# Callan

**December 31, 2023** 

North Dakota State Investment Board Insurance Trust

Investment Measurement Service Quarterly Review

# **Table of Contents December 31, 2023**

Executive Summary	
Active Management Overview	2
Capital Market Review	3
NDSIB - Consolidated	
Insurance Trust	
Actual vs Target Asset Allocation	19
Actual vs Target Asset Allocation	20
Quarterly Total Fund Attribution	21
Quarterly Total Fund Attribution	22
Cumulative Total Fund Attribution	23
Cumulative Total Fund Attribution	24
Cumulative Performance	32
Historical Asset Allocation	33
Drawdown Analysis	34
Total Fund Ranking	35
Asset Class Risk and Return	36
Asset Class Rankings	37
Investment Manager Asset Allocation	38
Investment Manager Returns	40
NDSIB - Workforce Safety & Insurance	
Actual vs Target Asset Allocation	53
Actual vs Target Asset Allocation	54
Quarterly Total Fund Attribution	55
Cumulative Total Fund Attribution	57
Cumulative Performance	65
Historical Asset Allocation	66
Asset Class Rankings	67
Asset Class Allocation	68
Asset Class Returns	69
NDSIB - Budget Stabilization Fund	
Actual vs Target Asset Allocation	71
Quarterly Total Fund Attribution	72
Cumulative Total Fund Attribution	73
Cumulative Performance	77
Historical Asset Allocation	78
Asset Class Allocation	79
Asset Class Returns	80

# **Table of Contents December 31, 2023**

Domestic Equity	
Domestic Equity Overview	82
Domestic Equity Composite	83
Parametric-Clifton Enh R1000	99
LA Capital LargeCap Growth	109
LA Capital Enhanced	119
NTAM R1000 Index	129
NTAM Quant Enh R1000	136
Atlanta Capital	143
NTAM R2000 Index	153
Riverbridge Small Cap Growth	160
Sycamore Small Cap Value	167
International Equity	
International Equity Overview	175
International Equity Composite	176
William Blair Int'l Leaders	195
Arrowstreet ACWI ex US	206
State St MSCI World exUS	214
DFA Intl SmallCap Value	222
State St MSCI exUS Small	233
DFA EM All Cap Core	241
State St MSCI EM China	246
State St MSCI EM ex China	251
Domestic Fixed Income	
Domestic Fixed Income Overview	257
Bond Market Environment	258
Domestic Fixed Income Composite	259
Allspring Med Quality Credit	273
PIMCO Core Plus Constrained	286
Prudential Core Plus	299
State Street Gov Index	312
State Street Credit Index	313
Western Asset Core Plus	316
Manulife-Declaration TRBF	329
PIMCO DISCO II	342
PIMCO Bravo II Fund	345
Real Estate	
Real Estate Overview	349
Real Estate Composite	350
Invesco Core Real Estate	353
JP Morgan Income and Growth Ed	358



# **Table of Contents December 31, 2023**

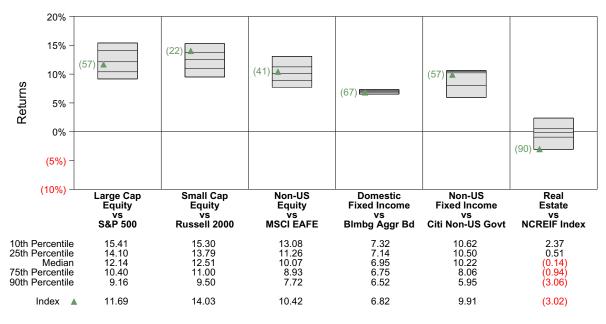
Diversified	
Real Assets Overview	363
Western Asset Management TIPS	364
Eastern Timber Opportunities	365
JP Morgan Infrastructure	366
Grosvenor CIS Fund	367
Grosvenor CIS Fund III	368
Macquarie Infrastructure Fund V	369
Short Term Fixed Income	
Short Term Fixed Income Composite	371
Barings Active Short Duration	373
JP Morgan Short Term Bonds	374
Callan Research/Education	375
Disclosures	378

# Market Overview Active Management vs Index Returns

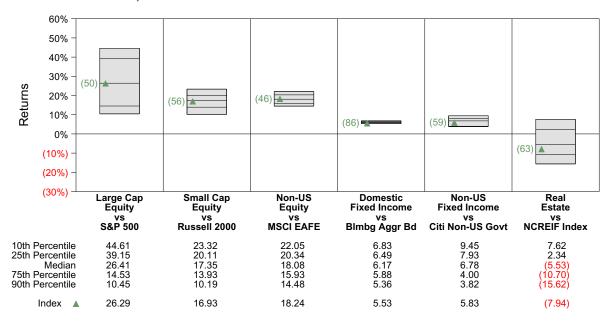
#### **Market Overview**

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

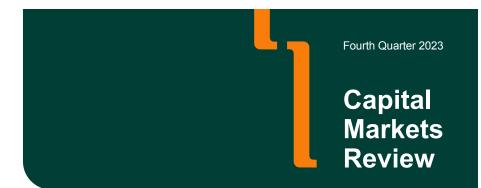
# Range of Separate Account Manager Returns by Asset Class One Quarter Ended December 31, 2023



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









# **Economy Becomes Even More Surprising**

**ECONOMY** 

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

# Increases in 2023 but **Inflation Tops Worries**

INSTITUTIONAL INVESTORS

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

# **Dovish Policy Drives Widespread Gains**

EQUITY

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

# **Broad Rally for Bonds** Private RE Falls but Across the World

FIXED INCOME

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

# **REITs Outpace Stocks**

REAL ESTATE/REAL ASSETS

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

# **Big Slowdown After** Frenzy of 2021

PRIVATE EQUITY

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

# **Net IRR of Nearly 9% Over Three Years**

PRIVATE CREDIT

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

# **Gains Spurred by** Stocks and Bonds

HEDGE FUNDS/MACs

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

# 2.9% Drop After Three **Quarters of Gains**

**DEFINED CONTRIBUTION** 

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

# **Broad Market Quarterly Returns**

**U.S. Equity** Russell 3000



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



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



6.8%

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



9.2%

Sources: Bloomberg, FTSE Russell, MSCI

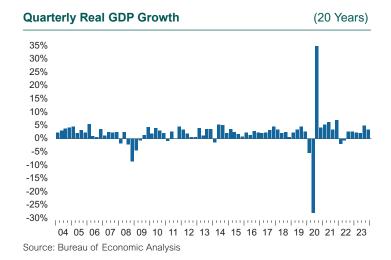
# The Economy Is More Surprising by the Quarter

# **ECONOMY** | Jay Kloepfer

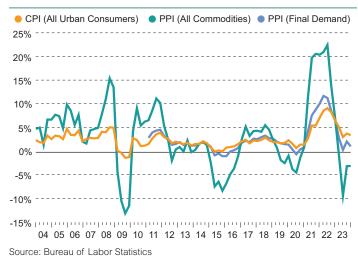
The U.S. economy grew by 3.3% in 4Q23, once again surprising to the upside. If you asked anyone who has to indulge in the hubris of forecasting the economy, all of 2023 has been a surprise. Last year was supposed to feature the recession caused by the Fed's dedication to fighting inflation by raising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

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

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



#### Inflation Year-Over-Year



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

the CPI-U index is up 10% since the start of 2022.

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

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

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

The Long-Term View

		Pe	riods F	nded 1	2/31/23
Index	4Q23	1 Yr			25 Yrs
U.S. Equity					
Russell 3000	12.1	26.0	15.2	11.5	7.7
S&P 500	11.7	26.3	15.7	12.0	7.6
Russell 2000	14.0	16.9	10.0	7.2	7.9
Global ex-U.S. Equity					
MSCI EAFE	10.4	18.2	8.2	4.3	4.4
MSCI ACWI ex USA	9.8	15.6	7.1	3.8	
MSCI Emerging Markets	7.9	9.8	3.7	2.7	
MSCI ACWI ex USA Small Cap	10.1	15.7	7.9	4.9	7.3
Fixed Income					
Bloomberg Agg	6.8	5.5	1.1	1.8	3.9
90-Day T-Bill	1.4	5.0	1.9	1.3	1.9
Bloomberg Long G/C	13.2	7.1	1.1	3.2	5.2
Bloomberg Gl Agg ex US	9.2	5.7	-1.6	-0.8	2.2
Real Estate					
NCREIF Property	-3.0	-7.9	4.3	6.8	8.0
FTSE Nareit Equity	16.2	13.7	7.4	7.6	9.3
Alternatives					
HFRI Fund Weighted	4.2	8.1	7.1	4.6	6.3
Cambridge PE*	-0.4	4.2	14.6	14.3	13.9
Bloomberg Commodity	-4.6	-7.9	7.2	-1.1	2.8
Gold Spot Price	11.0	13.4	10.1	5.6	8.2
Inflation – CPI-U	-0.3	3.4	4.1	2.8	2.5

<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

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

## **Recent Quarterly Economic Indicators**

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

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

# **Gains in 2023 but Inflation Tops Worries**

## **INSTITUTIONAL INVESTORS**

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

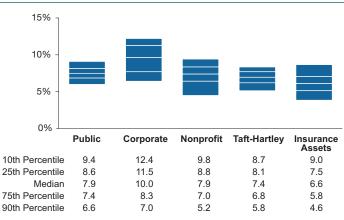
# **All Investor Types**

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

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

# **Quarterly Returns, Callan Database Groups**

(12/31/23)



Source: Callan

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

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

<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.

#### **Public DB Plans**

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

### **Corporate DB Plans**

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

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

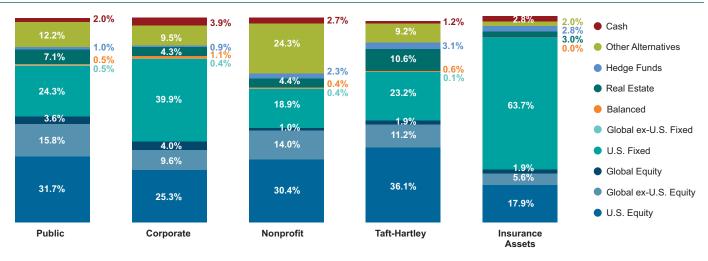
#### **Nonprofits**

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

# **Defined Contribution (DC) Plans**

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

#### **Average Asset Allocation, Callan Database Groups**



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

# **Equity**

# **U.S. Equities**

# **End-of-the-year rally**

- U.S. equity markets rebounded in the last two months of the year as the impact of possible rate cuts in 2024 started to get priced in.
- The S&P 500 Index approached a record high as the year closed. Of note, 2023 was the first year since 2012 that the S&P failed to reach a high-water mark. That said, the index was up an impressive 11.7% in 4Q and 26.3% for the year.
- The tech sector was the clear winner for the quarter and the year (+17.2%; +57.8%) while Energy (-6.9%; -1.3%) was the only sector to register both a 4Q and 2023 decline.
- 2023 saw the narrowest breadth of leadership ("the Magnificent Seven") since 1987, with just 27% of stocks outperforming the S&P 500. Historically, such concentrated leadership has not been the sign of a healthy market.
- Fourth quarter and 2023 returns for the bunch were impressive: Alphabet: +6.8%, +58.8%; Amazon: +19.5%, +80.9%;

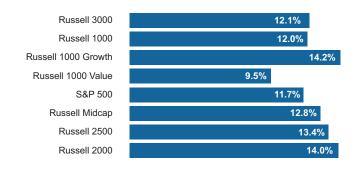
- Apple: +12.6%, +49.0%; Meta: +17.9%, +194.1%; Microsoft: +19.3%, +58.2%; NVIDIA: +13.9%, +239.0%; Tesla: -0.7%, +101.7%.
- The index would have been up only about 10% for the year without these stocks, and the equal-weighted S&P 500 returned 11.9% in 4Q and 13.9% in 2023.
- However, gains started broadening out in the last two months of the year with the equal-weighted S&P index outperforming the capitalization-weighted version.
- Smaller cap stocks also outperformed their large cap counterparts in 4Q23, further proof of the broadening out of returns.
- For the full year, large cap stocks outperformed small cap stocks by almost 10 percentage points.
- Growth vs. value performance was mixed across market capitalization during the quarter. Within large cap, growth outperformed value, while the opposite was true within small cap.

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

(12/31/23)

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

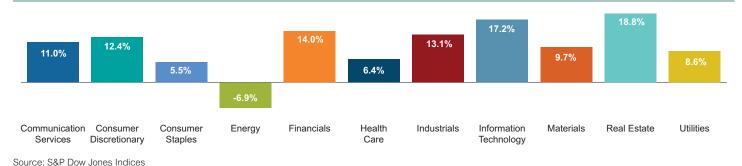
(12/31/23)





Sources: FTSE Russell and S&P Dow Jones Indices

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



# Global Equities: Global markets in the black for 4Q **Broad market**

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

# **Emerging markets**

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

# Growth vs. value

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

# U.S. dollar vs. other currencies

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

## China: Danger or opportunity?

## Long-term growth potential

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

# Valuation

Valuations remain attractive on a forward P/E basis.

## Structural challenges

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

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



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



Source: MSCI

# **Fixed Income**

#### U.S. Fixed Income

# Strong returns at end of year

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

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

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

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

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

#### **Valuations**

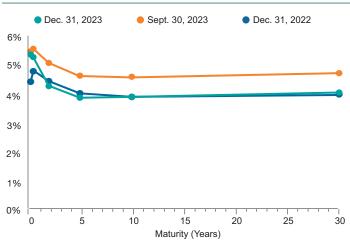
 Investment grade and high yield corporate spreads now below 10-year averages

# **Municipal Bonds**

# Gains in 4Q and a superb November

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

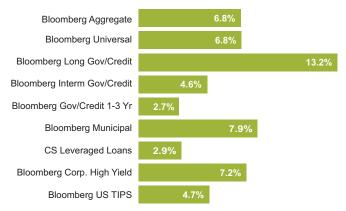
## **U.S. Treasury Yield Curves**



Source: Bloomberg

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

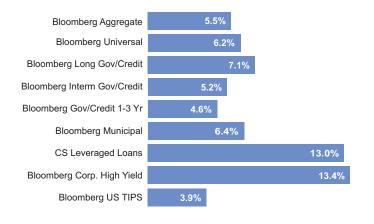
(12/31/23)



Sources: Bloomberg and Credit Suisse

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

(12/31/23)



## FIXED INCOME (Continued)

## BBBs performed best for quarter and year

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

#### **Valuations**

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

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

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

# Fundamentals for state, local governments remain sound

Upgrades exceeded downgrades in 2023.

### **Global Fixed Income**

# Falling rates bolstered 4Q returns globally

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

# U.S. dollar weakened

Major currencies rose compared to the dollar in 4Q.

# **Emerging markets also posted strong results**

Gains across most countries

# Change in 10-Year Global Government Bond Yields

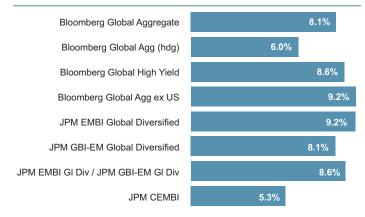




Source: Bloomberg

# **Global Fixed Income: Quarterly Returns**

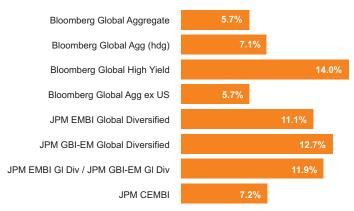
(12/31/23)



Sources: Bloomberg and JPMorgan Chase

# Global Fixed Income: One-Year Returns

(12/31/23)



Sources: Bloomberg and JPMorgan Chase

# **Private RE Falls but REITs Outpace Stocks**

# REAL ESTATE/REAL ASSETS | Munir Iman

# Private RE valuations reflect higher rates

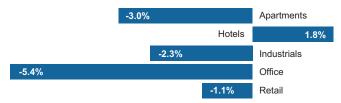
- The NCREIF Property Index, a measure of U.S. institutional real estate assets, fell 3.0% during 4Q23. The income return was 1.1% while the appreciation return was -4.1%.
- Hotels, which represent a small portion of the index, led property sector performance with a gain of 1.8%.
- Office finished last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

### **REITs outperform equities**

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

# **Sector Quarterly Returns by Property Type**





Source: NCREIF

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

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

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

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

# **Big Slowdown After Frenzy of 2021**

# PRIVATE EQUITY | Ashley Kahn

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

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

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

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

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

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

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

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

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

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	1,584	199,090	21%
Growth Equity	139	103,324	11%
Buyouts	515	471,684	50%
Mezzanine Debt	24	36,050	4%
Distressed/Special Credit	42	46,018	5%
Energy	6	3,296	0%
Secondary and Other	137	74,616	8%
Fund-of-funds	25	5,567	1%
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	11.7	26.3	10.0	15.7	12.0	14.0	9.7	7.6
Russell 3000	12.1	26.0	8.5	15.2	11.5	13.8	9.7	7.7

Note: Private equity returns are net of fees. Sources: Refinitiv/Cambridge and S&P Dow Jones Indices

\*Most recent data available at time of publication

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

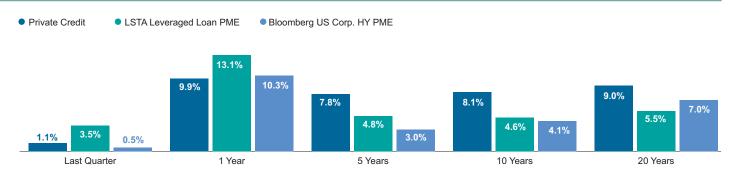
# **Net IRR of Nearly 9% Over Three Years**

# PRIVATE CREDIT | Catherine Beard

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

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



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

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

Source: LSEG/Cambridge

\*Most recent data available at time of publication

# Gains in 4Q23 Spurred by Rising Stocks and Bonds

# HEDGE FUNDS/MACs | Joe McGuane

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

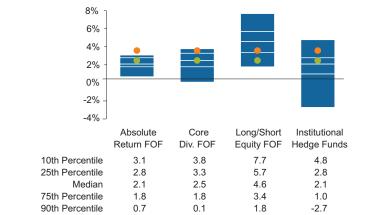
Hedge funds ended the year on a strong note. Equity hedge strategies were the best performing, as those with higher net long exposure performed better, along with strategies focused on health care and technology, media, and telecommunications (TMT). Relative value strategies generated positive performance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

# **Hedge Fund Style Group Returns**

(12/31/23)

3.6

2.5



3.6

2.5

3.6

Sources: Callan, Credit Suisse, Federal Reserve

3.6

HFRI Fund Wtd Index

90-Day T-Bills +5% •

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

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

<sup>\*</sup>Net of fees. Sources: Callan, Credit Suisse, Hedge Fund Research

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

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

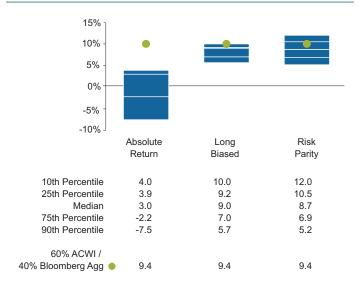
Within the HFRI indices, the best-performing strategy last quarter was equity hedge (5.6%), as health care-, financial-, and technology-focused strategies drove performance during the final quarter of the year. Macro strategies fell 1.1%, as short equity positions offset gains from front end interest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

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

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

# **MAC Style Group Returns**

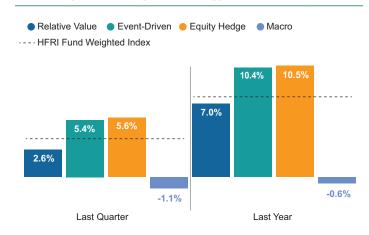
(12/31/23)



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

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

(12/31/23)



Source: HFRI

# Index Drops by 2.9% After Three Quarters of Gains

# **DEFINED CONTRIBUTION | Scotty Lee**

# Performance: Index Dips after Third Straight Quarterly Gain

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

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

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

#### **Turnover: Net Transfers Decrease**

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

# Net cash flow analysis: Stable Value Declines Sharply

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

### **Equity allocation: Exposure Declines**

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

## Asset allocation: Fixed Income, TDFs See Gains

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

#### Prevalence: Money Market Up, Stable Value Down

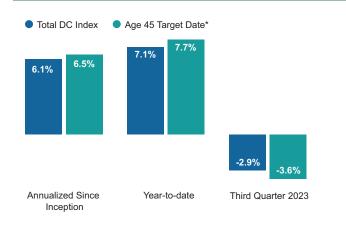
- The prevalence of money market funds (54.1%) rose by 1.5% accompanied by a decrease in the prevalence of stable value funds (70.1%) by 0.8%.

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

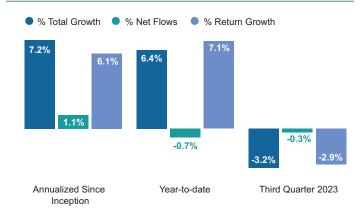
#### **Investment Performance**

(9/30/23)

(9/30/23)



# **Growth Sources**



# Net Cash Flow Analysis (3Q23)

(Top Two and Bottom Two Asset Gatherers)

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

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.

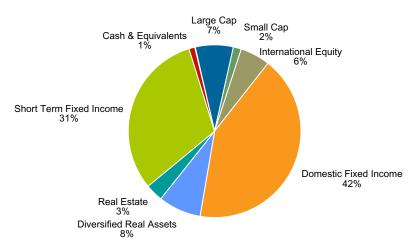
# Actual vs Target Asset Allocation As of December 31, 2023

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

#### **Actual Asset Allocation**



# **Target Asset Allocation**



Asset Class	\$000s	Weight	Torgot	Percent Difference	\$000s Difference
	Actual	Actual	Target	Dillerence	Dillerence
Large Cap	235,836	7.3%	7.1%	0.2%	5,682
Small Cap	47,144	1.5%	1.5%	(0.1%)	(2,805)
International Equity	180,463	5.6%	5.6%	0.0%	338
Domestic Fixed Income	1,358,113	42.0%	42.1%	(0.1%)	(3,343)
Diversified Real Assets	259,218	8.0%	8.0%	0.0%	102
Real Estate	108,359	3.4%	3.3%	0.1%	1,898
Short Term Fixed Income	1,008,612	31.2%	31.2%	(0.0%)	(178)
Cash & Equivalents	32,390	1.0%	1.1%	(0.1%)	(2,006)
Residual Holdings	313	0.0%	0.0%	`0.0%	313
Total	3,230,448	100.0%	100.0%		

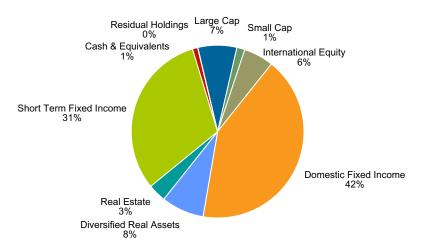
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



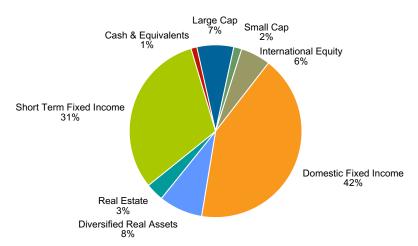
# Actual vs Corridor Target Asset Allocation As of December 31, 2023

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

#### **Actual Asset Allocation**



# **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	235,836	7.3%	7.0%	0.3%	9,635
Small Cap	47,144	1.5%	1.5%	(0.1%)	(1.947)
International Equity	180,463	5.6%	5.6%	0.0%	` <sup>'</sup> 338 <sup>'</sup>
Domestic Fixed Income	1,358,113	42.0%	42.1%	(0.0%)	(580)
Diversified Real Assets	259,218	8.0%	8.2%	(0.1%)	(4,553)
Real Estate	108,359	3.4%	3.4%	(0.1%)	(3.068)
Short Term Fixed Income	1,008,612	31.2%	31.2%	0.1%	1,869
Cash & Equivalents	32,390	1.0%	1.1%	(0.1%)	(2,006)
Residual Holdings	313	0.0%	0.0%	`0.0%	` ′313′
Total	3,230,448	100.0%	100.0%		

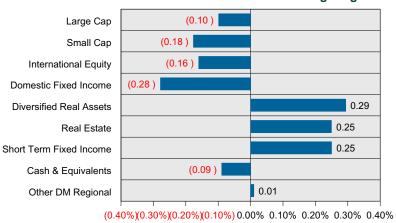
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



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

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

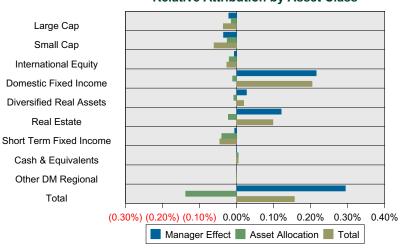




# **Actual vs Target Returns**

#### 11.68 11.96 11.56 14.03 9.69 9.81 7.34 6.82 3.30 2.98 0.25 2.69 1.38 1.37 2.66 2.66 2.66 5.66 5.51 (10%) (5%) 0% 5% 10% 15% 20%

## **Relative Attribution by Asset Class**



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

	Effective	Effective					Total
	Actual	Target	Actual	Target	Manager	Asset	Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Large Cap	7%	7%	11.68%	11.96%	(0.02%)	(0.01%)	(0.04%)
Small Cap	1%	2%	11.56%	14.03%	(0.04%)	(0.03%)	(0.06%)
International Equity	5%	6%	9.69%	9.81%	(0.01%)	(0.02%)	(0.03%)
Domestic Fixed Incom		42%	7.34%	6.82%	0.21%	(0.01%)	0.20%
Diversified Real Asset	s 8%	8%	3.30%	2.98%	0.03%	(0.01%)	0.02%
Real Estate	4%	3%	0.25%	(3.02%)	0.12%	(0.02%)	0.10%
Short Term Fixed Inco		32%	2.68%	2.69%	(0.01%)	(0.04%)	(0.05%)
Cash & Equivalents	1%	1%	1.38%	1.37%	0.00%	0.00%	0.00%
Other DM Regional	0%	0%	2.66%	2.66%	0.00%	(0.00%)	_(0.00%)_
			<b>5.000</b> /	= = 40/	0.000/	(0.440()	0.400/
Total			5.66% =	5.51% +	+ 0.29% <b>+</b>	(0.14%)	0.16%

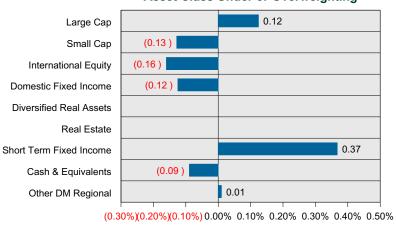
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



# Quarterly Total Fund Relative Attribution vs Corridor Target - December 31, 2023

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

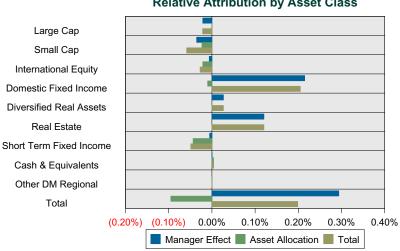




## **Actual vs Target Returns**

# 11.56 14.03 0.25 (3.02) 0% (10%)(5%)5% 10% 15% 20% Actual Target

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



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

A 4 Ol	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
Large Cap	7%	7%	11.68%	11.96%	(0.02%)	(0.00%)	(0.02%)
Small Cap	1%	1%	11.56%	14.03%	(0.04%)	(0.02%)	(0.06%)
International Equity	5%	6%	9.69%	9.81%	(0.01%)	(0.02%)	(0.03%)
Domestic Fixed Incom	ne 42%	42%	7.34%	6.82%	0.21%	(0.01%)	`0.20%´
Diversified Real Asset	ts 8%	8%	3.30%	2.98%	0.03%	`0.00%	0.03%
Real Estate	4%	4%	0.25%	(3.02%)	0.12%	0.00%	0.12%
Short Term Fixed Inco	me32%	32%	2.68%	`2.69%′	(0.01%)	(0.04%)	(0.05%)
Cash & Equivalents	1%	1%	1.38%	1.37%	`0.00%	`0.00%	`0.00%
Other DM Regional	0%	0%	2.66%	2.66%	0.00%	(0.00%)	(0.00%)
Total			5.66% =	5.46%	+ 0.29% +	(0.09%)	0.20%

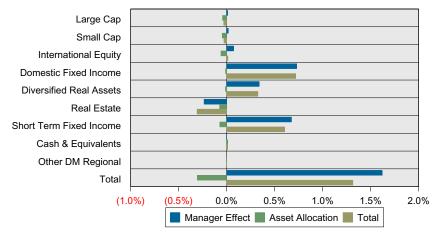
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



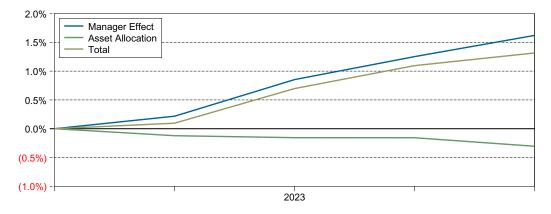
# **Cumulative Total Fund Relative Attribution - December 31, 2023**

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

#### **One Year Relative Attribution Effects**



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



# One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	7%	7%	26.68%	26.53%	0.01%	(0.04%)	(0.03%)
Small Cap	1%	2%	18.84%	16.93%	0.02%	(0.05%)	(0.03%)
International Equity	6%	6%	17.13%	15.62%	0.07%	(0.06%)	`0.01%´
Domestic Fixed Incom		44%	7.20%	5.53%	0.73%	(0.01%)	0.72%
Diversified Real Asset	ts 9%	8%	6.11%	2.24%	0.34%	(0.01%)	0.33%
Real Estate	4%	3%	(12.57%)	(7.94%)	(0.23%)	(0.07%)	(0.31%)
Short Term Fixed Inco	me29%	29%	7.06%	4.61%	0.68%	(0.07%)	0.61%
Cash & Equivalents	1%	1%	5.06%	5.01%	0.00%	0.01%	0.01%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			8.18% =	6.86%	+ 1.62% +	(0.30%)	1.32%

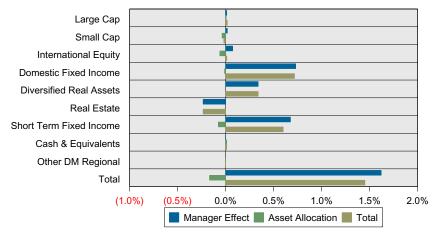
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



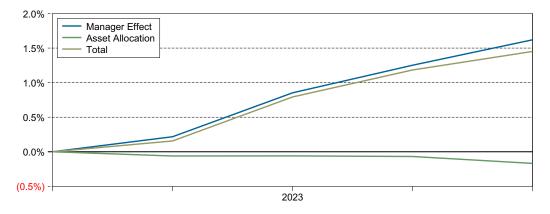
# Cumulative Total Fund Relative Attribution vs Corridor Target - December 31, 2023

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

#### **One Year Relative Attribution Effects**



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



# **One Year Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	7%	7%	26.68%	26.53%	0.01%	0.01%	0.02%
Small Cap	1%	2%	18.84%	16.93%	0.02%	(0.04%)	(0.02%)
International Equity	6%	6%	17.13%	15.62%	0.07%	(0.06%)	`0.01%´
Domestic Fixed Incom		44%	7.20%	5.53%	0.73%	(0.01%)	0.72%
Diversified Real Asset	s 9%	9%	6.11%	2.24%	0.34%	`0.00%	0.34%
Real Estate	4%	4%	(12.57%)	(7.94%)	(0.23%)	0.00%	(0.23%)
Short Term Fixed Inco	me29%	28%	` 7.06%′	`4.61%′	`0.68%	(0.08%)	`0.60%
Cash & Equivalents	1%	1%	5.06%	5.01%	0.00%	0.01%	0.01%
Other DM Regional	0%	0%	1.42%	1.42%	0.00%	(0.00%)	_(0.00%)
Total			8.18% =	6.72% -	+ 1.62% +	(0.17%)	1.45%

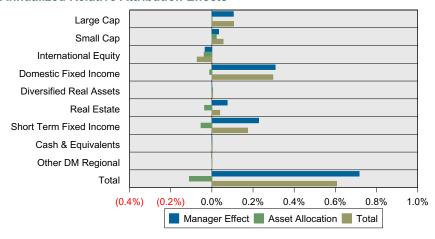
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



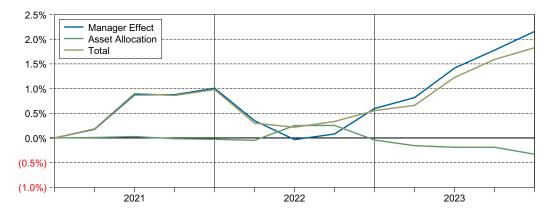
# **Cumulative Total Fund Relative Attribution - December 31, 2023**

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

## **Three Year Annualized Relative Attribution Effects**



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



# **Three Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	10.38%	8.97%	0.10%	0.00%	0.11%
Small Cap	2%	2%	4.85%	2.22%	0.03%	0.02%	0.05%
International Equity	6%	6%	2.64%	3.12%	(0.03%)	(0.04%)	(0.07%)
Domestic Fixed Incom		44%	(2.62%)	(3.31%)	`0.31%´	(0.01%)	`0.30%
Diversified Real Asset	s 9%	9%	`1.52%´	`1.44%′	(0.00%)	`0.00%	0.00%
Real Estate	4%	4%	6.45%	4.57%	`0.08%	(0.04%)	0.04%
Short Term Fixed Inco	me26%	26%	0.92%	0.09%	0.23%	(0.05%)	0.17%
Cash & Equivalents	1%	1%	2.16%	2.15%	0.00%	`0.00%	0.00%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	_(0.00%)
Total			0.53% =	(0.08%) +	0.72% +	(0.11%)	0.61%

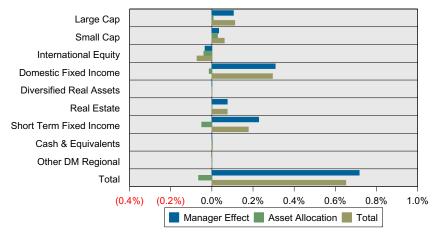
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



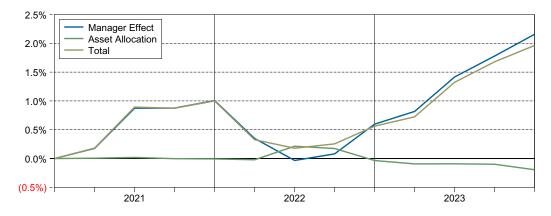
# Cumulative Total Fund Relative Attribution vs Corridor Target - December 31, 2023

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

## **Three Year Annualized Relative Attribution Effects**



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



# Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	8%	8%	10.38%	8.97%	0.10%	0.01%	0.11%
Small Cap	2%	2%	4.85%	2.22%	0.03%	0.03%	0.06%
International Equity	6%	6%	2.64%	3.12%	(0.03%)	(0.04%)	(0.07%)
Domestic Fixed Incom		44%	(2.62%)	(3.31%)	`0.31%′	(0.01%)	`0.29%′
Diversified Real Asset	s 9%	9%	`1.52%´	`1.44%´	(0.00%)	(0.00%)	(0.00%)
Real Estate	4%	4%	6.45%	4.57%	`0.08%	(0.00%)	`0.08%
Short Term Fixed Inco	me26%	26%	0.92%	0.09%	0.23%	(0.05%)	0.18%
Cash & Equivalents	1%	1%	2.16%	2.15%	0.00%	`0.00%	0.00%
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	_(0.00%)_
Total			0.53% =	(0.12%)	+ 0.72% +	(0.07%)	0.65%

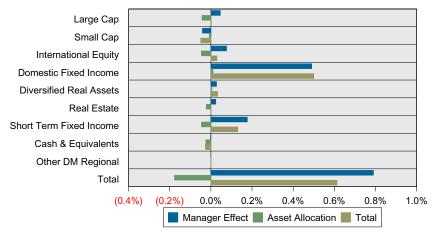
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



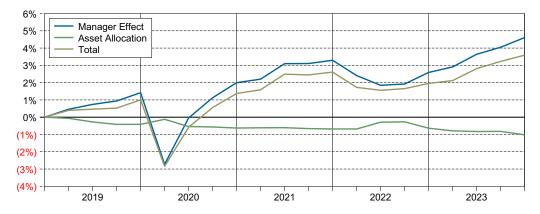
# **Cumulative Total Fund Relative Attribution - December 31, 2023**

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

#### **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	8%	8%	16.13%	15.52%	0.05%	(0.04%)	0.00%
Small Cap	2%	2%	9.19%	9.97%	(0.04%)	(0.01%)	(0.05%)
International Equity	6%	6%	8.94%	7.64%	`0.08%	(0.05%)	`0.03%´
Domestic Fixed Incom		46%	2.16%	1.10%	0.49%	`0.01%´	0.50%
Diversified Real Asset	s 9%	9%	3.77%	3.42%	0.03%	0.01%	0.03%
Real Estate	4%	4%	4.76%	4.33%	0.02%	(0.02%)	0.00%
Short Term Fixed Inco	me23%	23%	2.24%	1.51%	0.18%	(0.05%)	0.13%
Cash & Equivalents	2%	2%	1.80%	1.88%	(0.00%)	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	0.00%	(0.00%)	(0.00%)
Total			4.31% =	3.70%	+ 0.79% +	(0.18%)	0.61%

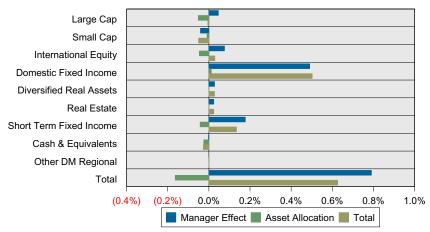
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



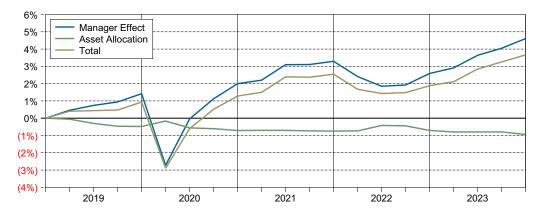
# Cumulative Total Fund Relative Attribution vs Corridor Target - December 31, 2023

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

#### **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	8%	8%	16.13%	15.52%	0.05%	(0.05%)	(0.01%)
Small Cap	2%	2%	9.19%	9.97%	(0.04%)	(0.01%)	(0.05%)
International Equity	6%	6%	8.94%	7.64%	`0.08%	(0.05%)	`0.03%´
Domestic Fixed Incom		46%	2.16%	1.10%	0.49%	`0.01%´	0.50%
Diversified Real Asset		9%	3.77%	3.42%	0.03%	(0.00%)	0.03%
Real Estate	4%	4%	4.76%	4.33%	0.02%	(0.00%)	0.02%
Short Term Fixed Inco	me23%	23%	2.24%	1.51%	0.18%	(0.04%)	0.13%
Cash & Equivalents	2%	2%	1.80%	1.88%	(0.00%)	(0.03%)	(0.03%)
Other DM Regional	0%	0%	-	-	`0.00%´	(0.00%)	(0.00%)
Total			4.31% =	3.68%	+ 0.79% +	(0.16%)	0.63%

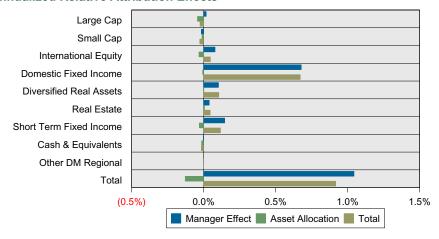
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



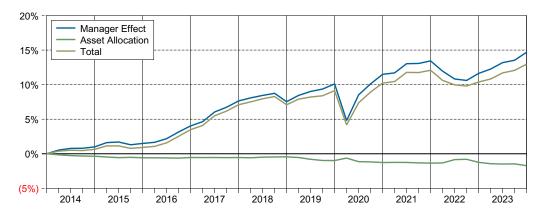
# **Cumulative Total Fund Relative Attribution - December 31, 2023**

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

#### **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	10%	10%	12.06%	11.80%	0.02%	(0.04%)	(0.02%)
Small Cap	3%	3%	6.95%	7.16%	(0.02%)	(0.01%)	(0.03%)
International Equity	7%	7%	5.17%	3.94%	`0.08%	(0.03%)	`0.05%´
Domestic Fixed Incom		45%	3.31%	1.81%	0.68%	(0.01%)	0.67%
Diversified Real Asset	s 10%	10%	3.92%	2.96%	0.10%	`0.00%	0.11%
Real Estate	5%	4%	7.41%	6.80%	0.04%	0.01%	0.05%
Short Term Fixed Inco	me18%	18%	1.88%	1.20%	0.15%	(0.03%)	0.12%
Cash & Equivalents	2%	2%	1.18%	1.25%	(0.00%)	(0.01%)	(0.02%)
Other DM Regional	0%	0%	-	-	`0.00%′	(0.00%)	(0.00%)
Total			4.37% =	3.46%	+ 1.04% +	(0.13%)	0.92%

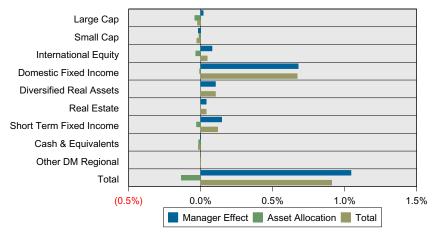
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



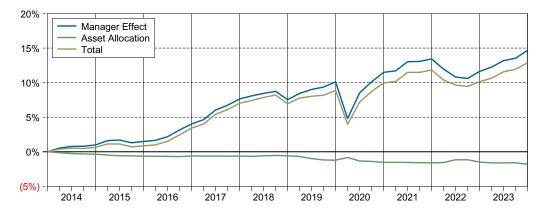
# Cumulative Total Fund Relative Attribution vs Corridor Target - December 31, 2023

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

#### **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	10%	10%	12.06%	11.80%	0.02%	(0.04%)	(0.02%)
Small Cap	3%	3%	6.95%	7.16%	(0.02%)	(0.01%)	(0.03%)
International Equity	7%	7%	5.17%	3.94%	`0.08%	(0.03%)	`0.05%´
Domestic Fixed Incom	ne 45%	45%	3.31%	1.81%	0.68%	(0.01%)	0.67%
Diversified Real Asset	s 10%	10%	3.92%	2.96%	0.10%	(0.00%)	0.10%
Real Estate	5%	5%	7.41%	6.80%	0.04%	(0.00%)	0.04%
Short Term Fixed Inco	me18%	18%	1.88%	1.20%	0.15%	(0.03%)	0.12%
Cash & Equivalents	2%	2%	1.18%	1.25%	(0.00%)	(0.01%)	(0.02%)
Other DM Regional	0%	0%	-	-	`0.00%′	(0.00%)	(0.00%)
Total			4.37% =	3.46%	+ 1.04% +	(0.13%)	0.91%

<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.

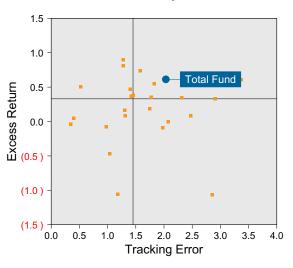


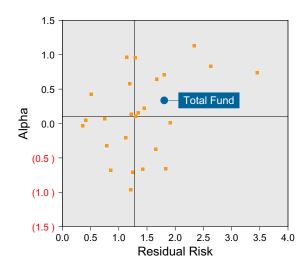
# Total Fund Total Fund vs Target Risk Analysis

#### **Risk Analysis**

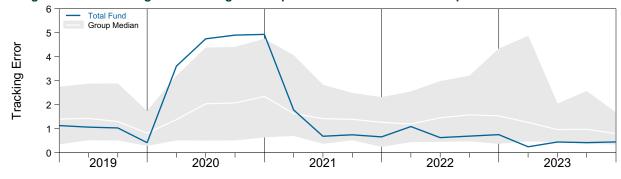
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return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

# Risk Analysis vs Callan Public Fund Sponsor Database Five Years Ended December 31, 2023

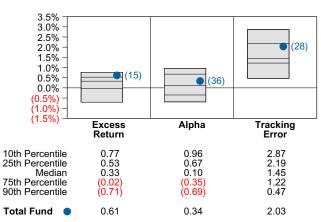


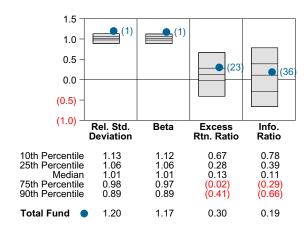


#### Rolling 4 Quarter Tracking Error vs Targets Compared to Callan Public Fund Sponsor Database



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Sponsor Database Five Years Ended December 31, 2023



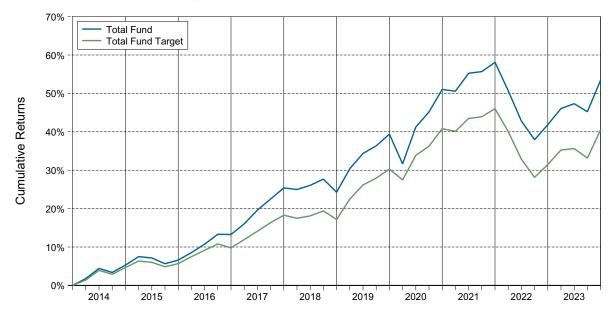




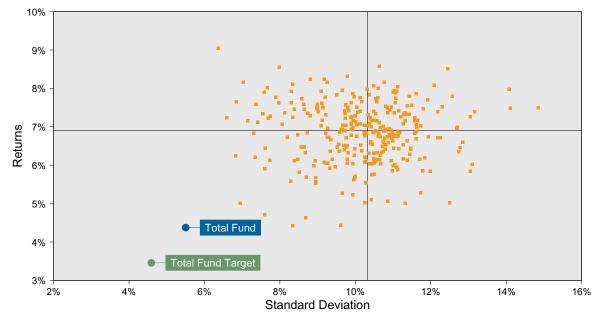
# **Cumulative Performance Relative to Target**

The first chart below illustrates the cumulative performance of the Total Fund relative to the cumulative performance of the Fund's Target Asset Mix. The Target Mix is assumed to be rebalanced each quarter with no transaction costs. The second chart below shows the return and the risk of the Total Fund and the Target Mix, contrasted with the returns and risks of the funds in the Callan Public Fund Sponsor Database.

# **Cumulative Returns Actual vs Target**



## Ten Year Annualized Risk vs Return



Squares represent membership of the Callan Public Fund Sponsor Database

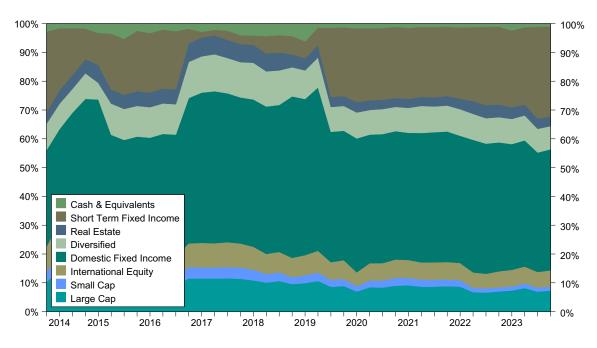
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



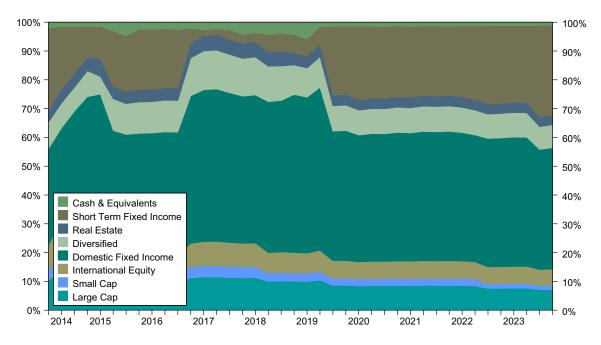
## **Actual vs Target Historical Asset Allocation**

The Historical asset allocation for a fund is by far the largest factor explaining its performance. The charts below show the fund's historical actual asset allocation, and the fund's historical target asset allocation.

## **Actual Historical Asset Allocation**



## **Target Historical Asset Allocation**



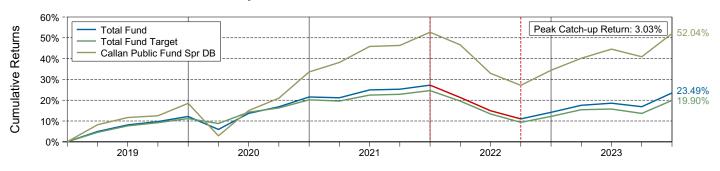
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



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

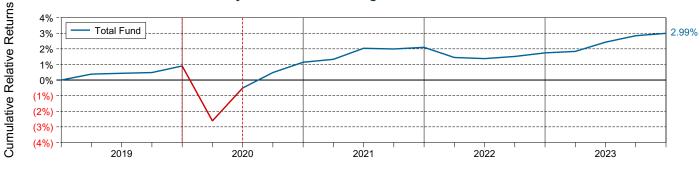
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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

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



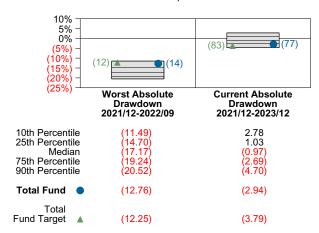
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(12.76)%	0.75	2021/12-2022/09	(12.25)%	(16.73)%	(2.94)%	2.00	2021/12-2023/12	(3.79)%	(0.42)%
Recovery from Trough	11.25%	1.25+	2022/09-2023/12	9.65%	19.58%	11.25%	1.25+	2022/09-2023/12	9.65%	19.58%
Total Fund Target	(12.25)%	0.75	2021/12-2022/09			(3.79)%	2.00	2021/12-2023/12		
Callan Public Fund Spr DB	(16.73)%	0.75	2021/12-2022/09			(0.42)%	2.00	2021/12-2023/12		

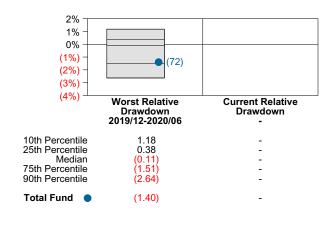
# Relative Cumulative Drawdown Analysis vs. Total Fund Target



	Woi	Worst Relative Drawdown			Current Relative Drawdown		
	Rel Rtn	Years	Period	Rel Rtn	Years	Period	
Total Fund	(1.40)%	0.50	2019/12-2020/06	-	-	-	
Recovery from Trough	1.66%	0.50	2020/06-2020/12	-	-	=	

Drawdown Rankings vs. Total Fund Target Rankings against Callan Public Fund Sponsor Database Five Years Ended December 31, 2023



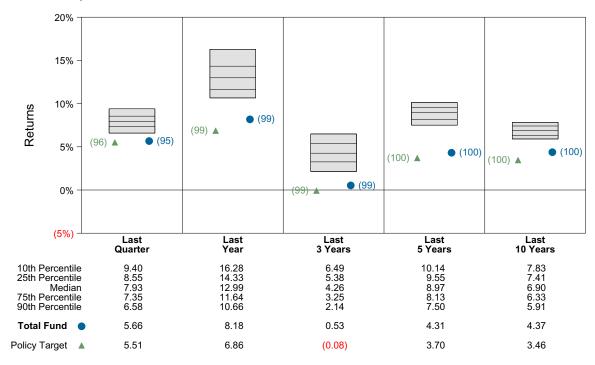




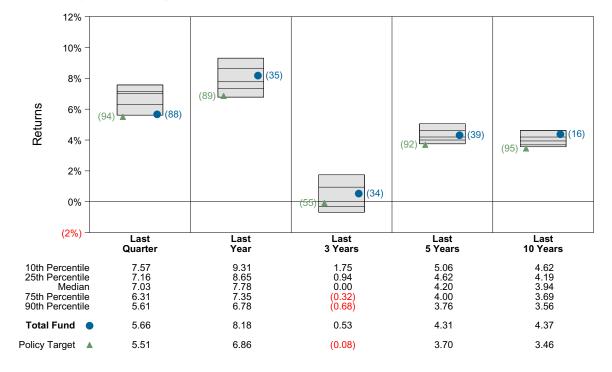
## **Total Fund Ranking**

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

#### **Callan Public Fund Sponsor Database**



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



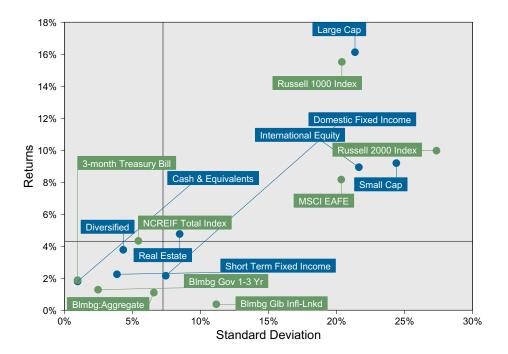
<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



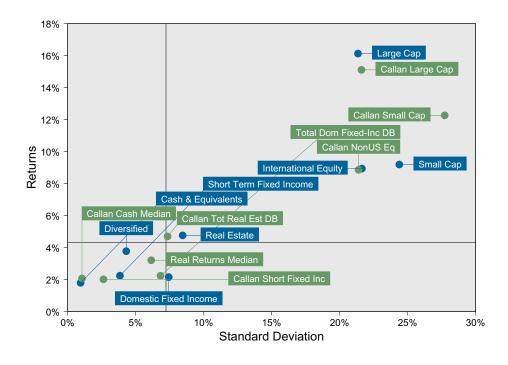
#### **Asset Class Risk and Return**

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

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



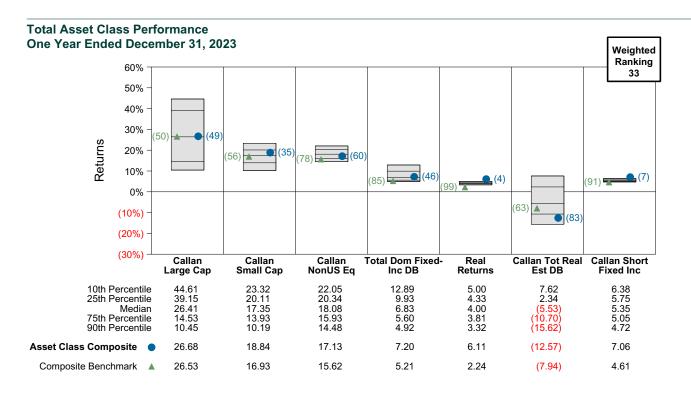
#### Five Year Annualized Risk vs Return Asset Classes vs Asset Class Median

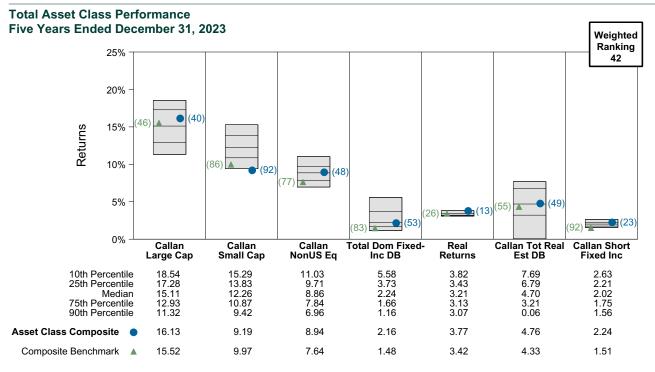




## **Asset Class Rankings**

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





<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.0% DRA Weighted Benchmark, 7.1% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.3% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.



## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

## **Asset Distribution Across Investment Managers**

	December 3	1, 2023			September 30, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Global Equity	\$463,443,204	14.35%	\$(6,127,778)	\$45,094,504	\$424,476,478	13.78%	
Domestic Equity	\$282,979,787	8.76%	\$(3,156,515)	\$29,203,500	\$256,932,802	8.34%	
Large Cap	\$235,836,028	7.30%	\$(2,956,711)	\$24,368,309	\$214,424,429	6.96%	
Parametric-Clifton Enh R1000	36,704,273	1.14%	(485,617)	3,905,131	33,284,759	1.08%	
L.A. Capital Large Cap Growth	5,752,637	0.18%	(322,841)	716,105	5,359,373	0.17%	
L.A. Capital Enhanced	98,741,740	3.06%	(145,586)	9,973,720	88,913,606	2.89%	
NTAM R1000 Index	58,187,573	1.80%	(1,022,310)	5,949,721	53,260,163	1.73%	
NTAM Quant Enh R1000	36,449,805	1.13%	(980,357)	3,823,632	33,606,530	1.09%	
Small Cap	\$47,143,759	1.46%	\$(199,804)	\$4,835,190	\$42,508,373	1.38%	
Atlanta Capital	14.841.674	0.46%	(242,805)	1,615,802	13,468,677	0.44%	
NTAM R2000 Index	2,636,678	0.08%	71,529	261,883	2,303,266	0.07%	
Riverbridge Small Cap Growth	14,858,039	0.46%	60,293	1,358,843	13,438,903	0.44%	
Sycamore Small Cap Value	14,807,368	0.46%	(88,821)	1,598,662	13,297,527	0.43%	
Total International Equity	\$180,463,417	5.59%	\$(2,971,264)	\$15,891,005	\$167,543,676	5.44%	
International All Cap	\$72,277,334	2.24%	\$(105,977)	\$6,398,935	\$65,984,376	2.14%	
William Blair Int'l Leaders	27,771,439	0.86%	(57,751)	3,193,376	24,635,814	0.80%	
Arrowstreet ACWI ex US	44,505,895	1.38%	(48,226)	3,205,558	41,348,562	1.34%	
Developed Intl Large Cap	\$66,547,237	2.06%	\$(2,602,519)	\$6,363,102	\$62,786,654	2.04%	
LSV Intl LargeCap Value	3,154	0.00%	(31)	165	3,020	0.00%	
State St MSCI World exUS	66,544,083	2.06%	(2,602,489)	6,362,938	62,783,634	2.04%	
Developed Intl Small Cap	\$10,650,337	0.33%	\$(696,301)	\$963,550	\$10,383,088	0.34%	
DFA Int'l Small Cap Value	4,606,644	0.14%	0	393,514	4,213,129	0.14%	
State St MSCI exUS Small	6,042,579	0.19%	(690,728)	570,036	6,163,271	0.20%	
Wellington Intl SM Cap	1,115	0.00%	(5,573)	0	6,688	0.00%	
Emerging Markets	\$30,988,508	0.96%	\$433,533	\$2,165,417	\$28,389,558	0.92%	
DFA EM All Cap Core	15.482.197	0.48%	(340.616)	1.116.935	14.705.878	0.48%	
State St MSCI EM China	4,034,697	0.12%	152,180	(169,767)	4,052,284	0.13%	
State St MSCI EM ex China	11,471,614	0.36%	621,969	1,218,249	9,631,396	0.31%	



## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of December 31, 2023, with the distribution as of September 30, 2023. The change in asset distribution is broken down into the dollar change due to Net New Investment and the dollar change due to Investment Return.

## **Asset Distribution Across Investment Managers**

	December 3	1, 2023			September 30, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Domestic Fixed Income	\$1,358,113,112	42.04%	\$(12,981,511)	\$93,244,556	\$1,277,850,067	41.47%	
Allspring Med Quality Credit	109,809,776	3.40%	(906,312)	9,223,011	101,493,076	3.29%	
Manulife-Declaration TRBF	78,760,661	2.44%	(8,066,000)	6,321,350	80,505,311	2.61%	
PIMCO Core Plus Constrained	264,508,774	8.19%	(71,506)	17,190,108	247,390,172	8.03%	
PIMCO DISCO II	51,519,498	1.59%	Ó	1,315,264	50,204,234	1.63%	
PIMCO Bravo II Fund	1,241,645	0.04%	0	64,741	1,176,904	0.04%	
Prudential Core Plus	332,702,757	10.30%	(185,674)	22,497,215	310,391,216	10.07%	
State Street Gov Index	147,574,009	4.57%	(1,107,357)	7,705,979	140,975,387	4.58%	
State Street Credit Index	38,810,638	1.20%	(2,556,576)	3,011,547	38,355,667	1.24%	
Western Asset Core Plus	333,185,354	10.31%	(88,086)	25,915,341	307,358,099	9.97%	
Global Real Assets	\$367,576,755	11.38%	\$(3,283,010)	\$8,629,631	\$362,230,133	11.76%	
Real Estate	\$108,358,959	3.35%	\$(269,510)	\$268,784	\$108,359,685	3.52%	
Invesco Core Real Estate	59,352,876	1.84%	Ó	(726)	59,353,602	1.93%	
JP Morgan RE Inc & Growth	49,006,083	1.52%	(269,510)	269,510	49,006,083	1.59%	
Diversified	\$259,217,796	8.02%	\$(3,013,500)	\$8,360,848	\$253,870,448	8.24%	
Western Asset TIPS	167,561,329	5.19%	(45,364)	8,047,950	159,558,743	5.18%	
JP Morgan IIF Infrastructure	38,543,371	1.19%	(1,131,692)	314,454	39,360,610	1.28%	
Eastern Timber Opportunities	26,586,970	0.82%	(1,663,778)	0	28,250,748	0.92%	
Grosvenor CIS Fund I	4,380,780	0.14%	(136,657)	(83,792)	4,601,229	0.15%	
Grosvenor CIS Fund III	5,767,457	0.18%	84,480	(94,686)	5,777,663	0.19%	
Macquarie Infrastructure Fund V	16,377,889	0.51%	(8,764)	65,198	16,321,455	0.53%	
Short Term Fixed Income	\$1,008,611,718	31.22%	\$(338,889)	\$26,305,261	\$982,645,347	31.89%	
Barings Active Short Duration	504,597,923	15.62%	(134,232)	11,417,765	493,314,390	16.01%	
JP Morgan Short Term Bonds	504,013,795	15.60%	(204,657)	14,887,496	489,330,957	15.88%	
Cash	\$32,390,246	1.00%	\$(1,922,995)	\$475,926	\$33.837.316	1.10%	
Northern Trust Cash Account	10,723,218	0.33%	(1,922,995)	186,608	12,459,605	0.40%	
Bank of ND	21,667,029	0.67%	0	289,318	21,377,711	0.69%	
Residual Holdings	\$312,862	0.01%	\$(411)	\$8,121	\$305,152	0.01%	
Total Fund	\$3,230,447,897	100.00%	\$(24,654,595)	\$173,757,999	\$3,081,344,492	100.00%	



Returns for Periods Ended December 31, 2023

			Last	Last	Last
	Last	Last	3	5	10
	Quarter	Year	Years	Years	Years
Slobal Equity					
Gross	10.87%	22.16%	6.57%	12.42%	_
Net	10.80%	21.94%	6.27%	12.13%	_
Weighted Benchmark	11.37%	21.24%	6.01%	11.99%	_
Weighted Benchmark	11.37%	21.24%	0.01%	11.99%	-
Oomestic Equity					
Gross	11.66%	25.40%	9.16%	14.59%	10.91%
Net	11.59%	25.22%	8.88%	14.34%	10.67%
Weighted Benchmark	12.38%	24.92%	7.63%	14.44%	-
.arge Cap Gross	11.68%	26.68%	10.38%	16.13%	12.06%
Net	11.64%	26.61%	10.20%	15.95%	11.87%
Benchmark(1)	11.96%	26.53%	8.97%	15.52%	11.80%
Parametric-Clifton Enh R1000 - Gross	11.80%	25.91%	9.07%	15.55%	11.96%
Parametric Clifton Enh R1000 - Net	11.80%	25.91%	8.89%	15.48%	11.89%
Benchmark(2)	11.96%	26.53%	10.07%	15.73%	12.05%
Denominan(2)	11.5070	20.0070	10.07 /0	10.7070	12.0070
LA Capital LargeCap Growth - Gross	13.56%	39.49%	10.22%	19.93%	14.77%
LA Capital LargeCap Growth - Net	13.41%	39.18%	9.83%	19.58%	14.50%
Russell 1000 Growth Index	14.16%	42.68%	8.86%	19.50%	14.86%
LA Capital Enhanced - Gross	11.40%	27.05%	10.38%	16.32%	12.18%
LA Capital Enhanced - Net	11.38%	26.97%	10.29%	16.22%	12.06%
Russell 1000 Index	11.96%	26.53%	8.97%	15.52%	11.80%
NTAM R1000 Index - Gross	12.01%	26.59%	-	-	_
NTAM R1000 Index - Net	12.00%	26.58%			_
Russell 1000 Index	11.96%	26.53%	8.97%	- 15.52%	11.80%
Russell 1000 Index	11.90%	20.53%	0.97%	15.52%	11.00%
NTAM Quant Enh R1000 - Gross	11.52%	24.52%	_	-	_
NTAM Quant Enh R1000 - Net	11.37%	24.35%	_	-	_
Russell 1000 Index	11.96%	26.53%	8.97%	15.52%	11.80%
Small Cap	11 500/	10.040/	4.050/	0.400/	0.050/
Gross	11.56%	18.84%	4.85%	9.19%	6.95%
Net	11.32%	18.09%	4.15%	8.64%	6.52%
Russell 2000 Index	14.03%	16.93%	2.22%	9.97%	7.16%
Atlanta Capital - Gross	12.16%	21.60%	8.89%	-	-
Atlanta Capital - Net	11.97%	20.83%	8.18%	-	_
S&P 600 Small Cap Index	15.12%	16.05%	7.28%	11.03%	8.66%
Riverbridge Small Cap Growth - Gross	10.12%	21.32%	(4.66%)	-	-
Riverbridge Small Cap Growth - Net	9.87%	20.39%	(5.39%)	-	-
Russell 2000 Growth Index	12.75%	18.66%	(3.50%)	9.22%	7.16%
Sycamore Small Can Value Crass	12.09%	12.52%	10.269/		
Sycamore Small Cap Value - Gross			10.26%	-	-
Sycamore Small Cap Value - Net	11.77%	11.84%	9.56%	-	- 0.700/
Russell 2000 Value Index	15.26%	14.65%	7.94%	10.00%	6.76%

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



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

Returns for Periods Ended December 31, 2023

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Total International Equity	Quartor	1001	10010	10010	10010
Gross	9.69%	17.13%	2.64%	8.94%	5.17%
Net	9.62%	16.86%	2.36%	8.63%	4.85%
Benchmark(1)	9.81%	15.62%	3.12%	7.64%	3.94%
Denominark(1)	3.0170	13.02 /0	J. 12 /0	7.0470	3.54 /0
International All Cap					
Gross	9.71%	19.34%	-	-	-
Net	9.54%	18.81%	-	-	-
MSCI ACWI xUS IMI	9.81%	15.62%	1.53%	7.19%	3.97%
William Blair Int'l Leaders - Gross	13.00%	14.48%	(2.97%)	9.38%	-
William Blair Int'l Leaders - Net	12.73%	13.96%	(3.39%)	8.95%	_
MSCI ACWI xUS IMI	9.81%	15.62%	1.53%	7.19%	3.97%
INISCI ACVII XOS IIVII	9.0176	13.02 /6	1.55 /6	7.1970	3.97 /6
Arrowstreet ACWI ex US - Gross	7.76%	22.67%	-	-	-
Arrowstreet ACWI ex US - Net	7.64%	22.11%	-	-	-
MSCI ACWI ex US IMI	9.81%	15.62%	1.53%	7.19%	3.97%
Developed Intl Large Cap	10.49%	17 000/			
Gross		17.88%	=	-	-
Net	10.48%	17.86%	-	- 0.450/	-
MSCI World xUS	10.51%	17.94%	4.42%	8.45%	4.32%
State St MSCI World exUS - Gross	10.49%	17.88%	-	-	-
State St MSCI World exUS - Net	10.48%	17.86%	-	-	-
MSCI World xUS	10.51%	17.94%	4.42%	8.45%	4.32%
Developed but Corell Core					
Developed Intl Small Cap Gross	9.96%	13.29%	_	_	_
Net	9.96%	12.97%	_	_	_
MSCI World xUS Small	10.60%	12.62%	(0.20%)	7.05%	4.63%
WSCI WOIIU XOS SIIIaii	10.00%	12.0270	(0.20%)	7.05%	4.03 %
DFA Intl Small Cap Value - Net	9.34%	17.58%	7.13%	8.44%	4.62%
World ex US SC Va	10.04%	14.70%	3.77%	7.08%	4.20%
State St MSCI exUS Small - Gross	10.52%	12.55%			_
State St MSCI exUS Small - Net	10.52%	12.50%	-	-	-
MSCI World xUS Small	10.60%	12.62%	(0.20%)	7.05%	4.63%
WISCI WOIIU XOS SITIAII	10.00 %	12.0270	(0.20%)	7.05%	4.03%
Emerging Markets					
Gross	7.84%	10.70%	-	-	-
Net	7.84%	10.50%	=	-	-
MSCI EM	7.86%	9.83%	(5.08%)	3.69%	2.66%
DFA EM All Cap Core - Gross	7.86%	_	_	_	_
DFA EM All Cap Core - Gloss DFA EM All Cap Core - Net	7.86%	-	-	-	-
MSCI EM	7.86%	9.83%	(5 000/ \	3.69%	2.66%
IVIOCI EIVI	1.00%	უ.oɔ%	(5.08%)	3.09%	2.00%
State St MSCI EM China - Gross	(4.19%)	-	-	-	-
State St MSCI EM China - Net	(4.19%)	-	-	-	-
MSCI China	(4.22%)	(11.20%)	(18.43%)	(2.80%)	0.85%
State St MSCI EM ay China Cra	10.760/				
State St MSCI EM ex China - Gross State St MSCI EM ex China - Net	12.76%	-	-	-	-
	12.74%	-	- 0.470/	- 6 000/	- 0.70/
MSCI EM x China	13.03%	20.03%	2.17%	6.88%	3.87%

<sup>(1)</sup> MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter.



Returns for Periods Ended December 31, 2023

	Last	Last Last	Last 3	Last 5 Years	Last 10 Years
		Year	Years		
	Quarter	rear	rears	rears	rears
Domestic Fixed Income	7.040/	7.000/	(0.000()	0.400/	0.040/
Gross	7.34%	7.20%	(2.62%)	2.16%	3.31%
Net	7.30%	7.08%	(2.75%)	2.03%	3.18%
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%
Allspring Med Quality Credit - Gross	9.12%	10.63%	(1.97%)	4.40%	4.31%
Allspring Med Quality Credit - Net	9.06%	10.47%	(2.14%)	4.22%	4.12%
Blmbg Credit Baa	8.81%	9.41%	(2.88%)	3.14%	3.30%
Manulife-Declaration TRBF - Net	8.38%	9.24%	1.38%	3.38%	3.76%
Libor-3 Month	1.44%	5.65%	2.66%	2.24%	1.60%
PIMCO Core Plus Cons Gross	6.05%	6.37%	(2.010/.)	_	
PIMCO Core Plus Cons Gross PIMCO Core Plus Cons Net	6.95% 6.92%	6.20%	(3.01%)	-	-
			(3.22%)	1 100/	4.040/
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%
Prudential Core Plus - Gross	7.25%	6.88%	(3.21%)	2.06%	2.97%
Prudential Core Plus - Net	7.19%	6.71%	(3.40%)	1.84%	2.73%
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%
State Street Gov Index - Gross	5.52%	<u>-</u>	<u>-</u>	-	_
State Street Gov Index - Net	5.51%	_	_	-	_
Blmbg Government	5.62%	4.09%	(3.74%)	0.56%	1.27%
State Street Credit Index - Gross	8.08%	_	_	-	_
State Street Credit Index - Sloss State Street Credit Index - Net	8.08%	-	-	-	-
Blmbg Credit	8.15%	8.18%	(3.21%)	2.45%	2.83%
, and the second			(===,,,,		
Western Asset Core Plus - Gross	8.43%	7.39%	(3.63%)	1.44%	2.67%
Western Asset Core Plus - Net	8.40%	7.26%	(3.74%)	1.32%	2.55%
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%
PIMCO DiSCO II - Net	2.62%	8.74%	4.86%	5.34%	6.94%
PIMCO Bravo II Fund - Net	5.50%	(12.62%)	(4.80%)	(6.39%)	2.59%
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%
ilobal Real Assets					
Gross	2.39%	(0.15%)	2.79%	4.00%	-
Net	2.34%	(0.47%)	2.51%	3.72%	-
Real Estate					
Gross	0.25%	(12.57%)	6.45%	4.76%	7.41%
Net	0.25%	(13.04%)	5.96%	4.27%	6.81%
NCREIF Total Index	(3.02%)	(7.94%)	4.57%	4.33%	6.80%
NONEII TOTALIIIUGA	(3.02 /0)	(1.34/0)	7.07 /0	7.55/0	0.00 %
Invesco Core Real Estate - Gross	(0.00%)	(12.47%)	6.87%	5.18%	7.72%
Invesco Core Real Estate - Net	(0.00%)	(12.76%)	6.53%	4.84%	7.36%
NCREIF Total Index	(3.02%)	(7.94%)	4.57%	4.33%	6.80%
JP Morgan - Gross	0.55%	(12.70%)	5.98%	4.30%	7.10%
JP Morgan - Net	0.55%	(13.39%)	5.32%	3.65%	6.29%
NCREIF Total Index	(3.02%)	(7.94%)	4.57%	4.33%	6.80%



Returns for Periods Ended December 31, 2023

	14		Last	Last	Last
	Last	Last	3	5 Years	10
	Quarter	Year	Years		Years
Diversified					
Gross	3.30%	6.11%	1.52%	3.77%	3.92%
Net	3.24%	5.87%	1.32%	3.58%	3.68%
Weighted Benchmark	2.98%	2.24%	1.44%	3.42%	2.96%
Western TIPS - Gross	5.04%	3.81%	(1.46%)	3.21%	2.28%
Western TIPS - Net	5.02%	3.69%	(1.57%)	3.10%	2.16%
Benchmark(1)	4.75%	3.84%	(1.28%)	3.14%	2.27%
JP Morgan Infrastructure - Gross	0.80%	15.22%	7.34%	7.37%	6.36%
JP Morgan Infrastructure - Net	0.80%	14.42%	6.58%	6.62%	5.57%
Benchmark(2)	(2.28%)	(5.16%)	5.08%	3.93%	2.91%
Eastern Timber Opportunities - Net	0.00%	4.02%	5.75%	3.07%	4.87%
NCREIF Timberland Index	4.34%	9.45%	10.49%	6.62%	5.77%
Grosvenor CIS Fund - Net	(1.82%)	25.63%	13.89%	10.41%	9.28%
Grosvenor CIS Fund III - Net	(1.57%)	11.50%	-	-	-
Benchmark(2)	(2.28%)	(5.16%)	5.08%	3.93%	2.91%
Macquarie Infrastructure Fund V - Net	0.40%	4.73%	<u>-</u>	-	_
Benchmark(4)	(2.28%)	(5.16%)	-	-	-
Short Term Fixed Income					
Gross	2.68%	7.06%	0.92%	2.24%	1.88%
Net	2.64%	6.93%	0.81%	2.13%	1.73%
Benchmark(3)	2.69%	4.61%	0.09%	1.51%	1.20%
Barings Active Short Duration - Gross	2.32%	8.35%	1.00%	-	_
Barings Active Short Duration - Net	2.29%	8.22%	0.87%	-	_
Blmbg Gov/Cred 1-3 Yr	2.69%	4.61%	0.09%	1.51%	1.27%
JP Morgan Short Term Bds - Gross	3.04%	5.79%	0.85%	2.36%	1.77%
JP Morgan Short Term Bds - Net	3.00%	5.67%	0.75%	2.25%	1.65%
Blmbg Gov/Credit 1-3 Y	2.69%	4.61%	0.09%	1.51%	1.27%
Cash & Equivalents - Net	1.38%	5.06%	2.16%	1.80%	1.18%
Cash Account- Net	1.53%	5.14%	2.11%	1.74%	1.12%
Bank of ND - Net	1.35%	5.12%	2.26%	1.90%	-
90 Day Treasury Bills	1.37%	5.01%	2.15%	1.88%	1.25%
otal Fund					
Gross	5.66%	8.18%	0.53%	4.31%	4.37%
Net	5.62%	8.02%	0.37%	4.15%	4.19%
Target*	5.51%	6.86%	(0.08%)	3.70%	3.46%
Corridor Target	5.46%	6.72%	(0.12%)	3.68%	3.46%

<sup>(4) 50%</sup> CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.



<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.

<sup>(1)</sup> Blmbg US TIPS through 12/31/2009; Blmbg Global Inflation-Linked through 10/31/18; Blmbg US Government Inflation Bond Index thereafter.

<sup>(2)</sup> CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

<sup>(3)</sup> Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter.

	2023	2022	2021	2020	2019
Global Equity					
Gross	22.16%	(18.46%)	21.52%	15.95%	27.92%
Net	21.94%	(18.69%)	21.05%	15.69%	27.67%
Weighted Benchmark	21.24%	(17.99%)	19.82%	16.08%	27.40%
Domestic Equity					
Gross	25.40%	(18.31%)	26.95%	17.43%	29.33%
Net Weighted Benchmark	25.22% 24.92%	(18.53%) (19.43%)	26.53% 23.90%	17.23% 20.95%	29.14% 30.14%
Weighted Benchmark	24.92 //	(19.45%)	23.90%	20.95%	30.14%
Large Cap					
Gross	26.68%	(18.20%)	29.79%	19.93%	30.93%
Net	26.61%	(18.34%)	29.45%	19.81%	30.72%
Benchmark(1)	26.53%	(19.13%)	26.45%	20.96%	31.43%
Parametric-Clifton Enh R1000 - Gross	25.91%	(19.58%)	28.17%	18.83%	33.57%
Parametric Clifton Enh R1000 - Net	25.91%	(19.58%)	27.50%	19.12%	33.57%
Benchmark(2)	26.53%	(18.12%)	28.71%	18.40%	31.49%
LA Capital LargeCap Growth - Gross	39.49%	(27.07%)	31.62%	37.71%	34.54%
LA Capital LargeCap Growth - Net	39.18%	(27.53%)	31.36%	37.44%	34.28%
Russell 1000 Growth Index	42.68%	(29.14%)	27.60%	38.49%	36.39%
rassell 1000 Growth mack	42.0070	(20.1470)	27.0070	00.4070	00.0070
LA Capital Enhanced - Gross	27.05%	(18.27%)	29.51%	22.03%	29.75%
LA Capital Enhanced - Net	26.97%	(18.33%)	29.39%	21.90%	29.61%
Russell 1000 Index	26.53%	(19.13%)	26.45%	20.96%	31.43%
NITAN BASSAL I	00.500/				
NTAM R1000 Index - Gross	26.59%	-	-	-	-
NTAM R1000 Index - Net	26.58%	=	-	-	-
Russell 1000 Index	26.53%	(19.13%)	26.45%	20.96%	31.43%
NTAM Quant Enh R1000 - Gross	24.52%	_	_	-	_
NTAM Quant Enh R1000 - Net	24.35%	_	_	_	_
Russell 1000 Index	26.53%	(19.13%)	26.45%	20.96%	31.43%
		(1211270)			
Small Cap Gross	18.84%	(17 150/)	17.08%	8.77%	23.80%
		(17.15%)			
Net	18.09%	(17.79%)	16.38%	8.32%	23.66%
Russell 2000 Index	16.93%	(20.44%)	14.82%	19.96%	25.52%
Atlanta Capital - Gross	21.60%	(11.66%)	20.18%	14.48%	_
Atlanta Capital - Net	20.83%	(12.30%)	19.48%	14.09%	-
S&P 600 Small Cap Index	16.05%	(16.10%)	26.82%	11.29%	22.78%
Diversidate Carell Care Carelle Cons	24 220/	(24.00%)	4.570/		
Riverbridge Small Cap Growth - Gross	21.32%	(31.69%)	4.57%	-	-
Riverbridge Small Cap Growth - Net	20.39%	(32.28%)	3.89%	-	-
Russell 2000 Growth Index	18.66%	(26.36%)	2.83%	34.63%	28.48%
Sycamore Small Cap Value - Gross	12.52%	(5.92%)	26.64%	-	<u>-</u>
Sycamore Small Cap Value - Net	11.84%	(6.64%)	25.95%	_	_
Russell 2000 Value Index	14.65%	(14.48%)	28.27%	4.63%	22.39%
Mussell 2000 Value Huex	14.05%	(14.40%)	20.2170	4.03%	22.3570



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

	2023	2022	2021	2020	2019
Total International Equity					
Gross	17.13%	(17.52%)	11.92%	13.19%	25.36%
Net	16.86%	(17.76%)	11.60%	12.85%	25.00%
Benchmark(1)	15.62%	(15.79%)	12.62%	7.59%	22.49%
International All Cap					
Gross	19.34%	-	-	-	-
Net	18.81%	-	-	-	-
MSCI ACWI xUS IMI	15.62%	(16.58%)	8.53%	11.12%	21.63%
William Blair Int'l Leaders - Gross	14.48%	(28.02%)	10.85%	28.37%	33.55%
William Blair Int'l Leaders - Net	13.96%	(28.36%)	10.45%	27.90%	33.08%
MSCI ACWI xUS IMI	15.62%	(16.58%)	8.53%	11.12%	21.63%
Arrowstreet ACWI ex US - Gross	22.67%	_	-	_	_
Arrowstreet ACWI ex US - Net	22.11%	_	_	_	_
MSCI ACWI ex US IMI	15.62%	(16.58%)	8.53%	11.12%	21.63%
Developed Intl Large Cap					
Gross	17.88%	_	-	-	-
Net	17.86%	-	-	-	-
MSCI World xUS	17.94%	(14.29%)	12.62%	7.59%	22.49%
State St MSCI World exUS - Gross	17.88%	-	-	-	-
State St MSCI World exUS - Net	17.86%	_	-	-	-
MSCI World xUS	17.94%	(14.29%)	12.62%	7.59%	22.49%
Developed Intl Small Cap					
Gross	13.29%	-	-	-	-
Net	12.97%	_	-	-	-
MSCI World xUS Small	12.62%	(20.59%)	11.14%	12.78%	25.41%
DFA Intl Small Cap Value - Net	17.58%	(9.78%)	15.89%	0.81%	21.00%
World ex US SC Va	14.70%	(14.00%)	13.27%	2.58%	22.83%
State St MSCI exUS Small - Gross	12.55%	-	-	-	-
State St MSCI exUS Small - Net	12.50%	-	-	-	-
MSCI World xUS Small	12.62%	(20.59%)	11.14%	12.78%	25.41%
Emerging Markets					
Gross	10.70%	-	-	-	-
Net	10.50%	-	-	-	-
MSCI EM	9.83%	(20.09%)	(2.54%)	18.31%	18.44%

<sup>(1)</sup> MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter.



	2023	2022	2021	2020	2019
Domestic Fixed Income					
Gross	7.20%	(13.65%)	(0.24%)	8.64%	10.90%
Net	7.08%	(13.77%)	(0.38%)	8.50%	10.76%
Blmbg Aggregate	5.53%	(13.01%)	(1.54%)	7.51%	8.72%
Allspring Med Quality Credit - Gross	10.63%	(16.14%)	1.55%	12.17%	17.37%
Allspring Med Quality Credit - Net	10.47%	(16.30%)	1.36%	11.96%	17.17%
Blmbg Credit Baa	9.41%	(15.94%)	(0.40%)	9.43%	16.46%
Manulife-Declaration TRBF - Net	9.24%	(6.88%)	2.45%	5.76%	7.16%
Libor-3 Month	5.65%	2.25%	0.17%	0.78%	2.43%
PIMCO Core Plus Cons Gross	6.37%	(13.61%)	(0.73%)	9.62%	-
PIMCO Core Plus Cons Net	6.20%	(13.78%)	(0.99%)	9.41%	-
Blmbg Aggregate	5.53%	(13.01%)	(1.54%)	7.51%	8.72%
Prudential Core Plus - Gross	6.88%	(14.37%)	(0.94%)	9.67%	11.34%
Prudential Core Plus - Net	6.71%	(14.55%)	(1.14%)	9.44%	11.05%
Blmbg Aggregate	5.53%	(13.01%)	(1.54%)	7.51%	8.72%
Western Asset Core Plus - Gross	7.39%	(15.67%)	(1.18%)	8.14%	10.99%
Western Asset Core Plus - Net	7.26%	(15.77%)	(1.28%)	8.01%	10.86%
Blmbg Aggregate	5.53%	(13.01%)	(1.54%)	7.51%	8.72%
PIMCO DiSCO II - Net	8.74%	(0.28%)	6.33%	4.38%	7.76%
PIMCO Bravo II Fund - Net	(12.62%)	(25.84%)	33.16%	(17.51%)	0.96%
Blmbg Aggregate	5.53%	(13.01%)	(1.54%)	7.51%	8.72%
Global Real Assets					
Gross	(0.15%)	0.44%	8.30%	5.23%	6.46%
Net	(0.47%)	0.19%	8.03%	4.96%	6.18%
Weighted Benchmark	-	(2.14%)	10.54%	5.49%	6.01%
Real Estate					
Gross	(12.57%)	20.63%	14.38%	(0.06%)	4.68%
Net	(13.04%)	20.13%	13.89%	(0.50%)	4.14%
NCREIF Total Index	(7.94%)	5.53%	17.70%	1.60%	6.42%
Invesco Core Real Estate - Gross	(12.47%)	19.92%	16.29%	(0.93%)	6.47%
Invesco Core Real Estate - Net	(12.76%)	19.56%	15.90%	(1.26%)	6.11%
NCREIF Total Index	(7.94%)	5.53%	17.70%	1.60%	6.42%
JP Morgan - Gross	(12.70%)	21.40%	12.31%	0.91%	2.79%
JP Morgan - Net	(13.39%)	20.75%	11.69%	0.35%	2.08%
NCREIF Total Index	(7.94%)	5.53%	17.70%	1.60%	6.42%



	2023	2022	2021	2020	2019
Diversified					
Gross	6.11%	(7.15%)	6.20%	7.32%	7.19%
Net	5.87%	(7.32%)	6.01%	7.12%	7.01%
Weighted Benchmark	2.24%	(5.21%)	7.71%	7.11%	5.84%
Western TIPS - Gross	3.81%	(12.89%)	5.81%	11.04%	10.27%
Western TIPS - Net	3.69%	(13.00%)	5.70%	10.91%	10.14%
Benchmark(1)	3.84%	(12.60%)	6.00%	11.54%	8.75%
JP Morgan Infrastructure - Gross	15.22%	(1.09%)	8.51%	9.05%	5.79%
JP Morgan Infrastructure - Net	14.42%	(1.77%)	7.71%	8.24%	5.18%
Benchmark(2)	(5.16%)	7.91%	13.37%	1.07%	3.43%
Eastern Timber Opportunities - Net	4.02%	10.41%	2.98%	(4.04%)	2.50%
NCREIF Timberland Index	9.45%	12.90%	9.17%	0.81%	1.30%
Grosvenor CIS Fund - Net	25.63%	3.78%	13.31%	9.33%	1.61%
Grosvenor CIS Fund III - Net	11.50%	(4.23%)	-	-	-
Benchmark(2)	(5.16%)	7.91%	13.37%	1.07%	3.43%
Macquarie Infrastructure Fund V - Net	4.73%	16.30%	-	-	-
Benchmark(4)	(5.16%)	7.91%	-	-	-
Short Term Fixed Income					
Gross	7.06%	(4.98%)	1.05%	3.61%	4.90%
Net	6.93%	(5.08%)	0.94%	3.49%	4.78%
Benchmark(3)	4.61%	(3.69%)	(0.47%)	3.33%	4.03%
Barings Active Short Duration - Gross	8.35%	(6.85%)	2.08%	2.52%	-
Barings Active Short Duration - Net	8.22%	(6.97%)	1.95%	2.40%	-
Blmbg Gov/Cred 1-3 Yr	4.61%	(3.69%)	(0.47%)	3.33%	4.03%
JP Morgan Short Term Bds - Gross	5.79%	(3.08%)	0.04%	4.71%	4.60%
JP Morgan Short Term Bds - Net	5.67%	(3.16%)	(0.06%)	4.58%	4.48%
Blmbg Gov/Credit 1-3 Y	4.61%	(3.69%)	(0.47%)	3.33%	4.03%
Cash & Equivalents - Net	5.06%	1.44%	0.04%	0.44%	2.409/
Cash Account- Net	5.06% 5.14%	1 <b>.44%</b> 1.26%	<b>0.04%</b> 0.01%	<b>0.44%</b> 0.35%	<b>2.10%</b> 2.01%
Bank of ND - Net	5.14% 5.12%	1.26%	0.01%	0.35%	2.01%
	5.12% 5.01%	1.46%	0.08%	0.56%	2.19% 2.28%
90 Day Treasury Bills	5.01%	1.46%	0.05%	0.67%	2.28%
Total Fund					40.400/
Gross	8.18%	(10.28%)	4.68%	8.35%	12.18%
Net	8.02%	(10.42%)	4.50%	8.18%	12.04%
Target*	6.86%	(9.96%)	3.70%	8.10%	11.17%
Corridor Target	6.72%	(9.95%)	3.68%	8.11%	11.24%



<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.

<sup>(1)</sup> Blmbg US TIPS through 12/31/2009; Blmbg Global Inflation-Linked through 10/31/18; Blmbg US Government Inflation Bond Index thereafter.

<sup>(2)</sup> CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

<sup>(3)</sup> Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter. (4) 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.

	6/2023-			<b>-</b> N/ <b>-</b> 004	
Clabal Facility	12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Global Equity Gross	7.26%	16.95%	(15.40%)	43.47%	1.34%
Net	7.26% 7.14%	16.72%		43.47%	1.13%
			(15.71%)		
Weighted Benchmark	7.49%	16.35%	(16.12%)	42.30%	0.79%
Domestic Equity					
Gross	8.08%	19.12%	(13.16%)	45.72%	3.31%
Net	7.97%	18.92%	(13.47%)	45.40%	3.15%
Weighted Benchmark	8.46%	18.17%	(15.82%)	47.25%	4.30%
Large Cap					
Gross	8.33%	20.13%	(11.99%)	46.31%	6.75%
Net	8.28%	20.03%	(12.23%)	46.17%	6.58%
Benchmark(1)	8.44%	19.36%	(13.04%)	43.07%	7.48%
Parametric-Clifton Enh R1000 - Gross	8.21%	19.42%	(12.72%)	41.68%	7.47%
Parametric-Clifton Enh R1000 - Net	8.21%	19.42%	(13.17%)	42.02%	7.47%
Benchmark(2)	8.44%	19.36%	(10.62%)	40.79%	7.51%
. ,					
LA Capital LargeCap Growth - Gross	10.15%	26.45%	(16.13%)	43.21%	22.75%
LA Capital LargeCap Growth - Net	9.96%	25.74%	(16.32%)	42.93%	22.50%
Russell 1000 Growth Index	10.59%	27.11%	(18.77%)	42.50%	23.28%
LA Capital Enhanced - Gross	7.97%	20.15%	(10.55%)	42.86%	8.65%
LA Capital Enhanced - Net	7.92%	20.10%	(10.64%)	42.72%	8.54%
Russell 1000 Index	8.44%	19.36%	(13.04%)	43.07%	7.48%
Small Cap					
Gross	6.65%	15.69%	(16.81%)	42.90%	(7.88%)
Net	6.21%	15.04%	(17.43%)	41.99%	(8.00%)
Russell 2000 Index	8.18%	12.31%	(25.20%)	62.03%	(6.63%)
Atlanta Capital - Gross	8.19%	16.48%	(7.05%)	37.25%	_
Atlanta Capital - Net	7.67%	15.92%	(7.68%)	36.38%	_
S&P 600 Small Cap Index	9.45%	9.75%	(16.81%)	67.40%	(11.29%)
Riverbridge Small Cap Growth - Gross	3.88%	18.58%	(34.68%)		
Riverbridge Small Cap Growth - Net	3.46%	17.71%	(35.23%)	_	-
Russell 2000 Growth Index	4.50%	18.53%	(33.43%)	- 51.36%	- 3.48%
				-	-
Sycamore Small Cap Value - Gross	7.97%	12.26%	(7.07%)	-	-
Sycamore Small Cap Value - Net	7.49%	11.68%	(7.72%)	-	-
Russell 2000 Value Index	11.85%	6.01%	(16.28%)	73.28%	(17.48%)

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



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

	6/2023-				
	12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Total International Equity					
Gross	6.02%	15.44%	(19.69%)	39.33%	(2.20%)
Net	5.89%	15.14%	(19.92%)	38.94%	(2.50%)
Benchmark(1)	5.98%	13.08%	(16.76%)	33.60%	(5.42%)
International All Cap					
William Blair Int'l Leaders - Gross	1.85%	17.27%	(28.45%)	38.39%	8.58%
William Blair Int'l Leaders - Net	1.50%	16.88%	(28.75%)	37.92%	8.16%
MSCI ACWI xUS IMI	5.98%	12.47%	(19.86%)	37.18%	(4.74%)
Arrowstreet ACWI ex US - Gross	8.77%	17.76%	_	_	-
Arrowstreet ACWI ex US - Net	8.52%	17.26%	-	-	-
MSCI ACWI ex US IMI	5.98%	12.47%	(19.86%)	37.18%	(4.74%)
Developed Intl Small Cap					
DFA Intl Small Cap Value - Net	9.42%	15.25%	(13.72%)	43.90%	(11.98%)
World ex US SC Va	8.93%	10.58%	(17.41%)	44.91%	(11.36%)

<sup>(1)</sup> MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/2016; MSCI World ex-US through 9/30/2022; MSCI ACWI xUS IMI(Net) thereafter.



	6/2023-				
	12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Domestic Fixed Income					
Gross	4.27%	0.41%	(11.18%)	3.01%	8.02%
Net	4.19%	0.30%	(11.31%)	2.87%	7.90%
Blmbg Aggregate	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Allspring Med Quality Credit - Gross	6.35%	3.25%	(14.90%)	9.37%	8.91%
Allspring Med Quality Credit - Net	6.25%	3.11%	(15.06%)	9.16%	8.70%
Blmbg Credit Baa	5.67%	2.64%	(14.89%)	5.41%	8.19%
Manulife-Declaration TRBF - Net	6.57%	1.18%	(5.18%)	6.87%	3.19%
Libor-3 Month	2.92%	4.53%	0.48%	0.22%	1.74%
PIMCO Core Plus Cons Gross	4.13%	(0.56%)	(11.05%)	1.62%	9.33%
PIMCO Core Plus Cons Net	4.02%	(0.75%)	(11.29%)	1.42%	9.23%
Blmbg Aggregate	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
PIMCO DiSCO II - Net	4.26%	5.07%	1.64%	8.63%	2.93%
PIMCO Bravo II Fund - Net	5.50%	(34.92%)	(1.66%)	28.42%	(18.00%)
Blmbg Aggregate	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Prudential Core Plus - Gross	4.01%	0.66%	(12.20%)	2.97%	8.48%
Prudential Core Plus - Net	3.90%	0.50%	(12.38%)	2.76%	8.26%
Blmbg Aggregate	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Western Asset Core Plus - Gross	4.23%	(0.20%)	(12.63%)	1.40%	8.47%
Western Asset Core Plus - Net	4.14%	(0.29%)	(12.72%)	1.29%	8.34%
Blmbg Aggregate	3.37%	(0.94%)	(10.29%)	(0.33%)	8.74%
Global Real Assets					
Gross	0.79%	(2.20%)	6.18%	6.74%	4.31%
Net	0.68%	(2.48%)	5.92%	6.47%	4.04%
Weighted Benchmark	-	(1.91%)	6.57%	6.10%	4.63%
Real Estate					
Gross	(2.80%)	(10.14%)	29.83%	6.31%	1.41%
Net	(2.93%)	(10.59%)	29.28%	5.86%	0.93%
NCREIF Total Index	(4.35%)	(6.60%)	21.45%	7.37%	2.69%
Invesco Core Real Estate - Gross	(1.57%)	(9.82%)	27.20%	7.80%	1.34%
Invesco Core Real Estate - Net	(1.66%)	(10.10%)	26.80%	7.45%	1.00%
NCREIF Total Index	(4.35%)	(6.60%)	21.45%	7.37%	2.69%
JP Morgan - Gross	(4.24%)	(10.47%)	32.84%	4.67%	1.50%
JP Morgan - Net	(4.41%)	(11.10%)	32.12%	4.13%	0.87%
NCREIF Total Index	(4.35%)	(6.60%)	21.45%	7.37%	2.69%



	6/2023-				
	12/2023	FY 2023	FY 2022	FY 2021	FY 2020
Diversified					
Gross	2.35%	1.73%	(2.33%)	6.96%	5.47%
Net	2.26%	1.53%	(2.50%)	6.75%	5.29%
Weighted Benchmark	1.16%	0.01%	0.94%	5.58%	5.42%
Western TIPS - Gross	1.53%	(0.79%)	(6.49%)	7.04%	8.48%
Western TIPS - Net	1.44%	(0.88%)	(6.59%)	6.93%	8.36%
Benchmark(1)	1.82%	(1.33%)	(5.73%)	6.51%	8.74%
JP Morgan Infrastructure - Gross	0.83%	12.50%	2.03%	11.25%	5.32%
JP Morgan Infrastructure - Net	0.86%	11.49%	1.38%	10.32%	4.63%
Benchmark(2)	(2.79%)	(3.04%)	18.33%	5.27%	1.62%
Eastern Timber Opportunities - Net	10.85%	(4.72%)	8.75%	2.70%	(1.57%)
NCREIF Timberland Index	5.76%	11.13%	12.01%	3.10%	0.34%
Grosvenor CIS Fund - Net	(2.08%)	28.49%	6.18%	15.73%	3.38%
Grosvenor CIS Fund III - Net	4.77%	5.19%	-	-	-
Benchmark(2)	(2.79%)	(3.04%)	18.33%	5.27%	1.62%
Macquarie Infrastructure Fund V - Net	0.53%	6.15%	_	_	_
Benchmark(4)	(2.79%)	(3.04%)	-	-	-
hort Term Fixed Income					
Gross	4.15%	3.23%	(5.48%)	4.09%	2.44%
Net	4.09%	3.12%	(5.59%)	3.96%	2.36%
Benchmark(3)	3.44%	0.53%	(3.56%)	0.44%	4.20%
Denominan(0)	0.4470	0.0070	(0.0070)	0.4470	4.2070
Barings Active Short Duration - Gross	4.37%	4.72%	(7.62%)	6.88%	-
Barings Active Short Duration - Net	4.31%	4.59%	(7.74%)	6.74%	-
Blmbg Gov/Cred 1-3 Yr	3.44%	0.52%	(3.56%)	0.44%	4.20%
JP Morgan Short Term Bds - Gross	3.93%	1.78%	(3.32%)	1.43%	5.03%
JP Morgan Short Term Bds - Net	3.86%	1.70%	(3.42%)	1.30%	4.97%
Blmbg Gov/Credit 1-3 Y	3.44%	0.52%	(3.56%)	0.44%	4.20%
ash & Equivalents - Net	2.71%	3.61%	0.16%	0.05%	1.37%
Cash Account- Net	2.86%	3.39%	0.12%	0.01%	1.26%
Bank of ND - Net	2.71%	3.82%	0.22%	0.10%	1.49%
90 Day Treasury Bills	2.70%	3.59%	0.17%	0.09%	1.63%
otal Fund					
Gross	4.16%	3.16%	(8.01%)	9.92%	5.12%
Net	4.08%	3.01%	(8.18%)	9.74%	5.00%
Target*	3.59%	2.09%	(7.41%)	7.18%	6.12%
Corridor Target	3.55%	1.95%	(7.38%)	7.24%	6.11%

<sup>(4) 50%</sup> CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net.



<sup>\*</sup> Current Quarter Target = 42.1% Blmbg:Aggregate, 31.2% Blmbg Gov/Cred 1-3 Yr, 8.2% DRA Weighted Benchmark, 7.0% Russell 1000 Index, 5.6% MSCI ACWI xUS IMI, 3.4% NCREIF Total Index, 1.5% Russell 2000 Index and 1.1% 3-month Treasury Bill.

<sup>(1)</sup> Blmbg US TIPS through 12/31/2009; Blmbg Global Inflation-Linked through 10/31/18; Blmbg US Government Inflation Bond Index thereafter.

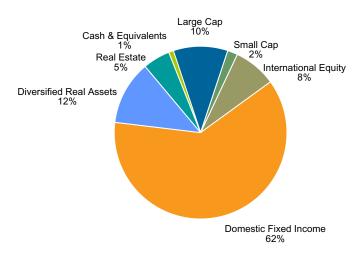
<sup>(2)</sup> CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

<sup>(3)</sup> Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter.

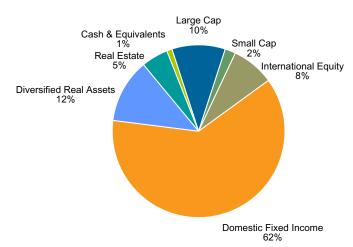
# Actual vs Target Asset Allocation As of December 31, 2023

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

#### **Actual Asset Allocation**



## **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	217,839	10.3%	10.0%	0.3%	5,567
Small Cap	39,704	1.9%	2.0%	(0.1%)	(2, <mark>751)</mark> 429
International Equity	170,247	8.0%	8.0%	`0.0%	429
Domestic Fixed Income	1,312,957	61.9%	62.0%	(0.1%)	(3, <mark>133</mark> ) 134
Diversified Real Assets	254,861	12.0%	12.0%	`0.0%	`134
Real Estate	108,053	5.1%	5.0%	0.1%	1,917
Cash & Equivalents	19,065	0.9%	1.0%	(0.1%)	(2,162)
Total	2,122,727	100.0%	100.0%		

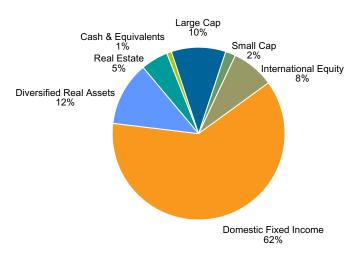
<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



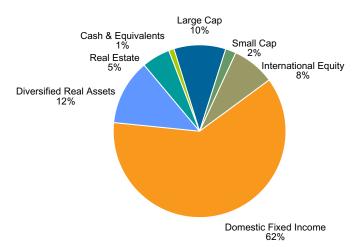
# Actual vs Target Asset Allocation As of December 31, 2023

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

#### **Actual Asset Allocation**



## **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Large Cap	217,839	10.3%	9.8%	0.5%	10,783
Small Cap	39,704	1.9%	2.0%	(0.1%)	(1, <del>707)</del> 429
International Equity	170,247	8.0%	8.0%	`0.0%	429
Domestic Fixed Income	1,312,957	61.9%	61.7%	0.1%	3,126
Diversified Real Assets	254,861	12.0%	12.3%	(0.3%)	(6,431)
Real Estate	108,053	5.1%	5.3%	(0.2%)	(4,038)
Cash & Equivalents	19,065	0.9%	1.0%	(0.1%)	(2,162)
Total	2,122,727	100.0%	100.0%		

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



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.

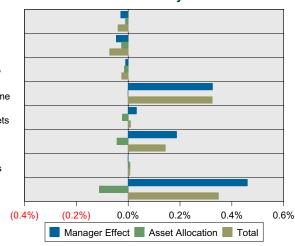




## **Actual vs Target Returns**

#### 11.69 11.96 11.54 14.03 International Equity 9.81 7.35 Domestic Fixed Income 6.82 3.30 3.05 **Diversified Real Assets** 0.25 (3.02)1.33 1.37 Cash & Equivalents 7.07 10% (10%)(5%)0% 5% 15% 20% Actual Target

## **Relative Attribution by Asset Class**



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

Large Cap

Small Cap

Real Estate

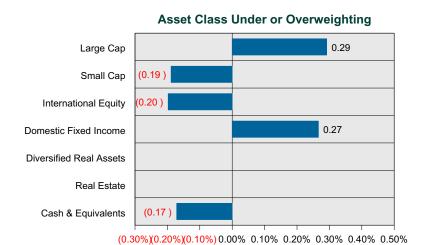
Total

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	11.69%	11.96%	(0.03%)	(0.01%)	(0.04%)
Small Cap	2%	2%	11.54%	14.03%	(0.05%)	(0.03%)	(0.07%)
International Equity	8%	8%	9.68%	9.81%	(0.01%)	(0.02%)	(0.03%)
Domestic Fixed Incom-		62%	7.35%	6.82%	`0.33%´	(0.00%)	0.32%
Diversified Real Assets		12%	3.30%	3.05%	0.03%	(0.02%)	0.01%
Real Estate	5%	5%	0.25%	(3.02%)	0.19%	(0.04%)	0.14%
Cash & Equivalents	1%	1%	1.33%	`1.37%′	(0.00%)	<u>`0.01%´</u>	0.01%
Total			7.07% =	6.72%	+ 0.46% +	(0.11%)	0.35%

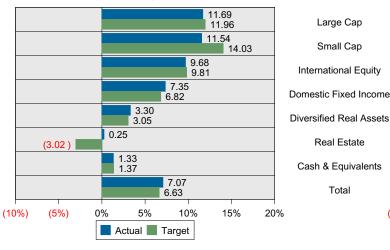
<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



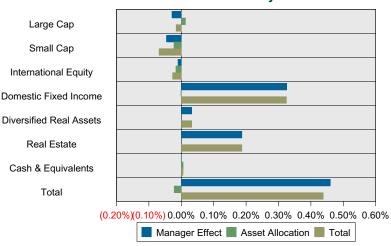
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation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







## **Relative Attribution by Asset Class**



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

Large Cap

Small Cap

Real Estate

Total

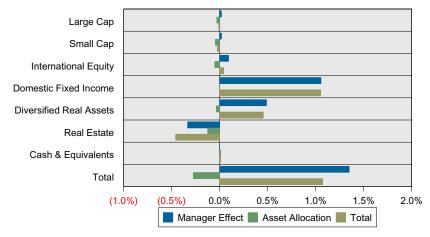
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	11.69%	11.96%	(0.03%)	0.01%	(0.02%)
Small Cap	2%	2%	11.54%	14.03%	(0.05%)	(0.02%)	(0.07%)
International Equity	8%	8%	9.68%	9.81%	(0.01%)	(0.02%)	(0.03%)
Domestic Fixed Incom	e 62%	62%	7.35%	6.82%	`0.33%´	(0.00%)	0.32%
Diversified Real Asset	s 13%	13%	3.30%	3.05%	0.03%	0.00%	0.03%
Real Estate	5%	5%	0.25%	(3.02%)	0.19%	0.00%	0.19%
Cash & Equivalents	1%	1%	1.33%	1.37%	(0.00%)	0.01%	0.01%
Total			7.07% =	6.63% +	0.46% +	(0.02%)	0.44%

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

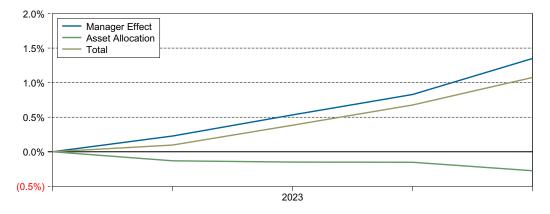


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

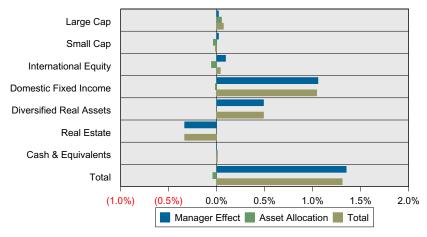
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	26.73%	26.53%	0.02%	(0.03%)	(0.01%)
Small Cap	2%	2%	18.86%	16.93%	0.02%	(0.04%)	(0.02%)
International Equity	8%	8%	17.02%	15.62%	0.09%	(0.05%)	`0.04%´
Domestic Fixed Income	e 61%	62%	7.23%	5.53%	1.06%	(0.00%)	1.05%
Diversified Real Assets		12%	6.11%	2.26%	0.49%	(0.03%)	0.46%
Real Estate	6%	5%	(12.57%)	(7.94%)	(0.33%)	(0.12%)	(0.46%)
Cash & Equivalents	1%	1%	5.02%	5.01%	`0.00%	0.01%	`0.01%´_
Total			8.56% =	7.49% +	+ 1.35% +	(0.27%)	1.08%

<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

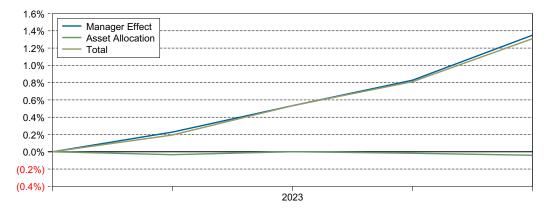


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

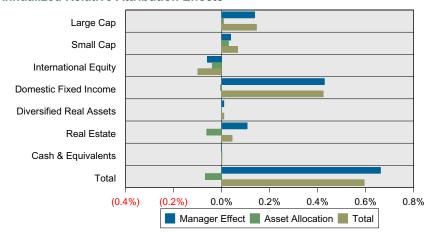
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	26.73%	26.53%	0.02%	0.05%	0.07%
Small Cap International Equity	2% 8%	2% 8%	18.86% 17.02%	16.93% 15.62%	0.02% 0.09%	(0.03%) (0.05%)	( <mark>0.01%)</mark> 0.04%
Domestic Fixed Incom	e 61%	62%	7.23%	5.53%	1.06%	(0.01%)	1.04%
Diversified Real Asset Real Estate	s 12% 6%	12% 6%	6.11% (12.57%)	2.26% (7.94%)	0.49% (0.33%)	0.00% 0.00%	0.49% (0.33%)
Cash & Equivalents	1%	1%	5.02%	5.01%	0.00%	0.01%	0.01%
Total			8.56% =	7.25% +	+ 1.35% +	(0.04%)	1.31%

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

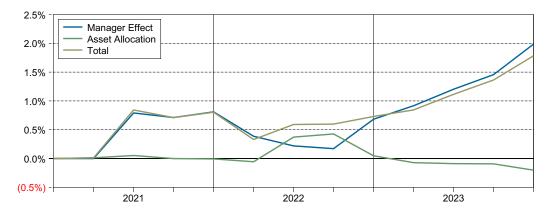


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

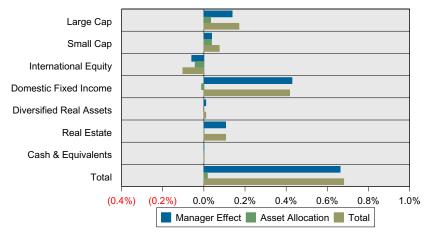
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	11%	10.40%	8.97%	0.14%	0.01%	0.15%
Small Cap	2% 8%	3% 8%	4.85% 2.39%	2.22% 3.12%	0.04% (0.06%)	0.03% (0.04%)	0.07% (0.10%)
International Equity Domestic Fixed Incom		61%	(2.62%)	(3.31%)	0.43%	(0.04%)	0.42%
Diversified Real Asset	s 12%	12%	1.56%	`1.45%´	0.01%	(0.00%)	0.01%
Real Estate	5%	5%	6.45%	4.57%	0.11%	(0.06%)	0.04%
Cash & Equivalents	1%	1%	2.14%	2.15%	0.00%	0.00%	0.00%
Total			0.31% =	(0.28%) +	0.66% +	(0.07%)	0.59%

<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

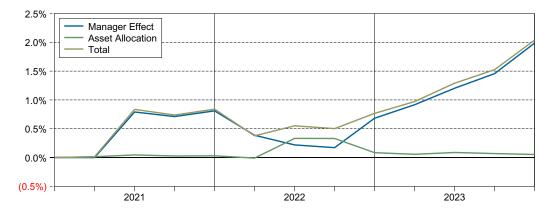


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

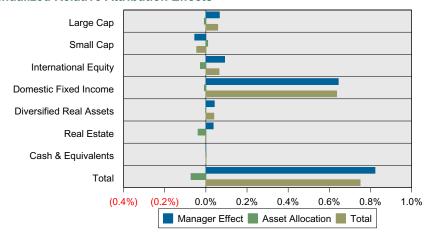
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	10%	10%	10.40%	8.97%	0.14%	0.03%	0.17%
Small Cap	2%	2%	4.85%	2.22%	0.04%	0.04%	0.08%
International Equity	8%	8%	2.39%	3.12%	(0.06%)	(0.04%)	(0.10%)
Domestic Fixed Incom		61%	(2.62%)	(3.31%)	0.43%	(0.01%)	`0.42%´
Diversified Real Assets		12%	`1.56%´	`1.45%´	0.01%	0.00%	0.01%
Real Estate	5%	5%	6.45%	4.57%	0.11%	0.00%	0.11%
Cash & Equivalents	1%	1%	2.14%	2.15%	0.00%	0.00%	0.00%
Total			0.31% =	(0.37%) +	0.66% +	0.02%	0.68%

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

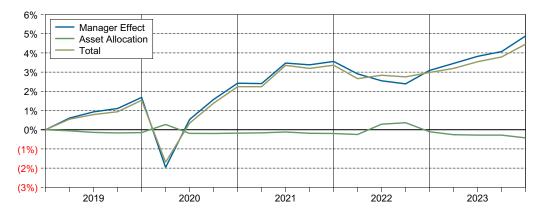


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

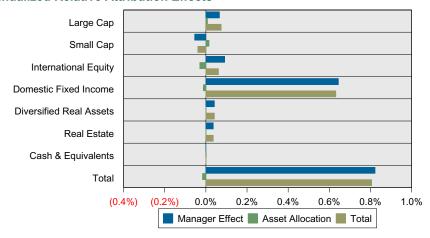
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	16.14%	15.52%	0.07%	(0.01%)	0.06%
Small Cap	3%	3%	9.11%	9.97%	(0.05%)	0.01%	(0.05%)
International Equity	8%	8%	8.78%	7.64%	0.09%	(0.03%)	`0.06%
Domestic Fixed Incom		61%	2.20%	1.10%	0.64%	(0.01%)	0.64%
Diversified Real Asset	s 12%	12%	3.80%	3.43%	0.04%	(0.00%)	0.04%
Real Estate	5%	5%	4.76%	4.33%	0.04%	(0.04%)	(0.00%)
Cash & Equivalents	1%	1%	1.79%	1.88%	(0.00%)	0.00%	
Total			4.79% =	4.04%	+ 0.82% +	(0.07%)	0.75%

<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

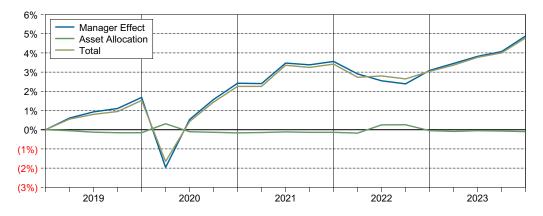


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

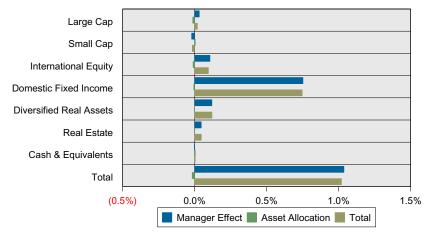
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	16.14%	15.52%	0.07%	0.01%	0.07%
Small Cap	3%	3%	9.11%	9.97%	(0.05%)	0.02%	(0.04%)
International Equity	8%	8%	8.78%	7.64%	0.09%	(0.03%)	`0.06%
Domestic Fixed Income	e 61%	61%	2.20%	1.10%	0.64%	(0.01%)	0.63%
Diversified Real Assets	12%	12%	3.80%	3.43%	0.04%	`0.00%	0.04%
Real Estate	5%	5%	4.76%	4.33%	0.04%	0.00%	0.04%
Cash & Equivalents	1%	1%	1.79%	1.88%	(0.00%)	0.00%	0.00%
Total			4.79% =	3.98%	+ 0.82% +	(0.02%)	0.81%

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

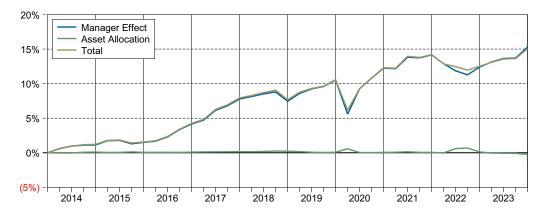


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

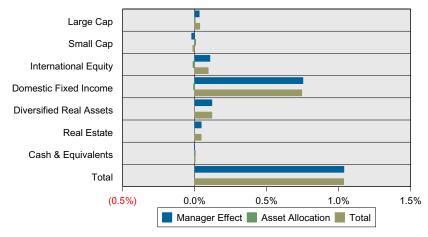
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	12.09%	11.80%	0.03%	(0.01%)	0.02%
Small Cap International Equity	3% 8%	3% 8%	6.92% 5.09%	7.16% 3.94%	( <mark>0.02%)</mark> 0.11%	`0.01%´ (0.01%)	( <mark>0.02%)</mark> 0.10%
Domestic Fixed Incom	e 57%	57%	3.19%	1.81%	0.75%	(0.01%)	0.75%
Diversified Real Asset Real Estate	s 14% 6%	14% 5%	4.03% 7.41%	3.19% 6.80%	0.12% 0.05%	0.00%	0.12% 0.05%
Cash & Equivalents	1%	1%	1.17%	1.25%	(0.00%)	0.00%	0.00%
Total			4.93% =	3.91%	+ 1.04% +	(0.02%)	1.02%

<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.

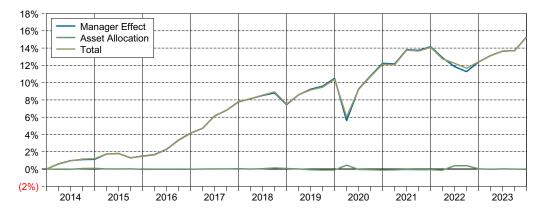


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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



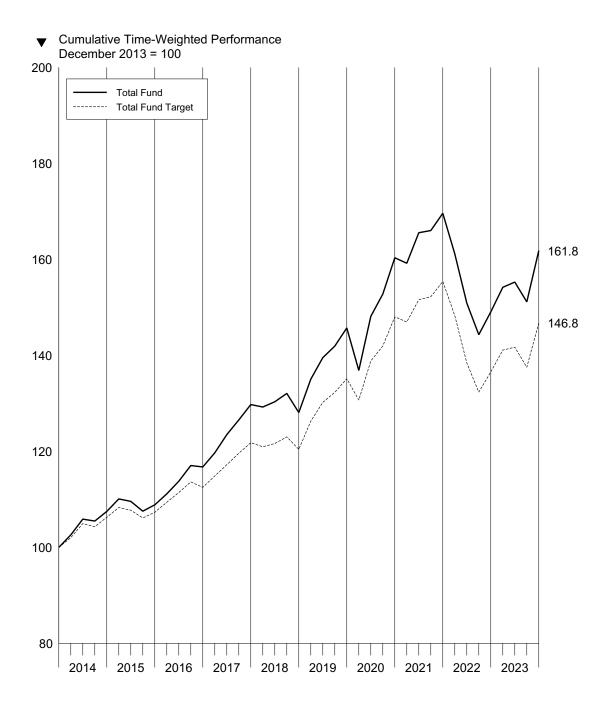
## **Ten Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Large Cap	11%	11%	12.09%	11.80%	0.03%	0.00%	0.04%
Small Cap International Equity	3% 8%	3% 8%	6.92% 5.09%	7.16% 3.94%	( <mark>0.02%)</mark> 0.11%	0.01% (0.01%)	( <mark>0.01%)</mark> 0.10%
Domestic Fixed Incom	e 57%	57%	3.19%	1.81%	0.75%	(0.01%)	0.74%
Diversified Real Assets		14%	4.03%	3.19%	0.12%	`0.00%′	0.12%
Real Estate	6%	6% 40/	7.41%	6.80%	0.05%	0.00%	0.05%
Cash & Equivalents	1%	1%	1.17%	1.25%	(0.00%)	0.01%	0.00%
Total			4.93% =	3.90%	+ 1.04% +	(0.00%)	1.03%

<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



# NDSIB - Workforce Safety & Insurance Cumulative Results

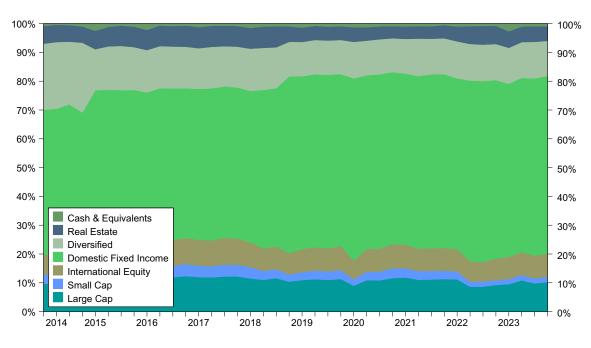




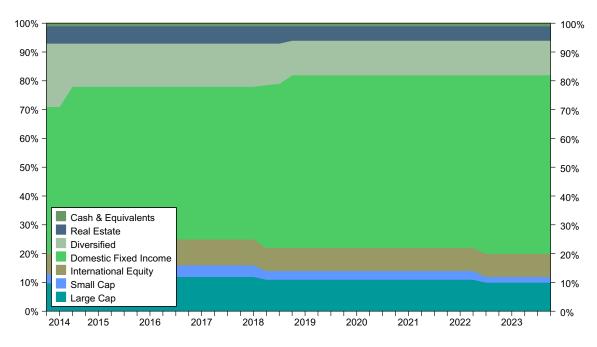
## **Actual vs Target Historical Asset Allocation**

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**

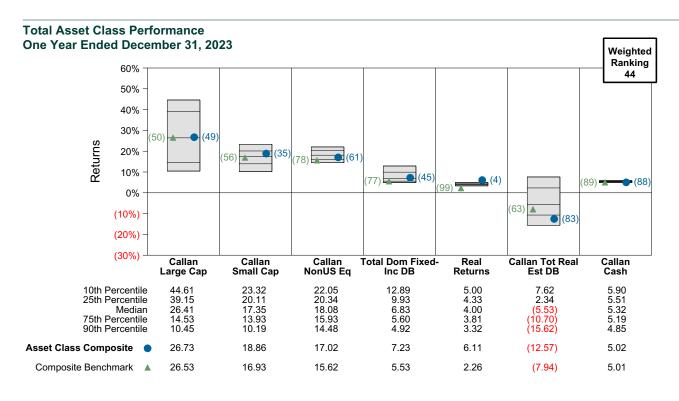


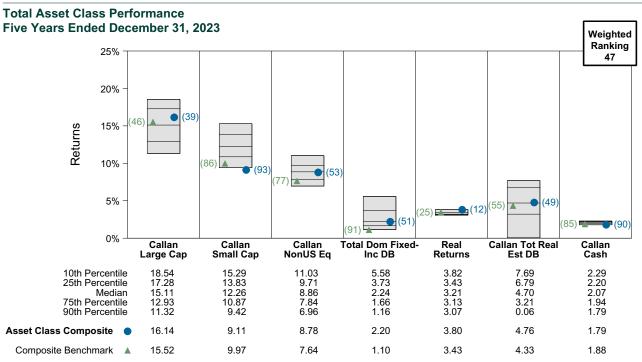
<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



## **Asset Class Rankings**

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





<sup>\*</sup> Current Quarter Target = 62.0% Blmbg:Aggregate, 12.0% DRA Weighted Benchmark, 10.0% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.0% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.



## **Asset Class Allocation**

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

	December 3	1, 2023		September 30, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Global Equity	\$427,790,053	20.15%	\$(2,453,575)	\$41,583,500	\$388,660,128	19.45%
Domestic Equity	\$257,543,401	12.13%	\$(329,310)	\$26,580,819	\$231,291,892	11.58%
Large Cap	217,839,457	10.26%	(993,989)	22,534,642	196,298,804	9.83%
Small Cap	39,703,944	1.87%	664,679	4,046,177	34,993,088	1.75%
International Equity	\$170,246,653	8.02%	\$(2,124,266)	\$15,002,681	\$157,368,237	7.88%
International All Cap	68,185,422	3.21%	205,985	6,002,493	61,976,943	3.10%
Developed Intl Large Cap	62,779,729	2.96%	(2,239,980)	6,046,280	58,973,429	2.95%
Developed Intl Small Cap	10,047,378	0.47%	(649,341)	944,228	9,752,491	0.49%
Domestic Fixed Income	\$1,312,957,331	61.84%	\$(9,859,670)	\$90,269,727	\$1,232,547,274	61.69%
Global Real Assets	\$362,913,907	17.09%	\$(3,419,285)	\$8,487,032	\$357,846,160	17.91%
Real Estate	108,053,152	5.09%	(343,334)	268,206	108,128,280	5.41%
Diversified	254,860,754	12.00%	(3,075,951)	8,218,826	249,717,879	12.50%
Cash	\$19,065,347	0.90%	\$269,513	\$223,051	\$18,572,782	0.93%
Total Fund	\$2,123,020,265	100.00%	\$(15,463,404)	\$140,570,932	\$1,997,912,737	100.00%



### **Asset Class Returns**

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

Returns for Periods Ended December 31, 2023

	Last	Last	Last 3	Last 5	Last 10	
	Quarter	Year	Years	Years	Years	
Global Equity						
Gross	10.85% 10.78%	22.15% 21.93%	6.53% 6.25%	12.40% 12.13%	-	
Net Weighted Benchmark	11.33%	21.22%	6.01%	11.97%	- -	
Domestic Equity						
Gross	11.67%	25.56%	9.55%	14.85%	11.08%	
Net Weighted Benchmark	11.60% 12.36%	25.38% 25.02%	9.27% 7.69%	14.60% 14.48%	10.85% -	
Large Cap						
Gross	11.69%	26.73%	10.40%	16.14%	12.09%	
Net Benchmark(1)	11.64% 11.96%	26.66% 26.53%	10.22% 8.97%	15.97% 15.52%	11.91% 11.80%	
Small Cap						
Gross	11.54%	18.86%	4.85%	9.11%	6.92%	
Net Russell 2000	11.31% 14.03%	18.13% 16.93%	4.16% 2.22%	8.56% 9.97%	6.50% 7.16%	
	14.03%	10.93%	Z.ZZ70	3.3170	1.1070	
International Equity Gross	9.68%	17.02%	2.39%	8.78%	5.09%	
Net	9.61%	16.75%	2.11%	8.48%	4.78%	
Benchmark(2)	9.81%	15.62%	3.12%	7.64%	3.94%	
International All Cap	0.000/	40.000/				
Gross Net	9.68% 9.50%	19.39% 18.85%	-	-	-	
MSCI ACWI xUS IMI	9.81%	15.62%	1.53%	7.19%	3.97%	
Developed Intl Large Cap						
Gross	10.57%	17.82%	-	-	-	
Net MSCI World xUS	10.57% 10.51%	17.80% 17.94%	- 4.42%	- 8.45%	4.32%	
Developed Intl Small Cap						
Gross	10.18%	13.30%	-	-	-	
Net MSCI World xUS Small	10.17% 10.60%	12.99% 12.62%	(0.20%)	7.05%	- 4.63%	
Domestic Fixed Income						
Gross	7.35%	7.23%	(2.62%)	2.20%	3.19%	
Net	7.31%	7.11%	(2.74%)	2.07%	3.06%	
Blmbg Aggregate	6.82%	5.53%	(3.31%)	1.10%	1.81%	
Global Real Assets Gross	2.38%	(0.21%)	2.84%	4.02%	-	
Net	2.33%	(0.53%)	2.55%	3.74%	-	
Weighted Benchmark	1.24%	(0.83%)	2.40%	3.72%	-	
Real Estate Gross	0.25%	(12.57%)	6.45%	4.76%	7.41%	
Net	0.25%	(13.04%)	5.96%	4.27%	6.81%	
NCREIF Total Index	(3.02%)	`(7.94%)	4.57%	4.33%	6.80%	
Diversified	2 200/	G 440/	1 FC0/	2 900/	4.020/	
Gross Net	3.30% 3.24%	6.11% 5.87%	1.56% 1.36%	3.80% 3.60%	4.03% 3.78%	
Weighted Benchmark	3.05%	2.26%	1.45%	3.43%	3.19%	
Cash & Equivalents - Net 90 Day Treasury Bills	<b>1.33%</b> 1.37%	<b>5.02%</b> 5.01%	<b>2.14%</b> 2.15%	<b>1.79%</b> 1.88%	<b>1.17%</b> 1.25%	
Total Fund						
TOTAL FULLO						
Gross	7.07%	8.56%	0.31%	4.79%	4.93%	
	7.07% 7.03% 6.72%	8.56% 8.39% 7.49%	0.31% 0.13% (0.28%)	4.79% 4.61% 4.04%	4.93% 4.73% 3.91%	

PLEASE REFER TO PAGES 40-43 FOR INVESTMENT MANAGER LEVEL RETURNS.

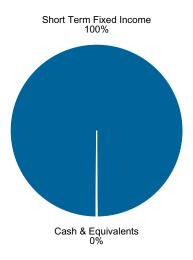


<sup>\*</sup> Current Quarter Target = 61.7% Blmbg:Aggregate, 12.3% DRA Weighted Benchmark, 9.8% Russell 1000 Index, 8.0% MSCI ACWI xUS IMI, 5.3% NCREIF Total Index, 2.0% Russell 2000 Index and 1.0% 3-month Treasury Bill.
(1) S&P 500 Index through 12/31/2011 and Russell 1000 Index thereafter.
(2) MSCI EAFE through 9/30/2000; 50% Hedged EAFE through 3/31/2011; MSCI EAFE again through 6/30/16; MSCI World ex-US

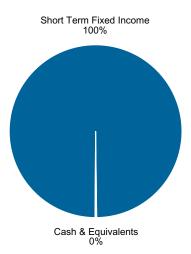
## **Actual vs Target Asset Allocation** As of December 31, 2023

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

#### **Actual Asset Allocation**



## **Target Asset Allocation**

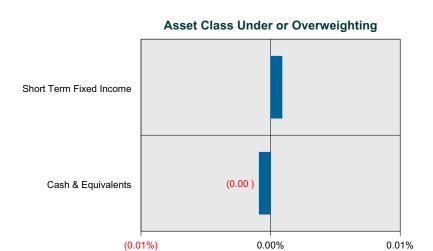


Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Short Term Fixed Income	949,430	99.8%	99.7%	0.0%	255
Cash & Equivalents	2,365	0.2%	0.3%	(0.0%)	(255)
Total	951.795	100.0%	100.0%	•	, , ,

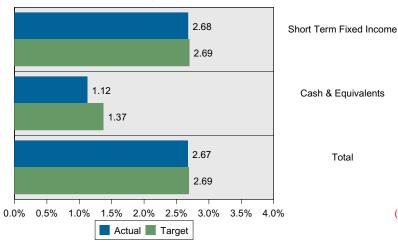
<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.



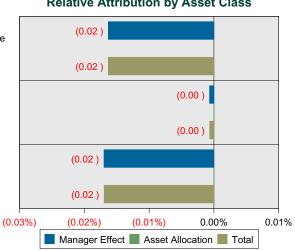
The following analysis approaches Total Fund Attribution from the perspective of relative return. Relative return attribution separates and quantifies the sources of total fund excess return relative to its target. This excess return is separated into two relative attribution effects: Asset Allocation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



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



## **Relative Attribution by Asset Class**



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

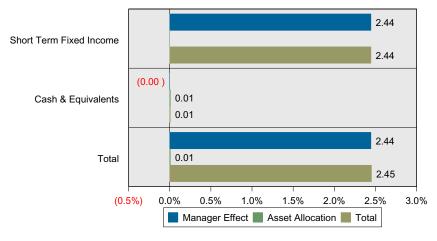
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return		Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed In Cash & Equivalents		100% 0%	2.68% 1.12%	2.69% 1.37%		(0.02%) (0.00%)	0.00% 0.00%	(0.02%) (0.00%)
Total			2.67% =	2.69%	+	(0.02%) +	0.00%	(0.02%)

<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.

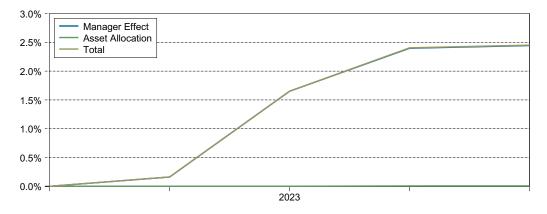


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

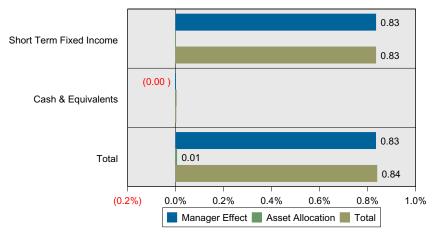
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed In Cash & Equivalents		100% 0%	7.07% 4.80%	4.61% 5.01%	2.44% (0.00%)	0.00% 0.01%	2.44% 0.01%
Total			7.06% =	4.61%	+ 2.44% -	+ 0.01%	2.45%

<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.

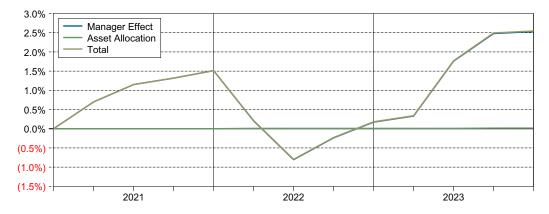


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

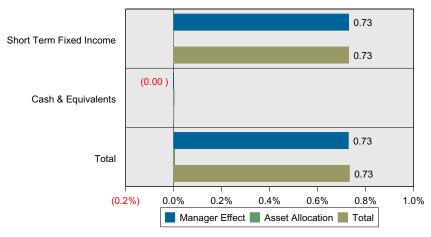
Asset Class Short Term Fixed Inc	Effective Actual Weight	Effective Target Weight 99%	Actual Return 0.93%	Target Return 0.09%	Manager Effect 0.83%	Asset Allocation 0.00%	Total Relative <u>Return</u> 0.83%
Cash & Equivalents	1%	1%	2.08%	2.15%	(0.00%)	0.00%	0.00%
Total			0.96% =	0.12%	+ 0.83% +	0.01%	0.84%

<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.

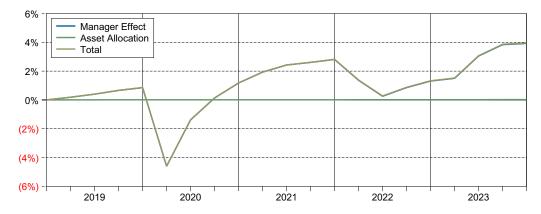


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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

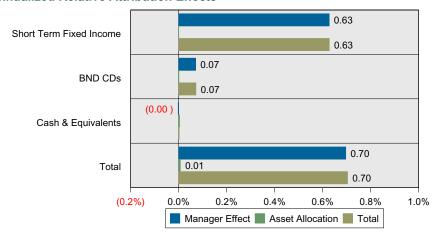
Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Inc Cash & Equivalents	ome99% 1%	99% 1%	2.25% 1.76%	1.51% 1.88%	0.73% (0.00%)	0.00% 0.00%	0.73% 0.00%
Total			2.25% =	1.51%	+ 0.73% +	0.00%	0.73%

<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.

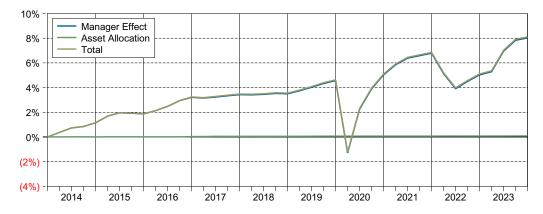


The charts below accumulate the Total Fund Attribution Analysis (shown earlier) over multiple periods to examine the cumulative sources of excess total fund performance relative to target. These cumulative results quantify the longer-term sources of total fund excess return relative to target by asset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



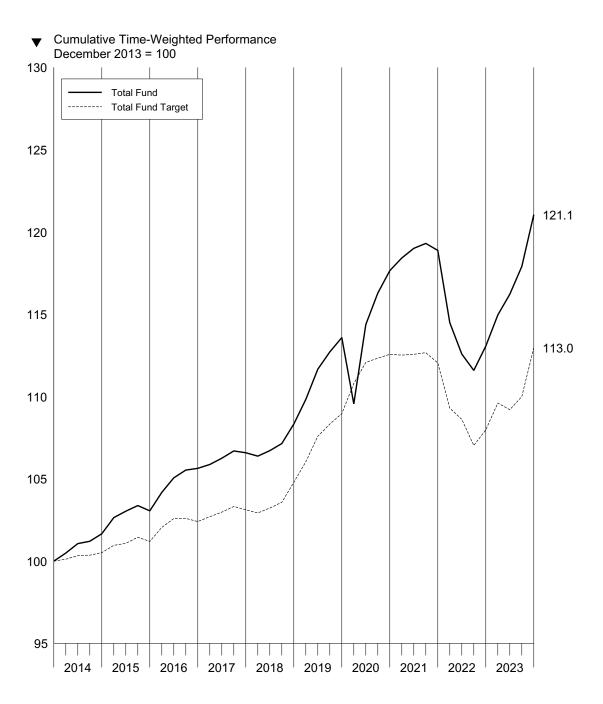
## Ten Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Short Term Fixed Inc	ome93%	93%	1.88%	1.20%	0.63%	0.00%	0.63%
BND CDs	5%	5%	-	-	0.07%	0.00%	0.07%
Cash & Equivalents	2%	2%	1.15%	1.25%	(0.00%)	0.00%	0.00%
Total			1.93% =	1.22%	+ 0.70% +	- 0.01%	0.70%

<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.



# NDSIB - Budget Stabilization Fund Cumulative Results

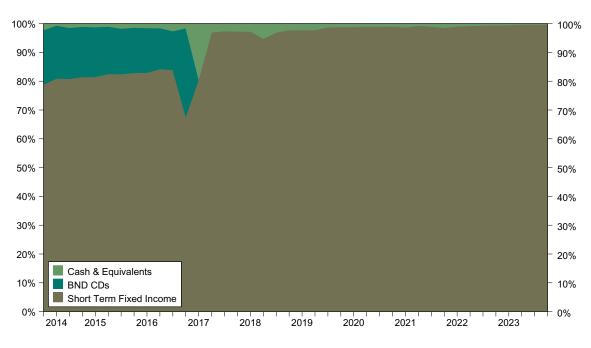




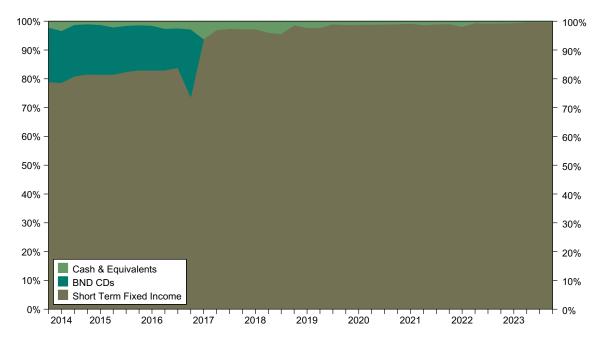
## **Actual vs Target Historical Asset Allocation**

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 = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill.



## **Asset Class Allocation**

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

	December 3	1, 2023			September 30, 2023		
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight	
Short Term Fixed Income	\$949,429,618	99.75%	\$427,501	\$24,753,194	\$924,248,923	99.67%	
Cash & Equivalents	\$2,364,987	0.25%	\$(758,475)	\$31,586	\$3,091,876	0.33%	
Total Fund	\$951,794,605	100.00%	\$(330,974)	\$24,784,779	\$927,340,799	100.00%	





## **Investment Manager Returns**

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

## Returns for Periods Ended December 31, 2023

	Last	Last	Last 3	Last 5	Last 10
	Quarter	Year	Years	Years	Years
Short Term Fixed Income					
Gross	2.68%	7.07%	0.93%	2.25%	1.88%
Net	2.64%	6.94%	0.82%	2.13%	1.73%
Blended Benchmark(1)	2.69%	4.61%	0.09%	1.51%	1.20%
Cash & Equivalents - Net	1.12%	4.80%	2.08%	1.76%	1.15%
3-month Treasury Bill	1.37%	5.01%	2.15%	1.88%	1.25%
Total Fund					
Gross	2.67%	7.06%	0.96%	2.25%	1.93%
Net	2.64%	6.94%	0.84%	2.13%	1.79%
Target*	2.69%	4.61%	0.12%	1.51%	1.23%

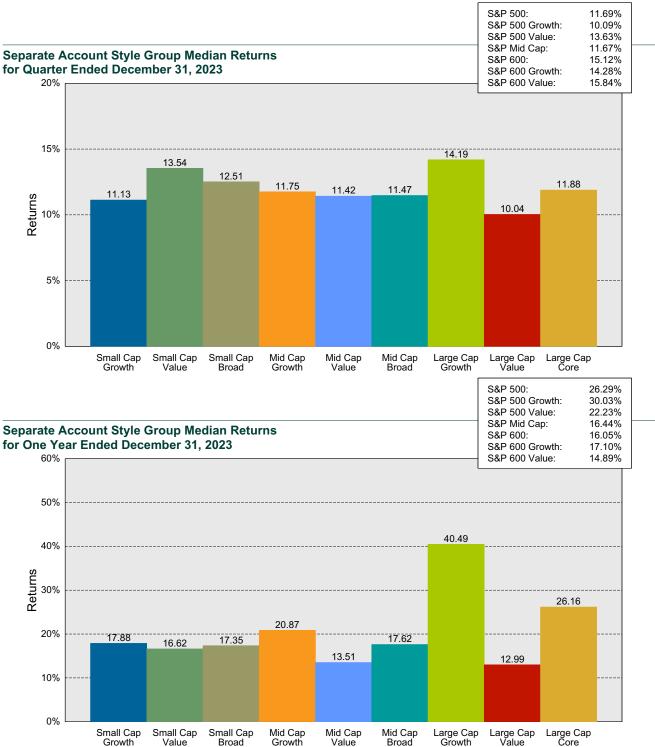
PLEASE REFER TO PAGES 33-35 FOR INVESTMENT MANAGER LEVEL RETURNS.



<sup>\*</sup> Current Quarter Target = 99.7% Blmbg Gov/Cred 1-3 Yr and 0.3% 3-month Treasury Bill. (1) Blmbg Gov 1-3 Yr through March 31, 2017 and Blmbg Gov/Credit 1-3 Yr thereafter.

# Domestic Equity Active Management Overview

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





# Domestic Equity Period Ended December 31, 2023

### **Quarterly Summary and Highlights**

- Domestic Equity's portfolio posted a 11.66% return for the quarter placing it in the 70 percentile of the Public Fund -Domestic Equity group for the quarter and in the 21 percentile for the last year.
- Domestic Equity's portfolio underperformed the Domestic Equity Target by 0.72% for the quarter and outperformed the Domestic Equity Target for the year by 0.49%.

#### **Quarterly Asset Growth**

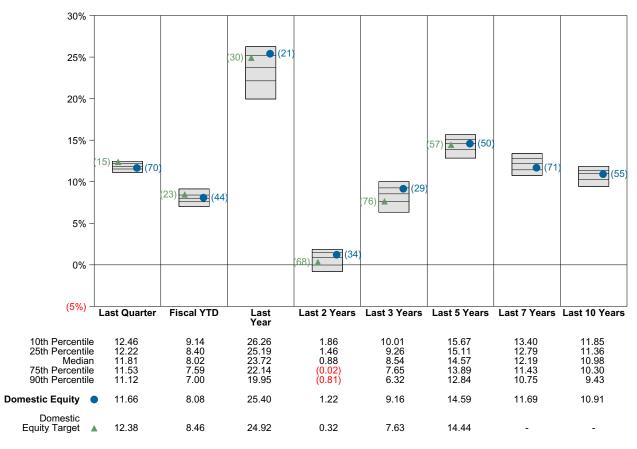
 Beginning Market Value
 \$256,932,802

 Net New Investment
 \$-3,156,515

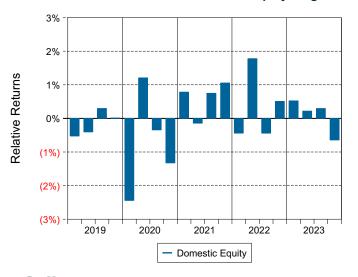
 Investment Gains/(Losses)
 \$29,203,500

 Ending Market Value
 \$282,979,787

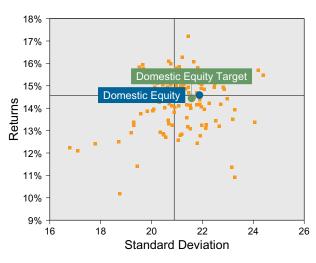
### Performance vs Public Fund - Domestic Equity (Gross)



#### **Relative Return vs Domestic Equity Target**



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



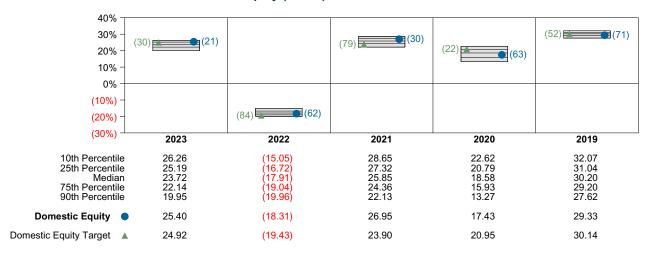


## Domestic Equity Return Analysis Summary

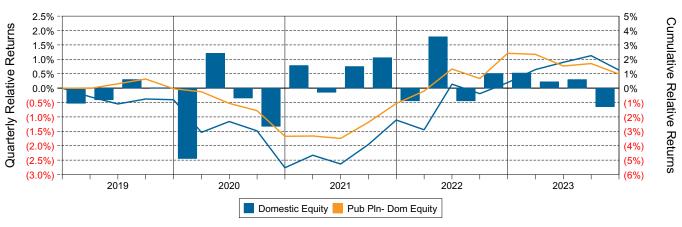
#### **Return Analysis**

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

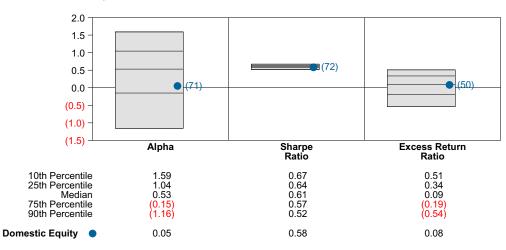
#### Performance vs Public Fund - Domestic Equity (Gross)



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



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



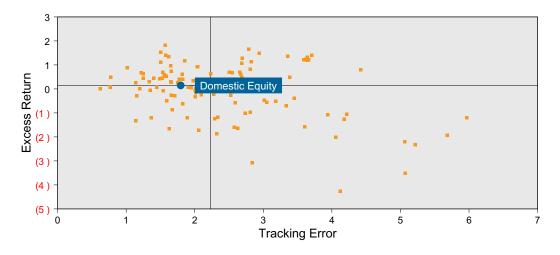


## Domestic Equity Risk Analysis Summary

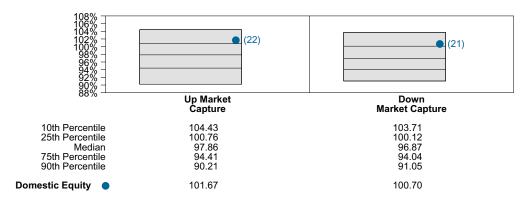
#### **Risk Analysis**

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.

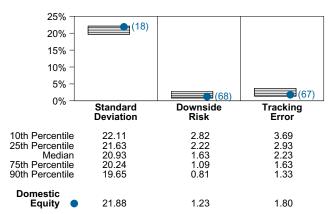
# Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023

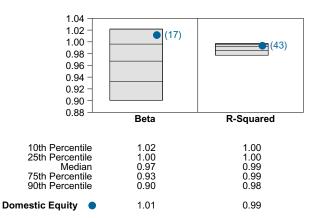


Market Capture vs Domestic Equity Target Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended December 31, 2023



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



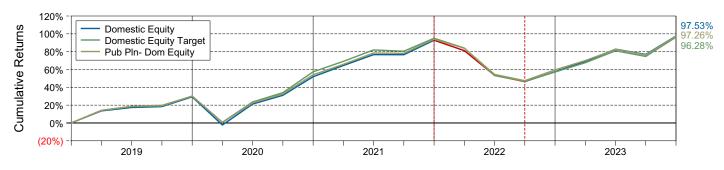




# Domestic Equity Drawdown Analysis for Five Years Ended December 31, 2023

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

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

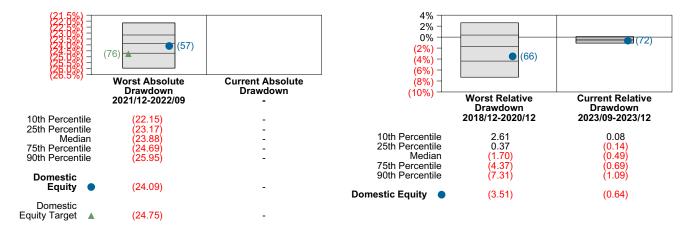


		worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers	
Domestic Equity	(24.09)%	0.75	2021/12-2022/09	(24.75)%	(24.00)%	-	-	-	-	-	
Recovery from Trough	34.96%	1.25+	2022/09-2023/12	33.75%	33.81%	-	-	-	-	-	
Domestic Equity Target	(24.75)%	0.75	2021/12-2022/09			-	-	-			
Pub Pln- Dom Equity	(24.00)%	0.75	2021/12-2022/09			-	-	-			

#### Relative Cumulative Drawdown Analysis vs. Domestic Equity Target Cumulative Relative Returns Peak Catch-up Rel Rtn: 0.65% Domestic Equity 2% Pub Pln- Dom Equity 1% 0.64% 0% (1%)(3%)(4%)(5%)2019 2020 2021 2022 2023

	V	Vorst Rel	ative Drawdown		Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Domestic Equity	(3.51)%	2.00	2018/12-2020/12	(2.13)%	(0.64)%	0.25	2023/09-2023/12	(0.48)%	
Recovery from Trough	0.78%	0.25	2020/12-2021/03	0.16%	-	-	-	-	
Pub Pln- Dom Equity	(2.64)%	1.25	2019/09-2020/12		(1.03)%	1.00	2022/12-2023/12		

Drawdown Rankings vs. Domestic Equity Target Rankings against Public Fund - Domestic Equity Five Years Ended December 31, 2023

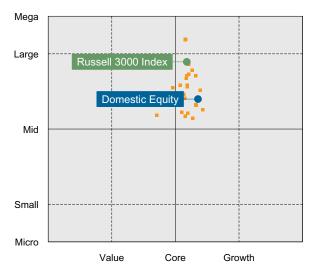




## Current Holdings Based Style Analysis Domestic Equity As of December 31, 2023

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

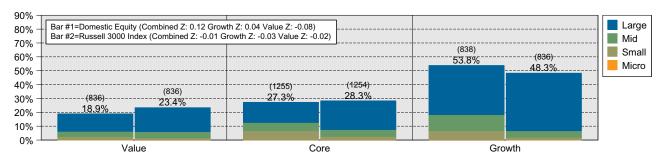
# Style Map vs Pub Pln- Dom Equity Holdings as of December 31, 2023



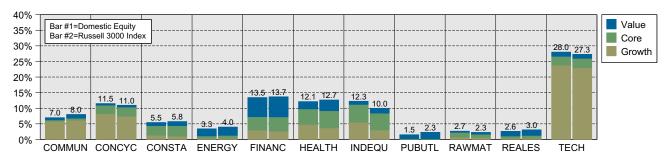
# Style Exposure Matrix Holdings as of December 31, 2023

	23.4% (836)	28.3% (1254)	48.3% (836)	100.0% (2926)
Total	, ,		, ,	, ,
	18.9% (836)	27.3% (1255)	53.8% (838)	100.0% (2929)
	0.2% (292)	0.3% (423)	0.1% (161)	0.6% (876)
Micro				
	0.0% (292)	0.2% (423)	0.3% (161)	0.5% (876)
	1.3% (282)	2.2% (528)	1.8% (362)	5.3% (1172)
Small				
	2.3% (282)	6.5% (529)	6.4% (362)	<b>15.2</b> % (1173)
	4.6% (166)	5.0% (207)	4.7% (213)	14.3% (586)
Mid				
	3.8% (166)	5.9% (207)	11.7% (215)	21.4% (588)
	17.3% (96)	20.9% (96)	41.7% (100)	79.9% (292)
Large	, ,	l	, ,	, ,
	12.7% (96)	14.7% (96)	35.5% (100)	62.9% (292)

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



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



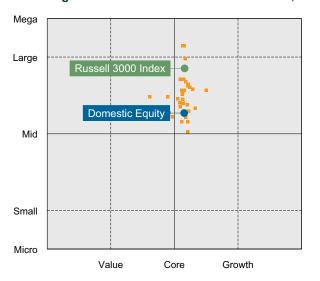


## Historical Holdings Based Style Analysis Domestic Equity For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

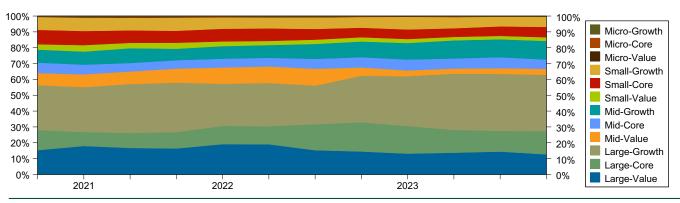
# Average Style Map vs Pub Pln- Dom Equity Holdings for Three Years Ended December 31, 2023

### Average Style Exposure Matrix Holdings for Three Years Ended December 31, 2023

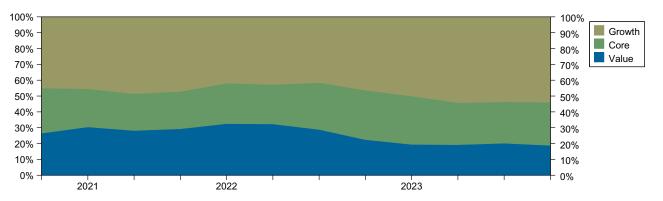


	15.7% (98)	13.2% (94)	30.4% (98)	59.4% (290)
Large				
	19.7% (99)	19.8% (95)	38.7% (103)	<b>78.2%</b> (297)
	7.0% (141)	6.1% (158)	9.4% (146)	22.5% (445)
Mid				
	4.7% (166)	5.2% (214)	5.3% (214)	<b>15.3%</b> (594)
	2.9% (152)	7.2% (266)	7.4% (193)	17.5% (611)
Small				
	1.5% (298)	2.3% (510)	2.0% (381)	<b>5.8%</b> (1189)
	0.2% (122)	0.3% (185)	0.2% (69)	0.7% (376)
Micro				
	0.2% (297)	0.3% (434)	0.1% (160)	<b>0.7%</b> (891)
	25.8% (513)	26.8% (703)	47.5% (506)	100.0% (1722)
Total				
	26.2% (860)	27.7% (1253)	46.1% (858)	<b>100.0%</b> (2971)
	Value	Core	Growth	Total

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



#### **Domestic Equity Historical Style Only Exposures**

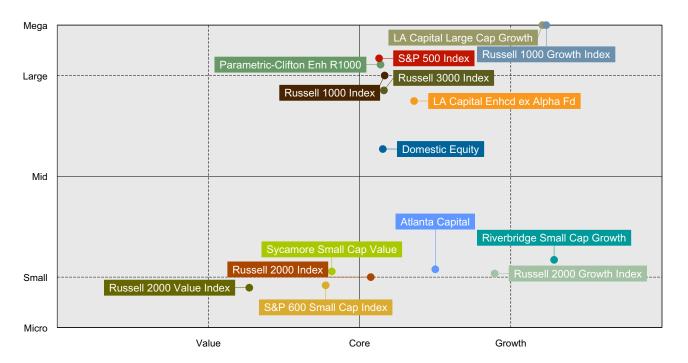




## Historical Holdings Based Style Analysis For Three Years Ended December 31, 2023

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

### Average Style Map Holdings for Three Years Ended December 31, 2023



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	iversification
Domestic Equity	59.53%	50.49	(0.01)	0.03	0.03	1743	92.66
Parametric-Clifton Enh R1000	10.08%	166.51	(0.02)	(0.02)	(0.01)	672	44.37
LA Capital Large Cap Growth	10.78%	361.78	0.79	0.34	(0.45)	144	12.00
LA Capital Enhcd ex Alpha Fd	6.69%	110.89	0.15	0.09	(0.06)	241	34.71
Atlanta Capital	4.40%	3.70	0.26	0.07	(0.19)	62	20.61
Riverbridge Small Cap Growth	4.26%	4.97	0.85	0.21	(0.64)	51	15.54
Sycamore Small Cap Value	4.26%	3.41	(0.26)	(80.0)	0.18	109	39.59
S&P 500 Index	-	180.21	(0.02)	(0.03)	(0.00)	504	40.51
S&P 600 Small Cap Index	-	2.30	(0.29)	(0.10)	0.19	601	155.58
Russell 1000 Index	-	142.92	0.00	(0.02)	(0.02)	1017	53.33
Russell 2000 Index	-	2.65	(0.07)	(0.11)	(0.05)	1992	336.28
Russell 3000 Index	-	124.23	(0.00)	(0.02)	(0.02)	3009	63.38
Russell 1000 Growth Index	-	327.93	0.81	0.31	(0.49)	488	12.34
Russell 2000 Growth Index	-	3.13	0.55	0.07	(0.49)	1145	156.97
Russell 2000 Value Index	-	2.20	(0.67)	(0.28)	0.39	1424	214.23

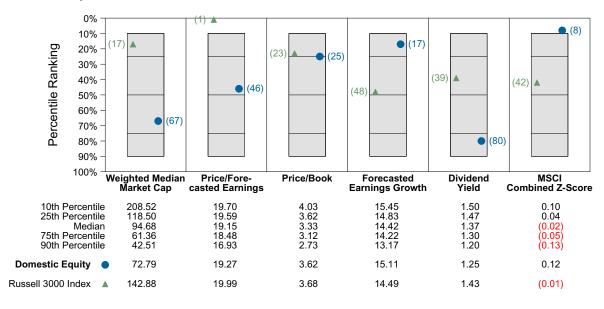


# Domestic Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

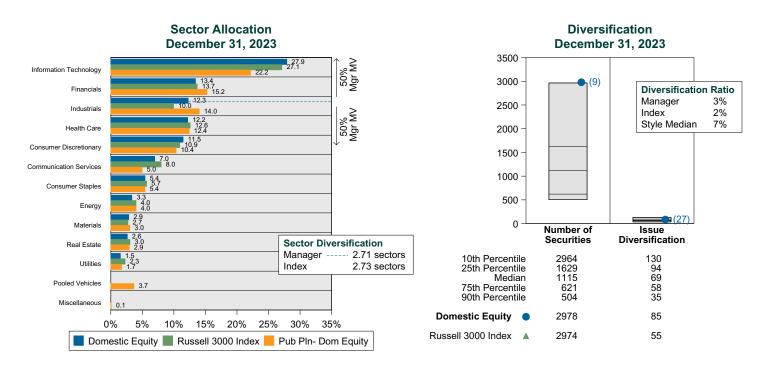
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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

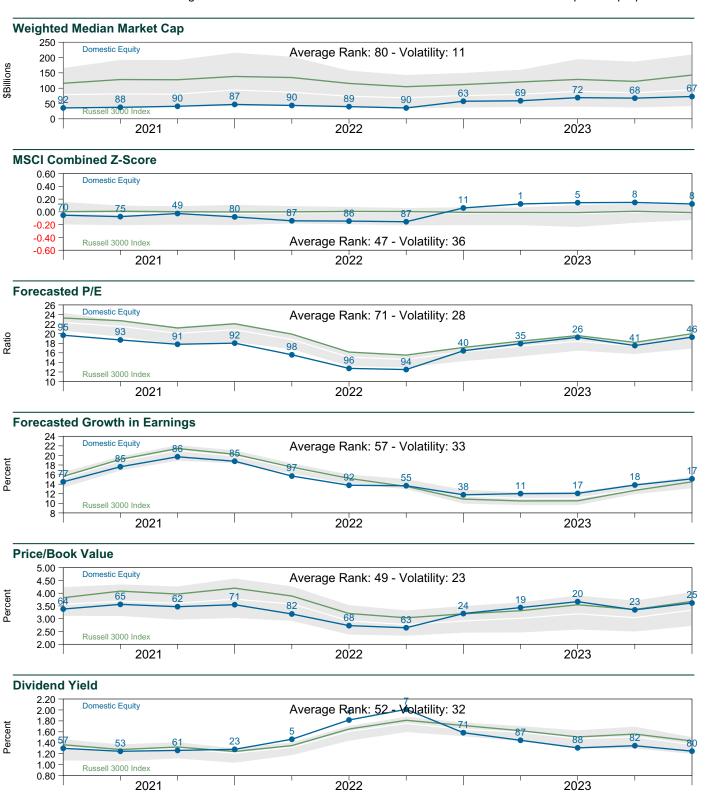




## **Portfolio Characteristics Analysis**

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

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

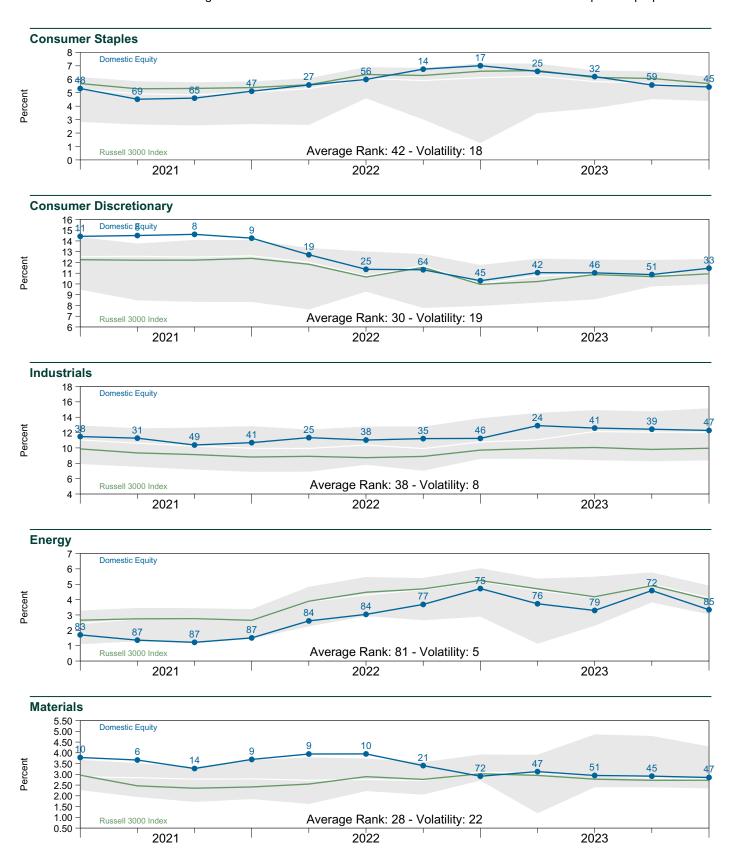


Any particular portfolio characteristic observation(s) may be missing due to a failure to pass a minimum "coverage hurdle" intended to ensure quality. This can occur when the portfolio has a significant weight in stocks for which the data vendor(s) cannot supply the particular relevant financial metric.



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

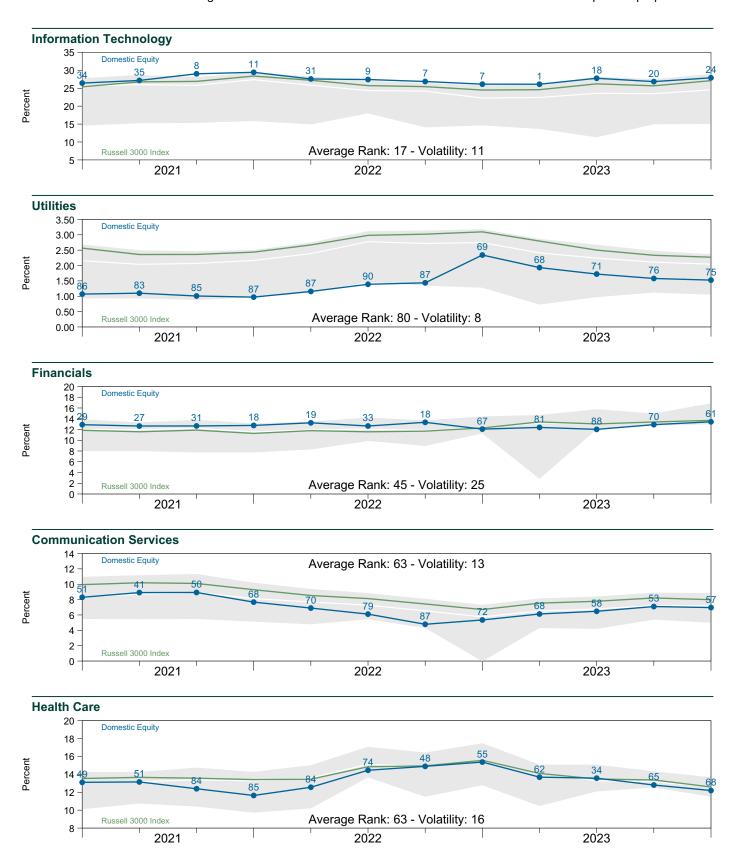
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Dom Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average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





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

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

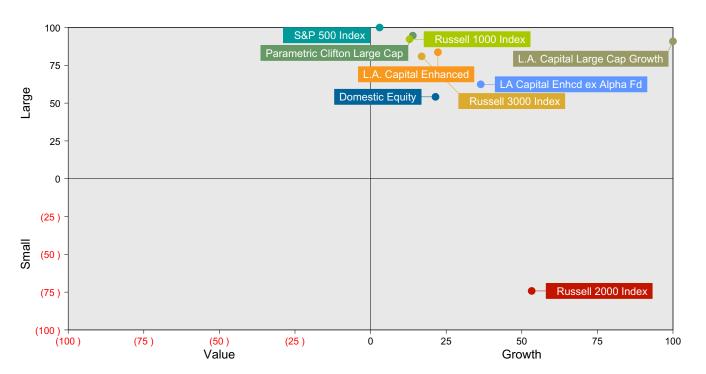




## Historical Returns Based Style Analysis For Three Years Ended December 31, 2023

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 December 31, 2023



	Weight	R-							
	%	Squared	LCG	LCV	MCG	MCV	SCG	SCV	T-BILLS
Domestic Equity	61.32%	1.00	39.00%	31.76%	10.47%	0.00%	10.18%	6.43%	2.16%
Parametric Clifton Large Cap	9.03%	1.00	51.61%	43.02%	5.37%	0.00%	0.00%	0.00%	0.00%
L.A. Capital Large Cap Growth	9.66%	0.98	95.44%	0.00%	0.00%	0.00%	4.56%	0.00%	0.00%
L.A. Capital Enhanced	14.00%	1.00	52.97%	37.57%	0.00%	0.00%	6.86%	0.00%	2.60%
LA Capital Enhcd ex Alpha Fd	6.00%	0.99	53.78%	23.12%	0.00%	0.00%	10.11%	4.35%	8.64%
S&P 500 Index	-	1.00	51.49%	48.51%	0.00%	0.00%	0.00%	0.00%	0.00%
Russell 1000 Index	-	1.00	50.15%	43.49%	4.86%	0.00%	1.37%	0.00%	0.13%
Russell 2000 Index	-	0.97	2.89%	0.00%	18.24%	0.00%	54.62%	22.48%	1.78%
Russell 3000 Index	-	1.00	46.81%	40.52%	5.97%	0.00%	5.51%	0.90%	0.29%



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 December 31, 2023 vs the Russell 3000 Index and the Pub Pln- Dom Equity PEER GROUP

	LA Capital										
(12)	Enhcd ex	1.83		16.05%	2.14	1.16%	0.51	0.86	1.98%	0.95	0.98
	Alpha Fd		(4)	(82)	(38)	(54)	(2)	(12)	(2)	(80)	(63)
	L.A. Capital										
(12)	Large Cap	1.68		21.01%	6.81	4.18%	0.38	0.25	0.85%	1.19	0.92
	Growth		(6)	(1)	(1)	(3)	(52)	(33)	(26)	(1)	(97)
	LA Capital										
(12)	Enhanced ex	1.56		16.19%	1.69	0.91%	0.49	0.93	1.67%	0.96	0.99
	Alpha Fd		(8)	(75)	(54)	(65)	(5)	(9)	(7)	(71)	(48)
		Excess		Standard	Tracking	Downside	Sharpe	Excess			
		Return		Deviation	Error	Risk	Ratio	Return	Alpha	Beta	R-Squared
	Į	Netum		Deviation	LIIOI	INSK	ixallo	Ratio			



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

### Excess Return Correlations for 3 Years Ended December 31, 2023 vs the Russell 3000 Index

(12)	LA Capital Enhcd ex Alpha Fd	(0.09)	0.33	1.00
(12)	L.A. Capital Large Cap Growth	0.43	1.00	0.33
(12)	Parametric Large Cap	1.00	0.43	(0.09)
		Parametric Large Cap	L.A. Capital Large Cap Growth	LA Capital Enhcd ex Alpha Fd



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 December 31, 2023 **VS THE Pub Pln- Dom Equity Peer Group**

	L.A. Capital											
(12)	Enhcd ex	110.89	241	34.71	0.09	(0.06)	0.15	17.37	15.72	1.12%	3.91	1.36%
	Alpha Fd	(26)	(100)	(99)	(6)	(68)	(20)	(70)	(45)	(85)	(17)	(59)
	L.A. Capital											
(12)	Large Cap	361.78	144	12.00	0.34	(0.45)	0.79	23.10	18.70	1.26%	8.87	0.85%
	Growth	(4)	(100)	(100)	(1)	(100)	(1)	(2)	(2)	(46)	(1)	(99)
(40)	Parametric	400.54	070	44.07	(0.00)	(0.04)	(0.00)	10.11	45.00	1.0.10/	0.07	4.500/
(12)	Large Cap	166.51	672	44.37	(0.02)	(0.01)	(0.02)	19.11	15.02	1.34%	3.87	1.53%
	Large Oup	(9)	(86)	(88)	(50)	(50)	(53)	(21)	(53)	(27)	(15)	(20)
		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 December 31, 2023

(12)	L.A. Capital Enhcd ex Alpha Fd	0376	63%	65% <b>115</b> )	95%		
(12)	L.A. Capital Large Cap Growth	91%	48%			95% (115)	65%
(12)	Parametric Large Cap		(1	48%	91%	63%	85%
		Parametr Large Ca		L.A. Cap Large C Growt	Cap	E	. Capital nhcd ex pha Fd



## Parametric-Clifton Enh R1000 Period Ended December 31, 2023

#### **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.

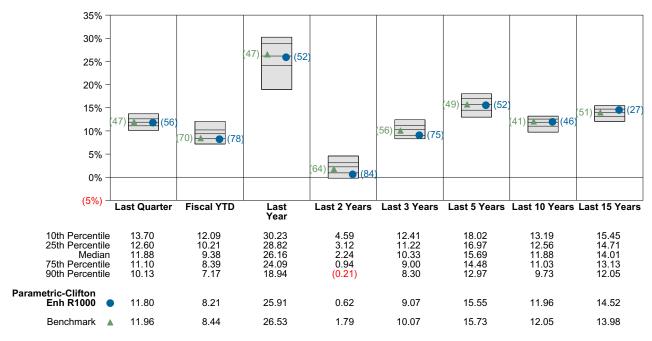
#### **Quarterly Summary and Highlights**

- Parametric-Clifton Enh R1000's portfolio posted a 11.80% return for the quarter placing it in the 56 percentile of the Callan Large Cap Core group for the quarter and in the 52 percentile for the last year.
- Parametric-Clifton Enh R1000's portfolio underperformed the Benchmark by 0.17% for the quarter and underperformed the Benchmark for the year by 0.62%.

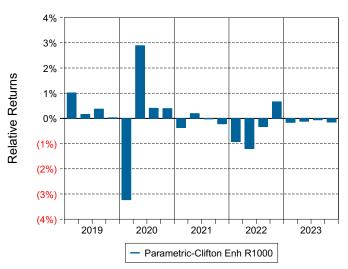
Quarterly A	sset Gro	wth
-------------	----------	-----

Beginning Market Value	\$33,284,759
Net New Investment	\$-485,617
Investment Gains/(Losses)	\$3,905,131
Ending Market Value	\$36,704,273

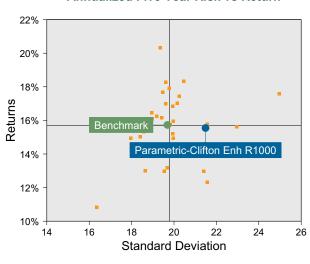
## Performance vs Callan Large Cap Core (Gross)



#### Relative Return vs Benchmark



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



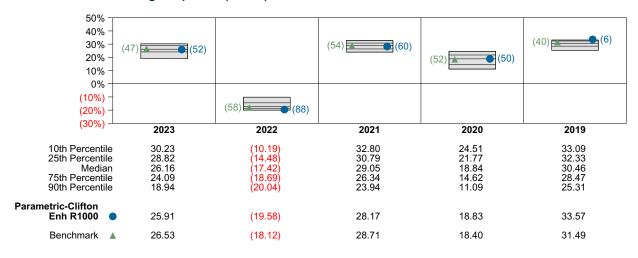


## Parametric-Clifton Enh R1000 **Return Analysis Summary**

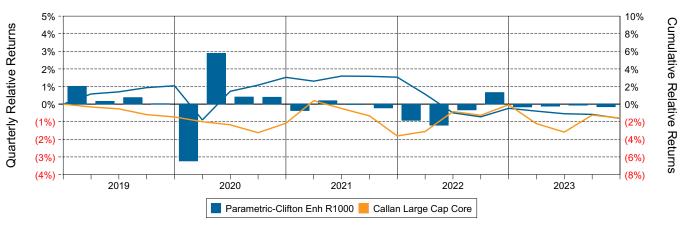
#### **Return Analysis**

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

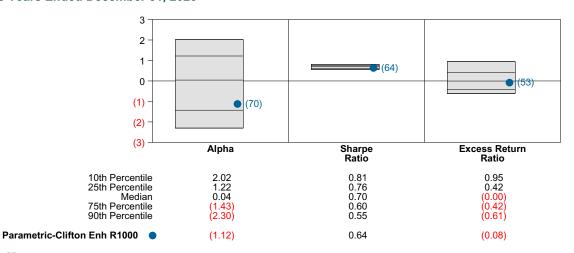
#### Performance vs Callan Large Cap Core (Gross)



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



Risk Adjusted Return Measures vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended December 31, 2023



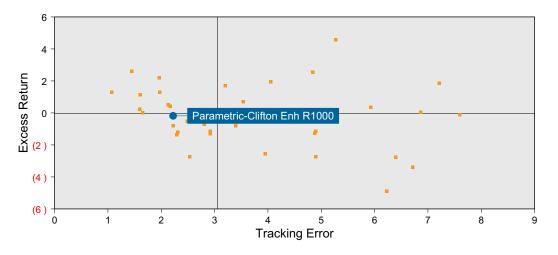


## Parametric-Clifton Enh R1000 **Risk Analysis Summary**

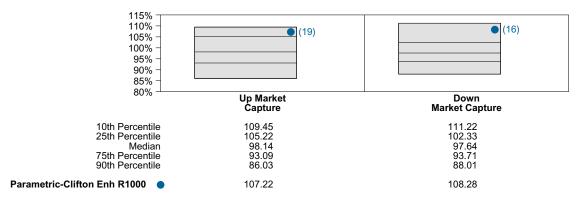
#### Risk Analysis

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.

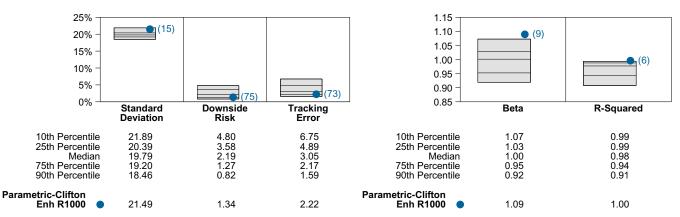
### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended December 31, 2023



**Market Capture vs Benchmark** Rankings Against Callan Large Cap Core (Gross) Five Years Ended December 31, 2023



Risk Statistics Rankings vs Benchmark Rankings Against Callan Large Cap Core (Gross) Five Years Ended December 31, 2023

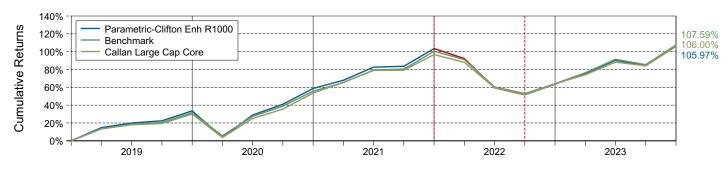




## Parametric-Clifton Enh R1000 Drawdown Analysis for Five Years Ended December 31, 2023

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

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



						Guiront / tacciate Brandonn				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Parametric-Clifton Enh R100	0 (25.51)%	0.75	2021/12-2022/09	(23.65)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.92%	1.25+	2022/09-2023/12	35.69%	35.78%	-	-	-	-	-
Benchmark	(23.65)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

Worst Absolute Drawdown

2020

# Relative Cumulative Drawdown Analysis vs. Benchmark Cumulative Relative Returns Peak Catch-up Rel Rtn: 2.76% Parametric-Clifton Enh R1000 Callan Large Cap Core (0.78%)

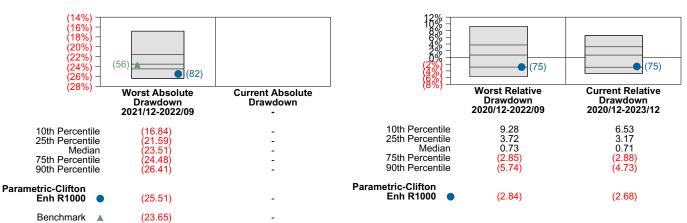
2021

2022

	Worst Relative Drawdown				Cu	Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Parametric-Clifton Enh R1000	(2.84)%	1.75	2020/12-2022/09	0.57%	(2.68)%	3.00	2020/12-2023/12	0.64%		
Recovery from Trough	0.17%	1.25+	2022/09-2023/12	0.06%	0.17%	1.25+	2022/09-2023/12	0.06%		
Callan Large Cap Core	(2.34)%	1.75	2018/12-2020/09		(1.00)%	2.75	2021/03-2023/12			

Drawdown Rankings vs. Benchmark Rankings against Callan Large Cap Core Five Years Ended December 31, 2023

2019





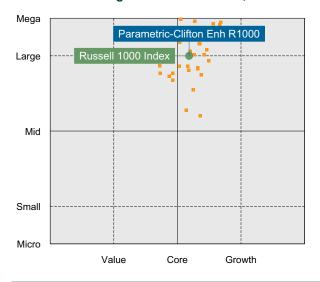
Current Absolute Drawdown

2023

## **Current Holdings Based Style Analysis** Parametric-Clifton Enh R1000 As of December 31, 2023

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

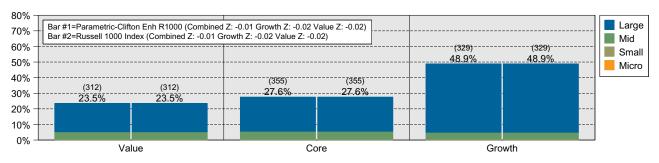
### Style Map vs Callan Large Cap Core Holdings as of December 31, 2023



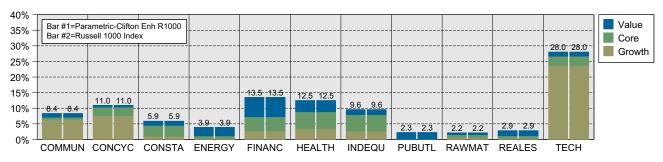
### **Style Exposure Matrix** Holdings as of December 31, 2023

	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)
Micro	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Siliali	0.4% (54)	0.5% (72)	0.4% (49)	1.3% (175)
Small	0.4% (54)	0.5% (72)	0.4% (49)	1.3% (175)
Mid	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
NAC-1	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
Large	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)
Lorgo	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)

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



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

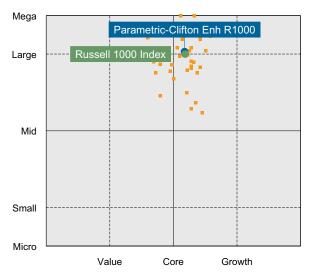


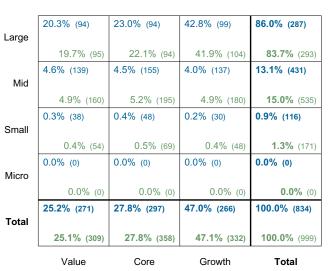


## **Historical Holdings Based Style Analysis** Parametric-Clifton Enh R1000 For One and 1/2 Years Ended December 31, 2023

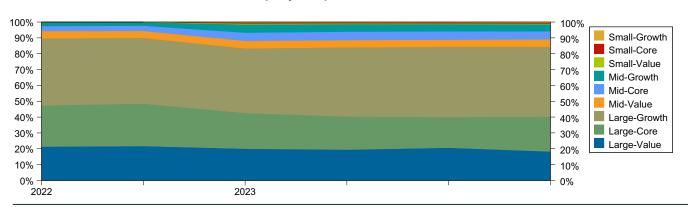
This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented quarterly by capitalization and style. 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 **Average Style Exposure Matrix** Holdings for One and 1/2 Years Ended December 31, 2023 Holdings for One and 1/2 Years Ended December 31, 2023

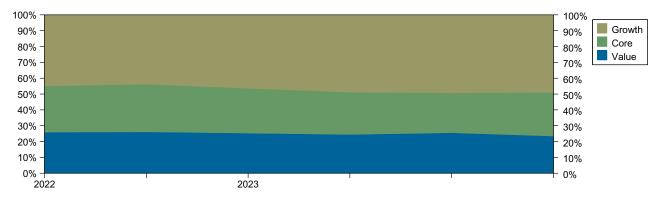




#### Parametric-Clifton Enh R1000 Historical Cap/Style Exposures



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



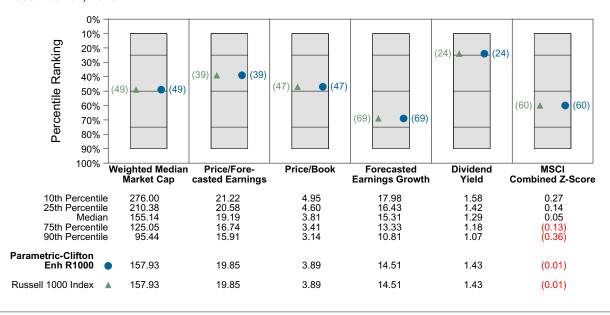


# Parametric-Clifton Enh R1000 **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

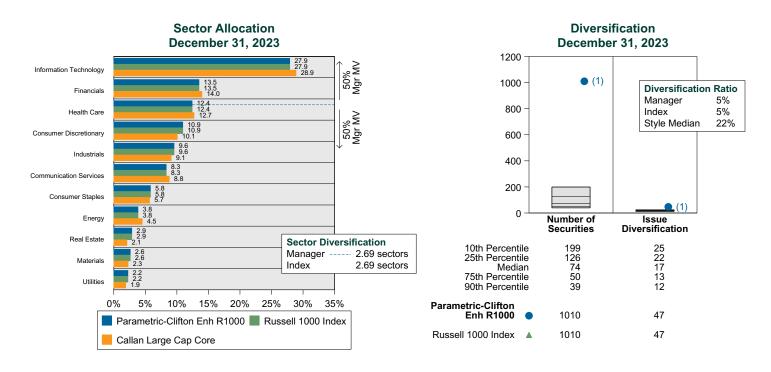
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of December 31, 2023



#### **Sector Weights**

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





# Parametric-Clifton Enh R1000 Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 10 Largest Holdings

Ending Market Value	Percent of	Qtrly	Market	Forecasted		Forecasted
		Qtrly	Market			
Value			ivial Ket	Earnings	Dividend	Growth in
	Portfolio	Return	Capital	Ratio	Yield	Earnings
\$2,373,249	6.5%	12.60%	2994.37	28.67	0.50%	6.14%
\$2,339,350	6.4%	19.34%	2794.83	31.10	0.80%	16.20%
\$1,144,262	3.1%	19.52%	1570.15	42.23	0.00%	7.27%
\$983,609	2.7%	13.86%	1223.19	24.99	0.03%	102.46%
\$693,889	1.9%	6.75%	826.69	20.89	0.00%	19.30%
\$654,440	1.8%	17.90%	785.65	20.19	0.00%	32.00%
\$591,290	1.6%	6.89%	806.82	21.27	0.00%	19.30%
\$573,083	1.6%	(0.70)%	789.90	65.37	0.00%	1.78%
\$545,930	1.5%	1.82%	466.66	19.71	0.00%	12.33%
\$412,355	1.1%	8.73%	FF2 27	47.00	0.770/	27.70%
	\$693,889 \$654,440 \$591,290 \$573,083 \$545,930	\$693,889 1.9% \$654,440 1.8% \$591,290 1.6% \$573,083 1.6% \$545,930 1.5%	\$693,889	\$693,889	\$693,889	\$693,889

#### **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				
Coinbase Global Inc -Class A	Financials	\$24,612	0.1%	131.66%	33.40	(346.45)	0.00%	-				
Affirm Holdings Inc	Financials	\$9,238	0.0%	131.05%	11.90	(20.43)	0.00%	-				
Gap	Consumer Discretionary	\$3,393	0.0%	99.59%	7.75	17.50	2.87%	(23.64)%				
Spirit Aerosystems Hldgs Inc Com Cl	Industrials	\$2,773	0.0%	96.91%	3.64	155.02	0.00%	(53.55)%				
Karuna Therapeutics	Health Care	\$9,397	0.0%	87.19%	11.99	(28.34)	0.00%	-				
Rocket Companies	Financials	\$1,425	0.0%	77.02%	1.93	45.53	0.00%	-				
Macys Inc	Consumer Discretionary	\$4,545	0.0%	74.76%	5.51	7.24	3.29%	(11.34)%				
Square Inc CI A	Financials	\$35,036	0.1%	74.76%	42.82	25.29	0.00%	68.96%				
Sentinelone A	Information Technology	\$5,353	0.0%	62.74%	6.83	946.21	0.00%	-				
Frontier Communications Parent	Communication Services	\$5,180	0.0%	61.93%	6.23	(49.40)	0.00%	-				

# **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
Chargepoint Holdings Inc Com Cl A	Industrials	\$600	0.0%	(52.91)%	0.98	(7.20)	0.00%	(38.40)%
Globant S A	Information Technology	\$8,192	0.0%	(47.93)%	10.10	35.76	0.00%	28.62%
Plug Power Inc	Industrials	\$1,975	0.0%	(40.84)%	2.72	(5.07)	0.00%	-
Maravai Lifesciences Hldgs Inc Cl A	Health Care	\$601	0.0%	(34.51)%	0.87	123.58	0.00%	(56.85)%
R1 Rcm Inc	Health Care	\$1,349	0.0%	(29.86)%	4.43	59.05	0.00%	(78.50)%
Agilon Health Inc Com	Health Care	\$3,045	0.0%	(29.34)%	5.10	545.65	0.00%	-
Bill.Com Holdings, Inc.	Information Technology	\$6,988	0.0%	(24.85)%	8.71	40.43	0.00%	13.36%
Lucid Group Inc	Consumer Discretionary	\$2,619	0.0%	(24.68)%	9.64	(3.97)	0.00%	14.60%
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$1,013	0.0%	(23.45)%	1.21	(3.83)	0.00%	6.01%
Petco Health & Wellness Co Inc Cl A	Consumer Discretionary	\$216	0.0%	(22.72)%	0.73	31.60	0.00%	(31.63)%

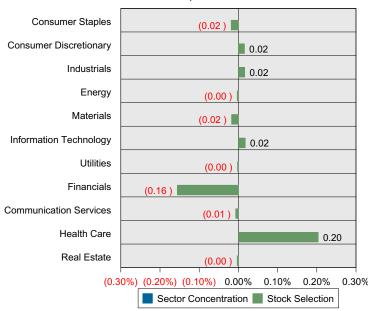


# Parametric-Clifton Enh R1000 vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### 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.

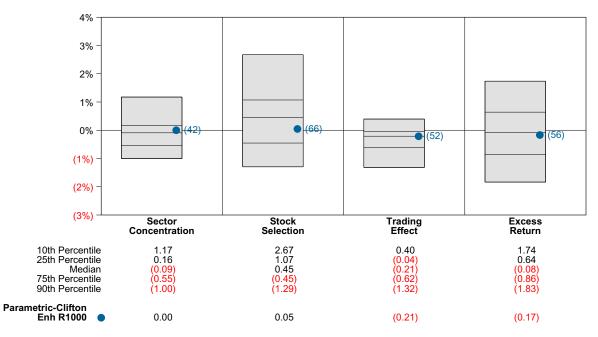
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	(0.02%)
Consumer Discretionary	0.00%	0.02%
Industrials	0.00%	0.02%
Energy	0.00%	(0.00%)
Materials	0.00%	(0.02%)
Information Technology	0.00%	0.02%
Utilities	0.00%	(0.00%)
Financials	0.00%	(0.16%)
Communication Services	s 0.00%	(0.01%)
Health Care	0.00%	0.20%
Real Estate	0.00%	(0.00%)
Total	0.00%	0.05%

Manager Return = Index Return + Sector Concentration + Stock Selection + Trading 11.80% 11.96% 0.00% 0.05%

# **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended December 31, 2023



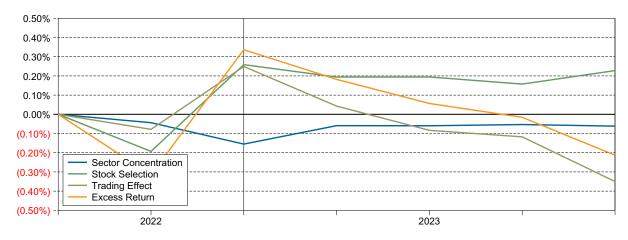


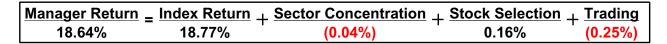
# Parametric-Clifton Enh R1000 vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

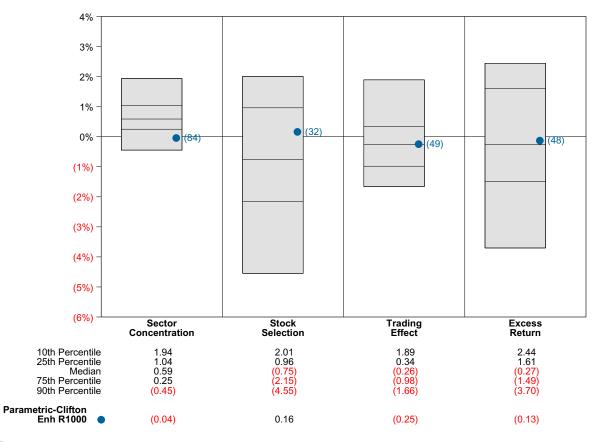
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs 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 One-Half Years Ended December 31, 2023





# L.A. Capital Period Ended December 31, 2023

#### **Investment Philosophy**

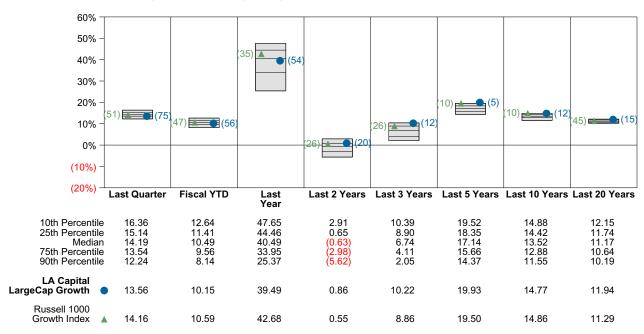
The LA Capital Structured portfolio is a large growth portfolio benchmarked to the Russell 1000 Growth Index. It is an active assignment meaning that it targets a 2% alpha and constrains its risk budget (tracking error) to 4% relative to the benchmark. LA Capital believes that investment results are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

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

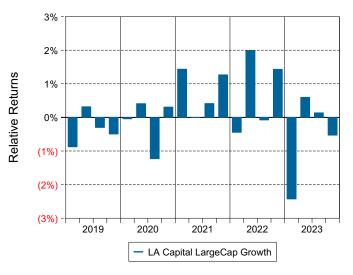
- LA Capital LargeCap Growth's portfolio posted a 13.56% return for the quarter placing it in the 75 percentile of the Callan Large Cap Growth group for the quarter and in the 54 percentile for the last year.
- LA Capital LargeCap Growth's portfolio underperformed the Russell 1000 Growth Index by 0.61% for the quarter and underperformed the Russell 1000 Growth Index for the year by 3.18%.

Beginning Market Value	\$5,359,373
Net New Investment	\$-322,841
Investment Gains/(Losses)	\$716,105
Ending Market Value	\$5,752,637

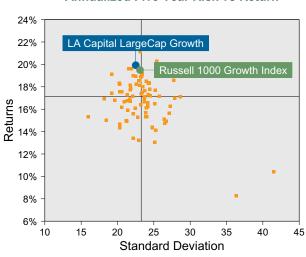
#### Performance vs Callan Large Cap Growth (Gross)



# Relative Return vs Russell 1000 Growth Index



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



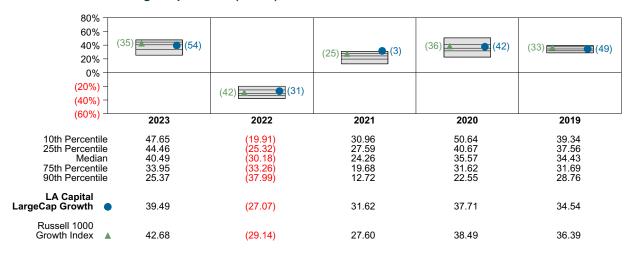


# LA Capital LargeCap Growth **Return Analysis Summary**

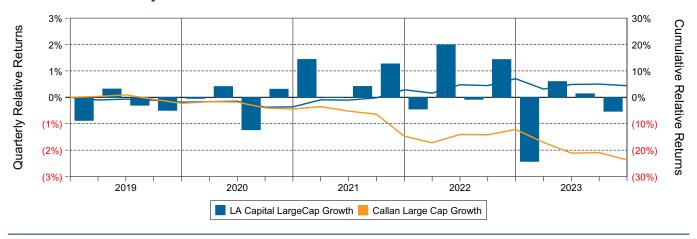
#### **Return Analysis**

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.

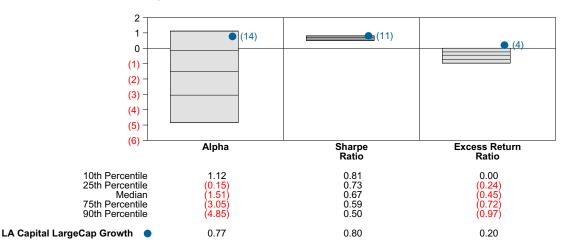
#### Performance vs Callan Large Cap Growth (Gross)



#### **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 December 31, 2023



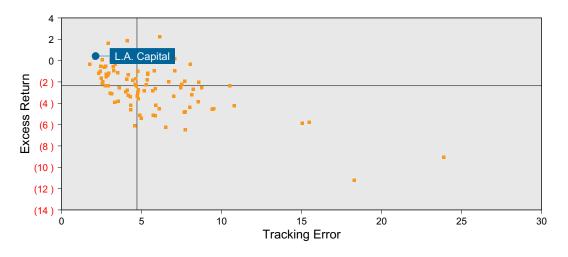


# L.A. Capital **Risk Analysis Summary**

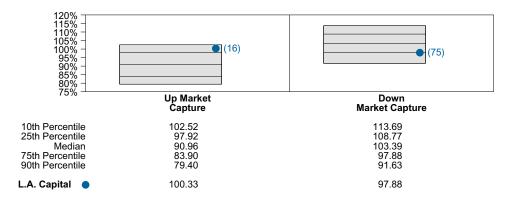
#### Risk Analysis

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

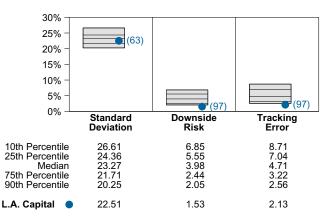
#### Risk Analysis vs Callan Large Cap Growth (Gross) Five Years Ended December 31, 2023

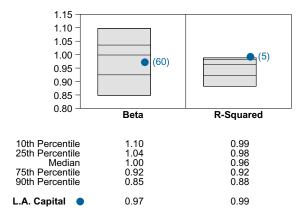


Market Capture vs Russell 1000 Growth Index Rankings Against Callan Large Cap Growth (Gross) Five Years Ended December 31, 2023



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



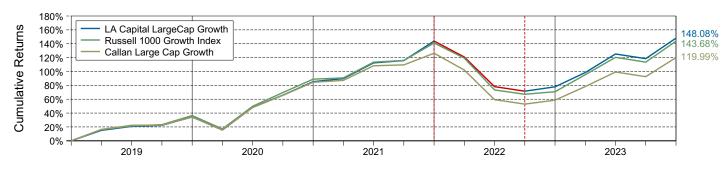




# LA Capital LargeCap Growth Drawdown Analysis for Five Years Ended December 31, 2023

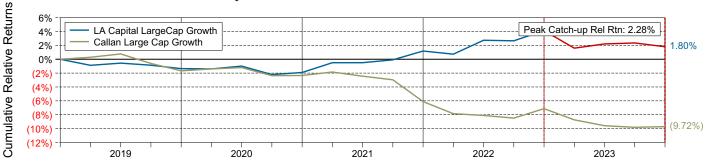
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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

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



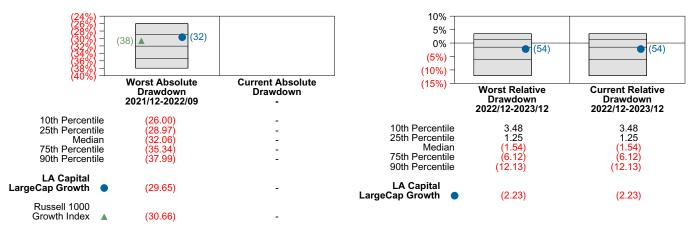
		Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
LA Capital LargeCap Growth	(29.65)%	0.75	2021/12-2022/09	(30.66)%	(32.42)%	-	-	-	-	-	
Recovery from Trough	44.60%	1.25+	2022/09-2023/12	45.81%	43.85%	-	-	-	-	-	
Russell 1000 Growth Index	(30.66)%	0.75	2021/12-2022/09			-	-	-			
Callan Large Cap Growth	(32.42)%	0.75	2021/12-2022/09			(2.79)%	2.00	2021/12-2023/12			

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



	V	Vorst Rei	ative Drawdown		Cu	Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
LA Capital LargeCap Growth	(2.23)%	1.00	2022/12-2023/12	(2.79)%	(2.23)%	1.00	2022/12-2023/12	(2.79)%			
Recovery from Trough	-	-	-	-	0.20%	0.75+	2023/03-2023/12	(1.07)%			
Callan Large Cap Growth	(10.50)%	4.25	2019/06-2023/09		(10.41)%	4.50	2019/06-2023/12				

Drawdown Rankings vs. Russell 1000 Growth Index Rankings against Callan Large Cap Growth Five Years Ended December 31, 2023

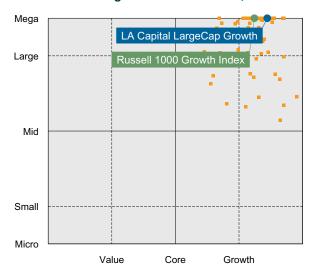




# **Current Holdings Based Style Analysis** LA Capital LargeCap Growth As of December 31, 2023

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

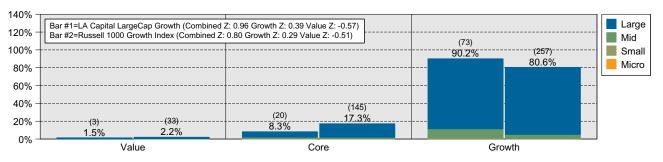
#### Style Map vs Callan Large Cap Growth Holdings as of December 31, 2023



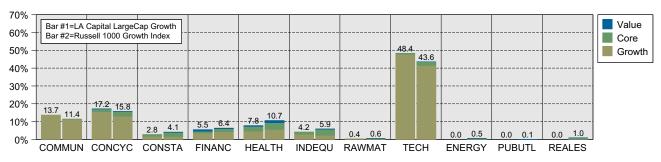
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	2.2% (33)	17.3% (145)	80.6% (257)	100.0% (435)
Total	1.5% (3)	8.3% (20)	90.2% (73)	100.0% (96)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	0.00/		0.00/	
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (6)	0.1% (20)	0.2% (27)	0.4% (53)
Small	0.076 (0)	0.070 (2)	1.170 (2)	1.7 70 (4)
	0.0% (0)	0.6% (2)	1.1% (2)	1.7% (4)
Mid	0.2% (15)	1.7% (67)	4.8% (136)	6.7% (218)
	0.0% (0)	1.3% (6)	10.3% (21)	11.6% (27)
Large	2.0% (12)	15.4% (58)	75.6% (94)	93.0% (164)
Large	1.5% (3)	6.4% (12)	78.9% (50)	86.7% (65)

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



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





# **Historical Holdings Based Style Analysis** LA Capital LargeCap Growth For Three Years Ended December 31, 2023

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.

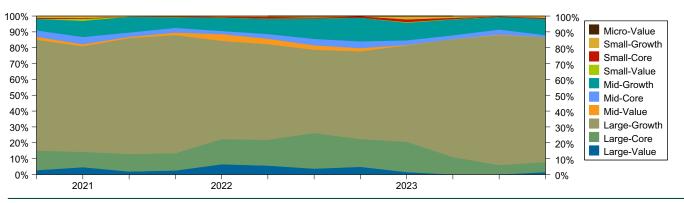
# Average Style Map vs Callan Large Cap Growth Holdings for Three Years Ended December 31, 2023

#### **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

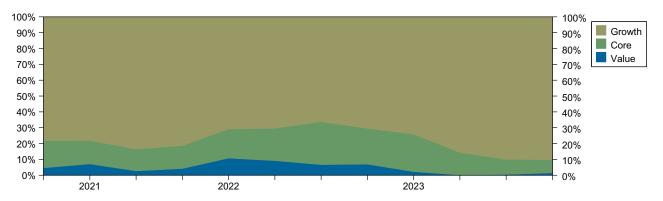




#### LA Capital LargeCap Growth Historical Cap/Style Exposures



LA Capital LargeCap Growth Historical Style Only Exposures



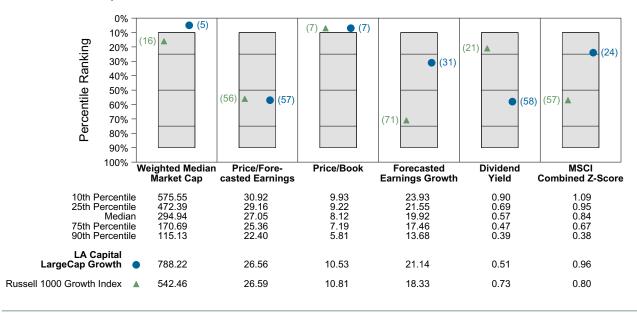


# LA Capital LargeCap Growth **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

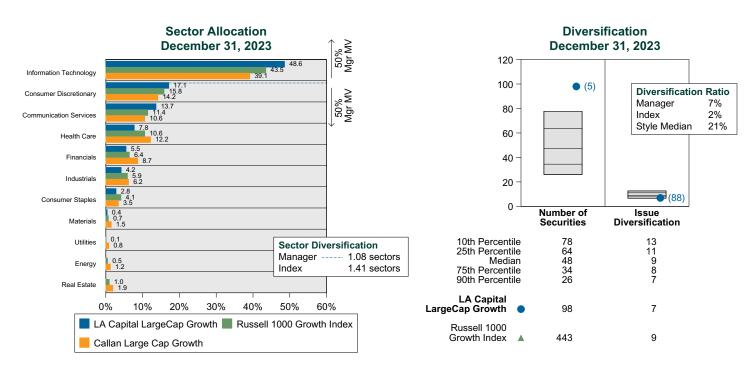
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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





# LA Capital LargeCap Growth Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 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	\$785,548	13.7%	19.34%	2794.83	31.10	0.80%	16.20%
Information Technology	\$746,824	13.0%	12.60%	2994.37	28.67	0.50%	6.14%
Consumer Discretionary	\$346,423	6.0%	19.52%	1570.15	42.23	0.00%	7.27%
Information Technology	\$343,683	6.0%	13.86%	1223.19	24.99	0.03%	102.46%
Communication Services	\$231,885	4.0%	6.75%	826.69	20.89	0.00%	19.30%
Communication Services	\$228,658	4.0%	17.90%	785.65	20.19	0.00%	32.00%
Communication Services	\$201,107	3.5%	6.89%	806.82	21.27	0.00%	19.30%
Consumer Discretionary	\$122,998	2.1%	(0.70)%	789.90	65.37	0.00%	1.78%
Information Technology	\$112,624	2.0%	29.77%	254.72	27.85	0.00%	29.60%
Health Care	\$112,138	2.0%	4.78%	486.95	18.86	1.43%	12.90%
	Information Technology Information Technology Consumer Discretionary Information Technology Communication Services Communication Services Communication Services Consumer Discretionary Information Technology	Market Value  Information Technology Information Services Communication Services Communication Services Communication Services Communication Services Information Technology Information Technology Information Technology  Informat	Sector         Market Value         of Value           Information Technology         \$785,548         13.7%           Information Technology         \$746,824         13.0%           Consumer Discretionary         \$346,423         6.0%           Information Technology         \$343,683         6.0%           Communication Services         \$231,885         4.0%           Communication Services         \$228,658         4.0%           Communication Services         \$201,107         3.5%           Consumer Discretionary         \$122,998         2.1%           Information Technology         \$112,624         2.0%	Sector         Market Value         of Value         Qtrly Portfolio           Information Technology Information Technology Consumer Discretionary Information Technology Information Technology Sada,683 Gow Information Technology Sada,683 Gow Information Services Sada,685 Gow Information Services Sada,685 Gow Information Services Sada,685 Gow Information Services Sada,685 Gow Information Services Sada,686 Gow Information Services Sada,687 Gow Information Services Sada,687 Gow Information Services Sada,687 Gow Information Services Sada,687 Gow Information Technology Sada,684 Gow Information Technology Sada,685 Gow Information Sada,685 Gow Information Sada,685 Gow Information Sada,685 Gow Information Sada,686 G	Market         of Value         Qtrly Portfolio         Market Return         Capital           Information Technology Information Services Information In	Sector         Forecasted Value         Percent Portfolio         Qtrly Return         Market Capital Ratio           Information Technology Information Services Information Informatio	Sector         Forecasted Value         Percent Portfolio         Qtrly Return         Market Capital         Forecasted Earnings Poil Return         Dividend Part Capital           Information Technology Information Services

#### **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			
Crowdstrike Hldgs Inc CI A	Information Technology	\$3,319	0.1%	52.54%	58.12	69.80	0.00%	41.74%			
Topbuild	Consumer Discretionary	\$14,596	0.3%	48.75%	11.89	17.99	0.00%	9.98%			
Burlington Stores Inc	Consumer Discretionary	\$1,556	0.0%	43.74%	12.55	27.97	0.00%	27.07%			
Godaddy Inc Cl A	Information Technology	\$58,600	1.0%	42.54%	14.95	23.93	0.00%	54.35%			
Docusign Inc	Information Technology	\$24,256	0.4%	41.56%	12.12	20.71	0.00%	94.21%			
Slm Corp	Financials	\$13,977	0.2%	41.36%	4.33	7.06	2.30%	10.49%			
Pulte Group Inc	Consumer Discretionary	\$5,574	0.1%	39.67%	22.25	9.04	0.77%	34.84%			
Toll Brothers	Consumer Discretionary	\$12,746	0.2%	39.39%	10.70	8.37	0.85%	0.62%			
Pinterest Inc CI A	Communication Services	\$36,188	0.6%	37.03%	21.72	28.12	0.00%	38.90%			
Nutanix Inc CI A	Information Technology	\$15,165	0.3%	36.72%	11.57	44.86	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			
Veeva Sys Inc Cl A Com	Health Care	\$18,867	0.3%	(5.37)%	31.00	34.97	0.00%	13.95%			
Celsius Holdings Inc	Consumer Staples	\$4,852	0.1%	(4.69)%	12.63	55.02	0.00%	177.03%			
Teradata Corp Del	Information Technology	\$8,223	0.1%	(3.35)%	4.26	18.30	0.00%	21.70%			
Tesla Mtrs Inc	Consumer Discretionary	\$122,998	2.1%	(0.70)%	789.90	65.37	0.00%	1.78%			
Rli Corp	Financials	\$27,156	0.5%	(0.37)%	6.07	24.32	0.81%	19.49%			
Applovin Corp	Information Technology	\$8,129	0.1%	(0.28)%	10.55	24.86	0.00%	-			
Fortinet Inc	Information Technology	\$5,502	0.1%	(0.26)%	44.95	34.76	0.00%	15.12%			
Pepsico Inc	Consumer Staples	\$18,003	0.3%	0.99%	233.51	20.83	2.98%	8.64%			
Emcor Group Inc	Industrials	\$74,108	1.3%	2.49%	10.13	16.40	0.34%	16.86%			
Splunk Inc	Information Technology	\$11,274	0.2%	4.17%	25.67	29.98	0.00%	25.10%			

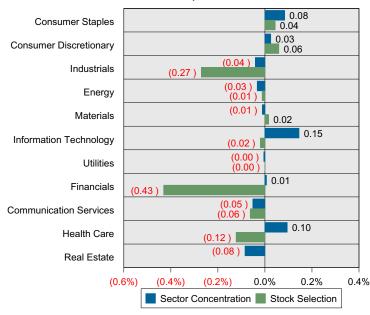


# LA Capital LargeCap Growth vs Russell 1000 Growth Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

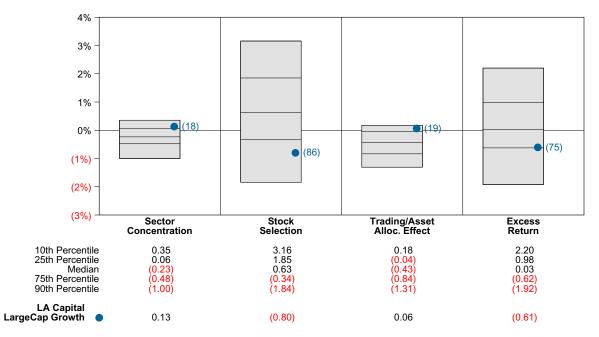
#### Attribution Effects by Sector vs Russell 1000 Growth Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.08%	0.04%
Consumer Discretionary	0.03%	0.06%
Industrials	(0.04%)	(0.27%)
Energy	(0.03%)	(0.01%)
Materials	(0.01%)	0.02%
Information Technology	0.15%	(0.02%)
Utilities	(0.00%)	(0.00%)
Financials	0.01%	(0.43%)
Communication Services	s (0.05%)	(0.06%)
Health Care	0.10%	(0.12%)
Real Estate	(0.08%)	0.00%
Total	0.13%	(0.80%)

Manager Return _	Index Return	Sector Concen	Stock Select _	<sub></sub> Trading <sub>→</sub>	Asset Alloc
13.56%	14.16%	0.13%	(0.80%)	່ 0.11%	(0.05%)

# **Equity Attribution Ranking vs Callan Large Cap Growth** Quarter ended December 31, 2023



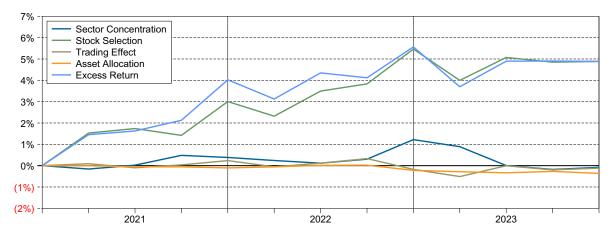


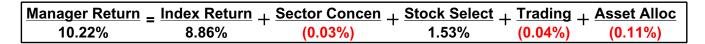
# LA Capital LargeCap Growth vs Russell 1000 Growth Index **Cumulative Equity Buy and Hold Attribution**

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

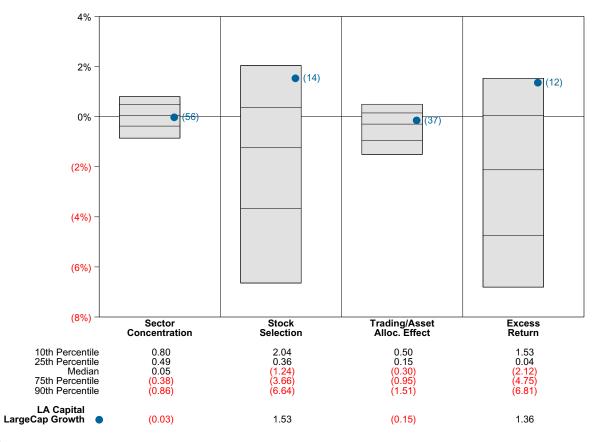
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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





#### **Equity Attribution Ranking vs Callan Large Cap Growth** Three Years Ended December 31, 2023





# LA Capital Enhanced Period Ended December 31, 2023

#### **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.

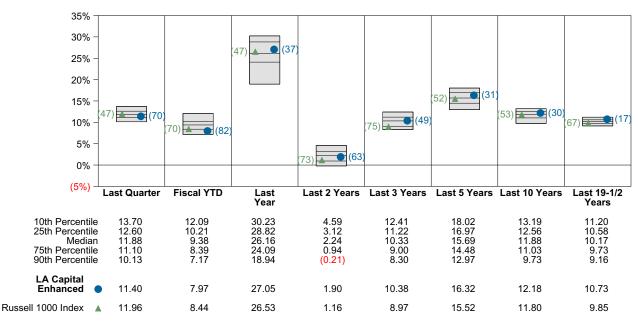
#### **Quarterly Summary and Highlights**

- LA Capital Enhanced's portfolio posted a 11.40% return for the quarter placing it in the 70 percentile of the Callan Large Cap Core group for the quarter and in the 37 percentile for the last year.
- LA Capital Enhanced's portfolio underperformed the Russell 1000 Index by 0.56% for the quarter and outperformed the Russell 1000 Index for the year by 0.52%.

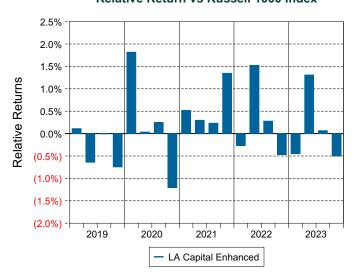
## **Quarterly Asset Growth**

Beginning Market Value	\$88,913,606
Net New Investment	\$-145,586
Investment Gains/(Losses)	\$9,973,720
Ending Market Value	\$98.741.740

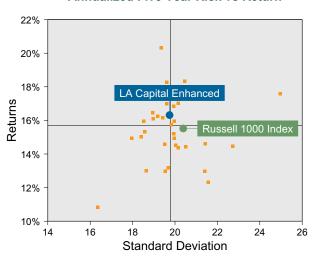
# Performance vs Callan Large Cap Core (Gross)



# Relative Return vs Russell 1000 Index



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



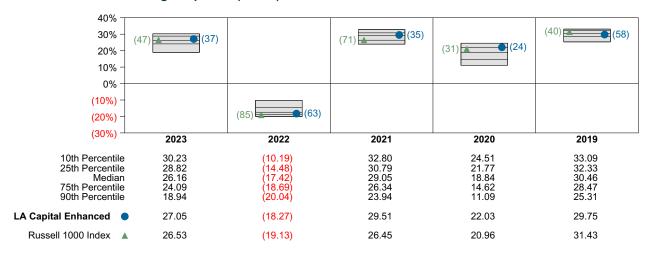


# LA Capital Enhanced **Return Analysis Summary**

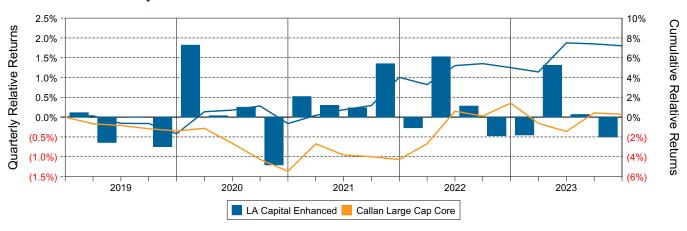
#### **Return Analysis**

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.

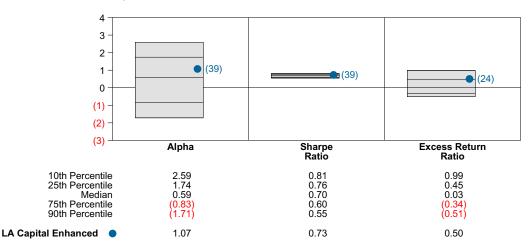
#### Performance vs Callan Large Cap Core (Gross)



#### **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 December 31, 2023



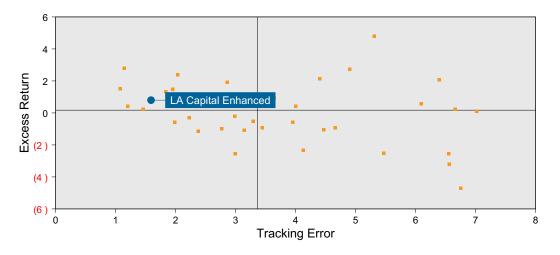


# **LA Capital Enhanced Risk Analysis Summary**

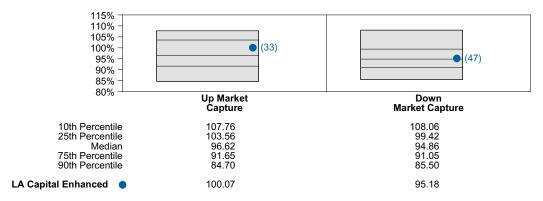
#### Risk Analysis

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.

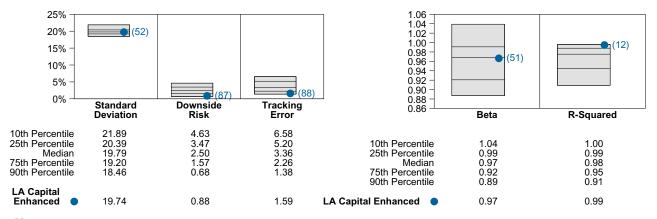
#### Risk Analysis vs Callan Large Cap Core (Gross) Five Years Ended December 31, 2023



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



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

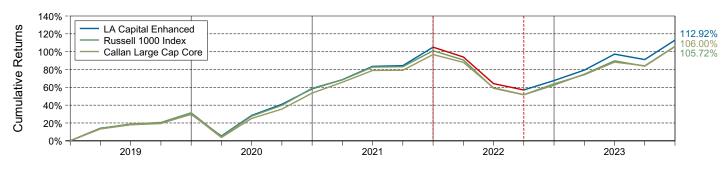




# LA Capital Enhanced Drawdown Analysis for Five Years Ended December 31, 2023

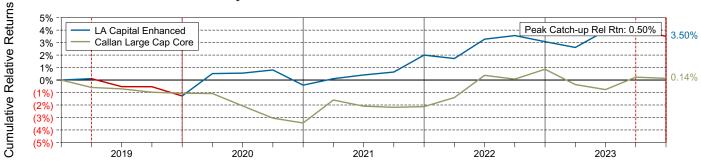
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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

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



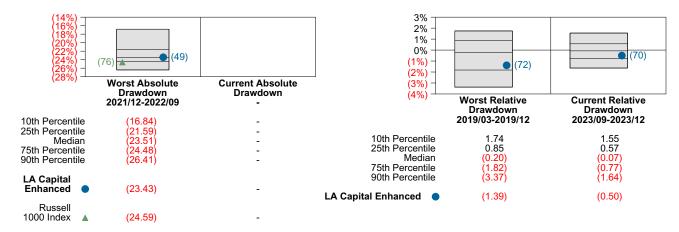
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	_Index_	Peers
LA Capital Enhanced	(23.43)%	0.75	2021/12-2022/09	(24.59)%	(22.89)%	-	-	-	-	-
Recovery from Trough	35.61%	1.25+	2022/09-2023/12	35.69%	35.78%	-	-	-	-	-
Russell 1000 Index	(24.59)%	0.75	2021/12-2022/09			-	-	-		
Callan Large Cap Core	(22.89)%	0.75	2021/12-2022/09			-	-	-		

# Relative Cumulative Drawdown Analysis vs. Russell 1000 Index



	V	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
LA Capital Enhanced	(1.39)%	0.75	2019/03-2019/12	(0.47)%	(0.50)%	0.25	2023/09-2023/12	(0.09)%	
Recovery from Trough	1.82%	0.25	2019/12-2020/03	(0.02)%	-	-	-	-	
Callan Large Cap Core	(3.44)%	2.00	2018/12-2020/12		(0.72)%	1.00	2022/12-2023/12		

Drawdown Rankings vs. Russell 1000 Index Rankings against Callan Large Cap Core Five Years Ended December 31, 2023

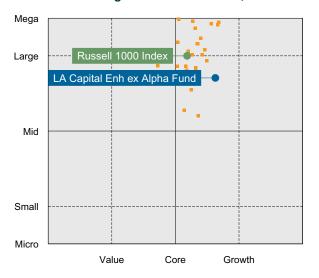




# **Current Holdings Based Style Analysis** LA Capital Enh ex Alpha Fund As of December 31, 2023

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

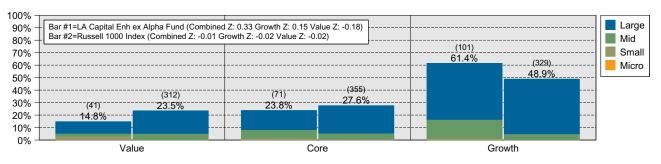
#### Style Map vs Callan Large Cap Core Holdings as of December 31, 2023



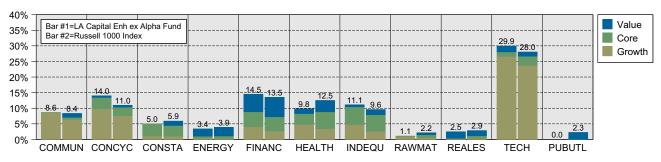
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
Total	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)
Tatal	14.8% (41)	23.8% (71)	61.4% (101)	100.0% (213)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	0.070 (0)	0.070 (0)	0.070 (0)	0.070 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Small	0.4% (54)	0.5% (72)	0.4% (49)	1.3% (175)
C all	3.0% (11)	1.3% (11)	1.6% (6)	5.9% (28)
	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
Mid	2.070 (10)	7.070 (22)	11.070 (41)	241270 (10)
	2.3% (10)	7.0% (22)	14.9% (41)	24.2% (73)
Large	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)
	9.5% (20)	15.5% (38)	45.0% (54)	69.9% (112)

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



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



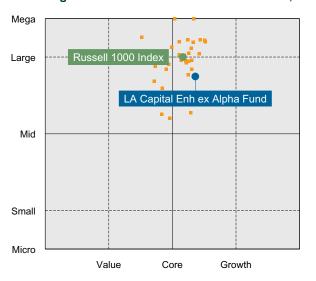


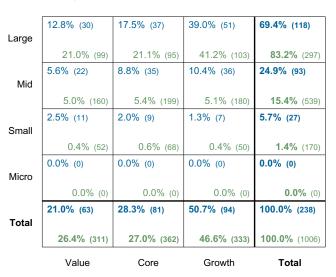
# **Historical Holdings Based Style Analysis** LA Capital Enh ex Alpha Fund For Three Years Ended December 31, 2023

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.

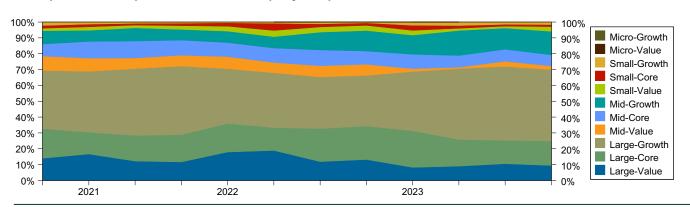
# Average Style Map vs Callan Large Cap Core Holdings for Three Years Ended December 31, 2023

#### **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

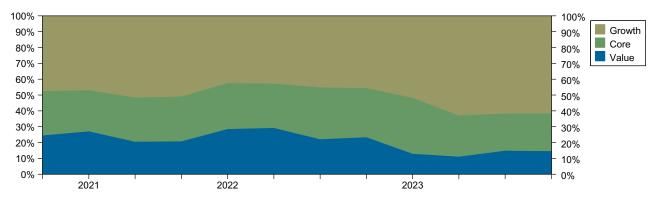




#### LA Capital Enh ex Alpha Fund Historical Cap/Style Exposures



LA Capital Enh ex Alpha Fund Historical Style Only Exposures



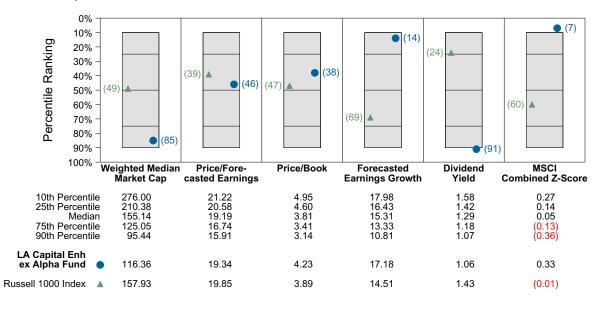


# LA Capital Enh ex Alpha Fund **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

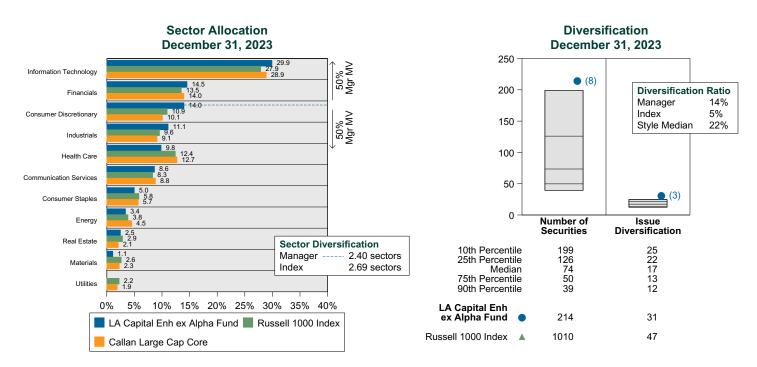
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of December 31, 2023



#### **Sector Weights**

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





# LA Capital Enh ex Alpha Fund Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 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	\$2,875,578	6.3%	19.34%	2794.83	31.10	0.80%	16.20%
Information Technology	\$2,520,025	5.5%	12.60%	2994.37	28.67	0.50%	6.14%
Information Technology	\$1,290,543	2.8%	13.86%	1223.19	24.99	0.03%	102.46%
Consumer Discretionary	\$1,274,321	2.8%	19.52%	1570.15	42.23	0.00%	7.27%
Communication Services	\$1,147,693	2.5%	6.75%	826.69	20.89	0.00%	19.30%
Communication Services	\$1,099,254	2.4%	6.89%	806.82	21.27	0.00%	19.30%
Communication Services	\$890,209	2.0%	17.90%	785.65	20.19	0.00%	32.00%
Health Care	\$735,479	1.6%	4.78%	486.95	18.86	1.43%	12.90%
Financials	\$694,060	1.5%	1.82%	466.66	19.71	0.00%	12.33%
Information Technology	\$686,920	1.5%	(5.34)%	205.29	12.84	3.08%	5.00%
	Information Technology Information Technology Information Technology Consumer Discretionary Communication Services Communication Services Communication Services Health Care Financials	Sector         Value           Information Technology         \$2,875,578           Information Technology         \$2,520,025           Information Technology         \$1,290,543           Consumer Discretionary         \$1,274,321           Communication Services         \$1,147,693           Communication Services         \$1,099,254           Communication Services         \$890,209           Health Care         \$735,479           Financials         \$694,060	Sector         Market Value         of Portfolio           Information Technology Information Technology Information Technology Information Technology Information Technology St.,290,025         5.5%           Information Technology Consumer Discretionary Communication Services Communication Services Communication Services Health Care Financials         \$1,274,321         2.8%           Communication Services St.,147,693         2.5%         2.4%           Communication Services Sego,209         2.0%           Health Care Financials         \$735,479         1.6%           Financials         \$694,060         1.5%	Sector         Market Value         of Value         Qtrly Portfolio           Information Technology Information Informati	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Information Technology Information Technology Information Technology Information Technology Information Technology Consumer Discretionary Communication Services Communication Services Communication Services Health Care Financials         \$1,274,321 \$1,147,693 \$1,099,254 \$1,099,254 \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$1,099,254 \$2.4% \$2.4% \$2.5% \$2.69 \$2	Sector         Value         Percent Value         Qtrly Return         Market Capital         Forecasted Earnings           Information Technology         \$2,875,578         6.3%         19.34%         2794.83         31.10           Information Technology         \$2,520,025         5.5%         12.60%         2994.37         28.67           Information Technology         \$1,290,543         2.8%         13.86%         1223.19         24.99           Consumer Discretionary         \$1,274,321         2.8%         19.52%         1570.15         42.23           Communication Services         \$1,147,693         2.5%         6.75%         826.69         20.89           Communication Services         \$1,099,254         2.4%         6.89%         806.82         21.27           Communication Services         \$890,209         2.0%         17.90%         785.65         20.19           Health Care         \$735,479         1.6%         4.78%         486.95         18.86           Financials         \$694,060         1.5%         1.82%         466.66         19.71	Sector         Warket Value         of Value         Qtrly Return         Market Capital         Earnings Ratio         Dividend Yield           Information Technology Information I

#### **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
Gap	Consumer Discretionary	\$239,838	0.5%	99.59%	7.75	17.50	2.87%	(23.64)%
Square Inc CI A	Financials	\$56,466	0.1%	74.76%	42.82	25.29	0.00%	68.96%
Topbuild	Consumer Discretionary	\$37,426	0.1%	48.75%	11.89	17.99	0.00%	9.98%
Expedia Group Inc	Consumer Discretionary	\$179,112	0.4%	47.27%	20.24	12.37	0.00%	24.70%
Uipath Inc	Information Technology	\$61,106	0.1%	45.16%	12.01	47.31	0.00%	46.20%
Burlington Stores Inc	Consumer Discretionary	\$126,412	0.3%	43.74%	12.55	27.97	0.00%	27.07%
Godaddy Inc Cl A	Information Technology	\$367,314	0.8%	42.54%	14.95	23.93	0.00%	54.35%
D.R. Horton	Consumer Discretionary	\$71,431	0.2%	41.75%	50.61	10.57	0.79%	5.34%
Docusign Inc	Information Technology	\$143,274	0.3%	41.56%	12.12	20.71	0.00%	94.21%
Slm Corp	Financials	\$116,632	0.3%	41.36%	4.33	7.06	2.30%	10.49%

# **10 Worst Performers**

						Price/		
		Ending	Percent	Otal.	Manhat	Forecasted	Dividend	Forecasted
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Kinsale Cap Group Inc	Financials	\$15,071	0.0%	(19.10)%	7.76	23.32	0.17%	49.11%
Ssr Mng Inc	Materials	\$41,254	0.1%	(16.49)%	2.19	18.15	2.60%	18.60%
Exxon Mobil Corp	Energy	\$402,120	0.9%	(14.19)%	396.21	10.76	3.80%	35.92%
Texas Pacific Land Corporati	Energy	\$42,456	0.1%	(13.60)%	12.07	28.11	0.83%	31.38%
Apa Corp	Energy	\$79,295	0.2%	(12.18)%	11.01	6.37	2.79%	0.00%
Boston Beer Inc CI A	Consumer Staples	\$13,824	0.0%	(11.28)%	3.50	30.95	0.00%	13.30%
Bristol-Myers Squibb Co	Health Care	\$49,514	0.1%	(10.70)%	104.40	7.08	4.45%	(0.90)%
Chevron Corp New	Energy	\$337,251	0.7%	(10.60)%	280.73	10.52	4.05%	(5.00)%
Schlumberger	Energy	\$74,417	0.2%	(10.30)%	74.34	14.46	1.92%	28.70%
Playtika Hldg Corp Com	Communication Services	\$34,706	0.1%	(9.46)%	3.20	10.20	0.00%	8.90%

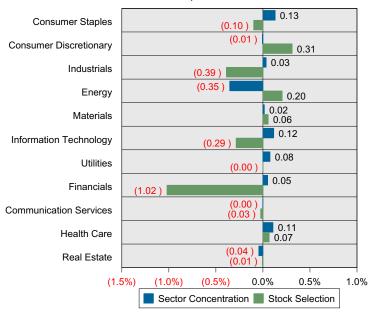


# LA Capital Enh ex Alpha Fund vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

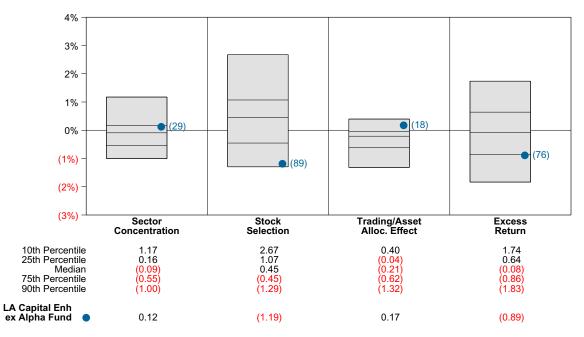
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.13%	(0.10%)
Consumer Discretionary	(0.01%)	0.31%
Industrials	0.03%	(0.39%)
Energy	(0.35%)	0.20%
Materials	0.02%	0.06%
Information Technology	0.12%	(0.29%)
Utilities	0.08%	(0.00%)
Financials	0.05%	(1.02%)
Communication Services	s (0.00%)	(0.03%)
Health Care	0.11%	0.07%
Real Estate	(0.04%)	(0.01%)
Total	0.12%	(1.19%)

Manager Return	Index Return _	Sector Concen _	_ Stock Select _	_ <u>Trading</u> _	Asset Alloc
11.08%	11.96%	0.12%	(1.19%)	0.20%	(0.03%)

# **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended December 31, 2023



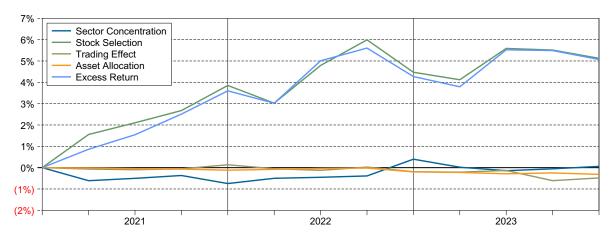


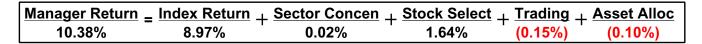
# LA Capital Enh ex Alpha Fund vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

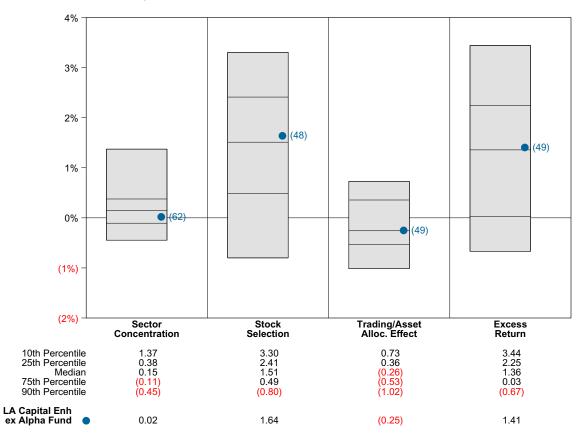
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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





#### **Equity Attribution Ranking vs Callan Large Cap Core** Three Years Ended December 31, 2023





# NTAM R1000 Index Period Ended December 31, 2023

#### **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.

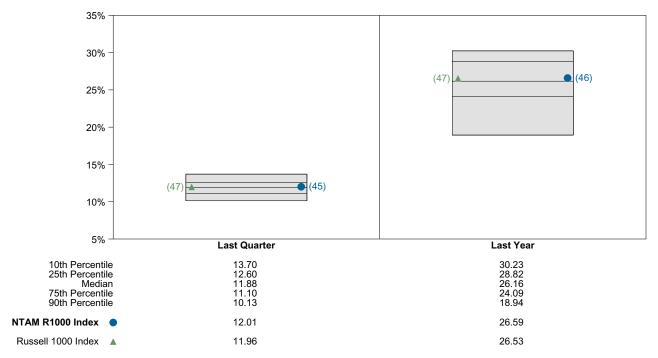
# **Quarterly Summary and Highlights**

- NTAM R1000 Index's portfolio posted a 12.01% return for the quarter placing it in the 45 percentile of the Callan Large Cap Core group for the quarter and in the 46 percentile for the last year.
- NTAM R1000 Index's portfolio outperformed the Russell 1000 Index by 0.04% for the quarter and outperformed the Russell 1000 Index for the year by 0.06%.

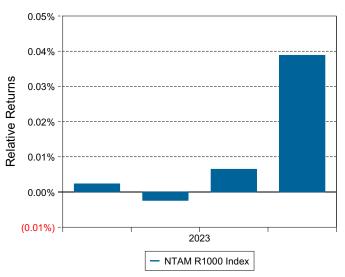
Quarterly	Asset	Growth

Beginning Market Value	\$53,260,163
Net New Investment	\$-1,022,310
Investment Gains/(Losses)	\$5,949,721
Ending Market Value	\$58 187 573

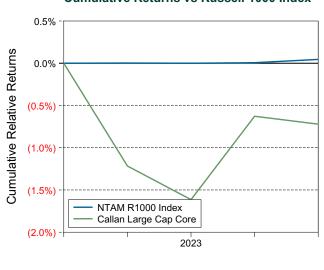
# Performance vs Callan Large Cap Core (Gross)



# Relative Return vs Russell 1000 Index



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

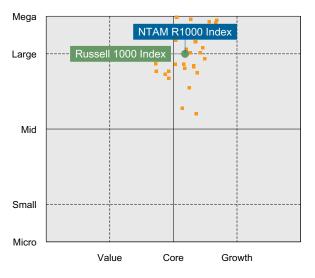




# **Current Holdings Based Style Analysis** NTAM R1000 Index As of December 31, 2023

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

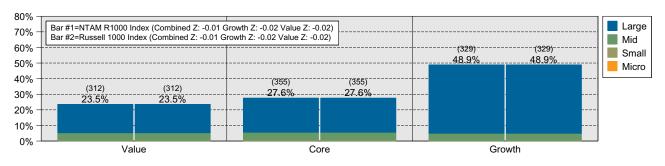
#### Style Map vs Callan Large Cap Core Holdings as of December 31, 2023



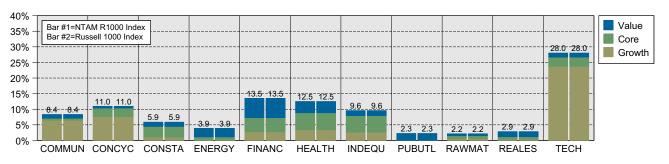
# **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
Total	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)
Total	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)
	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% (54)	0.5% (72)	0.4% (49)	1.3% (175)
Small				
	0.4% (54)	0.5% (72)	0.4% (49)	1.3% (175)
IVIIQ	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
Mid	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
Large	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)
	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)

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



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

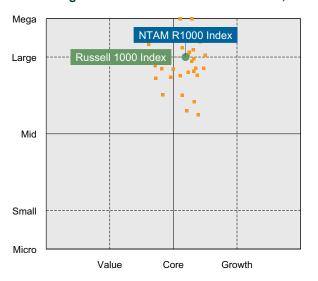




# **Historical Holdings Based Style Analysis** NTAM R1000 Index For One Year Ended December 31, 2023

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.

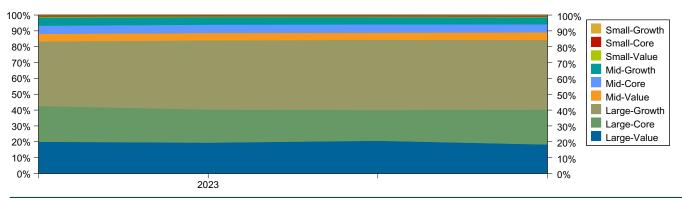
# Average Style Map vs Callan Large Cap Core Holdings for One Year Ended December 31, 2023



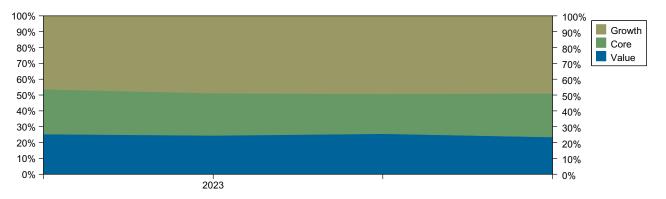
#### **Average Style Exposure Matrix** Holdings for One Year Ended December 31, 2023



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



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



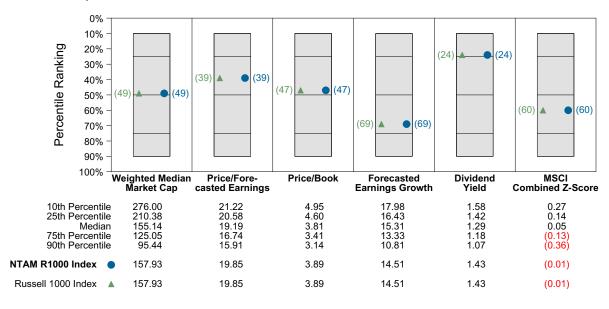


# NTAM R1000 Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

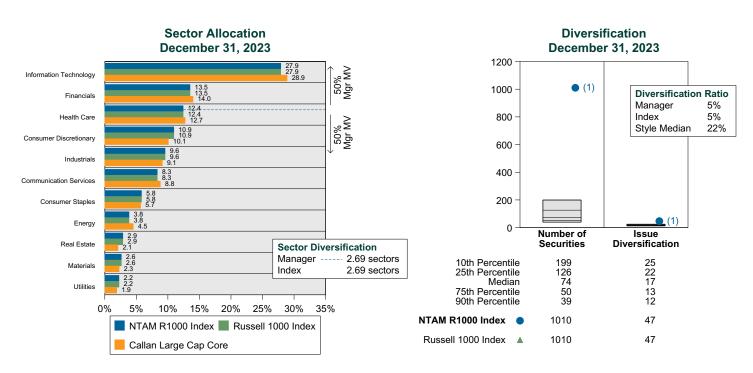
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of December 31, 2023



#### **Sector Weights**

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





# NTAM R1000 Index Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
rmation Technology	\$3,762,331	6.5%	12.60%	2994.37	28.67	0.50%	6.14%
rmation Technology	\$3,708,591	6.4%	19.34%	2794.83	31.10	0.80%	16.20%
sumer Discretionary	\$1,814,007	3.1%	19.52%	1570.15	42.23	0.00%	7.27%
rmation Technology	\$1,559,323	2.7%	13.86%	1223.19	24.99	0.03%	102.46%
nmunication Services	\$1,100,027	1.9%	6.75%	826.69	20.89	0.00%	19.30%
nmunication Services	\$1,037,489	1.8%	17.90%	785.65	20.19	0.00%	32.00%
nmunication Services	\$937,377	1.6%	6.89%	806.82	21.27	0.00%	19.30%
sumer Discretionary	\$908,512	1.6%	(0.70)%	789.90	65.37	0.00%	1.78%
Financials	\$865,467	1.5%	1.82%	466.66	19.71	0.00%	12.33%
Health Care	\$653,710	1.1%	8.73%	553.37	47.09	0.77%	27.70%
	ormation Technology assumer Discretionary formation Technology formation Services formunication Services formunica	ormation Technology         \$3,708,591           issumer Discretionary         \$1,814,007           ormation Technology         \$1,559,323           inmunication Services         \$1,100,027           inmunication Services         \$1,037,489           inmunication Services         \$937,377           insumer Discretionary         \$908,512           Financials         \$865,467	ormation Technology       \$3,708,591       6.4%         issumer Discretionary       \$1,814,007       3.1%         ormation Technology       \$1,559,323       2.7%         inmunication Services       \$1,100,027       1.9%         inmunication Services       \$1,037,489       1.8%         inmunication Services       \$937,377       1.6%         insumer Discretionary       \$908,512       1.6%         Financials       \$865,467       1.5%	ormation Technology         \$3,708,591         6.4%         19.34%           issumer Discretionary         \$1,814,007         3.1%         19.52%           ormation Technology         \$1,559,323         2.7%         13.86%           inmunication Services         \$1,100,027         1.9%         6.75%           inmunication Services         \$1,037,489         1.8%         17.90%           inmunication Services         \$937,377         1.6%         6.89%           insumer Discretionary         \$908,512         1.6%         (0.70)%           Financials         \$865,467         1.5%         1.82%	ormation Technology       \$3,708,591       6.4%       19.34%       2794.83         issumer Discretionary       \$1,814,007       3.1%       19.52%       1570.15         ormation Technology       \$1,559,323       2.7%       13.86%       1223.19         inmunication Services       \$1,100,027       1.9%       6.75%       826.69         inmunication Services       \$1,037,489       1.8%       17.90%       785.65         inmunication Services       \$937,377       1.6%       6.89%       806.82         issumer Discretionary       \$908,512       1.6%       (0.70)%       789.90         Financials       \$865,467       1.5%       1.82%       466.66	ormation Technology         \$3,708,591         6.4%         19.34%         2794.83         31.10           issumer Discretionary         \$1,814,007         3.1%         19.52%         1570.15         42.23           issumer Discretionary         \$1,559,323         2.7%         13.86%         1223.19         24.99           immunication Services         \$1,100,027         1.9%         6.75%         826.69         20.89           immunication Services         \$1,037,489         1.8%         17.90%         785.65         20.19           immunication Services         \$937,377         1.6%         6.89%         806.82         21.27           issumer Discretionary         \$908,512         1.6%         (0.70)%         789.90         65.37           Financials         \$865,467         1.5%         1.82%         466.66         19.71	ormation Technology         \$3,708,591         6.4%         19.34%         2794.83         31.10         0.80%           issumer Discretionary         \$1,814,007         3.1%         19.52%         1570.15         42.23         0.00%           immation Technology         \$1,559,323         2.7%         13.86%         1223.19         24.99         0.03%           immunication Services         \$1,100,027         1.9%         6.75%         826.69         20.89         0.00%           immunication Services         \$1,037,489         1.8%         17.90%         785.65         20.19         0.00%           immunication Services         \$937,377         1.6%         6.89%         806.82         21.27         0.00%           issumer Discretionary         \$908,512         1.6%         (0.70)%         789.90         65.37         0.00%           Financials         \$865,467         1.5%         1.82%         466.66         19.71         0.00%

#### **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		
Coinbase Global Inc -Class A	Financials	\$39,018	0.1%	131.66%	33.40	(346.45)	0.00%	-		
Affirm Holdings Inc	Financials	\$14,645	0.0%	131.05%	11.90	(20.43)	0.00%	-		
Gap	Consumer Discretionary	\$5,379	0.0%	99.59%	7.75	17.50	2.87%	(23.64)%		
Spirit Aerosystems Hldgs Inc Com Cl	Industrials	\$4,397	0.0%	96.91%	3.64	155.02	0.00%	(53.55)%		
Karuna Therapeutics	Health Care	\$14,897	0.0%	87.19%	11.99	(28.34)	0.00%	-		
Rocket Companies	Financials	\$2,259	0.0%	77.02%	1.93	45.53	0.00%	-		
Macys Inc	Consumer Discretionary	\$7,205	0.0%	74.76%	5.51	7.24	3.29%	(11.34)%		
Square Inc Cl A	Financials	\$55,543	0.1%	74.76%	42.82	25.29	0.00%	68.96%		
Sentinelone A	Information Technology	\$8,486	0.0%	62.74%	6.83	946.21	0.00%	-		
Frontier Communications Parent	Communication Services	\$8,211	0.0%	61.93%	6.23	(49.40)	0.00%	-		

# **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
Chargepoint Holdings Inc Com Cl A	Industrials	\$951	0.0%	(52.91)%	0.98	(7.20)	0.00%	(38.40)%
Globant S A	Information Technology	\$12,987	0.0%	(47.93)%	10.10	35.76	0.00%	28.62%
Plug Power Inc	Industrials	\$3,132	0.0%	(40.84)%	2.72	(5.07)	0.00%	-
Maravai Lifesciences Hldgs Inc Cl A	Health Care	\$952	0.0%	(34.51)%	0.87	123.58	0.00%	(56.85)%
R1 Rcm Inc	Health Care	\$2,139	0.0%	(29.86)%	4.43	59.05	0.00%	(78.50)%
Agilon Health Inc Com	Health Care	\$4,827	0.0%	(29.34)%	5.10	545.65	0.00%	-
Bill.Com Holdings, Inc.	Information Technology	\$11,079	0.0%	(24.85)%	8.71	40.43	0.00%	13.36%
Lucid Group Inc	Consumer Discretionary	\$4,152	0.0%	(24.68)%	9.64	(3.97)	0.00%	14.60%
Amc Entmt Hldgs Inc Cl A New	Communication Services	\$1,606	0.0%	(23.45)%	1.21	(3.83)	0.00%	6.01%
Petco Health & Wellness Co Inc Cl A	Consumer Discretionary	\$343	0.0%	(22.72)%	0.73	31.60	0.00%	(31.63)%

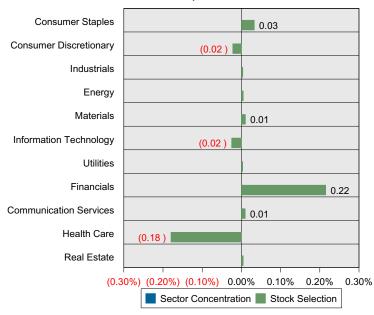


# NTAM R1000 Index vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### 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.

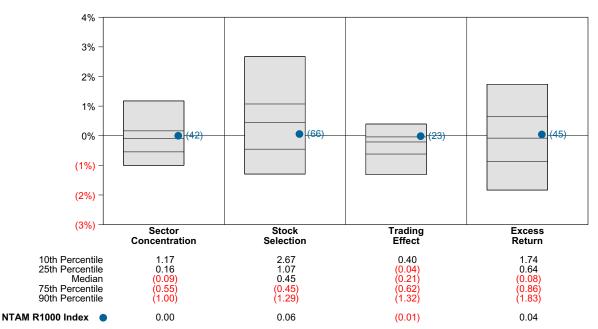
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	0.03%
Consumer Discretionary	0.00%	(0.02%)
Industrials	0.00%	0.00%
Energy	0.00%	0.00%
Materials	0.00%	0.01%
Information Technology	0.00%	(0.02%)
Utilities	0.00%	0.00%
Financials	0.00%	0.22%
Communication Services	s 0.00%	0.01%
Health Care	0.00%	(0.18%)
Real Estate	0.00%	0.00%
Total	0.00%	0.06%

Manager Return = Index Return + Sector Concentration + Stock Selection + Trading 12.01% 11.96% 0.00% 0.06%

# **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended December 31, 2023



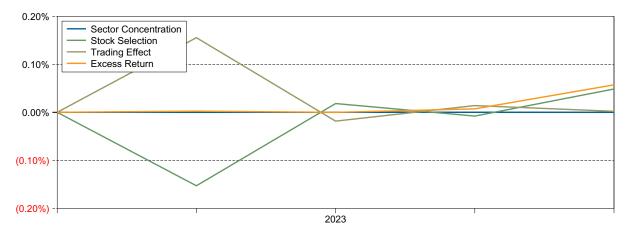


# NTAM R1000 Index vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

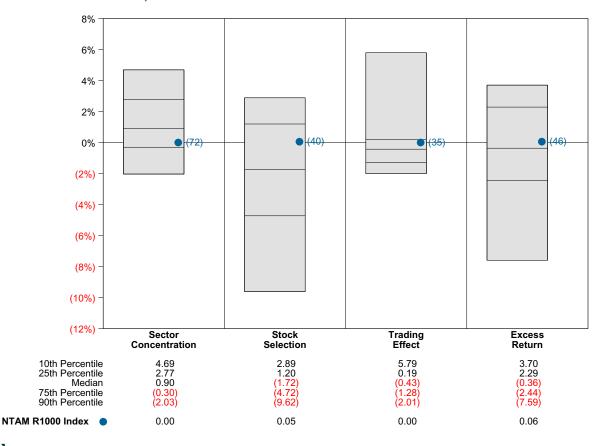
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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



Manager Return	Index Return	_ Sector Concentration _	L Stock Selection	_ <u>Trading</u>
26.59%	26.53%	0.00%	0.05%	0.00%

# **Equity Attribution Ranking vs Callan Large Cap Core** One Year Ended December 31, 2023





# **NTAM Quant Enh R1000** Period Ended December 31, 2023

### **Investment Philosophy**

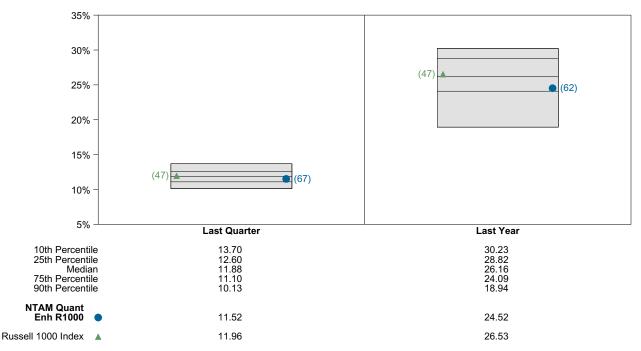
The Fund's Investment Objective is to exceed the total return of the Russell 1000 Index\* (the Benchmark) by 150 basis points on a gross of fee basis while targeting expected tracking error of no greater than 150-200 basis points.

# **Quarterly Summary and Highlights**

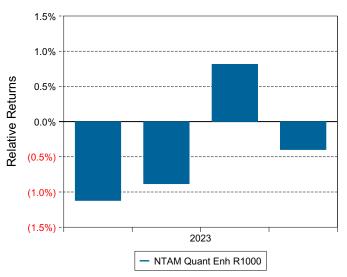
- NTAM Quant Enh R1000's portfolio posted a 11.52% return for the quarter placing it in the 67 percentile of the Callan Large Cap Core group for the quarter and in the 62 percentile for the last year.
- NTAM Quant Enh R1000's portfolio underperformed the Russell 1000 Index by 0.45% for the quarter and underperformed the Russell 1000 Index for the year by 2.01%.

Beginning Market Value	\$33,606,530
Net New Investment	\$-980,357
Investment Gains/(Losses)	\$3,823,632
Ending Market Value	\$36.449.805

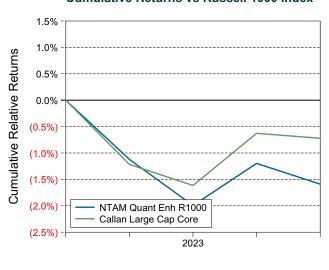
# Performance vs Callan Large Cap Core (Gross)



#### Relative Return vs Russell 1000 Index



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

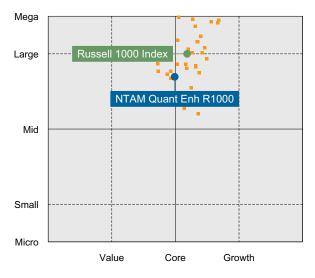




# **Current Holdings Based Style Analysis NTAM Quant Enh R1000** As of December 31, 2023

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

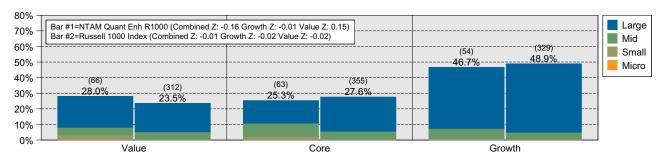
#### Style Map vs Callan Large Cap Core Holdings as of December 31, 2023



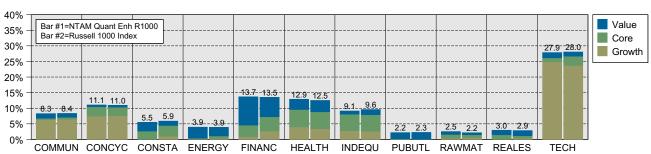
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	23.5% (312)	27.6% (355)	48.9% (329)	100.0% (996)
Total				
	28.0% (66)	25.3% (63)	46.7% (54)	100.0% (183)
	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% (54)	0.5% (72)	0.4% (49)	1.3% (175)
Small				
	3.0% (8)	2.2% (8)	0.7% (3)	5.9% (19)
	4.8% (162)	5.0% (187)	4.5% (180)	14.3% (529)
Mid				
	5.0% (23)	8.7% (26)	6.6% (19)	20.4% (68)
	18.3% (96)	22.0% (96)	44.0% (100)	84.4% (292)
Large				
	19.9% (35)	14.5% (29)	39.3% (32)	73.7% (96)

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



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

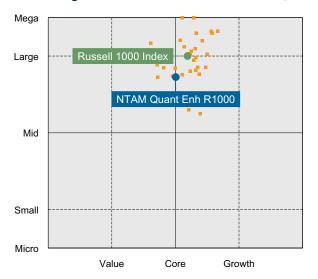




# **Historical Holdings Based Style Analysis NTAM Quant Enh R1000** For One Year Ended December 31, 2023

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.

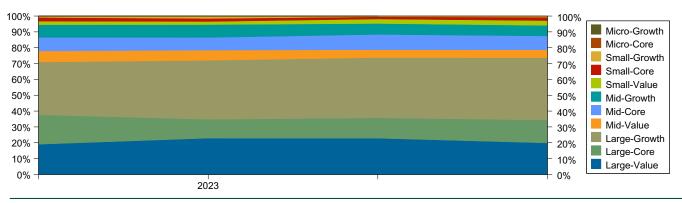
# Average Style Map vs Callan Large Cap Core Holdings for One Year Ended December 31, 2023



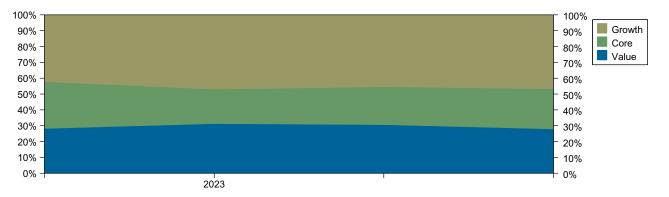
#### **Average Style Exposure Matrix** Holdings for One Year Ended December 31, 2023



# NTAM Quant Enh R1000 Historical Cap/Style Exposures



#### NTAM Quant Enh R1000 Historical Style Only Exposures



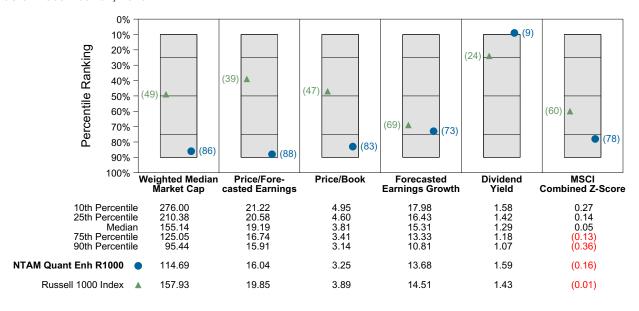


# **NTAM Quant Enh R1000 Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

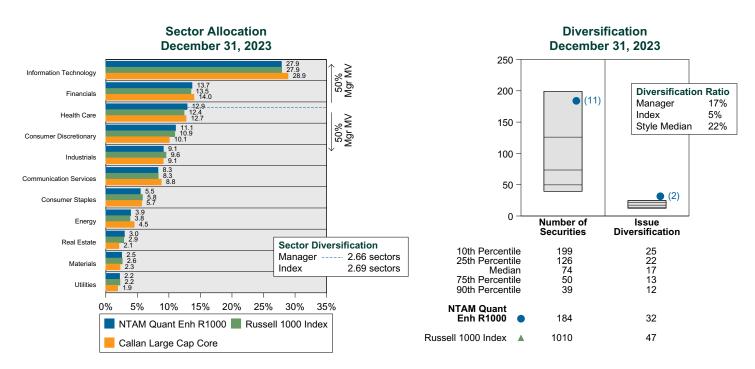
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Large Cap Core as of December 31, 2023



#### **Sector Weights**

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





# NTAM Quant Enh R1000 Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 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
Apple Inc	Information Technology	\$2,566,232	7.0%	12.60%	2994.37	28.67	0.50%	6.14%
Microsoft Corp	Information Technology	\$2,505,555	6.9%	19.34%	2794.83	31.10	0.80%	16.20%
Alphabet Inc Cl A	Communication Services	\$1,490,492	4.1%	6.75%	826.69	20.89	0.00%	19.30%
Amazon.Com	Consumer Discretionary	\$1,002,348	2.8%	19.52%	1570.15	42.23	0.00%	7.27%
Nvidia Corp	Information Technology	\$733,916	2.0%	13.86%	1223.19	24.99	0.03%	102.46%
Meta Platforms Inc	Communication Services	\$721,370	2.0%	17.90%	785.65	20.19	0.00%	32.00%
Broadcom Ltd Shs	Information Technology	\$642,960	1.8%	35.01%	522.56	23.23	1.46%	13.80%
JPMorgan Chase & Co	Financials	\$558,949	1.5%	18.16%	491.76	10.92	2.47%	17.53%
Adobe Inc	Information Technology	\$462,365	1.3%	17.00%	271.63	32.88	0.00%	14.50%
Exxon Mobil Corp	Energy	\$433,813	1.2%	(14.19)%	396.21	10.76	3.80%	35.92%

#### **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		
Rocket Companies	Financials	\$44,092	0.1%	77.02%	1.93	45.53	0.00%	-		
Expedia Group Inc	Consumer Discretionary	\$199,907	0.5%	47.27%	20.24	12.37	0.00%	24.70%		
Slm Corp	Financials	\$167,300	0.5%	41.36%	4.33	7.06	2.30%	10.49%		
Royal Caribbean Cruises Ltd	Consumer Discretionary	\$16,704	0.0%	40.54%	33.18	14.16	0.00%	(31.43)%		
Core & Main Inc	Industrials	\$109,754	0.3%	40.07%	7.24	16.77	0.00%	103.67%		
Pulte Group Inc	Consumer Discretionary	\$66,887	0.2%	39.67%	22.25	9.04	0.77%	34.84%		
Toll Brothers	Consumer Discretionary	\$135,374	0.4%	39.39%	10.70	8.37	0.85%	0.62%		
Kyndryl Hldgs Inc Com	Information Technology	\$106,705	0.3%	37.59%	4.77	(168.94)	0.00%	-		
Bank Ozk	Financials	\$89,096	0.2%	35.77%	6.39	8.37	2.97%	21.84%		
Nrg Energy Inc	Utilities	\$20,111	0.1%	35.41%	11.67	8.08	2.92%	24.76%		

# **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
Exxon Mobil Corp	Energy	\$433,813	1.2%	(14.19)%	396.21	10.76	3.80%	35.92%
Bristol-Myers Squibb Co	Health Care	\$219,402	0.6%	(10.70)%	104.40	7.08	4.45%	(0.90)%
Chevron Corp New	Energy	\$42,212	0.1%	(10.60)%	280.73	10.52	4.05%	(5.00)%
Align Technology Inc	Health Care	\$15,892	0.0%	(10.26)%	20.99	29.88	0.00%	13.64%
Playtika Hldg Corp Com	Communication Services	\$172,551	0.5%	(9.46)%	3.20	10.20	0.00%	8.90%
Wk Kellogg Co Com	Consumer Staples	\$3,482	0.0%	(9.21)%	1.13	8.71	4.87%	-
Polaris Inds Inc	Consumer Discretionary	\$54,398	0.1%	(8.28)%	5.35	10.39	2.74%	16.42%
Western Un Co	Financials	\$7,951	0.0%	(7.80)%	4.34	7.06	7.88%	0.97%
Occidental Petroleum	Energy	\$42,872	0.1%	(7.67)%	52.40	13.16	1.21%	(16.05)%
Valero Energy Corp New	Energy	\$252,590	0.7%	(7.50)%	44.26	9.02	3.13%	(21.25)%

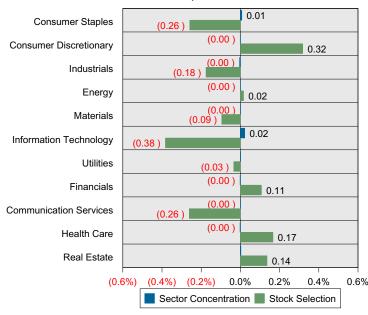


#### NTAM Quant Enh R1000 vs Russell 1000 Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

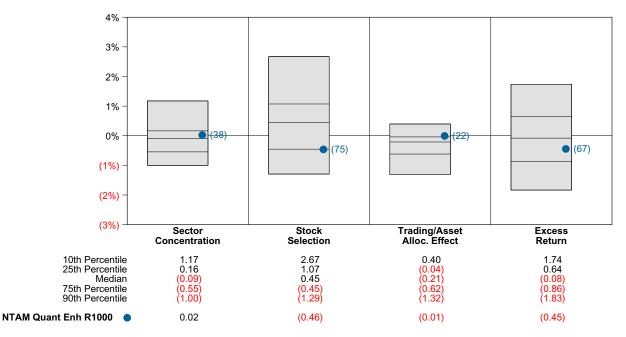
#### Attribution Effects by Sector vs Russell 1000 Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.01%	(0.26%)
Consumer Discretionary	(0.00%)	0.32%
Industrials	(0.00%)	(0.18%)
Energy	(0.00%)	0.02%
Materials	(0.00%)	(0.09%)
Information Technology	0.02%	(0.38%)
Utilities	0.00%	(0.03%)
Financials	(0.00%)	0.11%
Communication Services	s (0.00%)	(0.26%)
Health Care	(0.00%)	0.17%
Real Estate	0.00%	0.14%
Total	0.02%	(0.46%)

Manager Return _	Index Return	Sector Concen _	Stock Select _	<sub></sub> <u>Trading</u> _	Asset Alloc
11.52%	11.96%	0.02%	(0.46%)	0.11%	(0.11%)

#### **Equity Attribution Ranking vs Callan Large Cap Core** Quarter ended December 31, 2023



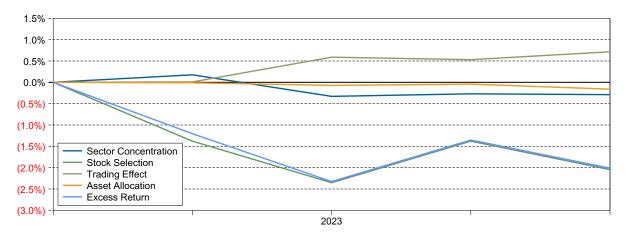


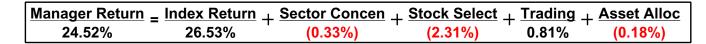
#### NTAM Quant Enh R1000 vs Russell 1000 Index **Cumulative Equity Buy and Hold Attribution**

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

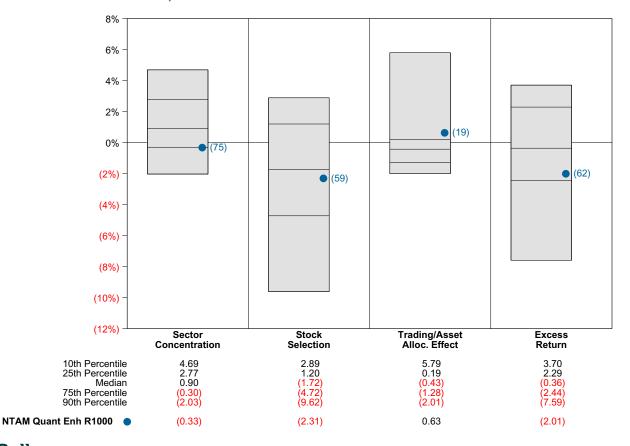
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs 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 Year Ended December 31, 2023





## Atlanta Capital Period Ended December 31, 2023

#### **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.

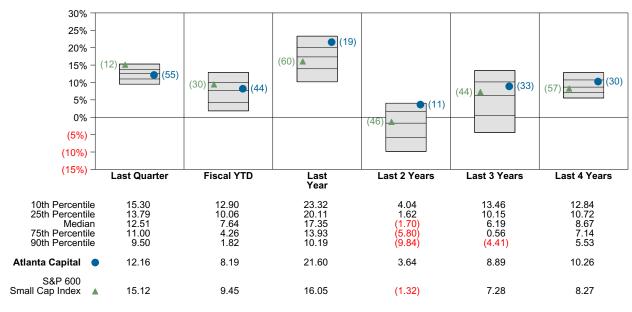
#### **Quarterly Summary and Highlights**

- Atlanta Capital's portfolio posted a 12.16% return for the quarter placing it in the 55 percentile of the Callan Small Capitalization group for the quarter and in the 19 percentile for the last year.
- Atlanta Capital's portfolio underperformed the S&P 600 Small Cap Index by 2.96% for the quarter and outperformed the S&P 600 Small Cap Index for the year by 5.55%.

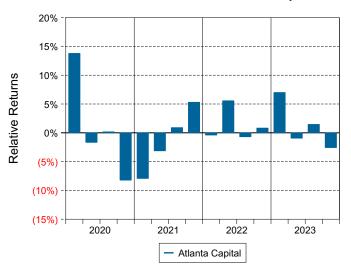
#### **Quarterly Asset Growth**

Beginning Market Value	\$13,468,677
Net New Investment	\$-242,805
Investment Gains/(Losses)	\$1,615,802
Ending Market Value	\$14,841,674

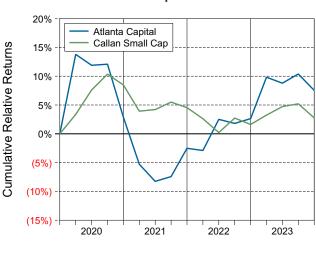
#### Performance vs Callan Small Capitalization (Gross)



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



#### Cumulative Returns vs S&P 600 Small Cap Index



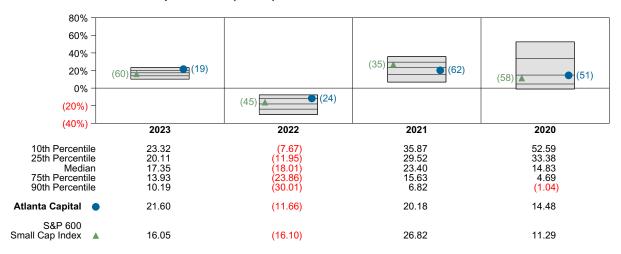


#### **Atlanta Capital Return Analysis Summary**

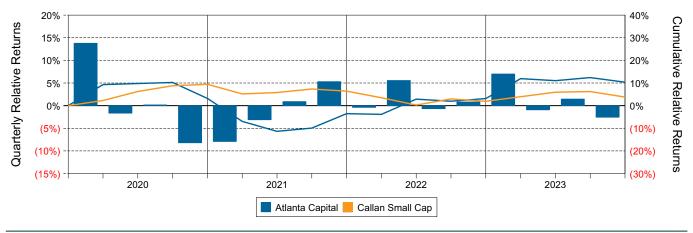
#### **Return Analysis**

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.

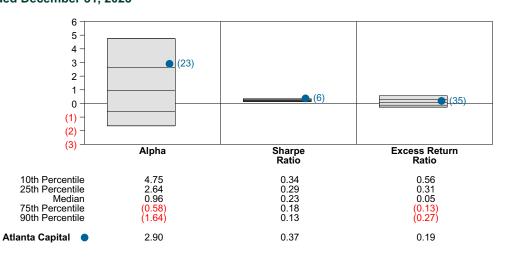
#### Performance vs Callan Small Capitalization (Gross)



#### 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 Years Ended December 31, 2023



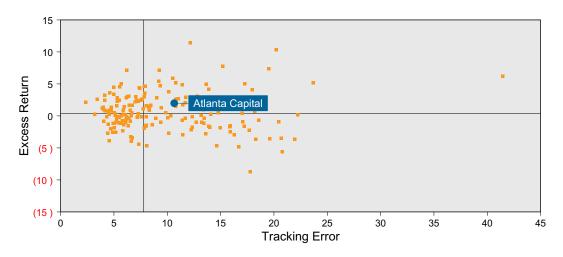


#### **Atlanta Capital Risk Analysis Summary**

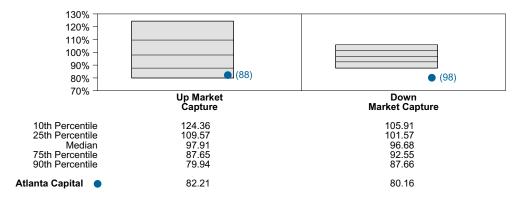
#### Risk Analysis

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.

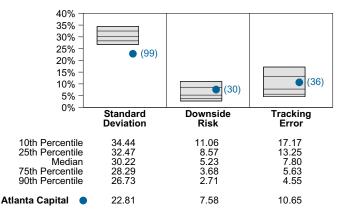
#### Risk Analysis vs Callan Small Capitalization (Gross) Four Years Ended December 31, 2023

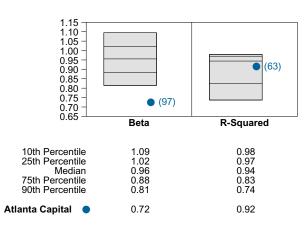


Market Capture vs S&P 600 Small Cap ldx Rankings Against Callan Small Capitalization (Gross) Four Years Ended December 31, 2023



Risk Statistics Rankings vs S&P 600 Small Cap Idx Rankings Against Callan Small Capitalization (Gross) Four Years Ended December 31, 2023



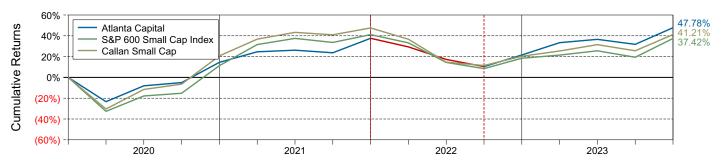




# Atlanta Capital Drawdown Analysis for Four Years Ended December 31, 2023

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

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

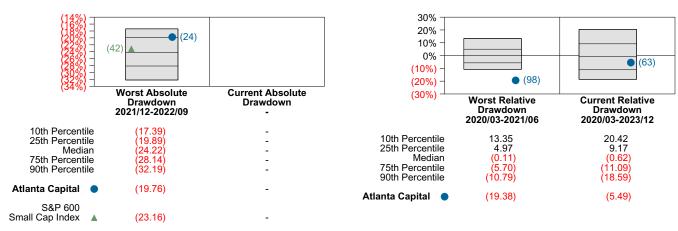


	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Atlanta Capital	(19.76)%	0.75	2021/12-2022/09	(23.16)%	(24.49)%	-	-	-	-	-
Recovery from Trough	33.87%	1.25+	2022/09-2023/12	26.72%	26.76%	-	-	-	-	-
S&P 600 Small Cap Index	(23.16)%	0.75	2021/12-2022/09			(2.63)%	2.00	2021/12-2023/12		
Callan Small Cap	(24.49)%	0.75	2021/12-2022/09			(4.29)%	2.00	2021/12-2023/12		

# Relative Cumulative Drawdown Analysis vs. S&P 600 Small Cap Index 20% 15% Atlanta Capital Callan Small Cap 10% 5% 0% (5%) (10%) (15%) 2020 2020 2021 2022 2023

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Atlanta Capital	(19.38)%	1.25	2020/03-2021/06	0.82%	(5.49)%	3.75	2020/03-2023/12	(0.59)%	
Recovery from Trough	17.22%	2.50+	2021/06-2023/12	(1.39)%	17.22%	2.50+	2021/06-2023/12	(1.39)%	
Callan Small Cap	(9.18)%	1.75	2020/09-2022/06		(6.88)%	3.25	2020/09-2023/12		

Drawdown Rankings vs. S&P 600 Small Cap Index Rankings against Callan Small Capitalization Four Years Ended December 31, 2023

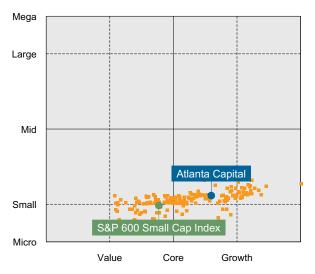




#### **Current Holdings Based Style Analysis Atlanta Capital** As of December 31, 2023

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

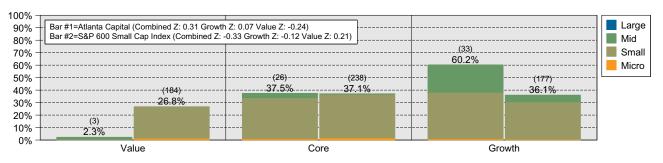
#### Style Map vs Callan Small Cap Holdings as of December 31, 2023



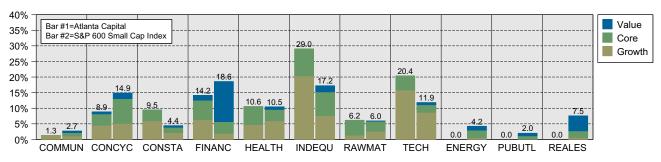
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
Total	26.8% (184)	37.1% (238)	36.1% (177)	100.0% (599)
	2.3% (3)	37.5% (26)	60.2% (33)	100.0% (62)
	1.4% (27)	1.7% (33)	0.6% (12)	3.6% (72)
Micro	(3)	(1)	(1)	
	0.0% (0)	1.1% (1)	1.0% (1)	2.1% (2)
Oman	25.4% (157)	34.9% (204)	29.9% (155)	90.2% (516)
Small	0.7% (1)	32.7% (23)	37.1% (22)	70.5% (46)
	0.0% (0)	0.6% (1)	5.6% (10)	6.2% (11)
Mid				
	1.6% (2)	3.7% (2)	22.1% (10)	27.5% (14)
_u.go	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 December 31, 2023



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



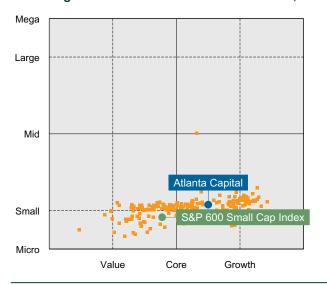


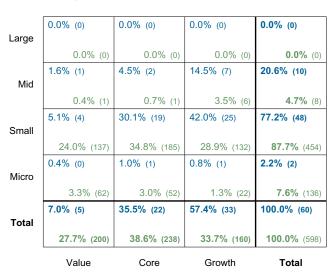
#### **Historical Holdings Based Style Analysis Atlanta Capital** For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented guarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

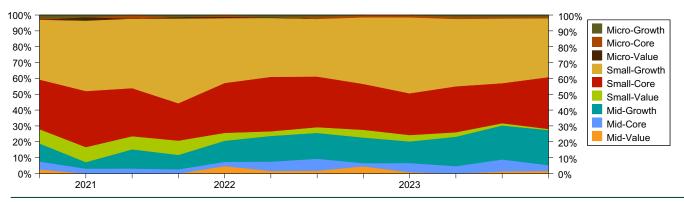
#### Average Style Map vs Callan Small Cap Holdings for Three Years Ended December 31, 2023

#### **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

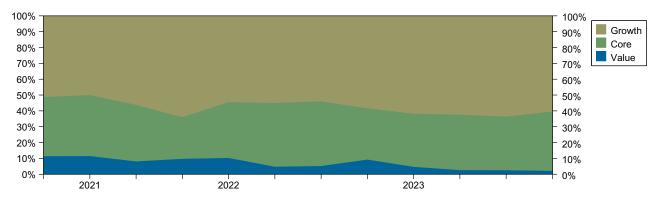




#### Atlanta Capital Historical Cap/Style Exposures



#### **Atlanta Capital Historical Style Only Exposures**



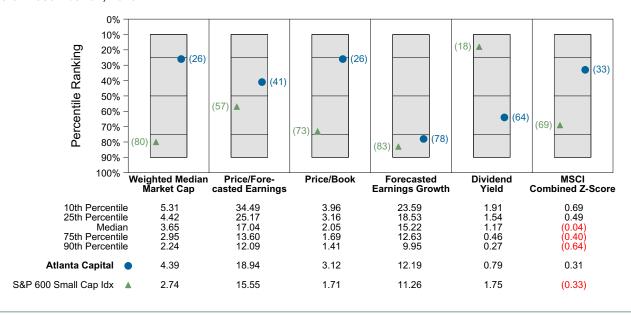


#### **Atlanta Capital Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

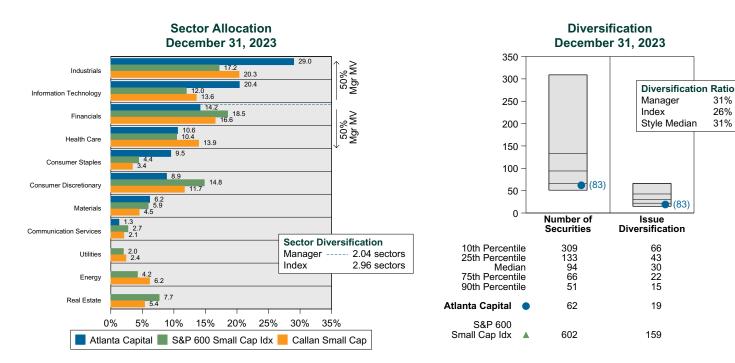
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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





31%

26%

31%

## **Atlanta Capital** Top 10 Portfolio Holdings Characteristics as of December 31, 2023

#### 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	\$676,415	4.6%	7.67%	4.61	28.04	1.74%	30.77%
Insight Enterprises Inc	Information Technology	\$533,165	3.6%	21.78%	5.77	15.62	0.00%	18.06%
Beacon Roofing Supply Inc	Industrials	\$515,855	3.5%	12.76%	5.51	10.96	0.00%	24.55%
Blackbaud Inc	Information Technology	\$474,856	3.2%	23.29%	4.67	18.97	0.00%	23.40%
Qualys Inc	Information Technology	\$471,072	3.2%	28.67%	7.22	37.13	0.00%	21.49%
Cbiz Inc	Industrials	\$461,539	3.1%	20.60%	3.12	23.16	0.00%	19.52%
Selective Insurance Grp	Financials	\$432,440	2.9%	(3.25)%	6.03	12.80	1.41%	23.80%
Moog Inc CI A	Industrials	\$387,721	2.6%	28.42%	4.22	20.21	0.73%	3.81%
Dorman Products Inc	Consumer Discretionary	\$342,648	2.3%	10.10%	2.63	15.99	0.00%	6.59%
Simpson Manufacturing Co Inc	Industrials	\$339,932	2.3%	32.40%	8.45	23.16	0.55%	33.50%

#### **10 Best Performers**

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Consumer Discretionary	\$86,293	0.6%	58.48%	1.42	6.90	0.00%	(1.12)%
Information Technology	\$177,174	1.2%	35.64%	3.33	23.41	0.00%	0.86%
Financials	\$113,870	0.8%	33.59%	5.56	8.58	5.40%	5.92%
Industrials	\$339,932	2.3%	32.40%	8.45	23.16	0.55%	33.50%
Financials	\$159,471	1.1%	31.59%	1.50	10.37	3.12%	16.85%
Financials	\$99,082	0.7%	30.53%	6.70	12.72	1.01%	10.02%
Industrials	\$189,698	1.3%	30.06%	6.00	31.94	0.43%	23.69%
Information Technology	\$471,072	3.2%	28.67%	7.22	37.13	0.00%	21.49%
Industrials	\$387,721	2.6%	28.42%	4.22	20.21	0.73%	3.81%
Materials	\$206,686	1.4%	26.69%	2.11	24.70	1.59%	(7.63)%
	Consumer Discretionary Information Technology Financials Industrials Financials Financials Industrials Information Technology Industrials	Sector         Market Value           Consumer Discretionary Information Technology         \$177,174           Financials         \$113,870           Industrials         \$339,932           Financials         \$159,471           Financials         \$99,082           Industrials         \$189,698           Information Technology         \$471,072           Industrials         \$387,721	Sector         Market Value         of Portfolio           Consumer Discretionary Information Technology Financials Industrials Financials Financials Financials Financials Financials Financials Financials Financials Financials Sepondary Industrials Sepondary Industrials Sepondary Sepondary Industrials Sepondary Sepond	Sector         Market Value         of Portfolio Portfolio         Qtrly Return           Consumer Discretionary Information Technology Financials Industrials Financials Financials Industrials Sa39,932 Signature Financials Signature Financials Signature Financials Signature Signa	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Consumer Discretionary Information Technology         \$86,293         0.6%         58.48%         1.42           Information Technology         \$177,174         1.2%         35.64%         3.33           Financials         \$113,870         0.8%         33.59%         5.56           Industrials         \$339,932         2.3%         32.40%         8.45           Financials         \$159,471         1.1%         31.59%         1.50           Financials         \$99,082         0.7%         30.53%         6.70           Industrials         \$189,698         1.3%         30.06%         6.00           Information Technology         \$471,072         3.2%         28.67%         7.22           Industrials         \$387,721         2.6%         28.42%         4.22	Sector         Warket Value         of Portfolio         Qtrly Return         Market Capital         Ratio           Consumer Discretionary Information Technology         \$86,293         0.6%         58.48%         1.42         6.90           Information Technology         \$177,174         1.2%         35.64%         3.33         23.41           Financials         \$113,870         0.8%         33.59%         5.56         8.58           Industrials         \$339,932         2.3%         32.40%         8.45         23.16           Financials         \$159,471         1.1%         31.59%         1.50         10.37           Financials         \$99,082         0.7%         30.53%         6.70         12.72           Industrials         \$189,698         1.3%         30.06%         6.00         31.94           Information Technology         \$471,072         3.2%         28.67%         7.22         37.13           Industrials         \$387,721         2.6%         28.42%         4.22         20.21	Sector         Value         Percent Value         Return         Capital Capital         Ratio         Piolidend Yield           Consumer Discretionary Information Technology         \$86,293         0.6%         58.48%         1.42         6.90         0.00%           Financials Industrials         \$113,870         0.8%         33.59%         5.56         8.58         5.40%           Industrials         \$339,932         2.3%         32.40%         8.45         23.16         0.55%           Financials         \$159,471         1.1%         31.59%         1.50         10.37         3.12%           Financials         \$99,082         0.7%         30.53%         6.70         12.72         1.01%           Industrials         \$189,698         1.3%         30.06%         6.00         31.94         0.43%           Information Technology Industrials         \$387,721         2.6%         28.42%         4.22         20.21         0.73%

#### **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
Omnicell Inc	Health Care	\$70,218	0.5%	(16.45)%	1.71	22.36	0.00%	(1.84)%
Icu Med Inc	Health Care	\$207,260	1.4%	(16.19)%	2.41	18.90	0.00%	(4.08)%
Envista Holdings Corp	Health Care	\$71,963	0.5%	(13.70)%	4.12	14.25	0.00%	4.30%
National Resh Corp Cl A	Health Care	\$215,246	1.5%	(10.57)%	0.97	44.20	1.21%	-
Forward Air Corp	Industrials	\$182,826	1.2%	(8.20)%	1.61	13.95	1.53%	19.34%
Choice Hotels Intl Inc	Consumer Discretionary	\$200,088	1.3%	(7.28)%	5.64	16.74	1.01%	5.40%
Kirby Corp	Industrials	\$234,891	1.6%	(5.22)%	4.64	15.49	0.00%	(4.93)%
Selective Insurance Grp	Financials	\$432,440	2.9%	(3.25)%	6.03	12.80	1.41%	23.80%
Patterson Cos	Health Care	\$111,609	0.8%	(3.19)%	2.64	11.45	3.65%	10.58%
Huron Consulting Group Inc	Industrials	\$317,241	2.1%	(1.30)%	1.93	18.72	0.00%	15.03%

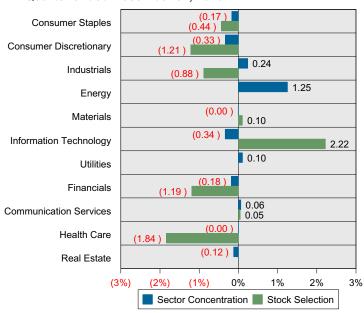


#### Atlanta Capital vs S&P 600 Small Cap Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

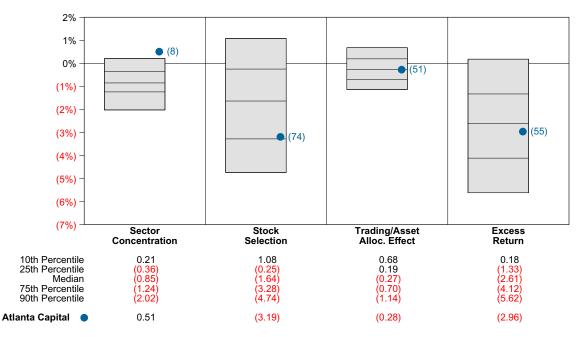
#### Attribution Effects by Sector vs S&P 600 Small Cap Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.17%)	(0.44%)
Consumer Discretionary	(0.33%)	(1.21%)
Industrials	0.24%	(0.88%)
Energy	1.25%	0.00%
Materials	(0.00%)	0.10%
Information Technology	(0.34%)	2.22%
Utilities	0.10%	0.00%
Financials	(0.18%)	(1.19%)
Communication Services	s 0.06%	0.05%
Health Care	(0.00%)	(1.84%)
Real Estate	(0.12%)	0.00%
Total	0.51%	(3.19%)

Manager Return	Index Return _	Sector Concen _	_ Stock Select _	_ <u>Trading</u> _	Asset Alloc
12.16%	15.12%	0.51%	(3.19%)	0.17%	(0.44%)

#### **Equity Attribution Ranking vs Callan Small Capitalization** Quarter ended December 31, 2023



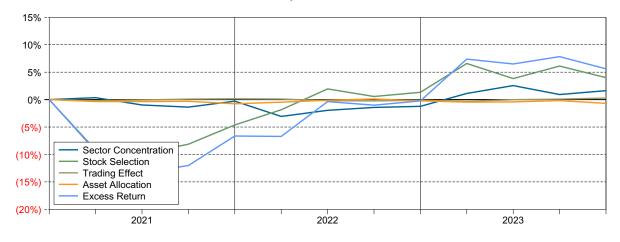


#### Atlanta Capital vs S&P 600 Small Cap Index **Cumulative Equity Buy and Hold Attribution**

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

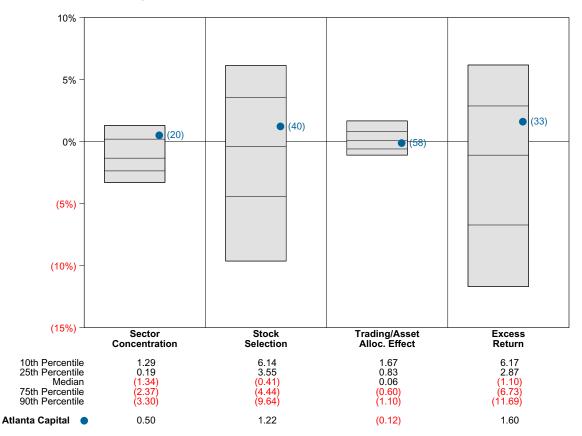
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs 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	<u>Sector Concen</u> →	Stock Select _	<sub></sub> Trading _	Asset Alloc
8.89%	7.28%	0.50%	1.22%	0.08%	(0.21%)

#### **Equity Attribution Ranking vs Callan Small Capitalization** Three Years Ended December 31, 2023





#### NTAM R2000 Index Period Ended December 31, 2023

#### **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.

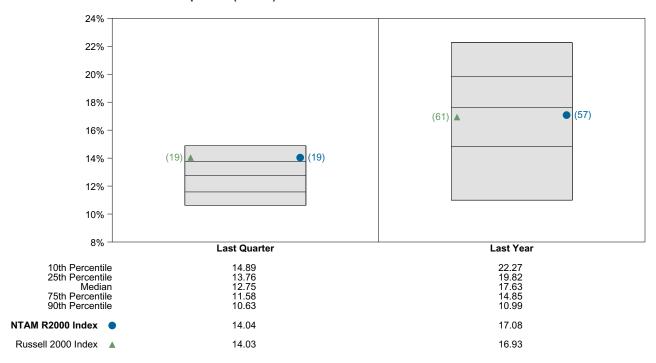
#### **Quarterly Summary and Highlights**

- NTAM R2000 Index's portfolio posted a 14.04% return for the quarter placing it in the 19 percentile of the Callan Small Cap Core group for the quarter and in the 57 percentile for the last year.
- NTAM R2000 Index's portfolio outperformed the Russell 2000 Index by 0.01% for the quarter and outperformed the Russell 2000 Index for the year by 0.15%.

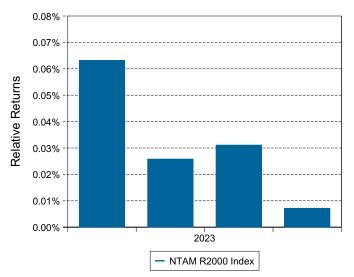
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$2,303,266
Net New Investment	\$71,529
Investment Gains/(Losses)	\$261,883
Ending Market Value	\$2,636,678

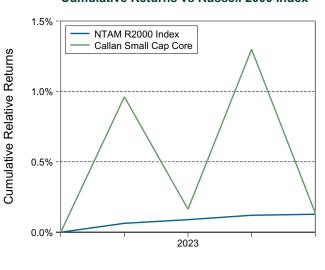
#### Performance vs Callan Small Cap Core (Gross)



#### Relative Return vs Russell 2000 Index



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

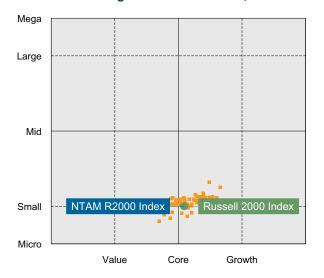




#### **Current Holdings Based Style Analysis NTAM R2000 Index** As of December 31, 2023

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

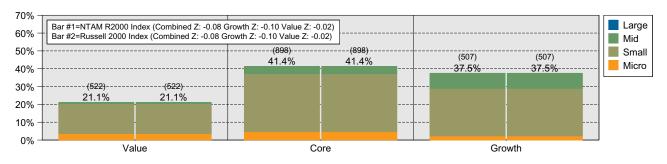
#### Style Map vs Callan Small Cap Core Holdings as of December 31, 2023



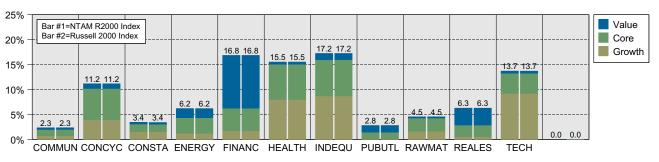
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	21.1% (522)	41.4% (898)	37.5% (507)	100.0% (1927)
Total	21.1% (522)	41.4% (898)	37.5% (507)	100.0% (1927)
	3.6% (290)	4.7% (422)	2.3% (161)	10.6% (873)
Micro				
	3.6% (290)	4.7% (422)	2.3% (161)	10.6% (873)
	16.7% (228)	32.4% (456)	26.6% (313)	75.7% (997)
Small	10.7 /0 (220)	32.470 (430)	20.070 (313)	13.1 /0 (991)
	16.7% (228)	32.4% (456)	26.6% (313)	75.7% (997)
iviiu	0.8% (4)	4.2% (20)	8.6% (33)	13.7% (57)
Mid	0.8% (4)	4.2% (20)	8.6% (33)	13.7% (57)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	0.070 (0)	0.070 (0)	0.0 /0 (0)	0.070 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



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

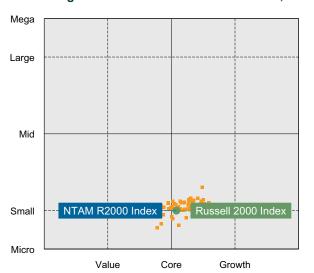




#### **Historical Holdings Based Style Analysis** NTAM R2000 Index For One Year Ended December 31, 2023

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.

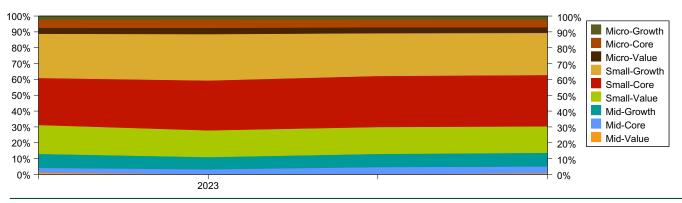
#### Average Style Map vs Callan Small Cap Core Holdings for One Year Ended December 31, 2023



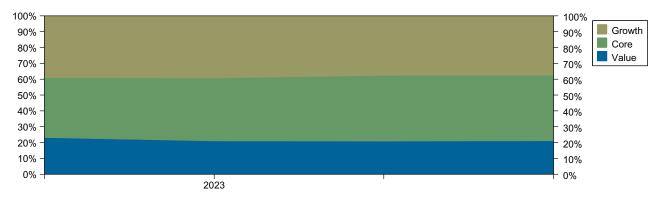
#### **Average Style Exposure Matrix** Holdings for One Year Ended December 31, 2023

	Value	Core	Growth	Total
. 0.0.	21.6% (530)	40.1% (893)	38.3% (509)	<b>100.0%</b> (1932)
Total	21.6% (530)	40.1% (893)	38.3% (509)	100.0% (1932)
	3.7% (290)	5.0% (430)	2.3% (156)	11.0% (876)
Micro	0.70/	5.00/	0.00/	44.00/
	3.7% (290)	5.0% (430)	2.3% (156)	11.0% (876)
	17.2% (237)	31.5% (446)	27.7% (319)	<b>76.3%</b> (1002)
Small				
	17.2% (237)	31.5% (446)	27.7% (319)	76.3% (1002)
	0.6% (3)	3.7% (17)	8.4% (34)	<b>12.7%</b> (54)
Mid	(1)		( )	12 (1)
	0.6% (3)	3.7% (17)	8.4% (34)	12.7% (54)
Large	0.0% (0)	0.0% (0)	0.0% (0)	<b>0.0%</b> (0)
_	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



#### NTAM R2000 Index Historical Style Only Exposures



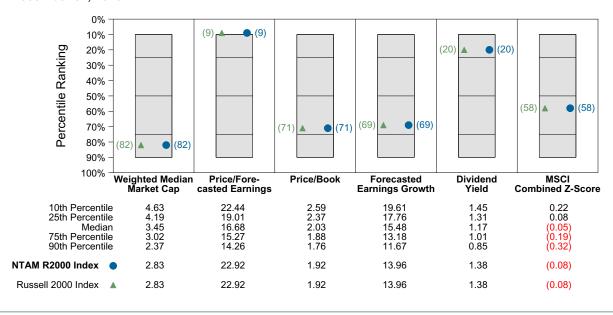


#### NTAM R2000 Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

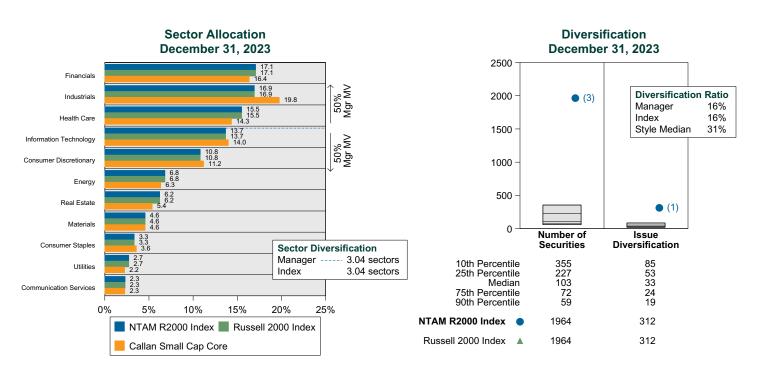
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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





## NTAM R2000 Index Top 10 Portfolio Holdings Characteristics as of December 31, 2023

#### 10 Largest Holdings

		Endina	Price/ ng Percent Forecasted					Forecasted	
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings	
Super Micro Computer Inc	Information Technology	\$13,717	0.5%	3.66%	15.79	15.11	0.00%	57.42%	
Simpson Manufacturing Co Inc	Industrials	\$8,842	0.3%	32.40%	8.45	23.16	0.55%	33.50%	
E L F Beauty Inc	Consumer Staples	\$8,104	0.3%	31.42%	7.97	48.78	0.00%	28.70%	
Cytokinetics Inc	Health Care	\$8,085	0.3%	183.38%	8.19	(18.62)	0.00%	-	
Microstrategy	Information Technology	\$8,022	0.3%	92.40%	8.64	236.56	0.00%	97.61%	
Ufp Industries Inc	Industrials	\$7,846	0.3%	22.94%	7.76	15.83	0.95%	39.32%	
Scientific Games Corp Cl A	Consumer Discretionary	\$7,802	0.3%	15.11%	7.39	23.70	0.00%	5.41%	
Onto Innovation Inc	Information Technology	\$7,791	0.3%	19.90%	7.50	32.05	0.00%	38.19%	
Rambus Inc Del	Information Technology	\$7,743	0.3%	22.33%	7.34	32.16	0.00%	14.05%	
Bellring Brands	Consumer Staples	\$7,608	0.3%	34.44%	7.27	33.09	0.00%	17.40%	

#### **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
Nkarta Inc Common Stock	Health Care	\$207	0.0%	375.17%	0.32	(2.79)	0.00%	-
Altimmune Inc	Health Care	\$618	0.0%	330.61%	0.60	(7.18)	0.00%	-
Alx Oncology Holdings Inc	Health Care	\$417	0.0%	210.19%	0.74	(4.37)	0.00%	-
Pulse Biosciences Inc	Health Care	\$206	0.0%	203.74%	0.67	(18.46)	0.00%	-
Immunitybio Inc	Health Care	\$692	0.0%	196.93%	3.35	(7.38)	0.00%	-
Eyepoint Pharmaceuticals Inc	Health Care	\$642	0.0%	189.86%	1.13	(12.78)	0.00%	-
Cleanspark Inc	Information Technology	\$1,718	0.1%	189.50%	2.04	(21.46)	0.00%	-
Cytokinetics Inc	Health Care	\$8,085	0.3%	183.38%	8.19	(18.62)	0.00%	-
Rayzebio	Health Care	\$1,299	0.0%	180.04%	3.79	(38.45)	0.00%	-
Marathon Digital Holdings In	Information Technology	\$5,203	0.2%	176.39%	5.23	138.18	0.00%	-

#### **10 Worst Performers**

						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Ventyx Biosciences Inc Common Stock	Health Care	\$120	0.0%	(92.89)%	0.15	(0.86)	0.00%	-
Enviva Inc	Energy	\$33	0.0%	(86.68)%	0.07	(0.45)	0.00%	(3.83)%
Aclaris Therapeutics Inc	Health Care	\$76	0.0%	(84.67)%	0.07	(0.80)	0.00%	-
Ocean Biomedical Inc	Health Care	\$6	0.0%	(83.08)%	0.02	(0.74)	0.00%	-
Reneo Pharmaceuticals	Health Care	\$22	0.0%	(78.99)%	0.05	(1.44)	0.00%	-
Charge Enterprises Inc	Communication Services	\$16	0.0%	(77.05)%	0.02	(1.43)	0.00%	-
Cano Health Inc Com Cl A	Health Care	\$16	0.0%	(76.85)%	0.02	(0.16)	0.00%	-
Caremax Inc Com Cl A	Health Care	\$39	0.0%	(76.51)%	0.06	(0.90)	0.00%	-
Velo3d Inc Common Stock	Industrials	\$38	0.0%	(74.51)%	0.10	(2.09)	0.00%	-
Fisker Inc CI A Com Stk	Consumer Discretionary	\$380	0.0%	(72.74)%	0.38	(3.45)	0.00%	-

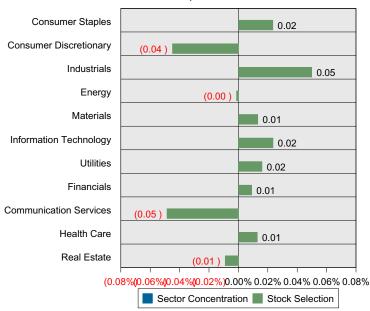


#### NTAM R2000 Index vs Russell 2000 Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

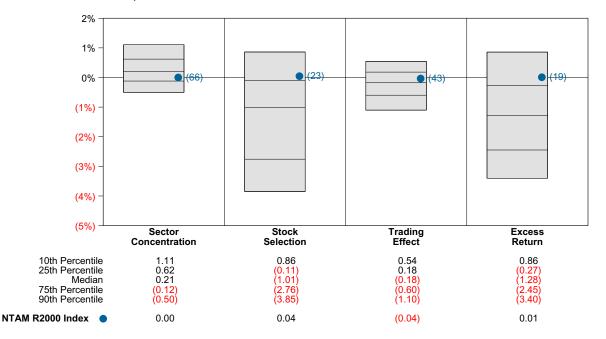
#### Attribution Effects by Sector vs Russell 2000 Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	0.00%	0.02%
Consumer Discretionary	0.00%	(0.04%)
Industrials	0.00%	0.05%
Energy	0.00%	(0.00%)
Materials	0.00%	0.01%
Information Technology	0.00%	0.02%
Utilities	0.00%	0.02%
Financials	0.00%	0.01%
Communication Services	s 0.00%	(0.05%)
Health Care	0.00%	0.01%
Real Estate	0.00%	(0.01%)
Total	0.00%	0.04%

Manager Return _	Index Return _	Sector Concentration	_ Stock Selection _	Trading
14.04%	14.03%	0.00%	0.04%	(0.04%)

#### **Equity Attribution Ranking vs Callan Small Cap Core** Quarter ended December 31, 2023



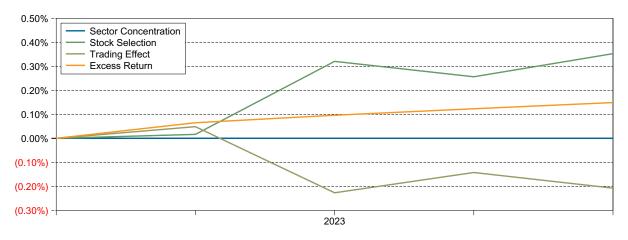


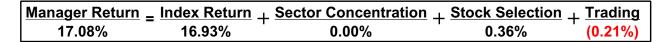
#### NTAM R2000 Index vs Russell 2000 Index **Cumulative Equity Buy and Hold Attribution**

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

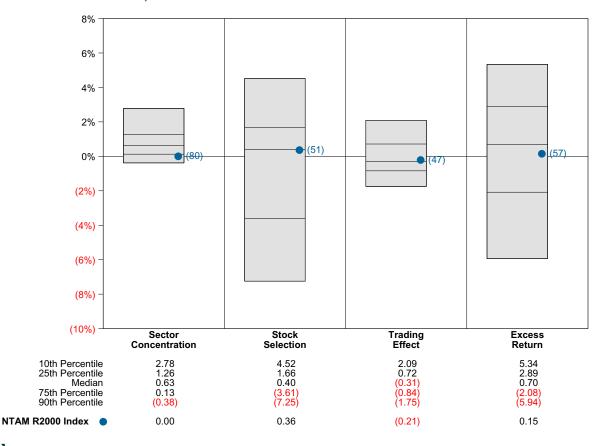
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs 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 Year Ended December 31, 2023





#### **Riverbridge Small Cap Growth** Period Ended December 31, 2023

#### **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.

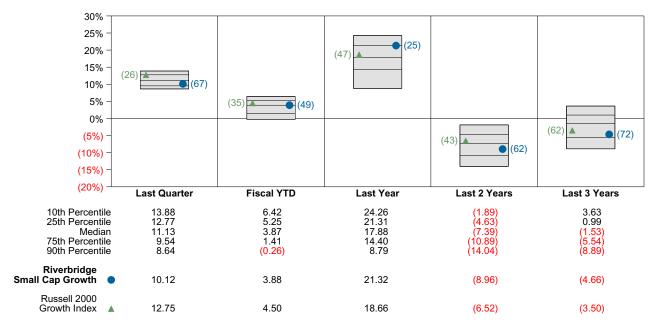
#### **Quarterly Summary and Highlights**

- Riverbridge Small Cap Growth's portfolio posted a 10.12% return for the quarter placing it in the 67 percentile of the Callan Small Cap Growth group for the quarter and in the 25 percentile for the last year.
- Riverbridge Small Cap Growth's portfolio underperformed the Russell 2000 Growth Index by 2.63% for the guarter and outperformed the Russell 2000 Growth Index for the year by

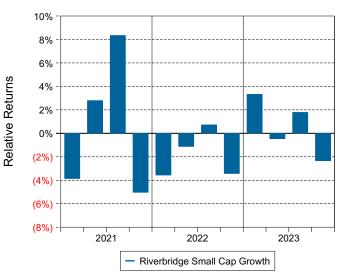
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$13,438,903
Net New Investment	\$60,293
Investment Gains/(Losses)	\$1,358,843
Ending Market Value	\$14,858,039

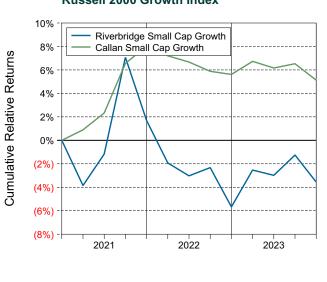
#### Performance vs Callan Small Cap Growth (Gross)



#### Relative Return vs Russell 2000 Growth Index



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

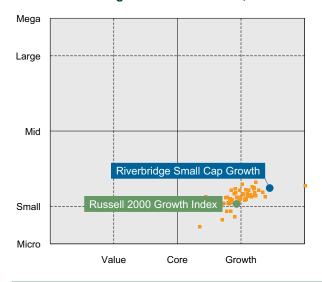




#### **Current Holdings Based Style Analysis Riverbridge Small Cap Growth** As of December 31, 2023

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

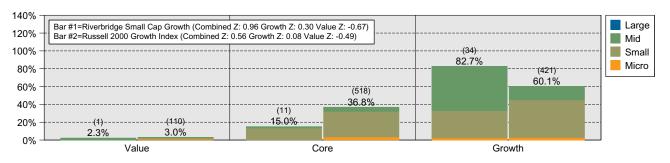
#### Style Map vs Callan Small Cap Growth Holdings as of December 31, 2023



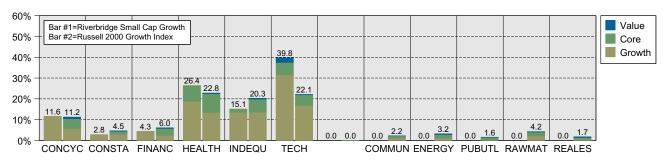
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	3.0% (110)	36.8% (518)	60.1% (421)	100.0% (1049)
Total				
	2.3% (1)	15.0% (11)	82.7% (34)	100.0% (46)
	0.9% (70)	3.5% (216)	2.8% (119)	7.1% (405)
Micro				
	0.0% (0)	0.0% (0)	2.3% (3)	2.3% (3)
	1.9% (39)	28.6% (287)	42.2% (270)	72.7% (596)
Small	, ,	, ,	, ,	
	0.0% (0)	13.4% (10)	30.6% (14)	44.1% (24)
	0.2% (1)	4.8% (15)	15.1% (32)	20.2% (48)
Mid				
	2.3% (1)	1.6% (1)	49.8% (17)	53.6% (19)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	0.070 (0)	0.070 (0)	0.070 (0)	0.0 /0 (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



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



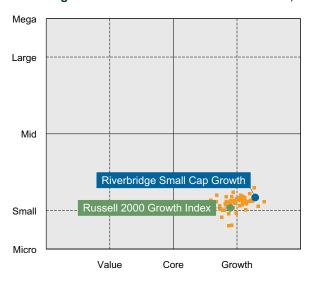


#### **Historical Holdings Based Style Analysis Riverbridge Small Cap Growth** For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various market capitalization and style segments of the domestic equity market. The market is segmented guarterly by capitalization and style. The capitalization segments are dictated by capitalization decile breakpoints. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each capitalization/style segment of the market. The next two style exposure charts illustrate the actual quarterly cap/style and style only segment exposures of the portfolio through history.

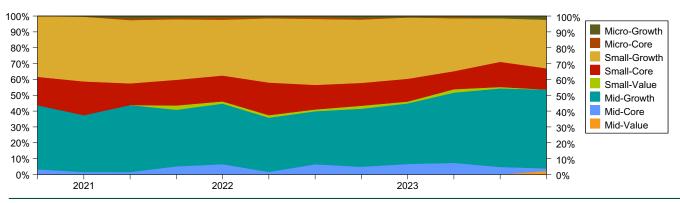
#### Average Style Map vs Callan Small Cap Growth Holdings for Three Years Ended December 31, 2023

#### **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

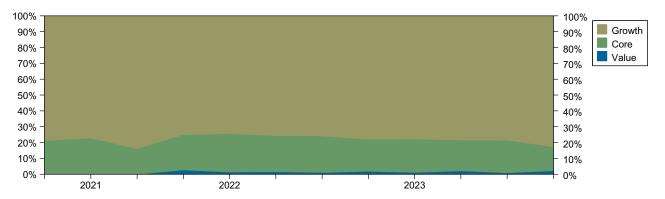




#### Riverbridge Small Cap Growth Historical Cap/Style Exposures



Riverbridge Small Cap Growth Historical Style Only Exposures



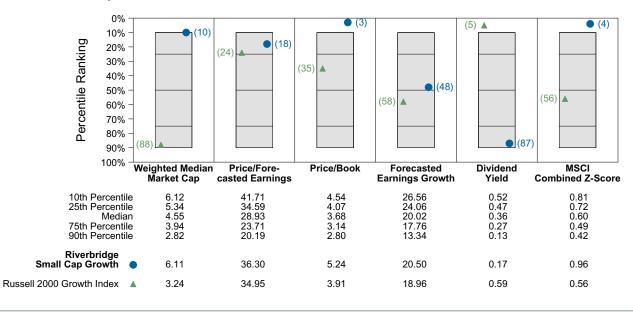


#### **Riverbridge Small Cap Growth Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

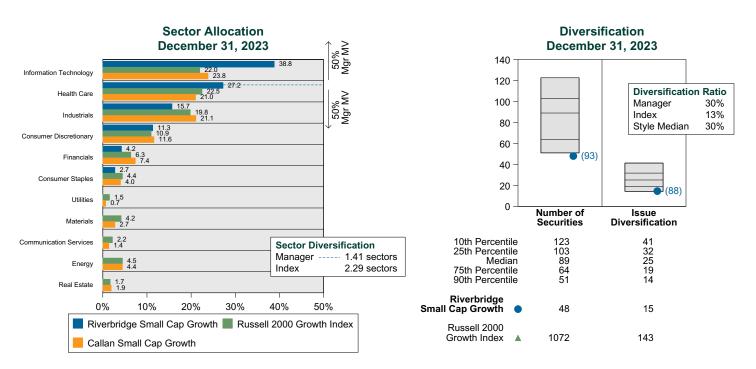
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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





# Riverbridge Small Cap Growth Top 10 Portfolio Holdings Characteristics as of December 31, 2023

#### 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	\$698,947	4.7%	(47.93)%	10.10	35.76	0.00%	28.62%
Information Technology	\$684,643	4.6%	13.62%	7.11	61.56	0.00%	22.85%
Health Care	\$669,462	4.5%	26.60%	9.41	30.72	0.00%	30.59%
Consumer Discretionary	\$661,222	4.5%	32.48%	11.76	32.70	0.00%	19.20%
Industrials	\$551,575	3.7%	10.20%	12.18	22.36	1.62%	25.32%
Consumer Discretionary	\$547,042	3.7%	12.97%	3.96	17.37	0.00%	1.29%
Information Technology	\$511,102	3.4%	0.19%	5.10	127.07	0.00%	-
Consumer Discretionary	\$447,467	3.0%	23.27%	11.89	51.96	0.00%	6.00%
Information Technology	\$418,738	2.8%	5.69%	3.23	31.41	0.00%	8.57%
Industrials	\$412,125	2.8%	(9.27)%	9.26	25.24	0.00%	19.90%
	Information Technology Information Technology Health Care Consumer Discretionary Industrials Consumer Discretionary Information Technology Consumer Discretionary Information Technology	Sector Value  Information Technology \$698,947 Information Technology \$684,643 Health Care \$669,462 Consumer Discretionary \$661,222 Industrials \$551,575 Consumer Discretionary \$547,042 Information Technology \$511,102 Consumer Discretionary \$447,467 Information Technology \$418,738	Sector         Market Value         of Value           Information Technology         \$698,947         4.7%           Information Technology         \$684,643         4.6%           Health Care         \$669,462         4.5%           Consumer Discretionary         \$661,222         4.5%           Industrials         \$551,575         3.7%           Consumer Discretionary         \$547,042         3.7%           Information Technology         \$511,102         3.4%           Consumer Discretionary         \$447,467         3.0%           Information Technology         \$418,738         2.8%	Sector         Market Value         of Value         Qtrly Return           Information Technology Information Technology Health Care         \$698,947         4.7%         (47.93)%           Health Care         \$669,462         4.5%         26.60%           Consumer Discretionary Industrials         \$551,575         3.7%         10.20%           Consumer Discretionary Information Technology         \$511,102         3.4%         0.19%           Consumer Discretionary Information Technology         \$447,467         3.0%         23.27%           Information Technology         \$418,738         2.8%         5.69%	Sector         Market Value         of Portfolio Portfolio         Qtrly Return         Market Capital           Information Technology Information Technology Health Care         \$698,947         4.7%         (47.93)%         10.10           Health Care Health Care Consumer Discretionary Industrials         \$669,462         4.5%         26.60%         9.41           Consumer Discretionary Information Technology Information Technology S511,102         3.7%         10.20%         12.18           Consumer Discretionary Information Technology Information Technology S447,467         3.0%         23.27%         11.89           Information Technology S418,738         2.8%         5.69%         3.23	Sector         Ending Market Value         Percent of Portfolio         Qtrly Return         Market Capital         Forecasted Earnings Ratio           Information Technology Information Technology Health Care         \$698,947         4.7%         (47.93)%         10.10         35.76           Health Care         \$669,462         4.5%         26.60%         9.41         30.72           Consumer Discretionary Industrials         \$551,575         3.7%         10.20%         12.18         22.36           Consumer Discretionary Information Technology         \$547,042         3.7%         12.97%         3.96         17.37           Information Technology         \$511,102         3.4%         0.19%         5.10         127.07           Consumer Discretionary Information Technology         \$447,467         3.0%         23.27%         11.89         51.96           Information Technology         \$418,738         2.8%         5.69%         3.23         31.41	Sector         Warket Value         of Portfolio         Qtrly Return         Market Capital         Earnings Ratio         Dividend Yield           Information Technology Information Technology Health Care         \$698,947         4.7%         (47.93)%         10.10         35.76         0.00%           Health Care         \$664,643         4.6%         13.62%         7.11         61.56         0.00%           Health Care         \$669,462         4.5%         26.60%         9.41         30.72         0.00%           Consumer Discretionary Industrials         \$551,575         3.7%         10.20%         12.18         22.36         1.62%           Consumer Discretionary Information Technology         \$511,102         3.4%         0.19%         5.10         127.07         0.00%           Consumer Discretionary Information Technology         \$447,467         3.0%         23.27%         11.89         51.96         0.00%           Information Technology         \$418,738         2.8%         5.69%         3.23         31.41         0.00%

#### **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
Five Below Inc	Consumer Discretionary	\$661,222	4.5%	32.48%	11.76	32.70	0.00%	19.20%
Freshpet Inc	Consumer Staples	\$401,005	2.7%	31.69%	4.19	(328.64)	0.00%	-
Doubleverify Holdings Inc	Information Technology	\$291,886	2.0%	31.59%	6.25	80.48	0.00%	42.62%
International Mny Express In	Financials	\$128,144	0.9%	30.47%	0.77	9.97	0.00%	36.54%
Medpace Hldgs Inc	Health Care	\$669,462	4.5%	26.60%	9.41	30.72	0.00%	30.59%
Pennant Group	Health Care	\$103,147	0.7%	25.07%	0.42	16.28	0.00%	(2.47)%
Kadant Inc	Industrials	\$366,926	2.5%	24.43%	3.28	28.02	0.42%	16.96%
Definitive Healthcare Corp Common St	Health Care	\$105,046	0.7%	24.38%	1.16	31.16	0.00%	-
Phreesia Inc	Health Care	\$117,162	0.8%	23.93%	1.29	(53.59)	0.00%	-
Floor & Decor Hldgs Inc Cl A	Consumer Discretionary	\$447,467	3.0%	23.27%	11.89	51.96	0.00%	6.00%

#### **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
Globant S A	Information Technology	\$698,947	4.7%	(47.93)%	10.10	35.76	0.00%	28.62%
Kinsale Cap Group Inc	Financials	\$324,863	2.2%	(19.10)%	7.76	23.32	0.17%	49.11%
Ccc Intelligent Solutions HI	Information Technology	\$323,613	2.2%	(14.68)%	7.23	32.08	0.00%	(29.00)%
Amn Healthcare Services Inc	Health Care	\$175,818	1.2%	(12.09)%	2.83	15.34	0.00%	37.62%
Paylocity Hldg Corp	Industrials	\$412,125	2.8%	(9.27)%	9.26	25.24	0.00%	19.90%
Paycor Hcm Inc Common Stock Usd.001	Information Technology	\$247,141	1.7%	(5.43)%	3.83	43.44	0.00%	19.46%
Cognex Corp	Information Technology	\$235,414	1.6%	(1.45)%	7.19	42.03	0.72%	(0.35)%
Acv Auctions Inc Com Cl A	Industrials	\$209,706	1.4%	(0.21)%	2.06	(61.09)	0.00%	-
Privia Health Group Inc	Health Care	\$285,987	1.9%	0.12%	2.72	78.07	0.00%	-
Workiva Inc Com Cl A	Information Technology	\$511,102	3.4%	0.19%	5.10	127.07	0.00%	-

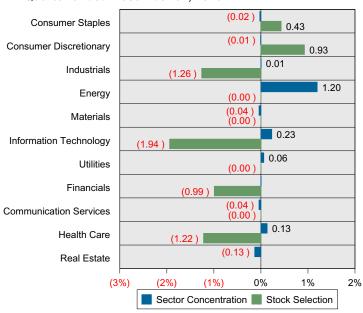


#### Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

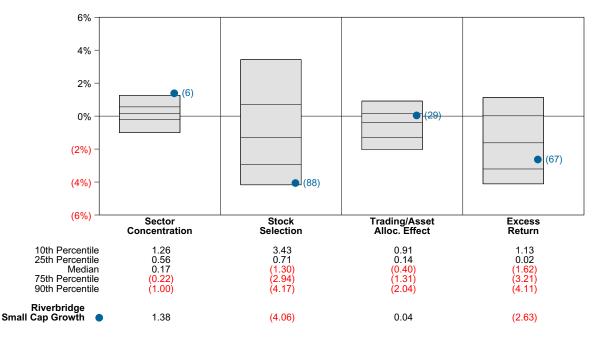
#### Attribution Effects by Sector vs Russell 2000 Growth Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.02%)	0.43%
Consumer Discretionary	(0.01%)	0.93%
Industrials	0.01%	(1.26%)
Energy	1.20%	(0.00%)
Materials	(0.04%)	(0.00%)
Information Technology	0.23%	(1.94%)
Utilities	0.06%	(0.00%)
Financials	0.00%	(0.99%)
Communication Services	s (0.04%)	(0.00%)
Health Care	0.13%	(1.22%)
Real Estate	(0.13%)	0.00%
Total	1.38%	(4.06%)

Manager Return	Index Return	Sector Concen _	Stock Select _	<sub>∔</sub> <u>Trading</u> _	Asset Alloc
10.12%	12.75%	1.38%	(4.06%)	0.25%	(0.21%)

#### **Equity Attribution Ranking vs Callan Small Cap Growth** Quarter ended December 31, 2023



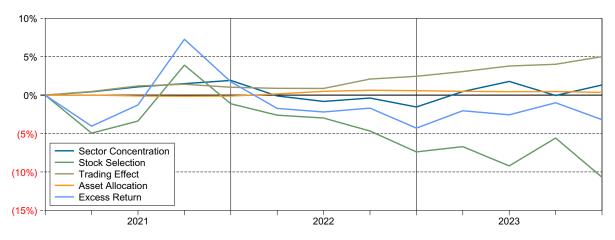


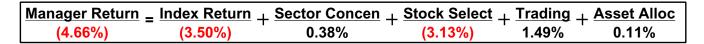
#### Riverbridge Small Cap Growth vs Russell 2000 Growth Index **Cumulative Equity Buy and Hold Attribution**

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

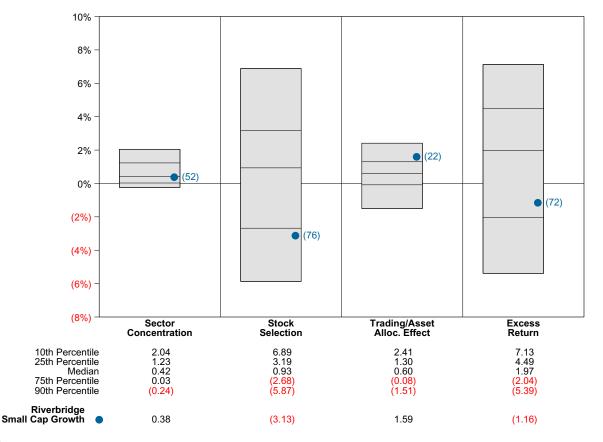
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs 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 Years Ended December 31, 2023





#### Sycamore Small Cap Value Period Ended December 31, 2023

#### **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.

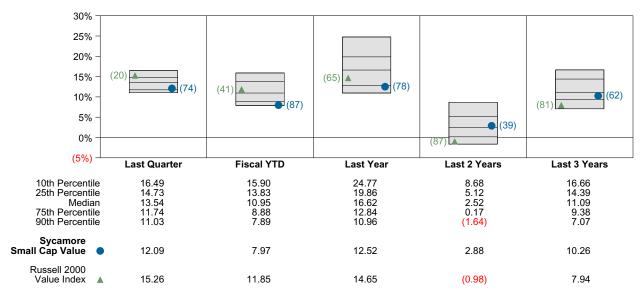
#### **Quarterly Summary and Highlights**

- Sycamore Small Cap Value's portfolio posted a 12.09% return for the quarter placing it in the 74 percentile of the Callan Small Cap Value group for the quarter and in the 78 percentile for the last year.
- Sycamore Small Cap Value's portfolio underperformed the Russell 2000 Value Index by 3.16% for the quarter and underperformed the Russell 2000 Value Index for the year by 2.13%.

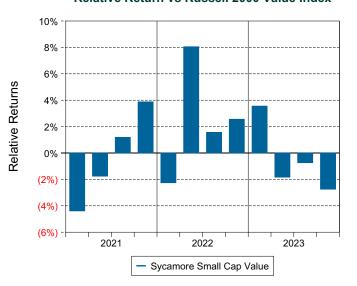
Quarterly	v Asset	Growth
addi toii	, , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.0111.

Beginning Market Value	\$13,297,527
Net New Investment	\$-88,821
Investment Gains/(Losses)	\$1,598,662
Ending Market Value	\$14,807,368

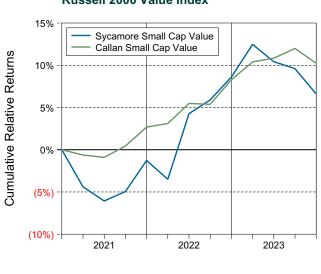
#### Performance vs Callan Small Cap Value (Gross)



#### Relative Return vs Russell 2000 Value Index



#### Cumulative Returns vs Russell 2000 Value Index

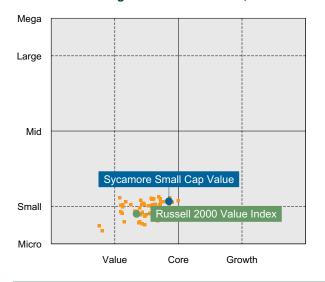




#### **Current Holdings Based Style Analysis** Sycamore Small Cap Value As of December 31, 2023

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

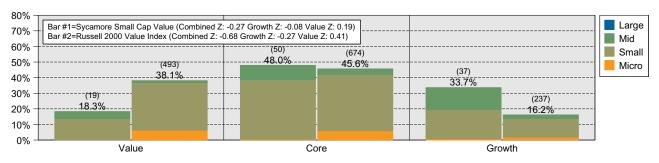
#### Style Map vs Callan Small Cap Value Holdings as of December 31, 2023



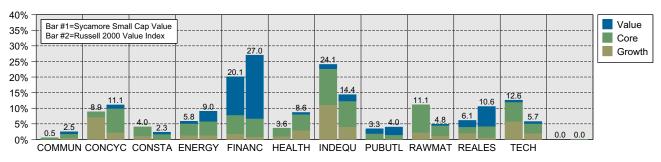
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	38.1% (493)	45.6% (674)	16.2% (237)	100.0% (1404)
Total	18.3% (19)	48.0% (50)	33.7% (37)	100.0% (106)
	6.2% (268)	5.9% (329)	1.8% (91)	13.8% (688)
Micro				
	0.0% (0)	0.5% (1)	0.7% (1)	1.2% (2)
	30.6% (222)	36.0% (333)	11.9% (136)	78.5% (691)
Small	10.7 % (10)	00.170 (00)	10.770 (21)	70.070 (70)
	13.7% (16)	38.1% (39)	18.7% (21)	70.5% (76)
IVIIG	1.4% (3)	3.7% (12)	2.5% (10)	7.7% (25)
Mid	4.6% (3)	9.4% (10)	14.3% (15)	28.4% (28)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	0.00/	0.00/	0.00/	0.00/
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



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



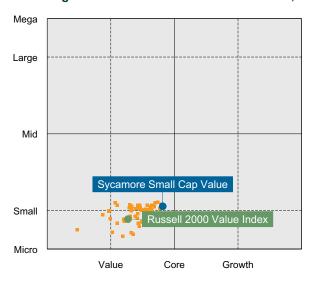


#### **Historical Holdings Based Style Analysis Sycamore Small Cap Value** For Three Years Ended December 31, 2023

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.

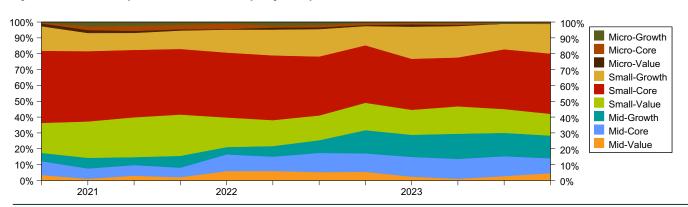
#### Average Style Map vs Callan Small Cap Value Holdings for Three Years Ended December 31, 2023

**Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

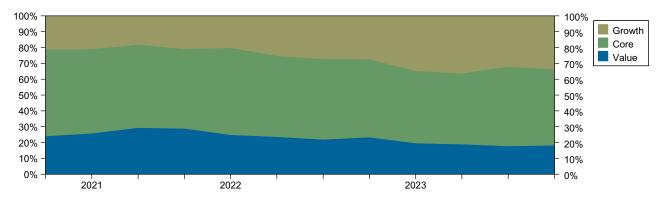




#### Sycamore Small Cap Value Historical Cap/Style Exposures



Sycamore Small Cap Value Historical Style Only Exposures



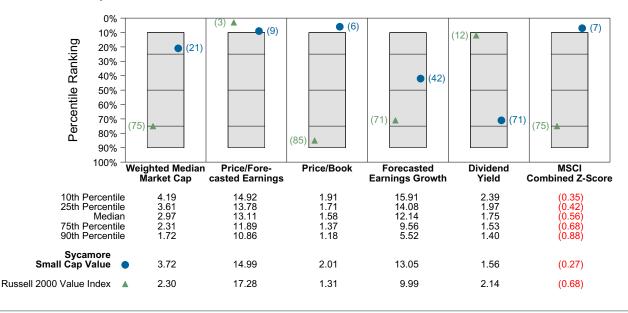


#### **Sycamore Small Cap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

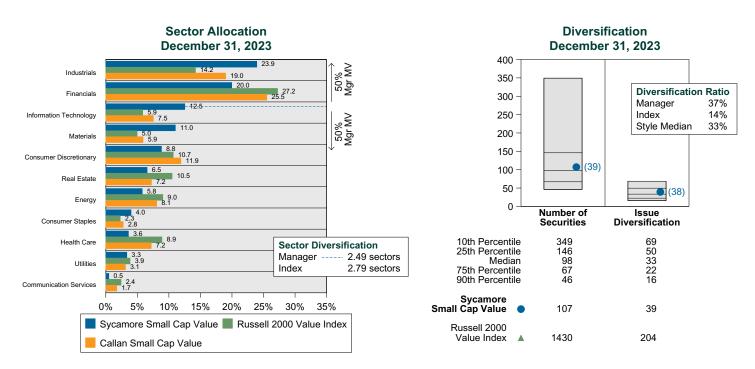
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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





# Sycamore Small Cap Value Top 10 Portfolio Holdings Characteristics as of December 31, 2023

#### 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
South St Corp	Financials	\$249,128	1.7%	26.32%	6.42	12.86	2.46%	8.85%
Umb Finl Corp	Financials	\$238,118	1.6%	35.34%	4.05	11.95	1.87%	19.31%
Wintrust Finl Corp	Financials	\$220,745	1.5%	23.47%	5.68	9.54	1.73%	15.30%
Hub Group Inc Cl A	Industrials	\$217,898	1.5%	17.06%	2.87	16.96	0.00%	(8.10)%
Werner Enterprises Inc	Industrials	\$214,180	1.4%	9.14%	2.69	17.27	1.32%	(2.85)%
Hillenbrand Inc	Industrials	\$211,018	1.4%	13.67%	3.35	12.33	1.84%	12.02%
Integer Hldgs Corp	Health Care	\$210,545	1.4%	26.33%	3.30	18.63	0.00%	15.80%
Magnolia Oil & Gas Corp Cl A	Energy	\$197,997	1.3%	(6.56)%	3.94	8.82	2.16%	62.64%
Matador Res Co	Energy	\$197,020	1.3%	(4.06)%	6.77	6.53	1.40%	66.80%
First Amern Finl Corp	Financials	\$195,898	1.3%	15.05%	6.65	12.93	3.29%	(0.04)%

#### **10 Best Performers**

Stock         Sector         Value Value         0.6% Portfolio Portfolio         50.67% Return         3.71 Portfolio Ratio         25.40 Portfolio Ratio         22.27% Portfolio Ratio           Walker & Dunlop Inc Signet Jewelers         Financials Consumer Discretionary         \$93,248 Portfolio Ratio         0.6% Portfolio Ratio         3.71 Portfolio Ratio         25.40 Portfolio Ratio         2.27% Portfolio Ratio         25.40 Portfolio Ratio         2.27% Portfolio Ratio         25.40 Portfolio Ratio	
StockSectorValuePortfolioReturnCapitalRatioYieldWalker & Dunlop IncFinancials\$93,2480.6%50.67%3.7125.402.27%	Forecasted
Walker & Dunlop Inc Financials \$93,248 0.6% 50.67% 3.71 25.40 2.27%	Growth in
, , , , , , , , , , , , , , , , , , ,	Earnings
Cignet levelers	(6.49)%
Signet Jewelers Consumer Discretionary \$155,527 1.1% 49.80% 4.75 10.13 0.87%	16.21%
Bank Hawaii Corp Financials \$110,139 0.7% 47.59% 2.88 19.83 3.86%	(0.93)%
Scripps E W Co Ohio Cl A New Communication Services \$69,513 0.5% 45.80% 0.58 4.43 0.00%	34.26%
Kontoor Brands Consumer Discretionary \$69,910 0.5% 43.46% 3.51 12.52 3.21%	6.00%
Core & Main Inc Industrials \$155,983 1.1% 40.07% 7.24 16.77 0.00%	103.67%
Lakeland Finl Corp Financials \$160,294 1.1% 38.64% 1.66 19.20 2.82%	2.76%
Viad Corp Industrials \$96,111 0.6% 38.17% 0.76 21.01 0.00%	15.67%
United Bankshares Inc West V Financials \$158,461 1.1% 37.54% 5.07 14.50 3.94%	3.88%
Umb Finl Corp         Financials         \$238,118         1.6%         35.34%         4.05         11.95         1.87%	19.31%

#### **10 Worst Performers**

		Endina	Price/ Percent Forecasted			Forecasted		
Stock	Sector	Market Value	of Portfolio	Qtrly Return	Market Capital	Earnings Ratio	Dividend Yield	Growth in Earnings
Astec Industries	Industrials	\$111,228	0.8%	(20.69)%	0.85	13.63	1.40%	4.53%
Air Transport Services Grp I	Industrials	\$59,786	0.4%	(15.62)%	1.15	10.88	0.00%	8.15%
Mattel Inc	Consumer Discretionary	\$179,360	1.2%	(14.30)%	6.67	13.29	0.00%	9.50%
Civitas Resources Inc	Energy	\$194,883	1.3%	(13.57)%	6.41	4.52	2.92%	23.42%
Helmerich & Payne Inc	Energy	\$144,880	1.0%	(13.14)%	3.60	10.91	2.76%	25.12%
Ryan Specialty Group Holdings	Financials	\$125,618	0.8%	(11.11)%	5.09	25.22	0.00%	-
Visteon Corp	Consumer Discretionary	\$159,872	1.1%	(9.54)%	3.47	13.56	0.00%	29.44%
Delek Us Hldgs Inc New	Energy	\$99,201	0.7%	(8.34)%	1.65	16.95	3.72%	(13.75)%
Magnolia Oil & Gas Corp Cl A	Energy	\$197,997	1.3%	(6.56)%	3.94	8.82	2.16%	62.64%
One Gas Inc	Utilities	\$86,022	0.6%	(5.69)%	3.53	16.48	4.08%	7.47%

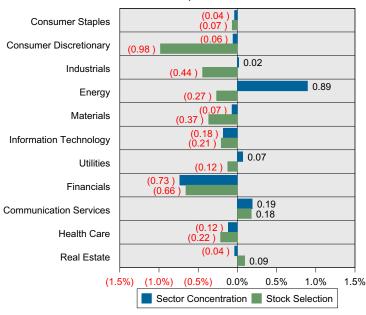


#### Sycamore Small Cap Value vs Russell 2000 Value Index **Quarterly Equity Buy and Hold Attribution**

#### **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.

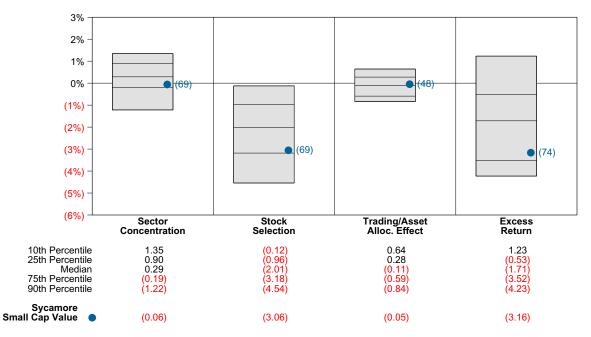
#### Attribution Effects by Sector vs Russell 2000 Value Index Quarter ended December 31, 2023



Sector	Sector Concentration	Stock Selection
Consumer Staples	(0.04%)	(0.07%)
Consumer Discretionary	(0.06%)	(0.98%)
Industrials	0.02%	(0.44%)
Energy	0.89%	(0.27%)
Materials	(0.07%)	(0.37%)
Information Technology	(0.18%)	(0.21%)
Utilities	0.07%	(0.12%)
Financials	(0.73%)	(0.66%)
Communication Services	s 0.19%	0.18%
Health Care	(0.12%)	(0.22%)
Real Estate	(0.04%)	0.09%
Total	(0.06%)	(3.06%)

Manager Return _	Index Return	Sector Concen	Stock Select _	<sub></sub> <u>Trading</u> _	Asset Alloc
12.09%	15.26%	(0.06%)	(3.06%)	0.28%	(0.33%)

#### **Equity Attribution Ranking vs Callan Small Cap Value** Quarter ended December 31, 2023



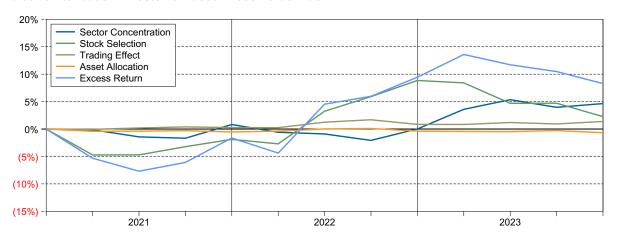


#### Sycamore Small Cap Value vs Russell 2000 Value Index **Cumulative Equity Buy and Hold Attribution**

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

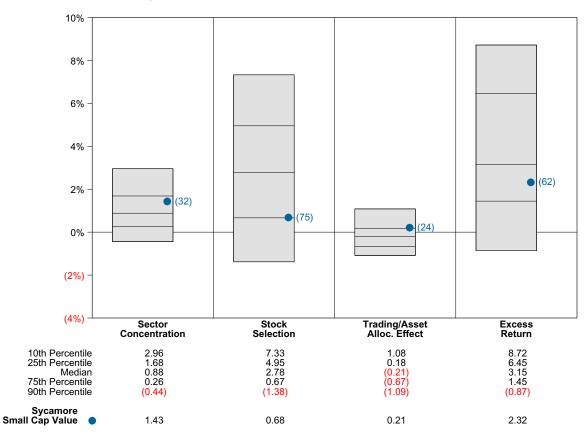
The first chart below illustrates the cumulative path of the four attribution factors, as well as the cumulative path of the manager's total excess return. The table in the center annualizes these cumulative values over the period of analysis. The bottom chart ranks the annualized cumulative values vs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

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



Manager Return	Index Return _	∟ <u>Sector Concen</u>	Stock Select _	∟ <u>Trading</u> _	Asset Alloc
10.26%	7.94%	1.43%	0.68%	0.41%	(0.20%)

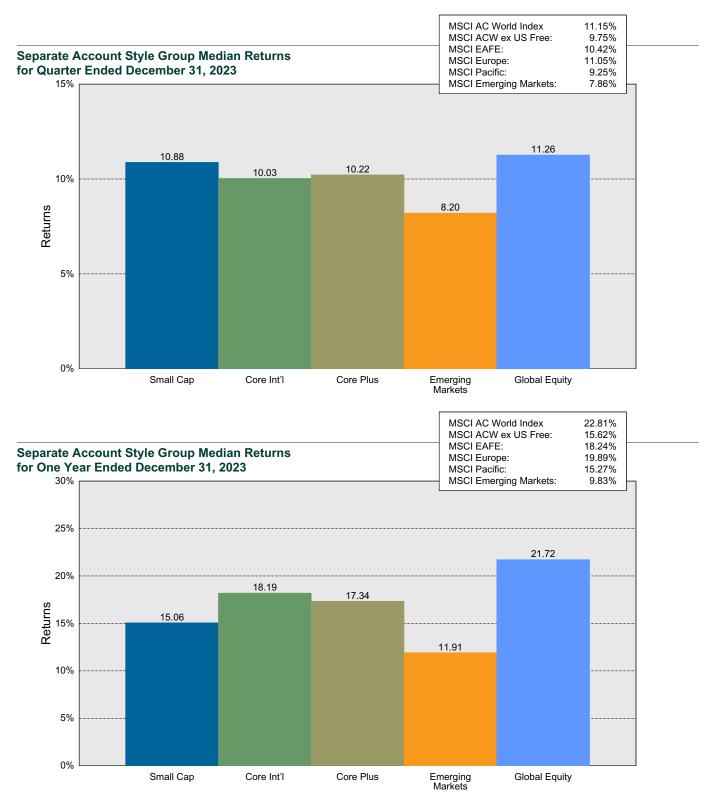
#### **Equity Attribution Ranking vs Callan Small Cap Value** Three Years Ended December 31, 2023





#### **International Equity Active Management Overview**

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





#### **International Equity** Period Ended December 31, 2023

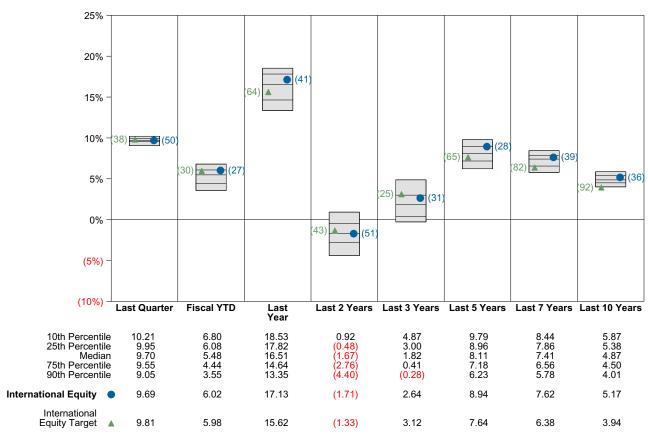
#### **Quarterly Summary and Highlights**

- International Equity's portfolio posted a 9.69% return for the quarter placing it in the 50 percentile of the Public Fund -International Equity group for the quarter and in the 41 percentile for the last year.
- International Equity's portfolio underperformed International Equity Target by 0.11% for the guarter and outperformed the International Equity Target for the year by 1.50%.

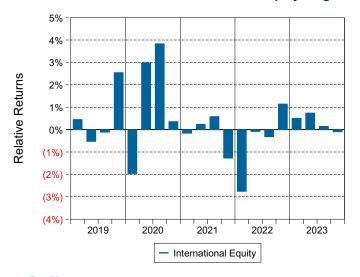
#### **Quarterly Asset Growth**

Beginning Market Value \$167,543,676 Net New Investment \$-2,971,264 Investment Gains/(Losses) \$15,891,005 **Ending Market Value** \$180,463,417

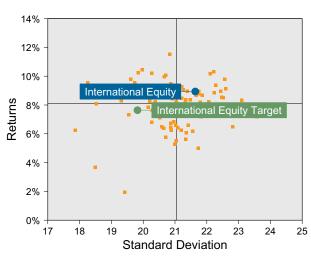
#### Performance vs Public Fund - International Equity (Gross)



#### Relative Return vs International Equity Target



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



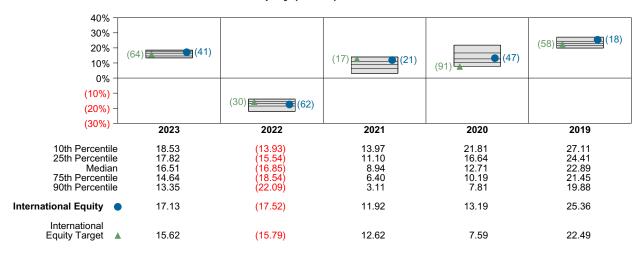


## **International Equity Return Analysis Summary**

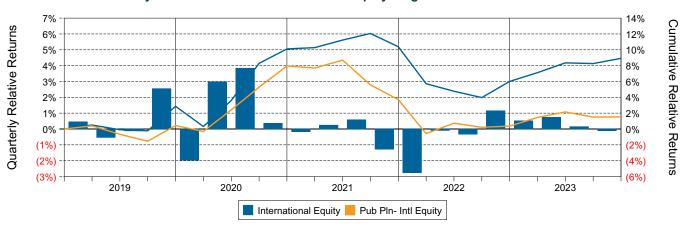
#### **Return Analysis**

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.

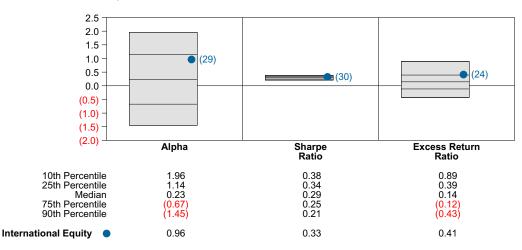
#### Performance vs Public Fund - International Equity (Gross)



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



Risk Adjusted Return Measures vs International Equity Target Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023



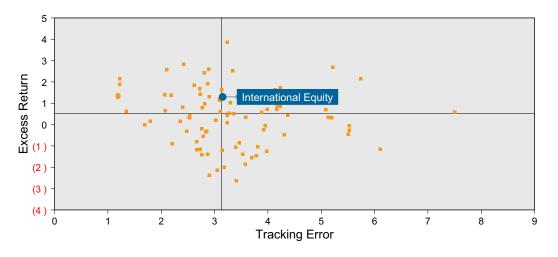


## **International Equity Risk Analysis Summary**

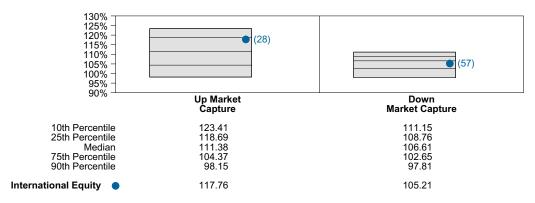
#### Risk Analysis

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

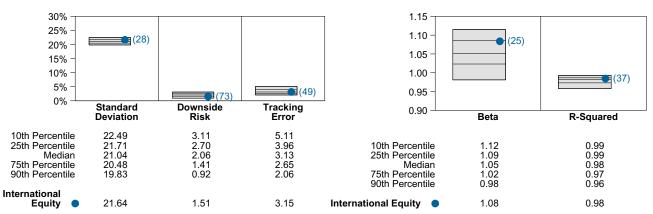
## Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended December 31, 2023



**Market Capture vs Intl Equity Target** Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023



Risk Statistics Rankings vs Intl Equity Target Rankings Against Public Fund - International Equity (Gross) Five Years Ended December 31, 2023

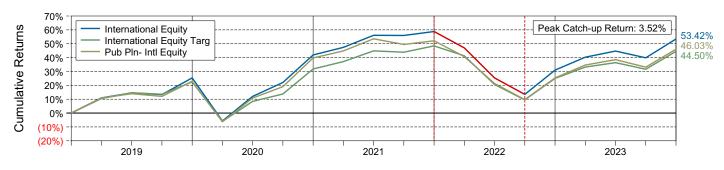




## **International Equity** Drawdown Analysis for Five Years Ended December 31, 2023

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

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



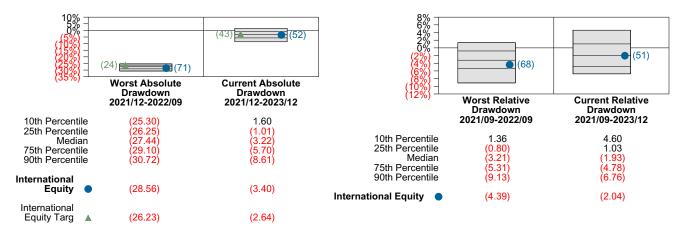
		Worst Absolute Diawdown					Current Absolute Diawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers		
International Equity	(28.56)%	0.75	2021/12-2022/09	(26.23)%	(27.88)%	(3.40)%	2.00	2021/12-2023/12	(2.64)%	(4.01)%		
Recovery from Trough	35.22%	1.25+	2022/09-2023/12	31.98%	33.11%	35.22%	1.25+	2022/09-2023/12	31.98%	33.11%		
International Equity Targ	(26.23)%	0.75	2021/12-2022/09			(2.64)%	2.00	2021/12-2023/12				
Pub Pln- Intl Equity	(28.55)%	1.25	2021/06-2022/09			(4.90)%	2.50	2021/06-2023/12				

Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. International Equity Targ **Cumulative Relative Returns** Peak Catch-up Rel Rtn: 2.08% International Equity Pub Pln- Intl Equity 6.17% 4% 2% 1.06% 2019 2021 2022 2023 2020

		Vorst Rela	ative Drawdown		Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
International Equity	(4.39)%	1.00	2021/09-2022/09	(3.54)%	(2.04)%	2.25	2021/09-2023/12	(2.71)%			
Recovery from Trough	2.46%	1.25+	2022/09-2023/12	0.86%	2.46%	1.25+	2022/09-2023/12	0.86%			
Pub Pln- Intl Equity	(6.09)%	1.25	2020/12-2022/03		(4.70)%	3.00	2020/12-2023/12				

**Drawdown Rankings vs. International Equity Targ** Rankings against Public Fund - International Equity Five Years Ended December 31, 2023





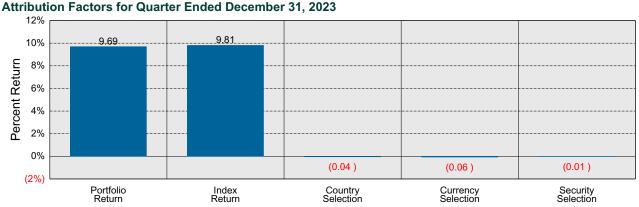
Current Absolute Drawdown

## International Equity vs MSCI ACWI xUS IMI Attribution for Quarter Ended December 31, 2023

#### **International Attribution**

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





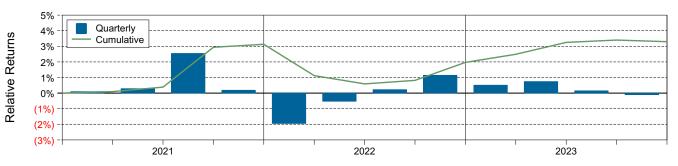


## International Equity vs MSCI ACWI xUS IMI Attribution for Three years Ended December 31, 2023

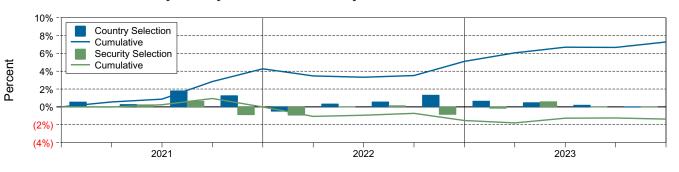
#### **Cumulative International Attribution**

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.

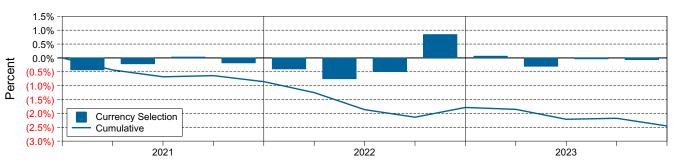
#### Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



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



## **Cumulative and Quarterly Currency Selection Factors**



## Attribution Factors for Three Years Ended December 31, 2023





## **Current Holdings Based Style Analysis International Equity** As of December 31, 2023

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

N. Ameri

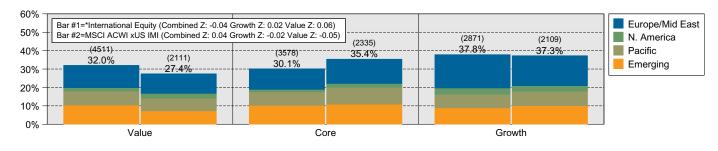
## Style Map vs Pub Pln- Intl Equity Holdings as of December 31, 2023



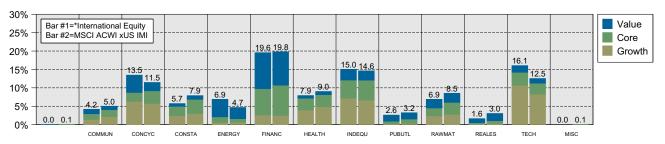
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	27.4% (2111)	35.4% (2335)	37.3% (2109)	100.0% (6555)
Total				
	32.0% (4511)	30.1% (3578)	37.8% (2871)	100.0% (10960)
	7.2% (1028)	10.9% (1191)	10.1% (1091)	28.2% (3310)
Emerging				
	10.4% (2669)	10.2% (2305)	8.9% (1783)	29.5% (6757)
	6.9% (527)	9.2% (520)	7.8% (472)	23.9% (1519)
Pacific				
	7.6% (1098)	7.3% (617)	7.4% (542)	22.3% (2257)
	2.6% (95)	2.1% (118)	3.0% (96)	7.7% (309)
N. America				
	1.9% (106)	1.4% (84)	3.3% (52)	6.6% (242)
Europe/ Mid East	10.6% (461)	13.3% (506)	16.3% (450)	40.2% (1417)
Furana/	12.2% (638)	11.2% (572)	18.2% (494)	41.6% (1704)

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



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



<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

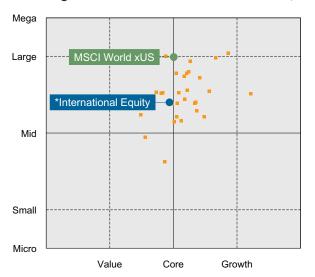


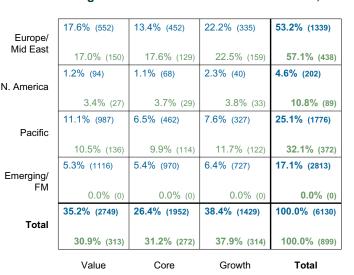
## **Historical Holdings Based Style Analysis International Equity** For Three Years Ended December 31, 2023

This page analyzes the historical investment style of a portfolio utilizing a detailed holdings-based style analysis to determine average actual exposures to various region and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are determined using the "Combined Z Score", based on the eight fundamental factors used in the MSCI stock style scoring system. The upper-left style map illustrates the average historical market capitalization and style score of the portfolio relative to indices and/or peers. The upper-right style exposure matrix displays the average historical portfolio and index weights and stock counts (in parentheses) in each region/style segment of the market. The next two style exposure charts illustrate the actual quarterly region/style and style only segment exposures of the portfolio through history.

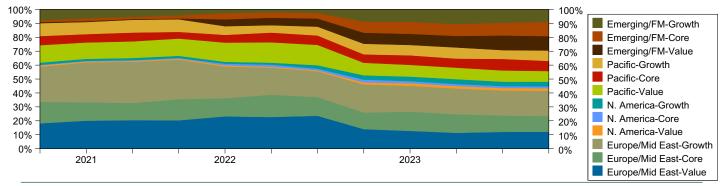
### Average Style Map vs Pub Pln- Intl Equity Holdings for Three Years Ended December 31, 2023

#### **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

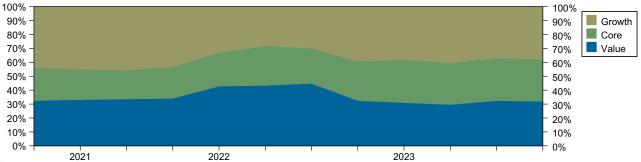




### \*International Equity Historical Region/Style Exposures



#### \*International Equity Historical Style Only Exposures



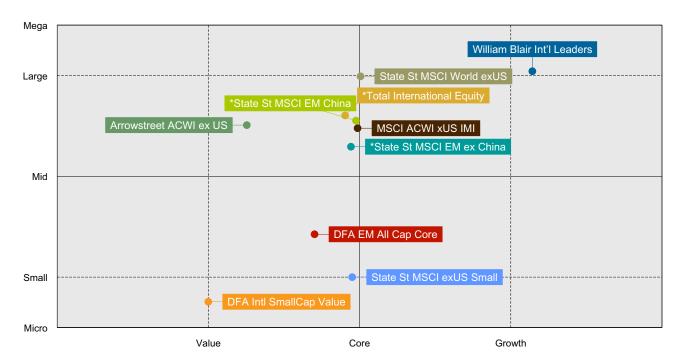
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



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

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

Style Map Holdings for One Quarter Ended December 31, 2023



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities I	<b>Diversification</b>
William Blair Int'l Leaders	15.39%	61.69	0.98	0.33	(0.65)	63	21.91
Arrowstreet ACWI ex US	24.66%	32.01	(0.61)	(0.03)	0.58	832	55.16
State St MSCI World exUS	36.87%	48.02	0.05	(0.02)	(0.07)	871	102.31
DFA Intl SmallCap Value	2.55%	1.91	(0.84)	(0.12)	0.72	1838	149.69
State St MSCI exUS Small	3.35%	2.53	0.01	(0.01)	(0.01)	2173	437.51
*State St MSCI EM ex China	6.36%	24.91	(0.00)	(0.03)	(0.02)	672	70.28
*State St MSCI EM China	2.24%	33.48	0.03	0.05	0.03	772	12.88
DFA EM All Cap Core	8.58%	7.91	(0.21)	(0.05)	0.16	6758	316.90
*Total International Equity	100.00%	35.19	(0.04)	0.02	0.06	11175	151.35
MSCI ACWI xUS IMI	-	30.99	0.04	(0.02)	(0.05)	6679	230.36

<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

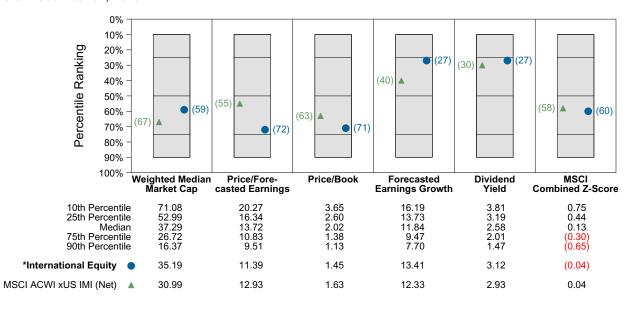


## International Equity **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

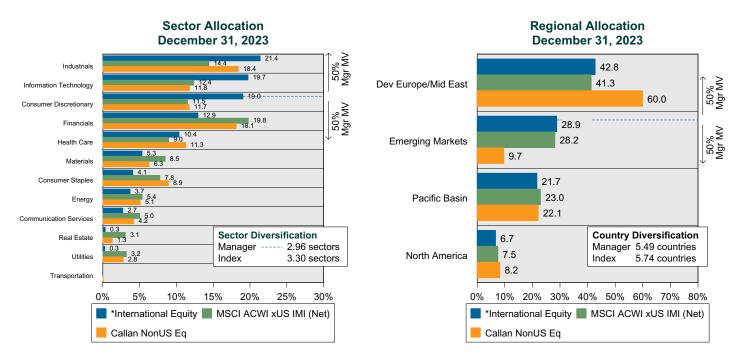
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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



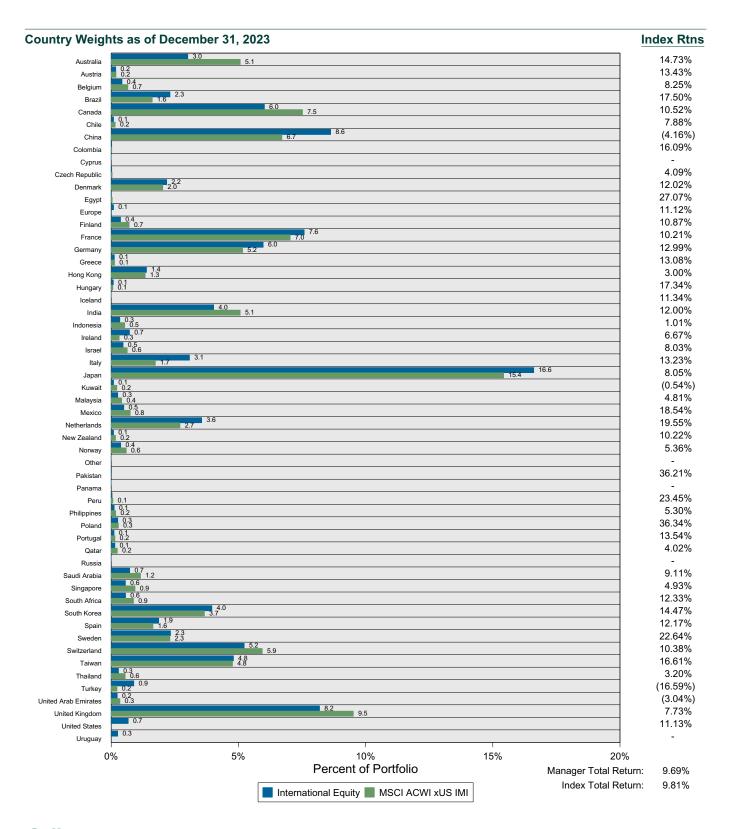
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



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

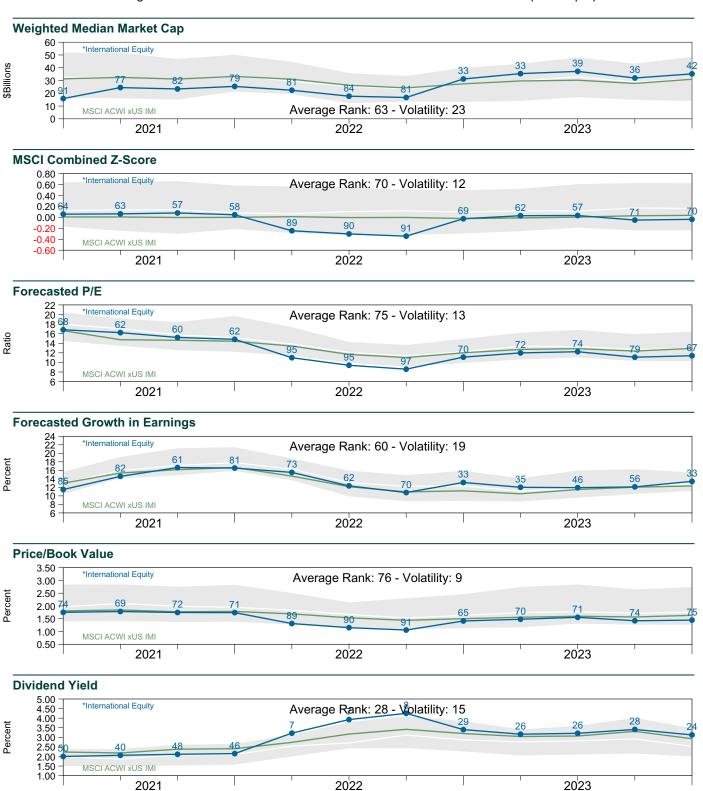




## **Portfolio Characteristics Analysis**

#### **Pub Pln-Intl Equity**

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



<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

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.

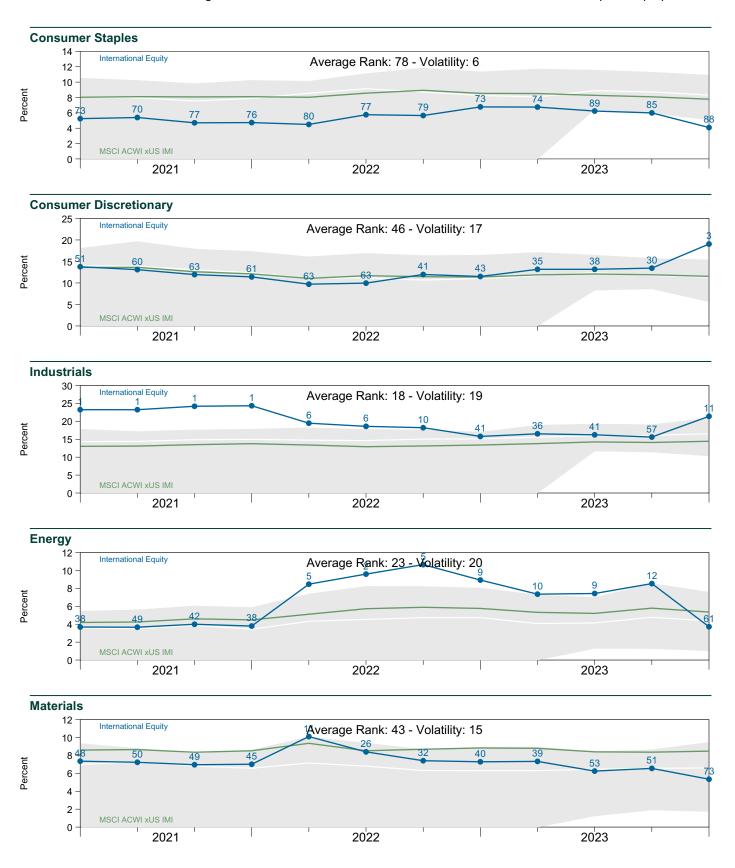


# North Dakota State Investment Board - Insurance Trust History of Ending Regional Weights Period Ended December 31, 2023



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

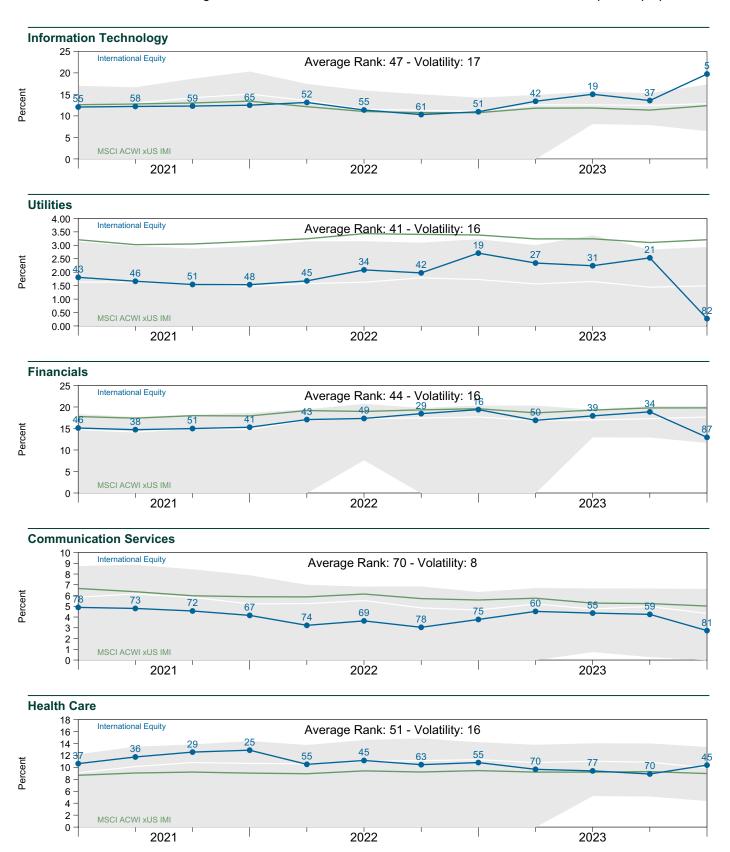
The charts below illustrate the behavior of the product over different industry sectors weights through time. As a backdrop the range (from 10th to 90th percentile) is shown for the Pub Pln- Intl Equity Universe. The ranking of the product in this group is shown above each quarter end dot. The average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





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

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





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 December 31, 2023 vs the International Equity Benc and the Pub PIn- Intl Equity PEER GROUP

	DFA Intl										
(12)	SmallCap	4.01	17.44%	4.57	1.42%	0.29	0.88	3.99%	1.04	0.93	
	Value	(1)	(30)	(8)	(83)	(2)	(10)	(1)	(42)	(97)	
	William Blair										
(12)	Int'l	(6.09)	21.23%	8.13	7.64%	(0.24)	(0.75)	(5.55)%	1.23	0.88	
	Leaders	(98)	(1)	(1)	(1)	(96)	(67)	(97)	(1)	(99)	
		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 December 31, 2023 vs the International Equity Targ

(12)	DFA Intl SmallCap	(0.60)	1.00
	Value		
	William Blair		
(12)	Int'l	1.00	(0.60)
	Leaders		
		William Blair	DFA Intl
		Int'l	SmallCap
		Leaders	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.

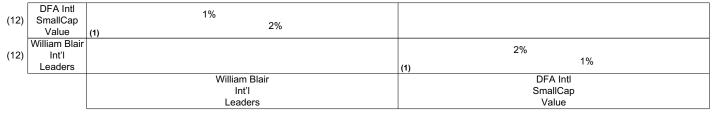
## Average Equity Characteristics for 3 Years Ended December 31, 2023 VS THE Pub Pln- Intl Equity Peer Group

	DFA Intl											
(12)	SmallCap	1.74	1907	162.16	(0.18)	0.70	(88.0)	9.83	9.22	1.07%	0.77	3.30%
	Value	(99)	(30)	(7)	(98)	(1)	(100)	(99)	(97)	(41)	(100)	(9)
	William Blair											
(12)	Int'l	51.28	64	21.42	0.32	(0.73)	1.05	26.65	16.98	1.57%	5.26	1.19%
	Leaders	(7)	(97)	(97)	(4)	(97)	(3)	(3)	(12)	(5)	(1)	(97)
		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 December 31, 2023





## William Blair Int'l Leaders Period Ended December 31, 2023

#### **Investment Philosophy**

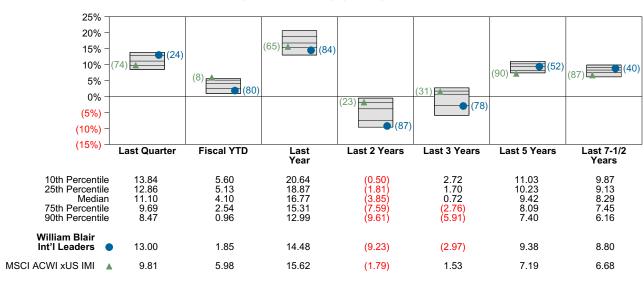
One of the basic investment tenets of William Blair & Company has been its focus on quality growth companies. They believe that investing in quality growth companies will generate above average results with generally less risk than the market. This opportunity exists because they believe the market underestimates 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**

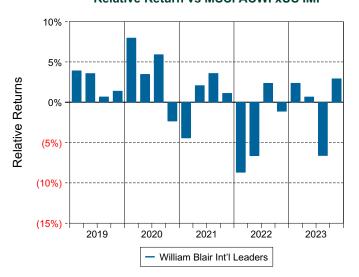
- William Blair Int'l Leaders's portfolio posted a 13.00% return for the quarter placing it in the 24 percentile of the Callan Non-US All Country Growth Equity group for the quarter and in the 84 percentile for the last year.
- William Blair Int'l Leaders's portfolio outperformed the MSCI ACWI xUS IMI by 3.19% for the quarter and underperformed the MSCI ACWI xUS IMI for the year by 1.14%.

Beginning Market Value	\$24,635,814
Net New Investment	\$-57,751
Investment Gains/(Losses)	\$3,193,376
Ending Market Value	\$27,771,439

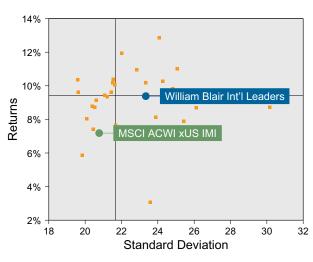
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



## Relative Return vs MSCI ACWI xUS IMI



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



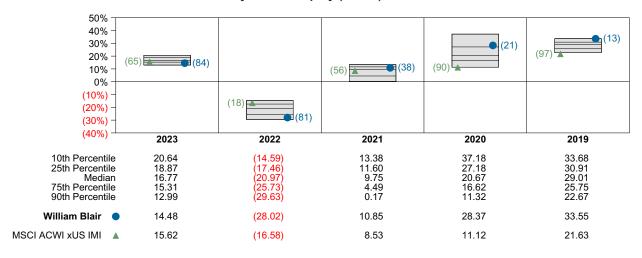


## William Blair **Return Analysis Summary**

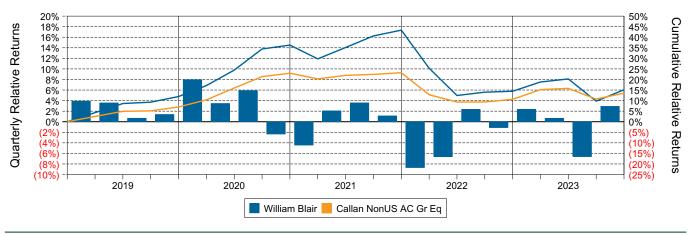
#### **Return Analysis**

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.

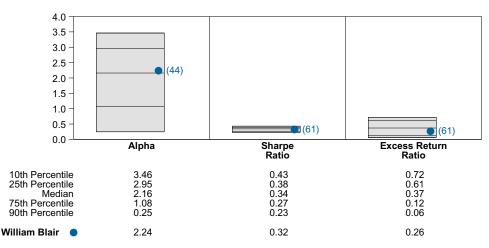
#### Performance vs Callan Non-US All Country Growth Equity (Gross)



#### 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 December 31, 2023



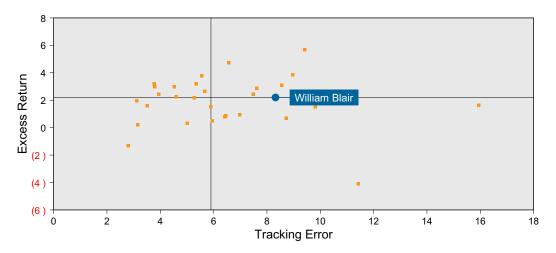


## William Blair **Risk Analysis Summary**

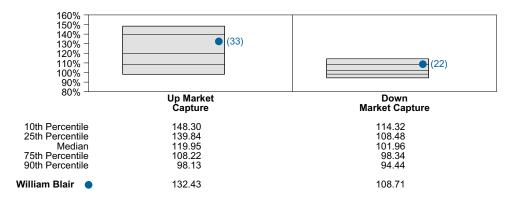
#### Risk Analysis

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.

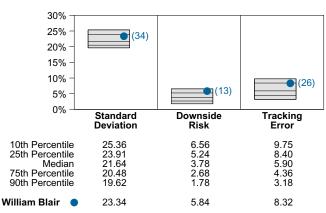
#### Risk Analysis vs Callan Non-US All Country Growth Equity (Gross) Five Years Ended December 31, 2023

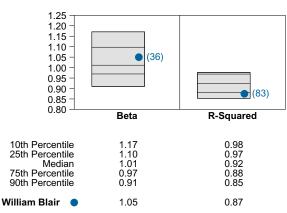


Market Capture vs MSCI ACWI xUS IMI (Net) Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended December 31, 2023



Risk Statistics Rankings vs MSCI ACWI xUS IMI (Net) Rankings Against Callan Non-US All Country Growth Equity (Gross) Five Years Ended December 31, 2023



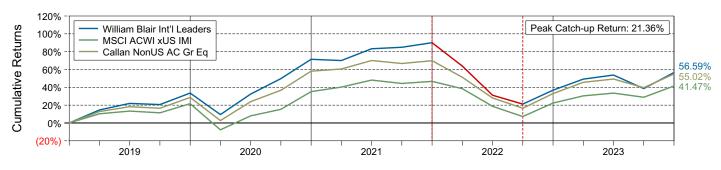




## William Blair Int'l Leaders Drawdown Analysis for Five Years Ended December 31, 2023

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

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



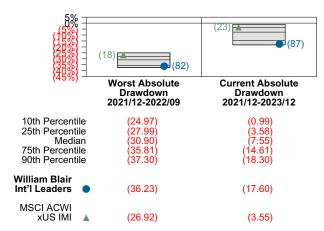
		11010111100011110 211111111111										
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers		
William Blair Int'l Leaders	(36.23)%	0.75	2021/12-2022/09	(26.92)%	(31.40)%	(17.60)%	2.00	2021/12-2023/12	(3.55)%	(8.75)%		
Recovery from Trough	29.21%	1.25+	2022/09-2023/12	31.98%	33.02%	29.21%	1.25+	2022/09-2023/12	31.98%	33.02%		
MSCI ACWI xUS IMI	(27.62)%	1.25	2021/06-2022/09			(4.48)%	2.50	2021/06-2023/12				
Callan NonUS AC Gr Eq	(31.47)%	1.25	2021/06-2022/09			(8.84)%	2.50	2021/06-2023/12				

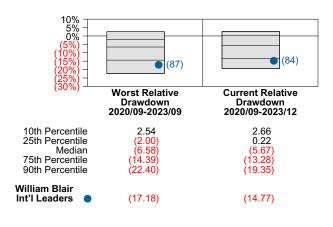
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. MSCI ACWI xUS IMI Cumulative Relative Returns Peak Catch-up Rel Rtn: 17.34% William Blair Int'l Leaders 30% Callan NonUS AC Gr Eq 25% 20% 15% 10.69% 10% 9.58% 5% 0% (5%) 2019 2022 2023 2020 2021

Worst Relative Drawdown Current Relative Drawdown Rel Rtn Period Rel Rtn Period Peers Years **Peers** Years William Blair Int'l Leaders (17.18)% 3.00 2020/09-2023/09 (8.61)% (14.77)% 3.25 2020/09-2023/12 (7.55)% Recovery from Trough 2.91% 0.25 +2023/09-2023/12 1.16% 2.91% 0.25 +2023/09-2023/12 1.16% Callan NonUS AC Gr Eq (9.00)% 1.75 2020/09-2022/06 3.25 2020/09-2023/12 (7.55)%

Drawdown Rankings vs. MSCI ACWI xUS IMI Rankings against Callan Non-US All Country Growth Equity Five Years Ended December 31, 2023





Current Absolute Drawdown



## **Current Holdings Based Style Analysis** William Blair As of December 31, 2023

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

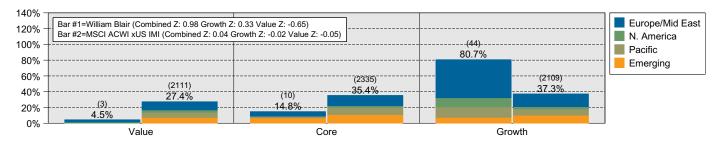
#### Style Map vs Callan NonUS AC Gr Eq Holdings as of December 31, 2023



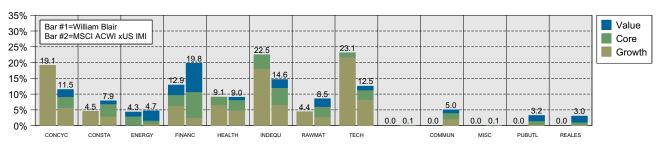
### **Style Exposure Matrix** Holdings as of December 31, 2023

Total	27.4% (2111)	35.4% (2335)	37.3% (2109)	100.0% (6555)
Total	4.5% (3)	14.8% (10)	80.7% (44)	100.0% (57)
	7.2% (1028)	10.9% (1191)	10.1% (1091)	28.2% (3310)
Emerging	0.070 (0)	0.070 (3)	7.570 (4)	13.376 (1)
	0.0% (0)	6.6% (3)	7.3% (4)	13.9% (7)
1 donic	6.9% (527)	9.2% (520)	7.8% (472)	23.9% (1519)
Pacific	0.0% (0)	2.4% (3)	13.4% (7)	15.8% (10)
	2.6% (95)	2.1% (118)	3.0% (96)	7.7% (309)
N. America				
	1.4% (1)	0.0% (0)	11.5% (6)	12.9% (7)
Europe/ Mid East	10.6% (461)	13.3% (506)	16.3% (450)	40.2% (1417)
F	3.1% (2)	5.8% (4)	48.4% (27)	57.4% (33)

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



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



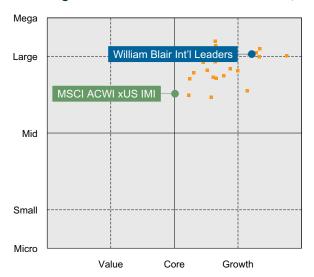


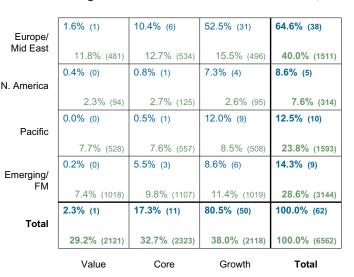
## **Historical Holdings Based Style Analysis** William Blair Int'l Leaders For Three Years Ended December 31, 2023

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.

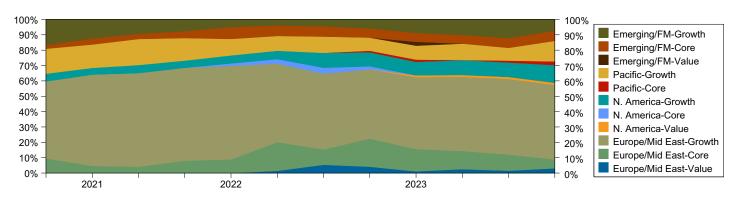
### Average Style Map vs Callan NonUS AC Gr Eq Holdings for Three Years Ended December 31, 2023

## **Average Style Exposure Matrix** Holdings for Three Years Ended December 31, 2023

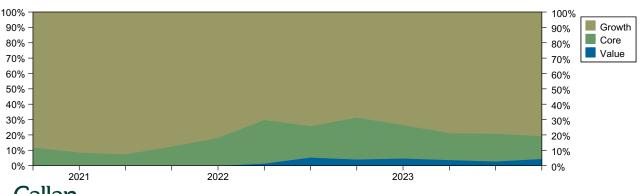




### William Blair Int'l Leaders Historical Region/Style Exposures



## William Blair Int'l Leaders Historical Style Only Exposures



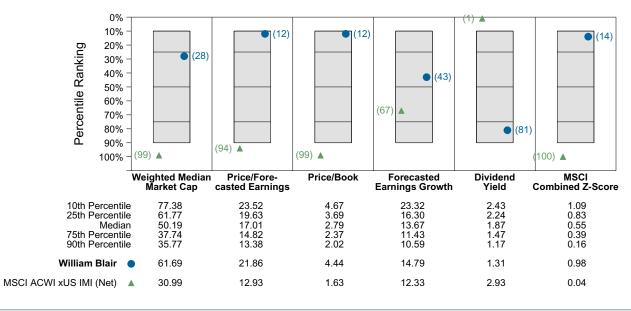
#### William Blair

## **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

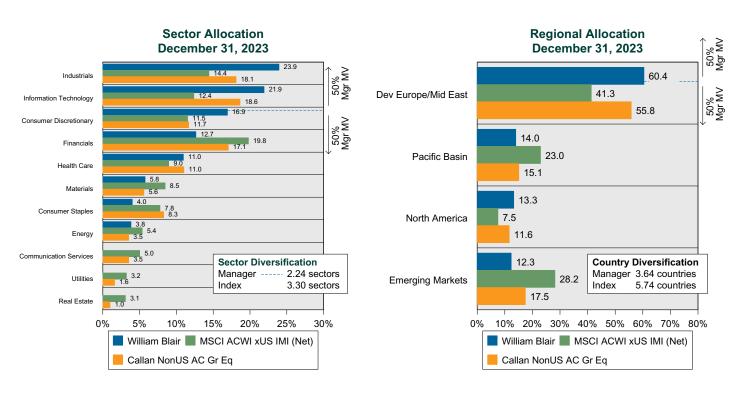
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US All Country Growth Equity as of December 31, 2023



#### **Sector Weights**

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

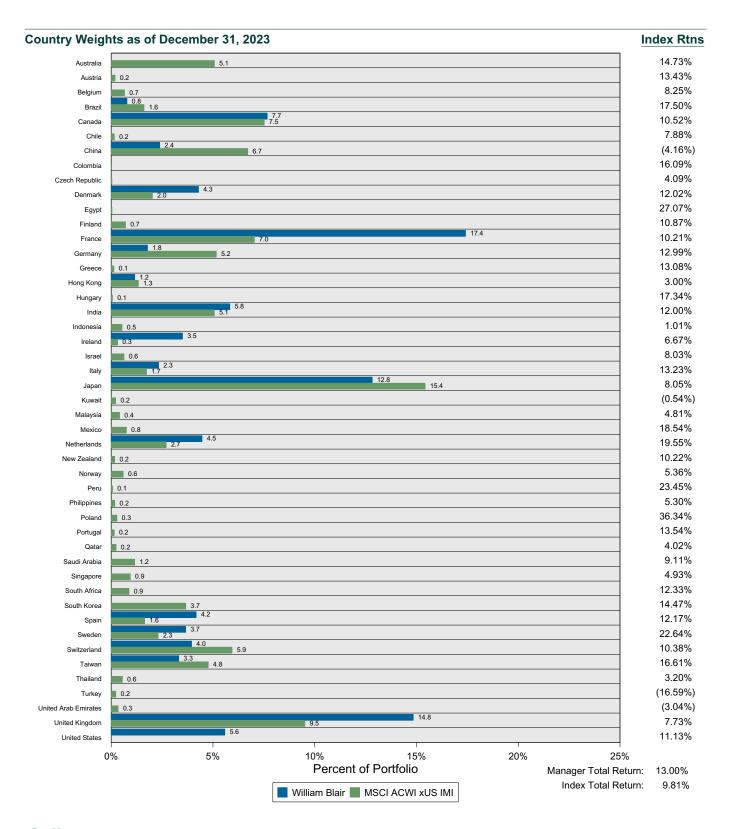




## **Country Allocation** William Blair VS MSCI ACWI xUS IMI (Net)

#### **Country Allocation**

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





# William Blair Int'l Leaders Top 10 Portfolio Holdings Characteristics as of December 31, 2023

## 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	\$899,704	3.3%	26.57%	501.06	15.76	2.03%	4.70%
Information Technology	\$858,466	3.1%	27.54%	303.59	34.70	0.87%	20.64%
Materials	\$717,695	2.6%	44.21%	84.95	19.12	1.69%	21.93%
Energy	\$711,062	2.6%	11.68%	210.17	21.61	0.35%	17.00%
Health Care	\$650,092	2.4%	22.10%	43.88	32.17	0.60%	14.80%
Financials	\$618,908	2.2%	17.64%	61.55	25.19	1.19%	10.30%
Health Care	\$611,458	2.2%	(0.28)%	209.44	16.16	2.24%	11.60%
Health Care	\$599,542	2.2%	19.94%	23.30	19.03	0.00%	12.90%
Consumer Discretionary	\$583,394	2.1%	18.32%	135.75	21.23	2.51%	15.00%
Information Technology	\$573,244	2.1%	30.91%	84.49	30.74	1.38%	6.50%
	Information Technology Information Technology Materials Energy Health Care Financials Health Care Health Care Consumer Discretionary	Sector         Market Value           Information Technology         \$899,704           Information Technology         \$858,466           Materials         \$717,695           Energy         \$711,062           Health Care         \$650,092           Financials         \$618,908           Health Care         \$611,458           Health Care         \$599,542           Consumer Discretionary         \$583,394	Sector         Market Value         of Portfolio           Information Technology Information Technology Information Technology Information Technology S858,466         3.1%           Materials S717,695         2.6%           Energy S711,062         2.6%           Health Care S650,092         2.4%           Financials S618,908         2.2%           Health Care S611,458         2.2%           Health Care S599,542         2.2%           Consumer Discretionary S583,394         2.1%	Sector         Market Value         of Valve Portfolio         Qtrly Return           Information Technology Information Technology Information Technology Information Technology S858,466         3.1%         27.54%           Materials S717,695         2.6%         44.21%           Energy S711,062         2.6%         11.68%           Health Care S650,092         2.4%         22.10%           Financials Financials S618,908         2.2%         17.64%           Health Care S611,458         2.2%         (0.28)%           Health Care S599,542         2.2%         19.94%           Consumer Discretionary         \$583,394         2.1%         18.32%	Sector         Market Value         of Portfolio         Qtrly Return         Market Capital           Information Technology         \$899,704         3.3%         26.57%         501.06           Information Technology         \$858,466         3.1%         27.54%         303.59           Materials         \$717,695         2.6%         44.21%         84.95           Energy         \$711,062         2.6%         11.68%         210.17           Health Care         \$650,092         2.4%         22.10%         43.88           Financials         \$618,908         2.2%         17.64%         61.55           Health Care         \$611,458         2.2%         (0.28)%         209.44           Health Care         \$599,542         2.2%         19.94%         23.30           Consumer Discretionary         \$583,394         2.1%         18.32%         135.75	Sector         Kanding Market Value         Percent Of Portfolio         Qtrly Return         Market Capital Ratio           Information Technology Information Technology Materials         \$899,704         3.3%         26.57%         501.06         15.76           Information Technology Materials         \$717,695         2.6%         44.21%         84.95         19.12           Energy Formation Technology Materials         \$711,062         2.6%         11.68%         210.17         21.61           Health Care Health Care         \$650,092         2.4%         22.10%         43.88         32.17           Financials Financials Health Care         \$618,908         2.2%         17.64%         61.55         25.19           Health Care Health Care         \$699,542         2.2%         19.94%         23.30         19.03           Consumer Discretionary         \$583,394         2.1%         18.32%         135.75         21.23	Sector         Kanding Market Value         Percent Portfolio         Qtrly Return         Market Capital Portfolio         Return Portfolio         Forecasted Earnings Pried Portfolio         Dividend Portfolio           Information Technology         \$899,704         3.3%         26.57%         501.06         15.76         2.03%           Information Technology         \$858,466         3.1%         27.54%         303.59         34.70         0.87%           Materials         \$717,695         2.6%         44.21%         84.95         19.12         1.69%           Energy         \$711,062         2.6%         11.68%         210.17         21.61         0.35%           Health Care         \$650,092         2.4%         22.10%         43.88         32.17         0.60%           Financials         \$618,908         2.2%         17.64%         61.55         25.19         1.19%           Health Care         \$611,458         2.2%         (0.28)%         209.44         16.16         2.24%           Health Care         \$599,542         2.2%         19.94%         23.30         19.03         0.00%           Consumer Discretionary         \$583,394         2.1%         18.32%         135.75         21.23         2.51%  <

## **10 Best Performers**

						Price/		Forecasted
		Ending	Percent			Forecasted		
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Lasertec	Information Technology	\$290,020	1.0%	69.41%	24.86	49.38	0.46%	65.37%
Be Semiconductor Inds NV Bes Ord Shs	Information Technology	\$349,994	1.3%	53.08%	12.23	41.03	2.06%	12.10%
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$258,676	0.9%	52.65%	194.39	19.85	0.00%	21.31%
Shin Etsu Chemical Co Ltd Shs	Materials	\$717,695	2.6%	44.21%	84.95	19.12	1.69%	21.93%
Crh Plc Ord	Materials	\$342,065	1.2%	35.50%	47.96	14.06	3.14%	28.65%
Lululemon Athletica Inc	Consumer Discretionary	\$554,750	2.0%	32.59%	61.90	36.41	0.00%	20.00%
Tokyo Electron	Information Technology	\$573,244	2.1%	30.91%	84.49	30.74	1.38%	6.50%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$858,466	3.1%	27.54%	303.59	34.70	0.87%	20.64%
Partners Grp Hldg Zug Namen Akt Shs	Financials	\$317,068	1.1%	27.45%	38.48	24.45	2.95%	9.90%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$899,704	3.3%	26.57%	501.06	15.76	2.03%	4.70%

## **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		
Rentokil Initial	Industrials	\$235,820	0.9%	(24.55)%	14.17	17.67	1.78%	12.11%		
Dsv As Shs	Industrials	\$371,372	1.3%	(6.19)%	38.47	20.56	0.54%	(5.67)%		
Daiichi Sankyo Co	Health Care	\$313,100	1.1%	(5.87)%	53.48	44.58	0.86%	6.01%		
Haleon Plc Ord Gbp1.25	Consumer Staples	\$136,326	0.5%	(1.43)%	37.87	16.80	1.29%	6.70%		
Kweichow Moutai Co. A	Consumer Staples	\$387,832	1.4%	(0.67)%	305.72	24.64	2.76%	19.90%		
Astrazeneca Plc Ord	Health Care	\$611,458	2.2%	(0.28)%	209.44	16.16	2.24%	11.60%		
Total Sa Act	Energy	\$326,963	1.2%	3.15%	164.15	6.86	5.15%	(1.90)%		
Mitsui & Co Ltd Ord	Industrials	\$127,771	0.5%	3.59%	57.22	9.04	2.88%	37.49%		
Dollarama Inc	Consumer Discretionary	\$565,582	2.0%	4.70%	20.37	25.01	0.29%	16.93%		
Moncler (Otc)	Consumer Discretionary	\$276,942	1.0%	5.51%	16.90	23.03	1.06%	6.20%		

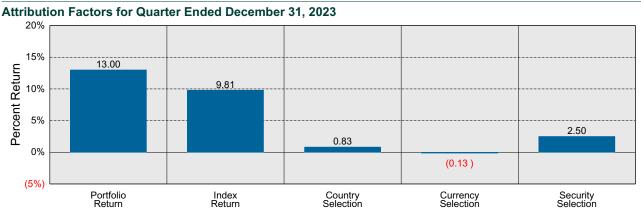


## William Blair Int'l Leaders vs MSCI ACWI xUS IMI Attribution for Quarter Ended December 31, 2023

#### **International Attribution**

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





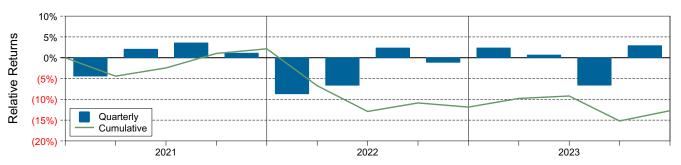


## William Blair Int'l Leaders vs MSCI ACWI xUS IMI Attribution for Three years Ended December 31, 2023

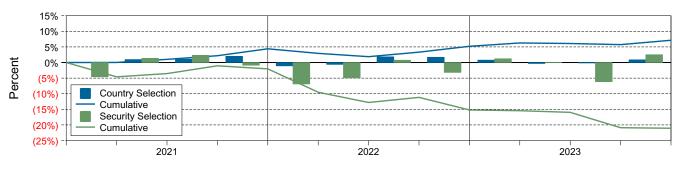
#### **Cumulative International Attribution**

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.

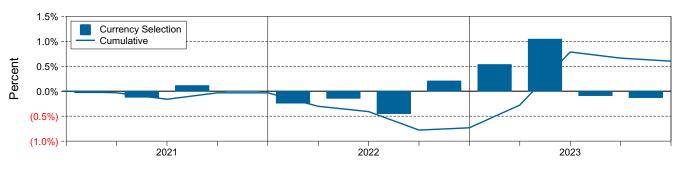
#### Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



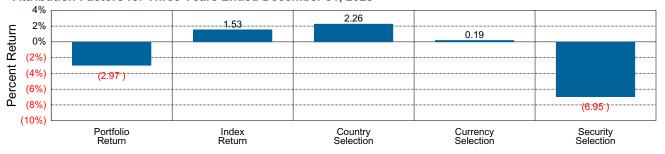
#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**



## Attribution Factors for Three Years Ended December 31, 2023





## **Arrowstreet ACWI ex US** Period Ended December 31, 2023

#### **Investment Philosophy**

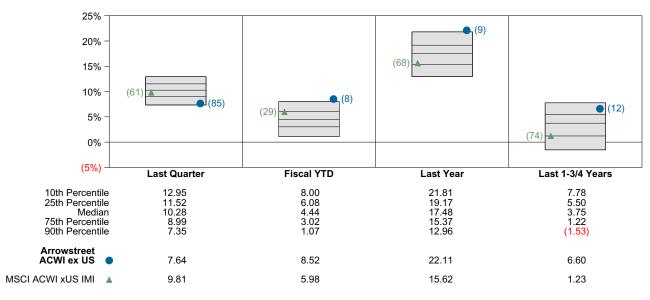
Arrowstreet is a 100% employed-owned firm whose strategies are team-managed by a deep and experienced group of individuals. The firm employs a quantitative process that identifies direct and indirect relationships to forecast stock price returns. The investment approach seeks to provide a risk controlled, 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**

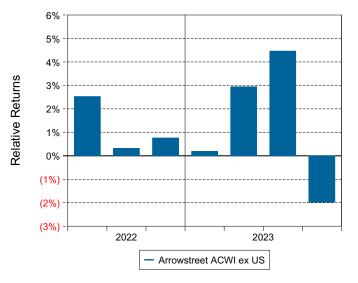
- Arrowstreet ACWI ex US's portfolio posted a 7.64% return for the quarter placing it in the 85 percentile of the Callan Non US Equity Mutual Funds group for the quarter and in the 9 percentile for the last year.
- Arrowstreet ACWI ex US's portfolio underperformed the MSCI ACWI xUS IMI by 2.17% for the quarter and outperformed the MSCI ACWI xUS IMI for the year by

Beginning Market Value	\$41,348,562
Net New Investment	\$0
Investment Gains/(Losses)	\$3,157,332
Ending Market Value	\$44,505,895

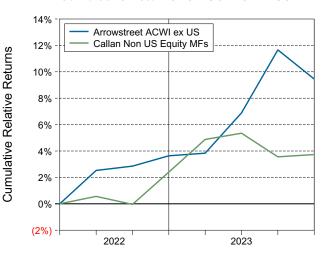
## Performance vs Callan Non US Equity Mutual Funds (Net)



#### Relative Return vs MSCI ACWI xUS IMI



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

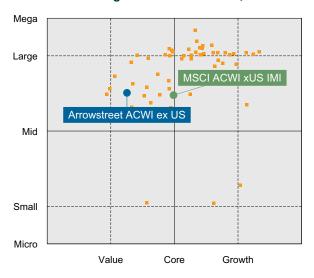




## **Current Holdings Based Style Analysis** Arrowstreet ACWI ex US As of December 31, 2023

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

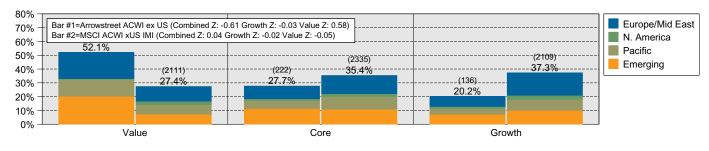
### Style Map vs Callan Non US Equity MFs Holdings as of December 31, 2023



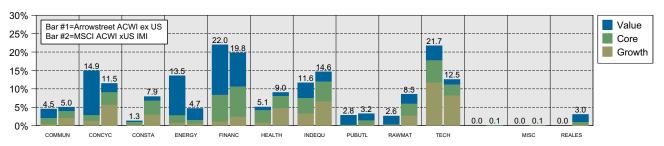
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	27.4% (2111)	35.4% (2335)	37.3% (2109)	100.0% (6555)
Total		, ,		, ,
	52.1% (464)	27.7% (222)	20.2% (136)	100.0% (822)
	7.2% (1028)	10.9% (1191)	10.1% (1091)	28.2% (3310)
Emerging				
	20.3% (220)	11.4% (93)	7.3% (57)	39.0% (370)
	6.9% (527)	9.2% (520)	7.8% (472)	23.9% (1519)
Pacific				
	12.3% (139)	6.0% (68)	4.4% (40)	22.7% (247)
	2.6% (95)	2.1% (118)	3.0% (96)	7.7% (309)
N. America				
	0.5% (7)	1.1% (6)	1.1% (7)	2.6% (20)
Mid East	10.6% (461)	13.3% (506)	16.3% (450)	40.2% (1417)
Europe/	19.1% (98)	9.3% (55)	7.4% (32)	35.7% (185)

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



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

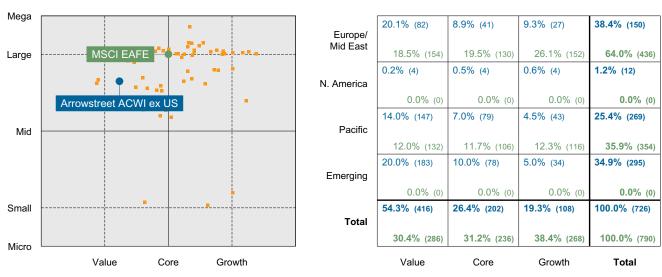




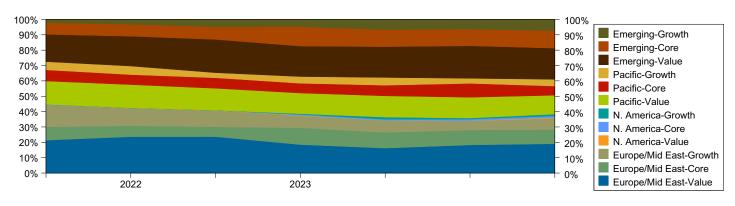
## **Historical Holdings Based Style Analysis** Arrowstreet ACWI ex US For One and 3/4 Years Ended December 31, 2023

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.

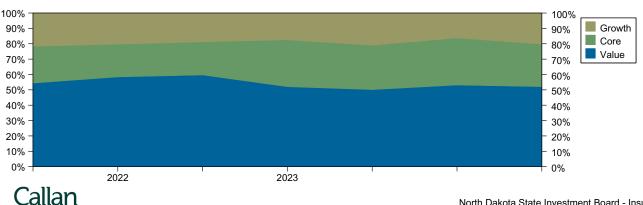
#### Average Style Map vs Callan Non US Equity MFs Average Style Exposure Matrix Holdings for One and 3/4 Years Ended December 31, 2023 Holdings for One and 3/4 Years Ended December 31, 2023



#### Arrowstreet ACWI ex US Historical Region/Style Exposures



## Arrowstreet ACWI ex US Historical Style Only Exposures

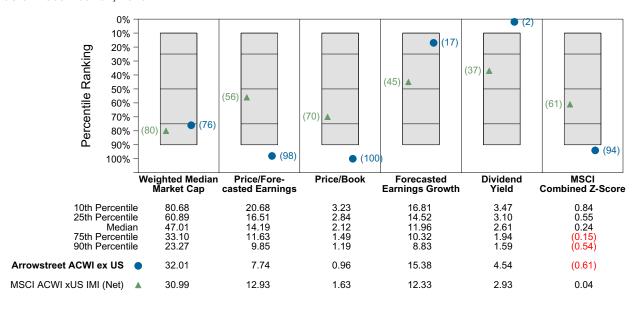


## **Arrowstreet ACWI ex US Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

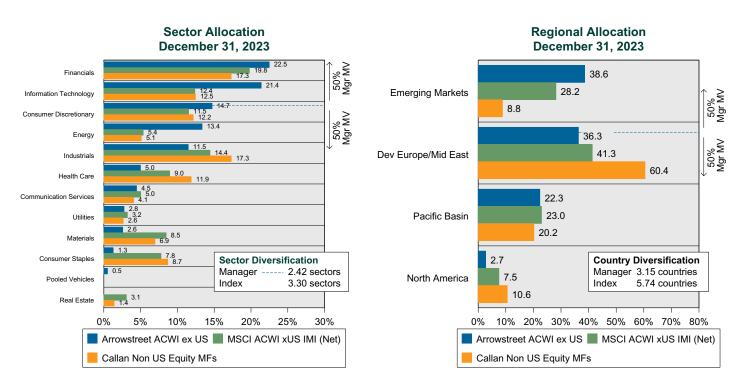
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non US Equity Mutual Funds as of December 31, 2023



#### **Sector Weights**

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

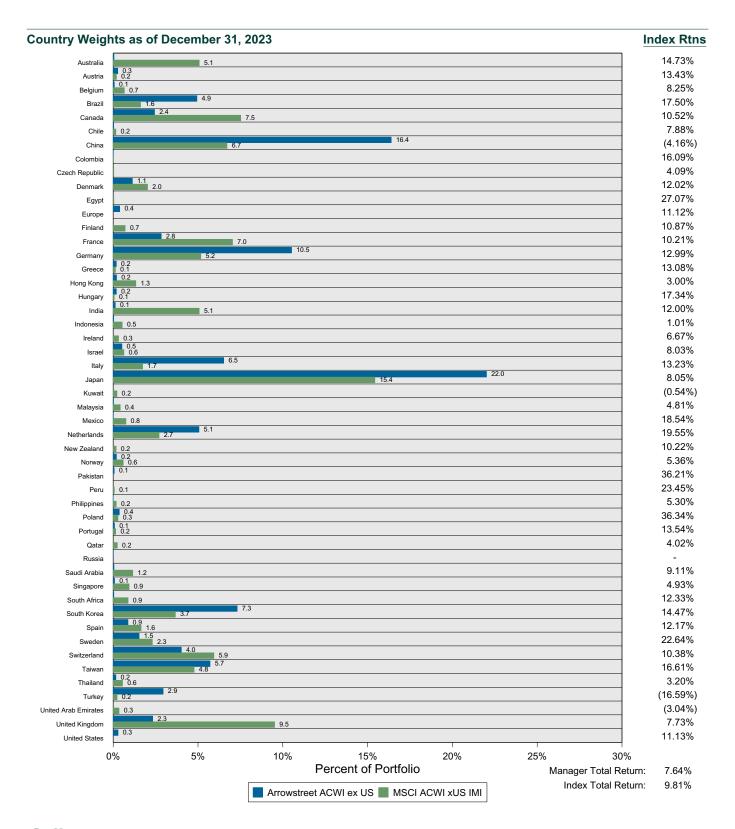




# **Country Allocation** Arrowstreet ACWI ex US VS MSCI ACWI xUS IMI (Net)

#### **Country Allocation**

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





# **Arrowstreet ACWI ex US** Top 10 Portfolio Holdings Characteristics as of December 31, 2023

## 10 Largest Holdings

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Samsung Electronics Co Ltd Ord	Information Technology	\$1,244,165	2.8%	20.88%	363.87	17.26	1.83%	(6.00)%
Stellantis N.V Shs	Consumer Discretionary	\$1,180,003	2.7%	21.18%	73.95	3.97	6.25%	5.50%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$990,563	2.2%	27.54%	303.59	34.70	0.87%	20.64%
Eni Spa Roma Az	Energy	\$730,678	1.6%	6.57%	57.24	6.12	5.86%	(5.90)%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$714,676	1.6%	6.11%	204.09	12.27	3.76%	2.25%
Bmw Stamm	Consumer Discretionary	\$698,323	1.6%	9.03%	64.56	6.23	8.33%	(15.40)%
Volkswagen Vorzug	Consumer Discretionary	\$649,156	1.5%	6.80%	25.46	3.81	7.74%	8.28%
Daimler Ag Reg Shs	Consumer Discretionary	\$621,994	1.4%	(0.90)%	73.98	5.34	8.20%	(1.34)%
Petroleo Brasileiro Sa Petro Pfd Shs	Energy	\$558,250	1.3%	15.29%	42.95	4.44	18.87%	48.61%
Novartis	Health Care	\$516,930	1.2%	3.68%	242.30	14.11	3.65%	10.96%

## **10 Best Performers**

						Price/		
Stock		Ending	nding Percent			Forecasted		Forecasted
		Market	of	Qtrly	y Market	Earnings	Dividend Yield	Growth in
	Sector	Value	Portfolio	Return	Capital	Ratio		Earnings
Bitfarms	Information Technology	\$2,291	0.0%	170.39%	0.94	17.49	0.00%	-
Pak.Refinery	Energy	\$3,897	0.0%	96.99%	0.07	10.00	0.00%	-
Screen Hldgs Co Ltd Shs New	Information Technology	\$23,211	0.1%	74.29%	8.60	17.59	1.39%	14.00%
Lasertec	Information Technology	\$446,726	1.0%	69.41%	24.86	49.38	0.46%	65.37%
Bank of Punjab	Financials	\$633	0.0%	67.65%	0.08	3.33	12.30%	52.21%
Bank of Polska Kasa Opieki Shs	Financials	\$42,843	0.1%	67.20%	10.15	7.57	2.37%	21.90%
Alior Bank Sa	Financials	\$2,049	0.0%	63.60%	2.53	6.89	0.00%	10.06%
Pakistan Petroleum Ltd Shs	Energy	\$19,230	0.0%	62.59%	1.11	2.85	2.14%	6.60%
Pko Bank Polski	Financials	\$27,060	0.1%	60.88%	16.00	7.77	3.58%	6.36%
Sui North Gas Pipelines	Utilities	\$1,452	0.0%	60.74%	0.17	5.65	2.68%	836.48%

## **10 Worst Performers**

						Price/		Forecasted Growth in Earnings
	Sector	Ending Market Value	Percent			Forecasted		
			of Portfolio	Qtrly	Market	Earnings Ratio	Dividend Yield	
Stock				Return	Capital			
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$1,344	0.0%	(37.60)%	3.08	7.44	2.52%	12.38%
Tofas Turk Otomobil Fabrikas Shs	Consumer Discretionary	\$56,787	0.1%	(34.03)%	3.56	5.06	2.93%	77.93%
Mitsubishi Motors Corp Shs New	Consumer Discretionary	\$96,322	0.2%	(27.05)%	4.75	4.62	2.13%	(3.40)%
Is Yatirim Mnk.Degerler	Financials	\$596	0.0%	(26.91)%	1.63	5.62	1.61%	50.27%
Orient Res. Gp.	Energy	\$1,306	0.0%	(25.84)%	2.83	5.45	0.00%	55.78%
Turk Traktor Ve Zirrat Maki Shs	Industrials	\$28,278	0.1%	(24.98)%	2.41	6.78	3.02%	56.65%
Bayer A G Namen -Akt	Health Care	\$120,357	0.3%	(22.60)%	36.57	5.71	5.86%	(6.53)%
Stx Pan Ocean Co Ltd Krw100	Industrials	\$5,338	0.0%	(21.42)%	1.55	5.29	4.00%	(44.63)%
Maoyan Entertainment	Communication Services	\$3,025	0.0%	(21.06)%	1.32	8.71	0.00%	-
Miniso Group Hldg Ltd Issue_code 10	Consumer Discretionary	\$12,793	0.0%	(19.41)%	6.44	16.80	2.02%	83.63%

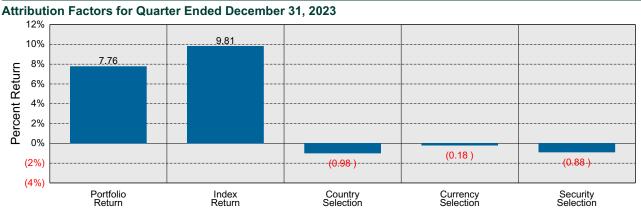


## Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for Quarter Ended December 31, 2023

#### **International Attribution**

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





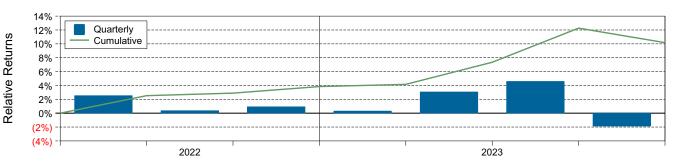


# Arrowstreet ACWI ex US vs MSCI ACWI xUS IMI Attribution for One and Three-Quarter years Ended December 31, 2023

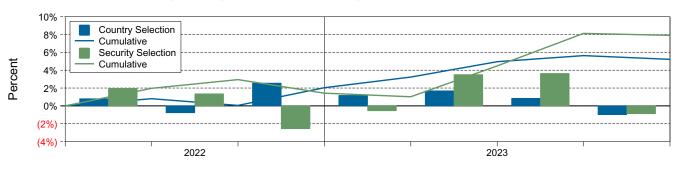
#### **Cumulative International Attribution**

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.

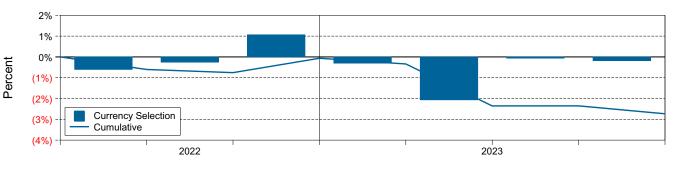
#### Cumulative and Quarterly Return vs MSCI ACWI xUS IMI



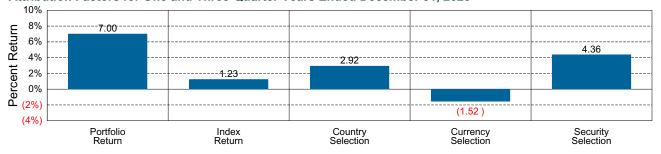
#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



# **Cumulative and Quarterly Currency Selection Factors**



# Attribution Factors for One and Three-Quarter Years Ended December 31, 2023





# State St MSCI World exUS Period Ended December 31, 2023

#### **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.

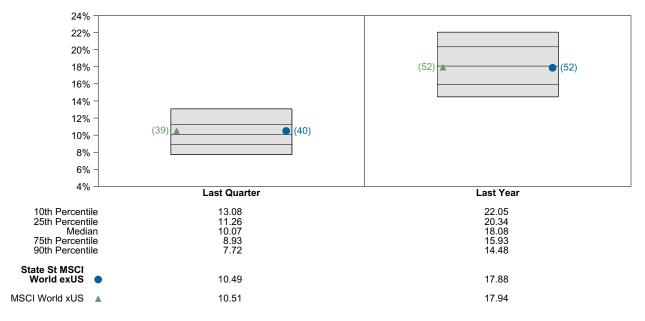
### **Quarterly Summary and Highlights**

- State St MSCI World exUS's portfolio posted a 10.49% return for the quarter placing it in the 40 percentile of the Callan Non-US Equity group for the quarter and in the 52 percentile for the last year.
- State St MSCI World exUS's portfolio underperformed the MSCI World xUS by 0.02% for the quarter and underperformed the MSCI World xUS for the year by 0.06%.

### **Quarterly Asset Growth**

Beginning Market Value	\$62,783,634
Net New Investment	\$-2,602,489
Investment Gains/(Losses)	\$6,362,938
Ending Market Value	\$66,544,083

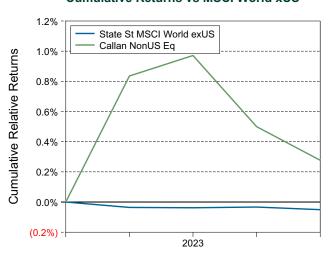
# Performance vs Callan Non-US Equity (Gross)



#### Relative Return vs MSCI World xUS

# 0.01% 0.00% Relative Returns (0.01%)(0.02%)(0.03%)(0.04%)(0.05%)2023 State St MSCI World exUS

## **Cumulative Returns vs MSCI World xUS**





# **Current Holdings Based Style Analysis** State St MSCI World exUS As of December 31, 2023

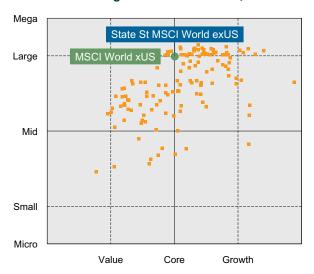
This page analyzes the current investment style of a portfolio utilizing a detailed holdings-based style analysis to determine actual exposures to various regional and style segments of the international/global equity market. The market is segmented quarterly by region and style. The style segments are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

> Eur Mid

N. Ame

Fmer

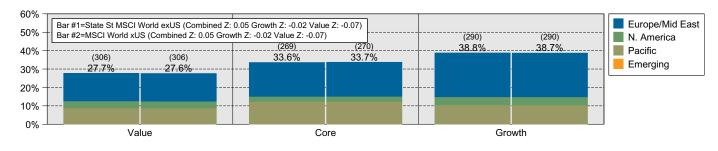
## Style Map vs Callan NonUS Eq Holdings as of December 31, 2023



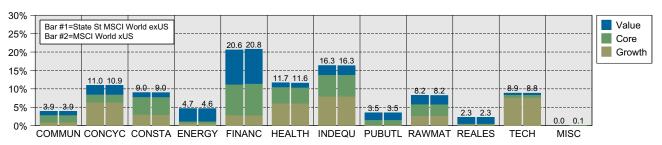
## **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	27.6% (306)	33.7% (270)	38.7% (290)	100.0% (866)
Total				
	27.7% (306)	33.6% (269)	38.8% (290)	100.0% (865)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
merging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	8.8% (132)	12.4% (107)	10.4% (105)	31.6% (344)
Pacific				
	8.8% (132)	12.5% (107)	10.4% (105)	31.7% (344)
	3.8% (27)	2.7% (26)	4.4% (36)	10.9% (89)
America				
	3.8% (27)	2.6% (25)	4.4% (36)	10.9% (88)
Europe/ /lid East	15.0% (147)	18.6% (137)	23.8% (149)	57.4% (433)
Europo/	15.0% (147)	18.5% (137)	23.9% (149)	57.4% (433)

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



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



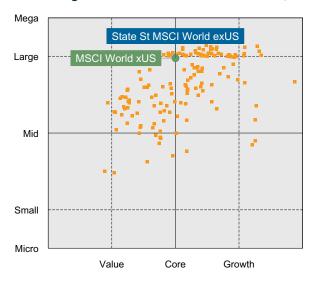


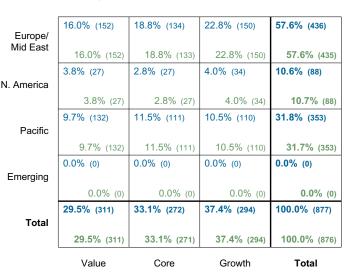
# **Historical Holdings Based Style Analysis** State St MSCI World exUS For One Year Ended December 31, 2023

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.

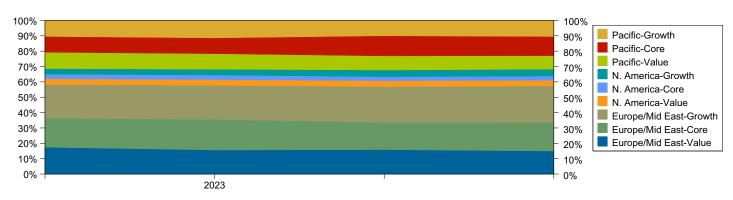
## Average Style Map vs Callan NonUS Eq Holdings for One Year Ended December 31, 2023

## **Average Style Exposure Matrix** Holdings for One Year Ended December 31, 2023

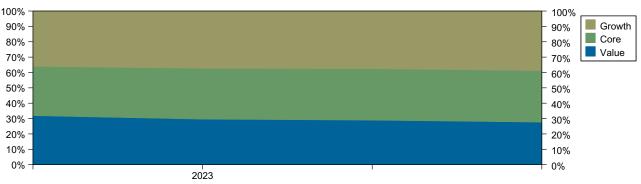




## State St MSCI World exUS Historical Region/Style Exposures



State St MSCI World exUS Historical Style Only Exposures

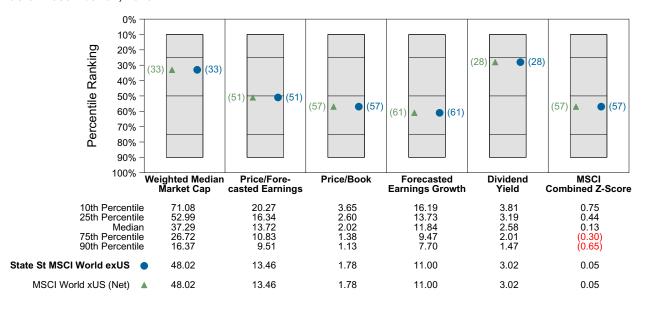


# State St MSCI World exUS **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

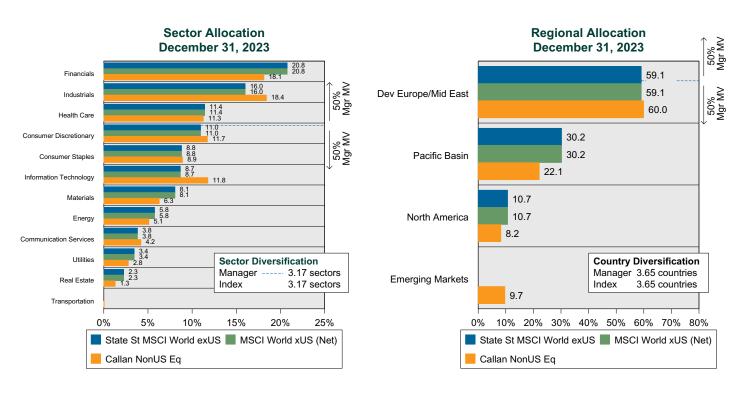
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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

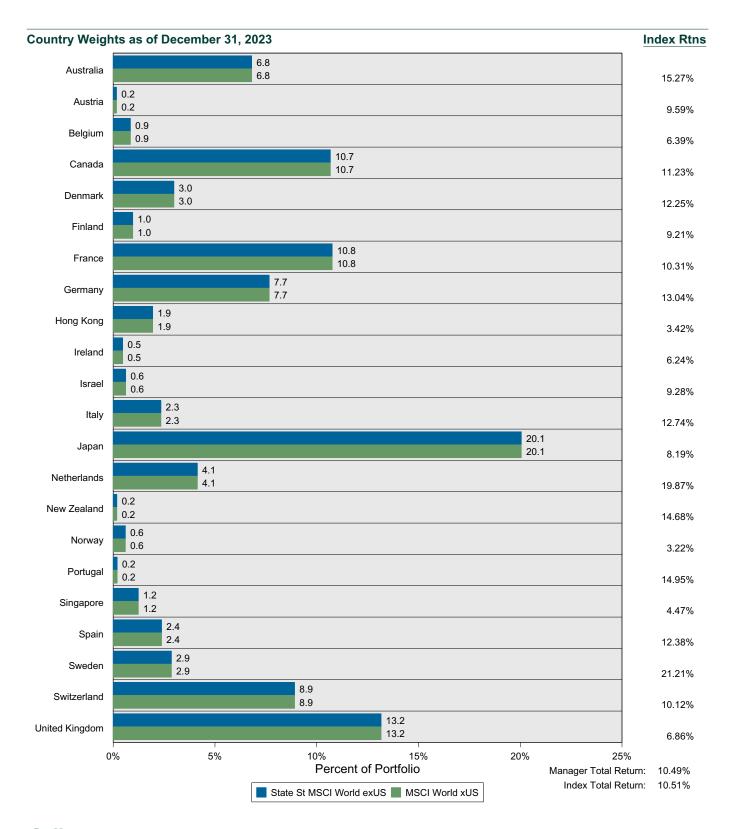




# **Country Allocation** State St MSCI World exUS VS MSCI World xUS (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent 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 World exUS Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 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	\$1,240,037	1.9%	13.15%	355.36	31.00	1.00%	30.80%
Nestle S A Shs Nom New	Consumer Staples	\$1,136,258	1.7%	2.16%	309.33	19.17	2.93%	4.95%
Asml Holding N V Asml Rev Stk Spl	Information Technology	\$1,115,116	1.7%	27.54%	303.59	34.70	0.87%	20.64%
Lvmh Moet Hennessy Lou Vuitt Ord	Consumer Discretionary	\$821,941	1.2%	7.68%	406.86	22.09	1.68%	6.99%
Astrazeneca Plc Ord	Health Care	\$769,310	1.2%	(0.28)%	209.44	16.16	2.24%	11.60%
Novartis	Health Care	\$759,220	1.1%	3.68%	242.30	14.11	3.65%	10.96%
Roche Hldgs Ag Basel Div Rts Ctf	Health Care	\$749,688	1.1%	6.11%	204.09	12.27	3.76%	2.25%
Toyota Motor Corp	Consumer Discretionary	\$715,771	1.1%	3.54%	299.79	8.40	2.40%	24.60%
Bhp Billiton Ltd Shs	Materials	\$640,431	1.0%	22.15%	174.35	12.66	5.04%	(2.50)%
Sap Se Shs	Information Technology	\$590,990	0.9%	18.45%	189.45	23.27	1.45%	22.20%

## **10 Best Performers**

					Price/				
	Ending F					Forecasted		Forecasted	
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in	
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings	
Adyen NV Common Stock	Financials	\$102,786	0.2%	72.48%	39.98	46.58	0.00%	21.52%	
Lasertec	Information Technology	\$73,050	0.1%	69.41%	24.86	49.38	0.46%	65.37%	
Fastighets Ab Balder Shs B	Real Estate	\$16,996	0.0%	56.56%	7.72	16.25	0.00%	14.30%	
Be Semiconductor Inds NV Bes Ord Shs	Information Technology	\$42,682	0.1%	53.08%	12.23	41.03	2.06%	12.10%	
Allied Mining & Proc.	Materials	\$123,174	0.2%	49.36%	60.97	12.53	5.86%	(9.25)%	
Unibail Rodamco Se Shs	Real Estate	\$32,091	0.0%	49.35%	10.28	7.13	0.00%	(3.56)%	
Vestas Wind Sys As Shs	Industrials	\$117,798	0.2%	47.57%	32.07	47.33	0.00%	(34.47)%	
James Hardie Inds Plc Chess Dep Int	Materials	\$62,316	0.1%	47.54%	16.79	22.86	2.39%	14.20%	
Latour Investment Ab Shs B	Industrials	\$14,155	0.0%	46.87%	15.43	39.43	1.36%	14.25%	
Shin Etsu Chemical Co Ltd Shs	Materials	\$280,848	0.4%	44.21%	84.95	19.12	1.69%	21.93%	

# **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
First Quantum Minerals Ltd	Materials	\$17,810	0.0%	(65.33)%	5.71	18.29	1.88%	(17.00)%
Hellofresh	Consumer Staples	\$9,027	0.0%	(46.83)%	2.75	13.04	0.00%	31.24%
Alstom	Industrials	\$14,244	0.0%	(43.78)%	5.17	7.34	2.03%	(10.79)%
Worldline	Financials	\$15,291	0.0%	(38.65)%	4.90	7.57	0.00%	10.29%
Rentokil Initial	Industrials	\$52,068	0.1%	(24.55)%	14.17	17.67	1.78%	12.11%
Igo Ltd Shs	Materials	\$15,460	0.0%	(23.25)%	4.68	10.76	6.23%	72.66%
Bayer A G Namen -Akt	Health Care	\$134,060	0.2%	(22.60)%	36.57	5.71	5.86%	(6.53)%
Argen-X	Health Care	\$82,343	0.1%	(22.19)%	22.42	(266.47)	0.00%	-
Burberry Group Plc Shs	Consumer Discretionary	\$24,100	0.0%	(21.60)%	6.47	13.20	4.40%	5.90%
Volvo Car Ab Ser'b'npv	Consumer Discretionary	\$7,072	0.0%	(21.16)%	9.61	6.20	0.00%	24.40%

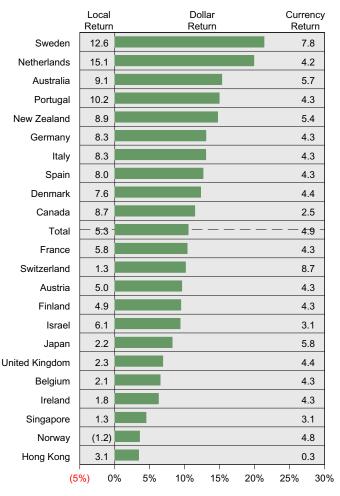


# State St MSCI World exUS vs MSCI World xUS Attribution for Quarter Ended December 31, 2023

#### **International Attribution**

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

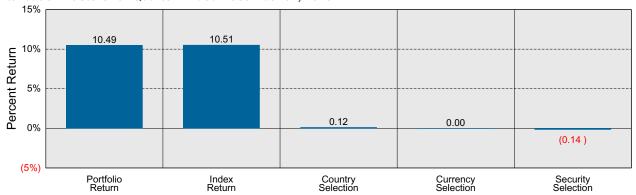




## **Beginning Relative Weights** (Portfolio - Index)

	Index Weight					Portfolio Weight
Sweden	2.8					2.8
Netherlands	3.8					3.8
Australia	6.6					6.6
Portugal	0.2					0.2
New Zealand	0.2					0.2
Germany	7.4					7.4
Italy	2.3					2.3
Spain	2.4					2.4
Denmark	2.9					2.9
Canada	10.6					10.6
Total						- — –
France	10.8					10.8
Switzerland	8.9					8.9
Austria	0.2					0.2
Finland	0.8					0.8
Israel	0.6					0.6
Japan	20.5					20.5
United Kingdom	13.7					13.7
Belgium	0.9					0.9
Ireland	0.5					0.5
Singapore	1.3					1.3
Norway	0.6					0.6
Hong Kong	2.1					2.1
(1.	0%)	(0.5%)	0.0	)%	0.5%	1.0%

#### Attribution Factors for Quarter Ended December 31, 2023



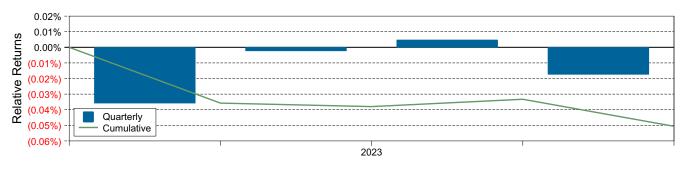


# State St MSCI World exUS vs MSCI World xUS Attribution for One year Ended December 31, 2023

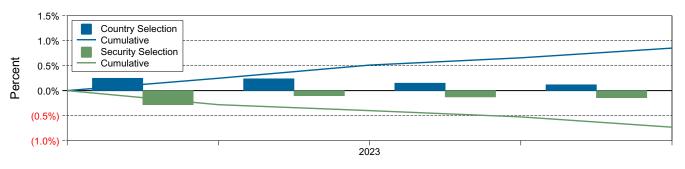
#### **Cumulative International Attribution**

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.

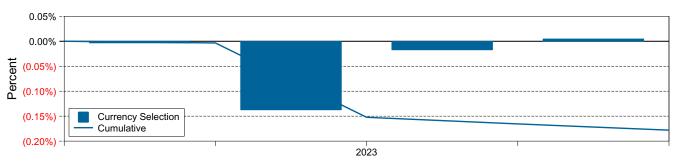
#### Cumulative and Quarterly Return vs MSCI World xUS



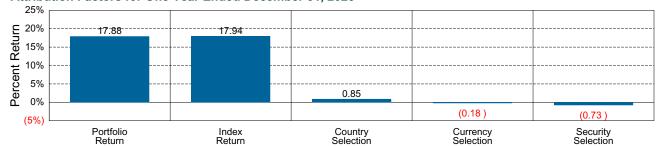
### **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**



#### Attribution Factors for One Year Ended December 31, 2023





# **DFA Intl SmallCap Value** Period Ended December 31, 2023

#### **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.

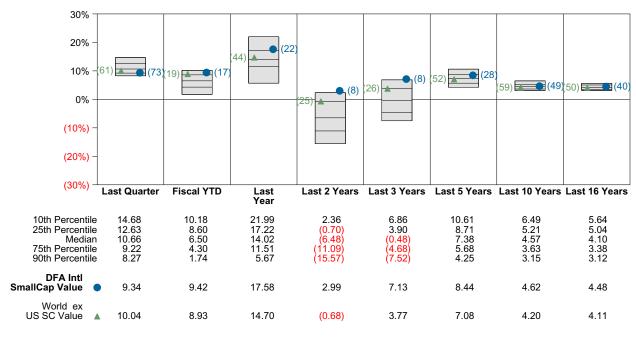
#### **Quarterly Summary and Highlights**

- DFA Intl SmallCap Value's portfolio posted a 9.34% return for the quarter placing it in the 73 percentile of the Callan International Small Cap Mut Funds group for the quarter and in the 22 percentile for the last year.
- DFA Intl SmallCap Value's portfolio underperformed the World ex US SC Value by 0.70% for the guarter and outperformed the World ex US SC Value for the year by

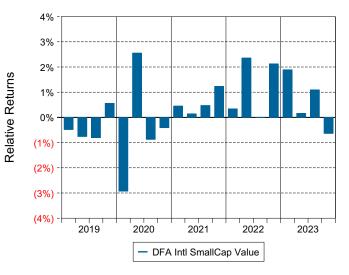
#### **Quarterly Asset Growth**

Beginning Market Value	\$4,213,129
Net New Investment	\$0
Investment Gains/(Losses)	\$393,514
Ending Market Value	\$4,606,644

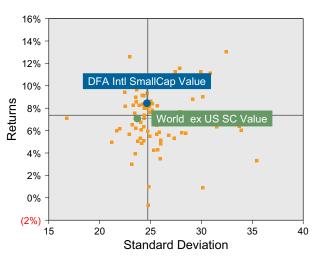
#### Performance vs Callan International Small Cap Mut Funds (Net)



#### Relative Return vs World ex US SC Value



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



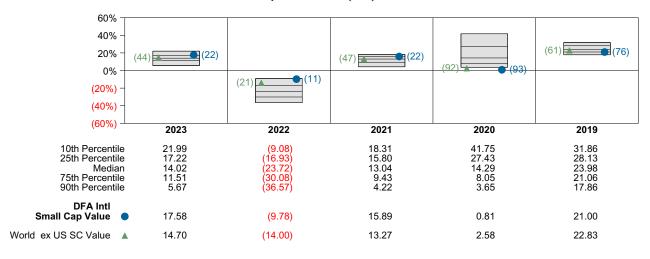


# **DFA Intl Small Cap Value Return Analysis Summary**

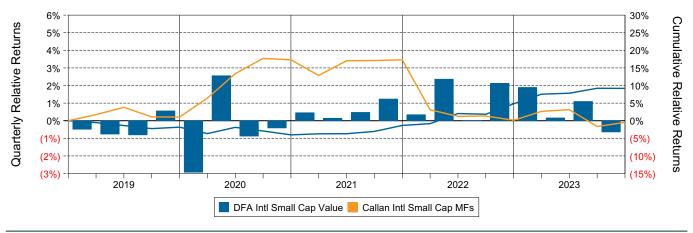
#### **Return Analysis**

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

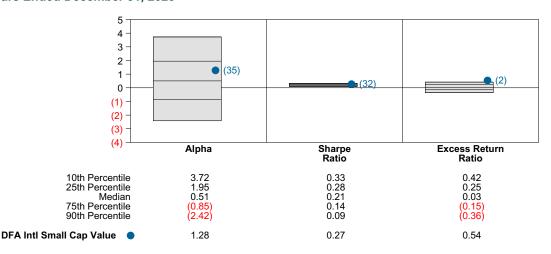
#### Performance vs Callan International Small Cap Mut Funds (Net)



## Cumulative and Quarterly Relative Returns vs World ex US SC Value



Risk Adjusted Return Measures vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended December 31, 2023



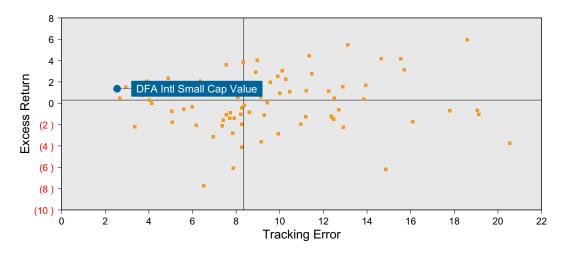


# **DFA Intl Small Cap Value Risk Analysis Summary**

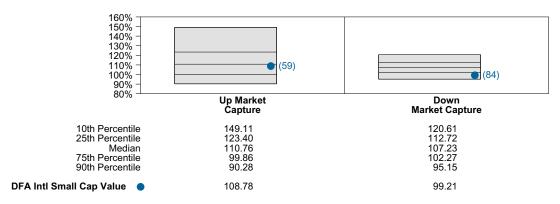
#### Risk Analysis

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.

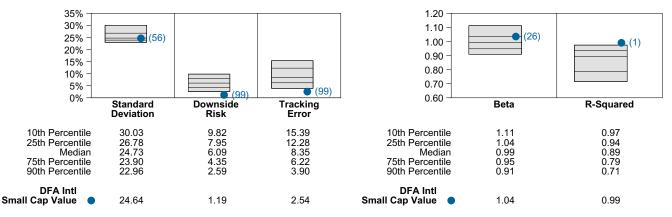
## Risk Analysis vs Callan International Small Cap Mut Funds (Net) Five Years Ended December 31, 2023



Market Capture vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended December 31, 2023



Risk Statistics Rankings vs World ex US SC Value Rankings Against Callan International Small Cap Mut Funds (Net) Five Years Ended December 31, 2023

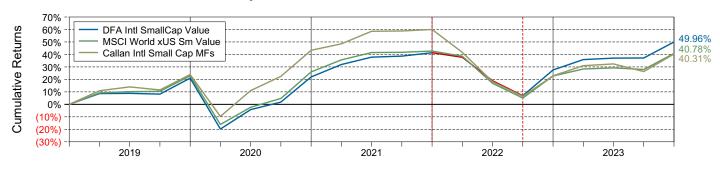




# **DFA Intl SmallCap Value** Drawdown Analysis for Five Years Ended December 31, 2023

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

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

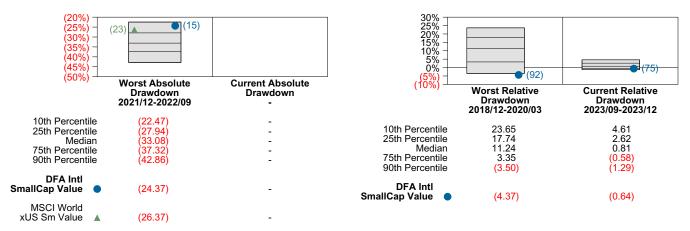


	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
DFA Intl SmallCap Value	(24.37)%	0.75	2021/12-2022/09	(26.37)%	(33.49)%	-	-	-	-	-
Recovery from Trough	40.26%	1.25+	2022/09-2023/12	33.98%	31.84%	-	-	-	-	-
MSCI World xUS Sm Value	(26.37)%	0.75	2021/12-2022/09			(1.35)%	2.00	2021/12-2023/12		
Callan Intl Small Cap MFs	(33.49)%	0.75	2021/12-2022/09			(12.31)%	2.00	2021/12-2023/12		

#### Relative Cumulative Drawdown Analysis vs. MSCI World xUS Sm Value Cumulative Relative Returns 20% Peak Catch-up Rel Rtn: 0.64% DFA Intl SmallCap Value Callan Intl Small Cap MFs 10% 6.52% 5% (0.33%)2019 2021 2022 2023 2020

	Worst Relative Drawdown				Cı	Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
DFA Intl SmallCap Value	(4.37)%	1.25	2018/12-2020/03	7.65%	(0.64)%	0.25	2023/09-2023/12	0.96%		
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		(14.74)%	3.25	2020/09-2023/12			

Drawdown Rankings vs. MSCI World xUS Sm Value Rankings against Callan International Small Cap Mut Funds Five Years Ended December 31, 2023

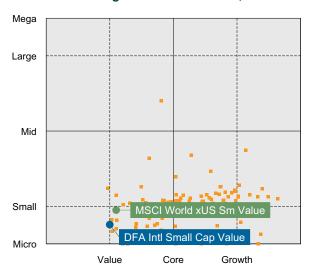




# **Current Holdings Based Style Analysis DFA Intl Small Cap Value** As of December 31, 2023

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

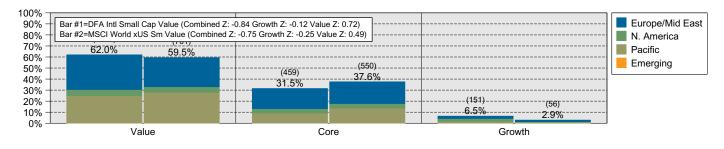
## Style Map vs Callan Intl Small Cap MFs Holdings as of December 31, 2023



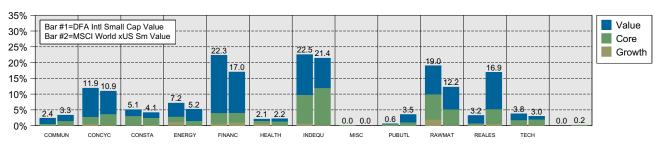
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	59.5% (761)	37.6% (550)	2.9% (56)	100.0% (1367)
Total				
	62.0% (1228)	31.5% (459)	6.5% (151)	100.0% (1838)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (2)	0.0% (0)	0.0% (0)	0.0% (2)
	27.9% (384)	13.8% (231)	1.1% (30)	42.7% (645)
Pacific				
	25.0% (776)	9.1% (219)	1.6% (65)	35.8% (1060)
	5.1% (68)	4.0% (61)	0.3% (6)	9.4% (135)
N. America				
	5.4% (76)	4.1% (43)	2.6% (15)	12.1% (134)
Europe/ Mid East	26.5% (309)	19.8% (258)	1.5% (20)	47.9% (587)
<b>-</b> (	31.6% (374)	18.3% (197)	2.2% (71)	52.1% (642)

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



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





# Historical Holdings Based Style Analysis DFA Intl Small Cap Value For Three Years Ended December 31, 2023

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.

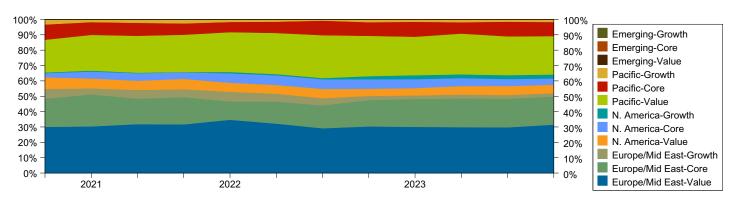
# Average Style Map vs Callan Intl Small Cap MFs Holdings for Three Years Ended December 31, 2023

#### Average Style Exposure Matrix Holdings for Three Years Ended December 31, 2023

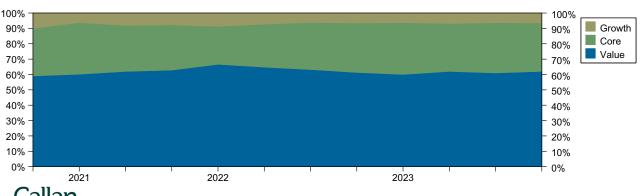




## DFA Intl Small Cap Value Historical Region/Style Exposures



## **DFA Intl Small Cap Value Historical Style Only Exposures**

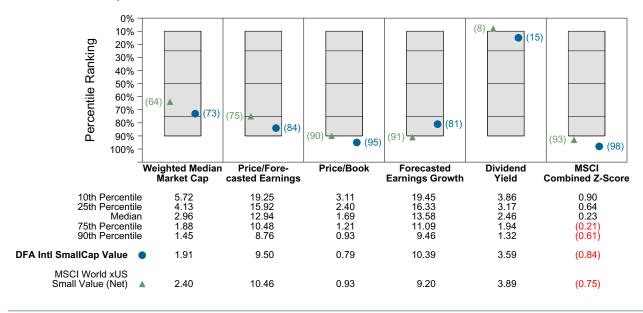


# **DFA Intl SmallCap Value Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

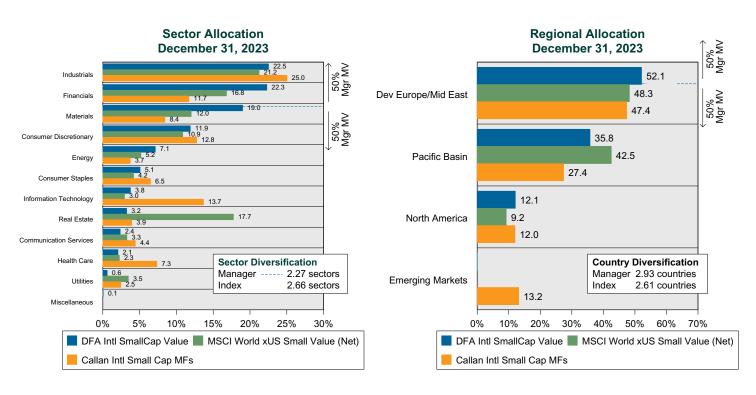
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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

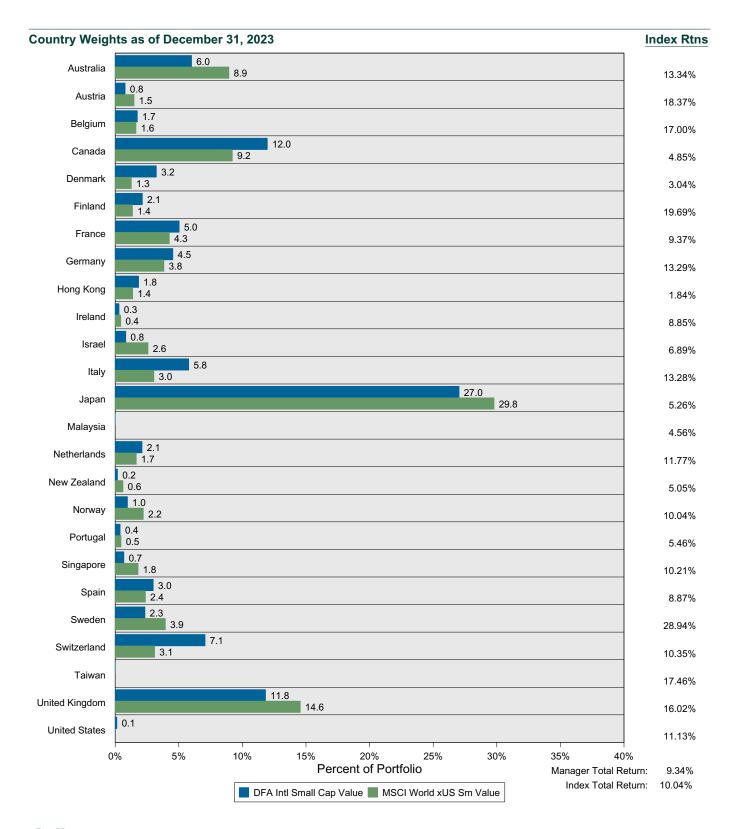




# **Country Allocation** DFA Intl Small Cap Value VS MSCI World xUS Small Value (Net)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent 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 December 31, 2023

# 10 Largest Holdings

		Ending	Ending Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Banco De Sabadell Sa Shs	Financials	\$48,263	1.0%	7.84%	6.69	4.86	4.59%	11.92%
Banco Popolare Societa Coope Shs New	Financials	\$47,093	1.0%	10.01%	8.00	5.23	4.75%	17.35%
Alamos Gold Inc Inc New	Materials	\$39,822	0.9%	19.47%	5.36	24.08	0.75%	32.19%
Leonardo Spa Shs	Industrials	\$38,248	0.8%	14.07%	9.54	10.41	0.93%	15.98%
Helvetia Patria Holding	Financials	\$35,981	0.8%	(1.89)%	7.30	12.99	4.93%	(0.93)%
Jyske Bank	Financials	\$33,490	0.7%	(0.73)%	4.61	6.34	0.00%	24.18%
Adecco Sa Cheserex Ord	Industrials	\$32,751	0.7%	18.80%	8.26	12.95	5.86%	6.76%
Rexel	Industrials	\$31,274	0.7%	21.33%	8.23	9.50	4.84%	(3.30)%
Asr Nederland	Financials	\$31,134	0.7%	25.43%	9.97	7.36	6.47%	1.90%
Crescent Pt Energy Corp	Energy	\$30,647	0.7%	(15.23)%	4.34	6.53	3.89%	(1.00)%

## **10 Best Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Lerado Group (Hdg.)	Consumer Discretionary	\$1	0.0%	150.16%	0.01	(3.18)	0.00%	-
Tai Fook Securities Gp.	Financials	\$1,412	0.0%	113.31%	1.63	(12.87)	5.42%	(3.76)%
Clx Communications	Information Technology	\$2,960	0.1%	110.63%	3.14	55.52	0.00%	7.16%
Openjobmetis Spa Agenzia Per II Lavo	Industrials	\$80	0.0%	93.66%	0.24	13.44	3.09%	38.81%
Solstad Farstad Asa Shs	Energy	\$41	0.0%	89.36%	0.30	5.54	0.00%	8.12%
Tokyo Rakutenchi	Real Estate	\$45	0.0%	74.05%	0.30	25.67	0.84%	1.37%
On The Beach Group	Consumer Discretionary	\$40	0.0%	72.75%	0.37	11.55	0.00%	33.73%
Montana Aerospace	Industrials	\$9	0.0%	70.48%	1.30	19.43	0.00%	-
Link Administration Holdings Common	Industrials	\$456	0.0%	70.43%	0.77	13.28	4.91%	14.50%
Rhythm Watch Co	Consumer Discretionary	\$1,090	0.0%	70.31%	0.18	30.73	1.57%	(17.11)%

# **10 Worst Performers**

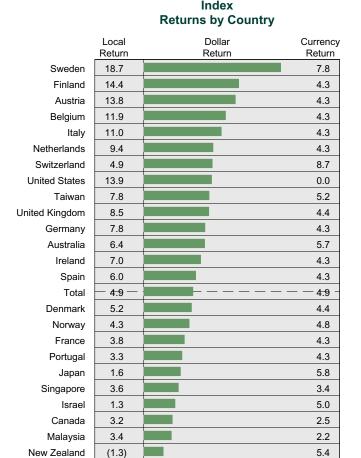
						Price/		
		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Korian	Health Care	\$713	0.0%	(55.97)%	0.28	8.10	10.27%	6.85%
Vpower Group Intl.	Industrials	\$59	0.0%	(49.10)%	0.29	(2.69)	12.54%	-
Frontier Developments	Communication Services	\$2	0.0%	(38.13)%	0.07	(5.94)	0.00%	38.87%
Oriental Press Group Ltd Shs	Communication Services	\$3	0.0%	(34.07)%	0.14	6.22	0.00%	46.69%
Ensign Energy Services	Energy	\$1,239	0.0%	(31.75)%	0.30	5.45	0.00%	(14.42)%
Lippo China Res.	Consumer Staples	\$22	0.0%	(31.20)%	0.10	(13.25)	0.00%	-
Corus Entertainment Inc CI B Non Vtg	Communication Services	\$680	0.0%	(29.31)%	0.11	4.86	0.00%	(8.64)%
Catena Media	Communication Services	\$35	0.0%	(28.54)%	0.10	406.67	0.00%	-
Bonterra Energy Corp New	Energy	\$358	0.0%	(28.21)%	0.15	4.00	0.00%	16.21%
Yangarra Res Ltd Com No Par	Energy	\$152	0.0%	(27.50)%	0.09	1.97	0.00%	8.86%



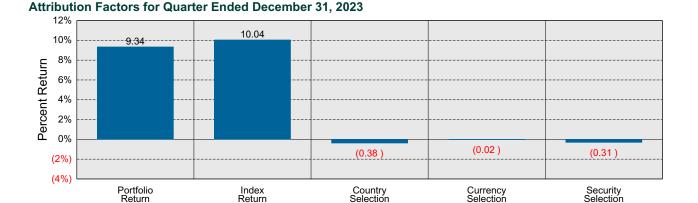
# DFA Intl SmallCap Value vs MSCI World xUS Sm Value Attribution for Quarter Ended December 31, 2023

#### International Attribution

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



#### **Beginning Relative Weights** (Portfolio - Index) Index Portfolio Weight Weight 3.2 2.1 Sweden Finland 1.2 2.0 Austria 1.5 0.7 Belgium 1.3 1.6 Italy 4.4 5.6 Netherlands 1.6 1.9 Switzerland 2.6 6.7 **United States** 0.0 0.1 Taiwan 0.0 0.0 United Kingdom 13.0 11.3 Germany 4.2 4.7 Australia 8.7 5.7 Ireland 0.4 0.4 2.4 3.0 Spain Total 3.5 Denmark 1.3 Norway 2.2 1.1 France 3.5 4.9 Portugal 0.5 0.4 Japan 31.0 27.5 0.8 1.8 Singapore Israel 2.6 0.9 Canada 10.0 12.9 Malaysia 0.0 0.0 8.0 New Zealand 0.2 Hong Kong 1.6 2.0 0.0 China 0.0



0.3

0.3

40%

(6%)

(4%)

(2%)

0%

2%

4%

6%

30%



Hong Kong

China

(10%)

(0.9)

(3.2)

0%

10%

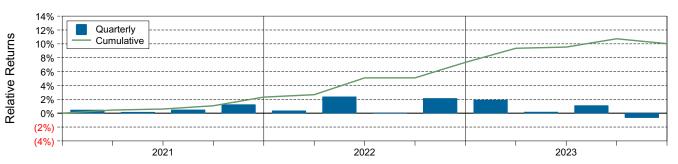
20%

# DFA Intl SmallCap Value vs MSCI World xUS Sm Value Attribution for Three years Ended December 31, 2023

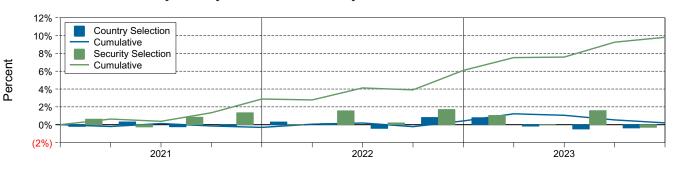
#### **Cumulative International Attribution**

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.

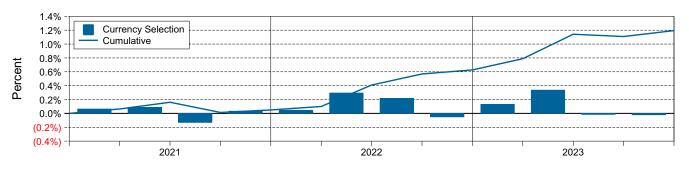
#### Cumulative and Quarterly Return vs MSCI World xUS Sm Value



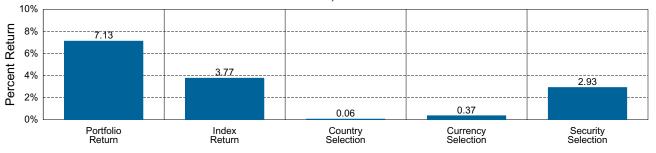
#### **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**









# State St MSCI exUS Small Period Ended December 31, 2023

#### **Investment Philosophy**

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

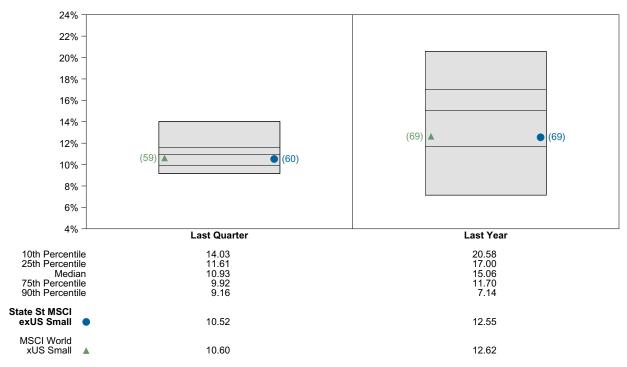
#### **Quarterly Summary and Highlights**

- State St MSCI exUS Small's portfolio posted a 10.52% return for the quarter placing it in the 60 percentile of the Callan International Small Cap group for the quarter and in the 69 percentile for the last year.
- State St MSCI exUS Small's portfolio underperformed the MSCI World xUS Small by 0.08% for the quarter and underperformed the MSCI World xUS Small for the year by 0.08%.

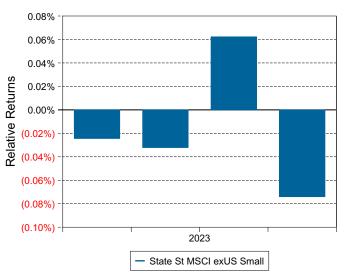
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$6,163,271
Net New Investment	\$-690,728
Investment Gains/(Losses)	\$570,036
Ending Market Value	\$6.042.579

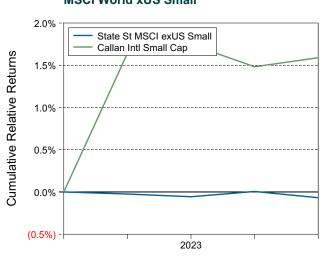
# Performance vs Callan International Small Cap (Gross)



#### Relative Return vs MSCI World xUS Small



## **Cumulative Returns vs MSCI World xUS Small**

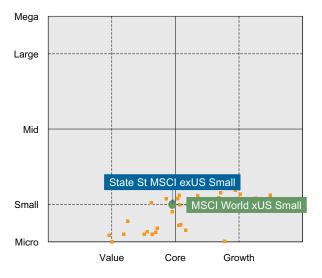




# **Current Holdings Based Style Analysis** State St MSCI exUS Small As of December 31, 2023

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

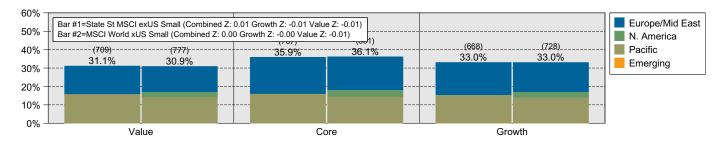
## Style Map vs Callan Intl Small Cap Holdings as of December 31, 2023



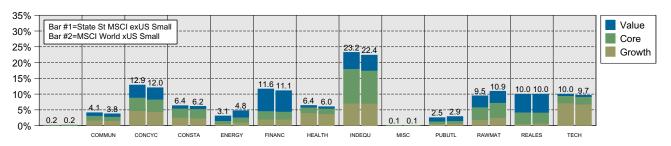
## **Style Exposure Matrix** Holdings as of December 31, 2023

	15.1% (314)	19.7% (370)	17.5% (301)	<b>52.4%</b> (985)
Europe/				
Mid East	13.7% (314)	17.9% (370)	15.9% (301)	47.5% (985)
	0.0% (0)	0.1% (4)	0.0% (0)	0.1% (4)
N. America	, ,	, ,	, ,	
	2.7% (68)	3.7% (88)	3.0% (60)	9.4% (216)
	16.0% (395)	16.0% (393)	15.4% (365)	47.3% (1153)
Pacific				
	14.5% (395)	14.5% (393)	14.0% (365)	43.0% (1153)
	0.0% (0)	0.0% (0)	0.1% (2)	0.1% (2)
Emerging	, ,	, ,	, ,	
	0.0% (0)	0.0% (0)	0.1% (2)	0.1% (2)
	31.1% (709)	35.9% (767)	33.0% (668)	100.0% (2144)
Total				
	30.9% (777)	36.1% (851)	33.0% (728)	100.0% (2356)
	Value	Core	Growth	Total

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



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



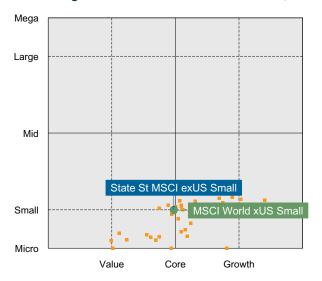


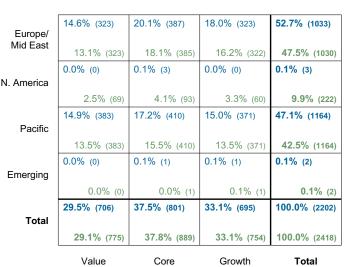
# **Historical Holdings Based Style Analysis** State St MSCI exUS Small For One Year Ended December 31, 2023

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.

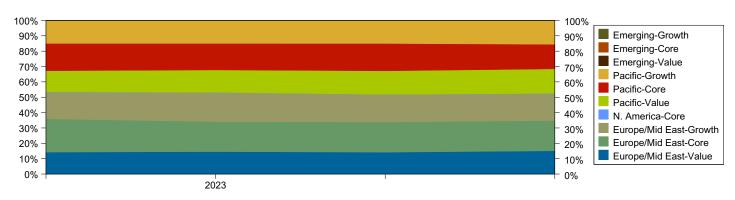
## Average Style Map vs Callan Intl Small Cap Holdings for One Year Ended December 31, 2023

# **Average Style Exposure Matrix** Holdings for One Year Ended December 31, 2023

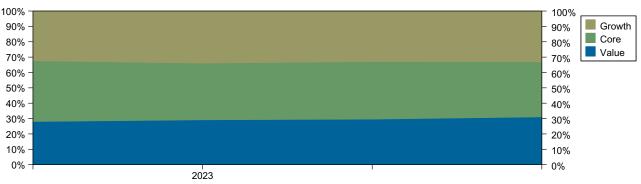




## State St MSCI exUS Small Historical Region/Style Exposures



State St MSCI exUS Small Historical Style Only Exposures

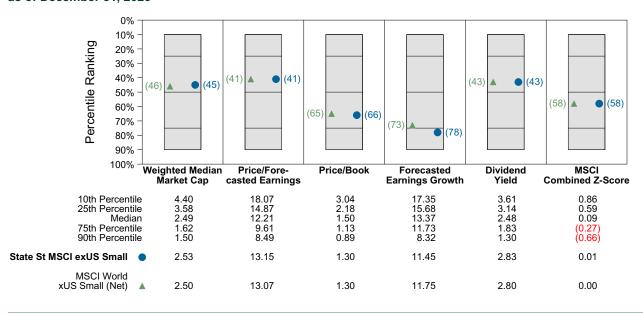


# State St MSCI exUS Small **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

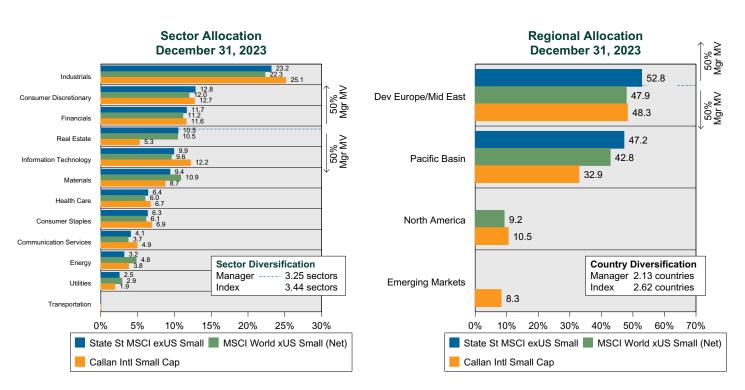
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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

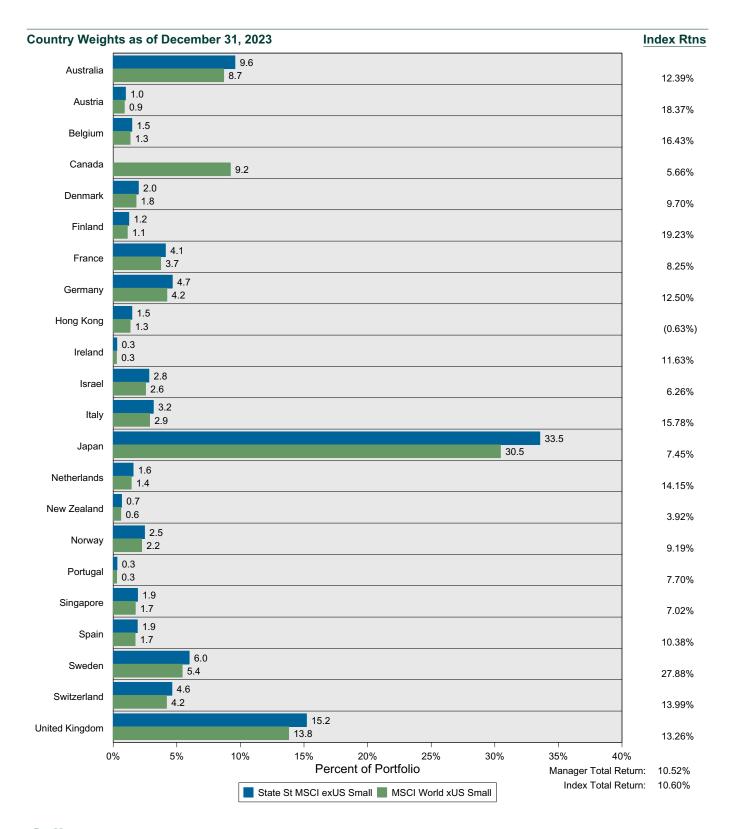




# **Country Allocation** State St MSCI exUS Small VS MSCI World xUS Small (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent 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 exUS Small Top 10 Portfolio Holdings Characteristics as of December 31, 2023

# 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
Trelleborg Ab Akt B	Industrials	\$17,537	0.3%	33.70%	7.59	20.33	1.71%	11.84%
Banco De Sabadell Sa Shs	Financials	\$15,981	0.3%	7.84%	6.69	4.86	4.59%	11.92%
Screen Hldgs Co Ltd Shs New	Information Technology	\$15,887	0.3%	74.29%	8.60	17.59	1.39%	14.00%
Marks & Spencer Group	Consumer Staples	\$15,821	0.3%	20.72%	6.85	11.64	0.00%	21.45%
B&m European Value Retail S A	Consumer Discretionary	\$15,715	0.3%	0.73%	7.16	14.14	2.60%	6.78%
Rexel	Industrials	\$15,385	0.3%	21.33%	8.23	9.50	4.84%	(3.30)%
Petroplus Hldgs Ag Zug Namen Akt	Real Estate	\$14,805	0.2%	18.13%	6.41	24.17	3.13%	6.83%
Weir Group Plc Ord	Industrials	\$14,422	0.2%	4.63%	6.24	15.17	1.95%	11.51%
Intermediate Capital Group P Ord	Financials	\$14,382	0.2%	28.96%	6.23	11.60	4.61%	2.47%
Diploma Plc Shs	Industrials	\$14,138	0.2%	24.54%	6.12	25.83	1.57%	6.70%

## **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
Neuren Pharms. Dead - Dead	Health Care	\$4,462	0.1%	138.70%	2.17	44.37	0.00%	-
Tai Fook Securities Gp.	Financials	\$1,131	0.0%	113.31%	1.63	(12.87)	5.42%	(3.76)%
Clx Communications	Information Technology	\$5,798	0.1%	110.63%	3.14	55.52	0.00%	7.16%
Benefit One	Industrials	\$2,768	0.0%	107.73%	2.40	35.27	1.62%	6.08%
Corem Property Group	Real Estate	\$1,246	0.0%	89.83%	1.07	29.17	3.64%	-
Camurus	Health Care	\$3,761	0.1%	86.95%	2.97	63.29	0.00%	-
Micronics Japan Co Ltd Tokyo Shs	Information Technology	\$1,685	0.0%	84.29%	1.04	20.54	1.53%	2.44%
Addlife	Health Care	\$2,807	0.0%	82.81%	1.28	42.41	1.05%	23.91%
Towa Corporation Ord	Information Technology	\$2,341	0.0%	81.63%	1.27	22.03	0.54%	50.04%
Nyfosa Ab Common Stock Sek.5	Real Estate	\$3,148	0.1%	77.65%	1.82	18.45	3.86%	(6.04)%

# **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
Korian	Health Care	\$459	0.0%	(55.97)%	0.28	8.10	10.27%	6.85%
Finnair Oyj Shs	Industrials	\$934	0.0%	(51.94)%	0.90	2.20	0.00%	11.50%
Euroapi	Health Care	\$764	0.0%	(49.89)%	0.60	17.78	0.00%	54.93%
Ukf (Holdings)	Financials	\$478	0.0%	(49.34)%	0.49	(2.91)	0.21%	-
Petrofac Ltd	Energy	\$489	0.0%	(48.64)%	0.25	(2.91)	0.00%	(51.43)%
Meyer Burger Techn	Information Technology	\$1,737	0.0%	(42.73)%	0.84	58.00	0.00%	(4.35)%
Union Medical Healthcare	Consumer Discretionary	\$244	0.0%	(42.43)%	0.26	10.62	2.70%	24.00%
Japan Display Inc	Information Technology	\$200	0.0%	(41.55)%	0.58	(3.33)	0.00%	-
Liontown Resources	Materials	\$3,150	0.1%	(40.66)%	2.73	80.42	0.00%	58.90%
Victoria	Consumer Discretionary	\$511	0.0%	(39.34)%	0.44	7.81	0.00%	46.63%

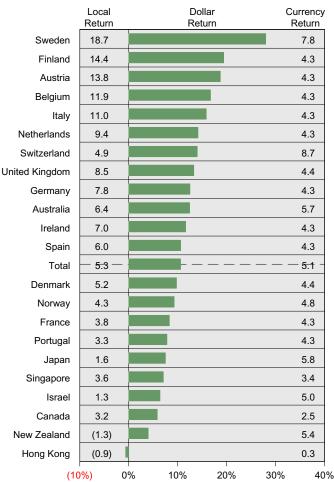


# State St MSCI exUS Small vs MSCI World xUS Small Attribution for Quarter Ended December 31, 2023

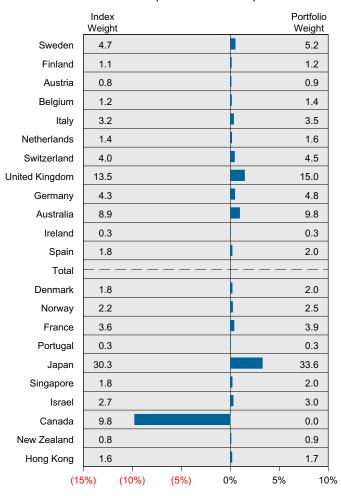
#### **International Attribution**

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

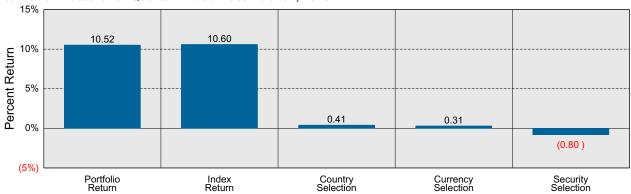




#### **Beginning Relative Weights** (Portfolio - Index)



# Attribution Factors for Quarter Ended December 31, 2023



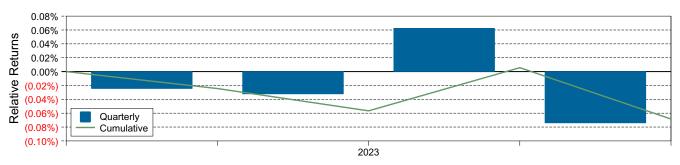


# State St MSCI exUS Small vs MSCI World xUS Small Attribution for One year Ended December 31, 2023

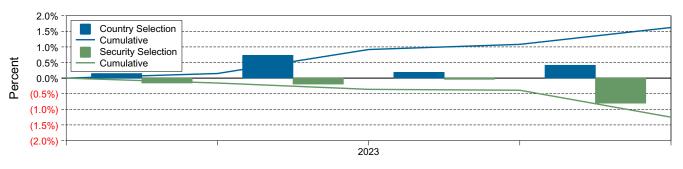
#### **Cumulative International Attribution**

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.

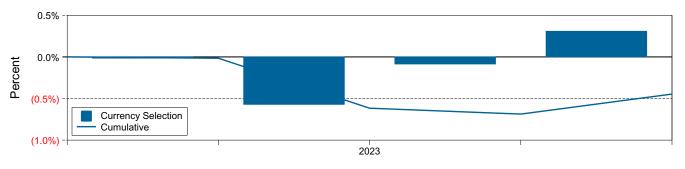
#### Cumulative and Quarterly Return vs MSCI World xUS Small



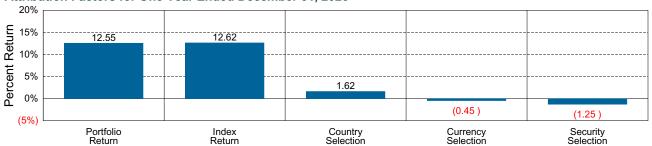
### **Cumulative and Quarterly Country Selection and Security Selection Factors**



## **Cumulative and Quarterly Currency Selection Factors**









# **DFA EM All Cap Core** Period Ended December 31, 2023

#### **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.

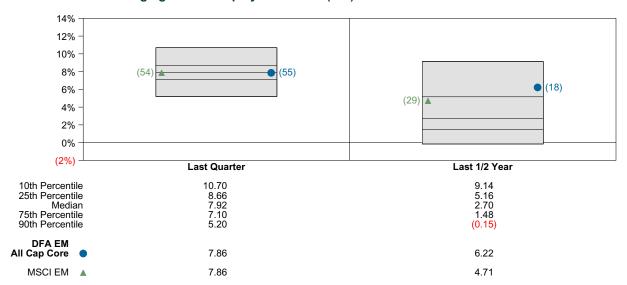
#### **Quarterly Summary and Highlights**

- DFA EM All Cap Core's portfolio posted a 7.86% return for the quarter placing it in the 55 percentile of the Callan Emerging Markets Equity Mut Funds group for the quarter and in the 18 percentile for the last one-half year.
- DFA EM All Cap Core's portfolio underperformed the MSCI EM by 0.01% for the quarter and outperformed the MSCI EM for the one-half year by 1.51%.

#### **Quarterly Asset Growth**

Beginning Market Value	\$14,705,878
Net New Investment	\$-340,616
Investment Gains/(Losses)	\$1,116,935
Ending Market Value	\$15,482,197

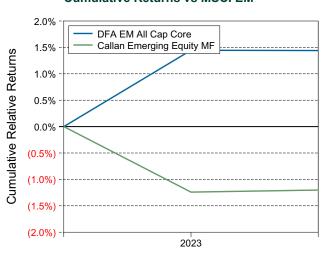
#### Performance vs Callan Emerging Markets Equity Mut Funds (Net)



#### Relative Return vs MSCI EM

# 1.8% 1.6% 1.4% Relative Returns 1.2% 1.0% 0.8% 0.6% 0.4% 0.2% 0.0% (0.2%)2023 DFA EM All Cap Core

## **Cumulative Returns vs MSCI EM**





# **Current Holdings Based Style Analysis DFA EM All Cap Core** As of December 31, 2023

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

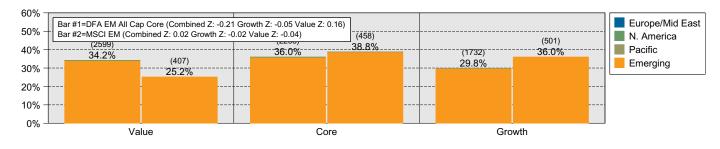
## Style Map vs Callan Emerging Equity MF Holdings as of December 31, 2023



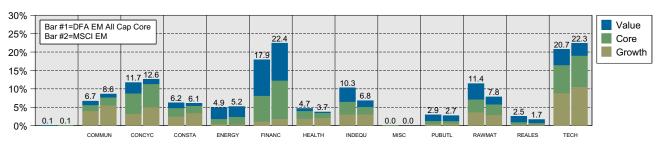
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	25.2% (407)	38.8% (458)	36.0% (501)	100.0% (1366)
Total			, ,	, ,
	34.2% (2599)	36.0% (2268)	29.8% (1732)	100.0% (6599)
0 0	25.2% (407)	38.7% (456)	36.0% (501)	99.9% (1364)
Emerging	0 / 0 (20)	(2223)	2011 /0 (1101)	(6616)
	34.1% (2577)	35.9% (2229)	29.7% (1707)	99.7% (6513)
	0.0% (0)	0.1% (2)	0.0% (0)	0.1% (2)
Pacific	0.070 (21)	0.170 (24)	0.170 (23)	0.270 (70)
	0.0% (21)	0.1% (24)	0.1% (25)	0.2% (70)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
N. America	(1)	(12)	(5)	(11)
	0.0% (1)	0.1% (15)	0.0% (0)	0.1% (16)
Europe/ Mid East	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
<b>-</b>	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

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



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



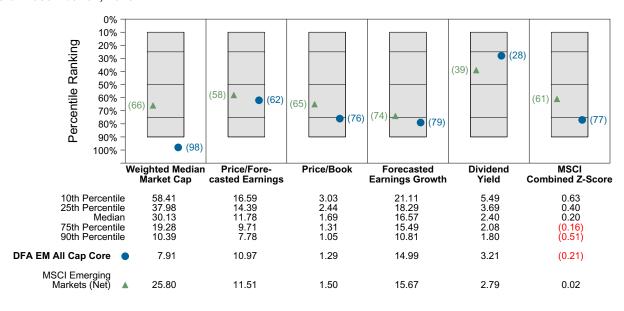


# **DFA EM All Cap Core Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

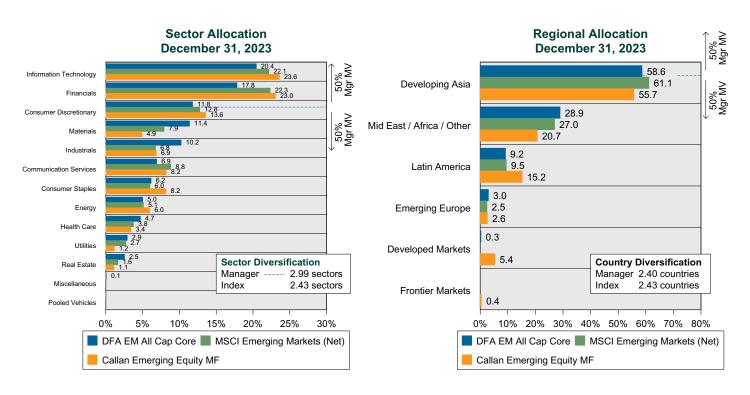
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Markets Equity Mut Funds as of December 31, 2023



#### **Sector Weights**

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

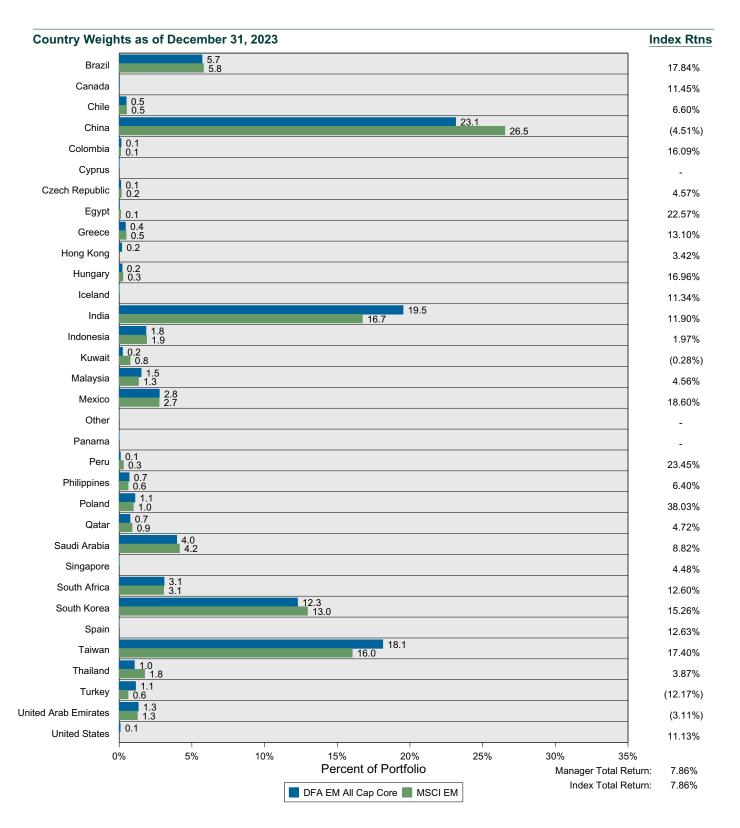




# **Country Allocation DFA EM All Cap Core VS MSCI Emerging Markets (Net)**

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent 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 December 31, 2023

# 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	\$499,805	3.2%	19.87%	501.06	15.76	2.03%	4.70%
Samsung Electronics Co Ltd Ord	Information Technology	\$419,392	2.7%	20.88%	363.87	17.26	1.83%	(6.00)%
Tencent Holdings Limited Shs Par Hkd	Communication Services	\$380,656	2.5%	(1.89)%	356.56	14.15	0.82%	27.00%
Taiwan Semiconductor Mfg Co Ltd Spon	Information Technology	\$200,066	1.3%	26.57%	501.06	15.76	2.03%	4.70%
Alibaba Group Holding Ltd	Consumer Discretionary	\$161,512	1.0%	(8.42)%	197.26	7.99	1.29%	(1.11)%
Petroleo Brasileiro Sa Petro Pfd Shs	Energy	\$101,674	0.7%	15.29%	42.95	4.44	18.87%	48.61%
China Construction Bank Shs H	Financials	\$100,267	0.6%	7.64%	143.17	3.09	9.53%	1.60%
Sk Hynix Inc Shs	Information Technology	\$94,343	0.6%	29.61%	79.98	14.62	0.85%	38.40%
Infosys Technologies	Information Technology	\$88,914	0.6%	8.67%	76.74	23.59	2.30%	12.30%
Reliance Industries Ltd Shs Demateri	Energy	\$87,628	0.6%	10.00%	210.17	21.61	0.35%	17.00%

## **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
Emerging Mem.&logic Sln.	Information Technology	\$973	0.0%	251.84%	0.37	29.72	0.00%	-
Alcor Micro	Information Technology	\$432	0.0%	245.66%	0.37	(152.00)	0.43%	-
Ls Cable&system Asia	Industrials	\$514	0.0%	170.69%	0.50	48.59	1.20%	6.43%
Weiqiao Textile Company Ltd Shs H	Consumer Discretionary	\$810	0.0%	160.06%	0.18	(7.34)	0.00%	-
Gafisa Sa Shs	Consumer Discretionary	\$73	0.0%	159.03%	0.14	(2.90)	0.00%	-
Inox Wind	Industrials	\$1,504	0.0%	158.30%	1.96	52.72	0.00%	-
Cafe24	Information Technology	\$460	0.0%	156.87%	0.49	45.29	0.00%	-
Ifa Hotels & Resorts	Consumer Discretionary	\$42	0.0%	152.28%	0.48	12.68	0.00%	-
Varo Vision	Financials	\$158	0.0%	144.84%	0.35	227.95	0.39%	-
Shin Yang P&p	Information Technology	\$1,331	0.0%	130.08%	0.49	59.80	0.00%	(50.21)%

# **10 Worst Performers**

		Ending	Percent		Forecast			Forecasted
		Market	of	Qtrly	Market	<b>Earnings</b>	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Konya Cimento	Materials	\$1,010	0.0%	-	1.19	398.63	0.00%	-
Shengjing Bank 'h'	Financials	\$42	0.0%	(85.33)%	0.23	8.33	0.00%	-
Silverman Holdings	Consumer Discretionary	\$2	0.0%	(79.82)%	0.01	-	39.45%	-
Hywin Hdg.Amer. Depy. Shs.1:2	Financials	\$6	0.0%	(74.12)%	0.05	2.25	0.00%	-
Nam Fong Intl.Hldg.	Real Estate	\$16	0.0%	(71.72)%	0.19	(13.50)	0.00%	-
Metro Healthcare Indonesia	Health Care	\$275	0.0%	(66.54)%	0.35	-	0.00%	-
Nanjing Sample Tech. H	Information Technology	\$7	0.0%	(64.86)%	0.03	26.20	0.00%	-
City Interactive	Consumer Staples	\$290	0.0%	(61.56)%	0.10	18.93	0.00%	3.54%
Cosmopolitan Intl Holdings L Shs	Real Estate	\$16	0.0%	(61.51)%	0.49	(35.64)	0.00%	-
Gubre Fabrikalari	Materials	\$78	0.0%	(60.44)%	1.74	104.20	0.00%	-



# State St MSCI EM China Period Ended December 31, 2023

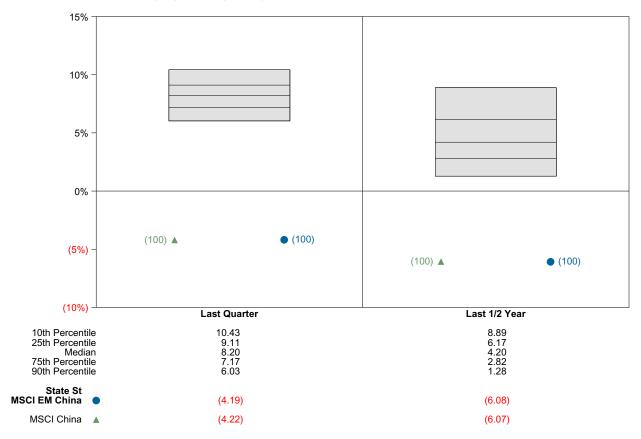
#### **Quarterly Summary and Highlights**

- State St MSCI EM China's portfolio posted a (4.19)% return for the quarter placing it in the 100 percentile of the Callan Emerging Broad group for the quarter and in the 100 percentile for the last one-half year.
- State St MSCI EM China's portfolio outperformed the MSCI China by 0.03% for the quarter and underperformed the MSCI China for the one-half year by 0.01%.

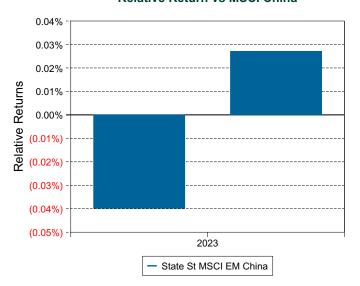
#### **Quarterly Asset Growth**

Beginning Market Value	\$4,052,284
Net New Investment	\$152,180
Investment Gains/(Losses)	\$-169,767
Ending Market Value	\$4 034 697

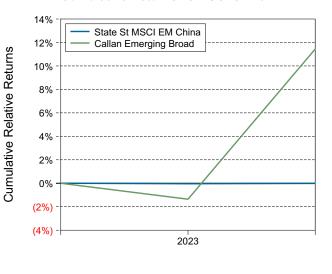
#### Performance vs Callan Emerging Broad (Gross)



## Relative Return vs MSCI China



## **Cumulative Returns vs MSCI China**





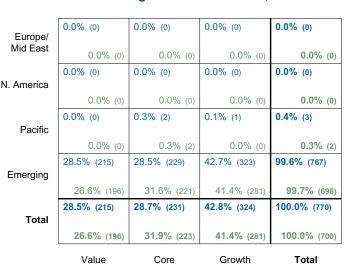
# **Current Holdings Based Style Analysis** State St MSCI EM China As of December 31, 2023

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

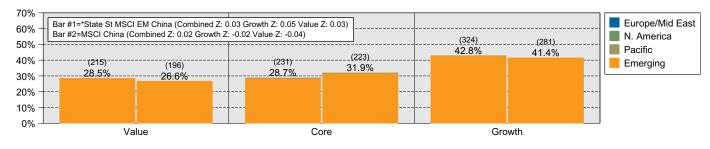
## Style Map vs Callan Emerging Broad Holdings as of December 31, 2023



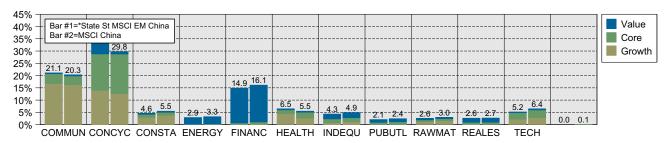
#### **Style Exposure Matrix** Holdings as of December 31, 2023



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



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



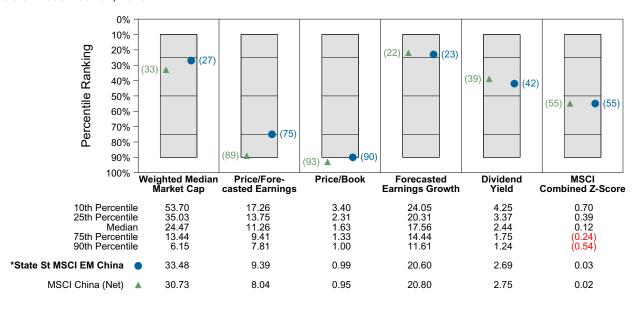
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

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

#### **Portfolio Characteristics**

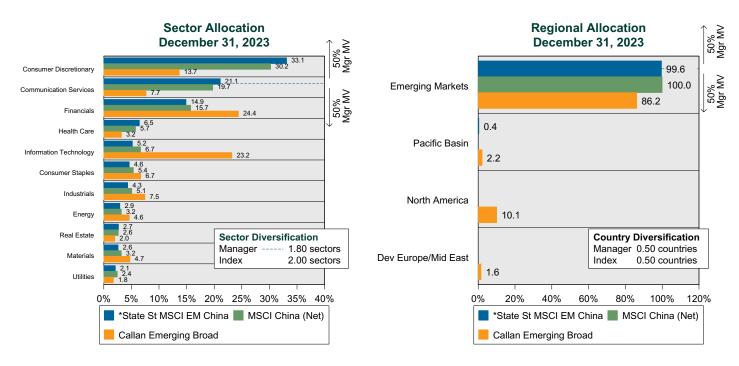
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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



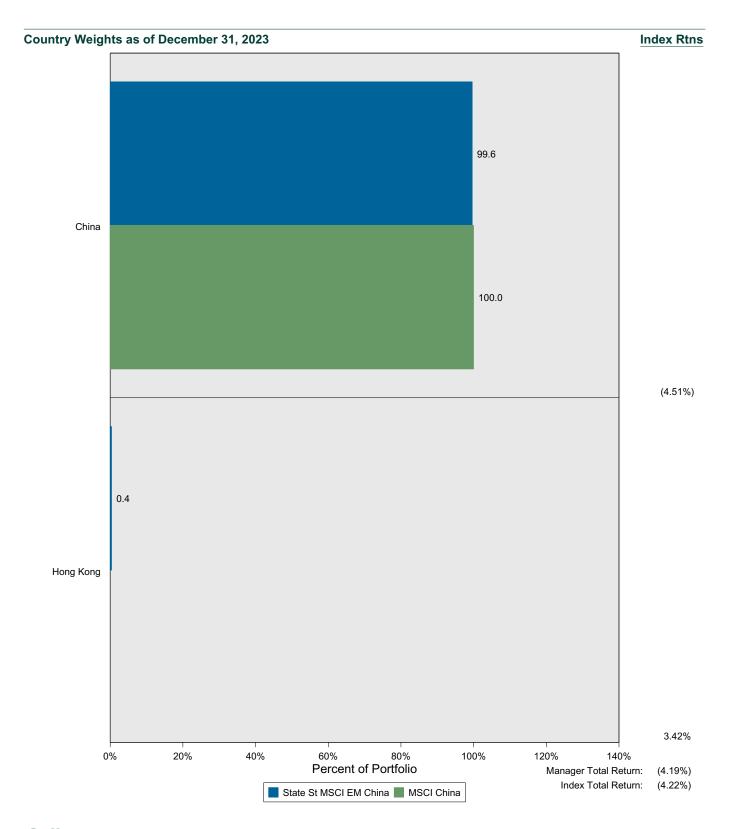
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



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





# State St MSCI EM China Top 10 Portfolio Holdings Characteristics as of December 31, 2023

### 10 Largest Holdings

					Price/		
	Ending	Percent			Forecasted		Forecasted
	Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Communication Services	\$561,002	13.9%	(1.89)%	356.56	14.15	0.82%	27.00%
Consumer Discretionary	\$398,709	9.9%	(8.42)%	197.26	7.99	1.29%	(1.11)%
Consumer Discretionary	\$194,321	4.8%	52.65%	194.39	19.85	0.00%	21.31%
Consumer Discretionary	\$164,934	4.1%	(26.88)%	59.15	15.22	0.00%	134.10%
Financials	\$126,046	3.1%	7.64%	143.17	3.09	9.53%	1.60%
Communication Services	\$87,538	2.2%	(9.41)%	58.06	12.82	1.94%	36.10%
Communication Services	\$85,342	2.1%	(10.96)%	42.06	10.88	0.00%	17.60%
Consumer Discretionary	\$76,633	1.9%	0.02%	40.24	7.42	2.16%	19.23%
Financials	\$70,859	1.8%	3.68%	42.46	3.37	9.06%	3.99%
Financials	\$67,063	1.7%	11.28%	31.91	3.47	9.11%	0.86%
	Communication Services Consumer Discretionary Consumer Discretionary Consumer Discretionary Financials Communication Services Communication Services Consumer Discretionary Financials	Sector         Market Value           Communication Services         \$561,002           Consumer Discretionary         \$398,709           Consumer Discretionary         \$194,321           Consumer Discretionary         \$164,934           Financials         \$126,046           Communication Services         \$87,538           Communication Services         \$85,342           Consumer Discretionary         \$76,633           Financials         \$70,859	Sector         Market Value         of Portfolio           Communication Services Consumer Discretionary Consumer Discretionary Financials         \$561,002         13.9%           Consumer Discretionary Consumer Discretionary Financials         \$194,321         4.8%           Communication Services Communication Services Communication Services Consumer Discretionary Financials         \$87,538         2.2%           Consumer Discretionary Financials         \$76,633         1.9%           Financials         \$70,859         1.8%	Sector         Market Value         of Value         Qtrly Return           Communication Services         \$561,002         13.9%         (1.89)%           Consumer Discretionary         \$398,709         9.9%         (8.42)%           Consumer Discretionary         \$194,321         4.8%         52.65%           Consumer Discretionary         \$164,934         4.1%         (26.88)%           Financials         \$126,046         3.1%         7.64%           Communication Services         \$87,538         2.2%         (9.41)%           Consumer Discretionary         \$76,633         1.9%         0.02%           Financials         \$70,859         1.8%         3.68%	Sector         Warket Value         of Portfolio         Qtrly Return         Market Capital           Communication Services         \$561,002         13.9%         (1.89)%         356.56           Consumer Discretionary         \$398,709         9.9%         (8.42)%         197.26           Consumer Discretionary         \$194,321         4.8%         52.65%         194.39           Consumer Discretionary         \$164,934         4.1%         (26.88)%         59.15           Financials         \$126,046         3.1%         7.64%         143.17           Communication Services         \$87,538         2.2%         (9.41)%         58.06           Communication Services         \$85,342         2.1%         (10.96)%         42.06           Consumer Discretionary         \$76,633         1.9%         0.02%         40.24           Financials         \$70,859         1.8%         3.68%         42.46	Sector         \$561,002         13.9%         (1.89)%         356.56         14.15           Consumer Discretionary         \$398,709         9.9%         (8.42)%         197.26         7.99           Consumer Discretionary         \$194,321         4.8%         52.65%         194.39         19.85           Consumer Discretionary         \$164,934         4.1%         (26.88)%         59.15         15.22           Financials         \$126,046         3.1%         7.64%         143.17         3.09           Communication Services         \$87,538         2.2%         (9.41)%         58.06         12.82           Communication Services         \$85,342         2.1%         (10.96)%         42.06         10.88           Consumer Discretionary         \$76,633         1.9%         0.02%         40.24         7.42           Financials         \$70,859         1.8%         3.68%         42.46         3.37	Sector         Warket Value         of Portfolio         Qtrly Return         Market Capital         Earnings Ratio         Dividend Yield           Communication Services         \$561,002         13.9%         (1.89)%         356.56         14.15         0.82%           Consumer Discretionary         \$398,709         9.9%         (8.42)%         197.26         7.99         1.29%           Consumer Discretionary         \$194,321         4.8%         52.65%         194.39         19.85         0.00%           Consumer Discretionary         \$164,934         4.1%         (26.88)%         59.15         15.22         0.00%           Financials         \$126,046         3.1%         7.64%         143.17         3.09         9.53%           Communication Services         \$87,538         2.2%         (9.41)%         58.06         12.82         1.94%           Consumer Discretionary         \$76,633         1.9%         0.02%         42.06         10.88         0.00%           Financials         \$70,859         1.8%         3.68%         42.46         3.37         9.06%

#### **10 Best Performers**

		Ending	Percent			Forecasted		Forecasted
		Market	of	Qtrly	Market	Earnings	Dividend	Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Isoftstone Itech. (Group) A	Information Technology	\$264	0.0%	77.84%	6.21	29.06	0.72%	-
Aac Technologies Holdings In Shs New	Information Technology	\$4,547	0.1%	77.15%	3.56	21.37	0.52%	(31.22)%
Bej.Wantai Bilg. Phmcy. Enter.A	Health Care	\$416	0.0%	60.22%	13.43	20.44	0.94%	1.09%
Jiangxi Spc.Elec.Mtr.'a'	Industrials	\$159	0.0%	55.55%	3.25	(237.50)	0.00%	-
Pinduoduo Inc Sponsored Ads	Consumer Discretionary	\$194,321	4.8%	52.65%	194.39	19.85	0.00%	21.31%
Hansoh Pharmaceutical Group Co Hk/03	Health Care	\$3,602	0.1%	51.29%	11.98	27.27	0.76%	12.13%
Tencent Music Entmt Group Spon Ads	Communication Services	\$15,037	0.4%	44.51%	7.96	15.64	0.00%	4.91%
Tal Ed Group Ads Repstg Com	Consumer Discretionary	\$12,415	0.3%	41.85%	6.20	54.68	0.00%	(17.49)%
Chongqing Sokon Igp.A	Consumer Discretionary	\$836	0.0%	39.93%	16.20	(114.26)	0.00%	(56.36)%
Lenova Group Ltd Shs	Information Technology	\$22,944	0.6%	39.59%	17.16	12.37	3.48%	12.25%

#### **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	
Jiumaojiu Intl Holdings Ltd	Consumer Discretionary	\$2,872	0.1%	(41.45)%	1.12	9.30	0.17%	33.03%	
Xtep International Holding L Shs	Consumer Discretionary	\$2,986	0.1%	(37.85)%	1.49	8.07	4.71%	(1.05)%	
Sany Heavy Equip Intl Hldg L Shs	Industrials	\$2,466	0.1%	(37.60)%	3.08	7.44	2.52%	12.38%	
Beijing Capital Intl Airport Shs H	Industrials	\$1,210	0.0%	(35.45)%	0.55	17.24	0.00%	17.91%	
Li Ning Company Limited Shs	Consumer Discretionary	\$13,901	0.3%	(35.10)%	7.03	11.02	3.35%	5.20%	
Goldfield Inds.A	Real Estate	\$313	0.0%	(34.59)%	2.78	3.28	3.11%	(16.52)%	
Wuxi Bio	Health Care	\$49,512	1.2%	(33.65)%	16.14	22.04	0.00%	62.90%	
Bej.Utd.Itech.A	Industrials	\$243	0.0%	(32.23)%	2.24	6.64	0.71%	82.60%	
China Overseas Property Hold Common	Real Estate	\$2,436	0.1%	(32.17)%	2.47	9.15	2.30%	19.80%	
Tianjin Zhonghuan Semicon.'a'	Information Technology	\$954	0.0%	(31.55)%	8.92	6.76	0.51%	82.04%	

<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



# State St MSCI EM ex China Period Ended December 31, 2023

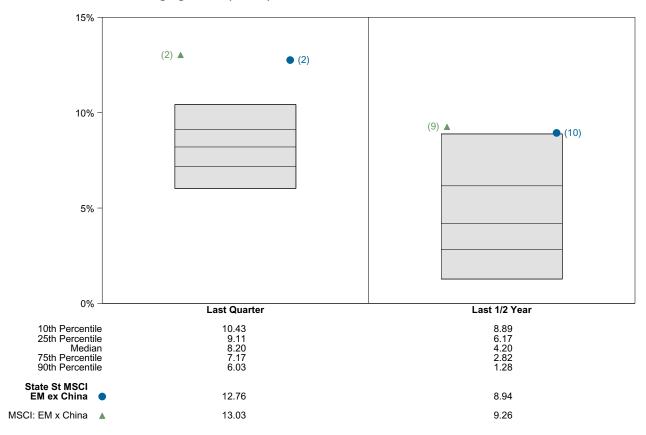
#### **Quarterly Summary and Highlights**

- State St MSCI EM ex China's portfolio posted a 12.76% return for the quarter placing it in the 2 percentile of the Callan Emerging Broad group for the quarter and in the 10 percentile for the last one-half year.
- State St MSCI EM ex China's portfolio underperformed the MSCI: EM x China by 0.27% for the quarter and underperformed the MSCI: EM x China for the one-half year by 0.32%.

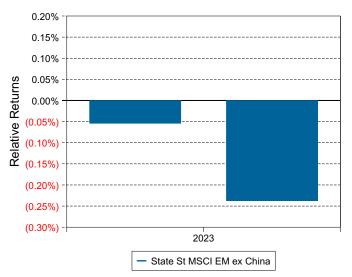
#### **Quarterly Asset Growth**

Beginning Market Value	\$9,631,396
Net New Investment	\$621,969
Investment Gains/(Losses)	\$1,218,249
Ending Market Value	\$11 471 614

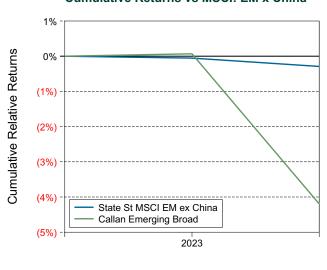
#### Performance vs Callan Emerging Broad (Gross)



#### Relative Return vs MSCI: EM x China



#### Cumulative Returns vs MSCI: EM x China

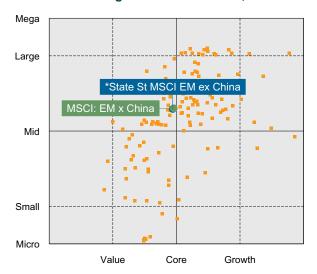




# **Current Holdings Based Style Analysis** State St MSCI EM ex China As of December 31, 2023

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

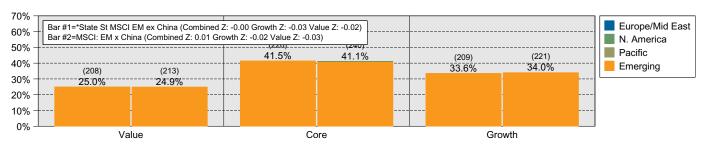
#### Style Map vs Callan Emerging Broad Holdings as of December 31, 2023



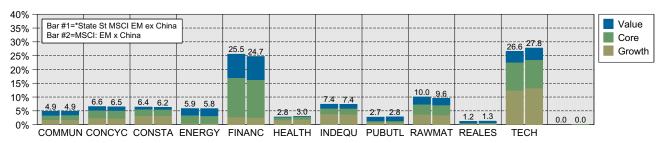
#### **Style Exposure Matrix** Holdings as of December 31, 2023

	Value	Core	Growth	Total
	24.9% (213)	41.1% (240)	34.0% (221)	100.0% (674)
Total				
	25.0% (208)	41.5% (226)	33.6% (209)	100.0% (643)
	24.9% (213)	41.1% (239)	34.0% (221)	100.0% (673)
Emerging				
	25.0% (208)	41.5% (226)	33.6% (209)	100.0% (643)
	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% (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 December 31, 2023



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



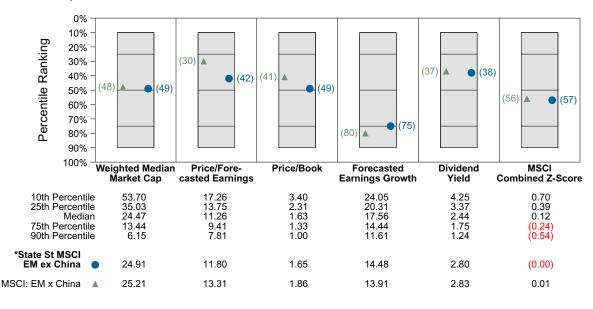
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

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

#### **Portfolio Characteristics**

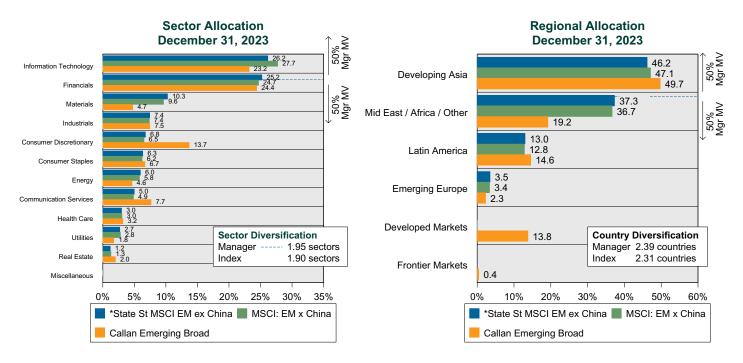
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

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



#### **Sector Weights**

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



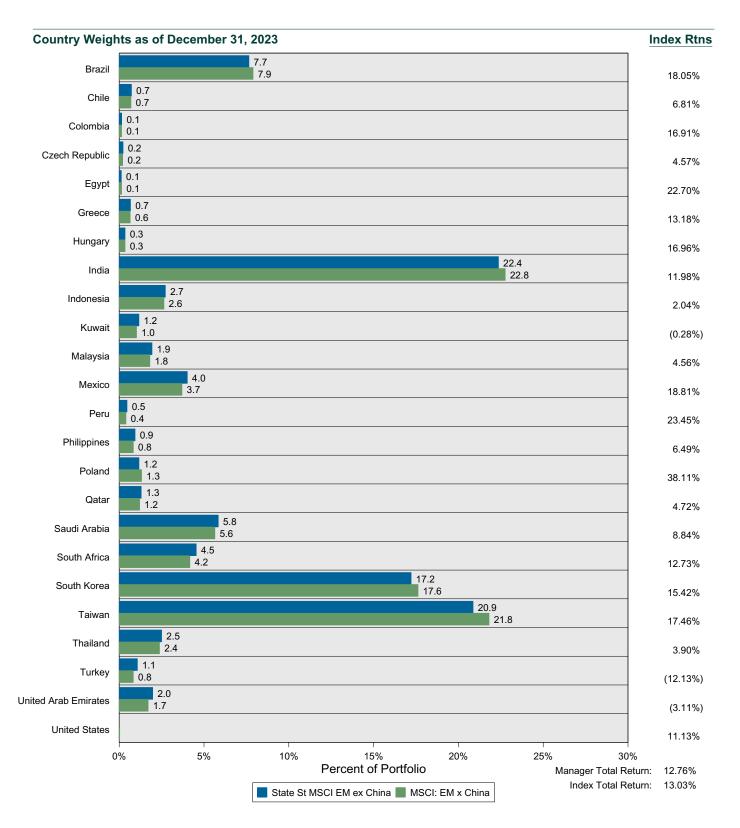
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



# **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 December 31, 2023. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent 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 December 31, 2023

# 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	\$995,067	8.7%	19.87%	501.06	15.76	2.03%	4.70%
Samsung Electronics Co Ltd Ord	Information Technology	\$602,381	5.3%	20.88%	363.87	17.26	1.83%	(6.00)%
Reliance Industries Ltd Shs Demateri	Energy	\$215,130	1.9%	10.00%	210.17	21.61	0.35%	17.00%
Icici Bank Limited Shs Dematerial	Financials	\$148,517	1.3%	4.48%	84.01	16.85	0.80%	116.32%
Infosys Technologies	Information Technology	\$143,610	1.3%	8.67%	76.74	23.59	2.30%	12.30%
H D F C Bank Ltd Shs	Financials	\$128,266	1.1%	11.75%	155.95	17.99	1.11%	14.50%
Sk Hynix Inc Shs	Information Technology	\$115,485	1.0%	29.61%	79.98	14.62	0.85%	38.40%
Vale Sa Shs	Materials	\$114,437	1.0%	21.37%	72.14	6.40	7.85%	(12.46)%
Hon Hai Precision Inds Ltd Ord	Information Technology	\$100,215	0.9%	5.69%	47.20	9.52	4.98%	9.02%
Tata Consultancy	Information Technology	\$97,263	0.8%	7.56%	164.93	27.61	1.33%	8.00%

#### **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
Compania De Minas Buenaventu Sponsor	Materials	\$8,416	0.1%	83.54%	3.70	119.51	0.51%	-
Harmony Gold Mining Co	Materials	\$8,712	0.1%	74.99%	4.05	8.06	0.78%	44.45%
Companhia Siderurgica Nacion Ord	Materials	\$3,996	0.0%	74.78%	5.62	13.73	12.46%	(11.05)%
Silergy	Information Technology	\$7,653	0.1%	72.71%	6.25	66.76	0.89%	12.75%
Bank of Polska Kasa Opieki Shs	Financials	\$10,636	0.1%	67.20%	10.15	7.57	2.37%	21.90%
Adani Green Energy Ltd	Utilities	\$9,424	0.1%	61.44%	30.40	158.60	0.00%	-
Pko Bank Polski	Financials	\$17,422	0.2%	60.88%	16.00	7.77	3.58%	6.36%
Budimex Sa Shs	Industrials	\$3,181	0.0%	59.93%	4.06	24.09	2.83%	9.83%
Bank Zachodni Wbk Sa Wroclaw Shs	Financials	\$7,384	0.1%	58.23%	12.73	11.58	5.22%	16.98%
Kukje Precision	Health Care	\$6,420	0.1%	57.16%	5.09	(93.96)	0.00%	-

#### **10 Worst Performers**

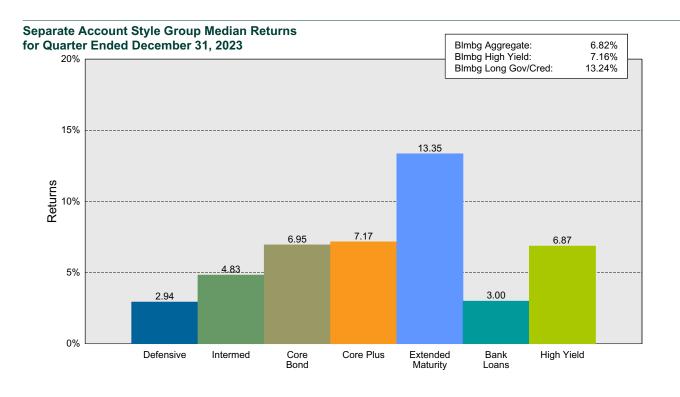
		Ending Market	Percent of	Qtrly	Market	Forecasted Earnings	Dividend	Forecasted Growth in
Stock	Sector	Value	Portfolio	Return	Capital	Ratio	Yield	Earnings
Koza Altin Isletmeleri	Materials	\$2,537	0.0%	(37.01)%	2.12	9.85	2.10%	47.06%
Tofas Turk Otomobil Fabrikas Shs	Consumer Discretionary	\$3,389	0.0%	(34.03)%	3.56	5.06	2.93%	77.93%
Sasa	Materials	\$4,780	0.0%	(31.22)%	6.57	26.74	0.00%	41.98%
Hektas Ticaret	Materials	\$2,810	0.0%	(30.64)%	1.72	680.00	0.00%	(9.44)%
Sasol	Materials	\$13,669	0.1%	(26.87)%	6.47	3.35	8.85%	2.40%
Pegasus Hava Tasimaciligi As	Industrials	\$3,481	0.0%	(26.85)%	2.25	3.96	0.00%	43.79%
Ecopro	Materials	\$33,181	0.3%	(24.76)%	13.38	53.47	0.07%	(33.39)%
Indah Kiat Paper&pulp	Materials	\$4,072	0.0%	(24.72)%	2.96	9.31	0.60%	243.52%
Americana Restaurants International	Consumer Discretionary	\$6,974	0.1%	(23.65)%	7.18	18.89	0.00%	-
Pt Vale Indonesia Tbk Shs	Materials	\$1,697	0.0%	(23.43)%	2.78	14.74	2.07%	(20.10)%

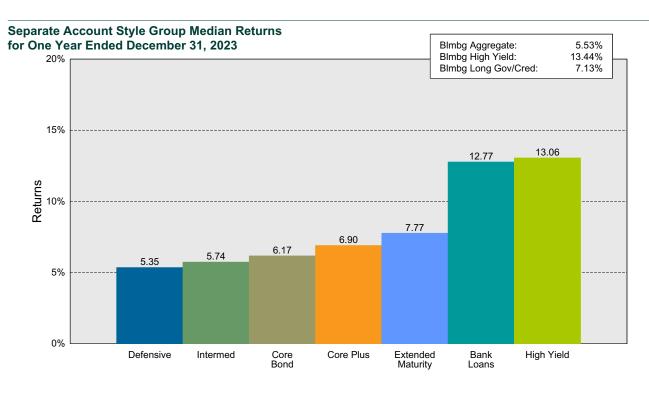
<sup>\*12/31/23</sup> portfolio characteristics generated using most recently available holdings (9/30/23) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.



# **Domestic Fixed Income Active Management Overview**

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





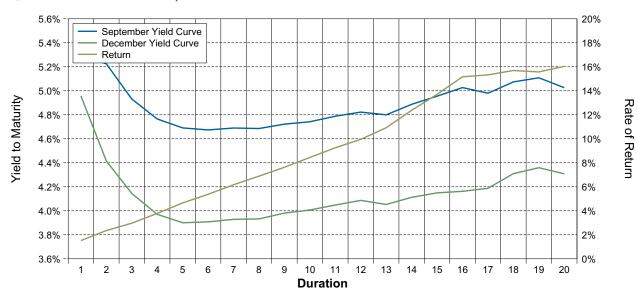


### **Bond Market Environment**

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

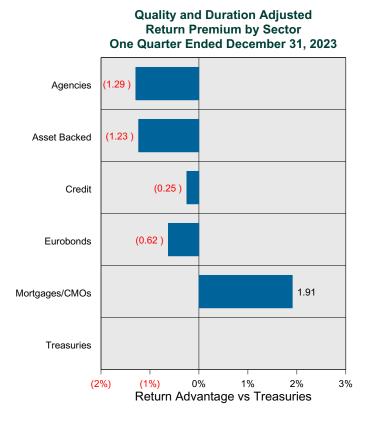
The charts below are designed to give you an overview of the factors that influenced bond market returns for the quarter. The first chart shows the shift in the Treasury yield curve and the resulting returns by duration. The second chart shows the average return premium (relative to Treasuries) for bonds with different quality ratings. The final chart shows the average return premium of the different sectors relative to Treasuries. These sector premiums are calculated after differences in quality and term structure have been accounted for across the sectors. They are typically explained by differences in convexity, sector specific supply and demand considerations, or other factors that influence the perceived risk of the sector.

#### Yield Curve Change and Rate of Return One Quarter Ended December 31, 2023



**Return Premium to Quality** One Quarter Ended December 31, 2023 Trsy AAA 0.51 1.23 AA Quality Rating Α 2.71 BBB 3.59 BB В 3.66 3.81 CCC 4% 0% 1% 2% 3% 5% Return Advantage vs Treasuries

**Duration Adjusted** 



# **Domestic Fixed Income** Period Ended December 31, 2023

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

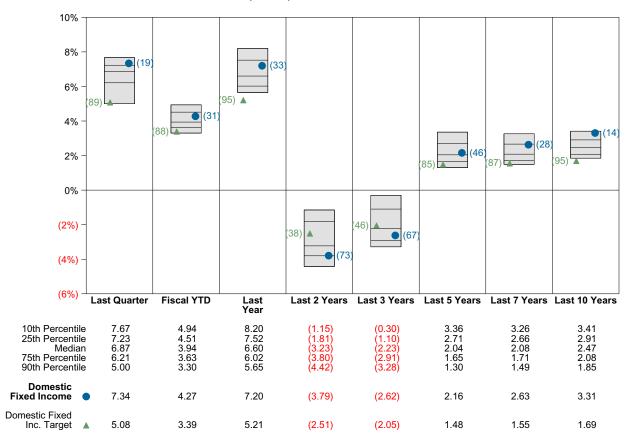
- Domestic Fixed Income's portfolio posted a 7.34% return for the quarter placing it in the 19 percentile of the Public Fund -Domestic Fixed group for the quarter and in the 33 percentile for the last year.
- Domestic Fixed Income's portfolio outperformed the Domestic Fixed Inc. Target by 2.26% for the quarter and outperformed the Domestic Fixed Inc. Target for the year by 1.99%.

#### **Quarterly Asset Growth**

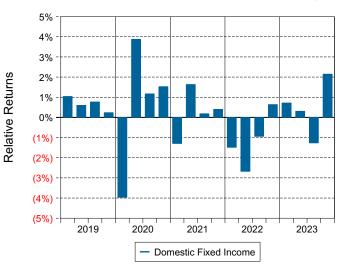
Beginning Market Value \$1,277,850,067 Net New Investment \$-12,981,511 Investment Gains/(Losses) \$93,244,556

**Ending Market Value** \$1,358,113,112

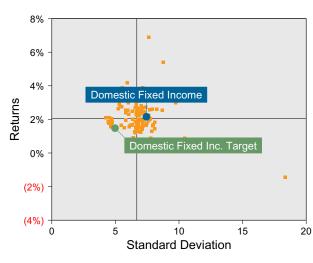
### Performance vs Public Fund - Domestic Fixed (Gross)



# Relative Return vs Domestic Fixed Inc. Target



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



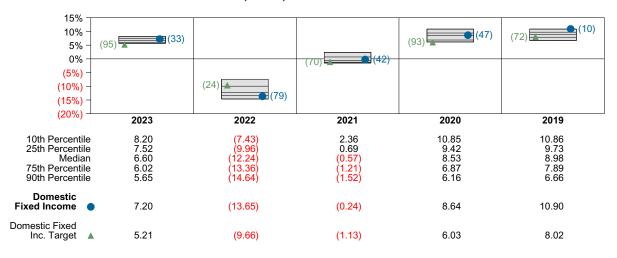


# **Domestic Fixed Income Return Analysis Summary**

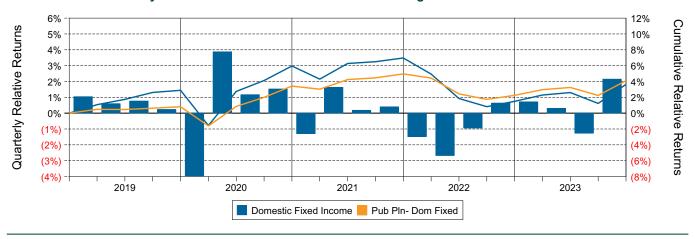
#### **Return Analysis**

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

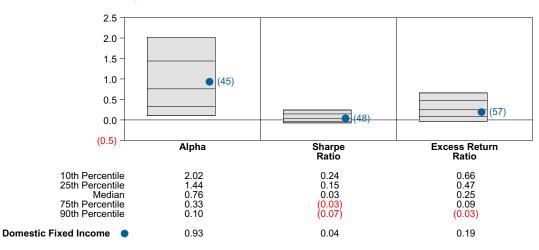
#### Performance vs Public Fund - Domestic Fixed (Gross)



#### Cumulative and Quarterly Relative Returns vs Domestic Fixed Inc. Target



Risk Adjusted Return Measures vs Domestic Fixed Inc. Target Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended December 31, 2023



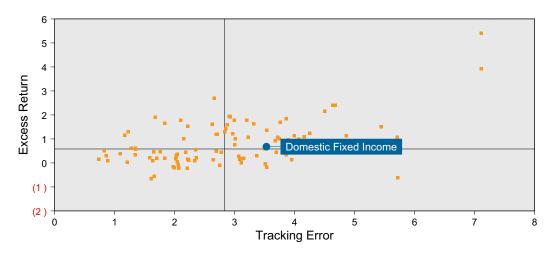


# **Domestic Fixed Income Risk Analysis Summary**

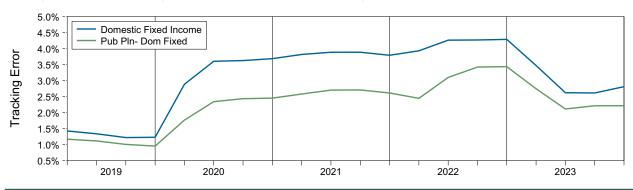
#### Risk Analysis

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

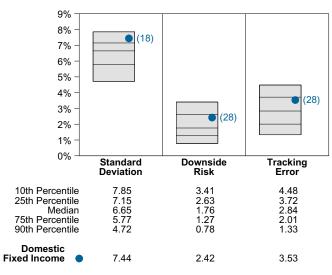
#### Risk Analysis vs Public Fund - Domestic Fixed (Gross) Five Years Ended December 31, 2023

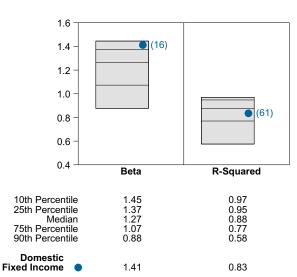


Rolling 12 Quarter Tracking Error vs Domestic Fixed Inc. Target



Risk Statistics Rankings vs Domestic Fixed Inc. Target Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended December 31, 2023



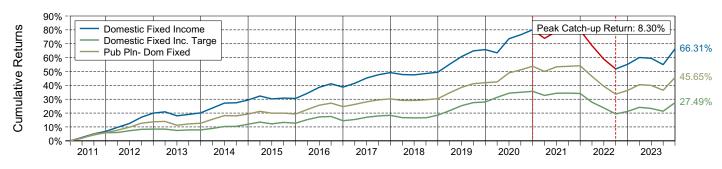




# **Domestic Fixed Income** Drawdown Analysis for Twelve and Three-Quarter Years Ended December 31, 2023

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

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



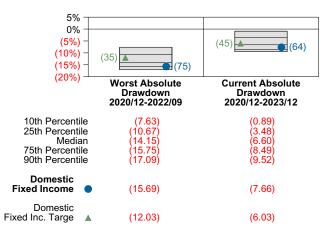
		Worst Absolute Blawdown					Guitcht Absolute Blawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers		
Domestic Fixed Income	(15.69)%	1.75	2020/12-2022/09	(12.03)%	(13.10)%	(7.66)%	3.00	2020/12-2023/12	(6.03)%	(5.29)%		
Recovery from Trough	9.53%	1.25+	2022/09-2023/12	6.81%	8.99%	9.53%	1.25+	2022/09-2023/12	6.81%	8.99%		
Domestic Fixed Inc. Targe	(12.03)%	1.75	2020/12-2022/09			(6.03)%	3.00	2020/12-2023/12				
Pub Pln- Dom Fixed	(13.28)%	0.75	2021/12-2022/09			(5.48)%	2.00	2021/12-2023/12				

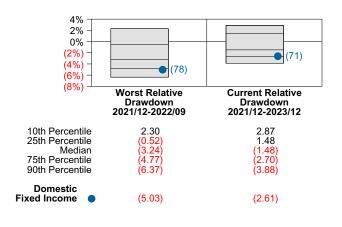
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. Domestic Fixed Inc. Targe Cumulative Relative Returns 40% Peak Catch-up Rel Rtn: 2.68% Domestic Fixed Income 35% Pub Pln- Dom Fixed 30.44% 30% 25% 20% 15% 14.24% 10% 5% 0% (5%)2011 2012 2013 2016 2017 2018 2019 2022 2023 2014 2015 2020 2021

	v	worst Relative Drawdown				Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
Domestic Fixed Income	(5.03)%	0.75	2021/12-2022/09	(2.54)%	(2.61)%	2.00	2021/12-2023/12	(0.55)%			
Recovery from Trough	2.54%	1.25+	2022/09-2023/12	2.04%	2.54%	1.25+	2022/09-2023/12	2.04%			
Pub Pln- Dom Fixed	(2.54)%	0.75	2021/12-2022/09		(0.55)%	2.00	2021/12-2023/12				

Drawdown Rankings vs. Domestic Fixed Inc. Targe Rankings against Public Fund - Domestic Fixed Twelve and Three-Quarter Years Ended December 31, 2023





Current Absolute Drawdown

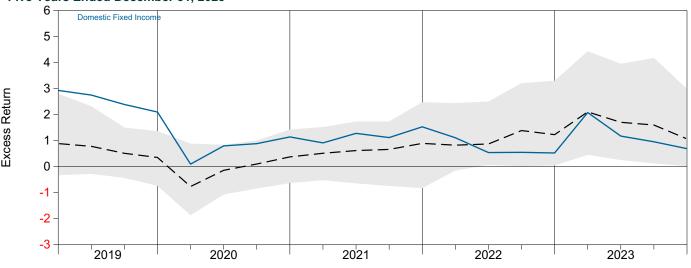


# **Domestic Fixed Income Historical Consistency Analysis**

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

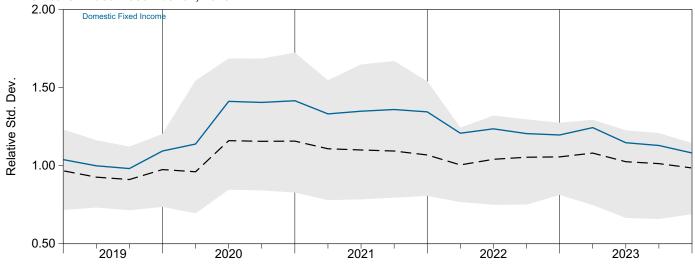
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbq:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Pub Pln- Dom Fixed. The second chart below illustrates the consistency of relative std. dev. over rolling three year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

#### Rolling Three Year Excess Return Relative to Blmbg:Aggregate Five Years Ended December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.78%	1.28%
% Positive Periods	90%	100%
Average Ranking	50	35

#### Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended December 31, 2023



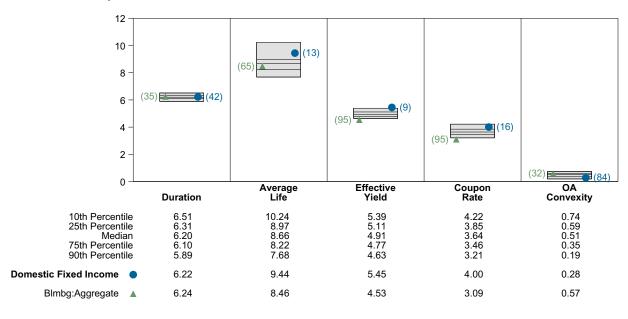
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.04%	1.22%
% Positive Periods	100%	100%
Average Ranking	50	22

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

#### **Portfolio Characteristics**

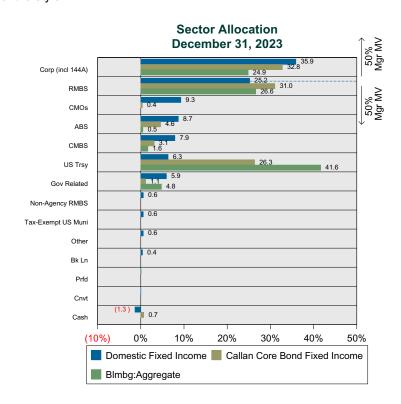
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

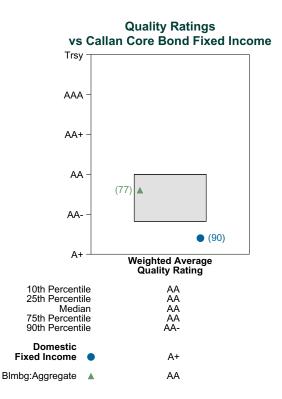
#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of December 31, 2023



#### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



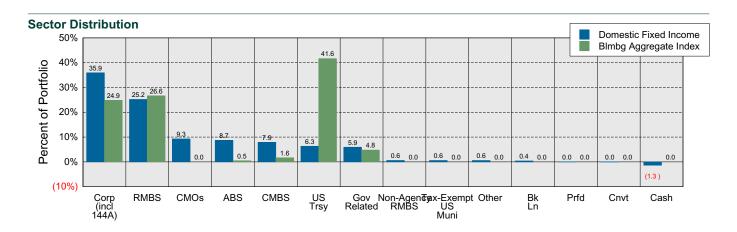


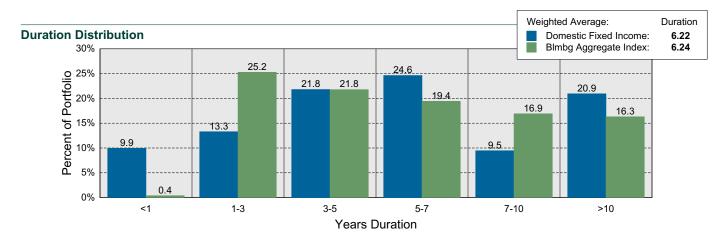


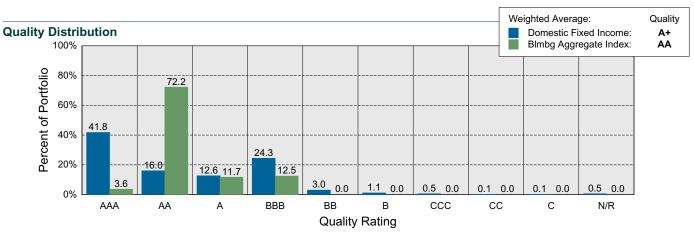
# **Domestic Fixed Income Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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

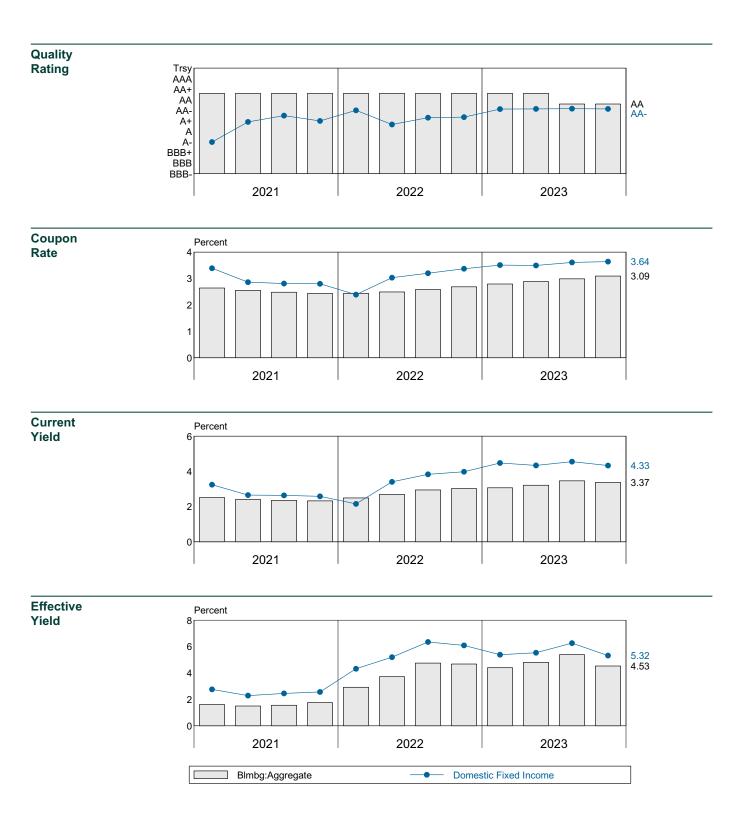






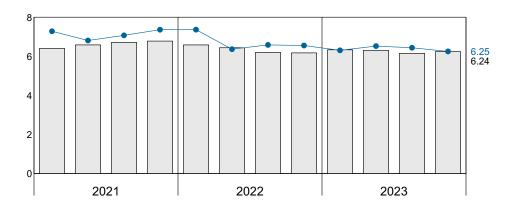


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

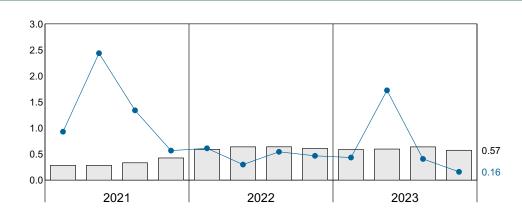


# North Dakota State Investment Board - Insurance Trust History of Fixed Income Characteristics Period December 31, 2023

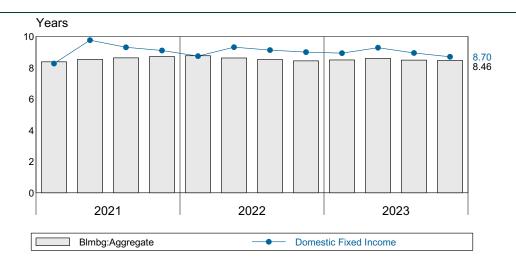
#### **Duration**



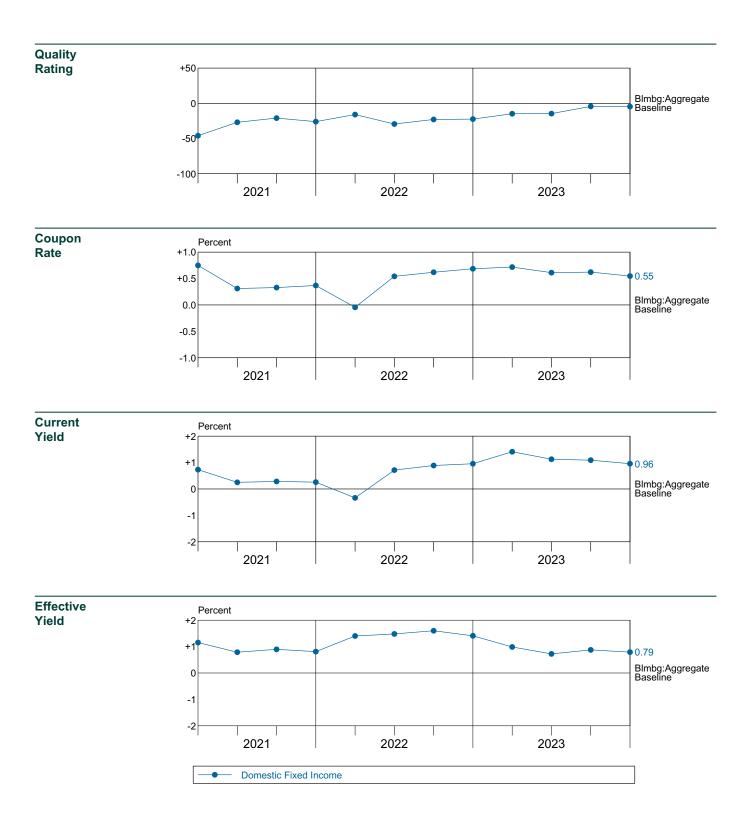
# OA Convexity



# Average Life

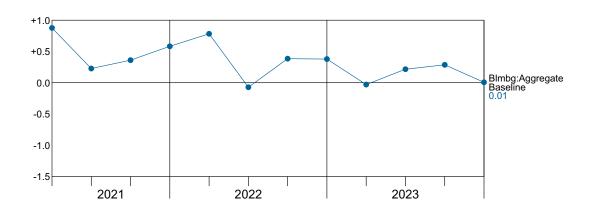


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

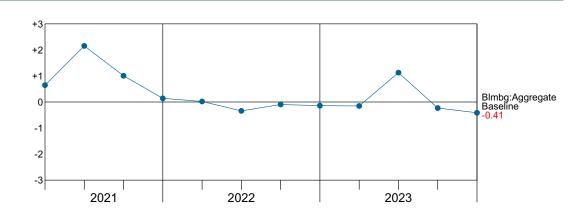


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

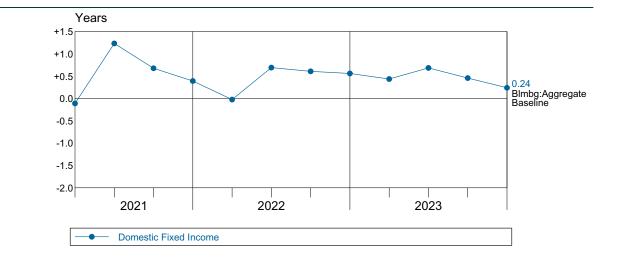




# OA Convexity



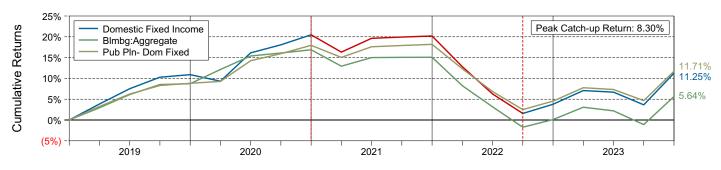




# **Domestic Fixed Income** Drawdown Analysis for Five Years Ended December 31, 2023

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

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

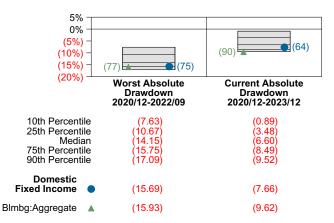


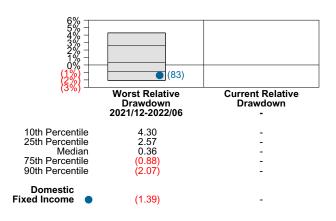
		st Absolute Drawd	lown		Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Domestic Fixed Income	(15.69)%	1.75	2020/12-2022/09	(15.93)%	(13.10)%	(7.66)%	3.00	2020/12-2023/12	(9.62)%	(5.29)%
Recovery from Trough	9.53%	1.25+	2022/09-2023/12	7.51%	8.99%	9.53%	1.25+	2022/09-2023/12	7.51%	8.99%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Pub Pln- Dom Fixed	(13.28)%	0.75	2021/12-2022/09			(5.48)%	2.00	2021/12-2023/12		

# Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns Domestic Fixed Income Pub Pln- Dom Fixed 5.31% 2019 2020 2021 2022 2023

	V	Norst Rel	ative Drawdown		Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Domestic Fixed Income	(1.39)%	0.50	2021/12-2022/06	0.84%	-	-	-	-	
Recovery from Trough	1.75%	1.25	2022/06-2023/09	2.18%	=	-	-	-	
Pub Pln- Dom Fixed	(2.85)%	1.00	2019/03-2020/03		(0.07)%	0.25	2023/09-2023/12		

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Public Fund - Domestic Fixed Five Years Ended December 31, 2023







# **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 December 31, 2023 **VS THE Pub Pln- Dom Fixed Peer Group**

(12)	Domestic Fixed Income	A+	3.18%	3.51%	4.54%	6.74	0.83	9.04	
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life	



# **Comparative Manager Matrix**

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

		Return Correlations for 3 Years Ended December 31, 2023 Ilmbg:Aggregate
(12)	Domestic Fixed Income	1.00
		Domestic
		Fixed
		Income



# Allspring Med Quality Credit Period Ended December 31, 2023

#### **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**

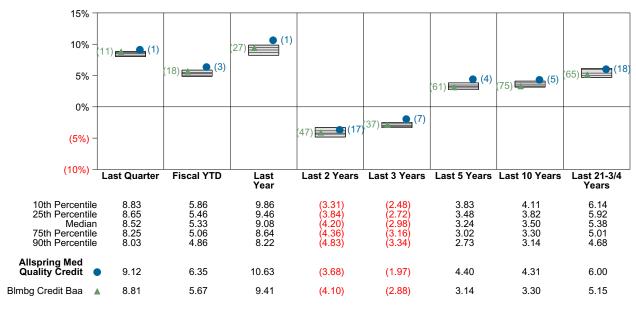
- Allspring Med Quality Credit's portfolio posted a 9.12% return for the quarter placing it in the 1 percentile of the Callan Investment Grade Credit Fixed Inc group for the quarter and in the 1 percentile for the last year.
- Allspring Med Quality Credit's portfolio outperformed the Blmbg Credit Baa by 0.31% for the quarter and outperformed the Blmbg Credit Baa for the year by 1.22%.

#### **Quarterly Asset Growth**

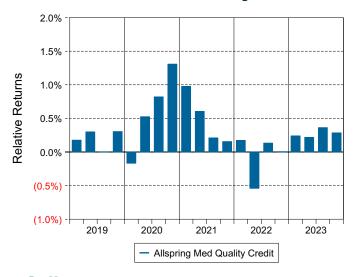
Beginning Market Value	\$101,493,076
Net New Investment	\$-906,312
Investment Gains/(Losses)	\$9,223,011

**Ending Market Value** \$109,809,776

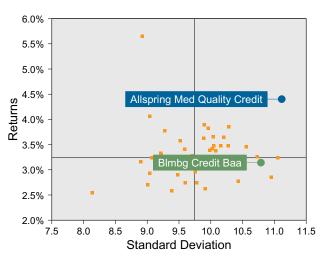
#### Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



#### Relative Return vs Blmbg Credit Baa



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



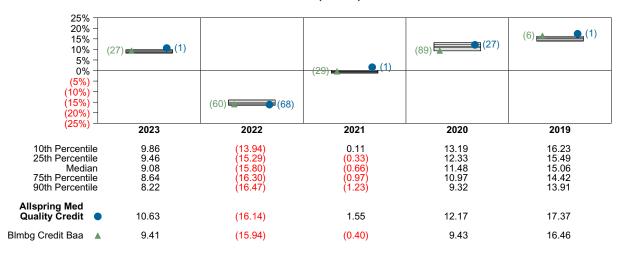


# **Allspring Med Quality Credit Return Analysis Summary**

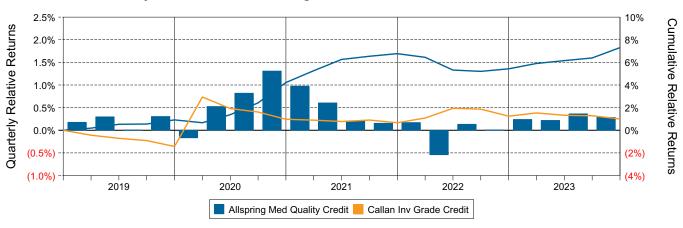
#### **Return Analysis**

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.

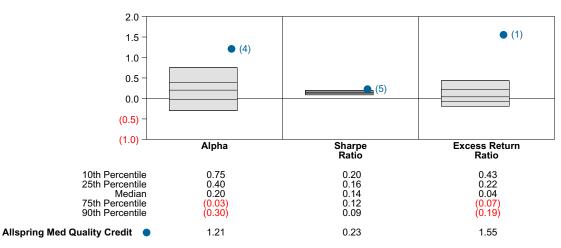
#### Performance vs Callan Investment Grade Credit Fixed Inc (Gross)



#### **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 December 31, 2023



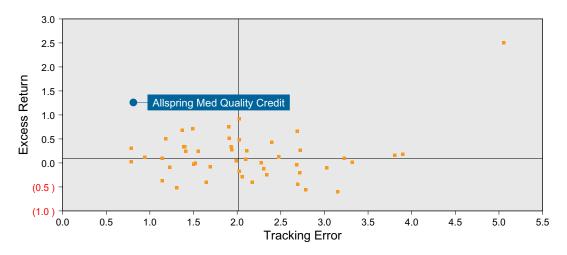


# **Allspring Med Quality Credit Risk Analysis Summary**

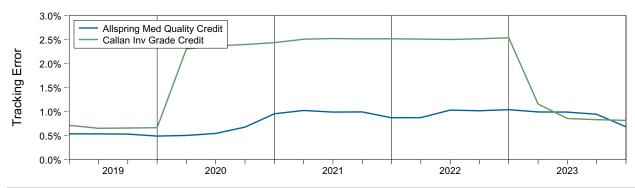
#### Risk Analysis

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.

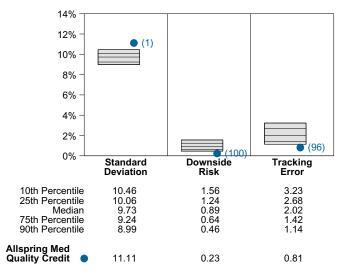
#### Risk Analysis vs Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended December 31, 2023

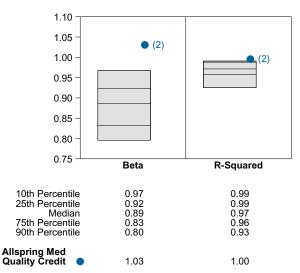


# Rolling 12 Quarter Tracking Error vs Bloomberg Credit Baa



Risk Statistics Rankings vs Bloomberg Credit Baa Rankings Against Callan Investment Grade Credit Fixed Inc (Gross) Five Years Ended December 31, 2023





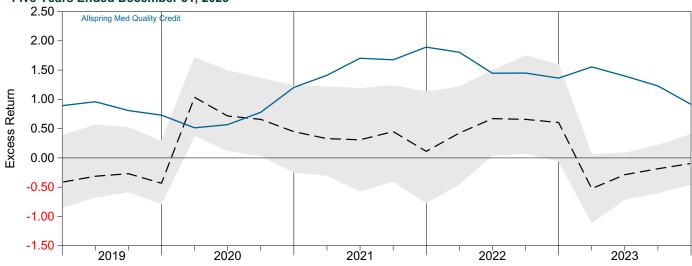


# **Allspring Med Quality Credit Historical Consistency Analysis**

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

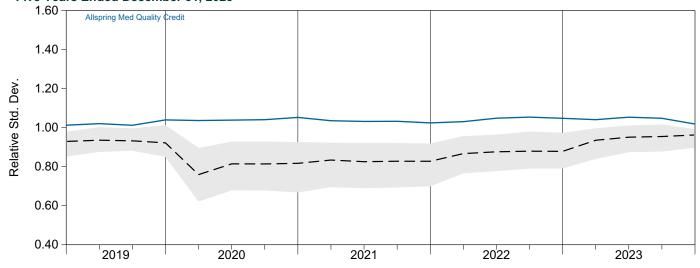
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg Credit Baa. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Inv Grade Credit. The second chart below illustrates the consistency 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.19%	1.21%
% Positive Periods	60%	100%
Average Ranking	50	14

#### Rolling Three Year Relative Std. Dev. Relative to Blmbg Credit Baa Five Years Ended December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	0.88%	1.04%
% Positive Periods	100%	100%
Average Ranking	50	3

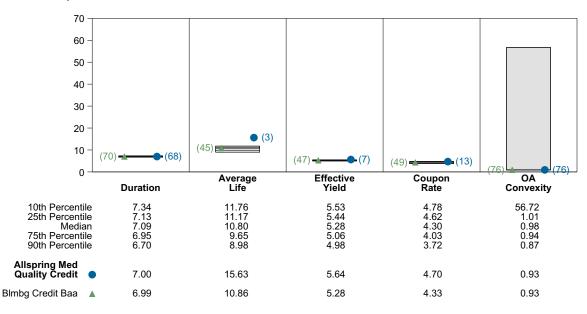


# **Allspring Med Quality Credit Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

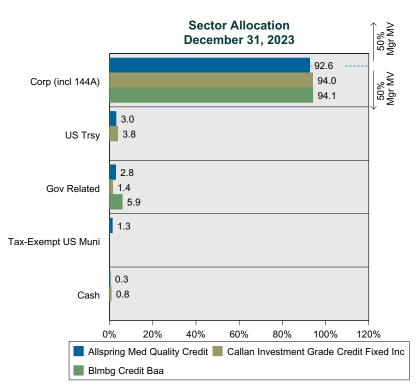
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Investment Grade Credit Fixed Inc as of December 31, 2023



#### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



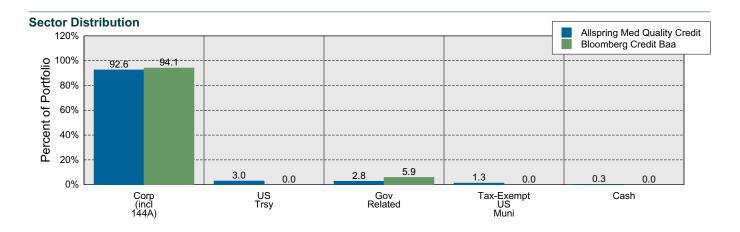
# **Quality Ratings** vs Callan Investment Grade Credit Fixed Inc Trsy AAA AA+ AA AA-Α+ Α A-BBB+ (100)BBB BBB-Weighted Average Quality Rating 10th Percentile 25th Percentile Median BBB 75th Percentile 90th Percentile Allspring Med Quality Credit BBB Blmbg Credit Baa BBB+

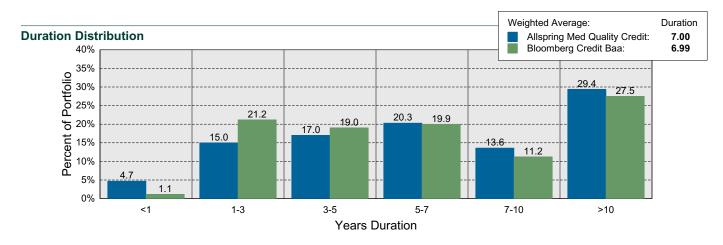


# **Allspring Med Quality Credit Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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

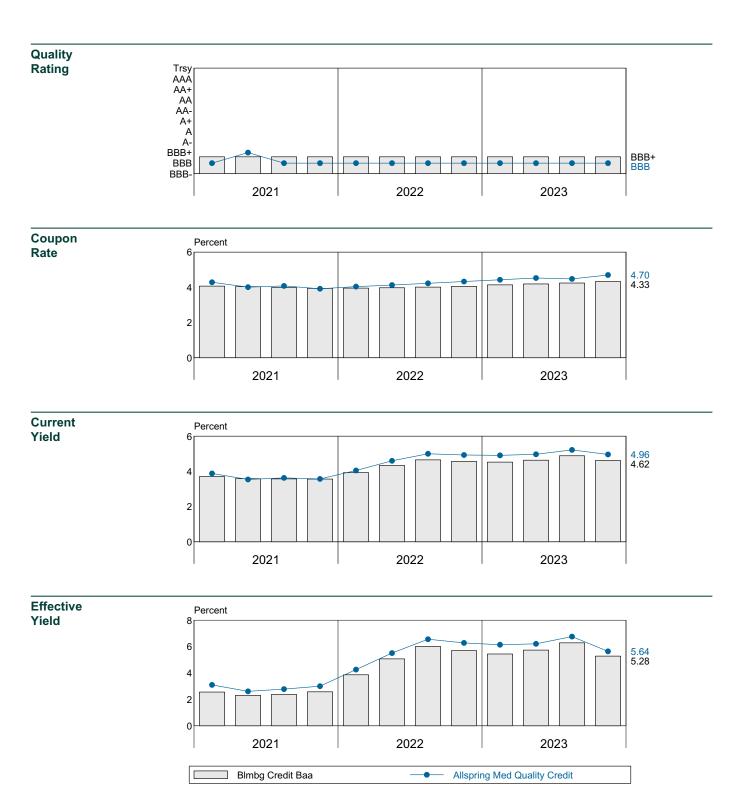






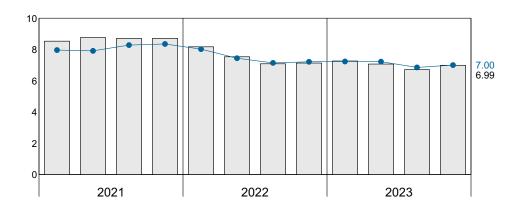


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

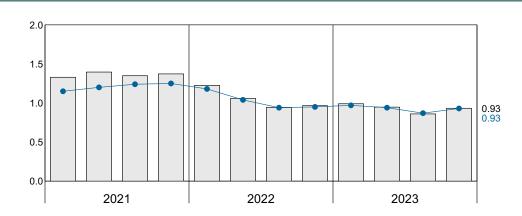


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

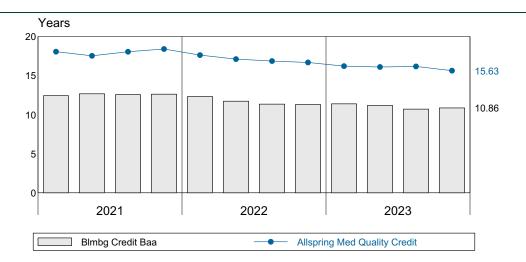
#### **Duration**



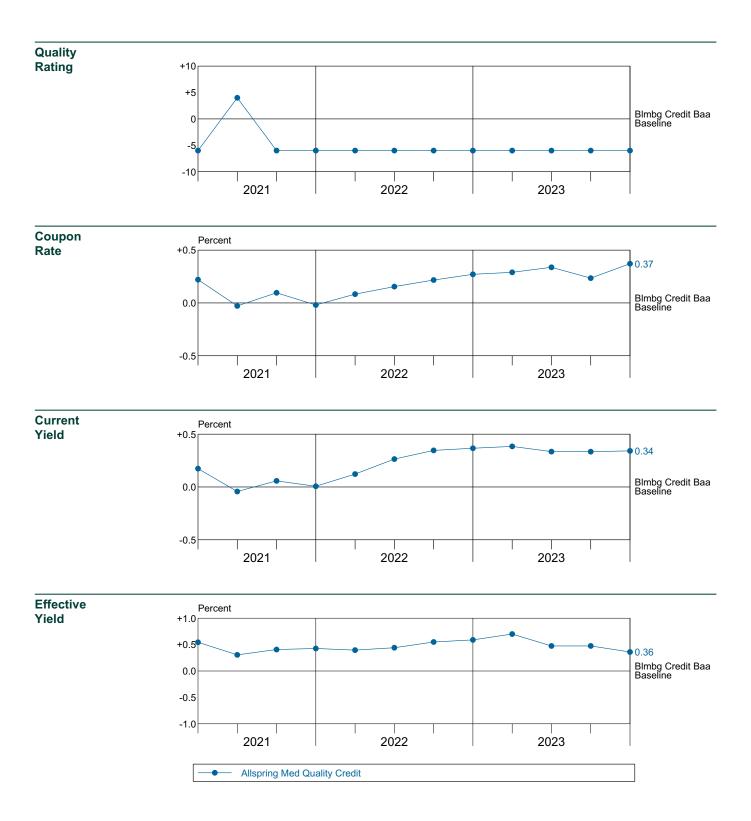
# OA Convexity



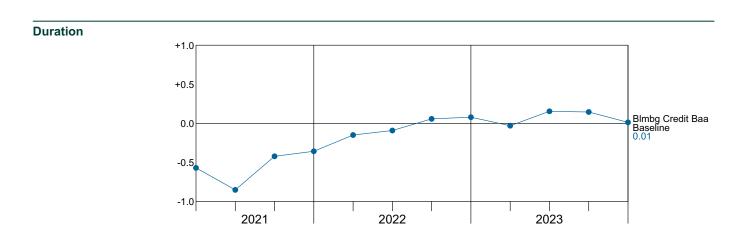
#### **Average** Life

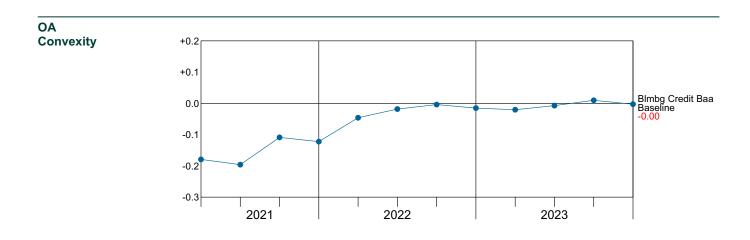


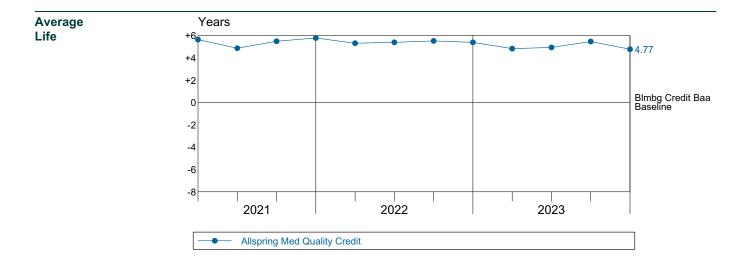
# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023



# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023



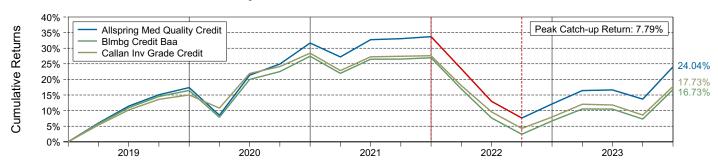




# **Allspring Med Quality Credit** Drawdown Analysis for Five Years Ended December 31, 2023

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

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

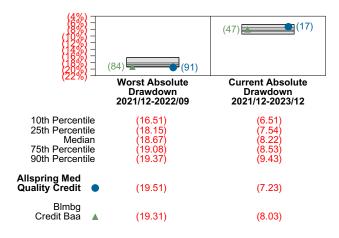


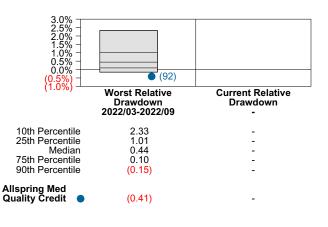
		st Absolute Drawd	lown		Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Allspring Med Quality Credit	(19.51)%	0.75	2021/12-2022/09	(19.31)%	(18.27)%	(7.23)%	2.00	2021/12-2023/12	(8.03)%	(7.73)%
Recovery from Trough	15.26%	1.25+	2022/09-2023/12	13.98%	12.89%	15.26%	1.25+	2022/09-2023/12	13.98%	12.89%
Blmbg Credit Baa	(19.64)%	1.75	2020/12-2022/09			(8.40)%	3.00	2020/12-2023/12		
Callan Inv Grade Credit	(18.79)%	1.75	2020/12-2022/09			(8.32)%	3.00	2020/12-2023/12		

# Relative Cumulative Drawdown Analysis vs. Blmbg Credit Baa Cumulative Relative Returns Allspring Med Quality Credit 6.26% Callan Inv Grade Credit 0.85% 2019 2022 2023 2020 2021

		Vorst Rel	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Allspring Med Quality Credit	(0.41)%	0.50	2022/03-2022/09	0.89%	-	-	-	-		
Recovery from Trough	0.47%	0.75	2022/09-2023/06	(0.62)%	-	-	-	-		
Callan Inv Grade Credit	(2.15)%	1.75	2020/03-2021/12		(1.82)%	3.75	2020/03-2023/12			

Drawdown Rankings vs. Blmbg Credit Baa Rankings against Callan Investment Grade Credit Fixed Inc Five Years Ended December 31, 2023







# **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 December 31, 2023 VS THE Callan Inv Grade Credit Peer Group

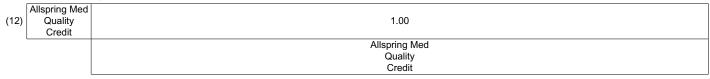
(12)	Allspring Med Quality Credit	BBB (96)	4.26% (11)	4.44%	4.90%	7.55 ( <b>45</b> )	1.05	17.03	
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life	



# **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 December 31, 2023 vs the Blmbg Credit Baa





## **PIMCO Core Plus Constrained** Period Ended December 31, 2023

#### **Investment Philosophy**

PIMCO's investment process utilizes both "top-down" and "bottom-up" strategies. Top-down strategies focus on duration, yield curve postioning, volatility, and sector rotation. These stretegies are deployed from a macro view of the portfolio driven by their secular outlook of the forces likely to influence the economy and financial markets over the next three to five years and their cyclical views of two- to four-quarter trends. Implementation in portfolios is effected by selecting securities that achieve the designated objectives. Bottom-up strategies drive their security selection process and facilitate the indentification and analysis of undervalued securities.

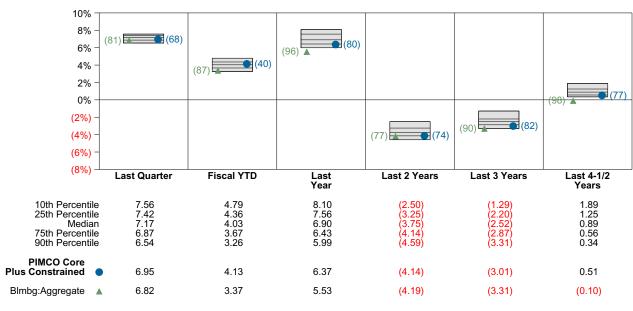
#### **Quarterly Summary and Highlights**

- PIMCO Core Plus Constrained's portfolio posted a 6.95% return for the quarter placing it in the 68 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 80 percentile for the last year.
- PIMCO Core Plus Constrained's portfolio outperformed the Blmbq:Aggregate by 0.13% for the guarter outperformed the Blmbg:Aggregate for the year by 0.84%.

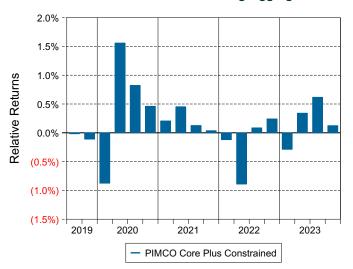
### **Quarterly Asset Growth**

Beginning Market Value	\$247,390,172
Net New Investment	\$-71,506
Investment Gains/(Losses)	\$17,190,108
Ending Market Value	\$264.508.774

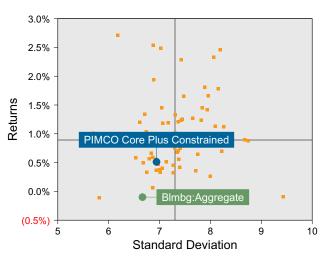
## Performance vs Callan Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



### Callan Core Plus Fixed Income (Gross) Annualized Four and One-Half Year Risk vs Return



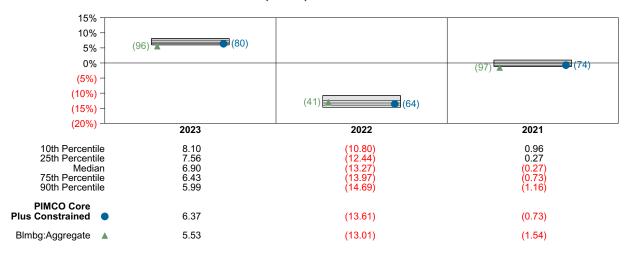


# **PIMCO Core Plus Constrained Return Analysis Summary**

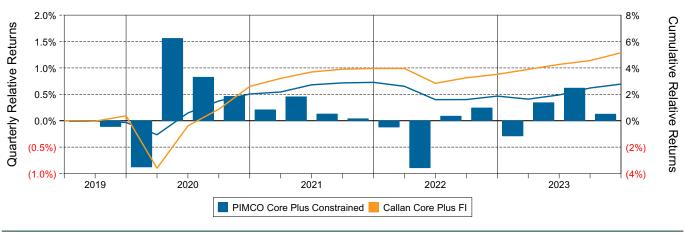
#### **Return Analysis**

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

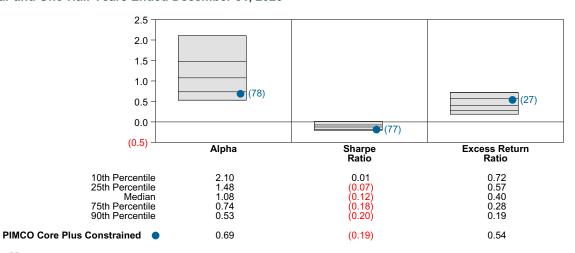
## Performance vs Callan Core Plus Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Four and One-Half Years Ended December 31, 2023



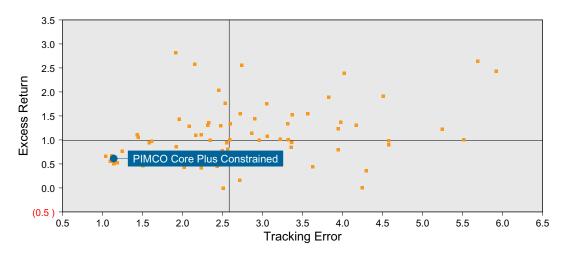


# **PIMCO Core Plus Constrained Risk Analysis Summary**

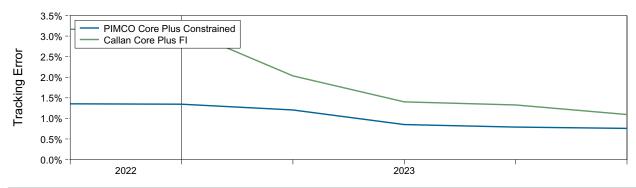
#### **Risk Analysis**

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

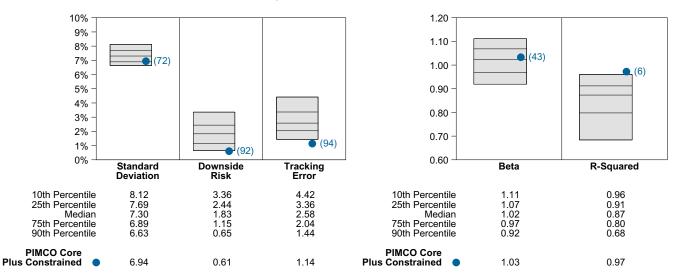
## Risk Analysis vs Callan Core Plus Fixed Income (Gross) Four and One-Half Years Ended December 31, 2023



## Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Four and One-Half Years Ended December 31, 2023



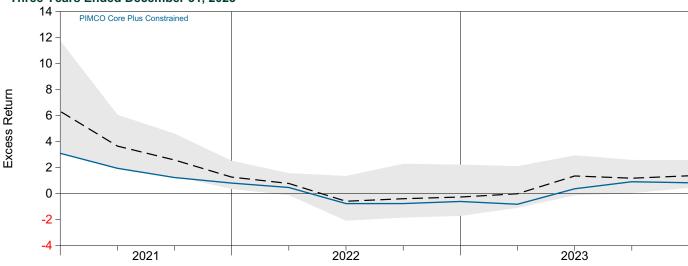


# **PIMCO Core Plus Constrained Historical Consistency Analysis**

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

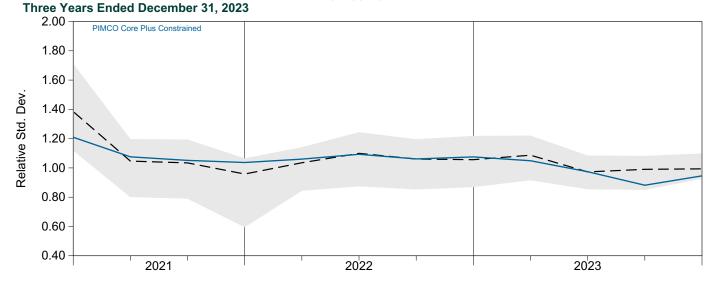
The first chart below illustrates the consistency of excess return over rolling one year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative std. dev. over rolling one year periods. The tables provide summary statistics for the median manager of the group and the portfolio.

## Rolling One Year Excess Return Relative to Blmbg:Aggregate Three Years Ended December 31, 2023



Rolling One Year Period Analysis	Median	Portfolio
Average Annual Excess Return	1.44%	0.57%
% Positive Periods	67%	67%
Average Ranking	50	75

# Rolling One Year Relative Std. Dev. Relative to Blmbg:Aggregate



Rolling One Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.06%	1.04%
% Positive Periods	100%	100%
Average Ranking	50	52

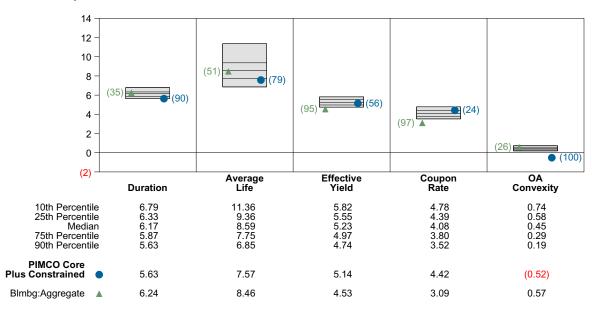


# **PIMCO Core Plus Constrained Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

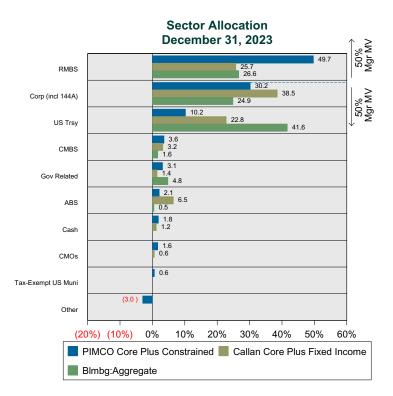
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

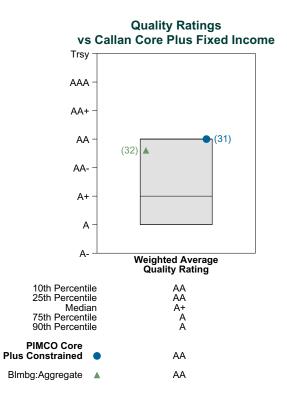
## **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of December 31, 2023



#### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



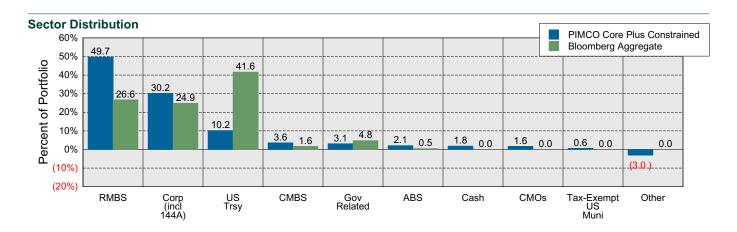


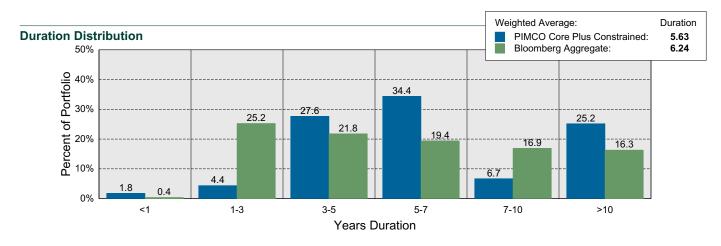


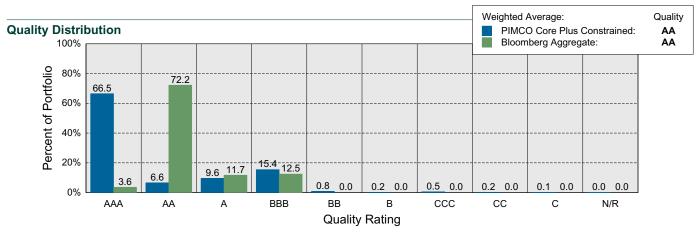
# **PIMCO Core Plus Constrained Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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

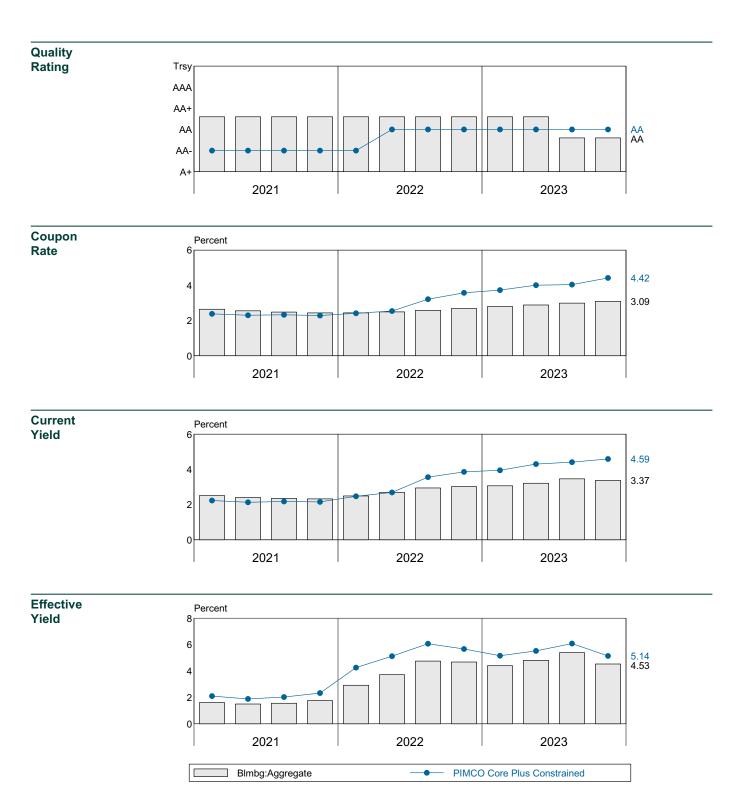






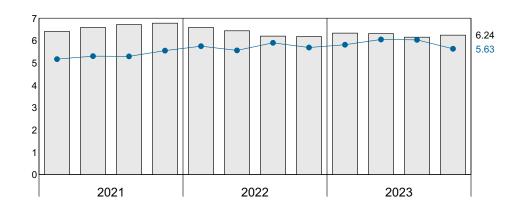


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

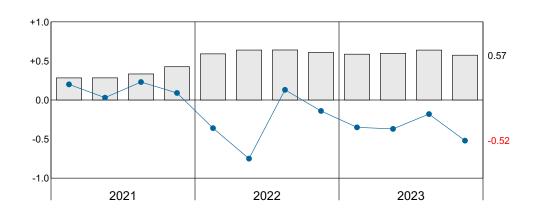


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

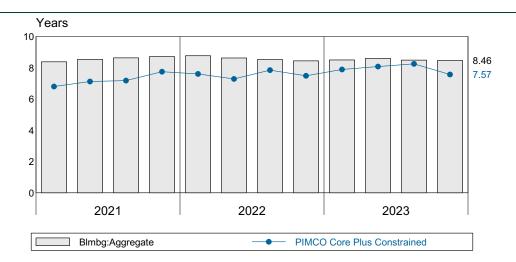
## **Duration**



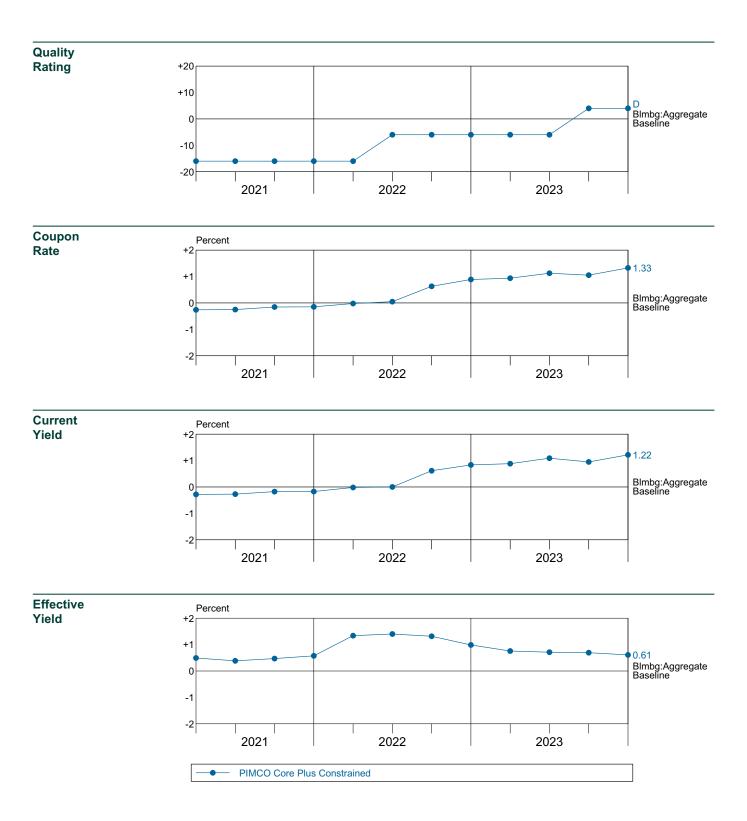
## OA Convexity



## **Average** Life

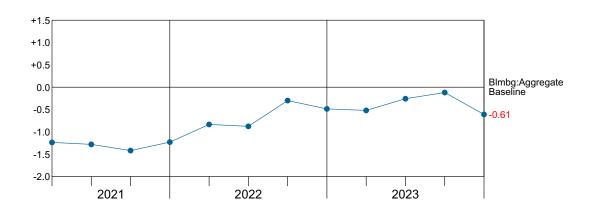


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

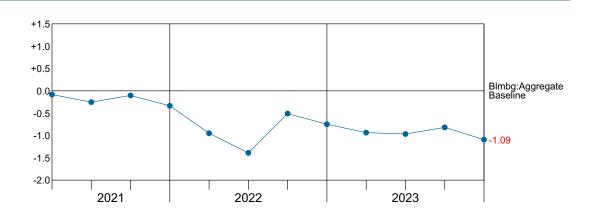


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

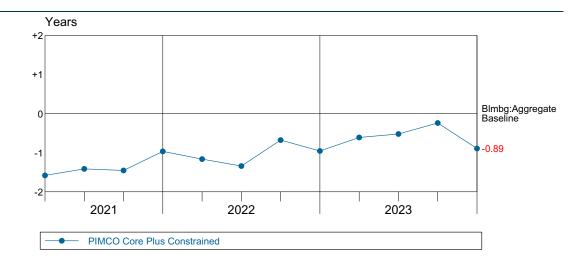




## OA Convexity



# Average Life

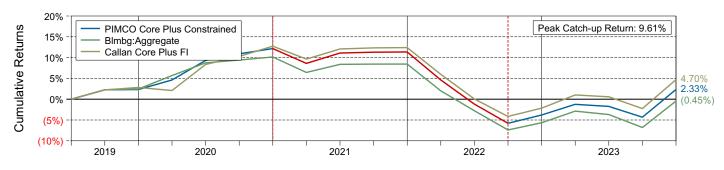




# **PIMCO Core Plus Constrained** Drawdown Analysis for Four and One-Half Years Ended December 31, 2023

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

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

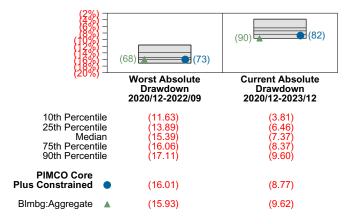


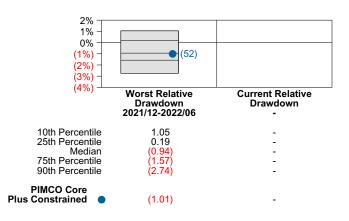
	worst Absolute Drawdown						Curre	ent Absolute Drawd	nwor	
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
PIMCO Core Plus Constraine	ed(16.01)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(8.77)%	3.00	2020/12-2023/12	(9.62)%	(7.13)%
Recovery from Trough	8.62%	1.25+	2022/09-2023/12	7.51%	9.23%	8.62%	1.25+	2022/09-2023/12	7.51%	9.23%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Callan Core Plus FI	(14.98)%	1.75	2020/12-2022/09			(7.13)%	3.00	2020/12-2023/12		

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns PIMCO Core Plus Constrained 5.17% Callan Core Plus FI 2.79% 2% 0% (4%)(6%)2019 2022 2023 2020 2021

	Worst Relative Drawdown					Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
PIMCO Core Plus Constraine	d (1.01)%	0.50	2021/12-2022/06	(0.71)%	-	-	-	-		
Recovery from Trough	1.13%	1.50+	2022/06-2023/12	2.19%	-	-	-	-		
Callan Core Plus FI	(0.71)%	0.50	2019/12-2020/06		-	-	-			

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Callan Core Plus Fixed Income Four and One-Half Years Ended December 31, 2023







# **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 December 31, 2023 **VS THE Callan Core Plus FI Peer Group**

(12)	PIMCO Core Plus	AA	3.10%	3.21%	4.28%	5.64	(0.17)	7.57	
	Constrained	(27)	(69)	(80)	(55)	(82)	(89)	(83)	
		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 December 31, 2023 vs the Blmbg:Aggregate PIMCO Core Plus 1.00 Constrained PIMCO Core Plus Constrained



## **Prudential Core Plus** Period Ended December 31, 2023

#### **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.

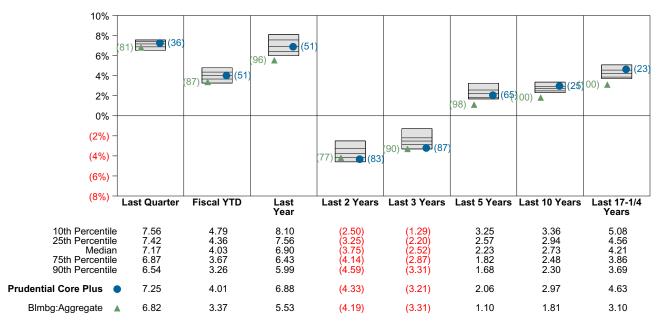
## **Quarterly Summary and Highlights**

- Prudential Core Plus's portfolio posted a 7.25% return for the quarter placing it in the 36 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 51 percentile for the last year.
- Prudential Core Plus's portfolio outperformed Blmbg:Aggregate by 0.43% for the quarter outperformed the Blmbg:Aggregate for the year by 1.35%.

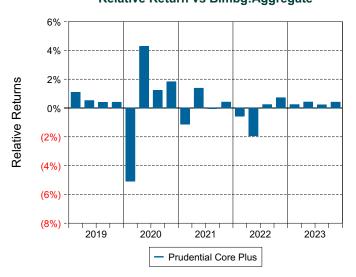
## **Quarterly Asset Growth**

Beginning Market Value	\$310,391,216
Net New Investment	\$-185,674
Investment Gains/(Losses)	\$22,497,215
Ending Market Value	\$332,702,757

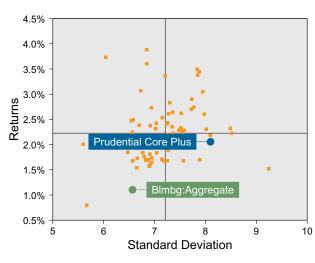
## Performance vs Callan Core Plus Fixed Income (Gross)



# Relative Return vs Blmbg:Aggregate



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



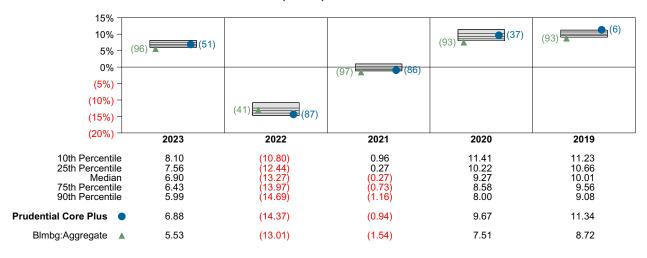


# **Prudential Core Plus Return Analysis Summary**

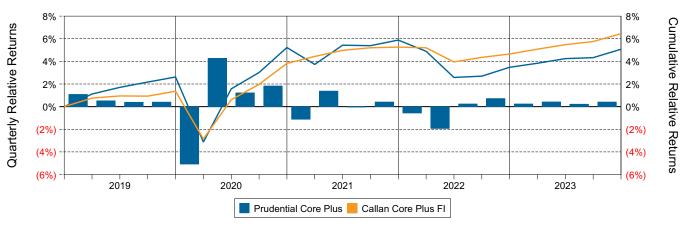
#### **Return Analysis**

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.

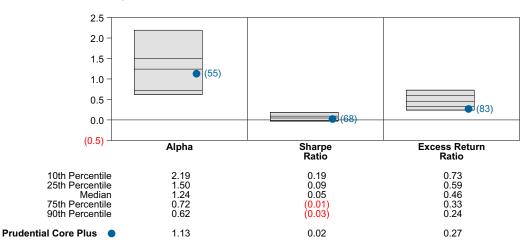
## Performance vs Callan Core Plus Fixed Income (Gross)



## 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 December 31, 2023



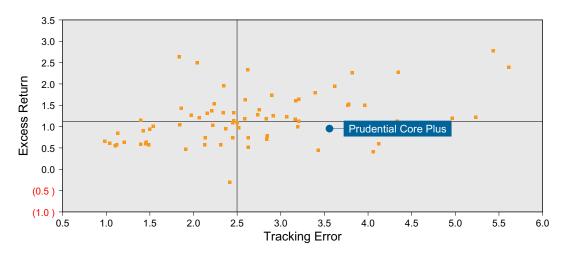


# **Prudential Core Plus Risk Analysis Summary**

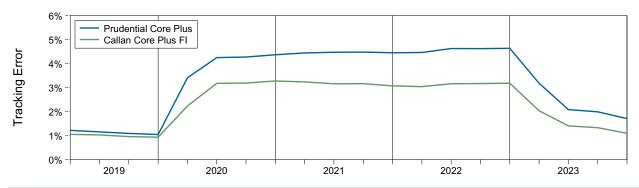
#### Risk Analysis

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.

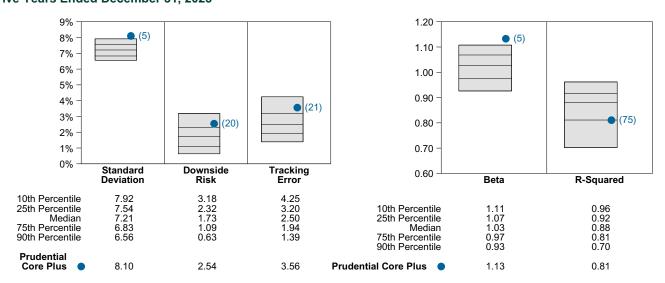
## Risk Analysis vs Callan Core Plus Fixed Income (Gross) Five Years Ended December 31, 2023



## 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 December 31, 2023



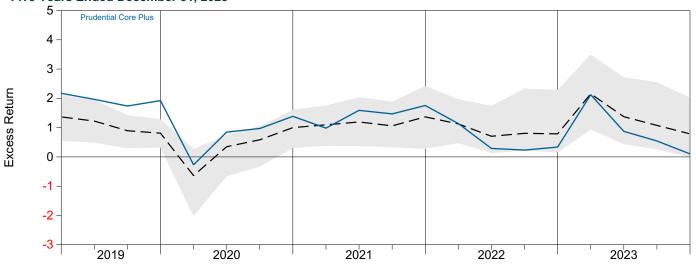


# **Prudential Core Plus Historical Consistency Analysis**

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

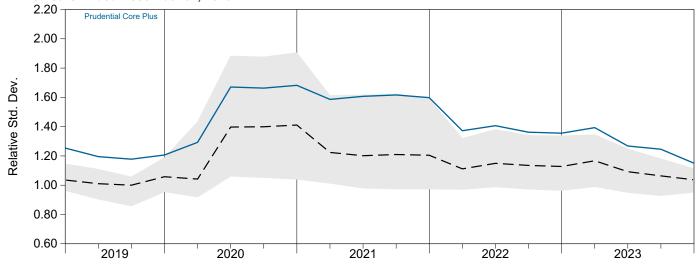
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbq:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.96%	1.11%
% Positive Periods	95%	95%
Average Ranking	50	42

## Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.15%	1.41%
% Positive Periods	100%	100%
Average Ranking	50	10

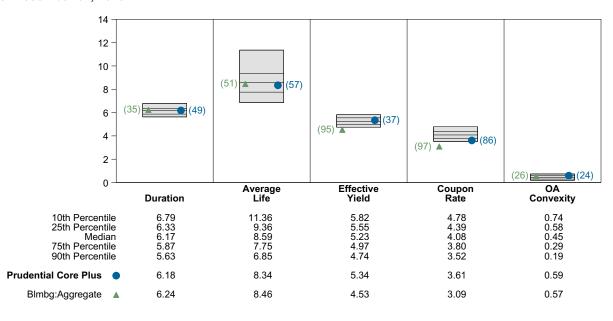


# **Prudential Core Plus Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

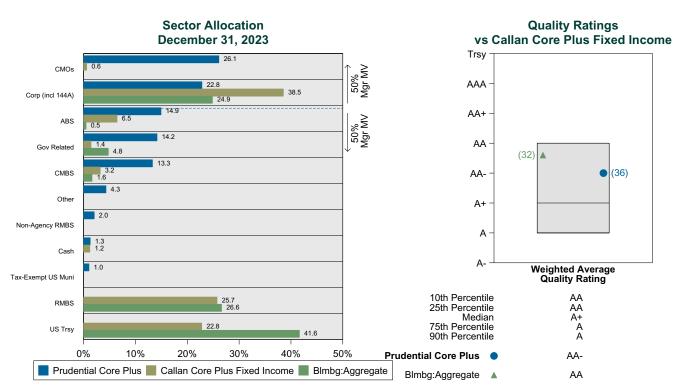
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of December 31, 2023



#### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

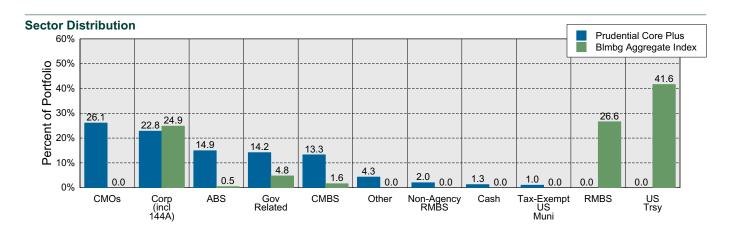


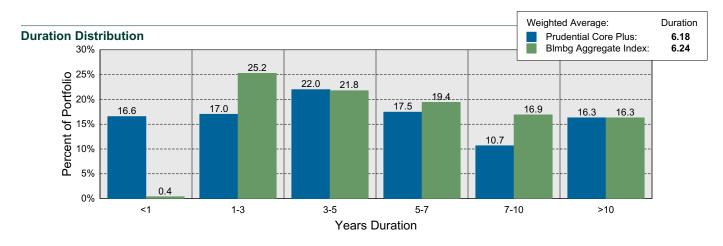


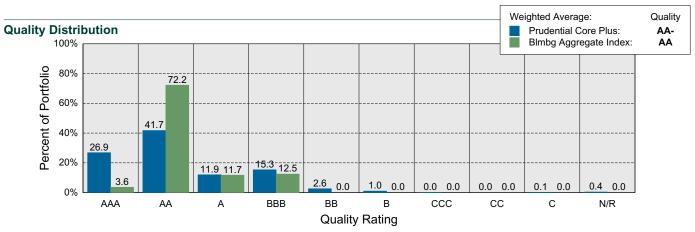
# **Prudential Core Plus Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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

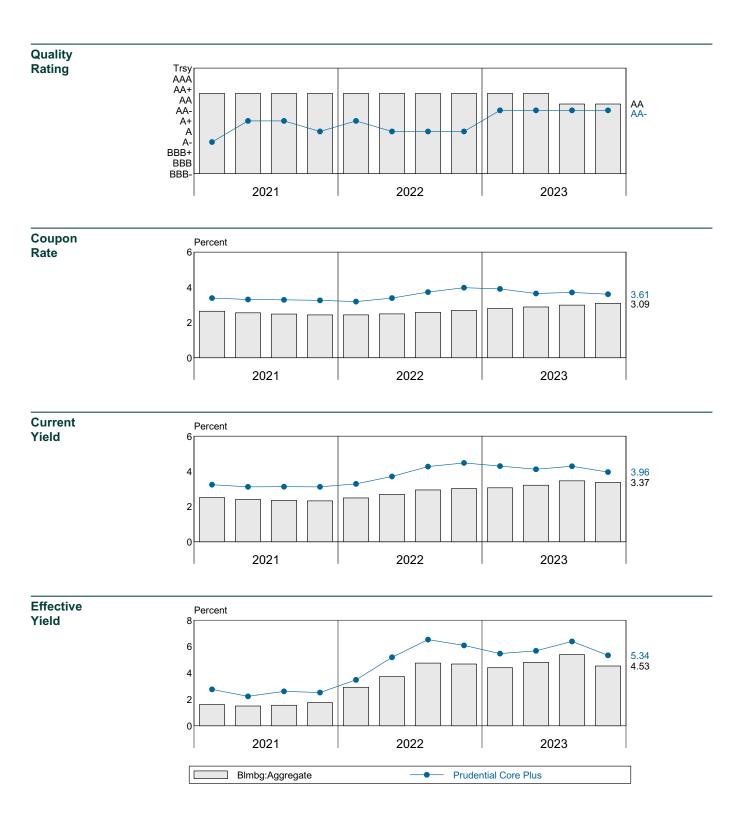






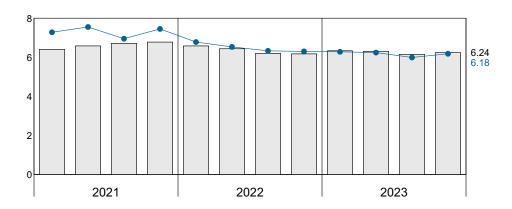


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

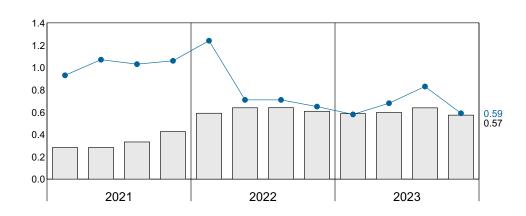


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

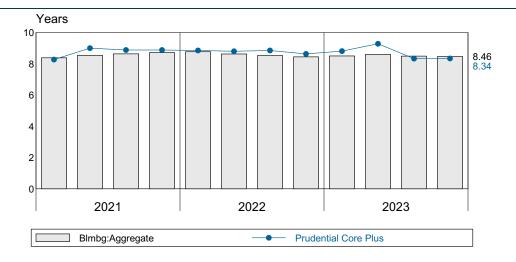
## **Duration**



## OA Convexity

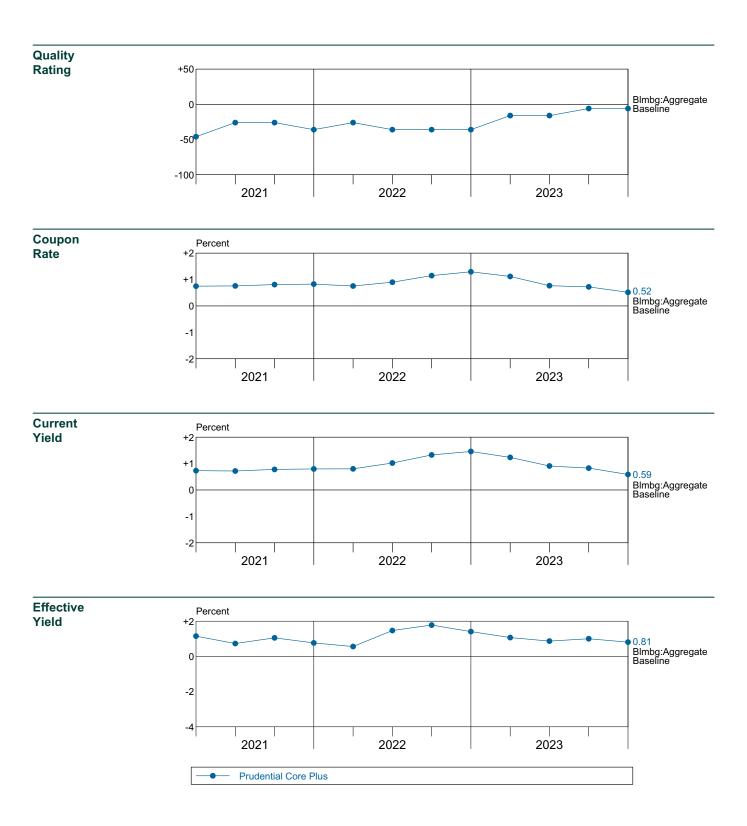


## Average Life



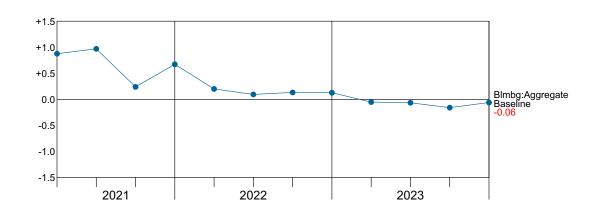


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

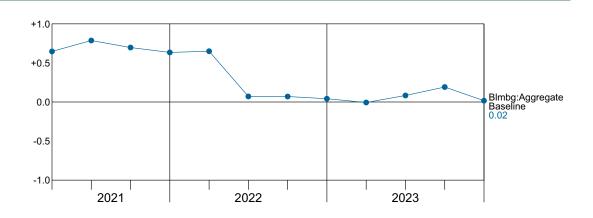


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

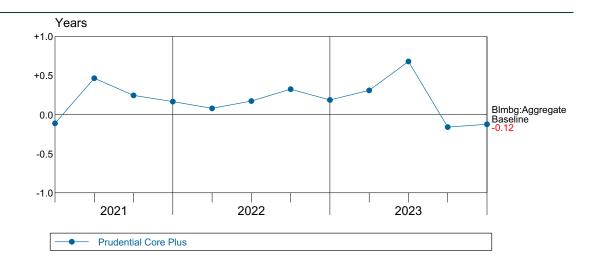




## OA Convexity



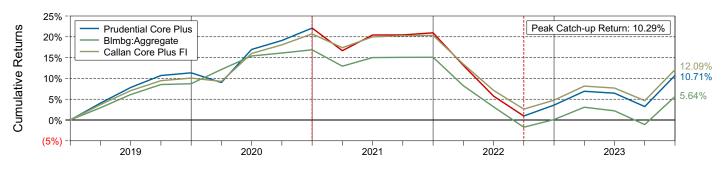




# **Prudential Core Plus** Drawdown Analysis for Five Years Ended December 31, 2023

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

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



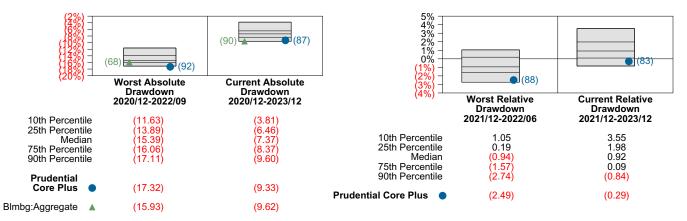
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Prudential Core Plus	(17.32)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(9.33)%	3.00	2020/12-2023/12	(9.62)%	(7.13)%
Recovery from Trough	9.66%	1.25+	2022/09-2023/12	7.51%	9.23%	9.66%	1.25+	2022/09-2023/12	7.51%	9.23%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Callan Core Plus FI	(14.98)%	1.75	2020/12-2022/09			(7.13)%	3.00	2020/12-2023/12		

Worst Absolute Drawdown

# Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns Peak Catch-up Rel Rtn: 0.30% Prudential Core Plus Callan Core Plus FI 4.80% 2019 2020 2021 2022 2023

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Prudential Core Plus	(2.49)%	0.50	2021/12-2022/06	(0.71)%	(0.29)%	2.00	2021/12-2023/12	1.47%	
Recovery from Trough	2.25%	1.50+	2022/06-2023/12	2.19%	2.25%	1.50+	2022/06-2023/12	2.19%	
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 December 31, 2023





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 December 31, 2023 **VS THE Callan Core Plus FI Peer Group**

(12)	Prudential Core Plus	A+ (60)	3.54% (43)	3.75% (52)	4.52% (38)	6.66 (27)	0.84 (16)	8.74 ( <b>45</b> )
		Quality Rating	Coupon Rate	Current Yield	Effective Yield	Duration	OA Convexity	Average Life



# **Comparative Manager Matrix**

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

## Excess Return Correlations for 3 Years Ended December 31, 2023 vs the Blmbg:Aggregate

Prudential Core Plus	1.00
	Prudential Core Plus



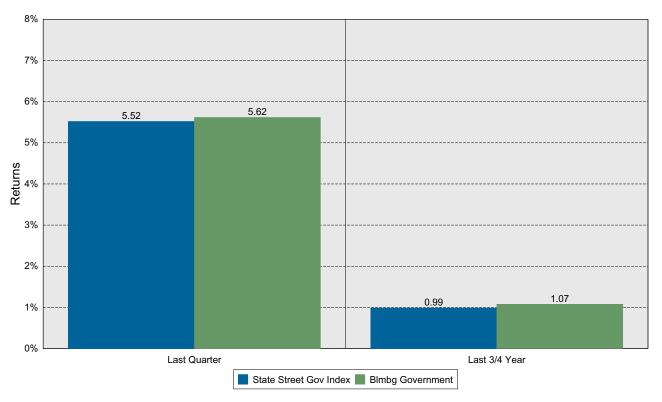
# **State Street Gov Index** Period Ended December 31, 2023

## **Quarterly Summary and Highlights**

 State Street Gov Index's portfolio underperformed the Blmbg Government by 0.10% for the quarter and underperformed the Blmbg Government for the three-quarter year by 0.09%.

#### **Quarterly Asset Growth**

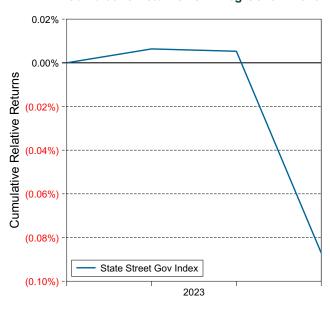
Beginning Market Value	\$140,975,387	
Net New Investment	\$-1,107,357	
Investment Gains/(Losses)	\$7,705,979	
Ending Market Value	\$147,574,009	



## Relative Return vs Blmbg Government

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

## **Cumulative Returns vs Blmbg Government**





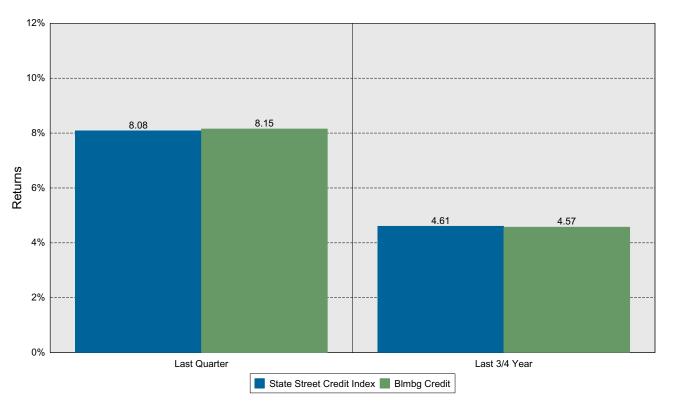
# **State Street Credit Index** Period Ended December 31, 2023

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

• State Street Credit Index's portfolio underperformed the Blmbg Credit by 0.07% for the quarter and outperformed the Blmbg Credit for the three-quarter year by 0.03%.

#### **Quarterly Asset Growth**

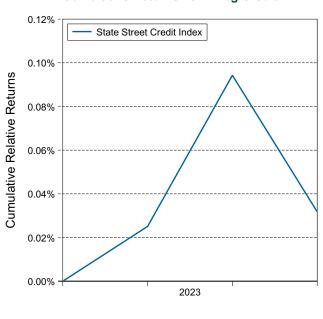
Beginning Market Value	\$38,355,667	
Net New Investment	\$-2,556,576	
Investment Gains/(Losses)	\$3,011,547	
Ending Market Value	\$38,810,638	



## Relative Return vs Blmbg Credit

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

## **Cumulative Returns vs Blmbg Credit**



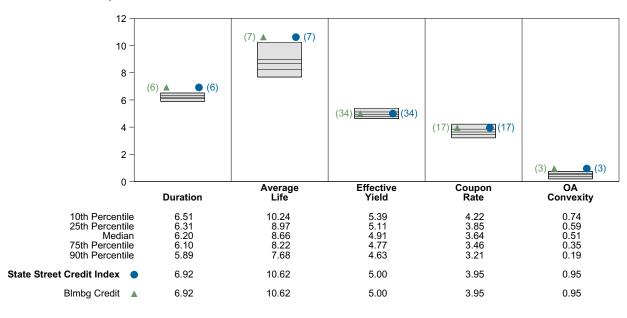


## **State Street Credit Index Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

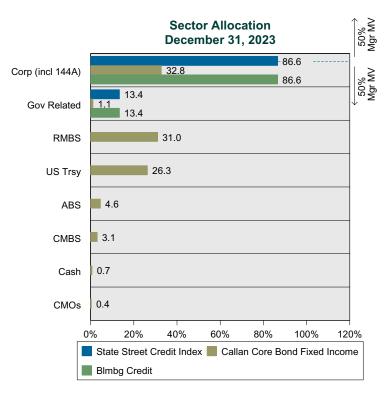
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

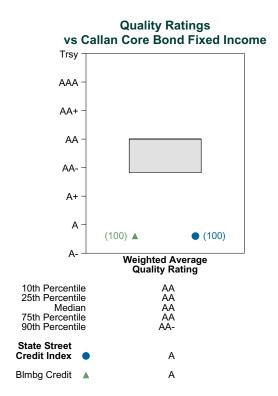
## **Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income** as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



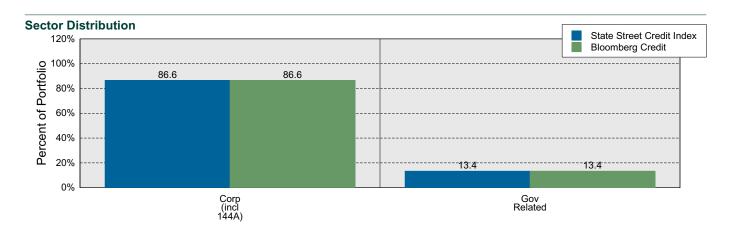


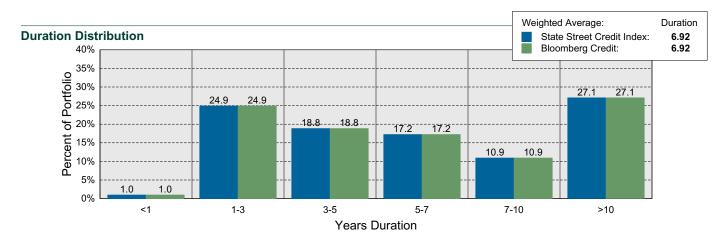


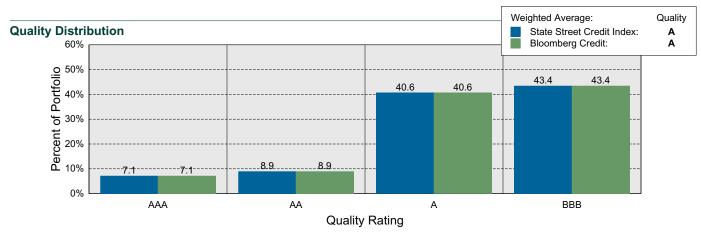
# **State Street Credit Index Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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









## **Western Asset Core Plus** Period Ended December 31, 2023

#### **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.

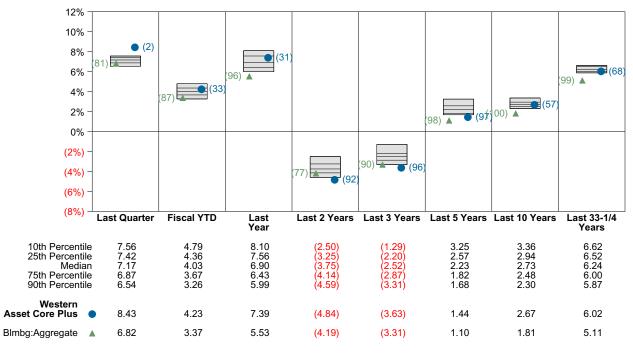
#### **Quarterly Summary and Highlights**

- Western Asset Core Plus's portfolio posted a 8.43% return for the quarter placing it in the 2 percentile of the Callan Core Plus Fixed Income group for the quarter and in the 31 percentile for the last year.
- Western Asset Core Plus's portfolio outperformed the Blmbg:Aggregate by 1.62% for the quarter outperformed the Blmbg:Aggregate for the year by 1.86%.

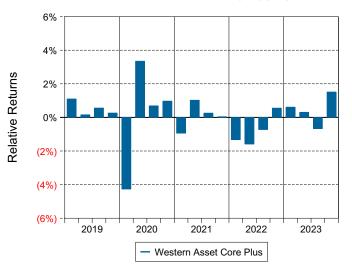
#### **Quarterly Asset Growth**

Beginning Market Value	\$307,358,099	
Net New Investment	\$-88,086	
Investment Gains/(Losses)	\$25,915,341	
Ending Market Value	\$333 185 354	

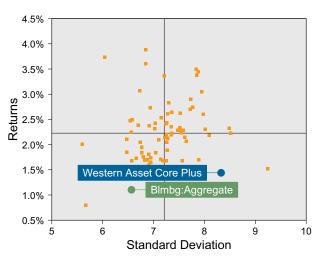
## Performance vs Callan Core Plus Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



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



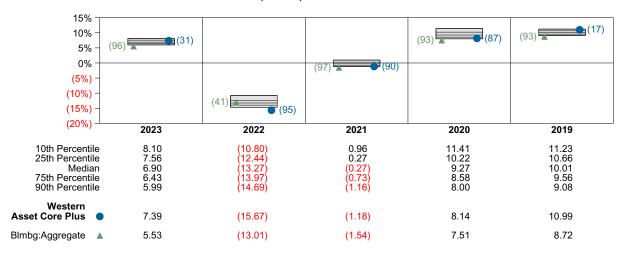


# **Western Asset Management Company Return Analysis Summary**

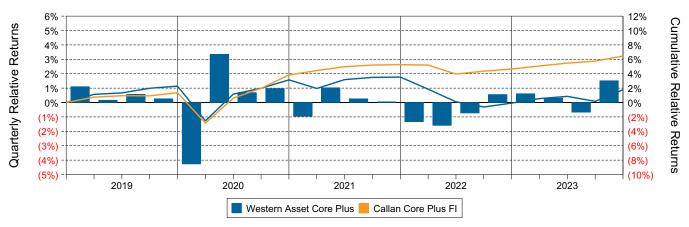
#### **Return Analysis**

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.

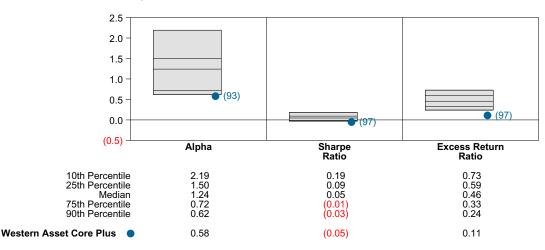
## Performance vs Callan Core Plus Fixed Income (Gross)



## **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 December 31, 2023



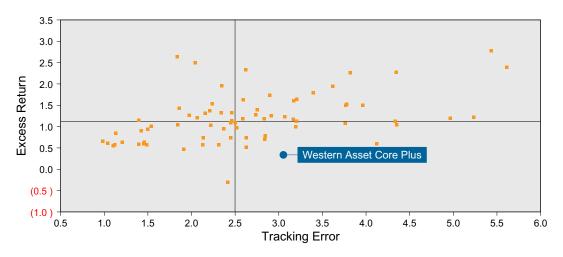


# **Western Asset Management Company Risk Analysis Summary**

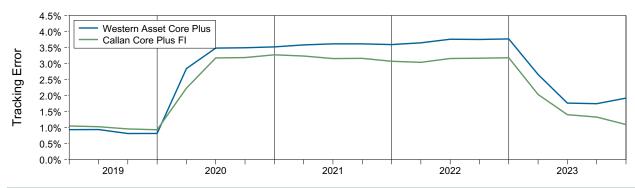
#### Risk Analysis

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.

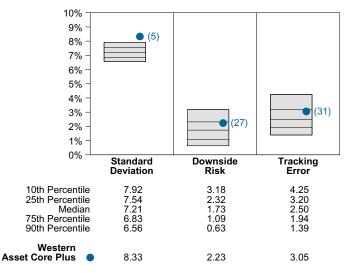
## Risk Analysis vs Callan Core Plus Fixed Income (Gross) Five Years Ended December 31, 2023

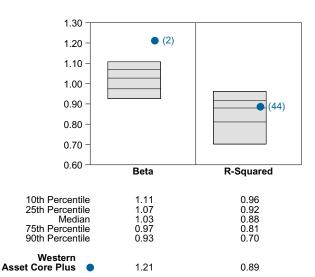


## Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Plus Fixed Income (Gross) Five Years Ended December 31, 2023





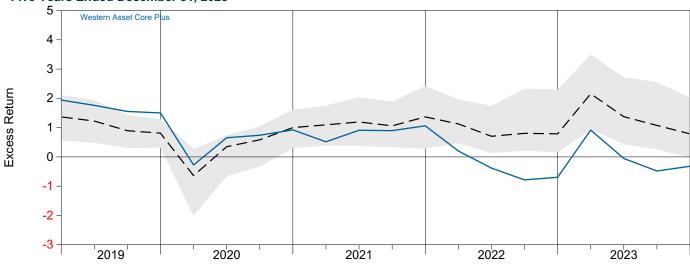


# **Western Asset Core Plus Historical Consistency Analysis**

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

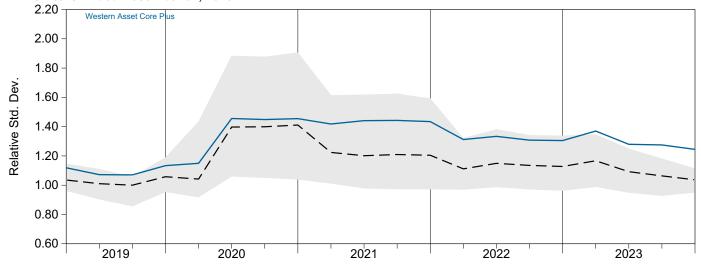
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Core Plus FI. The second chart below illustrates the consistency of relative 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.96%	0.53%
% Positive Periods	95%	65%
Average Ranking	50	63

## Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.15%	1.30%
% Positive Periods	100%	100%
Average Ranking	50	19

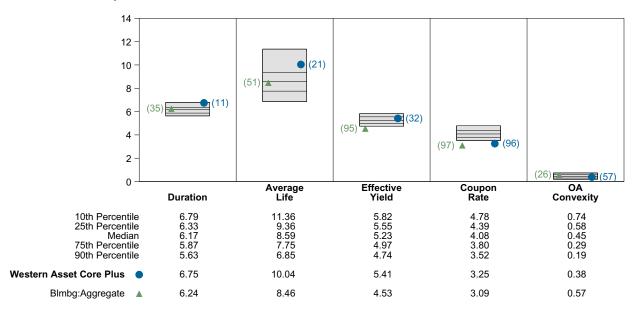


# **Western Asset Core Plus Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

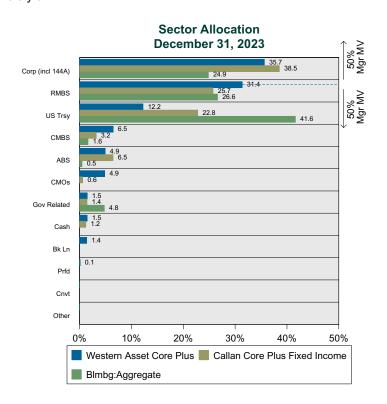
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

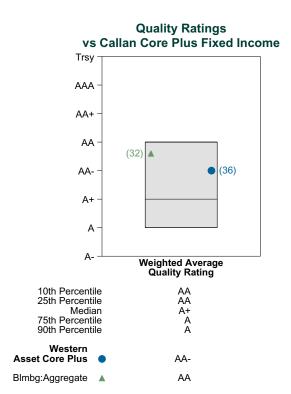
## **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Plus Fixed Income as of December 31, 2023



## Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



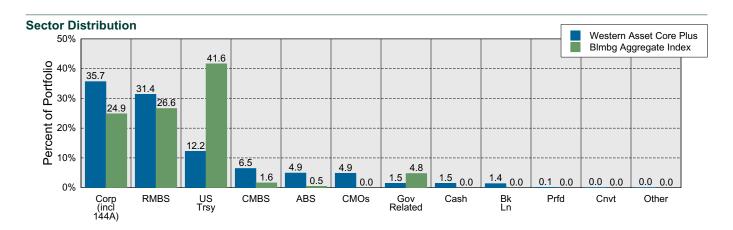


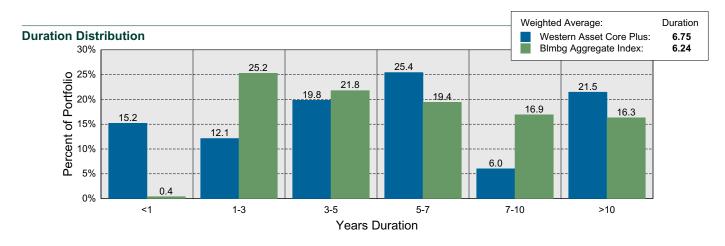


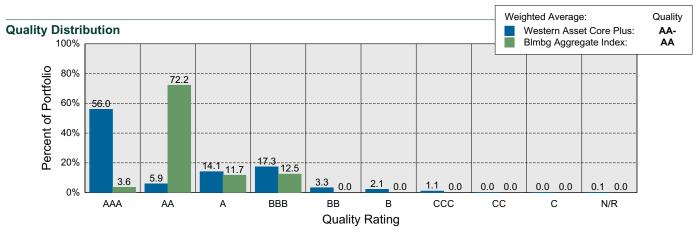
# **Western Asset Core Plus Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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

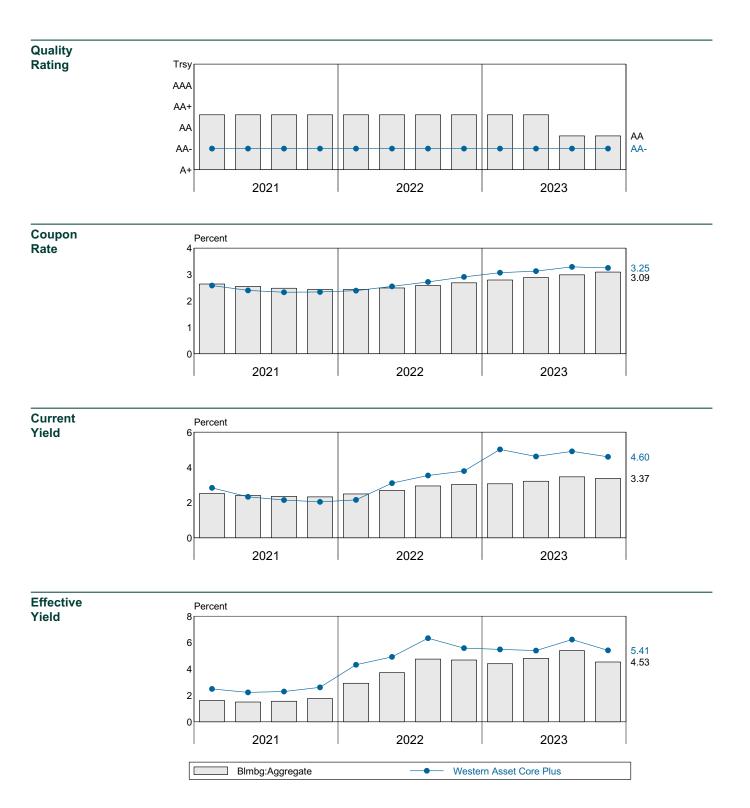






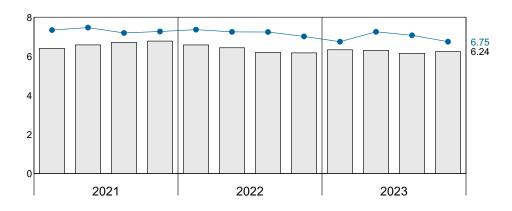


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

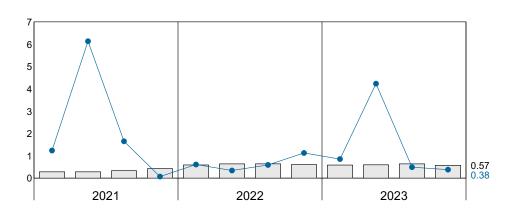


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

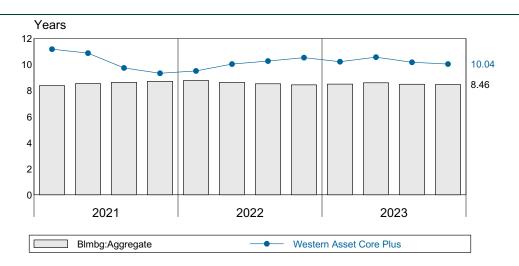
## **Duration**



# OA Convexity

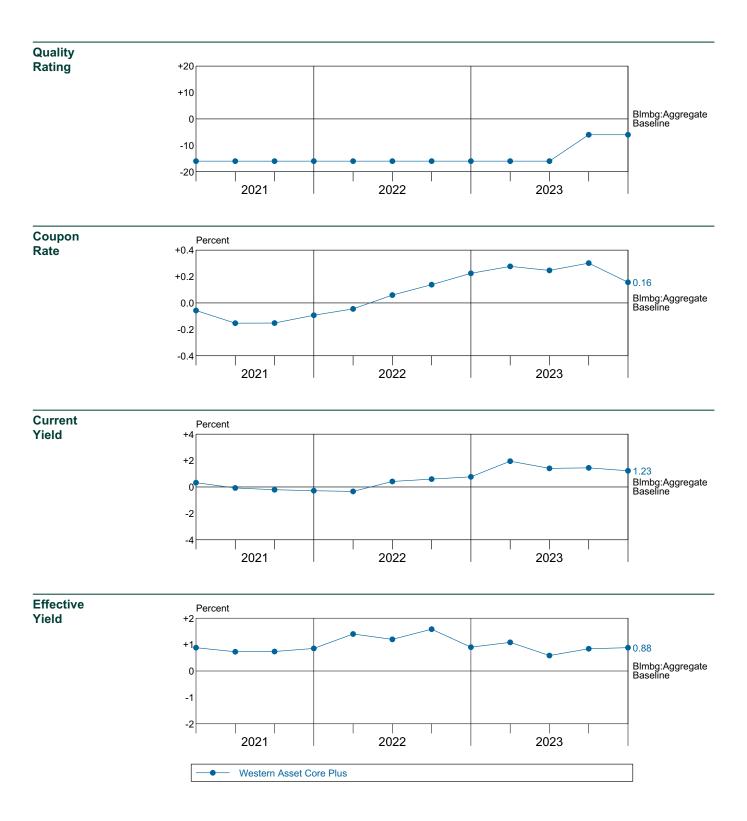


## **Average** Life



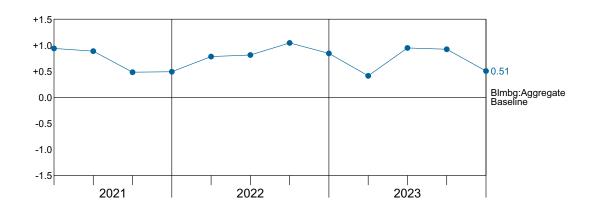


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

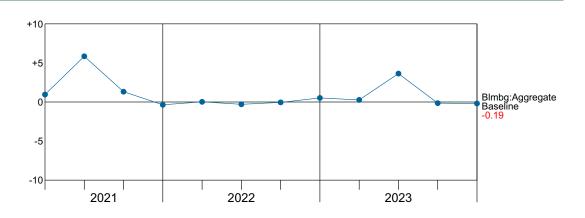


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

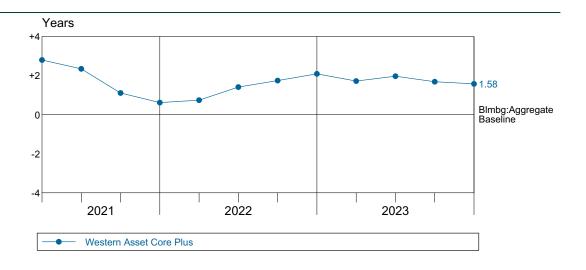




# OA Convexity



# Average Life

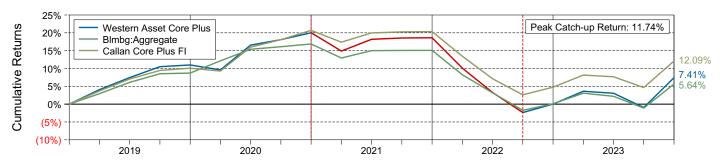




# **Western Asset Core Plus** Drawdown Analysis for Five Years Ended December 31, 2023

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

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

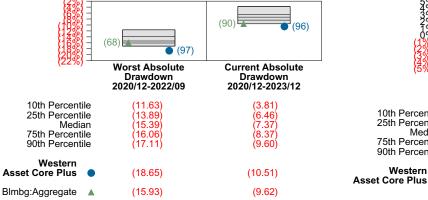


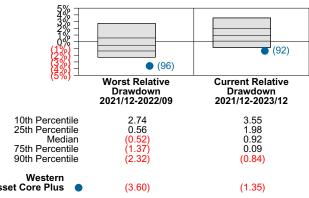
	Worst Absolute Drawdown						Curre	ent Absolute Draw	down	
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Western Asset Core Plus	(18.65)%	1.75	2020/12-2022/09	(15.93)%	(14.98)%	(10.51)%	3.00	2020/12-2023/12	(9.62)%	(7.13)%
Recovery from Trough	10.01%	1.25+	2022/09-2023/12	7.51%	9.23%	10.01%	1.25+	2022/09-2023/12	7.51%	9.23%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Callan Core Plus FI	(14.98)%	1.75	2020/12-2022/09			(7.13)%	3.00	2020/12-2023/12		

## Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns Peak Catch-up Rel Rtn: 1.37% Western Asset Core Plus Callan Core Plus FI 2% 1.68% 2019 2021 2023 2020 2022

	worst Relative Drawdown				Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Western Asset Core Plus	(3.60)%	0.75	2021/12-2022/09	(0.13)%	(1.35)%	2.00	2021/12-2023/12	1.47%		
Recovery from Trough	2.33%	1.25+	2022/09-2023/12	1.61%	2.33%	1.25+	2022/09-2023/12	1.61%		
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 December 31, 2023







# **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 December 31, 2023 **VS THE Callan Core Plus FI Peer Group**

(12)	Western Asset Core Plus	AA- (33)	2.75% (93)	3.42%	4.44%	7.16	1.48	10.21
	1 103	(33)	(93)	(00)	(42)	(4)	(31)	(19)
		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 December 31, 2023 vs the Blmbg:Aggregate

(12)	Western Asset Core Plus	1.00
		Western Asset Core Plus



# **Manulife-Declaration TRBF** Period Ended December 31, 2023

#### **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.

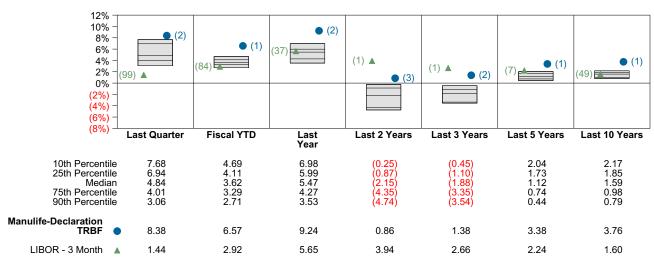
#### **Quarterly Summary and Highlights**

- Manulife-Declaration TRBF's portfolio posted a 8.38% return for the quarter placing it in the 2 percentile of the Callan Intermediate Fixed Inc Mut Funds group for the quarter and in the 2 percentile for the last year.
- Manulife-Declaration TRBF's portfolio outperformed the LIBOR - 3 Month by 6.94% for the quarter and outperformed the LIBOR - 3 Month for the year by 3.59%.

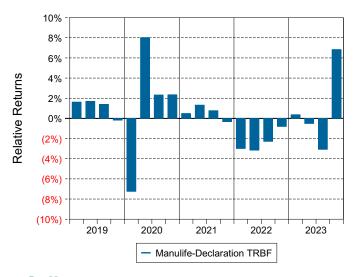
## **Quarterly Asset Growth**

Beginning Market Value	\$80,505,311
Net New Investment	\$-8,066,000
Investment Gains/(Losses)	\$6,321,350
Ending Market Value	\$78,760,661

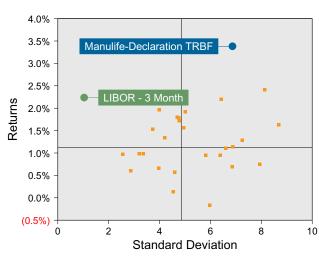
#### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



## Relative Return vs LIBOR - 3 Month



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



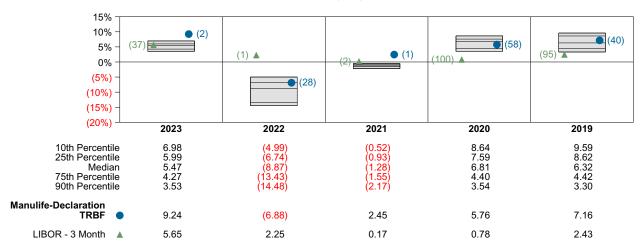


# **Manulife-Declaration TRBF Return Analysis Summary**

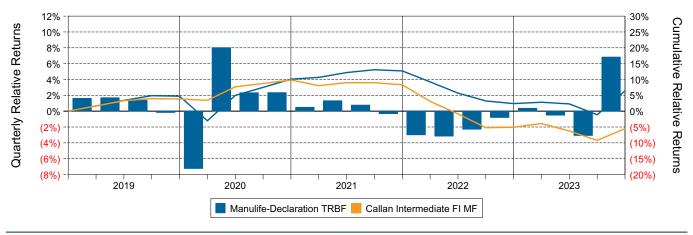
#### **Return Analysis**

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.

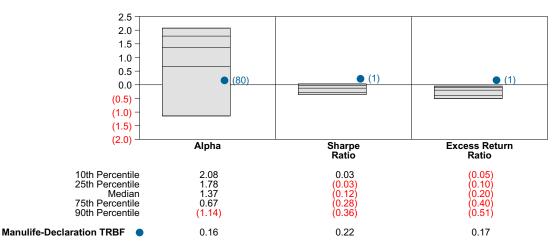
### Performance vs Callan Intermediate Fixed Inc Mut Funds (Net)



### 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 December 31, 2023



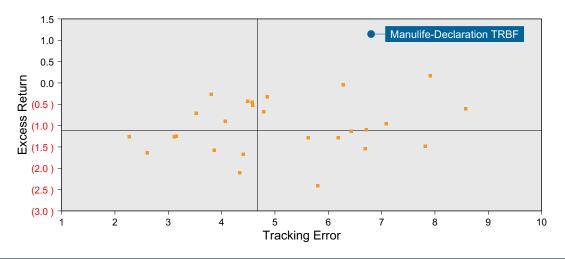


# **Manulife-Declaration TRBF Risk Analysis Summary**

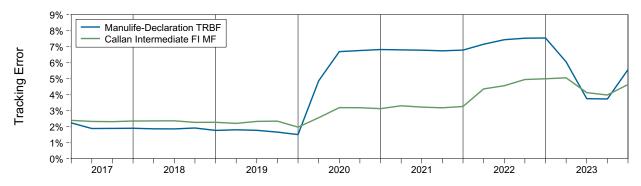
#### Risk Analysis

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.

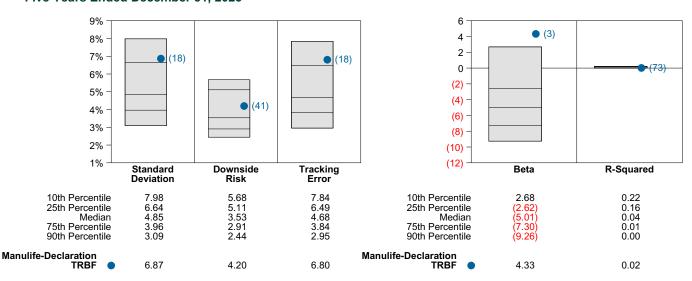
## Risk Analysis vs Callan Intermediate Fixed Inc Mut Funds (Net) Five Years Ended December 31, 2023



## 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 December 31, 2023



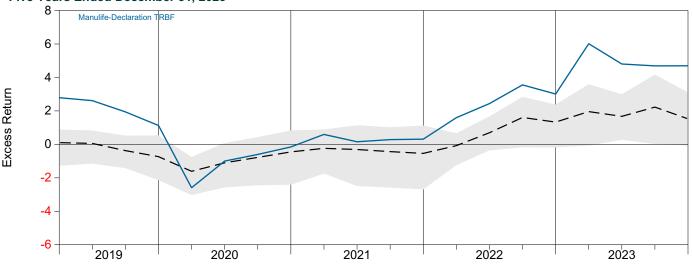


# **Manulife-Declaration TRBF Historical Consistency Analysis**

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

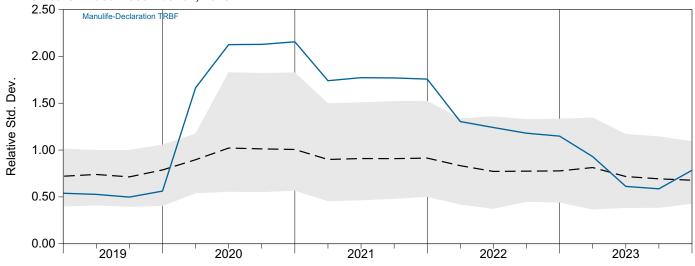
The first chart below illustrates the consistency of excess return over rolling three year periods versus the Blmbg:Aggregate. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Intermediate FI MF. The second chart below illustrates the consistency 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	0.23%	1.81%
% Positive Periods	45%	80%
Average Ranking	50	15

## Rolling Three Year Relative Std. Dev. Relative to Blmbg:Aggregate Five Years Ended December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	0.83%	1.25%
% Positive Periods	100%	100%
Average Ranking	50	30

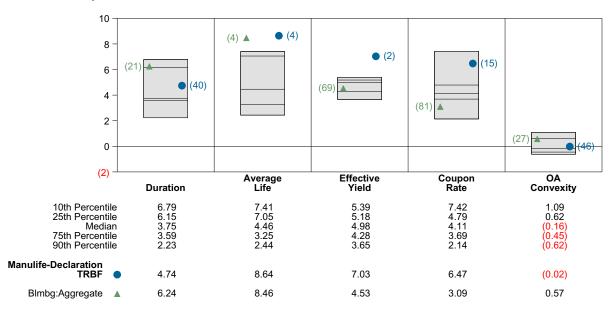


# **Manulife-Declaration TRBF Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

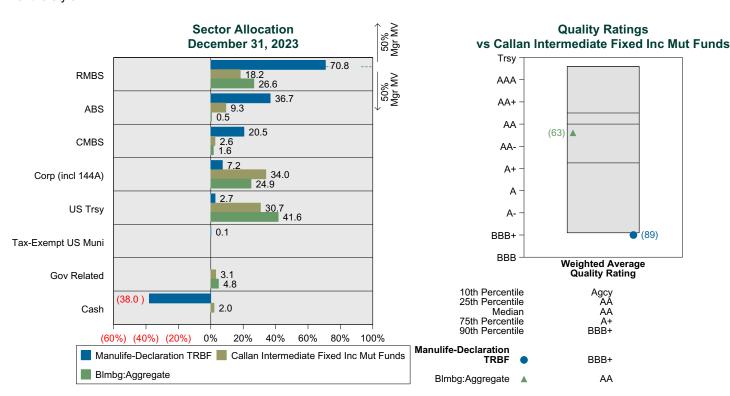
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Intermediate Fixed Inc Mut Funds as of December 31, 2023



#### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

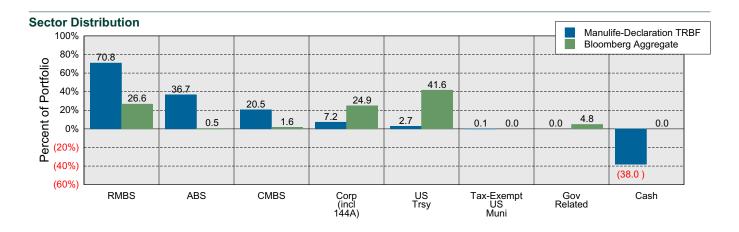


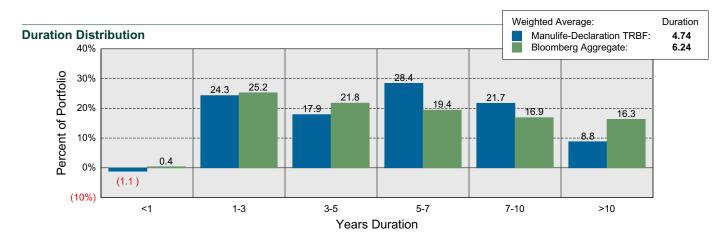


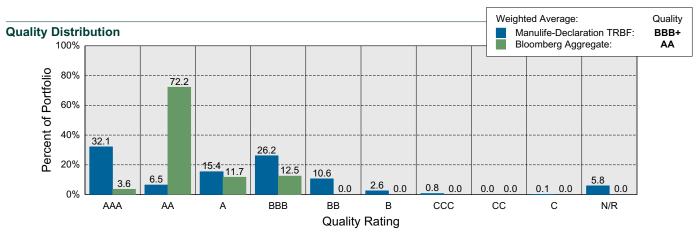
# **Manulife-Declaration TRBF Portfolio Characteristics Summary** As of December 31, 2023

#### **Portfolio Structure Comparison**

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



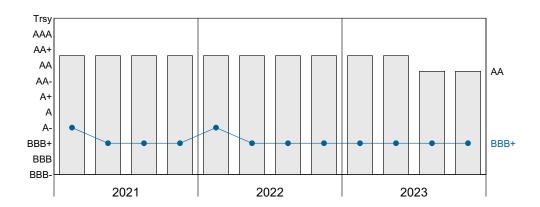




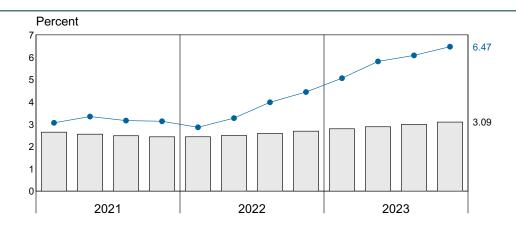


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

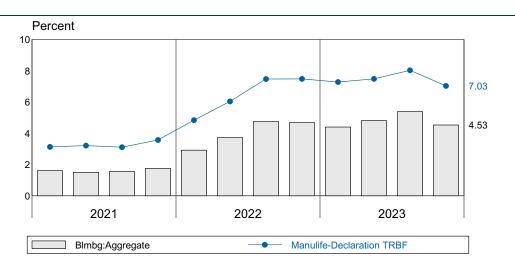




## Coupon Rate



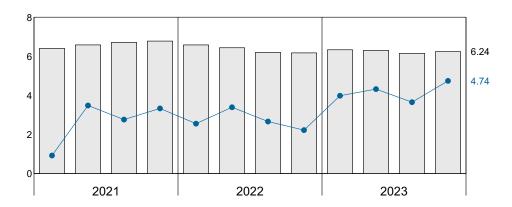




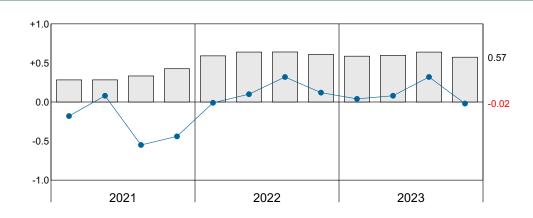


# North Dakota State Investment Board - Insurance Trust **History of Fixed Income Characteristics** Period December 31, 2023

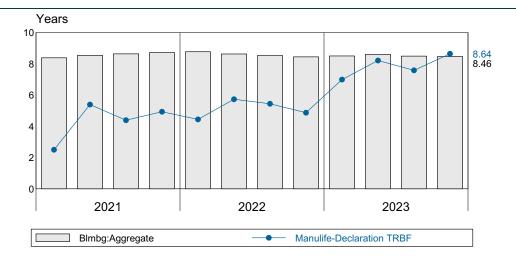
## **Duration**



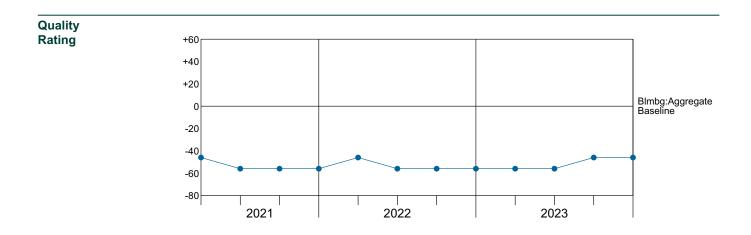
# OA Convexity

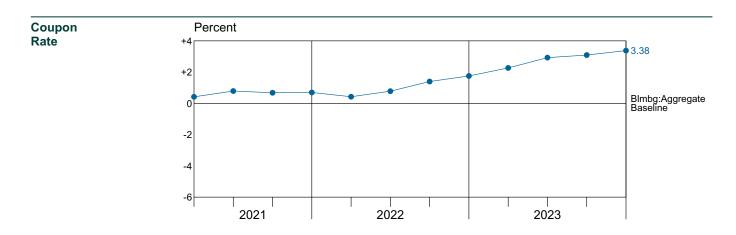


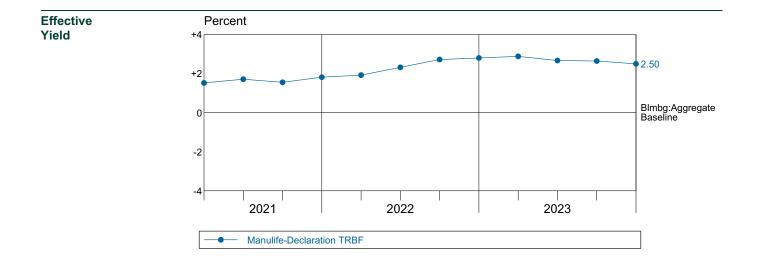
## **Average** Life



# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023



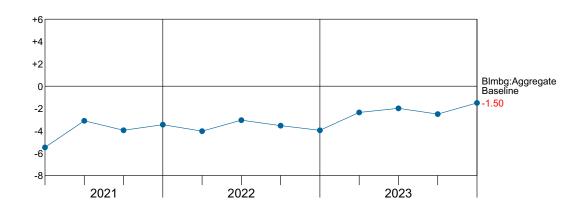




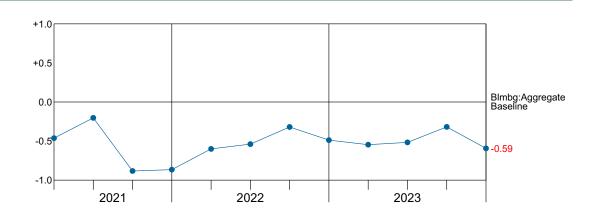


# North Dakota State Investment Board - Insurance Trust **Consistency of Fixed Income Characteristics** Period December 31, 2023

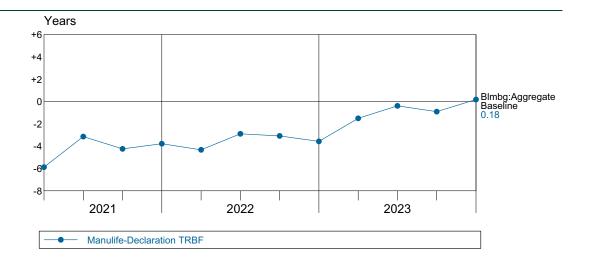




# OA Convexity





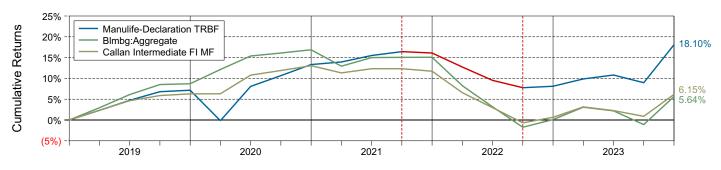




# **Manulife-Declaration TRBF** Drawdown Analysis for Five Years Ended December 31, 2023

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

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



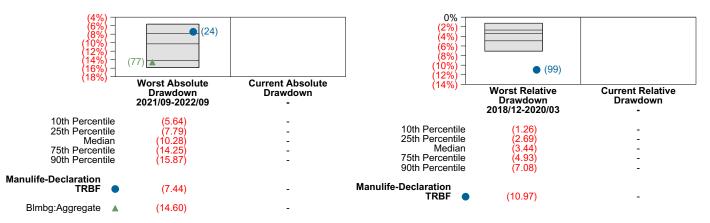
		Wordt / (Booluto Brandon)					- Cuii	one / tooolate Brant	40 1111	
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Manulife-Declaration TRBF	(7.44)%	1.00	2021/09-2022/09	(14.60)%	(11.57)%	-	-	-	-	-
Recovery from Trough	9.59%	1.25+	2022/09-2023/12	7.51%	6.87%	-	-	-	-	-
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(9.62)%	3.00	2020/12-2023/12		
Callan Intermediate FI MF	(12.15)%	1.75	2020/12-2022/09			(6.11)%	3.00	2020/12-2023/12		

Worst Absolute Drawdown

## Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate **Cumulative Relative Returns** 11.79% Manulife-Declaration TRBF Callan Intermediate FI MF 5% 0.49% 2019 2021 2022 2023 2020

	\	Norst Rel	ative Drawdown		Cu	irrent Re	lative Drawdown	
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Manulife-Declaration TRBF	(10.97)%	1.25	2018/12-2020/03	(5.20)%	-	-	-	-
Recovery from Trough	5.20%	0.25	2020/03-2020/06	1.28%	-	-	-	-
Callan Intermediate FI MF	(5.20)%	1.25	2018/12-2020/03		(1.49)%	0.25	2023/09-2023/12	

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Callan Intermediate Fixed Inc Mut Funds Five Years Ended December 31, 2023





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 December 31, 2023 **VS THE Callan Intermediate FI MF Peer Group**

(12)	Manulife- Declaration TR	BBB+ (95)	4.22% (18)	5.72%	3.17 ( <b>70</b> )	(0.01) (55)	5.76 ( <b>46</b>	6)
		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 December 31, 2023 vs the Blmbg:Aggregate

(12)	Manulife- Declaration TR	1.00
		Manulife- Declaration TR



# **PIMCO DISCO II** Period Ended December 31, 2023

#### **Investment Philosophy**

The PIMCO Distressed Senior Credit Opportunities Fund is an opportunistic private-equity style Fund which seeks to provide investors enhanced returns principally through long-biased investments in undervalued senior and super senior structured credit securities that are expected to produce attractive levels of current income and that may also appreciate in value over the long term. The fund will look to capitalize on forced sales by liquidity constrained investors.

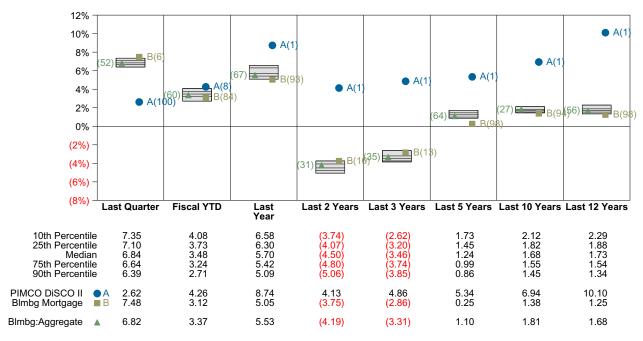
## **Quarterly Summary and Highlights**

- PIMCO DiSCO II's portfolio posted a 2.62% return for the quarter placing it in the 100 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 underperformed Blmbq:Aggregate by 4.20% for the quarter outperformed the Blmbg:Aggregate for the year by 3.21%.

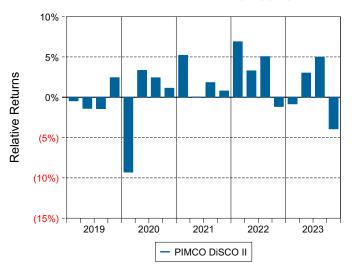
### **Quarterly Asset Growth**

Beginning Market Value	\$50,204,234
Net New Investment	\$0
Investment Gains/(Losses)	\$1,315,264
Ending Market Value	\$51,519,498

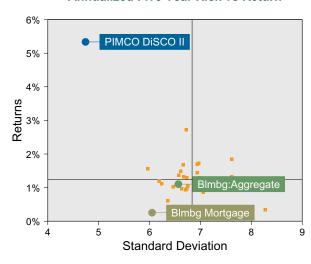
## Performance vs Callan Core Bond Mutual Funds (Net)



#### Relative Return vs Blmbg:Aggregate



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



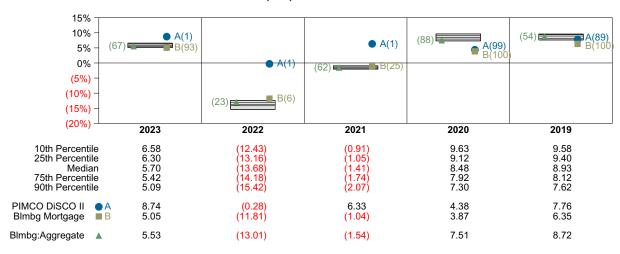


# **PIMCO DISCO II Return Analysis Summary**

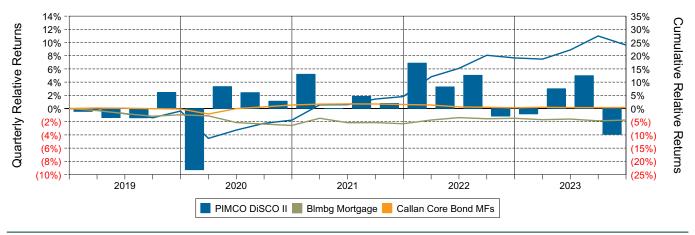
#### **Return Analysis**

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.

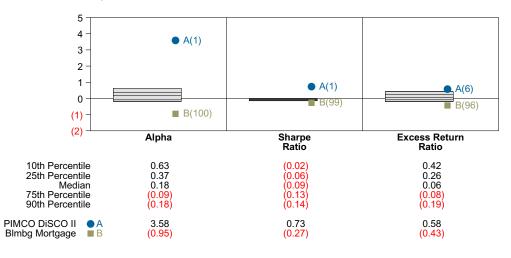
#### Performance vs Callan Core Bond Mutual Funds (Net)



# **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 December 31, 2023



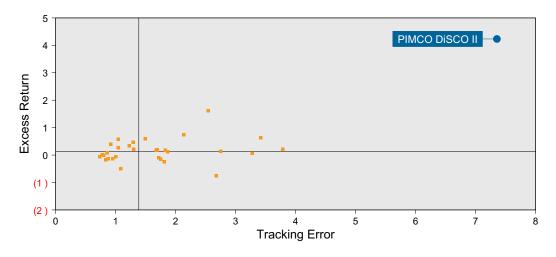


# **PIMCO DISCO II Risk Analysis Summary**

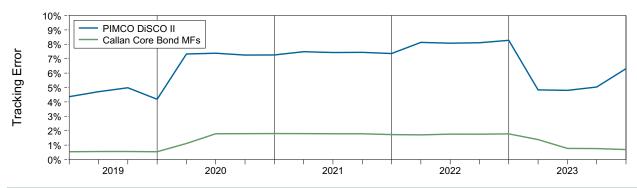
#### **Risk Analysis**

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

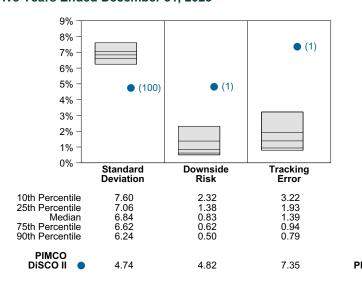
## Risk Analysis vs Callan Core Bond Mutual Funds (Net) Five Years Ended December 31, 2023

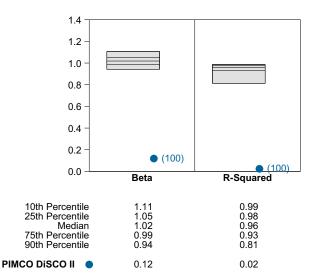


Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Five Years Ended December 31, 2023







# **PIMCO Bravo II Fund** Period Ended December 31, 2023

#### **Investment Philosophy**

The BRAVO II Fund is a private equity style fund targeting an annualized IRR of 15-20% and multiple of 1.8-2x, net of fees and carried interest with an initial 5-year term. The fund will seek to capitalize on non-economic asset sale decisions by global financial institutions. The fund will have the flexibility to acquire attractively discounted, less liquid loans, structured credit and other assets tied to residential or commercial real estate markets in the U.S. and Europe.

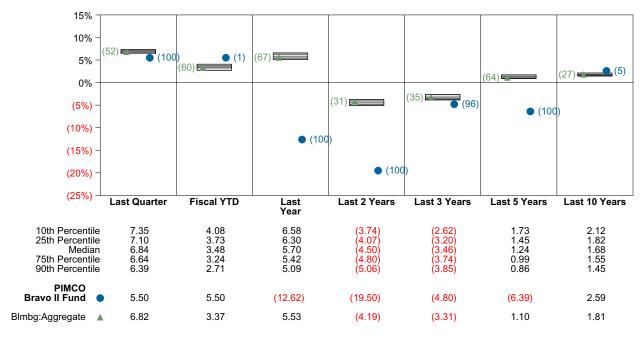
### **Quarterly Summary and Highlights**

- PIMCO Bravo II Fund's portfolio posted a 5.50% return for the quarter placing it in the 100 percentile of the Callan Core Bond Mutual Funds group for the quarter and in the 100 percentile for the last year.
- PIMCO Bravo II Fund's portfolio underperformed the Blmbq:Aggregate by 1.32% for the guarter underperformed the Blmbg:Aggregate for the year by

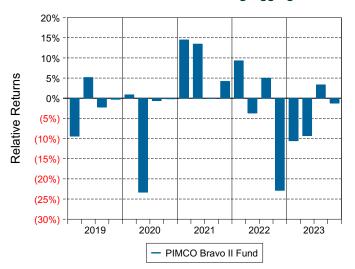
Quarterly	Asset	Growth
-----------	-------	--------

Beginning Market Value	\$1,176,904
Net New Investment	\$0
Investment Gains/(Losses)	\$64,741
Ending Market Value	\$1,241,645

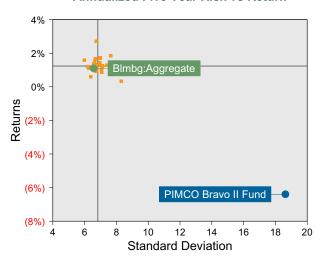
### Performance vs Callan Core Bond Mutual Funds (Net)



#### Relative Return vs Blmbg:Aggregate



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



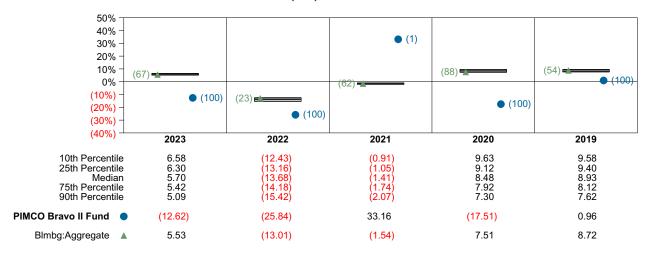


# **PIMCO Bravo II Fund Return Analysis Summary**

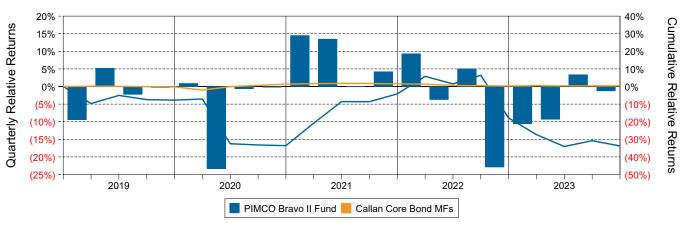
#### **Return Analysis**

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

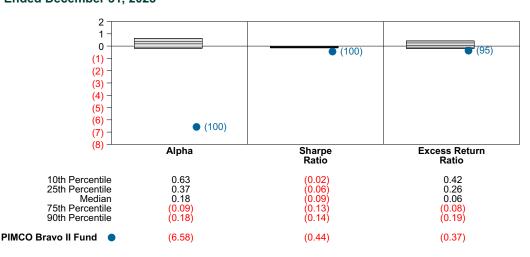
#### Performance vs Callan Core Bond Mutual Funds (Net)



### 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 December 31, 2023



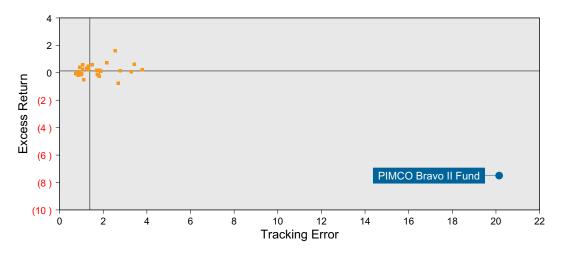


# **PIMCO Bravo II Fund Risk Analysis Summary**

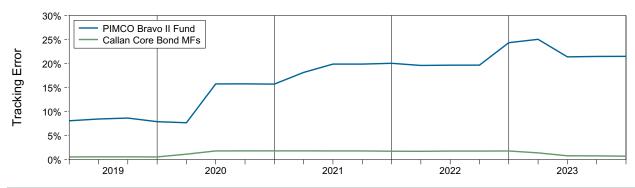
#### Risk Analysis

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

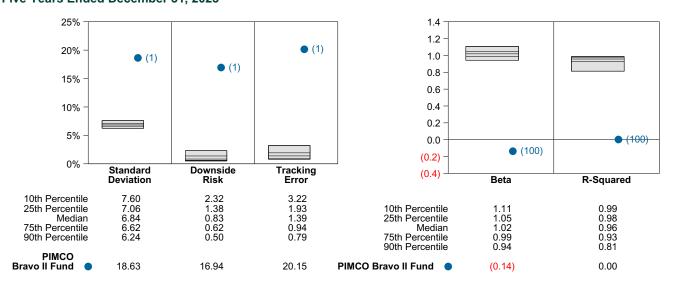
## Risk Analysis vs Callan Core Bond Mutual Funds (Net) Five Years Ended December 31, 2023



Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



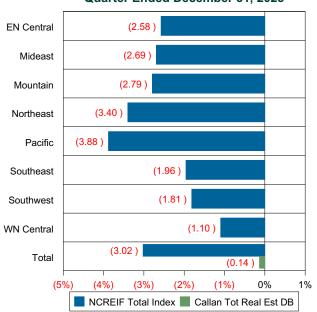
Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Mutual Funds (Net) Five Years Ended December 31, 2023



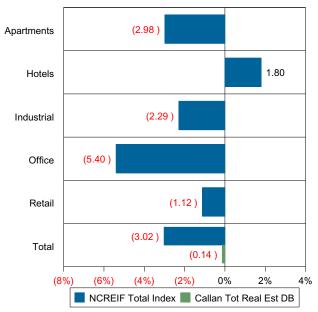
## **Real Estate Market Overview**

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

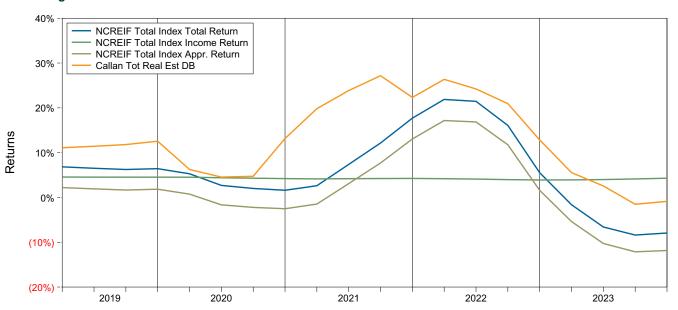
## NCREIF Total Index Returns by Geographic Area Quarter Ended December 31, 2023



## **NCREIF Total Index Returns by Property Type** Quarter Ended December 31, 2023



#### **Rolling 1 Year Returns**





# **Real Estate** Period Ended December 31, 2023

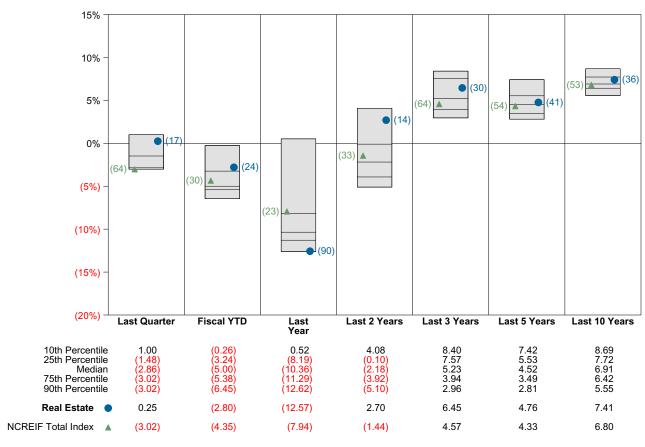
#### **Quarterly Summary and Highlights**

- Real Estate's portfolio posted a 0.25% return for the quarter placing it in the 17 percentile of the Public Fund - Real Estate group for the guarter and in the 90 percentile for the last year.
- Real Estate's portfolio outperformed the NCREIF Total Index by 3.27% for the guarter and underperformed the NCREIF Total Index for the year by 4.63%.

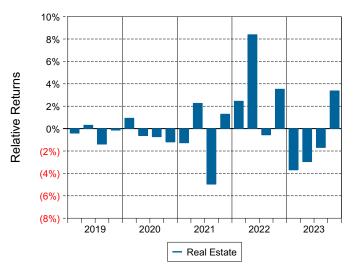
#### **Quarterly Asset Growth**

Beginning Market Value \$108,359,685 Net New Investment \$-269,510 Investment Gains/(Losses) \$268,784 **Ending Market Value** \$108,358,959

# Performance vs Public Fund - Real Estate (Gross)



#### **Relative Return vs NCREIF Total Index**



#### Public Fund - Real Estate (Gross) Annualized Five Year Risk vs Return



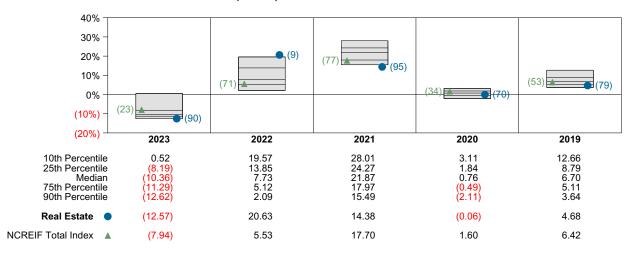


# **Real Estate Return Analysis Summary**

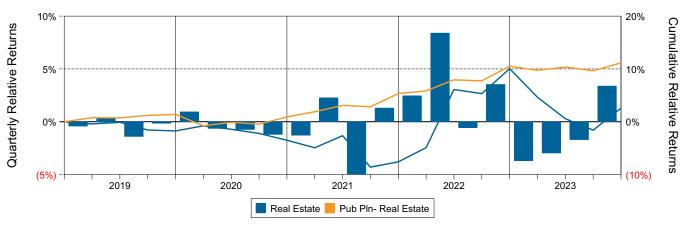
#### **Return Analysis**

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

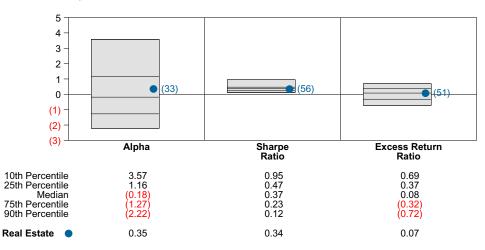
#### Performance vs Public Fund - Real Estate (Gross)



### **Cumulative and Quarterly Relative Returns vs NCREIF Total Index**



Risk Adjusted Return Measures vs NCREIF Total Index Rankings Against Public Fund - Real Estate (Gross) Five Years Ended December 31, 2023





# **Real Estate Risk Analysis Summary**

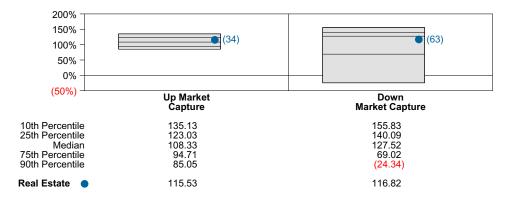
#### Risk Analysis

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

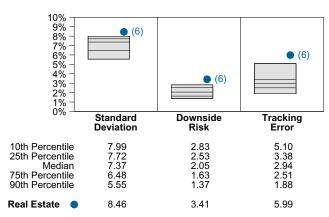
## Risk Analysis vs Public Fund - Real Estate (Gross) Five Years Ended December 31, 2023

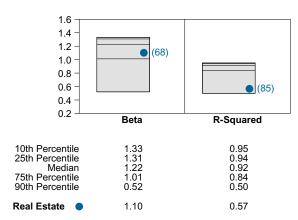


**Market Capture vs NCREIF Property Index** Rankings Against Public Fund - Real Estate (Gross) Five Years Ended December 31, 2023



Risk Statistics Rankings vs NCREIF Property Index Rankings Against Public Fund - Real Estate (Gross) Five Years Ended December 31, 2023







# **Invesco Core Real Estate** Period Ended December 31, 2023

#### **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

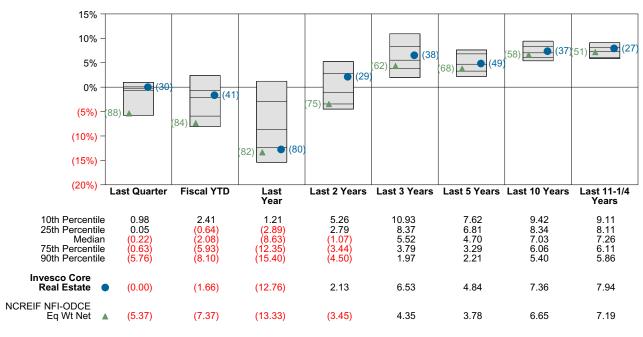
### **Quarterly Summary and Highlights**

- Invesco Core Real Estate's portfolio posted a (0.00)% return for the quarter placing it in the 30 percentile of the Callan Open End Core Cmmingled Real Est group for the quarter and in the 80 percentile for the last year.
- Invesco Core Real Estate's portfolio outperformed the NCREIF NFI-ODCE Eg Wt Net by 5.36% for the guarter and outperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 0.57%.

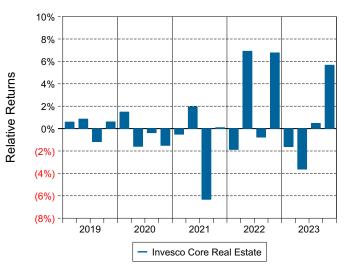
## **Quarterly Asset Growth**

Beginning Market Value	\$59,353,602
Net New Investment	\$0
Investment Gains/(Losses)	\$-726
Ending Market Value	\$59,352,876

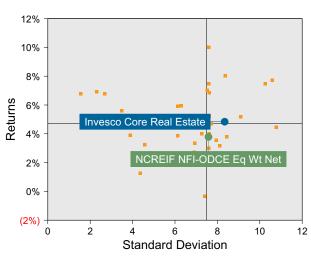
#### Performance vs Callan Open End Core Cmmingled Real Est (Net)



### **Relative Returns vs** NCREIF NFI-ODCE Eq Wt Net



#### Callan Open End Core Cmmingled Real Est (Net) Annualized Five Year Risk vs Return



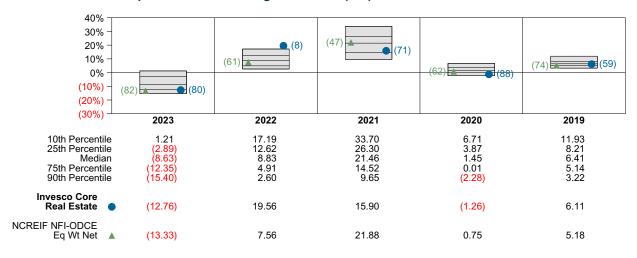


# **Invesco Core Real Estate Return Analysis Summary**

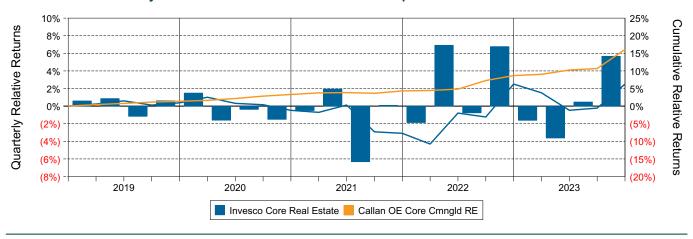
#### **Return Analysis**

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

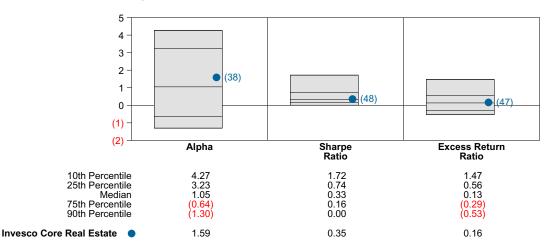
#### Performance vs Callan Open End Core Cmmingled Real Est (Net)



#### Cumulative and Quarterly Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



Risk Adjusted Return Measures vs NCREIF NFI-ODCE Eq Wt Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended December 31, 2023



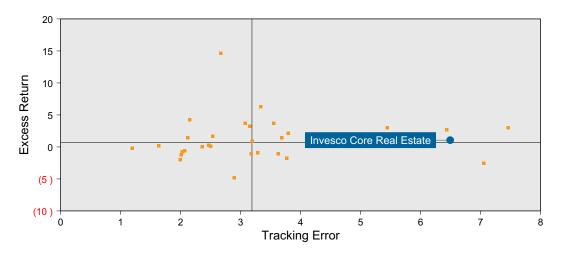


# **Invesco Core Real Estate Risk Analysis Summary**

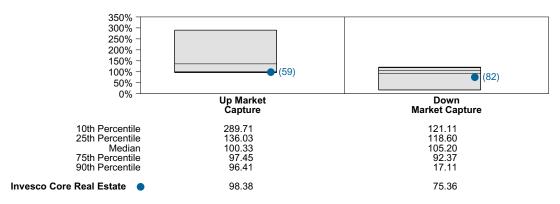
#### Risk Analysis

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.

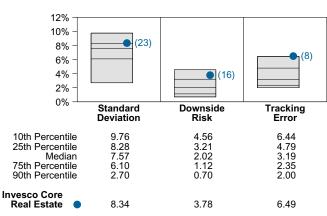
## Risk Analysis vs Callan Open End Core Cmmingled Real Est (Net) Five Years Ended December 31, 2023

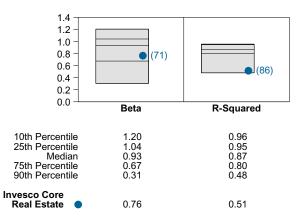


### Market Capture vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended December 31, 2023



## Risk Statistics Rankings vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Open End Core Cmmingled Real Est (Net) Five Years Ended December 31, 2023





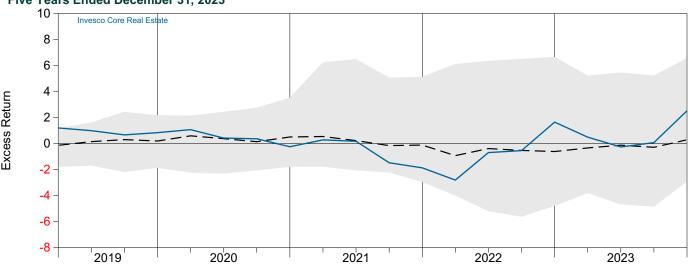


# **Invesco Core Real Estate Historical Consistency Analysis**

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

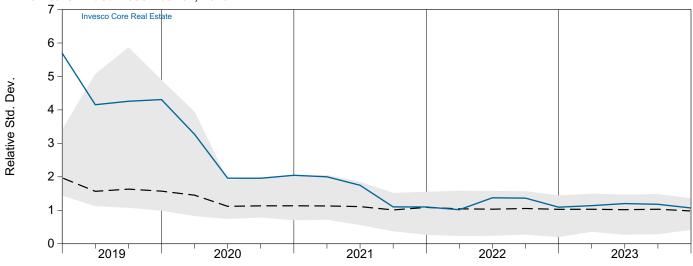
The first chart below illustrates the consistency of excess return over rolling three year periods versus the NCREIF NFI-ODCE Eq Wt Net. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan OE Core Cmngld RE. The second chart below illustrates the consistency 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	(0.01)	0.15%
% Positive Periods	50%	65%
Average Ranking	50	46

## Rolling Three Year Relative Std. Dev. Relative to NCREIF NFI-ODCE Eq Wt Net Five Years Ended December 31, 2023



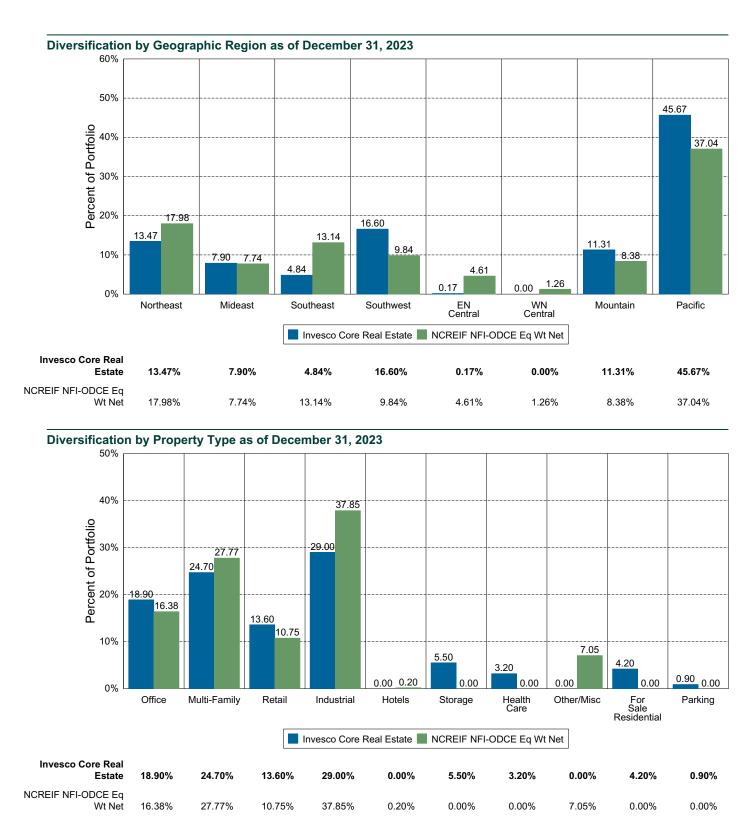
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	1.21%	2.15%
% Positive Periods	100%	100%
Average Ranking	50	21



## **Invesco Core Real Estate** Diversification Analysis as of December 31, 2023

## **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 Income and Growth Fd Period Ended December 31, 2023

### **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.

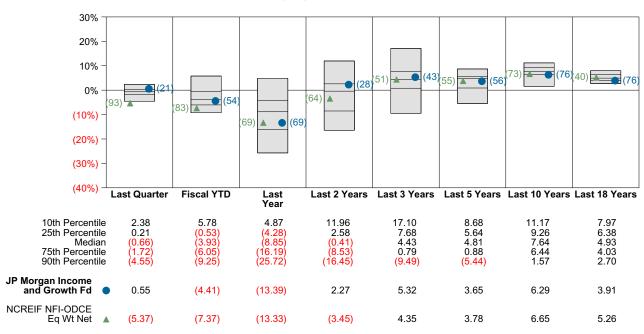
## **Quarterly Summary and Highlights**

- JP Morgan Income and Growth Fd's portfolio posted a 0.55% return for the quarter placing it in the 21 percentile of the Callan Real Estate Value Added group for the quarter and in the 69 percentile for the last year.
- JP Morgan Income and Growth Fd's portfolio outperformed the NCREIF NFI-ODCE Eg Wt Net by 5.92% for the guarter and underperformed the NCREIF NFI-ODCE Eq Wt Net for the year by 0.05%.

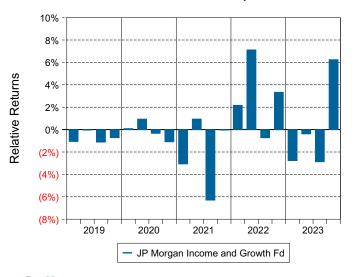
## **Quarterly Asset Growth**

Beginning Market Value	\$49,006,083
Net New Investment	\$-269,510
Investment Gains/(Losses)	\$269,510
Ending Market Value	\$49,006,083

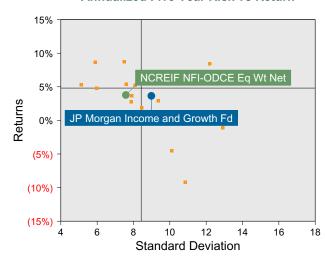
## Performance vs Callan Real Estate Value Added (Net)



## Relative Returns vs NCREIF NFI-ODCE Eq Wt Net



## Callan Real Estate Value Added (Net) Annualized Five Year Risk vs Return



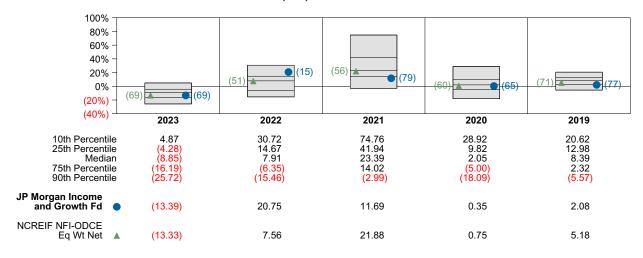


## JP Morgan Income and Growth Fd **Return Analysis Summary**

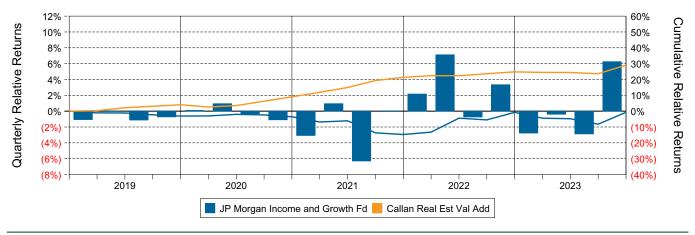
## **Return Analysis**

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.

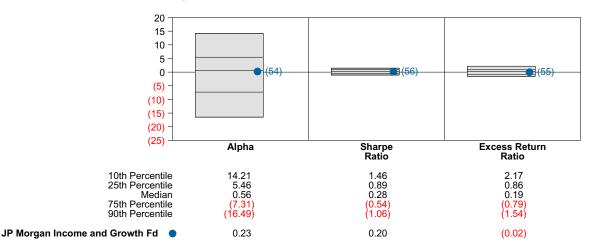
## Performance vs Callan Real Estate Value Added (Net)



## 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 December 31, 2023



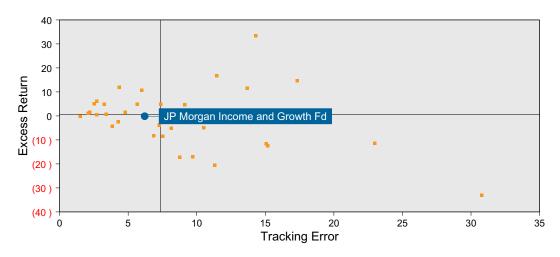


## JP Morgan Income and Growth Fd **Risk Analysis Summary**

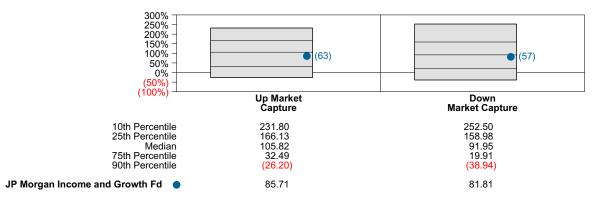
### Risk Analysis

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.

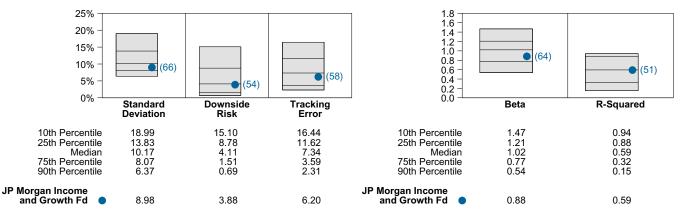
## Risk Analysis vs Callan Real Estate Value Added (Net) Five Years Ended December 31, 2023



Market Capture vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Real Estate Value Added (Net) Five Years Ended December 31, 2023



Risk Statistics Rankings vs NCREIF NFI-ODCE Equal Weight Net Rankings Against Callan Real Estate Value Added (Net) Five Years Ended December 31, 2023



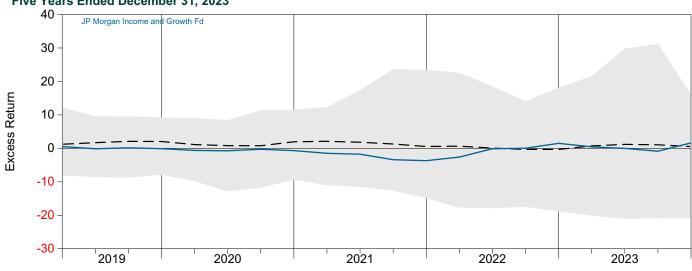


## JP Morgan Income and Growth Fd **Historical Consistency Analysis**

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

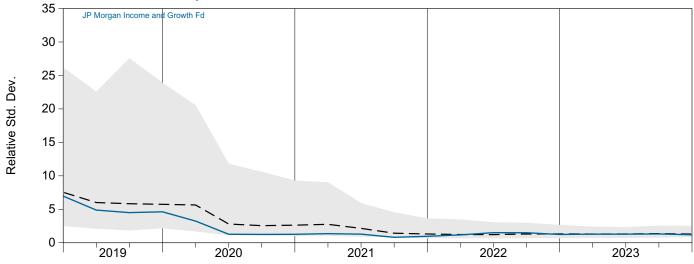
The first chart below illustrates the consistency of excess return over rolling three year periods versus the NCREIF NFI-ODCE Eq Wt Net. The gray area represents the range of excess return for the 10th through 90th percentile for the Callan Real Est Val Add. The second chart below illustrates the consistency 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 December 31, 2023



Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Excess Return	1.06%	(0.60)
% Positive Periods	90%	30%
Average Ranking	50	62

## Rolling Three Year Relative Std. Dev. Relative to NCREIF NFI-ODCE Eq Wt Net Five Years Ended December 31, 2023

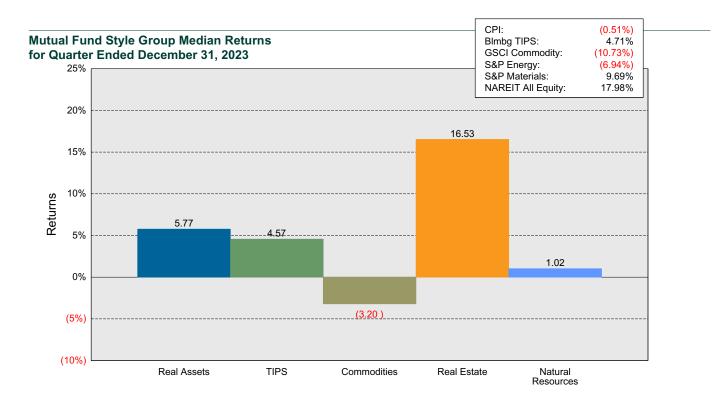


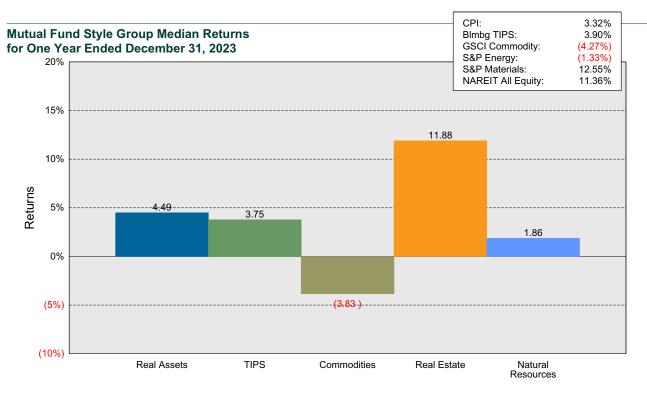
Rolling Three Year Period Analysis	Median	Portfolio
Average Annual Relative Std. Dev.	2.84%	2.15%
% Positive Periods	100%	100%
Average Ranking	50	65



## **Real Assets Active Management Overview**

Nearly all real assets categories performed well in the 4<sup>th</sup> Quarter. Among hard asset categories, Energy was a notable exception, reflecting sharp declines in natural gas and oil, with the S&P GSCI down 10.7% for the quarter. Meanwhile, metals were up, with gold hitting a new high (S&P Gold Spot Price: +11.0%) and Materials (S&P 100 Materials: +13.1%), REITs ((MSCI: US REIT: +16%), and infrastructure (DJB Global Infrastructure: +12.1%) all posted double-digit returns as well. TIPS underperformed nominal U.S. Treasuries but were up 4.7% for the quarter (Bloomberg US TIPS Index),







## **Western TIPS** Period Ended December 31, 2023

### **Investment Philosophy**

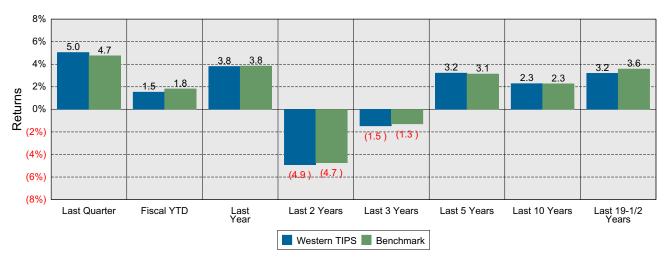
The Western Asset US TIPS Full Discretion strategy is an inflation-protected strategy that aims to maximize total return and add value through duration and curve positioning, sector allocation, and security selection, while approximating benchmark risk. The strategy invests in a diversified portfolio using higher-yielding inflation-protected instruments with a bias toward Treasury Inflation-Protected Securities (TIPS). Opportunistic investments include high-yield, emerging markets, non-dollar securities, commodities and bank loans that may also be employed using derivatives. Benchmark: Bloomberg US TIPS through 12/31/2009; Bloomberg Global Inflation-Linked through 10/31/2018; Bloomberg US Govt Inflation Linked Bond Index thereafter.

## **Quarterly Summary and Highlights**

 Western TIPS's portfolio outperformed the Benchmark by 0.30% for the quarter and underperformed the Benchmark for the year by 0.03%.

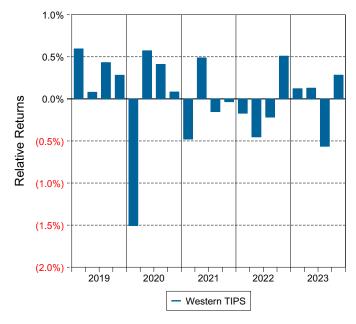
## **Quarterly Asset Growth**

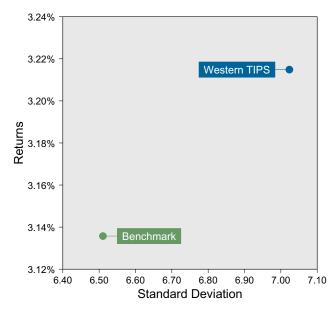
Beginning Market Value	\$159,558,743
Net New Investment	\$-45,364
Investment Gains/(Losses)	\$8,047,950
Ending Market Value	\$167,561,329



## Relative Return vs Benchmark

## Annualized Five Year Risk vs Return







## **Eastern Timber Opportunities** Period Ended December 31, 2023

### **Investment Philosophy**

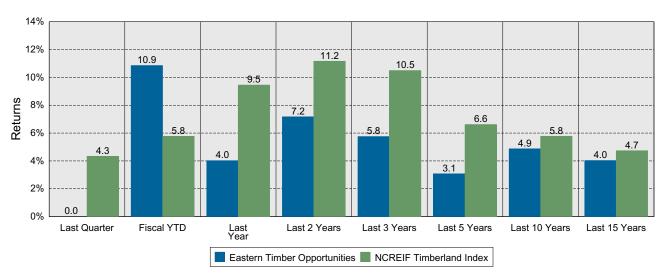
The investment objective of the Eastern Timberland Opportunities fund is to provide competitive timberland investment returns from Eastern US timberland investments by pursuing management strategies to increase timber production and land values through the investment term. TIR will maximize timber values within the portfolio with the application of intensive forest management techniques to accelerate the growth in timber volume and movement into higher value product categories. Additional value will be captured by realizing higher and better use opportunities for select timberland properties throughout the portfolio.

### **Quarterly Summary and Highlights**

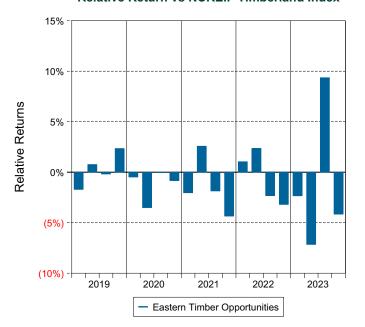
• Eastern Timber Opportunities's portfolio underperformed the NCREIF Timberland Index by 4.34% for the quarter and underperformed the NCREIF Timberland Index for the year by 5.43%.

Quarterly Asset Growth		
Beginning Market Value	\$28,250,748	
Net New Investment	\$-1,663,778	
Investment Gains/(Losses)	\$0	

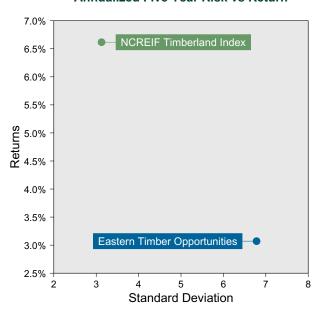
**Ending Market Value** \$26,586,970



## Relative Return vs NCREIF Timberland Index



## Annualized Five Year Risk vs Return





## JP Morgan Infrastructure Period Ended December 31, 2023

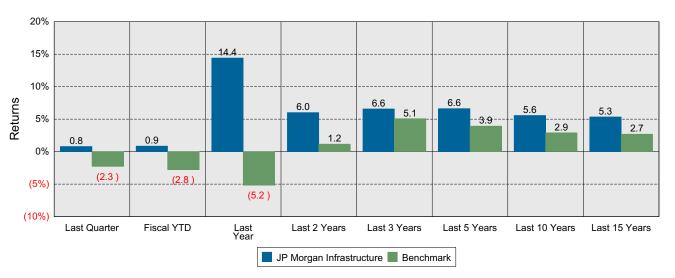
### **Investment Philosophy**

The only open-ended private commingled infrastructure fund in the U.S, the JPMorgan Infrastructure Investments Fund invests in stabilized assets in OECD countries with selected value-added opportunities, across infrastructure industry sub-sectors, including: toll roads, bridges and tunnels; oil and gas pipelines; electricity transmission and distribution facilities; contracted power generation assets; water distribution; waste-water collection and processing; railway lines and rapid rail links; and seaports and airports. The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one guarter and 50% NFI-ODCE Equal Weight Net thereafter.

## **Quarterly Summary and Highlights**

 JP Morgan Infrastructure's portfolio outperformed the Benchmark by 3.08% for the quarter and outperformed the Benchmark for the year by 19.58%.

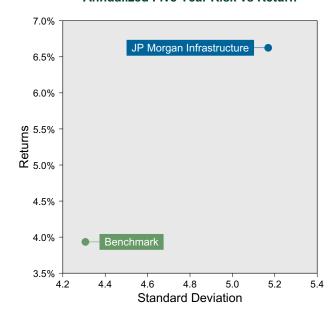
Quarterly Asset Growth		
Beginning Market Value	\$39,360,610	
Net New Investment	\$-1,131,692	
Investment Gains/(Losses)	\$314,454	
Ending Market Value	\$38,543,371	



## Relative Return vs Benchmark

## 12% 10% 8% 6% Relative Returns 4% (2%)(4%)(6%)(8%)2019 2020 2021 2022 2023 JP Morgan Infrastructure

## **Annualized Five Year Risk vs Return**





## **Grosvenor CIS Fund** Period Ended December 31, 2023

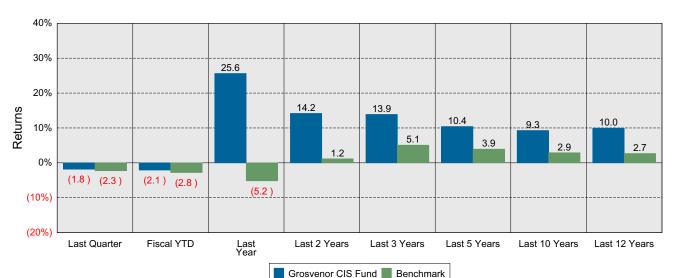
### **Investment Philosophy**

The Customized Infrastructure Strategies LP is a commingled fund focused on providing a comprehensive, diversified solution for investors looking to access the infrastructure asset class. The Fund seeks to generate stable, long-term yield and attractive risk-adjusted returns by investing in a diversified portfolio of primary core and core plus infrastructure funds (30%), co-investments (40%) and opportunistic secondary fund purchases (30%). The Benchmark is comprised of CPI-W through June 30, 2018; 50% CPI-U lagged one quarter and 50% NFI-ODCE Equal Weight Net thereafter.

## **Quarterly Summary and Highlights**

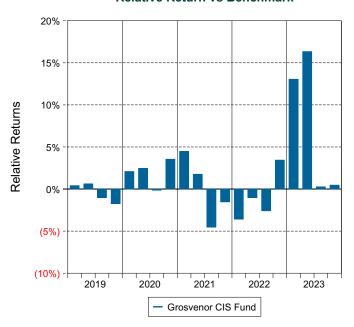
- Grosvenor CIS Fund's portfolio posted a (1.82)% return for the quarter placing it in the 100 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 1 percentile for the last year.
- Grosvenor CIS Fund's portfolio outperformed Benchmark by 0.46% for the guarter and outperformed the Benchmark for the year by 30.80%.

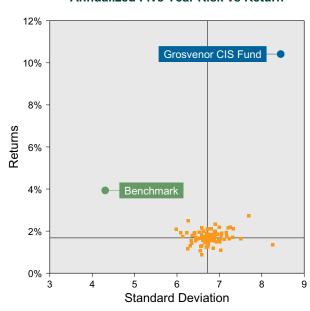
Beginning Market Value	\$4,601,229
Net New Investment	\$-136,657
Investment Gains/(Losses)	\$-83,792
Ending Market Value	\$4,380,780



## Relative Return vs Benchmark

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







## **Grosvenor CIS Fund III** Period Ended December 31, 2023

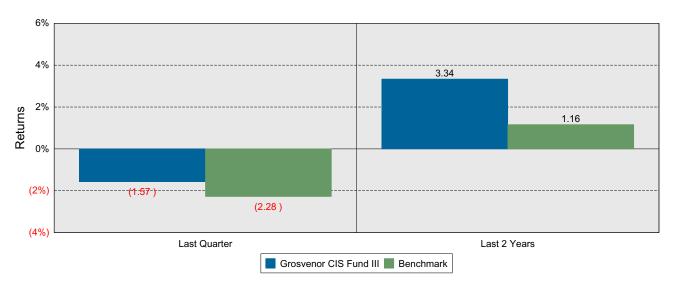
### **Investment Philosophy**

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 0.71% for the quarter and outperformed the Benchmark for the year by 16.66%.

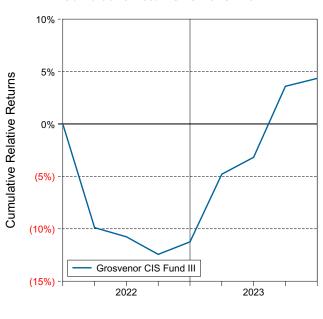
Quarterly Asset Growth		
Beginning Market Value	\$5,777,663	
Net New Investment	\$84,480	
Investment Gains/(Losses)	\$-94,686	
Ending Market Value	\$5,767,457	



### **Relative Return vs Benchmark**

# 10% Relative Returns (5%) (10%)(15%)2022 2023 Grosvenor CIS Fund III

### **Cumulative Returns vs Benchmark**





## **Macquarie Infrastructure Fund V** Period Ended December 31, 2023

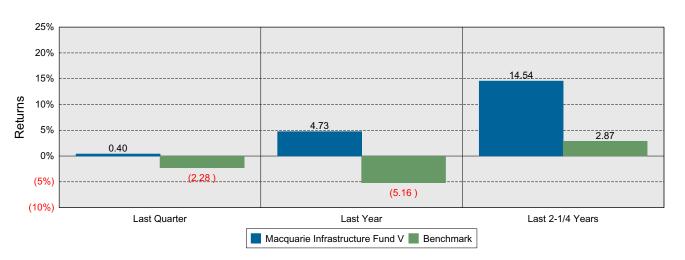
### **Investment Philosophy**

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 2.68% for the quarter and outperformed the Benchmark for the year by 9.90%.

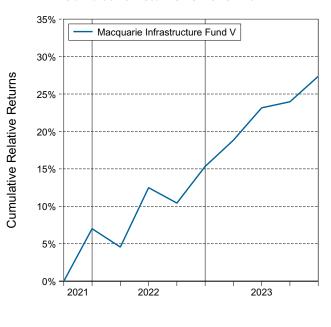
Quarterly Asset Growth		
Beginning Market Value	\$16,321,455	
Net New Investment	\$-8,764	
Investment Gains/(Losses)	\$65,198	
Ending Market Value	\$16 377 880	



### Relative Return vs Benchmark

# 10% 8% 6% Relative Returns 2% (2%)2021 2022 2023 Macquarie Infrastructure Fund V

### **Cumulative Returns vs Benchmark**





## **Short Term Fixed Income** Period Ended December 31, 2023

## **Quarterly Summary and Highlights**

- Short Term Fixed Income's portfolio posted a 2.68% return for the guarter placing it in the 80 percentile of the Callan Short Term Fixed Income group for the quarter and in the 7 percentile for the last year.
- Short Term Fixed Income's portfolio underperformed the Short Term Fixed Target by 0.02% for the quarter and outperformed the Short Term Fixed Target for the year by 2.44%.

## **Quarterly Asset Growth**

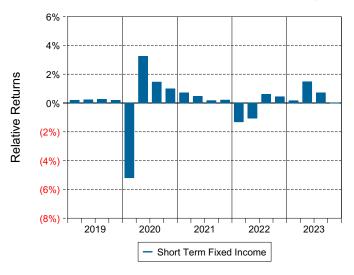
Beginning Market Value \$982,645,347 Net New Investment \$-338,889 Investment Gains/(Losses) \$26,305,261

**Ending Market Value** \$1,008,611,718

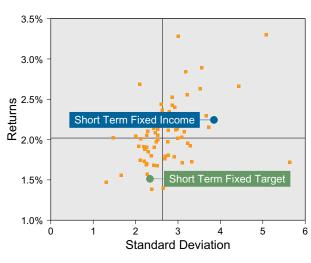
## Performance vs Callan Short Term Fixed Income (Gross)



## **Relative Return vs Short Term Fixed Target**



## **Callan Short Term Fixed Income (Gross)** Annualized Five Year Risk vs Return



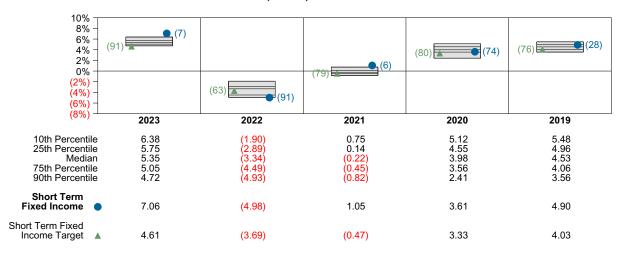


## **Short Term Fixed Income Return Analysis Summary**

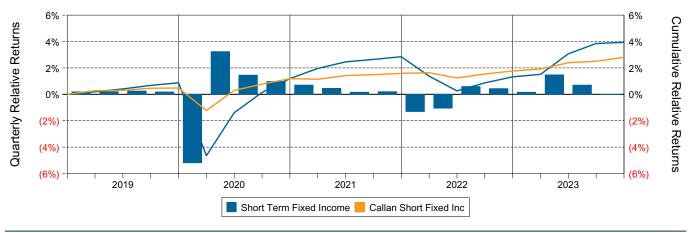
## **Return Analysis**

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

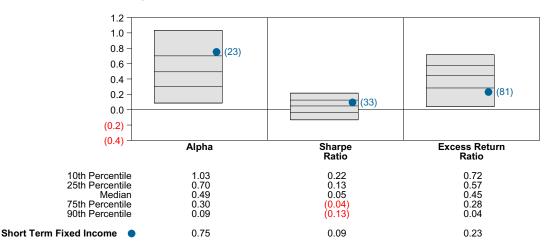
## Performance vs Callan Short Term Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Short Term Fixed Income Target



Risk Adjusted Return Measures vs Short Term Fixed Income Target Rankings Against Callan Short Term Fixed Income (Gross) Five Years Ended December 31, 2023





## **Barings Active Short Duration** Period Ended December 31, 2023

### **Investment Philosophy**

Babson's Active Short Duration team employs a total return management style, which dynamically adjusts duration in response to actual yield curve conditions. The approach seeks to take advantage of a variety of relative value opportunities, predominantly in the investment grade universe, which should provide steady income and potential capital appreciation. Value is also added through security selection. The end result is a high quality/short duration portfolio that has historically captured most of the returns of moderate duration bonds.

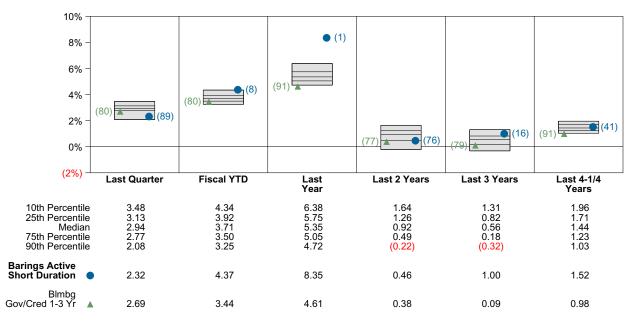
## **Quarterly Summary and Highlights**

- Barings Active Short Duration's portfolio posted a 2.32% return for the quarter placing it in the 89 percentile of the Callan Short Term Fixed Income group for the quarter and in the 1 percentile for the last year.
- Barings Active Short Duration's portfolio underperformed the Blmbg Gov/Cred 1-3 Yr by 0.38% for the guarter and outperformed the Blmbg Gov/Cred 1-3 Yr for the year by 3.74%.

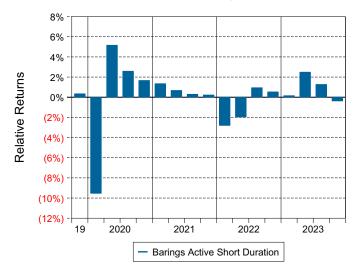
## **Quarterly Asset Growth**

Beginning Market Value	\$493,314,390
Net New Investment	\$-134,232
Investment Gains/(Losses)	\$11,417,765
Ending Market Value	\$504.597.923

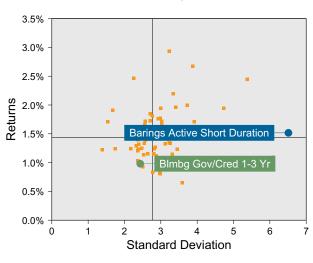
## Performance vs Callan Short Term Fixed Income (Gross)



### Relative Return vs Blmbg Gov/Cred 1-3 Yr



## Callan Short Term Fixed Income (Gross) Annualized Four and One-Quarter Year Risk vs Return





## JP Morgan Short Term Bonds Period Ended December 31, 2023

### **Investment Philosophy**

The investment objective of this account is to outperform the Bloomberg Capital 1-3 year Government/Credit Index while maintaining total return risk similar to that of the benchmark as measured over a market cycle. The weighted average effective duration of the portfolio will typically remain within +/- 30% of the benchmark.

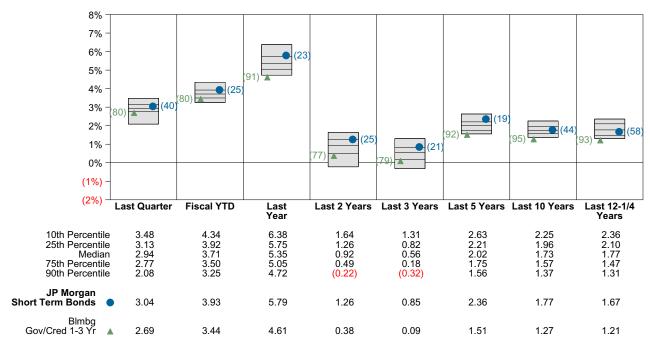
## **Quarterly Summary and Highlights**

- JP Morgan Short Term Bonds's portfolio posted a 3.04% return for the quarter placing it in the 40 percentile of the Callan Short Term Fixed Income group for the quarter and in the 23 percentile for the last year.
- JP Morgan Short Term Bonds's portfolio outperformed the Blmbg Gov/Cred 1-3 Yr by 0.35% for the guarter and outperformed the Blmbg Gov/Cred 1-3 Yr for the year by 1.18%.

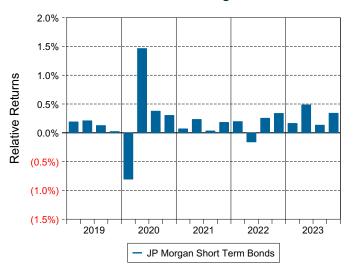
## **Quarterly Asset Growth**

Beginning Market Value	\$489,330,957
Net New Investment	\$-204,657
Investment Gains/(Losses)	\$14,887,496
Ending Market Value	\$504,013,795

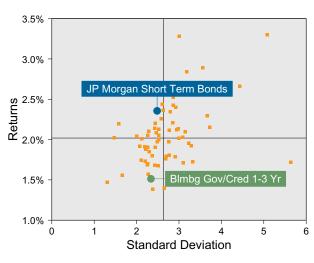
## Performance vs Callan Short Term Fixed Income (Gross)



### Relative Return vs Blmbg Gov/Cred 1-3 Yr



## Callan Short Term Fixed Income (Gross) Annualized Five Year Risk vs Return





## **Education**



4th Quarter 2023

## **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**

**2023 Nuclear Decommissioning Funding Study** | Callan's annual study offers key insights into the status of nuclear decommissioning funding to make peer comparisons more accurate and relevant.

**2023 Investment Management Fee Study** | The purpose of the study is to provide a detailed analysis on fee levels and trends across multiple asset classes and mandate sizes, for both active and passive management.

**2023 Asset Manager ESG Study** | Callan's inaugural ESG Study analyzes responses to various environmental, social, and governance questions in Callan's manager database by firm size, asset class, country of domicile, and ownership structure.

## **Webinar Replays**

Research Cafe: Office-to-Residential Conversions | During this interview, Callan specialists Aaron Quach and Christine Mays of Callan's Real Assets Consulting Group discuss office-to-residential conversions.

Webinar: Callan's Retirement Conundrum | During this discussion, representatives from Callan and October Three (a human resource and actuarial consulting firm) discuss how a small provision in SECURE 2.0 has paved the way for cash-balance pension plans to meet retirement income needs.

## **Blog Highlights**

How Your Public DB Plan's Returns Compare | This 3Q23 update to our quarterly series of blog posts provides context for public defined benefit (DB) plans about their returns over time.

<u>ILS on Pace for Banner Year in 2023</u> | When reviewing hedge fund portfolios, those investing in insurance-linked securities (ILS) are finding that this oft-overlooked strategy is buoying performance.

## **Quarterly Updates**

<u>Private Equity Update, 3Q23</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 3Q23 | A comparison of active managers alongside relevant benchmarks over the long term

<u>Market Pulse</u>, 3Q23 | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

Capital Markets Review, 3Q23 | Analysis and a broad overview of the economy and public and private markets activity each quarter across a wide range of asset classes

<u>Hedge Fund Update, 3Q23</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Update, 3Q23 | A summary of market activity for real assets and private real estate during the quarter

<u>Private Credit Update, 3Q23</u> | A review of performance and fundraising activity for private credit during the quarter

<u>Callan Target Date Index™, 3Q23</u> | Tracks the performance and asset allocation of available target date mutual funds and CITs

<u>Callan DC Index™</u>, <u>3Q23</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:

2024 National Conference April 8-10, 2024 – San Francisco

June Regional Workshops June 25, 2024 – Atlanta June 27, 2024 – San Francisco

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

## **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.

## **Alternative Investments**

Feb. 21-22, 2024 - Virtual

Alternative investments like private equity, hedge funds, and real estate can play a key role in any portfolio. In our "Callan College" on Alternatives, you will learn about the importance of allocations to alternatives, and how to consider integrating, evaluating, and monitoring them.

## Introduction to Investments March 19-21, 2024 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities.

Our virtual sessions are held over two to three days with virtual modules of 2.5-3 hours, while in-person sessions run either a full day or one-and-a-half days. Virtual tuition is \$950 per person and includes instruction and digital materials. In-person tuition is \$2,350 per person and includes instruction, all materials, breakfast and lunch on each day, and dinner on the first evening with the instructors.

Additional information including registration can be found at: callan.com/events-education



"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







# Callan

Quarterly List as of December 31, 2023

## 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
ABS Global Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
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
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC

Manager Name
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Belle Haven Investments L.P.
BentallGreenOak
Beutel, Goodman & Company Ltd.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.
Brown Brothers Harriman & Company

**Manager Name** 

Brown Innvestment Advisory & Trust Company

Capital Group

CastleArk Management, LLC

CIBC Asset Management Inc.

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments NA

**Comvest Partners** 

Covenant Capital Group

CQS

Credit Suisse Asset Management, LLC

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

First Sentier Investors

Fisher Investments

Franklin Templeton

Fred Alger Management, LLC

GAM (USA) Inc.

GlobeFlex Capital, L.P.

GoldenTree Asset Management, LP

Goldman Sachs

Golub Capital

Guggenheim Investments

**GW&K Investment Management** 

Harbor Capital Advisors

Harding Loevner LP

Hardman Johnston Global Advisors LLC

Heitman LLC

Hotchkis & Wiley Capital Management, LLC

**Manager Name** 

Impax Asset Management LLC

Income Research + Management

Insight Investment

Intech Investment Management LLC

Intercontinental Real Estate Corporation

Invesco

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

KeyCorp

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

LSV Asset Management

MacKay Shields LLC

Macquarie Asset Management (MAM)

Manulife Investment Management

Marathon Asset Management, L.P.

MetLife Investment Management

MFS Investment Management

MidFirst Bank

Mondrian Investment Partners Limited

Montag & Caldwell, LLC

Morgan Stanley Investment Management

MUFG Union Bank, N.A.

Natixis Investment Managers

Neuberger Berman

**Newton Investment Management** 

Northern Trust Asset Management

Nuveer

Oaktree Capital Management, L.P.

P/E Investments

Pacific Investment Management Company

Pantheon Ventures

Parametric Portfolio Associates LLC



**Manager Name** 

Partners Group (USA) Inc.

Pathway Capital Management, LP

PFM Asset Management LLC

**PGIM DC Solutions** 

**PGIM Fixed Income** 

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

Pretium Partners, LLC

**Principal Asset Management** 

Putnam Investments, LLC

Raymond James Investment Management

**RBC Global Asset Management** 

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Rockpoint

S&P Dow Jones Indices

Sands Capital Management

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

**SLC Management** 

Smith Graham & Co. Investment Advisors, L.P.

State Street Global Advisors

**Manager Name** 

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TD Global Investment Solutions - TD Epoch

The Carlyle Group

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

Top Tier Capital Partners

Tri-Star Trust Bank

Turning Rock Partners, L.P.

**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.



# Callan

Quarterly List as of December 31, 2023

## 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
ABS Global Investments
Acadian Asset Management LLC
Adams Street Partners, LLC
Aegon Asset Management
AEW Capital Management, L.P.
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
Ariel Investments, LLC
Aristotle Capital Management, LLC
Atlanta Capital Management Co., LLC

Manager Name
AXA Investment Managers
Baillie Gifford International, LLC
Baird Advisors
Barings LLC
Baron Capital Management, Inc.
Barrow, Hanley, Mewhinney & Strauss, LLC
Belle Haven Investments L.P.
BentallGreenOak
Beutel, Goodman & Company Ltd.
BlackRock
Blackstone Group (The)
Blue Owl Capital, Inc.
BNY Mellon Asset Management
Boston Partners
Brandes Investment Partners, L.P.
Brandywine Global Investment Management, LLC
Brookfield Asset Management Inc.
Brown Brothers Harriman & Company



**Manager Name** 

Brown Innvestment Advisory & Trust Company

Capital Group

CastleArk Management, LLC

CIBC Asset Management Inc.

ClearBridge Investments, LLC

Cohen & Steers Capital Management, Inc.

Columbia Threadneedle Investments NA

**Comvest Partners** 

Covenant Capital Group

CQS

Credit Suisse Asset Management, LLC

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

First Sentier Investors

Fisher Investments

Franklin Templeton

Fred Alger Management, LLC

GAM (USA) Inc.

GlobeFlex Capital, L.P.

GoldenTree Asset Management, LP

Goldman Sachs

Golub Capital

Guggenheim Investments

GW&K Investment Management

Harbor Capital Advisors

Harding Loevner LP

Hardman Johnston Global Advisors LLC

Heitman LLC

Hotchkis & Wiley Capital Management, LLC

**Manager Name** 

Impax Asset Management LLC

Income Research + Management

Insight Investment

Intech Investment Management LLC

Intercontinental Real Estate Corporation

Invesco

J.P. Morgan

Janus

Jennison Associates LLC

Jobs Peak Advisors

KeyCorp

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

LSV Asset Management

MacKay Shields LLC

Macquarie Asset Management (MAM)

Manulife Investment Management

Marathon Asset Management, L.P.

MetLife Investment Management

MFS Investment Management

MidFirst Bank

Mondrian Investment Partners Limited

Montag & Caldwell, LLC

Morgan Stanley Investment Management

MUFG Union Bank, N.A.

Natixis Investment Managers

Neuberger Berman

Newton Investment Management

Northern Trust Asset Management

Nuveer

Oaktree Capital Management, L.P.

P/E Investments

Pacific Investment Management Company

Pantheon Ventures

Parametric Portfolio Associates LLC



**Manager Name** 

Partners Group (USA) Inc.

Pathway Capital Management, LP

PFM Asset Management LLC

**PGIM DC Solutions** 

PGIM Fixed Income

PGIM Quantitative Solutions LLC

Pictet Asset Management

PineBridge Investments

Polen Capital Management, LLC

Pretium Partners, LLC

**Principal Asset Management** 

Putnam Investments, LLC

Raymond James Investment Management

**RBC Global Asset Management** 

Regions Financial Corporation

Robeco Institutional Asset Management, US Inc.

Rockpoint

S&P Dow Jones Indices

Sands Capital Management

Schroder Investment Management North America Inc.

Segall Bryant & Hamill

**SLC Management** 

Smith Graham & Co. Investment Advisors, L.P.

State Street Global Advisors

**Manager Name** 

Strategic Global Advisors, LLC

T. Rowe Price Associates, Inc.

TD Global Investment Solutions - TD Epoch

The Carlyle Group

The TCW Group, Inc.

Thompson, Siegel & Walmsley LLC

Top Tier Capital Partners

Tri-Star Trust Bank

Turning Rock Partners, L.P.

**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.



CLIENT: North Dakota State Invest	REPORT TYPE: EMAIL	
ORGID: 966	REPORT ID: 22	REPORT DATE: Dec 31, 2023
CONSULTANT	OFFICE	MAILING DUE DATE
Alexander Browning	CO	

BINDING: GBC Bi	nding	PRINT PAG	GE: SINGLE
TOTAL COPIES	CLIENT COPIES	CONSULT COPIES	
0	0	0	

## DATE MAILED:

TAB POS#: 1 PAGE NUMBER: 5 TAB POS#: 2 PAGE NUMBER: 22 TAB POS#: 3 PAGE NUMBER: 56 TAB POS#: 4 PAGE NUMBER: 74 TAB POS#: 5 PAGE NUMBER: 85 TAB POS#: 1 PAGE NUMBER: 178 TAB POS#: 2 PAGE NUMBER: 260 TAB POS#: 3 PAGE NUMBER: 352 TAB POS#: 4 PAGE NUMBER: 366 TAB POS#: 5 PAGE NUMBER: 374 TAB POS#: 1 PAGE NUMBER: 379 TAB POS#: 2 PAGE NUMBER: 382 **END COPY INSERT PAGE NUMBER: 386** 

### Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports 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 performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers 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. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.

CLIENT: North Dakota State Invest	REPORT TYPE: EMAIL	
ORGID: 966	REPORT ID: 22	REPORT DATE: Dec 31, 2023
CONSULTANT	OFFICE	MAILING DUE DATE
Alexander Browning	CO	

BINDING: GBC Bi	nding	PRINT PAG	GE: SINGLE
TOTAL COPIES	CLIENT COPIES	CONSULT COPIES	
0	0	0	

## DATE MAILED:

TAB POS#: 1 PAGE NUMBER: 5 TAB POS#: 2 PAGE NUMBER: 22 TAB POS#: 3 PAGE NUMBER: 56 TAB POS#: 4 PAGE NUMBER: 74 TAB POS#: 5 PAGE NUMBER: 85 TAB POS#: 1 PAGE NUMBER: 178 TAB POS#: 2 PAGE NUMBER: 260 TAB POS#: 3 PAGE NUMBER: 352 TAB POS#: 4 PAGE NUMBER: 366 TAB POS#: 5 PAGE NUMBER: 374 TAB POS#: 1 PAGE NUMBER: 379 TAB POS#: 2 PAGE NUMBER: 382 **END COPY INSERT PAGE NUMBER: 386** 

### Important Disclosures

Information contained in this document may include confidential, trade secret and/or proprietary information of Callan and the client. It is incumbent upon the user to maintain such information in strict confidence. Neither this document nor any specific information contained herein is to be used other than by the intended recipient for its intended purpose.

The content of this document is particular to the client and should not be relied upon by any other individual or entity. There can be no assurance that the performance of any account or investment will be comparable to the performance information presented in this document.

Certain information herein has been compiled by Callan from a variety of sources believed to be reliable but for which Callan has not necessarily verified for accuracy or completeness. Information contained herein may not be current. Callan has no obligation to bring current the information contained herein.

Callan's performance measurement service reports 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 performance measurement service includes portfolio holdings analysis, Callan relies entirely on holdings data provided by third parties including custodian banks, record keepers 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. Callan does not perform forward-looking risk analysis or guideline compliance analysis based on the performance or portfolio holdings data.

In no event should performance measurement service provided by Callan be used in the calculation, deliberation, policy determination, or any other action of the client as it pertains to determining contribution or funding amounts, timing or activity, benefit payments or distribution amounts, timing or activity, or performance-based fee amounts, timing or activity.

The content of this document may consist of statements of opinion, which are made as of the date they are expressed and are not statements of fact. The opinions expressed herein may change based upon changes in economic, market, financial and political conditions and other factors. Callan has no obligation to bring current the opinions expressed herein.

The information contained herein may include forward-looking statements regarding future results. The forward-looking statements herein: (i) are best estimations consistent with the information available as of the date hereof and (ii) involve known and unknown risks and uncertainties. Actual results may vary, perhaps materially, from the future results projected in this document. Undue reliance should not be placed on forward-looking statements.

Callan is not responsible for reviewing the risks of individual securities or the compliance/non-compliance of individual security holdings with a client's investment policy guidelines.

This document should not be construed as legal or tax advice on any matter. You should consult with legal and tax advisers before applying any of this information to your particular situation.

Reference to, or inclusion in this document of, any product, service or entity should not necessarily be construed as recommendation, approval, or endorsement or such product, service or entity by Callan. This document is provided in connection with Callan's consulting services and should not be viewed as an advertisement of Callan, or of the strategies or products discussed or referenced herein.

The issues considered and risks highlighted herein are not comprehensive and other risks may exist that the user of this document may deem material regarding the enclosed information. Please see any applicable full performance report or annual communication for other important disclosures.

Unless Callan has been specifically engaged to do so, Callan does not conduct background checks or in-depth due diligence of the operations of any investment manager search candidate or investment vehicle, as may be typically performed in an operational due diligence evaluation assignment and in no event does Callan conduct due diligence beyond what is described in its report to the client.

Any decision made on the basis of this document is sole responsibility of the client, as the intended recipient, and it is incumbent upon the client to make an independent determination of the suitability and consequences of such a decision.

Callan undertakes no obligation to update the information contained herein except as specifically requested by the client.

Past performance is no guarantee of future results.