## Callan

March 31, 2022
Pennsylvania SERS
Defined Benefit Plan

Investment Measurement Service Quarterly Review

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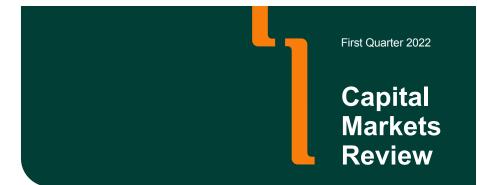
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### Geopolitical Upheaval; Unsettled Markets

**ECONOMY** 

Capital markets reacted strongly to the upheaval and uncertainty unleashed by Russia's invasion of Ukraine. Both stocks and bonds dropped in 1Q22, and GDP fell 1.4%, but underlying strength in the U.S. economy should spare the country from a recession.

## Global Indices Fall, Driven by Rate Hikes

FIXED INCOME

The Bloomberg
Aggregate fell 5.9%, its
worst quarterly return
since 1980. The Fed raised rates
by 25 bps, with many more hikes
expected. Global indices fell as
well, driven by broad interest rate
increases. Russia was removed
from indices at a price of \$0.

# Appealing in Climate of Low Yields

PRIVATE CREDIT

Private credit continues to be attractive in this low-yield environment, and the floating-rate structure of many types of private credit serves as a buffer as interest rates rise. On average, it has generated net IRRs of 8% to 10% for trailing periods ended Sep. 30, 2021.

# Quarterly Losses Amid Global Turmoil

INSTITUTIONAL INVESTORS

All institutional investor types saw declines in 1Q22, but most did better than a 60% stocks/40% bonds benchmark. Over 20 years, returns for institutional investors have roughly matched the benchmark returns, and exceeded fixed income and global ex-U.S. equities.

# Asset Class Shows Continued Gains

REAL ESTATE/REAL ASSETS

The NCREIF Property Index rose 5.3% during 1Q22. The NCREIF Open-End Diversified Core Equity (ODCE) Index rose 7.1%. While U.S. REITs, as measured by the FTSE Nareit Equity REITs Index, fell 3.9%, they outperformed U.S. equities. Commodities were a rare bright spot.

## Market Volatility Tests Managers' Strategies

HEDGE FUNDS/MACs

Hedge funds ended the volatile quarter with mixed results, as equity hedge managers had a difficult time. Event-driven strategies fell, due to a higher weight to equities vs. credit. Macro strategies soared, as commodities spiked. Relative value managers gained, profiting off rate volatility.

# War, COVID Weigh on Markets Worldwide

**EQUITY** 

The S&P 500 fell 4.6% in 1Q22, but was down more than 12% early in March before rallying into quarterend. Global equity indices fell as well, as a resurgence of COVID-19 cases in Europe and Asia, specifically in China, weighed on the global recovery.

# Where Do Investors Go From Here?

PRIVATE EQUITY

Except for fundraising dollar volume, all other private equity activity measures moderated in 1Q22. It was still a good quarter from a transaction volume perspective, as positive sentiment toward private equity and its ability to capitalize on volatile periods persisted.

# DC Index Bounces Back in 4Q After Loss

**DEFINED CONTRIBUTION** 

The Callan DC Index™ rose 5.1% in 4Q21, after falling in 3Q, while the Age 45 Target Date Fund gained 5.5%. TDFs again saw the largest net inflows. Real return/TIPS had larger-than-typical net inflows (+13.6%), indicating participants may be looking to hedge inflation.

# Broad Market Quarterly Returns

U.S. Equity Russell 3000



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



U.S. Fixed Income Bloomberg Agg



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



Sources: Bloomberg, FTSE Russell, MSCI

## **Geopolitical Upheaval and Unsettled Markets**

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

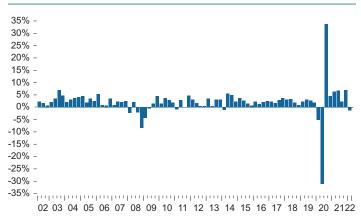
Capital markets abhor uncertainty, and there is no greater human-generated uncertainty than war. The Russian invasion of Ukraine upended expectations for an orderly slowdown in economic growth from the surge in 2021, and for the spike in inflation to subside as pandemic-induced supply chain bottlenecks cleared. Amid this geopolitical upheaval and humanitarian catastrophe, the equity and fixed income markets were both down in 1Q22. How often does that happen? More than we expected. Looking at data back to 1926, there have been 37 quarters in which returns on stocks and bonds were both negative, almost 10% of all guarters over that period. Before now, the most recent quarter was 1Q18, and before that, the 2nd and 3rd quarters of 2008, as the Global Financial Crisis (GFC) began unfolding. In case you were wondering, the S&P 500 plunged 19.6% in 1Q20, while the Bloomberg Aggregate rose 3.1%. The frequency of down quarters for both stocks and bonds has been much lower since 1990 than in the first 60 years of the data set. Looking at annual returns, there have been only two calendar years when stocks and bonds were both down, 1931 and 1969 (with a near-miss in 2018). The point: Over more recent history, stocks and bonds down together is relatively unusual.

The war also hit business and consumer confidence, and the 1Q GDP report surprised all with a 1.4% drop, following a 6.9% surge in 4Q21. The 8.3% swing in growth came from a huge drop in inventory investment and net exports. Imports surged 17.7% while exports declined 5.9%, a sharp reversal from 22.4% growth in 4Q21. The drop in GDP is a surprise because the economy is otherwise healthy, with a strong job market. Final sales to the private sector grew 3.7% in 1Q, up from 2.6% in 4Q21, suggesting strength in aggregate demand. The concern going forward is that the confidence to spend and invest will be tested by rising interest rates, skyrocketing inflation, war uncertainty, and the prospect of a recession.

The Fed raised rates at its March meeting, bringing the Fed Funds rate up to 0.25%-0.50%. Chairman Jerome Powell made a point of debunking a 75 basis point hike at the next

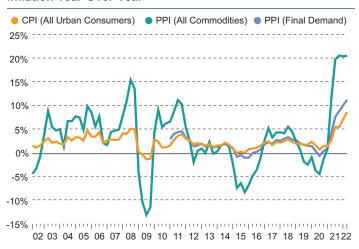
#### **Quarterly Real GDP Growth**

(20 Years)



Source: Bureau of Economic Analysis

#### Inflation Year-Over-Year



Source: Bureau of Labor Statistics

FOMC meeting. The median projection by FOMC members for the Fed Funds rate is 1.90% at the end of 2022, rising to 2.80% in 2023. However, the range of projections (1.4% to 3.2% by year-end) from Committee members reflects a high degree of uncertainty. As of quarter-end, the market was anticipating nine hikes in 2022, three more than expected by the Fed.

The war in Ukraine and the sanctions imposed on Russia are now piling on to supply bottlenecks, with particular concerns about food and energy supplies, and putting into question the assumption that inflation would ease later in 2022 and into 2023.

CPI-U for the U.S. hit 8.5% for the 12 months ending in March, the highest rate since the period ending December 1981. Driving the increase were prices for gasoline, shelter, and food. The energy index rose 32%, with gasoline prices up 48% year over year. The food price index rose 8.8%, and like the broad CPI, it was the biggest surge since 1981. Russia and Ukraine are vital suppliers to regional and global food supplies. In addition to price inflation, the war has raised serious concerns about the 2022 spring planting and harvest later in the year, and the potential for disaster in food-insecure parts of the globe.

The impact of the war is most direct and dramatic in eastern Europe and central Asia (EECA). The economic ties with Russia and Ukraine are extensive for many countries in the EECA bloc. Russia is the largest market for some countries, and the largest source of goods and energy for others. Tourism and foreign direct investment from Russia is substantial, and salary remittances from foreign workers in Russia are a vital source of income for many EECA countries. Poland attracted a substantial number of Ukrainian workers. Even without close ties, countries within the EECA, western Europe, Africa, and the Americas are vulnerable to disruptions in the flow of goods, services, and energy stemming from the conflict.

If recession is often identified by consecutive quarterly declines in GDP, why wouldn't the 1Q22 decline signal a potential downturn? First, aggregate demand remains robust. Second, household balance sheets are healthy. A labor market characterized by high employer demand, low unemployment (3.6% and falling), and rising compensation suggests continuing growth in consumer spending. Business investment will respond to this strong consumer demand. High frequency data show resilient growth in spending on travel and entertainment, and a recovery from the sharp drop in activity during the Omicron wave.

The Long-Term View

		Pe	riods F	Ended 1	2/31/21
Index	1Q22	1 Yr		10 Yrs	
U.S. Equity					
Russell 3000	-5.3	11.9	15.4	14.3	9.5
S&P 500	-4.6	15.6	16.0	14.6	9.4
Russell 2000	-7.5	-5.8	9.7	11.0	8.9
Global ex-U.S. Equity					
MSCI EAFE	-5.9	1.2	6.7	6.3	5.0
MSCI ACWI ex USA	-5.4	-1.5	6.8	5.6	
MSCI Emerging Markets	-7.0	-11.4	6.0	3.4	
MSCI ACWI ex USA Small Cap	-6.5	0.0	7.9	7.3	6.7
Fixed Income					
Bloomberg Agg	-5.9	-4.2	2.1	2.2	4.7
90-Day T-Bill	0.0	0.1	1.1	0.6	2.0
Bloomberg Long G/C	-11.0	-3.1	4.6	4.7	6.9
Bloomberg Gl Agg ex US	-6.1	-7.9	1.3	0.1	3.4
Real Estate					
NCREIF Property	5.3	21.9	8.5	9.6	9.5
FTSE Nareit Equity	-3.9	26.5	9.6	9.8	9.7
Alternatives					
CS Hedge Fund	2.1	7.5	5.5	4.7	6.6
Cambridge PE*	5.0	48.8	21.3	17.1	15.6
Bloomberg Commodity	25.5	49.3	9.0	-0.7	1.9
Gold Spot Price	6.9	13.9	9.3	1.6	7.1
Inflation – CPI-U	3.1	8.5	3.4	2.3	2.4

<sup>\*</sup>Data for most recent period lags. Data as of 9/30/21.

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

While expectations for economic growth in the U.S. are clearly lower since the Russian invasion, with GDP projections for 2022 down from 4% to 3% or lower, they are still positive. The impact of the war may be more consequential for Europe, with its greater dependence on energy imports. Risk of recession is higher, but not yet the expected case for 2022.

Kristin Bradbury contributed to this commentary.

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

	1Q22	4Q21	3Q21	2Q21	1Q21	4Q20	3Q20	2Q20
Employment Cost–Total Compensation Growth	4.5%	4.0%	3.7%	2.9%	2.6%	2.5%	2.4%	2.7%
Nonfarm Business–Productivity Growth	-7.5%	6.3%	-3.9%	3.2%	2.2%	-2.8%	6.2%	10.3%
GDP Growth	-1.4%	6.9%	2.3%	6.7%	6.3%	4.5%	33.8%	-31.2%
Manufacturing Capacity Utilization	78.0%	77.0%	76.1%	75.4%	74.5%	74.0%	71.9%	64.3%
Consumer Sentiment Index (1966=100)	63.1	69.9	74.8	85.6	80.2	79.8	75.6	74.0

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

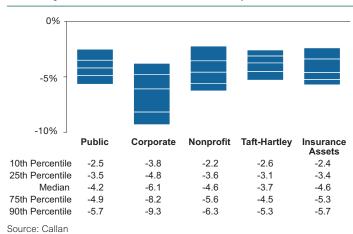
## Tough Quarter Amid Global Upheaval, Stock and Bond Drops

#### **INSTITUTIONAL INVESTORS**

- All institutional investor types saw lower returns in 1Q22, but most topped equities, fixed income, and a 60% stocks/40% bonds benchmark.
- Taft-Hartley plans fared best, followed by public defined benefit (DB) plans. Corporate DB plans brought up the rear, although the plunge in liabilities may have helped plan funded status.
- All investor types continue to show gains roughly in line with the 60%/40% benchmark over 20 years, although the gap widened a bit this quarter. And all types have topped global ex-U.S. equities and bonds over that same period, although they still lag U.S. equities.
- Strategic conversations remain focused on "Where do we go from here?" Many investors just enjoyed outstanding returns in 2021, but the elation is tempered by sobering capital markets assumptions.
- Inflation and what to do with fixed income continue to be the two primary topics of discussion.
  - · How to structure the overall portfolio to fight inflation
  - What to do to protect bond portfolios with rates rising faster than expected
- After the Global Financial Crisis, many public plans eliminated cost-of-living adjustments (COLAs) to help ensure

- solvency. Improving funded status coupled with generational highs in inflation are bringing COLAs to the forefront again. Retirees want COLAs while active participants in plans with cost sharing want lower contributions to maintain intergenerational equity.
- There is increasing concern about a market drawdown, given high valuations relative to historical averages, rising rates and inflation, and the war in Ukraine.
- More of our clients are back in the office, but uncertainty about return dates for others remains high.

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



#### Callan Database Median and Index Returns\* for Periods Ended 3/31/22

Quarter	1 Year	3 Years	5 Years	10 Years	20 Years
-4.2	5.5	10.6	9.2	8.5	7.2
-6.1	2.4	8.8	8.0	7.8	6.9
-4.6	4.6	10.3	8.9	8.2	7.2
-3.7	6.5	10.6	9.2	8.7	7.0
-4.6	-0.2	5.3	4.9	4.7	5.3
-4.5	4.8	10.1	8.8	8.2	7.1
-3.9	6.4	10.7	9.4	8.6	7.5
-4.7	4.6	10.1	8.9	8.2	7.0
-4.7	4.3	9.8	8.5	7.9	6.8
-5.1	7.5	12.1	10.6	9.8	7.4
	-4.2 -6.1 -4.6 -3.7 -4.6 -4.5 -3.9 -4.7	-4.2 5.5 -6.1 2.4 -4.6 4.6 -3.7 6.5 -4.6 -0.2 -4.5 4.8 -3.9 6.4 -4.7 4.6 -4.7 4.3	-4.2     5.5     10.6       -6.1     2.4     8.8       -4.6     4.6     10.3       -3.7     6.5     10.6       -4.6     -0.2     5.3       -4.5     4.8     10.1       -3.9     6.4     10.7       -4.7     4.6     10.1       -4.7     4.3     9.8	-4.2     5.5     10.6     9.2       -6.1     2.4     8.8     8.0       -4.6     4.6     10.3     8.9       -3.7     6.5     10.6     9.2       -4.6     -0.2     5.3     4.9       -4.5     4.8     10.1     8.8       -3.9     6.4     10.7     9.4       -4.7     4.6     10.1     8.9       -4.7     4.3     9.8     8.5	-4.2     5.5     10.6     9.2     8.5       -6.1     2.4     8.8     8.0     7.8       -4.6     4.6     10.3     8.9     8.2       -3.7     6.5     10.6     9.2     8.7       -4.6     -0.2     5.3     4.9     4.7       -4.5     4.8     10.1     8.8     8.2       -3.9     6.4     10.7     9.4     8.6       -4.7     4.6     10.1     8.9     8.2       -4.7     4.3     9.8     8.5     7.9

<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.

In terms of investment structures, few changes are planned in active vs. passive implementations.

#### **Corporate DB Plans**

- Lowered return expectations stress estimated return on asset assumptions for corporate plans.
- For corporate plans with de-risking glidepaths, strong returns led to improved funding and larger fixed income allocations, causing a reduction in expected returns.
- Funding relief from ARPA has some corporate plan sponsors reconsidering LDI in order to increase or at least maintain their allocations to growth assets and expected returns.

#### **Public DB Plans**

- 2020-21 gains drove improvements in the funded status of public plans.
- Large public plans are examining whether to have fewer active managers and increasing the allocation to passive in an effort to increase net-of-fee returns.
- Low projected returns mean downward pressure on actuarial discount rates. For many plans it may be an ideal time

- to lower discount rates without having funded status fall to untenable levels.
- However, increased funded status may spur retirees to seek improved COLAs given current inflation.
- Weaker expected returns from liquid markets may spur demand for larger allocations to alternatives as well as discussions of total fund leverage.
- Interest in private credit by public DB plans remains high.

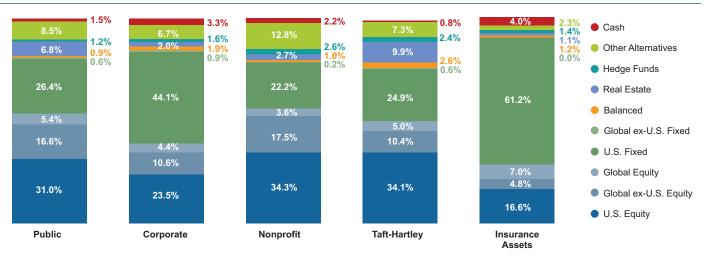
#### **Defined Contribution (DC) Plans**

- Fees continue as a top-of-mind issue, with most sponsors benchmarking their fees, according to our DC Survey.
- Target date funds are adding allocations to growth assets across the spectrum of retirement cohorts to increase income-replacement ratios.

#### **Nonprofits**

They continue to expand the depth and breadth of their private markets investments in light of both high valuations in public market growth assets and the potential for high inflation to erode the real values of their assets and distributions.

#### 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**

- The S&P 500 Index fell 4.6% in 1Q22, but was down more than 12% early in March before rallying into guarter-end.
- Value stocks sharply outpaced growth across capitalizations, with the spread exceeding 10% in both mid and small caps and just over 8% in large caps.
- Energy (+39%) was the best-performing sector given a 33% spike in WTI crude oil prices. Commodity-linked Materials and Utilities sectors also performed well on a relative basis.
- Communication Services (-12%), Consumer Discretionary (-9%), and Information Technology (-8%) were the worstperforming sectors.
- Uncertainty over rates, inflation, and geopolitical tensions all contributed to a volatile and risk-averse environment.
- Interestingly, the Russell Dynamic Index (-4.3%) outperformed the Russell Defensive Index (-5.9%) during the 1Q downturn.

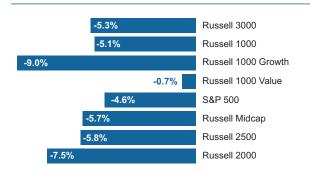
#### Historical small cap discount relative to large cap

 The Russell 2000 Index continues to underperform the Russell 1000 Index; the small cap index now trails large cap by almost 1,660 basis points cumulatively on a three-year basis and over 2,360 bps on a five-year basis.

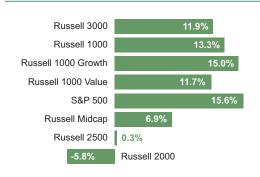
#### Index concentration

- Index concentration continues despite negative 1Q core index returns and falling earnings contributions.
- Among mega cap tech stocks, Apple and Microsoft now seen as providing downside protection

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



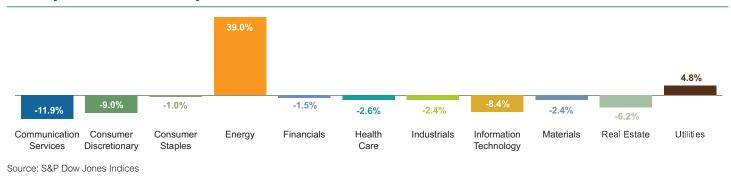
#### U.S. Equity: One-Year Returns



Sources: FTSE Russell and S&P Dow Jones Indices

 Index concentration continues to cause active managers significant headwinds in the large cap growth space—the Russell 1000 Growth Index has nearly 50% of its capitalization in just the top 10 names (Apple and Microsoft are greater than 10% weights).

#### **Quarterly Performance of Industry Sectors**



#### **Global Equity**

#### War in Ukraine stoked market volatility

- In the aftermath of invading Ukraine, Russia faced condemnation and sanctions that crippled its stocks, bonds, and currency and shocked the global markets.
- The fog of war exacerbated inflationary concerns and led to a surge in energy prices, as Russia is the second-largest natural gas provider and third-largest oil producer in the world.
- Energy exporters notably outperformed importers given the soaring prices.

#### Fears of COVID-19

- A resurgence of COVID-19 cases in Europe and Asia, specifically in China, weighed on the global recovery.
- China's zero-COVID policy has injected doubt into its 2022 projected GDP growth of 5.5%, which is already its lowest annual target in more than 25 years.

#### Growth vs. value

- Value sectors such as Energy, Materials, and Financials were in favor relative to growth sectors like Consumer Discretionary and Information Technology, due to recession fears and a tightening monetary cycle.
- However, Energy was the worst performer within emerging markets due to the removal of Russia from indices.

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

With the uncertainty of war, the U.S. dollar strengthened against other major currencies, including the yen, as the Bank of Japan maintained an easing policy.

#### Value is attractive relative to history

- There are attractive valuations in multiple regions.
- Growth relative to value is more vulnerable as interest rates normalize.
- Global recovery from COVID and deficit in Energy should support value.
- Value sectors are underexposed in international indices relative to history.
- Value outperforms in "heating up" inflationary environments.

#### Global ex-U.S. Equity: Quarterly Returns

(U.S. Dollar)



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

(U.S. Dollar)



Source: MSCI

### **Fixed Income**

#### U.S. Fixed Income

#### Bonds hit hard as rates rose sharply

- Bloomberg Aggregate worst quarterly return since 1980
- Curve flattened; as of 3/31 5-year U.S. Treasury yield was 10 bps higher than 10-year UST yield (2.42% vs. 2.32%).
- TIPS topped nominal Treasuries, and 10-year breakeven spread widened to 2.84% from 2.56% at year-end.
- Fed raised rates by 25 bps, with many more hikes expected this year.

#### Credit sectors underperformed

- Investment-grade corporates underperformed durationmatched U.S. Treasuries by 145 bps, RMBS by 71 bps.
- High yield "benefited" from less interest rate sensitivity and relatively higher exposure to the energy sector; excess return vs. U.S. Treasuries was 92 bps.
- Defaults remain low (less than 1%) and yield breeched 6%.

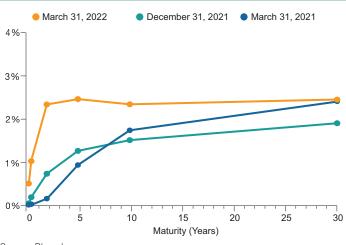
#### Leveraged loans performed relatively well

Helped by floating rate coupons/low duration

#### Securitized sectors also performed well

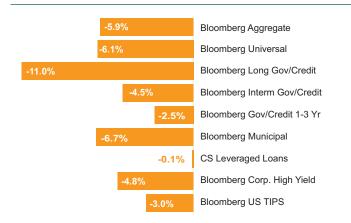
- Consumer ABS was the best within the sector due to its shorter duration profile and solid consumer spending.
- Conduit CMBS traded in line as the economy re-opens.
- Agency MBS saw duration extend by 0.4 year due to higher rates.
- The U.S. yield curve "bear-flattened" as the Fed pivoted to focus on higher-than-expected inflation.
- The U.S. yield curve (2Y/10Y) inverted on the last (intra) day of the quarter, which has not been seen since Aug. 2019.
- Despite rates moving higher this year, could the recent backup indicate a new regime of higher rates, or is the market simply trading to the higher end of this secular range that has persisted for nearly 40 years?

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



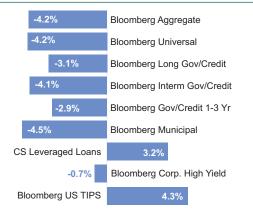
Source: Bloomberg

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



Sources: Bloomberg and Credit Suisse

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



Sources: Bloomberg and Credit Suisse

#### FIXED INCOME (Continued)

#### **Municipal Bonds**

#### Municipal bond returns hurt by rising rates

- Bloomberg Municipal Bond Index suffered its worst quarterly return since 3Q81.
- Lower quality underperformed: BBB -7.1%; AAA -6.1%
- As with U.S. Treasuries, the muni yield curve flattened with 2-year yields rising more than 10-year and 30-year yields

#### Valuations relatively attractive

- 10-year AAA Muni/10-year U.S. Treasury ratio = 94%
- Up from 68% at year-end; 10-year median = 90%
- Municipal Bond Index after-tax yield = 4.4% (tax rate of 37%)

#### Supply/demand

- Heavy outflows in 1Q22 following record inflows in 2021
- \$22 billion in outflows in 1Q (one-fifth of 2021 inflows)
- Supply down modestly vs. 1Q21

#### Credit quality remains stable to improving

- Tax revenues continued to rise and reserve levels are high
- Upgrades outpaced downgrades

#### **Global Fixed Income**

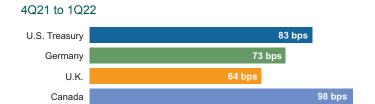
#### Negative returns driven by broad interest rate increases

 U.S. dollar appreciated against the Japanese yen, euro, and British pound.

#### Emerging market debt was not spared

- JPM Global Diversified hurt by rising rates in the U.S.
- GBI-EM hurt by rising local rates, but currency appreciation helped in Latin America and Africa.
- Russia removed from indices at a price of \$0 (-100% return).

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

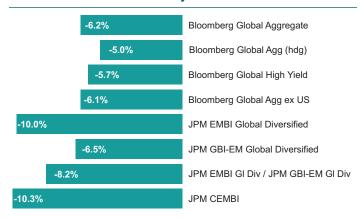


Source: Bloomberg

Japan

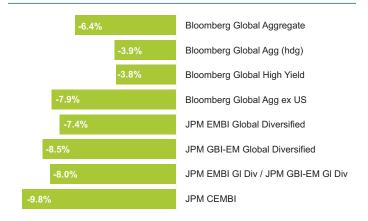
#### **Global Fixed Income: Quarterly Returns**

15 bps



Sources: Bloomberg and JPMorgan Chase

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



Sources: Bloomberg and JPMorgan Chase

## **Continued Strong Performance Across the Asset Class**

#### REAL ESTATE/REAL ASSETS | Munir Iman

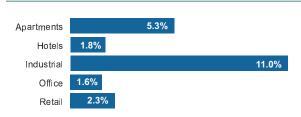
#### **Private Real Estate**

- The NCREIF Property Index, a measure of U.S. institutional real estate assets, rose 5.3% during 1Q22. The income return was 1.0% and the appreciation return was 4.3%.
- Industrial led property sector performance with a gain of 11.0%. Office finished last with an increase of 1.6%.
- Regionally, the West led with a 6.5% increase, while the Midwest was the worst performer but still gained 3.5%.
- The NCREIF Open-End Diversified Core Equity (ODCE)
   Index, representing equity ownership positions in U.S. core real estate, rose 7.1% during the quarter.
- Valuations are reflective of strong fundamentals in Industrial and Apartment and continued uncertainty despite a modest recovery in Office and Retail.
- Office and Retail vacancy rates increased slightly during the guarter.
- Net operating income growth turned negative for Office as the Omicron variant delayed many return-to-office plans.
- Net operating income growth continued its gradual increase in Industrial while decreasing slightly in Apartment and Retail.

#### **Public Real Estate**

 The FTSE EPRA Nareit Developed REIT Index, a measure of global real estate securities, fell 4.0% during 1Q22.

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



Source: NCREIF

- U.S. REITs, as measured by the FTSE EPRA Nareit Equity REITs Index, dropped 3.9%.
- The FTSE EPRA Nareit Asia Index (USD), representing the Asia/Pacific region, fell 1.0%.
- European REITs, as measured by the FTSE EPRA Nareit Europe Index (USD), fell 7.2%.

#### **Real Assets**

- Commodities were a rare bright spot given their inflation-protection properties as well as war-induced supply concerns.
   The Bloomberg Commodity TR Index soared 25.5% and the energy-heavy S&P GSCI climbed 33.1%.
- Gold (S&P Gold Spot Price Index: +6.9%) and listed infrastructure (DJB Global Infrastructure: +3.2%) outperformed global stocks and bonds.
- TIPS (Bloomberg TIPS: -3.0%) fell but outpaced nominal U.S. Treasuries.

#### Callan Database Median and Index Returns\* for Periods Ended 3/31/22

Private Real Assets	Quarter	Year to Date	1 Year	3 Years	5 Years	10 Years	15 Years
Real Estate ODCE Style	5.6	5.6	26.2	10.7	9.3	9.8	5.9
NFI-ODCE (value wt net)	7.1	7.1	27.3	10.3	8.9	9.9	6.0
NCREIF Property	5.3	5.3	21.9	9.6	8.5	9.6	7.3
NCREIF Farmland	2.6	2.6	9.7	5.9	6.2	9.6	10.6
NCREIF Timberland	3.2	3.2	11.8	4.7	4.1	5.6	5.2
Public Real Estate							
Global Real Estate Style	-4.1	-4.1	16.8	9.3	9.8	9.2	4.8
FTSE EPRA Nareit Developed	-4.0	-4.0	14.5	5.4	6.5	6.9	2.9
Global ex-U.S. Real Estate Style	-3.7	-3.7	4.4	5.0	8.9	8.4	2.6
FTSE EPRA Nareit Dev ex US	-3.3	-3.3	2.5	1.1	4.7	5.4	1.2
U.S. REIT Style	-4.9	-4.9	26.0	13.3	11.3	10.7	7.3
FTSE EPRA Nareit Equity REITs	-3.9	-3.9	26.5	11.1	9.6	9.8	6.4

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

### Where Do We Go From Here?

#### PRIVATE EQUITY | Gary Robertson

Private equity had a slower but still active 1Q22. The unsettling shift in the geopolitical and economic environment is creating murkiness regarding the future direction of private equity activity volumes. Fundraising remained strong, with venture capital dominating new commitments and buyouts paling by comparison—an unusual circumstance not seen since the late 1990s. Company-level private transactions fell on average about 23% by dollar volume and 24% by new deal count. Exits declined more than new investments. IPOs faced continuing challenges.

Fundraising ► Based on preliminary data, 1Q22 private equity partnerships holding final closes totaled \$216 billion, up 16% from 4Q21. New partnerships formed dropped 34% to 497, with larger funds remaining dominant. European commitments fell to a markedly low 16% of the total in 1Q. New buyout fund commitments were surprisingly low given its 44% share of commitments for the full year 2021. (Unless otherwise noted, all data come from PitchBook.)

**Buyouts** ► Funds closed 2,667 investments with \$200 billion in disclosed deal value, a 31% decline in count and a 16% drop in dollar value from 4Q. The largest investment was the \$17.0 billion sponsor-to-sponsor sale of electronic medical records company Athenahealth by Veritas and Elliott to Bain and Hellman & Friedman.

VC Investments ► New investments in venture capital companies totaled 11,495 rounds of financing, down 6%, with \$154 billion of announced value, down 20%. The largest investment was the \$3.0 billion mega 2nd round in Altos Labs, which focuses on cellular rejuvenation, by Foresite.

**Exits** ► There were 540 private M&A exits of private equitybacked companies, a drop of 41%. Disclosed values declined 33% to \$140 billion. There were 41 private equity-backed IPOs, down 66%, which raised an aggregate \$7 billion, down 76%.

Venture-backed M&A exits totaled 693 with disclosed value of \$46 billion. The number of sales fell 18% from 4Q, and announced value fell 22%. There were 69 VC-backed IPOs, down 60%, and the combined float totaled \$7 billion, an 83% decrease.

#### Funds Closed 1/1/22 to 3/31/22

Strategy	No. of Funds	Amt (\$mm)	Share
Venture Capital	319	92,441	43%
Growth Equity	35	44,023	20%
Buyouts	99	58,897	27%
Mezzanine Debt	2	8,980	4%
Distressed	5	5,339	2%
Energy	2	810	0%
Secondary and Other	31	4,398	2%
Fund-of-Funds	4	1,234	1%
Totals	497	216,122	100%

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

#### Private Equity Performance (%) (Pooled Horizon IRRs through 9/30/21\*)

Strategy	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years	20 Years	25 Years
All Venture	7.2	76.0	36.3	27.5	20.6	15.6	11.5	23.8
Growth Equity	4.4	52.3	29.0	24.3	18.1	15.6	14.7	16.4
All Buyouts	4.4	42.8	21.8	20.2	16.1	12.6	14.2	13.7
Mezzanine	3.0	22.2	11.8	12.4	12.2	11.0	10.5	10.4
Credit Opportunities	2.1	21.7	7.0	8.8	9.9	9.0	9.9	9.9
Control Distressed	7.2	42.6	16.6	14.3	13.5	10.8	11.7	11.9
All Private Equity	5.1	49.8	24.8	21.4	16.7	13.3	13.2	14.8
S&P 500	0.6	30.0	16.0	16.9	16.6	10.4	9.5	9.7
Russell 3000	-0.1	31.9	16.0	16.9	16.6	10.4	9.8	9.7

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

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

## **Appealing to Investors in Low-Yield Climate**

#### PRIVATE CREDIT | Catherine Beard

#### Benefiting from low-yield environment

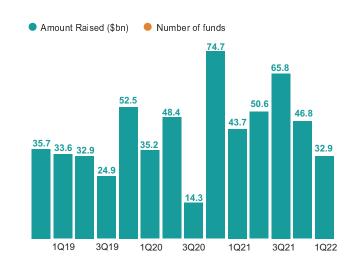
- Yield and income-generating characteristics remain attractive in a low-rate environment.
- Alpha generation can be magnified through strategies that extract a complexity premium.
- Many direct lending assets are floating rate, which can add protection against rising rates.
- Portfolios were resilient during the COVID dislocation due to liquidity injected into the economy; valuations are back to 2019 levels but the space remains crowded.
- Private credit performance varies across sub-asset class and underlying return drivers. On average, the asset class has generated net IRRs of 8% to 10% for trailing periods ended Sep. 30, 2021. Higher-risk strategies performed better than lower-risk strategies.

#### Fundraising in 2022 seasonally slow

- Private credit fundraising tapered off in 3Q20 due to COVIDrelated disruption but significantly rebounded in 4Q20 and 1H21; 1Q22 has been seasonally slow with fewer funds in the market but with larger fundraise targets.
- Fundraising in the first part of 2022 focused on diversifying strategies such as specialty finance, specialized industry lending, and non-sponsor/opportunistic lending.
- Traditional sponsor-backed strategies are coming to market with evergreen structures for which there is growing demand.
- There is continued strong PC fundraising activity from large credit shops as well as new offerings from traditional fixed income managers.

Industry consolidation is in full swing with large traditional firms acquiring alternative credit managers, such as T. Rowe Price acquiring Oak Hill Advisors and Alliance Bernstein's acquisition of CarVal.

#### Private Credit Fundraising (\$bn)





Source: Pregin

#### Private Credit Performance (%) (Pooled Horizon IRRs through 9/30/21\*)

Strategy	Quarter	1 Year	3 Years	5 Years	8 Years	10 Years	15 Years	20 Years
Senior Debt	1.1	11.3	6.9	7.9	7.4	7.4	7.5	7.5
Mezzanine	3.0	22.2	11.8	12.4	11.5	12.2	11.1	10.4
Credit Opportunities	2.1	21.7	7.0	8.8	7.5	9.9	9.0	9.9
Total Private Credit	2.1	19.6	8.1	9.4	8.4	10	9.3	9.8

Sources: Refinitiv/Cambridge

\*Most recent data available at time of publication

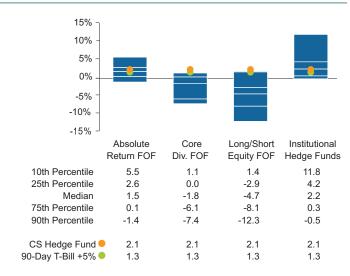
## **Market Volatility Tests Managers**

#### **HEDGE FUNDS/MACs | Joe McGuane**

Global market volatility spiked during 1Q22 following Russia's invasion of Ukraine. The S&P 500 fell 4.6%, but was off more than 12% at its lowest point in the quarter. Despite the conflict in Europe, the Federal Reserve moved ahead with a 25 basis point increase in policy rates, its first since 2018. The U.S. Treasury 10-year yield rose by 70 bps to 2.33%. Hawkish monetary policy drove bond yields higher and prices lower.

Hedge funds ended the volatile quarter with mixed results. Equity managers with a focus on energy and industrials had a solid guarter but were not able to offset those with net long exposure to tech, media, and telecom (TMT), which was a drag on performance. Event-driven strategies also fell due to a higher weight to equities vs. credit to start off the year. Macro strategies soared, as commodities spiked. Relative value managers ended slightly higher, as they were able to profit off an increase in rate volatility.

#### **Hedge Fund Style Group Returns**



Sources: Callan, Credit Suisse, Federal Reserve

#### Callan Peer Group Median and Index Returns\* for Periods Ended 3/31/22

Hedge Fund Universe	Quarter	1 Year	3 Years	5 Years	10 Years	15 Years
Callan Institutional Hedge Fund Peer Group	2.2	8.0	6.3	5.6	6.4	6.7
Callan Fund-of-Funds Peer Group	-1.3	1.2	6.0	5.1	5.1	4.1
Callan Absolute Return FOF Style	1.5	6.5	6.0	4.4	4.9	3.5
Callan Core Diversified FOF Style	-1.8	1.3	6.1	4.7	4.8	3.8
Callan Long/Short Equity FOF Style	-4.7	-2.8	6.6	6.0	5.5	4.9
BB GS Cross Asset Risk Premia 6% Vol Idx	0.6	0.0	-0.4	1.7	3.6	5.1
Credit Suisse Hedge Fund	2.1	7.5	7.3	5.5	4.7	4.2
CS Convertible Arbitrage	-2.5	1.0	6.0	4.4	3.9	3.9
CS Distressed	-0.2	5.6	5.0	4.1	4.7	3.9
CS Emerging Markets	-7.2	-4.9	4.7	4.6	4.6	4.1
CS Equity Market Neutral	-0.1	5.1	2.2	2.0	1.6	-1.3
CS Event-Driven Multi	-3.0	3.5	7.4	5.1	4.3	4.0
CS Fixed Income Arb	-1.0	2.0	3.9	3.8	4.2	3.6
CS Global Macro	16.2	23.9	13.4	8.8	5.8	6.6
CS Long/Short Equity	-3.3	2.3	6.3	5.8	5.6	4.6
CS Managed Futures	12.3	18.9	9.4	5.6	3.1	3.9
CS Multi-Strategy	3.1	8.0	6.6	5.1	6.0	5.1
CS Risk Arbitrage	-0.6	2.7	7.7	5.9	4.1	4.1
HFRI Fund Wtd Composite	0.1	5.3	8.2	7.0	6.9	6.8
90-Day T-Bill + 5%	1.3	5.1	5.8	6.1	5.6	5.8

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

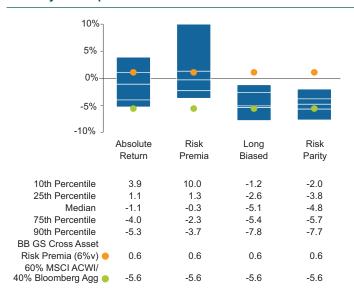
Representing a raw collection of hedge funds reporting performance without implementation costs, the HFRI Fund-Weighted Composite Index lost 1.8% for 1Q. The median manager in the Callan Hedge Fund-of-Funds (FOF) Database Group detracted 1.3%, net of all fees. Serving as a proxy for large, broadly diversified hedge funds with low-beta exposure to equity markets, the median Callan Institutional Hedge Fund Peer Group manager rose 2.2%.

Within the HFRI indices, the best-performing strategy last quarter was Macro (+6.7%), aided by its exposure to commodities. Equity hedge strategies (-4.3%) had a difficult quarter, as those that were overweight to growth performed worse than those with a value bias.

Across the Callan Hedge FOF Database, the median Absolute Return FOF gained 1.5%, as a focus on lower beta strategies performed well. Meanwhile, the Callan Long-Short Equity FOF fell 4.7% as a growth bias was a drag on performance. The median Callan Core Diversified FOF declined 1.8%, as equity positioning and interest rate volatility offset macro outperformance.

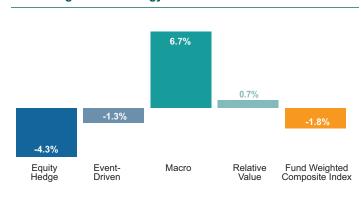
Measuring the quarter's performance of alternative risk premia, the Bloomberg GSAM Risk Premia Index increased 0.6% based upon a 6% volatility target. Within Callan's database of liquid alternative solutions, the median managers of the Callan Multi-Asset Class (MAC) Style Groups generated negative returns for the quarter, gross of fees. The median Callan Long Biased MAC manager fell 5.1%, as exposure to equity and fixed income was a drag on performance. The Callan Risk Parity MAC index, which typically targets an equally riskweighted allocation to the major asset classes with leverage, was down 4.8%. The Callan Risk Premia MAC held up the best, down 0.3%.

#### **MAC Style Group Returns**



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

#### **HFRI Hedge Fund Strategy Returns**



Source: HFRI

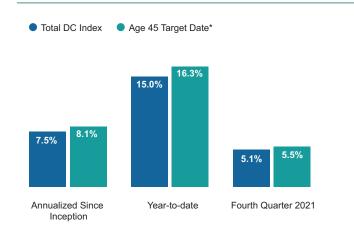
## DC Index Bounces Back in 4Q

#### **DEFINED CONTRIBUTION | Patrick Wisdom**

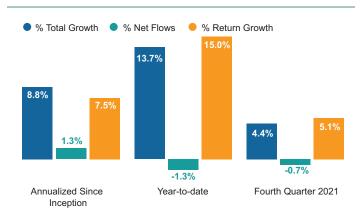
- The Callan DC Index™ gained 5.1% in 4Q21, rebounding from its 3Q21 decline (-0.4%).
- The Age 45 Target Date Fund (analogous to the 2040 vintage) had a slightly higher quarterly return (5.5%), attributable to its larger allocation to equity, which outperformed fixed income during the guarter.
- Balances within the DC Index rose by 4.4% after a 0.7% decline the previous quarter. Investment returns (5.1%) were the sole driver of the growth, offset by net flows (-0.7%).
- Target date funds received 77.9% of net inflows, the largest share for the fourth straight quarter.
- For the second straight quarter, real return/TIPS had largerthan-typical net inflows (+13.6%), indicating that participants may be looking to hedge inflation.
- In 4Q21, investors transferred assets out of less-risky asset classes, as stable value (-15.6%), U.S. fixed income (-8.2%), and money market (-3.4%) experienced net outflows.
- U.S. large cap (-40.4%) and U.S. small/mid cap (-10.4%) saw material net outflows. In contrast, global ex-U.S. equity (+5.1%) saw net inflows, while emerging market equity (+0.1%) experienced relatively little change.
- Turnover (net transfer activity levels within DC plans) in the DC Index remained at 0.19%, consistent with the 3Q level.
- The Index's overall allocation to equity (72.8%) increased from the previous quarter's level (72.2%), and is within reach of the high mark of 4Q07 (72.9%).
- U.S. large cap (27.7%) had the largest percentage increase in allocation from 3Q. The increase came despite net outflows, signaling that the relative outperformance of U.S. equity drove the higher overall allocations.
- U.S. fixed income (5.5%) experienced the largest percentage decrease in allocation.
- The prevalence of a balanced fund (44.1%) decreased to its lowest level since the inception of the Index in 2006.

The Callan DC Index is an equally weighted index tracking the cash flows and performance of over 100 plans, representing nearly \$300 billion in assets. The Index is updated quarterly and is available on Callan's website.

#### **Investment Performance**



#### **Growth Sources**



#### **Net Cash Flow Analysis (4Q21)**

(Top Two and Bottom Two Asset Gatherers)

Asset Class	Flows as % of Total Net Flows
Target Date Funds	77.9%
Real Return/TIPS	13.6%
Stable Value	-15.6%
U.S. Large Cap	-40.4%
Total Turnover**	0.19%

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

Source: Callan DC Index

Note: DC Index inception date is January 2006.

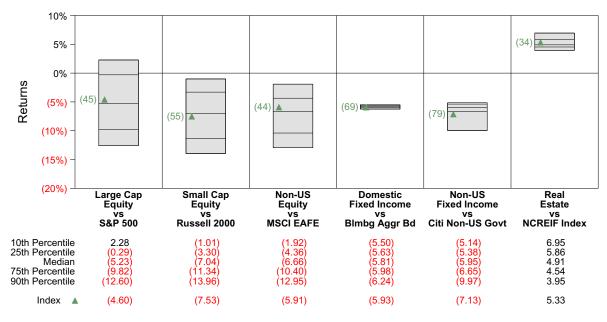
- The Age 45 Fund transitioned from the average 2035 TDF to the 2040 TDF in June 2018.
- \*\* Total Index "turnover" measures the percentage of total invested assets (transfers only, excluding contributions and withdrawals) that moved between asset classes.

# Market Overview Active Management vs Index Returns

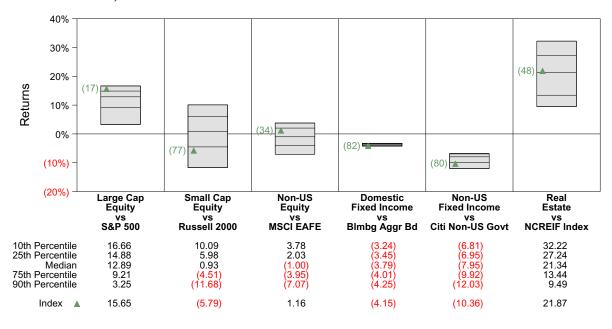
#### **Market Overview**

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 March 31, 2022



## Range of Separate Account Manager Returns by Asset Class One Year Ended March 31, 2022





#### **ASSET ALLOCATION AND PERFORMANCE**

#### **Asset Allocation and Performance**

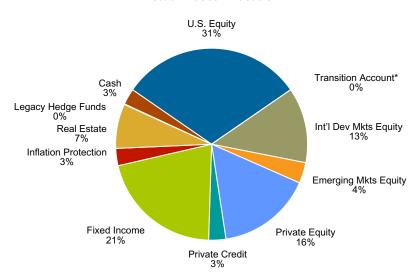
This section begins with an overview of the fund's asset allocation at the broad asset class level. This is followed by a top down performance attribution analysis which analyzes the fund's performance relative to the performance of the fund's policy target asset allocation. The fund's historical performance 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.



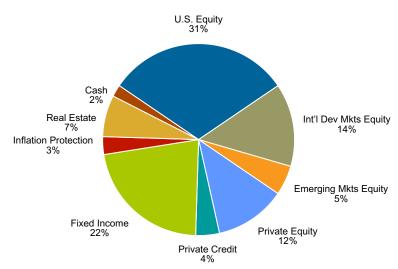
#### **Actual vs Target Asset Allocation** As of March 31, 2022

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

#### **Actual Asset Allocation**



### **Target Asset Allocation**



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
U.S. Equity	11,751,308	30.8%	31.0%	(0.2%)	(89,568)
Transition Account*	1,106	0.0%	0.0%	0.0%	1,106
Int'l Dev Mkts Equity	4,851,443	12.7%	14.0%	(1.3%)	(496,049)
Emerging Mkts Equity	1,342,398	3.5%	5.0%	(1.5%)	(567,421)
Private Equity	6,117,368	16.0%	12.0%	4.0%	1,533,804
Private Credit	1,102,294	2.9%	4.0%	(1.1%)	(425,560)
Fixed Income	8,001,099	20.9%	22.0%	(1.1%)	(402,104)
Inflation Protection	1,121,105	2.9%	3.0%	(0.1%)	(24,787)
Real Estate	2,853,968	7.5%	7.0%	0.5%	180,222
Legacy Hedge Funds	21,129	0.1%	0.0%	0.1%	21,129
Cash	1,033,156	2.7%	2.0%	0.7%	269,228
Total	38 196 373	100.0%	100.0%		

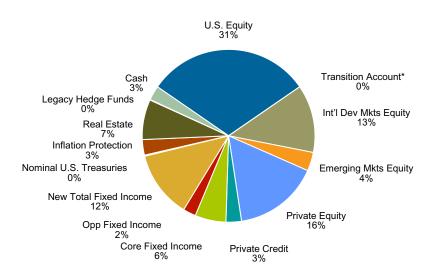
<sup>\*</sup>Market values are shown net of accrued fees.



## Actual Asset Allocation As of March 31, 2022

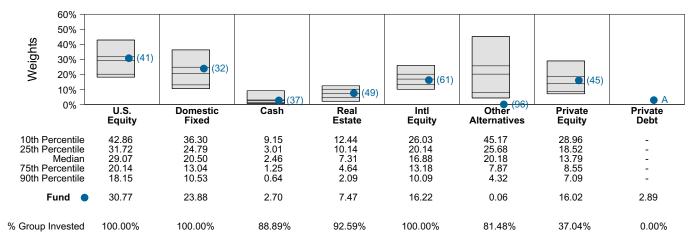
The first chart below shows the Fund's asset allocation as of March 31, 2022. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons- V Lg DB (>10B).

#### **Actual Asset Allocation**



	\$000s	vveight
Asset Class	Actual	Actual
U.S. Equity	11,751,308	30.8%
Transition Account*	1,106	0.0%
Int'l Dev Mkts Equity	4,851,443	12.7%
Emerging Mkts Equity	1,342,398	3.5%
Private Equity	6,117,368	16.0%
Private Credit	1,102,294	2.9%
Core Fixed Income	2,208,546	5.8%
Opp Fixed Income	925,482	2.4%
New Total Fixed Income	4,771,876	12.5%
Nominal U.S. Treasuries	95,195	0.2%
Inflation Protection	1,121,105	2.9%
Real Estate	2,853,968	7.5%
Legacy Hedge Funds	21,129	0.1%
Cash	1,033,156	2.7%
Total	38,196,373	100.0%

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



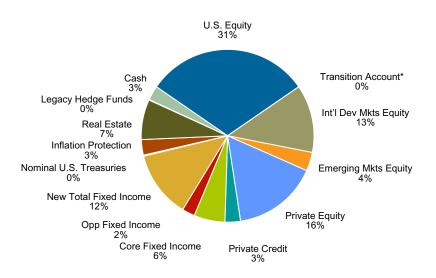
<sup>\*</sup>Market values are shown net of accrued fees.



## Actual Asset Allocation As of March 31, 2022

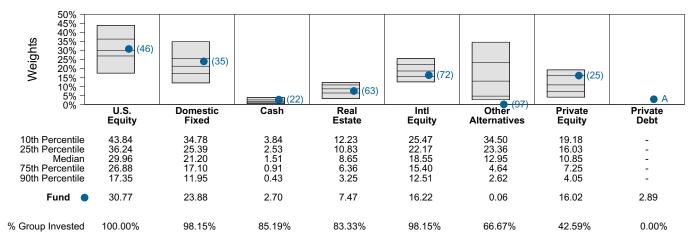
The first chart below shows the Fund's asset allocation as of March 31, 2022. The second chart ranks the fund's asset allocation versus the Callan Public Fund Spons - Large (>1B).

#### **Actual Asset Allocation**



	\$000s	Weight
Asset Class	Actual	Actual
U.S. Equity	11,751,308	30.8%
Transition Account*	1.106	0.0%
Int'l Dev Mkts Equity	4,851,443	12.7%
Emerging Mkts Equity	1,342,398	3.5%
Private Equity	6,117,368	16.0%
Private Credit	1,102,294	2.9%
Core Fixed Income	2,208,546	5.8%
Opp Fixed Income	925,482	2.4%
New Total Fixed Income	4,771,876	12.5%
Nominal U.S. Treasuries	95,195	0.2%
Inflation Protection	1,121,105	2.9%
Real Estate	2,853,968	7.5%
Legacy Hedge Funds	21,129	0.1%
Cash	1,033,156	2.7%
Total	38,196,373	100.0%

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



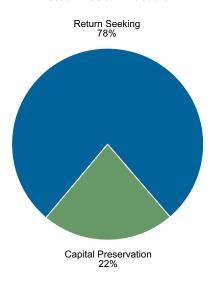
<sup>\*</sup>Market values are shown net of accrued fees.



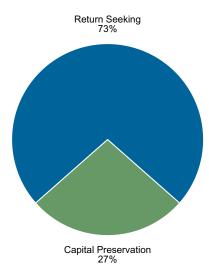
### **Actual vs Target Asset Allocation** As of March 31, 2022

The first chart below shows the Fund's asset allocation as of March 31, 2022. 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	29,655	77.6%	73.0%	4.6%	1,771
Capital Preservation	8,542	22.4%	27.0%	(4.6%)	(1,771)
Total	38,196	100.0%	100.0%	, ,	, , ,

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

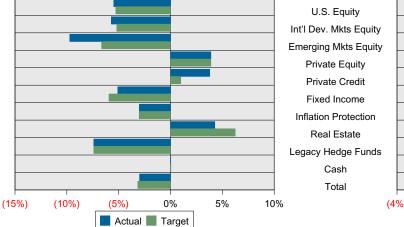
<sup>\*</sup>Capital Preservation Assets: Core FI, Nominal Treas, Inflation Protection (TIPS), Interm Treas, Long Duration, Securitized, Interm Credit and Cash. \*Market values are shown net of accrued fees.



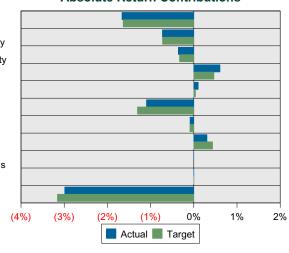
#### Quarterly Total Fund Absolute Attribution - March 31, 2022

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 Return Contributions**



#### Absolute Attribution Effects for Quarter ended March 31, 2022

	Effective Actual Weight	Actual Return	Absolute Return Contribution	Effective Target Weight	Target Return	Target Return Contribution	Return Contribution Difference
U.S. Equity	30%	(5.45%)	(1.66%)	31%	(5.28%)	(1.64%)	(0.03%)
Int'l Dev. Mkts Equity	13%	(5.72%)	(0.73%)	14%	(5.18%)	(0.73%)	(0.00%)
Emerging Mkts Equity	4%	(9.71%)	(0.36%)	5%	(6.65%)	(0.33%)	(0.03%)
Private Equity	16%	3.90%	0.61%	12%	3.90%	0.47%	0.14%
Private Credit	3%	3.78%	0.10%	4%	0.99%	0.04%	0.06%
Fixed Income	22%	(5.08%)	(1.10%)	22%	(5.93%)	(1.31%)	0.21%
Inflation Protection	3%	(3.00%)	(0.09%)	3%	(3.02%)	(0.09%)	0.00%
Real Estate	7%	4.27%	0.31%	7%	6.23%	0.44%	(0.13%)
Legacy Hedge Funds	0%	(7.39%)	(0.00%)	0%	(7.39%)	0.00%	(0.00%)
Cash	3%	0.03%	0.00%	2%	0.04%	0.00%	(0.00%)

**Total Fund Return** 0.17% (2.99%)**Target Return** (3.16%)

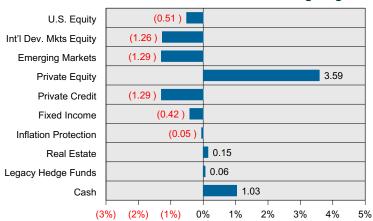
<sup>\*</sup> Current Quarter Target = 22.0% Blmbg U.S. Agg Bond Index, 31.0% Russell 3000 Index, 12.0% Private Equity, 14.0% MSCI World ex US IMI, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 4.0% S&P Levered Loan Index +1% (Qtr lag), 5.0% MSCI EM IMI, 3.0% U.S. TIPS Index, 2.0% 3-month Treasury Bill, 0.7% FTSE EP/NA US Index. Returns are shown gross of fees.



#### Quarterly Total Fund Relative Attribution - March 31, 2022

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**

Actual Target

#### U.S. Equity Int'l Dev. Mkts Equity **Emerging Markets** Private Equity Private Credit Fixed Income Inflation Protection Real Estate Legacy Hedge Funds Cash Total (10%)(0.30%) (0.20%) (0.10%) 0.00% 0.10% 0.20% 0.30% 0.40% (5%)0% 5% 10%

**Relative Attribution by Asset Class** 

Manager Effect Asset Allocation Total

#### Relative Attribution Effects for Quarter ended March 31, 2022

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
U.S. Equity	30%	31%	(5.45%)	(5.28%)	(0.06%)	(0.01%)	(0.07%)
Int'l Dev. Mkts Equity	13%	14%	(5.72%)	(5.18%)	(0.07%)	0.02%	(0.05%)
Emerging Markets	4%	5%	(9.71%)	(6.65%)	(0.12%)	0.05%	(0.07%)
Private Equity	16%	12%	3.90%	3.90%	0.00%	0.24%	0.24%
Private Credit	3%	4%	3.78%	0.99%	0.07%	(0.06%)	0.02%
Fixed Income	22%	22%	(5.08%)	(5.93%)	0.19%	`0.01%	0.19%
Inflation Protection	3%	3%	(3.00%)	(3.02%)	0.00%	(0.00%)	(0.00%)
Real Estate	7%	7%	4.27%	6.23%	(0.13%)	`0.01%	(0.12%)
Legacy Hedge Funds	0%	0%	(7.39%)	(7.39%)	0.00%	(0.00%)	(0.00%)
Cash	3%	2%	0.03%	0.04%	(0.00%)	0.03%	0.03%
Total			(2.99%) =	(3.16%) +	(0.12%) +	0.29%	0.17%

<sup>\*</sup> Current Quarter Target = 22.0% Blmbg U.S. Agg Bond Index, 31.0% Russell 3000 Index, 12.0% Private Equity, 14.0% MSCI World ex US IMI, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 4.0% S&P Levered Loan Index +1% (Qtr lag), 5.0% MSCI EM IMI, 3.0% U.S. TIPS Index, 2.0% 3-month Treasury Bill, 0.7% FTSE EP/NA US Index. Returns are shown gross of fees.

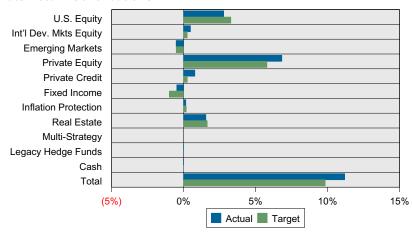


(15%)

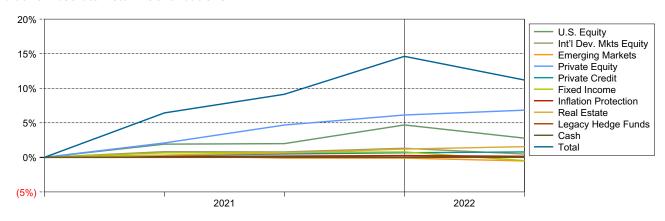
#### **Cumulative Total Fund Absolute Attribution - March 31, 2022**

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	28%	10.32%	2.78%	28%	11.92%	3.28%	(0.50%)
Int'l Dev. Mkts Equity	13%	3.78%	0.48%	13%	2.31%	0.24%	0.23%
Emerging Markets	4%	(12.34%)	(0.52%)	4%	(9.49%)	(0.51%)	(0.01%)
Private Equity	15%	`50.63%´	6.82%	12%	50.63%	5.79%	`1.03%´
Private Credit	4%	20.34%	0.78%	4%	6.20%	0.26%	0.53%
Fixed Income	23%	(2.16%)	(0.47%)	24%	(4.15%)	(0.99%)	0.52%
Inflation Protection	3%	`3.90%	0.15%	3%	4.29%	0.18%	(0.02%)
Real Estate	7%	21.54%	1.55%	7%	22.36%	1.64%	(0.09%)
Multi-Strategy	0%	-	0.00%	0%	-	0.00%	`0.00%
Legacy Hedge Funds	0%	13.46%	0.01%	0%	3.71%	0.00%	0.01%
Cash	2%	0.07%	0.00%	2%	0.06%	0.00%	0.00%

Target Return

9.84%

\* Current Quarter Target = 22.0% Blmbg U.S. Agg Bond Index, 31.0% Russell 3000 Index, 12.0% Private Equity, 14.0% MSCI World ex US IMI, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 4.0% S&P Levered Loan Index +1% (Qtr lag), 5.0% MSCI EM IMI, 3.0% U.S. TIPS Index, 2.0% 3-month Treasury Bill, 0.7% FTSE EP/NA US Index. Returns are shown gross of fees.

Total Fund Return 11.19%

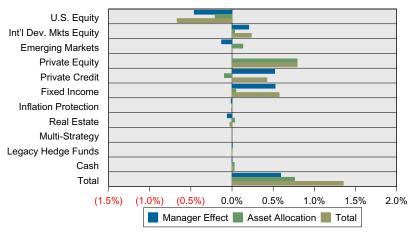


1.35%

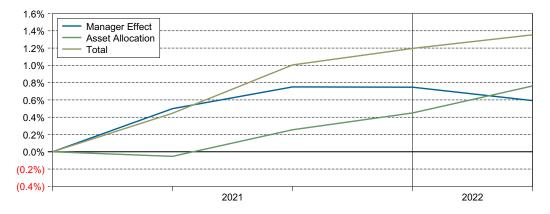
#### **Cumulative Total Fund Relative Attribution - March 31, 2022**

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**

Assat Olses	Effective Actual	Effective Target	Actual	Target	Manager	Asset	Total Relative
Asset Class	Weight	Weight	Return	Return	Effect	Allocation	Return
U.S. Equity	28%	28%	10.32%	11.92%	(0.46%)	(0.21%)	(0.67%)
Int'l Dev. Mkts Equity	13%	13%	3.78%	2.31%	0.20%	0.03%	0.24%
Emerging Markets	4%	4%	(12.34%)	(9.49%)	(0.13%)	0.13%	0.00%
Private Equity	15%	12%	50.63%	50.63%	0.00%	0.79%	0.79%
Private Credit	4%	4%	20.34%	6.20%	0.52%	(0.09%)	0.42%
Fixed Income	23%	24%	(2.16%)	(4.15%)	0.53%	`0.05%´	0.57%
Inflation Protection	3%	3%	`3.90%′	4.29%	(0.01%)	0.00%	(0.01%)
Real Estate	7%	7%	21.54%	22.36%	(0.06%)	0.03%	(0.03%)
Multi-Strategy	0%	0%	-	-	0.00%	0.00%	0.00%
Legacy Hedge Funds	0%	0%	13.46%	3.71%	0.01%	(0.00%)	0.00%
Cash	2%	2%	0.07%	0.06%	(0.00%)	0.03%	0.03%
Total			11.19% =	9.84% +	· 0.59% +	0.76%	1.35%

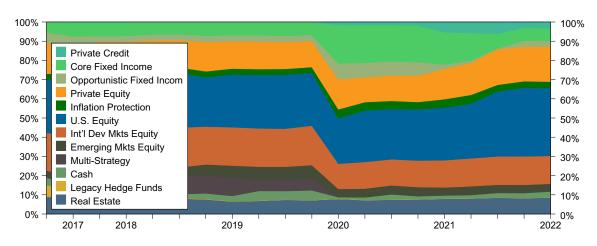
<sup>\*</sup> Current Quarter Target = 22.0% Blmbg U.S. Agg Bond Index, 31.0% Russell 3000 Index, 12.0% Private Equity, 14.0% MSCI World ex US IMI, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 4.0% S&P Levered Loan Index +1% (Qtr lag), 5.0% MSCI EM IMI, 3.0% U.S. TIPS Index, 2.0% 3-month Treasury Bill, 0.7% FTSE EP/NA US Index. Returns are shown gross of fees.



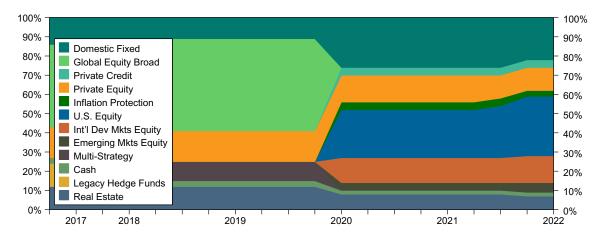
#### **Actual vs Target Historical Asset Allocation**

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).

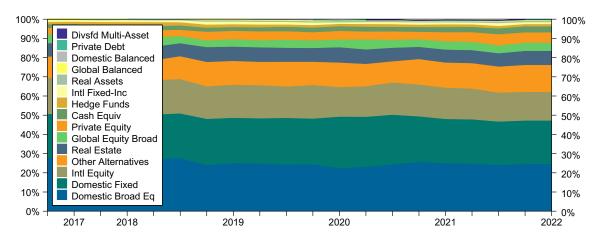
#### **Actual Historical Asset Allocation**



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



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



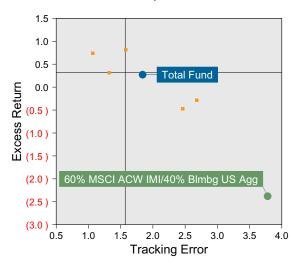


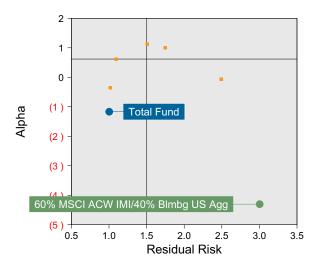
# Total Fund Total Fund vs Target Risk Analysis

#### **Risk Analysis**

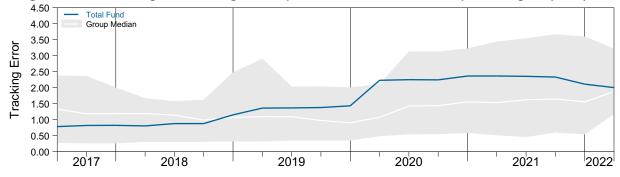
The graphs below analyze the performance and risk of the fund relative to the appropriate target mix. This relative performance is compared to a peer group of funds wherein each member fund is measured against its own target mix. The first scatter chart illustrates the relationship, called Excess Return 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 March 31, 2022

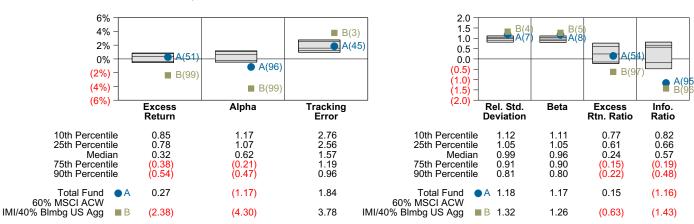




#### Rolling 12 Quarter Tracking Error vs Targets Compared to Callan Public Fund Spons- V Lg DB (>10B)



Risk Statistics Rankings vs Targets Rankings Against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended March 31, 2022

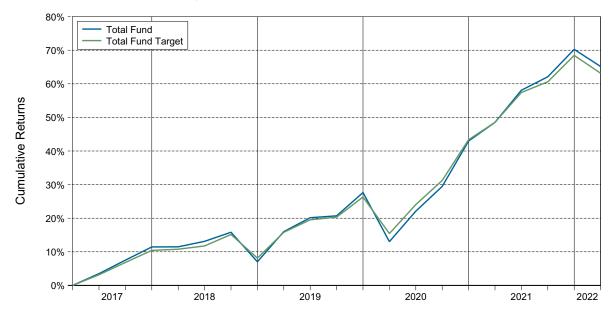




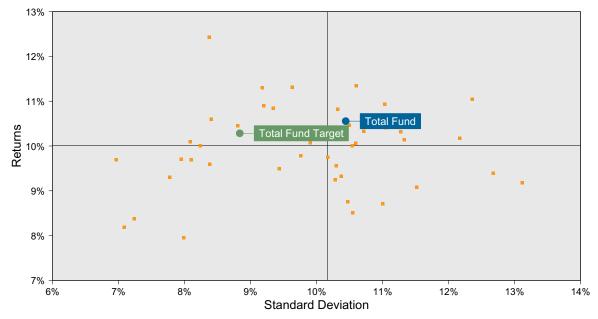
### **Cumulative Performance Relative to Target**

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

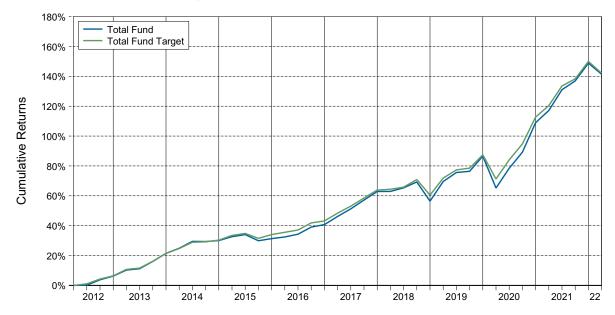


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

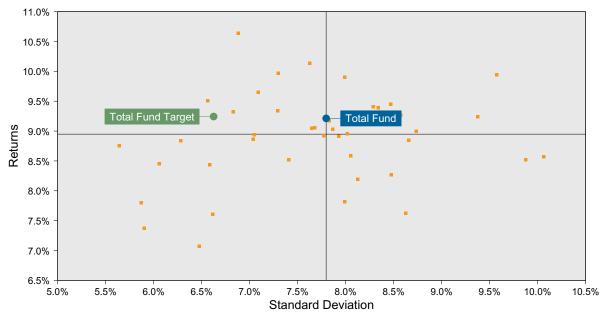
# **Cumulative Performance Relative to Target**

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

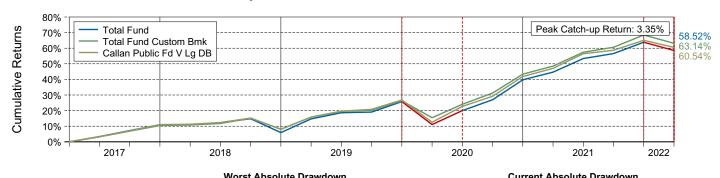


Squares represent membership of the Callan Public Fund Spons- V Lg DB (>10B)

# Total Fund Drawdown Analysis for Five Years Ended March 31, 2022

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

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

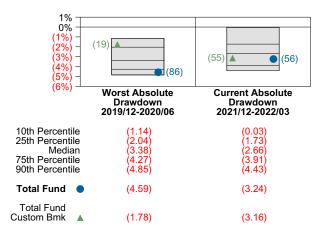


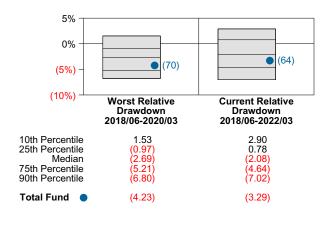
Worst Absolute Diawdown					Current Absolute Diawdown					
Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
(4.59)%	0.50	2019/12-2020/06	(1.78)%	(3.24)%	(3.24)%	0.25	2021/12-2022/03	(3.16)%	(2.74)%	
5.78%	0.25	2020/06-2020/09	5.79%	5.31%	-	-	-	-	-	
(6.11)%	0.25	2018/09-2018/12			(3.16)%	0.25	2021/12-2022/03			
(6.30)%	0.25	2018/09-2018/12			(2.74)%	0.25	2021/12-2022/03			
	(4.59)% 5.78% (6.11)%	Return         Years           (4.59)%         0.50           5.78%         0.25           (6.11)%         0.25	Return         Years         Period           (4.59)%         0.50         2019/12-2020/06           5.78%         0.25         2020/06-2020/09           (6.11)%         0.25         2018/09-2018/12	Return         Years         Period         Index           (4.59)%         0.50         2019/12-2020/06         (1.78)%           5.78%         0.25         2020/06-2020/09         5.79%           (6.11)%         0.25         2018/09-2018/12	Return         Years         Period         Index         Peers           (4.59)%         0.50         2019/12-2020/06         (1.78)%         (3.24)%           5.78%         0.25         2020/06-2020/09         5.79%         5.31%           (6.11)%         0.25         2018/09-2018/12         5.79%         5.31%	Return         Years         Period         Index         Peers         Return           (4.59)%         0.50         2019/12-2020/06         (1.78)%         (3.24)%         (3.24)%           5.78%         0.25         2020/06-2020/09         5.79%         5.31%         -           (6.11)%         0.25         2018/09-2018/12         (3.16)%	Return         Years         Period         Index         Peers         Return         Years           (4.59)%         0.50         2019/12-2020/06         (1.78)%         (3.24)%         (3.24)%         0.25           5.78%         0.25         2020/06-2020/09         5.79%         5.31%         -         -           (6.11)%         0.25         2018/09-2018/12         (3.16)%         0.25	Return         Years         Period         Index         Peers         Return         Years         Period           (4.59)%         0.50         2019/12-2020/06         (1.78)%         (3.24)%         0.25         2021/12-2022/03           5.78%         0.25         2020/06-2020/09         5.79%         5.31%         -         -         -         -           (6.11)%         0.25         2018/09-2018/12         (3.16)%         0.25         2021/12-2022/03	(4.59)%     0.50     2019/12-2020/06     (1.78)%     (3.24)%     (3.24)%     0.25     2021/12-2022/03     (3.16)%       5.78%     0.25     2020/06-2020/09     5.79%     5.31%     -     -     -     -     -     -       (6.11)%     0.25     2018/09-2018/12     (3.16)%     0.25     2021/12-2022/03	

#### Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk **Cumulative Relative Returns** Peak Catch-up Rel Rtn: 3.41% Total Fund 1% Callan Public Fd V Lg DB (1%)(1.59%)(2%) (2.83%)(4%)(5%)2017 2019 2020 2021 2022 2018

	Worst Relative Drawdown				Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
Total Fund	(4.23)%	1.75	2018/06-2020/03	(3.03)%	(3.29)%	3.75	2018/06-2022/03	(2.13)%			
Recovery from Trough	0.98%	2.00+	2020/03-2022/03	0.93%	0.98%	2.00+	2020/03-2022/03	0.93%			
Callan Public Fd V Lg DB	(3.04)%	2.25	2017/12-2020/03		(2.14)%	4.25	2017/12-2022/03				

Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Five Years Ended March 31, 2022





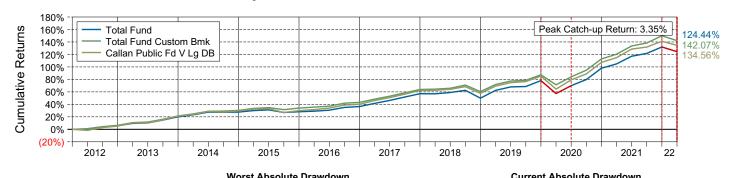


#### **Total Fund**

## Drawdown Analysis for Ten Years Ended March 31, 2022

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

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



		st Absolute Drawd	Current Absolute Drawdown							
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Total Fund	(4.59)%	0.50	2019/12-2020/06	(1.78)%	(3.24)%	(3.24)%	0.25	2021/12-2022/03	(3.16)%	(2.74)%
Recovery from Trough	5.78%	0.25	2020/06-2020/09	5.79%	5.31%	-	-	-	-	-
Total Fund Custom Bmk	(6.11)%	0.25	2018/09-2018/12			(3.16)%	0.25	2021/12-2022/03		
Callan Public Fd V Lg DB	(6.30)%	0.25	2018/09-2018/12			(2.74)%	0.25	2021/12-2022/03		

#### Relative Cumulative Drawdown Analysis vs. Total Fund Custom Bmk Cumulative Relative Returns Peak Catch-up Rel Rtn: 7.10% Total Fund 4% Callan Public Fd V Lg DB 2% 0% (2%)(3.10%)(4%)(6%)(7.28%)(8%)

2017

2018

2019

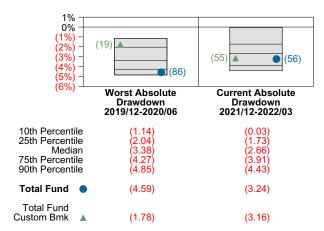
		vorst Kei	ative Drawdown		Current Relative Drawdown						
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers			
Total Fund	(8.19)%	8.00	2012/03-2020/03	(3.99)%	(6.63)%	9.25	2012/12-2022/03	(1.96)%			
Recovery from Trough	0.54%	0.25	2020/03-2020/06	1.44%	0.98%	2.00+	2020/03-2022/03	0.93%			
Callan Public Fd V Lg DB	(3.99)%	8.00	2012/03-2020/03		(2.91)%	7.75	2014/06-2022/03				

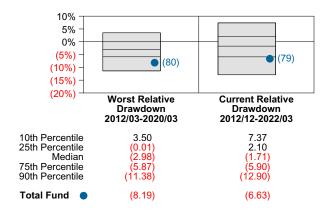
2016

2015

Drawdown Rankings vs. Total Fund Custom Bmk Rankings against Callan Public Fund Spons- V Lg DB (>10B) Ten Years Ended March 31, 2022

2014







(10%)

2012

2013

2021

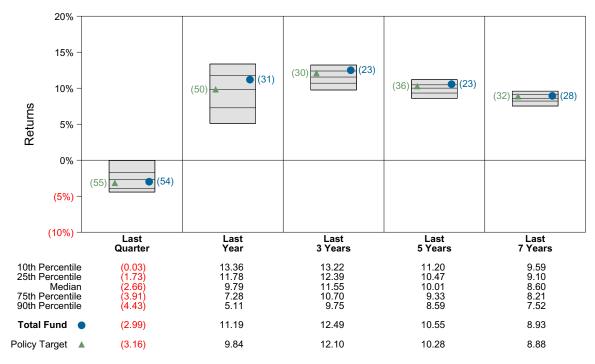
2020

22

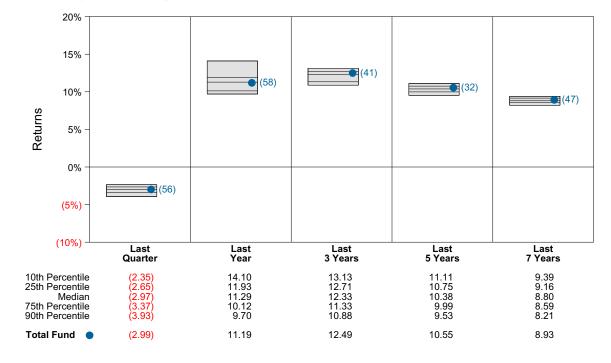
#### **Total Fund Ranking**

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 March 31, 2022. 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 = 31.0% Russell 3000 Index, 22.0% Blmbg Aggregate, 14.0% MSCI World ex US IMI, 12.0% Private Equity, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 4.0% S&P/LSTA Lev Loan lagged 3 months+1.0%, 3.0% Blmbg TIPS, 2.0% 3-month Treasury Bill and 0.7% FTSE EP/NA US Index.

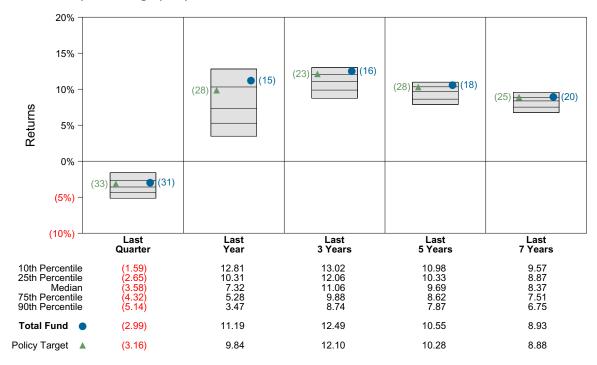
<sup>\*</sup>The gross history shown is estimated by BNY Mellon using a gross-up methodology through 12/31/19. Gross performance is calculated for the Total Fund starting 01/01/2020.



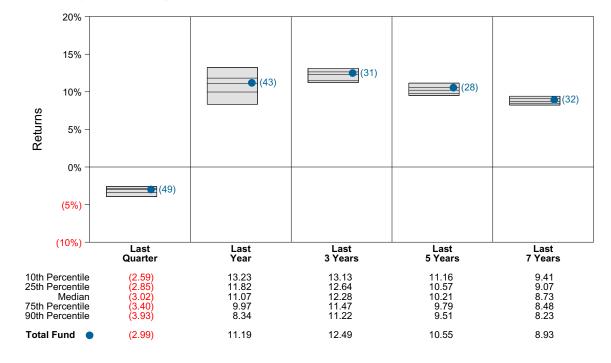
#### **Total Fund Ranking**

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 March 31, 2022. 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 = 31.0% Russell 3000 Index, 22.0% Blmbg Aggregate, 14.0% MSCI World ex US IMI, 12.0% Private Equity, 6.3% NCREIF NFI-ODCE Eq Wt Net lagged 3 months, 5.0% MSCI EM IMI, 4.0% S&P/LSTA Lev Loan lagged 3 months+1.0%, 3.0% Blmbg TIPS, 2.0% 3-month Treasury Bill and 0.7% FTSE EP/NA US Index.

<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 March 31, 2022

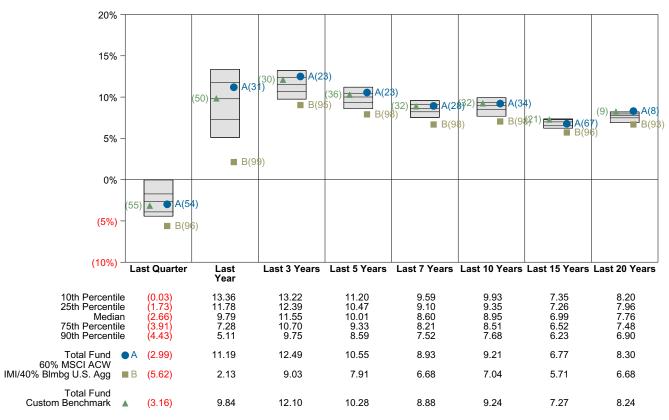
#### **Gross Performance History**

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.

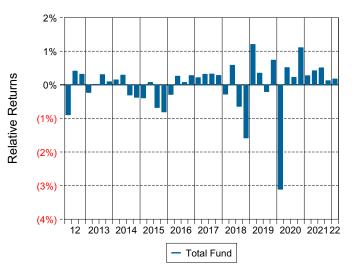
#### **Quarterly Summary and Highlights**

- Total Fund's portfolio posted a (2.99)% return for the quarter placing it in the 54 percentile of the Callan Public Fund Spons- V Lg DB (>10B) group for the quarter and in the 31 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Custom Benchmark by 0.17% for the quarter and outperformed the Total Fund Custom Benchmark for the year by 1.35%.

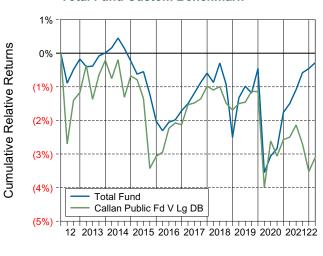
## Performance vs Callan Public Fund Spons- V Lg DB (>10B) (Gross)







# Cumulative Returns vs Total Fund Custom Benchmark





## Total Fund Period Ended March 31, 2022

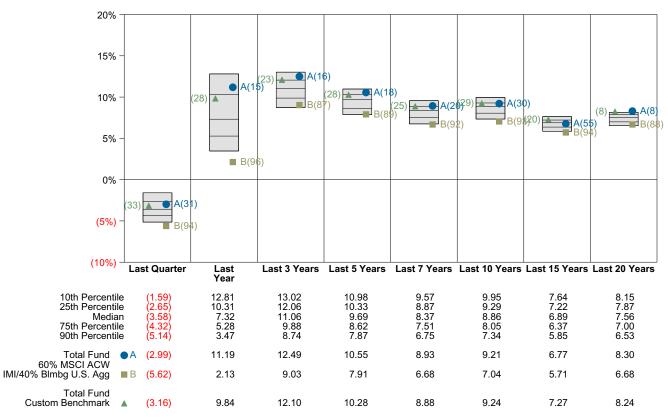
#### **Gross Performance History**

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.

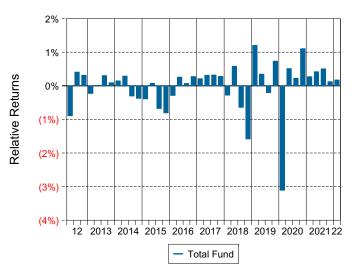
#### **Quarterly Summary and Highlights**

- Total Fund's portfolio posted a (2.99)% return for the quarter placing it in the 31 percentile of the Callan Public Fund Spons - Large (>1B) group for the quarter and in the 15 percentile for the last year.
- Total Fund's portfolio outperformed the Total Fund Custom Benchmark by 0.17% for the quarter and outperformed the Total Fund Custom Benchmark for the year by 1.35%.

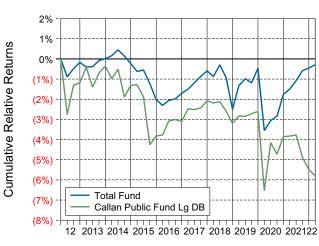
## Performance vs Callan Public Fund Spons - Large (>1B) (Gross)



# Relative Returns vs Total Fund Custom Benchmark



#### Cumulative Returns vs Total Fund Custom Benchmark

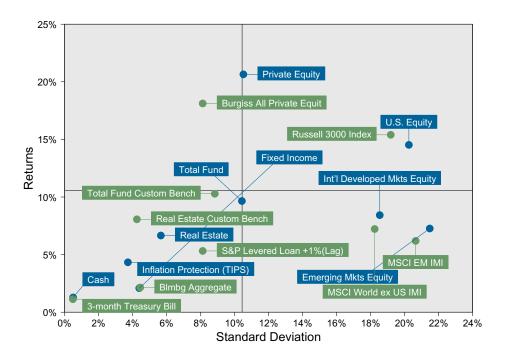




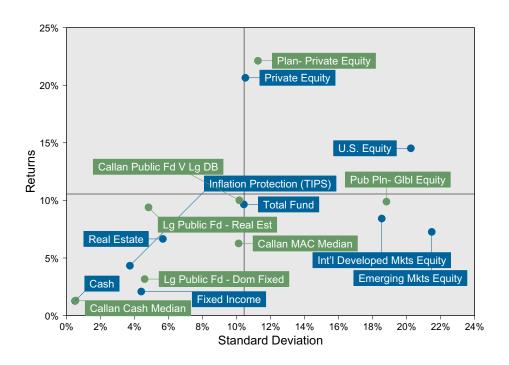
#### **Asset Class Risk and Return**

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 March 31, 2022, with the distribution as of December 31, 2021.

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

		M	larch 31, 20	)22		De	cember 31, 20	21
	Market Value	% of Total	(min)	Target	(max)	Market Value	% of Total	Target
	\$(000)	Weight	Weight	\$(000)	Weight	Weight		
NET OF FEES*								
U.S. Equity	\$11,751,308	30.77%	26.00%	31.00%	36.00%	\$12,430,523	31.14%	31.00%
Int'l Developed Markets Equity	\$4,851,443	12.70%	9.00%	14.00%	19.00%	\$5,147,117	12.89%	14.00%
Emerging Mkts Equity	\$1,342,398	3.51%	1.00%	5.00%	9.00%	\$1,488,692	3.73%	5.00%
Private Equity (1)	\$6,117,368	16.02%	10.00%	12.00%	14.00%	\$6,263,770	15.69%	12.00%
Buyouts	3,611,038	9.45%				3,556,979	8.91%	
Special Situations	675,530	1.77%				612,656	1.53%	
Growth Equity	1,542,815	4.04%				1,468,541	3.68%	
Keystone Legacy (2)	287,985	0.75%				625,595	1.57%	
Private Credit (1)	\$1,102,294	2.89%	N/A	4.00%	N/A	\$1,036,569	2.60%	4.00%
Direct Lending	362,046	0.95%				331,220	0.83%	
Distressed Debt	302,953	0.79%				283,718	0.71%	
Diversified Credit	437,296	1.14%				421,631	1.06%	
Fixed Income	\$8,001,099	20.95%	17.00%	22.00%	27.00%	\$8,604,962	21.56%	22.00%
Core Fixed Income	2,208,546	5.78%				2,345,184	5.87%	
Opportunistic Fixed Income	925,482	2.42%				1,067,260	2.67%	
Nominal U.S. Treasuries	95,195	0.25%				101,566	0.25%	
New Fixed Income Structure (3)	\$4,771,876	12.49%	_	_	_	\$5,090,952	12.75%	_
Intermediate Treasury	273,554	0.72%				285,427	0.71%	
Long Duration	1.219.811	3.19%				1.363.614	3.42%	
Securitized	668,113	1.75%				702,881	1.76%	
Intermediate Credit	1,922,146	5.03%				2,023,272	5.07%	
High Yield	688,252	1.80%				715,758	1.79%	
Inflation Protection (TIPS)	\$1,121,105	2.94%	0.00%	3.00%	6.00%	\$1,156,071	2.90%	3.00%
,								
Real Estate (1)	\$2,853,968	7.47%	N/A	7.00%	N/A	\$2,870,293	7.19%	7.00%
Core/Core Plus Real Estate Funds		3.25%				1,182,571	2.96%	
Value Add/Opportunistic SMA	549,492	1.44%				639,713	1.60%	
Value Add/Opportunistic Funds	693,738	1.82%				666,904	1.67%	
REITS Legacy Real Assets	369,382 0	0.97% 0.00%				380,919 185	0.95% 0.00%	
Legacy Hedge Funds	\$21,129	0.06%	_	_	_	\$22,816	0.06%	_
	. ,							
Cash	\$1,033,156	2.70%	0.00%	2.00%	7.00%	\$898,561	2.25%	2.00%
Total Fund	\$38,196,373	100.0%		100.0%		\$39,920,483	100.0%	100.0%



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

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

<sup>(2)</sup> As of 12/31/2020 Keystone Legacy SPV consists of 119 non-core funds, prior performance in previous sub-asset classes (3) The New Fixed Income Structure is a sub-composite of Fixed Income and was incepted 03/01/2021.

# **Investment Manager Asset Allocation**

The table below contrasts the distribution of assets across the Fund's investment managers as of March 31, 2022, with the distribution as of December 31, 2021.

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

		M	arch 31, 20	)22		De	cember 31, 20	21
	Market Value	% of Total	(min)	Target	(max)	Market Value	% of Total	Target
	\$(000)	Weight	Weight	\$(000)	Weight	Weight		
GROSS OF FEES*	1,(222)	<b>.</b>		.,,				
U.S. Equity	\$11,752,202	30.76%	26.00%	31.00%	36.00%	\$12,431,724	31.14%	31.00%
Int'l Developed Markets Equity	\$4,852,546	12.70%	9.00%	14.00%	19.00%	\$5,148,383	12.89%	14.00%
Emerging Mkts Equity	\$1,342,645	3.51%	1.00%	5.00%	9.00%	\$1,488,953	3.73%	5.00%
Private Equity (1)	\$6,117,368	16.01%	10.00%	12.00%	14.00%	\$6,263,770	15.69%	12.00%
Buyouts	3,611,038	9.45%	10.0070	12.00 /0	14.00 /0	3,556,979	8.91%	12.0070
Special Situations	675,530	1.77%				612.656	1.53%	
	,					. ,		
Growth Equity	1,542,815	4.04%				1,468,541	3.68%	
Keystone Legacy (2)	287,985	0.75%				625,595	1.57%	
Private Credit (1)	\$1,102,294	2.89%	N/A	4.00%	N/A	\$1,036,569	2.60%	4.00%
Direct Lending	362.046	0.95%				331,220	0.83%	
Distressed Debt	302,953	0.79%				283.718	0.71%	
Diversified Credit	437,296	1.14%				421,631	1.06%	
21101011100 010011	.0.,200					,		
Fixed Income	\$8,002,654	20.95%	17.00%	22.00%	27.00%	\$8,607,337	21.56%	22.00%
Core Fixed Income	2,208,820	5.78%				2,345,906	5.88%	
Opportunistic Fixed Income	925.584	2.42%				1,067,498	2.67%	
Nominal U.S. Treasuries	95,218	0.25%				101,599	0.25%	
New Fixed Income Structure (3)	\$4,773,031	12.49%	-	-	-	\$5,092,334	12.75%	-
Intermediate Treasury	273,562	0.72%				285,440	0.71%	
Long Duration	1,219,845	3.19%				1,363,685	3.42%	
Securitized	668,132	1.75%				702,917	1.76%	
Intermediate Credit	1,922,199	5.03%				2,023,369	5.07%	
High Yield	689,293	1.80%				716,923	1.80%	
rigit field	009,293	1.00%				7 10,923	1.00 %	
Inflation Protection (TIPS)	\$1,121,404	2.94%	0.00%	3.00%	6.00%	\$1,156,487	2.90%	3.00%
Real Estate (1)	\$2,854,286	7.47%	N/A	7.00%	N/A	\$2,870,920	7.19%	7.00%
Core/Core Plus Real Estate Funds		3.25%	11/4	7.00 /0	11/73	1,182,571	2.96%	1.00/0
Value Add/Opportunistic SMA	549,492	1.44%				639.713	1.60%	
Value Add/Opportunistic SMA  Value Add/Opportunistic Funds	693,738	1.82%				666,904	1.67%	
REITS	369,700	0.97%				381,545	0.96%	
Legacy Real Assets	0	0.00%				185	0.00%	
Legacy Hedge Funds	\$21,129	0.06%	-	-	-	\$22,816	0.06%	-
Cash	\$1,033,156	2.70%	0.00%	2.00%	7.00%	\$898,561	2.25%	2.00%
Total Fund	\$38,200,790	100.0%		100.0%				



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

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

<sup>(2)</sup> As of 12/31/2020 Keystone Legacy SPV consists of 119 non-core funds, prior performance in previous sub-asset classes (3) The New Fixed Income Structure is a sub-composite of Fixed Income and was incepted 03/01/2021.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance		<b>.</b>				
Total Fund Total Fund Custom Benchmark(1) Public Market Equiv Benchmark(2) 60/40 Index(3)	\$38,196 - - -	100.00% - - -	(3.24%) (3.16%) (2.88%) (5.62%)	<b>9.58%</b> 9.84% 6.45% 2.13%	<b>11.39%</b> 12.10% 11.65% 9.03%	<b>9.65%</b> 10.28% 9.82% 7.91%
U.S. Equity Russell 3000 Index S&P 1500 Index	\$11,751 - -	30.77% - -	(5.46%) (5.28%) (4.64%)	<b>10.28%</b> 11.92% 14.57%	<b>17.52%</b> 18.24% 18.49%	<b>14.52%</b> 15.40% 15.53%
Int'l Developed Mkts Equity MSCI World ex US IMI	\$4,851 -	12.70% -	<b>(5.75%)</b> (5.18%)	<b>3.65%</b> 2.31%	<b>9.81%</b> 8.69%	<b>8.43%</b> 7.22%
Emerging Mkts Equity MSCI EM IMI	\$1,342 -	3.51% -	<b>(9.83%)</b> (6.65%)	<b>(12.82%)</b> (9.49%)	<b>6.99%</b> 5.74%	<b>7.27%</b> 6.19%
Private Equity  Burgiss Private Equity Index (Qtr lag)  Global Equity + 3% (Qtr lag)(4)	\$6,117 - -	16.02% - -	<b>2.78%</b> 4.27% 8.39%	<b>39.82%</b> 26.86% 25.52%	<b>26.30%</b> 20.83% 27.12%	<b>20.64%</b> 18.12% 20.17%
Private Credit S&P Levered Loan Index + 1% (Qtr lag)	\$1,102 -	2.89% -	<b>3.00%</b> 0.99%	<b>16.06%</b> 6.20%	<b>12.76%</b> 6.71%	- 5.32%
Fixed Income Blmbg U.S. Agg Bond Index	\$8,001 -	20.95% -	<b>(5.12%)</b> (5.93%)	<b>(2.33%)</b> (4.15%)	<b>1.71%</b> 1.69%	<b>2.09%</b> 2.14%
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	\$1,121 -	2.94% -	<b>(3.02%)</b> (3.02%)	<b>3.79%</b> 4.29%	<b>5.91%</b> 6.22%	<b>4.33%</b> 4.43%
Real Estate Real Estate Custom Bench (Qtr lag)(5) CPI + 3% (Qtr lag)	\$2,854 - -	7.47% - -	<b>3.56%</b> 6.23% 2.34%	<b>19.20%</b> 22.36% 10.04%	<b>9.92%</b> 9.23% 6.53%	<b>6.66%</b> 8.06% 5.92%
Cash 3-month Treasury Bill	\$1,033 -	2.70% -	<b>0.03%</b> 0.04%	<b>0.06%</b> 0.06%	<b>0.80%</b> 0.81%	<b>1.28%</b> 1.13%

<sup>(5)</sup> 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.



<sup>(1)</sup> The current total fund 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. See page 78 for full benchmark history.

<sup>(2)</sup> The current public equivalent benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 9% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 4% S&P/LSTA Levered Loan Index +1% (Qtr lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 3% MSCI World ex US +3% (Qtr lag),

<sup>2%</sup> ICE BofAML 3 Mo US T-Bill Index. See page 78 for full benchmark history.

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

<sup>(4)</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.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	1
Net Performance					•	
Total Fund Total Fund Custom Benchmark(1) Public Market Equiv Benchmark(2) 60/40 Index(3)	<b>8.42%</b> 9.24% 9.30% 7.04%	<b>5.93%</b> 7.27% 7.26% 5.71%	<b>7.45%</b> 8.24% 8.23% 6.68%	<b>7.82%</b> 8.28% 8.27% 6.56%	9.62% - - - -	(1/81)
U.S. Equity Russell 3000 Index S&P 1500 Index	<b>13.53%</b> 14.28% 14.41%	<b>8.57%</b> 10.10% 10.22%	<b>8.82%</b> 9.37% 9.36%	<b>9.11%</b> 9.50% 9.63%	<b>11.07%</b> 11.39% -	
Int'l Developed Mkts Equity MSCI World ex US IMI	<b>7.20%</b> 6.46%	<b>3.10%</b> 3.29%	<b>6.55%</b> 6.59%	- 5.51%	<b>6.55%</b> 6.57%	(1/02) (1/02)
Emerging Mkts Equity MSCI EM IMI	<b>4.17%</b> 3.59%	<b>2.36%</b> 4.00%	<b>6.84%</b> 8.71%	- 4.72%	<b>7.25%</b> 9.19%	(1/02) (1/02)
Private Equity Burgiss Private Equity Index (Qtr lag) Global Equity + 3% (Qtr lag)(4)	<b>14.95%</b> 15.19% 19.01%	<b>12.31%</b> 12.17% 13.74%	<b>12.29%</b> 13.04% 12.92%	<b>13.76%</b> 14.37% 13.11%	<b>12.10%</b> 17.29% 15.18%	(1/86) (1/86) (1/86)
Private Credit S&P Levered Loan Index + 1% (Qtr lag)	- 5.72%	<b>-</b> 5.56%	<b>-</b> 5.86%	-	<b>11.38%</b> 5.39%	(12/17 (12/17
Fixed Income Blmbg U.S. Agg Bond Index	<b>2.65%</b> 2.24%	<b>3.99%</b> 3.56%	<b>5.10%</b> 4.00%	<b>5.35%</b> 4.71%	<b>7.91%</b> 7.19%	(1/81) (1/81)
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	<b>2.46%</b> 2.69%	<b>3.67%</b> 4.30%	- 5.07%	- 5.34%	<b>3.54%</b> 4.50%	(2/03) (2/03)
Real Estate Real Estate Custom Bench (Qtr lag)(5) CPI + 3% (Qtr lag)	<b>7.80%</b> 9.69% 5.14%	<b>3.87%</b> 5.83% 5.18%	<b>7.02%</b> 7.77% 5.31%	<b>7.85%</b> 8.35% 5.28%	<b>8.50%</b> - 5.70%	(3/84)
Cash 3-month Treasury Bill	<b>0.89%</b> 0.63%	<b>1.14%</b> 0.83%	<b>1.54%</b> 1.27%	<b>2.34%</b> 2.01%	<b>3.42%</b> 3.15%	(1/87) (1/87)

<sup>(5)</sup> 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.



<sup>(1)</sup> The current total fund 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. See page 78 for full benchmark history.

<sup>(2)</sup> The current public equivalent benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 9% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 4% S&P/LSTA Levered Loan Index +1% (Qtr lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 3% MSCI World ex US +3% (Qtr lag),

<sup>2%</sup> ICE BofAML 3 Mo US T-Bill Index. See page 78 for full benchmark history.

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

<sup>(4)</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.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance- Domestic Equity						
U.S. Equity Russell 3000 Index (1)	\$11,751	100.00%	<b>(5.46%)</b> (5.28%)	<b>10.28%</b> 11.92%	<b>17.52%</b> 18.24%	<b>14.52%</b> 15.40%
S&P 1500 Index	-	-	(4.64%)	14.57%	18.49%	15.53%
MCM Russell 1000 Index	9,217	78.43%	(5.11%)	13.46%	18.74%	15.86%
Russell 1000 Index S&P 500 Index	-	-	(5.13%) (4.60%)	13.27% 15.65%	18.71% 18.92%	15.82% 15.99%
odi odo index			(4.0070)	13.03 /0	10.52 /0	13.33 /0
MCM Russell 2000 Core Index	1,200	10.21%	(7.52%)	(3.91%)	12.21%	10.01%
Russell 2000 Index	-	-	(7.53%)	(5.79%)	11.74%	9.74%
S&P 600 Index	-	-	(5.62%)	1.23%	13.58%	10.89%
MCM Russell 2000 Val Index	759	6.46%	(2.40%)	3.42%	12.76%	8.56%
Russell 2000 Value Index	-	-	(2.40%)	3.32%	12.73%	8.57%
S&P 600 Value Index	-	-	(1.64%)	3.73%	13.51%	9.98%
Emerald Asset Management	575	4.89%	(10.40%)	(8.42%)	10.81%	11.93%
Russell 2000 Growth Index	-	-	(12.63%)	(14.33%)	9.88%	10.33%
S&P 600 Growth Index	-	-	(9.51%)	(1.17%)	13.19%	11.57%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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
Net Performance- Domestic Equity					
U.S. Equity	13.53%	8.57%	8.82%	9.11%	<b>11.07%</b> (1/8
Russell 3000 Index (1)	14.28%	10.10%	9.37%	9.50%	11.39% (1/8
S&P 1500 Index	14.41%	10.22%	9.36%	9.63%	-
MCM Russell 1000 Index	14.53%	-	-	-	15.50% (1/ <sup>-</sup>
Russell 1000 Index	14.53%	10.26%	9.42%	9.60%	15.51% (1/-
S&P 500 Index	14.64%	10.26%	9.25%	9.44%	15.58% (1/
MCM Russell 2000 Core Index	-	-	-	-	10.43% (12
Russell 2000 Index	11.04%	7.99%	8.72%	8.88%	10.18% (12
S&P 600 Index	12.56%	9.50%	10.04%	10.71%	11.09% (12
MCM Russell 2000 Val Index	-	-	-	-	8.80% (12
Russell 2000 Value Index	10.54%	6.91%	8.55%	9.49%	8.81% (12
S&P 600 Value Index	11.97%	8.59%	9.35%	10.44%	9.89% (12
Emerald Asset Management	-	-	-	-	12.42% (12
Russell 2000 Growth Index	11.21%	8.81%	8.57%	7.80%	11.01% (12
S&P 600 Growth Index	13.00%	10.32%	10.61%	10.58%	12.03% (12

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance- International Equity	<del></del>		add: to:		10010	10010
Int'l Developed Mkts Equity	\$4,851	100.00%	<b>(5.75%)</b> (5.18%)	<b>3.65%</b>	<b>9.81%</b>	<b>8.43%</b>
MSCI World ex US IMI	-	-		2.31%	8.69%	7.22%
Walter Scott & Partners(1) MSCI World	748	15.41%	(8.93%)	8.31%	14.57%	15.11%
	-	-	(5.15%)	10.12%	14.98%	12.42%
BlackRock MSCI World Ex US Index	3,730	76.89%	(4.68%)	3.47%	9.02%	-
MSCI World ex US		-	(4.81%)	3.04%	8.55%	7.14%
Xponance Non-U.S. Small Cap	238	4.91%	(9.06%)	(3.36%)	7.89%	-
MSCI ACWI ex US Small Cap		-	(6.52%)	0.03%	10.22%	7.89%
Harris Assoc Int'l SCV	132	2.71%	(10.47%)	(4.09%)	10.30%	6.17%
MSCI World ex US Sm Cap	-	-	(7.23%)	(1.69%)	9.55%	7.79%
MSCI World ex US Sm Value	-	-	(2.92%)	2.15%	8.27%	6.26%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 15	Last 20	Last 25	Since
	Years	Years	Years	Years	Inception
Net Performance- International Equity					
Int'l Developed Mkts Equity	7.20%	3.10%	6.55%	-	<b>6.55%</b> (1/02)
MSCI World ex US IMI	6.46%	3.29%	6.59%	5.51%	6.57% (1/02)
Walter Scott & Partners(1)	12.40%	9.89%	-	-	10.07% (10/06)
MSCI World	10.88%	6.88%	7.76%	7.28%	7.38% (10/06)
BlackRock MSCI World Ex US Index	-	-	-	-	6.66% (6/17)
MSCI World ex US	6.25%	3.09%	6.19%	5.25%	6.20% (6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	5.05% (10/18)
MSCI ACWI ex US Small Cap	7.28%	4.64%	9.32%	6.70%	6.91% (10/18)
Harris Assoc Int'l SCV	6.89%	5.04%	-	-	10.41% (7/03)
MSCI World ex US Sm Cap	7.78%	4.38%	8.96%	-	9.25% (7/03)
MSCI World ex US Sm Value	7.01%	3.93%	9.38%	7.61%	9.14% (7/03)

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance- Emerging Mkts Equit	у					
Emerging Mkts Equity MSCI EM IMI	\$1,342 -	100.00% -	<b>(9.83%)</b> (6.65%)	<b>(12.82%)</b> (9.49%)	<b>6.99%</b> 5.74%	<b>7.27%</b> 6.19%
Macquarie Emg Mkts Equity	366	27.26%	(12.07%)	(14.88%)	5.46%	6.63%
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
Martin Currie Emg Mkts Equity	398	29.66%	(12.79%)	(17.66%)	6.80%	8.17%
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
BlackRock Emg Mkts Index	195	14.56%	(7.09%)	(11.60%)	4.62%	-
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
Leading Edge Emg Mkts Fund	244	18.17%	(9.16%)	(14.86%)	4.09%	-
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
GlobeFlex Emerging Small Cap	139	10.35%	1.29%	14.96%	15.19%	10.50%
MSCI EM Small Cap	-	-	(4.33%)	5.52%	11.93%	7.82%

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



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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
Net Performance- Emerging Mkts Equity	rears	1 cars	16013	i cai s	шсерион
Emerging Mkts Equity MSCI EM IMI	<b>4.17%</b> 3.59%	<b>2.36%</b> 4.00%	<b>6.84%</b> 8.71%	- 4.72%	<b>7.25%</b> (1/02) 9.19% (1/02)
Macquarie Emg Mkts Equity	-	-	-	-	4.51% (5/13)
MSCI EM	3.36%	3.79%	8.61%	-	3.46% (5/13)
Martin Currie Emg Mkts Equity MSCI EM	-	-	-	-	5.33% (1/14)
	3.36%	3.79%	8.61%	-	3.97% (1/14)
BlackRock Emg Mkts Index	-	-	-	-	4.67% (7/17)
MSCI EM	3.36%	3.79%	8.61%	-	4.95% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	<del>-</del>	6.50% (11/18)
MSCI EM	3.36%	3.79%	8.61%	-	7.68% (11/18)
GlobeFlex Emerging Small Cap	-	-	-	-	7.81% (8/13)
MSCI EM Small Cap	5.31%	5.20%	10.13%	5.16%	5.96% (8/13)

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



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance - Private Equity						
Private Equity	\$6,117	100.00%	2.78%	39.82%	26.30%	20.64%
Burgiss Private Equity Index (Qtr lag)	-	-	4.27%	26.86%	20.83%	18.12%
Global Equity + 3% (Qtr lag)(1)	-	-	8.39%	25.52%	27.12%	20.17%
Buyouts	3,611	59.03%	3.37%	34.85%	24.61%	19.83%
Burgiss Buyout Index (Qtr lag)	-	-	4.57%	26.64%	18.65%	16.86%
Special Situations	676	11.04%	12.23%	49.60%	26.59%	21.60%
Burgiss Special Situations Idx (Qtr lag)	-	-	2.47%	11.29%	7.41%	7.54%
Growth Equity	1,543	25.22%	6.50%	59.69%	44.36%	33.69%
Burgiss Venture Capital Index (Qtr lag)	-	-	4.55%	35.60%	33.67%	27.23%
Keystone Legacy (2)	288	4.71%	(29.34%)	(2.47%)	1.50%	-

<sup>(2)</sup> As of 12/31/2020, Keystone Legacy SPV consists of 119 non-core funds, prior performance in previous sub-asset classes



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

<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.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 20 Years	Last 25 Years	Cin an
		Years			Since Inception
Net Performance - Private Equity	i cai s	i cai s	i cais	i cais	псериоп
Private Equity	14.95%	12.31%	12.29%	13.76%	<b>12.10%</b> (1/86)
Burgiss Private Equity Index (Qtr lag)	15.19%	12.17%	13.04%	14.37%	17.29% (1/86)
Global Equity + 3% (Qtr lag)(1)	19.01%	13.74%	12.92%	13.11%	15.18% (1/86)
Buyouts	16.40%	13.34%	14.60%	15.74%	14.04% (4/86)
Burgiss Buyout Index (Qtr lag)	14.57%	11.78%	14.33%	13.87%	19.64% (4/86)
Special Situations	14.40%	13.42%	14.45%	13.93%	13.80% (1/95)
Burgiss Special Situations Idx (Qtr lag)	8.78%	7.33%	9.38%	9.88%	10.24% (1/95)
Growth Equity	18.53%	13.24%	7.79%	10.09%	9.56% (1/86)
Burgiss Venture Capital Index (Qtr lag)	20.43%	15.29%	10.46%	15.54%	15.11% (1/86)
Keystone Legacy (2)	-	-	-	-	(0.33%) (7/18)

<sup>(2)</sup> As of 12/31/2020, Keystone Legacy SPV consists of 119 non-core funds, prior performance in previous sub-asset classes



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

<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.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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.

Net Performance - Private Credit	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years	
Private Credit S&P Levered Loan Index +1% (Qtr lag)	\$1,102 -	100.00% -	<b>3.00%</b> 0.99%	<b>16.06%</b> 6.20%	<b>12.76%</b> 6.71%	- 5.32%	
Direct Lending	362	32.84%	3.08%	13.62%	-	-	
Distressed Debt	303	27.48%	2.59%	29.21%	-	-	
Diversified Credit	437	39.67%	3.20%	15.26%	-	-	

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



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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception
Net Performance - Private Credit	i ears	i ears	Tears	i ears	псерион
Private Credit S&P Levered Loan Index +1% (Qtr lag)	- 5.72%	- 5.56%	- 5.86%	<u>-</u>	<b>11.38%</b> (12/17) 5.39% (12/17)
Direct Lending	-	-	-	-	10.04% (1/20)
Distressed Debt	-	-	-	-	24.38% (1/20)
Diversified Credit	-	-	-	-	15.83% (1/20)

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



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	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Net Performance - Fixed Income						
Fixed Income (1) Blmbg U.S. Agg Bond Index	\$8,001 -	40.31% -	<b>(5.12%)</b> (5.93%)	<b>(2.33%)</b> (4.15%)	<b>1.71%</b> 1.69%	<b>2.09%</b> 2.14%
Core Fixed Income Blmbg U.S. Agg Bond Index	\$2,209 -	11.13% -	<b>(5.81%)</b> (5.93%)	<b>(4.02%)</b> (4.15%)	<b>1.62%</b> 1.69%	<b>2.16%</b> 2.14%
PIMCO Core Bond Fund Blmbg Agg ex Treasury	554 -	2.79% -	(5.86%) (6.16%)	(3.91%) (4.46%)	2.03% 1.76%	2.54% 2.31%
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	1,654 -	8.33% -	(5.81%) (5.93%)	(4.10%) (4.15%)	1.61% 1.69%	2.09% 2.14%
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	\$95 -	0.48% -	<b>(6.27%)</b> (6.86%)	<b>(3.03%)</b> (3.44%)	<b>1.25%</b> 1.62%	<b>1.76%</b> 1.85%
PIMCO US Treasuries Blmbg US Treas Bell 10Y	95 -	0.48%	(6.27%) (6.86%)	(3.03%) (3.44%)	1.85% 1.62%	2.21% 1.85%
New Total Fixed Income Structure (1)	\$4,772	24.04%	(6.27%)	(2.86%)	-	-
Intermediate Treasury  Mellon Intermediate Treasury Index Blmbg Intmdt Treasury	<b>\$274</b> 274 -	<b>1.38%</b> 1.38% -	<b>(4.16%)</b> (4.16%) (4.21%)	<b>(4.13%)</b> (4.13%) (4.17%)	- - 1.04%	- - 1.34%
Long Duration  Mellon Long Duration Index  Blmbg Long Treasury	<b>\$1,220</b> 618 -	<b>6.15%</b> 3.12%	<b>(10.55%)</b> (10.17%) (10.58%)	<b>(2.45%)</b> (0.91%) (1.42%)	- - 3.26%	- - 3.90%
Mellon Long Term Credit Bond Index Blmbg Long Credit	601 -	3.03%	(10.92%) (11.23%)	(4.11%) (4.24%)	- 4.37%	- 4.77%
Securitized  Mellon Securitized Index Blmbg Securitized	<b>\$668</b> 668 -	<b>3.37%</b> 3.37% -	<b>(4.95%)</b> (4.95%) (4.99%)	<b>(5.03%)</b> (5.03%) (4.86%)	- - 0.66%	- - 1.44%
Intermediate Credit  Mellon Intermediate Credit  Blmbg Intmdt Credit	<b>\$1,922</b> 1,922 -	<b>9.68%</b> 9.68% -	<b>(5.00%)</b> (5.00%) (5.07%)	(4.12%) (4.12%) (4.05%)	- - 2.10%	- - 2.47%
High Yield Fidelity HY CMBS (3) BImbg US CMBS Ex AAA Index (4)	<b>\$688</b> 329 -	<b>3.47%</b> 1.66% -	(3.87%) (2.96%) (5.78%)	<b>0.83%</b> 2.09% (3.42%)	- 1.45% 2.20%	- 2.88% 3.42%
BlackRock US High Yield Index ICE BofA US HY Constrained Index	118 -	0.59% -	(4.59%) (4.53%)	(0.46%) (0.33%)	- 4.36%	- 4.48%
Mellon High Yield Beta Fund Blmbg HY Corp	241 -	1.21% -	(4.75%) (4.84%)	(0.66%)	- 4.58%	- 4.69%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

<sup>(4)</sup> Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.



The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

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

<sup>(3)</sup> On 03/01/2021, the Fidelity HY CMBS account switched from the Opportunistic Fixed composite to the High Yield composite under the new fixed income structure.

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	Last	Last	Last	Last	
	10	15	20	25	Since
	Years	Years	Years	Years	Inception
Net Performance - Fixed Income					
Fixed Income (1)	2.65%	3.99%	5.10%	5.35%	<b>7.91%</b> (1/81
Blmbg U.S. Agg Bond Index	2.24%	3.56%	4.00%	4.71%	7.19% (1/81
Core Fixed Income	2.53%	3.92%	4.33%	-	<b>4.26%</b> (1/02
Blmbg U.S. Agg Bond Index	2.24%	3.56%	4.00%	4.71%	3.96% (1/02
PIMCO Core Bond Fund	-	-	-	-	2.22% (1/13
Blmbg Agg ex Treasury	2.53%	3.80%	-	-	2.28% (1/13
Mellon Bond-Index	2.14%	3.44%	3.99%	4.75%	6.67% (4/84
Blmbg U.S. Agg Bond Index (2)	2.24%	3.56%	4.11%	4.85%	-
Nominal U.S. Treasuries	1.98%	-		-	<b>1.86%</b> (9/11
Blmbg US Treas Bell 10Y	1.93%	3.82%	4.23%	4.68%	1.99% (9/11
PIMCO US Treasuries	2.30%	-	-	-	2.20% (9/11
Blmbg US Treas Bell 10Y	1.93%	3.82%	4.23%	4.68%	1.99% (9/11
New Total Fixed Income Structure (1)	-	-	-	-	<b>(4.11%)</b> (3/21
Intermediate Treasury	-	-	-	-	<b>(4.46%)</b> (3/21
Mellon Intermediate Treasury Index Blmbg Intmdt Treasury	- 1.29%	- 2.71%	- 3.05%	- 3.80%	(4.46%) (3/21
billing illuliut Heasury	1.2970	2.7 1 70	3.03%	3.60 %	(4.46%) (3/21
Long Duration	-	-	-	-	<b>(5.26%)</b> (3/21
Mellon Long Duration Index Blmbg Long Treasury	- 3.97%	- 5.77%	6.20%	- 6.70%	(12.03%) (1/21 (11.97%) (1/21
5 5 7			5.2576	211.272	
Mellon Long Term Credit Index Blmbg Long Credit	- 5.07%	- 6.21%	- 6.67%	- 6.88%	(6.04%) (3/21 (6.35%) (3/21
	0.07 70	0.2170	0.07 /0	0.0070	, , ,
Securitized  Mellon Securitized Index	-	-	-	-	<b>(5.52%)</b> (3/21
Blmbg Securitized	1.76%	3.22%	3.66%	4.46%	(5.52%) (3/21 (4.98%) (3/21
Intermediate Credit	-	-	-	-	<b>(4.94%)</b> (3/21
Mellon Intermediate Credit	-	-	=	=	(4.94%) (3/21
Blmbg Intmdt Credit	2.74%	3.94%	4.39%	4.95%	(4.58%) (3/21
High Yield	-	-	-	-	<b>1.13%</b> (3/21
Fidelity HY CMBS (3)	6.00%	5.29%	6.92%	7.73%	7.73% (4/97
Blmbg US CMBS Ex AAA Index (4)	3.82%	0.35%	2.36%	3.75%	3.75% (4/97
BlackRock US High Yield Bond Index	-	-	-	-	(0.46%) (4/21
ICE BofA US HY Constrained Index	-	-	-	-	(0.33%) (4/21
Mellon High Yield Beta Fund	-	-	-	-	(2.08%) (5/21
		6.53%	7.48%		

<sup>(4)</sup> Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

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

<sup>(3)</sup> On 03/01/2021, the Fidelity HY CMBS account switched from the Opportunistic Fixed composite to the High Yield composite under the new fixed income structure.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance - Fixed Income						
Fixed Income (1) Blmbg U.S. Agg Bond Index	\$8,001 -	100.00% -	<b>(5.12%)</b> (5.93%)	<b>(2.33%)</b> (4.15%)	<b>1.71%</b> 1.69%	<b>2.09%</b> 2.14%
Opportunistic Fixed Income	\$925	11.57%	2.78%	10.47%	6.47%	4.97%
SEI Str. Credit: HY Bank Loans (2)(3) FTSE HY Corp (1 month lag)	32	0.41% -	(0.46%) (1.72%)	12.08% 0.91%	9.97% 5.02%	8.99% 4.68%
BAAM Keystone (4) HFRI FOF Comp Index	892	11.15% -	2.91% (2.89%)	9.89% 1.07%	7.63% 5.81%	6.43% 4.60%

<sup>(4)</sup> 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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The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

<sup>(2)</sup> SEI HY Bank Loans since inception returns were included in the Fixed Income composite through 9/30/2017 and in the Multi-Strategy composite through 12/31/2019.

<sup>(3)</sup> SEI HY Bank Loans has a 1 month lag in valuation.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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
Net Performance - Fixed Income					
Fixed Income (1) Blmbg Aggregate	<b>2.65%</b> 2.24%	<b>3.99%</b> 3.56%	<b>5.10%</b> 4.00%	<b>5.35%</b> 4.71%	<b>7.91%</b> (1/81) 7.19% (1/81)
Opportunistic Fixed Income	-	-	-	-	<b>4.93%</b> (10/12)
SEI Str. Credit: HY Bank Loans (2)(3) FTSE HY Corp (1 month lag)	8.87% 5.55%	- 6.28%	- 7.41%	- 6.48%	12.02% (5/08) 7.05% (5/08)
BAAM Keystone (4) HFRI FOF Comp Index	- 3.91%	- 2.34%	- 3.70%	- 4.47%	7.52% (7/12) 4.26% (7/12)

<sup>(4)</sup> 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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The market values and performance of such accounts are included within their relevant composites. (1) Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

<sup>(2)</sup> SEI HY Bank Loans since inception returns were included in the Fixed Income composite through 9/30/2017 and in the Multi-Strategy composite through 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 March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance - Inflation Protection						
Inflation Protection (TIPS) Blmbg U.S. TIPS Index	\$1,121 -	100.00% -	<b>(3.02%)</b> (3.02%)	<b>3.79%</b> 4.29%	<b>5.91%</b> 6.22%	<b>4.33%</b> 4.43%
NISA Inv Adv TIPS BImbg U.S. TIPS Index (1)	483 -	43.09% -	(2.80%) (3.02%)	4.62% 4.29%	6.23% 6.22%	4.45% 4.43%
Brown Brothers TIPS Blmbg U.S. TIPS Index	506 -	45.10% -	(2.88%) (3.02%)	4.05% 4.29%	6.14% 6.22%	4.32% 4.43%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	132	11.80% -	(4.39%) (4.38%)	0.95% 2.02%	4.90% 4.93%	4.28% 4.28%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 15	Last 20	Last 25	Since
	Years	Years	Years	Years	Inception
Net Performance - Inflation Protection					
Inflation Protection (TIPS)	2.46%	3.67%	-	-	<b>3.54%</b> (2/03)
Blmbg U.S. TIPS Index	2.69%	4.30%	5.07%	5.34%	4.50% (2/03)
NISA Inv Adv TIPS	2.31%	3.59%	-	-	3.59% (4/07)
Blmbg U.S. TIPS Index (1)	2.31%	3.58%	4.52%	4.90%	3.58% (4/07)
Brown Brothers TIPS	2.77%	-	-	-	2.60% (2/12)
Blmbg U.S. TIPS Index	2.69%	4.30%	5.07%	5.34%	2.50% (2/12)
New Century Global TIPS	2.79%	-	-	-	2.72% (2/12)
Blmbg Wrld Inflation Linked Unhdg	2.50%	3.82%	5.63%	5.67%	2.46% (2/12)

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Net Performance - Real Estate						
Real Estate	\$2,854	100.00%	3.56%	19.20%	9.92%	6.66%
Real Estate Custom Bench (Qtr lag) (1)	-	-	6.23%	22.36%	9.23%	8.06%
CPI +3% (Qtr lag)	-	-	2.34%	10.04%	6.53%	5.92%
Core/Core Plus Real Estate Funds	1,241	43.50%	5.81%	17.71%	7.87%	7.46%
NCREIF ODCE Index (Qtr lag)	=	-	7.38%	21.88%	8.90%	8.18%
Value Add/Opportunistic SMA	549	19.25%	0.36%	13.86%	10.57%	4.46%
NCREIF ODCE Index (Qtr lag)	-	-	7.38%	21.88%	8.90%	8.18%
Value Add/Opportunistic Funds	694	24.31%	5.88%	22.85%	10.16%	9.53%
NCREIF ODCE Index (Qtr lag)	-	-	7.38%	21.88%	8.90%	8.18%
REITS	369	12.94%	(3.03%)	27.26%	12.98%	10.73%
FTSE NAREIT US Index	-	-	(4.16%)	24.90%	9.92%	8.85%

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The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 20	Last 25	Since
		· ·	Years	Years	Years
Net Performance - Real Estate					
Real Estate	7.80%	3.87%	7.02%	7.85%	<b>8.50%</b> (3/84)
Real Estate Custom Bench (Qtr lag) (1)	9.69%	5.83%	7.77%	8.35%	-
CPI +3% (Qtr lag)	5.14%	5.18%	5.31%	5.28%	5.70% (3/84)
Core/Core Plus Real Estate Funds	9.53%	6.57%	7.81%	8.56%	7.23% (9/86)
NCREIF ODCE Index (Qtr lag)	9.70%	5.85%	7.24%	7.99%	6.27% (9/86)
Value Add/Opportunistic SMA	5.84%	2.51%	5.18%	6.23%	5.45% (6/88)
NCREIF ODCE Index (Qtr lag)	9.70%	5.85%	7.24%	7.99%	6.32% (6/88)
Value Add/Opportunistic Funds	10.53%	4.11%	7.82%	9.23%	8.07% (3/84)
NCREIF ODCE Index (Qtr lag)	9.70%	5.85%	7.24%	7.99%	6.50% (3/84)
REITS	10.20%	6.09%	10.26%	9.36%	10.27% (4/96)
FTSE NAREIT US Index	10.32%	6.00%	10.12%	9.49%	10.61% (4/96)

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	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Gross Performance	, ,					
Total Fund (1)	\$38,201	100.00%	(2.99%)	11.19%	-	-
Total Fund Estimated Gross History (1)	38,201	100.00%	(2.99%)	11.19%	12.49%	10.55%
Total Fund Custom Benchmark	-	-	(3.16%)	9.84%	12.10%	10.28%
Public Market Equiv Benchmark	-	-	(2.88%)	6.45%	11.65%	9.82%
60/40 Index	-	-	(5.62%)	2.13%	9.03%	7.91%
U.S. Equity	\$11,752	30.76%	(5.45%)	10.32%	17.59%	14.60%
Russell 3000 Index	\$11,73Z	30.70%	(5.28%)	11.92%	18.24%	15.40%
S&P 1500 Index	_	-	(4.64%)	14.57%	18.49%	15.53%
S&P 1500 Index	-	-	(4.64%)	14.57 %	10.49%	15.53%
Int'l Developed Mkts Equity	\$4,853	12.70%	(5.72%)	3.78%	9.97%	8.59%
MSCI World ex US IMI	-	-	(5.18%)	2.31%	8.69%	7.22%
Emerging Mkts Equity	\$1,343	3.51%	(9.71%)	(12.34%)	7.53%	7.83%
MSCI EM IMI	-	-	(6.65%)	(9.49%)	5.74%	6.19%
Private Equity (1)	\$6,117	16.01%	3.90%	50.63%	-	-
Burgiss Private Equity Index (Qtr lag)	-	-	4.27%	26.86%	20.83%	18.12%
Global Equity +3% (Qtr lag)	-	-	8.39%	25.52%	27.12%	20.17%
Private Credit (1)	\$1,102	2.89%	3.78%	20.34%	_	_
S&P Levered Loan Index +1% (Qtr Lag)	-	-	0.99%	6.20%	6.71%	-
<b>-</b>	***	00.050/	( <b>7.00</b> 0()	(0.400()	4.000/	0.000/
Fixed Income	\$8,003	20.95%	(5.08%)	(2.16%)	1.92%	2.29%
Blmbg U.S. Agg Bond Index	-	-	(5.93%)	(4.15%)	1.69%	2.14%
Inflation Protection (TIPS)	\$1,121	2.94%	(3.00%)	3.90%	6.05%	4.46%
Blmbg U.S. TIPS Index	-	-	(3.02%)	4.29%	6.22%	4.43%
Real Estate (1)	\$2,854	7.47%	4.27%	21.54%	_	_
Real Estate (1)  Real Estate Custom Benchmark (Qtr lag)	\$2,654 -	7.4170	6.23%	22.36%	9.23%	<b>-</b> 8.06%
CPI +3% (Qtr lag)	-	- -	2.34%	10.04%	6.53%	5.92%
01	04.000	0 =00/	0.000/	0.070/	0.000/	4.000/
Cash	\$1,033	2.70%	0.03%	0.07%	0.80%	1.28%
3-month Treasury Bill	-	-	0.04%	0.06%	0.81%	1.13%

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The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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						
Total Fund (2)	_	-	_	_	<b>12.14%</b> (1)	/20)
Total Fund Estimated Gross History (2)	9.21%	6.77%	8.30%	8.60%	•	/96)
Total Fund Custom Benchmark	9.24%	7.27%	8.24%	8.28%	•	/96)
Public Market Equiv Benchmark	9.30%	7.26%	8.23%	8.27%		/96)
60/40 Index	7.04%	5.71%	6.68%	6.56%	6.55% (1/	/96)
U.S. Equity	13.65%	8.71%	8.96%	9.23%	<b>11.15%</b> (1)	/81)
Russell 3000 Index (1)	14.28%	10.10%	9.37%	9.50%	•	/81)
S&P 1500 Index	14.41%	10.22%	9.36%	9.63%	-	,0.,
Int'l Developed Mkts Equity	7.42%	3.36%	6.85%	_	<b>6.85%</b> (1)	/02)
MSCI World ex US IMI	6.46%	3.29%	6.59%	5.51%	•	/02)
Emerging Mkts Equity	4.65%	2.81%	7.23%	_	<b>7.64%</b> (1)	/02)
MSCI EM IMI	3.59%	4.00%	8.71%	4.72%		/02)
Private Equity (2)	_	-	-	_	<b>40.06%</b> (1)	/20)
Burgiss Private Equity Index (Qtr lag)	15.19%	12.17%	13.04%	14.37%		/20)
Global Equity +3% (Qtr lag)	19.01%	13.74%	12.92%	13.11%	•	/20)
Private Credit (2)				-	<b>18.10%</b> (1)	/20)
S&P Levered Loan Index +1% (Qtr Lag)	5.72%	5.56%	5.86%	-	•	/20)
Fixed Income	2.90%	4.22%	5.34%	5.58%	<b>7.20%</b> (1)	/85)
Blmbg U.S. Agg Bond Index	2.24%	3.56%	4.00%	4.71%	6.37% (1)	/85)
Inflation Protection (TIPS)	2.59%	3.78%			<b>3.67%</b> (2)	2/03)
Blmbg U.S. TIPS Index	2.69%	4.30%	5.07%	5.34%	•	2/03)
Real Estate (2)	_	-	-	-	<b>11.94%</b> (1)	/20)
Real Estate Custom Benchmark (Qtr lag)	9.69%	5.83%	7.77%	8.35%	10.47% (1)	/20)
CPI +3% (Qtr lag)	5.14%	5.18%	5.31%	5.28%	6.73% (1)	/20)
Cash	0.89%	1.15%	1.57%	2.33%	*	/87)
3-month Treasury Bill	0.63%	0.83%	1.27%	2.01%	3.15% (1)	/87)

<sup>(2)</sup> The Total Fund Estimated Gross History is calculated by BNY Mellon using a gross-up methodology through 12/31/19. 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.



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	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Gross Performance- Domestic Equity						
U.S. Equity	\$11,752	100.00%	(5.45%)	<b>10.32%</b> 11.92%	<b>17.59%</b> 18.24%	<b>14.60%</b> 15.40%
Russell 3000 Index(1) S&P 1500 Index	-	-	(5.28%) (4.64%)	14.57%	18.49%	15.53%
MCM Russell 1000 Index	9,217	78.43%	(5.11%)	13.47%	18.75%	15.87%
Russell 1000 Index	-	-	(5.13%)	13.27%	18.71%	15.82%
S&P 500 Index	-	-	(4.60%)	15.65%	18.92%	15.99%
MCM Russell 2000 Core Index	1,200	10.21%	(7.51%)	(3.89%)	12.24%	10.03%
Russell 2000 Index	-	-	(7.53%)	(5.79%)	11.74%	9.74%
S&P 600 Index	-	-	(5.62%)	1.23%	13.58%	10.89%
MCM Russell 2000 Val Index	759	6.46%	(2.39%)	3.44%	12.78%	8.58%
Russell 2000 Value Index	-	-	(2.40%)	3.32%	12.73%	8.57%
S&P 600 Value Index	-	-	(1.64%)	3.73%	13.51%	9.98%
Emerald Asset Management	575	4.90%	(10.29%)	(7.98%)	11.36%	12.46%
Russell 2000 Growth Index	-	-	(12.63%)	(14.33%)	9.88%	10.33%
S&P 600 Growth Index	-	-	(9.51%)	(1.17%)	13.19%	11.57%

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	Last 10 Years	Last 15 Years	Last 20 Years	Last 25 Years	Since Inception	
Gross Performance- Domestic Equity	i ears	i ears	i ears	I Gai S	inception	
U.S. Equity	13.65%	8.71%	8.96%	9.23%	11.15% (	(1/81)
Russell 3000 Index(1)	14.28%	10.10%	9.37%	9.50%	11.39%	(1/81)
S&P 1500 Index	14.41%	10.22%	9.36%	9.63%	- `	
MCM Russell 1000 Index	14.54%	-	_	_	15.51% (	(1/12)
Russell 1000 Index	14.53%	10.26%	9.42%	9.60%	`	(1/12)
S&P 500 Index	14.64%	10.26%	9.25%	9.44%	15.58%	(1/12)
MCM Russell 2000 Core Index	-	-	_	_	10.45%	(12/16)
Russell 2000 Index	11.04%	7.99%	8.72%	8.88%		(12/16)
S&P 600 Index	12.56%	9.50%	10.04%	10.71%	11.09%	(12/16)
MCM Russell 2000 Val Index	-	-	-	-	8.82% (	(12/16)
Russell 2000 Value Index	10.54%	6.91%	8.55%	9.49%	8.81%	(12/16)
S&P 600 Value Index	11.97%	8.59%	9.35%	10.44%	9.89% (	(12/16)
Emerald Asset Management	-	-	-	-	12.95% (	(12/16)
Russell 2000 Growth Index	11.21%	8.81%	8.57%	7.80%		(12/16)
S&P 600 Growth Index	13.00%	10.32%	10.61%	10.58%	12.03%	(12/16)

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Gross Performance - International Equity	, ,					
Int'l Developed Mkts Equity	\$4,853	100.00%	<b>(5.72%)</b> (5.18%)	<b>3.78%</b>	<b>9.97%</b>	<b>8.59%</b>
MSCI World ex US IMI	-	-		2.31%	8.69%	7.22%
Walter Scott & Partners (1)	748	15.42%	(8.83%)	8.74%	15.11%	15.61%
MSCI World	-	-	(5.15%)	10.12%	14.98%	12.42%
BlackRock MSCI World Ex US Index	3,730	76.87%	(4.68%)	3.48%	9.04%	-
MSCI World ex US	-	-	(4.81%)	3.04%	8.55%	7.14%
Xponance Non-U.S. Small Cap	238	4.91%	(8.91%)	(2.70%)	8.57%	-
MSCI ACWI ex US Small Cap		-	(6.52%)	0.03%	10.22%	7.89%
Harris Assoc Int'l SCV	132	2.72%	(10.27%)	(3.33%)	11.39%	7.08%
MSCI World ex US Sm Cap	-	-	(7.23%)	(1.69%)	9.55%	7.79%
MSCI World ex US Sm Value	-	-	(2.92%)	2.15%	8.27%	6.26%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 15	Last 20	Last 25	Since
	Years	Years	Years	Years	Inception
Gross Performance - International Equity					
Int'l Developed Mkts Equity	7.42%	3.36%	6.85%	-	<b>6.85%</b> (1/02)
MSCI World ex US IMI	6.46%	3.29%	6.59%	5.51%	6.57% (1/02)
Walter Scott & Partners (1)	12.88%	10.36%	-	-	10.54% (10/06
MSCI World	10.88%	6.88%	7.76%	7.28%	7.38% (10/06
BlackRock MSCI World Ex US Index	-	-	-	-	6.67% (6/17)
MSCI World ex US	6.25%	3.09%	6.19%	5.25%	6.20% (6/17)
Xponance Non-U.S. Small Cap	-	-	-	-	5.61% (10/18
MSCI ACWI ex US Small Cap	7.28%	4.64%	9.32%	6.70%	6.91% (10/18
Harris Assoc Int'l SCV	7.69%	5.84%	-	-	11.22% (7/03)
MSCI World ex US Sm Cap	7.78%	4.38%	8.96%	-	9.25% (7/03)
MSCI World ex US Sm Value	7.01%	3.93%	9.38%	7.61%	9.14% (7/03)

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Walter Scott since inception returns were contained in the Global Mandates composite prior to 12/31/2019.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Emerging Mkts Ec	quity	-				
Emerging Mkts Equity MSCI EM IMI	\$1,343 -	100.00% -	<b>(9.71%)</b> (6.65%)	<b>(12.34%)</b> (9.49%)	<b>7.53%</b> 5.74%	<b>7.83%</b> 6.19%
Macquarie Emg Mkts Equity	366	27.25%	(11.95%)	(14.41%)	6.05%	7.26%
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
Martin Currie Emg Mkts Equity	398	29.66%	(12.68%)	(17.24%)	7.40%	8.86%
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
BlackRock Emg Mkts Index	195	14.56%	(7.08%)	(11.57%)	4.72%	-
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
Leading Edge Emg Mkts Fund	244	18.16%	(8.99%)	(14.18%)	4.84%	-
MSCI EM	-	-	(6.97%)	(11.37%)	4.94%	5.98%
GlobeFlex Emerging Small Cap	139	10.37%	1.46%	15.69%	16.04%	11.23%
MSCI EM Small Cap		-	(4.33%)	5.52%	11.93%	7.82%

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



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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 - Emerging Mkts Equity					
Emerging Mkts Equity  MSCI EM IMI	<b>4.65%</b> 3.59%	<b>2.81%</b> 4.00%	<b>7.23%</b> 8.71%	- 4.72%	<b>7.64%</b> (1/02) 9.19% (1/02)
Macquarie Emg Mkts Equity	-	-	-	-	5.17% (5/13)
MSCI EM	3.36%	3.79%	8.61%	-	3.46% (5/13)
Martin Currie Emg Mkts Equity	-	-	-	-	5.89% (1/14)
MSCI EM	3.36%	3.79%	8.61%	-	3.97% (1/14)
BlackRock Emg Mkts Index	-	-	-	-	4.75% (7/17)
MSCI EM	3.36%	3.79%	8.61%	-	4.95% (7/17)
Leading Edge Emg Mkts Fund	-	-	-	-	7.17% (11/18)
MSCI EM	3.36%	3.79%	8.61%		7.68% (11/18)
GlobeFlex Emerging Small Cap	-	-	-	-	8.47% (8/13)
MSCI EM Small Cap	5.31%	5.20%	10.13%	5.16%	5.96% (8/13)

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



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Since Inception
Gross Performance - Private Equity	Ψ()	TVOIGHT	Quartor	Tour	10010	moophon
Private Equity (1)	\$6,117	100.00%	3.90%	50.63%	-	<b>40.06%</b> (1/20)
Burgiss All Private Equity (Qtr Lag)	-	-	4.27%	26.86%	20.83%	24.37% (1/20)
Global Equity +3% (Qtr lag) (2)	-	-	8.39%	25.52%	27.12%	25.83% (1/20)
Buyouts	3,611	59.03%	4.25%	44.19%	-	37.31% (1/20)
Burgiss Buyout Index (Qtr Lag)	-	-	4.57%	26.64%	18.65%	21.73% (1/20)
Special Situations	676	11.04%	15.20%	63.21%	-	37.87% (1/20)
Burgiss Special Sits Index (Qtr Lag)	-	-	2.47%	11.29%	7.41%	8.38% (1/20)
Growth Equity	1,543	25.22%	7.92%	77.38%	-	66.51% (1/20)
Burgiss Venture Capital Idx (Qtr Lag)	-	-	4.55%	35.60%	33.67%	39.96% (1/20)
Keystone Legacy (3)	288	4.71%	(29.34%)	0.68%	3.64%	1.35% (7/18)

<sup>(3)</sup> As of 12/31/2020, Keystone Legacy SPV consists of 119 non-core funds, prior performance in previous sub-asset classes



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

The market values and performance of such accounts are included within their relevant composites.

<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.

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

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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.

Gross Performance - Private Credit	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Since Inception
Private Credit (1) S&P Levered Loan Index + 1% (Qtr Lag)	\$1,102 -	100.00% -	<b>3.78%</b> 0.99%	<b>20.34%</b> 6.20%	- 6.71%	<b>18.10%</b> (1/20) 5.58% (1/20)
Direct Lending	362	32.84%	3.65%	17.40%	-	13.41% (1/20)
Distressed Debt	303	27.48%	3.46%	39.44%	-	33.14% (1/20)
Diversified Credit	437	39.67%	4.08%	19.31%	-	20.50% (1/20)



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) 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.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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			,	Last	Last
	Value	Ending	Last	Last	3	5
	\$(mm)	Weight	Quarter	Year	Years	Years
Gross Performance - Fixed Income						
Fixed Income (1)	\$8,003	40.31%	(5.08%)	(2.16%)	1.92%	2.29%
Blmbg U.S. Agg Bond Index	-	-	(5.93%)	(4.15%)	1.69%	2.14%
Core Fixed Income	\$2,209	11.13%	(5.80%)	(3.96%)	1.71%	2.25%
Blmbg U.S. Agg Bond Index	-	-	(5.93%)	(4.15%)	1.69%	2.14%
PIMCO Core Bond Fund	555	2.79%	(5.79%)	(3.65%)	2.33%	2.79%
Blmbg Agg ex Treasury	-	-	(6.16%)	(4.46%)	1.76%	2.31%
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	1,654	8.33%	(5.80%) (5.93%)	(4.07%) (4.15%)	1.63% 1.69%	2.11% 2.14%
Billiby U.S. Agg Build Index (2)	-	-	(5.95%)	(4.15%)	1.09 //	2.1470
Nominal U.S. Treasuries	\$95	0.48%	(6.25%)	(2.68%)	1.43%	1.91%
Blmbg US Treas Bell 10Y	-	-	(6.86%)	(3.44%)	1.62%	1.85%
PIMCO US Treasuries	95	0.48%	(6.25%)	(2.68%)	2.05%	2.35%
Blmbg US Treas Bell 10Y	-	-	(6.86%)	(3.44%)	1.62%	1.85%
New Total Fixed Income Structure (1)	\$4,773	24.04%	(6.26%)	(2.80%)	_	-
,	. ,		(1117)	(,		
Intermediate Treasury	\$274	1.38%	(4.16%)	(4.12%)	-	-
Mellon Intermediate Treasury Index	274	1.38%	(4.16%)	(4.12%)	-	-
Blmbg Intmdt Treasury	-	-	(4.21%)	(4.17%)	1.04%	1.34%
Long Duration	\$1,220	6.14%	(10.54%)	(2.44%)	-	-
Mellon Long Duration Index	618	3.12%	(10.17%)	(0.91%)	-	-
Blmbg Long Treasury	-	-	(10.58%)	(1.42%)	3.26%	3.90%
Mellon Long Term Credit Index	601	3.03%	(10.92%)	(4.10%)	-	-
Blmbg Long Credit	-	-	(11.23%)	(4.24%)	4.37%	4.77%
Securitized	\$668	3.37%	(4.95%)	(5.02%)	_	-
Mellon Securitized Index	668	3.37%	(4.95%)	(5.02%)	-	-
Blmbg Securitized	-	-	(4.99%)	(4.86%)	0.66%	1.44%
Intermediate Credit	\$1,922	9.68%	(5.00%)	(4.11%)	-	-
Mellon Intermediate Credit	1,922	9.68%	(5.00%)	(4.11%)	-	-
Blmbg Intmdt Credit	-	=	(5.07%)	(4.05%)	2.10%	2.47%
High Yield	\$689	3.47%	(3.79%)	1.19%	-	-
Fidelity HY CMBS (3)	330	1.66%	(2.82%)	2.64%	2.10%	3.53%
Blmbg US CMBS Ex AAA Index (4)	-	-	(5.78%)	(3.42%)	2.20%	3.42%
BlackRock US High Yield Bond Index	118	0.59%	(4.56%)	(0.35%)	-	-
ICE BofA US HY Constrained Index	-	-	(4.53%)	(0.33%)	4.36%	4.48%
Mellon High Yield Beta Fund	241	1.21%	(4.72%)	-	-	-
Blmbg HY Corp	-	-	(4.84%)	(0.66%)	4.58%	4.69%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

<sup>(4)</sup> Fidelity's blended benchmark consists of FTSE High Yield Market Index prior to 12/31/2009 and Blmbg US CMBS Ex AAA Index, thereafter.



The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

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

<sup>(3)</sup> On 03/01/2021, the Fidelity HY CMBS account switched from the Opportunistic Fixed composite to the High Yield composite under the new fixed income structure.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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 - Fixed Income					•
Fixed Income (1) Blmbg U.S. Agg Bond Index	<b>2.90%</b> 2.24%	<b>4.22%</b> 3.56%	<b>5.34%</b> 4.00%	<b>5.58%</b> 4.71%	<b>7.20%</b> (1/85) 6.37% (1/85)
Core Fixed Income Blmbg U.S. Agg Bond Index	<b>2.64%</b> 2.24%	<b>4.07%</b> 3.56%	<b>4.49%</b> 4.00%	- 4.71%	<b>4.42%</b> (1/02) 3.96% (1/02)
PIMCO Core Bond Fund Blmbg Agg ex Treasury	- 2.53%	3.80%	- -	- -	2.44% (1/13) 2.28% (1/13)
Mellon Bond Index Blmbg U.S. Agg Bond Index (2)	2.17% 2.24%	3.48% 3.56%	4.03% 4.11%	4.79% 4.85%	4.81% (10/93) 4.87% (10/93)
Nominal U.S. Treasuries Blmbg US Treas Bell 10Y	<b>2.11%</b> 1.93%	<b>-</b> 3.82%	<b>-</b> 4.23%	- 4.68%	<b>1.98%</b> (9/11) <b>1.99%</b> (9/11)
PIMCO US Treasuries Blmbg US Treas Bell 10Y	2.43% 1.93%	- 3.82%	- 4.23%	- 4.68%	2.31% (9/11) 1.99% (9/11)
New Total Fixed Income Structure (1)	-	-	-	-	<b>(4.04%)</b> (3/21)
Intermediate Treasury  Mellon Intermediate Treasury Index BImbg Intmdt Treasury	- - 1.29%	- - 2.71%	- - 3.05%	- - 3.80%	(4.45%) (3/21) (4.45%) (3/21) (4.46%) (3/21)
Long Duration  Mellon Long Duration Index  Blmbg Long Treasury	- - 3.97%	- - 5.77%	- - 6.20%	- - 6.70%	(5.25%) (3/21) (12.02%) (1/21) (11.97%) (1/21)
Mellon Long Term Credit Bond Index Blmbg Long Credit	- 5.07%	- 6.21%	- 6.67%	- 6.88%	(6.03%) (3/21) (6.35%) (3/21)
Securitized  Mellon Securitized Index  BImbg Securitized	- - 1.76%	- - 3.22%	- - 3.66%	- - 4.46%	<b>(5.51%)</b> (3/21) (5.51%) (3/21) (4.98%) (3/21)
Intermediate Credit  Mellon Intermediate Credit  Blmbg Intmdt Credit	- - 2.74%	- - 3.94%	- - 4.39%	- - 4.95%	(4.93%) (3/21) (4.93%) (3/21) (4.58%) (3/21)
High Yield Fidelity HY CMBS (3) BImbg US CMBS Ex AAA Index (4)	- 6.69% 3.82%	- 5.98% 0.35%	- 7.62% 2.36%	- 8.41% 3.75%	<b>1.51%</b> (3/21) 8.41% (4/97) 3.75% (4/97)
BlackRock US High Yield Bond Index ICE BofA US HY Constrained Index	- -	- -	- -	-	(0.35%) (4/21) (0.33%) (4/21)
Mellon High Yield Beta Fund Blmbg HY Corp	- 5.75%	- 6.53%	- 7.48%	- 6.62%	(1.98%) (5/21) (1.73%) (5/21)

<sup>(4)</sup> 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>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

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

<sup>(3)</sup> On 03/01/2021, the Fidelity HY CMBS account switched from the Opportunistic Fixed composite to the High Yield composite under the new fixed income structure.

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	Market Value \$(mm)	Ending Weight	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Fixed Income						
Fixed Income (1) Blmbg U.S. Agg Bond Index	\$8,003 -	100.00% -	<b>(5.08%)</b> (5.93%)	<b>(2.16%)</b> (4.15%)	<b>1.92%</b> 1.69%	<b>2.29%</b> 2.14%
Opportunistic Fixed Income	\$926	11.57%	3.05%	11.76%	7.27%	5.69%
SEI St. Credit: HY Bank Loans(2)(3) FTSE HY Corp (1 month lag)	33	0.41% -	(0.15%) (1.72%)	13.41% 0.91%	11.30% 5.02%	10.10% 4.68%
BAAM Keystone (4) HFRI FOF Comp Index	892 -	11.15% -	3.17% (2.89%)	11.15% 1.07%	8.46% 5.81%	6.93% 4.60%

<sup>(4)</sup> 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.



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

<sup>(2)</sup> SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017 and in the Multi-Strategy composite through 12/31/2019.

<sup>(3)</sup> SEI HY Bank Loans has a 1 month lag in valuation.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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 - Fixed Income					-
Fixed Income (1)	2.90%	4.22%	5.34%	5.58%	<b>7.20%</b> (1/85)
Blmbg Aggregate	2.24%	3.56%	4.00%	4.71%	6.37% (1/85)
Opportunistic Fixed Income	-	-	-	-	<b>5.64%</b> (10/12)
SEI St. Credit: HY Bank Loans(2)(3)	9.92%	-	-	-	13.11% (5/08)
FTSE HY Corp (1 month lag)	5.55%	6.28%	7.41%	6.48%	7.05% (5/08)
BAAM Keystone (4)	-	-	-	-	7.78% (7/12)
HFRI FOF Comp Index	3.91%	2.34%	3.70%	4.47%	4.26% (7/12)

<sup>(4)</sup> 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.



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation.

The market values and performance of such accounts are included within their relevant composites.

<sup>(1)</sup> Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

<sup>(2)</sup> SEI HY Bank Loans since inception returns are included in the Fixed Income composite through 9/30/2017 and in the Multi-Strategy composite through 12/31/2019.

<sup>(3)</sup> SEI HY Bank Loans has a 1 month lag in valuation.

The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Last 5 Years
Gross Performance - Inflation Protection						
Inflation Protection (TIPS) BImbg U.S. TIPS Index	\$1,121 -	100.00% -	<b>(3.00%)</b> (3.02%)	<b>3.90%</b> 4.29%	<b>6.05%</b> 6.22%	<b>4.46%</b> 4.43%
NISA Inv Adv TIPS	483	43.09%	(2.77%)	4.74%	6.35%	4.56%
Blmbg U.S. TIPS Index (1)	-	-	(3.02%)	4.29%	6.22%	4.43%
Brown Brothers TIPS	506	45.10%	(2.86%)	4.13%	6.24%	4.44%
Blmbg U.S. TIPS Index	-	-	(3.02%)	4.29%	6.22%	4.43%
New Century Global TIPS Blmbg Wrld Inflation Linked Unhdg	132	11.81%	(4.33%)	1.18%	5.17%	4.54%
	-	-	(4.38%)	2.02%	4.93%	4.28%

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last 15	Last 20	Last 25	Since
	Years	Years Years Years		Inception	
Gross Performance - Inflation Protection					
Inflation Protection (TIPS)	2.59%	3.78%	_	_	<b>3.67%</b> (2/03)
Blmbg U.S. TIPS Index	2.69%	4.30%	5.07%	5.34%	4.50% (2/03)
NISA Inv Adv TIPS	2.41%	3.68%	-	-	3.68% (4/07)
Blmbg U.S. TIPS Index (1)	2.31%	3.58%	4.52%	4.90%	3.58% (4/07)
Brown Brothers TIPS	2.89%	-	-	-	2.71% (2/12)
Blmbg U.S. TIPS Index	2.69%	4.30%	5.07%	5.34%	2.50% (2/12)
New Century Global TIPS	3.04%	-	-	-	2.97% (2/12)
Blmbg Wrld Inflation Linked Unhdg	2.50%	3.82%	5.63%	5.67%	2.46% (2/12)

<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) Benchmark history is a blend of current and past benchmark indices. History prior to 12/31/2018 is provided by RVK.



The table below details the rates of return for the Fund's investment managers over various time periods ended March 31, 2022. 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	Last Year	Last 3 Years	Since Inception
Gross Performance - Real Estate						•
Real Estate (1)	\$2,854	100.00%	4.27%	21.54%	-	<b>11.94%</b> (1/20)
Real Estate Custom Bench (Qtr lag) (2)	-	-	6.23%	22.36%	9.23%	10.47% (1/20)
CPI + 3% (Qtr lag)	-	-	2.34%	10.04%	6.53%	6.73% (1/20)
Core/Core Plus Real Estate Funds	1,241	43.49%	6.25%	19.54%	-	10.16% (1/20)
NCREIF ODCE Index (Qtr lag)	-	-	7.38%	21.88%	8.90%	10.19% (1/20)
Value Add/Opportunistic SMA	549	19.25%	1.16%	16.19%	-	11.05% (1/20)
NCREIF ODCE Index (Qtr lag)	-	-	7.38%	21.88%	8.90%	10.19% (1/20)
Value Add/Opportunistic Funds	694	24.31%	7.37%	27.27%	_	15.10% (1/20)
NCREIF ODCE Index (Qtr lag)	-	-	7.38%	21.88%	8.90%	10.19% (1/20)
REITS	370	12.95%	(2.94%)	27.69%	-	13.71% (1/20)
FTSE NAREIT US Index	-	-	(4.16%)	24.90%	9.92%	9.94% (1/20)

<sup>(2)</sup> 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.



<sup>\*</sup>Market values may not sum as a result of accounts funded within the quarter or accounts in the process of liquidation. The market values and performance of such accounts are included within their relevant composites. (1) 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.

### 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.

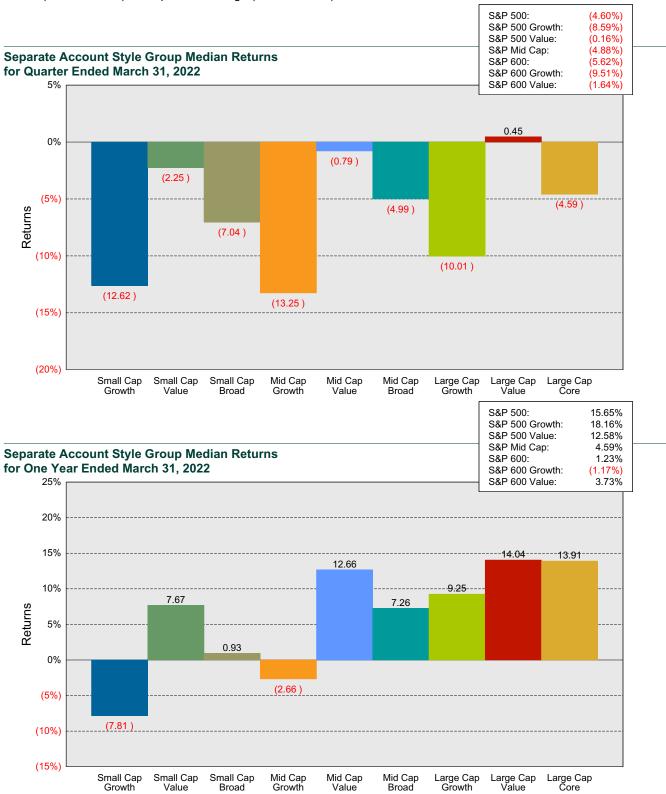
### **Public Market Equivalent Benchmark Definition:**

- 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.
- Starting10/01/2021, benchmark consists of: 22% Bloomberg U.S. Agg Bond Index, 31% Russell 3000, 14% MSCI World ex US IMI Index, 9% Russell 3000+ 3% (Qtr lag), 7% CPI+3% (Qtr Lag), 4% S&P/LSTA Levered Loan Index +1% (Qtr lag), 3% Bloomberg US TIPS Index, 5% MSCI EM IMI Index, 3% MSCI World ex US +3% (Qtr lag), 2% ICE BofAML 3 Mo US T-Bill Index.



# Domestic Equity Active Management Overview

The S&P 500 Index fell 4.6% for the quarter, but it was down more than 12% early in March before staging a rally into quarter-end. Value stocks sharply outpaced growth across capitalizations, with the spread exceeding 10% in both mid and small caps and just over 8% in large caps. Not surprisingly, Energy (+39%) was the best-performing sector given a 33% spike in WTI crude oil prices. The defensive Utilities sector (+5%) also posted a positive result. Communication Services (-12%), Consumer Discretionary (-9%), and Information Technology (-8%) were the worst-performing sectors. Small cap stocks (R2000: -7.5%) underperformed large (R1000: -5.1%).



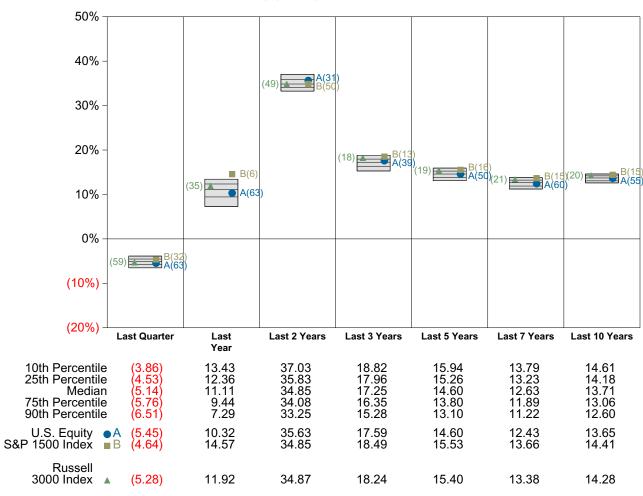


### U.S. Equity Period Ended March 31, 2022

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

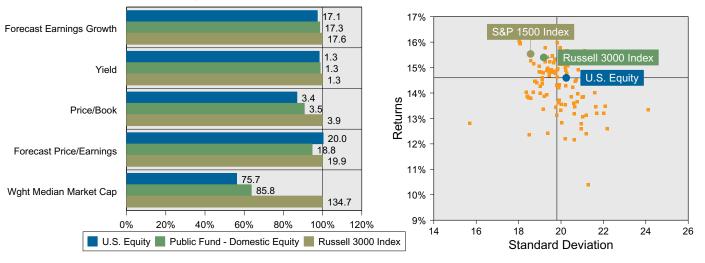
- U.S. Equity's portfolio posted a (5.45)% return for the quarter placing it in the 63 percentile of the Public Fund Domestic Equity group for the quarter and in the 63 percentile for the last year.
- U.S. Equity's portfolio underperformed the Russell 3000 Index by 0.18% for the quarter and underperformed the Russell 3000 Index for the year by 1.61%.

### 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



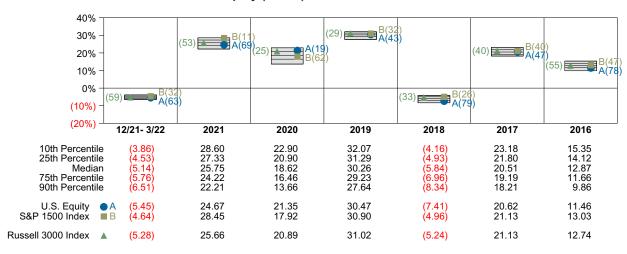


### U.S. Equity Return Analysis Summary

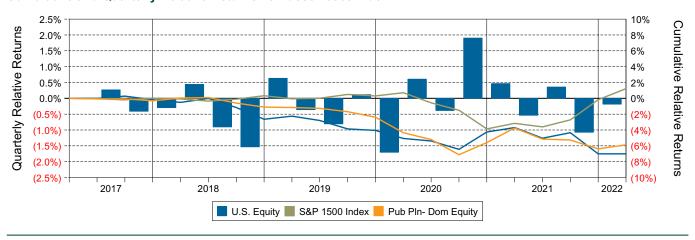
### **Return Analysis**

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.

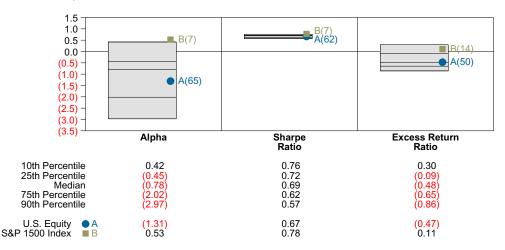
### Performance vs Public Fund - Domestic Equity (Gross)



### **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 March 31, 2022



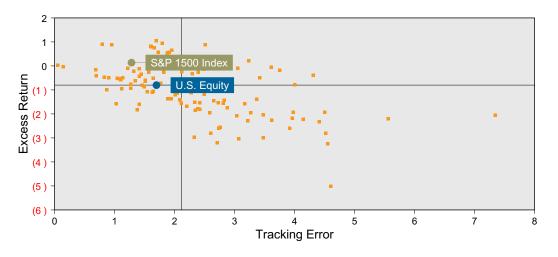


### U.S. Equity Risk Analysis Summary

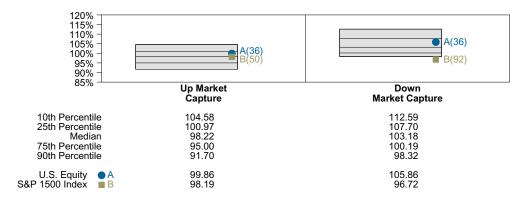
#### **Risk Analysis**

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.

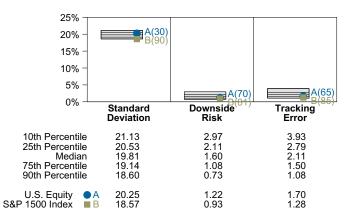
### Risk Analysis vs Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2022

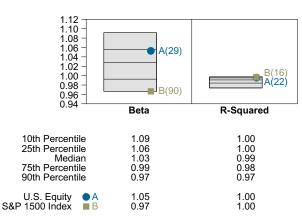


Market Capture vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs Russell 3000 Index Rankings Against Public Fund - Domestic Equity (Gross) Five Years Ended March 31, 2022



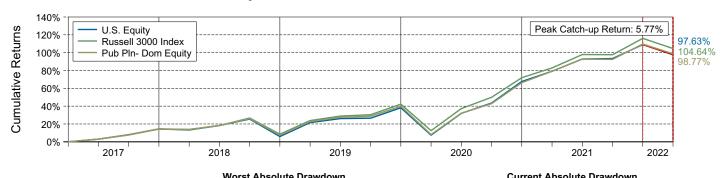




# U.S. Equity Drawdown Analysis for Five Years Ended March 31, 2022

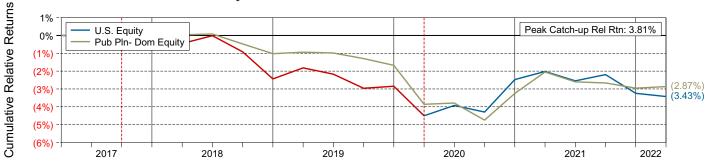
The following analysis focuses on downside risk by looking at cumulative drawdowns experienced from peak-to-trough for the portfolio, index, and peer group. Drawdown is measured from the "high-water mark" of cumulative return to the subsequent "trough". The first chart illustrates the Worst Absolute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



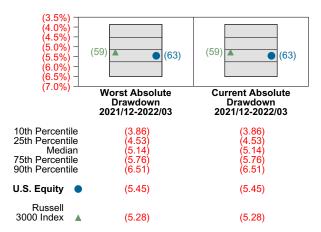
		Worst Absolute Drawdown					Current Absolute Diawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers	
U.S. Equity	(5.45)%	0.25	2021/12-2022/03	(5.28)%	(5.19)%	(5.45)%	0.25	2021/12-2022/03	(5.28)%	(5.19)%	
Recovery from Trough	-	-	-	-	-	-	-	-	-	-	
Russell 3000 Index	(5.28)%	0.25	2021/12-2022/03			(5.28)%	0.25	2021/12-2022/03			
Pub Pln- Dom Equity	(5.55)%	0.50	2019/12-2020/06			(5.19)%	0.25	2021/12-2022/03			

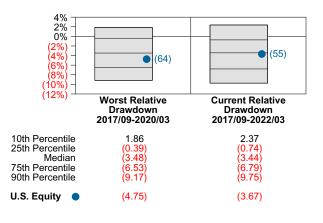
### Relative Cumulative Drawdown Analysis vs. Russell 3000 Index



	worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
U.S. Equity	(4.75)%	2.50	2017/09-2020/03	(3.81)%	(3.67)%	4.50	2017/09-2022/03	(2.81)%
Recovery from Trough	1.13%	2.00+	2020/03-2022/03	1.03%	1.13%	2.00+	2020/03-2022/03	1.03%
Pub Pln- Dom Equity	(4.83)%	2.25	2018/06-2020/09		(2.95)%	3.75	2018/06-2022/03	

Drawdown Rankings vs. Russell 3000 Index Rankings against Public Fund - Domestic Equity Five Years Ended March 31, 2022







# Current Holdings Based Style Analysis U.S. Equity As of March 31, 2022

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

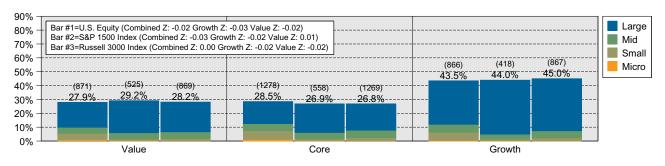
### Style Map vs Pub Pln- Dom Equity Holdings as of March 31, 2022



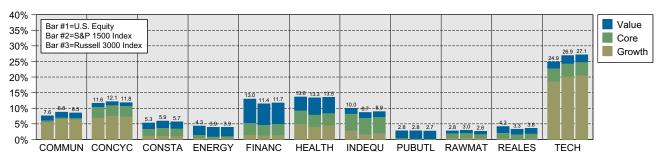
### Style Exposure Matrix Holdings as of March 31, 2022

	Value	Core	Growth	Total
	28.2% (869)	26.8% (1269)	45.0% (867)	100.0% (3005)
Total	29.2% (525)	26.9% (558)	44.0% (418)	100.0% (1501)
	27.9% (871)	28.5% (1278)	43.5% (866)	100.0% (3015)
	0.2% (281)	0.3% (461)	0.1% (160)	0.6% (902)
Micro	0.1% (67)	0.1% (49)	0.0% (19)	0.2% (135)
	0.9% (282)	1.1% (466)	0.4% (160)	2.4% (908)
	1.6% (313)	2.1% (489)	2.1% (400)	5.7% (1202)
Small	1.3% (213)	1.4% (250)	1.3% (193)	3.9% (656)
	4.6% (313)	6.4% (493)	5.9% (399)	16.8% (1205)
	4.8% (170)	5.4% (222)	5.1% (209)	15.3% (601)
Mid	4.6% (141)	4.6% (164)	3.6% (129)	12.8% (434)
	4.4% (171)	5.0% (222)	5.7% (209)	15.2% (602)
	21.6% (105)	19.1% (97)	37.7% (98)	78.4% (300)
Large	23.2% (104)	20.8% (95)	39.0% (77)	83.1% (276)
	18.1% (105)	16.0% (97)	31.6% (98)	65.6% (300)

### Combined Z-Score Style Distribution Holdings as of March 31, 2022



### Sector Weights Distribution Holdings as of March 31, 2022

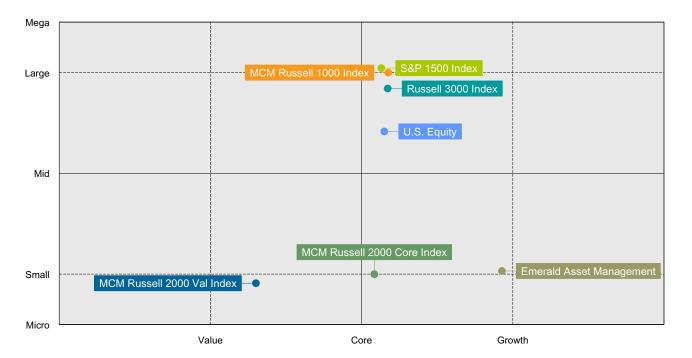




### **Holdings Based Style Analysis** For One Quarter Ended March 31, 2022

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

Style Map Holdings for One Quarter Ended March 31, 2022



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities I	Security Diversification
MCM Russell 2000 Val Index	6.46%	2.44	(0.61)	(0.24)	0.36	1443	206.43
MCM Russell 2000 Core Index	x 10.21%	2.86	(0.07)	(0.11)	(0.05)	2028	328.66
Emerald Asset Management	4.90%	3.34	0.56	0.13	(0.44)	119	33.21
MCM Russell 1000 Index	78.43%	156.55	0.00	(0.02)	(0.02)	1025	51.69
U.S. Equity	100.00%	75.71	(0.02)	(0.03)	(0.02)	3054	106.38
Russell 3000 Index	-	134.73	0.00	(0.02)	(0.02)	3036	61.40
S&P 1500 Index	-	166.38	(0.03)	(0.02)	0.01	1506	49.09

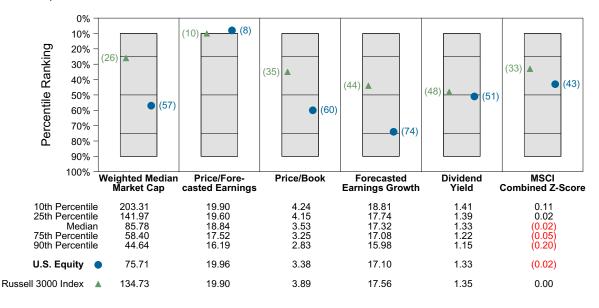


# U.S. Equity Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

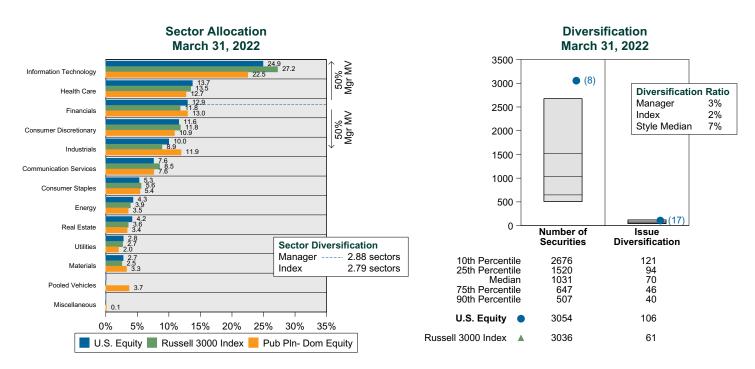
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Public Fund - Domestic Equity as of March 31, 2022



#### **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.





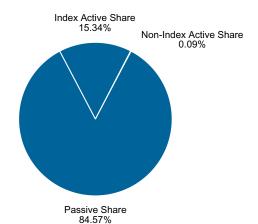
### **U.S. Equity**

### Active Share Analysis as of March 31, 2022

### vs. Russell 3000 Index

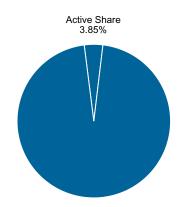
Active Share analysis compares the holdings of a portfolio to an index to measure how aggressively it differs from the index. Active share is measured at the individual stock level ("holdings-level active share") and using sector weights ("sector exposure active share"). Holdings-level active share comes 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**



Total Active Share: 15.43%

### **Sector Exposure Active Share**



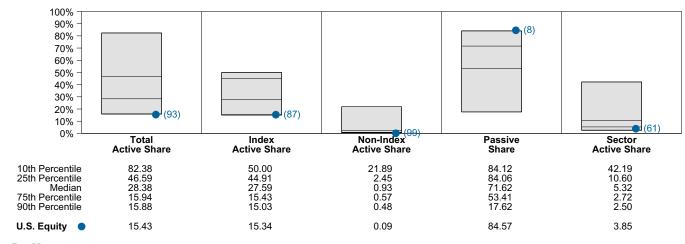
Passive Share 96.15%

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
6.08%	0.00%	6.08%	8.53%	7.57%	0.90%
13.88%	0.07%	13.95%	11.83%	11.57%	1.70%
10.03%	0.13%	10.16%	5.59%	5.27%	0.71%
21.85%	0.00%	21.85%	3.90%	4.31%	0.78%
22.07%	0.28%	22.35%	11.79%	12.94%	2.37%
16.25%	0.09%	16.34%	13.46%	13.72%	2.16%
22.62%	0.00%	22.62%	8.90%	9.98%	1.84%
8.46%	0.01%	8.46%	27.23%	24.92%	3.19%
19.91%	0.12%	20.04%	2.55%	2.75%	0.47%
0.00%	100.00%	100.00%	-	0.00%	0.00%
0.00%	100.00%	100.00%	-	0.04%	0.02%
24.89%	0.00%	24.89%	3.56%	4.16%	0.82%
17.91%	0.00%	17.91%	2.67%	2.78%	0.46%
15.34%	0.09%	15.43%	100.00%	100.00%	15.43%

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





### MCM Russell 1000 Index Period Ended March 31, 2022

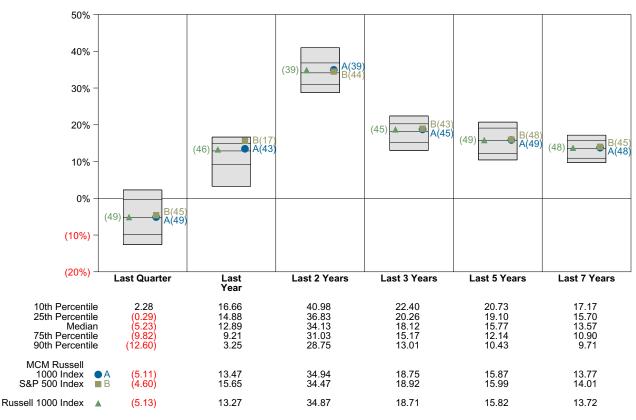
#### **Investment Philosophy**

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

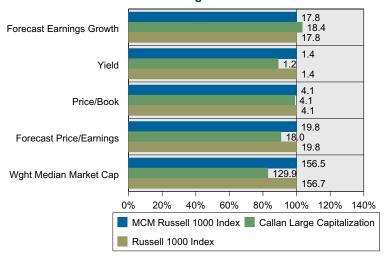
#### **Quarterly Summary and Highlights**

- MCM Russell 1000 Index's portfolio posted a (5.11)% return for the quarter placing it in the 49 percentile of the Callan Large Capitalization group for the quarter and in the 43 percentile for the last year.
- MCM Russell 1000 Index's portfolio outperformed the Russell 1000 Index by 0.02% for the quarter and outperformed the Russell 1000 Index for the year by 0.20%.

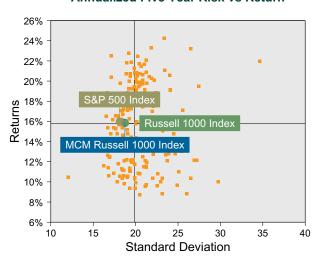
### Performance vs Callan Large Capitalization (Gross)



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



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



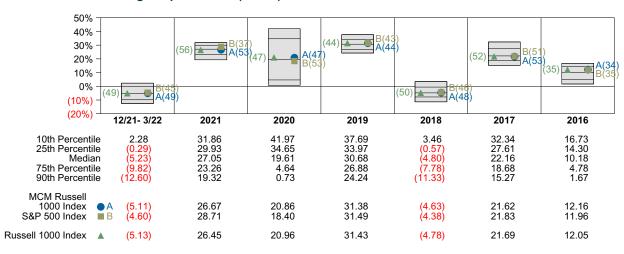


### MCM Russell 1000 Index Return Analysis Summary

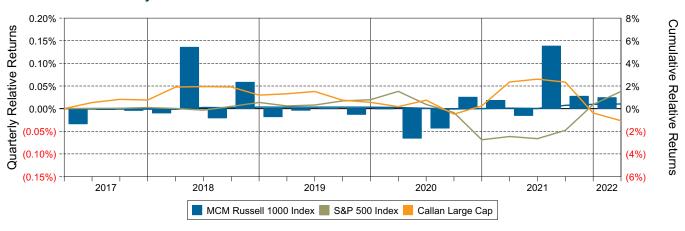
### **Return Analysis**

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.

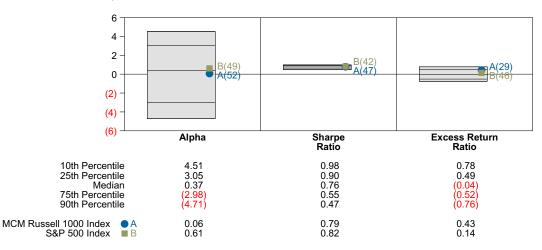
### Performance vs Callan Large Capitalization (Gross)



### 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 March 31, 2022



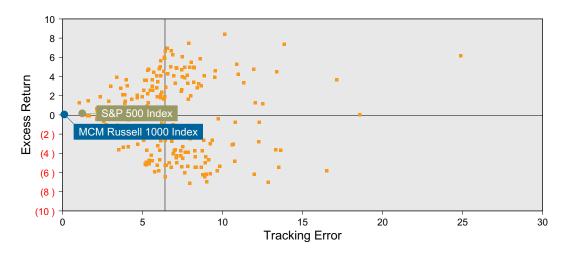


# MCM Russell 1000 Index Risk Analysis Summary

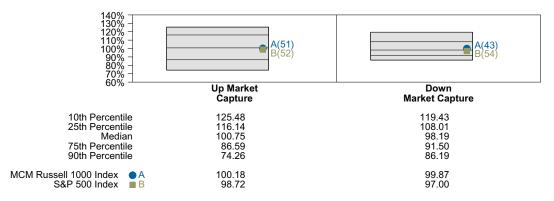
#### **Risk Analysis**

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.

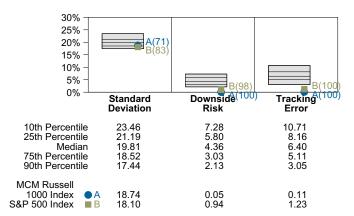
### Risk Analysis vs Callan Large Capitalization (Gross) Five Years Ended March 31, 2022

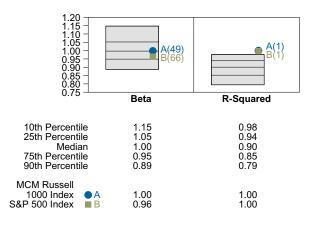


Market Capture vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs Russell 1000 Index Rankings Against Callan Large Capitalization (Gross) Five Years Ended March 31, 2022



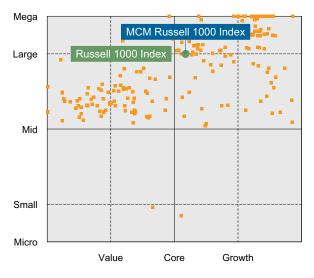




# Current Holdings Based Style Analysis MCM Russell 1000 Index As of March 31, 2022

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.

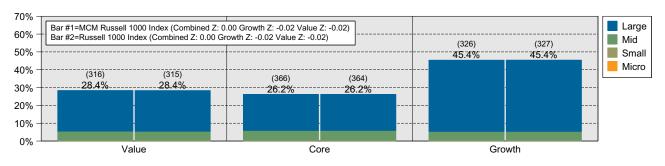
### Style Map vs Callan Large Cap Holdings as of March 31, 2022



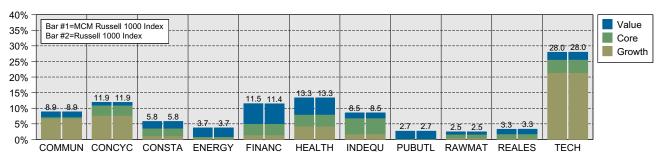
### Style Exposure Matrix Holdings as of March 31, 2022

ū	22.9% (105)	20.3% (97)	40.1% (98)	83.4% (300)
	5.0% (161)	5.4% (203)	4.9% (176)	15.3% (540)
Mid	, ,	, ,	, ,	, ,
	5.0% (160)	5.4% (203)	4.9% (176)	15.3% (539)
	0.4% (50)	0.5% (66)	0.4% (52)	1.3% (168)
Small				
	0.4% (50)	0.5% (64)	0.4% (53)	1.3% (167)
	. ,	/- (/	(/	110 70 (101)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Micro	0.0% (0)	\ /	\ /	` ,
Micro	0.0% (0)	\ /	\ /	` ,
Micro	, ,	0.0% (0)	0.0% (0)	0.0% (0)
Micro <b>Total</b>	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

### Combined Z-Score Style Distribution Holdings as of March 31, 2022



### Sector Weights Distribution Holdings as of March 31, 2022



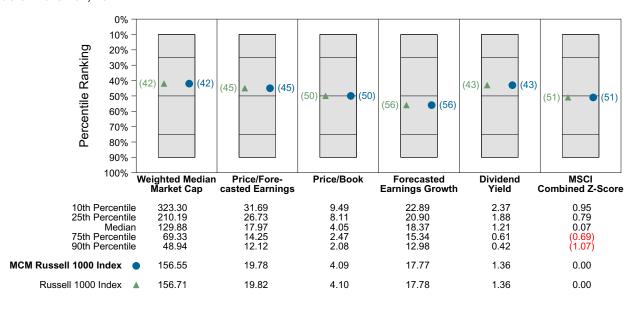


# MCM Russell 1000 Index Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

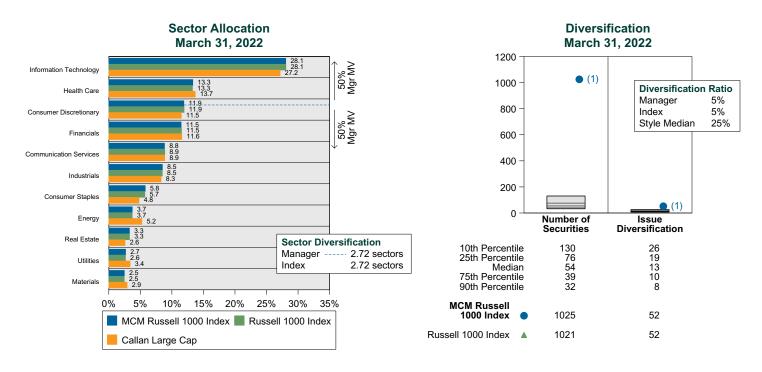
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Callan Large Capitalization as of March 31, 2022



#### **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.



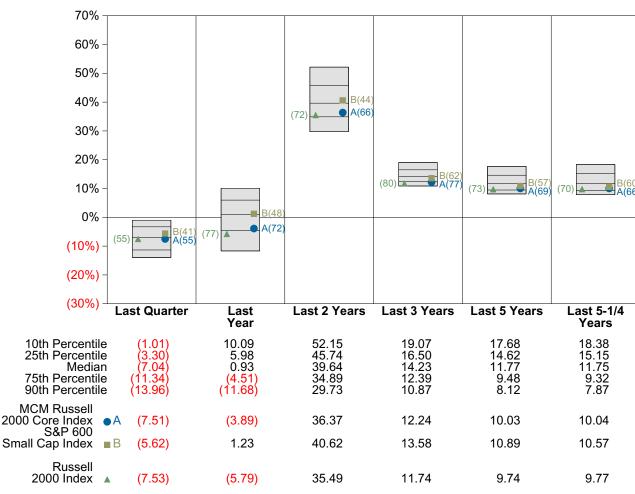


### MCM Russell 2000 Core Index Period Ended March 31, 2022

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

- MCM Russell 2000 Core Index's portfolio posted a (7.51)% return for the quarter placing it in the 55 percentile of the Callan Small Capitalization group for the quarter and in the 72 percentile for the last year.
- MCM Russell 2000 Core Index's portfolio outperformed the Russell 2000 Index by 0.01% for the quarter and outperformed the Russell 2000 Index for the year by 1.89%.

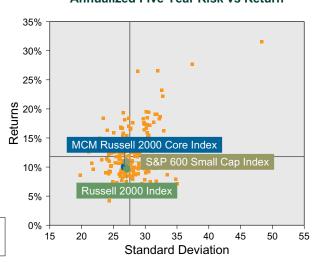
### Performance vs Callan Small Capitalization (Gross)



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

#### 13.4 14.9 Forecast Earnings Growth 13.3 1.2 Yield 1.0 1.2 2.2 2.3 Price/Book 2.2 21.4 16.2 Forecast Price/Earnings 21.4 2.9 Wght Median Market Cap 3.5 2.9 50% 100% MCM Russell 2000 Core Index Callan Small Capitalization Russell 2000 Index

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

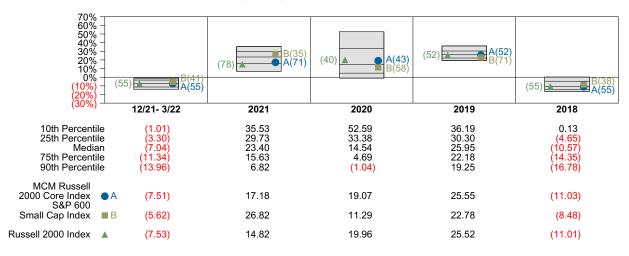


# MCM Russell 2000 Core Index Return Analysis Summary

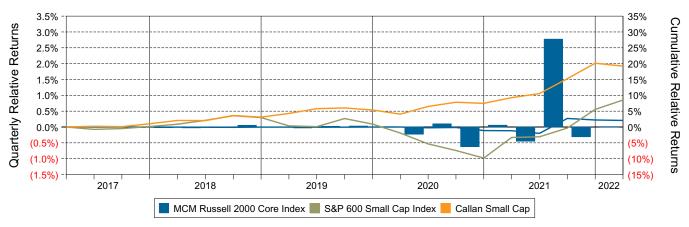
### **Return Analysis**

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.

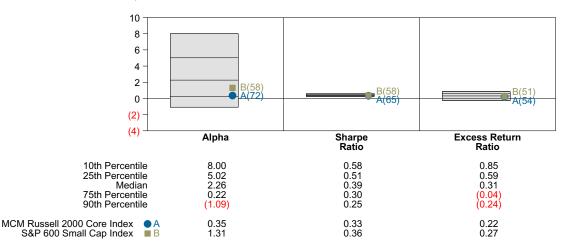
### Performance vs Callan Small Capitalization (Gross)



### **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 March 31, 2022



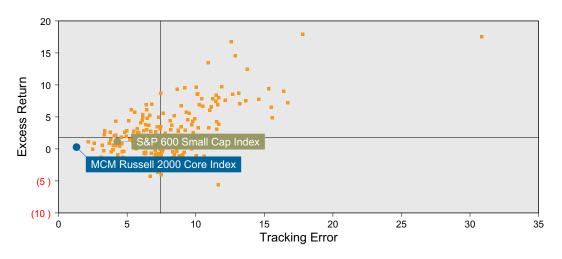


# MCM Russell 2000 Core Index Risk Analysis Summary

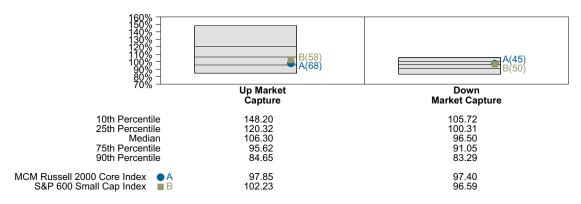
#### **Risk Analysis**

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.

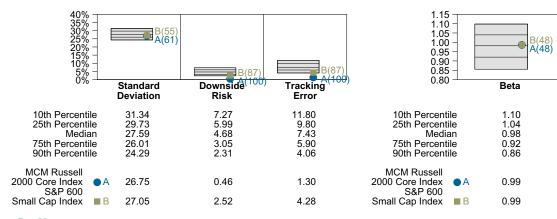
### Risk Analysis vs Callan Small Capitalization (Gross) Five Years Ended March 31, 2022



Market Capture vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs Russell 2000 Index Rankings Against Callan Small Capitalization (Gross) Five Years Ended March 31, 2022





R-Squared

0.98

0.94

0.90

0.84

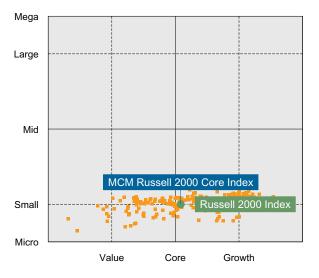
1.00

0.98

# Current Holdings Based Style Analysis MCM Russell 2000 Core Index As of March 31, 2022

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

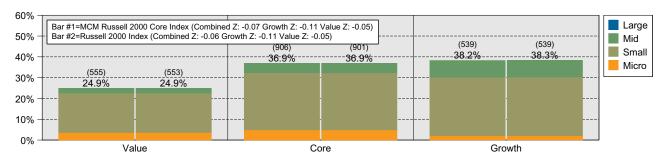
### Style Map vs Callan Small Cap Holdings as of March 31, 2022



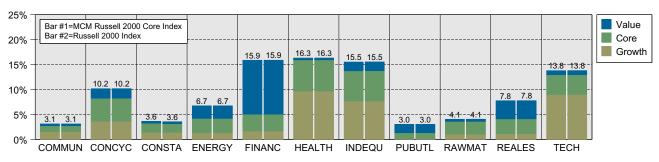
### Style Exposure Matrix Holdings as of March 31, 2022

	Value	Core	Growth	Total
	24.9% (553)	36.9% (901)	38.3% (539)	100.0% (1993)
Total	(****)	(****)	(****)	( , , ,
	24.9% (555)	36.9% (906)	38.2% (539)	100.0% (2000)
	3.6% (280)	4.9% (457)	2.1% (159)	10.5% (896)
Micro				
	3.6% (281)	4.9% (459)	2.1% (159)	10.6% (899)
	19.0% (263)	27.4% (425)	28.2% (347)	74.6% (1035)
Small				
	19.0% (264)	27.5% (426)	28.2% (347)	74.6% (1037)
	2.3% (10)	4.6% (19)	8.0% (33)	14.8% (62)
Mid				
	2.3% (10)	4.6% (21)	8.0% (33)	14.8% (64)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

### Combined Z-Score Style Distribution Holdings as of March 31, 2022



### Sector Weights Distribution Holdings as of March 31, 2022



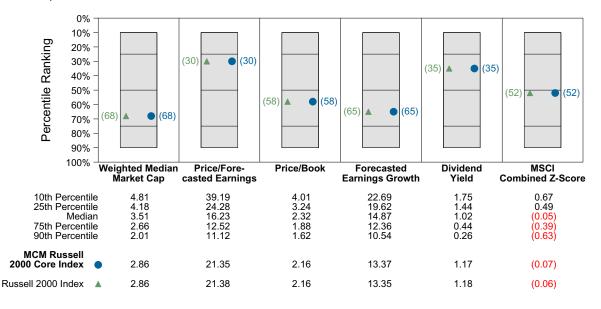


# MCM Russell 2000 Core Index Equity Characteristics Analysis Summary

#### **Portfolio Characteristics**

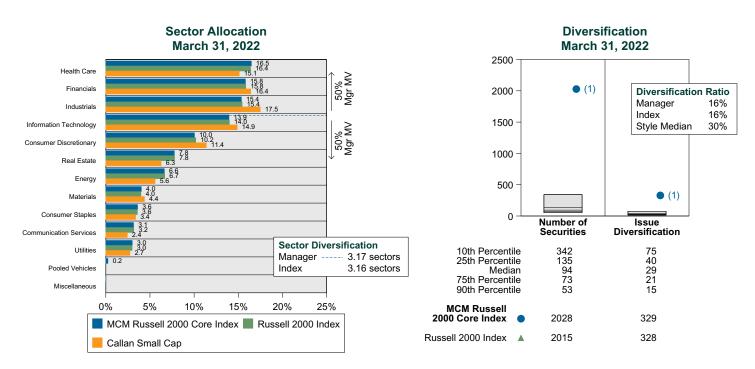
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Capitalization as of March 31, 2022



#### **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.



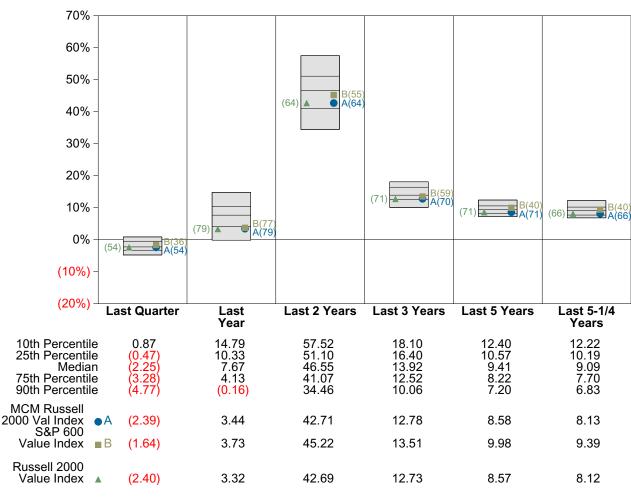


### MCM Russell 2000 Val Index Period Ended March 31, 2022

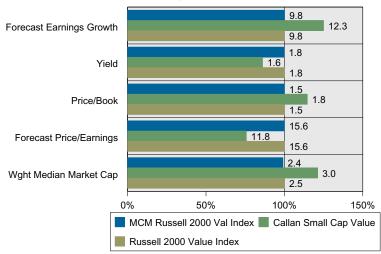
### **Quarterly Summary and Highlights**

- MCM Russell 2000 Val Index's portfolio posted a (2.39)% return for the quarter placing it in the 54 percentile of the Callan Small Cap Value group for the quarter and in the 79 percentile for the last year.
- MCM Russell 2000 Val Index's portfolio outperformed the Russell 2000 Value Index by 0.00% for the quarter and outperformed the Russell 2000 Value Index for the year by 0.12%.

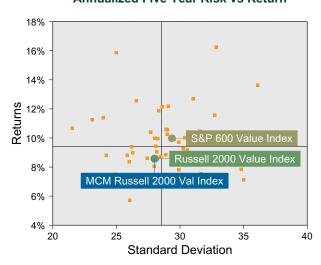
### Performance vs Callan Small Cap Value (Gross)



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



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



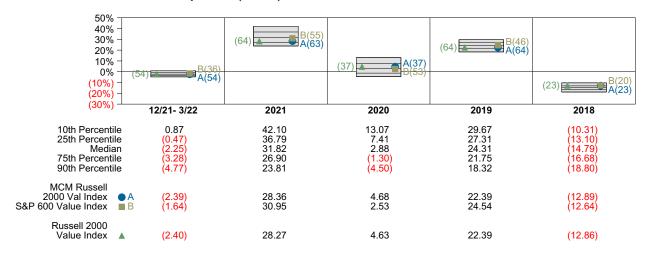


### MCM Russell 2000 Val Index **Return Analysis Summary**

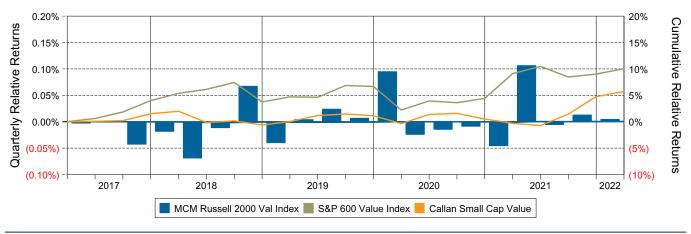
### **Return Analysis**

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.

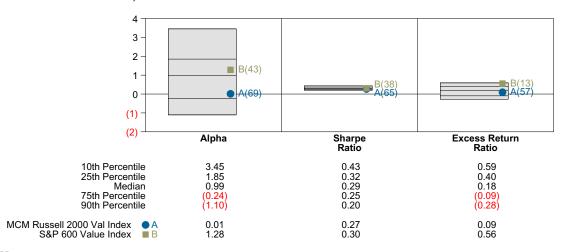
### Performance vs Callan Small Cap Value (Gross)



### 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 March 31, 2022



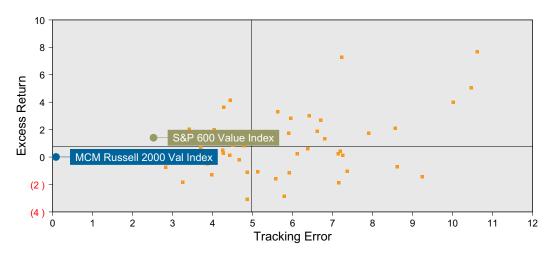


### MCM Russell 2000 Val Index **Risk Analysis Summary**

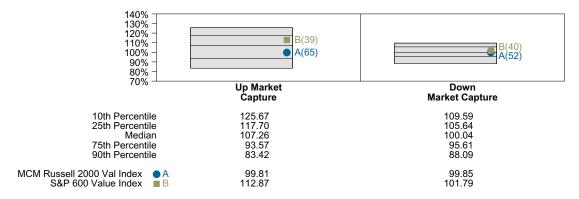
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The graphs below analyze the risk or variation of a manager's return pattern. The first scatter chart illustrates the relationship, called Excess Return Ratio, between excess return and tracking error relative to the benchmark. The second chart shows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

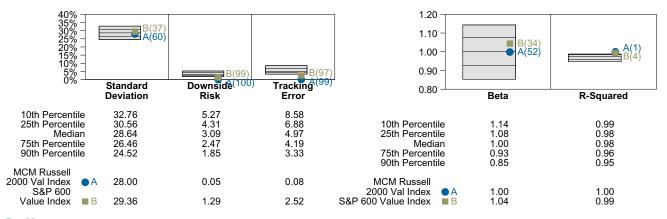
### Risk Analysis vs Callan Small Cap Value (Gross) Five Years Ended March 31, 2022



Market Capture vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs Russell 2000 Value Index Rankings Against Callan Small Cap Value (Gross) Five Years Ended March 31, 2022

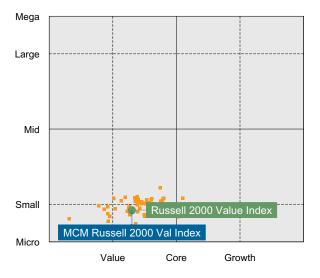




# **Current Holdings Based Style Analysis** MCM Russell 2000 Val Index As of March 31, 2022

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

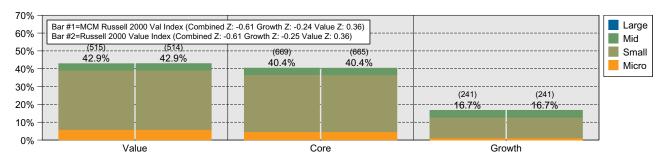
# Style Map vs Callan Small Cap Value Holdings as of March 31, 2022



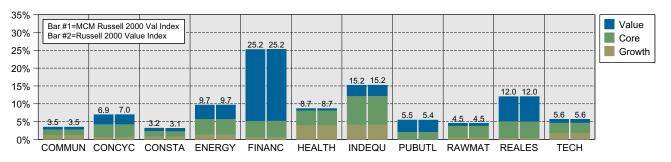
# **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	42.9% (514)	40.4% (665)	16.7% (241)	100.0% (1420)
Total	( , ,	(****)	,	,
	42.9% (515)	40.4% (669)	16.7% (241)	100.0% (1425)
	5.9% (251)	4.7% (328)	1.1% (76)	11.7% (655)
Micro				
	5.9% (251)	4.7% (329)	1.1% (76)	11.7% (656)
	33.3% (254)	31.9% (326)	11.6% (154)	76.8% (734)
Small				
	33.3% (255)	31.9% (327)	11.6% (154)	76.8% (736)
	3.7% (9)	3.8% (11)	4.0% (11)	11.5% (31)
Mid				
	3.7% (9)	3.8% (13)	4.0% (11)	11.5% (33)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large		, ,	, ,	. ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



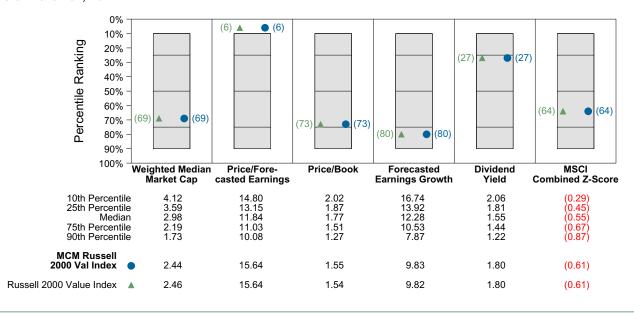


# MCM Russell 2000 Val Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

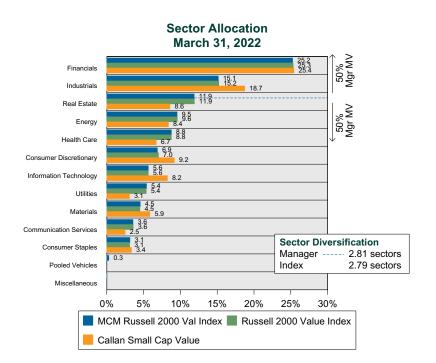
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

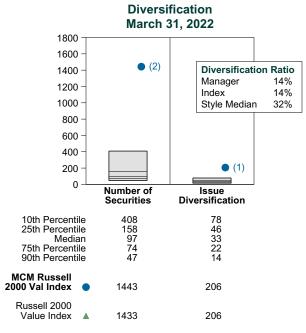
## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Small Cap Value as of March 31, 2022



#### **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 March 31, 2022

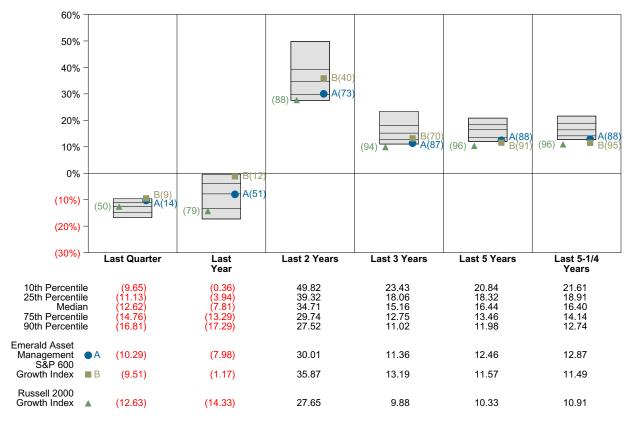
#### **Investment Philosophy**

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

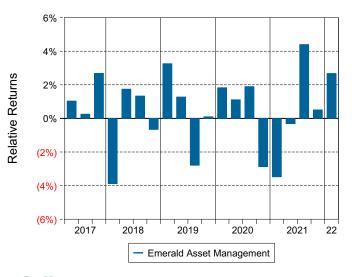
#### **Quarterly Summary and Highlights**

- Emerald Asset Management's portfolio posted a (10.29)% return for the quarter placing it in the 14 percentile of the Callan Small Cap Growth group for the quarter and in the 51 percentile for the last year.
- Emerald Asset Management's portfolio outperformed the Russell 2000 Growth Index by 2.34% for the quarter and outperformed the Russell 2000 Growth Index for the year by 6.35%.

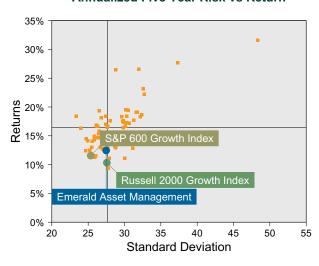
# Performance vs Callan Small Cap Growth (Gross)



# Relative Return vs Russell 2000 Growth Index



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

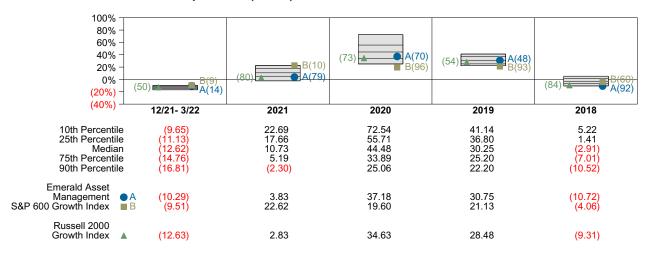


# **Emerald Asset Management Return Analysis Summary**

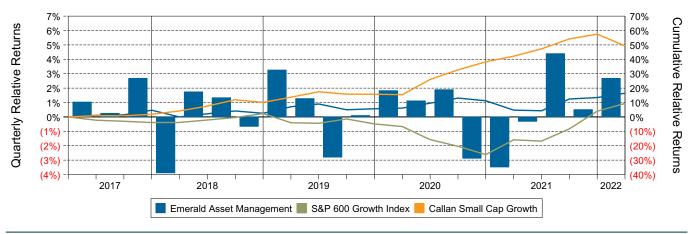
#### **Return Analysis**

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.

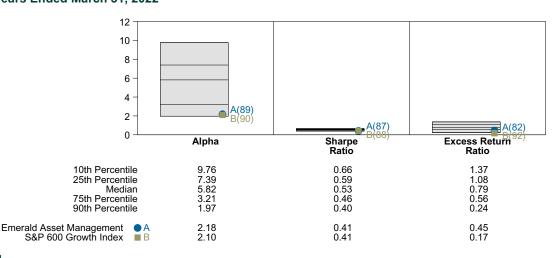
# Performance vs Callan Small Cap Growth (Gross)



#### 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 March 31, 2022



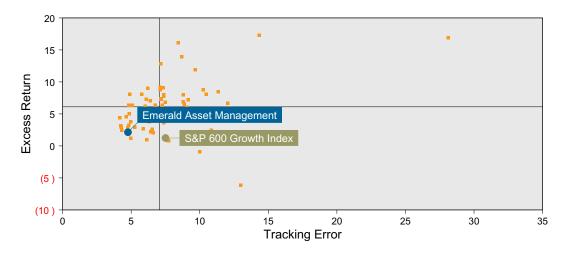


# **Emerald Asset Management Risk Analysis Summary**

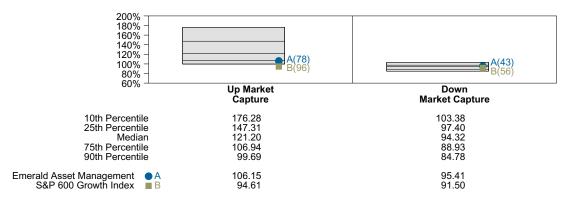
#### Risk Analysis

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

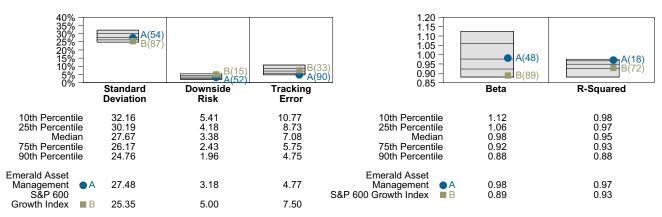
## Risk Analysis vs Callan Small Cap Growth (Gross) Five Years Ended March 31, 2022



Market Capture vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs Russell 2000 Growth Index Rankings Against Callan Small Cap Growth (Gross) Five Years Ended March 31, 2022

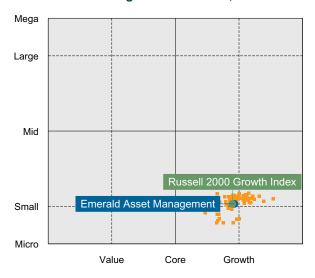




# **Current Holdings Based Style Analysis Emerald Asset Management** As of March 31, 2022

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

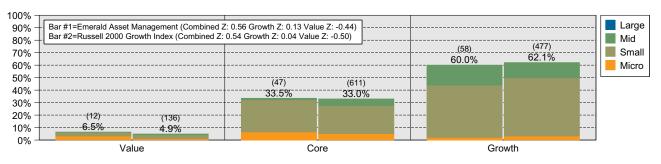
# Style Map vs Callan Small Cap Growth Holdings as of March 31, 2022



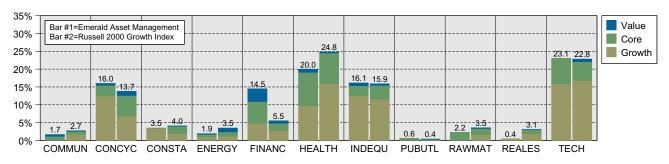
# **Style Exposure Matrix** Holdings as of March 31, 2022

	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)
	0.2% (1)	1.4% (1)	16.1% (12)	17.7% (14)
Mid				
	0.7% (4)	5.4% (15)	12.3% (30)	18.5% (49)
	3.1% (4)	25.7% (31)	41.9% (40)	70.7% (75)
Small				
	3.1% (53)	22.5% (270)	46.6% (308)	72.2% (631)
	3.1% (7)	6.5% (15)	2.0% (6)	11.6% (28)
Micro				
	1.0% (79)	5.1% (326)	3.2% (139)	9.3% (544)
	6.5% (12)	33.5% (47)	60.0% (58)	100.0% (117)
Total				
	4.9% (136)	33.0% (611)	62.1% (477)	100.0% (1224)
	Value	Core	Growth	Total

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



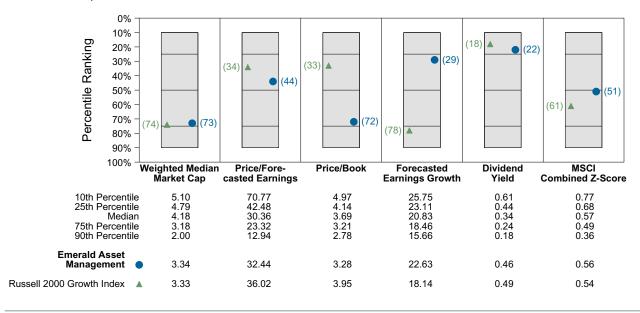


# **Emerald Asset Management Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

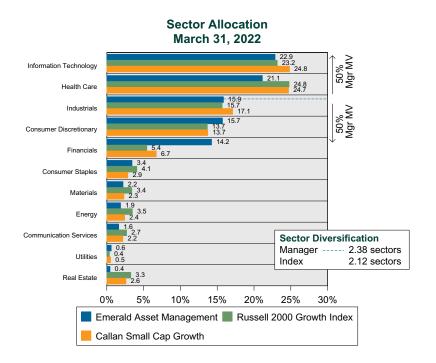
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

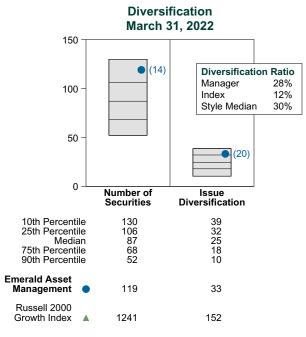
## **Portfolio Characteristics Percentile Rankings Rankings Against Callan Small Cap Growth** as of March 31, 2022



#### **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.

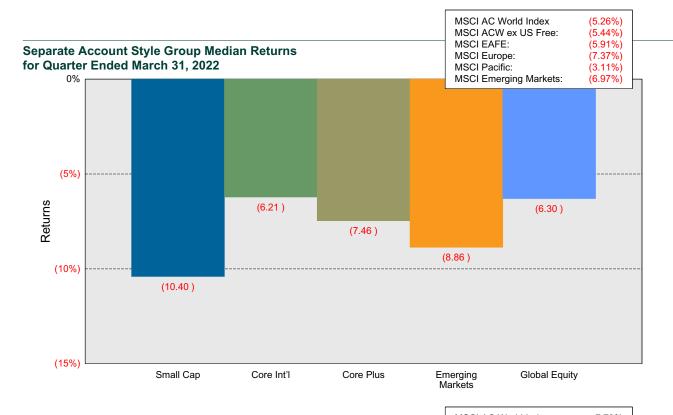


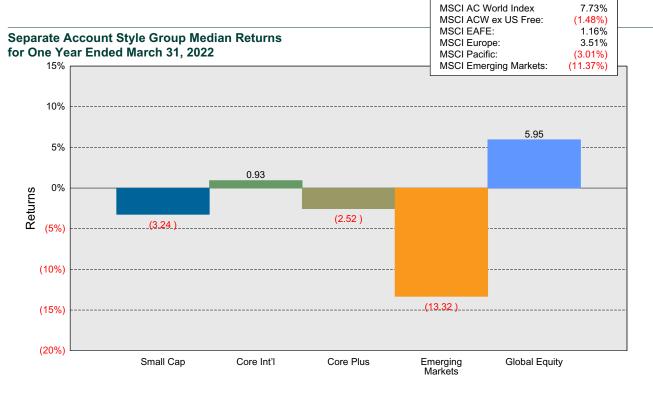




# **International Equity Active Management Overview**

Emerging markets (MSCI EM: -1.3% in 4Q21; -2.5% in 2021) did not participate in the stock rally the rest of the world enjoyed during the fourth quarter and 2021. Chinas weight in the Index (35%) and poor performance (-6%; -22%) was a key driver. China stocks were hurt by slowing growth and heightened regulation. Brazil (-6%; -17%) was also a notable underperformer. India (-0.2%; +26%) and Russia (-9%; +19%) fell in the fourth quarter, but were up for the year. Turkey (-11%; -28%) was the worst performer and the 44% decline in the Turkish lira was also notable. The country is battling high inflation (36% in December) with unconventional monetary policy (lowering rates).





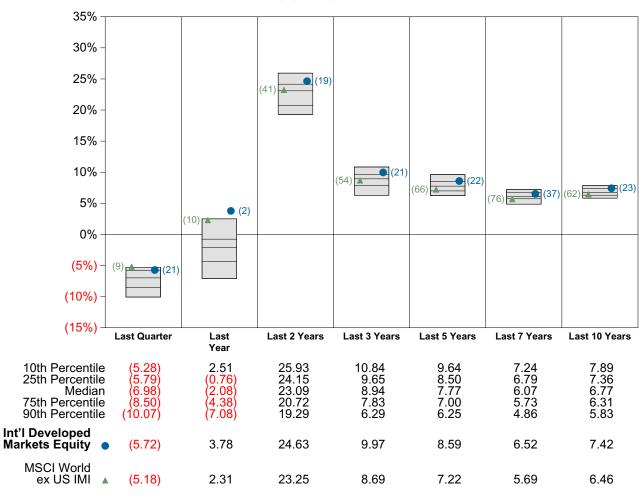


# Int'l Developed Markets Equity Period Ended March 31, 2022

## **Quarterly Summary and Highlights**

- Int'l Developed Markets Equity's portfolio posted a (5.72)% return for the quarter placing it in the 21 percentile of the Public Fund - International Equity group for the quarter and in the 2 percentile for the last year.
- Int'l Developed Markets Equity's portfolio underperformed the MSCI World ex US IMI by 0.54% for the quarter and outperformed the MSCI World ex US IMI for the year by 1.47%.

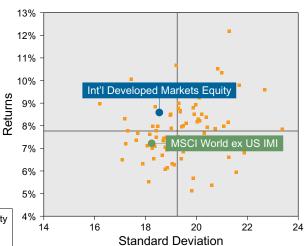
## Performance vs Public Fund - International Equity (Gross)



# Portfolio Characteristics as a Percentage of the MSCI World ex US IMI

#### 13.9 17.0 Forecast Earnings Growth 13.4 2.6 2.5 Yield 2.8 2.0 1.8 Price/Book 1.8 14.8 Forecast Price/Earnings 138 14.0 46.4 Wght Median Market Cap 30.1 33.5 50% 100% 150% 200% Int'l Developed Markets Equity Public Fund - International Equity MSCI World ex US IMI

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



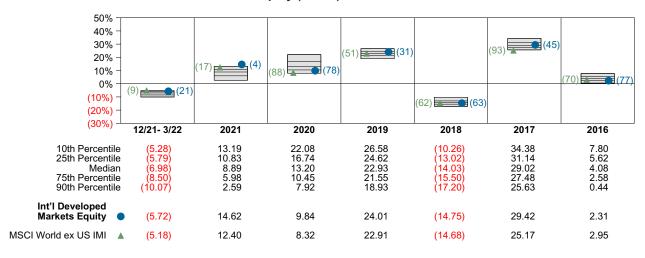


# Int'l Developed Markets Equity **Return Analysis Summary**

#### **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.

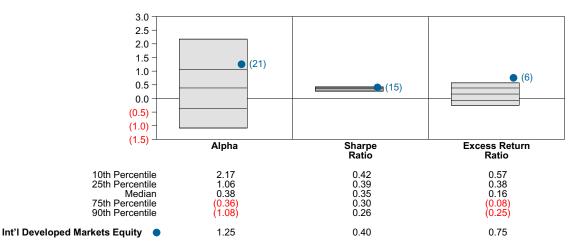
# Performance vs Public Fund - International Equity (Gross)



## Cumulative and Quarterly Relative Returns vs MSCI World ex US IMI



Risk Adjusted Return Measures vs MSCI World ex US IMI Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2022



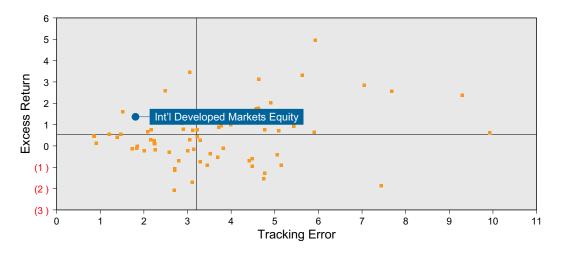


# Int'l Developed Markets Equity **Risk Analysis Summary**

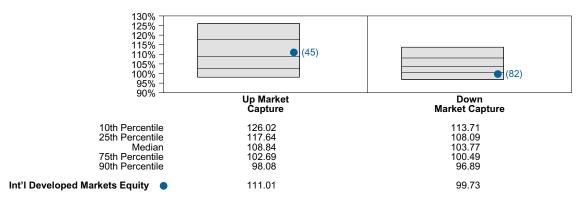
#### Risk Analysis

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.

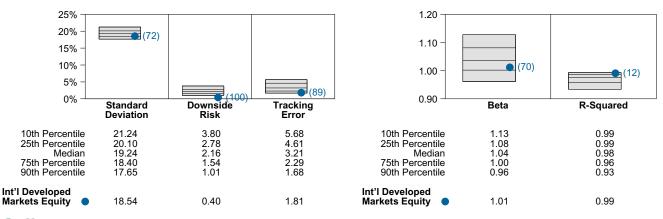
## Risk Analysis vs Public Fund - International Equity (Gross) Five Years Ended March 31, 2022



Market Capture vs MSCI World ex US IMI Index (USD Net Div) Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI World ex US IMI Index (USD Net Div) Rankings Against Public Fund - International Equity (Gross) Five Years Ended March 31, 2022

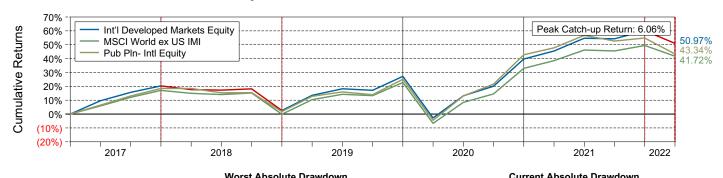




# Int'l Developed Markets Equity Drawdown Analysis for Five Years Ended March 31, 2022

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**

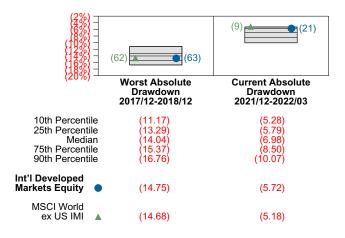


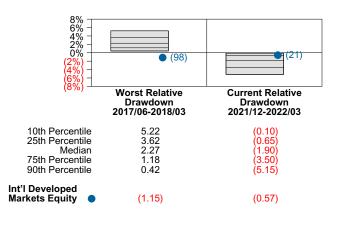
	Worst Absolute Drawdown				Current Absolute Diawdown					
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Int'l Developed Markets Equi	ty (14.75)%	1.00	2017/12-2018/12	(14.68)%	(14.04)%	(5.72)%	0.25	2021/12-2022/03	(5.18)%	(7.43)%
Recovery from Trough	24.01%	1.00	2018/12-2019/12	22.91%	22.83%	-	-	-	-	-
MSCI World ex US IMI	(14.68)%	1.00	2017/12-2018/12			(5.18)%	0.25	2021/12-2022/03		
Pub Pln- Intl Equity	(14.04)%	1.00	2017/12-2018/12			(8.57)%	0.75	2021/06-2022/03		

#### Relative Cumulative Drawdown Analysis vs. MSCI World ex US IMI Cumulative Relative Returns Peak Catch-up Rel Rtn: 0.57% 8% Int'l Developed Markets Equity 7% Pub Pln- Intl Equity 6.53% 6% 5% 4% 3% 2% 1 14% 1% 0% (1%)2017 2018 2019 2020 2021 2022

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Int'l Developed Markets Equity	(1.15)%	0.75	2017/06-2018/03	2.48%	(0.57)%	0.25	2021/12-2022/03	(2.37)%
Recovery from Trough	1.25%	1.75	2018/03-2019/12	(1.13)%	-	-	-	-
Pub Pln- Intl Equity	(5.80)%	1.25	2020/12-2022/03		(5.80)%	1.25	2020/12-2022/03	

Drawdown Rankings vs. MSCI World ex US IMI Rankings against Public Fund - International Equity Five Years Ended March 31, 2022



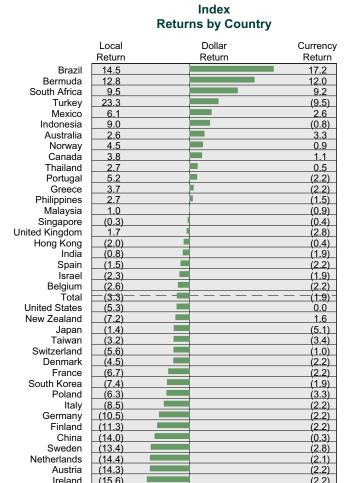




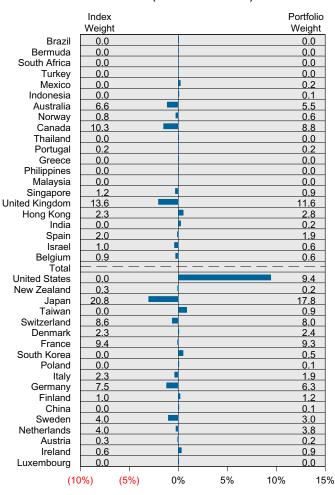
# Int'l Developed Markets Equity vs MSCI World ex US IMI Attribution for Quarter Ended March 31, 2022

#### 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.



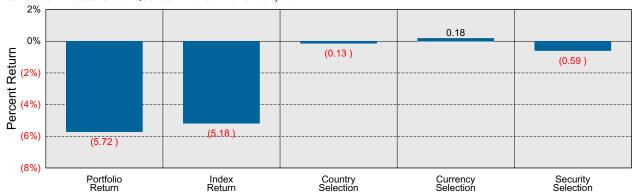
## **Beginning Relative Weights** (Portfolio - Index)



#### Attribution Factors for Quarter Ended March 31, 2022

0%

20%



(11.0)

60%

40%



Luxembourg

(18.4)

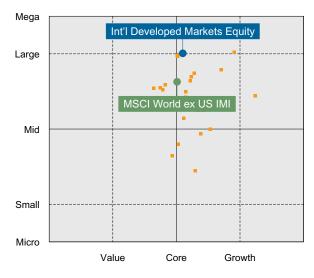
(20%)

(40%)

# **Current Holdings Based Style Analysis** Int'l Developed Markets Equity As of March 31, 2022

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

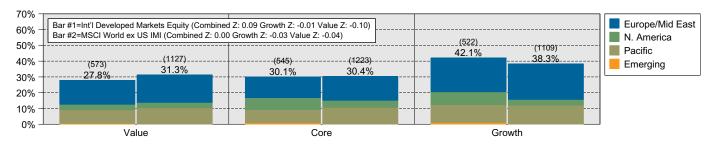
# Style Map vs Pub Pln- Intl Equity Holdings as of March 31, 2022



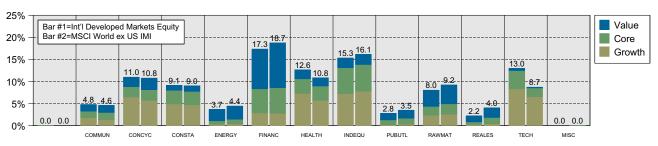
# **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	31.3% (1127)	30.4% (1223)	38.3% (1109)	100.0% (3459)
Total				
	27.8% (573)	30.1% (545)	42.1% (522)	100.0% (1640)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.5% (47)	0.8% (60)	1.1% (65)	2.3% (172)
	10.3% (533)	10.6% (550)	12.0% (501)	33.0% (1584)
Pacific	, ,		, ,	, ,
	8.6% (240)	8.4% (195)	11.4% (180)	28.4% (615)
	3.4% (90)	4.5% (126)	3.6% (94)	11.6% (310)
N. America				
	3.6% (32)	7.5% (51)	8.1% (47)	19.2% (130)
Europe/ Mid East	17.5% (504)	15.2% (547)	22.7% (514)	55.4% (1565)
<b>-</b>	15.3% (254)	13.3% (239)	21.6% (230)	50.1% (723)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022

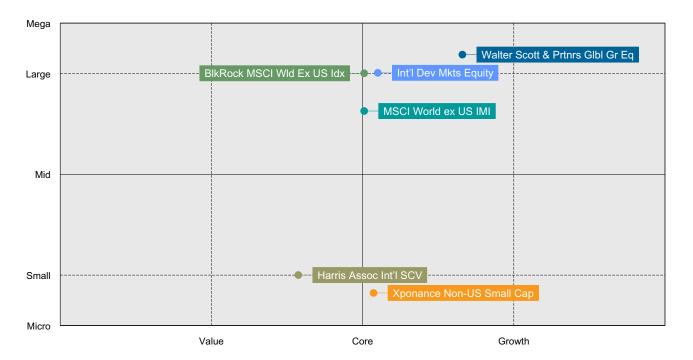




# **International Holdings Based Style Analysis** For One Quarter Ended March 31, 2022

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

Style Map Holdings for One Quarter Ended March 31, 2022



	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	Eq5.42%	103.98	0.59	0.08	(0.51)	47	16.66
BlkRock MSCI Wld Ex US Idx	76.87%	45.04	0.00	(0.04)	(0.04)	913	108.21
Harris Assoc Int'l SCV	2.72%	2.58	(0.37)	(0.12)	0.25	59	18.30
Xponance Non-US Small Cap	4.91%	2.12	0.06	0.12	0.06	698	112.51
Int'l Dev Mkts Equity	100.00%	46.40	0.09	(0.01)	(0.10)	1658	119.01
MSCI World ex US IMI	-	33.53	0.00	(0.03)	(0.04)	3491	154.14

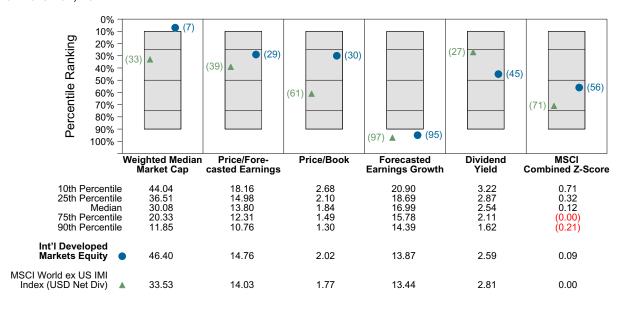


# Int'l Developed Markets Equity **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

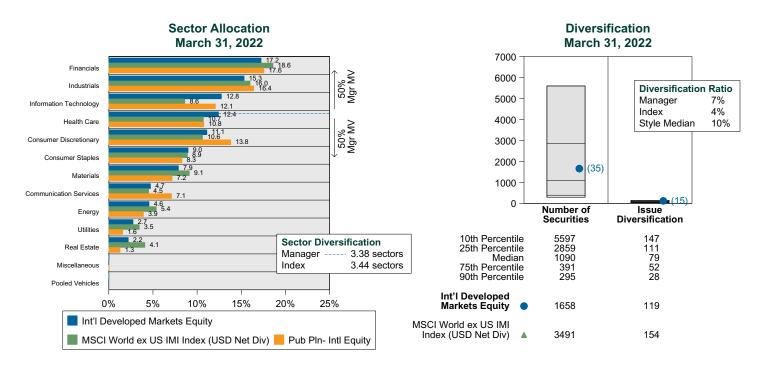
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Public Fund - International Equity as of March 31, 2022



#### **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.

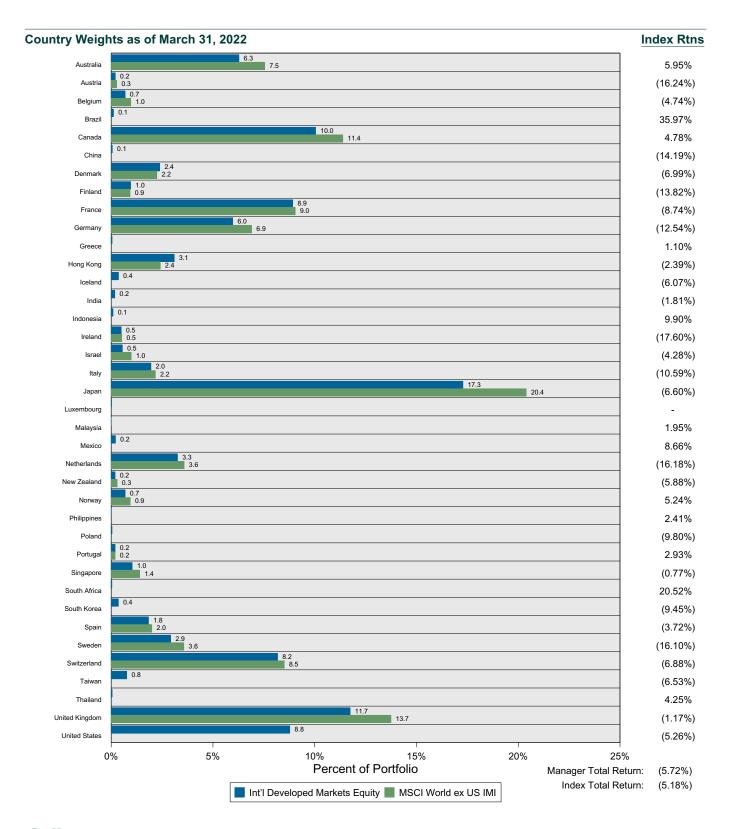




# **Country Allocation** Int'l Developed Markets Equity VS MSCI World ex US IMI Index (USD Net Div)

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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.





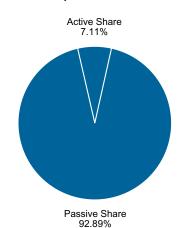
# Int'l Developed Markets Equity Active Share Analysis as of March 31, 2022 vs. MSCI World ex US IMI Index (USD Net Div)

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 17.00% Non-Index Active Share 9.58% Passive Share 73.41%

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

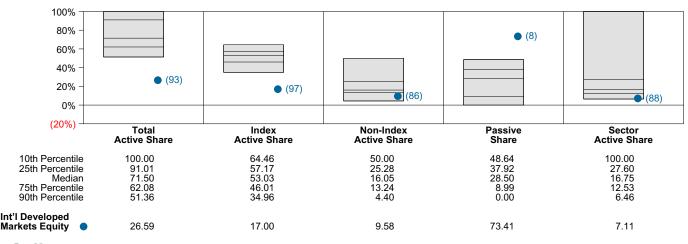


Total Active Share: 26.59%

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
14.66%	10.20%	24.86%	4.51%	4.73%	1.09%
19.55%	11.95%	31.50%	10.61%	11.10%	3.31%
13.47%	7.49%	20.96%	8.90%	8.98%	1.86%
16.39%	8.82%	25.21%	5.38%	4.56%	1.31%
10.28%	3.69%	13.97%	18.59%	17.25%	2.98%
15.38%	10.37%	25.75%	10.71%	12.42%	2.71%
19.59%	6.64%	26.23%	16.00%	15.32%	4.23%
25.73%	20.86%	46.59%	8.62%	12.75%	4.46%
19.60%	9.13%	28.73%	9.12%	7.89%	2.57%
50.00%	50.00%	100.00%	-	0.03%	0.02%
50.00%	50.00%	100.00%	-	0.01%	0.01%
44.31%	5.01%	49.33%	4.09%	2.21%	1.24%
18.13%	6.72%	24.85%	3.46%	2.75%	0.78%
17.00%	9.58%	26.59%	100.00%	100.00%	26.58%

## Active Share vs. Pub Pln-Intl Equity





# Walter Scott & Prtnrs Glbl Gr Eq Period Ended March 31, 2022

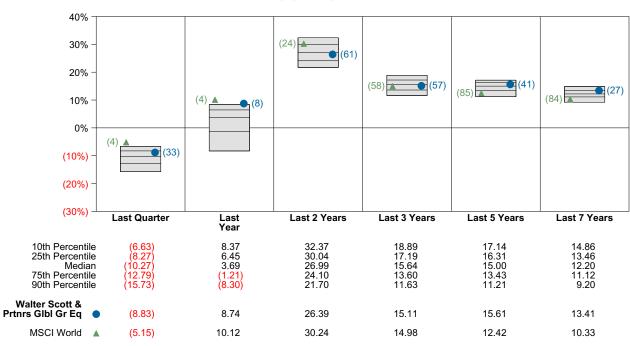
#### **Investment Philosophy**

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 22-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**

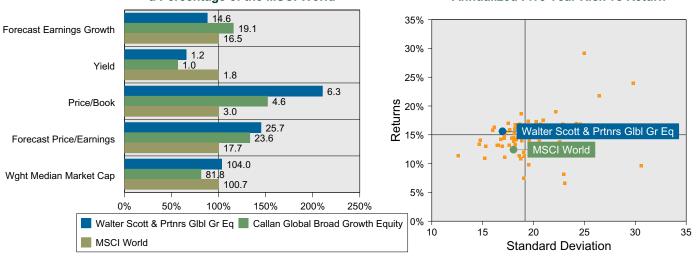
- Walter Scott & Prtnrs Glbl Gr Eq's portfolio posted a (8.83)% return for the quarter placing it in the 33 percentile of the Callan Global Broad Growth Equity group for the guarter and in the 8 percentile for the last year.
- Walter Scott & Prtnrs Glbl Gr Eq's portfolio underperformed the MSCI World by 3.68% for the guarter and underperformed the MSCI World for the year by 1.38%.

#### 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



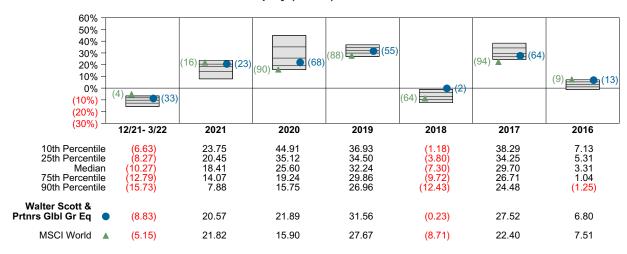


# Walter Scott & Prtnrs Glbl Gr Eq **Return Analysis Summary**

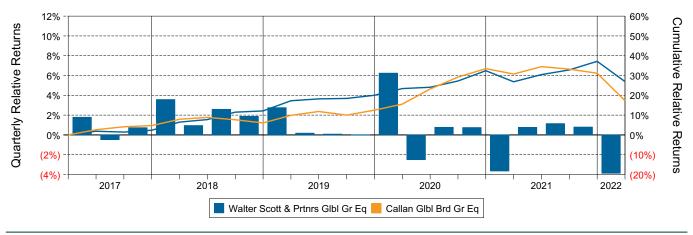
#### **Return Analysis**

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.

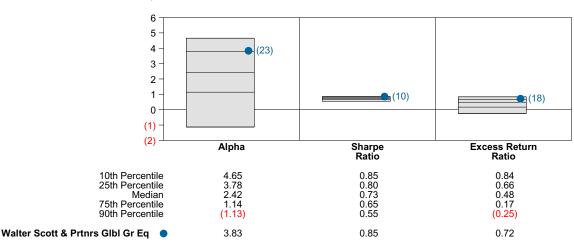
# Performance vs Callan Global Broad Growth Equity (Gross)



# **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 March 31, 2022



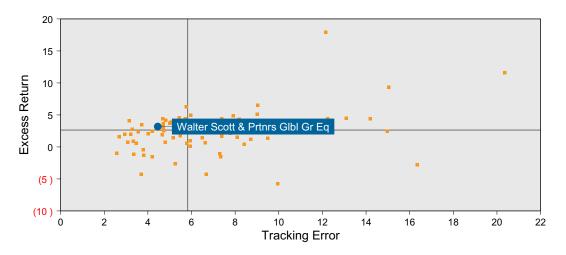


# Walter Scott & Prtnrs Glbl Gr Eq **Risk Analysis Summary**

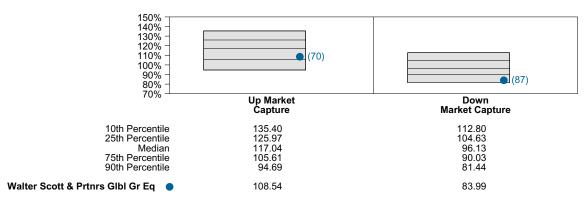
#### Risk Analysis

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.

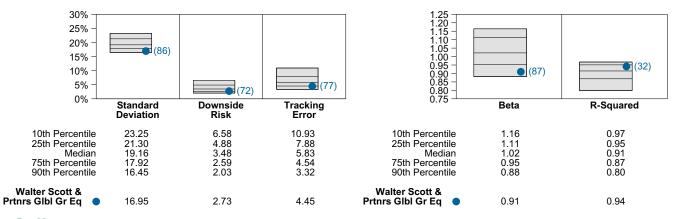
## Risk Analysis vs Callan Global Broad Growth Equity (Gross) Five Years Ended March 31, 2022



Market Capture vs MSCI World Index (USD Net Div) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI World Index (USD Net Div) Rankings Against Callan Global Broad Growth Equity (Gross) Five Years Ended March 31, 2022

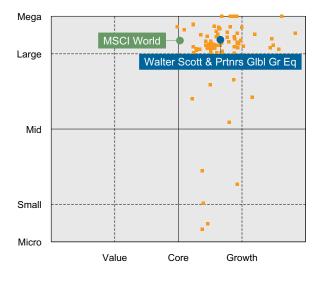




# **Current Holdings Based Style Analysis** Walter Scott & Prtnrs Glbl Gr Eq As of March 31, 2022

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.

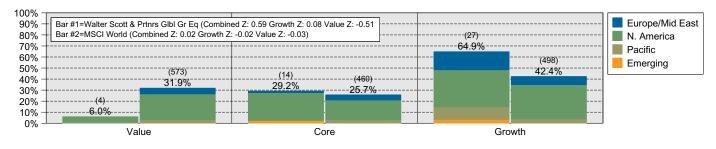
# Style Map vs Callan Glbl Brd Gr Eq Holdings as of March 31, 2022



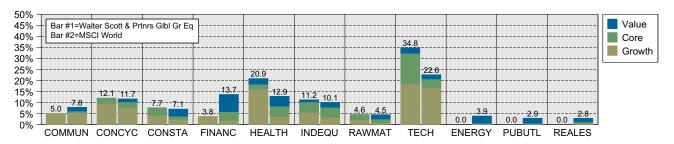
## **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
·otai	31.9% (573)	25.7% (460)	42.4% (498)	100.0% (1531)
Total	6.0% (4)	29.2% (14)	64.9% (27)	100.0% (45)
	0.0% (1)	0.0% (1)	0.0% (1)	0.1% (3)
Emerging	0.070 (0)	2.470 (1)	3.5 /0 (1)	3.0 /0 (2)
	0.0% (0)	2.4% (1)	3.3% (1)	5.8% (2)
Pacific	3.1% (137)	3.0% (115)	3.8% (128)	9.9% (380)
Davitia	0.9% (1)	0.0% (0)	11.5% (6)	12.4% (7)
	23.4% (284)	18.0% (219)	31.0% (202)	72.5% (705)
N. America				
	5.0% (3)	25.3% (11)	33.5% (12)	63.8% (26)
Mid East	5.4% (151)	4.7% (125)	7.6% (167)	17.6% (443)
Europe/	0.0% (0)	1.5% (2)	16.5% (8)	18.0% (10)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



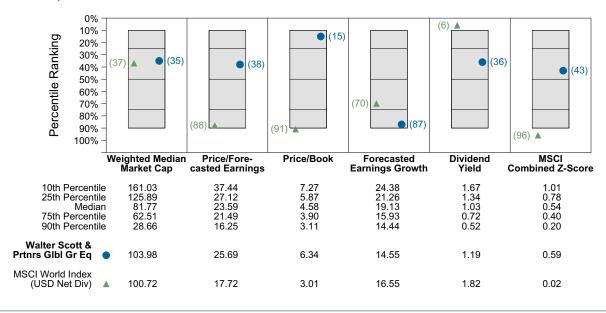


# Walter Scott & Prtnrs Glbl Gr Eq **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

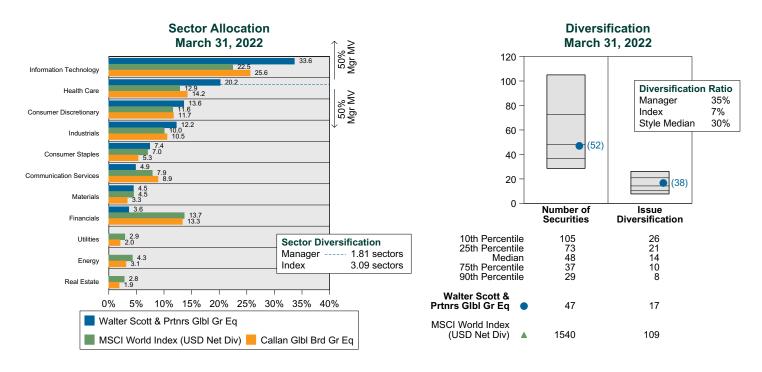
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Global Broad Growth Equity as of March 31, 2022



#### **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 March 31, 2022

#### **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**

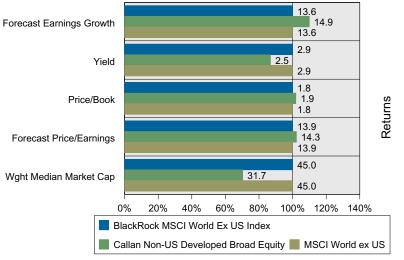
- BlackRock MSCI World Ex US Index's portfolio posted a (4.68)% return for the quarter placing it in the 28 percentile of the Callan Non-US Developed Broad Equity group for the quarter and in the 17 percentile for the last year.
- BlackRock MSCI World Ex US Index's portfolio outperformed the MSCI World ex US by 0.13% for the quarter and outperformed the MSCI World ex US for the year by 0.44%.

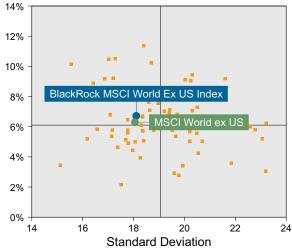
# Performance vs Callan Non-US Developed Broad Equity (Gross)



## **Portfolio Characteristics as** a Percentage of the MSCI World ex US

## Callan Non-US Developed Broad Equity (Gross) Annualized Four and Three-Quarter Year Risk vs Return





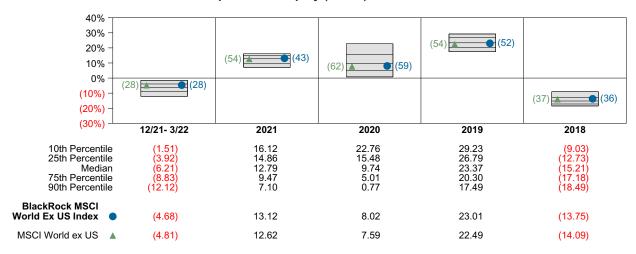


# BlackRock MSCI World Ex US Index **Return Analysis Summary**

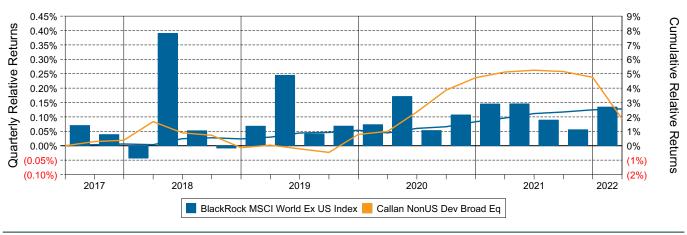
#### **Return Analysis**

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.

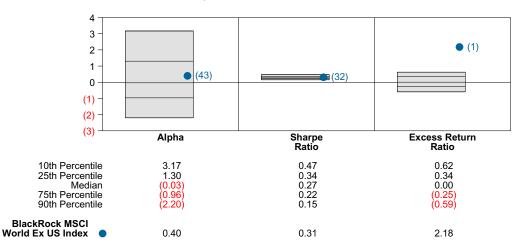
# Performance vs Callan Non-US Developed Broad Equity (Gross)



## Cumulative and Quarterly Relative Returns vs MSCI World ex US



Risk Adjusted Return Measures vs MSCI World ex US Rankings Against Callan Non-US Developed Broad Equity (Gross) Four and Three-Quarter Years Ended March 31, 2022



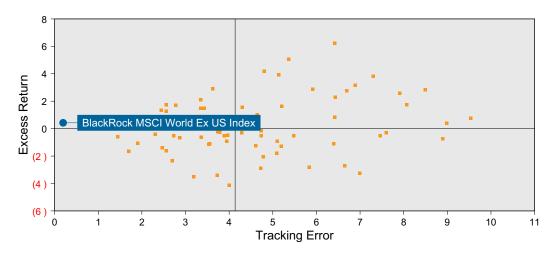


# BlackRock MSCI World Ex US Index **Risk Analysis Summary**

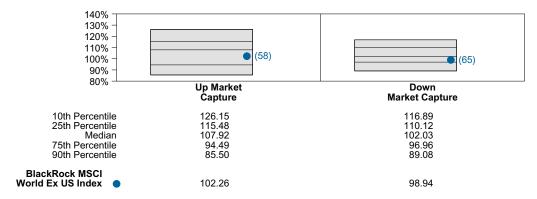
#### Risk Analysis

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.

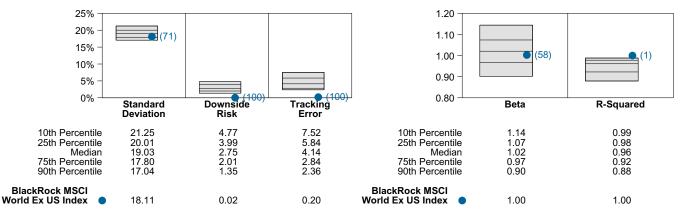
## Risk Analysis vs Callan Non-US Developed Broad Equity (Gross) Four and Three-Quarter Years Ended March 31, 2022



Market Capture vs MSCI World ex US Index (USD Net Div) Rankings Against Callan Non-US Developed Broad Equity (Gross) Four and Three-Quarter Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI World ex US Index (USD Net Div) Rankings Against Callan Non-US Developed Broad Equity (Gross) Four and Three-Quarter Years Ended March 31, 2022

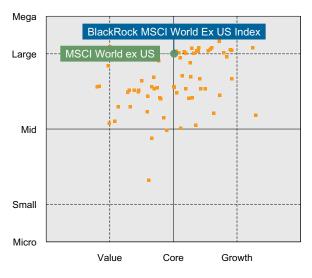




# **Current Holdings Based Style Analysis** BlackRock MSCI World Ex US Index As of March 31, 2022

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.

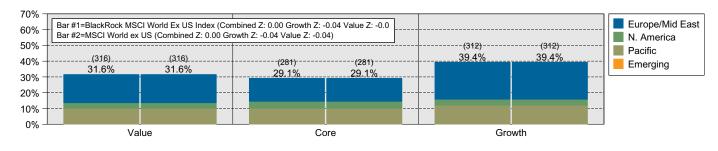
# Style Map vs Callan NonUS Dev Broad Eq Holdings as of March 31, 2022



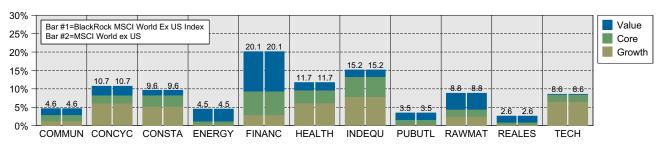
# **Style Exposure Matrix** Holdings as of March 31, 2022

_	18.0% (152)	14.6% (131)	23.5% (157)	56.1% (440)
Europe/ Mid East				
	18.0% (152)	14.6% (131)	23.5% (157)	56.1% (440)
	3.5% (26)	4.4% (31)	3.8% (32)	11.8% (89)
N. America				
	3.5% (26)	4.4% (31)	3.8% (32)	11.8% (89)
	10.0% (138)	10.0% (119)	12.0% (123)	32.1% (380)
Pacific				
	10.0% (138)	10.0% (119)	12.0% (123)	32.1% (380)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Emerging				
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
	31.6% (316)	29.1% (281)	39.4% (312)	100.0% (909)
Total				
	31.6% (316)	29.1% (281)	39.4% (312)	100.0% (909)
	Value	Core	Growth	Total

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



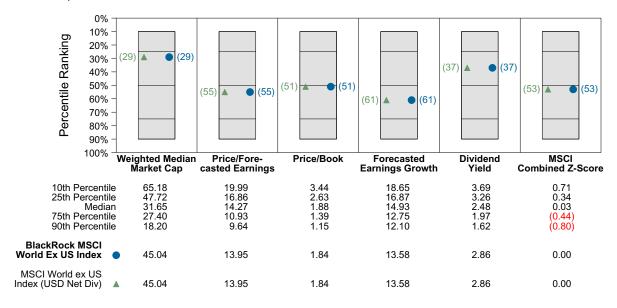


# BlackRock MSCI World Ex US Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

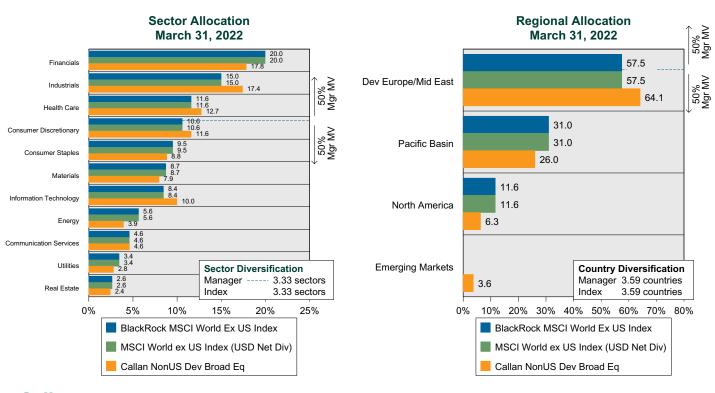
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Non-US Developed Broad Equity as of March 31, 2022



#### **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.

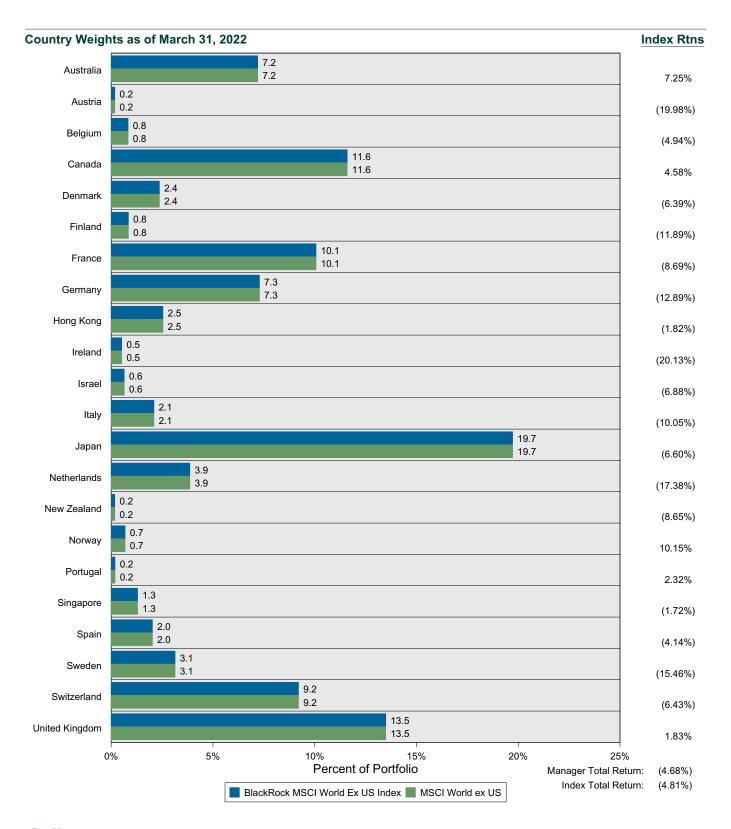




# **Country Allocation** BlackRock MSCI World Ex US Index VS MSCI World ex US Index (USD Net Div)

# **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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 March 31, 2022

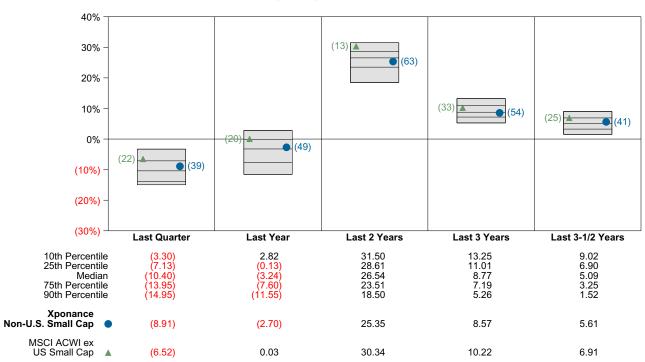
#### **Investment Philosophy**

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**

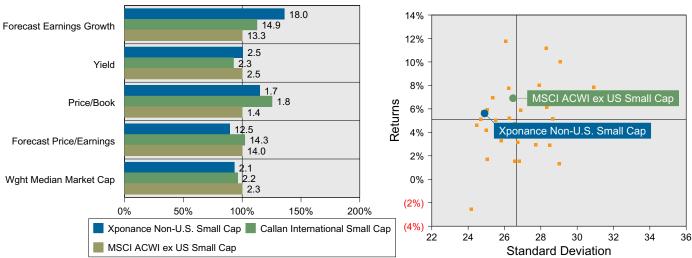
- Xponance Non-U.S. Small Cap's portfolio posted a (8.91)% return for the guarter placing it in the 39 percentile of the Callan International Small Cap group for the quarter and in the 49 percentile for the last year.
- Xponance Non-U.S. Small Cap's portfolio underperformed the MSCI ACWI ex US Small Cap by 2.39% for the guarter and underperformed the MSCI ACWI ex US Small Cap for the year by 2.74%.

## Performance vs Callan International Small Cap (Gross)



# Portfolio Characteristics as a Percentage of the MSCI ACWI ex US Small Cap

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





# **Current Holdings Based Style Analysis Xponance Non-U.S. Small Cap** As of March 31, 2022

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.

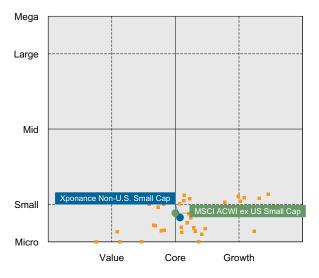
> Europe Mid Eas

N. Americ

Pacif

Emerging

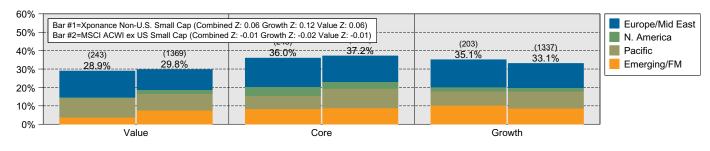
# Style Map vs Callan Intl Small Cap Holdings as of March 31, 2022



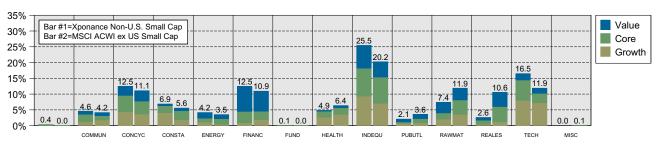
## **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	29.8% (1369)	37.2% (1598)	33.1% (1337)	100.0% (4304)
Total			,	,
	28.9% (243)	36.0% (245)	35.1% (203)	100.0% (691)
erging/ FM	7.6% (557)	8.9% (641)	8.7% (539)	<b>25.2</b> % (1737)
	3.8% (44)	8.3% (57)	10.3% (63)	22.4% (164)
	9.0% (396)	10.6% (442)	9.1% (378)	28.8% (1216)
Pacific	10.070 (103)	7.270 (77)	7.770 (30)	20.470 (230)
	10.5% (103)	7.2% (77)	7.7% (56)	25.4% (236)
nenca	2.1% (64)	3.6% (99)	2.0% (63)	7.8% (226)
merica	0.4% (2)	4.8% (9)	2.3% (6)	7.5% (17)
d East	11.0% (352)	14.1% (416)	13.2% (357)	38.3% (1125)
urope/	14.2% (94)	15.6% (102)	14.9% (78)	44.7% (274)

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



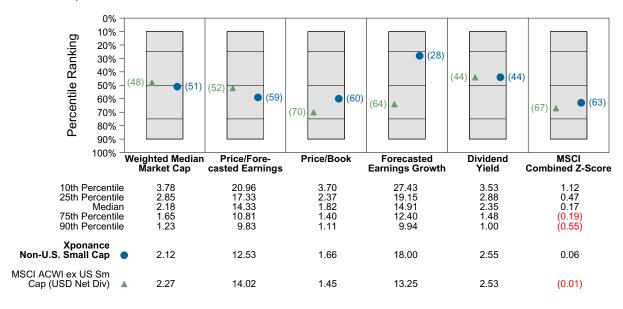


# **Xponance Non-U.S. Small Cap Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

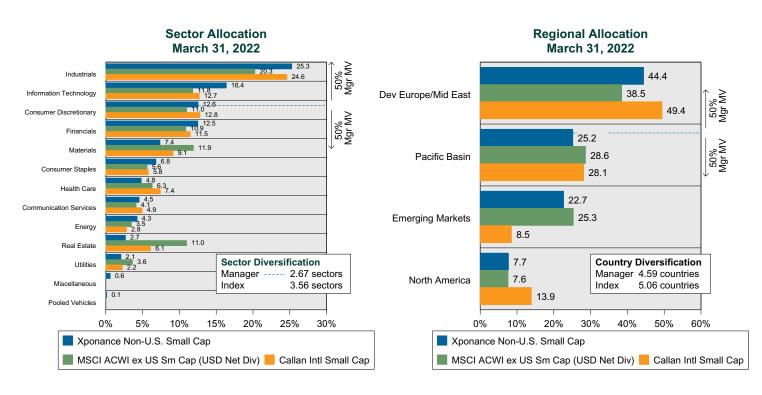
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap as of March 31, 2022



#### **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.

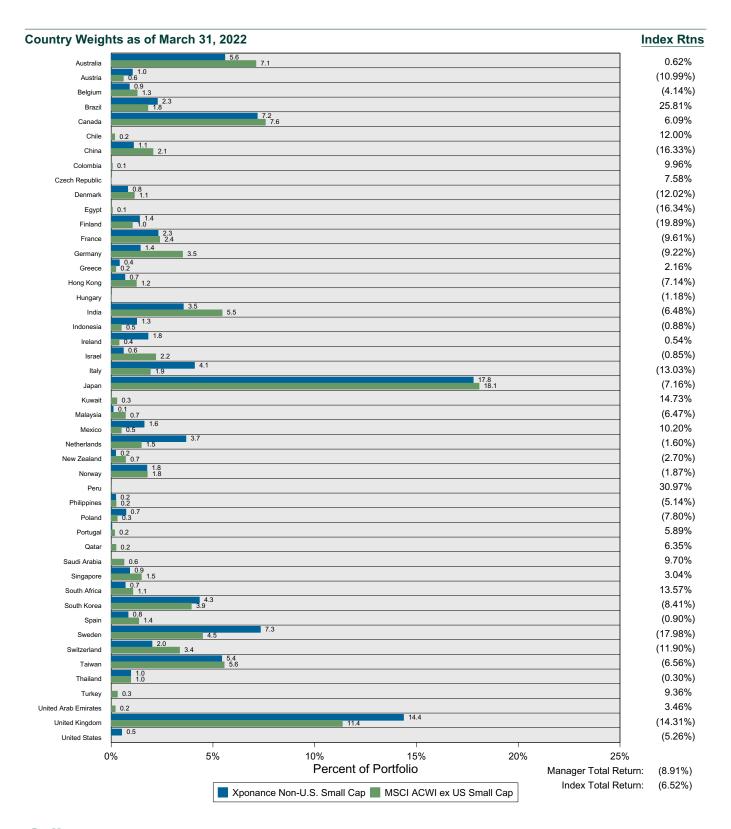




# **Country Allocation Xponance Non-U.S. Small Cap VS MSCI ACWI ex US Sm Cap (USD Net Div)**

## **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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 March 31, 2022

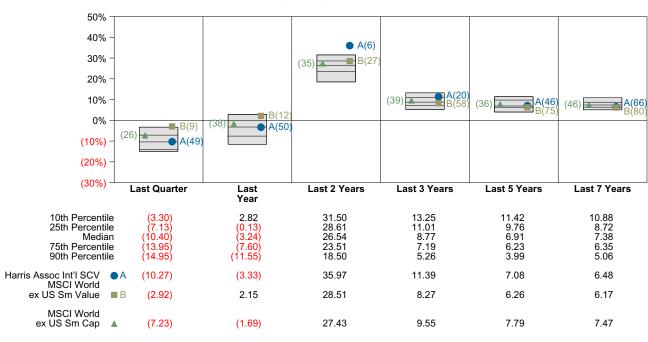
#### **Investment Philosophy**

The Oakmark International Small Cap Fund is sub-advised by Harris Associates. Harris 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.

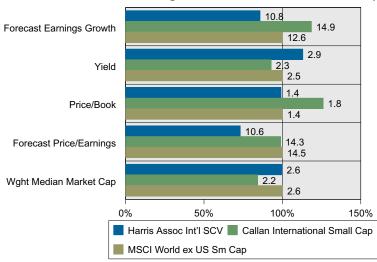
#### **Quarterly Summary and Highlights**

- Harris Assoc Int'l SCV's portfolio posted a (10.27)% return for the quarter placing it in the 49 percentile of the Callan International Small Cap group for the quarter and in the 50 percentile for the last year.
- Harris Assoc Int'l SCV's portfolio underperformed the MSCI World ex US Sm Cap by 3.04% for the guarter and underperformed the MSCI World ex US Sm Cap for the year by 1.64%.

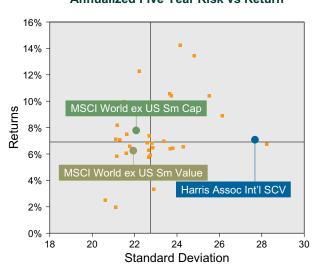
### Performance vs Callan International Small Cap (Gross)



# Portfolio Characteristics as a Percentage of the MSCI World ex US Sm Cap



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



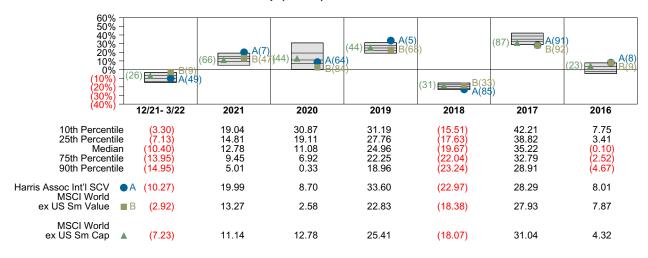


# Harris Assoc Int'l SCV **Return Analysis Summary**

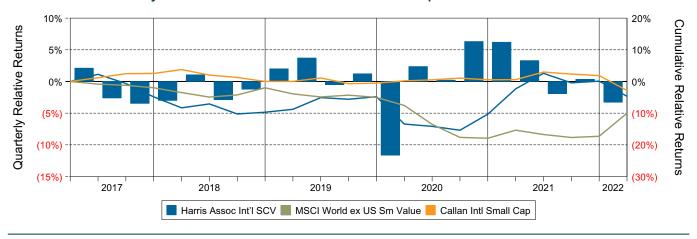
#### **Return Analysis**

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.

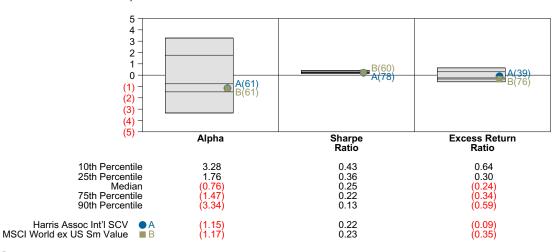
#### Performance vs Callan International Small Cap (Gross)



# Cumulative and Quarterly Relative Returns vs MSCI World ex US Sm Cap



Risk Adjusted Return Measures vs MSCI World ex US Sm Cap Rankings Against Callan International Small Cap (Gross) Five Years Ended March 31, 2022



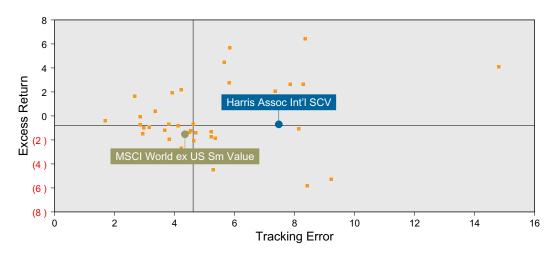


# Harris Assoc Int'l SCV **Risk Analysis Summary**

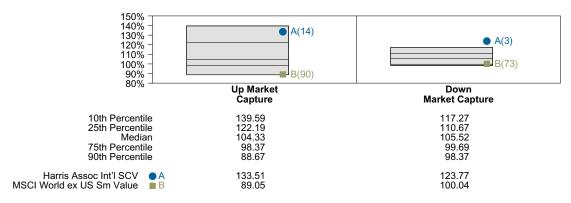
#### Risk Analysis

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.

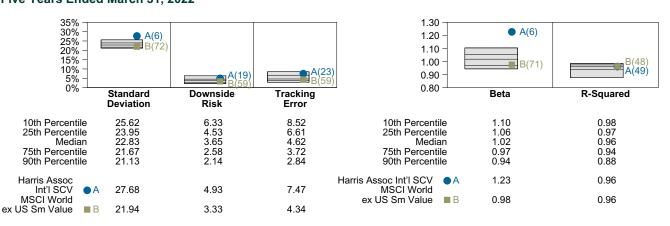
# Risk Analysis vs Callan International Small Cap (Gross) Five Years Ended March 31, 2022



Market Capture vs MSCI World ex US Small Cap (USD Net Div) Rankings Against Callan International Small Cap (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI World ex US Small Cap (USD Net Div) Rankings Against Callan International Small Cap (Gross) Five Years Ended March 31, 2022

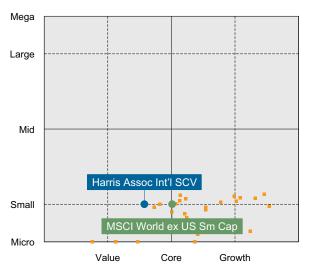




# **Current Holdings Based Style Analysis** Harris Assoc Int'l SCV As of March 31, 2022

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

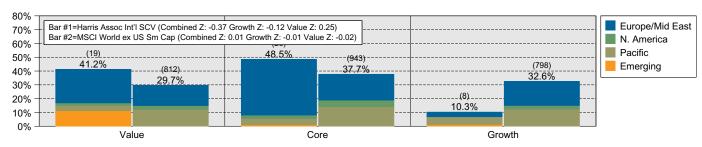
# Style Map vs Callan Intl Small Cap Holdings as of March 31, 2022



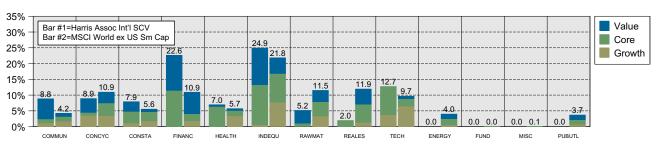
# **Style Exposure Matrix** Holdings as of March 31, 2022

			Г	
	24.4% (12)	40.4% (20)	3.4% (4)	68.3% (36)
Europe/				
Mid East	14.8% (352)	18.8% (416)	17.6% (357)	51.2% (1125)
	1.8% (1)	2.5% (2)	0.0% (0)	4.3% (3)
N. America	, ,	, ,	, ,	,
	2.8% (64)	4.8% (95)	2.7% (62)	10.3% (221)
	3.8% (2)	4.5% (3)	5.6% (3)	14.0% (8)
Pacific	, ,	, ,	, ,	, ,
	12.1% (395)	14.1% (431)	12.2% (378)	38.4% (1204)
	11.2% (4)	1.0% (1)	1.2% (1)	13.4% (6)
Emerging	, ,	, ,	, ,	
	0.0% (1)	0.0% (1)	0.0% (1)	0.0% (3)
	41.2% (19)	48.5% (26)	10.3% (8)	100.0% (53)
Total				
	29.7% (812)	37.7% (943)	32.6% (798)	100.0% (2553)
	Value	Core	Growth	Total

# **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



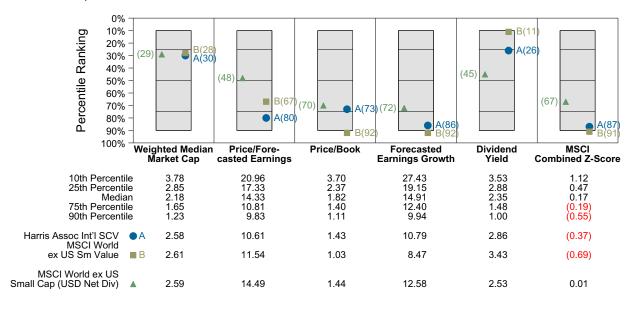


# Harris Assoc Int'l SCV **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

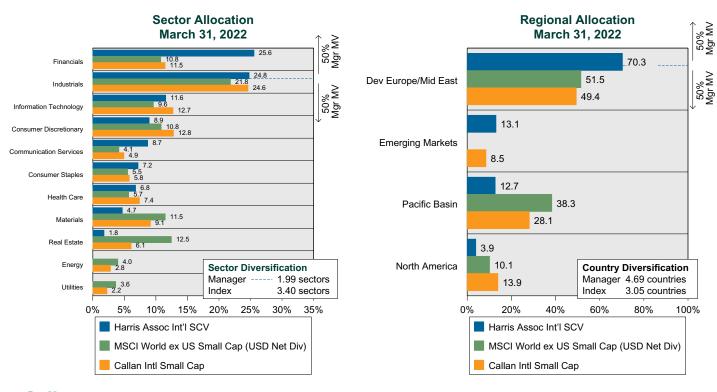
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan International Small Cap as of March 31, 2022



#### **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.

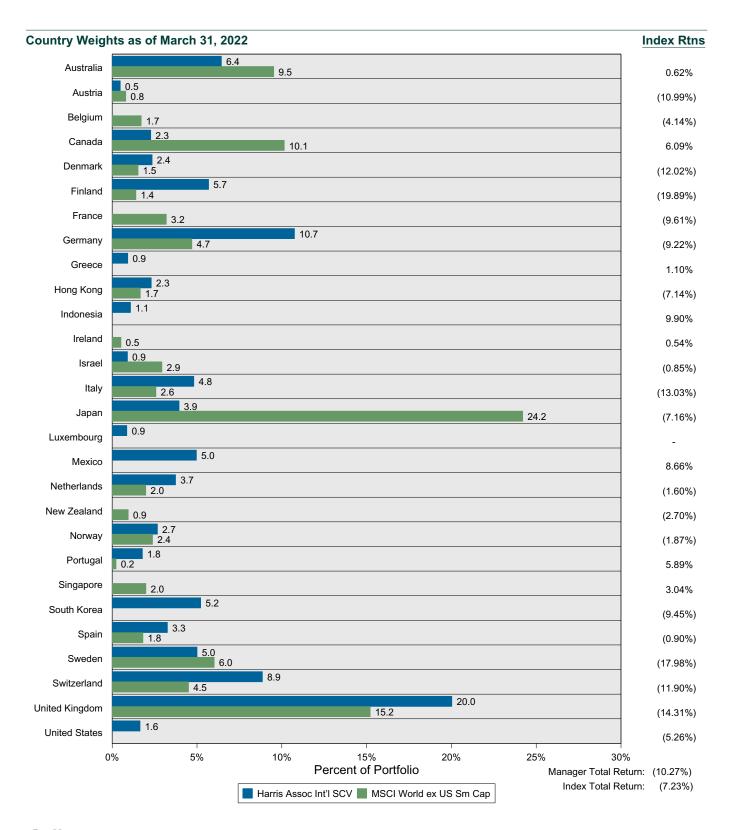




# **Country Allocation** Harris Assoc Int'l SCV VS MSCI World ex US Small Cap (USD Net Div)

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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.



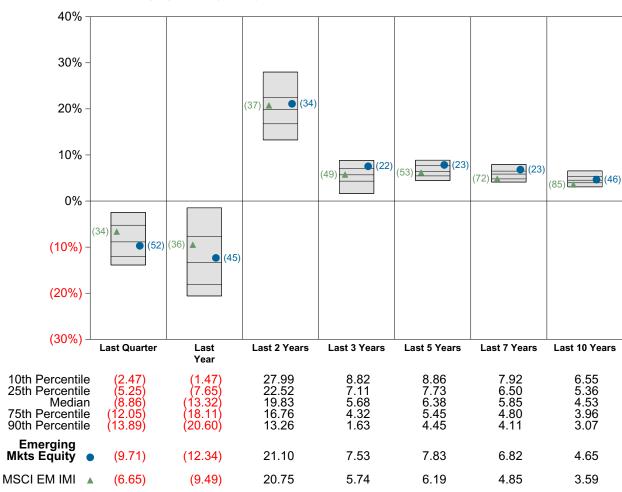


# **Emerging Mkts Equity** Period Ended March 31, 2022

### **Quarterly Summary and Highlights**

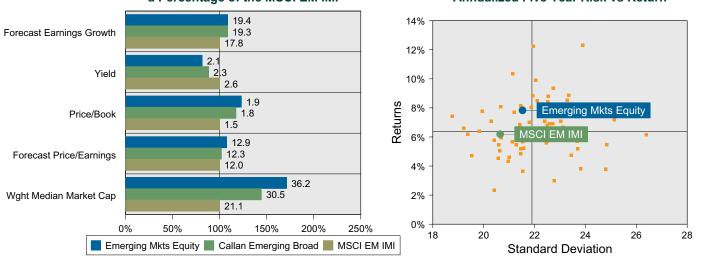
- Emerging Mkts Equity's portfolio posted a (9.71)% return for the quarter placing it in the 52 percentile of the Callan Emerging Broad group for the quarter and in the 45 percentile for the last year.
- Emerging Mkts Equity's portfolio underperformed the MSCI EM IMI by 3.06% for the quarter and underperformed the MSCI EM IMI for the year by 2.85%.

# 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



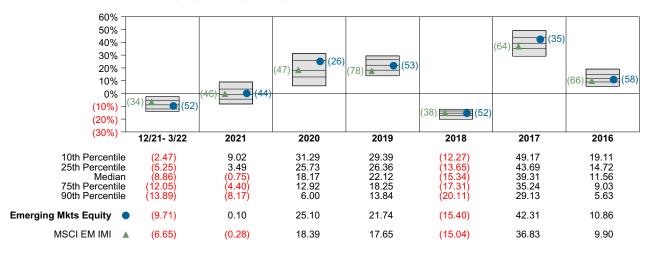


# **Emerging Mkts Equity Return Analysis Summary**

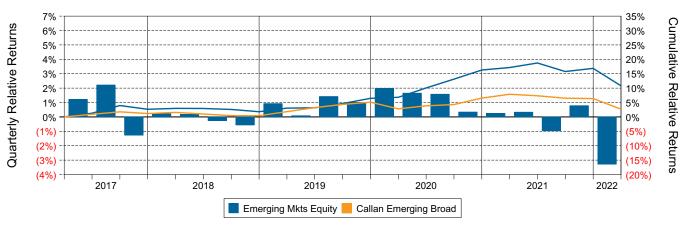
#### **Return Analysis**

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.

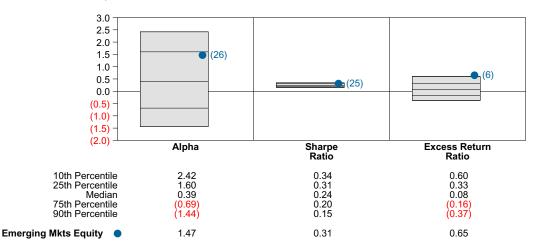
# Performance vs Callan Emerging Broad (Gross)



# **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 March 31, 2022



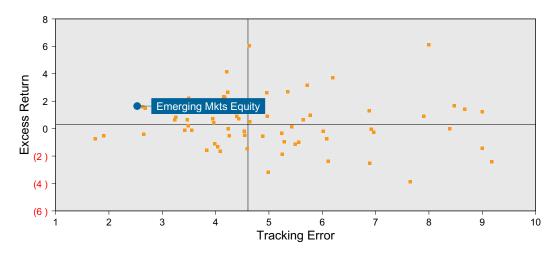


# **Emerging Mkts Equity Risk Analysis Summary**

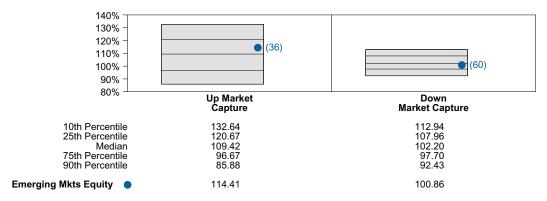
#### Risk Analysis

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.

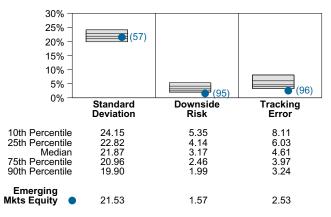
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended March 31, 2022

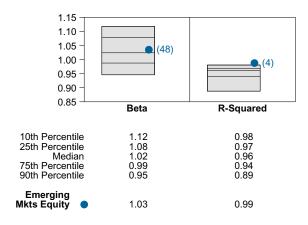


Market Capture vs MSCI EM IMI Index (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM IMI Index (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



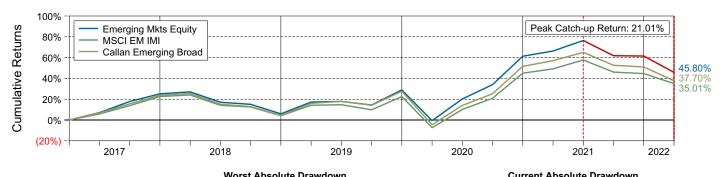




# **Emerging Mkts Equity** Drawdown Analysis for Five Years Ended March 31, 2022

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**

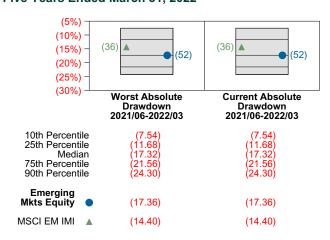


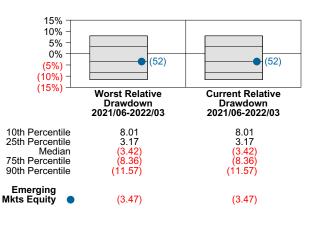
	Worst Absolute Drawdown			Current Absolute Drawdown						
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Emerging Mkts Equity Recovery from Trough	(17.36)%	0.75	2021/06-2022/03	(14.40)%	(16.57)%	(17.36)%	0.75	2021/06-2022/03	(14.40)%	(16.57)%
MSCI EM IMI Callan Emerging Broad	(25.37)% (16.80)%	2.00 0.75	2018/03-2020/03 2018/03-2018/12			(14.40)% (16.57)%	0.75 0.75	2021/06-2022/03 2021/06-2022/03		

#### Relative Cumulative Drawdown Analysis vs. MSCI EM IMI **Cumulative Relative Returns** 14% Peak Catch-up Rel Rtn: 3.59% **Emerging Mkts Equity** 12% Callan Emerging Broad 10% 7.99% 8% 6% 1.99% 2% 0% 2017 2018 2019 2020 2021 2022

	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Emerging Mkts Equity	(3.47)%	0.75	2021/06-2022/03	(2.54)%	(3.47)%	0.75	2021/06-2022/03	(2.54)%
Recovery from Trough	-	-	-	-	-	-	-	-
Callan Emerging Broad	(3.12)%	1.00	2021/03-2022/03		(3.12)%	1.00	2021/03-2022/03	

Drawdown Rankings vs. MSCI EM IMI Rankings against Callan Emerging Broad Five Years Ended March 31, 2022



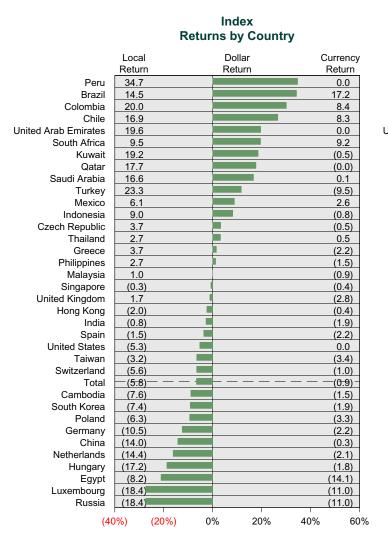




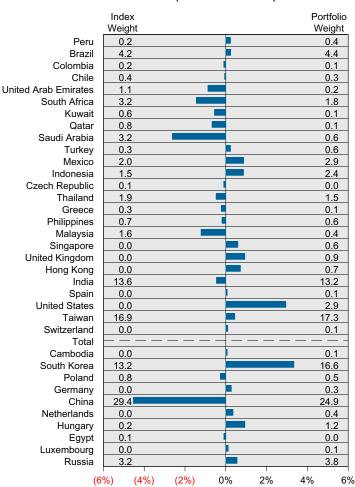
# **Emerging Mkts Equity vs MSCI EM IMI** Attribution for Quarter Ended March 31, 2022

#### International Attribution

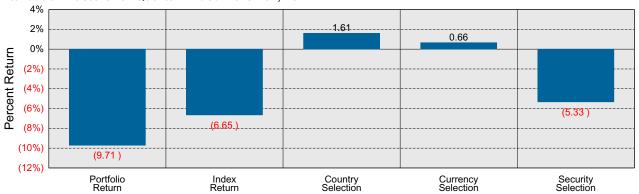
The first chart below illustrates the return for each country in the index sorted from high to low. The total return for the index is highlighted with a dotted line. The second chart (countries presented in the same order) illustrates the manager's country allocation decisions relative to the index. 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)









# **Current Holdings Based Style Analysis Emerging Mkts Equity** As of March 31, 2022

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.

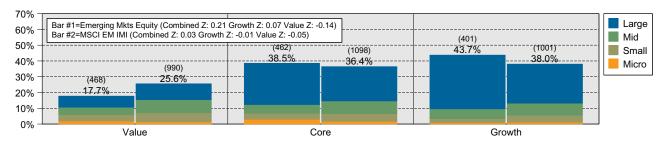
# Style Map vs Callan Emerging Broad Holdings as of March 31, 2022



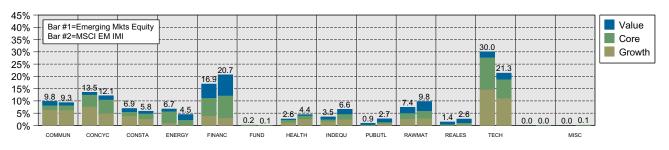
# **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	25.6% (990)	36.4% (1098)	38.0% (1001)	100.0% (3089)
Total				
	17.7% (468)	38.5% (462)	43.7% (401)	100.0% (1331)
	1.4% (326)	1.7% (362)	1.1% (266)	4.2% (954)
Micro				
	1.9% (44)	2.9% (38)	0.9% (24)	5.7% (106)
	5.7% (393)	5.0% (421)	4.4% (373)	15.1% (1187)
Small				
	4.0% (173)	3.9% (146)	2.5% (101)	10.4% (420)
	8.4% (189)	7.9% (232)	7.7% (251)	24.0% (672)
Mid				
	4.7% (175)	5.5% (190)	6.2% (170)	16.4% (535)
	10.1% (82)	21.8% (83)	24.8% (111)	56.7% (276)
Large		(3.7)		,
	7.1% (76)	26.2% (88)	34.1% (106)	67.5% (270)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



### **Sector Weights Distribution** Holdings as of March 31, 2022

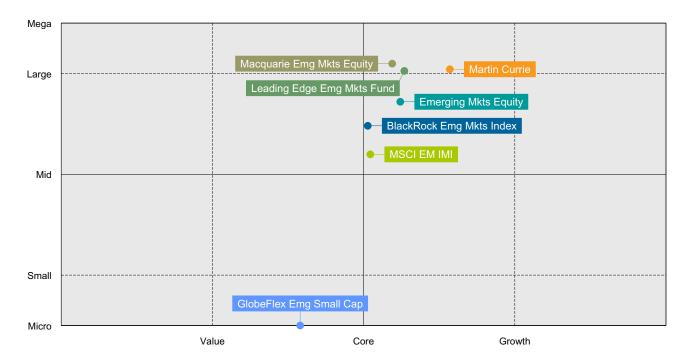




# **International Holdings Based Style Analysis** For One Quarter Ended March 31, 2022

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

Style Map Holdings for One Quarter Ended March 31, 2022



	Weight %	Wtd Median Mkt Cap	Combined Z-Score	Growth Z-Score	Value Z-Score	Number of Securities I	Security Diversification
BlackRock Emg Mkts Index	14.56%	29.30	0.02	(0.01)	(0.03)	1423	79.54
Leading Edge Emg Mkts Fund	18.16%	52.48	0.24	0.07	(0.17)	226	13.15
Macquarie Emg Mkts Equity	27.25%	75.40	0.16	0.06	(0.10)	85	6.92
Martin Currie	29.66%	57.72	0.51	0.11	(0.39)	50	12.78
GlobeFlex Emg Small Cap	10.37%	0.50	(0.36)	0.07	0.44	130	18.73
Emerging Mkts Equity	100.00%	36.17	0.21	0.07	(0.14)	1676	32.48
MSCI EM IMI	-	21.13	0.03	(0.01)	(0.05)	3159	120.94

<sup>\*3/31/22</sup> portfolio characteristics generated using most recently available holdings (3/31/22) modified based on a "buy-and-hold" assumption (repriced and adjusted for corporate actions). Analysis is then done using current market and company financial data.

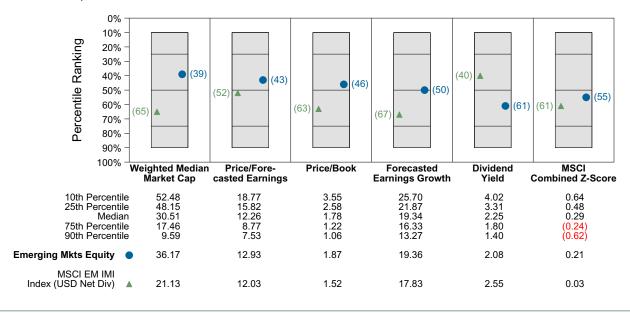


# **Emerging Mkts Equity Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

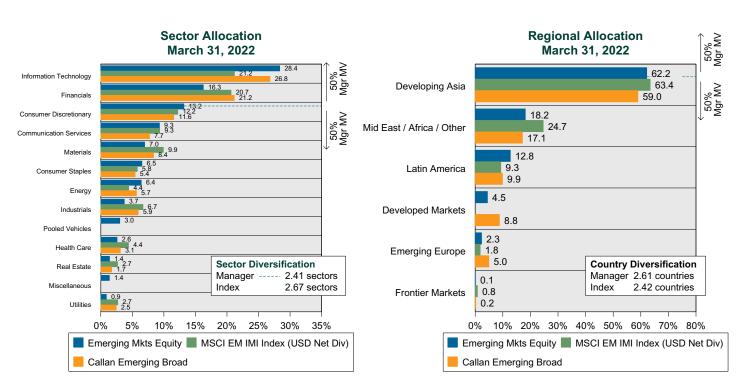
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2022



#### **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.

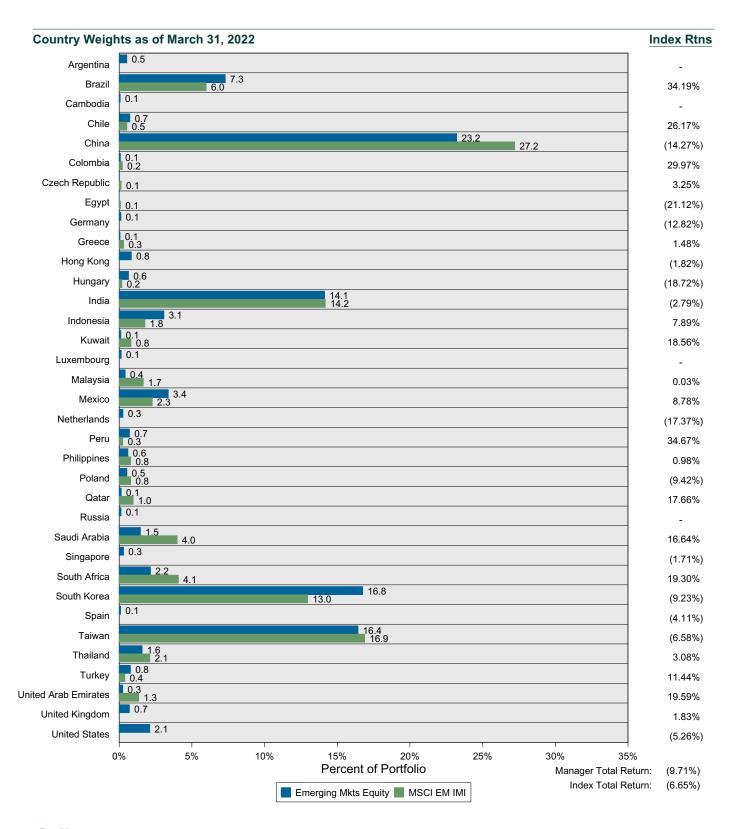




# **Country Allocation Emerging Mkts Equity VS MSCI EM IMI Index (USD Net Div)**

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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.





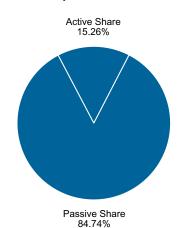
# **Emerging Mkts Equity** Active Share Analysis as of March 31, 2022 vs. MSCI EM IMI Index (USD Net Div)

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 46.60% Non-Index Active Share 8.82% Passive Share 44.59%

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

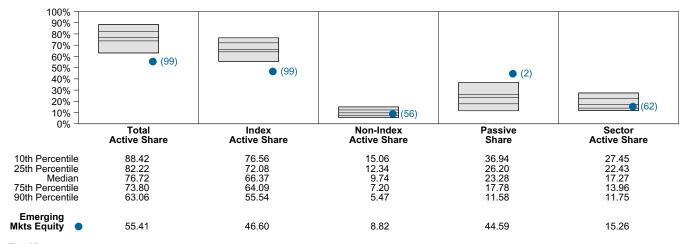


Total Active Share: 55.41%

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
48.68%	4.26%	52.95%	9.35%	9.31%	4.93%
41.21%	12.65%	53.86%	12.22%	13.18%	6.69%
59.99%	3.14%	63.13%	5.79%	6.53%	3.90%
39.95%	3.79%	43.74%	4.43%	6.42%	1.93%
48.22%	10.85%	59.07%	20.65%	16.26%	11.06%
65.35%	6.34%	71.69%	4.40%	2.58%	2.63%
59.48%	10.60%	70.08%	6.69%	3.73%	3.75%
38.10%	2.72%	40.82%	21.19%	28.37%	10.09%
51.17%	10.69%	61.86%	9.93%	6.96%	5.51%
50.00%	50.44%	100.44%	-	1.37%	0.70%
0.00%	100.00%	100.00%	-	3.02%	1.51%
54.41%	13.77%	68.18%	2.66%	1.40%	1.40%
48.11%	8.91%	57.02%	2.69%	0.88%	1.31%
46.60%	8.82%	55.41%	100.00%	100.00%	55.41%

# Active Share vs. Callan Emerging Broad





# BlackRock Emg Mkts Index Period Ended March 31, 2022

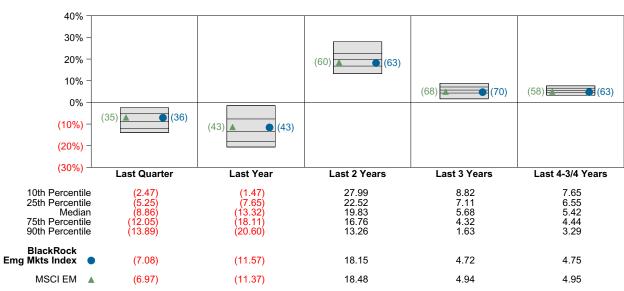
#### **Investment Philosophy**

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**

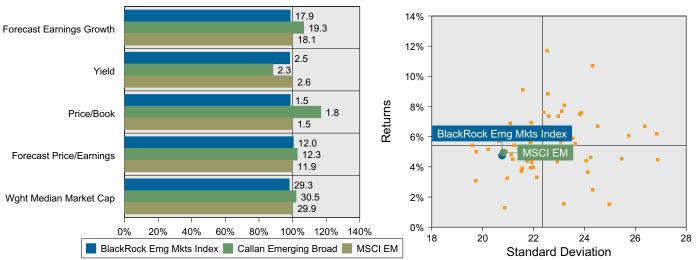
- BlackRock Emg Mkts Index's portfolio posted a (7.08)% return for the quarter placing it in the 36 percentile of the Callan Emerging Broad group for the quarter and in the 43 percentile for the last year.
- BlackRock Emg Mkts Index's portfolio underperformed the MSCI EM by 0.10% for the quarter and underperformed the MSCI EM for the year by 0.20%.

## Performance vs Callan Emerging Broad (Gross)



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

#### Callan Emerging Broad (Gross) Annualized Four and Three-Quarter Year Risk vs Return



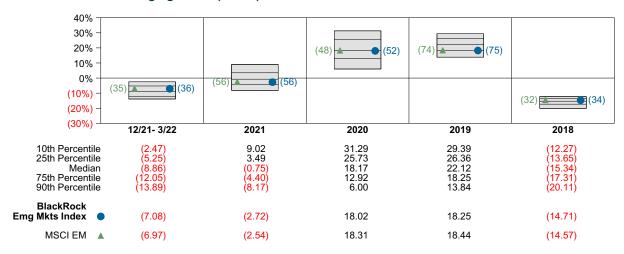


# BlackRock Emg Mkts Index **Return Analysis Summary**

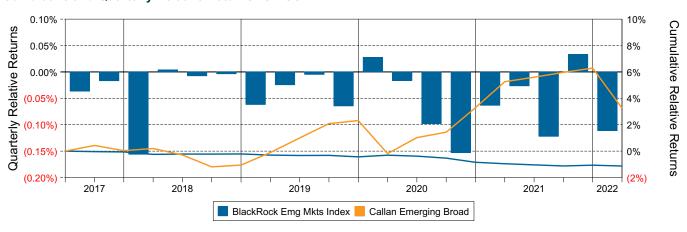
#### **Return Analysis**

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.

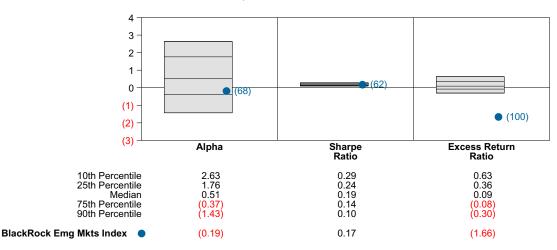
#### Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Four and Three-Quarter Years Ended March 31, 2022



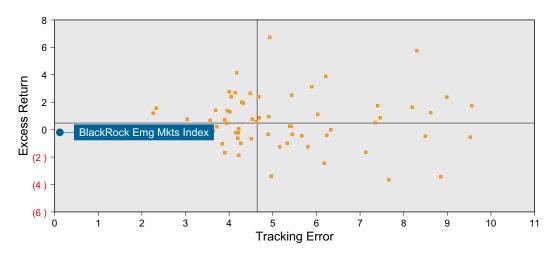


# BlackRock Emg Mkts Index **Risk Analysis Summary**

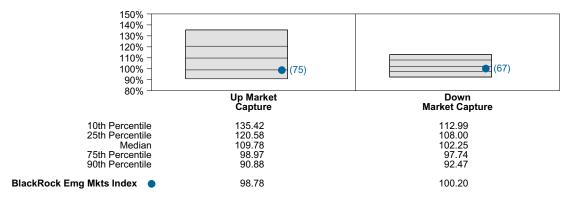
#### Risk Analysis

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.

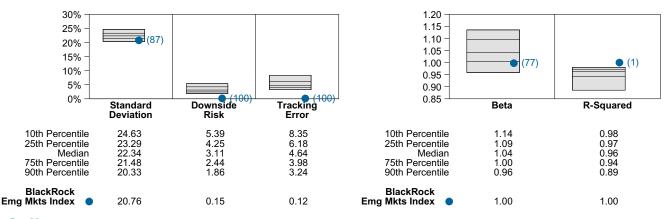
# Risk Analysis vs Callan Emerging Broad (Gross) Four and Three-Quarter Years Ended March 31, 2022



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Four and Three-Quarter Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Four and Three-Quarter Years Ended March 31, 2022

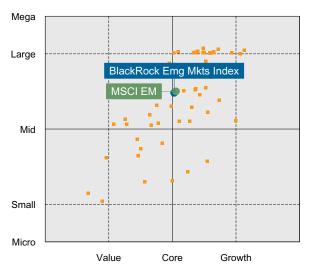




# **Current Holdings Based Style Analysis** BlackRock Emg Mkts Index As of March 31, 2022

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.

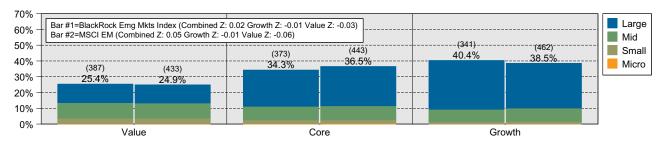
# Style Map vs Callan Emerging Broad Holdings as of March 31, 2022



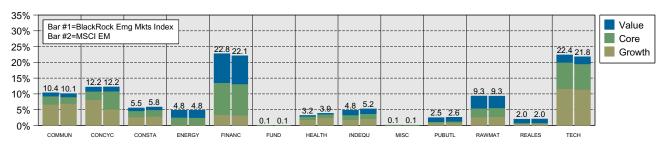
### **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
Total	24.9% (433)	36.5% (443)	38.5% (462)	100.0% (1338)
Tatal	25.4% (387)	34.3% (373)	40.4% (341)	100.0% (1101)
	0.1% (3)	0.3% (2)	0.0% (5)	0.4% (10)
Micro	0.170 (0)	0.070 (4)	0.070 (0)	0.470 (10)
	0.1% (3)	0.3% (4)	0.0% (3)	0.4% (10)
Small	3.6% (161)	2.3% (132)	1.5% (107)	7.5% (400)
	3.6% (146)	2.2% (110)	1.4% (80)	7.2% (336)
	9.5% (187)	8.9% (226)	8.5% (239)	26.9% (652)
Mid	, ,	, ,	, ,	, ,
	9.9% (167)	8.6% (185)	7.9% (166)	26.4% (518)
Large	11.6% (82)	25.0% (83)	28.5% (111)	65.1% (276)
	11.8% (71)	23.1% (74)	31.0% (92)	66.0% (237)
	44.00/ (=1)	00.40/ (= 1)	04.00/ (00)	00 00/ (007)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



### **Sector Weights Distribution** Holdings as of March 31, 2022



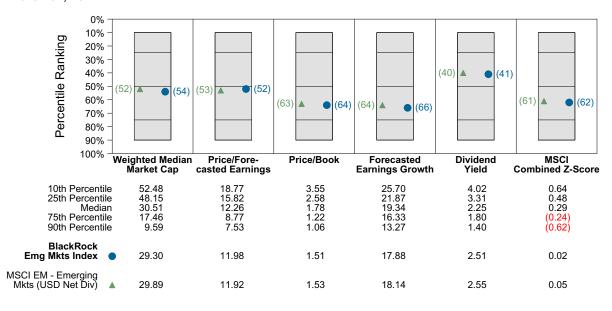


# BlackRock Emg Mkts Index **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

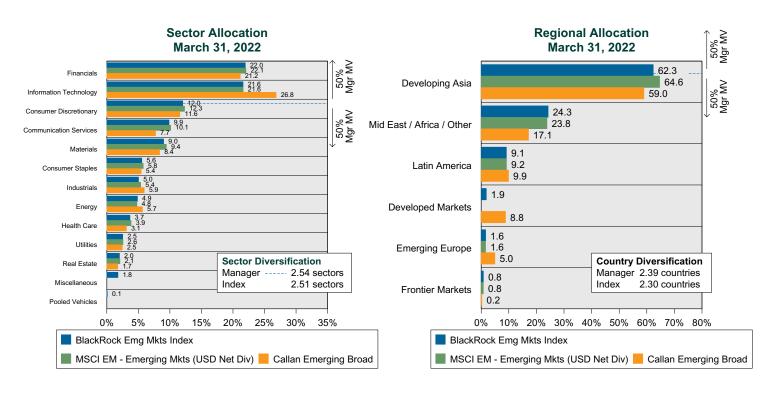
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2022



#### **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.

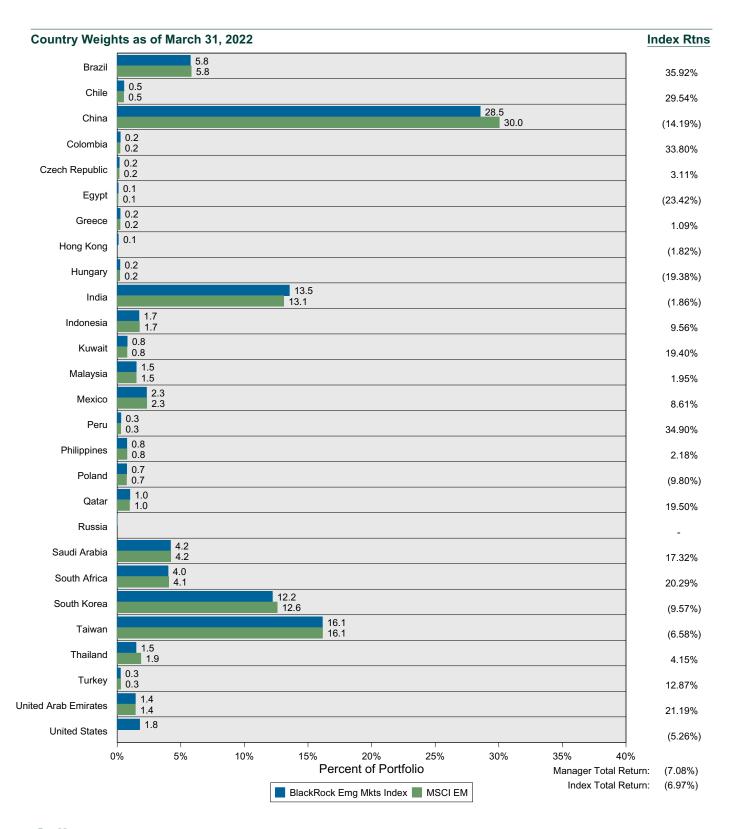




# **Country Allocation** BlackRock Emg Mkts Index VS MSCI EM - Emerging Mkts (USD Net Div)

# **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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 March 31, 2022

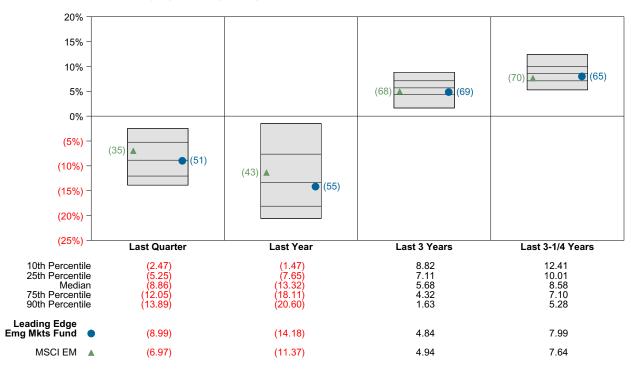
#### **Investment Philosophy**

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

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

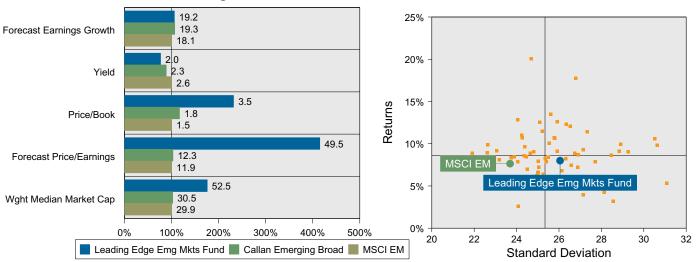
- Leading Edge Emg Mkts Fund's portfolio posted a (8.99)% return for the quarter placing it in the 51 percentile of the Callan Emerging Broad group for the quarter and in the 55 percentile for the last year.
- Leading Edge Emg Mkts Fund's portfolio underperformed the MSCI EM by 2.01% for the quarter and underperformed the MSCI EM for the year by 2.81%.

### Performance vs Callan Emerging Broad (Gross)



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

### **Callan Emerging Broad (Gross)** Annualized Three and One-Quarter Year Risk vs Return



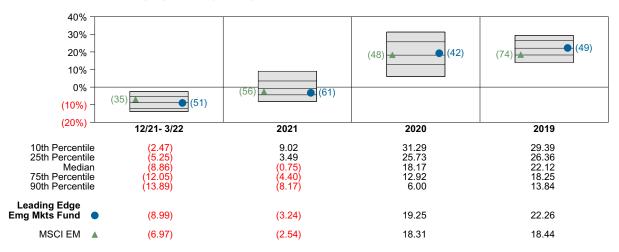


# Leading Edge Emg Mkts Fund **Return Analysis Summary**

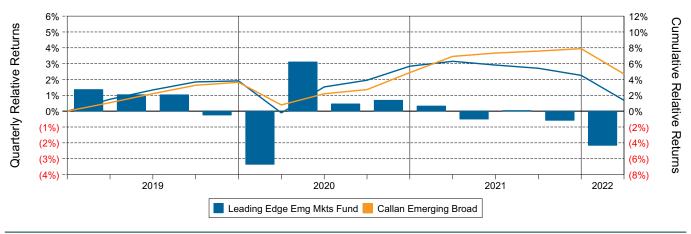
#### **Return Analysis**

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.

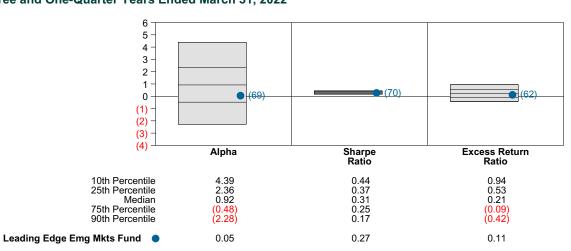
# Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Three and One-Quarter Years Ended March 31, 2022



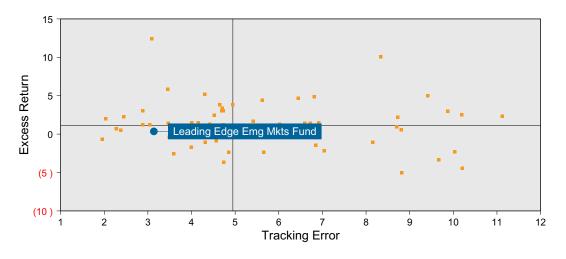


# Leading Edge Emg Mkts Fund **Risk Analysis Summary**

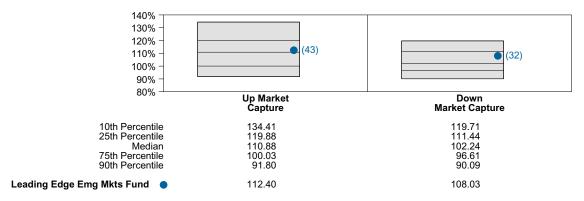
#### Risk Analysis

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.

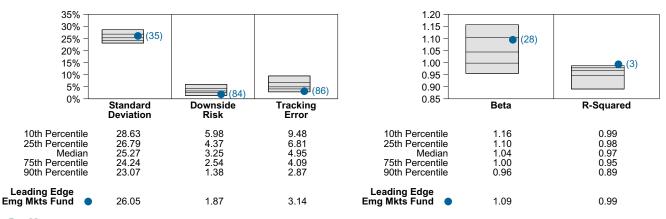
# Risk Analysis vs Callan Emerging Broad (Gross) Three and One-Quarter Years Ended March 31, 2022



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Three and One-Quarter Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Three and One-Quarter Years Ended March 31, 2022

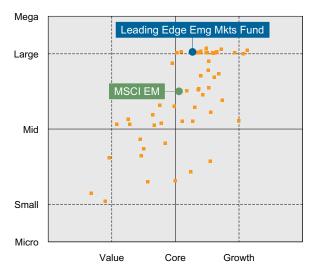




# **Current Holdings Based Style Analysis** Leading Edge Emg Mkts Fund As of March 31, 2022

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.

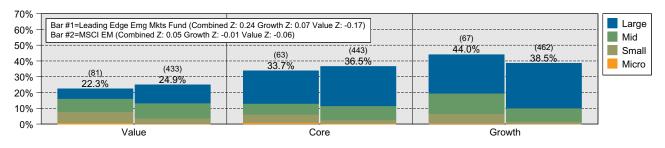
# Style Map vs Callan Emerging Broad Holdings as of March 31, 2022



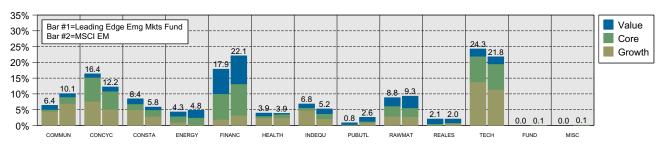
### **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	24.9% (433)	36.5% (443)	38.5% (462)	100.0% (1338)
Total	22.3% (81)	33.7% (63)	44.0% (67)	100.0% (211)
	0.1% (3)	0.3% (2)	0.0% (5)	0.4% (10)
Micro	0.40/	0.00/	0.00/	0.40/
	0.6% (5)	0.9% (2)	0.4% (2)	2.0% (9)
	3.6% (161)	2.3% (132)	1.5% (107)	7.5% (400)
Small	(1.1)	,		(**,
	7.1% (33)	5.3% (22)	6.2% (13)	18.6% (68)
	9.5% (187)	8.9% (226)	8.5% (239)	26.9% (652)
Mid	0.3% (30)	0.9% (16)	12.9% (22)	20.1% (70)
	8.3% (30)	6.9% (18)	12.9% (22)	28.1% (70)
Large	11.6% (82)	25.0% (83)	28.5% (111)	65.1% (276)
	6.2% (13)	20.7% (21)	24.5% (30)	51.4% (64)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



# **Sector Weights Distribution** Holdings as of March 31, 2022



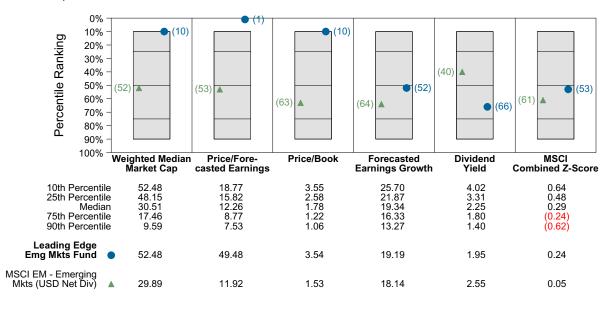


# Leading Edge Emg Mkts Fund **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

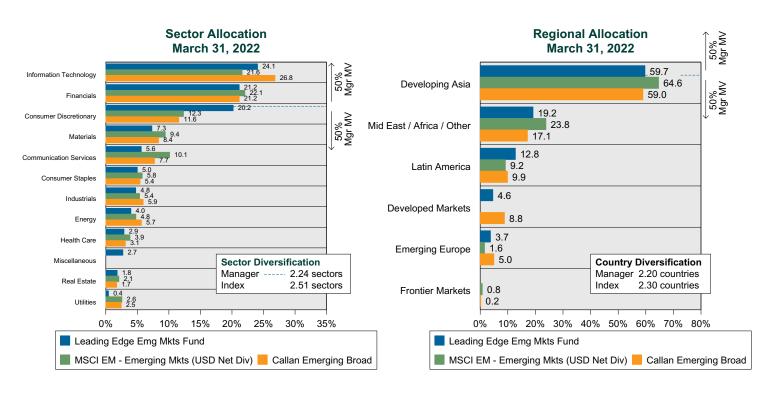
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2022



#### **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.

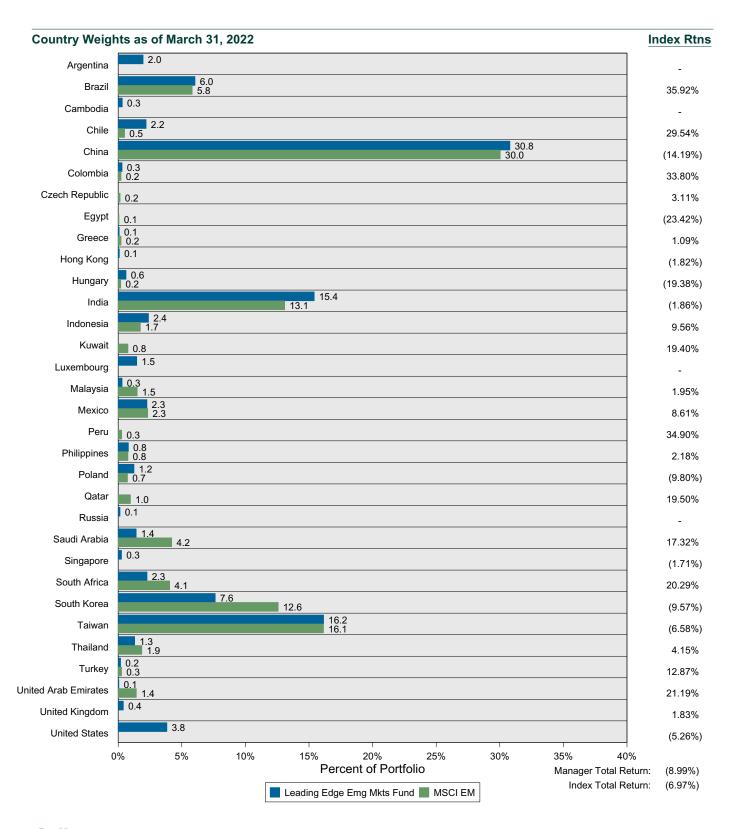




# **Country Allocation** Leading Edge Emg Mkts Fund VS MSCI EM - Emerging Mkts (USD Net Div)

### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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 March 31, 2022

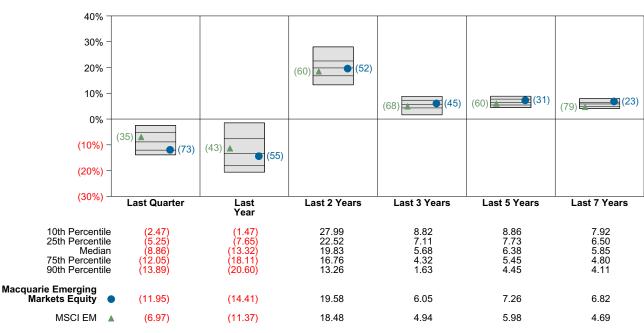
#### **Investment Philosophy**

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.

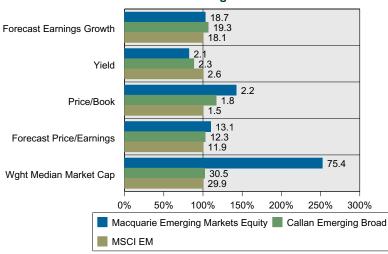
### **Quarterly Summary and Highlights**

- Macquarie Emerging Markets Equity's portfolio posted a (11.95)% return for the quarter placing it in the 73 percentile of the Callan Emerging Broad group for the quarter and in the 55 percentile for the last year.
- Macquarie Emerging Markets Equity's portfolio underperformed the MSCI EM by 4.97% for the guarter and underperformed the MSCI EM for the year by 3.04%.

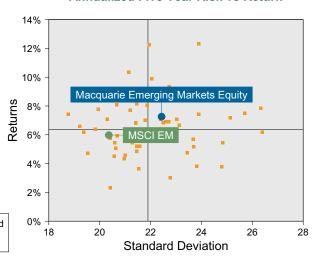
# Performance vs Callan Emerging Broad (Gross)



# Portfolio Characteristics as a Percentage of the MSCI EM



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



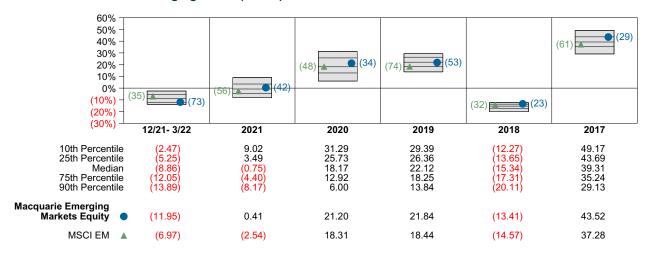


# **Macquarie Emerging Markets Equity Return Analysis Summary**

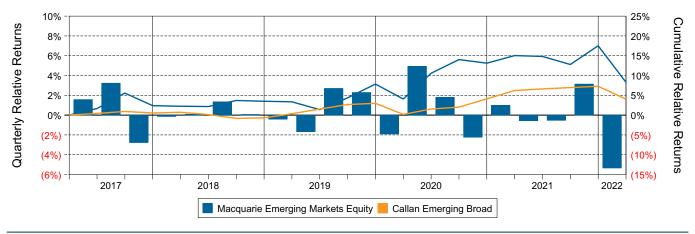
#### **Return Analysis**

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.

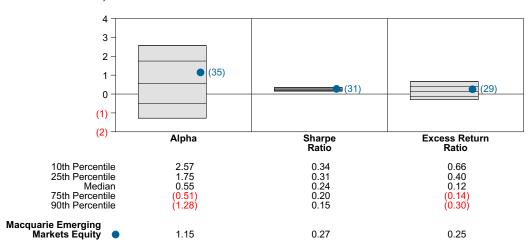
### Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



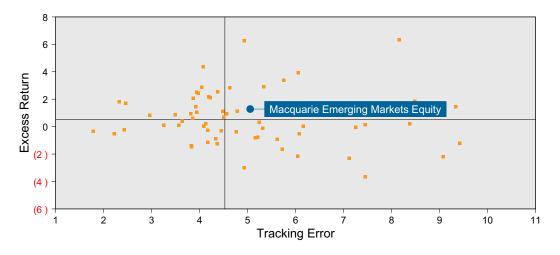


# **Macquarie Emerging Markets Equity Risk Analysis Summary**

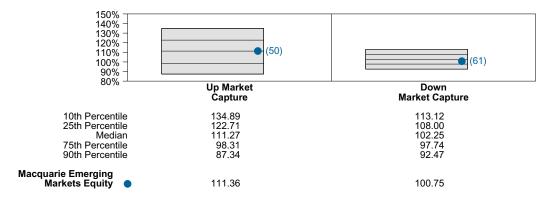
#### Risk Analysis

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.

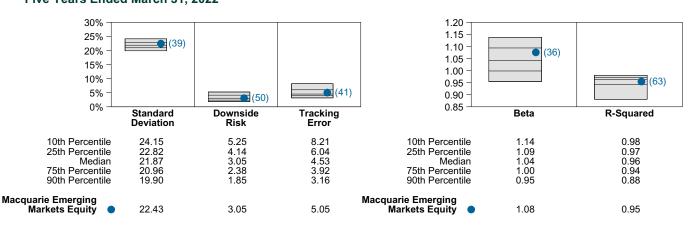
# Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022

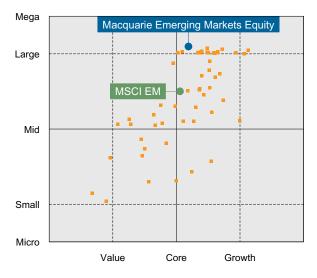




# **Current Holdings Based Style Analysis Macquarie Emerging Markets Equity** As of March 31, 2022

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.

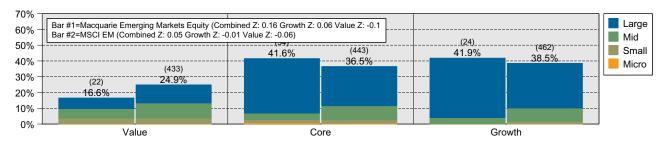
# Style Map vs Callan Emerging Broad Holdings as of March 31, 2022



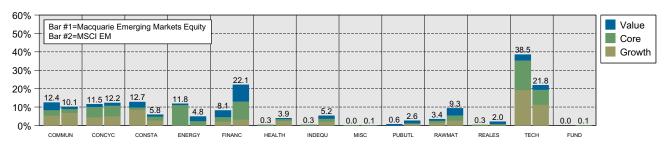
# **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	24.9% (433)	36.5% (443)	38.5% (462)	100.0% (1338)
Total				
	16.6% (22)	41.6% (34)	41.9% (24)	100.0% (80)
	0.1% (3)	0.3% (2)	0.0% (5)	0.4% (10)
Micro				
	0.1% (1)	0.7% (3)	0.1% (4)	0.9% (8)
	3.6% (161)	2.3% (132)	1.5% (107)	7.5% (400)
Small				
	3.5% (6)	2.1% (11)	0.0% (0)	5.5% (17)
	9.5% (187)	8.9% (226)	8.5% (239)	26.9% (652)
Mid				
	6.2% (8)	4.2% (5)	3.9% (6)	14.2% (19)
	11.6% (82)	25.0% (83)	28.5% (111)	65.1% (276)
Large	( )	, ,	,	(1.17
	6.8% (7)	34.6% (15)	37.8% (14)	79.3% (36)

## **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



### **Sector Weights Distribution** Holdings as of March 31, 2022



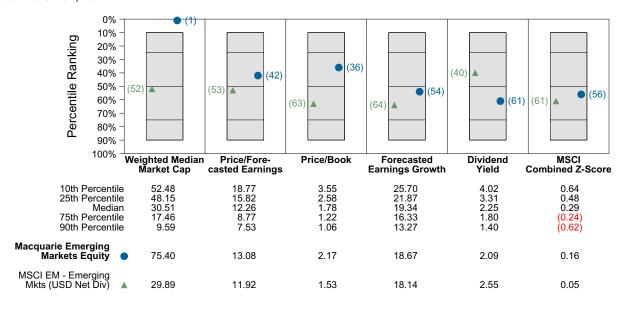


# **Macquarie Emerging Markets Equity Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

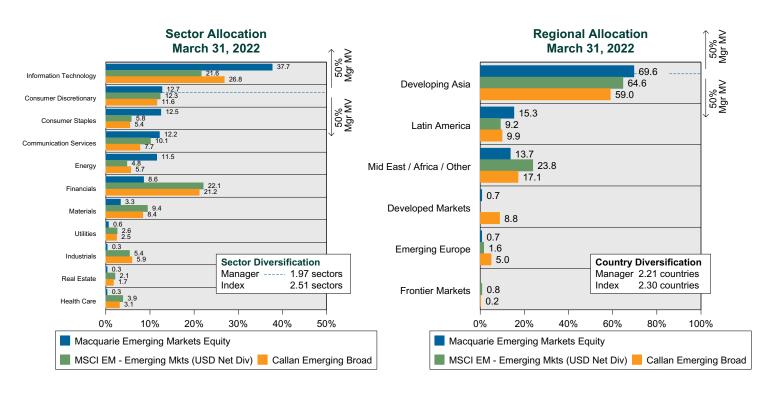
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

# **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2022



#### **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.

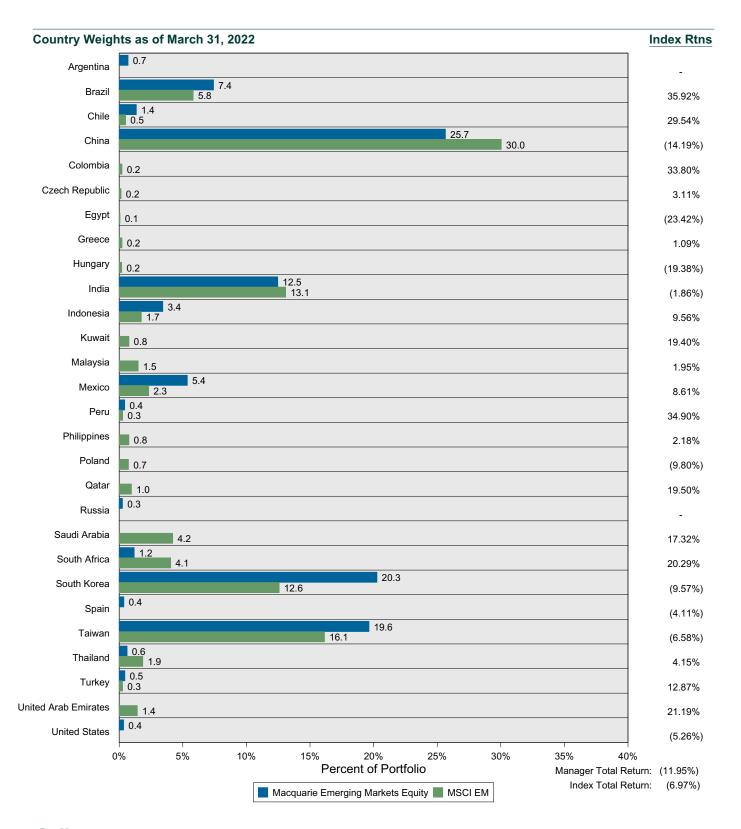




# **Country Allocation** Macquarie Emerging Markets Equity VS MSCI EM - Emerging Mkts (USD Net Div)

# **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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 March 31, 2022

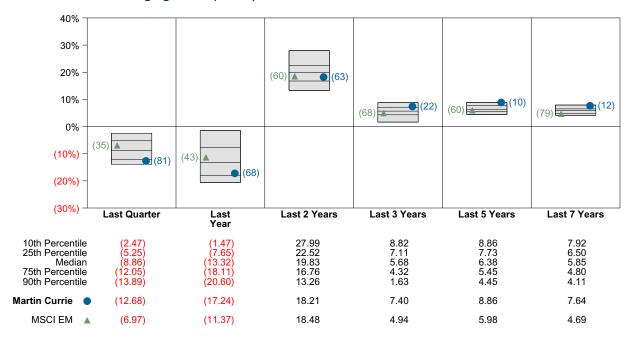
#### **Investment Philosophy**

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.

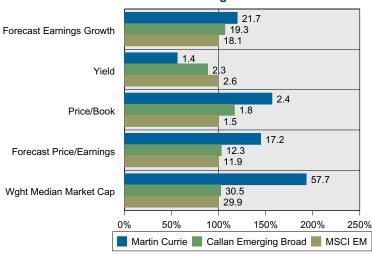
#### **Quarterly Summary and Highlights**

- Martin Currie's portfolio posted a (12.68)% return for the quarter placing it in the 81 percentile of the Callan Emerging Broad group for the quarter and in the 68 percentile for the last year.
- Martin Currie's portfolio underperformed the MSCI EM by 5.70% for the quarter and underperformed the MSCI EM for the year by 5.88%.

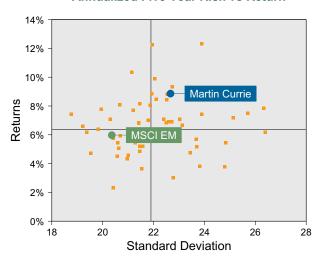
#### Performance vs Callan Emerging Broad (Gross)



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



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



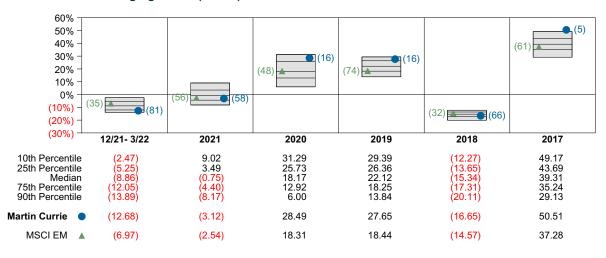


## **Martin Currie Return Analysis Summary**

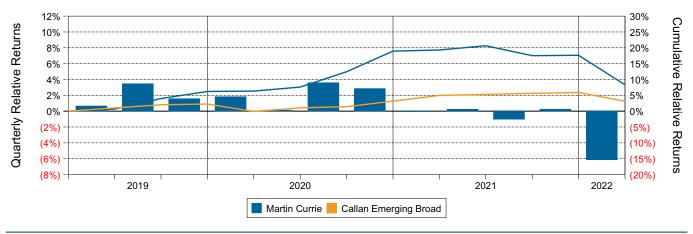
#### **Return Analysis**

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.

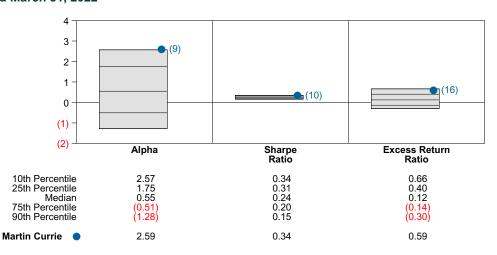
#### Performance vs Callan Emerging Broad (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



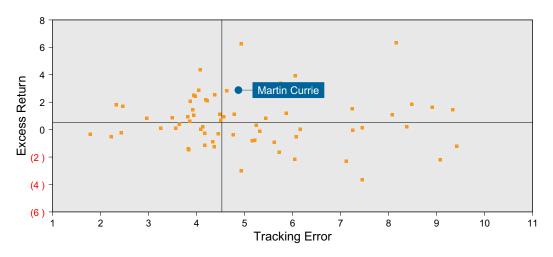


## **Martin Currie Risk Analysis Summary**

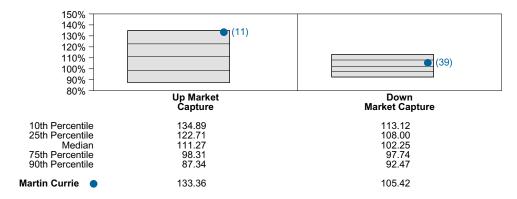
#### Risk Analysis

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.

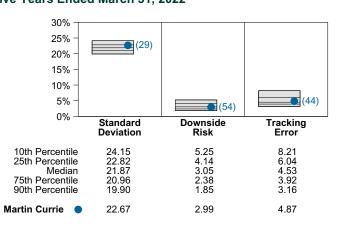
## Risk Analysis vs Callan Emerging Broad (Gross) Five Years Ended March 31, 2022

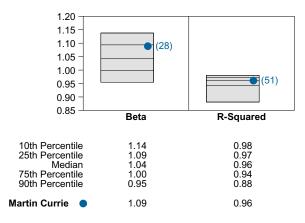


Market Capture vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM - Emerging Mkts (USD Net Div) Rankings Against Callan Emerging Broad (Gross) Five Years Ended March 31, 2022







## **Current Holdings Based Style Analysis Martin Currie** As of March 31, 2022

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.

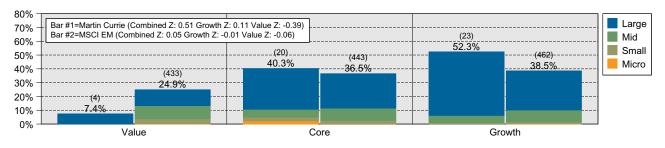
## Style Map vs Callan Emerging Broad Holdings as of March 31, 2022



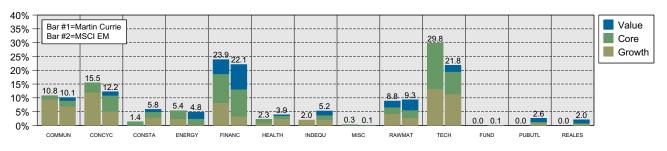
## **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	24.9% (433)	36.5% (443)	38.5% (462)	100.0% (1338)
Total				
	7.4% (4)	40.3% (20)	52.3% (23)	100.0% (47)
	0.1% (3)	0.3% (2)	0.0% (5)	0.4% (10)
Micro				
	0.0% (0)	2.2% (1)	0.0% (0)	2.2% (1)
	3.6% (161)	2.3% (132)	1.5% (107)	7.5% (400)
Small	, ,		, ,	. , ,
	0.0% (0)	2.7% (3)	0.8% (1)	3.5% (4)
	9.5% (187)	8.9% (226)	8.5% (239)	26.9% (652)
Mid	, ,		, ,	, ,
	0.0% (0)	5.7% (5)	5.3% (3)	11.0% (8)
_	11.6% (82)	25.0% (83)	28.5% (111)	65.1% (276)
Large	(1)		(15)	(0.1)
	7.4% (4)	29.7% (11)	46.2% (19)	83.2% (34)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



## **Sector Weights Distribution** Holdings as of March 31, 2022



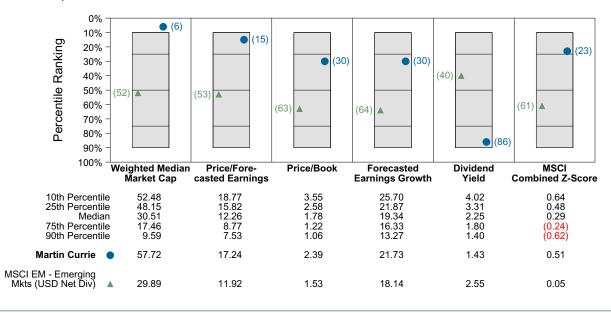


## **Martin Currie Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

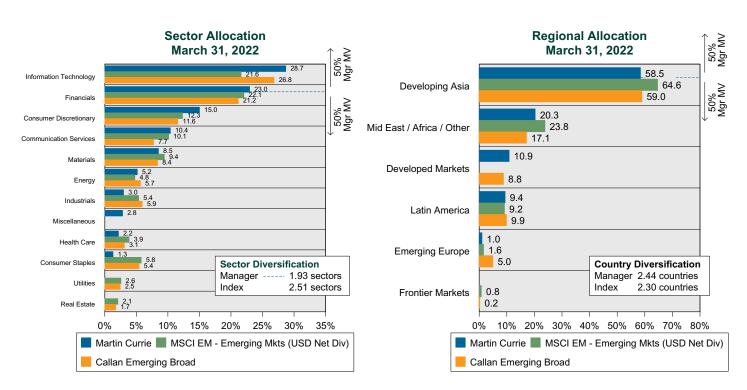
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Broad as of March 31, 2022



#### **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.

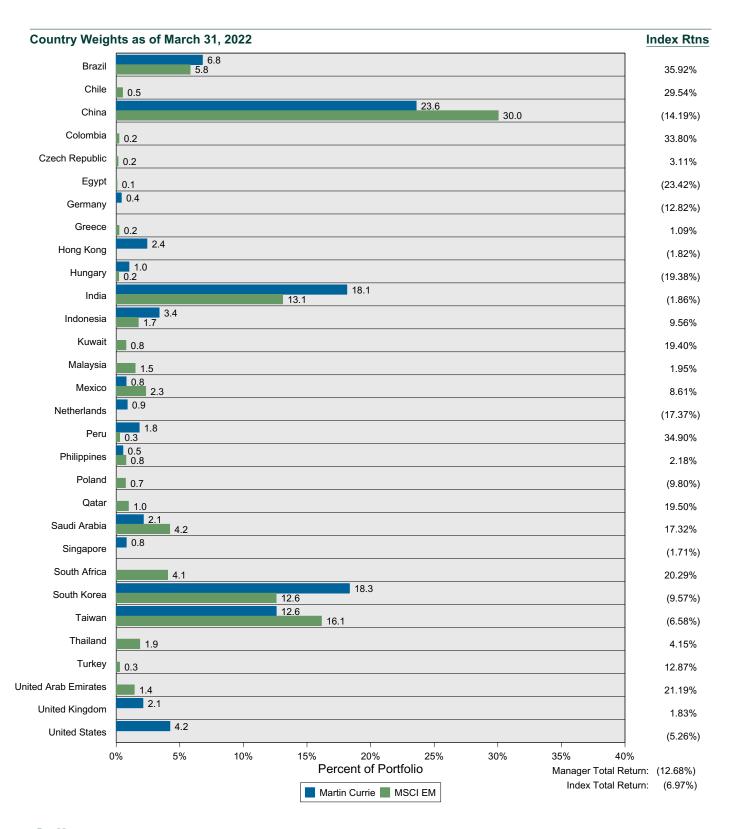




# **Country Allocation** Martin Currie VS MSCI EM - Emerging Mkts (USD Net Div)

#### **Country Allocation**

The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. 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.





## **GlobeFlex Emerging Small Cap** Period Ended March 31, 2022

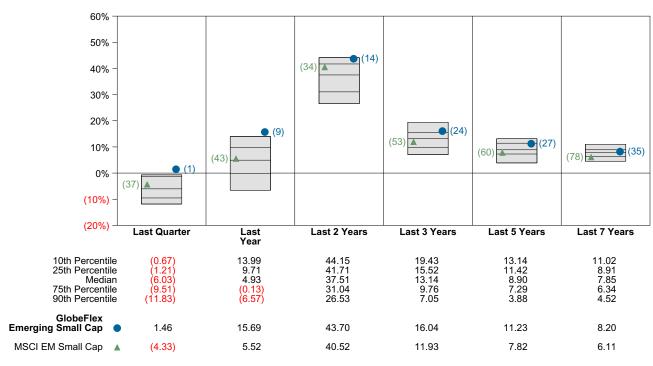
#### **Investment Philosophy**

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

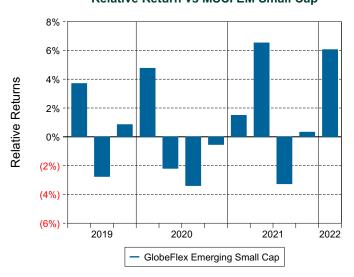
#### **Quarterly Summary and Highlights**

- GlobeFlex Emerging Small Cap's portfolio posted a 1.46% return for the quarter placing it in the 1 percentile of the Callan Emerging Small group for the quarter and in the 9 percentile for the last year.
- GlobeFlex Emerging Small Cap's portfolio outperformed the MSCI EM Small Cap by 5.79% for the quarter and outperformed the MSCI EM Small Cap for the year by 10.17%.

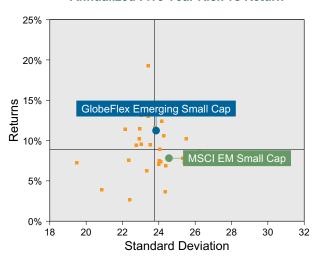
#### Performance vs Callan Emerging Small (Gross)



# Relative Return vs MSCI EM Small Cap



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

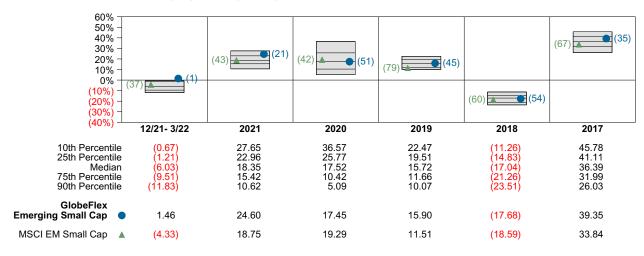


# **GlobeFlex Emerging Small Cap Return Analysis Summary**

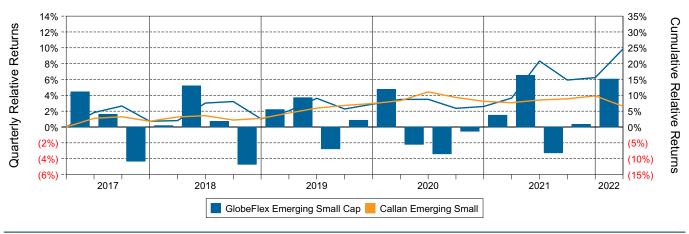
#### **Return Analysis**

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.

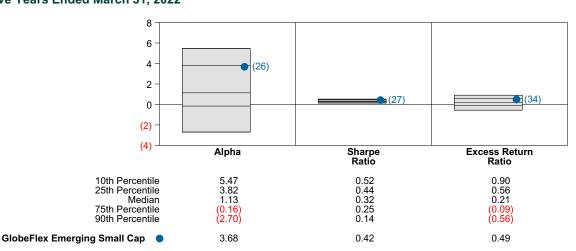
## Performance vs Callan Emerging Small (Gross)



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



Risk Adjusted Return Measures vs MSCI EM Small Cap Rankings Against Callan Emerging Small (Gross) Five Years Ended March 31, 2022



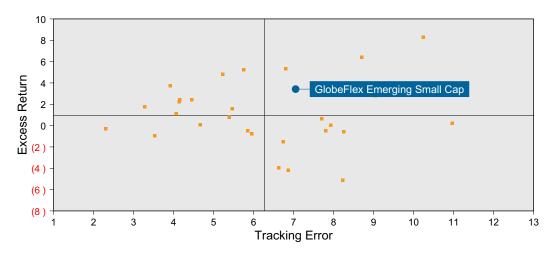


# **GlobeFlex Emerging Small Cap Risk Analysis Summary**

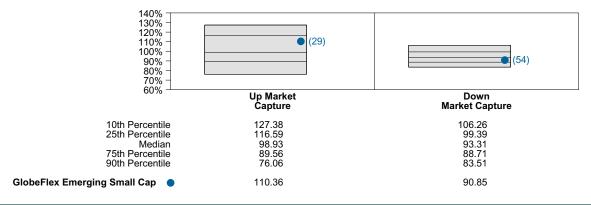
#### Risk Analysis

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.

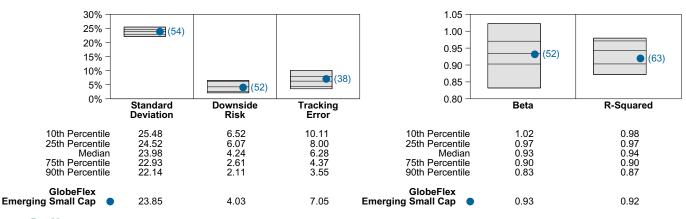
### Risk Analysis vs Callan Emerging Small (Gross) Five Years Ended March 31, 2022



Market Capture vs MSCI EM Small Cap Index (USD Net Div) Rankings Against Callan Emerging Small (Gross) Five Years Ended March 31, 2022



Risk Statistics Rankings vs MSCI EM Small Cap Index (USD Net Div) Rankings Against Callan Emerging Small (Gross) Five Years Ended March 31, 2022

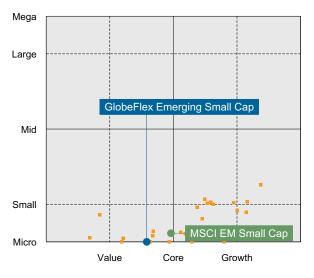




# **Current Holdings Based Style Analysis GlobeFlex Emerging Small Cap** As of March 31, 2022

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

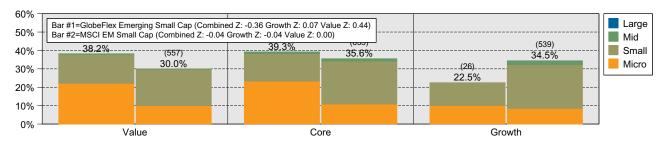
## Style Map vs Callan Emerging Small Holdings as of March 31, 2022



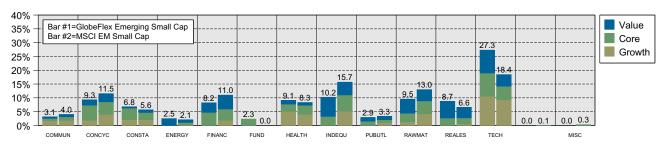
## **Style Exposure Matrix** Holdings as of March 31, 2022

	Value	Core	Growth	Total
	30.0% (557)	35.6% (655)	34.5% (539)	100.0% (1751)
Total				
	38.2% (51)	39.3% (47)	22.5% (26)	100.0% (124)
	10.0% (323)	10.8% (360)	8.4% (261)	29.2% (944)
Micro				
	22.1% (35)	23.2% (30)	10.0% (15)	55.3% (80)
	19.7% (232)	23.3% (289)	23.7% (266)	66.8% (787)
Small				
	15.7% (15)	14.9% (16)	12.5% (11)	43.1% (42)
	0.3% (2)	1.4% (6)	2.3% (12)	4.0% (20)
Mid				
	0.4% (1)	1.1% (1)	0.0% (0)	1.5% (2)
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)
Large	. ,	, ,	, ,	, ,
	0.0% (0)	0.0% (0)	0.0% (0)	0.0% (0)

#### **Combined Z-Score Style Distribution** Holdings as of March 31, 2022



#### **Sector Weights Distribution** Holdings as of March 31, 2022





## GlobeFlex Emerging Small Cap **Equity Characteristics Analysis Summary**

#### **Portfolio Characteristics**

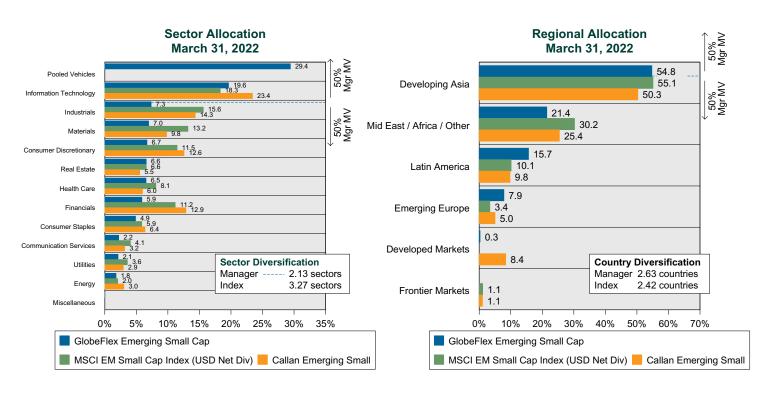
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

## **Portfolio Characteristics Percentile Rankings** Rankings Against Callan Emerging Small as of March 31, 2022



#### **Sector Weights**

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

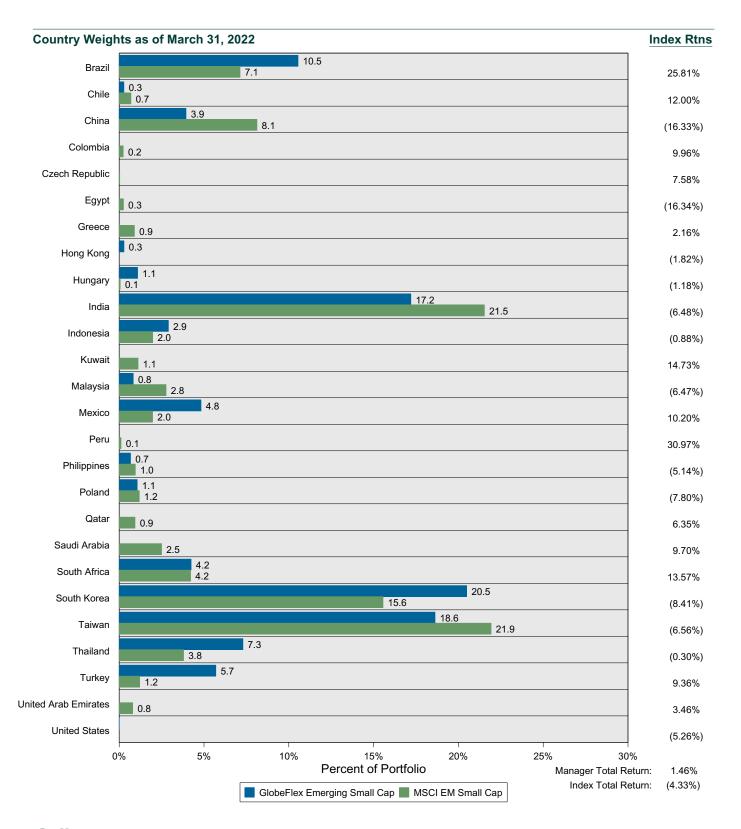




# **Country Allocation** GlobeFlex Emerging Small Cap VS MSCI EM Small Cap Index (USD Net Div)

## **Country Allocation**

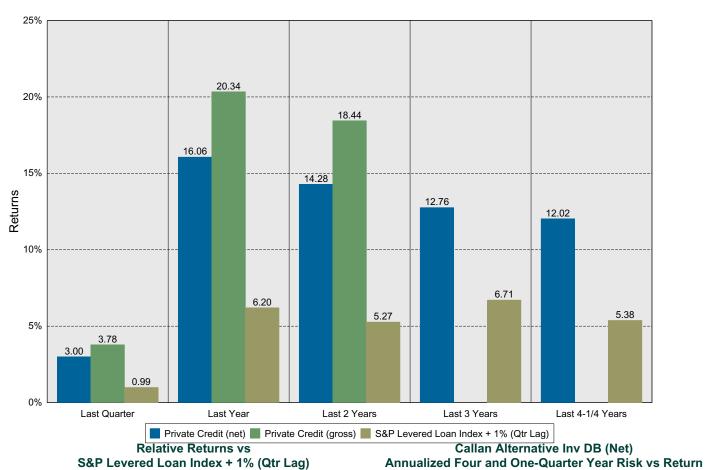
The chart below contrasts the portfolio's country allocation with that of the index as of March 31, 2022. This chart is useful because large deviations in country allocation relative to the index are often good predictors of tracking error in the subsequent guarter. To the extent that the portfolio allocation 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.



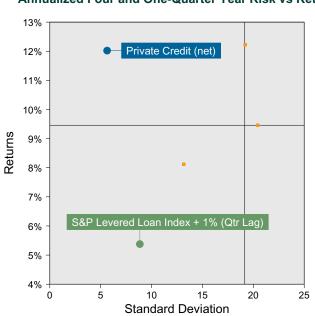


# **Private Credit** Period Ended March 31, 2022

- Private Credit (net)'s portfolio posted a 3.00% return for the quarter placing it in the 78 percentile of the Callan Alternative Inv DB group for the quarter and in the 80 percentile for the last year.
- Private Credit (net)'s portfolio outperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 2.01% for the quarter and outperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 9.86%.

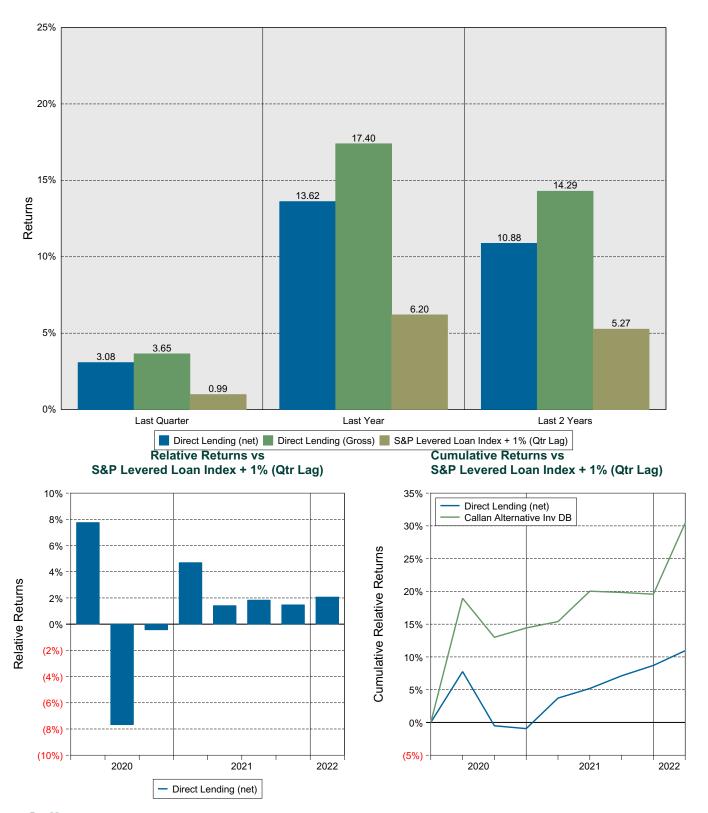


12% 10% 8% Relative Returns 4% 2% 0% (4%)(6%)2018 2019 2020 2021 22 Private Credit (net)



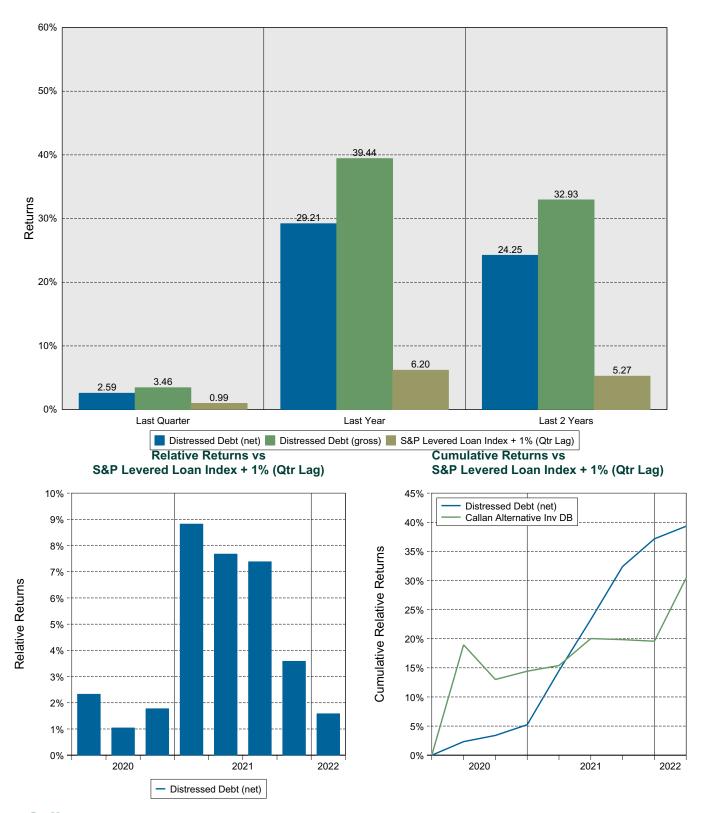
## **Direct Lending** Period Ended March 31, 2022

- Direct Lending (net)'s portfolio posted a 3.08% return for the quarter placing it in the 78 percentile of the Callan Alternative Inv DB group for the quarter and in the 81 percentile for the last year.
- Direct Lending (net)'s portfolio outperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 2.09% for the quarter and outperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 7.41%.



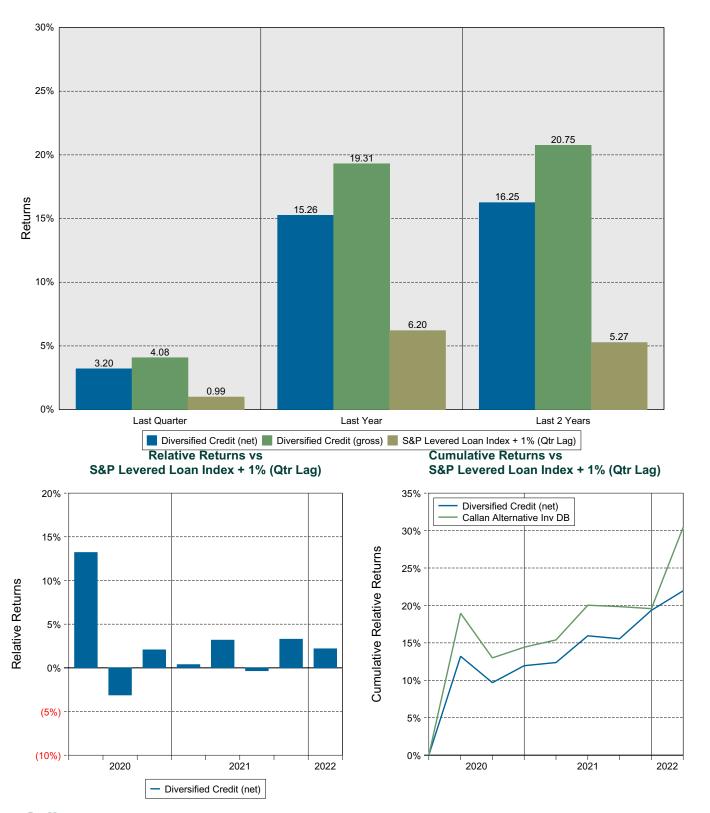
# **Distressed Debt** Period Ended March 31, 2022

- Distressed Debt (net)'s portfolio posted a 2.59% return for the quarter placing it in the 78 percentile of the Callan Alternative Inv DB group for the quarter and in the 66 percentile for the last year.
- Distressed Debt (net)'s portfolio outperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 1.60% for the quarter and outperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 23.01%.



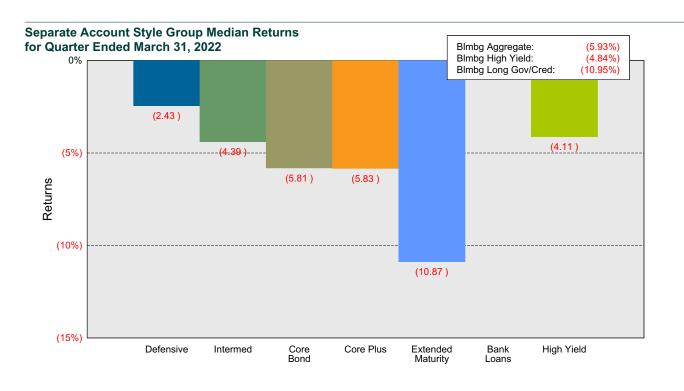
# **Diversified Credit** Period Ended March 31, 2022

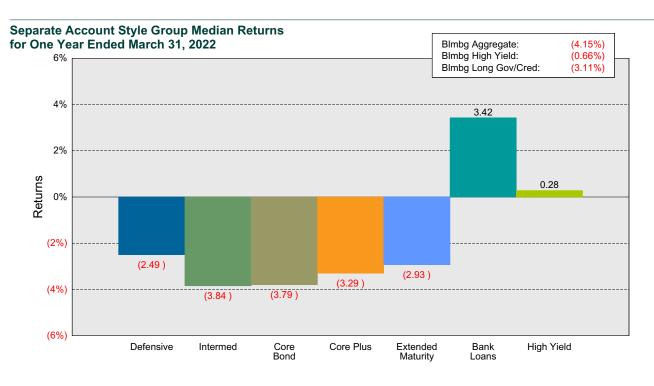
- Diversified Credit (net)'s portfolio posted a 3.20% return for the quarter placing it in the 77 percentile of the Callan Alternative Inv DB group for the quarter and in the 80 percentile for the last year.
- Diversified Credit (net)'s portfolio outperformed the S&P Levered Loan Index + 1% (Qtr Lag) by 2.21% for the quarter and outperformed the S&P Levered Loan Index + 1% (Qtr Lag) for the year by 9.06%.



# **Domestic Fixed Income Active Management Overview**

The Bloomberg US Aggregate Bond Index sank 5.9% over the quarter, the third-worst quarter since the indexs inception in 1976 (the other two being in 1980). Rates rose sharply on worries over inflation and expectations for Fed rate hikes. The 10-year U.S. Treasury closed the quarter at 2.32%, up from 1.52% at year-end. Notably, the yield curve flattened meaningfully and as of quarter-end the relationship between the 5-year yield (2.42%) and the 10-year yield (2.32%) was inverted. Against this backdrop, TIPS (Bloomberg TIPS: -3.0%) did relatively well as inflation expectations rose. High yield corporates (Bloomberg High Yield: -4.8%) outperformed investment grade corporates given less sensitivity to interest rates, and bank loans (S&P LSTA Leveraged Loan: -0.1%) were helped by their floating rate coupons and low duration. ^L

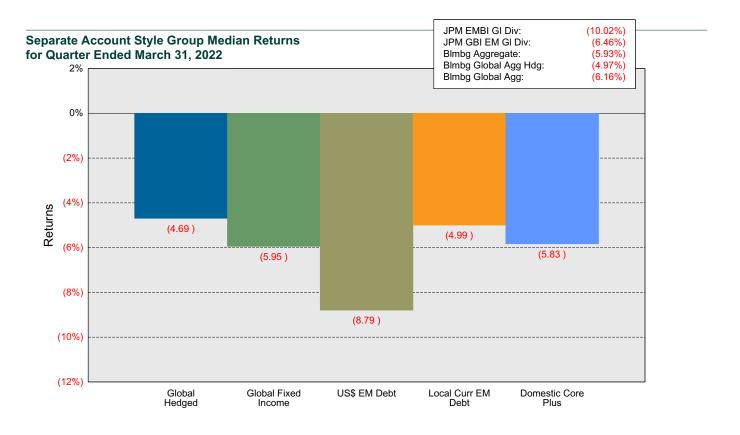


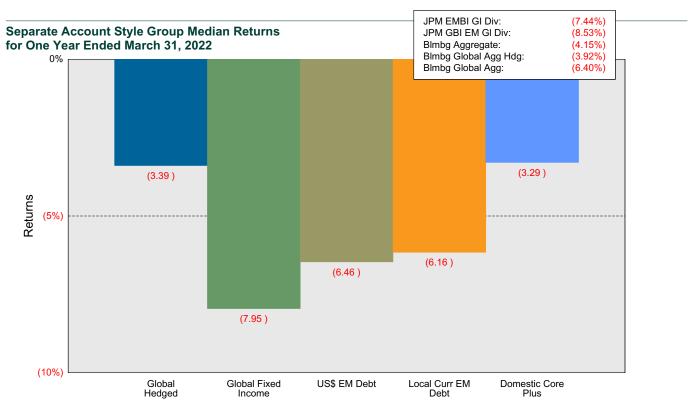




# **Global Fixed Income Active Management Overview**

Rates rose across most developed markets and led to broad-based negative returns. The U.S. dollar strengthened vs. most developed market currencies. The Bloomberg Global Aggregate ex-US Bond Index fell 6.1% unhedged and 4.1% hedged.





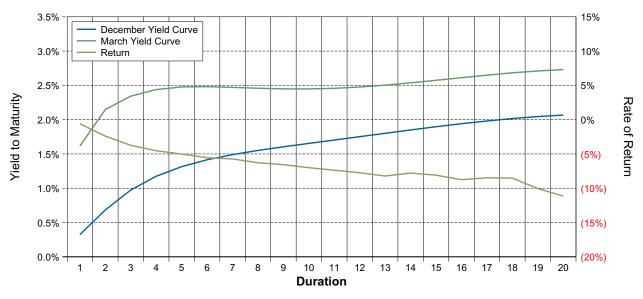


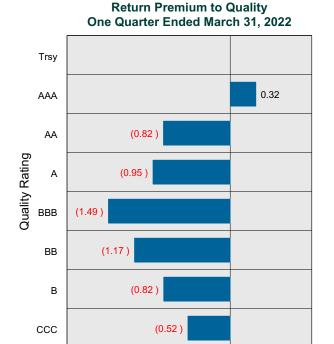
## **Bond Market Environment**

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

The charts below are designed to give you an overview of the factors that influenced bond market returns for the quarter. The first chart shows the shift in the Treasury yield curve and the resulting returns by duration. The second chart shows the average return premium (relative to Treasuries) for bonds with different quality ratings. The final chart shows the average return premium of the different sectors relative to Treasuries. These sector premiums are calculated after differences in quality and term structure have been accounted for across the sectors. They are typically explained by differences in convexity, sector specific supply and demand considerations, or other factors that influence the perceived risk of the sector.

## Yield Curve Change and Rate of Return One Quarter Ended March 31, 2022





(1.5%) (1.0%) (0.5%)

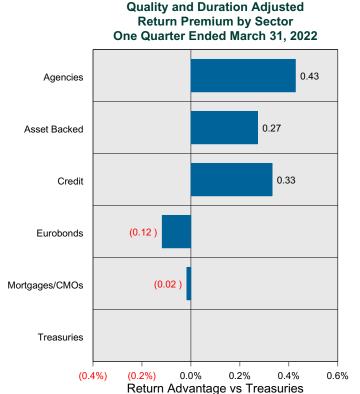
0.0%

Return Advantage vs Treasuries

0.5%

1.0%

**Duration Adjusted** 



(2.0%)

## **Fixed Income** Period Ended March 31, 2022

#### **Asset Class Membership Changes**

Fixed Income also includes the new fixed income sub-composite which was funded in 03/01/2021.

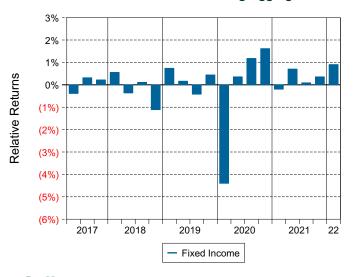
#### **Quarterly Summary and Highlights**

- Fixed Income's portfolio posted a (5.08)% return for the quarter placing it in the 54 percentile of the Public Fund -Domestic Fixed group for the quarter and in the 22 percentile for the last year.
- Fixed Income's portfolio outperformed the Blmbg Aggregate by 0.85% for the quarter and outperformed the Blmbg Aggregate for the year by 1.99%.

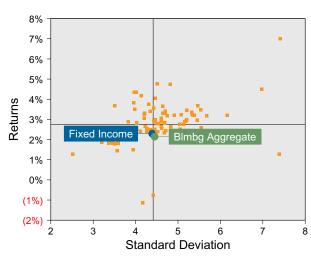
#### Performance vs Public Fund - Domestic Fixed (Gross)



#### Relative Return vs Blmbg Aggregate



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



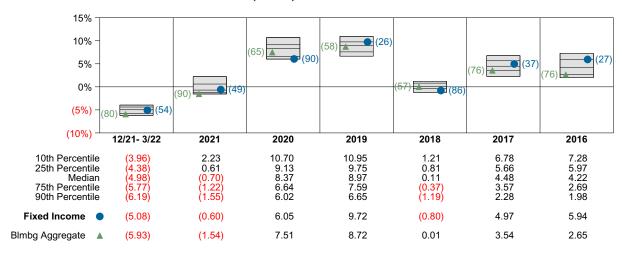


## **Fixed Income Return Analysis Summary**

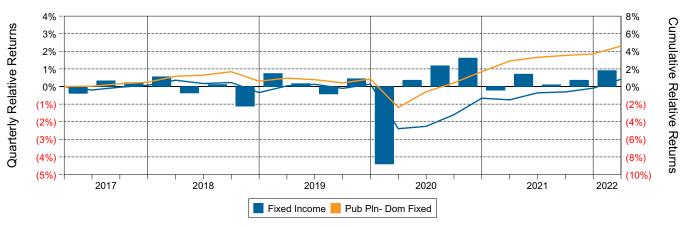
#### **Return Analysis**

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.

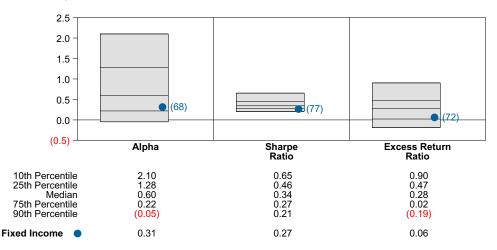
## Performance vs Public Fund - Domestic Fixed (Gross)



## 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 March 31, 2022

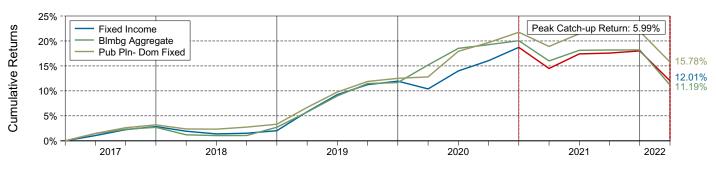




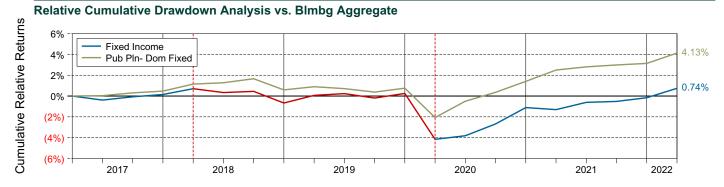
# **Fixed Income** Drawdown Analysis for Five Years Ended March 31, 2022

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**

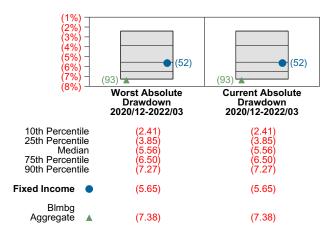


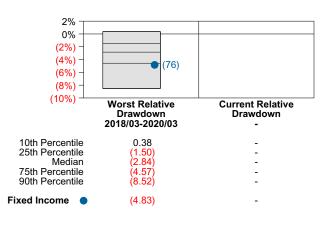
	Worst Absolute Drawdown					Current Absolute Drawdown				
	Return	Years	Period	Index	Peers	Return	Years	Period	Index	Peers
Fixed Income	(5.65)%	1.25	2020/12-2022/03	(7.38)%	(4.90)%	(5.65)%	1.25	2020/12-2022/03	(7.38)%	(4.90)%
Recovery from Trough	-	-	-	-	-	-	-	-	-	-
Blmbg Aggregate	(7.38)%	1.25	2020/12-2022/03			(7.38)%	1.25	2020/12-2022/03		
Pub Pln- Dom Fixed	(5.03)%	0.25	2021/12-2022/03			(5.03)%	0.25	2021/12-2022/03		



	Worst Relative Drawdown			Current Relative Drawdown				
	Rel Rtn	Years	Period	Peers	Rel Rtn	Years	Period	Peers
Fixed Income	(4.83)%	2.00	2018/03-2020/03	(3.18)%	-	-	-	-
Recovery from Trough	5.12%	2.00+	2020/03-2022/03	6.33%	-	-	-	-
Pub Pln- Dom Fixed	(3.67)%	1.50	2018/09-2020/03		-	-	-	

Drawdown Rankings vs. Blmbg Aggregate Rankings against Public Fund - Domestic Fixed Five Years Ended March 31, 2022





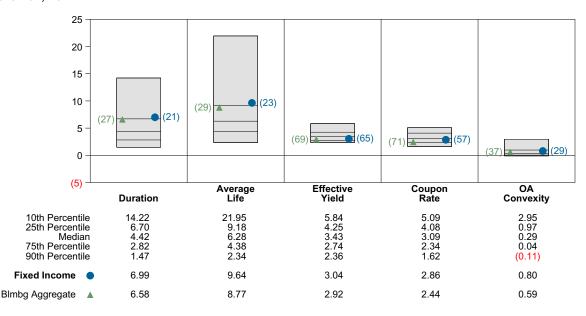


## **Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

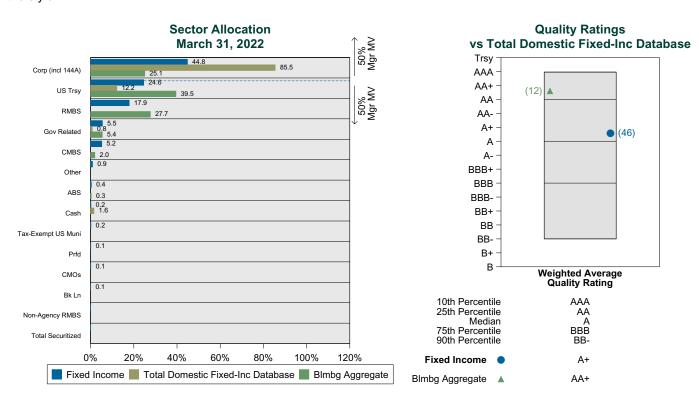
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

#### **Fixed Income Portfolio Characteristics** Rankings Against Total Domestic Fixed-Inc Database as of March 31, 2022



#### 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.

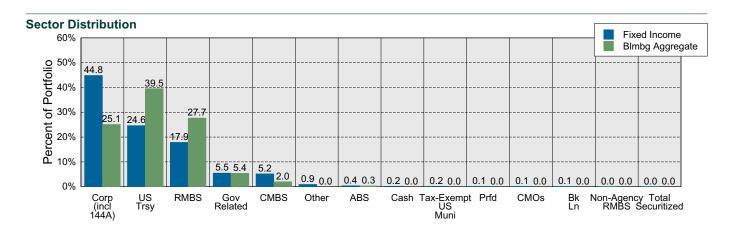


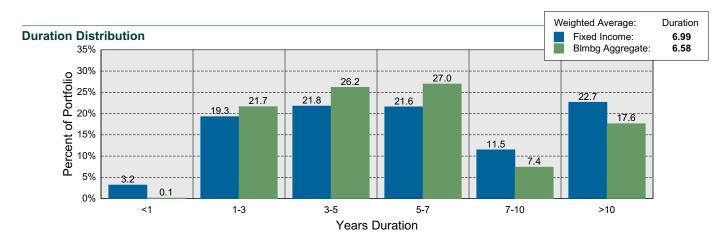


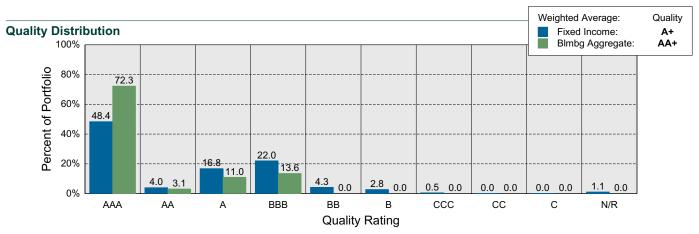
# **Fixed Income Portfolio Characteristics Summary** As of March 31, 2022

## **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.







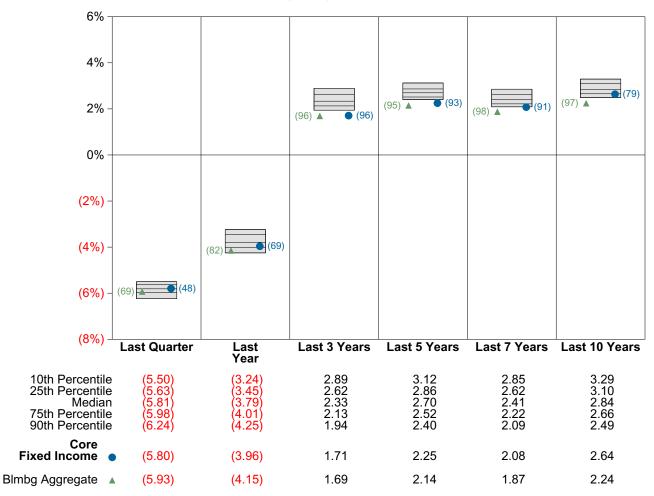


# **Core Fixed Income** Period Ended March 31, 2022

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

- Core Fixed Income's portfolio posted a (5.80)% return for the guarter placing it in the 48 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 69 percentile for the last year.
- Core Fixed Income's portfolio outperformed the Blmbg Aggregate by 0.14% for the quarter and outperformed the Blmbg Aggregate for the year by 0.19%.

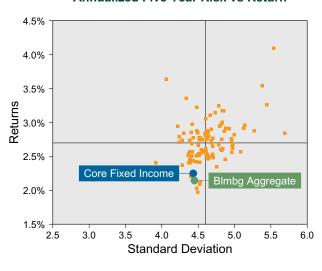
#### Performance vs Callan Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate

# 1.0% 0.5% Relative Returns 0.0% (0.5%)(1.0%)(1.5%)(2.0%)2017 2018 2019 2020 2021 22 Core Fixed Income

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



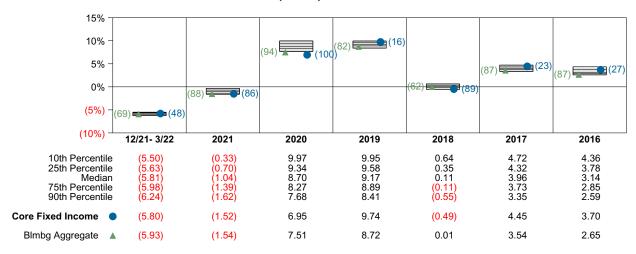


## **Core Fixed Income Return Analysis Summary**

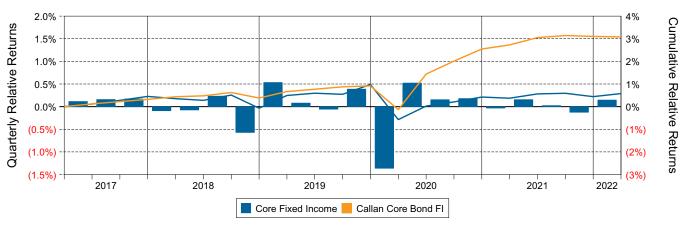
#### **Return Analysis**

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.

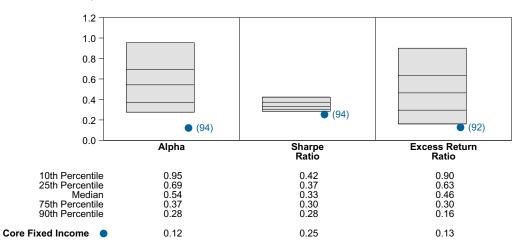
#### Performance vs Callan Core Bond Fixed Income (Gross)



#### **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 March 31, 2022



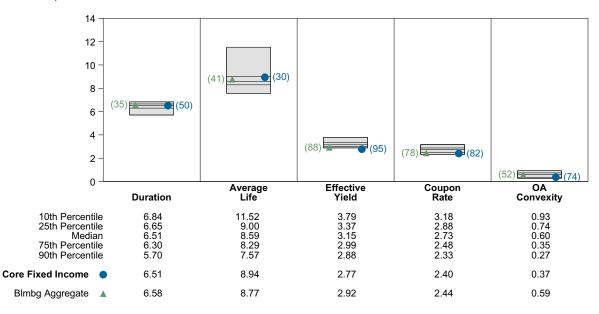


# **Core Fixed Income Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

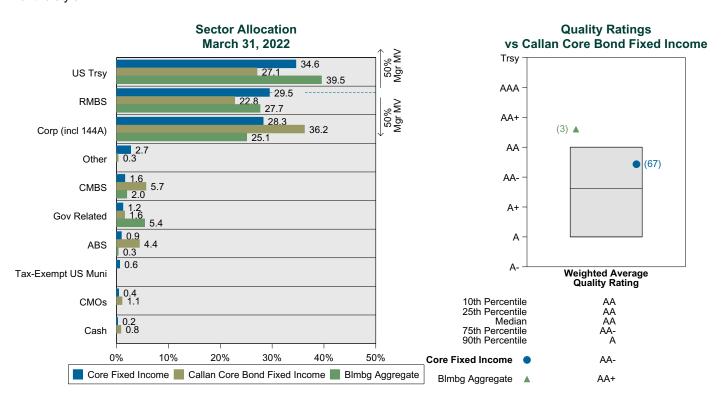
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of March 31, 2022



#### **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.

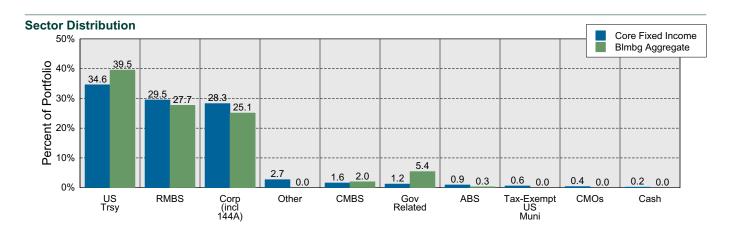


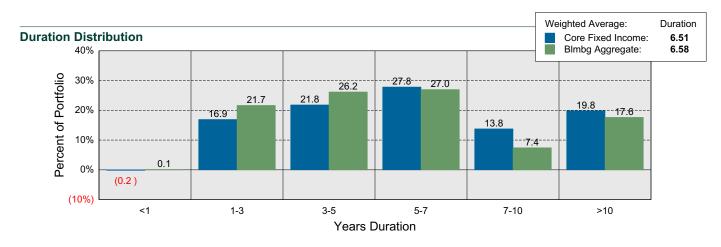


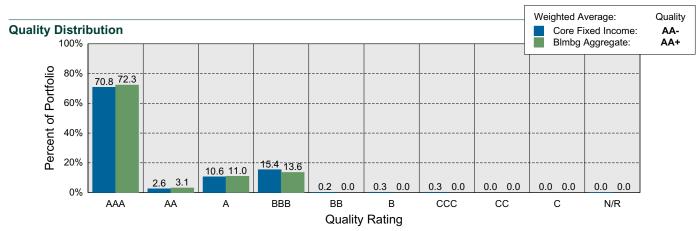
# **Core Fixed Income Portfolio Characteristics Summary** As of March 31, 2022

# **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 March 31, 2022

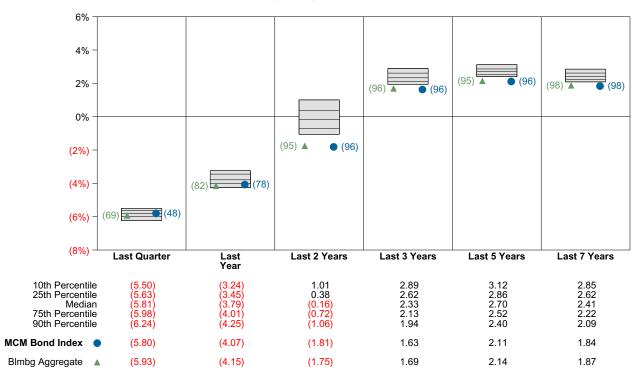
#### **Investment Philosophy**

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.

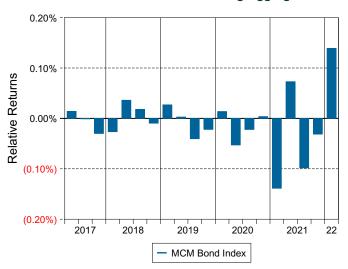
### **Quarterly Summary and Highlights**

- MCM Bond Index's portfolio posted a (5.80)% return for the quarter placing it in the 48 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 78 percentile for the last year.
- MCM Bond Index's portfolio outperformed the Blmbg Aggregate by 0.13% for the guarter and outperformed the Blmbg Aggregate for the year by 0.08%.

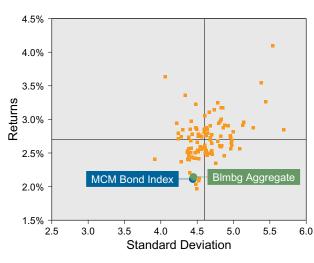
#### Performance vs Callan Core Bond Fixed Income (Gross)



#### Relative Return vs Blmbg Aggregate



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



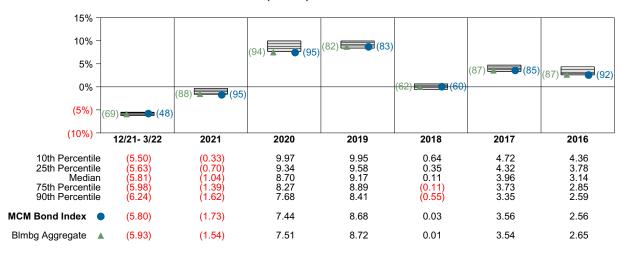


## **MCM Bond Index Return Analysis Summary**

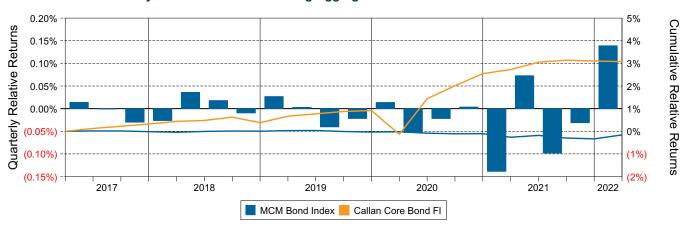
#### **Return Analysis**

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.

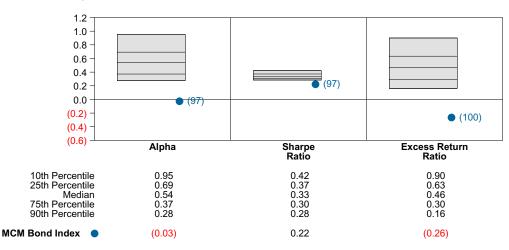
#### Performance vs Callan Core Bond Fixed Income (Gross)



#### **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 March 31, 2022



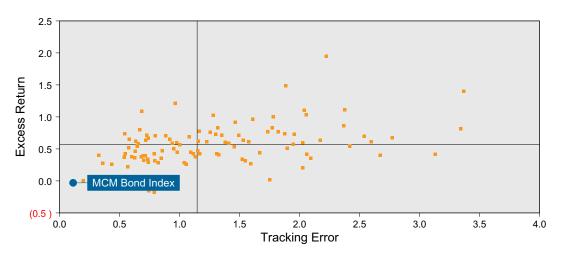


## **MCM Bond Index Risk Analysis Summary**

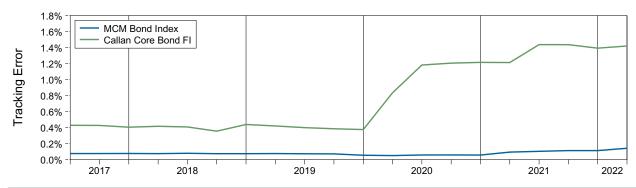
#### Risk Analysis

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.

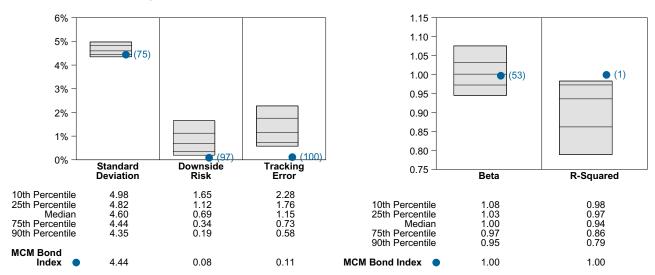
## Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2022



## Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate



Risk Statistics Rankings vs Bloomberg Aggregate Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2022

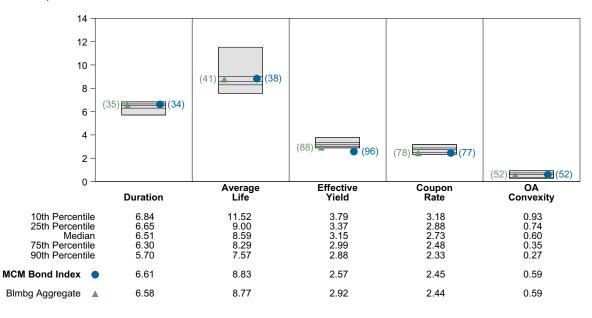


## **MCM Bond Index Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

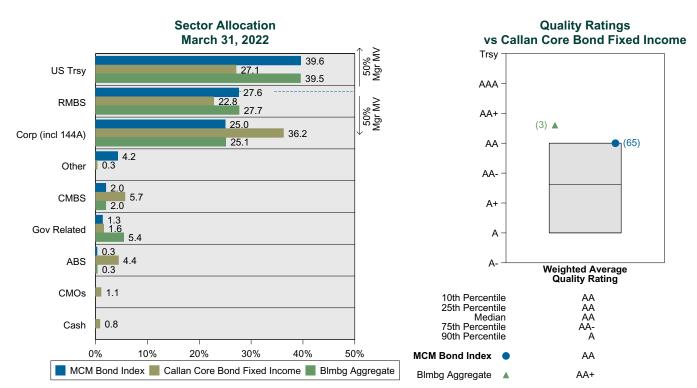
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Core Bond Fixed Income as of March 31, 2022



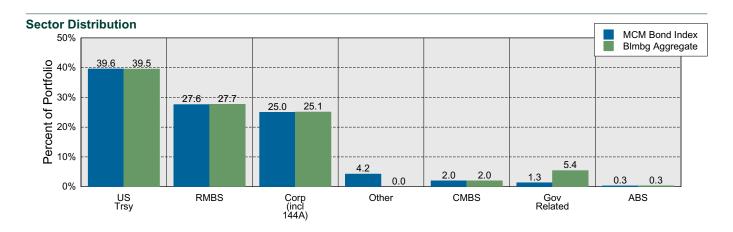
## Sector Allocation and Quality Ratings

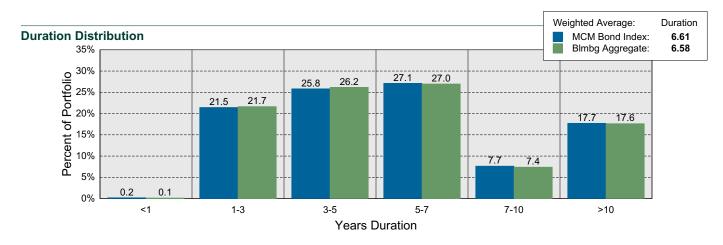
The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.

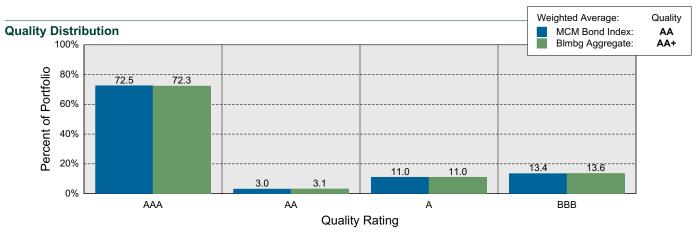


# **MCM Bond Index Portfolio Characteristics Summary** As of March 31, 2022

# **Portfolio Structure Comparison**





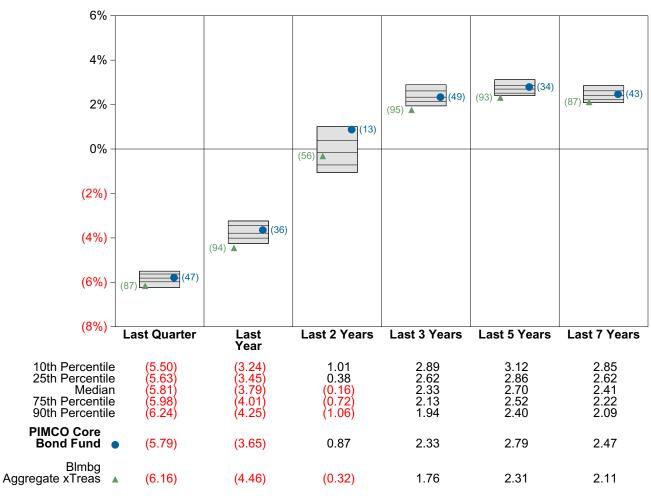


# **PIMCO Core Bond Fund** Period Ended March 31, 2022

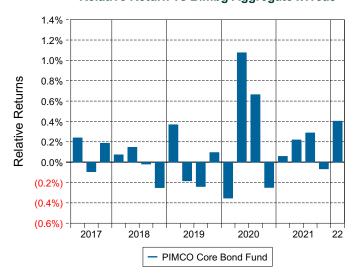
#### **Quarterly Summary and Highlights**

- PIMCO Core Bond Fund's portfolio posted a (5.79)% return for the quarter placing it in the 47 percentile of the Callan Core Bond Fixed Income group for the quarter and in the 36 percentile for the last year.
- PIMCO Core Bond Fund's portfolio outperformed the Blmbg Aggregate xTreas by 0.38% for the quarter and outperformed the Blmbg Aggregate xTreas for the year by 0.81%.

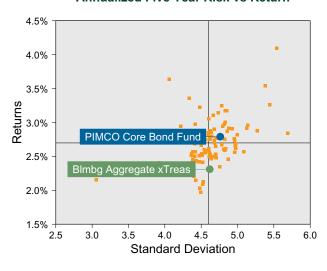
### Performance vs Callan Core Bond Fixed Income (Gross)



### Relative Return vs Blmbg Aggregate xTreas



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

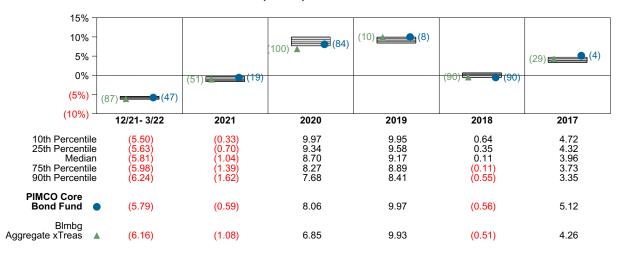


# **PIMCO Core Bond Fund Return Analysis Summary**

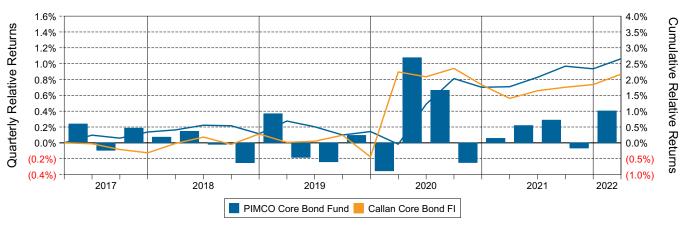
#### **Return Analysis**

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.

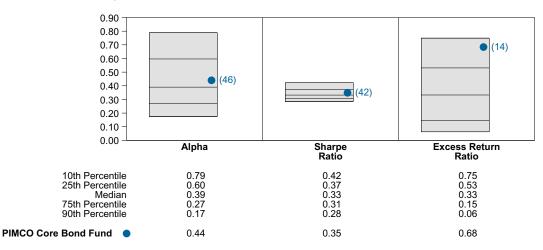
#### Performance vs Callan Core Bond Fixed Income (Gross)



### 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 March 31, 2022



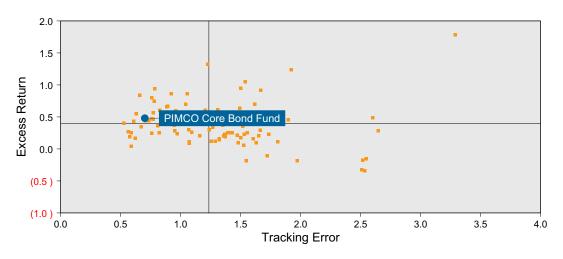


# **PIMCO Core Bond Fund Risk Analysis Summary**

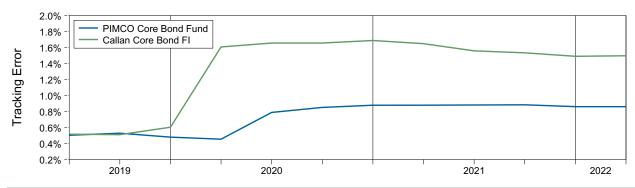
#### **Risk Analysis**

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.

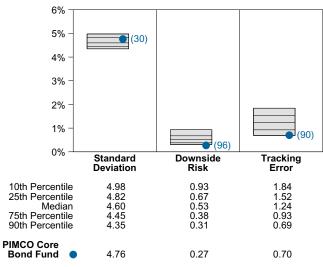
### Risk Analysis vs Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2022

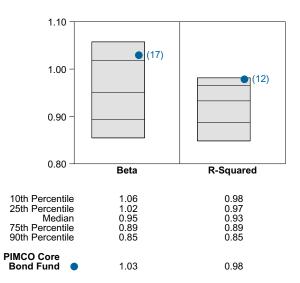


Rolling 12 Quarter Tracking Error vs Bloomberg Aggregate xTreasury



Risk Statistics Rankings vs Bloomberg Aggregate xTreasury Rankings Against Callan Core Bond Fixed Income (Gross) Five Years Ended March 31, 2022





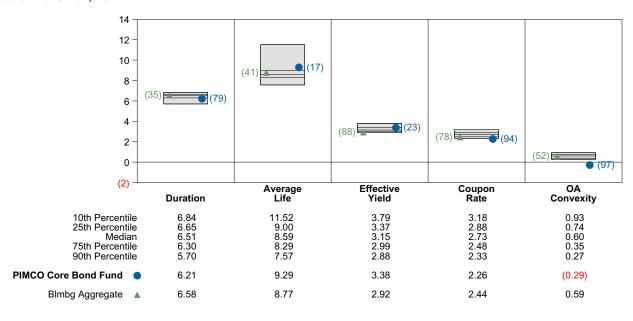


# **PIMCO Core Bond Fund Bond Characteristics Analysis Summary**

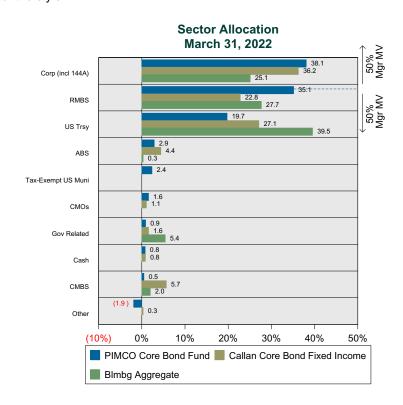
#### **Portfolio Characteristics**

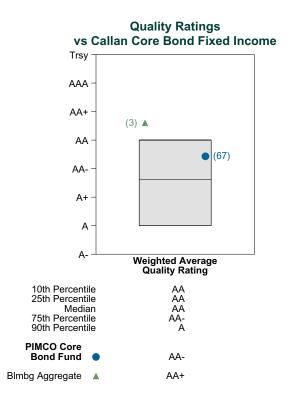
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics Rankings Against Callan Core Bond Fixed Income** as of March 31, 2022



#### Sector Allocation and Quality Ratings

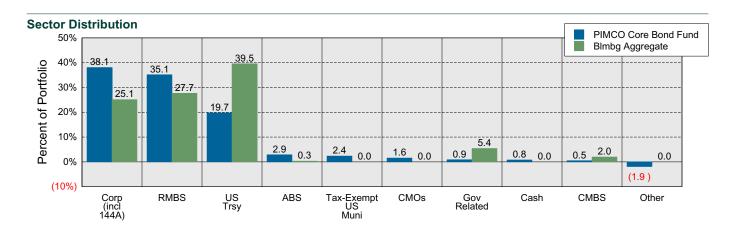


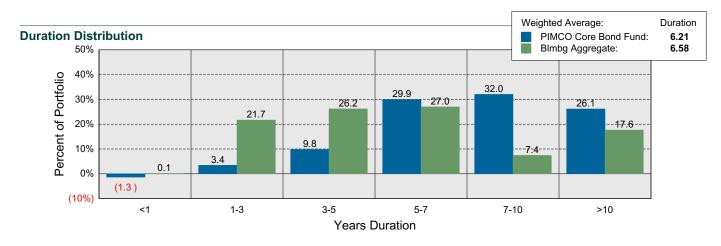


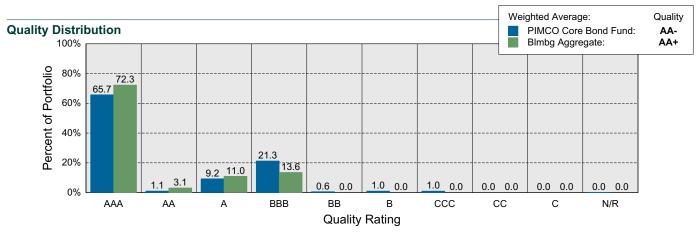


# **PIMCO Core Bond Fund Portfolio Characteristics Summary** As of March 31, 2022

# **Portfolio Structure Comparison**







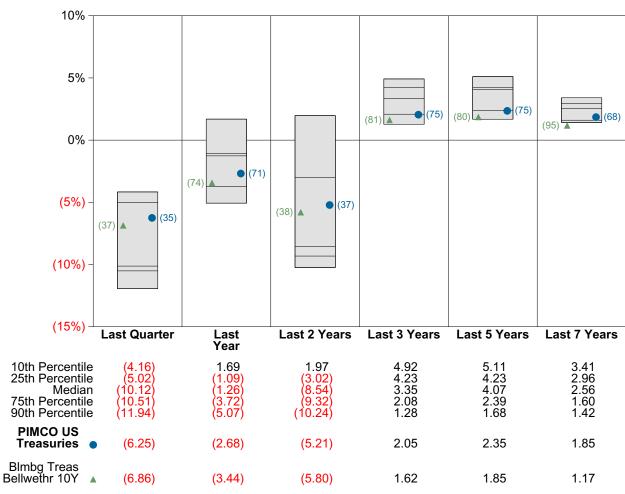


# **PIMCO US Treasuries** Period Ended March 31, 2022

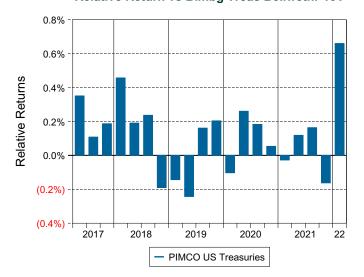
#### **Quarterly Summary and Highlights**

- PIMCO US Treasuries's portfolio posted a (6.25)% return for the quarter placing it in the 35 percentile of the Callan US Treas Bond Funds group for the guarter and in the 71 percentile for the last year.
- PIMCO US Treasuries's portfolio outperformed the Blmbg Treas Bellwethr 10Y by 0.61% for the quarter and outperformed the Blmbg Treas Bellwethr 10Y for the year by 0.75%.

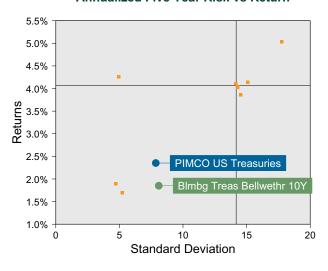
# Performance vs Callan US Treas Bond Funds (Gross)



### Relative Return vs Blmbg Treas Bellwethr 10Y



### Callan US Treas Bond Funds (Gross) Annualized Five Year Risk vs Return

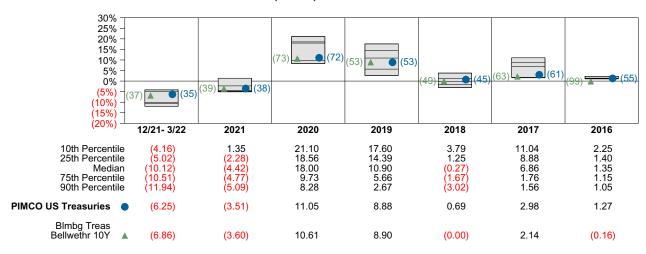


# **PIMCO US Treasuries Return Analysis Summary**

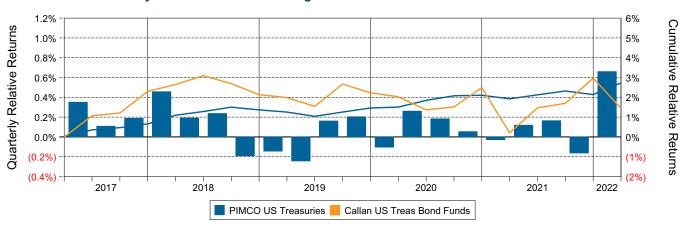
#### **Return Analysis**

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.

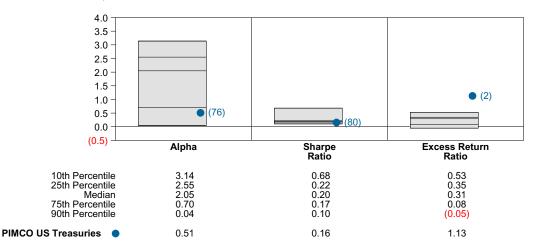
### Performance vs Callan US Treas Bond Funds (Gross)



### 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 March 31, 2022



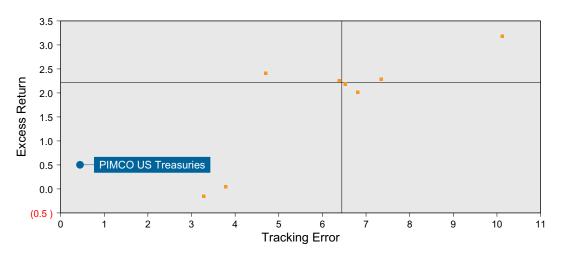


# **PIMCO US Treasuries Risk Analysis Summary**

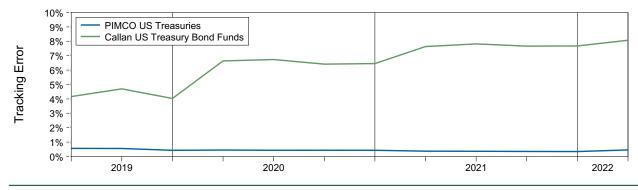
#### Risk Analysis

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.

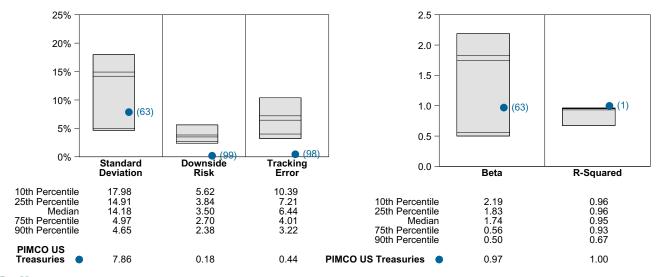
### Risk Analysis vs Callan US Treasury Bond Funds (Gross) Five Years Ended March 31, 2022



Rolling 12 Quarter Tracking Error vs Bloomberg Treas Bellwethr 10Y

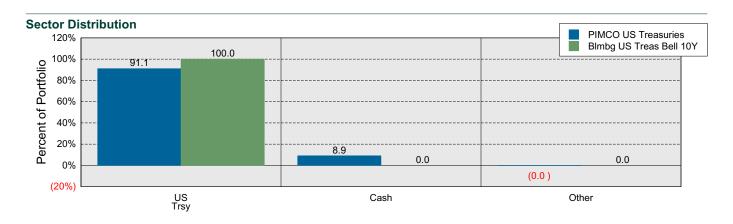


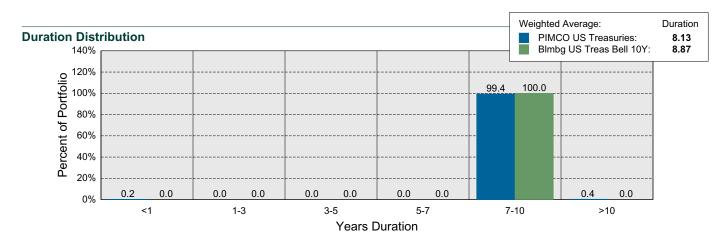
Risk Statistics Rankings vs Bloomberg Treas Bellwethr 10Y Rankings Against Callan US Treasury Bond Funds (Gross) Five Years Ended March 31, 2022



# **PIMCO US Treasuries Portfolio Characteristics Summary** As of March 31, 2022

### **Portfolio Structure Comparison**





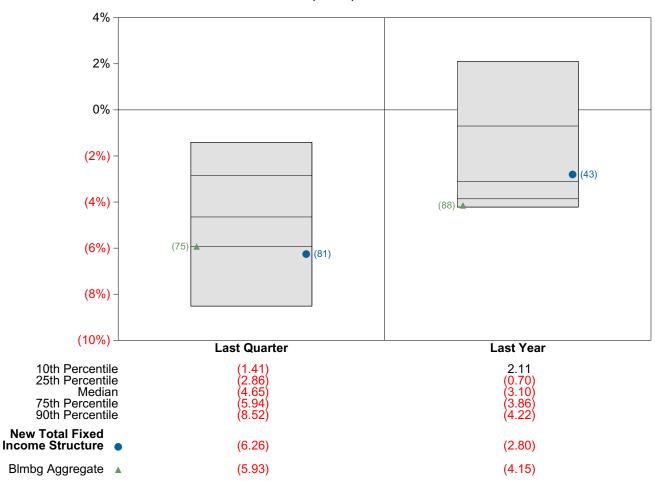


# **New Total Fixed Income Structure** Period Ended March 31, 2022

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

- New Total Fixed Income Structure's portfolio posted a (6.26)% return for the guarter placing it in the 81 percentile of the Total Domestic Fixed-Inc Database group for the quarter and in the 43 percentile for the last year.
- New Total Fixed Income Structure's portfolio underperformed the Blmbg Aggregate by 0.32% for the quarter and outperformed the Blmbg Aggregate for the year by 1.35%.

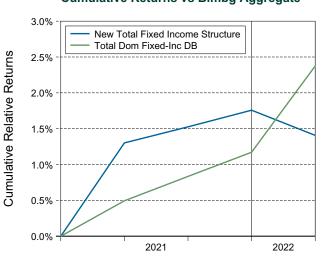
### Performance vs Total Domestic Fixed-Inc Database (Gross)



### Relative Return vs Blmbg Aggregate

# 1.5% 1.0% Relative Returns 0.5% 0.0% (0.5%)(1.0%)2021 2022 New Total Fixed Income Structure

# **Cumulative Returns vs Blmbg Aggregate**



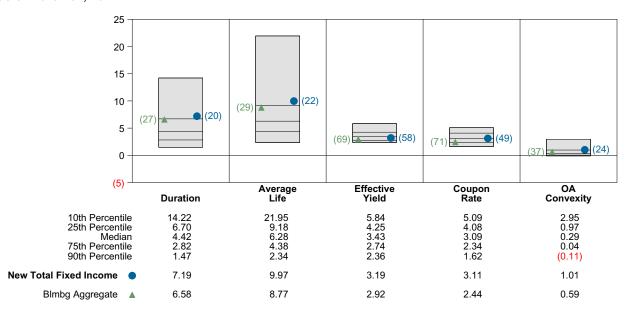


# **New Total Fixed Income Bond Characteristics Analysis Summary**

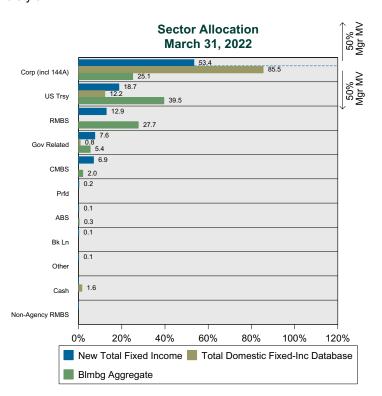
#### **Portfolio Characteristics**

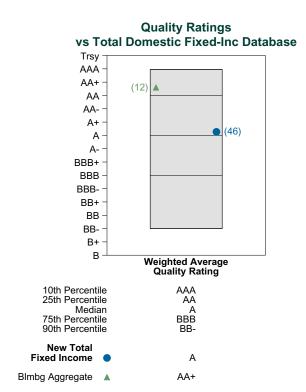
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Total Domestic Fixed-Inc Database as of March 31, 2022



#### Sector Allocation and Quality Ratings

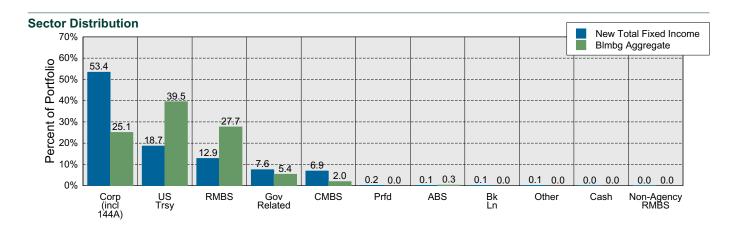


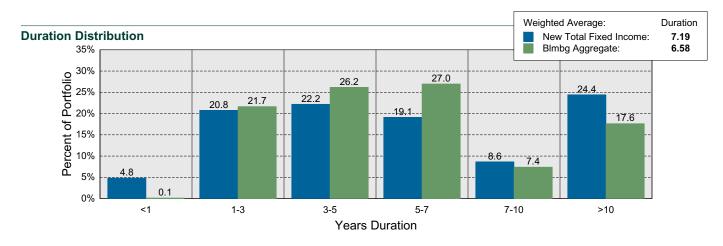


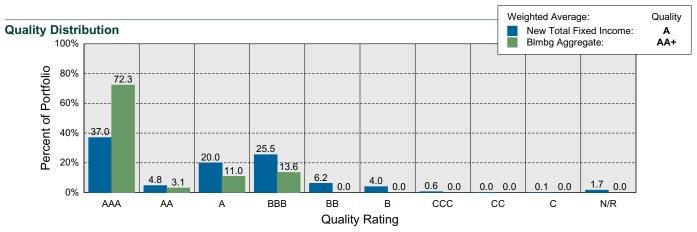


# **New Total Fixed Income Portfolio Characteristics Summary** As of March 31, 2022

# **Portfolio Structure Comparison**









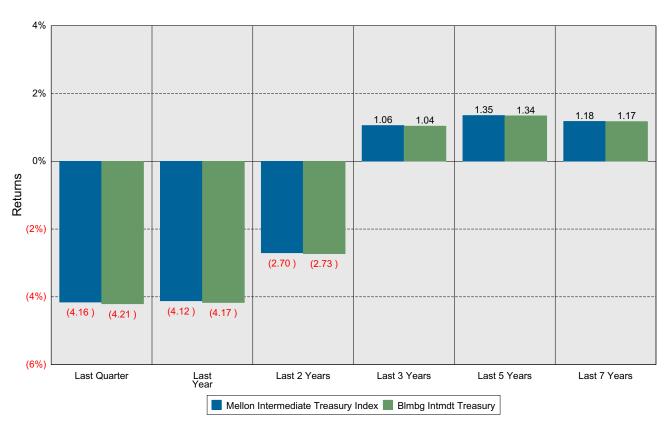
# **Mellon Intermediate Treasury Index** Period Ended March 31, 2022

#### **Return History**

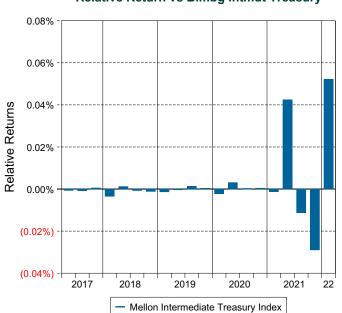
The Mellon Intermediate Treasury Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

### **Quarterly Summary and Highlights**

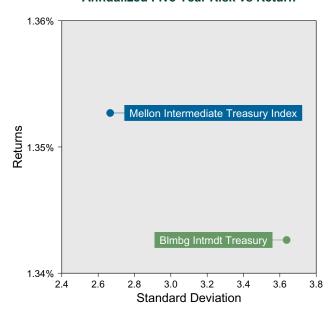
 Mellon Intermediate Treasury Index's portfolio outperformed the Blmbg Intmdt Treasury by 0.05% for the quarter and outperformed the Blmbg Intmdt Treasury for the year by 0.05%.



### Relative Return vs Blmbg Intmdt Treasury



#### Annualized Five Year Risk vs Return



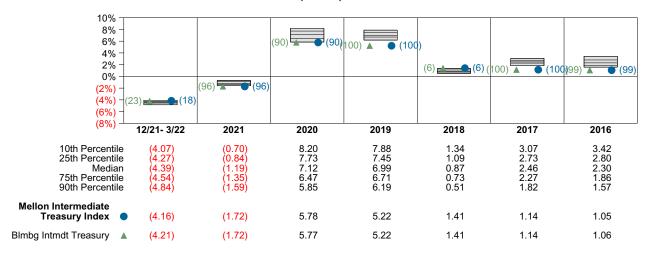


# **Mellon Intermediate Treasury Index Return Analysis Summary**

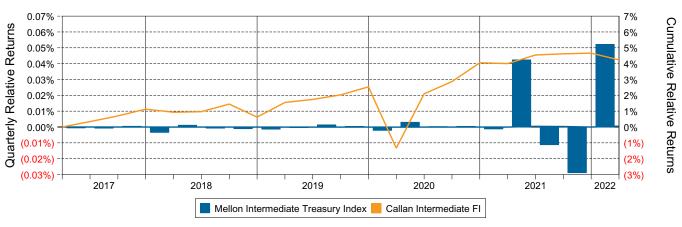
#### **Return Analysis**

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

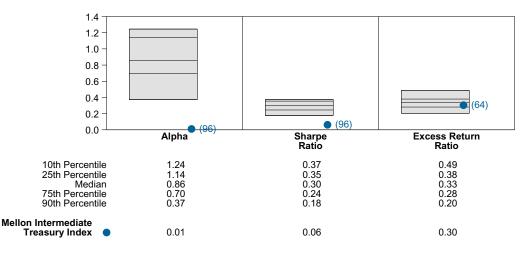
#### Performance vs Callan Intermediate Fixed Income (Gross)



### **Cumulative and Quarterly Relative Returns vs Blmbg Intmdt Treasury**



Risk Adjusted Return Measures vs Blmbg Intmdt Treasury Rankings Against Callan Intermediate Fixed Income (Gross) Five Years Ended March 31, 2022



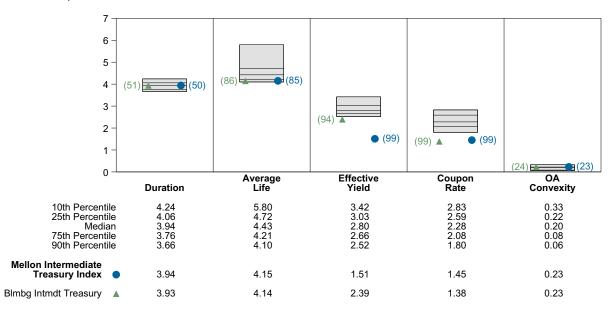


# **Mellon Intermediate Treasury Index Bond Characteristics Analysis Summary**

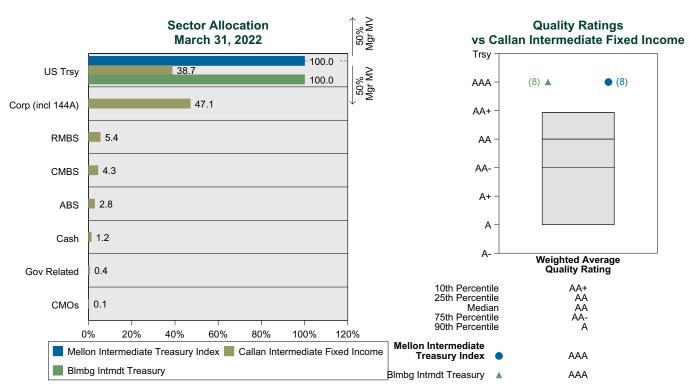
#### **Portfolio Characteristics**

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

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Intermediate Fixed Income as of March 31, 2022



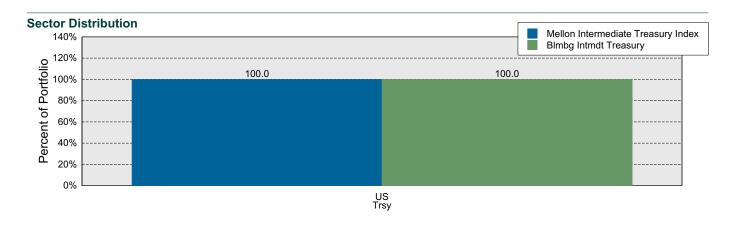
#### **Sector Allocation and Quality Ratings**

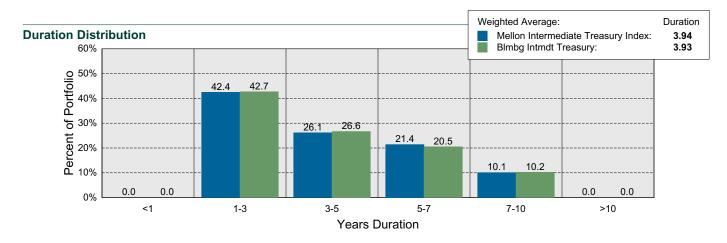


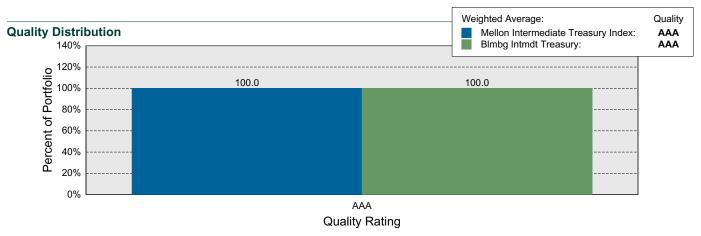


# **Mellon Intermediate Treasury Index Portfolio Characteristics Summary** As of March 31, 2022

# **Portfolio Structure Comparison**







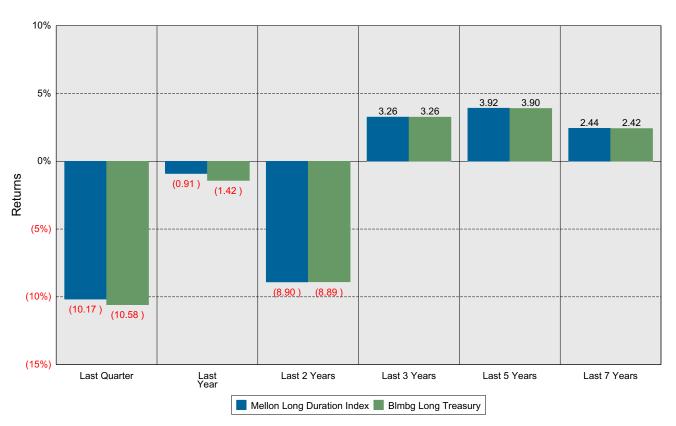
# **Mellon Long Duration Index** Period Ended March 31, 2022

#### **Return History**

The Mellon Long Duration Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

### **Quarterly Summary and Highlights**

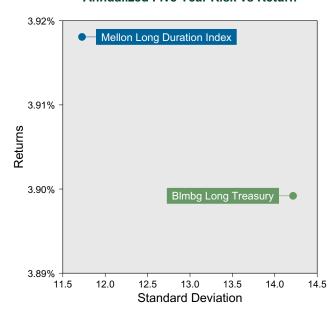
• Mellon Long Duration Index's portfolio outperformed the Blmbg Long Treasury by 0.41% for the quarter and outperformed the Blmbg Long Treasury for the year by 0.51%.



### Relative Return vs Blmbg Long Treasury

# 0.8% 0.6% 0.4% Relative Returns 0.2% 0.0% (0.2%)(0.4%)(0.6%)(0.8%)2017 2018 2019 2020 2021 22 Mellon Long Duration Index

#### Annualized Five Year Risk vs Return



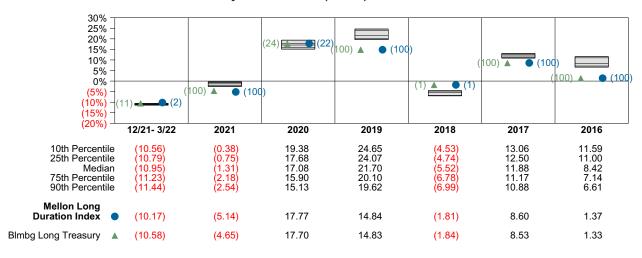


# **Mellon Long Duration Index Return Analysis Summary**

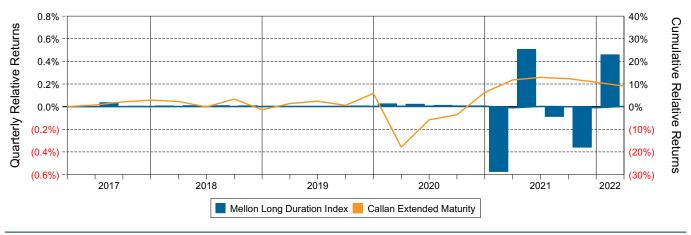
#### **Return Analysis**

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

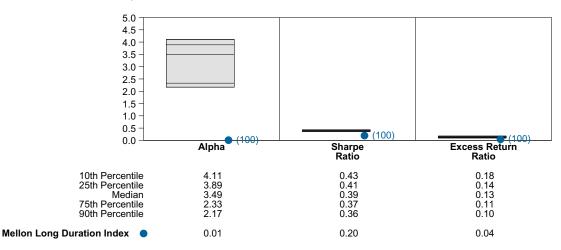
#### Performance vs Callan Extended Maturity Fixed Income (Gross)



### **Cumulative and Quarterly Relative Returns vs Blmbg Long Treasury**



Risk Adjusted Return Measures vs Blmbg Long Treasury Rankings Against Callan Extended Maturity Fixed Income (Gross) Five Years Ended March 31, 2022



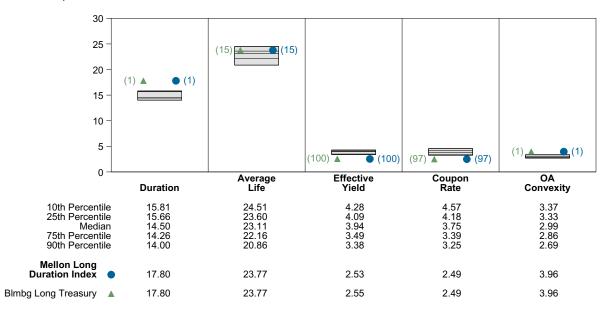


# **Mellon Long Duration Index Bond Characteristics Analysis Summary**

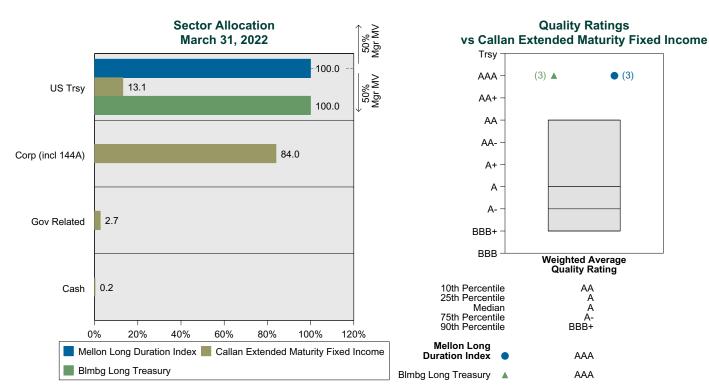
#### **Portfolio Characteristics**

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

### **Fixed Income Portfolio Characteristics Rankings Against Callan Extended Maturity Fixed Income** as of March 31, 2022



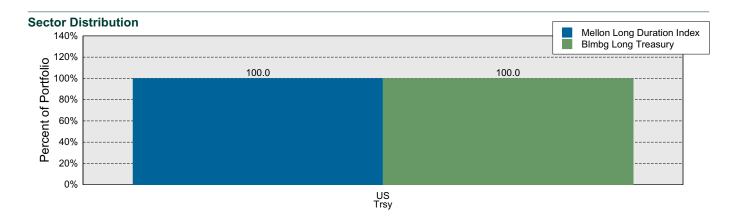
#### Sector Allocation and Quality Ratings

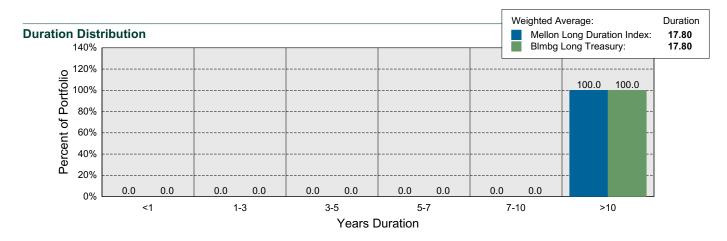


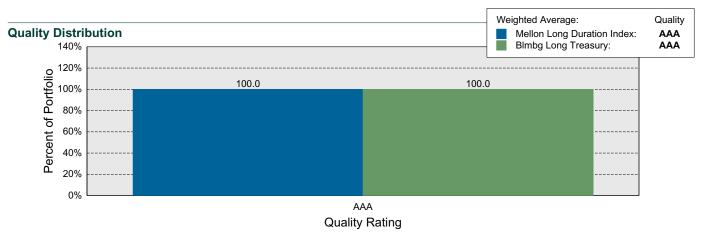


# **Mellon Long Duration Index Portfolio Characteristics Summary** As of March 31, 2022

### **Portfolio Structure Comparison**







# **Mellon Long Term Credit Index** Period Ended March 31, 2022

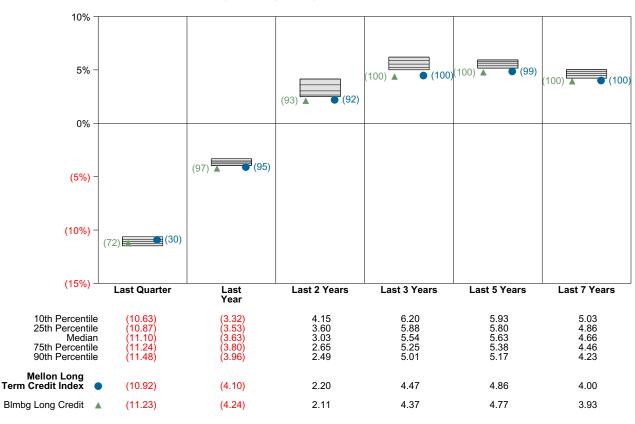
#### **Return History**

The Mellon Long Term Credit Index account was funded in March of 2021. Previous history reflects the manager's commingled vehicle.

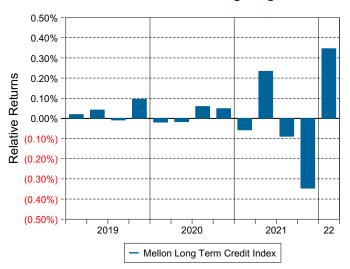
### **Quarterly Summary and Highlights**

- Mellon Long Term Credit Index's portfolio posted a (10.92)% return for the quarter placing it in the 30 percentile of the Callan Extended Maturity Credit group for the quarter and in the 95 percentile for the last year.
- Mellon Long Term Credit Index's portfolio outperformed the Blmbg Long Credit by 0.31% for the quarter and outperformed the Blmbg Long Credit for the year by 0.14%.

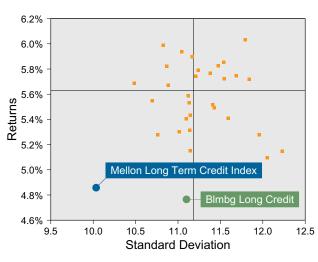
### Performance vs Callan Extended Maturity Credit (Gross)



#### Relative Return vs Blmbg Long Credit



### **Callan Extended Maturity Credit (Gross)** Annualized Five Year Risk vs Return



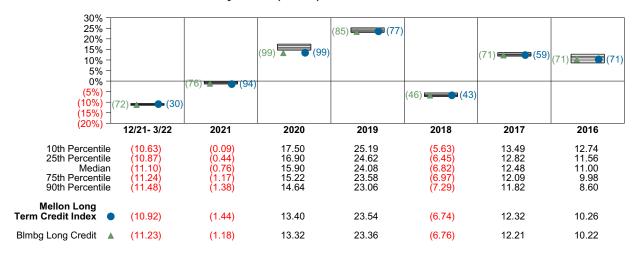


# **Mellon Long Term Credit Index Return Analysis Summary**

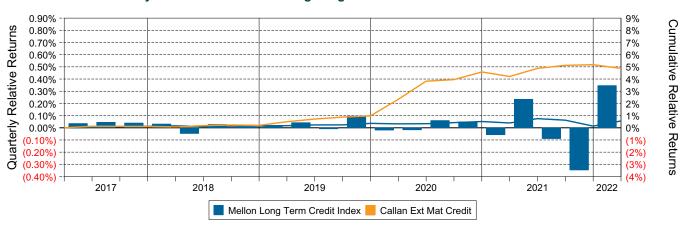
#### **Return Analysis**

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

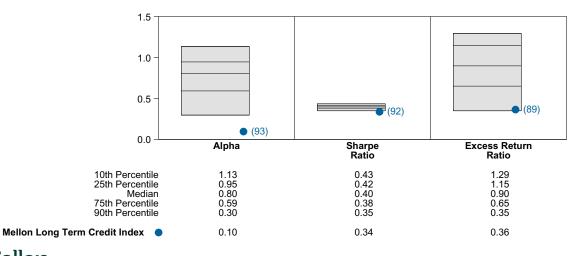
#### Performance vs Callan Extended Maturity Credit (Gross)



#### Cumulative and Quarterly Relative Returns vs Blmbg Long Credit



Risk Adjusted Return Measures vs Blmbg Long Credit Rankings Against Callan Extended Maturity Credit (Gross) Five Years Ended March 31, 2022



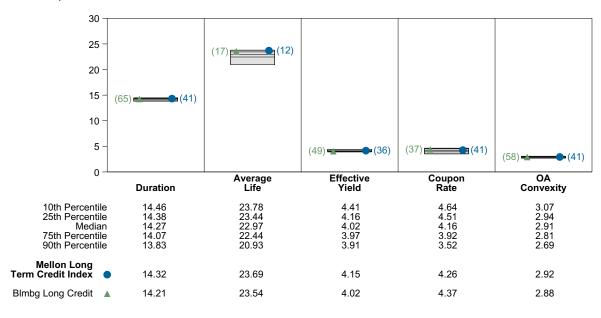


# **Mellon Long Term Credit Index Bond Characteristics Analysis Summary**

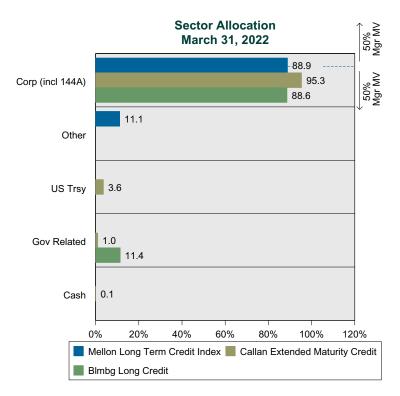
#### **Portfolio Characteristics**

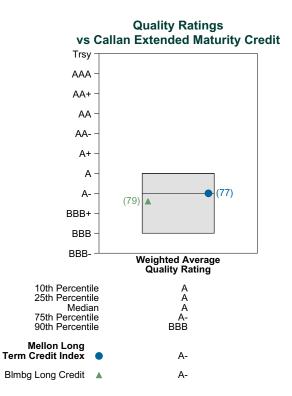
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics Rankings Against Callan Extended Maturity Credit** as of March 31, 2022



#### Sector Allocation and Quality Ratings

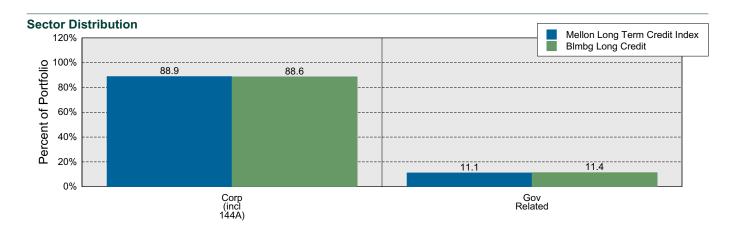


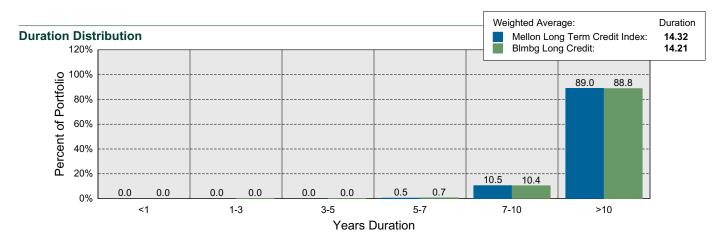


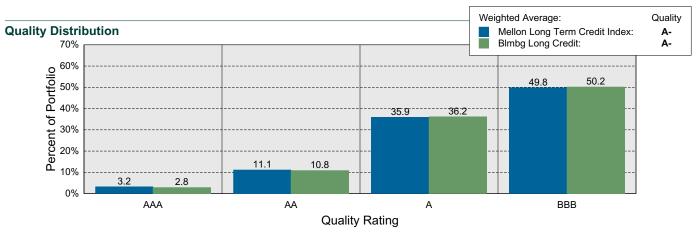


# **Mellon Long Term Credit Index Portfolio Characteristics Summary** As of March 31, 2022

### **Portfolio Structure Comparison**









## **Mellon Securitized Index** Period Ended March 31, 2022

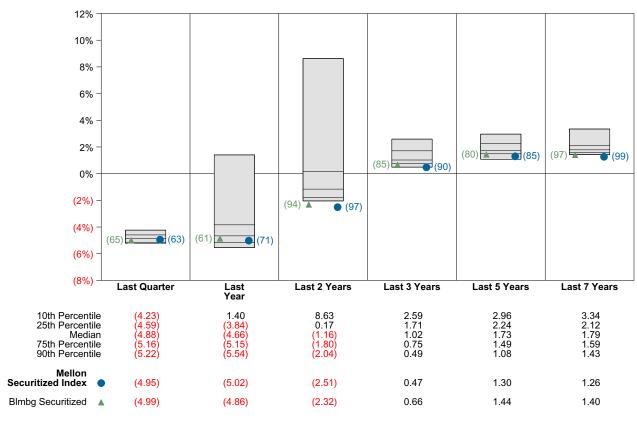
#### **Return History**

The Mellon Securitized Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

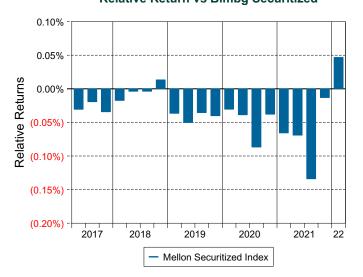
### **Quarterly Summary and Highlights**

- Mellon Securitized Index's portfolio posted a (4.95)% return for the quarter placing it in the 63 percentile of the Callan Mortgage Backed Fixed Income group for the quarter and in the 71 percentile for the last year.
- Mellon Securitized Index's portfolio outperformed the Blmbg Securitized by 0.04% for the quarter and underperformed the Blmbg Securitized for the year by 0.16%.

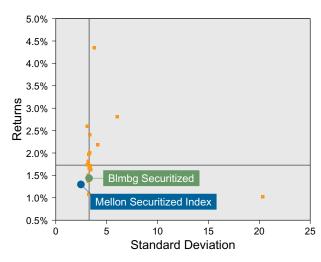
# Performance vs Callan Mortgage Backed Fixed Income (Gross)



# Relative Return vs Blmbg Securitized



### Callan Mortgage Backed Fixed Income (Gross) Annualized Five Year Risk vs Return



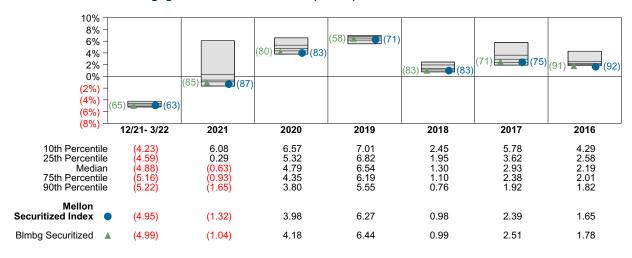


# **Mellon Securitized Index Return Analysis Summary**

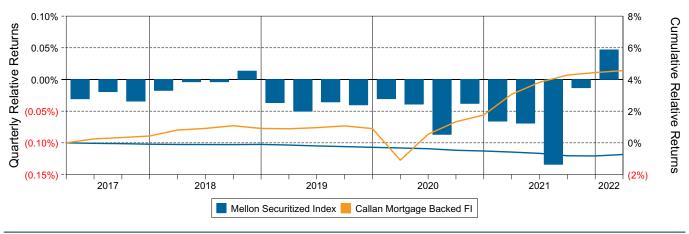
#### **Return Analysis**

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.

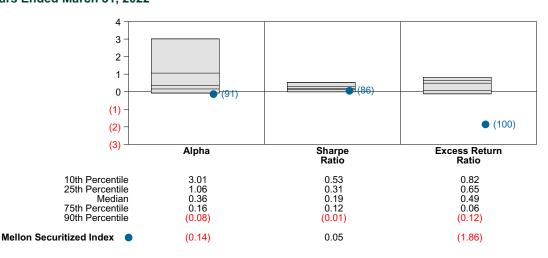
#### Performance vs Callan Mortgage Backed Fixed Income (Gross)



### Cumulative and Quarterly Relative Returns vs Blmbg Securitized



Risk Adjusted Return Measures vs Blmbg Securitized Rankings Against Callan Mortgage Backed Fixed Income (Gross) Five Years Ended March 31, 2022



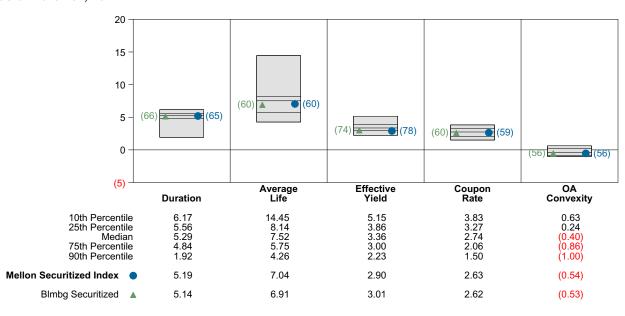


# **Mellon Securitized Index Bond Characteristics Analysis Summary**

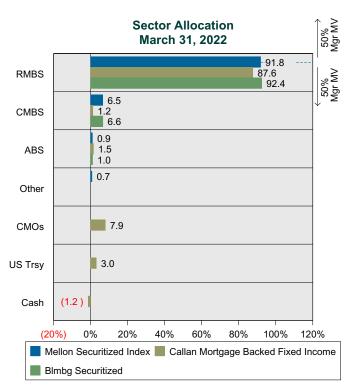
#### **Portfolio Characteristics**

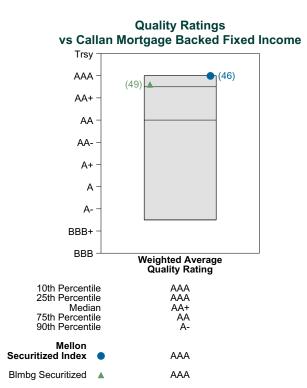
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Mortgage Backed Fixed Income as of March 31, 2022



#### Sector Allocation and Quality Ratings

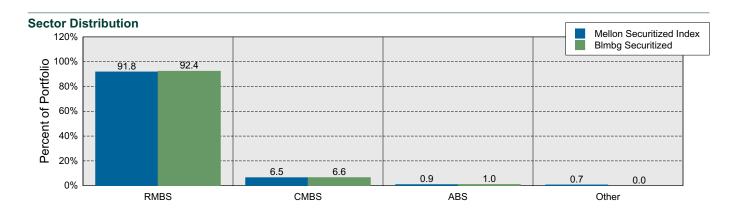


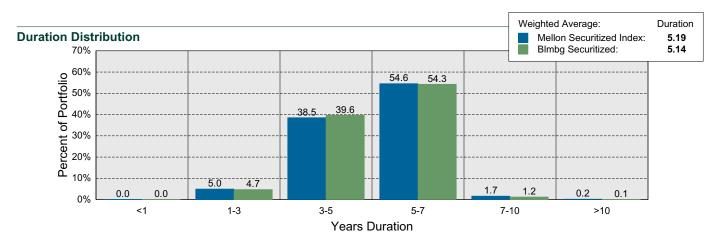




# **Mellon Securitized Index Portfolio Characteristics Summary** As of March 31, 2022

### **Portfolio Structure Comparison**









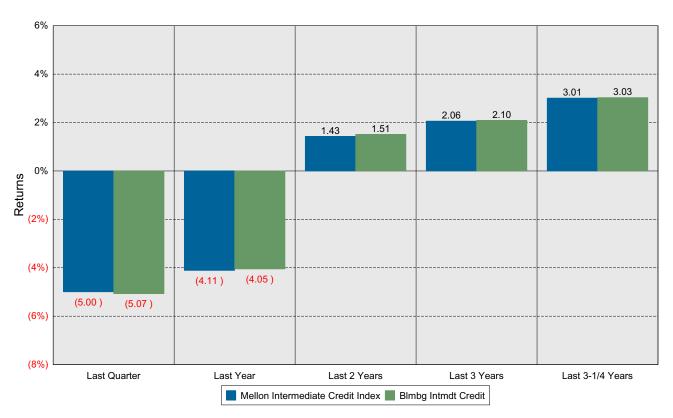
# **Mellon Intermediate Credit Index** Period Ended March 31, 2022

#### **Return History**

The Mellon Intermediate Credit Index account was funded in March of 2021. Previous history reflects the manager's composite returns.

### **Quarterly Summary and Highlights**

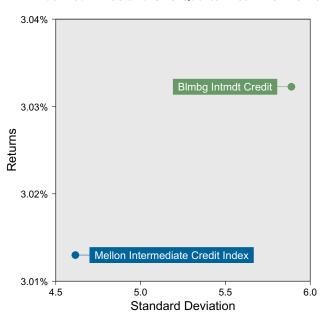
 Mellon Intermediate Credit Index's portfolio outperformed the Blmbg Intmdt Credit by 0.07% for the quarter and underperformed the Blmbg Intmdt Credit for the year by 0.06%.



### Relative Return vs Blmbg Intmdt Credit

# 0.10% 0.05% Relative Returns 0.00% (0.10%)(0.15%)2019 2020 2021 22 Mellon Intermediate Credit Index

#### Annualized Three and One-Quarter Year Risk vs Return

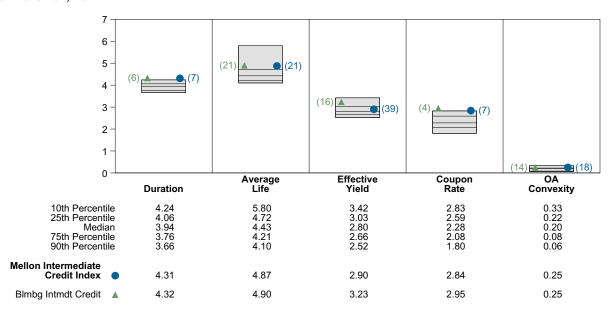


# **Mellon Intermediate Credit Index Bond Characteristics Analysis Summary**

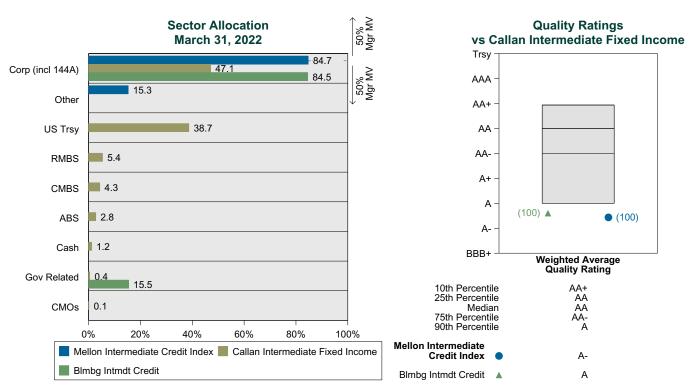
#### **Portfolio Characteristics**

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

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Intermediate Fixed Income as of March 31, 2022



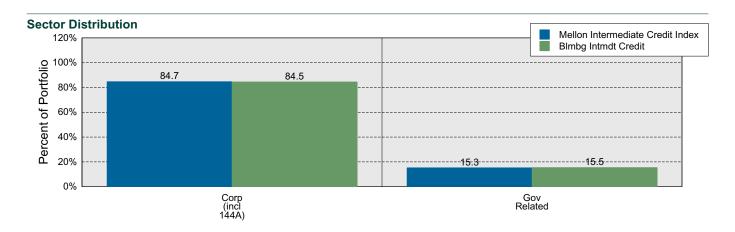
# **Sector Allocation and Quality Ratings**

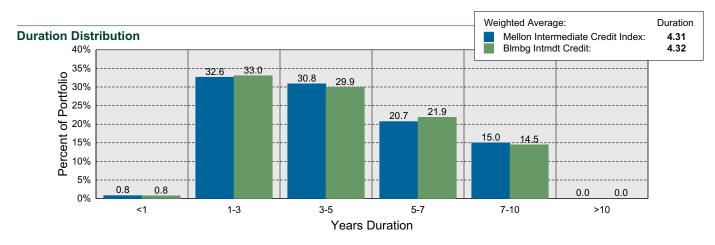


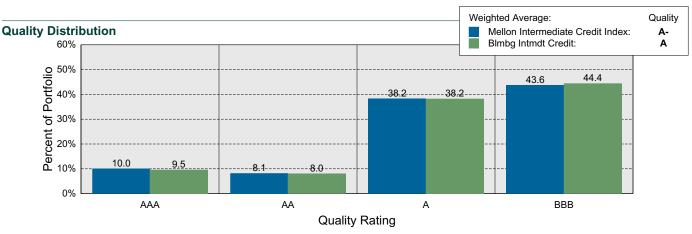


# **Mellon Intermediate Credit Index Portfolio Characteristics Summary** As of March 31, 2022

# **Portfolio Structure Comparison**









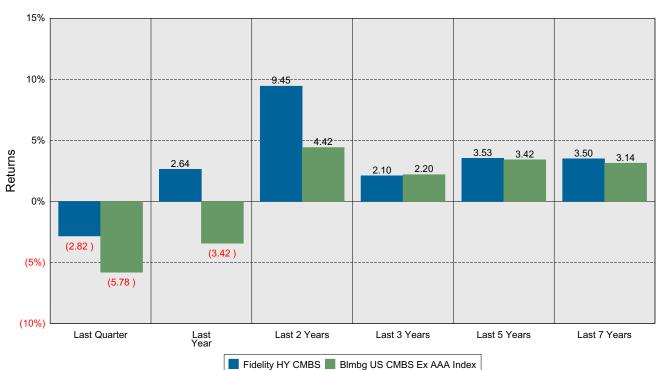
# Fidelity HY CMBS Period Ended March 31, 2022

#### **Asset Class Membership Changes**

On 03/01/2021, the Fidelity HY CMBS account switched from the Opportunistic Fixed composite to the High Yield composite under the new fixed income structure.

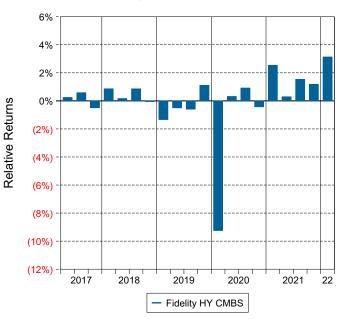
### **Quarterly Summary and Highlights**

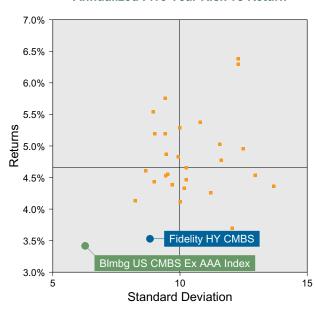
- Fidelity HY CMBS's portfolio posted a (2.82)% return for the quarter placing it in the 4 percentile of the Callan Global Fixed High Yield group for the quarter and in the 1 percentile for the last year.
- Fidelity HY CMBS's portfolio outperformed the Blmbg US CMBS Ex AAA Index by 2.95% for the quarter and outperformed the BImbg US CMBS Ex AAA Index for the year by 6.06%.



Relative Returns vs Blmbg US CMBS Ex AAA Index

Callan Global Fixed High Yield (Gross) **Annualized Five Year Risk vs Return** 





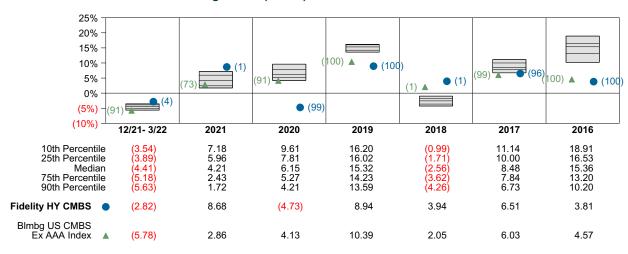


## Fidelity HY CMBS **Return Analysis Summary**

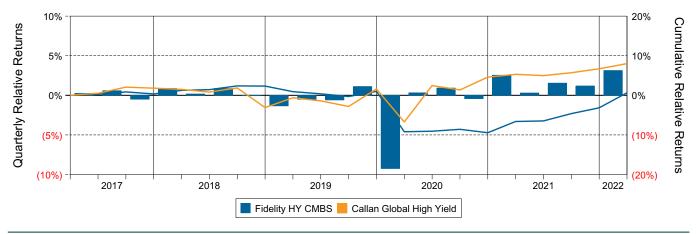
### **Return Analysis**

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 March 31, 2022



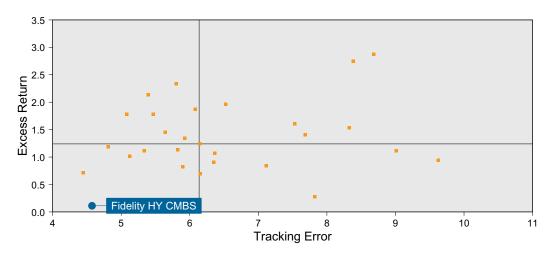


## Fidelity HY CMBS **Risk Analysis Summary**

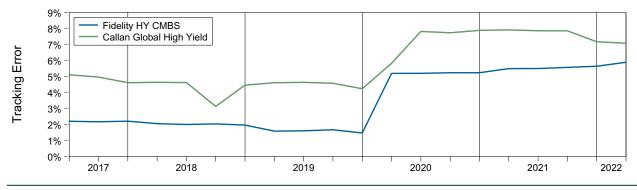
### **Risk Analysis**

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.

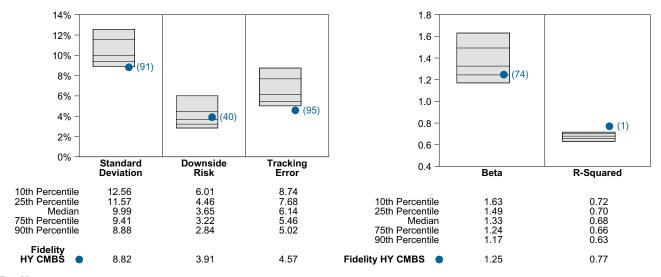
### Risk Analysis vs Callan Global Fixed High Yield (Gross) Five Years Ended March 31, 2022



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 March 31, 2022

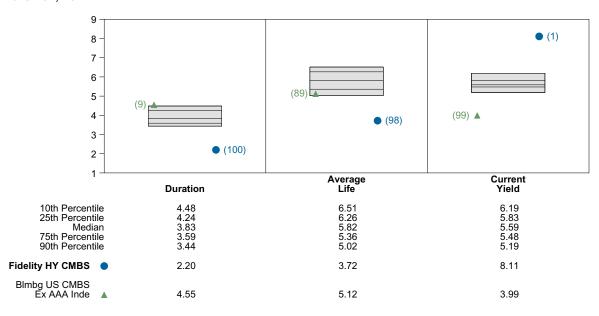


## **Fidelity HY CMBS Bond Characteristics Analysis Summary**

### **Portfolio Characteristics**

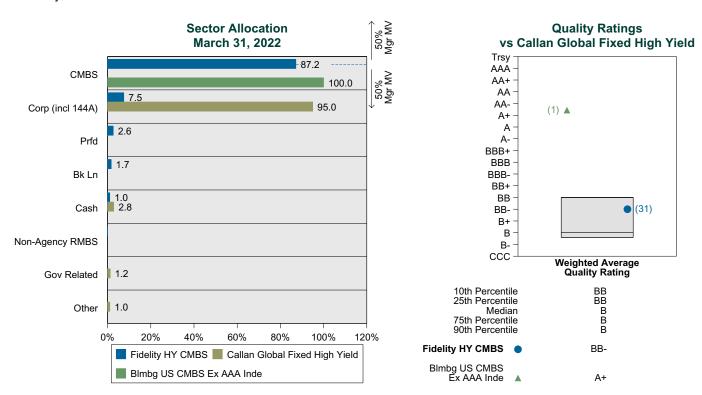
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan Global Fixed High Yield as of March 31, 2022



### **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.

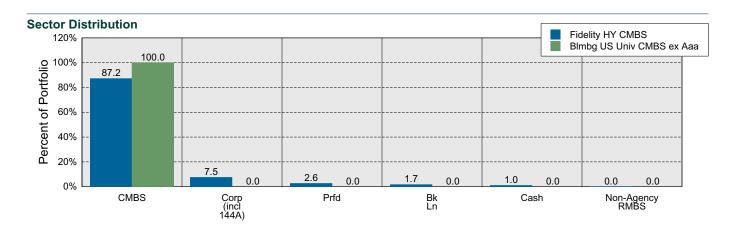


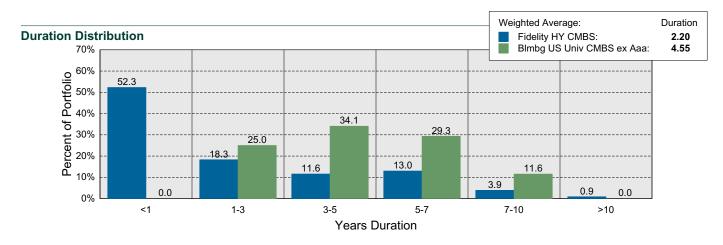


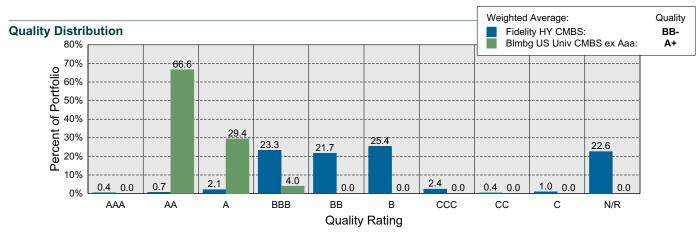
## **Fidelity HY CMBS Portfolio Characteristics Summary** As of March 31, 2022

## **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.









## BlackRock High Yield Index Period Ended March 31, 2022

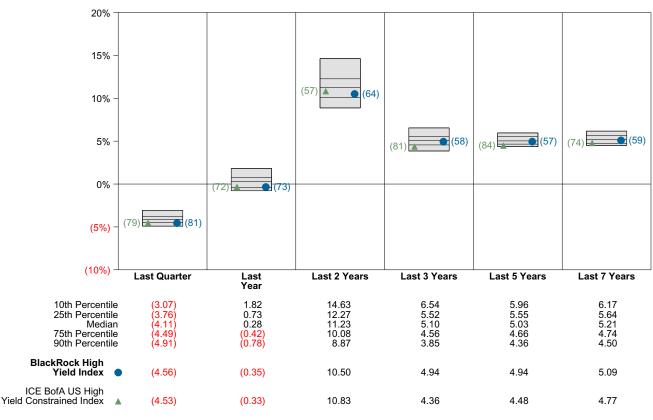
### **Return History**

The BlackRock High Yield account was funded in March of 2021. Previous history reflects the manager's composite

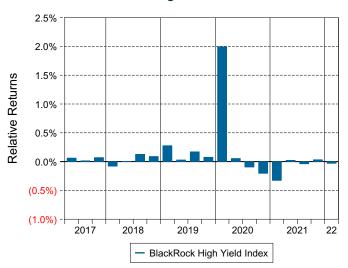
### **Quarterly Summary and Highlights**

- BlackRock High Yield Index's portfolio posted a (4.56)% return for the quarter placing it in the 81 percentile of the Callan High Yield Fixed Income group for the guarter and in the 73 percentile for the last year.
- BlackRock High Yield Index's portfolio underperformed the ICE BofA US High Yield Constrained Index by 0.03% for the quarter and underperformed the ICE BofA US High Yield Constrained Index for the year by 0.02%.

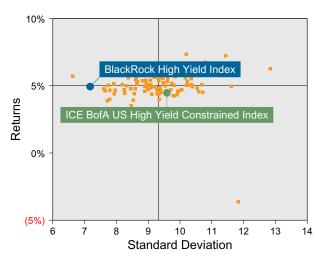
### Performance vs Callan High Yield Fixed Income (Gross)



## Relative Returns vs ICE BofA US High Yield Constrained Index



### Callan High Yield Fixed Income (Gross) **Annualized Five Year Risk vs Return**



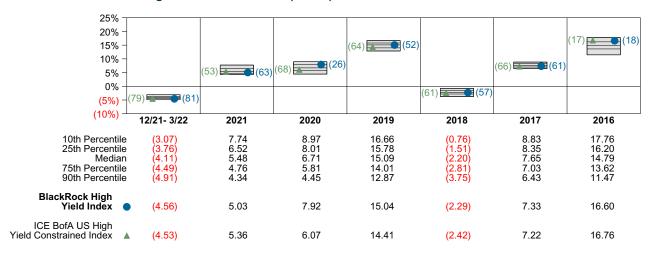


## BlackRock High Yield Index **Return Analysis Summary**

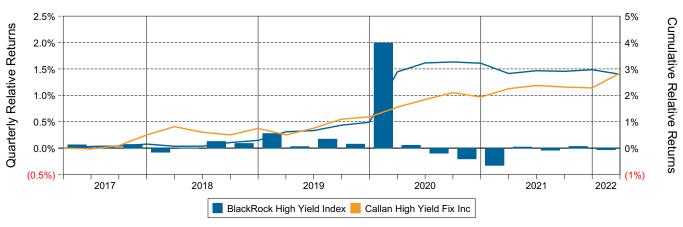
### **Return Analysis**

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.

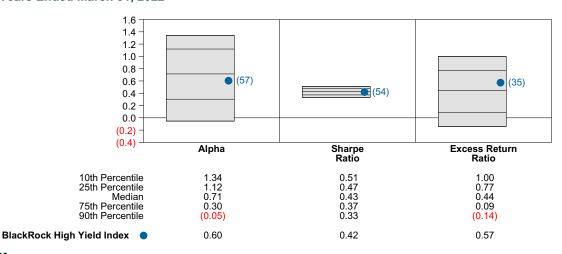
## Performance vs Callan High Yield Fixed Income (Gross)



## Cumulative and Quarterly Relative Returns vs ICE BofA US High Yield Constrained Index



Risk Adjusted Return Measures vs ICE BofA US High Yield Constrained Index Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2022



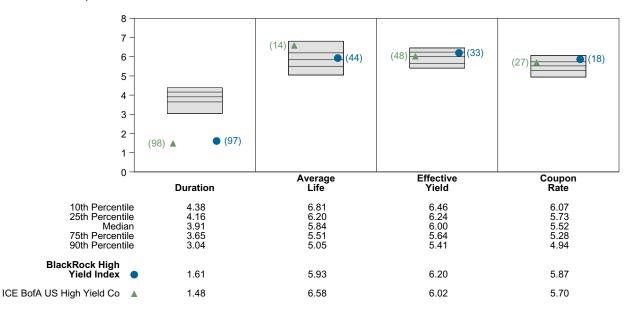


## BlackRock High Yield Index **Bond Characteristics Analysis Summary**

### **Portfolio Characteristics**

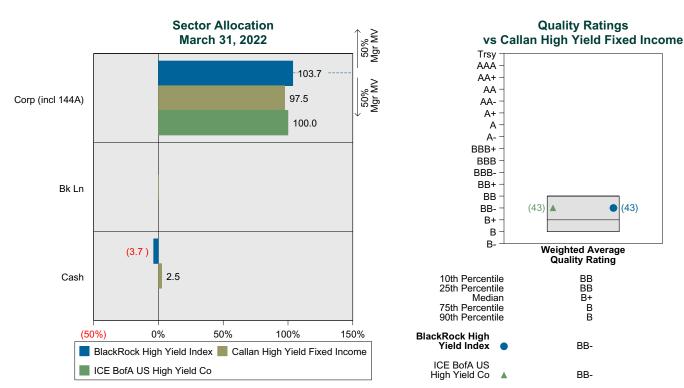
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics** Rankings Against Callan High Yield Fixed Income as of March 31, 2022



### 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.

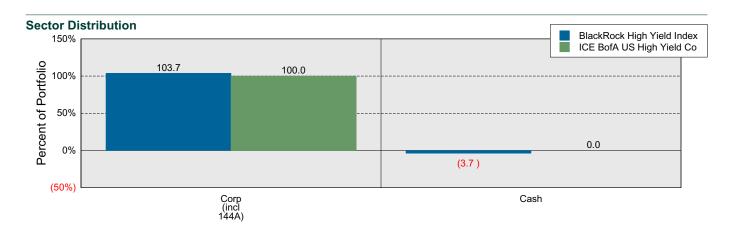


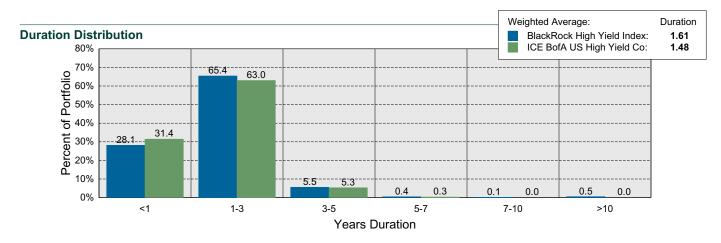


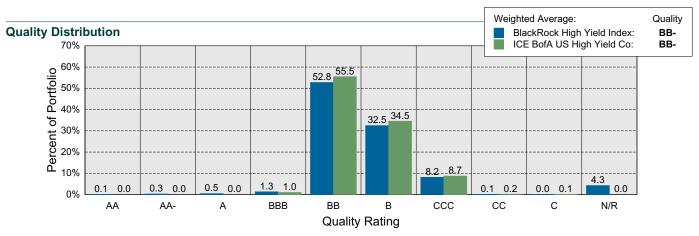
## BlackRock High Yield Index **Portfolio Characteristics Summary** As of March 31, 2022

### **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.









## Mellon High Yield Beta Period Ended March 31, 2022

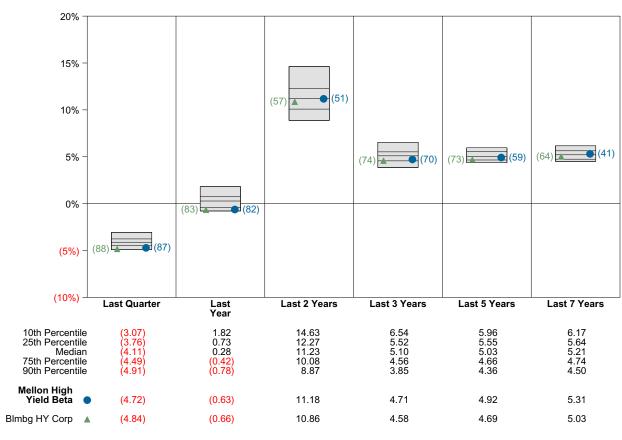
### **Return History**

The Mellon High Yield Beta account was funded in May of 2021. Previous history reflects the manager's composite returns.

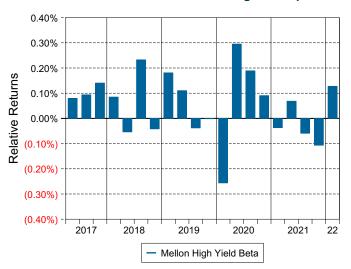
### **Quarterly Summary and Highlights**

- Mellon High Yield Beta's portfolio posted a (4.72)% return for the quarter placing it in the 87 percentile of the Callan High Yield Fixed Income group for the quarter and in the 82 percentile for the last year.
- Mellon High Yield Beta's portfolio outperformed the Blmbg HY Corp by 0.12% for the quarter and outperformed the Blmbg HY Corp for the year by 0.03%.

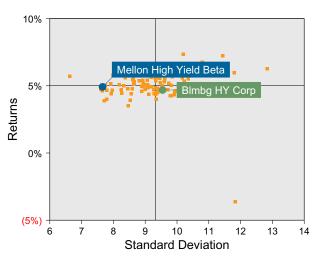
### Performance vs Callan High Yield Fixed Income (Gross)



### Relative Return vs Blmbg HY Corp



### Callan High Yield Fixed Income (Gross) **Annualized Five Year Risk vs Return**



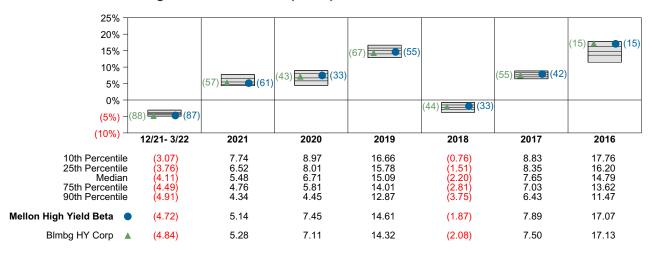


## Mellon High Yield Beta **Return Analysis Summary**

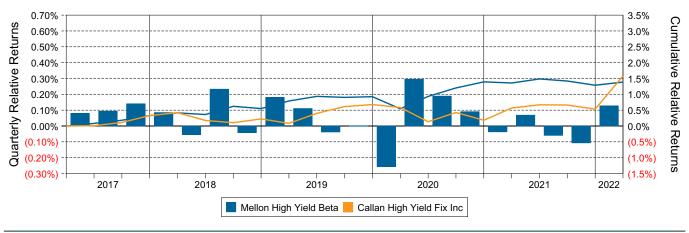
### **Return Analysis**

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

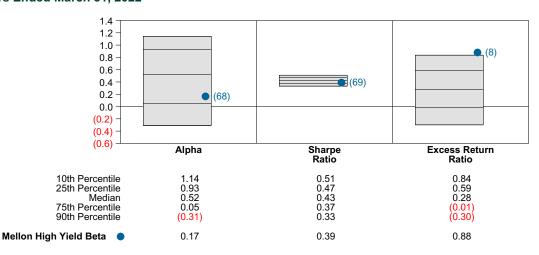
## Performance vs Callan High Yield Fixed Income (Gross)



### **Cumulative and Quarterly Relative Returns vs Blmbg HY Corp**



Risk Adjusted Return Measures vs Blmbg HY Corp Rankings Against Callan High Yield Fixed Income (Gross) Five Years Ended March 31, 2022



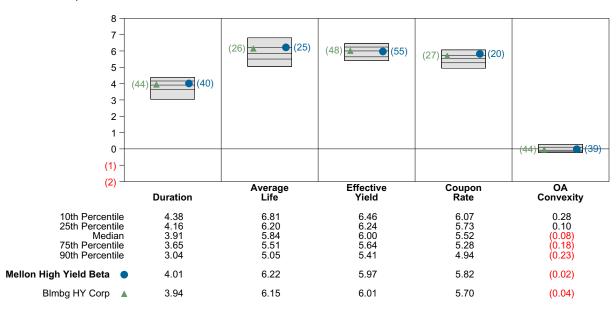


## Mellon High Yield Beta **Bond Characteristics Analysis Summary**

### **Portfolio Characteristics**

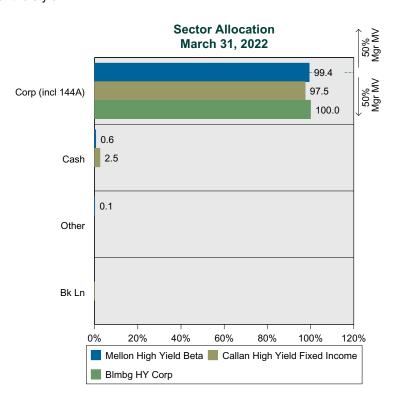
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

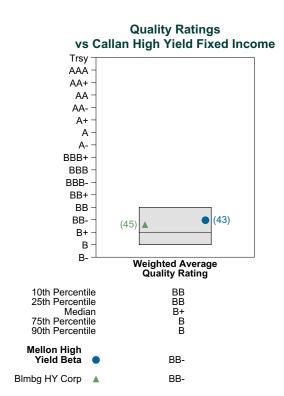
### **Fixed Income Portfolio Characteristics** Rankings Against Callan High Yield Fixed Income as of March 31, 2022



### Sector Allocation and Quality Ratings

The first graph compares the manager's sector allocation with the average allocation across all the members of the manager's style. The second graph compares the manager's weighted average quality rating with the range of quality ratings for the style.



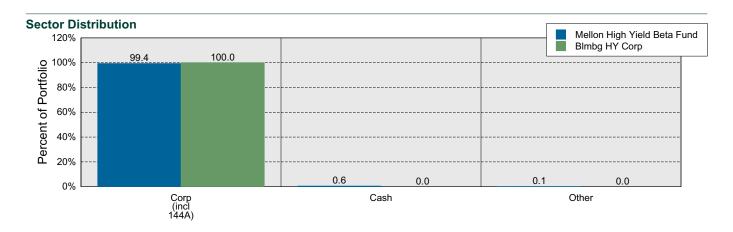


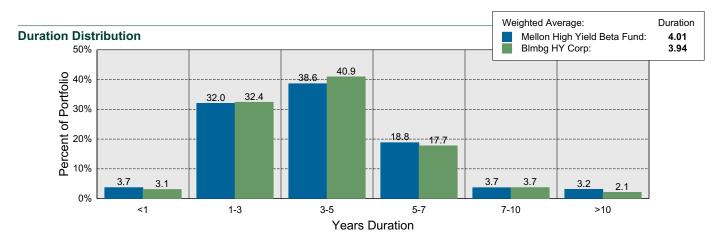


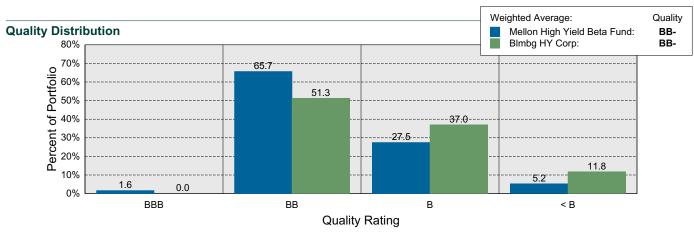
# Mellon High Yield Beta Fund **Portfolio Characteristics Summary** As of March 31, 2022

## **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.







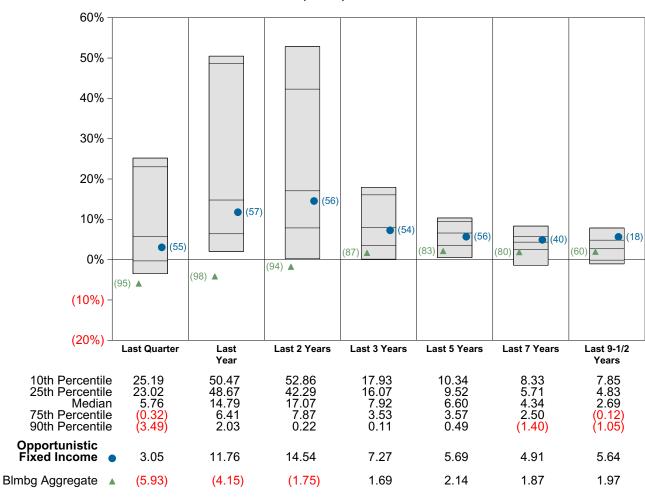


## **Opportunistic Fixed Income** Period Ended March 31, 2022

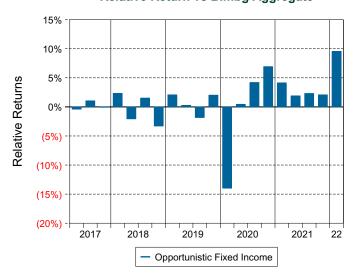
### **Quarterly Summary and Highlights**

- Opportunistic Fixed Income's portfolio posted a 3.05% return for the quarter placing it in the 55 percentile of the Callan Alternative Investments DB group for the quarter and in the 57 percentile for the last year.
- Opportunistic Fixed Income's portfolio outperformed the Blmbg Aggregate by 8.98% for the quarter and outperformed the Blmbg Aggregate for the year by 15.91%.

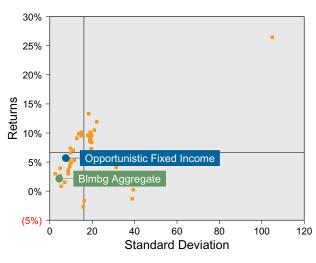
### Performance vs Callan Alternative Investments DB (Gross)



### Relative Return vs Blmbg Aggregate



### Callan Alternative Investments DB (Gross) Annualized Five Year Risk vs Return

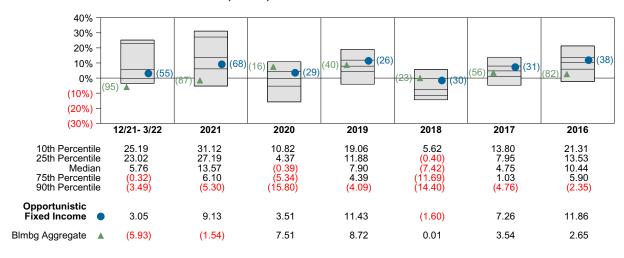


## **Opportunistic Fixed Income Return Analysis Summary**

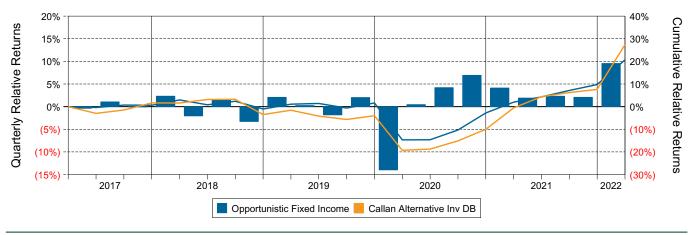
### **Return Analysis**

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.

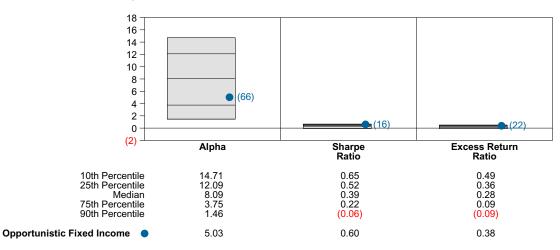
## Performance vs Callan Alternative Inv DB (Gross)



## Cumulative and Quarterly Relative Returns vs Blmbg Aggregate



Risk Adjusted Return Measures vs Blmbg Aggregate Rankings Against Callan Alternative Inv DB (Gross) Five Years Ended March 31, 2022





## **Blackstone Keystone** Period Ended March 31, 2022

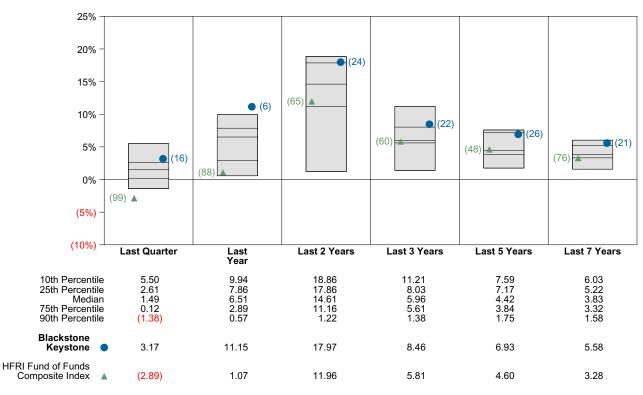
### **Asset Class Membership Changes**

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.

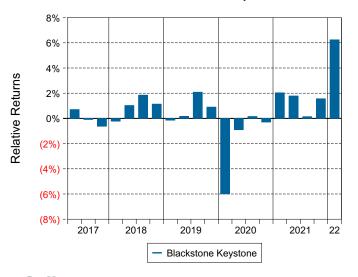
### **Quarterly Summary and Highlights**

- Blackstone Keystone's portfolio posted a 3.17% return for the quarter placing it in the 16 percentile of the Callan Absolute Rtn Hedge Fund of Funds group for the quarter and in the 6 percentile for the last year.
- Blackstone Keystone's portfolio outperformed the HFRI Fund of Funds Composite Index by 6.06% for the guarter and outperformed the HFRI Fund of Funds Composite Index for the year by 10.08%.

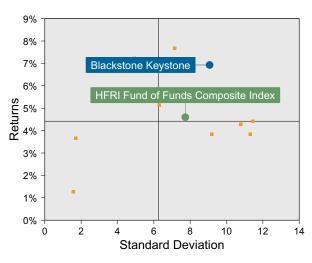
### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



### Relative Returns vs **HFRI Fund of Funds Composite Index**



Callan Absolute Rtn Hedge Fund of Funds (Net) Annualized Five Year Risk vs Return



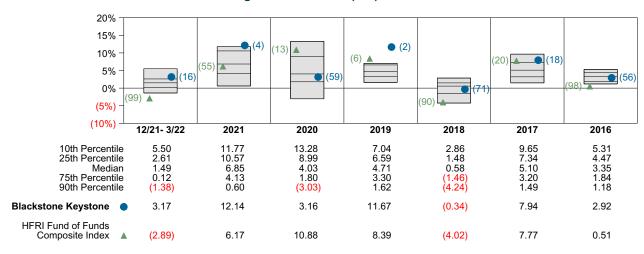


## **Blackstone Keystone Return Analysis Summary**

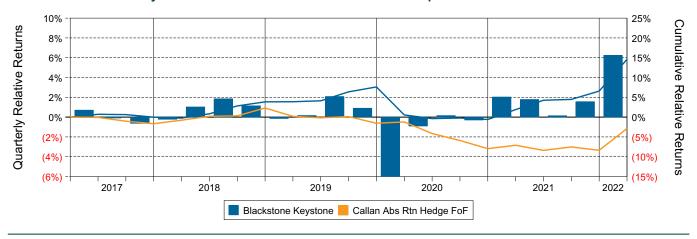
### **Return Analysis**

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.

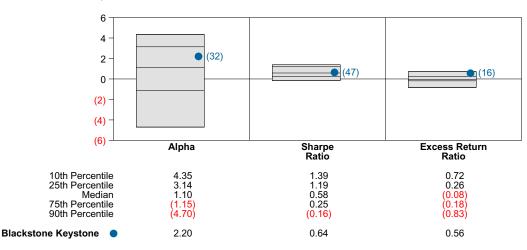
### Performance vs Callan Absolute Rtn Hedge Fund of Funds (Net)



### 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 March 31, 2022

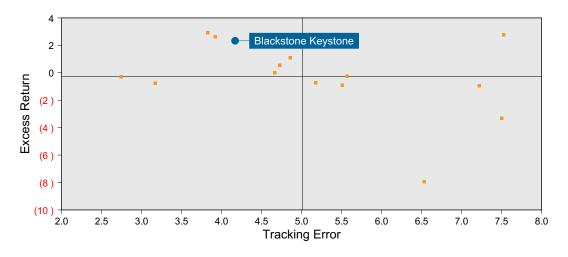


## **Blackstone Keystone Risk Analysis Summary**

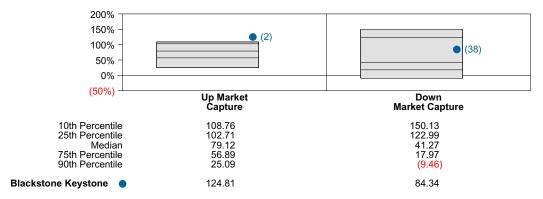
### Risk Analysis

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.

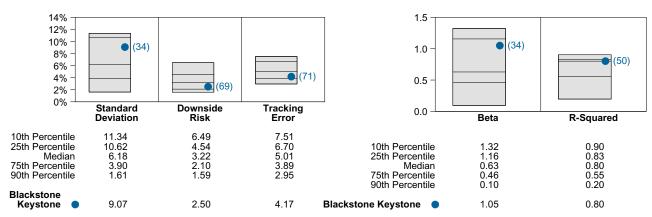
### Risk Analysis vs Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended March 31, 2022



Market Capture vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended March 31, 2022



Risk Statistics Rankings vs HFRI Fund of Funds Composite Index Rankings Against Callan Absolute Rtn Hedge Fund of Funds (Net) Five Years Ended March 31, 2022

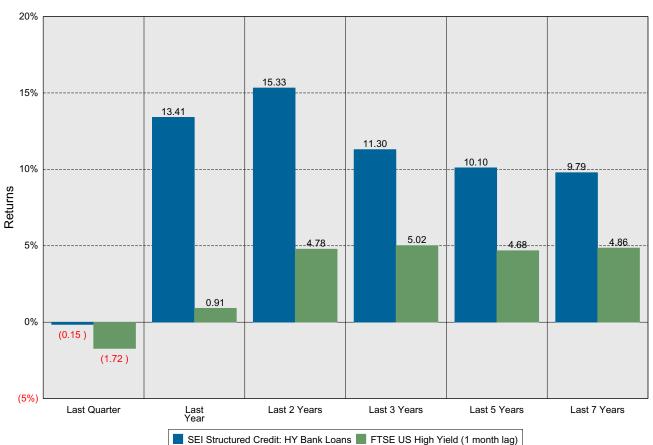




## **SEI Structured Credit: HY Bank Loans** Period Ended March 31, 2022

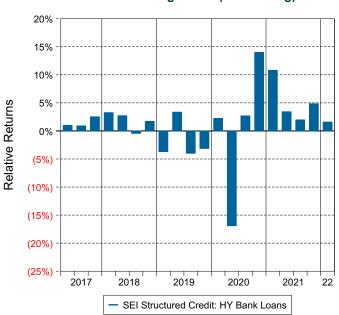
### **Quarterly Summary and Highlights**

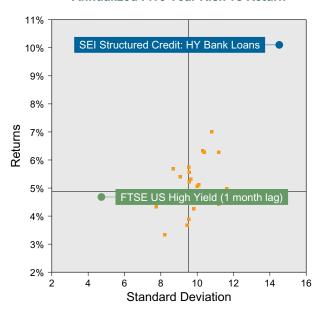
- SEI Structured Credit: HY Bank Loans's portfolio posted a (0.15)% return for the quarter placing it in the 3 percentile of the Callan Multi-Sector Credit group for the quarter and in the 1 percentile for the last year.
- SEI Structured Credit: HY Bank Loans's portfolio outperformed the FTSE US High Yield (1 month lag) by 1.57% for the quarter and outperformed the FTSE US High Yield (1 month lag) for the year by 12.49%.



# Relative Returns vs FTSE US High Yield (1 month lag)

Callan Multi-Sector Credit (Gross) Annualized Five Year Risk vs Return





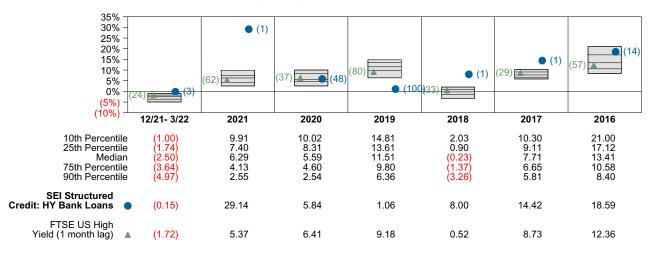


## **SEI Structured Credit: HY Bank Loans Return Analysis Summary**

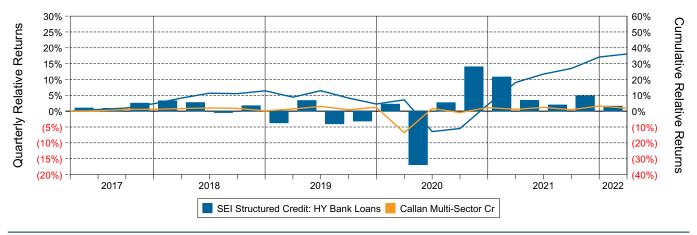
### **Return Analysis**

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

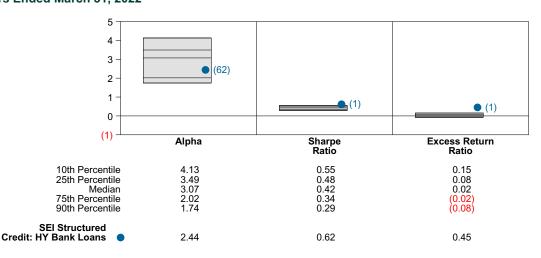
### Performance vs Callan Multi-Sector Credit (Gross)



## Cumulative and Quarterly Relative Returns vs FTSE US High Yield (1 month lag)



Risk Adjusted Return Measures vs FTSE US High Yield (1 month lag) Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended March 31, 2022

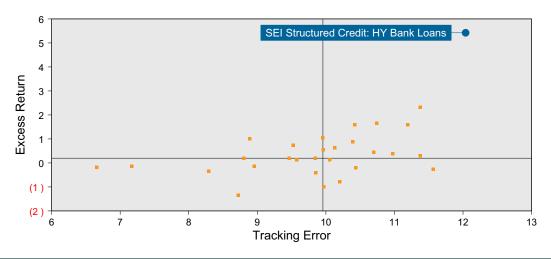


## **SEI Structured Credit: HY Bank Loans Risk Analysis Summary**

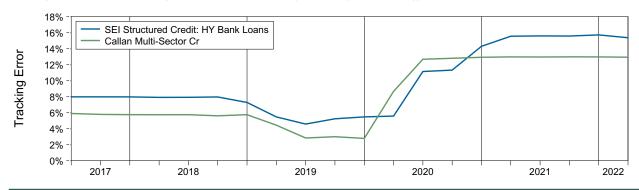
### Risk Analysis

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

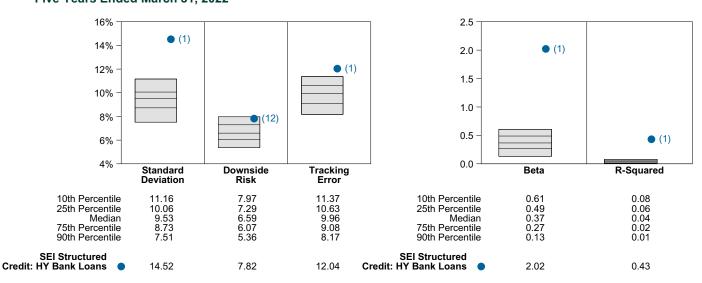
### Risk Analysis vs Callan Multi-Sector Credit (Gross) Five Years Ended March 31, 2022



Rolling 12 Quarter Tracking Error vs FTSE US High Yield (1 month lag)



Risk Statistics Rankings vs FTSE US High Yield (1 month lag) Rankings Against Callan Multi-Sector Credit (Gross) Five Years Ended March 31, 2022

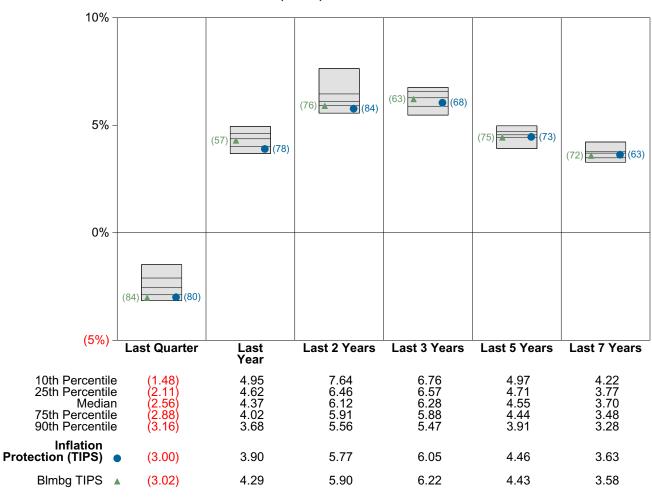


## Inflation Protection (TIPS) Period Ended March 31, 2022

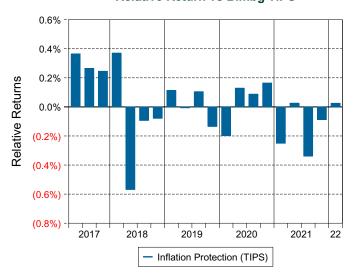
### **Quarterly Summary and Highlights**

- Inflation Protection (TIPS)'s portfolio posted a (3.00)% return for the quarter placing it in the 80 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 outperformed the Blmbg TIPS by 0.02% for the quarter and underperformed the Blmbg TIPS for the year by 0.39%.

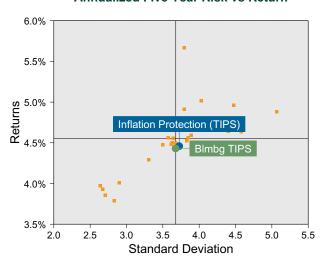
### Performance vs Callan Inflation Linked Bonds (Gross)



### Relative Return vs Blmbg TIPS



### **Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return**



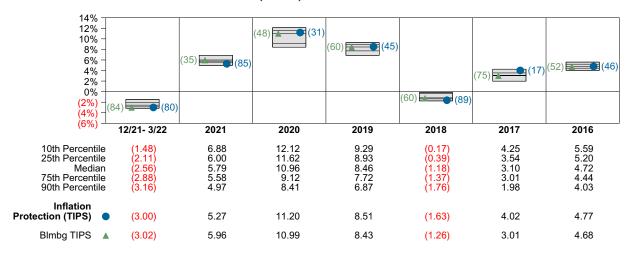


## Inflation Protection (TIPS) **Return Analysis Summary**

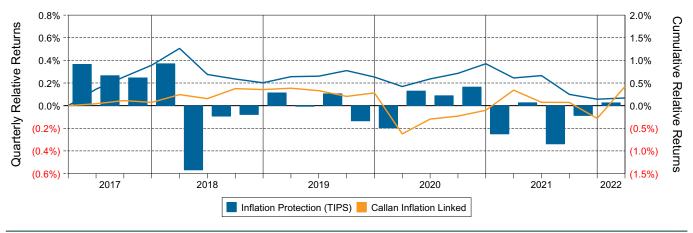
### **Return Analysis**

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.

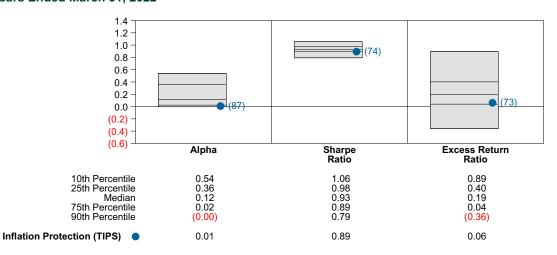
## Performance vs Callan Inflation Linked Bonds (Gross)



### 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 March 31, 2022



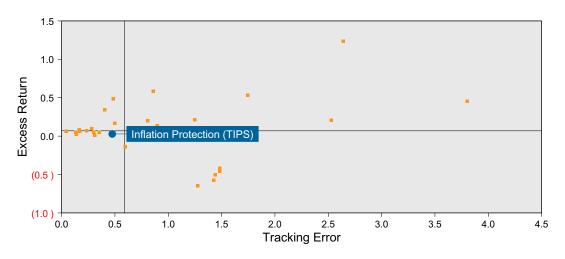


## Inflation Protection (TIPS) **Risk Analysis Summary**

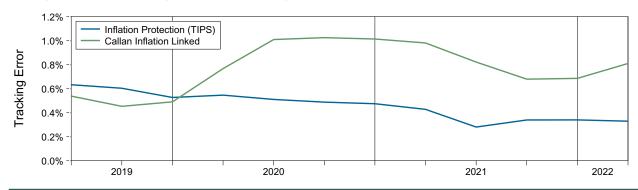
### Risk Analysis

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.

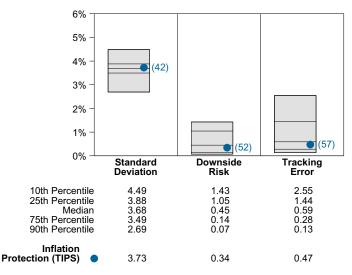
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022

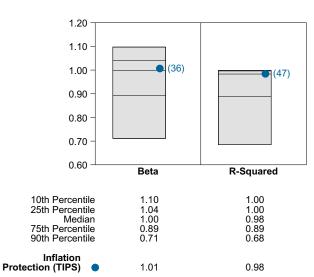


**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022





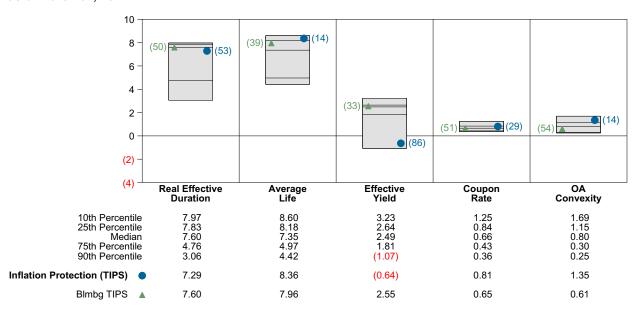


## Inflation Protection (TIPS) **Bond Characteristics Analysis Summary**

### **Portfolio Characteristics**

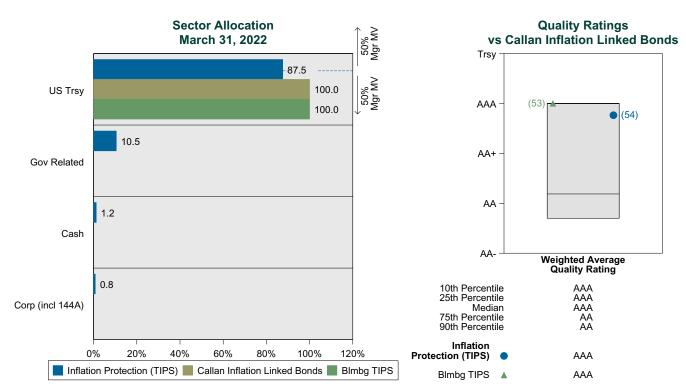
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of March 31, 2022



## 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.

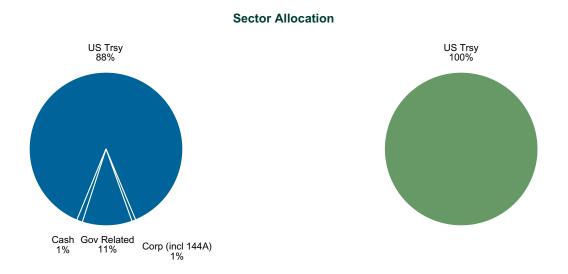




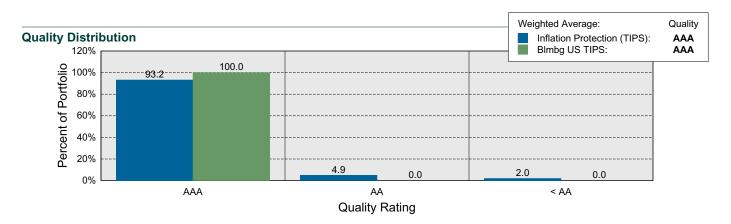
## Inflation Protection (TIPS) **Portfolio Characteristics Summary** As of March 31, 2022

### **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) Blmbg US TIPS** Weighted Average: Real Duration **Duration Distribution** Inflation Protection (TIPS): 7.29 35% Blmbg US TIPS: 7.60 Dercent of Portfolio 30% 25% 20% 15% 10% 5% 27.1 25.3 24.6 20.5 20.2 17.2 16.5 16.7 9.8 0% 7-10 <1 1-3 3-5 5-7 >10 Years Duration



## **Brown Brothers TIPS** Period Ended March 31, 2022

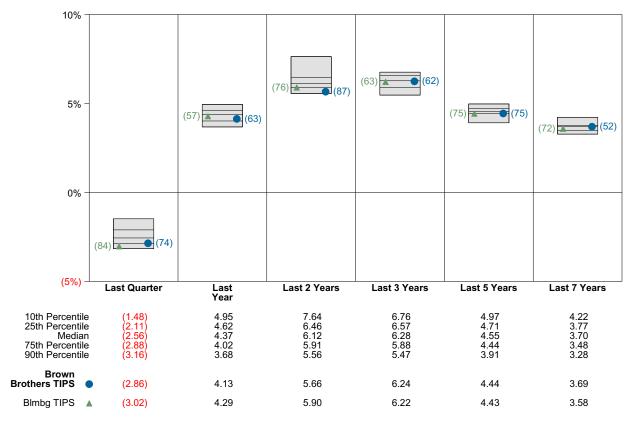
### **Investment Philosophy**

The BBH U.S. TIPS strategy seeks to capture a range of fundamentally-based and technically-based opportunities in the inflation-indexed securities market.

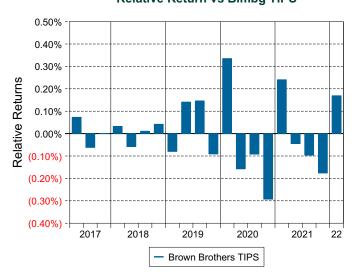
## **Quarterly Summary and Highlights**

- Brown Brothers TIPS's portfolio posted a (2.86)% return for the quarter placing it in the 74 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 63 percentile for the last year.
- Brown Brothers TIPS's portfolio outperformed the Blmbg TIPS by 0.16% for the quarter and underperformed the Blmbg TIPS for the year by 0.15%.

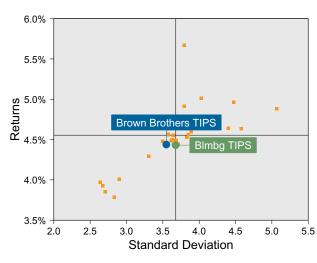
## Performance vs Callan Inflation Linked Bonds (Gross)



## Relative Return vs Blmbg TIPS



### Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return



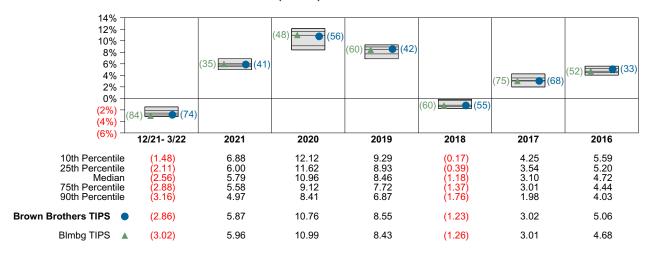


## **Brown Brothers TIPS Return Analysis Summary**

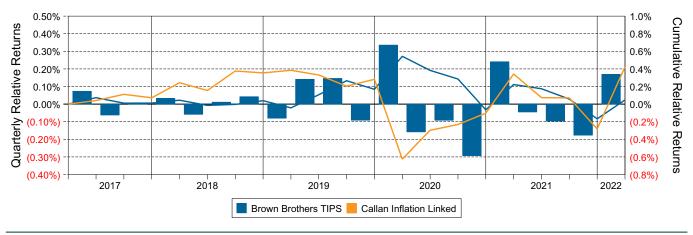
### **Return Analysis**

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.

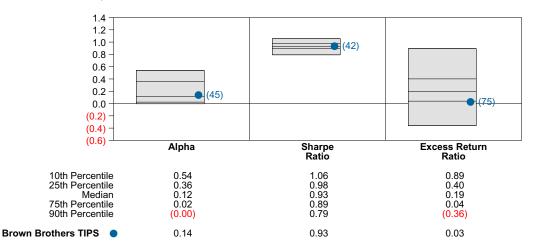
## Performance vs Callan Inflation Linked Bonds (Gross)



### 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 March 31, 2022



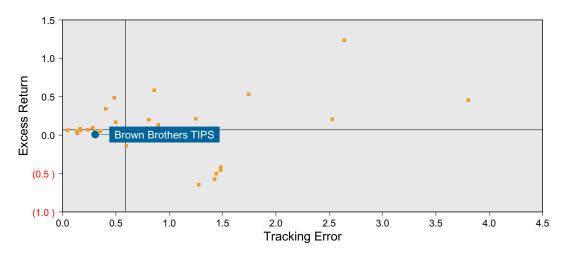


# **Brown Brothers TIPS Risk Analysis Summary**

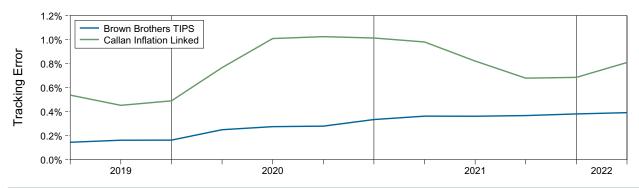
### **Risk Analysis**

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.

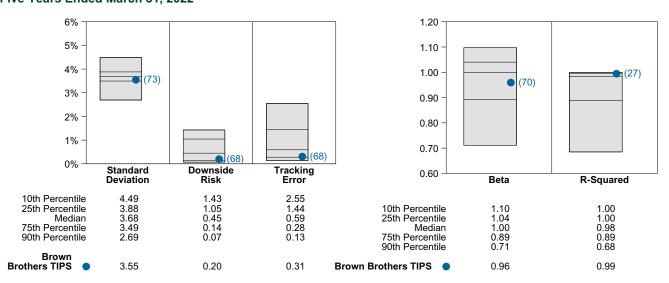
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022



**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022

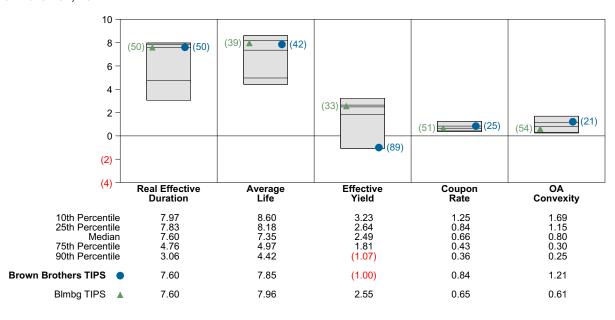


## **Brown Brothers TIPS Bond Characteristics Analysis Summary**

### **Portfolio Characteristics**

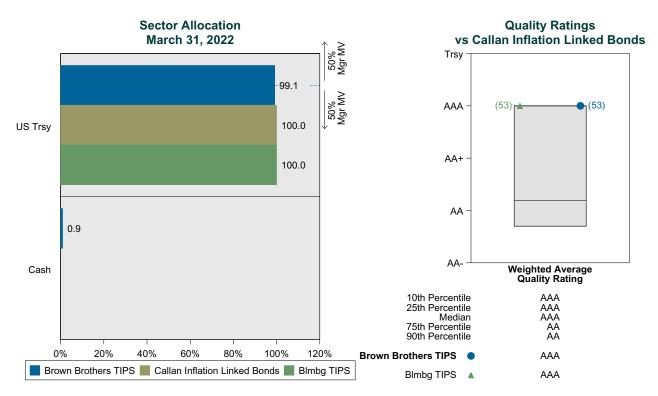
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of March 31, 2022



## 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 March 31, 2022

### **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** Weighted Average: Real Duration **Duration Distribution** Brown Brothers TIPS: 7.60 40% Blmbg US TIPS: 35% Percent of Portfolio 30% 25.3 24.6 25% 21.3 20.9 20% 16.5 15% 9.8 10% 5.7 5% 0% 3-5 <1 1-3 5-7 7-10 >10

Years Duration



## **NISA Inv Adv TIPS** Period Ended March 31, 2022

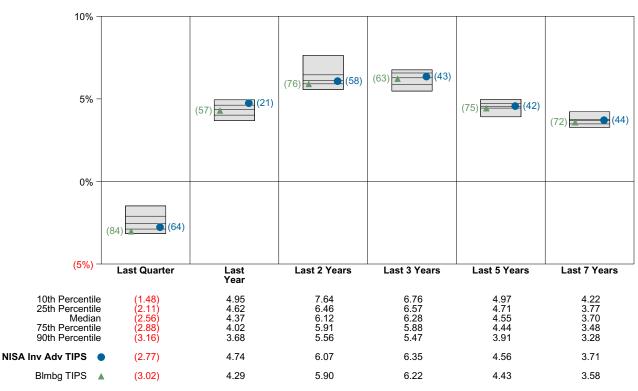
### **Investment Philosophy**

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.

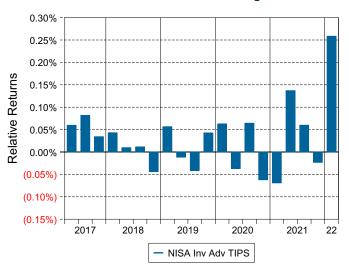
### **Quarterly Summary and Highlights**

- NISA Inv Adv TIPS's portfolio posted a (2.77)% return for the quarter placing it in the 64 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 21 percentile for the last year.
- NISA Inv Adv TIPS's portfolio outperformed the Blmbg TIPS by 0.25% for the quarter and outperformed the Blmbg TIPS for the year by 0.45%.

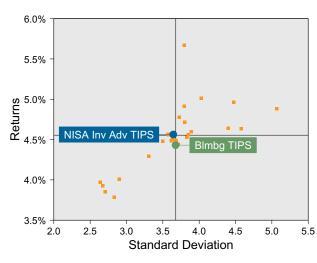
### Performance vs Callan Inflation Linked Bonds (Gross)



### Relative Return vs Blmbg TIPS



### Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return



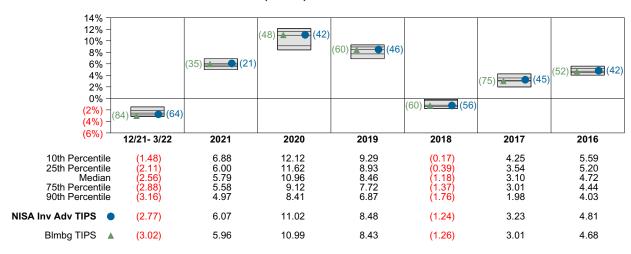


## **NISA Inv Adv TIPS Return Analysis Summary**

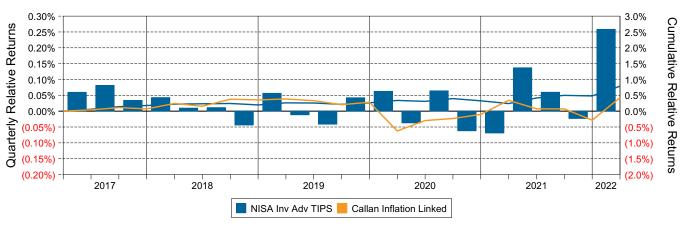
### **Return Analysis**

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.

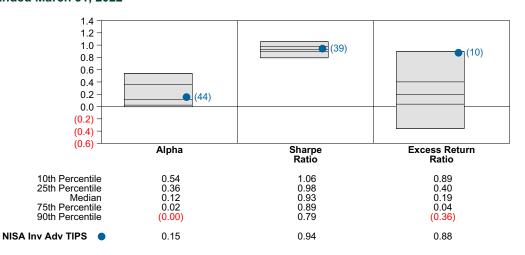
### Performance vs Callan Inflation Linked Bonds (Gross)



### **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 March 31, 2022



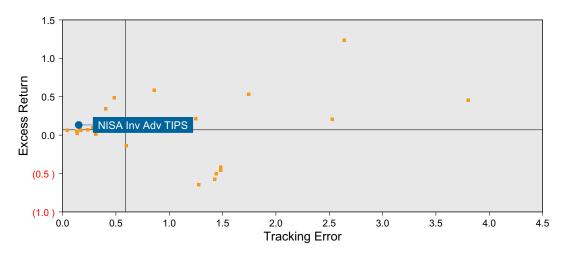


## **NISA Inv Adv TIPS Risk Analysis Summary**

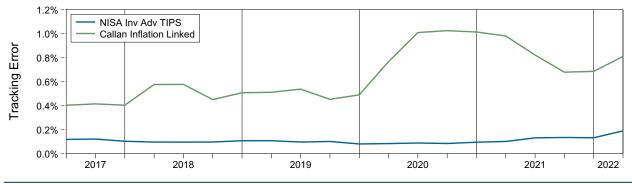
#### Risk Analysis

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.

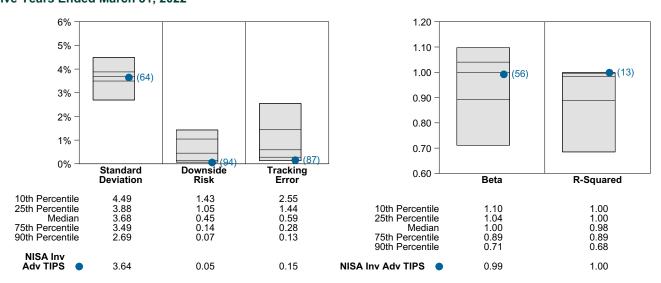
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022



**Rolling 12 Quarter Tracking Error vs Bloomberg TIPS** 



Risk Statistics Rankings vs Bloomberg TIPS Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022

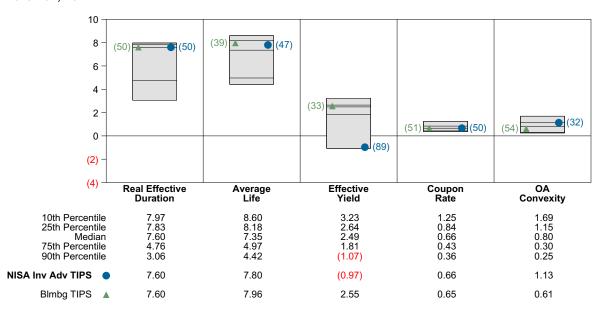


## **NISA Inv Adv TIPS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

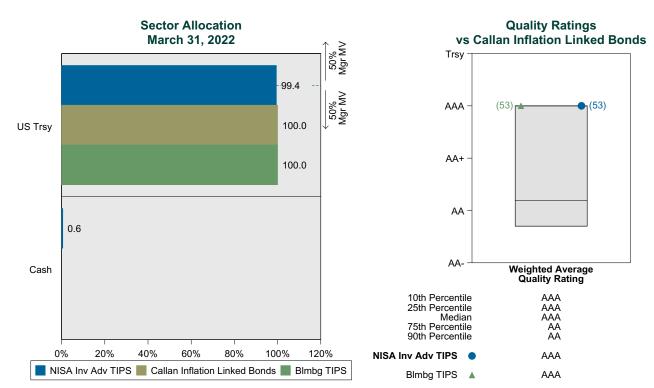
This graph compares the manager's portfolio characteristics with the range of characteristics for the portfolios which make up the manager's style group. This analysis illustrates whether the manager's current holdings are consistent with other managers employing the same style.

### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of March 31, 2022



## 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.





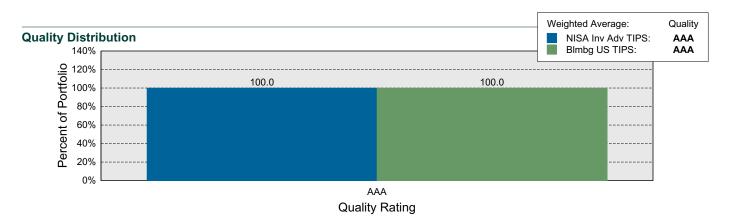
## **NISA Inv Adv TIPS Portfolio Characteristics Summary** As of March 31, 2022

### **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.



#### **NISA Inv Adv TIPS Blmbg US TIPS** Weighted Average: Real Duration **Duration Distribution** NISA Inv Adv TIPS: 7.60 30% Blmbg US TIPS: 25.3 Percent of Portfolio 24.6 25% -23-6-22.4 20.7 20% 16.5 16.7 16.7 16.0 15% 9.8 10% 5% 0% 3-5 7-10 <1 1-3 5-7 >10 Years Duration



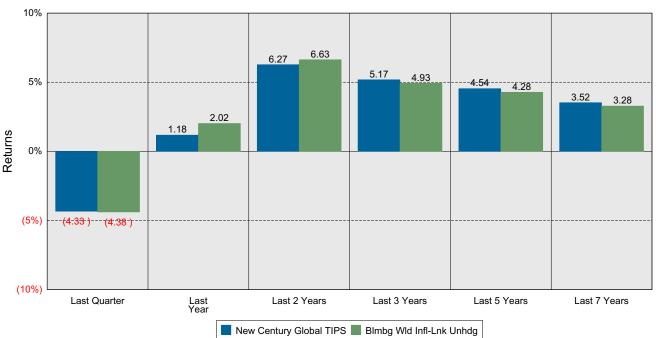
## **New Century Global TIPS** Period Ended March 31, 2022

#### **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.

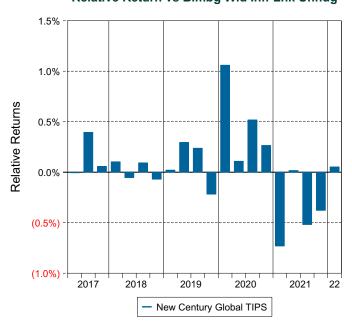
### **Quarterly Summary and Highlights**

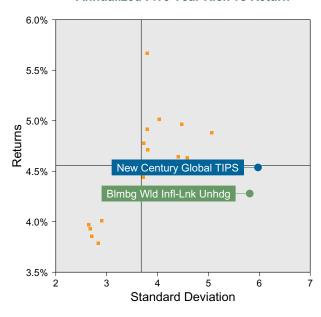
- New Century Global TIPS's portfolio posted a (4.33)% return for the quarter placing it in the 100 percentile of the Callan Inflation Linked Bonds group for the quarter and in the 100 percentile for the last year.
- New Century Global TIPS's portfolio outperformed the Blmbg Wld Infl-Lnk Unhdg by 0.05% for the quarter and underperformed the Blmbg Wld Infl-Lnk Unhdg for the year by 0.84%.



## Relative Return vs Blmbg Wld Infl-Lnk Unhdg

## Callan Inflation Linked Bonds (Gross) Annualized Five Year Risk vs Return





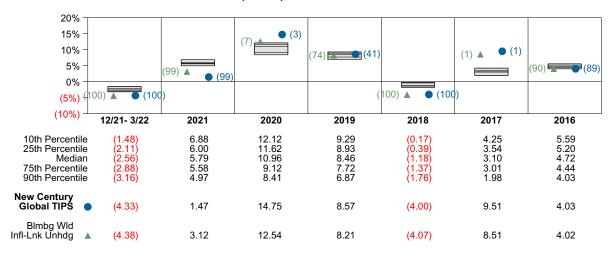


## **New Century Global TIPS Return Analysis Summary**

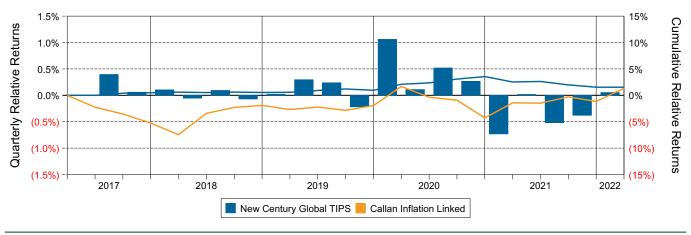
### **Return Analysis**

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.

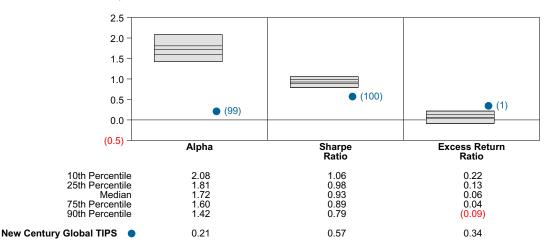
### Performance vs Callan Inflation Linked Bonds (Gross)



## 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 March 31, 2022



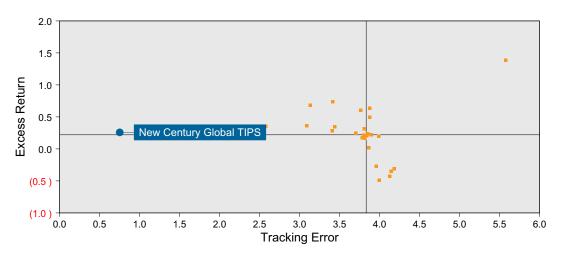


## **New Century Global TIPS Risk Analysis Summary**

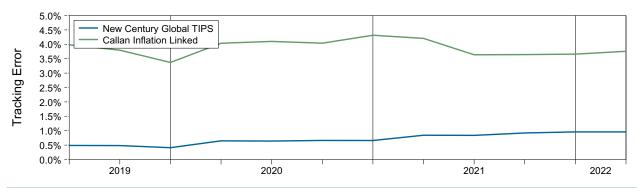
#### Risk Analysis

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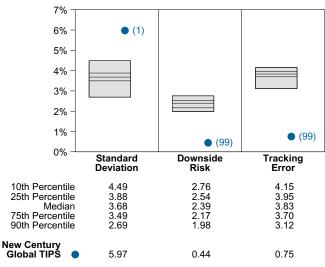
### Risk Analysis vs Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022

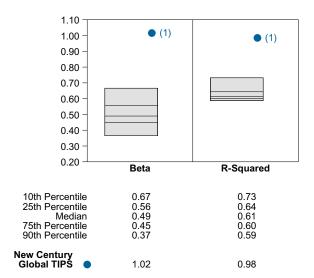


Rolling 12 Quarter Tracking Error vs Bloomberg World Infl-Linked Unhdg



Risk Statistics Rankings vs Bloomberg World Infl-Linked Unhdg Rankings Against Callan Inflation Linked Bonds (Gross) Five Years Ended March 31, 2022





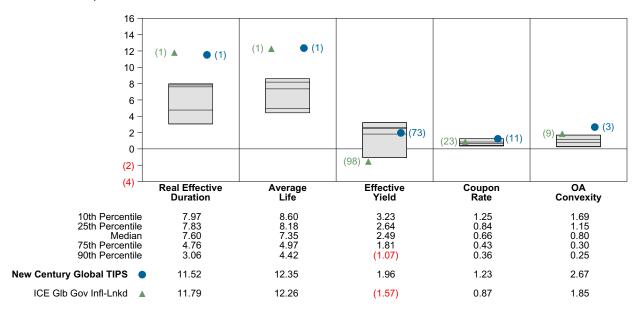


## **New Century Global TIPS Bond Characteristics Analysis Summary**

#### **Portfolio Characteristics**

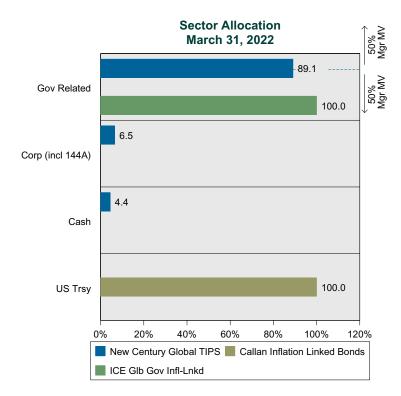
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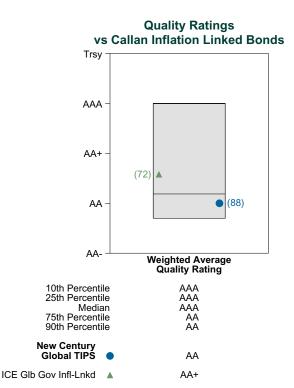
### **Fixed Income Portfolio Characteristics Rankings Against Callan Inflation Linked Bonds** as of March 31, 2022



## **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.



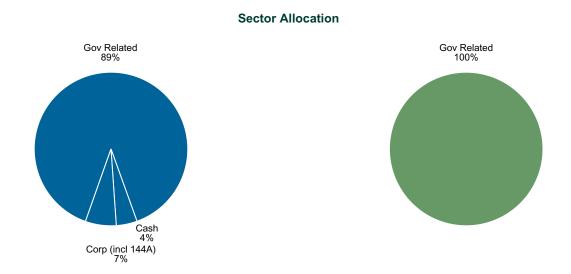




## **New Century Global TIPS Portfolio Characteristics Summary** As of March 31, 2022

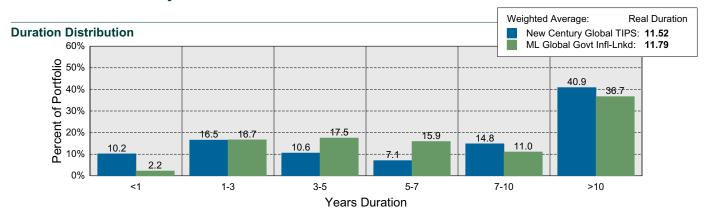
### **Portfolio Structure Comparison**

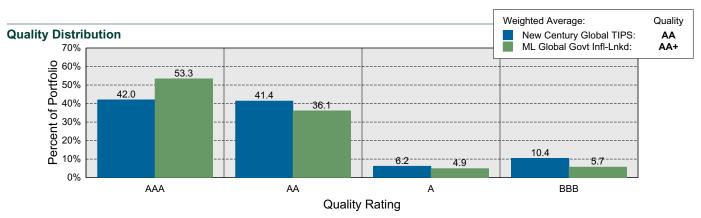
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## **New Century Global TIPS**

## ML Global Govt Infl-Lnkd









1st Quarter 2022

## **Quarterly Highlights**

The Callan Institute provides research to update clients on the latest industry trends and carefully structured educational programs to enhance the knowledge of industry 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

Alternatives Focus: Outlook for Hedge Funds | Joe McGuane analyzes hedge fund performance in 2021 and provides his outlook for the asset class in 2022.

**2022-2031 Capital Markets Assumptions** | A white paper detailing the process involved in creating our 2022-2031 Capital Markets Assumptions and the reasoning behind them. You can also view our interactive webpage and charticle featuring this year's assumptions.

**2022 Defined Contribution Trends Survey** | This survey provides extensive information for DC plan sponsors to use in improving and benchmarking their plans.

## Callan Periodic Table of Investment Returns & Collection | The

Periodic Table of Investment Returns depicts annual returns for key asset classes, ranked from best to worst performance for each calendar year. Expanding upon our Classic Periodic Table, the Collection offers additional versions focused on equity, fixed income, institutional investors, and alternatives such as real estate, private equity, and hedge funds. Other tables compare the performance of key indices to zero and to inflation.

### **Blog Highlights**

**DOL Weighs in on Cryptocurrencies in DC Plans** | The U.S. Department of Labor issued a compliance assistance bulletin, which does not carry the force of law, regarding offering cryptocurrency investments in a defined contribution plan, with a number of stern warnings about the potential fiduciary challenges.

## **Hedge Funds and Ukraine: A Guide for Institutional Investors**

| This post provides an analysis of the performance of hedge funds through the end of February, categorized by strategy type, and how they have been grappling with the Ukraine crisis.

## Why It Was a Tough 4Q21 for Large Cap Growth Managers

With rising case counts stemming from the Omicron variant, and concerns about interest rates and inflation, volatility in the markets spiked in 4Q21. For large cap growth investment managers, pro-cyclical positioning generally hurt portfolios given those fears. More than 90% of large cap growth managers underperformed the benchmark for the quarter.

Risky Business Update: Rising Inflation and Continued Uncertainty Challenge Investors | Using our proprietary Capital Markets Assumptions, we found that investors in 2022 needed to take on over five times as much risk as they did 30 years ago to earn the same nominal return.

## **Quarterly Periodicals**

<u>Private Equity Trends, 4Q21</u> | A high-level summary of private equity activity in the quarter through all the investment stages

Active vs. Passive Charts, 4Q21 | A comparison of active managers alongside relevant benchmarks over the long term

Market Pulse Flipbook, 4Q21 | 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, 4Q21</u> | Analysis and a broad overview of the economy and public and private market activity each quarter across a wide range of asset classes

<u>Hedge Fund Quarterly, 4Q21</u> | Commentary on developments for hedge funds and multi-asset class (MAC) strategies

Real Assets Reporter, 4Q21 | A summary of market activity for real assets and private real estate during the quarter

### **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:

Research Café: How to Navigate Private Equity Fees and Terms (webinar)

May 11, 2022 at 9:30am PT

June Regional Workshop June 7, 2022 – Atlanta June 9, 2022 – Portland

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

**3,700** 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

July 26-27, 2022 – San Francisco

September 20-22 – Virtual

This program familiarizes institutional investor trustees and staff and asset management advisers with basic investment theory, terminology, and practices. Our virtual session is held over three days with virtual modules of 2.5-3 hours, while the in-person session lasts one-and-a-half days. This course is designed for individuals with less than two years of experience with asset-management oversight and/or support responsibilities. 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/



"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 March 31, 2022

## **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

