

# San Jose Federated Retiree Health Care 115 Trust

As of June 30, 2023

Quarterly Review

**Agenda**

1. Economic and Market Update
2. Executive Summary
  - Aggregate Plan Overview
  - Second Quarter Manager Summary
  - Watch List
  - Market Environment – 2Q23 Overview
3. 2Q23 Review
4. Glossary and Notes

## **Economic and Market Update**

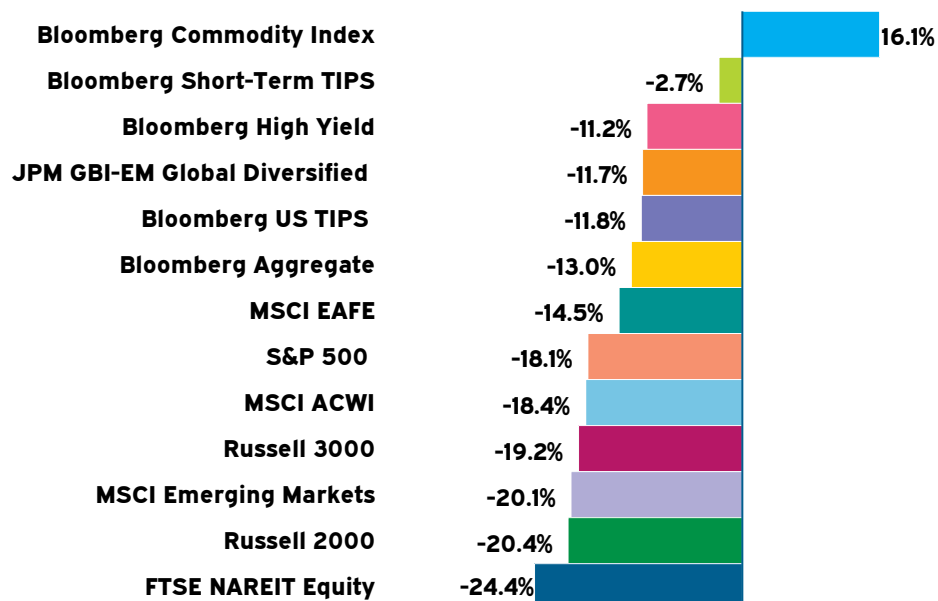
Data as of July 31, 2023

### Commentary

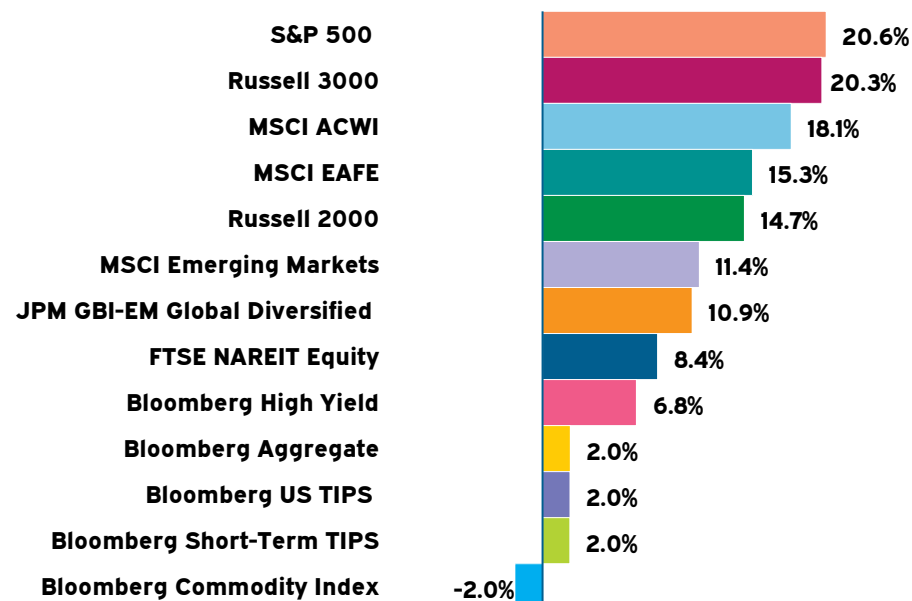
- Riskier assets continued to gain in July as economic data remained resilient while inflation receded. Except for commodities, most public market asset classes remained positive for the year, with US equities leading the way.
- After a pause in June, the Federal Reserve increased interest rates in July by 0.25% to a range of 5.25% - 5.5%, the highest level in over two decades. Markets are largely expecting that this will be the Fed's final rate increase.
  - US equity markets (Russell 3000 index) continued to rise in July (+3.8%), bringing the year-to-date gains to 20.3%. The technology sector remains the key driver of results this year, helped by artificial intelligence optimism.
  - Non-US developed equity markets also rose in July (MSCI EAFE +3.2%), but they continue to trail US markets year-to-date (15.3% versus 20.3%).
  - Emerging market equities had the strongest results in July, gaining 6.2%, driven by optimism over additional policy support in China. They continue to trail developed market equities year-to-date though, returning 11.4%, due partly to China's weak results for the period.
  - Generally, corporate bonds outperformed government bonds for the month on continued risk appetite. Overall, interest rates increased slightly in July, leading to a small decline in the broad US bond market (-0.1%). The index remains positive (+2.0%) year-to-date on declining inflation and expectations for the Fed to end their rate hikes soon.
- This year, the paths of inflation and monetary policy, slowing global growth, and the war in Ukraine will all be key.

### Index Returns<sup>1</sup>

#### 2022



#### YTD



- After a particularly difficult 2022, most public market assets are up thus far in 2023, led by developed market equities.
- Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall, while growth has remained relatively resilient.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2023.

### Domestic Equity Returns<sup>1</sup>

Domestic Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	3.2	8.7	20.6	13.0	13.7	12.2	12.7
Russell 3000	3.6	8.4	20.3	12.6	13.1	11.4	12.1
Russell 1000	3.4	8.6	20.7	12.9	13.2	11.9	12.4
Russell 1000 Growth	3.4	12.8	33.4	17.3	12.2	15.2	15.5
Russell 1000 Value	3.5	4.1	8.8	8.3	14.1	8.0	9.0
Russell MidCap	4.0	4.8	13.3	8.7	11.8	8.8	10.1
Russell MidCap Growth	3.0	6.2	19.4	13.0	6.0	9.9	11.2
Russell MidCap Value	4.4	3.9	9.8	6.2	14.9	7.2	8.9
Russell 2000	6.1	5.2	14.7	7.9	12.0	5.1	8.2
Russell 2000 Growth	4.7	7.1	18.9	11.6	6.5	4.8	8.5
Russell 2000 Value	7.5	3.2	10.2	3.9	17.5	4.7	7.4

### US Equities: Russell 3000 Index rose 3.6% in July and 20.3% YTD.

- Equity investors continue to express optimism that the Federal Reserve's monetary tightening will not have serious impacts on earnings. Though corporate profits were down compared to a year ago, approximately 80% of S&P 500 companies that reported second quarter results in July exceeded earnings expectations.
- In contrast to the year-to-date trend, value stocks outperformed growth stocks in July, particularly in small cap, driven by outperformance in financials and energy. So far in 2023, growth has significantly outperformed value driven by optimism over artificial intelligence.
- Small cap stocks outperformed large cap stocks in July, but trail for the full year, again due to the strength of the technology sector. The July dynamic was driven partially by the outperformance of small cap banks after regulators announced higher capital requirements for larger banks.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2023.

### Foreign Equity Returns<sup>1</sup>

Foreign Equity	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	4.1	2.4	13.9	13.4	7.1	3.9	4.7
MSCI EAFE	3.2	3.0	15.3	16.8	9.3	4.5	5.2
MSCI EAFE (Local Currency)	1.7	4.3	14.0	13.6	13.0	6.2	7.4
MSCI EAFE Small Cap	4.4	0.6	10.2	7.9	6.1	2.1	6.0
MSCI Emerging Markets	6.2	0.9	11.4	8.3	1.5	1.7	3.5
MSCI Emerging Markets (Local Currency)	5.3	1.7	11.1	8.6	3.0	3.7	6.1
MSCI China	10.8	-9.7	4.7	1.8	-9.9	-2.8	3.7

**Foreign Equity: Developed international equities (MSCI EAFE) rose 3.2% in July bringing the YTD gains to 15.3%. Emerging market equities (MSCI EM) rose 6.2% in July, rising 11.4% YTD.**

- International equities also had strong results in July, led by China and emerging markets more broadly.
- Japanese equities continued their steady rise, especially in the mid- and small-cap sectors. Eurozone and UK equities were broadly supported by falling inflation and solid corporate fundamentals.
- After a disappointing reopening of the economy, China's government announced additional support to stimulate consumption and bolster the real estate sector, leading to double-digit gains for the month (10.8%). India underperformed as higher food costs kept inflation elevated.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2023.

### Fixed Income Returns<sup>1</sup>

Fixed Income	July (%)	Q2 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.1	-0.6	2.4	-2.4	-4.0	1.0	1.8	5.2	6.2
Bloomberg Aggregate	-0.1	-0.8	2.0	-3.4	-4.5	0.7	1.5	4.9	6.5
Bloomberg US TIPS	0.1	-1.4	2.0	-5.4	-0.8	2.6	2.0	4.6	6.9
Bloomberg Short-term TIPS	0.5	-0.7	2.0	-1.2	2.3	2.9	1.7	5.3	2.7
Bloomberg High Yield	1.4	1.7	6.8	4.4	2.0	3.4	4.4	8.3	4.0
JPM GBI-EM Global Diversified (USD)	2.9	2.5	10.9	14.3	-1.5	0.5	-0.2	6.5	5.0

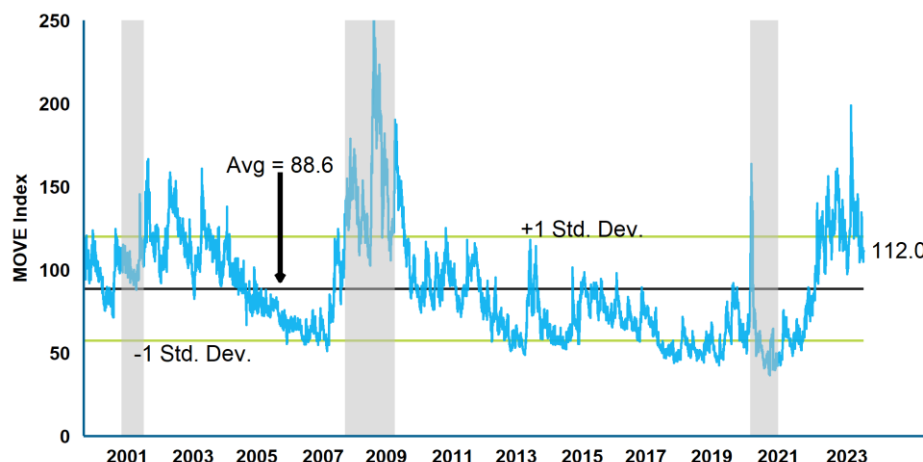
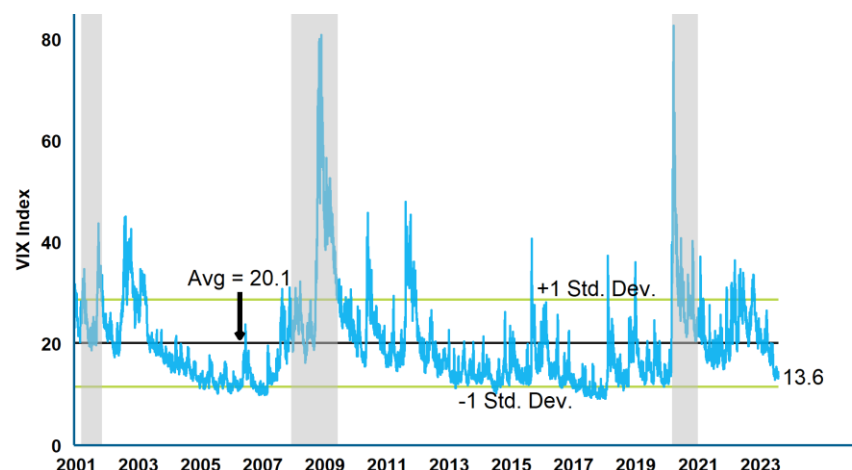
**Fixed Income: The Bloomberg Universal rose 0.1% in July remaining positive YTD (+2.4%), as inflation continues to decline, and yields remain high.**

- In July, riskier bonds continued to outperform government bonds on optimism over a potential soft landing of the economy.
- The broad US bond market (Bloomberg Aggregate) declined slightly for the month (-0.1%) while the TIPS index, and the short-term TIPS index both posted small gains. All three indexes now have the same results so far in 2023.
- In the risk-on environment, high yield bonds rose 1.4% for the month, while emerging market bonds were the top performer, up 2.9%. The two asset classes remain the top performers for the year.

<sup>1</sup> Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of July 31, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.



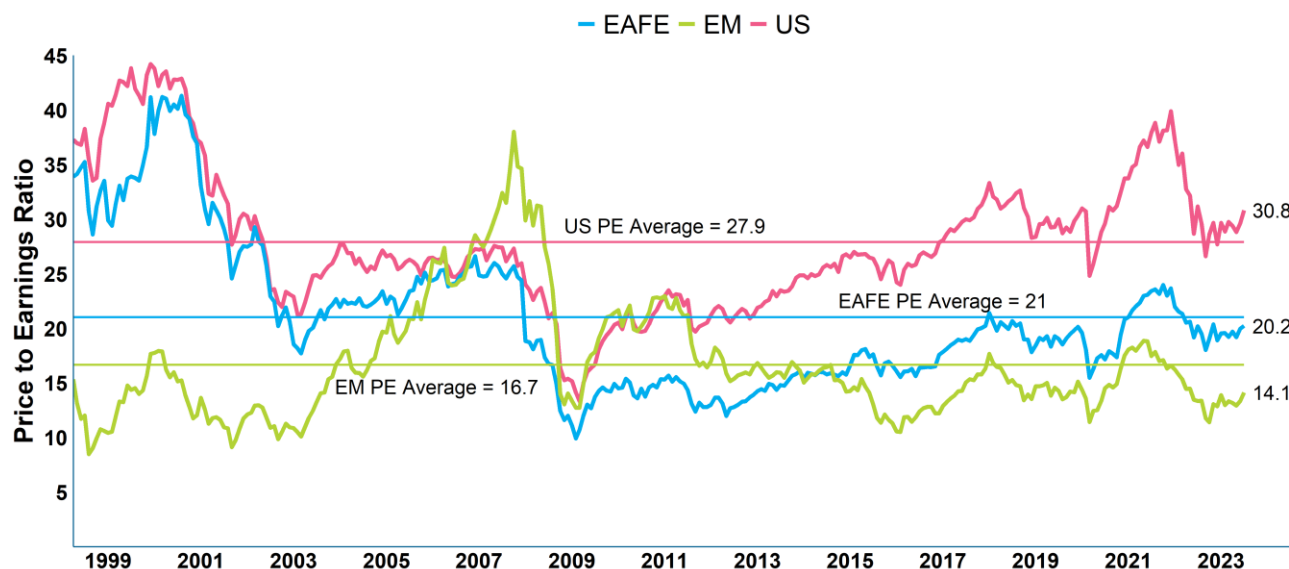
### Equity and Fixed Income Volatility<sup>1</sup>



- Volatility in equities (VIX) remains well below the historical average as investors continue to anticipate the end of the Fed's policy tightening.
- The bond market continues to be volatile after last year's historic losses and due to policy uncertainty and previous issues in the banking sector. The MOVE (fixed income volatility) remains well above (112.0) its long-run average (88.6), but off its recent peak during the heart of the banking crisis.

<sup>1</sup> Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of July 2023. The average line indicated is the average of the VIX and MOVE values between January 2000 and July 2023.

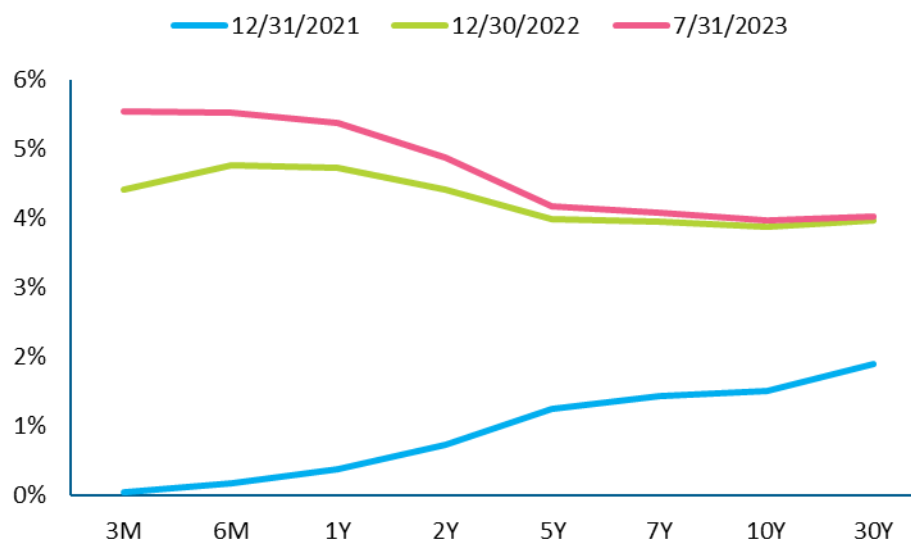
### Equity Cyclically Adjusted P/E Ratios<sup>1</sup>



- Given the strong technology-driven rally this year, the US equity price-to-earnings ratio increased above its long-run (21st century) average.
- International developed market valuations are below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

<sup>1</sup> US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of July 2023. The average line is the long-term average of the US, EM, and EAFE PE values from December 1999 to the recent month-end respectively.

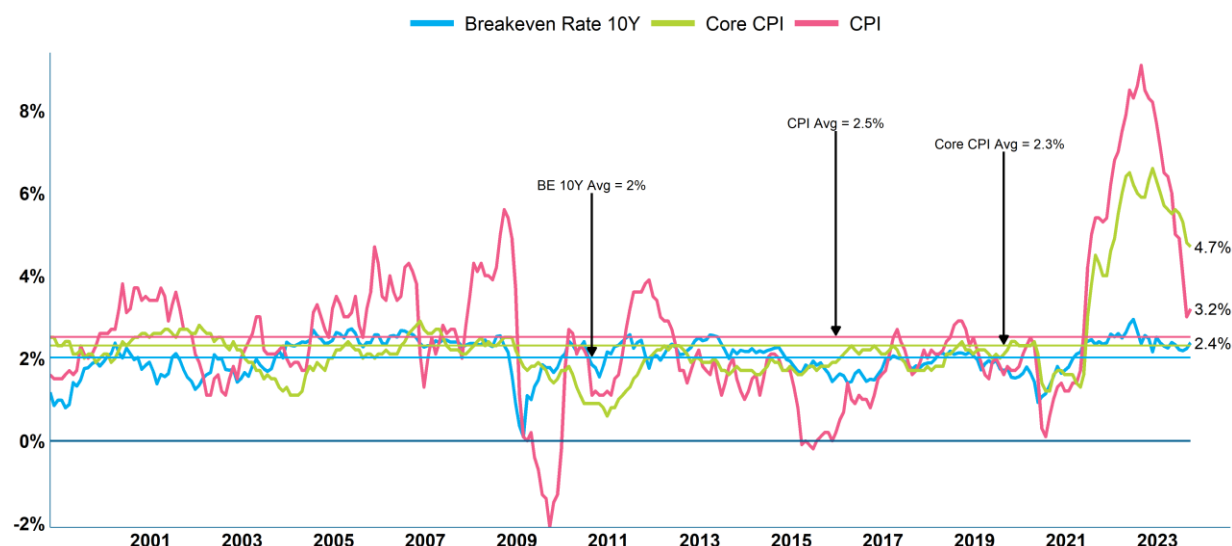
### US Yield Curve<sup>1</sup>



- In July, very short-term interest rates (6-months or less) fell as it appears interest rate hikes might be coming to an end. Longer dated maturities continued to drift higher, as economic data remains resilient. So far in 2023, rates overall remain higher, particularly the policy sensitive front-end of the yield curve.
- The yield curve remains inverted with the spread between two-year and ten-year Treasuries finishing the month at -0.91%. The more closely watched measure (by the Fed) of the three-month and ten-year Treasuries spread also remained inverted at -1.60%. Inversions in the yield curve have often preceded recessions.

<sup>1</sup> Source: Bloomberg. Data is as of July 31, 2023.

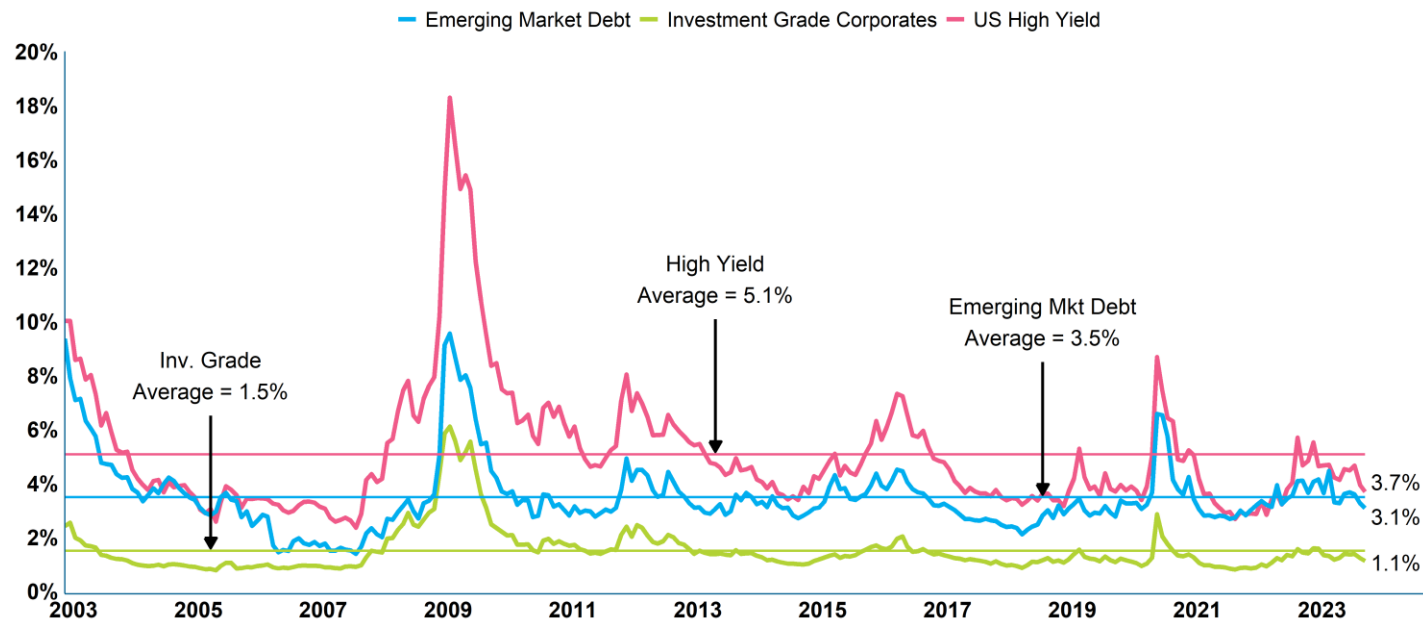
## Ten-Year Breakeven Inflation and CPI<sup>1</sup>



- Declines in inflation while other economic data remains strong has led to optimism over the Federal Reserve potentially achieving a rarely observed soft landing for the economy.
- Year-over-year headline inflation rose slightly in July (3.0% to 3.2%) but came in below expectations. The trend of lower month-over-month price increases continued with the rate staying steady at 0.2%.
- Core inflation – excluding food and energy - fell (4.8% to 4.7%) year-over-year. It remains stubbornly high though driven by shelter costs (+7.7%), particularly owners equivalent rent, and transportation services (+9.0%).
- Inflation expectations (breakevens) remain well below current inflation as investors continue to expect inflation to track back toward the Fed's 2% average target.

<sup>1</sup> Source: Bloomberg. Data is as July 31, 2023. The CPI and 10 Year Breakeven average lines denote the average values from August 1998 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

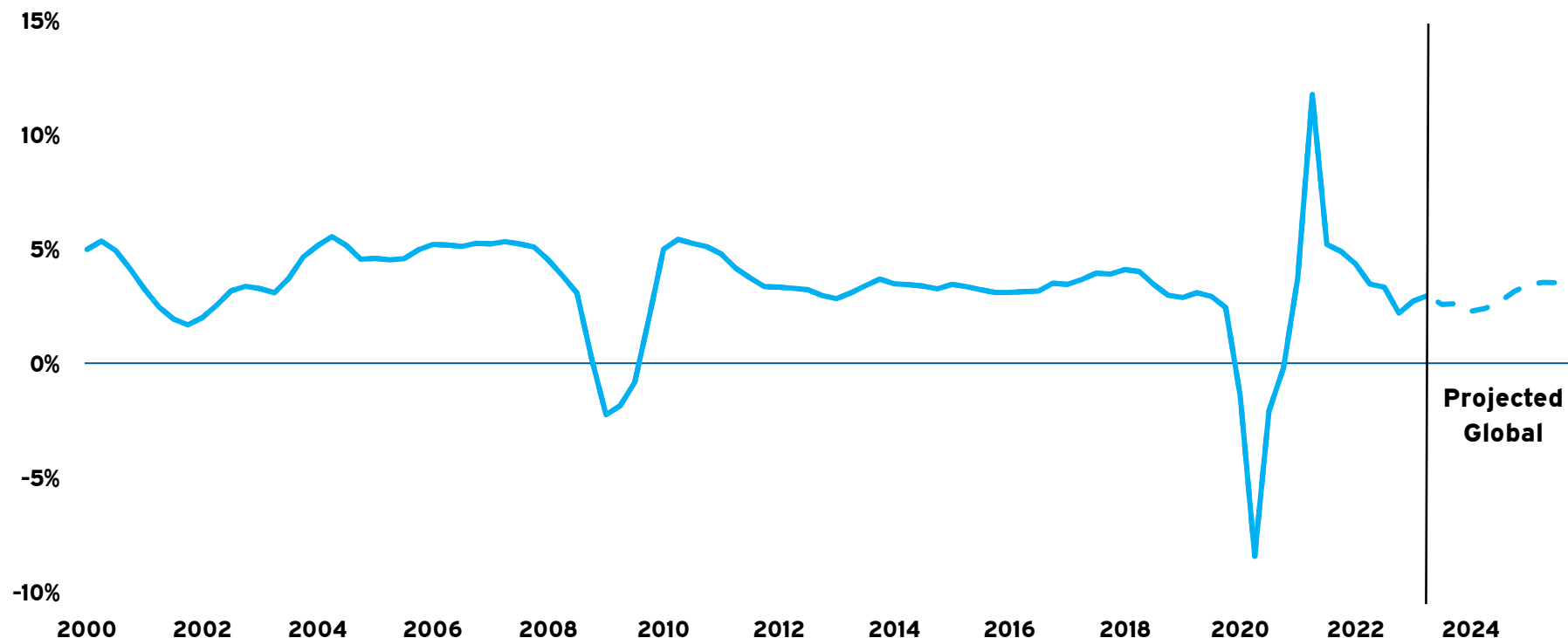
## Credit Spreads vs. US Treasury Bonds<sup>1</sup>



- Credit markets outperformed government bonds for the month with spreads (the added yield above a comparable maturity Treasury) declining. Risk appetite was strong as growth remains resilient, while inflation continues to decline.
- High yield spreads remain well below the long-term average. Investment grade and emerging market spreads are also below their respective long-term averages, but by smaller margins.

<sup>1</sup> Sources: Bloomberg. Data is as of July 31, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from August 2000 to the recent month-end, respectively.

### Global Real Gross Domestic Product (GDP) Growth<sup>1</sup>

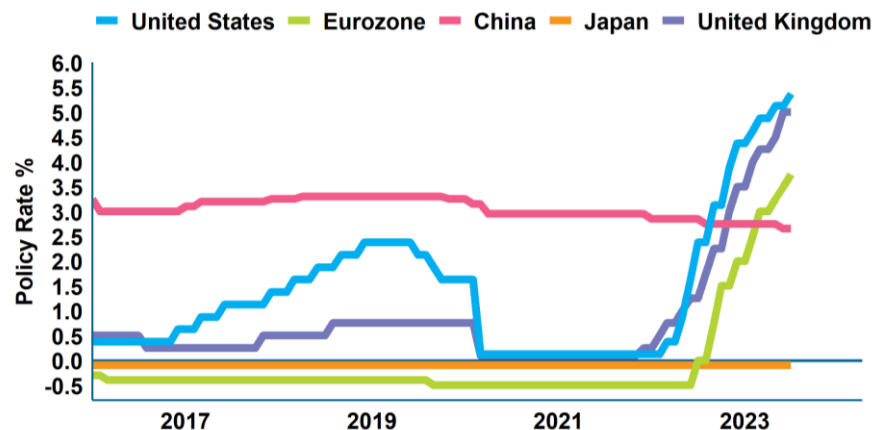


- Global economies are expected to slow this year compared to 2022. The risk of recession remains given policymakers' aggressive tightening, but optimism has started to grow over some central banks potentially navigating a soft landing.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

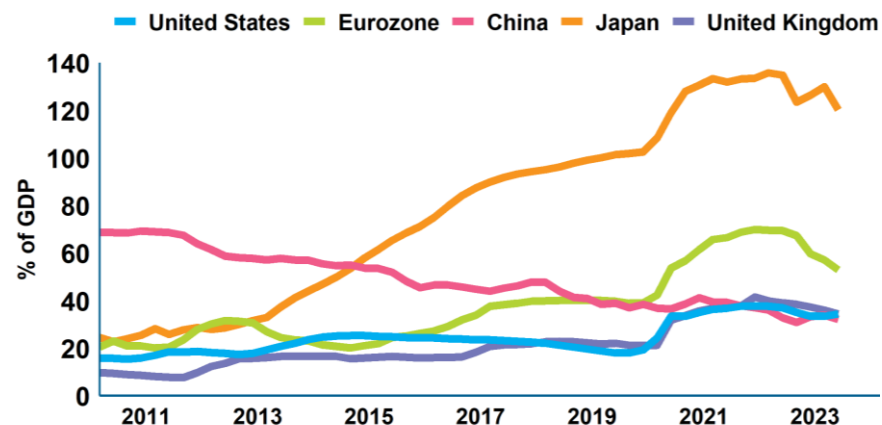
<sup>1</sup> Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated July 2023.

### Central Bank Response<sup>1</sup>

Policy Rates



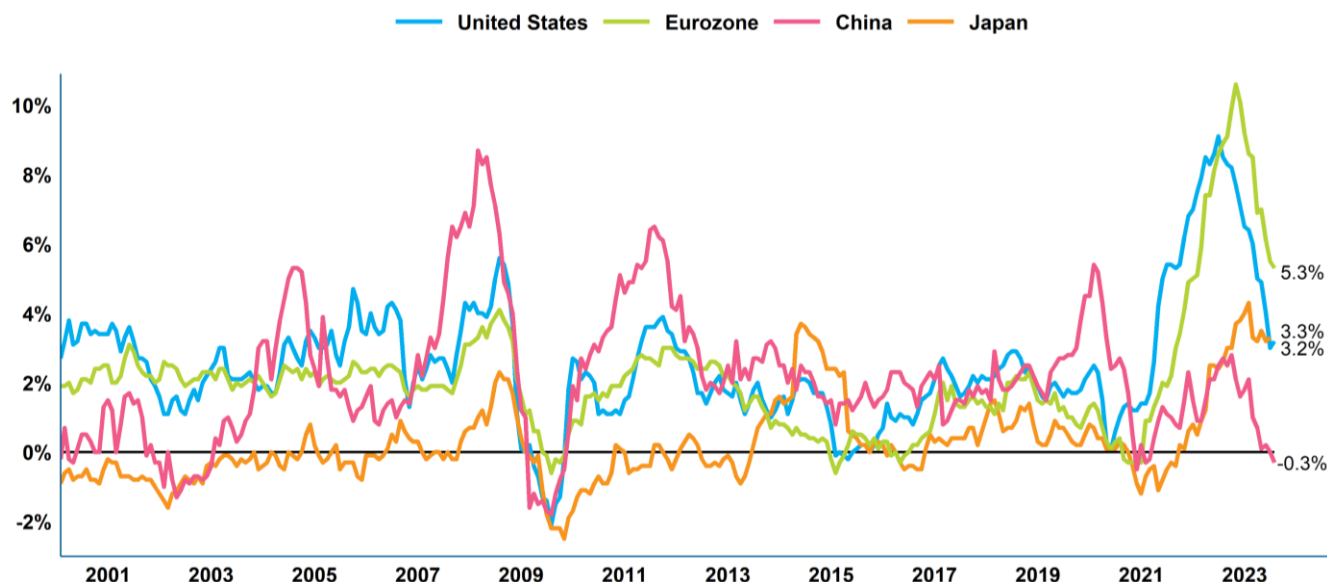
Balance Sheet as % of GDP



- Slowing inflation and growth have led to expectations for a reduction in the pace of aggressive policy tightening.
- In July the Fed raised rates another 25 basis points to a range of 5.25% to 5.50% with markets largely expecting this to be the last rate increase. After month-end, the FOMC paused its tightening campaign.
- The European Central Bank also increased rates in July, but they remain lower than in the US. In Japan the BOJ surprised markets by announcing they would be more flexible on their 10-year interest rate target.
- The central bank in China has continued to cut interest rates and inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.
- Looking ahead, risks remain for a policy error as central banks attempt to balance multiple goals, bringing down inflation, maintaining financial stability, and supporting growth.

<sup>1</sup> Source: Bloomberg. Policy rate data is as of July 31, 2023. China policy rate is defined as the medium-term lending facility 1 year interest rate. Balance sheet as % of GDP is based on quarterly data and is as of June 30, 2023.

### Inflation (CPI Trailing Twelve Months)<sup>1</sup>

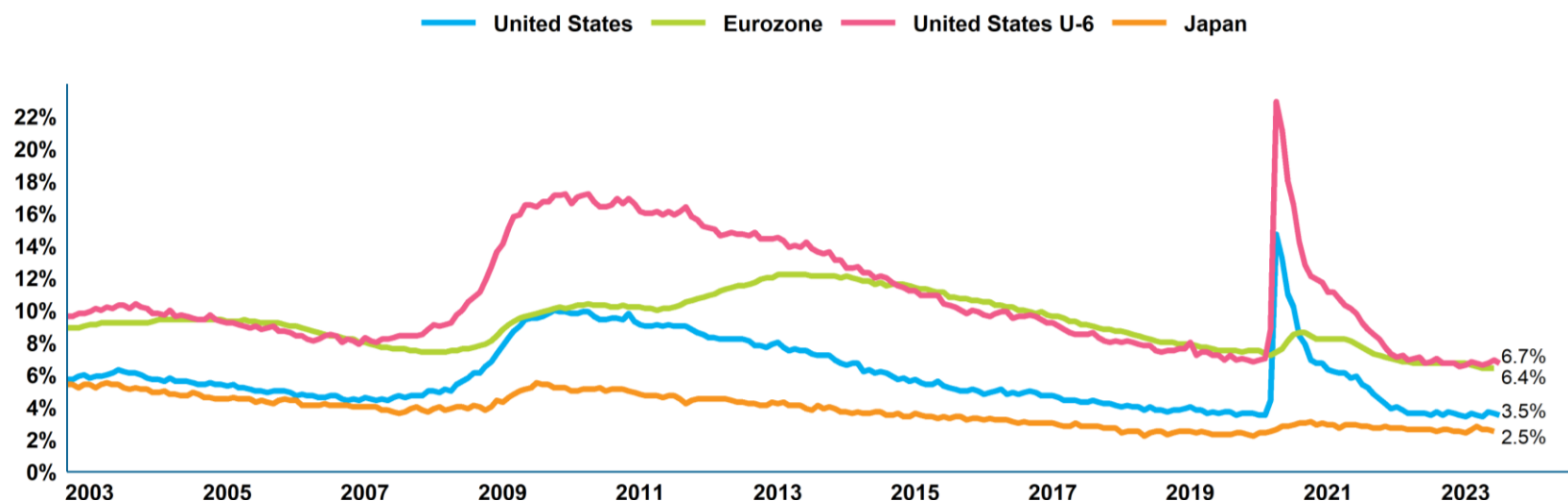


- The inflation picture remains mixed across the major economies.
- In the US, inflation rose slightly in July (3.0% to 3.2%), while eurozone inflation continued to fall (5.5% to 5.3%) a level well off its peak. Despite 2023's significant declines in the US and Europe, inflation levels remain elevated compared to central bank targets.
- Inflation in Japan remains elevated at levels not seen in almost a decade largely driven by food and home related items. In China, deflationary pressures emerged in July due to falling food prices, but this is expected to be temporary as high base effects from last year work their way through.

<sup>1</sup> Source: Bloomberg. Data is as July 31, 2023. The most recent Japanese inflation data is as of June 2023.



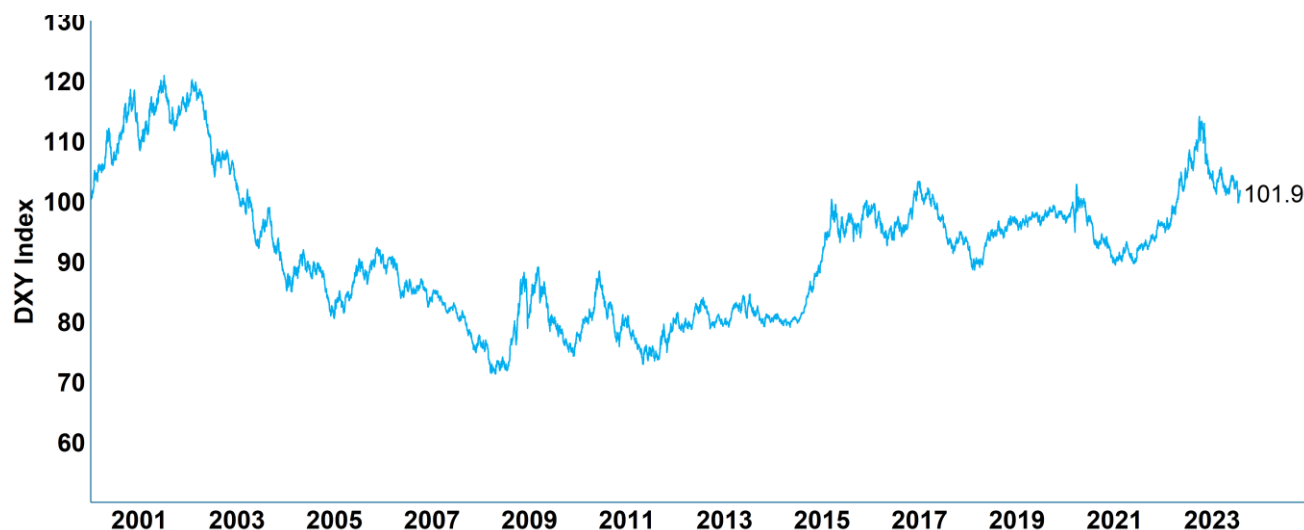
### Unemployment<sup>1</sup>



- Despite slowing growth and relatively high inflation, the US labor market continues to show signs of resilience (3.5%). Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.7% but also declined dramatically from their peak.
- The strong labor market and higher wages, although beneficial for workers, motivates the Fed's efforts to fight inflation, potentially leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been flat through the pandemic given less layoffs.

<sup>1</sup> Source: Bloomberg. Data is as July 31, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of June 2023.

### US Dollar versus Broad Currencies<sup>1</sup>



- The dollar finished 2022 much higher than it started, due to the increased pace of policy tightening, stronger relative growth, and safe-haven flows.
- Late last year and into early this year, the dollar declined, as weaker economic data and lower inflation led to investors anticipating the end of Fed tightening. Since then, the dollar has largely been range-bound due to competing forces of safe-haven flows and monetary policy expectations.
- For the rest of this year, the track of inflation across economies and the corresponding monetary policies will be key drivers of currency moves.

<sup>1</sup> Source: Bloomberg. Data as of July 31, 2023.

## Summary

### Key Trends:

- The impact of inflation still above policy targets will remain key, with bond market volatility likely to stay high.
- Global monetary policies could diverge in 2023. The risk of policy errors remains elevated as central banks try to reduce persistent inflation while not tipping their economies into recession.
- Growth is expected to slow globally this year, with many economies forecasted to tip into recession. Optimism has been building though that some economies could experience a soft landing. Inflation, monetary policy, and the war will all be key.
- In the US, consumers could feel pressure as certain components of inflation remain high (e.g., shelter), borrowing cost are elevated, and the job market may weaken.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow. Also, the future path of the large technology companies that have driven market gains will be important.
- Equity valuations remain lower in emerging and developed markets, but risks remain, including potential for renewed strength in the US dollar, higher inflation weighing particularly on Europe, and China's sluggish economic reopening and on-going weakness in the real estate sector. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.

## **Executive Summary**

### **As of June 30, 2023**

The value of the San Jose Federated Retiree Health Care Trust's assets was \$376.3 million on June 30, 2023, compared to \$371.5 million at the end of the prior quarter. The Trust had \$4.3 million of net cash outflows for the quarter, and \$9.1 million of investment gains during the three-month period.

- The Health Care Trust's net of fees performance was +2.5% for the quarter, outperforming the Policy Benchmark return of +2.4%. Over the trailing one-year period, the Trust returned +8.2%, outperforming the Policy Benchmark return of +7.6%. The Trust ranked in or near the top third of the peer group for the quarter, 1-year, 3-year, 5-year, and since inception periods.
- Growth returned +5.2% for the quarter and +15.3% over the trailing one-year period. The Public Equity Benchmark returned +5.4% for the quarter and +15.2% over the trailing one-year period.
  - Low Beta returned +1.1% for the quarter and +3.6% over the trailing one-year period, in line with the ICE Bank of America Merrill Lynch 91 Days T-Bill TR benchmark over the quarter and the trailing one-year period.
  - Other assets returned -1.6% for the quarter and -1.8% over the trailing one-year period. The Other Benchmark returned -2.1% for the quarter and -3.6% for the one-year period.
- The Health Care Trust had no manager changes during the quarter.

## Second Quarter Manager Summary

Investment Manager	Asset Class	Changes/ Announcements	Meketa Recommendation <sup>1</sup>	Comments
Artisan Global Value	Global Equity	---	---	---
Artisan Global Opportunities	Global Equity	---	Hold	Watch List
Cove Street Small Cap Value	US Equity	---	---	---
BlackRock Core Property	Core Real Estate	---	---	---
Clarion Lion Properties	Core Real Estate	---	---	---
Clarion Lion Industrial Trust	Core Real Estate	---	---	---
TA Realty Core Property	Core Real Estate	---	---	---
Credit Suisse Risk Parity	Commodities	---	---	---

<sup>1</sup> The Meketa Investment Group recommendations are based on organizational or resource changes at each manager.

### Watch List<sup>1,2</sup>

Investment Manager	Asset Class	Watch List Status	Comments
Artisan Global Opportunities	Global Equity	Monitoring	Underperformance

### Artisan Global Opportunities

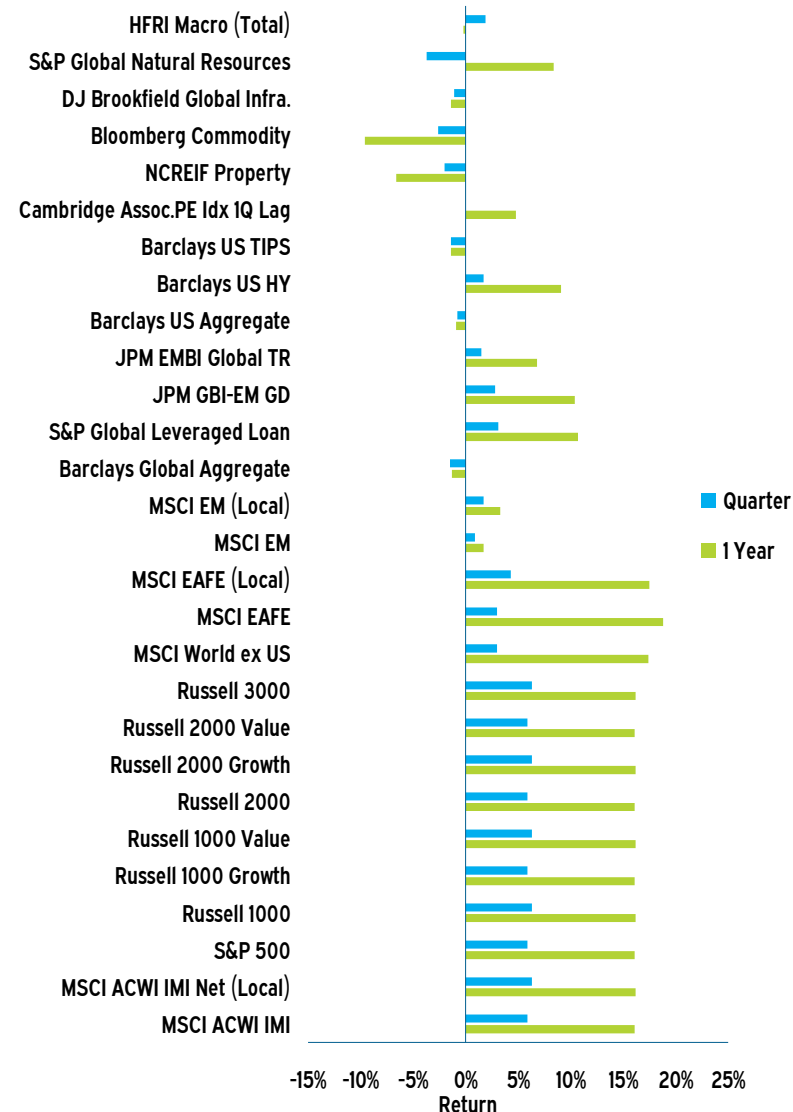
→ Over the three-year period, Artisan (+5.0%) has underperformed the MSCI ACWI Growth NR by 460 basis points. Since inception in July 2020, Artisan has ranked in the 88th percentile compared to peers.

<sup>1</sup> Watch List excludes Private Markets and Passive Funds.

<sup>2</sup> Placement on the Watch List includes qualitative reasons and manager underperformance versus the appropriate benchmark over a three and or five year period as outlined in the Investment Policy Statement.

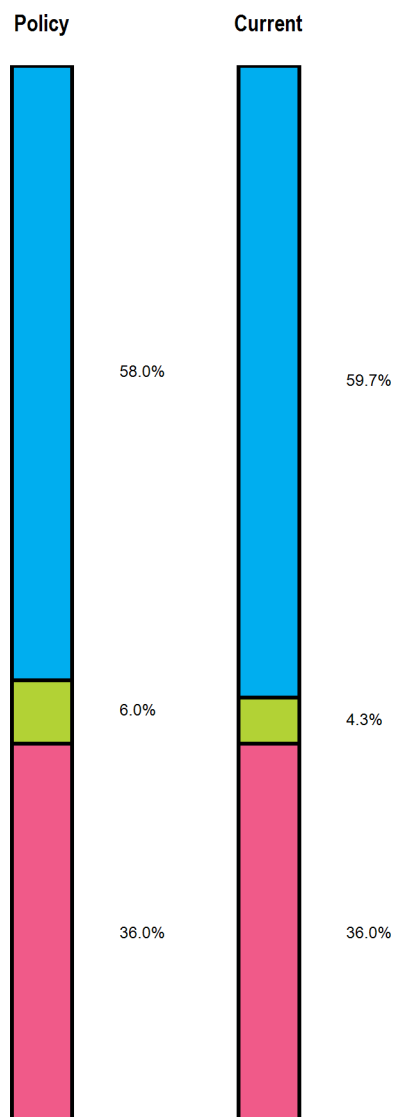
### Market Environment – 2Q23 Overview

Benchmark	Scope	2Q23 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
<b>Global Equity</b>						
MSCI ACWI IMI	World	5.9	16.1	11.0	7.6	8.6
MSCI ACWI IMI Net (Local)	World (Local Currency)	6.3	16.2	11.9	8.5	9.7
<b>Domestic Equity</b>						
S&P 500	Large Core	8.7	19.6	14.6	12.3	12.9
Russell 1000	Large Core	8.6	19.4	14.1	11.9	12.6
Russell 1000 Growth	Large Growth	12.8	27.1	13.7	15.1	15.7
Russell 1000 Value	Large Value	4.1	11.5	14.3	8.1	9.2
Russell 2000	Small Core	5.2	12.3	10.8	4.2	8.3
Russell 2000 Growth	Small Growth	7.1	18.5	6.1	4.2	8.8
Russell 2000 Value	Small Value	3.2	6.0	15.4	3.5	7.3
Russell 3000	All Cap Core	8.4	19.0	13.9	11.4	12.3
<b>International Equity</b>						
MSCI World ex US	World ex-US	3.0	17.4	9.3	4.6	5.4
MSCI EAFE	International Developed	3.0	18.8	8.9	4.4	5.4
MSCI EAFE (Local)	International Developed (Local Currency)	4.3	17.5	11.7	6.4	7.7
MSCI EM	Emerging Markets	0.9	1.7	2.3	0.9	3.0
MSCI EM (Local)	Emerging Markets (Local Currency)	1.7	3.3	3.9	3.0	5.7
<b>Global Fixed Income</b>						
Barclays Global Aggregate	Global Core Bonds	-1.5	-1.3	-5.0	-1.1	0.2
S&P Global Leveraged Loan	Bank Loans	3.1	10.7	6.3	3.9	3.8
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	2.8	10.4	0.0	3.9	5.1
JPM EMBI Global TR	Emerging Market Bonds	1.5	6.8	-2.7	0.8	2.6
<b>Domestic Fixed Income</b>						
Barclays US Aggregate	Core Bonds	-0.8	-0.9	-4.0	0.8	1.5
Barclays US HY	High Yield	1.7	9.1	3.1	3.4	4.4
Barclays US TIPS	Inflation	-1.4	-1.4	-0.1	2.5	2.1
<b>Other</b>						
Cambridge Associates PE Index 1Qtr Lag	Private Equity	0.0	4.8	24.8	22.1	18.1
NCREIF Property	Real Estate	-2.0	-6.6	6.8	5.9	7.8
Bloomberg Commodity	Commodities	-2.6	-9.6	17.8	4.7	-1.0
DJ Brookfield Global Infrastructure	Infrastructure	-1.1	-1.4	6.2	4.9	6.0
S&P Global Natural Resources	Natural Resources	-3.7	8.4	18.6	5.9	5.8
HFRI Macro	Hedge Funds	1.9	-0.2	7.4	5.0	3.1





## **2Q23 Review**



Allocation vs. Targets and Policy			
	Current Balance	Current Allocation	Policy
<b>Growth</b>	<b>\$224,596,998</b>	<b>59.7%</b>	<b>58.0%</b>
Public Equity	\$224,596,998	59.7%	58.0%
<b>Low Beta</b>	<b>\$16,322,278</b>	<b>4.3%</b>	<b>6.0%</b>
Short-Term IG Bonds	\$13,194,043	3.5%	6.0%
Cash	\$3,128,235	0.8%	0.0%
<b>Other</b>	<b>\$135,403,399</b>	<b>36.0%</b>	<b>36.0%</b>
Core Real Estate	\$49,827,507	13.2%	12.0%
Commodities	\$17,533,532	4.7%	5.0%
Investment Grade Bonds	\$50,521,048	13.4%	14.0%
Long-Term Government Bonds	\$17,521,313	4.7%	5.0%
<b>Total</b>	<b>\$376,322,675</b>	<b>100.0%</b>	<b>100.0%</b>

### Asset Class Net Performance Summary

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>376,322,675</b>	<b>100.0</b>	<b>2.5</b>	<b>6.6</b>	<b>8.2</b>	<b>6.7</b>	<b>4.8</b>	<b>4.7</b>	<b>Jul-11</b>
<i>Policy Benchmark</i>			2.4	6.3	7.6	6.8	5.0	5.1	Jul-11
<i>InvMetrics Health &amp; Welfare Net Median</i>			1.6	5.1	4.8	2.5	3.8	4.1	Jul-11
<i>InvMetrics Health &amp; Welfare Net Rank</i>			26	26	19	11	25	34	Jul-11
<b>Growth</b>	<b>224,596,998</b>	<b>59.7</b>	<b>5.2</b>	<b>12.8</b>	<b>15.3</b>	<b>9.8</b>	<b>6.5</b>	<b>8.9</b>	<b>Dec-11</b>
<i>Public Equity Benchmark</i>			5.4	12.4	15.2	10.0	7.3	9.2	Dec-11
<b>Public Equity</b>	<b>224,596,998</b>	<b>59.7</b>	<b>5.2</b>	<b>12.8</b>	<b>15.3</b>	<b>9.8</b>	<b>6.5</b>	<b>8.9</b>	<b>Dec-11</b>
<i>Public Equity Benchmark</i>			5.4	12.4	15.2	10.0	7.3	9.2	Dec-11
<b>Global Equity</b>	<b>36,447,122</b>	<b>9.7</b>	<b>5.9</b>	<b>15.9</b>	<b>18.3</b>	<b>10.3</b>	<b>4.1</b>	<b>5.5</b>	<b>Jul-15</b>
<i>MSCI ACWI IMI Net USD</i>			5.9	13.2	16.1	11.0	7.6	7.9	Jul-15
<b>U.S. Equity</b>	<b>96,576,217</b>	<b>25.7</b>	<b>8.4</b>	<b>15.9</b>	<b>18.8</b>	<b>14.0</b>	<b>11.2</b>	<b>11.1</b>	<b>Jul-15</b>
<i>Russell 3000</i>			8.4	16.2	19.0	13.9	11.4	11.5	Jul-15
<b>International Equity</b>	<b>51,168,716</b>	<b>13.6</b>	<b>2.8</b>	<b>11.3</b>	<b>18.6</b>	<b>9.1</b>	<b>4.6</b>	<b>4.8</b>	<b>Jul-15</b>
<i>MSCI EAFE</i>			3.0	11.7	18.8	8.9	4.4	4.6	Jul-15
<b>Emerging Markets Equity</b>	<b>40,404,943</b>	<b>10.7</b>	<b>0.5</b>	<b>4.7</b>	<b>1.4</b>	<b>1.8</b>	<b>0.6</b>	<b>2.1</b>	<b>Jul-15</b>
<i>MSCI Emerging Markets</i>			0.9	4.9	1.7	2.3	0.9	2.7	Jul-15

Fiscal Year begins July 1.

Please see the Appendix for composition of the Policy Benchmark and Public Equity Benchmark.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Low Beta</b>	<b>16,322,278</b>	<b>4.3</b>	<b>1.1</b>	<b>2.2</b>	<b>3.6</b>	<b>1.3</b>	<b>1.5</b>	<b>0.8</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	1.6	0.8	Jul-11
<b>Cash</b>	<b>3,128,235</b>	<b>0.8</b>	<b>0.3</b>	<b>1.2</b>	<b>2.5</b>	<b>0.8</b>	<b>1.2</b>	<b>0.6</b>	<b>Jul-11</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	1.6	0.8	Jul-11
<b>Short-Term IG Bonds</b>	<b>13,194,043</b>	<b>3.5</b>	<b>1.3</b>	<b>2.5</b>	<b>4.0</b>	<b>1.4</b>	<b>--</b>	<b>1.7</b>	<b>Oct-18</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	--	1.5	Oct-18
<b>Other</b>	<b>135,403,399</b>	<b>36.0</b>	<b>-1.6</b>	<b>-2.0</b>	<b>-1.8</b>	<b>5.8</b>	<b>3.8</b>	<b>3.1</b>	<b>Jul-15</b>
Other Benchmark			-2.1	-2.5	-3.6	5.7	2.5	2.8	Jul-15
<b>Core Real Estate</b>	<b>49,827,507</b>	<b>13.2</b>	<b>-2.7</b>	<b>-7.4</b>	<b>0.1</b>	<b>10.1</b>	<b>8.2</b>	<b>7.7</b>	<b>Jul-15</b>
Core Real Estate Benchmark			-3.4	-8.4	-3.9	8.1	6.2	7.0	Jul-15
<b>Commodities</b>	<b>17,533,532</b>	<b>4.7</b>	<b>0.2</b>	<b>-3.4</b>	<b>0.2</b>	<b>16.3</b>	<b>6.5</b>	<b>2.2</b>	<b>Jan-15</b>
Bloomberg Commodity Index TR USD			-2.6	-7.8	-9.6	17.8	4.7	0.9	Jan-15
<b>Investment Grade Bonds</b>	<b>50,521,048</b>	<b>13.4</b>	<b>-0.8</b>	<b>2.1</b>	<b>-0.9</b>	<b>-3.7</b>	<b>-2.1</b>	<b>-5.3</b>	<b>Jun-21</b>
Bloomberg US Aggregate TR			-0.8	2.1	-0.9	-4.0	0.8	-5.2	Jun-21
<b>Long-Term Government Bonds</b>	<b>17,521,313</b>	<b>4.7</b>	<b>-2.3</b>	<b>4.2</b>	<b>-6.8</b>	<b>--</b>	<b>--</b>	<b>-10.7</b>	<b>Jun-21</b>
Bloomberg US Treasury Long TR			-2.3	3.7	-6.8	--	--	-10.9	Jun-21

Please see the Appendix for composition of the Other Benchmark.

Trailing Net Performance									
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>376,322,675</b>	<b>100.0</b>	<b>2.5</b>	<b>6.6</b>	<b>8.2</b>	<b>6.7</b>	<b>4.8</b>	<b>4.7</b>	<b>Jul-11</b>
Policy Benchmark			2.4	6.3	7.6	6.8	5.0	5.1	Jul-11
InvMetrics Health & Welfare Net Median			1.6	5.1	4.8	2.5	3.8	4.1	Jul-11
InvMetrics Health & Welfare Net Rank			26	26	19	11	25	34	Jul-11
<b>Growth</b>	<b>224,596,998</b>	<b>59.7</b>	<b>5.2</b>	<b>12.8</b>	<b>15.3</b>	<b>9.8</b>	<b>6.5</b>	<b>8.9</b>	<b>Dec-11</b>
Public Equity Benchmark			5.4	12.4	15.2	10.0	7.3	9.2	Dec-11
<b>Public Equity</b>	<b>224,596,998</b>	<b>59.7</b>	<b>5.2</b>	<b>12.8</b>	<b>15.3</b>	<b>9.8</b>	<b>6.5</b>	<b>8.9</b>	<b>Dec-11</b>
Public Equity Benchmark			5.4	12.4	15.2	10.0	7.3	9.2	Dec-11
<b>Global Equity</b>	<b>36,447,122</b>	<b>9.7</b>	<b>5.9</b>	<b>15.9</b>	<b>18.3</b>	<b>10.3</b>	<b>4.1</b>	<b>5.5</b>	<b>Jul-15</b>
MSCI ACWI IMI Net USD			5.9	13.2	16.1	11.0	7.6	7.9	Jul-15
Artisan Global Value	18,927,350	5.0	5.7	16.1	18.8	15.1	6.8	6.8	Jun-15
MSCI ACWI Value NR USD			3.0	4.3	10.0	11.8	5.2	5.1	Jun-15
eV All Global Equity Net Median			4.6	11.5	15.8	10.5	7.6	7.5	Jun-15
eV All Global Equity Net Rank			38	20	27	14	63	62	Jun-15
Artisan Global Opportunities	17,519,772	4.7	5.8	15.4	17.3	5.0	--	5.0	Jul-20
MSCI ACWI Growth NR USD			9.2	24.2	23.1	9.6	--	9.6	Jul-20
eV All Global Equity Net Median			4.6	11.5	15.8	10.5	7.6	10.5	Jul-20
eV All Global Equity Net Rank			36	23	39	88	--	88	Jul-20

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>U.S. Equity</b>	<b>96,576,217</b>	<b>25.7</b>	<b>8.4</b>	<b>15.9</b>	<b>18.8</b>	<b>14.0</b>	<b>11.2</b>	<b>11.1</b>	<b>Jul-15</b>
<i>Russell 3000</i>			<i>8.4</i>	<i>16.2</i>	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>	<i>11.5</i>	<i>Jul-15</i>
Northern Trust Russell 3000	96,576,217	25.7	8.4	16.0	18.8	13.8	11.3	11.1	Jun-15
<i>Russell 3000</i>			<i>8.4</i>	<i>16.2</i>	<i>19.0</i>	<i>13.9</i>	<i>11.4</i>	<i>11.1</i>	<i>Jun-15</i>
<b>International Equity</b>	<b>51,168,716</b>	<b>13.6</b>	<b>2.8</b>	<b>11.3</b>	<b>18.6</b>	<b>9.1</b>	<b>4.6</b>	<b>4.8</b>	<b>Jul-15</b>
<i>MSCI EAFE</i>			<i>3.0</i>	<i>11.7</i>	<i>18.8</i>	<i>8.9</i>	<i>4.4</i>	<i>4.6</i>	<i>Jul-15</i>
Northern Trust EAFE Index	51,168,716	13.6	2.8	11.3	18.6	9.1	4.6	--	Jul-15
<i>MSCI EAFE</i>			<i>3.0</i>	<i>11.7</i>	<i>18.8</i>	<i>8.9</i>	<i>4.4</i>	<i>--</i>	<i>Jul-15</i>
<b>Emerging Markets Equity</b>	<b>40,404,943</b>	<b>10.7</b>	<b>0.5</b>	<b>4.7</b>	<b>1.4</b>	<b>1.8</b>	<b>0.6</b>	<b>2.1</b>	<b>Jul-15</b>
<i>MSCI Emerging Markets</i>			<i>0.9</i>	<i>4.9</i>	<i>1.7</i>	<i>2.3</i>	<i>0.9</i>	<i>2.7</i>	<i>Jul-15</i>
Northern Trust MSCI EM	40,404,943	10.7	0.5	4.7	1.4	1.8	--	0.9	Aug-18
<i>MSCI Emerging Markets</i>			<i>0.9</i>	<i>4.9</i>	<i>1.7</i>	<i>2.3</i>	<i>--</i>	<i>1.1</i>	<i>Aug-18</i>
<b>Low Beta</b>	<b>16,322,278</b>	<b>4.3</b>	<b>1.1</b>	<b>2.2</b>	<b>3.6</b>	<b>1.3</b>	<b>1.5</b>	<b>0.8</b>	<b>Jul-11</b>
<i>ICE BofA 91 Days T-Bills TR</i>			<i>1.2</i>	<i>2.3</i>	<i>3.6</i>	<i>1.3</i>	<i>1.6</i>	<i>0.8</i>	<i>Jul-11</i>
<b>Cash</b>	<b>3,128,235</b>	<b>0.8</b>	<b>0.3</b>	<b>1.2</b>	<b>2.5</b>	<b>0.8</b>	<b>1.2</b>	<b>0.6</b>	<b>Jul-11</b>
<i>ICE BofA 91 Days T-Bills TR</i>			<i>1.2</i>	<i>2.3</i>	<i>3.6</i>	<i>1.3</i>	<i>1.6</i>	<i>0.8</i>	<i>Jul-11</i>

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
<b>Short-Term IG Bonds</b>	<b>13,194,043</b>	<b>3.5</b>	<b>1.3</b>	<b>2.5</b>	<b>4.0</b>	<b>1.4</b>	<b>--</b>	<b>1.7</b>	<b>Oct-18</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	--	1.5	Oct-18
BlackRock 3-Month T-Bill	13,194,043	3.5	1.3	2.5	4.0	1.4	--	1.7	Oct-18
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	--	1.5	Oct-18
<b>Other</b>	<b>135,403,399</b>	<b>36.0</b>	<b>-1.6</b>	<b>-2.0</b>	<b>-1.8</b>	<b>5.8</b>	<b>3.8</b>	<b>3.1</b>	<b>Jul-15</b>
Other Benchmark			-2.1	-2.5	-3.6	5.7	2.5	2.8	Jul-15
<b>Core Real Estate</b>	<b>49,827,507</b>	<b>13.2</b>	<b>-2.7</b>	<b>-7.4</b>	<b>0.1</b>	<b>10.1</b>	<b>8.2</b>	<b>7.7</b>	<b>Jul-15</b>
Core Real Estate Benchmark			-3.4	-8.4	-3.9	8.1	6.2	7.0	Jul-15
BlackRock Core Property Fund	9,572,082	2.5	-4.0	-7.8	1.4	10.4	--	8.4	Feb-19
Core Real Estate Benchmark 2			-3.4	-8.4	-3.9	8.1	--	6.1	Feb-19
Clarion Lion Properties Fund	14,355,448	3.8	-5.3	-10.4	-3.4	9.0	--	7.3	May-19
Core Real Estate Benchmark			-3.4	-8.4	-3.9	8.1	--	6.3	May-19
Clarion Lion Industrial Trust	4,792,053	1.3	-0.9	-2.3	9.6	--	--	18.4	Oct-21
Core Real Estate Benchmark 3			-3.4	-8.4	-3.9	--	--	6.1	Oct-21
TA Realty Core Property Fund	21,107,924	5.6	-0.7	-6.2	0.0	--	--	9.7	Oct-21
Core Real Estate Benchmark 3			-3.4	-8.4	-3.9	--	--	6.1	Oct-21
<b>Commodities</b>	<b>17,533,532</b>	<b>4.7</b>	<b>0.2</b>	<b>-3.4</b>	<b>0.2</b>	<b>16.3</b>	<b>6.5</b>	<b>2.2</b>	<b>Jan-15</b>
Bloomberg Commodity Index TR USD			-2.6	-7.8	-9.6	17.8	4.7	0.9	Jan-15
BlackRock Commodities Index	17,533,532	4.7	0.2	--	--	--	--	--	Jan-23
<b>Investment Grade Bonds</b>	<b>50,521,048</b>	<b>13.4</b>	<b>-0.8</b>	<b>2.1</b>	<b>-0.9</b>	<b>-3.7</b>	<b>-2.1</b>	<b>-5.3</b>	<b>Jun-21</b>
Bloomberg US Aggregate TR			-0.8	2.1	-0.9	-4.0	0.8	-5.2	Jun-21

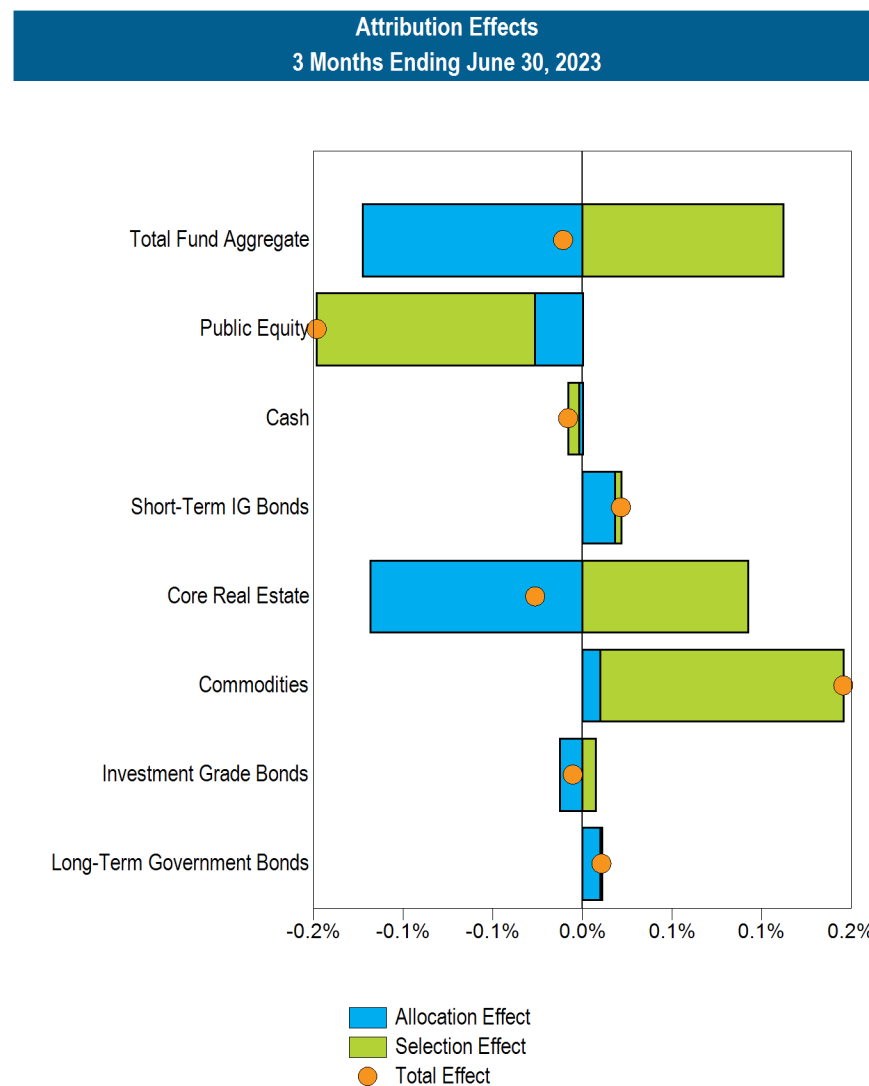
Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	Inception (%)	Inception Date
Northern Trust Core Bonds	50,521,048	13.4	-0.8	2.1	-0.9	--	--	-5.3	Jun-21
<i>Bloomberg US Aggregate TR</i>			-0.8	2.1	-0.9	--	--	-5.2	Jun-21
<b>Long-Term Government Bonds</b>	<b>17,521,313</b>	<b>4.7</b>	<b>-2.3</b>	<b>4.2</b>	<b>-6.8</b>	--	--	<b>-10.7</b>	<b>Jun-21</b>
<i>Bloomberg US Treasury Long TR</i>			-2.3	3.7	-6.8	--	--	-10.9	Jun-21
BlackRock Long Treasury	17,521,313	4.7	-2.3	4.2	-6.8	--	--	-12.8	Jun-21
<i>Bloomberg US Treasury Long TR</i>			-2.3	3.7	-6.8	--	--	-12.8	Jun-21



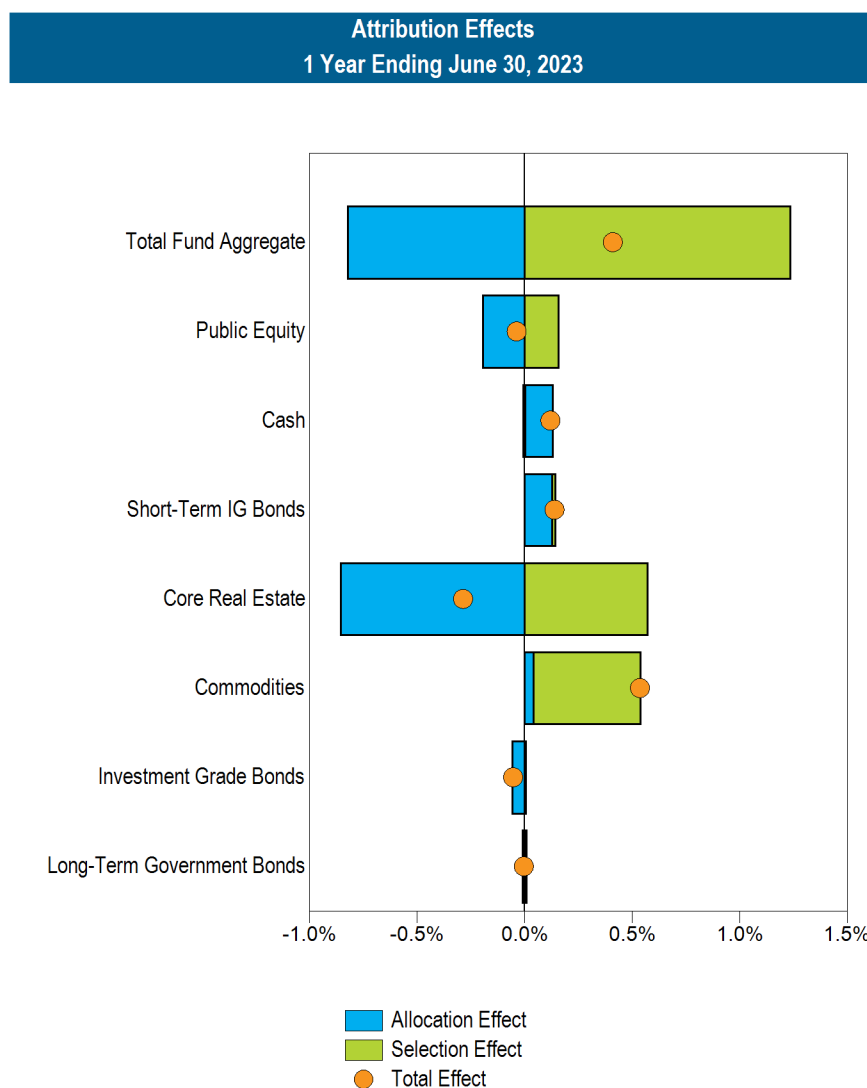
Cash Flow Summary						
QTD Ending June 30, 2023						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Artisan Global Value	\$20,849,856	\$0	-\$3,000,000	-\$3,000,000	\$1,077,494	\$18,927,350
Artisan Global Opportunities	\$16,554,432	\$0	\$0	\$0	\$965,340	\$17,519,772
Northern Trust Russell 3000	\$89,112,017	\$0	-\$5,570	-\$5,570	\$7,469,769	\$96,576,217
Northern Trust EAFE Index	\$49,777,218	\$0	-\$3,733	-\$3,733	\$1,395,232	\$51,168,716
Northern Trust MSCI EM	\$40,212,486	\$0	-\$9,550	-\$9,550	\$202,007	\$40,404,943
Internal Cash Account	\$1,951,202	\$8,006,136	-\$6,840,849	\$1,165,287	\$11,746	\$3,128,235
BlackRock 3-Month T-Bill	\$13,029,354	\$0	\$0	\$0	\$164,689	\$13,194,043
BlackRock Core Property Fund	\$10,069,979	\$0	-\$96,688	-\$96,688	-\$401,210	\$9,572,082
Clarion Lion Properties Fund	\$15,252,373	\$0	-\$91,892	-\$91,892	-\$805,033	\$14,355,448
Clarion Lion Industrial Trust	\$4,850,739	\$0	-\$15,864	-\$15,864	-\$42,822	\$4,792,053
TA Realty Core Property Fund	\$21,467,687	\$0	-\$213,211	-\$213,211	-\$146,552	\$21,107,924
BlackRock Commodities Index	\$17,501,021	\$0	-\$1,021	-\$1,021	\$33,532	\$17,533,532
Northern Trust Core Bonds	\$52,941,712	\$0	-\$2,000,000	-\$2,000,000	-\$420,664	\$50,521,048
BlackRock Long Treasury	\$17,932,062	\$0	\$0	\$0	-\$410,750	\$17,521,313
<b>Total</b>	<b>\$371,502,141</b>	<b>\$8,006,136</b>	<b>-\$12,278,378</b>	<b>-\$4,272,242</b>	<b>\$9,092,776</b>	<b>\$376,322,675</b>

Attribution Summary						
3 Months Ending June 30, 2023						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	5.2%	5.4%	-0.2%	-0.1%	0.0%	-0.1%
Cash	0.3%	1.2%	-0.9%	0.0%	0.0%	0.0%
Short-Term IG Bonds	1.3%	1.2%	0.1%	0.0%	0.0%	0.0%
Core Real Estate	-2.7%	-3.4%	0.7%	0.1%	-0.1%	0.0%
Commodities	0.2%	-2.6%	2.8%	0.1%	0.0%	0.1%
Investment Grade Bonds	-0.8%	-0.8%	0.0%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-2.3%	-2.3%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>2.5%</b>	<b>2.5%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>-0.1%</b>	<b>0.0%</b>



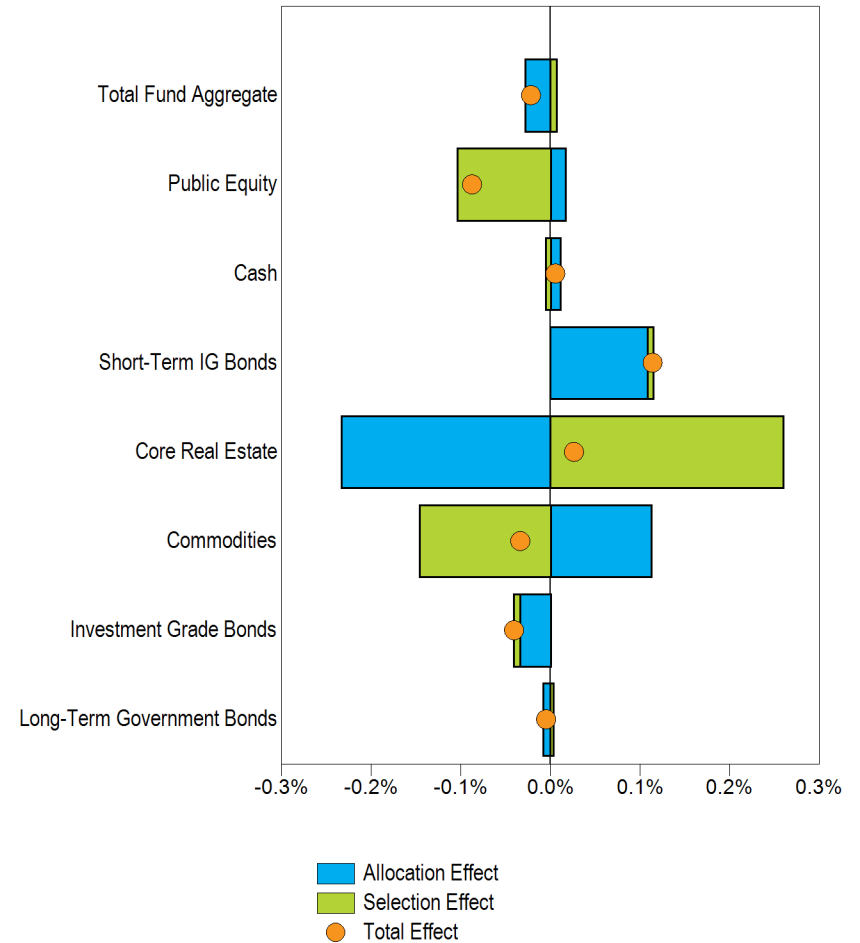
Difference in attribution returns and returns in the performance summary may occur as a result of the different calculation methodologies that are applied by InvestorForce.

Attribution Summary						
1 Year Ending June 30, 2023						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	15.3%	15.2%	0.1%	0.2%	-0.2%	0.0%
Cash	2.5%	3.6%	-1.1%	0.0%	0.1%	0.1%
Short-Term IG Bonds	4.0%	3.6%	0.4%	0.0%	0.1%	0.1%
Core Real Estate	0.1%	-3.9%	4.0%	0.6%	-0.9%	-0.3%
Commodities	0.2%	-9.6%	9.8%	0.5%	0.0%	0.5%
Investment Grade Bonds	-0.9%	-0.9%	0.0%	0.0%	-0.1%	-0.1%
Long-Term Government Bonds	-6.8%	-6.8%	0.1%	0.0%	0.0%	0.0%
<b>Total</b>	<b>8.2%</b>	<b>7.8%</b>	<b>0.4%</b>	<b>1.2%</b>	<b>-0.8%</b>	<b>0.4%</b>

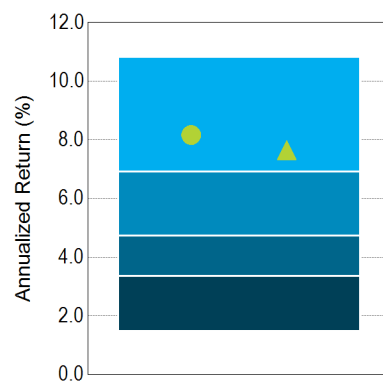


Attribution Summary						
3 Years Ending June 30, 2023						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	9.8%	10.0%	-0.2%	-0.1%	0.0%	-0.1%
Cash	0.8%	1.3%	-0.5%	0.0%	0.0%	0.0%
Short-Term IG Bonds	1.4%	1.3%	0.2%	0.0%	0.1%	0.1%
Core Real Estate	10.1%	8.1%	2.0%	0.3%	-0.2%	0.0%
Commodities	16.3%	17.8%	-1.5%	-0.1%	0.1%	0.0%
Investment Grade Bonds	-3.7%	-4.0%	0.2%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-7.6%	-12.1%	4.5%	0.0%	0.0%	0.0%
<b>Total</b>	<b>6.6%</b>	<b>6.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>

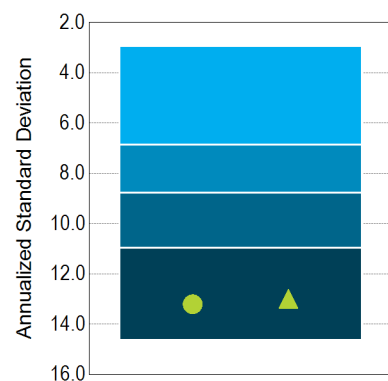
### Attribution Effects 3 Years Ending June 30, 2023



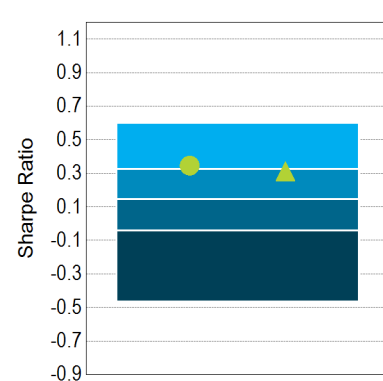
Annualized Return (%)  
vs. InvMetrics Health & Welfare Net



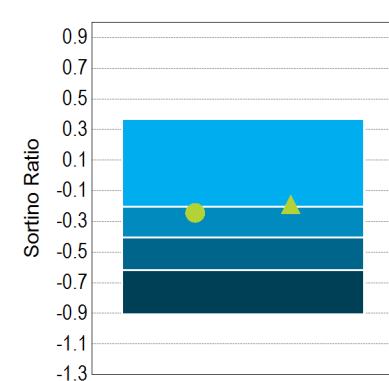
Annualized Standard Deviation  
vs. InvMetrics Health & Welfare Net



Sharpe Ratio  
vs. InvMetrics Health & Welfare Net



Sortino Ratio  
vs. InvMetrics Health & Welfare Net



● Total Fund Aggregate

Value	8.2
Rank	19
▲ Policy Benchmark	
Value	7.6
Rank	21

Universe

5th %tile	10.8
25th %tile	6.9
Median	4.8
75th %tile	3.4
95th %tile	1.5

● Total Fund Aggregate

Value	13.2
Rank	89
▲ Policy Benchmark	
Value	13.0
Rank	88

Universe

5th %tile	2.9
25th %tile	6.8
Median	8.7
75th %tile	10.9
95th %tile	14.6

● Total Fund Aggregate

Value	0.3
Rank	24
▲ Policy Benchmark	
Value	0.3
Rank	29

Universe

5th %tile	0.6
25th %tile	0.3
Median	0.1
75th %tile	0.0
95th %tile	-0.5

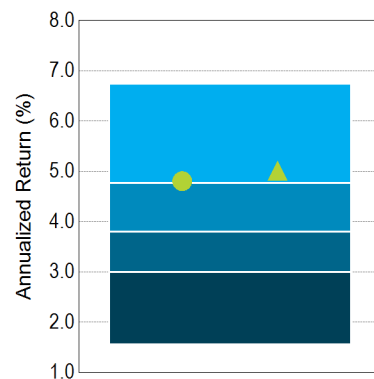
● Total Fund Aggregate

Value	-0.2
Rank	30
▲ Policy Benchmark	
Value	-0.2
Rank	24

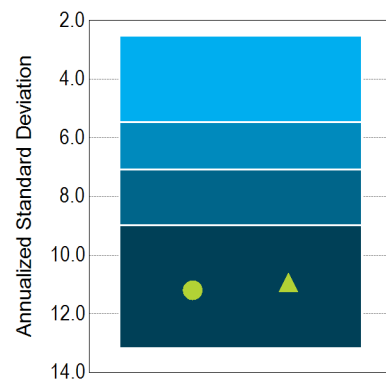
Universe

5th %tile	0.4
25th %tile	-0.2
Median	-0.4
75th %tile	-0.6
95th %tile	-0.9

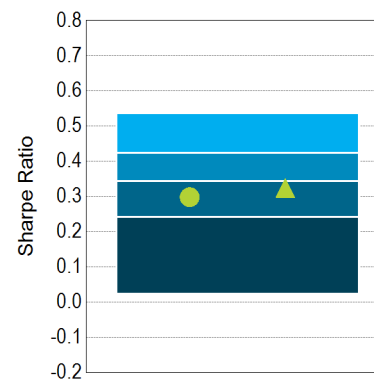
Annualized Return (%)  
vs. InvMetrics Health & Welfare Net



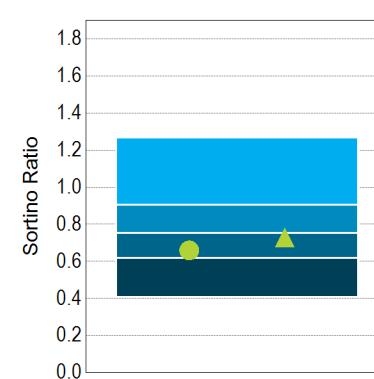
Annualized Standard Deviation  
vs. InvMetrics Health & Welfare Net



Sharpe Ratio  
vs. InvMetrics Health & Welfare Net



Sortino Ratio  
vs. InvMetrics Health & Welfare Net



● Total Fund Aggregate

Value	4.8
Rank	25
▲ Policy Benchmark	
Value	5.0
Rank	22

Universe	
5th %tile	6.7
25th %tile	4.8
Median	3.8
75th %tile	3.0
95th %tile	1.6

● Total Fund Aggregate

Value	11.2
Rank	86
▲ Policy Benchmark	
Value	10.9
Rank	85

Universe	
5th %tile	2.5
25th %tile	5.4
Median	7.1
75th %tile	8.9
95th %tile	13.2

● Total Fund Aggregate

Value	0.3
Rank	64
▲ Policy Benchmark	
Value	0.3
Rank	56

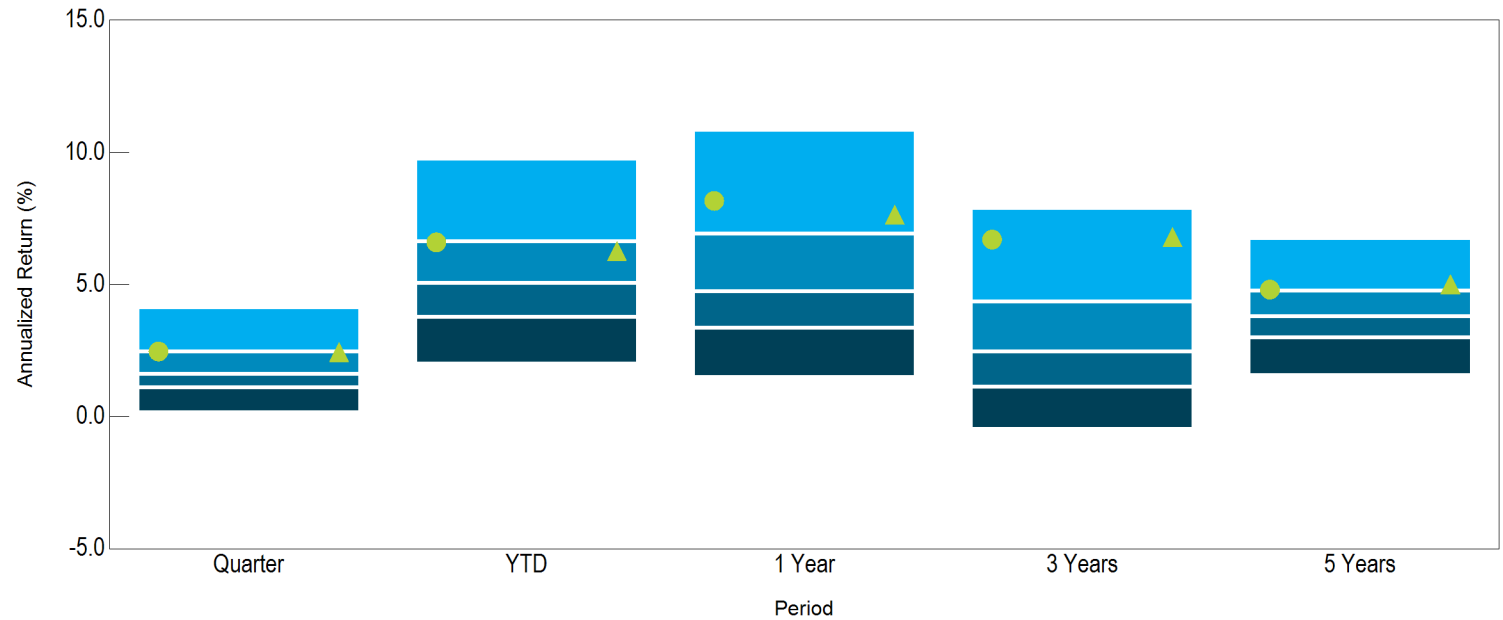
Universe	
5th %tile	0.5
25th %tile	0.4
Median	0.3
75th %tile	0.2
95th %tile	0.0

● Total Fund Aggregate

Value	0.7
Rank	68
▲ Policy Benchmark	
Value	0.7
Rank	57

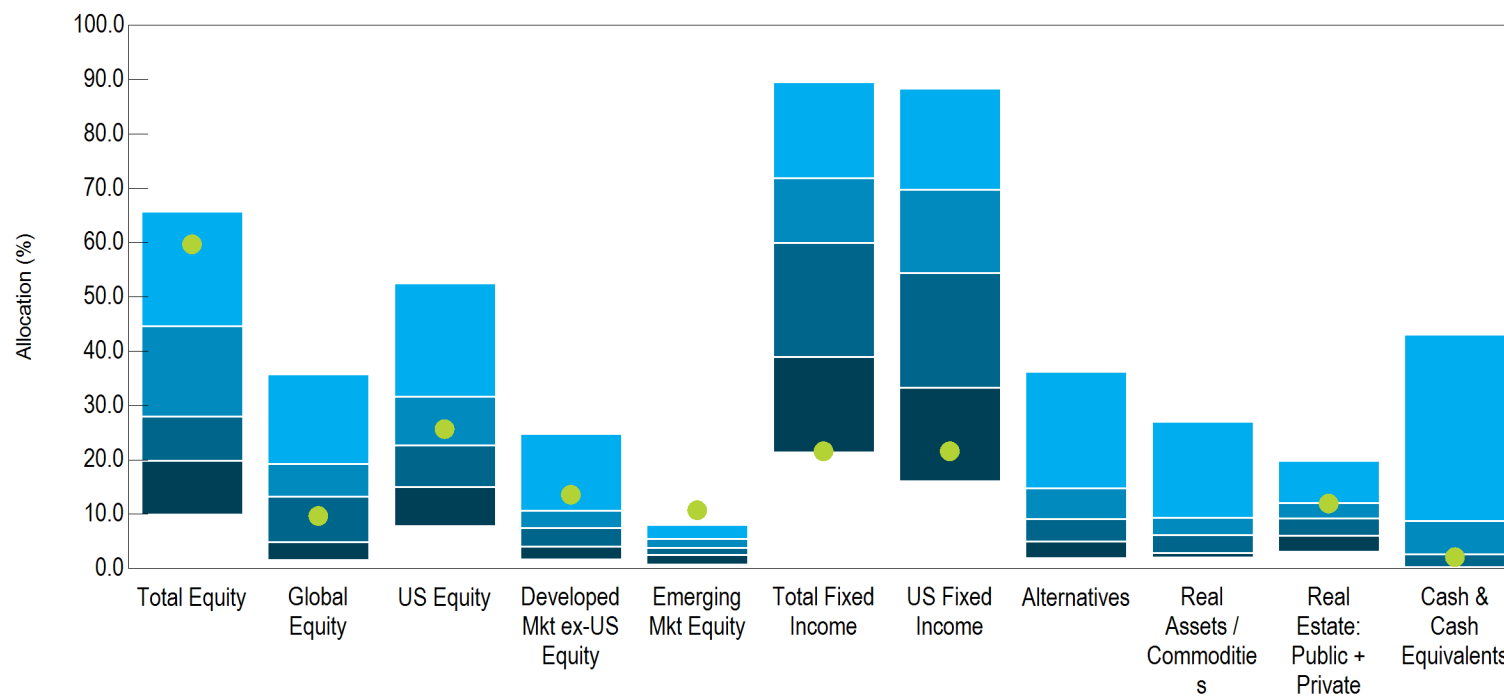
Universe	
5th %tile	1.3
25th %tile	0.9
Median	0.8
75th %tile	0.6
95th %tile	0.4

#### InvMetrics Health & Welfare Net Return Comparison Ending June 30, 2023



	Return (Rank)									
5th Percentile	4.1		9.7		10.8		7.9		6.7	
25th Percentile	2.5		6.6		6.9		4.4		4.8	
Median	1.6		5.1		4.8		2.5		3.8	
75th Percentile	1.1		3.8		3.4		1.1		3.0	
95th Percentile	0.2		2.0		1.5		-0.5		1.6	
# of Portfolios	352		351		348		336		325	
● Total Fund Aggregate	2.5	(26)	6.6	(26)	8.2	(19)	6.7	(11)	4.8	(25)
▲ Policy Benchmark	2.4	(26)	6.3	(30)	7.6	(21)	6.8	(10)	5.0	(22)

Total Plan Allocation vs. InvMetrics Health & Welfare Net  
As of June 30, 2023



	Allocation											
5th Percentile	65.8	35.8	52.5	24.8	8.1	89.5	88.3	36.2	27.0	19.9	43.1	--
25th Percentile	44.7	19.4	31.7	10.8	5.6	72.0	69.9	14.9	9.5	12.1	8.9	--
Median	28.0	13.3	22.8	7.6	3.9	60.1	54.5	9.2	6.3	9.3	2.8	--
75th Percentile	20.0	5.0	15.2	4.1	2.6	39.0	33.4	5.1	3.0	6.2	0.4	--
95th Percentile	10.1	1.6	7.9	1.7	0.8	21.4	16.2	2.0	2.1	3.3	0.0	--
# of Portfolios	282	29	246	16	25	316	290	76	45	95	250	--
● Total Fund Aggregate Rank	59.7	9.7	25.7	13.6	10.7	21.6	21.6	--	--	12.0	2.1	--
	11	62	42	17	1	95	91			27	56	

Alternatives group includes Real Assets.



### Benchmark History

#### Total Fund Aggregate

5/1/2022	Present	30% Russell 3000 / 16% MSCI EAFE / 12% MSCI Emerging Markets / 6% ICE BofA 91 Days T-Bills TR / 14% Bloomberg US Aggregate TR / 5% Bloomberg US Treasury Long TR / 12% Core Real Estate Benchmark / 5% Bloomberg Commodity Index TR USD
5/1/2021	4/30/2022	30% Russell 3000 / 14% MSCI EAFE / 15% MSCI Emerging Markets / 21% 91 Day T-Bills / 2.5% Bloomberg US Aggregate TR / 2.5% Bloomberg US Treasury Long TR / 10% Core Real Estate Benchmark / 5% Bloomberg Commodity Index TR USD
10/1/2018	4/30/2021	28% Russell 3000 / 13% MSCI EAFE / 15% MSCI Emerging Markets / 29% ICE BofA 91 Days T-Bills TR / 10% NCREIF ODCE Equal Weighted / 5% Bloomberg Commodity Index TR USD
5/1/2018	9/30/2018	55% MSCI ACWI IMI Net USD / 28% Bloomberg Global Aggregate TR / 5% Bloomberg Commodity Index TR USD / 4% S&P Global Natural Resources Index TR USD / 8% NCREIF ODCE Equal Weighted (Net)
7/1/2011	4/30/2018	46.7% MSCI ACWI IMI Net USD / 30.3% Bloomberg Global Aggregate TR / 6% Bloomberg Commodity Index TR USD / 5% S&P Global Natural Resources Index TR USD / 7% NCREIF ODCE Equal Weighted (Net) / 5% DJ Brookfield Global Infrastructure Net TR USD

#### Growth

5/1/2022	Present	51.7% Russell 3000 / 27.61% MSCI EAFE / 20.7% MSCI Emerging Markets
10/1/2018	4/30/2022	50% Russell 3000 / 23.21% MSCI EAFE / 26.79% MSCI Emerging Markets
12/1/2011	9/30/2018	MSCI ACWI IMI Net USD

#### Public Equity

5/1/2022	Present	51.7% Russell 3000 / 27.61% MSCI EAFE / 20.7% MSCI Emerging Markets
10/1/2018	4/30/2022	50% Russell 3000 / 23.21% MSCI EAFE / 26.79% MSCI Emerging Markets
12/1/2011	9/30/2018	MSCI ACWI IMI Net USD

#### Global Equity

7/1/2015	Present	MSCI ACWI IMI Net USD
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#### U.S. Equity

7/1/2015	Present	Russell 3000
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#### International Equity

7/1/2015	Present	MSCI EAFE
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#### Emerging Markets Equity

7/1/2015	Present	MSCI Emerging Markets
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#### Low Beta

7/1/2011	Present	ICE BofA 91 Days T-Bills TR
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Cash		
7/1/2011	Present	ICE BofA 91 Days T-Bills TR
Short-Term IG Bonds		
10/1/2018	Present	ICE BofA 91 Days T-Bills TR
Other		
5/1/2021	Present	12.5% Bloomberg US Aggregate TR / 12.5% Bloomberg US Treasury Long TR / 50% Core Real Estate Benchmark / 25% Bloomberg Commodity Index TR USD
10/1/2018	4/30/2021	66.67% NCREIF-ODCE / 33.33% Bloomberg Commodity Index TR USD
5/1/2018	9/30/2018	62.22% Bloomberg Global Aggregate TR / 17.78% NCREIF Property Index / 11.11% Bloomberg Commodity Index TR USD / 88.9% S&P Global Natural Resources Index TR USD
7/1/2015	4/30/2018	56.85% Bloomberg Global Aggregate TR / 13.13% NCREIF Property Index / 11.26% Bloomberg Commodity Index TR USD / 93.8% S&P Global Natural Resources Index TR USD / 93.8% DJ Brookfield Global Infrastructure Net TR USD
Core Real Estate		
7/1/2015	Present	Core Real Estate Benchmark
Commodities		
1/1/2015	Present	Bloomberg Commodity Index TR USD
Natural Resources		
6/1/2015	Present	S&P Global Natural Resources Index TR USD
Infrastructure		
6/1/2015	Present	DJ Brookfield Global Infrastructure Net TR USD
Investment Grade Bonds		
6/1/2021	Present	Bloomberg US Aggregate TR
TIPS		
3/1/2017	Present	100% Bloomberg US Treasury TIPS 0-5 Yr TR
Long-Term Government Bonds		
6/1/2021	Present	Bloomberg US Treasury Long TR

## **Glossary and Notes**

**Credit Risk:** Refers to the risk that the issuer of a fixed income security may default (i.e., the issuer will be unable to make timely principal and/or interest payments on the security.)

**Duration:** Measure of the sensitivity of the price of a bond to a change in its yield to maturity. Duration summarizes, in a single number, the characteristics that cause bond prices to change in response to a change in interest rates. For example, the price of a bond with a duration of three years will rise by approximately 3% for each 1% decrease in its yield to maturity. Conversely, the price will decrease 3% for each 1% increase in the bond's yield. Price changes for two different bonds can be compared using duration. A bond with a duration of six years will exhibit twice the percentage price change of a bond with a three-year duration. The actual calculation of a bond's duration is somewhat complicated, but the idea behind the calculation is straightforward. The first step is to measure the time interval until receipt for each cash flow (coupon and principal payments) from a bond. The second step is to compute a weighted average of these time intervals. Each time interval is measured by the present value of that cash flow. This weighted average is the duration of the bond measured in years.

**Information Ratio:** This statistic is a measure of the consistency of a portfolio's performance relative to a benchmark. It is calculated by subtracting the benchmark return from the portfolio return (excess return), and dividing the resulting excess return by the standard deviation (volatility) of this excess return. A positive information ratio indicates outperformance versus the benchmark, and the higher the information ratio, the more consistent the outperformance.

**Jensen's Alpha:** A measure of the average return of a portfolio or investment in excess of what is predicted by its beta or "market" risk.  $\text{Portfolio Return} - [\text{Risk Free Rate} + \text{Beta} \times (\text{market return} - \text{Risk Free Rate})]$ .

**Market Capitalization:** For a firm, market capitalization is the total market value of outstanding common stock. For a portfolio, market capitalization is the sum of the capitalization of each company weighted by the ratio of holdings in that company to total portfolio holdings; thus it is a weighted-average capitalization. Meketa Investment Group considers the largest 65% of the broad domestic equity market as large capitalization, the next 25% of the market as medium capitalization, and the smallest 10% of stocks as small capitalization.

**Market Weighted:** Stocks in many indices are weighted based on the total market capitalization of the issue. Thus, the individual returns of higher market-capitalization issues will more heavily influence an index's return than the returns of the smaller market-capitalization issues in the index.

**Maturity:** The date on which a loan, bond, mortgage, or other debt/security becomes due and is to be paid off.

**Prepayment Risk:** The risk that prepayments will increase (homeowners will prepay all or part of their mortgage) when mortgage interest rates decline; hence, investors' monies will be returned to them in a lower interest rate environment. Also, the risk that prepayments will slow down when mortgage interest rates rise; hence, investors will not have as much money as previously anticipated in a higher interest rate environment. A prepayment is any payment in excess of the scheduled mortgage payment.

**Price-Book Value (P/B) Ratio:** The current market price of a stock divided by its book value per share. Meketa Investment Group calculates P/B as the current price divided by Compustat's quarterly common equity. Common equity includes common stock, capital surplus, retained earnings, and treasury stock adjusted for both common and nonredeemable preferred stock. Similar to high P/E stocks, stocks with high P/B's tend to be riskier investments.

**Price-Earnings (P/E) Ratio:** A stock's market price divided by its current or estimated future earnings. Lower P/E ratios often characterize stocks in low growth or mature industries, stocks in groups that have fallen out of favor, or stocks of established blue chip companies with long records of stable earnings and regular dividends. Sometimes a company that has good fundamentals may be viewed unfavorably by the market if it is an industry that is temporarily out of favor. Or a business may have experienced financial problems causing investors to be skeptical about its future. Either of these situations would result in lower relative P/E ratios. Some stocks exhibit above-average sales and earnings growth or expectations for above average growth. Consequently, investors are willing to pay more for these companies' earnings, which results in elevated P/E ratios. In other words, investors will pay more for shares of companies whose profits, in their opinion, are expected to increase faster than average. Because future events are in no way assured, high P/E stocks tend to be riskier and more volatile investments. Meketa Investment Group calculates P/E as the current price divided by the I/B/E/S consensus of twelve-month forecast earnings per share.

**Quality Rating:** The rank assigned a security by such rating services as Fitch, Moody's, and Standard & Poor's. The rating may be determined by such factors as (1) the likelihood of fulfillment of dividend, income, and principal payment of obligations; (2) the nature and provisions of the issue; and (3) the security's relative position in the event of liquidation of the company. Bonds assigned the top four grades (AAA, AA, A, BBB) are considered investment grade because they are eligible bank investments as determined by the controller of the currency.

**Sharpe Ratio:** A commonly used measure of risk-adjusted return. It is calculated by subtracting the risk free return (usually three-month Treasury bill) from the portfolio return and dividing the resulting excess return by the portfolio's total risk level (standard deviation). The result is a measure of return per unit of total risk taken. The higher the Sharpe ratio, the better the fund's historical risk adjusted performance.

**STIF Account:** Short-term investment fund at a custodian bank that invests in cash-equivalent instruments. It is generally used to safely invest the excess cash held by portfolio managers.

**Standard Deviation:** A measure of the total risk of an asset or a portfolio. Standard deviation measures the dispersion of a set of numbers around a central point (e.g., the average return). If the standard deviation is small, the distribution is concentrated within a narrow range of values. For a normal distribution, about two thirds of the observations will fall within one standard deviation of the mean, and 95% of the observations will fall within two standard deviations of the mean.

**Style:** The description of the type of approach and strategy utilized by an investment manager to manage funds. For example, the style for equities is determined by portfolio characteristics such as price-to-book value, price-to-earnings ratio, and dividend yield. Equity styles include growth, value, and core.

**Tracking Error:** A divergence between the price behavior of a position or a portfolio and the price behavior of a benchmark, as defined by the difference in standard deviation.

**Yield to Maturity:** The yield, or return, provided by a bond to its maturity date; determined by a mathematical process, usually requiring the use of a “basis book.” For example, a 5% bond pays \$5 a year interest on each \$100 par value. To figure its current yield, divide \$5 by \$95—the market price of the bond—and you get 5.26%. Assume that the same bond is due to mature in five years. On the maturity date, the issuer is pledged to pay \$100 for the bond that can be bought now for \$95. In other words, the bond is selling at a discount of 5% below par value. To figure yield to maturity, a simple and approximate method is to divide 5% by the five years to maturity, which equals 1% pro rata yearly. Add that 1% to the 5.26% current yield, and the yield to maturity is roughly 6.26%.

$$\frac{5\% \text{ (discount)}}{5 \text{ (yrs. to maturity)}} = 1\% \text{ pro rata, plus } 5.26\% \text{ (current yield)} = 6.26\% \text{ (yield to maturity)}$$

**Yield to Worst:** The lowest potential yield that can be received on a bond without the issuer actually defaulting. The yield to worst is calculated by making worst-case scenario assumptions on the issue by calculating the returns that would be received if provisions, including prepayment, call, or sinking fund, are used by the issuer.

**NCREIF Property Index (NPI):** Measures unleveraged investment performance of a very large pool of individual commercial real estate properties acquired in the private market by tax-exempt institutional investors for investment purposes only. The NPI index is capitalization-weighted for a quarterly time series composite total rate of return.

**NCREIF Fund Index - Open End Diversified Core Equity (NFI-ODCE):** Measures the investment performance of 28 open-end commingled funds pursuing a core investment strategy that reflects funds' leverage and cash positions. The NFI-ODCE index is equal-weighted and is reported gross and net of fees for a quarterly time series composite total rate of return.

Sources: Investment Terminology, International Foundation of Employee Benefit Plans, 1999.

The Handbook of Fixed Income Securities, Fabozzi, Frank J., 1991

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Throughout this report, numbers may not sum due to rounding.

Returns for periods greater than one year are annualized throughout this report.

Values shown are in millions of dollars, unless noted otherwise.