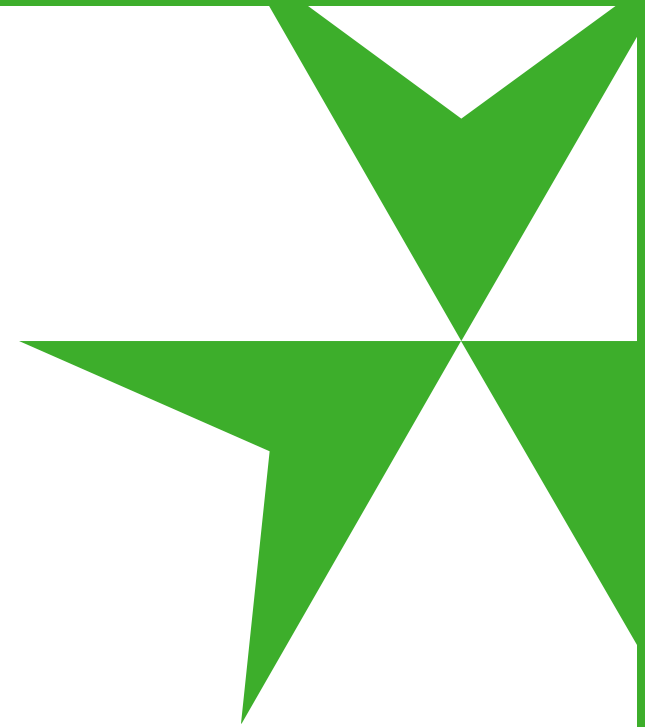




Bristol County Retirement System

# Analysis of Investment Performance

December 31, 2022

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## ANALYSIS OF INVESTMENT PERFORMANCE

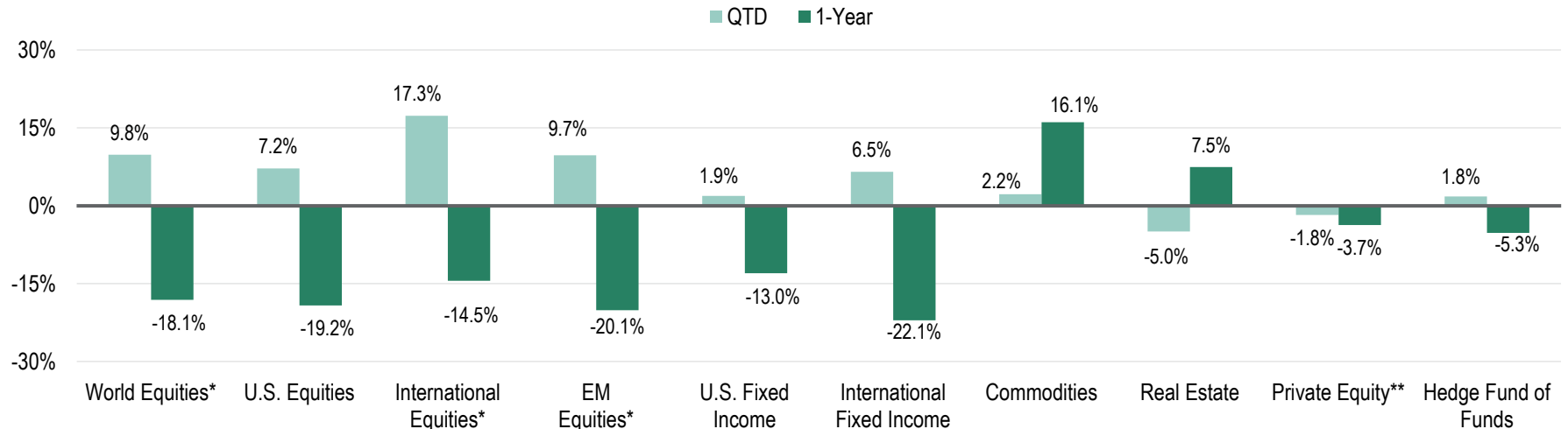
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## **Financial Market Conditions**

# Quarter In Review

## Summary of Investment Returns



## Quarterly Synopsis

- World equity markets were solidly positive. Moderating inflation and hopes that global rate hikes would slow fueled stocks' gains.
- U.S. equities rose. Investors were cheered by the fact that inflation was cooling, and thus that interest rate hikes may slow.
- International equities surged, as energy supply concerns faded and hopes grew that inflation had peaked.
- Emerging market equities also rose, with a weaker US dollar and investor optimism around China reopening.
- U.S. fixed income was positive. Treasuries were slightly higher even as the Federal Reserve hiked rates twice in the quarter.
- Non-U.S. fixed income also was higher. With signs that inflation may have peaked in the eurozone, investors were hopeful that rate hikes would slow.
- Hedge funds posted a gain. Emerging markets performed best in the quarter.
- Commodities gained as well, with industrial and precious metals both rising.

\* Net Dividends Reinvested

\*\* Performance as of Q3 2022 because more recent performance data is not yet available.

Sources: Investment Metrics, Cambridge Associates, FactSet

# Index Returns

| Asset Class            | Indices                                             | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|------------------------|-----------------------------------------------------|-------|--------|--------|--------|--------|---------|
| World Equity           | MSCI World <sup>1</sup>                             | 9.77  | -18.14 | -18.14 | 4.94   | 6.14   | 8.85    |
| U.S. Equity            | Russell 3000                                        | 7.18  | -19.21 | -19.21 | 7.07   | 8.79   | 12.13   |
| Non-U. S. Equity       | MSCI EAFE <sup>1</sup>                              | 17.34 | -14.45 | -14.45 | 0.87   | 1.54   | 4.67    |
| Emerging Market Equity | MSCI EM <sup>1</sup>                                | 9.70  | -20.09 | -20.09 | -2.69  | -1.40  | 1.44    |
| U.S. Fixed Income      | Bloomberg U.S. Aggregate                            | 1.87  | -13.01 | -13.01 | -2.71  | 0.02   | 1.06    |
| Non-U.S. Fixed Income  | FTSE <sup>2</sup> Non-U.S. WGBI (Unhedged)          | 6.51  | -22.07 | -22.07 | -7.96  | -4.21  | -2.27   |
| Commodities            | Bloomberg Commodity Index                           | 2.22  | 16.09  | 16.09  | 12.65  | 6.44   | -1.28   |
| Real Estate            | NFI-ODCE <sup>3</sup>                               | -4.96 | 7.47   | 7.47   | 9.93   | 8.68   | 10.10   |
| Private Equity         | Cambridge Associates US Private Equity <sup>4</sup> | -1.8  | -8.8   | -3.7   | 20.7   | 17.3   | 15.5    |
| Hedge Funds            | HFRI Fund of Funds Composite                        | 1.79  | -5.25  | -5.25  | 3.71   | 3.02   | 3.51    |

<sup>1</sup> Net Dividends Reinvested

<sup>2</sup> Formerly Citigroup Non-U.S. WGBI. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and were all rebranded to FTSE by July 31, 2018.

FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG.

<sup>3</sup> NCREIF Fund Index (NFI) – Open End Diversified Core Equity (ODCE)

<sup>4</sup> Performance as of Q3 2022 because more recent performance data is not yet available.

Sources: Investment Metrics, Cambridge Associates, FactSet

# Index Returns

| Equity Indices      | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|---------------------|-------|--------|--------|--------|--------|---------|
| S&P 500®            | 7.56  | -18.11 | -18.11 | 7.66   | 9.42   | 12.56   |
| Russell 1000        | 7.24  | -19.13 | -19.13 | 7.35   | 9.13   | 12.37   |
| Russell 1000 Growth | 2.20  | -29.14 | -29.14 | 7.79   | 10.96  | 14.10   |
| Russell 1000 Value  | 12.42 | -7.54  | -7.54  | 5.96   | 6.67   | 10.29   |
| Russell 2000        | 6.23  | -20.44 | -20.44 | 3.10   | 4.13   | 9.01    |
| Russell 2000 Growth | 4.13  | -26.36 | -26.36 | 0.65   | 3.51   | 9.20    |
| Russell 2000 Value  | 8.42  | -14.48 | -14.48 | 4.70   | 4.13   | 8.48    |
| Russell 3000        | 7.18  | -19.21 | -19.21 | 7.07   | 8.79   | 12.13   |
| MSCI EAFE*          | 17.34 | -14.45 | -14.45 | 0.87   | 1.54   | 4.67    |
| MSCI World*         | 9.77  | -18.14 | -18.14 | 4.94   | 6.14   | 8.85    |
| MSCI EM*            | 9.70  | -20.09 | -20.09 | -2.69  | -1.40  | 1.44    |

| Fixed-Income Indices                 | QTD  | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|--------------------------------------|------|--------|--------|--------|--------|---------|
| Blbg U.S. Aggregate                  | 1.87 | -13.01 | -13.01 | -2.71  | 0.02   | 1.06    |
| Blbg U.S. Govt/Credit                | 1.80 | -13.58 | -13.58 | -2.57  | 0.21   | 1.16    |
| Blbg U.S. Intermediate Govt/Credit   | 1.54 | -8.23  | -8.23  | -1.26  | 0.73   | 1.12    |
| Blbg U.S. L/T Govt/Credit            | 2.61 | -27.09 | -27.09 | -6.20  | -1.21  | 1.57    |
| Blbg U.S. Government                 | 0.72 | -12.32 | -12.32 | -2.57  | -0.06  | 0.60    |
| Blbg U.S. Credit                     | 3.44 | -15.26 | -15.26 | -2.86  | 0.42   | 1.82    |
| Blbg U.S. Mortgage-Backed Securities | 2.14 | -11.81 | -11.81 | -3.22  | -0.53  | 0.75    |
| Blbg U.S. Corporate High Yield       | 4.17 | -11.19 | -11.19 | 0.05   | 2.31   | 4.03    |
| FTSE Non-U.S. WGBI (Unhedged)***     | 6.51 | -22.07 | -22.07 | -7.96  | -4.21  | -2.27   |
| FTSE 3-Month T-Bill***               | 0.87 | 1.50   | 1.50   | 0.71   | 1.25   | 0.74    |

| Other Indices                         | QTD   | YTD   | 1-Year | 3-Year | 5-Year | 10-Year |
|---------------------------------------|-------|-------|--------|--------|--------|---------|
| Hueler Stable Value                   | 0.55  | 1.87  | 1.87   | 1.94   | 2.13   | 1.97    |
| Bloomberg Commodity                   | 2.22  | 16.09 | 16.09  | 12.65  | 6.44   | -1.28   |
| HFRI Fund of Funds Composite          | 1.79  | -5.25 | -5.25  | 3.71   | 3.02   | 3.51    |
| NCREIF NFI-ODCE                       | -4.96 | 7.47  | 7.47   | 9.93   | 8.68   | 10.10   |
| Cambridge Associates Private Equity** | -1.8  | -8.8  | -3.7   | 20.7   | 17.3   | 15.5    |

\* Net Dividends Reinvested

\*\* Performance reported as of Q3 2022 because more recent performance data is not yet available.

\*\*\*Formerly Citigroup Non-U.S. WGBI. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and were all rebranded to FTSE by July 31, 2018. FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG

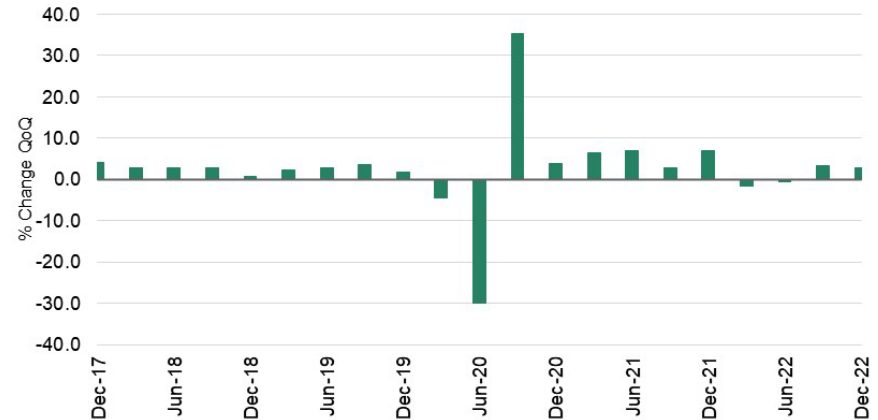
Sources: eVestment Alliance, Hueler Analytics, Investment Metrics, Cambridge Assoc, FactSet

# Quarter In Review: U.S. Economy

## GDP Growth

- U.S. GDP growth rose 2.9% in the quarter ending December 31.
- The quarterly growth was solidly positive even as recession fears persist. The Federal Reserve's spate of interest rate hikes were aimed at cooling inflation but have also led to less robust economic growth.
- The economy is still facing numerous challenges, including rate hikes, fallout from the Russia/Ukraine conflict, and still-high inflation.
- However, there are some signs of economic resilience, including a solid labor market and relatively strong consumer spending.

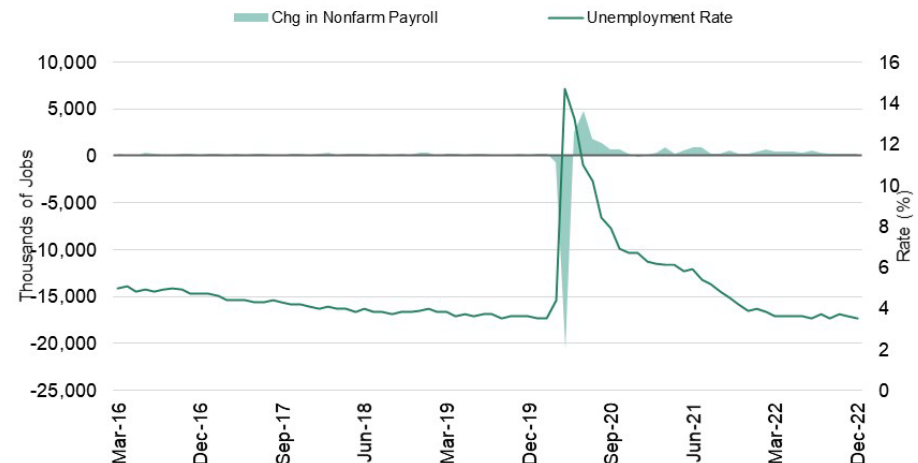
U.S. Real GDP Growth



## Employment Picture

- The unemployment rate was 3.5% in December, beating market expectations.
- Nonfarm payrolls rose by 223,000 in December, showing that the labor market remains strong in spite of several Federal Reserve rate hikes aimed at slowing the economy in order to reduce inflation.
- The leisure and hospitality sector gained the most in December (67k), while health care added 55k.

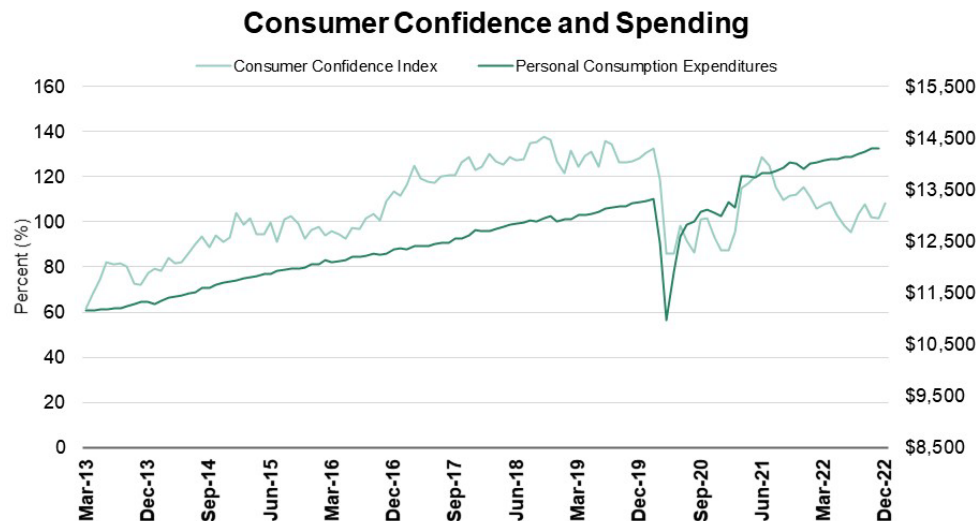
U.S. Nonfarm Payrolls and Unemployment Rate



# Quarter In Review: U.S. Economy

## Consumer Confidence and Spending

- The consumer confidence index rose slightly in the quarter. Consumers had a more favorable outlook as inflation moderated and interest rate hikes were seen as more likely to slow.
- A cooler economy, still-high inflation, and the Russia/Ukraine conflict still weighed on consumer sentiment, which remained below its 2021 level.
- Personal consumption expenditures rose in October and November\*.



## Retail Sales

- Retail sales fell in December 2022, the biggest decline in a year. However, retail sales increased +6% year over year.
- Manufacturing output saw its biggest drop in almost two years in December, and monthly producer prices also fell.
- Sales at gas stations (-4.6%) had the biggest decrease in December, followed by furniture stores (-2.5%) on the back of slowdown in housing as mortgage rates increased.
- This weakening of demand may help persuade the Fed to reduce the size of its interest rate hikes going forward (though it is unlikely to stop hiking completely).



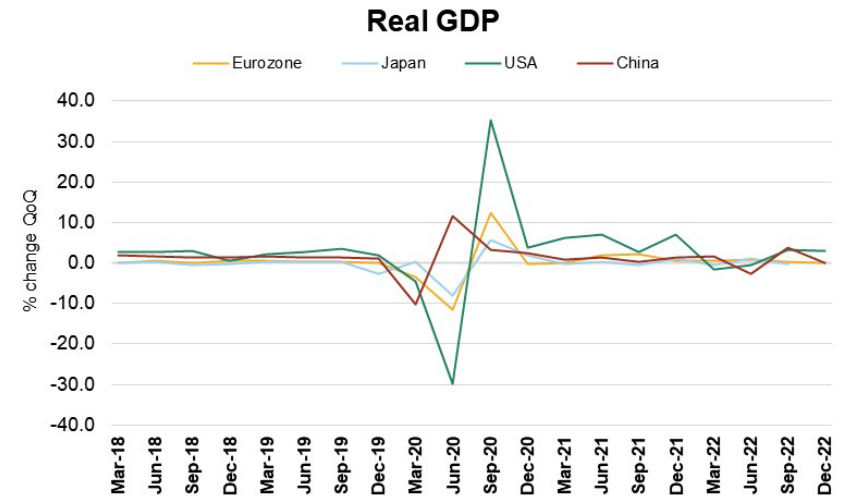
\*The most recent data available.  
Source this page: FactSet



# Quarter In Review: Global Economy

## World GDP Growth

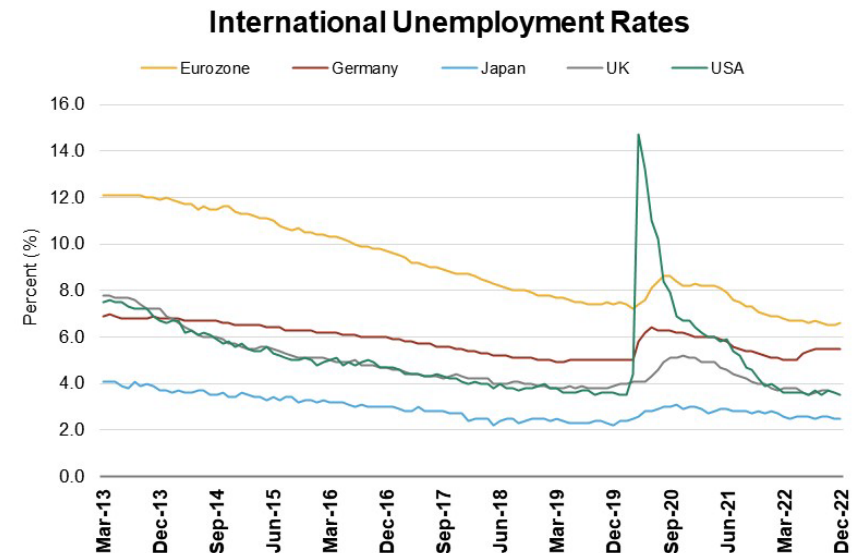
- Eurozone GDP inched up +0.1% quarter over quarter (QoQ). While it was the weakest GDP expansion rate since the first three months of 2021, it was better than feared early in the year as energy issues caused by the war were better than expected. High inflation and increasing rates hit economic performance in the quarter.
- China's GDP growth was flat in the quarter ending December 31. Growth slowed as the country's zero-Covid policy took a toll.
- Japan's GDP slid -0.2% in the quarter ending September 30\*\*. Private consumption was slow as another COVID wave hit that country in August.
- U.S. GDP grew +2.9% in the quarter ending December 31.



Note that the figures in the graph above represent the percent change in real GDP from the previous quarter, not the annual growth rate of these economies.

## Global Employment Picture

- Eurozone unemployment was +6.6% in December 2022, a number that has been relatively stable over the past few months.
- Germany (+2.9%) had the lowest unemployment rate in the Eurozone, while Spain (+13.1%) and Italy (+7.8%) had two of the highest.
- Japan's unemployment rate stayed steady +2.5% in December, the lowest level since February 2020.



\*\*Most recent data available.

Source this page: FactSet

# Quarter In Review: Global Equity Overview

| Equity Indices                                | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|-----------------------------------------------|-------|--------|--------|--------|--------|---------|
| S&P 500                                       | 7.56  | -18.11 | -18.11 | 7.66   | 9.42   | 12.56   |
| MSCI Europe, Australasia and Far East (EAFE)* | 17.34 | -14.45 | -14.45 | 0.87   | 1.54   | 4.67    |
| MSCI Emerging Markets (EM)*                   | 9.70  | -20.09 | -20.09 | -2.69  | -1.40  | 1.44    |

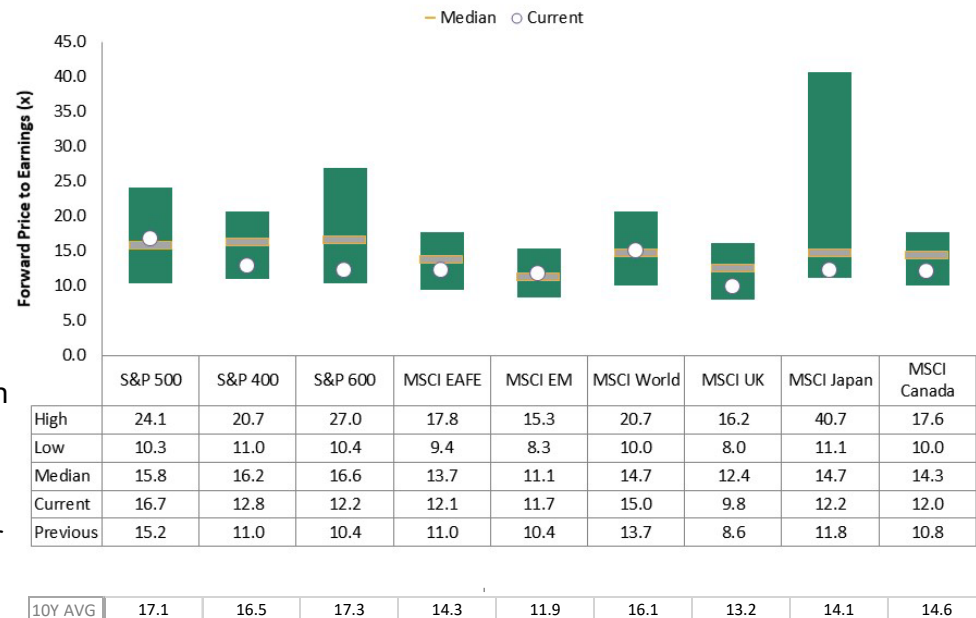
All data in the table are percentages.

\* Net dividends reinvested

## Global Equity Performance and Valuations

- U.S., developed international, and emerging markets equities all posted positive returns in the quarter ending December 31, as global market sentiment was boosted by the prospect of cooling inflation. Returns for the year were soundly negative across the board, however.
- Following a period of strong U.S. dollar appreciation, the U.S. dollar weakened during the quarter, boosting developed international and emerging market stocks.
- European markets stabilized following the UK's bond price crash in September and with a slowdown in European Central Bank rate increases. Emerging markets benefitted greatly from relaxing China pandemic restrictions.
- U.S. large cap and emerging market valuations remain above their long-term median, while most other markets including U.S. small cap, and developed international, appear cheap relative to the last 20 years.

## Price to Earnings



Data range is from 3/31/00-12/31/22. P/E ratios are forward 12 months.

# Quarter In Review: U.S. Equity

| U.S. Equity Indices | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|---------------------|-------|--------|--------|--------|--------|---------|
| S&P 500             | 7.56  | -18.11 | -18.11 | 7.66   | 9.42   | 12.56   |
| Russell 1000        | 7.24  | -19.13 | -19.13 | 7.35   | 9.13   | 12.37   |
| Russell 1000 Growth | 2.20  | -29.14 | -29.14 | 7.79   | 10.96  | 14.10   |
| Russell 1000 Value  | 12.42 | -7.54  | -7.54  | 5.96   | 6.67   | 10.29   |
| Russell 2000        | 6.23  | -20.44 | -20.44 | 3.10   | 4.13   | 9.01    |
| Russell 2000 Growth | 4.13  | -26.36 | -26.36 | 0.65   | 3.51   | 9.20    |
| Russell 2000 Value  | 8.42  | -14.48 | -14.48 | 4.70   | 4.13   | 8.48    |
| Russell Midcap      | 9.18  | -17.32 | -17.32 | 5.88   | 7.10   | 10.96   |
| Russell 3000        | 7.18  | -19.21 | -19.21 | 7.07   | 8.79   | 12.13   |

All data in the tables are percentages.

## Performance

- U.S. equities were up +7.6% for the quarter ending December 31. The Fed raised interest rates by 50 basis points (“bps”) in December, a slower pace than its previous 75 bps increases. Overall market sentiment has improved following declining inflation readings, which in turn boosted equity markets.
- Value significantly outperformed growth during the quarter, as weaker growth expectations for 2023 hurt technology and longer duration growth equities and investors sought more attractive valuations within value sectors.
- For the quarter ending December 31, large cap growth underperformed small cap growth while large cap value outperformed small cap value. This can be explained by sector performance and differentiation of sector weights in varying benchmarks.
- Due to a weakening U.S. dollar, progress on China reopening, and an increased demand outlook, energy lead the way again (+22.8%) for all U.S. sectors. Consumer Discretionary (-10.2%) and Telecom (-1.4%) were the only sectors to post negative returns. For the entire year, however, only Energy (+65.7%) and Utilities (+1.6%) finished net positive.

Sources this page: Investment Metrics, FactSet

| S&P 500 Sector Returns | QTD    | 1-Year |
|------------------------|--------|--------|
| Cons. Disc.            | -10.18 | -37.03 |
| Cons. Staples          | 12.72  | -0.62  |
| Energy                 | 22.81  | 65.72  |
| Financials             | 13.61  | -10.53 |
| Healthcare             | 12.80  | -1.95  |
| Industrials            | 19.22  | -5.48  |
| IT                     | 4.74   | -28.19 |
| Materials              | 15.05  | -12.27 |
| Telecom                | -1.38  | -39.89 |
| Real Estate            | 3.82   | -26.13 |
| Utilities              | 8.64   | 1.57   |

# Quarter In Review: International Equity

| MSCI International Equity Indices | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|-----------------------------------|-------|--------|--------|--------|--------|---------|
| World ex. U.S.                    | 16.18 | -14.29 | -14.29 | 1.27   | 1.79   | 4.59    |
| EAFE                              | 17.34 | -14.45 | -14.45 | 0.87   | 1.54   | 4.67    |
| EAFE Local Currency               | 8.72  | -7.00  | -7.00  | 3.64   | 3.81   | 7.56    |
| Europe                            | 19.35 | -15.06 | -15.06 | 1.35   | 1.87   | 4.58    |
| Europe ex U.K.                    | 20.11 | -17.96 | -17.96 | 1.72   | 2.19   | 5.24    |
| U.K.                              | 16.98 | -4.84  | -4.84  | 0.32   | 0.96   | 3.07    |
| Japan                             | 13.23 | -16.65 | -16.65 | -0.99  | 0.23   | 5.55    |
| Pacific ex Japan                  | 15.72 | -5.94  | -5.94  | 1.61   | 2.18   | 3.81    |

All data in the tables are percentages and net dividends reinvested.

## Performance

- Developed international stocks were up +17.3% during the quarter, as investors expected that inflation was peaking. Aggressive central bank moves and lower risk from the Russia/Ukraine war benefitted non-dollar currencies.
- Europe had strong positive returns of +19.4% during the quarter, outperforming other regions, as the European Central Bank slowed the pace of interest rate hikes and U.K. sterling appreciated against the U.S. dollar following the resignation of PM Truss, resulting in the abandonment of her fiscal spending and tax cut plan.
- Japanese stocks were up +13.2%, as the yen appreciated roughly 9% against the U.S. dollar during the quarter and with a strong third quarter earnings season for that country.
- All international sectors were positive in the quarter, with Financials (+23.9%), Materials (+20.7%), and Energy (+19.8%) producing the highest returns. Defensive sectors of the market such as Consumer Staples (+10.6%) and Telecom (+10.1%) lagged overall. Despite the positive fourth quarter, only Energy (+27.7%) managed to produce positive returns for the year.

| MSCI EAFE Sector Returns | QTD   | 1-Year |
|--------------------------|-------|--------|
| Consumer Disc.           | 17.83 | -22.42 |
| Cons. Staples            | 10.63 | -13.05 |
| Energy                   | 19.78 | 27.67  |
| Financials               | 23.91 | -4.57  |
| Healthcare               | 14.19 | -11.03 |
| Industrials              | 19.04 | -20.58 |
| IT                       | 14.90 | -32.37 |
| Materials                | 20.73 | -10.26 |
| Telecom                  | 10.12 | -16.78 |
| Utilities                | 19.43 | -12.45 |
| Real Estate              | 11.03 | -20.89 |

# Quarter In Review: Emerging Market Equity

| MSCI EM Equity Indices | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|------------------------|-------|--------|--------|--------|--------|---------|
| Emerging Markets       | 9.70  | -20.09 | -20.09 | -2.69  | -1.40  | 1.44    |
| EM Local Currency      | 6.57  | -15.54 | -15.54 | 0.14   | 1.29   | 4.58    |
| Asia                   | 10.83 | -21.11 | -21.11 | -1.31  | -0.62  | 3.55    |
| EMEA                   | 5.80  | -28.31 | -28.31 | -7.65  | -5.25  | -3.05   |
| Latin America          | 5.73  | 8.92   | 8.92   | -4.79  | -1.08  | -2.15   |

All data in the tables are percentages and net dividends reinvested.

## Performance

- Emerging markets were up +9.7% during the quarter, as the weakening U.S. dollar and cooling inflation benefitted emerging economies.
- Turkey continues to produce the strongest returns, supported by the central bank's loosening monetary policy. China outperformed after Beijing ended its "Zero Covid" policy, resulting in an accelerated economic re-opening.
- Middle East markets, including Qatar and Saudi Arabia, underperformed as they were impacted by weaker energy prices. Brazil continues to underperform following Lula's election and continued policy uncertainty.
- All emerging market sectors were positive in the quarter. Telecom (+13.8%) rebounded as inflationary and demand concerns were minimized with Energy (+4.2%) lagging the index. Russia's early year performance continues to weigh heavily on Energy's 1-year return. Though all sectors showed strong returns for the quarter, all sectors remained net negative for the year.

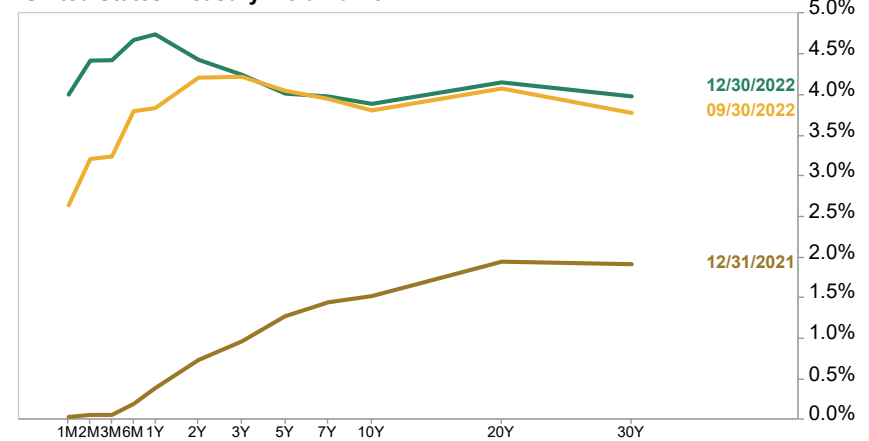
| MSCI EM Sector Returns | QTD   | 1-Year |
|------------------------|-------|--------|
| Cons. Disc.            | 9.66  | -20.82 |
| Cons. Staples          | 6.51  | -10.61 |
| Energy                 | 4.16  | -24.29 |
| Financials             | 6.99  | -7.90  |
| Healthcare             | 13.16 | -23.50 |
| Industrials            | 12.37 | -10.79 |
| IT                     | 12.00 | -33.40 |
| Materials              | 12.08 | -14.88 |
| Telecom                | 13.76 | -27.03 |
| Utilities              | 4.57  | -4.50  |
| Real Estate            | 8.99  | -18.92 |

# Quarter In Review: Fixed Income Overview

## Yield Curve

- Yields rose in most maturities of the interest rate curve in the quarter ended December 31 as the Federal Reserve hiked rates again in both November and December.
- Shorter-maturity yields rose the most over the quarter, with the 2-year Treasury rising by 22 bps over the prior quarter.
- 10- and 30-year Treasury yields rose 8 basis points and 20 basis points, ending the quarter at 3.88% and 3.97%, respectively.

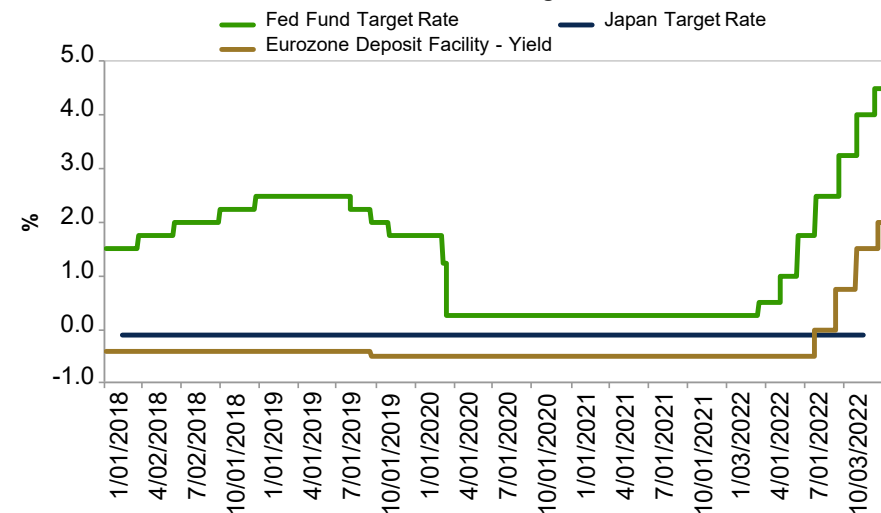
United States Treasury Yield Curve



## Monetary Policies/Global Interest Rates

- Central bank deposit rates remained negative in Japan, while rates in Europe ended the quarter at 2.50%.
- The U.S. policy rate is above those of the Eurozone and Japan, at 4.50%.

Central Bank Target Rates



| Interest Rates | Fed Funds Rate | EZ Deposit Facility Rate |
|----------------|----------------|--------------------------|
| Average        | 4.95           | 0.82                     |
| Max            | 20.00          | 3.75                     |
| Min            | 0.25           | -0.50                    |

# Quarter In Review: U.S. Fixed Income

| U.S. Fixed Income Indices* | QTD  | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|----------------------------|------|--------|--------|--------|--------|---------|
| U.S. Aggregate             | 1.87 | -13.01 | -13.01 | -2.71  | 0.02   | 1.06    |
| Government/Credit          | 1.80 | -13.58 | -13.58 | -2.57  | 0.21   | 1.16    |
| Government                 | 0.72 | -12.32 | -12.32 | -2.57  | -0.06  | 0.60    |
| Investment Grade Credit    | 3.44 | -15.26 | -15.26 | -2.86  | 0.42   | 1.82    |
| Investment Grade CMBS      | 0.95 | -10.94 | -10.94 | -1.70  | 0.76   | 1.61    |
| U.S. Corporate High Yield  | 4.17 | -11.19 | -11.19 | 0.05   | 2.31   | 4.03    |
| FTSE** 3-Month T-Bill      | 0.87 | 1.50   | 1.50   | 0.71   | 1.25   | 0.74    |
| Hueler Stable Value        | 0.55 | 1.87   | 1.87   | 1.96   | 2.13   | 1.97    |

\* Bloomberg Indices, unless otherwise noted.

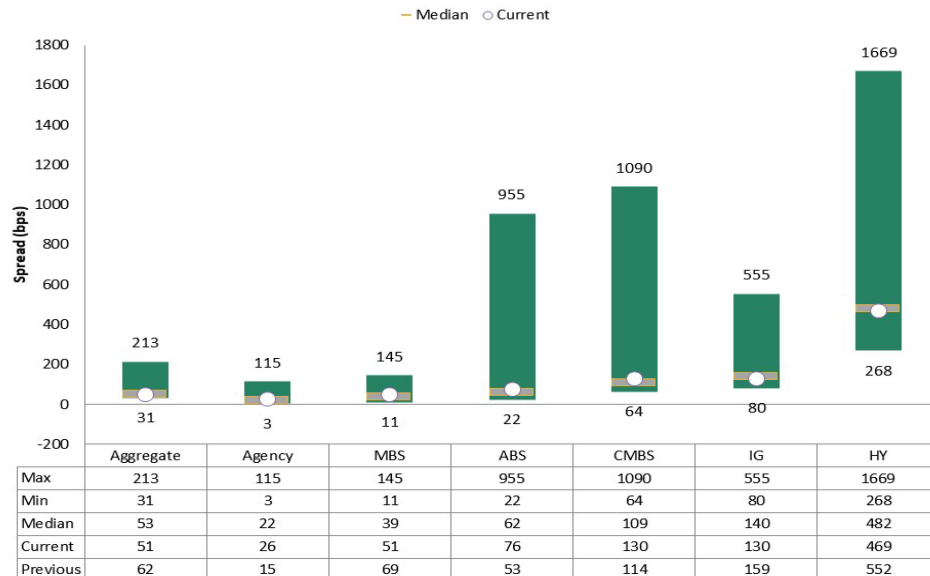
\*\* Formerly Citigroup. Citigroup's fixed income indices were purchased by London Stock Exchange Group (LSEG) and were rebranded to FTSE by July 31, 2018. FTSE Russell is a unit of LSEG's Information Services Division and a wholly owned subsidiary of LSEG.

All data in the table are percentages.

## Performance and Spreads

- The U.S. Aggregate Index was positive in the quarter. All sectors delivered positive quarterly returns.
- High Yield had the strongest performance at +4.17% for the quarter. Cash experienced the weakest performance in the quarter ended December 31 (0.87%).
- For the quarter, domestic fixed income spreads decreased in the agency RMBS and Investment Grade Corporate sectors, narrowing 18 basis points and 29 basis points, respectively. ABS and CMBS spreads increased by 23 basis points and 15 basis points, respectively.

Fixed Income Spreads



Sources this page: Investment Metrics, Hueler Analytics, FactSet

Data range is from 9/29/00-/12/30/22



# Quarter In Review: International Fixed Income

| Global Fixed Income Indices      | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|----------------------------------|-------|--------|--------|--------|--------|---------|
| Bloomberg Global Aggregate       | 4.55  | -16.25 | -16.25 | -4.48  | -1.66  | -0.44   |
| Bloomberg Global Aggregate (Hgd) | 0.99  | -11.22 | -11.22 | -2.59  | 0.36   | 1.70    |
| FTSE Non-U.S. WGBI*              | 6.51  | -22.07 | -22.07 | -7.95  | -4.21  | -2.27   |
| FTSE Non-U.S. WGBI (Hgd)         | -0.96 | -13.10 | -13.10 | -3.88  | -0.14  | 1.88    |
| JPM EMBI Global Diversified**    | 8.11  | -17.78 | -17.78 | -5.28  | -1.31  | 1.59    |
| JPM GBI-EM Global Diversified*** | 8.45  | -11.69 | -11.69 | -6.11  | -2.51  | -2.03   |

All data in the table are percentages.

\* Formerly Citigroup. The FTSE Non-U.S. World Government Bond Index (WGBI) measures the performance of fixed-rate, local currency, investment grade sovereign bonds excluding the U.S.

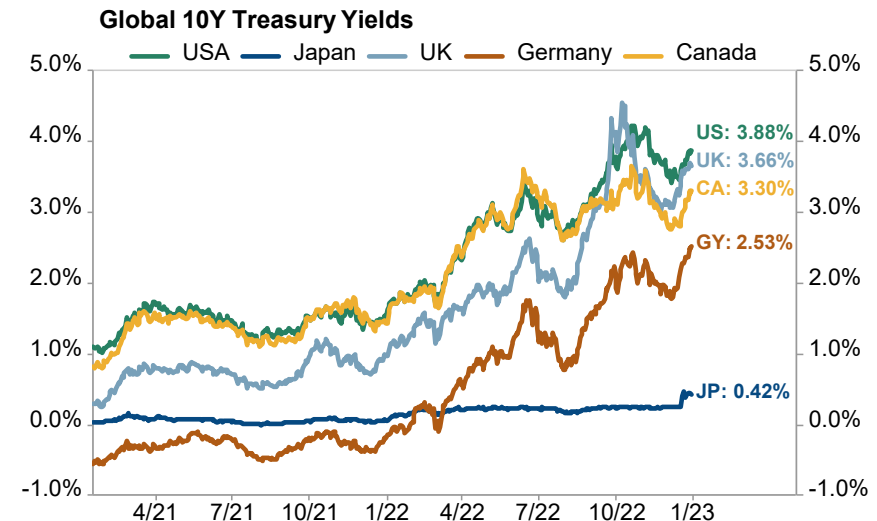
\*\* The JP Morgan Emerging Market Bond Index (EMBI) Global Diversified index measures government bonds in hard currencies.

\*\*\* The JP Morgan Government Bond Index – Emerging Markets (GBI-EM) Global Diversified index measures government bonds in local currencies.

## Global Performance and Yields

- Yields rose in most developed markets in the quarter. One exception was the UK, where the Bank of England made two rate hikes after yields tumbled early in the quarter with worries surrounding the previous prime minister's budget programs.
- Central Banks in the U.S., Canada, and the UK continued to raise rates during the quarter. Emerging markets central banks were generally ahead of developed markets in raising rates, although inflationary pressures may result in further tightening.
- The U.S. dollar depreciated relative to the yen, British pound and Euro.
- Global returns were positive for the quarter ended December 31, with emerging markets sovereign bonds exhibiting the strongest performance.

Sources this page: FactSet, Investment Metrics





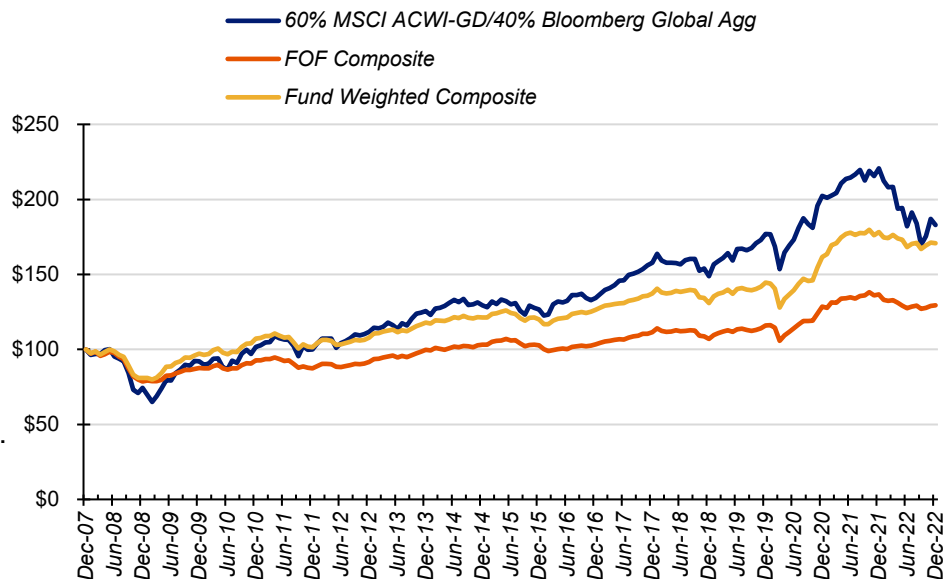
# Quarter In Review: Absolute Return Strategies

| HFRI Indices            | QTD   | YTD    | 1-Year | 3-Year | 5-Year | 10-Year |
|-------------------------|-------|--------|--------|--------|--------|---------|
| Fund of Funds Composite | 1.79  | -5.25  | -5.25  | 3.71   | 3.02   | 3.51    |
| Fund Weighted Composite | 2.32  | -4.14  | -4.14  | 5.70   | 4.44   | 4.69    |
| Event Driven            | 3.14  | -4.83  | -4.83  | 5.34   | 4.22   | 4.84    |
| Equity Hedge            | 4.27  | -10.13 | -10.13 | 5.77   | 4.55   | 5.57    |
| Macro                   | -1.34 | 8.98   | 8.98   | 7.35   | 4.79   | 3.08    |
| Emerging Markets        | 4.62  | -13.05 | -13.05 | 1.60   | 0.86   | 2.86    |
| Relative Value          | 1.47  | -0.68  | -0.68  | 3.38   | 3.39   | 4.04    |

## Hedge Fund Performance

- The HFRI Fund Weighted Composite Index returned 2.32% during the quarter ending December 31. In a reversal of previous performance trends, Macro funds underperformed the rest of the hedge fund landscape (-1.34%), while Emerging Markets (+4.62%) and Equity Hedge (+4.27%) rebounded well.
- Within Equity Hedge, fundamental value-oriented managers (+6.10%) outperformed peers as value equities broadly outperformed the market, while in Emerging Markets, funds targeting investment in China (+8.11%) outperformed as China relaxed its zero-covid policy.
- Within Macro, Commodity funds (+4.04%) outperformed peers as commodity markets ended the calendar year with a positive quarter.
- The Fund of Funds Composite rose 1.79% during the quarter, underperforming the 60% MSCI ACWI / 40% Bloomberg Global Aggregate blended index, which returned 7.81%.

**HFR Fund Weighted and Fund of Funds Composite Growth of \$100 | January 2008 - December 2022**



# Quarter In Review: Private Equity

## Performance

- The total return for private equity funds, comprising performance across all strategies, was -3.7% over the 1-year period and -1.8% for the quarter ending Q3 2022.
- The 3-, 5-, 10-, and 20-year returns for US private equity funds were 20.2%, 17.3%, 15.5% and 13.7%, respectively, as of 9/30/2022.
- As increases in interest rates affected costs and discount rates, and public market equivalents fell, both private equity (-2.7%) and venture capital managers had negative performance (-8.5%) in Q3 2022.

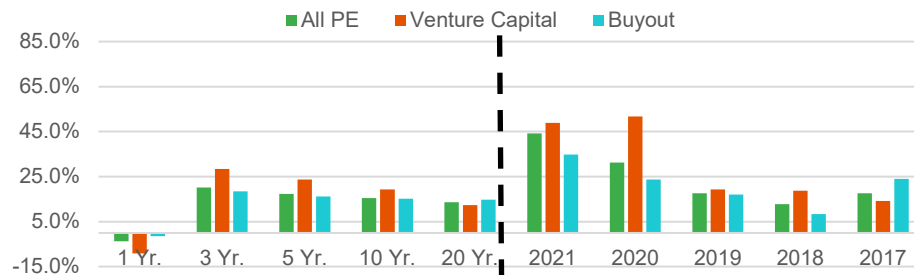
## Fundraising

- US private equity funds raised approximately \$343.1 billion across 405 funds in 2022. It is below the \$362.9 billion raised in 2021 across 733 funds.
- Dry powder in 2022 has come down from peak of \$883.8 billion in 2021 but remains elevated at \$787.5 billion, which is 30.2% of total assets under management. Economic and monetary policy uncertainty is expected to dampen deal activity for buyout transactions in the upcoming quarters. The public markets remain an attractive source of value for take-privates.

## Exit Activity

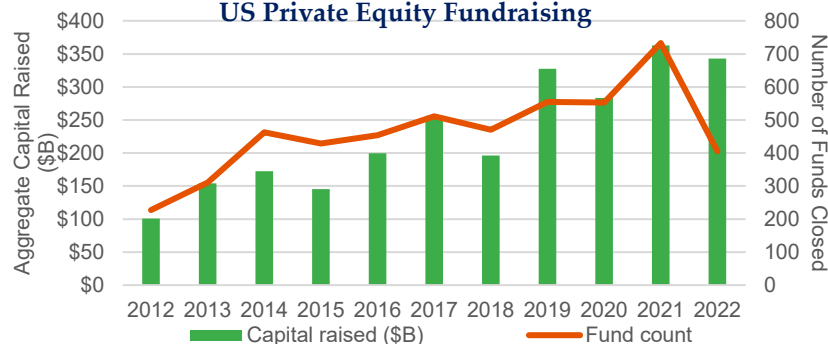
- Exit activity across, public listings declined in 2022 in both number of exits and total value. In 2022, PE firms exited 1,274 US companies for a cumulative value of \$295.8 billion, which was a decline of 28.3% and 66.3%, respectively, from levels seen the year prior. Few public listings took place in the quarter; activity in corporate acquisitions and sponsor acquisitions continue to provide liquidity.

## Private Equity Performance by Investment Horizon and Vintage Year



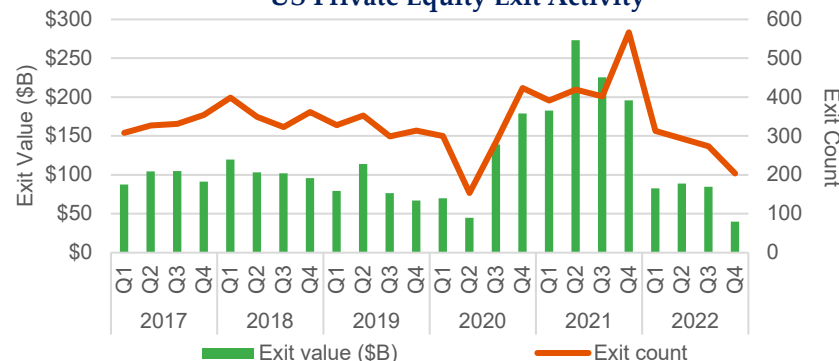
Performance is pooled IRR of the peer group as reported by ThomsonOne/Cambridge Associates. All PE includes VC, Growth Equity, Buyout, Subordinated Capital, Credit opportunities, and Control-Oriented Distressed funds.  
Source: Thompson Reuters

## US Private Equity Fundraising



Source: Pitchbook

## US Private Equity Exit Activity



Source: Pitchbook

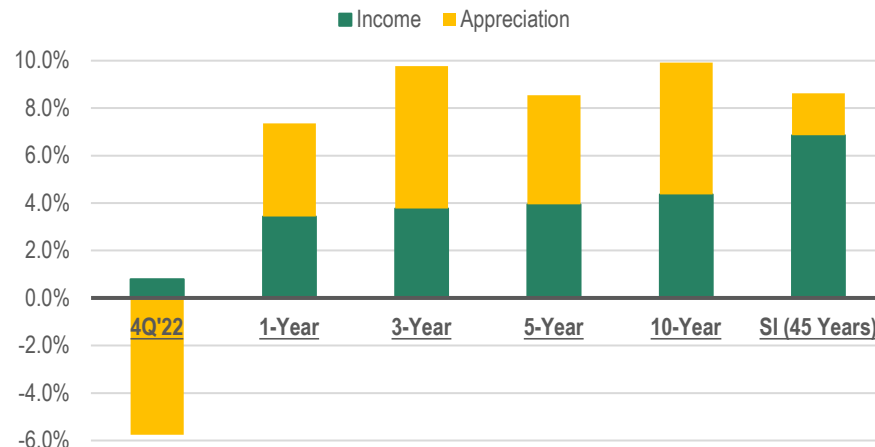
Sources: Thomson Reuters and Pitchbook. All data is as of the latest available. Performance data was final as of 6/30/22 and buyout and venture fundraising and exit data as of Q4 2022.

# Quarter In Review: Real Estate

## Real Estate Performance\*

- NFI-ODCE returned -4.97% (gross) for the quarter, while the NCREIF-NPI returned -3.50% and the NAREIT Equity REIT Index returned +4.14%.
- Income return for the NFI-ODCE was +0.80% for the quarter. Appreciation of assets generated a -5.76% return for the quarter<sup>1</sup>.
- In the U.S., for the quarter retail sector appreciation was -2.86%, apartment sector appreciation was -4.12%, office sector appreciation was -5.86% and industrial sector appreciation was -4.32%. For the same time period, retail sector income was +1.25%, apartment sector income was +0.91%, office sector income was +1.06% and industrial sector income was +0.76%.
- In the U.S., the return for the fourth quarter of 2022 by region was: East (-3.85%), Midwest (-3.40%), South (-2.49%) and West (-3.80%).

NCREIF Fund Index (NFI) Open-End Diversified Core (ODCE) Real Estate Performance<sup>1</sup>

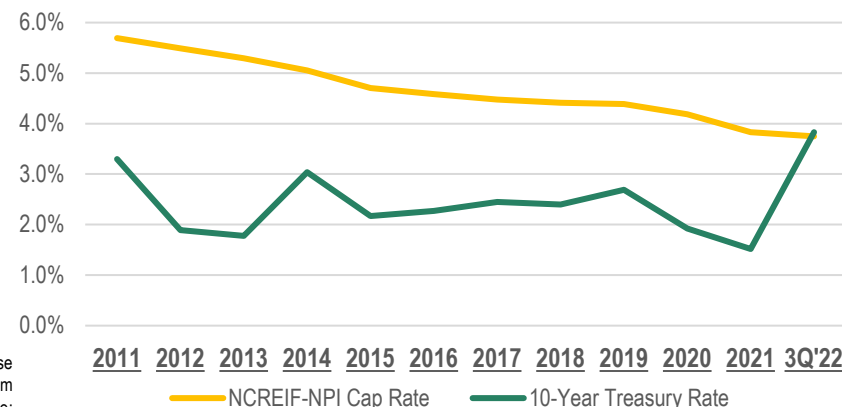


The NFI-ODCE (Open-end Diversified Core Equity) is defined by NCREIF as a fund-level cap-weighted, gross of fee, time-weighted return index with an inception date of December 31, 1977. 1. The sum of income and appreciation returns may not equal total return due to rounding and/or the compounding of individual component returns to each other.

## Real Estate Capitalization Rates\* vs. Treasuries

- Nationally, cap rates expanded 22 basis points in the quarter to 3.97%.
- The 10-year Treasury averaged 3.83% in the quarter and ended the quarter at 3.88%. As a result, the spread between the 10-year Treasury rate and national cap-rates at the end of the quarter was 9 bps. This was an increase over the previous quarter where the 10-year treasury rate (3.83%) exceeded the NPI cap rate (3.75%).

Capitalization Rates & 10-Year U.S. Treasury Rates



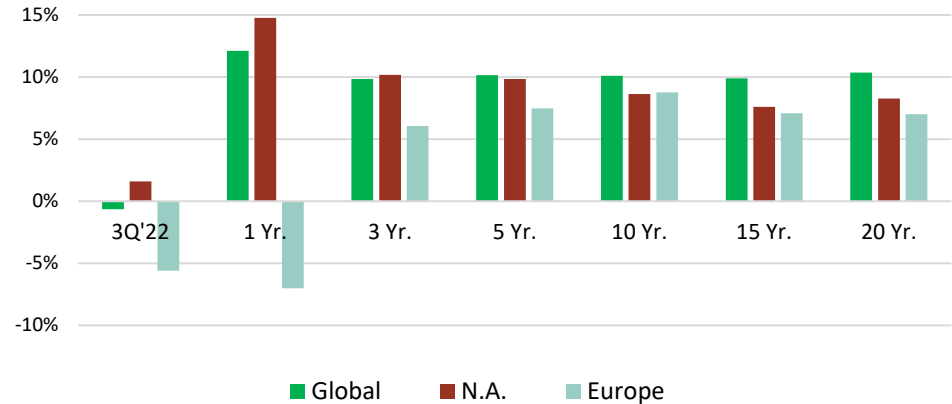
\*A cap rate is the potential rate of return on a real estate investment. Assuming no change in net operating income, real estate valuations rise when cap rates fall. Comparing cap rates to the 10-year U.S. Treasury provides investors with an estimated spread for expected returns from real estate (higher risk) vs. fixed rate bond (lower risk) investments. NFI-ODCE returns are preliminary performance. Sources this page: NCREIF, NPI, FRED Economic Data (Federal Reserve Bank of St Louis) 1. The sum of income and appreciation returns may not equal total return due to rounding and/or the compounding of individual component returns to each other.

# Quarter In Review: Infrastructure

## Performance\*

- The total return for North American private infrastructure funds was 1.60% in the quarter and 14.76% over the 1-year period ending September 2022.
- On a relative basis, North American infrastructure led in performance throughout the quarter ending June 30, 2022 (1.60%) whereas Global and European funds posted -0.65% and -5.59%, respectively.
- The 3-, 5-, 10-, 15-, and 20-year return for North American private infrastructure funds was 10.19%, 9.85%, 8.65%, 7.61%, 8.29%, respectively, as of September 30, 2022.
- Public infrastructure registered a -8.87% return in Q3 2022 as per the FTSE Global Core Infrastructure 50/50 Index. Trailing 1-, 3-, 5-year returns are -5.48%, 0.64% and 4.09%.

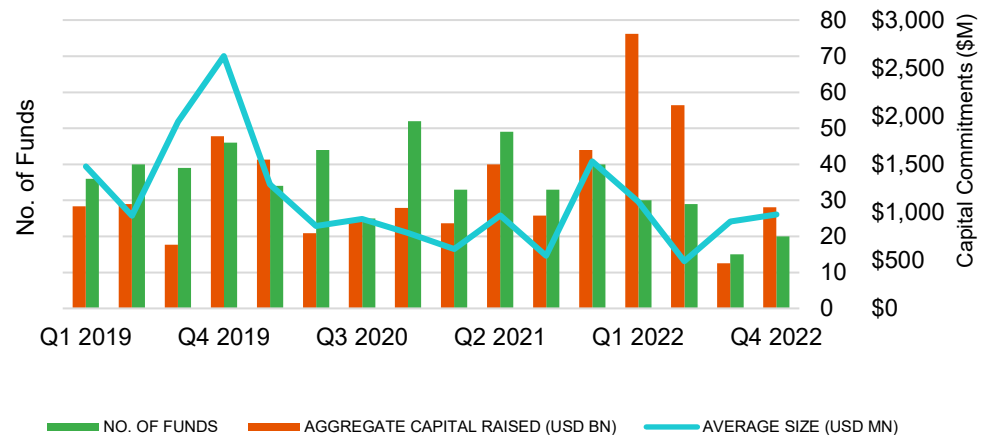
Burgiss Infrastructure Performance by Investment Horizon and Region



## Fundraising

- Aggregate capital commitments for infrastructure funds increased in the fourth quarter versus the previous quarter, raising \$28.1 billion in capital commitment across 20 funds.
- Investor concerns over inflation, a global energy crisis, and intensifying pressure to accelerate the energy transition drove substantial capital to the asset class in 2022.
- Core and core plus strategies represent most of the infrastructure funds in markets making up 224 of the 438 total fund in market (55%) or \$242 billion of the \$393 billion of capital targeted from funds in markets (62%).

Historical Infrastructure Fundraising



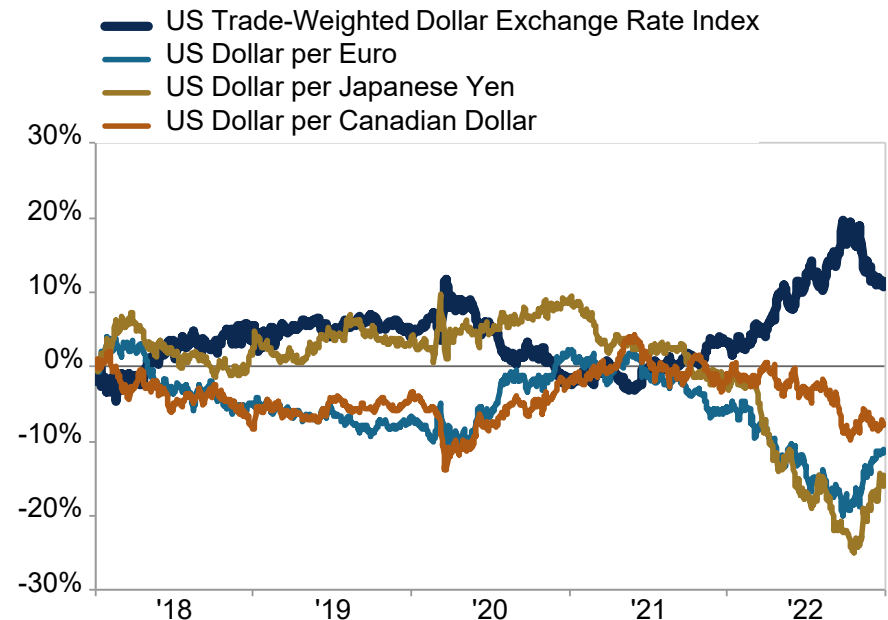
\*Most recent data available from Burgiss Privatel. Subject to one quarter lag.  
Preliminary returns Source: Preqin

# Quarter In Review: Commodities and Currencies

| BCOM Indices                     | QTD   | YTD   | 1-Year | 3-Year | 5-Year | 10-Year |
|----------------------------------|-------|-------|--------|--------|--------|---------|
| Bloomberg Commodity Index (BCOM) | 2.22  | 16.09 | 16.09  | 12.65  | 6.44   | -1.28   |
| Energy                           | -9.07 | 36.22 | 36.22  | 5.88   | 2.98   | -6.65   |
| Agriculture                      | 2.42  | 15.55 | 15.55  | 19.46  | 9.12   | -0.80   |
| Industrial Metals                | 16.44 | -2.40 | -2.40  | 13.96  | 4.98   | 1.52    |
| Precious Metals                  | 13.32 | 0.12  | 0.12   | 5.69   | 5.69   | -0.88   |
| Livestock                        | 8.47  | 7.44  | 7.44   | -3.68  | -3.76  | -3.18   |

## Commodity and Currency Highlights

- The Bloomberg Commodity Index rose in the quarter. Industrial metals (+16.4%) surged with outsized gains for nickel (42.5%) and copper (13.1%).
- The overall energy commodity sector was the worst performing subsector in the index. While crude prices were higher, natural gas prices plummeted -36% in the quarter. Natural gas supply issues eased significantly in Europe by year end.
- Other commodity sectors were mixed. Precious metals (+13.3%) were higher, with silver surging +26.7% and gold up +9.5%. Agriculture's gain was more muted as sugar and cocoa rose while wheat and coffee prices fell.
- The U.S. dollar appreciated relative to the yen, British pound and euro.



# Disclaimer

*The information and some of the opinions herein provided by third parties have been obtained from sources believed to be reliable, but accuracy and completeness cannot be guaranteed. These insights and the data and analysis herein are intended for general education only and not as investment advice. They are not intended for use as a basis for investment decisions, nor should they be construed as advice designed to meet the needs of any particular investor. Please contact Segal Marco Advisors or another qualified investment professional for advice regarding the evaluation of any specific information, opinion, advice, or other content. Of course, on all matters involving legal interpretations and regulatory issues, investors should consult legal counsel.*

## Total Plan

# Bristol County Retirement System

## Comparative Performance

As of December 31, 2022

|                               | Allocation           |              | Performance (%) |                           |                           |              |              |            |            |            |             |                 |                   |
|-------------------------------|----------------------|--------------|-----------------|---------------------------|---------------------------|--------------|--------------|------------|------------|------------|-------------|-----------------|-------------------|
|                               | Market Value (\$000) | %            | 1 Quarter       | 1 Quarter Ending Sep-2022 | 1 Quarter Ending Jun-2022 | Year To Date | 1 Year       | 3 Years    | 5 Years    | 7 Years    | 10 Years    | Since Inception | Inception Date    |
| <b>Total Fund</b>             | <b>830,773</b>       | <b>100.0</b> | <b>4.4</b>      | <b>-4.0</b>               | <b>-8.0</b>               | <b>-9.9</b>  | <b>-9.9</b>  | <b>5.8</b> | <b>6.0</b> | <b>7.8</b> | <b>7.8</b>  | <b>7.4</b>      | <b>01/01/2000</b> |
| Total Plan Index              |                      |              | 6.7             | -5.5                      | -11.0                     | -14.2        | -14.2        | 3.0        | 4.4        | 6.2        | 6.8         | 4.9             |                   |
| Total Plan Allocation Index   |                      |              | 6.7             | -5.1                      | -10.1                     | -12.0        | -12.0        | 3.9        | 4.8        |            |             |                 |                   |
| <b>Total Domestic Equity</b>  | <b>170,479</b>       | <b>20.5</b>  | <b>10.1</b>     | <b>-5.4</b>               | <b>-17.4</b>              | <b>-19.4</b> | <b>-19.4</b> | <b>6.6</b> | <b>6.9</b> | <b>9.4</b> | <b>11.3</b> | <b>5.9</b>      | <b>01/01/2000</b> |
| S&P 500 Index                 |                      |              | 7.6             | -4.9                      | -16.1                     | -18.1        | -18.1        | 7.7        | 9.4        | 11.5       | 12.6        | 6.3             |                   |
| Russell 3000 Index            |                      |              | 7.2             | -4.5                      | -16.7                     | -19.2        | -19.2        | 7.1        | 8.8        | 11.0       | 12.1        | 6.5             |                   |
| NT S&P 500 Index              | 26,751               | 3.2          | 7.6             | -4.9                      | -16.1                     | -18.1        | -18.1        |            |            |            |             | -7.2            | 10/01/2021        |
| S&P 500                       |                      |              | 7.6             | -4.9                      | -16.1                     | -18.1        | -18.1        | 7.7        | 9.4        | 11.5       | 12.6        | -7.3            |                   |
| ClearBridge Large Cap Growth  | 24,164               | 2.9          | 4.5             | -5.5                      | -21.4                     | -31.3        | -31.3        | 3.6        |            |            |             | 6.6             | 09/01/2018        |
| Russell 1000 Growth Index     |                      |              | 2.2             | -3.6                      | -20.9                     | -29.1        | -29.1        | 7.8        | 11.0       | 12.9       | 14.1        | 8.9             |                   |
| Columbia                      | 22,997               | 2.8          | 7.9             | -4.1                      | -23.2                     | -32.3        | -32.3        | 3.3        | 7.8        | 8.9        |             | 10.5            | 09/01/2013        |
| Russell 1000 Growth Index     |                      |              | 2.2             | -3.6                      | -20.9                     | -29.1        | -29.1        | 7.8        | 11.0       | 12.9       | 14.1        | 13.4            |                   |
| LSV                           | 31,812               | 3.8          | 14.3            | -6.8                      | -10.5                     | -5.3         | -5.3         | 6.6        | 5.9        | 9.2        | 11.2        | 8.7             | 09/01/2004        |
| Russell 1000 Value Index      |                      |              | 12.4            | -5.6                      | -12.2                     | -7.5         | -7.5         | 6.0        | 6.7        | 9.1        | 10.3        | 7.9             |                   |
| Lyrical                       | 30,158               | 3.6          | 14.1            | -6.1                      | -17.1                     | -15.4        | -15.4        | 7.6        | 4.6        | 8.1        |             | 9.5             | 09/01/2013        |
| Russell 1000 Value Index      |                      |              | 12.4            | -5.6                      | -12.2                     | -7.5         | -7.5         | 6.0        | 6.7        | 9.1        | 10.3        | 9.2             |                   |
| Frontier Capital Appreciation | 17,160               | 2.1          | 11.0            | -4.6                      | -18.9                     | -18.0        | -18.0        | 4.6        |            |            |             | 6.9             | 12/01/2018        |
| Russell 2000 Growth Index     |                      |              | 4.1             | 0.2                       | -19.3                     | -26.4        | -26.4        | 0.6        | 3.5        | 7.1        | 9.2         | 3.6             |                   |
| Earnest Partners              | 17,437               | 2.1          | 9.5             | -4.6                      | -14.6                     | -11.7        | -11.7        | 7.9        | 6.5        | 10.7       | 11.1        | 11.1            | 04/01/2003        |
| Russell 2000 Value Index      |                      |              | 8.4             | -4.6                      | -15.3                     | -14.5        | -14.5        | 4.7        | 4.1        | 8.2        | 8.5         | 9.4             |                   |



|                                       | Allocation           |             | Performance (%) |                           |                           |              |              |             |             |            |            |                 | Inception Date    |
|---------------------------------------|----------------------|-------------|-----------------|---------------------------|---------------------------|--------------|--------------|-------------|-------------|------------|------------|-----------------|-------------------|
|                                       | Market Value (\$000) | %           | 1 Quarter       | 1 Quarter Ending Sep-2022 | 1 Quarter Ending Jun-2022 | Year To Date | 1 Year       | 3 Years     | 5 Years     | 7 Years    | 10 Years   | Since Inception |                   |
| <b>Total International Equity</b>     | <b>161,088</b>       | <b>19.4</b> | <b>11.4</b>     | <b>-9.5</b>               | <b>-14.4</b>              | <b>-19.7</b> | <b>-19.7</b> | <b>0.1</b>  | <b>1.4</b>  | <b>5.8</b> | <b>5.3</b> | <b>8.6</b>      | <b>01/01/2000</b> |
| MSCI EAFE (net)                       |                      |             | 17.3            | -9.4                      | -14.5                     | -14.5        | -14.5        | 0.9         | 1.5         | 4.5        | 4.7        | 3.0             |                   |
| MSCI AC World ex USA                  |                      |             | 14.4            | -9.8                      | -13.5                     | -15.6        | -15.6        | 0.5         | 1.4         | 5.3        | 4.3        | 3.8             |                   |
| <b>Arrowstreet Capital</b>            | <b>33,361</b>        | <b>4.0</b>  | <b>14.5</b>     | <b>-9.5</b>               | <b>-12.1</b>              | <b>-11.8</b> | <b>-11.8</b> | <b>7.7</b>  | <b>6.3</b>  | <b>9.2</b> | <b>8.1</b> | <b>7.7</b>      | <b>07/01/2001</b> |
| MSCI AC World ex USA                  |                      |             | 14.4            | -9.8                      | -13.5                     | -15.6        | -15.6        | 0.5         | 1.4         | 5.3        | 4.3        | 5.5             |                   |
| <b>Freedom Capital Intl</b>           | <b>32,686</b>        | <b>3.9</b>  | <b>16.7</b>     | <b>-11.1</b>              | <b>-14.1</b>              | <b>-14.4</b> | <b>-14.4</b> | <b>-0.3</b> | <b>1.0</b>  | <b>5.3</b> | <b>6.5</b> | <b>8.1</b>      | <b>06/01/1998</b> |
| MSCI EAFE (net)                       |                      |             | 17.3            | -9.4                      | -14.5                     | -14.5        | -14.5        | 0.9         | 1.5         | 4.5        | 4.7        | 4.0             |                   |
| <b>Fiera International Equity</b>     | <b>30,178</b>        | <b>3.6</b>  | <b>15.5</b>     | <b>-7.8</b>               | <b>-15.7</b>              | <b>-19.2</b> | <b>-19.2</b> | <b>4.6</b>  |             |            |            | <b>10.0</b>     | <b>12/01/2018</b> |
| MSCI EAFE (Net)                       |                      |             | 17.3            | -9.4                      | -14.5                     | -14.5        | -14.5        | 0.9         | 1.5         | 4.5        | 4.7        | 4.4             |                   |
| <b>Aberdeen Emerging Markets</b>      | <b>33,789</b>        | <b>4.1</b>  | <b>9.8</b>      | <b>-10.9</b>              | <b>-12.5</b>              | <b>-25.0</b> | <b>-25.0</b> | <b>-2.4</b> | <b>-0.5</b> |            |            | <b>3.0</b>      | <b>03/01/2017</b> |
| MSCI Emerging Markets Index           |                      |             | 9.8             | -11.4                     | -11.3                     | -19.7        | -19.7        | -2.3        | -1.0        | 5.6        | 1.8        | 3.2             |                   |
| <b>William Blair Emerging Markets</b> | <b>31,075</b>        | <b>3.7</b>  | <b>1.4</b>      | <b>-8.1</b>               | <b>-17.8</b>              |              |              |             |             |            |            | <b>-23.4</b>    | <b>04/01/2022</b> |
| MSCI Emerging Markets Index           |                      |             | 9.8             | -11.4                     | -11.3                     | -19.7        | -19.7        | -2.3        | -1.0        | 5.6        | 1.8        | -13.8           |                   |
| <b>Global REITs</b>                   |                      |             |                 |                           |                           |              |              |             |             |            |            |                 |                   |
| <b>Brookfield Global Real Estate</b>  | <b>13,469</b>        | <b>1.6</b>  | <b>7.8</b>      | <b>-11.8</b>              | <b>-16.6</b>              | <b>-22.0</b> | <b>-22.0</b> | <b>-4.7</b> |             |            |            | <b>-0.4</b>     | <b>12/01/2018</b> |
| FTSE EPRA/NAREIT Developed Index      |                      |             | 7.1             | -11.4                     | -17.2                     | -24.4        | -24.4        | -4.1        | 0.7         | 2.8        | 3.9        | 0.7             |                   |

# Bristol County Retirement System

## Comparative Performance

As of December 31, 2022

|                                            | Allocation           |            | Performance (%) |                           |                           |              |              |             |             |            |            |                 | Inception Date    |
|--------------------------------------------|----------------------|------------|-----------------|---------------------------|---------------------------|--------------|--------------|-------------|-------------|------------|------------|-----------------|-------------------|
|                                            | Market Value (\$000) | %          | 1 Quarter       | 1 Quarter Ending Sep-2022 | 1 Quarter Ending Jun-2022 | Year To Date | 1 Year       | 3 Years     | 5 Years     | 7 Years    | 10 Years   | Since Inception |                   |
| <b>Total Domestic Fixed</b>                | <b>39,456</b>        | <b>4.7</b> | <b>1.9</b>      | <b>-4.7</b>               | <b>-5.1</b>               | <b>-13.6</b> | <b>-13.6</b> | <b>-2.1</b> | <b>0.5</b>  | <b>1.4</b> | <b>1.5</b> | <b>4.6</b>      | <b>01/01/2000</b> |
| <i>Barclays Cap Aggregate</i>              |                      |            | 1.9             | -4.8                      | -4.7                      | -13.0        | -13.0        | -2.7        | 0.0         | 0.9        | 1.1        | 4.0             |                   |
| NT Aggregate Bond Index                    | 12,648               | 1.5        | 1.9             | -4.7                      | -4.7                      | -12.9        | -12.9        |             |             |            |            | -10.6           | 10/01/2021        |
| <i>Blmbg. U.S. Aggregate</i>               |                      |            | 1.9             | -4.8                      | -4.7                      | -13.0        | -13.0        | -2.7        | 0.0         | 0.9        | 1.1        | -10.5           |                   |
| Income Research & Management               | 26,790               | 3.2        | 1.9             | -4.4                      | -5.2                      | -13.6        | -13.6        | -1.8        | 0.8         | 1.8        | 1.8        | 4.8             | 12/01/1996        |
| <i>Blmbg. U.S. Gov't/Credit</i>            |                      |            | 1.8             | -4.6                      | -5.0                      | -13.6        | -13.6        | -2.6        | 0.2         | 1.1        | 1.2        | 4.2             |                   |
| <b>Total Global Fixed</b>                  | <b>74,412</b>        | <b>9.0</b> | <b>5.2</b>      | <b>-3.6</b>               | <b>-9.5</b>               | <b>-12.4</b> | <b>-12.4</b> | <b>-2.5</b> | <b>-0.2</b> | <b>2.4</b> | <b>1.6</b> | <b>5.3</b>      | <b>01/01/2000</b> |
| <i>Blmbg. Global Aggregate</i>             |                      |            | 4.5             | -6.9                      | -8.3                      | -16.2        | -16.2        | -4.5        | -1.7        | 0.1        | -0.4       | 3.3             |                   |
| <b>Broad Mkt Global Fixed Income</b>       | <b>24,883</b>        | <b>3.0</b> | <b>4.6</b>      | <b>-1.0</b>               | <b>-8.5</b>               | <b>-8.8</b>  | <b>-8.8</b>  | <b>-1.1</b> | <b>0.8</b>  | <b>3.0</b> | <b>2.1</b> | <b>5.2</b>      | <b>12/01/2002</b> |
| <i>Blmbg. Global Aggregate</i>             |                      |            | 4.5             | -6.9                      | -8.3                      | -16.2        | -16.2        | -4.5        | -1.7        | 0.1        | -0.4       | 2.9             |                   |
| PIMCO Diversified Income                   | 10,927               | 1.3        | 4.8             | -2.5                      | -9.2                      | -14.0        | -14.0        | -2.8        | 0.5         | 3.1        | 2.5        | 4.9             | 08/01/2006        |
| <i>Global Diversified Index**</i>          |                      |            | 6.3             | -4.6                      | -10.1                     | -15.3        | -15.3        | -3.5        | -0.5        | 2.1        | 1.4        | 4.3             |                   |
| GoldenTree Multi-Sector Opportunistic Fund | 13,956               | 1.7        | 4.5             | 0.2                       | -7.6                      | -3.4         | -3.4         | 4.8         |             |            |            | 4.9             | 05/01/2019        |
| <i>GoldenTree Blended Benchmark*</i>       |                      |            | 3.4             | 0.4                       | -7.2                      | -6.0         | -6.0         | 1.2         | 2.7         | 4.7        | 3.8        | 2.0             |                   |
| EnTrust Global Recovery Fund               | 12,565               | 1.5        | 9.1             | -12.4                     | -13.0                     | -26.4        | -26.4        |             |             |            |            | -20.4           | 02/01/2021        |
| <i>Blmbg. Global Aggregate</i>             |                      |            | 4.5             | -6.9                      | -8.3                      | -16.2        | -16.2        | -4.5        | -1.7        | 0.1        | -0.4       | -10.7           |                   |
| Bardin Hill Opportunistic Credit           | 20,382               | 2.5        | 0.4             | 0.4                       | -5.8                      | -2.0         | -2.0         |             |             |            |            | 13.7            | 03/01/2021        |
| <i>Blmbg. Global Aggregate</i>             |                      |            | 4.5             | -6.9                      | -8.3                      | -16.2        | -16.2        | -4.5        | -1.7        | 0.1        | -0.4       | -10.3           |                   |

|                                              | Allocation           |             | Performance (%) |                           |                           |              |              |              |             |            |             |                 | Inception Date    |
|----------------------------------------------|----------------------|-------------|-----------------|---------------------------|---------------------------|--------------|--------------|--------------|-------------|------------|-------------|-----------------|-------------------|
|                                              | Market Value (\$000) | %           | 1 Quarter       | 1 Quarter Ending Sep-2022 | 1 Quarter Ending Jun-2022 | Year To Date | 1 Year       | 3 Years      | 5 Years     | 7 Years    | 10 Years    | Since Inception |                   |
| <b>Emerging Market Debt Composite</b>        | <b>16,582</b>        | <b>2.0</b>  | <b>9.9</b>      | <b>-5.1</b>               | <b>-12.6</b>              | <b>-17.5</b> | <b>-17.5</b> | <b>-7.4</b>  | <b>-3.6</b> |            |             | <b>-0.9</b>     | <b>01/01/2017</b> |
| 50%/50% Blend **                             |                      |             | 8.3             | -4.6                      | -10.0                     | -14.8        | -14.8        | -5.7         | -1.9        | 1.8        | -0.2        | 0.4             |                   |
| <b>Stone Harbor EMD</b>                      | <b>8,905</b>         | <b>1.1</b>  | <b>9.4</b>      | <b>-3.1</b>               | <b>-11.2</b>              | <b>-14.1</b> | <b>-14.1</b> | <b>-4.8</b>  | <b>-2.0</b> |            |             | <b>-0.1</b>     | <b>11/01/2016</b> |
| 50%/50% Blend **                             |                      |             | 8.3             | -4.6                      | -10.0                     | -14.8        | -14.8        | -5.7         | -1.9        | 1.8        | -0.2        | -0.2            |                   |
| <b>Ashmore Emerging Markets Total Return</b> | <b>7,677</b>         | <b>0.9</b>  | <b>10.5</b>     | <b>-7.3</b>               | <b>-14.0</b>              | <b>-21.3</b> | <b>-21.3</b> | <b>-10.1</b> | <b>-5.4</b> |            |             | <b>-2.5</b>     | <b>01/01/2017</b> |
| 50%/50% Blend **                             |                      |             | 8.3             | -4.6                      | -10.0                     | -14.8        | -14.8        | -5.7         | -1.9        | 1.8        | -0.2        | 0.4             |                   |
| <b>Hedge Funds</b>                           |                      |             |                 |                           |                           |              |              |              |             |            |             |                 |                   |
| <b>PRIT Absolute Return</b>                  | <b>25,854</b>        | <b>3.1</b>  | <b>1.5</b>      | <b>-0.7</b>               | <b>-3.7</b>               | <b>-2.0</b>  | <b>-2.0</b>  | <b>2.8</b>   | <b>2.9</b>  | <b>3.7</b> | <b>4.2</b>  | <b>3.8</b>      | <b>10/01/2008</b> |
| HFRI Fund of Funds Composite Index           |                      |             | 1.7             | -0.4                      | -3.9                      | -5.3         | -5.3         | 3.7          | 3.0         | 3.3        | 3.5         | 2.8             |                   |
| HFRI FOF: Diversified Index                  |                      |             | 1.3             | 0.3                       | -3.1                      | -3.1         | -3.1         | 4.3          | 3.5         | 3.5        | 3.7         | 3.0             |                   |
| <b>Total Real Estate</b>                     | <b>119,987</b>       | <b>14.4</b> | <b>-3.5</b>     | <b>0.9</b>                | <b>4.4</b>                | <b>5.9</b>   | <b>5.9</b>   | <b>8.1</b>   | <b>9.3</b>  | <b>9.1</b> | <b>9.4</b>  | <b>7.4</b>      | <b>01/01/1995</b> |
| NCREIF Property Index                        |                      |             | -3.5            | 0.6                       | 3.2                       | 5.5          | 5.5          | 8.1          | 7.5         | 7.5        | 8.8         | 9.2             |                   |
| <b>RREEF America REIT II</b>                 | <b>23,343</b>        | <b>2.8</b>  | <b>-3.5</b>     | <b>-0.6</b>               | <b>6.4</b>                | <b>8.7</b>   | <b>8.7</b>   | <b>11.5</b>  | <b>10.0</b> | <b>9.5</b> | <b>11.1</b> | <b>8.2</b>      | <b>04/01/2005</b> |
| NCREIF Property Index                        |                      |             | -3.5            | 0.6                       | 3.2                       | 5.5          | 5.5          | 8.1          | 7.5         | 7.5        | 8.8         | 8.2             |                   |
| <b>Intercontinental</b>                      | <b>46,435</b>        | <b>5.6</b>  | <b>-6.0</b>     | <b>1.6</b>                | <b>7.2</b>                | <b>8.3</b>   | <b>8.3</b>   | <b>11.0</b>  | <b>10.6</b> |            |             | <b>10.2</b>     | <b>01/01/2017</b> |
| NCREIF Property Index                        |                      |             | -3.5            | 0.6                       | 3.2                       | 5.5          | 5.5          | 8.1          | 7.5         | 7.5        | 8.8         | 7.4             |                   |
| <b>TA Realty Logistics Fund</b>              | <b>7,231</b>         | <b>0.9</b>  | <b>-5.0</b>     | <b>2.2</b>                |                           |              |              |              |             |            |             | <b>-2.9</b>     | <b>07/01/2022</b> |
| NCREIF Property Index                        |                      |             | -3.5            | 0.6                       | 3.2                       | 5.5          | 5.5          | 8.1          | 7.5         | 7.5        | 8.8         | -2.9            |                   |
| <b>Oaktree Real Estate Income Fund</b>       | <b>7,099</b>         | <b>0.9</b>  | <b>-5.1</b>     |                           |                           |              |              |              |             |            |             | <b>-5.1</b>     | <b>10/01/2022</b> |
| NCREIF Property Index                        |                      |             | -3.5            | 0.6                       | 3.2                       | 5.5          | 5.5          | 8.1          | 7.5         | 7.5        | 8.8         | -3.5            |                   |

# Bristol County Retirement System

## Comparative Performance

As of December 31, 2022

|                                                   | Allocation           |            | Performance (%) |                           |                           |              |             |             |             |            |            |                 | Inception Date    |
|---------------------------------------------------|----------------------|------------|-----------------|---------------------------|---------------------------|--------------|-------------|-------------|-------------|------------|------------|-----------------|-------------------|
|                                                   | Market Value (\$000) | %          | 1 Quarter       | 1 Quarter Ending Sep-2022 | 1 Quarter Ending Jun-2022 | Year To Date | 1 Year      | 3 Years     | 5 Years     | 7 Years    | 10 Years   | Since Inception |                   |
| <b>Total Infrastructure</b>                       | <b>53,069</b>        | <b>6.4</b> | <b>3.5</b>      | <b>0.8</b>                | <b>2.8</b>                | <b>8.5</b>   | <b>8.5</b>  | <b>11.0</b> | <b>12.8</b> |            |            | <b>12.6</b>     | <b>03/01/2016</b> |
| <i>Dow Jones Brookfield Global Infrastructure</i> |                      |            | 9.6             | -11.1                     | -7.1                      | -6.6         | -6.6        | 1.4         | 4.3         | 7.0        | 6.4        | 7.1             |                   |
| <b>IFM</b>                                        | <b>43,656</b>        | <b>5.3</b> | <b>4.2</b>      | <b>0.4</b>                | <b>2.7</b>                | <b>9.0</b>   | <b>9.0</b>  | <b>10.3</b> | <b>12.7</b> |            |            | <b>13.2</b>     | <b>04/01/2017</b> |
| <i>Dow Jones Brookfield Global Infrastructure</i> |                      |            | 9.6             | -11.1                     | -7.1                      | -6.6         | -6.6        | 1.4         | 4.3         | 7.0        | 6.4        | 5.1             |                   |
| <b>Total Timber &amp; Farmland</b>                | <b>54,964</b>        | <b>6.6</b> | <b>3.0</b>      | <b>1.3</b>                | <b>1.0</b>                | <b>8.4</b>   | <b>8.4</b>  | <b>7.4</b>  | <b>6.3</b>  | <b>7.3</b> |            | <b>8.8</b>      | <b>12/01/2013</b> |
| <i>50% Timberland / 50% Farmland Index***</i>     |                      |            | 4.1             | 2.2                       | 1.7                       | 11.3         | 11.3        | 7.1         | 5.1         | 4.6        | 5.7        | 5.9             |                   |
| <b>Hancock Timber &amp; Farmland Fund</b>         | <b>24,944</b>        | <b>3.0</b> | <b>0.4</b>      | <b>-1.6</b>               | <b>-0.1</b>               | <b>1.0</b>   | <b>1.0</b>  |             |             |            |            | <b>4.2</b>      | <b>08/01/2020</b> |
| <i>50% Timberland / 50% Farmland Index</i>        |                      |            | 4.1             | 2.2                       | 1.7                       | 11.3         | 11.3        | 7.1         | 5.1         | 4.6        | 5.7        | 8.8             |                   |
| <b>BTG Pactual U.S. Timberland Fund</b>           | <b>12,139</b>        | <b>1.5</b> | <b>5.1</b>      | <b>4.1</b>                | <b>1.5</b>                | <b>12.7</b>  | <b>12.7</b> |             |             |            |            | <b>12.8</b>     | <b>07/01/2020</b> |
| <i>NCREIF Timberland Index</i>                    |                      |            | 4.9             | 2.4                       | 1.9                       | 12.9         | 12.9        | 7.5         | 5.4         | 4.7        | 5.8        | 9.0             |                   |
| <b>Ceres Farms</b>                                | <b>15,951</b>        | <b>1.9</b> | <b>6.2</b>      | <b>4.0</b>                | <b>4.3</b>                | <b>23.3</b>  | <b>23.3</b> |             |             |            |            | <b>18.0</b>     | <b>08/01/2020</b> |
| <i>NCREIF Farmland Index</i>                      |                      |            | 3.3             | 2.0                       | 1.4                       | 9.6          | 9.6         | 6.8         | 6.4         | 6.5        | 8.8        | 8.3             |                   |
| <b>Bristol County Cash</b>                        | <b>4,165</b>         | <b>0.5</b> | <b>0.8</b>      | <b>0.5</b>                | <b>0.1</b>                | <b>1.3</b>   | <b>1.3</b>  | <b>0.8</b>  | <b>1.8</b>  | <b>1.4</b> | <b>1.2</b> | <b>2.5</b>      | <b>01/01/1997</b> |
| <i>90 Day U.S. Treasury Bill</i>                  |                      |            | 0.8             | 0.5                       | 0.1                       | 1.5          | 1.5         | 0.7         | 1.3         | 1.1        | 0.8        | 2.0             |                   |

\*\*Stone Harbor 50/50 Blend: 50% JPM EMBI Global Diversified Index/50% JPM GBI-EM Global Diversified US Index

\*\*PIMCO Index: 33% BC Global Agg/33% ML Global HY/33% JPM EMBI Global.

\*GoldenTree Blended Benchmark: 50% Merrill Lynch High Yield Index / 50% S&P/LSTA Leveraged Loan Index

\*\*\* Prior to 7/1/2020, the Total Timber & Farmland composite is benchmarked 100% to the NCREIF Timberland Index

|                                                  | Market Value<br>(\$) | %   | 1<br>Quarter | 1<br>Quarter<br>Ending<br>Sep-2022 | 1<br>Quarter<br>Ending<br>Jun-2022 | Year<br>To Date | 1<br>Year | 3<br>Years | 5<br>Years | 7<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Date |
|--------------------------------------------------|----------------------|-----|--------------|------------------------------------|------------------------------------|-----------------|-----------|------------|------------|------------|-------------|--------------------|-------------------|
| <b>Other Fixed Income</b>                        |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| Invesco Mortgage Recovery Fund                   | 17,924               | 0.0 | 0.0          | 0.0                                | -0.1                               | -0.3            | -0.3      | -1.4       | 6.3        | 0.0        | 16.2        | 13.7               | 03/31/2010        |
| <b>Real Assets</b>                               |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| <b>Closed-End Real Estate</b>                    |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| Invesco Mortgage Recovery II                     | 4,371,755            | 0.5 | 0.0          | -2.6                               | -2.9                               | -6.8            | -6.8      | -16.9      | -1.2       |            |             | 3.8                | 05/20/2016        |
| TerraCap Partners IV                             | 8,914,715            | 1.1 | 0.0          | 0.9                                | -0.7                               | 1.5             | 1.5       | 7.8        |            |            |             | 10.2               | 07/17/2018        |
| TerraCap Partners V                              | 22,591,235           | 2.7 | 0.0          | 1.1                                | -0.7                               | 1.5             | 1.5       |            |            |            |             | 7.4                | 10/16/2020        |
| <b>Closed-End Infrastructure</b>                 |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| GCM Customized Infrastructures Strategies II, LP | 9,412,566            | 1.1 | 0.0          | 2.5                                | 2.7                                | 4.7             | 4.7       | 12.1       | 11.7       |            |             | 11.3               | 03/10/2016        |
|                                                  | 9,412,566            | 1.1 | 0.0          | 2.5                                | 2.7                                | 4.7             | 4.7       | 12.1       | 11.7       |            |             | 11.3               | 03/10/2016        |
| <b>Closed-End Timber</b>                         |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| Brookfield Timberlands Fund V                    | 43,716               | 0.0 | 0.0          | -2.0                               | -6.4                               | -10.8           | -10.8     | 1.2        | 2.3        | 5.7        |             | 6.6                | 12/23/2013        |
| Eastern Timberland Opportunities II              | 1,886,212            | 0.2 | 0.0          | 2.5                                | 1.9                                | 5.8             | 5.8       | 5.4        | 5.0        | 6.3        |             | 7.7                | 07/03/2014        |

# Bristol County Retirement System

## Comparative Performance - IRR

As of December 31, 2022

|                                 | Market Value<br>(\$) | %           | 1<br>Quarter | 1<br>Quarter<br>Ending<br>Sep-2022 | 1<br>Quarter<br>Ending<br>Jun-2022 | Year<br>To Date | 1<br>Year   | 3<br>Years  | 5<br>Years  | 7<br>Years  | 10<br>Years | Since<br>Inception | Inception<br>Date |
|---------------------------------|----------------------|-------------|--------------|------------------------------------|------------------------------------|-----------------|-------------|-------------|-------------|-------------|-------------|--------------------|-------------------|
| <b>Total Private Equity</b>     | <b>113,830,896</b>   | <b>13.7</b> | <b>-1.3</b>  | <b>-4.9</b>                        | <b>-2.7</b>                        | <b>-2.8</b>     | <b>-2.8</b> | <b>24.3</b> | <b>21.7</b> | <b>18.8</b> | <b>15.5</b> | <b>177.7</b>       | <b>01/05/1995</b> |
| <b>Active Funds</b>             |                      |             |              |                                    |                                    |                 |             |             |             |             |             |                    |                   |
| BlackRock Vesey Street Fund III | 144,712              | 0.0         | 0.0          | -1.9                               | -5.8                               | -5.9            | -5.9        | -1.1        | -5.7        | -7.0        | 8.6         | 4.1                | 07/17/2006        |
| DuPont Capital Management II    | 280,300              | 0.0         | 0.0          | -8.7                               | -8.2                               | -19.1           | -19.1       | -4.3        | -5.2        | -4.0        | -0.7        | 0.3                | 08/14/2006        |
| DN Partners II                  | 2,911,591            | 0.4         | 0.0          | 0.0                                | 0.0                                | 31.0            | 31.0        | 9.8         | 21.6        | 18.6        | 3.5         | 0.3                | 01/11/2007        |
| BlackRock Vesey Street Fund IV  | 454,680              | 0.1         | 0.0          | -7.5                               | -31.0                              | -40.9           | -40.9       | -1.3        | 5.2         | 6.9         | 9.3         | 7.8                | 02/24/2009        |
| Mesirow PE Fund V               | 2,761,555            | 0.3         | 0.0          | -3.8                               | -10.3                              | -22.8           | -22.8       | 21.8        | 19.2        | 16.7        | 17.3        | 15.7               | 04/09/2009        |
| PRIT Vintage 2014               | 10,775,856           | 1.3         | -2.0         | -3.7                               | -2.9                               | -5.0            | -5.0        | 25.0        | 26.8        | 23.6        |             | 21.3               | 05/01/2014        |
| PRIT Vintage 2015               | 16,542,507           | 2.0         | 1.0          | -9.2                               | -4.6                               | -15.5           | -15.5       | 28.0        | 28.4        | 26.9        |             | 25.2               | 03/01/2015        |
| PRIT Vintage 2016               | 8,328,031            | 1.0         | -2.7         | -6.7                               | 1.3                                | -6.7            | -6.7        | 31.2        | 21.2        |             |             | 18.7               | 03/01/2016        |
| PRIT Vintage 2017               | 19,168,429           | 2.3         | 1.1          | -5.3                               | 1.4                                | 5.7             | 5.7         | 31.7        | 23.6        |             |             | 22.1               | 04/30/2017        |
| PRIT Vintage 2018               | 16,165,746           | 1.9         | -0.1         | -4.7                               | -2.0                               | 0.1             | 0.1         | 27.9        |             |             |             | 22.7               | 05/30/2018        |
| PRIT Vintage 2019               | 9,688,156            | 1.2         | -2.2         | -3.4                               | -2.3                               | -2.8            | -2.8        | 35.9        |             |             |             | 30.6               | 03/31/2019        |
| PRIT Vintage 2020               | 7,092,999            | 0.9         | -3.5         | -6.9                               | -0.4                               | 4.5             | 4.5         |             |             |             |             | 6.4                | 02/29/2020        |
| PRIT Vintage 2021               | 8,208,431            | 1.0         | -7.2         | -2.6                               | -1.0                               | 4.3             | 4.3         |             |             |             |             | -8.7               | 03/31/2021        |
| PRIT Vintage 2022               | 1,936,906            | 0.2         | -15.0        | 23.0                               | -42.9                              | -34.5           | -34.5       |             |             |             |             | -34.5              | 02/28/2022        |
| GCM Grosvenor SOF III           | 5,121,895            | 0.6         | 0.0          | 10.0                               | -3.2                               | 3.9             | 3.9         |             |             |             |             | 10.5               | 12/15/2021        |
| Pomona Capital Fund X           | 4,249,102            | 0.5         | 0.0          | -7.6                               | -16.3                              |                 |             |             |             |             |             | 37.6               | 03/25/2022        |

# Bristol County Retirement System

## Comparative Performance

As of December 31, 2022

|                                      | Allocation           |              | Performance (%) |             |             |              |             |             |             |             |             |             |
|--------------------------------------|----------------------|--------------|-----------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                                      | Market Value (\$000) | %            | 2021            | 2020        | 2019        | 2018         | 2017        | 2016        | 2015        | 2014        | 2013        | 2012        |
| <b>Total Fund</b>                    | <b>830,773</b>       | <b>100.0</b> | <b>17.0</b>     | <b>12.4</b> | <b>17.5</b> | <b>-3.7</b>  | <b>17.3</b> | <b>7.3</b>  | <b>0.2</b>  | <b>5.3</b>  | <b>18.9</b> | <b>15.7</b> |
| <i>Total Plan Index</i>              |                      |              | 12.1            | 13.5        | 18.9        | -4.7         | 15.9        | 6.2         | 0.8         | 6.3         | 17.8        | 12.6        |
| <i>Total Plan Allocation Index</i>   |                      |              | 13.6            | 12.1        | 18.3        | -4.7         | 16.4        |             |             |             |             |             |
| <b>Total Domestic Equity</b>         | <b>170,479</b>       | <b>20.5</b>  | <b>23.4</b>     | <b>21.8</b> | <b>29.7</b> | <b>-11.1</b> | <b>23.6</b> | <b>9.0</b>  | <b>0.7</b>  | <b>11.0</b> | <b>39.1</b> | <b>16.3</b> |
| <i>S&amp;P 500 Index</i>             |                      |              | 28.7            | 18.4        | 31.5        | -4.4         | 21.8        | 12.0        | 1.4         | 13.7        | 32.4        | 16.0        |
| <i>Russell 3000 Index</i>            |                      |              | 25.7            | 20.9        | 31.0        | -5.2         | 21.1        | 12.7        | 0.5         | 12.6        | 33.6        | 16.4        |
| <b>NT S&amp;P 500 Index</b>          | <b>26,751</b>        | <b>3.2</b>   |                 |             |             |              |             |             |             |             |             |             |
| <i>S&amp;P 500</i>                   |                      |              | 28.7            | 18.4        | 31.5        | -4.4         | 21.8        | 12.0        | 1.4         | 13.7        | 32.4        | 16.0        |
| <b>Columbia</b>                      | <b>22,997</b>        | <b>2.8</b>   | <b>10.0</b>     | <b>48.1</b> | <b>37.9</b> | <b>-4.3</b>  | <b>35.6</b> | <b>-8.2</b> | <b>8.7</b>  | <b>10.5</b> |             |             |
| <i>Russell 1000 Growth Index</i>     |                      |              | 27.6            | 38.5        | 36.4        | -1.5         | 30.2        | 7.1         | 5.7         | 13.1        | 33.5        | 15.3        |
| <b>ClearBridge Large Cap Growth</b>  | <b>24,164</b>        | <b>2.9</b>   | <b>23.0</b>     | <b>31.6</b> | <b>33.2</b> |              |             |             |             |             |             |             |
| <i>Russell 1000 Growth Index</i>     |                      |              | 27.6            | 38.5        | 36.4        | -1.5         | 30.2        | 7.1         | 5.7         | 13.1        | 33.5        | 15.3        |
| <b>Intech Large Cap Growth</b>       |                      | <b>0.0</b>   |                 |             |             |              | <b>30.0</b> | <b>6.1</b>  | <b>4.4</b>  | <b>10.4</b> | <b>33.9</b> | <b>14.8</b> |
| <i>Russell 1000 Growth Index</i>     |                      |              | 27.6            | 38.5        | 36.4        | -1.5         | 30.2        | 7.1         | 5.7         | 13.1        | 33.5        | 15.3        |
| <b>LSV</b>                           | <b>31,812</b>        | <b>3.8</b>   | <b>30.0</b>     | <b>-1.6</b> | <b>24.7</b> | <b>-11.7</b> | <b>18.9</b> | <b>16.7</b> | <b>-2.1</b> | <b>13.3</b> | <b>40.9</b> | <b>21.2</b> |
| <i>Russell 1000 Value Index</i>      |                      |              | 25.2            | 2.8         | 26.5        | -8.3         | 13.7        | 17.3        | -3.8        | 13.5        | 32.5        | 17.5        |
| <b>Lyrical</b>                       | <b>30,158</b>        | <b>3.6</b>   | <b>30.4</b>     | <b>12.8</b> | <b>27.3</b> | <b>-20.8</b> | <b>19.3</b> | <b>15.3</b> | <b>-4.3</b> | <b>14.3</b> |             |             |
| <i>Russell 1000 Value Index</i>      |                      |              | 25.2            | 2.8         | 26.5        | -8.3         | 13.7        | 17.3        | -3.8        | 13.5        | 32.5        | 17.5        |
| <b>Frontier Capital Appreciation</b> | <b>17,160</b>        | <b>2.1</b>   | <b>18.2</b>     | <b>18.1</b> | <b>28.9</b> |              |             |             |             |             |             |             |
| <i>Russell 2000 Growth Index</i>     |                      |              | 2.8             | 34.6        | 28.5        | -9.3         | 22.2        | 11.3        | -1.4        | 5.6         | 43.3        | 14.6        |
| <b>Rice Hall James</b>               |                      | <b>0.0</b>   |                 |             |             | <b>1.0</b>   | <b>13.3</b> | <b>7.1</b>  | <b>-0.1</b> | <b>5.4</b>  | <b>36.4</b> | <b>13.3</b> |
| <i>Russell 2000 Growth Index</i>     |                      |              | 2.8             | 34.6        | 28.5        | -9.3         | 22.2        | 11.3        | -1.4        | 5.6         | 43.3        | 14.6        |

|                                         | Allocation           |             | Performance (%) |             |             |              |             |            |             |             |             |             |
|-----------------------------------------|----------------------|-------------|-----------------|-------------|-------------|--------------|-------------|------------|-------------|-------------|-------------|-------------|
|                                         | Market Value (\$000) | %           | 2021            | 2020        | 2019        | 2018         | 2017        | 2016       | 2015        | 2014        | 2013        | 2012        |
| Earnest Partners                        | 17,437               | 2.1         | 20.6            | 17.8        | 25.8        | -13.4        | 20.0        | 24.4       | -4.5        | 8.9         | 34.9        | 14.9        |
| <i>Russell 2000 Value Index</i>         |                      |             | 28.3            | 4.6         | 22.4        | -12.9        | 7.8         | 31.7       | -7.5        | 4.2         | 34.5        | 18.1        |
| <b>Total International Equity</b>       | <b>161,088</b>       | <b>19.4</b> | <b>8.8</b>      | <b>14.7</b> | <b>22.8</b> | <b>-12.7</b> | <b>27.7</b> | <b>8.4</b> | <b>-4.3</b> | <b>-3.2</b> | <b>21.8</b> | <b>24.4</b> |
| <i>MSCI EAFE (net)</i>                  |                      |             | 11.3            | 7.8         | 22.0        | -13.8        | 25.0        | 1.0        | -0.8        | -4.9        | 22.8        | 17.3        |
| <i>MSCI AC World ex USA</i>             |                      |             | 8.3             | 11.1        | 22.1        | -13.8        | 27.8        | 5.0        | -5.3        | -3.4        | 15.8        | 17.4        |
| Arrowstreet Capital                     | 33,361               | 4.0         | 15.2            | 22.8        | 23.6        | -12.0        | 27.3        | 6.9        | -1.9        | -2.7        | 23.4        | 19.1        |
| <i>MSCI AC World ex USA</i>             |                      |             | 8.3             | 11.1        | 22.1        | -13.8        | 27.8        | 5.0        | -5.3        | -3.4        | 15.8        | 17.4        |
| Freedom Capital Intl                    | 32,686               | 3.9         | 11.0            | 4.4         | 21.4        | -12.9        | 28.0        | 6.8        | 1.4         | -2.9        | 33.2        | 31.5        |
| <i>MSCI EAFE (net)</i>                  |                      |             | 11.3            | 7.8         | 22.0        | -13.8        | 25.0        | 1.0        | -0.8        | -4.9        | 22.8        | 17.3        |
| Fiera International Equity              | 30,178               | 3.6         | 17.7            | 20.2        | 32.3        |              |             |            |             |             |             |             |
| <i>MSCI EAFE (Net)</i>                  |                      |             | 11.3            | 7.8         | 22.0        | -13.8        | 25.0        | 1.0        | -0.8        | -4.9        | 22.8        | 17.3        |
| MFS International Equity                |                      | 0.0         |                 |             |             |              | 28.0        | 0.3        | 0.0         | -4.2        | 18.6        | 22.5        |
| <i>MSCI EAFE (Net)</i>                  |                      |             | 11.3            | 7.8         | 22.0        | -13.8        | 25.0        | 1.0        | -0.8        | -4.9        | 22.8        | 17.3        |
| Lazard Emerging Markets                 |                      | 0.0         | 6.1             | -1.0        | 17.5        | -18.1        | 27.5        | 20.9       | -20.4       | -4.0        | -0.8        | 21.8        |
| <i>MSCI Emerging Markets Index</i>      |                      |             | -2.2            | 18.7        | 18.9        | -14.2        | 37.8        | 11.6       | -14.6       | -1.8        | -2.3        | 18.6        |
| Aberdeen Emerging Markets               | 33,789               | 4.1         | -3.7            | 28.7        | 21.5        | -13.7        |             |            |             |             |             |             |
| <i>MSCI Emerging Markets Index</i>      |                      |             | -2.2            | 18.7        | 18.9        | -14.2        | 37.8        | 11.6       | -14.6       | -1.8        | -2.3        | 18.6        |
| William Blair Emerging Markets          | 31,075               | 3.7         |                 |             |             |              |             |            |             |             |             |             |
| <i>MSCI Emerging Markets Index</i>      |                      |             | -2.2            | 18.7        | 18.9        | -14.2        | 37.8        | 11.6       | -14.6       | -1.8        | -2.3        | 18.6        |
| Global REITs                            |                      |             |                 |             |             |              |             |            |             |             |             |             |
| Brookfield Global Real Estate           | 13,469               | 1.6         | 23.8            | -10.3       | 20.4        |              |             |            |             |             |             |             |
| <i>FTSE EPRA/NAREIT Developed Index</i> |                      |             | 27.2            | -8.2        | 23.1        | -4.7         | 11.4        | 5.0        | 0.1         | 15.9        | 4.4         | 28.7        |



|                                            | Allocation           |            | Performance (%) |             |            |             |             |            |             |            |             |             |
|--------------------------------------------|----------------------|------------|-----------------|-------------|------------|-------------|-------------|------------|-------------|------------|-------------|-------------|
|                                            | Market Value (\$000) | %          | 2021            | 2020        | 2019       | 2018        | 2017        | 2016       | 2015        | 2014       | 2013        | 2012        |
| <b>Total Domestic Fixed</b>                | <b>39,456</b>        | <b>4.7</b> | <b>-1.2</b>     | <b>10.0</b> | <b>9.3</b> | <b>-0.1</b> | <b>3.8</b>  | <b>3.9</b> | <b>0.7</b>  | <b>6.1</b> | <b>-2.1</b> | <b>9.7</b>  |
| Barclays Cap Aggregate                     |                      |            | -1.5            | 7.5         | 8.7        | 0.0         | 3.5         | 2.6        | 0.5         | 6.0        | -2.0        | 4.2         |
| NT Aggregate Bond Index                    | 12,648               | 1.5        |                 |             |            |             |             |            |             |            |             |             |
| Blmbg. U.S. Aggregate                      |                      |            | -1.5            | 7.5         | 8.7        | 0.0         | 3.5         | 2.6        | 0.5         | 6.0        | -2.0        | 4.2         |
| Income Research & Management               | 26,790               | 3.2        | -1.2            | 10.9        | 10.1       | -0.2        | 4.5         | 4.0        | 0.2         | 7.2        | -1.4        | 7.7         |
| Blmbg. U.S. Gov't/Credit                   |                      |            | -1.7            | 8.9         | 9.7        | -0.4        | 4.0         | 3.0        | 0.1         | 6.0        | -2.4        | 4.8         |
| IR+M TIPS                                  |                      | 0.0        |                 |             | 6.9        | -0.3        | 2.0         | 4.1        | -0.5        | 0.9        | -5.5        | 5.0         |
| Barclays Cap US Treas: US TIPS             |                      |            | 6.0             | 11.0        | 8.4        | -1.3        | 3.0         | 4.7        | -1.4        | 3.6        | -8.6        | 7.0         |
| <b>Total Global Fixed</b>                  | <b>74,412</b>        | <b>9.0</b> | <b>2.0</b>      | <b>3.7</b>  | <b>9.6</b> | <b>-2.4</b> | <b>10.0</b> | <b>8.5</b> | <b>-1.1</b> | <b>2.1</b> | <b>-1.5</b> | <b>11.0</b> |
| Blmbg. Global Aggregate                    |                      |            | -4.7            | 9.2         | 6.8        | -1.2        | 7.4         | 2.1        | -3.2        | 0.6        | -2.6        | 4.3         |
| <b>Broad Mkt Global Fixed Income</b>       | <b>24,883</b>        | <b>3.0</b> | <b>2.6</b>      | <b>3.3</b>  | <b>8.9</b> | <b>-0.9</b> | <b>8.7</b>  | <b>8.8</b> | <b>-1.1</b> | <b>2.1</b> | <b>-1.5</b> | <b>11.0</b> |
| Blmbg. Global Aggregate                    |                      |            | -4.7            | 9.2         | 6.8        | -1.2        | 7.4         | 2.1        | -3.2        | 0.6        | -2.6        | 4.3         |
| Franklin Templeton Global Bond             |                      | 0.0        |                 | -5.3        |            |             |             |            |             |            |             |             |
| FTSE World Government Bond Index           |                      |            | -7.0            | 10.1        | 5.9        | -0.8        | 7.5         | 1.6        | -3.6        | -0.5       | -4.0        | 1.6         |
| PIMCO Diversified Income                   | 10,927               | 1.3        | 0.3             | 6.5         | 12.8       | -1.0        | 8.8         | 10.6       | 1.2         | 3.0        | -0.9        | 15.0        |
| Global Diversified Index**                 |                      |            | -1.6            | 8.0         | 11.7       | -3.0        | 9.0         | 9.0        | -2.0        | 2.0        | -0.5        | 13.9        |
| GoldenTree Multi-Sector Opportunistic Fund | 13,956               | 1.7        | 10.7            | 7.8         |            |             |             |            |             |            |             |             |
| GoldenTree Blended Benchmark*              |                      |            | 5.3             | 4.7         | 11.5       | -0.9        | 5.8         | 13.8       | -2.7        | 2.1        | 6.4         | 12.6        |
| Colchester Global Bond                     |                      | 0.0        |                 |             |            | -0.5        | 8.7         | 4.3        | -5.5        | 0.3        | -2.9        |             |
| FTSE World Government Bond Index           |                      |            | -7.0            | 10.1        | 5.9        | -0.8        | 7.5         | 1.6        | -3.6        | -0.5       | -4.0        | 1.6         |
| EnTrust Global Recovery Fund               | 12,565               | 1.5        |                 |             |            |             |             |            |             |            |             |             |
| Blmbg. Global Aggregate                    |                      |            | -4.7            | 9.2         | 6.8        | -1.2        | 7.4         | 2.1        | -3.2        | 0.6        | -2.6        | 4.3         |

|                                           | Allocation           |             | Performance (%) |             |             |             |             |            |             |             |            |            |
|-------------------------------------------|----------------------|-------------|-----------------|-------------|-------------|-------------|-------------|------------|-------------|-------------|------------|------------|
|                                           | Market Value (\$000) | %           | 2021            | 2020        | 2019        | 2018        | 2017        | 2016       | 2015        | 2014        | 2013       | 2012       |
| Bardin Hill Opportunistic Credit          | 20,382               | 2.5         |                 |             |             |             |             |            |             |             |            |            |
| <i>BImbg. Global Aggregate</i>            |                      |             | -4.7            | 9.2         | 6.8         | -1.2        | 7.4         | 2.1        | -3.2        | 0.6         | -2.6       | 4.3        |
| <b>Emerging Market Debt Composite</b>     | <b>16,582</b>        | <b>2.0</b>  | <b>-7.6</b>     | <b>4.3</b>  | <b>12.4</b> | <b>-6.8</b> | <b>14.0</b> |            |             |             |            |            |
| <i>50%/50% Blend **</i>                   |                      |             | -5.3            | 4.0         | 14.3        | -5.2        | 12.7        | 10.2       | -7.1        | 0.7         | -7.1       | 17.2       |
| Stone Harbor EMD                          | 8,905                | 1.1         | -5.0            | 5.7         | 14.7        | -8.7        | 14.3        |            |             |             |            |            |
| <i>50%/50% Blend **</i>                   |                      |             | -5.3            | 4.0         | 14.3        | -5.2        | 12.7        | 10.2       | -7.1        | 0.7         | -7.1       | 17.2       |
| Ashmore Emerging Markets Total Return     | 7,677                | 0.9         | -10.1           | 2.9         | 9.8         | -5.3        | 13.7        |            |             |             |            |            |
| <i>50%/50% Blend **</i>                   |                      |             | -5.3            | 4.0         | 14.3        | -5.2        | 12.7        | 10.2       | -7.1        | 0.7         | -7.1       | 17.2       |
| Hedge Funds                               |                      |             |                 |             |             |             |             |            |             |             |            |            |
| PRIT Absolute Return                      | 25,854               | 3.1         | 9.5             | 1.3         | 7.7         | -1.6        | 8.2         | 3.6        | -1.9        | 5.5         | 12.6       | 8.4        |
| <i>HFRI Fund of Funds Composite Index</i> |                      |             | 6.2             | 10.9        | 8.4         | -4.0        | 7.8         | 0.5        | -0.3        | 3.4         | 9.0        | 4.8        |
| <i>HFRI FOF: Diversified Index</i>        |                      |             | 5.9             | 10.6        | 8.1         | -3.3        | 6.9         | 0.4        | -0.2        | 3.4         | 9.0        | 4.8        |
| <b>Total Real Estate</b>                  | <b>119,987</b>       | <b>14.4</b> | <b>21.9</b>     | <b>-2.0</b> | <b>9.5</b>  | <b>12.6</b> | <b>7.6</b>  | <b>9.6</b> | <b>12.8</b> | <b>10.4</b> | <b>7.8</b> | <b>6.5</b> |
| <i>NCREIF Property Index</i>              |                      |             | 17.7            | 1.6         | 6.4         | 6.7         | 7.0         | 8.0        | 13.3        | 11.8        | 11.0       | 10.5       |
| RREEF America REIT II                     | 23,343               | 2.8         | 25.0            | 2.1         | 7.3         | 8.4         | 7.4         | 9.1        | 16.7        | 13.0        | 15.0       | 12.4       |
| <i>NCREIF Property Index</i>              |                      |             | 17.7            | 1.6         | 6.4         | 6.7         | 7.0         | 8.0        | 13.3        | 11.8        | 11.0       | 10.5       |
| Intercontinental                          | 46,435               | 5.6         | 24.3            | 1.6         | 9.1         | 10.7        | 8.5         |            |             |             |            |            |
| <i>NCREIF Property Index</i>              |                      |             | 17.7            | 1.6         | 6.4         | 6.7         | 7.0         | 8.0        | 13.3        | 11.8        | 11.0       | 10.5       |
| TA Realty Logistics Fund                  | 7,231                | 0.9         |                 |             |             |             |             |            |             |             |            |            |
| <i>NCREIF Property Index</i>              |                      |             | 17.7            | 1.6         | 6.4         | 6.7         | 7.0         | 8.0        | 13.3        | 11.8        | 11.0       | 10.5       |
| Oaktree Real Estate Income Fund           | 7,099                | 0.9         |                 |             |             |             |             |            |             |             |            |            |
| <i>NCREIF Property Index</i>              |                      |             | 17.7            | 1.6         | 6.4         | 6.7         | 7.0         | 8.0        | 13.3        | 11.8        | 11.0       | 10.5       |

|                                                   | Allocation           |            | Performance (%) |            |             |             |             |            |             |             |            |            |
|---------------------------------------------------|----------------------|------------|-----------------|------------|-------------|-------------|-------------|------------|-------------|-------------|------------|------------|
|                                                   | Market Value (\$000) | %          | 2021            | 2020       | 2019        | 2018        | 2017        | 2016       | 2015        | 2014        | 2013       | 2012       |
| <b>Total Infrastructure</b>                       | <b>53,069</b>        | <b>6.4</b> | <b>17.3</b>     | <b>7.3</b> | <b>15.4</b> | <b>16.0</b> | <b>15.9</b> |            |             |             |            |            |
| <i>Dow Jones Brookfield Global Infrastructure</i> |                      |            | 19.9            | -7.0       | 28.7        | -7.9        | 15.8        | 12.5       | -14.4       | 16.4        | 15.9       | 16.0       |
| <b>IFM</b>                                        | <b>43,656</b>        | <b>5.3</b> | <b>18.3</b>     | <b>4.0</b> | <b>16.1</b> | <b>16.9</b> |             |            |             |             |            |            |
| <i>Dow Jones Brookfield Global Infrastructure</i> |                      |            | 19.9            | -7.0       | 28.7        | -7.9        | 15.8        | 12.5       | -14.4       | 16.4        | 15.9       | 16.0       |
| <b>Total Timber &amp; Farmland</b>                | <b>54,964</b>        | <b>6.6</b> | <b>9.4</b>      | <b>4.5</b> | <b>7.2</b>  | <b>1.9</b>  | <b>14.4</b> | <b>5.8</b> | <b>12.7</b> | <b>15.9</b> |            |            |
| <i>50% Timberland / 50% Farmland Index***</i>     |                      |            | 8.5             | 1.8        | 1.3         | 3.2         | 3.6         | 2.6        | 5.0         | 10.5        | 9.7        | 7.8        |
| <b>Hancock Timber &amp; Farmland Fund</b>         | <b>24,944</b>        | <b>3.0</b> | <b>6.9</b>      |            |             |             |             |            |             |             |            |            |
| <i>50% Timberland / 50% Farmland Index</i>        |                      |            | 8.5             | 1.8        | 1.3         | 3.2         | 3.6         | 2.6        | 5.0         | 10.5        | 9.7        | 7.8        |
| <b>BTG Pactual U.S. Timberland Fund</b>           | <b>12,139</b>        | <b>1.5</b> | <b>14.7</b>     |            |             |             |             |            |             |             |            |            |
| <i>NCREIF Timberland Index</i>                    |                      |            | 9.2             | 0.8        | 1.3         | 3.2         | 3.6         | 2.6        | 5.0         | 10.5        | 9.7        | 7.8        |
| <b>Ceres Farms</b>                                | <b>15,951</b>        | <b>1.9</b> | <b>14.5</b>     |            |             |             |             |            |             |             |            |            |
| <i>NCREIF Farmland Index</i>                      |                      |            | 7.8             | 3.1        | 4.8         | 6.7         | 6.2         | 7.1        | 10.4        | 12.6        | 20.9       | 18.6       |
| <b>Bristol County Cash</b>                        | <b>4,165</b>         | <b>0.5</b> | <b>0.4</b>      | <b>0.7</b> | <b>2.7</b>  | <b>3.8</b>  | <b>0.8</b>  | <b>0.3</b> | <b>1.2</b>  | <b>0.9</b>  | <b>0.2</b> | <b>0.1</b> |
| <i>90 Day U.S. Treasury Bill</i>                  |                      |            | 0.0             | 0.7        | 2.3         | 1.9         | 0.9         | 0.3        | 0.0         | 0.0         | 0.0        | 0.1        |

\*\*Stone Harbor 50/50 Blend: 50% JPM EMBI Global Diversified Index/50% JPM GBI-EM Global Diversified US Index

\*\*PIMCO Index: 33% BC Global Agg/33% ML Global HY/33% JPM EMBI Global.

\*GoldenTree Blended Benchmark: 50% Merrill Lynch High Yield Index / 50% S&P/LSTA Leveraged Loan Index

\*\*\* Prior to 7/1/2020, the Total Timber & Farmland composite is benchmarked 100% to the NCREIF Timberland Index

# Bristol County Retirement System

## Plan Index

As of December 31, 2022

| Policy Index            | Weight (%) |
|-------------------------|------------|
| Jan-1976                |            |
| Blmbg. U.S. Aggregate   | 35.0       |
| MSCI EAFE (Net)         | 15.0       |
| S&P 500                 | 50.0       |
| Jul-2007                |            |
| Blmbg. U.S. Aggregate   | 33.0       |
| MSCI EAFE (Net)         | 22.0       |
| S&P 500                 | 45.0       |
| Jul-2010                |            |
| Blmbg. U.S. Aggregate   | 33.0       |
| MSCI EAFE (Net)         | 25.5       |
| S&P 500                 | 41.5       |
| Jan-2017                |            |
| Blmbg. U.S. Aggregate   | 18.0       |
| Russell 3000 Index      | 34.0       |
| Blmbg. Global Aggregate | 16.5       |
| MSCI AC World ex USA    | 24.0       |
| NCREIF Property Index   | 7.5        |
| Jan-2020                |            |
| Blmbg. U.S. Aggregate   | 13.5       |
| Russell 3000 Index      | 36.5       |
| Blmbg. Global Aggregate | 14.5       |
| MSCI AC World ex USA    | 24.5       |
| NCREIF Property Index   | 11.0       |

# Bristol County Retirement System

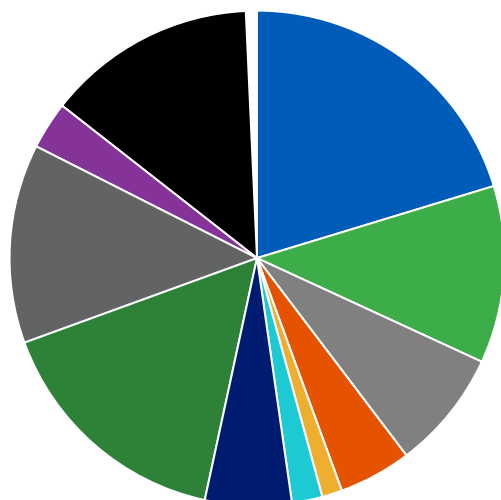
## Total Plan Allocation Index

As of December 31, 2022

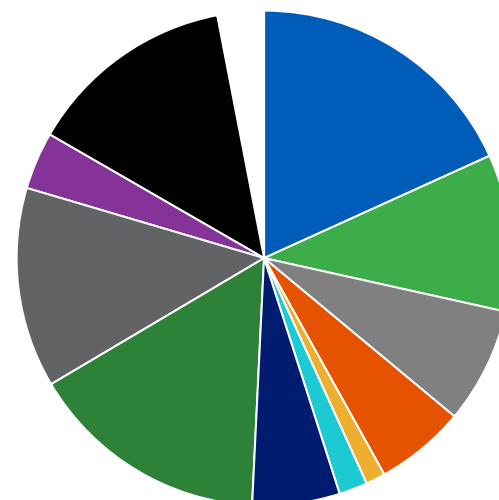
| Policy Index                                         | Weight (%) |
|------------------------------------------------------|------------|
| Jan-2017                                             |            |
| Russell 3000 Index                                   | 30.0       |
| NCREIF Timberland Index                              | 3.0        |
| FTSE EPRA/NAREIT Developed Index                     | 2.0        |
| MSCI EAFE Index                                      | 12.5       |
| MSCI Emerging Markets Index                          | 10.5       |
| Blmbg. U.S. Aggregate                                | 11.0       |
| Blmbg. U.S. TIPS                                     | 2.0        |
| Blmbg. Global Aggregate                              | 6.5        |
| 50% JPM EMBI Global Div./ 50% JPM GBI-EM Global Div. | 7.0        |
| FTSE High Yield Market Capped Index                  | 3.0        |
| HFRI FOF: Diversified Index                          | 5.0        |
| NCREIF Property Index                                | 7.5        |
| Jan-2020                                             |            |
| Russell 3000 Index                                   | 34.0       |
| NCREIF Timberland Index                              | 3.0        |
| FTSE EPRA/NAREIT Developed Index                     | 2.0        |
| MSCI EAFE Index                                      | 11.0       |
| MSCI Emerging Markets Index                          | 11.0       |
| Blmbg. U.S. Aggregate                                | 5.0        |
| Blmbg. Global Aggregate                              | 3.0        |
| 50% JPM EMBI Global Div./ 50% JPM GBI-EM Global Div. | 4.0        |
| FTSE High Yield Market Capped Index                  | 3.0        |
| HFRI FOF: Diversified Index                          | 4.0        |
| NCREIF Property Index                                | 11.0       |
| NCREIF Farmland Index                                | 3.0        |
| Dow Jones Brookfield Global Infrastructure           | 6.0        |

Dec-2022 : \$830,773,351

Sep-2022 : \$812,295,748



| Segments                   | Market Value (\$) | Allocation (%) |
|----------------------------|-------------------|----------------|
| Domestic Equity            | 168,591,259       | 20.3           |
| International Equity       | 96,224,291        | 11.6           |
| Emerging Equity            | 64,863,617        | 7.8            |
| Domestic Fixed Income      | 39,455,751        | 4.7            |
| International Fixed Income | 10,926,858        | 1.3            |
| Emerging Fixed Income      | 16,582,500        | 2.0            |
| Global Fixed Income        | 46,902,624        | 5.6            |
| Real Estate                | 133,455,311       | 16.1           |
| Alternative Investment     | 108,032,601       | 13.0           |
| Hedge Fund                 | 25,854,309        | 3.1            |
| Private Equity             | 113,830,896       | 13.7           |
| Cash Equivalent            | 6,053,334         | 0.7            |



| Segments                   | Market Value (\$) | Allocation (%) |
|----------------------------|-------------------|----------------|
| Domestic Equity            | 147,935,010       | 18.2           |
| International Equity       | 83,379,746        | 10.3           |
| Emerging Equity            | 61,458,036        | 7.6            |
| Domestic Fixed Income      | 47,780,590        | 5.9            |
| International Fixed Income | 10,431,073        | 1.3            |
| Emerging Fixed Income      | 15,096,033        | 1.9            |
| Global Fixed Income        | 46,328,526        | 5.7            |
| Real Estate                | 127,699,520       | 15.7           |
| Alternative Investment     | 106,271,107       | 13.1           |
| Hedge Fund                 | 30,475,787        | 3.8            |
| Private Equity             | 110,743,081       | 13.6           |
| Cash Equivalent            | 24,697,237        | 3.0            |

# Bristol County Retirement System

## Financial Reconciliation

1 Quarter Ending December 31, 2022

|                                            | Market Value<br>As of<br>10/01/2022 | Contributions | Distributions | Fees    | Expenses | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|--------------------------------------------|-------------------------------------|---------------|---------------|---------|----------|-------------------------|-------------------------------------|
| Domestic Equity                            |                                     |               |               |         |          |                         |                                     |
| NT S&P 500 Index                           | 20,227,195                          | 5,000,000     |               | -511    |          | 1,524,538               | 26,751,222                          |
| ClearBridge Large Cap Growth               | 23,151,426                          |               |               | -37,775 |          | 1,050,451               | 24,164,102                          |
| Columbia                                   | 21,311,014                          |               |               |         |          | 1,685,849               | 22,996,863                          |
| LSV                                        | 27,866,486                          |               |               | -41,420 |          | 3,986,679               | 31,811,745                          |
| Lyrical                                    | 26,463,978                          |               |               | -49,613 |          | 3,743,704               | 30,158,069                          |
| Earnest Partners                           | 15,952,949                          |               |               | -33,658 |          | 1,517,895               | 17,437,186                          |
| Frontier Capital Appreciation              | 15,454,576                          |               |               |         |          | 1,705,464               | 17,160,040                          |
| International Equity                       |                                     |               |               |         |          |                         |                                     |
| Arrowstreet Capital                        | 29,138,153                          | 58,731        |               | -58,731 |          | 4,222,478               | 33,360,631                          |
| Freedom Capital Intl                       | 28,067,123                          |               |               | -67,808 |          | 4,686,336               | 32,685,651                          |
| Fiera International Equity                 | 26,174,470                          |               |               | -54,775 |          | 4,058,314               | 30,178,009                          |
| Aberdeen Emerging Markets                  | 30,825,693                          |               |               | -70,275 |          | 3,033,422               | 33,788,840                          |
| William Blair Emerging Markets             | 30,632,343                          | 72,358        |               | -72,358 |          | 442,433                 | 31,074,776                          |
| Global REITs                               |                                     |               |               |         |          |                         |                                     |
| Brookfield Global Real Estate              | 12,493,164                          |               |               |         |          | 975,433                 | 13,468,597                          |
| Domestic Fixed Income                      |                                     |               |               |         |          |                         |                                     |
| NT Aggregate Bond Index                    | 16,485,543                          | 5,000,000     | -9,000,000    | -511    |          | 162,906                 | 12,647,938                          |
| Income Research & Management               | 31,232,295                          |               | -5,000,247    | -26,503 |          | 584,344                 | 26,789,889                          |
| Invesco Mortgage Recovery Fund             | 62,752                              |               | -44,828       |         |          |                         | 17,924                              |
| International Fixed Income                 |                                     |               |               |         |          |                         |                                     |
| PIMCO Diversified Income                   | 10,431,073                          |               |               |         |          | 495,785                 | 10,926,858                          |
| GoldenTree Multi-Sector Opportunistic Fund | 13,356,971                          |               |               |         |          | 599,207                 | 13,956,178                          |
| Stone Harbor EMD                           | 8,149,422                           |               |               | -11,511 |          | 767,469                 | 8,905,381                           |
| Ashmore Emerging Markets Total Return      | 6,946,611                           |               |               |         |          | 730,508                 | 7,677,119                           |

# Bristol County Retirement System

## Financial Reconciliation

1 Quarter Ending December 31, 2022

|                                  | Market Value<br>As of<br>10/01/2022 | Contributions | Distributions | Fees    | Expenses | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|----------------------------------|-------------------------------------|---------------|---------------|---------|----------|-------------------------|-------------------------------------|
| EnTrust Global Recovery Fund     | 11,512,127                          |               |               |         |          | 1,052,636               | 12,564,763                          |
| Bardin Hill Opportunistic Credit | 21,459,428                          | 3,956,573     | -4,928,226    | -58,798 | -131,552 | 84,258                  | 20,381,683                          |
| Short Term Investments           |                                     |               |               |         |          |                         |                                     |
| Bristol County Cash              | 22,204,624                          | 26,413,551    | -44,541,018   |         |          | 88,208                  | 4,165,366                           |
| Total Private Equity             |                                     |               |               |         |          |                         |                                     |
| DN Partners II                   | 2,911,591                           |               |               |         |          |                         | 2,911,591                           |
| DuPont Capital Management II     | 289,633                             | 1,001         | -10,334       | -1,001  |          | 1,001                   | 280,300                             |
| BlackRock Vesey Street Fund III  | 144,712                             |               |               |         |          |                         | 144,712                             |
| BlackRock Vesey Street Fund IV   | 454,680                             |               |               |         |          |                         | 454,680                             |
| Mesirow PE Fund V                | 2,866,555                           | 25,000        | -130,000      | -25,000 |          | 25,000                  | 2,761,555                           |
| PRIT Vintage 2014                | 11,209,606                          | 5,612         | -221,293      | -1,953  | -15,082  | -201,034                | 10,775,856                          |
| PRIT Vintage 2015                | 16,819,604                          | 48,946        | -484,835      | -6,677  | -37,687  | 203,155                 | 16,542,507                          |
| PRIT Vintage 2016                | 8,932,504                           | 66,735        | -431,547      | -1,560  | -24,959  | -213,143                | 8,328,031                           |
| PRIT Vintage 2017                | 18,777,841                          | 459,361       | -279,529      | -4,113  | -43,672  | 258,541                 | 19,168,429                          |
| PRIT Vintage 2018                | 16,076,750                          | 258,237       | -159,556      | -3,161  | -45,622  | 39,098                  | 16,165,746                          |
| PRIT Vintage 2019                | 9,693,055                           | 226,488       | -17,971       | -7,795  | -23,975  | -181,647                | 9,688,156                           |
| PRIT Vintage 2020                | 6,721,417                           | 711,457       | -101,587      | -3,068  | -33,410  | -201,809                | 7,092,999                           |
| PRIT Vintage 2021                | 7,791,604                           | 998,015       | -56           | -4,058  | -58,087  | -518,987                | 8,208,431                           |
| PRIT Vintage 2022                | 1,541,732                           | 653,719       | -245          | -2,658  | -23,647  | -231,996                | 1,936,906                           |
| GCM Grosvenor SOF III            | 2,878,079                           | 2,361,820     | -118,004      |         |          |                         | 5,121,895                           |
| Pomona Capital Fund X            | 3,633,717                           | 1,000,000     | -384,615      |         |          |                         | 4,249,102                           |



# Bristol County Retirement System

## Financial Reconciliation

1 Quarter Ending December 31, 2022

|                                                  | Market Value<br>As of<br>10/01/2022 | Contributions | Distributions | Fees       | Expenses | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|--------------------------------------------------|-------------------------------------|---------------|---------------|------------|----------|-------------------------|-------------------------------------|
| Real Assets                                      |                                     |               |               |            |          |                         |                                     |
| RREEF America REIT II                            | 25,255,156                          |               | -1,007,127    | -56,920    |          | -848,395                | 23,342,714                          |
| Intercontinental                                 | 49,570,041                          |               |               | -163,576   |          | -2,971,034              | 46,435,431                          |
| TA Realty Logistics Fund                         | 7,635,912                           |               |               | -24,691    |          | -379,833                | 7,231,389                           |
| Oaktree Real Estate Income Fund                  |                                     | 7,500,000     |               | -18,750    |          | -381,775                | 7,099,475                           |
| Invesco Mortgage Recovery II                     | 4,371,755                           |               |               |            |          |                         | 4,371,755                           |
| TerraCap Partners IV                             | 8,914,715                           |               |               |            |          |                         | 8,914,715                           |
| TerraCap Partners V                              | 19,458,778                          | 5,474,098     | -2,341,641    | -146,812   |          | 146,812                 | 22,591,235                          |
| Brookfield Timberlands Fund V                    | 43,716                              |               |               |            |          |                         | 43,716                              |
| Eastern Timberland Opportunities II              | 1,886,212                           |               |               |            |          |                         | 1,886,212                           |
| GCM Customized Infrastructures Strategies II, LP | 9,979,401                           | 48,929        | -615,764      | -14,051    | -34,878  | 48,929                  | 9,412,566                           |
| IFM                                              | 41,968,526                          |               |               | -83,150    |          | 1,770,672               | 43,656,047                          |
| BTG Pactual U.S. Timberland Fund                 | 11,662,336                          |               | -117,085      |            |          | 593,896                 | 12,139,147                          |
| Hancock Timber & Farmland Fund                   | 25,502,624                          |               | -602,719      | -62,194    |          | 106,444                 | 24,944,155                          |
| Ceres Farms                                      | 15,228,292                          |               |               | -221,046   |          | 943,512                 | 15,950,758                          |
| Hedge Fund of Funds                              |                                     |               |               |            |          |                         |                                     |
| PRIT Absolute Return                             | 30,475,787                          |               | -5,000,000    | -71,084    |          | 449,606                 | 25,854,309                          |
| Total Fund                                       | 812,295,748                         | 60,340,632    | -75,538,227   | -1,507,563 | -472,570 | 35,655,332              | 830,773,351                         |

# Bristol County Retirement System

## Financial Reconciliation

1 Year Ending December 31, 2022

|                                | Market Value<br>As of<br>01/01/2022 | Contributions | Distributions | Fees     | Expenses | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|--------------------------------|-------------------------------------|---------------|---------------|----------|----------|-------------------------|-------------------------------------|
| Domestic Equity                |                                     |               |               |          |          |                         |                                     |
| NT S&P 500 Index               | 15,838,535                          | 27,501,201    | -12,000,000   | -2,750   |          | -4,585,765              | 26,751,222                          |
| ClearBridge Large Cap Growth   | 38,531,917                          |               | -3,000,000    | -185,536 |          | -11,182,279             | 24,164,102                          |
| Columbia                       | 35,013,378                          |               | -1,000,000    |          |          | -11,016,515             | 22,996,863                          |
| LSV                            | 41,024,686                          |               | -7,000,000    | -197,430 |          | -2,015,510              | 31,811,745                          |
| Lyrical                        | 41,767,378                          |               | -5,500,000    | -251,588 |          | -5,857,721              | 30,158,069                          |
| Earnest Partners               | 19,913,224                          |               |               | -150,557 |          | -2,325,481              | 17,437,186                          |
| Frontier Capital Appreciation  | 20,927,798                          |               |               |          |          | -3,767,757              | 17,160,040                          |
| International Equity           |                                     |               |               |          |          |                         |                                     |
| Arrowstreet Capital            | 37,803,148                          | 259,894       |               | -259,894 |          | -4,442,516              | 33,360,631                          |
| Freedom Capital Intl           | 38,503,965                          |               |               | -309,592 |          | -5,508,721              | 32,685,651                          |
| Fiera International Equity     | 39,659,601                          |               | -2,000,000    | -230,564 |          | -7,251,028              | 30,178,009                          |
| Lazard Emerging Markets        | 42,662,780                          |               | -40,069,623   |          |          | -2,593,157              |                                     |
| Aberdeen Emerging Markets      | 40,366,551                          | 4,000,000     |               | -296,995 |          | -10,280,717             | 33,788,840                          |
| William Blair Emerging Markets |                                     | 40,168,732    |               | -168,732 |          | -8,925,224              | 31,074,776                          |
| Global REITs                   |                                     |               |               |          |          |                         |                                     |
| Brookfield Global Real Estate  | 21,464,758                          |               | -4,000,000    |          |          | -3,996,162              | 13,468,597                          |
| Domestic Fixed Income          |                                     |               |               |          |          |                         |                                     |
| NT Aggregate Bond Index        | 12,473,073                          | 29,001,892    | -26,000,000   | -3,441   |          | -2,823,587              | 12,647,938                          |
| Income Research & Management   | 47,512,524                          |               | -15,000,247   | -123,198 |          | -5,599,190              | 26,789,889                          |
| Invesco Mortgage Recovery Fund | 62,925                              |               | -44,828       |          |          | -173                    | 17,924                              |

# Bristol County Retirement System

## Financial Reconciliation

1 Year Ending December 31, 2022

|                                            | Market Value<br>As of<br>01/01/2022 | Contributions | Distributions | Fees     | Expenses | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|--------------------------------------------|-------------------------------------|---------------|---------------|----------|----------|-------------------------|-------------------------------------|
| International Fixed Income                 |                                     |               |               |          |          |                         |                                     |
| PIMCO Diversified Income                   | 24,731,746                          |               | -11,000,000   |          |          | -2,804,888              | 10,926,858                          |
| GoldenTree Multi-Sector Opportunistic Fund | 19,461,852                          |               | -5,000,000    |          |          | -505,674                | 13,956,178                          |
| Stone Harbor EMD                           | 12,447,761                          |               | -2,000,000    | -51,211  |          | -1,491,170              | 8,905,381                           |
| Ashmore Emerging Markets Total Return      | 11,774,942                          |               | -2,000,000    |          |          | -2,097,822              | 7,677,119                           |
| EnTrust Global Recovery Fund               | 13,381,869                          | 5,367,960     | -1,975,260    |          |          | -4,209,806              | 12,564,763                          |
| Bardin Hill Opportunistic Credit           | 21,634,896                          | 5,348,349     | -5,928,226    | -117,066 | -179,613 | -376,657                | 20,381,683                          |
| Short Term Investments                     |                                     |               |               |          |          |                         |                                     |
| Bristol County Cash                        | 3,572,568                           | 211,715,090   | -211,337,657  |          |          | 215,364                 | 4,165,366                           |
| Total Private Equity                       |                                     |               |               |          |          |                         |                                     |
| DN Partners II                             | 2,221,933                           |               |               |          |          | 689,658                 | 2,911,591                           |
| DuPont Capital Management II               | 381,945                             | 2,374         | -33,459       | -2,374   |          | -68,186                 | 280,300                             |
| BlackRock Vesey Street Fund III            | 153,717                             |               |               |          |          | -9,005                  | 144,712                             |
| BlackRock Vesey Street Fund IV             | 890,498                             |               | -108,344      |          |          | -327,474                | 454,680                             |
| Mesirow PE Fund V                          | 4,169,302                           | 25,000        | -550,000      | -25,000  |          | -857,747                | 2,761,555                           |
| PRIT Vintage 2014                          | 12,522,005                          | 141,438       | -1,283,091    | -8,970   | -65,437  | -530,088                | 10,775,856                          |
| PRIT Vintage 2015                          | 21,763,939                          | 296,724       | -2,331,240    | -32,263  | -148,865 | -3,005,788              | 16,542,507                          |
| PRIT Vintage 2016                          | 10,933,106                          | 193,958       | -2,136,765    | -3,650   | -109,940 | -548,678                | 8,328,031                           |
| PRIT Vintage 2017                          | 18,436,662                          | 1,579,947     | -1,879,664    | -8,152   | -166,281 | 1,205,918               | 19,168,429                          |
| PRIT Vintage 2018                          | 15,862,645                          | 1,077,639     | -789,737      | -13,119  | -190,935 | 219,254                 | 16,165,746                          |
| PRIT Vintage 2019                          | 9,174,694                           | 1,237,566     | -458,758      | -26,789  | -97,563  | -140,993                | 9,688,156                           |
| PRIT Vintage 2020                          | 4,900,428                           | 2,095,899     | -153,490      | -5,505   | -140,399 | 396,067                 | 7,092,999                           |
| PRIT Vintage 2021                          | 3,400,014                           | 4,557,142     | -2,336        | -7,202   | -206,361 | 467,174                 | 8,208,431                           |
| PRIT Vintage 2022                          |                                     | 2,356,564     | 372           | -5,577   | -30,627  | -383,825                | 1,936,906                           |
| GCM Grosvenor SOF III                      | 4,114,124                           | 2,981,556     | -2,099,082    |          |          | 125,297                 | 5,121,895                           |
| Pomona Capital Fund X                      |                                     | 4,200,000     | -934,330      |          |          | 983,432                 | 4,249,102                           |

# Bristol County Retirement System

## Financial Reconciliation

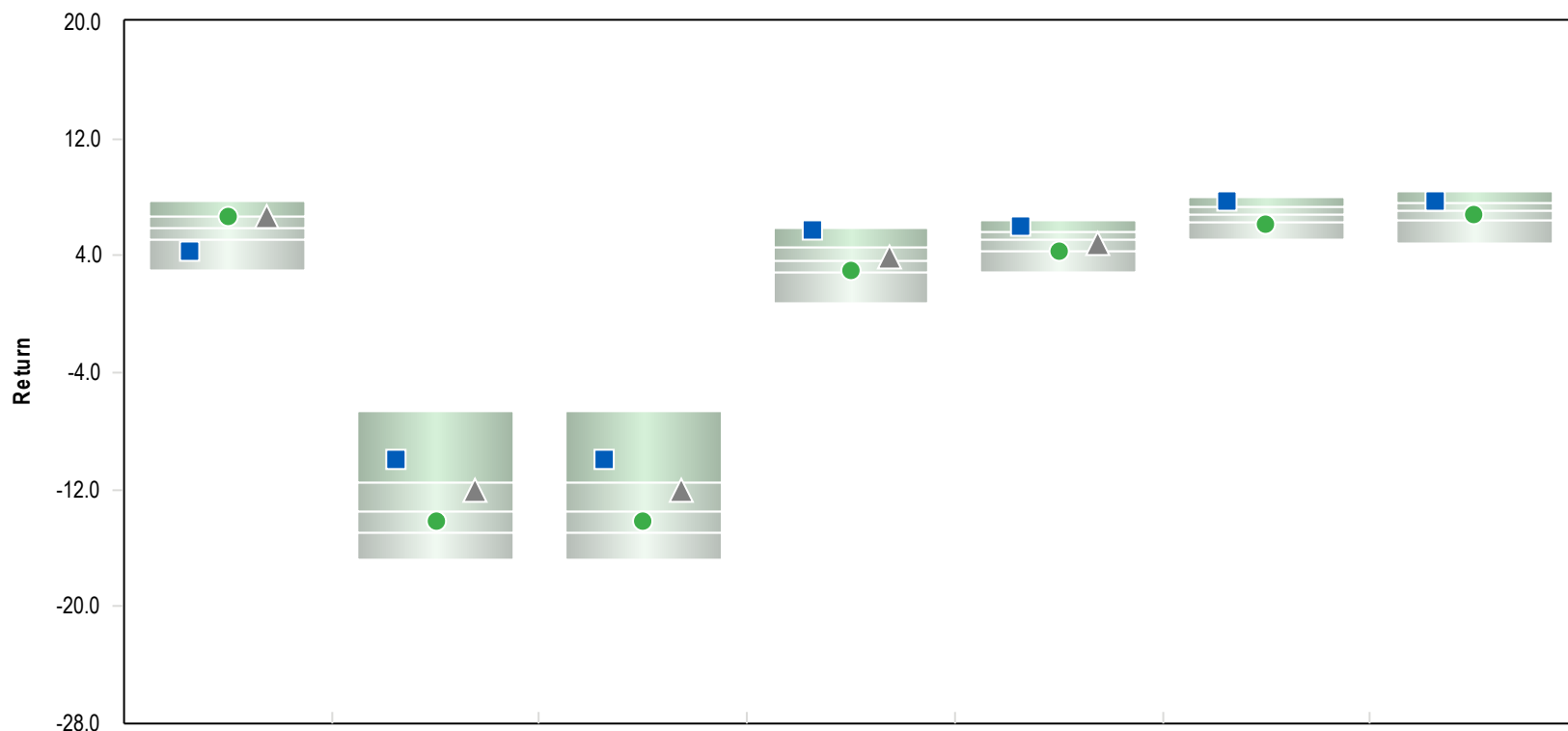
1 Year Ending December 31, 2022

|                                                  | Market Value<br>As of<br>01/01/2022 | Contributions | Distributions | Fees       | Expenses   | Return On<br>Investment | Market Value<br>As of<br>12/31/2022 |
|--------------------------------------------------|-------------------------------------|---------------|---------------|------------|------------|-------------------------|-------------------------------------|
| Real Assets                                      |                                     |               |               |            |            |                         |                                     |
| RREEF America REIT II                            | 18,947,725                          | 3,750,000     | -1,007,127    | -225,765   |            | 1,877,881               | 23,342,714                          |
| Intercontinental                                 | 38,404,231                          | 5,000,000     |               | -411,358   |            | 3,442,558               | 46,435,431                          |
| TA Realty Logistics Fund                         |                                     | 7,500,000     |               | -50,762    |            | -217,849                | 7,231,389                           |
| Oaktree Real Estate Income Fund                  |                                     | 7,500,000     |               | -18,750    |            | -381,775                | 7,099,475                           |
| Invesco Mortgage Recovery II                     | 4,688,864                           |               |               |            |            | -317,109                | 4,371,755                           |
| TerraCap Partners IV                             | 9,512,562                           | 65,049        | -797,428      | -65,049    |            | 199,581                 | 8,914,715                           |
| TerraCap Partners V                              | 19,333,302                          | 5,474,098     | -2,511,153    | -146,812   |            | 441,800                 | 22,591,235                          |
| Brookfield Timberlands Fund V                    | 1,131,832                           | 8,453         | -1,011,574    | -5,448     | -3,005     | -76,542                 | 43,716                              |
| Eastern Timberland Opportunities II              | 2,139,810                           |               | -369,940      |            |            | 116,342                 | 1,886,212                           |
| GCM Customized Infrastructures Strategies II, LP | 10,624,304                          | 830,636       | -2,497,301    | -55,094    | -54,894    | 564,914                 | 9,412,566                           |
| IFM                                              | 40,362,844                          |               |               | -320,481   |            | 3,613,684               | 43,656,047                          |
| BTG Pactual U.S. Timberland Fund                 | 10,987,012                          |               | -232,108      |            |            | 1,384,243               | 12,139,147                          |
| Hancock Timber & Farmland Fund                   | 25,849,604                          |               | -901,362      | -255,442   |            | 251,355                 | 24,944,155                          |
| Ceres Farms                                      | 8,988,242                           | 5,000,000     |               | -609,365   |            | 2,571,881               | 15,950,758                          |
| Hedge Fund of Funds                              |                                     |               |               |            |            |                         |                                     |
| PRIT Absolute Return                             | 36,713,060                          |               | -10,000,000   | -342,370   |            | -516,381                | 25,854,309                          |
| Total Fund                                       | 937,140,277                         | 379,237,161   | -386,943,758  | -4,993,851 | -1,393,921 | -92,272,557             | 830,773,351                         |

# Bristol County Retirement System

All Public Plans < \$1B-Total Fund

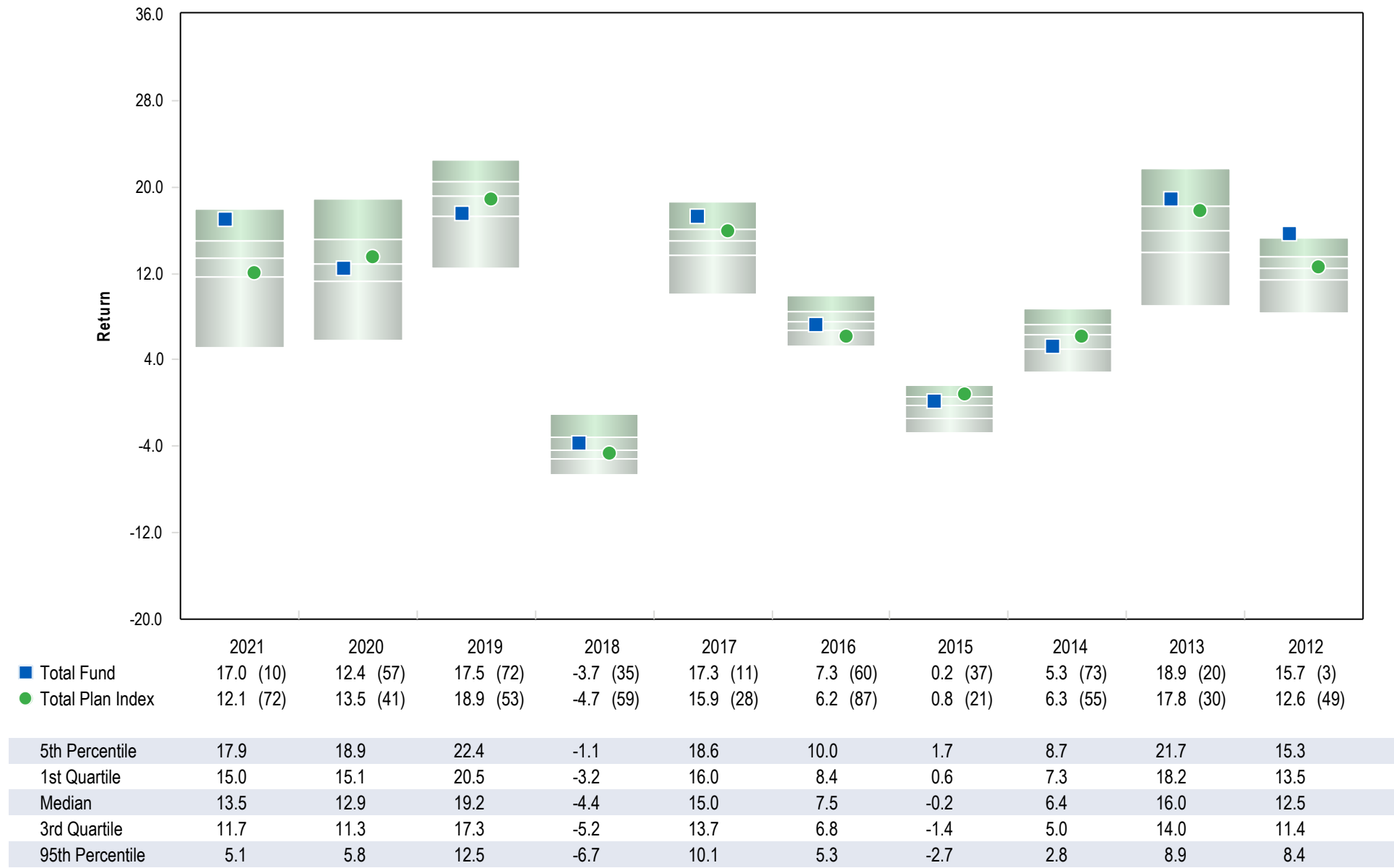
As of December 31, 2022



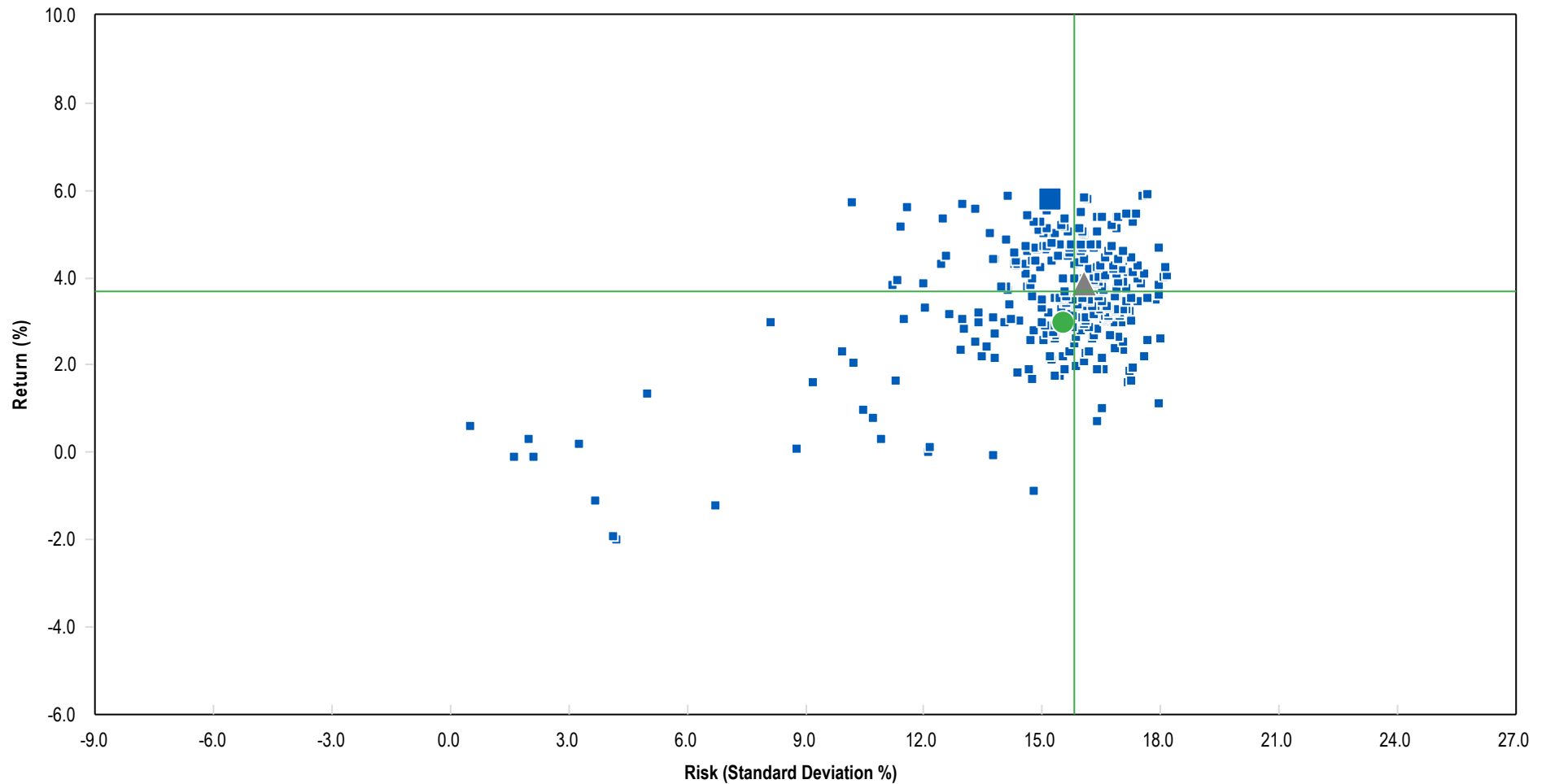
■ Total Fund  
● Total Plan Index  
▲ Total Plan Allocation Index

|                 |     |       |       |     |     |     |     |
|-----------------|-----|-------|-------|-----|-----|-----|-----|
| 5th Percentile  | 7.7 | -6.7  | -6.7  | 5.9 | 6.5 | 8.0 | 8.3 |
| 1st Quartile    | 6.7 | -11.5 | -11.5 | 4.6 | 5.7 | 7.4 | 7.6 |
| Median          | 5.8 | -13.5 | -13.5 | 3.7 | 5.0 | 6.8 | 7.1 |
| 3rd Quartile    | 5.1 | -14.9 | -14.9 | 2.9 | 4.3 | 6.3 | 6.4 |
| 95th Percentile | 3.0 | -16.8 | -16.8 | 0.8 | 2.8 | 5.1 | 4.9 |
| Population      | 365 | 351   | 351   | 331 | 313 | 297 | 264 |

Parentheses contain percentile rankings.  
Calculation based on quarterly periodicity.

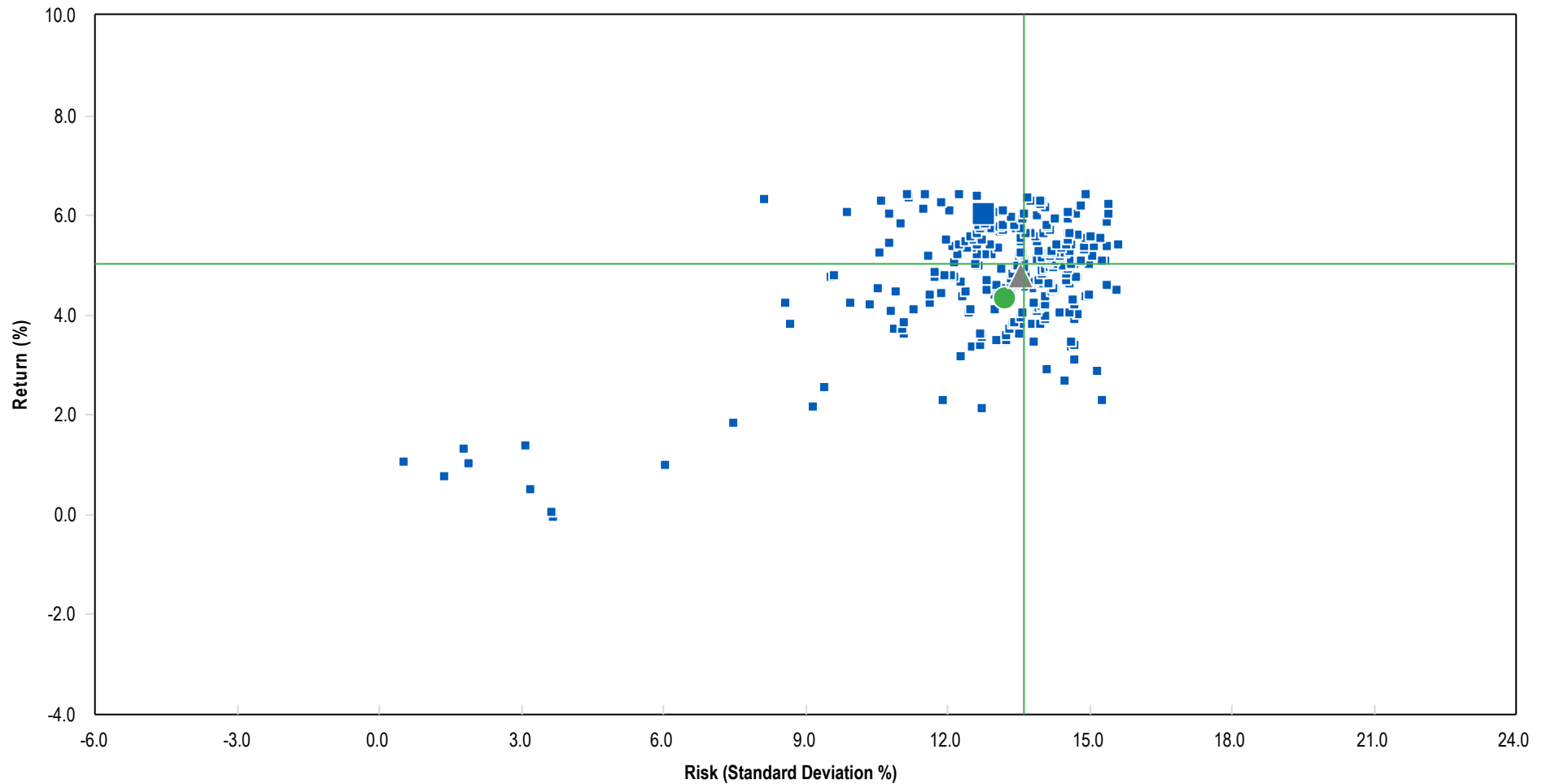


Parentheses contain percentile rankings.  
Calculation based on quarterly periodicity.



|                               | Return | Standard<br>Deviation |
|-------------------------------|--------|-----------------------|
| ■ Total Fund                  | 5.8    | 15.2                  |
| ● Total Plan Index            | 3.0    | 15.5                  |
| ▲ Total Plan Allocation Index | 3.9    | 16.1                  |
| — Median                      | 3.7    | 15.8                  |

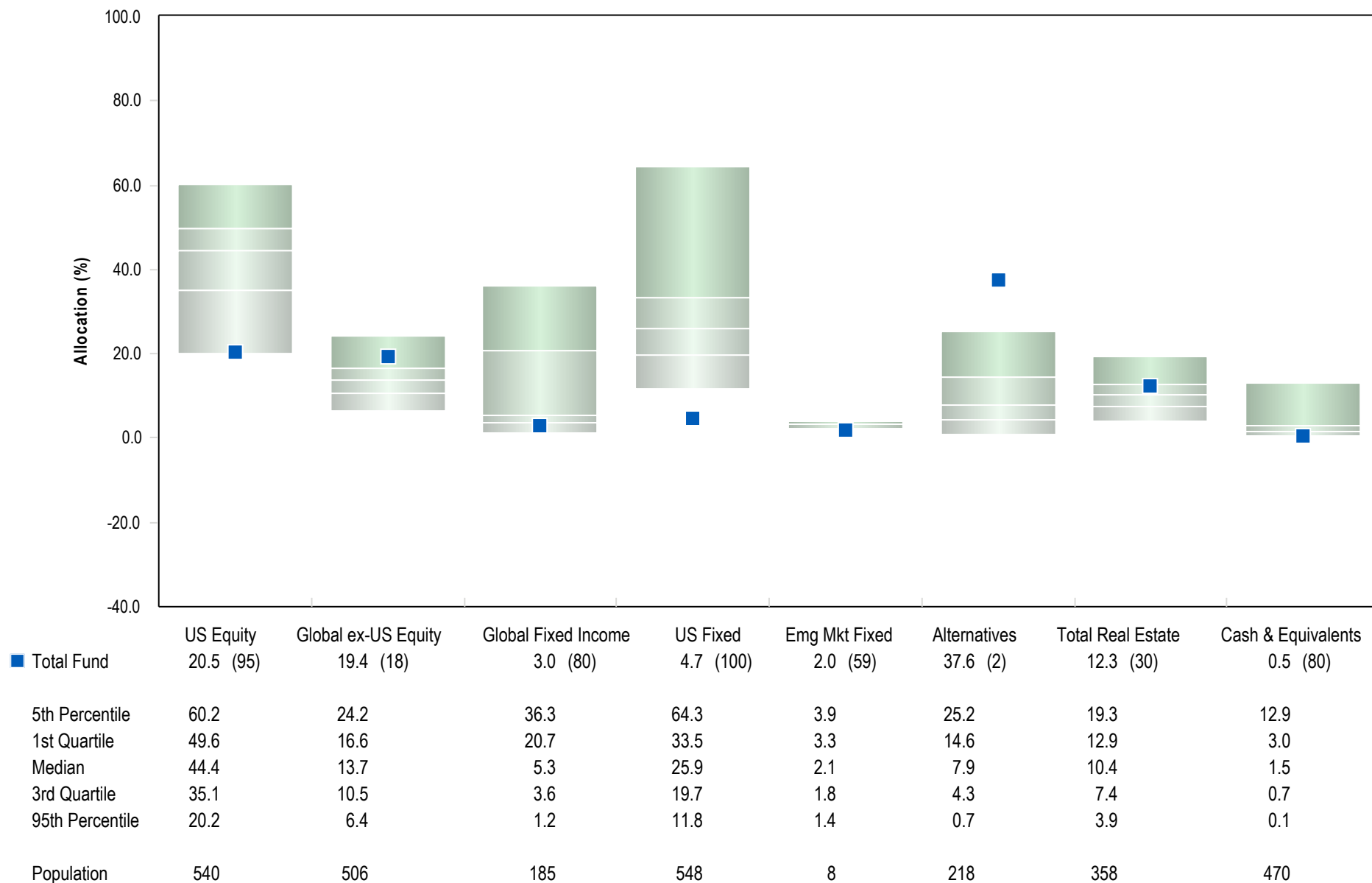
Calculation based on quarterly periodicity.



|                               | Return | Standard<br>Deviation |
|-------------------------------|--------|-----------------------|
| ■ Total Fund                  | 6.0    | 12.8                  |
| ● Total Plan Index            | 4.4    | 13.2                  |
| ▲ Total Plan Allocation Index | 4.8    | 13.5                  |
| — Median                      | 5.0    | 13.6                  |

Calculation based on quarterly periodicity.





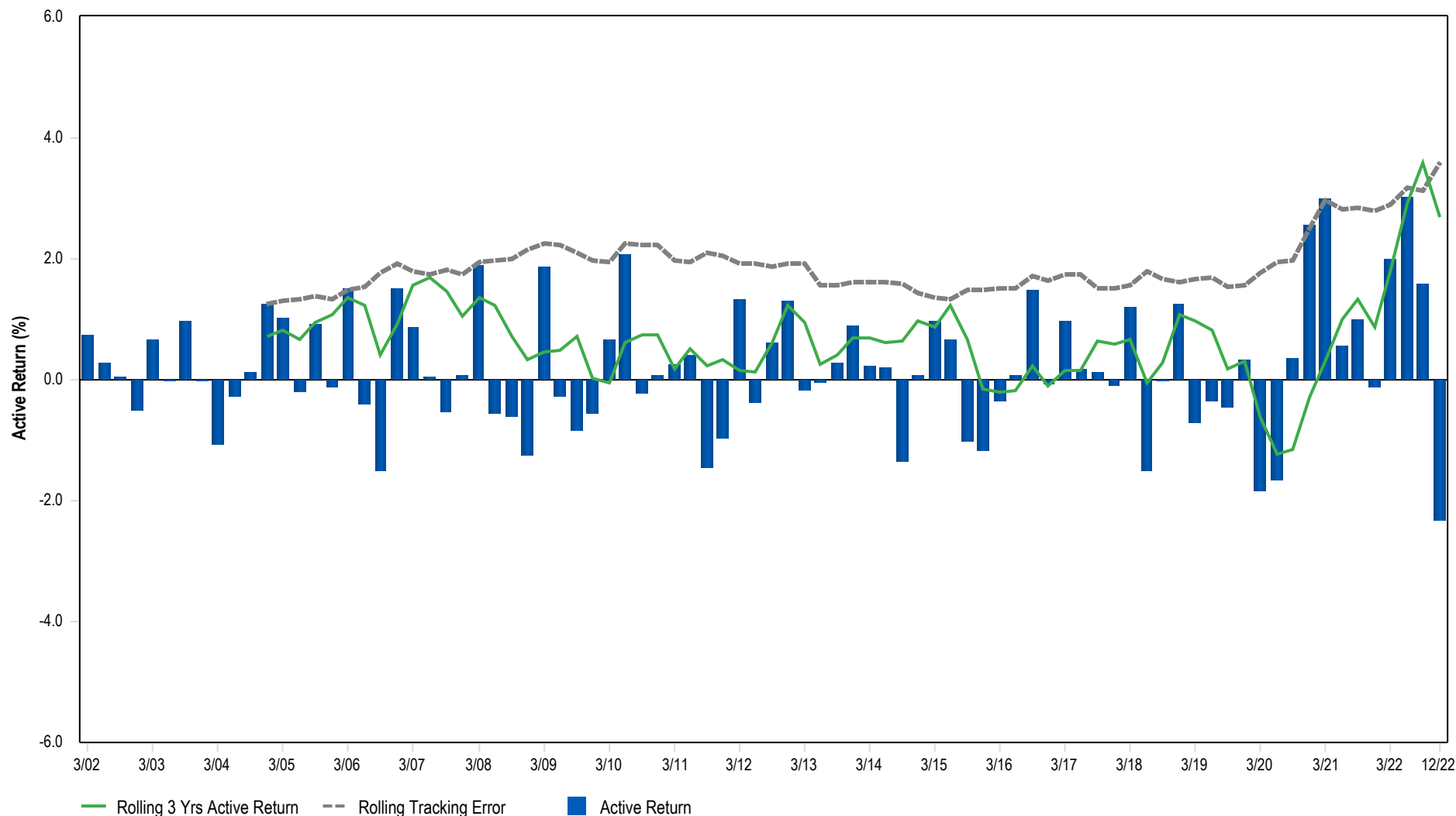
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

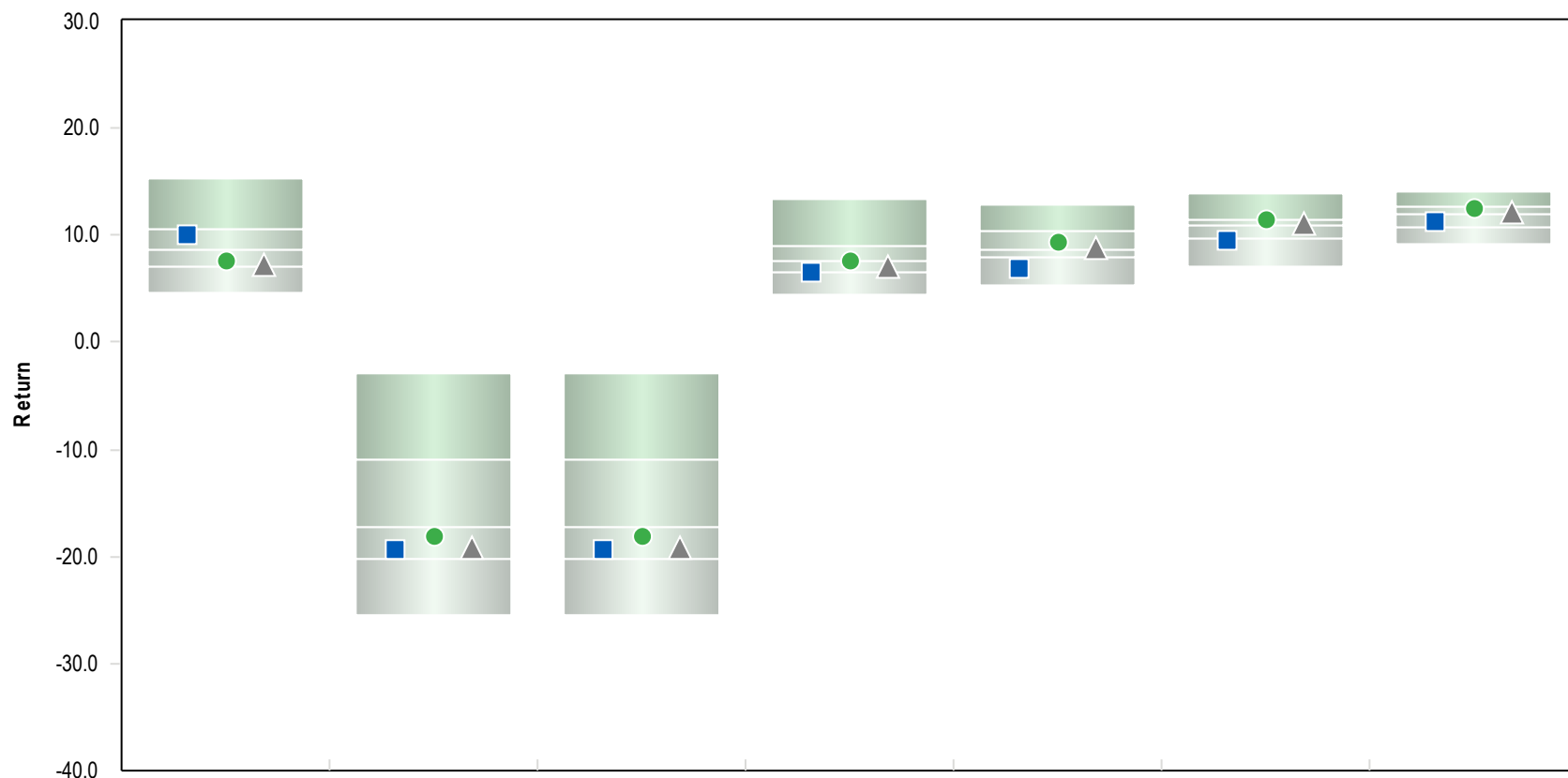
As of December 31, 2022

|                  | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Total Fund       | 4.4   | -9.9  | -9.9  | 5.8   | 6.0   | 7.8   | 7.8    | 17.0 | 12.4 | 17.5 | -3.7 |
| Total Plan Index | 6.7   | -14.2 | -14.2 | 3.0   | 4.4   | 6.2   | 6.8    | 12.1 | 13.5 | 18.9 | -4.7 |
| Difference       | -2.3  | 4.3   | 4.3   | 2.8   | 1.6   | 1.6   | 1.0    | 4.9  | -1.1 | -1.4 | 1.0  |



Gross of Fees

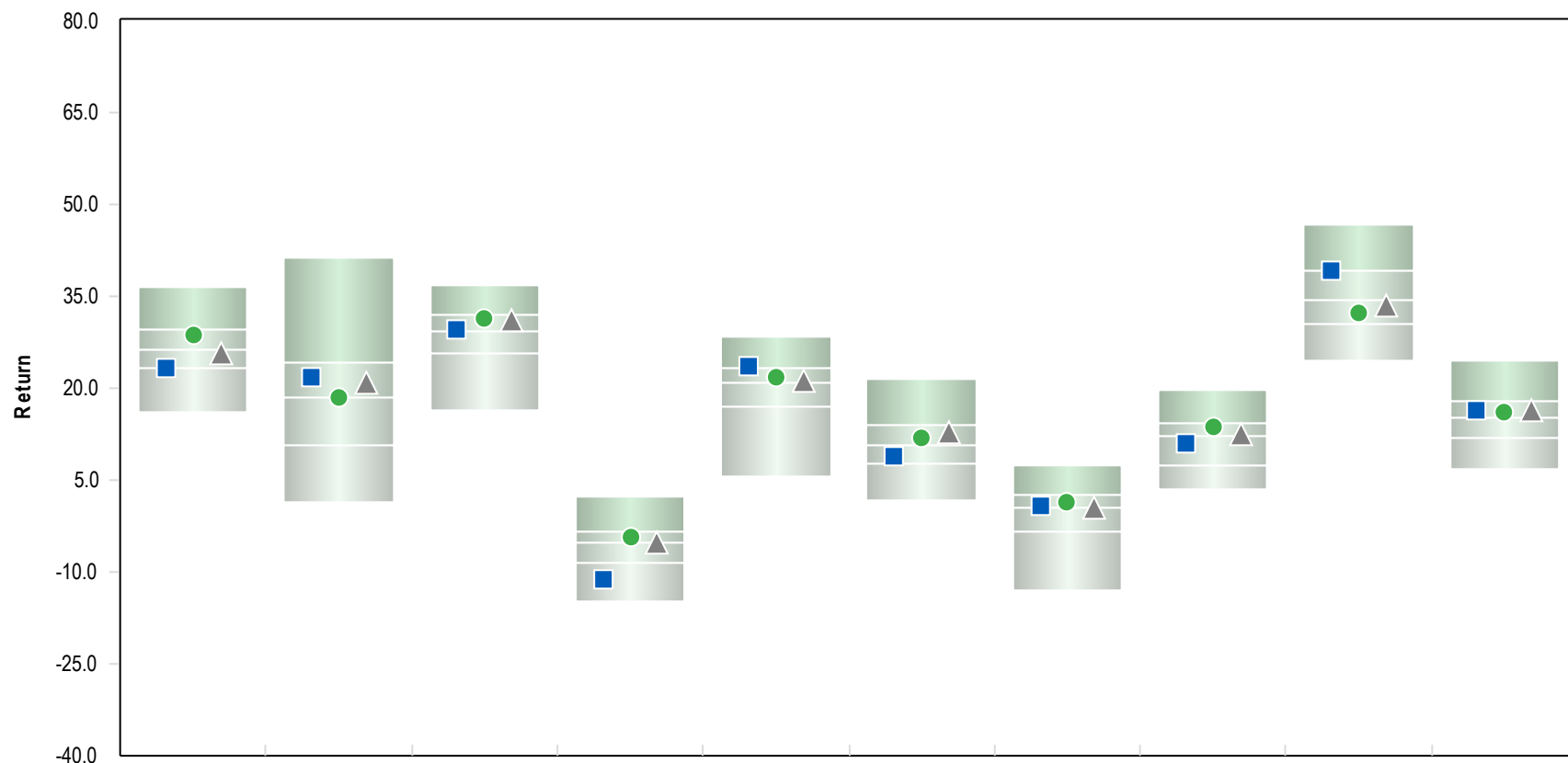
## **Domestic Equity**



|                         | 1 Qtr     | YTD        | 1 Yr       | 3 Yrs    | 5 Yrs    | 7 Yrs     | 10 Yrs    |
|-------------------------|-----------|------------|------------|----------|----------|-----------|-----------|
| ■ Total Domestic Equity | 10.1 (32) | -19.4 (74) | -19.4 (74) | 6.6 (76) | 6.9 (88) | 9.4 (81)  | 11.3 (60) |
| ● S&P 500 Index         | 7.6 (65)  | -18.1 (57) | -18.1 (57) | 7.7 (52) | 9.4 (30) | 11.5 (29) | 12.6 (37) |
| ▲ Russell 3000 Index    | 7.2 (74)  | -19.2 (74) | -19.2 (74) | 7.1 (71) | 8.8 (46) | 11.0 (49) | 12.1 (48) |

|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 15.3 | -3.0  | -3.0  | 13.4 | 12.9 | 13.9 | 14.1 |
| 1st Quartile    | 10.7 | -10.9 | -10.9 | 8.9  | 10.4 | 11.5 | 12.7 |
| Median          | 8.7  | -17.3 | -17.3 | 7.7  | 8.6  | 11.0 | 12.0 |
| 3rd Quartile    | 7.1  | -20.2 | -20.2 | 6.6  | 7.9  | 9.7  | 10.8 |
| 95th Percentile | 4.6  | -25.4 | -25.4 | 4.5  | 5.4  | 7.1  | 9.1  |

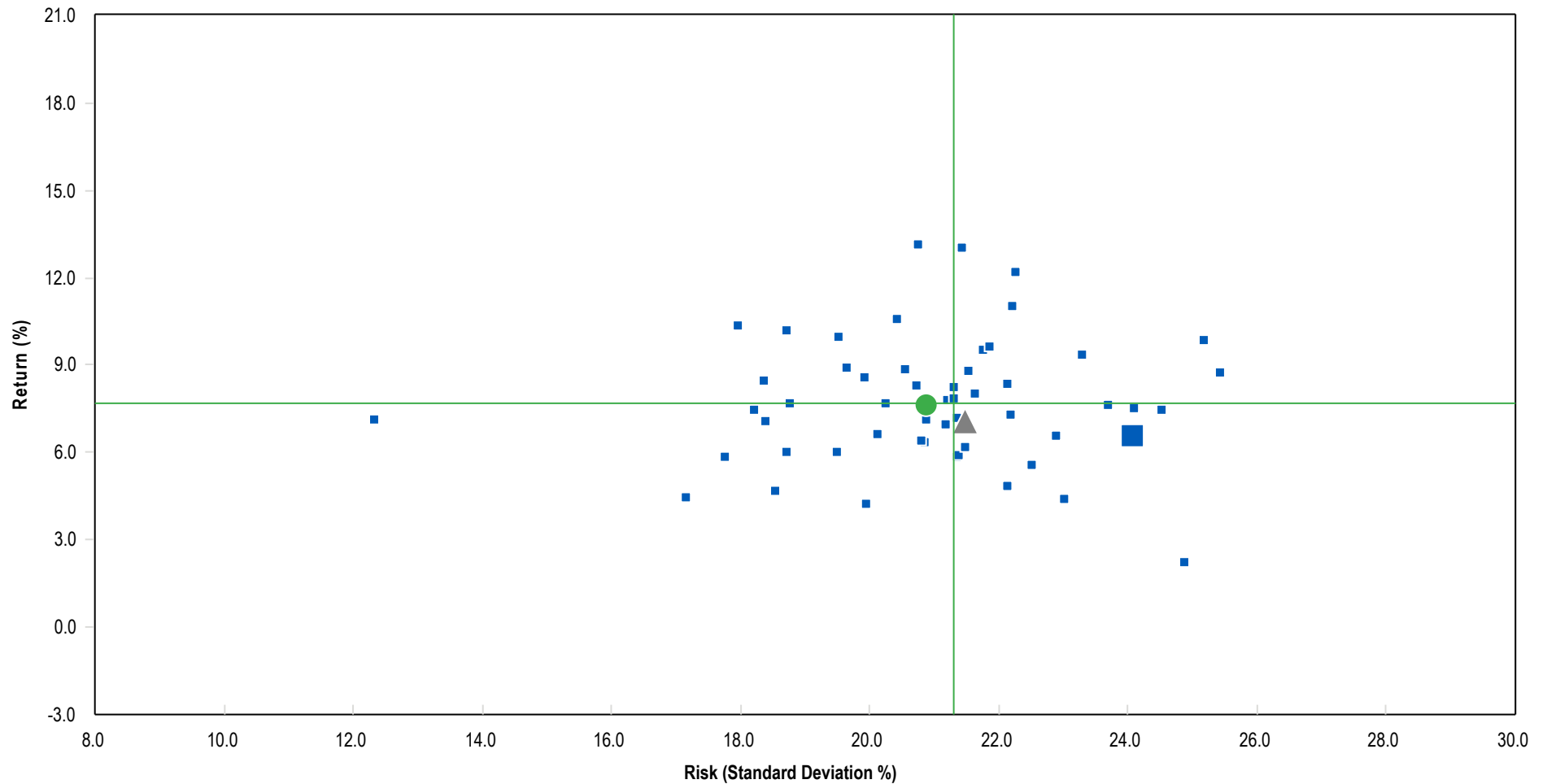
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                         | 2021      | 2020      | 2019      | 2018       | 2017      | 2016      | 2015     | 2014      | 2013      | 2012      |
|-------------------------|-----------|-----------|-----------|------------|-----------|-----------|----------|-----------|-----------|-----------|
| ■ Total Domestic Equity | 23.4 (76) | 21.8 (37) | 29.7 (48) | -11.1 (86) | 23.6 (23) | 9.0 (67)  | 0.7 (43) | 11.0 (58) | 39.1 (25) | 16.3 (39) |
| ● S&P 500 Index         | 28.7 (31) | 18.4 (54) | 31.5 (31) | -4.4 (39)  | 21.8 (41) | 12.0 (47) | 1.4 (37) | 13.7 (32) | 32.4 (65) | 16.0 (42) |
| ▲ Russell 3000 Index    | 25.7 (58) | 20.9 (40) | 31.0 (36) | -5.2 (54)  | 21.1 (48) | 12.7 (38) | 0.5 (46) | 12.6 (47) | 33.6 (55) | 16.4 (36) |

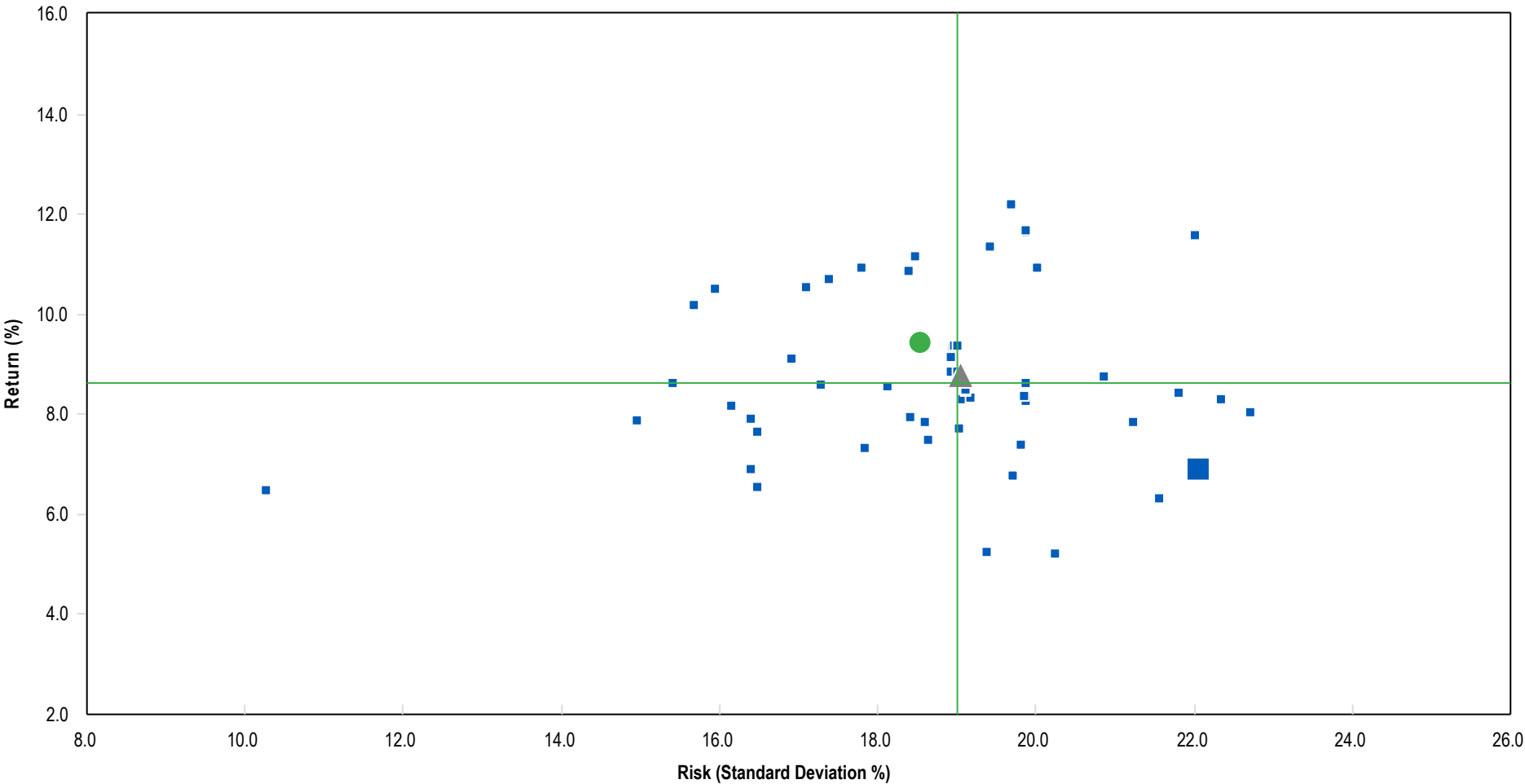
|                 |      |      |      |       |      |      |       |      |      |      |
|-----------------|------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 36.6 | 41.2 | 36.7 | 2.4   | 28.5 | 21.6 | 7.4   | 19.7 | 46.7 | 24.4 |
| 1st Quartile    | 29.7 | 24.3 | 32.0 | -3.3  | 23.3 | 14.1 | 2.7   | 14.2 | 39.1 | 17.9 |
| Median          | 26.3 | 18.6 | 29.3 | -5.1  | 20.9 | 10.8 | 0.4   | 12.2 | 34.3 | 15.3 |
| 3rd Quartile    | 23.4 | 10.8 | 25.8 | -8.6  | 16.9 | 7.7  | -3.3  | 7.4  | 30.5 | 11.8 |
| 95th Percentile | 16.2 | 1.5  | 16.4 | -14.8 | 5.6  | 1.6  | -12.9 | 3.4  | 24.5 | 6.7  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                         | Return | Standard<br>Deviation |
|-------------------------|--------|-----------------------|
| ■ Total Domestic Equity | 6.6    | 24.1                  |
| ● S&P 500 Index         | 7.7    | 20.9                  |
| ▲ Russell 3000 Index    | 7.1    | 21.5                  |
| — Median                | 7.7    | 21.3                  |

Calculation based on monthly periodicity.



|                         | Return | Standard<br>Deviation |
|-------------------------|--------|-----------------------|
| ■ Total Domestic Equity | 6.9    | 22.0                  |
| ● S&P 500 Index         | 9.4    | 18.5                  |
| ▲ Russell 3000 Index    | 8.8    | 19.1                  |
| — Median                | 8.6    | 19.0                  |

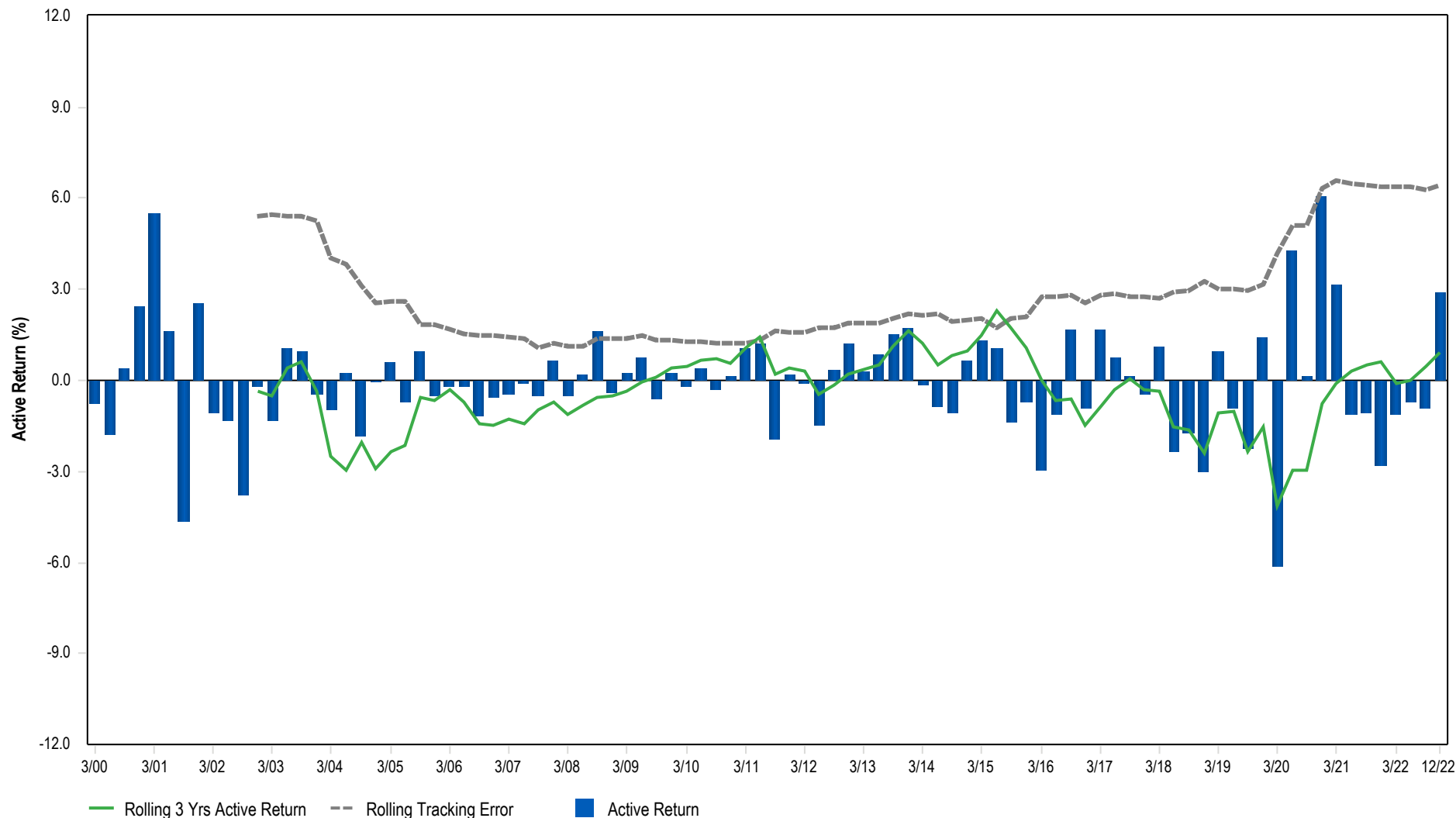
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                       | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|-----------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Total Domestic Equity | 10.1  | -19.4 | -19.4 | 6.6   | 6.9   | 9.4   | 11.3   | 23.4 | 21.8 | 29.7 | -11.1 |
| Russell 3000 Index    | 7.2   | -19.2 | -19.2 | 7.1   | 8.8   | 11.0  | 12.1   | 25.7 | 20.9 | 31.0 | -5.2  |
| Difference            | 2.9   | -0.2  | -0.2  | -0.5  | -1.9  | -1.6  | -0.8   | -2.3 | 0.9  | -1.3 | -5.9  |





Buy-and-Hold Portfolio 10.1  
 Portfolio Trading 0.0  
 Actual Return 10.1  
 Benchmark Return 7.2  
 Actual Active Return 2.9

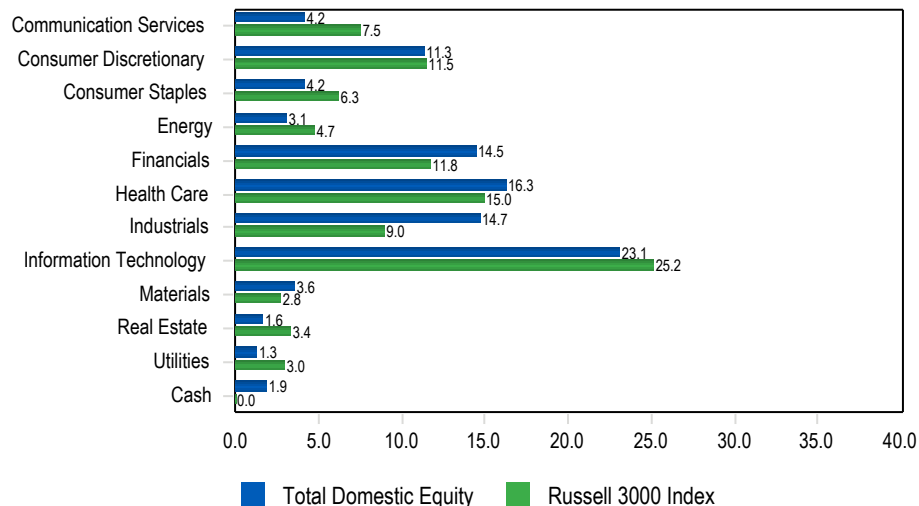
Stock Selection 2.3  
 Sector Selection 0.8  
 Interaction -0.1  
 Total Selection 3.0

Portfolio Trading 0.0  
 Benchmark Trading 0.0  
 Active Trading Impact 0.0

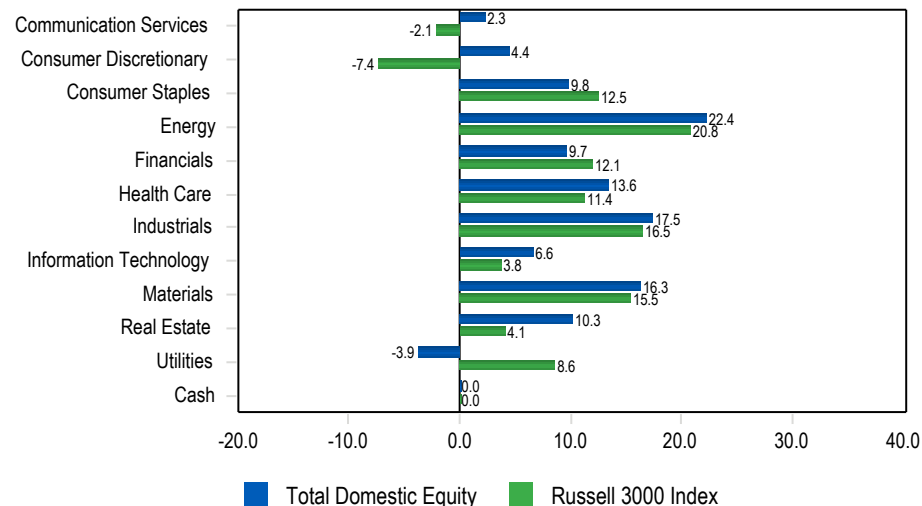
Buy & Hold Active Return 2.9

|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 4.2                     | 7.5       | 2.3                                                 | -2.1      | 0.3         | 0.3    | -0.1        | 0.5   |
| Consumer Discretionary | 11.3                    | 11.5      | 4.4                                                 | -7.4      | 1.4         | 0.0    | 0.0         | 1.4   |
| Consumer Staples       | 4.2                     | 6.3       | 9.8                                                 | 12.5      | -0.2        | -0.1   | 0.1         | -0.2  |
| Energy                 | 3.1                     | 4.7       | 22.4                                                | 20.8      | 0.1         | -0.2   | 0.0         | -0.2  |
| Financials             | 14.5                    | 11.8      | 9.7                                                 | 12.1      | -0.3        | 0.1    | -0.1        | -0.2  |
| Health Care            | 16.3                    | 15.0      | 13.6                                                | 11.4      | 0.3         | 0.1    | 0.0         | 0.4   |
| Industrials            | 14.7                    | 9.0       | 17.5                                                | 16.5      | 0.1         | 0.5    | 0.1         | 0.7   |
| Information Technology | 23.1                    | 25.2      | 6.6                                                 | 3.8       | 0.7         | 0.1    | -0.1        | 0.7   |
| Materials              | 3.6                     | 2.8       | 16.3                                                | 15.5      | 0.0         | 0.1    | 0.0         | 0.1   |
| Real Estate            | 1.6                     | 3.4       | 10.3                                                | 4.1       | 0.2         | 0.1    | -0.1        | 0.2   |
| Utilities              | 1.3                     | 3.0       | -3.9                                                | 8.6       | -0.4        | 0.0    | 0.2         | -0.2  |
| Cash                   | 1.9                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | -0.1   | 0.0         | -0.1  |
| Total                  | 100.0                   | 100.0     | 10.1                                                | 7.2       | 2.3         | 0.8    | -0.1        | 3.0   |

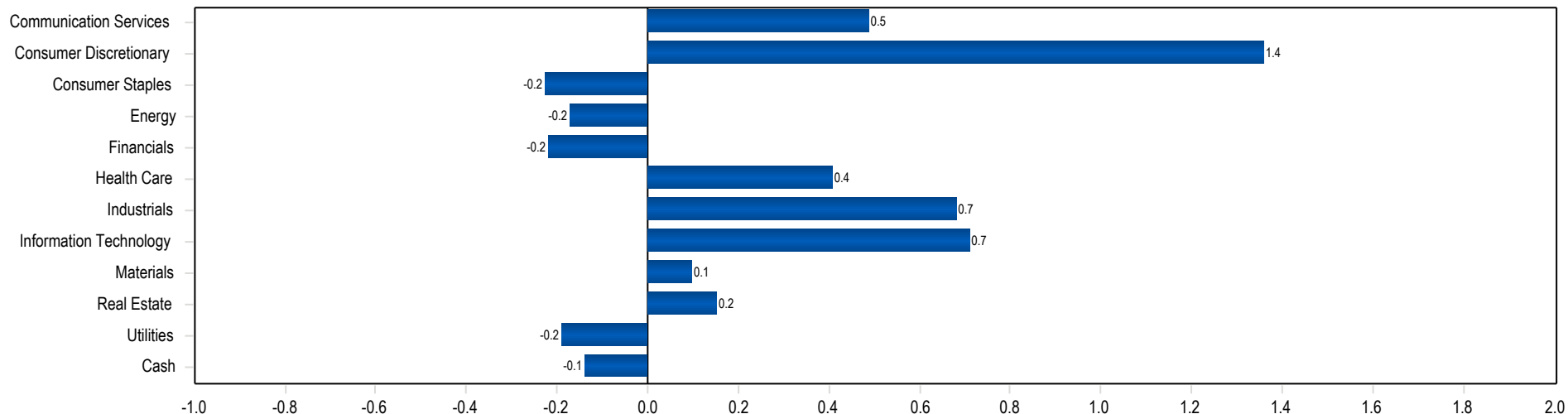
### Allocation



### Performance



### Total Attribution



Buy-and-Hold Portfolio 10.1  
 Portfolio Trading 0.0  
 Actual Return 10.1  
 Benchmark Return 7.2  
 Actual Active Return 2.9

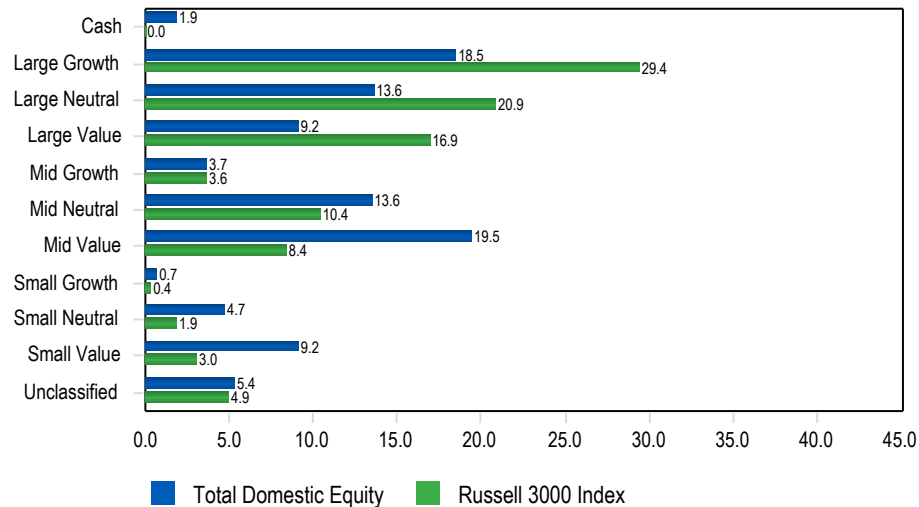
Stock Selection 2.0  
 Style Selection 0.6  
 Interaction 0.3  
 Total Selection 3.0

Portfolio Trading 0.0  
 Benchmark Trading 0.0  
 Active Trading Impact 0.0

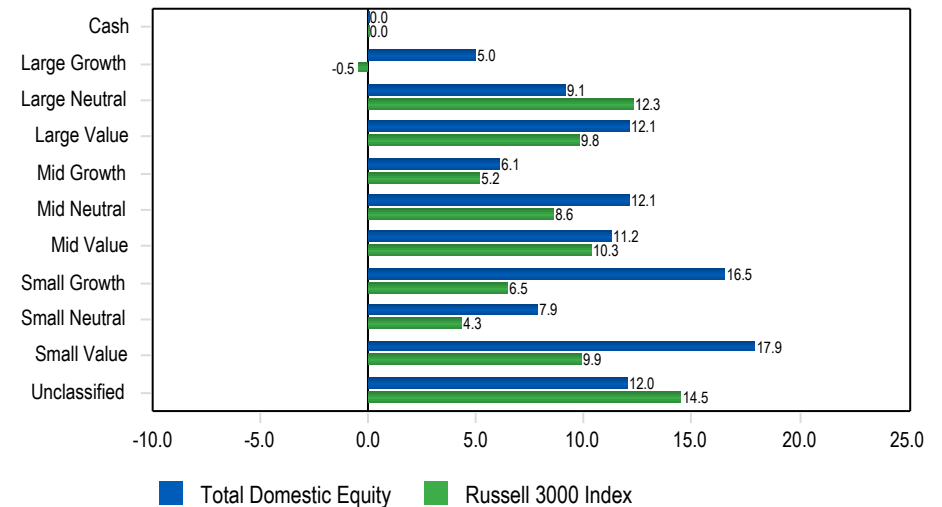
Buy & Hold Active Return 2.9

|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             | Total |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction |       |
| Cash          | 1.9                   | 0.0       | 0.0                                            | 0.0       | 0.0         | -0.1  | 0.0         | -0.1  |
| Large Growth  | 18.5                  | 29.4      | 5.0                                            | -0.5      | 1.6         | 0.8   | -0.6        | 1.8   |
| Large Neutral | 13.6                  | 20.9      | 9.1                                            | 12.3      | -0.7        | -0.4  | 0.2         | -0.8  |
| Large Value   | 9.2                   | 16.9      | 12.1                                           | 9.8       | 0.4         | -0.2  | -0.2        | 0.0   |
| Mid Growth    | 3.7                   | 3.6       | 6.1                                            | 5.2       | 0.0         | 0.0   | 0.0         | 0.0   |
| Mid Neutral   | 13.6                  | 10.4      | 12.1                                           | 8.6       | 0.4         | 0.0   | 0.1         | 0.5   |
| Mid Value     | 19.5                  | 8.4       | 11.2                                           | 10.3      | 0.1         | 0.4   | 0.1         | 0.5   |
| Small Growth  | 0.7                   | 0.4       | 16.5                                           | 6.5       | 0.0         | 0.0   | 0.0         | 0.1   |
| Small Neutral | 4.7                   | 1.9       | 7.9                                            | 4.3       | 0.1         | -0.1  | 0.1         | 0.1   |
| Small Value   | 9.2                   | 3.0       | 17.9                                           | 9.9       | 0.2         | 0.2   | 0.5         | 0.9   |
| Unclassified  | 5.4                   | 4.9       | 12.0                                           | 14.5      | -0.1        | 0.0   | 0.0         | -0.1  |
| Total         | 100.0                 | 100.0     | 10.1                                           | 7.2       | 2.0         | 0.6   | 0.3         | 3.0   |

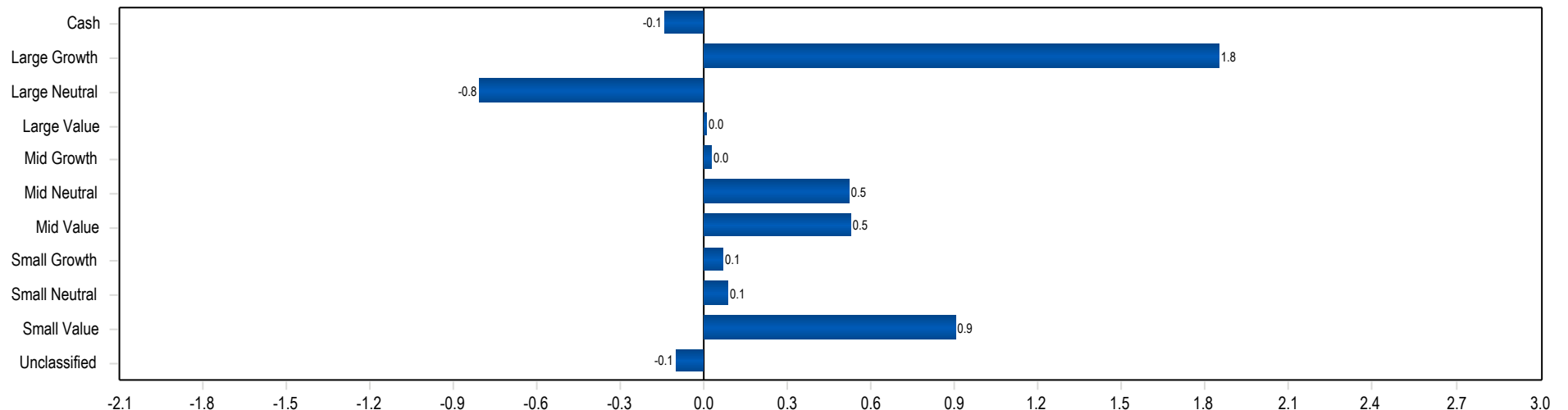
### Allocation



### Performance



### Total Attribution



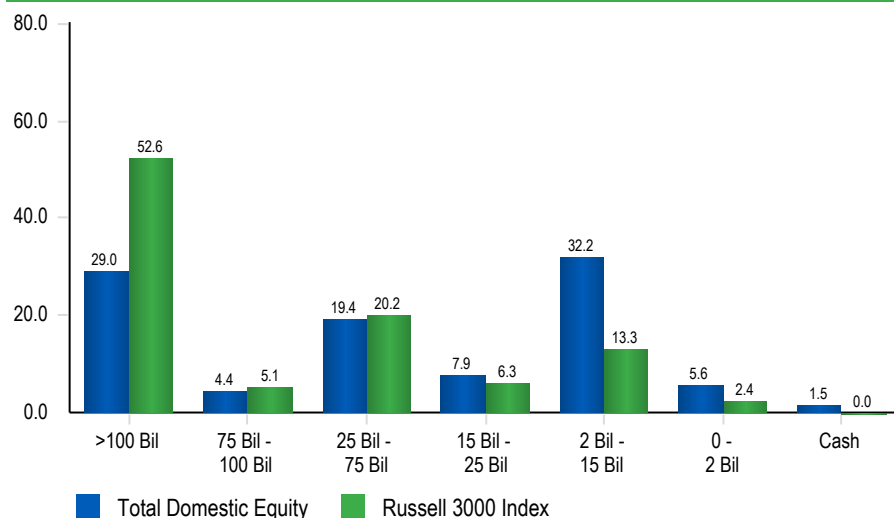
## Top Ten Equity Holdings

|                          | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|--------------------------|----------------------|----------------------|-------------------|----------------------|
| Microsoft Corp           | 1.8                  | 4.8                  | -3.0              | 3.3                  |
| Visa Inc                 | 1.7                  | 0.9                  | 0.8               | 17.2                 |
| Amazon.com Inc           | 1.6                  | 2.0                  | -0.4              | -25.7                |
| Apple Inc                | 1.6                  | 5.2                  | -3.6              | -5.8                 |
| Ameriprise Financial Inc | 1.5                  | 0.1                  | 1.4               | 24.1                 |
| NVIDIA Corporation       | 1.2                  | 0.9                  | 0.3               | 20.4                 |
| United Rentals Inc.      | 1.2                  | 0.1                  | 1.1               | 31.6                 |
| Nike Inc                 | 1.1                  | 0.4                  | 0.7               | 41.2                 |
| HCA Healthcare Inc       | 1.0                  | 0.1                  | 0.9               | 30.9                 |
| Univar Solutions Inc     | 1.0                  | 0.0                  | 1.0               | 39.8                 |
| % of Portfolio           | 13.7                 | 14.5                 | -0.8              |                      |

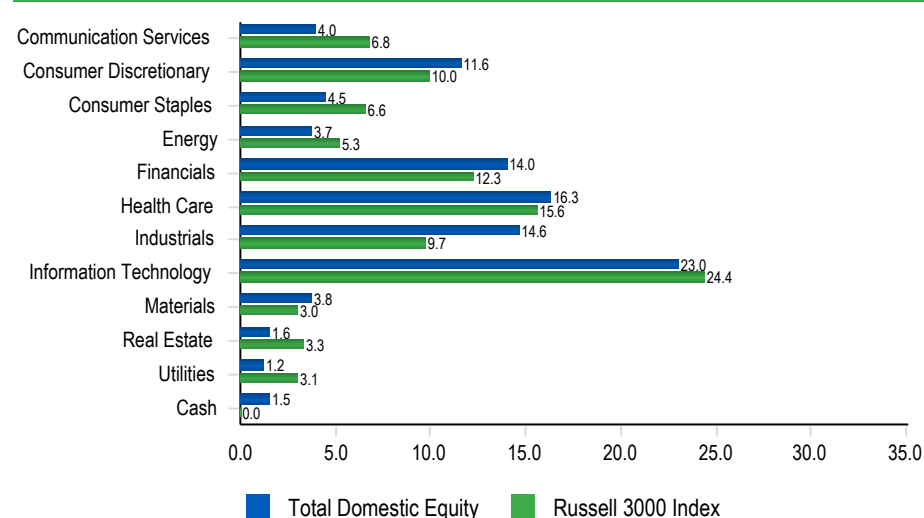
## Portfolio Characteristics

|                           | Portfolio       | Benchmark       |
|---------------------------|-----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 157,222,435,088 | 354,763,906,773 |
| Median Mkt. Cap (\$)      | 16,638,562,500  | 1,954,238,280   |
| Price/Earnings ratio      | 15.2            | 18.1            |
| Price/Book ratio          | 3.1             | 3.6             |
| 5 Yr. EPS Growth Rate (%) | 17.1            | 17.9            |
| Current Yield (%)         | 1.5             | 1.7             |
| Beta (5 Years, Monthly)   | 1.1             | 1.0             |
| Number of Stocks          | 760             | 2,960           |

## Distribution of Market Capitalization (%)



## Sector Weights (%)



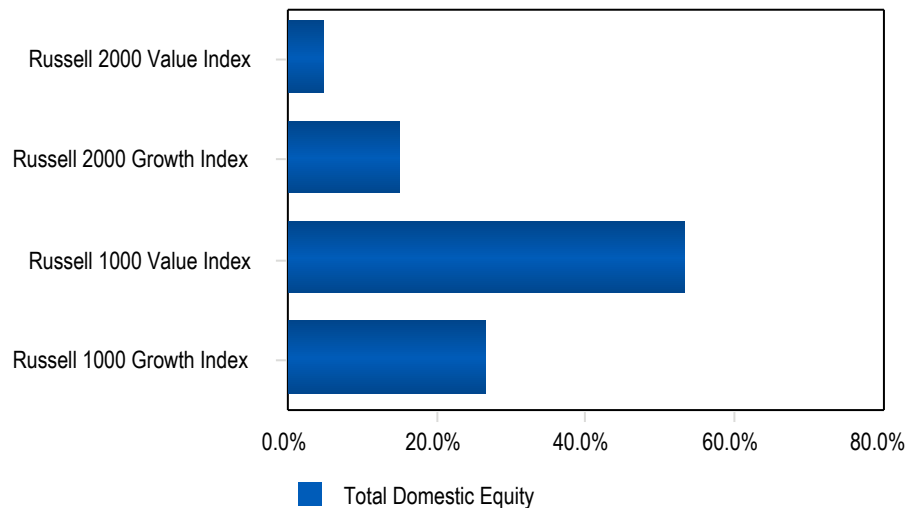
## Ten Best Performers

|                                | Portfolio<br>Weight<br>(%) | Benchmark<br>Weight<br>(%) | Active<br>Weight<br>(%) | Quarterly<br>Return<br>(%) |
|--------------------------------|----------------------------|----------------------------|-------------------------|----------------------------|
| Newpark Resources Inc.         | 0.2                        | 0.0                        | 0.2                     | 64.7                       |
| Magnite Inc                    | 0.0                        | 0.0                        | 0.0                     | 61.2                       |
| MRC Global Inc                 | 0.2                        | 0.0                        | 0.2                     | 61.1                       |
| Halliburton Co                 | 0.0                        | 0.1                        | -0.1                    | 60.4                       |
| Universal Health Services Inc. | 0.0                        | 0.0                        | 0.0                     | 60.0                       |
| PVH Corp                       | 0.1                        | 0.0                        | 0.1                     | 57.7                       |
| Boeing Co                      | 0.1                        | 0.3                        | -0.2                    | 57.3                       |
| Modine Manufacturing Co        | 0.1                        | 0.0                        | 0.1                     | 53.5                       |
| Exact Sciences Corporation     | 0.4                        | 0.0                        | 0.4                     | 52.4                       |
| Moderna Inc                    | 0.0                        | 0.2                        | -0.2                    | 51.9                       |
| % of Portfolio                 | 1.1                        | 0.6                        | 0.5                     |                            |

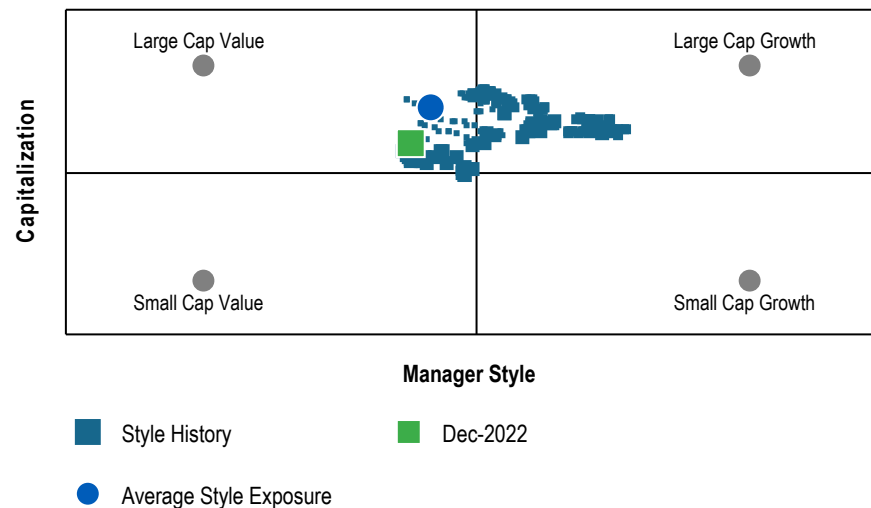
## Ten Worst Performers

|                          | Portfolio<br>Weight<br>(%) | Benchmark<br>Weight<br>(%) | Active<br>Weight<br>(%) | Quarterly<br>Return<br>(%) |
|--------------------------|----------------------------|----------------------------|-------------------------|----------------------------|
| Tesla Inc                | 0.2                        | 0.8                        | -0.6                    | -53.6                      |
| Rogers Corp.             | 0.1                        | 0.0                        | 0.1                     | -50.7                      |
| Generac Holdings Inc     | 0.0                        | 0.0                        | 0.0                     | -43.5                      |
| Atlassian Corp           | 0.2                        | 0.0                        | 0.2                     | -38.9                      |
| Caesarstone Ltd          | 0.0                        | 0.0                        | 0.0                     | -38.7                      |
| Cardlytics Inc           | 0.0                        | 0.0                        | 0.0                     | -38.5                      |
| Catalent Inc             | 0.2                        | 0.0                        | 0.2                     | -37.8                      |
| CrowdStrike Holdings Inc | 0.2                        | 0.1                        | 0.1                     | -36.1                      |
| Livent Corp              | 0.0                        | 0.0                        | 0.0                     | -35.2                      |
| Wolfspeed Inc            | 0.1                        | 0.0                        | 0.1                     | -33.2                      |
| % of Portfolio           | 1.0                        | 0.9                        | 0.1                     |                            |

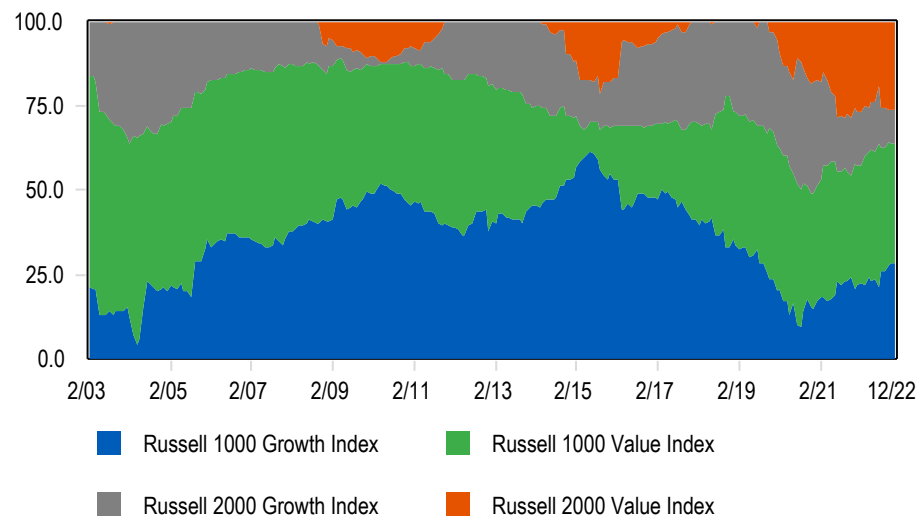
### Investment Style Exposure



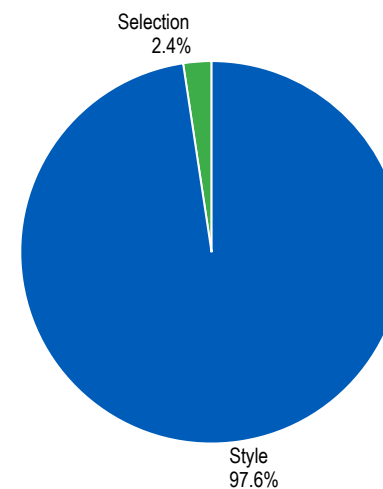
### Style Map(36 Months)

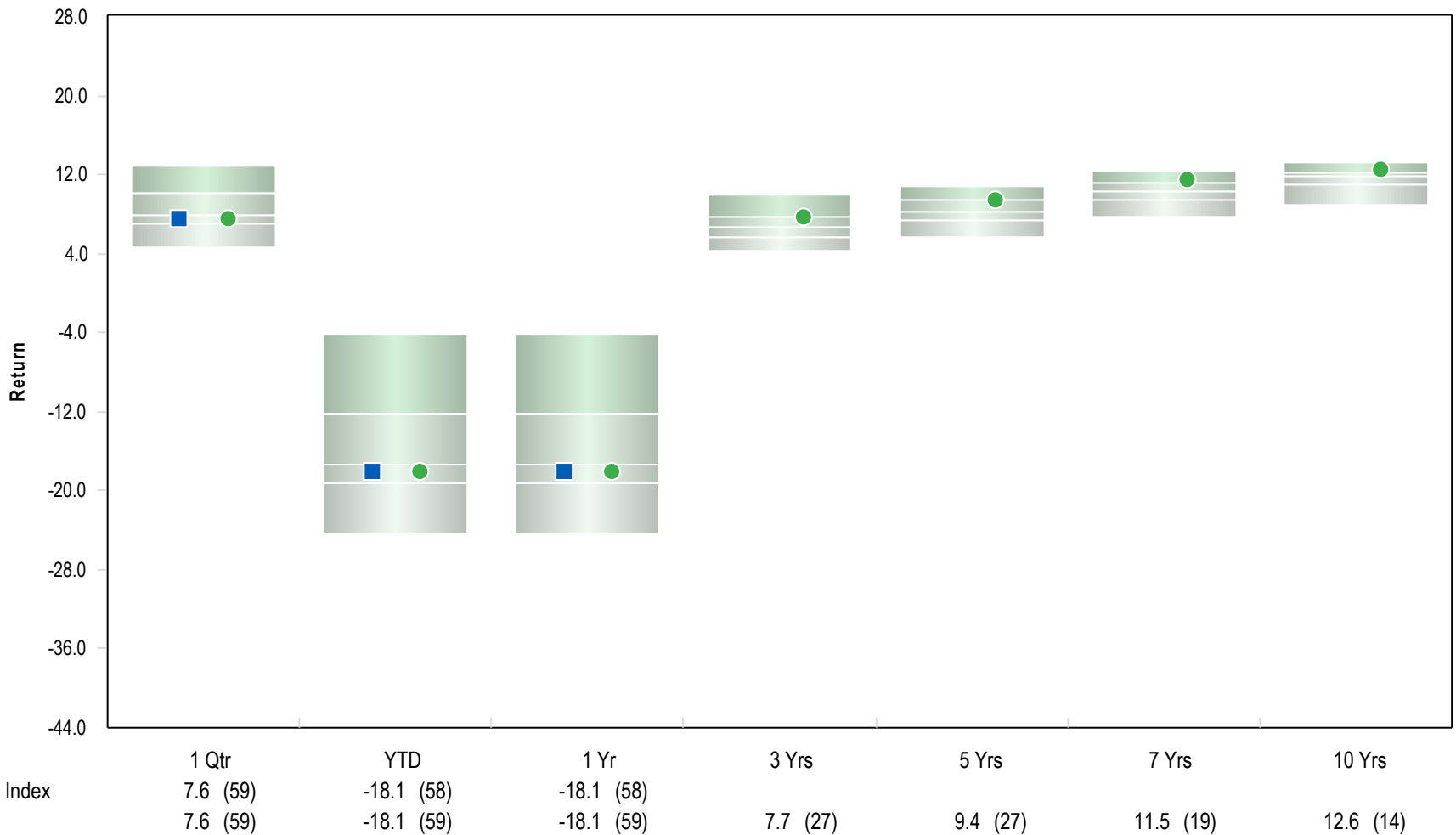


### Style History(36 Months)



### Return Variance





|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 12.8 | -4.1  | -4.1  | 10.0 | 10.7 | 12.4 | 13.1 |
| 1st Quartile    | 10.1 | -12.3 | -12.3 | 7.8  | 9.5  | 11.1 | 12.2 |
| Median          | 8.0  | -17.4 | -17.4 | 6.7  | 8.2  | 10.4 | 11.8 |
| 3rd Quartile    | 7.0  | -19.2 | -19.2 | 5.6  | 7.3  | 9.5  | 11.0 |
| 95th Percentile | 4.6  | -24.4 | -24.4 | 4.2  | 5.6  | 7.8  | 9.0  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

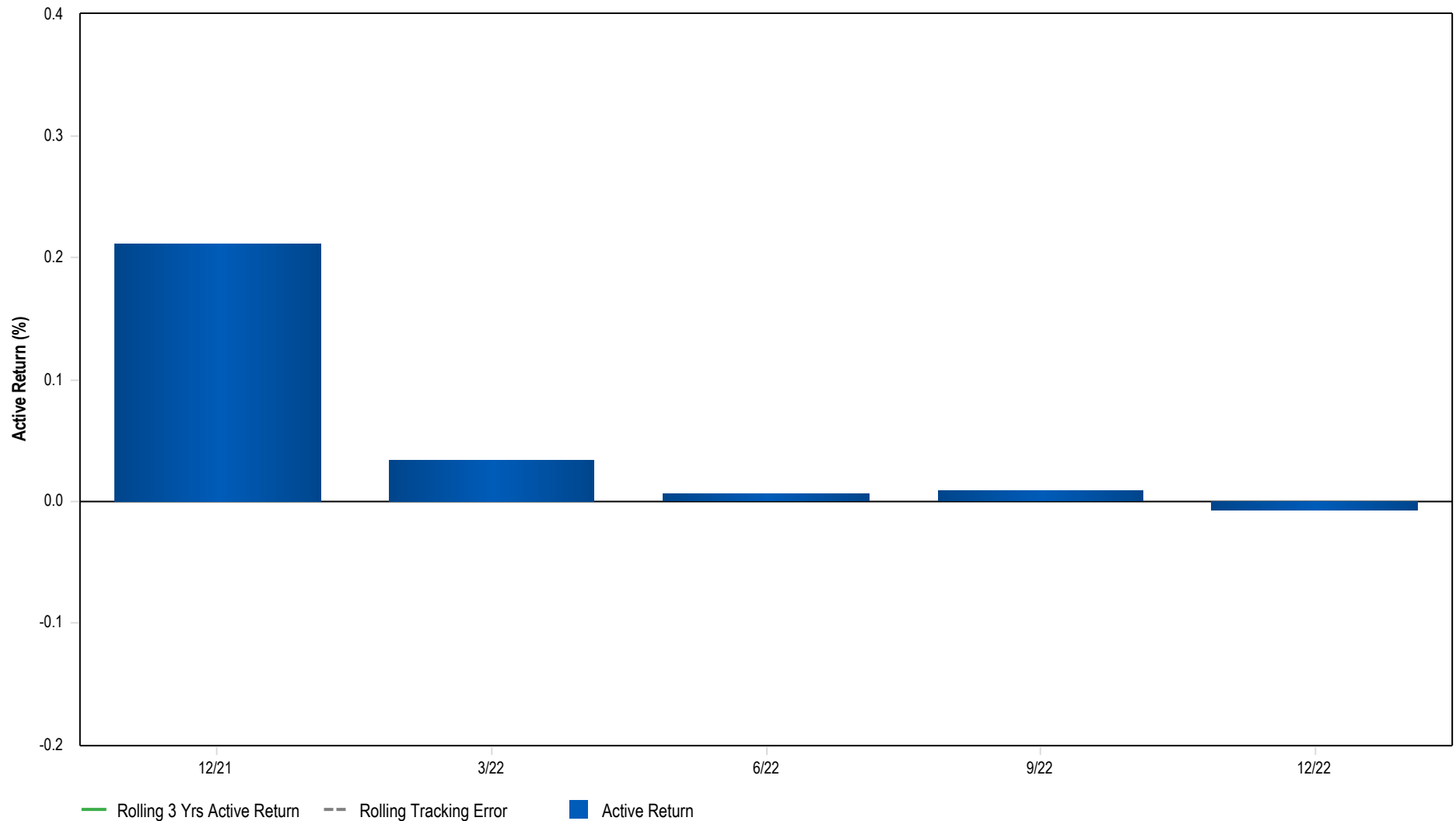


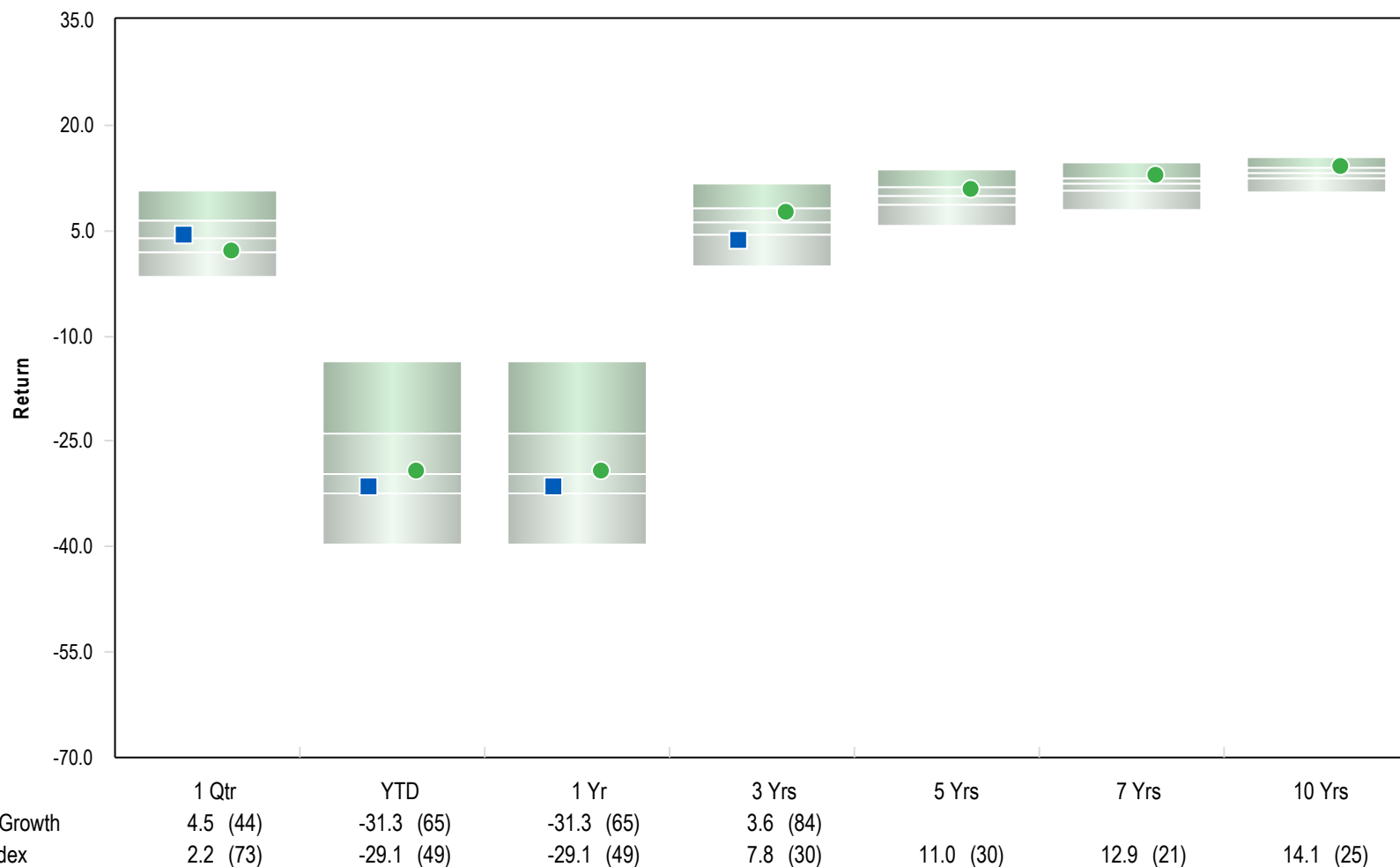
# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

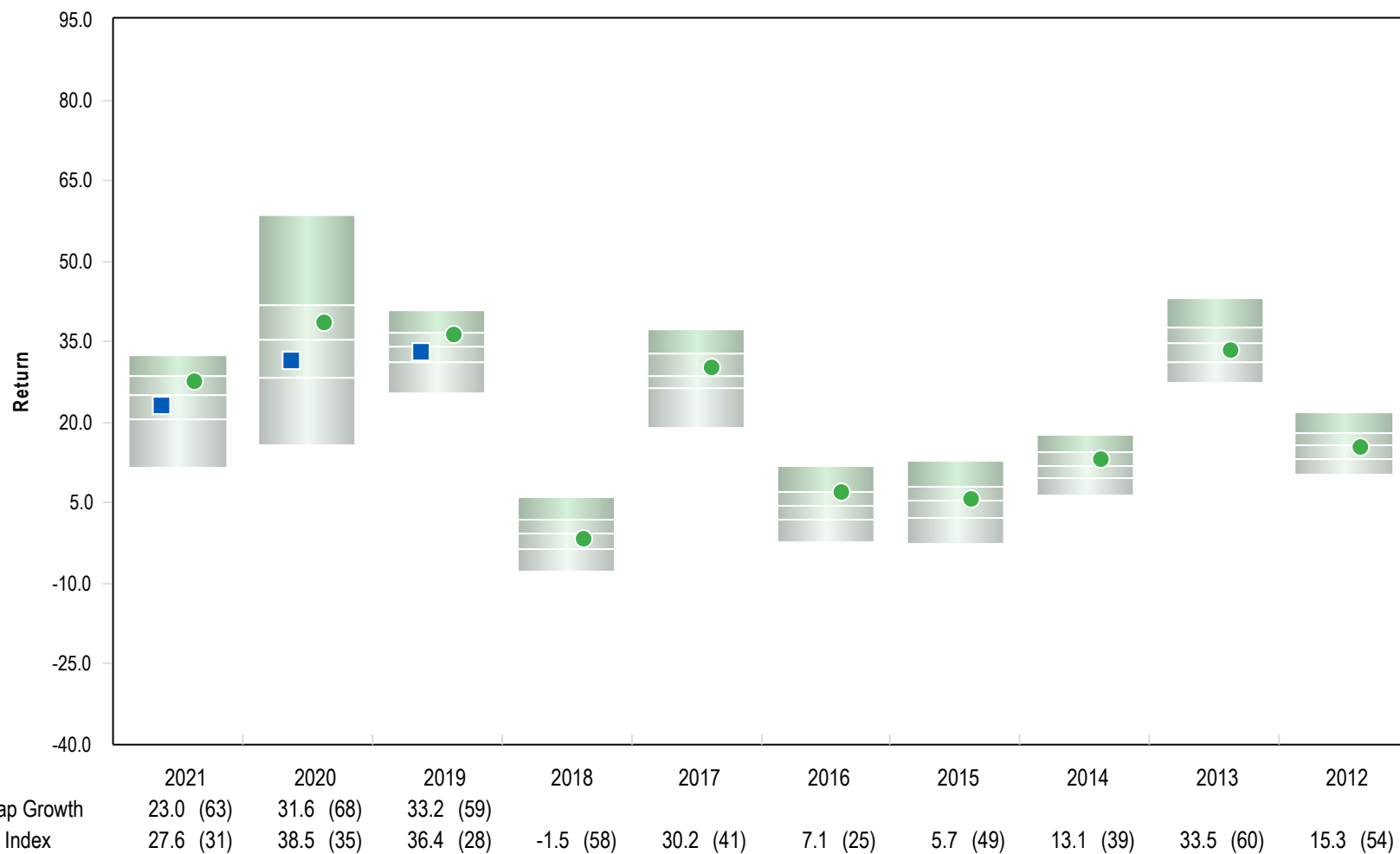
|                  | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| NT S&P 500 Index | 7.6   | -18.1 | -18.1 |       |       |       |        |      |      |      |      |
| S&P 500          | 7.6   | -18.1 | -18.1 | 7.7   | 9.4   | 11.5  | 12.6   | 28.7 | 18.4 | 31.5 | -4.4 |
| Difference       | 0.0   | 0.0   | 0.0   |       |       |       |        |      |      |      |      |





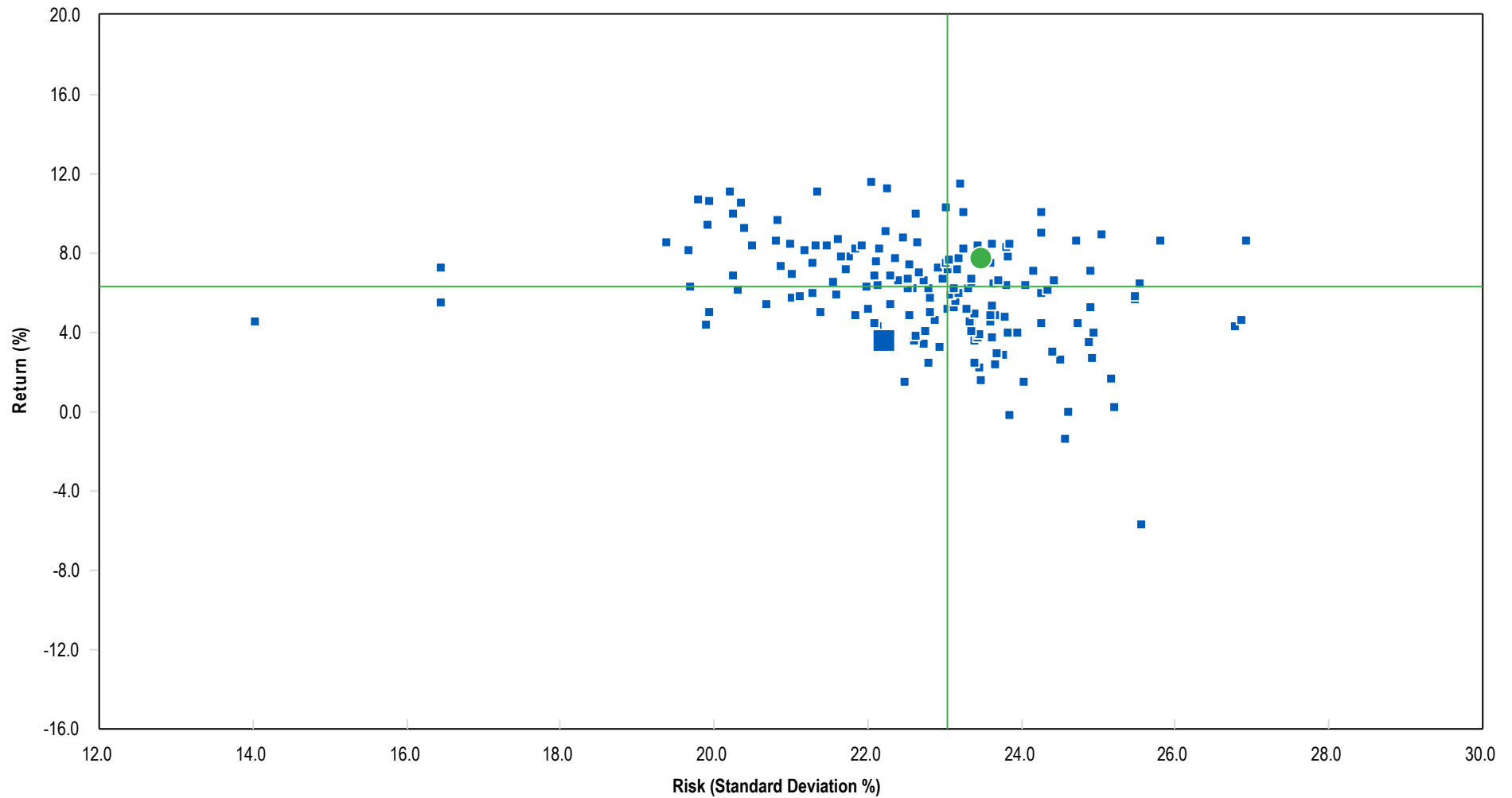
|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 10.8 | -13.6 | -13.6 | 11.8 | 13.8 | 14.7 | 15.4 |
| 1st Quartile    | 6.3  | -24.0 | -24.0 | 8.2  | 11.1 | 12.5 | 14.1 |
| Median          | 3.9  | -29.6 | -29.6 | 6.3  | 10.0 | 11.7 | 13.3 |
| 3rd Quartile    | 1.9  | -32.5 | -32.5 | 4.4  | 8.6  | 10.7 | 12.5 |
| 95th Percentile | -1.6 | -39.7 | -39.7 | 0.0  | 5.6  | 7.8  | 10.3 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                 |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| 5th Percentile  | 32.5 | 58.6 | 40.7 | 6.2  | 37.4 | 11.7 | 12.8 | 17.6 | 43.2 | 21.9 |
| 1st Quartile    | 28.5 | 41.8 | 36.8 | 1.8  | 32.7 | 7.0  | 8.1  | 14.4 | 37.6 | 18.0 |
| Median          | 25.0 | 35.4 | 34.0 | -0.5 | 28.5 | 4.6  | 5.4  | 12.0 | 34.6 | 15.6 |
| 3rd Quartile    | 20.5 | 28.5 | 31.2 | -3.7 | 26.2 | 1.8  | 2.3  | 9.7  | 31.3 | 13.3 |
| 95th Percentile | 11.7 | 15.7 | 25.3 | -7.8 | 19.0 | -2.3 | -2.6 | 6.3  | 27.4 | 10.2 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                                | Return | Standard<br>Deviation |
|--------------------------------|--------|-----------------------|
| ■ ClearBridge Large Cap Growth | 3.6    | 22.2                  |
| ● Russell 1000 Growth Index    | 7.8    | 23.5                  |
| — Median                       | 6.3    | 23.0                  |

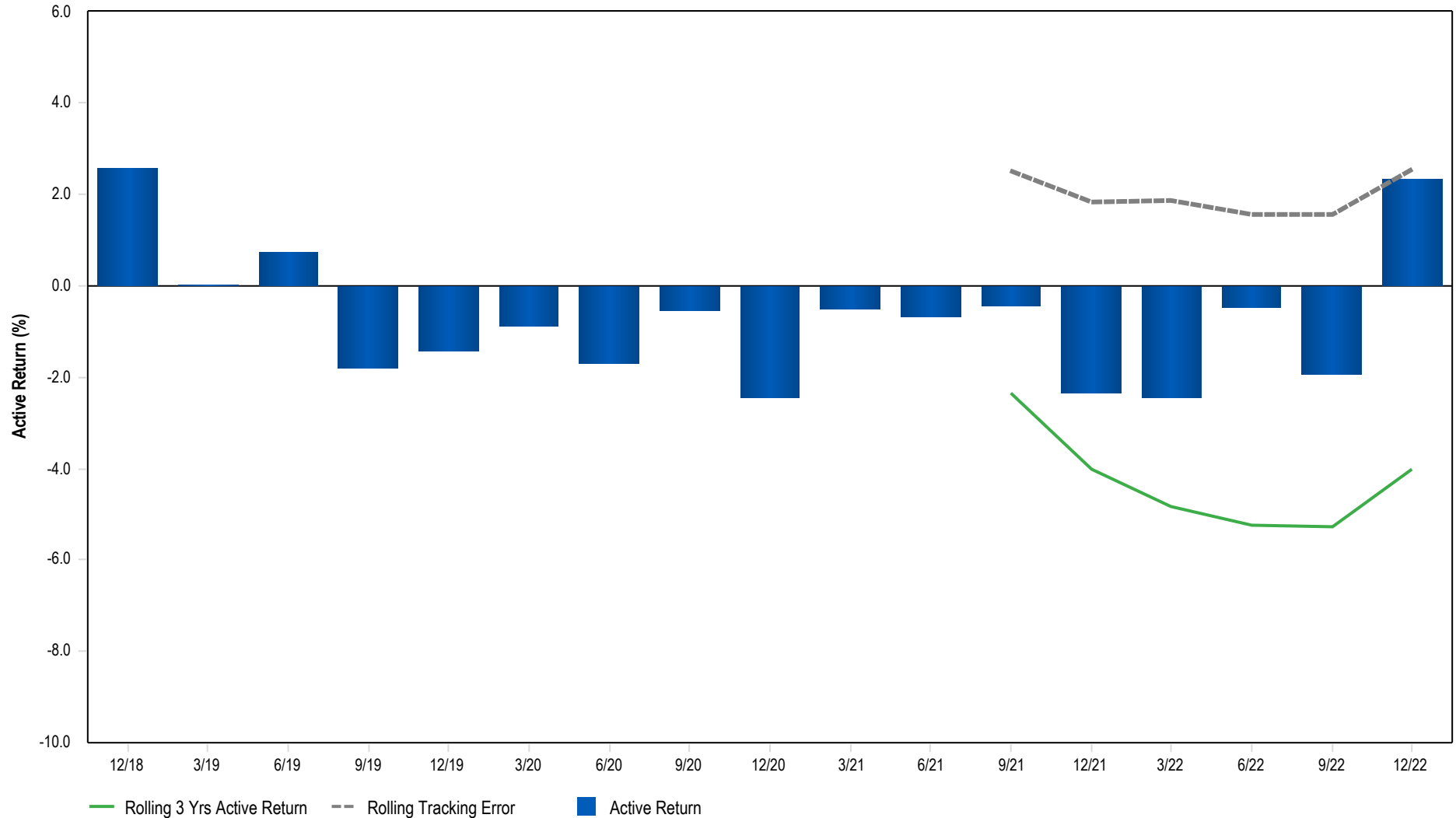
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                              | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| ClearBridge Large Cap Growth | 4.5   | -31.3 | -31.3 | 3.6   |       |       |        | 23.0 | 31.6 | 33.2 |      |
| Russell 1000 Growth Index    | 2.2   | -29.1 | -29.1 | 7.8   | 11.0  | 12.9  | 14.1   | 27.6 | 38.5 | 36.4 | -1.5 |
| Difference                   | 2.3   | -2.2  | -2.2  | -4.2  |       |       |        | -4.6 | -6.9 | -3.2 |      |



Buy-and-Hold Portfolio 4.8

Portfolio Trading -0.2

Actual Return 4.5

Benchmark Return 2.2

Actual Active Return 2.3

Stock Selection 1.9

Sector Selection 1.1

Interaction -0.5

Total Selection 2.6

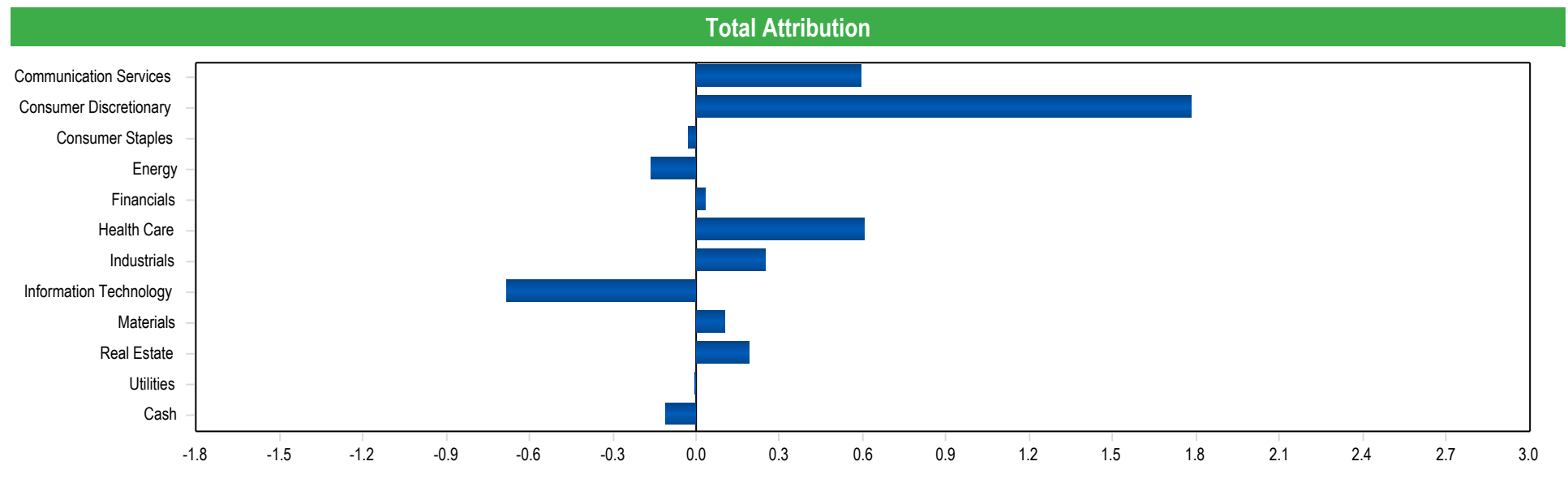
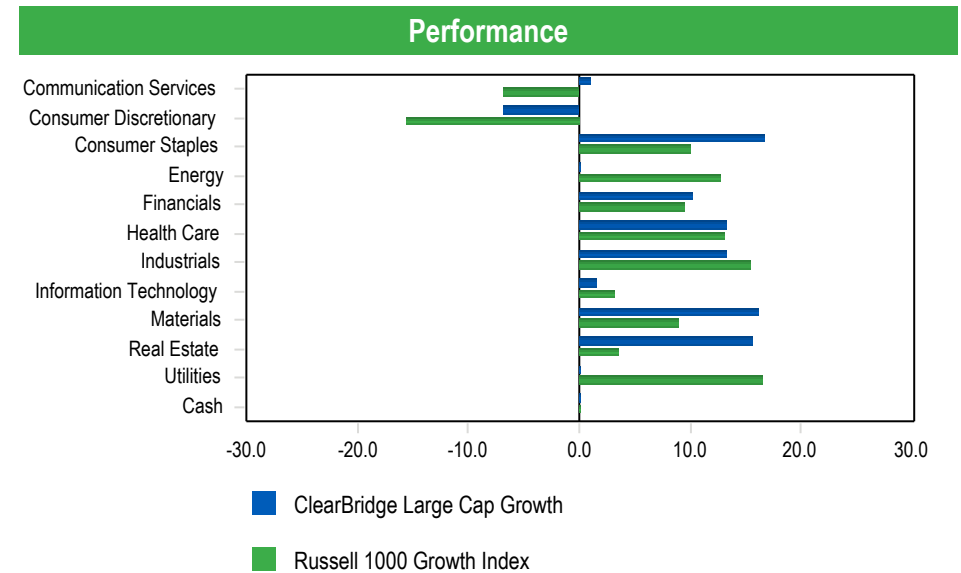
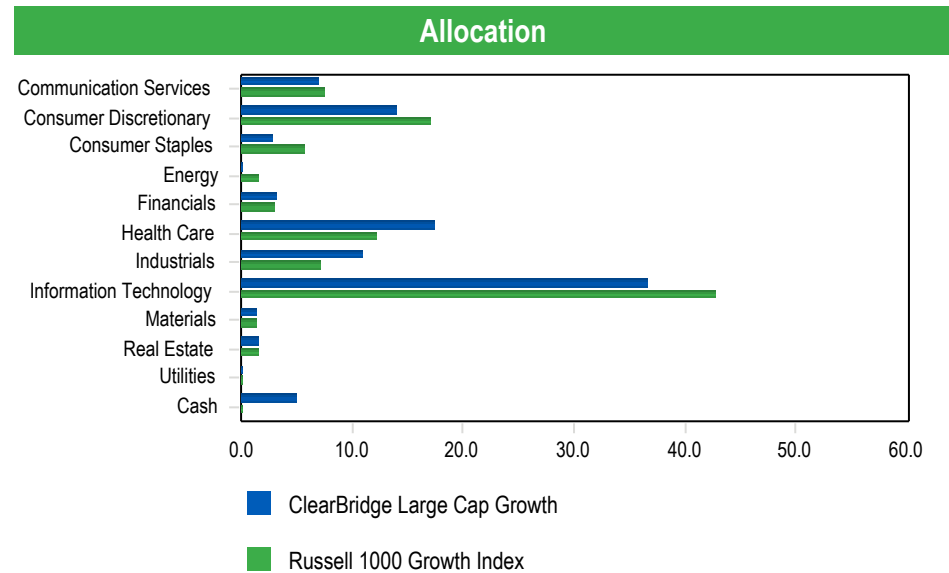
Portfolio Trading -0.2

Benchmark Trading 0.0

Active Trading Impact -0.2

Buy &amp; Hold Active Return 2.3

|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Stock | Attribution |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------|-------------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark |       | Sector      | Interaction |       |
| Communication Services | 7.0                     | 7.6       | 1.0                                                 | -6.8      | 0.6   | 0.0         | 0.0         | 0.6   |
| Consumer Discretionary | 13.9                    | 17.1      | -6.8                                                | -15.6     | 1.5   | 0.6         | -0.3        | 1.8   |
| Consumer Staples       | 2.8                     | 5.7       | 16.8                                                | 10.0      | 0.4   | -0.2        | -0.2        | 0.0   |
| Energy                 | 0.0                     | 1.6       | 0.0                                                 | 12.8      | 0.0   | -0.2        | 0.0         | -0.2  |
| Financials             | 3.2                     | 3.0       | 10.2                                                | 9.4       | 0.0   | 0.0         | 0.0         | 0.0   |
| Health Care            | 17.4                    | 12.2      | 13.3                                                | 13.1      | 0.0   | 0.6         | 0.0         | 0.6   |
| Industrials            | 10.9                    | 7.2       | 13.2                                                | 15.4      | -0.2  | 0.5         | -0.1        | 0.2   |
| Information Technology | 36.7                    | 42.7      | 1.6                                                 | 3.3       | -0.7  | -0.1        | 0.1         | -0.7  |
| Materials              | 1.4                     | 1.4       | 16.2                                                | 8.9       | 0.1   | 0.0         | 0.0         | 0.1   |
| Real Estate            | 1.6                     | 1.6       | 15.7                                                | 3.6       | 0.2   | 0.0         | 0.0         | 0.2   |
| Utilities              | 0.0                     | 0.0       | 0.0                                                 | 16.5      | 0.0   | 0.0         | 0.0         | 0.0   |
| Cash                   | 5.0                     | 0.0       | 0.0                                                 | 0.0       | 0.0   | -0.1        | 0.0         | -0.1  |
| Total                  | 100.0                   | 100.0     | 4.8                                                 | 2.2       | 1.9   | 1.1         | -0.5        | 2.6   |



Buy-and-Hold Portfolio 4.8

Portfolio Trading -0.2

Actual Return 4.5

Benchmark Return 2.2

Actual Active Return 2.3

Stock Selection 2.1

Style Selection 2.0

Interaction -1.5

Total Selection 2.6

Portfolio Trading -0.2

Benchmark Trading 0.0

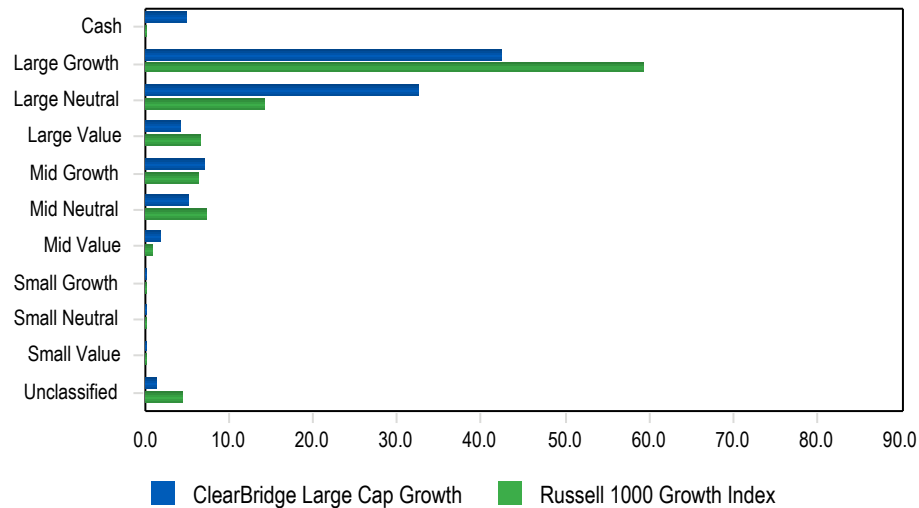
Active Trading Impact -0.2

Buy &amp; Hold Active Return 2.3

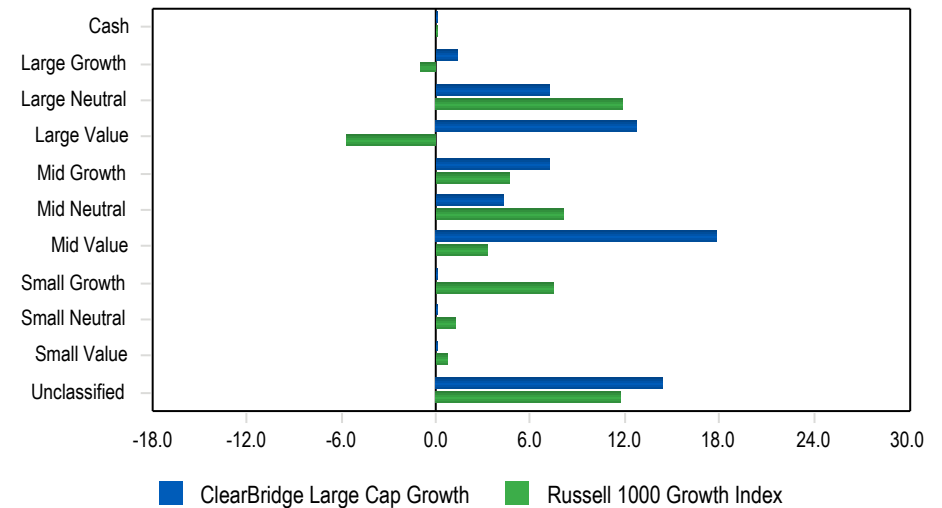
|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             |       |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction | Total |
| Cash          | 5.0                   | 0.0       | 0.0                                            | 0.0       | 0.0         | -0.1  | 0.0         | -0.1  |
| Large Growth  | 42.4                  | 59.3      | 1.4                                            | -1.0      | 1.4         | 0.5   | -0.4        | 1.6   |
| Large Neutral | 32.6                  | 14.3      | 7.2                                            | 11.9      | -0.7        | 1.8   | -0.9        | 0.2   |
| Large Value   | 4.3                   | 6.6       | 12.8                                           | -5.7      | 1.2         | 0.2   | -0.4        | 1.0   |
| Mid Growth    | 7.1                   | 6.5       | 7.2                                            | 4.7       | 0.2         | 0.0   | 0.0         | 0.2   |
| Mid Neutral   | 5.3                   | 7.5       | 4.3                                            | 8.1       | -0.3        | -0.1  | 0.1         | -0.3  |
| Mid Value     | 1.9                   | 1.0       | 17.8                                           | 3.3       | 0.1         | 0.0   | 0.1         | 0.3   |
| Small Growth  | 0.0                   | 0.1       | 0.0                                            | 7.5       | 0.0         | 0.0   | 0.0         | 0.0   |
| Small Neutral | 0.0                   | 0.2       | 0.0                                            | 1.3       | 0.0         | 0.0   | 0.0         | 0.0   |
| Small Value   | 0.0                   | 0.0       | 0.0                                            | 0.8       | 0.0         | 0.0   | 0.0         | 0.0   |
| Unclassified  | 1.3                   | 4.5       | 14.5                                           | 11.8      | 0.1         | -0.3  | -0.1        | -0.3  |
| Total         | 100.0                 | 100.0     | 4.8                                            | 2.2       | 2.1         | 2.0   | -1.5        | 2.6   |



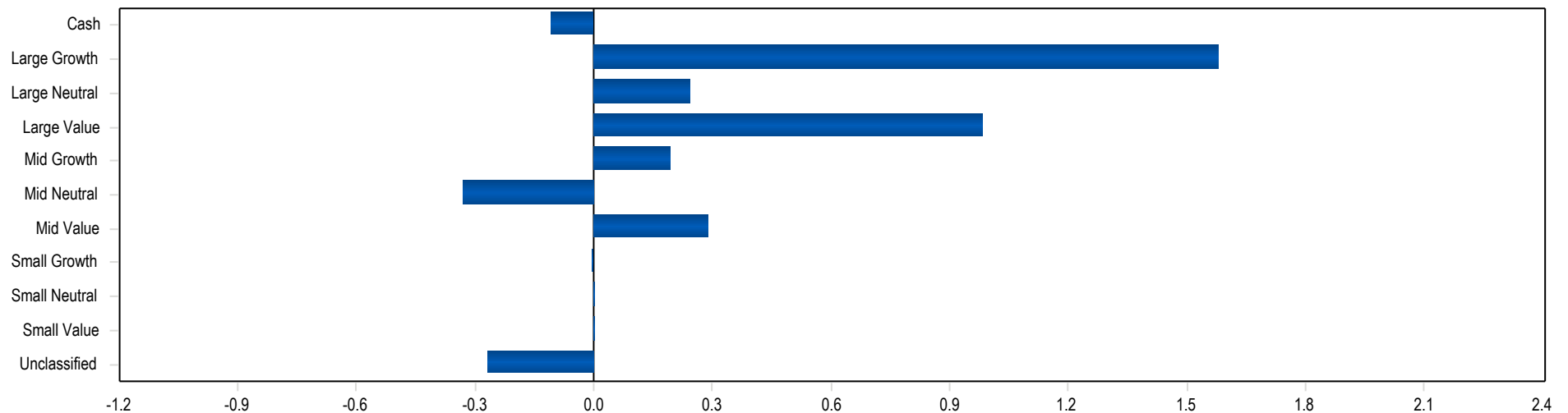
### Allocation



### Performance



### Total Attribution



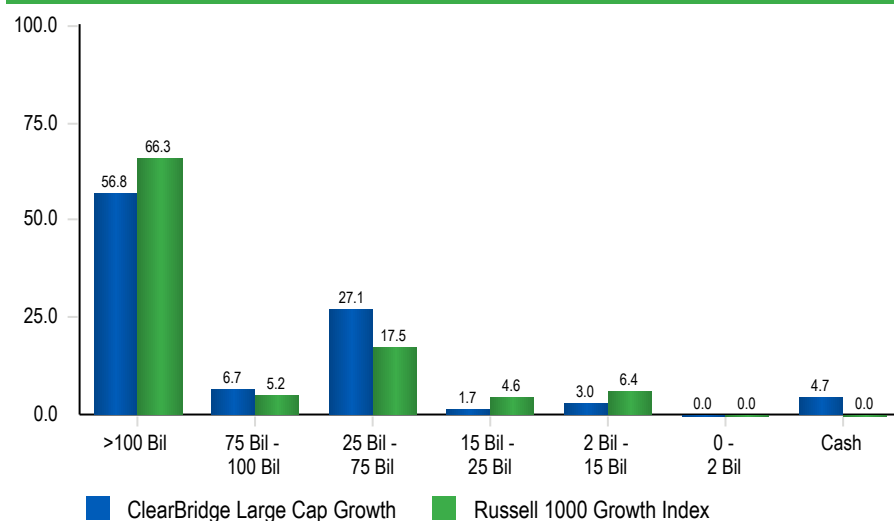
### Top Ten Equity Holdings

|                              | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|------------------------------|----------------------|----------------------|-------------------|----------------------|
| Microsoft Corp               | 6.8                  | 10.5                 | -3.7              | 3.3                  |
| Visa Inc                     | 6.0                  | 2.0                  | 4.0               | 17.2                 |
| Amazon.com Inc               | 5.8                  | 4.4                  | 1.4               | -25.7                |
| Unitedhealth Group Inc       | 5.2                  | 2.6                  | 2.6               | 5.3                  |
| Apple Inc                    | 4.3                  | 11.4                 | -7.1              | -5.8                 |
| Thermo Fisher Scientific Inc | 3.3                  | 0.2                  | 3.1               | 8.6                  |
| NVIDIA Corporation           | 3.2                  | 2.1                  | 1.1               | 20.4                 |
| Monster Beverage Corp        | 3.2                  | 0.2                  | 3.0               | 16.8                 |
| Raytheon Technologies Corp   | 2.9                  | 0.0                  | 2.9               | 24.0                 |
| Netflix Inc                  | 2.9                  | 0.3                  | 2.6               | 25.2                 |
| % of Portfolio               | 43.6                 | 33.7                 | 9.9               |                      |

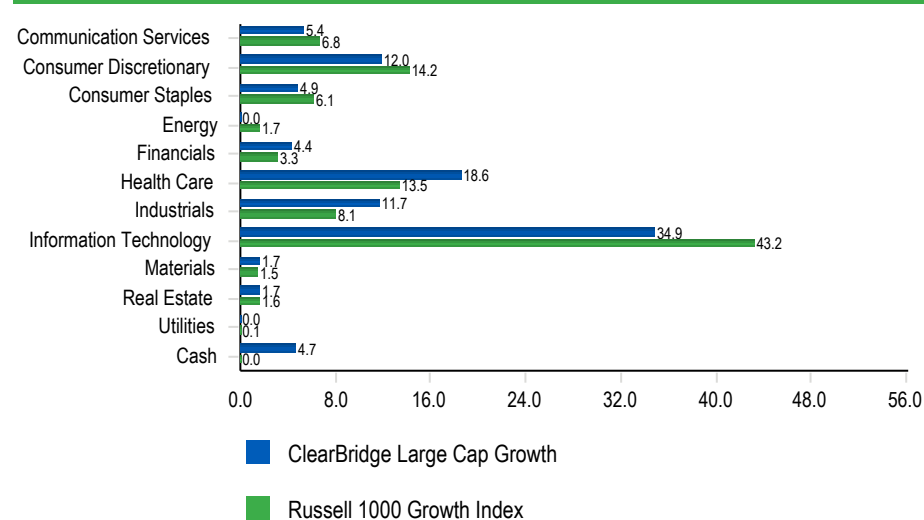
### Portfolio Characteristics

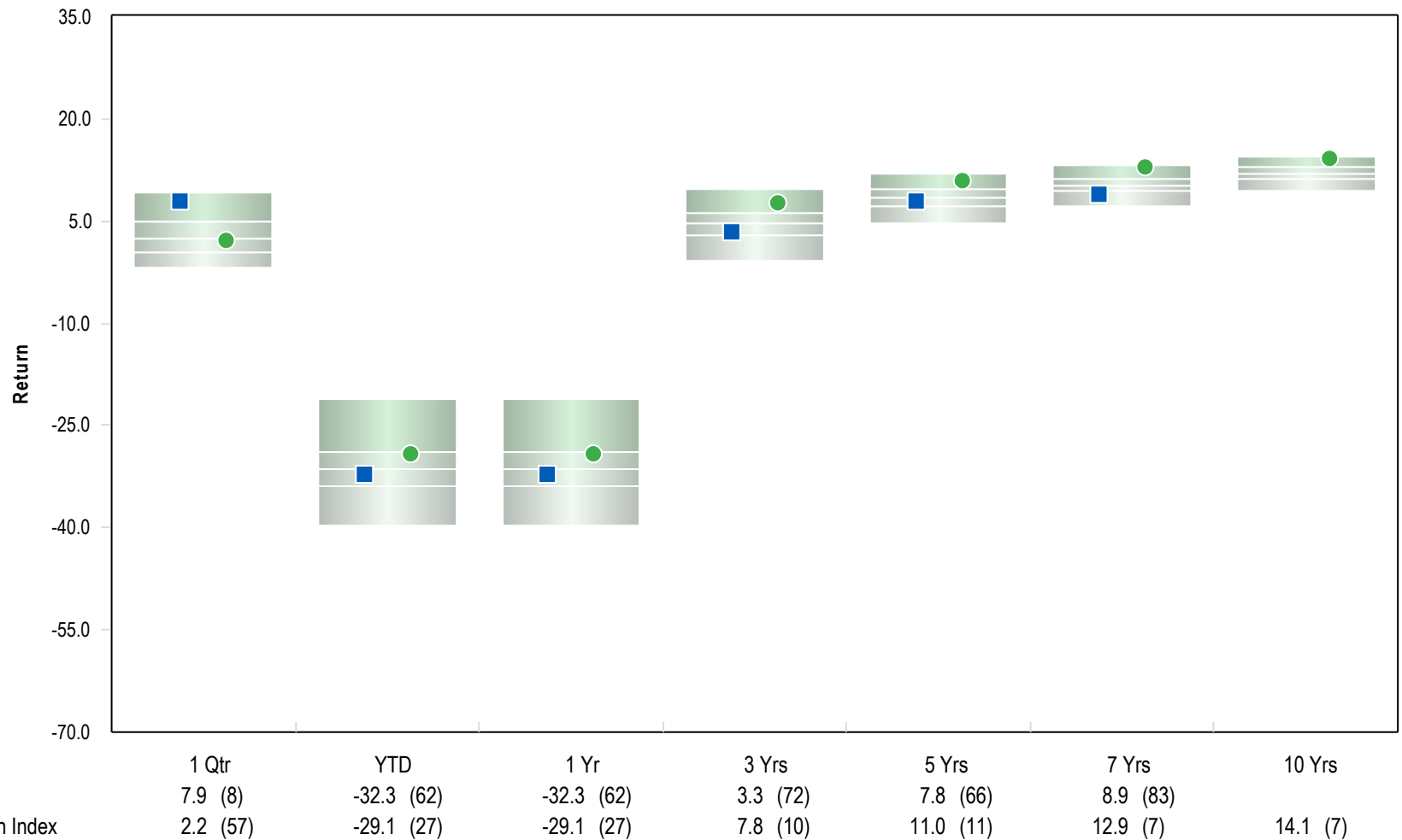
|                           | Portfolio       | Benchmark       |
|---------------------------|-----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 384,048,097,739 | 619,988,774,187 |
| Median Mkt. Cap (\$)      | 82,079,734,800  | 13,739,979,500  |
| Price/Earnings ratio      | 30.5            | 24.5            |
| Price/Book ratio          | 6.0             | 8.5             |
| 5 Yr. EPS Growth Rate (%) | 18.5            | 23.1            |
| Current Yield (%)         | 0.8             | 1.1             |
| Beta (3 Years, Monthly)   | 0.9             | 1.0             |
| Number of Stocks          | 42              | 512             |

### Distribution of Market Capitalization (%)



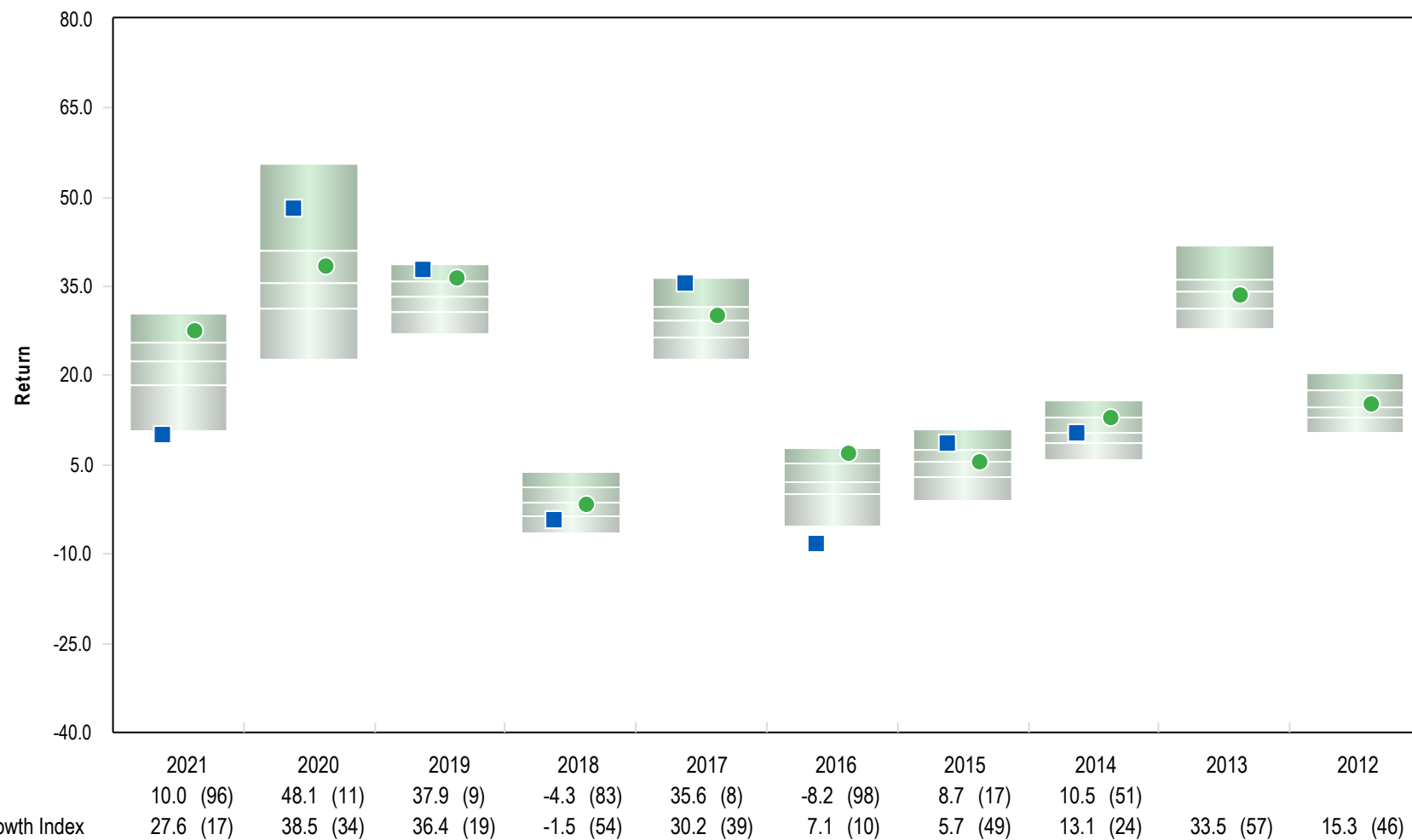
### Sector Weights (%)





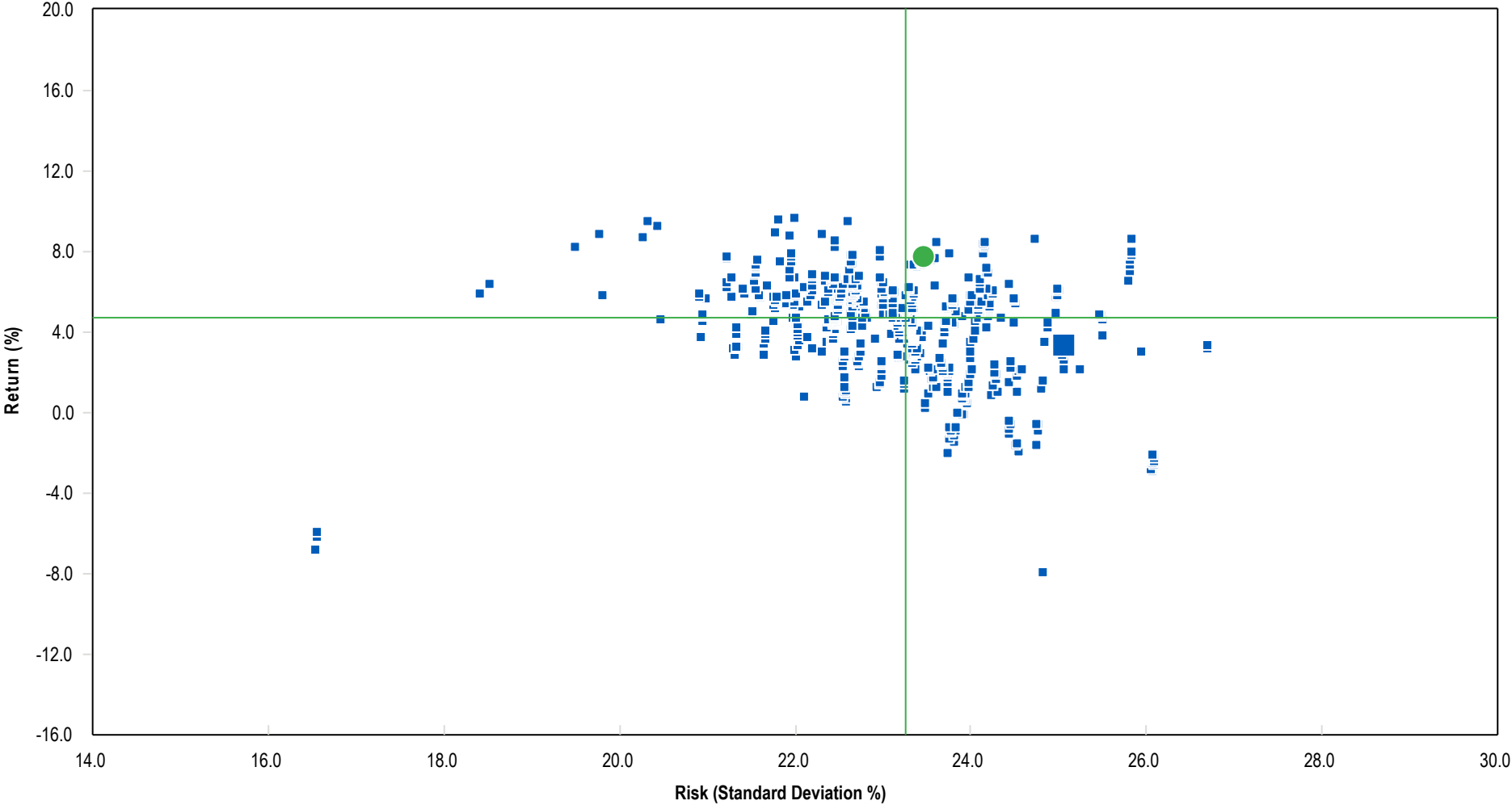
|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 9.1  | -21.3 | -21.3 | 9.7  | 11.9 | 13.2 | 14.4 |
| 1st Quartile    | 4.8  | -28.8 | -28.8 | 6.1  | 9.7  | 11.3 | 12.9 |
| Median          | 2.5  | -31.3 | -31.3 | 4.8  | 8.5  | 10.3 | 12.0 |
| 3rd Quartile    | 0.5  | -33.9 | -33.9 | 3.0  | 7.3  | 9.3  | 11.2 |
| 95th Percentile | -1.9 | -39.8 | -39.8 | -0.9 | 4.7  | 7.3  | 9.4  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



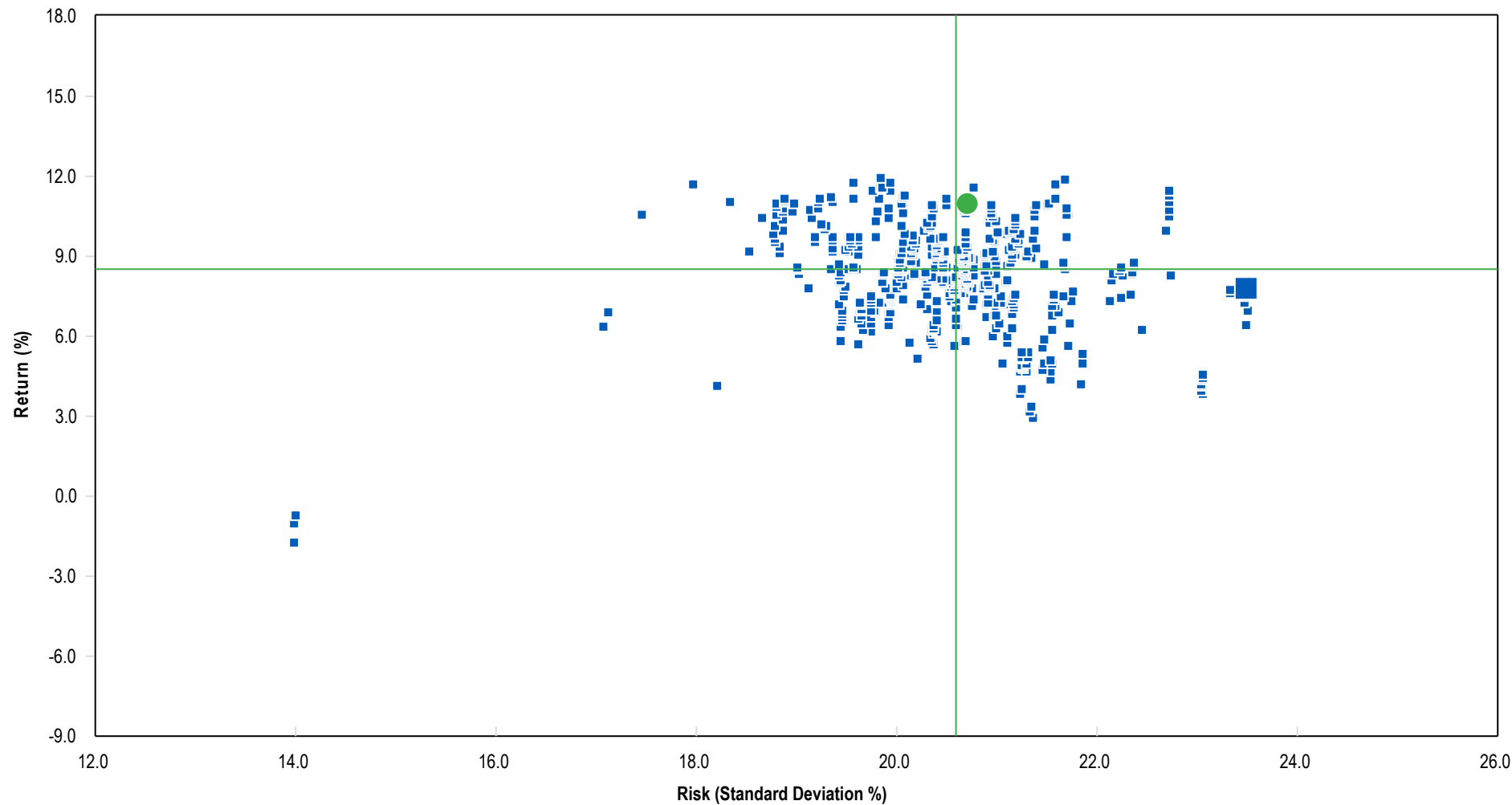
|                 |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| 5th Percentile  | 30.5 | 55.6 | 38.7 | 4.0  | 36.3 | 7.9  | 10.9 | 15.7 | 41.9 | 20.4 |
| 1st Quartile    | 25.6 | 41.2 | 35.9 | 1.2  | 31.7 | 5.3  | 7.6  | 13.0 | 36.3 | 17.5 |
| Median          | 22.4 | 35.6 | 33.3 | -1.2 | 29.3 | 2.2  | 5.6  | 10.5 | 34.1 | 14.8 |
| 3rd Quartile    | 18.4 | 31.2 | 30.7 | -3.6 | 26.4 | 0.0  | 3.1  | 8.6  | 31.4 | 13.0 |
| 95th Percentile | 10.6 | 22.6 | 27.0 | -6.6 | 22.7 | -5.3 | -1.0 | 5.8  | 27.9 | 10.5 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                             | Return | Standard<br>Deviation |
|-----------------------------|--------|-----------------------|
| ■ Columbia                  | 3.3    | 25.1                  |
| ● Russell 1000 Growth Index | 7.8    | 23.5                  |
| — Median                    | 4.8    | 23.3                  |

Calculation based on monthly periodicity.



|                             | Return | Standard<br>Deviation |
|-----------------------------|--------|-----------------------|
| ■ Columbia                  | 7.8    | 23.5                  |
| ● Russell 1000 Growth Index | 11.0   | 20.7                  |
| — Median                    | 8.5    | 20.6                  |

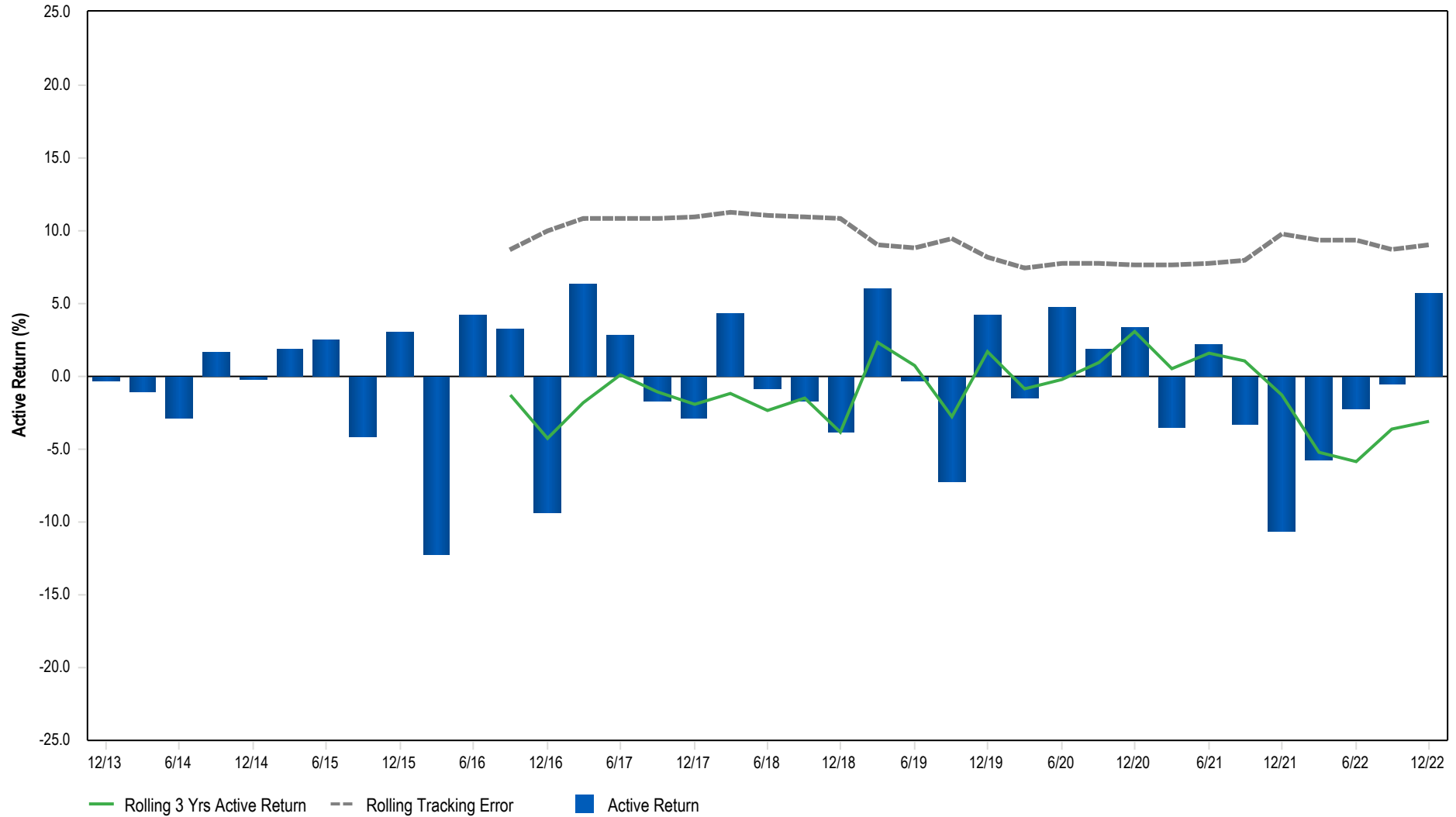
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                           | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021  | 2020 | 2019 | 2018 |
|---------------------------|-------|-------|-------|-------|-------|-------|--------|-------|------|------|------|
| Columbia                  | 7.9   | -32.3 | -32.3 | 3.3   | 7.8   | 8.9   |        | 10.0  | 48.1 | 37.9 | -4.3 |
| Russell 1000 Growth Index | 2.2   | -29.1 | -29.1 | 7.8   | 11.0  | 12.9  | 14.1   | 27.6  | 38.5 | 36.4 | -1.5 |
| Difference                | 5.7   | -3.2  | -3.2  | -4.5  | -3.2  | -4.0  |        | -17.6 | 9.6  | 1.5  | -2.8 |



Buy-and-Hold Portfolio 8.4  
 Portfolio Trading -0.5  
 Actual Return 7.9  
 Benchmark Return 2.2  
 Actual Active Return 5.7

Stock Selection 3.5  
 Sector Selection 3.3  
 Interaction -0.6  
 Total Selection 6.2

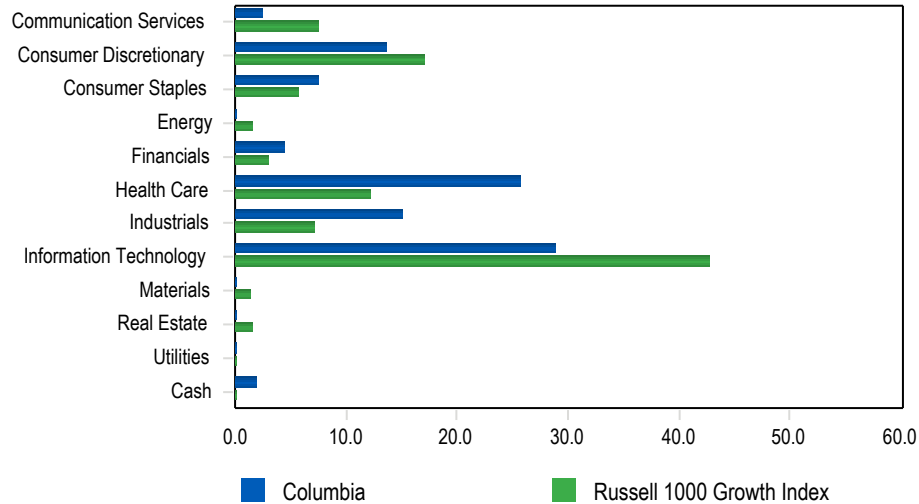
Portfolio Trading -0.5  
 Benchmark Trading 0.0  
 Active Trading Impact -0.5

Buy & Hold Active Return 5.7

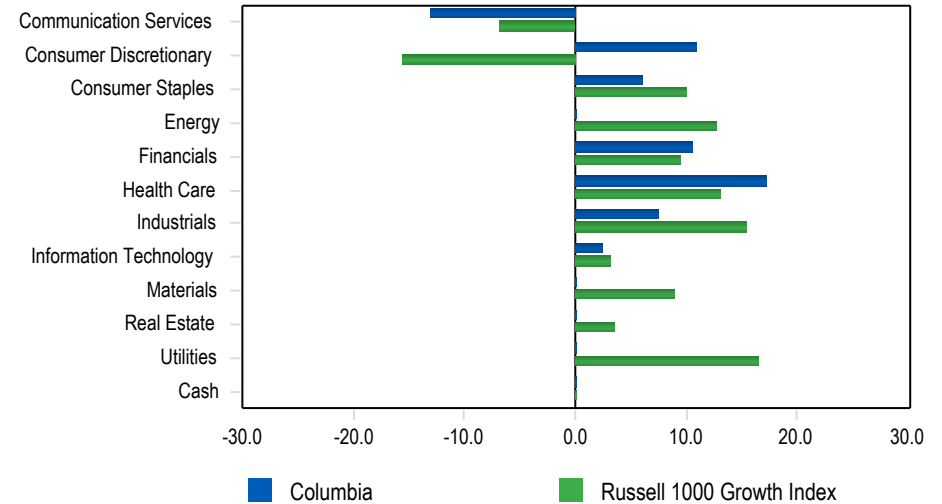
|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 2.6                     | 7.6       | -13.1                                               | -6.8      | -0.5        | 0.4    | 0.3         | 0.3   |
| Consumer Discretionary | 13.7                    | 17.1      | 11.0                                                | -15.6     | 4.5         | 0.6    | -0.9        | 4.2   |
| Consumer Staples       | 7.6                     | 5.7       | 6.1                                                 | 10.0      | -0.2        | 0.1    | -0.1        | -0.1  |
| Energy                 | 0.0                     | 1.6       | 0.0                                                 | 12.8      | 0.0         | -0.2   | 0.0         | -0.2  |
| Financials             | 4.4                     | 3.0       | 10.6                                                | 9.4       | 0.0         | 0.1    | 0.0         | 0.2   |
| Health Care            | 25.7                    | 12.2      | 17.3                                                | 13.1      | 0.5         | 1.5    | 0.6         | 2.6   |
| Industrials            | 15.2                    | 7.2       | 7.6                                                 | 15.4      | -0.6        | 1.1    | -0.6        | -0.1  |
| Information Technology | 29.0                    | 42.7      | 2.5                                                 | 3.3       | -0.4        | -0.2   | 0.1         | -0.4  |
| Materials              | 0.0                     | 1.4       | 0.0                                                 | 8.9       | 0.0         | -0.1   | 0.0         | -0.1  |
| Real Estate            | 0.0                     | 1.6       | 0.0                                                 | 3.6       | 0.0         | 0.0    | 0.0         | 0.0   |
| Utilities              | 0.0                     | 0.0       | 0.0                                                 | 16.5      | 0.0         | 0.0    | 0.0         | 0.0   |
| Cash                   | 2.0                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | 0.0    | 0.0         | 0.0   |
| Total                  | 100.0                   | 100.0     | 8.4                                                 | 2.2       | 3.5         | 3.3    | -0.6        | 6.2   |



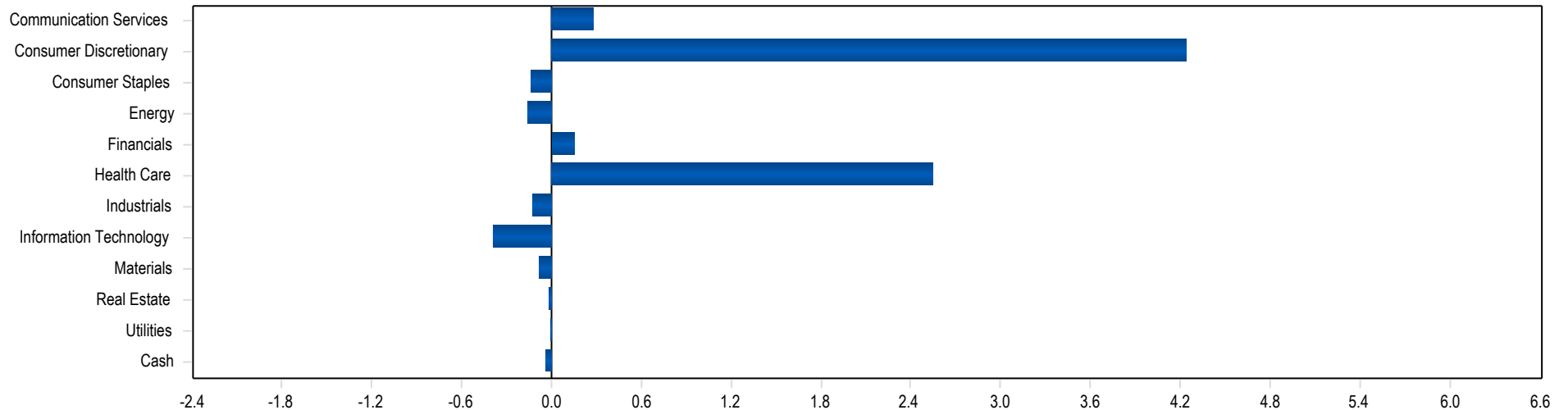
### Allocation



### Performance



### Total Attribution



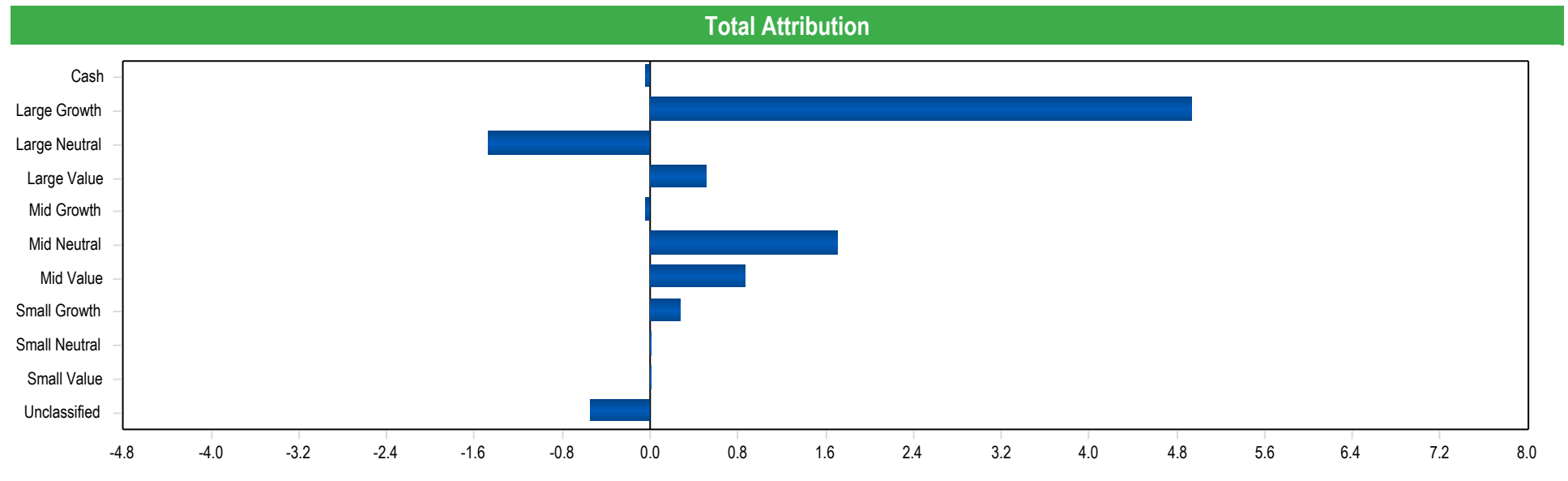
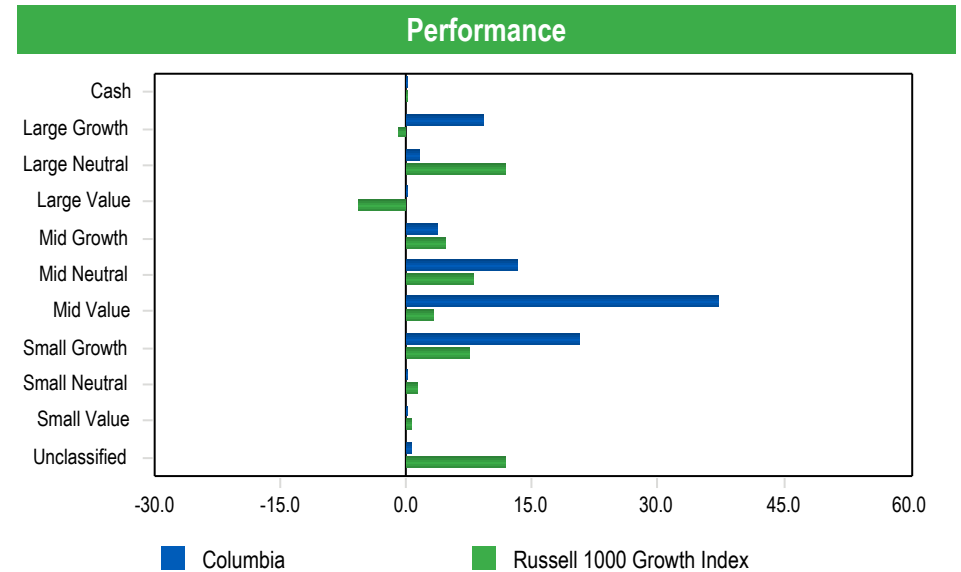
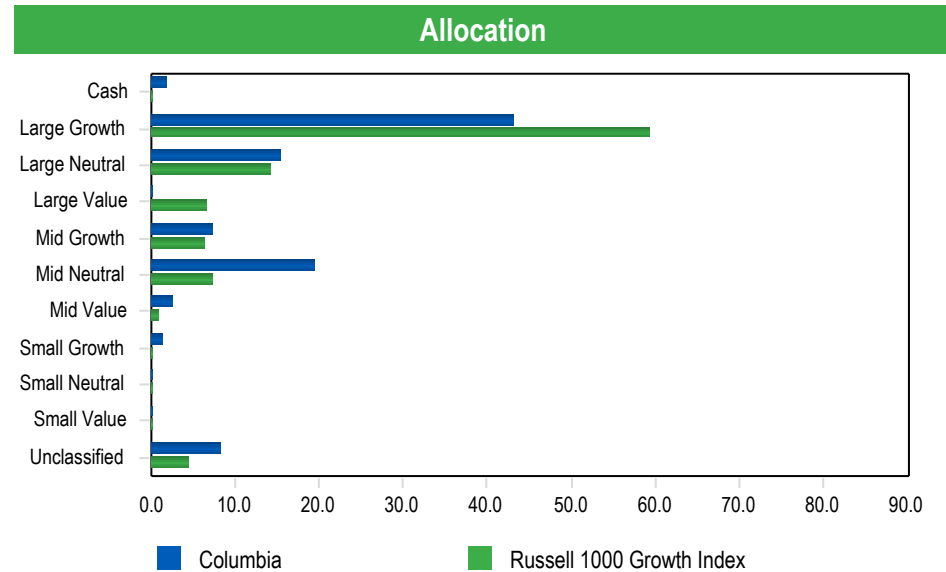
Buy-and-Hold Portfolio 8.4  
 Portfolio Trading -0.5  
 Actual Return 7.9  
 Benchmark Return 2.2  
 Actual Active Return 5.7

Stock Selection 4.8  
 Style Selection 2.3  
 Interaction -0.9  
 Total Selection 6.2

Portfolio Trading -0.5  
 Benchmark Trading 0.0  
 Active Trading Impact -0.5

Buy & Hold Active Return 5.7

|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             |       |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction | Total |
| Cash          | 2.0                   | 0.0       | 0.0                                            | 0.0       | 0.0         | 0.0   | 0.0         | 0.0   |
| Large Growth  | 43.2                  | 59.3      | 9.2                                            | -1.0      | 6.1         | 0.5   | -1.6        | 4.9   |
| Large Neutral | 15.4                  | 14.3      | 1.6                                            | 11.9      | -1.5        | 0.1   | -0.1        | -1.5  |
| Large Value   | 0.0                   | 6.6       | 0.0                                            | -5.7      | 0.0         | 0.5   | 0.0         | 0.5   |
| Mid Growth    | 7.5                   | 6.5       | 3.8                                            | 4.7       | -0.1        | 0.0   | 0.0         | 0.0   |
| Mid Neutral   | 19.5                  | 7.5       | 13.2                                           | 8.1       | 0.4         | 0.7   | 0.6         | 1.7   |
| Mid Value     | 2.5                   | 1.0       | 37.3                                           | 3.3       | 0.3         | 0.0   | 0.5         | 0.9   |
| Small Growth  | 1.5                   | 0.1       | 20.7                                           | 7.5       | 0.0         | 0.1   | 0.2         | 0.3   |
| Small Neutral | 0.0                   | 0.2       | 0.0                                            | 1.3       | 0.0         | 0.0   | 0.0         | 0.0   |
| Small Value   | 0.0                   | 0.0       | 0.0                                            | 0.8       | 0.0         | 0.0   | 0.0         | 0.0   |
| Unclassified  | 8.4                   | 4.5       | 0.8                                            | 11.8      | -0.5        | 0.4   | -0.4        | -0.5  |
| Total         | 100.0                 | 100.0     | 8.4                                            | 2.2       | 4.8         | 2.3   | -0.9        | 6.2   |



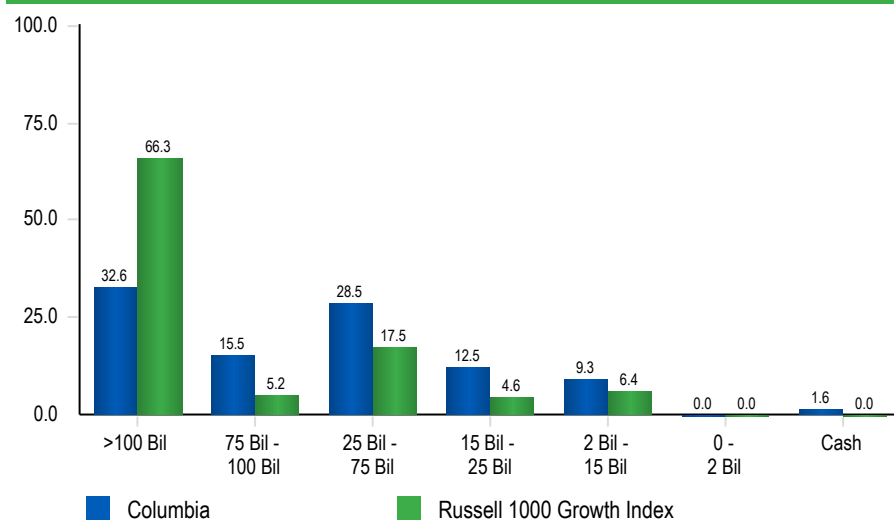
## Top Ten Equity Holdings

|                            | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|----------------------------|----------------------|----------------------|-------------------|----------------------|
| Visa Inc                   | 4.9                  | 2.0                  | 2.9               | 17.2                 |
| Nike Inc                   | 4.8                  | 0.8                  | 4.0               | 41.2                 |
| Intuitive Surgical Inc     | 4.8                  | 0.5                  | 4.3               | 41.6                 |
| Booking Holdings Inc       | 4.4                  | 0.5                  | 3.9               | 22.6                 |
| MSCI Inc                   | 4.2                  | 0.2                  | 4.0               | 10.6                 |
| Eli Lilly and Co           | 4.2                  | 1.5                  | 2.7               | 13.5                 |
| NVIDIA Corporation         | 4.1                  | 2.1                  | 2.0               | 20.4                 |
| CoStar Group Inc           | 4.1                  | 0.0                  | 4.1               | 11.0                 |
| Estee Lauder Cos Inc (The) | 4.1                  | 0.3                  | 3.8               | 15.3                 |
| Intuit Inc.                | 4.0                  | 0.6                  | 3.4               | 0.7                  |
| % of Portfolio             | 43.6                 | 8.5                  | 35.1              |                      |

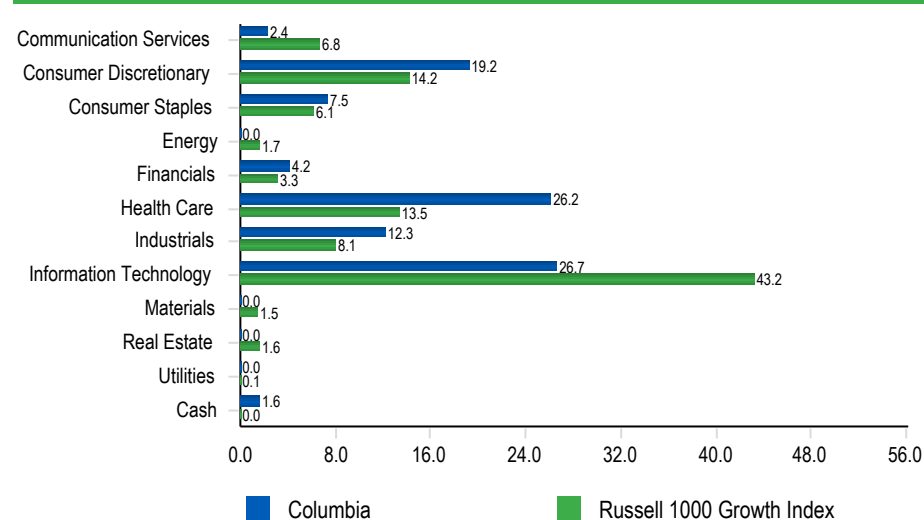
## Portfolio Characteristics

|                           | Portfolio       | Benchmark       |
|---------------------------|-----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 126,494,752,341 | 619,988,774,187 |
| Median Mkt. Cap (\$)      | 40,702,543,700  | 13,739,979,500  |
| Price/Earnings ratio      | 47.8            | 24.5            |
| Price/Book ratio          | 8.8             | 8.5             |
| 5 Yr. EPS Growth Rate (%) | 15.6            | 23.1            |
| Current Yield (%)         | 0.4             | 1.1             |
| Beta (5 Years, Monthly)   | 1.1             | 1.0             |
| Number of Stocks          | 33              | 512             |

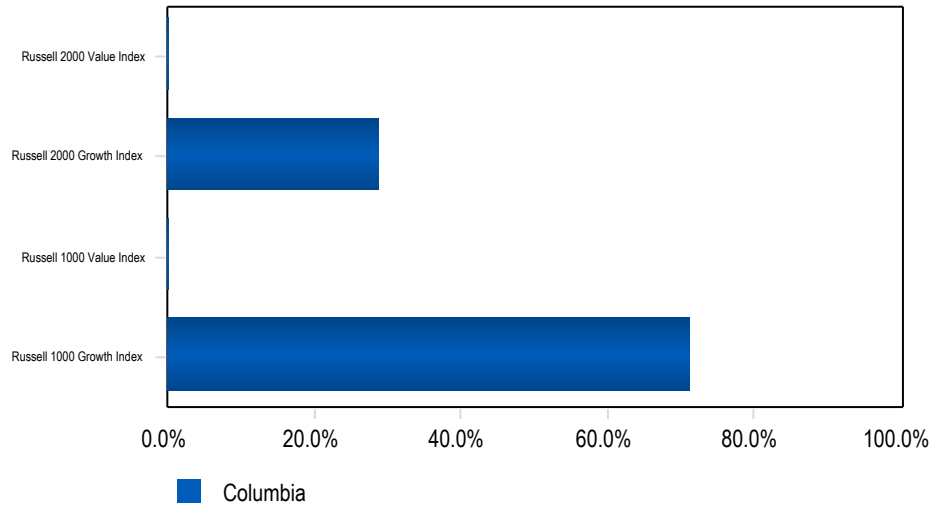
## Distribution of Market Capitalization (%)



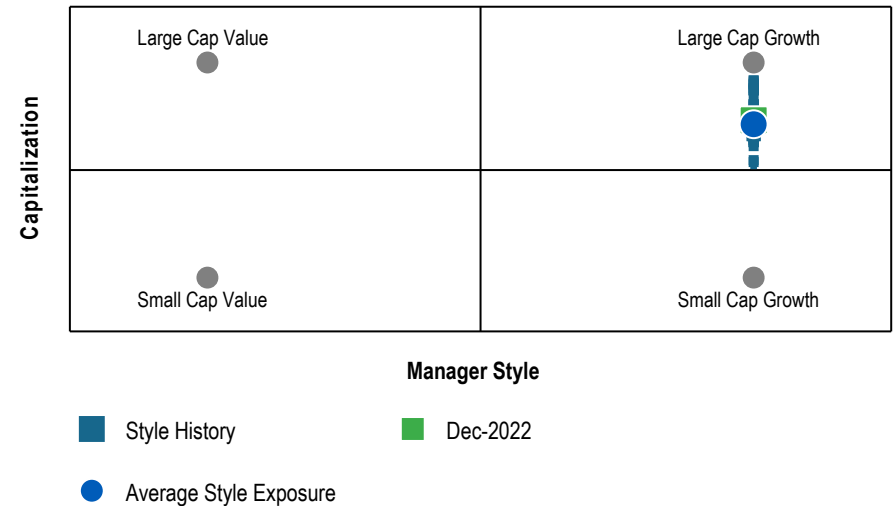
## Sector Weights (%)



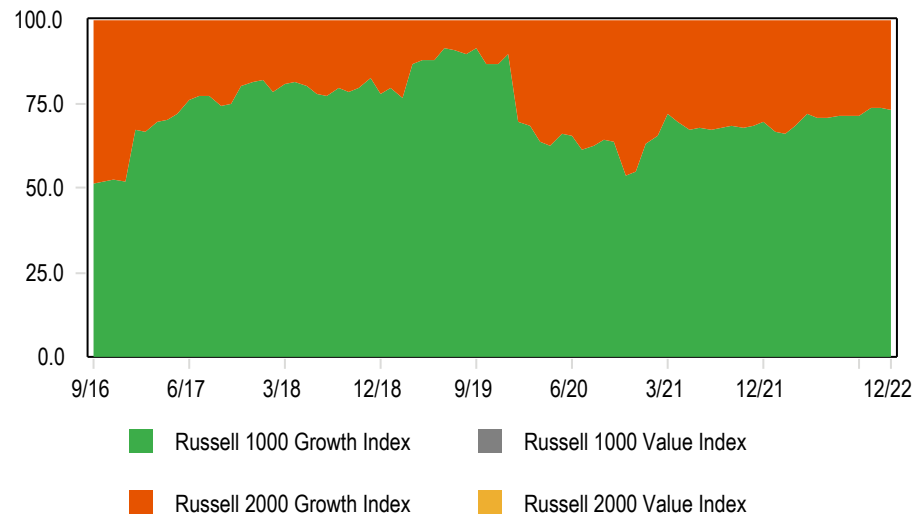
### Investment Style Exposure



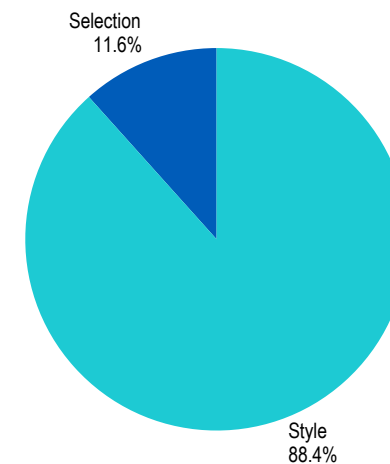
### Style Map(36 Months)

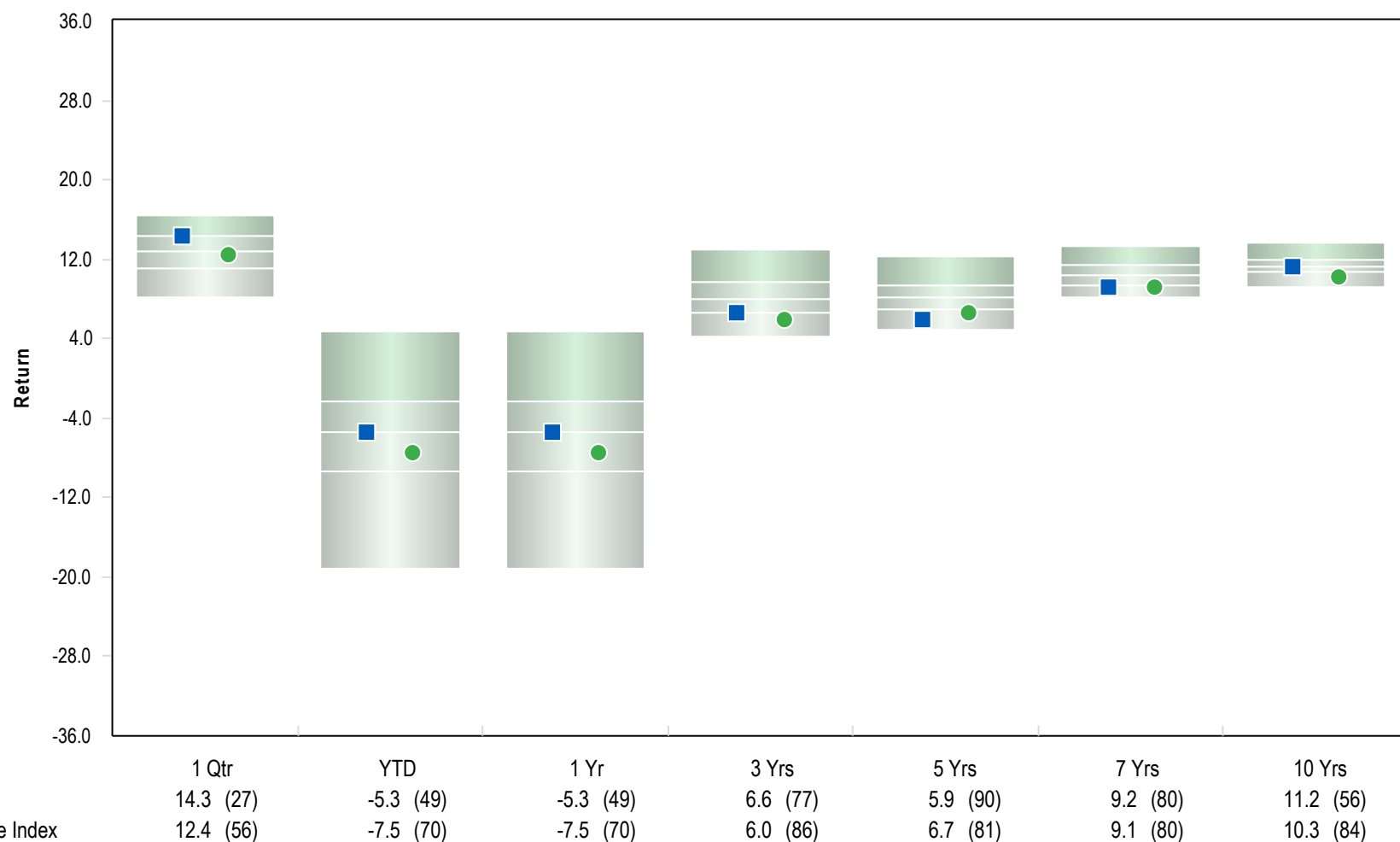


### Style History(36 Months)



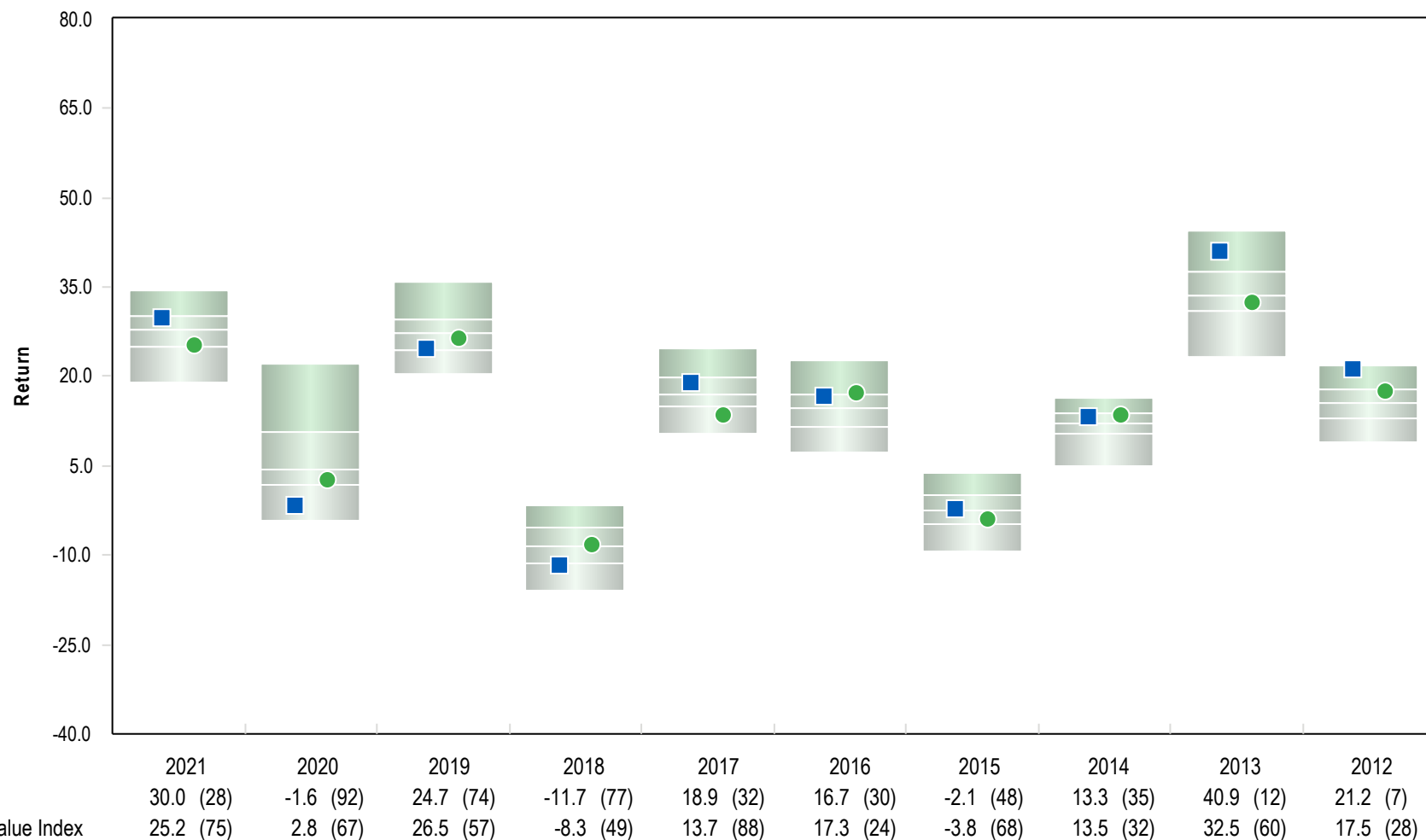
### Return Variance





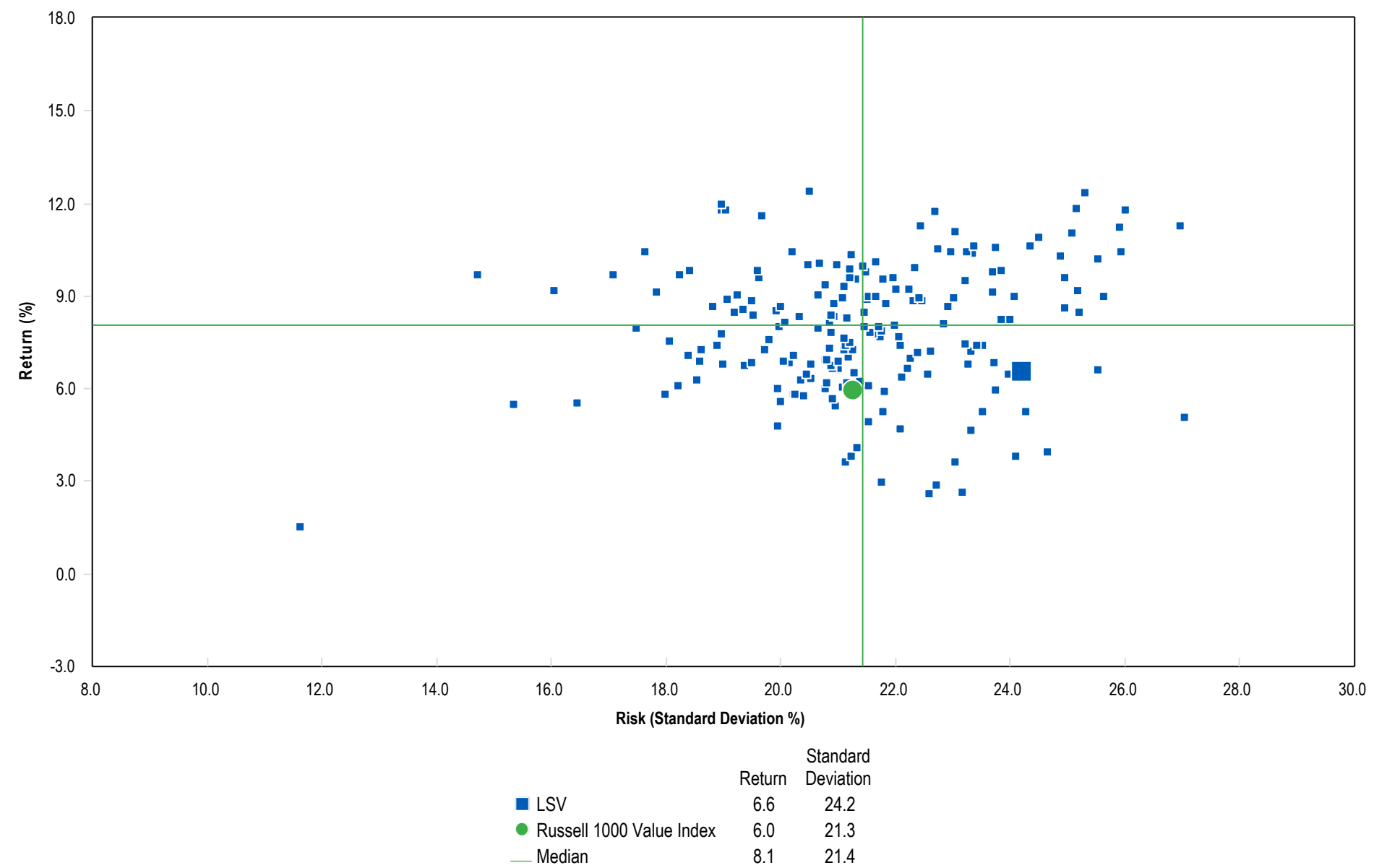
|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 16.5 | 4.6   | 4.6   | 12.9 | 12.2 | 13.3 | 13.6 |
| 1st Quartile    | 14.4 | -2.3  | -2.3  | 9.6  | 9.3  | 11.5 | 12.0 |
| Median          | 12.7 | -5.4  | -5.4  | 8.1  | 8.1  | 10.5 | 11.3 |
| 3rd Quartile    | 11.1 | -9.3  | -9.3  | 6.7  | 7.0  | 9.4  | 10.7 |
| 95th Percentile | 8.1  | -19.1 | -19.1 | 4.1  | 4.9  | 8.1  | 9.2  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



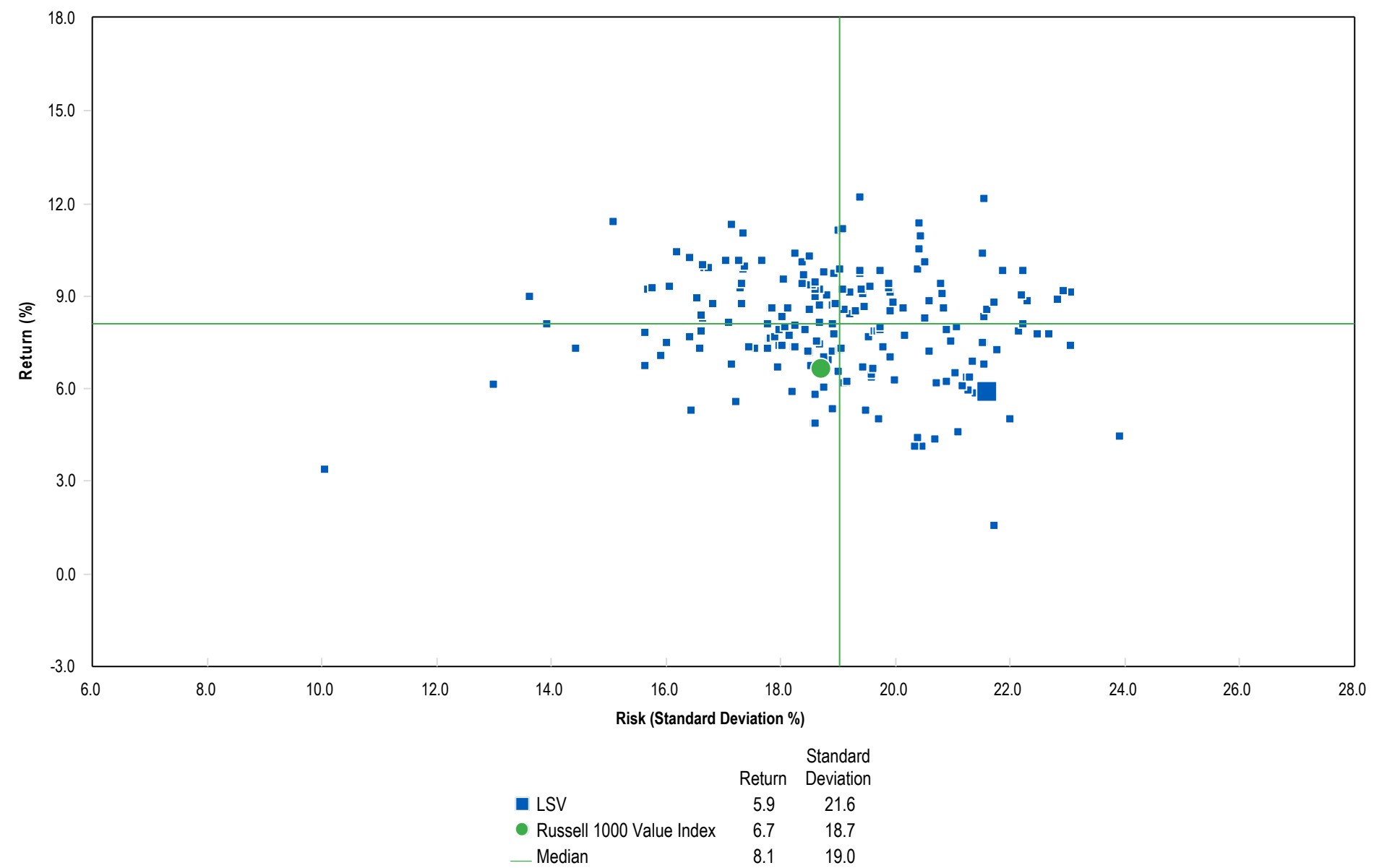
|                 |      |      |      |       |      |      |      |      |      |      |
|-----------------|------|------|------|-------|------|------|------|------|------|------|
| 5th Percentile  | 34.3 | 22.1 | 35.8 | -1.7  | 24.8 | 22.7 | 3.8  | 16.5 | 44.4 | 21.9 |
| 1st Quartile    | 30.2 | 10.8 | 29.6 | -5.3  | 19.8 | 17.1 | 0.0  | 13.9 | 37.6 | 18.0 |
| Median          | 27.8 | 4.4  | 27.4 | -8.4  | 17.1 | 14.8 | -2.4 | 12.1 | 33.7 | 15.7 |
| 3rd Quartile    | 25.1 | 1.7  | 24.5 | -11.5 | 15.1 | 11.6 | -4.8 | 10.3 | 30.9 | 13.1 |
| 95th Percentile | 19.0 | -4.3 | 20.4 | -16.1 | 10.4 | 7.2  | -9.5 | 5.0  | 23.3 | 9.0  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



Calculation based on monthly periodicity.





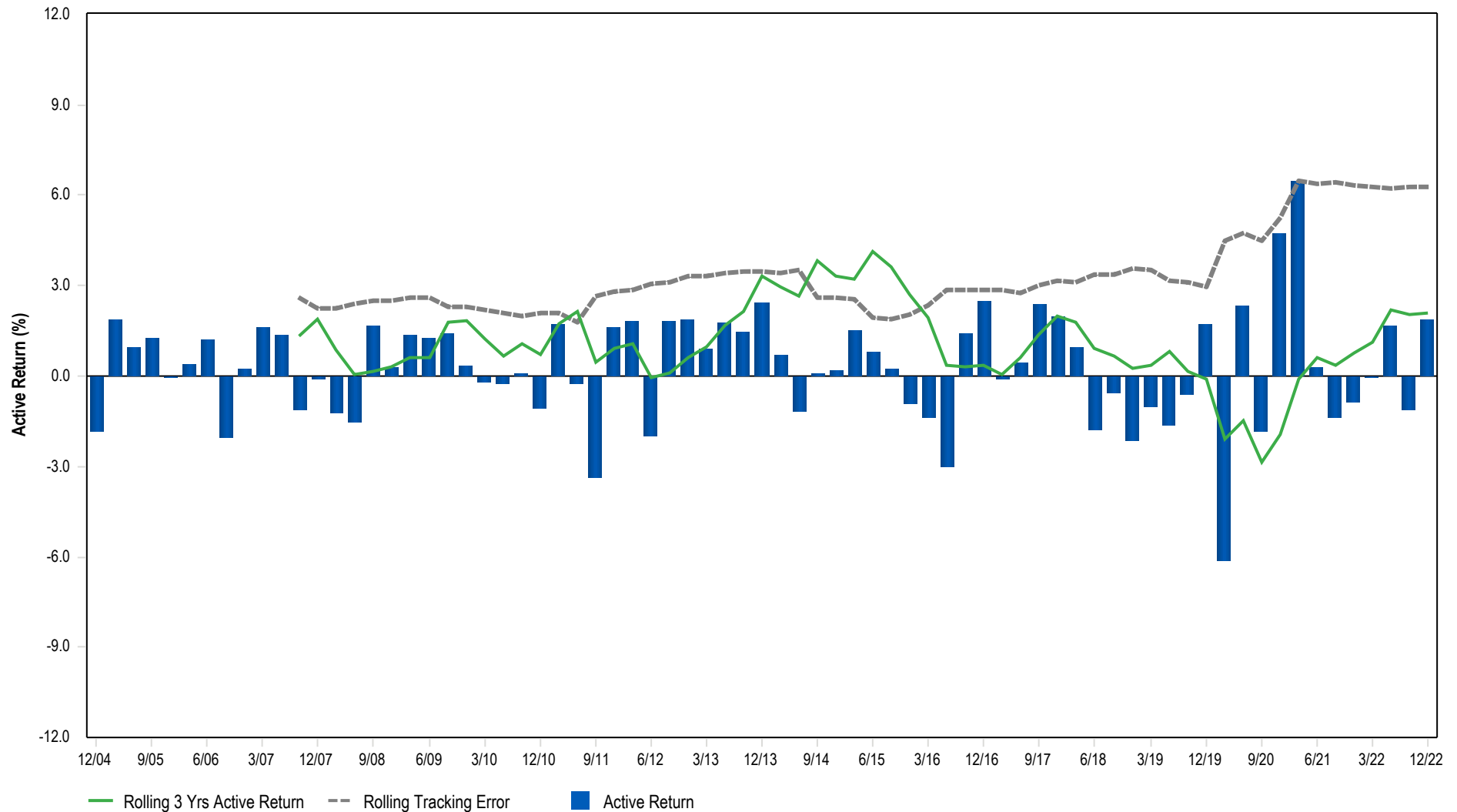
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                          | 1 Qtr | YTD  | 1 Yr | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|--------------------------|-------|------|------|-------|-------|-------|--------|------|------|------|-------|
| LSV                      | 14.3  | -5.3 | -5.3 | 6.6   | 5.9   | 9.2   | 11.2   | 30.0 | -1.6 | 24.7 | -11.7 |
| Russell 1000 Value Index | 12.4  | -7.5 | -7.5 | 6.0   | 6.7   | 9.1   | 10.3   | 25.2 | 2.8  | 26.5 | -8.3  |
| Difference               | 1.9   | 2.2  | 2.2  | 0.6   | -0.8  | 0.1   | 0.9    | 4.8  | -4.4 | -1.8 | -3.4  |



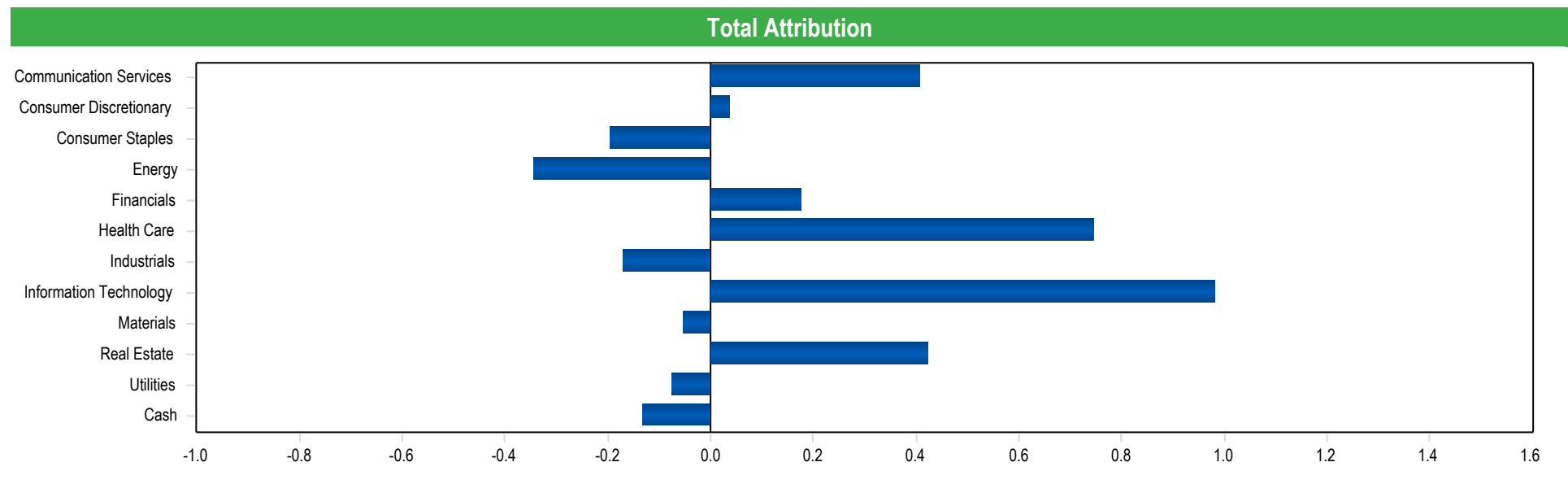
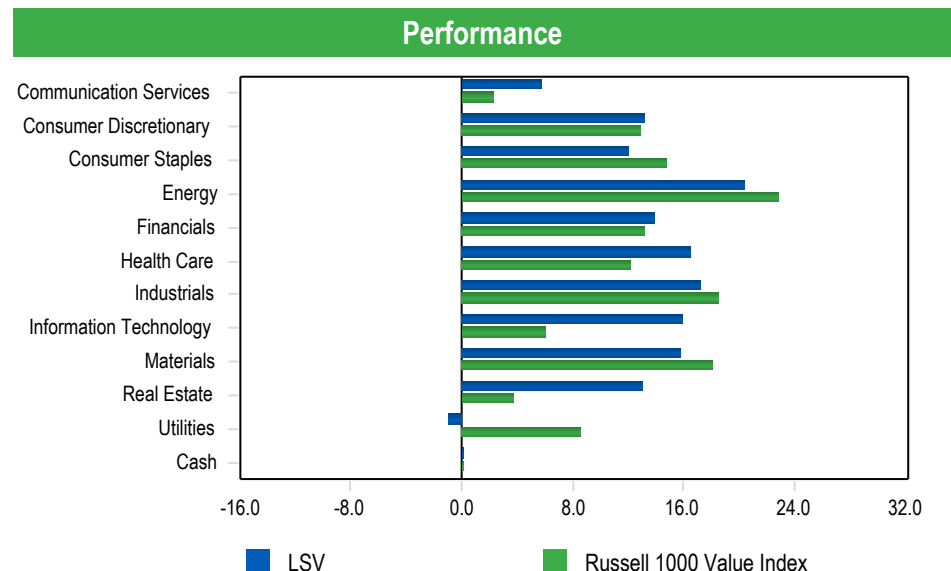
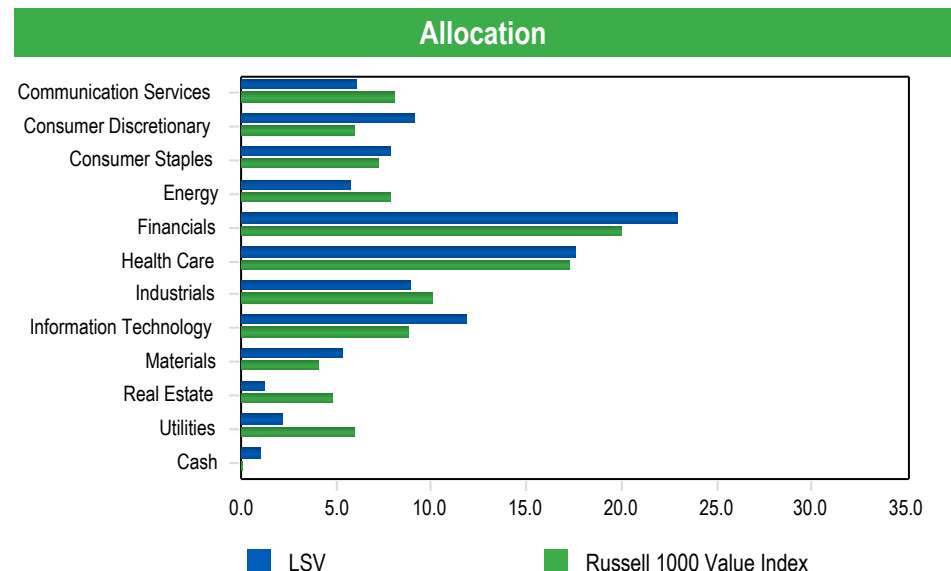
Buy-and-Hold Portfolio 14.2  
 Portfolio Trading 0.1  
 Actual Return 14.3  
 Benchmark Return 12.4  
 Actual Active Return 1.9

Stock Selection 1.3  
 Sector Selection 0.2  
 Interaction 0.3  
 Total Selection 1.8

Portfolio Trading 0.1  
 Benchmark Trading 0.0  
 Active Trading Impact 0.1

Buy & Hold Active Return 1.9

|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 6.1                     | 8.0       | 5.8                                                 | 2.3       | 0.3         | 0.2    | -0.1        | 0.4   |
| Consumer Discretionary | 9.1                     | 6.0       | 13.2                                                | 13.0      | 0.0         | 0.0    | 0.0         | 0.0   |
| Consumer Staples       | 7.8                     | 7.2       | 12.1                                                | 14.8      | -0.2        | 0.0    | 0.0         | -0.2  |
| Energy                 | 5.8                     | 7.8       | 20.4                                                | 22.8      | -0.2        | -0.2   | 0.0         | -0.3  |
| Financials             | 22.9                    | 20.0      | 13.9                                                | 13.2      | 0.1         | 0.0    | 0.0         | 0.2   |
| Health Care            | 17.6                    | 17.3      | 16.5                                                | 12.3      | 0.7         | 0.0    | 0.0         | 0.7   |
| Industrials            | 8.9                     | 10.0      | 17.3                                                | 18.5      | -0.1        | -0.1   | 0.0         | -0.2  |
| Information Technology | 11.8                    | 8.8       | 16.0                                                | 6.0       | 0.9         | -0.2   | 0.3         | 1.0   |
| Materials              | 5.4                     | 4.1       | 15.8                                                | 18.1      | -0.1        | 0.1    | 0.0         | -0.1  |
| Real Estate            | 1.3                     | 4.8       | 13.0                                                | 3.7       | 0.4         | 0.3    | -0.3        | 0.4   |
| Utilities              | 2.2                     | 6.0       | -1.0                                                | 8.6       | -0.6        | 0.1    | 0.4         | -0.1  |
| Cash                   | 1.1                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | -0.1   | 0.0         | -0.1  |
| Total                  | 100.0                   | 100.0     | 14.2                                                | 12.4      | 1.3         | 0.2    | 0.3         | 1.8   |



Buy-and-Hold Portfolio 14.2  
 Portfolio Trading 0.1  
 Actual Return 14.3  
 Benchmark Return 12.4  
 Actual Active Return 1.9

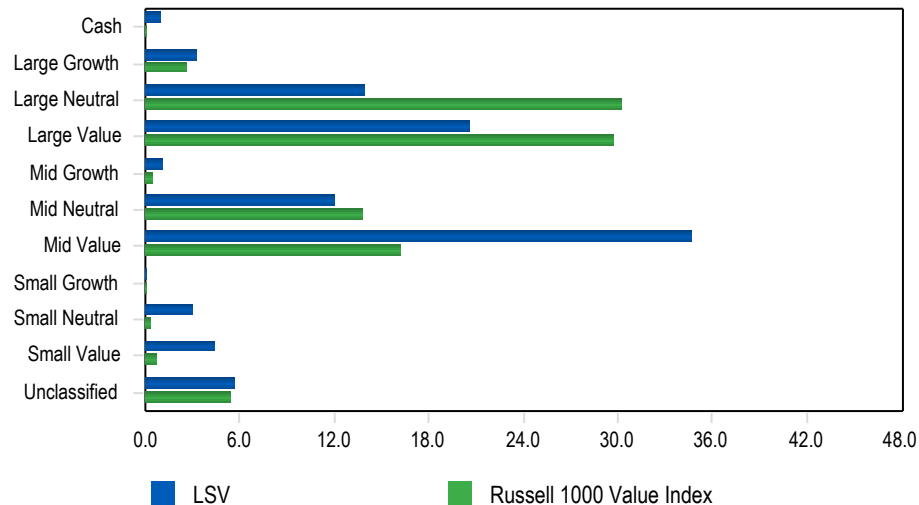
Stock Selection 2.7  
 Style Selection -0.5  
 Interaction -0.4  
 Total Selection 1.8

Portfolio Trading 0.1  
 Benchmark Trading 0.0  
 Active Trading Impact 0.1

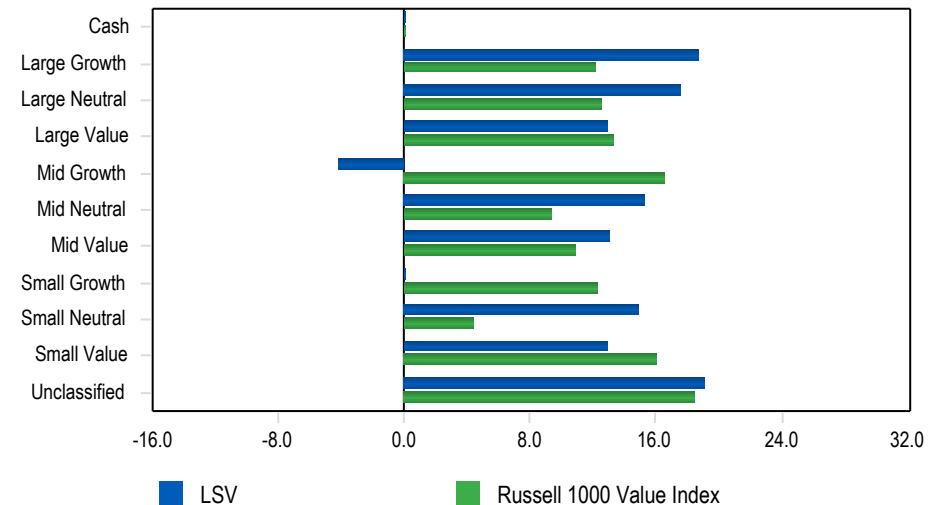
Buy & Hold Active Return 1.9

|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             | Total |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction |       |
| Cash          | 1.1                   | 0.0       | 0.0                                            | 0.0       | 0.0         | -0.1  | 0.0         | -0.1  |
| Large Growth  | 3.3                   | 2.7       | 18.7                                           | 12.2      | 0.2         | 0.0   | 0.0         | 0.2   |
| Large Neutral | 13.9                  | 30.3      | 17.6                                           | 12.5      | 1.5         | 0.0   | -0.8        | 0.7   |
| Large Value   | 20.6                  | 29.8      | 13.0                                           | 13.3      | -0.1        | -0.1  | 0.0         | -0.2  |
| Mid Growth    | 1.2                   | 0.5       | -4.2                                           | 16.6      | -0.1        | 0.0   | -0.1        | -0.2  |
| Mid Neutral   | 12.0                  | 13.8      | 15.3                                           | 9.4       | 0.8         | 0.1   | -0.1        | 0.8   |
| Mid Value     | 34.6                  | 16.3      | 13.1                                           | 10.9      | 0.4         | -0.3  | 0.4         | 0.5   |
| Small Growth  | 0.0                   | 0.0       | 0.0                                            | 12.3      | 0.0         | 0.0   | 0.0         | 0.0   |
| Small Neutral | 3.1                   | 0.4       | 15.0                                           | 4.5       | 0.0         | -0.2  | 0.3         | 0.1   |
| Small Value   | 4.4                   | 0.8       | 12.9                                           | 16.1      | 0.0         | 0.1   | -0.1        | 0.0   |
| Unclassified  | 5.7                   | 5.5       | 19.1                                           | 18.4      | 0.0         | 0.0   | 0.0         | 0.1   |
| Total         | 100.0                 | 100.0     | 14.2                                           | 12.4      | 2.7         | -0.5  | -0.4        | 1.8   |

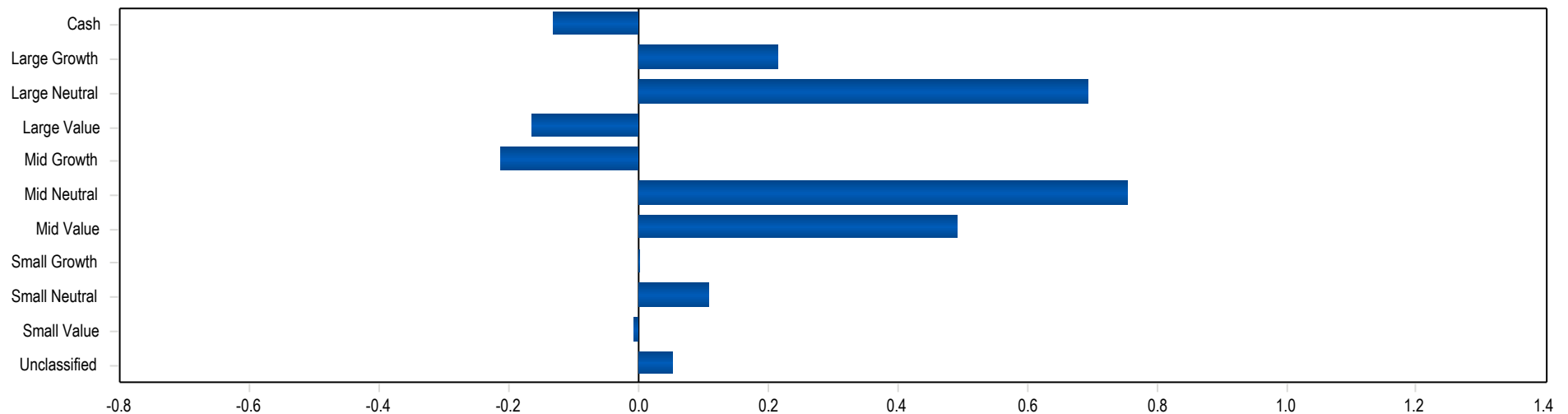
### Allocation



### Performance



### Total Attribution



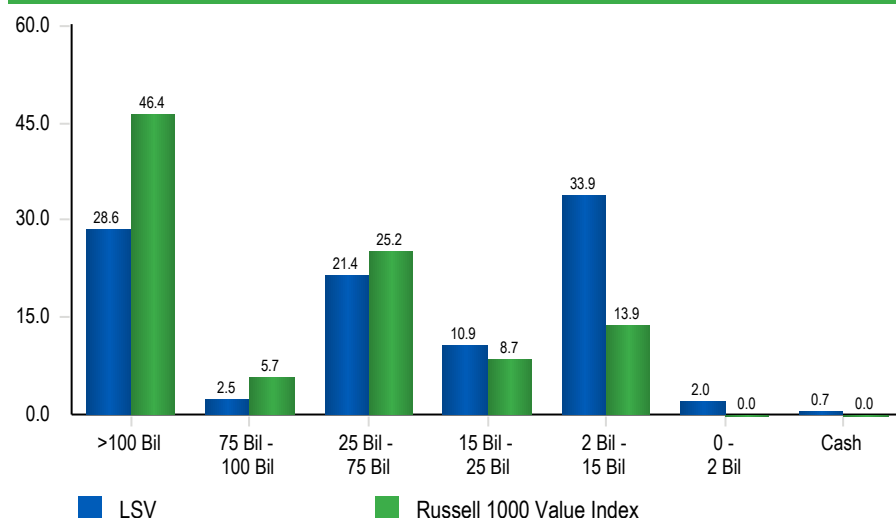
## Top Ten Equity Holdings

|                            | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|----------------------------|----------------------|----------------------|-------------------|----------------------|
| Merck & Co Inc             | 3.1                  | 0.9                  | 2.2               | 29.7                 |
| Exxon Mobil Corp           | 2.9                  | 2.5                  | 0.4               | 27.3                 |
| Pfizer Inc                 | 2.6                  | 1.6                  | 1.0               | 18.1                 |
| Bristol-Myers Squibb Co    | 2.2                  | 0.8                  | 1.4               | 2.0                  |
| Verizon Communications Inc | 1.8                  | 0.9                  | 0.9               | 5.6                  |
| Amgen Inc                  | 1.6                  | 0.1                  | 1.5               | 17.3                 |
| Ameriprise Financial Inc   | 1.5                  | 0.1                  | 1.4               | 24.1                 |
| McKesson Corp              | 1.4                  | 0.2                  | 1.2               | 10.5                 |
| Cummins Inc.               | 1.4                  | 0.2                  | 1.2               | 19.8                 |
| Intel Corp                 | 1.4                  | 0.6                  | 0.8               | 3.9                  |
| % of Portfolio             | 19.9                 | 7.9                  | 12.0              |                      |

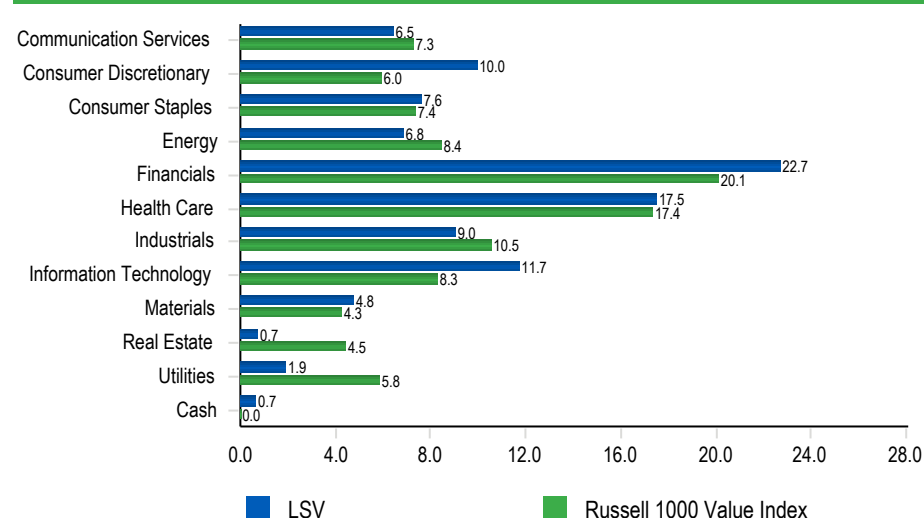
## Portfolio Characteristics

|                           | Portfolio      | Benchmark       |
|---------------------------|----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 77,516,616,800 | 150,837,985,042 |
| Median Mkt. Cap (\$)      | 12,013,395,995 | 11,339,673,090  |
| Price/Earnings ratio      | 9.9            | 15.1            |
| Price/Book ratio          | 2.1            | 2.4             |
| 5 Yr. EPS Growth Rate (%) | 15.2           | 12.9            |
| Current Yield (%)         | 2.9            | 2.3             |
| Beta (5 Years, Monthly)   | 1.1            | 1.0             |
| Number of Stocks          | 149            | 852             |

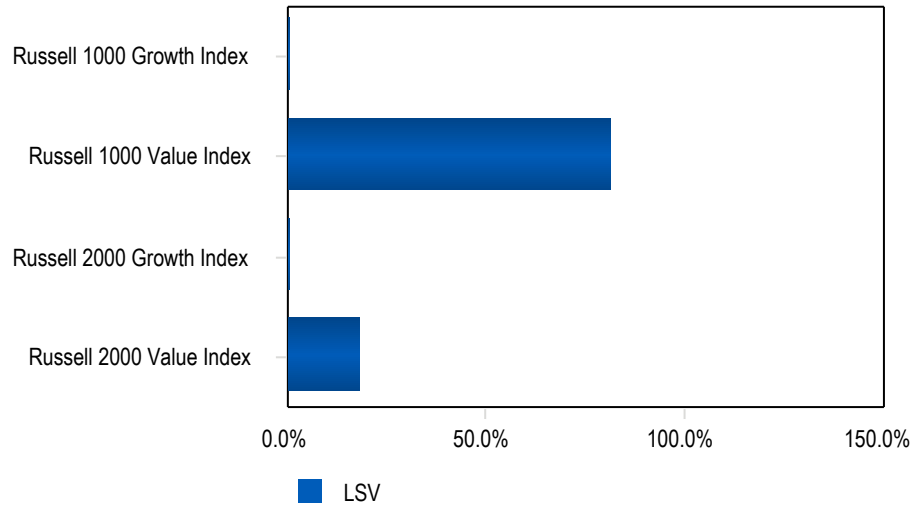
## Distribution of Market Capitalization (%)



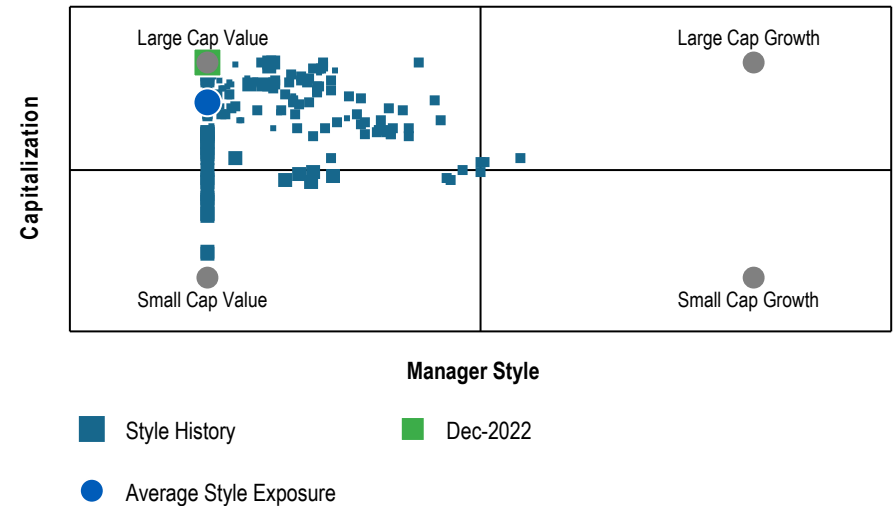
## Sector Weights (%)



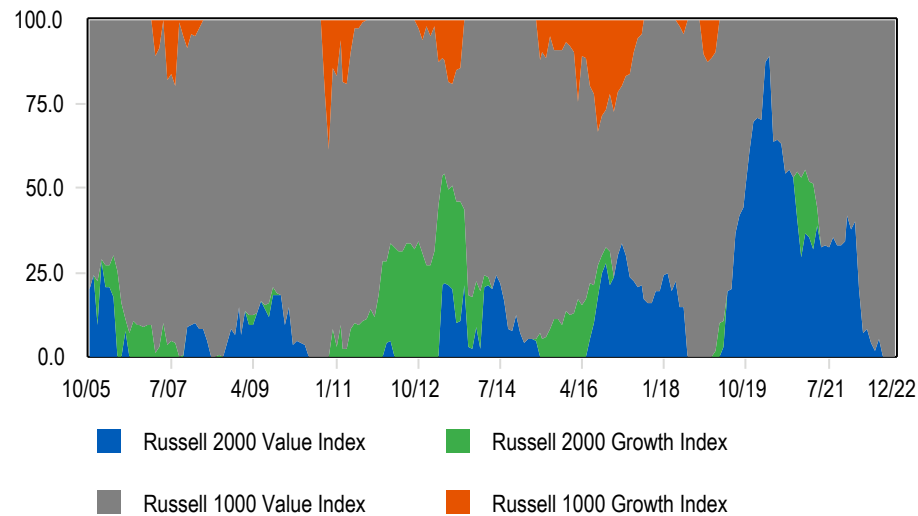
### Investment Style Exposure



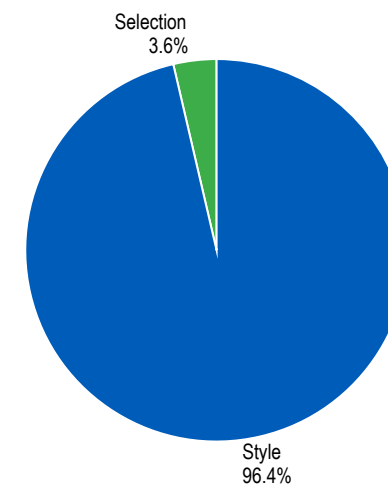
### Style Map(12 Months)



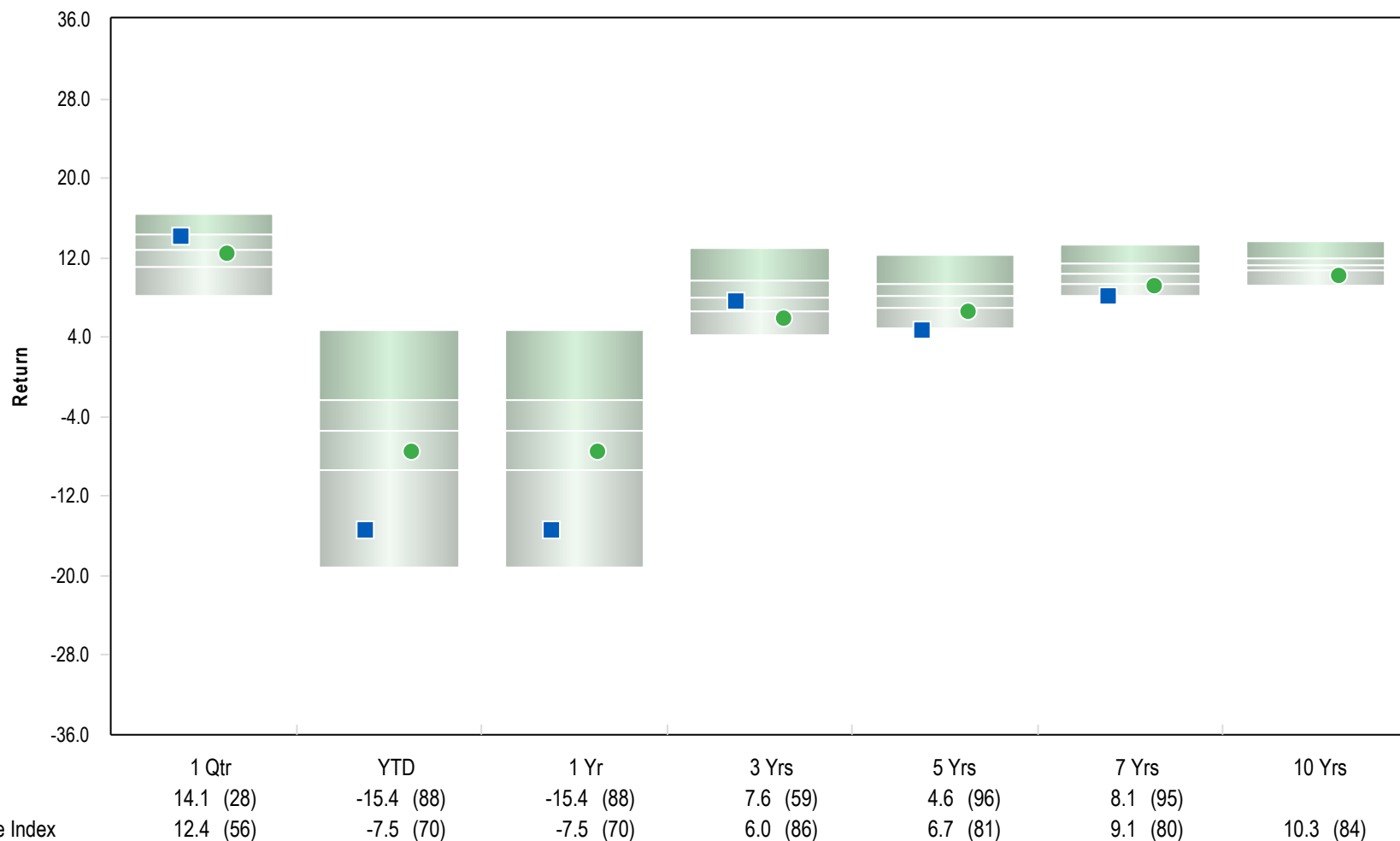
### Style History(12 Months)



### Return Variance

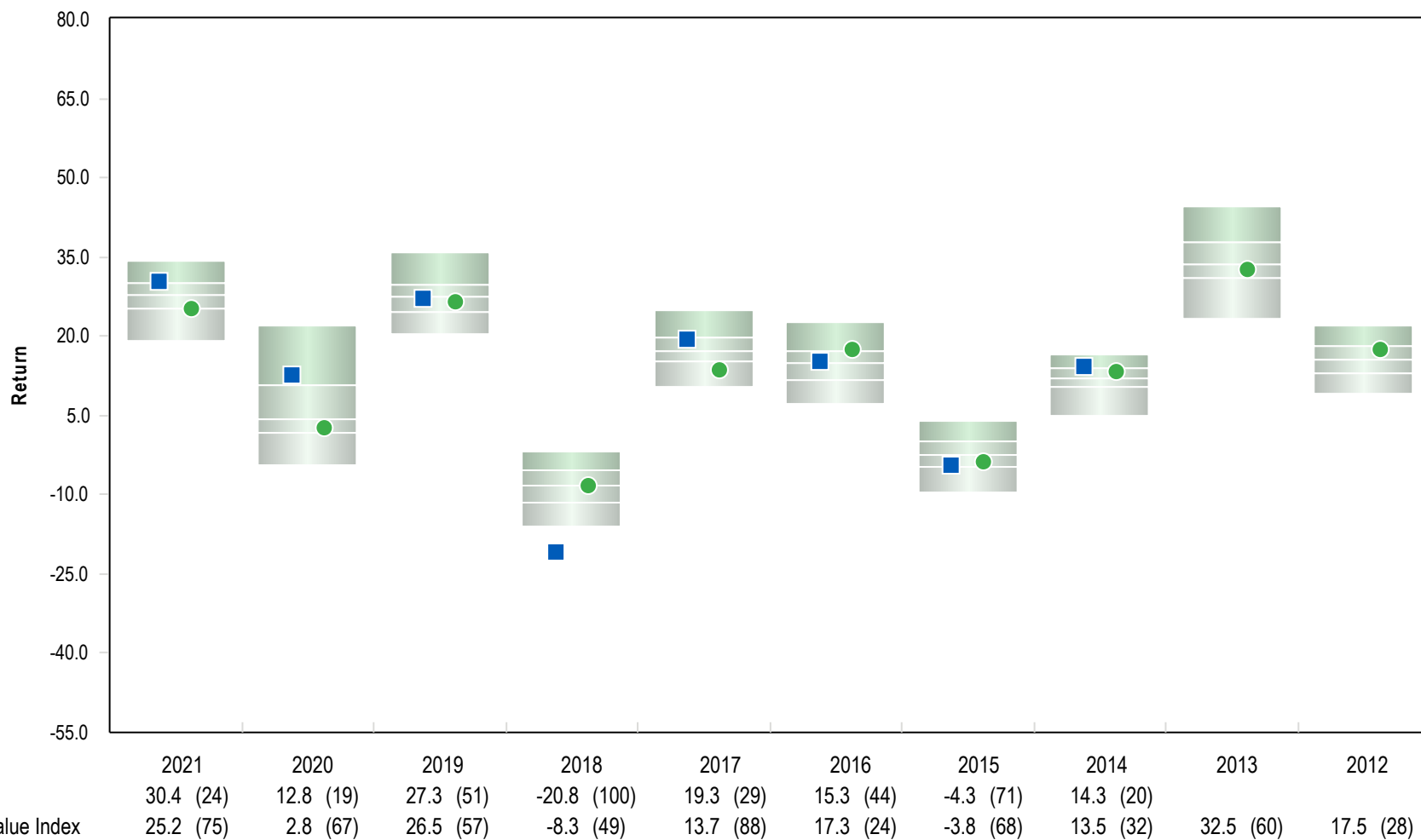






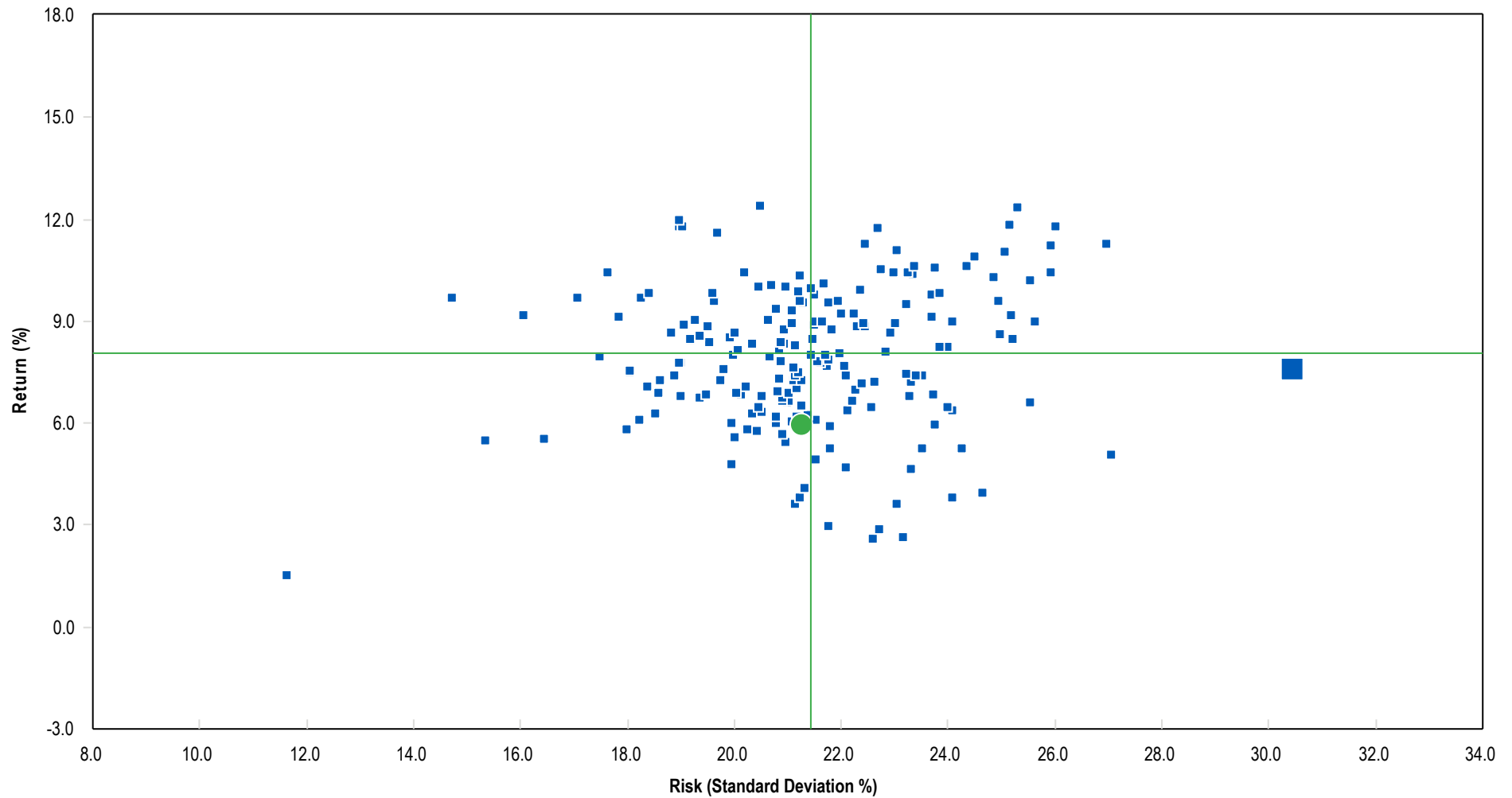
|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 16.5 | 4.6   | 4.6   | 12.9 | 12.2 | 13.3 | 13.6 |
| 1st Quartile    | 14.4 | -2.3  | -2.3  | 9.6  | 9.3  | 11.5 | 12.0 |
| Median          | 12.7 | -5.4  | -5.4  | 8.1  | 8.1  | 10.5 | 11.3 |
| 3rd Quartile    | 11.1 | -9.3  | -9.3  | 6.7  | 7.0  | 9.4  | 10.7 |
| 95th Percentile | 8.1  | -19.1 | -19.1 | 4.1  | 4.9  | 8.1  | 9.2  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



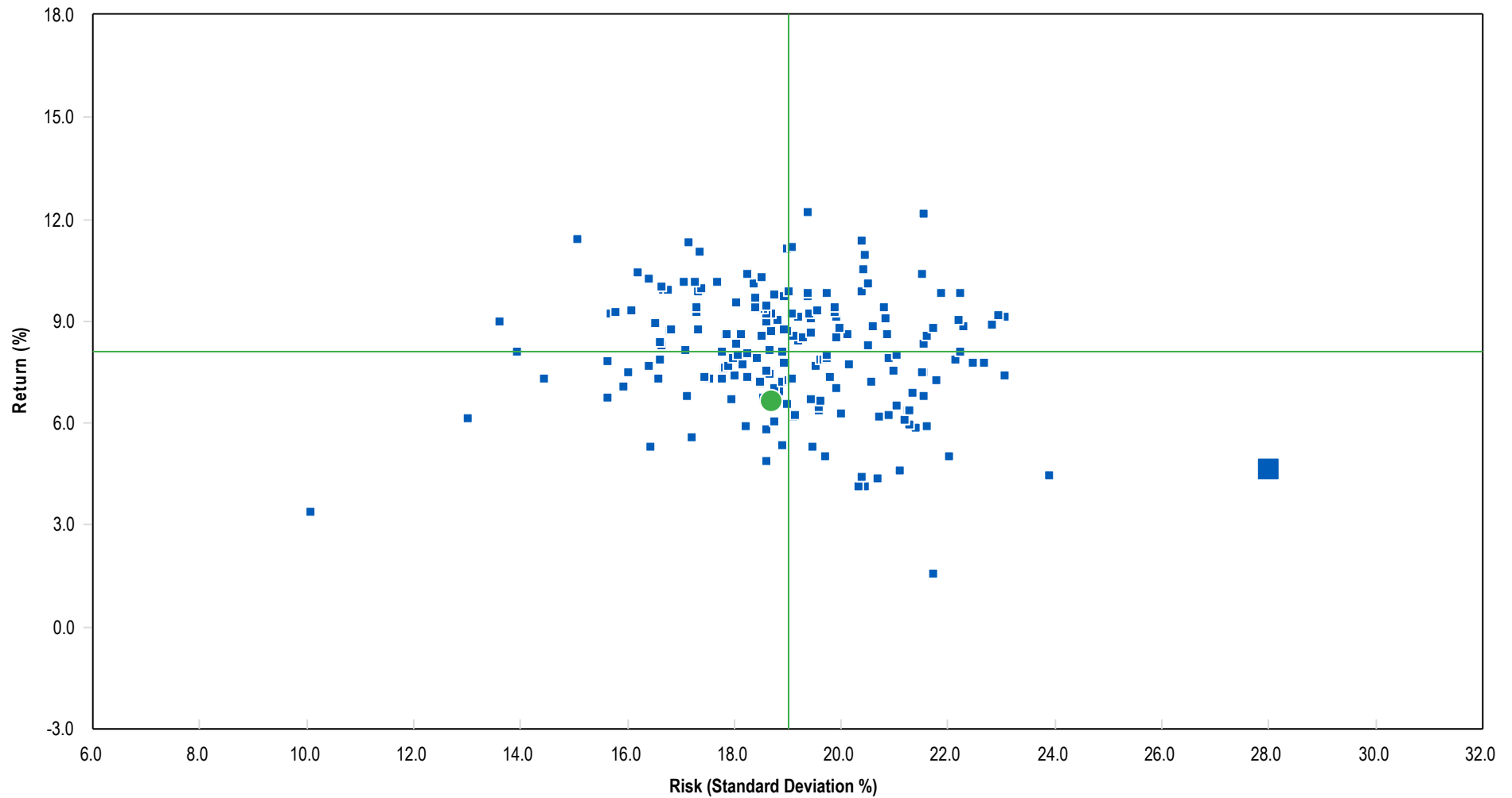
|                 |      |      |      |       |      |      |      |      |      |      |
|-----------------|------|------|------|-------|------|------|------|------|------|------|
| 5th Percentile  | 34.3 | 22.1 | 35.8 | -1.7  | 24.8 | 22.7 | 3.8  | 16.5 | 44.4 | 21.9 |
| 1st Quartile    | 30.2 | 10.8 | 29.6 | -5.3  | 19.8 | 17.1 | 0.0  | 13.9 | 37.6 | 18.0 |
| Median          | 27.8 | 4.4  | 27.4 | -8.4  | 17.1 | 14.8 | -2.4 | 12.1 | 33.7 | 15.7 |
| 3rd Quartile    | 25.1 | 1.7  | 24.5 | -11.5 | 15.1 | 11.6 | -4.8 | 10.3 | 30.9 | 13.1 |
| 95th Percentile | 19.0 | -4.3 | 20.4 | -16.1 | 10.4 | 7.2  | -9.5 | 5.0  | 23.3 | 9.0  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                            | Return | Standard<br>Deviation |
|----------------------------|--------|-----------------------|
| ■ Lyrical                  | 7.6    | 30.4                  |
| ● Russell 1000 Value Index | 6.0    | 21.3                  |
| — Median                   | 8.1    | 21.4                  |

Calculation based on monthly periodicity.



|                            | Return | Standard<br>Deviation |
|----------------------------|--------|-----------------------|
| ■ Lyrical                  | 4.6    | 28.0                  |
| ● Russell 1000 Value Index | 6.7    | 18.7                  |
| — Median                   | 8.1    | 19.0                  |

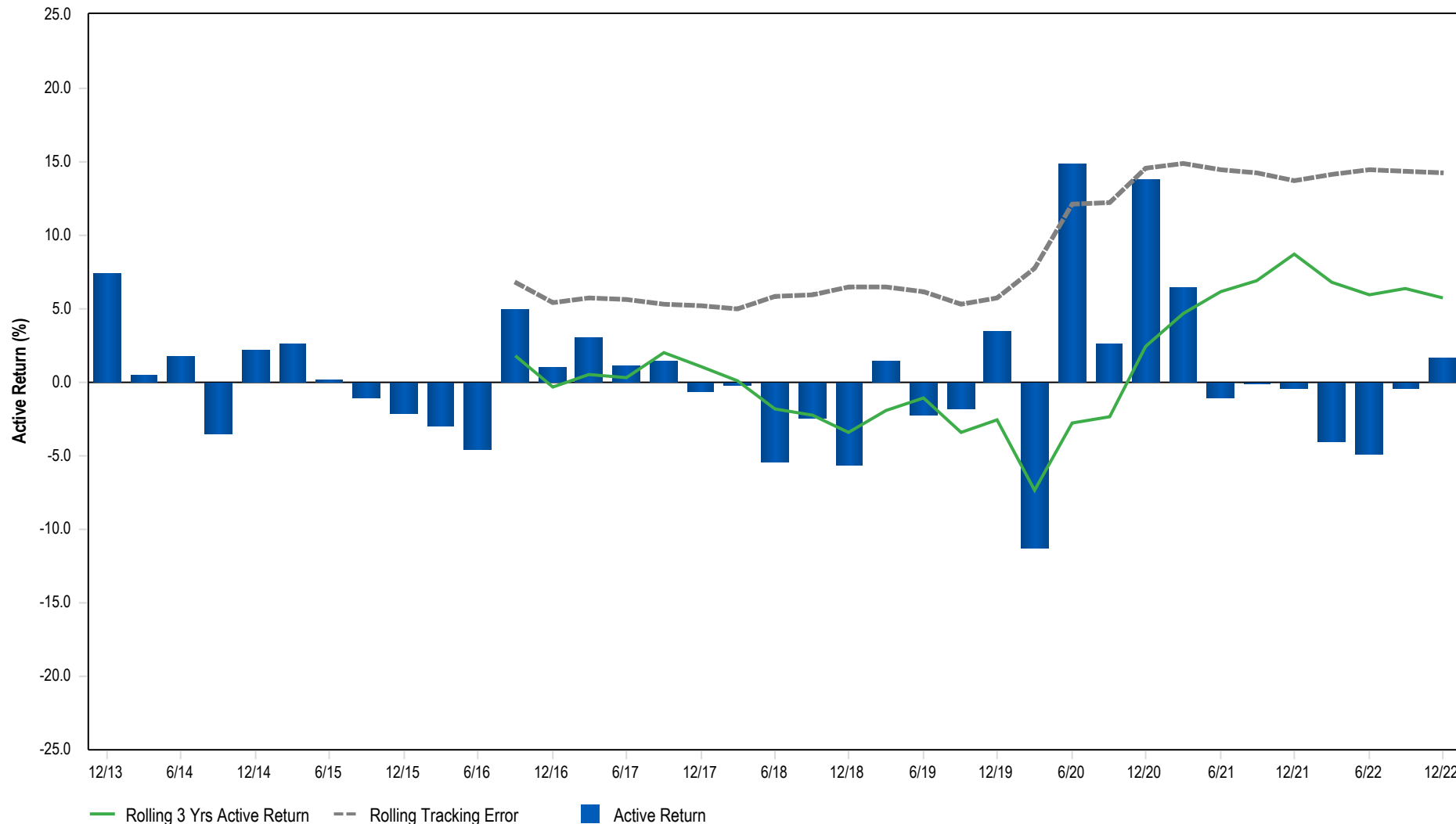
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                          | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|--------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Lyrical                  | 14.1  | -15.4 | -15.4 | 7.6   | 4.6   | 8.1   |        | 30.4 | 12.8 | 27.3 | -20.8 |
| Russell 1000 Value Index | 12.4  | -7.5  | -7.5  | 6.0   | 6.7   | 9.1   | 10.3   | 25.2 | 2.8  | 26.5 | -8.3  |
| Difference               | 1.7   | -7.9  | -7.9  | 1.6   | -2.1  | -1.0  |        | 5.2  | 10.0 | 0.8  | -12.5 |



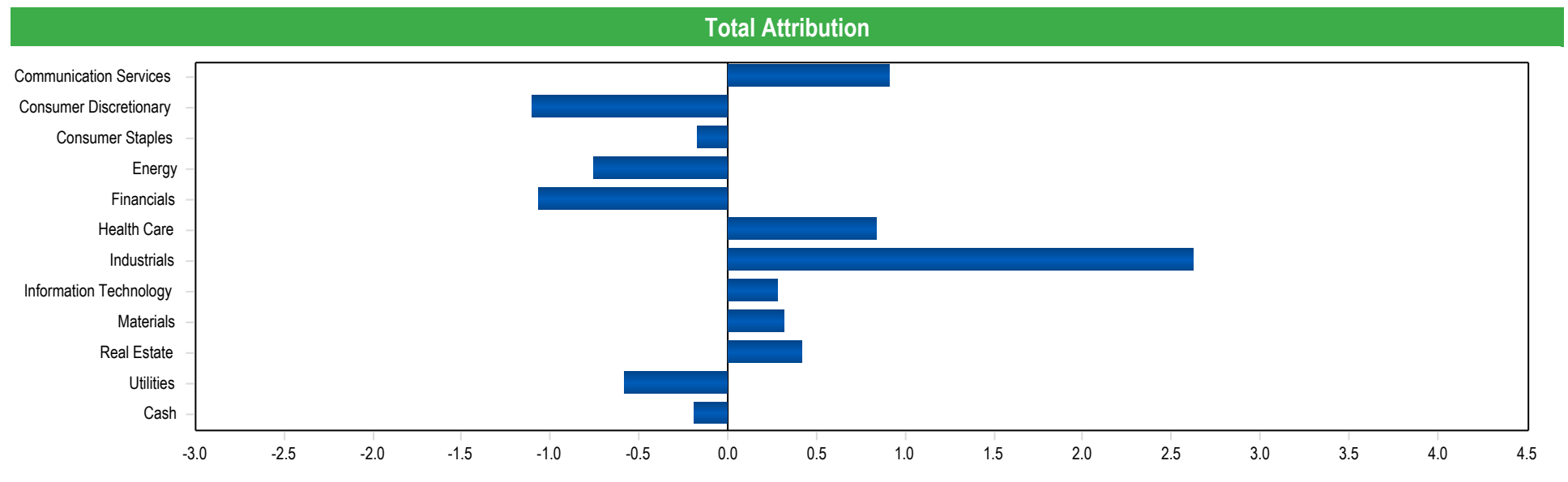
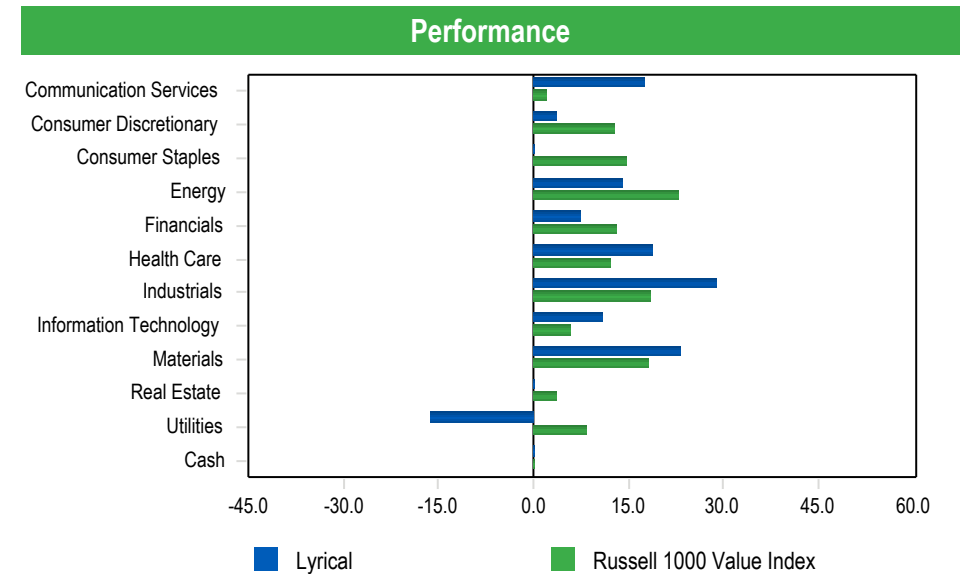
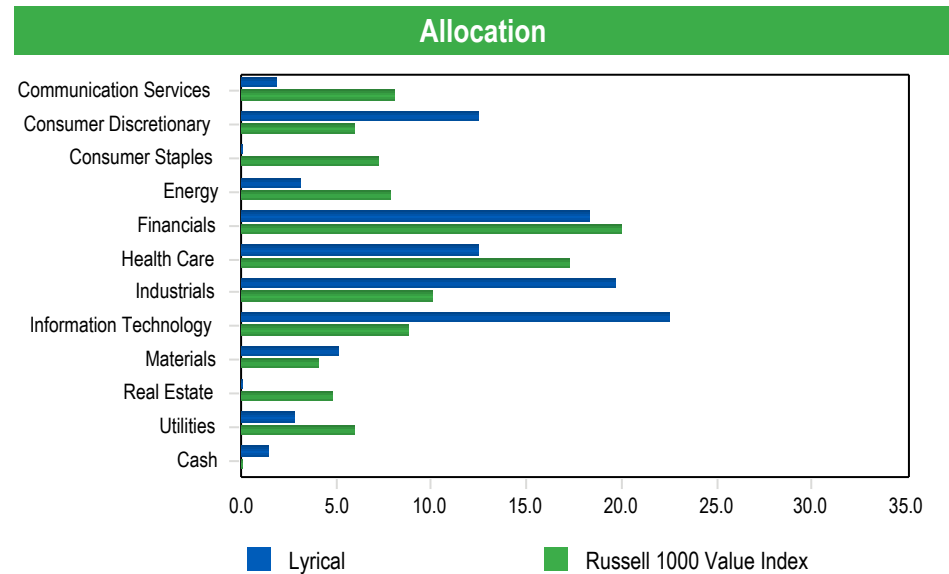
Buy-and-Hold Portfolio 13.9  
 Portfolio Trading 0.2  
 Actual Return 14.1  
 Benchmark Return 12.4  
 Actual Active Return 1.7

Stock Selection 0.2  
 Sector Selection 0.1  
 Interaction 1.2  
 Total Selection 1.5

Portfolio Trading 0.2  
 Benchmark Trading 0.0  
 Active Trading Impact 0.2

Buy & Hold Active Return 1.7

|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 1.9                     | 8.0       | 17.8                                                | 2.3       | 1.2         | 0.6    | -1.0        | 0.9   |
| Consumer Discretionary | 12.5                    | 6.0       | 3.9                                                 | 13.0      | -0.5        | 0.0    | -0.6        | -1.1  |
| Consumer Staples       | 0.0                     | 7.2       | 0.0                                                 | 14.8      | 0.0         | -0.2   | 0.0         | -0.2  |
| Energy                 | 3.1                     | 7.8       | 14.1                                                | 22.8      | -0.7        | -0.5   | 0.4         | -0.8  |
| Financials             | 18.3                    | 20.0      | 7.5                                                 | 13.2      | -1.1        | 0.0    | 0.1         | -1.1  |
| Health Care            | 12.4                    | 17.3      | 19.0                                                | 12.3      | 1.2         | 0.0    | -0.3        | 0.8   |
| Industrials            | 19.7                    | 10.0      | 28.8                                                | 18.5      | 1.0         | 0.6    | 1.0         | 2.6   |
| Information Technology | 22.6                    | 8.8       | 11.1                                                | 6.0       | 0.5         | -0.9   | 0.7         | 0.3   |
| Materials              | 5.1                     | 4.1       | 23.2                                                | 18.1      | 0.2         | 0.1    | 0.1         | 0.3   |
| Real Estate            | 0.0                     | 4.8       | 0.0                                                 | 3.7       | 0.0         | 0.4    | 0.0         | 0.4   |
| Utilities              | 2.8                     | 6.0       | -16.2                                               | 8.6       | -1.5        | 0.1    | 0.8         | -0.6  |
| Cash                   | 1.5                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | -0.2   | 0.0         | -0.2  |
| Total                  | 100.0                   | 100.0     | 13.9                                                | 12.4      | 0.2         | 0.1    | 1.2         | 1.5   |



Buy-and-Hold Portfolio 13.9

Portfolio Trading 0.2

Actual Return 14.1

Benchmark Return 12.4

Actual Active Return 1.7

Stock Selection -3.8

Style Selection -0.5

Interaction 5.8

Total Selection 1.5

Portfolio Trading 0.2

Benchmark Trading 0.0

Active Trading Impact 0.2

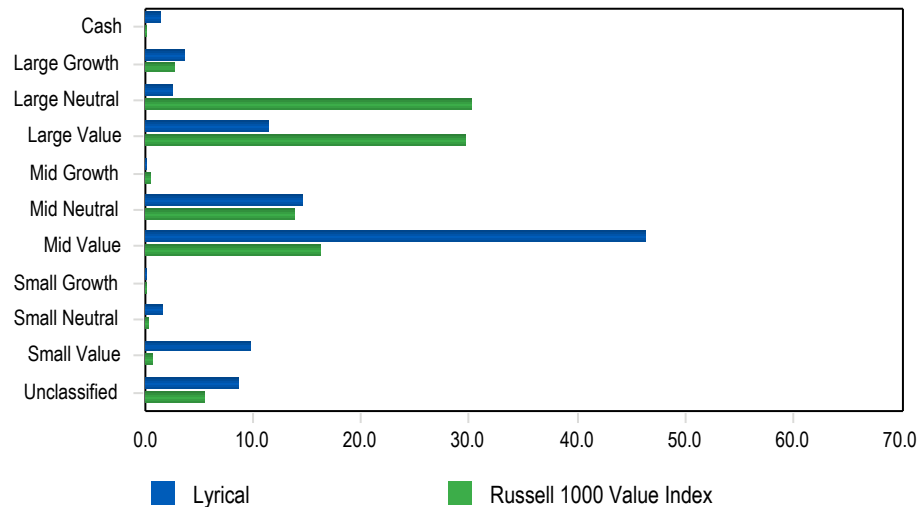
Buy &amp; Hold Active Return 1.7

Performance-1 Quarter Ending December  
31, 2022

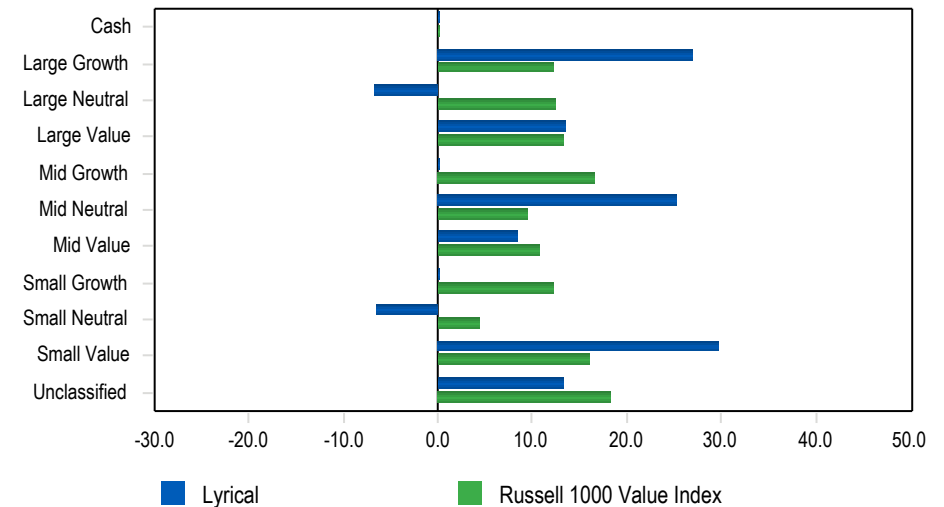
|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December<br>31, 2022 |           | Attribution |       |             | Total |
|---------------|-----------------------|-----------|---------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                         | Benchmark | Stock       | Style | Interaction |       |
| Cash          | 1.5                   | 0.0       | 0.0                                               | 0.0       | 0.0         | -0.2  | 0.0         | -0.2  |
| Large Growth  | 3.7                   | 2.7       | 27.0                                              | 12.2      | 0.4         | 0.0   | 0.1         | 0.5   |
| Large Neutral | 2.5                   | 30.3      | -6.7                                              | 12.5      | -5.8        | 0.0   | 5.3         | -0.5  |
| Large Value   | 11.5                  | 29.8      | 13.5                                              | 13.3      | 0.0         | -0.2  | 0.0         | -0.2  |
| Mid Growth    | 0.0                   | 0.5       | 0.0                                               | 16.6      | 0.0         | 0.0   | 0.0         | 0.0   |
| Mid Neutral   | 14.5                  | 13.8      | 25.4                                              | 9.4       | 2.2         | 0.0   | 0.1         | 2.3   |
| Mid Value     | 46.3                  | 16.3      | 8.4                                               | 10.9      | -0.4        | -0.5  | -0.7        | -1.6  |
| Small Growth  | 0.0                   | 0.0       | 0.0                                               | 12.3      | 0.0         | 0.0   | 0.0         | 0.0   |
| Small Neutral | 1.6                   | 0.4       | -6.5                                              | 4.5       | 0.0         | -0.1  | -0.1        | -0.3  |
| Small Value   | 9.7                   | 0.8       | 29.7                                              | 16.1      | 0.1         | 0.3   | 1.2         | 1.7   |
| Unclassified  | 8.7                   | 5.5       | 13.4                                              | 18.4      | -0.3        | 0.2   | -0.2        | -0.2  |
| Total         | 100.0                 | 100.0     | 13.9                                              | 12.4      | -3.8        | -0.5  | 5.8         | 1.5   |



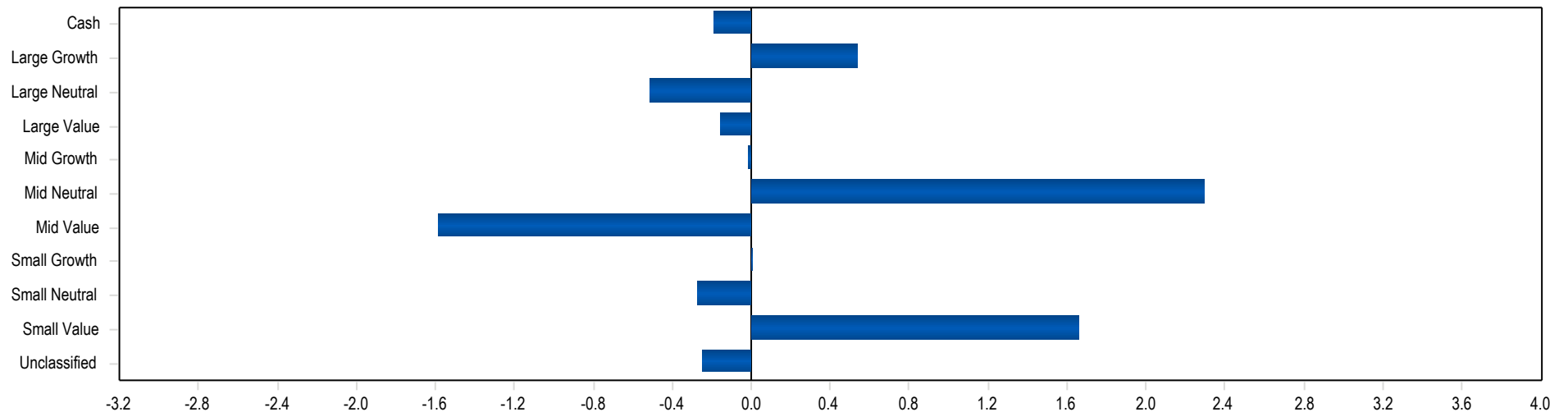
### Allocation



### Performance



### Total Attribution



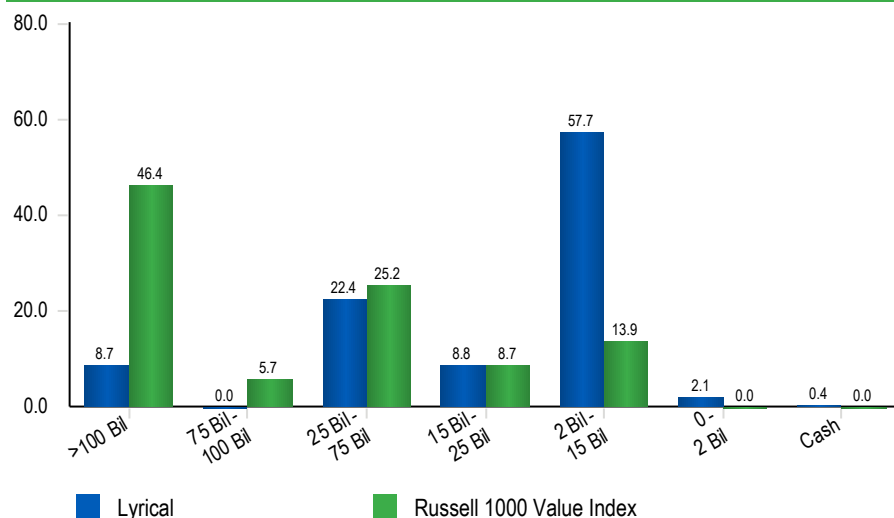
## Top Ten Equity Holdings

|                          | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|--------------------------|----------------------|----------------------|-------------------|----------------------|
| Ameriprise Financial Inc | 6.8                  | 0.1                  | 6.7               | 24.1                 |
| United Rentals Inc.      | 6.6                  | 0.1                  | 6.5               | 31.6                 |
| Univar Solutions Inc     | 5.5                  | 0.0                  | 5.5               | 39.8                 |
| Cigna Corp               | 4.7                  | 0.5                  | 4.2               | 19.8                 |
| AerCap Holdings NV       | 4.6                  | 0.0                  | 4.6               | 37.8                 |
| HCA Healthcare Inc       | 4.5                  | 0.3                  | 4.2               | 30.9                 |
| Flex Ltd                 | 4.1                  | 0.0                  | 4.1               | 28.8                 |
| Broadcom Inc             | 4.0                  | 0.0                  | 4.0               | 27.0                 |
| Arrow Electronics Inc    | 3.7                  | 0.0                  | 3.7               | 13.4                 |
| Assurant Inc.            | 3.6                  | 0.0                  | 3.6               | -13.4                |
| % of Portfolio           | 48.1                 | 1.0                  | 47.1              |                      |

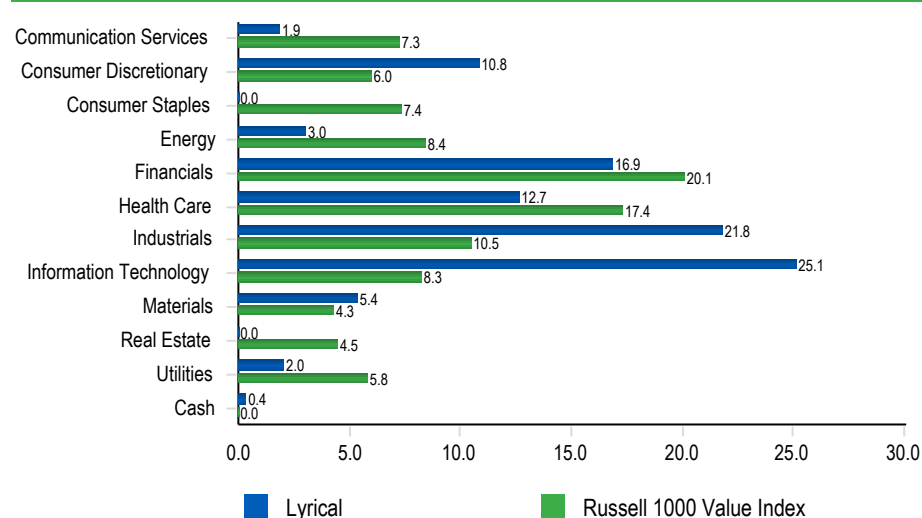
## Portfolio Characteristics

|                           | Portfolio      | Benchmark       |
|---------------------------|----------------|-----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 30,602,542,918 | 150,837,985,042 |
| Median Mkt. Cap (\$)      | 8,841,462,370  | 11,339,673,090  |
| Price/Earnings ratio      | 9.9            | 15.1            |
| Price/Book ratio          | 2.3            | 2.4             |
| 5 Yr. EPS Growth Rate (%) | 19.5           | 12.9            |
| Current Yield (%)         | 1.5            | 2.3             |
| Beta (5 Years, Monthly)   | 1.4            | 1.0             |
| Number of Stocks          | 34             | 852             |

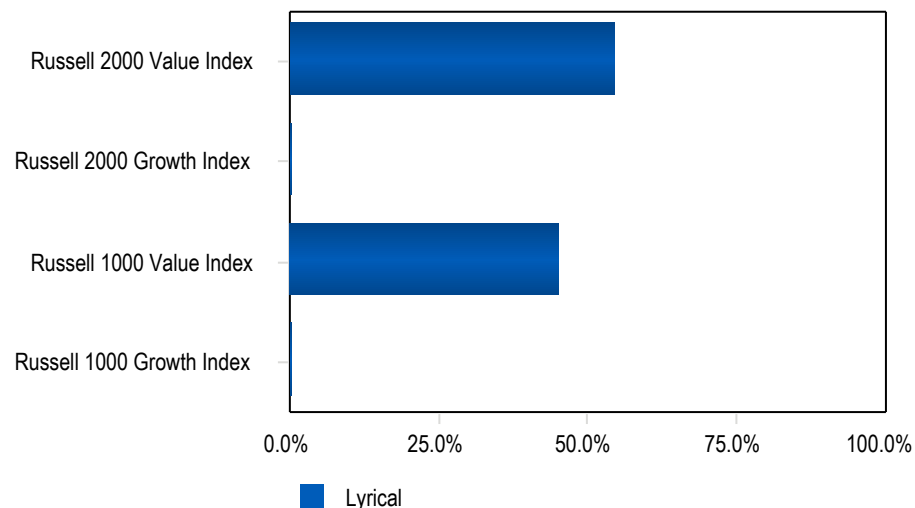
## Distribution of Market Capitalization (%)



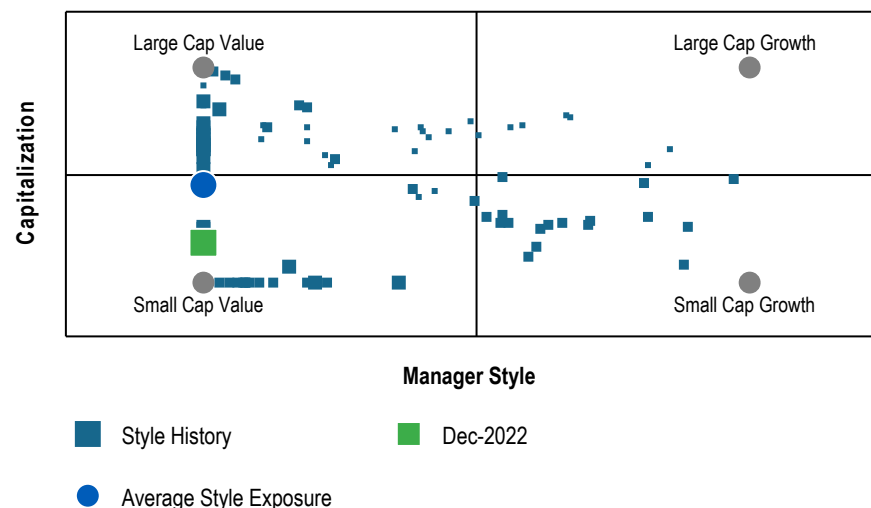
## Sector Weights (%)



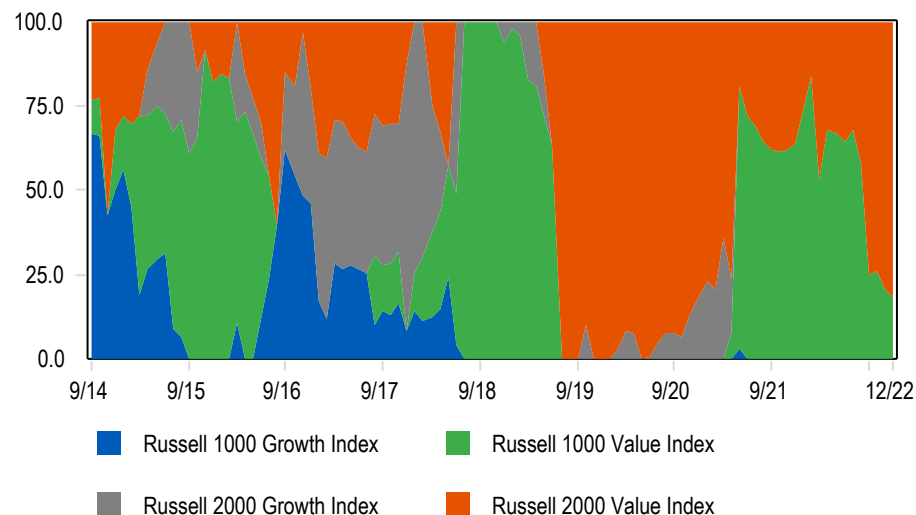
### Investment Style Exposure



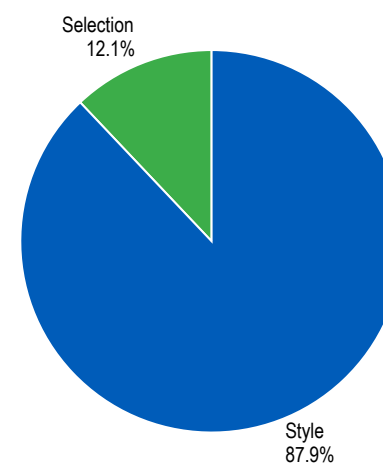
### Style Map(12 Months)

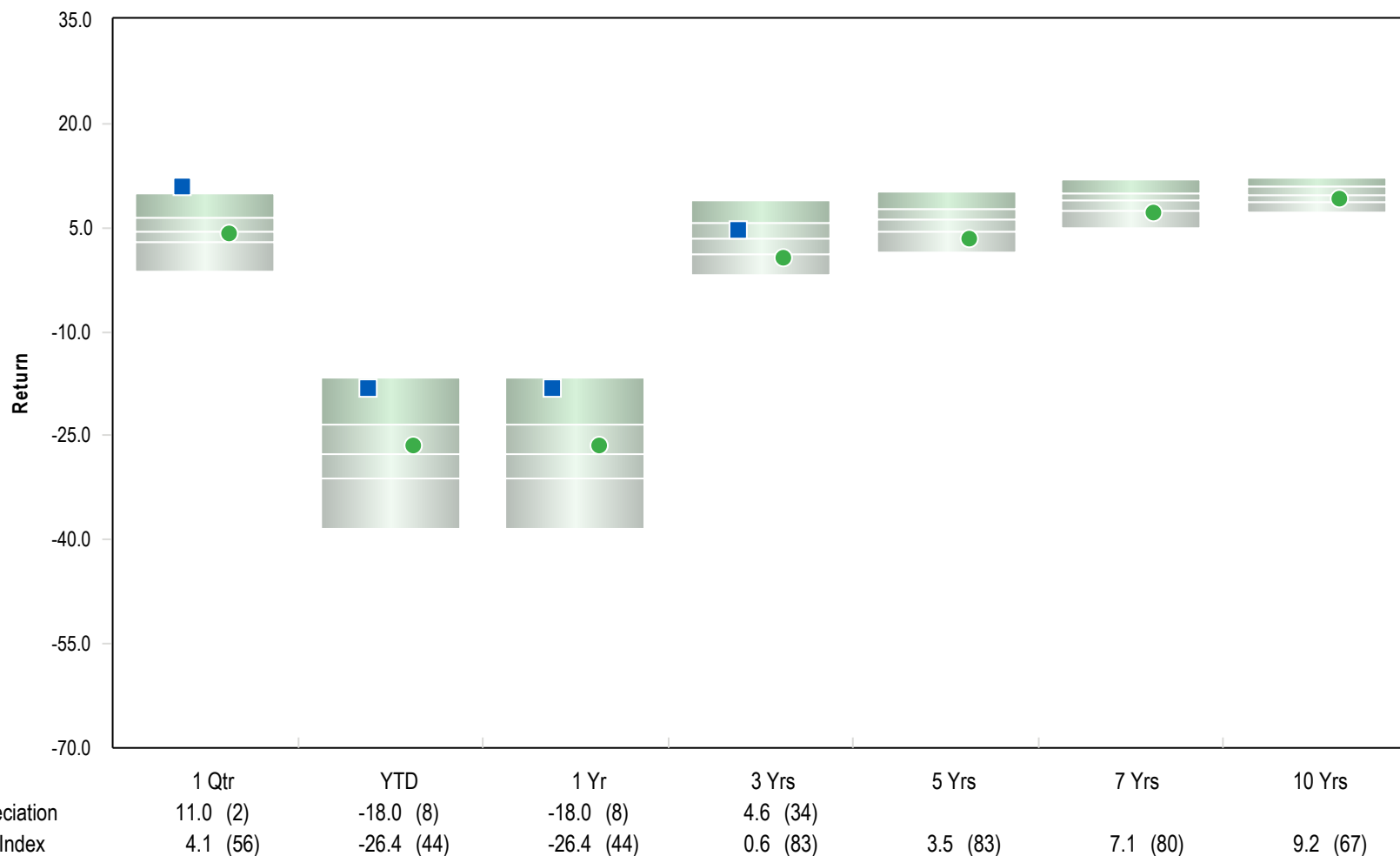


### Style History(12 Months)



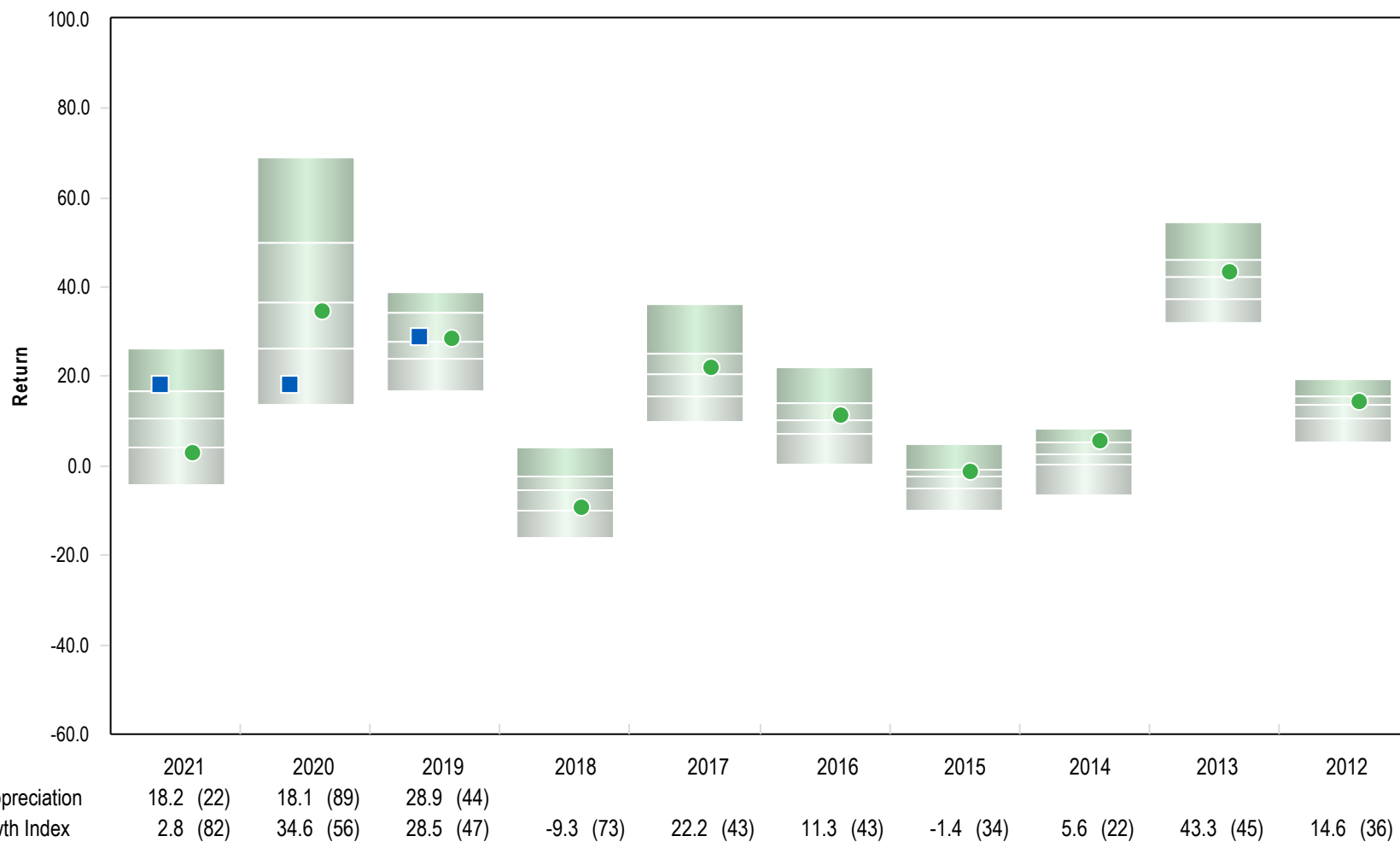
### Return Variance





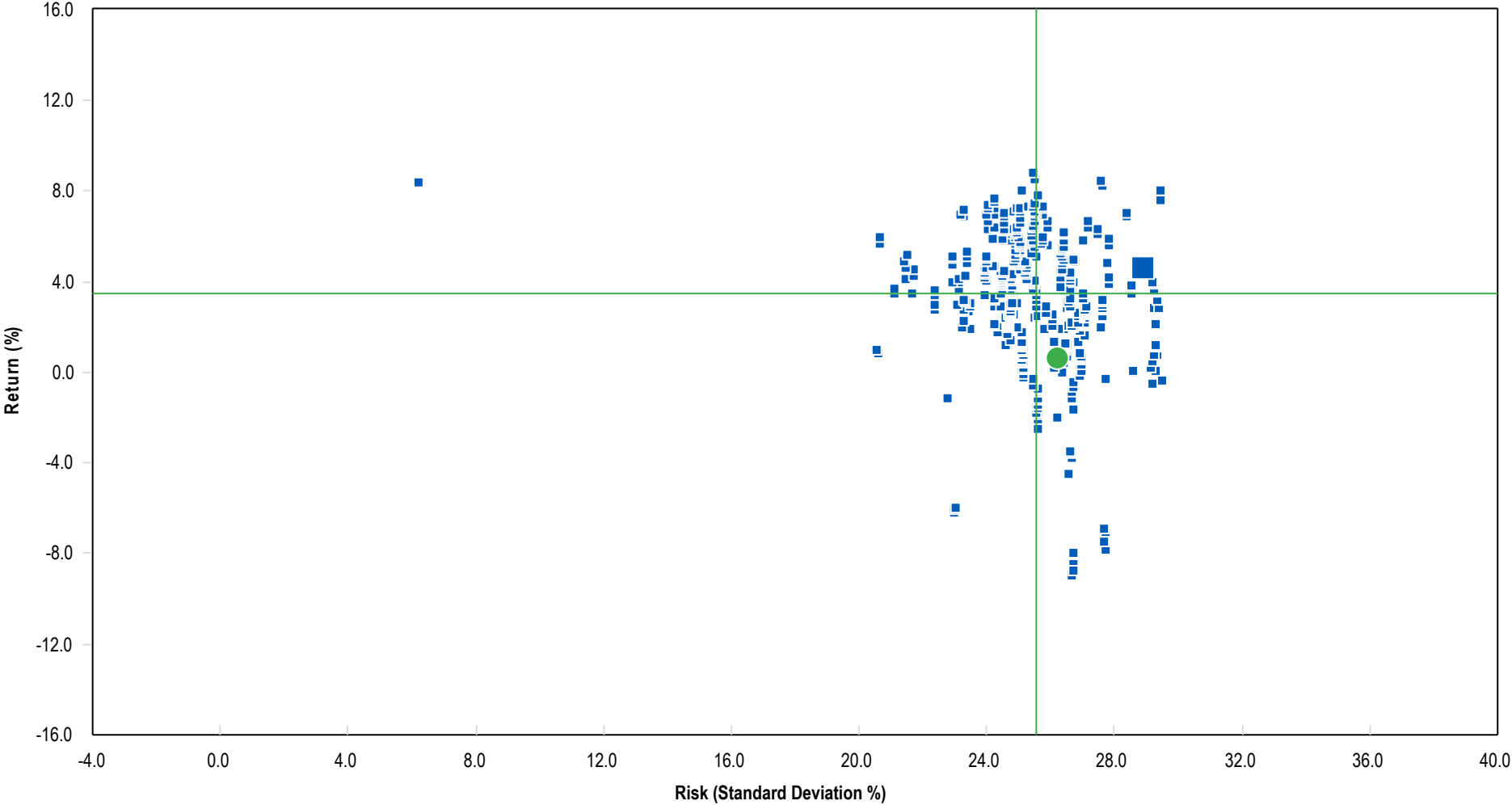
|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 10.1 | -16.5 | -16.5 | 8.9  | 10.1 | 11.8 | 12.2 |
| 1st Quartile    | 6.5  | -23.3 | -23.3 | 5.6  | 7.6  | 10.0 | 10.9 |
| Median          | 4.5  | -27.5 | -27.5 | 3.5  | 6.1  | 8.9  | 9.8  |
| 3rd Quartile    | 2.9  | -31.2 | -31.2 | 1.2  | 4.4  | 7.5  | 8.7  |
| 95th Percentile | -1.4 | -38.5 | -38.5 | -1.8 | 1.4  | 5.0  | 7.2  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                 |      |      |      |       |      |      |      |      |      |      |
|-----------------|------|------|------|-------|------|------|------|------|------|------|
| 5th Percentile  | 26.2 | 68.9 | 38.8 | 4.2   | 36.1 | 22.1 | 4.8  | 8.2  | 54.4 | 19.4 |
| 1st Quartile    | 16.9 | 49.9 | 34.1 | -2.4  | 25.3 | 14.0 | -0.6 | 5.2  | 46.1 | 15.6 |
| Median          | 10.5 | 36.5 | 27.7 | -5.6  | 20.7 | 10.1 | -2.4 | 2.8  | 42.5 | 13.6 |
| 3rd Quartile    | 4.0  | 26.4 | 23.9 | -9.9  | 15.6 | 7.3  | -4.9 | 0.2  | 37.5 | 10.7 |
| 95th Percentile | -4.4 | 13.7 | 16.8 | -16.1 | 9.7  | 0.3  | -9.9 | -6.5 | 32.1 | 5.4  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



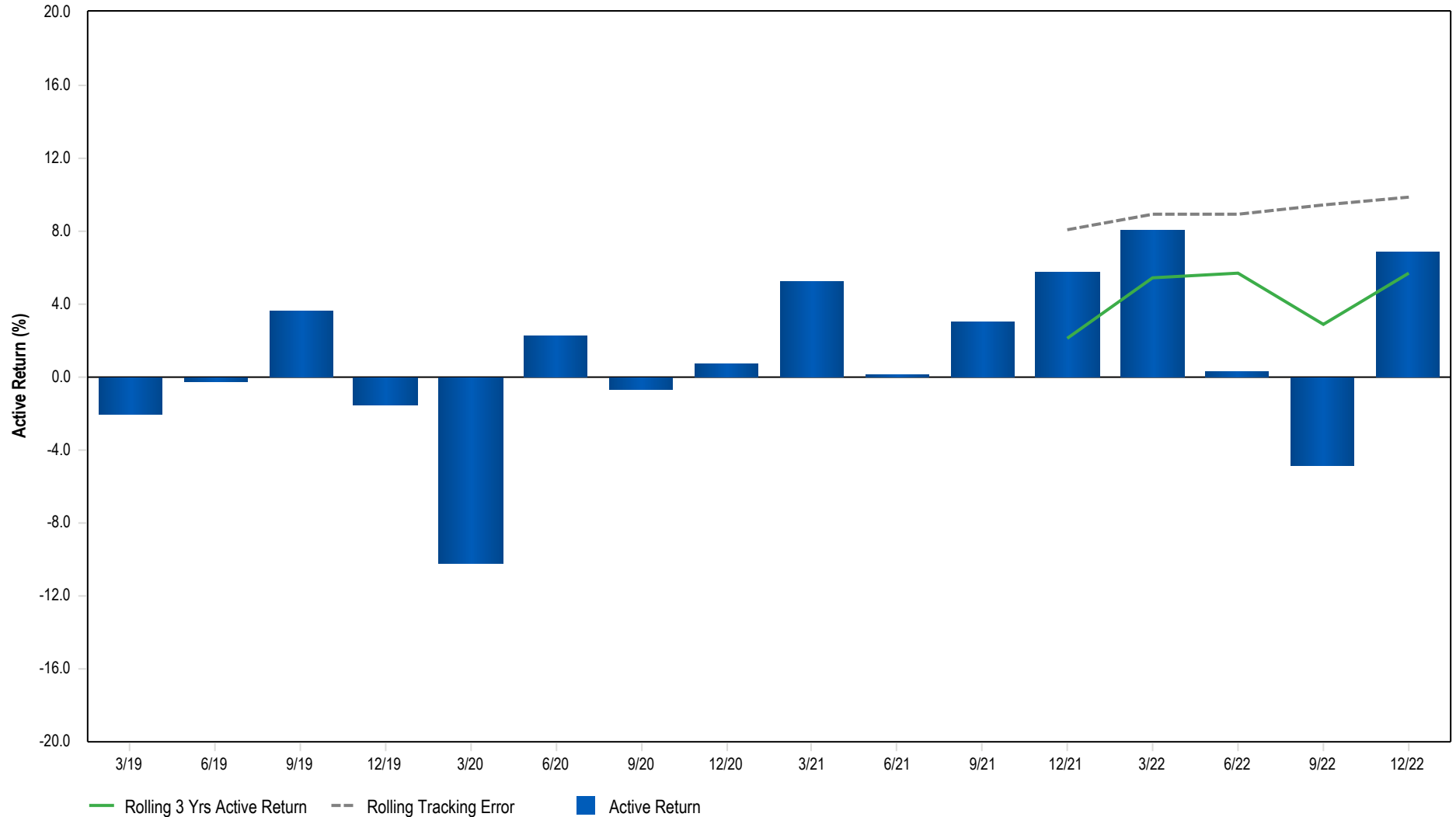
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                               | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020  | 2019 | 2018 |
|-------------------------------|-------|-------|-------|-------|-------|-------|--------|------|-------|------|------|
| Frontier Capital Appreciation | 11.0  | -18.0 | -18.0 | 4.6   |       |       |        | 18.2 | 18.1  | 28.9 |      |
| Russell 2000 Growth Index     | 4.1   | -26.4 | -26.4 | 0.6   | 3.5   | 7.1   | 9.2    | 2.8  | 34.6  | 28.5 | -9.3 |
| Difference                    | 6.9   | 8.4   | 8.4   | 4.0   |       |       |        | 15.4 | -16.5 | 0.4  |      |



Buy-and-Hold Portfolio 11.2  
 Portfolio Trading -0.2  
 Actual Return 11.0  
 Benchmark Return 4.1  
 Actual Active Return 6.9

Stock Selection 6.9  
 Sector Selection 0.2  
 Interaction 0.0  
 Total Selection 7.1

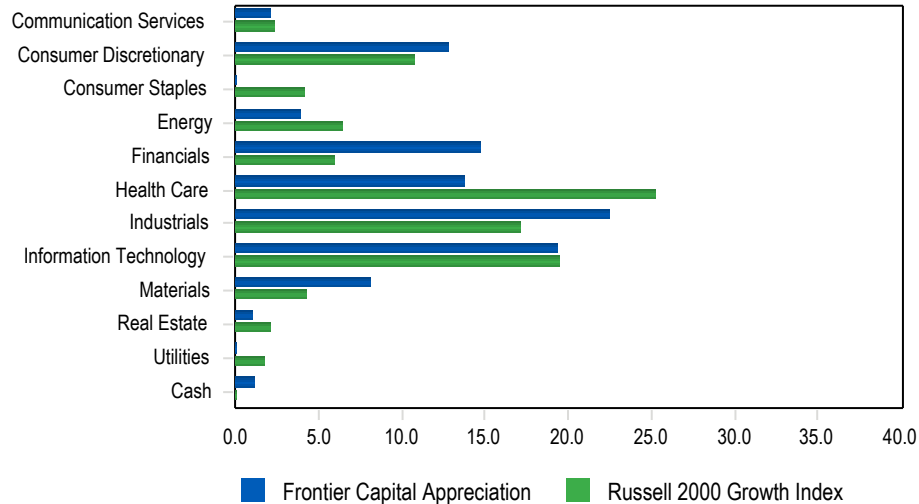
Portfolio Trading -0.2  
 Benchmark Trading 0.0  
 Active Trading Impact -0.2

Buy & Hold Active Return 6.9

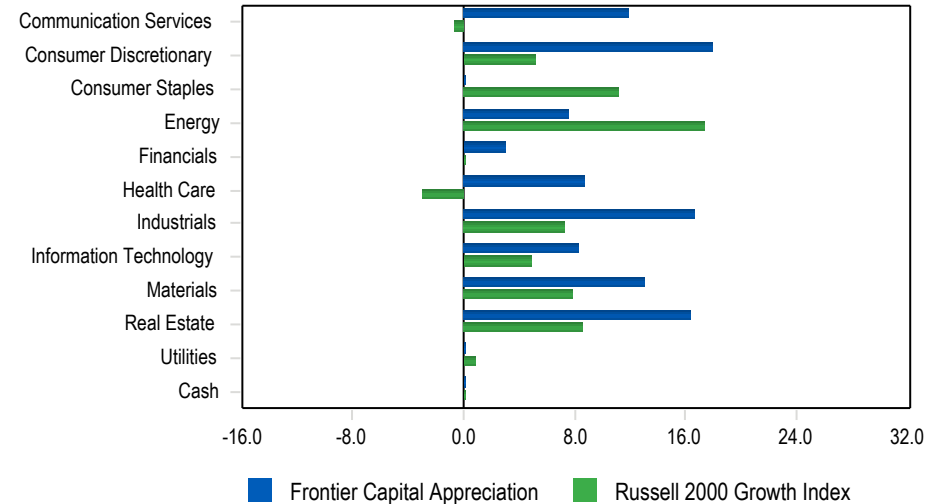
|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 2.1                     | 2.4       | 12.0                                                | -0.7      | 0.3         | 0.0    | 0.0         | 0.3   |
| Consumer Discretionary | 12.8                    | 10.8      | 18.0                                                | 5.1       | 1.4         | 0.0    | 0.3         | 1.7   |
| Consumer Staples       | 0.0                     | 4.2       | 0.0                                                 | 11.2      | 0.0         | -0.3   | 0.0         | -0.3  |
| Energy                 | 4.0                     | 6.5       | 7.6                                                 | 17.4      | -0.6        | -0.3   | 0.2         | -0.7  |
| Financials             | 14.8                    | 6.0       | 3.1                                                 | 0.1       | 0.2         | -0.4   | 0.3         | 0.1   |
| Health Care            | 13.8                    | 25.3      | 8.8                                                 | -3.0      | 3.0         | 0.8    | -1.4        | 2.5   |
| Industrials            | 22.5                    | 17.1      | 16.7                                                | 7.3       | 1.6         | 0.2    | 0.5         | 2.3   |
| Information Technology | 19.5                    | 19.5      | 8.4                                                 | 4.9       | 0.7         | 0.0    | 0.0         | 0.7   |
| Materials              | 8.2                     | 4.3       | 13.1                                                | 8.0       | 0.2         | 0.2    | 0.2         | 0.6   |
| Real Estate            | 1.1                     | 2.1       | 16.4                                                | 8.7       | 0.2         | 0.0    | -0.1        | 0.0   |
| Utilities              | 0.0                     | 1.8       | 0.0                                                 | 0.9       | 0.0         | 0.1    | 0.0         | 0.1   |
| Cash                   | 1.2                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | -0.1   | 0.0         | -0.1  |
| Total                  | 100.0                   | 100.0     | 11.2                                                | 4.1       | 6.9         | 0.2    | 0.0         | 7.1   |



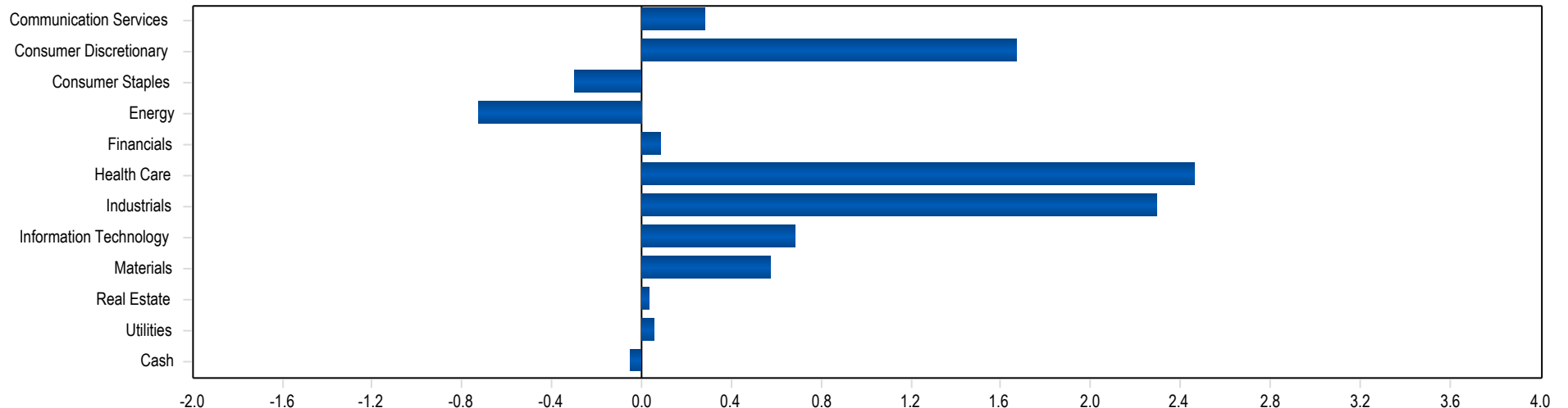
### Allocation



### Performance



### Total Attribution



Buy-and-Hold Portfolio 11.2  
 Portfolio Trading -0.2  
 Actual Return 11.0  
 Benchmark Return 4.1  
 Actual Active Return 6.9

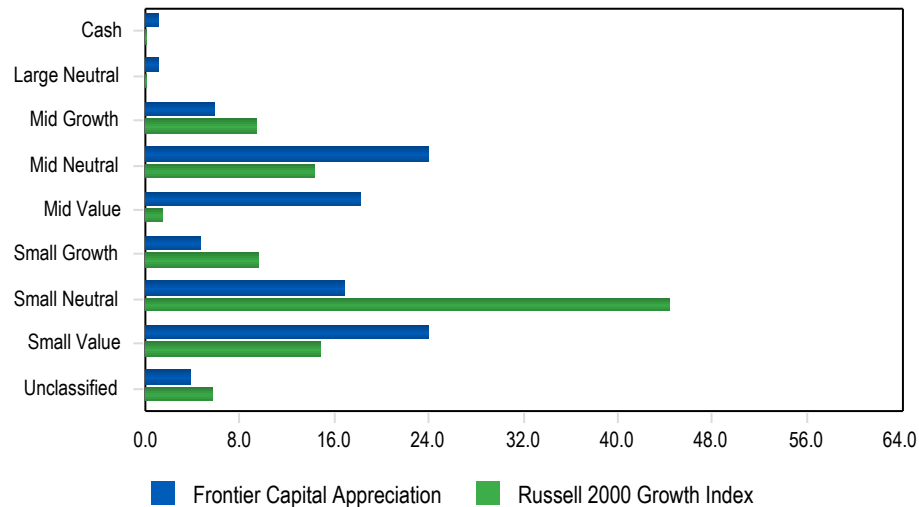
Stock Selection 6.6  
 Style Selection 0.8  
 Interaction -0.3  
 Total Selection 7.1

Portfolio Trading -0.2  
 Benchmark Trading 0.0  
 Active Trading Impact -0.2

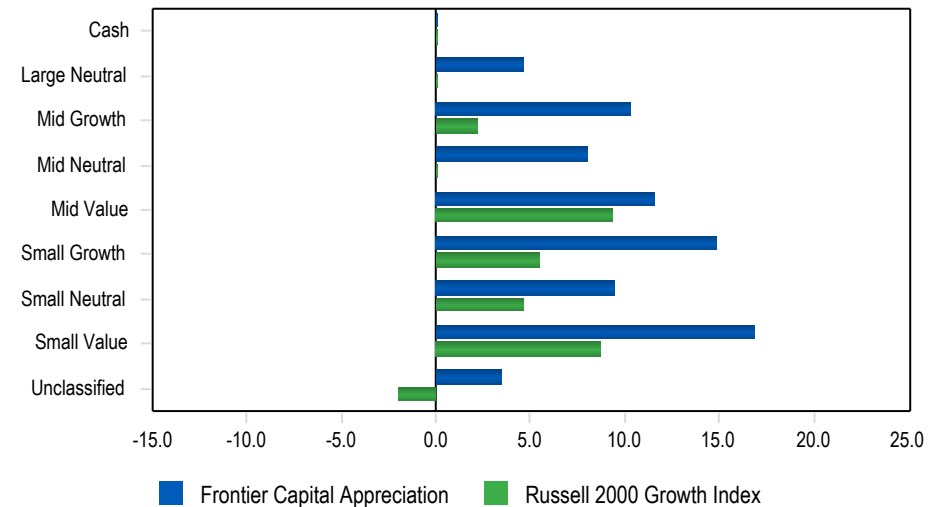
Buy & Hold Active Return 6.9

|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             |       |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction | Total |
| Cash          | 1.2                   | 0.0       | 0.0                                            | 0.0       | 0.0         | -0.1  | 0.0         | -0.1  |
| Large Neutral | 1.2                   | 0.0       | 4.6                                            | 0.0       | 0.0         | 0.0   | 0.0         | 0.0   |
| Mid Growth    | 5.9                   | 9.5       | 10.3                                           | 2.2       | 0.8         | 0.1   | -0.3        | 0.5   |
| Mid Neutral   | 23.9                  | 14.3      | 8.0                                            | 0.0       | 1.1         | -0.4  | 0.8         | 1.5   |
| Mid Value     | 18.2                  | 1.5       | 11.6                                           | 9.4       | 0.0         | 0.9   | 0.4         | 1.3   |
| Small Growth  | 4.8                   | 9.7       | 14.9                                           | 5.5       | 0.9         | -0.1  | -0.5        | 0.4   |
| Small Neutral | 16.9                  | 44.4      | 9.5                                            | 4.6       | 2.2         | -0.1  | -1.4        | 0.7   |
| Small Value   | 23.9                  | 14.8      | 16.9                                           | 8.7       | 1.2         | 0.4   | 0.7         | 2.4   |
| Unclassified  | 3.9                   | 5.8       | 3.5                                            | -2.0      | 0.3         | 0.1   | -0.1        | 0.3   |
| Total         | 100.0                 | 100.0     | 11.2                                           | 4.1       | 6.6         | 0.8   | -0.3        | 7.1   |

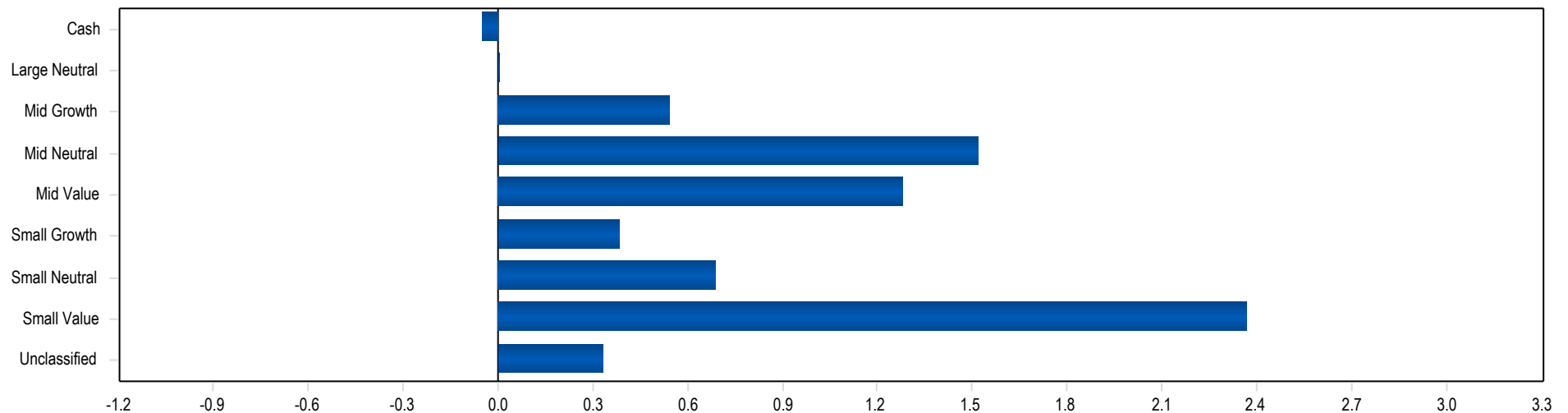
### Allocation



### Performance



### Total Attribution



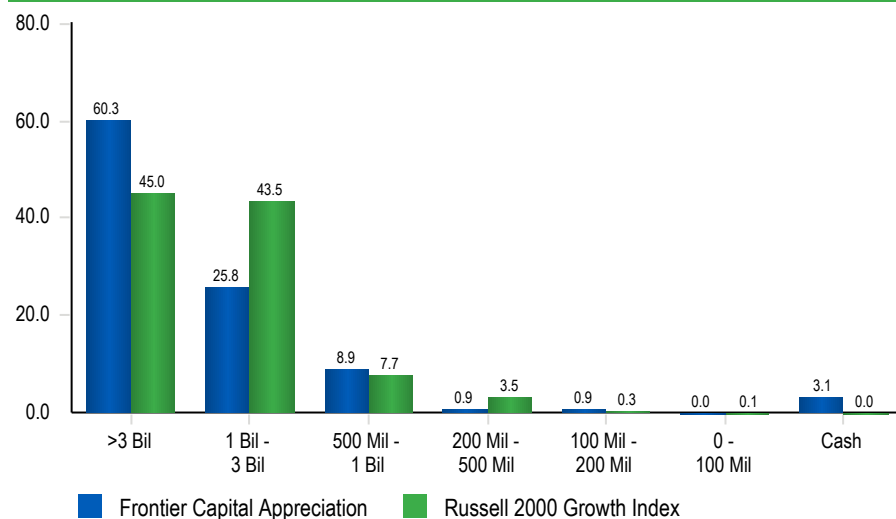
## Top Ten Equity Holdings

|                                         | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|-----------------------------------------|----------------------|----------------------|-------------------|----------------------|
| Builders FirstSource Inc                | 2.2                  | 0.0                  | 2.2               | 10.1                 |
| MRC Global Inc                          | 1.9                  | 0.1                  | 1.8               | 61.1                 |
| Array Technologies Inc                  | 1.8                  | 0.3                  | 1.5               | 16.6                 |
| MACOM Technology Solutions Holdings Inc | 1.8                  | 0.3                  | 1.5               | 21.6                 |
| Insulet Corporation                     | 1.7                  | 0.0                  | 1.7               | 28.3                 |
| KBR Inc                                 | 1.7                  | 0.0                  | 1.7               | 22.4                 |
| ATI Inc                                 | 1.6                  | 0.3                  | 1.3               | 12.2                 |
| Bancorp Inc (The)                       | 1.5                  | 0.1                  | 1.4               | 29.1                 |
| Jabil Inc                               | 1.5                  | 0.0                  | 1.5               | 18.3                 |
| Wolfspeed Inc                           | 1.3                  | 0.0                  | 1.3               | -33.2                |
| % of Portfolio                          | 17.0                 | 1.1                  | 15.9              |                      |

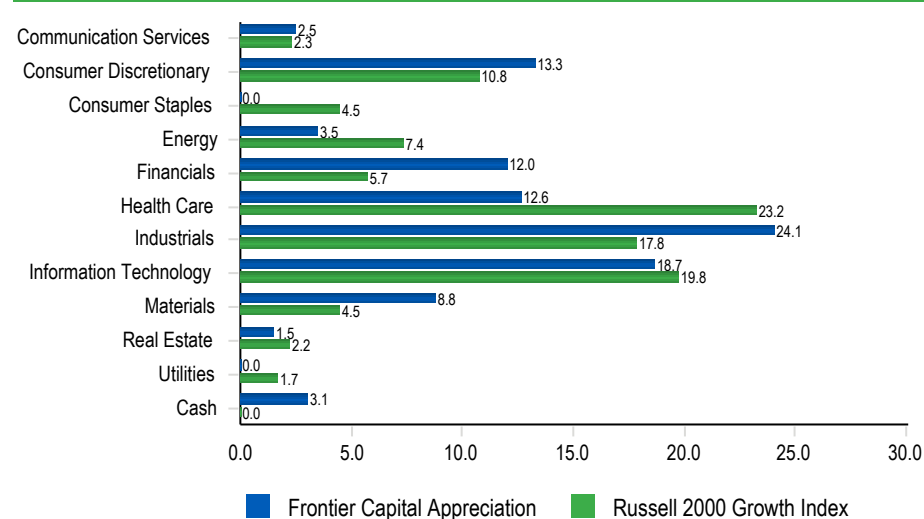
## Portfolio Characteristics

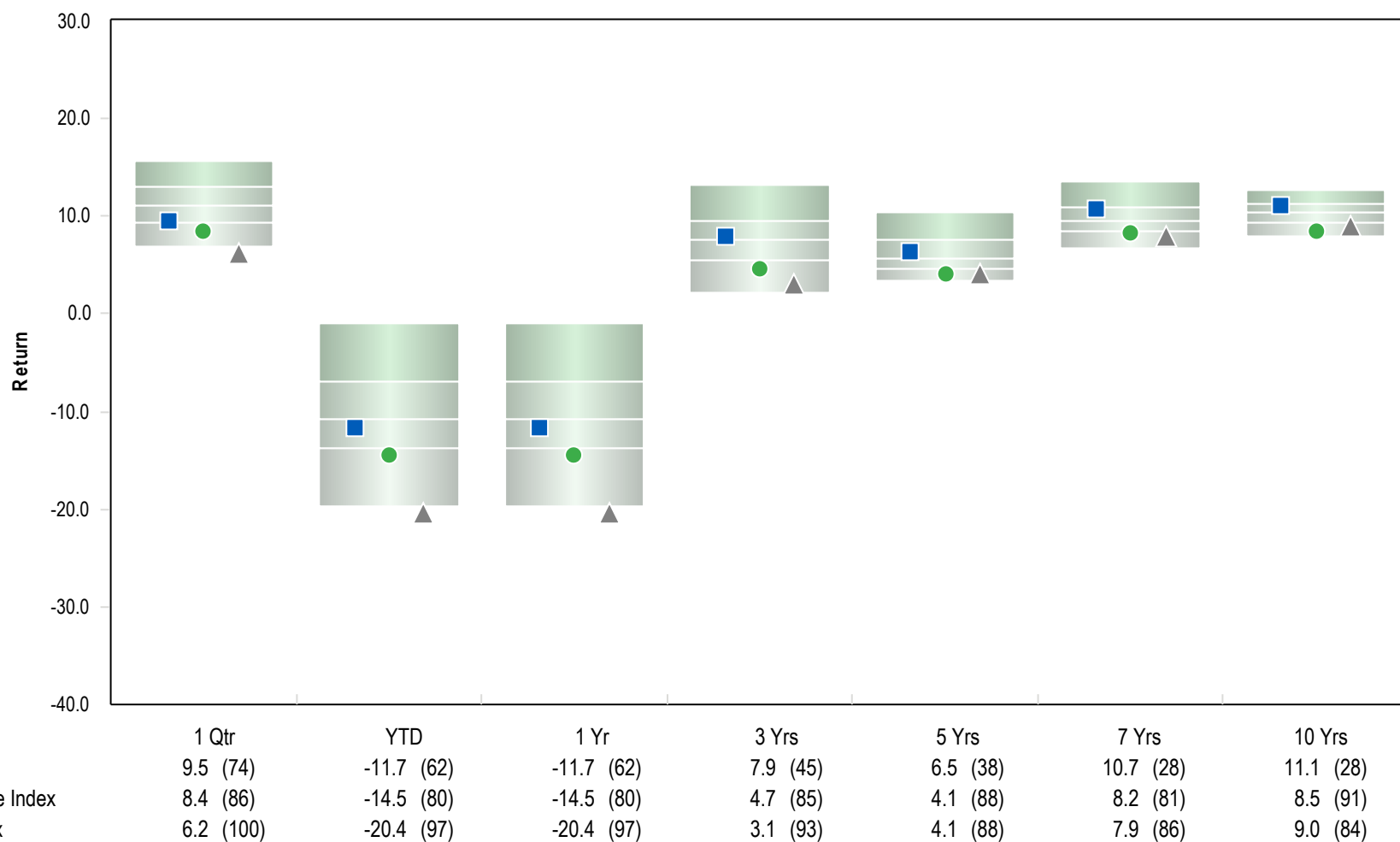
|                           | Portfolio     | Benchmark     |
|---------------------------|---------------|---------------|
| Wtd. Avg. Mkt. Cap (\$)   | 6,708,476,610 | 3,064,367,113 |
| Median Mkt. Cap (\$)      | 3,413,614,200 | 1,111,892,480 |
| Price/Earnings ratio      | 14.1          | 14.0          |
| Price/Book ratio          | 2.5           | 3.5           |
| 5 Yr. EPS Growth Rate (%) | 22.3          | 22.5          |
| Current Yield (%)         | 0.8           | 0.9           |
| Beta (3 Years, Monthly)   | 1.0           | 1.0           |
| Number of Stocks          | 142           | 1,109         |

## Distribution of Market Capitalization (%)



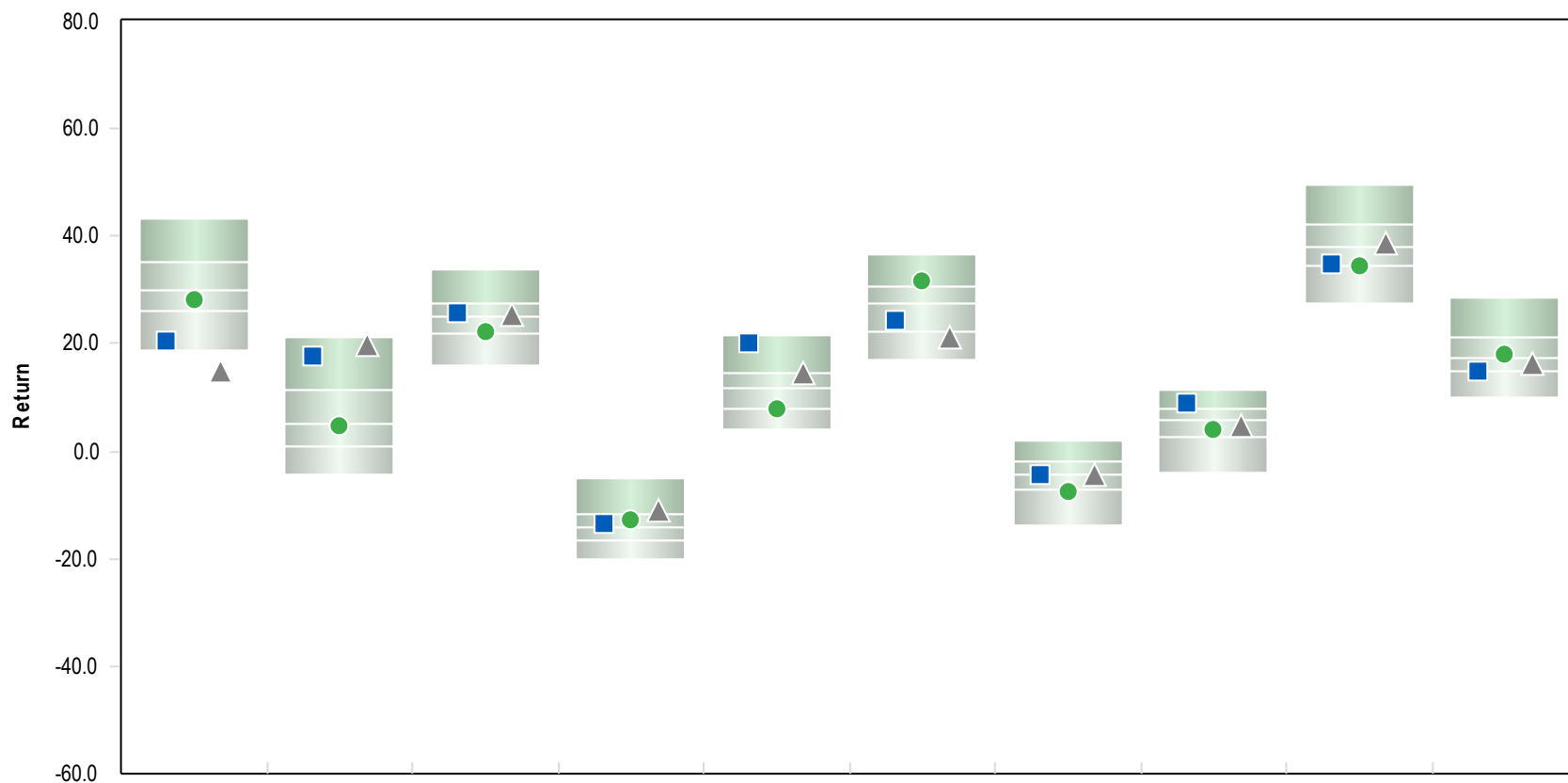
## Sector Weights (%)





|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 15.6 | -0.9  | -0.9  | 13.1 | 10.4 | 13.5 | 12.6 |
| 1st Quartile    | 12.9 | -7.0  | -7.0  | 9.5  | 7.6  | 10.9 | 11.3 |
| Median          | 11.1 | -10.9 | -10.9 | 7.5  | 5.7  | 9.6  | 10.4 |
| 3rd Quartile    | 9.4  | -13.8 | -13.8 | 5.5  | 4.7  | 8.5  | 9.4  |
| 95th Percentile | 6.9  | -19.7 | -19.7 | 2.2  | 3.3  | 6.8  | 8.0  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

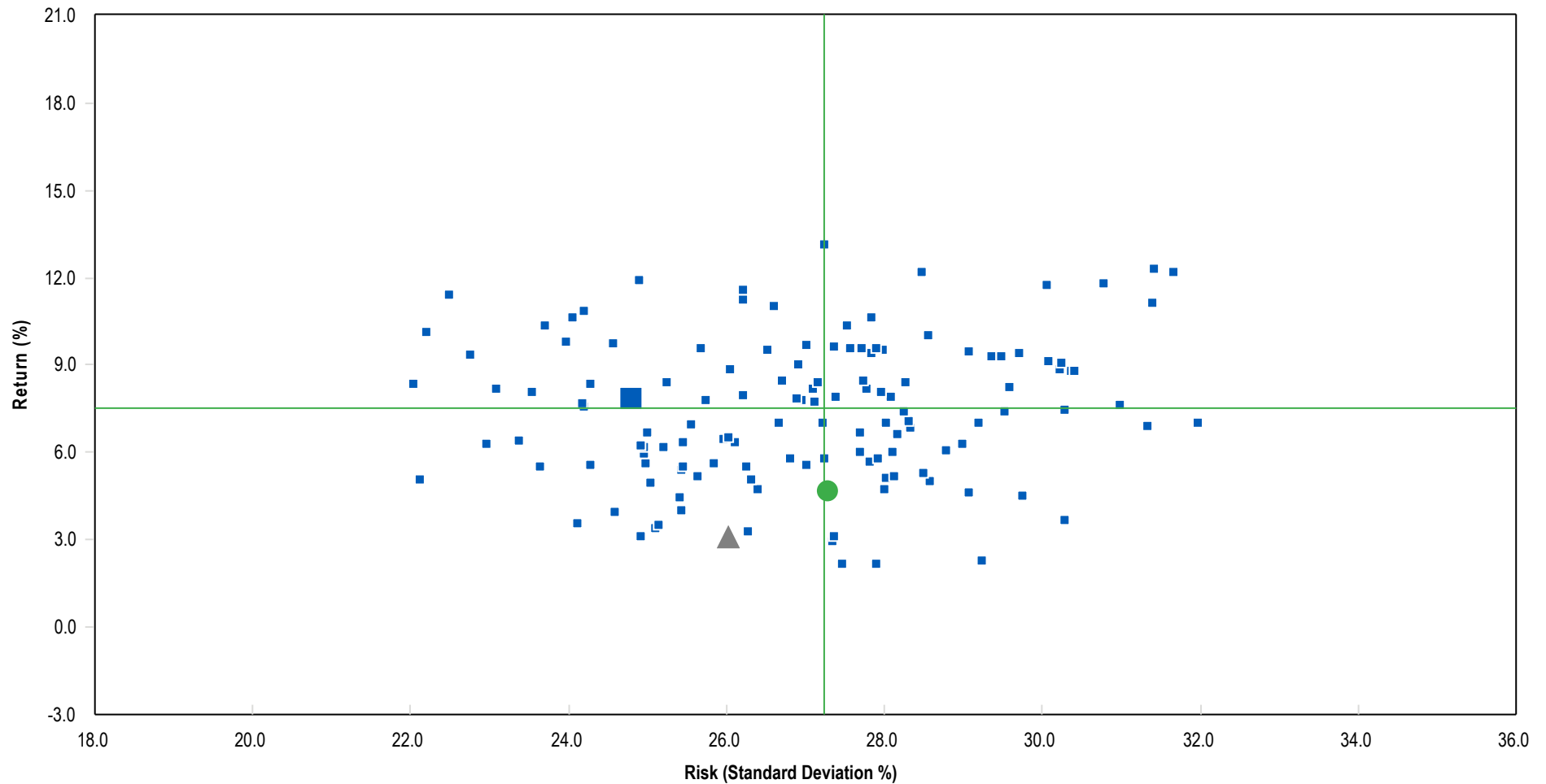


■ Earnest Partners  
● Russell 2000 Value Index  
▲ Russell 2000 Index

|                          | 2021      | 2020      | 2019      | 2018       | 2017      | 2016      | 2015      | 2014     | 2013      | 2012      |
|--------------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|----------|-----------|-----------|
| Earnest Partners         | 20.6 (93) | 17.8 (11) | 25.8 (41) | -13.4 (41) | 20.0 (7)  | 24.4 (67) | -4.5 (53) | 8.9 (15) | 34.9 (74) | 14.9 (74) |
| Russell 2000 Value Index | 28.3 (58) | 4.6 (52)  | 22.4 (73) | -12.9 (37) | 7.8 (75)  | 31.7 (18) | -7.5 (77) | 4.2 (67) | 34.5 (75) | 18.1 (46) |
| Russell 2000 Index       | 14.8 (99) | 20.0 (7)  | 25.5 (45) | -11.0 (23) | 14.6 (25) | 21.3 (82) | -4.4 (51) | 4.9 (59) | 38.8 (46) | 16.3 (60) |

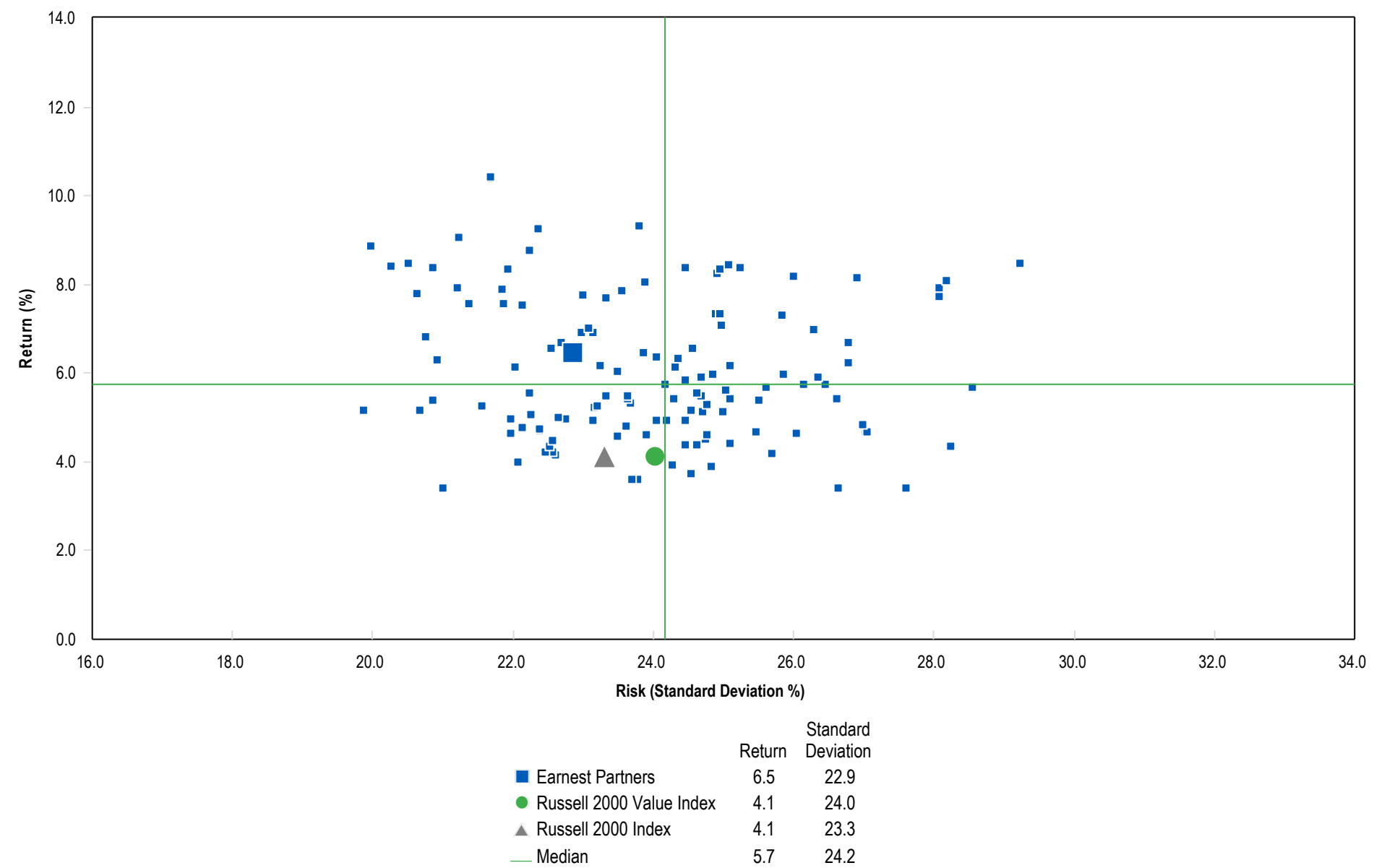
|                 |      |      |      |       |      |      |       |      |      |      |
|-----------------|------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 43.1 | 21.1 | 33.8 | -4.9  | 21.5 | 36.8 | 1.9   | 11.5 | 49.6 | 28.6 |
| 1st Quartile    | 35.3 | 11.3 | 27.4 | -11.6 | 14.5 | 30.7 | -2.0  | 7.9  | 42.2 | 21.2 |
| Median          | 30.1 | 5.2  | 25.1 | -14.1 | 11.6 | 27.3 | -4.3  | 5.7  | 38.0 | 17.4 |
| 3rd Quartile    | 26.3 | 0.9  | 21.9 | -16.7 | 7.8  | 22.4 | -7.1  | 2.8  | 34.4 | 14.8 |
| 95th Percentile | 18.8 | -4.3 | 16.0 | -20.0 | 3.9  | 17.0 | -13.6 | -4.1 | 27.3 | 10.0 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                            | Return | Standard<br>Deviation |
|----------------------------|--------|-----------------------|
| ■ Earnest Partners         | 7.9    | 24.8                  |
| ● Russell 2000 Value Index | 4.7    | 27.3                  |
| ▲ Russell 2000 Index       | 3.1    | 26.0                  |
| — Median                   | 7.5    | 27.2                  |

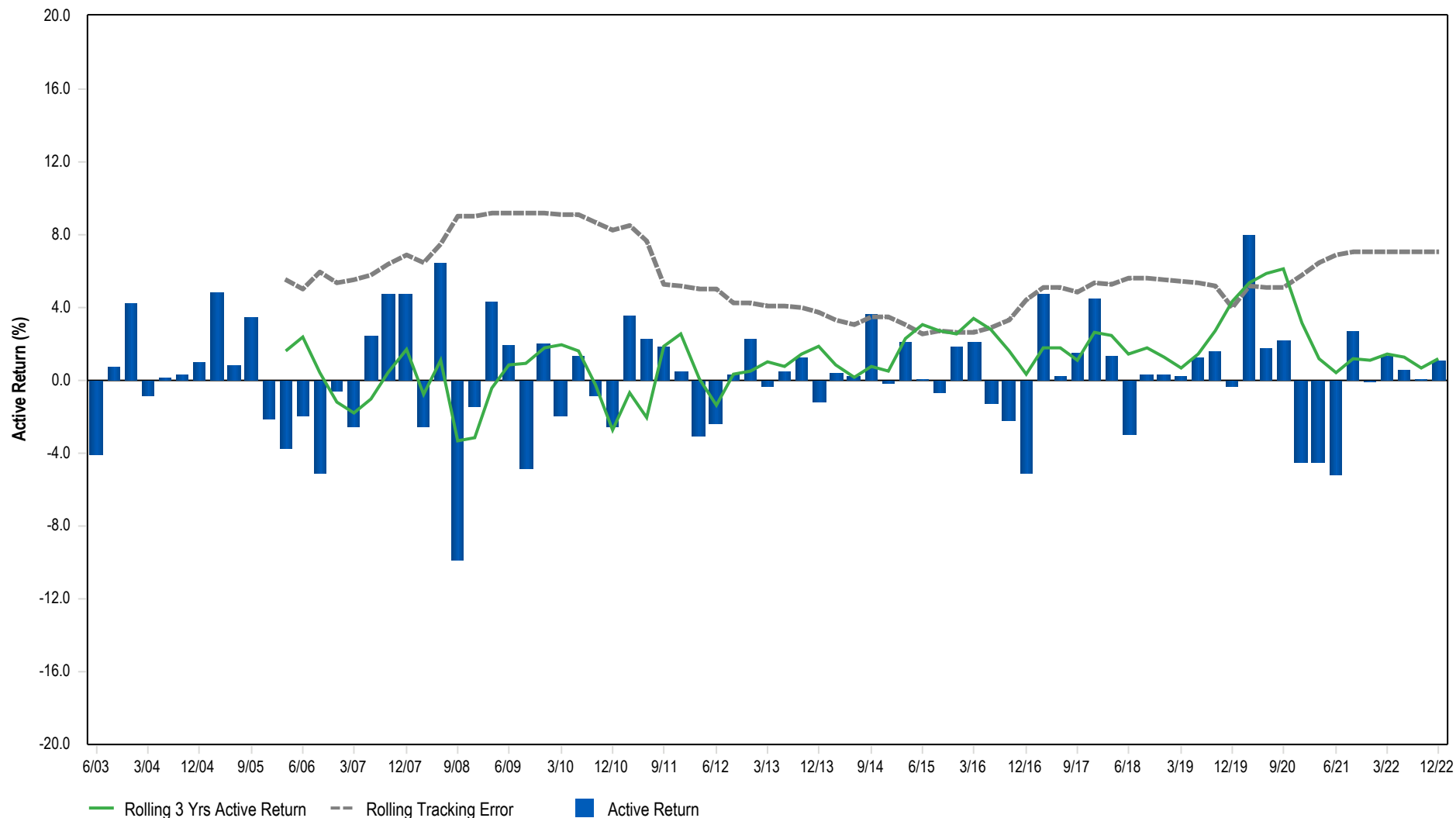
Calculation based on monthly periodicity.



Calculation based on monthly periodicity.



|                          | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|--------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Earnest Partners         | 9.5   | -11.7 | -11.7 | 7.9   | 6.5   | 10.7  | 11.1   | 20.6 | 17.8 | 25.8 | -13.4 |
| Russell 2000 Value Index | 8.4   | -14.5 | -14.5 | 4.7   | 4.1   | 8.2   | 8.5    | 28.3 | 4.6  | 22.4 | -12.9 |
| Difference               | 1.1   | 2.8   | 2.8   | 3.2   | 2.4   | 2.5   | 2.6    | -7.7 | 13.2 | 3.4  | -0.5  |



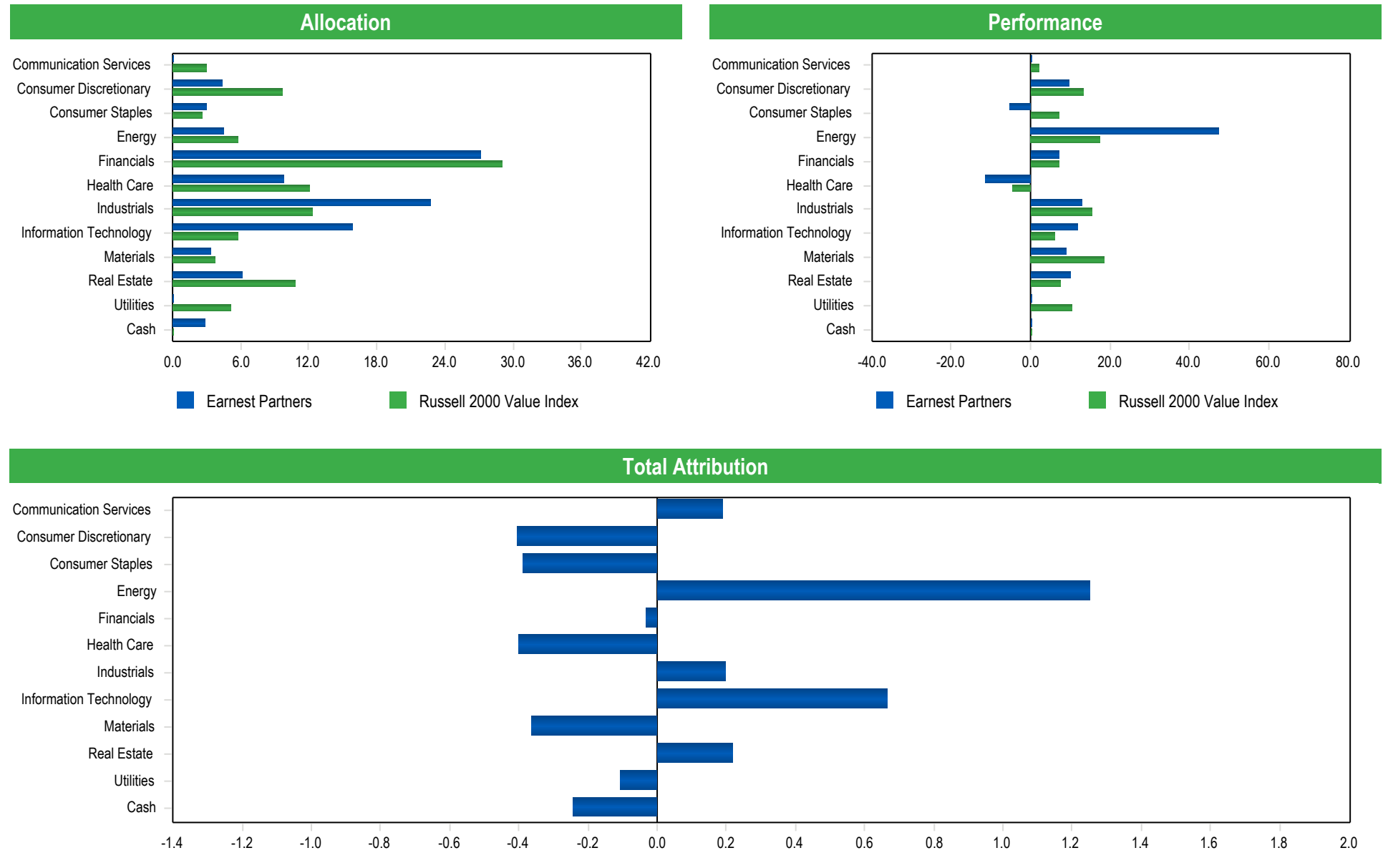
Buy-and-Hold Portfolio 9.0  
 Portfolio Trading 0.5  
 Actual Return 9.5  
 Benchmark Return 8.4  
 Actual Active Return 1.1

Stock Selection 0.1  
 Sector Selection 0.3  
 Interaction 0.2  
 Total Selection 0.6

Portfolio Trading 0.5  
 Benchmark Trading 0.0  
 Active Trading Impact 0.5

Buy & Hold Active Return 1.1

|                        | Allocation — 10/01/2022 |           | Performance — 1 Quarter Ending<br>December 31, 2022 |           | Attribution |        |             | Total |
|------------------------|-------------------------|-----------|-----------------------------------------------------|-----------|-------------|--------|-------------|-------|
|                        | Portfolio               | Benchmark | Portfolio                                           | Benchmark | Stock       | Sector | Interaction |       |
| Communication Services | 0.0                     | 3.0       | 0.0                                                 | 2.1       | 0.0         | 0.2    | 0.0         | 0.2   |
| Consumer Discretionary | 4.4                     | 9.6       | 9.6                                                 | 13.2      | -0.3        | -0.2   | 0.2         | -0.4  |
| Consumer Staples       | 3.1                     | 2.7       | -5.4                                                | 7.1       | -0.3        | 0.0    | 0.0         | -0.4  |
| Energy                 | 4.6                     | 5.7       | 47.5                                                | 17.6      | 1.7         | -0.1   | -0.4        | 1.3   |
| Financials             | 27.1                    | 29.1      | 7.2                                                 | 7.4       | -0.1        | 0.0    | 0.0         | 0.0   |
| Health Care            | 9.8                     | 12.1      | -11.6                                               | -4.5      | -0.9        | 0.3    | 0.2         | -0.4  |
| Industrials            | 22.7                    | 12.4      | 13.1                                                | 15.4      | -0.3        | 0.7    | -0.2        | 0.2   |
| Information Technology | 15.9                    | 5.8       | 11.7                                                | 6.1       | 0.3         | -0.2   | 0.6         | 0.7   |
| Materials              | 3.4                     | 3.7       | 9.0                                                 | 18.7      | -0.4        | 0.0    | 0.0         | -0.4  |
| Real Estate            | 6.2                     | 10.8      | 10.2                                                | 7.4       | 0.3         | 0.0    | -0.1        | 0.2   |
| Utilities              | 0.0                     | 5.1       | 0.0                                                 | 10.5      | 0.0         | -0.1   | 0.0         | -0.1  |
| Cash                   | 2.9                     | 0.0       | 0.0                                                 | 0.0       | 0.0         | -0.2   | 0.0         | -0.2  |
| Total                  | 100.0                   | 100.0     | 9.0                                                 | 8.4       | 0.1         | 0.3    | 0.2         | 0.6   |



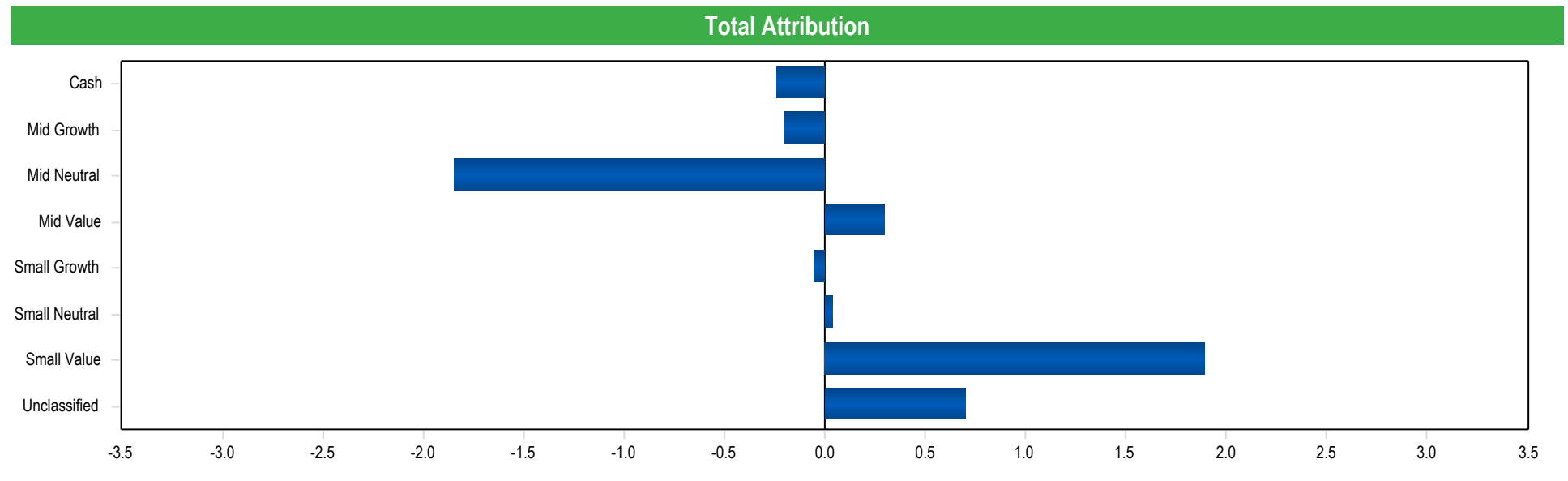
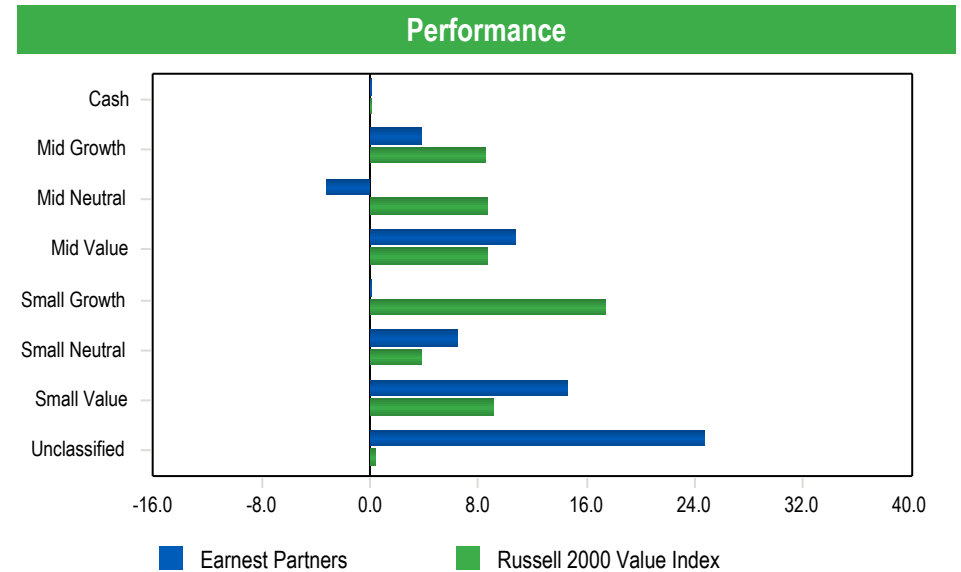
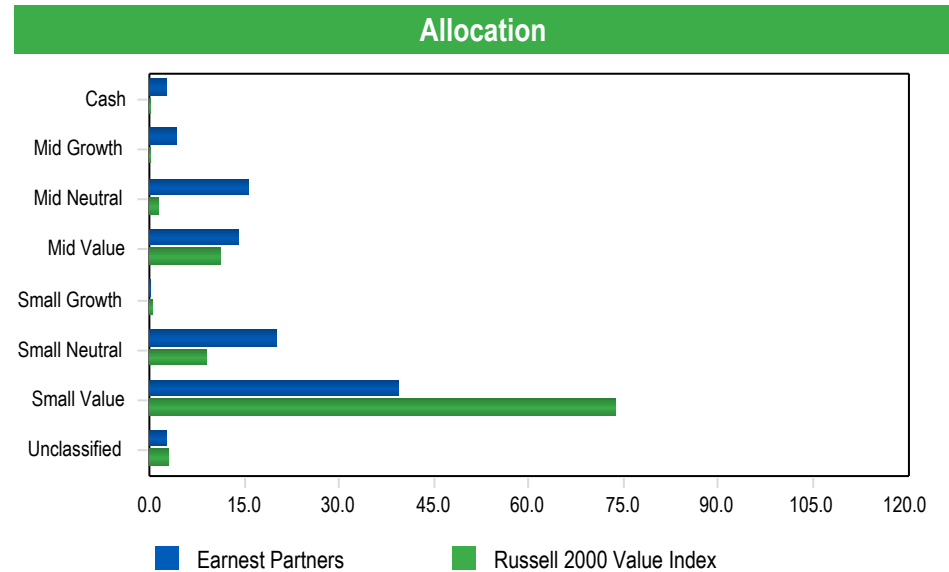
Buy-and-Hold Portfolio 9.0  
 Portfolio Trading 0.5  
 Actual Return 9.5  
 Benchmark Return 8.4  
 Actual Active Return 1.1

Stock Selection 5.1  
 Style Selection -1.0  
 Interaction -3.5  
 Total Selection 0.6

Portfolio Trading 0.5  
 Benchmark Trading 0.0  
 Active Trading Impact 0.5

Buy & Hold Active Return 1.1

|               | Allocation-10/01/2022 |           | Performance-1 Quarter Ending December 31, 2022 |           | Attribution |       |             |       |
|---------------|-----------------------|-----------|------------------------------------------------|-----------|-------------|-------|-------------|-------|
|               | Portfolio             | Benchmark | Portfolio                                      | Benchmark | Stock       | Style | Interaction | Total |
| Cash          | 2.9                   | 0.0       | 0.0                                            | 0.0       | 0.0         | -0.2  | 0.0         | -0.2  |
| Mid Growth    | 4.4                   | 0.4       | 3.8                                            | 8.5       | 0.0         | 0.0   | -0.2        | -0.2  |
| Mid Neutral   | 15.9                  | 1.5       | -3.2                                           | 8.6       | -0.2        | 0.0   | -1.7        | -1.8  |
| Mid Value     | 14.2                  | 11.2      | 10.7                                           | 8.7       | 0.2         | 0.0   | 0.1         | 0.3   |
| Small Growth  | 0.0                   | 0.7       | 0.0                                            | 17.4      | 0.0         | -0.1  | 0.0         | -0.1  |
| Small Neutral | 20.3                  | 9.1       | 6.5                                            | 3.8       | 0.2         | -0.5  | 0.3         | 0.0   |
| Small Value   | 39.5                  | 74.0      | 14.6                                           | 9.2       | 4.0         | -0.3  | -1.9        | 1.9   |
| Unclassified  | 2.8                   | 3.0       | 24.8                                           | 0.4       | 0.7         | 0.0   | 0.0         | 0.7   |
| Total         | 100.0                 | 100.0     | 9.0                                            | 8.4       | 5.1         | -1.0  | -3.5        | 0.6   |



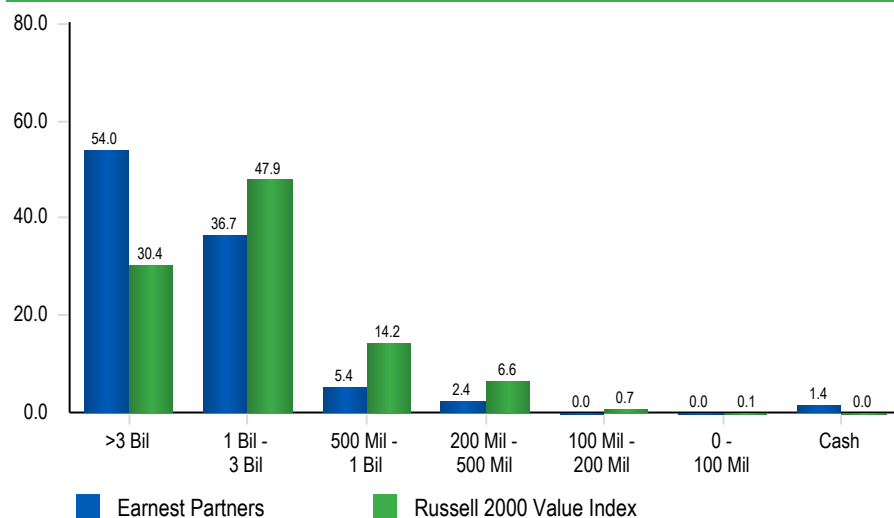
## Top Ten Equity Holdings

|                                   | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|-----------------------------------|----------------------|----------------------|-------------------|----------------------|
| Casella Waste Systems Inc         | 4.2                  | 0.0                  | 4.2               | 3.8                  |
| STAG Industrial Inc               | 3.7                  | 0.5                  | 3.2               | 14.9                 |
| Archrock Inc                      | 3.3                  | 0.1                  | 3.2               | 42.3                 |
| Franklin Electric Co Inc          | 3.3                  | 0.0                  | 3.3               | -2.2                 |
| Houlihan Lokey Inc                | 3.0                  | 0.0                  | 3.0               | 16.2                 |
| Darling Ingredients Inc           | 2.6                  | 0.0                  | 2.6               | -5.4                 |
| Reinsurance Group of America Inc. | 2.4                  | 0.0                  | 2.4               | 13.6                 |
| Hexcel Corp                       | 2.3                  | 0.0                  | 2.3               | 14.0                 |
| SPX Technologies Inc              | 2.3                  | 0.3                  | 2.0               | 18.9                 |
| CONMED Corp                       | 2.1                  | 0.0                  | 2.1               | 10.8                 |
| % of Portfolio                    | 29.2                 | 0.9                  | 28.3              |                      |

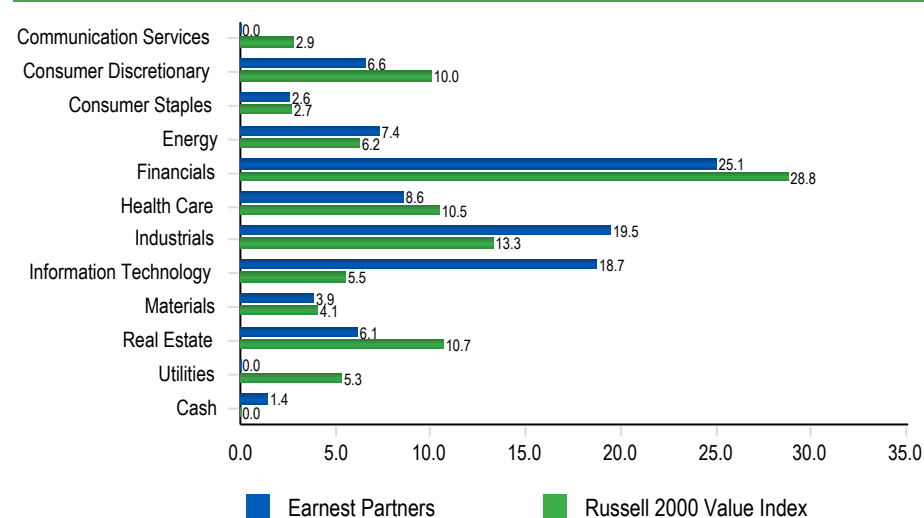
## Portfolio Characteristics

|                           | Portfolio     | Benchmark     |
|---------------------------|---------------|---------------|
| Wtd. Avg. Mkt. Cap (\$)   | 3,852,272,336 | 2,370,346,459 |
| Median Mkt. Cap (\$)      | 2,916,252,620 | 804,843,200   |
| Price/Earnings ratio      | 16.4          | 10.1          |
| Price/Book ratio          | 2.1           | 1.6           |
| 5 Yr. EPS Growth Rate (%) | 12.5          | 13.7          |
| Current Yield (%)         | 1.7           | 2.3           |
| Beta (5 Years, Monthly)   | 0.9           | 1.0           |
| Number of Stocks          | 58            | 1,383         |

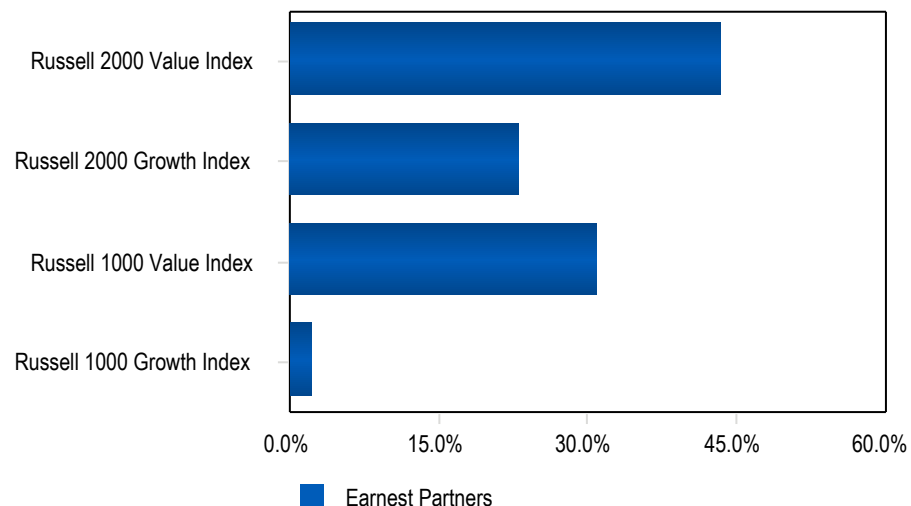
## Distribution of Market Capitalization (%)



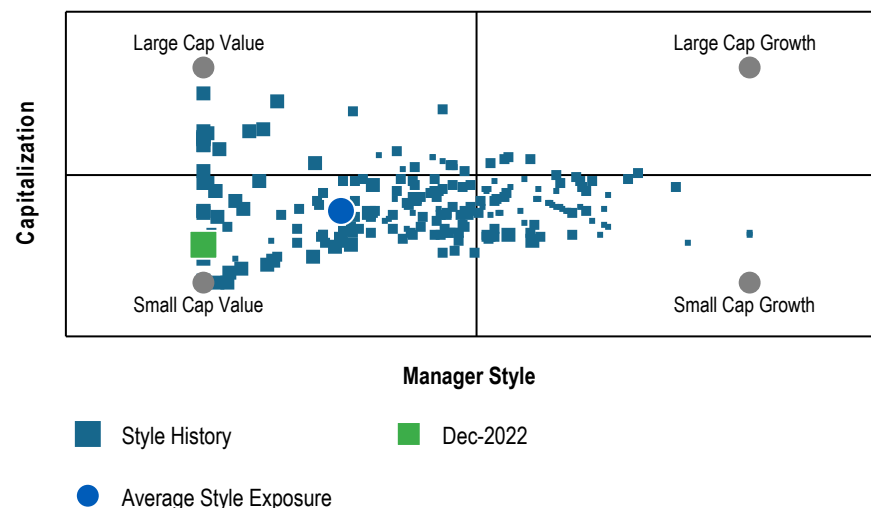
## Sector Weights (%)



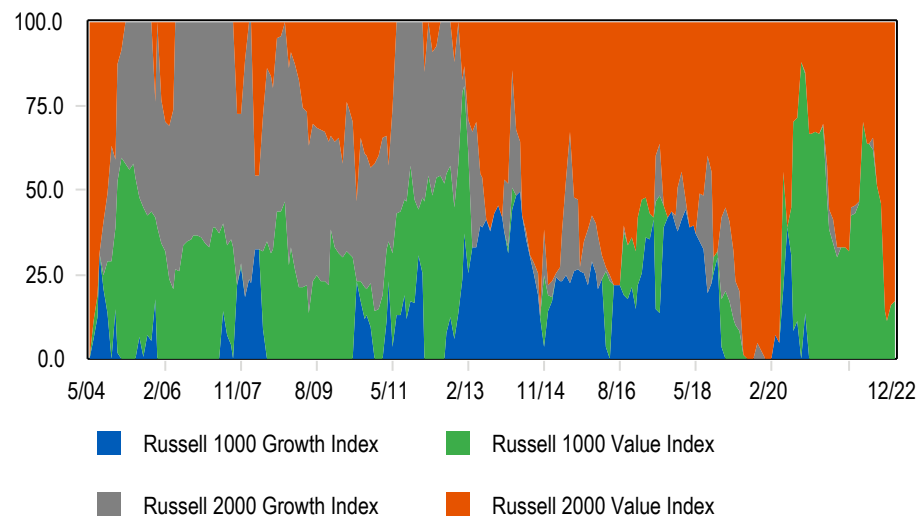
### Investment Style Exposure



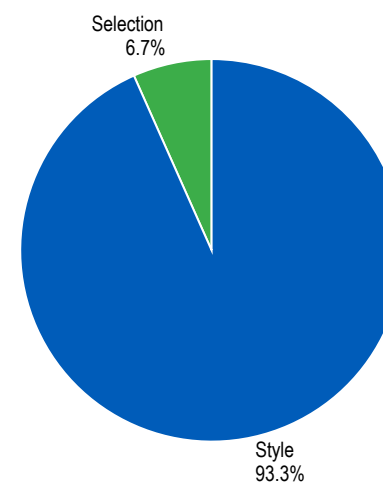
### Style Map(12 Months)



### Style History(12 Months)

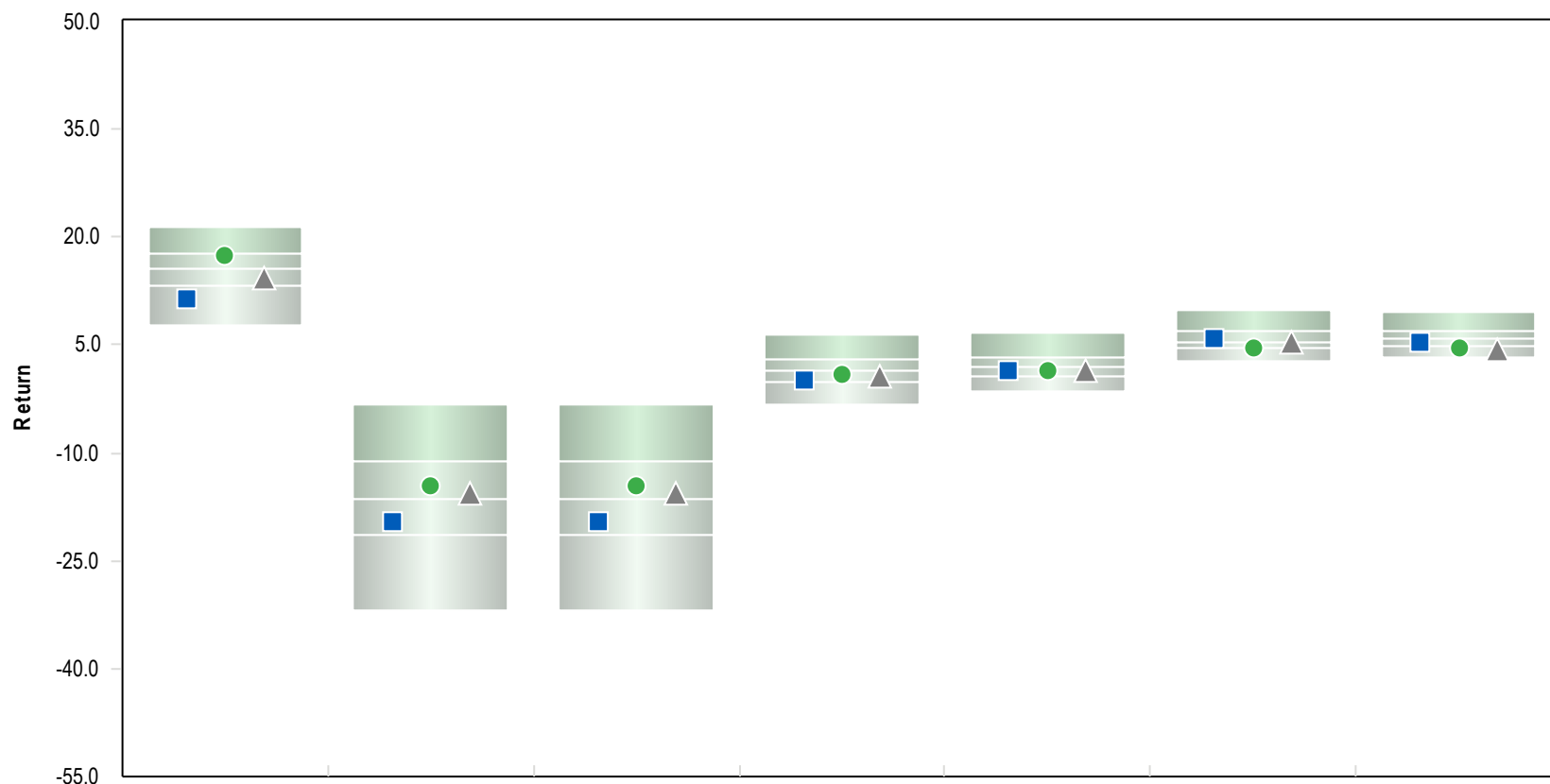


### Return Variance



## **International Equity**

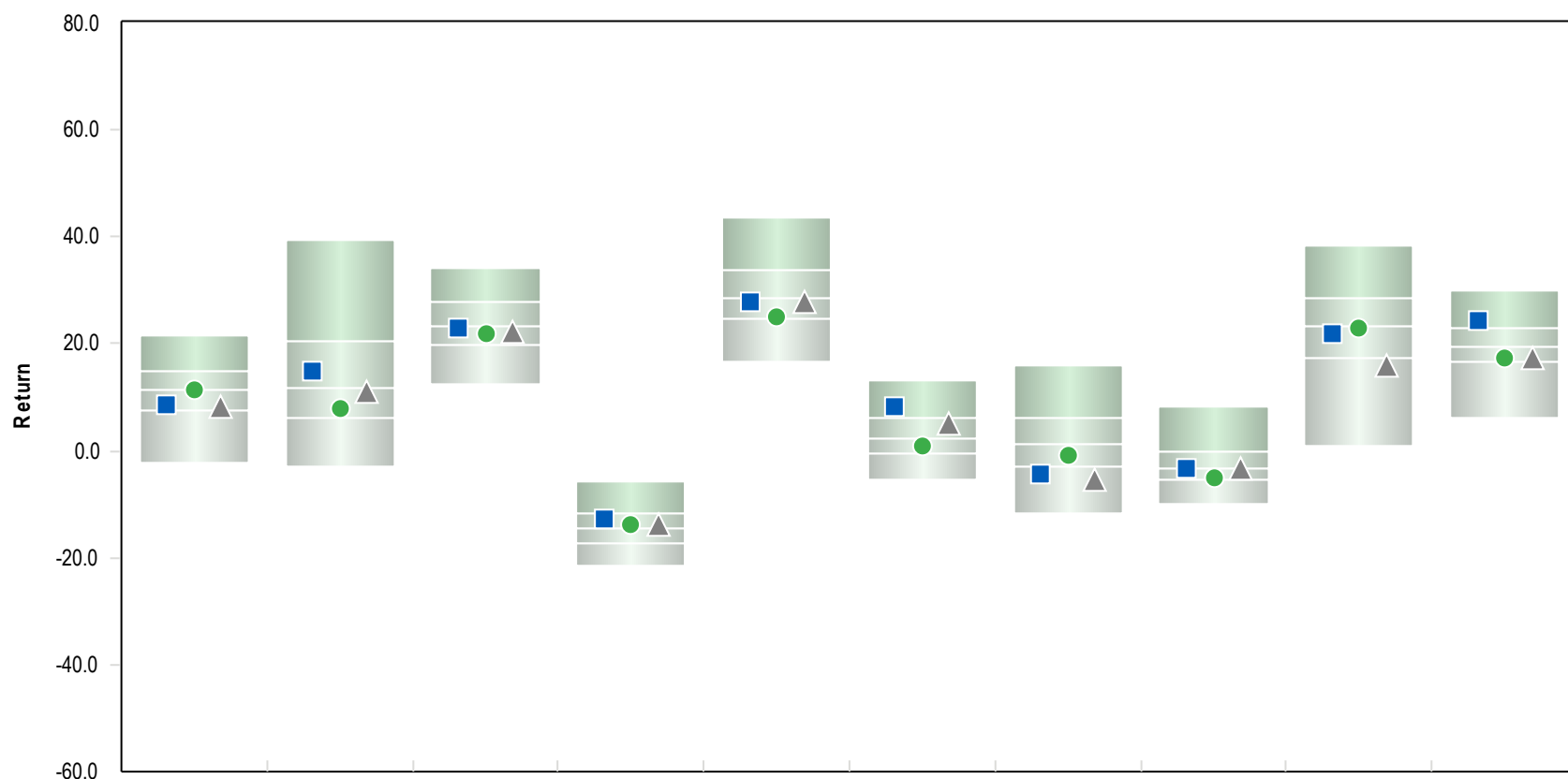




|                              | 1 Qtr     | YTD        | 1 Yr       | 3 Yrs    | 5 Yrs    | 7 Yrs    | 10 Yrs   |
|------------------------------|-----------|------------|------------|----------|----------|----------|----------|
| ■ Total International Equity | 11.4 (86) | -19.7 (68) | -19.7 (68) | 0.1 (72) | 1.4 (61) | 5.8 (42) | 5.3 (64) |
| ● MSCI EAFE (net)            | 17.3 (30) | -14.5 (39) | -14.5 (39) | 0.9 (60) | 1.5 (60) | 4.5 (76) | 4.7 (80) |
| ▲ MSCI AC World ex USA       | 14.4 (66) | -15.6 (45) | -15.6 (45) | 0.5 (65) | 1.4 (63) | 5.3 (54) | 4.3 (86) |

|                 |      |       |       |      |      |     |     |
|-----------------|------|-------|-------|------|------|-----|-----|
| 5th Percentile  | 21.4 | -3.2  | -3.2  | 6.4  | 6.6  | 9.8 | 9.5 |
| 1st Quartile    | 17.6 | -11.1 | -11.1 | 3.1  | 3.3  | 7.0 | 7.0 |
| Median          | 15.5 | -16.4 | -16.4 | 1.4  | 1.9  | 5.5 | 5.8 |
| 3rd Quartile    | 13.4 | -21.5 | -21.5 | -0.1 | 0.7  | 4.5 | 4.9 |
| 95th Percentile | 7.6  | -31.8 | -31.8 | -3.2 | -1.4 | 2.7 | 3.2 |

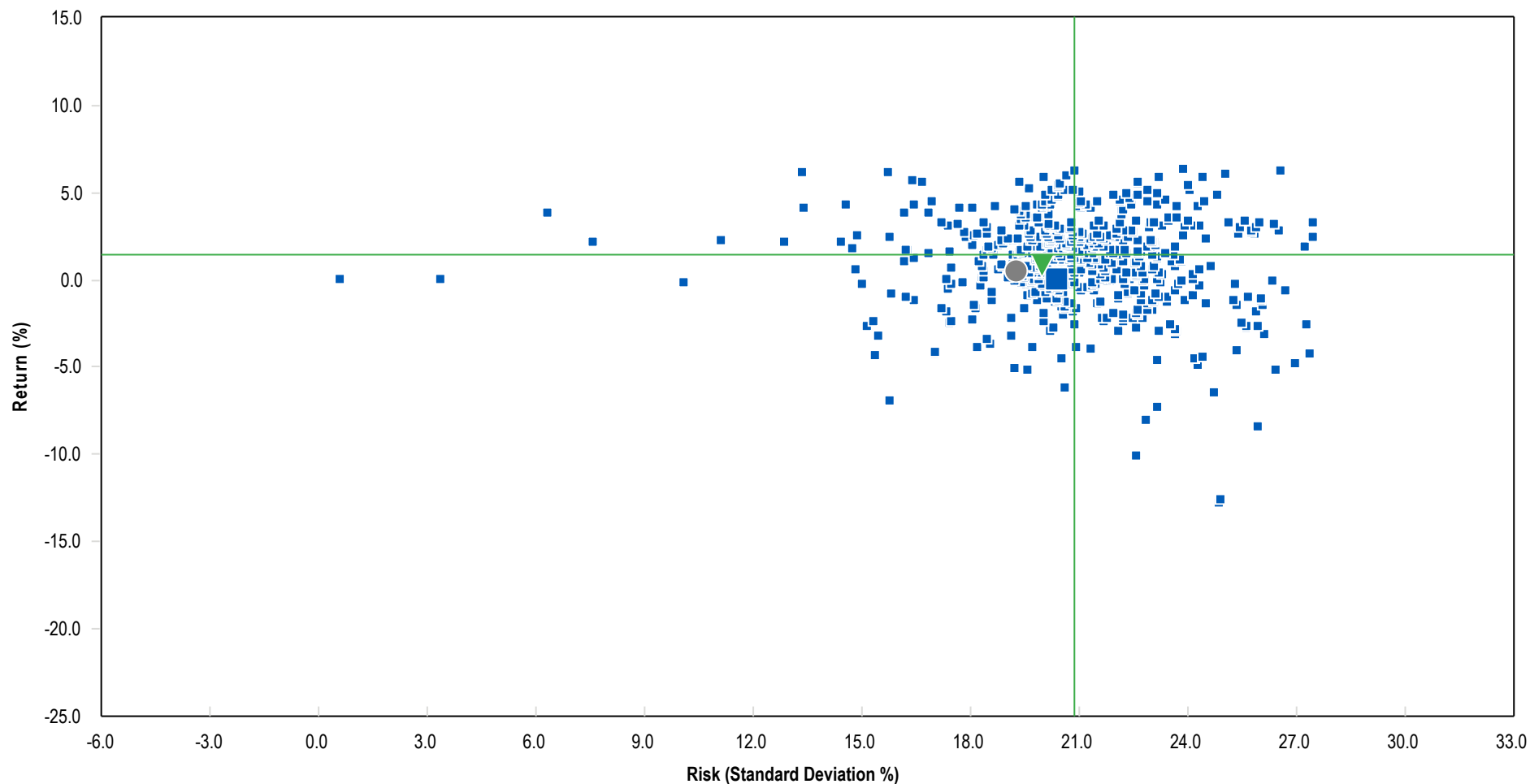
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                              | 2021      | 2020      | 2019      | 2018       | 2017      | 2016     | 2015      | 2014      | 2013      | 2012      |
|------------------------------|-----------|-----------|-----------|------------|-----------|----------|-----------|-----------|-----------|-----------|
| ■ Total International Equity | 8.8 (68)  | 14.7 (41) | 22.8 (55) | -12.7 (32) | 27.7 (56) | 8.4 (16) | -4.3 (81) | -3.2 (49) | 21.8 (58) | 24.4 (17) |
| ● MSCI EAFE (net)            | 11.3 (53) | 7.8 (68)  | 22.0 (61) | -13.8 (42) | 25.0 (74) | 1.0 (64) | -0.8 (64) | -4.9 (71) | 22.8 (54) | 17.3 (69) |
| ▲ MSCI AC World ex USA       | 8.3 (71)  | 11.1 (52) | 22.1 (59) | -13.8 (42) | 27.8 (56) | 5.0 (32) | -5.3 (85) | -3.4 (52) | 15.8 (80) | 17.4 (68) |

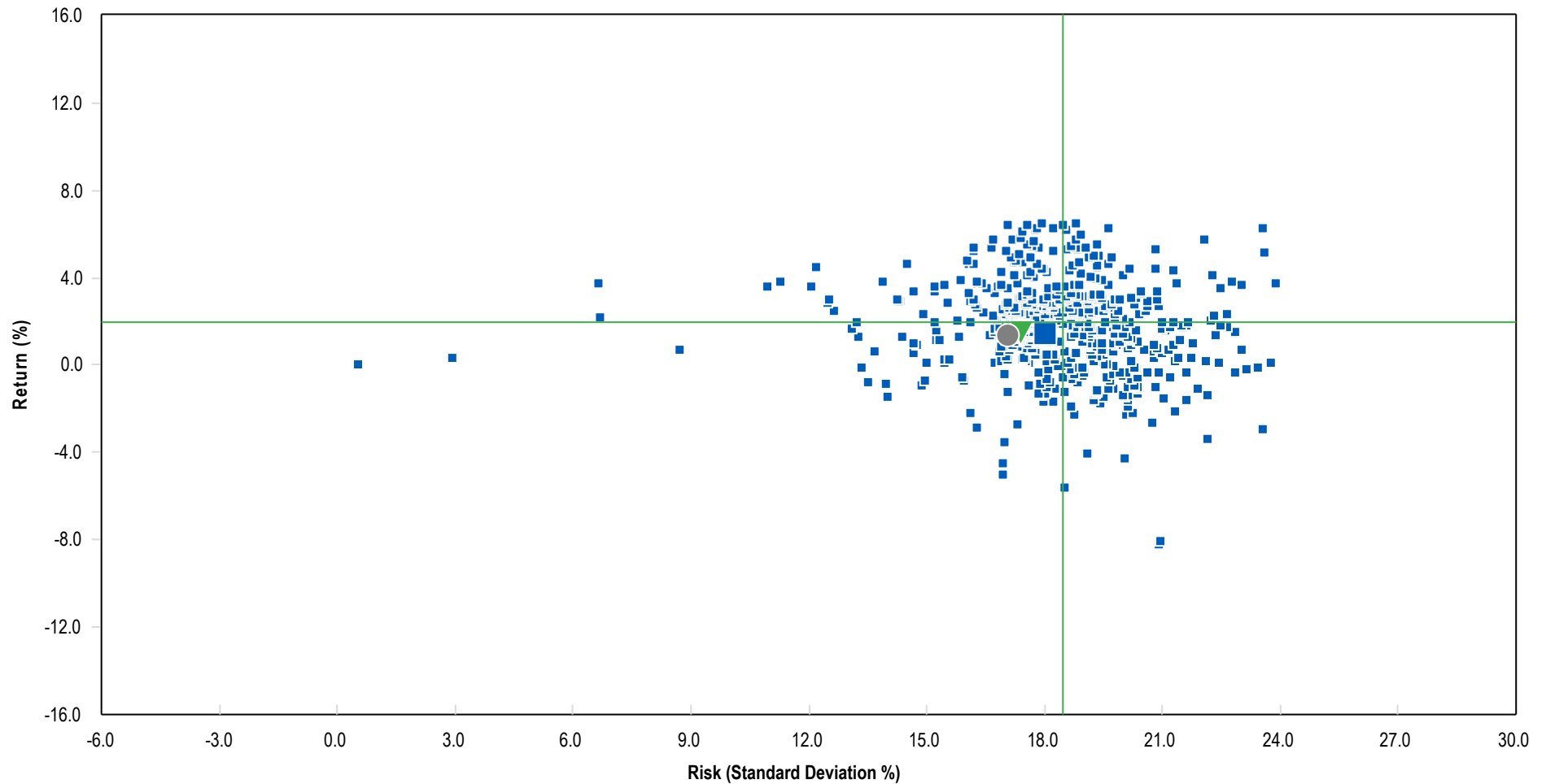
|                 |      |      |      |       |      |      |       |      |      |      |
|-----------------|------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 21.7 | 39.3 | 34.2 | -5.6  | 43.6 | 13.3 | 16.1  | 8.4  | 38.2 | 29.8 |
| 1st Quartile    | 14.8 | 20.5 | 27.9 | -11.7 | 33.8 | 6.2  | 6.0   | -0.2 | 28.5 | 22.9 |
| Median          | 11.6 | 11.6 | 23.3 | -14.5 | 28.7 | 2.4  | 1.2   | -3.3 | 23.4 | 19.6 |
| 3rd Quartile    | 7.5  | 6.0  | 19.8 | -17.2 | 24.8 | -0.4 | -3.0  | -5.4 | 17.2 | 16.5 |
| 95th Percentile | -2.4 | -2.9 | 12.6 | -21.5 | 16.8 | -5.3 | -11.7 | -9.9 | 1.1  | 6.1  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                              | Return | Standard<br>Deviation |
|------------------------------|--------|-----------------------|
| ■ Total International Equity | 0.1    | 20.4                  |
| ▼ MSCI EAFE (net)            | 0.9    | 20.0                  |
| ● MSCI AC World ex USA       | 0.5    | 19.2                  |
| — Median                     | 1.4    | 20.9                  |

Calculation based on monthly periodicity.



|                              | Return | Standard<br>Deviation |
|------------------------------|--------|-----------------------|
| ■ Total International Equity | 1.4    | 18.0                  |
| ▼ MSCI EAFE (net)            | 1.5    | 17.4                  |
| ● MSCI AC World ex USA       | 1.4    | 17.1                  |
| — Median                     | 1.9    | 18.5                  |

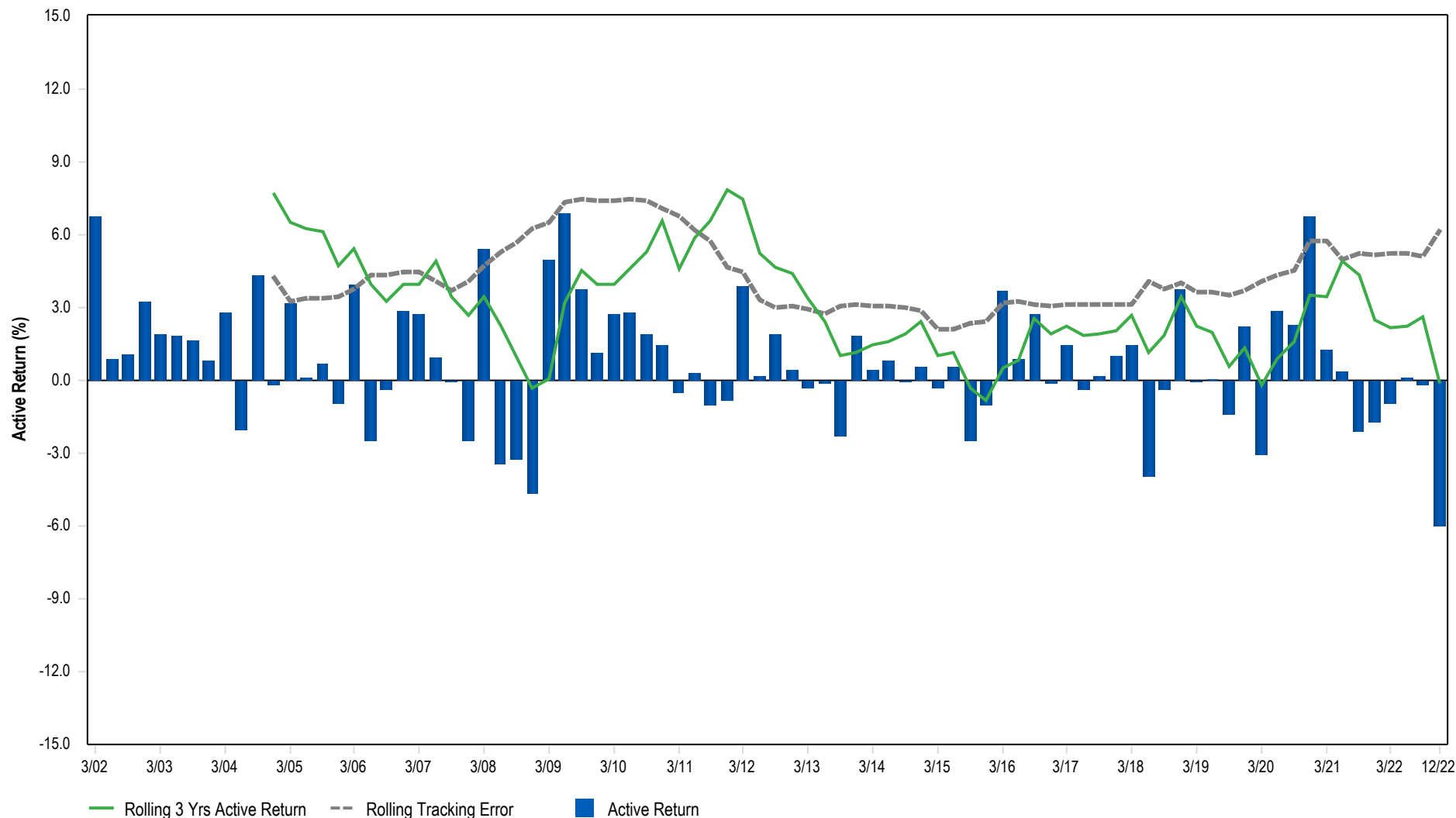
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                            | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|----------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Total International Equity | 11.4  | -19.7 | -19.7 | 0.1   | 1.4   | 5.8   | 5.3    | 8.8  | 14.7 | 22.8 | -12.7 |
| MSCI EAFE (net)            | 17.3  | -14.5 | -14.5 | 0.9   | 1.5   | 4.5   | 4.7    | 11.3 | 7.8  | 22.0 | -13.8 |
| Difference                 | -5.9  | -5.2  | -5.2  | -0.8  | -0.1  | 1.3   | 0.6    | -2.5 | 6.9  | 0.8  | 1.1   |



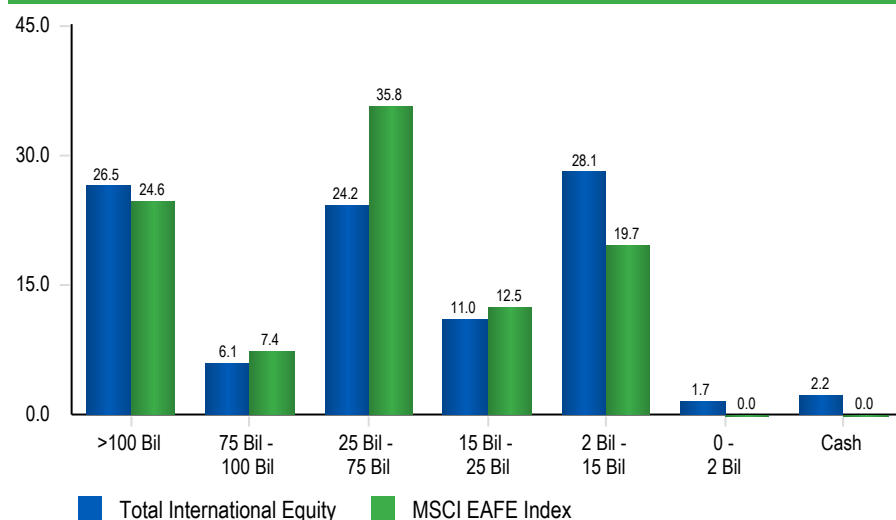
## Top Ten Equity Holdings

|                            | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|----------------------------|----------------------|----------------------|-------------------|----------------------|
| Taiwan Semiconductor       | 2.3                  | 0.0                  | 2.3               | 9.3                  |
| Novo Nordisk A/S           | 1.6                  | 1.6                  | 0.0               | 34.2                 |
| Samsung Electronics Co Ltd | 1.6                  | 0.0                  | 1.6               | 17.8                 |
| Taiwan Semiconductor Manuf | 1.6                  | 0.0                  | 1.6               | 10.4                 |
| Tencent Holdings LTD       | 1.4                  | 0.0                  | 1.4               | 26.1                 |
| Samsung Electronics Co Ltd | 1.2                  | 0.0                  | 1.2               | 21.8                 |
| Nestle SA, Cham Und Vevey  | 1.2                  | 2.2                  | -1.0              | 6.4                  |
| Alibaba Group Holding Ltd  | 1.1                  | 0.0                  | 1.1               | 11.3                 |
| Roche Holding AG           | 1.1                  | 1.5                  | -0.4              | -4.5                 |
| AIA Group Ltd              | 1.0                  | 0.9                  | 0.1               | 33.4                 |
| % of Portfolio             | 14.1                 | 6.2                  | 7.9               |                      |

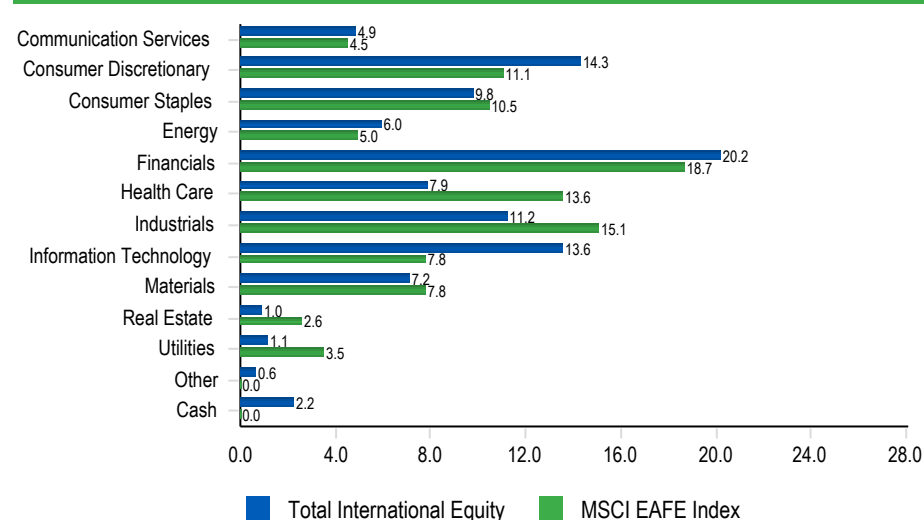
## Portfolio Characteristics

|                           | Portfolio      | Benchmark      |
|---------------------------|----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 77,926,196,320 | 76,649,372,164 |
| Median Mkt. Cap (\$)      | 6,573,780,178  | 11,967,087,452 |
| Price/Earnings ratio      | 12.1           | 12.9           |
| Price/Book ratio          | 2.6            | 2.4            |
| 5 Yr. EPS Growth Rate (%) | 14.6           | 10.5           |
| Current Yield (%)         | 3.3            | 3.4            |
| Beta (5 Years, Monthly)   | 1.0            | 1.0            |
| Number of Stocks          | 980            | 796            |

## Distribution of Market Capitalization (%)



## Sector Weights (%)



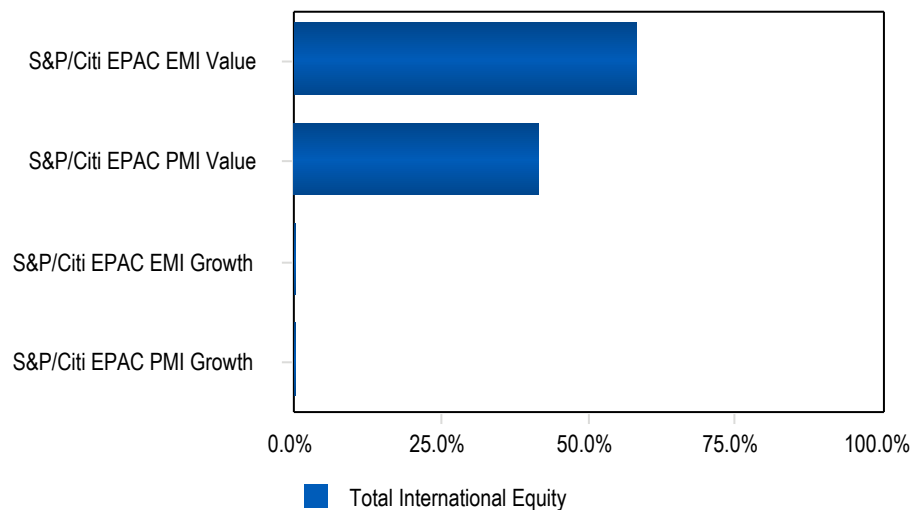
## Ten Best Performers

|                                            | Portfolio<br>Weight<br>(%) | Benchmark<br>Weight<br>(%) | Active<br>Weight<br>(%) | Quarterly<br>Return<br>(%) |
|--------------------------------------------|----------------------------|----------------------------|-------------------------|----------------------------|
| Turk Traktor ve Ziraat Makineleri A.S.     | 0.0                        | 0.0                        | 0.0                     | 134.0                      |
| IS Yatirim Menkul Degerler A.S.            | 0.0                        | 0.0                        | 0.0                     | 133.4                      |
| Hyundai Construction Equipment Corporation | 0.0                        | 0.0                        | 0.0                     | 119.9                      |
| Aselsan A.S.                               | 0.0                        | 0.0                        | 0.0                     | 111.1                      |
| Nippon Steel Trading Corp                  | 0.0                        | 0.0                        | 0.0                     | 101.5                      |
| Pegasus Hava Tasimaciligi Anonim Sirketi   | 0.0                        | 0.0                        | 0.0                     | 99.6                       |
| Turk Hava Yollari Ao                       | 0.1                        | 0.0                        | 0.1                     | 97.6                       |
| Jastrzebska Spolka Weglowa SA              | 0.0                        | 0.0                        | 0.0                     | 96.4                       |
| Hurxley Corp                               | 0.0                        | 0.0                        | 0.0                     | 94.6                       |
| Hello Group Inc                            | 0.0                        | 0.0                        | 0.0                     | 94.4                       |
| % of Portfolio                             | 0.1                        | 0.0                        | 0.1                     |                            |

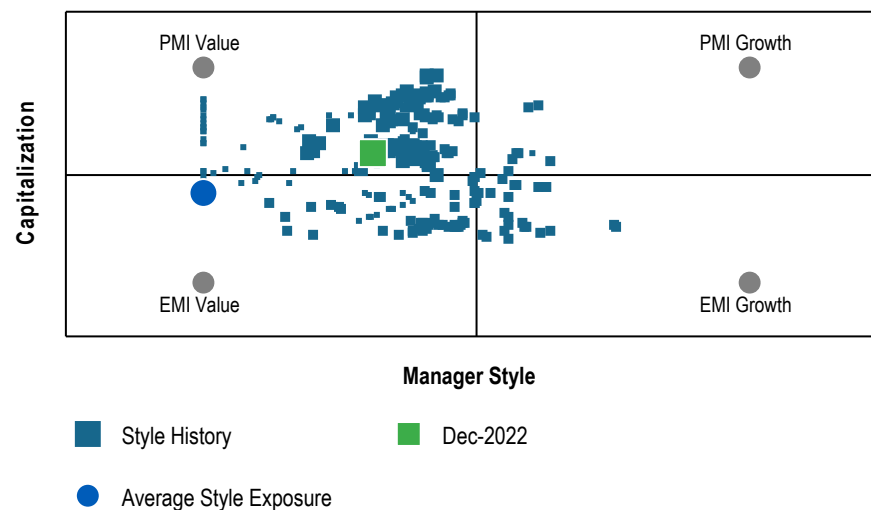
## Ten Worst Performers

|                                                | Portfolio<br>Weight<br>(%) | Benchmark<br>Weight<br>(%) | Active<br>Weight<br>(%) | Quarterly<br>Return<br>(%) |
|------------------------------------------------|----------------------------|----------------------------|-------------------------|----------------------------|
| Yankuang Energy Group Company Limited          | 0.0                        | 0.0                        | 0.0                     | -31.7                      |
| Discount Investment Corp                       | 0.0                        | 0.0                        | 0.0                     | -31.1                      |
| Delek Group Ltd                                | 0.0                        | 0.0                        | 0.0                     | -30.3                      |
| Jinneng Holding Shanxi Coal Industry Co Ltd    | 0.0                        | 0.0                        | 0.0                     | -30.2                      |
| Trevi-Finanziaria Industriale SPA, Cesena (FO) | 0.1                        | 0.0                        | 0.1                     | -27.5                      |
| Harbour Energy plc                             | 0.0                        | 0.0                        | 0.0                     | -26.8                      |
| flatexDEGIRO AG                                | 0.1                        | 0.0                        | 0.1                     | -25.3                      |
| Guanghui Energy Co Ltd                         | 0.0                        | 0.0                        | 0.0                     | -25.1                      |
| Qatar Islamic Bank                             | 0.0                        | 0.0                        | 0.0                     | -24.9                      |
| Huaibei Mining Holdings Co Ltd                 | 0.0                        | 0.0                        | 0.0                     | -22.5                      |
| % of Portfolio                                 | 0.2                        | 0.0                        | 0.2                     |                            |

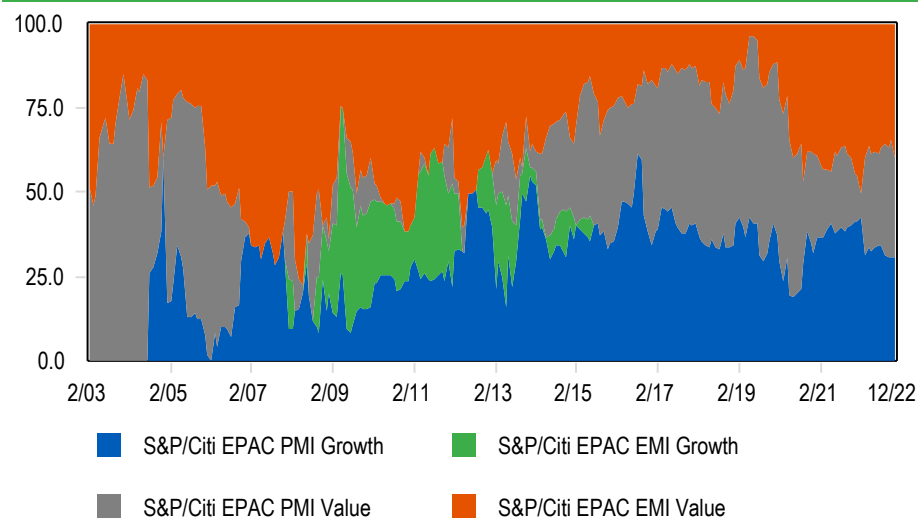
### Investment Style Exposure



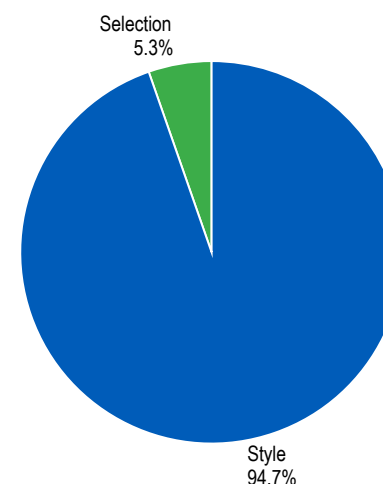
### Style Map(36 Months)



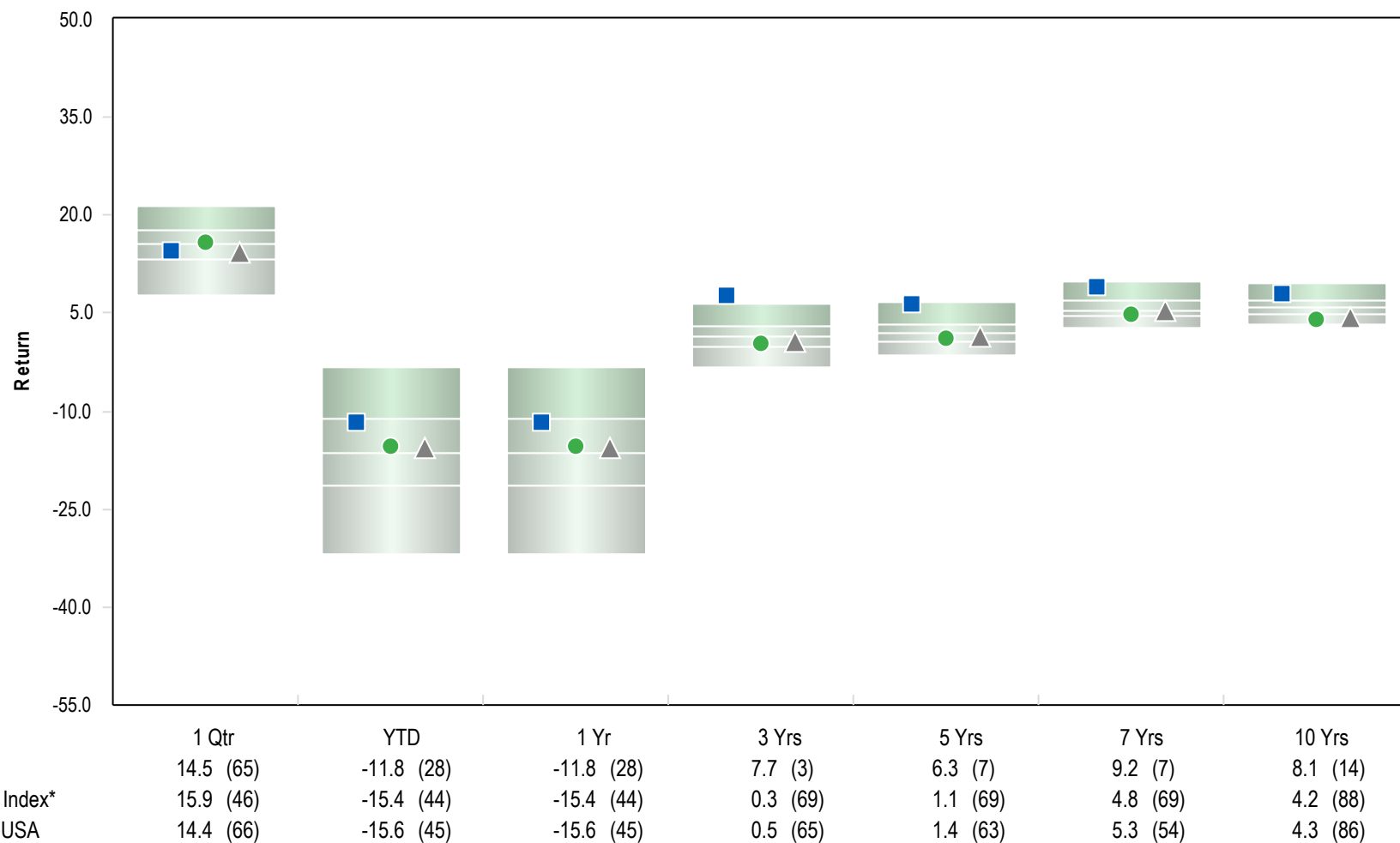
### Style History(36 Months)



### Return Variance

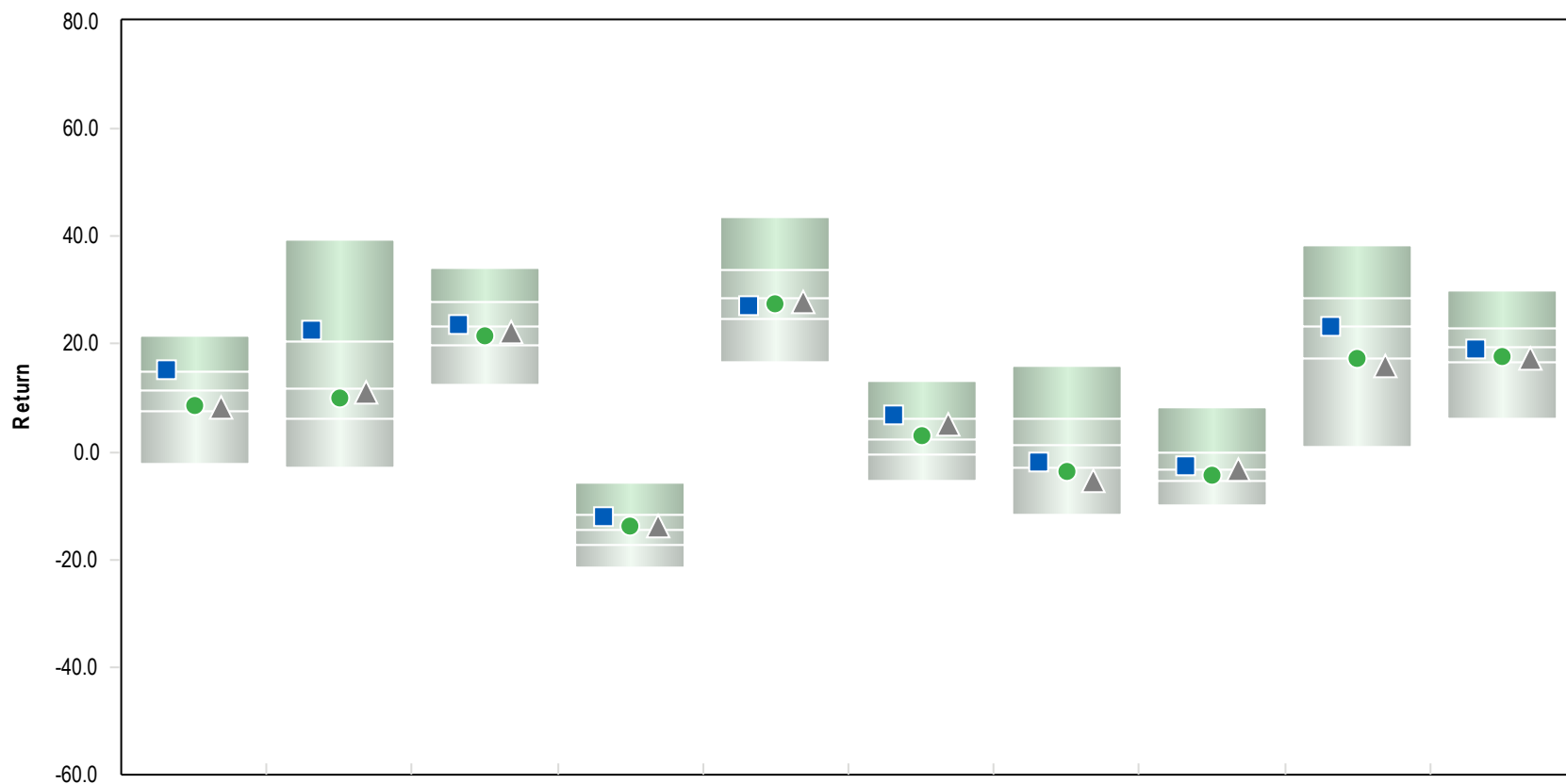






|                 |      |       |       |      |      |     |     |
|-----------------|------|-------|-------|------|------|-----|-----|
| 5th Percentile  | 21.4 | -3.2  | -3.2  | 6.4  | 6.6  | 9.8 | 9.5 |
| 1st Quartile    | 17.6 | -11.1 | -11.1 | 3.1  | 3.3  | 7.0 | 7.0 |
| Median          | 15.5 | -16.4 | -16.4 | 1.4  | 1.9  | 5.5 | 5.8 |
| 3rd Quartile    | 13.4 | -21.5 | -21.5 | -0.1 | 0.7  | 4.5 | 4.9 |
| 95th Percentile | 7.6  | -31.8 | -31.8 | -3.2 | -1.4 | 2.7 | 3.2 |

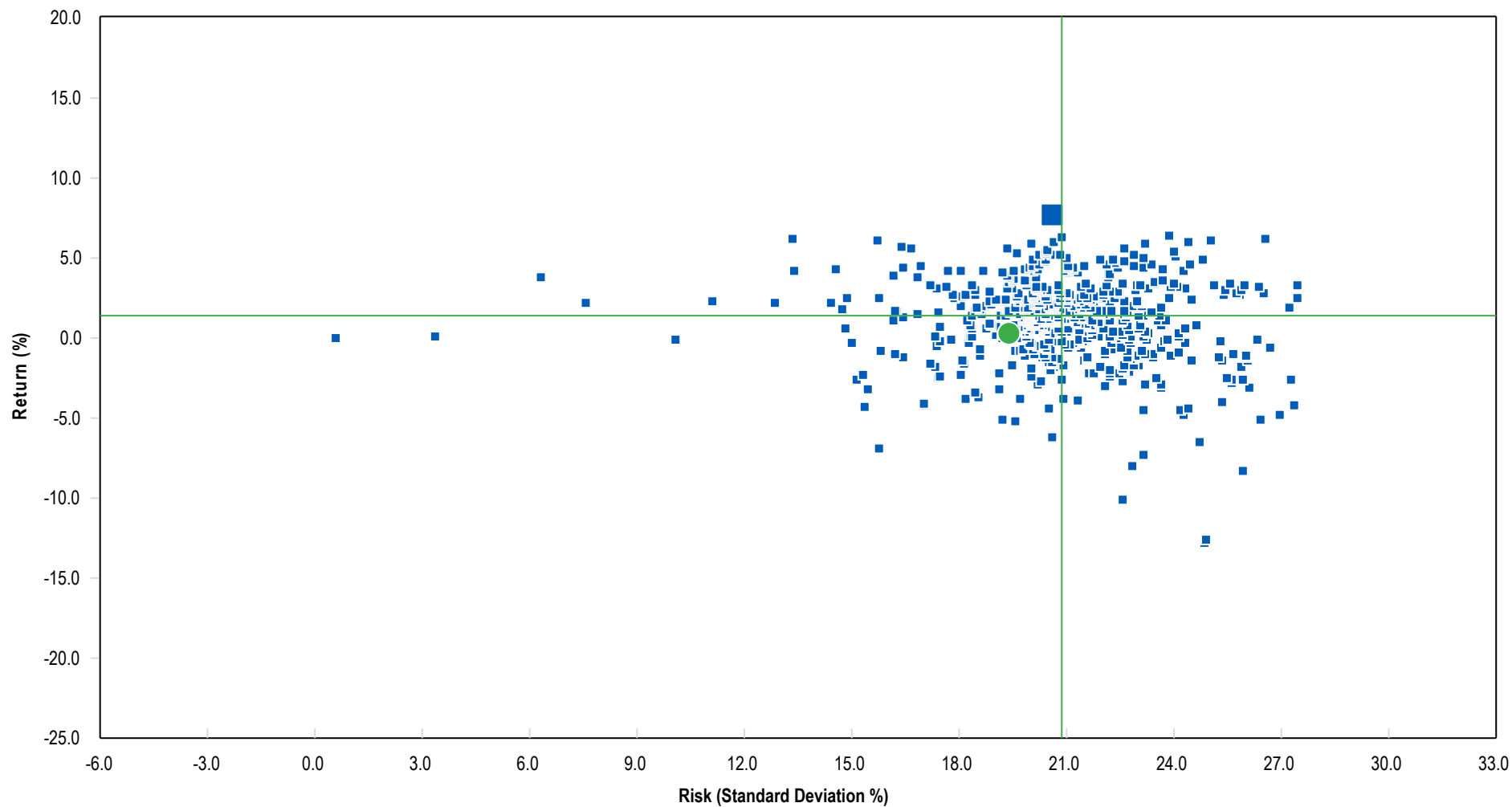
\*80% MSCI EAFE/20% MSCI EME



|                              | 2021      | 2020      | 2019      | 2018       | 2017      | 2016     | 2015      | 2014      | 2013      | 2012      |
|------------------------------|-----------|-----------|-----------|------------|-----------|----------|-----------|-----------|-----------|-----------|
| ■ Arrowstreet Capital        | 15.2 (24) | 22.8 (21) | 23.6 (49) | -12.0 (27) | 27.3 (60) | 6.9 (22) | -1.9 (70) | -2.7 (44) | 23.4 (50) | 19.1 (55) |
| ● Arrowstreet Capital Index* | 8.5 (70)  | 10.1 (58) | 21.4 (67) | -13.8 (42) | 27.5 (58) | 3.2 (44) | -3.6 (79) | -4.2 (62) | 17.4 (75) | 17.6 (67) |
| ▲ MSCI AC World ex USA       | 8.3 (71)  | 11.1 (52) | 22.1 (59) | -13.8 (42) | 27.8 (56) | 5.0 (32) | -5.3 (85) | -3.4 (52) | 15.8 (80) | 17.4 (68) |

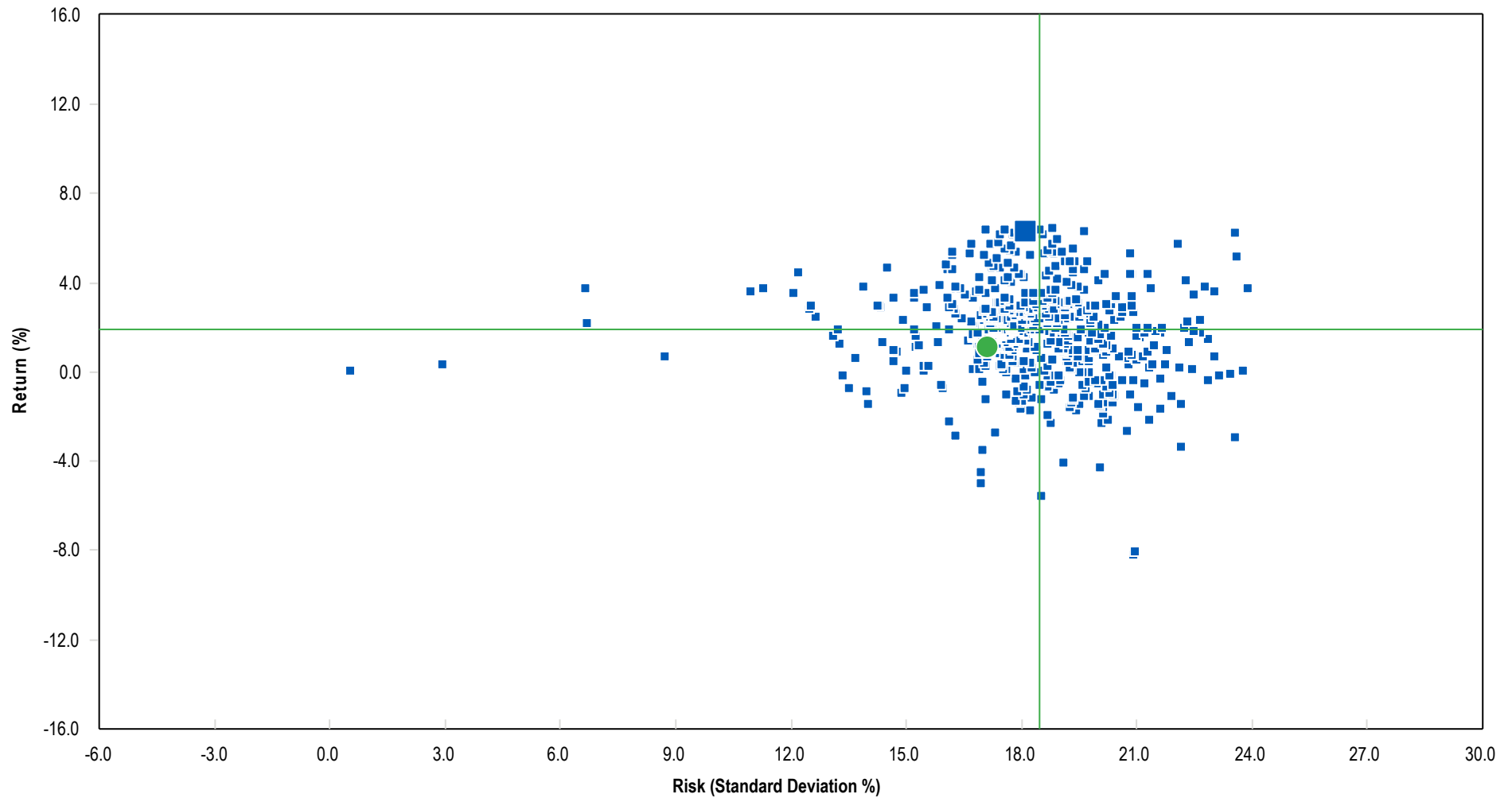
|                 |      |      |      |       |      |      |       |      |      |      |
|-----------------|------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 21.7 | 39.3 | 34.2 | -5.6  | 43.6 | 13.3 | 16.1  | 8.4  | 38.2 | 29.8 |
| 1st Quartile    | 14.8 | 20.5 | 27.9 | -11.7 | 33.8 | 6.2  | 6.0   | -0.2 | 28.5 | 22.9 |
| Median          | 11.6 | 11.6 | 23.3 | -14.5 | 28.7 | 2.4  | 1.2   | -3.3 | 23.4 | 19.6 |
| 3rd Quartile    | 7.5  | 6.0  | 19.8 | -17.2 | 24.8 | -0.4 | -3.0  | -5.4 | 17.2 | 16.5 |
| 95th Percentile | -2.4 | -2.9 | 12.6 | -21.5 | 16.8 | -5.3 | -11.7 | -9.9 | 1.1  | 6.1  |

\*80% MSCI EAFE/20% MSCI EME



|                              | Return | Standard<br>Deviation |
|------------------------------|--------|-----------------------|
| ■ Arrowstreet Capital        | 7.7    | 20.6                  |
| ● Arrowstreet Capital Index* | 0.3    | 19.4                  |
| — Median                     | 1.4    | 20.9                  |

\*80% MSCI EAFE/20% MSCI EME.



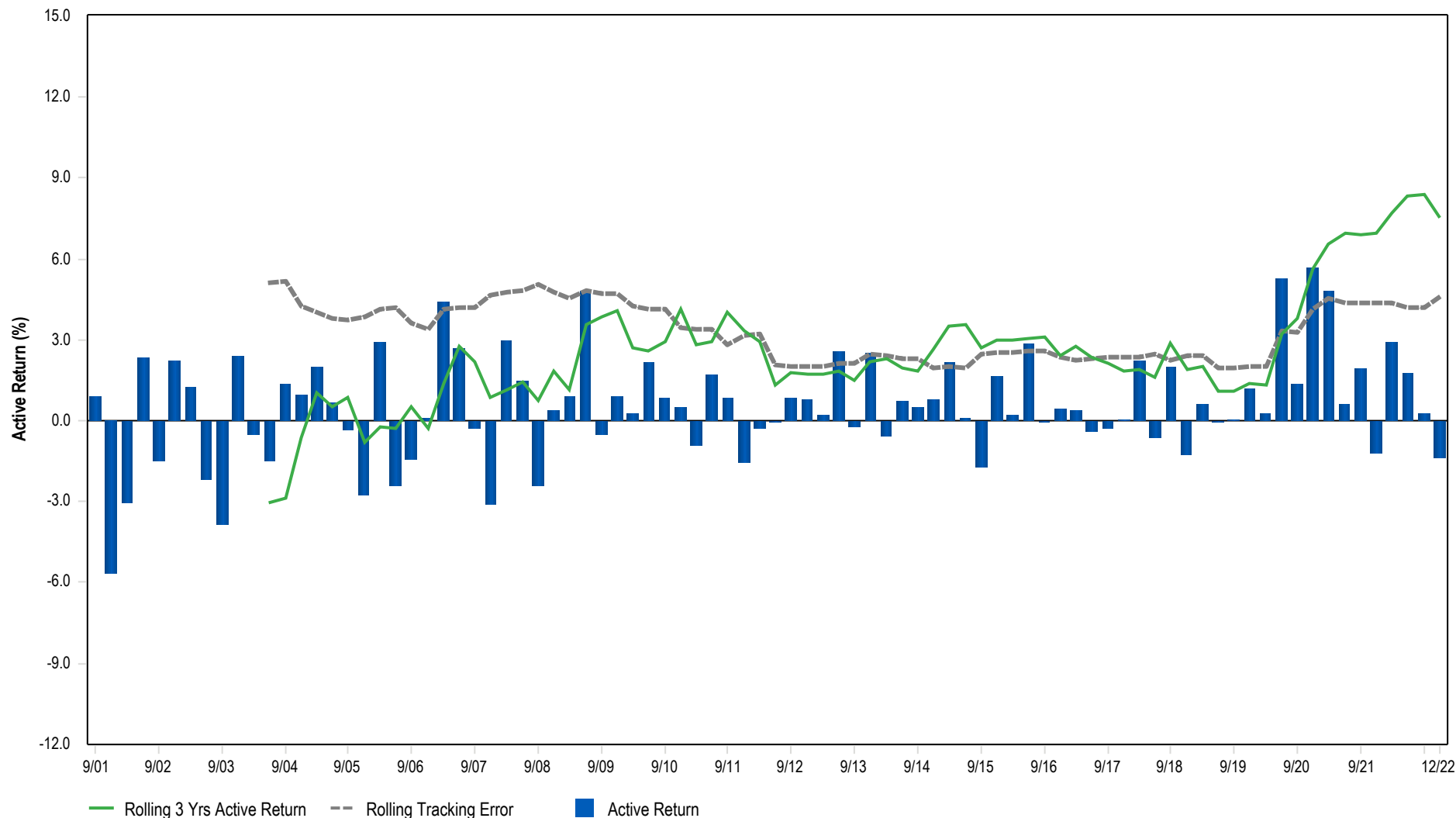
\*80% MSCI EAFE/20% MSCI EME.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                            | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|----------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Arrowstreet Capital        | 14.5  | -11.8 | -11.8 | 7.7   | 6.3   | 9.2   | 8.1    | 15.2 | 22.8 | 23.6 | -12.0 |
| Arrowstreet Capital Index* | 15.9  | -15.4 | -15.4 | 0.3   | 1.1   | 4.8   | 4.2    | 8.5  | 10.1 | 21.4 | -13.8 |
| Difference                 | -1.4  | 3.6   | 3.6   | 7.4   | 5.2   | 4.4   | 3.9    | 6.7  | 12.7 | 2.2  | 1.8   |



\*80% MSCI EAFE (Net)/20% MSCI EMF.  
Gross of Fees

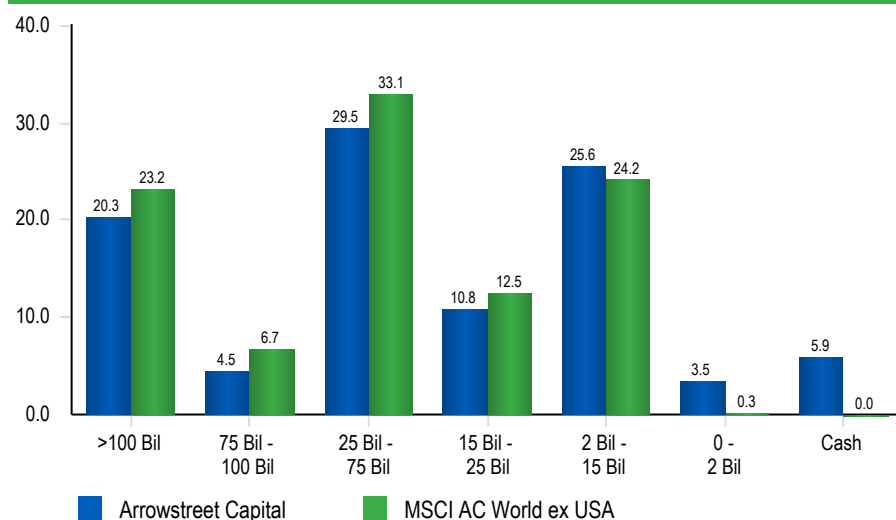
## Top Ten Equity Holdings

|                                      | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|--------------------------------------|----------------------|----------------------|-------------------|----------------------|
| ishare Inc - iShares MSCI Taiwan ETF | 3.1                  | 0.0                  | 3.1               | 10.0                 |
| TotalEnergies SE                     | 2.4                  | 0.7                  | 1.7               | 34.6                 |
| Samsung Electronics Co Ltd           | 2.4                  | 0.9                  | 1.5               | 17.8                 |
| Roche Holding AG                     | 2.0                  | 1.0                  | 1.0               | -4.5                 |
| Shell Plc                            | 1.7                  | 0.9                  | 0.8               | 12.6                 |
| Novo Nordisk A/S                     | 1.6                  | 1.0                  | 0.6               | 34.2                 |
| Eni SpA                              | 1.6                  | 0.2                  | 1.4               | 34.8                 |
| ASML Holding NV                      | 1.5                  | 1.0                  | 0.5               | 27.0                 |
| Deutsche Telekom AG                  | 1.4                  | 0.3                  | 1.1               | 16.1                 |
| Taiwan Semiconductor                 | 1.3                  | 1.6                  | -0.3              | 9.3                  |
| % of Portfolio                       | 19.0                 | 7.6                  | 11.4              |                      |

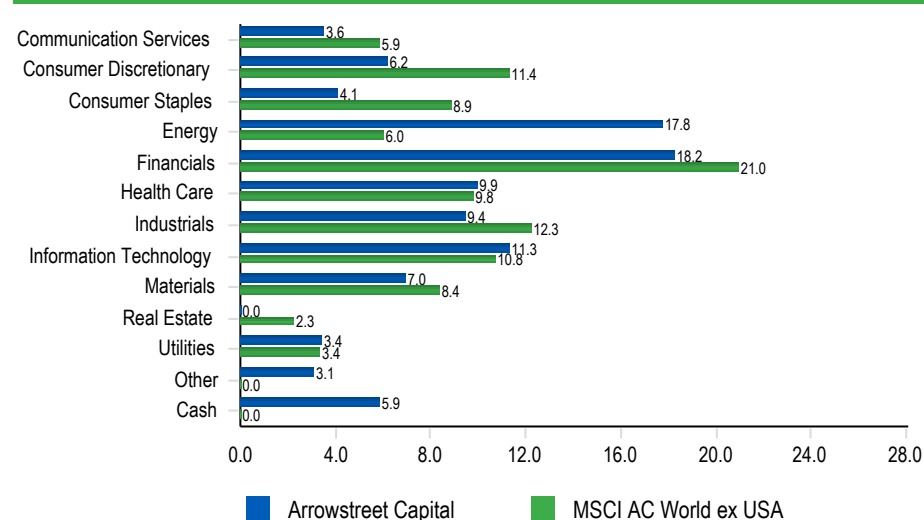
## Portfolio Characteristics

|                           | Portfolio      | Benchmark      |
|---------------------------|----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 63,054,246,717 | 77,574,438,787 |
| Median Mkt. Cap (\$)      | 5,178,082,343  | 8,612,419,739  |
| Price/Earnings ratio      | 6.1            | 12.2           |
| Price/Book ratio          | 2.0            | 2.4            |
| 5 Yr. EPS Growth Rate (%) | 21.0           | 12.2           |
| Current Yield (%)         | 6.6            | 3.4            |
| Beta (5 Years, Monthly)   | 1.0            | 1.0            |
| Number of Stocks          | 738            | 2,261          |

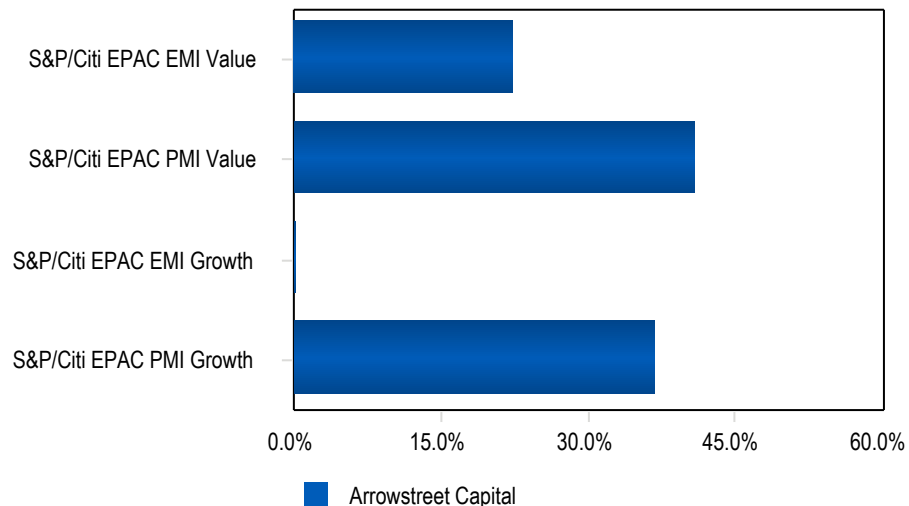
## Distribution of Market Capitalization (%)



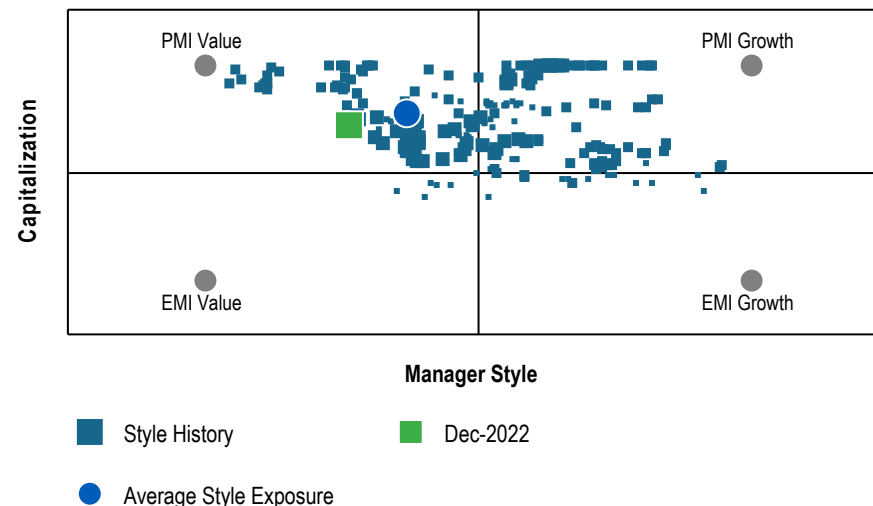
## Sector Weights (%)



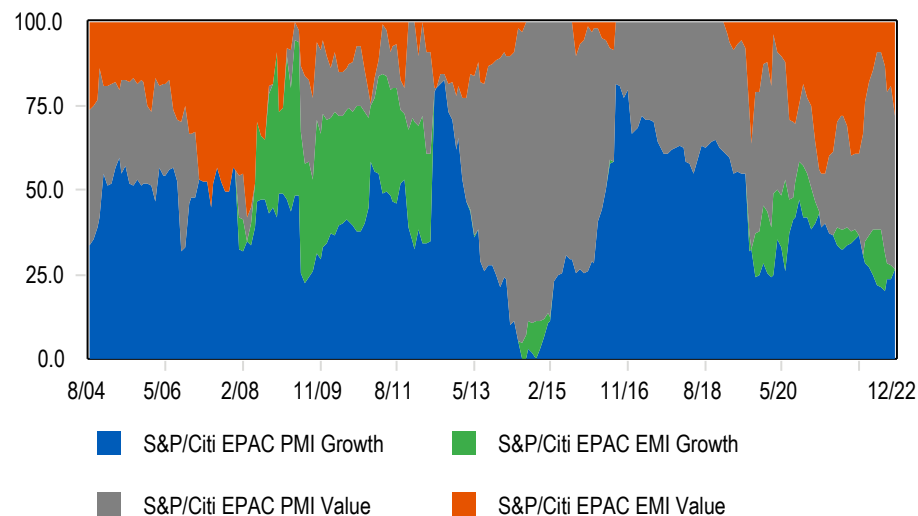
### Investment Style Exposure



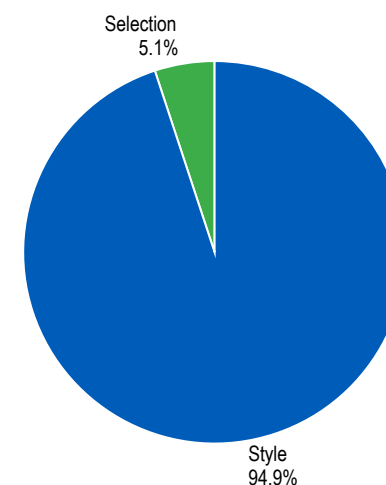
### Style Map(36 Months)

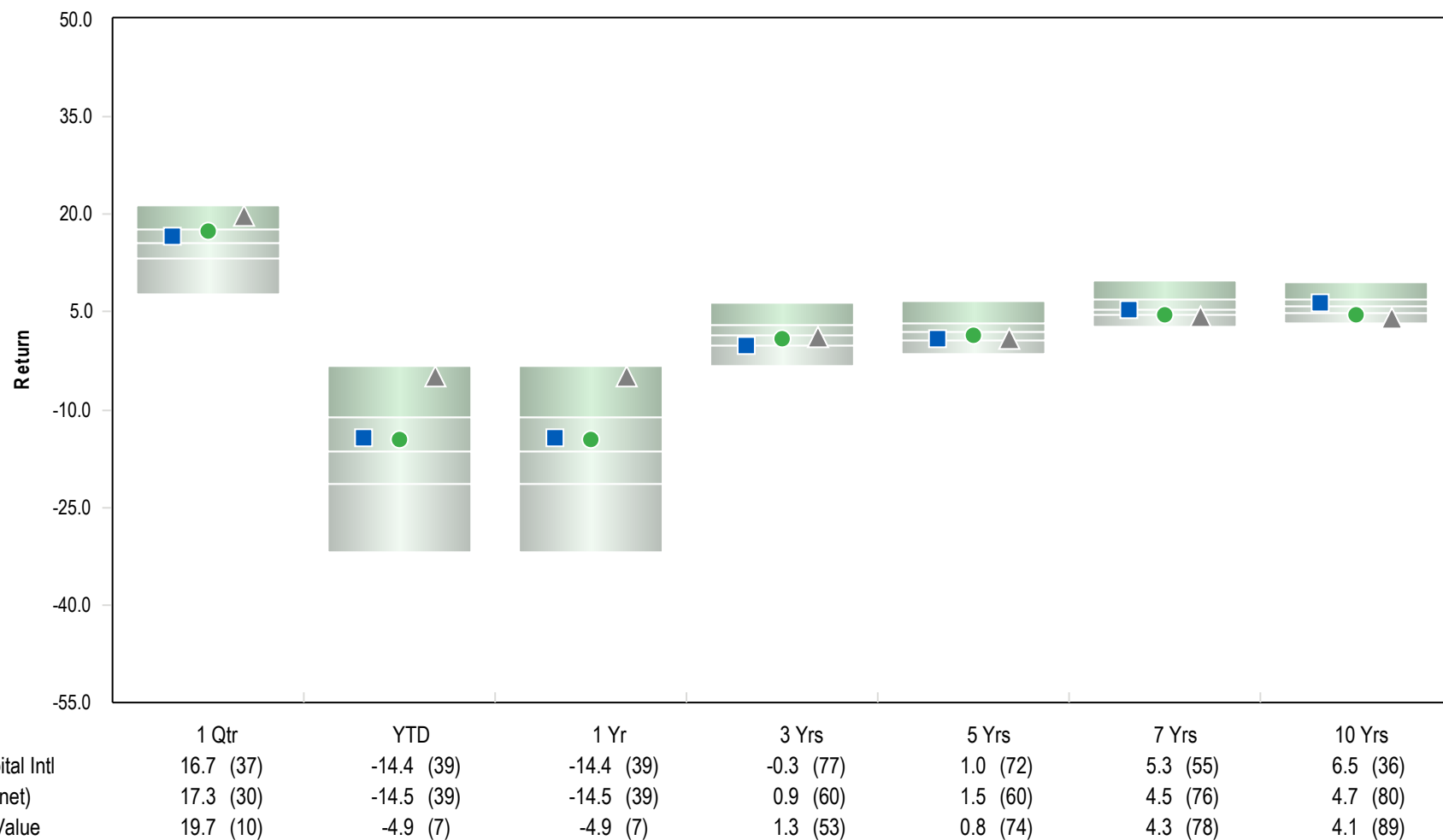


### Style History(36 Months)



### Return Variance

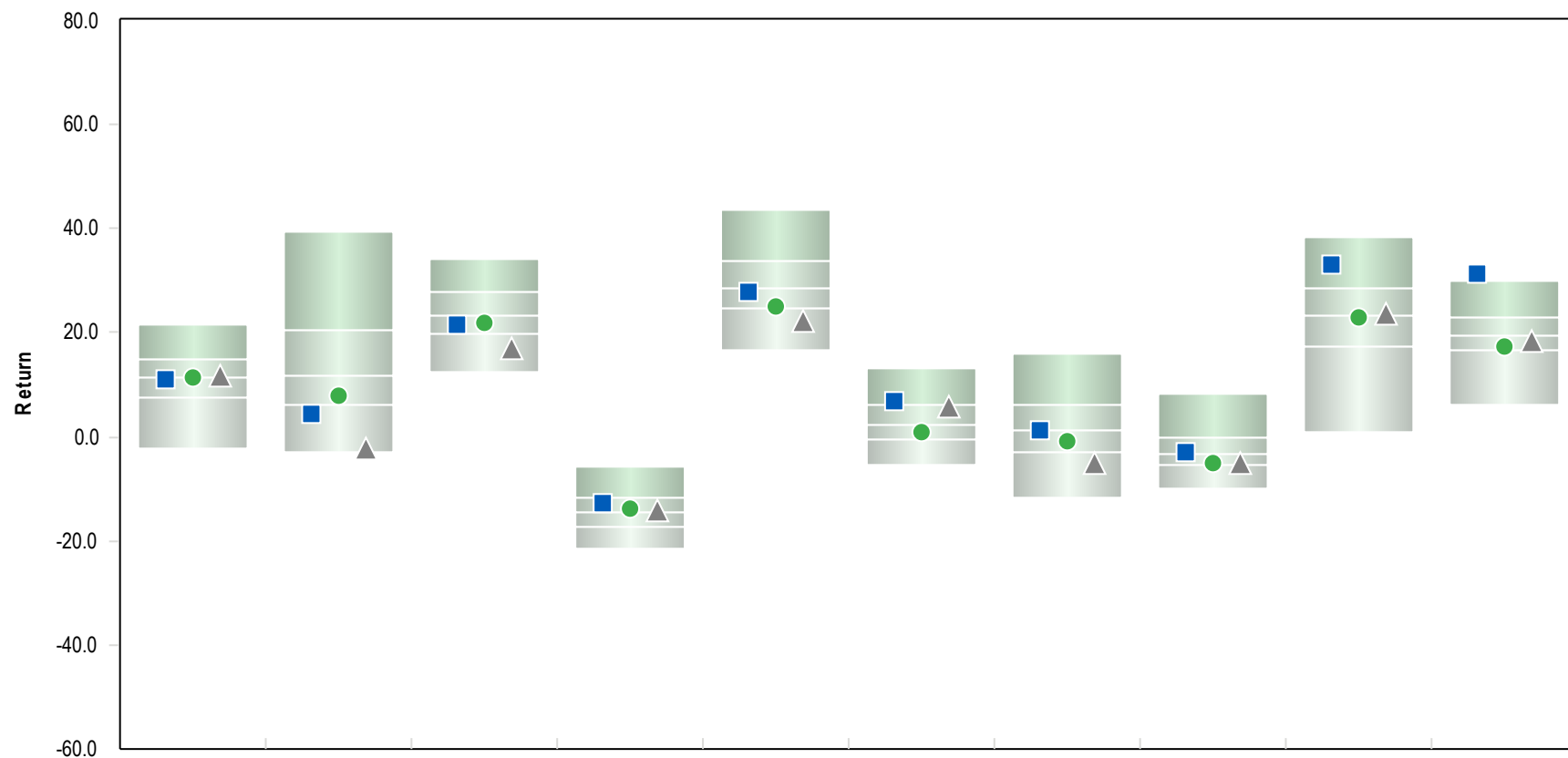




|                 |      |       |       |      |      |     |     |
|-----------------|------|-------|-------|------|------|-----|-----|
| 5th Percentile  | 21.4 | -3.2  | -3.2  | 6.4  | 6.6  | 9.8 | 9.5 |
| 1st Quartile    | 17.6 | -11.1 | -11.1 | 3.1  | 3.3  | 7.0 | 7.0 |
| Median          | 15.5 | -16.4 | -16.4 | 1.4  | 1.9  | 5.5 | 5.8 |
| 3rd Quartile    | 13.4 | -21.5 | -21.5 | -0.1 | 0.7  | 4.5 | 4.9 |
| 95th Percentile | 7.6  | -31.8 | -31.8 | -3.2 | -1.4 | 2.7 | 3.2 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

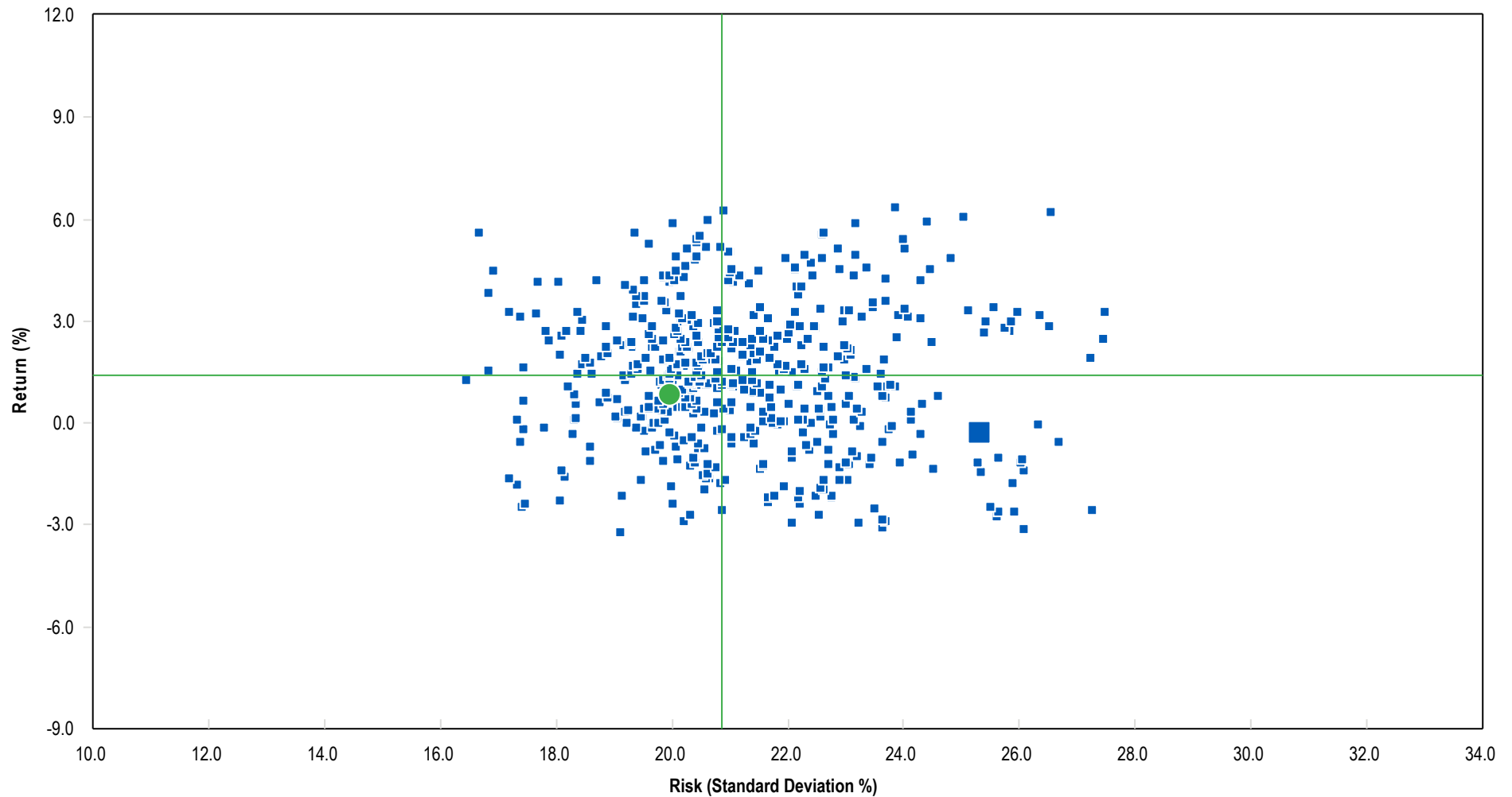




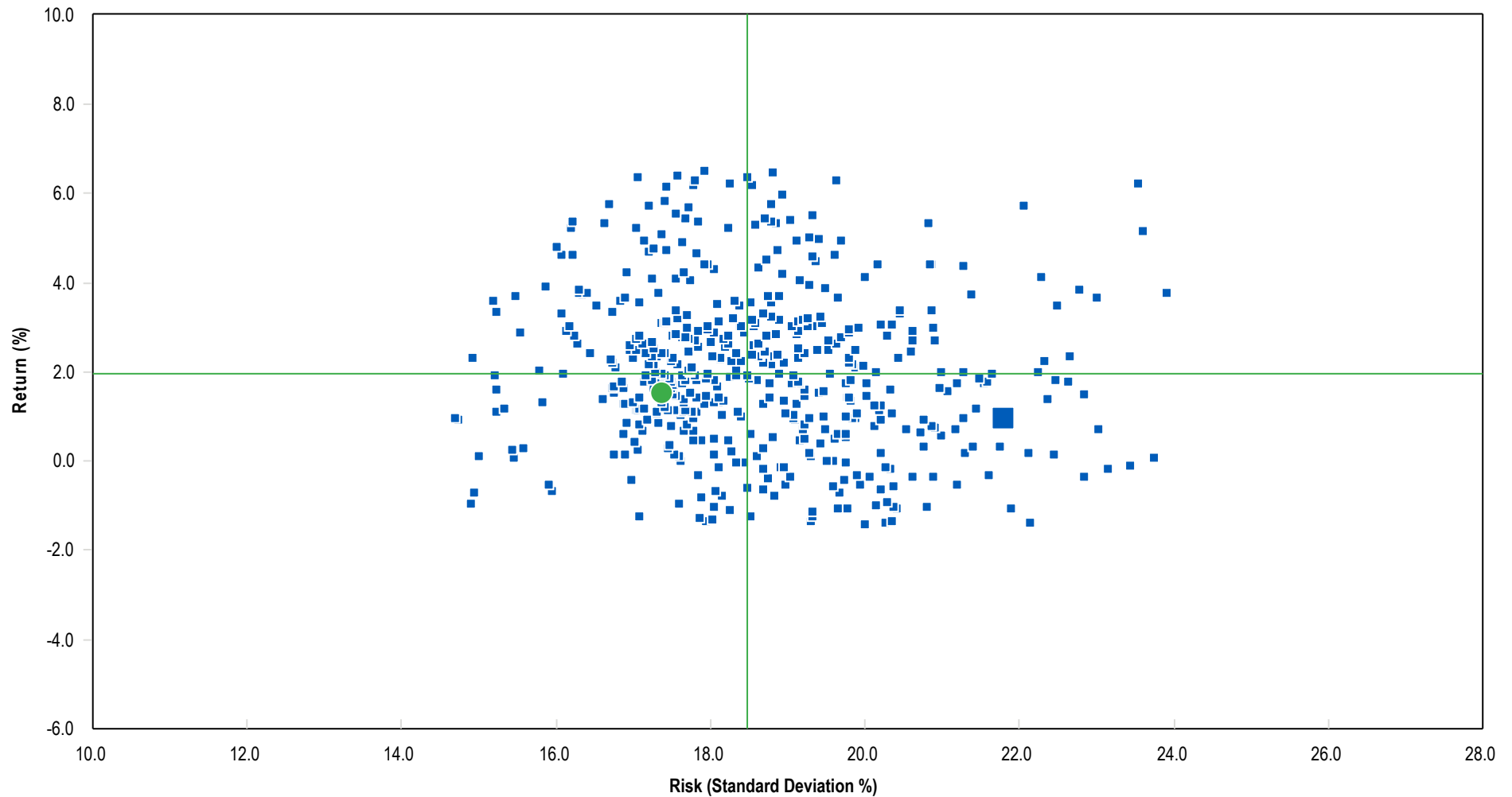
|                        | 2021      | 2020      | 2019      | 2018       | 2017      | 2016     | 2015      | 2014      | 2013      | 2012      |
|------------------------|-----------|-----------|-----------|------------|-----------|----------|-----------|-----------|-----------|-----------|
| ■ Freedom Capital Intl | 11.0 (56) | 4.4 (80)  | 21.4 (67) | -12.9 (32) | 28.0 (55) | 6.8 (22) | 1.4 (49)  | -2.9 (45) | 33.2 (11) | 31.5 (4)  |
| ● MSCI EAFE (net)      | 11.3 (53) | 7.8 (68)  | 22.0 (61) | -13.8 (42) | 25.0 (74) | 1.0 (64) | -0.8 (64) | -4.9 (71) | 22.8 (54) | 17.3 (69) |
| ▲ MSCI EAFE Value      | 11.6 (50) | -2.1 (94) | 16.8 (89) | -14.3 (48) | 22.1 (88) | 5.7 (28) | -5.2 (85) | -4.9 (71) | 23.6 (49) | 18.4 (60) |

|                 |      |      |      |       |      |      |       |      |      |      |
|-----------------|------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 21.7 | 39.3 | 34.2 | -5.6  | 43.6 | 13.3 | 16.1  | 8.4  | 38.2 | 29.8 |
| 1st Quartile    | 14.8 | 20.5 | 27.9 | -11.7 | 33.8 | 6.2  | 6.0   | -0.2 | 28.5 | 22.9 |
| Median          | 11.6 | 11.6 | 23.3 | -14.5 | 28.7 | 2.4  | 1.2   | -3.3 | 23.4 | 19.6 |
| 3rd Quartile    | 7.5  | 6.0  | 19.8 | -17.2 | 24.8 | -0.4 | -3.0  | -5.4 | 17.2 | 16.5 |
| 95th Percentile | -2.4 | -2.9 | 12.6 | -21.5 | 16.8 | -5.3 | -11.7 | -9.9 | 1.1  | 6.1  |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



Calculation based on monthly periodicity.



|                        | Return | Standard<br>Deviation |
|------------------------|--------|-----------------------|
| ■ Freedom Capital Intl | 1.0    | 21.8                  |
| ● MSCI EAFE (net)      | 1.5    | 17.4                  |
| — Median               | 1.9    | 18.5                  |

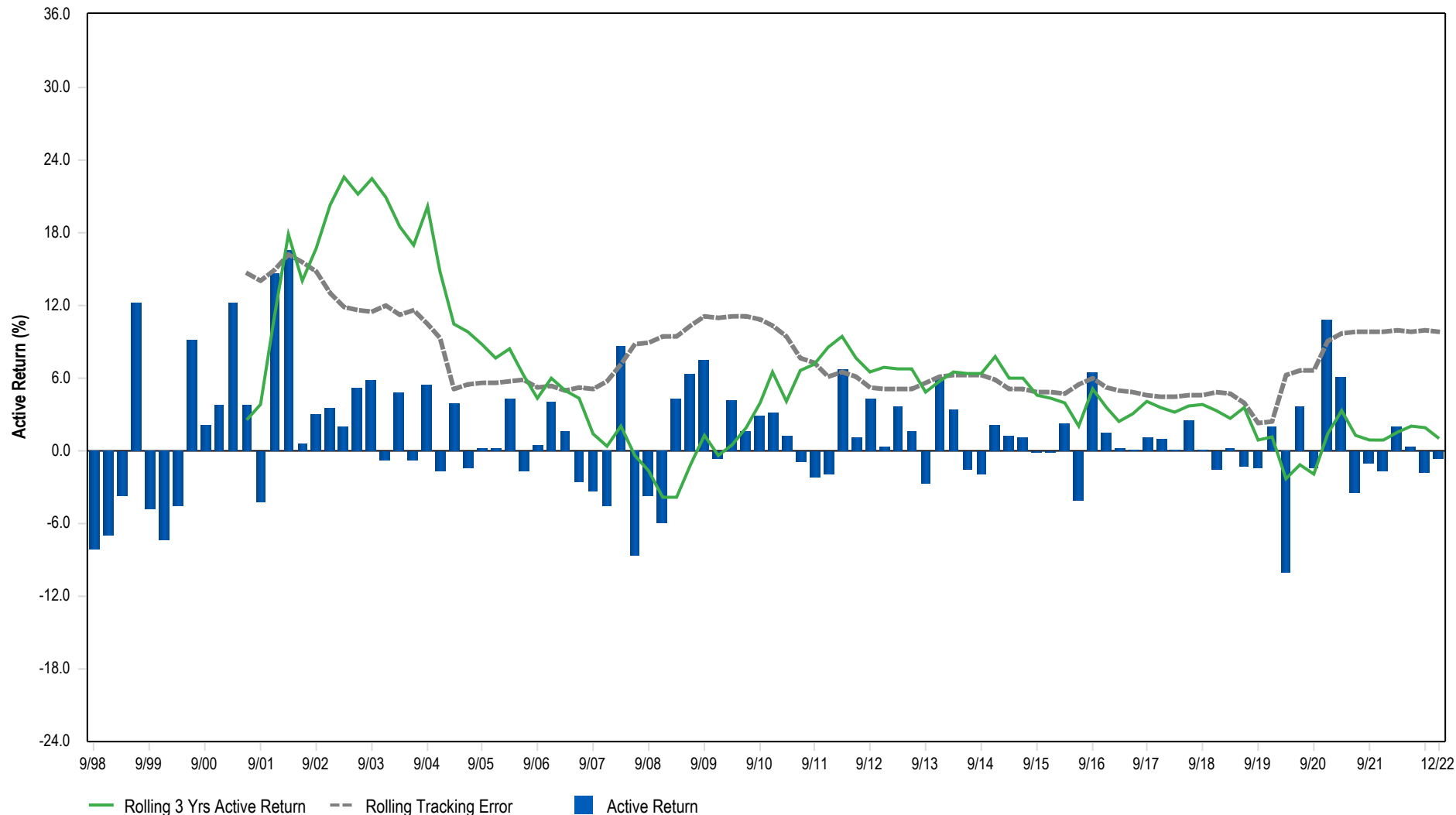
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                      | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|----------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Freedom Capital Intl | 16.7  | -14.4 | -14.4 | -0.3  | 1.0   | 5.3   | 6.5    | 11.0 | 4.4  | 21.4 | -12.9 |
| MSCI EAFE (net)      | 17.3  | -14.5 | -14.5 | 0.9   | 1.5   | 4.5   | 4.7    | 11.3 | 7.8  | 22.0 | -13.8 |
| Difference           | -0.6  | 0.1   | 0.1   | -1.2  | -0.5  | 0.8   | 1.8    | -0.3 | -3.4 | -0.6 | 0.9   |



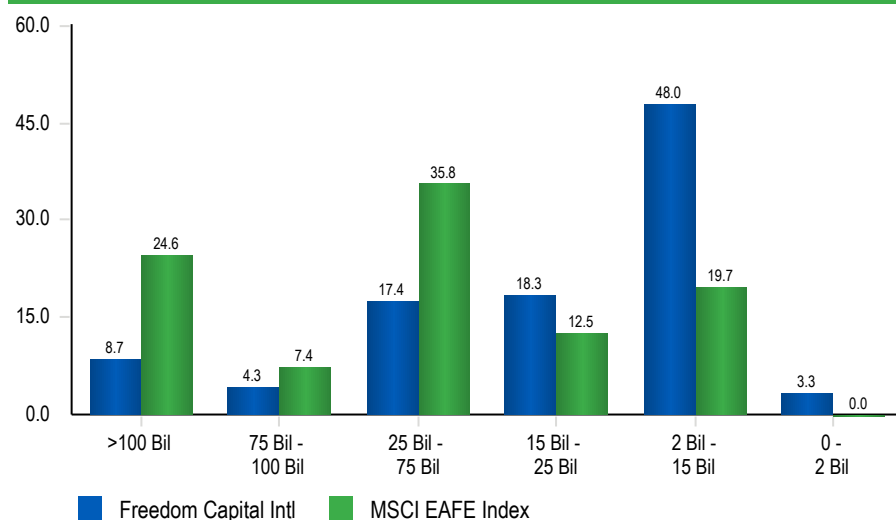
## Top Ten Equity Holdings

|                               | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|-------------------------------|----------------------|----------------------|-------------------|----------------------|
| Publicis Groupe SA            | 2.9                  | 0.1                  | 2.8               | 32.4                 |
| Marubeni Corp                 | 2.7                  | 0.1                  | 2.6               | 31.1                 |
| Popular Inc                   | 2.7                  | 0.0                  | 2.7               | -7.2                 |
| Weichai Power Co Ltd          | 2.6                  | 0.0                  | 2.6               | 41.5                 |
| Hannover Rueck SE             | 2.4                  | 0.1                  | 2.3               | 31.1                 |
| Next PLC                      | 2.4                  | 0.1                  | 2.3               | 31.8                 |
| DNB Bank ASA                  | 2.4                  | 0.1                  | 2.3               | 24.4                 |
| Toronto-Dominion Bank (The)   | 2.4                  | 0.0                  | 2.4               | 6.1                  |
| Muenchener Rueckversicherungs | 2.4                  | 0.3                  | 2.1               | 33.8                 |
| Antofagasta PLC               | 2.4                  | 0.1                  | 2.3               | 49.3                 |
| % of Portfolio                | 25.3                 | 0.9                  | 24.4              |                      |

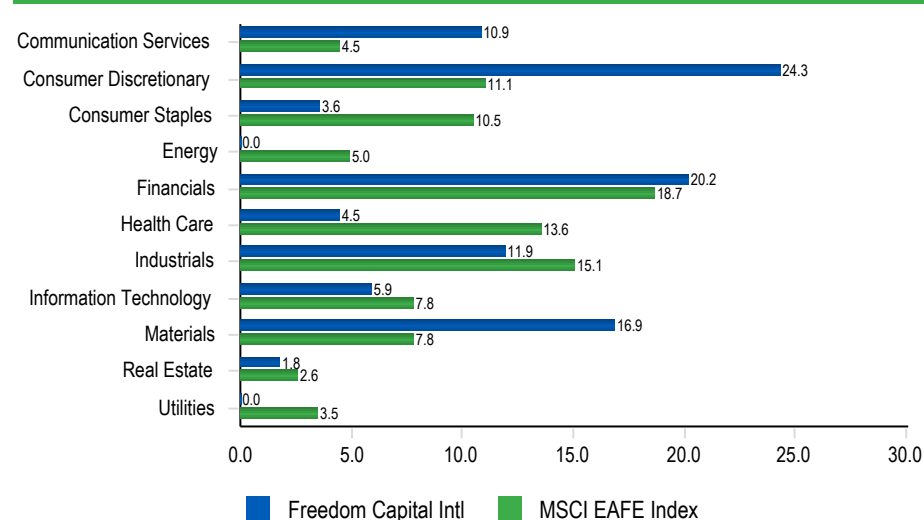
## Portfolio Characteristics

|                           | Portfolio      | Benchmark      |
|---------------------------|----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 35,543,352,957 | 76,649,372,164 |
| Median Mkt. Cap (\$)      | 10,576,687,753 | 11,967,087,452 |
| Price/Earnings ratio      | 9.8            | 12.9           |
| Price/Book ratio          | 1.8            | 2.4            |
| 5 Yr. EPS Growth Rate (%) | 10.9           | 10.5           |
| Current Yield (%)         | 3.5            | 3.4            |
| Beta (5 Years, Monthly)   | 1.2            | 1.0            |
| Number of Stocks          | 57             | 796            |

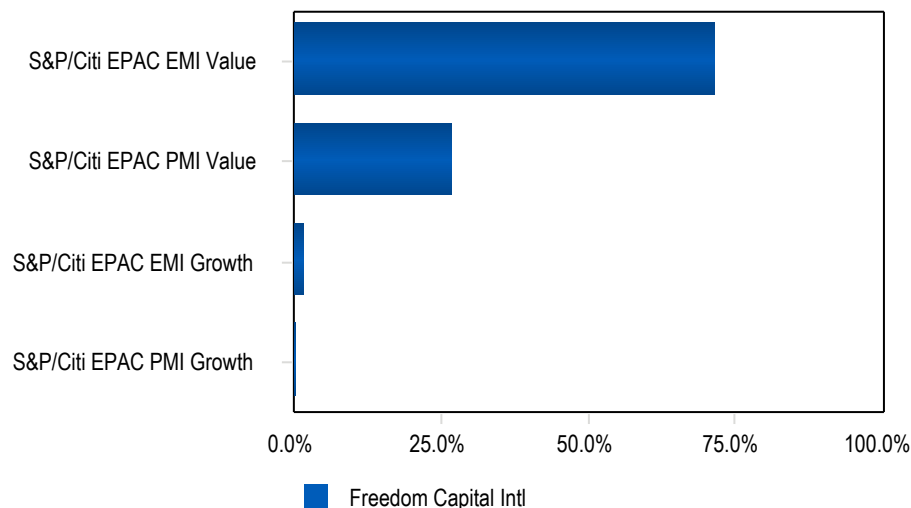
## Distribution of Market Capitalization (%)



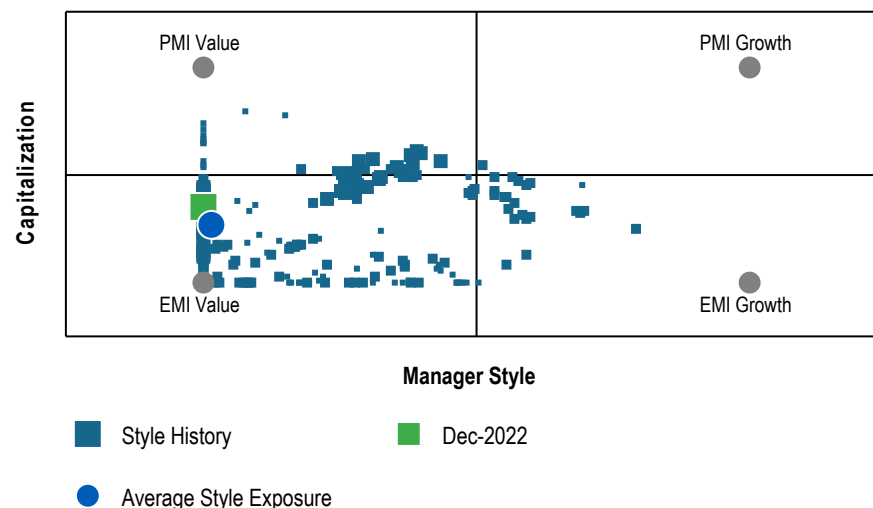
## Sector Weights (%)



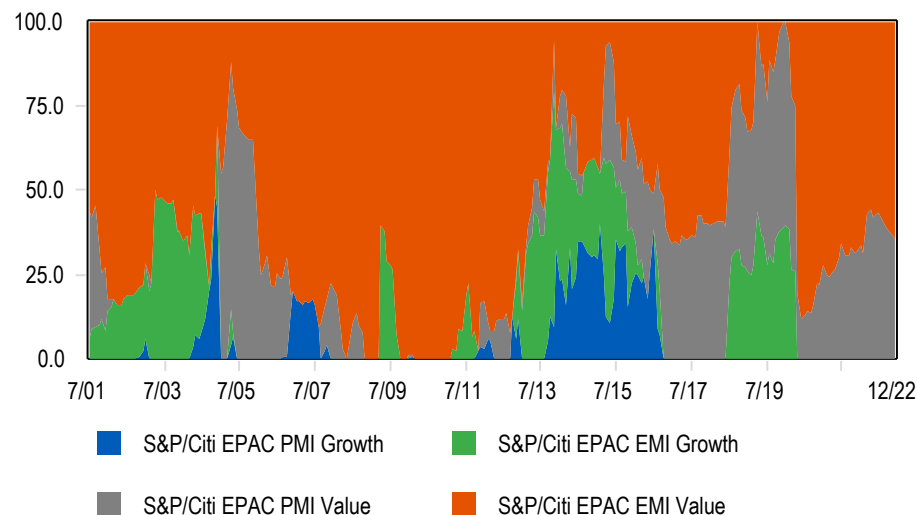
### Investment Style Exposure



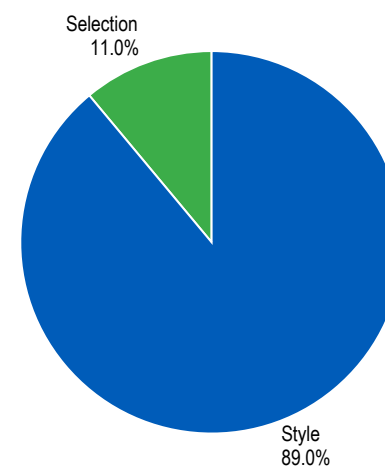
### Style Map(36 Months)

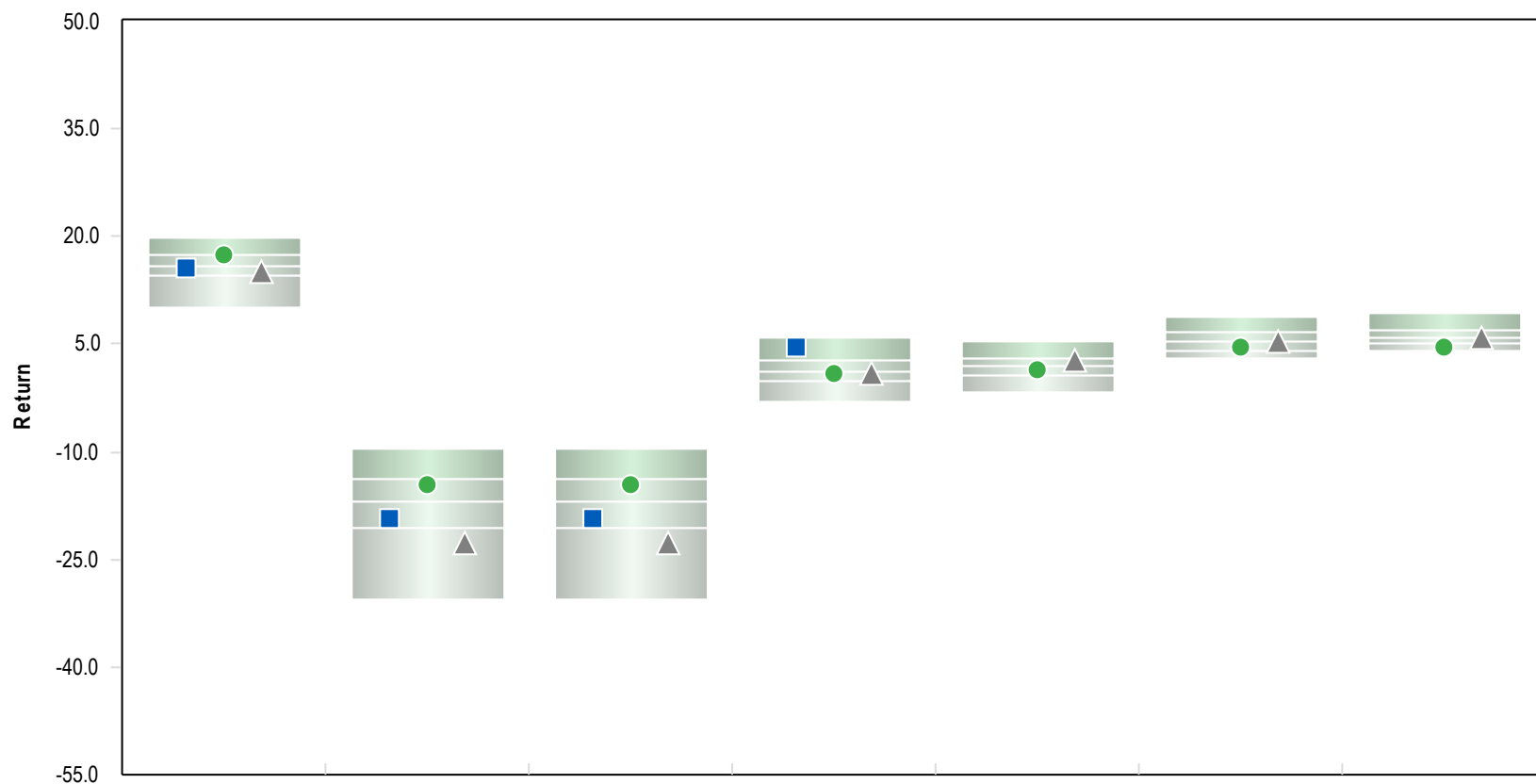


### Style History(36 Months)



### Return Variance



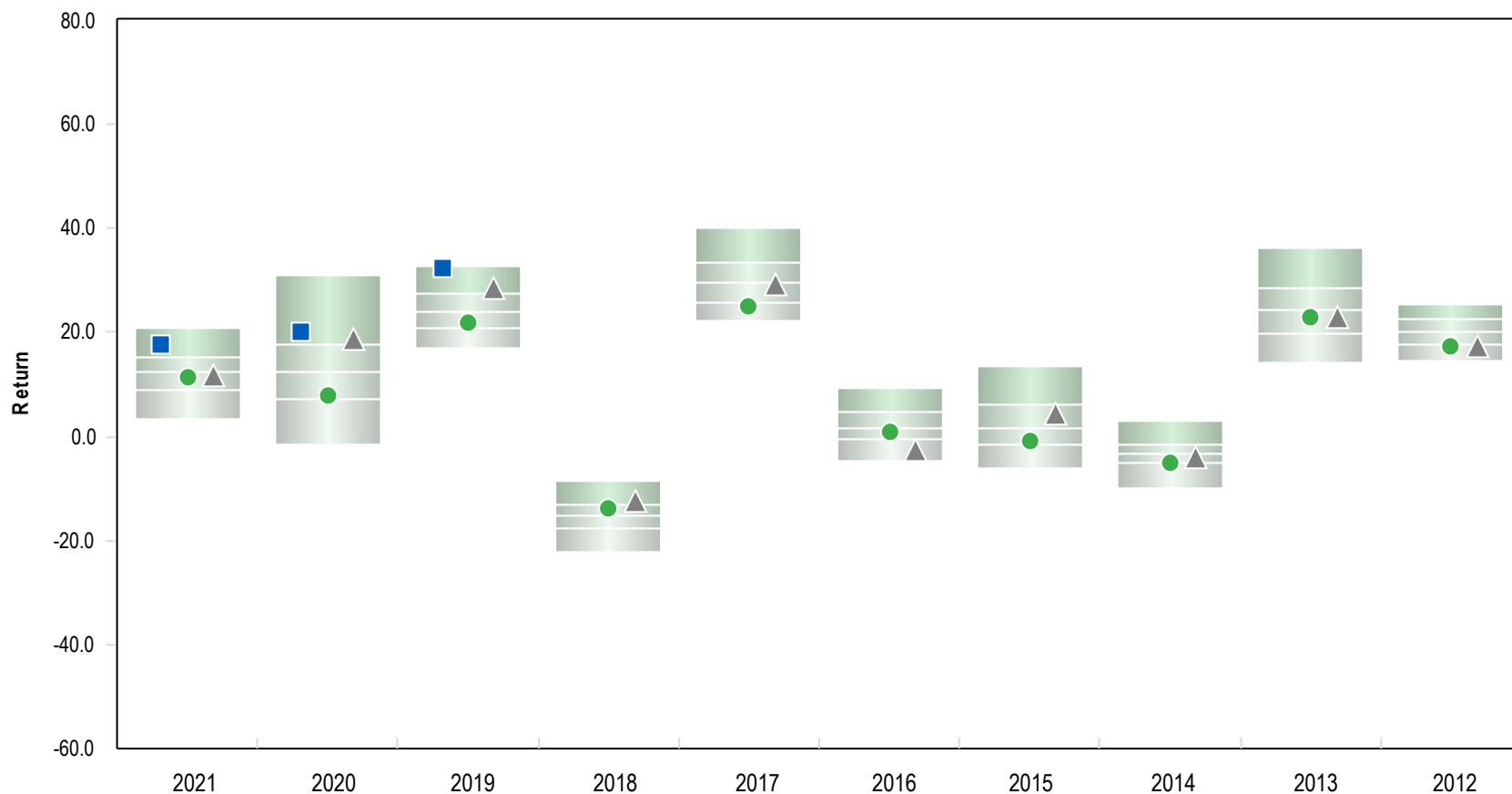


■ Fiera International Equity  
 ● MSCI EAFE (Net)  
 ▲ MSCI EAFE Growth Index

|                            | 1 Qtr     | YTD        | 1 Yr       | 3 Yrs    | 5 Yrs    | 7 Yrs    | 10 Yrs   |
|----------------------------|-----------|------------|------------|----------|----------|----------|----------|
| Fiera International Equity | 15.5 (57) | -19.2 (66) | -19.2 (66) | 4.6 (10) |          |          |          |
| MSCI EAFE (Net)            | 17.3 (27) | -14.5 (32) | -14.5 (32) | 0.9 (58) | 1.5 (60) | 4.5 (70) | 4.7 (84) |
| MSCI EAFE Growth Index     | 15.1 (62) | -22.7 (84) | -22.7 (84) | 0.8 (59) | 2.8 (27) | 5.4 (48) | 6.0 (47) |

|                 |      |       |       |      |      |     |     |
|-----------------|------|-------|-------|------|------|-----|-----|
| 5th Percentile  | 19.7 | -9.7  | -9.7  | 5.9  | 5.4  | 8.7 | 9.3 |
| 1st Quartile    | 17.4 | -13.8 | -13.8 | 2.7  | 2.9  | 6.7 | 6.9 |
| Median          | 15.9 | -16.8 | -16.8 | 1.3  | 1.9  | 5.3 | 5.9 |
| 3rd Quartile    | 14.5 | -20.6 | -20.6 | -0.2 | 0.7  | 4.1 | 5.0 |
| 95th Percentile | 10.1 | -30.5 | -30.5 | -2.9 | -1.6 | 2.9 | 4.1 |

Parentheses contain percentile rankings.  
 Calculation based on monthly periodicity.

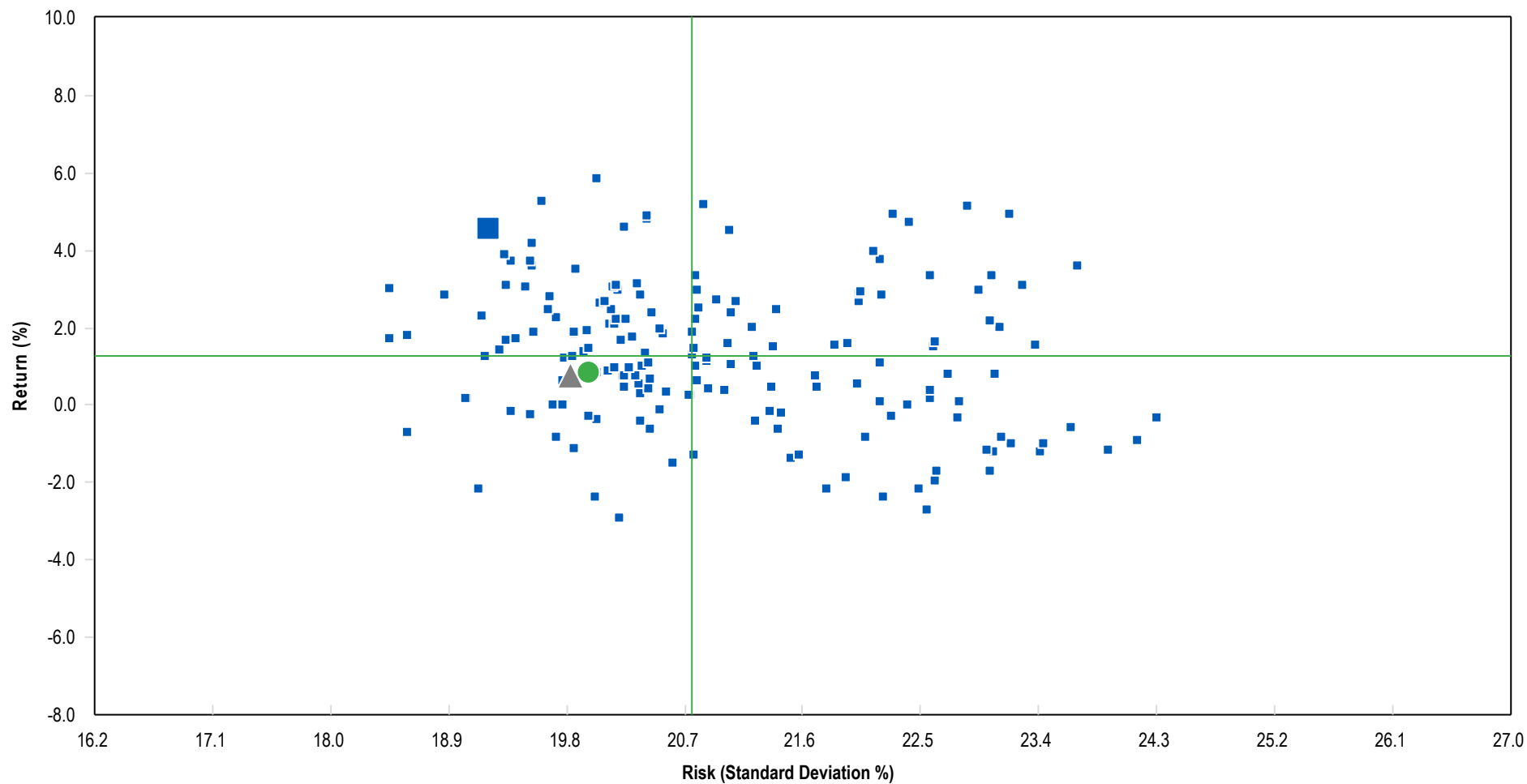


|                            | 2021      | 2020      | 2019      | 2018       | 2017      | 2016      | 2015      | 2014      | 2013      | 2012      |
|----------------------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Fiera International Equity | 17.7 (12) | 20.2 (18) | 32.3 (6)  |            | 25.0 (81) | 1.0 (59)  | -0.8 (71) | -4.9 (70) | 22.8 (61) | 17.3 (80) |
| MSCI EAFE (Net)            | 11.3 (60) | 7.8 (73)  | 22.0 (68) | -13.8 (35) | 25.0 (81) | 1.0 (59)  | -0.8 (71) | -4.9 (70) | 22.8 (61) | 17.3 (80) |
| MSCI EAFE Growth Index     | 11.6 (59) | 18.7 (22) | 28.4 (18) | -12.5 (22) | 29.3 (51) | -2.7 (89) | 4.5 (28)  | -4.1 (60) | 22.9 (60) | 17.3 (80) |

|                 |      |      |      |       |      |      |      |       |      |      |
|-----------------|------|------|------|-------|------|------|------|-------|------|------|
| 5th Percentile  | 20.7 | 31.0 | 32.6 | -8.4  | 40.2 | 9.5  | 13.4 | 3.0   | 36.3 | 25.4 |
| 1st Quartile    | 15.3 | 17.6 | 27.5 | -13.0 | 33.5 | 4.6  | 6.3  | -1.5  | 28.6 | 22.5 |
| Median          | 12.4 | 12.3 | 24.0 | -15.1 | 29.4 | 1.7  | 1.6  | -3.4  | 24.3 | 20.0 |
| 3rd Quartile    | 8.9  | 7.0  | 20.9 | -17.5 | 25.8 | -0.5 | -1.7 | -5.2  | 19.9 | 17.9 |
| 95th Percentile | 3.2  | -1.5 | 17.1 | -22.1 | 22.2 | -4.7 | -6.3 | -10.0 | 14.1 | 14.6 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.





|                              | Return | Standard<br>Deviation |
|------------------------------|--------|-----------------------|
| ■ Fiera International Equity | 4.6    | 19.2                  |
| ● MSCI EAFE (Net)            | 0.9    | 20.0                  |
| ▲ MSCI EAFE Growth Index     | 0.8    | 19.8                  |
| — Median                     | 1.3    | 20.8                  |

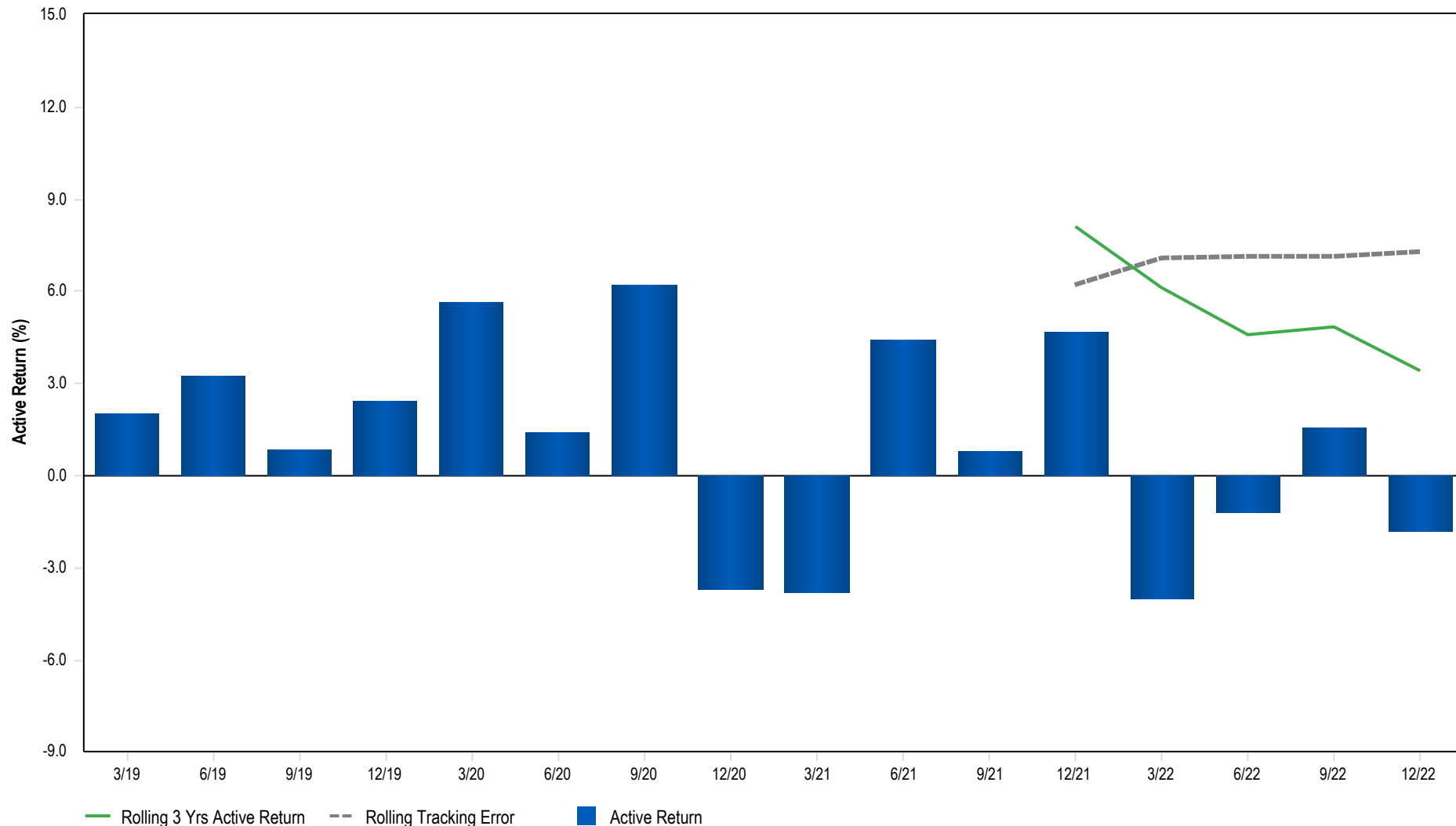
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                            | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|----------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Fiera International Equity | 15.5  | -19.2 | -19.2 | 4.6   |       |       |        | 17.7 | 20.2 | 32.3 |       |
| MSCI EAFE (Net)            | 17.3  | -14.5 | -14.5 | 0.9   | 1.5   | 4.5   | 4.7    | 11.3 | 7.8  | 22.0 | -13.8 |
| Difference                 | -1.8  | -4.7  | -4.7  | 3.7   |       |       |        | 6.4  | 12.4 | 10.3 |       |



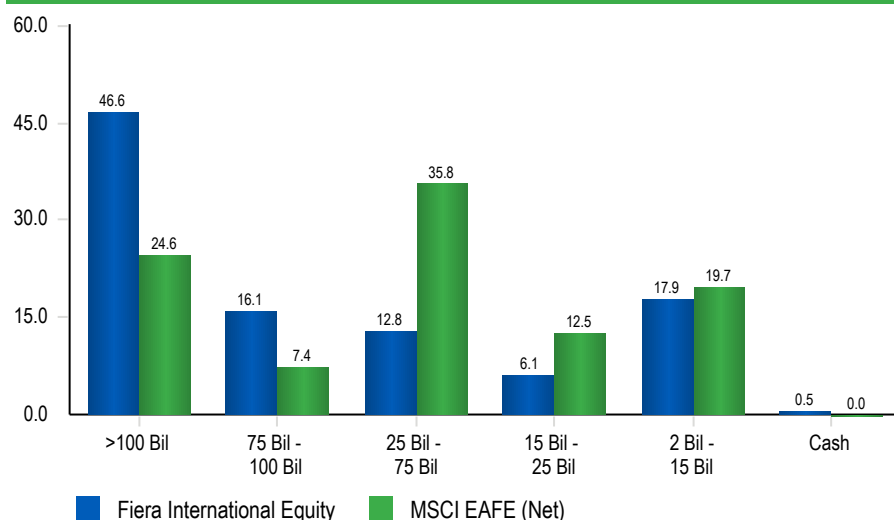
## Top Ten Equity Holdings

|                                     | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|-------------------------------------|----------------------|----------------------|-------------------|----------------------|
| Novo Nordisk A/S                    | 7.0                  | 1.6                  | 5.4               | 34.2                 |
| Nestle SA, Cham Und Vevey           | 6.4                  | 2.2                  | 4.2               | 6.4                  |
| Taiwan Semiconductor                | 5.2                  | 0.0                  | 5.2               | 9.3                  |
| LVMH Moet Hennessy Louis Vuitton SE | 5.0                  | 1.4                  | 3.6               | 24.5                 |
| S&P Global Inc                      | 4.4                  | 0.0                  | 4.4               | 10.0                 |
| Diageo PLC                          | 4.4                  | 0.7                  | 3.7               | 3.6                  |
| LOreal SA                           | 4.3                  | 0.6                  | 3.7               | 10.0                 |
| Keyence Corp                        | 3.9                  | 0.5                  | 3.4               | 17.8                 |
| CIE Generale                        | 3.9                  | 0.4                  | 3.5               | 31.3                 |
| Canadian National Railway Co        | 3.8                  | 0.0                  | 3.8               | 10.6                 |
| % of Portfolio                      | 48.3                 | 7.4                  | 40.9              |                      |

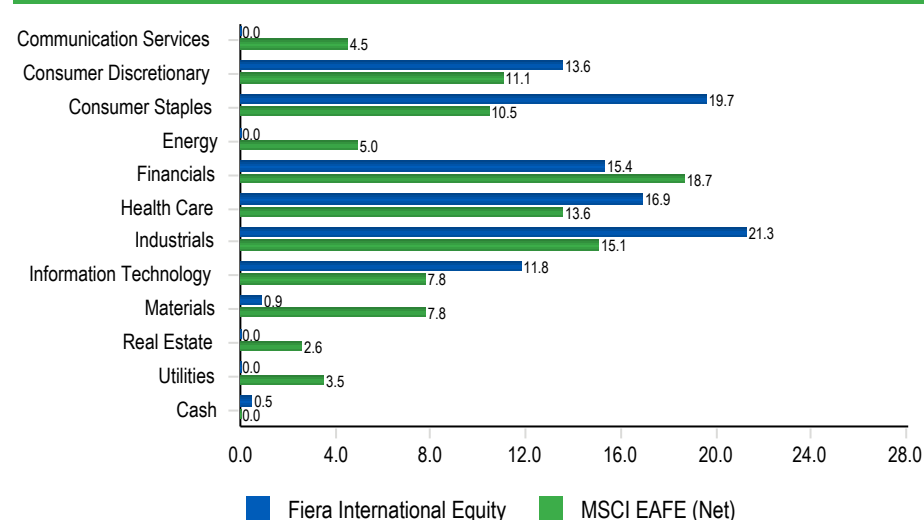
## Portfolio Characteristics

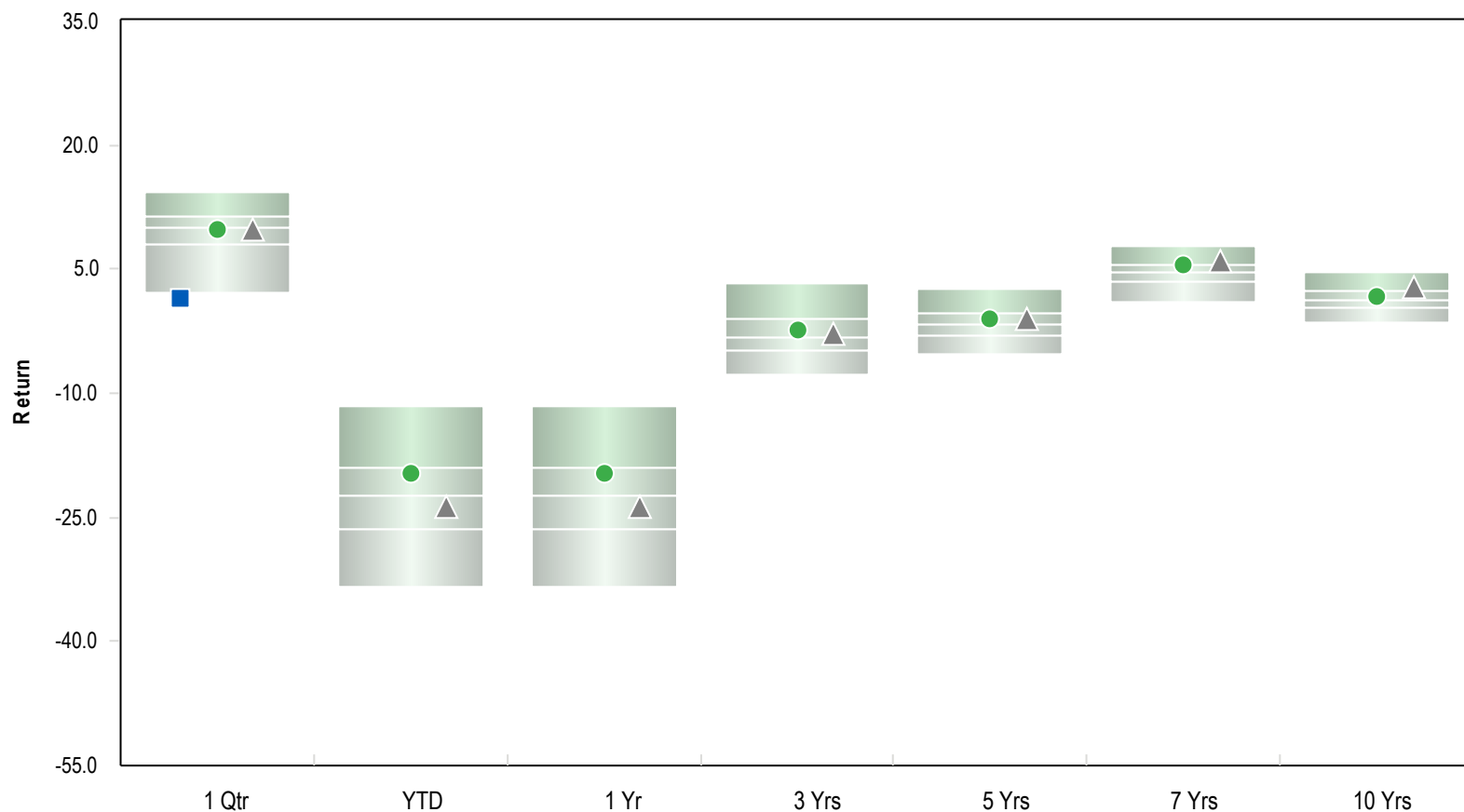
|                           | Portfolio       | Benchmark      |
|---------------------------|-----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 112,125,846,774 | 76,649,372,164 |
| Median Mkt. Cap (\$)      | 38,825,444,822  | 11,967,087,452 |
| Price/Earnings ratio      | 25.5            | 12.9           |
| Price/Book ratio          | 3.7             | 2.4            |
| 5 Yr. EPS Growth Rate (%) | 8.4             | 10.5           |
| Current Yield (%)         | 1.9             | 3.4            |
| Beta (3 Years, Monthly)   | 0.9             | 1.0            |
| Number of Stocks          | 34              | 796            |

## Distribution of Market Capitalization (%)



## Sector Weights (%)





■ William Blair Emerging Markets  
 ● MSCI Emerging Markets Index  
 ▲ MSCI Emerging Markets Growth

|                                | 1 Qtr    | YTD        | 1 Yr       | 3 Yrs     | 5 Yrs     | 7 Yrs    | 10 Yrs   |
|--------------------------------|----------|------------|------------|-----------|-----------|----------|----------|
| William Blair Emerging Markets | 1.4 (96) |            |            |           |           |          |          |
| MSCI Emerging Markets Index    | 9.8 (53) | -19.7 (29) | -19.7 (29) | -2.3 (40) | -1.0 (34) | 5.6 (26) | 1.8 (34) |
| MSCI Emerging Markets Growth   | 9.7 (55) | -23.7 (61) | -23.7 (61) | -2.7 (44) | -1.1 (35) | 6.0 (19) | 2.9 (19) |

|                 |      |       |       |      |      |     |      |
|-----------------|------|-------|-------|------|------|-----|------|
| 5th Percentile  | 14.4 | -11.6 | -11.6 | 3.3  | 2.6  | 7.8 | 4.7  |
| 1st Quartile    | 11.4 | -19.0 | -19.0 | -1.0 | -0.3 | 5.6 | 2.5  |
| Median          | 9.9  | -22.4 | -22.4 | -3.2 | -1.7 | 4.5 | 1.2  |
| 3rd Quartile    | 8.1  | -26.4 | -26.4 | -4.8 | -2.9 | 3.4 | 0.3  |
| 95th Percentile | 2.3  | -33.4 | -33.4 | -7.7 | -5.2 | 1.0 | -1.3 |

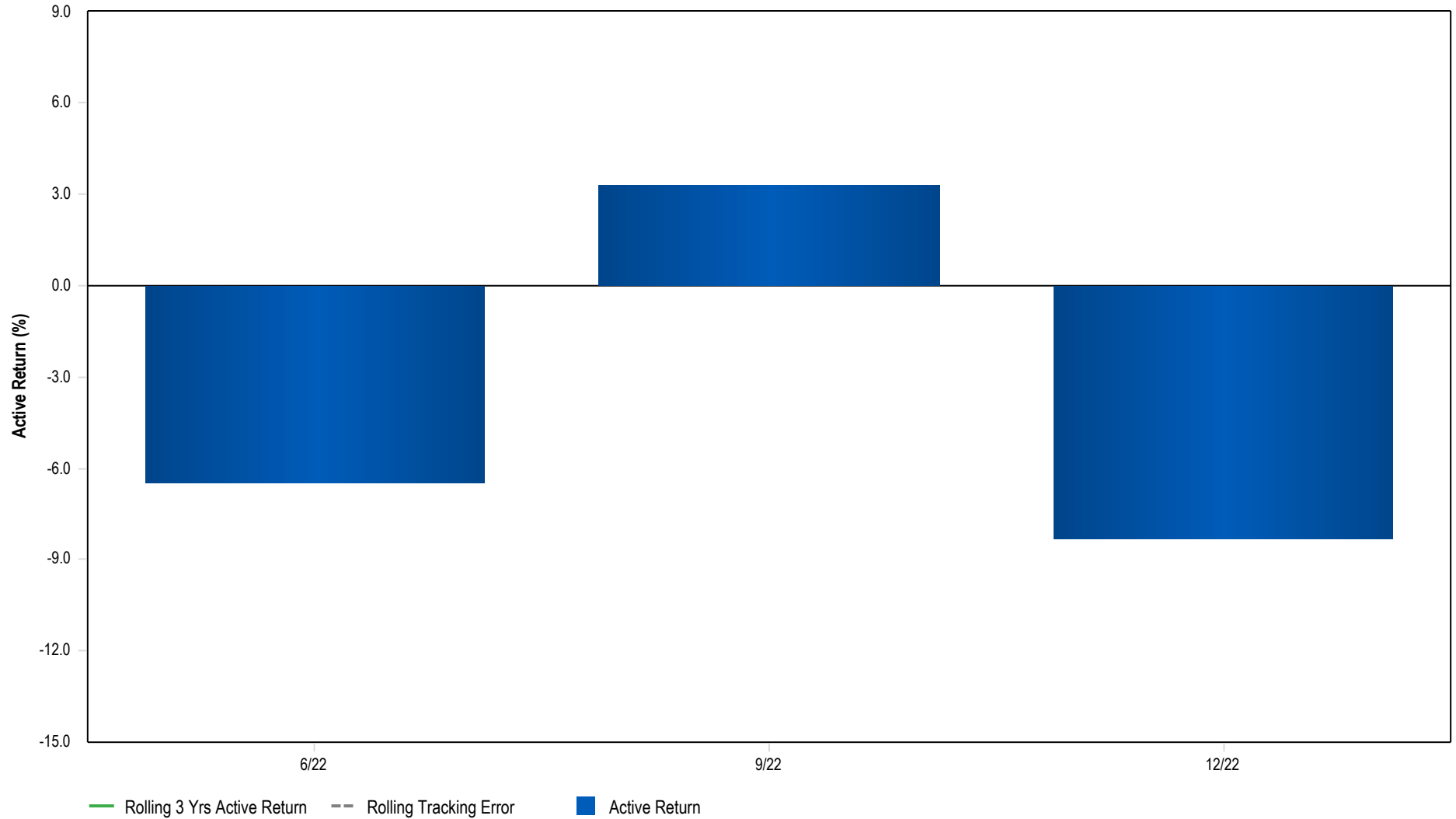
Parentheses contain percentile rankings.  
 Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                                | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|--------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| William Blair Emerging Markets | 1.4   |       |       |       |       |       |        |      |      |      |       |
| MSCI Emerging Markets Index    | 9.8   | -19.7 | -19.7 | -2.3  | -1.0  | 5.6   | 1.8    | -2.2 | 18.7 | 18.9 | -14.2 |
| Difference                     | -8.4  |       |       |       |       |       |        |      |      |      |       |



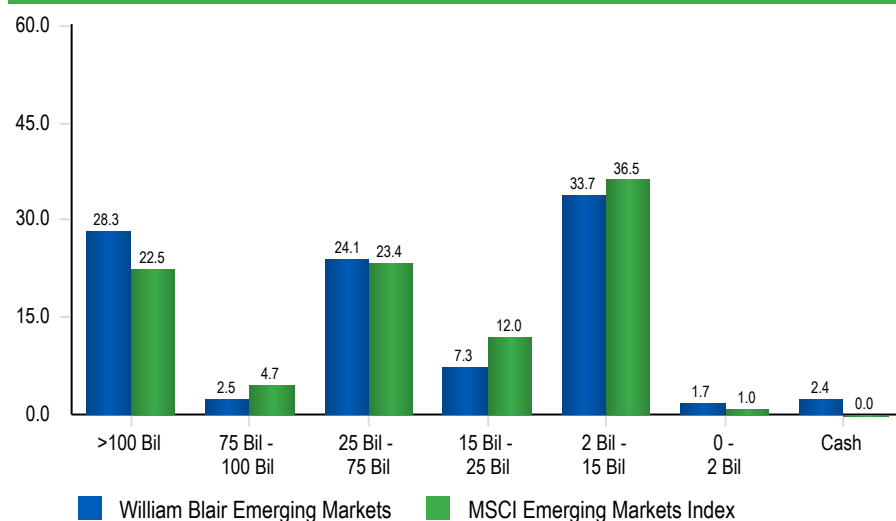
### Top Ten Equity Holdings

|                                               | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|-----------------------------------------------|----------------------|----------------------|-------------------|----------------------|
| Taiwan Semiconductor                          | 5.7                  | 5.7                  | 0.0               | 9.3                  |
| Reliance Industries Ltd                       | 4.5                  | 1.5                  | 3.0               | 5.3                  |
| Samsung Electronics Co Ltd                    | 3.8                  | 3.3                  | 0.5               | 17.8                 |
| PT Bank Central Asia TBK                      | 3.5                  | 0.5                  | 3.0               | -1.8                 |
| AIA Group Ltd                                 | 2.6                  | 0.0                  | 2.6               | 33.4                 |
| China Tourism Group Duty Free Corporation Ltd | 2.5                  | 0.1                  | 2.4               | 11.2                 |
| Kweichow Moutai Co Ltd                        | 2.2                  | 0.3                  | 1.9               | -4.7                 |
| Wal-Mart De Mexico SA De Cv, Mexico           | 2.2                  | 0.3                  | 1.9               | 1.0                  |
| PT Bank Rakyat Indonesia TBK                  | 2.0                  | 0.3                  | 1.7               | 7.6                  |
| H D F C Bank Ltd                              | 1.9                  | 0.0                  | 1.9               | 12.6                 |
| % of Portfolio                                | 30.9                 | 12.0                 | 18.9              |                      |

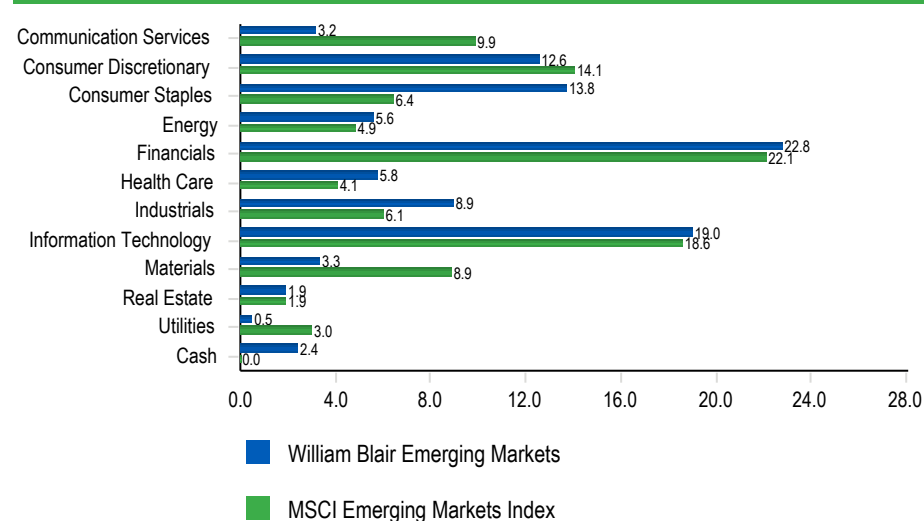
### Portfolio Characteristics

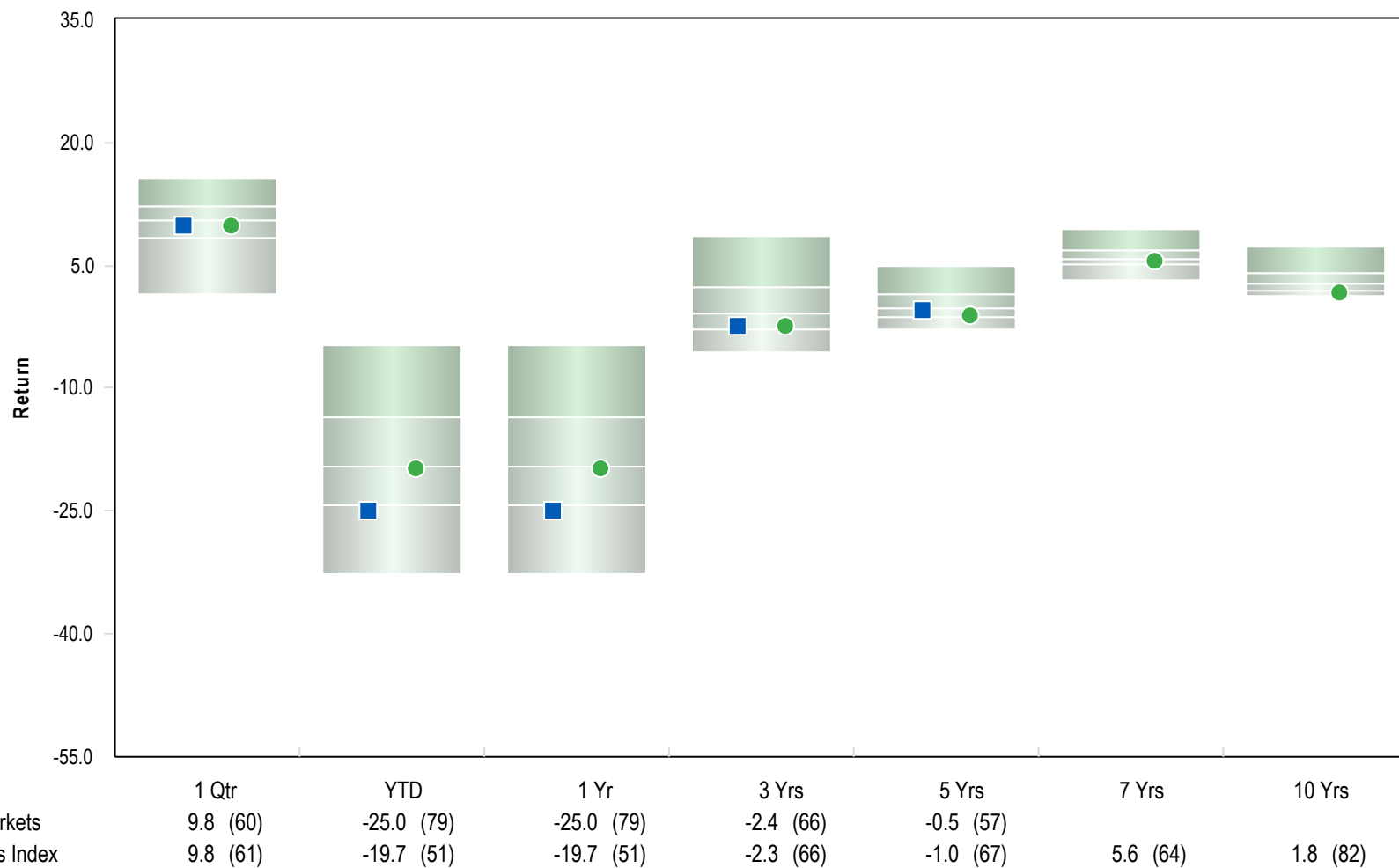
|                           | Portfolio      | Benchmark      |
|---------------------------|----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 82,256,188,590 | 86,972,099,106 |
| Median Mkt. Cap (\$)      | 7,767,562,223  | 6,192,741,822  |
| Price/Earnings ratio      | 20.6           | 10.9           |
| Price/Book ratio          | 3.7            | 2.6            |
| 5 Yr. EPS Growth Rate (%) | 16.5           | 15.5           |
| Current Yield (%)         | 1.7            | 3.3            |
| Beta                      |                | 1.0            |
| Number of Stocks          | 143            | 1,377          |

### Distribution of Market Capitalization (%)



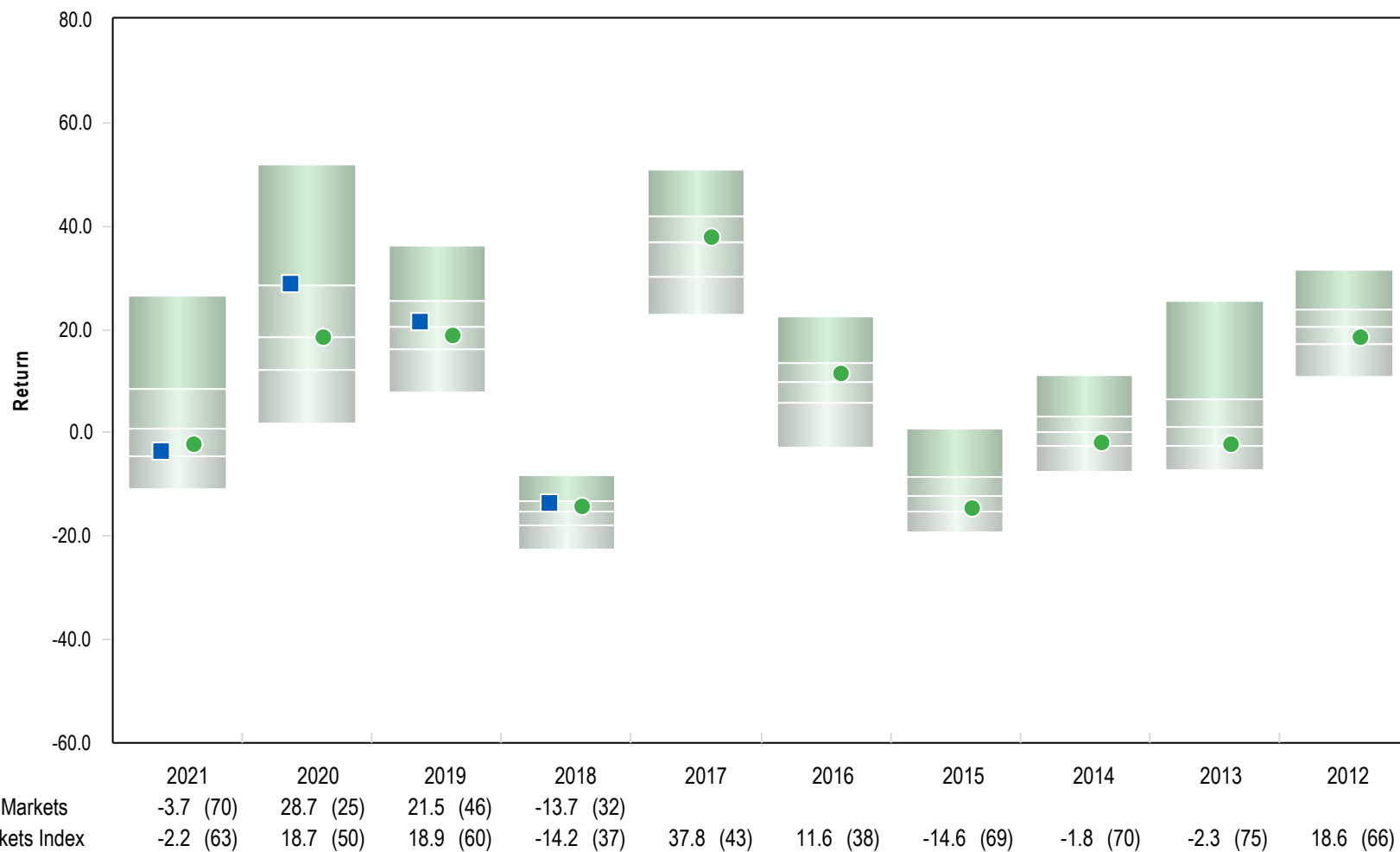
### Sector Weights (%)





|                 |      |       |       |      |      |     |     |
|-----------------|------|-------|-------|------|------|-----|-----|
| 5th Percentile  | 15.7 | -4.8  | -4.8  | 8.5  | 5.0  | 9.5 | 7.2 |
| 1st Quartile    | 12.3 | -13.6 | -13.6 | 2.4  | 1.5  | 7.0 | 4.2 |
| Median          | 10.6 | -19.6 | -19.6 | -1.0 | -0.1 | 5.9 | 2.8 |
| 3rd Quartile    | 8.3  | -24.3 | -24.3 | -2.8 | -1.4 | 5.1 | 2.0 |
| 95th Percentile | 1.6  | -32.7 | -32.7 | -5.5 | -2.8 | 3.1 | 1.2 |

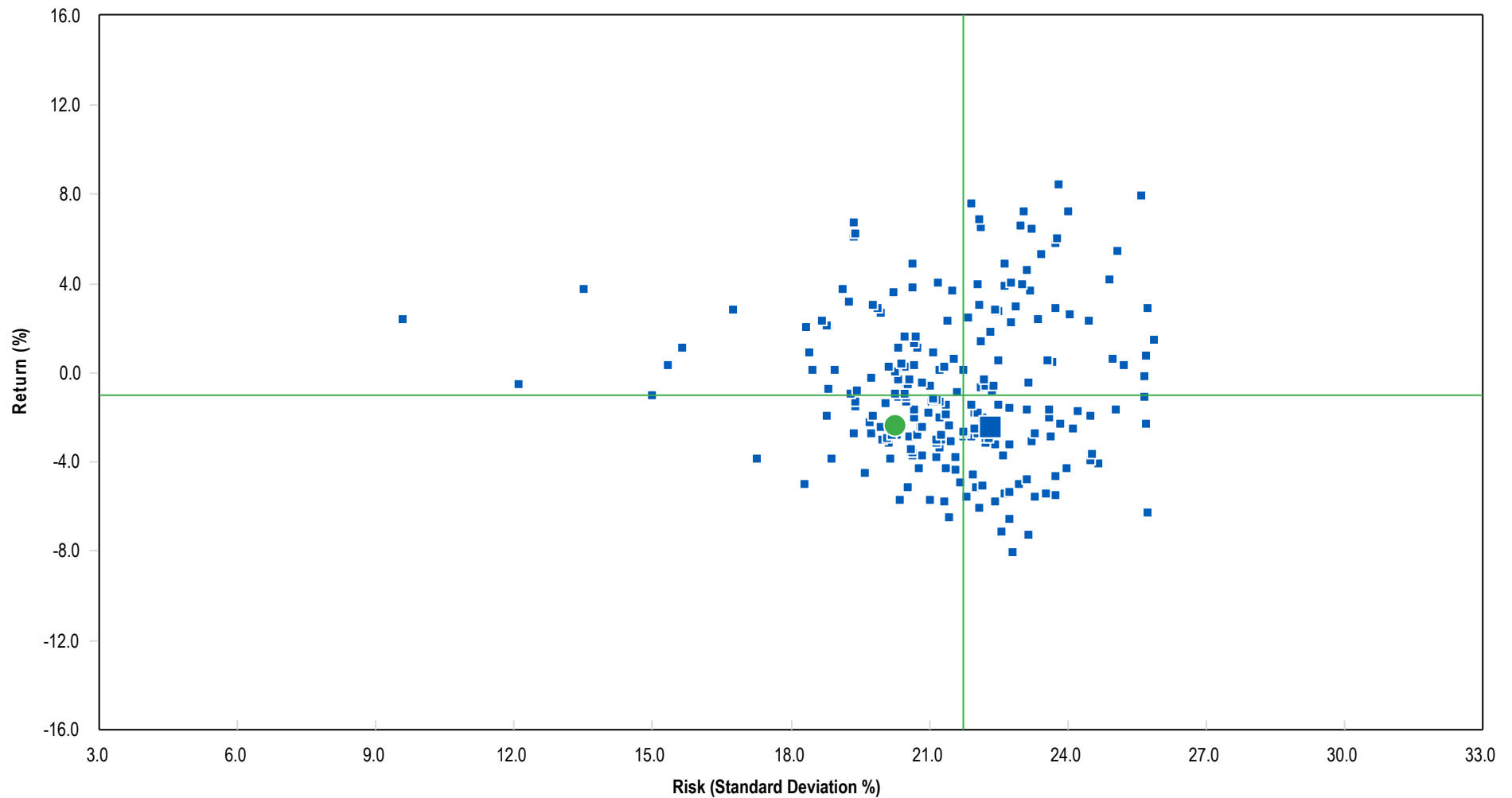
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                 |       |      |      |       |      |      |       |      |      |      |
|-----------------|-------|------|------|-------|------|------|-------|------|------|------|
| 5th Percentile  | 26.6  | 51.9 | 36.2 | -8.1  | 51.0 | 22.6 | 0.8   | 11.2 | 25.4 | 31.5 |
| 1st Quartile    | 8.5   | 28.6 | 25.6 | -13.3 | 41.9 | 13.5 | -8.5  | 3.3  | 6.4  | 23.7 |
| Median          | 0.8   | 18.4 | 20.4 | -15.2 | 36.8 | 9.8  | -12.2 | 0.1  | 1.2  | 20.5 |
| 3rd Quartile    | -4.7  | 12.3 | 16.0 | -17.9 | 30.3 | 5.7  | -15.3 | -2.5 | -2.5 | 17.1 |
| 95th Percentile | -10.9 | 1.7  | 7.7  | -22.5 | 22.9 | -2.8 | -19.2 | -7.4 | -7.2 | 10.7 |

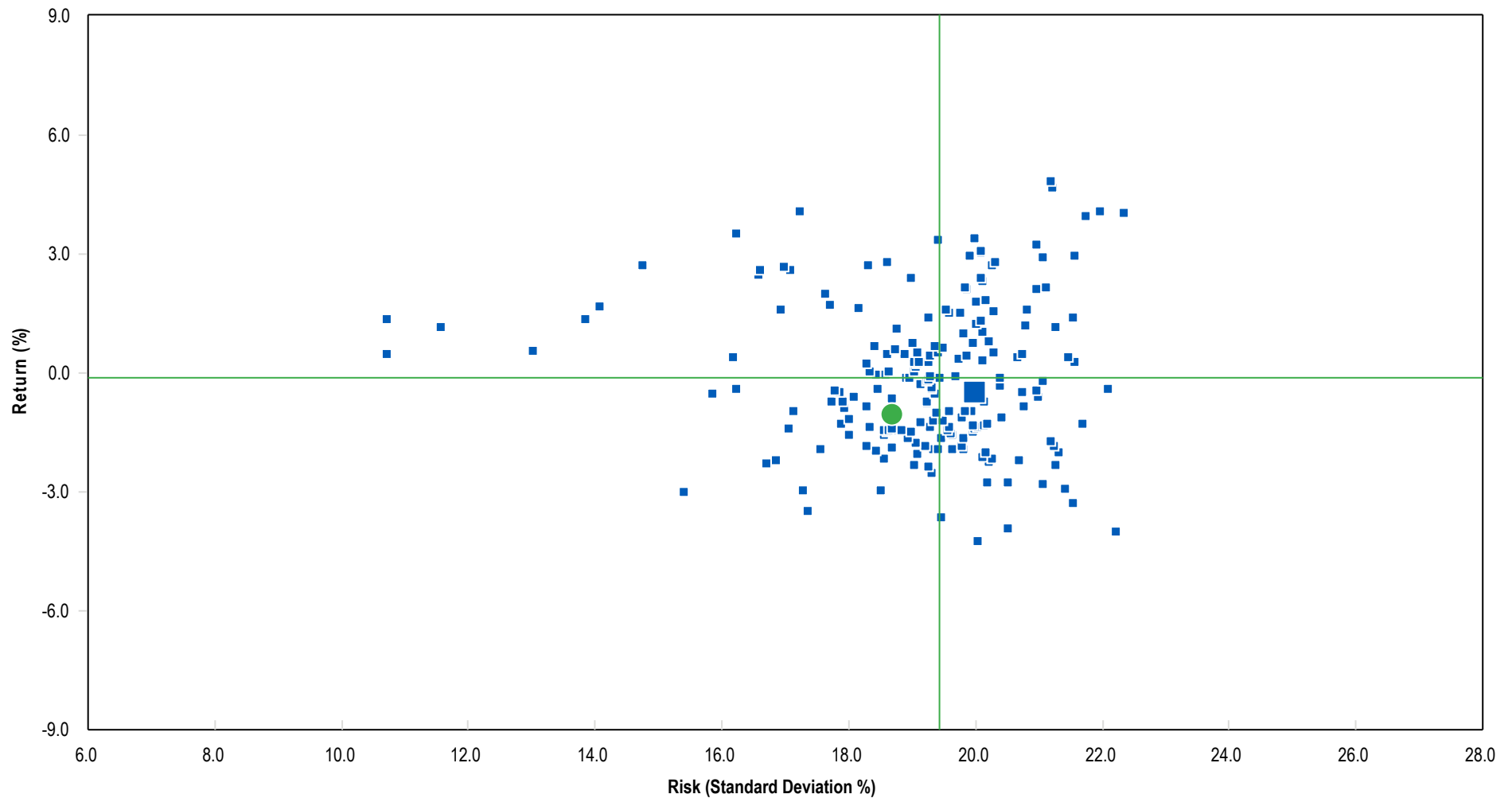
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.





|                               | Return | Standard<br>Deviation |
|-------------------------------|--------|-----------------------|
| ■ Aberdeen Emerging Markets   | -2.4   | 22.3                  |
| ● MSCI Emerging Markets Index | -2.3   | 20.3                  |
| — Median                      | -1.0   | 21.7                  |

Calculation based on monthly periodicity.



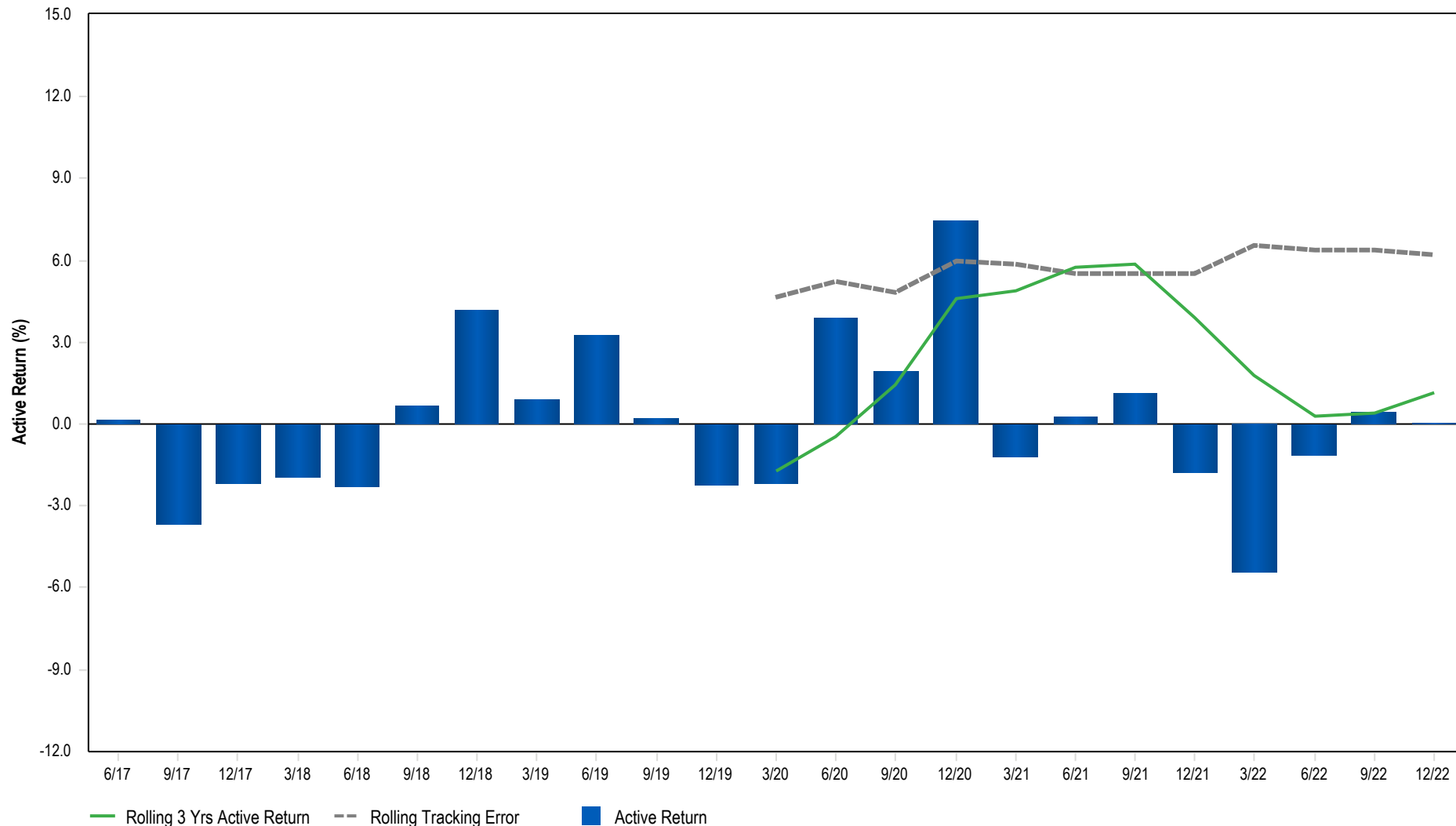
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                             | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018  |
|-----------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|-------|
| Aberdeen Emerging Markets   | 9.8   | -25.0 | -25.0 | -2.4  | -0.5  |       |        | -3.7 | 28.7 | 21.5 | -13.7 |
| MSCI Emerging Markets Index | 9.8   | -19.7 | -19.7 | -2.3  | -1.0  | 5.6   | 1.8    | -2.2 | 18.7 | 18.9 | -14.2 |
| Difference                  | 0.0   | -5.3  | -5.3  | -0.1  | 0.5   |       |        | -1.5 | 10.0 | 2.6  | 0.5   |



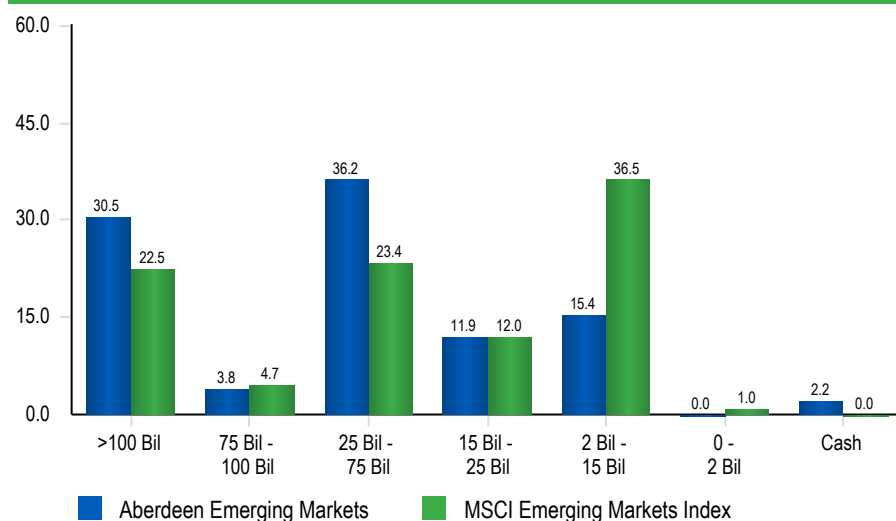
## Top Ten Equity Holdings

|                                      | Portfolio Weight (%) | Benchmark Weight (%) | Active Weight (%) | Quarterly Return (%) |
|--------------------------------------|----------------------|----------------------|-------------------|----------------------|
| Taiwan Semiconductor Manuf           | 6.3                  | 5.7                  | 0.6               | 10.4                 |
| Samsung Electronics Co Ltd           | 5.7                  | 0.5                  | 5.2               | 21.8                 |
| Tencent Holdings LTD                 | 5.2                  | 4.2                  | 1.0               | 26.1                 |
| Alibaba Group Holding Ltd            | 3.9                  | 2.6                  | 1.3               | 11.3                 |
| Housing Development Finance Corp Ltd | 3.7                  | 0.9                  | 2.8               | 13.4                 |
| AIA Group Ltd                        | 2.7                  | 0.0                  | 2.7               | 33.4                 |
| JD.com Inc                           | 2.6                  | 1.0                  | 1.6               | 11.5                 |
| SBI Life Insurance Company Limited   | 2.3                  | 0.1                  | 2.2               | -3.2                 |
| Lg Chem Ltd                          | 2.1                  | 0.4                  | 1.7               | 26.7                 |
| Kotak Mahindra Bank Ltd              | 1.9                  | 0.2                  | 1.7               | -1.2                 |
| % of Portfolio                       | 36.4                 | 15.6                 | 20.8              |                      |

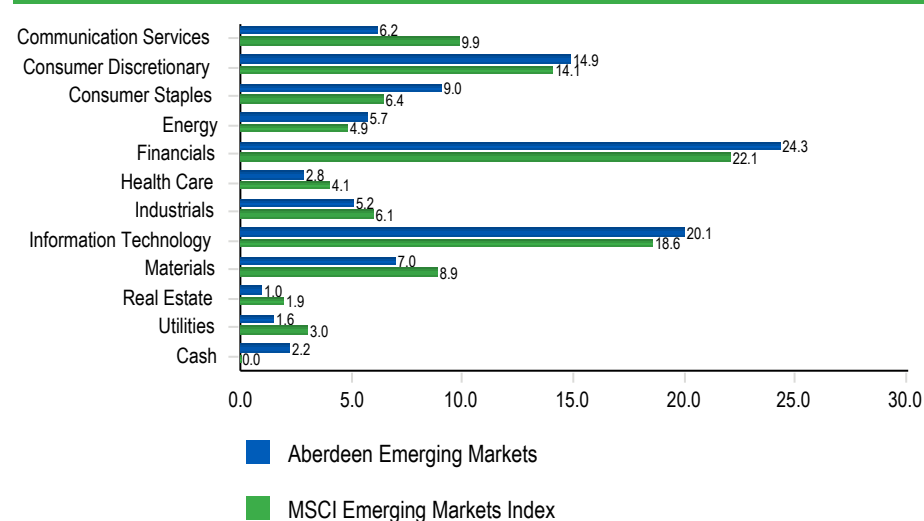
## Portfolio Characteristics

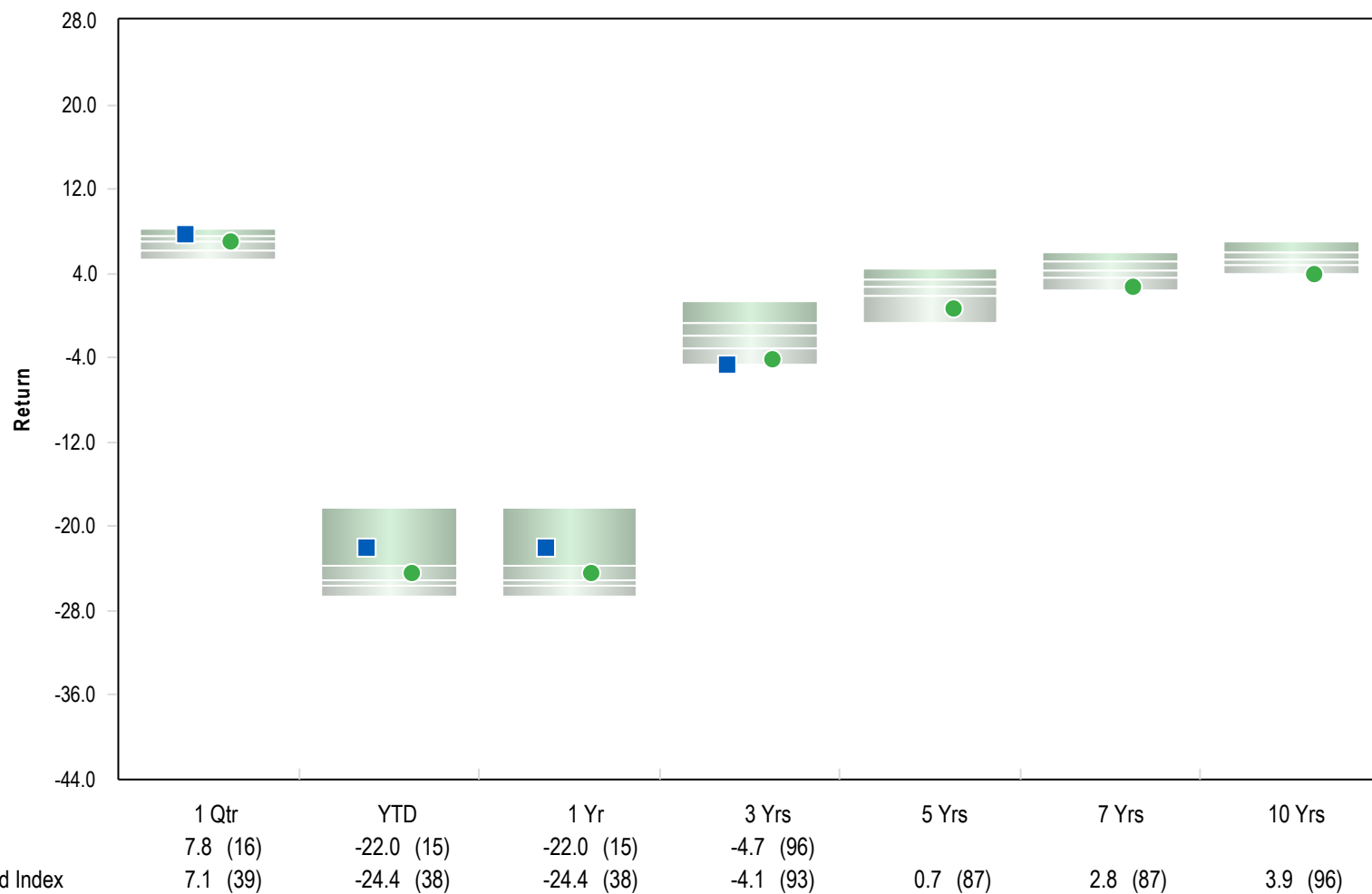
|                           | Portfolio      | Benchmark      |
|---------------------------|----------------|----------------|
| Wtd. Avg. Mkt. Cap (\$)   | 99,687,420,432 | 86,972,099,106 |
| Median Mkt. Cap (\$)      | 32,662,744,790 | 6,192,741,822  |
| Price/Earnings ratio      | 17.3           | 10.9           |
| Price/Book ratio          | 2.8            | 2.6            |
| 5 Yr. EPS Growth Rate (%) | 19.1           | 15.5           |
| Current Yield (%)         | 2.6            | 3.3            |
| Beta (5 Years, Monthly)   | 1.0            | 1.0            |
| Number of Stocks          | 64             | 1,377          |

## Distribution of Market Capitalization (%)



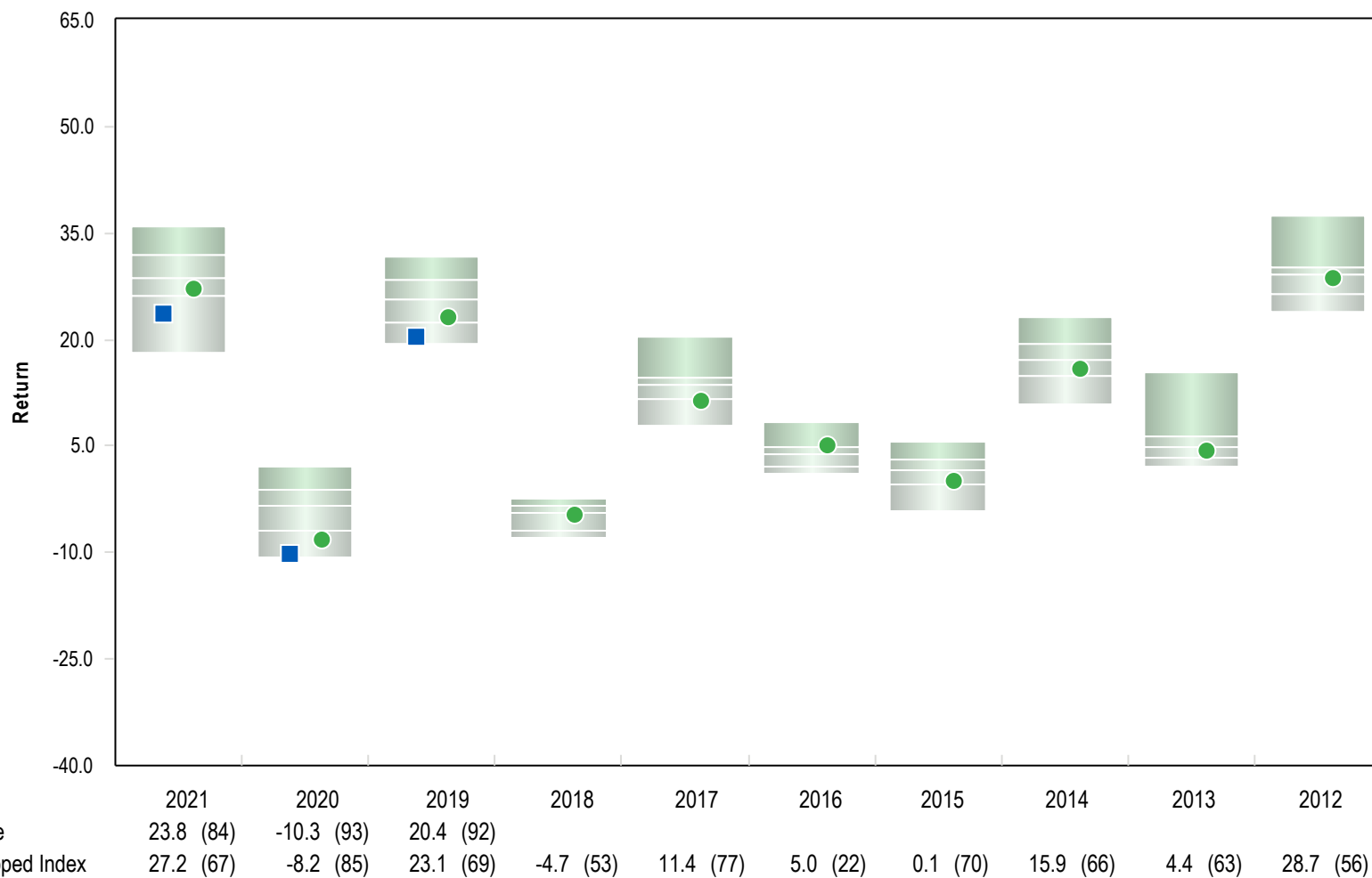
## Sector Weights (%)





|                 |     |       |       |      |      |     |     |
|-----------------|-----|-------|-------|------|------|-----|-----|
| 5th Percentile  | 8.3 | -18.2 | -18.2 | 1.4  | 4.4  | 6.1 | 7.1 |
| 1st Quartile    | 7.5 | -23.7 | -23.7 | -0.7 | 3.4  | 5.2 | 6.0 |
| Median          | 7.0 | -25.1 | -25.1 | -1.8 | 2.8  | 4.3 | 5.3 |
| 3rd Quartile    | 6.1 | -25.6 | -25.6 | -3.1 | 2.0  | 3.5 | 4.9 |
| 95th Percentile | 5.3 | -26.7 | -26.7 | -4.6 | -0.7 | 2.4 | 3.9 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                 |      |       |      |      |      |     |      |      |      |      |
|-----------------|------|-------|------|------|------|-----|------|------|------|------|
| 5th Percentile  | 36.0 | 2.1   | 31.6 | -2.5 | 20.4 | 8.3 | 5.7  | 23.3 | 15.3 | 37.5 |
| 1st Quartile    | 32.0 | -1.2  | 28.3 | -3.3 | 14.5 | 4.8 | 3.1  | 19.3 | 6.3  | 30.1 |
| Median          | 28.7 | -3.5  | 25.8 | -4.5 | 13.5 | 3.8 | 1.6  | 17.0 | 4.9  | 29.1 |
| 3rd Quartile    | 26.0 | -6.9  | 22.5 | -6.9 | 11.6 | 2.0 | -0.3 | 14.9 | 3.2  | 26.4 |
| 95th Percentile | 18.2 | -10.7 | 19.3 | -7.9 | 8.0  | 1.0 | -4.1 | 10.8 | 2.2  | 23.9 |

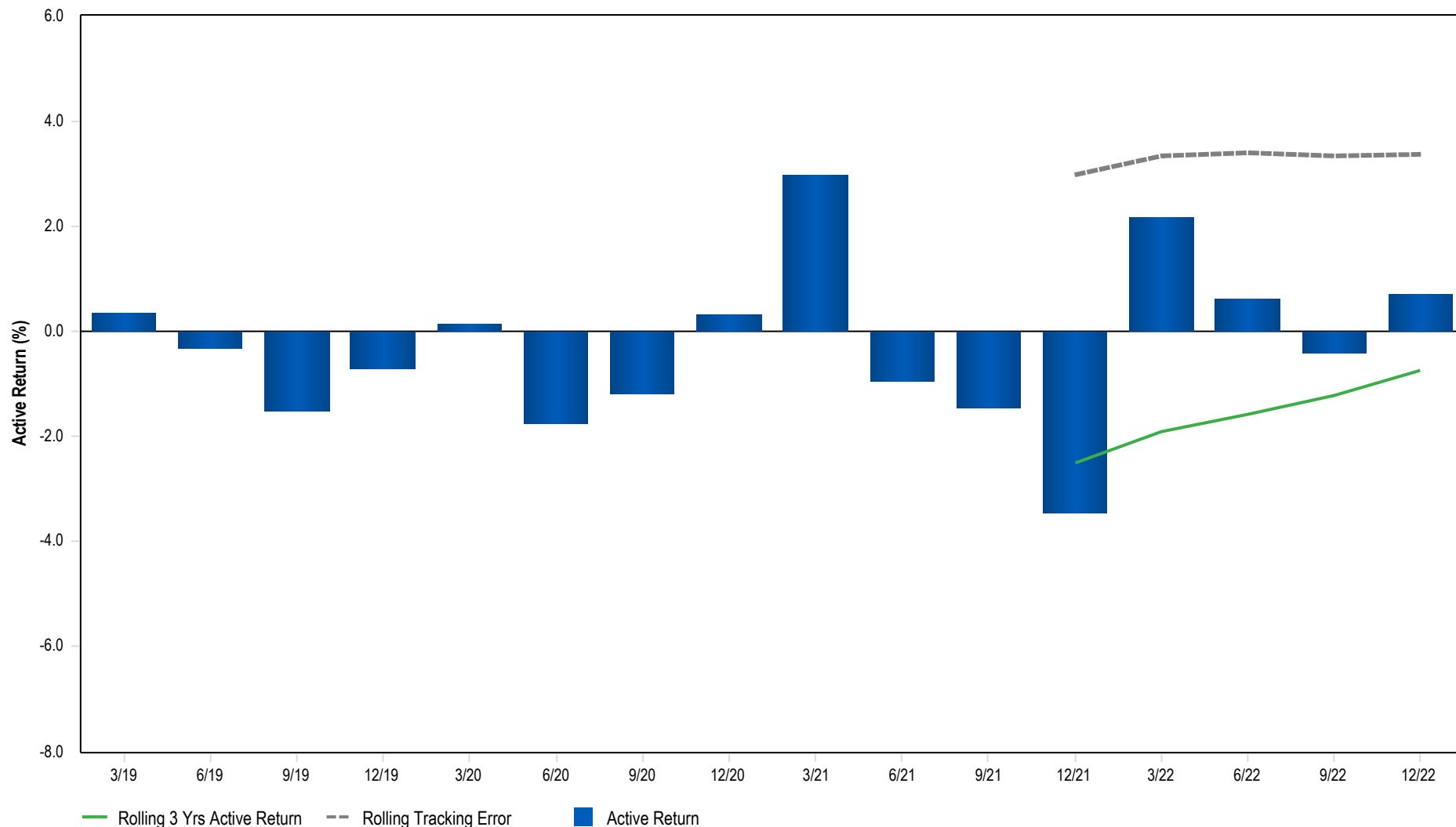
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

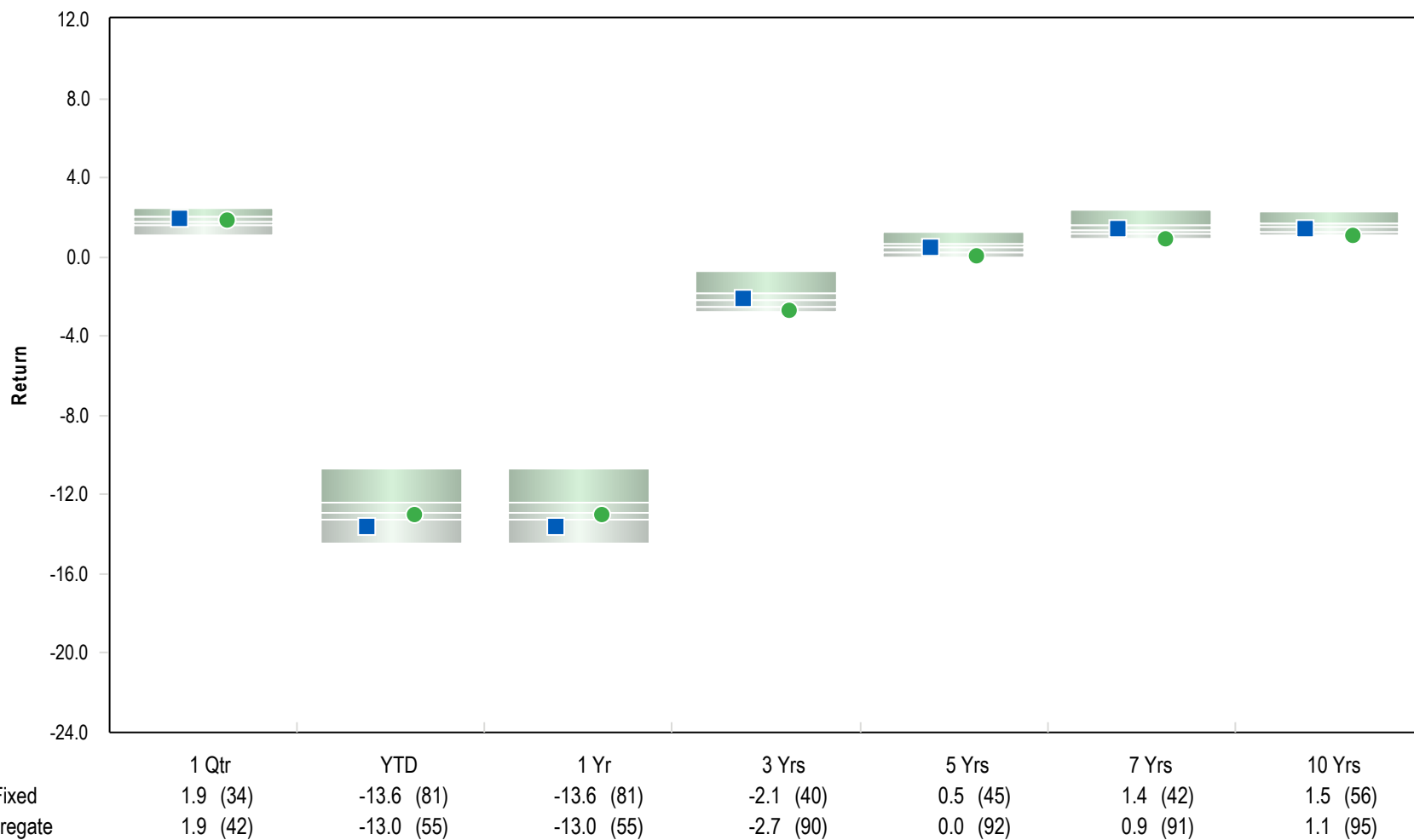
As of December 31, 2022

|                                  | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020  | 2019 | 2018 |
|----------------------------------|-------|-------|-------|-------|-------|-------|--------|------|-------|------|------|
| Brookfield Global Real Estate    | 7.8   | -22.0 | -22.0 | -4.7  |       |       |        | 23.8 | -10.3 | 20.4 |      |
| FTSE EPRA/NAREIT Developed Index | 7.1   | -24.4 | -24.4 | -4.1  | 0.7   | 2.8   | 3.9    | 27.2 | -8.2  | 23.1 | -4.7 |
| Difference                       | 0.7   | 2.4   | 2.4   | -0.6  |       |       |        | -3.4 | -2.1  | -2.7 |      |



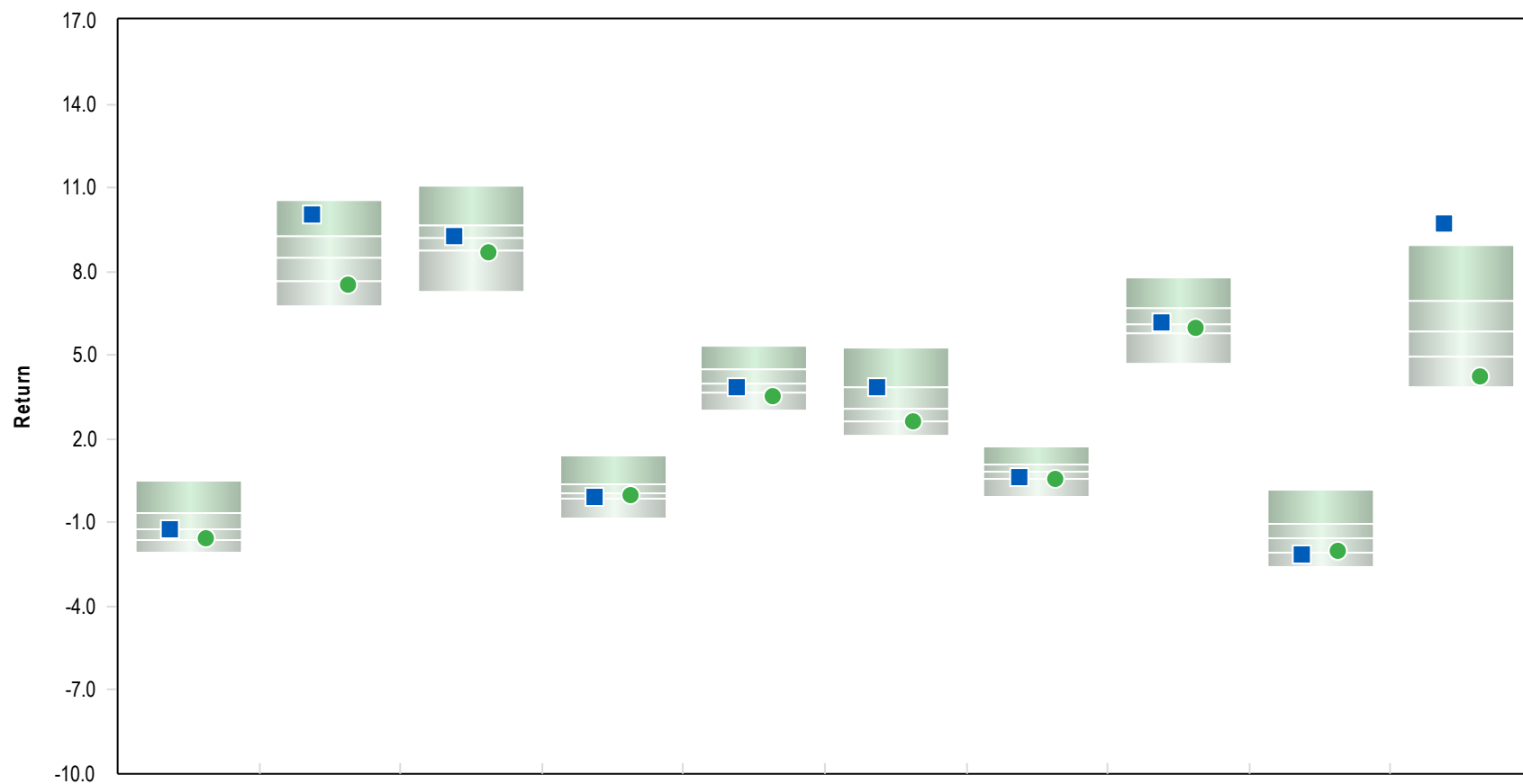
## **Domestic Fixed Income**





|                 |     |       |       |      |     |     |     |
|-----------------|-----|-------|-------|------|-----|-----|-----|
| 5th Percentile  | 2.5 | -10.7 | -10.7 | -0.7 | 1.3 | 2.4 | 2.3 |
| 1st Quartile    | 2.0 | -12.4 | -12.4 | -1.8 | 0.7 | 1.6 | 1.7 |
| Median          | 1.8 | -12.9 | -12.9 | -2.2 | 0.5 | 1.4 | 1.5 |
| 3rd Quartile    | 1.6 | -13.3 | -13.3 | -2.5 | 0.3 | 1.2 | 1.3 |
| 95th Percentile | 1.1 | -14.5 | -14.5 | -2.8 | 0.0 | 0.9 | 1.1 |

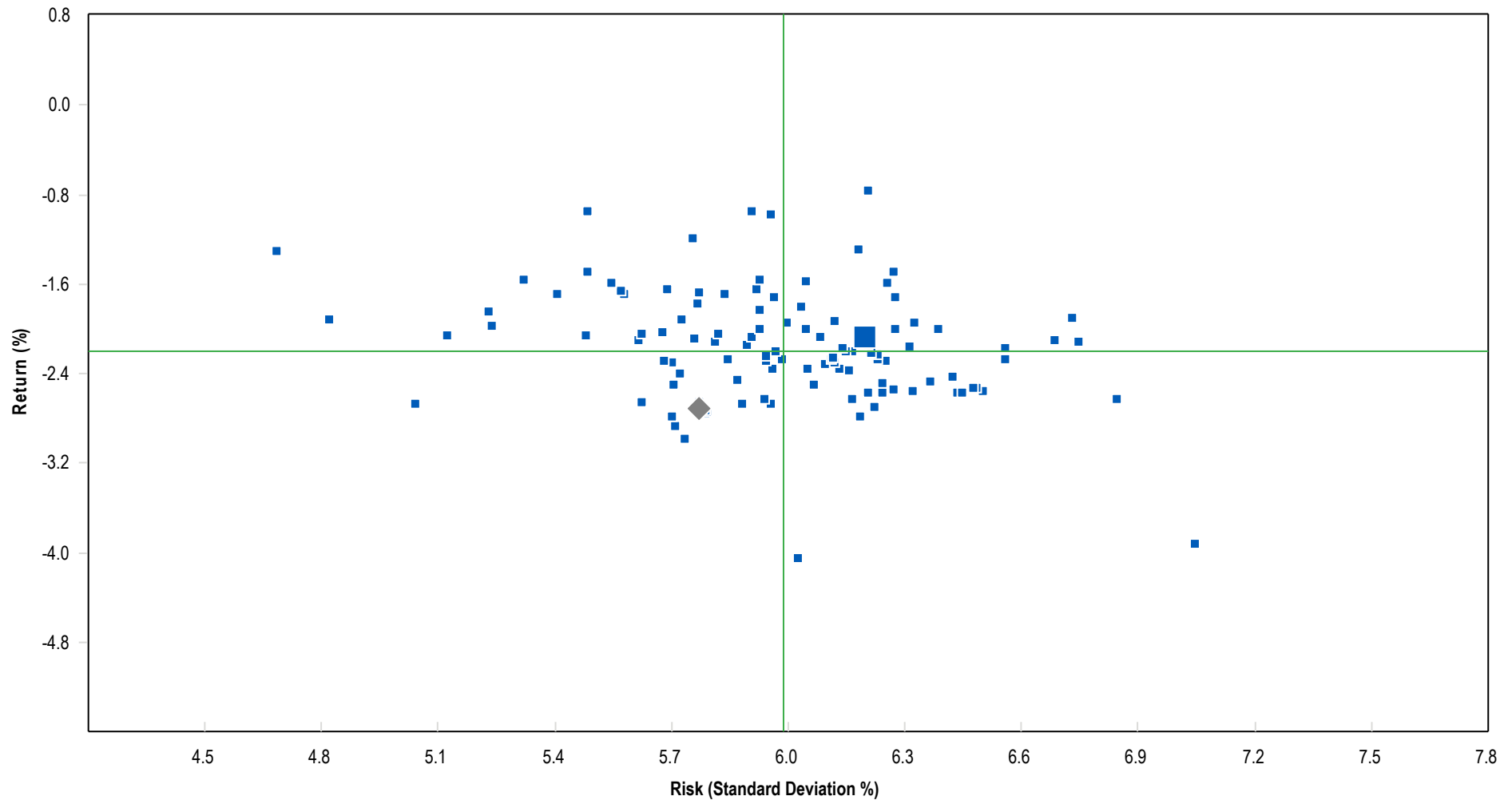
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                         | 2021      | 2020      | 2019     | 2018      | 2017     | 2016     | 2015     | 2014     | 2013      | 2012     |
|-------------------------|-----------|-----------|----------|-----------|----------|----------|----------|----------|-----------|----------|
| ■ Total Domestic Fixed  | -1.2 (51) | 10.0 (11) | 9.3 (48) | -0.1 (71) | 3.8 (61) | 3.9 (25) | 0.7 (64) | 6.1 (50) | -2.1 (82) | 9.7 (5)  |
| ● Blmbg. U.S. Aggregate | -1.5 (68) | 7.5 (87)  | 8.7 (78) | 0.0 (61)  | 3.5 (83) | 2.6 (75) | 0.5 (76) | 6.0 (67) | -2.0 (73) | 4.2 (89) |

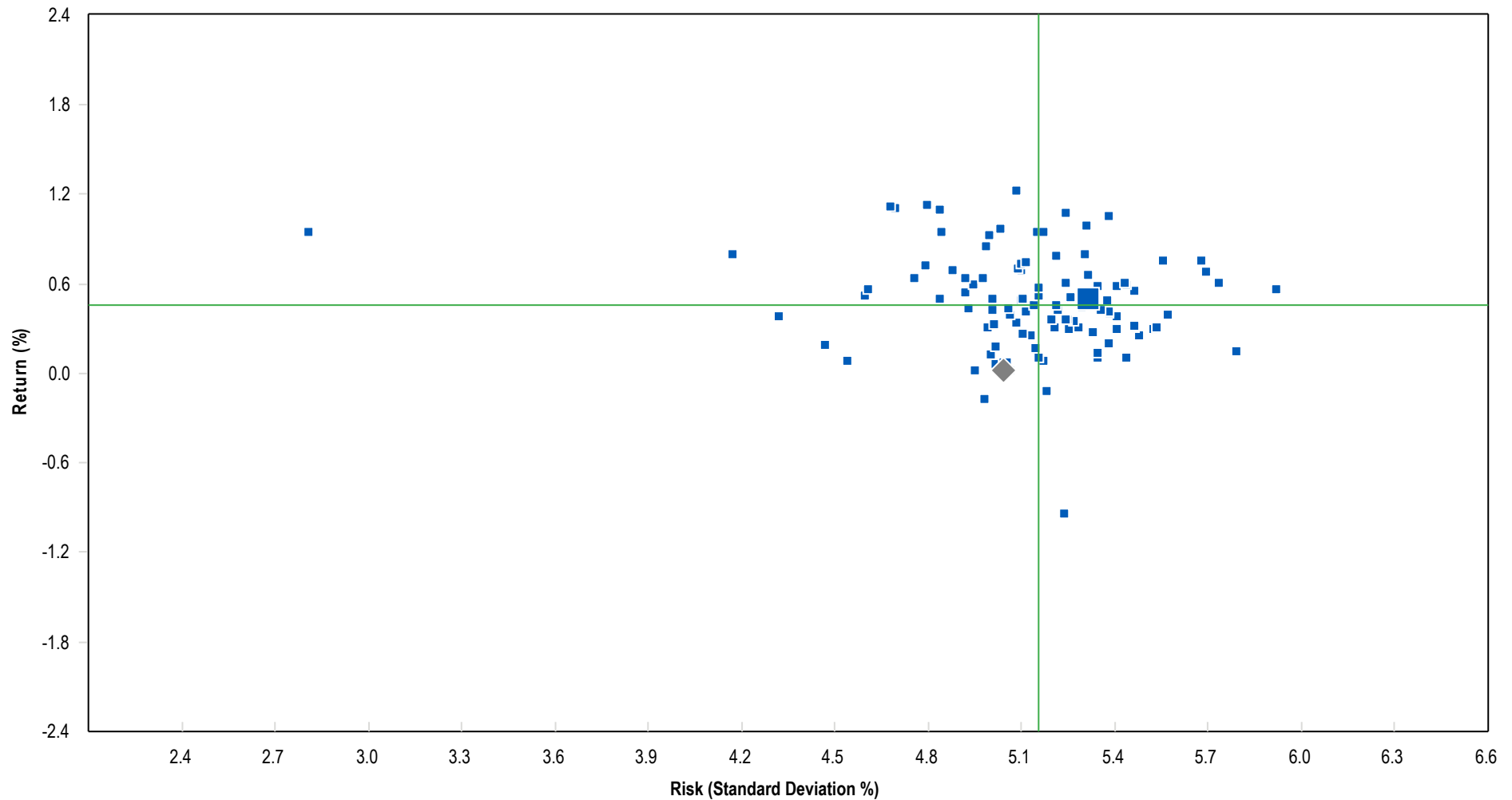
|                 |      |      |      |      |     |     |      |     |      |     |
|-----------------|------|------|------|------|-----|-----|------|-----|------|-----|
| 5th Percentile  | 0.5  | 10.5 | 11.1 | 1.4  | 5.3 | 5.3 | 1.7  | 7.8 | 0.2  | 9.0 |
| 1st Quartile    | -0.6 | 9.3  | 9.7  | 0.4  | 4.5 | 3.8 | 1.1  | 6.7 | -1.0 | 6.9 |
| Median          | -1.2 | 8.5  | 9.2  | 0.1  | 4.0 | 3.1 | 0.8  | 6.1 | -1.6 | 5.8 |
| 3rd Quartile    | -1.6 | 7.7  | 8.7  | -0.1 | 3.6 | 2.6 | 0.6  | 5.8 | -2.0 | 4.9 |
| 95th Percentile | -2.1 | 6.7  | 7.2  | -0.9 | 3.0 | 2.1 | -0.1 | 4.7 | -2.6 | 3.8 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                        | Return | Standard<br>Deviation |
|------------------------|--------|-----------------------|
| ■ Total Domestic Fixed | -2.1   | 6.2                   |
| ◆ Barclays Aggregate   | -2.7   | 5.8                   |
| — Median               | -2.2   | 6.0                   |

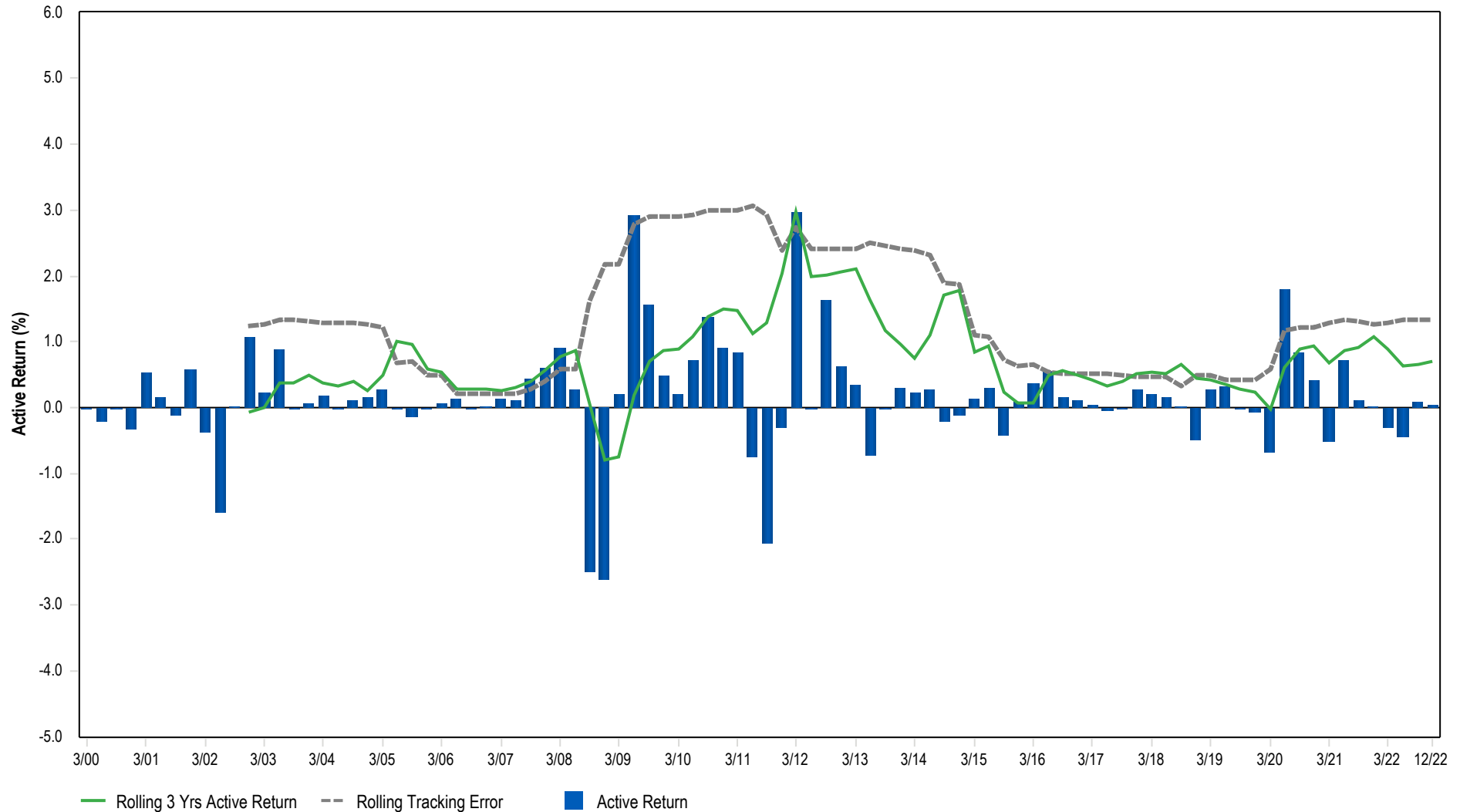
Calculation based on monthly periodicity.



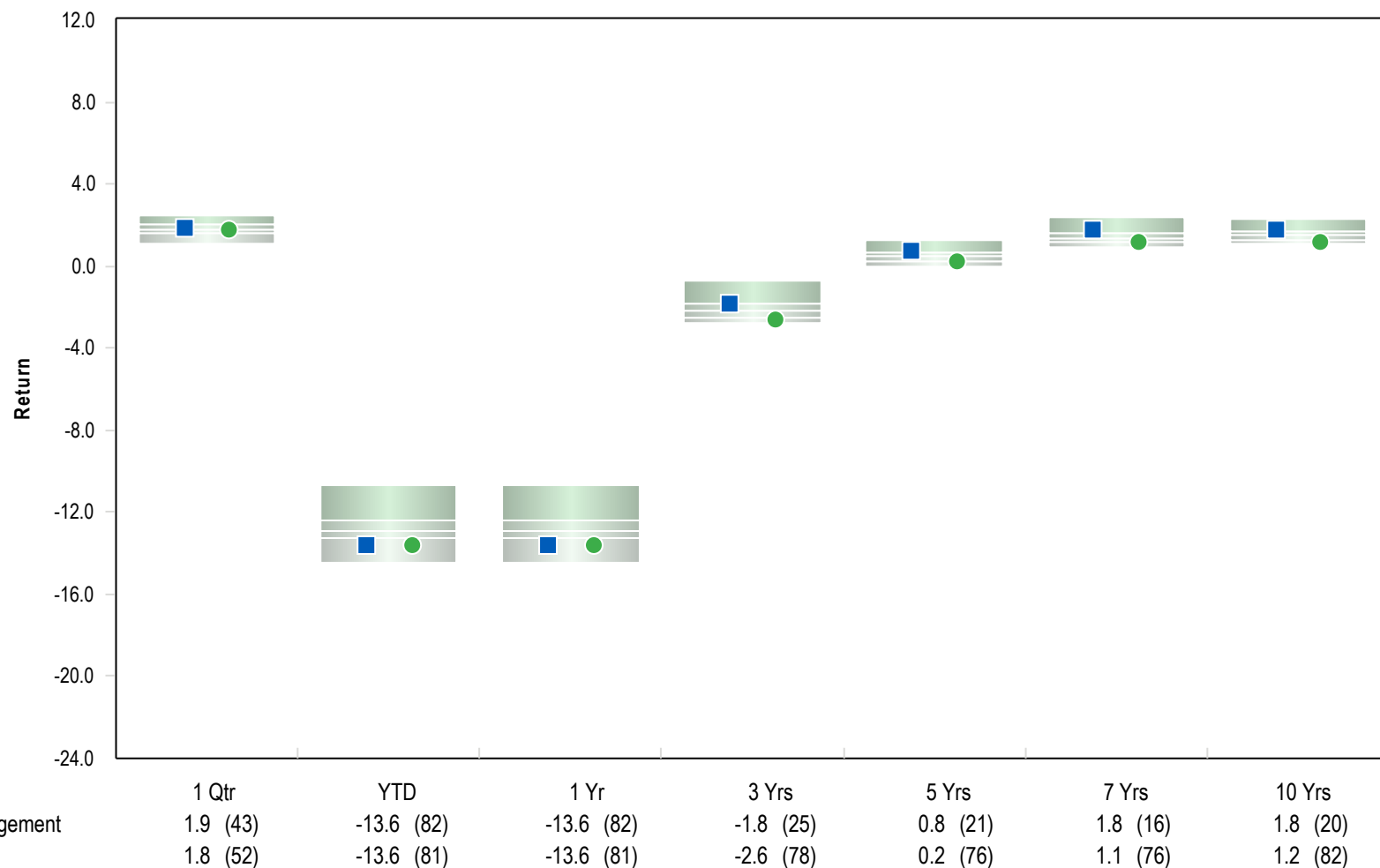
|                        | Return | Standard<br>Deviation |
|------------------------|--------|-----------------------|
| ■ Total Domestic Fixed | 0.5    | 5.3                   |
| ◆ Barclays Aggregate   | 0.0    | 5.0                   |
| — Median               | 0.5    | 5.2                   |

Calculation based on monthly periodicity.

|                      | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|----------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Total Domestic Fixed | 1.9   | -13.6 | -13.6 | -2.1  | 0.5   | 1.4   | 1.5    | -1.2 | 10.0 | 9.3  | -0.1 |
| Barclays Aggregate   | 1.9   | -13.0 | -13.0 | -2.7  | 0.0   | 0.9   | 1.1    | -1.5 | 7.5  | 8.7  | 0.0  |
| Difference           | 0.0   | -0.6  | -0.6  | 0.6   | 0.5   | 0.5   | 0.4    | 0.3  | 2.5  | 0.6  | -0.1 |

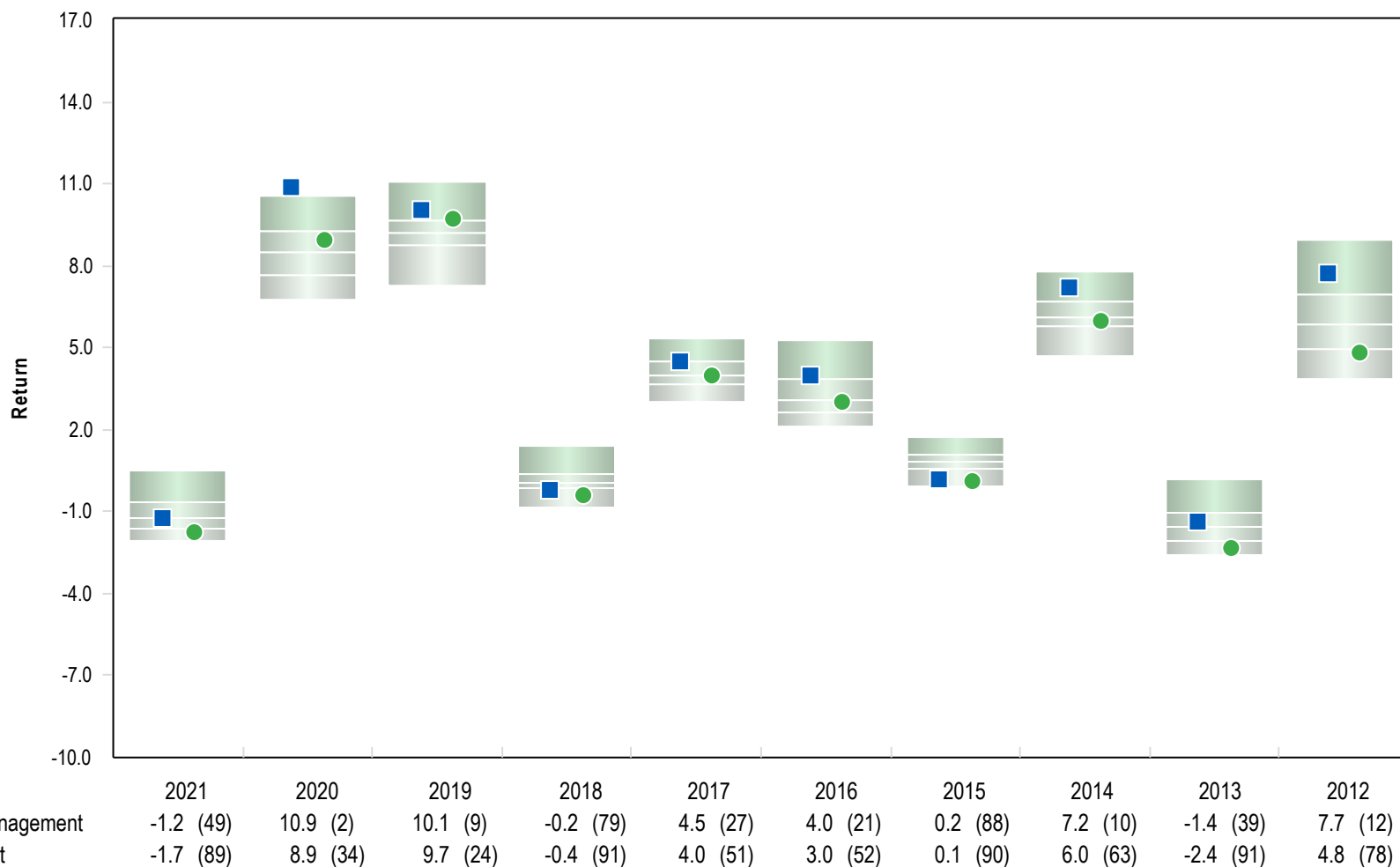


Gross of Fees



|                 |     |       |       |      |     |     |     |
|-----------------|-----|-------|-------|------|-----|-----|-----|
| 5th Percentile  | 2.5 | -10.7 | -10.7 | -0.7 | 1.3 | 2.4 | 2.3 |
| 1st Quartile    | 2.0 | -12.4 | -12.4 | -1.8 | 0.7 | 1.6 | 1.7 |
| Median          | 1.8 | -12.9 | -12.9 | -2.2 | 0.5 | 1.4 | 1.5 |
| 3rd Quartile    | 1.6 | -13.3 | -13.3 | -2.5 | 0.3 | 1.2 | 1.3 |
| 95th Percentile | 1.1 | -14.5 | -14.5 | -2.8 | 0.0 | 0.9 | 1.1 |

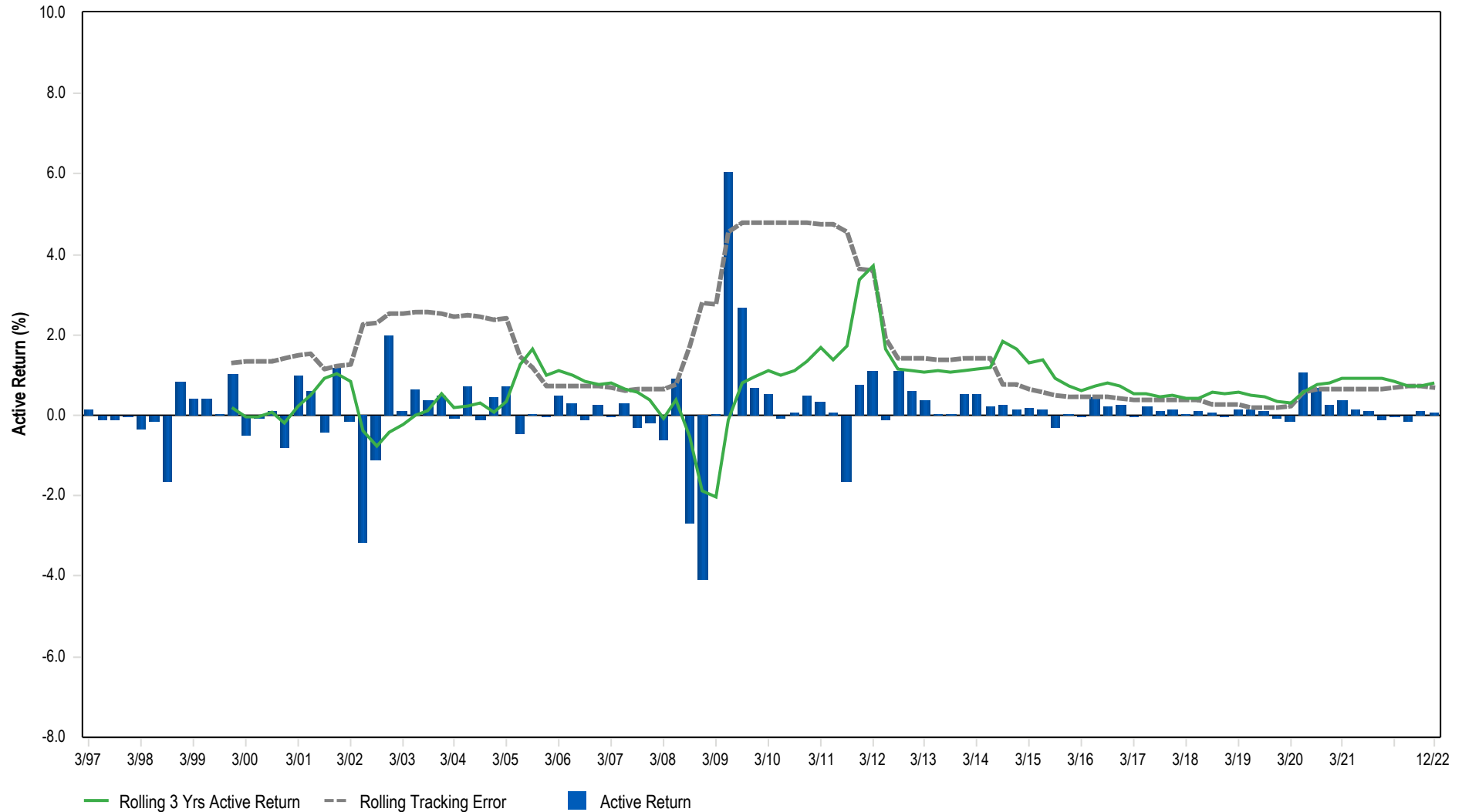
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



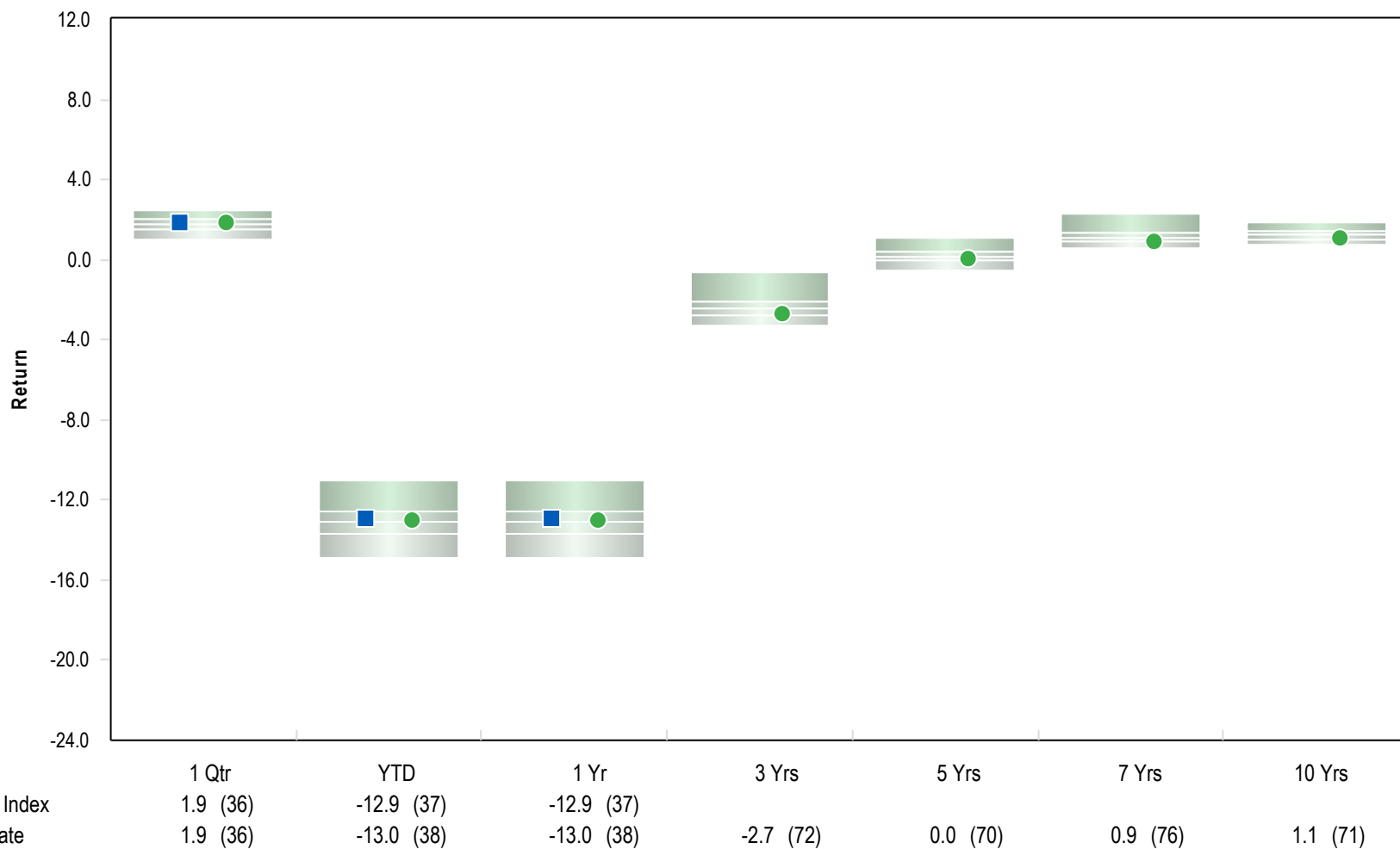
|                 |      |      |      |      |     |     |      |     |      |     |
|-----------------|------|------|------|------|-----|-----|------|-----|------|-----|
| 5th Percentile  | 0.5  | 10.5 | 11.1 | 1.4  | 5.3 | 5.3 | 1.7  | 7.8 | 0.2  | 9.0 |
| 1st Quartile    | -0.6 | 9.3  | 9.7  | 0.4  | 4.5 | 3.8 | 1.1  | 6.7 | -1.0 | 6.9 |
| Median          | -1.2 | 8.5  | 9.2  | 0.1  | 4.0 | 3.1 | 0.8  | 6.1 | -1.6 | 5.8 |
| 3rd Quartile    | -1.6 | 7.7  | 8.7  | -0.1 | 3.6 | 2.6 | 0.6  | 5.8 | -2.0 | 4.9 |
| 95th Percentile | -2.1 | 6.7  | 7.2  | -0.9 | 3.0 | 2.1 | -0.1 | 4.7 | -2.6 | 3.8 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

|                              | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Income Research & Management | 1.9   | -13.6 | -13.6 | -1.8  | 0.8   | 1.8   | 1.8    | -1.2 | 10.9 | 10.1 | -0.2 |
| Blmbg. U.S. Gov't/Credit     | 1.8   | -13.6 | -13.6 | -2.6  | 0.2   | 1.1   | 1.2    | -1.7 | 8.9  | 9.7  | -0.4 |
| Difference                   | 0.1   | 0.0   | 0.0   | 0.8   | 0.6   | 0.7   | 0.6    | 0.5  | 2.0  | 0.4  | 0.2  |



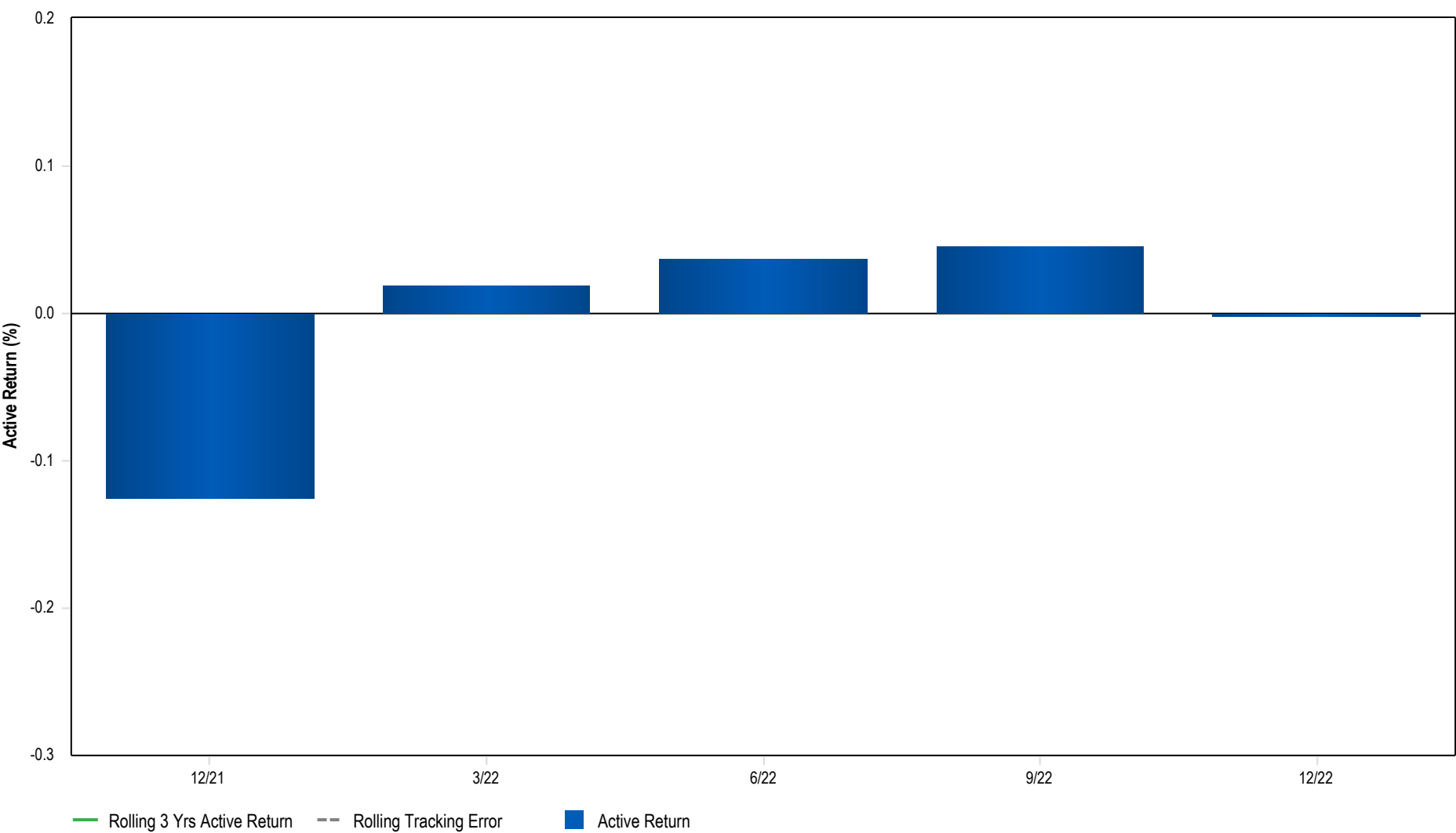




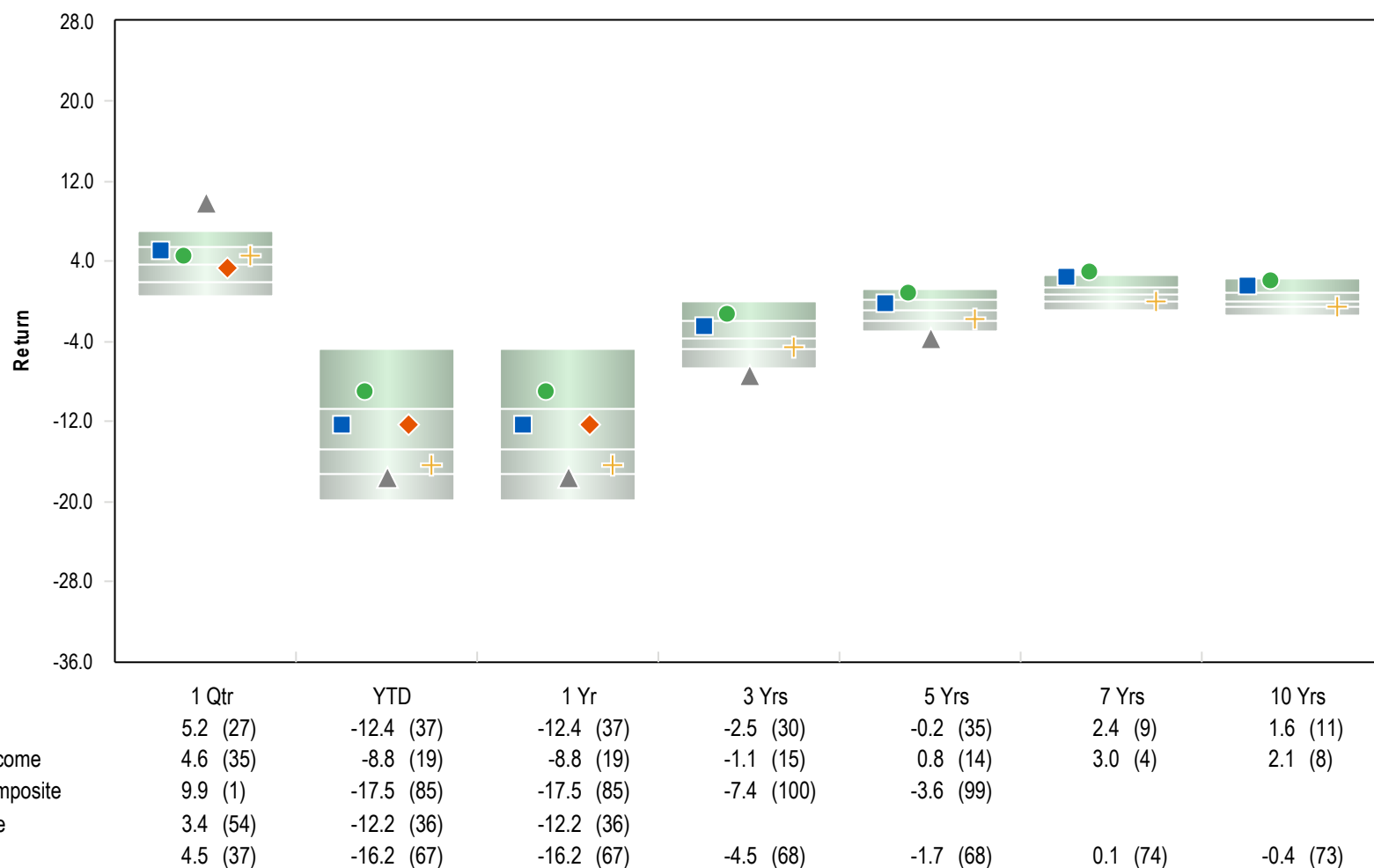
|                 |     |       |       |      |      |     |     |
|-----------------|-----|-------|-------|------|------|-----|-----|
| 5th Percentile  | 2.4 | -11.0 | -11.0 | -0.6 | 1.1  | 2.3 | 1.9 |
| 1st Quartile    | 2.0 | -12.6 | -12.6 | -2.1 | 0.4  | 1.3 | 1.4 |
| Median          | 1.8 | -13.1 | -13.1 | -2.5 | 0.2  | 1.1 | 1.2 |
| 3rd Quartile    | 1.5 | -13.7 | -13.7 | -2.8 | 0.0  | 0.9 | 1.0 |
| 95th Percentile | 1.0 | -14.9 | -14.9 | -3.3 | -0.5 | 0.5 | 0.7 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

|                         | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|-------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| NT Aggregate Bond Index | 1.9   | -12.9 | -12.9 |       |       |       |        |      |      |      |      |
| Blmbg. U.S. Aggregate   | 1.9   | -13.0 | -13.0 | -2.7  | 0.0   | 0.9   | 1.1    | -1.5 | 7.5  | 8.7  | 0.0  |
| Difference              | 0.0   | 0.1   | 0.1   |       |       |       |        |      |      |      |      |

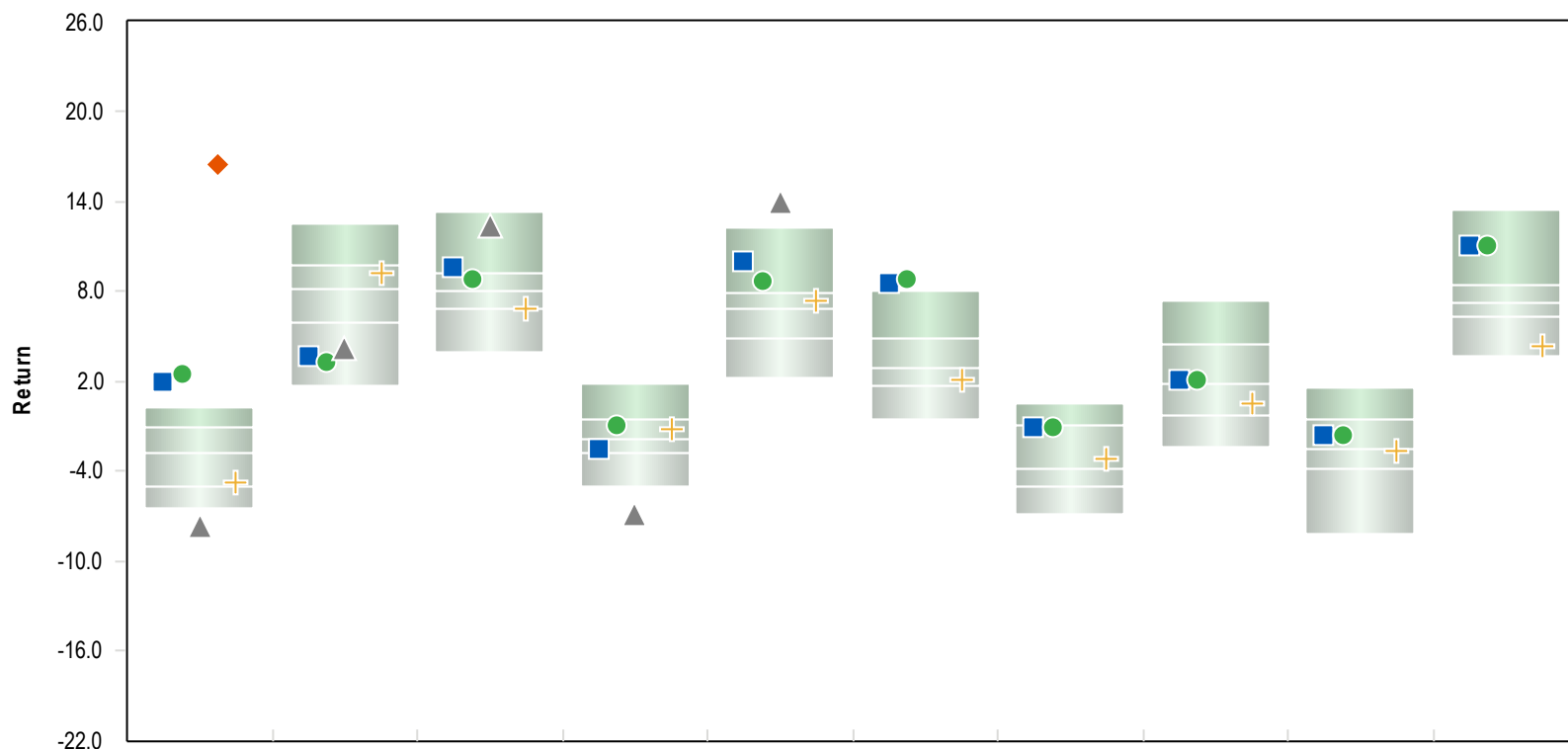


## **Global Fixed Income**



|                 |     |       |       |      |      |      |      |
|-----------------|-----|-------|-------|------|------|------|------|
| 5th Percentile  | 7.1 | -4.7  | -4.7  | 0.1  | 1.3  | 2.7  | 2.4  |
| 1st Quartile    | 5.6 | -10.7 | -10.7 | -2.0 | 0.2  | 1.4  | 1.0  |
| Median          | 3.8 | -14.7 | -14.7 | -3.7 | -0.9 | 0.7  | 0.0  |
| 3rd Quartile    | 2.1 | -17.1 | -17.1 | -4.7 | -1.8 | 0.1  | -0.5 |
| 95th Percentile | 0.6 | -19.8 | -19.8 | -6.6 | -2.9 | -0.9 | -1.3 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                                  | 2021      | 2020     | 2019     | 2018       | 2017      | 2016     | 2015      | 2014     | 2013      | 2012      |
|----------------------------------|-----------|----------|----------|------------|-----------|----------|-----------|----------|-----------|-----------|
| ■ Total Global Fixed             | 2.0 (1)   | 3.7 (92) | 9.6 (22) | -2.4 (68)  | 10.0 (10) | 8.5 (3)  | -1.1 (27) | 2.1 (47) | -1.5 (38) | 11.0 (14) |
| ● Broad Mkt Global Fixed Income  | 2.6 (1)   | 3.3 (93) | 8.9 (30) | -0.9 (34)  | 8.7 (19)  | 8.8 (3)  | -1.1 (27) | 2.1 (47) | -1.5 (38) | 11.0 (14) |
| ▲ Emerging Market Debt Composite | -7.6 (98) | 4.3 (89) | 12.4 (6) | -6.8 (100) | 14.0 (1)  |          |           |          |           |           |
| ◆ Opportunistic Fixed Income     | 16.5 (1)  |          |          |            |           |          |           |          |           |           |
| + Blmbg. Global Aggregate        | -4.7 (69) | 9.2 (36) | 6.8 (77) | -1.2 (40)  | 7.4 (39)  | 2.1 (69) | -3.2 (41) | 0.6 (62) | -2.6 (53) | 4.3 (94)  |

|                 |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| 5th Percentile  | 0.2  | 12.5 | 13.4 | 1.8  | 12.3 | 8.1  | 0.5  | 7.4  | 1.7  | 13.5 |
| 1st Quartile    | -1.0 | 9.8  | 9.2  | -0.5 | 7.9  | 4.9  | -0.9 | 4.6  | -0.5 | 8.4  |
| Median          | -2.7 | 8.2  | 8.1  | -1.8 | 6.8  | 2.9  | -3.8 | 1.9  | -2.5 | 7.3  |
| 3rd Quartile    | -4.9 | 5.9  | 6.9  | -2.8 | 4.9  | 1.8  | -4.9 | -0.2 | -3.8 | 6.3  |
| 95th Percentile | -6.4 | 1.7  | 4.0  | -5.0 | 2.3  | -0.5 | -6.9 | -2.3 | -8.1 | 3.7  |

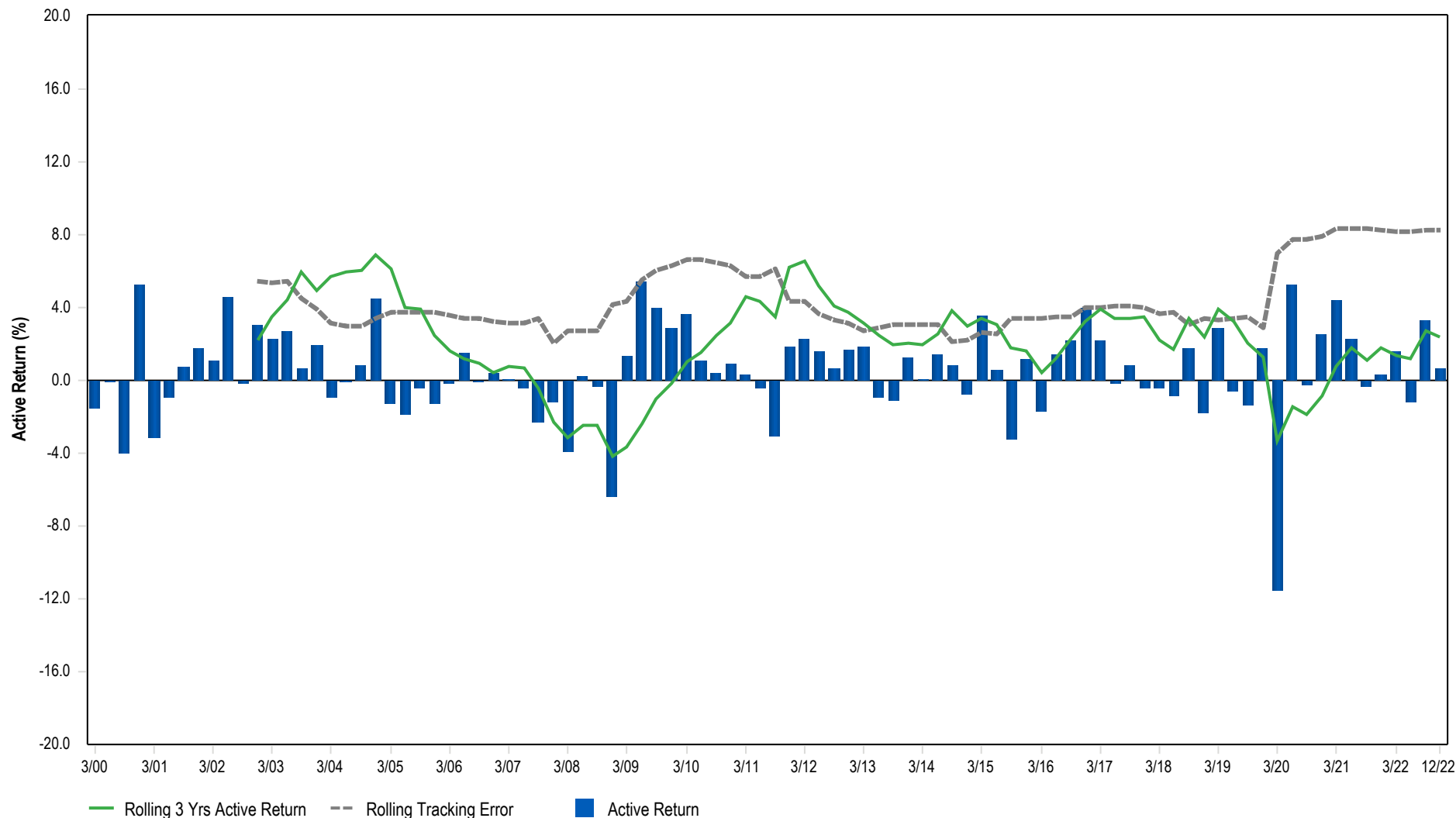
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Bristol County Retirement System

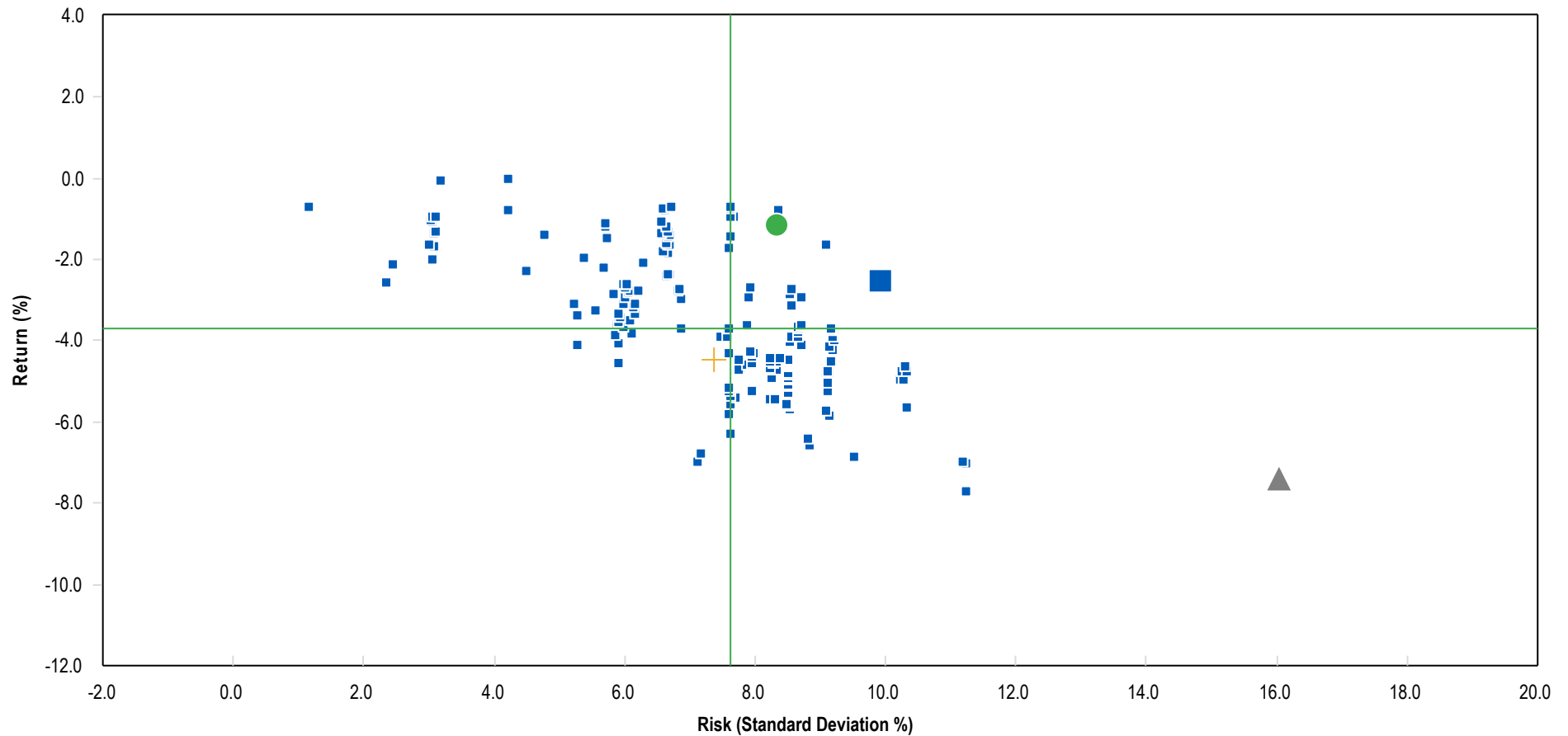
## Comparative Performance & Rolling Return

As of December 31, 2022

|                         | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|-------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Total Global Fixed      | 5.2   | -12.4 | -12.4 | -2.5  | -0.2  | 2.4   | 1.6    | 2.0  | 3.7  | 9.6  | -2.4 |
| Blmbg. Global Aggregate | 4.5   | -16.2 | -16.2 | -4.5  | -1.7  | 0.1   | -0.4   | -4.7 | 9.2  | 6.8  | -1.2 |
| Difference              | 0.7   | 3.8   | 3.8   | 2.0   | 1.5   | 2.3   | 2.0    | 6.7  | -5.5 | 2.8  | -1.2 |

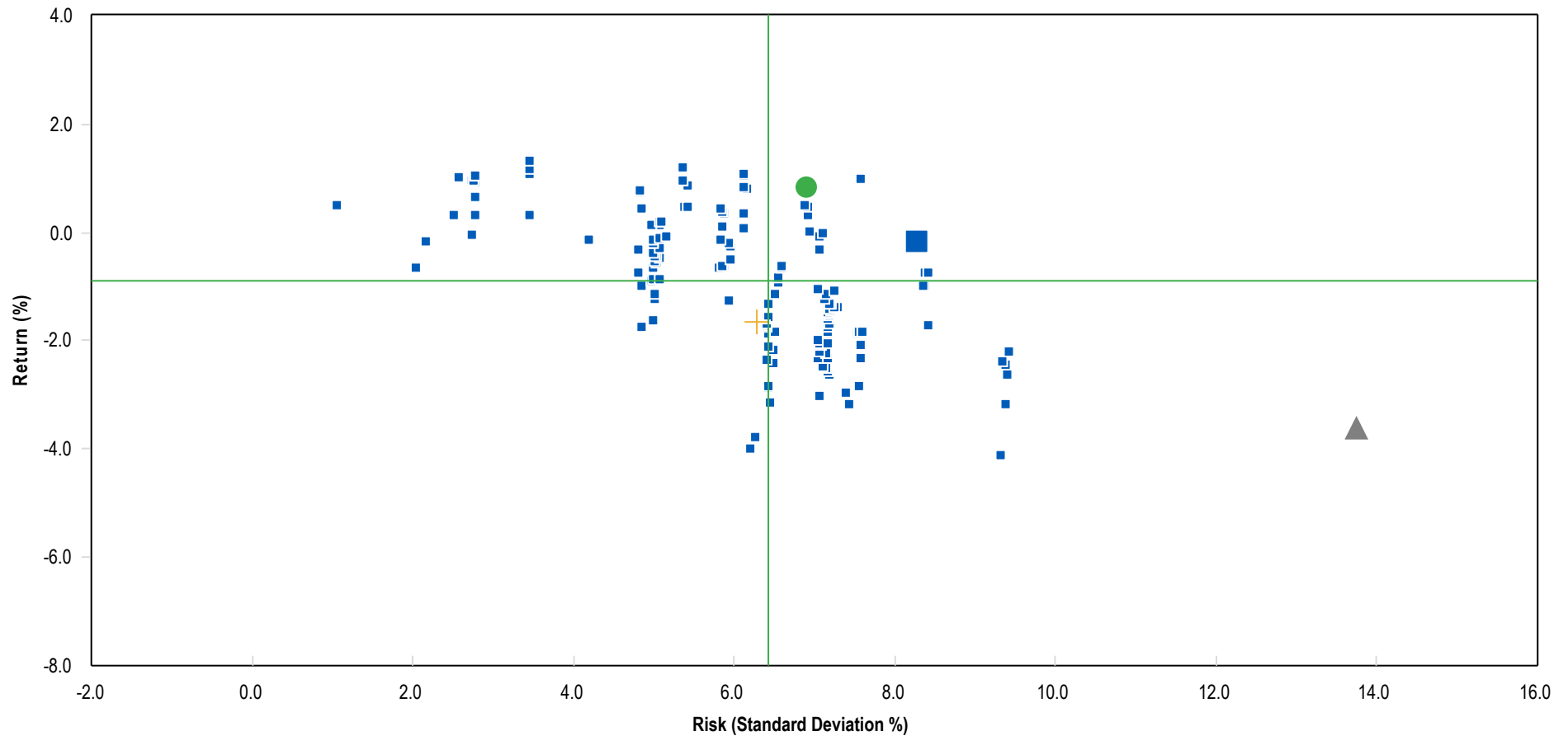


Net of fees.



|                                  | Return | Standard<br>Deviation |
|----------------------------------|--------|-----------------------|
| ■ Total Global Fixed             | -2.5   | 9.9                   |
| ● Broad Mkt Global Fixed Income  | -1.1   | 8.3                   |
| ▲ Emerging Market Debt Composite | -7.4   | 16.0                  |
| ◆ Opportunistic Fixed Income     |        |                       |
| + Blmbg. Global Aggregate        | -4.5   | 7.4                   |
| — Median                         | -3.7   | 7.6                   |

Calculation based on monthly periodicity.



|                                  | Return | Standard<br>Deviation |
|----------------------------------|--------|-----------------------|
| ■ Total Global Fixed             | -0.2   | 8.3                   |
| ● Broad Mkt Global Fixed Income  | 0.8    | 6.9                   |
| ▲ Emerging Market Debt Composite | -3.6   | 13.7                  |
| ◆ Opportunistic Fixed Income     |        |                       |
| + Blmbg. Global Aggregate        | -1.7   | 6.3                   |
| — Median                         | -0.9   | 6.4                   |

Calculation based on monthly periodicity.

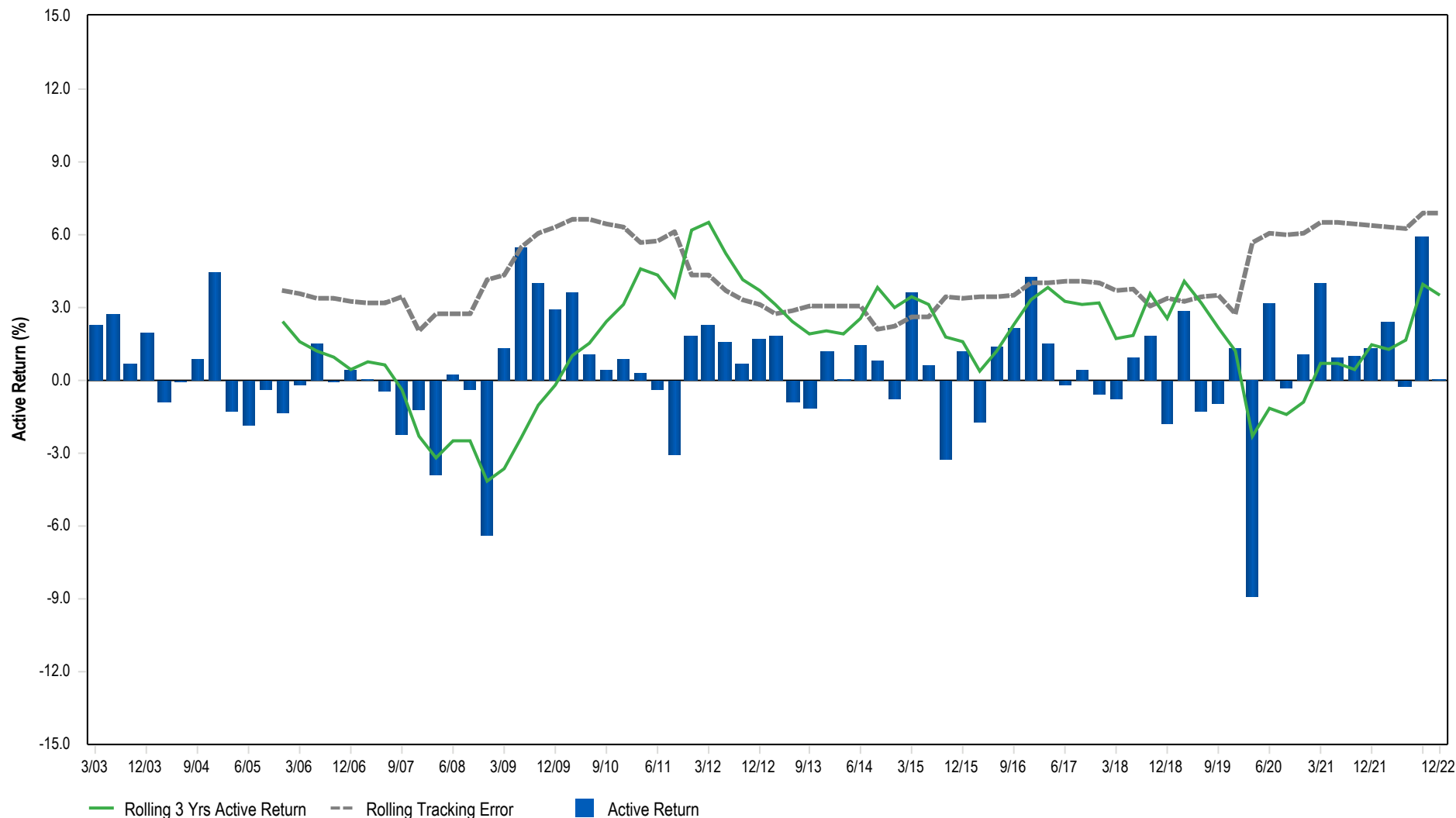


# Bristol County Retirement System

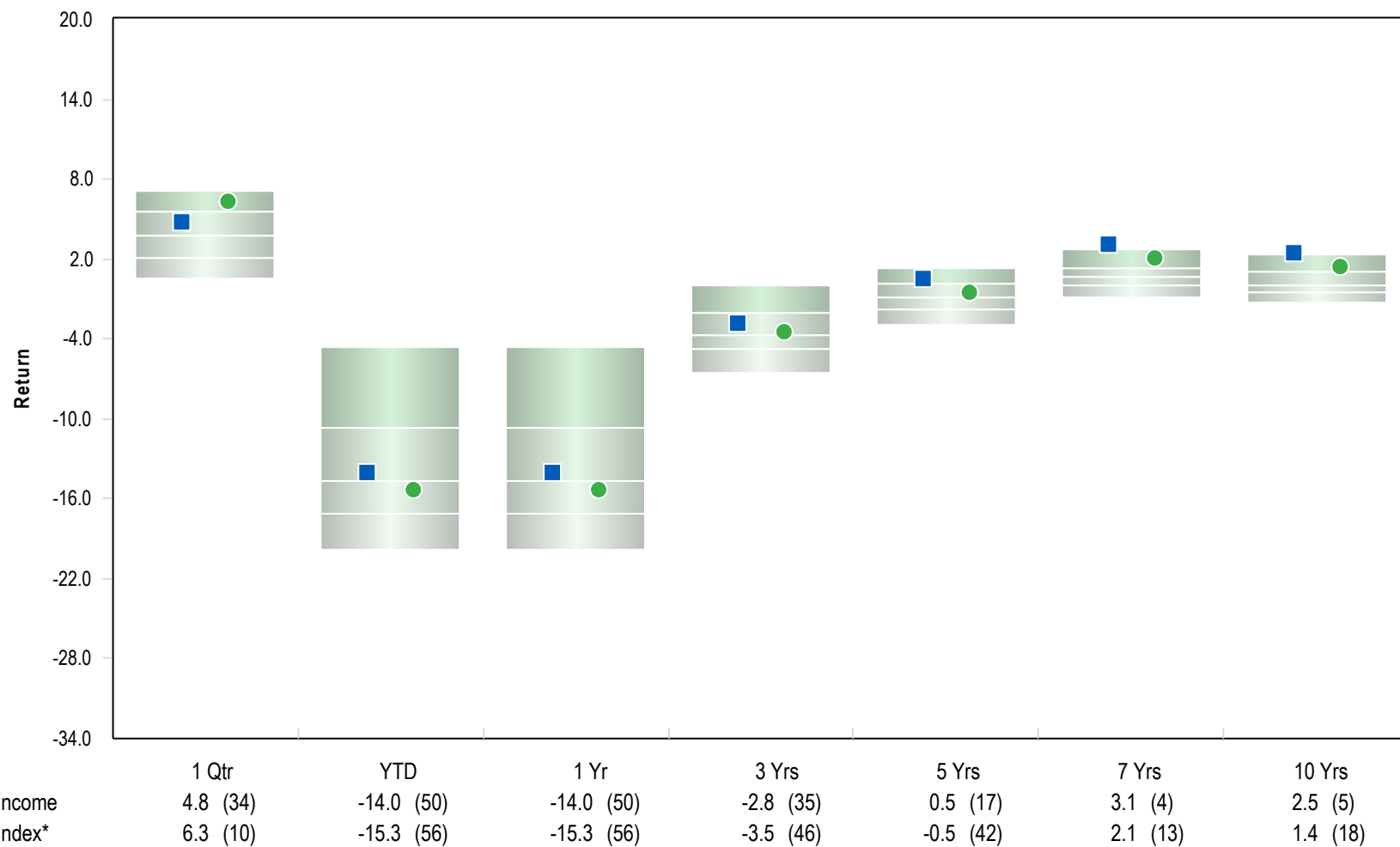
## Comparative Performance & Rolling Return

As of December 31, 2022

|                               | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|-------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Broad Mkt Global Fixed Income | 4.6   | -8.8  | -8.8  | -1.1  | 0.8   | 3.0   | 2.1    | 2.6  | 3.3  | 8.9  | -0.9 |
| Blmbg. Global Aggregate       | 4.5   | -16.2 | -16.2 | -4.5  | -1.7  | 0.1   | -0.4   | -4.7 | 9.2  | 6.8  | -1.2 |
| Difference                    | 0.1   | 7.4   | 7.4   | 3.4   | 2.5   | 2.9   | 2.5    | 7.3  | -5.9 | 2.1  | 0.3  |

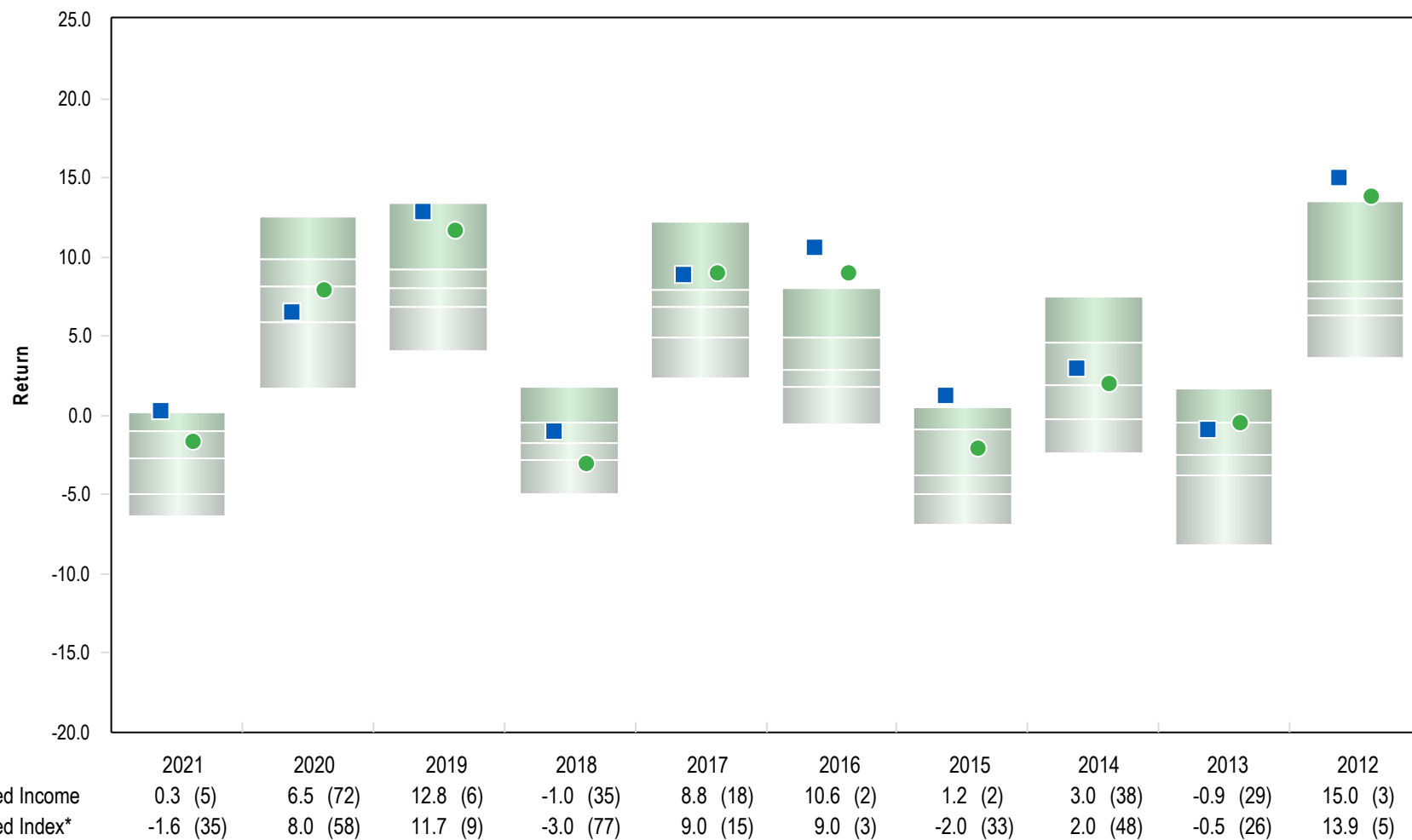


Net of fees.



|                 |     |       |       |      |      |      |      |
|-----------------|-----|-------|-------|------|------|------|------|
| 5th Percentile  | 7.1 | -4.7  | -4.7  | 0.1  | 1.3  | 2.7  | 2.4  |
| 1st Quartile    | 5.6 | -10.7 | -10.7 | -2.0 | 0.2  | 1.4  | 1.0  |
| Median          | 3.8 | -14.7 | -14.7 | -3.7 | -0.9 | 0.7  | 0.0  |
| 3rd Quartile    | 2.1 | -17.1 | -17.1 | -4.7 | -1.8 | 0.1  | -0.5 |
| 95th Percentile | 0.6 | -19.8 | -19.8 | -6.6 | -2.9 | -0.9 | -1.3 |

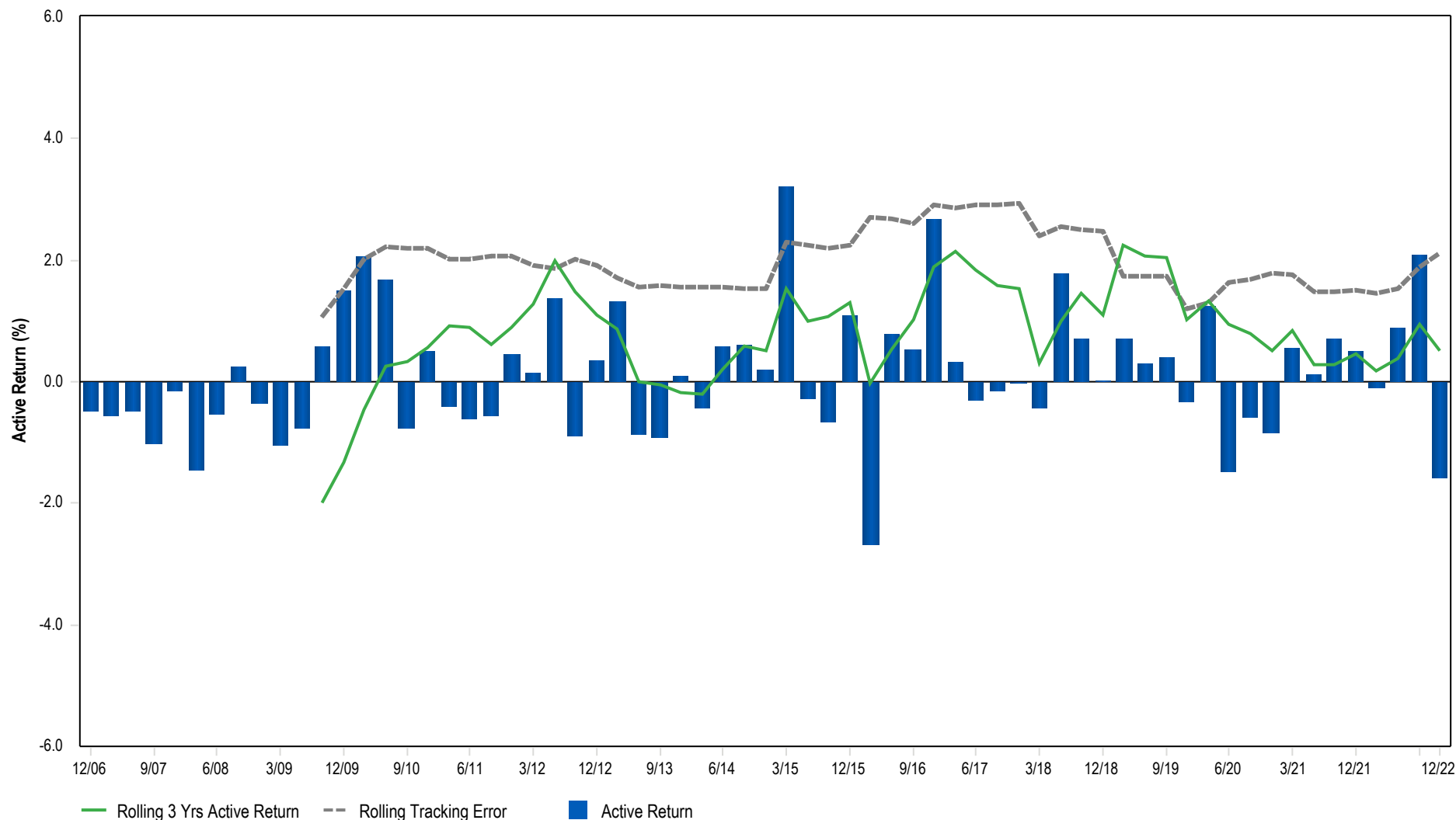
\*33.3% ML Global HY/33.3% JPM EMBI Global/33.3% LB Global Agg



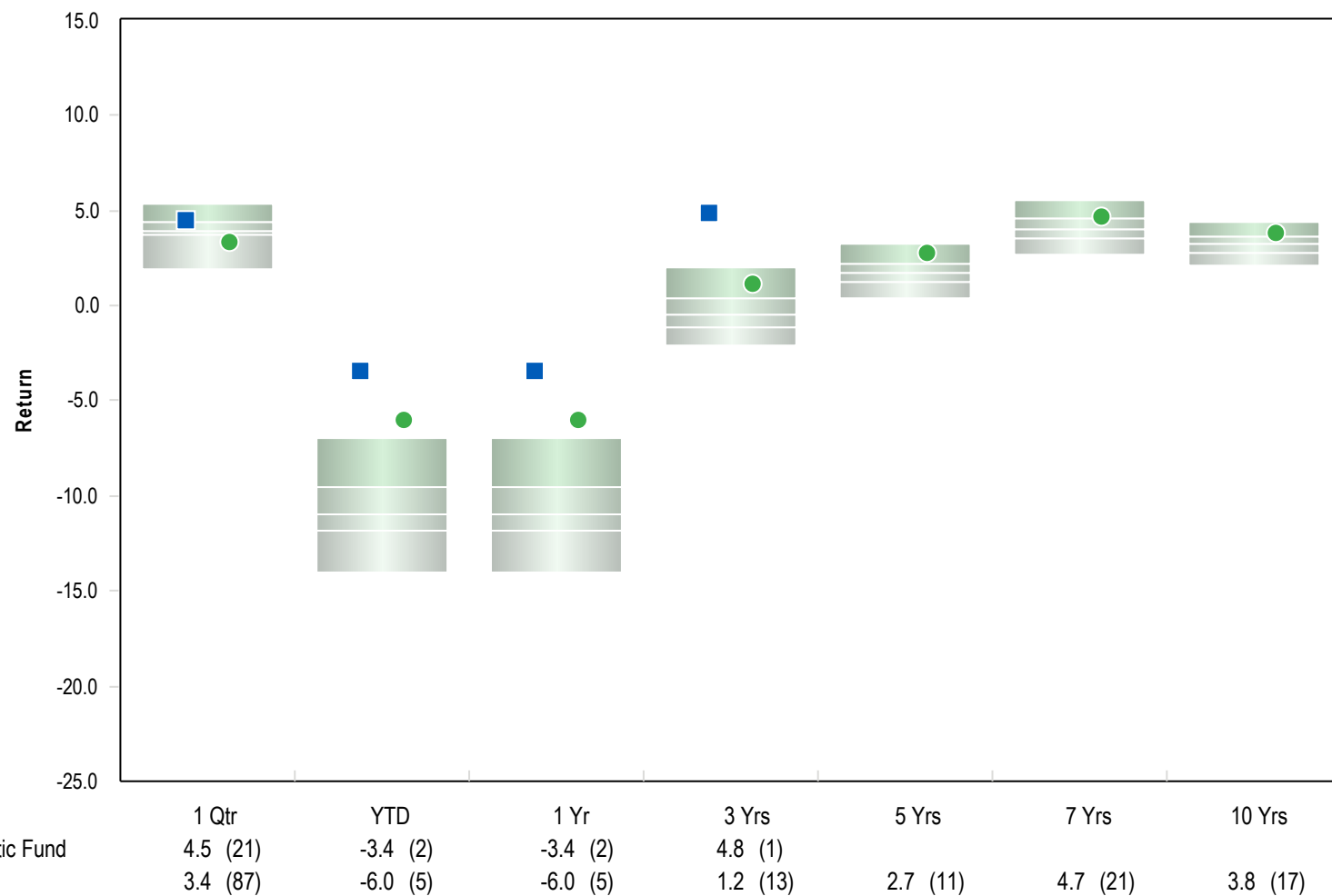
|                 |      |      |      |      |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|------|------|------|------|
| 5th Percentile  | 0.2  | 12.5 | 13.4 | 1.8  | 12.3 | 8.1  | 0.5  | 7.4  | 1.7  | 13.5 |
| 1st Quartile    | -1.0 | 9.8  | 9.2  | -0.5 | 7.9  | 4.9  | -0.9 | 4.6  | -0.5 | 8.4  |
| Median          | -2.7 | 8.2  | 8.1  | -1.8 | 6.8  | 2.9  | -3.8 | 1.9  | -2.5 | 7.3  |
| 3rd Quartile    | -4.9 | 5.9  | 6.9  | -2.8 | 4.9  | 1.8  | -4.9 | -0.2 | -3.8 | 6.3  |
| 95th Percentile | -6.4 | 1.7  | 4.0  | -5.0 | 2.3  | -0.5 | -6.9 | -2.3 | -8.1 | 3.7  |

\*33.3% ML Global HY/33.3% JPM EMBI Global/33.3% LB Global Agg

|                          | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|--------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| PIMCO Diversified Income | 4.8   | -14.0 | -14.0 | -2.8  | 0.5   | 3.1   | 2.5    | 0.3  | 6.5  | 12.8 | -1.0 |
| PIMCO Diversified Index* | 6.3   | -15.3 | -15.3 | -3.5  | -0.5  | 2.1   | 1.4    | -1.6 | 8.0  | 11.7 | -3.0 |
| Difference               | -1.5  | 1.3   | 1.3   | 0.7   | 1.0   | 1.0   | 1.1    | 1.9  | -1.5 | 1.1  | 2.0  |



\*PIMCO Index: 33% BC Global Agg/33% ML Global HY/33% JPM EMBI Global.



|                 |     |       |       |      |     |     |     |
|-----------------|-----|-------|-------|------|-----|-----|-----|
| 5th Percentile  | 5.3 | -6.9  | -6.9  | 2.0  | 3.2 | 5.5 | 4.4 |
| 1st Quartile    | 4.4 | -9.6  | -9.6  | 0.4  | 2.2 | 4.6 | 3.6 |
| Median          | 4.0 | -10.9 | -10.9 | -0.5 | 1.7 | 4.1 | 3.2 |
| 3rd Quartile    | 3.7 | -11.8 | -11.8 | -1.1 | 1.2 | 3.6 | 2.8 |
| 95th Percentile | 2.0 | -14.0 | -14.0 | -2.1 | 0.4 | 2.7 | 2.2 |

\*50% Merrill Lynch High Yield Index / 50% S&P/LSTA Leveraged Loan Index



|                 |     |     |      |      |     |      |      |      |      |      |
|-----------------|-----|-----|------|------|-----|------|------|------|------|------|
| 5th Percentile  | 8.6 | 9.7 | 16.3 | -0.5 | 8.7 | 17.4 | -0.3 | 3.9  | 11.1 | 18.1 |
| 1st Quartile    | 5.9 | 6.8 | 14.9 | -2.2 | 7.3 | 15.5 | -2.1 | 2.4  | 7.9  | 15.9 |
| Median          | 4.9 | 5.4 | 13.8 | -3.0 | 6.6 | 13.8 | -4.0 | 1.5  | 6.7  | 14.6 |
| 3rd Quartile    | 4.0 | 4.2 | 12.6 | -3.8 | 5.9 | 12.4 | -5.3 | 0.2  | 5.7  | 13.5 |
| 95th Percentile | 2.4 | 1.9 | 9.0  | -5.2 | 4.6 | 9.4  | -8.2 | -1.5 | 4.3  | 10.6 |

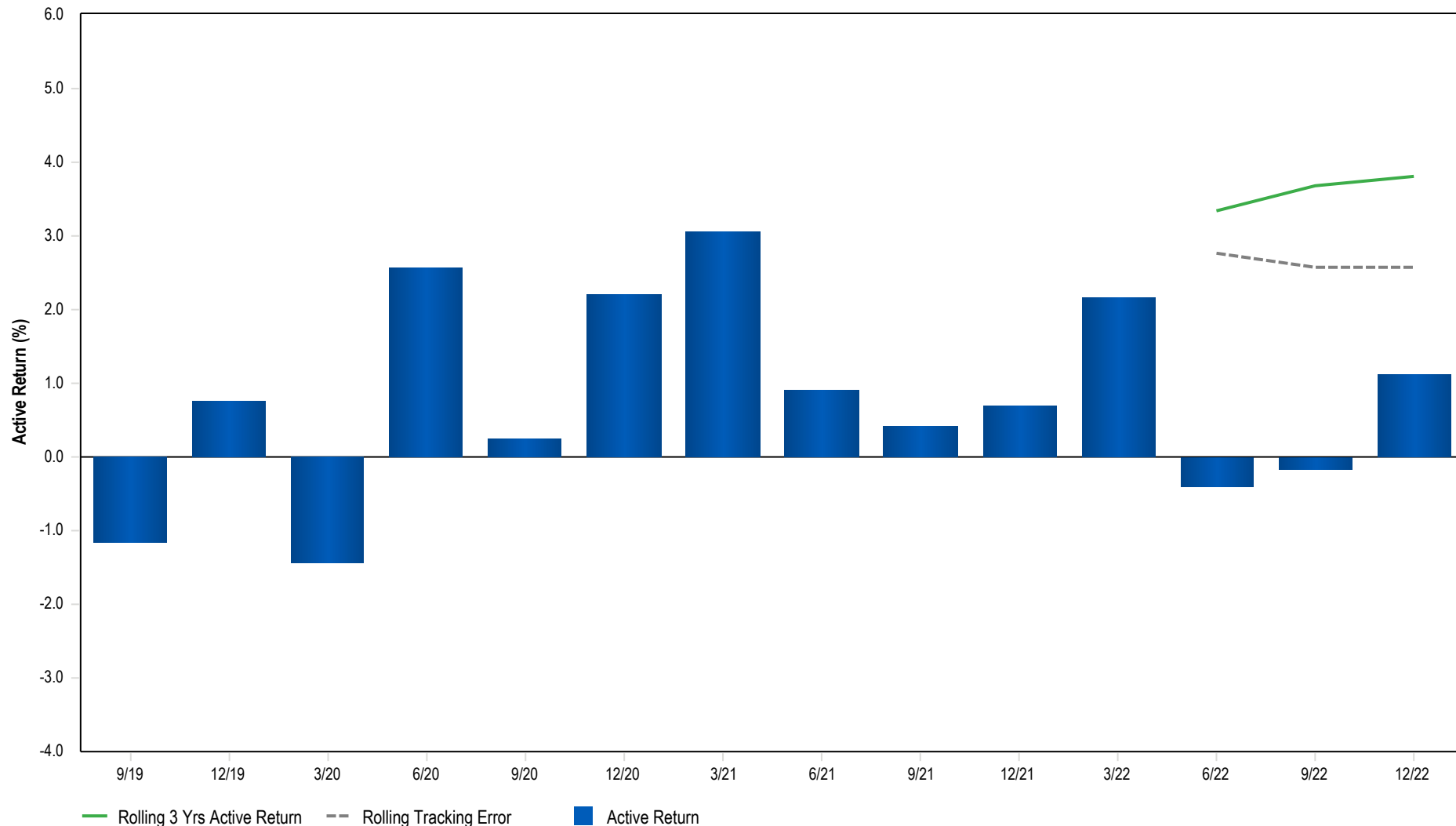
\*50% Merrill Lynch High Yield Index / 50% S&P/LSTA Leveraged Loan Index

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                                            | 1 Qtr | YTD  | 1 Yr | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|--------------------------------------------|-------|------|------|-------|-------|-------|--------|------|------|------|------|
| GoldenTree Multi-Sector Opportunistic Fund | 4.5   | -3.4 | -3.4 | 4.8   |       |       |        | 10.7 | 7.8  |      |      |
| GoldenTree Blended Benchmark*              | 3.4   | -6.0 | -6.0 | 1.2   | 2.7   | 4.7   | 3.8    | 5.3  | 4.7  | 11.5 | -0.9 |
| Difference                                 | 1.1   | 2.6  | 2.6  | 3.6   |       |       |        | 5.4  | 3.1  |      |      |



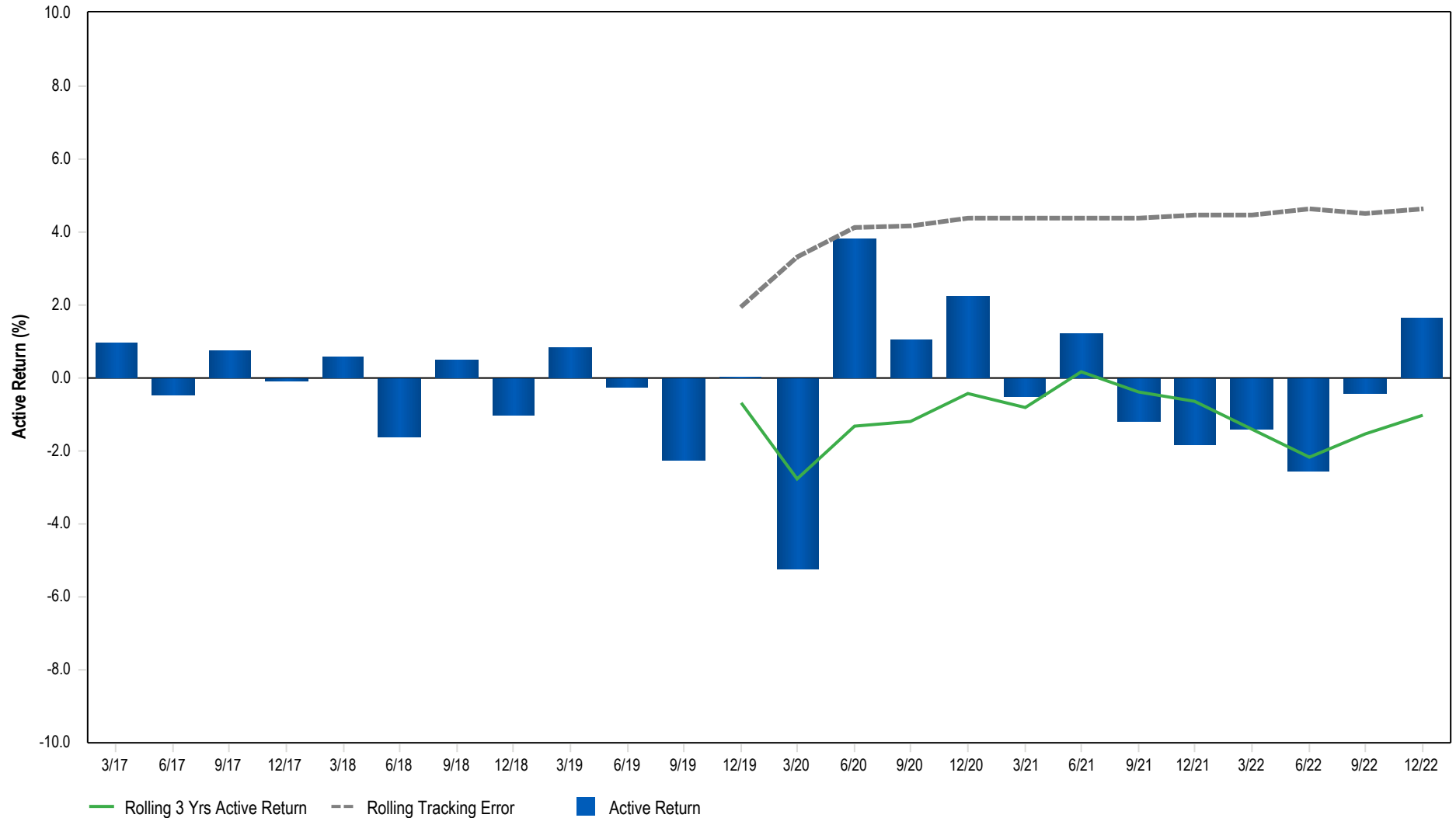
\*50% Merrill Lynch High Yield Index / 50% S&P/LSTA Leveraged Loan Index

# Bristol County Retirement System

## Comparative Performance & Rolling Return

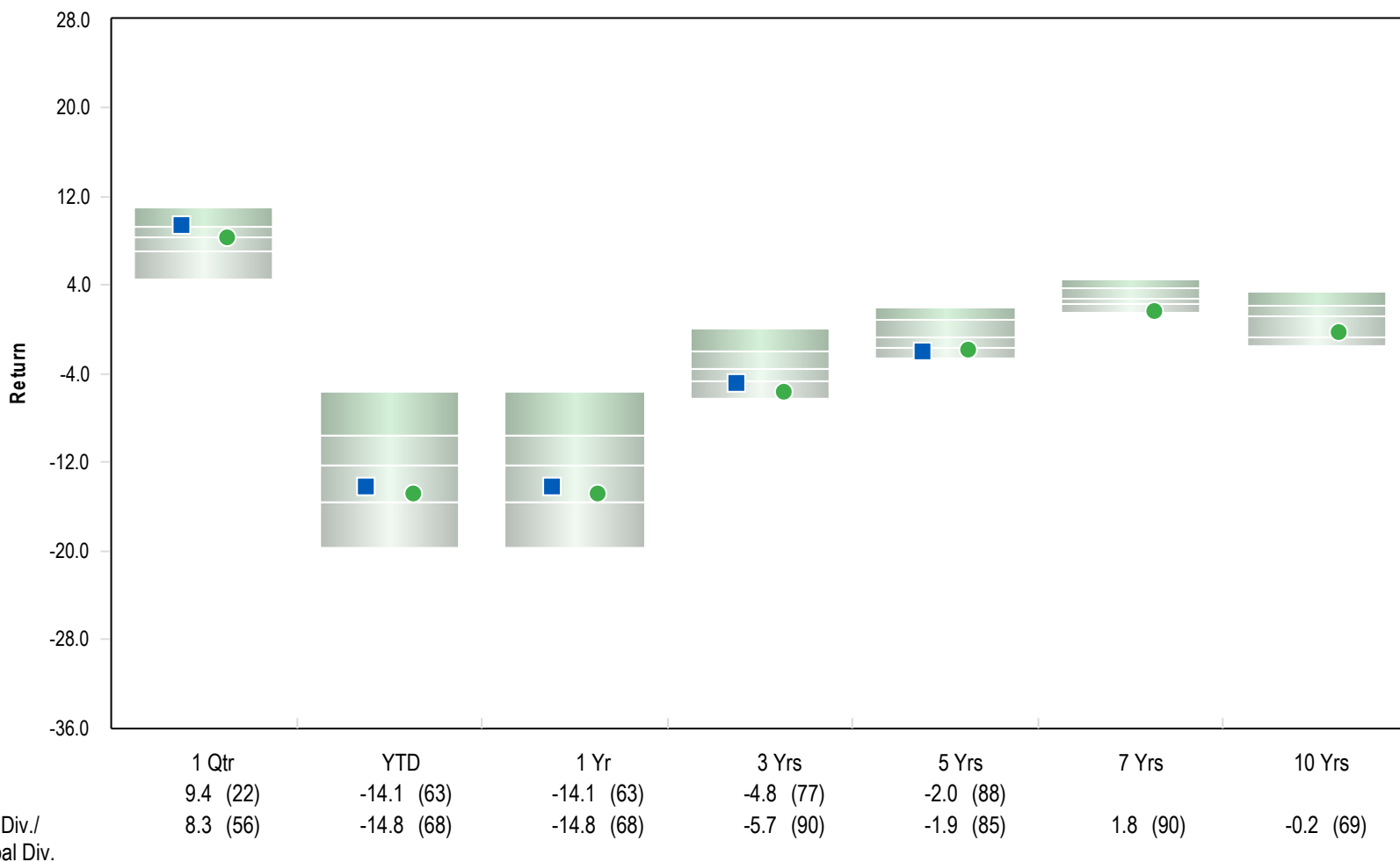
As of December 31, 2022

|                                                                      | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|----------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Emerging Market Debt Composite                                       | 9.9   | -17.5 | -17.5 | -7.4  | -3.6  |       |        | -7.6 | 4.3  | 12.4 | -6.8 |
| 50% JPM EMBI Global Diversified/50% JPM GBI-EM Global Diversified US | 8.3   | -14.8 | -14.8 | -5.7  | -1.9  | 1.8   | -0.2   | -5.3 | 4.0  | 14.3 | -5.2 |
| Difference                                                           | 1.6   | -2.7  | -2.7  | -1.7  | -1.7  |       |        | -2.3 | 0.3  | -1.9 | -1.6 |



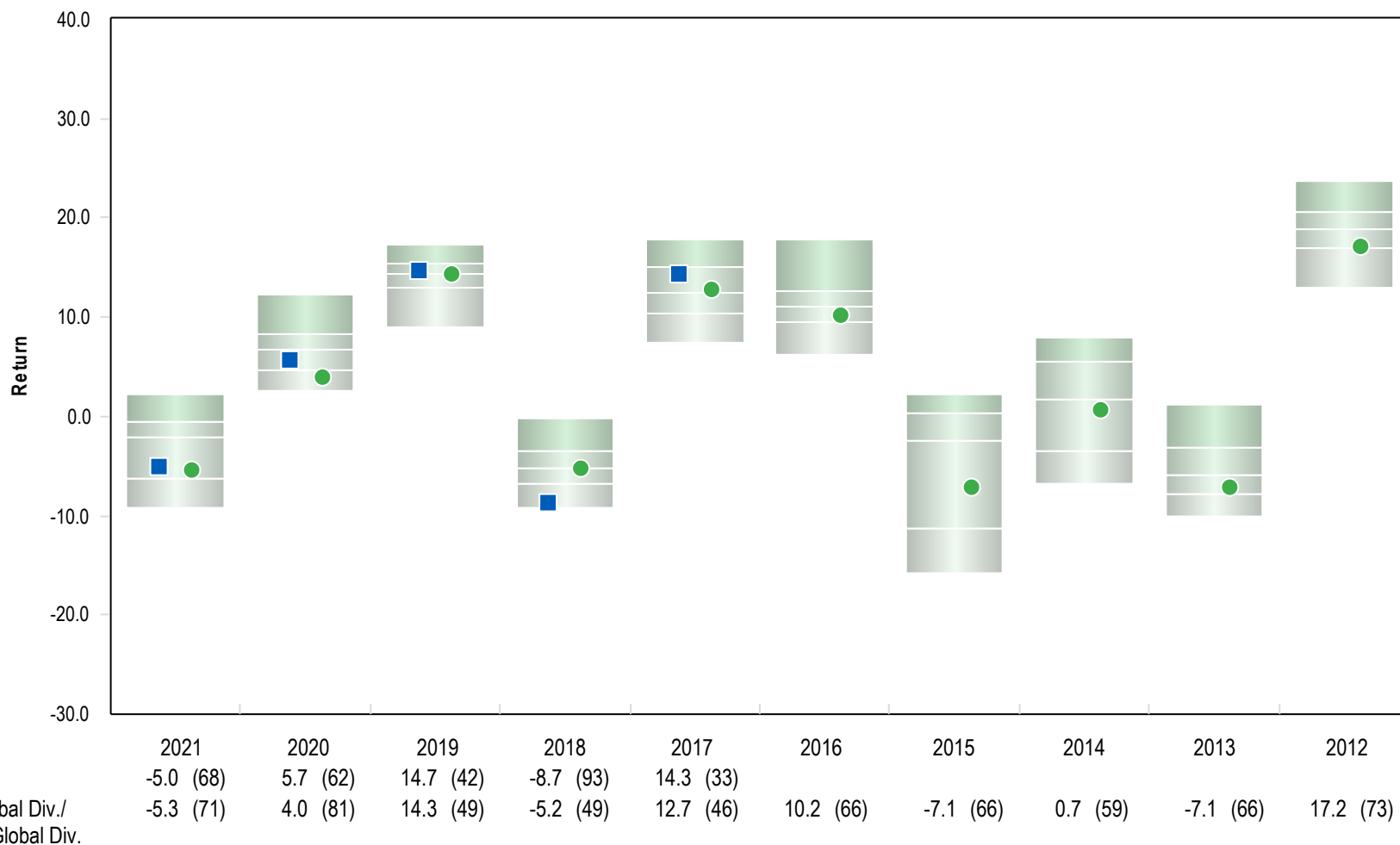
Net of fees.





|                 |      |       |       |      |      |     |      |
|-----------------|------|-------|-------|------|------|-----|------|
| 5th Percentile  | 11.1 | -5.7  | -5.7  | 0.2  | 2.0  | 4.6 | 3.4  |
| 1st Quartile    | 9.3  | -9.6  | -9.6  | -1.9 | 0.9  | 3.7 | 2.1  |
| Median          | 8.4  | -12.2 | -12.2 | -3.5 | -0.6 | 2.8 | 1.2  |
| 3rd Quartile    | 7.1  | -15.6 | -15.6 | -4.7 | -1.6 | 2.4 | -0.7 |
| 95th Percentile | 4.6  | -19.7 | -19.7 | -6.2 | -2.6 | 1.5 | -1.5 |

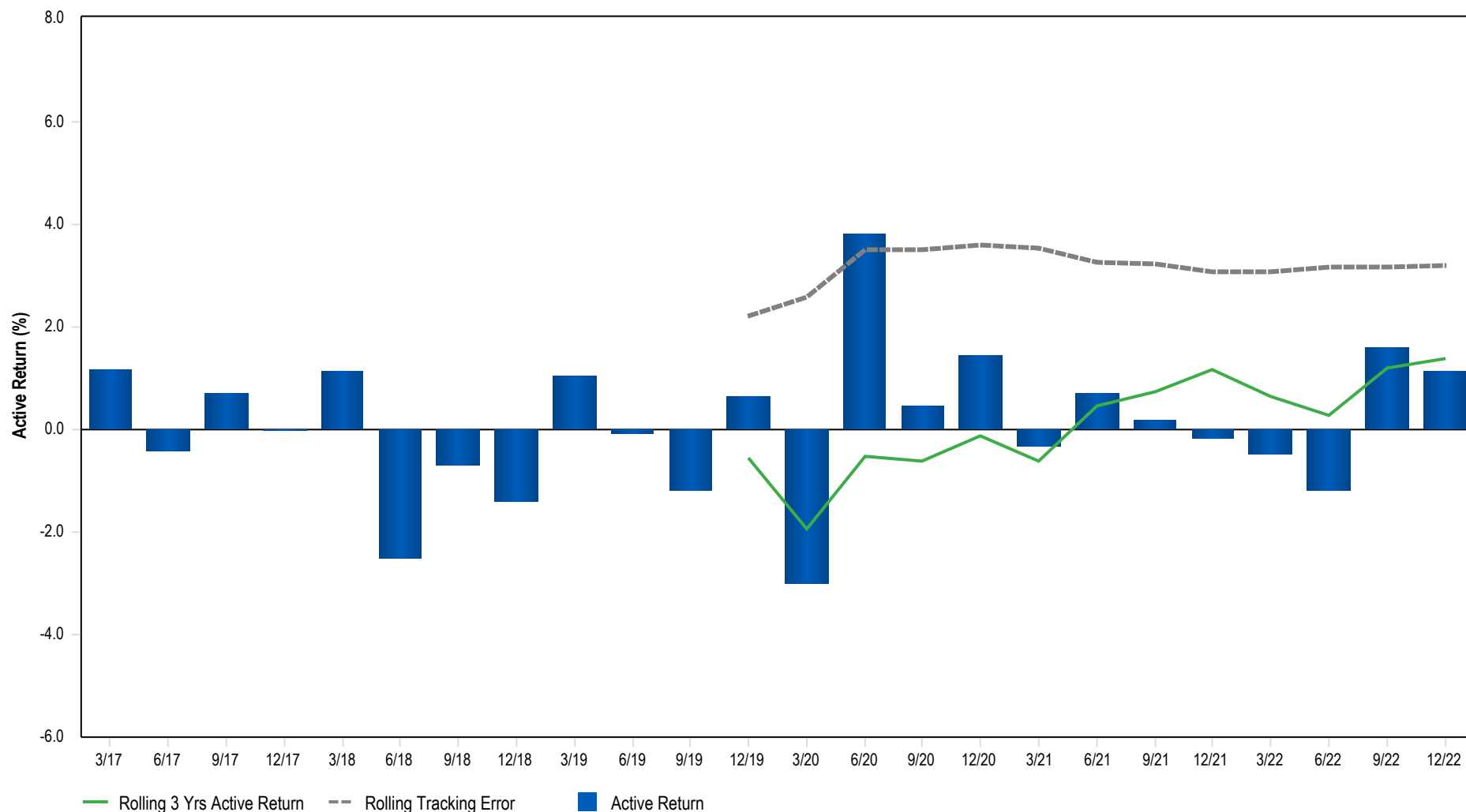
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

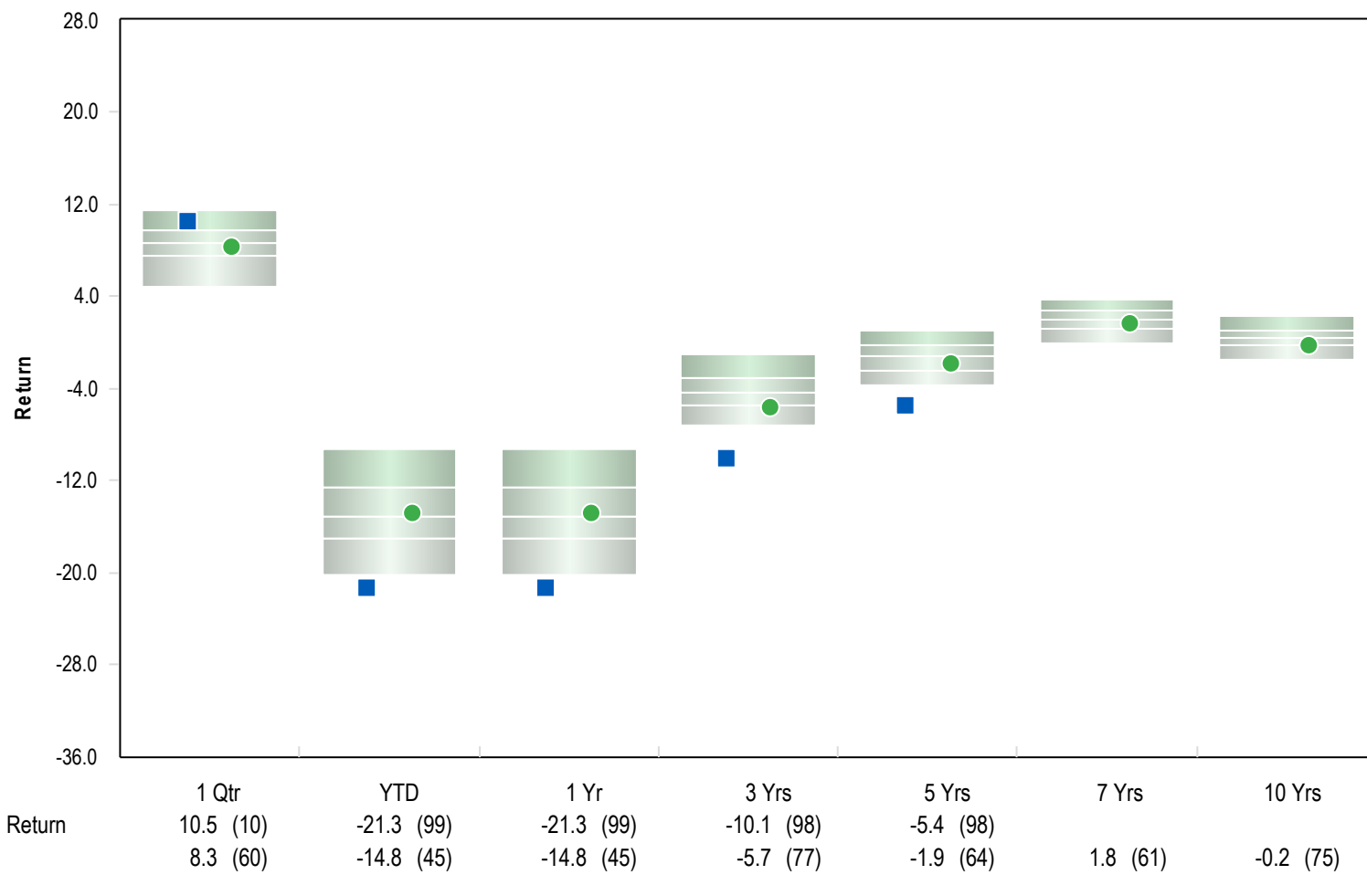


|                 |      |      |      |      |      |      |       |      |       |      |
|-----------------|------|------|------|------|------|------|-------|------|-------|------|
| 5th Percentile  | 2.2  | 12.2 | 17.2 | -0.2 | 17.7 | 17.8 | 2.2   | 8.0  | 1.2   | 23.8 |
| 1st Quartile    | -0.5 | 8.3  | 15.3 | -3.5 | 15.0 | 12.6 | 0.3   | 5.5  | -3.2  | 20.6 |
| Median          | -2.1 | 6.7  | 14.3 | -5.3 | 12.4 | 11.1 | -2.5  | 1.7  | -5.9  | 18.9 |
| 3rd Quartile    | -6.2 | 4.6  | 13.0 | -6.8 | 10.5 | 9.5  | -11.3 | -3.6 | -7.9  | 17.0 |
| 95th Percentile | -9.2 | 2.5  | 9.0  | -9.3 | 7.4  | 6.2  | -15.7 | -6.7 | -10.0 | 12.9 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

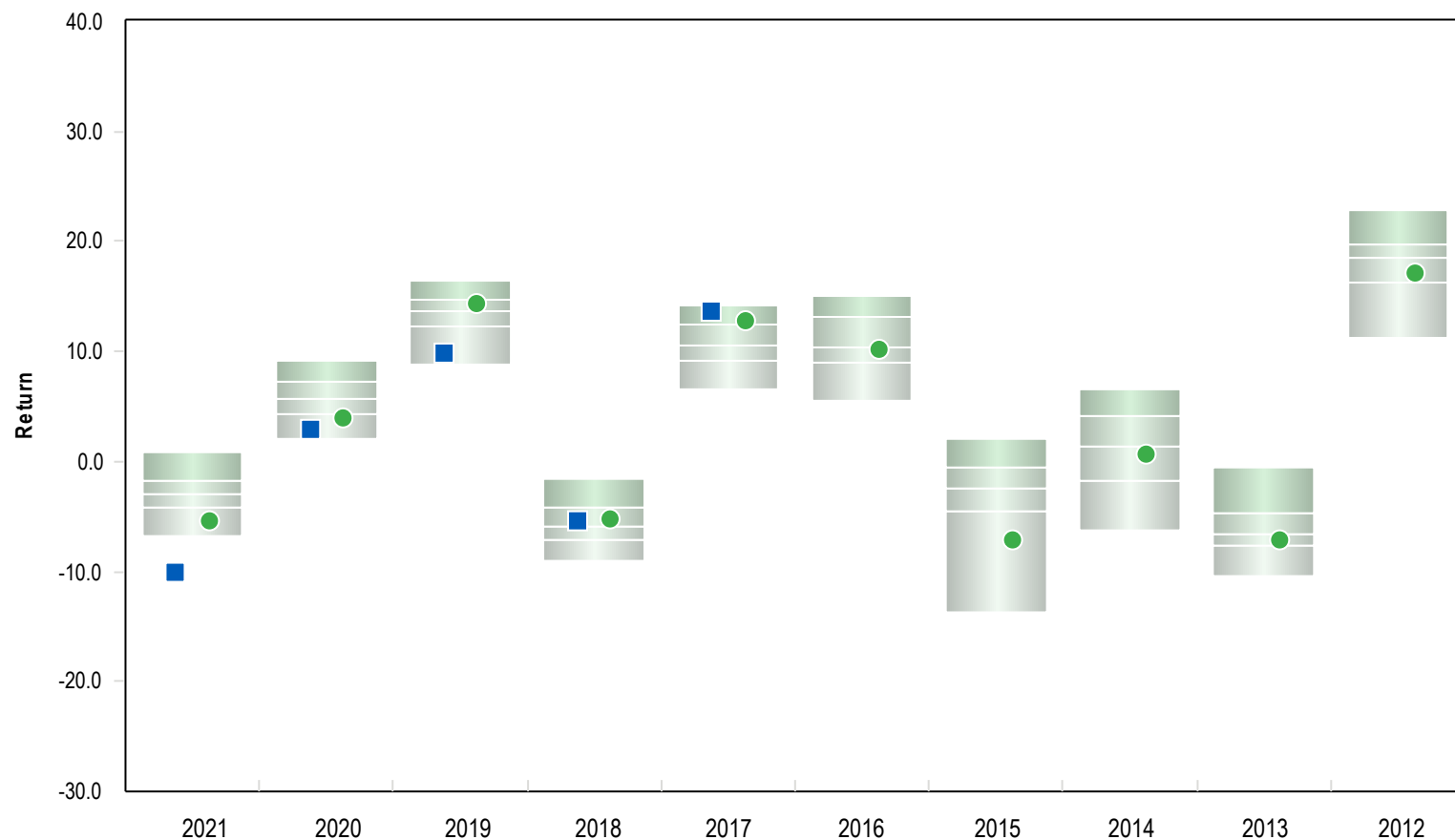
|                                                                          | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|--------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Stone Harbor EMD                                                         | 9.4   | -14.1 | -14.1 | -4.8  | -2.0  |       |        | -5.0 | 5.7  | 14.7 | -8.7 |
| 50% JPM EMBI Global Diversified/<br>50% JPM GBI-EM Global Diversified US | 8.3   | -14.8 | -14.8 | -5.7  | -1.9  | 1.8   | -0.2   | -5.3 | 4.0  | 14.3 | -5.2 |
| Difference                                                               | 1.1   | 0.7   | 0.7   | 0.9   | -0.1  |       |        | 0.3  | 1.7  | 0.4  | -3.5 |





|                 |      |       |       |      |      |     |      |
|-----------------|------|-------|-------|------|------|-----|------|
| 5th Percentile  | 11.5 | -9.2  | -9.2  | -1.0 | 1.0  | 3.7 | 2.3  |
| 1st Quartile    | 9.8  | -12.5 | -12.5 | -3.1 | -0.2 | 2.9 | 1.1  |
| Median          | 8.6  | -15.1 | -15.1 | -4.3 | -1.2 | 2.0 | 0.5  |
| 3rd Quartile    | 7.6  | -17.0 | -17.0 | -5.5 | -2.4 | 1.2 | -0.2 |
| 95th Percentile | 4.9  | -20.2 | -20.2 | -7.2 | -3.6 | 0.0 | -1.5 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                                                           |            |          |           |           |           |           |           |          |           |           |
|-----------------------------------------------------------|------------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|
| ■ Ashmore Emerging Markets Total Return                   | 2021       | 2020     | 2019      | 2018      | 2017      | 2016      | 2015      | 2014     | 2013      | 2012      |
|                                                           | -10.1 (98) | 2.9 (88) | 9.9 (93)  | -5.3 (42) | 13.7 (10) | 10.2 (56) | -7.1 (84) | 0.7 (58) | -7.1 (63) | 17.2 (65) |
| ● 50% JPM EMBI Global Div./<br>50% JPM GBI-EM Global Div. | -5.3 (89)  | 4.0 (79) | 14.3 (31) | -5.2 (39) | 12.7 (23) | 10.2 (56) | -7.1 (84) | 0.7 (58) | -7.1 (63) | 17.2 (65) |

|                 |      |     |      |      |      |      |       |      |       |      |
|-----------------|------|-----|------|------|------|------|-------|------|-------|------|
| 5th Percentile  | 0.8  | 9.1 | 16.5 | -1.7 | 14.3 | 15.0 | 2.0   | 6.5  | -0.5  | 22.9 |
| 1st Quartile    | -1.8 | 7.2 | 14.7 | -4.2 | 12.5 | 13.2 | -0.6  | 4.1  | -4.7  | 19.7 |
| Median          | -3.0 | 5.7 | 13.6 | -5.9 | 10.5 | 10.4 | -2.5  | 1.3  | -6.5  | 18.6 |
| 3rd Quartile    | -4.2 | 4.3 | 12.3 | -7.1 | 9.1  | 9.0  | -4.5  | -1.7 | -7.7  | 16.3 |
| 95th Percentile | -6.8 | 2.1 | 8.8  | -9.0 | 6.6  | 5.5  | -13.7 | -6.2 | -10.4 | 11.2 |

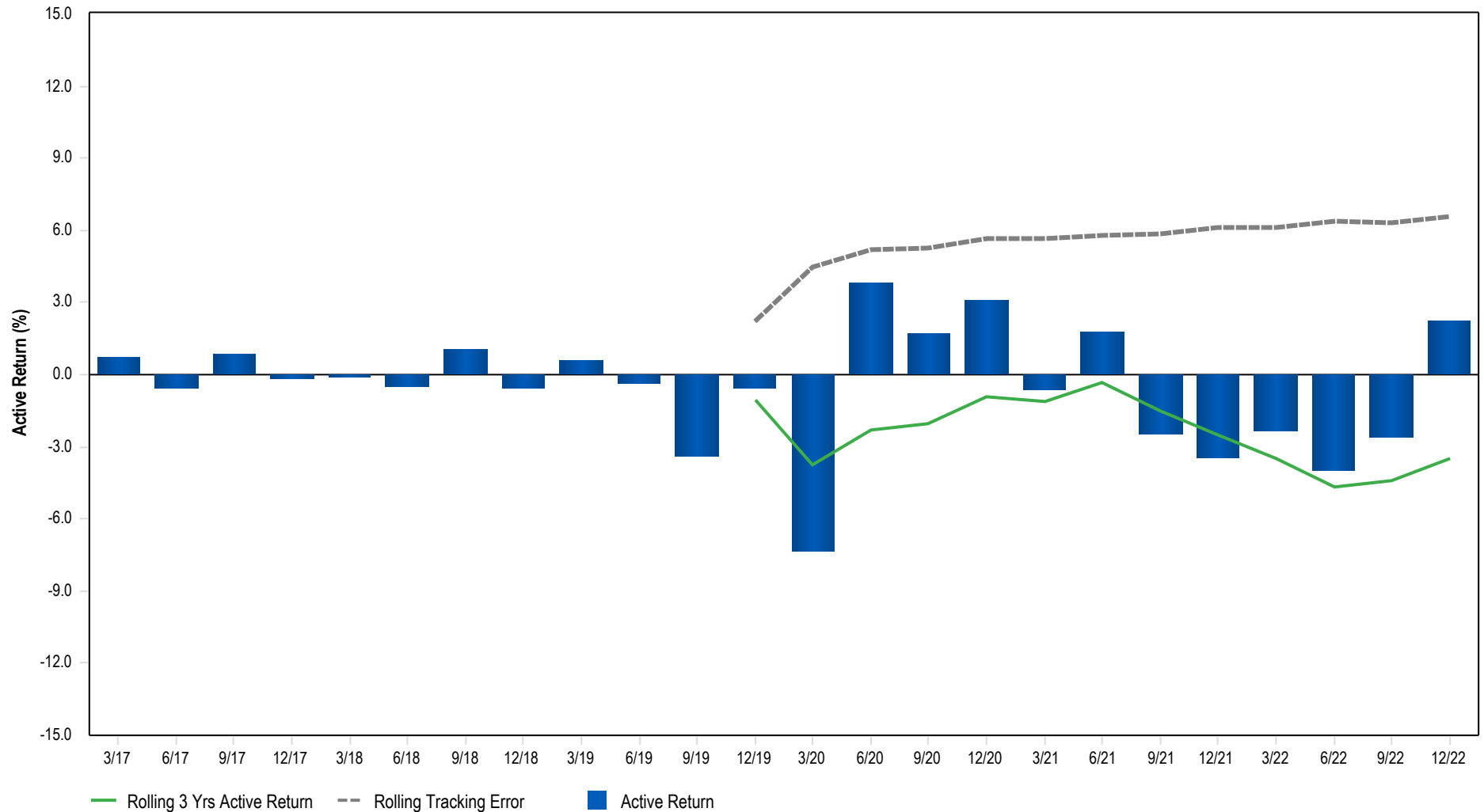
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

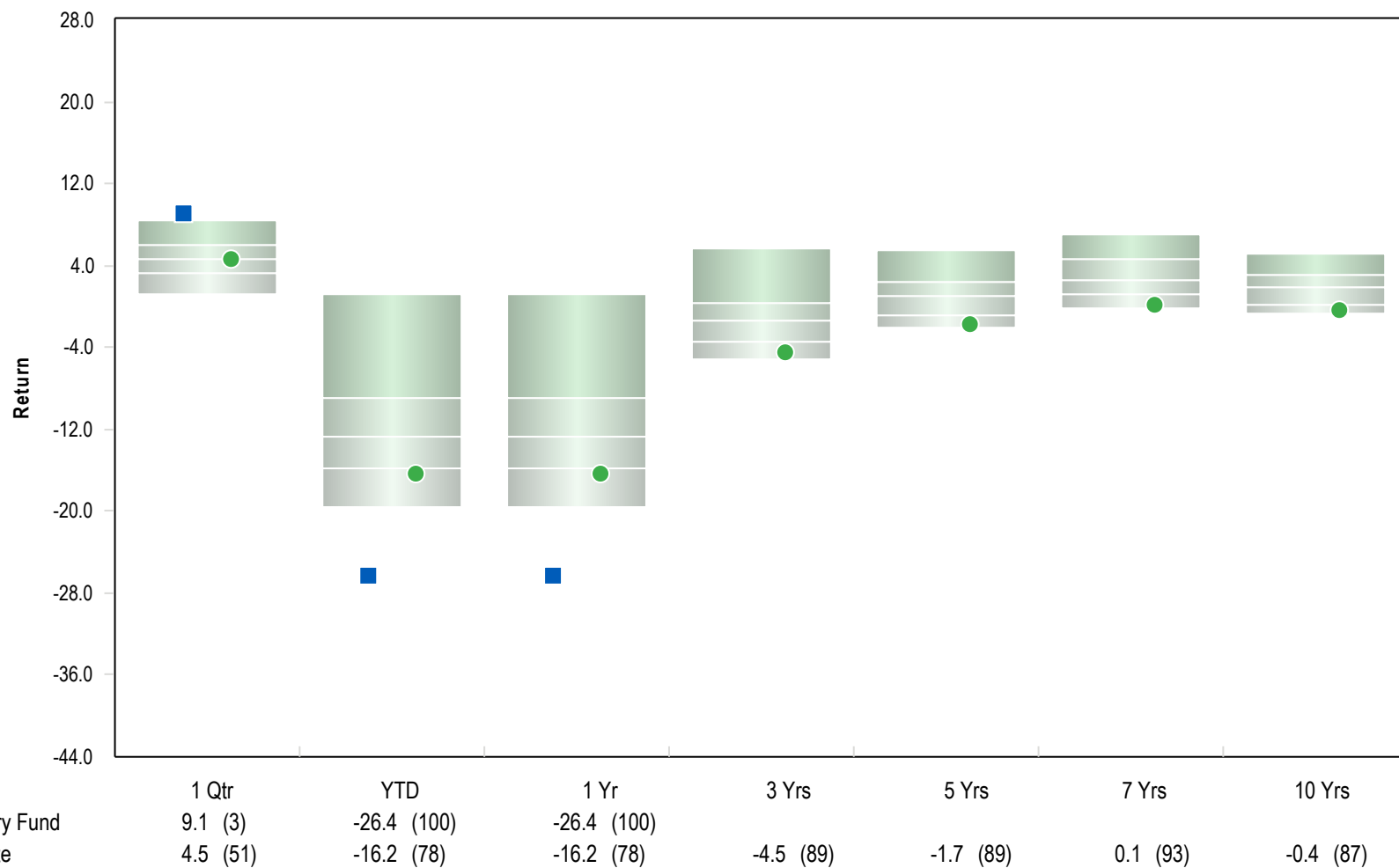
# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                                                                          | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021  | 2020 | 2019 | 2018 |
|--------------------------------------------------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|------|------|------|
| Ashmore Emerging Markets Total Return                                    | 10.5  | -21.3 | -21.3 | -10.1 | -5.4  |       |        | -10.1 | 2.9  | 9.9  | -5.3 |
| 50% JPM EMBI Global Diversified/<br>50% JPM GBI-EM Global Diversified US | 8.3   | -14.8 | -14.8 | -5.7  | -1.9  | 1.8   | -0.2   | -5.3  | 4.0  | 14.3 | -5.2 |
| Difference                                                               | 2.2   | -6.5  | -6.5  | -4.4  | -3.5  |       |        | -4.8  | -1.1 | -4.4 | -0.1 |





|                 |     |       |       |      |      |      |      |
|-----------------|-----|-------|-------|------|------|------|------|
| 5th Percentile  | 8.4 | 1.2   | 1.2   | 5.6  | 5.5  | 7.1  | 5.2  |
| 1st Quartile    | 6.0 | -8.9  | -8.9  | 0.4  | 2.3  | 4.6  | 3.2  |
| Median          | 4.6 | -12.7 | -12.7 | -1.4 | 1.1  | 2.6  | 2.0  |
| 3rd Quartile    | 3.2 | -15.8 | -15.8 | -3.4 | -0.9 | 1.1  | 0.2  |
| 95th Percentile | 1.2 | -19.6 | -19.6 | -5.2 | -2.0 | -0.1 | -0.7 |

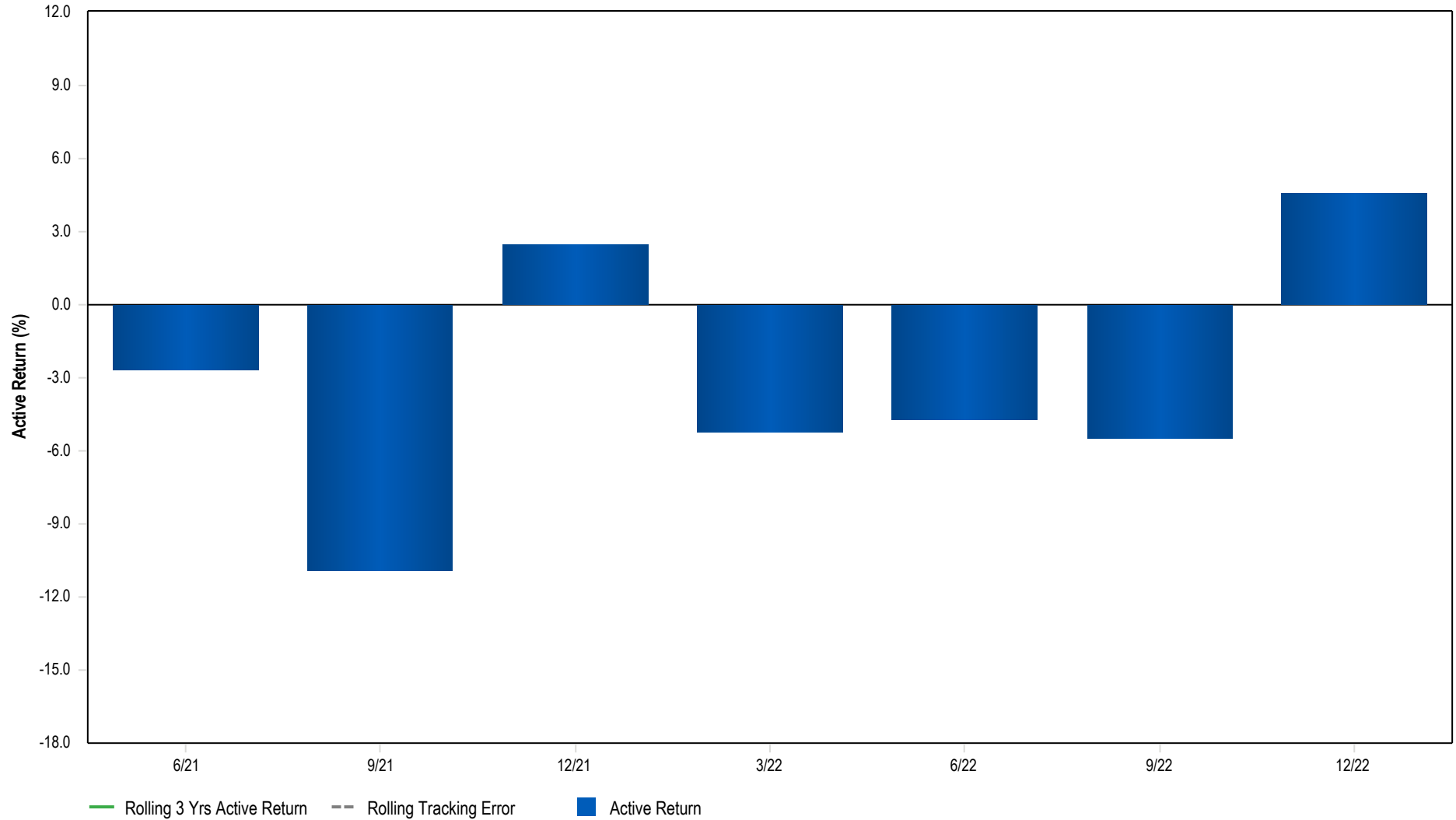
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Bristol County Retirement System

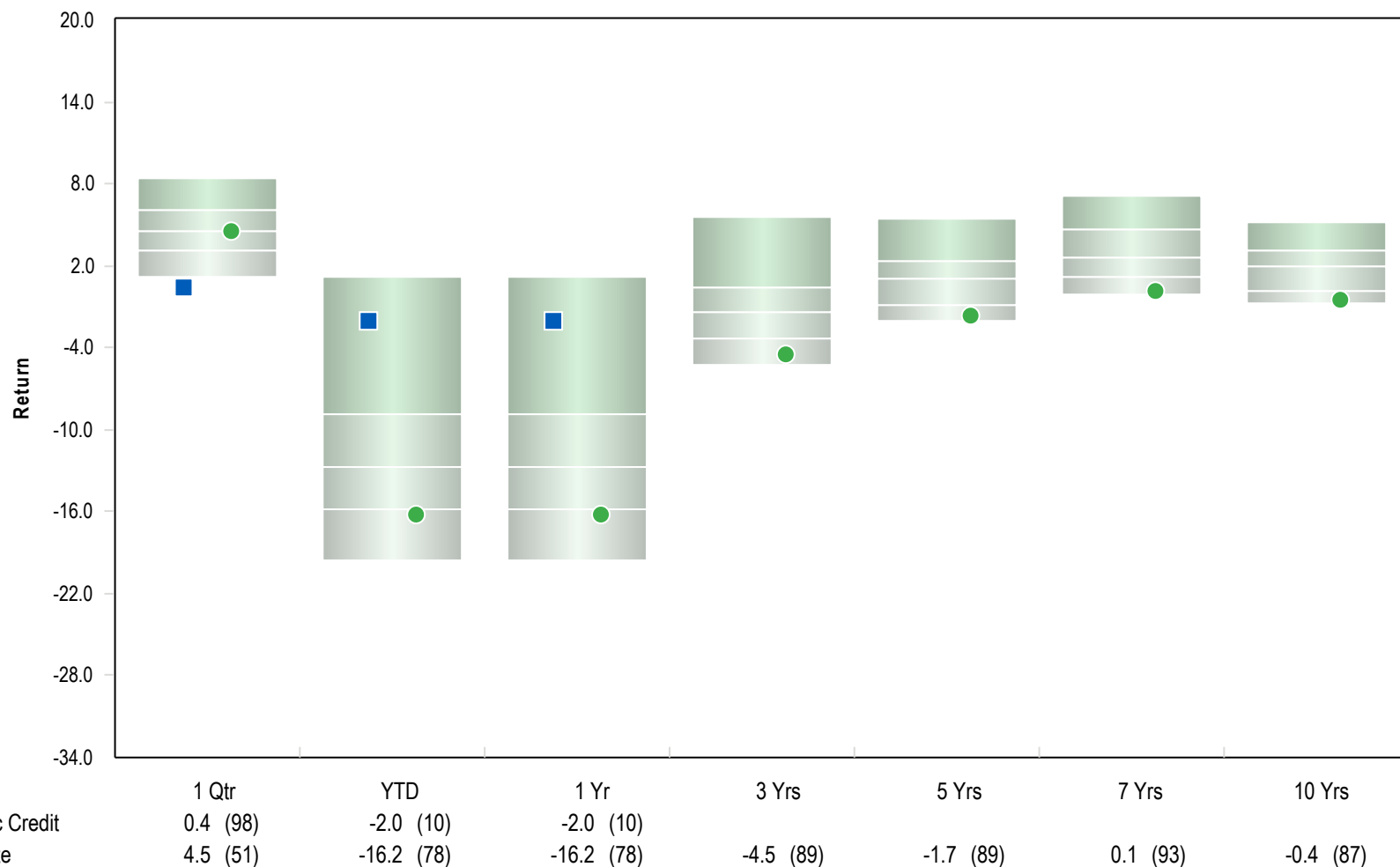
## Comparative Performance & Rolling Return

As of December 31, 2022

|                              | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| EnTrust Global Recovery Fund | 9.1   | -26.4 | -26.4 |       |       |       |        |      |      |      |      |
| Blmbg. Global Aggregate      | 4.5   | -16.2 | -16.2 | -4.5  | -1.7  | 0.1   | -0.4   | -4.7 | 9.2  | 6.8  | -1.2 |
| Difference                   | 4.6   | -10.2 | -10.2 |       |       |       |        |      |      |      |      |







|                 |     |       |       |      |      |      |      |
|-----------------|-----|-------|-------|------|------|------|------|
| 5th Percentile  | 8.4 | 1.2   | 1.2   | 5.6  | 5.5  | 7.1  | 5.2  |
| 1st Quartile    | 6.0 | -8.9  | -8.9  | 0.4  | 2.3  | 4.6  | 3.2  |
| Median          | 4.6 | -12.7 | -12.7 | -1.4 | 1.1  | 2.6  | 2.0  |
| 3rd Quartile    | 3.2 | -15.8 | -15.8 | -3.4 | -0.9 | 1.1  | 0.2  |
| 95th Percentile | 1.2 | -19.6 | -19.6 | -5.2 | -2.0 | -0.1 | -0.7 |

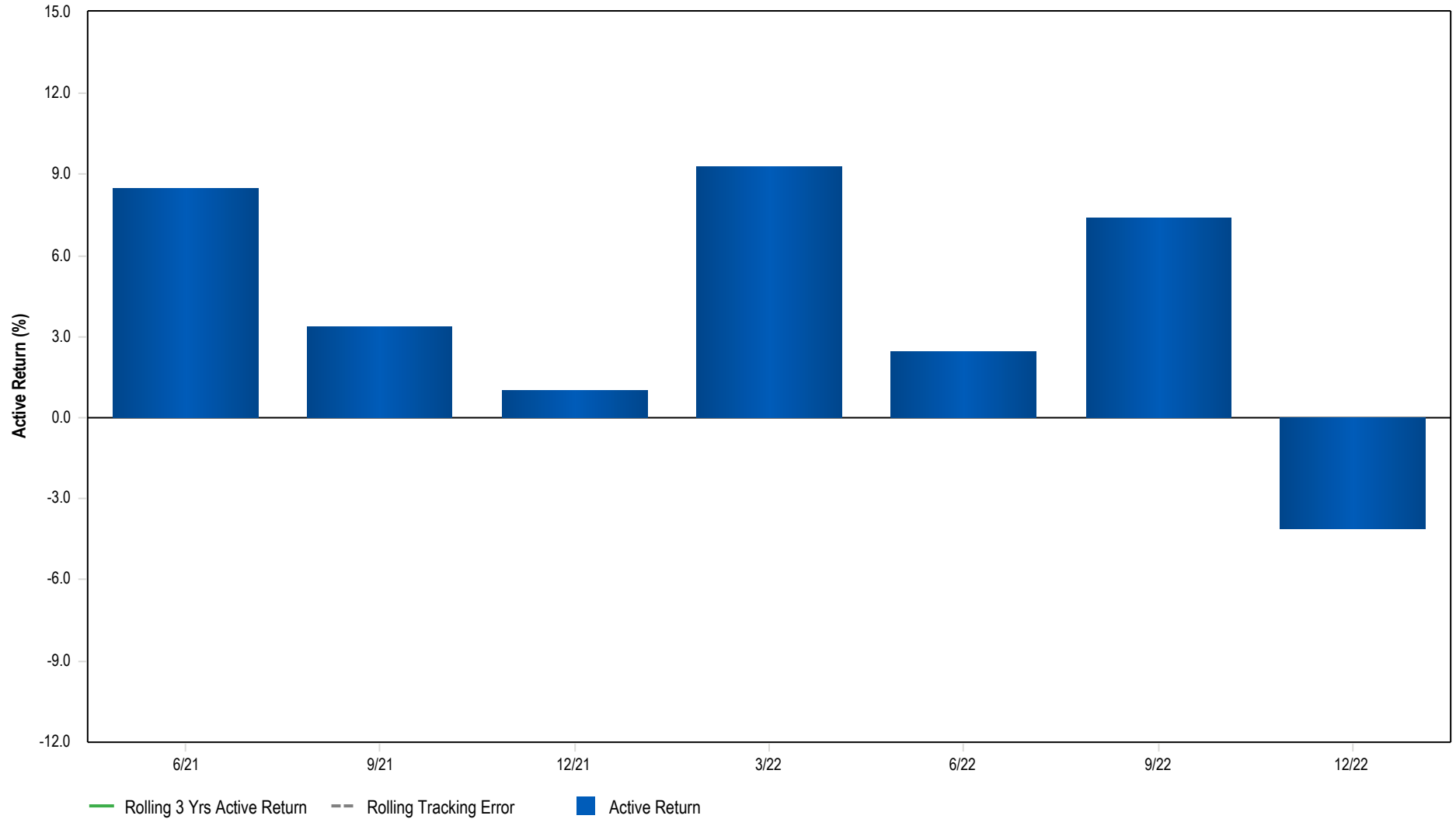
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.

# Bristol County Retirement System

## Comparative Performance & Rolling Return

As of December 31, 2022

|                                  | 1 Qtr | YTD   | 1 Yr  | 3 Yrs | 5 Yrs | 7 Yrs | 10 Yrs | 2021 | 2020 | 2019 | 2018 |
|----------------------------------|-------|-------|-------|-------|-------|-------|--------|------|------|------|------|
| Bardin Hill Opportunistic Credit | 0.4   | -2.0  | -2.0  |       |       |       |        |      |      |      |      |
| Blmbg. Global Aggregate          | 4.5   | -16.2 | -16.2 | -4.5  | -1.7  | 0.1   | -0.4   | -4.7 | 9.2  | 6.8  | -1.2 |
| Difference                       | -4.1  | 14.2  | 14.2  |       |       |       |        |      |      |      |      |



## Other Fixed Income

# Bristol County Retirement System

## Comparative Performance - IRR

As of December 31, 2022

|                                | Market Value<br>(\$) | %   | 1<br>Quarter | Year<br>To<br>Date | 1<br>Year | 3<br>Years | 5<br>Years | 7<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Date |
|--------------------------------|----------------------|-----|--------------|--------------------|-----------|------------|------------|------------|-------------|--------------------|-------------------|
| Invesco Mortgage Recovery Fund | 17,924               | 0.0 | 0.0          | -0.3               | -0.3      | -1.4       | 6.3        | 0.0        | 16.2        | 13.7               | 03/31/2010        |

# Bristol County Retirement System

## Schedule of Investable Assets

## Invesco Mortgage Recovery Fund

Since Inception Ending December 31, 2022

| Periods Ending | Beginning<br>Market Value<br>(\$) | Net<br>Cash Flow<br>(\$) | Contributions<br>(\$) | Withdrawals<br>(\$) | Gain/Loss<br>(\$) | Ending<br>Market Value<br>(\$) | %Return | Unit Value | Income<br>(\$) | Income % of<br>Beginning<br>Market Value |
|----------------|-----------------------------------|--------------------------|-----------------------|---------------------|-------------------|--------------------------------|---------|------------|----------------|------------------------------------------|
| Jun-2010       |                                   | 2,047,799                | 2,089,844             | 42,045              |                   | 2,151,396                      | 5.7     | 105.7      | 27,307         | 0.0                                      |
| Sep-2010       | 2,151,396                         | 739,731                  | 921,104               | 181,373             | 142,577           | 3,033,704                      | 5.9     | 112.0      | 75,028         | 3.5                                      |
| Dec-2010       | 3,033,704                         | -448,204                 | 33,362                | 481,566             | 96,495            | 2,681,995                      | 3.7     | 116.1      | 209,106        | 6.9                                      |
| Mar-2011       | 2,681,995                         | -265,432                 | 215,509               | 480,941             | 114,718           | 2,531,281                      | 4.3     | 121.1      | 206,684        | 7.7                                      |
| Jun-2011       | 2,531,281                         | -248,483                 | 200,172               | 448,655             | -37,226           | 2,245,572                      | -1.7    | 119.1      | 33,871         | 1.3                                      |
| Sep-2011       | 2,245,572                         | 1,186,159                | 1,302,619             | 116,460             | -15,163           | 3,416,568                      | -0.7    | 118.3      | 8,310          | 0.4                                      |
| Dec-2011       | 3,416,568                         | -974,627                 |                       | 974,627             | 7,383             | 2,449,324                      | 0.2     | 118.6      | 38,619         | 1.1                                      |
| Mar-2012       | 2,449,324                         | -880,764                 |                       | 880,764             | 106,038           | 1,674,598                      | 4.6     | 124.1      | 18,649         | 0.8                                      |
| Jun-2012       | 1,674,598                         | -3,746                   | 159,003               | 162,749             | 44,872            | 1,715,724                      | 2.5     | 127.1      | 75,013         | 4.5                                      |
| Sep-2012       | 1,715,724                         | -10,305                  |                       | 10,305              | 37,498            | 1,742,917                      | 2.2     | 129.9      |                | 0.0                                      |
| Dec-2012       | 1,742,917                         | -510,562                 |                       | 510,562             | 85,492            | 1,317,847                      | 5.9     | 137.6      |                | 0.0                                      |
| Mar-2013       | 1,317,847                         | -65,326                  |                       | 65,326              | 22,847            | 1,275,368                      | 1.7     | 140.0      |                | 0.0                                      |
| Jun-2013       | 1,275,368                         | -59,917                  | 20,152                | 80,069              | 26,281            | 1,241,732                      | 2.2     | 143.1      |                | 0.0                                      |
| Sep-2013       | 1,241,732                         | 221,939                  | 221,939               |                     | 2,024             | 1,465,695                      | 0.1     | 143.3      |                | 0.0                                      |
| Dec-2013       | 1,465,695                         | 132,967                  | 329,829               | 196,862             | 124,547           | 1,723,209                      | 8.1     | 154.9      |                | 0.0                                      |
| Mar-2014       | 1,723,209                         | -97,979                  |                       | 97,979              | 39,216            | 1,664,446                      | 2.4     | 158.5      |                | 0.0                                      |
| Jun-2014       | 1,664,446                         | -64,464                  | 70,551                | 135,015             | 53,465            | 1,653,447                      | 3.3     | 163.8      |                | 0.0                                      |
| Sep-2014       | 1,653,447                         | -38,489                  | 40,092                | 78,581              | 82,363            | 1,697,321                      | 5.1     | 172.2      |                | 0.0                                      |
| Dec-2014       | 1,697,321                         | 53,602                   | 88,065                | 34,463              | 315,116           | 2,066,039                      | 18.0    | 203.2      |                | 0.0                                      |
| Mar-2015       | 2,066,039                         | -338,868                 | 42,571                | 381,439             | 49,102            | 1,776,273                      | 2.9     | 209.0      |                | 0.0                                      |
| Jun-2015       | 1,776,273                         | 28,704                   | 28,704                |                     | 67,010            | 1,871,987                      | 3.9     | 217.2      |                | 0.0                                      |
| Sep-2015       | 1,871,987                         | -239,366                 | 44,631                | 283,997             | 184,643           | 1,817,264                      | 11.3    | 241.8      |                | 0.0                                      |
| Dec-2015       | 1,817,264                         | -255,351                 |                       | 255,351             | 107,519           | 1,669,432                      | 6.9     | 258.4      |                | 0.0                                      |
| Mar-2016       | 1,669,432                         | 9,080                    | 57,199                | 48,119              | -204              | 1,678,308                      | 0.0     | 258.4      |                | 0.0                                      |
| Jun-2016       | 1,678,308                         | -423,449                 |                       | 423,449             | 62,718            | 1,317,577                      | 5.0     | 271.3      |                | 0.0                                      |
| Sep-2016       | 1,317,577                         | -175,341                 |                       | 175,341             | 1,890             | 1,144,126                      | 0.2     | 271.7      |                | 0.0                                      |
| Dec-2016       | 1,144,126                         | -1,965                   |                       | 1,965               | -85,161           | 1,057,000                      | -7.4    | 251.5      |                | 0.0                                      |
| Mar-2017       | 1,057,000                         |                          |                       |                     | -25,343           | 1,031,657                      | -2.4    | 245.5      |                | 0.0                                      |
| Jun-2017       | 1,031,657                         | -559,332                 |                       | 559,332             | -399              | 471,926                        | -0.1    | 245.3      |                | 0.0                                      |
| Sep-2017       | 471,926                           | -80,808                  |                       | 80,808              | -25,848           | 365,270                        | -6.6    | 229.1      |                | 0.0                                      |

\*% return represents a time weighted return.

# Bristol County Retirement System

## Schedule of Investable Assets

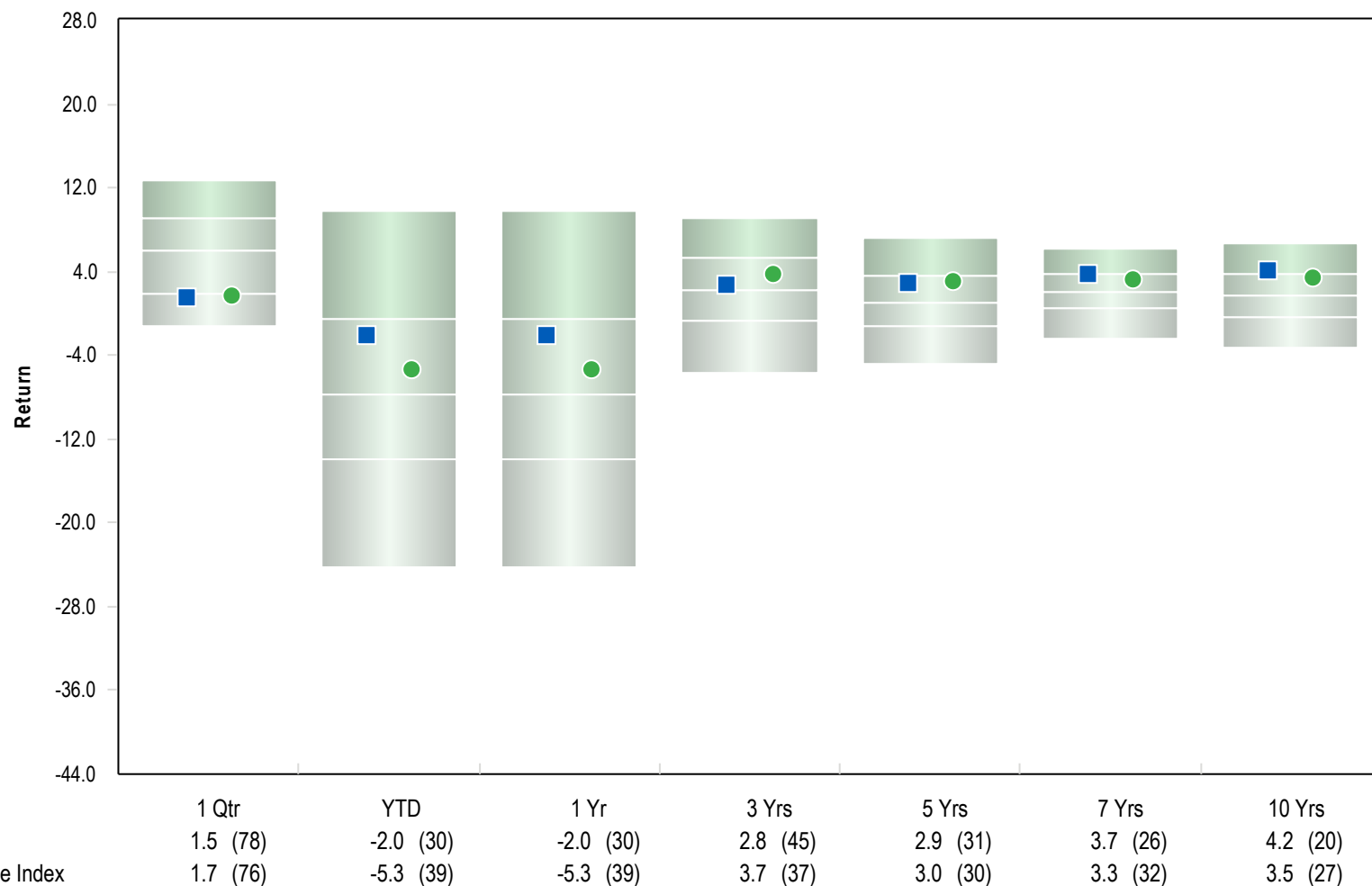
## Invesco Mortgage Recovery Fund

Since Inception Ending December 31, 2022

| Periods Ending | Beginning<br>Market Value<br>(\$) | Net<br>Cash Flow<br>(\$) | Contributions<br>(\$) | Withdrawals<br>(\$) | Gain/Loss<br>(\$) | Ending<br>Market Value<br>(\$) | %Return | Unit Value | Income<br>(\$) | Income % of<br>Beginning<br>Market Value |
|----------------|-----------------------------------|--------------------------|-----------------------|---------------------|-------------------|--------------------------------|---------|------------|----------------|------------------------------------------|
| Dec-2017       | 365,270                           |                          |                       |                     | 18,088            | 383,358                        | 5.0     | 240.4      |                | 0.0                                      |
| Mar-2018       | 383,358                           | 840                      | 840                   |                     | 12,252            | 396,450                        | 3.4     | 248.5      |                | 0.0                                      |
| Jun-2018       | 396,450                           | -76,638                  |                       | 76,638              | 22,664            | 342,476                        | 5.8     | 262.8      |                | 0.0                                      |
| Sep-2018       | 342,476                           |                          |                       |                     | 13,122            | 355,598                        | 3.8     | 272.9      |                | 0.0                                      |
| Dec-2018       | 355,598                           |                          |                       |                     | 18,584            | 374,182                        | 5.2     | 287.1      |                | 0.0                                      |
| Mar-2019       | 374,182                           | -126,979                 |                       | 126,979             | 5,019             | 252,222                        | 1.4     | 291.1      |                | 0.0                                      |
| Jun-2019       | 252,222                           |                          |                       |                     | -824              | 251,398                        | -0.3    | 290.1      |                | 0.0                                      |
| Sep-2019       | 251,398                           |                          |                       |                     | -41               | 251,357                        | 0.0     | 290.1      |                | 0.0                                      |
| Dec-2019       | 251,357                           |                          |                       |                     | -11,356           | 240,001                        | -4.5    | 277.0      |                | 0.0                                      |
| Mar-2020       | 240,001                           |                          |                       |                     | -1,073            | 238,928                        | -0.4    | 275.7      |                | 0.0                                      |
| Jun-2020       | 238,928                           |                          |                       |                     | -136              | 238,792                        | -0.1    | 275.6      |                | 0.0                                      |
| Sep-2020       | 238,792                           |                          |                       |                     | 367               | 239,159                        | 0.2     | 276.0      |                | 0.0                                      |
| Dec-2020       | 239,159                           | -172,673                 |                       | 172,673             | -1,356            | 65,130                         | -2.0    | 270.4      |                | 0.0                                      |
| Mar-2021       | 65,130                            |                          |                       |                     | -371              | 64,759                         | -0.6    | 268.8      |                | 0.0                                      |
| Jun-2021       | 64,759                            |                          |                       |                     | 918               | 65,677                         | 1.4     | 272.6      |                | 0.0                                      |
| Sep-2021       | 65,677                            |                          |                       |                     | -1,008            | 64,669                         | -1.5    | 268.4      |                | 0.0                                      |
| Dec-2021       | 64,669                            |                          |                       |                     | -1,744            | 62,925                         | -2.7    | 261.2      |                | 0.0                                      |
| Mar-2022       | 62,925                            |                          |                       |                     | -100              | 62,825                         | -0.2    | 260.8      |                | 0.0                                      |
| Jun-2022       | 62,825                            |                          |                       |                     | -73               | 62,752                         | -0.1    | 260.5      |                | 0.0                                      |
| Sep-2022       | 62,752                            |                          |                       |                     |                   | 62,752                         | 0.0     | 260.5      |                | 0.0                                      |
| Dec-2022       | 62,752                            | -44,828                  |                       | 44,828              |                   | 17,924                         | 0.0     | 260.5      |                | 0.0                                      |
|                |                                   | -1,743,075               | 5,866,186             | 7,609,261           | 1,657,402         | 17,924                         | 7.8     | 260.5      | 692,587        | 0.0                                      |

\*% return represents a time weighted return.

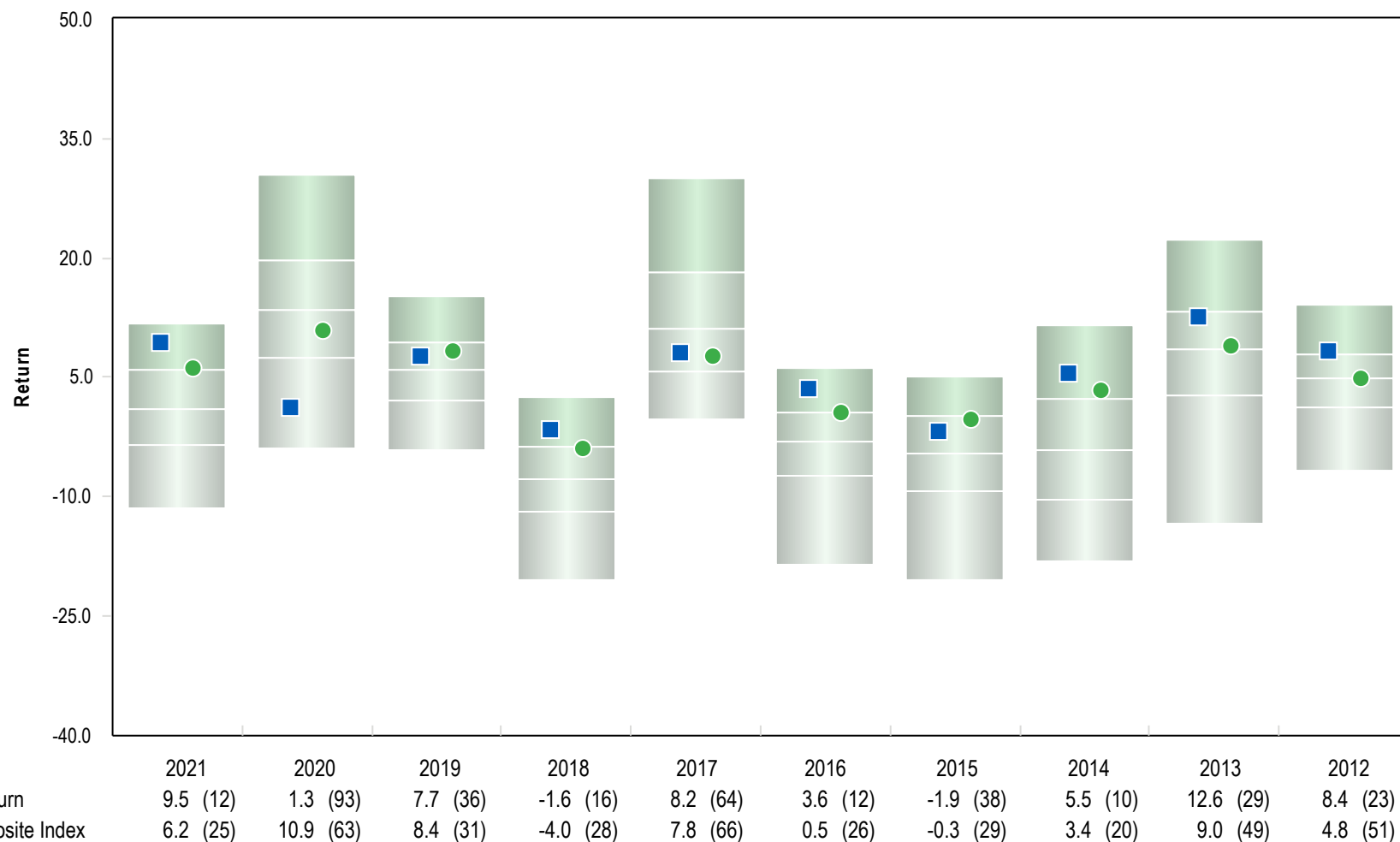
## Alternatives



|                 |      |       |       |      |      |      |      |
|-----------------|------|-------|-------|------|------|------|------|
| 5th Percentile  | 12.6 | 9.8   | 9.8   | 9.1  | 7.2  | 6.2  | 6.8  |
| 1st Quartile    | 9.1  | -0.5  | -0.5  | 5.2  | 3.6  | 3.7  | 3.7  |
| Median          | 6.0  | -7.7  | -7.7  | 2.2  | 1.1  | 2.1  | 1.8  |
| 3rd Quartile    | 1.9  | -13.9 | -13.9 | -0.7 | -1.2 | 0.4  | -0.4 |
| 95th Percentile | -1.2 | -24.3 | -24.3 | -5.6 | -4.8 | -2.5 | -3.3 |

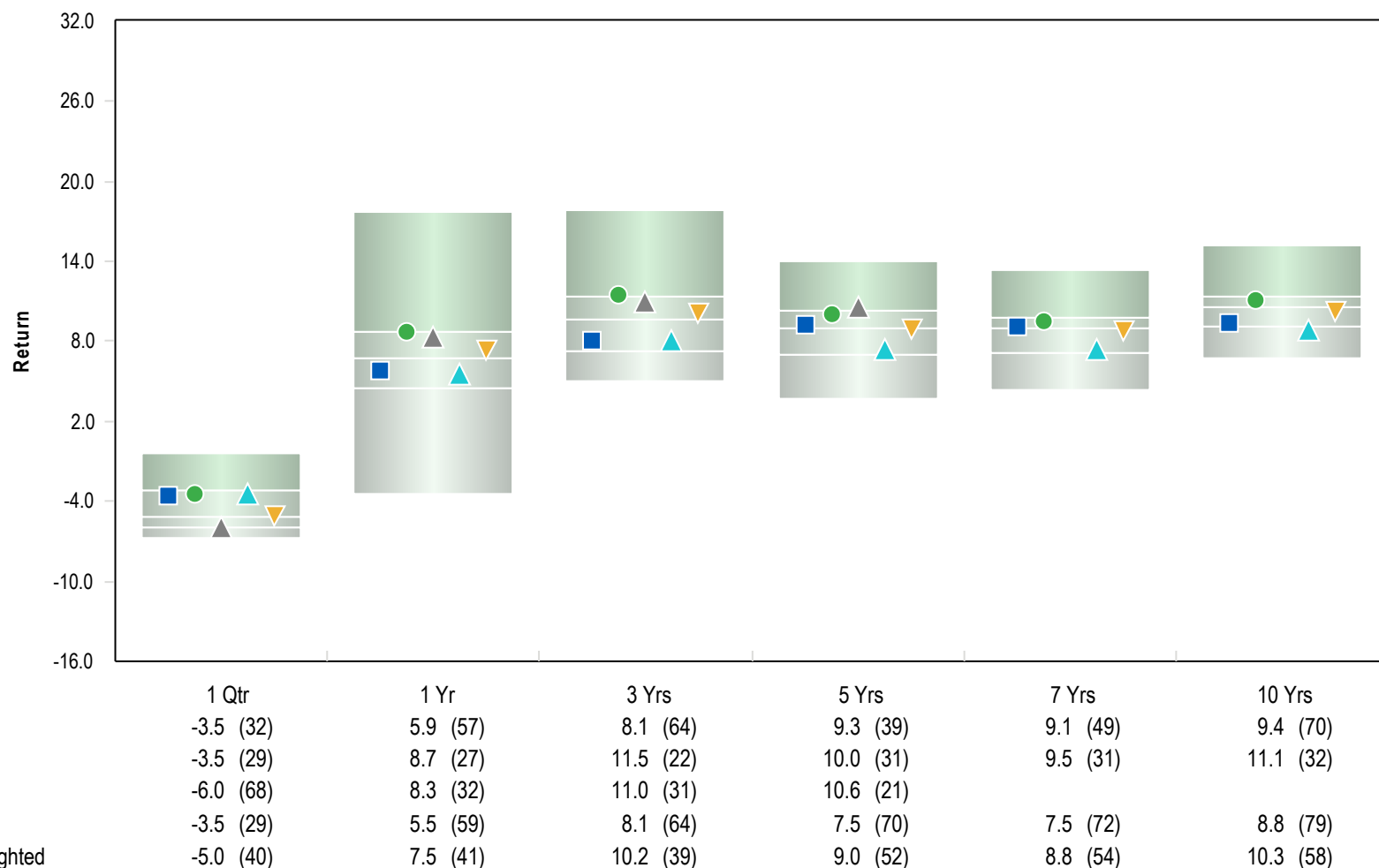
Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.





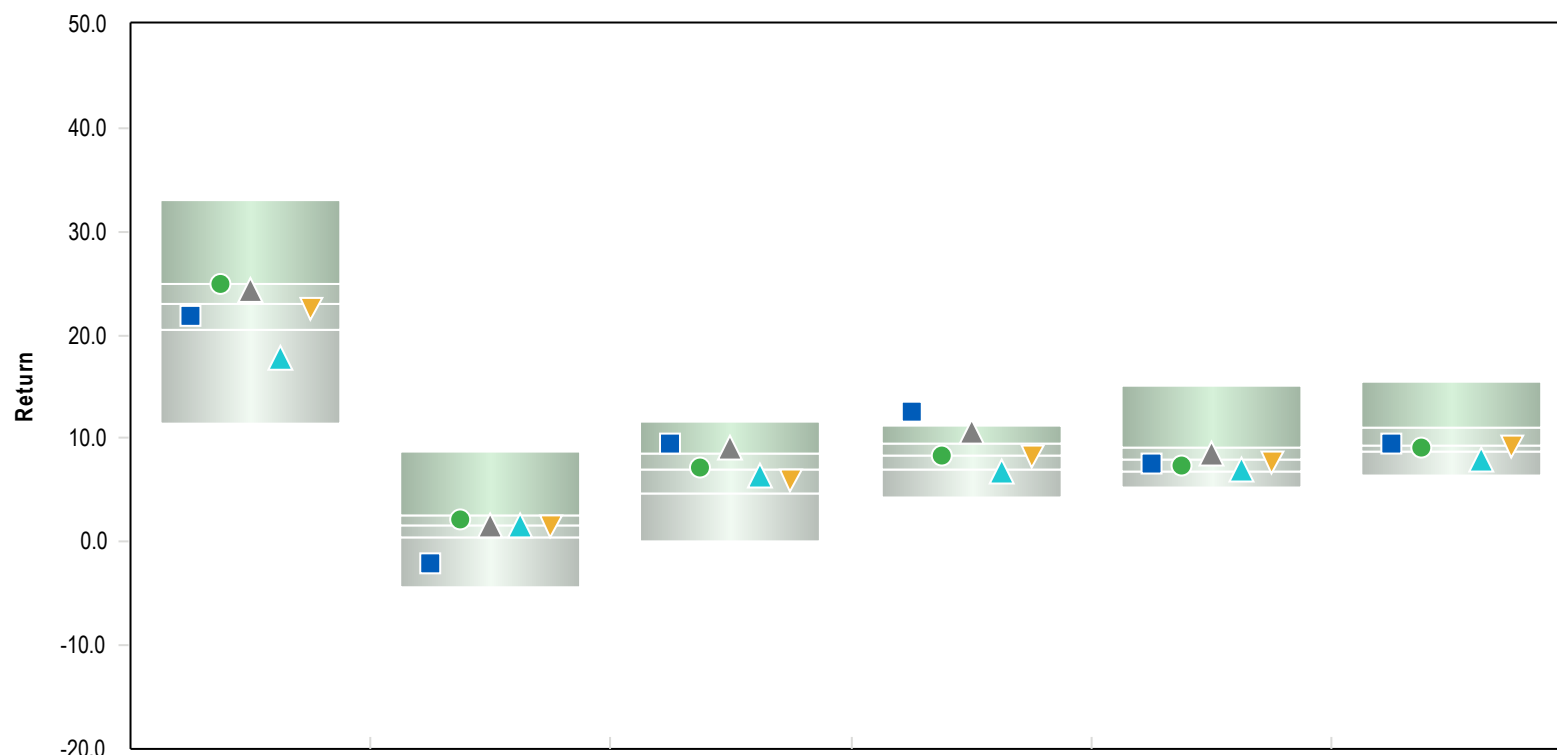
|                 |       |      |      |       |      |       |       |       |       |      |
|-----------------|-------|------|------|-------|------|-------|-------|-------|-------|------|
| 5th Percentile  | 11.8  | 30.4 | 15.1 | 2.5   | 29.9 | 6.2   | 5.0   | 11.5  | 22.3  | 14.1 |
| 1st Quartile    | 6.0   | 19.8 | 9.4  | -3.6  | 18.2 | 0.5   | 0.2   | 2.3   | 13.3  | 8.0  |
| Median          | 1.0   | 13.4 | 6.0  | -7.9  | 11.1 | -3.1  | -4.5  | -4.1  | 8.6   | 4.8  |
| 3rd Quartile    | -3.4  | 7.5  | 2.0  | -11.9 | 5.8  | -7.3  | -9.3  | -10.4 | 2.8   | 1.3  |
| 95th Percentile | -11.4 | -4.0 | -4.1 | -20.5 | -0.2 | -18.5 | -20.4 | -18.0 | -13.3 | -6.6 |

Parentheses contain percentile rankings.  
Calculation based on monthly periodicity.



|                 |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|
| 5th Percentile  | -0.4 | 17.8 | 17.8 | 14.0 | 13.4 | 15.2 |
| 1st Quartile    | -3.2 | 8.8  | 11.4 | 10.3 | 9.7  | 11.4 |
| Median          | -5.2 | 6.8  | 9.7  | 9.0  | 9.0  | 10.6 |
| 3rd Quartile    | -6.0 | 4.5  | 7.2  | 7.0  | 7.1  | 9.1  |
| 95th Percentile | -6.8 | -3.5 | 5.1  | 3.7  | 4.3  | 6.8  |

Parentheses contain percentile rankings.  
Calculation based on quarterly periodicity.



|                              | 2021      | 2020      | 2019     | 2018      | 2017     | 2016     |
|------------------------------|-----------|-----------|----------|-----------|----------|----------|
| ■ Total Real Estate          | 21.9 (56) | -2.0 (90) | 9.5 (20) | 12.6 (3)  | 7.6 (58) | 9.6 (47) |
| ● RREEF America REIT II      | 25.0 (23) | 2.1 (36)  | 7.3 (38) | 8.4 (50)  | 7.4 (64) | 9.1 (59) |
| ▲ Intercontinental           | 24.3 (30) | 1.6 (47)  | 9.1 (22) | 10.7 (12) | 8.5 (41) |          |
| ▲ NCREIF Property Index      | 17.7 (84) | 1.6 (49)  | 6.4 (62) | 6.7 (81)  | 7.0 (73) | 8.0 (79) |
| ▼ NCREIF ODCE Equal Weighted | 22.6 (53) | 1.6 (53)  | 6.1 (70) | 8.3 (54)  | 7.8 (53) | 9.3 (50) |

|                 |      |      |      |      |      |      |
|-----------------|------|------|------|------|------|------|
| 5th Percentile  | 33.0 | 8.6  | 11.6 | 11.3 | 15.1 | 15.5 |
| 1st Quartile    | 24.8 | 2.5  | 8.6  | 9.5  | 9.1  | 11.0 |
| Median          | 23.0 | 1.6  | 7.0  | 8.4  | 8.1  | 9.2  |
| 3rd Quartile    | 20.5 | 0.4  | 4.7  | 7.0  | 6.8  | 8.8  |
| 95th Percentile | 11.4 | -4.5 | 0.1  | 4.3  | 5.3  | 6.5  |

Parentheses contain percentile rankings.  
Calculation based on quarterly periodicity.

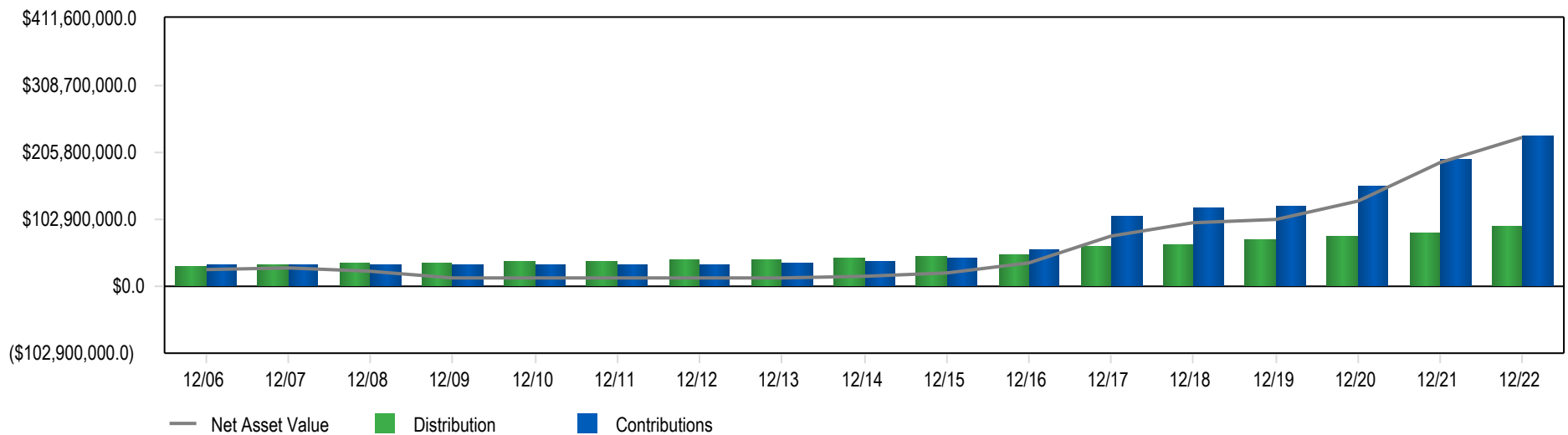
### Cash Flow Summary

Capital Committed: \$205,927,501  
 Total Contributions: \$239,321,489  
 Remaining Capital Commitment: -\$22,156,997

Total Distributions: \$92,944,230  
 Market Value: \$228,019,315

Inception Date: 01/01/1995  
 Inception IRR: 13.5  
 TVPI: 1.3

### Cash Flow Analysis



## Bristol County Retirement System

## Hard Asset Summary of Partnership

As of December 31, 2022

| Partnerships                                     | Vintage Year | Investment Strategy   | Capital Commitment (\$) | Contributions (\$) | Distributions (\$) | Market Value (\$)  | IRR (%)     | DPI Multiple | TVPI Multiple | Remaining Commitment (\$) |
|--------------------------------------------------|--------------|-----------------------|-------------------------|--------------------|--------------------|--------------------|-------------|--------------|---------------|---------------------------|
| <b>Closed-End Real Estate</b>                    |              |                       | <b>76,776,354</b>       | <b>84,632,235</b>  | <b>64,875,585</b>  | <b>35,877,705</b>  | <b>5.4</b>  | <b>0.8</b>   | <b>1.2</b>    | <b>-721,030</b>           |
| Invesco Mortgage Recovery II                     | 2016         | Real Estate           | 15,000,000              | 16,416,062         | 13,292,489         | 4,371,755          | 3.8         | 0.8          | 1.1           | 4,278,970                 |
| TerraCap Partners IV                             | 2017         | Value-Add Real Estate | 10,000,000              | 10,965,720         | 6,402,228          | 8,914,715          | 10.2        | 0.6          | 1.4           |                           |
| TerraCap Partners V                              | 2020         | Value-Add Real Estate | 17,500,000              | 22,974,098         | 2,717,768          | 22,591,235         | 7.4         | 0.1          | 1.1           | -5,000,000                |
| <b>Closed-End Infrastructure</b>                 |              |                       | <b>13,000,000</b>       | <b>15,804,723</b>  | <b>11,599,044</b>  | <b>9,412,566</b>   | <b>11.3</b> | <b>0.7</b>   | <b>1.3</b>    | <b>1,248,106</b>          |
| GCM Customized Infrastructures Strategies II, LP | 2015         | Infrastructure        | 13,000,000              | 15,804,723         | 11,599,044         | 9,412,566          | 11.3        | 0.7          | 1.3           | 1,248,106                 |
| <b>Closed-End Timber</b>                         |              |                       | <b>8,578,397</b>        | <b>4,511,781</b>   | <b>6,211,475</b>   | <b>1,929,928</b>   | <b>7.4</b>  | <b>1.4</b>   | <b>1.8</b>    | <b>4,115,927</b>          |
| Brookfield Timberlands Fund V                    | 2013         | Timber                | 5,000,000               | 1,175,060          | 1,689,687          | 43,716             | 6.6         | 1.4          | 1.5           | 3,874,251                 |
| Eastern Timberland Opportunities II              | 2014         | Timber                | 2,500,000               | 2,258,324          | 1,921,557          | 1,886,212          | 7.7         | 0.9          | 1.7           | 241,676                   |
| <b>Total Hard Assets</b>                         |              |                       | <b>205,927,501</b>      | <b>239,321,489</b> | <b>92,944,230</b>  | <b>228,019,315</b> | <b>13.5</b> | <b>0.4</b>   | <b>1.3</b>    | <b>-22,156,997</b>        |

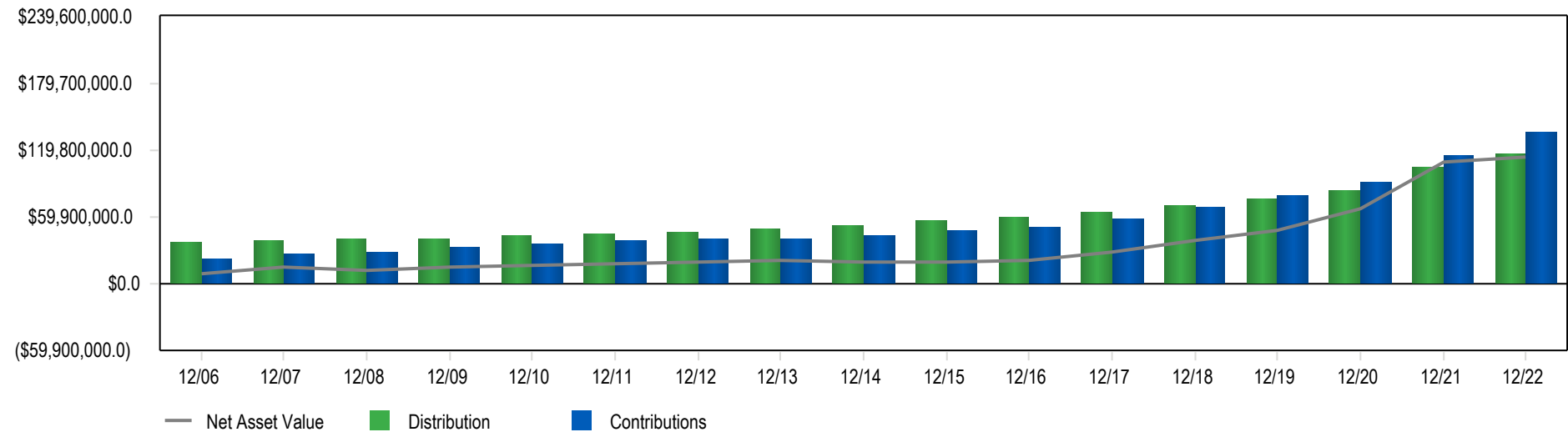
\* Composites and Total Hard Assets include prior funds that have been fully liquidated

|                                                  | Market Value<br>(\$) | %   | 1<br>Quarter | 1<br>Quarter<br>Ending<br>Sep-2022 | 1<br>Quarter<br>Ending<br>Jun-2022 | Year<br>To Date | 1<br>Year | 3<br>Years | 5<br>Years | 7<br>Years | 10<br>Years | Since<br>Inception | Inception<br>Date |
|--------------------------------------------------|----------------------|-----|--------------|------------------------------------|------------------------------------|-----------------|-----------|------------|------------|------------|-------------|--------------------|-------------------|
| <b>Real Assets</b>                               |                      |     |              |                                    |                                    |                 |           |            |            |            |             |                    |                   |
| <b>Closed-End Real Estate</b>                    | 35,877,705           | 4.3 | 0.0          | 0.5                                | -1.0                               | 0.3             | 0.3       | 2.6        | 6.6        | 6.9        | 7.4         | 5.4                | 10/01/2004        |
| Invesco Mortgage Recovery II                     | 4,371,755            | 0.5 | 0.0          | -2.6                               | -2.9                               | -6.8            | -6.8      | -16.9      | -1.2       |            |             | 3.8                | 05/20/2016        |
| TerraCap Partners IV                             | 8,914,715            | 1.1 | 0.0          | 0.9                                | -0.7                               | 1.5             | 1.5       | 7.8        |            |            |             | 10.2               | 07/17/2018        |
| TerraCap Partners V                              | 22,591,235           | 2.7 | 0.0          | 1.1                                | -0.7                               | 1.5             | 1.5       |            |            |            |             | 7.4                | 10/16/2020        |
| <b>Closed-End Infrastructure</b>                 | 9,412,566            | 1.1 | 0.0          | 2.5                                | 2.7                                | 4.7             | 4.7       | 12.1       | 11.7       |            |             | 11.3               | 03/10/2016        |
| GCM Customized Infrastructures Strategies II, LP | 9,412,566            | 1.1 | 0.0          | 2.5                                | 2.7                                | 4.7             | 4.7       | 12.1       | 11.7       |            |             | 11.3               | 03/10/2016        |
| <b>Closed-End Timber</b>                         | 1,929,928            | 0.2 | 0.0          | 1.3                                | -1.0                               | 1.1             | 1.1       | 4.2        | 4.2        | 6.1        |             | 7.4                | 12/23/2013        |
| Brookfield Timberlands Fund V                    | 43,716               | 0.0 | 0.0          | -2.0                               | -6.4                               | -10.8           | -10.8     | 1.2        | 2.3        | 5.7        |             | 6.6                | 12/23/2013        |
| Eastern Timberland Opportunities II              | 1,886,212            | 0.2 | 0.0          | 2.5                                | 1.9                                | 5.8             | 5.8       | 5.4        | 5.0        | 6.3        |             | 7.7                | 07/03/2014        |

Cash Flow Summary

|                               |               |
|-------------------------------|---------------|
| Capital Committed:            | \$202,805,923 |
| Total Contributions:          | \$136,250,347 |
| Remaining Capital Commitment: | \$71,883,307  |
|                               |               |
| Total Distributions:          | \$117,442,032 |
| Market Value:                 | \$113,830,896 |
|                               |               |
| Inception Date:               | 01/05/1995    |
| Inception IRR:                | 177.7         |
| TVPI:                         | 1.7           |

Cash Flow Analysis



# Bristol County Retirement System

## Private Equity Summary of Partnership

As of December 31, 2022

| Partnerships                    | Vintage Year | Capital Commitment (\$) | Contributions (\$) | Distributions (\$) | Market Value (\$)  | IRR (%)      | DPI Multiple | TVPI Multiple | Remaining Commitment (\$) |
|---------------------------------|--------------|-------------------------|--------------------|--------------------|--------------------|--------------|--------------|---------------|---------------------------|
| DuPont Capital Management II    | 2005         | 5,000,000               | 3,667,446          | 3,464,641          | 280,300            | 0.3          | 0.9          | 1.0           | 1,592,651                 |
| BlackRock Vesey Street Fund III | 2005         | 5,000,000               | 4,433,304          | 5,839,094          | 144,712            | 4.1          | 1.3          | 1.4           | 650,000                   |
| DN Partners II                  | 2005         | 6,000,000               | 2,829,275          | 28,285             | 2,911,591          | 0.3          | 0.0          | 1.0           | 3,170,725                 |
| BlackRock Vesey Street Fund IV  | 2007         | 10,000,000              | 9,370,622          | 14,724,558         | 454,680            | 7.8          | 1.6          | 1.6           | 2,260,127                 |
| Mesirow PE Fund V               | 2008         | 5,000,000               | 4,322,431          | 7,810,658          | 2,761,555          | 15.7         | 1.8          | 2.4           | 706,700                   |
| PRIT Vintage 2014               | 2014         | 9,090,291               | 8,485,514          | 9,283,850          | 10,775,856         | 21.3         | 1.1          | 2.4           | 636,135                   |
| PRIT Vintage 2015               | 2015         | 12,307,878              | 12,196,365         | 13,538,382         | 16,542,507         | 25.2         | 1.1          | 2.5           | 308,146                   |
| PRIT Vintage 2016               | 2016         | 8,302,928               | 7,383,151          | 5,342,788          | 8,328,031          | 18.7         | 0.7          | 1.9           | 942,547                   |
| PRIT Vintage 2017               | 2017         | 15,589,476              | 13,849,962         | 4,136,645          | 19,168,429         | 22.1         | 0.3          | 1.7           | 1,784,979                 |
| PRIT Vintage 2018               | 2018         | 14,323,604              | 12,042,202         | 2,775,065          | 16,165,746         | 22.7         | 0.2          | 1.6           | 2,310,873                 |
| PRIT Vintage 2019               | 2019         | 9,425,656               | 7,417,982          | 2,144,260          | 9,688,156          | 30.6         | 0.3          | 1.6           | 2,069,151                 |
| PRIT Vintage 2020               | 2020         | 10,391,266              | 6,764,153          | 161,796            | 7,092,999          | 6.4          | 0.0          | 1.1           | 3,634,338                 |
| PRIT Vintage 2021               | 2021         | 18,780,010              | 8,916,039          | 1,668              | 8,208,431          | -8.7         | 0.0          | 0.9           | 9,873,311                 |
| PRIT Vintage 2022               | 2022         | 15,000,000              | 2,356,564          | -372               | 1,936,906          | -34.5        | -            | 0.8           | 12,649,013                |
| GCM Grosvenor SOF III           | 2020         | 20,000,000              | 6,881,743          | 2,099,082          | 5,121,895          | 10.5         | 0.3          | 1.0           | 15,196,610                |
| Pomona Capital Fund X           | 2020         | 20,000,000              | 4,200,000          | 934,330            | 4,249,102          | 37.6         | 0.2          | 1.2           | 16,349,715                |
| <b>Total Private Equity</b>     |              | <b>202,805,923</b>      | <b>136,250,347</b> | <b>117,442,032</b> | <b>113,830,896</b> | <b>177.7</b> | <b>0.9</b>   | <b>1.7</b>    | <b>71,883,307</b>         |

\*Active Private Equity managers shown



|                                 | Market Value<br>(\$) | %           | 1<br>Quarter | 1<br>Quarter<br>Ending<br>Sep-2022 | 1<br>Quarter<br>Ending<br>Jun-2022 | Year<br>To<br>Date | 1<br>Year   | 3<br>Years  | 5<br>Years  | 7<br>Years  | 10<br>Years | Since<br>Inception | Inception<br>Date |
|---------------------------------|----------------------|-------------|--------------|------------------------------------|------------------------------------|--------------------|-------------|-------------|-------------|-------------|-------------|--------------------|-------------------|
| <b>Total Private Equity</b>     | <b>113,830,896</b>   | <b>13.7</b> | <b>-1.3</b>  | <b>-4.9</b>                        | <b>-2.7</b>                        | <b>-2.8</b>        | <b>-2.8</b> | <b>24.3</b> | <b>21.7</b> | <b>18.8</b> | <b>15.5</b> | <b>177.7</b>       | <b>01/05/1995</b> |
| BlackRock Vesey Street Fund III | 144,712              | 0.0         | 0.0          | -1.9                               | -5.8                               | -5.9               | -5.9        | -1.1        | -5.7        | -7.0        | 8.6         | 4.1                | 07/17/2006        |
| DuPont Capital Management II    | 280,300              | 0.0         | 0.0          | -8.7                               | -8.2                               | -19.1              | -19.1       | -4.3        | -5.2        | -4.0        | -0.7        | 0.3                | 08/14/2006        |
| DN Partners II                  | 2,911,591            | 0.4         | 0.0          | 0.0                                | 0.0                                | 31.0               | 31.0        | 9.8         | 21.6        | 18.6        | 3.5         | 0.3                | 01/11/2007        |
| BlackRock Vesey Street Fund IV  | 454,680              | 0.1         | 0.0          | -7.5                               | -31.0                              | -40.9              | -40.9       | -1.3        | 5.2         | 6.9         | 9.3         | 7.8                | 02/24/2009        |
| Mesirow PE Fund V               | 2,761,555            | 0.3         | 0.0          | -3.8                               | -10.3                              | -22.8              | -22.8       | 21.8        | 19.2        | 16.7        | 17.3        | 15.7               | 04/09/2009        |
| PRIT Vintage 2014               | 10,775,856           | 1.3         | -2.0         | -3.7                               | -2.9                               | -5.0               | -5.0        | 25.0        | 26.8        | 23.6        |             | 21.3               | 05/01/2014        |
| PRIT Vintage 2015               | 16,542,507           | 2.0         | 1.0          | -9.2                               | -4.6                               | -15.5              | -15.5       | 28.0        | 28.4        | 26.9        |             | 25.2               | 03/01/2015        |
| PRIT Vintage 2016               | 8,328,031            | 1.0         | -2.7         | -6.7                               | 1.3                                | -6.7               | -6.7        | 31.2        | 21.2        |             |             | 18.7               | 03/01/2016        |
| PRIT Vintage 2017               | 19,168,429           | 2.3         | 1.1          | -5.3                               | 1.4                                | 5.7                | 5.7         | 31.7        | 23.6        |             |             | 22.1               | 04/30/2017        |
| PRIT Vintage 2018               | 16,165,746           | 1.9         | -0.1         | -4.7                               | -2.0                               | 0.1                | 0.1         | 27.9        |             |             |             | 22.7               | 05/30/2018        |
| PRIT Vintage 2019               | 9,688,156            | 1.2         | -2.2         | -3.4                               | -2.3                               | -2.8               | -2.8        | 35.9        |             |             |             | 30.6               | 03/31/2019        |
| PRIT Vintage 2020               | 7,092,999            | 0.9         | -3.5         | -6.9                               | -0.4                               | 4.5                | 4.5         | 6.4         |             |             |             | 6.4                | 02/29/2020        |
| PRIT Vintage 2021               | 8,208,431            | 1.0         | -7.2         | -2.6                               | -1.0                               | 4.3                | 4.3         |             |             |             |             | -8.7               | 03/31/2021        |
| PRIT Vintage 2022               | 1,936,906            | 0.2         | -15.0        | 23.0                               | -42.9                              | -34.5              | -34.5       |             |             |             |             | -34.5              | 02/28/2022        |
| GCM Grosvenor SOF III           | 5,121,895            | 0.6         | 0.0          | 10.0                               | -3.2                               | 3.9                | 3.9         |             |             |             |             | 10.5               | 12/15/2021        |
| Pomona Capital Fund X           | 4,249,102            | 0.5         | 0.0          | -7.6                               | -16.3                              |                    |             |             |             |             |             | 37.6               | 03/25/2022        |