

City of San Jose Police and Fire Department Retirement Plan

As of March 31, 2023

Quarterly Review

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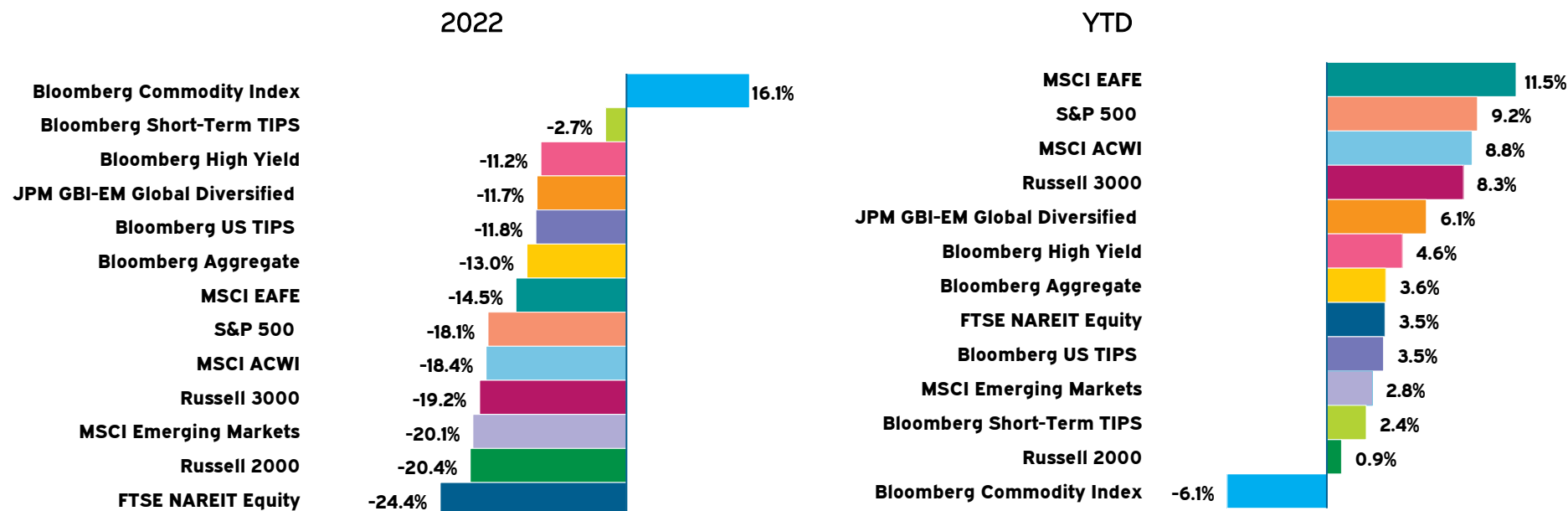
Economic and Market Update

Data as of April 30, 2023

Commentary

- Most asset classes added to first quarter gains in April as investors remained focused on slowing inflation and a potential end to rate hikes.
- The Fed increased interest rates for the tenth time after month-end, to a range of 5.0% - 5.25%, with this action largely expected to be their final hike.
 - Political struggles over the debt ceiling led to a significant increase in short-term rates and a historically high price of the cost to insure against defaults on US Treasuries.
 - US equity markets (Russell 3000) rose in April (+1.1%) adding to YTD gains (+8.3%). Some of the largest technology names drove positive results, with lingering issues in the banking sector (e.g., First Republic) weighing on parts of the equity markets.
 - Non-US developed equity markets also rallied in April (MSCI EAFE +2.8%) extending the outperformance relative to the US so far in 2023 (+11.5% versus +8.3%).
 - Emerging market equities fell in April (-1.1%) driven by declines in China (-5.2%). They significantly trail developed market equities YTD returning +2.8% partly due to higher US-China tensions.
 - After a strong March driven by the issues in the banking sector, bonds had more subdued gains in April, with the broad US bond market (Bloomberg Aggregate) gaining 0.6% for the month.
- This year, the path of inflation and monetary policy, slowing global growth, and the war in Ukraine, as well as recent pressures in regional banks and the looming debt ceiling breach in the US, will all be key.

Index Returns¹



- After a particularly difficult 2022, most public market assets are up in 2023, building on gains from the fourth quarter of last year.
- Risk sentiment has been supported by expectations that policy tightening could be ending soon, as inflation continues to fall and growth has slowed.

¹ Source: Bloomberg and FactSet. Data is as of April 30, 2023.

Domestic Equity Returns¹

Domestic Equity	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	1.6	7.5	9.2	2.7	14.5	11.4	12.2
Russell 3000	1.1	7.2	8.3	1.5	14.1	10.6	11.7
Russell 1000	1.2	7.5	8.8	1.8	14.2	11.1	12.0
Russell 1000 Growth	1.0	14.4	15.5	2.3	13.6	13.8	14.5
Russell 1000 Value	1.5	1.0	2.5	1.2	14.4	7.7	9.1
Russell MidCap	-0.5	4.1	3.5	-1.7	13.8	8.0	9.9
Russell MidCap Growth	-1.4	9.1	7.6	1.6	9.2	9.0	10.8
Russell MidCap Value	0.0	1.3	1.3	-3.5	15.8	6.4	8.7
Russell 2000	-1.8	2.7	0.9	-3.6	11.9	4.1	7.9
Russell 2000 Growth	-1.2	6.1	4.8	0.7	7.8	4.0	8.4
Russell 2000 Value	-2.5	-0.7	-3.1	-8.0	15.5	3.7	7.0

US Equities: Russell 3000 Index rose 1.1% in April and 8.3% YTD.

- US stocks rose in April as optimism over the Fed potentially ending its rate hiking campaign was mitigated by lingering concerns in the banking sector and slowing growth. Year-to-date gains in the US equity market remain strong though.
- Most sectors in the Russell 3000 index rose during the month, led by consumer staples and communication services. Growth stocks have significantly outperformed value stocks across the market capitalization spectrum this year, particularly in the large cap space due to technology stocks.
- The resurgence of large cap technology stocks is also driving the outperformance of the large cap indices versus the small cap indices. Weakness in the performance of small cap bank stocks is also contributing to results.

¹ Source: Bloomberg. Data is as of April 30, 2023.

Foreign Equity Returns¹

Foreign Equity	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	1.7	6.9	8.7	3.0	9.8	2.5	4.0
MSCI EAFE	2.8	8.5	11.5	8.4	11.7	3.6	4.8
MSCI EAFE (Local Currency)	2.3	7.5	9.9	7.7	13.5	5.8	7.1
MSCI EAFE Small Cap	2.0	4.9	7.0	-1.2	9.2	1.0	5.7
MSCI Emerging Markets	-1.1	4.0	2.8	-6.5	4.3	-1.0	1.8
MSCI Emerging Markets (Local Currency)	-0.7	3.8	3.1	-3.9	5.5	1.5	5.0
MSCI China	-5.2	4.7	-0.7	-5.8	-6.3	-5.0	2.7

Foreign Equity: Developed international equities (MSCI EAFE) rose 2.8% in April and 11.5% YTD. Emerging market equities (MSCI EM) fell -1.1% for the month but rose 2.8% YTD.

- Non-US equities had mixed results in April with developed markets (MSCI EAFE) gaining and outpacing US equities (2.8% versus 1.1%) for the month, while emerging markets (MSCI Emerging Markets) were the one area that declined (-1.1%).
- Developed market equity gains were broad-based across European sectors, while financials and energy were strong in the UK. In Japan, further weakness in the yen continued to boost market sentiment.
- The decline in emerging market equities (-1.1%) was driven largely by China (-5.2%). An escalation in US-China tensions and mixed results from the reopening of their economy weighed on shares. Taiwan also experienced marked declines over geopolitical concerns and weakness in semiconductors, while India was a bright spot.

¹ Source: Bloomberg. Data is as of April 30, 2023.

Fixed Income Returns¹

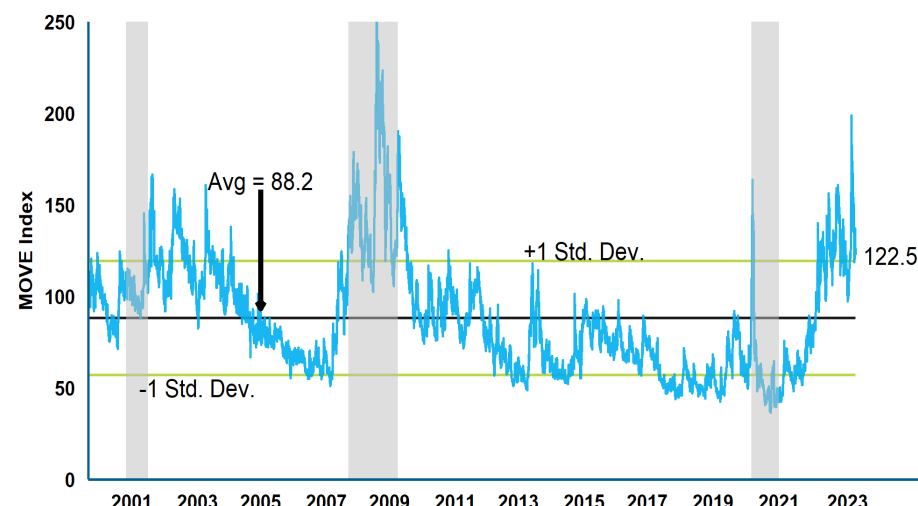
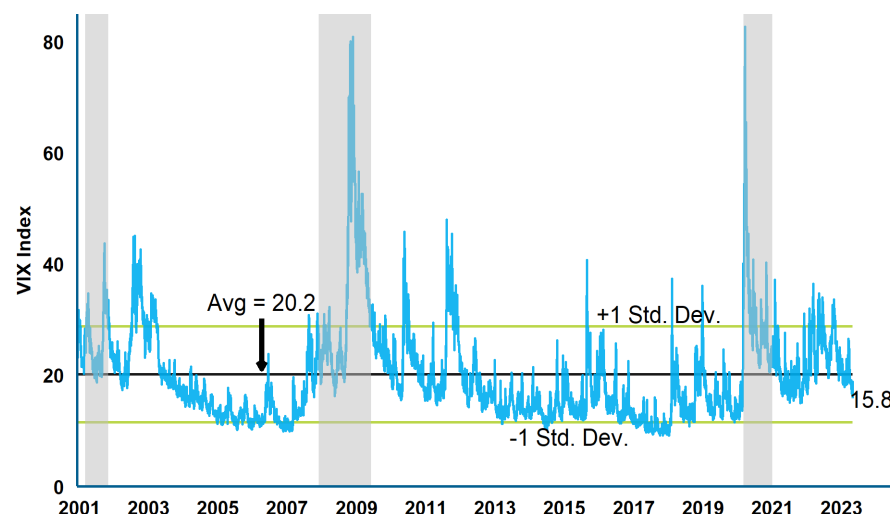
Fixed Income	April (%)	Q1 (%)	YTD (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Current Yield (%)	Duration (Years)
Bloomberg Universal	0.6	2.9	3.6	-0.3	-2.5	1.3	1.6	4.8	6.3
Bloomberg Aggregate	0.6	3.0	3.6	-0.4	-3.2	1.2	1.3	4.4	6.5
Bloomberg US TIPS	0.1	3.3	3.5	-4.0	0.9	3.0	1.4	4.0	7.0
Bloomberg Short-term TIPS	0.2	2.2	2.4	-0.1	3.1	3.0	1.6	4.6	2.6
Bloomberg High Yield	1.0	3.6	4.6	1.2	4.7	3.3	4.0	8.5	4.2
JPM GBI-EM Global Diversified (USD)	0.9	5.2	6.1	6.6	-0.1	-1.6	-1.8	7.0	5.0

Fixed Income: The Bloomberg Universal rose 0.6% in April and 3.6% YTD as global sovereign debt yields generally declined for major economies.

- As issues in the banking sector from March eased, the US bond market had a calm April, with interest rates, outside of the very shortest maturities, remaining stable.
- The TIPS index and short-term TIPS index had gains for the month but trailed the broad US bond market (Bloomberg Aggregate).
- High yield bonds (+1.0%) had the best results for the month as they particularly benefited from support for the banking sector.

¹ Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of April 30, 2023. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.

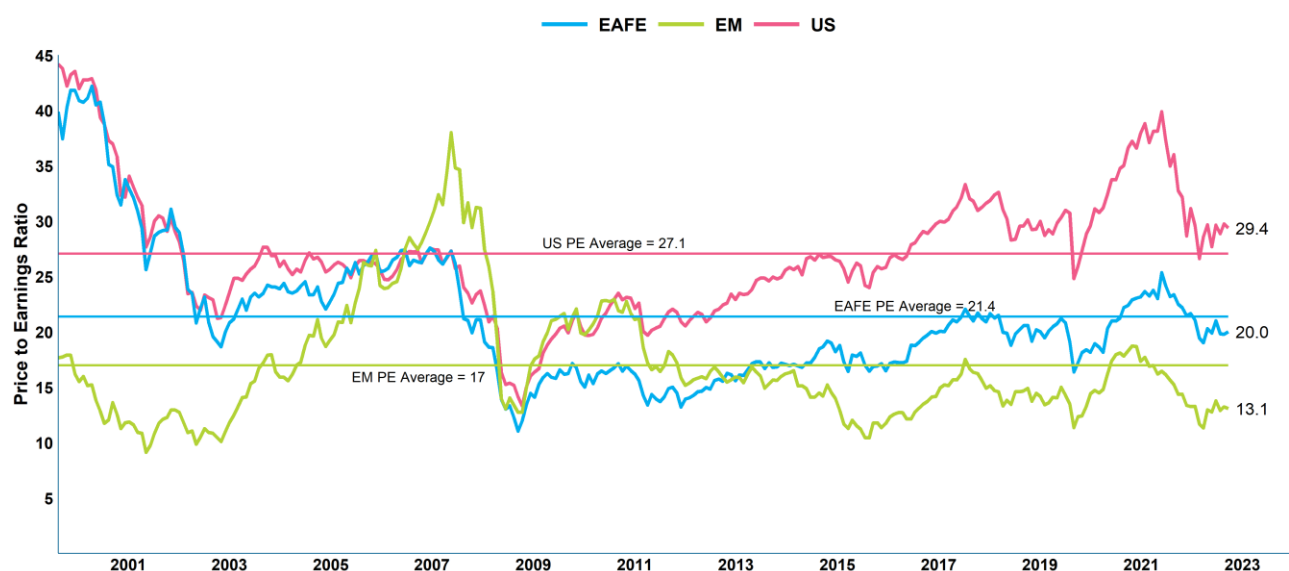
Equity and Fixed Income Volatility¹



- Volatility in equities (VIX) continued to decline in April, reaching levels not seen since late 2021 as investors anticipate the end of the Fed's policy tightening.
- In comparison, the bond market remains on edge after last year's historic losses and continued volatility in interest rates this year due to policy uncertainty and issues in the banking sector. The MOVE (fixed income volatility) remains well above its long-run average, but off its recent peak during the heart of the banking crises.

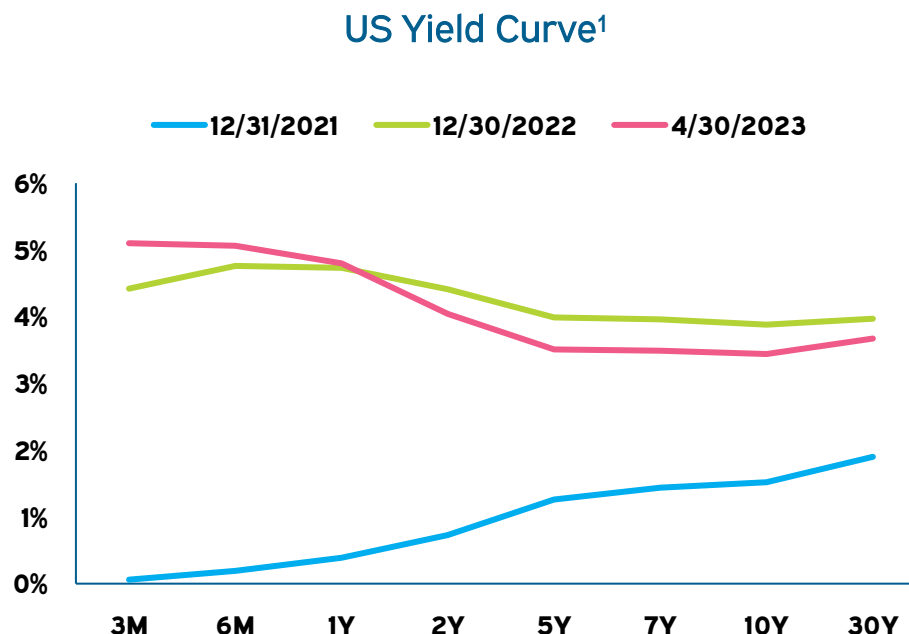
¹ Equity and Fixed Income Volatility – Source: Bloomberg. Implied volatility as measured using VIX Index for equity markets and the MOVE Index to measure interest rate volatility for fixed income markets. Data is as of April 2023. The average line indicated is the average of the VIX and MOVE values between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

Equity Cyclically Adjusted P/E Ratios¹



- After its dramatic decline last year the US equity price-to-earnings ratio remains above its long-run (21st century) average.
- International developed market valuations are slightly below their own long-term average, with those for emerging markets the lowest and well under the long-term average.

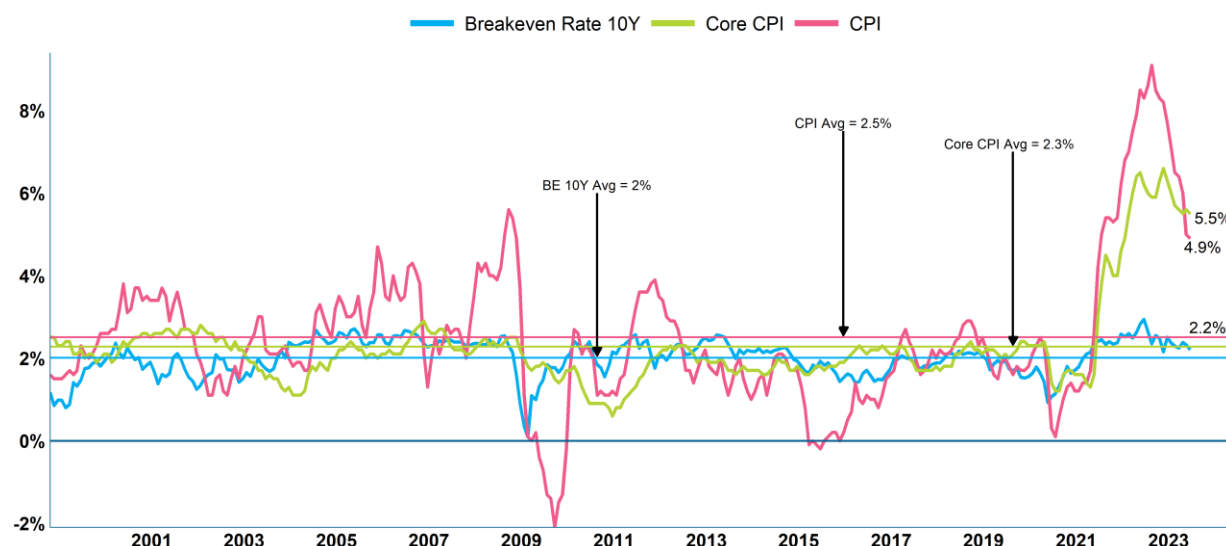
¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years. Data is as of April 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.



- Interest rates have declined this year for maturities two years and beyond, given expectations for peaking policy, while the rates on the very shortest maturities increased due to debt ceiling concerns.
- During April, interest rates at the very front-end of the yield curve rose significantly as the debt ceiling debate continued while other maturities remained largely flat.
- After hitting -1.07% in early March, the yield spread between two-year and ten-year Treasuries finished the month largely unchanged at -0.59%. The more closely watched measure (by the Fed) of three-month and ten-year Treasuries remained inverted. Inversions in the yield curve have often preceded recessions.

¹ Source: Bloomberg. Data is as of April 30, 2023.

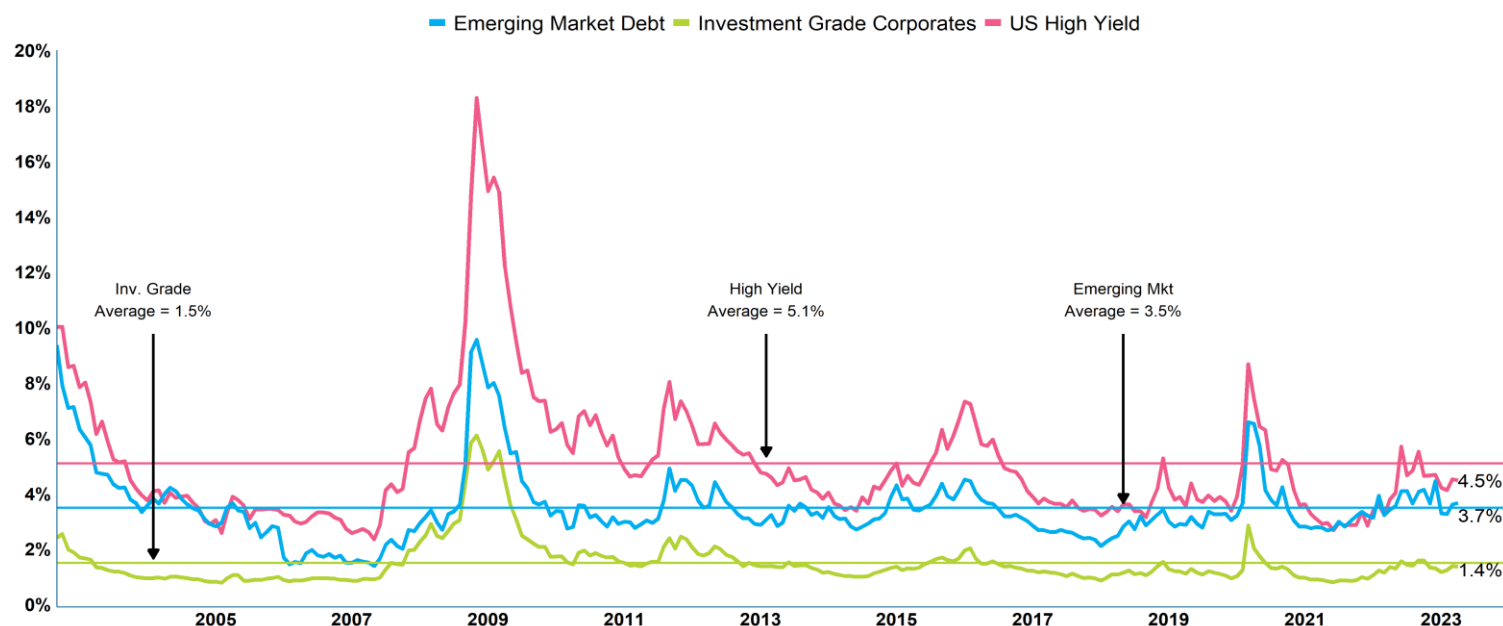
Ten-Year Breakeven Inflation and CPI¹



- Inflation continued to decline in April, with the year-over-year reading falling from 5.0% to 4.9% (slightly below expectations). The month-over-month rate of price increases was 0.4% (matching expectations), with food prices remaining flat, energy prices slightly increasing (0.6%), and all other areas rising 0.4% in aggregate.
- Core inflation – excluding food and energy – fell slightly (5.6% to 5.5%) but remained stubbornly high as the cost for shelter continued to rise.
- Inflation expectations (breakevens) declined very slightly for the month as investors continue to expect inflation to track back toward the Fed's 2% target.

¹ Source: Bloomberg. Data is as of April 30, 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.

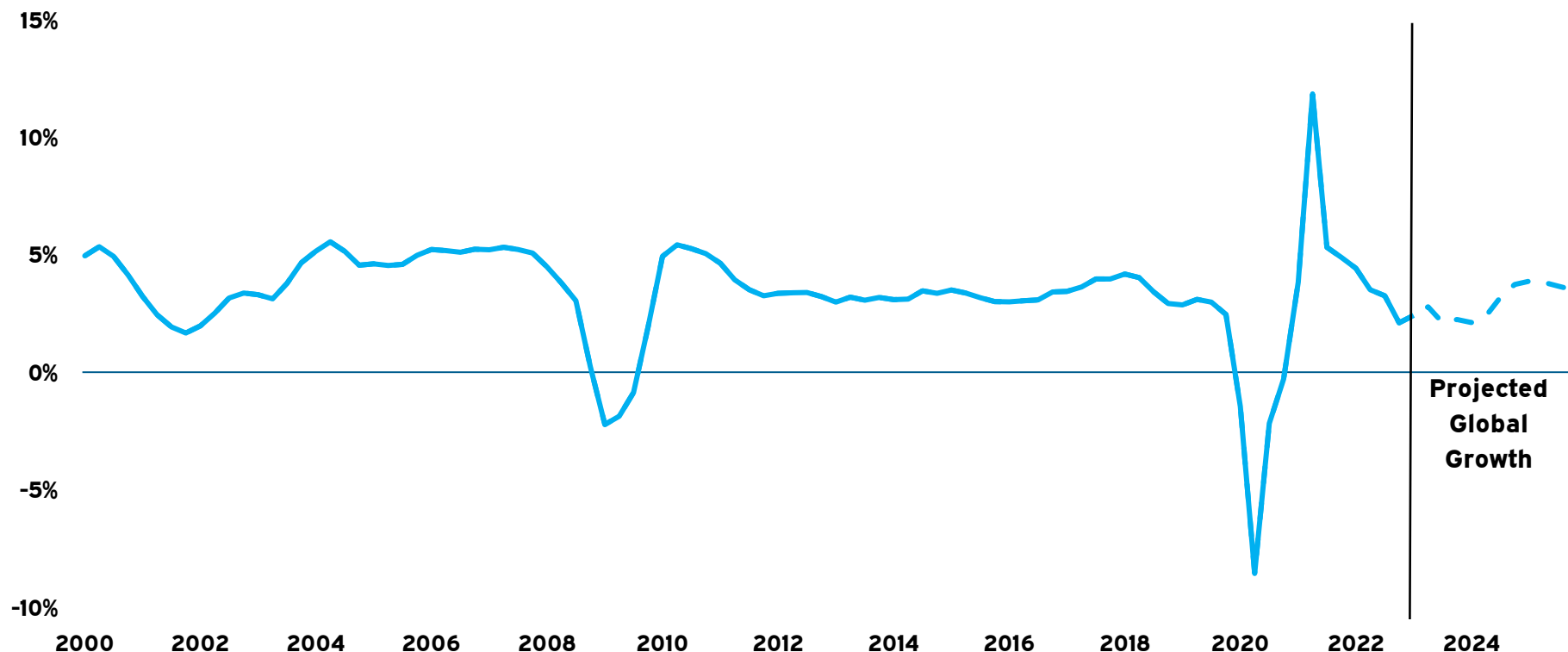
Credit Spreads vs. US Treasury Bonds¹



- Spreads (the added yield above a comparable maturity Treasury) were stable in April as concerns over the banking sector subsided and government and corporate bonds had similar gains.
- High yield spreads remain below the long-term average. Investment grade spreads and emerging market spreads are narrower than high yield spreads and close to their respective long-term averages.

¹ Sources: Bloomberg. Data is as of April 30, 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) Growth¹

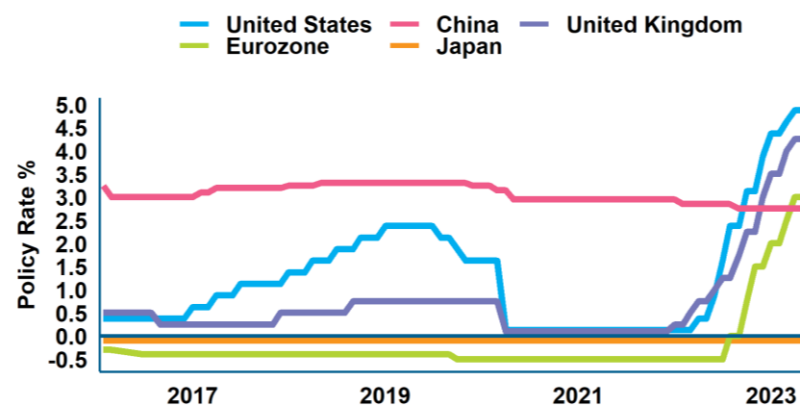


- Global economies are expected to slow this year compared to 2022, with risks of recession increasing given persistently high inflation and related tighter monetary policy.
- The delicate balancing act of central banks trying to reduce inflation without dramatically depressing growth will remain key.

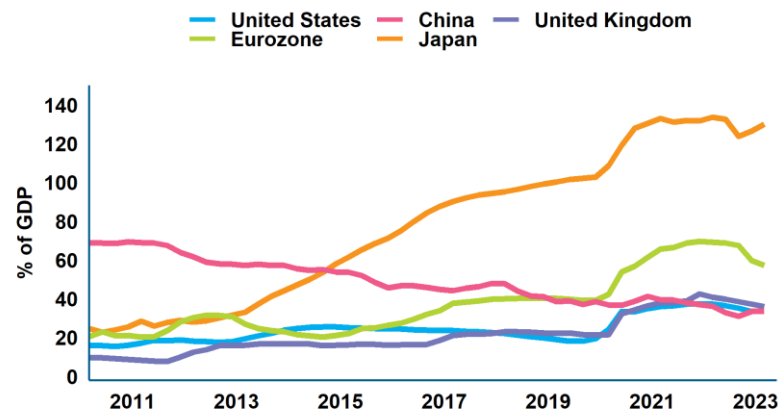
¹ Source: Oxford Economics (World GDP, US\$ prices & PPP exchange rate, real, % change YoY). Updated April 2023.

Central Bank Response¹

Policy Rates



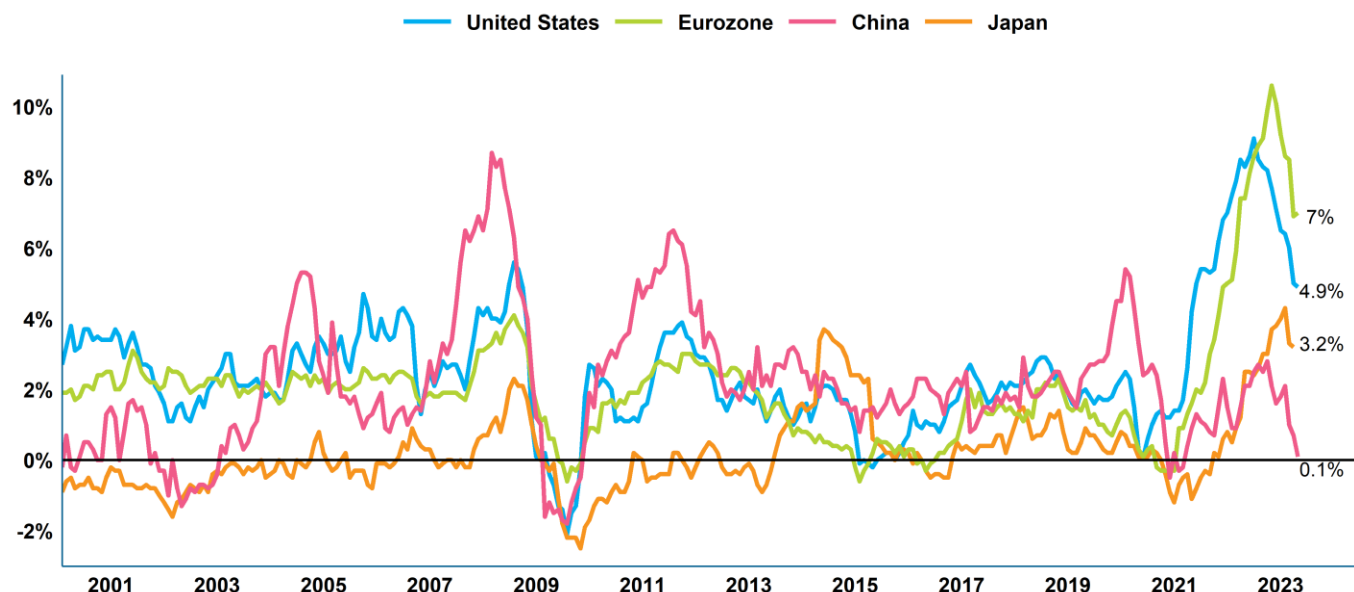
Balance Sheet as % of GDP



- In 2022, many central banks aggressively reduced pandemic-era policy support in the face of high inflation, with the US taking the most aggressive approach. Slowing inflation and recent signs of instability in the banking sector have led to expectations for the slowing of policy tightening going forward.
- Since month-end, the Fed remained committed to fighting inflation despite pressures in the banking sector, raising rates another 25 basis points to a range of 5.0% to 5.25% at its early May meeting. This is largely expected to be the Fed's last rate hike in this cycle.
- China's central bank is a notable exception. They are expected to maintain an accommodative monetary stance to support the economy.
- Looking ahead the risk remains for a policy error as central banks attempt to balance bringing down inflation, maintaining financial stability, and growth.

¹ Source: Bloomberg. Policy rate data is as of April 30, 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 March 31, 2023.

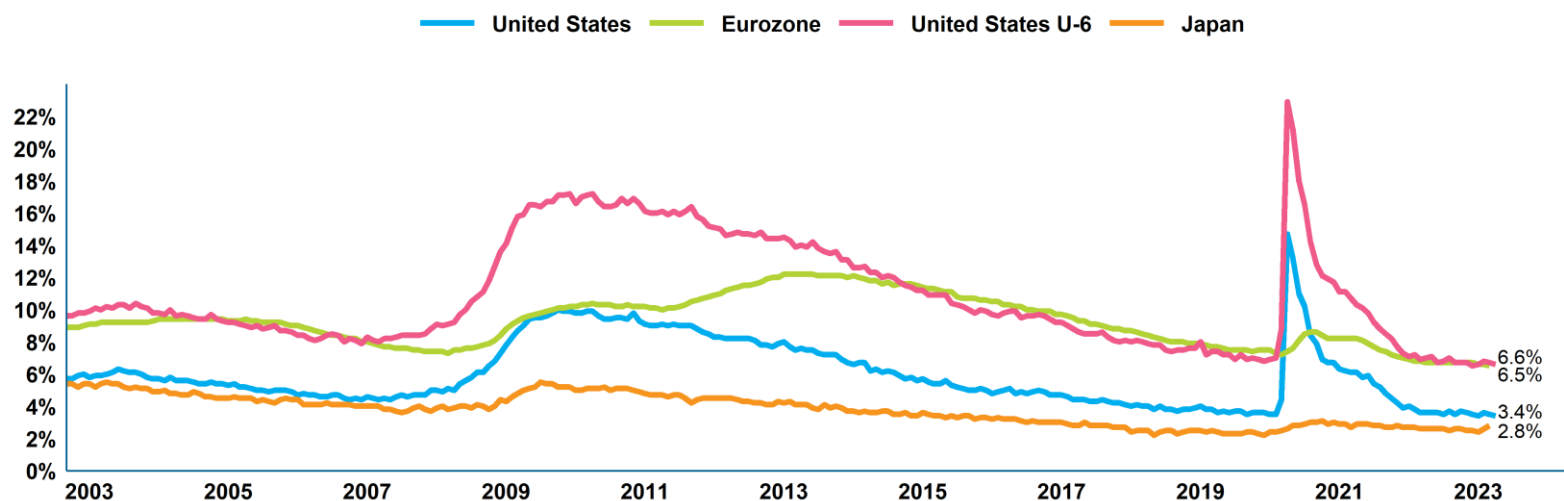
Inflation (CPI Trailing Twelve Months)¹



- Inflation pressures continued to decline globally due to the easing of supply chain issues from the pandemic, declining energy prices, and tighter monetary policy.
- In the US, inflation fell to 4.9% at month-end, while eurozone inflation increased slightly (7.0% versus 6.9%) a level well off its peak. Despite 2023's declines in the US and Europe, inflation levels remain elevated.
- Inflation remains relatively lower in China and Japan and has also declined recently. In China, inflation levels approached 0% at month-end as the reopening of their economy has led to an uneven economic recovery.

¹ Source: Bloomberg. Data is as April 30, 2023. The most recent Japanese inflation data is as of March 2023.

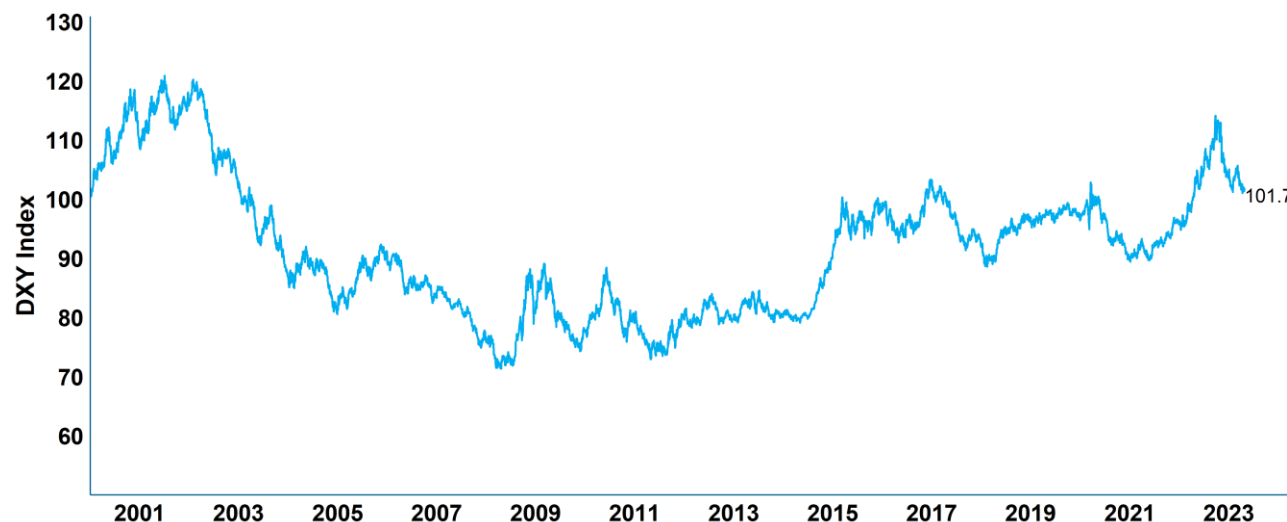
Unemployment¹



- Labor markets have significantly improved from the pandemic as economies have largely reopened.
- Despite slowing growth and high inflation, the US labor market remains a particular bright spot. Unemployment in the US, which experienced the steepest rise, recently returned to pre-pandemic levels. Broader measures of unemployment (U-6) remain higher at 6.6% 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, likely leading to higher unemployment.
- Unemployment in Europe has also declined but remains higher than the US, while levels in Japan have been relatively flat through the pandemic given less layoffs.

¹ Source: Bloomberg. Data is as April 30, 2023, for the US. The most recent data for Eurozone and Japanese unemployment is as of March 2023.

US Dollar versus Broad Currencies¹



- 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 has fallen, as weaker economic data and declining inflation led to investors anticipating the end of Fed tightening.
- This year, the track of inflation across economies and the corresponding monetary policies will likely be key drivers of currency moves.

¹ Source: Bloomberg. Data as of April 30, 2023.

Summary

Key Trends:

- The impacts of still relatively high inflation will remain key, with bond market volatility likely to stay high.
- Recent issues related to the banking sector have created a delicate balance for central banks to continue to fight inflation but also to try to maintain financial stability.
- 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 forecast to tip into recession. Inflation, monetary policy, and the war will all be key.
- In the US, the end of many fiscal programs is expected to put the burden of continued growth on consumers. Costs for shelter, medical care, and education could continue to rise, keeping 'sticky price' inflation at elevated levels.
- The key for US equities going forward will be whether earnings can remain resilient if growth continues to slow.
- Equity valuations remain lower in both emerging and developed markets, but risks remain, including potential continued strength in the US dollar, higher inflation weighing particularly on Europe, and China's rushed exit from COVID-19 restrictions and on-going weakness in the real estate sector.

Executive Summary

As of March 31, 2023

The value of the City of San Jose Police & Fire Department Retirement Plan's assets on March 31, 2023 was \$4.6 billion, compared to \$4.5 billion at the end of the prior quarter. The Plan had net cash outflows of \$66 million and investment gains of \$172 million during the quarter.

- The Retirement Plan's net of fees performance for the quarter was +3.8%, outperforming the Policy Benchmark (+3.6%) and the Investable Benchmark Portfolio (+3.4%). The peer median return was +3.7%. The Plan ranked in the top half of the peer group for the quarter.
- The Retirement Plan returned -3.0% over the trailing one-year period, outperforming the Policy Benchmark (-3.5%), the Investable Benchmark (-3.8%) and a 60/40 global portfolio (-7.6%). The Retirement Plan's standard deviation of returns was 11.4% over the trailing one-year period, exhibiting lower volatility vs. the peer median (11.9%).
 - Growth returned +5.2% for the quarter and -4.7% over the trailing one-year period, compared to the +4.7% and -5.1% returns for the Growth Benchmark over the same periods, respectively.
 - Low Beta returned +1.1% for the quarter and +2.6% over the trailing one-year period, compared to +1.7% and +0.4% returns for the Low Beta Benchmark over the same periods, respectively.
 - Other returned -0.4% for the quarter and -0.1% over the trailing one-year period, compared to the +0.1% and -0.9% returns for the Other Benchmark over the same periods, respectively.
- During the quarter, the Plan added one new investment: HIG Infrastructure Partners (Private Real Assets). The Plan did not liquidate any investments.

Artisan

→ Artisan Global Value returned +10.1% for the quarter, outperforming the MSCI ACWI Value NR USD benchmark by 890 basis points, ranking in the top quintile of its peer group. Performance for the quarter was driven by Meta (announcement of cost-cutting programs), HeidelbergCement (good operating results), and Danone (operational execution). Compared to peers, Artisan ranks in the 34th percentile since inception (1st is best and 100th is worst).

Morgan Stanley

→ Morgan Stanley International Equity returned +18.4% for the quarter, outperforming the MSCI ACWI ex USA benchmark by 1,150 basis points. Outperformance for the quarter was driven by stock selection in consumer discretionary, financials, industrials, and consumer staples. Compared to peers, Morgan Stanley ranks in the top percentile of its peer group for the quarter.

Clarion Lion

→ Clarion Lion Industrial Trust returned -1.4% for the quarter, outperforming the Core Real Estate benchmark (2) by 380 basis points. Since inception in January of 2022, Clarion Lion has outperformed by 1,600 basis points annualized.

First Quarter Manager Summary

Investment Manager	Asset Class	Changes/ Announcements	Meketa Recommendation ¹	Comments
Artisan Global Value	Global Equity	---	---	---
Artisan Global Opportunities	Global Equity	---	Hold	Watch List
Cove Street Small Cap Value	US Equity	---	---	---
Oberweis International Opps	International Equity	---	Hold	Watch List
Morgan Stanley Int'l Equity	International Equity	--- ²	---	---
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	--- ²	---	---
Kotak India Midcap	Emerging Markets Equity	--- ²	---	---
Mellon High Yield Beta	High Yield Bonds	--- ²	---	---
Columbia High Yield	High Yield Bonds	---	---	---
Wellington Iguazu Partners LP	Emerging Markets Debt	--- ²	---	---
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	---	---	---

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

² Firm hasn't yet responded to quarterly update questionnaire.

Watch List^{1,2}

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

¹ Watch List excludes Private Markets and Passive Funds.

² 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

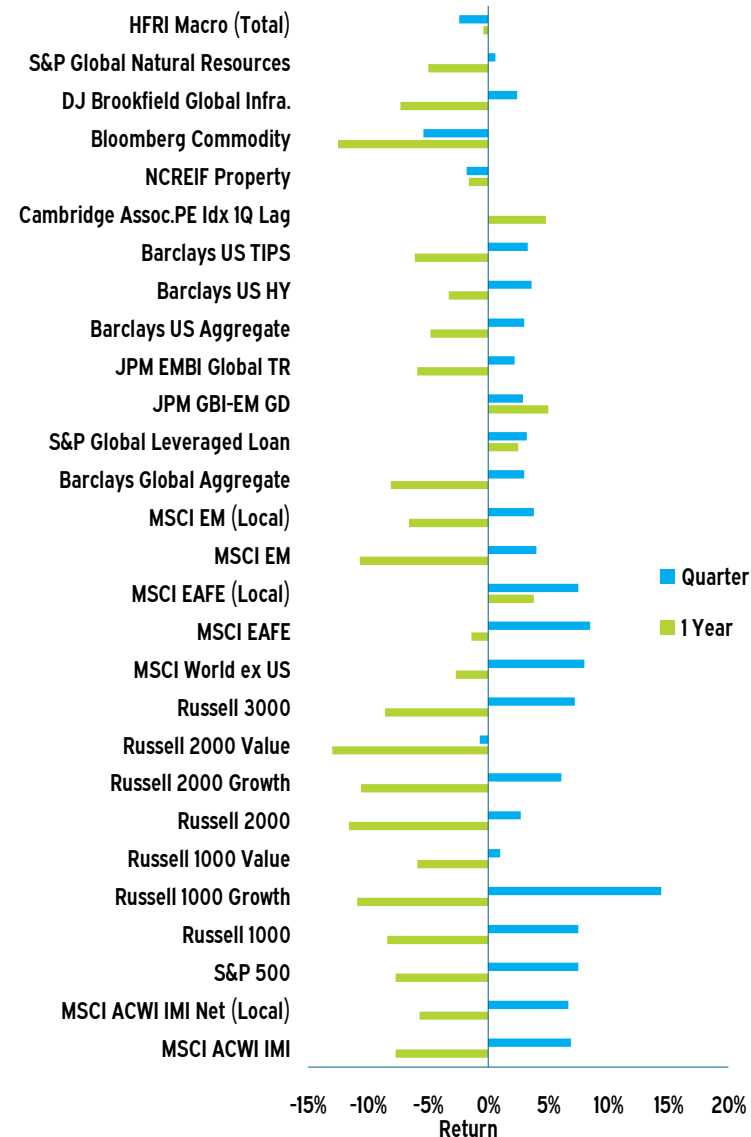
- Over the three-year period, Artisan (+11.9%) has underperformed the MSCI ACWI Growth NR by 280 basis points. Since inception in May 2013, Artisan has outperformed the benchmark by 60 basis points per year, on average, and ranked in the 15th percentile compared to peers.

Oberweis International Opps

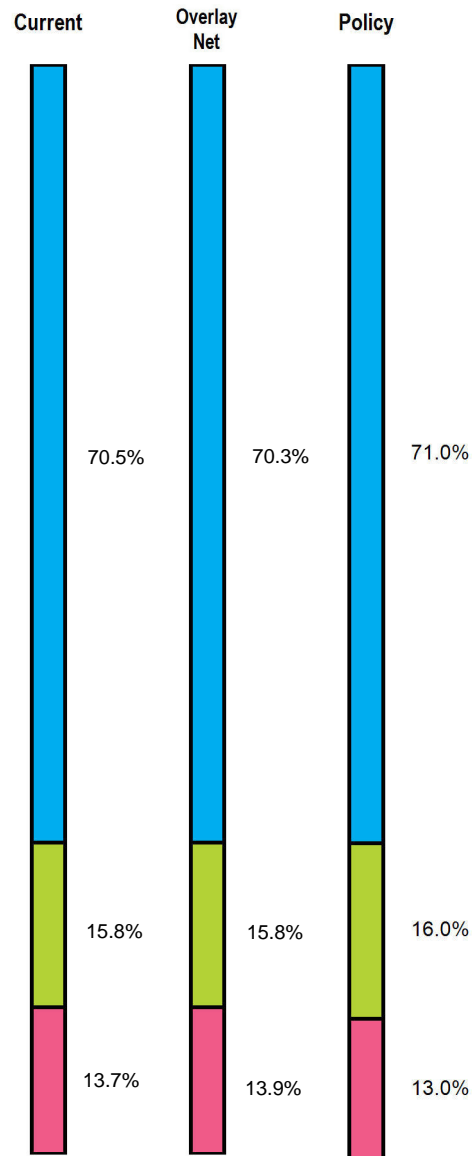
- Over the five-year period, Oberweis (+1.4%) has underperformed the MSCI World ex USA Small Cap Growth NR by 10 basis points. Since inception in March 2014, Oberweis has outperformed the benchmark by 80 basis points per year, on average, and ranked in the 23rd percentile compared to peers.

Market Environment – 1Q23 Overview

Benchmark	Scope	1Q23 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Global Equity						
MSCI ACWI IMI	World	6.9	-7.7	15.6	6.6	7.9
MSCI ACWI IMI Net (Local)	World (Local Currency)	6.7	-5.7	16.1	7.8	9.1
Domestic Equity						
S&P 500	Large Core	7.5	-7.7	18.6	11.2	12.2
Russell 1000	Large Core	7.5	-8.4	18.6	10.9	12.0
Russell 1000 Growth	Large Growth	14.4	-10.9	18.6	13.7	14.6
Russell 1000 Value	Large Value	1.0	-5.9	17.9	7.5	9.1
Russell 2000	Small Core	2.7	-11.6	17.5	4.7	8.0
Russell 2000 Growth	Small Growth	6.1	-10.6	13.4	4.3	8.5
Russell 2000 Value	Small Value	-0.7	-13.0	21.0	4.5	7.2
Russell 3000	All Cap Core	7.2	-8.6	18.5	10.4	11.7
International Equity						
MSCI World ex US	World ex-US	8.0	-2.7	13.5	3.8	4.9
MSCI EAFE	International Developed	8.5	-1.4	13.0	3.5	5.0
MSCI EAFE (Local)	International Developed (Local Currency)	7.5	3.8	14.6	6.2	7.3
MSCI EM	Emerging Markets	4.0	-10.7	7.8	-0.9	2.0
MSCI EM (Local)	Emerging Markets (Local Currency)	3.8	-6.6	8.8	1.9	5.0
Global Fixed Income						
Barclays Global Aggregate	Global Core Bonds	3.0	-8.1	-3.4	-1.3	0.1
S&P Global Leveraged Loan	Bank Loans	3.2	2.5	8.5	3.1	3.5
JPM GBI-EM GD	Emerging Markets Bonds (Local Currency)	2.9	5.0	1.0	2.9	4.5
JPM EMBI Global TR	Emerging Market Bonds	2.2	-5.9	0.3	-0.2	1.8
Domestic Fixed Income						
Barclays US Aggregate	Core Bonds	3.0	-4.8	-2.8	0.9	1.4
Barclays US HY	High Yield	3.6	-3.3	5.9	3.2	4.1
Barclays US TIPS	Inflation	3.3	-6.1	1.8	2.9	1.5
Other						
Cambridge AssociatesPE Index 1Qtr Lag	Private Equity	0.0	4.8	24.8	22.1	18.1
NCREIF Property	Real Estate	-1.8	-1.6	7.2	6.7	8.3
Bloomberg Commodity	Commodities	-5.4	-12.5	20.8	5.4	-1.7
DJ Brookfield Global Infrastructure	Infrastructure	2.4	-7.3	10.5	6.0	5.8
S&P Global Natural Resources	Natural Resources	0.6	-5.0	27.7	7.8	5.1
HFRI Macro	Hedge Funds	-2.4	-0.4	7.0	4.6	2.7



1Q23 Review



Allocation vs. Targets and Policy				
	Current Balance	Current Allocation	Russell Overlay Net Position	Policy
Growth	\$3,225,428,703	70.5%	70.3%	71.0%
Public Equity	\$1,935,211,307	41.9%	41.7%	42.0%
Private Markets	\$1,106,717,729	24.7%	24.7%	25.0%
Emerging Markets Debt	\$90,063,620	1.9%	1.9%	2.0%
High Yield Bonds	\$93,436,047	2.0%	2.0%	2.0%
Low Beta	\$723,815,649	15.8%	15.8%	16.0%
Market Neutral Strategies	\$140,853,305	3.1%	3.1%	3.0%
Immunized Cash Flows	\$585,429,203	12.7%	12.7%	13.0%
Cash	\$-2,466,859	0.0%	0.0%	0.0%
Other	\$636,813,483	13.7%	13.9%	13.0%
Core Real Estate	\$280,283,562	6.0%	6.0%	5.0%
TIPS	\$91,328,308	2.0%	2.0%	2.0%
Investment Grade Bonds	\$198,854,858	4.3%	4.4%	4.5%
Long Term Government Bonds	\$66,346,754	1.4%	1.5%	1.5%

¹ Data in the column titled "Russel Overlay Net Position" is based on physical exposures, adjusted for synthetic positions provided by Russell Investments.

² Policy Targets represent approved asset allocation from March of 2022.

³ All data on this page is from Russell Investments and reflects trades made on or before 3/31/2023. Data on subsequent pages is from the custodian and may not reflect all trades made on or before 3/31/2023 depending on the settlement date of transaction.

Asset Class Net Performance Summary

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	4,627,330,859	100.0	3.8	4.6	-3.0	11.2	6.3	5.8	8.3	Mar-71
Policy Benchmark			3.6	4.6	-3.5	10.7	5.9	5.9	--	Mar-71
Investable Benchmark Portfolio			3.4	4.2	-3.8	11.8	5.7	5.7	--	Mar-71
Low-Cost Passive Portfolio			4.6	6.0	-6.7	9.2	--	--	--	Mar-71
60/40 MSCI ACWI IMI/BBgBarc Global Aggregate			5.4	6.0	-7.6	7.8	3.6	4.9	--	Mar-71
Liability Benchmark Portfolio			6.2	-4.6	-16.0	-11.3	--	--	--	Mar-71
Alternative Investable Benchmark			6.7	35.9	53.0	37.8	33.0	--	--	Mar-71
InvMetrics Public DB > \$1B Net Median			3.7	4.7	-4.2	11.1	6.3	7.2	--	Mar-71
InvMetrics Public DB > \$1B Net Rank			45	56	18	48	50	99	--	Mar-71
Growth	3,292,975,022	71.2	5.2	6.5	-4.7	15.3	7.9	--	--	Jul-15
Growth Benchmark			4.7	6.2	-5.1	15.3	8.0	--	--	Jul-15
Public Equity	1,960,989,278	42.4	7.8	10.4	-7.4	16.3	6.4	7.8	6.2	Apr-08
Public Equity Benchmark			6.8	9.4	-7.7	15.4	6.3	7.8	6.3	Apr-08
Global Equity	505,488,549	10.9	9.7	12.2	-6.6	16.5	8.0	10.0	10.2	Mar-13
eV All Global Equity Net Median			6.6	10.4	-6.2	15.3	6.9	8.1	8.3	Mar-13
eV All Global Equity Net Rank			19	29	53	38	33	19	18	Mar-13
U.S. Equity	815,718,281	17.6	7.3	10.0	-8.4	18.8	10.6	11.8	9.8	Jun-95
MSCI USA IMI NR USD			7.2	9.6	-8.9	18.2	10.1	11.2	9.4	Jun-95
eV All US Equity Net Median			4.6	9.0	-7.7	18.4	8.5	10.1	10.2	Jun-95
eV All US Equity Net Rank			29	39	57	47	23	23	64	Jun-95

¹ Fiscal Year begins July 1.

² Please see the Appendix for composition of the Policy Benchmark, Low-Cost Passive Portfolio, Liability Benchmark Portfolio, Growth Benchmark, and Public Equity Benchmark.

³ Returns for the Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
International Equity	394,952,932	8.5	9.1	14.1	-4.8	14.5	3.4	5.1	7.2	Jun-95
<i>MSCI World ex USA IMI NR USD</i>			7.6	13.3	-3.9	13.5	3.5	5.0	--	Jun-95
<i>eV ACWI ex-US All Cap Equity Net Median</i>			8.3	12.2	-4.7	13.3	3.2	5.4	6.8	Jun-95
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			38	31	52	32	44	66	47	Jun-95
Emerging Markets Equity	244,829,516	5.3	4.0	2.0	-10.2	11.5	-0.8	1.8	7.8	Sep-01
<i>MSCI Emerging Markets IMI Net</i>			3.9	1.5	-10.7	9.2	-0.6	2.2	8.4	Sep-01
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	9.1	Sep-01
<i>eV Emg Mkts Equity Net Rank</i>			69	69	62	38	67	76	87	Sep-01
Private Markets	1,146,538,270	24.8	1.2	0.3	-1.7	14.4	10.5	--	9.1	Jul-15
<i>Private Markets Benchmark</i>			1.2	0.3	-1.7	14.4	10.2	--	9.6	Jul-15
<i>MSCI ACWI IMI + 100bps</i>			7.1	10.4	-6.8	16.7	7.6	--	8.4	Jul-15
Private Markets ex Proxy	951,024,479	20.6	0.6	-1.4	2.5	16.0	12.6	--	10.1	Jul-15
Private Equity	390,620,427	8.4	-0.3	-6.8	-4.1	17.7	16.9	14.4	11.6	Oct-05
<i>Custom PE Benchmark</i>			0.0	-5.2	-5.5	18.7	15.6	14.7	13.0	Oct-05
Venture Capital	46,800,173	1.0	-0.7	-3.8	-5.4	--	--	--	12.8	Sep-20
Private Debt	204,322,767	4.4	0.8	-0.7	3.1	13.2	7.1	--	6.4	Oct-15
<i>S&P Global Leveraged Loan + 2%</i>			3.7	8.9	4.6	10.7	5.1	--	6.1	Oct-15
Growth Real Estate	209,796,818	4.5	0.7	7.0	12.7	14.4	11.7	--	10.8	Jul-15
<i>NCREIF Property Index</i>			-1.8	-4.7	-1.6	7.2	6.7	--	7.3	Jul-15
Private Real Assets	99,484,293	2.1	3.5	4.7	14.4	12.7	11.4	--	9.1	Jun-16

¹ Please see the Appendix for composition of the Private Markets Benchmark.

² Private Equity composite includes Russell 3000 proxy performance history prior to October 1, 2018.

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Real Assets	99,484,293	2.1	3.5	4.7	14.4	12.7	11.4	--	9.1	Jun-16
Northern Trust Russell 3000	55,822,763	1.2	7.2	9.8	-8.5	18.5	10.5	--	10.6	Apr-14
<i>Russell 3000</i>			7.2	9.7	-8.6	18.5	10.4	--	10.6	Apr-14
Blackrock Liquid Fed Trust Fund	139,691,028	3.0	1.0	--	--	--	--	--	--	Dec-22
High Yield Bonds	93,439,634	2.0	4.0	8.3	-2.1	--	--	--	3.4	Jun-20
<i>Bloomberg US Corporate High Yield TR</i>			3.6	7.2	-3.3	--	--	--	3.0	Jun-20
<i>eV US High Yield Fixed Inc Net Median</i>			3.3	6.8	-2.8	5.7	3.0	3.8	3.1	Jun-20
<i>eV US High Yield Fixed Inc Net Rank</i>			10	4	33	--	--	--	40	Jun-20
Emerging Market Debt	92,007,840	2.0	3.5	1.9	3.4	6.8	5.0	3.3	2.9	Jan-13
<i>50% JPM EMBI GD / 50% JPM GBI-EM</i>			3.5	6.9	-3.8	0.5	-1.4	0.3	0.2	Jan-13
<i>eV All Emg Mkts Fixed Inc Net Median</i>			2.2	6.0	-3.9	2.2	-0.5	1.3	1.1	Jan-13
<i>eV All Emg Mkts Fixed Inc Net Rank</i>			25	98	2	6	1	3	9	Jan-13
Low Beta	699,514,758	15.1	1.1	1.1	2.6	3.6	3.4	--	2.6	Jul-15
<i>Low Beta Benchmark</i>			1.7	0.7	0.4	0.3	1.1	--	0.8	Jul-15
Immunized Cash Flows	427,400,894	9.2	1.8	0.0	-0.5	-1.1	--	--	1.0	Oct-18
<i>Immunized Cash Flow Benchmark</i>			1.8	0.0	-0.5	-1.1	--	--	1.0	Oct-18
Market Neutral Strategies	138,895,632	3.0	-1.1	2.9	11.4	15.1	9.8	6.0	5.9	Nov-12
<i>Market Neutral Strategies Benchmark</i>			1.5	3.7	4.3	1.6	1.6	1.2	1.4	Nov-12

¹ Please see the Appendix for composition of the Low Beta Benchmark, Immunized Cash Flows Benchmark, and Market Neutral Strategies Benchmark.

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Relative Value	138,895,632	3.0	-1.1	2.9	11.4	16.6	10.3	--	7.6	Jul-15
HFRI Relative Value (Total) Index			1.3	2.8	0.0	7.7	3.6	--	3.6	Jul-15
Relative Value Arbitrage MStar MF Median			1.5	3.6	-0.8	5.3	3.5	2.9	3.1	Jul-15
Relative Value Arbitrage MStar MF Rank			99	61	1	1	1	--	1	Jul-15
Cash	40,497,283	0.9	1.0	2.3	2.4	0.8	1.4	0.9	7.4	Jul-02
ICE BofA 91 Days T-Bills TR			1.1	2.4	2.5	0.9	1.4	0.9	1.3	Jul-02
Short Term IG Bonds	92,720,949	2.0	1.2	2.7	--	--	--	--	--	May-22
ICE BofA 3M US Treasury TR USD			1.1	2.4	--	--	--	--	--	May-22
Other	622,510,933	13.5	-0.4	-0.2	-0.1	1.7	1.3	--	1.8	Jul-15
Other Benchmark			0.1	-0.4	-0.9	1.4	0.5	--	1.5	Jul-15
Core Real Estate	266,913,489	5.8	-4.8	3.1	10.7	10.8	9.4	--	8.8	Jul-15
Core Real Estate Benchmark			-5.2	-0.6	6.5	8.7	7.3	--	7.7	Jul-15
TIPS	91,328,308	2.0	2.2	0.7	-0.6	3.5	--	--	3.2	Oct-18
Bloomberg US Treasury TIPS 0-5 Yr TR			2.2	0.8	-0.3	3.5	--	--	3.2	Oct-18
Investment Grade Bonds	197,921,087	4.3	2.7	-0.9	-5.9	--	--	--	-3.0	May-20
Custom IG Bonds Benchmark			2.9	-0.3	-4.8	--	--	--	-3.2	May-20
Long-Term Government Bonds	66,348,049	1.4	6.7	-4.6	-15.9	--	--	--	-11.8	May-20
Long-Term Government Bonds Benchmark			6.2	-4.6	-16.0	--	--	--	-11.9	May-20
Overlay	12,330,145	0.3								

Core Real Estate values are one-quarter lagged.

¹ Please see the Appendix for composition of the Other Benchmark.

Trailing Net Performance										
	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	4,627,330,859	100.0	3.8	4.6	-3.0	11.2	6.3	5.8	8.3	Mar-71
Policy Benchmark			3.6	4.6	-3.5	10.7	5.9	5.9	--	Mar-71
Investable Benchmark Portfolio			3.4	4.2	-3.8	11.8	5.7	5.7	--	Mar-71
Low-Cost Passive Portfolio			4.6	6.0	-6.7	9.2	--	--	--	Mar-71
60/40 MSCI ACWI IMI/BBgBarc Global Aggregate			5.4	6.0	-7.6	7.8	3.6	4.9	--	Mar-71
Liability Benchmark Portfolio			6.2	-4.6	-16.0	-11.3	--	--	--	Mar-71
Alternative Investable Benchmark			6.7	35.9	53.0	37.8	33.0	--	--	Mar-71
InvMetrics Public DB > \$1B Net Median			3.7	4.7	-4.2	11.1	6.3	7.2	--	Mar-71
InvMetrics Public DB > \$1B Net Rank			45	56	18	48	50	99	--	Mar-71
Growth	3,292,975,022	71.2	5.2	6.5	-4.7	15.3	7.9	--	--	Jul-15
Growth Benchmark			4.7	6.2	-5.1	15.3	8.0	--	--	Jul-15
Public Equity	1,960,989,278	42.4	7.8	10.4	-7.4	16.3	6.4	7.8	6.2	Apr-08
Public Equity Benchmark			6.8	9.4	-7.7	15.4	6.3	7.8	6.3	Apr-08
Global Equity	505,488,549	10.9	9.7	12.2	-6.6	16.5	8.0	10.0	10.2	Mar-13
eV All Global Equity Net Median			6.6	10.4	-6.2	15.3	6.9	8.1	8.3	Mar-13
eV All Global Equity Net Rank			19	29	53	38	33	19	18	Mar-13
Artisan Global Value	286,584,192	6.2	10.1	13.4	-1.9	20.1	7.0	8.9	9.2	Mar-13
MSCI ACWI Value NR USD			1.2	6.8	-5.5	15.2	4.3	5.9	6.0	Mar-13
eV All Global Equity Net Median			6.6	10.4	-6.2	15.3	6.9	8.1	8.3	Mar-13
eV All Global Equity Net Rank			16	20	13	14	49	35	34	Mar-13

¹ Please see the Appendix for composition of the Policy Benchmark, Low-Cost Passive Portfolio, Liability Benchmark Portfolio, Growth Benchmark, and Public Equity Benchmark.

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Artisan Global Opportunities	218,904,357	4.7	9.0	10.7	-12.1	11.9	8.1	--	10.4	May-13
MSCI ACWI Growth NR USD			13.8	12.7	-10.0	14.7	9.0	--	9.8	May-13
eV All Global Equity Net Median			6.6	10.4	-6.2	15.3	6.9	8.1	7.9	May-13
eV All Global Equity Net Rank			22	46	83	79	33	--	15	May-13
U.S. Equity	815,718,281	17.6	7.3	10.0	-8.4	18.8	10.6	11.8	9.8	Jun-95
MSCI USA IMI NR USD			7.2	9.6	-8.9	18.2	10.1	11.2	9.4	Jun-95
eV All US Equity Net Median			4.6	9.0	-7.7	18.4	8.5	10.1	10.2	Jun-95
eV All US Equity Net Rank			29	39	57	47	23	23	64	Jun-95
Northern Trust Russell 3000	797,407,780	17.2	7.8	10.4	-8.0	18.7	--	--	18.7	Apr-20
Russell 3000			7.2	9.7	-8.6	18.5	--	--	18.5	Apr-20
Cove Street Small Cap Value	18,310,502	0.4	8.0	12.3	-7.2	23.2	6.0	--	4.9	Dec-17
Russell 2000 Value			-0.7	2.7	-13.0	21.0	4.5	--	3.5	Dec-17
eV US Small Cap Value Equity Net Median			2.0	7.9	-6.9	23.1	5.6	8.0	4.9	Dec-17
eV US Small Cap Value Equity Net Rank			4	17	52	49	45	--	48	Dec-17
International Equity	394,952,932	8.5	9.1	14.1	-4.8	14.5	3.4	5.1	7.2	Jun-95
MSCI World ex USA IMI NR USD			7.6	13.3	-3.9	13.5	3.5	5.0	--	Jun-95
eV ACWI ex-US All Cap Equity Net Median			8.3	12.2	-4.7	13.3	3.2	5.4	6.8	Jun-95
eV ACWI ex-US All Cap Equity Net Rank			38	31	52	32	44	66	47	Jun-95
Northern Trust MSCI World ex US	186,045,687	4.0	8.2	14.6	-0.9	14.1	4.2	--	4.1	Apr-14
MSCI World ex USA			8.0	14.0	-2.7	13.5	3.8	--	3.7	Apr-14

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Oberweis Intl Opportunities	55,143,155	1.2	5.5	5.7	-19.0	14.5	1.4	--	5.2	Mar-14
<i>MSCI World ex USA Small Cap Growth NR USD</i>			5.4	9.2	-13.0	11.2	1.5	--	4.4	Mar-14
<i>eV ACWI ex-US All Cap Equity Net Median</i>			8.3	12.2	-4.7	13.3	3.2	5.4	4.3	Mar-14
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			91	95	99	32	85	--	23	Mar-14
Morgan Stanley International Equity	71,676,534	1.5	18.4	25.2	-0.9	--	--	--	-9.0	Feb-22
<i>MSCI ACWI ex US</i>			6.9	10.0	-5.1	--	--	--	-5.9	Feb-22
<i>eV ACWI ex-US All Cap Equity Net Median</i>			8.3	12.2	-4.7	13.3	3.2	5.4	-6.4	Feb-22
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			1	1	19	--	--	--	67	Feb-22
First Eagle International Equity	82,087,556	1.8	6.5	9.5	--	--	--	--	9.5	Jun-22
<i>MSCI World ex USA</i>			8.0	14.0	--	--	--	--	3.2	Jun-22
<i>eV ACWI ex-US All Cap Equity Net Median</i>			8.3	12.2	-4.7	13.3	3.2	5.4	2.2	Jun-22
<i>eV ACWI ex-US All Cap Equity Net Rank</i>			79	77	--	--	--	--	3	Jun-22
Emerging Markets Equity	244,829,516	5.3	4.0	2.0	-10.2	11.5	-0.8	1.8	7.8	Sep-01
<i>MSCI Emerging Markets IMI Net</i>			3.9	1.5	-10.7	9.2	-0.6	2.2	8.4	Sep-01
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	9.1	Sep-01
<i>eV Emg Mkts Equity Net Rank</i>			69	69	62	38	67	76	87	Sep-01
Northern Trust MSCI EM IMI	52,558,131	1.1	4.5	2.4	-9.2	9.8	--	--	1.8	Oct-18
<i>MSCI Emerging Markets IMI Net</i>			3.9	1.5	-10.7	9.2	--	--	1.5	Oct-18
Dimensional Fund Adv EM Value	53,651,453	1.2	3.7	3.2	-7.9	16.2	0.1	--	3.6	Jul-15
<i>MSCI Emerging Markets Value NR USD</i>			3.9	1.6	-9.4	10.0	-1.2	--	1.5	Jul-15
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	3.4	Jul-15
<i>eV Emg Mkts Equity Net Rank</i>			74	56	39	18	46	--	45	Jul-15

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GQG Global Emerging Markets	43,437,863	0.9	2.6	-1.1	-12.2	8.4	0.7	--	4.0	Jul-17
<i>MSCI Emerging Markets</i>			4.0	0.8	-10.7	7.8	-0.9	--	2.0	Jul-17
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	2.6	Jul-17
<i>eV Emg Mkts Equity Net Rank</i>			89	93	83	65	35	--	26	Jul-17
Redwheel Emerging Markets Equity	35,741,136	0.8	3.8	0.1	-12.2	12.2	--	--	4.1	Sep-19
<i>MSCI Emerging Markets</i>			4.0	0.8	-10.7	7.8	--	--	2.5	Sep-19
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	3.5	Sep-19
<i>eV Emg Mkts Equity Net Rank</i>			73	85	83	34	--	--	41	Sep-19
Wellington Emerging Markets Systematic	45,423,005	1.0	6.9	3.5	-9.4	11.6	--	--	4.6	Sep-19
<i>MSCI Emerging Markets</i>			4.0	0.8	-10.7	7.8	--	--	2.5	Sep-19
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	3.5	Sep-19
<i>eV Emg Mkts Equity Net Rank</i>			19	54	52	38	--	--	38	Sep-19
Kotak India Midcap	14,017,927	0.3	-1.2	5.4	-10.9	--	--	--	-3.8	Jul-21
<i>MSCI India Midcap</i>			-5.8	0.6	-15.8	--	--	--	-7.6	Jul-21
<i>eV Emg Mkts Equity Net Median</i>			4.9	4.0	-9.3	9.9	0.0	2.7	-13.4	Jul-21
<i>eV Emg Mkts Equity Net Rank</i>			99	39	73	--	--	--	7	Jul-21
Private Markets	1,146,538,270	24.8	1.2	0.3	-1.7	14.4	10.5	--	9.1	Jul-15
<i>Private Markets Benchmark</i>			1.2	0.3	-1.7	14.4	10.2	--	9.6	Jul-15
<i>MSCI ACWI IMI + 100bps</i>			7.1	10.4	-6.8	16.7	7.6	--	8.4	Jul-15

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Markets ex Proxy	951,024,479	20.6	0.6	-1.4	2.5	16.0	12.6	--	10.1	Jul-15
Private Equity	390,620,427	8.4	-0.3	-6.8	-4.1	17.7	16.9	14.4	11.6	Oct-05
<i>Custom PE Benchmark</i>			0.0	-5.2	-5.5	18.7	15.6	14.7	13.0	Oct-05
PE Strategic Partnership, LP	309,888,066	6.7	0.0	-4.9	2.4	23.2	19.5	--	15.9	Aug-17
Pantheon USA Fund VI, LP	408,214	0.0	3.2	-1.2	-7.1	-8.9	-8.2	-0.8	1.5	Oct-05
Portfolio Advisors Private Eq	2,486,521	0.1	-4.0	-9.4	-12.4	4.4	3.3	6.8	5.7	Nov-05
HarbourVest Partners VII	121,332	0.0	-2.5	1.7	1.2	-4.0	-5.1	4.1	5.7	Dec-05
TCW/Crescent Mezzanine	109,155	0.0	52.1	42.4	42.1	53.6	37.9	24.0	18.7	Dec-08
TPG Opportunities Partners II	136,108	0.0	0.0	11.4	13.4	8.4	8.7	12.4	11.7	Oct-12
Crescent Mezzanine Partners VI	2,163,896	0.0	5.8	-2.5	-6.6	11.5	10.9	8.6	8.5	Feb-13
Warburg Pincus (Europa) XI	7,583,061	0.2	3.1	-19.7	-19.5	1.3	5.2	--	8.4	May-13
57 Stars Global Opportunity	25,349,344	0.5	0.0	-4.9	-12.1	5.3	4.2	--	2.6	Jan-14
TPG Opportunities Partners III	2,914,492	0.1	-4.3	-13.5	-15.0	6.0	8.0	--	5.1	Mar-14
CCMP Capital Investors III, LP	4,218,373	0.1	0.0	-37.9	-49.6	0.1	3.7	--	5.4	Aug-14
Francisco Partners	14,241,657	0.3	-3.8	-27.1	-39.6	8.8	21.1	--	17.1	May-15
Innovation Endeavors III	12,012,776	0.3	-3.6	-1.7	-4.7	43.7	--	--	26.0	Jun-18
Crestline Portfolio Financing	8,987,432	0.2	-2.1	2.5	3.2	6.7	--	--	8.2	Jun-18

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Venture Capital	46,800,173	1.0	-0.7	-3.8	-5.4	--	--	--	12.8	Sep-20
Top Tier Capital Partners IX	7,794,460	0.2	-0.3	-6.6	-10.6	--	--	--	17.1	Sep-20
Northgate Venture Partners IX LP	9,475,755	0.2	0.0	-4.4	10.2	--	--	--	4.4	Sep-20
Canvas III	3,369,987	0.1	-6.6	1.9	6.7	--	--	--	4.3	Nov-20
Innovation Endeavors IV	1,293,009	0.0	-1.9	-4.5	-0.2	--	--	--	-6.2	Jun-21
Invesco Alpha II	7,180,864	0.2	0.0	5.8	-17.2	--	--	--	40.7	Sep-21
Next Play Capital III	4,807,477	0.1	0.0	-5.2	-4.8	--	--	--	-3.6	Dec-21
Tiger Iron SJPF	7,078,345	0.2	0.0	-8.8	-12.4	--	--	--	-11.5	Mar-22
Bow Capital Fund II	1,379,399	0.0	-2.3	-9.4	--	--	--	--	-9.4	Jun-22
Lerer Hippeau VIII	1,008,412	0.0	0.0	--	--	--	--	--	0.0	Sep-22
BSF II	1,173,211	0.0	-0.1	--	--	--	--	--	-8.0	Jul-22
Signia Venture Partners IV	539,586	0.0	-2.0	--	--	--	--	--	--	Sep-22
Next Play SJPF	1,699,668	0.0	0.0	--	--	--	--	--	0.0	Nov-22
Private Debt	204,322,767	4.4	0.8	-0.7	3.1	13.2	7.1	--	6.4	Oct-15
<i>S&P Global Leveraged Loan + 2%</i>			3.7	8.9	4.6	10.7	5.1	--	6.1	Oct-15
White Oak Direct Lending	37,326,913	0.8	1.3	1.7	14.3	48.1	25.4	10.6	9.0	Nov-10
Blackstone/GSO Cap Partners	3,988,662	0.1	0.0	5.0	6.1	-17.1	-13.7	-5.5	-0.7	Dec-10

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Medley Opportunity Fund II LP	4,378,782	0.1	0.0	0.0	-9.8	-7.4	-9.8	-2.9	-1.6	Mar-11
Cross Ocean USD ESS Fund I, LP	6,815,952	0.1	-0.5	-0.9	-1.6	11.9	6.1	--	7.7	Apr-14
Park Square Credit Opp II, LP	112,683	0.0	-2.9	-4.7	-10.7	17.4	12.2	--	9.6	Nov-14
Shoreline China Value III, LP	4,986,822	0.1	0.0	-26.9	-25.3	-6.8	-5.5	--	0.1	Jul-15
Cross Ocean USD ESS Fund II LP	13,084,698	0.3	-0.6	0.0	-0.6	3.8	4.5	--	7.2	May-16
Cross Ocean USD ESS Fund III, LP	39,181,081	0.8	1.1	2.8	6.5	14.7	--	--	11.3	Jun-19
Arbour Lane Credit Opportunity Fund II, L.P.	15,154,556	0.3	0.0	-1.0	2.2	--	--	--	16.3	Apr-20
Eagle Point Defensive Income Fund	10,866,154	0.2	-0.1	-8.4	-6.3	--	--	--	2.0	Jun-20
HPS Special Situations Opportunity	11,268,629	0.2	3.2	10.7	14.8	--	--	--	20.7	Dec-20
Crestline Portfolio Fin II	3,011,331	0.1	5.2	10.6	12.9	--	--	--	10.0	Dec-20
SVP Special Situations V	8,220,873	0.2	3.0	-0.6	1.8	--	--	--	4.6	Jun-21
Arbour Lane COF III	8,121,096	0.2	0.2	-9.3	-9.4	--	--	--	-6.7	Nov-21
Angelo Gordon CS II	10,427,096	0.2	-0.3	-7.2	-6.0	--	--	--	-5.2	Feb-22
Octagon CLO Opp Fund IV	20,001,209	0.4	0.0	-0.7	-0.7	--	--	--	-0.6	Mar-22
Eagle Point Defensive II	4,296,670	0.1	7.7	--	--	--	--	--	4.2	Sep-22
HPS Special Situations Opportunity Fund II	3,079,560	0.1	-2.6	--	--	--	--	--	--	Sep-22

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Growth Real Estate	209,796,818	4.5	0.7	7.0	12.7	14.4	11.7	--	10.8	Jul-15
<i>NCREIF Property Index</i>			<i>-1.8</i>	<i>-4.7</i>	<i>-1.6</i>	<i>7.2</i>	<i>6.7</i>	<i>--</i>	<i>7.3</i>	<i>Jul-15</i>
TA Realty Associates Fund X	8,197	0.0	-5.7	16.5	49.8	10.9	13.4	12.5	12.4	Mar-13
Brookfield SREP I	2,470,646	0.1	-8.2	-6.7	-6.6	0.8	5.4	--	13.2	Sep-13
Tristan - EPISO III	2,738,246	0.1	-4.3	0.6	-1.8	6.2	-6.0	--	2.2	Dec-13
Orion Euro Real Estate IV LP	5,227,522	0.1	47.8	52.1	42.2	6.2	-5.6	--	-3.3	Apr-14
Sculptor Real Estate Fund III	2,717,631	0.1	11.7	106.8	129.5	48.6	36.5	--	25.3	Oct-14
Tristan - EPISO IV	17,649,874	0.4	-2.5	2.3	-1.3	6.8	6.3	--	6.7	Dec-15
KSL Capital Partners IV, LP	21,598,661	0.5	0.0	1.4	10.6	17.4	17.0	--	5.7	Apr-16
Brookfield SREP II	13,546,623	0.3	-3.8	0.1	7.5	14.8	13.8	--	12.6	Jun-16
DRA Growth & Income Fund IX	14,802,565	0.3	0.0	7.5	14.1	23.6	19.2	--	17.8	Feb-17
GEM Realty Fund VI	7,596,720	0.2	-7.7	-8.4	-2.7	14.5	13.2	--	7.2	Nov-17
Torchlight Debt Opportunity VI	21,994,897	0.5	1.3	5.7	9.2	8.6	6.3	--	6.3	Apr-18
Tristan - EPISO V	17,614,216	0.4	3.7	12.5	17.3	1.3	--	--	-24.5	May-19
DRA Growth and Income Fund X, LLC	15,937,247	0.3	0.0	8.9	23.7	25.2	--	--	25.2	Mar-20
Rockpoint Real Estate Fund VI, L.P.	9,972,045	0.2	0.0	-0.2	8.4	--	--	--	15.2	May-20
Exeter Industrial Value Fund V	13,871,955	0.3	5.1	0.7	6.3	--	--	--	31.9	Oct-20
Torchlight Debt Fund VII	4,805,320	0.1	1.8	7.0	8.4	--	--	--	4.3	Feb-21

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
HIG Realty Partners IV	9,595,714	0.2	4.7	19.8	114.5	--	--	--	92.4	Feb-22
Praedium X MidInc	5,239,063	0.1	-10.6	-11.2	-11.2	--	--	--	-11.2	Apr-22
AIGGRE Fund IV	14,835,594	0.3	-0.9	37.8	--	--	--	--	31.2	Jun-22
GCP SecureSpace Property Partners, L.P	3,442,728	0.1	0.0	--	--	--	--	--	3.4	Aug-22
Centerbridge RE II	4,131,355	0.1	3.0	--	--	--	--	--	-11.8	Jul-22
Private Real Assets	99,484,293	2.1	3.5	4.7	14.4	12.7	11.4	--	9.1	Jun-16
Brookfield Infrastructure III	20,641,015	0.4	5.6	6.5	14.4	11.1	11.4	--	11.0	Jun-16
Global Infra Part III-A/B, LP	20,547,865	0.4	6.5	6.8	12.0	13.1	11.7	--	7.0	Sep-16
Lime Rock Partners VIII	7,125,564	0.2	7.2	12.6	37.1	15.2	--	--	11.9	Dec-18
Kimmeridge Energy Fund V, L.P.	10,060,129	0.2	0.0	-2.9	13.7	27.0	--	--	11.5	Aug-19
Global Infra Partners IV	4,836,434	0.1	1.1	4.6	8.7	-63.5	--	--	-65.0	Aug-19
Lime Rock New Energy, L.P	3,299,666	0.1	6.7	14.2	-8.4	--	--	--	0.6	Aug-20
Orion Mine Finance Fund III, L.P.	7,550,439	0.2	0.0	-1.2	0.8	--	--	--	6.8	Sep-20
Real Assets Coinvest I	1,799,998	0.0	0.0	0.0	0.0	--	--	--	0.0	Sep-20
Crestline Co-Investment II	5,998,185	0.1	2.3	5.7	51.5	--	--	--	34.3	Feb-21
Tembo Cap Mining III	3,491,596	0.1	15.9	-6.4	-4.3	--	--	--	-0.3	Oct-21
Mountain Capital II	1,520,409	0.0	-5.0	-12.5	4.7	--	--	--	3.0	Jan-22

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Aether Seed Partners I	1,979,352	0.0	0.0	304.3	--	--	--	--	304.3	May-22
Hull Street Energy II	477,047	0.0	0.0	0.0	--	--	--	--	0.0	Jul-22
Kimmeridge Fund VI	9,854,814	0.2	0.0	--	--	--	--	--	0.0	Sep-22
HIG Infrastructure Partners	301,780	0.0	-36.5	--	--	--	--	--	-36.5	Jan-23
Northern Trust Russell 3000	55,822,763	1.2	7.2	9.8	-8.5	18.5	10.5	--	10.6	Apr-14
<i>Russell 3000</i>			7.2	9.7	-8.6	18.5	10.4	--	10.6	Apr-14
Blackrock Liquid Fed Trust Fund	139,691,028	3.0	1.0	--	--	--	--	--	--	Dec-22
High Yield Bonds	93,439,634	2.0	4.0	8.3	-2.1	--	--	--	3.4	Jun-20
<i>Bloomberg US Corporate High Yield TR</i>			3.6	7.2	-3.3	--	--	--	3.0	Jun-20
<i>eV US High Yield Fixed Inc Net Median</i>			3.3	6.8	-2.8	5.7	3.0	3.8	3.1	Jun-20
<i>eV US High Yield Fixed Inc Net Rank</i>			10	4	33	--	--	--	40	Jun-20
Mellon High Yield Beta	9,133,520	0.2	3.7	7.9	-2.8	--	--	--	3.2	Jun-20
<i>Bloomberg US Corporate High Yield TR</i>			3.6	7.2	-3.3	--	--	--	2.8	Jun-20
<i>eV US High Yield Fixed Inc Net Median</i>			3.3	6.8	-2.8	5.7	3.0	3.8	2.9	Jun-20
<i>eV US High Yield Fixed Inc Net Rank</i>			21	12	50	--	--	--	39	Jun-20
Columbia High Yield Fixed Income	84,306,114	1.8	4.0	8.3	-2.0	--	--	--	-0.6	Dec-20
<i>Bloomberg US Corporate High Yield TR</i>			3.6	7.2	-3.3	--	--	--	-1.4	Dec-20
<i>eV US High Yield Fixed Inc Net Median</i>			3.3	6.8	-2.8	5.7	3.0	3.8	-1.0	Dec-20
<i>eV US High Yield Fixed Inc Net Rank</i>			9	4	32	--	--	--	39	Dec-20

Total Fund | As of March 31, 2023

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Emerging Market Debt	92,007,840	2.0	3.5	1.9	3.4	6.8	5.0	3.3	2.9	Jan-13
50% JPM EMBI GD / 50% JPM GBI-EM			3.5	6.9	-3.8	0.5	-1.4	0.3	0.2	Jan-13
eV All Emg Mkts Fixed Inc Net Median			2.2	6.0	-3.9	2.2	-0.5	1.3	1.1	Jan-13
eV All Emg Mkts Fixed Inc Net Rank			25	98	2	6	1	3	9	Jan-13
Wellington Iguazu Partners LP Fund	79,943,472	1.7	3.6	0.9	6.9	9.9	9.8	--	8.6	Feb-14
50% JPM EMBI GD + 50% JPM GBI EM GD			3.5	6.9	-3.8	0.5	-1.4	--	1.3	Feb-14
eV All Emg Mkts Fixed Inc Net Median			2.2	6.0	-3.9	2.2	-0.5	1.3	2.1	Feb-14
eV All Emg Mkts Fixed Inc Net Rank			24	99	1	1	1	--	1	Feb-14
Payden EMD Blended Currency	12,064,368	0.3	2.9	9.3	-3.5	--	--	--	-7.3	Dec-20
50% JPM EMBI GD / 50% JPM GBI-EM			3.5	6.9	-3.8	--	--	--	-7.7	Dec-20
eV Emg Mkts Fixed Inc - Blended Currency Net Median			2.7	7.1	-4.1	2.2	-0.9	0.8	-6.7	Dec-20
eV Emg Mkts Fixed Inc - Blended Currency Net Rank			36	10	46	--	--	--	60	Dec-20
Low Beta	699,514,758	15.1	1.1	1.1	2.6	3.6	3.4	--	2.6	Jul-15
Low Beta Benchmark			1.7	0.7	0.4	0.3	1.1	--	0.8	Jul-15
Immunized Cash Flows	427,400,894	9.2	1.8	0.0	-0.5	-1.1	--	--	1.0	Oct-18
Immunized Cash Flow Benchmark			1.8	0.0	-0.5	-1.1	--	--	1.0	Oct-18
Insight Immunized Cash Flow	427,400,894	9.2	1.8	0.0	-0.5	-1.1	--	--	0.3	Jun-19
Bloomberg US Govt/Credit 1-3 Yr. TR			1.5	0.9	0.3	-0.4	--	--	0.6	Jun-19

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Market Neutral Strategies	138,895,632	3.0	-1.1	2.9	11.4	15.1	9.8	6.0	5.9	Nov-12
<i>Market Neutral Strategies Benchmark</i>			1.5	3.7	4.3	1.6	1.6	1.2	1.4	Nov-12
Relative Value	138,895,632	3.0	-1.1	2.9	11.4	16.6	10.3	--	7.6	Jul-15
<i>HFRI Relative Value (Total) Index</i>			1.3	2.8	0.0	7.7	3.6	--	3.6	Jul-15
<i>Relative Value Arbitrage MStar MF Median</i>			1.5	3.6	-0.8	5.3	3.5	2.9	3.1	Jul-15
<i>Relative Value Arbitrage MStar MF Rank</i>			99	61	1	1	1	--	1	Jul-15
Pine River Fund, Ltd	268,553	0.0	-7.0	-1.5	-13.9	-2.7	4.1	2.6	3.1	Jan-13
<i>HFRI Relative Value (Total) Index</i>			1.3	2.8	0.0	7.7	3.6	3.9	4.1	Jan-13
DE Shaw Composite Fund, LLC	68,444,740	1.5	2.4	11.4	20.7	21.5	17.0	14.2	14.2	Apr-13
<i>HFRI Fund Weighted Composite Index</i>			1.2	2.8	-2.1	10.5	4.7	4.4	4.4	Apr-13
Hudson Bay	15,061,387	0.3	1.4	7.4	9.2	11.8	10.5	--	9.7	Aug-17
<i>HFRI Relative Value (Total) Index</i>			1.3	2.8	0.0	7.7	3.6	--	3.5	Aug-17
Crabel Advanced Trend	55,120,953	1.2	-5.8	-7.3	1.9	--	--	--	6.7	Jun-21
<i>Barclay CTA Index</i>			-1.9	-2.8	-0.2	--	--	--	3.3	Jun-21
Cash	40,497,283	0.9	1.0	2.3	2.4	0.8	1.4	0.9	7.4	Jul-02
<i>ICE BofA 91 Days T-Bills TR</i>			1.1	2.4	2.5	0.9	1.4	0.9	1.3	Jul-02
Short Term IG Bonds	92,720,949	2.0	1.2	2.7	--	--	--	--	--	May-22
<i>ICE BofA 3M US Treasury TR USD</i>			1.1	2.4	--	--	--	--	--	May-22

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Blackrock 3-Month T-Bill	92,720,949	2.0	1.2	2.7	--	--	--	--	2.8	May-22
ICE BofA 3M US Treasury TR USD			1.1	2.4	--	--	--	--	2.5	May-22
Other	622,510,933	13.5	-0.4	-0.2	-0.1	1.7	1.3	--	1.8	Jul-15
Other Benchmark			0.1	-0.4	-0.9	1.4	0.5	--	1.5	Jul-15
Core Real Estate	266,913,489	5.8	-4.8	3.1	10.7	10.8	9.4	--	8.8	Jul-15
Core Real Estate Benchmark			-5.2	-0.6	6.5	8.7	7.3	--	7.7	Jul-15
BlackRock Core Property Fund	54,399,935	1.2	-3.9	5.6	13.8	12.0	--	--	10.3	Feb-19
Core Real Estate Benchmark 2			-5.2	-0.6	6.5	8.7	--	--	7.4	Feb-19
Clarion Lion Properties Fund	102,028,871	2.2	-5.4	1.8	8.8	10.2	--	--	9.2	Mar-19
Core Real Estate Benchmark 2			-5.2	-0.6	6.5	8.7	--	--	7.5	Mar-19
Clarion Lion Industrial Trust	25,020,375	0.5	-1.4	10.6	22.0	--	--	--	27.6	Jan-22
Core Real Estate Benchmark 2			-5.2	-0.6	6.5	--	--	--	11.6	Jan-22
TA Realty Core Property Fund	85,464,308	1.8	-5.5	-0.4	7.8	--	--	--	13.5	Jan-22
Core Real Estate Benchmark 2			-5.2	-0.6	6.5	--	--	--	11.6	Jan-22
TIPS	91,328,308	2.0	2.2	0.7	-0.6	3.5	--	--	3.2	Oct-18
Bloomberg US Treasury TIPS 0-5 Yr TR			2.2	0.8	-0.3	3.5	--	--	3.2	Oct-18

	Market Value (\$)	% of Portfolio	QTD (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Investment Grade Bonds	197,921,087	4.3	2.7	-0.9	-5.9	--	--	--	-3.0	May-20
Custom IG Bonds Benchmark			2.9	-0.3	-4.8	--	--	--	-3.2	May-20
Voya Securitized Credit	39,616,657	0.9	3.7	-1.4	-6.7	--	--	--	-1.3	Apr-20
Bloomberg US Securitized MBS ABS CMBS TR			2.5	-0.9	-4.7	--	--	--	-3.4	Apr-20
Invesco Core Bonds	158,304,429	3.4	2.4	-0.8	-5.7	--	--	--	-5.4	Feb-21
Bloomberg US Aggregate TR			3.0	-0.1	-4.8	--	--	--	-4.9	Feb-21
Long-Term Government Bonds	66,348,049	1.4	6.7	-4.6	-15.9	--	--	--	-11.8	May-20
Long-Term Government Bonds Benchmark			6.2	-4.6	-16.0	--	--	--	-11.9	May-20
BlackRock Long-Term Gov Bonds	66,348,049	1.4	6.7	-4.6	-15.9	--	--	--	-11.8	May-20
Bloomberg US Govt Long TR			6.2	-4.6	-15.9	--	--	--	-11.9	May-20
Overlay	12,330,145	0.3								
Russell Overlay	12,118,856	0.3								

Cash Flow Summary						
Quarter Ending March 31, 2023						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
57 Stars Global Opportunity	\$25,890,376	\$0	-\$541,032	-\$541,032	\$0	\$25,349,344
Aether Seed Partners I	\$1,504,507	\$516,328	-\$41,483	\$474,845	\$0	\$1,979,352
AIGGRE Fund IV	\$13,657,216	\$1,390,214	\$0	\$1,390,214	-\$211,836	\$14,835,594
Angelo Gordon CS II	\$9,616,459	\$1,050,000	-\$214,405	\$835,595	-\$24,958	\$10,427,096
Arbour Lane COF III	\$8,103,057	\$0	\$0	\$0	\$18,039	\$8,121,096
Arbour Lane Credit Opportunity Fund II, L.P.	\$15,986,436	\$0	-\$831,880	-\$831,880	\$0	\$15,154,556
Artisan Global Opportunities	\$200,781,112	\$0	\$0	\$0	\$18,123,244	\$218,904,357
Artisan Global Value	\$260,179,237	\$0	\$0	\$0	\$26,404,955	\$286,584,192
Blackrock 3-Month T-Bill	\$91,638,336	\$0	\$0	\$0	\$1,082,614	\$92,720,949
BlackRock Core Property Fund	\$57,166,502	\$0	-\$549,494	-\$549,494	-\$2,217,072	\$54,399,935
BlackRock Liquid Fed Trust Fund	\$95,153,988	\$68,000,000	-\$25,000,000	\$43,000,000	\$1,537,040	\$139,691,028
BlackRock Long-Term Gov Bonds	\$62,202,114	\$0	\$0	\$0	\$4,145,935	\$66,348,049
Blackstone/GSO Cap Partners	\$3,988,662	\$0	\$0	\$0	\$0	\$3,988,662
Bow Capital Fund II	\$1,324,102	\$86,202	\$0	\$86,202	-\$30,905	\$1,379,399
Brookfield Infrastructure III	\$17,508,635	\$2,042,907	\$0	\$2,042,907	\$1,089,473	\$20,641,015
Brookfield SREP I	\$3,413,210	\$61,761	-\$665,225	-\$603,464	-\$339,100	\$2,470,646
Brookfield SREP II	\$18,784,034	\$78,000	-\$4,707,377	-\$4,629,377	-\$608,034	\$13,546,623
BSF II	\$1,174,701	\$0	\$0	\$0	-\$1,490	\$1,173,211
Canvas III	\$3,361,780	\$239,865	\$0	\$239,865	-\$231,658	\$3,369,987
Cash	\$49,704,672	\$191,984,049	-\$201,717,834	-\$9,733,785	\$526,396	\$40,497,283
CCMP Capital Investors III, LP	\$4,218,373	\$0	\$0	\$0	\$0	\$4,218,373
Centerbridge RE II	\$1,941,253	\$2,088,755	\$0	\$2,088,755	\$101,347	\$4,131,355

Total Fund | As of March 31, 2023

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Clarion Lion Industrial Trust	\$25,465,801	\$0	-\$79,337	-\$79,337	-\$366,090	\$25,020,375
Clarion Lion Properties Fund	\$108,452,719	\$0	-\$646,231	-\$646,231	-\$5,777,617	\$102,028,871
Columbia High Yield Fixed Income	\$81,064,271	\$27,604	-\$27,604	\$0	\$3,241,842	\$84,306,114
Cove Street Small Cap Value	\$33,559,988	\$0	-\$18,000,000	-\$18,000,000	\$2,750,513	\$18,310,502
Crabel Advanced Trend	\$58,495,782	\$0	\$0	\$0	-\$3,374,829	\$55,120,953
Crescent Mezzanine Partners VI	\$2,556,403	\$0	-\$510,222	-\$510,222	\$117,715	\$2,163,896
Crestline Co-Investment II	\$5,843,618	\$20,989	\$0	\$20,989	\$133,578	\$5,998,185
Crestline Portfolio Fin II	\$3,429,689	\$0	-\$577,430	-\$577,430	\$159,072	\$3,011,331
Crestline Portfolio Financing	\$11,513,714	\$32,931	-\$2,295,766	-\$2,262,835	-\$263,447	\$8,987,432
Cross Ocean USD ESS Fund I, LP	\$6,847,202	\$0	\$0	\$0	-\$31,250	\$6,815,952
Cross Ocean USD ESS Fund II LP	\$13,160,817	\$13,433	\$0	\$13,433	-\$89,552	\$13,084,698
Cross Ocean USD ESS Fund III, LP	\$38,748,907	\$0	\$0	\$0	\$432,174	\$39,181,081
DE Shaw Composite Fund, LLC	\$71,533,295	\$0	-\$4,718,565	-\$4,718,565	\$1,630,010	\$68,444,740
Dimensional Fund Adv EM Value	\$51,715,882	\$0	\$0	\$0	\$1,935,571	\$53,651,453
DRA Growth & Income Fund IX	\$15,142,032	\$0	-\$339,467	-\$339,467	\$0	\$14,802,565
DRA Growth and Income Fund X, LLC	\$14,408,277	\$1,657,895	-\$128,925	\$1,528,970	\$0	\$15,937,247
Eagle Point Defensive II	\$2,474,151	\$1,780,800	-\$141,852	\$1,638,948	\$183,571	\$4,296,670
Eagle Point Defensive Income Fund	\$10,531,406	\$541,200	-\$194,649	\$346,551	-\$11,803	\$10,866,154
Exeter Industrial Value Fund V	\$13,192,992	\$0	\$0	\$0	\$678,963	\$13,871,955
First Eagle International Equity	\$77,063,108	\$0	\$0	\$0	\$5,024,448	\$82,087,556
Francisco Partners	\$14,796,598	\$138,735	\$0	\$138,735	-\$693,676	\$14,241,657
GCP SecureSpace Property Partners, L.P	\$3,442,728	\$0	\$0	\$0	\$0	\$3,442,728
GEM Realty Fund VI	\$7,582,306	\$746,389	\$0	\$746,389	-\$731,975	\$7,596,720
Global Infra Part III-A/B, LP	\$19,508,371	\$0	-\$220,051	-\$220,051	\$1,259,545	\$20,547,865
Global Infra Partners IV	\$4,792,505	\$0	-\$9,483	-\$9,483	\$53,412	\$4,836,434

Total Fund | As of March 31, 2023

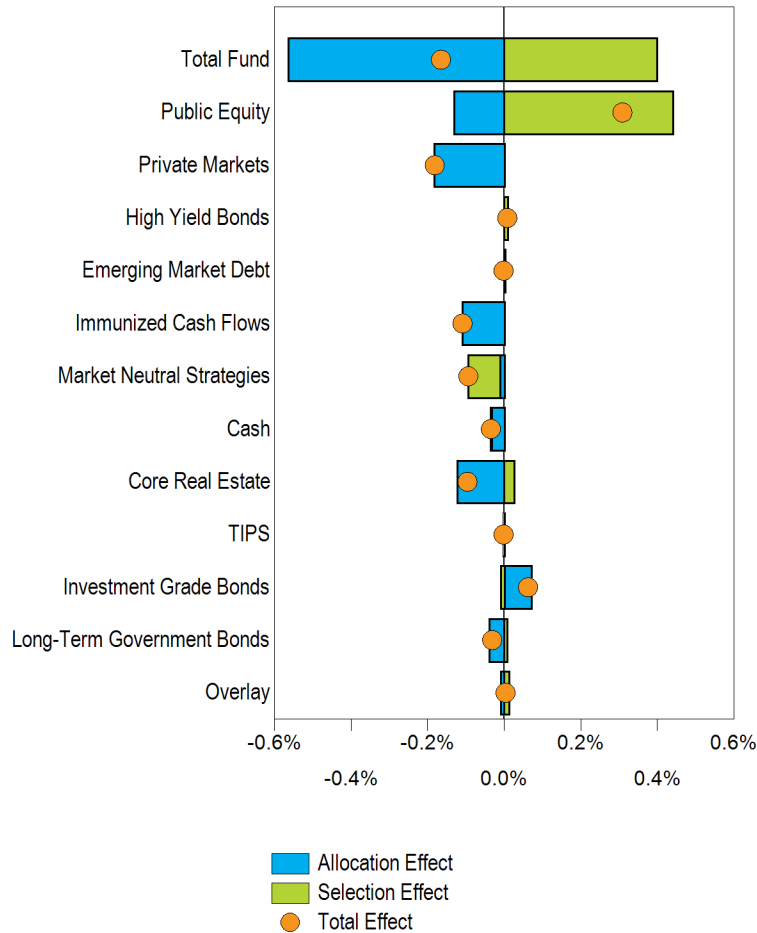
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
GQG Global Emerging Markets	\$42,353,506	\$0	\$0	\$0	\$1,084,357	\$43,437,863
HarbourVest Partners VII	\$124,471	\$0	\$0	\$0	-\$3,139	\$121,332
HIG Infrastructure Partners	\$0	\$475,000	\$0	\$475,000	-\$173,220	\$301,780
HIG Realty Partners IV	\$7,128,639	\$2,036,484	\$0	\$2,036,484	\$430,591	\$9,595,714
HPS Special Situations Opportunity	\$10,919,845	\$0	\$0	\$0	\$348,784	\$11,268,629
HPS Special Situations Opportunity Fund II	\$2,103,378	\$1,031,980	\$0	\$1,031,980	-\$55,798	\$3,079,560
Hudson Bay	\$14,854,286	\$0	\$0	\$0	\$207,101	\$15,061,387
Hull Street Energy II	\$477,047	\$0	\$0	\$0	\$0	\$477,047
Innovation Endeavors III	\$12,459,753	\$111,744	\$0	\$111,744	-\$558,721	\$12,012,776
Innovation Endeavors IV	\$1,317,919	\$0	\$0	\$0	-\$24,910	\$1,293,009
Insight Immunized Cash Flow	\$436,389,131	\$0	-\$16,486,122	-\$16,486,122	\$7,497,885	\$427,400,894
Invesco Alpha II	\$6,906,719	\$274,145	\$0	\$274,145	\$0	\$7,180,864
Invesco Core Bonds	\$154,594,532	\$0	\$0	\$0	\$3,709,897	\$158,304,429
Kimmeridge Energy Fund V, L.P.	\$10,060,129	\$0	\$0	\$0	\$0	\$10,060,129
Kimmeridge Fund VI	\$13,596,550	\$0	-\$3,741,736	-\$3,741,736	\$0	\$9,854,814
Kotak India Midcap	\$14,194,699	\$0	\$0	\$0	-\$176,771	\$14,017,927
KSL Capital Partners IV, LP	\$21,461,016	\$137,645	\$0	\$137,645	\$0	\$21,598,661
Lerer Hippeau VIII	\$1,008,412	\$0	\$0	\$0	\$0	\$1,008,412
Lime Rock New Energy, L.P	\$3,055,386	\$40,199	\$0	\$40,199	\$204,081	\$3,299,666
Lime Rock Partners VIII	\$6,752,236	\$0	-\$110,468	-\$110,468	\$483,796	\$7,125,564
Medley Opportunity Fund II LP	\$4,378,782	\$0	\$0	\$0	\$0	\$4,378,782
Mellon High Yield Beta	\$8,807,294	\$0	\$0	\$0	\$326,226	\$9,133,520
Morgan Stanley International Equity	\$60,512,771	\$0	\$0	\$0	\$11,163,763	\$71,676,534
Mountain Capital II	\$1,600,809	\$25,855	\$0	\$25,855	-\$106,255	\$1,520,409
Next Play Capital III	\$3,807,477	\$1,000,000	\$0	\$1,000,000	\$0	\$4,807,477

Total Fund | As of March 31, 2023

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Next Play SJPF	\$1,059,863	\$639,805	\$0	\$639,805	\$0	\$1,699,668
Northern Trust 0-5 Year TIPS	\$89,389,137	\$0	\$0	\$0	\$1,939,171	\$91,328,308
Northern Trust MSCI EM IMI	\$56,887,759	\$0	-\$7,000,000	-\$7,000,000	\$2,670,373	\$52,558,131
Northern Trust MSCI World ex US	\$190,873,495	\$0	-\$20,000,000	-\$20,000,000	\$15,172,192	\$186,045,687
Northern Trust Russell 3000	\$726,835,645	\$18,000,000	\$0	\$18,000,000	\$52,572,134	\$797,407,780
Northern Trust Russell 3000	\$113,951,132	\$0	-\$65,000,000	-\$65,000,000	\$6,871,631	\$55,822,763
Northgate Venture Partners IX LP	\$9,275,857	\$200,000	\$0	\$200,000	-\$102	\$9,475,755
Oberweis Intl Opportunities	\$52,285,087	\$0	\$0	\$0	\$2,858,068	\$55,143,155
Octagon CLO Opp Fund IV	\$17,738,516	\$3,150,000	-\$887,307	\$2,262,693	\$0	\$20,001,209
Orion Euro Real Estate IV LP	\$3,554,784	\$0	-\$23,953	-\$23,953	\$1,696,691	\$5,227,522
Orion Mine Finance Fund III, L.P.	\$7,335,071	\$215,368	\$0	\$215,368	\$0	\$7,550,439
Pantheon USA Fund VI, LP	\$395,646	\$0	\$0	\$0	\$12,568	\$408,214
Park Square Credit Opp II, LP	\$116,007	\$0	\$0	\$0	-\$3,324	\$112,683
Payden EMD Blended Currency	\$11,719,114	\$0	\$0	\$0	\$345,253	\$12,064,368
PE Strategic Partnership, LP	\$296,806,816	\$13,081,250	\$0	\$13,081,250	\$0	\$309,888,066
Pine River Fund, Ltd	\$288,761	\$0	\$0	\$0	-\$20,209	\$268,553
Portfolio Advisors Private Eq	\$2,664,724	\$0	-\$70,613	-\$70,613	-\$107,590	\$2,486,521
Praedium X MidInc	\$5,919,689	\$0	-\$56,861	-\$56,861	-\$623,765	\$5,239,063
Real Assets Coinvest I	\$1,799,998	\$0	\$0	\$0	\$0	\$1,799,998
Redwheel Emerging Markets Equity	\$34,430,627	\$0	\$0	\$0	\$1,310,509	\$35,741,136
Rockpoint Real Estate Fund VI, L.P.	\$9,972,045	\$0	\$0	\$0	\$0	\$9,972,045
Russell Overlay	\$11,493,617	\$0	\$0	\$0	\$625,240	\$12,118,856
Sculptor Real Estate Fund III	\$4,155,844	\$11,982	-\$1,760,338	-\$1,748,356	\$310,143	\$2,717,631
Shoreline China Value III, LP	\$5,108,322	\$0	-\$121,500	-\$121,500	\$0	\$4,986,822
Signia Venture Partners IV	\$550,551	\$0	\$0	\$0	-\$10,965	\$539,586

	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
SVP Special Situations V	\$6,431,209	\$1,552,090	-\$3,875	\$1,548,215	\$241,449	\$8,220,873
TA Realty Associates Fund X	\$8,695	\$125	\$0	\$125	-\$623	\$8,197
TA Realty Core Property Fund	\$91,336,834	\$0	-\$863,276	-\$863,276	-\$5,009,250	\$85,464,308
TCW/Crescent Mezzanine	\$71,742	\$0	\$0	\$0	\$37,413	\$109,155
Tembo Cap Mining III	\$2,342,960	\$683,625	\$0	\$683,625	\$465,011	\$3,491,596
Tiger Iron SJPF	\$5,405,962	\$1,672,383	\$0	\$1,672,383	\$0	\$7,078,345
Top Tier Capital Partners IX	\$7,794,460	\$25,000	\$0	\$25,000	-\$25,000	\$7,794,460
Torchlight Debt Fund VII	\$4,719,780	\$0	\$0	\$0	\$85,540	\$4,805,320
Torchlight Debt Opportunity VI	\$21,715,127	\$135,017	\$0	\$135,017	\$144,753	\$21,994,897
TPG Opportunities Partners II	\$529,134	\$0	-\$393,026	-\$393,026	\$0	\$136,108
TPG Opportunities Partners III	\$3,758,789	\$40,072	-\$684,838	-\$644,766	-\$199,531	\$2,914,492
Tristan - EPIISO III	\$2,862,423	\$0	\$0	\$0	-\$124,177	\$2,738,246
Tristan - EPIISO IV	\$18,107,277	\$25,303	\$0	\$25,303	-\$482,707	\$17,649,874
Tristan - EPIISO V	\$17,602,089	\$0	-\$618,559	-\$618,559	\$630,686	\$17,614,216
Voya Securitized Credit	\$38,206,963	\$0	\$0	\$0	\$1,409,695	\$39,616,657
Warburg Pincus (Europa) XI	\$7,353,271	\$0	\$0	\$0	\$229,790	\$7,583,061
Wellington Emerging Markets Systematic	\$42,496,720	\$0	\$0	\$0	\$2,926,285	\$45,423,005
Wellington Iguazu Partners LP Fund	\$77,177,837	\$0	\$0	\$0	\$2,765,636	\$79,943,472
White Oak Direct Lending	\$36,832,370	\$0	\$0	\$0	\$494,543	\$37,326,913
Total	\$4,521,059,364	\$317,063,128	-\$379,980,783	-\$65,818,129	\$172,089,623	\$4,627,330,859

Attribution Effects 3 Months Ending March 31, 2023



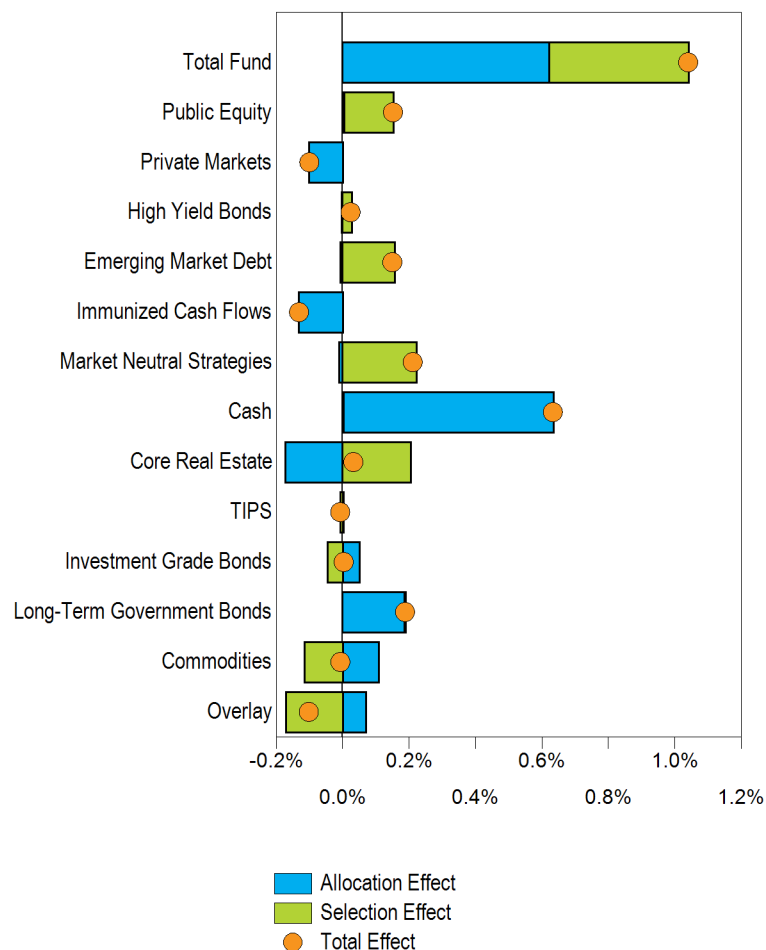
Attribution Summary

3 Months Ending March 31, 2023

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	7.8%	6.8%	1.1%	0.4%	-0.1%	0.3%
Private Markets	1.2%	1.2%	0.0%	0.0%	-0.2%	-0.2%
High Yield Bonds	4.0%	3.6%	0.4%	0.0%	0.0%	0.0%
Emerging Market Debt	3.5%	3.5%	0.0%	0.0%	0.0%	0.0%
Immunized Cash Flows	1.8%	1.8%	0.0%	0.0%	-0.1%	-0.1%
Market Neutral Strategies	-1.1%	1.5%	-2.6%	-0.1%	0.0%	-0.1%
Cash	1.0%	1.1%	-0.1%	0.0%	0.0%	0.0%
Core Real Estate	-4.8%	-5.2%	0.4%	0.0%	-0.1%	-0.1%
TIPS	2.2%	2.2%	0.0%	0.0%	0.0%	0.0%
Investment Grade Bonds	2.7%	2.9%	-0.2%	0.0%	0.1%	0.1%
Long-Term Government Bonds	6.7%	6.2%	0.5%	0.0%	0.0%	0.0%
Overlay	5.3%	1.1%	4.3%	0.0%	0.0%	0.0%
Total	3.8%	3.9%	-0.1%	0.4%	-0.6%	-0.2%

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.

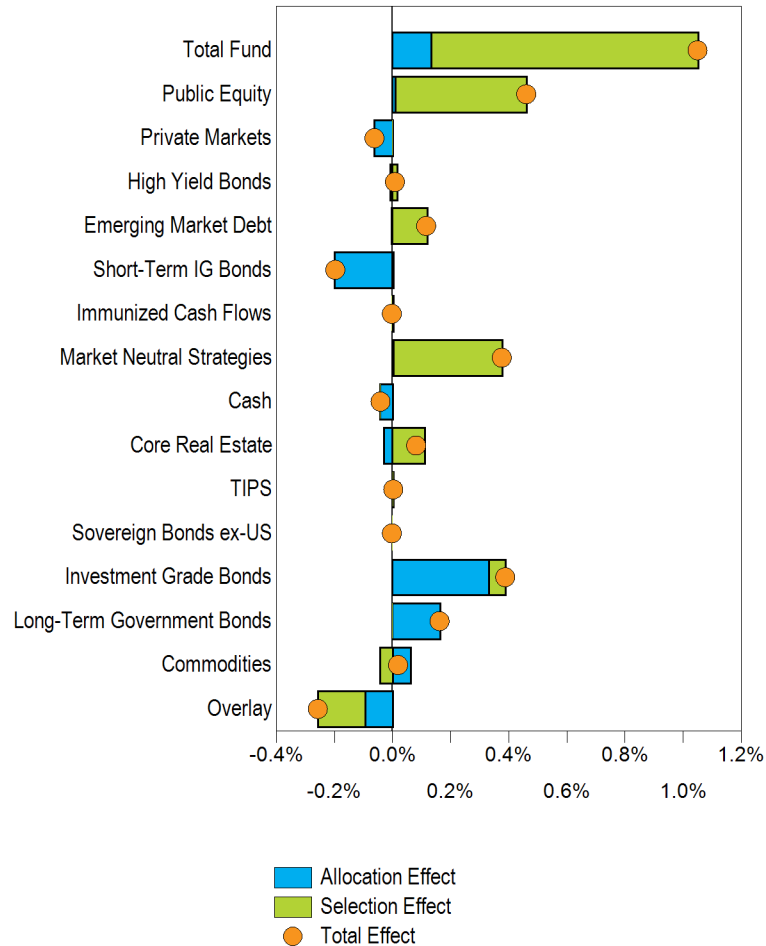
Attribution Effects 1 Year Ending March 31, 2023



Attribution Summary 1 Year Ending March 31, 2023

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	-7.4%	-7.7%	0.3%	0.1%	0.0%	0.2%
Private Markets	-1.7%	-1.7%	0.0%	0.0%	-0.1%	-0.1%
High Yield Bonds	-2.1%	-3.3%	1.2%	0.0%	0.0%	0.0%
Emerging Market Debt	3.4%	-3.8%	7.2%	0.2%	0.0%	0.1%
Immunized Cash Flows	-0.5%	-0.5%	0.0%	0.0%	-0.1%	-0.1%
Market Neutral Strategies	11.4%	4.3%	7.1%	0.2%	0.0%	0.2%
Cash	2.4%	2.5%	-0.1%	0.0%	0.6%	0.6%
Core Real Estate	10.7%	6.5%	4.2%	0.2%	-0.2%	0.0%
TIPS	-0.6%	-0.3%	-0.3%	0.0%	0.0%	0.0%
Investment Grade Bonds	-5.9%	-4.8%	-1.1%	0.0%	0.0%	0.0%
Long-Term Government Bonds	-15.9%	-16.0%	0.1%	0.0%	0.2%	0.2%
Commodities	--	--	--	-0.1%	0.1%	0.0%
Overlay	-31.0%	2.5%	-33.5%	-0.2%	0.1%	-0.1%
Total	-3.1%	-4.2%	1.1%	0.4%	0.6%	1.0%

Attribution Effects 3 Years Ending March 31, 2023

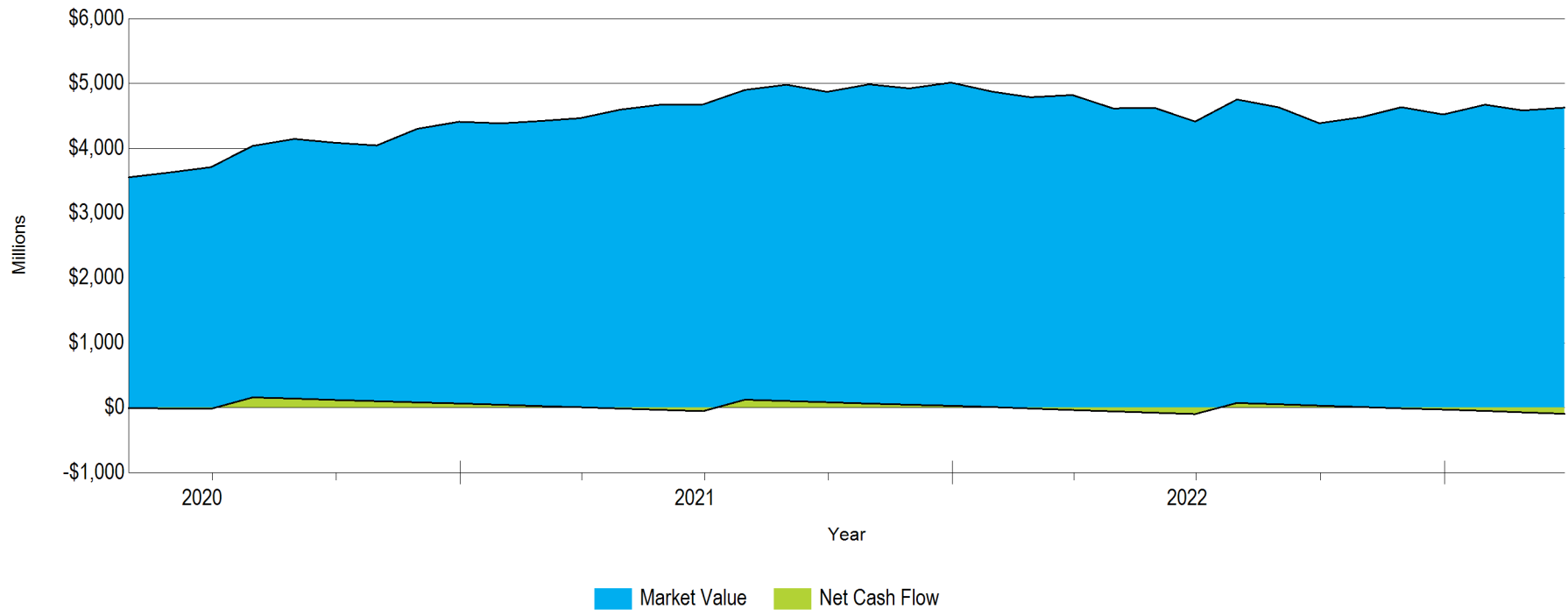


Attribution Summary

3 Years Ending March 31, 2023

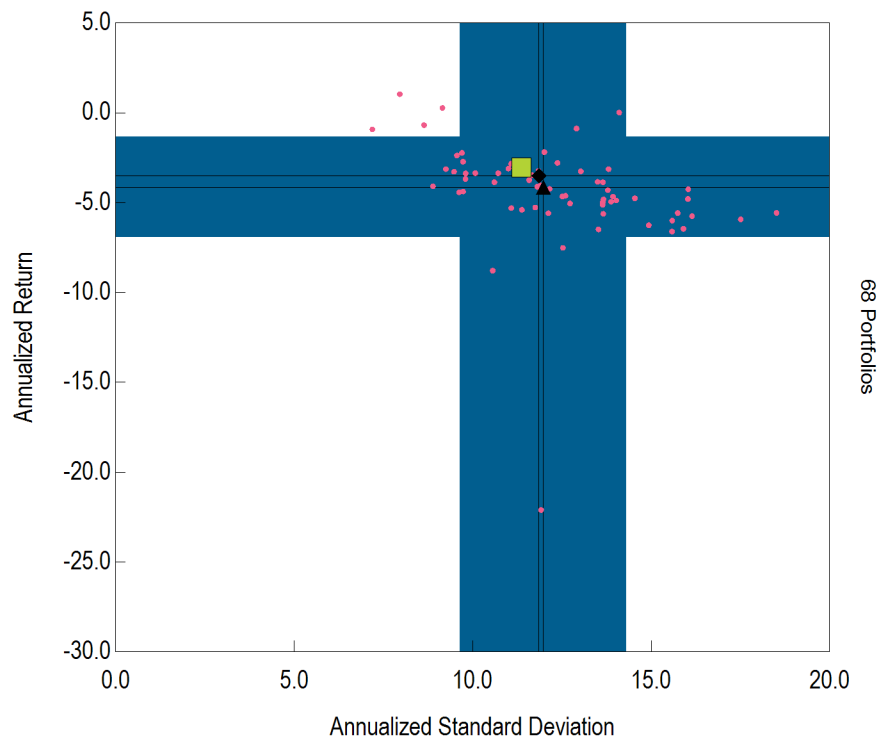
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Public Equity	16.3%	15.4%	0.9%	0.5%	0.0%	0.5%
Private Markets	14.4%	14.4%	0.0%	0.0%	-0.1%	-0.1%
High Yield Bonds	3.2%	5.9%	-2.7%	0.0%	0.0%	0.0%
Emerging Market Debt	6.8%	0.5%	6.3%	0.1%	0.0%	0.1%
Short-Term IG Bonds	0.4%	0.6%	-0.2%	0.0%	-0.2%	-0.2%
Immunized Cash Flows	-1.1%	-1.1%	0.0%	0.0%	0.0%	0.0%
Market Neutral Strategies	15.1%	1.6%	13.5%	0.4%	0.0%	0.4%
Cash	0.8%	0.9%	0.0%	0.0%	0.0%	0.0%
Core Real Estate	10.8%	8.7%	2.1%	0.1%	0.0%	0.1%
TIPS	3.5%	3.5%	0.0%	0.0%	0.0%	0.0%
Sovereign Bonds ex-US	0.0%	1.3%	-1.3%	0.0%	0.0%	0.0%
Investment Grade Bonds	-2.9%	-2.7%	-0.2%	0.1%	0.3%	0.4%
Long-Term Government Bonds	-11.2%	-11.2%	0.0%	0.0%	0.2%	0.2%
Commodities	10.2%	28.0%	-17.8%	0.0%	0.1%	0.0%
Overlay	-19.8%	0.9%	-20.7%	-0.2%	-0.1%	-0.3%
Total	11.3%	10.2%	1.1%	0.9%	0.1%	1.0%

Market Value History
3 Years Ending March 31, 2023



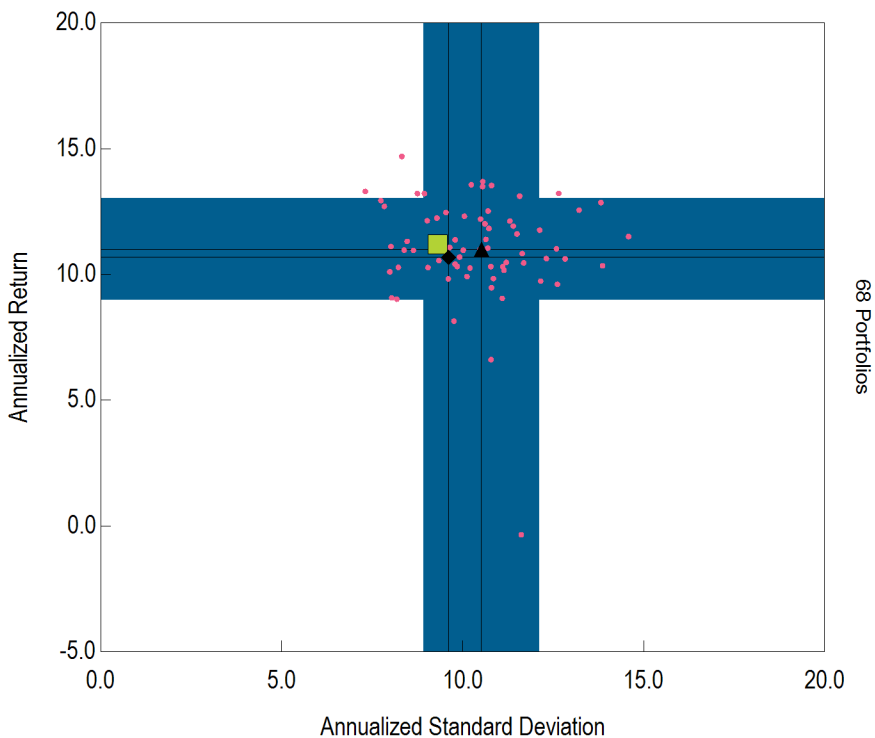
	First Quarter	Year-To-Date	One Year	Three Years
Beginning Market Value	\$4,521,059,364	\$4,521,059,364	\$4,821,557,388	\$3,395,146,324
Net Cash Flow	-\$65,818,129	-\$65,818,129	-\$57,987,350	-\$94,262,363
Net Investment Change	\$172,089,623	\$172,089,623	-\$136,239,179	\$1,326,446,897
Ending Market Value	\$4,627,330,859	\$4,627,330,859	\$4,627,330,859	\$4,627,330,859

Annualized Return vs. Annualized Standard Deviation
1 Year Ending March 31, 2023



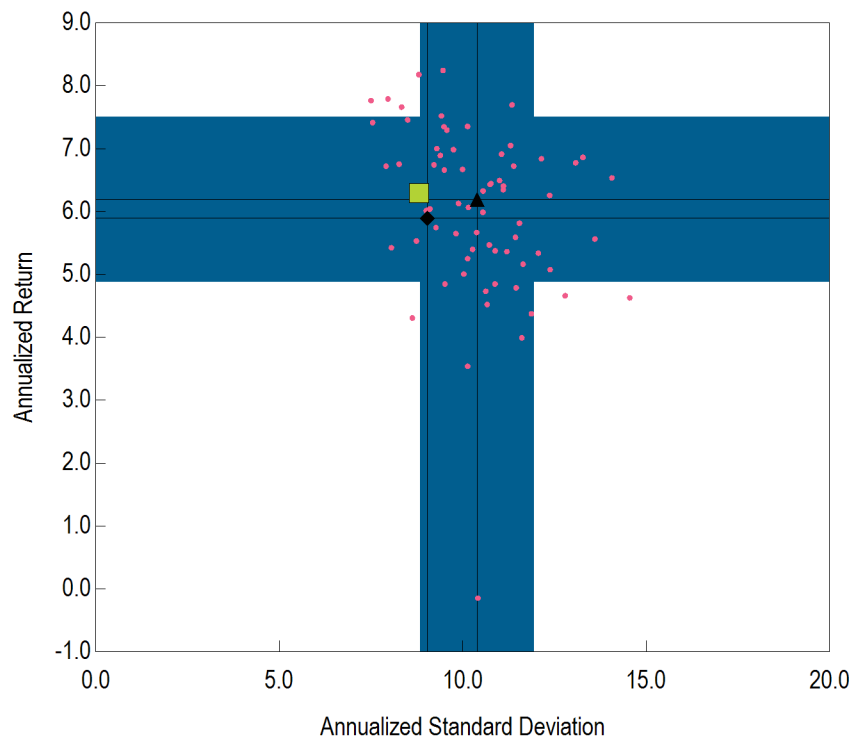
- Total Fund
- ◆ Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

Annualized Return vs. Annualized Standard Deviation
3 Years Ending March 31, 2023



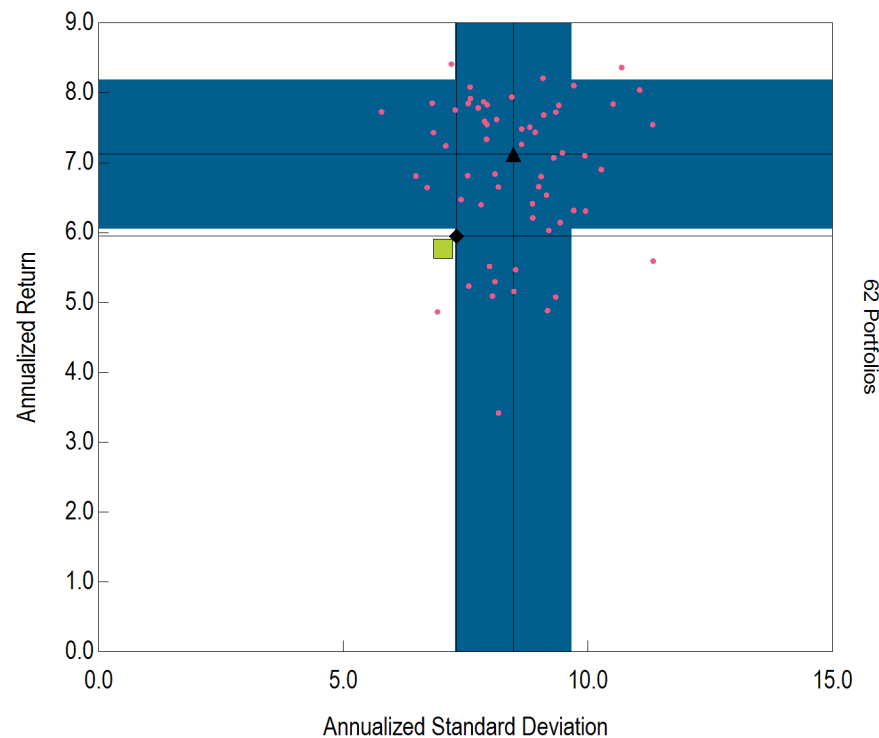
- Total Fund
- ◆ Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

Annualized Return vs. Annualized Standard Deviation
5 Years Ending March 31, 2023



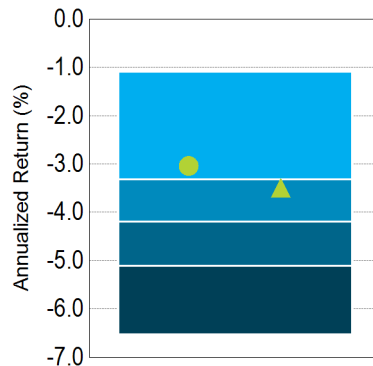
- Total Fund
- ◆ Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

Annualized Return vs. Annualized Standard Deviation
10 Years Ending March 31, 2023



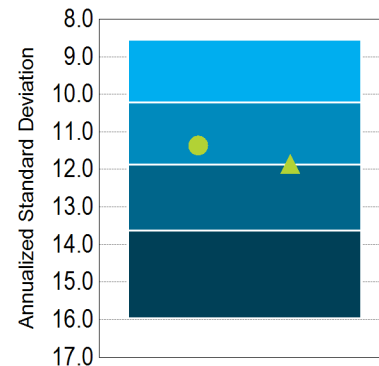
- Total Fund
- ◆ Policy Benchmark
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Gross

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



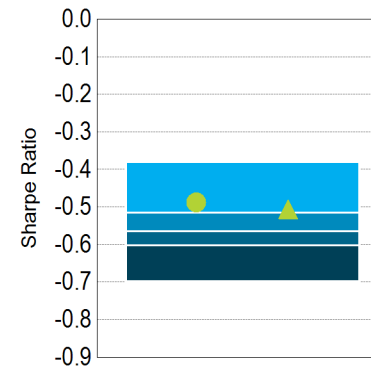
● Total Fund	
Value	-3.0
Rank	18
▲ Policy Benchmark	
Value	-3.5
Rank	33
Universe	
5th %tile	-1.1
25th %tile	-3.3
Median	-4.2
75th %tile	-5.1
95th %tile	-6.5

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



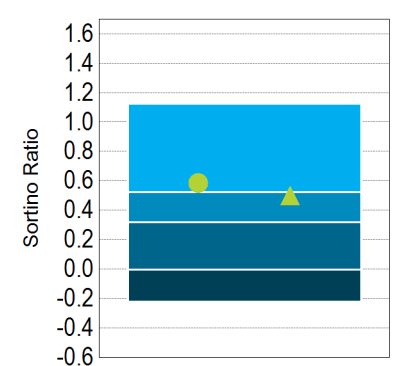
● Total Fund	
Value	11.4
Rank	39
▲ Policy Benchmark	
Value	11.9
Rank	51
Universe	
5th %tile	8.5
25th %tile	10.2
Median	11.9
75th %tile	13.6
95th %tile	15.9

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



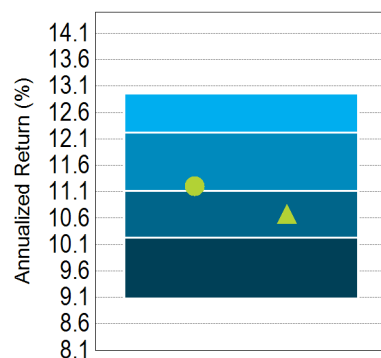
● Total Fund	
Value	-0.5
Rank	19
▲ Policy Benchmark	
Value	-0.5
Rank	23
Universe	
5th %tile	-0.4
25th %tile	-0.5
Median	-0.6
75th %tile	-0.6
95th %tile	-0.7

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



● Total Fund	
Value	0.6
Rank	18
▲ Policy Benchmark	
Value	0.5
Rank	27
Universe	
5th %tile	1.1
25th %tile	0.5
Median	0.3
75th %tile	0.0
95th %tile	-0.2

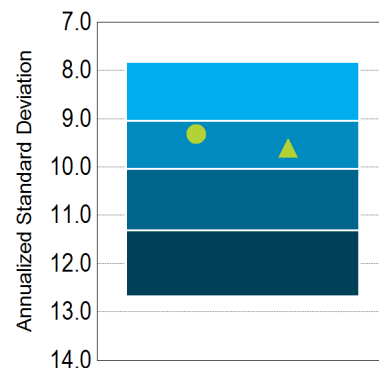
Annualized Return (%)
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	11.2
Rank	48
▲ Policy Benchmark	
Value	10.7
Rank	64

Universe	
5th %tile	13.0
25th %tile	12.2
Median	11.1
75th %tile	10.2
95th %tile	9.1

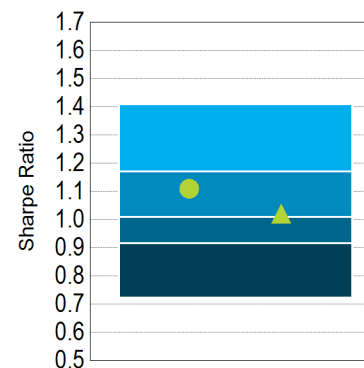
Annualized Standard Deviation
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	9.3
Rank	31
▲ Policy Benchmark	
Value	9.6
Rank	37

Universe	
5th %tile	7.8
25th %tile	9.0
Median	10.0
75th %tile	11.3
95th %tile	12.7

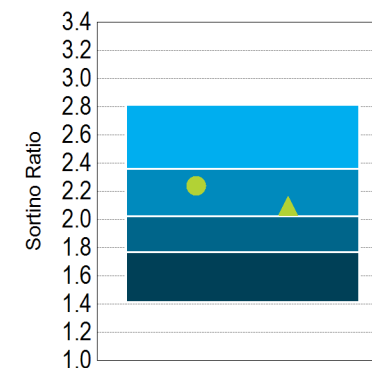
Sharpe Ratio
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	1.1
Rank	33
▲ Policy Benchmark	
Value	1.0
Rank	49

Universe	
5th %tile	1.4
25th %tile	1.2
Median	1.0
75th %tile	0.9
95th %tile	0.7

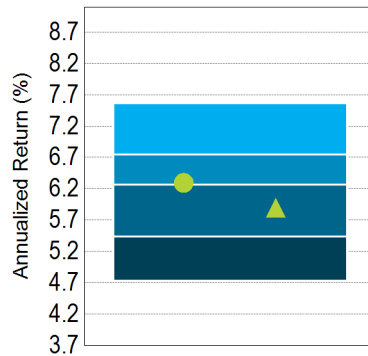
Sortino Ratio
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	2.2
Rank	32
▲ Policy Benchmark	
Value	2.1
Rank	47

Universe	
5th %tile	2.8
25th %tile	2.4
Median	2.0
75th %tile	1.8
95th %tile	1.4

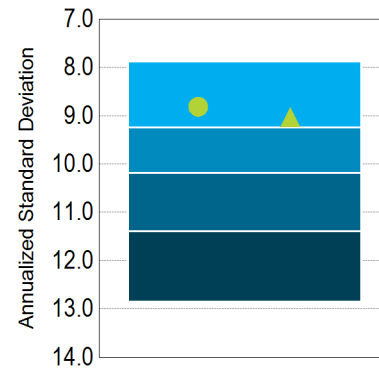
Annualized Return (%) vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	6.3
Rank	50
▲ Policy Benchmark	
Value	5.9
Rank	61

Universe	
5th %tile	7.6
25th %tile	6.8
Median	6.3
75th %tile	5.4
95th %tile	4.7

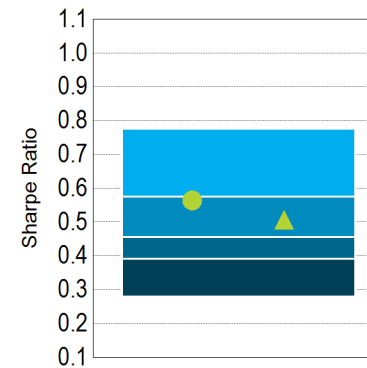
Annualized Standard Deviation vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	8.8
Rank	20
▲ Policy Benchmark	
Value	9.0
Rank	22

Universe	
5th %tile	7.9
25th %tile	9.2
Median	10.2
75th %tile	11.4
95th %tile	12.8

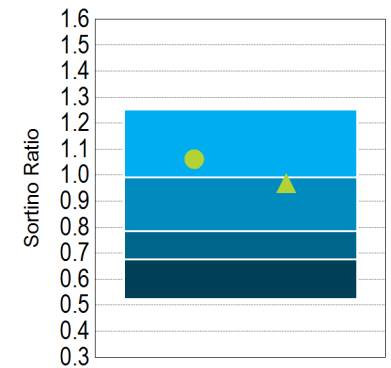
Sharpe Ratio vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	0.6
Rank	27
▲ Policy Benchmark	
Value	0.5
Rank	36

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

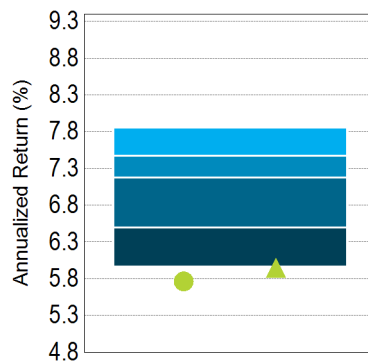
Sortino Ratio vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	1.1
Rank	20
▲ Policy Benchmark	
Value	1.0
Rank	27

Universe	
5th %tile	1.3
25th %tile	1.0
Median	0.8
75th %tile	0.7
95th %tile	0.5

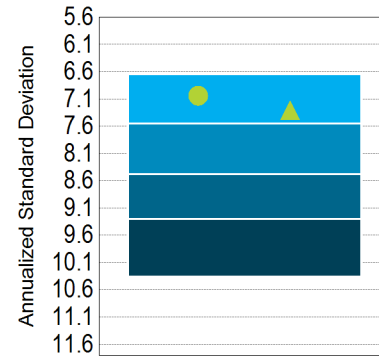
Annualized Return (%)
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	5.8
Rank	99
▲ Policy Benchmark	
Value	5.9
Rank	96

Universe	
5th %tile	7.9
25th %tile	7.5
Median	7.2
75th %tile	6.5
95th %tile	6.0

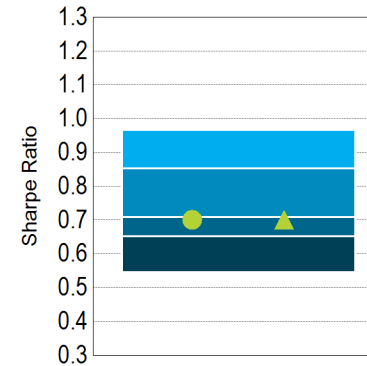
Annualized Standard Deviation
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	7.0
Rank	13
▲ Policy Benchmark	
Value	7.3
Rank	19

Universe	
5th %tile	6.6
25th %tile	7.5
Median	8.5
75th %tile	9.3
95th %tile	10.3

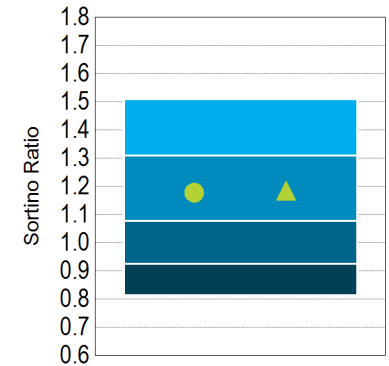
Sharpe Ratio
vs. InvMetrics Public DB > \$1B Net



● Total Fund	
Value	0.7
Rank	58
▲ Policy Benchmark	
Value	0.7
Rank	58

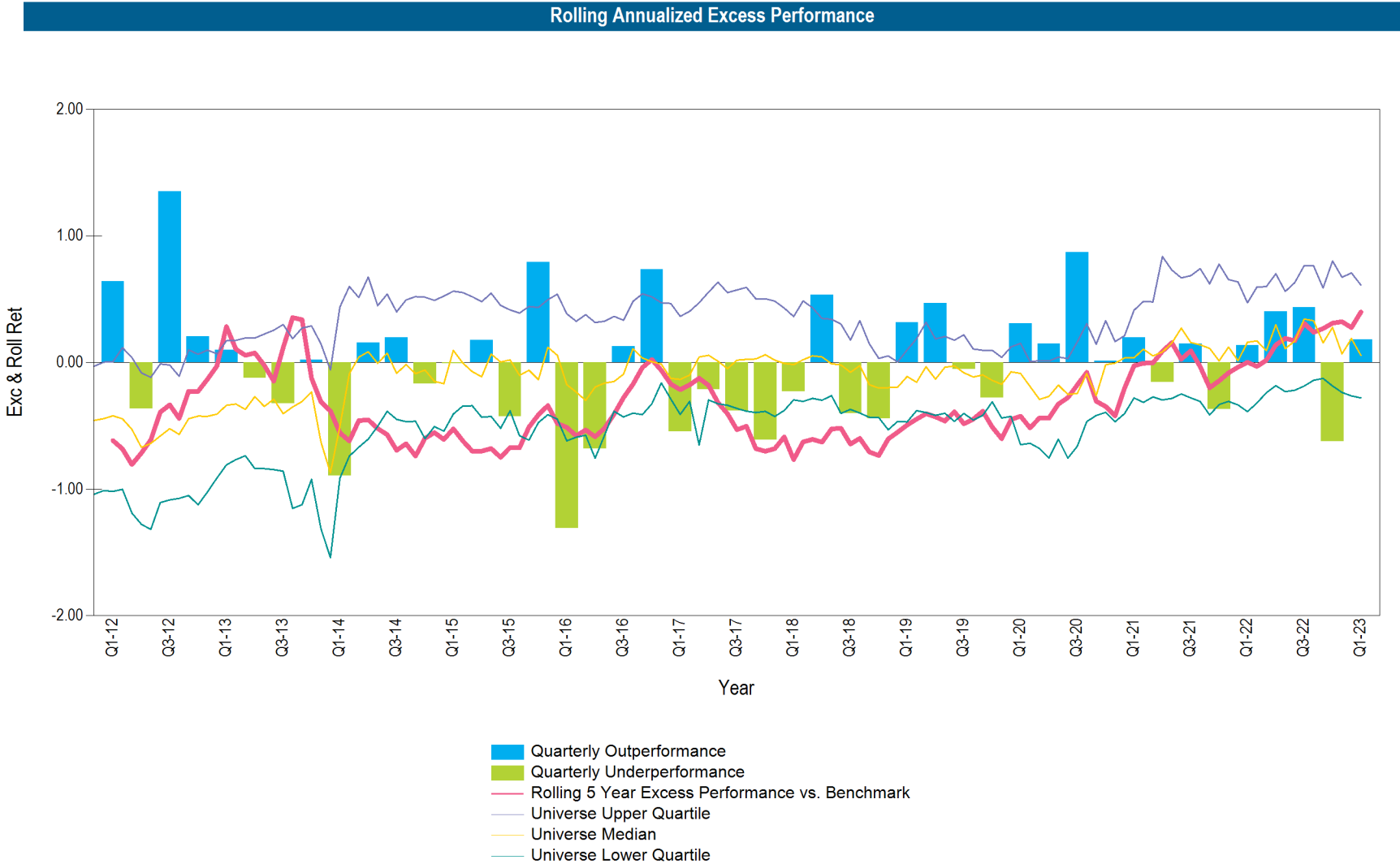
Universe	
5th %tile	1.0
25th %tile	0.9
Median	0.7
75th %tile	0.7
95th %tile	0.5

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

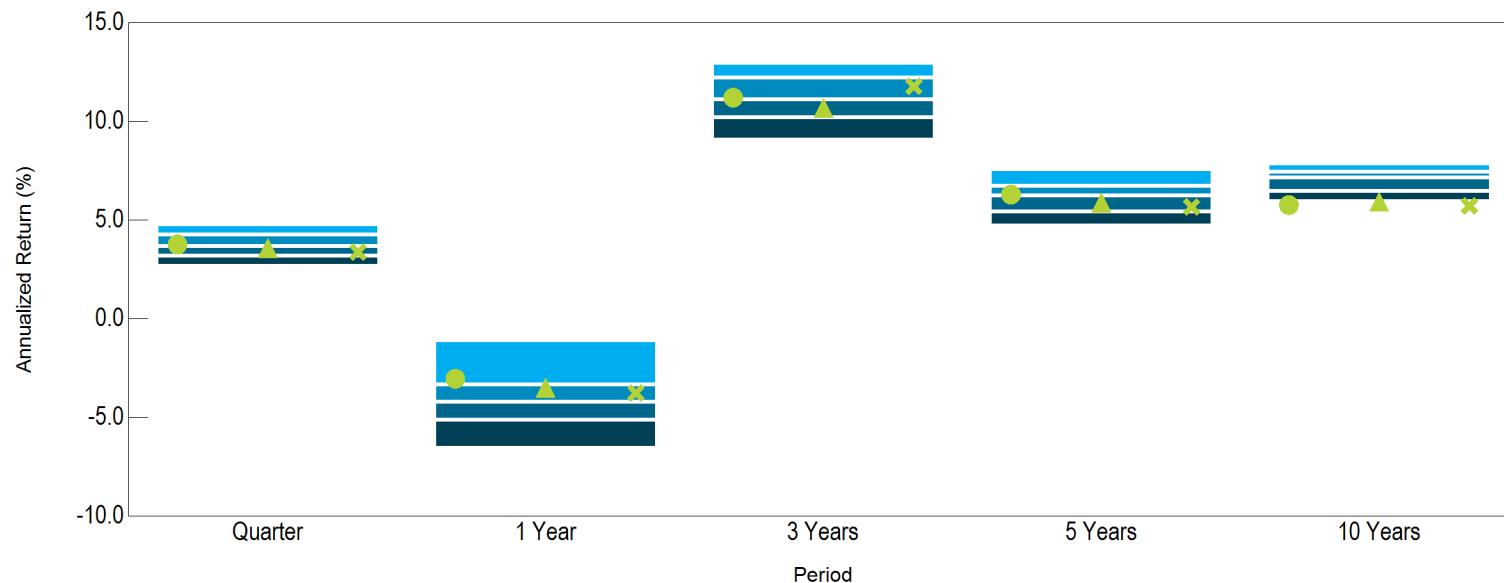


● Total Fund	
Value	1.2
Rank	36
▲ Policy Benchmark	
Value	1.2
Rank	35

Universe	
5th %tile	1.5
25th %tile	1.3
Median	1.1
75th %tile	0.9
95th %tile	0.8



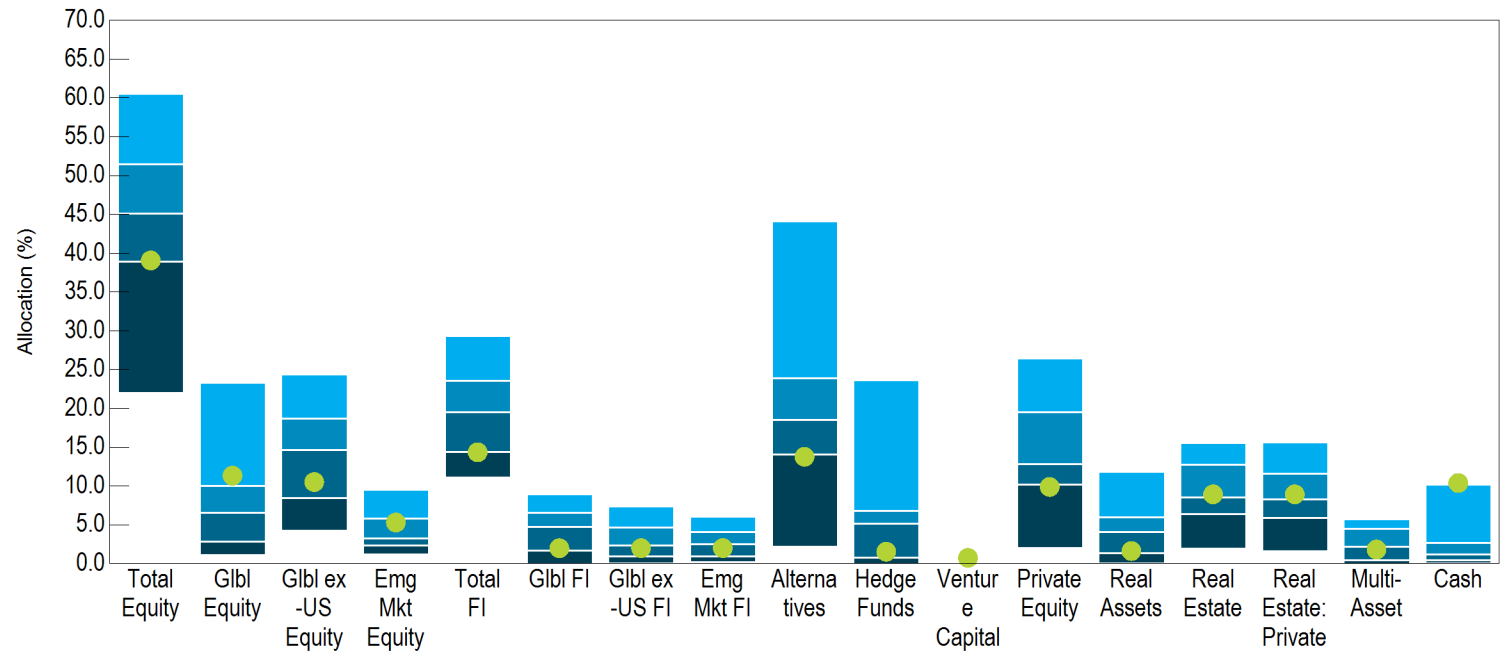
InvMetrics Public DB > \$1B Net Return Comparison Ending March 31, 2023



	Return (Rank)									
5th Percentile	4.8		-1.1		13.0		7.6		7.9	
25th Percentile	4.3		-3.3		12.2		6.8		7.5	
Median	3.7		-4.2		11.1		6.3		7.2	
75th Percentile	3.2		-5.1		10.2		5.4		6.5	
95th Percentile	2.7		-6.5		9.1		4.7		6.0	
# of Portfolios	58		58		58		58		55	
● Total Fund	3.8	(45)	-3.0	(18)	11.2	(48)	6.3	(50)	5.8	(99)
▲ Policy Benchmark	3.6	(61)	-3.5	(33)	10.7	(64)	5.9	(61)	5.9	(96)
✕ Investable Benchmark Portfolio	3.4	(69)	-3.8	(43)	11.8	(38)	5.7	(67)	5.7	(99)

¹ Fiscal Year begins July 1.

Total Plan Allocation vs. InvMetrics Public DB > \$1B Net
As of March 31, 2023



	Allocation																	
5th Percentile	60.5	23.3	24.4	9.5	29.3	8.9	7.4	6.0	44.1	23.6	0.0	26.4	11.8	15.5	15.6	5.7	10.2	--
25th Percentile	51.6	10.1	18.8	5.9	23.7	6.6	4.7	4.1	24.0	6.9	0.0	19.6	6.1	12.8	11.7	4.6	2.7	--
Median	45.2	6.7	14.7	3.3	19.6	4.8	2.4	2.6	18.6	5.2	0.0	12.9	4.1	8.6	8.3	2.3	1.3	--
75th Percentile	39.0	2.9	8.5	2.4	14.5	1.8	1.0	1.0	14.1	0.8	0.0	10.3	1.4	6.5	6.0	0.5	0.5	--
95th Percentile	22.0	1.2	4.3	1.2	11.1	0.0	0.1	0.3	2.2	0.0	0.0	2.1	0.1	2.0	1.6	0.0	0.1	--
# of Portfolios	49	21	49	29	49	17	23	9	49	34	2	45	30	48	45	14	48	--
																		--
<div></div> Total Fund Rank	39.1	11.3	10.5	5.3	14.3	2.0	2.0	2.0	13.8	1.5	0.7	9.9	1.6	8.9	8.9	1.8	10.4	--
	75	21	67	31	79	73	54	55	76	68	1	78	75	46	43	56	5	

Major Benchmark Returns					
Periods Ending March 31, 2023					
Name	Q1-23	1 Yr	3 Yrs	5 Yrs	10 Yrs
US Equity					
Russell 3000	7.2	-8.6	18.5	10.4	11.7
S&P 500	7.5	-7.7	18.6	11.2	12.2
Russell 1000	7.5	-8.4	18.6	10.9	12.0
Russell 1000 Growth	14.4	-10.9	18.6	13.7	14.6
Russell 1000 Value	1.0	-5.9	17.9	7.5	9.1
Russell MidCap	4.1	-8.8	19.2	8.1	10.1
Russell 2000	2.7	-11.6	17.5	4.7	8.0
Russell 2000 Growth	6.1	-10.6	13.4	4.3	8.5
Russell 2000 Value	-0.7	-13.0	21.0	4.5	7.2
International Equity					
MSCI ACWI	7.3	-7.4	15.4	6.9	8.1
MSCI World ex USA	8.0	-2.7	13.5	3.8	4.9
MSCI EAFE	8.5	-1.4	13.0	3.5	5.0
MSCI Emerging Markets	4.0	-10.7	7.8	-0.9	2.0
Fixed Income					
91 Day T-Bills	1.1	2.5	0.9	1.3	0.8
Bloomberg US Aggregate TR	3.0	-4.8	-2.8	0.9	1.4
Bloomberg US Govt/Credit TR	3.2	-4.8	-2.6	1.2	1.5
Bloomberg US Municipal TR	2.8	0.3	0.3	2.0	2.4
Bloomberg US High Yield TR	3.6	-3.3	5.9	3.2	4.1
FTSE WGBI TR	3.5	-9.6	-5.3	-2.4	-0.6
FTSE WGBI ex US TR	3.7	-13.0	-6.2	-4.3	-1.5
Real Estate					
FTSE NAREIT All REIT	1.5	-19.8	10.3	5.7	6.1
NCREIF Property Index	-1.8	-1.6	7.2	6.7	8.3
Alternatives					
HFRI Fund of Funds Composite Index	0.7	-1.9	7.2	3.1	3.2
Inflation					
Consumer Price Index	1.7	5.0	5.4	3.9	2.6

Statistics Summary												
3 Years Ending March 31, 2023												
	% of Total MV	Anlzd Return	Anlzd Return	Anlzd Standard	Anlzd Standard	Anlzd Alpha	Anlzd Alpha	Tracking	Information	Information	Beta	Sharpe Ratio
			Rank	Deviation	Deviation	J	J Rank	Error	Ratio	Ratio Rank		
					Rank							
Total Fund	100.00%	11.20%	48	9.32%	31	0.85%	69	0.82%	0.64	15	0.97	1.11
Policy Benchmark	--	10.68%	64	9.61%	37	0.00%	89	0.00%	--	--	1.00	1.02
Growth	71.16%	15.35%	--	13.05%	--	0.60%	--	1.49%	0.02	--	0.96	1.11
Growth Benchmark	--	15.32%	--	13.51%	--	0.00%	--	0.00%	--	--	1.00	1.07
Public Equity	42.38%	16.28%	15	18.33%	85	0.61%	38	1.58%	0.56	14	1.02	0.84
Public Equity Benchmark	--	15.39%	32	17.93%	83	0.00%	72	0.00%	--	--	1.00	0.81
Global Equity	10.92%	16.50%	38	18.80%	51	--	--	--	--	--	--	0.83
MSCI All Country World Investable Market Net Index	--	--	--	--	--	--	--	--	--	--	--	--
U.S. Equity	17.63%	18.75%	47	19.54%	40	0.62%	58	0.76%	0.70	11	0.99	0.91
MSCI USA IMI NR USD	--	18.22%	53	19.63%	41	0.00%	63	0.00%	--	--	1.00	0.88
International Equity	8.54%	14.51%	32	19.78%	66	0.22%	45	3.68%	0.28	29	1.07	0.69
MSCI World ex USA IMI NR USD	--	13.46%	49	18.27%	38	0.00%	49	0.00%	--	--	1.00	0.69
Emerging Markets Equity	5.29%	11.52%	38	18.13%	26	2.62%	39	2.61%	0.90	17	0.97	0.59
MSCI Emerging Markets IMI Net	--	9.18%	57	18.57%	38	0.00%	59	0.00%	--	--	1.00	0.45
Private Markets	24.78%	14.42%	--	7.60%	--	0.00%	--	0.00%	0.03	--	1.00	1.78
Private Markets Benchmark	--	14.42%	--	7.60%	--	0.00%	--	0.00%	--	--	1.00	1.78
Private Equity	8.44%	17.67%	88	11.93%	35	16.84%	12	20.70%	-0.05	43	0.00	1.41
Custom PE Benchmark	--	18.72%	76	16.87%	85	0.00%	91	0.00%	--	--	1.00	1.06
Private Equity ex Russell 3000	--	--	--	--	--	--	--	--	--	--	--	--
San Jose Custom Private Equity Benchmark	--	--	--	--	--	--	--	--	--	--	--	--
Private Equity ex Russell 3000	8.44%	17.60%	--	11.86%	--	16.76%	--	20.66%	-0.05	--	0.00	1.41
Custom PE Benchmark	--	18.72%	--	16.87%	--	0.00%	--	0.00%	--	--	1.00	1.06
Private Debt	4.42%	13.16%	1	6.48%	77	14.67%	1	8.80%	0.28	82	-0.24	1.89
S&P Global Leveraged Loan + 2%	--	10.68%	2	4.87%	17	0.00%	93	0.00%	--	--	1.00	2.01
Growth Real Estate	4.53%	14.37%	1	7.75%	31	14.42%	1	10.77%	0.67	1	-0.15	1.74
NCREIF Property Index	--	7.16%	72	6.57%	21	0.00%	55	0.00%	--	--	1.00	0.96
Northern Trust Russell 3000	1.21%	18.72%	--	19.54%	--	0.29%	--	0.33%	0.73	--	1.00	0.91
Russell 3000	--	18.48%	--	19.59%	--	0.00%	--	0.00%	--	--	1.00	0.90
Emerging Market Debt	1.99%	6.81%	6	6.78%	4	6.08%	7	8.80%	0.72	24	0.37	0.87

	% 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
50% JPM EMBI GD / 50% JPM GBI-EM	--	0.46%	85	10.84%	45	0.00%	85	0.00%	--	--	1.00	-0.04
Low Beta	15.12%	3.57%	--	1.55%	--	2.85%	--	1.91%	1.70	--	0.30	1.74
Low Beta Benchmark	--	0.32%	--	1.74%	--	0.00%	--	0.00%	--	--	1.00	-0.32
Immunized Cash Flows	9.24%	-1.08%	99	2.34%	99	0.00%	97	0.12%	-0.04	99	1.00	-0.84
Immunized Cash Flow Benchmark	--	-1.07%	99	2.33%	99	0.00%	96	0.00%	--	--	1.00	-0.84
Market Neutral Strategies	3.00%	15.08%	1	6.81%	55	16.17%	1	6.97%	1.93	1	-2.64	2.09
Market Neutral Strategies Benchmark	--	1.62%	87	0.60%	1	0.00%	88	0.00%	--	--	1.00	1.24
Relative Value	3.00%	16.56%	1	6.58%	88	16.10%	1	7.61%	1.17	1	-0.06	2.38
HFRI Relative Value (Total) Index	--	7.67%	15	3.62%	30	0.00%	1	0.00%	--	--	1.00	1.88
Cash	0.88%	0.84%	--	0.40%	--	-0.04%	--	0.10%	-0.45	--	0.89	-0.09
ICE BofA 91 Days T-Bills TR	--	0.89%	--	0.43%	--	0.00%	--	0.00%	--	--	1.00	0.02
Other	13.45%	1.69%	--	3.39%	--	0.36%	--	1.09%	0.27	--	0.88	0.24
Other Benchmark	--	1.39%	--	3.70%	--	0.00%	--	0.00%	--	--	1.00	0.14
Core Real Estate	5.77%	10.75%	--	9.12%	--	1.53%	--	2.26%	0.91	--	1.07	1.08
Core Real Estate Benchmark	--	8.70%	--	8.30%	--	0.00%	--	0.00%	--	--	1.00	0.94
TIPS	1.97%	3.48%	18	3.15%	1	0.10%	7	0.45%	0.04	17	0.97	0.83
Bloomberg US Treasury TIPS 0-5 Yr TR	--	3.47%	18	3.23%	1	0.00%	7	0.00%	--	--	1.00	0.80
Overlay	0.27%	-19.79%	--	48.41%	--	-20.67%	--	48.39%	-0.43	--	6.68	-0.43
91 Day T-Bills	--	0.88%	--	0.44%	--	0.00%	--	0.00%	--	--	1.00	0.00

Benchmark History

Total Fund

4/1/2022	Present	24% MSCI USA IMI NR USD / 11% MSCI World ex USA IMI NR USD / 7% MSCI Emerging Markets / 25% Private Markets Benchmark / 5% NCREIF-ODCE NR USD / 2% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% Bloomberg US Corporate High Yield TR / 3% SOFR +1.5% / 13% Immunized Cash Flow Benchmark / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 4.5% Custom IG Bonds Benchmark / 1.5% Bloomberg US Treasury Long TR
3/1/2022	3/31/2022	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 9% MSCI Emerging Markets / 19% Private Markets Benchmark / 5% NCREIF-ODCE NR USD / 2% 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 Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 11% Custom IG Bonds Benchmark / 3% 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 / 9% MSCI Emerging Markets / 19% Private Markets Benchmark / 5% NCREIF-ODCE NR USD / 2% 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 Commodity Index TR USD / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 11% Custom IG Bonds Benchmark / 3% Bloomberg US Treasury Long TR
4/1/2020	5/31/2021	23% MSCI USA IMI NR USD / 11% 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 Flow Benchmark / 3% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg US Govt Long TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR / 8% BBgBarc Global Aggregate TR
1/1/2020	3/31/2020	14% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 13% MSCI Emerging Market IMI Net / 22% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 14% Bloomberg US Govt/Credit 1-3 Yr. TR / 5% Immunized Cash Flow Benchmark / 5% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
12/1/2019	12/31/2019	14% MSCI USA IMI NR USD / 11% MSCI World ex USA IMI NR USD / 13% MSCI Emerging Market IMI Net / 22% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 15% Bloomberg US Govt/Credit 1-3 Yr. TR / 5% Immunized Cash Flow Benchmark / 5% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
11/1/2019	11/30/2019	13% MSCI USA IMI NR USD / 11% MSCI World ex USA IMI NR USD / 13% MSCI Emerging Market IMI Net / 22% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 16% Bloomberg US Govt/Credit 1-3 Yr. TR / 5% Immunized Cash Flow Benchmark / 5% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
9/1/2019	10/31/2019	13% MSCI USA IMI NR USD / 10% MSCI World ex USA IMI NR USD / 13% MSCI Emerging Market IMI Net / 22% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 17% Bloomberg US Govt/Credit 1-3 Yr. TR / 5% Immunized Cash Flow Benchmark / 5% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
10/1/2018	8/31/2019	13% MSCI USA IMI NR USD / 8% MSCI World ex USA IMI NR USD / 10% MSCI Emerging Market IMI Net / 22% Private Markets Benchmark / 3% 50% JPM EMBI GD / 50% JPM GBI-EM / 20% ICE BofA 91 Days T-Bills TR / 5% Immunized Cash Flow Benchmark / 7% Market Neutral Strategies / 5% NCREIF-ODCE / 2% Bloomberg Commodity Index TR USD / 3% FTSE WGBI ex US TR / 2% Bloomberg US Treasury TIPS 0-5 Yr TR
5/1/2018	9/30/2018	34% MSCI ACWI IMI (Net) / 8% San Jose Custom Total Private Equity Index / 22.4% Bloomberg Global Aggregate TR / 1.4% S&P Global Leveraged Loan / 1.4% JP Morgan EMBI Global Diversified / 1.4% JP Morgan GBI EM Global Diversified TR USD / 6% HFRI Macro (Total) Index / 2% DJ Brookfield Global Infrastructure Net TR USD / 6% Bloomberg Commodity Index TR USD / 8% S&P Global Leveraged Loan + 2% / 8% NCREIF Property Index / 1.4% ICE BofA Global High Yield TR

Low-Cost Passive Portfolio		
4/1/2022	Present	24% MSCI USA IMI NR USD / 11% MSCI World ex USA IMI NR USD / 7% MSCI Emerging Markets / 13% Russell 3000 / 4% BBgBarc US Aggregate TR / 4% S&P Global Natural Resources / 2% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% BBgBarc US Corporate High Yield TR / 9% FTSE EPRA/NAREIT Global NR USD / 1.5% BBgBarc US Treasury Long TR / 13% BBgBarc Gov/Credit 1-3 Yr / 3% SOFR / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 4.5% Custom IG Bonds Benchmark
6/1/21	3/31/2022	25% MSCI USA IMI NR USD / 12% MSCI World ex USA IMI NR USD / 9% MSCI Emerging Markets / 10% Russell 3000 / 3% BBgBarc US Aggregate TR / 3% S&P Global Natural Resources / 2% 50% JPM EMBI GD / 50% JPM GBI-EM / 2% BBgBarc US Corporate High Yield TR / 8% FTSE EPRA/NAREIT Global NR USD / 3% 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 / 11% Custom IG Bonds Benchmark / 2% Bloomberg Commodity Index TR USD
4/1/2020	5/31/2021	23% MSCI USA IMI NR USD / 11% MSCI World ex USA IMI NR USD / 12% MSCI Emerging Market IMI Net / 10% Russell 3000 / 15% 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 / 5% 3-Month Libor +1% / 2% BBgBarc US Treasury TIPS 0-5 Yr TR / 3% FTSE WGBI ex US TR
1/1/2020	3/31/2020	14% MSCI USA IMI NR USD / 12% 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/14% BBgBarc US Govt/Credit 1-3 Yr. TR
12/1/2019	12/31/2019	14% MSCI USA IMI NR USD / 11% 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/15% BBgBarc US Govt/Credit 1-3 Yr. TR
11/1/2019	11/30/2019	13% MSCI USA IMI NR USD / 11% 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/16% BBgBarc US Govt/Credit 1-3 Yr. TR
9/1/2019	10/31/2019	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
10/1/2018	8/31/2019	13% MSCI USA IMI NR USD / 8% MSCI World ex USA IMI NR USD / 10% 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 / 25% 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 / 3% FTSE WGBI ex US TR
Liability Driven Benchmark Portfolio		
10/1/2018	Present	BBgBarc US Treasury Long TR

Growth		
4/1/2022	Present	59.15% Public Equity Benchmark / 35.21% Private Markets Benchmark / 2.82% 50% JPM EMBI GD / 50% JPM GBI-EM / 2.82% BBgBarc US Corporate High Yield TR
6/1/2021	3/31/2022	66.67% Public Equity Benchmark / 27.54% Private Markets Benchmark / 2.90% 50% JPM EMBI GD / 50% JPM GBI-EM / 2.90% BBgBarc US Corporate High Yield TR
4/1/2020	5/31/2021	65.71% Public Equity Benchmark / 27.14% Private Markets Benchmark / 4.29% 50% JPM EMBI GD / 50% JPM GBI-EM / 2.86% BBgBarc US Corporate High Yield TR
1/1/2020	3/31/2020	60.94% Public Equity Benchmark / 34.38% Private Markets Benchmark / 4.69% 50% JPM EMBI GD / 50% JPM GBI-EM
12/1/2019	12/31/2019	60.32% Public Equity Benchmark / 34.92% Private Markets Benchmark / 4.76% 50% JPM EMBI GD / 50% JPM GBI-EM
11/1/2019	11/30/2019	59.68% Public Equity Benchmark / 35.48% Private Markets Benchmark / 4.88% 50% JPM EMBI GD / 50% JPM GBI-EM
9/1/2019	10/31/2019	59.02% Public Equity Benchmark / 36.07% Private Markets Benchmark / 4.92% 50% JPM EMBI GD / 50% JPM GBI-EM
10/1/2018	8/31/2019	51.73% Public Equity Benchmark / 43.1% Private Markets Benchmark / 5.17% 50% JPM EMBI GD / 50% JPM GBI-EM
5/1/2018	9/30/2018	55.18% MSCI ACWI IMI Net USD / 12.99% S&P Global Leveraged Loan Index +2% / 12.99% Private Markets Benchmark / 6.49% NCREIF Property Index / 4.55% 50% JPM EMBI GD / 50% JPM GBI-EM / 4.55% 50% BAML Global HY / 50% S&P Global Leveraged Loan / 3.25% DJ Brookfield Global Infrastructure Net TR USD
7/31/2015	4/30/2018	51.92% MSCI ACWI IMI Net USD / 18.43% S&P Global Leveraged Loan Index +2% / 13.4% Private Markets Benchmark / 2.68% 50% JPM EMBI GD / 50% JPM GBI-EM / 2.68% 50% BAML Global HY / 50% S&P Global Leveraged Loan
Public Equity		
4/1/2022	Present	57.14% MSCI USA IMI NR USD / 26.19% MSCI World ex USA IMI NR USD / 16.67% MSCI Emerging Market IMI Net
6/1/2021	3/31/2022	54.35% MSCI USA IMI NR USD / 26.09% MSCI World ex USA IMI NR USD / 19.56% MSCI Emerging Market IMI Net
4/1/2020	5/31/2021	50% MSCI USA IMI NR USD / 23.91% MSCI World ex USA IMI NR USD / 26.09% MSCI Emerging Market IMI Net
1/1/2020	3/31/2020	35.9% MSCI USA IMI NR USD / 30.77% MSCI World ex USA IMI NR USD / 33.33% MSCI Emerging Market IMI Net
12/1/2019	12/31/2019	36.84% MSCI USA IMI NR USD / 28.95% MSCI World ex USA IMI NR USD / 34.21% MSCI Emerging Market IMI Net
11/1/2019	11/30/2019	35.13% MSCI USA IMI NR USD / 29.73% MSCI World ex USA IMI NR USD / 35.13% MSCI Emerging Market IMI Net
9/1/2019	10/31/2019	36.11% MSCI USA IMI NR USD / 27.78% MSCI World ex USA IMI NR USD / 36.11% MSCI Emerging Market IMI Net
10/1/2018	8/31/2019	41.93% MSCI USA IMI NR USD / 25.81% MSCI World ex USA IMI NR USD / 32.26% MSCI Emerging Market IMI Net
4/1/2008	9/30/2018	MSCI ACWI IMI (Net)
Global Equity		
3/1/2013	Present	MSCI ACWI IMI Index
U.S. Equity		
6/1/1995	Present	MSCI USA IMI NR USD

International Equity		
6/1/1995	Present	MSCI World ex USA IMI NR USD
Emerging Markets Equity		
9/1/2001	Present	MSCI Emerging Market IMI Net
Private Markets		
10/1/2018	Present	Private Markets
5/1/2018	9/30/2018	36.36% Cambridge Associates PE Composite BM / 36.36% S&P Global Leveraged Loan Index +2% / 18.18% NCREIF Property Index / 9.1% DJ Brookfield Global Infrastructure Net TR USD
7/1/2015	4/30/2018	19.61% Cambridge Associates PE Composite BM / 11.76% Russell 3000 / 43.14% S&P Global Leveraged Loan Index +2% / 13.73% NCREIF Property Index / 11.76% DJ Brookfield Global Infrastructure Net TR USD
Private Markets ex Russell 3000		
No Benchmark Selected		
Private Equity		
11/1/2016	Present	Custom Private Equity BM (100% Cambridge US PE)
10/1/2005	10/31/2016	Cambridge Associates US All PE (1 Qtr Lag)
Private Equity ex Russell 3000		
11/1/2016	9/30/2021	Custom Private Equity BM
10/1/2005	10/31/2016	Cambridge Associates US All PE (1 Qtr Lag)
Northern Trust Russell 3000		
4/1/2014	Present	Russell 3000
Private Debt		
10/1/2015	Present	S&P Global Leveraged Loan + 2%
Private Real Estate		
7/1/2015	Present	NCREIF ODCE Equal Weighted
Private Real Assets		
No Benchmark Selected		

High Yield Bonds		
6/1/2020	Present	BBgBarc US Corporate High Yield TR
Emerging Market Debt		
1/1/2013	Present	50% JP Morgan GBI EM Global Diversified TR USD / 50% JP Morgan EMBI Global Diversified
Low Beta		
4/1/2022	Present	81.3% Immunized Cash Flow Benchmark / 18.7% SOFR +1.5%
3/1/2022	3/31/2022	62.5% Immunized Cash Flow Benchmark / 37.5% SOFR +1.5%
6/1/2021	2/28/2022	62.5% Immunized Cash Flow Benchmark / 37.5% LIBOR 3-Month +1.5%
4/1/2020	5/31/2021	62.5% ICE BofA 91 Days T-Bills TR / 37.5% Market Neutral Strategies
1/1/2020	3/31/2020	35.71% ICE BofA 91 Days T-Bills TR / 58.33% BBgBarc US Govt/Credit 1-3 Yr. TR / 35.71% Market Neutral Strategies
12/1/2019	12/31/2019	20% ICE BofA 91 Days T-Bills TR / 60% BBgBarc US Govt/Credit 1-3 Yr. TR / 20% Market Neutral Strategies
11/1/2019	11/30/2019	19.23% ICE BofA 91 Days T-Bills TR / 61.54% BBgBarc US Govt/Credit 1-3 Yr. TR / 19.23% Market Neutral Strategies
9/1/2019	10/31/2019	18.52% ICE BofA 91 Days T-Bills TR / 62.96% BBgBarc US Govt/Credit 1-3 Yr. TR / 18.52% Market Neutral Strategies
10/1/2018	8/31/2019	62.5% ICE BofA 91 Days T-Bills TR / 15.62% Immunized Cash Flow Benchmark / 21.88% Market Neutral Strategies
5/1/2018	9/30/2018	HFRI Macro (Total) Index
7/1/2015	4/30/2018	85.71% HFRI Macro (Total) Index / 14.29% ICE BofA 91 Days T-Bills TR
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	ICE BofA 91 Days T-Bills TR
11/1/2012	9/30/2018	HFRI Macro (Total) Index
Macro		
7/1/2015	Present	HFRI Macro (Total) Index
Relative Value		
7/1/2015	Present	HFRI Relative Value (Total) Index
Cash		
7/1/2002	Present	ICE BofA 91 Days T-Bills TR

Other		
4/1/2022	Present	38.46% NCREIF ODCE Value Weighted (Net) (1 Qtr Lag) / 34.62% Custom IG Bonds Benchmark / 11.54% BBgBarc US Treasury Long TR / 15.38% BBgBarc US Treasury TIPS 0-5 Yr TR
6/1/2021	3/31/2022	21.74% NCREIF ODCE Value Weighted (Net) (1 Qtr Lag) / 47.83% Custom IG Bonds Benchmark / 13.04% BBgBarc US Treasury Long TR / 8.70% BBgBarc US Treasury TIPS 0-5 Yr TR / 8.70% Bloomberg Commodity Index TR USD
4/1/2020	5/31/2021	22.73% NCREIF ODCE Equal Weighted / 54.55% Custom IG Bonds Benchmark / 13.64% BBgBarc US Govt Long TR / 9.09% BBgBarc US Treasury TIPS 0-5 Yr TR
10/1/2018	3/31/2020	41.67% NCREIF ODCE Equal Weighted / 16.67% Bloomberg Commodity Index TR USD / 25% FTSE WGBI ex US TR / 16.66% BBgBarc US Treasury TIPS 0-5 Yr TR
5/1/2018	9/30/2018	69.14% BBgBarc Global Aggregate TR / 18.52% Bloomberg Commodity Index TR USD / 12.34% NCREIF Property Index
7/1/2015	4/30/2018	38.44% BBgBarc Global Aggregate TR / 30.03% 60% MSCI World & 40% Citigroup WGBI / 21.02% Bloomberg Commodity Index TR USD / 10.51% NCREIF Property Index
Core Real Estate		
6/1/2021	Present	NCREIF ODCE Value Weighted (Net) (1 Qtr Lag)
9/1/2011	5/31/2021	NCREIF ODCE Equal Weighted (Net)
TIPS		
10/1/2018	Present	BBgBarc US Treasury TIPS 0-5 Yr TR
Sovereign Bonds ex-US		
10/1/2018	Present	FTSE WGBI ex US TR
Investment Grade Bonds		
5/1/2020	Present	Custom IG Bonds Benchmark (25% BBgBarc 1-3 Year Government/Credit, 56% US Aggregate, 19% US Securitized MBS/ABS/CMBS)
Long Term Government Bonds		
6/1/2020	Present	Long Term Government Bonds
Overlay		
	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.