# Callan

June 30, 2024
Pennsylvania SERS
Defined Benefit Plan
Investment Measurement Service
Quarterly Review

# Table of Contents Pennsylvania SERS June 30, 2024

Market Overview  Asset Allocation and Performance foreword  Actual vs. Target Asset Allocation Actual vs. Target Asset Al	1
Active Management Overview	
Market Overview	17
Asset Allocation and Performance	
Foreword	19
	23
	24
Historical Asset Allocation	30
Total Fund Cumulative Performance	32
Total Fund Cumulative Performance	33
Total Fund Drawdown Analysis	34
Total Fund Ranking	36
Investment Manager Returns- Net	43
Investment Manager Returns- Gross	61
U.S. Equity	
Domestic Equity Overview	79
U.S. Equity	80
U.S. Equity Drawdown Analysis	83
Current Holdings-Based Style Analysis	84
Domestic Equity Holdings-Based Manager Comparison	85
Equity Characteristics Analysis	86
Active Share Analysis	87
U.S. Equity Managers	88
U.S. Mid/Large Cap Equity	
MCM Russell 1000 Index	89
Current Holdings Based Style Analysis	92
Equity Characteristics Analysis	93
U.S. Small Cap Equity	
MCM Russell 2000 Core Index	94
Current Holdings Based Style Analysis	97
Equity Characteristics Analysis	98
MCM Russell 2000 Val Index	99
Current Holdings Based Style Analysis	102
Equity Characteristics Analysis	103
Emerald Advisers Div Small Cap Growth	104
Current Holdings Based Style Analysis	107
Equity Characteristics Analysis	108



# Table of Contents Pennsylvania SERS June 30, 2024

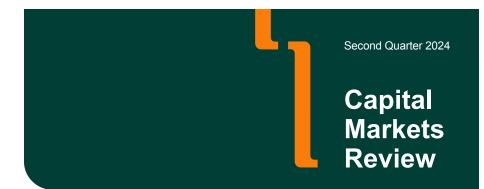
International Equity	
International Equity Overview	110
International Developed Markets Equity	
International Developed Markets Equity	112
International Developed Equity Drawdown Analysis	115
Equity Characteristics Analysis	119
Country Weights	120
Active Share Analysis	121
International Developed Equity Managers	
Walter Scott & Partners Global Growth Equity	123
Equity Characteristics Analysis	127
BlackRock MSCI World Ex. U.S. Index	128
Equity Characteristics Analysis	132
Country Weights	133
Xponance Non-U.S. Small Cap	134
Equity Characteristics Analysis	138
Country Weights	139
Harris Assoc Int'l Small Cap Value	140
Equity Characteristics Analysis	144
Country Weights	145
Emerging Markets Equity	
Emerging Markets Equity	147
Emerging Markets Equity Drawdown Analysis	150
Equity Characteristics Analysis	154
Country Weights	155
Active Share Analysis	156
Emerging Markets Managers	
BlackRock Emerging Markets Index	158
Equity Characteristics Analysis	162
Country Weights	163
Leading Edge Emerging Markets	164
Equity Characteristics Analysis	168
Country Weights	169
Macquarie Emerging Markets Equity	170
Equity Characteristics Analysis	174
Country Weights	175
Martin Currie Emerging Markets Equity	176
Equity Characteristics Analysis	180
Country Weights	181
GlobeFlex Emerging Small Cap	182



# Table of Contents Pennsylvania SERS June 30, 2024

Private Credit	
Legacy Private Credit	186
Fixed Income Domestic Fixed Income Overview	100
	188
International Fixed Income Overview	189
Fixed Income	
Fixed Income Drawdown Analysis  Pand Characteristics Analysis	193
Bond Characteristics Analysis	194
Core Fixed Income	
Core Fixed Income	197
Bond Characteristics Analysis	199
Core Fixed Income Managers	
MCM Bond Index	202
Bond Characteristics Analysis	205
PIMCO Core Bond Fund	207
Bond Characteristics Analysis	210
Opportunistic Fixed Income	
Blackstone Keystone	213
Nominal U. S. Treasuries	_
Nominal U.S. Treasuries	217
Bond Characteristics Analysis	219
Legacy Fixed Income	
Fidelity HY CMBS	221
Bond Characteristics Analysis	224
Inflation Protection (TIPS)	
Inflation Protection (TIPS)	227
Bond Characteristics Analysis	230
Inflation Protection (TIPS) Managers	
Brown Brothers TIPS	233
Bond Characteristics Analysis	236
NISA TIPS	238
Bond Characteristics Analysis	241
New Century Global TIPS	243
Bond Characteristics Analysis	246
Research & Disclosures	248







# Will the Fed Be Able to Stick the Landing?

**ECONOMY** 

Here we are, on the verge of something that's never PAGE been done before: a soft landing for the U.S. economy, where inflation is brought down while growth gradually subsides, but we avoid a recession. After the devastation of the pandemic, it would be a remarkable achievement.

# Solid Gains Over **Trailing One Year**

INSTITUTIONAL INVESTORS

Continued strong U.S. equity gains helped PAGE institutional investors show strong gains over the trailing one year ended 6/30/24, but a lagging bond market and lower global ex-U.S. equity performance held them back from matching a 60% stocks/40% bonds index.

# Strong Start to Year in U.S. but Not Globally

EQUITY

The U.S. equity markets had an exceptional start with the S&P 500 hitting 31 record highs over the first six months of 2024 and gaining 15.3%. Developed non-U.S. markets struggled with growing uncertainty on future economic growth. Emerging markets rebounded.

# **Slight Gain for Bonds: Markets Await Fed**

FIXED INCOME

The

Bloomberg US 8 and Global Aggregate PAGE indices both rose 0.1%. Treasury yields were up modestly, to 4.36%. Municipal yields climbed higher than U.S. Treasury yields. weakness currencies' against the dollar hurt unhedged returns.

# **Income Positive but Appreciation Falls**

REAL ESTATE/REAL ASSETS

NPI income returns were positive across sectors and regions but all appreciation returns declined, except for hotels. REITs underperformed equities in the U.S. and globally. ODCE redemption queues have exceeded the levels hit during the Global Financial Crisis.

# Signs of Rebound; **Challenges Remain**

PRIVATE EQUITY

The number of funds raised in 1Q24 dropped PAGE 42% vs. 1Q23. but the dollar amount was flat. This year also saw improving buyout conditions. Valuations rose amid mixed signs of recovery for venture capital and growth equity. Shortterm returns lag public equity.

# **Gains Continue to Top Leveraged Loans**

PRIVATE CREDIT

Private credit has shown a net IRR of 8.0% PAGE over the last 10 years, easily topping a leveraged loan benchmark. Sub-investment grade corporate yields rose sharply at the start of 2022 and peaked in September. Yields continued to drop in 1Q24 and spreads contracted.

# Managers Capitalizing on Volatility in 2Q24

HEDGE FUNDS/MACs

The median Callan Institutional Hedge Fund PAGE Peer Group manager rose 1.6%. Within the HFRI Indices, the best-performing strategy was relative value, which was up 1.4%. Equity hedge ended the quarter up 1.0%. Macro strategies ended the quarter slightly negative.

# **DC Index Starts Year** with a Big Gain

**DEFINED CONTRIBUTION** 

The Callan DC Index™ gained 6.6% in 1Q24. PAGE Balances rose by 6.6% after a 9.0% increase in 4Q23, driven exclusively by investment gains. Stable value saw large outflows for the sixth straight quarter. U.S. large cap equity saw large percentage increases in allocation.

# **Broad Market Quarterly Returns**

**U.S. Equity** Russell 3000



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



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



0.1%

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



-2.1%

Sources: Bloomberg, FTSE Russell, MSCI

# Can the Fed Stick the Landing?

#### **ECONOMY** | Jay Kloepfer

The hunt for signs of the much-anticipated slowdown in the U.S. economy continues to be thwarted. Every data release is scrutinized: Is this the one that is finally the sign of a crack in growth? The economy is clearly set to slow compared to the surprise robust growth in the second half of 2023, but key measures like stubborn inflation, a job market that has yet to sag, and persistent growth in consumption spending have kept surprising to the upside. Inflation eased from the worrisome rise in 1Q24, but still sits at 3.0% compared to a year ago, well above the Fed's target. The job market looked like it finally cracked in April, creating just 108,000 jobs after adding 800,000 in the first three months of the year. Then job growth rebounded to 218,000 in May and 206,000 in June, clearly softer than the average monthly rate of 250,000 in 2023 and the surge in 1Q, but still solid. The unemployment rate remains low at 4.1%, although initial unemployment claims have been rising gradually since the recent low set in January. The labor market is indeed softening, which should reduce pressure on wage inflation at some point.

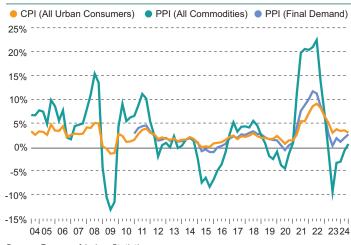
A softer labor market will likely dampen consumer demand, and therefore provide more relief to inflation pressures. Consumer spending slowed from a robust 3% growth rate in the second half of 2023 to 1.5% in 1Q, another potential crack in the façade. Then spending rebounded to a 2.3% gain in 2Q and drove a surprising 2Q GDP growth rate of 2.8%, about double the rate expected for the quarter. In addition to consumer spending, GDP growth was driven by private inventory investment and business fixed investment, particularly in equipment and intellectual property. 1Q GDP growth came in at just 1.4%, the first sure sign of the anticipated slowdown—or so it seemed.

Interest rates have been higher for a longer period than many expected, including the Fed. There are surprisingly few signs that these higher rates have taken the expected toll on the economy. The economy does appear to be gradually slowing, current contradictory indicators like the strong GDP report aside. The cost of borrowing is sharply higher, and delinquencies in auto loans

#### **Quarterly Real GDP Growth** (20 Years) 35% 30% 25% 20% 15% 10% 5% 0% -5% -10% -15% -20% -25% -30% 0405 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 2324

#### Inflation Year-Over-Year

Source: Bureau of Economic Analysis



Source: Bureau of Labor Statistics

and credit cards are rising. The real estate market is grappling with much higher mortgage rates, although the market is showing a few unexpected features. The sale of existing homes in 2023 fell by one-third from the peak set in 2021, and the rate of sales in 2024 is holding steady at the 2023 rate. However, home prices are rising around the country. As interest rates rose, homeowners were supposedly reluctant to sell and buy again with much higher mortgage rates. However, the supply of homes for sale is rising, alongside higher prices and high mortgage rates compared to 2021, a puzzling market dynamic.

Inflation cooled in May and June after throwing a scare into both the Fed and the capital markets during the first four months of 2024. CPI had inched up to an annual rate of 3.5% in March from 3.1% in January. Then gasoline prices fell 3.6% in May and 3.8% in June, enough to bring the monthly change in the CPI to zero in May and slightly negative in June. The annual rate eased to 3.0% in June. Broad inflation may now be headed in the right direction for the Fed to act on rates. However, under the hood, inflation weighs heavily on basic items for lower- and middle-income households: shelter, food, motor vehicle insurance, and medical care. The shelter index rose 5.2% from June 2023 to June 2024 and accounted for over 60% of the increase in headline CPI this past year. While the spike in inflation may be past, the impact of prices now "permanently" higher on household budgets is likely to dampen the consumer spending that has driven the economy.

So what to make of all this contrasting economic data? Putting it in context, four years ago U.S. GDP dropped an incredible 28% in one quarter. While it quickly rebounded, the country suffered a pandemic of stunning cost, both economically and, more importantly, in terms of lost lives, severed social connections, missed education, and worsening mental health. And yet here we are, on the verge of something that's never been done before: a soft landing for the U.S. economy, where inflation is brought down while growth gradually subsides, but we avoid a recession. It would be a remarkable achievement.

#### The Long-Term View

		Periods Ended 6/30			6/30/24
Index	2Q24	1 Yr	5 Yrs	10 Yrs	25 Yrs
U.S. Equity					
Russell 3000	3.2	23.1	14.1	12.1	7.8
S&P 500	4.3	24.6	15.0	12.9	7.7
Russell 2000	-3.3	10.1	6.9	7.0	7.6
Global ex-U.S. Equity					
MSCI EAFE	-0.4	11.5	6.5	4.3	4.5
MSCI ACWI ex USA	1.0	11.6	5.5	3.8	
MSCI Emerging Markets	5.0	12.5	3.1	2.8	
MSCI ACWI ex USA Small Cap	0.7	11.3	6.1	4.4	6.7
Fixed Income					
Bloomberg Agg	0.1	2.6	-0.2	1.3	3.9
90-Day T-Bill	1.3	5.4	2.2	1.5	1.9
Bloomberg Long G/C	-1.7	-1.6	-2.2	1.6	5.3
Bloomberg GI Agg ex US	-2.1	-0.7	-3.6	-1.9	2.5
Real Estate					
NCREIF Property	-0.3	-5.5	3.4	6.1	7.8
FTSE Nareit Equity	0.1	7.8	3.9	5.9	9.1
Alternatives					
Cambridge PE*	1.2	5.2	14.6	13.5	13.4
Cambridge Senior Debt*	4.2	10.0	6.9	6.9	4.2
HFRI Fund Weighted	0.5	9.8	6.7	4.8	6.0
Bloomberg Commodity	2.9	5.0	7.2	-1.3	2.7
Inflation – CPI-U	0.6	3.0	4.2	2.8	2.6

\*Data for most recent period lags. Data as of 1Q24.

Sources: Bloomberg, Bureau of Economic Analysis, FTSE Russell, Hedge Fund Research, MSCI, NCREIF, Refinitiv/Cambridge, S&P Dow Jones Indices

#### **Recent Quarterly Economic Indicators**

	2Q24	1Q24	4Q23	3Q23	2Q23	1Q23
Employment Cost: Total Compensation Growth	4.1%	4.2%	4.2%	4.3%	4.5%	4.8%
Nonfarm Business: Productivity Growth	2.3%	0.4%	3.5%	4.6%	3.3%	-0.3%
GDP Growth	2.8%	1.4%	3.4%	4.9%	2.1%	2.2%
Manufacturing Capacity Utilization	77.5%	77.1%	77.6%	78.1%	78.4%	78.7%
Consumer Sentiment Index (1966=100)	71.1	78.4	64.9	69.6	62.3	64.6

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

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

#### **INSTITUTIONAL INVESTORS**

- Continued strong U.S. equity gains helped institutional investors show robust gains over the trailing one year ended 6/30/24, but a lagging bond market and lower global ex-U.S. equity performance held them back from matching a 60% stocks/40% bonds benchmark.
- Still, most investor types showed double-digit gains.
- Corporate plans, with their typically bond-heavy portfolios, were the exception.
- Even over longer periods, the gap between institutional investor returns and the 60%/40% benchmark continued.
- Institutional investors are focused on a handful of major macroeconomic issues:
  - Interest rates and inflation
  - · The U.S. election
  - Geopolitics

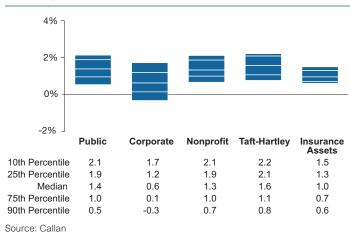
#### Public defined benefit (DB) plans

- The median discount rate, according to the most recent NASRA survey, is 7.00%.
- A 7.00% return expectation can be achieved with 50% in core fixed income.

- Public DB plans have reviewed their allocations to fixed income and generally either confirmed the amount or made an increase.
- Plans are starting to review their fixed income structures, specifically the need for risk in a higher-rate environment.
- Plans are also starting to evaluate their exposure to risk assets, with some wondering why invest in anything besides U.S. large cap stocks and others debating whether to take risk off the table.

(6/30/24)

### Quarterly Returns, Callan Database Groups



# Callan Database Median and Index Returns\* for Periods Ended 6/30/24

Database Group	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
Public Database	1.4	11.1	3.2	7.7	7.0	7.1
Corporate Database	0.6	7.5	-0.7	4.6	5.3	6.5
Nonprofit Database	1.3	11.9	3.1	7.6	6.5	7.0
Taft-Hartley Database	1.6	11.0	3.4	7.5	6.9	6.9
Insurance Assets Database	1.0	7.8	1.0	3.5	3.7	4.5
All Institutional Investors	1.2	10.8	2.8	7.2	6.5	6.9
Large (>\$1 billion)	1.1	9.8	2.9	7.5	6.8	7.1
Medium (\$100mm - \$1bn)	1.2	10.9	2.9	7.3	6.6	7.0
Small (<\$100 million)	1.3	11.6	2.6	7.0	6.2	6.7
60% S&P 500/40% Bloomberg Agg	2.6	15.5	4.8	9.2	8.4	7.7

<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.

## **Corporate DB plans**

- Interest rate hedging continues to work.
- Funded status continues to be a major, if not the major, issue. Funded ratios for some corporate DB plans improved as the equity market increased.
- As closed plans' liabilities shorten, intermediate fixed income will continue to attract interest.
- As credit spreads have tightened, it is important to manage or reduce any overweight to credit.

#### **Nonprofits**

- Nonprofits indicated that they had noticeable uncertainty about allocations to private markets in general.
- For plans that had increased the risk in their fixed income sleeves to gain a higher yield (in the lower-rate environment), they too are reviewing the need for risk in a higher-rate environment.
- Others are worried about concentration in their growth portfolios.

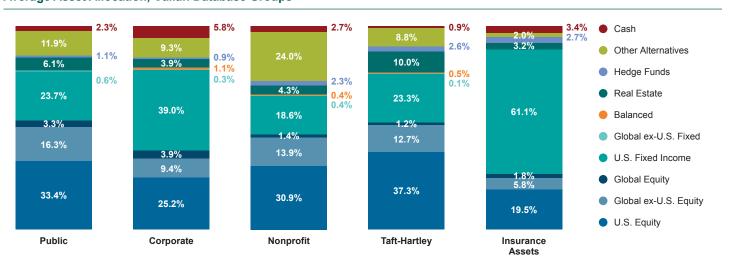
#### Insurance asset pools

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

## **Defined contribution (DC) plans**

- The Callan DC Index™ gained 6.6% in 1Q24 due to the strong equity market.
- Turnover (i.e., net transfer activity) increased slightly to 0.44% from the prior quarter's 0.24%. The index's historical average remained at 0.55% and is a good reminder that participants tend to set their allocation and not make many changes.
- Automatic features typically result in target date funds (TDFs) receiving the largest net inflows in the index, as they did in 1Q24, garnering 80% of quarterly net flows. Stable value, money market, and company stock saw the largest outflows during the quarter.
- The gap in returns between money market and stable value funds continues to concern DC plans.
- Discussions are ongoing around how or whether to help participants with retirement income.

#### **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**

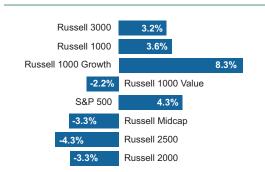
#### Broad indices exhibit strong start to 2024

- The U.S. equity markets had an exceptional start with the S&P 500 hitting 31 record highs over the first six months of 2024 and gaining 15.3%.
- Index returns continue to be driven by a handful of stocks, especially the "Magnificent Seven," which comprised 33% of the S&P 500 as of quarter-end. As a group, the cohort gained 33% in the first six months of the year, far exceeding the S&P 493 gain of only 5%.
- Performance underlying indices is uneven
- 2Q returns for the broad index were modest at 4.3%, but sector performance was quite mixed, ranging from -4.5% (Materials) to +13.8% (Technology), with 6 of the 11 S&P 500 sectors posting negative returns during the period.
- During 2Q, value (R1000V: -2.2%) continued to underperform growth (R1000G: +8.3%) and small cap (R2000: -3.3%) continued to underperform large cap (R1000: +3.6%).
- The "Magnificent Seven" stocks pushed large cap indices to record highs while the rest of the market traded sideways.
- Magnificent Seven stocks accounted for 116% of S&P 500 total return in 2Q24.
- YTD 2024, the bucket of Magnificent Seven stocks handily outperformed the equal weight S&P 500 Index and small cap Russell 2000 Index returns.
- Magnificent Seven returns over the trailing 3½ years (dating back to 2021) drove a large contribution of total index returns relative to the remaining ~493 stocks in the S&P 500.

- Market concentration has hit its highest level since 1972. The top 10 stocks have broken away from stocks #11-#50 to an even greater degree than in the tech bubble in 2000-01.
- The largest and most successful stocks were generating more earnings, earnings growth, and cash relative to the smaller stocks in the index. Price appreciation for the largest stocks is supported by strong earnings growth and robust economic profits.

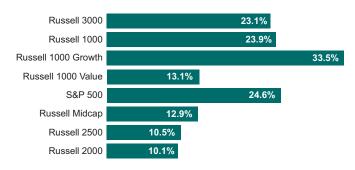
## U.S. Equity: Quarterly Returns

(6/30/24)



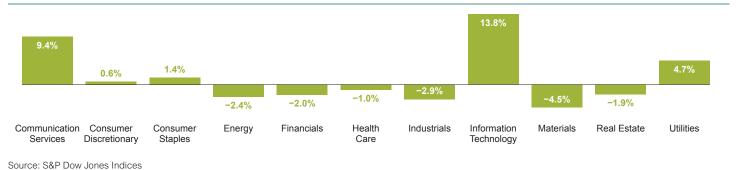
#### **U.S. Equity: One-Year Returns**

(6/30/24)



Sources: FTSE Russell and S&P Dow Jones Indices

#### **Quarterly Performance of Industry Sectors** (6/30/24)



## **Global Equities**

#### **Broad market**

- The U.S. continued its lead over developed non-U.S. markets resulting in a positive ACWI return.
- Developed non-U.S. markets struggled with growing uncertainty on future economic growth, political instability, and divergent central bank policies.
- Small caps once again trailed large caps in a higher interest rate environment and amid exchange rate volatility.

## **Emerging markets**

- Emerging markets rebounded, snapping a two-quarter losing streak relative to developed markets as both China and India produced strong returns.
- China's GDP growth exceeded expectations with a rebound in industrial production, manufacturing, and exports. Further, the Chinese government implemented several measures to support capital markets.

#### Growth vs. value

Growth and value saw little difference, as much of the caution was driven around macro concerns about future growth and a growing risk of a recession.

#### U.S. dollar strength

The U.S. Dollar Index (DXY), was relatively flat in 2Q due to a balancing act of increased global uncertainty but a more likely 2024 U.S. central bank rate cut.

#### China experiences significant decline

Mainland China's allocation within the MSCI EM Index and active EM equity strategies has steadily declined since peaking in 2020. Sluggish growth with weak home sales and deflationary pressures combined with heightened geopolitical risks have been contributors.

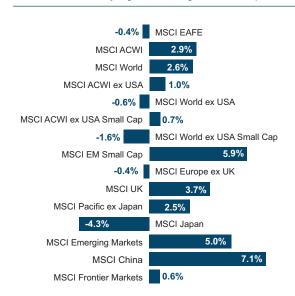
#### Taiwan increases with Taiwan Semiconductor strength

 Despite Taiwan's related geopolitical concerns to mainland China, Taiwan has seen increasing allocations in the index and across managers. The largest stock in the MSCI Taiwan Index, Taiwan Semiconductor, which accounts for ~50% of the index, continues to exhibit robust growth as the global leader in semiconductor manufacturing.

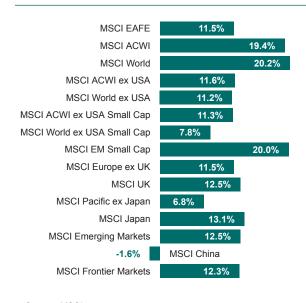
## India continues rapid growth

- Benefiting from positive demographics with a large growing working population, India has experienced one of the highest real GDP growth rates globally in recent years when compared to other major countries/regions.
- India's growth within the MSCI EM Index and manager allocations has been nearly the mirror image to China's allocations since 2020.

### Global ex-U.S. Equity: Quarterly Returns (U.S. Dollar, 6/30/24)



# Global ex-U.S. Equity: One-Year Returns (U.S. Dollar, 6/30/24)



Source: MSCI

# **Fixed Income**

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

#### Macro environment

- Fed on hold awaiting more evidence that inflation is under control as economy remained resilient
- 10-year U.S. Treasury yield up modestly from 4.21% to 4.36%
- Curve remained inverted

#### Performance and drivers

- The Bloomberg US Aggregate Index rose 0.1% amid higher rates.
- Corporates and most securitized sectors were roughly flat vs.
   U.S. Treasuries on a duration-adjusted basis.
- Lower quality outperformed, with high yield corporates and leveraged loans posting the best returns.
- Longer maturity underperformed short and intermediate strategies as curve steepened from 5 years out to 30.

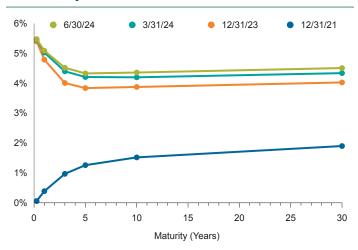
#### **Valuations**

- Corporate credit remains rich with spreads near historical tights.
- Default rates fell to just 1.2% for HY and 1.1% for bank loans.
- Corporate bond issuance remained robust
- IG corporate new issuance slowed from record highs in 1Q but remained robust with \$349 billion in new debt, bringing YTD total to \$886 billion.
- HY new issuance in 2Q nearly matched 1Q with \$83 billion, bringing YTD total to \$172 billion.
- Both were met with strong investor demand.

#### Rate cut expectations

- Strong April jobs reports and sticky inflation readings initially drove intermediate- and long-term rates higher, sending the 10-year Treasury 50 bps higher and reducing the 2s10s inversion to just -24 bps.
- Markets reacted with reduced expectations for Fed rate cuts.
   Entering 2024, Fed Funds futures priced in at least six cuts for the year; that declined to around one as of April.
- However, subsequent data, including easing inflation, brought rates back close to where they started, with the 10-year Treasury ending the quarter 16 bps higher.

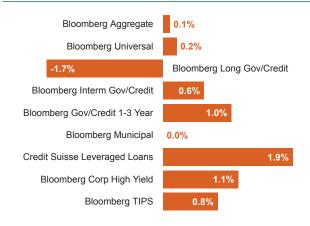
#### **U.S. Treasury Yield Curves**



Source: Bloomberg

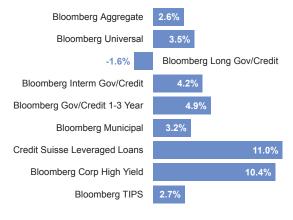
## **U.S. Fixed Income: Quarterly Returns**

(6/30/24)



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

(6/30/24)



Sources: Bloomberg and Credit Suisse

#### FIXED INCOME (Continued)

## **Municipal Bonds**

### Higher quality municipal bonds post flat returns in 2Q

- Muni bond yields climbed more than U.S. Treasury yields.
- 10-year AAA municipal bond yield rose 33 bps to 2.84%.
- 10-year U.S. Treasury yield ended 2Q at 4.36% from 4.21%.
- YTD issuance (\$235 billion, up 37% YOY) has been met by strong demand with \$11.4 billion in positive flows to municipal bond funds.

# BBB performs best for the quarter and year

AAA: -0.28% AA: -0.11%

A: +0.22%

BBB: +0.68%

#### Muni valuations vs. U.S. Treasuries remain rich

- 10-year AAA Muni/10-year U.S. Treasury yield ratio increased to 65%, but remains below the 10-year median
- Fundamentals for state and local governments remain sound as upgrades continue to surpass downgrades.
- The need for increased infrastructure spending could benefit municipal bond issuance in years to come.

## **Global Fixed Income**

#### **Macro environment**

- Developed market rates rose further in 2Q.
- In June, the Bank of Canada lowered its overnight rate, and the European Central bank cut rates for the first time in five years as growth and inflation moderated.
- Japan's 10-year government bond yield rose above 1% for the first time since 2013.

#### U.S. dollar continues to strengthen

- Major currencies generally continued to weaken relative to the U.S. dollar, albeit at a slower pace from 2Q, detracting from unhedged returns.
- Hedged investors were flat for the quarter following the increase in yields.

#### Emerging market debt is similarly lackluster

India was added to the JPM GBI-EM suite of indices in June.

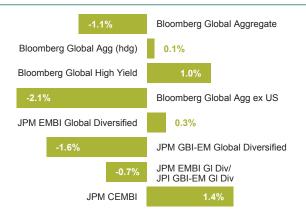
#### Change in 10-Year Global Government Bond Yields



Source: Bloomberg

# **Global Fixed Income: Quarterly Returns**

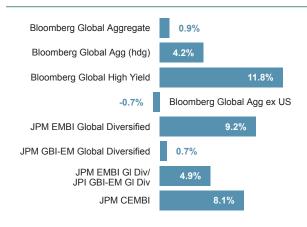
(6/30/24)



Sources: Bloomberg and JPMorgan Chase

#### Global Fixed Income: One-Year Returns

(6/30/24)



Sources: Bloomberg and JPMorgan Chase

 EM hard currency rose 0.3% while the local currency JPM EMBI Global Diversified Index declined 1.6% as the U.S. dollar generally if modestly strengthened relative to local currencies.

# **Income Positive but Appreciation Falls**

### REAL ESTATE/REAL ASSETS | Munir Iman

# Valuations reflect higher interest rates

- NCREIF Property Index income returns were positive across sectors and regions.
- All property sectors and regions experienced negative appreciation, except for hotels.
- Valuations are reflective of higher interest rates, which have put upward pressure on capitalization rate and discount rate assumptions.
- Both the NPI and the NCREIF ODCE Index fell in the quarter and have produced negative returns over the last year.

#### **Observations**

- Global REITs underperformed in 2Q24, declining 2.4% compared to a 2.6% increase for global equities (MSCI World).
- U.S. REITs gained 0.1% in 2Q24, in contrast with the S&P 500 Index, which rose 4.3%.

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

(6/30/24)



Source: NCREIF

- REITs continue to trade at a discount to NAV (-4.2%) and offer some relative value given this spread.
- Historically, global REITS have traded at a -4.0% discount to NAV.

# **Redemption queues**

- Current ODCE redemption queues are approximately 17.3% of net asset value, with a median queue of 13.9%. This compares to the GFC when queues peaked at approximately 15% of NAV.
- Outstanding redemption requests for most large ODCE funds are approximately 11% to 20% of net asset value.
- For a large proportion of funds, these redemptions are partial redemptions, due to portfolio rebalancing and liquidity needs.
   For a smaller underperforming subset, redemption requests are full redemptions indicative of manager termination.

## **Transaction activity**

- Transaction volume has flattened on a rolling four-quarter basis and remains well below five-year averages.
- In 2Q24, transaction volume increased slightly on a quarterover-quarter basis. Transaction volume remains significantly lower compared to 2022.
- The volatile rise in interest rates is the driving force behind the slowdown in transactions.

#### Callan Database Median and Index Returns\* for Periods Ended 6/30/24

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	20 Years
Real Estate ODCE Style	-0.4	-2.8	-9.6	1.6	2.8	6.0	5.4
NFI-ODCE (value-weighted, net)	-0.7	-3.2	-10.0	1.0	2.3	5.5	5.8
NCREIF Property	-0.3	-1.2	-5.5	2.3	3.4	6.1	7.3
NCREIF Farmland	-0.2	0.5	2.5	6.8	5.8	6.9	12.1
NCREIF Timberland	1.7	3.9	9.8	11.0	7.2	5.9	7.1
Public Real Estate							
Global Real Estate Style	-1.7	-2.1	6.6	-3.1	2.0	4.5	7.1
FTSE EPRA Nareit Developed	0.5	1.2	2.7	1.8	2.6	4.7	
Global ex-U.S. Real Estate Style	-3.3	-4.9	6.4	-7.5	-0.2	3.0	
FTSE EPRA Nareit Dev ex US	-5.6	-7.6	3.1	-9.6	-4.4	-0.5	
U.S. REIT Style	-0.2	-0.6	7.1	-0.1	4.9	6.6	8.6
FTSE EPRA Nareit Equity REITs	0.1	-0.1	7.8	0.3	3.9	5.9	7.7
FTSE EPRA Nareit Equity REITs	0.1	-0.1	7.8	0.3	3.9	5.9	

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

# Some Early Signs of a Rebound, but Challenges Remain

### PRIVATE EQUITY | Ashley Kahn

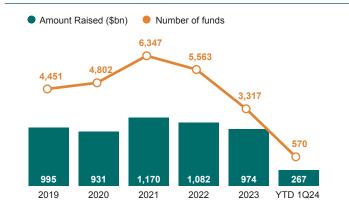
Fundraising The 2023 vintage year experienced the full impact of the denominator effect, with sharp declines in fundraising for the year. The number of funds raised dropped by ~50% from the highs of 2021–22. Heading into 2024, fundraising continues to fall. The number of funds raised in 1Q24 was down by 42% compared to 1Q23, although the dollar amount raised is consistent.

**Buyouts** ▶ 2023 represented the trough in buyout dealmaking, with early 2024 seeing improved liquidity conditions and higher public markets comps. Buyout activity was up by 7% in 1Q24 compared to 4Q23. Lower valuations, reflecting higher interest rates and a narrowing of the bid-ask spread, have led to greater activity.

Venture Capital and Growth Equity ▶ Venture capital and growth equity have shown mixed signs of recovery but no large snapback, yet. 1Q24 deal activity was down by 9% from 4Q23. While venture capital activity was steady, there was a significant slowdown in growth equity, with no large growth equity deals during the quarter. 1Q24 exhibited a notable recovery in latestage valuations. Similarly, early-stage valuations in 2024 also increased by 21% from the prior year.

### **Annual Fundraising**

(3/31/24)



Source: Pltchbook

Exits ► In 2023, private equity exits declined dramatically by over 50% compared to their all-time record in 2021. Exit activity is up so far in 2024, by 15% compared to early 2023. IPO activity remains depressed, and the public offerings that do occur tend to be smaller in scale.

Returns ▶ Public equity's exceptional start to 2024 (led by the "Magnificent Seven" technology stocks) has left private equity in its wake. Over the long-term, private equity has outperformed public equity by 1%-3%.

#### Private Equity Performance (%) (Pooled Horizon IRRs through 3/31/24\*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
All Venture	1.4	-1.5	0.6	16.1	15.3	12.5
Growth Equity	1.0	3.9	3.5	14.2	13.3	13.4
All Buyouts	1.1	7.6	10.8	15.4	13.8	14.1
Mezzanine	1.8	10.4	11.1	11.5	10.9	11.3
Credit Opportunities	1.9	8.2	8.8	8.4	7.3	9.2
Control Distressed	0.8	4.5	12.9	13.8	11.0	11.3
All Private Equity	1.2	5.1	7.3	14.7	13.4	13.2

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

\*Most recent data available at time of publication

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

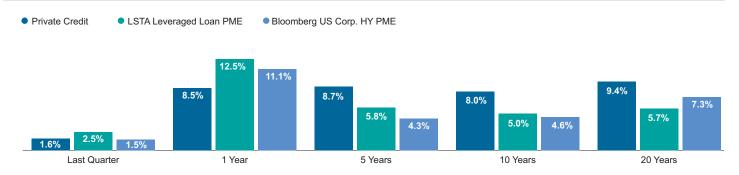
# Gains Outpace Leveraged Loans Over Time; Spreads Contract

#### PRIVATE CREDIT | Cos Braswell and Daniel Brown

- Over the past 10 years private credit has generated a net IRR of 8.0%, outperforming leveraged loans as of 1Q24.
- Higher-risk strategies have performed better than lower-risk strategies.
- U.S. sub-investment grade corporate yields rose dramatically at the beginning of 2022 with yields peaking in September. This was a combination of higher interest rates due to tighter Fed policy and a widening of high yield spreads. Effective yields continued to drop in 1Q24.
- Spreads contracted during 1Q24, a continuation from late 2023, due to stronger credit conditions as the U.S. economic outlook improved.
- Default rates for U.S. corporate bonds and loans in 2024 continued to slightly rise but remained in the historical average of 3% - 4%.

- The Corporate Bond Market Distress Index (CMDI) rose rapidly during 2022, especially for investment grade bonds, but has fallen since then. In 2024, both the investment grade distress and high yield bond indicator continued to fall, a trend that has proceeded since last year.
- Private credit assets under management (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% compound annual growth rate from 2023 to 2028.
- Direct lending is expected to grow steadily through 2028 as investors increase their private credit allocations. Distressed exposure should 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 3/31/24\*)



# Private Credit Performance (%) (Pooled Horizon IRRs by Strategy through 3/31/24\*)

Strategy	Quarter	1 Year	5 Years	10 Years	20 Years
Senior Debt	0.7	7.7	7.0	7.0	7.2
Mezzanine	1.8	10.4	11.6	10.9	11.3
Credit Opportunities	1.9	8.2	8.4	7.3	9.2
Total Private Credit	1.6	8.5	8.7	8.0	9.4

Source: LSEG/Cambridge

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

# Hedge Funds Gain, Capitalizing on Volatility

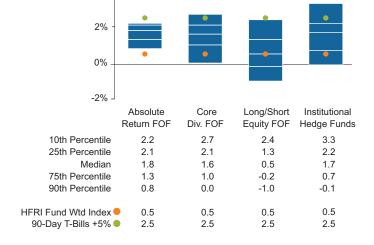
#### HEDGE FUNDS/MACs | Sean Lee and Joe McGuane

U.S. equity markets moved higher during 2Q24, driven by a few large technology and Al-related companies along with generally healthy corporate earnings. Interest rates were volatile during the quarter, as signs of sticky inflation drove bond yields sharply higher, but as the quarter wore on, softer macroeconomic data points and lower inflation readings reversed much of the move. The 10-year U.S. Treasury rose from 4.21% to 4.36%, and the 30-year from 4.34% to 4.51%, as Fed minutes indicate an eagerness to cut rates in September, driven primarily by concerns about the employment outlook despite reasonably good current data.

The S&P 500 rose 4.3% during 2Q, as Technology, Communication Services, and Utilities were the best sectors. Materials, Energy, and Real Estate were down on concerns of higher rates for longer and the slowing economy. Highlighting the AI theme during 2Q, the top six technology stocks in the S&P 500 rose 17% on average primarily due to EPS revisions and multiple expansion, while the remaining 494 S&P 500 stocks saw a slight upward earnings-per-share revision and larger multiple compression driving a 1% decline on average.

**Hedge Fund Style Group Returns** 

(6/30/24)



Sources: Callan, Credit Suisse, Federal Reserve

Hedge funds ended 2Q higher, as strategies with a higher correlation and a material beta to equities were successfully able to capitalize on volatility in markets. Equity hedge funds again saw positive performance, as managers that focused on technology saw the biggest gains. Managers with more

Callan Peer Group Median and Index Returns\* for Periods Ended 6/30/24

Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	1.7	10.1	5.7	7.3	6.3	7.4
Callan Fund-of-Funds Peer Group	1.3	9.8	3.8	5.7	4.4	5.4
Callan Absolute Return FOF Style	1.8	8.8	5.1	5.4	4.0	5.1
Callan Core Diversified FOF Style	1.6	10.0	4.2	5.9	4.5	5.6
Callan Long/Short Equity FOF Style	0.5	11.1	0.8	5.6	5.3	5.6
HFRI Fund Weighted Index	0.5	9.8	2.9	6.7	4.8	5.3
HFRI Fixed Convertible Arbitrage	1.2	7.5	4.1	6.6	5.0	6.5
HFRI Distressed/Restructuring	2.1	10.5	2.9	6.5	4.1	6.4
HFRI Emerging Markets	1.8	8.6	-1.3	4.1	3.3	4.2
HFRI Equity Market Neutral	2.0	11.2	5.1	4.2	3.4	3.1
HFRI Event-Driven	0.2	10.5	2.7	6.2	4.5	6.1
HFRI Relative Value	1.4	8.4	3.7	4.6	3.9	5.6
HFRI Macro	-0.8	5.9	4.4	5.7	3.5	2.8
HFRI Equity Hedge	1.0	11.8	1.9	7.8	5.6	6.2
HFRI Multi-Strategy	1.1	11.0	-0.3	5.0	2.9	4.5
HFRI Merger Arbitrage	0.0	8.3	3.4	5.5	4.5	4.4
90-Day T-Bill + 5%	2.5	10.4	8.0	7.2	6.5	6.0

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

directional equity exposure and those with more of a marketneutral focus also had a solid quarter. Relative value strategies also gained, as credit relative value and merger arbitrage strategies added to that performance. Macro strategies ended the quarter lower, as long positioning in developed market frontend rates detracted from performance, along with shorts in U.S. equities and long Japanese yen exposure.

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 1.7%. Within this style group of 50 peers, the average hedged credit manager gained 1.6%, driven by interest rate volatility. Meanwhile, the average hedged equity manager added 2.4%, as those focused on the Technology, Energy, and Health Care sectors drove performance. The median Callan Institutional hedged rates manager rose 1.6%, largely driven by relative value fixed income trades.

Within the HFRI Indices, the best-performing strategy was relative value, which was up 1.4%, as managers were positioned to profit off interest rate volatility during the quarter. Equity hedge gained 1.0%, as managers that were focused on tech, media, and telecom drove performance. Macro strategies ended the quarter slightly negative, as rates trading and long U.S. equities drove performance lower.

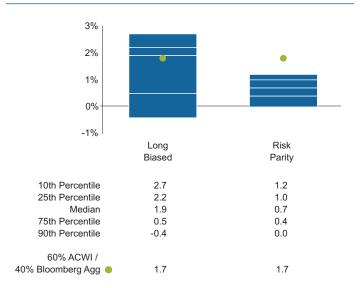
Across the Callan Hedge FOF database, the median Callan Long-Short Equity FOF ended 0.5% higher, as managers with a focus on the Technology sector drove performance. Meanwhile, the median Callan Core Diversified FOF rose 1.6%, driven by equity and event-driven strategies. The Callan Absolute Return FOF ended up 1.8%; equity beta strategies were behind this move.

Since the Global Financial Crisis, liquid alternatives to hedge funds have become popular among investors for their attractive risk-adjusted returns that are similarly uncorrelated with traditional stock and bond investments but offered at a lower cost. Much of that interest is focused on rules-based, long-short strategies that isolate known risk premia such as value, momentum, and carry found across the various capital markets. These alternative risk premia are often embedded, to varying degrees, in hedge funds as well as other actively managed investment products.

Within Callan's database of liquid alternative solutions, the median Callan MAC Long Biased manager rose 1.9%, as the strong equity rally pushed performance higher. The Callan MAC Risk Parity peer group rose 0.7%, as equities and fixed income drove the gains.

## **MAC Style Group Returns**

(6/30/24)



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

#### **HFRI Hedge Fund-Weighted Strategy Returns** (6/30/24)

■ Relative Value
■ Event-Driven● Equity Hedge</ti> · - - · HFRI Fund Weighted Index 11.8% 10.5% 8.4% 1.0% -0.8%

Last Year

Source: HFRI

Last Quarter

# DC Index Starts Year with a Big Gain

### **DEFINED CONTRIBUTION | Scotty Lee**

## Performance: Index kicks off 2024 with a gain

 The Callan DC Index™ gained 6.6% in 1Q24, which brought the Index's trailing one-year gain to 18.8%.

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

- Balances within the DC Index rose by 6.6% after a 9.0% increase in the previous quarter.
- Investment gains (6.6%) were the sole driver of the gain, while net flows (0.03%) had a negligible effect.

#### **Turnover: Net transfers increase**

 Turnover (i.e., net transfer activity levels within DC plans) in the DC Index increased to 0.44% from the previous guarter's measure of 0.24%.

#### 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 1Q24 as the asset allocation funds garnered 79.5% of quarterly net flows.
- Within equities, investors withdrew assets from U.S. small/ mid-cap equity (-12.7%) and company stock (-15.6%).
- Notably, stable value (-50.9%) saw relatively large outflows for the sixth consecutive quarter.

#### **Equity allocation: Exposure rises**

The Index's overall allocation to equity (73.5%) rose slightly from the previous quarter's level (72.5%). The current equity allocation continues to sit above the Index's historical average (68.6%).

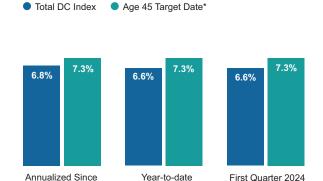
#### Asset allocation: Fixed income exposure falls

- U.S. large cap equity (27.8%) and target date funds (35.3%) were among the asset classes with the largest percentage increases in allocation.
- Stable value (6.6%) had the largest decrease in allocation from the previous quarter due to net outflows.

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**

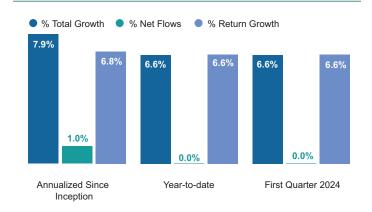
(3/31/24)



#### **Growth Sources**

Inception

(3/31/24)



# **Net Cash Flow Analysis 1Q24)**

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	79.5%
U.S. Large Cap	10.5%
Company Stock	-15.6%
Stable Value	-50.9%
Total Turnover**	0.4%

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

Note: DC Index inception date is January 2006.

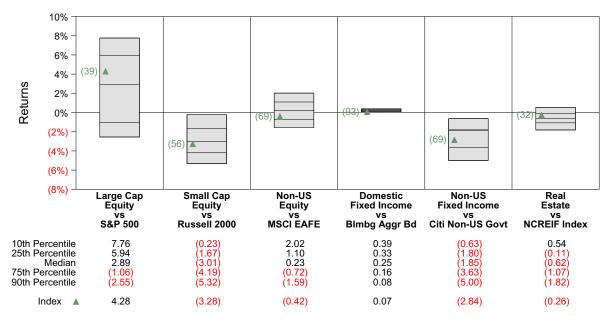
- The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.
- \*\* Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

# Market Overview Active Management vs Index Returns

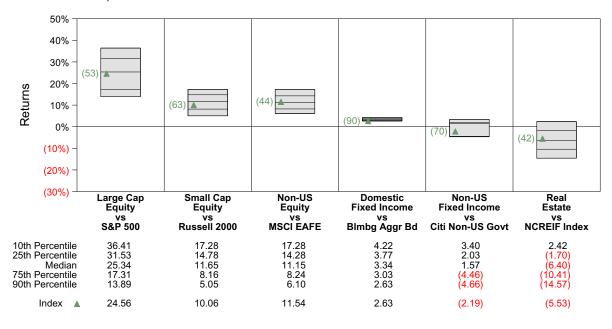
#### **Market Overview**

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

## Range of Separate Account Manager Returns by Asset Class One Quarter Ended June 30, 2024



# Range of Separate Account Manager Returns by Asset Class One Year Ended June 30, 2024





## **ASSET ALLOCATION AND PERFORMANCE**

## **Asset Allocation and Performance**

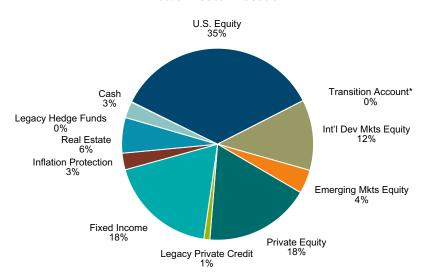
This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance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



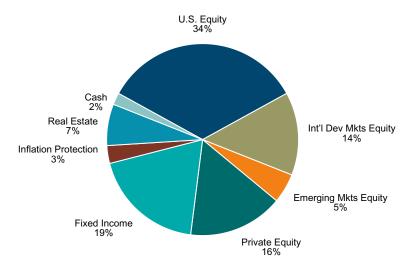
# **Actual vs Target Asset Allocation** As of June 30, 2024

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





# **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
U.S. Equity	13,268,114	35.2%	34.0%	1.2%	463,632
Transition Account*	970	0.0%	0.0%	0.0%	970
Int'l Dev Mkts Equity	4.469.476	11.9%	14.0%	(2.1%)	(802,958)
Emerging Mkts Equity	1.522.942	4.0%	5.0%	(1.0%)	(360,070)
Private Equity	6,737,587	17.9%	16.0%	1.9%	711,948
Legacy Private Credit	379,224	1.0%	0.0%	1.0%	379,224
Fixed Income	6,927,720	18.4%	19.0%	(0.6%)	(227,725)
Inflation Protection	1,050,199	2.8%	3.0%	(0.2%)	(79,608)
Real Estate	2.268.382	6.0%	7.0%	(1.0%)	(367,834)
Legacy Hedge Funds	14.668	0.0%	0.0%	0.0%	14,668
Cash	1,020,958	2.7%	2.0%	0.7%	267,753
Total	37 660 240	100.0%	100.0%		•

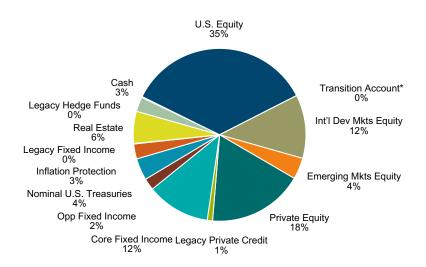
<sup>\*</sup>Market values are shown net of accrued fees.



# Actual Asset Allocation As of June 30, 2024

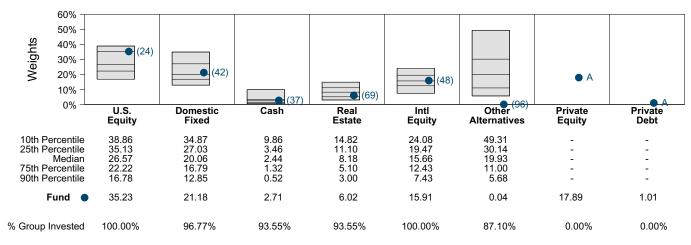
The first chart below shows the Fund's asset allocation as of June 30, 2024. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons- V Lg DB (>10B).

#### **Actual Asset Allocation**



Asset Class	\$000s Actual	Weight Actual
U.S. Equity	13,268,114	35.2%
Transition Account*	970	0.0%
Int'l Dev Mkts Equity	4,469,476	11.9%
Emerging Mkts Equity	1,522,942	4.0%
Private Equity	6,737,587	17.9%
Legacy Private Credit	379,224	1.0%
Core Fixed Income	4,497,910	11.9%
Opp Fixed Income	824,097	2.2%
Nominal U.S. Treasuries	1,558,835	4.1%
Inflation Protection	1,050,199	2.8%
Legacy Fixed Income	46,878	0.1%
Real Estate	2,268,382	6.0%
Legacy Hedge Funds	14,668	0.0%
Cash	1,020,958	2.7%
Total	37,660,240	100.0%

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



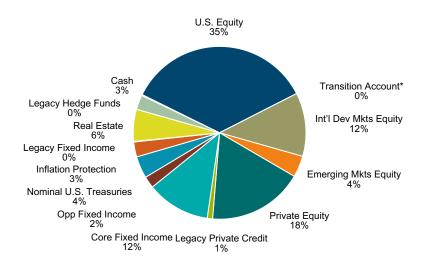
<sup>\*</sup>Market values are shown net of accrued fees.



# Actual Asset Allocation As of June 30, 2024

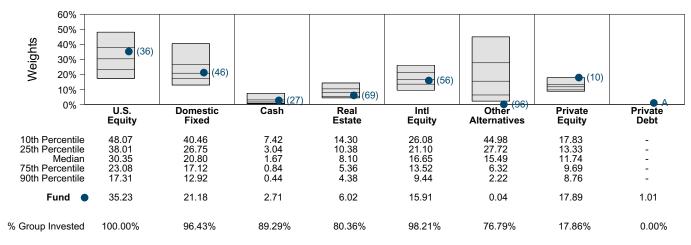
The first chart below shows the Fund's asset allocation as of June 30, 2024. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons - Large (>1B).

#### **Actual Asset Allocation**



Asset Class	\$000s Actual	Weight Actual
U.S. Equity	13,268,114	35.2%
Transition Account*	970	0.0%
Int'l Dev Mkts Equity	4,469,476	11.9%
Emerging Mkts Equity	1,522,942	4.0%
Private Equity	6,737,587	17.9%
Legacy Private Credit	379,224	1.0%
Core Fixed Income	4,497,910	11.9%
Opp Fixed Income	824,097	2.2%
Nominal U.S. Treasuries	1,558,835	4.1%
Inflation Protection	1,050,199	2.8%
Legacy Fixed Income	46,878	0.1%
Real Estate	2,268,382	6.0%
Legacy Hedge Funds	14,668	0.0%
Cash	1,020,958	2.7%
Total	37,660,240	100.0%

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



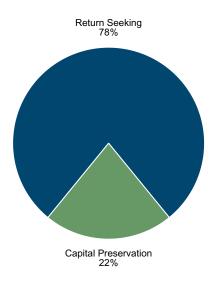
<sup>\*</sup>Market values are shown net of accrued fees.



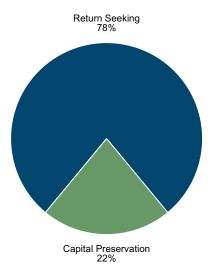
# **Actual vs Target Asset Allocation** As of June 30, 2024

The first chart below shows the Fund's asset allocation as of June 30, 2024. The second chart shows the Fund's target asset allocation as outlined in the investment policy statement.

#### **Actual Asset Allocation**



# **Target Asset Allocation**



Asset Class	\$Millions Actual	Weight Actual	Target	Percent Difference	\$Millions Difference
Return Seeking	29,153	78.2%	78.0%	0.2%	74
Capital Preservation	8,128	21.8%	22.0%	(0.2%)	(74)
Total	37,281	100.0%	100.0%	, ,	, , –

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

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

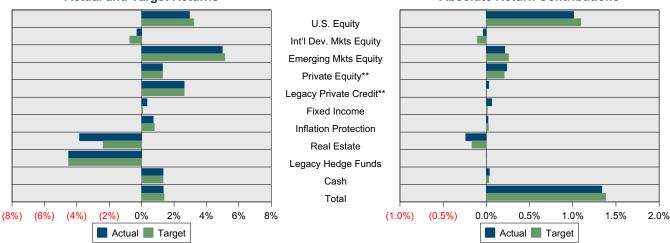


<sup>\*</sup>Capital Preservation Assets: Core Fixed Income, Nominal U.S. Treasuries, Inflation Protection (TIPS) and Cash.

# Quarterly Total Fund Absolute Attribution - June 30, 2024

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





## Absolute Attribution Effects for Quarter ended June 30, 2024

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
U.S. Equity	34%	2.96%	1.01%	34%	3.22%	1.09%	(0.08%)
Int'l Dev. Mkts Equity	12%	(0.29%)	(0.03%)	14%	(0.73%)	(0.10%)	`0.07%´
Emerging Mkts Equity	4%	4.98%	0.21%	5%	5.13%	0.26%	(0.04%)
Private Equity**	18%	1.29%	0.24%	16%	1.29%	0.21%	0.03%
Legacy Private Credit**	1%	2.63%	0.03%	0%	2.63%	0.00%	0.03%
Fixed Income	19%	0.33%	0.06%	19%	0.07%	0.01%	0.05%
Inflation Protection	3%	0.71%	0.02%	3%	0.79%	0.02%	(0.00%)
Real Estate	6%	(3.84%)	(0.24%)	7%	(2.38%)	(0.17%)	(0.07%)
Legacy Hedge Funds	0%	(4.51%)	(0.00%)	0%	(4.51%)	0.00%	(0.00%)
Cash	3%	1.33%	0.04%	2%	1.32%	0.03%	0.01%

Total Fund Return 1.34% Target Return 1.38% (0.05%)

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

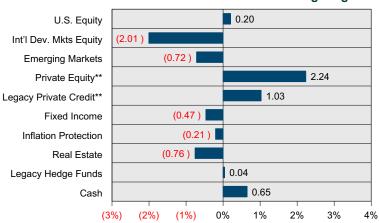


<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

# Quarterly Total Fund Relative Attribution - June 30, 2024

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





# **Actual vs Target Returns**

#### **Relative Attribution by Asset Class** U.S. Equity Int'l Dev. Mkts Equity **Emerging Markets** Private Equity\*\* Legacy Private Credit\*\* Fixed Income Inflation Protection Real Estate Legacy Hedge Funds Cash Total (6%) (4%)(2%)0% 2% 4% 6% 8% (0.10%) (0.05%) 0.00% 0.05% 0.10% 0.15% Actual Target ■ Manager Effect ■ Asset Allocation ■ Total

#### Relative Attribution Effects for Quarter ended June 30, 2024

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	34%	34%	2.96%	3.22%	(0.09%)	(0.00%)	(0.09%)
Int'l Dev. Mkts Equity	12%	14%	(0.29%)	(0.73%)	0.05%	0.04%	0.09%
Emerging Markets	4%	5%	4.98%	5.13%	(0.01%)	(0.03%)	(0.04%)
Private Equity**	18%	16%	1.29%	1.29%	0.00%	(0.01%)	(0.01%)
Legacy Private Credit**	1%	0%	2.63%	2.63%	0.00%	`0.01%´	`0.01%´
Fixed Income	19%	19%	0.33%	0.07%	0.05%	0.01%	0.06%
Inflation Protection	3%	3%	0.71%	0.79%	(0.00%)	0.00%	(0.00%)
Real Estate	6%	7%	(3.84%)	(2.38%)	(0.09%)	0.03%	(0.07%)
Legacy Hedge Funds	0%	0%	(4.51%)	(4.51%)	0.00%	(0.00%)	(0.00%)
Cash	3%	2%	1.33%	1.32%	0.00%	0.00%	0.00%
Total			1.34% =	1.38% +	(0.09%) +	0.04%	(0.05%)

<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index. 2% ICE BofAML 3 Mo US T-Bill Index.

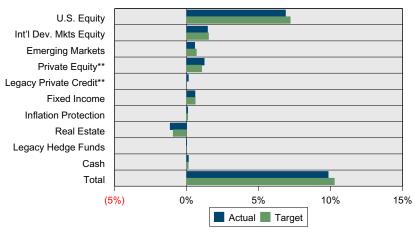
<sup>\*\*</sup>For this analysis, PE and PC are benchmarked to the SERS' PE and PC program returns, respectively.



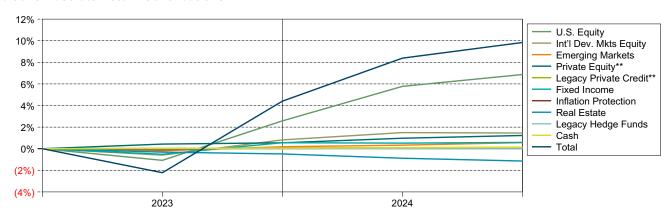
# Cumulative Total Fund Absolute Attribution - June 30, 2024

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

#### **One Year Absolute Return Contributions**



#### **Cumulative Absolute Return Contributions**



#### **One Year Absolute Attribution Effects**

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
U.S. Equity	32%	22.36%	6.87%	32%	23.13%	7.20%	(0.33%)
Int'l Dev. Mkts Equity	13%	11.32%	1.45%	14%	10.76%	1.53%	(0.07%)
Emerging Markets	4%	12.95%	0.56%	5%	13.56%	0.68%	(0.12%)
Private Equity**	19%	6.47%	1.23%	16%	6.47%	1.05%	`0.18%
Legacy Private Credit**	1%	11.65%	0.12%	0%	11.65%	0.00%	0.12%
Fixed Income	19%	3.20%	0.58%	21%	2.63%	0.60%	(0.01%)
Inflation Protection	3%	2.40%	0.07%	3%	2.71%	0.08%	(0.01%)
Real Estate	7%	(15.13%)	(1.14%)	7%	(12.33%)	(0.93%)	(0.21%)
Legacy Hedge Funds	0%	(18.03%)	(0.01%)	0%	(18.03%)	0.00%	(0.01%)
Cash	2%	5.47%	0.13%	2%	5.40%	0.11%	0.02%

Total Fund Return 9.84% Target Return 10.27% (0.43%)

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

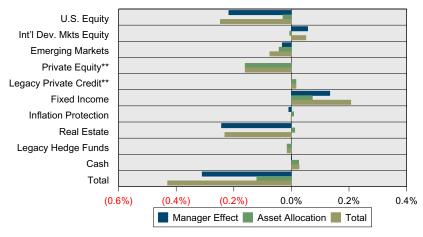


<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index. 2% ICE BofAML 3 Mo US T-Bill Index.

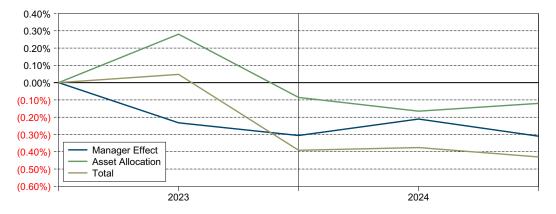
# Cumulative Total Fund Relative Attribution - June 30, 2024

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

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



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



# **One Year Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	32%	32%	22.36%	23.13%	(0.22%)	(0.03%)	(0.25%)
Int'l Dev. Mkts Equity	13%	14%	11.32%	10.76%	0.06%	(0.01%)	0.05%
Emerging Markets	4%	5%	12.95%	13.56%	(0.03%)	(0.04%)	(0.07%)
Private Equity**	19%	16%	6.47%	6.47%	0.00%	(0.16%)	(0.16%)
Legacy Private Credit**	1%	0%	11.65%	11.65%	0.00%	0.02%	0.02%
Fixed Income	19%	21%	3.20%	2.63%	0.13%	0.07%	0.21%
Inflation Protection	3%	3%	2.40%	2.71%	(0.01%)	0.01%	(0.00%)
Real Estate	7%	7%	(15.13%)	(12.33%)	(0.24%)	0.01%	(0.23%)
Legacy Hedge Funds	0%	0%	(18.03%)	(18.03%)	0.00%	(0.01%)	(0.01%)
Cash	2%	2%	5.47%	5.40%	0.00%	0.03%	0.03%
Total			9.84% =	10.27% +	(0.31%) +	(0.12%)	(0.43%)

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

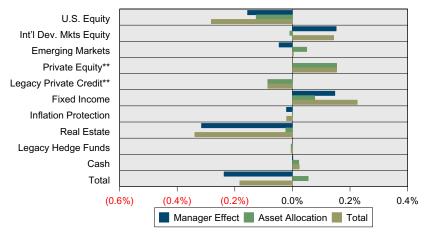


<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index. 2% ICE BofAML 3 Mo US T-Bill Index.

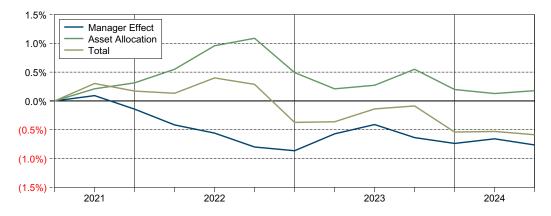
# Cumulative Total Fund Relative Attribution - June 30, 2024

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

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



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



# **Three Year Annualized Relative Attribution Effects**

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	31%	31%	7.54%	8.05%	(0.16%)	(0.13%)	(0.28%)
Int'l Dev. Mkts Equity	13%	14%	3.16%	1.97%	0.15%	(0.01%)	0.14%
Emerging Markets	4%	5%	(5.20%)	(4.11%)	(0.05%)	0.05%	0.00%
Private Equity**	18%	15%	8.33%	8.33%	0.00%	0.15%	0.15%
Legacy Private Credit**	2%	1%	10.68%	10.68%	0.00%	(0.09%)	(0.09%)
Fixed Income	20%	22%	(2.37%)	(3.02%)	0.15%	`0.08%	0.23%
Inflation Protection	3%	3%	(1.98%)	(1.33%)	(0.02%)	0.00%	(0.02%)
Real Estate	8%	7%	(2.20%)	`1.78%′	(0.32%)	(0.02%)	(0.34%)
Legacy Hedge Funds	0%	0%	(8.17%)	(8.17%)	0.00%	(0.00%)	(0.00%)
Cash	2%	2%	3.15%	3.03%	0.00%	0.02%	0.02%
Total			3.48% =	3.66% +	(0.24%) +	0.06%	(0.18%)

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

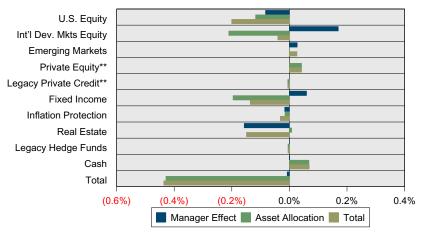


<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index. 2% ICE BofAML 3 Mo US T-Bill Index.

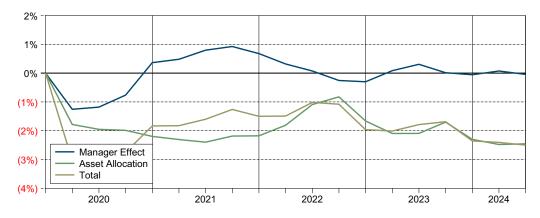
# Cumulative Total Fund Relative Attribution - June 30, 2024

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

#### Four and One-Half Year Annualized Relative Attribution Effects



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



# Four and One-Half Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	29%	29%	13.02%	13.32%	(0.08%)	(0.12%)	(0.20%)
Int'l Dev. Mkts Equity	13%	14%	6.57%	5.31%	`0.17%´	(0.21%)	(0.04%)
Emerging Markets	4%	5%	3.28%	2.86%	0.03%	(0.00%)	0.03%
Private Equity**	16%	14%	15.27%	15.27%	0.00%	0.04%	0.04%
Legacy Private Credit**	2%	2%	10.67%	10.67%	0.00%	(0.01%)	(0.01%)
Fixed Income	22%	23%	(0.61%)	(0.79%)	0.06%	(0.20%)	(0.14%)
Inflation Protection	3%	3%	1.32%	`1.82%´	(0.02%)	(0.02%)	(0.03%)
Real Estate	7%	7%	0.48%	2.35%	(0.16%)	0.01%	(0.15%)
Legacy Hedge Funds	0%	0%	(2.55%)	(2.28%)	(0.00%)	(0.00%)	(0.01%)
Cash	2%	2%	2.25%	2.17%	0.00%	0.07%	0.07%
Total			6.91% =	7.35% -	· (0.01%) +	(0.43%)	(0.44%)

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

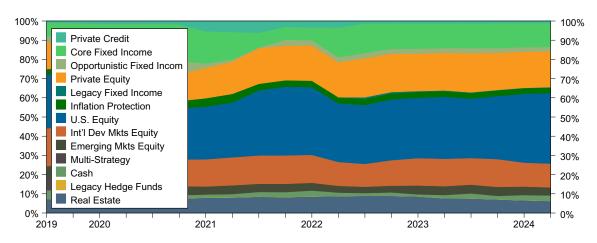


<sup>\*</sup> Current Quarter Target = 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index. 2% ICE BofAML 3 Mo US T-Bill Index.

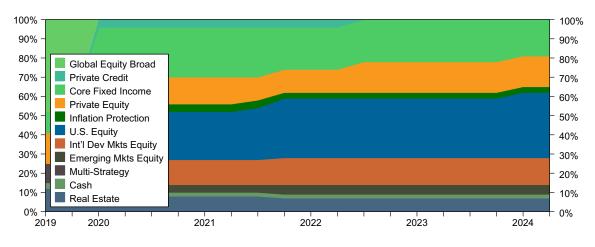
# **Actual vs Target Historical Asset Allocation**

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

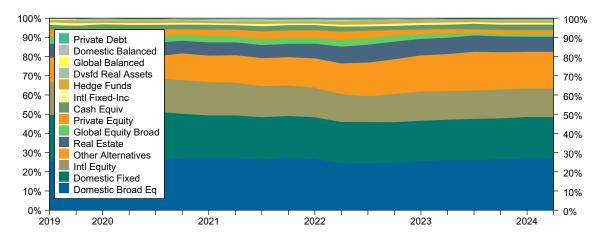
#### **Actual Historical Asset Allocation**



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



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



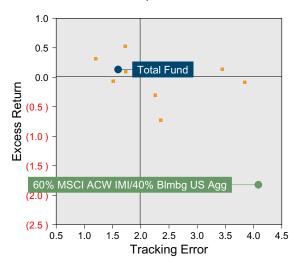


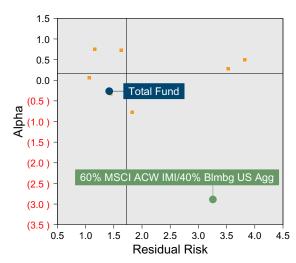
# Total Fund Total Fund vs Target Risk Analysis

#### **Risk Analysis**

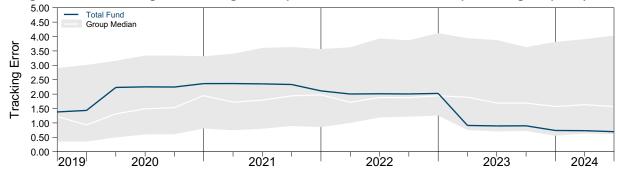
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return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

# Risk Analysis vs Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended June 30, 2024

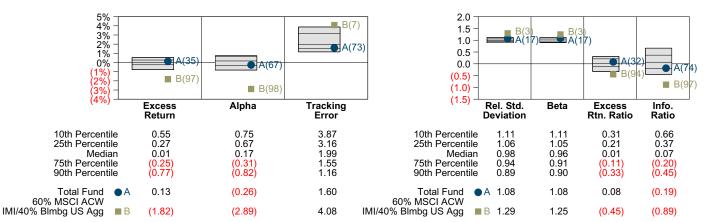




Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Spons- V Lg DB (>10B)



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended June 30, 2024

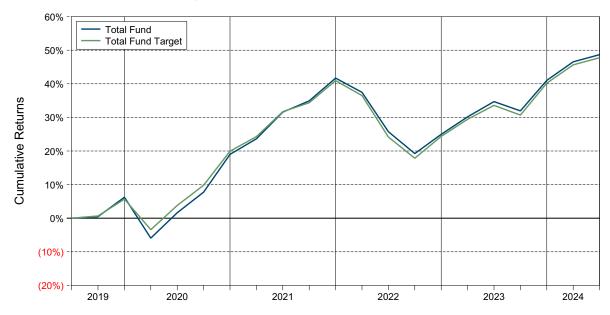




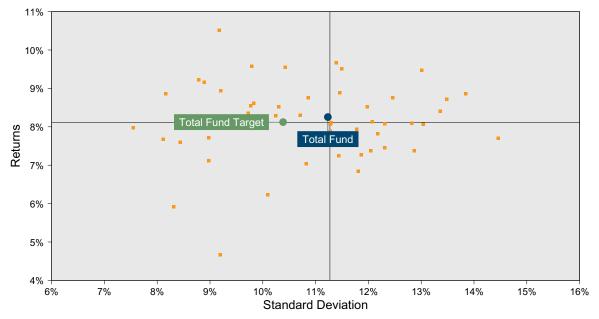
# **Cumulative Performance Relative to Target**

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

## **Cumulative Returns Actual vs Target**



#### Five Year Annualized Risk vs Return

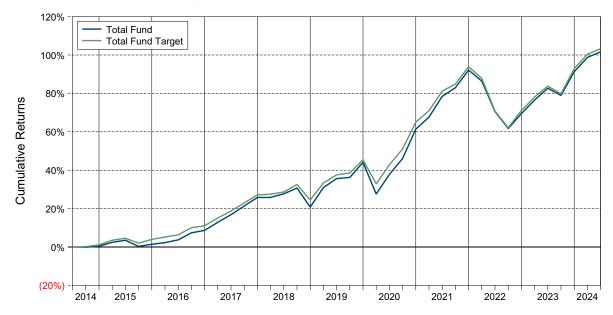


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

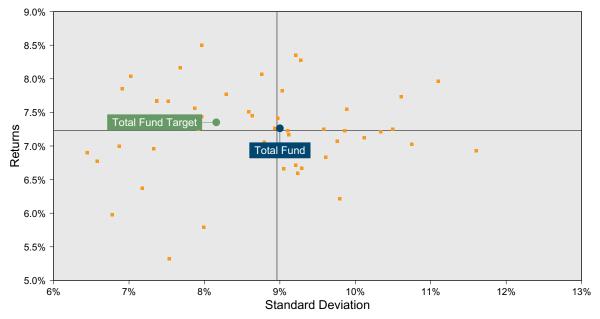
## **Cumulative Performance Relative to Target**

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

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



#### Ten Year Annualized Risk vs Return



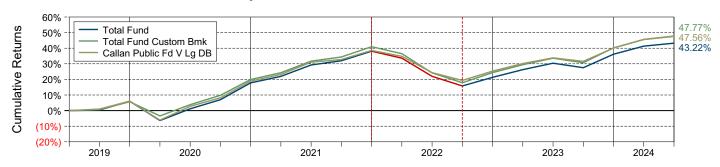
Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)



## Total Fund Drawdown Analysis for Five Years Ended June 30, 2024

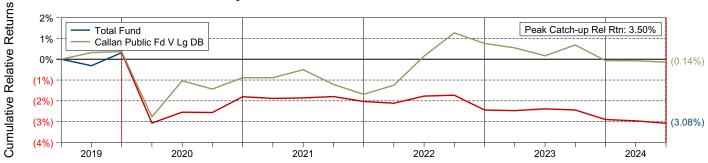
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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

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



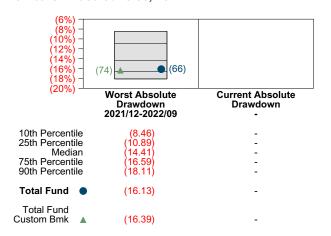
		Wor	st Absolute Drawd	lown		Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
Total Fund	(16.13)%	0.75	2021/12-2022/09	(16.39)%	(13.87)%	-	-	_	-	-	
Recovery from Trough	22.03%	1.50	2022/09-2024/03	23.58%	21.94%	-	-	-	-	-	
Total Fund Custom Bmk	(16.39)%	0.75	2021/12-2022/09			-	-	-			
Callan Public Fd V Lg DB	(13.87)%	0.75	2021/12-2022/09			-	-	-			

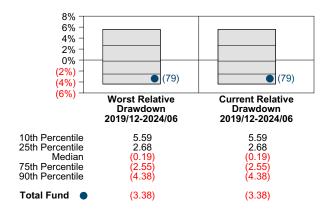
## Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk



	\	Vorst Rel	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Total Fund	(3.38)%	4.50	2019/12-2024/06	(0.51)%	(3.38)%	4.50	2019/12-2024/06	(0.51)%		
Recovery from Trough	-	-	-	-	-	-	-	-		
Callan Public Fd V Lg DB	(2.04)%	2.00	2019/12-2021/12		(1.39)%	1.75	2022/09-2024/06			

Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended June 30, 2024





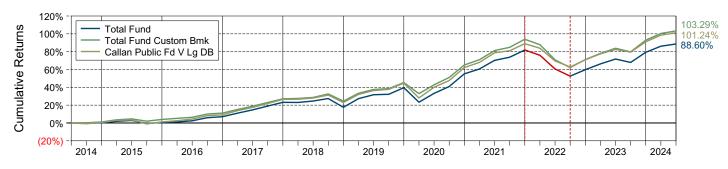


## Total Fund

## Drawdown Analysis for Ten Years Ended June 30, 2024

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

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



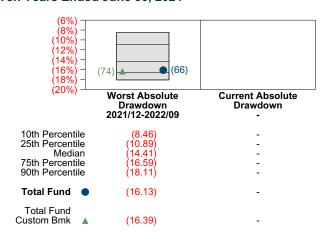
		****	ot / tboolate Blane								
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
Total Fund	(16.13)%	0.75	2021/12-2022/09	(16.39)%	(13.87)%	-	-	-	-	-	
Recovery from Trough	22.03%	1.50	2022/09-2024/03	23.58%	21.94%	-	-	-	-	-	
Total Fund Custom Bmk	(16.39)%	0.75	2021/12-2022/09			-	-	-			
Callan Public Fd V Lg DB	(13.87)%	0.75	2021/12-2022/09			-	-	-			

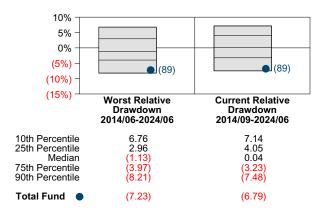
Worst Absolute Drawdown

#### Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk Cumulative Relative Returns Peak Catch-up Rel Rtn: 7.28% Total Fund Callan Public Fd V Lg DB (1.01%)(6%)(7.23%)(8%)2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

	\	Norst Rei	ative Drawdown		Current Relative Drawdown					
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers		
Total Fund	(7.23)%	10.00	2014/06-2024/06	(1.01)%	(6.79)%	9.75	2014/09-2024/06	0.06%		
Recovery from Trough	-	-	-	-	=	-	-	-		
Callan Public Fd V Lg DB	(3.62)%	5.75	2014/06-2020/03		(1.39)%	1.75	2022/09-2024/06			

Drawdown Rankings vs. Total Fund Custom Bmk
Rankings against Callan Public Fund Spons- V Lg DB (>10B)
Ten Years Ended June 30, 2024





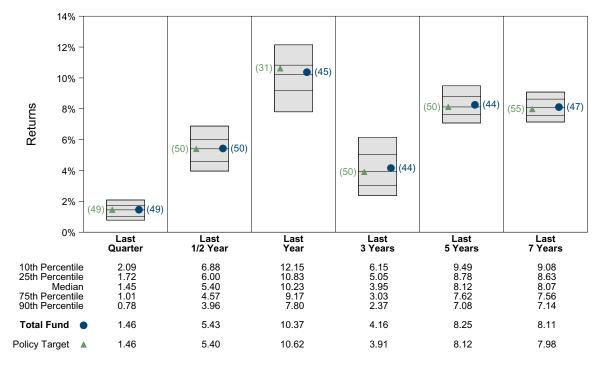
Current Absolute Drawdown



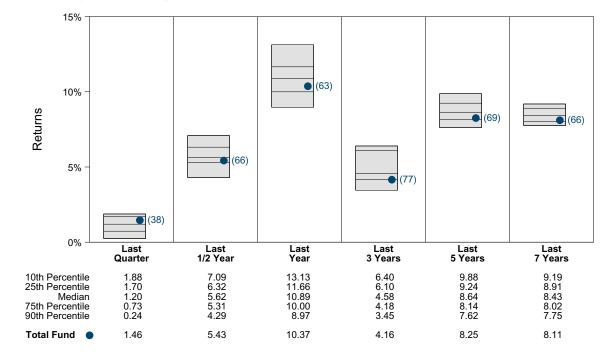
#### **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Spons- V Lg DB (>10B) for periods ended June 30, 2024. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

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



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



<sup>\*</sup> Current Quarter Target = 34.0% Russell 3000 Index, 19.0% Blmbg:Aggregate, 16.0% Private Equity, 14.0% MSCI World xUS IMI, 7.0% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 3.0% Blmbg TIPS and 2.0% 3-month Treasury Bill.

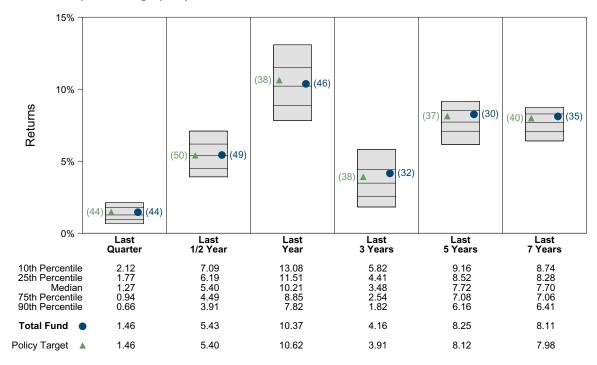
<sup>\*</sup>The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.



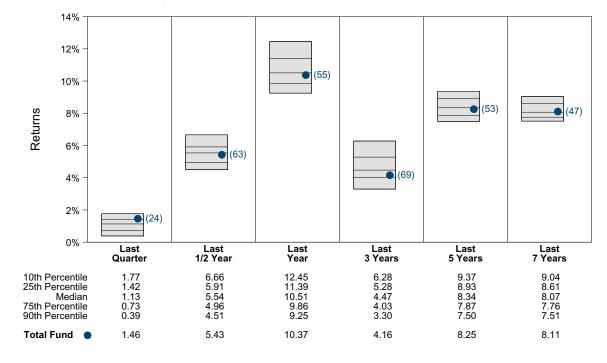
#### **Total Fund Ranking**

The first two charts show the ranking of the Total Fund's performance relative to that of the Callan Public Fund Spons - Large (>1B) for periods ended June 30, 2024. The first chart is a standard unadjusted ranking. In the second chart each fund in the database is adjusted to have the same historical asset allocation as that of the Total Fund.

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



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



<sup>\*</sup> Current Quarter Target = 34.0% Russell 3000 Index, 19.0% Blmbg:Aggregate, 16.0% Private Equity, 14.0% MSCI World xUS IMI, 7.0% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 3.0% Blmbg TIPS and 2.0% 3-month Treasury Bill.

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



## Total Fund Period Ended June 30, 2024

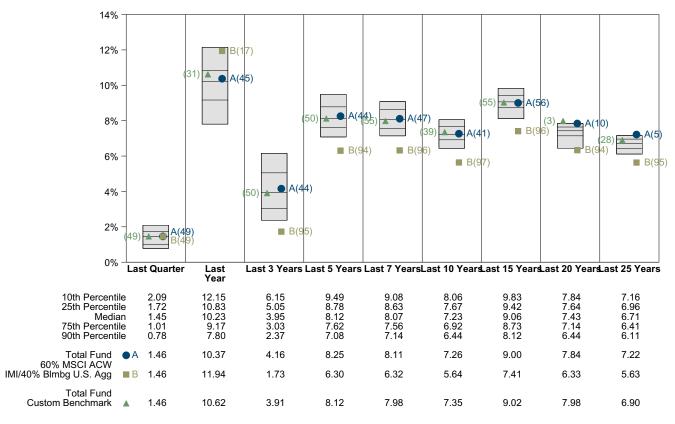
#### **Gross Performance History**

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

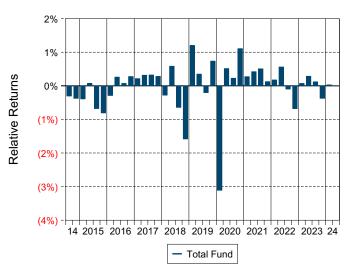
#### **Quarterly Summary and Highlights**

- Total Fund's portfolio posted a 1.46% return for the quarter placing it in the 49 percentile of the Callan Public Fund Spons- V Lg DB (>10B) group for the quarter and in the 45 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Custom Benchmark by 0.00% for the quarter and underperformed the Total Fund Custom Benchmark for the year by 0.25%.

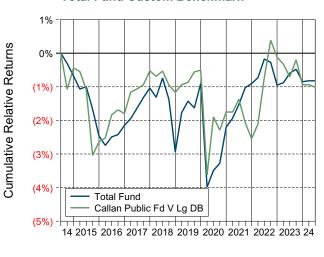
## Performance vs Callan Public Fund Spons- V Lg DB (>10B) (Gross)



# Relative Returns vs Total Fund Custom Benchmark



# Cumulative Returns vs Total Fund Custom Benchmark





## Total Fund Period Ended June 30, 2024

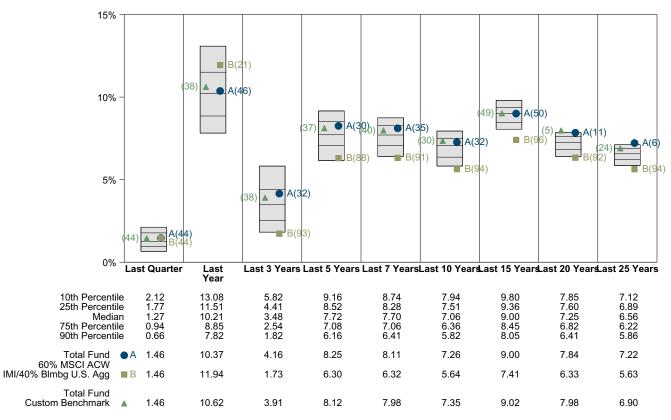
#### **Gross Performance History**

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

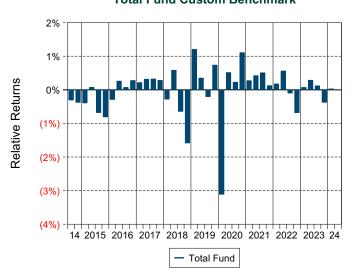
#### **Quarterly Summary and Highlights**

- Total Fund's portfolio posted a 1.46% return for the quarter placing it in the 44 percentile of the Callan Public Fund Spons - Large (>1B) group for the quarter and in the 46 percentile for the last year.
- Total Fund's portfolio underperformed the Total Fund Custom Benchmark by 0.00% for the quarter and underperformed the Total Fund Custom Benchmark for the year by 0.25%.

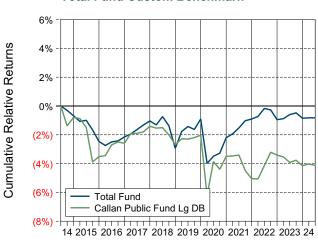
## Performance vs Callan Public Fund Spons - Large (>1B) (Gross)



## Relative Returns vs Total Fund Custom Benchmark



# Cumulative Returns vs Total Fund Custom Benchmark

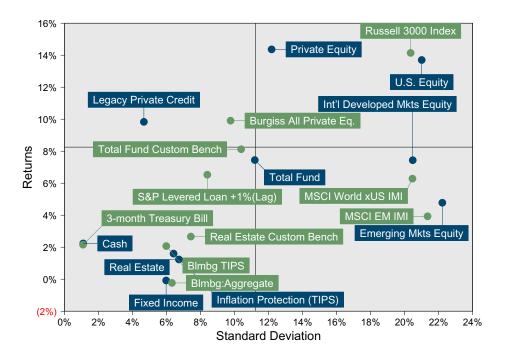




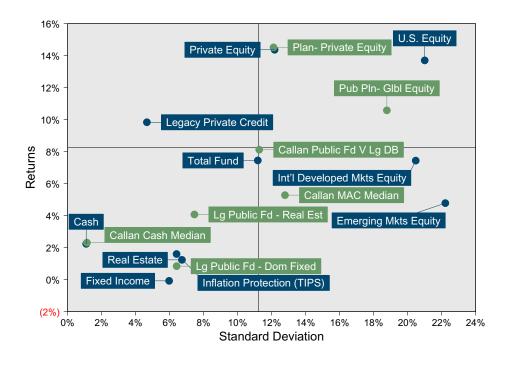
#### **Asset Class Risk and Return**

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

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



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





## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2024, with the distribution as of March 31, 2024.

#### **Asset Distribution Across Investment Managers**

		J	June 30, 20	24		ı	March 31, 2024	ı
	Market Value	% of Total	(min)	Target	(max)	Market Value	% of Total	Target
	\$(000)	Weight	Weight		Weight	\$(000)	Weight	
NET OF FEES*								
U.S. Equity	\$13,268,114	35.23%	29.00%	34.00%	39.00%	\$12,887,026	34.36%	34.00%
Int'l Developed Markets Equity	\$4,469,476	11.87%	9.00%	14.00%	19.00%	\$4,482,476	11.95%	14.00%
Emerging Mkts Equity	\$1,522,942	4.04%	1.00%	5.00%	9.00%	\$1,588,337	4.23%	5.00%
Private Equity (1)	\$6,737,587	17.89%	14.00%	16.00%	18.00%	\$6,780,487	18.08%	16.00%
Buyouts	3,651,157	9.69%				3,619,631	9.65%	
Special Situations	1,724,261	4.58%				1,701,296	4.54%	
Growth Equity	1,174,294	3.12%				1,270,073	3.39%	
Keystone Legacy (2)	187,874	0.50%				189,487	0.51%	
Legacy Private Credit (3)	\$379,224	1.01%	-	-	-	\$383,028	1.02%	-
Fixed Income (4)	\$6,927,720	18.40%	14.00%	19.00%	24.00%	\$6,966,114	18.57%	19.00%
Core Fixed Income	4,497,910	11.94%				4,492,066	11.98%	
Opportunistic Fixed Income	824,097	2.19%				854,052	2.28%	
Nominal U.S. Treasuries	1,558,835	4.14%				1,563,567	4.17%	
Legacy Fixed Income	46,878	0.12%				56,429	0.15%	
Inflation Protection (TIPS)	\$1,050,199	2.79%	0.00%	3.00%	6.00%	\$1,042,793	2.78%	3.00%
Real Estate (1)	\$2,268,382	6.02%	N/A	7.00%	N/A	\$2,374,962	6.33%	7.00%
Core/Core Plus Real Estate Funds		2.92%				1,095,200	2.92%	,
Value Add/Opportunistic SMA	282.881	0.75%				407,385	1.09%	
Value Add/Opportunistic Funds	755,901	2.01%				741,987	1.98%	
REITS	131,254	0.35%				130,389	0.35%	
Legacy Hedge Funds	\$14,668	0.04%	-	-	-	\$15,414	0.04%	-
Cash	\$1,020,958	2.71%	0.00%	2.00%	7.00%	\$984,545	2.63%	2.00%
Total Fund	\$37,660,240	100.00%		100.00%		\$37,506,160	100.00%	100.00%

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



<sup>\*</sup>Market values shown are net of accrued fees.

<sup>(1)</sup> Private Equity and Real Estate Market Values have a 1 Qtr lag

<sup>(2)</sup> As of 03/31/2024, Keystone Legacy SPV consists of 37 non-core funds, prior performance reflected in previous sub-asset classes.

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

## **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of June 30, 2024, with the distribution as of March 31, 2024.

#### **Asset Distribution Across Investment Managers**

		J	lune 30, 20	24		r	March 31, 2024	ļ
	Market Value	% of Total	(min)	Target	(max)	Market Value	% of Total	Target
	\$(000)	Weight	Weight		Weight	\$(000)	Weight	
GROSS OF FEES*	1,(2.2.2)					.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
U.S. Equity	\$13,268,828	35.23%	29.00%	34.00%	39.00%	\$12,887,704	34.36%	34.00%
Int'l Developed Markets Equity	\$4,470,647	11.87%	9.00%	14.00%	19.00%	\$4,483,644	11.95%	14.00%
Emerging Mkts Equity	\$1,523,255	4.04%	1.00%	5.00%	9.00%	\$1,588,645	4.24%	5.00%
Private Equity (1)	\$6,737,587	17.89%	14.00%	16.00%	18.00%	\$6,780,487	18.08%	16.00%
Buyouts	3,651,157	9.69%				3,619,631	9.65%	
Special Situations	1,724,261	4.58%				1,701,296	4.54%	
Growth Equity	1,174,294	3.12%				1,270,073	3.39%	
Keystone Legacy (2)	187,874	0.50%				189,487	0.51%	
Legacy Private Credit (3)	\$379,224	1.01%	-	-	-	\$383,028	1.02%	-
Fixed Income (4)	\$6,928,183	18.40%	14.00%	19.00%	24.00%	\$6,966,620	18.57%	19.00%
Core Fixed Income	4,498,238	11.94%				4,492,408	11.98%	
Opportunistic Fixed Income	824,097	2.19%				854,052	2.28%	
Nominal U.S. Treasuries	1,558,883	4.14%				1,563,608	4.17%	
Legacy Fixed Income	46,965	0.12%				56,552	0.15%	
Inflation Protection (TIPS)	\$1,050,474	2.79%	0.00%	3.00%	6.00%	\$1,043,069	2.78%	3.00%
Real Estate (1)	\$2,268,525	6.02%	N/A	7.00%	N/A	\$2,375,105	6.33%	7.00%
Core/Core Plus Real Estate Funds		2.92%				1,095,200	2.92%	
Value Add/Opportunistic SMA	282,881	0.75%				407,385	1.09%	
Value Add/Opportunistic Funds	755,901	2.01%				741,987	1.98%	
REITS	131,396	0.35%				130,532	0.35%	
Legacy Hedge Funds	\$14,668	0.04%	-	-	-	\$15,414	0.04%	-
Cash	\$1,020,958	2.71%	0.00%	2.00%	7.00%	\$984,545	2.62%	2.00%
Total Fund	\$37,663,319	100.00%		100.00%		\$37,509,240	100.00%	100.00%

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



<sup>\*</sup>Market values shown are gross of accrued fees.

<sup>(1)</sup> Private Equity and Real Estate Market Values have a 1 Qtr lag

<sup>(2)</sup> As of 03/31/2024, Keystone Legacy SPV consists of 37 non-core funds, prior performance reflected in previous sub-asset classes.

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

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance	Ψ()	TTOIGHT	Quartor	Duto	ı oui	Touro	Touro
Total Fund Total Fund Custom Benchmark(1) Public Market Equiv Benchmark(2) 60/40 Index(3)	\$37,660 - - -	100.00% - - -	<b>1.34%</b> 1.46% 3.01% 1.46%	<b>5.20%</b> 5.40% 9.02% 5.80%	<b>9.84%</b> 10.62% 15.46% 11.94%	<b>3.48%</b> 3.91% 4.85% 1.73%	<b>7.45%</b> 8.12% 8.55% 6.30%
U.S. Equity	\$13,268	35.23%	<b>2.96%</b>	<b>12.92%</b>	<b>22.36%</b> 23.13% 23.52%	<b>7.54%</b>	<b>13.70%</b>
Russell 3000 Index (4)	-	-	3.22%	13.56%		8.05%	14.14%
S&P 1500 Index	-	-	3.66%	14.35%		9.43%	14.59%
Int'l Developed Mkts Equity	\$4,469	11.87%	<b>(0.29%)</b>	<b>5.12%</b>	<b>11.32%</b>	<b>3.16%</b>	<b>7.44%</b>
MSCI World ex US IMI	-	-	(0.73%)	4.41%	10.76%	1.97%	6.29%
Emerging Mkts Equity	\$1,523	4.04%	<b>4.98%</b>	<b>8.59%</b>	<b>12.95%</b>	<b>(5.20%)</b>	<b>4.78%</b>
MSCI EM IMI	-	-	5.13%	7.41%	13.56%	(4.11%)	3.93%
Private Equity Burgiss Private Equity Index (Qtr lag) Global Equity + 3% (Qtr lag)(5)	\$6,738	17.89%	<b>1.29%</b>	<b>3.53%</b>	<b>6.47%</b>	<b>8.33%</b>	<b>14.36%</b>
	-	-	0.01%	0.04%	0.05%	3.57%	9.91%
	-	-	9.50%	22.99%	29.05%	12.21%	16.52%
Legacy Private Credit Funds (6)	<b>\$379</b>	1.01%	<b>2.63%</b>	<b>5.29%</b>	<b>11.65%</b>	<b>10.68%</b> 7.00%	<b>9.83%</b>
S&P Levered Loan Index + 1% (Qtr la	g) -	-	2.69%	5.87%	13.48%		6.53%
Fixed Income Blmbg U.S. Agg Bond Index	\$6,928 -	18.40% -	<b>0.33%</b> 0.07%	<b>0.15%</b> (0.71%)	<b>3.20%</b> 2.63%	<b>(2.37%)</b> (3.02%)	<b>(0.08%)</b> (0.23%)
Inflation Protection (TIPS) BImbg U.S. TIPS Index	\$1,050 -	2.79% -	<b>0.71%</b> 0.79%	<b>0.54%</b> 0.70%	<b>2.40%</b> 2.71%	<b>(1.98%)</b> (1.33%)	<b>1.60%</b> 2.07%
Real Estate Real Estate Custom Bench (Qtr lag)(7 CPI + 3% (Qtr lag)	\$2,268 () -	6.02% - -	(3.84%) (2.38%) 2.52%	(9.24%) (7.62%) 2.95%	(15.13%) (12.33%) 6.48%	(2.20%) 1.78% 8.65%	<b>1.23%</b> 2.66% 7.21%
Cash	\$1,021	2.71%	<b>1.33%</b>	<b>2.69%</b> 2.63%	<b>5.47%</b>	<b>3.15%</b>	<b>2.23%</b>
3-month Treasury Bill	-	-	1.32%		5.40%	3.03%	2.16%



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

<sup>(1)</sup>The current total fund benchmark consists of: 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

(2) The current public equivalent benchmark consists of: 19% Bloomberg U.S. Agg Bond Index, 34% Russell 3000, 14% MSCI World ex US IMI Index, 12% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 4% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

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

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

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

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

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

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

#### Returns for Periods Ended June 30, 2024

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
Net Performance					•	
Total Fund Total Fund Custom Benchmark(1) Public Market Equiv Benchmark(2) 60/40 Index(3)	<b>6.55%</b> 7.35% 7.62% 5.64%	<b>8.24%</b> 9.02% 9.35% 7.41%	<b>7.04%</b> 7.98% 8.23% 6.33%	<b>6.44%</b> 6.90% 7.09% 5.63%	9.28% ( - - -	(1/81)
U.S. Equity Russell 3000 Index (4) S&P 1500 Index	<b>11.33%</b> 12.15% 12.50%	<b>14.05%</b> 14.49% 14.67%	<b>9.36%</b> 10.17% 10.26%	<b>7.55%</b> 7.82% 7.90%	<b>10.97%</b> ( 11.28% (	. ,
Int'l Developed Mkts Equity MSCI World ex US IMI	<b>5.15%</b> 4.23%	<b>7.90%</b> 6.79%	<b>5.98%</b> 5.82%	- 4.81%		(1/02) (1/02)
Emerging Mkts Equity MSCI EM IMI	<b>3.79%</b> 3.09%	<b>4.99%</b> 5.19%	<b>5.74%</b> 7.51%	- 6.38%		(1/02) (1/02)
Private Equity Burgiss Private Equity Index (Qtr lag) Global Equity + 3% (Qtr lag)(5)	<b>11.88%</b> 10.71% 15.06%	<b>13.08%</b> 12.60% 18.38%	<b>12.33%</b> 12.30% 13.22%	<b>11.66%</b> 11.89% 11.25%		(1/86) (1/86) (1/86)
Legacy Private Credit Funds (6) S&P Levered Loan Index + 1% (Qtr lag)	-	-	-	-		(4/18) (4/18)
Fixed Income Blmbg U.S. Agg Bond Index	<b>1.28%</b> 1.35%	<b>4.00%</b> 2.50%	<b>3.94%</b> 3.12%	<b>4.51%</b> 3.88%		(1/81) (1/81)
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	<b>1.69%</b> 1.91%	<b>2.40%</b> 3.11%	<b>2.90%</b> 3.57%	- 4.74%		(2/03) (2/03)
Real Estate Real Estate Custom Bench (Qtr lag)(7) CPI + 3% (Qtr lag)	<b>3.07%</b> 5.59% 5.83%	<b>4.03%</b> 6.60% 5.60%	<b>4.68%</b> 6.12% 5.59%	<b>5.81%</b> 6.76% 5.59%	-	(3/84) (3/84)
Cash 3-month Treasury Bill	<b>1.75%</b> 1.51%	<b>1.26%</b> 1.04%	<b>1.81%</b> 1.57%	<b>2.27%</b> 1.91%		(1/87) (1/87)

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

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

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



<sup>(1)</sup>The current total fund benchmark consists of: 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index. See page 77 for full benchmark history.

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

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

<sup>(6)</sup> Legacy Private Credit performance is included in the total fund starting at the composite's true inception date,

<sup>07/01/2022.</sup> The history is calculated and shown for informational purposes

The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance- Domestic Equity							
U.S. Equity	\$13,268	100.00%	<b>2.96%</b>	<b>12.92%</b>	<b>22.36%</b> 23.13% 23.52%	<b>7.54%</b>	<b>13.70%</b>
Russell 3000 Index (1)	-	-	3.22%	13.56%		8.05%	14.14%
S&P 1500 Index	-	-	3.66%	14.35%		9.43%	14.59%
MCM Russell 1000 Index	11,777	88.76%	3.56%	14.22%	23.91%	8.93%	14.70%
Russell 1000 Index	-	-	3.57%	14.24%	23.88%	8.74%	14.61%
S&P 500 Index	-	-	4.28%	15.29%	24.56%	10.01%	15.05%
MCM Russell 2000 Core Index	693	5.22%	(3.26%)	2.27%	10.57%	(1.55%)	7.38%
Russell 2000 Index	-	-	(3.28%)	1.73%	10.06%	(2.58%)	6.94%
S&P 600 Index	-	-	(3.11%)	(0.72%)	8.66%	(0.26%)	8.06%
MCM Russell 2000 Val Index	366	2.76%	(3.63%)	(0.84%)	10.88%	(0.45%)	7.15%
Russell 2000 Value Index	-	-	(3.64%)	(0.85%)	10.90%	(0.53%)	7.07%
S&P 600 Value Index	-	-	(4.85%)	(4.72%)	4.20%	(0.79%)	7.42%
Emerald Asset Management	433	3.26%	3.16%	8.84%	14.47%	(1.08%)	7.44%
Russell 2000 Growth Index	-	-	(2.92%)	4.44%	9.14%	(4.86%)	6.17%
S&P 600 Growth Index	-	-	(1.40%)	3.30%	13.03%	0.17%	8.34%

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
Net Performance- Domestic Equity						
U.S. Equity	11.33%	14.05%	9.36%	7.55%	<b>10.97%</b> (1)	1/81)
Russell 3000 Index (1)	12.15%	14.49%	10.17%	7.82%	11.28% (1)	/81)
S&P 1500 Index	12.50%	14.67%	10.26%	7.90%	-	
MCM Russell 1000 Index	12.58%	-	_	-	14.47% (1)	1/12)
Russell 1000 Index	12.51%	14.71%	10.33%	7.82%		/ I/12)
S&P 500 Index	12.86%	14.82%	10.29%	7.67%	14.64% (1)	1/12)
MCM Russell 2000 Core Index	-	-	-	-	7.66% (1:	12/16)
Russell 2000 Index	7.00%	11.24%	7.85%	7.60%	7.38% (1:	12/16)
S&P 600 Index	8.24%	12.63%	9.09%	9.41%	8.01% (1:	12/16)
MCM Russell 2000 Val Index	-	-	_	-	6.09% (1:	12/16)
Russell 2000 Value Index	6.23%	10.59%	7.23%	8.32%	6.06% (1)	12/16)
S&P 600 Value Index	7.18%	11.81%	8.34%	8.92%	6.71% (1:	12/16)
Emerald Asset Management	-	-	-	-	9.87% (1:	12/16)
Russell 2000 Growth Index	7.39%	11.59%	8.21%	6.42%	`	12/16)
S&P 600 Growth Index	9.11%	13.35%	9.73%	9.47%		12/16)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance- International Equity							
Int'l Developed Mkts Equity	\$4,469	100.00%	<b>(0.29%)</b>	<b>5.12%</b>	<b>11.32%</b>	<b>3.16%</b>	<b>7.44%</b>
MSCI World ex US IMI	-	-	(0.73%)	4.41%	10.76%	1.97%	6.29%
Walter Scott & Partners(1)	822	18.39%	(0.0 <mark>8%)</mark>	7.98%	13.48%	5.52%	11.20%
MSCI World		-	2.63%	11.75%	20.19%	6.86%	11.78%
BlackRock MSCI World Ex US Index	3,248	72.66%	(0.37%)	5.24%	11.56%	3.27%	7.00%
MSCI World ex US		-	(0.60%)	4.96%	11.22%	2.82%	6.55%
Xponance Non-U.S. Small Cap	248	5.55%	1.66%	5.75%	12.08%	(1.87%)	4.96%
MSCI ACWI ex US Small Cap		-	0.66%	2.78%	11.26%	(1.45%)	6.13%
Harris Assoc Int'l SCV	148	3.31%	(2.78%)	(2.16%)	5.82%	(0.07%)	7.41%
MSCI World ex US Sm Cap	-	-	(1.56%)	0.98%	7.80%	(2.98%)	4.69%
MSCI World ex US Sm Value	-	-	(1.82%)	1.02%	10.04%	0.16%	5.24%

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



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	Last 10	Last 15	Last 20	Last 25	Since
	Years	Years	Years	Years	Inception
Net Performance- International Equity					
Int'l Developed Mkts Equity	5.15%	7.90%	5.98%	_	<b>6.44%</b> (1/02)
MSCI World ex US IMI	4.23%	6.79%	5.82%	4.81%	6.32% (1/02)
Walter Scott & Partners(1)	10.95%	12.07%	-	-	9.74% (10/06)
MSCI World	9.16%	11.07%	8.20%	6.14%	7.48% (10/06)
BlackRock MSCI World Ex US Index	-	-	-	-	6.26% (6/17)
MSCI World ex US	4.27%	6.68%	5.72%	4.63%	5.80% (6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	3.79% (10/18)
MSCI ACWI ex US Small Cap	4.44%	7.69%	7.08%	6.74%	4.47% (10/18)
Harris Assoc Int'l SCV	4.79%	9.01%	8.39%	-	9.86% (7/03)
MSCI World ex US Sm Cap	4.04%	7.67%	6.36%	-	8.08% (7/03)
MSCI World ex US Sm Value	3.55%	7.34%	6.59%	7.38%	8.26% (7/03)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance- Emerging Mkts Eq	uity						
Emerging Mkts Equity MSCI EM IMI	\$1,523 -	100. <u>0</u> 0%	<b>4.98%</b> 5.13%	<b>8.59%</b> 7.41%	<b>12.95%</b> 13.56%	<b>(5.20%)</b> (4.11%)	<b>4.78%</b> 3.93%
Macquarie Emg Mkts Equity	416	27.34%	7.78%	16.35%	24.95%	(2.43%)	6.23%
MSCI EM		-	5.00%	7.49%	12.55%	(5.07%)	3.10%
Martin Currie Emg Mkts Equity	376	24.71%	3.67%	5.10%	4.42%	(9.55%)	2.64%
MSCI EM	-	-	5.00%	7.49%	12.55%	(5.07%)	3.10%
BlackRock Emg Mkts Index	467	30.69%	5.09%	7.38%	11.94%	(5.35%)	2.79%
MSCI EM		-	5.00%	7.49%	12.55%	(5.07%)	3.10%
Leading Edge Emg Mkts Fund	247	16.21%	3.49%	6.31%	10.12%	(6.17%)	2.35%
MSCI EM	-	-	5.00%	7.49%	12.55%	(5.07%)	3.10%
GlobeFlex Emerging Small Cap MSCI EM Small Cap	16	1.04%	2.74% 5.93%	6.03% 7.04%	14.29% 20.04%	3.79% 2.54%	11.44% 9.99%

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance- Emerging Mkts Equity					•
Emerging Mkts Equity  MSCI EM IMI	<b>3.79%</b> 3.09%	<b>4.99%</b> 5.19%	<b>5.74%</b> 7.51%	- 6.38%	<b>6.67%</b> (1/02) 8.38% (1/02)
Macquarie Emg Mkts Equity	4.29%	-	-	-	4.79% (5/13)
MSCI EM	2.79%	4.90%	7.27%	-	2.88% (5/13)
Martin Currie Emg Mkts Equity MSCI EM	3.46% 2.79%	- 4.90%	- 7.27%	-	3.61% (1/14) 3.24% (1/14)
BlackRock Emg Mkts Index	-	-	-	-	3.26% (7/17)
MSCI EM	2.79%	4.90%	7.27%	-	3.54% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	-	4.09% (11/18)
MSCI EM	2.79%	4.90%	7.27%	-	4.82% (11/18)
GlobeFlex Emerging Small Cap	6.55%	-	-	-	7.53% (8/13)
MSCI EM Small Cap	5.15%	7.22%	9.29%	7.69%	5.94% (8/13)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Private Equity							
Private Equity	\$6,738	100.00%	<b>1.29%</b>	<b>3.53%</b>	<b>6.47%</b>	<b>8.33%</b>	<b>14.36%</b>
Burgiss Private Equity Index (Qtr lag)	-	-	0.01%	0.04%	0.05%	3.57%	9.91%
Global Equity + 3% (Qtr lag)(1)	-	-	9.50%	22.99%	29.05%	12.21%	16.52%
Buyouts	3,651	54.19%	0.67%	1.95%	4.60%	8.78%	14.41%
Burgiss Buyout Index (Qtr lag)	-	-	0.01%	0.04%	0.06%	4.55%	9.16%
Special Situations	1,724	25.59%	2.42%	6.03%	10.73%	15.21%	17.72%
Burgiss Special Situations Idx (Qtr lag	ı) -	-	0.02%	0.05%	0.08%	2.40%	3.90%
Growth Equity	1,174	17.43%	1.73%	5.88%	7.17%	4.88%	18.00%
Burgiss Venture Capital Index (Qtr lag	a) -	-	0.01%	0.02%	(0.01%)	2.08%	14.94%
Keystone Legacy (2)	188	2.79%	0.54%	(2.65%)	1.19%	(9.28%)	(3.48%)

<sup>(1)</sup> As of 01/01/2020 benchmark consists of 25% MSCI World ex US and 75% Russell 3000 + 3% with a 1 quarter lag. (2) As of 03/31/2024 Keystone Legacy SPV consists of 37 non-core funds, prior performance is reflected in previous sub-asset classes.



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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Private Equity					•
Private Equity	11.88%	13.08%	12.33%	11.66%	<b>11.41%</b> (1/86)
Burgiss Private Equity Index (Qtr lag)	10.71%	12.60%	12.30%	11.89%	16.02% (1/86)
Global Equity + 3% (Qtr lag)(1)	15.06%	18.38%	13.22%	11.25%	14.77% (1/86)
Buyouts	12.68%	14.38%	14.21%	13.32%	13.33% (4/86)
Burgiss Buyout Index (Qtr lag)	10.34%	12.46%	12.84%	11.69%	18.26% (4/86)
Special Situations	12.36%	14.76%	13.45%	13.40%	13.17% (1/95)
Burgiss Special Situations Idx (Qtr lag)	5.30%	8.98%	7.81%	8.93%	9.41% (1/95)
Growth Equity	14.49%	12.85%	9.69%	7.55%	8.51% (1/86)
Burgiss Venture Capital Index (Qtr lag)	14.95%	14.70%	12.24%	11.58%	13.80% (1/86)
Keystone Legacy (2)	-	-	-	-	(3.42%) (7/18)

<sup>(1)</sup> As of 01/01/2020 benchmark consists of 25% MSCI World ex US and 75% Russell 3000 + 3% with a 1 quarter lag. (2) As of 03/31/2024, Keystone Legacy SPV consists of 37 non-core funds, prior performance is reflected in previous sub-asset classes.



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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Net Performance - Fixed Income	4()						
Fixed Income (1) Blmbg U.S. Agg Bond Index	\$6,928 -	100.00% -	<b>0.33%</b> 0.07%	<b>0.15%</b> (0.71%)	<b>3.20%</b> 2.63%	<b>(2.37%)</b> (3.02%)	<b>(0.08%)</b> (0.23%)
Core Fixed Income Blmbg U.S. Agg Bond Index	\$4,498 -	64.93% -	<b>0.13%</b> 0.07%	<b>(0.38%)</b> (0.71%)	<b>2.92%</b> 2.63%	<b>(2.49%)</b> (3.02%)	<b>0.05%</b> (0.23%)
PIMCO Core Bond Fund Blmbg Agg ex Treasury	545 -	7.87% -	0.21% 0.04%	(0.19%) (0.60%)	3.54% 3.41%	(2.55%) (2.83%)	0.30% (0.01%)
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	3,953 -	57.06% -	0.12% 0.07%	(0.50%) (0.71%)	2.74% 2.63%	(2.97%) (3.02%)	(0.24%) (0.23%)
Opportunistic Fixed Income	\$824	11.90%	2.41%	5.07%	9.61%	7.68%	6.48%
BAAM Keystone (3) HFRI FOF Comp Index	824 -	11.90% -	2.41% 0.61%	5.07% 4.81%	9.61% 8.70%	7.20% 2.12%	7.53% 4.82%
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	\$1,559 -	22.50%	<b>(0.31%)</b> (0.36%)	<b>(1.32%)</b> (2.03%)	<b>(0.84%)</b> (0.66%)	<b>(5.51%)</b> (5.23%)	<b>(2.17%)</b> (1.77%)
Mellon US Treasury Index	1,559	22.50%	-	-	-	-	-
Legacy Fixed Income	\$47	0.68%	2.34%	11.26%	8.84%	-	-
Fidelity HY CMBS (4) Blmbg US CMBS Ex AAA Index (5)	47	0.67% -	2.36% 1.07%	11.87% 2.80%	9.44% 7.49%	0.38% (2.95%)	0.72% 0.09%

<sup>(4)</sup> Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter. (5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA



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<sup>(1)</sup> Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the

<sup>(1)</sup> Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.
(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.
(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2020, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

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			,		
	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Fixed Income					
Fixed Income (1) Blmbg U.S. Agg Bond Index	<b>1.28%</b> 1.35%	<b>4.00%</b> 2.50%	<b>3.94%</b> 3.12%	<b>4.51%</b> 3.88%	<b>7.43%</b> (1/81) 6.73% (1/81)
Core Fixed Income Blmbg U.S. Agg Bond Index	<b>1.56%</b> 1.35%	<b>3.30%</b> 2.50%	<b>3.48%</b> 3.12%	- 3.88%	<b>3.76%</b> (1/02) <b>3.41%</b> (1/02)
PIMCO Core Bond Fund Blmbg Agg ex Treasury	1.73% 1.59%	- 2.86%	- -	- -	1.63% (1/13) 1.64% (1/13)
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	1.32% 1.35%	2.42% 2.50%	3.04% 3.12%	3.85% 3.94%	6.21% (4/84) -
Opportunistic Fixed Income	4.42%	-	-	-	<b>5.37%</b> (10/12)
BAAM Keystone (3) HFRI FOF Comp Index	5.95% 3.50%	- 3.75%	- 3.46%	- 4.16%	7.48% (7/12) 4.15% (7/12)
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	<b>0.45%</b> 0.54%	- 2.00%	- 2.87%	<b>-</b> 3.52%	<b>0.68%</b> (9/11) 0.88% (9/11)
Mellon US Treasury Index	-	-	-	-	2.48% (5/24)
Legacy Fixed Income	-	-	-	-	<b>2.49%</b> (7/22)
Fidelity HY CMBS (4) Blmbg US CMBS Ex AAA Index (5)	2.80% 2.19%	8.76% 6.69%	5.58% 1.04%	6.80% 2.98%	7.16% (4/97) 3.35% (4/97)

<sup>(4)</sup> Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter. (5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.



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

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	Market			Year	Last	Last	
	Value	Ending	Last	to	Last	3	5
	\$(mm)	Weight	Quarter	Date	Year	Years	Years
Net Performance - Inflation Protection							
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	\$1,050 -	100.00%	<b>0.71%</b> 0.79%	<b>0.54%</b> 0.70%	<b>2.40%</b> 2.71%	<b>(1.98%)</b> (1.33%)	<b>1.60%</b> 2.07%
NISA Inv Adv TIPS Blmbg U.S. TIPS Index (1)	459 -	43.70% -	0.93% 0.79%	0.95% 0.70%	2.76% 2.71%	(1.31%) (1.33%)	2.06% 2.07%
Brown Brothers TIPS Blmbg U.S. TIPS Index	480	45.72% -	0.88% 0.79%	0.85% 0.70%	2.58% 2.71%	(1.44%) (1.33%)	1.97% 2.07%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	111 -	10.59% -	(0.86%) (0.67%)	(2.43%) (2.22%)	0.21% 0.53%	(6.26%) (5.85%)	(1.09%) (0.98%)

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	Last 10	Last 15	Last 20	Last 25	Since
	Years	Years	Years	Years	Inception
Net Performance - Inflation Protection					
Inflation Protection (TIPS)	1.69%	2.40%	2.90%	-	<b>2.85%</b> (2/03)
Blmbg U.S. TIPS Index	1.91%	3.11%	3.57%	4.74%	3.77% (2/03)
NISA Inv Adv TIPS	1.91%	2.42%	-	-	2.80% (4/07)
Blmbg U.S. TIPS Index (1)	1.91%	2.42%	3.03%	4.31%	2.80% (4/07)
Brown Brothers TIPS	1.93%	-	-	-	1.70% (2/12)
Blmbg U.S. TIPS Index	1.91%	3.11%	3.57%	4.74%	1.63% (2/12)
New Century Global TIPS	0.25%	-	-	-	0.80% (2/12)
Blmbg Wrld Inflation Linked Unhdg	0.21%	2.01%	2.88%	4.13%	0.61% (2/12)

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	Market			Year to		Last	Last
	Value \$(mm)	Ending Weight			Last Year	3 Years	5 Years
Net Performance - Real Estate	, ,						
Real Estate	<b>\$2,268</b> (1) -	100.00%	(3.84%)	(9.24%)	(15.13%)	(2.20%)	<b>1.23%</b>
Real Estate Custom Bench (Qtr lag)		-	(2.38%)	(7.62%)	(12.33%)	1.78%	2.66%
CPI +3% (Qtr lag)		-	2.52%	2.95%	6.48%	8.65%	7.21%
Core/Core Plus Real Estate Funds	1,098	48.42%	1.12%	(5.29%)	(7.95%)	3.10%	3.60%
NCREIF ODCE Index (Qtr lag)	-	-	(2.38%)	(7.62%)	(12.33%)	2.81%	2.98%
Value Add/Opportunistic SMA	283	12.47%	(24.82%)	(30.79%)	(44.65%)	(18.51%)	(9.08%)
NCREIF ODCE Index (Qtr lag)		-	(2.38%)	(7.62%)	(12.33%)	2.81%	2.98%
Value Add/Opportunistic Funds	756	33.32%	(1.01%)	(5.03%)	(9.92%)	1.13%	3.45%
NCREIF ODCE Index (Qtr lag)	-	-	(2.38%)	(7.62%)	(12.33%)	2.81%	2.98%
REITS	131	5.79%	0.66%	0.26%	8.10%	0.38%	4.81%
FTSE NAREIT US Index	-	-	(0.20%)	(0.81%)	6.71%	(0.39%)	3.04%

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



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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Real Estate					-
Real Estate	3.07%	4.03%	4.68%	5.81%	<b>7.47%</b> (3/84)
Real Estate Custom Bench (Qtr lag) (1)	5.59%	6.60%	6.12%	6.76%	-
CPI +3% (Qtr lag)	5.83%	5.60%	5.59%	5.59%	5.83% (3/84)
Core/Core Plus Real Estate Funds	6.27%	7.02%	6.73%	7.06%	6.68% (9/86)
NCREIF ODCE Index (Qtr lag)	6.15%	5.99%	5.98%	6.38%	5.62% (9/86)
Value Add/Opportunistic SMA	(3.56%)	(2.10%)	0.63%	2.12%	2.98% (6/88)
NCREIF ODCE Index (Qtr lag)	6.15%	5.99%	5.98%	6.38%	5.64% (6/88)
Value Add/Opportunistic Funds	5.87%	6.11%	6.12%	6.95%	7.31% (3/84)
NCREIF ODCE Index (Qtr lag)	6.15%	5.99%	5.98%	6.38%	5.88% (3/84)
REITS	5.43%	11.13%	7.12%	9.17%	8.98% (4/96)
FTSE NAREIT US Index	5.85%	12.98%	6.98%	9.03%	9.23% (4/96)

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



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	Market			Year to	Last	Last 3 Years	Last 5
	Value	Ending	Last				
	\$(mm)	Weight	Quarter	Date	Year		Years
Net Performance - DWDO Managers	,						
Xponance Non-U.S. Small Cap MSCI ACWI ex US Small Cap	248	0.66%	1.66% 0.66%	5.75% 2.78%	12.08% 11.26%	(1.87%) (1.45%)	4.96% 6.13%
Leading Edge Emg Mkts Fund MSCI EM	247 -	0.66% -	3.49% 5.00%	6.31% 7.49%	10.12% 12.55%	(6.17%) (5.07%)	2.35% 3.10%
GlobeFlex Emerging Small Cap MSCI EM Small Cap	16 -	0.04%	2.74% 5.93%	6.03% 7.04%	14.29% 20.04%	3.79% 2.54%	11.44% 9.99%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	111	0.30%	(0.86%) (0.67%)	(2.43%) (2.22%)	0.21% 0.53%	(6.26%) (5.85%)	(1.09%) (0.98%)

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - DWDO Managers			1 00.10		
Xponance Non-U.S. Small Cap	-	-	-	-	3.79% (10/18)
MSCI ACWI ex US Small Cap	4.44%	7.69%	7.08%	6.74%	4.47% (10/18)
Leading Edge Emg Mkts Fund	-	-	-	-	4.09% (11/18)
MSCIEM	2.79%	4.90%	7.27%	-	4.82% (11/18)
GlobeFlex Emerging Small Cap	6.55%	-	-	-	7.53% (8/13)
MSCI EM Small Cap	5.15%	7.22%	9.29%	7.69%	5.94% (8/13)
New Century Global TIPS	0.25%	_	-	-	0.80% (2/12)
Blmbg Wrld Inflation Linked Unhdg	0.21%	2.01%	2.88%	4.13%	0.61% (2/12)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance	<del></del>						
Total Fund (2) Total Fund Estimated Gross Hist Total Fund Custom Benchmark Public Market Equiv Benchmark 60/40 Index	-	<b>100.00%</b> 100.00% - - -	<b>1.46%</b> 1.46% 1.46% 3.01% 1.46%	<b>5.43%</b> 5.43% 5.40% 9.02% 5.80%	<b>10.37%</b> 10.37% 10.62% 15.46% 11.94%	<b>4.16%</b> 4.16% 3.91% 4.85% 1.73%	8.25% 8.12% 8.55% 6.30%
U.S. Equity Russell 3000 Index (1) S&P 1500 Index	\$13,269 - -	35.23% - -	<b>2.96%</b> 3.22% 3.66%	<b>12.94%</b> 13.56% 14.35%	<b>22.39%</b> 23.13% 23.52%	<b>7.57%</b> 8.05% 9.43%	<b>13.75%</b> 14.14% 14.59%
Int'l Developed Mkts Equity MSCI World ex US IMI	\$4,471 -	11.87% -	<b>(0.25%)</b> (0.73%)	<b>5.20%</b> 4.41%	<b>11.46%</b> 10.76%	<b>3.29%</b> 1.97%	<b>7.59%</b> 6.29%
Emerging Mkts Equity MSCI EM IMI	\$1,523 -	4.04% -	<b>5.10%</b> 5.13%	<b>8.82%</b> 7.41%	<b>13.43%</b> 13.56%	<b>(4.74%)</b> (4.11%)	<b>5.29%</b> 3.93%
Private Equity (2) Burgiss Private Equity Index (Qtr Global Equity +3% (Qtr lag)	\$6,738 lag) - -	17.89% - -	<b>1.77%</b> 0.01% 9.50%	<b>4.63%</b> 0.04% 22.99%	<b>8.62%</b> 0.05% 29.05%	<b>11.26%</b> 3.57% 12.21%	9.91% 16.52%
Legacy Private Credit (3) S&P Levered Loan Index +1% (0	<b>\$379</b> Qtr Lag) -	1.01% -	<b>3.67%</b> 2.69%	<b>7.31%</b> 5.87%	<b>14.98%</b> 13.48%	<b>13.56%</b> 7.06%	- 6.57%
Fixed Income Blmbg U.S. Agg Bond Index	\$6,928 -	18.40% -	<b>0.37%</b> 0.07%	<b>0.23%</b> (0.71%)	<b>3.38%</b> 2.63%	<b>(2.22%)</b> (3.02%)	<b>0.10%</b> (0.23%)
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	\$1,050 -	2.79% -	<b>0.74%</b> 0.79%	<b>0.59%</b> 0.70%	<b>2.51%</b> 2.71%	<b>(1.88%)</b> (1.33%)	<b>1.71%</b> 2.07%
Real Estate (2) Real Estate Custom Benchmark CPI +3% (Qtr lag)	<b>\$2,269</b> (Qtr lag) <i>-</i> -	6.02% - -	(3.73%) (2.38%) 2.52%	(9.69%) (7.62%) 2.95%	(15.12%) (12.33%) 6.48%	(1.09%) 1.78% 8.65%	2.66% 7.21%
Cash 3-month Treasury Bill	\$1,021 -	2.71% -	<b>1.33%</b> 1.32%	<b>2.69%</b> 2.63%	<b>5.47%</b> 5.40%	<b>3.16%</b> 3.03%	<b>2.24%</b> 2.16%



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<sup>(1)</sup> Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.
(2) The Total Fund Estimated Gross History is calculated by BNY Mellon using a gross-up methodology through 12/31/2019. Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including Private Equity, Legacy Private Credit, and Real Estate, for which gross history was not previously calculated.
(3) Legacy Private Credit performance is included in the total fund starting at the composite's true inception date, 07/01/2022. The history is calculated and shown for informational purposes.

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance					•
Total Fund (2)	_	_	_	_	<b>7.76%</b> (1/20
Total Fund Estimated Gross History (2)	7.26%	9.00%	7.84%	7.22%	8.39% (1/96
Total Fund Custom Benchmark	7.35%	9.02%	7.98%	6.90%	8.05% (1/96
Public Market Equiv Benchmark	7.62%	9.35%	8.23%	7.09%	8.22% (1/96
60/40 Index	5.64%	7.41%	6.33%	5.63%	6.31% (1/96
U.S. Equity	11.42%	14.17%	9.49%	7.67%	<b>11.03%</b> (1/81
Russell 3000 Index (1)	12.15%	14.49%	10.17%	7.82%	11.28% (1/81
S&P 1500 Index	12.50%	14.67%	10.26%	7.90%	-
Int'l Developed Mkts Equity	5.33%	8.13%	6,25%	_	<b>6.72%</b> (1/02
MSCI World ex US IMI	4.23%	6.79%	5.82%	4.81%	6.32% (1/02
Emerging Mkts Equity	4.33%	5.45%	6.17%	-	<b>7.06%</b> (1/02
MSCI EM IMI	3.09%	5.19%	7.51%	6.38%	8.38% (1/02
Private Equity (2)	-	_	-	-	<b>19.62%</b> (1/20
Burgiss Private Equity Index (Qtr lag)	10.71%	12.60%	12.30%	11.89%	10.05% (1/20
Global Equity +3% (Qtr lag)	15.06%	18.38%	13.22%	11.25%	16.76% (1/20
Legacy Private Credit (3)		_	_	_	<b>13.68%</b> (1/20
S&P Levered Loan Index +1% (Qtr Lag)	-	-	-	-	6.54% (1/20
Fixed Income	1.50%	4.21%	4.17%	4.74%	<b>6.72%</b> (1/85
Blmbg U.S. Agg Bond Index	1.35%	2.50%	3.12%	3.88%	5.91% (1/85
Inflation Protection (TIPS)	1.81%	2.52%	3.02%	-	<b>2.97%</b> (2/03
Blmbg U.S. TIPS Index	1.91%	3.11%	3.57%	4.74%	3.77% (2/03
Real Estate (2)	-	_	_	-	<b>1.57%</b> (1/20
Real Estate Custom Benchmark (Qtr lag)	5.59%	6.60%	6.12%	6.76%	2.35% (1/20
CPI +3% (Qtr lag)	5.83%	5.60%	5.59%	5.59%	7.45% (1/20
Cash	1.75%	1.27%	1.85%	2.21%	<b>3.82%</b> (1/87
3-month Treasury Bill	1.51%	1.04%	1.57%	1.91%	3.20% (1/87

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



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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance- Domestic Equit		TTO:gnt	<del>Quality</del>			100.0	
U.S. Equity Russell 3000 Index(1) S&P 1500 Index	\$13,269 - -	100.00% - -	<b>2.96%</b> 3.22% 3.66%	<b>12.94%</b> 13.56% 14.35%	<b>22.39%</b> 23.13% 23.52%	<b>7.57%</b> 8.05% 9.43%	<b>13.75%</b> 14.14% 14.59%
MCM Russell 1000 Index	11,777	88.76%	3.56%	14.23%	23.92%	8.94%	14.71%
Russell 1000 Index	-	-	3.57%	14.24%	23.88%	8.74%	14.61%
S&P 500 Index	-	-	4.28%	15.29%	24.56%	10.01%	15.05%
MCM Russell 2000 Core Index	693	5.22%	(3.26%)	2.28%	10.59%	(1.52%)	7.40%
Russell 2000 Index	-	-	(3.28%)	1.73%	10.06%	(2.58%)	6.94%
S&P 600 Index	-	-	(3.11%)	(0.72%)	8.66%	(0.26%)	8.06%
MCM Russell 2000 Val Index	366	2.76%	(3.63%)	(0.83%)	10.90%	(0.43%)	7.17%
Russell 2000 Value Index	-	-	(3.64%)	(0.85%)	10.90%	(0.53%)	7.07%
S&P 600 Value Index	-	-	(4.85%)	(4.72%)	4.20%	(0.79%)	7.42%
Emerald Asset Management	433	3.26%	3.28%	9.10%	15.01%	(0.60%)	7.97%
Russell 2000 Growth Index	-	-	(2.92%)	4.44%	9.14%	(4.86%)	6.17%
S&P 600 Growth Index	-	-	(1.40%)	3.30%	13.03%	0.17%	8.34%

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	n
Gross Performance- Domestic Equity					•	
U.S. Equity	11.42%	14.17%	9.49%	7.67%	11.03%	(1/81)
Russell 3000 Index(1)	12.15%	14.49%	10.17%	7.82%	11.28%	(1/81)
S&P 1500 Index	12.50%	14.67%	10.26%	7.90%	-	
MCM Russell 1000 Index	12.58%	-	_	-	14.48%	(1/12)
Russell 1000 Index	12.51%	14.71%	10.33%	7.82%	14.45%	(1/12)
S&P 500 Index	12.86%	14.82%	10.29%	7.67%	14.64%	(1/12)
MCM Russell 2000 Core Index	-	-	-	-	7.68%	(12/16)
Russell 2000 Index	7.00%	11.24%	7.85%	7.60%	7.38%	(12/16)
S&P 600 Index	8.24%	12.63%	9.09%	9.41%	8.01%	(12/16)
MCM Russell 2000 Val Index	-	-	-	-	6.11%	(12/16)
Russell 2000 Value Index	6.23%	10.59%	7.23%	8.32%	6.06%	(12/16)
S&P 600 Value Index	7.18%	11.81%	8.34%	8.92%	6.71%	(12/16)
Emerald Asset Management	-	-	_	_	10.39%	(12/16)
Russell 2000 Growth Index	7.39%	11.59%	8.21%	6.42%	8.24%	(12/16)
S&P 600 Growth Index	9.11%	13.35%	9.73%	9.47%	9.08%	(12/16)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance - International Equ	ity						
Int'l Developed Mkts Equity	\$4,471	100. <u>0</u> 0%	<b>(0.25%)</b>	<b>5.20%</b>	<b>11.46%</b>	<b>3.29%</b>	<b>7.59%</b>
MSCI World ex US IMI	-		(0.73%)	4.41%	10.76%	1.97%	6.29%
Walter Scott & Partners (1)	823	18.41%	0.02%	8.19%	13.93%	5.95%	11.69%
MSCI World		-	2.63%	11.75%	20.19%	6.86%	11.78%
BlackRock MSCI World Ex US Index	3,248	72.65%	(0.37%)	5.24%	11.57%	3.28%	7.01%
MSCI World ex US		-	(0.60%)	4.96%	11.22%	2.82%	6.55%
Xponance Non-U.S. Small Cap	248	5.55%	1.84%	6.10%	12.84%	(1.20%)	5.68%
MSCI ACWI ex US Small Cap		-	0.66%	2.78%	11.26%	(1.45%)	6.13%
Harris Assoc Int'l SCV	148	3.32%	(2.58%)	(1.77%)	6.66%	0.73%	8.43%
MSCI World ex US Sm Cap	-	-	(1.56%)	0.98%	7.80%	(2.98%)	4.69%
MSCI World ex US Sm Value	-	-	(1.82%)	1.02%	10.04%	0.16%	5.24%

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



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The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - International Equity					
Int'l Developed Mkts Equity	5.33%	8.13%	6.25%	-	<b>6.72%</b> (1/02)
MSCI World ex US IMI	4.23%	6.79%	5.82%	4.81%	6.32% (1/02)
Walter Scott & Partners (1)	11.41%	12.53%	-	-	10.20% (10/06)
MSCI World	9.16%	11.07%	8.20%	6.14%	7.48% (10/06)
BlackRock MSCI World Ex US Index	-	-	-	-	6.27% (6/17)
MSCI World ex US	4.27%	6.68%	5.72%	4.63%	5.80% (6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	4.40% (10/18)
MSCI ACWI ex US Small Cap	4.44%	7.69%	7.08%	6.74%	4.47% (10/18)
Harris Assoc Int'l SCV	5.61%	9.83%	9.20%	-	10.67% (7/03)
MSCI World ex US Sm Cap	4.04%	7.67%	6.36%	-	8.08% (7/03)
MSCI World ex US Sm Value	3.55%	7.34%	6.59%	7.38%	8.26% (7/03)

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



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	Market			Year		Last 3	Last 5	
	Value	Ending	Last	to	Last			
	\$(mm)	Weight	Quarter	Date	Year	Years	Years	
Gross Performance - Emerging Mkts	Equity							
Emerging Mkts Equity	\$1,523	100. <u>0</u> 0%	<b>5.10%</b>	<b>8.82%</b>	<b>13.43%</b>	<b>(4.74%)</b>	<b>5.29%</b>	
MSCI EM IMI	-		5.13%	7.41%	13.56%	(4.11%)	3.93%	
Macquarie Emg Mkts Equity	416	27.34%	7.93%	16.67%	25.64%	(1.89%)	6.80%	
MSCI EM		-	5.00%	7.49%	12.55%	(5.07%)	3.10%	
Martin Currie Emg Mkts Equity	376	24.71%	3.79%	5.35%	4.92%	(9.10%)	3.17%	
MSCI EM	-	-	5.00%	7.49%	12.55%	(5.07%)	3.10%	
BlackRock Emg Mkts Index	468	30.69%	5.10%	7.41%	12.00%	(5.29%)	2.87%	
MSCI EM		-	5.00%	7.49%	12.55%	(5.07%)	3.10%	
Leading Edge Emg Mkts Fund	247	16.20%	3.70%	6.74%	11.01%	(5.42%)	3.15%	
MSCI EM	-	-	5.00%	7.49%	12.55%	(5.07%)	3.10%	
GlobeFlex Emerging Small Cap MSCI EM Small Cap	16	1.06%	2.91% 5.93%	6.37% 7.04%	15.02% 20.04%	4.46% 2.54%	12.18% 9.99%	

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - Emerging Mkts Equity					•
Emerging Mkts Equity  MSCI EM IMI	<b>4.33%</b> 3.09%	<b>5.45%</b> 5.19%	<b>6.17%</b> 7.51%	- 6.38%	<b>7.06%</b> (1/02) 8.38% (1/02)
Macquarie Emg Mkts Equity	4.97%	-	-	-	5.44% (5/13)
MSCI EM	2.79%	4.90%	7.27%	-	2.88% (5/13)
Martin Currie Emg Mkts Equity MSCI EM	4.01%	-	-	-	4.15% (1/14)
	2.79%	4.90%	7.27%	-	3.24% (1/14)
BlackRock Emg Mkts Index	-	-	-	-	3.33% (7/17)
MSCI EM	2.79%	4.90%	7.27%	-	3.54% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	-	4.81% (11/18)
MSCI EM	2.79%	4.90%	7.27%	-	4.82% (11/18)
GlobeFlex Emerging Small Cap	7.23%	-	-	-	8.19% (8/13)
MSCI EM Small Cap	5.15%	7.22%	9.29%	7.69%	5.94% (8/13)

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### Returns for Periods Ended June 30, 2024

	Market Value	Ending	Last	Year to	Last	Last 3	Since
Gross Performance - Private Equity	\$(mm)	Weight	Quarter	Date	Year	Years	Inception
Private Equity (1)  Burgiss All Private Equity (Qtr Lag) Global Equity +3% (Qtr lag) (2)	\$6,738 - -	100.00% - -	<b>1.77%</b> 0.01% 9.50%	<b>4.63%</b> 0.04% 22.99%	<b>8.62%</b> 0.05% 29.05%	<b>11.26%</b> 3.57% 12.21%	<b>19.62%</b> (1/20) 10.05% (1/20) 16.76% (1/20)
Buyouts Burgiss Buyout Index (Qtr Lag)	3,651 -	54.19% -	1.11% 0.01%	2.78% 0.04%	6.39% 0.06%	11.81% 4.55%	19.51% (1/20) 9.36% (1/20)
Special Situations Burgiss Special Sits Index (Qtr Lag)	1,724	25.59% -	3.42% 0.02%	7.98% 0.05%	14.05% 0.08%	19.01% 2.40%	21.95% (1/20) 3.99% (1/20)
Growth Equity Burgiss Venture Capital Idx (Qtr Lag	1,174 j) -	17.43% -	1.61% 0.01%	6.78% 0.02%	9.13% (0.01%)	7.10% 2.08%	24.27% (1/20) 15.09% (1/20)
Keystone Legacy (3)	188	2.79%	0.85%	(2.35%)	1.81%	(6.54%)	(0.35%) (1/20)

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<sup>(1)</sup> Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including Private Equity, Private Credit, and Real Estate, for which gross history was not previously calculated.
(2) As of 01/01/2020 benchmark is 25% MSCI World ex US Index and 75% Russell 3000 + 3% with a 1 Qtr lag.
(3) As of 03/31/2024, Keystone Legacy SPV consists of 37 non-core funds, prior performance reflected in previous

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Fixed Income							
Fixed Income (1) Blmbg U.S. Agg Bond Index	\$6,928 -	100.00% -	<b>0.37%</b> 0.07%	<b>0.23%</b> (0.71%)	<b>3.38%</b> 2.63%	<b>(2.22%)</b> (3.02%)	<b>0.10%</b> (0.23%)
Core Fixed Income Blmbg U.S. Agg Bond Index	\$4,498 -	64.93% -	<b>0.14%</b> 0.07%	<b>(0.36%)</b> (0.71%)	<b>2.95%</b> 2.63%	<b>(2.45%)</b> (3.02%)	<b>0.11%</b> (0.23%)
PIMCO Core Bond Fund Blmbg Agg ex Treasury	545 -	7.87% -	0.25% 0.04%	(0.08%) (0.60%)	3.74% 3.41%	(2.34%) (2.83%)	0.55% (0.01%)
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	3,953 -	57.06% -	0.12% 0.07%	(0.50%) (0.71%)	2.75% 2.63%	(2.95%) (3.02%)	(0.23%) (0.23%)
Opportunistic Fixed Income	\$824	11.89%	2.68%	5.63%	10.82%	8.69%	7.33%
BAAM Keystone (3) HFRI FOF Comp Index	824 -	11.89% -	2.68% 0.61%	5.63% 4.81%	10.82% 8.70%	8.20% 2.12%	8.41% 4.82%
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	\$1,559 -	22.50%	<b>(0.30%)</b> (0.36%)	<b>(1.31%)</b> (2.03%)	<b>(0.83%)</b> (0.66%)	<b>(5.39%)</b> (5.23%)	<b>(2.06%)</b> (1.77%)
Mellon US Treasury Index	1,559	22.50%	-	-	-	-	-
Legacy Fixed Income	\$47	0.68%	2.51%	11.62%	9.57%	-	-
Fidelity HY CMBS (4) Blmbg US CMBS Ex AAA Index (5	) -	0.67% -	2.53% 1.07%	12.24% 2.80%	10.18% 7.49%	1.01% (2.95%)	1.38% 0.09%

<sup>(4)</sup> Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter. (5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA



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<sup>(1)</sup> Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the

<sup>(1)</sup> Fixed Income included the new fixed income sub-composite from 03/01/2021 to 06/30/2022. On 07/01/2022, the sub-composites of the new fixed income structure was liquidated and the managers reorganized under Core Fixed Income, Opportunistic Fixed Income, Nominal US Treasuries and Legacy Fixed Income sub-composites.
(2) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.
(3) Blackstone Keystone since inception returns were included in the Legacy Hedge Fund composite through 9/30/2017, included in the Multi-Strategy composite from 10/01/2017 through 12/31/2019, included in the Opportunistic Fixed composite from 01/01/2020 through 12/31/2020, included in the Private Credit from 01/01/2021 through 09/30/2021 and Opportunistic Fixed composite, thereafter.

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - Fixed Income					<u> </u>
Fixed Income (1) BImbg U.S. Agg Bond Index	<b>1.50%</b> 1.35%	<b>4.21%</b> 2.50%	<b>4.17%</b> 3.12%	<b>4.74%</b> 3.88%	<b>6.72%</b> (1/85) 5.91% (1/85)
Core Fixed Income Blmbg U.S. Agg Bond Index	<b>1.65%</b> 1.35%	<b>3.43%</b> 2.50%	<b>3.63%</b> 3.12%	<b>-</b> 3.88%	<b>3.90%</b> (1/02) 3.41% (1/02)
PIMCO Core Bond Fund Blmbg Agg ex Treasury	1.95% 1.59%	- 2.86%	- -	- -	1.84% (1/13) 1.64% (1/13)
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	1.34% 1.35%	2.45% 2.50%	3.08% 3.12%	3.89% 3.94%	4.35% (10/93) 4.39% (10/93)
Opportunistic Fixed Income	5.15%	-	-	-	<b>6.11%</b> (10/12)
BAAM Keystone (3) HFRI FOF Comp Index	6.39% 3.50%	- 3.75%	- 3.46%	- 4.16%	7.85% (7/12) 4.15% (7/12)
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	<b>0.56%</b> 0.54%	- 2.00%	- 2.87%	- 3.52%	<b>0.78%</b> (9/11) 0.88% (9/11)
Mellon US Treasury Index	-	-	-	-	2.48% (5/24)
Legacy Fixed Income	-	-	-	-	<b>3.17%</b> (7/22)
Fidelity HY CMBS (4) BImbg US CMBS Ex AAA Index (5)	3.46% 2.19%	9.46% 6.69%	6.28% 1.04%	7.50% 2.98%	7.84% (4/97) 3.35% (4/97)

<sup>(4)</sup> Fidelity was included in the Opportunistic Fixed composite prior to 03/01/2021, included in the High Yield under the new fixed income structure from 03/01/2021 through 06/30/2022, and Legacy Fixed Income Structure, thereafter. (5) Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and BImbg US CMBS Ex AAA Index, thereafter.



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

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	Market Value	Ending	Last	Year to	Last	Last 3	Last 5
	\$(mm)	Weight	Quarter	Date	Year	Years	Years
Gross Performance - Inflation Protecti	on						
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	\$1,050 -	100.00% -	<b>0.74%</b> 0.79%	<b>0.59%</b> 0.70%	<b>2.51%</b> 2.71%	<b>(1.88%)</b> (1.33%)	<b>1.71%</b> 2.07%
NISA Inv Adv TIPS Blmbg U.S. TIPS Index (1)	459 -	43.70% -	0.95% 0.79%	1.00% 0.70%	2.86% 2.71%	(1.20%) (1.33%)	2.17% 2.07%
Brown Brothers TIPS Blmbg U.S. TIPS Index	480	45.71% -	0.90% 0.79%	0.89% 0.70%	2.67% 2.71%	(1.36%) (1.33%)	2.06% 2.07%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	111 ı -	10.59% -	(0.80%) (0.67%)	(2.31%) (2.22%)	0.45% 0.53%	(6.04%) (5.85%)	(0.85%) (0.98%)

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - Inflation Protection					<u> </u>
Inflation Protection (TIPS)	1.81%	2.52%	3.02%	-	<b>2.97%</b> (2/03)
Blmbg U.S. TIPS Index	1.91%	3.11%	3.57%	4.74%	3.77% (2/03)
NISA Inv Adv TIPS	2.02%	2.52%	-	-	2.90% (4/07)
Blmbg U.S. TIPS Index (1)	1.91%	2.42%	3.03%	4.31%	2.80% (4/07)
Brown Brothers TIPS	2.04%	-	-	-	1.81% (2/12)
Blmbg U.S. TIPS Index	1.91%	3.11%	3.57%	4.74%	1.63% (2/12)
New Century Global TIPS	0.50%	_	-	-	1.04% (2/12)
Blmbg Wrld Inflation Linked Unhdg	0.21%	2.01%	2.88%	4.13%	0.61% (2/12)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Year to Date	Last Year	Last 3 Years	Since Inception
Gross Performance - Real Estate							
Real Estate (1) Real Estate Custom Bench (Qtr lag CPI + 3% (Qtr lag)	<b>\$2,269</b> J) (2) - -	100.00% - -	(3.73%) (2.38%) 2.52%	<b>(9.69%)</b> (7.62%) 2.95%	<b>(15.12%)</b> (12.33%) 6.48%	<b>(1.09%)</b> 1.78% 8.65%	<b>1.57%</b> (1/20) 2.35% (1/20) 7.45% (1/20)
Core/Core Plus Real Estate Funds	1,098	48.42%	1.39%	(4.92%)	(7.54%)	3.96%	4.35% (1/20)
NCREIF ODCE Index (Qtr lag)	-	-	(2.38%)	(7.62%)	(12.33%)	2.81%	2.79% (1/20)
Value Add/Opportunistic SMA	283	12.47%	(24.57%)	(32.55%)	(45.12%)	(17.97%)	(10.54%) (1/20)
NCREIF ODCE Index (Qtr lag)		-	(2.38%)	(7.62%)	(12.33%)	2.81%	2.79% (1/20)
Value Add/Opportunistic Funds	756	33.32%	(1.23%)	(5.72%)	(10.12%)	3.58%	5.67% (1/20)
NCREIF ODCE Index (Qtr lag)	-		(2.38%)	(7.62%)	(12.33%)	2.81%	2.79% (1/20)
REITS	131	5.79%	0.78%	0.48%	8.60%	0.78%	4.20% (1/20)
FTSE NAREIT US Index	-	-	(0.20%)	(0.81%)	6.71%	(0.39%)	1.93% (1/20)

Starting 01/01/2020 gross performance is calculated for all asset classes and the Total Fund, including
Private Equity, Private Credit, and Real Estate, for which gross history was not previously calculated.
 As of 03/31/2019 benchmark consists of 90% NCREIF ODCE Index (Qtr lag) and 10% FTSE NAREIT Index (unlagged).
Prior to 03/31/2019, benchmark history was provided by RVK.



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	Market			Year	Last	Last	
	Value	Ending	Last	to	Last	3 Years	5
	\$(mm)	Weight	Quarter	Date	Year		Years
Gross Performance - DWDO Managers	;	-					
Xponance Non-U.S. Small Cap MSCI ACWI ex US Small Cap	248	0.66%	1.84% 0.66%	6.10% 2.78%	12.84% 11.26%	(1.20%) (1.45%)	5.68% 6.13%
Leading Edge Emg Mkts Fund MSCI EM	247 -	0.66% -	3.70% 5.00%	6.74% 7.49%	11.01% 12.55%	(5.42%) (5.07%)	3.15% 3.10%
GlobeFlex Emerging Small Cap MSCI EM Small Cap	16 -	0.04%	2.91% 5.93%	6.37% 7.04%	15.02% 20.04%	4.46% 2.54%	12.18% 9.99%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	111 -	0.30%	(0.80%) (0.67%)	(2.31%) (2.22%)	0.45% 0.53%	(6.04%) (5.85%)	(0.85%) (0.98%)

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



The table below details the rates of return for the Fund's investment managers over various time periods ended June 30, 2024. Negative returns are shown in red, positive returns in black. Returns for one year or greater are annualized. The first set of returns for each asset class represents the composite returns for all the fund's accounts for that asset class.

	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Gross Performance - DWDO Managers	i ears	i ears	i ears	i ears	пісерион
Xponance Non-U.S. Small Cap	_	_	<u>-</u>	-	4.40% (10/18)
MSCI ACWI ex US Small Cap	4.44%	7.69%	7.08%	6.74%	4.47% (10/18)
Leading Edge Emg Mkts Fund	-	-	-	-	4.81% (11/18)
MSCIEM	2.79%	4.90%	7.27%	-	4.82% (11/18)
GlobeFlex Emerging Small Cap	7.23%	-	-	-	8.19% (8/13)
MSCI EM Small Cap	5.15%	7.22%	9.29%	7.69%	5.94% (8/13)
New Century Global TIPS	0.50%	-	-	-	1.04% (2/12)
Blmbg Wrld Inflation Linked Unhdg	0.21%	2.01%	2.88%	4.13%	0.61% (2/12)

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



### **Benchmark Definitions**

#### **Total Fund Benchmark Definition:**

- The Total Fund Custom Benchmark returns were provided by RVK prior to 12/31/2018.
- Starting 01/01/2020, benchmark consists of: 26% Bloomberg U.S. Agg Bond Index, 14% SERS Private Equity
  Composite, 25% Russell 3000 Index, 13% MSCI World ex US IMI Index, 8% Real Estate Custom Benchmark, 4%
  S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 4% MSCI Emerging Markets IMI Index, 4% Bloomberg US TIPS
  Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2021, benchmark consists of: 26% Bloomberg U.S. Agg Bond Index, 12% SERS Private Equity
  Composite, 27% Russell 3000 Index, 13% MSCI World ex US IMI Index, 8% Real Estate Custom Benchmark, 4%
  S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 4% MSCI Emerging Markets IMI Index, 4% Bloomberg US TIPS
  Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 10/01/2021, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 12% SERS Private Equity
  Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% Real Estate Custom Benchmark, 4%
  S&P/LSTA Leveraged Loan Index + 1% (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS
  Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 07/01/2022, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 31% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.
- Starting 03/01/2024, benchmark consists of: 19% Bloomberg U.S. Agg Bond Index, 16% SERS Private Equity Composite, 34% Russell 3000 Index, 14% MSCI World ex US IMI Index, 7% NCREIF NFI-ODCE (Qtr lag), 5% MSCI Emerging Markets IMI Index, 3% Bloomberg US TIPS Index, 2% ICE BofAML 3 Mo US T-Bill Index.

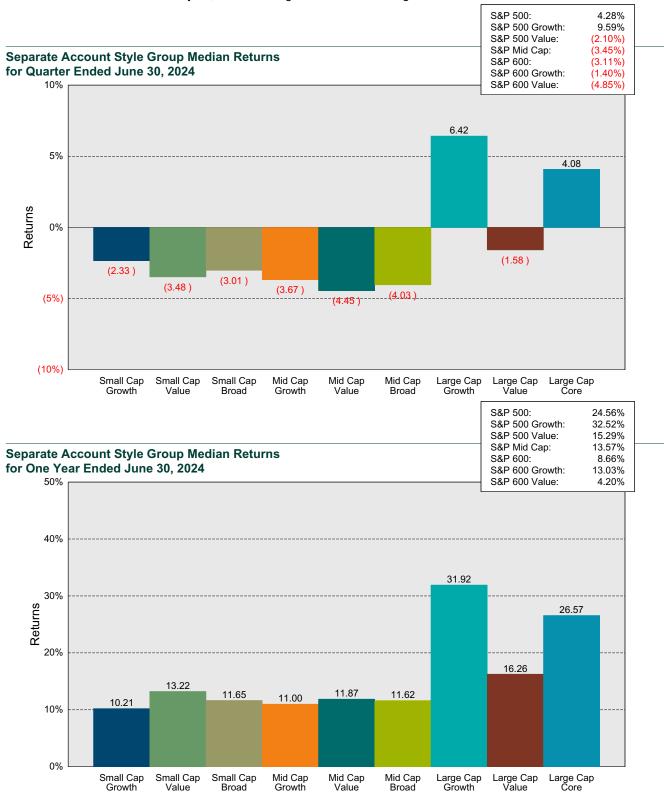
#### **Public Market Equivalent Benchmark Definition:**

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

The S&P 500 Index returned 4.3% in 2Q but dispersion was significant. Sector performance ranged from -4.5% (Materials) to +13.8% (Technology) with 6 of the 11 S&P 500 sectors posting negative 2Q returns. Index returns were driven by a handful of stocks; the 10 largest stocks in the index returned 14% while the equal-weighted S&P 500 fell 2.6% for the quarter. Value (R1000V: -2.2%) sharply underperformed Growth (R1000G:+8.3%) and small cap (R2000: -3.3%) underperformed large (R1000: +3.6%). The Magnificent Seven comprised 33% of the S&P 500 as of quarter-end and, as a group, they climbed 33% in the first six months of the year, far exceeding the S&P 500 ex-Mag Seven return of 5%.



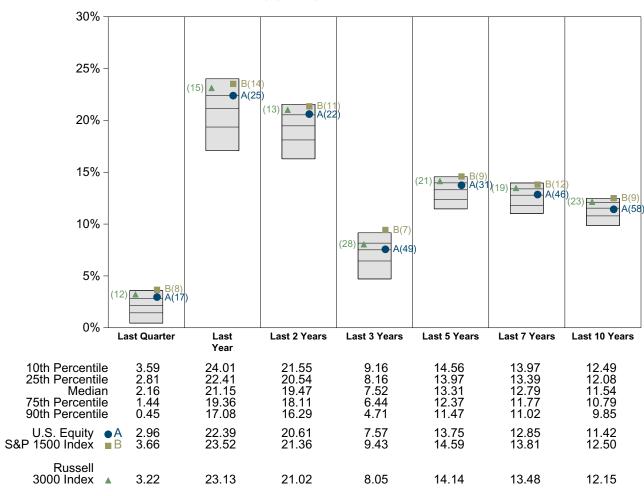


### U.S. Equity Period Ended June 30, 2024

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

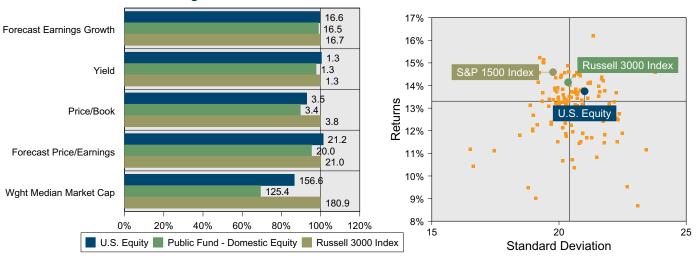
- U.S. Equity's portfolio posted a 2.96% return for the quarter placing it in the 17 percentile of the Public Fund Domestic Equity group for the quarter and in the 25 percentile for the last year.
- U.S. Equity's portfolio underperformed the Russell 3000 Index by 0.25% for the quarter and underperformed the Russell 3000 Index for the year by 0.74%.

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



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

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



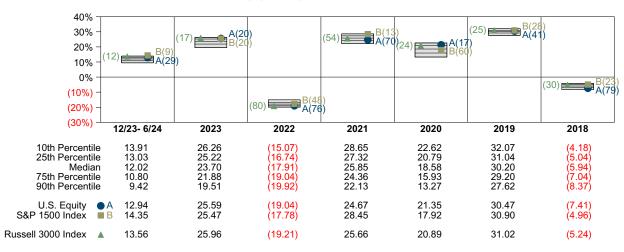


### U.S. Equity Return Analysis Summary

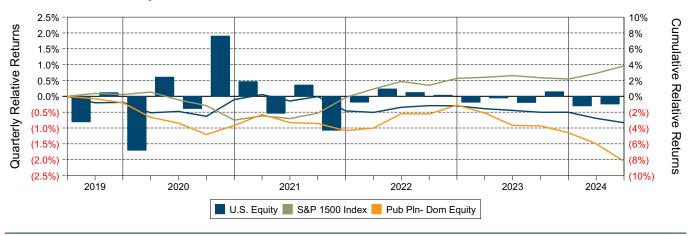
#### **Return Analysis**

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

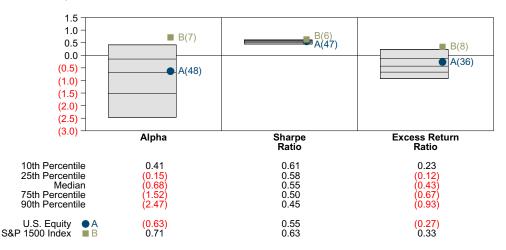
### Performance vs Public Fund - Domestic Equity (Gross)



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



Risk Adjusted Return Measures vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended June 30, 2024



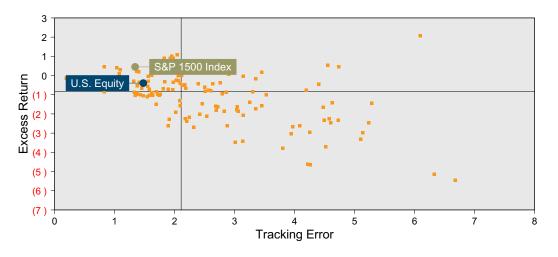


### U.S. Equity Risk Analysis Summary

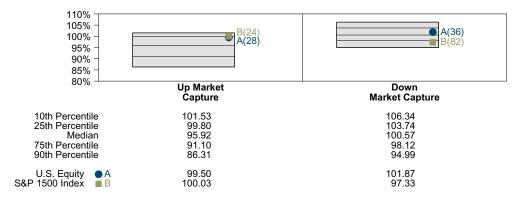
#### **Risk Analysis**

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

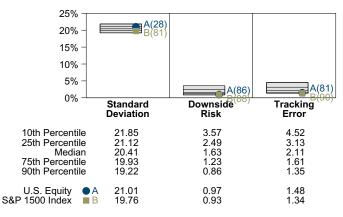
### Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended June 30, 2024

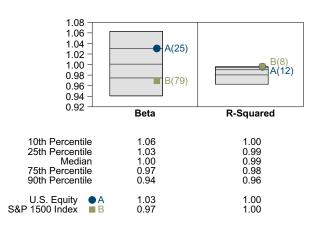


Market Capture vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended June 30, 2024



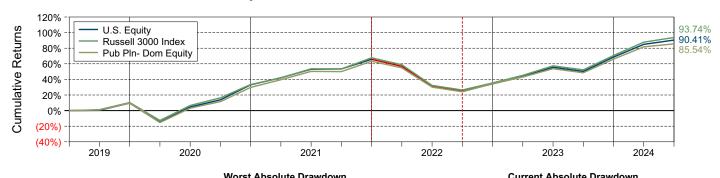




# U.S. Equity Drawdown Analysis for Five Years Ended June 30, 2024

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

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

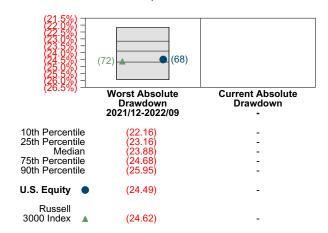


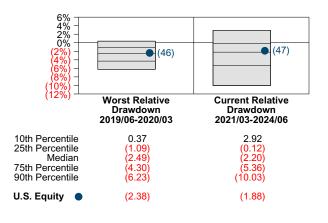
			ot / tooolate blane	401111							
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
U.S. Equity	(24.49)%	0.75	2021/12-2022/09	(24.62)%	(23.99)%	-	-	-	-	-	
Recovery from Trough	34.66%	1.25	2022/09-2023/12	35.00%	33.74%	-	-	-	-	-	
Russell 3000 Index	(24.62)%	0.75	2021/12-2022/09			-	-	-			
Pub PIn- Dom Equity	(23.99)%	0.75	2021/12-2022/09			-	-	-			

#### Relative Cumulative Drawdown Analysis vs. Russell 3000 Index Cumulative Relative Returns Peak Catch-up Rel Rtn: 1.91% U.S. Equity Pub Pln- Dom Equity (1.72%)(3%)(4%)(4.23%)(5%)2019 2020 2022 2024 2021 2023

	\	Norst Rel	ative Drawdown		Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
U.S. Equity	(2.38)%	0.75	2019/06-2020/03	(3.05)%	(1.88)%	3.25	2021/03-2024/06	(2.66)%	
Recovery from Trough	0.61%	0.25	2020/03-2020/06	(0.13)%	-	-	-	-	
Pub Pln- Dom Equity	(4.23)%	5.00	2019/06-2024/06		(3.93)%	4.75	2019/09-2024/06		

Drawdown Rankings vs. Russell 3000 Index Rankings against Public Fund - Domestic Equity Five Years Ended June 30, 2024



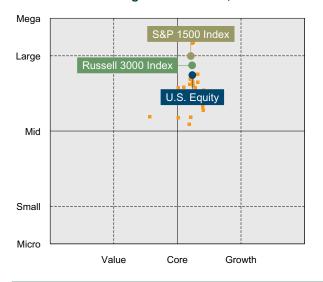




# Current Holdings Based Style Analysis U.S. Equity As of June 30, 2024

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

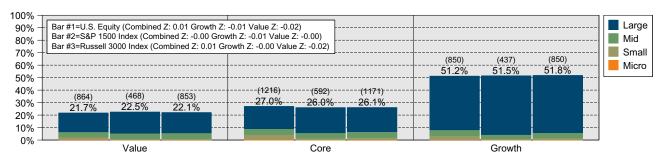
### Style Map vs Pub Pln- Dom Equity Holdings as of June 30, 2024



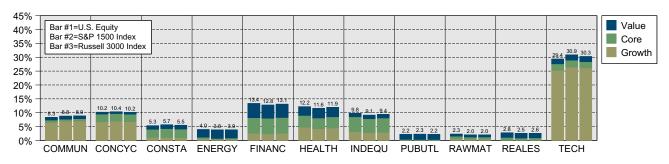
### Style Exposure Matrix Holdings as of June 30, 2024

	Value	Core	Growth	Total
	22.1% (853)	26.1% (1171)	51.8% (850)	100.0% (2874)
Total	22.5% (468)	26.0% (592)	51.5% (437)	100.0% (1497)
	21.7% (864)	27.0% (1216)	51.2% (850)	100.0% (2930)
	0.2% (325)	0.2% (367)	0.1% (169)	0.4% (861)
Micro	0.0% (36)	0.0% (25)	0.0% (4)	0.1% (65)
	0.5% (335)	0.4% (390)	0.2% (160)	1.1% (885)
	1.0% (261)	2.0% (508)	1.6% (381)	4.6% (1150)
Small	0.8% (178)	1.6% (309)	1.0% (197)	3.4% (684)
	1.9% (262)	4.0% (529)	3.3% (388)	9.2% (1179)
	4.5% (166)	4.6% (203)	4.1% (207)	13.3% (576)
Mid	4.6% (153)	4.2% (165)	3.3% (159)	12.1% (477)
	4.2% (166)	4.6% (204)	4.7% (207)	13.4% (577)
	16.4% (101)	19.4% (93)	46.0% (93)	81.7% (287)
Large	17.1% (101)	20.2% (93)	47.1% (77)	84.5% (271)
	15.2% (101)	18.0% (93)	43.1% (95)	76.2% (289)

### Combined Z-Score Style Distribution Holdings as of June 30, 2024



### Sector Weights Distribution Holdings as of June 30, 2024

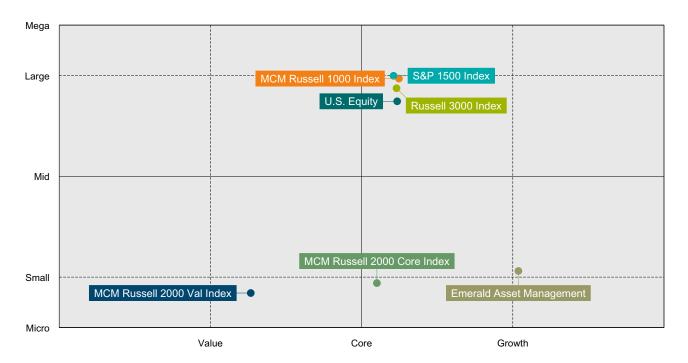




### **Holdings Based Style Analysis** For One Quarter Ended June 30, 2024

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

Style Map Holdings for One Quarter Ended June 30, 2024



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities D	Security Diversification
MCM Russell 2000 Val Index	2.76%	2.21	(0.84)	(0.29)	0.55	1428	199.27
MCM Russell 2000 Core Index	x 5.22%	2.70	(0.09)	(0.07)	0.02	1971	312.03
<b>Emerald Asset Management</b>	3.26%	3.85	0.66	0.15	(0.51)	117	30.27
MCM Russell 1000 Index	88.76%	198.88	0.02	0.00	(0.02)	1010	36.93
U.S. Equity	100.00%	156.56	0.01	(0.01)	(0.02)	2997	55.01
Russell 3000 Index	-	180.85	0.01	(0.00)	(0.02)	2923	42.85
S&P 1500 Index	-	204.08	(0.00)	(0.01)	(0.00)	1506	36.28

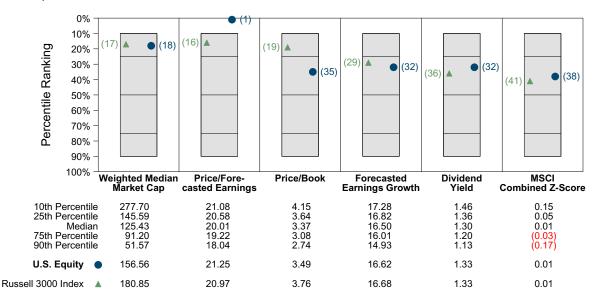


## U.S. Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

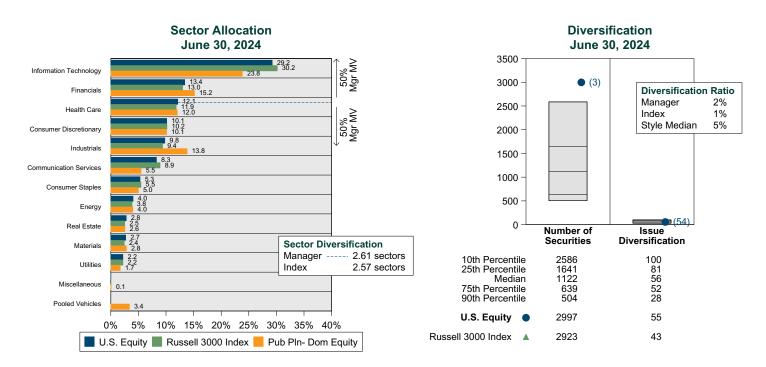
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic Equity as of June 30, 2024



#### **Sector Weights**

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





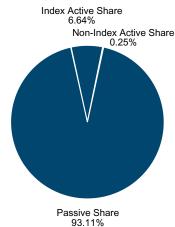
### **U.S. Equity**

### Active Share Analysis as of June 30, 2024

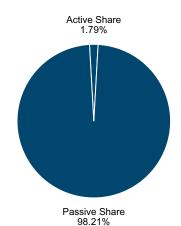
### vs. Russell 3000 Index

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

### **Holdings-Level Active Share**



### **Sector Exposure Active Share**

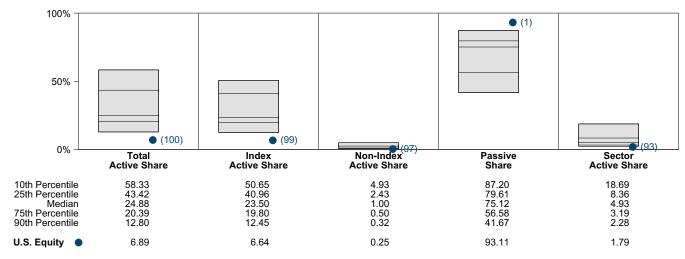


**Total Active Share: 6.89%** 

Communication Services **Consumer Discretionary Consumer Staples** Energy Financials Health Care Industrials Information Technology Materials Miscellaneous Real Estate Utilities Total

Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
1.91%	0.10%	2.01%	8.93%	8.27%	0.43%
5.81%	0.30%	6.10%	10.18%	10.13%	0.60%
4.37%	0.02%	4.40%	5.47%	5.30%	0.30%
10.90%	0.37%	11.26%	3.85%	4.03%	0.39%
8.67%	0.17%	8.84%	13.02%	13.40%	1.07%
8.82%	0.30%	9.11%	11.85%	12.13%	1.00%
9.68%	0.13%	9.81%	9.37%	9.79%	0.81%
3.82%	0.20%	4.02%	30.16%	29.25%	1.58%
12.88%	1.81%	14.68%	2.44%	2.70%	0.30%
0.00%	100.00%	100.00%	-	0.01%	0.00%
12.25%	0.30%	12.56%	2.53%	2.79%	0.26%
7.01%	0.00%	7.01%	2.20%	2.19%	0.15%
6.64%	0.25%	6.89%	100.00%	100.00%	6.89%

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





### MCM Russell 1000 Index Period Ended June 30, 2024

#### **Investment Philosophy**

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

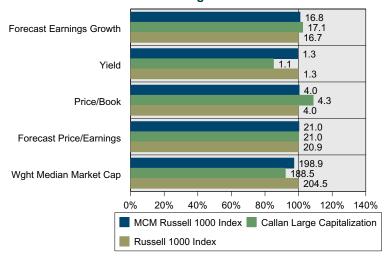
#### **Quarterly Summary and Highlights**

- MCM Russell 1000 Index's portfolio posted a 3.56% return for the quarter placing it in the 46 percentile of the Callan Large Capitalization group for the quarter and in the 55 percentile for the last year.
- MCM Russell 1000 Index's portfolio underperformed the Russell 1000 Index by 0.01% for the quarter and outperformed the Russell 1000 Index for the year by 0.04%.

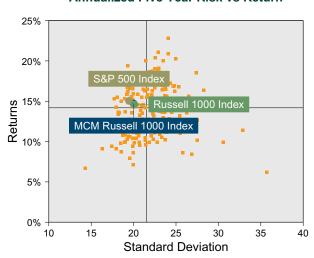
### Performance vs Callan Large Capitalization (Gross)



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



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



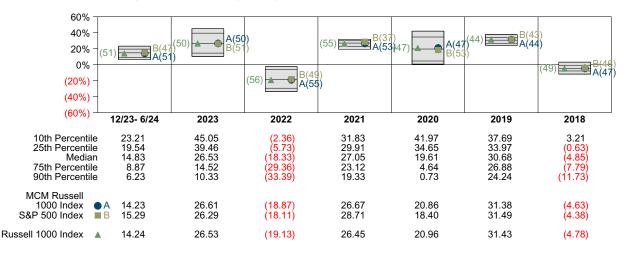


## MCM Russell 1000 Index Return Analysis Summary

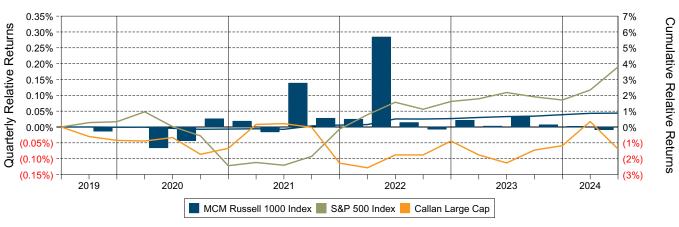
#### **Return Analysis**

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

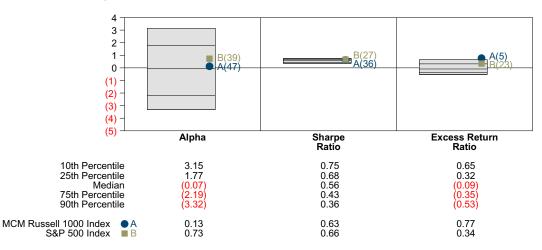
### Performance vs Callan Large Capitalization (Gross)



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



Risk Adjusted Return Measures vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended June 30, 2024



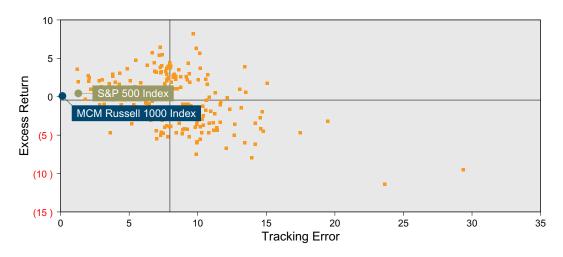


## MCM Russell 1000 Index Risk Analysis Summary

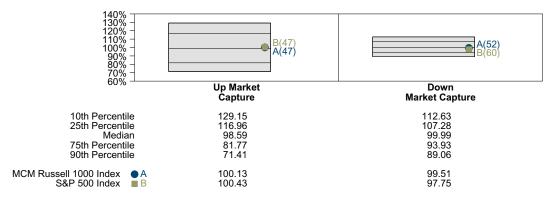
#### **Risk Analysis**

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

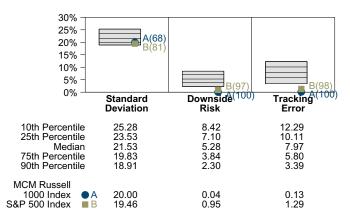
### Risk Analysis vs Callan Large Capitalization (Gross) Five Years Ended June 30, 2024

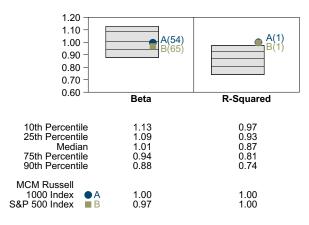


Market Capture vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended June 30, 2024



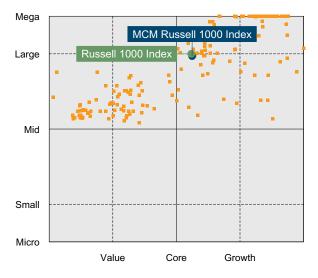




# Current Holdings Based Style Analysis MCM Russell 1000 Index As of June 30, 2024

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

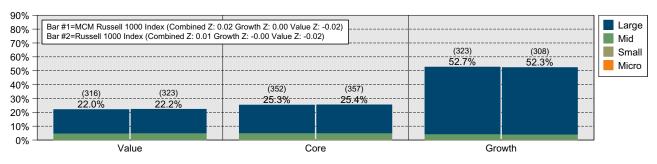
### Style Map vs Callan Large Cap Holdings as of June 30, 2024



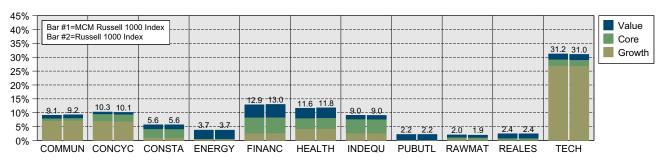
### Style Exposure Matrix Holdings as of June 30, 2024

(0) 0.0% (5) 25.3% (352) 323) 25.4% (3	52.7% (323)	100.0% (991)
(0) 0.0%	. ,	<del>'   ` ` `</del>
	(0) 0.0% (0	0.0% (0)
0.0% (0)	0.007	
0.0% (0)		
0.0% (0)	0.0% (0)	0.0% (0)
(59) 0.6% (	84) 0.3% (45	1.2% (188)
0.5% (72)	0.3% (42)	1.1% (164)
/	,	` ` `
163) 4.5% (1	80) 3.8% (171	13.1% (514)
4.6% (187)	4.1% (186)	13.4% (538)
101) 20.3% (	93) 48.2% (92	85.7% (286)
	48.3% (95)	85.5% (289)
		) 20.2% (93) 48.3% (95)

### Combined Z-Score Style Distribution Holdings as of June 30, 2024



### Sector Weights Distribution Holdings as of June 30, 2024



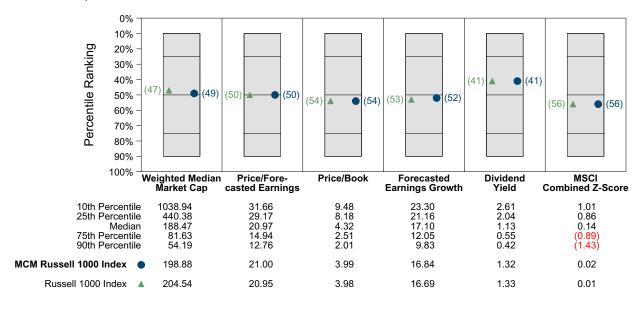


## MCM Russell 1000 Index Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

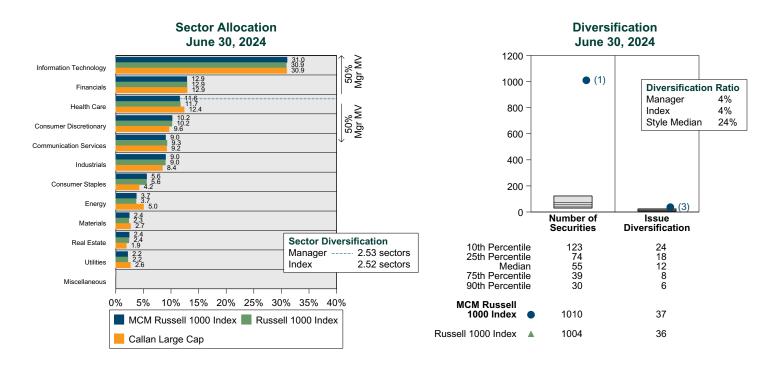
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Capitalization as of June 30, 2024



#### **Sector Weights**

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



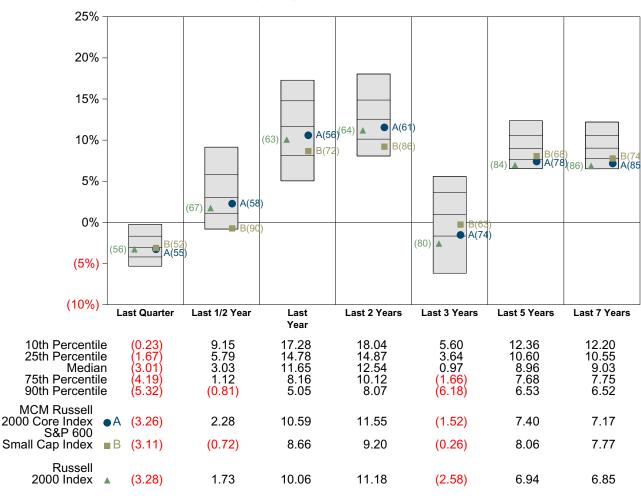


### MCM Russell 2000 Core Index Period Ended June 30, 2024

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

- MCM Russell 2000 Core Index's portfolio posted a (3.26)% return for the quarter placing it in the 55 percentile of the Callan Small Capitalization group for the quarter and in the 56 percentile for the last year.
- MCM Russell 2000 Core Index's portfolio outperformed the Russell 2000 Index by 0.02% for the quarter and outperformed the Russell 2000 Index for the year by 0.53%.

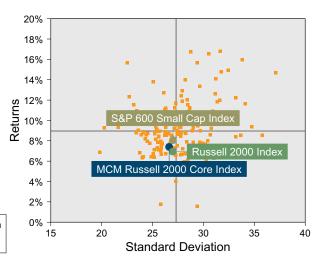
### Performance vs Callan Small Capitalization (Gross)



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

#### 13.5 16.6 Forecast Earnings Growth 16.5 1.5 Yield 1.2 1.4 1.8 2.0 Price/Book 1.9 23.1 17.0 Forecast Price/Earnings 21.5 Wght Median Market Cap 3.7 3.0 50% 100% 150% MCM Russell 2000 Core Index Callan Small Capitalization Russell 2000 Index

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

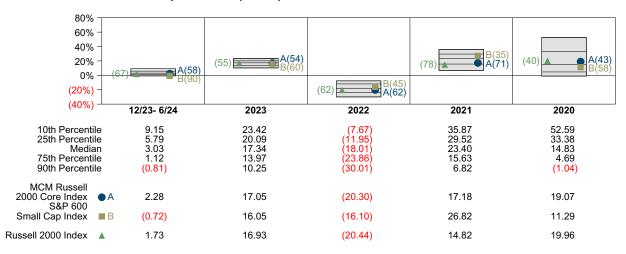


# MCM Russell 2000 Core Index Return Analysis Summary

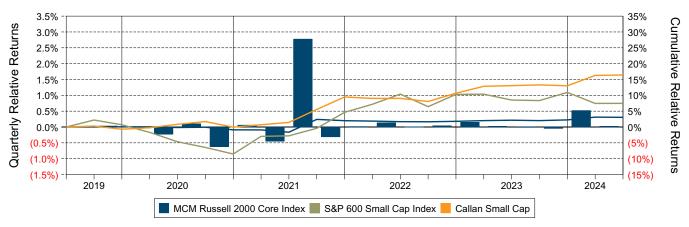
#### **Return Analysis**

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

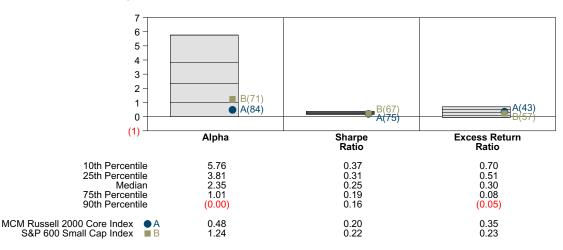
### Performance vs Callan Small Capitalization (Gross)



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



Risk Adjusted Return Measures vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended June 30, 2024



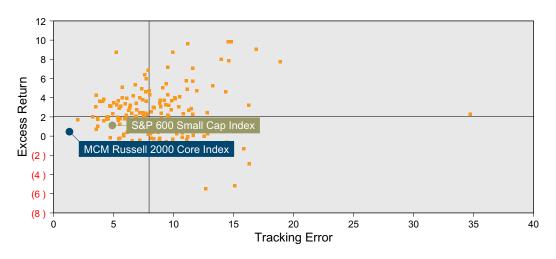


## MCM Russell 2000 Core Index Risk Analysis Summary

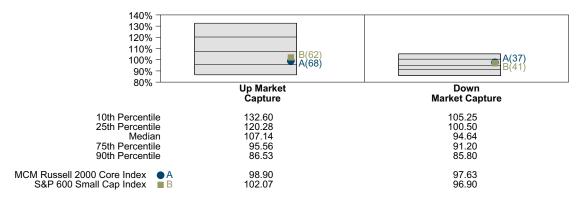
#### **Risk Analysis**

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

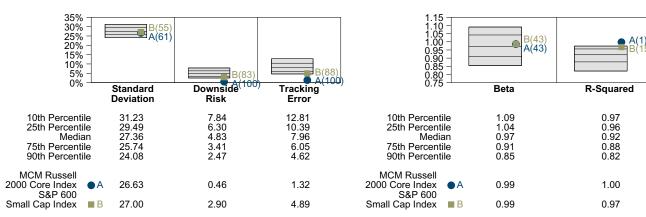
### Risk Analysis vs Callan Small Capitalization (Gross) Five Years Ended June 30, 2024



Market Capture vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended June 30, 2024

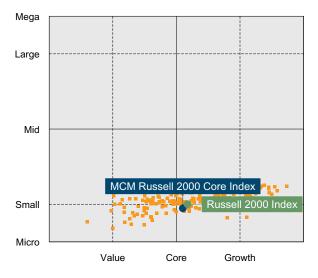




# Current Holdings Based Style Analysis MCM Russell 2000 Core Index As of June 30, 2024

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

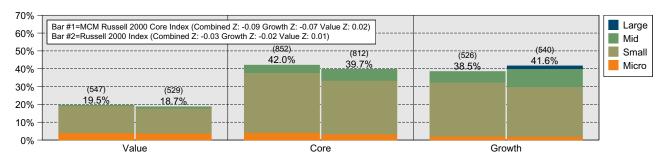
### Style Map vs Callan Small Cap Holdings as of June 30, 2024



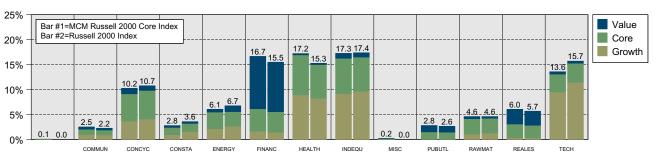
### Style Exposure Matrix Holdings as of June 30, 2024

	Value	Core	Growth	Total
	18.7% (529)	39.7% (812)	41.6% (540)	100.0% (1881)
Total				
	19.5% (547)	42.0% (852)	38.5% (526)	100.0% (1925)
	3.8% (324)	3.3% (365)	1.9% (167)	9.0% (856)
Micro				
	4.0% (334)	4.2% (381)	2.1% (159)	10.3% (874)
	14.1% (202)	30.0% (424)	27.9% (336)	72.0% (962)
Small				
	15.3% (212)	33.6% (454)	30.3% (346)	79.2% (1012)
	0.9% (3)	6.3% (23)	10.1% (36)	17.3% (62)
Mid				
	0.2% (1)	4.2% (17)	6.0% (21)	10.5% (39)
	0.0% (0)	0.0% (0)	1.7% (1)	1.7% (1)
Large				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

### Combined Z-Score Style Distribution Holdings as of June 30, 2024



## Sector Weights Distribution Holdings as of June 30, 2024



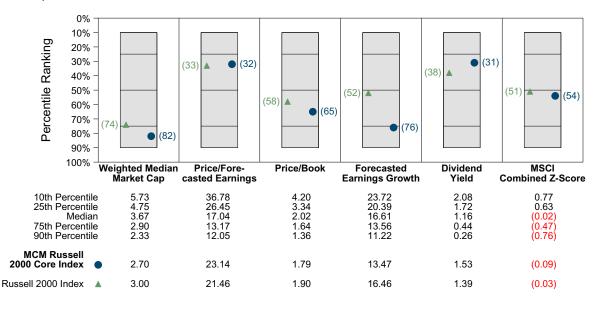


## MCM Russell 2000 Core Index Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

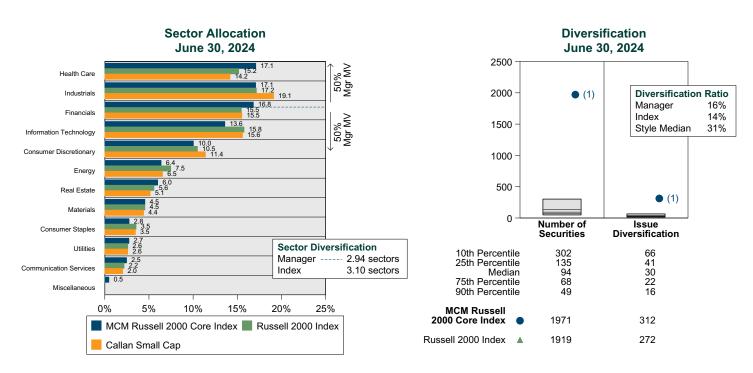
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization as of June 30, 2024



#### **Sector Weights**

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



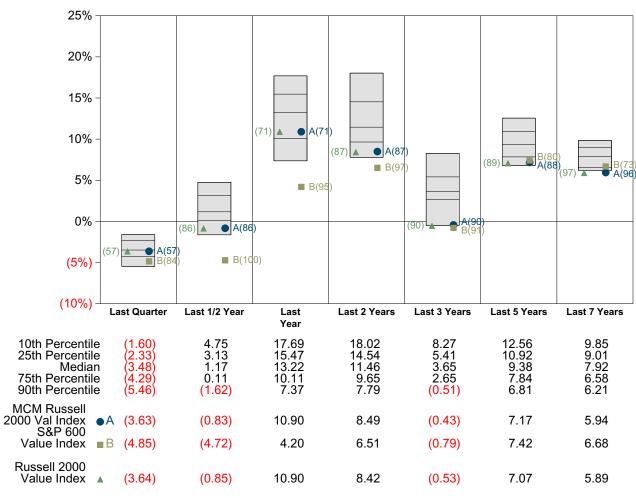


### MCM Russell 2000 Val Index Period Ended June 30, 2024

### **Quarterly Summary and Highlights**

- MCM Russell 2000 Val Index's portfolio posted a (3.63)% return for the quarter placing it in the 57 percentile of the Callan Small Cap Value group for the quarter and in the 71 percentile for the last year.
- MCM Russell 2000 Val Index's portfolio outperformed the Russell 2000 Value Index by 0.02% for the quarter and outperformed the Russell 2000 Value Index for the year by 0.00%.

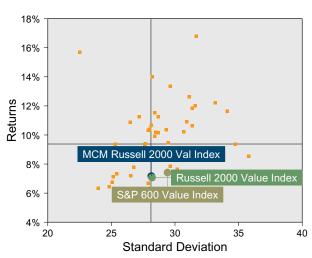
### Performance vs Callan Small Cap Value (Gross)



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



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



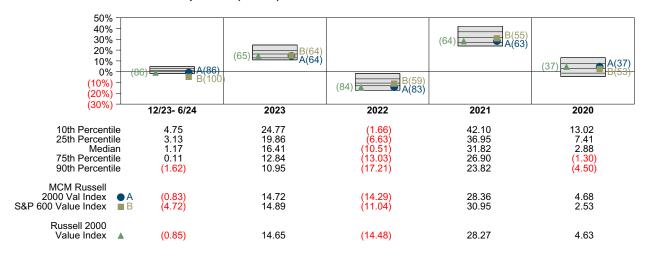


### MCM Russell 2000 Val Index **Return Analysis Summary**

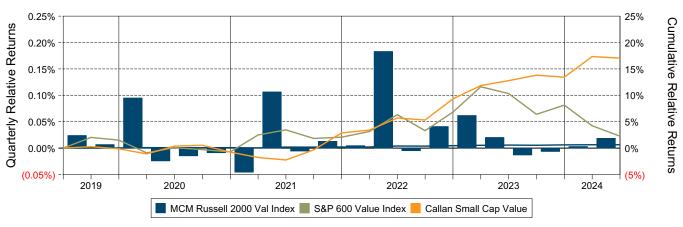
#### **Return Analysis**

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

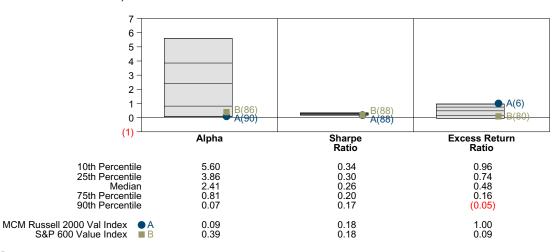
### Performance vs Callan Small Cap Value (Gross)



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



Risk Adjusted Return Measures vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2024



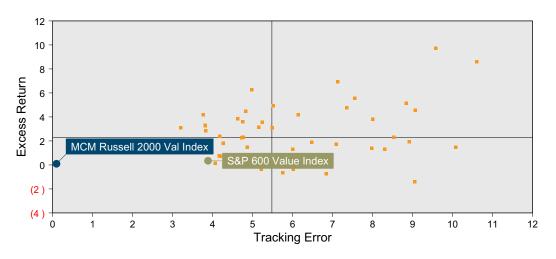


### MCM Russell 2000 Val Index **Risk Analysis Summary**

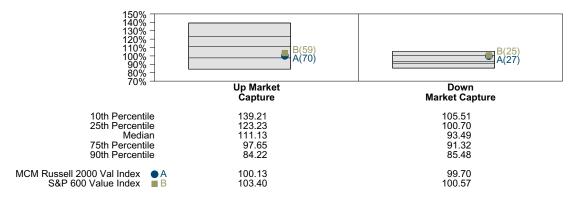
#### Risk Analysis

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

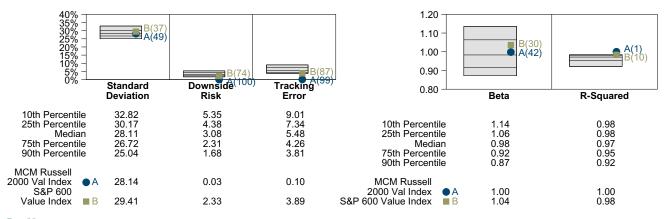
### Risk Analysis vs Callan Small Cap Value (Gross) Five Years Ended June 30, 2024



Market Capture vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended June 30, 2024

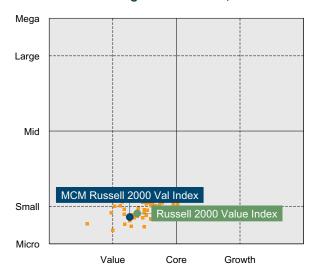




### **Current Holdings Based Style Analysis** MCM Russell 2000 Val Index As of June 30, 2024

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

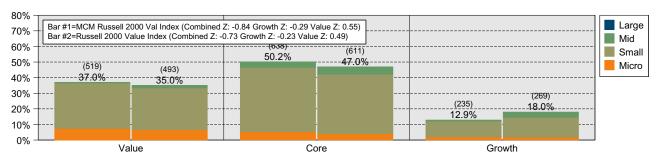
### Style Map vs Callan Small Cap Value Holdings as of June 30, 2024



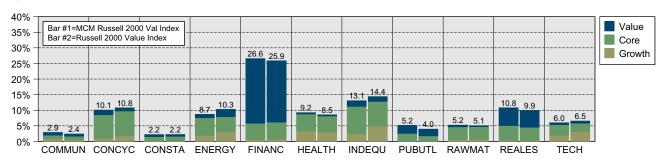
### **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	35.0% (493)	47.0% (611)	18.0% (269)	100.0% (1373)
Total	37.0% (519)	50.2% (638)	12.9% (235)	100.0% (1392)
	6.6% (294)	4.0% (271)	1.8% (110)	12.5% (675)
Micro				
	7.4% (314)	5.3% (294)	2.0% (102)	14.7% (710)
Siliali	26.6% (196)	38.1% (328)	12.6% (146)	77.4% (670)
Small	29.1% (204)	41.2% (333)	10.1% (129)	80.4% (666)
	1.8% (3)	4.8% (12)	3.5% (13)	10.1% (28)
Mid				
	0.5% (1)	3.6% (11)	0.8% (4)	4.9% (16)
Large	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 June 30, 2024



### **Sector Weights Distribution** Holdings as of June 30, 2024



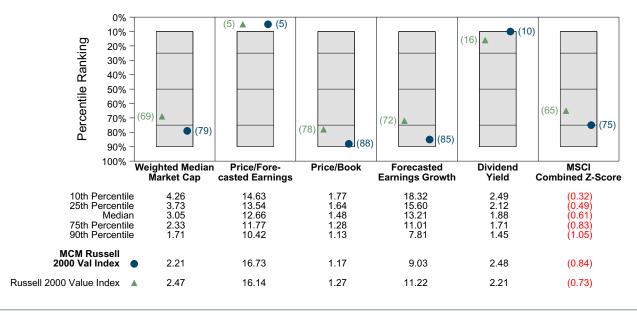


### MCM Russell 2000 Val Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

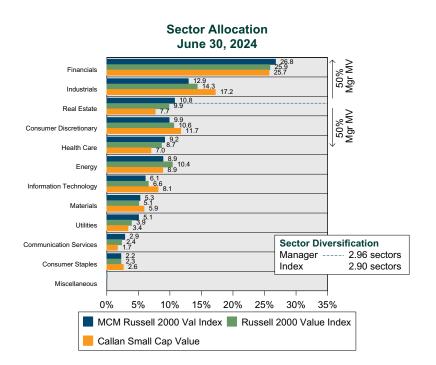
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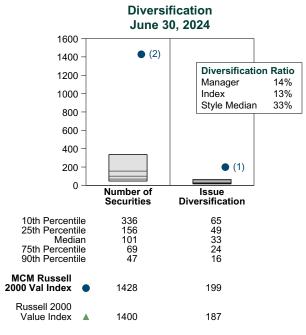
### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Small Cap Value as of June 30, 2024



#### **Sector Weights**

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







### Emerald Asset Management Period Ended June 30, 2024

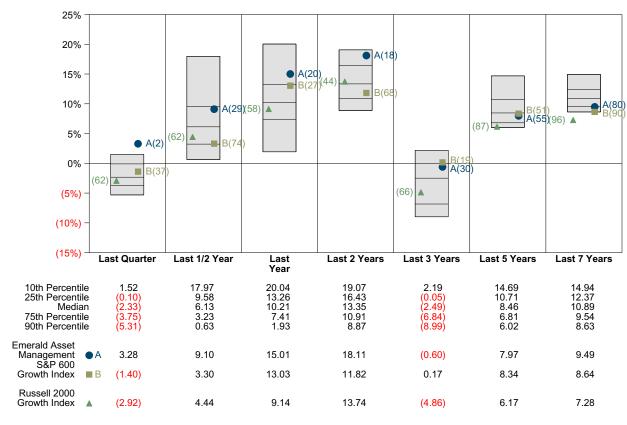
#### **Investment Philosophy**

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

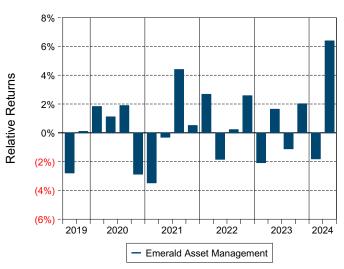
### **Quarterly Summary and Highlights**

- Emerald Asset Management's portfolio posted a 3.28% return for the quarter placing it in the 2 percentile of the Callan Small Cap Growth group for the quarter and in the 20 percentile for the last year.
- Emerald Asset Management's portfolio outperformed the Russell 2000 Growth Index by 6.20% for the quarter and outperformed the Russell 2000 Growth Index for the year by 5.87%.

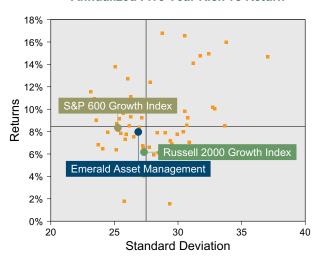
### Performance vs Callan Small Cap Growth (Gross)



#### Relative Return vs Russell 2000 Growth Index



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

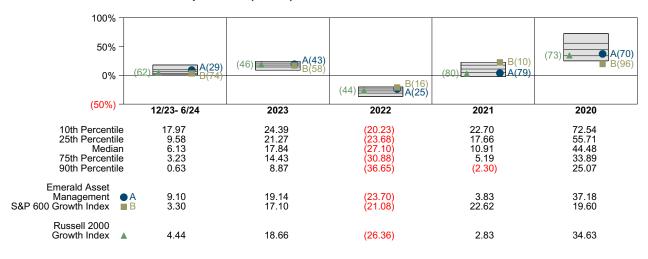


#### **Emerald Asset Management Return Analysis Summary**

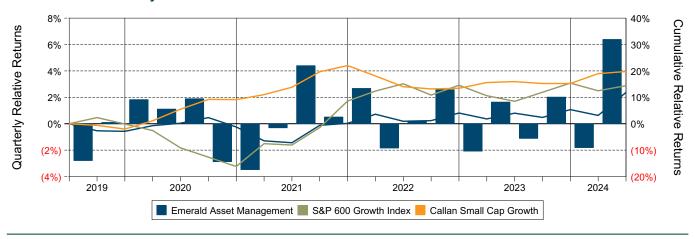
#### **Return Analysis**

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

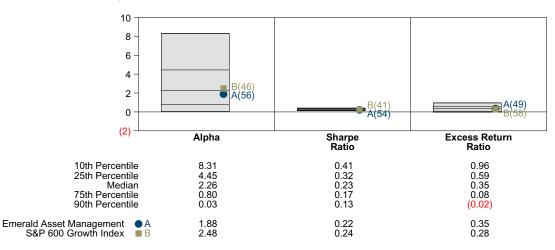
#### Performance vs Callan Small Cap Growth (Gross)



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



Risk Adjusted Return Measures vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2024



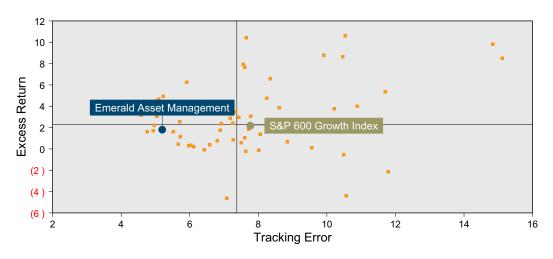


#### **Emerald Asset Management Risk Analysis Summary**

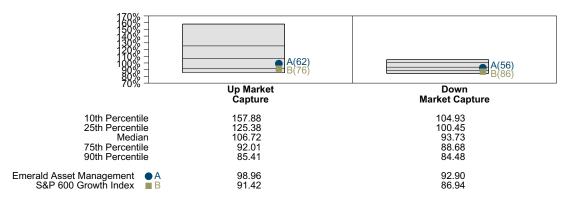
#### Risk Analysis

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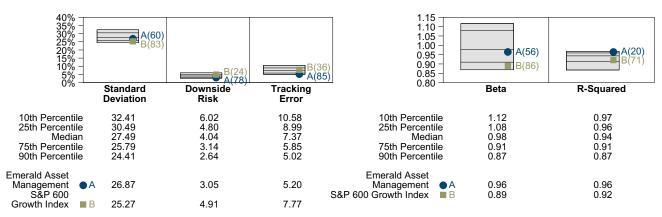
#### Risk Analysis vs Callan Small Cap Growth (Gross) Five Years Ended June 30, 2024



Market Capture vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended June 30, 2024





#### **Current Holdings Based Style Analysis Emerald Asset Management** As of June 30, 2024

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

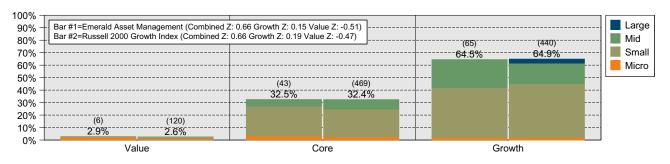
#### Style Map vs Callan Small Cap Growth Holdings as of June 30, 2024



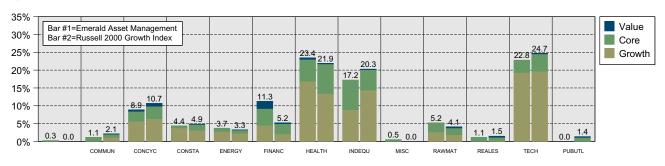
#### **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
Total	2.6% (120)	32.4% (469)	64.9% (440)	100.0% (1029)
T. (.)	2.9% (6)	32.5% (43)	64.5% (65)	100.0% (114)
	1.0% (87)	2.7% (202)	2.0% (109)	5.7% (398)
Micro	2.270 (4)	0.170 (0)	2.0 % (0)	7.070 (11)
	2.2% (4)	3.1% (8)	2.0% (5)	7.3% (17)
Small	1.7% (33)	22.1% (250)	43.0% (295)	66.7% (578)
	0.7% (2)	24.1% (29)	39.9% (43)	64.7% (74)
	0.0% (0)	7.7% (17)	16.6% (35)	24.4% (52)
Mid	0.070 (0)	0.070 (0)	22.770 (11)	20.0 /0 (20)
	0.0% (0)	5.3% (6)	22.7% (17)	28.0% (23)
Large	0.0% (0)	0.0% (0)	3.3% (1)	3.3% (1)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

#### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



#### **Sector Weights Distribution** Holdings as of June 30, 2024



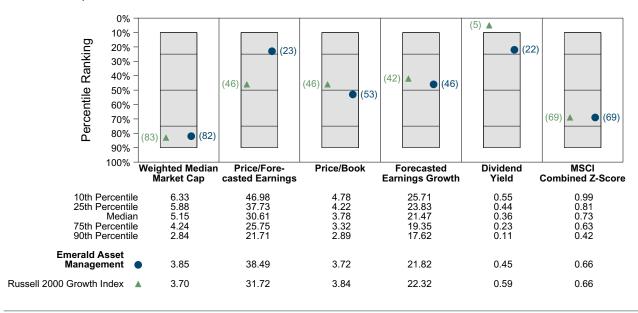


#### **Emerald Asset Management Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

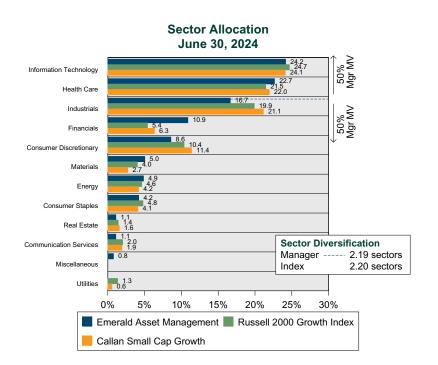
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

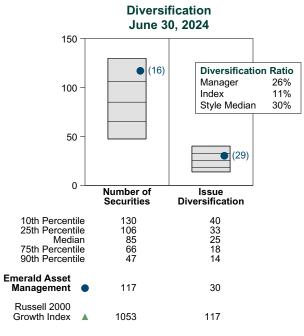
#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Small Cap Growth as of June 30, 2024



#### **Sector Weights**

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

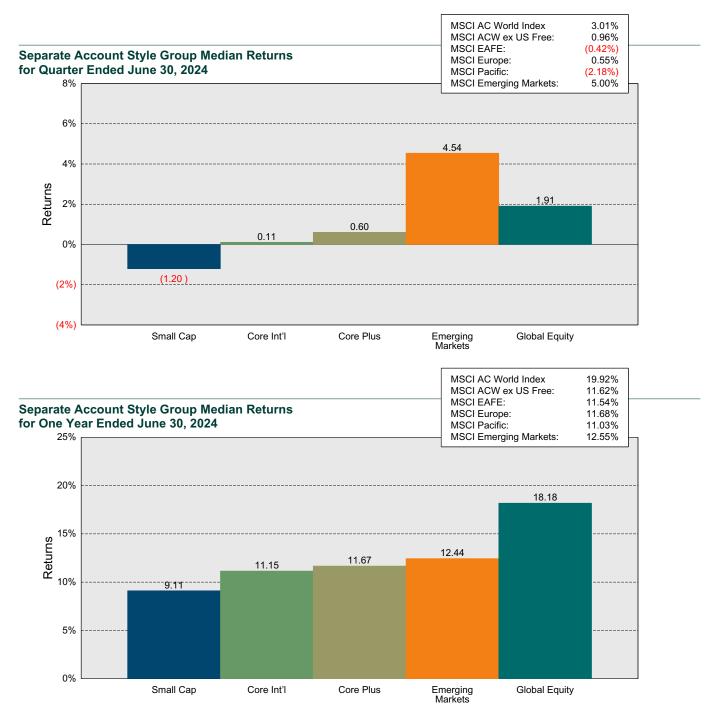






#### International Equity **Active Management Overview**

The MSCI ACWI ex USA trailed most U.S. stock indices, posting a modest gain of +1.0% (Local: +2.3%). The U.S. dollar strengthened against most currencies, notably the Japanese yen. Similar to the U.S., Information Technology (+3.8%) was the best-performing sector. Financials (+2.6%), the largest sector in the index, also bolstered results. The UK posted a 3.7% gain. Europe ex-UK (-0.4%) was hurt by weak performance in France (-7.5%) due to concerns over the far right's advancement and its implications for spending and an already high deficit. Japan (-4.3%) was a notable underperformer but in local terms the country was up 1.8%. The yen fell about 6% in 2Q to its weakest level since 1986. The currency is down 12.4% YTD. Emerging markets (MSCI EM: +5.0%; Local: +6.2%) saw mixed results. Information Technology and Energy were the best-performing sectors. Stocks related to the artificial intelligence (AI) theme continued to perform strongly, with TSMC contributing more than a quarter of broad index gains. Latin America (-12.2%) fared the worst driven by poor returns in Brazil (-12.2%) and Mexico (-16.1%). Meanwhile, Emerging Asia (+7.4%) benefited from strong performance in China (+7.1%) and Taiwan (+15.1%). India (+10.2%) was also up sharply for the quarter in spite of a short-lived sell-off after the presidential election.





#### Int'l Developed Markets Equity Period Ended June 30, 2024

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

- Int'l Developed Markets Equity's portfolio posted a (0.25)% return for the quarter placing it in the 96 percentile of the Public Fund - International Equity group for the quarter and in the 78 percentile for the last year.
- Int'l Developed Markets Equity's portfolio outperformed the MSCI World xUS IMI by 0.48% for the quarter and outperformed the MSCI World xUS IMI for the year by 0.71%.

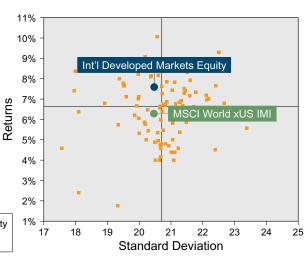
#### Performance vs Public Fund - International Equity (Gross)



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

#### 111.9 15.0 Forecast Earnings Growth 12.2 2.8 Yield 2.8 3.2 2.1 1.9 Price/Book 1.8 14.9 Forecast Price/Earnings 13.9 139 44.1 Wght Median Market Cap 32.3 39.4 50% 100% Int'l Developed Markets Equity Public Fund - International Equity MSCI World xUS IMI

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



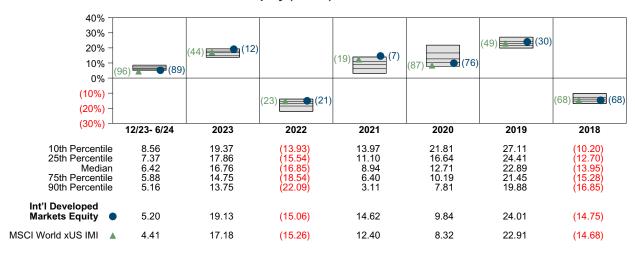


#### Int'l Developed Markets Equity **Return Analysis Summary**

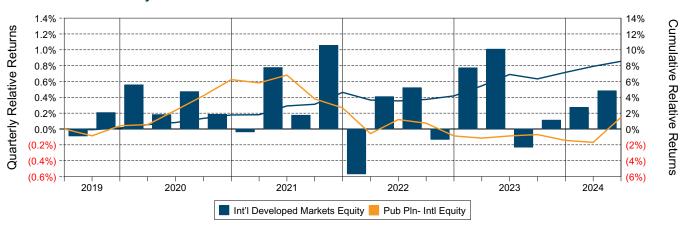
#### **Return Analysis**

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

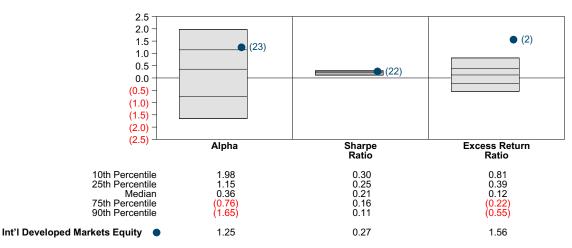
#### Performance vs Public Fund - International Equity (Gross)



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



Risk Adjusted Return Measures vs MSCI World xUS IMI Rankings Against Public Fund - International Equity (Gross) Five Years Ended June 30, 2024



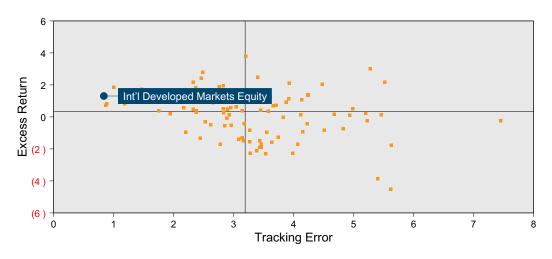


#### Int'l Developed Markets Equity **Risk Analysis Summary**

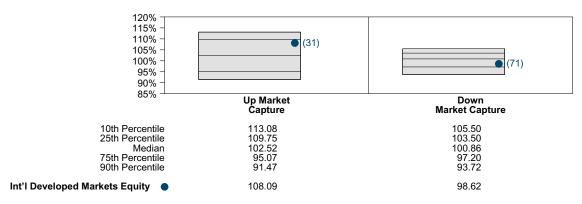
#### Risk Analysis

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

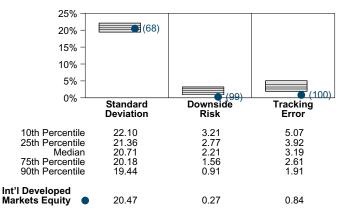
#### Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended June 30, 2024

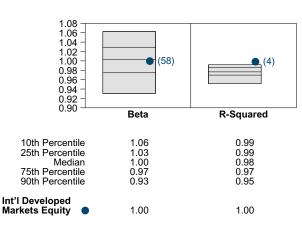


Market Capture vs MSCI World xUS IMI (Net) Rankings Against Public Fund - International Equity (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI World xUS IMI (Net) Rankings Against Public Fund - International Equity (Gross) Five Years Ended June 30, 2024



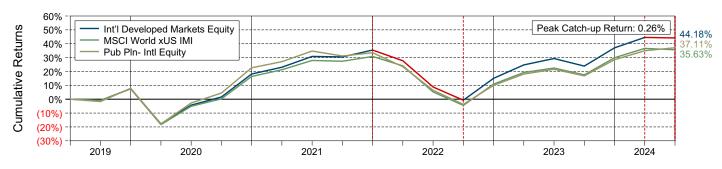




# Int'l Developed Markets Equity Drawdown Analysis for Five Years Ended June 30, 2024

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

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

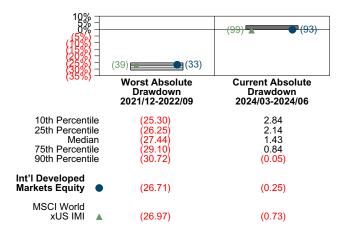


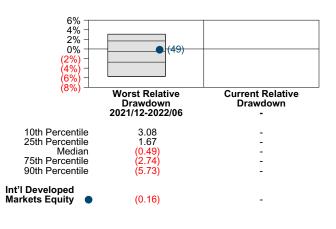
	worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Int'l Developed Markets Equi	ty (26.71)%	0.75	2021/12-2022/09	(26.97)%	(27.88)%	(0.25)%	0.25	2024/03-2024/06	(0.73)%	1.60%
Recovery from Trough	38.06%	1.25	2022/09-2023/12	35.98%	33.45%	-	-	-	-	-
MSCI World xUS IMI	(26.97)%	0.75	2021/12-2022/09			(0.73)%	0.25	2024/03-2024/06		
Pub Pln- Intl Equity	(28.55)%	1.25	2021/06-2022/09			-	-	-		

# Relative Cumulative Drawdown Analysis vs. MSCI World xUS IMI 8% 6% Pub Pln- Int'l Developed Markets Equity 4% 2% 0% (2%) (2%) (4%) 2019 2020 2021 2022 2023 2024

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Int'l Developed Markets Equity	(0.16)%	0.50	2021/12-2022/06	(0.89)%	-	-	-	-
Recovery from Trough	0.52%	0.25	2022/06-2022/09	(0.36)%	-	-	-	-
Pub Pln- Intl Equity	(6.26)%	3.25	2020/12-2024/03		(4.05)%	3.50	2020/12-2024/06	

Drawdown Rankings vs. MSCI World xUS IMI Rankings against Public Fund - International Equity Five Years Ended June 30, 2024





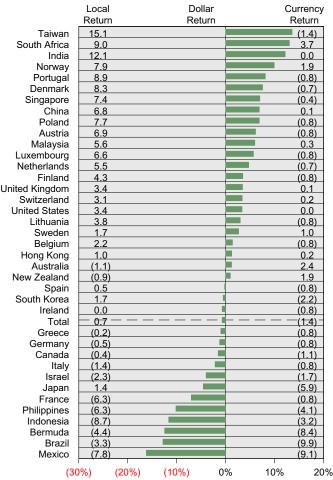


#### Int'l Developed Markets Equity vs MSCI World xUS IMI Attribution for Quarter Ended June 30, 2024

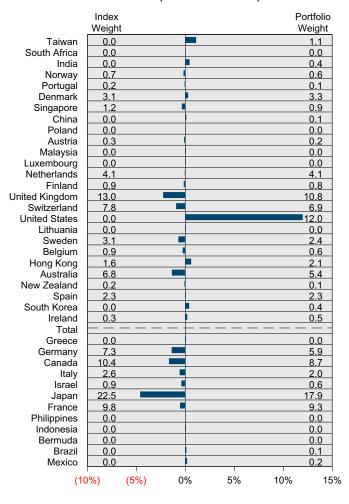
#### International Attribution

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

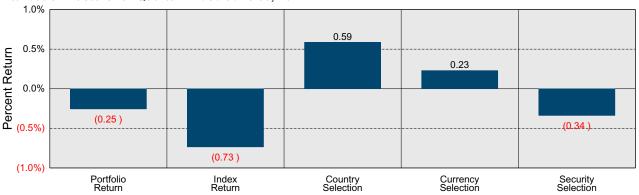




#### **Beginning Relative Weights** (Portfolio - Index)



#### Attribution Factors for Quarter Ended June 30, 2024





#### **Current Holdings Based Style Analysis** Int'l Developed Markets Equity As of June 30, 2024

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

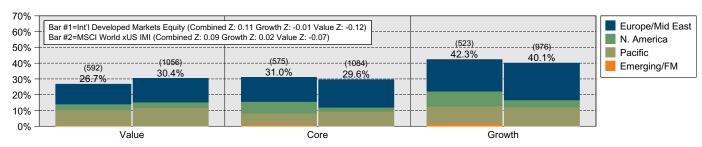
#### Style Map vs Pub Pln- Intl Equity Holdings as of June 30, 2024



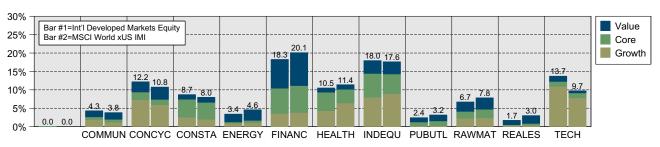
#### **Style Exposure Matrix** Holdings as of June 30, 2024

	12.7% (222)	15.4% (226)	20.0% (192)	48.0% (640)
Europe/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(===)		(2.13)
Mid East	15.1% (436)	17.6% (514)	23.4% (425)	56.1% (1375)
	3.8% (58)	7.5% (64)	9.5% (80)	20.8% (202)
N. America				
	3.5% (91)	2.6% (98)	4.5% (105)	10.6% (294)
	9.8% (240)	7.4% (175)	11.1% (152)	28.3% (567)
Pacific				
	11.8% (529)	9.4% (471)	12.1% (445)	33.3% (1445)
	0.4% (72)	0.7% (110)	1.7% (99)	2.8% (281)
Emerging/				
FM	0.0% (0)	0.0% (1)	0.0% (1)	0.0% (2)
	26.7% (592)	31.0% (575)	42.3% (523)	100.0% (1690)
Total				
	30.4% (1056)	29.6% (1084)	40.1% (976)	100.0% (3116)
	Value	Core	Growth	Total

#### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



#### **Sector Weights Distribution** Holdings as of June 30, 2024

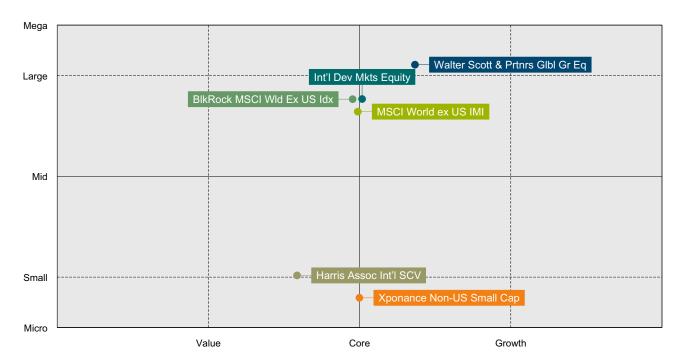




#### **International Holdings Based Style Analysis** For One Quarter Ended June 30, 2024

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

Style Map Holdings for One Quarter Ended June 30, 2024



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities I	Diversification
Walter Scott & Prtnrs Glbl Gr	Eq8.41%	100.71	0.41	(80.0)	(0.49)	48	15.69
BlkRock MSCI Wld Ex US Idx	72.65%	44.00	0.05	0.00	(0.05)	830	94.97
Harris Assoc Int'l SCV	3.32%	2.82	(0.28)	(0.15)	0.13	63	18.94
Xponance Non-US Small Cap	5.55%	2.07	0.10	0.09	(0.01)	893	118.45
Int'l Dev Mkts Equity	100.00%	44.05	0.11	(0.01)	(0.12)	1758	103.94
MSCI World ex US IMI	-	39.41	0.09	0.02	(0.07)	3151	129.32

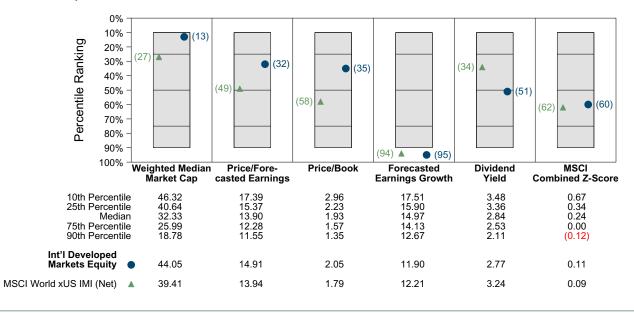


#### Int'l Developed Markets Equity **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

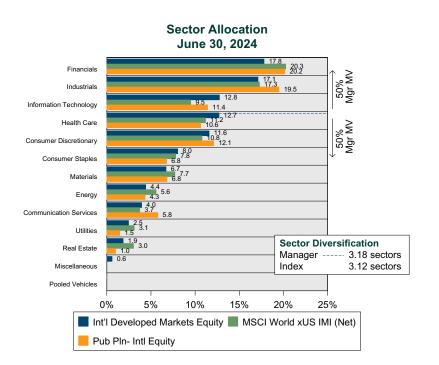
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

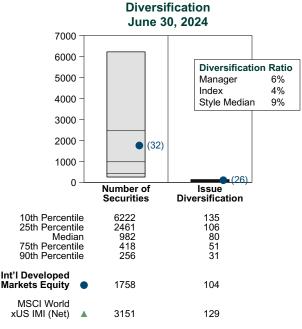
#### **Portfolio Characteristics Percentile Rankings** Rankings Against Public Fund - International Equity as of June 30, 2024



#### **Sector Weights**

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



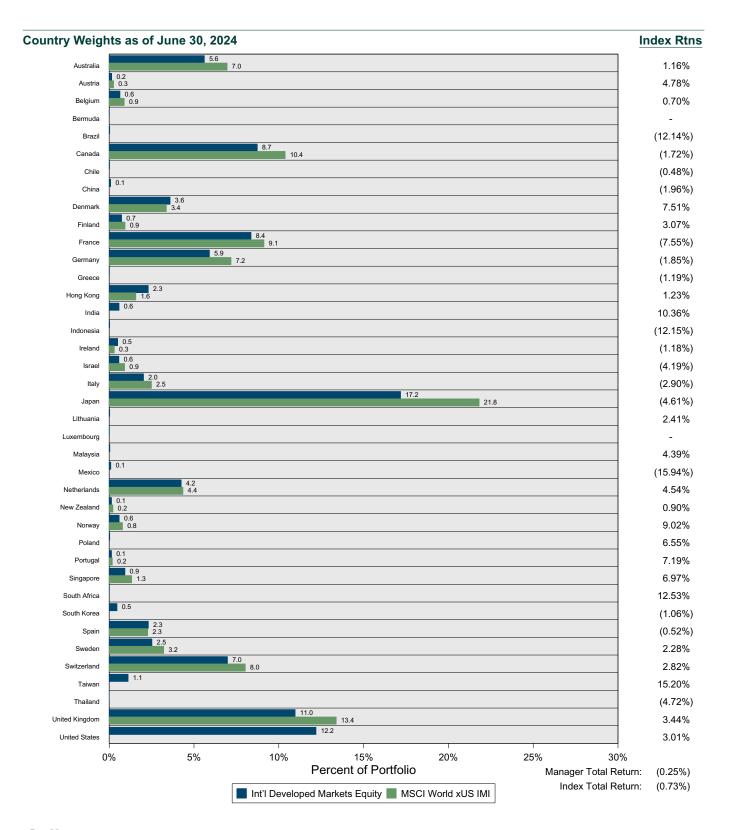




#### **Country Allocation** Int'l Developed Markets Equity VS MSCI World xUS IMI (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





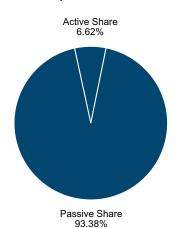
#### Int'l Developed Markets Equity Active Share Analysis as of June 30, 2024 vs. MSCI World xUS IMI (Net)

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

#### **Holdings-Level Active Share**

# Index Active Share 19.04% Non-Index Active Share 11.30% Passive Share 69.66%

#### **Sector Exposure Active Share**



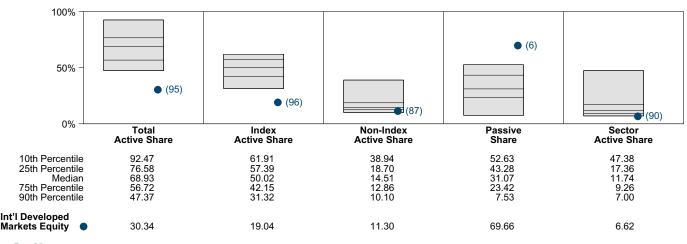
Total Active Share: 30.34%

Communication Services **Consumer Discretionary Consumer Staples** Energy Financials Health Care Industrials Information Technology Materials Miscellaneous Pooled Vehicles Real Estate Utilities

Total

Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
16.42%	10.37%	26.79%	3.74%	3.95%	0.96%
23.18%	10.91%	34.08%	10.78%	11.59%	3.67%
14.97%	8.42%	23.38%	7.81%	8.03%	1.79%
22.24%	14.93%	37.16%	5.58%	4.41%	2.00%
10.12%	4.43%	14.56%	20.26%	17.80%	3.72%
24.58%	21.12%	45.70%	11.18%	12.71%	5.16%
21.20%	9.33%	30.53%	17.29%	17.12%	5.30%
21.98%	17.57%	39.55%	9.50%	12.76%	3.84%
15.78%	5.41%	21.18%	7.71%	6.71%	1.83%
0.00%	100.00%	100.00%	-	0.60%	0.28%
0.00%	100.00%	100.00%	-	0.00%	0.00%
36.57%	10.12%	46.69%	3.03%	1.86%	1.07%
15.38%	5.27%	20.66%	3.11%	2.47%	0.68%
19.04%	11.30%	30.34%	100.00%	100.00%	30.31%

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





#### Walter Scott & Prtnrs Glbl Gr Eq Period Ended June 30, 2024

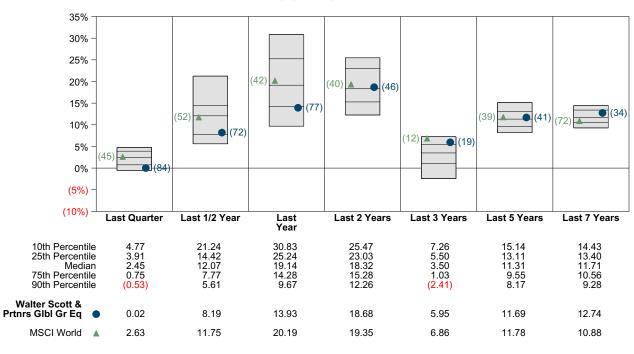
#### **Investment Philosophy**

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

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

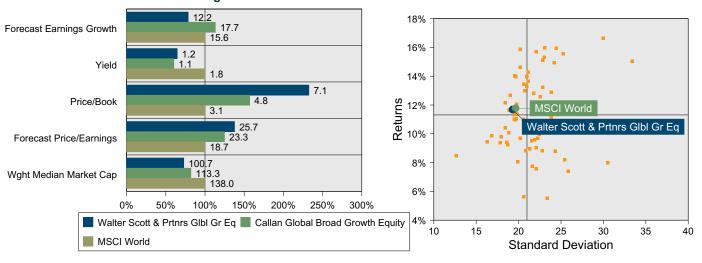
- Walter Scott & Prtnrs Glbl Gr Eq's portfolio posted a 0.02% return for the quarter placing it in the 84 percentile of the Callan Global Broad Growth Equity group for the quarter and in the 77 percentile for the last year.
- Walter Scott & Prtnrs Glbl Gr Eq's portfolio underperformed the MSCI World by 2.61% for the guarter and underperformed the MSCI World for the year by 6.26%.

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



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

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



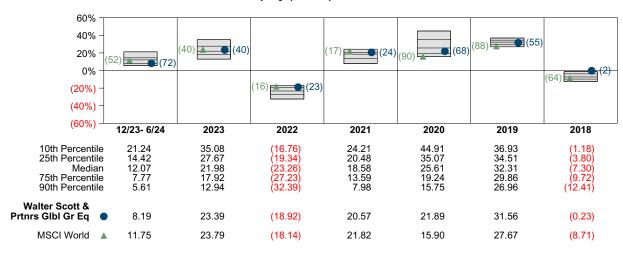


#### Walter Scott & Prtnrs Glbl Gr Eq **Return Analysis Summary**

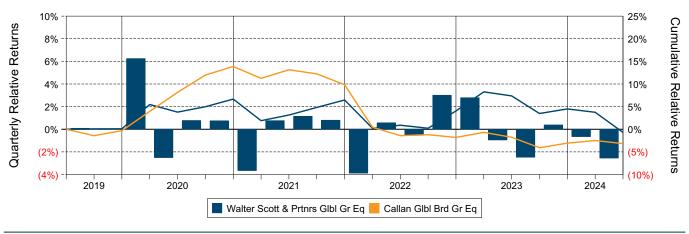
#### **Return Analysis**

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

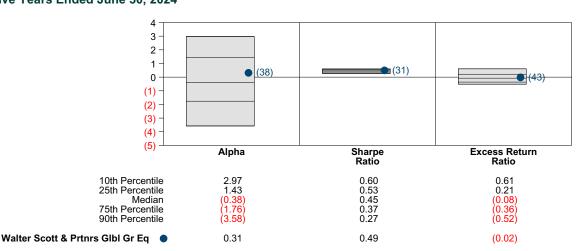
#### Performance vs Callan Global Broad Growth Equity (Gross)



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



Risk Adjusted Return Measures vs MSCI World Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended June 30, 2024



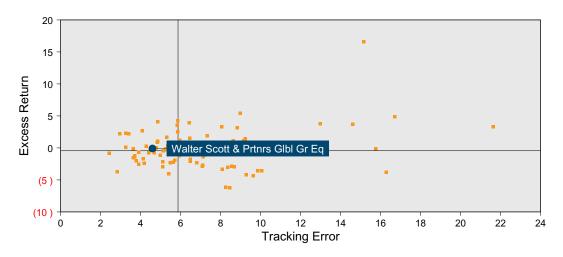


#### Walter Scott & Prtnrs Glbl Gr Eq **Risk Analysis Summary**

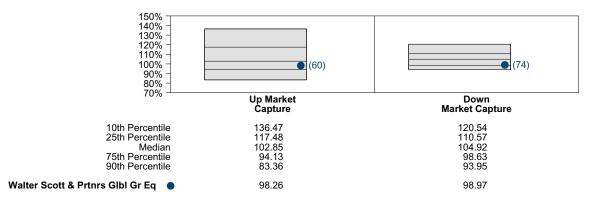
#### Risk Analysis

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

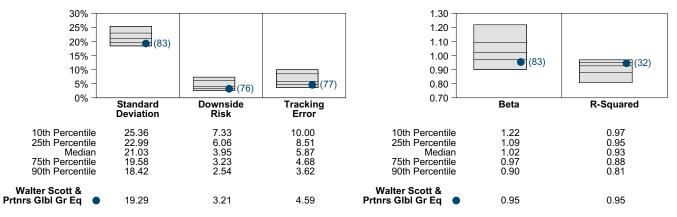
#### Risk Analysis vs Callan Global Broad Growth Equity (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI World (Net) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI World (Net) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended June 30, 2024



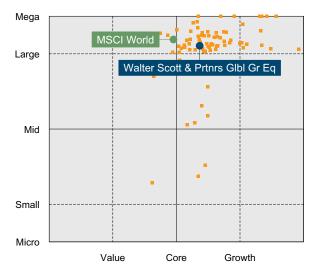


#### **Current Holdings Based Style Analysis** Walter Scott & Prtnrs Glbl Gr Eq As of June 30, 2024

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

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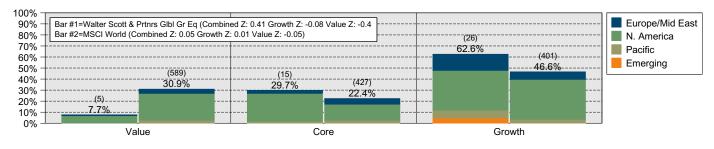
#### Style Map vs Callan Glbl Brd Gr Eq Holdings as of June 30, 2024



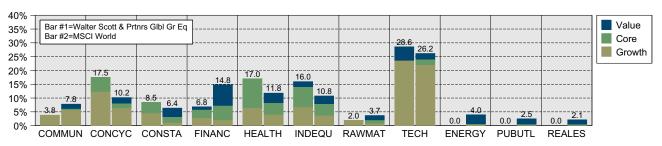
#### **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	30.9% (589)	22.4% (427)	46.6% (401)	100.0% (1417)
Total				
	7.7% (5)	29.7% (15)	62.6% (26)	100.0% (46)
	0.0% (1)	0.0% (0)	0.1% (2)	0.1% (3)
Emerging				
	0.0% (0)	0.0% (0)	4.7% (1)	4.7% (1)
	2.8% (121)	2.6% (91)	3.3% (99)	8.7% (311)
Pacific				
	0.0% (0)	1.8% (1)	7.1% (4)	8.9% (5)
	24.1% (320)	14.6% (188)	36.3% (166)	74.9% (674)
N. America				
	6.7% (4)	25.2% (12)	36.0% (14)	67.9% (30)
Mid East	4.0% (147)	5.3% (148)	7.0% (134)	16.2% (429)
Europe/	1.0% (1)	2.8% (2)	14.8% (7)	18.5% (10)

#### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



#### **Sector Weights Distribution** Holdings as of June 30, 2024



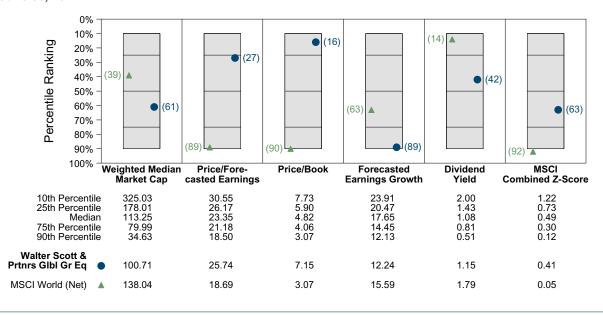


#### Walter Scott & Prtnrs Glbl Gr Eq **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

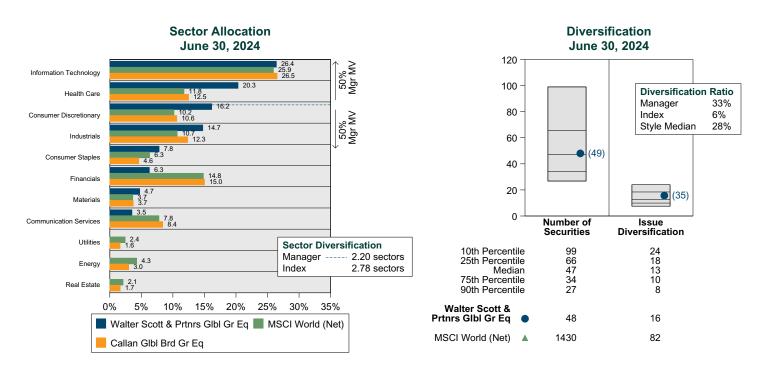
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings Rankings Against Callan Global Broad Growth Equity** as of June 30, 2024



#### **Sector Weights**

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





#### BlackRock MSCI World Ex US Index Period Ended June 30, 2024

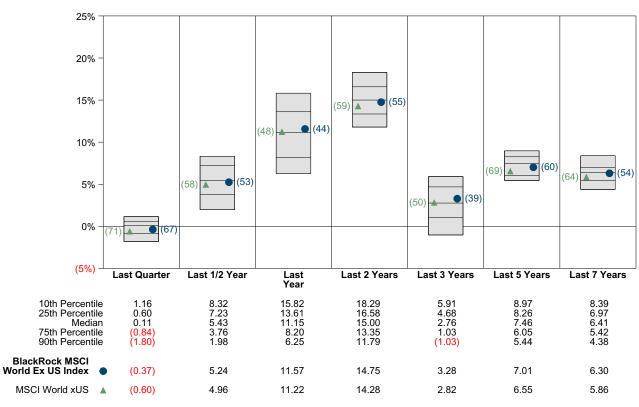
#### **Investment Philosophy**

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

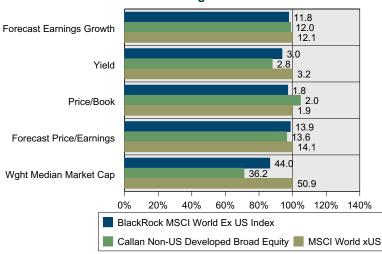
#### **Quarterly Summary and Highlights**

- BlackRock MSCI World Ex US Index's portfolio posted a (0.37)% return for the quarter placing it in the 67 percentile of the Callan Non-US Developed Broad Equity group for the quarter and in the 44 percentile for the last year.
- BlackRock MSCI World Ex US Index's portfolio outperformed the MSCI World xUS by 0.23% for the quarter and outperformed the MSCI World xUS for the year by 0.35%.

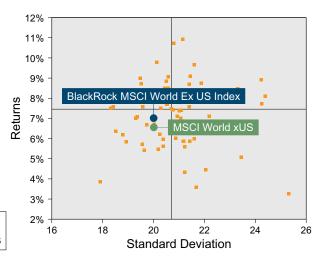
#### Performance vs Callan Non-US Developed Broad Equity (Gross)



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



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



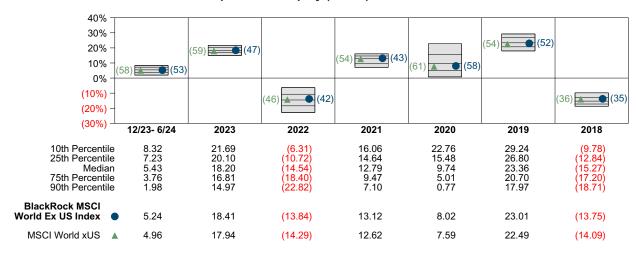


#### BlackRock MSCI World Ex US Index **Return Analysis Summary**

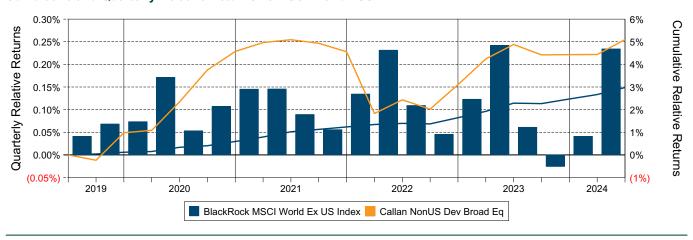
#### **Return Analysis**

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

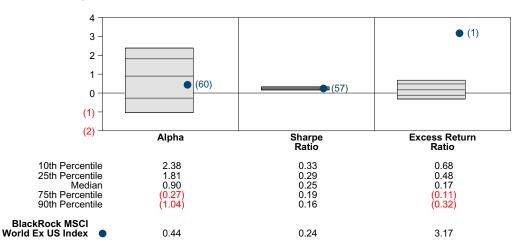
#### Performance vs Callan Non-US Developed Broad Equity (Gross)



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



Risk Adjusted Return Measures vs MSCI World xUS Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended June 30, 2024

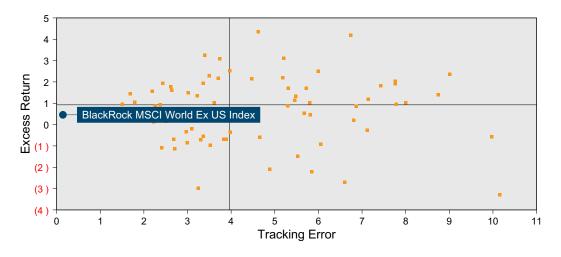


#### BlackRock MSCI World Ex US Index **Risk Analysis Summary**

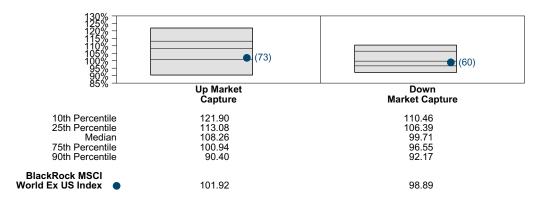
#### Risk Analysis

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

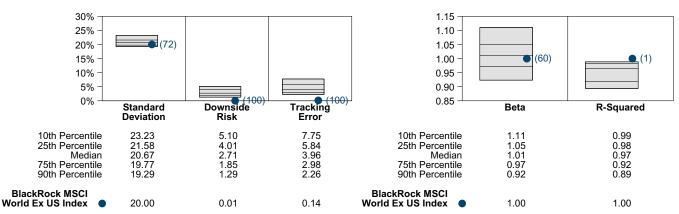
#### Risk Analysis vs Callan Non-US Developed Broad Equity (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI World xUS (Net) Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI World xUS (Net) Rankings Against Callan Non-US Developed Broad Equity (Gross) Five Years Ended June 30, 2024

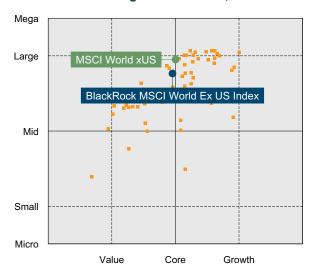




#### **Current Holdings Based Style Analysis** BlackRock MSCI World Ex US Index As of June 30, 2024

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

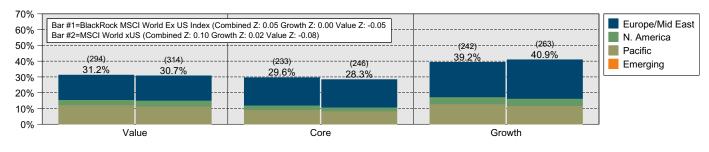
#### Style Map vs Callan NonUS Dev Broad Eq Holdings as of June 30, 2024



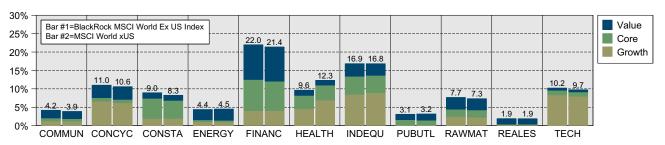
#### **Style Exposure Matrix** Holdings as of June 30, 2024

	15.5% (144)	17.6% (129)	21.9% (109)	55.0% (382)
Europe/				
Mid East	15.6% (158)	17.5% (140)	24.6% (127)	57.7% (425)
	10.070 (130)	17.570 (140)	24.070 (127)	31.1 /0 (423)
	3.4% (24)	2.9% (20)	4.5% (35)	10.8% (79)
N. America				
	3.6% (27)	2.5% (21)	4.6% (39)	10.7% (87)
	12.3% (126)	9.1% (84)	12.8% (97)	34.2% (307)
Pacific				
	11.5% (129)	8.4% (85)	11.7% (96)	31.6% (310)
	0.0% (0)	0.0% (0)	0.0% (1)	0.0% (1)
Emerging	, ,	, ,	, ,	
	0.0% (0)	0.0% (0)	0.0% (1)	0.0% (1)
	31.2% (294)	29.6% (233)	39.2% (242)	100.0% (769)
Total				
	30.7% (314)	28.3% (246)	40.9% (263)	100.0% (823)
	Value	Core	Growth	Total

#### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



#### **Sector Weights Distribution** Holdings as of June 30, 2024



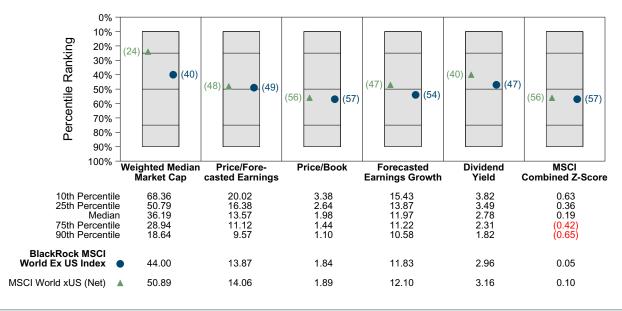


#### BlackRock MSCI World Ex US Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

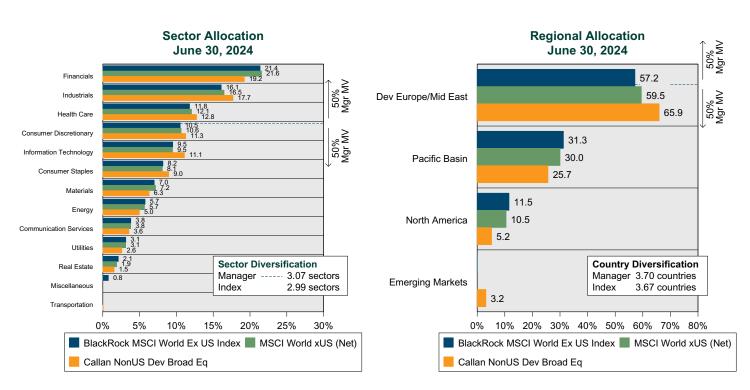
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US Developed Broad Equity as of June 30, 2024



#### **Sector Weights**

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

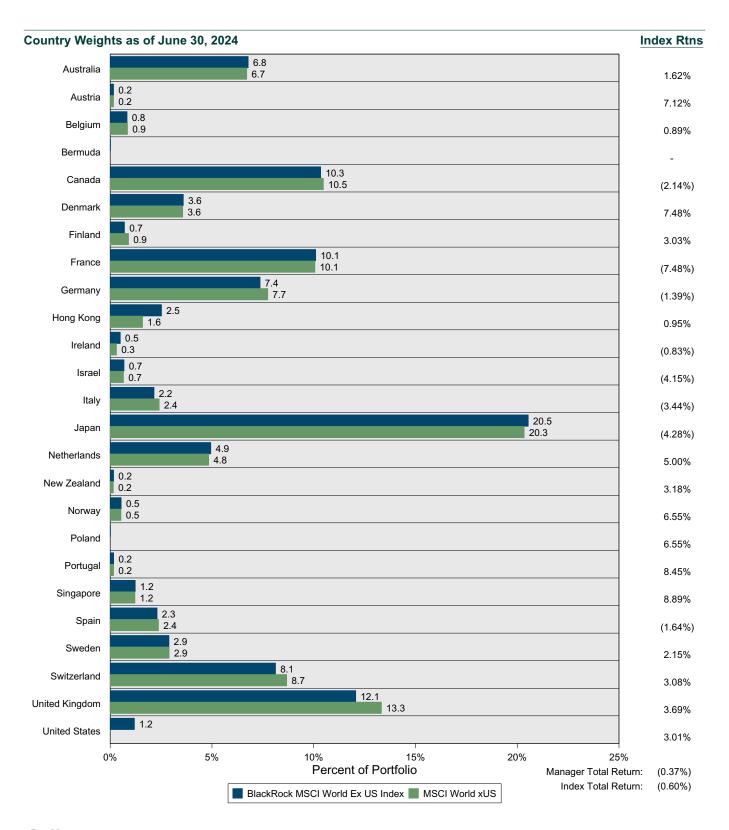




#### **Country Allocation** BlackRock MSCI World Ex US Index VS MSCI World xUS (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





#### **Xponance Non-U.S. Small Cap** Period Ended June 30, 2024

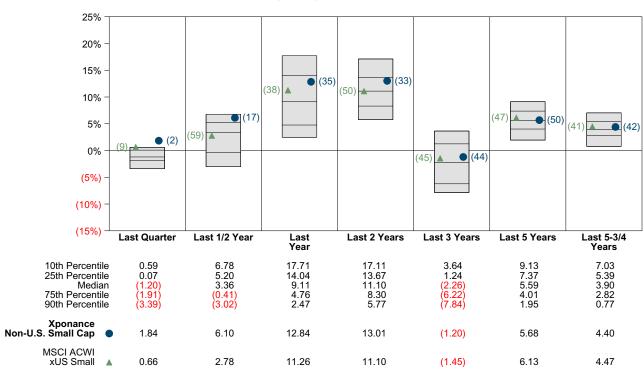
#### **Investment Philosophy**

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

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

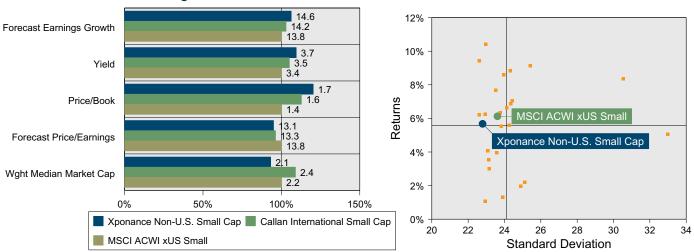
- Xponance Non-U.S. Small Cap's portfolio posted a 1.84% return for the quarter placing it in the 2 percentile of the Callan International Small Cap group for the quarter and in the 35 percentile for the last year.
- Xponance Non-U.S. Small Cap's portfolio outperformed the MSCI ACWI xUS Small by 1.18% for the quarter and outperformed the MSCI ACWI xUS Small for the year by 1.58%.

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



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

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



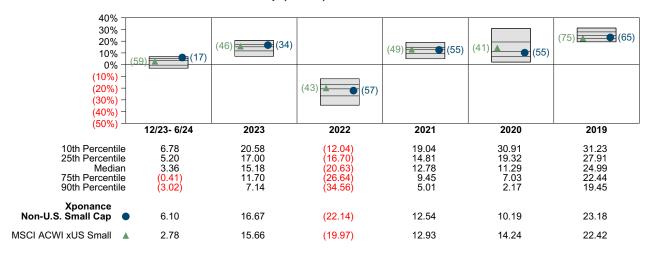


#### **Xponance Non-U.S. Small Cap Return Analysis Summary**

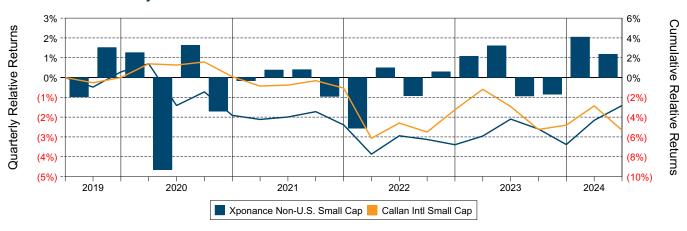
#### **Return Analysis**

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

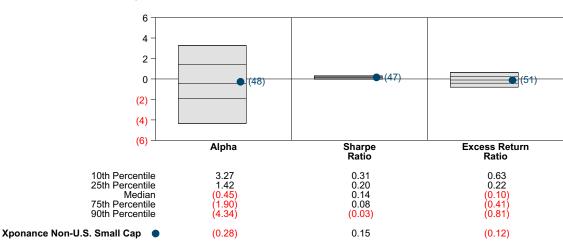
#### Performance vs Callan International Small Cap (Gross)



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



Risk Adjusted Return Measures vs MSCI ACWI xUS Small Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024



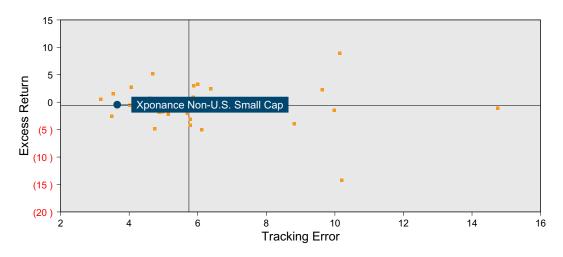


#### **Xponance Non-U.S. Small Cap Risk Analysis Summary**

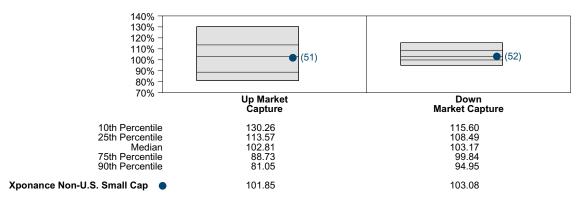
#### Risk Analysis

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

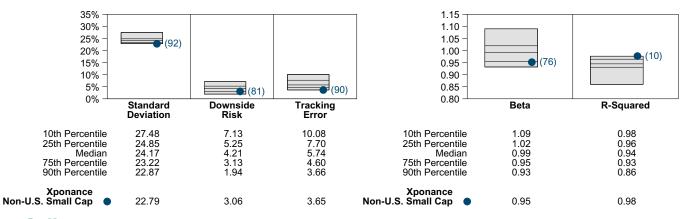
#### Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI ACWI xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI ACWI xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024

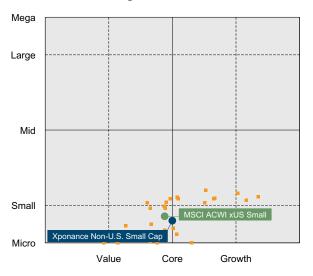




#### **Current Holdings Based Style Analysis Xponance Non-U.S. Small Cap** As of June 30, 2024

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

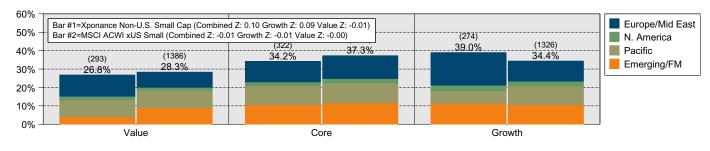
#### Style Map vs Callan Intl Small Cap Holdings as of June 30, 2024



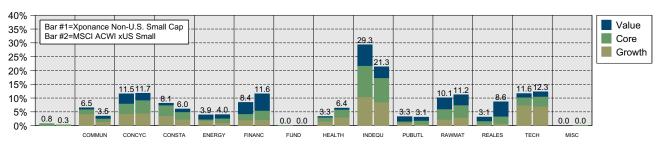
#### **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	28.3% (1386)	37.3% (1595)	34.4% (1326)	100.0% (4307)
Total				
	26.8% (293)	34.2% (322)	39.0% (274)	100.0% (889)
Emerging/ FM	8.9% (643)	11.5% (740)	10.6% (609)	31.0% (1992)
	4.0% (70)	10.6% (109)	11.2% (95)	25.8% (274)
	9.4% (400)	10.8% (400)	10.1% (353)	30.4% (1153)
Pacific	, ,	, ,	` ′	, ,
	9.1% (114)	10.3% (92)	6.8% (53)	26.1% (259)
	1.7% (64)	2.4% (81)	2.8% (66)	6.9% (211)
N. America	, ,	, ,	, ,	, ,
	2.0% (30)	2.1% (31)	3.2% (35)	7.4% (96)
Europe/ Mid East	8.3% (279)	12.5% (374)	10.9% (298)	31.8% (951)
Furanc/	11.6% (79)	11.2% (90)	17.8% (91)	40.7% (260)

#### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



#### **Sector Weights Distribution** Holdings as of June 30, 2024





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

#### **Portfolio Characteristics**

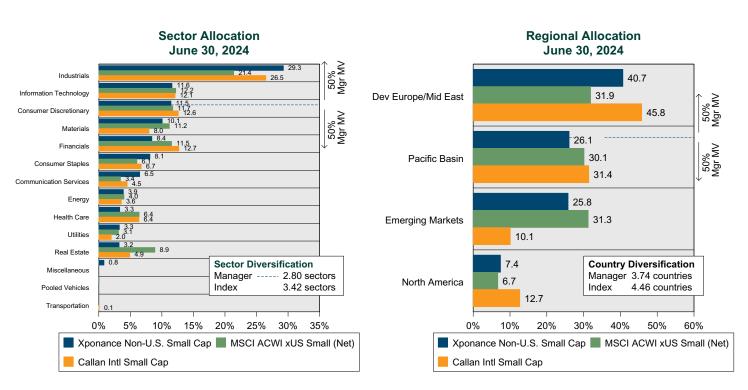
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap as of June 30, 2024



#### **Sector Weights**

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

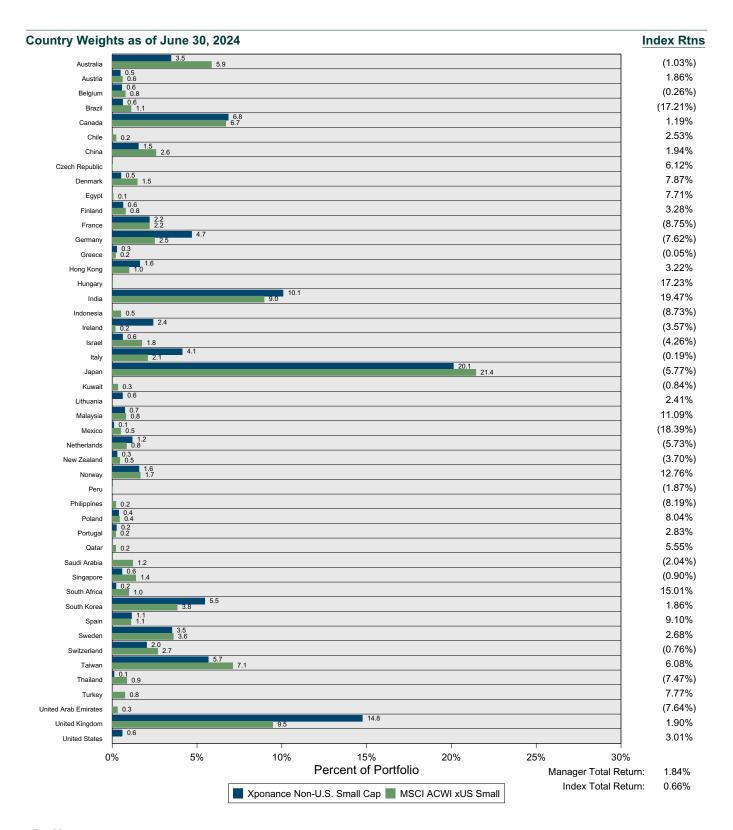




#### **Country Allocation Xponance Non-U.S. Small Cap VS MSCI ACWI xUS Small (Net)**

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





#### Harris Assoc Int'l SCV Period Ended June 30, 2024

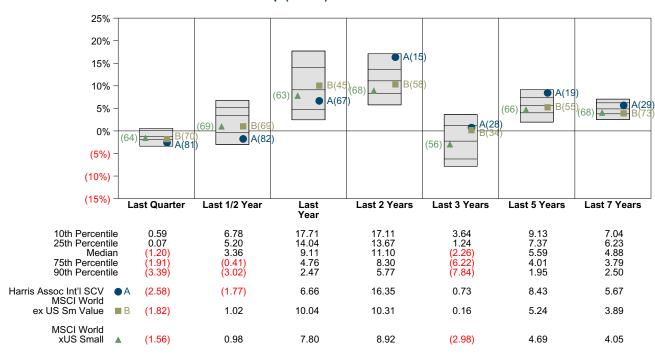
#### **Investment Philosophy**

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

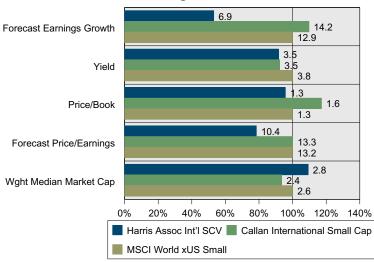
#### **Quarterly Summary and Highlights**

- Harris Assoc Int'l SCV's portfolio posted a (2.58)% return for the quarter placing it in the 81 percentile of the Callan International Small Cap group for the quarter and in the 67 percentile for the last year.
- Harris Assoc Int'l SCV's portfolio underperformed the MSCI World xUS Small by 1.03% for the quarter and underperformed the MSCI World xUS Small for the year by 1.15%.

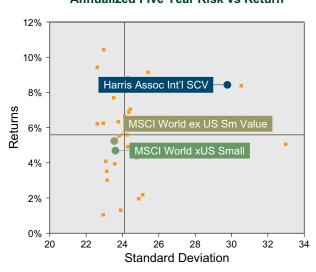
#### Performance vs Callan International Small Cap (Gross)



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



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



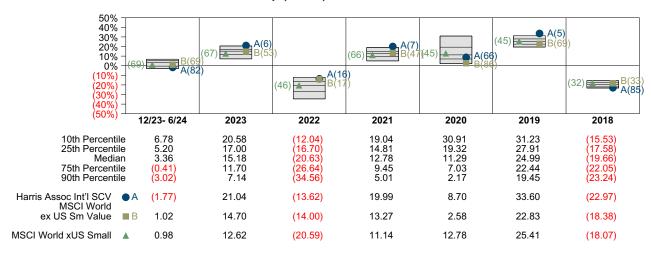


# Harris Assoc Int'l SCV **Return Analysis Summary**

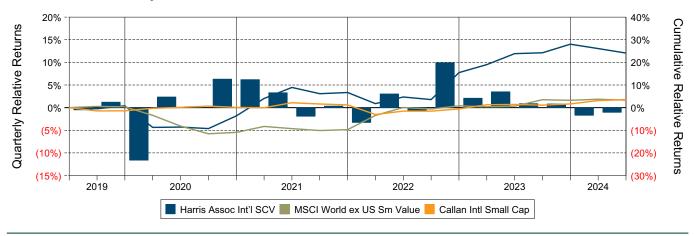
## **Return Analysis**

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

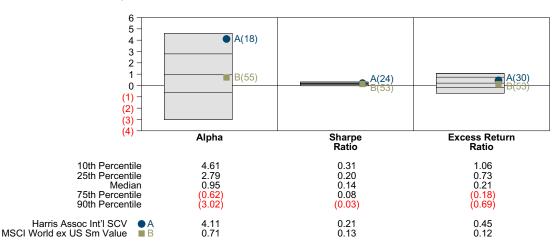
## Performance vs Callan International Small Cap (Gross)



# Cumulative and Quarterly Relative Returns vs MSCI World xUS Small



Risk Adjusted Return Measures vs MSCI World xUS Small Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024



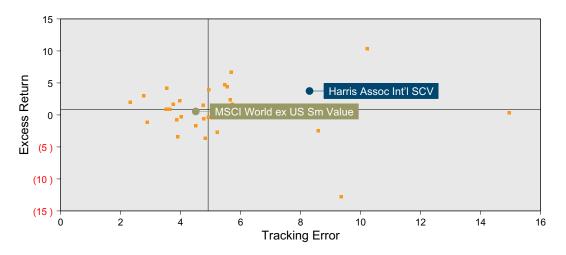


# Harris Assoc Int'l SCV **Risk Analysis Summary**

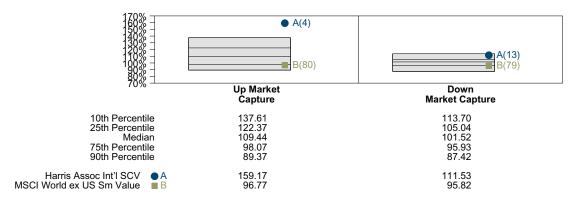
#### Risk Analysis

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

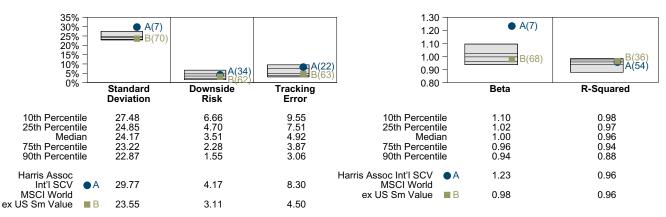
# Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI World xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI World xUS Small (Net) Rankings Against Callan International Small Cap (Gross) Five Years Ended June 30, 2024

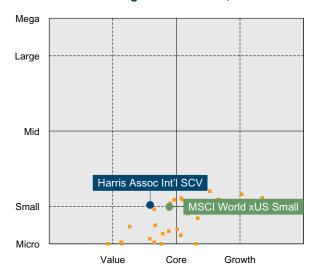




# **Current Holdings Based Style Analysis** Harris Assoc Int'l SCV As of June 30, 2024

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

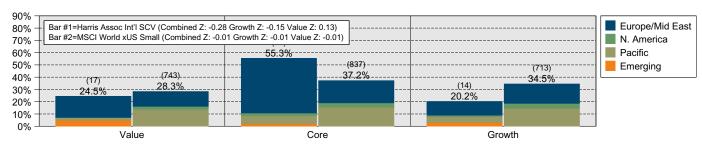
## Style Map vs Callan Intl Small Cap Holdings as of June 30, 2024



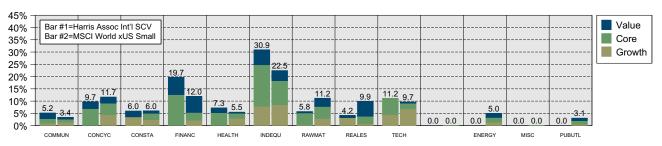
# **Style Exposure Matrix** Holdings as of June 30, 2024

Furanc/	17.4% (13)	44.5% (24)	11.2% (6)	73.1% (43)
Europe/ Mid East				
Wild Last	12.1% (279)	18.2% (374)	15.9% (298)	46.2% (951)
	0.0% (0)	2.3% (2)	1.3% (1)	3.7% (3)
N. America				
	2.5% (64)	3.4% (77)	4.0% (66)	9.9% (207)
	2.4% (2)	6.6% (3)	4.7% (3)	13.6% (8)
Pacific				
	13.7% (400)	15.6% (386)	14.6% (349)	43.9% (1135)
	4.7% (2)	1.9% (1)	3.0% (4)	9.6% (7)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	24.5% (17)	55.3% (30)	20.2% (14)	100.0% (61)
Total				
	28.3% (743)	37.2% (837)	34.5% (713)	100.0% (2293)
	Value	Core	Growth	Total

# **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



# **Sector Weights Distribution** Holdings as of June 30, 2024



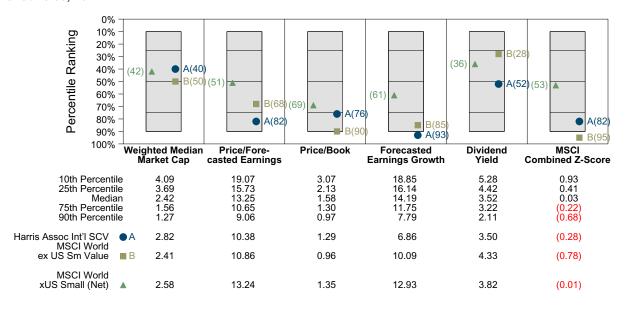


# Harris Assoc Int'l SCV **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

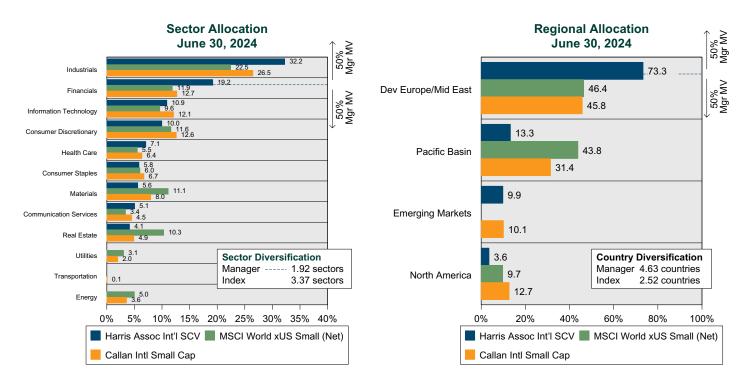
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap as of June 30, 2024



#### **Sector Weights**

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

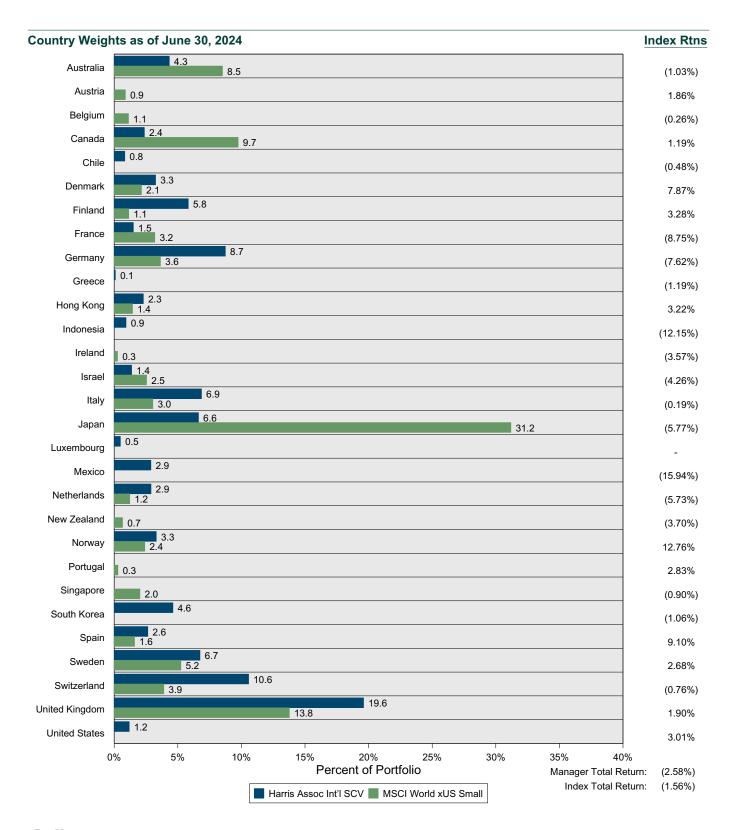




# **Country Allocation** Harris Assoc Int'l SCV VS MSCI World xUS Small (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.



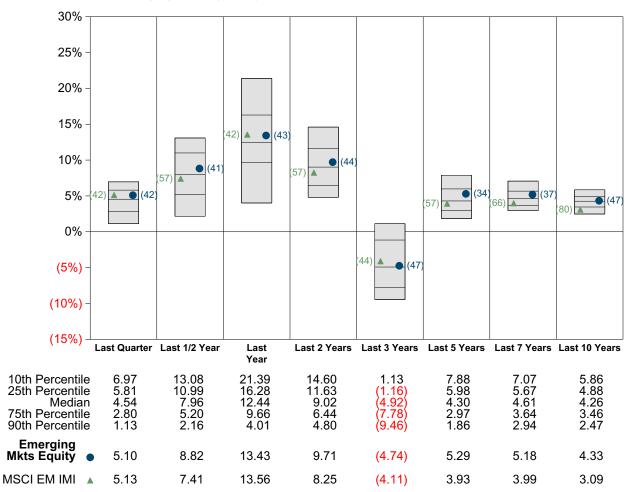


# **Emerging Mkts Equity** Period Ended June 30, 2024

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

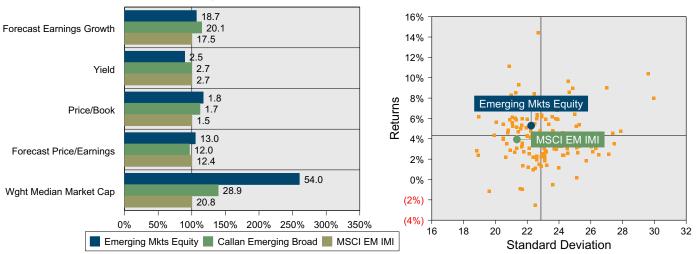
- Emerging Mkts Equity's portfolio posted a 5.10% return for the quarter placing it in the 42 percentile of the Callan Emerging Broad group for the quarter and in the 43 percentile for the last year.
- Emerging Mkts Equity's portfolio underperformed the MSCI EM IMI by 0.04% for the quarter and underperformed the MSCI EM IMI for the year by 0.13%.

# Performance vs Callan Emerging Broad (Gross)



# Portfolio Characteristics as a Percentage of the MSCI EM IMI

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



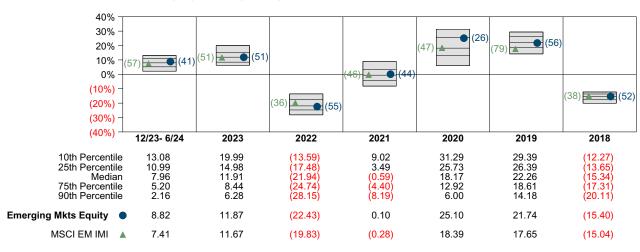


# **Emerging Mkts Equity Return Analysis Summary**

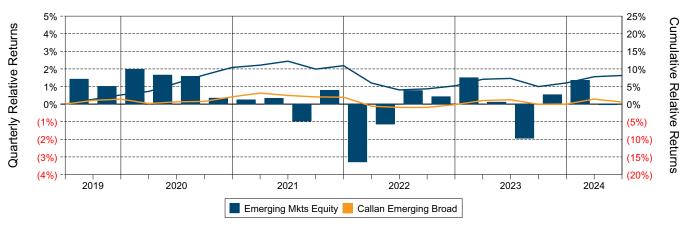
## **Return Analysis**

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

# Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM IMI Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



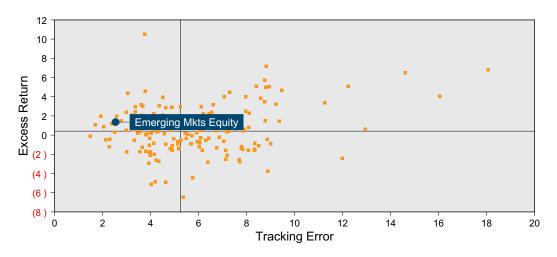


# **Emerging Mkts Equity Risk Analysis Summary**

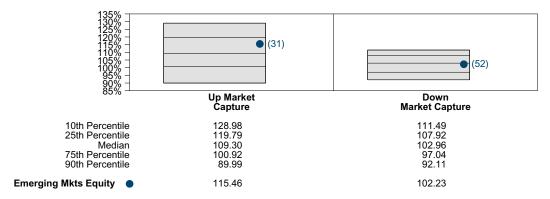
#### Risk Analysis

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

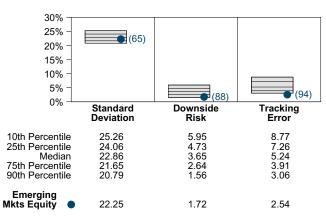
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended June 30, 2024

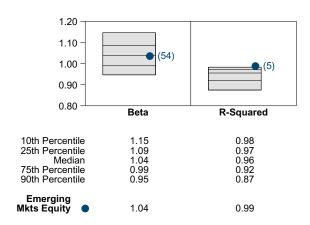


Market Capture vs MSCI EM IMI (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI EM IMI (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



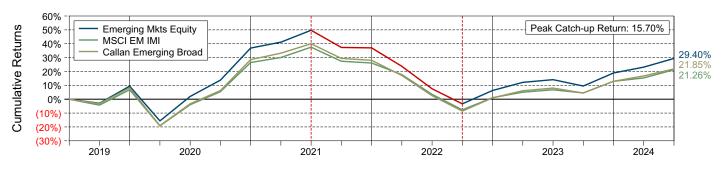




# **Emerging Mkts Equity** Drawdown Analysis for Five Years Ended June 30, 2024

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

## **Absolute Cumulative Drawdown Analysis**

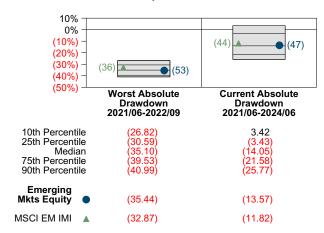


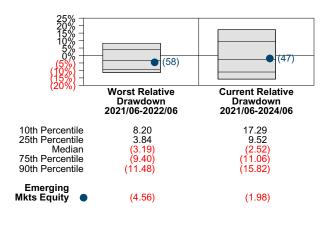
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Emerging Mkts Equity	(35.44)%	1.25	2021/06-2022/09	(32.87)%	(34.71)%	(13.57)%	3.00	2021/06-2024/06	(11.82)%	(12.96)%
Recovery from Trough	33.88%	1.75+	2022/09-2024/06	31.35%	33.32%	33.88%	1.75+	2022/09-2024/06	31.35%	33.32%
MSCI EM IMI	(32.87)%	1.25	2021/06-2022/09			(11.82)%	3.00	2021/06-2024/06		
Callan Emerging Broad	(34.71)%	1.25	2021/06-2022/09			(12.96)%	3.00	2021/06-2024/06		

#### Relative Cumulative Drawdown Analysis vs. MSCI EM IMI Cumulative Relative Returns Peak Catch-up Rel Rtn: 2.02% **Emerging Mkts Equity** 10% Callan Emerging Broad 8% 6.71% 6% 4% 2% 0.48% 0% (2%)(4%)2019 2020 2021 2022 2024 2023

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Emerging Mkts Equity	(4.56)%	1.00	2021/06-2022/06	(2.65)%	(1.98)%	3.00	2021/06-2024/06	(1.29)%
Recovery from Trough	2.71%	2.00+	2022/06-2024/06	1.40%	2.71%	2.00+	2022/06-2024/06	1.40%
Callan Emerging Broad	(3.33)%	1.50	2021/03-2022/09		(1.88)%	3.25	2021/03-2024/06	

Drawdown Rankings vs. MSCI EM IMI Rankings against Callan Emerging Broad Five Years Ended June 30, 2024



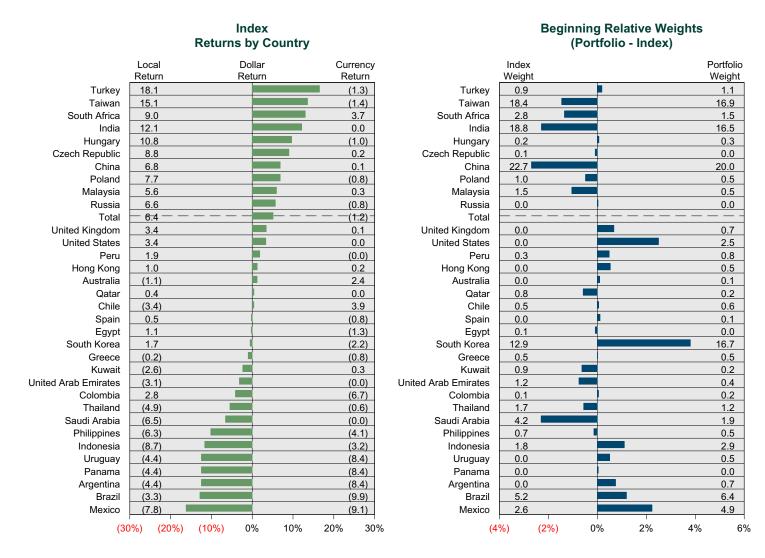


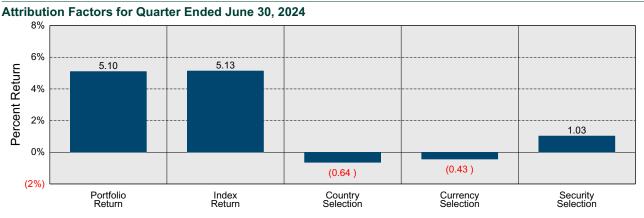


# **Emerging Mkts Equity vs MSCI EM IMI** Attribution for Quarter Ended June 30, 2024

#### International Attribution

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







# **Current Holdings Based Style Analysis Emerging Mkts Equity** As of June 30, 2024

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

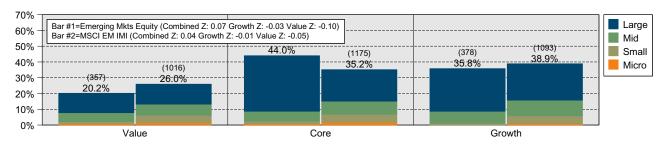
# Style Map vs Callan Emerging Broad Holdings as of June 30, 2024



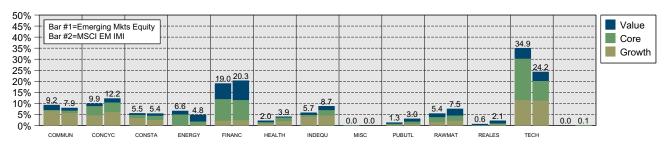
# **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	26.0% (1016)	35.2% (1175)	38.9% (1093)	100.0% (3284)
Total	, ,		, ,	, ,
	20.2% (357)	44.0% (375)	35.8% (378)	100.0% (1110)
	1.5% (373)	1.8% (382)	1.0% (259)	4.3% (1014)
Micro				
	0.9% (9)	0.9% (9)	0.0% (0)	1.7% (18)
	4.7% (385)	5.0% (474)	4.7% (450)	14.4% (1309)
Small				
	1.3% (106)	1.5% (84)	1.1% (77)	3.9% (267)
	7.1% (176)	8.4% (232)	10.0% (297)	25.5% (705)
Mid				
	5.6% (160)	6.3% (193)	7.6% (223)	19.5% (576)
	12.7% (82)	20.0% (87)	23.2% (87)	55.9% (256)
Large				
	12.4% (82)	35.3% (89)	27.1% (78)	74.9% (249)

# **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



## **Sector Weights Distribution** Holdings as of June 30, 2024

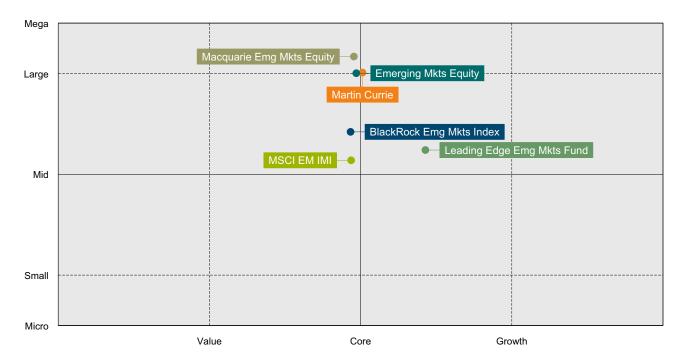




# **International Holdings Based Style Analysis** For One Quarter Ended June 30, 2024

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

Style Map Holdings for One Quarter Ended June 30, 2024



	Weight	Wtd Median	Combined	Growth	Value	Number of	Security
	%	Mkt Cap	Z-Score	Z-Score	Z-Score	Securities D	Diversification
BlackRock Emg Mkts Index	30.69%	31.23	0.04	(0.01)	(0.05)	1332	73.53
Leading Edge Emg Mkts Fund	16.20%	24.54	0.46	0.04	(0.42)	49	9.27
Macquarie Emg Mkts Equity	27.34%	127.93	0.06	(0.04)	(0.09)	85	6.23
Martin Currie	24.71%	57.00	0.11	(0.05)	(0.16)	55	13.46
Emerging Mkts Equity	100.00%	53.99	0.07	(0.03)	(0.10)	1417	25.81
MSCI EM IMI	-	20.76	0.04	(0.01)	(0.05)	3357	123.25

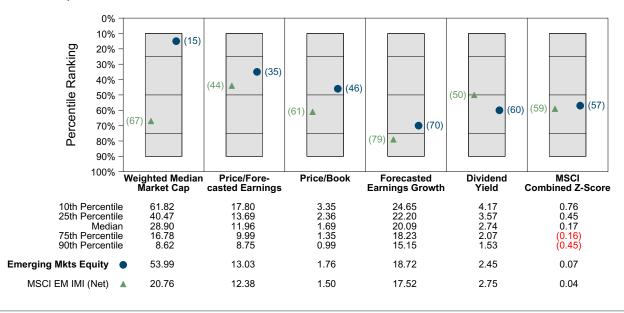


# **Emerging Mkts Equity Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

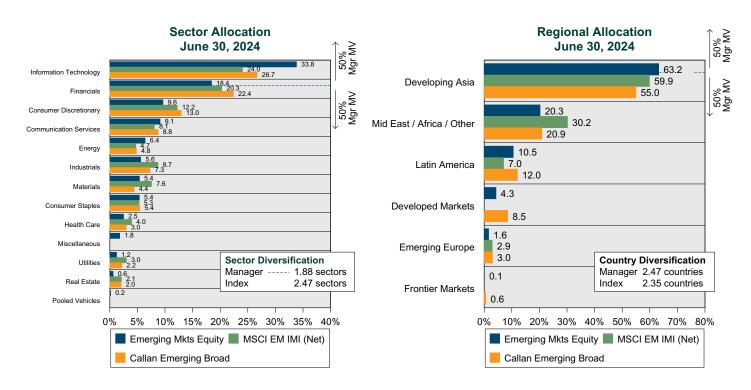
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of June 30, 2024



#### **Sector Weights**

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

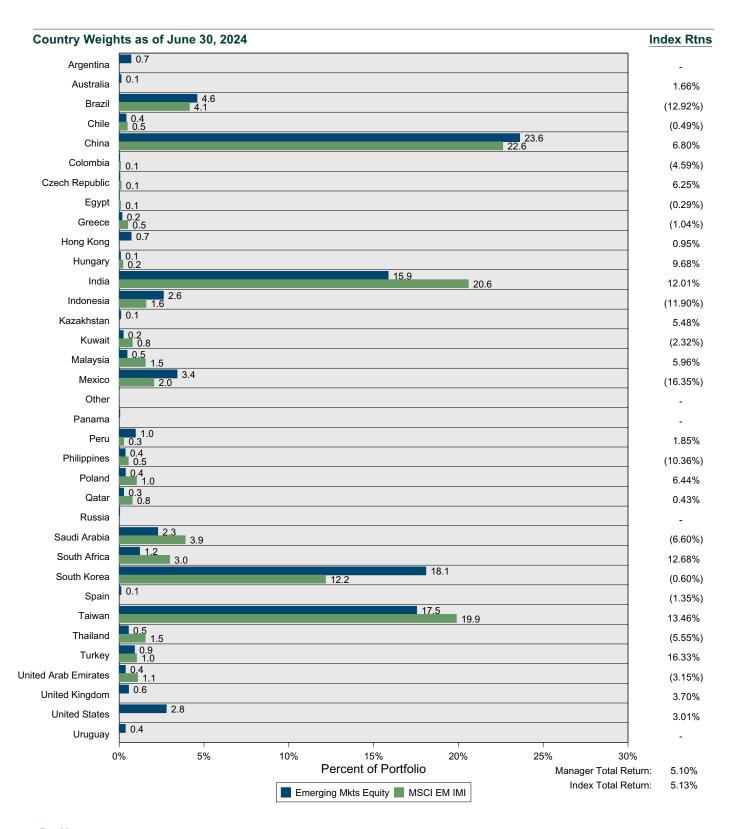




# **Country Allocation Emerging Mkts Equity VS MSCI EM IMI (Net)**

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





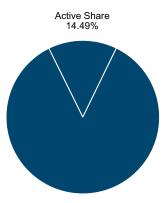
# **Emerging Mkts Equity** Active Share Analysis as of June 30, 2024 vs. MSCI EM IMI (Net)

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

## **Holdings-Level Active Share**

# Index Active Share 37.93% Non-Index Active Share 5.79% Passive Share 56.28%

## **Sector Exposure Active Share**



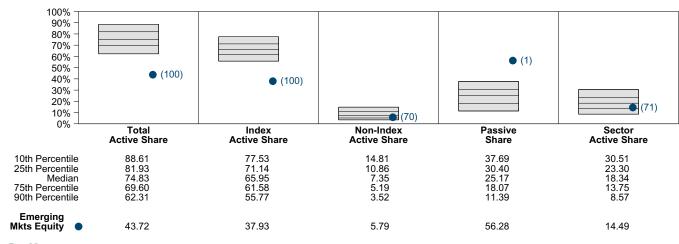
Passive Share 85.51%

Total Active Share: 43.72%

Communication Services Consumer Discretionary **Consumer Staples** Energy Financials Health Care Industrials Information Technology Materials Miscellaneous Pooled Vehicles Real Estate Utilities Total

Index Active Share Within Sector	Non-Index Active Share Within Sector	Total Active Share Within Sector	Index Weight	Manager Weight	Contribution to Total Portfolio Active Share
31.47%	3.64%	35.11%	8.08%	9.11%	3.21%
35.75%	5.62%	41.38%	12.21%	9.63%	4.55%
48.74%	4.04%	52.78%	5.31%	5.35%	2.81%
32.09%	4.07%	36.16%	4.72%	6.41%	1.54%
39.51%	4.44%	43.95%	20.27%	18.43%	8.69%
37.00%	16.97%	53.97%	3.96%	2.50%	2.02%
54.08%	2.17%	56.26%	8.72%	5.60%	4.50%
30.42%	4.80%	35.22%	24.04%	33.82%	10.05%
40.27%	6.87%	47.13%	7.56%	5.37%	3.35%
0.00%	102.44%	102.44%	-	1.80%	0.92%
0.00%	100.00%	100.00%	-	0.16%	0.08%
33.80%	10.80%	44.60%	2.11%	0.60%	0.88%
19.24%	2.06%	21.30%	3.01%	1.23%	1.07%
37.93%	5.79%	43.72%	100.00%	100.00%	43.67%

# Active Share vs. Callan Emerging Broad





# BlackRock Emg Mkts Index Period Ended June 30, 2024

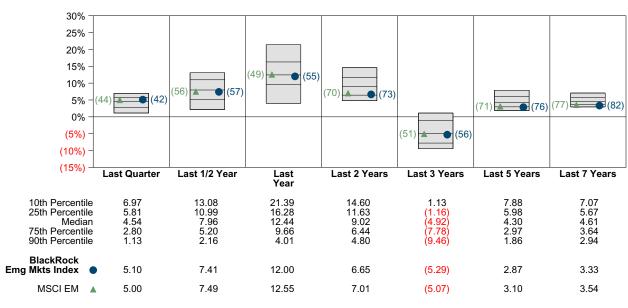
### **Investment Philosophy**

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

## **Quarterly Summary and Highlights**

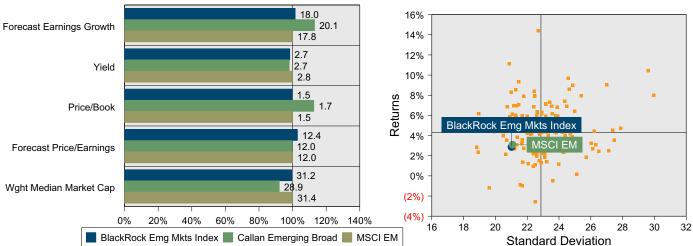
- BlackRock Emg Mkts Index's portfolio posted a 5.10% return for the quarter placing it in the 42 percentile of the Callan Emerging Broad group for the quarter and in the 55 percentile for the last year.
- BlackRock Emg Mkts Index's portfolio outperformed the MSCI EM by 0.11% for the quarter and underperformed the MSCI EM for the year by 0.54%.

# Performance vs Callan Emerging Broad (Gross)



# Portfolio Characteristics as a Percentage of the MSCI EM

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



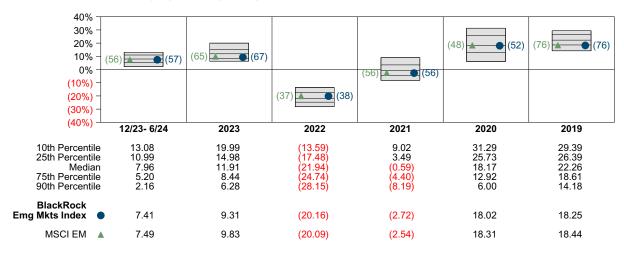


# BlackRock Emg Mkts Index **Return Analysis Summary**

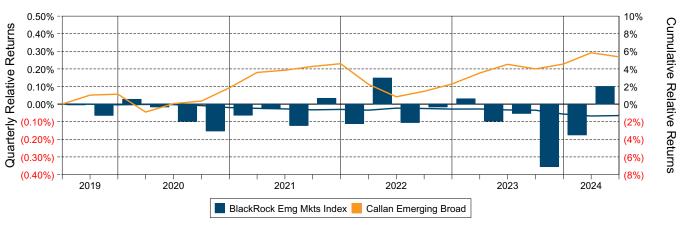
## **Return Analysis**

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

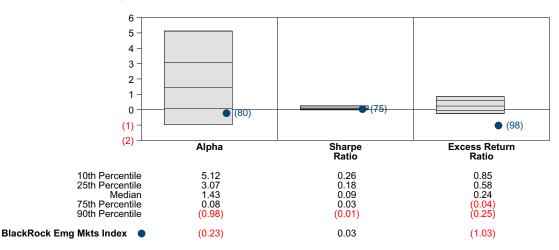
# Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



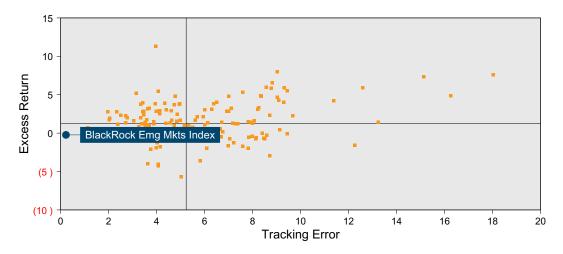


# BlackRock Emg Mkts Index **Risk Analysis Summary**

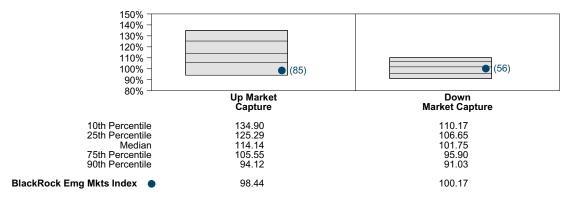
#### Risk Analysis

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

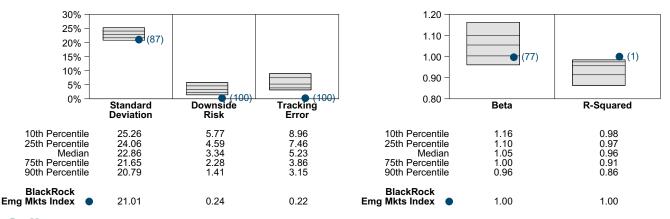
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



# **Current Holdings Based Style Analysis** BlackRock Emg Mkts Index As of June 30, 2024

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

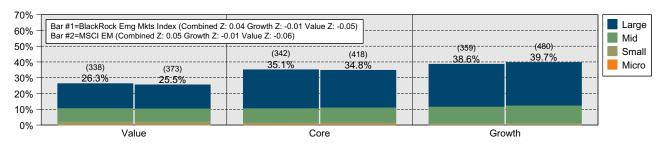
## Style Map vs Callan Emerging Broad Holdings as of June 30, 2024



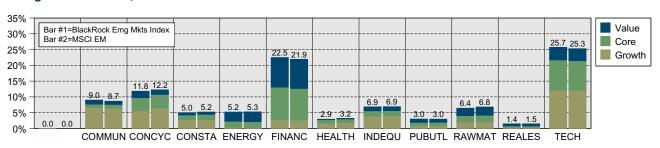
# **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	25.5% (373)	34.8% (418)	39.7% (480)	100.0% (1271)
Total			, ,	, ,
	26.3% (338)	35.1% (342)	38.6% (359)	100.0% (1039)
	0.0% (2)	0.3% (3)	0.0% (0)	0.3% (5)
Micro				
	0.0% (2)	0.3% (4)	0.0% (0)	0.3% (6)
	2.4% (122)	1.5% (110)	1.5% (114)	5.4% (346)
Small				
	2.3% (105)	1.5% (76)	1.4% (70)	5.2% (251)
	8.1% (167)	9.4% (218)	11.0% (279)	28.6% (664)
Mid				
	8.5% (156)	9.0% (184)	10.4% (216)	27.9% (556)
	14.9% (82)	23.5% (87)	27.2% (87)	65.6% (256)
Large	( ),	( 1,	( ),	( ),
	15.5% (75)	24.3% (78)	26.8% (73)	66.6% (226)

# **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



## **Sector Weights Distribution** Holdings as of June 30, 2024





# BlackRock Emg Mkts Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

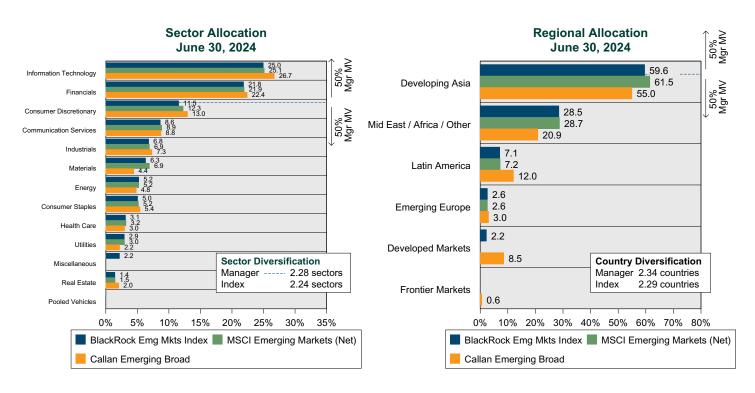
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# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of June 30, 2024



#### **Sector Weights**

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

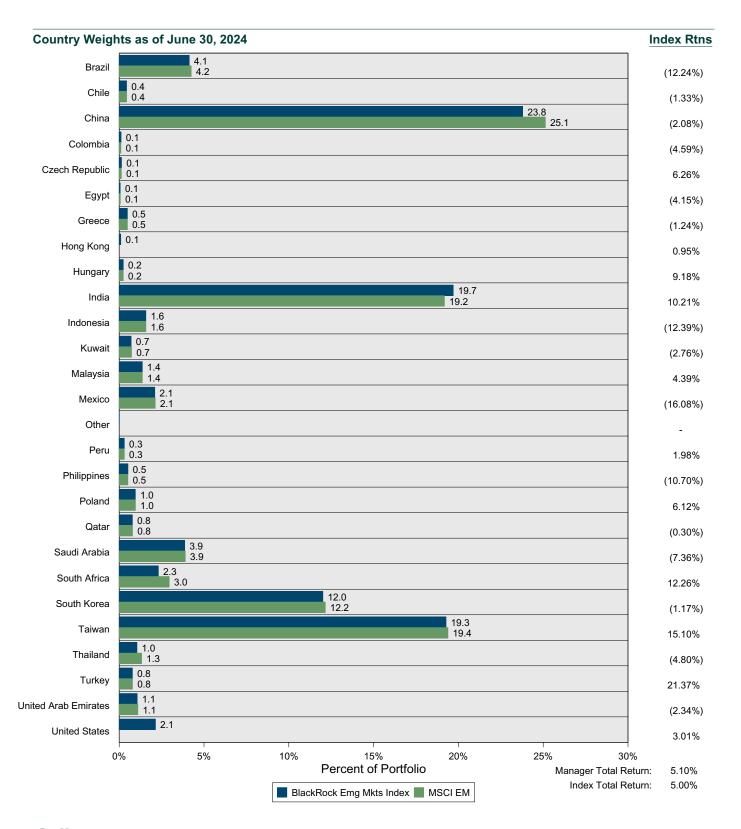




# **Country Allocation** BlackRock Emg Mkts Index VS MSCI Emerging Markets (Net)

# **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





# Leading Edge Emg Mkts Fund Period Ended June 30, 2024

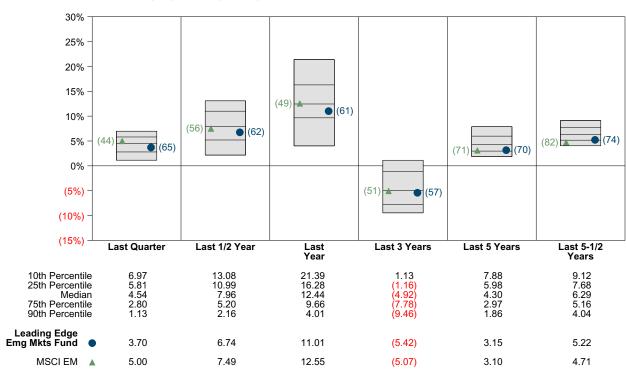
#### **Investment Philosophy**

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

### **Quarterly Summary and Highlights**

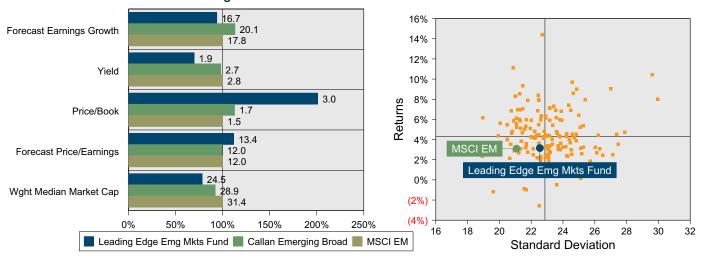
- Leading Edge Emg Mkts Fund's portfolio posted a 3.70% return for the guarter placing it in the 65 percentile of the Callan Emerging Broad group for the quarter and in the 61 percentile for the last year.
- Leading Edge Emg Mkts Fund's portfolio underperformed the MSCI EM by 1.30% for the quarter and underperformed the MSCI EM for the year by 1.54%.

## Performance vs Callan Emerging Broad (Gross)



# Portfolio Characteristics as a Percentage of the MSCI EM

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



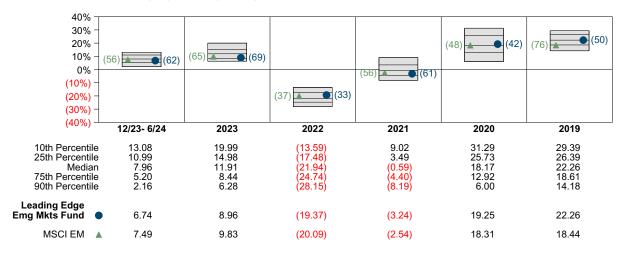


# Leading Edge Emg Mkts Fund **Return Analysis Summary**

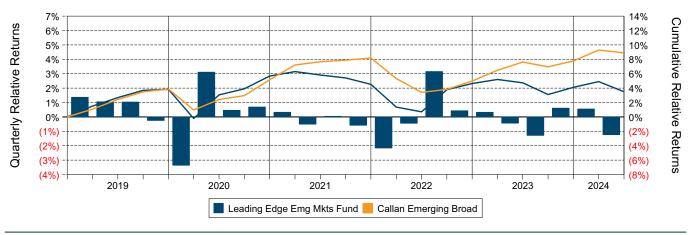
## **Return Analysis**

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

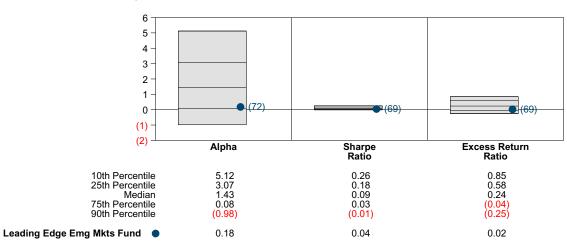
# Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



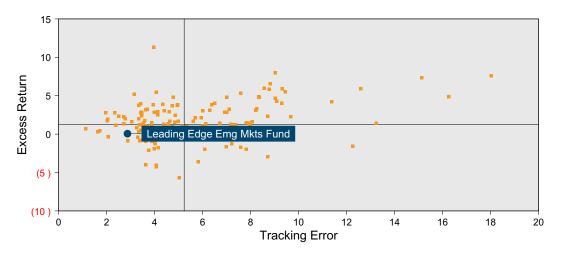


# Leading Edge Emg Mkts Fund **Risk Analysis Summary**

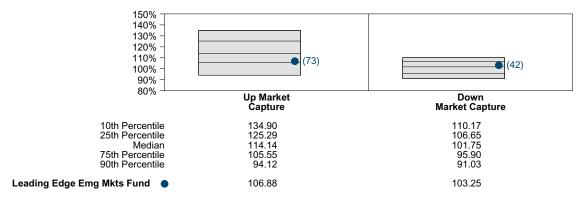
#### Risk Analysis

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

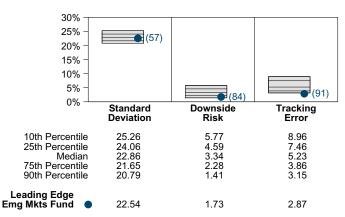
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended June 30, 2024

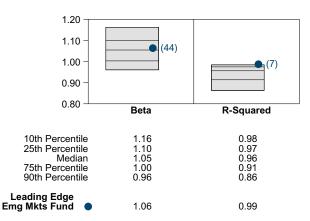


Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



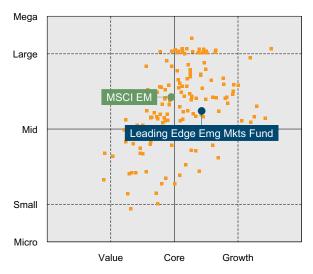




# **Current Holdings Based Style Analysis** Leading Edge Emg Mkts Fund As of June 30, 2024

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

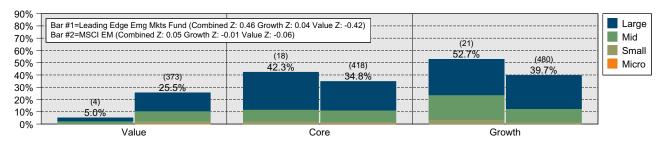
# Style Map vs Callan Emerging Broad Holdings as of June 30, 2024



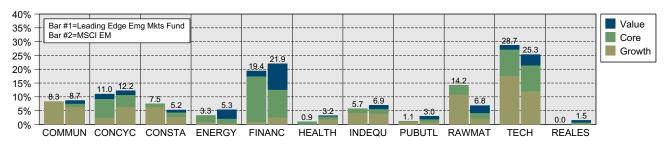
# **Style Exposure Matrix** Holdings as of June 30, 2024

	Value	Core	Growth	Total
	<b>25.5</b> % (373)	34.8% (418)	39.7% (480)	100.0% (1271)
Total	3.0 /0 ( <del>4</del> )	42.070 (10)	02.770 (21)	100.070 (43)
	5.0% (4)	42.3% (18)	52.7% (21)	100.0% (43)
	0.0% (2)	0.3% (3)	0.0% (0)	0.3% (5)
Micro				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	2.4% (122)	1.5% (110)	1.5% (114)	5.4% (346)
Small				
	0.0% (0)	2.4% (3)	3.6% (3)	6.0% (6)
	8.1% (167)	9.4% (218)	11.0% (279)	28.6% (664)
Mid				
	2.4% (2)	9.4% (5)	20.1% (11)	31.9% (18)
	14.9% (82)	23.5% (87)	27.2% (87)	65.6% (256)
Large				
	2.7% (2)	30.5% (10)	29.0% (7)	62.1% (19)

# **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



## **Sector Weights Distribution** Holdings as of June 30, 2024



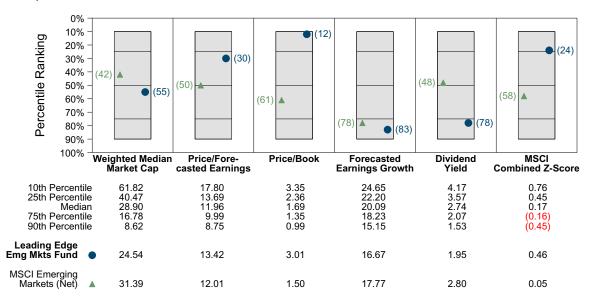


# Leading Edge Emg Mkts Fund **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

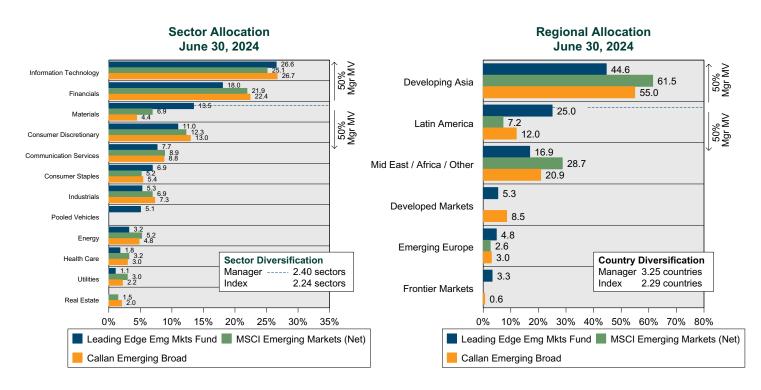
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of June 30, 2024



#### **Sector Weights**

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

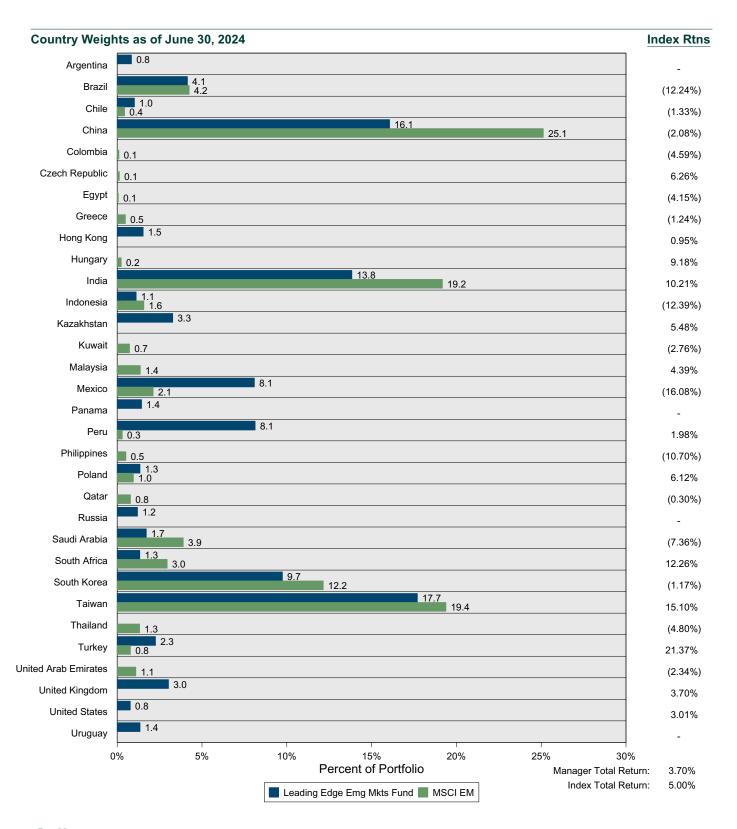




# **Country Allocation** Leading Edge Emg Mkts Fund VS MSCI Emerging Markets (Net)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





# Macquarie Emerging Markets Equity Period Ended June 30, 2024

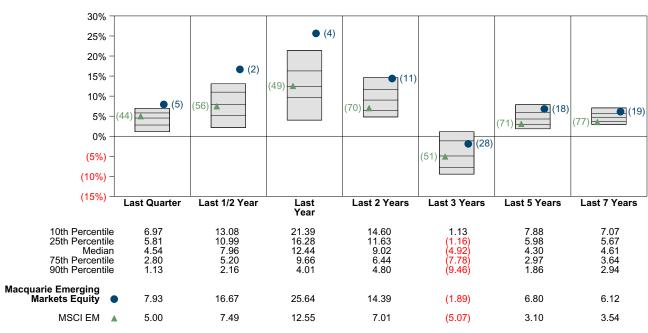
#### **Investment Philosophy**

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

## **Quarterly Summary and Highlights**

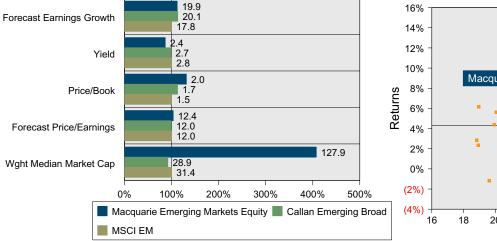
- Macquarie Emerging Markets Equity's portfolio posted a 7.93% return for the quarter placing it in the 5 percentile of the Callan Emerging Broad group for the quarter and in the 4 percentile for the last year.
- Macquarie Emerging Markets Equity's portfolio outperformed the MSCI EM by 2.93% for the quarter and outperformed the MSCI EM for the year by 13.09%.

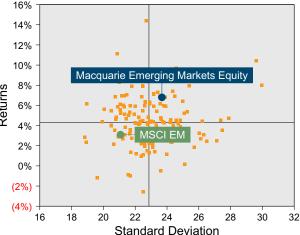
# Performance vs Callan Emerging Broad (Gross)



# Portfolio Characteristics as a Percentage of the MSCI EM

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





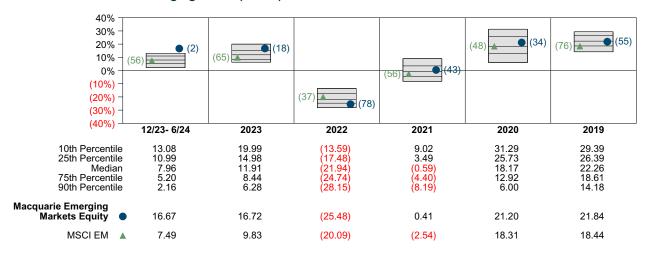


# **Macquarie Emerging Markets Equity Return Analysis Summary**

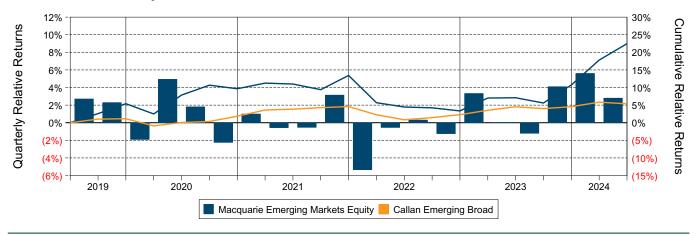
## **Return Analysis**

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

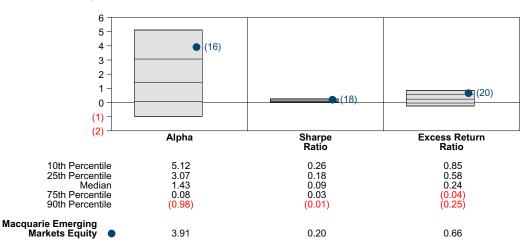
## Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



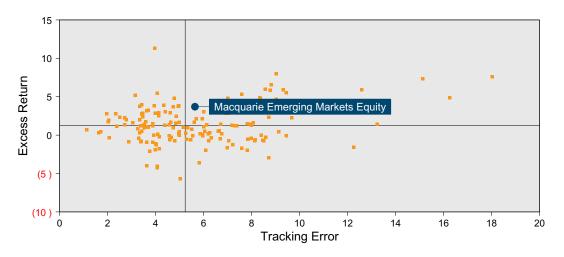


# **Macquarie Emerging Markets Equity Risk Analysis Summary**

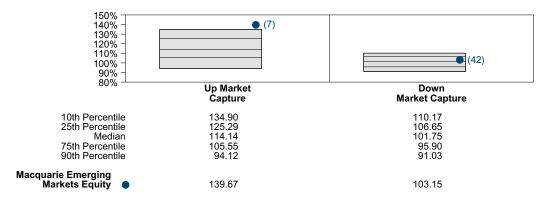
#### Risk Analysis

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

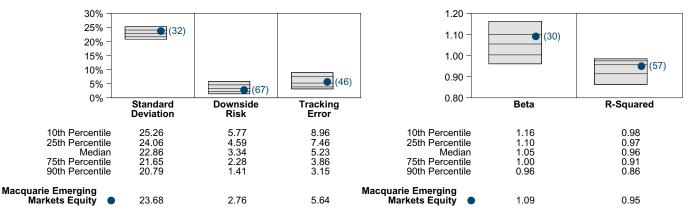
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024

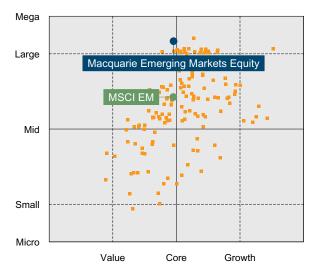




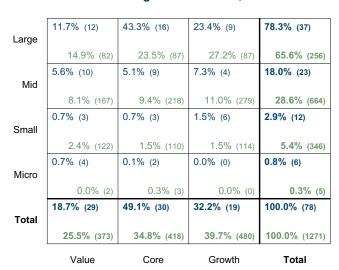
# **Current Holdings Based Style Analysis Macquarie Emerging Markets Equity** As of June 30, 2024

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

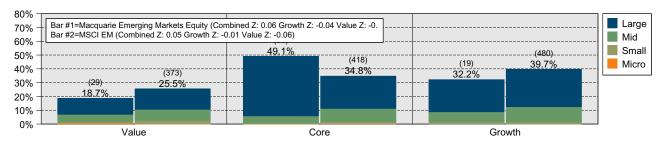
# Style Map vs Callan Emerging Broad Holdings as of June 30, 2024



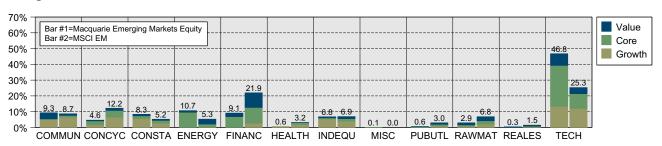
## **Style Exposure Matrix** Holdings as of June 30, 2024



# **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



## **Sector Weights Distribution** Holdings as of June 30, 2024



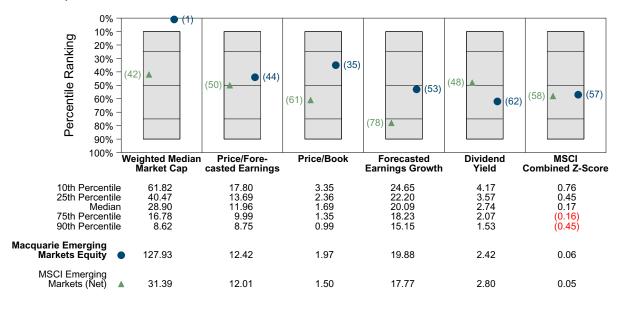


# **Macquarie Emerging Markets Equity Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

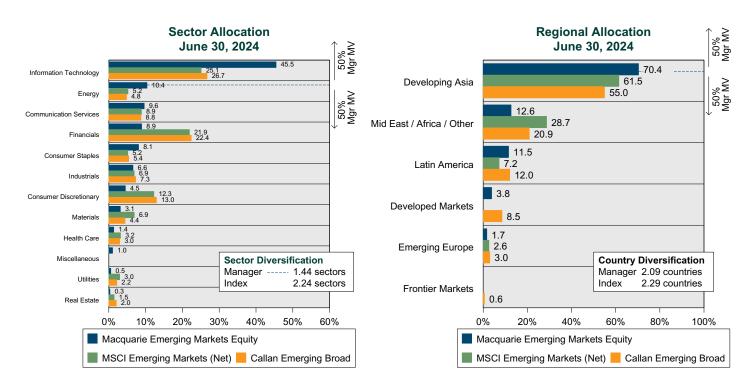
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of June 30, 2024



#### **Sector Weights**

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

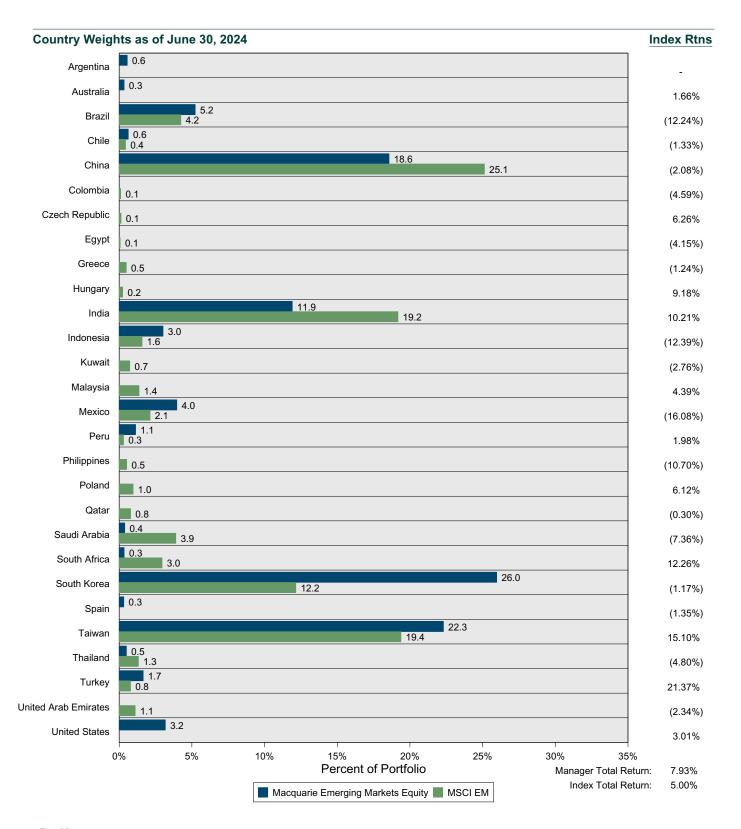




# **Country Allocation** Macquarie Emerging Markets Equity VS MSCI Emerging Markets (Net)

# **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





# **Martin Currie** Period Ended June 30, 2024

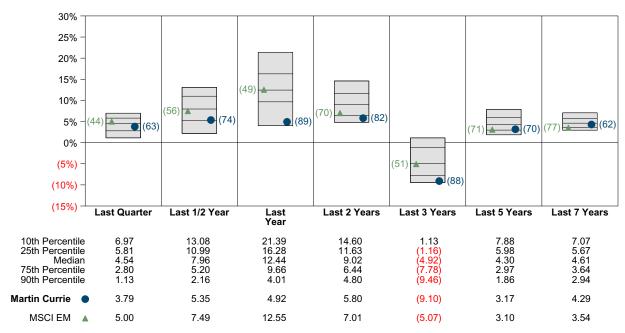
#### **Investment Philosophy**

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

## **Quarterly Summary and Highlights**

- Martin Currie's portfolio posted a 3.79% return for the quarter placing it in the 63 percentile of the Callan Emerging Broad group for the quarter and in the 89 percentile for the last year.
- Martin Currie's portfolio underperformed the MSCI EM by 1.21% for the quarter and underperformed the MSCI EM for the year by 7.63%.

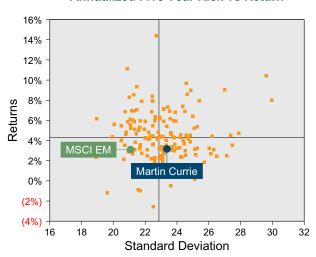
# Performance vs Callan Emerging Broad (Gross)



## Portfolio Characteristics as a Percentage of the MSCI EM



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



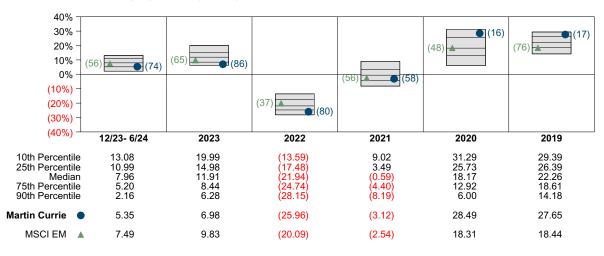


# **Martin Currie Return Analysis Summary**

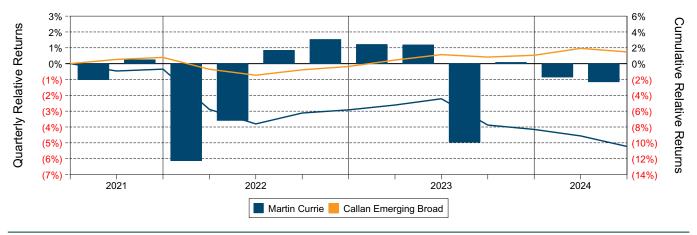
### **Return Analysis**

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

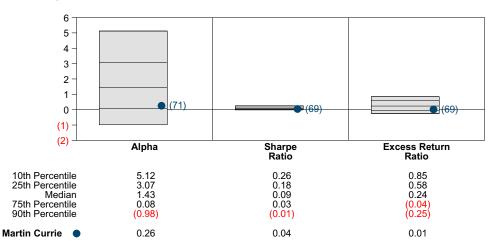
## Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



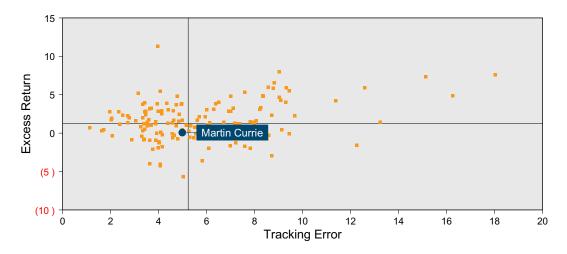


## **Martin Currie Risk Analysis Summary**

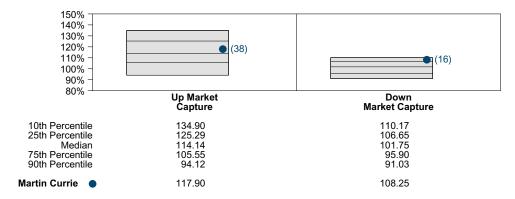
#### Risk Analysis

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

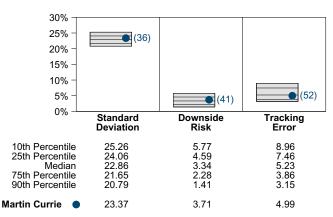
## Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended June 30, 2024

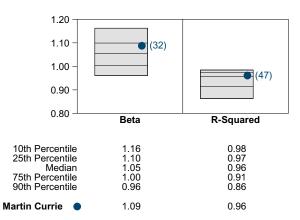


Market Capture vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI Emerging Markets (Net) Rankings Against Callan Emerging Broad (Gross) Five Years Ended June 30, 2024







## **Current Holdings Based Style Analysis Martin Currie** As of June 30, 2024

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

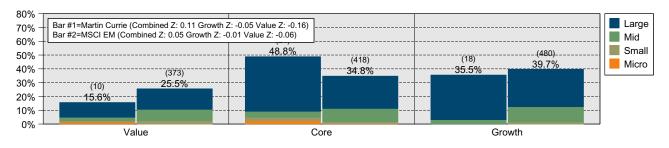
## Style Map vs Callan Emerging Broad Holdings as of June 30, 2024



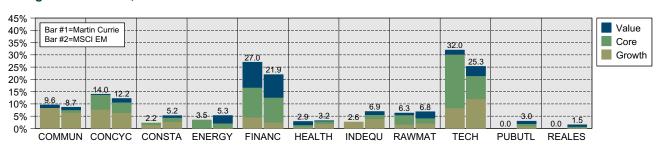
## **Style Exposure Matrix** Holdings as of June 30, 2024

	25.5% (373)	34.8% (418)	39.7% (480)	100.0% (1271)
Total	, ,			` ′
	15.6% (10)	48.8% (24)	35.5% (18)	100.0% (52)
	0.0% (2)	0.3% (3)	0.0% (0)	0.3% (5)
Micro				
	1.4% (1)	2.4% (2)	0.0% (0)	3.8% (3)
	2.4% (122)	1.5% (110)	1.5% (114)	5.4% (346)
Small				
	0.8% (1)	2.5% (2)	0.0% (0)	3.4% (3)
	8.1% (167)	9.4% (218)	11.0% (279)	28.6% (664)
Mid				
	2.6% (2)	4.3% (4)	3.2% (2)	10.1% (8)
	14.9% (82)	23.5% (87)	27.2% (87)	65.6% (256)
Large				
	10.8% (6)	39.6% (16)	32.3% (16)	82.7% (38)

### **Combined Z-Score Style Distribution** Holdings as of June 30, 2024



### **Sector Weights Distribution** Holdings as of June 30, 2024



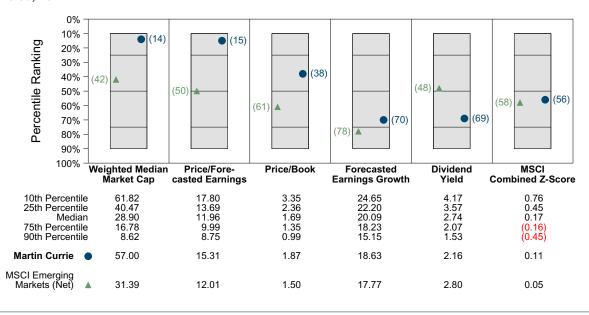


# **Martin Currie Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

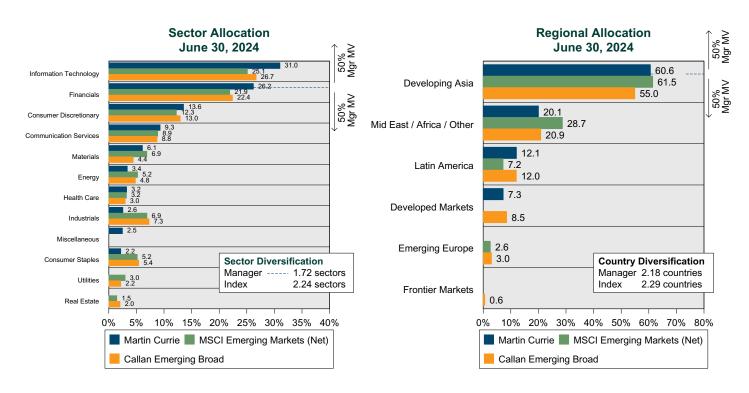
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of June 30, 2024



#### **Sector Weights**

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

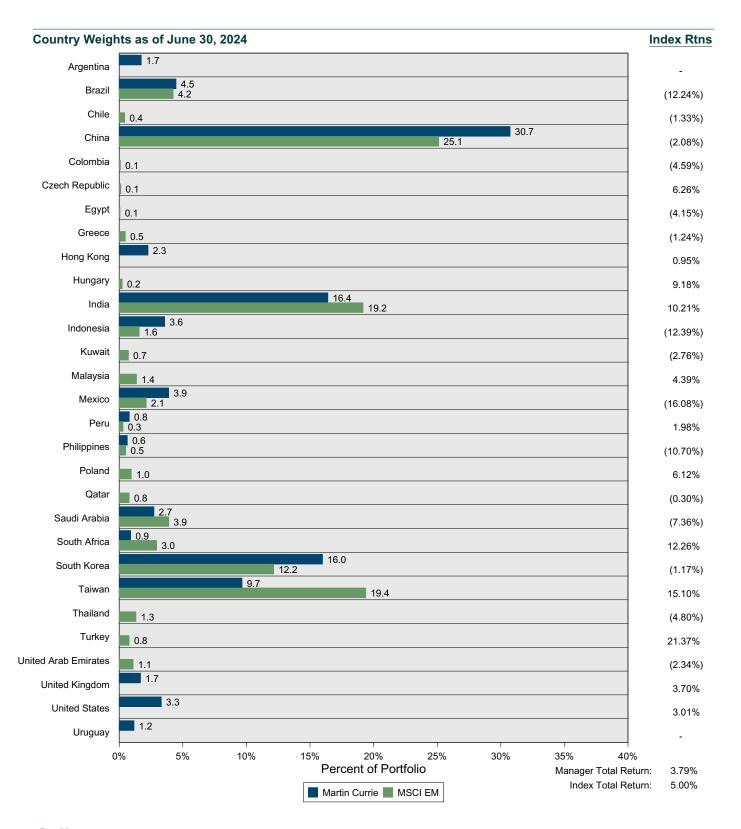




# **Country Allocation** Martin Currie VS MSCI Emerging Markets (Net)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of June 30, 2024. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent quarter. To the extent that the portfolio allocation is similar to the index, the portfolio should experience more "index-like" performance. In order to illustrate the performance effect on the portfolio and index of these country allocations, the individual index country returns are also shown.





## **GlobeFlex Emerging Small Cap** Period Ended June 30, 2024

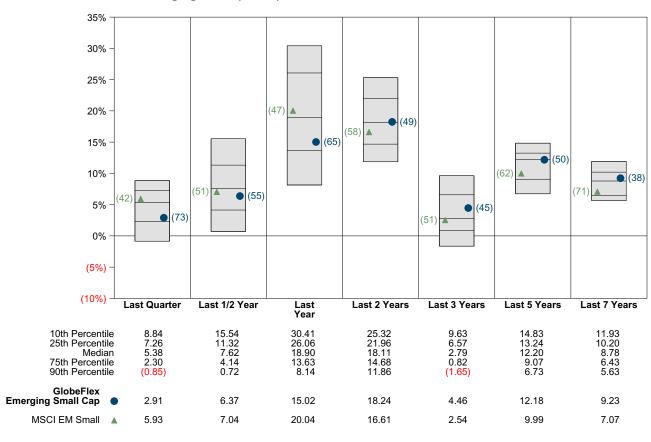
#### **Investment Philosophy**

This account started the process of liquidation in June of 2024.

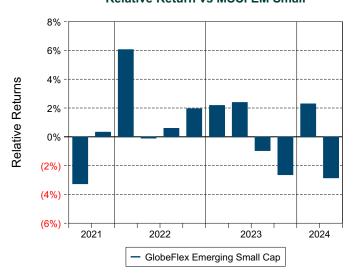
### **Quarterly Summary and Highlights**

- · GlobeFlex Emerging Small Cap's portfolio posted a 2.91% return for the quarter placing it in the 73 percentile of the Callan Emerging Small group for the quarter and in the 65 percentile for the last year.
- GlobeFlex Emerging Small Cap's portfolio underperformed the MSCI EM Small by 3.02% for the quarter and underperformed the MSCI EM Small for the year by 5.02%.

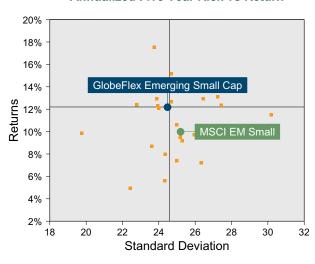
### Performance vs Callan Emerging Small (Gross)



# **Relative Return vs MSCI EM Small**



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



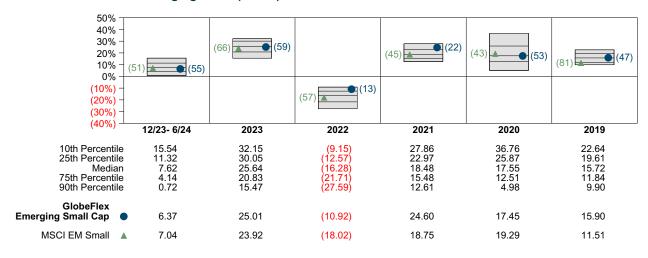


# **GlobeFlex Emerging Small Cap Return Analysis Summary**

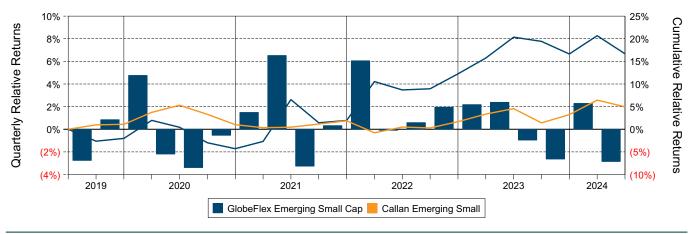
### **Return Analysis**

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

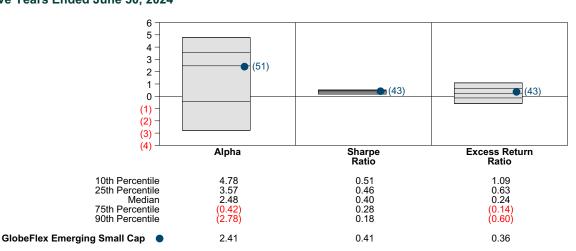
### Performance vs Callan Emerging Small (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Small Rankings Against Callan Emerging Small (Gross) Five Years Ended June 30, 2024



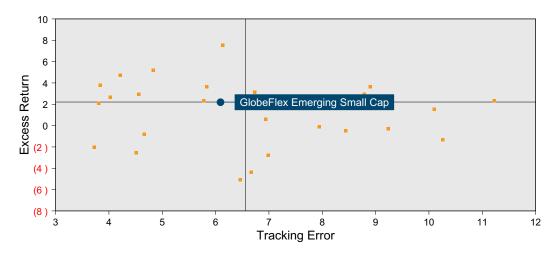


# **GlobeFlex Emerging Small Cap Risk Analysis Summary**

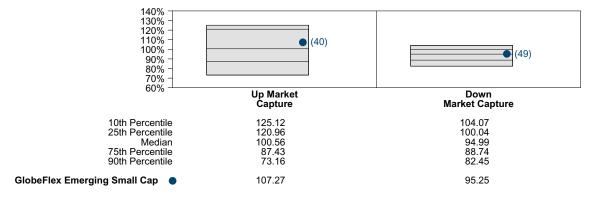
#### Risk Analysis

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

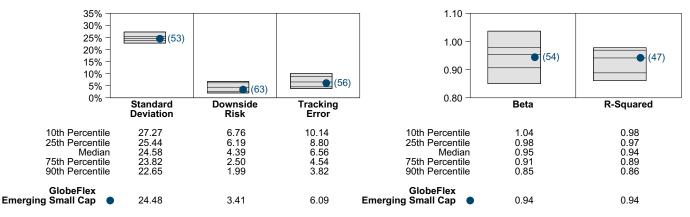
## Risk Analysis vs Callan Emerging Small (Gross) Five Years Ended June 30, 2024



Market Capture vs MSCI EM Small (Net) Rankings Against Callan Emerging Small (Gross) Five Years Ended June 30, 2024



Risk Statistics Rankings vs MSCI EM Small (Net) Rankings Against Callan Emerging Small (Gross) Five Years Ended June 30, 2024





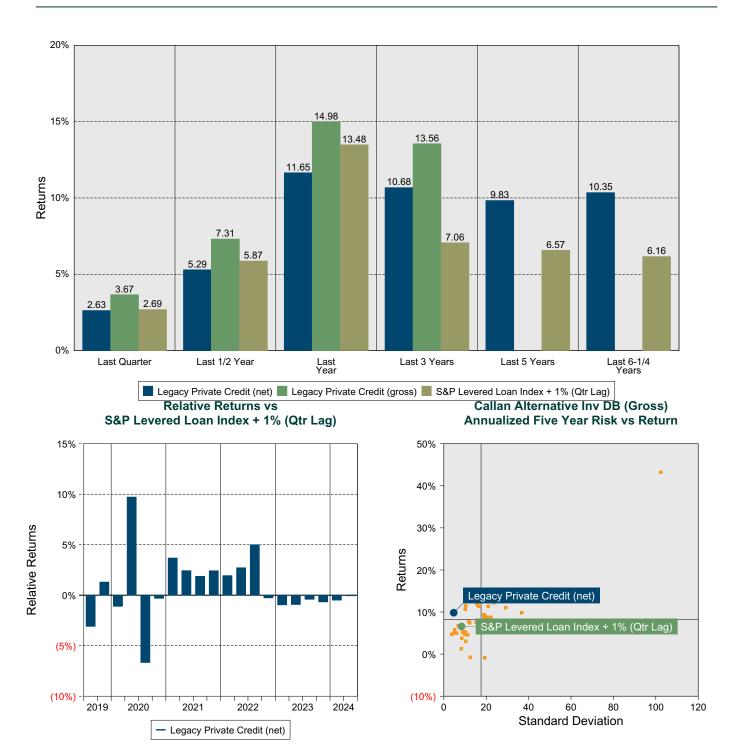
## **Legacy Private Credit** Period Ended June 30, 2024

### **Asset Class Membership Changes**

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

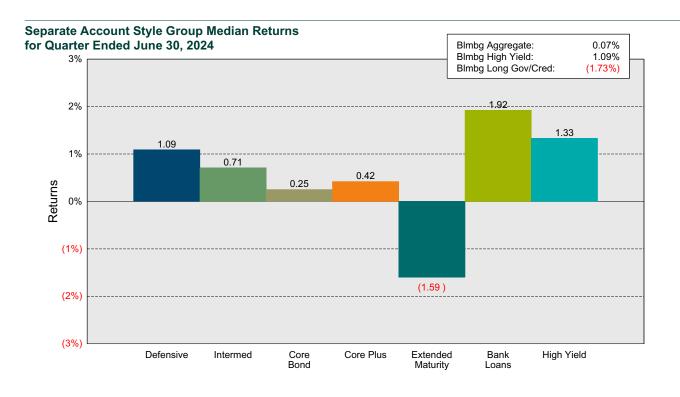
## **Quarterly Summary and Highlights**

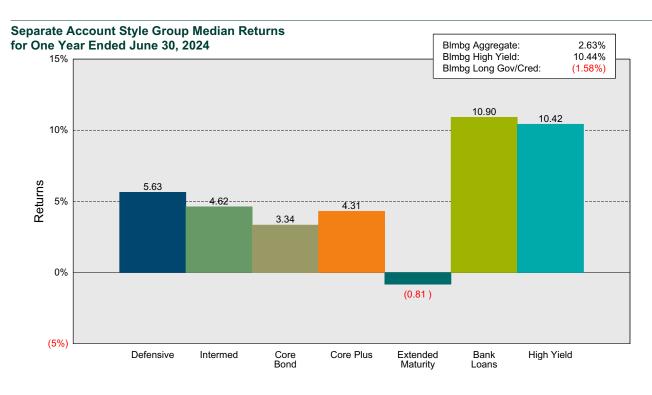
- Legacy Private Credit (net)'s portfolio posted a 2.63% return for the quarter placing it in the 38 percentile of the Callan Alternative Inv DB group for the quarter and in the 33 percentile for the last year.
- Legacy Private Credit (net)'s portfolio underperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 0.06% for the quarter and underperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 1.83%.



# **Domestic Fixed Income Active Management Overview**

The Bloomberg US Aggregate Bond Index (+0.1%) was flat in 2Q, bringing its YTD return to -0.7%. The yield on the 10-year U.S. Treasury climbed from 4.20% to 4.36% over the guarter. The yield curve steepened slightly but remained inverted at the front-end. As a result, intermediate and long-term maturities underperformed. High yield (Bloomberg High Yield: +1.1%) and bank loans (Morningstar Leveraged Loan: +1.9%) performed well. Valuations across the credit spectrum, as measured by spreads, remained rich from a historical perspective. Supply for investment grade and high yield issuers was robust but met with strong demand.

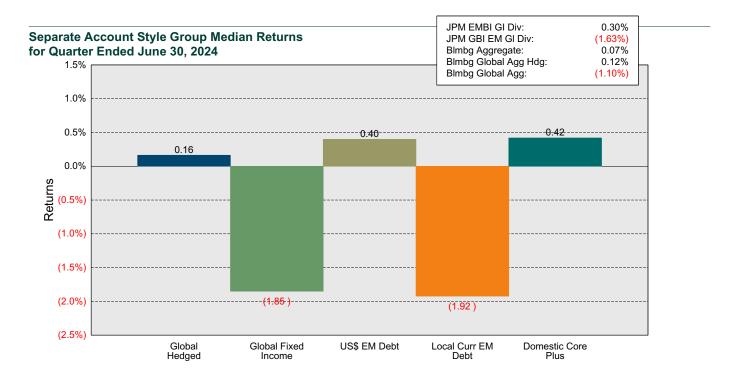


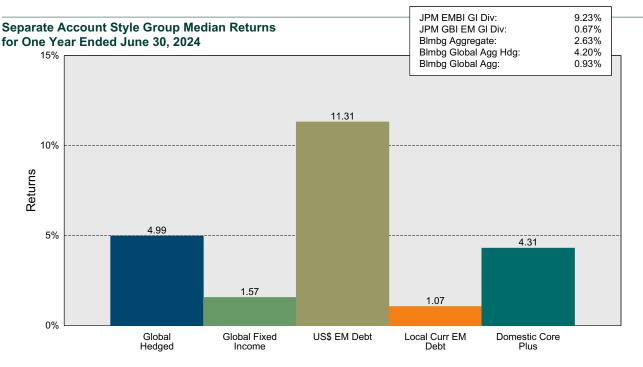




# **Global Fixed Income Active Management Overview**

The Bloomberg Global Aggregate was down 1.1% in 2Q. The U.S. (+0.0%) was flat and Japan (-8.0%) sank, hurt mostly by yen depreciation. In hedged terms, Japan was off only 1.1%. The U.S. dollar strengthened versus most currencies, helping returns for hedged investors in the U.S. (Bloomberg Global Aggregate USD Hedged: +0.1%). South Africa (+11.5%) was the top performer in the Index. Emerging market performance was muted with the hard currency JPM EMBI Global Diversified Index up 0.3% and the local currency JPM GBI EM Global Diversified Index down 1.6%. Within the latter, Latin America (-8.2%) offset strong returns from the Middle East/Africa (+11.5%) while Asia (+0.7%) and Europe (+0.2%) were muted. In Latin America, Brazil (-10.7%), Colombia (-7.4%) and Mexico (-9.6%) were notable underperformers given currency weakness.





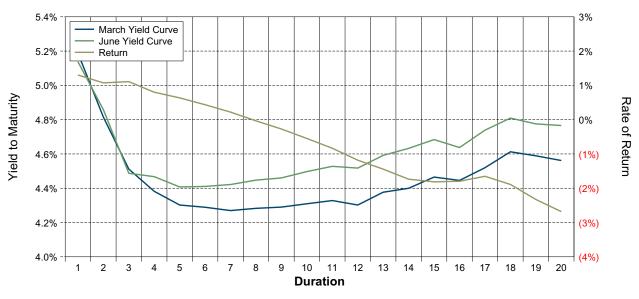


### **Bond Market Environment**

### **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.

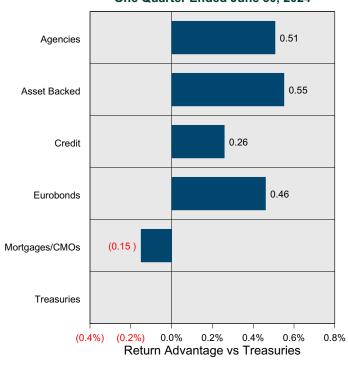
## Yield Curve Change and Rate of Return One Quarter Ended June 30, 2024





Trsy AAA (0.26)(0.53)AA Quality Rating (0.37)Α (0.19)BBB 0.35 BB (0.07)В (1.10)CCC (1.5%)(1.0%)(0.5%)0.0% 0.5% 1.0% Return Advantage vs Treasuries

## **Quality and Duration Adjusted Return Premium by Sector** One Quarter Ended June 30, 2024



## **Fixed Income** Period Ended June 30, 2024

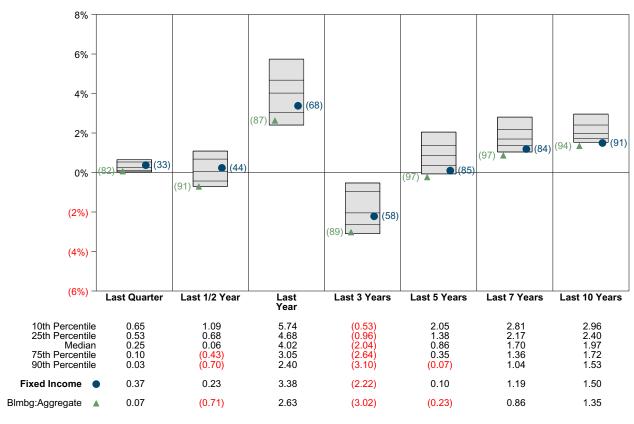
### **Asset Class Membership Changes**

Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021 and ended in 06/30/2022.

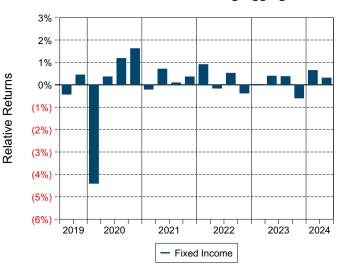
### **Quarterly Summary and Highlights**

- Fixed Income's portfolio posted a 0.37% return for the quarter placing it in the 33 percentile of the Public Fund -Domestic Fixed group for the quarter and in the 68 percentile for the last year.
- Fixed Income's portfolio outperformed the BImbg:Aggregate by 0.31% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.75%.

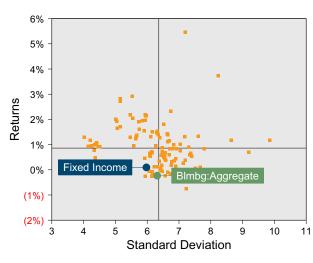
# Performance vs Public Fund - Domestic Fixed (Gross)



### Relative Return vs Blmbg:Aggregate



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



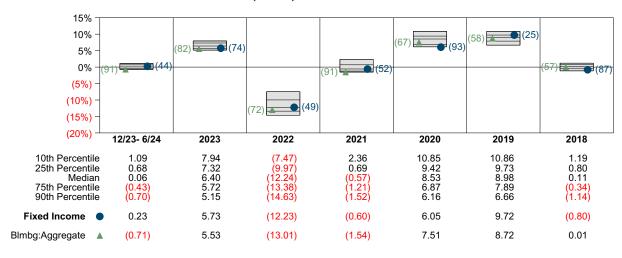


## **Fixed Income Return Analysis Summary**

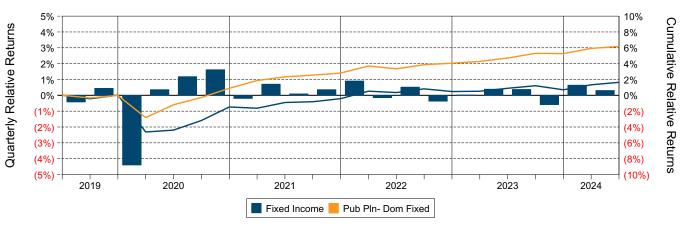
### **Return Analysis**

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

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



## Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Public Fund - Domestic Fixed (Gross) Five Years Ended June 30, 2024



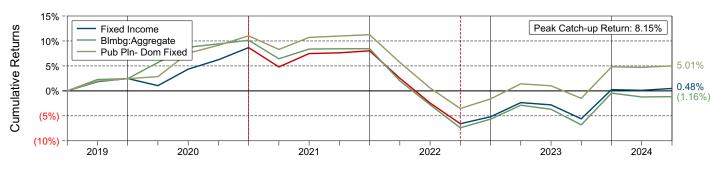


## **Fixed Income**

## Drawdown Analysis for Five Years Ended June 30, 2024

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

### **Absolute Cumulative Drawdown Analysis**

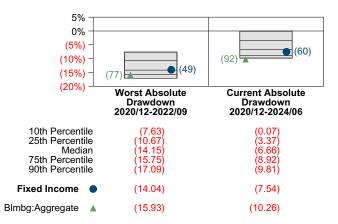


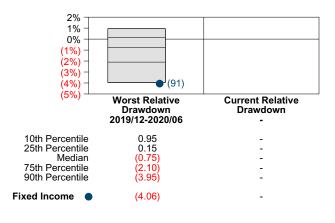
	Worst Absolute Drawdown				Current Absolute Drawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Fixed Income	(14.04)%	1.75	2020/12-2022/09	(15.93)%	(13.11)%	(7.54)%	3.50	2020/12-2024/06	(10.26)%	(5.42)%
Recovery from Trough	7.56%	1.75+	2022/09-2024/06	6.74%	8.86%	7.56%	1.75+	2022/09-2024/06	6.74%	8.86%
Blmbg:Aggregate	(15.93)%	1.75	2020/12-2022/09			(10.26)%	3.50	2020/12-2024/06		
Pub Pln- Dom Fixed	(13.29)%	0.75	2021/12-2022/09			(5.61)%	2.50	2021/12-2024/06		

#### Relative Cumulative Drawdown Analysis vs. Blmbg:Aggregate Cumulative Relative Returns Fixed Income 6.24% Pub Pln- Dom Fixed 2% 1.66% 0% (4%) (6%)2019 2020 2021 2022 2024 2023

	Worst Relative Drawdown				Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers	
Fixed Income	(4.06)%	0.50	2019/12-2020/06	(1.08)%	-	-	-	-	
Recovery from Trough	4.74%	1.75	2020/06-2022/03	4.78%	-	-	-	-	
Pub Pln- Dom Fixed	(2.66)%	0.75	2019/06-2020/03		-	-	-		

Drawdown Rankings vs. Blmbg:Aggregate Rankings against Public Fund - Domestic Fixed Five Years Ended June 30, 2024





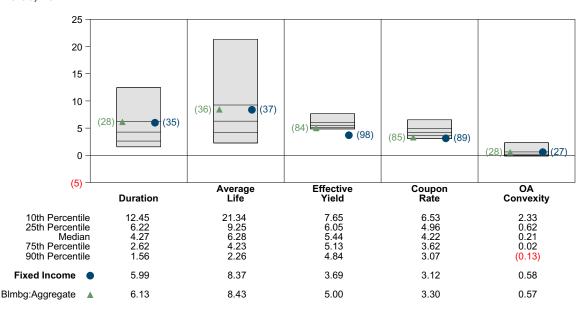


## **Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

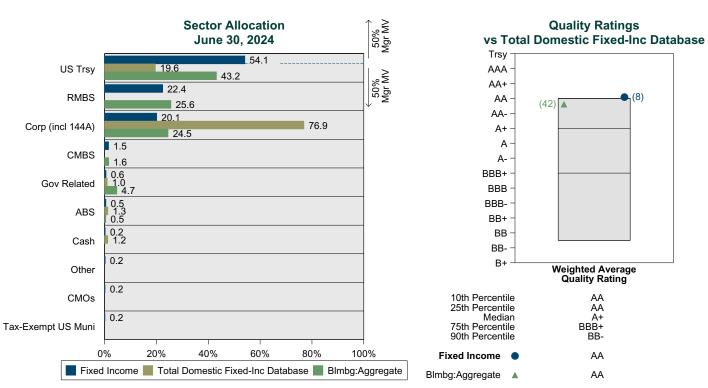
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Total Domestic Fixed-Inc Database as of June 30, 2024



### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

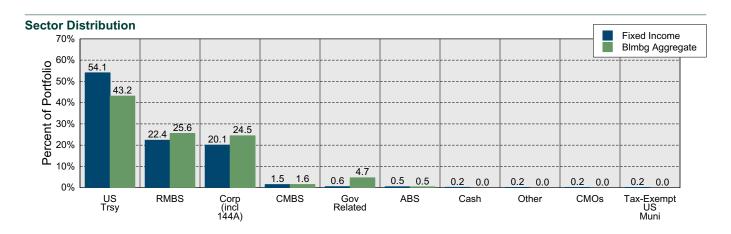


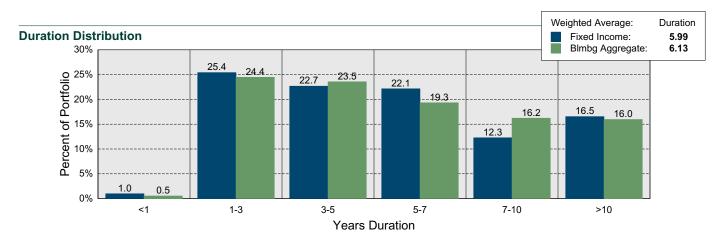


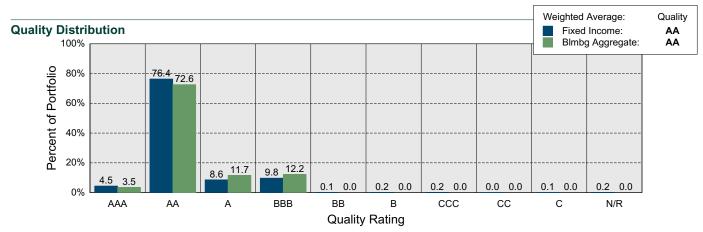
# **Fixed Income Portfolio Characteristics Summary** As of June 30, 2024

# **Portfolio Structure Comparison**

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







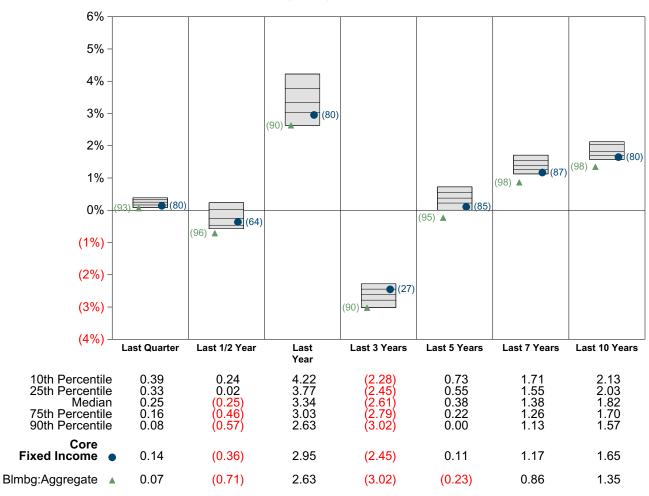


## **Core Fixed Income** Period Ended June 30, 2024

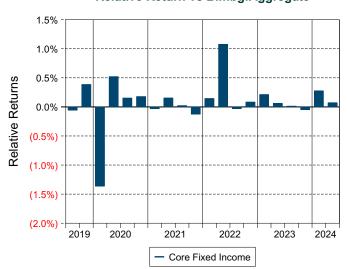
### **Quarterly Summary and Highlights**

- Core Fixed Income's portfolio posted a 0.14% return for the quarter placing it in the 80 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 80 percentile for the last year.
- Core Fixed Income's portfolio outperformed the Blmbg:Aggregate by 0.07% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.32%.

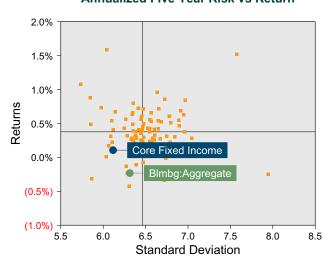
## Performance vs Callan Core Bond Fixed Income (Gross)



### Relative Return vs Blmbg:Aggregate



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



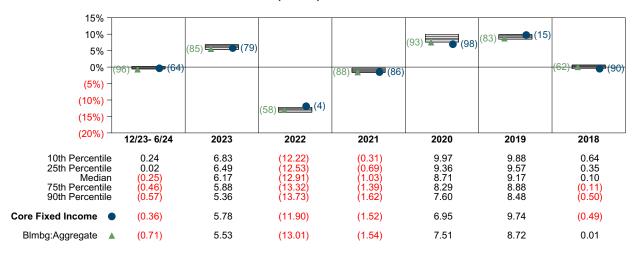


## **Core Fixed Income Return Analysis Summary**

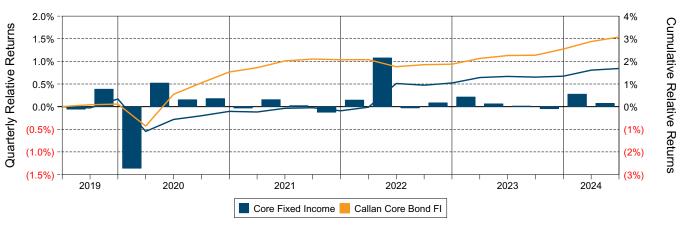
### **Return Analysis**

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

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



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



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024



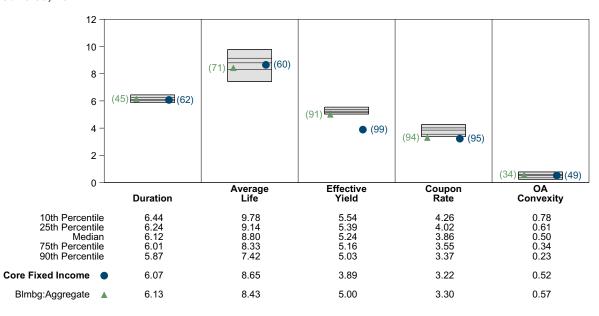


# **Core Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

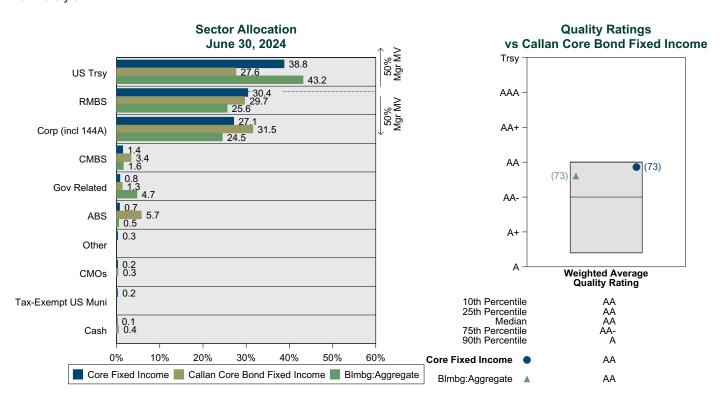
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income** as of June 30, 2024



### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

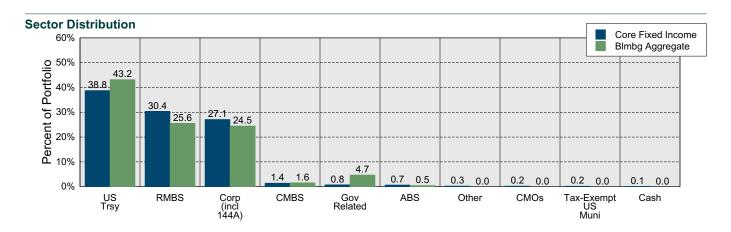


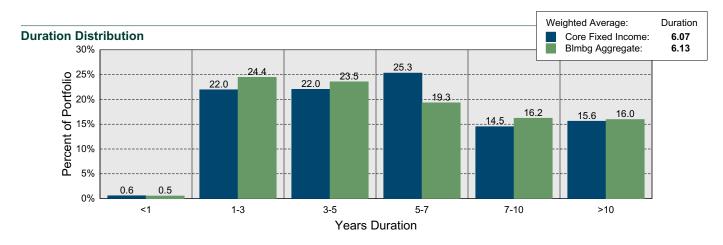


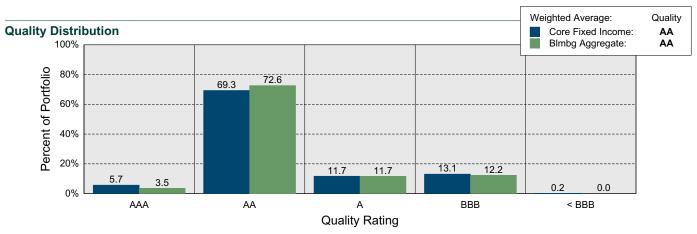
# **Core Fixed Income Portfolio Characteristics Summary** As of June 30, 2024

# **Portfolio Structure Comparison**

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









## **MCM Bond Index** Period Ended June 30, 2024

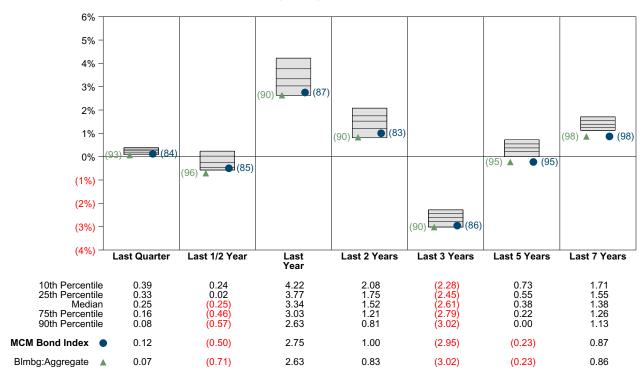
#### **Investment Philosophy**

Fixed income indexing offers a cost-effective, sensible investment approach to gaining diversified market exposure and receiving competitive relative returns over the long-term. Mellon Capital's Aggregate Bond Index Strategy employs a stratified sampling approach that has consistently added value with very little tracking error versus the Barclays Capital Aggregate Bond Index. We emphasize low turnover (low transaction costs) and strict risk control in the structuring of our portfolios.

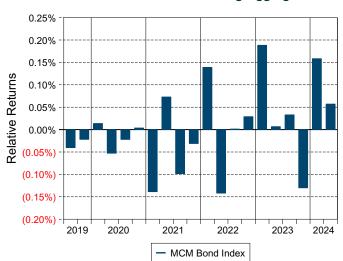
## **Quarterly Summary and Highlights**

- MCM Bond Index's portfolio posted a 0.12% return for the quarter placing it in the 84 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 87 percentile for the last year.
- MCM Bond Index's portfolio outperformed the Blmbg:Aggregate by 0.06% for the quarter and outperformed the Blmbg:Aggregate for the year by 0.12%.

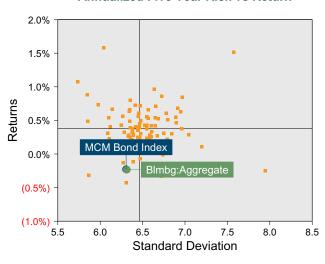
### Performance vs Callan Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg:Aggregate



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



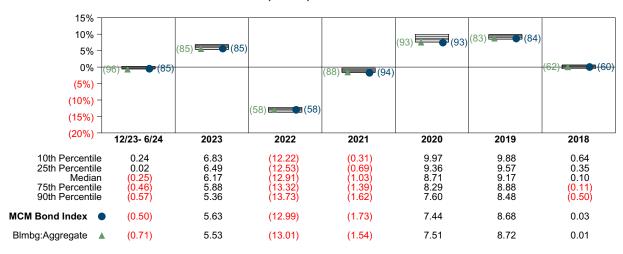


## **MCM Bond Index Return Analysis Summary**

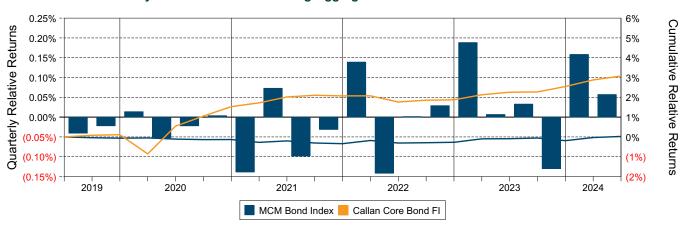
### **Return Analysis**

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

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



## Cumulative and Quarterly Relative Returns vs Blmbg:Aggregate



Risk Adjusted Return Measures vs Blmbg:Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024



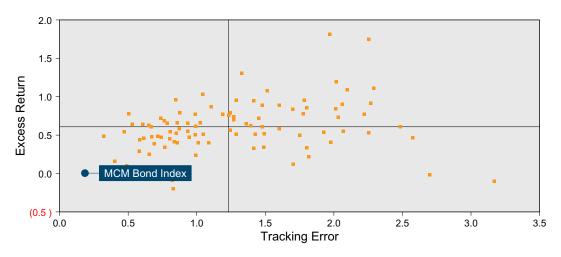


## **MCM Bond Index Risk Analysis Summary**

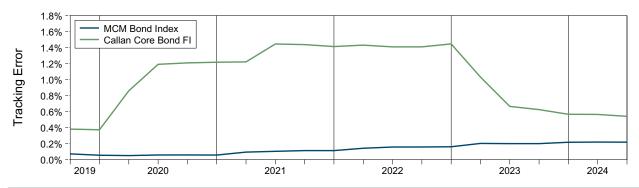
#### Risk Analysis

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

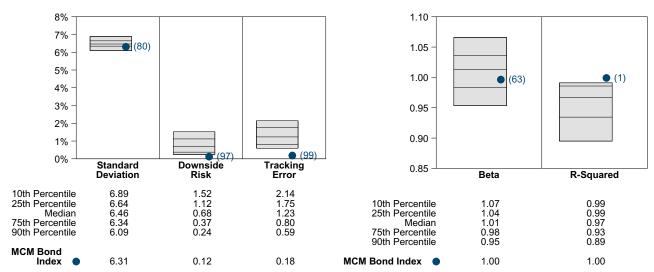
## Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024



Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024

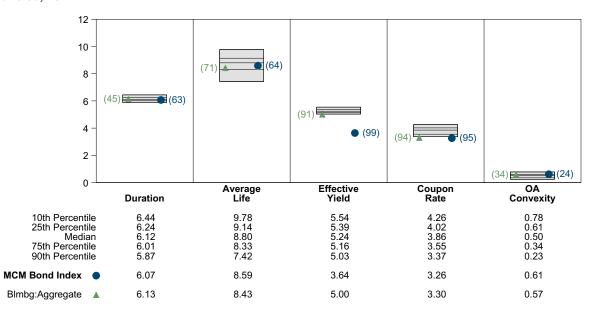


## **MCM Bond Index Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

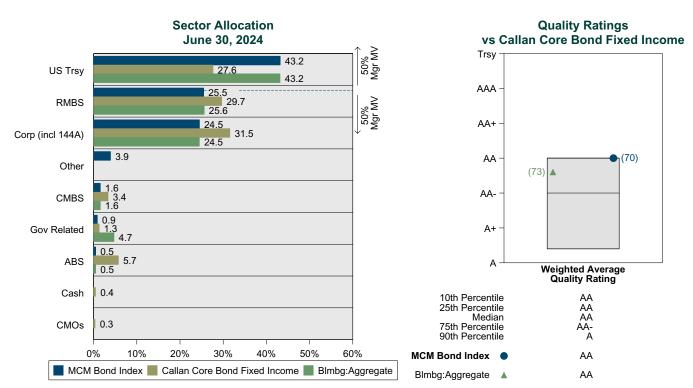
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income** as of June 30, 2024



### **Sector Allocation and Quality Ratings**

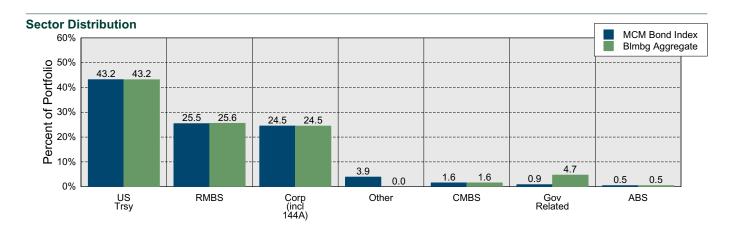
The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

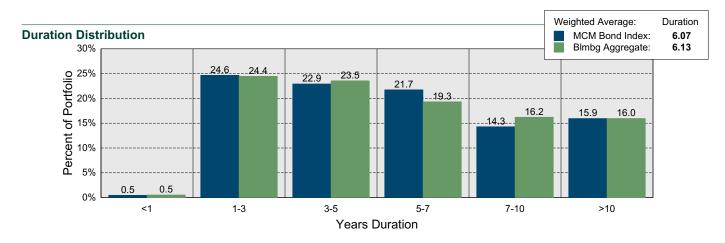


# **MCM Bond Index Portfolio Characteristics Summary** As of June 30, 2024

# **Portfolio Structure Comparison**

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







## **PIMCO Core Bond Fund** Period Ended June 30, 2024

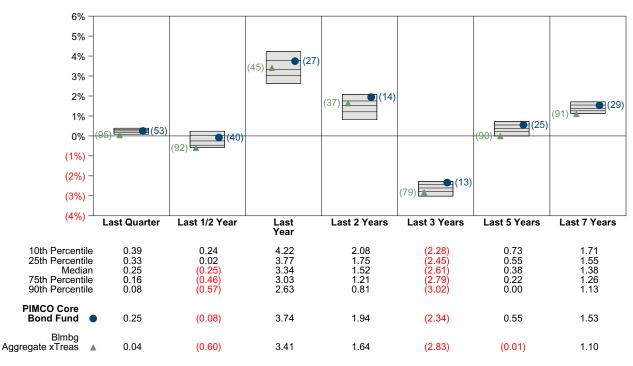
#### **Investment Philosophy**

The Total Return Fund II Fund is a constrained version of the Total Return Fund. The Fund can only invest in fixed income investment grade securities of US issuers and, unlike the larger Total Return Fund, may purchase only investment grade issues. Both funds are co-managed by a team of senior portfolio managers. PIMCO is well-known for its macroeconomic forecasts, which contribute to the top down elements of its investment process while sector teams and analysts help drive the bottom-up security selection choices. Duration is generally maintained within a band of 2 years around the Bloomberg Aggregate benchmark. There are no limitations on the use of derivatives.

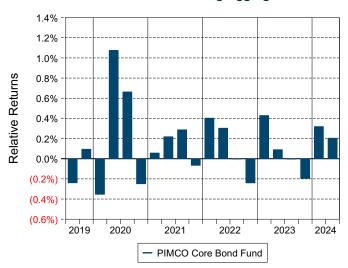
#### **Quarterly Summary and Highlights**

- PIMCO Core Bond Fund's portfolio posted a 0.25% return for the quarter placing it in the 53 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 27 percentile for the last year.
- PIMCO Core Bond Fund's portfolio outperformed the BImbg Aggregate xTreas by 0.20% for the quarter and outperformed the Blmbg Aggregate xTreas for the year by 0.33%.

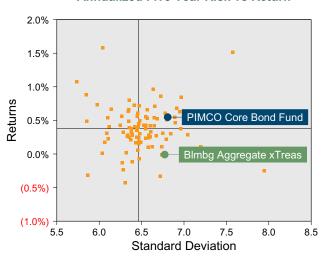
## Performance vs Callan Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate xTreas



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



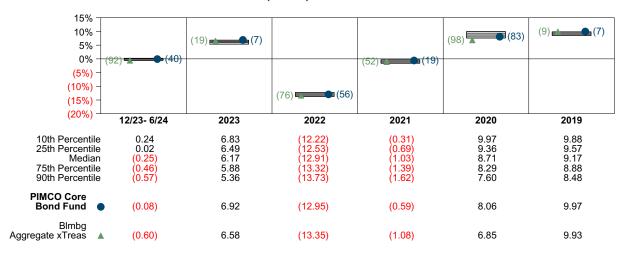


# **PIMCO Core Bond Fund Return Analysis Summary**

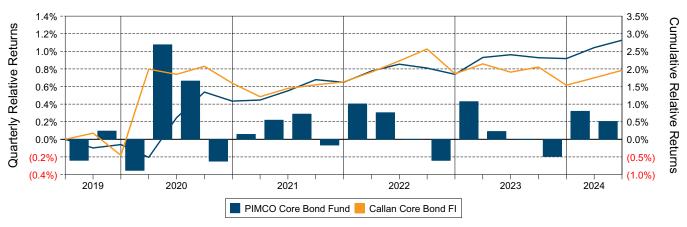
### **Return Analysis**

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

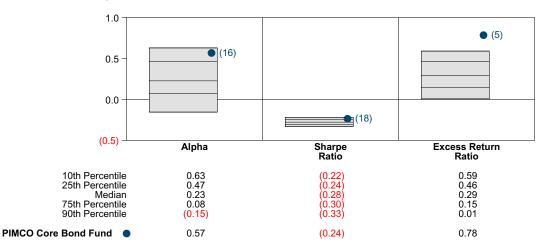
### Performance vs Callan Core Bond Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs Blmbg Aggregate xTreas



Risk Adjusted Return Measures vs Blmbg Aggregate xTreas Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024



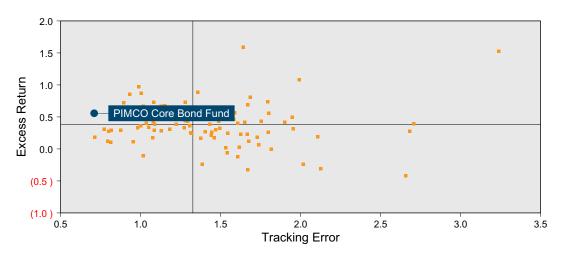


# **PIMCO Core Bond Fund Risk Analysis Summary**

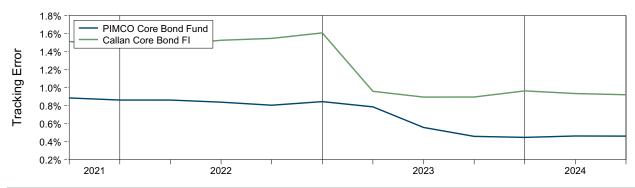
#### Risk Analysis

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

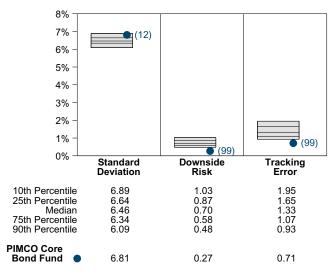
## Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024

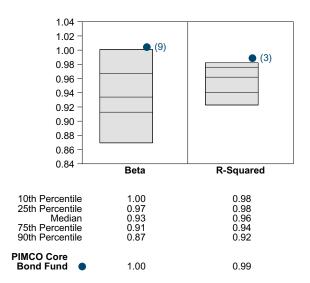


Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate xTreasury



Risk Statistics Rankings vs Bloomberg Aggregate xTreasury Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended June 30, 2024





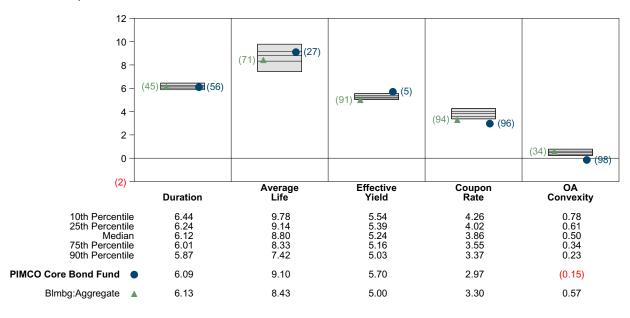


# **PIMCO Core Bond Fund Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

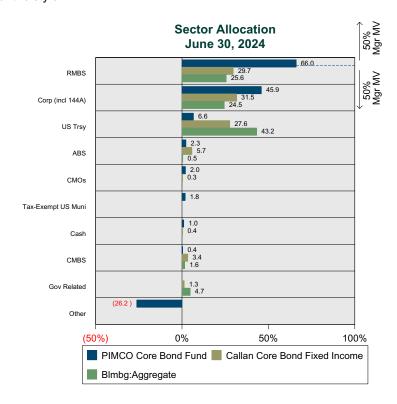
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

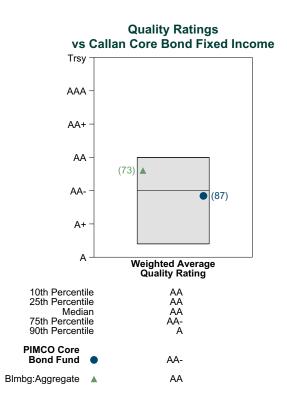
## **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of June 30, 2024



### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



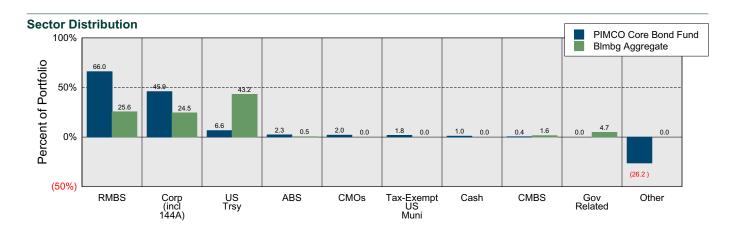


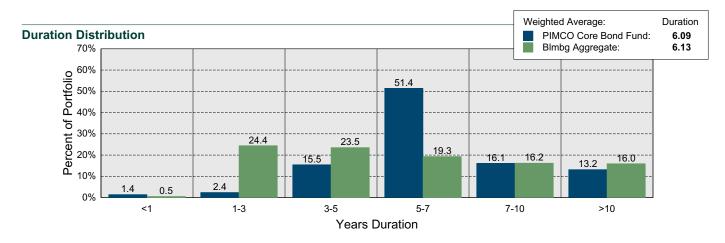


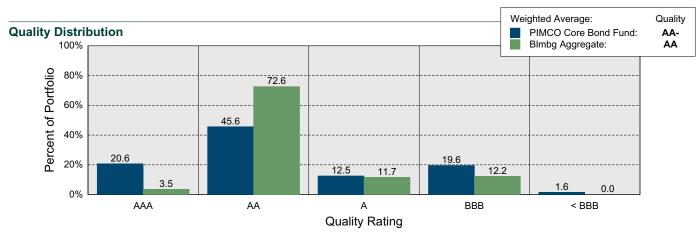
# **PIMCO Core Bond Fund Portfolio Characteristics Summary** As of June 30, 2024

# **Portfolio Structure Comparison**

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









# **Blackstone Keystone** Period Ended June 30, 2024

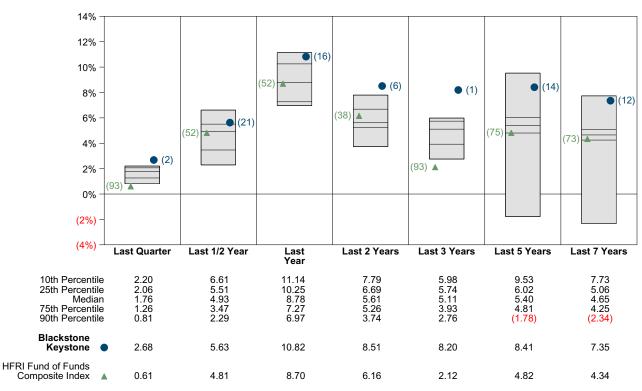
#### **Asset Class Membership Changes**

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

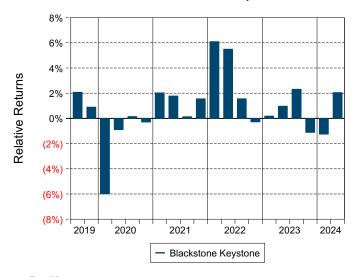
#### **Quarterly Summary and Highlights**

- Blackstone Keystone's portfolio posted a 2.68% return for the quarter placing it in the 2 percentile of the Callan Absolute Rtn Hedge Fund of Funds group for the quarter and in the 16 percentile for the last year.
- Blackstone Keystone's portfolio outperformed the HFRI Fund of Funds Composite Index by 2.07% for the guarter and outperformed the HFRI Fund of Funds Composite Index for the year by 2.13%.

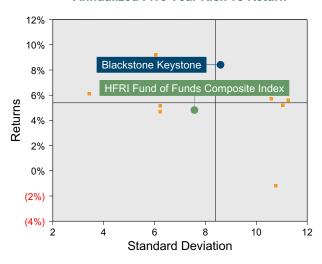
#### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



#### Relative Returns vs **HFRI Fund of Funds Composite Index**



#### Callan Absolute Rtn Hedge Fund of Funds (Net) Annualized Five Year Risk vs Return



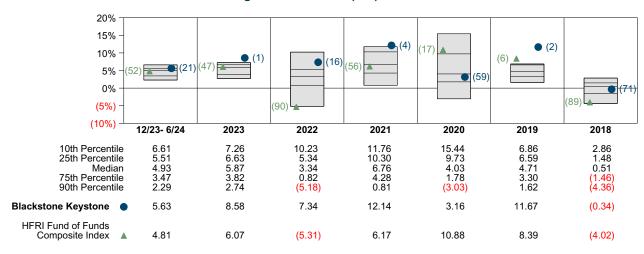


# **Blackstone Keystone Return Analysis Summary**

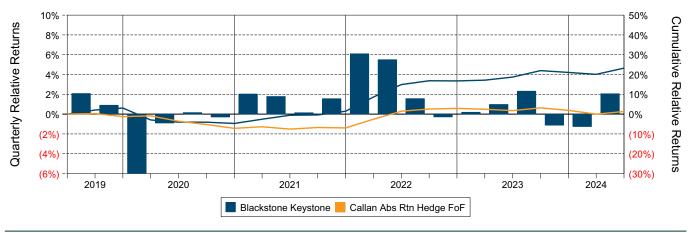
#### **Return Analysis**

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

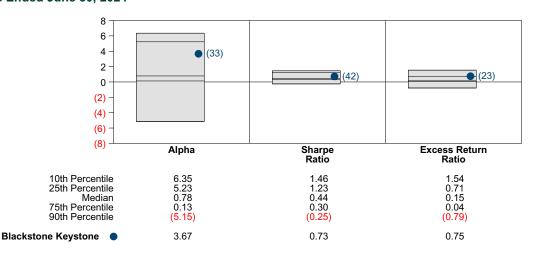
#### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



#### Cumulative and Quarterly Relative Returns vs HFRI Fund of Funds Composite Index



Risk Adjusted Return Measures vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended June 30, 2024



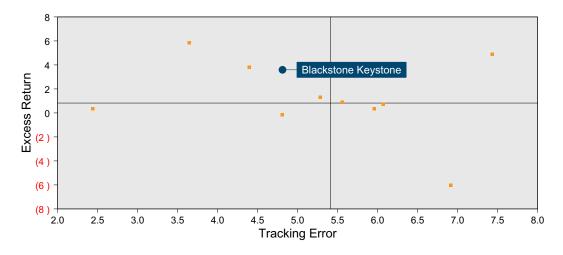


# **Blackstone Keystone Risk Analysis Summary**

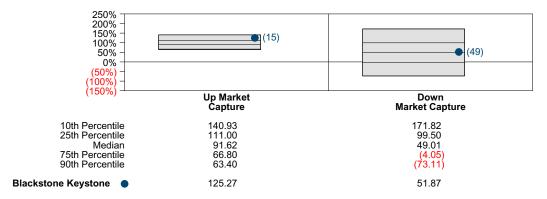
#### Risk Analysis

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

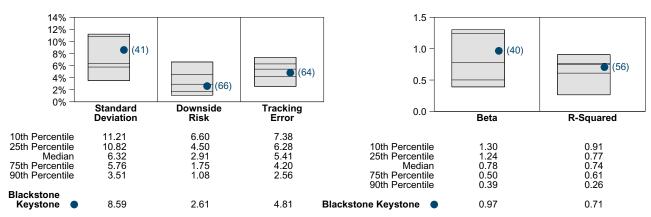
#### Risk Analysis vs Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended June 30, 2024



#### Market Capture vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended June 30, 2024



#### Risk Statistics Rankings vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended June 30, 2024



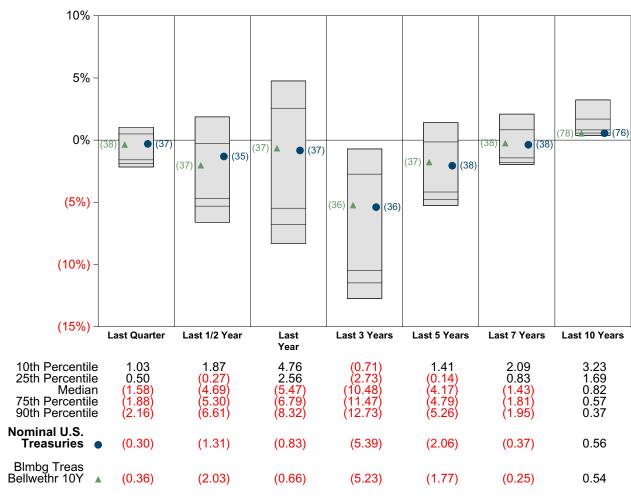


# **Nominal U.S. Treasuries** Period Ended June 30, 2024

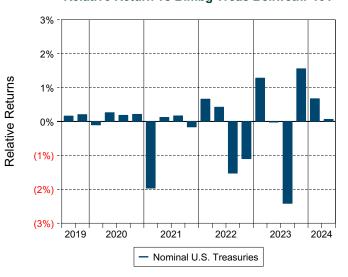
#### **Quarterly Summary and Highlights**

- Nominal U.S. Treasuries's portfolio posted a (0.30)% return for the quarter placing it in the 37 percentile of the Callan US Treas Bond Funds group for the guarter and in the 37 percentile for the last year.
- Nominal U.S. Treasuries's portfolio outperformed the Blmbg Treas Bellwethr 10Y by 0.06% for the quarter and underperformed the Blmbg Treas Bellwethr 10Y for the year by 0.17%.

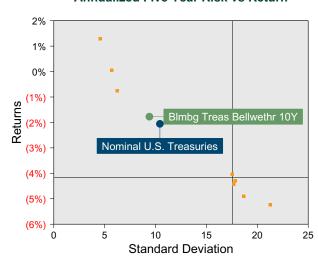
# Performance vs Callan US Treas Bond Funds (Gross)



#### Relative Return vs Blmbg Treas Bellwethr 10Y



#### Callan US Treas Bond Funds (Gross) Annualized Five Year Risk vs Return



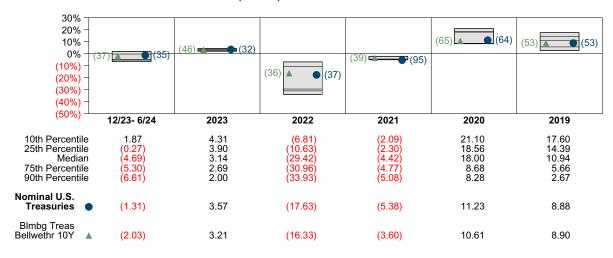


# **Nominal U.S. Treasuries Return Analysis Summary**

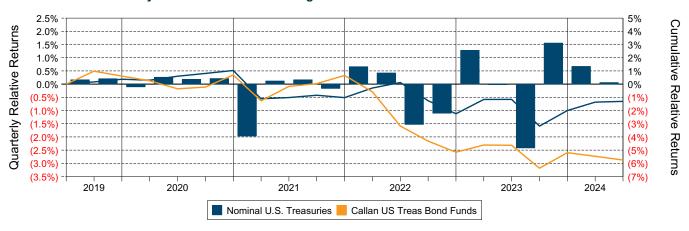
#### **Return Analysis**

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

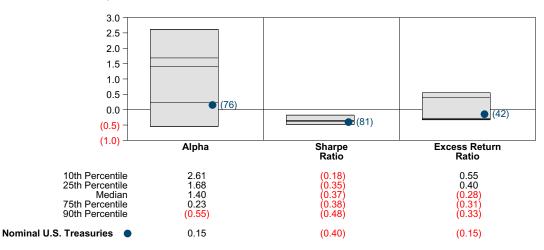
#### Performance vs Callan US Treas Bond Funds (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg Treas Bellwethr 10Y



Risk Adjusted Return Measures vs Blmbg Treas Bellwethr 10Y Rankings Against Callan US Treas Bond Funds (Gross) Five Years Ended June 30, 2024

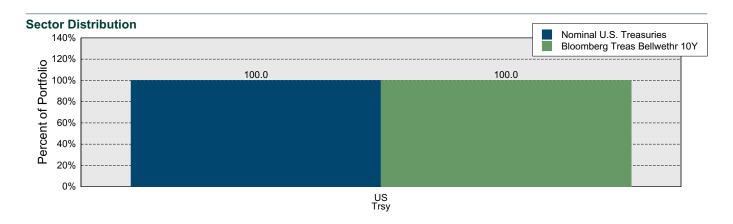


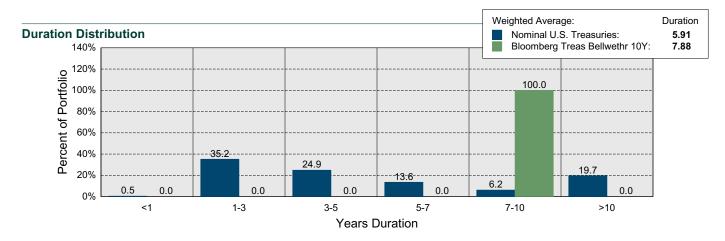


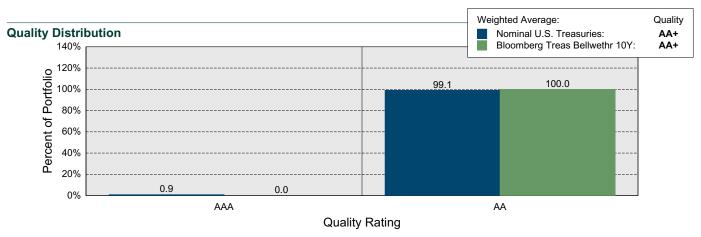
# **Nominal U.S. Treasuries Portfolio Characteristics Summary** As of June 30, 2024

#### **Portfolio Structure Comparison**

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









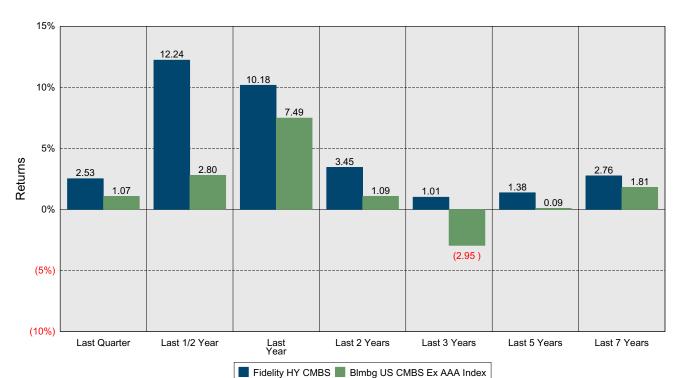
# Fidelity HY CMBS Period Ended June 30, 2024

#### **Asset Class Membership Changes**

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

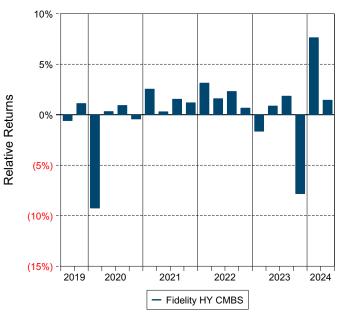
# **Quarterly Summary and Highlights**

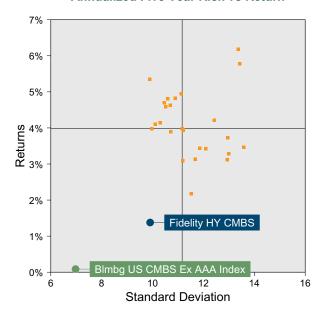
- Fidelity HY CMBS's portfolio posted a 2.53% return for the quarter placing it in the 1 percentile of the Callan Global Fixed High Yield group for the quarter and in the 92 percentile for the last year.
- Fidelity HY CMBS's portfolio outperformed the Blmbg US CMBS Ex AAA Index by 1.46% for the quarter and outperformed the BImbg US CMBS Ex AAA Index for the year by 2.69%.



Relative Returns vs Blmbg US CMBS Ex AAA Index

Callan Global Fixed High Yield (Gross) **Annualized Five Year Risk vs Return** 



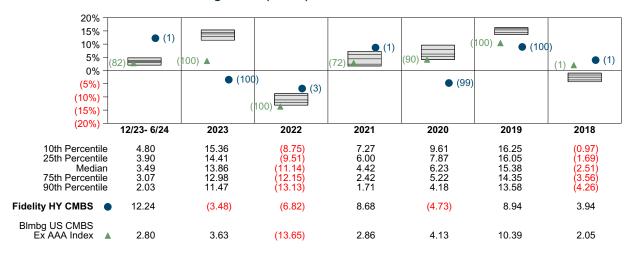


# Fidelity HY CMBS **Return Analysis Summary**

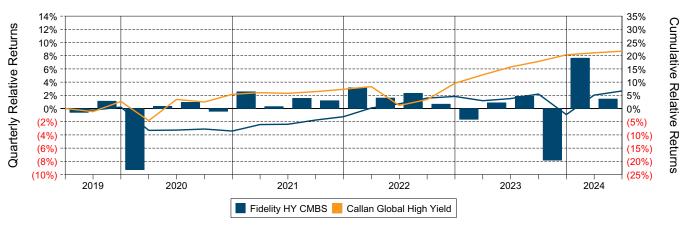
#### **Return Analysis**

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

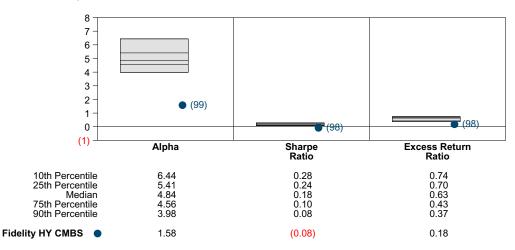
#### Performance vs Callan Global Fixed High Yield (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg US CMBS Ex AAA Index



Risk Adjusted Return Measures vs Blmbg US CMBS Ex AAA Index Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended June 30, 2024



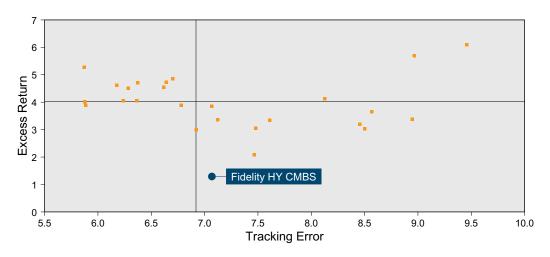


# Fidelity HY CMBS **Risk Analysis Summary**

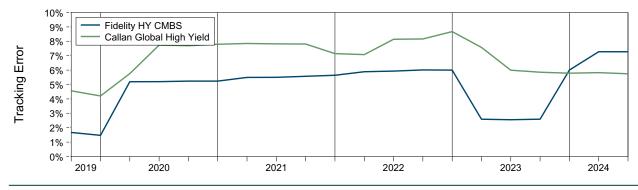
#### **Risk Analysis**

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

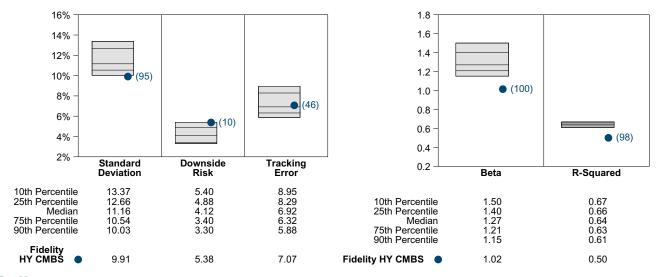
#### Risk Analysis vs Callan Global Fixed High Yield (Gross) Five Years Ended June 30, 2024



Rolling 12 Quarter Tracking Error vs Blmbg US CMBS Ex AAA Index



Risk Statistics Rankings vs Blmbg US CMBS Ex AAA Index Rankings Against Callan Global Fixed High Yield (Gross) Five Years Ended June 30, 2024

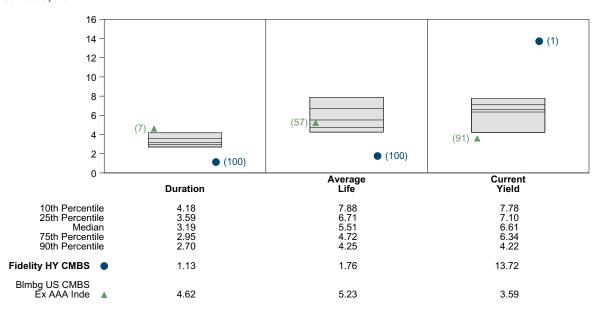


# **Fidelity HY CMBS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

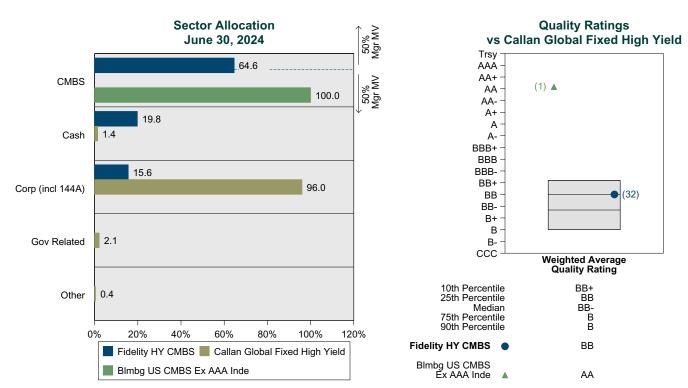
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics** Rankings Against Callan Global Fixed High Yield as of June 30, 2024



#### **Sector Allocation and Quality Ratings**

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

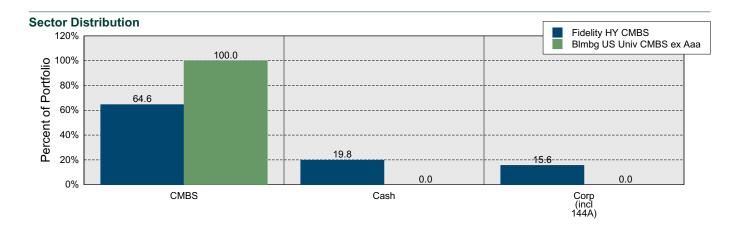


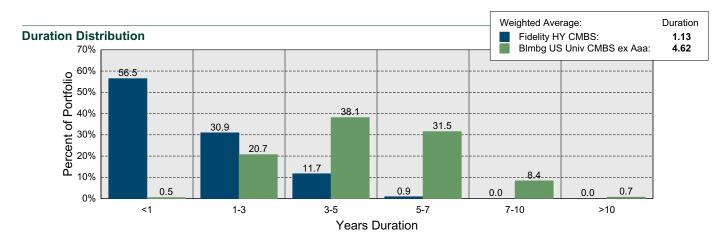


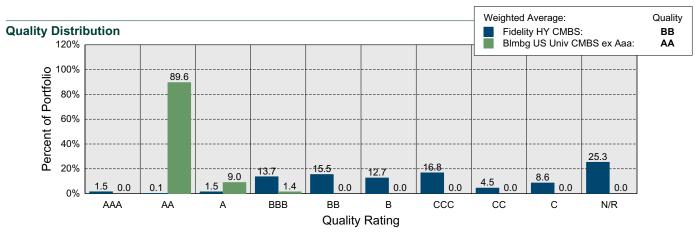
# **Fidelity HY CMBS Portfolio Characteristics Summary** As of June 30, 2024

# **Portfolio Structure Comparison**

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







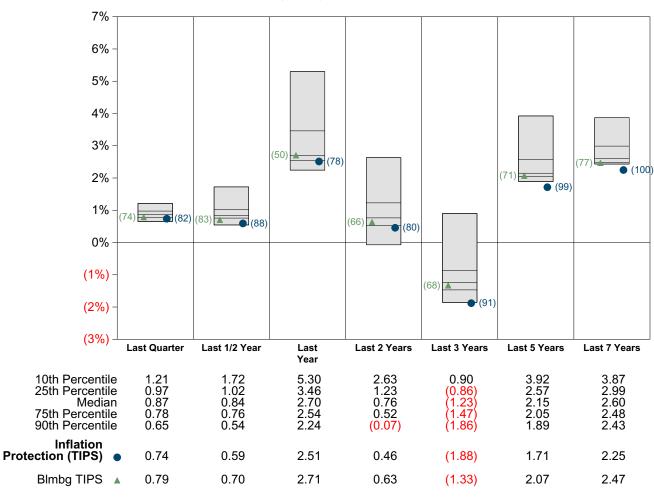


# Inflation Protection (TIPS) Period Ended June 30, 2024

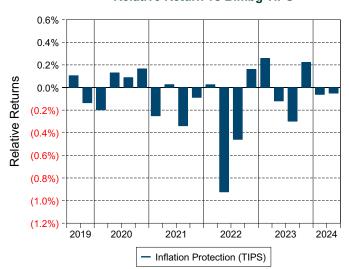
#### **Quarterly Summary and Highlights**

- Inflation Protection (TIPS)'s portfolio posted a 0.74% return for the guarter placing it in the 82 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 78 percentile for the last year.
- Inflation Protection (TIPS)'s portfolio underperformed the BImbg TIPS by 0.05% for the quarter and underperformed the Blmbg TIPS for the year by 0.19%.

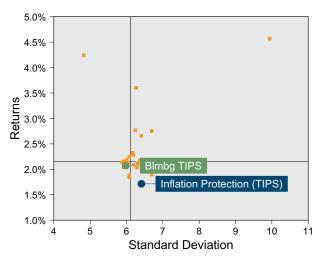
# Performance vs Callan Inflation Linked Bonds (Gross)



# Relative Return vs Blmbg TIPS



## **Callan Inflation Linked Bonds (Gross)** Annualized Five Year Risk vs Return



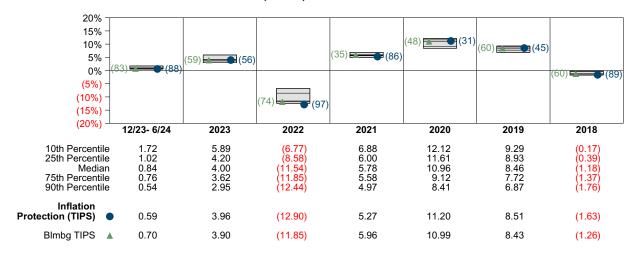


# Inflation Protection (TIPS) **Return Analysis Summary**

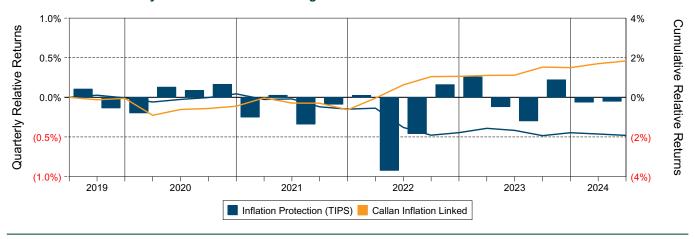
#### **Return Analysis**

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

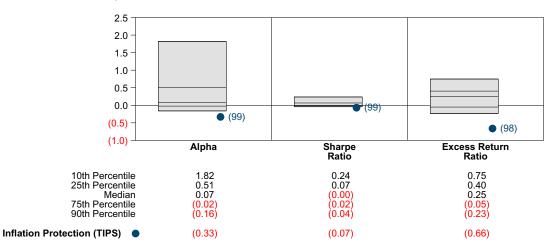
#### Performance vs Callan Inflation Linked Bonds (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg TIPS



Risk Adjusted Return Measures vs Blmbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

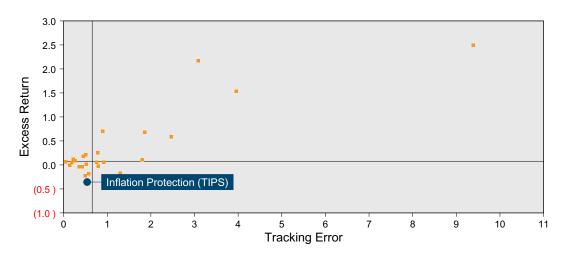


# Inflation Protection (TIPS) **Risk Analysis Summary**

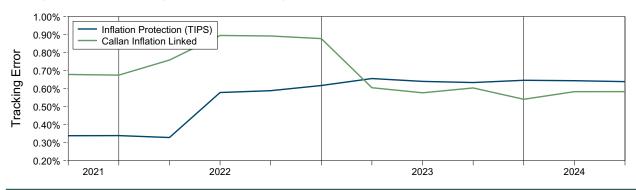
#### Risk Analysis

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

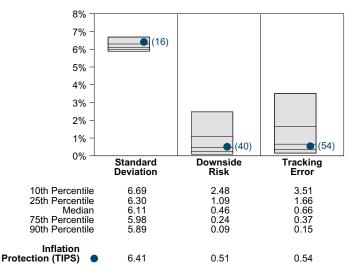
#### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

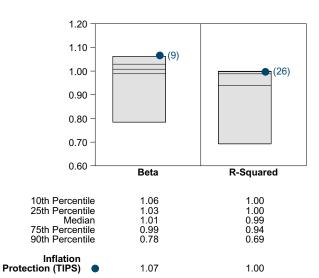


**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024





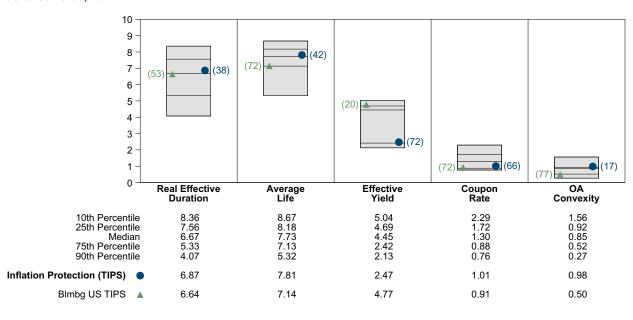


# Inflation Protection (TIPS) **Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

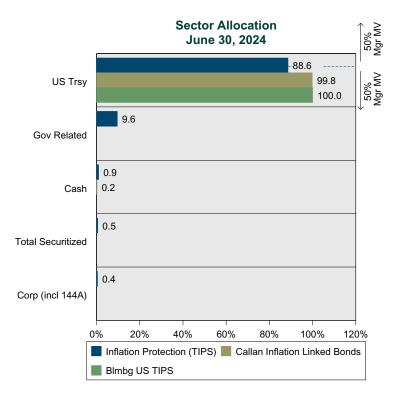
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

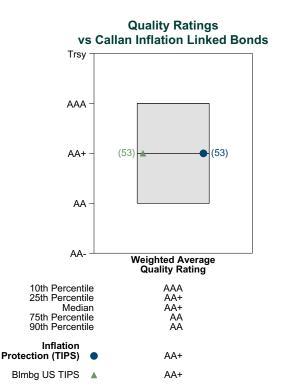
#### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of June 30, 2024



#### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.







# Inflation Protection (TIPS) **Portfolio Characteristics Summary** As of June 30, 2024

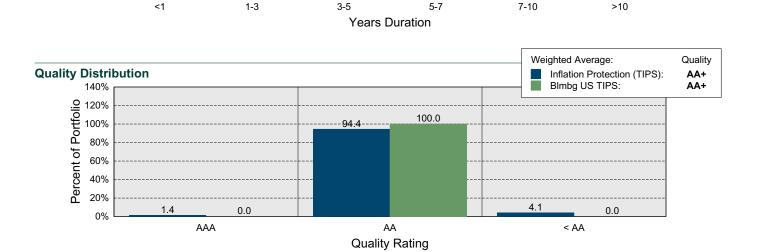
#### **Portfolio Structure Comparison**

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



#### **Blmbg US TIPS** Inflation Protection (TIPS) Weighted Average: Real Duration **Duration Distribution** Inflation Protection (TIPS): 6.87 Blmbg US TIPS: 6.64 50% Percent of Portfolio <del>37.9</del> 29.1 30% 26.6 21.2 20.8 19.9 20%

3-5



6.9

5-7

0%

<1

14.7

0.7

13.3

# **Brown Brothers TIPS** Period Ended June 30, 2024

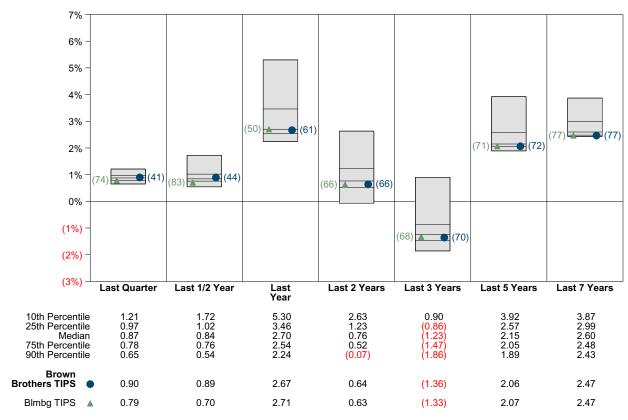
#### **Investment Philosophy**

The BBH U.S. TIPS strategy seeks to capture a range of fundamentally-based and technically-based opportunities in the inflation-indexed securities market.

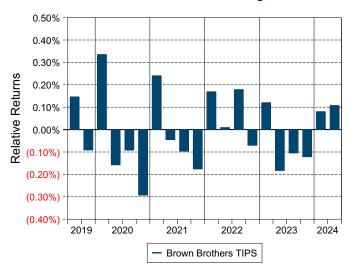
# **Quarterly Summary and Highlights**

- Brown Brothers TIPS's portfolio posted a 0.90% return for the quarter placing it in the 41 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 61 percentile for the last year.
- Brown Brothers TIPS's portfolio outperformed the Blmbg TIPS by 0.11% for the quarter and underperformed the Blmbg TIPS for the year by 0.04%.

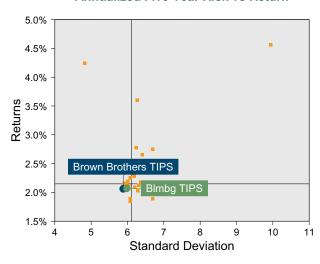
# Performance vs Callan Inflation Linked Bonds (Gross)



#### Relative Return vs Blmbg TIPS



#### **Callan Inflation Linked Bonds (Gross)** Annualized Five Year Risk vs Return



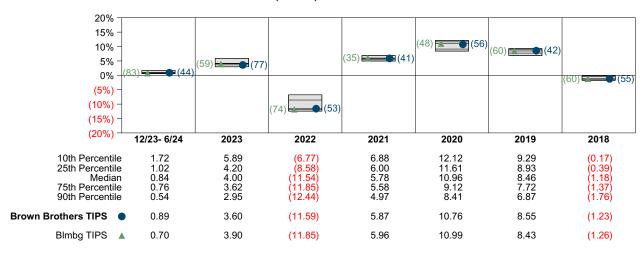


# **Brown Brothers TIPS Return Analysis Summary**

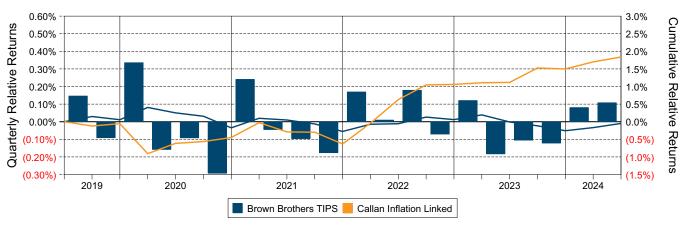
#### **Return Analysis**

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

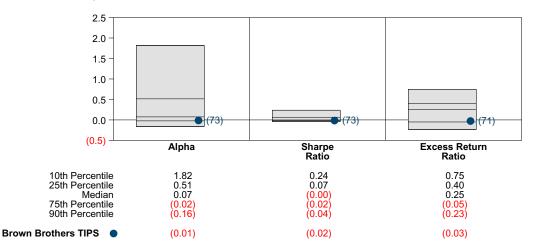
#### Performance vs Callan Inflation Linked Bonds (Gross)



#### **Cumulative and Quarterly Relative Returns vs Blmbg TIPS**



Risk Adjusted Return Measures vs Blmbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024



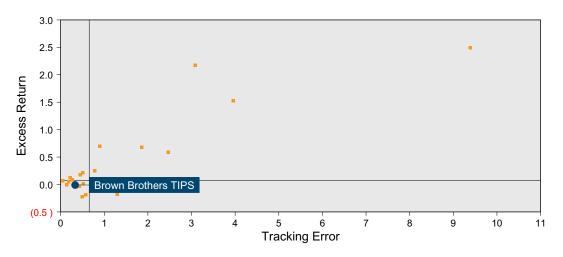


# **Brown Brothers TIPS Risk Analysis Summary**

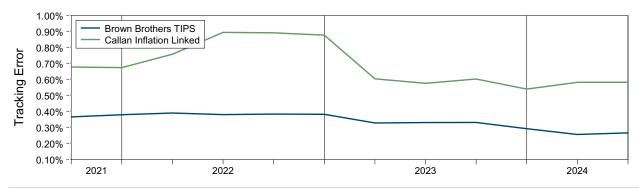
#### Risk Analysis

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

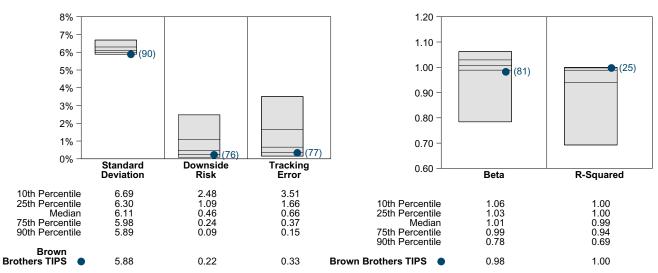
#### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024



**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

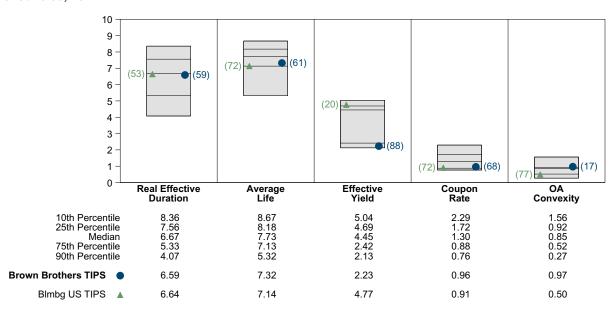


# **Brown Brothers TIPS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

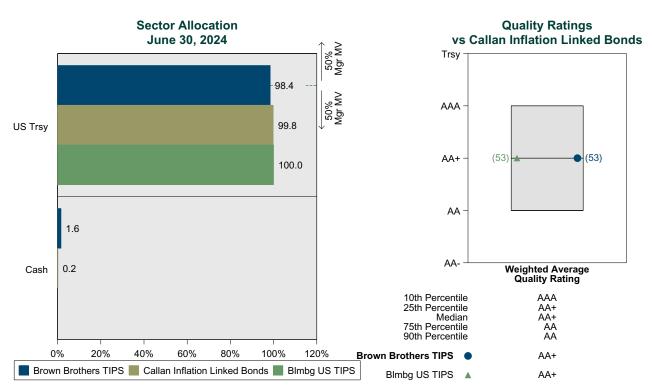
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of June 30, 2024



# Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.





# **Brown Brothers TIPS Portfolio Characteristics Summary** As of June 30, 2024

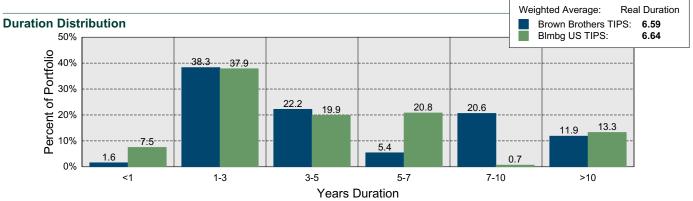
#### **Portfolio Structure Comparison**

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



# **Brown Brothers TIPS**

# **Blmbg US TIPS**





# **NISA Inv Adv TIPS** Period Ended June 30, 2024

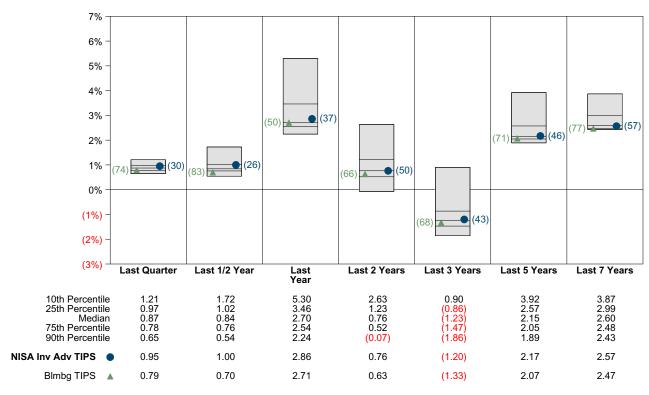
#### **Investment Philosophy**

NISA believes that markets offer opportunities to capitalize on moderate inefficiencies for predictable gains. The team applies a fundamental approach and strategy to all fixed income portfolios, regardless of benchmark. Central to their investment philosophy is the following: practice active trading, hold high average credit quality, maintain tight duration collars, and avoid large exposure to any one entity.

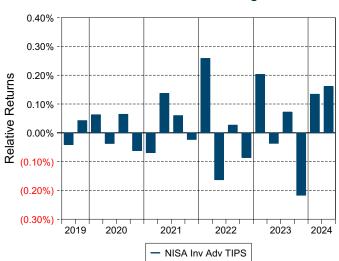
#### **Quarterly Summary and Highlights**

- NISA Inv Adv TIPS's portfolio posted a 0.95% return for the guarter placing it in the 30 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 37 percentile for the last year.
- NISA Inv Adv TIPS's portfolio outperformed the Blmbg TIPS by 0.16% for the quarter and outperformed the Blmbg TIPS for the year by 0.15%.

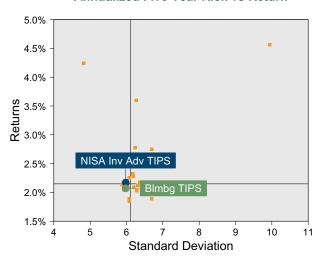
#### Performance vs Callan Inflation Linked Bonds (Gross)



#### Relative Return vs Blmbg TIPS



#### Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return



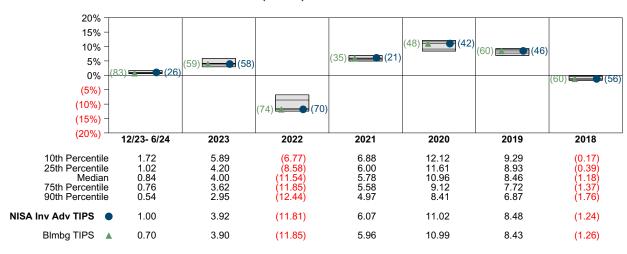


# **NISA Inv Adv TIPS Return Analysis Summary**

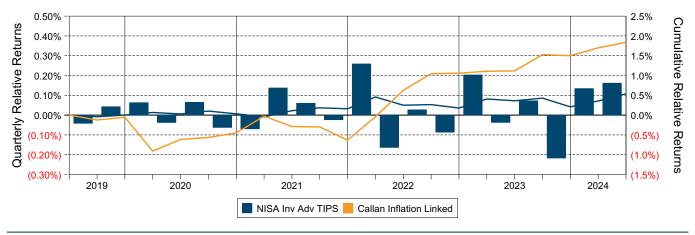
#### **Return Analysis**

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

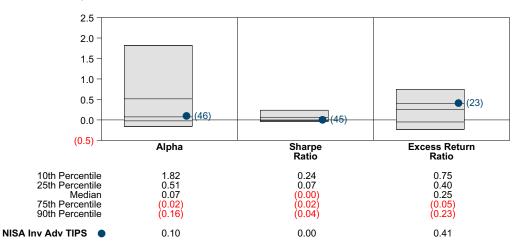
#### Performance vs Callan Inflation Linked Bonds (Gross)



#### **Cumulative and Quarterly Relative Returns vs Blmbg TIPS**



Risk Adjusted Return Measures vs Blmbg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

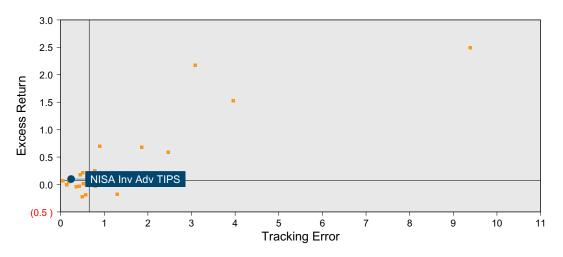


# **NISA Inv Adv TIPS Risk Analysis Summary**

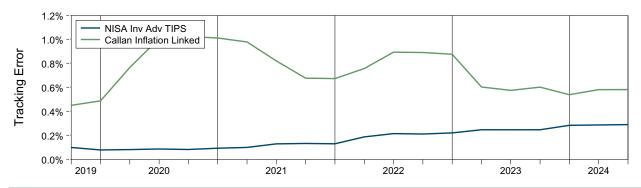
#### Risk Analysis

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

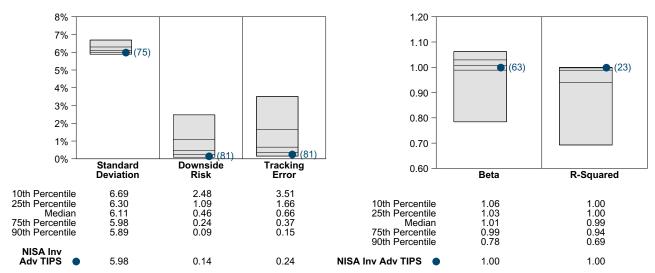
#### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024



**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

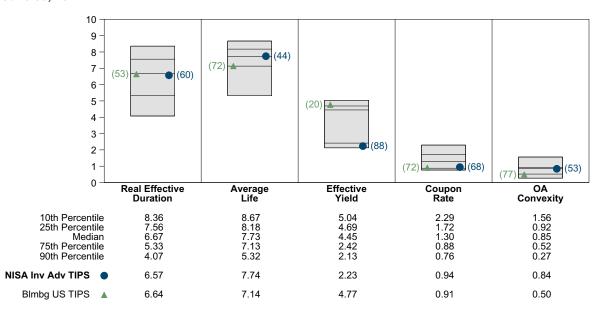


# **NISA Inv Adv TIPS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

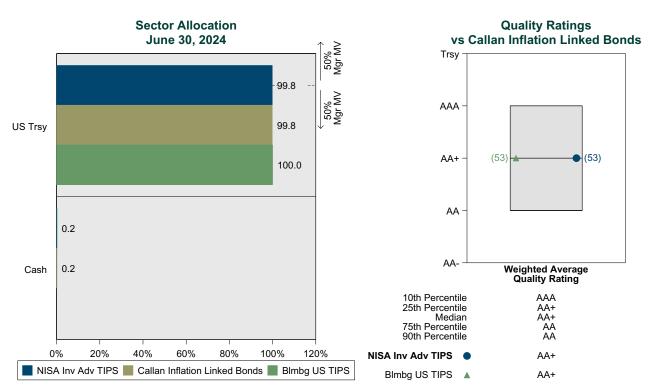
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of June 30, 2024



#### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



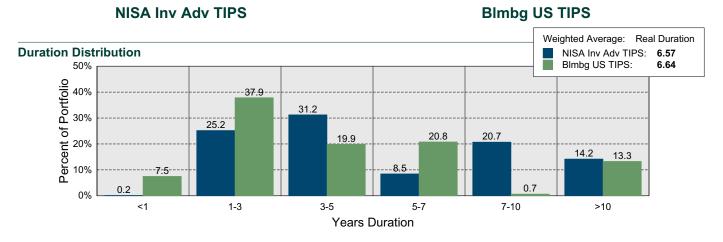


# **NISA Inv Adv TIPS Portfolio Characteristics Summary** As of June 30, 2024

#### **Portfolio Structure Comparison**

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







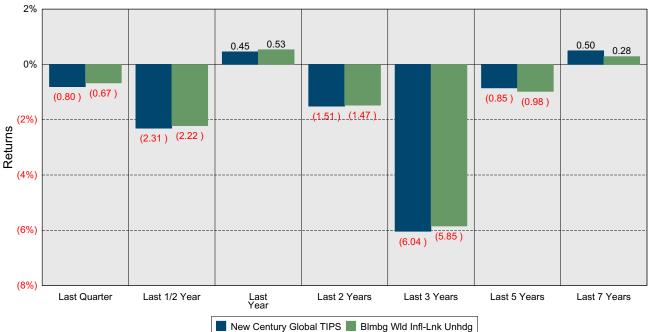
# **New Century Global TIPS** Period Ended June 30, 2024

#### **Investment Philosophy**

New Century Advisors believes there are five main sources of excess return that an active manager can capture in the Global Inflation Linked Bond Product: duration management, county selection, currency management, yield curve positioning, and nominal/linker relative value. New Century Advisors approach to adding value in each case is the same, a three pronged approach combining fundamental analysis, technical analysis and human judgment.

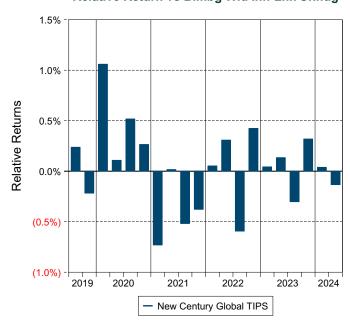
#### **Quarterly Summary and Highlights**

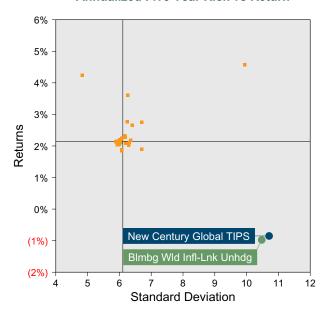
- New Century Global TIPS's portfolio posted a (0.80)% return for the quarter placing it in the 100 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 100 percentile for the last year.
- New Century Global TIPS's portfolio underperformed the Blmbg Wld Infl-Lnk Unhdg by 0.13% for the quarter and underperformed the Blmbg Wld Infl-Lnk Unhdg for the year by 0.08%.



# Relative Return vs Blmbg Wld Infl-Lnk Unhdg

# Callan Inflation Linked Bonds (Gross) **Annualized Five Year Risk vs Return**





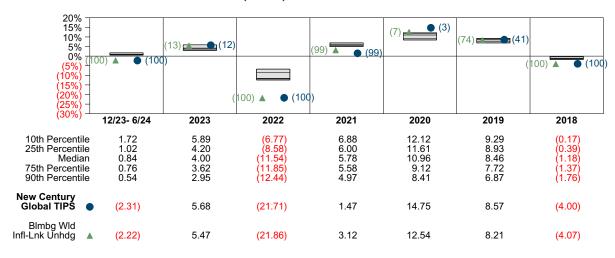


# **New Century Global TIPS Return Analysis Summary**

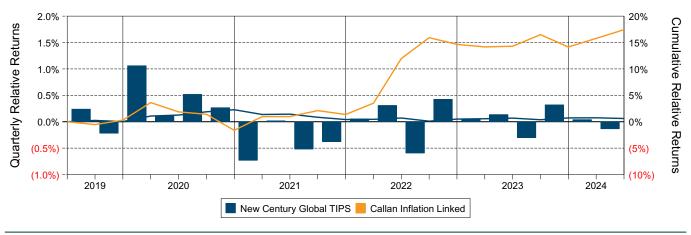
#### **Return Analysis**

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

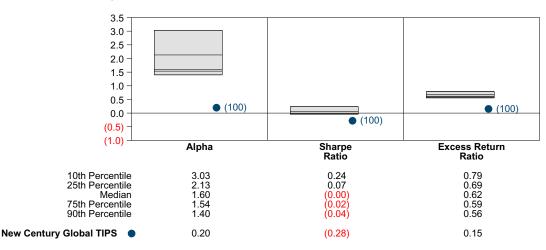
#### Performance vs Callan Inflation Linked Bonds (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg Wld Infl-Lnk Unhdg



Risk Adjusted Return Measures vs Blmbg Wld Infl-Lnk Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024



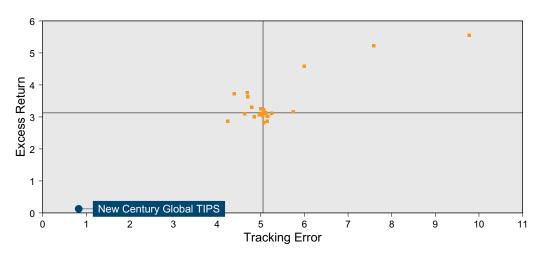


# **New Century Global TIPS Risk Analysis Summary**

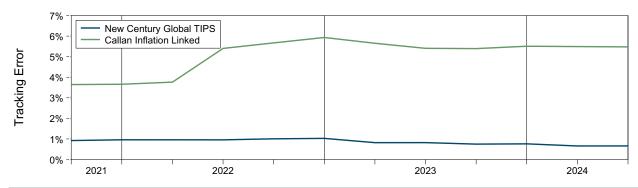
#### Risk Analysis

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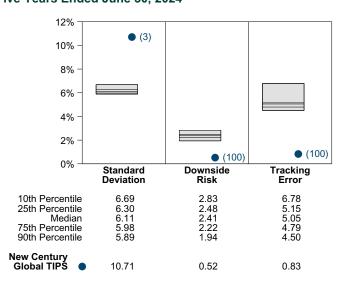
#### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024

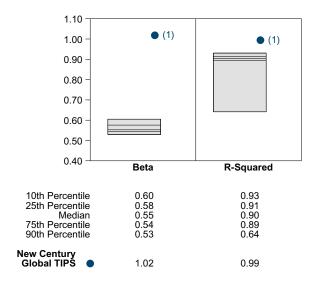


Rolling 12 Quarter Tracking Error vs Bloomberg World Infl-Linked Unhdg



Risk Statistics Rankings vs Bloomberg World Infl-Linked Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended June 30, 2024





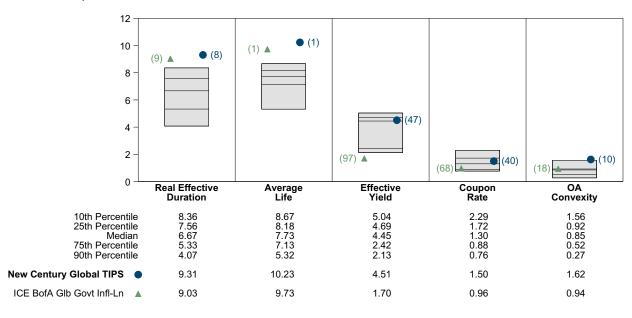


# **New Century Global TIPS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

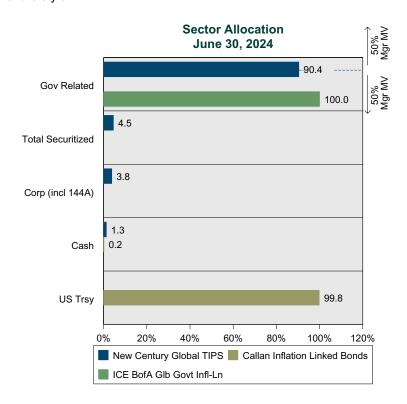
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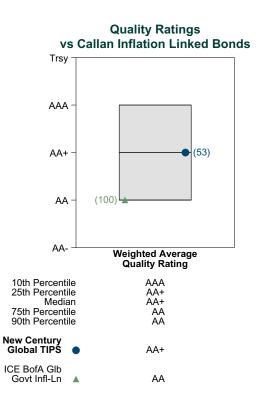
#### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of June 30, 2024



#### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



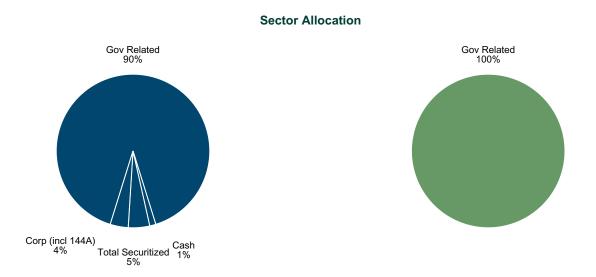




# **New Century Global TIPS Portfolio Characteristics Summary** As of June 30, 2024

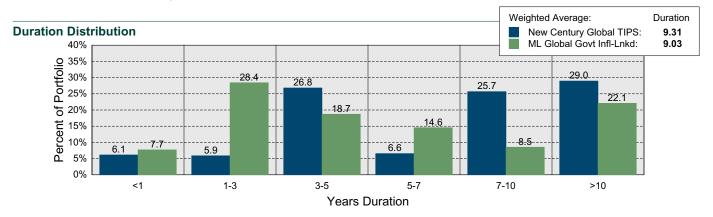
#### **Portfolio Structure Comparison**

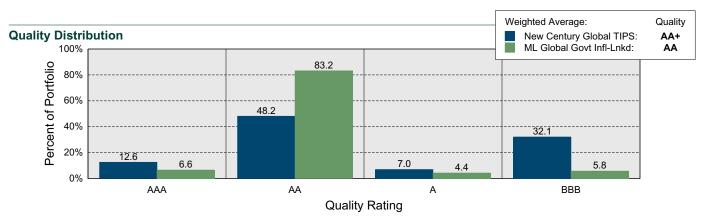
The charts below compare the structure of the portfolio to that of the index from the three perspectives that have the greatest influence on return. The first chart compares the two portfolios across sectors. The second chart compares the duration distribution. The last chart compares the distribution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



# **New Century Global TIPS**

# ML Global Govt Infl-Lnkd





# **Education**



**2Q24** 

# **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**

Quantifying Sequence-of-Returns Risk for Institutional Investors | This paper shows institutional investors how to quantify sequence-of-returns risk in a single number. The metric is flexible enough to apply to strategic asset-allocation decisions across a variety of investor types.

Sector-Specialist Strategies on the Rise: Do They Make Sense for Large LPs' Portfolios? | To distinguish themselves in a competitive market, more private equity general partners are offering sector-specialist strategies, which focus on investing in a specific industry.

**2024 Asset Manager DEI Study** | The study offers a high-level assessment of the degree to which asset management organizations have established diversity, equity, and inclusion (DEI) policies and procedures.

**2024 DC Trends Survey** | This survey provides extensive information for DC plan sponsors to use in improving and benchmarking their plans.

#### **Webinar Replays**

Research Café: ESG Interview Series | This session features Mark Wood, Callan ESG team member, interviewing Nicole Wubbena, fellow ESG and Global Manager Research group member. Their discussion focuses on impact investing in public equity.

#### **Blog Highlights**

<u>Commercial</u> Real <u>Estate</u> <u>Capital</u> <u>Markets</u> <u>and</u> <u>Institutional</u> <u>Investors</u> | A blog post from Christine Mays on the state of the commercial real estate capital markets.

<u>Is This a Time for Active Managers to Shine?</u> | Tony Lissuzzo of Callan's Nonprofit Group writes on how dispersion affects active management.

# **Quarterly Updates**

<u>Private Equity Update, 1Q24</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 1Q24 | A comparison of active managers alongside relevant benchmarks over the long term

<u>Market Pulse</u>, <u>1Q24</u> | A quarterly market reference guide covering trends in the U.S. economy, developments for institutional investors, and the latest data on the capital markets

<u>Capital Markets Review, 1Q24</u> | 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, 1Q24</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Update, 1Q24 | A summary of market activity for real assets and private real estate during the quarter

<u>Private Credit Update</u>, <u>1Q24</u> | A review of performance and fundraising activity for private credit during the quarter

<u>Callan Target Date Index™, 1Q24</u> | Tracks the performance and asset allocation of available target date mutual funds and CITs

<u>Callan DC Index™, 1Q24</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:

# **October Regional Workshops**

October 22, 2024 – Denver October 23, 2024 – Chicago

For more information about events, please contact Barb Gerraty: 415-274-3093 / gerraty@callan.com

#### **Education: By the Numbers**

Unique pieces of research the Institute generates each year

Attendees (on average) of the Institute's annual National Conference

**4,845** Total attendees of the "Callan College" since 1994

#### **Education**

Founded in 1994, the "Callan College" offers educational sessions for industry professionals involved in the investment decision-making process.

# Introduction to Investments September 24-26, 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 June 30, 2024

# 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	Manager Name



Manager Name	Manager Name
	_

Manager Name	Manager Name