March 31, 2024

#### **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.

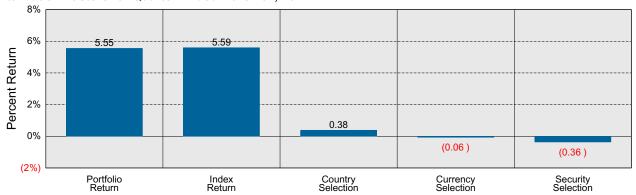




# **Beginning Relative Weights** (Portfolio - Index)

	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%)	(0.5%)	0.0%	0.5%	1.0%

#### Attribution Factors for Quarter Ended March 31, 2024



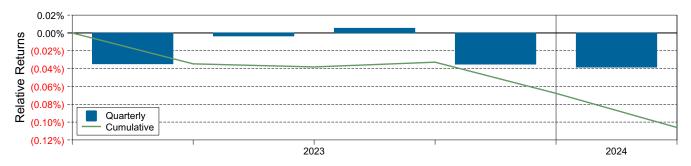


# State St MSCI World exUS vs MSCI World xUS Attribution for One and One-Quarter years Ended March 31, 2024

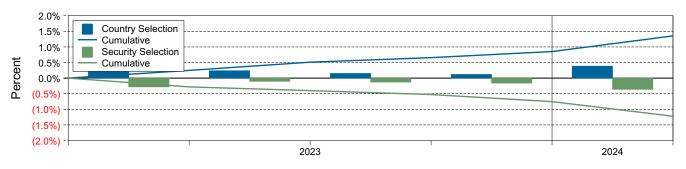
#### **Cumulative International Attribution**

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.

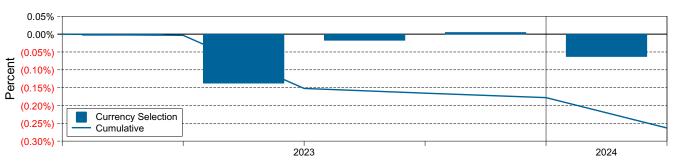
#### Cumulative and Quarterly Return vs MSCI World xUS



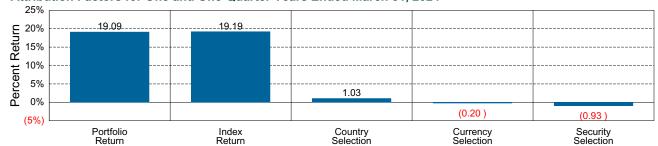
#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for One and One-Quarter Years Ended March 31, 2024





# 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.

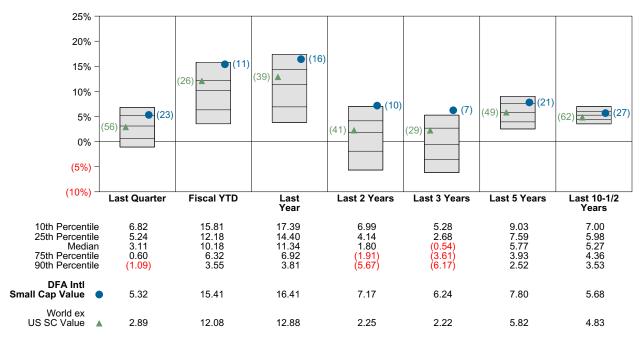
#### **Quarterly Summary and Highlights**

- 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 16 percentile for the last year.
- DFA Intl Small Cap Value's portfolio outperformed the World ex US SC Value by 2.42% for the quarter and outperformed the World ex US SC Value for the year by 3.53%.

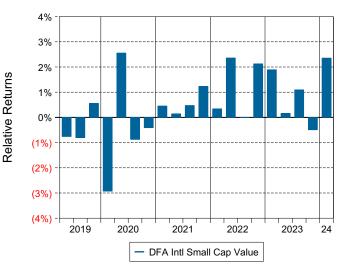
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$55,938,096
Net New Investment	\$3,655,538
Investment Gains/(Losses)	\$3,176,260
Ending Market Value	\$62.769.894

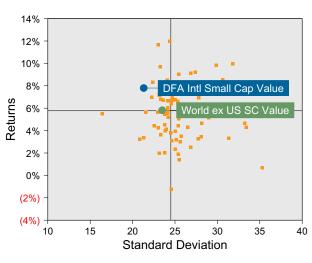
# Performance vs Callan International Small Cap Mut Funds (Net)



# Relative Return vs World ex US SC Value



# Callan International Small Cap Mut Funds (Net) Annualized Five Year Risk vs Return



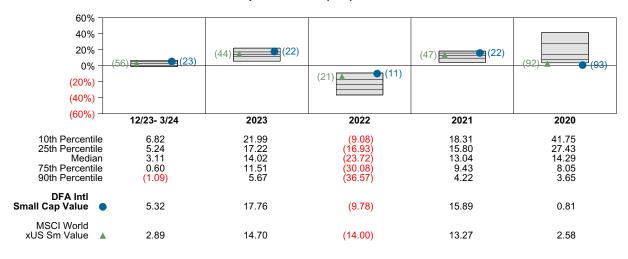


# **DFA Intl Small Cap Value Return Analysis Summary**

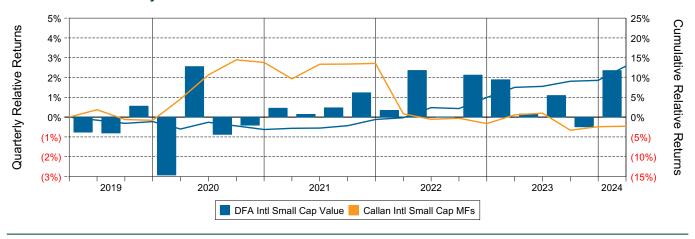
#### **Return Analysis**

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.

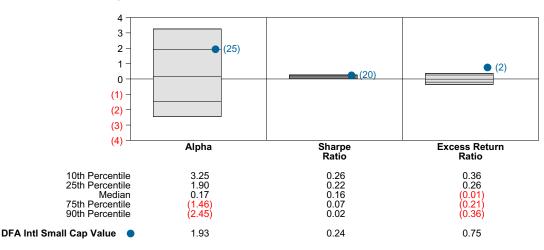
#### Performance vs Callan International Small Cap Mut Funds (Net)



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



Risk Adjusted Return Measures vs MSCI World xUS Sm Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



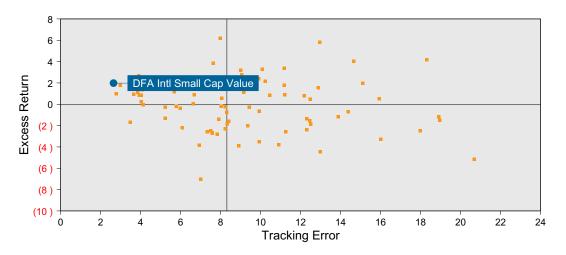


# **DFA Intl Small Cap Value Risk Analysis Summary**

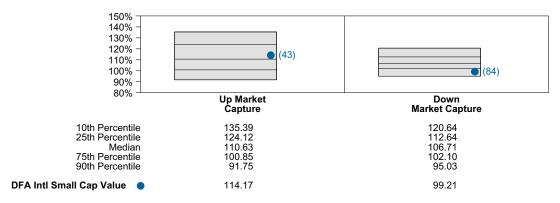
#### Risk Analysis

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.

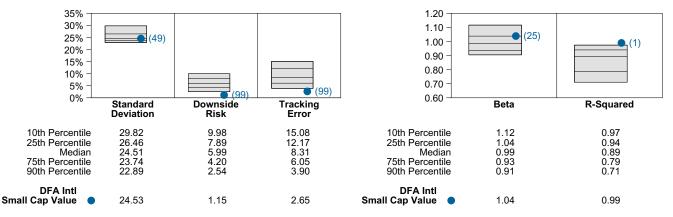
# Risk Analysis vs Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



Market Capture vs MSCI World xUS Small Value (Net) Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024



Risk Statistics Rankings vs MSCI World xUS Small Value (Net) Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended March 31, 2024

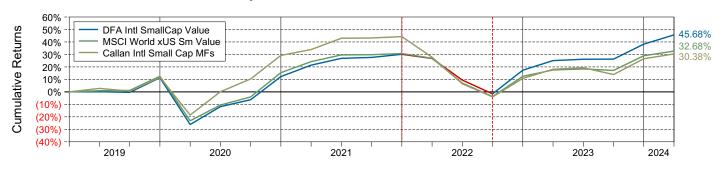




# DFA Intl SmallCap Value Drawdown Analysis for Five Years Ended March 31, 2024

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**

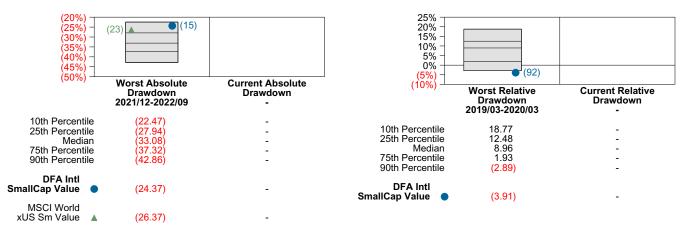


	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
DFA Intl SmallCap Value	(24.37)%	0.75	2021/12-2022/09	(26.37)%	(33.49)%	-	-	-	-	-
Recovery from Trough	40.47%	1.25	2022/09-2023/12	33.98%	31.85%	-	-	-	-	-
MSCI World xUS Sm Value	(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		

# Relative Cumulative Drawdown Analysis vs. MSCI World xUS Sm Value 20% 15% Callan Intl SmallCap Value Callan Intl Small Cap MFs 0% 0% (5%) 2019 2020 2021 2022 2023 2024

	Worst Relative Drawdown			Cu	irrent Re	lative Drawdown		
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
DFA Intl SmallCap 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

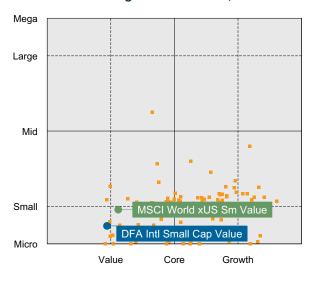




# **Current Holdings Based Style Analysis DFA Intl Small Cap Value** As of March 31, 2024

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.

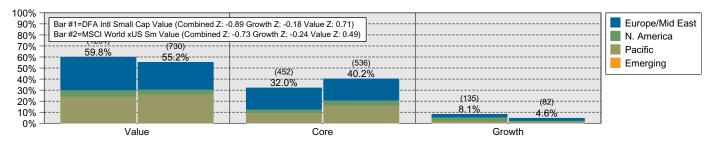
# Style Map vs Callan Intl Small Cap MFs Holdings as of March 31, 2024



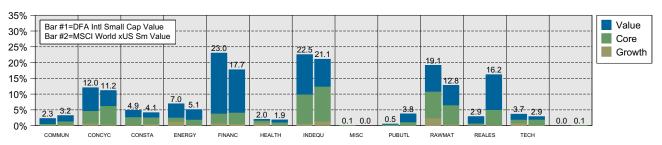
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	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)
Europe/ Mid East	24.5% (301)	19.4% (234)	2.1% (33)	46.0% (568)
Furanc/	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

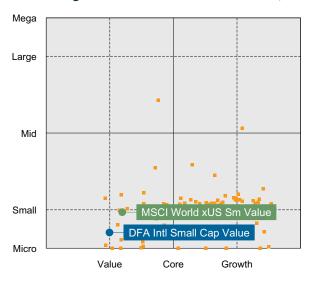




# **Historical Holdings Based Style Analysis DFA Intl Small Cap Value** For Three Years Ended March 31, 2024

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.

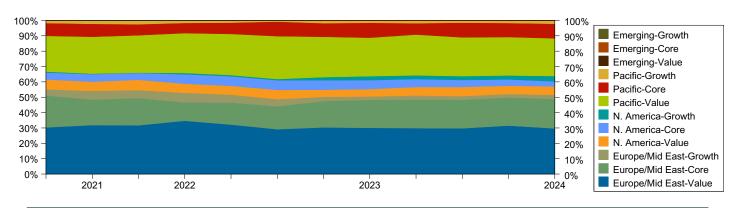
# Average Style Map vs Callan Intl Small Cap MFs Holdings for Three Years Ended March 31, 2024



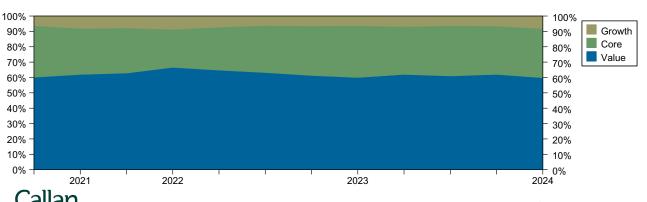
#### **Average Style Exposure Matrix** Holdings for Three Years Ended March 31, 2024

	31.0% (381)	17.2% (225)	3.8% (69)	<b>52.0</b> % (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)	12.5% (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**

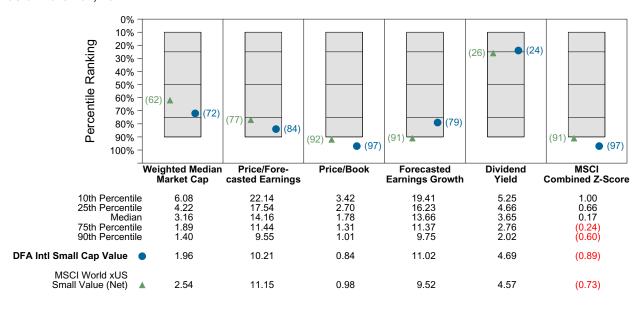


# **DFA Intl Small Cap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

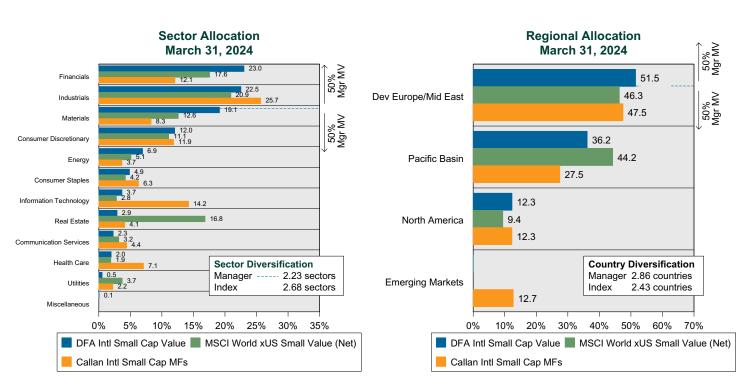
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **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.

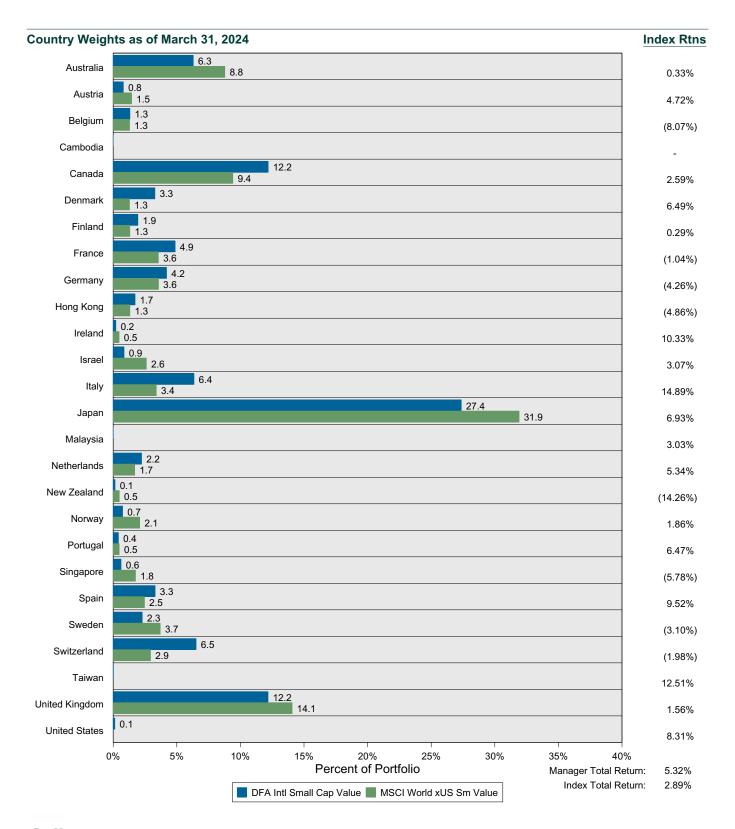




# **Country Allocation** DFA Intl Small Cap Value VS MSCI World xUS Small Value (Net)

#### **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 SmallCap Value** Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

Sector	Ending Market Value	Percent of	Qtrly	Market	Forecasted		Forecasted
Sector		of	Qtrlv	Market			
Sector	Value			wante	Earnings	Dividend	Growth in
	value	Portfolio	Return	Capital	Ratio	98 Dividend Yield 3.82% 1.20% 0.68% 0.00% 4.15% 260.13% 1.34% 9.01% 4.75%	Earnings
Financials	\$821,739	1.3%	27.81%	8.55	6.21	3.82%	14.68%
Industrials	\$717,289	1.1%	52.40%	14.54	15.23	1.20%	15.98%
Materials	\$521,671	0.8%	9.39%	5.86	25.27	0.68%	30.47%
Information Technology	\$487,552	0.8%	52.80%	5.35	15.10	0.00%	38.78%
Energy	\$478,006	0.8%	18.77%	5.08	6.07	4.15%	7.00%
Consumer Discretionary	\$472,893	0.8%	32.84%	5.30	12.96	260.13%	11.54%
Financials	\$472,320	0.8%	19.21%	5.42	7.31	1.34%	30.91%
Financials	\$471,979	0.8%	26.08%	10.09	6.76	9.01%	8.52%
Financials	\$467,713	0.7%	0.22%	7.32	14.28	4.75%	7.72%
Financials	\$426,790	0.7%	3.93%	10.36	8.29	6.36%	1.90%
	Industrials Materials Information Technology Energy Consumer Discretionary Financials Financials Financials	Industrials	Industrials	Industrials	Industrials         \$717,289         1.1%         52.40%         14.54           Materials         \$521,671         0.8%         9.39%         5.86           Information Technology         \$487,552         0.8%         52.80%         5.35           Energy         \$478,006         0.8%         18.77%         5.08           Consumer Discretionary         \$472,893         0.8%         32.84%         5.30           Financials         \$472,320         0.8%         19.21%         5.42           Financials         \$471,979         0.8%         26.08%         10.09           Financials         \$467,713         0.7%         0.22%         7.32	Industrials         \$717,289         1.1%         52.40%         14.54         15.23           Materials         \$521,671         0.8%         9.39%         5.86         25.27           Information Technology         \$487,552         0.8%         52.80%         5.35         15.10           Energy         \$478,006         0.8%         18.77%         5.08         6.07           Consumer Discretionary         \$472,893         0.8%         32.84%         5.30         12.96           Financials         \$472,320         0.8%         19.21%         5.42         7.31           Financials         \$471,979         0.8%         26.08%         10.09         6.76           Financials         \$467,713         0.7%         0.22%         7.32         14.28	Industrials         \$717,289         1.1%         52.40%         14.54         15.23         1.20%           Materials         \$521,671         0.8%         9.39%         5.86         25.27         0.68%           Information Technology         \$487,552         0.8%         52.80%         5.35         15.10         0.00%           Energy         \$478,006         0.8%         18.77%         5.08         6.07         4.15%           Consumer Discretionary         \$472,893         0.8%         32.84%         5.30         12.96         260.13%           Financials         \$472,320         0.8%         19.21%         5.42         7.31         1.34%           Financials         \$471,979         0.8%         26.08%         10.09         6.76         9.01%           Financials         \$467,713         0.7%         0.22%         7.32         14.28         4.75%

# **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted Growth in
		Market	of	Qtrly	Market	Earnings	Dividend	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Mitsui Engr & Shipbldg Co Lt Shs	Industrials	\$24,330	0.0%	153.06%	1.30	9.98	0.16%	20.15%
Cmc Markets	Financials	\$1,100	0.0%	105.26%	0.77	13.89	225.09%	5.84%
Chilled & Frozen Logis	Industrials	\$8,973	0.0%	99.69%	0.52	19.13	1.27%	4.51%
Midland Holdings Ltd Shs	Real Estate	\$1,151	0.0%	99.54%	0.09	17.86	0.00%	4.41%
Softlaw Corp.	Communication Services	\$13,733	0.0%	92.65%	0.44	28.41	0.00%	-
Calima Energy Ltd Shs New	Energy	\$269	0.0%	83.47%	0.05	1.38	0.00%	-
Dai-Ichi Kogyo Seiyaku	Materials	\$11,646	0.0%	76.53%	0.26	15.27	1.77%	(34.06)%
Alps Logistics Co	Industrials	\$21,385	0.0%	66.69%	0.69	28.29	1.49%	15.64%
Iveco Group Nv	Industrials	\$197,333	0.3%	66.05%	4.04	8.63	1.59%	30.45%
Dai-Dan	Industrials	\$40,863	0.1%	65.89%	0.76	15.71	2.91%	5.54%

# **10 Worst Performers**

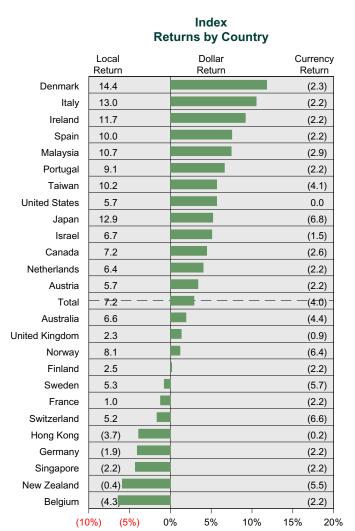
		Endina	Percent			Price/ Forecasted		Forecasted
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Ssr Mng Inc	Materials	\$54,457	0.1%	(59.61)%	0.90	45.98	6.28%	14.91%
Provident Financial Plc Shs	Financials	\$2,039	0.0%	(59.58)%	0.17	6.26	2884.74%	(9.39)%
Hellofresh	Consumer Staples	\$2,795	0.0%	(55.28)%	1.23	11.72	0.00%	37.07%
Ams Ag Shs New	Information Technology	\$38,778	0.1%	(53.69)%	1.16	14.18	0.00%	17.48%
Ferrexpo Plc London Shs	Materials	\$1,313	0.0%	(52.06)%	0.33	3.87	6.00%	11.69%
Close Brothers Group Inc Shs	Financials	\$76,488	0.1%	(47.81)%	0.80	5.23	16.10%	5.56%
Terracom	Energy	\$432	0.0%	(45.37)%	0.13	0.71	5624.14%	-
Nexity Shs	Real Estate	\$26,805	0.0%	(45.02)%	0.57	20.43	26.38%	18.35%
Petra Diamonds Limited Shs	Materials	\$153	0.0%	(42.40)%	0.10	5.26	0.00%	(60.12)%
Storskogen Group	Industrials	\$8,971	0.0%	(42.33)%	0.81	6.79	1.89%	51.61%



# DFA Intl SmallCap Value vs MSCI World xUS Sm Value Attribution for Quarter Ended March 31, 2024

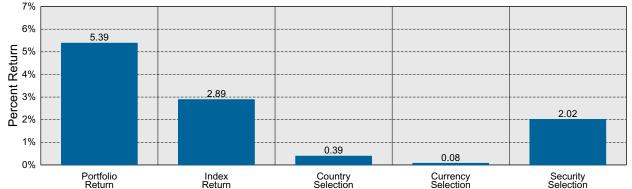
#### International Attribution

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.



#### **Beginning Relative Weights** (Portfolio - Index) Index Portfolio Weight Weight Denmark 1.3 3.2 Italy 3.0 5.8 Ireland 0.4 0.3 Spain 2.4 3.0 Malaysia 0.0 0.0 Portugal 0.5 0.4 Taiwan 0.0 0.0 **United States** 0.0 0.1 29.8 27.0 Japan Israel 2.6 8.0 Canada 9.2 12.0 1.7 2.1 Netherlands Austria 1.5 8.0 Total Australia 8.9 6.0 14.6 11.8 United Kingdom Norway 2.2 1.0 Finland 1.4 2.1 3.9 2.3 Sweden France 4.3 5.0 Switzerland 3.1 7.1 Hong Kong 1.4 1.8 Germany 3.8 4.5 Singapore 1.8 0.7 New Zealand 0.6 0.2 1.7 Belgium 1.6 (6%)(4%)(2%)0% 2% 4% 6%





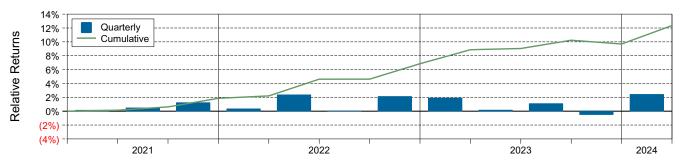


# DFA Intl SmallCap Value vs MSCI World xUS Sm Value Attribution for Three years Ended March 31, 2024

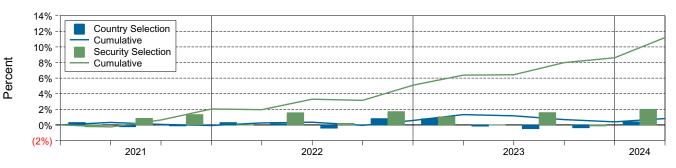
#### **Cumulative International Attribution**

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.

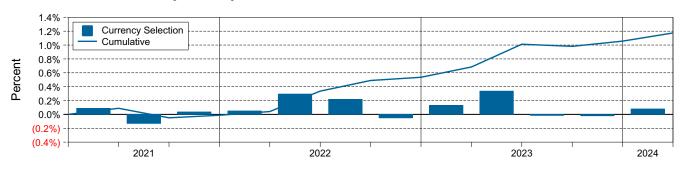
#### Cumulative and Quarterly Return vs MSCI World xUS Sm Value



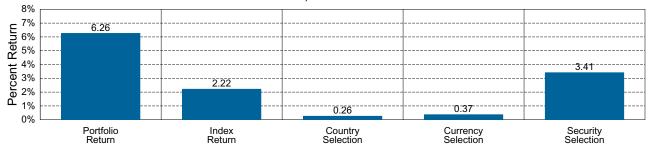
# **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for Three Years Ended March 31, 2024





# State St MSCI exUS Small Period Ended March 31, 2024

#### **Investment Philosophy**

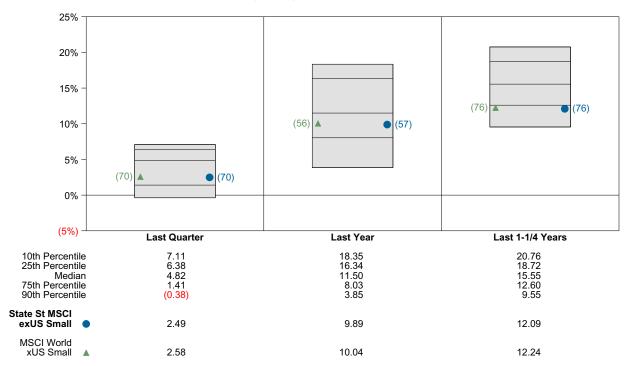
SSGA's objective is to provide the most cost-effective implementation with stringent risk control and tracking requirements.

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

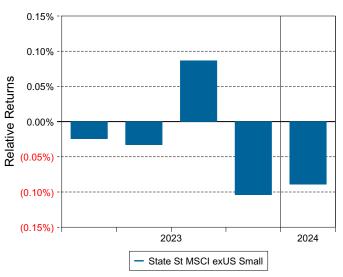
- State St MSCI exUS Small's portfolio posted a 2.49% return for the quarter placing it in the 70 percentile of the Callan International Small Cap group for the quarter and in the 57 percentile for the last year.
- State St MSCI exUS Small's portfolio underperformed the MSCI World xUS Small by 0.09% for the quarter and underperformed the MSCI World xUS Small for the year by 0.15%.

Beginning Market Value	\$83,997,110
Net New Investment	\$5,045,048
Investment Gains/(Losses)	\$2,358,699
Ending Market Value	\$91.400.857

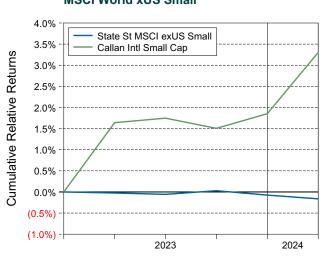
#### Performance vs Callan International Small Cap (Gross)



#### Relative Return vs MSCI World xUS Small



# Cumulative Returns vs MSCI World xUS Small

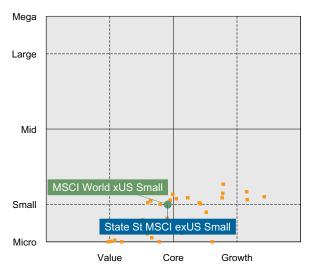




# **Current Holdings Based Style Analysis** State St MSCI exUS Small As of March 31, 2024

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.

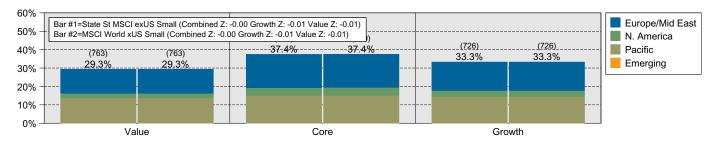
# Style Map vs Callan Intl Small Cap Holdings as of March 31, 2024



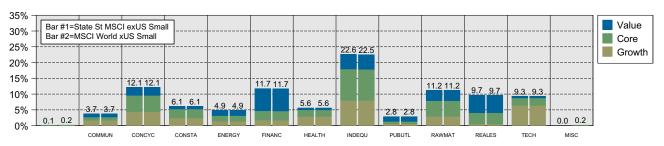
# **Style Exposure Matrix** Holdings as of March 31, 2024

	13.1% (311)	18.1% (362)	15.5% (303)	46.6% (976)
Europe/				
Mid East	13.1% (311)	17.9% (360)	15.5% (303)	46.5% (974)
	2.3% (60)	4.1% (96)	3.3% (58)	9.7% (214)
N. America	, ,	, ,	, ,	, ,
	2.3% (60)	4.2% (98)	3.3% (58)	9.8% (216)
	13.9% (392)	15.2% (392)	14.4% (364)	43.6% (1148)
Pacific				
	13.9% (392)	15.2% (392)	14.4% (364)	43.6% (1148)
	0.0% (0)	0.0% (0)	0.1% (1)	0.1% (1)
Emerging				
	0.0% (0)	0.0% (0)	0.1% (1)	0.1% (1)
	29.3% (763)	37.4% (850)	33.3% (726)	100.0% (2339)
Total				
	29.3% (763)	37.4% (850)	33.3% (726)	100.0% (2339)
	Value	Core	Growth	Total

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



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



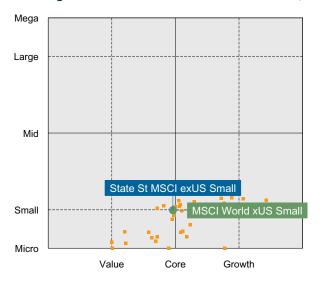


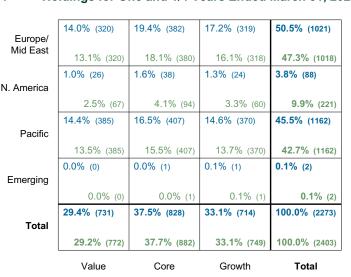
# **Historical Holdings Based Style Analysis** State St MSCI exUS Small For One and 1/4 Years Ended March 31, 2024

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.

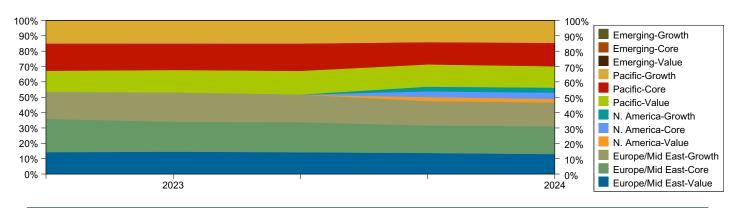
# Average Style Map vs Callan Intl Small Cap Holdings for One and 1/4 Years Ended March 31, 2024

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

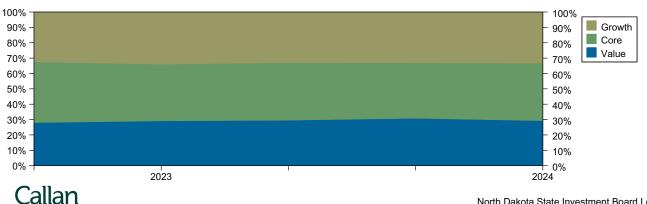




# State St MSCI exUS Small Historical Region/Style Exposures



State St MSCI exUS Small Historical Style Only Exposures

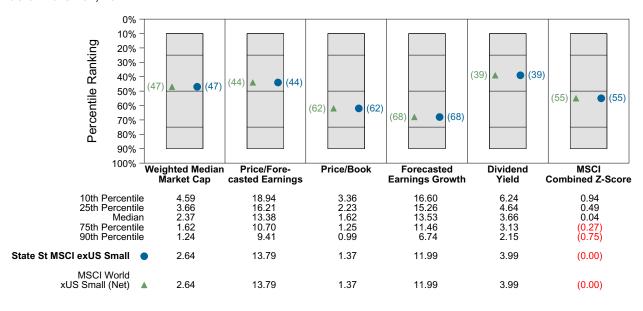


# State St MSCI exUS Small **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

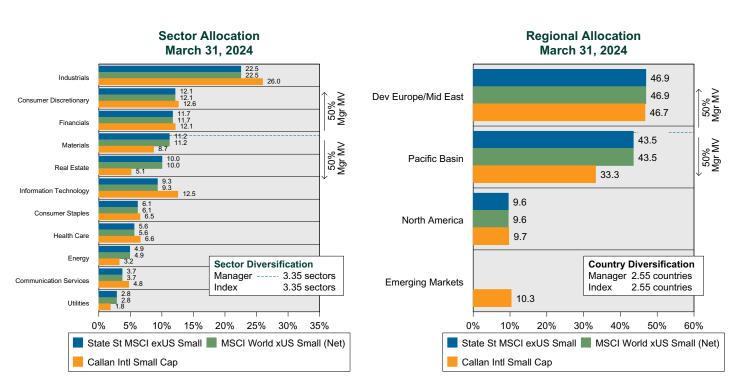
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap as of 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.

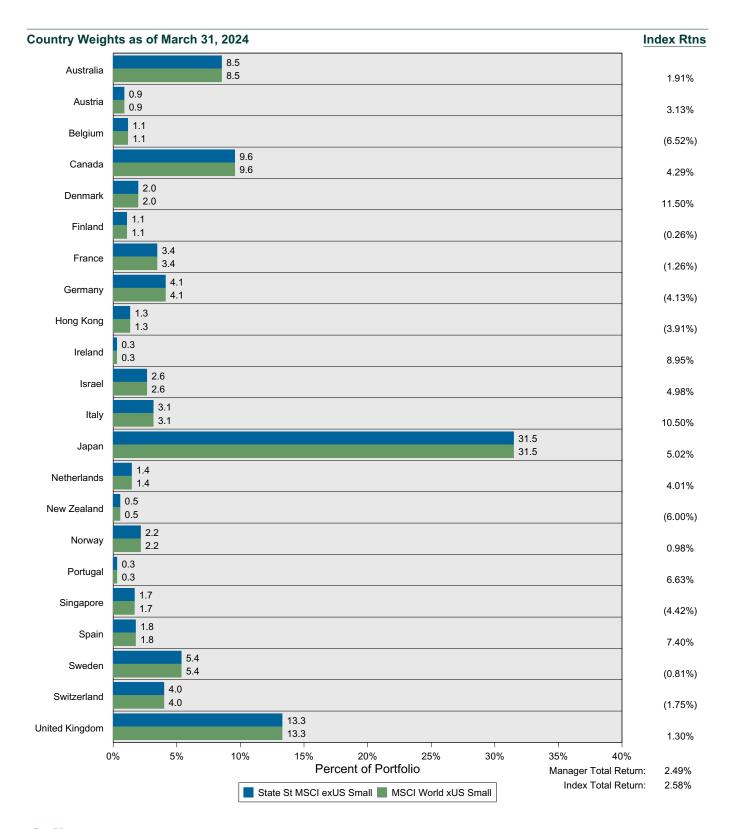




# **Country Allocation** State St MSCI exUS Small VS MSCI World xUS Small (Net)

# **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 exUS Small Top 10 Portfolio Holdings Characteristics as of March 31, 2024

# 10 Largest Holdings

						Price/		
		Ending	Percent			Forecasted		Forecasted Growth in
		Market	of	Qtrly	Market	Earnings	Dividend	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Banco De Sabadell Sa Shs	Financials	\$263,818	0.3%	27.81%	8.55	6.21	3.82%	14.68%
Ebara Corp	Industrials	\$259,675	0.3%	54.49%	8.42	20.45	1.66%	29.10%
Trelleborg Ab Akt B	Industrials	\$250,445	0.3%	6.90%	8.12	21.94	1.76%	16.70%
Asics Corp Shs	Consumer Discretionary	\$240,266	0.3%	54.11%	9.16	32.97	0.89%	81.54%
Intermediate Capital Group P Ord	Financials	\$232,705	0.3%	21.12%	7.54	13.21	379.71%	28.20%
Snc-Lavalin Group	Industrials	\$221,791	0.2%	26.59%	7.19	21.65	0.14%	(10.86)%
B&m European Value Retail S A	Consumer Discretionary	\$213,371	0.2%	0.23%	6.91	13.43	636.21%	6.32%
D S Smith Plc Shs	Materials	\$213,024	0.2%	27.92%	6.90	11.93	453.86%	1.64%
Weir Group Plc Ord	Industrials	\$204,643	0.2%	6.21%	6.63	16.05	190.92%	11.00%
Marks & Spencer Group	Consumer Staples	\$203,909	0.2%	(3.56)%	6.80	10.60	37.71%	16.17%

# **10 Best Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	bited gs Dividend Yield 0.06% 0.37% 2.15% 219.99% 0.33% 0.00% 0.00% 0.92% 0.76%	Earnings
Sakura Internet	Information Technology	\$21,786	0.0%	139.66%	1.41	312.75	0.06%	28.77%
Micronics Japan Co Ltd Tokyo Shs	Information Technology	\$50,960	0.1%	126.95%	2.36	38.22	0.37%	3.43%
Fujikura Ltd Shs	Industrials	\$116,815	0.1%	97.99%	4.45	12.55	2.15%	41.47%
Wincanton Plc Shs	Industrials	\$29,132	0.0%	90.56%	0.94	18.00	219.99%	17.04%
Kasumigaseki Capital	Real Estate	\$23,153	0.0%	90.25%	1.18	21.26	0.33%	-
Morphosys Ag Shs	Health Care	\$84,337	0.1%	88.03%	2.73	(18.88)	0.00%	75.93%
Zealand Pharma Dead - 09/12/05	Health Care	\$161,807	0.2%	78.43%	6.18	(128.16)	0.00%	-
Hensoldt	Industrials	\$91,973	0.1%	76.26%	5.45	26.13	0.92%	14.99%
Hammond Pwr Solutions Inc Cl A Sub V	Industrials	\$27,161	0.0%	73.16%	0.98	25.70	0.76%	94.30%
Iveco Group Nv	Industrials	\$81,083	0.1%	66.05%	4.04	8.63	1.59%	30.45%

# **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
Atos Sa Ex Amime Sa Puteax Shs	Information Technology	\$5,992	0.0%	(73.65)%	0.23	0.75	0.00%	(23.35)%
Meyer Burger Techn	Information Technology	\$2,773	0.0%	(68.21)%	0.66	(3.11)	0.00%	(4.35)%
Intrum Justitia Ab Shs	Industrials	\$6,145	0.0%	(66.45)%	0.28	1.99	53.96%	(21.58)%
Aker Carbon Capture As	Energy	\$5,982	0.0%	(60.02)%	0.32	(53.00)	0.00%	-
Ssr Mng Inc	Materials	\$28,038	0.0%	(59.61)%	0.90	45.98	6.28%	14.91%
Provident Financial Plc Shs	Financials	\$5,269	0.0%	(59.58)%	0.17	6.26	2884.74%	(9.39)%
Hellofresh	Consumer Staples	\$34,246	0.0%	(55.28)%	1.23	11.72	0.00%	37.07%
Ams Ag Shs New	Information Technology	\$35,834	0.0%	(53.69)%	1.16	14.18	0.00%	17.48%
Euroapi	Health Care	\$4,870	0.0%	(52.31)%	0.29	(83.85)	0.00%	-
Ferrexpo Plc London Shs	Materials	\$5,090	0.0%	(52.06)%	0.33	3.87	6.00%	11.69%

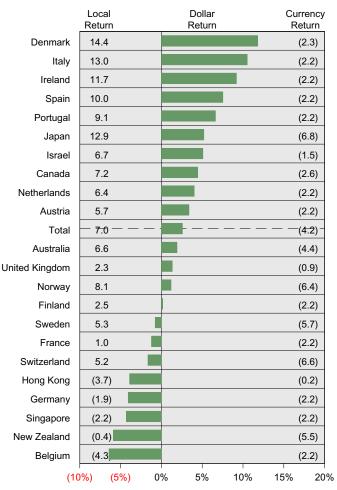


# State St MSCI exUS Small vs MSCI World xUS Small Attribution for Quarter Ended March 31, 2024

#### **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.

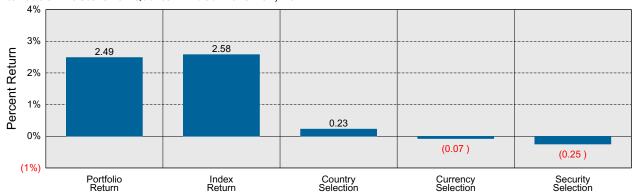




# **Beginning Relative Weights** (Portfolio - Index)

	Index Weight				Portfolio Weight
Denmark	1.8				1.8
Italy	2.9				2.9
Ireland	0.3				0.3
Spain	1.7				1.7
Portugal	0.3				0.3
Japan	30.5				30.5
Israel	2.6				2.6
Canada	9.2				9.2
Netherlands	1.4				1.4
Austria	0.9				0.9
Total					
Australia	8.7				8.7
United Kingdom	13.8				13.8
Norway	2.2				2.2
Finland	1.1				1.1
Sweden	5.4				5.4
France	3.7				3.7
Switzerland	4.2				4.2
Hong Kong	1.3				1.3
Germany	4.2				4.2
Singapore	1.7				1.7
New Zealand	0.6				0.6
Belgium	1.3				1.3
(1.	0%)	(0.5%)	0.0%	0.5%	1.0%

#### Attribution Factors for Quarter Ended March 31, 2024



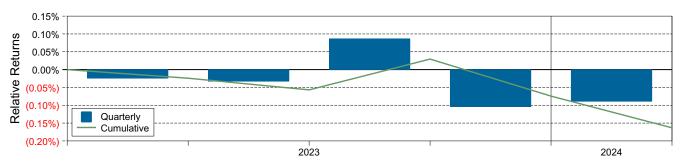


# State St MSCI exUS Small vs MSCI World xUS Small Attribution for One and One-Quarter years Ended March 31, 2024

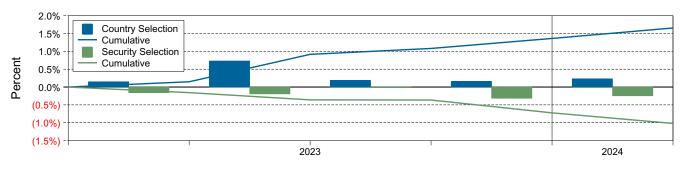
#### **Cumulative International Attribution**

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.

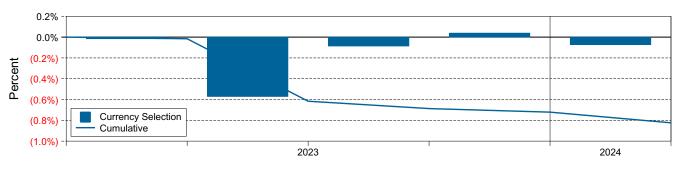
#### Cumulative and Quarterly Return vs MSCI World xUS Small



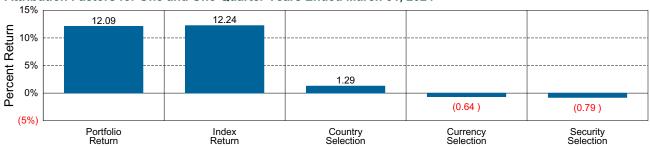
#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for One and One-Quarter Years Ended March 31, 2024





# **DFA EM All Cap Core** Period Ended March 31, 2024

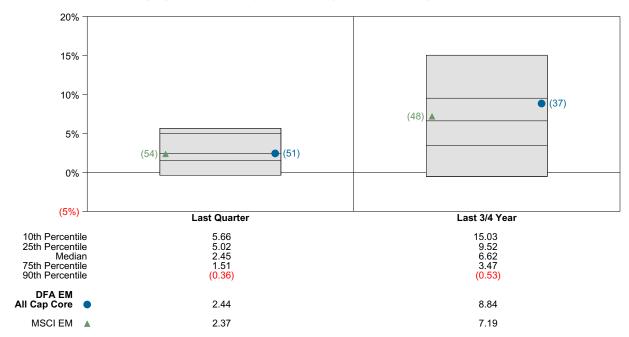
#### **Investment Philosophy**

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.

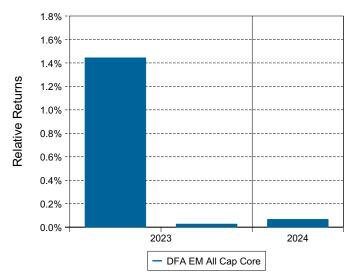
#### **Quarterly Summary and Highlights**

- DFA EM All Cap Core's portfolio posted a 2.44% return for the quarter placing it in the 51 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 0.07% for the guarter and outperformed the MSCI EM for the three-quarter year by 1.65%.

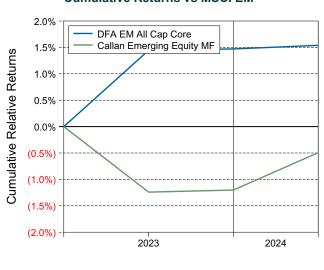
#### Performance vs Callan Emerging Markets Equity Mut Funds (Institutional Net)



#### Relative Return vs MSCI EM



# **Cumulative Returns vs MSCI EM**

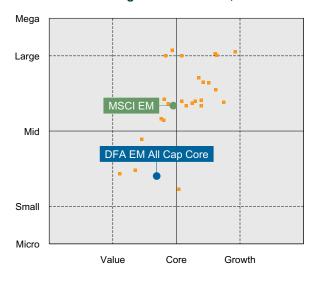




# **Current Holdings Based Style Analysis DFA EM All Cap Core** As of March 31, 2024

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.

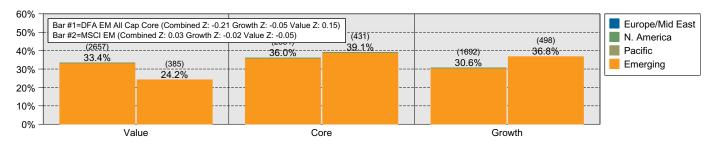
# Style Map vs Callan Emerging Equity MF Holdings as of March 31, 2024



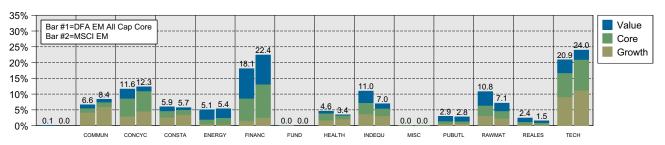
#### **Style Exposure Matrix** Holdings as of March 31, 2024

	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	(2007)	(====)	(1010)	(222,
	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 % (22)	0.176 (33)	0.176 (21)	0.2 /6 (76)
	0.0% (22)	0.1% (35)	0.1% (21)	0.2% (78)
1117111101100	0.0% (0)	0.0% (1)	0.0% (0)	0.0% (1)
N. America	0.070 (1)	0.170 (17)	0.070 (2)	0.170 (20)
	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)
_ ,	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



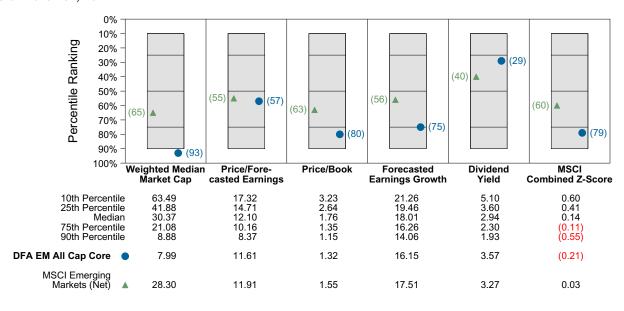


# **DFA EM All Cap Core Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

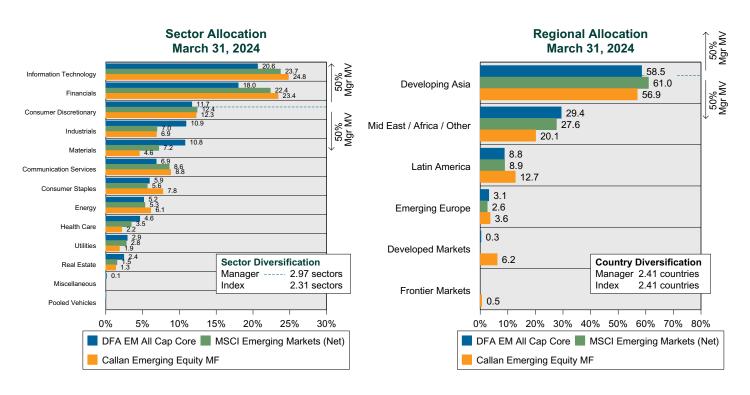
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **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.

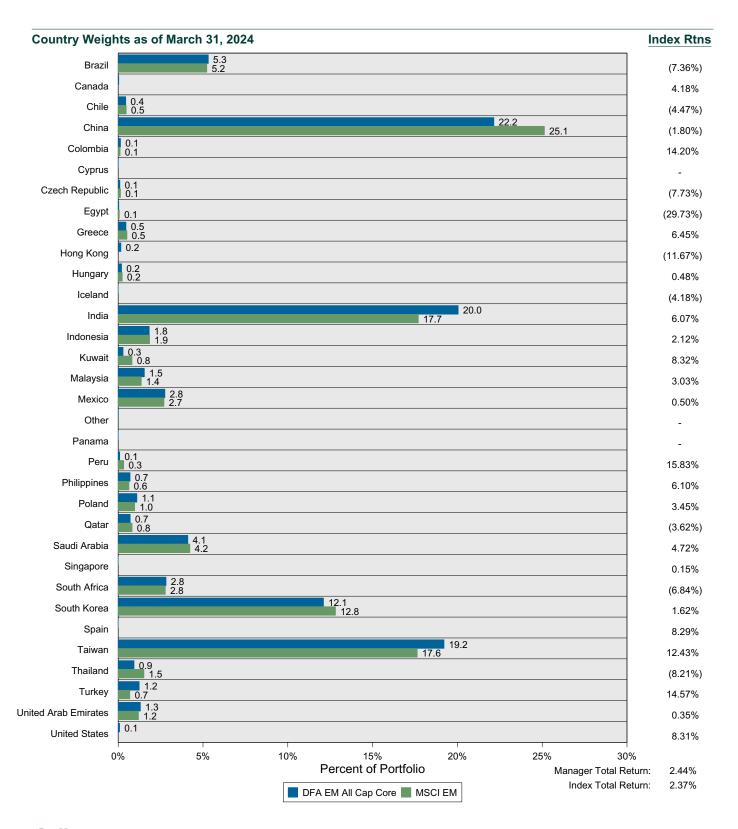




# **Country Allocation DFA EM All Cap Core VS MSCI Emerging Markets (Net)**

#### **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

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Ratio         Yield           19.14         1.67%           14.15         0.79%           16.40         1.75%           19.14         1.67%           8.03         1.34%	Earnings
Taiwan Semicond Manufac Co L Shs	Information Technology	\$8,023,880	3.8%	26.55%	631.29	19.14	1.67%	11.74%
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$5,105,845	2.4%	1.48%	367.29	14.15	0.79%	20.87%
Samsung Electronics Co Ltd Ord	Information Technology	\$5,037,257	2.4%	0.88%	365.39	16.40	1.75%	54.00%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$3,200,032	1.5%	26.06%	631.29	19.14	1.67%	11.74%
Alibaba Group Holding Ltd	Consumer Discretionary	\$1,953,314	0.9%	(8.87)%	182.88	8.03	1.34%	1.47%
Reliance Industries Ltd Shs Demateri	Energy	\$1,393,918	0.7%	14.70%	241.07	24.06	0.30%	17.60%
China Construction Bank Shs H	Financials	\$1,315,665	0.6%	(0.45)%	144.99	3.17	9.95%	2.30%
Petroleo Brasileiro Sa Petro Pfd Shs	Energy	\$1,279,203	0.6%	(2.57)%	41.81	4.44	19.61%	47.65%
Infosys Technologies	Information Technology	\$1,116,098	0.5%	(3.13)%	74.35	22.37	2.37%	12.18%
Petroleo Brasileiro Sa Petro Ord New	Energy	\$953,394	0.5%	(4.64)%	56.92	4.60	19.12%	47.67%

# **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		
Zhej.Wanfeng Auto Wheel 'a'	Consumer Discretionary	\$21,939	0.0%	235.52%	4.96	32.05	0.59%	24.59%		
Digital Aria	Health Care	\$10,733	0.0%	194.94%	0.78	(10040.00)	0.00%	-		
Techwing	Information Technology	\$36,145	0.0%	192.38%	0.96	21.13	0.39%	20.57%		
Enchem	Materials	\$11,870	0.0%	173.15%	3.10	(72.28)	0.00%	-		
New Era Eltn.Co.	Information Technology	\$9,701	0.0%	164.66%	0.26	196.43	0.00%	-		
Shinsung Delta Tech	Industrials	\$43,237	0.0%	152.97%	2.13	559.65	0.11%	(2.61)%		
Angels Tech.Co.Ltd.	Industrials	\$54	0.0%	152.28%	0.12	(29.00)	0.00%	-		
Shihlin Electr. & Eng	Industrials	\$65,160	0.0%	136.30%	4.75	37.38	0.69%	9.74%		
Egis Technology	Information Technology	\$7,213	0.0%	118.67%	0.63	607.86	0.00%	(49.76)%		
Bajaj Tempo	Industrials	\$15,309	0.0%	115.60%	1.14	43.50	0.14%	(25.53)%		

# **10 Worst Performers**

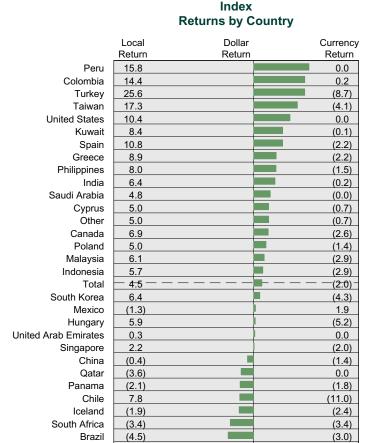
		Endina	Percent	Price/ Forecasted Forecasted					
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings	
Abdullah Saad Moati Stationaries			0.0%		0.16	149.25	1.64%	12.29%	
	Consumer Discretionary	\$4,858		(89.98)%				12.29%	
Yu Neh Huat	Real Estate	\$3,897	0.0%	(87.89)%	0.06	(28.00)	0.00%	-	
Ssangyong Motor Co Shs	Consumer Discretionary	\$6,049	0.0%	(77.27)%	0.90	(133.61)	0.00%	-	
Sunshine 100 China Hdg.	Real Estate	\$3	0.0%	(72.64)%	0.01	(0.05)	0.00%	-	
Cosmopolitan Intl Holdings L Shs	Real Estate	\$59	0.0%	(72.44)%	0.14	(2.68)	0.00%	-	
Gome Elctrcl Applins Hldgs L Shs	Consumer Discretionary	\$1,316	0.0%	(72.17)%	0.11	(0.18)	0.00%	-	
China Fordoo Holdings	Consumer Discretionary	\$191	0.0%	(67.12)%	0.10	(12.33)	0.00%	-	
Pt M Cash	Financials	\$69	0.0%	(65.17)%	0.09	33.33	0.00%	(46.14)%	
Central China Management	Real Estate	\$716	0.0%	(64.66)%	0.05	1.17	71.43%	-	
China Motion Telecom	Real Estate	\$36	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.

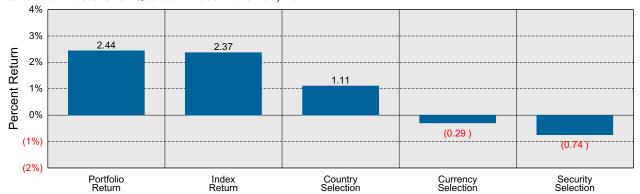


#### **Beginning Relative Weights** (Portfolio - Index) Index Portfolio Weight Weight Peru 0.3 0.1 Colombia 0.1 0.1 Turkev 0.6 1.1 Taiwan 16.0 18.1 **United States** 0.1 0.0 Kuwait 0.8 0.2 Spain 0.0 0.0 Greece 0.5 0.4 Philippines 0.7 0.6 19.5 India 16.7 Saudi Arabia 4.2 4.0 Cyprus 0.0 0.0 Other 0.0 0.0 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 Czech Republic 0.2 0.1 Thailand 1.8 1.0 Hong Kong 0.0 0.2

#### Attribution Factors for Quarter Ended March 31, 2024

0%

10%



(4.5)

(6.5)

(0.2)

(34.8)

30%

20%

Egypt

0.1

(4%)

(2%)

0%

(6%)



Czech Republic

Thailand

Egypt

Hong Kong

(3.3)

(1.8)

7.7

(40%) (30%) (20%) (10%)

(11.5)

0.0

4%

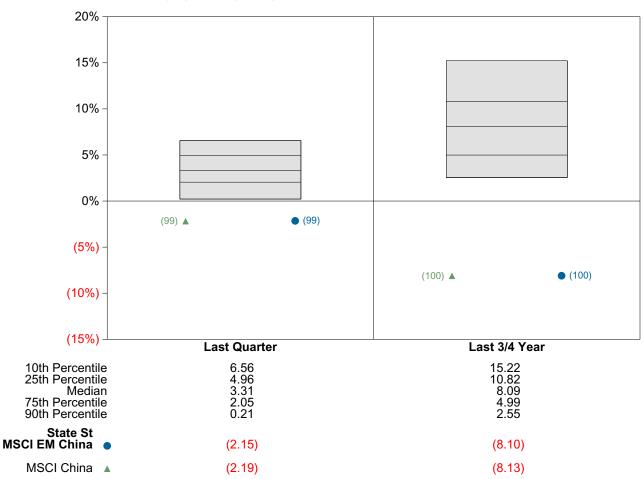
2%

# State St MSCI EM China Period Ended March 31, 2024

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

- State St MSCI EM China's portfolio posted a (2.15)% 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 0.03%.

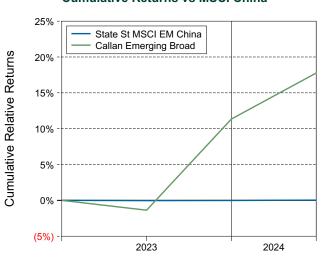
#### Performance vs Callan Emerging Broad (Gross)



#### Relative Return vs MSCI China

# 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.

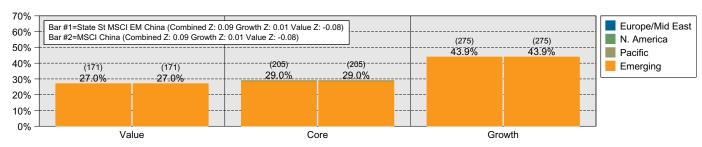
### Style Map vs Callan Emerging Broad Holdings as of March 31, 2024



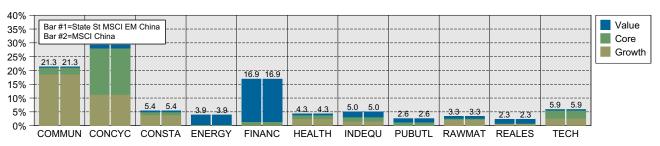
### **Style Exposure Matrix** Holdings as of March 31, 2024

	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/	0.070 (0)	0.070 (0)	0.070 (0)	0.070 (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



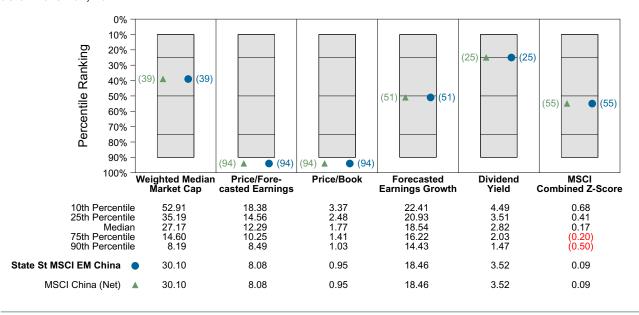


## State St MSCI EM China **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

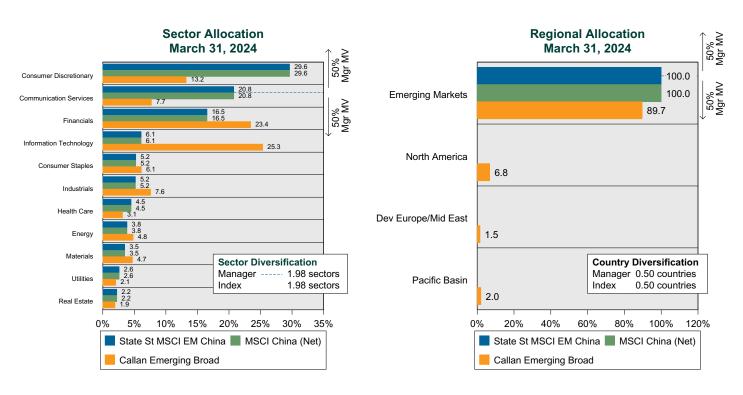
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **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.

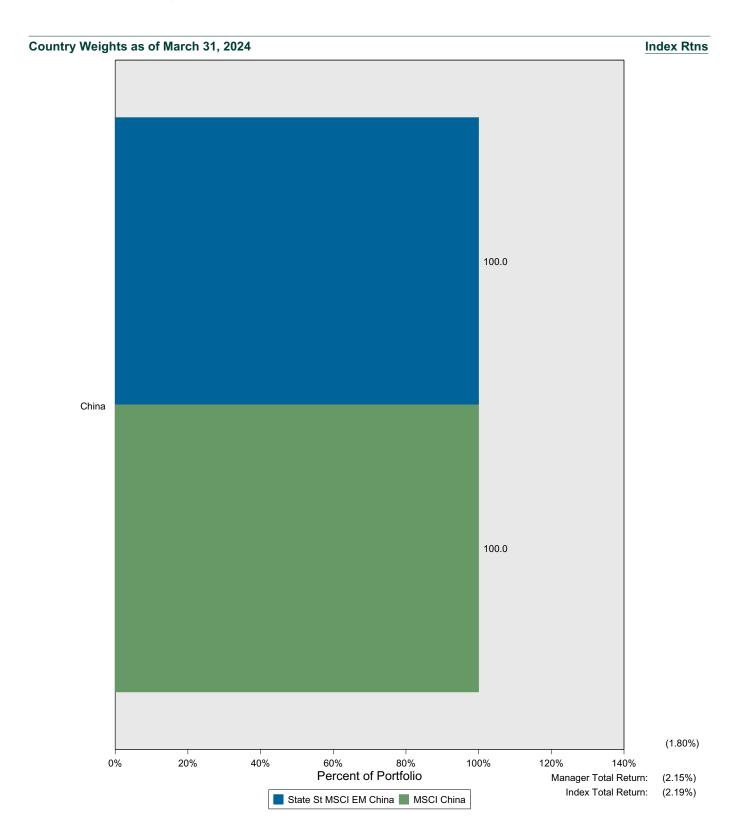




# **Country Allocation** State St MSCI EM China VS MSCI China (Net)

#### **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	\$7,495,589	14.2%	1.48%	367.29	14.15	0.79%	20.87%
Alibaba Group Hldg Ltd Sponsored Ads	Consumer Discretionary	\$4,264,059	8.1%	(8.44)%	184.04	8.25	0.17%	8.32%
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$2,028,329	3.8%	(22.08)%	154.45	12.28	0.00%	26.58%
Meituan Dianping Hk/03690	Consumer Discretionary	\$1,832,227	3.5%	15.92%	69.69	16.36	0.00%	134.10%
China Construction Bank Shs H	Financials	\$1,692,567	3.2%	(0.45)%	144.99	3.17	9.95%	2.30%
Netease Inc Sponsored Adr	Communication Services	\$1,174,576	2.2%	10.00%	66.73	13.97	0.50%	24.92%
Bank of China Ltd Shs	Financials	\$956,811	1.8%	6.30%	34.51	3.82	7.26%	2.10%
Industrial and Comm Bk of Cn Hkd Shs	Financials	\$956,369	1.8%	1.15%	43.69	3.57	7.95%	4.83%
Jd Com Inc Spon Adr Cl A	Consumer Discretionary	\$942,755	1.8%	(7.02)%	38.51	7.47	2.76%	9.39%
Baidu Inc Spon Adr Rep A	Communication Services	\$863,717	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	\$14,407	0.0%	62.10%	8.26	48.56	0.33%	34.65%
China Molybdenum 'a'	Materials	\$35,448	0.1%	56.92%	20.34	16.91	1.02%	31.65%
China Molybdenum Co Ltd H	Materials	\$92,661	0.2%	52.74%	3.34	12.14	1.38%	22.80%
Zhejiang Lsh.Auto Parts 'a'	Industrials	\$11,593	0.0%	48.04%	6.65	59.42	0.60%	46.08%
Foxconn Industrial Internet A	Information Technology	\$72,723	0.1%	47.69%	62.58	16.41	2.40%	23.40%
Zhengzen Yutong Coach A	Industrials	\$10,610	0.0%	47.08%	6.09	18.71	5.01%	(15.67)%
Inner Mongolia Yitai B	Energy	\$59,219	0.1%	45.72%	5.59	13.26	14.76%	-
Zhejiang Zheneng Elec. Power 'a'	Utilities	\$17,975	0.0%	41.90%	12.37	10.34	0.00%	(12.44)%
Flat Glass Group H	Information Technology	\$30,320	0.1%	41.53%	1.09	11.20	1.35%	19.00%
Zhejiang Juhua Co. A	Materials	\$15,405	0.0%	40.72%	8.84	23.53	1.14%	3.85%

### **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	
Wuxi Apptec H	Health Care	\$48,194	0.1%	(54.20)%	1.83	9.17	259.39%	14.95%	
Wuxi Bio	Health Care	\$204,339	0.4%	(52.62)%	7.78	11.42	0.00%	34.61%	
Nio Inc Ads	Consumer Discretionary	\$177,559	0.3%	(51.34)%	8.69	(4.29)	0.00%	-	
Xpeng Inc	Consumer Discretionary	\$138,080	0.3%	(48.38)%	5.91	(7.39)	0.00%	-	
Sunny Optical Tchnlgy Grp Lt Shs	Information Technology	\$106,200	0.2%	(44.70)%	5.60	19.19	0.55%	(18.95)%	
Asr Microelectronics A	Information Technology	\$4,151	0.0%	(42.71)%	2.38	(47.82)	0.00%		
Zai Lab Ltd Adr	Health Care	\$45,336	0.1%	(42.51)%	1.59	(8.02)	0.00%	-	
Guangdong Investment Ltd Shs	Utilities	\$36,751	0.1%	(42.16)%	2.80	5.63	926.64%	5.22%	
China Medical System Hldgs L Shs	Health Care	\$41,336	0.1%	(41.75)%	2.58	5.36	7.28%	14.84%	
Country Garden Hldgs Co Ltd	Real Estate	\$22,778	0.0%	(39.01)%	1.73	(1.09)	0.00%	10.00%	

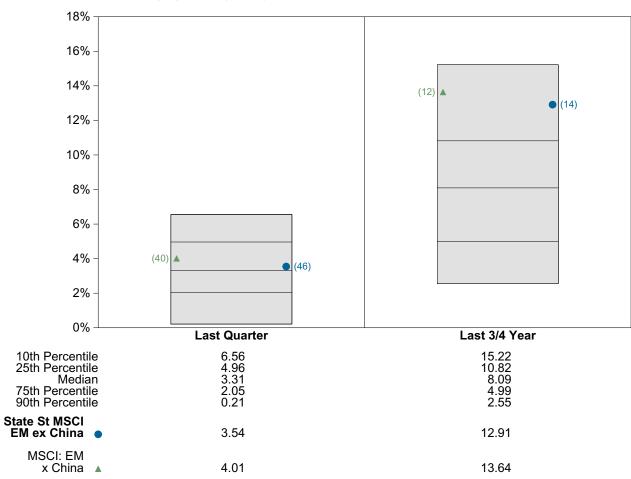


### State St MSCI EM ex China Period Ended March 31, 2024

#### **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 0.73%.

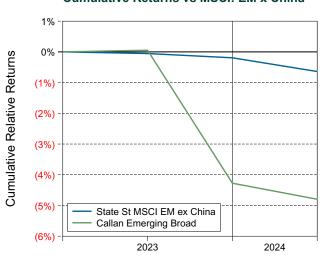
### Performance vs Callan Emerging Broad (Gross)



### 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



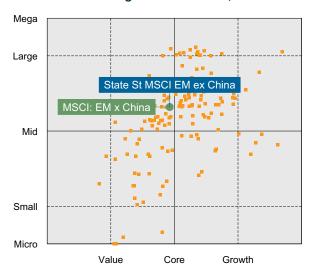


## **Current Holdings Based Style Analysis** State St MSCI EM ex China As of March 31, 2024

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.

N.

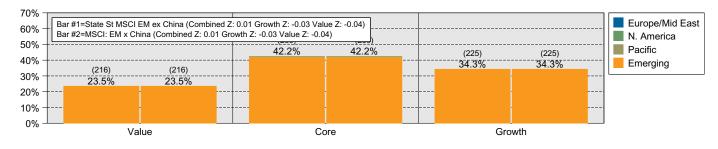
### Style Map vs Callan Emerging Broad Holdings as of March 31, 2024



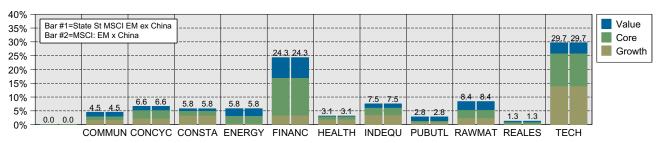
### **Style Exposure Matrix** Holdings as of March 31, 2024

	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	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				
	0.0% (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)
Furana/	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



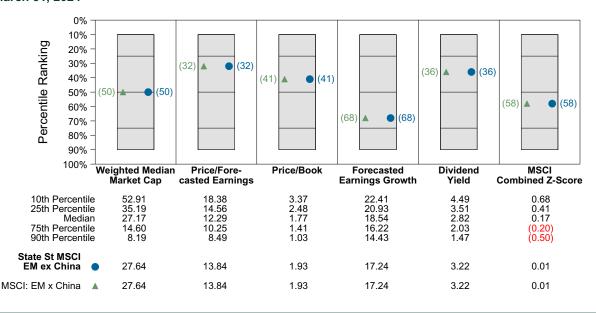


## State St MSCI EM ex China **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

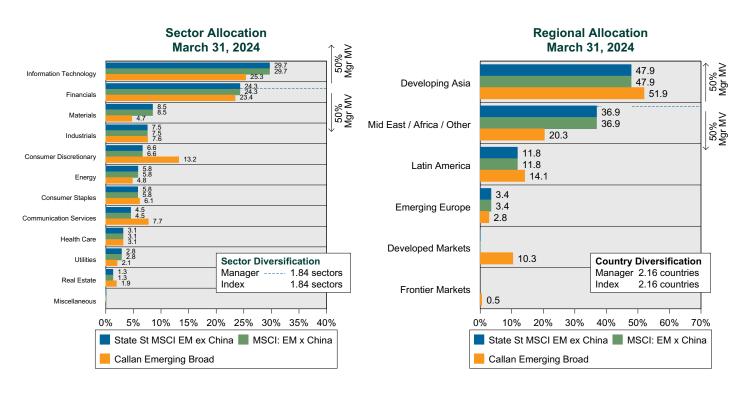
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **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.

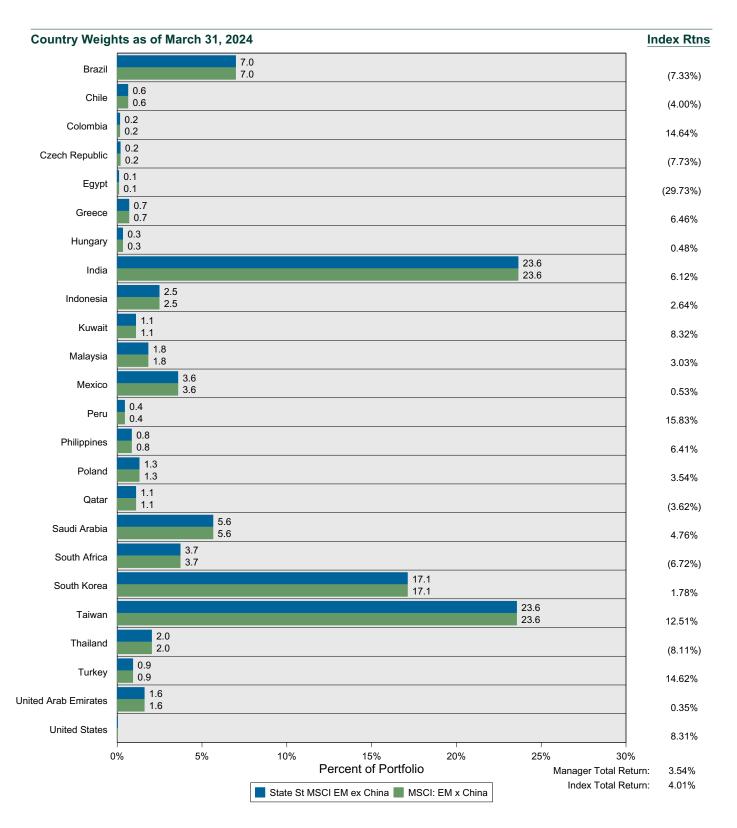




### **Country Allocation** State St MSCI EM ex China VS MSCI: EM x China

#### **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	\$18,163,113	11.1%	26.55%	631.29	19.14	1.67%	11.74%
Samsung Electronics Co Ltd Ord	Information Technology	\$8,853,993	5.4%	0.88%	365.39	16.40	1.75%	54.00%
Reliance Industries Ltd Shs Demateri	Energy	\$3,285,786	2.0%	14.70%	241.07	24.06	0.30%	17.60%
Sk Hynix Inc Shs	Information Technology	\$2,248,066	1.4%	23.97%	98.96	12.27	0.66%	4.00%
Icici Bank Limited Shs Dematerial	Financials	\$2,061,225	1.3%	9.45%	92.05	17.72	0.76%	52.00%
Infosys Technologies	Information Technology	\$1,806,435	1.1%	(3.13)%	74.35	22.37	2.37%	12.18%
Hon Hai Precision Inds Ltd Ord	Information Technology	\$1,771,262	1.1%	37.65%	64.98	12.61	3.53%	11.22%
Media Tek Incorporation Shs	Information Technology	\$1,718,731	1.1%	15.90%	59.73	18.94	4.60%	9.00%
H D F C Bank Ltd Shs	Financials	\$1,477,184	0.9%	(15.48)%	131.89	15.23	1.32%	14.30%
Al-Rajhi Bkg.&inv.	Financials	\$1,315,399	0.8%	(3.58)%	87.77	17.82	2.78%	3.80%

### **10 Best Performers**

				Price/					
		Ending				Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Hanmi Semiconductor	Information Technology	\$131,764	0.1%	108.16%	9.67	98.33	0.31%	(11.16)%	
Kukje Precision	Health Care	\$277,676	0.2%	107.28%	10.22	(72.82)	0.00%	-	
Samsung Techwin Co	Industrials	\$163,066	0.1%	59.41%	7.69	16.79	0.88%	5.00%	
Cummins India (Kirloskar	Industrials	\$151,321	0.1%	53.78%	9.99	50.35	1.03%	28.67%	
Jio Financial Services Limited	Financials	\$367,297	0.2%	51.52%	26.95	706.67	0.00%	-	
Saudi Resh.& Mktg.Gp.	Communication Services	\$83,733	0.1%	51.21%	5.53	26.18	0.00%	133.45%	
Savola Group	Consumer Staples	\$119,391	0.1%	50.31%	8.02	30.76	1.17%	25.37%	
Ytl Power International Bhd Shs	Utilities	\$60,615	0.0%	47.92%	6.67	10.35	1.55%	(17.93)%	
Zomato	Consumer Discretionary	\$403,257	0.2%	46.88%	18.94	114.74	0.00%	-	
Sk Square Co Ltd Common Stock Krw500	Industrials	\$172,920	0.1%	43.69%	8.16	9.93	0.00%	-	

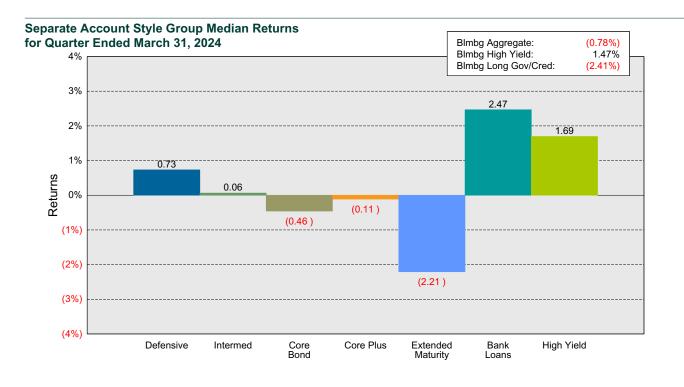
### **10 Worst Performers**

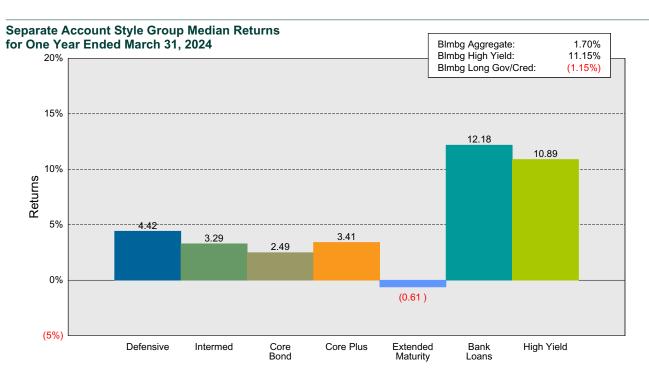
						Price/		
		Ending	Percent		Forecasted			Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend Yield	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio		Earnings
Eastern Tobacco	Consumer Staples	\$17,857	0.0%	(41.74)%	1.19	6.21	14.65%	36.49%
Posdata Company	Information Technology	\$58,544	0.0%	(36.82)%	5.52	110.06	0.20%	6.00%
One 97 Communications	Financials	\$37,147	0.0%	(36.77)%	3.07	(73.18)	0.00%	-
Silergy	Information Technology	\$101,377	0.1%	(36.71)%	3.94	41.16	0.60%	(2.14)%
Ecopro Materials	Materials	\$40,603	0.0%	(33.62)%	6.70	(97160.00)	0.00%	-
Pepco Group	Consumer Discretionary	\$23,626	0.0%	(31.89)%	2.60	11.42	0.00%	-
Global Unichip	Information Technology	\$110,536	0.1%	(31.38)%	5.21	41.47	1.12%	27.80%
Barito Pacific Timber	Materials	\$50,773	0.0%	(31.00)%	5.59	-	0.00%	(32.73)%
Commercial InternationI Bk L Shs	Financials	\$129,599	0.1%	(30.87)%	4.90	5.36	0.62%	22.45%
Hanwha Chemical Corp	Materials	\$71,267	0.0%	(30.80)%	3.62	14.61	1.06%	(45.02)%



# **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%).





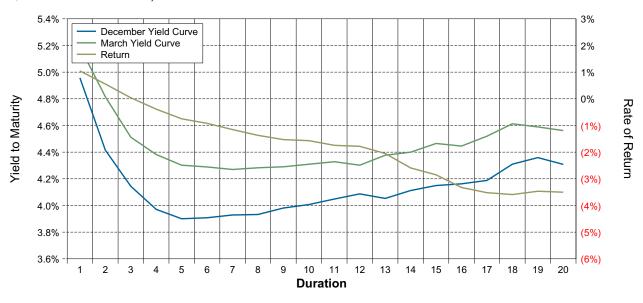


### **Bond Market Environment**

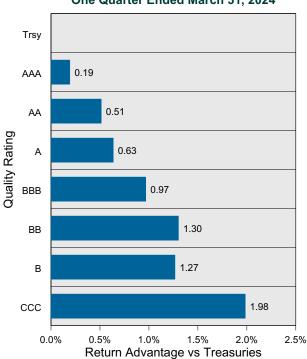
#### **Factors Influencing Bond Returns**

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.

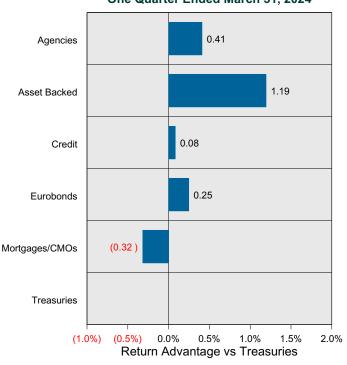
### Yield Curve Change and Rate of Return One Quarter Ended March 31, 2024



**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



### **Global Fixed Income** Period Ended March 31, 2024

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

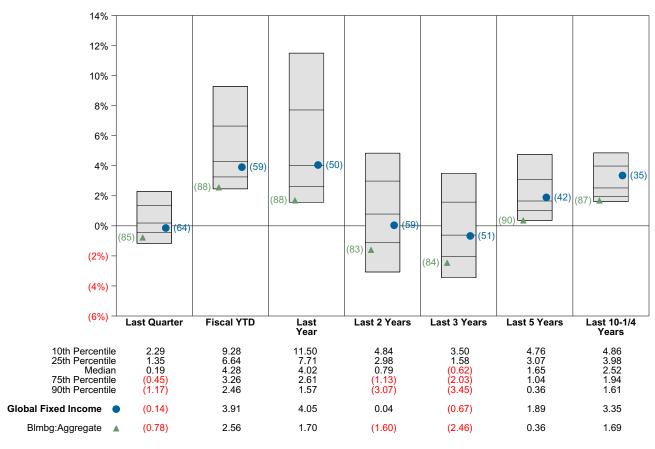
- Global Fixed Income's portfolio posted a (0.14)% return for the quarter placing it in the 64 percentile of the Total Domestic Fixed-Inc Database group for the quarter and in the 50 percentile for the last year.
- Global Fixed Income's portfolio outperformed Blmbg:Aggregate by 0.63% for the quarter outperformed the Blmbg:Aggregate for the year by 2.35%.

#### **Quarterly Asset Growth**

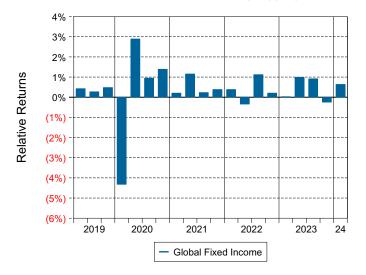
Beginning Market Value \$2,925,203,191 Net New Investment \$184,642,202 Investment Gains/(Losses) \$-2,462,795

**Ending Market Value** \$3,107,382,598

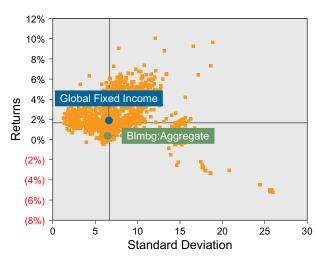
### Performance vs Total Domestic Fixed-Inc Database (Gross)



#### Relative Return vs Blmbg:Aggregate



#### **Total Domestic Fixed-Inc Database (Gross)** Annualized Five Year Risk vs Return



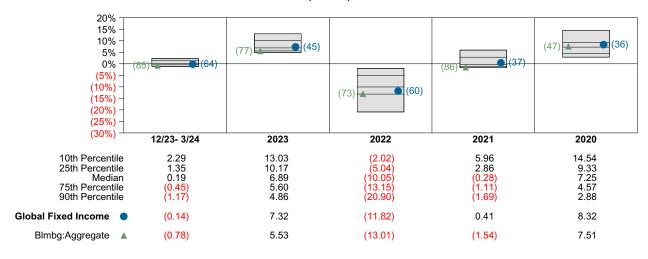


## **Global Fixed Income Return Analysis Summary**

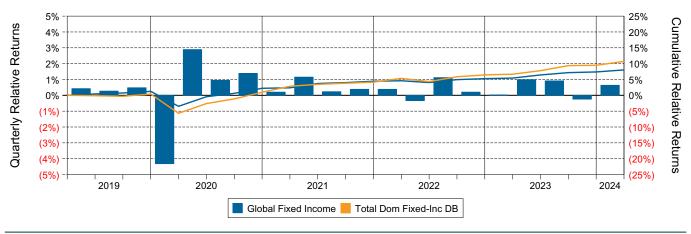
#### **Return Analysis**

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.

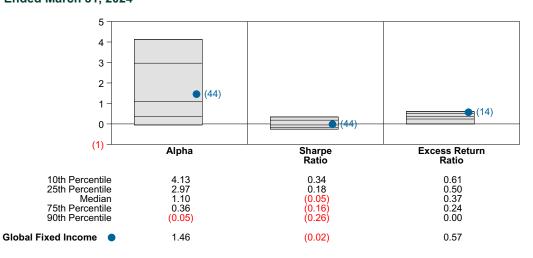
#### Performance vs Total Domestic Fixed-Inc Database (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Total Domestic Fixed-Inc Database (Gross) Five Years Ended March 31, 2024



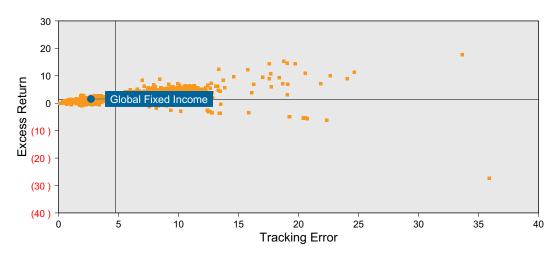


### **Global Fixed Income Risk Analysis Summary**

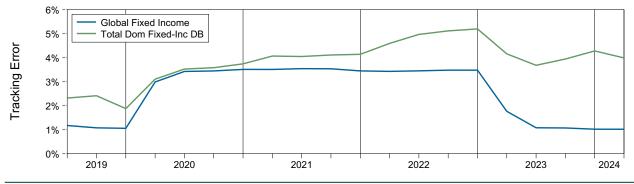
#### Risk Analysis

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.

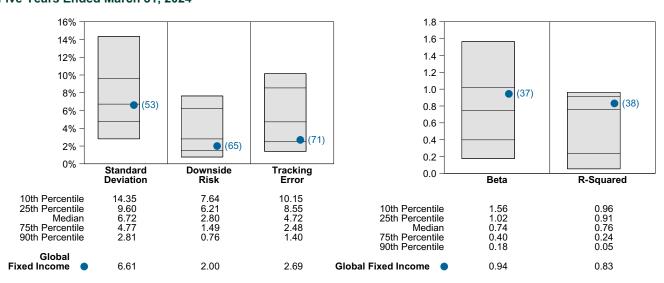
### Risk Analysis vs Total Domestic Fixed-Inc Database (Gross) Five Years Ended March 31, 2024



Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Total Domestic Fixed-Inc Database (Gross) Five Years Ended March 31, 2024

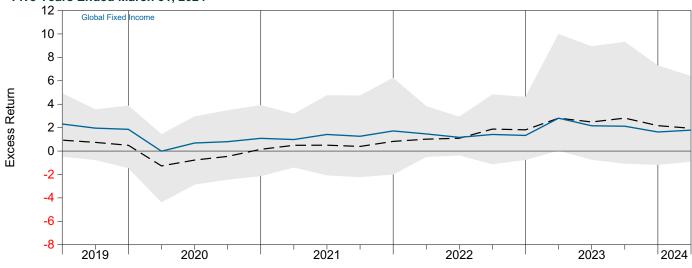


# **Global Fixed Income Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

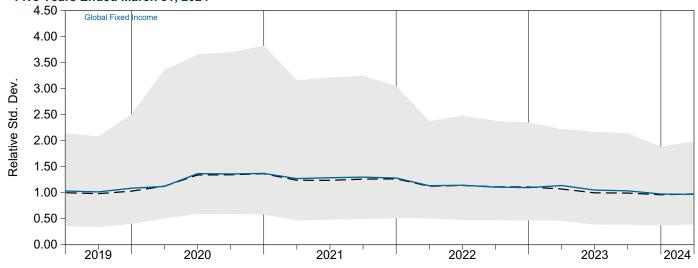
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Total Dom Fixed-Inc DB. The second chart below illustrates the consistency of 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	1.00%	1.50%
% Positive Periods	85%	95%
Average Ranking	50	40
% Positive Periods		

### 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.	1.13%	1.16%
% Positive Periods	100%	100%
Average Ranking	50	47

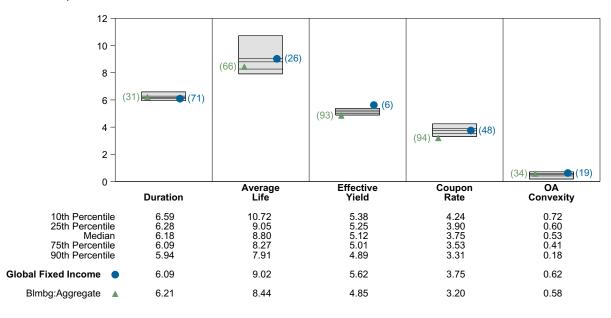


# **Global Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

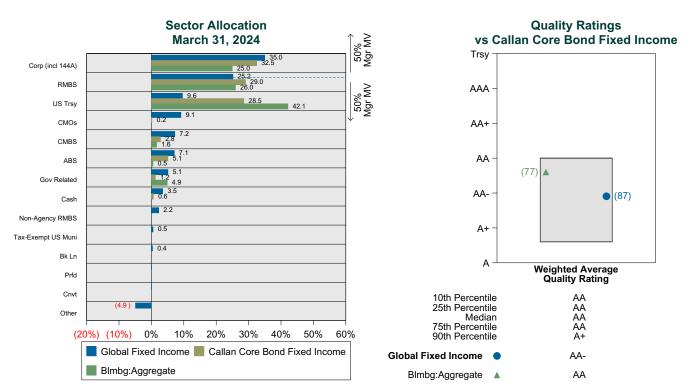
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **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.

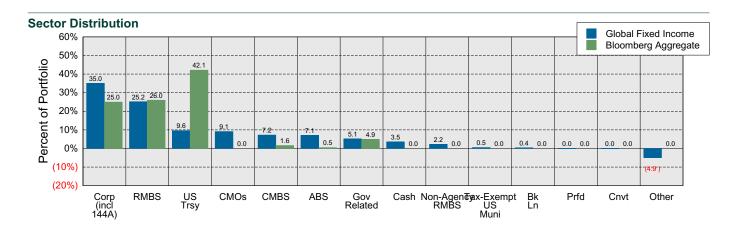


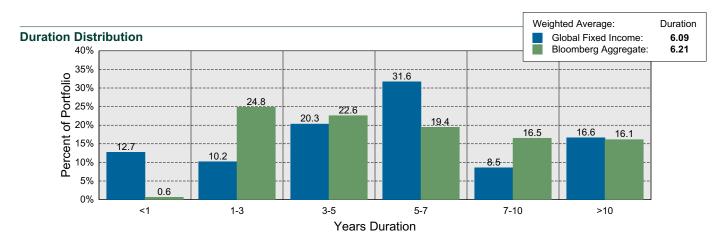


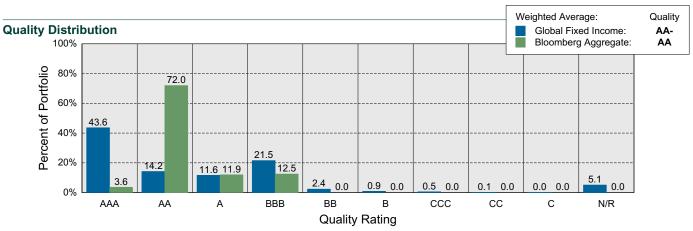
# **Global Fixed Income Portfolio Characteristics Summary** As of March 31, 2024

# **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.

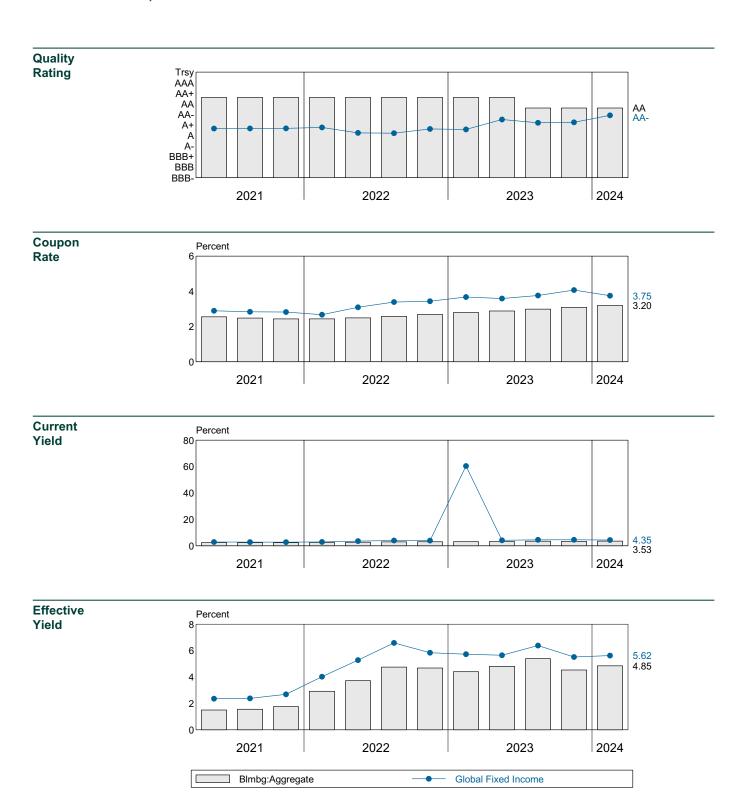






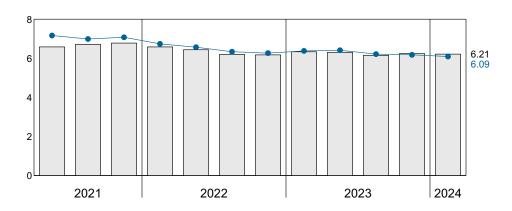


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

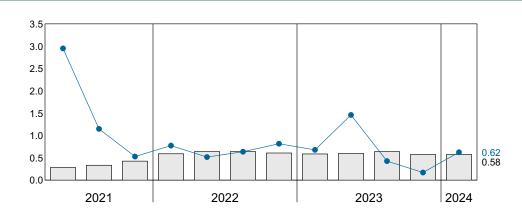


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

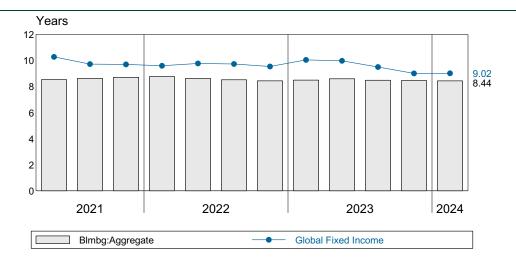
### **Duration**



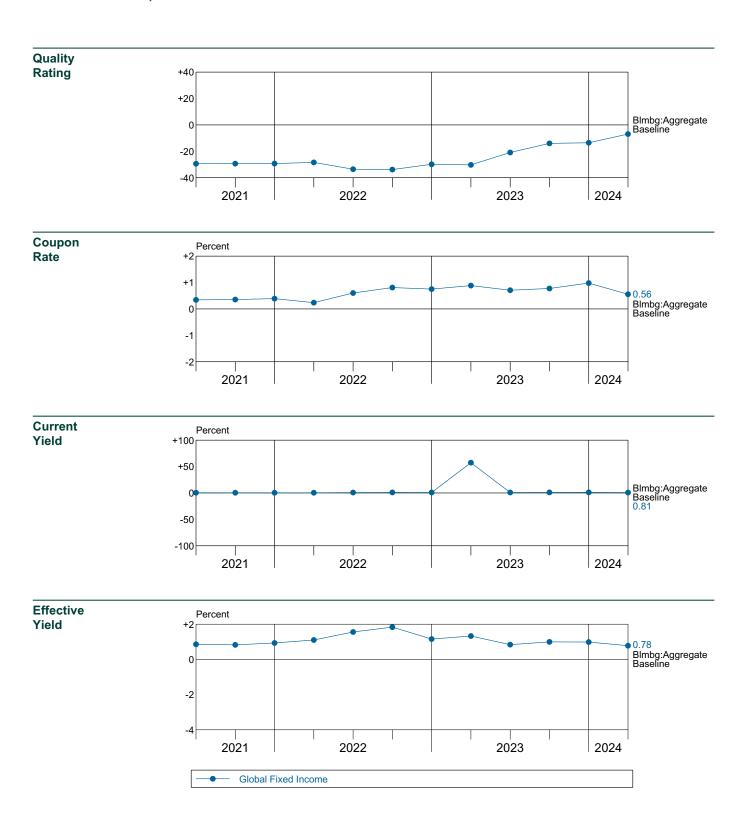
### OA Convexity



### **Average** Life

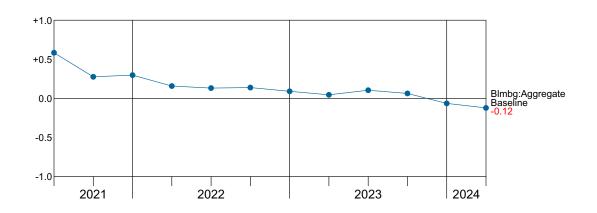


# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

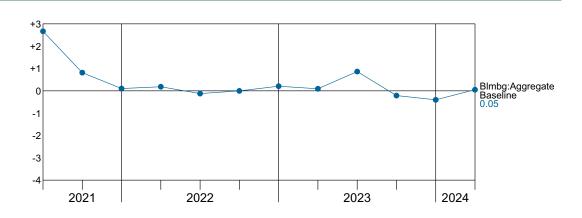


# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

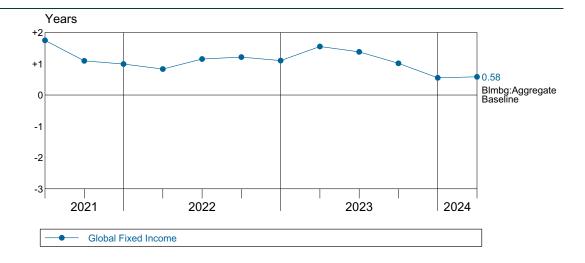




### OA Convexity





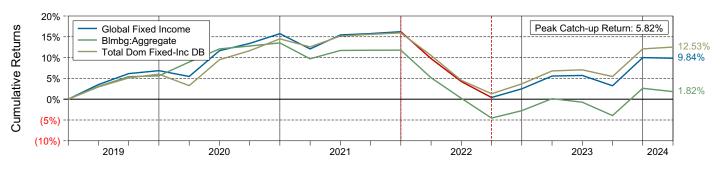




# **Global Fixed Income** Drawdown Analysis for Five Years Ended March 31, 2024

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**



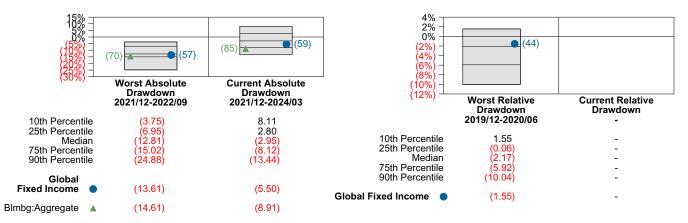
		Troist / tboolate Brawaemi										
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers		
Global Fixed Income	(13.61)%	0.75	2021/12-2022/09	(14.61)%	(12.62)%	(5.50)%	2.25	2021/12-2024/03	(8.91)%	(2.95)%		
Recovery from Trough	9.39%	1.50+	2022/09-2024/03	6.67%	11.08%	9.39%	1.50+	2022/09-2024/03	6.67%	11.08%		
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.32)%	3.25	2020/12-2024/03				
Total Dom Fixed-Inc DB	(12.62)%	0.75	2021/12-2022/09			(2.95)%	2.25	2021/12-2024/03				

Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns 15% Global Fixed Income 10.52% Total Dom Fixed-Inc DB 7.87% 0% 2019 2021 2022 2023 2024 2020

		vorst Rei	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Global Fixed Income	(1.55)%	0.50	2019/12-2020/06	(2.70)%	-	-	-	-		
Recovery from Trough	2.35%	0.50	2020/06-2020/12	3.26%	-	-	-	-		
Total Dom Fixed-Inc DB	(2.70)%	0.50	2019/12-2020/06		-	-	-			

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Total Domestic Fixed-Inc Database 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 Total Dom Fixed-Inc DB Peer Group

(12)	Global Fixed Income	A+ (47)	3.33%	8.38%	4.84%	6.53	0.89	9.66
		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

	Global Fixed	
(12)	Fixed	1.00
	Income	
		Global
		Global Fixed
		Income



### Ares ND Credit Strategies Fd Period Ended March 31, 2024

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

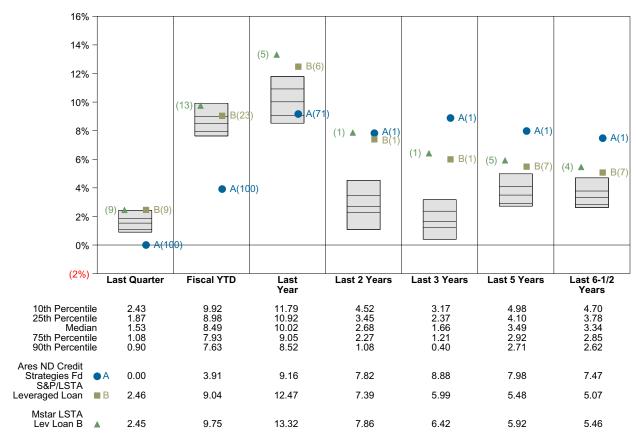
- Ares ND Credit Strategies Fd's portfolio posted a 0.00% return for the quarter placing it in the 100 percentile of the Callan High Yield Mutual Funds group for the quarter and in the 71 percentile for the last year.
- Ares ND Credit Strategies Fd's portfolio underperformed the Mstar LSTA Lev Loan B by 2.45% for the quarter and underperformed the Mstar LSTA Lev Loan B for the year by 4.16%.

### **Quarterly Asset Growth**

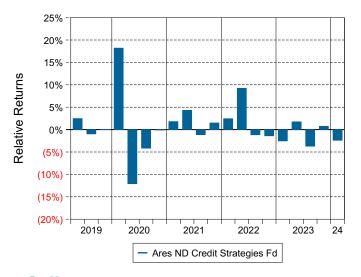
Beginning Market Value	\$122,670,750
Net New Investment	\$0
Investment Gains/(Losses)	\$0
investment Gains/(Losses)	φι

**Ending Market Value** \$122,670,750

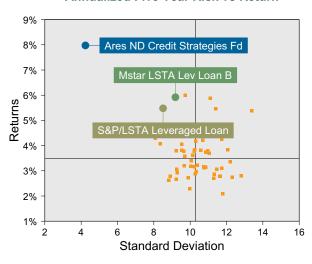
### Performance vs Callan High Yield Mutual Funds (Net)



### Relative Return vs Mstar LSTA Lev Loan B



#### **Callan High Yield Mutual Funds (Net)** Annualized Five Year Risk vs Return



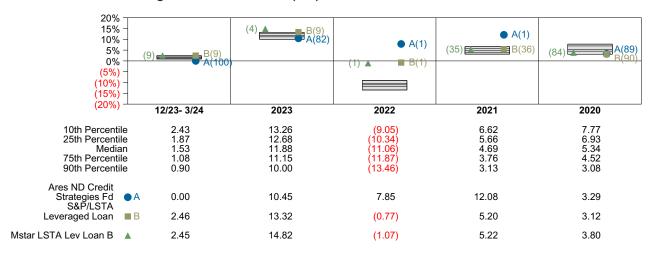


## Ares ND Credit Strategies Fd **Return Analysis Summary**

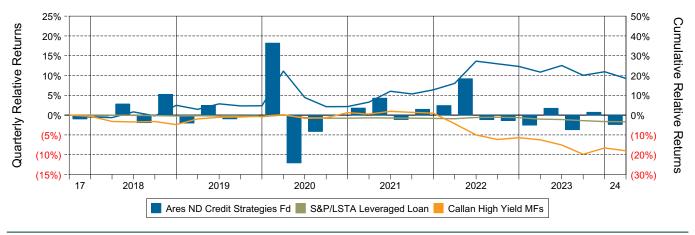
#### **Return Analysis**

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.

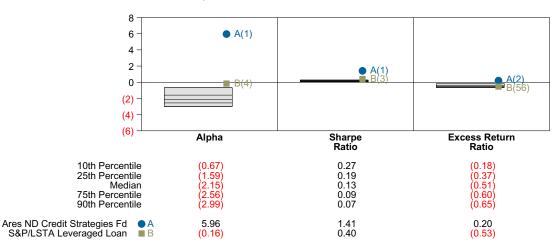
#### Performance vs Callan High Yield Mutual Funds (Net)



### Cumulative and Quarterly Relative Returns vs Mstar LSTA Lev Loan B



Risk Adjusted Return Measures vs Mstar LSTA Lev Loan B Rankings Against Callan High Yield Mutual Funds (Net) Six and One-Half Years Ended March 31, 2024





### **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 2.43% return for the quarter placing it in the 10 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 0.02% for the guarter and underperformed the Mstar LSTA Lev Loan B for the year by 4.72%.

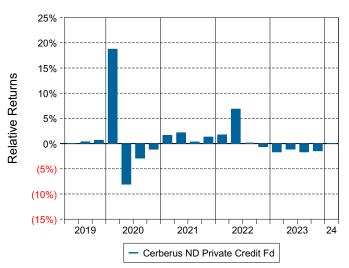
#### **Quarterly Asset Growth**

Beginning Market Value	\$156,208,503
Net New Investment	\$6,750,000
Investment Gains/(Losses)	\$3,908,739
Ending Market Value	\$166.867.242

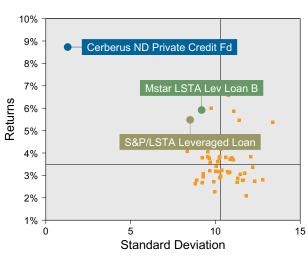
### Performance vs Callan High Yield Mutual Funds (Net)



#### Relative Return vs Mstar LSTA Lev Loan B



#### **Callan High Yield Mutual Funds (Net) Annualized Five Year Risk vs Return**



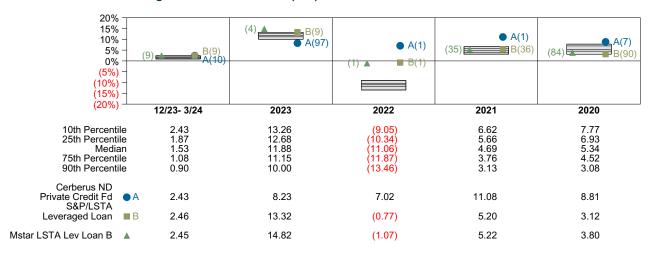


# **Cerberus ND Private Credit Fd Return Analysis Summary**

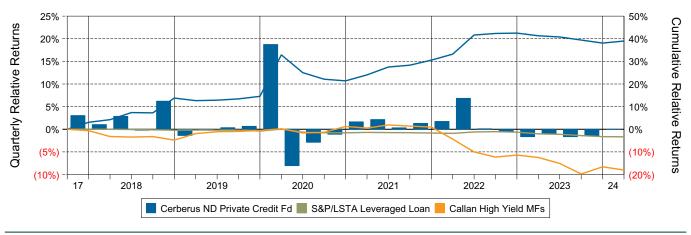
#### **Return Analysis**

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.

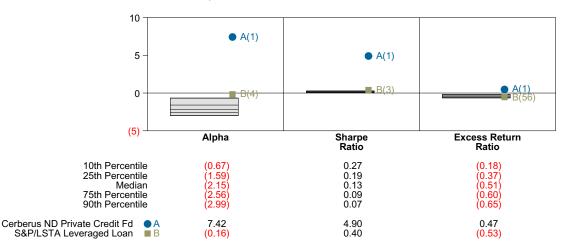
#### Performance vs Callan High Yield Mutual Funds (Net)



### Cumulative and Quarterly Relative Returns vs Mstar LSTA Lev Loan B



Risk Adjusted Return Measures vs Mstar LSTA Lev Loan B Rankings Against Callan High Yield Mutual Funds (Net) Six and One-Half Years Ended March 31, 2024





# **Allspring Med Quality Credit** Period Ended March 31, 2024

#### **Investment Philosophy**

The Medium Quality Credit fixed income strategy is designed to maximize total return from the high-grade corporate bond market while maintaining a strategic allocation to the BBB portion of the high yield market. The investment process for this fund starts with a "top-down" strategy. Security selection is determined by in-depth credit research, holding that in-depth knowledge of industries, companies, and their management teams can help identify credit trends that can lead to investment opportunities. Furthermore, a disciplined relative value framework is applied to help determine the optimal position to invest within an industry and within an individual issuer's capital structure.

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

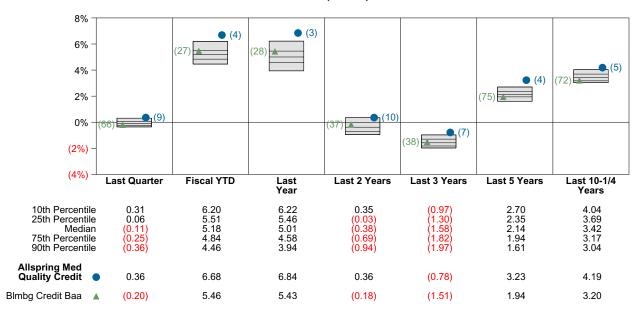
- Allspring Med Quality Credit's portfolio posted a 0.36% return for the quarter placing it in the 9 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 3 percentile for the last year.
- Allspring Med Quality Credit's portfolio outperformed the Blmbg Credit Baa by 0.56% for the guarter and outperformed the Blmbg Credit Baa for the year by 1.42%.

### **Quarterly Asset Growth**

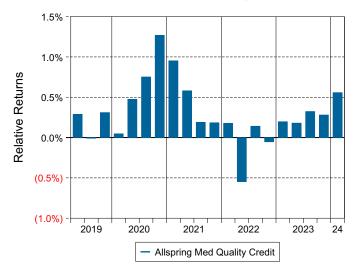
Beginning Market Value	\$193,139,254
Net New Investment	\$15,589,000
Investment Gains/(Losses)	\$930,171

**Ending Market Value** \$209,658,426

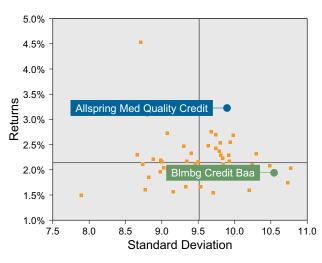
### Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



#### Relative Return vs Blmbg Credit Baa



#### Callan Investment Grade Credit Fixed Inc (Gross) Annualized Five Year Risk vs Return



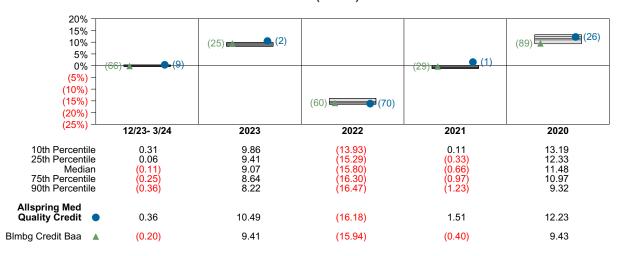


## **Allspring Med Quality Credit Return Analysis Summary**

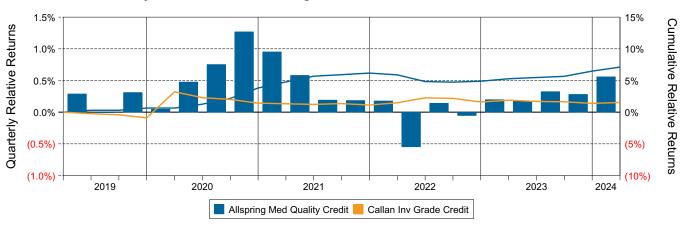
#### **Return Analysis**

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.

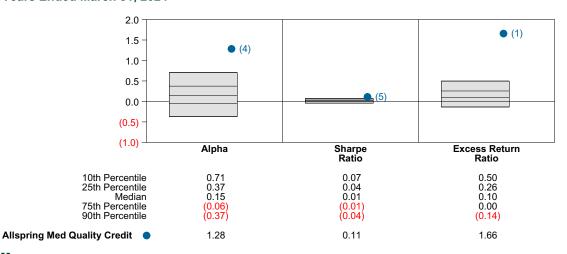
#### Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



#### **Cumulative and Quarterly Relative Returns vs Blmbg Credit Baa**



Risk Adjusted Return Measures vs Blmbg Credit Baa Rankings Against Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended March 31, 2024



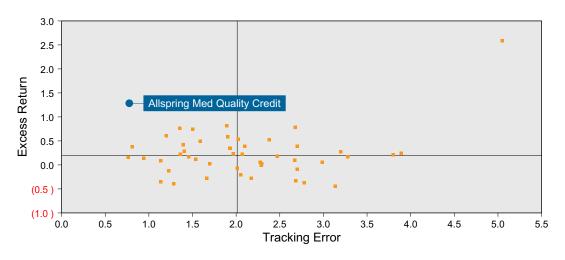


### **Allspring Med Quality Credit Risk Analysis Summary**

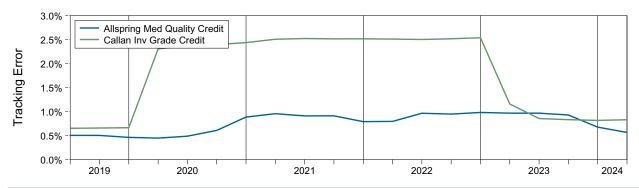
#### **Risk Analysis**

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.

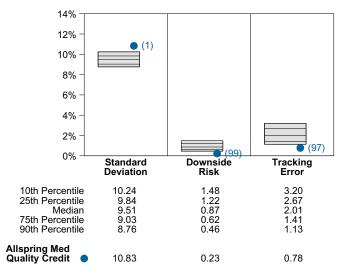
### Risk Analysis vs Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended March 31, 2024

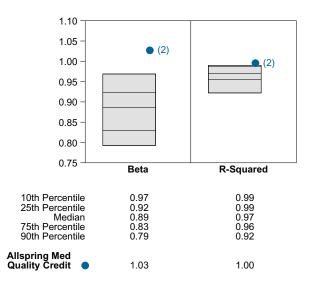


### Rolling 12 Quarter Tracking Error vs Bloomberg Credit Baa



Risk Statistics Rankings vs Bloomberg Credit Baa Rankings Against Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended March 31, 2024





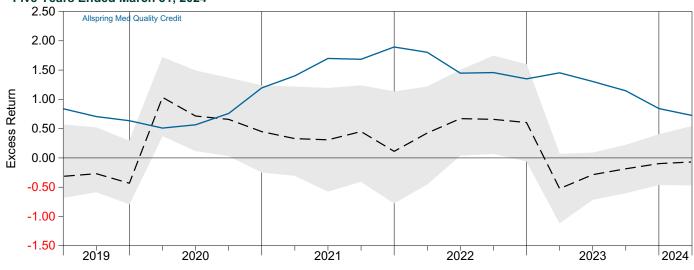


## **Allspring Med Quality Credit Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

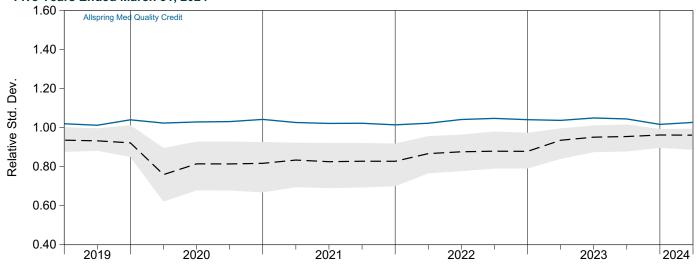
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg Credit Baa. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Inv Grade Credit. The second chart below illustrates the consistency 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 Credit Baa Five Years Ended March 31, 2024



Median	Portfolio
0.21%	1.17%
60%	100%
50	15
	0.21% 60%

### Rolling Three Year Relative Std. Dev. Relative to Blmbg Credit Baa Five Years Ended March 31, 2024



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	0.88%	1.03%
% Positive Periods	100%	100%
Average Ranking	50	3

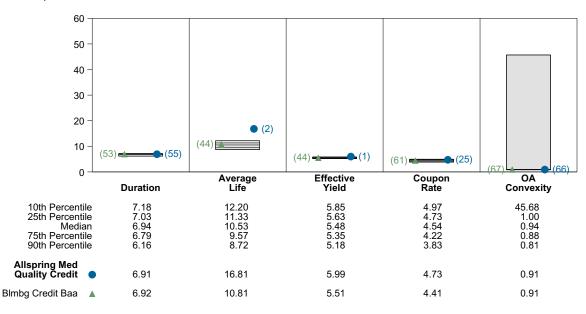


## **Allspring Med Quality Credit Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

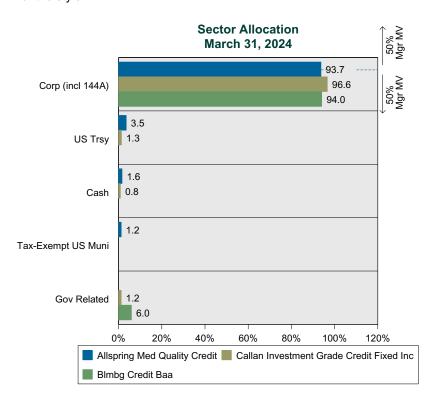
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Investment Grade Credit Fixed Inc 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.



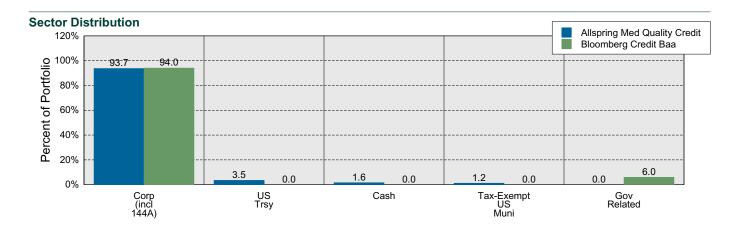
### **Quality Ratings** vs Callan Investment Grade Credit Fixed Inc Trsy AAA AA+ AA AA-Α+ Α A-BBB+ (100)BBB BBB-Weighted Average Quality Rating 10th Percentile 25th Percentile Median BBB+ 75th Percentile BBB 90th Percentile Allspring Med Quality Credit BBB Blmbg Credit Baa BBB+

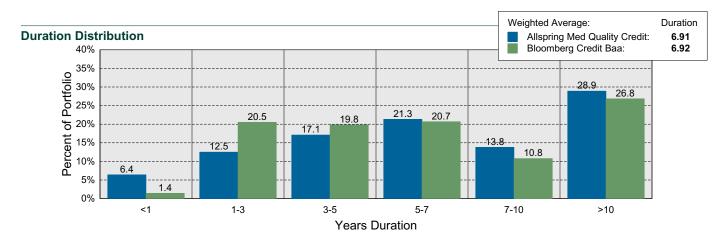


# **Allspring Med Quality Credit Portfolio Characteristics Summary** As of March 31, 2024

# **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.



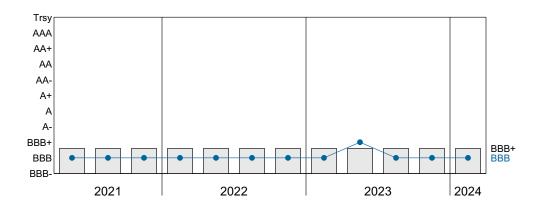




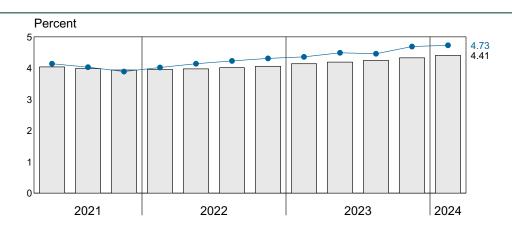


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

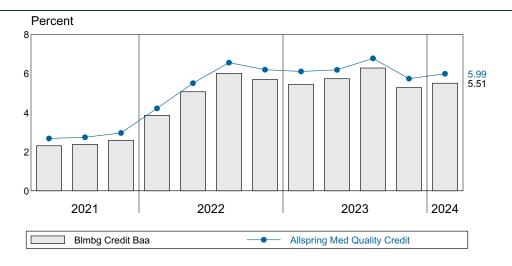




### Coupon Rate



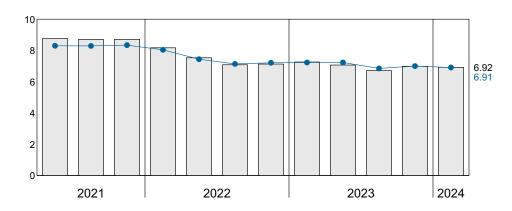




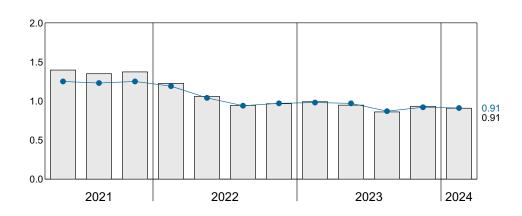


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

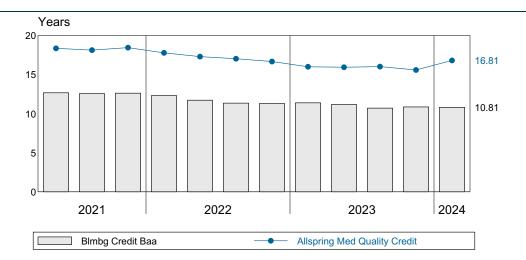
#### **Duration**



# OA Convexity

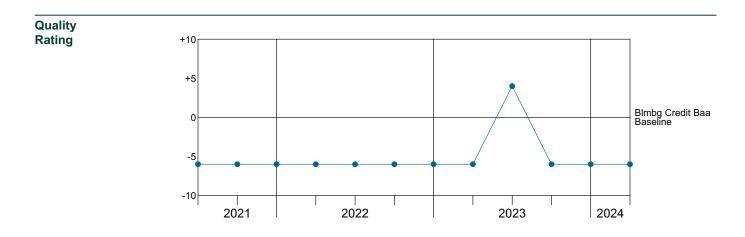


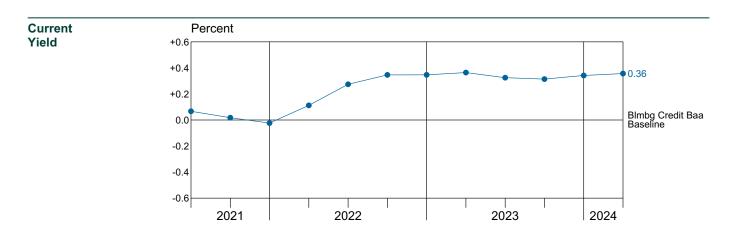
# Average Life

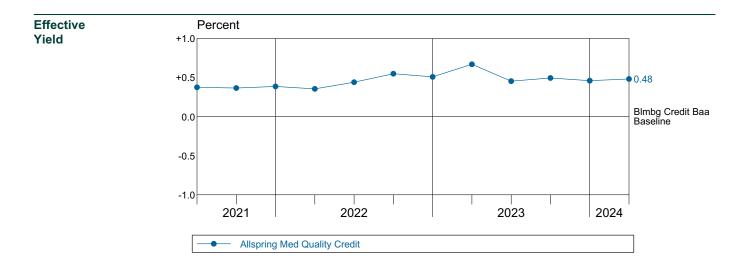




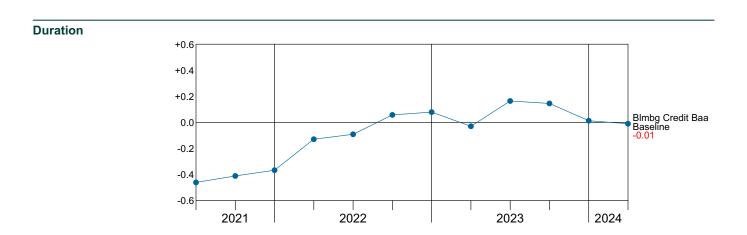
# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

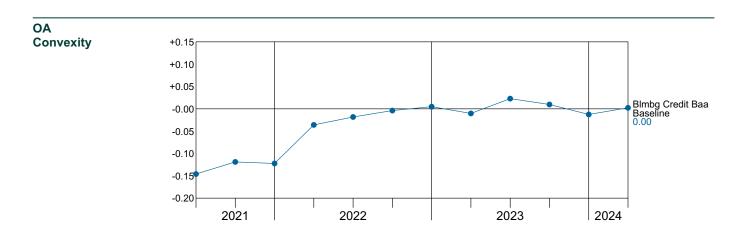


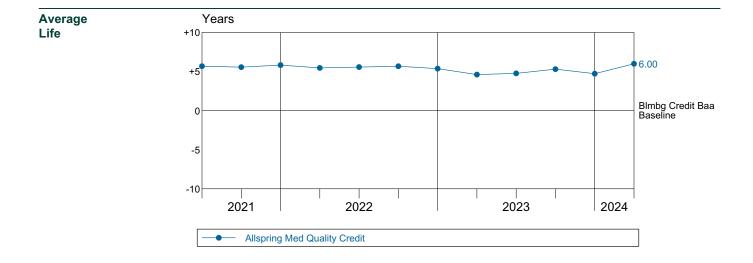




# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024



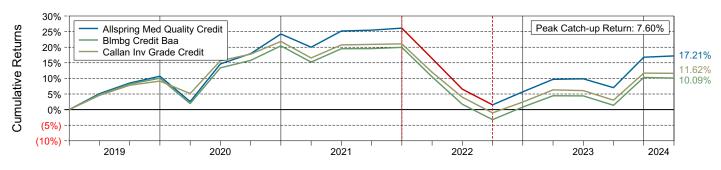




# **Allspring Med Quality Credit** Drawdown Analysis for Five Years Ended March 31, 2024

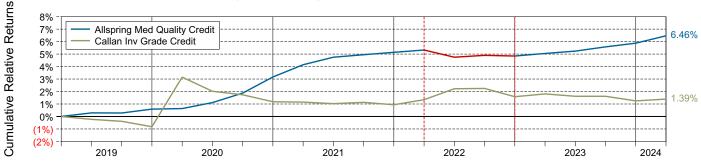
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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



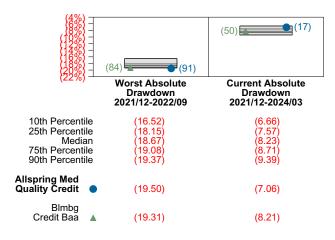
		st Absolute Drawd	lown			Curre	ent Absolute Drawe	down		
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Allspring Med Quality Credit	(19.50)%	0.75	2021/12-2022/09	(19.31)%	(18.27)%	(7.06)%	2.25	2021/12-2024/03	(8.21)%	(7.80)%
Recovery from Trough	15.45%	1.50+	2022/09-2024/03	13.76%	12.81%	15.45%	1.50+	2022/09-2024/03	13.76%	12.81%
Blmbg Credit Baa	(19.64)%	1.75	2020/12-2022/09			(8.58)%	3.25	2020/12-2024/03		
Callan Inv Grade Credit	(18.79)%	1.75	2020/12-2022/09			(8.39)%	3.25	2020/12-2024/03		

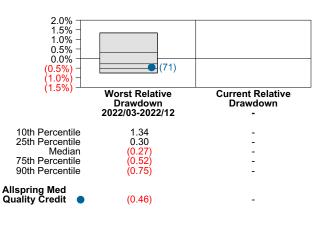
# Relative Cumulative Drawdown Analysis vs. Blmbg Credit Baa



	V	Vorst Rel	ative Drawdown		Current Relative Drawdown			
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Allspring Med Quality Credit	(0.46)%	0.75	2022/03-2022/12	0.24%	-	-	-	-
Recovery from Trough	0.70%	0.75	2022/12-2023/09	0.03%	-	-	-	-
Callan Inv Grade Credit	(2.15)%	1.75	2020/03-2021/12		(1.71)%	4.00	2020/03-2024/03	

Drawdown Rankings vs. Blmbg Credit Baa Rankings against Callan Investment Grade Credit Fixed Inc 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 Inv Grade Credit Peer Group

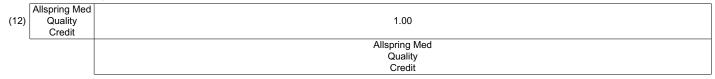
(12)	Allspring Med Quality Credit	BBB <b>(97)</b>	4.29% (13)	5.14% (6)	7.50 <b>(41)</b>	1.04 <b>(62)</b>	17.01 (°	1)
		Quality Rating	Coupon Rate	Effective Yield	Duration	OA Convexity	Average Life	



# **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 Credit Baa





# **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.

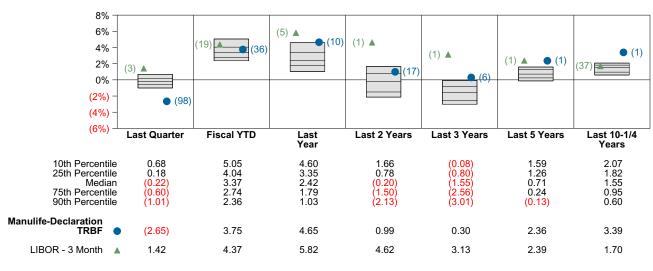
#### **Quarterly Summary and Highlights**

- Manulife-Declaration TRBF's portfolio posted a (2.65)% 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 4.07% for the quarter and underperformed the LIBOR - 3 Month for the year by 1.17%.

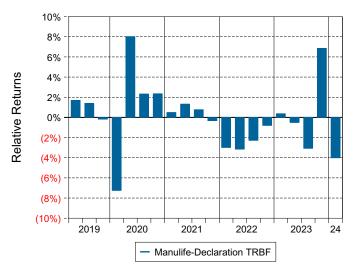
#### **Quarterly Asset Growth**

Beginning Market Value	\$155,542,551
Net New Investment	\$-9,213,609
Investment Gains/(Losses)	\$-4,076,400
Ending Market Value	\$142,252,542

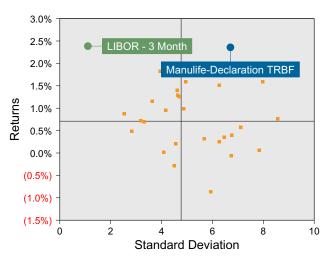
#### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



# Relative Return vs LIBOR - 3 Month



#### Callan Intermediate Fixed Inc Mut Funds (Net) Annualized Five Year Risk vs Return



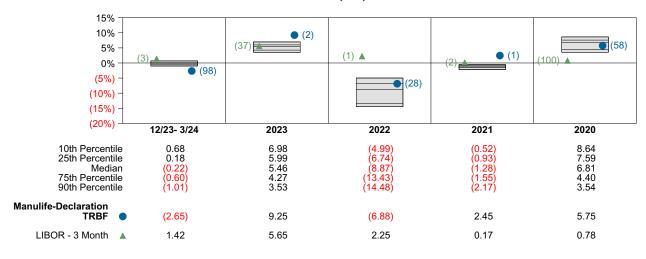


# **Manulife-Declaration TRBF Return Analysis Summary**

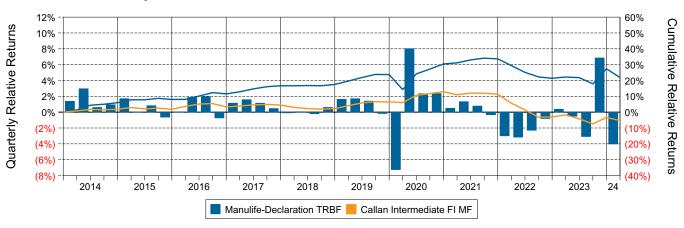
#### **Return Analysis**

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.

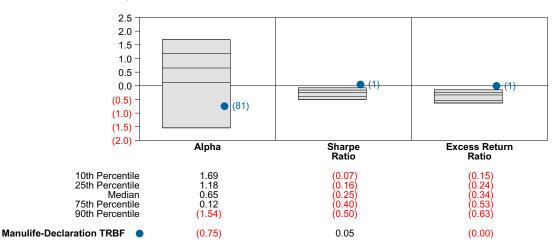
#### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



#### 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



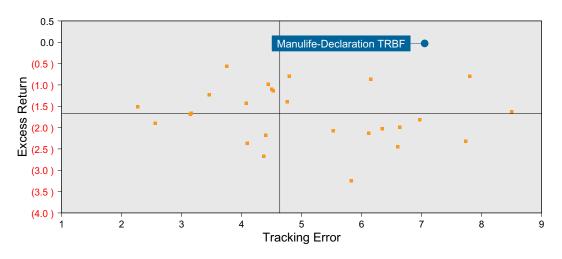


# **Manulife-Declaration TRBF Risk Analysis Summary**

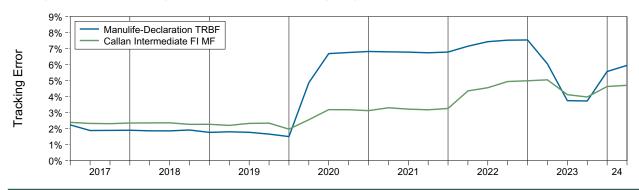
#### **Risk Analysis**

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.

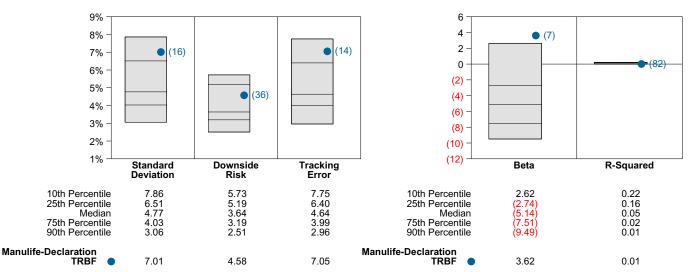
#### Risk Analysis vs Callan Intermediate Fixed Inc Mut Funds (Net) Five Years Ended March 31, 2024



#### 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



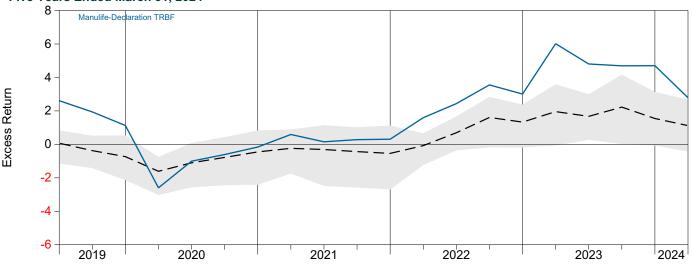


# **Manulife-Declaration TRBF Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

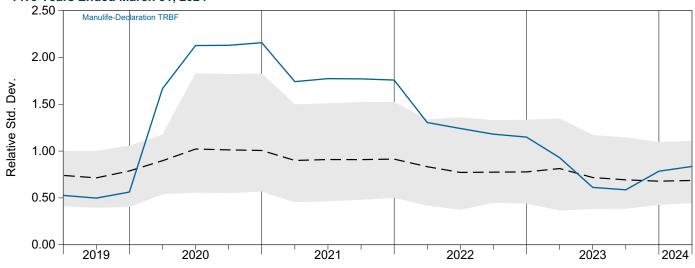
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Intermediate FI MF. The second chart below illustrates the consistency 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	29

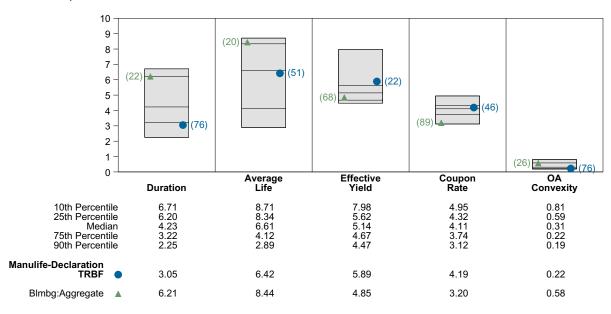


# **Manulife-Declaration TRBF Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

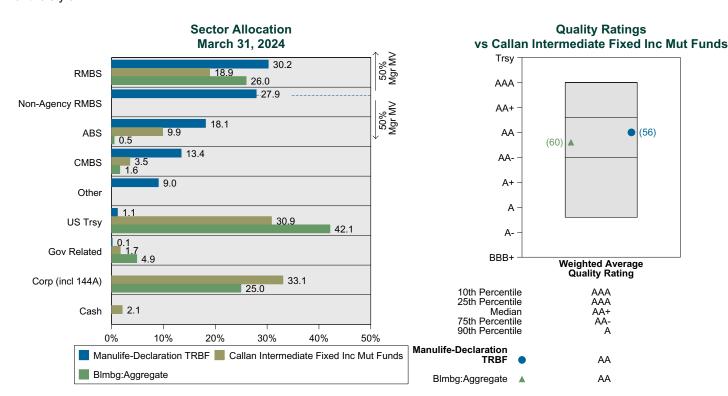
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Intermediate Fixed Inc Mut Funds 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.

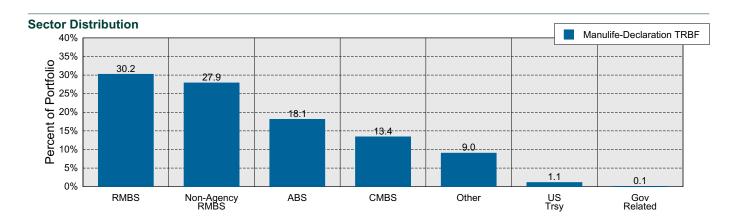


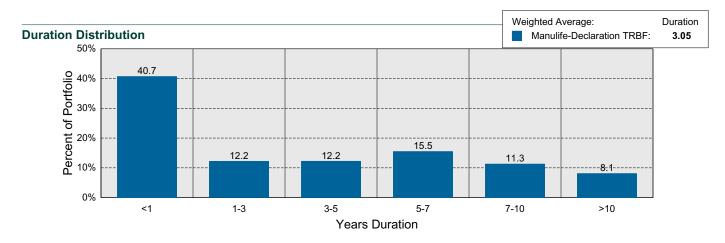


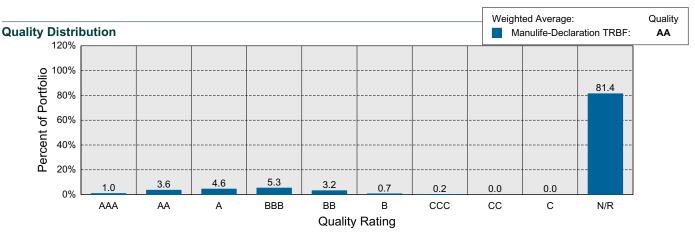
# **Manulife-Declaration TRBF Portfolio Characteristics Summary** As of March 31, 2024

#### **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.



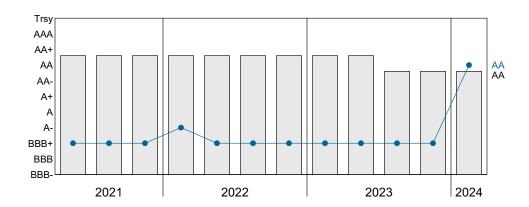




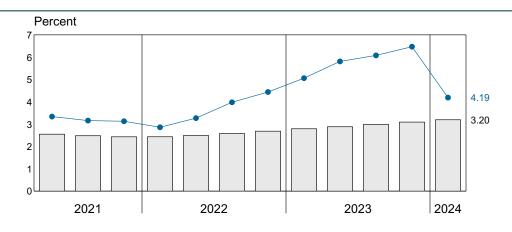


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

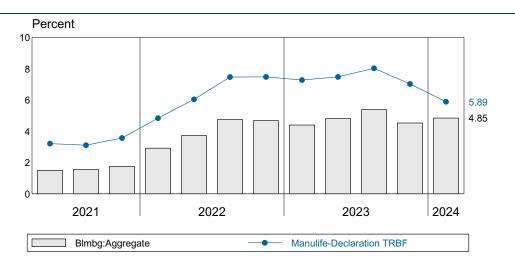




#### Coupon Rate

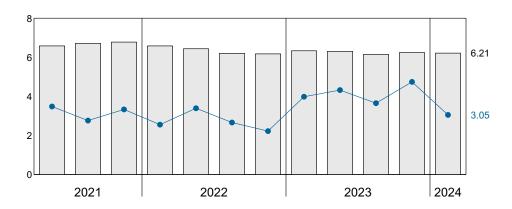




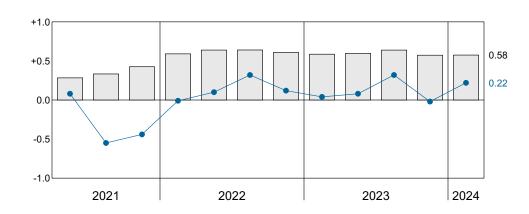


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

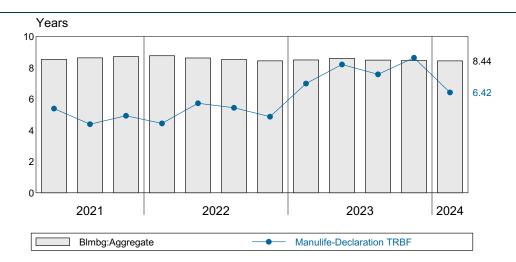
#### **Duration**



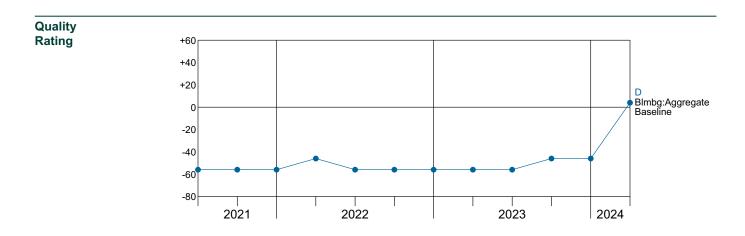
# OA Convexity

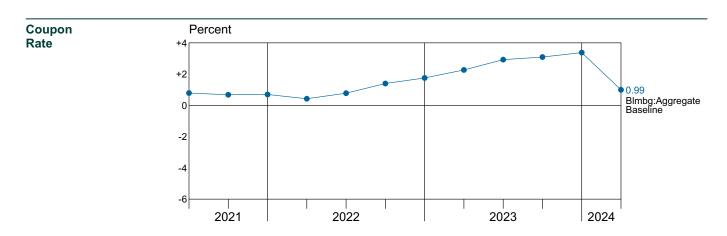


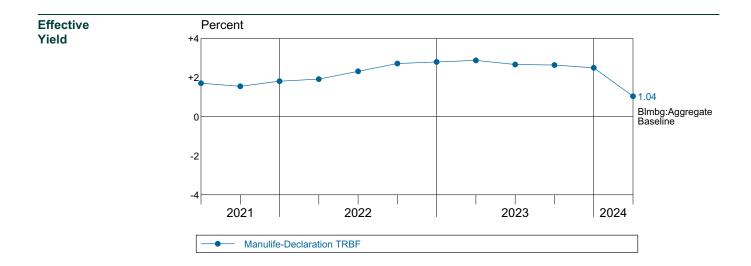
# Average Life



# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

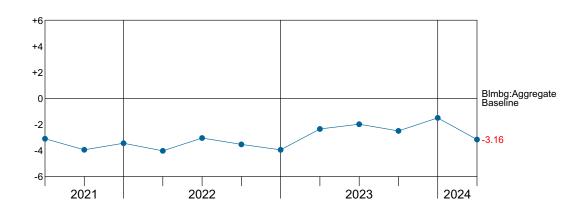




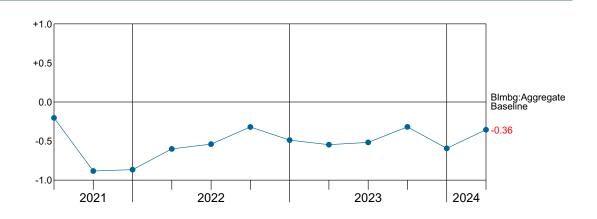


# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

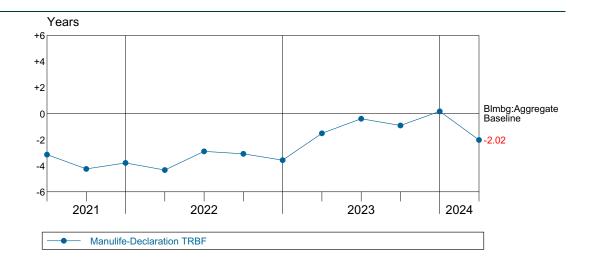




# OA Convexity





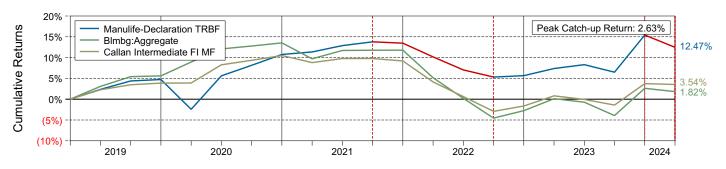




# **Manulife-Declaration TRBF** Drawdown Analysis for Five Years Ended March 31, 2024

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**

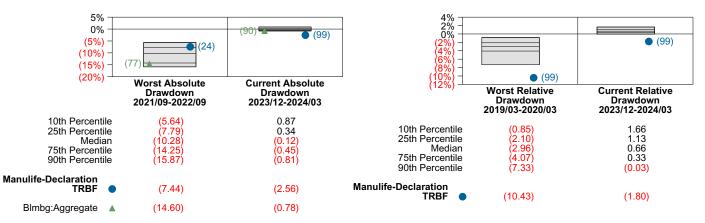


	Worst Absolute Drawdown						Current Absolute Drawdown			
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Manulife-Declaration TRBF	(7.44)%	1.00	2021/09-2022/09	(14.60)%	(11.57)%	(2.56)%	0.25	2023/12-2024/03	(0.78)%	(0.20)%
Recovery from Trough	9.60%	1.25	2022/09-2023/12	7.51%	6.87%	-	-	-	-	-
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: 1.83% Manulife-Declaration TRBF 15% Callan Intermediate FI MF 10.46% 10% 5% 1.69% 0% (10%) 2019 2020 2021 2022 2023 2024

	V	Norst Rel	ative 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)%	(1.80)%	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)	5.95%	3.34 (68)	0.02 <b>(56)</b>	6.09
		Quality Rating	Coupon Rate	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



# PIMCO Bravo II 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. Prior to July 1, 2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.

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

- PIMCO Bravo II's portfolio posted a 5.50% return for the quarter placing it in the 1 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 99 percentile for the last year.
- **PIMCO** Bravo ll's portfolio outperformed the 6.28% Blmbg:Aggregate by for the quarter and underperformed the Blmbg:Aggregate for the year by 1.59%.

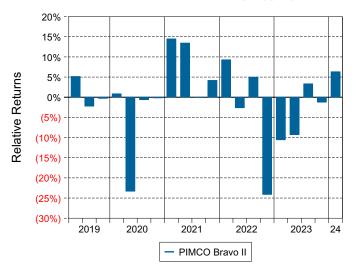
#### **Quarterly Asset Growth**

Beginning Market Value	\$1,188,725
Net New Investment	\$0
Investment Gains/(Losses)	\$65,424
Ending Market Value	\$1,254,149

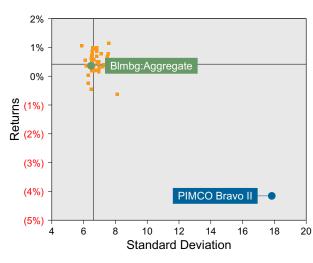
#### Performance vs Callan Core Bond Mutual Funds (Net)



#### Relative Return vs Blmbg:Aggregate



#### Callan Core Bond Mutual Funds (Net) Annualized Five Year Risk vs Return



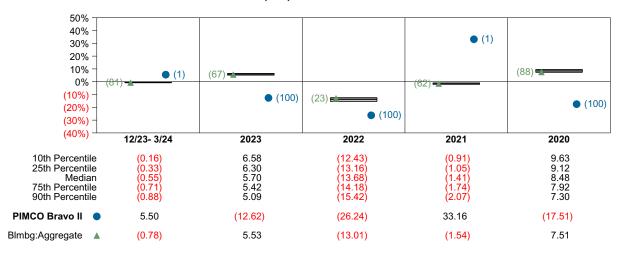


# **PIMCO Bravo II Return Analysis Summary**

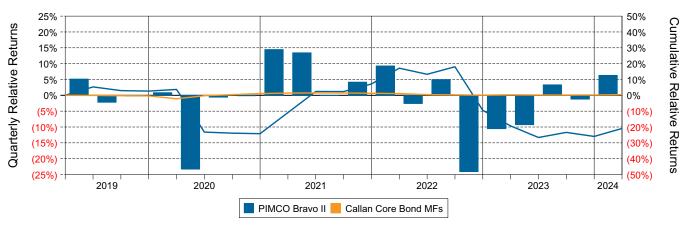
#### **Return Analysis**

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.

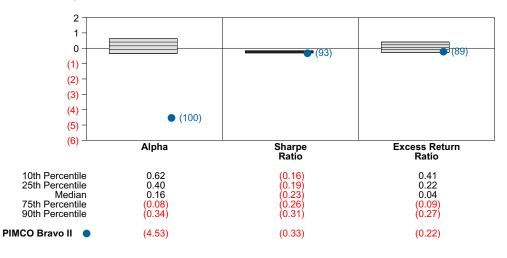
#### Performance vs Callan Core Bond Mutual Funds (Net)



# Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Five Years Ended March 31, 2024





# **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. Prior to July 1, 2019, the Legacy Fund participated in these portfolios via the Insurance Pool. Beginning July 1, 2019, its portion of the pool was segregated into its own portfolios. Returns prior to that date reflect the data from the Insurance pool.

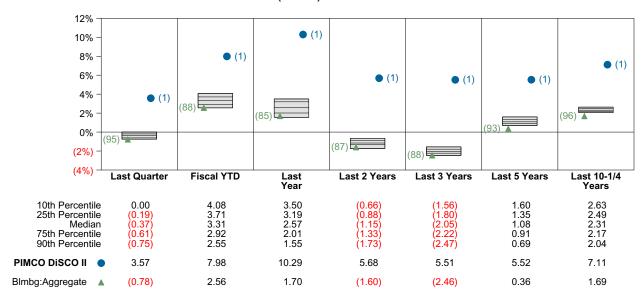
#### **Quarterly Summary and Highlights**

- 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** ll's portfolio outperformed the by 4.35% Blmbg:Aggregate for the quarter outperformed the Blmbg:Aggregate for the year by 8.59%.

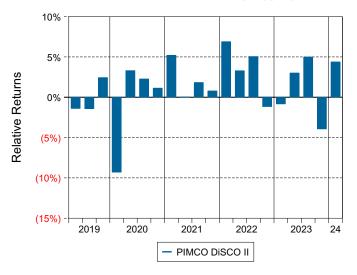
#### **Quarterly Asset Growth**

Beginning Market Value	\$108,544,678
Net New Investment	\$0
Investment Gains/(Losses)	\$3,876,737
Ending Market Value	\$112,421,415

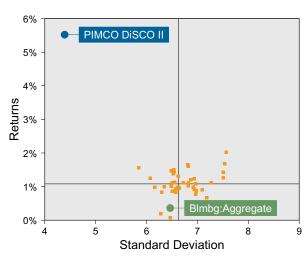
#### Performance vs Callan Core Bond Mutual Funds (Gross)



# Relative Return vs Blmbg:Aggregate



#### Callan Core Bond Mutual Funds (Gross) Annualized Five Year Risk vs Return



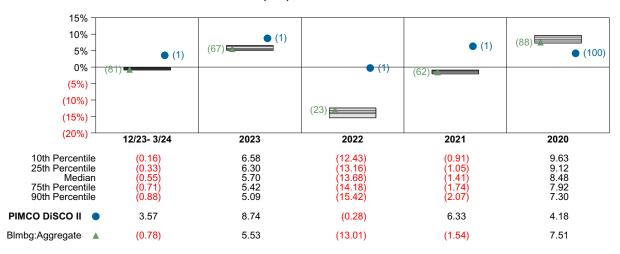


# **PIMCO DISCO II Return Analysis Summary**

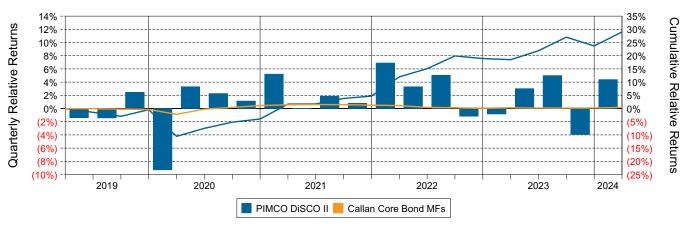
#### **Return Analysis**

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.

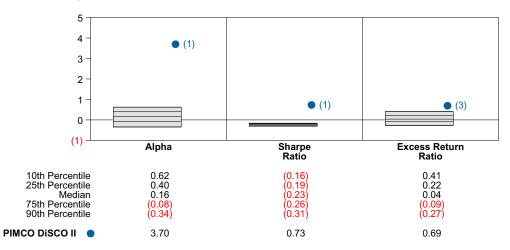
#### Performance vs Callan Core Bond Mutual Funds (Net)



# **Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate**



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Five Years Ended March 31, 2024





# **Prudential Core Plus** Period Ended March 31, 2024

#### **Investment Philosophy**

The core plus fixed income account is a multi-sector strategy that is diversified across a broad range of fixed income sectors, including Treasuries, agencies, mortgage-backed securities, structured product (asset-backed securities, commercial mortgage-backed securities), investment grade corporate bonds, high yield bonds, bank loans and international debt. The primary sources of excess return are sector allocation and security selection, with duration and yield curve less of a focus.

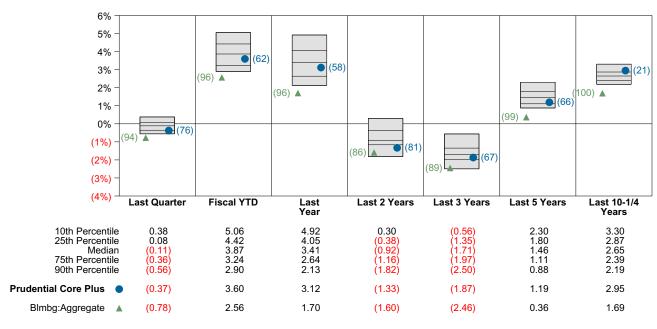
#### **Quarterly Summary and Highlights**

- Prudential Core Plus's portfolio posted a (0.37)% return for the quarter placing it in the 76 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 58 percentile for the last year.
- Prudential Core Plus's portfolio outperformed Blmbg:Aggregate by 0.40% for the quarter outperformed the Blmbg:Aggregate for the year by 1.42%.

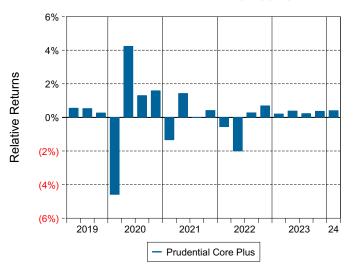
#### **Quarterly Asset Growth**

Beginning Market Value	\$588,335,991
Net New Investment	\$56,631,922
Investment Gains/(Losses)	\$-1,733,600
Ending Market Value	\$643.234.313

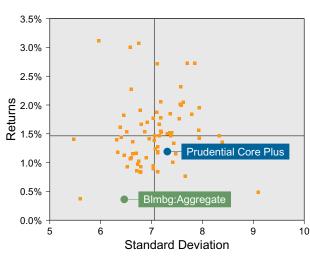
# Performance vs Callan Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



#### Callan Core Plus Fixed Income (Gross) Annualized Five Year Risk vs Return



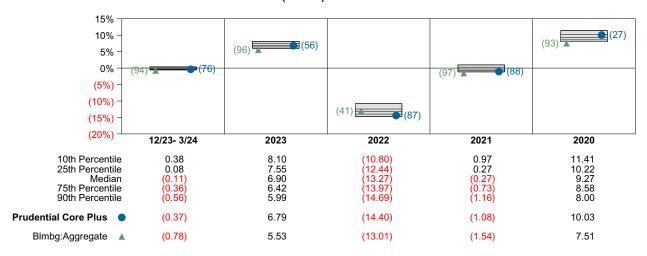


# **Prudential Core Plus Return Analysis Summary**

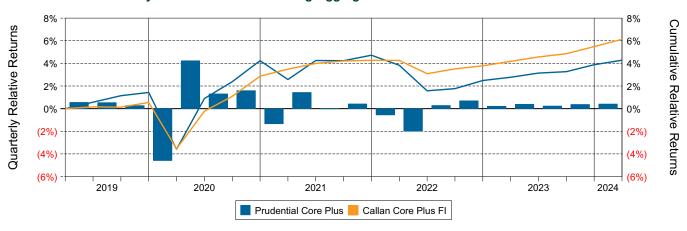
#### **Return Analysis**

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.

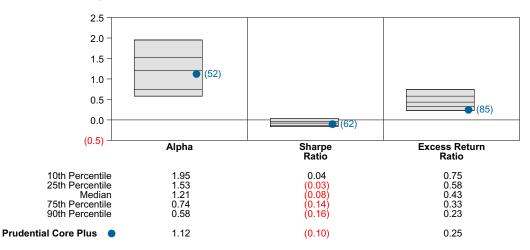
#### Performance vs Callan Core Plus Fixed Income (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



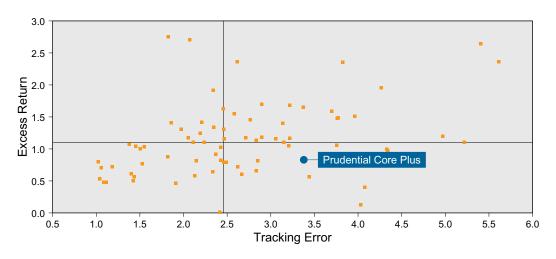


# **Prudential Core Plus Risk Analysis Summary**

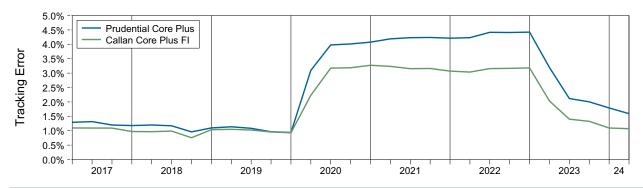
#### Risk Analysis

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.

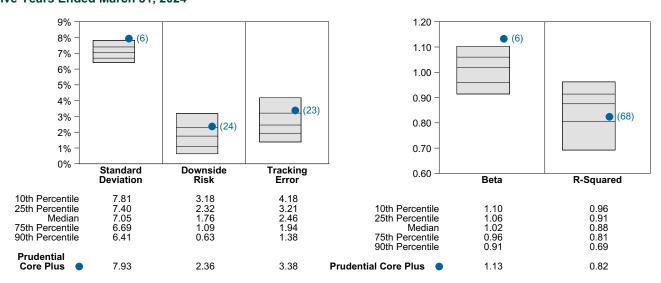
#### Risk Analysis vs Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



#### Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



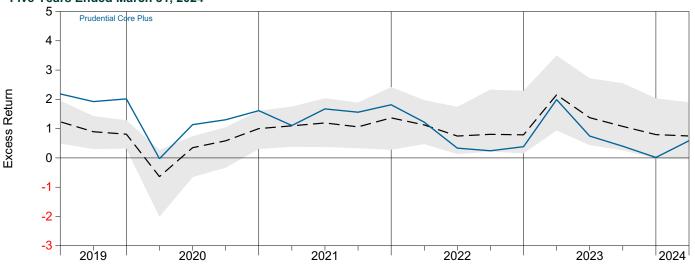


# **Prudential Core Plus Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

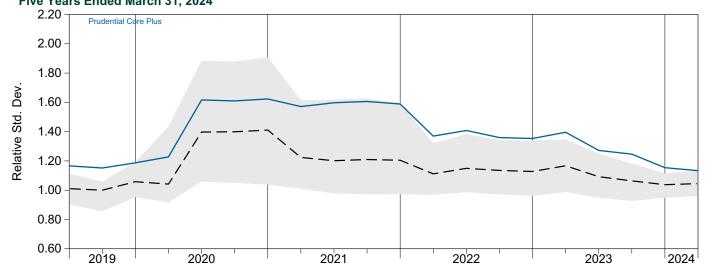
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbq:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative 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%	1.11%
% Positive Periods	95%	95%
Average Ranking	50	42

#### 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%	1.38%
% Positive Periods	100%	100%
Average Ranking	50	11

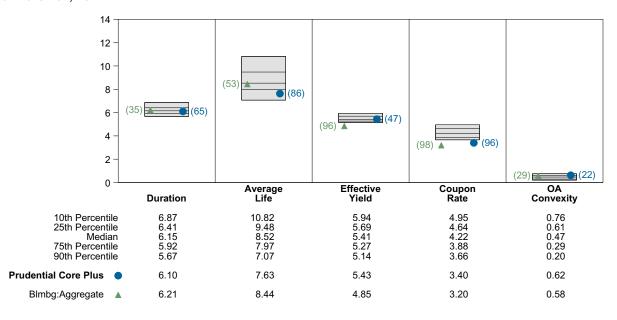


# **Prudential Core Plus Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

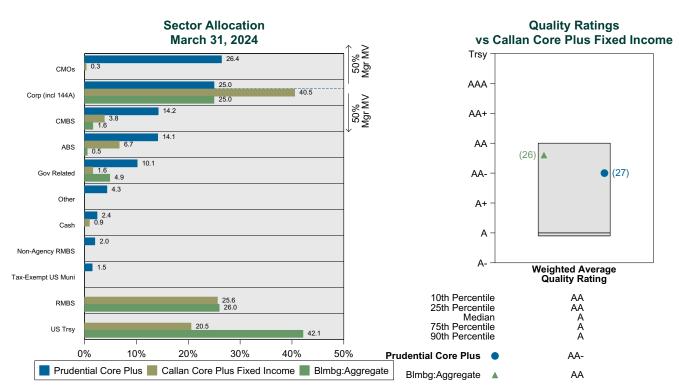
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **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.

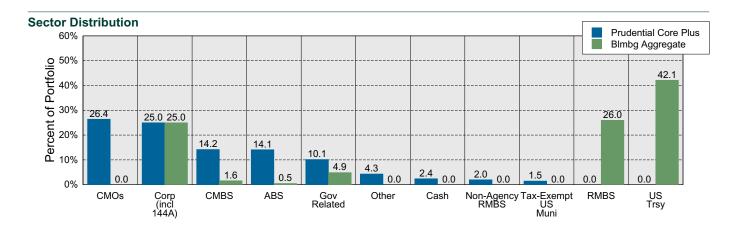


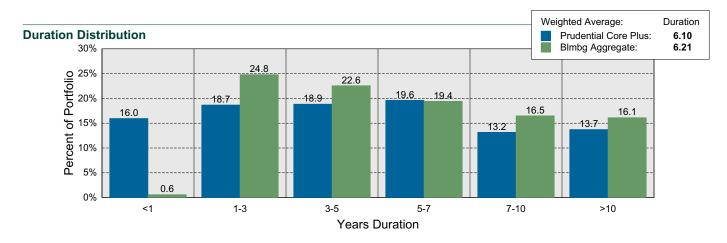


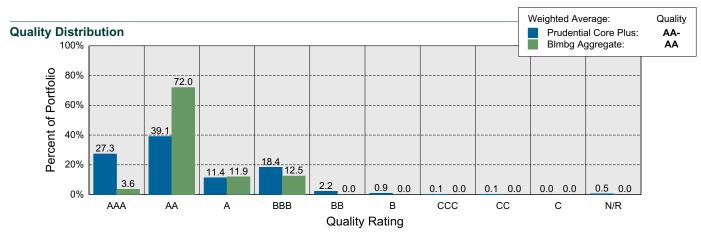
# **Prudential Core Plus Portfolio Characteristics Summary** As of March 31, 2024

# **Portfolio Structure Comparison**

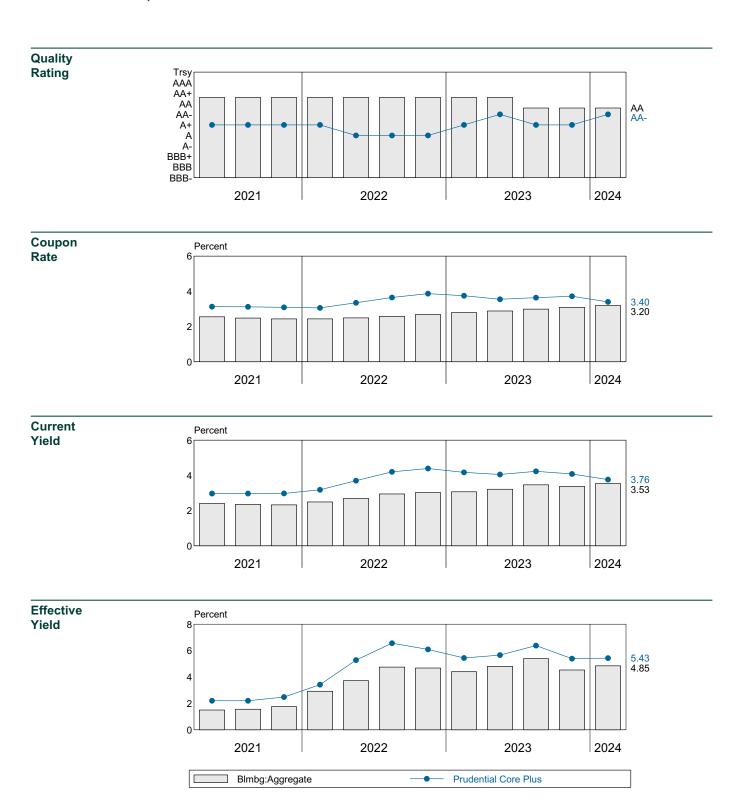
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution across quality ratings.





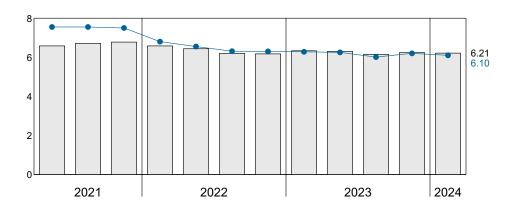


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

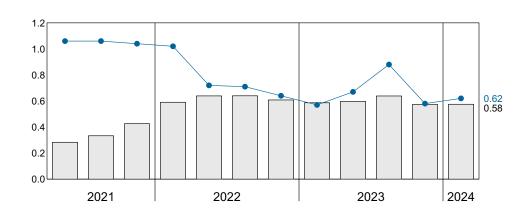


# North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

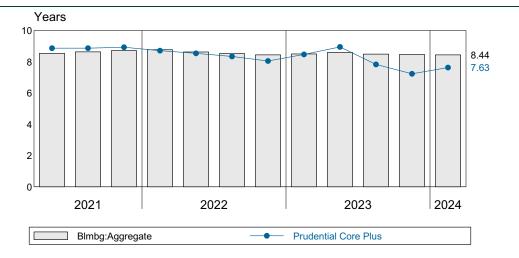
#### **Duration**



# OA Convexity

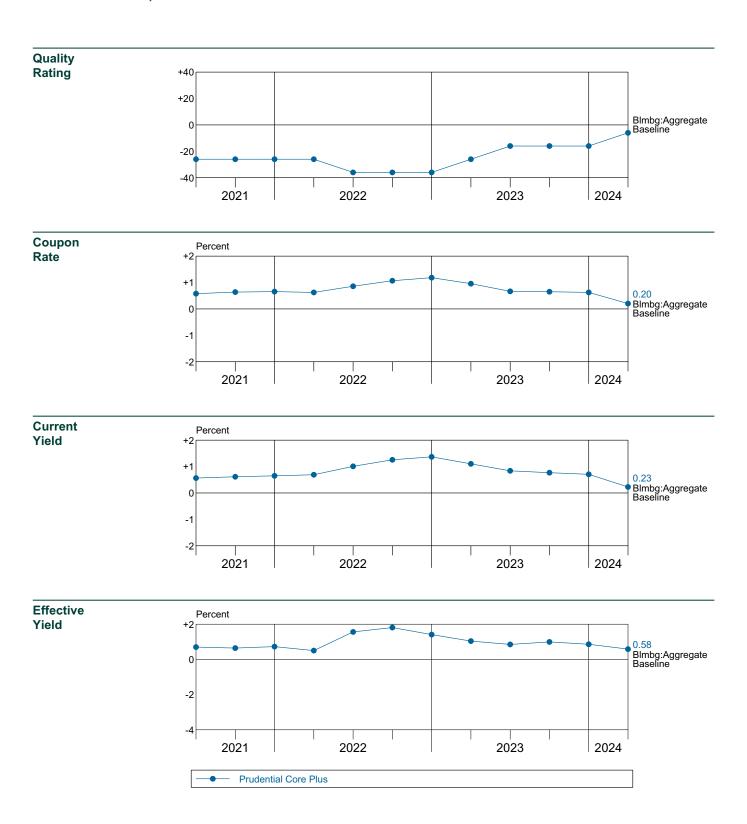






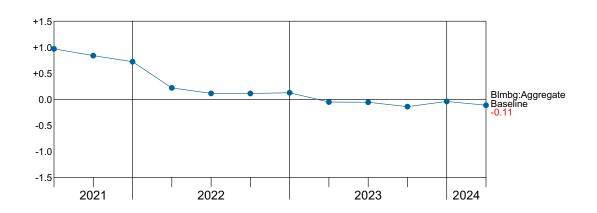


# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

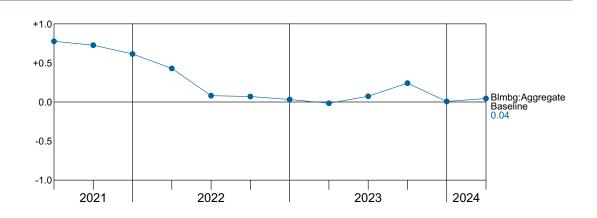


# North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024

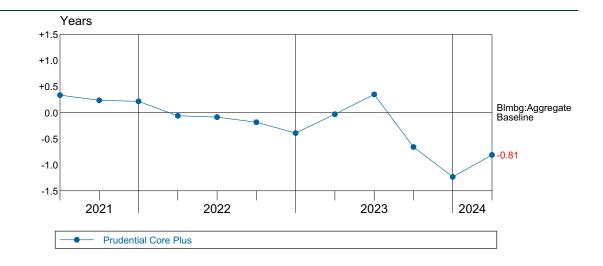




# OA Convexity



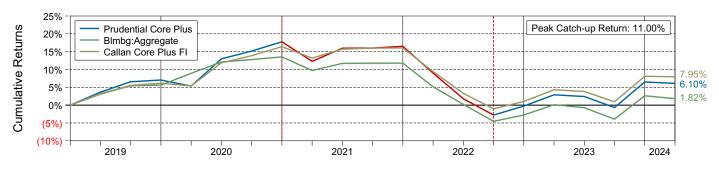




# **Prudential Core Plus** Drawdown Analysis for Five Years Ended March 31, 2024

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**

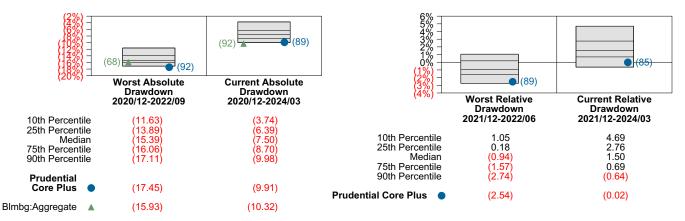


	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Prudential Core Plus	(17.45)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(9.91)%	3.25	2020/12-2024/03	(10.32)%	(7.26)%
Recovery from Trough	9.13%	1.50+	2022/09-2024/03	6.67%	9.08%	9.13%	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 Peak Catch-up Rel Rtn: 0.02% Prudential Core Plus 6.02% Callan Core Plus FI 4.20% 2% (4%)(6%)2019 2021 2022 2023 2024 2020

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Prudential Core Plus	(2.54)%	0.50	2021/12-2022/06	(0.71)%	(0.02)%	2.25	2021/12-2024/03	2.12%	
Recovery from Trough	2.59%	1.75+	2022/06-2024/03	2.85%	2.59%	1.75+	2022/06-2024/03	2.85%	
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 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**

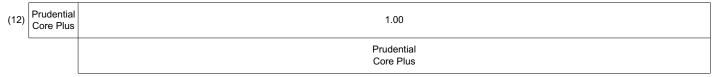
(17)	Prudential Core Plus	A+ (53)	3.44% (58)	3.72%	4.71% (43)	6.62	0.80	8.37 (59)
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **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





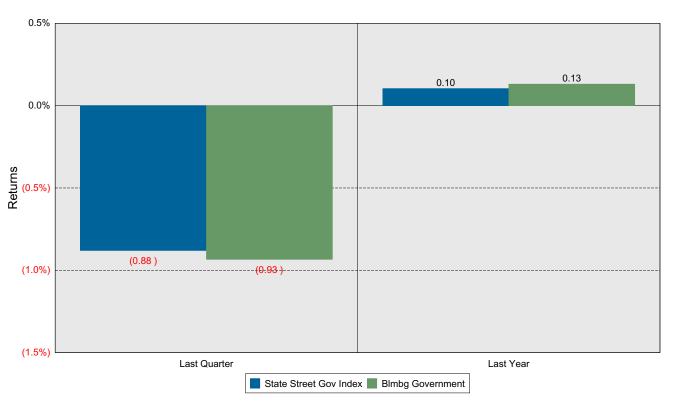
## **State Street Gov Index** Period Ended March 31, 2024

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

• State Street Gov Index's portfolio outperformed the Blmbg Government by 0.05% for the quarter and underperformed the Blmbg Government for the year by 0.03%.

#### **Quarterly Asset Growth**

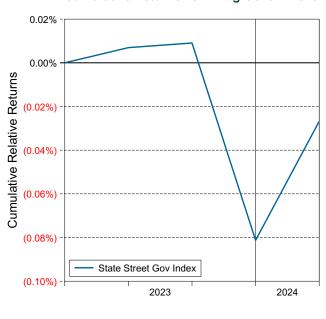
Beginning Market Value	\$276,076,793
Net New Investment	\$12,355,587
Investment Gains/(Losses)	\$-2,337,449
Ending Market Value	\$286,094,931



## Relative Return vs Blmbg Government

## 0.08% 0.06% 0.04% 0.02% Relative Returns 0.00% (0.02%) (0.06%)(0.08%)(0.10%)(0.12%)2023 2024 State Street Gov Index

#### **Cumulative Returns vs Blmbg Government**





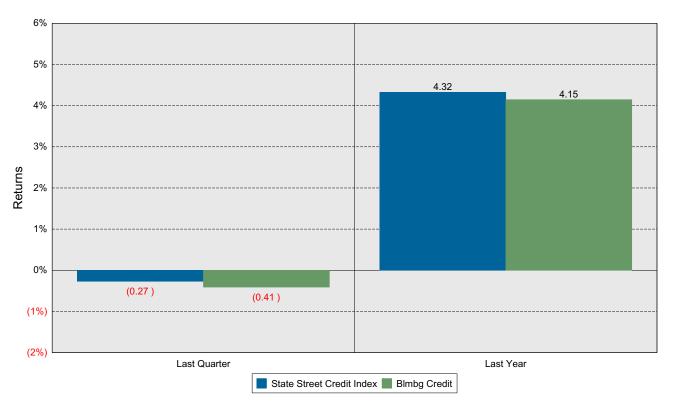
## **State Street Credit Index** Period Ended March 31, 2024

#### **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**

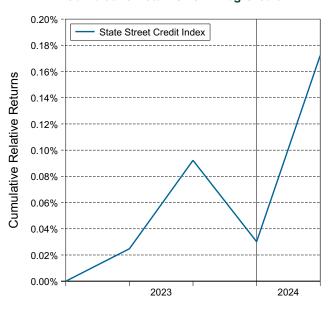
Beginning Market Value	\$72,042,024
Net New Investment	\$-13,078,858
Investment Gains/(Losses)	\$-228,831
Ending Market Value	\$58,734,336



#### Relative Return vs Blmbg Credit

# 0.20% 0.15% 0.10% Relative Returns 0.05% 0.00% (0.05%)(0.10%)2023 2024 State Street Credit Index

#### **Cumulative Returns vs Blmbg Credit**



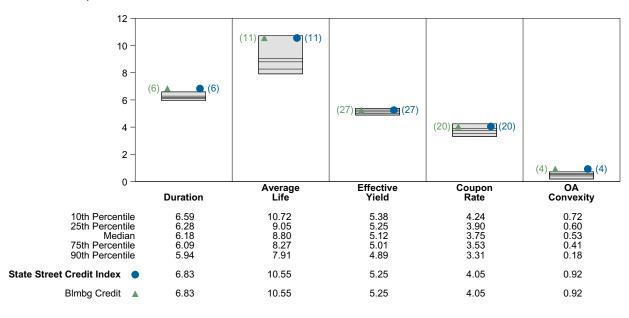


## **State Street Credit Index Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

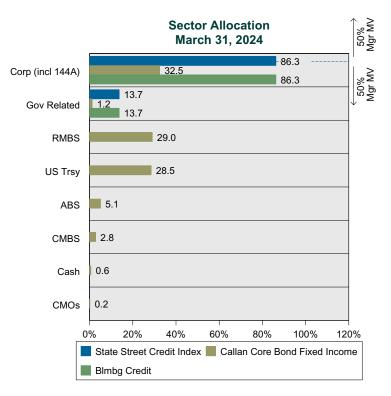
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

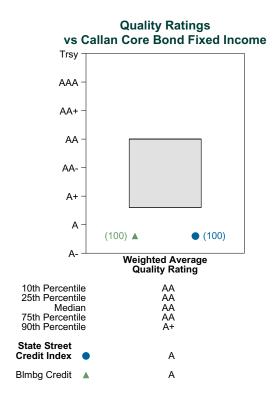
#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of March 31, 2024



#### 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.



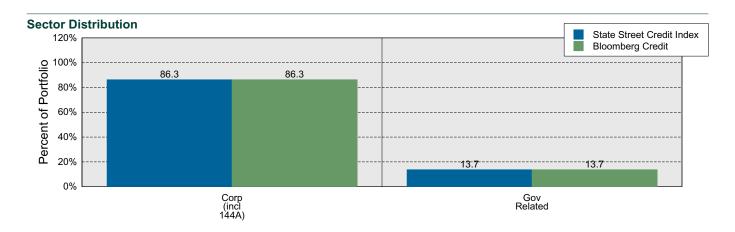


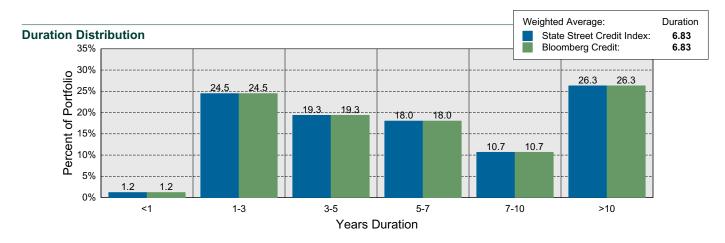


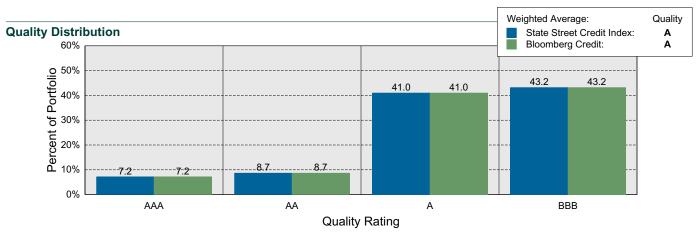
## **State Street Credit Index Portfolio Characteristics Summary** As of March 31, 2024

#### **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 Management Company** 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.

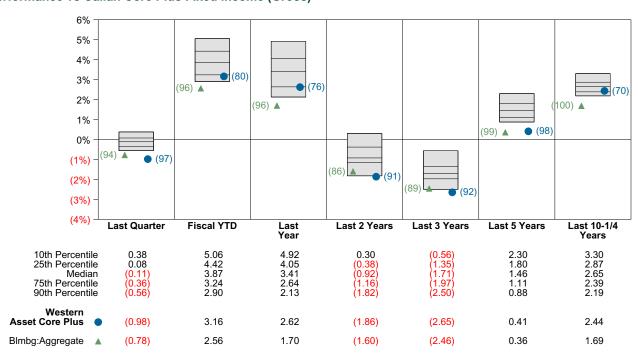
#### **Quarterly Summary and Highlights**

- Western Asset Core Plus's portfolio posted a (0.98)% 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 0.21% for the guarter and outperformed the Blmbg:Aggregate for the year by 0.93%.

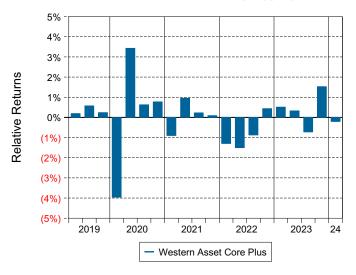
#### **Quarterly Asset Growth**

Beginning Market Value	\$594,379,080
Net New Investment	\$54,726,932
Investment Gains/(Losses)	\$-5,338,925
Ending Market Value	\$643,767,087

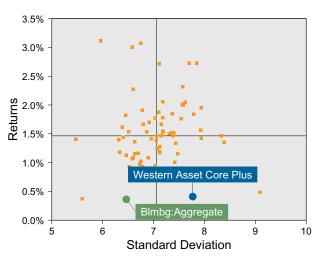
## Performance vs Callan Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



#### Callan Core Plus Fixed Income (Gross) Annualized Five Year Risk vs Return



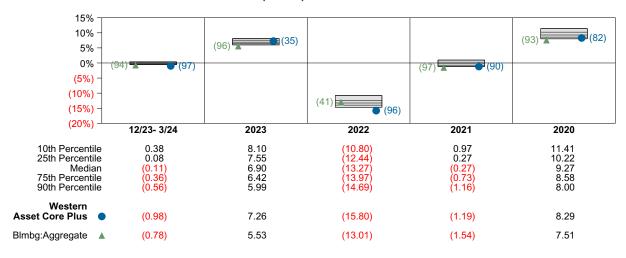


## **Western Asset Core Plus Return Analysis Summary**

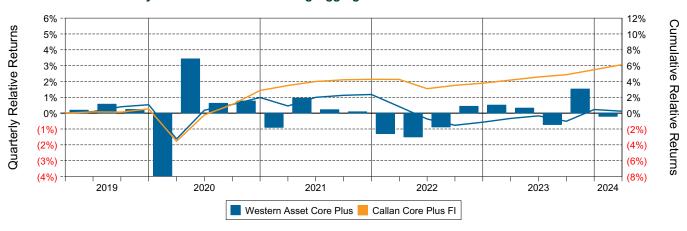
#### **Return Analysis**

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.

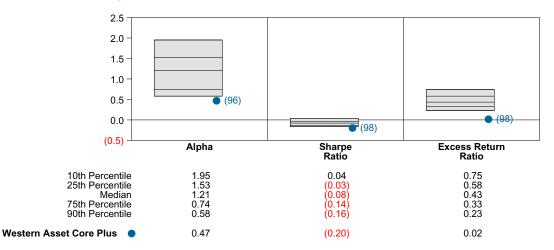
#### Performance vs Callan Core Plus Fixed Income (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



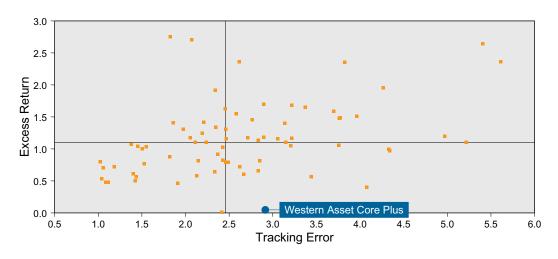


## **Western Asset Core Plus Risk Analysis Summary**

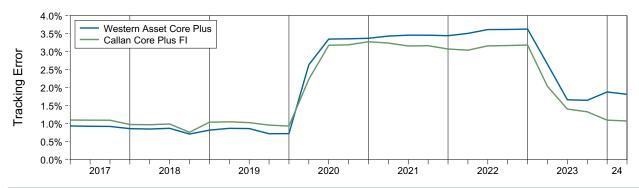
#### **Risk Analysis**

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.

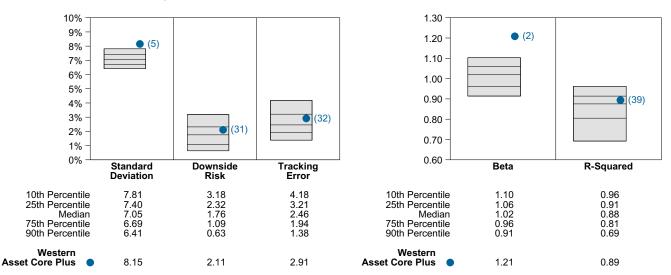
#### Risk Analysis vs Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



## Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended March 31, 2024



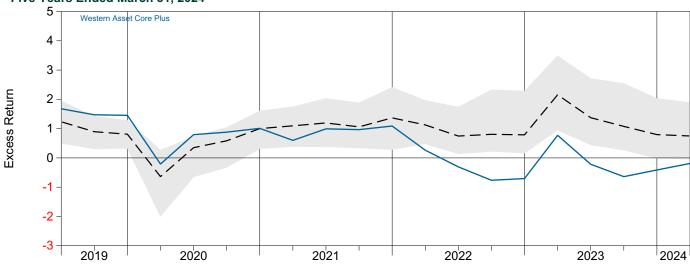


## **Western Asset Core Plus Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

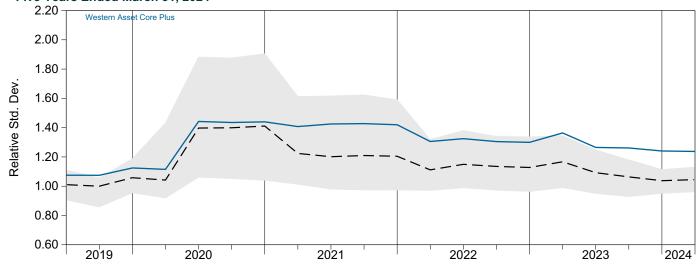
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative 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%	0.43%
% Positive Periods	95%	60%
Average Ranking	50	64

#### 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%	1.30%
% Positive Periods	100%	100%
Average Ranking	50	20

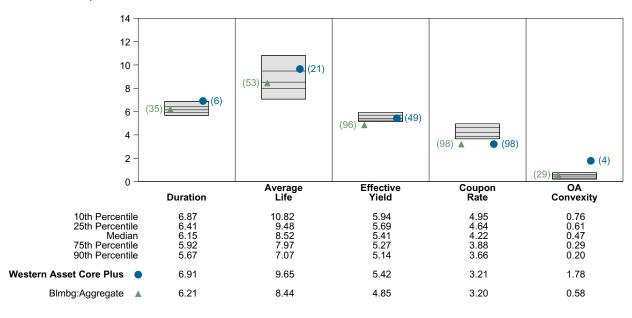


## **Western Asset Core Plus Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

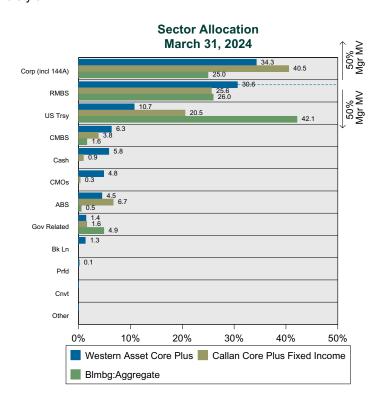
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

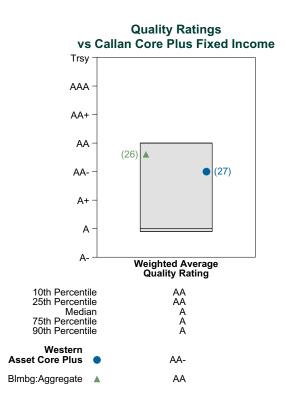
#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of March 31, 2024



#### 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.



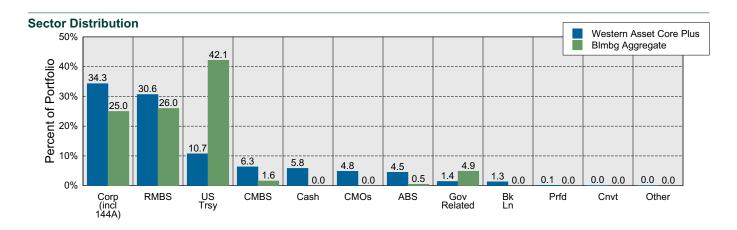


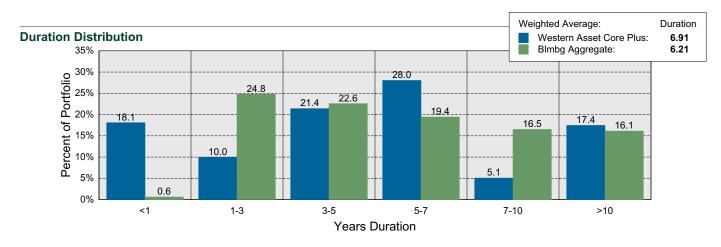


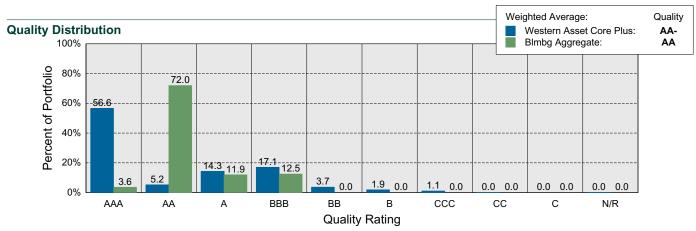
## **Western Asset Core Plus Portfolio Characteristics Summary** As of March 31, 2024

## **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.

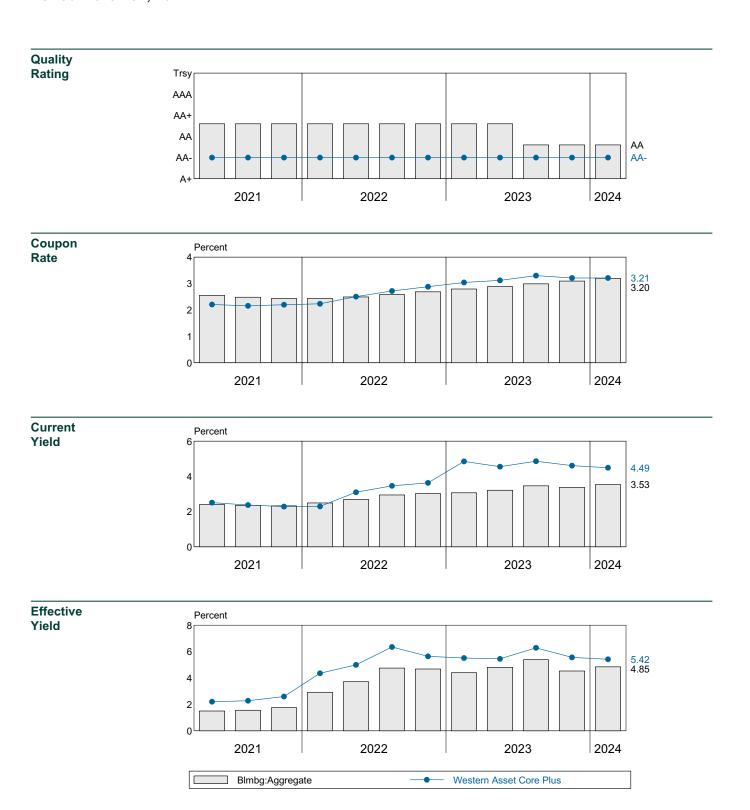






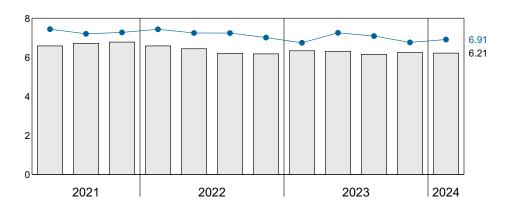


## North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

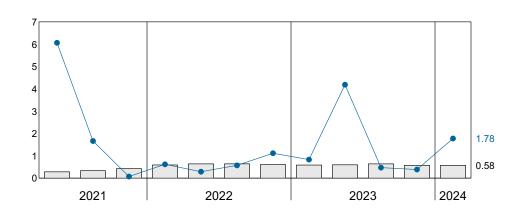


## North Dakota State Investment Board Legacy Fund History of Fixed Income Characteristics Period March 31, 2024

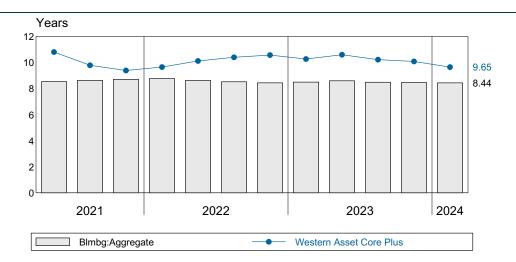
#### **Duration**



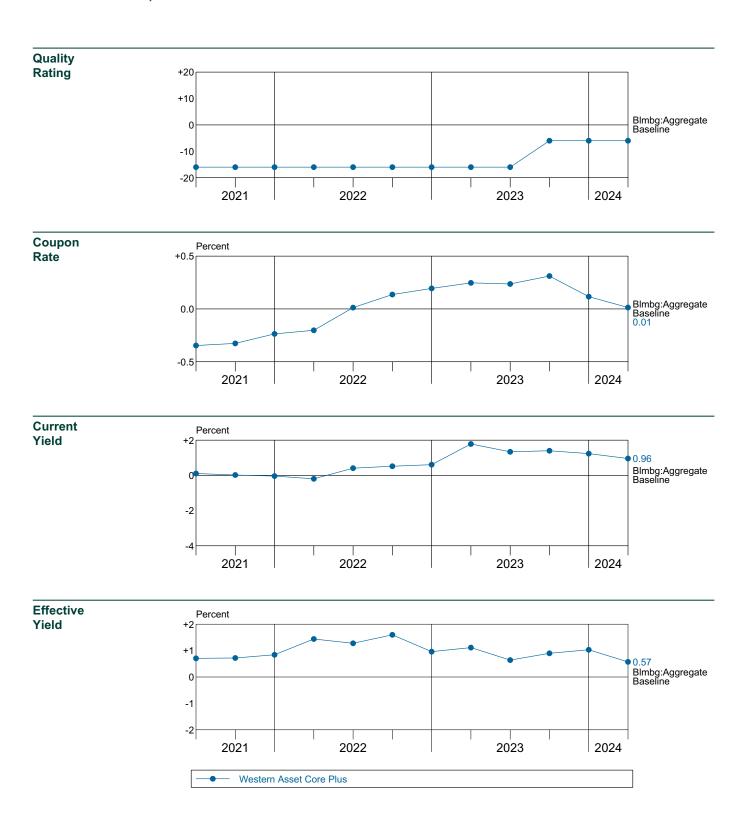
## OA Convexity



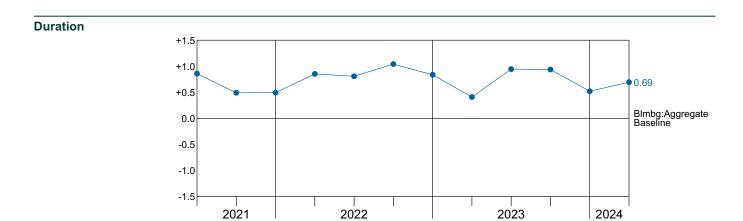
## **Average** Life

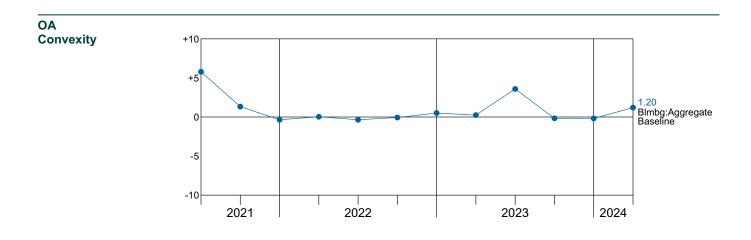


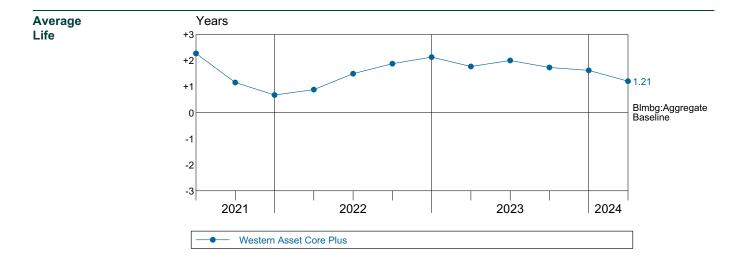
## North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024



## North Dakota State Investment Board Legacy Fund **Consistency of Fixed Income Characteristics** Period March 31, 2024



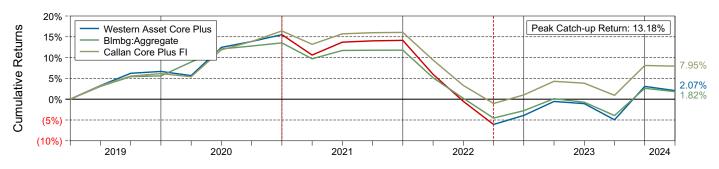




## **Western Asset Core Plus** Drawdown Analysis for Five Years Ended March 31, 2024

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**



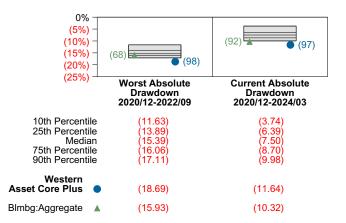
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Western Asset Core Plus	(18.69)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(11.64)%	3.25	2020/12-2024/03	(10.32)%	(7.26)%
Recovery from Trough	8.67%	1.50+	2022/09-2024/03	6.67%	9.08%	8.67%	1.50+	2022/09-2024/03	6.67%	9.08%
Blmbg:Aggregate	(15.93)%	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		

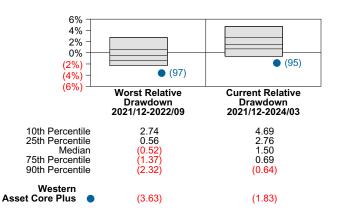
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate **Cumulative Relative Returns** Peak Catch-up Rel Rtn: 1.86% Western Asset Core Plus 6.02% Callan Core Plus FI 2% 0.24% 2019 2021 2022 2023 2024 2020

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Western Asset Core Plus	(3.63)%	0.75	2021/12-2022/09	(0.13)%	(1.83)%	2.25	2021/12-2024/03	2.12%
Recovery from Trough	1.87%	1.50+	2022/09-2024/03	2.25%	1.87%	1.50+	2022/09-2024/03	2.25%
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 Years Ended March 31, 2024





Current Absolute Drawdown



## **Comparative Manager Matrix**

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## Average Bond Characteristics for 3 Years Ended March 31, 2024 **VS THE Callan Core Plus FI Peer Group**

(12)	Western Asset Core Plus	AA- (34)	2.73% (96)	3.58%	4.72% ( <b>40</b> )	7.13	1.50	10.13
		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

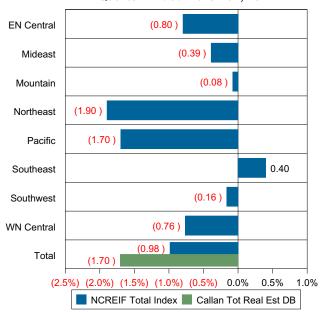
	Western Asset	
(12)	Core	1.00
	Plus	
•		Western Asset
		Core Plus
		Plus



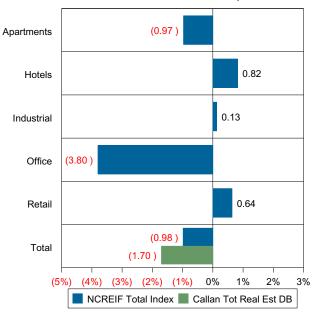
## **Real Estate Market Overview**

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%.

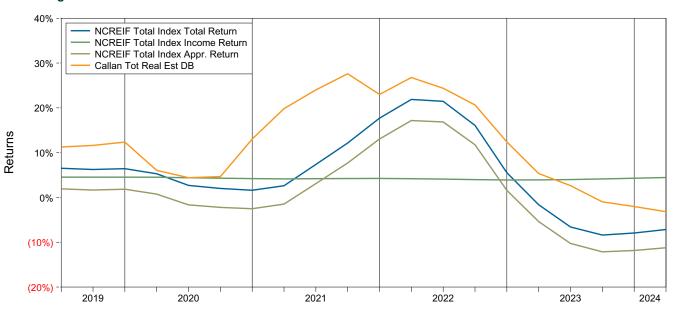
#### **NCREIF Total Index Returns by Geographic Area** Quarter Ended March 31, 2024



#### **NCREIF Total Index Returns by Property Type** Quarter Ended March 31, 2024



#### **Rolling 1 Year Returns**





## **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**

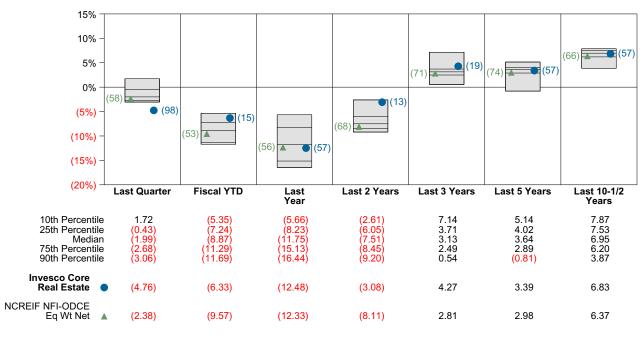
- Invesco Core Real Estate's portfolio posted a (4.76)% return for the quarter placing it in the 98 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 57 percentile for the last year.
- Invesco Core Real Estate's portfolio underperformed the NCREIF NFI-ODCE Eg 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**

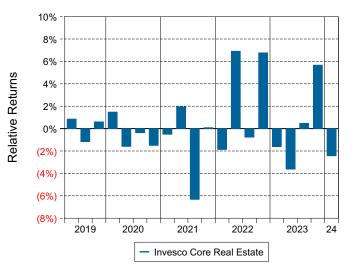
Investment Gains/(Losses)	\$-9,889,877
Net New Investment	\$0
Beginning Market Value	\$207,987,673

**Ending Market Value** \$198,097,796

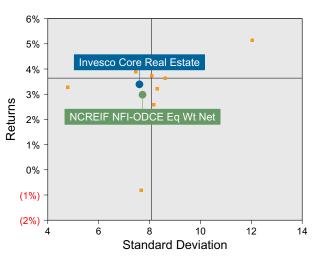
#### Performance vs Callan Open End Core Cmmingled Real Est (Gross)



#### Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



#### Callan Open End Core Cmmingled Real Est (Gross) Annualized Five Year Risk vs Return



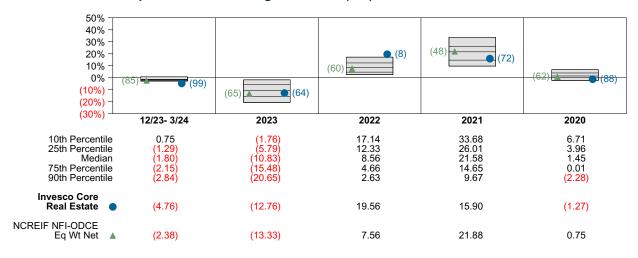


## **Invesco Core Real Estate Return Analysis Summary**

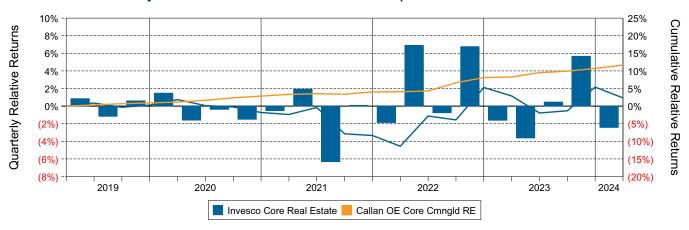
#### **Return Analysis**

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.

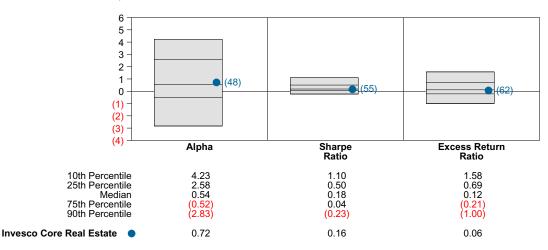
#### Performance vs Callan Open End Core Cmmingled Real Est (Net)



#### 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



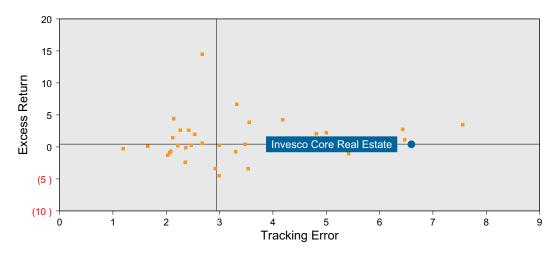


## **Invesco Core Real Estate Risk Analysis Summary**

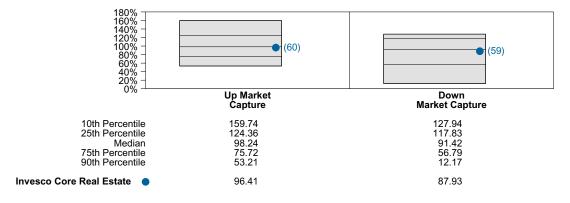
#### Risk Analysis

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.

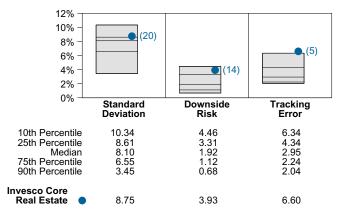
#### Risk Analysis vs Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024

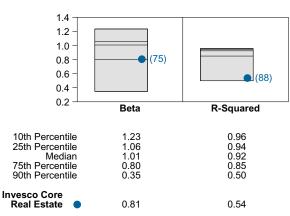


#### Market Capture vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended March 31, 2024



#### 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





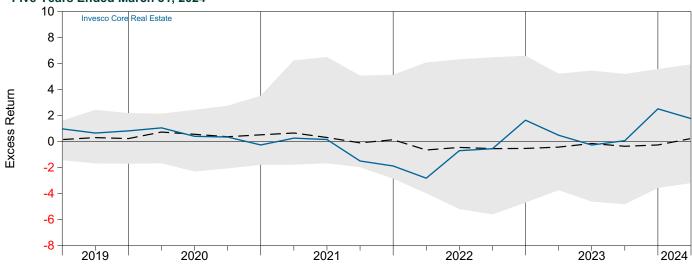


## **Invesco Core Real Estate Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

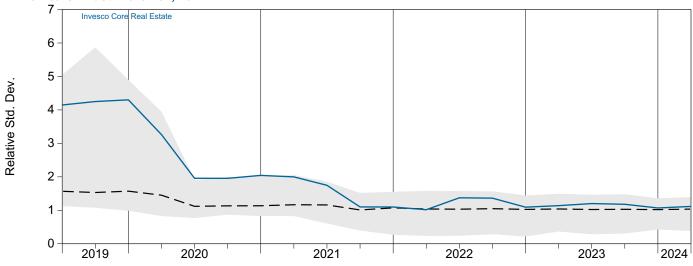
The first chart below illustrates the consistency of excess return over rolling three year periods versus the NCREIF NFI-ODCE Eq Wt Net. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan OE Core Cmngld RE. The second chart below illustrates the consistency 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



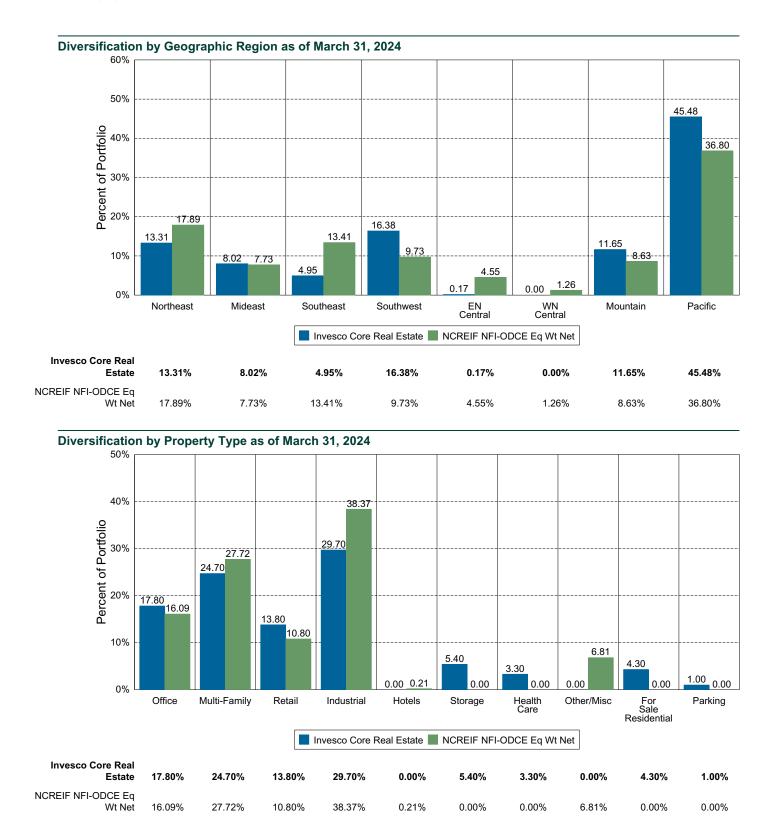
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.16%	1.92%
% Positive Periods	100%	100%
Average Ranking	50	22



## **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.





## JP Morgan Inc & Growth Fd Period Ended March 31, 2024

#### **Investment Philosophy**

The J.P. Morgan U.S. Real Estate Income and Growth Fund seeks to construct and opportunistically manage a portfolio of core direct real estate investments, complemented by other real estate and real estate-related assets. The Fund pursues a broadly diversified absolute-return strategy and pursues all property investments on an opportunistic basis. The majority of the Fund's investments will be in direct core properties in the office, industrial, retail and residential sectors.

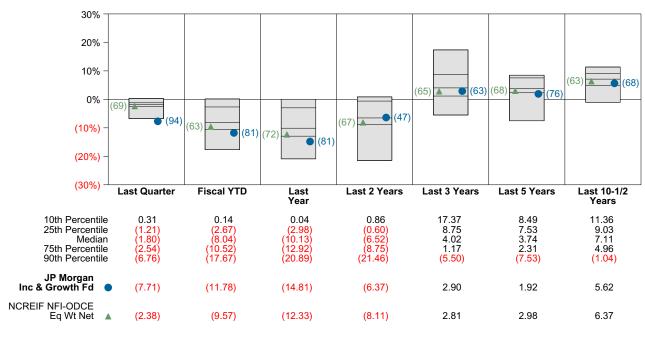
#### **Quarterly Summary and Highlights**

- JP Morgan Inc & Growth Fd's portfolio posted a (7.71)% return for the quarter placing it in the 94 percentile of the Callan Real Estate Value Added group for the quarter and in the 81 percentile for the last year.
- JP Morgan Inc & Growth Fd's portfolio underperformed the NCREIF NFI-ODCE Eg Wt Net by 5.33% for the guarter and underperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 2.48%.

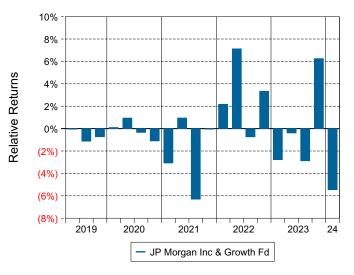
#### **Quarterly Asset Growth**

Beginning Market Value	\$200,340,058
Net New Investment	\$-333,871
Investment Gains/(Losses)	\$-15,182,897
Ending Market Value	\$184,823,289

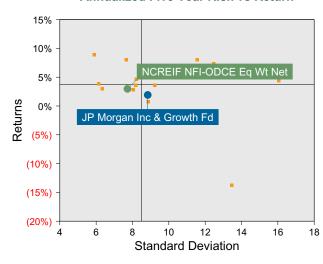
#### Performance vs Callan Real Estate Value Added (Net)



#### Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



#### Callan Real Estate Value Added (Net) Annualized Five Year Risk vs Return



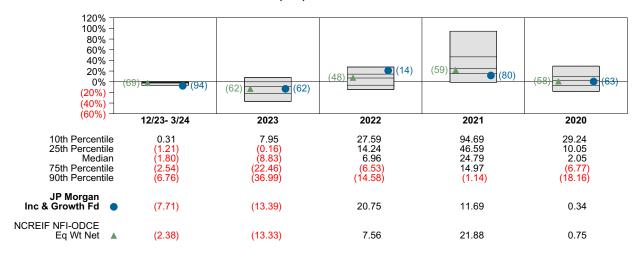


## JP Morgan Inc & Growth Fd **Return Analysis Summary**

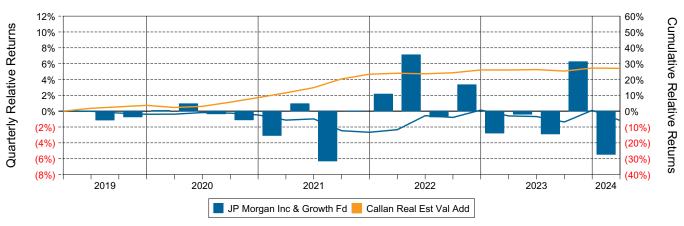
#### **Return Analysis**

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.

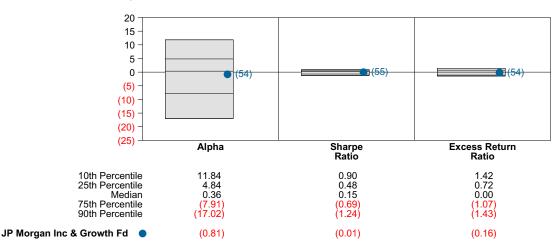
#### Performance vs Callan Real Estate Value Added (Net)



## 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 Real Estate Value Added (Net) Five Years Ended March 31, 2024



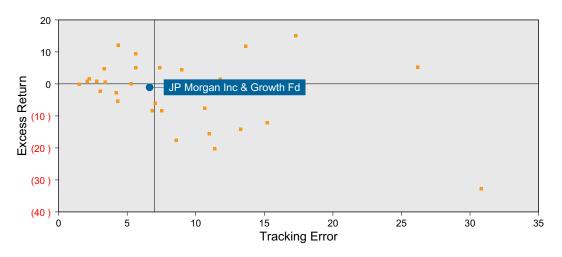


## JP Morgan Inc & Growth Fd **Risk Analysis Summary**

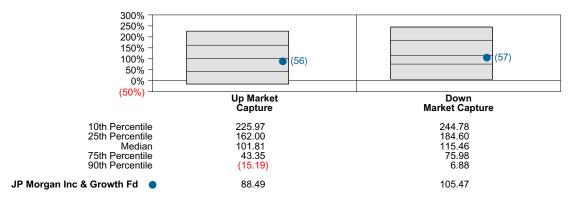
#### Risk Analysis

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.

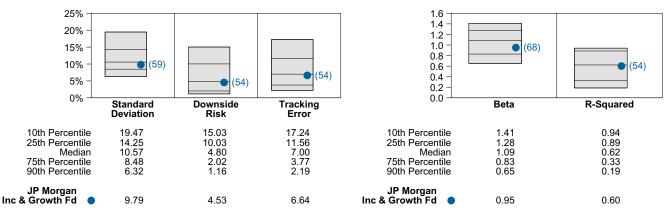
#### Risk Analysis vs Callan Real Estate Value Added (Net) Five Years Ended March 31, 2024



#### Market Capture vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Real Estate Value Added (Net) Five Years Ended March 31, 2024



#### Risk Statistics Rankings vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Real Estate Value Added (Net) Five Years Ended March 31, 2024



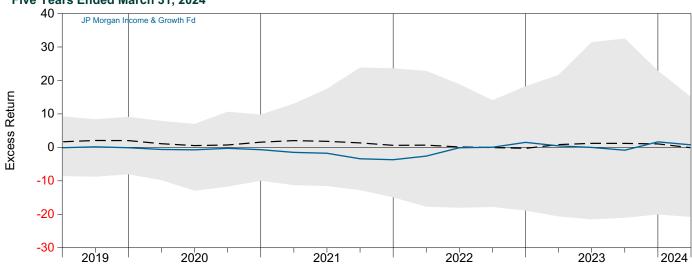


## JP Morgan Income & Growth Fd **Historical Consistency Analysis**

#### Consistency of Excess Return and Relative Std. Dev.

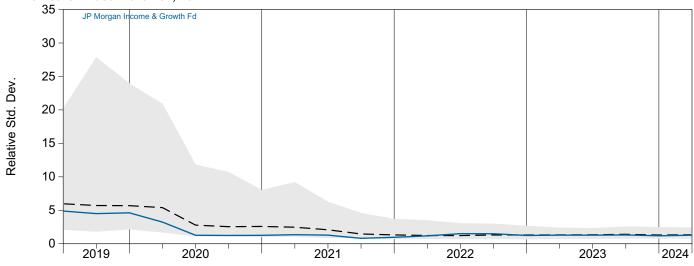
The first chart below illustrates the consistency of excess return over rolling three year periods versus the NCREIF NFI-ODCE Eq Wt Net. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Real Est Val Add. The second chart below illustrates the consistency 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



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	1.00%	(0.60)
% Positive Periods	85%	30%
Average Ranking	50	61

#### Rolling Three Year Relative Std. Dev. Relative to NCREIF NFI-ODCE Eq Wt Net Five Years Ended March 31, 2024

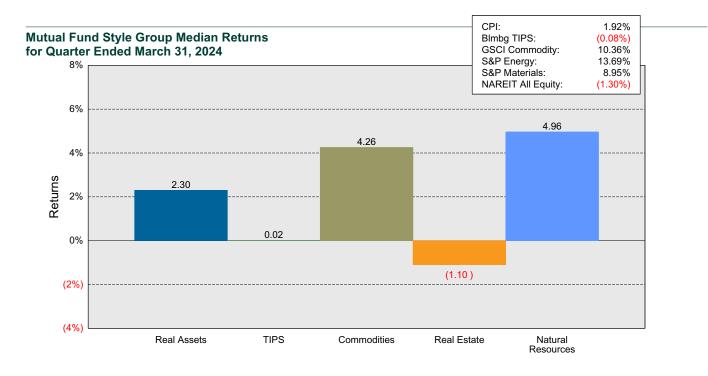


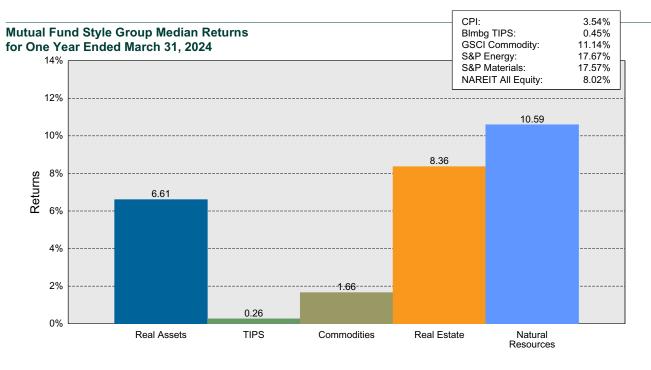
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	2.49%	1.86%
% Positive Periods	100%	100%
Average Ranking	50	65



## **Real Assets Active Management Overview**

Nominal equities outperformed real assets during the first quarter of 2024, as the backdrop of solid growth, positive earnings, and future rate cuts fueled hopes for disinflationary pressure. Both energy-related commodities (S&P GSCI: +10.4%) and commodity-sensitive equities (S&P Global Natural Resources: +2%) were amongst the best performing real assets during the quarter, as these assets were the first to respond to economic growth optimism and broadly favorable supply/demand dynamics. Meanwhile, REIT returns weighed on real asset performance (FTSE NAREIT All Equity: -1.3%) as the REIT market struggled in the face of stubbornly high interest rates and concerns about the state of the commercial real estate market. Finally, bank loans performed well (Bloomberg US Floating Rate Note: +1.8%), supported by rising bond yields and a resilient economy, while TIPS were relatively flat (Bloomberg TIPS: -0.1%) and nominal U.S. Treasuries underperformed (Bloomberg Treasury 7-10 Yr: -1.4%).^L^L







## JP Morgan IIF Infrastructure Period Ended March 31, 2024

#### **Investment Philosophy**

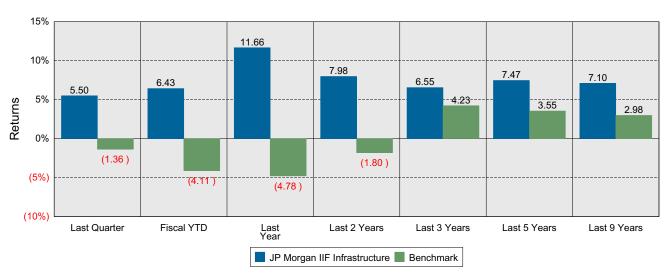
The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas 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 March 31, 2018; 50% CPI-U lagged one guarter and 50% NFI-ODCE Equal Weight Net thereafter.

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

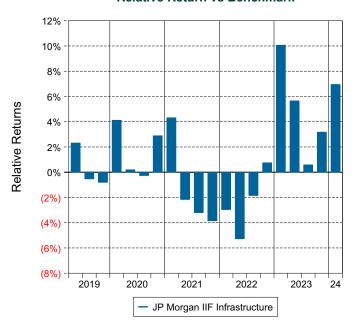
• JP Morgan IIF Infrastructure's portfolio outperformed the Benchmark by 6.86% for the quarter and outperformed the Benchmark for the year by 16.44%.

Quarterly Asset Growth	
Beginning Market Value	\$103,231,321
Net New Investment	\$-1,587,958
Investment Gains/(Losses)	\$6,019,002

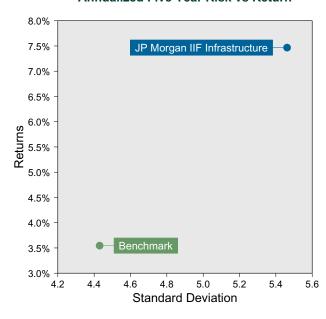
**Ending Market Value** \$107,662,365



#### Relative Return vs Benchmark



#### Annualized Five Year Risk vs Return





## **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 March 31, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

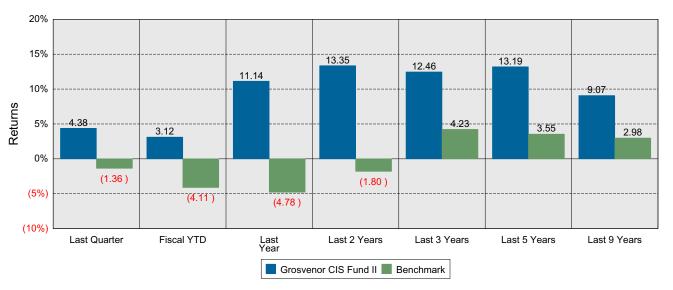
#### **Quarterly Summary and Highlights**

• Grosvenor CIS Fund II's portfolio outperformed the Benchmark by 5.74% for the quarter and outperformed the Benchmark for the year by 15.92%.

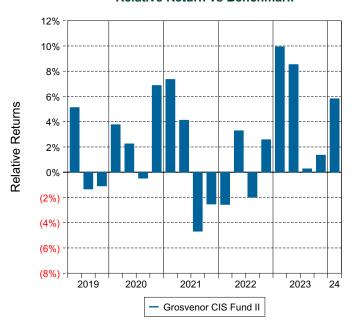
Quarterly Asset G	Growth
Beginning Market Value	\$50,448,368
Net New Investment	\$-1,489,907
Investment Gains/(Losses)	\$2,198,590

\$51,157,051

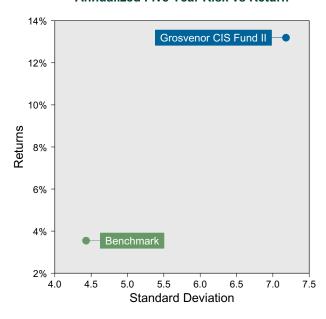
**Ending Market Value** 



#### Relative Return vs Benchmark



#### Annualized Five Year Risk vs Return





## **Grosvenor CIS Fund III** Period Ended March 31, 2024

#### **Investment Philosophy**

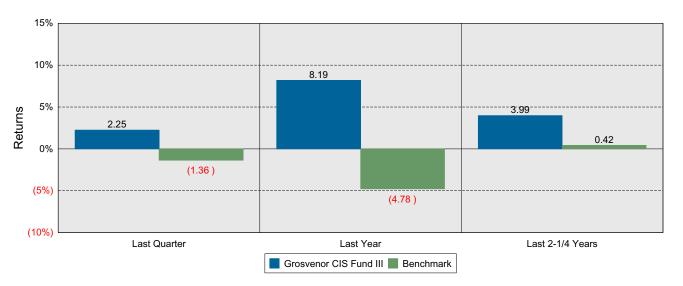
The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified 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 Growth**

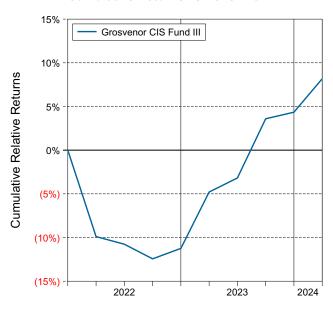
Beginning Market Value	\$40,372,202
Net New Investment	\$8,658,787
Investment Gains/(Losses)	\$984,473
Ending Market Value	\$50,015,462



#### **Relative Return vs Benchmark**

# 10% Relative Returns (5%) (10%)(15%)2022 2023 2024 Grosvenor CIS Fund III

#### **Cumulative Returns vs Benchmark**





## ISQ Global Infrastructure II Period Ended March 31, 2024

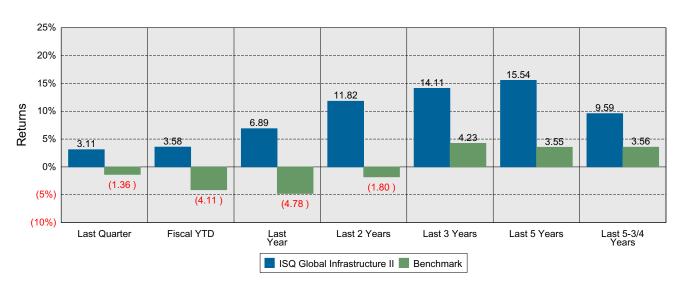
#### **Investment Philosophy**

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.

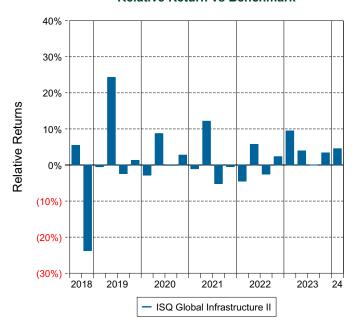
#### **Quarterly Summary and Highlights**

 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%.

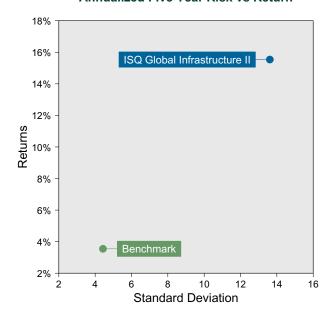
Quarterly Asset Growth	
Beginning Market Value	\$81,734,554
Net New Investment	\$-181,976
Investment Gains/(Losses)	\$2,536,492
Ending Market Value	\$84,089,070



#### Relative Return vs Benchmark



#### Annualized Five Year Risk vs Return





## ISQ Global Infrastructure III Period Ended March 31, 2024

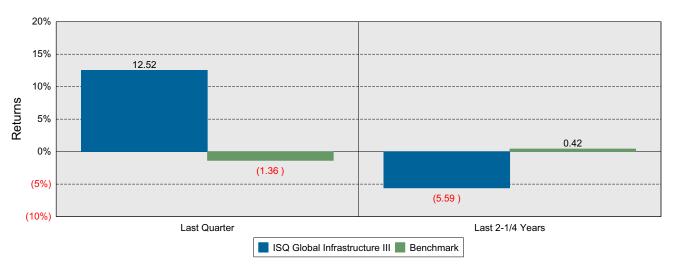
#### **Investment Philosophy**

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.

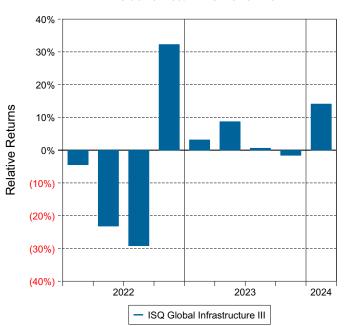
#### **Quarterly Summary and Highlights**

 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%.

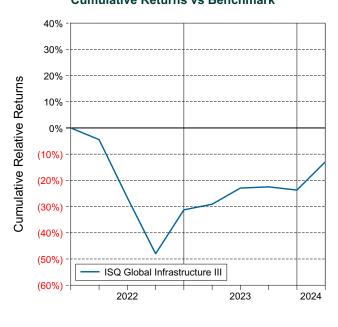
Quarterly Asset Growth	
Beginning Market Value	\$35,298,532
Net New Investment	\$0
Investment Gains/(Losses)	\$4,419,566
Ending Market Value	\$39,718,098







## **Cumulative Returns vs Benchmark**





## **Macquarie Infrastructure Fund IV** Period Ended March 31, 2024

#### **Investment Philosophy**

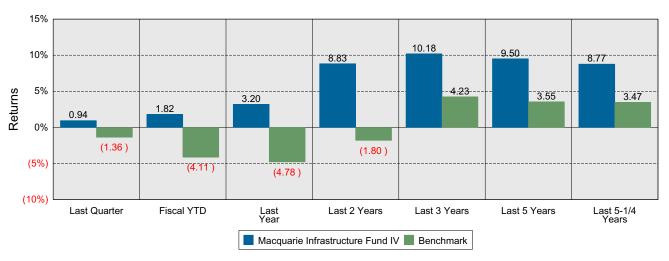
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience 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**

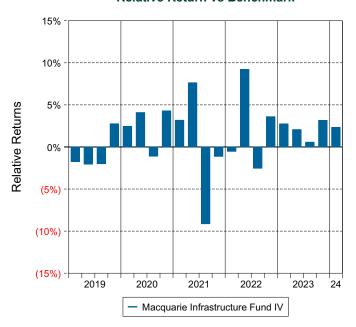
 Macquarie Infrastructure Fund IV's portfolio outperformed the Benchmark by 2.30% for the quarter and outperformed the Benchmark for the year by 7.98%.

#### **Quarterly Asset Growth**

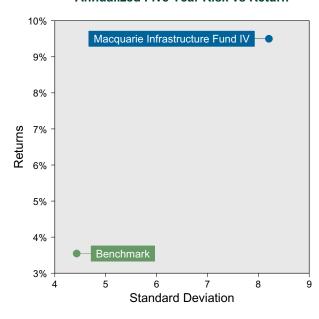
Beginning Market Value	\$92,590,118
Net New Investment	\$-42,395
Investment Gains/(Losses)	\$871,522
Ending Market Value	\$93,419,245



#### Relative Return vs Benchmark



#### Annualized Five Year Risk vs Return





## Macquarie Infrastructure Fund V Period Ended March 31, 2024

#### **Investment Philosophy**

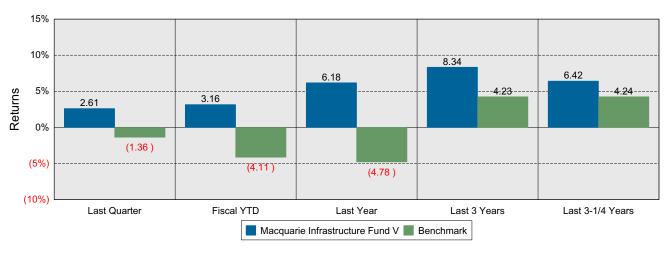
Macquarie's principal investment philosophy is to invest in infrastructure assets that exhibit monopolistic and/or contractual revenue drivers, limited substitution risk and high barriers to entry. The manager has continued to focus on investments where the team's sector expertise and operating experience 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 Growth**

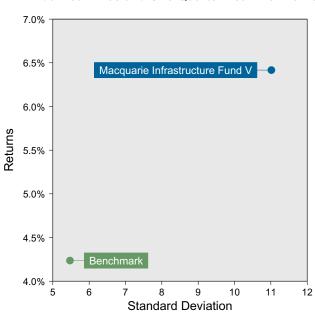
_	
Beginning Market Value	\$98,210,162
Net New Investment	\$-55,943
Investment Gains/(Losses)	\$2,564,078
Ending Market Value	\$100,718,297



#### Relative Return vs Benchmark

## 15% 10% 5% Relative Returns 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

<u>Callan Target Date Index™, 4Q23</u> | Tracks the performance and asset allocation of available target date mutual funds and CITs

<u>Callan DC Index™, 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: <a href="mailto:callan.com/events-education">callan.com/events-education</a>



"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

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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Callan's performance measurement service reports estimated returns for a portfolio and compares them against relevant benchmarks and peer groups, as appropriate; such service may also report on historical portfolio holdings, comparing them to holdings of relevant benchmarks and peer groups, as appropriate ("portfolio holdings analysis"). To the extent that Callan's reports include a portfolio holdings analysis, Callan relies entirely on holdings, pricing, characteristics, and risk data provided by third parties including custodian banks, record keepers, pricing services, index providers, and investment managers. Callan reports the performance and holdings data as received and does not attempt to audit or verify the holdings data. Callan is not responsible for the accuracy or completeness of the performance or holdings data received from third parties and such data may not have been verified for accuracy or completeness.

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