

# San Jose Federated City Employees' Retirement System

As of June 30, 2023

Quarterly Review

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## **Economic and Market Update**

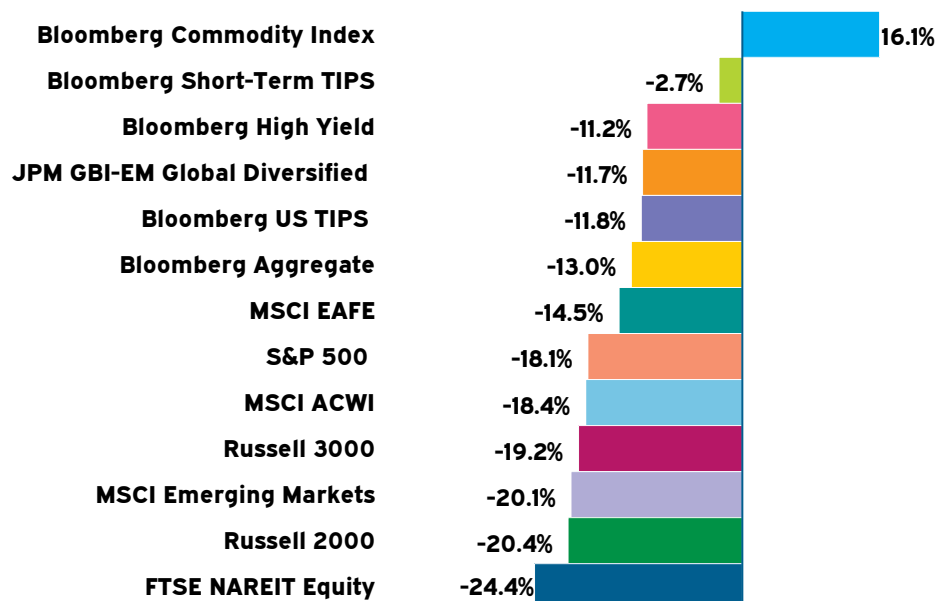
Data as of July 31, 2023

### Commentary

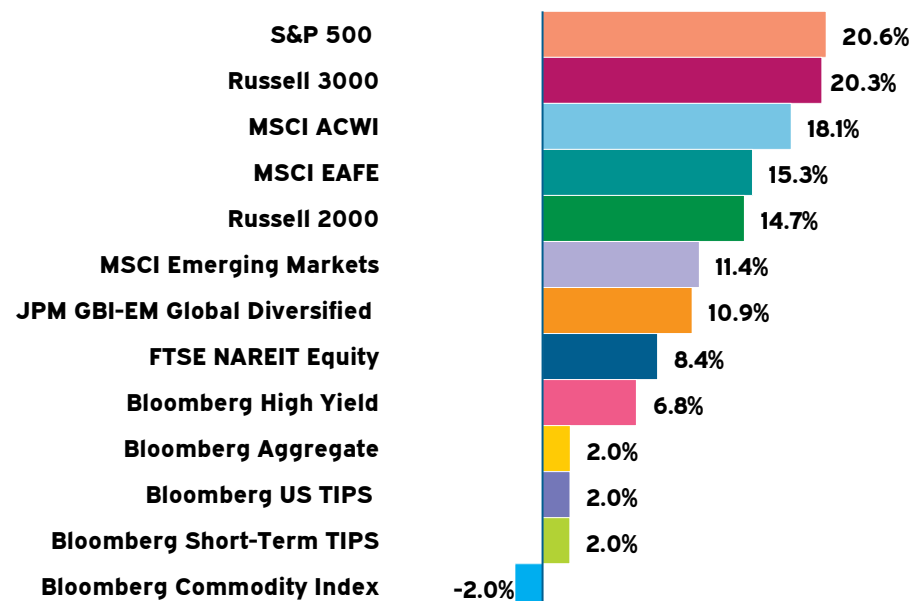
- Riskier assets continued to gain in July as economic data remained resilient while inflation receded. Except for commodities, most public market asset classes remained positive for the year, with US equities leading the way.
- After a pause in June, the Federal Reserve increased interest rates in July 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

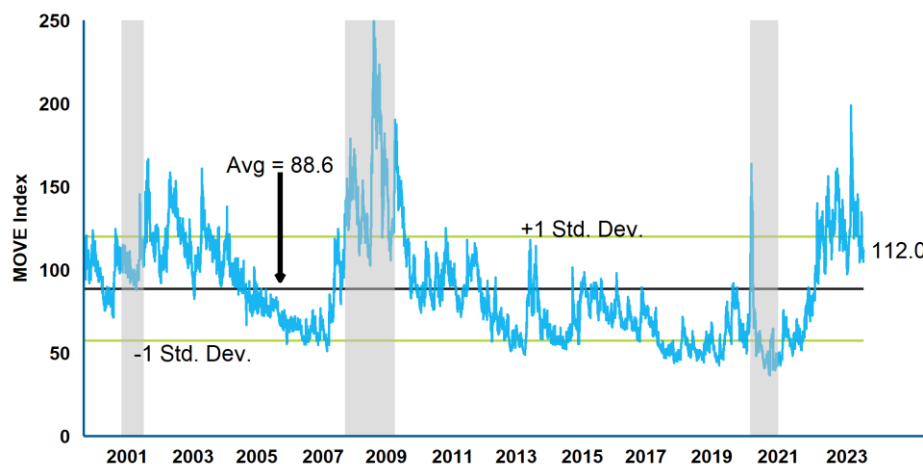
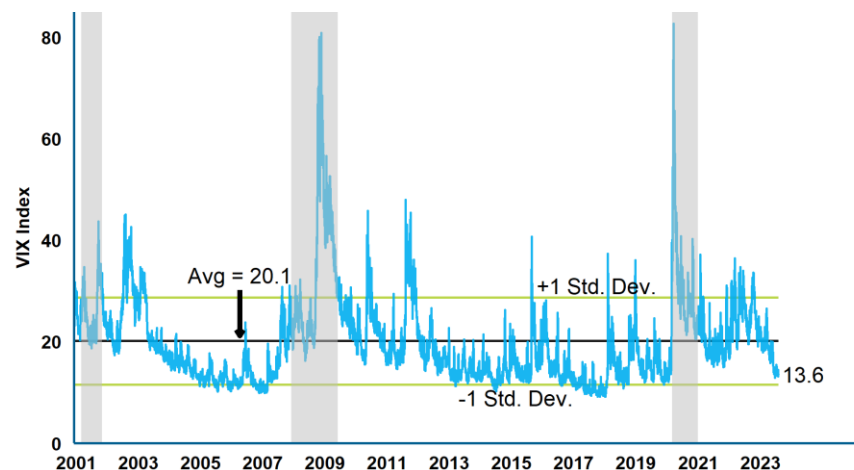
**Fixed Income: The Bloomberg Universal rose 0.1% in July remaining positive YTD (+2.4%), as inflation continues to decline, and yields remain high.**

- 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.



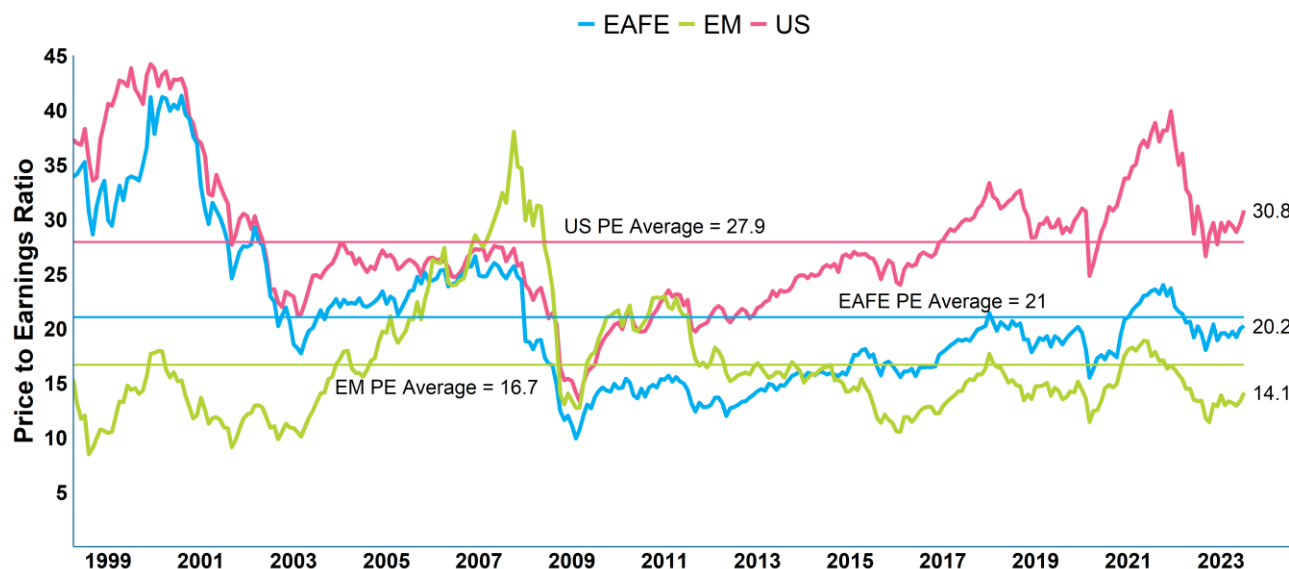
### Equity and Fixed Income Volatility<sup>1</sup>



- 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.

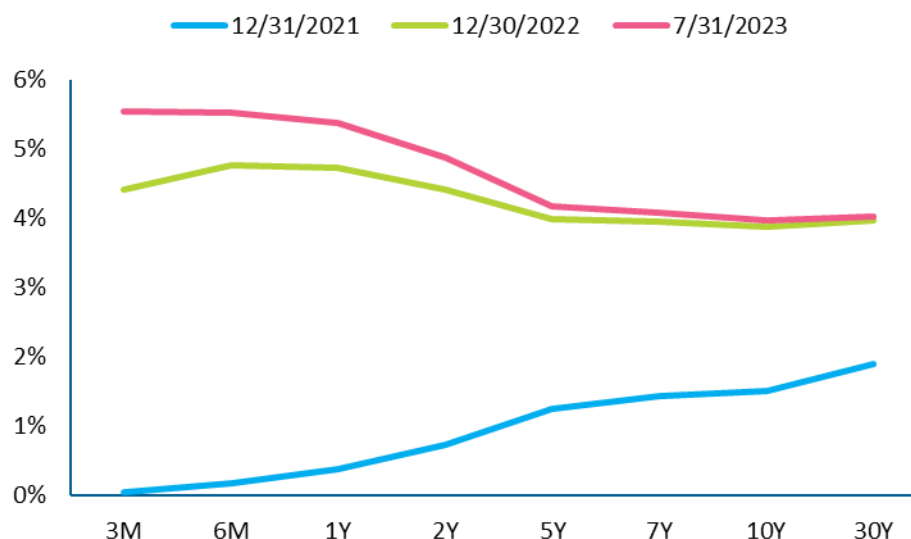
### Equity Cyclically Adjusted P/E Ratios<sup>1</sup>



- 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.

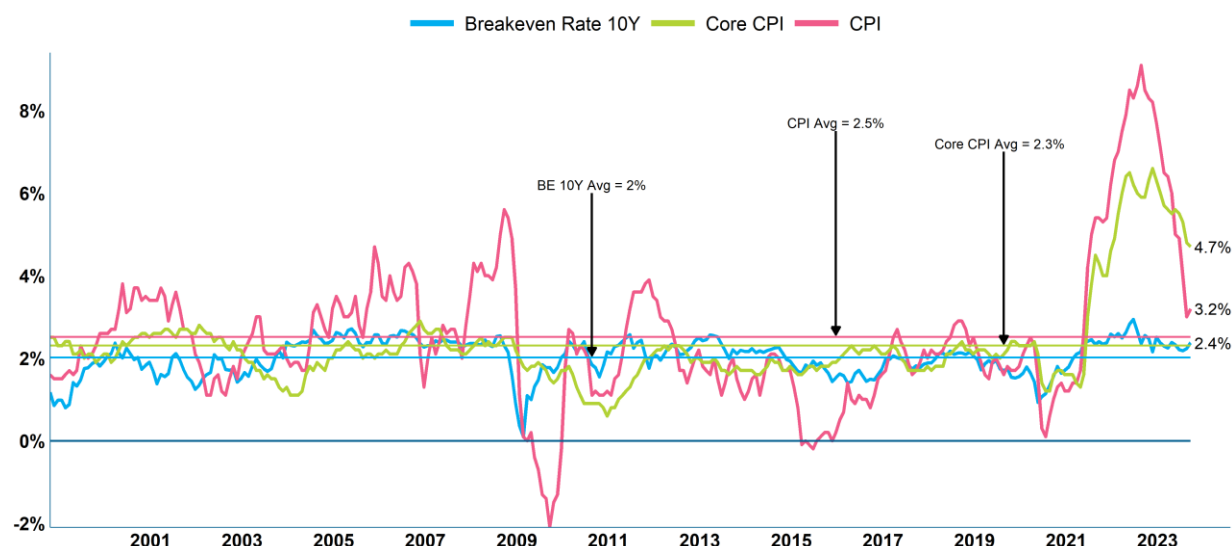
### US Yield Curve<sup>1</sup>



- 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.

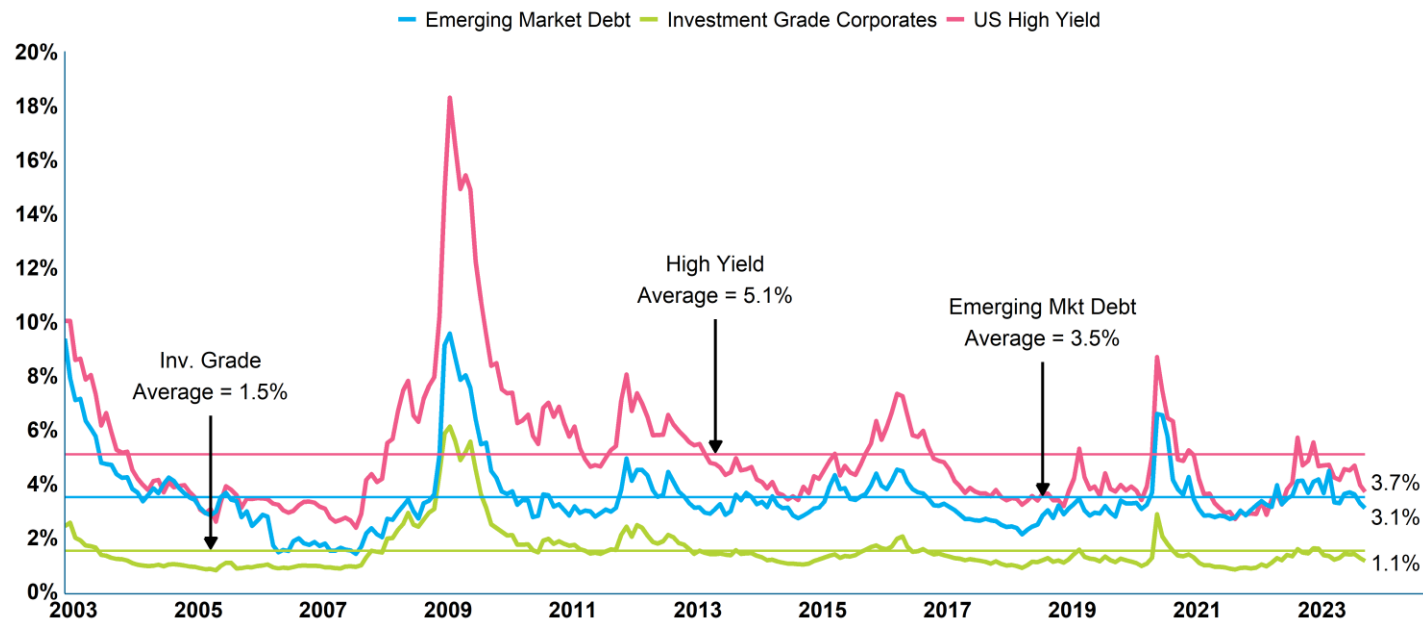
## Ten-Year Breakeven Inflation and CPI<sup>1</sup>



- 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.

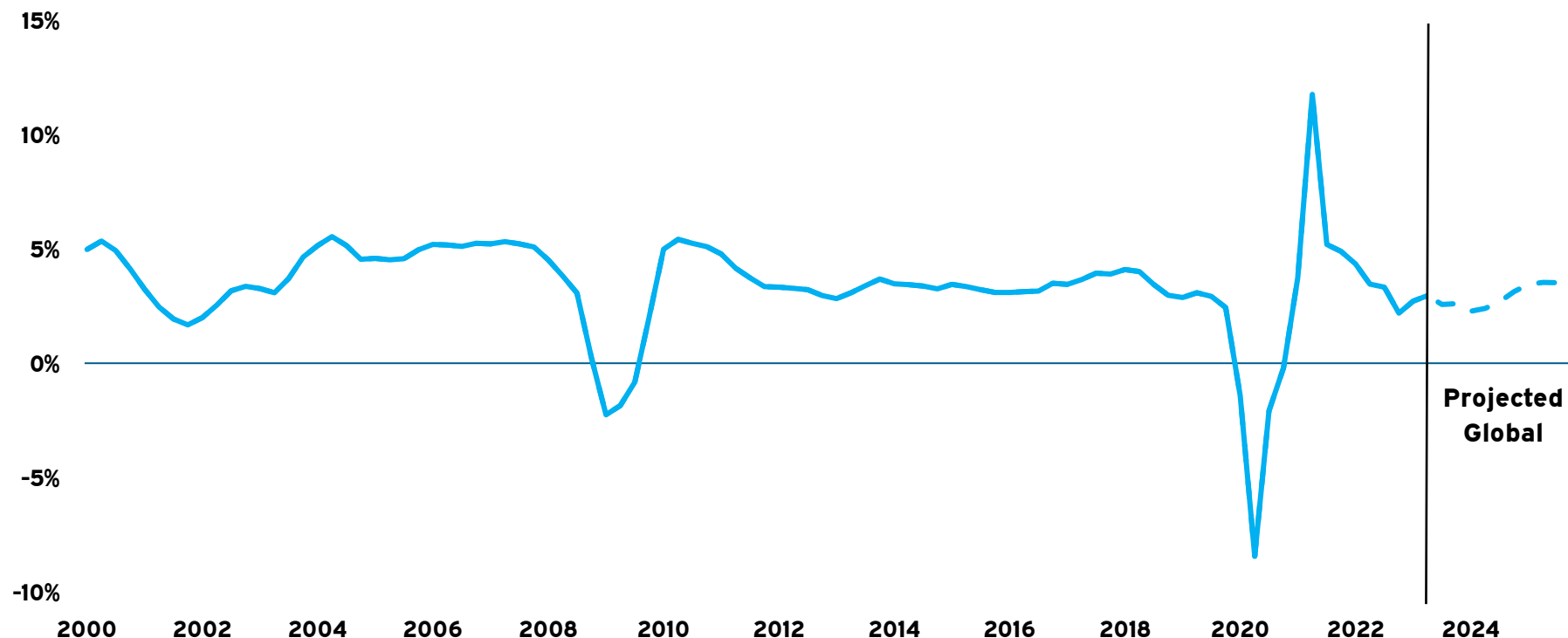
## Credit Spreads vs. US Treasury Bonds<sup>1</sup>



- 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>

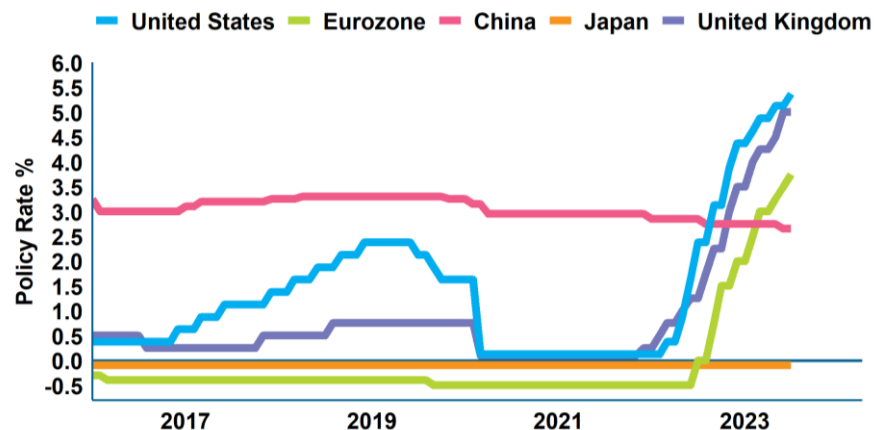


- Global economies are expected to slow this year compared to 2022. The risk of recession remains given policymakers' aggressive tightening, but optimism has started to grow over some central banks potentially navigating a soft landing.
- The delicate balancing act of central banks trying to reduce inflation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

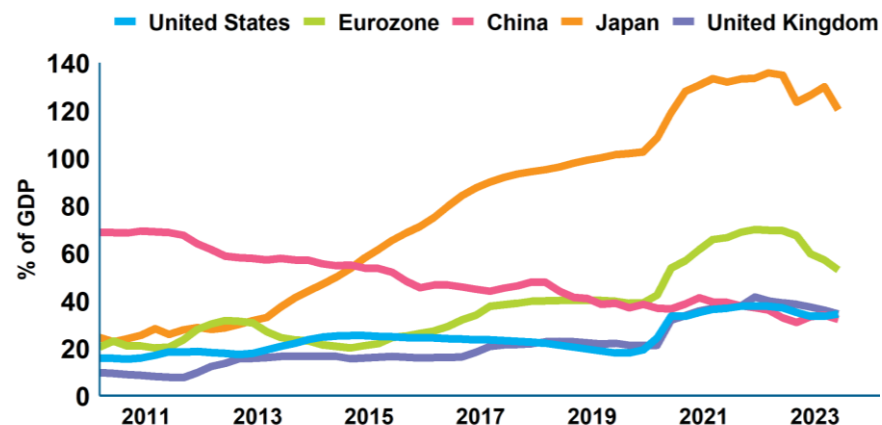
<sup>1</sup> Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated July 2023.

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

Policy Rates



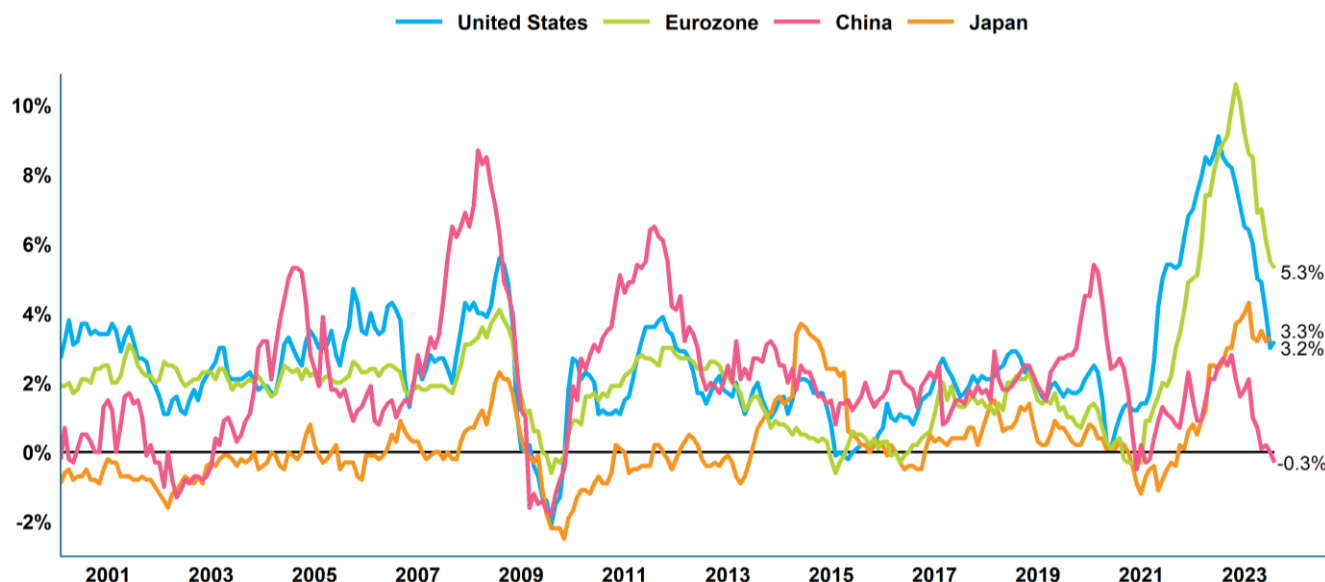
Balance Sheet as % of GDP



- 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>

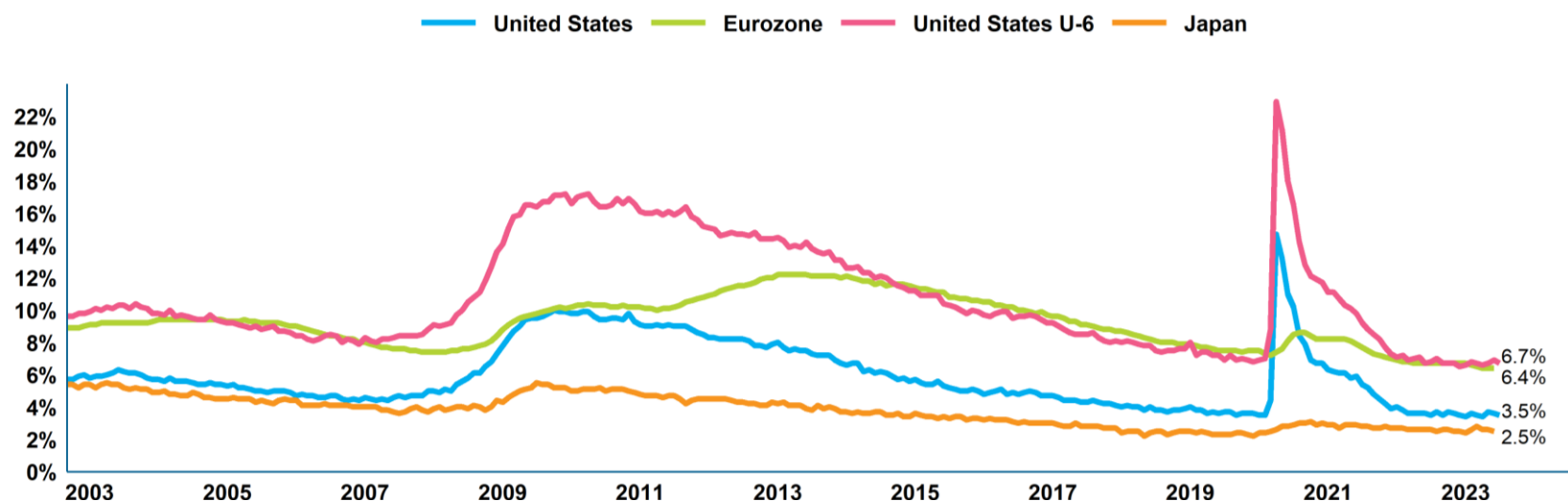


- The inflation picture remains mixed across the major economies.
- In the US, inflation rose slightly in July (3.0% to 3.2%), while eurozone inflation continued to fall (5.5% to 5.3%) a level well off its peak. Despite 2023's significant declines in the US and Europe, inflation levels remain elevated 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 City Employees' Retirement System assets on June 30, 2023 was \$2.9 billion, up from \$2.8 billion at the end of the prior quarter. The System had net cash outflows of \$52 million and \$89 million of investment gains during the quarter.

- The System's net of fees performance for the quarter was +3.2%, outperforming the Policy Benchmark (+3.0%) and the Investable Benchmark Portfolio (+2.9%). Additionally, the System outperformed the peer median return of +2.6%.
- The Retirement System returned +7.5% over the trailing one-year period, compared to the Policy Benchmark (+7.8%) and the Investable Benchmark (+7.0%). The Retirement System's standard deviation of returns was 10.3% over the trailing one-year period, exhibiting lower volatility vs. the peer median (10.4%). Additionally, the System outperformed 84% of peers over the 3-year period.
  - Growth returned +4.5% for the quarter and +10.4% over the trailing one-year period, compared to the +4.4% and +10.6% returns for the Growth Benchmark over the same periods, respectively.
  - Low Beta returned +0.7% for the quarter and +1.9% over the trailing one-year period, compared to +0.3% and +1.9% returns for the Low Beta Benchmark over the same periods, respectively.
  - Other assets returned -1.8% for the quarter and -2.0% over the trailing one-year period, compared to the -1.7% and -2.0% returns for the Other Benchmark over the same periods, respectively.
- During the quarter, the Plan added three new investments: Burgundy US Small Cap (US Equity), Paine Schwartz VI (Private Real Assets), and Unifi India (Emerging Markets Equity). The Plan did not liquidate any investments.

**Artisan**

→ Artisan Global Value returned +6.6% for the quarter, outperforming the MSCI ACWI Value NR USD benchmark by 360 basis points, ranking near the top quartile of its peer group. Performance for the quarter was driven by Meta (earnings growth), Alphabet (A.I.), and Heidelberg (operational execution). Compared to peers, Artisan ranks in the 18th percentile since inception (1st is best and 100th is worst).

**GQG**

→ GQG Global Emerging Markets Equity returned +10.7% for the quarter, outperforming the MSCI Emerging Markets benchmark by 980 basis points. Outperformance for the quarter was aided by stock selection in information technology. Compared to peers, GQG ranks in the 10th percentile since inception.

**Voya**

→ Voya Securitized Credit returned +0.2% for the quarter, outperforming the Bloomberg Securitized benchmark by 80 basis points. Since inception in May of 2020, Voya has outperformed the benchmark by 300 basis points per year.

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	---	---	---
Burgundy US Small Cap	US Equity	--- <sup>2</sup>	---	---
Oberweis International Opps	International Equity	---	Hold	Watch List
Morgan Stanley Int'l Equity	International Equity	Yes	Hold	CEO departing in next year
First Eagle Int'l Equity	International Equity	---	---	---
Dimensional EM Value	Emerging Markets Equity	---	---	---
GQG Partners Global EM	Emerging Markets Equity	---	---	---
RWC Emerging Markets Equity	Emerging Markets Equity	---	---	---
Wellington EM Systematic	Emerging Markets Equity	--- <sup>2</sup>	---	---
Kotak India Midcap	Emerging Markets Equity	--- <sup>2</sup>	---	---
Unifi India		--- <sup>2</sup>	---	---
Mellon High Yield Beta	High Yield Bonds	--- <sup>2</sup>	---	---
Columbia High Yield	High Yield Bonds	Yes	---	Global Head of Risk departed
Wellington Iguazu Partners LP	Emerging Markets Debt	--- <sup>2</sup>	---	---
Payden EMD Blended Currency	Emerging Markets Debt	---	---	---
BlackRock Core Property	Core Real Estate	---	---	---
Clarion Lion Properties	Core Real Estate	---	---	---
TA Realty Core Property	Core Real Estate	---	---	---
Clarion Lion Industrial Trust	Core Real Estate	---	---	---
Voya Securitized Credit	Investment Grade Bonds	---	---	---
Invesco Core Bonds	Investment Grade Bonds	---	---	---

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

<sup>2</sup> Firm hasn't yet responded to quarterly update questionnaire or information is not yet on file.

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

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

<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.



**Artisan Global Opportunities**

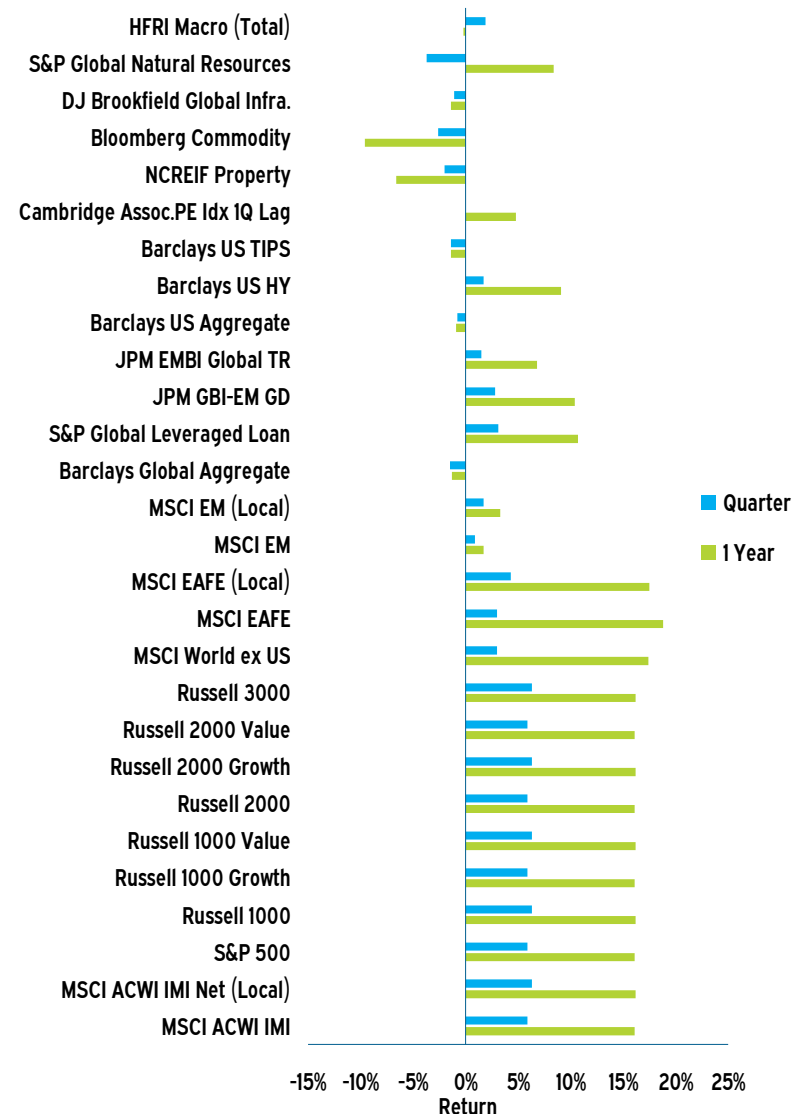
→ Over the three-year period, Artisan (+5.2%) has underperformed the MSCI ACWI Growth NR by 440 basis points. Since inception in July 2017, Artisan has underperformed the benchmark by 130 basis points per year, on average, and ranked in the 25th percentile compared to peers.

**Oberweis International Opps**

→ Over the three-year period, Oberweis (+0.6%) has underperformed the MSCI World ex USA Small Cap Growth NR by 230 basis points. Since inception in November 2015, Oberweis has outperformed the benchmark by 50 basis points per year, on average, and ranked in the 48th percentile compared to peers.

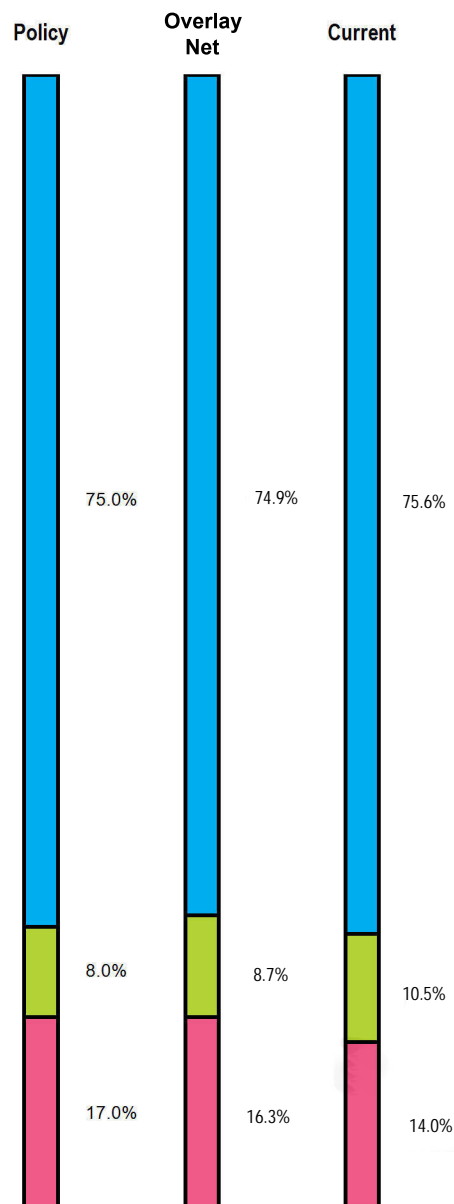
### Market Environment – 2Q23 Overview

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**

Total Fund | As of June 30, 2023



Allocation vs. Targets and Policy				
	Current Balance	Current Allocation	Russell Overlay Net Position	Policy
<b>Growth</b>	<b>\$2,166,423,270</b>	<b>75.6%</b>	<b>74.9%</b>	<b>75.0%</b>
Public Equity	\$1,339,905,114	46.7%	46.1%	49.0%
Private Markets	\$682,559,035	23.8%	23.8%	21.0%
Emerging Markets Debt	\$84,978,687	3.0%	3.0%	3.0%
High Yield Bonds	\$58,980,434	2.1%	2.1%	2.0%
<b>Low Beta</b>	<b>\$299,634,791</b>	<b>10.5%</b>	<b>8.7%</b>	<b>8.0%</b>
Market Neutral Strategies	\$86,958,412	3.0%	3.0%	3.0%
Immunized Cash Flows	\$162,315,118	5.7%	5.7%	5.0%
Cash	\$50,361,261	1.8%	0.0%	0.0%
<b>Other</b>	<b>\$400,061,640</b>	<b>14.0%</b>	<b>16.3%</b>	<b>17.0%</b>
Core Real Estate	\$162,354,456	5.7%	5.7%	5.0%
TIPS	\$57,074,041	2.0%	2.0%	2.0%
Investment Grade Bonds	\$124,134,732	4.3%	6.8%	8.0%
Long Term Govt Bonds	\$56,498,411	2.0%	1.9%	2.0%
<b>Total</b>	<b>\$2,866,119,701</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Data in the column titled "Russell Overlay Net Position" is based on physical exposures, adjusted for synthetic positions provided by Russell Investments.

All data on this page is from Russell Investments. Data on subsequent pages is from the custodian.

### Asset Class Net Performance Summary

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>2,879,458,659</b>	<b>100.0</b>	<b>3.2</b>	<b>7.1</b>	<b>7.5</b>	<b>9.9</b>	<b>7.5</b>	<b>6.3</b>	<b>6.8</b>	<b>Jan-94</b>
<i>Policy Benchmark</i>			3.0	6.9	7.8	9.4	7.1	6.5	7.0	Jan-94
<i>Investable Benchmark Portfolio</i>			2.9	6.5	7.0	9.0	6.7	5.8	--	Jan-94
<i>Low-Cost Passive Portfolio</i>			3.5	8.6	9.9	6.7	--	--	--	Jan-94
<i>60/40 MSCI ACWI IMI/BBgBarc Global Aggregate</i>			2.9	8.4	9.0	4.5	4.4	5.4	--	Jan-94
<i>Liability Benchmark Portfolio</i>			-2.3	3.7	-6.8	-12.1	--	--	--	Jan-94
<i>InvMetrics Public DB &gt; \$1B Net Median</i>			2.6	6.5	7.6	8.3	6.5	7.3	7.4	Jan-94
<i>InvMetrics Public DB &gt; \$1B Net Rank</i>			20	31	53	16	18	90	89	Jan-94
<b>Growth</b>	<b>2,174,423,342</b>	<b>75.5</b>	<b>4.5</b>	<b>9.7</b>	<b>10.4</b>	<b>12.9</b>	<b>9.0</b>	<b>--</b>	<b>8.0</b>	<b>Jul-15</b>
<i>Growth Benchmark</i>			4.4	9.3	10.6	12.5	8.8	--	8.7	Jul-15
<b>Public Equity</b>	<b>1,348,441,728</b>	<b>46.8</b>	<b>5.9</b>	<b>13.6</b>	<b>15.9</b>	<b>10.6</b>	<b>6.8</b>	<b>7.8</b>	<b>7.8</b>	<b>May-10</b>
<i>Public Equity Benchmark</i>			5.3	12.1	14.5	10.2	7.2	8.4	8.1	May-10
<b>Global Equity</b>	<b>241,289,352</b>	<b>8.4</b>	<b>6.2</b>	<b>16.4</b>	<b>19.1</b>	<b>10.9</b>	<b>8.4</b>	<b>--</b>	<b>8.9</b>	<b>Jul-15</b>
<i>MSCI ACWI IMI Index</i>			5.9	13.2	16.1	11.0	7.6	--	7.9	Jul-15
<i>eV All Global Equity Net Median</i>			4.6	11.5	15.8	10.5	7.6	8.7	7.8	Jul-15
<i>eV All Global Equity Net Rank</i>			31	18	25	47	40	--	33	Jul-15
<b>US Equity</b>	<b>548,025,309</b>	<b>19.0</b>	<b>8.5</b>	<b>16.4</b>	<b>19.5</b>	<b>14.3</b>	<b>10.5</b>	<b>--</b>	<b>10.4</b>	<b>Jul-15</b>
<i>MSCI USA IMI NR USD</i>			8.3	16.1	18.6	13.6	11.0	--	11.0	Jul-15
<i>eV All US Equity Net Median</i>			5.4	10.0	15.2	13.5	8.7	10.3	9.2	Jul-15
<i>eV All US Equity Net Rank</i>			22	23	27	41	32	--	36	Jul-15

Fiscal Year begins July 1.

Please see the Appendix for composition of the Policy Benchmark, Low-Cost Passive Portfolio, Liability Benchmark Portfolio, Growth Benchmark, and Public Equity Benchmark.

Returns for the Public Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>International Equity</b>	<b>267,579,580</b>	<b>9.3</b>	<b>2.3</b>	<b>11.1</b>	<b>16.4</b>	<b>7.4</b>	<b>3.4</b>	<b>--</b>	<b>4.5</b>	<b>Jul-15</b>
MSCI World ex USA IMI NR USD			2.7	10.5	16.3	8.9	4.2	--	4.7	Jul-15
eV ACWI ex-US All Cap Equity Net Median			2.7	11.5	15.5	7.9	4.1	5.8	5.0	Jul-15
eV ACWI ex-US All Cap Equity Net Rank			59	54	38	54	66	--	71	Jul-15
<b>Emerging Markets Equity</b>	<b>291,547,488</b>	<b>10.1</b>	<b>4.2</b>	<b>8.5</b>	<b>6.0</b>	<b>6.3</b>	<b>2.4</b>	<b>--</b>	<b>2.6</b>	<b>Jul-15</b>
MSCI Emerging Markets IMI Net			1.6	5.6	3.2	3.6	1.4	--	2.8	Jul-15
eV Emg Mkts Equity Net Median			2.2	7.3	6.1	4.2	2.2	3.7	3.6	Jul-15
eV Emg Mkts Equity Net Rank			26	37	52	37	44	--	76	Jul-15
<b>Private Markets</b>	<b>683,663,668</b>	<b>23.7</b>	<b>2.9</b>	<b>3.4</b>	<b>1.3</b>	<b>20.3</b>	<b>13.2</b>	<b>--</b>	<b>10.5</b>	<b>Jul-15</b>
Private Markets Benchmark			2.9	3.4	1.3	20.3	12.9	--	11.9	Jul-15
MSCI ACWI IMI + 100bps			6.1	13.6	17.1	12.0	8.7	--	9.0	Jul-15
<b>Private Markets ex Russell 3000</b>	<b>683,663,668</b>	<b>23.7</b>	<b>2.9</b>	<b>3.4</b>	<b>1.3</b>	<b>21.4</b>	<b>13.9</b>	<b>--</b>	<b>10.9</b>	<b>Jul-15</b>
<b>Private Equity</b>	<b>359,469,305</b>	<b>12.5</b>	<b>5.5</b>	<b>5.3</b>	<b>-0.5</b>	<b>26.3</b>	<b>19.0</b>	<b>14.8</b>	<b>10.2</b>	<b>Jan-06</b>
San Jose Custom Private Equity Benchmark			2.7	3.7	-1.6	24.9	16.1	14.7	12.5	Jan-06
<b>Venture Capital</b>	<b>15,921,121</b>	<b>0.6</b>	<b>-3.9</b>	<b>-4.0</b>	<b>-4.2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-2.7</b>	<b>Jun-21</b>
<b>Private Debt</b>	<b>121,662,805</b>	<b>4.2</b>	<b>1.1</b>	<b>2.2</b>	<b>2.2</b>	<b>17.6</b>	<b>6.8</b>	<b>4.8</b>	<b>5.3</b>	<b>Dec-10</b>
S&P Global Leveraged Loan Index +2%			3.7	7.5	12.9	8.4	5.9	5.9	6.2	Dec-10
<b>Growth Real Estate</b>	<b>118,191,791</b>	<b>4.1</b>	<b>-0.8</b>	<b>-0.5</b>	<b>4.9</b>	<b>13.2</b>	<b>12.4</b>	<b>--</b>	<b>14.8</b>	<b>Jul-15</b>
NCREIF Property Index			-2.0	-3.8	-6.6	6.8	5.9	--	6.8	Jul-15
<b>Private Real Assets</b>	<b>68,418,645</b>	<b>2.4</b>	<b>1.2</b>	<b>5.1</b>	<b>6.3</b>	<b>19.6</b>	<b>11.0</b>	<b>--</b>	<b>9.0</b>	<b>Jul-15</b>

Returns for the Fixed income, Private Debt, and Real Assets Aggregates are gross of fees through June 2015 and net of fees thereafter.

Please see the Appendix for composition of the Private Markets Benchmark.

Private Equity composite includes Russell 3000 proxy performance history prior to October 1, 2018.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Emerging Markets Debt</b>	<b>83,340,993</b>	<b>2.9</b>	<b>-2.5</b>	<b>0.9</b>	<b>-0.4</b>	<b>3.4</b>	<b>4.8</b>	<b>--</b>	<b>3.5</b>	<b>Jul-15</b>
50% JPM EMBI GD / 50% JPM GBI-EM			2.3	5.9	9.4	-2.2	0.5	--	1.5	Jul-15
eV All Emg Mkts Fixed Inc Net Median			2.3	4.5	8.6	-1.0	1.1	2.2	2.0	Jul-15
eV All Emg Mkts Fixed Inc Net Rank			99	98	99	5	2	--	7	Jul-15
<b>High Yield Bonds</b>	<b>58,976,952</b>	<b>2.0</b>	<b>1.4</b>	<b>5.4</b>	<b>9.8</b>	<b>3.6</b>	<b>2.5</b>	<b>--</b>	<b>1.3</b>	<b>Jun-14</b>
Bloomberg US Corporate High Yield TR			1.7	5.4	9.1	3.1	3.4	--	3.7	Jun-14
<b>Low Beta</b>	<b>302,738,689</b>	<b>10.5</b>	<b>0.7</b>	<b>1.6</b>	<b>1.9</b>	<b>4.4</b>	<b>4.0</b>	<b>--</b>	<b>3.1</b>	<b>Jul-15</b>
Low Beta Benchmark			0.3	1.9	1.9	0.3	1.2	--	0.8	Jul-15
<b>Immunized Cash Flows</b>	<b>162,315,118</b>	<b>5.6</b>	<b>-0.5</b>	<b>1.2</b>	<b>-0.2</b>	<b>-0.8</b>	<b>--</b>	<b>--</b>	<b>1.1</b>	<b>Oct-18</b>
Bloomberg US Govt/Credit 1-3 Yr. TR			-0.4	1.1	0.5	-0.9	--	--	1.1	Oct-18
<b>Market Neutral Strategies</b>	<b>88,501,686</b>	<b>3.1</b>	<b>3.4</b>	<b>2.4</b>	<b>6.7</b>	<b>15.1</b>	<b>10.0</b>	<b>6.5</b>	<b>6.5</b>	<b>Nov-12</b>
Market Neutral Strategies Benchmark			1.6	3.1	5.4	2.1	2.0	1.6	1.5	Nov-12
<b>Relative Value</b>	<b>88,501,686</b>	<b>3.1</b>	<b>3.4</b>	<b>2.4</b>	<b>6.7</b>	<b>15.6</b>	<b>8.9</b>	<b>--</b>	<b>6.7</b>	<b>Oct-14</b>
HFRI Relative Value (Total) Index			1.2	2.5	4.0	5.9	3.6	--	3.5	Oct-14
<b>Cash</b>	<b>51,921,885</b>	<b>1.8</b>	<b>0.7</b>	<b>1.7</b>	<b>3.0</b>	<b>1.1</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>Jan-06</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	1.6	--	--	Jan-06
<b>Other</b>	<b>394,619,156</b>	<b>13.7</b>	<b>-1.8</b>	<b>-2.0</b>	<b>-2.0</b>	<b>0.1</b>	<b>0.8</b>	<b>1.6</b>	<b>1.7</b>	<b>Jul-04</b>
Other Benchmark			-1.7	-1.0	-2.0	-0.2	-0.1	--	--	Jul-04
<b>Investment Grade Bonds</b>	<b>123,728,072</b>	<b>4.3</b>	<b>-0.4</b>	<b>2.4</b>	<b>-1.5</b>	<b>-2.7</b>	<b>--</b>	<b>--</b>	<b>-0.6</b>	<b>Dec-19</b>
Custom IG Bonds Benchmark			-0.7	1.8	-0.6	-3.1	--	--	-1.2	Dec-19

Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.  
Please see the Appendix for composition of the Low Beta Benchmark, Immunized Cash Flows Benchmark, Market Neutral Strategies Benchmark, and Other Benchmark.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>TIPS</b>	<b>57,074,041</b>	<b>2.0</b>	<b>-0.7</b>	<b>1.5</b>	<b>0.0</b>	<b>2.4</b>	<b>2.6</b>	<b>--</b>	<b>1.6</b>	<b>Jul-14</b>
<i>BBg U.S. TIPS 0-5 Years</i>			<i>-0.7</i>	<i>1.5</i>	<i>0.1</i>	<i>2.3</i>	<i>2.7</i>	<i>--</i>	<i>1.7</i>	<i>Jul-14</i>
<b>Core Private Real Estate</b>	<b>157,317,404</b>	<b>5.5</b>	<b>-3.1</b>	<b>-7.8</b>	<b>-0.2</b>	<b>10.1</b>	<b>8.3</b>	<b>9.4</b>	<b>8.6</b>	<b>Jul-15</b>
<i>Core Real Estate Benchmark</i>			<i>-3.4</i>	<i>-8.4</i>	<i>-3.9</i>	<i>8.1</i>	<i>6.2</i>	<i>--</i>	<i>7.0</i>	<i>Jul-15</i>
<b>Long-Term Government Bonds</b>	<b>56,499,639</b>	<b>2.0</b>	<b>-2.3</b>	<b>4.2</b>	<b>-6.7</b>	<b>-12.0</b>	<b>--</b>	<b>--</b>	<b>-11.3</b>	<b>May-20</b>
<i>Bloomberg US Treasury Long TR</i>			<i>-2.3</i>	<i>3.7</i>	<i>-6.8</i>	<i>-12.1</i>	<i>--</i>	<i>--</i>	<i>-12.0</i>	<i>May-20</i>
<b>Overlay</b>	<b>7,677,472</b>	<b>0.3</b>								

Core Private Real Estate values are one quarter lagged.



	Trailing Net Performance									
	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Fund Aggregate</b>	<b>2,879,458,659</b>	<b>100.0</b>	<b>3.2</b>	<b>7.1</b>	<b>7.5</b>	<b>9.9</b>	<b>7.5</b>	<b>6.3</b>	<b>6.8</b>	<b>Jan-94</b>
Policy Benchmark			3.0	6.9	7.8	9.4	7.1	6.5	7.0	Jan-94
Investable Benchmark Portfolio			2.9	6.5	7.0	9.0	6.7	5.8	--	Jan-94
Low-Cost Passive Portfolio			3.5	8.6	9.9	6.7	--	--	--	Jan-94
60/40 MSCI ACWI IMI/BBgBarc Global Aggregate			2.9	8.4	9.0	4.5	4.4	5.4	--	Jan-94
Liability Benchmark Portfolio			-2.3	3.7	-6.8	-12.1	--	--	--	Jan-94
InvMetrics Public DB > \$1B Net Median			2.6	6.5	7.6	8.3	6.5	7.3	7.4	Jan-94
InvMetrics Public DB > \$1B Net Rank			20	31	53	16	18	90	89	Jan-94
<b>Growth</b>	<b>2,174,423,342</b>	<b>75.5</b>	<b>4.5</b>	<b>9.7</b>	<b>10.4</b>	<b>12.9</b>	<b>9.0</b>	<b>--</b>	<b>8.0</b>	<b>Jul-15</b>
Growth Benchmark			4.4	9.3	10.6	12.5	8.8	--	8.7	Jul-15
<b>Public Equity</b>	<b>1,348,441,728</b>	<b>46.8</b>	<b>5.9</b>	<b>13.6</b>	<b>15.9</b>	<b>10.6</b>	<b>6.8</b>	<b>7.8</b>	<b>7.8</b>	<b>May-10</b>
Public Equity Benchmark			5.3	12.1	14.5	10.2	7.2	8.4	8.1	May-10
<b>Global Equity</b>	<b>241,289,352</b>	<b>8.4</b>	<b>6.2</b>	<b>16.4</b>	<b>19.1</b>	<b>10.9</b>	<b>8.4</b>	<b>--</b>	<b>8.9</b>	<b>Jul-15</b>
MSCI ACWI IMI Index			5.9	13.2	16.1	11.0	7.6	--	7.9	Jul-15
eV All Global Equity Net Median			4.6	11.5	15.8	10.5	7.6	8.7	7.8	Jul-15
eV All Global Equity Net Rank			31	18	25	47	40	--	33	Jul-15
Artisan Global Value	126,039,122	4.4	6.6	17.4	20.7	16.5	8.5	9.4	10.2	Mar-11
MSCI ACWI Value NR USD			3.0	4.3	10.0	11.8	5.2	6.2	5.6	Mar-11
eV All Global Equity Net Median			4.6	11.5	15.8	10.5	7.6	8.7	8.0	Mar-11
eV All Global Equity Net Rank			27	15	16	9	39	37	18	Mar-11

Returns for the Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.  
Please see final page of the performance report for composition of the Policy Benchmark.  
Throughout the report performance will be shown for funds after one full month of investment.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Artisan Global Opportunities	115,250,229	4.0	5.9	15.5	17.3	5.2	9.2	--	10.1	Jul-17
MSCI ACWI Growth NR USD			9.2	24.2	23.1	9.6	10.4	--	11.4	Jul-17
eV All Global Equity Net Median			4.6	11.5	15.8	10.5	7.6	8.7	8.3	Jul-17
eV All Global Equity Net Rank			35	23	39	87	28	--	25	Jul-17
<b>US Equity</b>	<b>548,025,309</b>	<b>19.0</b>	<b>8.5</b>	<b>16.4</b>	<b>19.5</b>	<b>14.3</b>	<b>10.5</b>	<b>--</b>	<b>10.4</b>	<b>Jul-15</b>
MSCI USA IMI NR USD			8.3	16.1	18.6	13.6	11.0	--	11.0	Jul-15
eV All US Equity Net Median			5.4	10.0	15.2	13.5	8.7	10.3	9.2	Jul-15
eV All US Equity Net Rank			22	23	27	41	32	--	36	Jul-15
Northern Trust Russell 3000 PE	516,902,945	18.0	8.4	16.2	19.0	14.0	--	--	19.4	Mar-20
Russell 3000			8.4	16.2	19.0	13.9	--	--	14.2	Mar-20
Cove Street Small Cap Value	794	0.0	16.2	25.6	31.1	22.3	8.9	--	7.5	May-14
Russell 2000 Value			3.2	2.5	6.0	15.4	3.5	--	6.2	May-14
eV US Small Cap Value Equity Net Median			3.8	5.7	11.2	16.9	5.6	8.2	6.9	May-14
eV US Small Cap Value Equity Net Rank			1	1	1	13	8	--	34	May-14
Burgundy US Small Cap	31,121,570	1.1	--	--	--	--	--	--	3.7	Jun-23
Russell 2000 Value			--	--	--	--	--	--	7.9	Jun-23
<b>International Equity</b>	<b>267,579,580</b>	<b>9.3</b>	<b>2.3</b>	<b>11.1</b>	<b>16.4</b>	<b>7.4</b>	<b>3.4</b>	<b>--</b>	<b>4.5</b>	<b>Jul-15</b>
MSCI World ex USA IMI NR USD			2.7	10.5	16.3	8.9	4.2	--	4.7	Jul-15
eV ACWI ex-US All Cap Equity Net Median			2.7	11.5	15.5	7.9	4.1	5.8	5.0	Jul-15
eV ACWI ex-US All Cap Equity Net Rank			59	54	38	54	66	--	71	Jul-15
Northern Trust MSCI World ex US	144,647,572	5.0	3.1	11.4	18.2	10.1	5.2	--	7.2	Nov-16
MSCI World ex USA			3.0	11.3	17.4	9.3	4.6	--	6.6	Nov-16

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Oberweis Intl Opportunities	37,714,786	1.3	-1.0	4.4	4.6	0.6	1.6	--	5.9	Nov-15
<i>MSCI World ex USA Small Cap Growth NR USD</i>			0.3	5.7	9.5	2.9	1.5	--	5.4	Nov-15
<i>eV ACWI ex-US All Cap Equity Net Median</i>			2.7	11.5	15.5	7.9	4.1	5.8	5.8	Nov-15
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			99	99	99	95	93	--	48	Nov-15
Morgan Stanley Intl Equity	35,100,642	1.2	4.0	23.2	30.1	--	--	--	-5.0	Apr-21
<i>MSCI ACWI ex USA</i>			2.4	9.5	12.7	--	--	--	-1.9	Apr-21
<i>eV ACWI ex-US All Cap Equity Net Median</i>			2.7	11.5	15.5	7.9	4.1	5.8	-1.5	Apr-21
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			15	1	1	--	--	--	76	Apr-21
First Eagle International Equity	50,116,580	1.7	1.8	8.4	11.5	--	--	--	10.5	Jun-22
<i>MSCI World ex USA</i>			3.0	11.3	17.4	--	--	--	5.9	Jun-22
<i>eV ACWI ex-US All Cap Equity Net Median</i>			2.7	11.5	15.5	7.9	4.1	5.8	4.9	Jun-22
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			75	84	83	--	--	--	5	Jun-22
<b>Emerging Markets Equity</b>	<b>291,547,488</b>	<b>10.1</b>	<b>4.2</b>	<b>8.5</b>	<b>6.0</b>	<b>6.3</b>	<b>2.4</b>	<b>--</b>	<b>2.6</b>	<b>Jul-15</b>
<i>MSCI Emerging Markets IMI Net</i>			1.6	5.6	3.2	3.6	1.4	--	2.8	Jul-15
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	3.6	Jul-15
<i>eV Emg Mkts Equity Net Rank</i>			26	37	52	37	44	--	76	Jul-15
Northern Trust MSCI EM IMI	96,245,283	3.3	1.2	5.7	3.4	3.6	--	--	1.7	Oct-18
<i>MSCI Emerging Markets IMI Net</i>			1.6	5.6	3.2	3.6	--	--	1.8	Oct-18
Dimensional Fund Adv EM Value	45,794,437	1.6	4.6	8.5	7.9	11.3	3.0	--	5.1	Nov-16
<i>MSCI Emerging Markets Value NR USD</i>			2.5	6.5	4.1	6.3	1.2	--	3.1	Nov-16
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	4.5	Nov-16
<i>eV Emg Mkts Equity Net Rank</i>			22	36	42	15	36	--	36	Nov-16

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GQG Global Emerging Markets	59,052,480	2.1	10.7	14.0	10.0	6.0	5.5	--	6.2	Jul-17
<i>MSCI Emerging Markets</i>			0.9	4.9	1.7	2.3	0.9	--	2.1	Jul-17
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	3.0	Jul-17
<i>eV Emg Mkts Equity Net Rank</i>			2	8	32	39	13	--	10	Jul-17
Redwheel Emerging Markets Equity	28,710,694	1.0	-0.7	3.1	-0.6	3.4	--	--	3.7	Sep-19
<i>MSCI Emerging Markets</i>			0.9	4.9	1.7	2.3	--	--	2.6	Sep-19
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	3.8	Sep-19
<i>eV Emg Mkts Equity Net Rank</i>			91	93	91	55	--	--	52	Sep-19
Wellington Emerging Markets Systematic Equity	39,973,633	1.4	5.0	12.2	8.6	7.5	--	--	5.4	Sep-19
<i>MSCI Emerging Markets</i>			0.9	4.9	1.7	2.3	--	--	2.6	Sep-19
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	3.8	Sep-19
<i>eV Emg Mkts Equity Net Rank</i>			20	14	40	31	--	--	33	Sep-19
Kotak India Midcap	10,463,861	0.4	12.0	10.6	18.1	--	--	--	2.3	Jun-21
<i>MSCI India Midcap</i>			20.7	13.7	21.4	--	--	--	2.6	Jun-21
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	-11.0	Jun-21
<i>eV Emg Mkts Equity Net Rank</i>			1	22	8	--	--	--	1	Jun-21
Unifi India	11,307,100	0.4	13.1	--	--	--	--	--	13.1	Apr-23
<i>MSCI India Midcap</i>			20.7	--	--	--	--	--	20.7	Apr-23
<i>eV Emg Mkts Equity Net Median</i>			2.2	7.3	6.1	4.2	2.2	3.7	2.2	Apr-23
<i>eV Emg Mkts Equity Net Rank</i>			1	--	--	--	--	--	1	Apr-23
<b>Private Markets</b>	<b>683,663,668</b>	<b>23.7</b>	<b>2.9</b>	<b>3.4</b>	<b>1.3</b>	<b>20.3</b>	<b>13.2</b>	<b>--</b>	<b>10.5</b>	<b>Jul-15</b>
<i>Private Markets Benchmark</i>			2.9	3.4	1.3	20.3	12.9	--	11.9	Jul-15
<i>MSCI ACWI IMI + 100bps</i>			6.1	13.6	17.1	12.0	8.7	--	9.0	Jul-15

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Private Markets ex Russell 3000</b>	<b>683,663,668</b>	<b>23.7</b>	<b>2.9</b>	<b>3.4</b>	<b>1.3</b>	<b>21.4</b>	<b>13.9</b>	<b>--</b>	<b>10.9</b>	<b>Jul-15</b>
<b>Private Equity</b>	<b>359,469,305</b>	<b>12.5</b>	<b>5.5</b>	<b>5.3</b>	<b>-0.5</b>	<b>26.3</b>	<b>19.0</b>	<b>14.8</b>	<b>10.2</b>	<b>Jan-06</b>
<i>San Jose Custom Private Equity Benchmark</i>			<i>2.7</i>	<i>3.7</i>	<i>-1.6</i>	<i>24.9</i>	<i>16.1</i>	<i>14.7</i>	<i>12.5</i>	<i>Jan-06</i>
PE Strategic Partnership, LP	324,918,058	11.3	5.7	5.7	-0.4	27.1	21.2	--	16.5	Aug-17
Pathway Private Eq Fund VIII	543,074	0.0	-9.4	-14.2	-19.1	-3.2	-8.7	-0.9	3.5	Jul-09
Pantheon USA Fund VII, LP	5,526,039	0.2	1.3	0.3	-8.0	21.1	10.9	--	11.4	Jul-09
Pantheon Global Secondary III	442,520	0.0	-0.1	-0.1	-2.5	-5.1	-3.9	-0.9	1.1	Jul-09
Great Hill Equity Partners IV	4,479,485	0.2	39.9	52.1	31.2	32.4	31.5	34.3	30.2	Jul-09
Partners Group Secondary 2008	508,514	0.0	3.4	6.4	-4.7	14.5	4.9	5.9	8.0	Jul-09
Partners Group Secondary 2011	3,106,614	0.1	0.0	-2.9	-21.1	17.0	4.8	10.4	14.0	Nov-12
Innovation Endeavors III	13,409,206	0.5	-2.3	-5.8	-4.0	42.3	24.5	--	24.1	Jun-18
Crestline Portfolio Financing	6,535,796	0.2	3.2	1.0	5.7	7.4	8.6	--	8.4	Jun-18
<b>Venture Capital</b>	<b>15,921,121</b>	<b>0.6</b>	<b>-3.9</b>	<b>-4.0</b>	<b>-4.2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>-2.7</b>	<b>Jun-21</b>
Innovation Endeavors IV	1,943,257	0.1	-0.7	-2.6	-5.2	--	--	--	-5.8	Jun-21
TI Platform SJFED LP	7,515,274	0.3	-4.4	-4.4	-4.4	--	--	--	-1.9	Jul-21
Soma Capital Fund III LP	2,387,900	0.1	-1.3	-0.6	3.7	--	--	--	4.9	Dec-21
Fin VC Horizons II	4,074,690	0.1	-5.5	-5.5	-7.5	--	--	--	--	Jan-22

Returns for the Private Debt and Real Assets Aggregates are gross of fees through June 2015 and net of fees thereafter.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Private Debt</b>	<b>121,662,805</b>	<b>4.2</b>	<b>1.1</b>	<b>2.2</b>	<b>2.2</b>	<b>17.6</b>	<b>6.8</b>	<b>4.8</b>	<b>5.3</b>	<b>Dec-10</b>
<i>S&amp;P Global Leveraged Loan Index +2%</i>			3.7	7.5	12.9	8.4	5.9	5.9	6.2	Dec-10
White Oak Direct Lending	32,408,443	1.1	-6.3	-5.1	-4.7	48.2	23.0	10.6	9.3	Feb-11
Blackstone/GSO Cap Partners	4,512,572	0.2	13.1	13.1	18.8	0.0	-12.0	-5.1	-1.1	Mar-11
Medley Opportunity Fund II LP	2,525,359	0.1	-4.0	-4.0	-4.0	-6.7	-10.3	-3.2	-1.6	Jun-11
Cross Ocean USD ESS Fund II LP	2,620,230	0.1	0.1	-0.5	0.2	8.4	5.7	--	8.1	Aug-16
Crestline Co-Investment	1,470,514	0.1	2.2	3.8	20.1	15.6	--	--	13.3	Mar-19
Cross Ocean USD ESS Fund III, L.P.	22,823,956	0.8	3.6	4.7	6.4	16.1	--	--	11.5	Jun-19
Arbour Lane Credit Opportunity Fund II, L.P.	10,050,958	0.3	6.1	6.1	5.1	3.6	--	--	17.1	Apr-20
Eagle Point Defensive Income Fund	7,300,835	0.3	2.6	2.5	-5.9	2.7	--	--	2.6	Jun-20
HPS Special Situations Opportunity Fund	7,203,048	0.3	5.8	9.2	17.1	--	--	--	21.2	Jan-21
Crestline Portfolio Financing Fund II	2,946,288	0.1	2.5	7.8	13.3	--	--	--	10.0	Jan-21
SVP Special Situations V	4,149,363	0.1	4.4	7.5	3.8	--	--	--	6.3	Jun-21
Arbour Lane COF III	4,849,691	0.2	6.3	6.5	-3.0	--	--	--	-2.1	Nov-21
Octagon CLO Opp Fund IV	8,850,973	0.3	7.0	7.0	6.3	--	--	--	4.7	Mar-22
Angelo Gordon CS II	4,448,092	0.2	2.2	1.9	-4.9	--	--	--	-2.7	Feb-22
HPS SP SIT OPP II	1,534,639	0.1	4.6	2.0	--	--	--	--	2.0	Dec-22
Eagle Point DIF II	3,967,844	0.1	0.5	8.2	--	--	--	--	4.8	Sep-22

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Growth Real Estate</b>	<b>118,191,791</b>	<b>4.1</b>	<b>-0.8</b>	<b>-0.5</b>	<b>4.9</b>	<b>13.2</b>	<b>12.4</b>	<b>--</b>	<b>14.8</b>	<b>Jul-15</b>
<i>NCREIF Property Index</i>			-2.0	-3.8	-6.6	6.8	5.9	--	6.8	Jul-15
DRA Growth & Income Fund VII	834,061	0.0	16.5	16.5	18.7	50.7	53.3	37.6	34.9	Apr-12
DRA Growth & Income Fund VIII	3,892,392	0.1	-26.0	-26.0	-24.4	-6.5	-0.8	--	4.2	Jan-15
Tristan - EPISO IV	12,771,566	0.4	0.9	-1.6	3.3	8.0	7.0	--	7.4	Jan-16
DRA Growth & Income Fund IX	13,487,533	0.5	0.8	0.8	8.3	23.2	18.5	--	17.2	Feb-17
GEM Realty Fund VI	5,012,336	0.2	-1.0	-8.7	-9.3	14.1	12.0	--	6.8	Dec-17
Torchlight Debt Opportunity VI	22,179,034	0.8	0.8	2.1	6.6	10.5	6.5	--	6.1	Apr-18
Tristan - EPISO V	10,589,083	0.4	1.1	4.8	13.8	5.6	--	--	-27.9	Apr-19
DRA Growth & Income Fund X	10,060,441	0.3	2.0	2.0	11.0	23.7	--	--	23.2	Mar-20
Rockpoint Real Estate Fund VI, L.P.	5,518,754	0.2	-2.1	-2.1	-2.3	13.5	--	--	12.8	May-20
Exeter Industrial Value Fund V	8,078,745	0.3	0.6	5.8	1.3	--	--	--	28.8	Oct-20
Torchlight Debt Fund VII	3,220,670	0.1	0.5	2.4	7.6	--	--	--	4.1	Feb-21
H.I.G. Realty Partners IV, L.P.	7,531,682	0.3	2.8	7.6	23.2	--	--	--	--	Dec-21
Praedium X MidInc	3,560,423	0.1	-4.4	-14.6	-15.1	--	--	--	-12.2	Apr-22
AIGGRE Fund IV	7,085,741	0.2	-0.4	-1.3	37.2	--	--	--	28.0	Jun-22

Returns for the Private Debt and Real Assets Aggregates are gross of fees through June 2015 and net of fees thereafter.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Centerbridge RE II	2,865,582	0.1	4.1	7.1	--	--	--	--	-8.2	Jul-22
GCP SecureSpace Property Partners, L.P	1,503,748	0.1	-27.7	-27.7	--	--	--	--	-25.3	Jul-22
<b>Private Real Assets</b>	<b>68,418,645</b>	<b>2.4</b>	<b>1.2</b>	<b>5.1</b>	<b>6.3</b>	<b>19.6</b>	<b>11.0</b>	<b>--</b>	<b>9.0</b>	<b>Jul-15</b>
Global Infra Part III-A/B, LP	25,914,358	0.9	1.2	7.8	8.2	19.4	12.0	--	6.8	Sep-16
Lime Rock Partners VIII	3,478,972	0.1	-6.7	0.0	5.1	26.8	--	--	9.5	Dec-18
Kimmeridge Energy Fund V, L.P.	6,288,692	0.2	18.4	18.4	15.0	41.3	--	--	15.6	Aug-19
Global Infra Partners IV	2,589,623	0.1	1.2	2.3	5.8	-42.5	--	--	--	Sep-19
Lime Rock New Energy, L.P.	2,154,100	0.1	17.0	24.8	33.6	--	--	--	--	Aug-20
Orion Mine Finance III	4,426,950	0.2	14.8	14.8	13.4	--	--	--	11.5	Aug-20
Real Assets Coinvest I	45,000	0.0	-96.3	-96.3	-96.3	--	--	--	-69.7	Sep-20
Crestline Co-Investment II	3,408,573	0.1	-5.8	-3.6	-0.4	--	--	--	26.0	Jan-21
Tembo Cap Mining III	2,634,045	0.1	5.9	22.8	--	--	--	--	3.0	Oct-21
Mountain Capital II	2,363,751	0.1	-1.2	-6.1	-13.5	--	--	--	2.3	Jan-22
Aether Seed Partners I	3,485,913	0.1	-1.8	-1.8	414.9	--	--	--	307.4	May-22
Hull Street Energy II	3,454,076	0.1	-34.5	-34.5	-34.5	--	--	--	-34.5	Jul-22
Kimmeridge Fund VI	5,891,419	0.2	6.0	6.0	--	--	--	--	6.0	Oct-22
HIG Infrastructure Partners	1,147,967	0.0	-8.9	-42.1	--	--	--	--	-42.1	Jan-23
Paine Schwartz VI	1,135,206	0.0	-5.3	--	--	--	--	--	-5.3	Apr-23



Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Emerging Markets Debt</b>	<b>83,340,993</b>	<b>2.9</b>	<b>-2.5</b>	<b>0.9</b>	<b>-0.4</b>	<b>3.4</b>	<b>4.8</b>	<b>--</b>	<b>3.5</b>	<b>Jul-15</b>
50% JPM EMBI GD / 50% JPM GBI-EM			2.3	5.9	9.4	-2.2	0.5	--	1.5	Jul-15
eV All Emg Mkts Fixed Inc Net Median			2.3	4.5	8.6	-1.0	1.1	2.2	2.0	Jul-15
eV All Emg Mkts Fixed Inc Net Rank			99	98	99	5	2	--	7	Jul-15
Wellington Iguazu Partners LP Fund	58,303,273	2.0	-4.5	-1.1	-3.7	6.1	--	--	8.4	May-19
50% JPM EMBI GD / 50% JPM GBI-EM			2.3	5.9	9.4	-2.2	--	--	-0.8	May-19
eV All Emg Mkts Fixed Inc Net Median			2.3	4.5	8.6	-1.0	1.1	2.2	0.2	May-19
eV All Emg Mkts Fixed Inc Net Rank			99	99	99	1	--	--	1	May-19
Payden EMD Blended Currency	25,037,719	0.9	2.6	5.7	12.1	--	--	--	-5.6	Dec-20
50% JPM EMBI GD / 50% JPM GBI-EM			2.3	5.9	9.4	--	--	--	-6.1	Dec-20
eV All Emg Mkts Fixed Inc Net Median			2.3	4.5	8.6	-1.0	1.1	2.2	-4.9	Dec-20
eV All Emg Mkts Fixed Inc Net Rank			42	36	20	--	--	--	67	Dec-20
<b>High Yield Bonds</b>	<b>58,976,952</b>	<b>2.0</b>	<b>1.4</b>	<b>5.4</b>	<b>9.8</b>	<b>3.6</b>	<b>2.5</b>	<b>--</b>	<b>1.3</b>	<b>Jun-14</b>
Bloomberg US Corporate High Yield TR			1.7	5.4	9.1	3.1	3.4	--	3.7	Jun-14
Mellon High Yield Beta	5,354,642	0.2	1.8	5.6	9.9	3.5	--	--	3.4	Jun-20
Bloomberg US Corporate High Yield TR			1.7	5.4	9.1	3.1	--	--	3.4	Jun-20
eV US High Yield Fixed Inc Net Median			1.4	4.8	8.3	3.2	3.2	4.1	3.3	Jun-20
eV US High Yield Fixed Inc Net Rank			23	17	11	36	--	--	47	Jun-20
Columbia High Yield	53,622,310	1.9	1.4	5.4	9.8	--	--	--	0.0	Dec-20
Bloomberg US Corporate High Yield TR			1.7	5.4	9.1	--	--	--	-0.6	Dec-20
eV US High Yield Fixed Inc Net Median			1.4	4.8	8.3	3.2	3.2	4.1	-0.3	Dec-20
eV US High Yield Fixed Inc Net Rank			57	22	13	--	--	--	45	Dec-20

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Low Beta</b>	<b>302,738,689</b>	<b>10.5</b>	<b>0.7</b>	<b>1.6</b>	<b>1.9</b>	<b>4.4</b>	<b>4.0</b>	<b>--</b>	<b>3.1</b>	<b>Jul-15</b>
Low Beta Benchmark			0.3	1.9	1.9	0.3	1.2	--	0.8	Jul-15
<b>Immunized Cash Flows</b>	<b>162,315,118</b>	<b>5.6</b>	<b>-0.5</b>	<b>1.2</b>	<b>-0.2</b>	<b>-0.8</b>	<b>--</b>	<b>--</b>	<b>1.1</b>	<b>Oct-18</b>
Bloomberg US Govt/Credit 1-3 Yr. TR			-0.4	1.1	0.5	-0.9	--	--	1.1	Oct-18
Insight Immunized Cash Flow	162,315,118	5.6	-0.5	1.2	-0.2	-0.8	--	--	--	Jun-19
Bloomberg US Govt/Credit 1-3 Yr. TR			-0.4	1.1	0.5	-0.9	--	--	--	Jun-19
<b>Market Neutral Strategies</b>	<b>88,501,686</b>	<b>3.1</b>	<b>3.4</b>	<b>2.4</b>	<b>6.7</b>	<b>15.1</b>	<b>10.0</b>	<b>6.5</b>	<b>6.5</b>	<b>Nov-12</b>
Market Neutral Strategies Benchmark			1.6	3.1	5.4	2.1	2.0	1.6	1.5	Nov-12
<b>Relative Value</b>	<b>88,501,686</b>	<b>3.1</b>	<b>3.4</b>	<b>2.4</b>	<b>6.7</b>	<b>15.6</b>	<b>8.9</b>	<b>--</b>	<b>6.7</b>	<b>Oct-14</b>
HFRI Relative Value (Total) Index			1.2	2.5	4.0	5.9	3.6	--	3.5	Oct-14
Pine River Fund, Ltd	282,570	0.0	0.0	-7.0	-1.5	-1.1	4.5	2.6	3.2	Jan-13
HFRI Relative Value (Total) Index			1.2	2.5	4.0	5.9	3.6	4.0	4.1	Jan-13
DE Shaw Composite Fund, LLC	42,996,642	1.5	0.6	3.0	12.1	19.9	16.7	13.8	13.9	Apr-13
HFRI Fund Weighted Composite Index			2.2	3.4	5.0	8.1	5.0	4.7	4.5	Apr-13
Hudson Bay	10,089,360	0.4	0.5	1.9	7.9	9.3	10.3	--	9.4	Aug-17
HFRI Relative Value (Total) Index			1.2	2.5	4.0	5.9	3.6	--	3.6	Aug-17
Crabel Advanced Trend	35,133,113	1.2	8.0	1.8	0.2	--	--	--	10.0	Jun-21
Barclay CTA Index			2.5	0.5	-0.4	--	--	--	4.1	Jun-21
<b>Cash</b>	<b>51,921,885</b>	<b>1.8</b>	<b>0.7</b>	<b>1.7</b>	<b>3.0</b>	<b>1.1</b>	<b>1.4</b>	<b>--</b>	<b>--</b>	<b>Jan-06</b>
ICE BofA 91 Days T-Bills TR			1.2	2.3	3.6	1.3	1.6	--	--	Jan-06

Cash composite includes the cash account, cash collateral in the Russell Investments Overlay program, and residuals from terminated manager assets.

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Other</b>	<b>394,619,156</b>	<b>13.7</b>	<b>-1.8</b>	<b>-2.0</b>	<b>-2.0</b>	<b>0.1</b>	<b>0.8</b>	<b>1.6</b>	<b>1.7</b>	<b>Jul-04</b>
Other Benchmark			-1.7	-1.0	-2.0	-0.2	-0.1	--	--	Jul-04
<b>Investment Grade Bonds</b>	<b>123,728,072</b>	<b>4.3</b>	<b>-0.4</b>	<b>2.4</b>	<b>-1.5</b>	<b>-2.7</b>	<b>--</b>	<b>--</b>	<b>-0.6</b>	<b>Dec-19</b>
Custom IG Bonds Benchmark			-0.7	1.8	-0.6	-3.1	--	--	-1.2	Dec-19
Voya Securitized Credit	40,668,468	1.4	0.2	3.6	-1.5	-1.0	--	--	-0.4	May-20
Bloomberg US Securitized MBS ABS CMBS TR			-0.6	1.8	-1.5	-3.6	--	--	-3.4	May-20
Invesco Core Bonds	83,059,604	2.9	-0.6	1.8	-1.5	--	--	--	-5.1	Feb-21
Bloomberg US Aggregate TR			-0.8	2.1	-0.9	--	--	--	-4.7	Feb-21
<b>TIPS</b>	<b>57,074,041</b>	<b>2.0</b>	<b>-0.7</b>	<b>1.5</b>	<b>0.0</b>	<b>2.4</b>	<b>2.6</b>	<b>--</b>	<b>1.6</b>	<b>Jul-14</b>
BBG U.S. TIPS 0-5 Years			-0.7	1.5	0.1	2.3	2.7	--	1.7	Jul-14
Northern Trust 0-5 Year TIPS	57,074,041	2.0	-0.7	1.5	0.0	2.4	2.9	--	1.8	Jul-14
Bloomberg US Treasury TIPS 0-5 Yr TR			-0.7	1.5	0.1	2.3	2.7	--	1.7	Jul-14
<b>Core Private Real Estate</b>	<b>157,317,404</b>	<b>5.5</b>	<b>-3.1</b>	<b>-7.8</b>	<b>-0.2</b>	<b>10.1</b>	<b>8.3</b>	<b>9.4</b>	<b>8.6</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	29,749,306	1.0	-4.0	-7.8	1.4	10.8	--	--	8.7	Feb-19
Core Real Estate Benchmark 2			-3.4	-8.4	-3.9	8.1	--	--	6.1	Feb-19
Clarion Lion Properties Fund	58,625,479	2.0	-5.3	-10.4	-3.6	8.9	--	--	7.3	Apr-19
Core Real Estate Benchmark 2			-3.4	-8.4	-3.9	8.1	--	--	6.3	Apr-19
Clarion Lion Industrial Trust	14,702,043	0.5	-0.8	-2.3	9.7	--	--	--	18.5	Oct-21
Core Real Estate Benchmark 3			-3.4	-8.4	-3.9	--	--	--	6.1	Oct-21

Total Fund | As of June 30, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
TA Realty Core Property Fund	54,240,576	1.9	-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>Long-Term Government Bonds</b>	<b>56,499,639</b>	<b>2.0</b>	<b>-2.3</b>	<b>4.2</b>	<b>-6.7</b>	<b>-12.0</b>	--	--	<b>-11.3</b>	<b>May-20</b>
Bloomberg US Treasury Long TR			-2.3	3.7	-6.8	-12.1	--	--	-12.0	May-20
BlackRock Long-Term Gov Bonds	56,499,639	2.0	-2.3	4.2	-6.7	-12.0	--	--	-11.3	May-20
Bloomberg US Treasury Long TR			-2.3	3.7	-6.8	-12.1	--	--	-12.0	May-20
<b>Overlay</b>	<b>7,677,472</b>	<b>0.3</b>								
Russell Investments Overlay	7,670,254	0.3								

Cash Flow Summary						
Quarter Ending June 30, 2023						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aether Seed Partners I	\$1,319,569	\$2,243,975	\$0	\$2,243,975	-\$77,631	\$3,485,913
AIGGRE Fund IV	\$6,743,452	\$371,011	\$0	\$371,011	-\$28,722	\$7,085,741
Angelo Gordon CS II	\$4,469,070	\$0	-\$116,973	-\$116,973	\$95,995	\$4,448,092
Arbour Lane COF III	\$3,480,470	\$1,139,357	\$0	\$1,139,357	\$229,864	\$4,849,691
Arbour Lane Credit Opportunity Fund II, L.P.	\$10,103,037	\$0	-\$643,884	-\$643,884	\$591,805	\$10,050,958
Artisan Global Opportunities	\$108,806,203	\$0	\$0	\$0	\$6,444,026	\$115,250,229
Artisan Global Value	\$148,156,482	\$0	-\$30,000,000	-\$30,000,000	\$7,882,640	\$126,039,122
BlackRock Core Property Fund	\$31,296,652	\$0	-\$300,498	-\$300,498	-\$1,246,848	\$29,749,306
BlackRock Long-Term Gov Bonds	\$47,638,169	\$10,000,000	\$0	\$10,000,000	-\$1,138,530	\$56,499,639
Blackstone/GSO Cap Partners	\$3,988,662	\$0	\$0	\$0	\$523,910	\$4,512,572
Burgundy US Small Cap	--	\$30,000,000	\$0	\$30,000,000	\$1,121,570	\$31,121,570
Cash Account	\$23,757,692	\$189,309,052	-\$161,305,213	\$28,003,839	\$160,354	\$51,921,885
Centerbridge RE II	\$2,753,875	\$0	\$0	\$0	\$111,707	\$2,865,582
Clarion Lion Industrial Trust	\$14,876,978	\$0	-\$48,950	-\$48,950	-\$125,984	\$14,702,043
Clarion Lion Properties Fund	\$62,288,383	\$0	-\$375,276	-\$375,276	-\$3,287,628	\$58,625,479
Columbia High Yield	\$52,903,725	\$0	\$0	\$0	\$718,585	\$53,622,310
Cove Street Small Cap Value	\$12,000,319	\$0	-\$13,067,713	-\$13,067,713	\$1,068,188	\$794
Crabel Advanced Trend	\$32,531,755	\$0	\$0	\$0	\$2,601,358	\$35,133,113
Crestline Co-Investment	\$1,438,196	\$0	\$0	\$0	\$32,318	\$1,470,514
Crestline Co-Investment II	\$3,617,952	\$0	\$0	\$0	-\$209,379	\$3,408,573
Crestline Portfolio Financing	\$6,127,804	\$214,669	\$0	\$214,669	\$193,323	\$6,535,796
Crestline Portfolio Financing Fund II	\$2,007,554	\$943,136	-\$76,991	\$866,145	\$72,589	\$2,946,288

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Cross Ocean USD ESS Fund II LP	\$2,616,942	\$0	\$0	\$0	\$3,288	\$2,620,230
Cross Ocean USD ESS Fund III, L.P.	\$22,039,359	\$0	\$0	\$0	\$784,597	\$22,823,956
DE Shaw Composite Fund, LLC	\$42,734,852	\$0	\$0	\$0	\$261,790	\$42,996,642
Dimensional Fund Adv EM Value	\$43,779,551	\$0	\$0	\$0	\$2,014,886	\$45,794,437
DRA Growth & Income Fund IX	\$14,802,565	\$0	-\$1,428,839	-\$1,428,839	\$113,807	\$13,487,533
DRA Growth & Income Fund VII	\$715,812	\$0	\$0	\$0	\$118,249	\$834,061
DRA Growth & Income Fund VIII	\$5,258,891	\$0	\$0	\$0	-\$1,366,499	\$3,892,392
DRA Growth & Income Fund X	\$8,854,025	\$1,105,263	-\$75,027	\$1,030,236	\$176,180	\$10,060,441
Eagle Point Defensive Income Fund	\$7,244,103	\$0	-\$130,818	-\$130,818	\$187,550	\$7,300,835
Eagle Point DIF II	\$2,046,033	\$1,906,000	\$0	\$1,906,000	\$15,811	\$3,967,844
Exeter Industrial Value Fund V	\$8,031,132	\$0	\$0	\$0	\$47,614	\$8,078,745
Fin VC Horizons II	\$4,311,363	\$0	\$0	\$0	-\$236,672	\$4,074,690
First Eagle International Equity	\$49,252,534	\$0	\$0	\$0	\$864,047	\$50,116,580
GCP SecureSpace Property Partners, L.P	\$1,475,456	\$436,667	\$0	\$436,667	-\$408,375	\$1,503,748
GEM Realty Fund VI	\$5,064,480	\$0	\$0	\$0	-\$52,144	\$5,012,336
Global Infra Part III-A/B, LP	\$25,684,823	\$0	-\$85,918	-\$85,918	\$315,453	\$25,914,358
Global Infra Partners IV	\$2,579,429	\$20,154	-\$39,856	-\$19,702	\$29,896	\$2,589,623
GQG Global Emerging Markets	\$63,309,640	\$0	-\$10,000,000	-\$10,000,000	\$5,742,840	\$59,052,480
Great Hill Equity Partners IV	\$3,389,521	\$0	-\$236,699	-\$236,699	\$1,326,663	\$4,479,485
H.I.G. Realty Partners IV, L.P.	\$6,397,142	\$928,513	\$0	\$928,513	\$206,027	\$7,531,682
HIG Infrastructure Partners	\$174,715	\$1,056,918	\$0	\$1,056,918	-\$83,666	\$1,147,967
HPS SP SIT OPP II	\$1,466,457	\$0	\$0	\$0	\$68,182	\$1,534,639
HPS Special Situations Opportunity Fund	\$7,512,419	\$0	-\$739,833	-\$739,833	\$430,462	\$7,203,048
Hudson Bay	\$10,040,913	\$0	\$0	\$0	\$48,447	\$10,089,360
Hull Street Energy II	\$318,033	\$3,265,598	\$0	\$3,265,598	-\$129,555	\$3,454,076

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Innovation Endeavors III	\$13,728,886	\$0	\$0	\$0	-\$319,680	\$13,409,206
Innovation Endeavors IV	\$1,477,729	\$480,000	\$0	\$480,000	-\$14,472	\$1,943,257
Insight Immunized Cash Flow	\$200,713,076	\$0	-\$37,605,276	-\$37,605,276	-\$792,682	\$162,315,118
Invesco Core Bonds	\$83,588,055	\$1,830	-\$1,830	\$0	-\$528,452	\$83,059,604
Kimmeridge Energy Fund V, L.P.	\$5,309,509	\$0	\$0	\$0	\$979,183	\$6,288,692
Kimmeridge Fund VI	\$5,543,333	\$13,143	\$0	\$13,143	\$334,943	\$5,891,419
Kotak India Midcap	\$9,345,285	\$0	\$0	\$0	\$1,118,576	\$10,463,861
Lime Rock New Energy, L.P.	\$1,833,146	\$10,126	\$0	\$10,126	\$310,828	\$2,154,100
Lime Rock Partners VIII	\$3,800,300	\$0	-\$65,974	-\$65,974	-\$255,354	\$3,478,972
Medley Opportunity Fund II LP	\$4,378,782	\$0	-\$1,738,314	-\$1,738,314	-\$115,109	\$2,525,359
Mellon High Yield Beta	\$5,259,114	\$0	\$0	\$0	\$95,528	\$5,354,642
Morgan Stanley Intl Equity	\$33,758,796	\$0	\$0	\$0	\$1,341,846	\$35,100,642
Mountain Capital II	\$1,013,606	\$1,377,880	\$0	\$1,377,880	-\$27,735	\$2,363,751
Northern Trust 0-5 Year TIPS	\$57,454,866	\$0	\$0	\$0	-\$380,826	\$57,074,041
Northern Trust MSCI EM IMI	\$100,167,080	\$0	-\$5,000,000	-\$5,000,000	\$1,078,204	\$96,245,283
Northern Trust MSCI World ex US	\$140,511,222	\$5,000,000	-\$5,000,000	\$0	\$4,136,350	\$144,647,572
Northern Trust Russell 3000 PE	\$524,238,014	\$5,000,000	-\$55,000,000	-\$50,000,000	\$42,664,932	\$516,902,945
Oberweis Intl Opportunities	\$38,106,580	\$0	\$0	\$0	-\$391,794	\$37,714,786
Octagon CLO Opp Fund IV	\$8,571,947	\$0	-\$320,618	-\$320,618	\$599,644	\$8,850,973
Orion Mine Finance III	\$4,194,665	\$32,553	-\$421,454	-\$388,901	\$621,186	\$4,426,950
Paine Schwartz VI	\$0	\$1,193,563	-\$6,496	\$1,187,067	-\$51,861	\$1,135,206
Pantheon Global Secondary III	\$443,066	\$0	\$0	\$0	-\$546	\$442,520
Pantheon USA Fund VII, LP	\$5,692,305	\$0	-\$240,001	-\$240,001	\$73,735	\$5,526,039
Partners Group Secondary 2008	\$550,434	\$0	-\$58,557	-\$58,557	\$16,636	\$508,514
Partners Group Secondary 2011	\$3,195,331	\$0	-\$90,020	-\$90,020	\$1,303	\$3,106,614
Pathway Private Eq Fund VIII	\$582,781	\$15,744	\$0	\$15,744	-\$55,451	\$543,074

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Payden EMD Blended Currency	\$14,397,236	\$10,000,000	\$0	\$10,000,000	\$640,484	\$25,037,719
PE Strategic Partnership, LP	\$300,538,014	\$6,950,000	\$0	\$6,950,000	\$17,430,044	\$324,918,058
Pine River Fund, Ltd	\$282,451	\$0	\$0	\$0	\$119	\$282,570
Praedium X MidInc	\$2,910,592	\$824,072	-\$42,577	\$781,495	-\$131,664	\$3,560,423
Real Assets Coinvest I	\$1,199,996	\$0	\$0	\$0	-\$1,154,996	\$45,000
Redwheel Emerging Markets Equity	\$28,918,258	\$0	\$0	\$0	-\$207,564	\$28,710,694
Rockpoint Real Estate Fund VI, L.P.	\$5,636,374	\$0	\$0	\$0	-\$117,620	\$5,518,754
Russell Investments Overlay	\$8,396,658	\$0	\$0	\$0	-\$726,404	\$7,670,254
Soma Capital Fund III LP	\$2,169,009	\$250,000	\$0	\$250,000	-\$31,109	\$2,387,900
State Street Terminated Managers	\$7,189	\$0	-\$1	-\$1	\$30	\$7,218
SVP Special Situations V	\$3,977,858	\$0	-\$2,688	-\$2,688	\$174,193	\$4,149,363
TA Realty Core Property Fund	\$55,165,053	\$0	-\$547,885	-\$547,885	-\$376,592	\$54,240,576
Tembo Cap Mining III	\$2,327,730	\$167,817	\$0	\$167,817	\$138,498	\$2,634,045
TI Platform SJFED LP	\$7,128,419	\$700,000	\$0	\$700,000	-\$313,145	\$7,515,274
Torchlight Debt Fund VII	\$3,203,547	\$0	\$0	\$0	\$17,123	\$3,220,670
Torchlight Debt Opportunity VI	\$21,994,897	\$0	\$0	\$0	\$184,137	\$22,179,034
Tristan - EPISO IV	\$12,747,132	\$0	-\$92,813	-\$92,813	\$117,246	\$12,771,566
Tristan - EPISO V	\$10,197,709	\$271,075	\$0	\$271,075	\$120,300	\$10,589,083
Unifi India	\$0	\$10,000,000	\$0	\$10,000,000	\$1,307,100	\$11,307,100
Voya Securitized Credit	\$40,577,771	\$0	\$0	\$0	\$90,697	\$40,668,468
Wellington Emerging Markets Systematic Equity	\$39,257,214	\$0	\$0	\$0	\$716,419	\$39,973,633
Wellington Iguazu Partners LP Fund	\$71,144,239	\$0	-\$10,000,611	-\$10,000,611	-\$2,840,355	\$58,303,273
White Oak Direct Lending	\$37,326,916	\$0	-\$2,594,969	-\$2,594,969	-\$2,323,504	\$32,408,443
<b>Total</b>	<b>\$2,842,368,357</b>	<b>\$285,228,117</b>	<b>-\$337,502,573</b>	<b>-\$52,274,456</b>	<b>\$89,364,758</b>	<b>\$2,879,458,659</b>



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

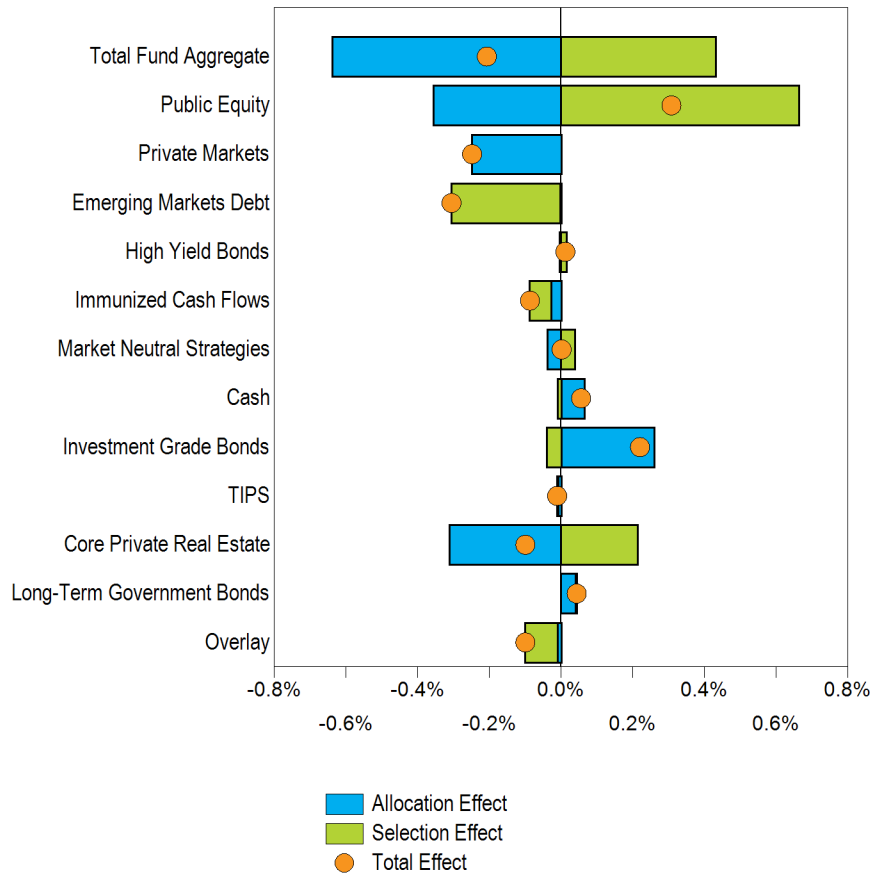


#### Attribution Summary 3 Months Ending June 30, 2023

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	5.9%	5.3%	0.7%	0.3%	-0.1%	0.2%
Private Markets	2.9%	2.9%	0.0%	0.0%	0.0%	0.0%
Emerging Markets Debt	-2.5%	2.3%	-4.9%	-0.1%	0.0%	-0.1%
High Yield Bonds	1.4%	1.7%	-0.3%	0.0%	0.0%	0.0%
Immunized Cash Flows	-0.5%	-0.4%	-0.1%	0.0%	-0.1%	-0.1%
Market Neutral Strategies	3.4%	1.6%	1.8%	0.1%	0.0%	0.1%
Cash	0.7%	1.2%	-0.5%	0.0%	0.0%	0.0%
Investment Grade Bonds	-0.4%	-0.7%	0.3%	0.0%	0.1%	0.2%
TIPS	-0.7%	-0.7%	0.0%	0.0%	0.0%	0.0%
Core Private Real Estate	-3.1%	-3.4%	0.3%	0.0%	-0.1%	0.0%
Long-Term Government Bonds	-2.3%	-2.3%	0.0%	0.0%	0.0%	0.0%
Overlay	-8.6%	1.2%	-9.8%	0.0%	0.0%	0.0%
<b>Total</b>	<b>3.2%</b>	<b>3.0%</b>	<b>0.1%</b>	<b>0.2%</b>	<b>-0.1%</b>	<b>0.1%</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 Effects 1 Year Ending June 30, 2023



#### Attribution Summary 1 Year Ending June 30, 2023

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	15.9%	14.5%	1.5%	0.7%	-0.4%	0.3%
Private Markets	1.3%	1.3%	0.0%	0.0%	-0.2%	-0.2%
Emerging Markets Debt	-0.4%	9.4%	-9.8%	-0.3%	0.0%	-0.3%
High Yield Bonds	9.8%	9.1%	0.7%	0.0%	0.0%	0.0%
Immunized Cash Flows	-0.2%	0.5%	-0.7%	-0.1%	0.0%	-0.1%
Market Neutral Strategies	6.7%	5.4%	1.3%	0.0%	0.0%	0.0%
Cash	3.0%	3.6%	-0.6%	0.0%	0.1%	0.1%
Investment Grade Bonds	-1.5%	-0.6%	-0.8%	0.0%	0.3%	0.2%
TIPS	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%
Core Private Real Estate	-0.2%	-3.9%	3.7%	0.2%	-0.3%	-0.1%
Long-Term Government Bonds	-6.7%	-6.8%	0.1%	0.0%	0.0%	0.0%
Overlay	-28.4%	3.6%	-32.0%	-0.1%	0.0%	-0.1%
<b>Total</b>	<b>7.6%</b>	<b>7.8%</b>	<b>-0.2%</b>	<b>0.4%</b>	<b>-0.6%</b>	<b>-0.2%</b>

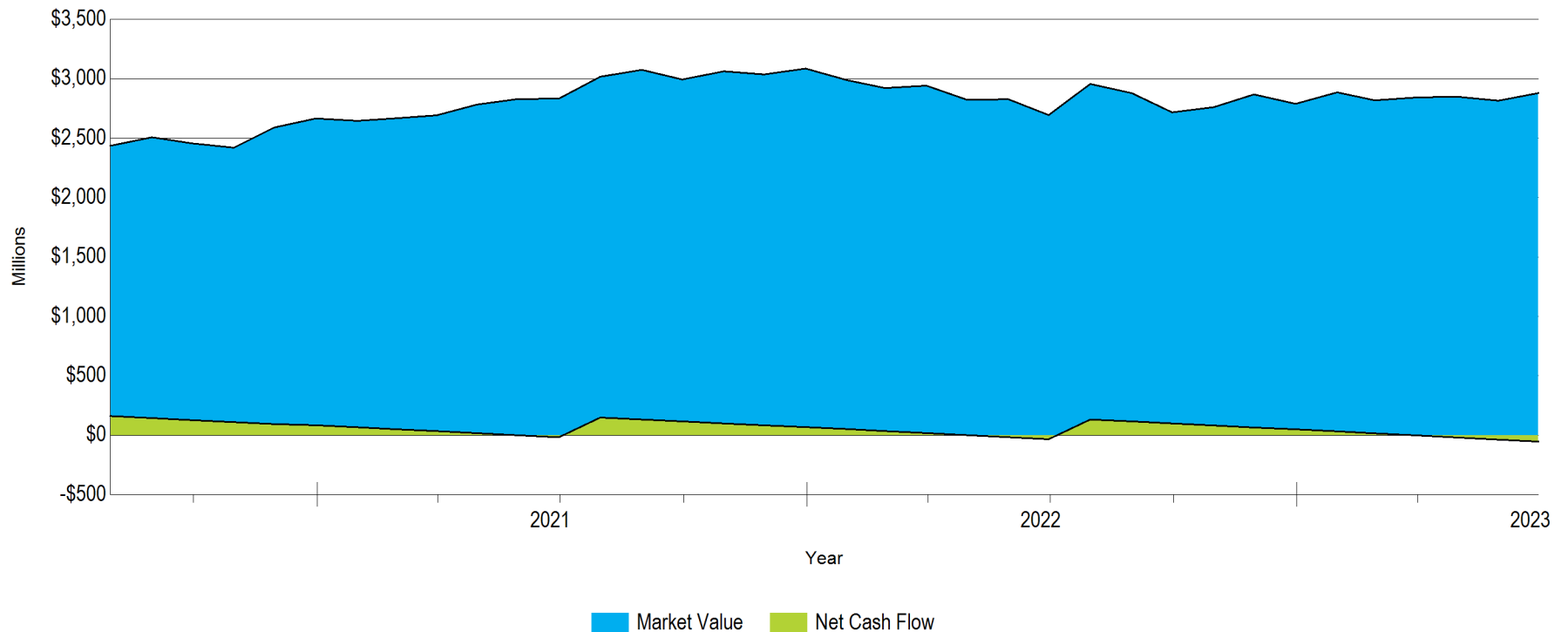
Attribution Effects  
3 Years Ending June 30, 2023



Attribution Summary  
3 Years Ending June 30, 2023

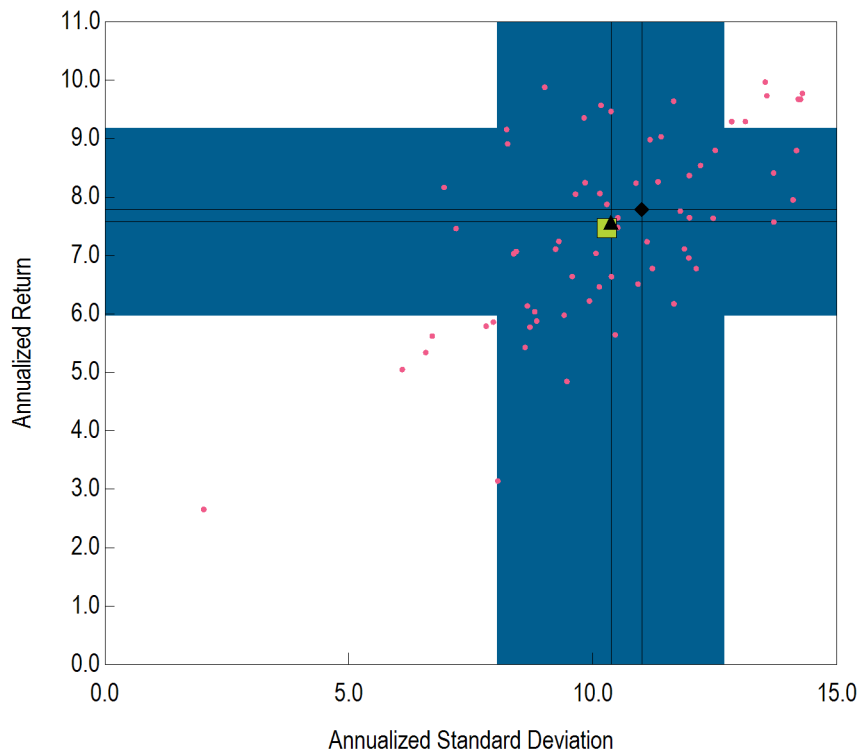
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	10.6%	10.2%	0.4%	0.2%	-0.1%	0.1%
Private Markets	20.3%	20.3%	0.0%	0.0%	0.0%	0.0%
Emerging Markets Debt	3.4%	-2.2%	5.7%	0.2%	0.0%	0.2%
High Yield Bonds	3.6%	3.1%	0.5%	0.0%	0.0%	0.0%
Immunized Cash Flows	-0.8%	-0.9%	0.1%	0.0%	0.0%	0.0%
Market Neutral Strategies	15.1%	2.1%	13.0%	0.3%	0.1%	0.4%
Cash	1.1%	1.3%	-0.2%	0.0%	-0.1%	-0.1%
Investment Grade Bonds	-2.7%	-3.1%	0.4%	0.0%	0.2%	0.2%
TIPS	2.4%	2.3%	0.0%	0.0%	0.0%	0.0%
Core Private Real Estate	10.1%	8.1%	2.0%	0.1%	-0.1%	0.0%
Long-Term Government Bonds	-12.0%	-12.1%	0.1%	0.0%	0.0%	0.0%
Overlay	-27.1%	1.3%	-28.4%	-0.1%	0.0%	-0.2%
<b>Total</b>	<b>10.1%</b>	<b>9.4%</b>	<b>0.7%</b>	<b>0.8%</b>	<b>0.0%</b>	<b>0.7%</b>

Market Value History  
3 Years Ending June 30, 2023



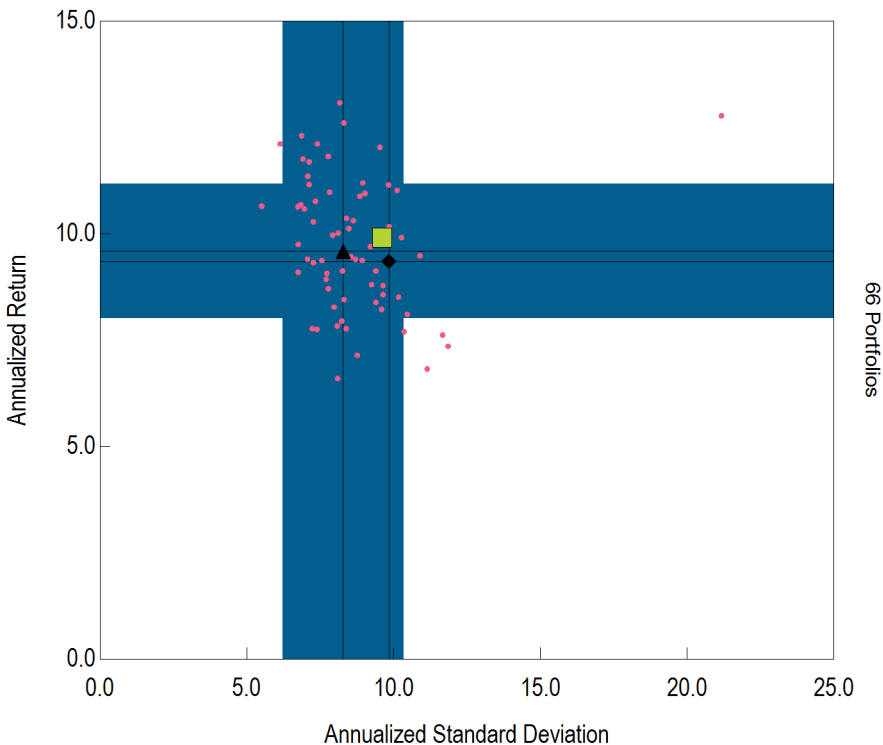
	Second Quarter	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$2,842,368,357	\$2,694,268,662	\$2,694,268,662	\$2,183,349,144
Net Cash Flow	-\$52,274,456	-\$19,755,852	-\$19,755,852	-\$54,445,250
Net Investment Change	\$89,364,758	\$204,945,849	\$204,945,849	\$750,554,765
Ending Market Value	\$2,879,458,659	\$2,879,458,659	\$2,879,458,659	\$2,879,458,659

Annualized Return vs. Annualized Standard Deviation  
1 Year Ending June 30, 2023



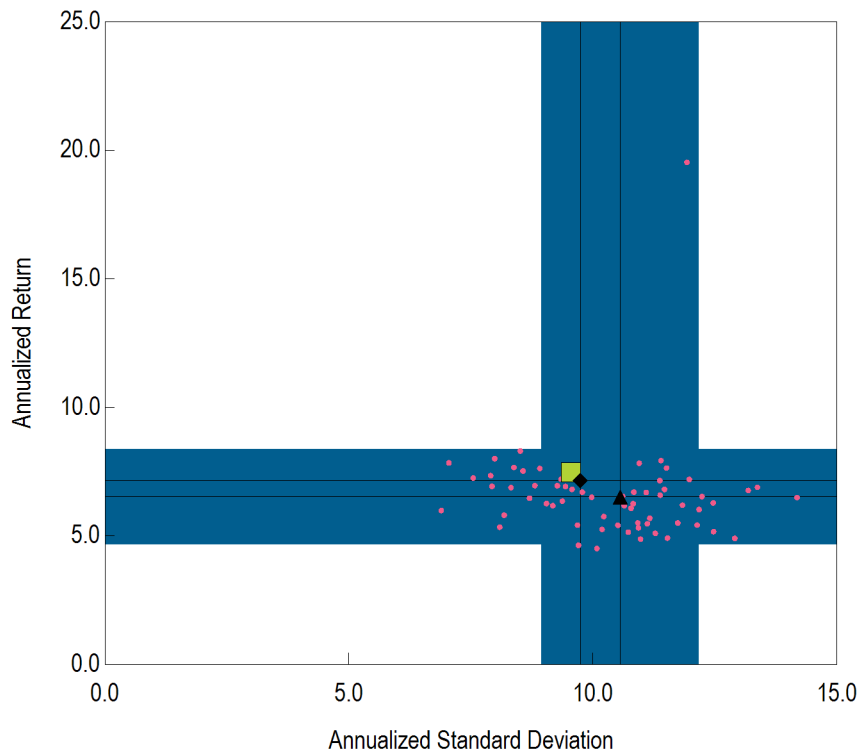
- Total Fund Aggregate
- Policy Benchmark
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2023



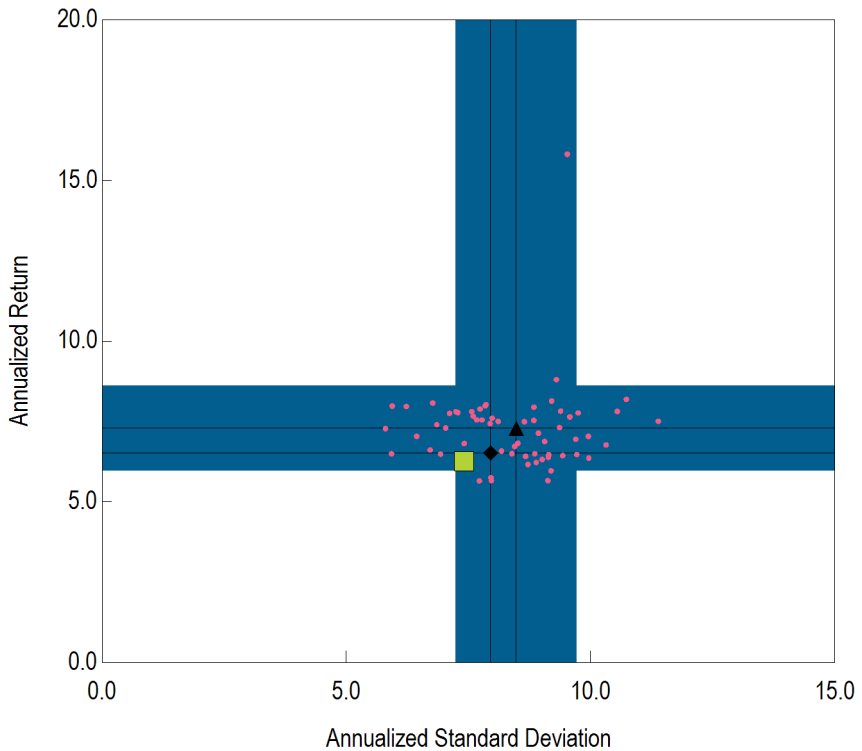
- Total Fund Aggregate
- Policy Benchmark
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

Annualized Return vs. Annualized Standard Deviation  
5 Years Ending June 30, 2023



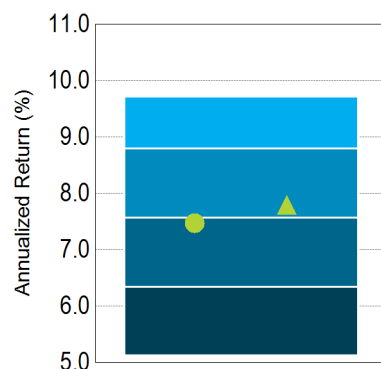
- Total Fund Aggregate
- Policy Benchmark
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

Annualized Return vs. Annualized Standard Deviation  
10 Years Ending June 30, 2023



- Total Fund Aggregate
- Policy Benchmark
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

#### Annualized Return (%) vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 7.5  
Rank 53

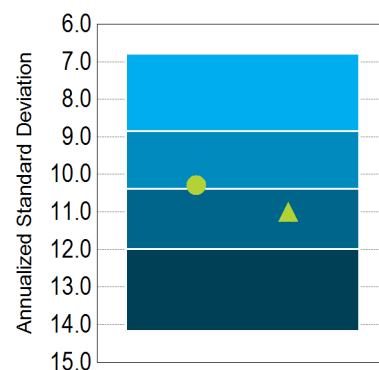
#### ▲ Policy Benchmark

Value 7.8  
Rank 44

#### Universe

5th %tile 9.7  
25th %tile 8.8  
Median 7.6  
75th %tile 6.3  
95th %tile 5.1

#### Annualized Standard Deviation vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 10.3  
Rank 49

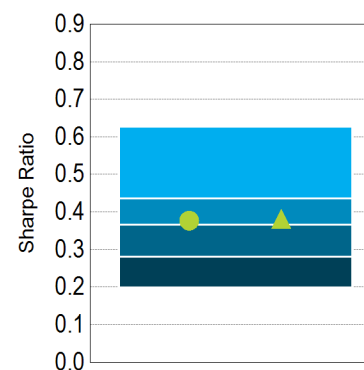
#### ▲ Policy Benchmark

Value 11.0  
Rank 60

#### Universe

5th %tile 6.8  
25th %tile 8.8  
Median 10.4  
75th %tile 12.0  
95th %tile 14.1

#### Sharpe Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 0.4  
Rank 48

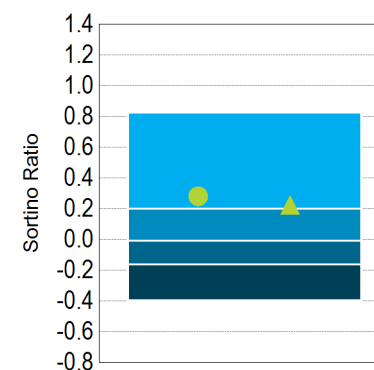
#### ▲ Policy Benchmark

Value 0.4  
Rank 47

#### Universe

5th %tile 0.6  
25th %tile 0.4  
Median 0.4  
75th %tile 0.3  
95th %tile 0.2

#### Sortino Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 0.3  
Rank 18

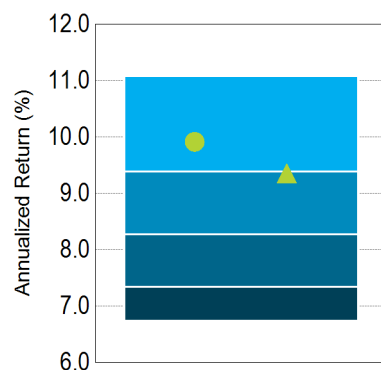
#### ▲ Policy Benchmark

Value 0.2  
Rank 22

#### Universe

5th %tile 0.8  
25th %tile 0.2  
Median 0.0  
75th %tile -0.2  
95th %tile -0.4

#### Annualized Return (%) vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

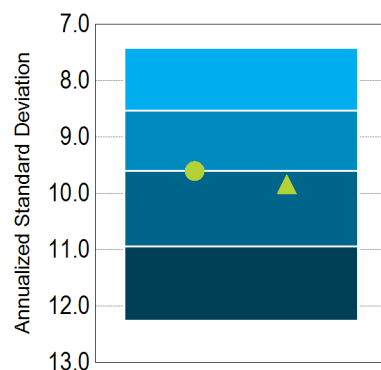
Value 9.9  
Rank 16

#### ▲ Policy Benchmark

Value 9.4  
Rank 27

Universe  
5th %tile 11.1  
25th %tile 9.4  
Median 8.3  
75th %tile 7.3  
95th %tile 6.7

#### Annualized Standard Deviation vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

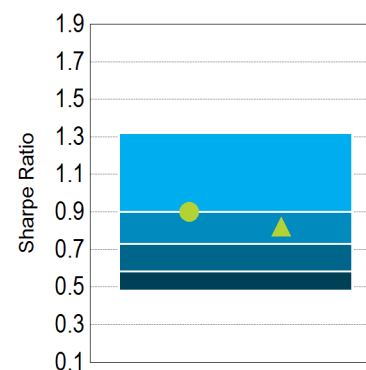
Value 9.6  
Rank 51

#### ▲ Policy Benchmark

Value 9.8  
Rank 54

Universe  
5th %tile 7.4  
25th %tile 8.5  
Median 9.6  
75th %tile 10.9  
95th %tile 12.3

#### Sharpe Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

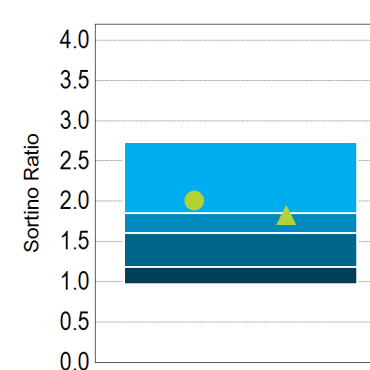
Value 0.9  
Rank 26

#### ▲ Policy Benchmark

Value 0.8  
Rank 34

Universe  
5th %tile 1.3  
25th %tile 0.9  
Median 0.7  
75th %tile 0.6  
95th %tile 0.5

#### Sortino Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 2.0  
Rank 20

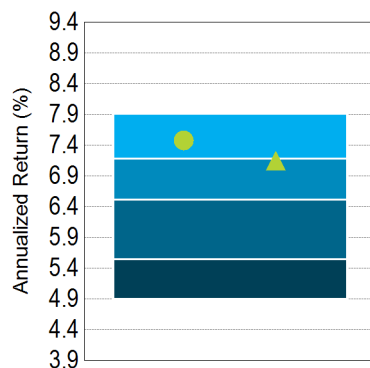
#### ▲ Policy Benchmark

Value 1.8  
Rank 28

Universe  
5th %tile 2.7  
25th %tile 1.9  
Median 1.6  
75th %tile 1.2  
95th %tile 1.0



#### Annualized Return (%) vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 7.5  
Rank 18

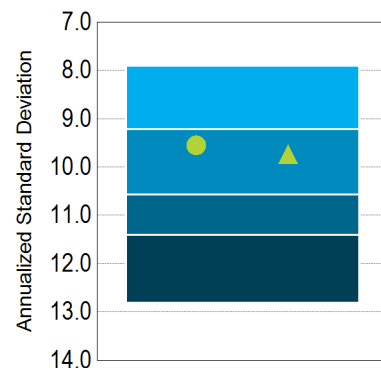
#### ▲ Policy Benchmark

Value 7.1  
Rank 27

#### Universe

5th %tile 7.9  
25th %tile 7.2  
Median 6.5  
75th %tile 5.6  
95th %tile 4.9

#### Annualized Standard Deviation vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 9.6  
Rank 34

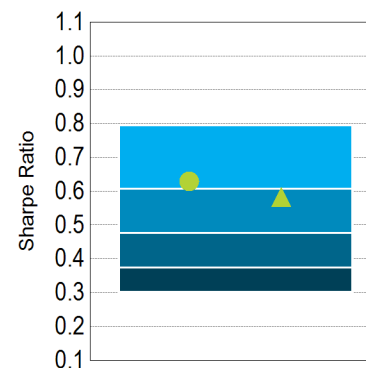
#### ▲ Policy Benchmark

Value 9.7  
Rank 41

#### Universe

5th %tile 7.9  
25th %tile 9.2  
Median 10.6  
75th %tile 11.4  
95th %tile 12.8

#### Sharpe Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 0.6  
Rank 20

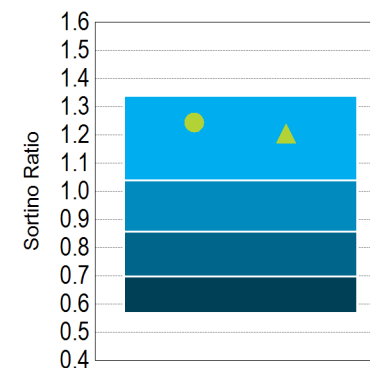
#### ▲ Policy Benchmark

Value 0.6  
Rank 28

#### Universe

5th %tile 0.8  
25th %tile 0.6  
Median 0.5  
75th %tile 0.4  
95th %tile 0.3

#### Sortino Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 1.2  
Rank 13

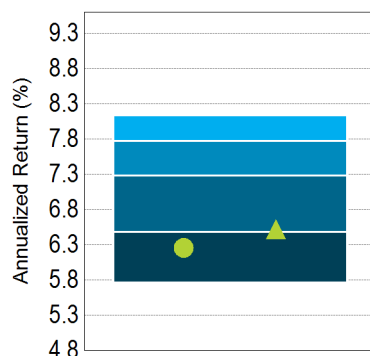
#### ▲ Policy Benchmark

Value 1.2  
Rank 14

#### Universe

5th %tile 1.3  
25th %tile 1.0  
Median 0.9  
75th %tile 0.7  
95th %tile 0.6

#### Annualized Return (%) vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 6.3  
Rank 90

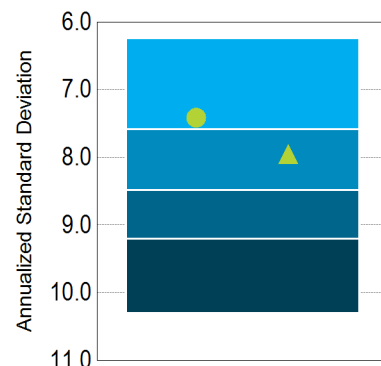
#### ▲ Policy Benchmark

Value 6.5  
Rank 71

#### Universe

5th %tile 8.1  
25th %tile 7.8  
Median 7.3  
75th %tile 6.5  
95th %tile 5.8

#### Annualized Standard Deviation vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 7.4  
Rank 23

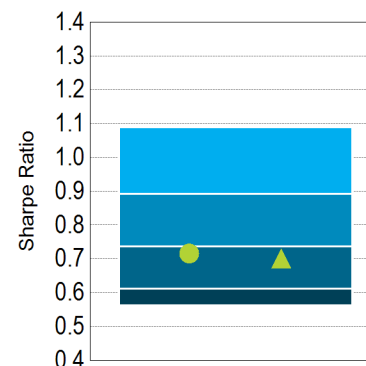
#### ▲ Policy Benchmark

Value 8.0  
Rank 39

#### Universe

5th %tile 6.2  
25th %tile 7.6  
Median 8.5  
75th %tile 9.2  
95th %tile 10.3

#### Sharpe Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

Value 0.7  
Rank 52

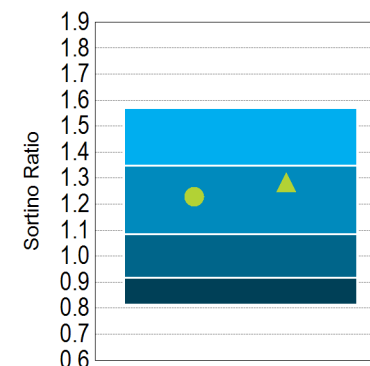
#### ▲ Policy Benchmark

Value 0.7  
Rank 53

#### Universe

5th %tile 1.1  
25th %tile 0.9  
Median 0.7  
75th %tile 0.6  
95th %tile 0.6

#### Sortino Ratio vs. InvMetrics Public DB > \$1B Net



#### ● Total Fund Aggregate

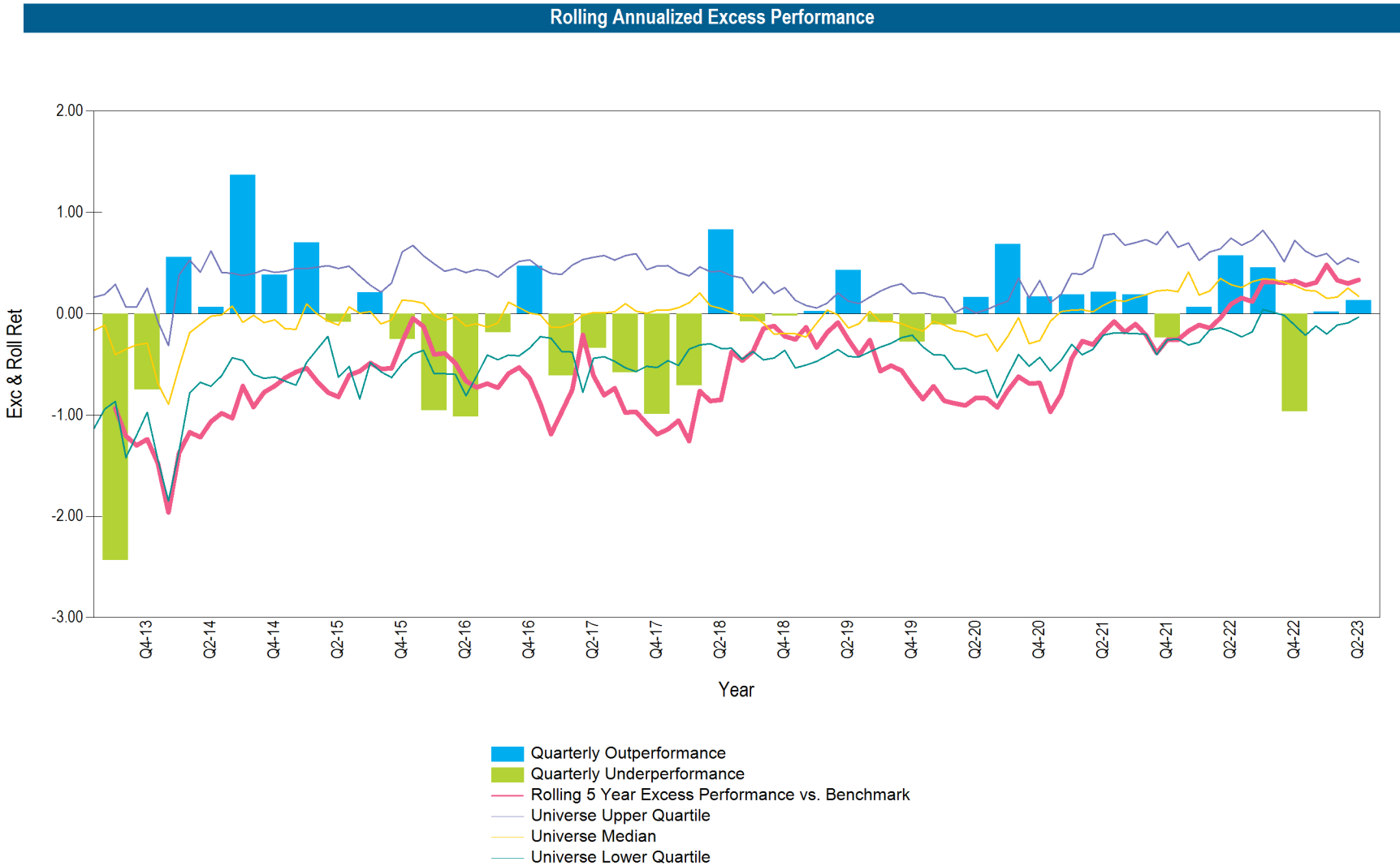
Value 1.2  
Rank 38

#### ▲ Policy Benchmark

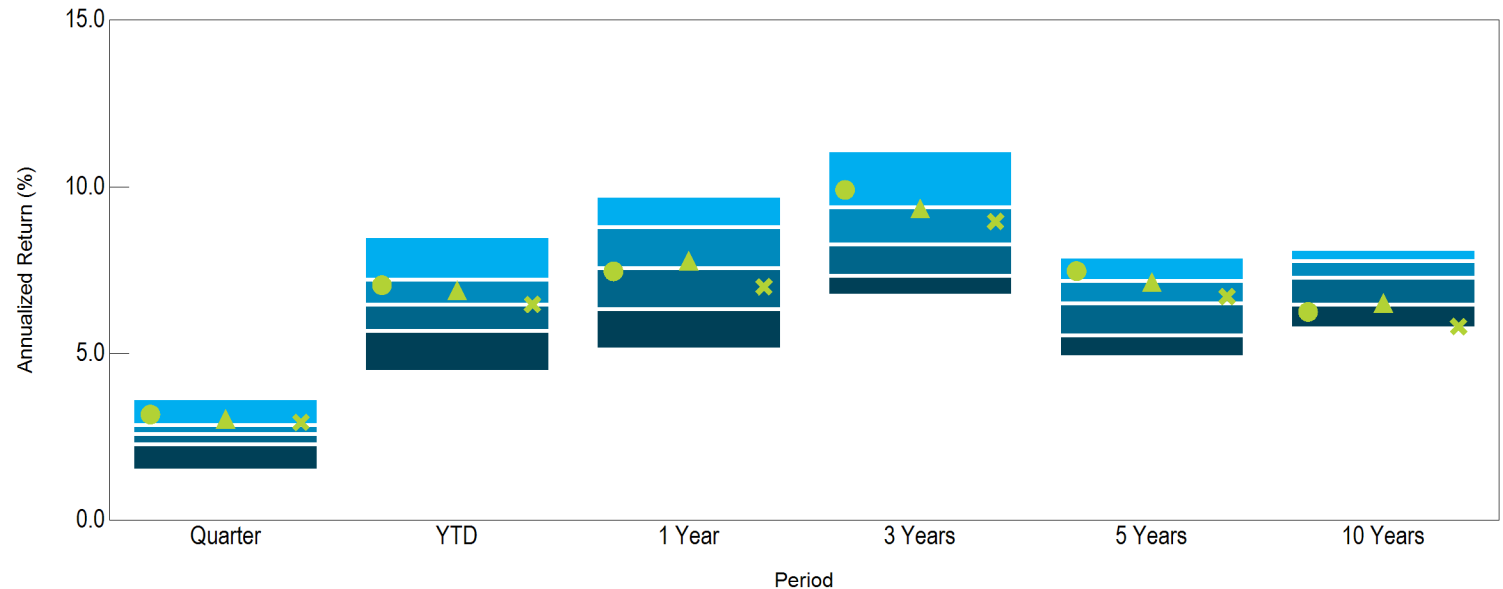
Value 1.3  
Rank 31

#### Universe

5th %tile 1.6  
25th %tile 1.3  
Median 1.1  
75th %tile 0.9  
95th %tile 0.8

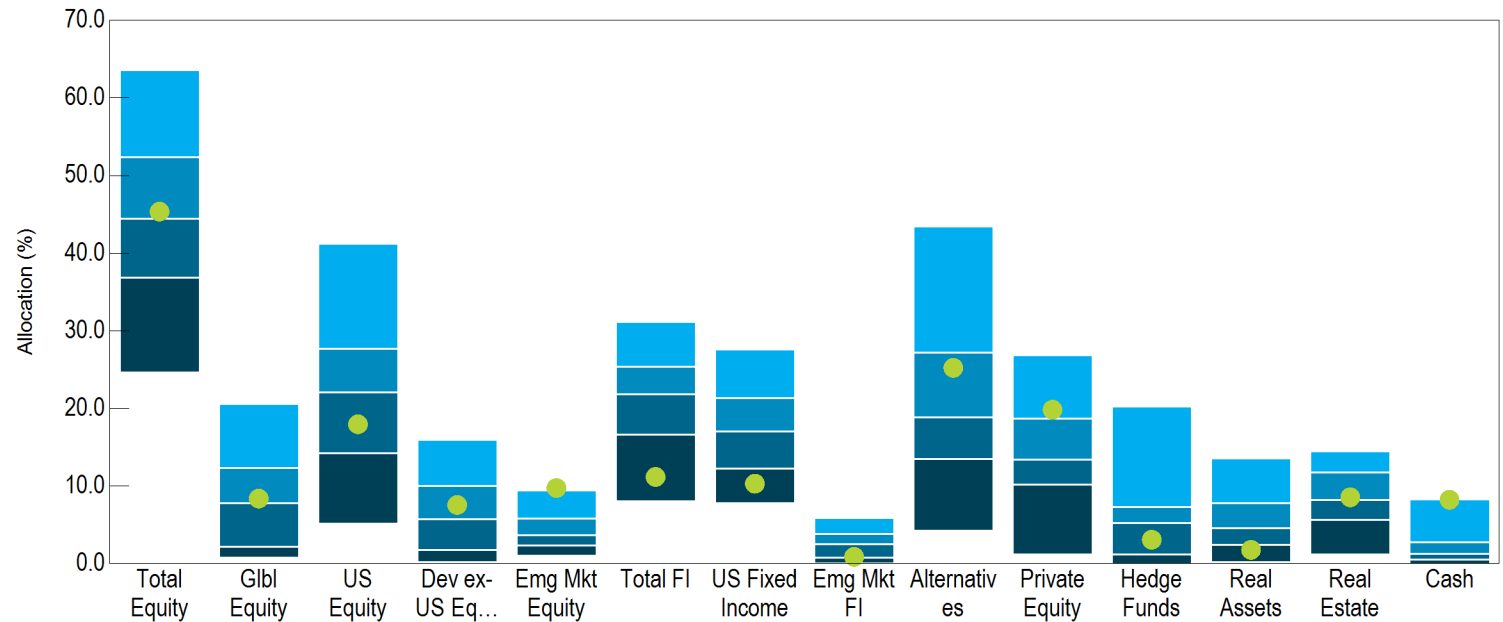


InvMetrics Public DB > \$1B Net Return Comparison  
Ending June 30, 2023



	Return (Rank)											
5th Percentile	3.7		8.5		9.7		11.1		7.9	8.1		
25th Percentile	2.9		7.2		8.8		9.4		7.2	7.8		
Median	2.6		6.5		7.6		8.3		6.5	7.3		
75th Percentile	2.3		5.7		6.3		7.3		5.6	6.5		
95th Percentile	1.5		4.5		5.1		6.7		4.9	5.8		
# of Portfolios	68		67		67		66		66	62		
● Total Fund Aggregate	3.2	(20)	7.1	(31)	7.5	(53)	9.9	(16)	7.5	(18)	6.3	(90)
▲ Policy Benchmark	3.0	(23)	6.9	(37)	7.8	(44)	9.4	(27)	7.1	(27)	6.5	(71)
✘ Investable Benchmark Portfolio	2.9	(24)	6.5	(51)	7.0	(65)	9.0	(32)	6.7	(42)	5.8	(95)

Total Plan Allocation vs. InvMetrics Public DB > \$1B Net  
As of June 30, 2023



	Allocation													
5th Percentile	63.6	20.6	41.2	15.9	9.4	31.1	27.6	5.9	43.4	26.8	20.2	13.5	14.5	8.3
25th Percentile	52.5	12.4	27.8	10.1	5.9	25.4	21.4	3.9	27.2	18.8	7.3	7.8	11.8	2.8
Median	44.5	7.9	22.2	5.8	3.7	21.9	17.1	2.6	18.9	13.5	5.3	4.6	8.3	1.3
75th Percentile	36.9	2.3	14.3	1.8	2.4	16.7	12.3	0.9	13.5	10.2	1.2	2.5	5.7	0.6
95th Percentile	24.7	0.8	5.2	0.3	1.1	8.1	7.9	0.1	4.3	1.3	0.0	0.2	1.3	0.0
# of Portfolios	63	28	58	22	42	65	54	11	62	56	42	37	59	63
● Total Fund Aggregate Rank	45.4	8.4	18.0	7.6	9.7	11.2	10.3	0.9	25.2	19.8	3.1	1.8	8.5	8.2
	50	41	66	41	1	92	87	75	29	23	66	83	48	6

Alternatives group includes Private Equity, Hedge Funds, and Real Assets. Private Equity group includes Private Debt and Venture Capital.

Name	Major Benchmark Returns				
	Periods Ending June 30, 2023				
	Q2-23	1 Yr	3 Yrs	5 Yrs	10 Yrs
US Equity					
Russell 3000	8.4	19.0	13.9	11.4	12.3
S&P 500	8.7	19.6	14.6	12.3	12.9
Russell 1000	8.6	19.4	14.1	11.9	12.6
Russell 1000 Growth	12.8	27.1	13.7	15.1	15.7
Russell 1000 Value	4.1	11.5	14.3	8.1	9.2
Russell MidCap	4.8	14.9	12.5	8.5	10.3
Russell 2000	5.2	12.3	10.8	4.2	8.3
Russell 2000 Growth	7.1	18.5	6.1	4.2	8.8
Russell 2000 Value	3.2	6.0	15.4	3.5	7.3
International Equity					
MSCI ACWI	6.2	16.5	11.0	8.1	8.8
MSCI World ex USA	3.0	17.4	9.3	4.6	5.4
MSCI EAFE	3.0	18.8	8.9	4.4	5.4
MSCI Emerging Markets	0.9	1.7	2.3	0.9	3.0
Fixed Income					
91 Day T-Bills	1.2	3.6	1.3	1.5	0.9
Bloomberg US Aggregate TR	-0.8	-0.9	-4.0	0.8	1.5
Bloomberg US Govt/Credit TR	-0.9	-0.7	-4.1	1.0	1.7
Bloomberg US Municipal TR	-0.1	3.2	-0.6	1.8	2.7
Bloomberg US High Yield TR	1.7	9.1	3.1	3.4	4.4
FTSE WGBI TR	-1.8	-2.5	-6.5	-2.0	-0.5
FTSE WGBI ex US TR	-2.1	-2.6	-7.8	-3.7	-1.4
Real Estate					
FTSE NAREIT All REIT	1.6	-4.3	6.2	4.3	6.6
NCREIF Property Index	-2.0	-6.6	6.8	5.9	7.8
Alternatives					
HFRI Fund of Funds Composite Index	1.5	3.7	5.0	3.3	3.4
Inflation					
Consumer Price Index	1.1	3.0	5.8	3.9	2.7

Statistics Summary												
3 Years Ending June 30, 2023												
	% of Total MV	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Anlzd Alpha J	Anlzd Alpha J Rank	Tracking Error	Information Ratio	Information Ratio Rank	Beta	Sharpe Ratio
Total Fund Aggregate	100.00%	9.91%	16	9.61%	51	0.77%	55	0.75%	0.74	11	0.97	0.90
Policy Benchmark	--	9.35%	27	9.84%	54	0.00%	85	0.00%	--	--	1.00	0.82
Growth	75.52%	12.85%	--	12.53%	--	0.48%	--	0.81%	0.48	--	0.99	0.93
Growth Benchmark	--	12.47%	--	12.60%	--	0.00%	--	0.00%	--	--	1.00	0.89
Public Equity	46.83%	10.59%	42	17.31%	86	0.17%	48	1.16%	0.30	18	1.02	0.54
Public Equity Benchmark	--	10.23%	67	16.93%	82	0.00%	57	0.00%	--	--	1.00	0.53
Global Equity	8.38%	10.88%	47	17.88%	44	-0.21%	52	3.25%	-0.02	48	1.01	0.54
MSCI ACWI IMI Index	--	10.97%	46	17.36%	34	0.00%	49	0.00%	--	--	1.00	0.56
US Equity	19.03%	14.31%	41	18.45%	38	0.77%	50	0.73%	1.01	2	1.00	0.71
MSCI USA IMI NR USD	--	13.57%	50	18.49%	39	0.00%	58	0.00%	--	--	1.00	0.67
International Equity	9.29%	7.39%	54	19.17%	69	-1.83%	61	3.03%	-0.49	76	1.05	0.32
MSCI World ex USA IMI NR USD	--	8.87%	36	18.10%	43	0.00%	44	0.00%	--	--	1.00	0.42
Emerging Markets Equity	10.13%	6.33%	37	17.08%	28	2.81%	36	2.65%	1.03	16	0.96	0.30
MSCI Emerging Markets IMI Net	--	3.60%	54	17.52%	35	0.00%	54	0.00%	--	--	1.00	0.13
Private Markets	23.74%	20.28%	--	8.12%	--	0.00%	--	0.00%	--	--	1.00	2.34
Private Markets Benchmark	--	20.28%	--	8.12%	--	0.00%	--	0.00%	--	--	1.00	2.34
Private Equity	12.48%	26.34%	19	14.47%	68	27.98%	1	22.50%	0.07	50	-0.12	1.73
San Jose Custom Private Equity Benchmark	--	24.86%	44	15.44%	72	0.00%	99	0.00%	--	--	1.00	1.53
Private Debt	4.23%	17.62%	1	8.36%	99	15.20%	1	8.99%	1.02	39	0.16	1.96
S&P Global Leveraged Loan Index +2%	--	8.43%	2	4.02%	11	0.00%	91	0.00%	--	--	1.00	1.78

	% of Total MV	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Anlzd Alpha J	Anlzd Alpha J Rank	Tracking Error	Information Ratio	Information Ratio Rank	Beta	Sharpe Ratio
Growth Real Estate	4.10%	13.17%	1	7.25%	23	12.80%	1	10.56%	0.60	1	-0.16	1.64
NCREIF Property Index	--	6.80%	64	6.67%	20	0.00%	38	0.00%	--	--	1.00	0.83
Emerging Markets Debt	2.89%	3.43%	5	6.72%	7	3.48%	13	8.45%	0.67	29	0.37	0.32
50% JPM EMBI GD / 50% JPM GBI-EM	--	-2.24%	79	10.25%	49	0.00%	74	0.00%	--	--	1.00	-0.34
High Yield Bonds	2.05%	3.65%	33	8.65%	89	0.47%	42	0.80%	0.64	15	1.02	0.28
Bloomberg US Corporate High Yield TR	--	3.13%	51	8.41%	77	0.00%	58	0.00%	--	--	1.00	0.22
Low Beta	10.51%	4.40%	--	1.91%	--	3.08%	--	2.36%	1.73	--	-0.06	1.65
Low Beta Benchmark	--	0.31%	--	1.31%	--	0.00%	--	0.00%	--	--	1.00	-0.72
Immunized Cash Flows	5.64%	-0.76%	99	2.01%	99	0.13%	74	0.64%	0.20	99	1.00	-1.01
Bloomberg US Govt/Credit 1-3 Yr. TR	--	-0.88%	99	1.91%	99	0.00%	89	0.00%	--	--	1.00	-1.13
Market Neutral Strategies	3.07%	15.10%	--	6.30%	--	15.35%	--	6.47%	2.01	--	-1.75	2.20
Market Neutral Strategies Benchmark	--	2.12%	--	0.71%	--	0.00%	--	0.00%	--	--	1.00	1.21
Relative Value	3.07%	15.59%	--	6.31%	--	15.07%	--	7.35%	1.32	--	-0.16	2.27
HFRI Relative Value (Total) Index	--	5.89%	--	3.28%	--	0.00%	--	0.00%	--	--	1.00	1.41
Cash	1.80%	1.07%	--	0.47%	--	-0.20%	--	0.31%	-0.65	--	0.72	-0.41
ICE BofA 91 Days T-Bills TR	--	1.27%	--	0.53%	--	0.00%	--	0.00%	--	--	1.00	0.03
Other	13.70%	0.07%	--	3.31%	--	0.01%	--	1.23%	0.20	--	0.83	-0.36
Other Benchmark	--	-0.18%	--	3.77%	--	0.00%	--	0.00%	--	--	1.00	-0.38
Investment Grade Bonds	4.30%	-2.70%	9	5.17%	8	0.49%	51	1.11%	0.40	8	1.01	-0.77
Custom IG Bonds Benchmark	--	-3.14%	23	5.00%	7	0.00%	86	0.00%	--	--	1.00	-0.88
TIPS	1.98%	2.38%	--	3.14%	--	0.08%	--	0.46%	0.09	--	0.97	0.36



	% of Total MV	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Anlzd Alpha J	Anlzd Alpha J Rank	Tracking Error	Information Ratio	Information Ratio Rank	Beta	Sharpe Ratio
BBg U.S. TIPS 0-5 Years	--	2.34%	--	3.22%	--	0.00%	--	0.00%	--	--	1.00	0.34
Core Private Real Estate	5.46%	10.14%	--	9.30%	--	1.59%	--	2.10%	0.97	--	1.07	0.95
Core Real Estate Benchmark	--	8.09%	--	8.51%	--	0.00%	--	0.00%	--	--	1.00	0.80
Long-Term Government Bonds	1.96%	-11.97%	--	13.61%	--	0.09%	--	1.69%	0.07	--	1.00	-0.97
Bloomberg US Treasury Long TR	--	-12.09%	--	13.53%	--	0.00%	--	0.00%	--	--	1.00	-0.99
Overlay	0.27%	-27.14%	--	38.74%	--	-28.40%	--	38.70%	-0.73	--	6.37	-0.73
91 Day T-Bills	--	1.26%	--	0.53%	--	0.00%	--	0.00%	--	--	1.00	0.00

### Benchmark History

#### Total Fund Aggregate

3/1/2022	Present	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Markets IMI NR USD / 21% Private Markets Benchmark / 5% NCREIF-ODCE NR USD / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% Bloomberg US Corporate High Yield TR / 3% SOFR +1.5% / 5% Immunized Cash Flow Benchmark / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 8% Custom IG Bonds Benchmark / 2% Bloomberg US Treasury Long TR
6/1/2021	2/28/2022	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Markets IMI NR USD / 21% Private Markets Benchmark / 5% NCREIF-ODCE NR USD / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% Bloomberg US Corporate High Yield TR / 3% LIBOR 3-Month +1.5% / 5% Immunized Cash Flow Benchmark / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 8% Custom IG Bonds Benchmark / 2% Bloomberg US Treasury Long TR
4/1/2020	5/31/2021	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 21% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% Bloomberg US Corporate High Yield TR / 5% Immunized Cash Flows Benchmark / 3% Market Neutral Strategies Benchmark / 5% NCREIF-ODCE / 2% Bloomberg US Govt Long TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 8% Custom IG Bonds Benchmark
12/1/2019	3/31/2020	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 23% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 15% ICE BofA 91 Days T-Bills TR / 5% Immunized Cash Flows Benchmark / 7% Market Neutral Strategies Benchmark / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 3% BBgBarc Global Aggregate TR
11/1/2019	11/30/2019	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 23% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 18% ICE BofA 91 Days T-Bills TR / 5% Immunized Cash Flows Benchmark / 7% Market Neutral Strategies Benchmark / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
10/1/2019	10/31/2019	13% MSCI USA IMI NR USD / 7% MSCI World ex USA IMI NR USD / 10% MSCI Emerging Market IMI Net / 25% Private Markets Benchmark / 5% 50% JPM EMBI GD / 50% JPM GBI-EM / 18% ICE BofA 91 Days T-Bills TR / 5% Immunized Cash Flows Benchmark / 7% Market Neutral Strategies Benchmark / 5% NCREIF-ODCE / 3% Bloomberg Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
10/1/2018	9/30/2019	13% MSCI USA IMI NR USD / 7% MSCI World ex USA IMI NR USD / 10% MSCI Emerging Market IMI Net / 25% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 20% ICE BofA 91 Days T-Bills TR / 5% Immunized Cash Flows Benchmark / 7% Market Neutral Strategies Benchmark / 5% NCREIF-ODCE / 3% Bloomberg Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
11/1/2017	9/30/2018	28% MSCI ACWI IMI Net USD / 9% Cambridge PE Composite BM / 33% Fixed Income Custom Benchmark / 6% S&P Global Leveraged Loan Index +2% / 8% NCREIF Property Index / 4% Bloomberg Commodity Index TR USD / 1% DJ Brookfield Global Infrastructure Net TR USD / 11% HFRI Macro (Total) Index
7/1/2015	10/31/2017	28% MSCI ACWI IMI Net USD / 9% Cambridge Associates Private Equity Composite / 19% Fixed Income Custom Benchmark / 5% S&P Global Leveraged Loan Index +2% / 7% NCREIF Property Index / 6% Bloomberg Commodity Index TR USD / 5% DJ Brookfield Global Infrastructure Net TR USD / 5% S&P Global LargeMidCap Commodity and Resources GR USD / 11% HFRI Macro (Total) Index / 5% 60/40 MSCI ACWI IMI/BC Global

### Low Cost Passive Benchmark

6/1/2021	Present	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Markets IMI NR USD / 12% Russell 3000 / 3% BBgBarc US Aggregate TR / 3% S&P Global Natural Resources / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% BBgBarc US Corporate High Yield TR / 8% FTSE EPRA/NAREIT Global NR USD / 2% BBgBarc US Treasury Long TR / 5% BBgBarc Gov/Credit 1-3 Yr / 3% LIBOR 3-Month / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 8% Custom IG Bonds Benchmark
4/1/2020	5/31/2021	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 10% Russell 3000 / 11% BBgBarc US Aggregate TR / 2% BBgBarc US Corporate High Yield TR 8% / 3% FTSE EPRA/NAREIT Global NR USD / 2% BBgBarc US Govt Long TR / 5% ICE BofAML 91 Days T-Bills TR / 3% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR
12/1/2019	3/31/2020	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 13% Russell 3000 / 7% BBgBarc US Aggregate TR / 8% FTSE EPRA/NAREIT Global NR USD / 3% S&P Global Natural Resources Net USD / 5% 50% JPM EMBI GD / 50% JPM GBI-EM / 5% ICE BofAML 91 Days T-Bills TR / 7% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 2% Bloomberg Commodity Index TR USD / 15% BBgBarc US Govt/Credit 1-3 Yr. TR
11/1/2019	11/30/2019	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 13% Russell 3000 / 7% BBgBarc US Aggregate TR / 8% FTSE EPRA/NAREIT Global NR USD / 3% S&P Global Natural Resources Net USD / 5% 50% JPM EMBI GD / 50% JPM GBI-EM / 5% ICE BofAML 91 Days T-Bills TR / 7% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 2% Bloomberg Commodity Index TR USD / 18% BBgBarc US Govt/Credit 1-3 Yr. TR
10/1/2019	10/31/2019	13% MSCI USA IMI NR USD / 7% MSCI World ex USA IMI NR USD / 10% MSCI Emerging Market IMI Net / 15% Russell 3000 / 4% BBgBarc US Aggregate TR / 8% FTSE EPRA/NAREIT Global NR USD / 3% S&P Global Natural Resources Net USD / 5% 50% JPM EMBI GD / 50% JPM GBI-EM / 5% ICE BofAML 91 Days T-Bills TR / 7% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 3% Bloomberg Commodity Index TR USD / 18% BBgBarc US Govt/Credit 1-3 Yr. TR
10/1/2018	9/30/2019	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 13% MSCI Emerging Market IMI Net / 12% Russell 3000 / 4% BBgBarc US Aggregate TR / 8% FTSE EPRA/NAREIT Global NR USD / 3% S&P Global Natural Resources Net USD / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 5% ICE BofAML 91 Days T-Bills TR / 5% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR/17% BBgBarc US Govt/Credit 1-3 Yr. TR

Growth		
6/1/2021	Present	65.33% Public Equity Benchmark / 28.0% Private Markets Benchmark / 4.0% 50% JPM EMBI GD / 50% JPM GBI-EM / 2.67% BBgBarc US Corporate High Yield TR
4/1/2020	5/31/2021	65.33% Public Equity Benchmark / 28% Private Markets Benchmark / 6.67% 50% JPM EMBI GD / 50% JPM GBI-EM / 4.08% BBgBarc US Corporate High Yield TR
11/1/2019	3/31/2020	57.38% Public Equity Benchmark / 37.7% Private Markets Benchmark / 4.92% 50% JPM EMBI GD / 50% JPM GBI-EM
10/1/2019	10/31/2019	50% Public Equity Benchmark / 41.67% Private Markets Benchmark / 8.33% 50% JPM EMBI GD / 50% JPM GBI-EM
10/1/2018	9/30/2019	51.73% Public Equity Benchmark / 43.1% Private Markets Benchmark / 5.17% 50% JPM EMBI GD / 50% JPM GBI-EM
11/1/2017	9/30/2018	51.29% MSCI ACWI IMI Net USD / 16.48% Cambridge PE Composite BM / 10.99% S&P Global Leveraged Loan Index +2% / 7.33% NCREIF Property Index / 60.4% 50% JPM EMBI GD (US) / 50% JPM GBIEM GD (Lcl) / 60.4% 50% BAML Global HY / 50% S&P Global Leveraged Loan / 1.83% DJ Brookfield Global Infrastructure Net TR USD
7/1/2015	10/31/2017	47.23% MSCI ACWI IMI Net USD / 15.18% Cambridge PE Composite BM / 8.43% S&P Global Leveraged Loan Index +2% / 8.43% DJ Brookfield Global Infrastructure Net TR USD / 8.43% S&P Global Natural Resources Index TR USD / 5.9% NCREIF Property Index / 3.2% 50% JPM EMBI GD (US) / 50% JPM GBIEM GD (Lcl) / 3.2% 50% BAML Global HY / 50% S&P Global Leveraged Loan
Public Equity		
6/1/2021	Present	51.02% MSCI USA IMI NR USD / 24.49% MSCI World ex USA IMI NR USD / 24.49% MSCI Emerging Market IMI NR USD
4/1/2020	5/31/2021	51.02% MSCI USA IMI NR USD / 24.49% MSCI World ex USA IMI NR USD / 24.49% MSCI Emerging Market IMI Net
11/1/2019	3/31/2020	37.14% MSCI USA IMI NR USD / 28.57% MSCI World ex USA IMI NR USD / 34.29% MSCI Emerging Market IMI Net
10/1/2018	10/31/2019	43.33% MSCI USA IMI NR USD / 23.33% MSCI World ex USA IMI NR USD / 33.33% MSCI Emerging Market IMI Net
5/1/2010	9/30/2018	MSCI ACWI IMI Net USD
Global Equity		
7/1/2015	Present	MSCI ACWI IMI NR USD
US Equity		
7/1/2015	Present	MSCI USA IMI NR USD
International Equity		
7/1/2015	Present	MSCI World ex USA IMI NR USD
Emerging Markets Equity		
7/1/2015	Present	MSCI Emerging Markets IMI NR USD

Marketable Alternative Equity		
10/1/2014	Present	HFRI Equity Hedge (Total) Index
Private Markets		
7/1/2015	Present	Private Markets
Private Markets ex Russell 3000		
No Benchmark Selected		
Private Equity		
1/1/2006	Present	Custom Private Equity BM (100% Cambridge US PE)
Private Equity ex Russell 3000		
7/1/2018	9/30/2021	Cambridge Associates Global Private Equity Index
Northern Trust Russell 3000		
6/1/2018	Present	Russell 3000
Private Debt		
12/1/2010	Present	S&P Global Leveraged Loan Index +2%
Growth Real Estate		
7/1/2015	Present	NCREIF Property Index
Private Real Assets		
No Benchmark Selected		
Emerging Markets Debt		
7/1/2015	Present	50% JP Morgan GBI EM Global Diversified TR USD / 50% JP Morgan EMBI Global Diversified
High Yield Bonds		
6/1/2020	Present	BBgBarc US Corporate High Yield TR
Low Beta		
4/1/2020	Present	62.5% Immunized Cash Flows Benchmark / 37.5% Market Neutral Strategies Benchmark
12/1/2019	3/31/2020	55.56% ICE BofA 91 Days T-Bills TR / 25.93% Immunized Cash Flows Benchmark / 18.52% Market Neutral Strategies Benchmark
10/1/2019	11/30/2019	60% ICE BofA 91 Days T-Bills TR / 23.33% Immunized Cash Flows Benchmark / 6.67% Market Neutral Strategies Benchmark
10/1/2018	9/30/2019	62.5% ICE BofA 91 Days T-Bills TR / 15.62% Immunized Cash Flows Benchmark / 21.88% Market Neutral Strategies Benchmark
7/1/2015	9/30/2018	HFRI Macro (Total) Index

Short-Term IG Bonds		
10/1/2018	Present	91 Day T-Bills
Immunized Cash Flows		
10/1/2018	Present	Immunized Cash Flows
Market Neutral Strategies		
3/1/2022	Present	SOFR + 1.5%
6/1/2021	2/28/2022	LIBOR 3-Month +1.5%
10/1/2018	5/31/2021	3-Month Libor Total Return USD
11/1/2012	9/30/2018	HFRI Macro (Total) Index
Macro		
10/1/2014	Present	HFRI Macro (Total) Index
Relative Value		
10/1/2014	Present	HFRI Relative Value (Total) Index
Cash		
1/1/2006	Present	ICE BofA 91 Days T-Bills TR
Other		
6/1/2021	Present	29.41% NCREIF ODCE Value Weighted (Net) (1 Qtr Lag) / 47.06% Custom IG Bonds Benchmark / 11.76% BBgBarc US Treasury Long TR / 11.76% BBgBarc US Treasury TIPS 0-5 Yr TR
4/1/2020	5/31/2021	29.41% NCREIF ODCE Equal Weighted / 47.06% Custom IG Bonds Benchmark / 11.76% BBgBarc US Govt Long TR / 11.76% BBgBarc US Treasury TIPS 0-5 Yr TR
12/1/2019	3/31/2020	41.67% NCREIF-ODCE / 16.67% Bloomberg Commodity Index TR USD / 16.67% BBgBarc U.S. TIPS 0-5 Years / 25% BBgBarc Global Aggregate TR
11/1/2019	11/30/2019	55.55% NCREIF-ODCE / 22.22% Bloomberg Commodity Index TR USD / 22.22% BBgBarc U.S. TIPS 0-5 Years
10/1/2018	10/31/2019	50% NCREIF-ODCE / 30% Bloomberg Commodity Index TR USD / 20% BBgBarc U.S. TIPS 0-5 Years
11/1/2017	9/30/2018	76.74% BBgBarc Global Aggregate TR / 11.63% NCREIF Property Index / 11.63% Bloomberg Commodity Index TR USD
7/1/2015	10/31/2017	51.18% BBgBarc Global Aggregate TR / 11.78% NCREIF Property Index / 20.2% Bloomberg Commodity Index TR USD / 16.84% 60/40 MSCI ACWI/BBgBarc Global Aggregate
Investment Grade Bonds		
12/1/2019	Present	Custom IG Bonds Benchmark (25% BBgBarc 1-3 Year Government/Credit, 56% US Aggregate, 19% US Securitized MBS/ABS/CMBS)
TIPS		
3/1/2017	Present	100% BBgBarc US Treasury TIPS 0-5 Yr TR

Core Private Real Estate		
6/1/2021	Present	NCREIF ODCE Value Weighted (Net) (1 Qtr Lag)
7/1/2004	5/31/2021	NCREIF ODCE Equal Weighted (Net)
Commodities		
5/1/2010	Present	Bloomberg Commodity Index TR USD
Long Term Government Bonds		
5/1/2020	Present	BBgBarc US Govt Long TR
Core Bonds		
7/1/2015	Present	BBgBarc Global Aggregate TR
Overlay		
11/1/2011	Present	91 Day T-Bills

## **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.