

As of December 31, 2023

**Quarterly Review** 



Agenda

- 1. Economic and Market Update
- 2. Executive Summary
  - Aggregate Plan Overview
  - Manager Highlights
  - Fourth Quarter Manager Summary
  - Watch List
  - Market Environment 4Q23 Overview
- 3. 4Q23 Review
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# **Economic and Market Update**

Data as of January 31, 2024

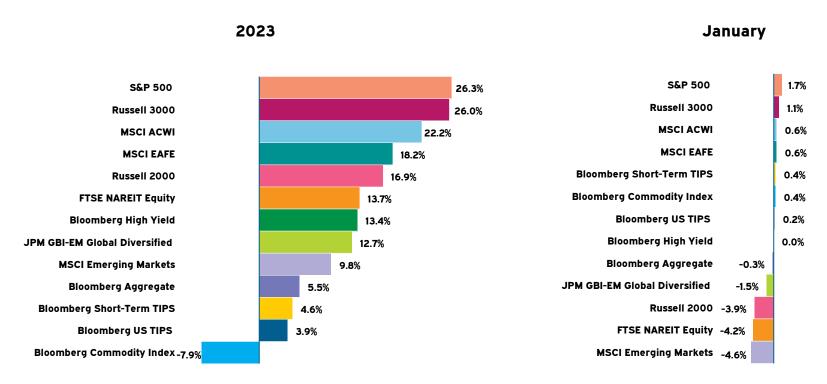


## Commentary

- → Markets were mixed in January after posting strong returns in 2023.
  - Major central banks have largely paused interest rate hikes with expectations for many to cut rates this year.
     During the month there were signs though that many central banks, including the US, might not cut rates as soon as expected given strong economic data.
  - In general inflation pressures have receded in most countries, but some uncertainty remains. Headline inflation fell in January in the US, but core inflation remained unchanged and elevated. China moved further into deflationary territory (-0.8%) in January.
  - US equity markets (Russell 3000 index) rose 1.1% in January after a very strong 2023 (26.0%). There were mixed results across sectors, but technology continued to do well.
  - Non-US developed equity markets gained 0.6% in January but 2.6% in local terms as the US dollar reversed course and strengthened during the month. The appreciation of the dollar was largely driven by strong economic data and related expectations that the Fed may delay policy rate cuts this year.
  - Emerging market equity returns were also negatively influenced by the strong US dollar, but the biggest headwind in January was China (-10.6%). Emerging market equities had the weakest results for the month, down 4.6%.
  - Bonds experienced selling pressure over the month, but ultimately finished the month nearly unchanged. The broad US bond market (Bloomberg Aggregate) declined (0.3%) in January.
- → Looking to the rest of this year, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, the many looming elections, and the wars in Ukraine and Israel, will be key.



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



- → After a strong market performance in 2023, the start of 2024 saw US large cap growth stocks continue their rally causing the S&P 500 to lead the way. Emerging market equity was the worst performer, dragged down by the continued sell-off of Chinese stocks.
- → Better than expected economic news in the US weighed on bond markets for the month with the broad US bond market (Bloomberg Aggregate) down slightly.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 31, 2024.



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

Domestic Equity	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
S&P 500	1.7	11.7	20.8	11.0	14.3	12.6
Russell 3000	1.1	12.1	19.1	9.1	13.5	12.0
Russell 1000	1.4	12.0	20.2	9.8	14.0	12.3
Russell 1000 Growth	2.5	14.2	35.0	10.0	18.0	15.5
Russell 1000 Value	0.1	9.5	6.1	9.2	9.3	8.8
Russell MidCap	-1.4	12.8	6.7	5.5	10.1	9.5
Russell MidCap Growth	-0.5	14.5	15.1	1.2	11.2	10.7
Russell MidCap Value	-1.8	12.1	2.4	7.8	8.6	8.2
Russell 2000	-3.9	14.0	2.4	-0.8	6.8	7.0
Russell 2000 Growth	-3.2	12.7	4.5	-6.0	6.2	7.0
Russell 2000 Value	-4.5	15.3	-0.1	4.5	6.7	6.7

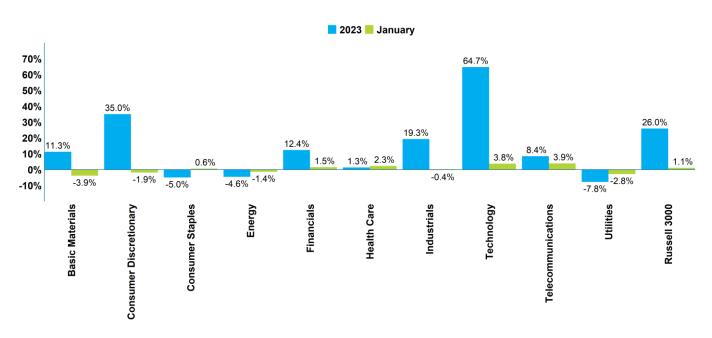
## US Equities: The Russell 3000 increased 1.1% in January with a one-year return of 19.1%.

- → US equities built on their large gains from last year in January. Strong corporate earnings, economic data suggesting a soft landing might be achievable, and hopes for significant interest rate cuts (for most of the month) all drove results.
- → Large cap stocks accounted for all the US equity market gains in January. NVIDIA, Microsoft, and Meta Platforms made up nearly 90% of the increase in the Russell 1000 index. Growth stocks outperformed value stocks across the market cap spectrum.
- → While US equities advanced as a group, small and mid-cap stocks both declined in January. Banks contributed to this dynamic after a surprise loss at New York Community Bancorp rekindled fears regarding the banking system.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 31, 2024.



#### Russell 3000 Sector Returns<sup>1</sup>



- → In January, telecommunications (3.9%), technology stocks (3.8%), and health care (2.3%) outperformed other sectors. Traditionally defensive sector utilities (-2.8%) trailed along with basic materials (-3.9%) and energy stocks (-1.4%).
- → In 2023, technology (64.7%) and consumer discretionary (35.0%) sectors had the best results, helped respectively by artificial intelligence optimism and a healthy US consumer.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 31, 2024.



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

Foreign Equity	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
MSCI ACWI ex. US	-1.0	9.8	5.9	1.1	5.3	4.2
MSCI EAFE	0.6	10.4	10.0	4.6	6.9	4.8
MSCI EAFE (Local Currency)	2.6	5.0	12.1	9.7	8.9	7.2
MSCI EAFE Small Cap	-1.6	11.1	3.6	-1.1	4.6	4.8
MSCI Emerging Markets	-4.6	7.9	-2.9	-7.5	1.0	2.9
MSCI Emerging Markets (Local Currency)	-3.5	5.6	-0.5	-4.9	3.2	5.3
MSCI China	-10.6	-4.2	-29.0	-23.2	-6.9	0.4

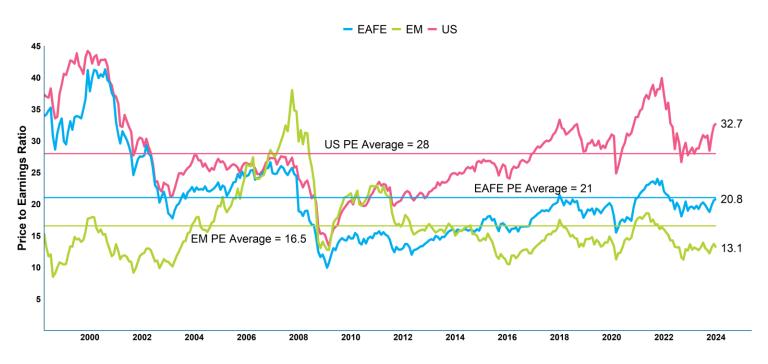
Foreign Equity: Developed international equities (MSCI EAFE) gained 0.6% in January and had a one-year return of 10.0%. Emerging market equities (MSCI EM) fell -4.6% in January, and -2.9% for the trailing year.

- → International developed equities saw slight gains for the month, while emerging market equities saw large losses for the same period; both were hampered by the US dollar reversing its sell-off from the end of last year. Outside of emerging markets, growth outperformed value for the month.
- → Eurozone equities performed well, benefiting from ECB policy expectations, developments in the tech sector, and promising manufacturing data. U.K. equities stalled, as an unexpected increase in inflation pushed out the expected timing of rate cuts. Japan continues to see the highest returns globally over optimism on structural changes, January being no exception.
- $\rightarrow$  EM equities continue to be bogged down by China (-10.6%) despite news of further stimulus by the PBOC.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 31, 2024.



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



- → In January, the US equity price-to-earnings ratio increased further above its 21st century average.
- → International market valuations were mixed in January and remain below the US. In the case of developed markets, valuations increased slightly to just below their long-term average, while emerging market valuations declined, remaining well below their average.

<sup>&</sup>lt;sup>1</sup> US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group. Developed and Emerging Market Equity (MSCI EAFE and EM Index) Cyclically Adjusted P/E – Source: Bloomberg. Earnings figures represent the average of monthly "as reported" earnings over the previous ten years. Data is as of January 2023. The average line is the long-term average of the US, EM, and EAFE PE values from April 1998 to the recent month-end respectively.



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

							Current	
Fixed Income	January (%)	Q4 2023 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)	Yield (%)	Duration (Years)
Bloomberg Universal	-0.2	6.8	2.7	-2.8	1.1	1.9	4.9	6.0
Bloomberg Aggregate	-0.3	6.8	2.1	-3.2	0.8	1.6	4.6	6.2
Bloomberg US TIPS	0.2	4.7	2.2	-1.0	2.9	2.2	4.2	6.9
Bloomberg Short-term TIPS	0.4	2.6	4.3	2.3	3.3	2.0	4.4	2.6
Bloomberg High Yield	0.0	7.2	9.3	1.9	4.4	4.5	7.8	3.7
JPM GBI-EM Global Diversified (USD)	-1.5	8.1	6.4	-3.3	-0.2	0.4	6.3	5.0

## Fixed Income: The Bloomberg Universal index fell -0.2% in January but gained 2.7% on a one-year basis.

- → Strong economic data in January and comments toward the end of the month by Federal Reserve Chair Jerome Powell hinting that rate cuts were not imminent drove rates up over the month, weighing on bonds.
- → The broad US bond market (Bloomberg Aggregate) declined 0.3% for the month. The broader TIPS index rose 0.2%, while the less interest-rate-sensitive short-term TIPS index rose 0.4%.
- → High yield bonds ended the month unchanged, while emerging market debt declined by 1.5%. Both asset classes produced double-digit gains last year.

<sup>1</sup> Source: Bloomberg. JPM GBI-EM data is from InvestorForce. Data is as of January 31, 2024. The yield and duration data from Bloomberg is defined as the index's yield to worst and modified duration respectively.



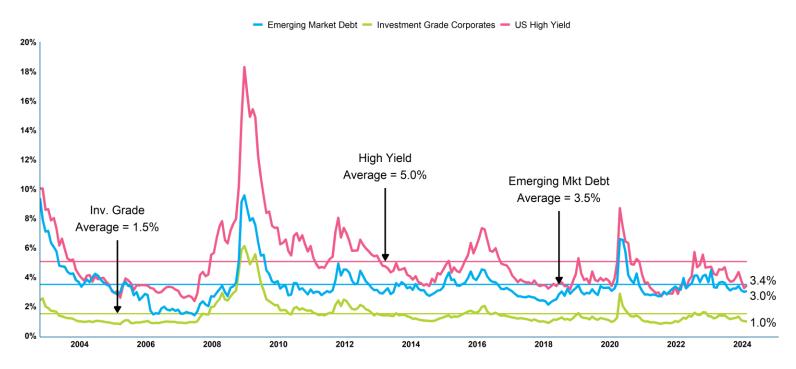


- → Both short-term and longer-term maturities ended the month largely unchanged, however, yields were volatile over the month on surprisingly strong economic data and shifts in monetary policy expectations.
- → For the month, two-year Treasury yields ended at 4.2% (around 1% below the peak from October) while 10-year Treasury yields ended at 3.9%.
- → The yield curve remained inverted at month-end despite a recent flattening trend. The yield spread between the two-year and ten-year Treasury was -0.3% at the end of January.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 31, 2024.



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

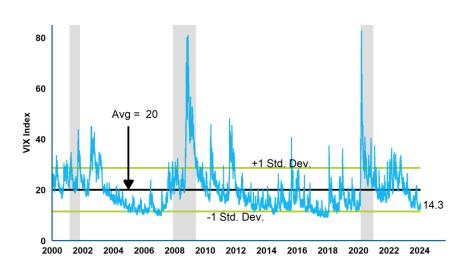


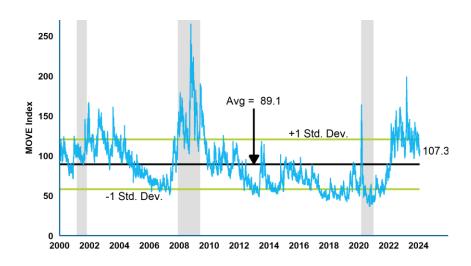
- → Credit spreads widened slightly for high yield in January (3.2% to 3.4%) while spreads for investment grade corporate and emerging market bonds remained the same.
- → Expectations of peaking policy rates and the corresponding increase in risk appetite has recently benefited credit, with spreads (the added yield above a comparable maturity Treasury) narrowing.
- → All spreads remain below their respective long run averages, particularly within high yield.

<sup>1</sup> Sources: Bloomberg. Data is as of January 31, 2024. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.



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



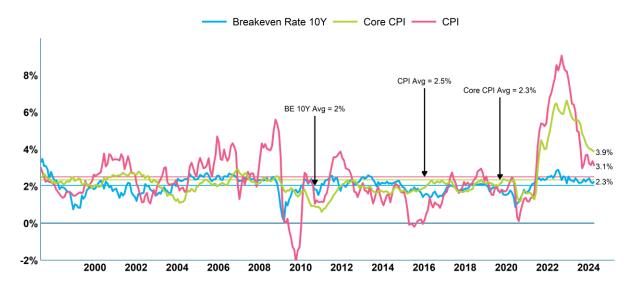


- → Volatility in equities (VIX) remains close to one standard deviation below the long-term average as the focus shifted late last year to peaking policy rates and the potential for a soft landing.
- → Volatility in the bond market (MOVE) came down over the month (114.6 to 107.3) but remains elevated and well above its long-run average (89.1). The bond market remained on edge for most of 2023, driven largely by uncertainty about the ultimate path of monetary policy, as well as continued (and surprising) strength in economic data.

<sup>&</sup>lt;sup>1</sup> Equity Volatility – Source: FRED. 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 January 2024. The average line indicated is the average of the VIX and MOVE values between January 2020 and January 2024.



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

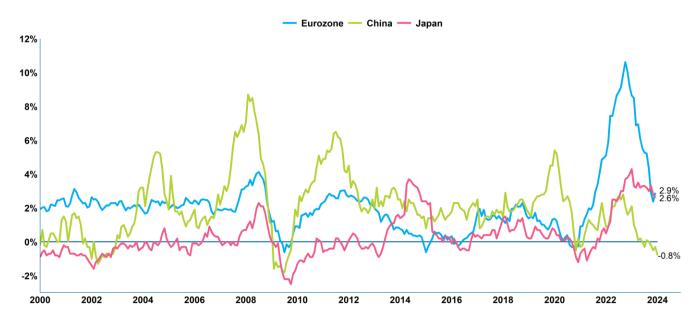


- → Year-over-year headline inflation declined in January (3.4% to 3.1%) but not by as much as expected (expectations were for a 2.9% reading). Month-over-month inflation came in at 0.3%, the same as last month and slightly above expectations of 0.2%. Shelter continues to keep inflation elevated, increasing 6.0% from a year prior. Food rose 2.6% over the same period, while downward pressure on energy prices continued, falling 4.6%.
- → Core inflation excluding food and energy remained unchanged at 3.9% year-over-year (expectations were for a decline to 3.7%), with shelter costs again driving the total core index increase.
- → Inflation expectations (breakevens) have remained relatively stable despite the recent significant volatility in inflation.

<sup>&</sup>lt;sup>1</sup> Source: FRED. Data is as January 2024. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.



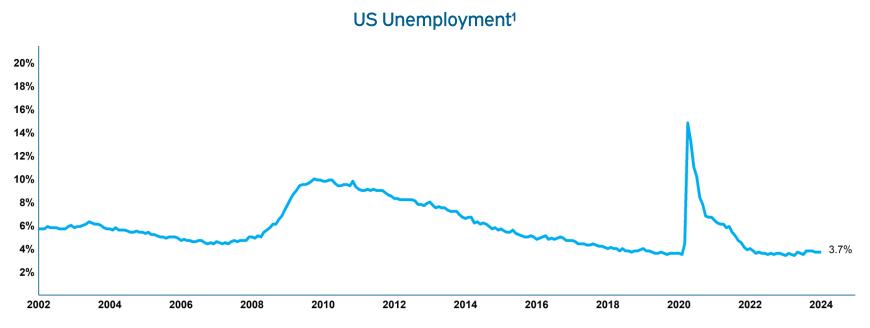
## Global Inflation (CPI Trailing Twelve Months)<sup>1</sup>



- → Outside the US, inflation is also falling across major economies with China slipping further into deflation.
- → In the eurozone, inflation experienced a dramatic decline last year. In January inflation rose slightly (2.8% to 2.9%) remaining below the 3.1% year-over-year level in the US.
- → Inflation in Japan has slowly declined from the early 2023 peak, but it remains near levels not seen in almost a decade, largely driven by higher food prices.

<sup>1</sup> Source: FRED for United States CPI and Eurozone CPI. Source: Bloomberg for Japan CPI, China CPI, and Eurozone CPI. Data is as January 31, 2024, except Japan which is as of December 31, 2023.



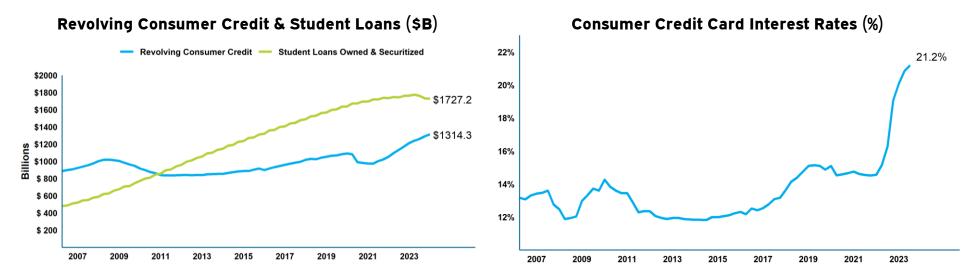


- → Overall, the US labor market remains healthy with the unemployment rate relatively low, wage growth now positive in real terms, and initial claims for unemployment staying subdued.
- → In January, the number of jobs added in the US were stronger than expected (353,000 versus 185,000) with the unemployment rate remaining at 3.7%. Payrolls from November and December of last year were also revised upward. Business and professional, health care, and retail sales jobs rose the most in January.
- → The labor force participation remained relatively stable at 62.5%, well off the lows of the pandemic (60.1%) but not back to pre-pandemic levels (63.3%).
- → The pace of hourly wage growth has declined from its peak of close to 6.0% but is above the 3.1% level of inflation. Wage growth rose at 4.5% year-on-year in January, an increase from the 4.1% level in December and above expectations of 4.1%.

<sup>&</sup>lt;sup>1</sup> Source: FRED. Data is as January 31, 2024.



#### **US Consumer Under Stress?**<sup>1</sup>

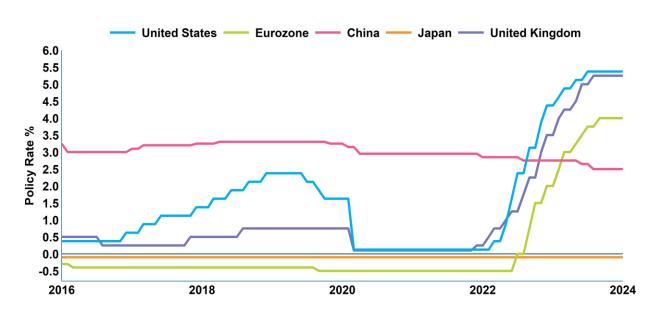


- → Despite the strong labor market and higher wages, pressures have started to build on the US consumer. This is an important consideration as consumer spending has been a key driver of economic growth.
- → Revolving consumer credit surged to new highs in 2023 even as credit card interest rates hit levels not seen before (the prior peak was around 19% in the 1980s). Recently we have also seen payment delinquencies on credit cards start to increase.
- → The return of student loan repayments after a three-year pandemic-related reprieve could add to pressures on consumers' budgets. This might be partially mitigated by recently initiated repayment and forgiveness programs.
- → As we look ahead, the strength of the US consumer will remain key as this sector makes up most of the domestic economy (GDP).

<sup>1</sup> Source: FRED. Data is as of December 31, 2023. Consumer Credit Card Rate data is as of September 30, 2023. Revolving Consumer Credit data is seasonally adjusted to remove distortions during the holiday season.



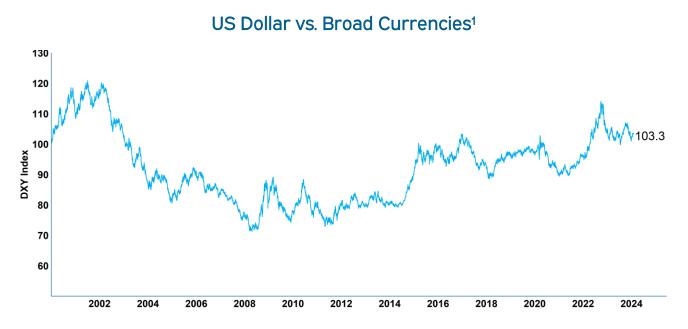




- → The Fed has been on hold since July 2023 when it raised rates to a range of 5.25%-5.50%. Markets are now pricing in around four rate cuts this year down from close to seven late last year as economic data has come in above expectations. There remains a gap between the amount of rate cuts the Fed is predicting compared to the market's expectations, but it has significantly narrowed.
- → The European and UK central banks also recently paused their rate increases on slowing inflation with cuts likely to follow there too. In Japan, the BoJ has further relaxed its yield curve control on the 10-year bond, and expectations for further policy normalization are rising.
- → The central bank in China has maintained interest rates at record low levels and continues to inject liquidity into the banking system, as weaker than expected economic data appears to indicate a widespread slowdown.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data is as of January 2024.





- → Overall, the dollar finished last year only slightly below where it started but it was a volatile year for the US currency as expectations related to monetary policy evolved.
- → Strong economic data in the US may delay policy rate cuts this year which could contribute to upward pressure on the dollar as other countries pivot to rate cuts.

<sup>&</sup>lt;sup>1</sup> Source: Bloomberg. Data as of January 31, 2024.



#### Summary

## **Key Trends:**

- → The impact of inflation still above policy targets will remain important, with bond market volatility likely to stay high.
- → Global monetary policies could diverge going forward. The risk of policy errors remains elevated as central banks try to further reduce inflation toward targets while not tipping their economies into recession. In the case of the US the resolution of the disparity between market expectations for the path of interest rates versus the Fed's dot plot will be key.
- → Global growth is expected to slow this year, with some economies forecasted to tip into recession. However, optimism has been building that certain economies could experience soft landings. Inflation, monetary policy, and geopolitical issues will remain key in 2024.
- → US consumers could feel pressure as certain components of inflation (e.g., shelter), remain high, borrowing costs are elevated, and the job market may weaken.
- → A focus for US equities going forward, will be whether earnings can remain resilient if growth continues to slow.

  Also, the future paths of the large technology companies that have driven market gains will be important.
- → Equity valuations remain lower in emerging and developed markets, but risks remain, including China's economic uncertainty and on-going weakness in the real estate sector which could spill over into key trading partners' economies. Japan's recent hint at potentially tightening monetary policy along with changes in corporate governance in the country could influence relative results.

# **Executive Summary**As of December 31, 2023



**Aggregate Plan Overview** 

The value of the City of San Jose Police & Fire Department Retirement Plan's assets on December 31, 2023 was \$5.0 billion, compared to \$4.8 billion at the end of the prior quarter. The Plan had net cash outflows of \$59 million and investment gains of \$260 million during the quarter.

- → The Retirement Plan's net of fees performance for the quarter was +5.5% compared to the Policy Benchmark and the Investable Benchmark Portfolio which posted +5.9% and +5.8% returns, respectively. The peer median return was +6.6%. The Plan ranked in the 80th percentile of the peer group for the quarter. Private market fund valuations are one quarter lagged, and the third quarter of 2023 was a weak quarter in the markets. This timing mismatch was likely a reason for underperformance for the fourth quarter versus some peers.
- → The Retirement Plan returned +11.3% over the trailing one-year period, outperforming both the Policy Benchmark (+11.2%) and the Investable Benchmark Portfolio (+10.9%). The Retirement Plan's standard deviation of returns was 7.2% over the trailing one-year period, exhibiting lower volatility vs. the peer median (8.7%).
  - Growth returned +6.9% for the quarter and +15.8% over the trailing one-year period, compared to the +7.1% and +15.3% returns for the Growth Benchmark over the same periods, respectively.
  - Low Beta returned +1.4% for the quarter and +4.3% over the trailing one-year period, compared to +2.7% and +4.8% returns for the Low Beta Benchmark over the same periods, respectively.
  - Other returned +3.1% for the quarter and -2.5% over the trailing one-year period, compared to the +3.4% and -2.1% returns for the Other Benchmark over the same periods, respectively.
- → During the quarter, the Plan added six new investments: EQT Value V (Growth Real Estate), DRA Growth Fund XI (Growth Real Estate), Lime Rock IX (Private Real Assets), Orion Mine IV (Private Real Assets), Scout Energy VI (Private Real Assets) and Collective Global I (Venture Capital). The Plan fully redeemed from one investment over the quarter, HarbourVest Partners VII (Private Equity).



**Manager Highlights** 

#### GQG

→ GQG Partners Global Emerging Markets Equity returned +11.7% for the quarter, outperforming the MSCI Emerging Markets Index, which returned +7.9%, over the same period. Additionally, the strong fourth quarter performance ranked the strategy in the top 9 percentile of the eVestment Emerging Markets Equity peer universe for the second consecutive quarter. Outperformance versus the benchmark stems from the fund's underweight allocation to China (9.7% vs 29.1% as of December 2023). Stock selection within Utilities also helped relative performance where an investment in Adani Green Energy, based in India, posted a 61.3% return on the back of an upgrade from Moody's. Compared to peers, GQG ranks in the 8th percentile since inception in July 2017.

#### **Artisan Global Value**

→ Artisan global Value returned +12.3% for the quarter, outperforming the MSCI ACWI Value benchmark by 310 basis points, ranking in the 33rd percentile of its peer group. Top performers for the fund over the quarter were UBS, Samsung and BNY Mellon. UBS stock rose 26% over the quarter as the acquisition of Credit Suisse continues to smooth. Samsung rose 21% as the semiconductor supply glut has eased price pressure on memory chips. Compared to peers, Artisan Global Value ranks in the 28th percentile since inception.

## Payden EMD Blended Currency

→ Payden EMD Blended Currency returned +9.7% for the quarter, outperforming the 50/50 split JPM EMBI Global Debt and JPM GBI-EM index by 110 basis points. Emerging Market Debt rallied to end the year. Anticipation grew that key central banks would ease monetary policy in 2024 and rates compressed over the quarter. EM local debt markets also generally appreciated further against the U.S. dollar. Compared to peers, Payden EMD Blended Currency ranks in the 75th percentile since inception in January 2021.



### Fourth Quarter Manager Summary

Investment Manager	Asset Class	Changes/ Announcements	Meketa Recommendation <sup>1</sup>	Comments
Artisan Global Value	Global Equity			
Artisan Global Opportunities	Global Equity		Hold	Watch List
Cove Street Small Cap Value	US Equity			
Burgundy US Small Cap	US Equity			
Oberweis International Opps	International Equity		Hold	Watch List
Morgan Stanley Int'l Equity	International Equity	Yes	Hold	Edward Pick Appointed CEO
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		Hold	Watch List
Wellington EM Systematic	Emerging Markets Equity			
Kotak India Midcap	Emerging Markets Equity			
Unifi India	Emerging Markets Equity	Yes	Hold	Compliance Officer departed
Mellon High Yield Beta	High Yield Bonds	2		
Columbia High Yield	High Yield Bonds	Yes	Hold	Global Head of Risk departed
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			

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

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



**Watch List** 

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

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

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

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



Fourth Quarter Manager Summary

## **Artisan Global Opportunities**

→ Over the three-year period, Artisan (-0.6%) has underperformed the MSCI ACWI Growth NR by 430 basis points. Since inception in May 2013, Artisan has outperformed the benchmark by 20 basis points per year, on average, and ranked in the 15th percentile compared to peers.

## **Oberweis International Opps**

→ Over the three-year period, Oberweis (-11.1%) has underperformed the MSCI World ex USA Small Cap Growth NR by 690 basis points. Since inception in March 2014, Oberweis has outperformed the benchmark by 30 basis points per year, on average, and ranked in the 35th percentile compared to peers.

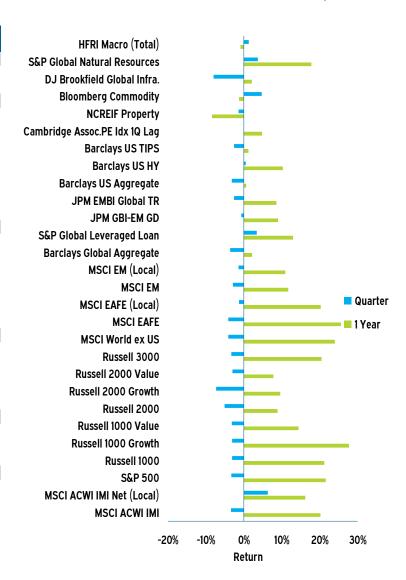
### Redwheel Emerging Markets Equity

→ Over the three-year period, Redwheel (-8.4%) has underperformed the MSCI Emerging Markets Index by 3.3%. Since inception in September 2019, Redwheel has outperformed the benchmark by 60 basis points per year, on average, and ranked in the 58th percentile compared to peers.



#### Market Environment - 4Q23 Overview

Benchmark	Scope	4Q23 (%)	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
Global Equity						
MSCI ACWI IMI	World	11.1	21.6	5.5	11.5	7.8
MSCI ACWI IMI Net (Local) <sup>1</sup>	World (Local Currency)	6.3	16.2	11.9	8.5	9.7
Domestic Equity						
S&P 500	Large Core	11.7	26.3	10.0	15.7	12.0
Russell 1000	Large Core	12.0	26.5	9.0	15.5	11.8
Russell 1000 Growth	Large Growth	14.2	42.7	8.9	19.5	14.9
Russell 1000 Value	Large Value	9.5	11.5	8.9	10.9	8.4
Russell 2000	Small Core	14.0	16.9	2.2	10.0	7.2
Russell 2000 Growth	Small Growth	12.8	18.7	-3.5	9.2	7.2
Russell 2000 Value	Small Value	15.3	14.7	7.9	10.0	6.8
Russell 3000	All Cap Core	12.1	26.0	8.5	15.2	11.5
International Equity						
MSCI World ex US	World ex-US	10.5	17.9	4.4	8.5	4.3
MSCI EAFE	International Developed	10.4	18.2	4.0	8.2	4.3
MSCI EAFE (Local)	International Developed					
	(Local Currency)	5.0	16.2	8.6	9.5	6.6
MSCI EM	Emerging Markets	7.9	9.8	-5.1	3.7	2.7
MSCI EM (Local)	Emerging Markets (Local					
	Currency)	5.6	9.9	-2.5	5.4	5.2
Global Fixed Income						
Barclays Global Aggregate	Global Core Bonds	8.1	5.7	-5.5	-0.3	0.4
S&P Global Leveraged Loan	Bank Loans	2.9	13.3	5.8	5.5	3.9
JPM GBI-EM GD	Emerging Markets Bonds	4.0	10.0	0.0	44	F 4
IDM FMDI Clabal TD	(Local Currency)	4.8	10.0	0.2	4.1	5.4
JPM EMBI Global TR	Emerging Market Bonds	9.3	10.5	-3.1	1.9	3.1
Domestic Fixed Income	Cana Danda	6.0		2.2	.,	10
Barclays US Aggregate	Core Bonds	6.8	5.5	-3.3 2.0	1.1 5.4	1.8
Barclays US HY	High Yield Inflation	7.2 4.7	13.4			4.6 2.4
Barclays US TIPS Other	inilation	4.1	3.9	-1.0	3.2	2.4
==	Daireche Carribe	0.0	4.0	240	221	10.1
Cambridge AssociatesPE Index 1Qtr Lag	Private Equity	0.0	4.8	24.8	22.1	18.1
NCREIF Property	Real Estate	-3.0	-7.9	4.6	4.3	6.8
Bloomberg Commodity	Commodities	-4.6	-7.9	10.8	7.2	-1.1 5.2
DJ Brookfield Global Infrastructure S&P Global Natural Resources	Infrastructure Natural Resources	12.2 3.6	4.6 4.1	5.4 12.9	7.0 11.2	5.3
HFRI Macro			4.I -0.3	12.9 5.4	11.2 5.6	5.2 3.1
TEKI WIACI U	Hedge Funds	-0.8	-0.5	3.4	0.0	3.1



<sup>&</sup>lt;sup>1</sup> Return is as of 9/30/2023.

# **4Q23 Review**



Total Fund | As of December 31, 2023

Policy	Overlay Net	Current
71.0%	71.3%	72.3%
16.0%	15.6%	14.7%
13.0%	13.1%	13.0%

	Current Balance (\$)	Current Allocation (%)	Russell Overlay Net position (%)	Policy (%)
Growth	3,565,643,434	72.3%	71.3%	71.0
Public Equity	2,125,334,047	43.1%	42.1%	42.0
Private Markets	1,239,277,176	25.1%	25.1%	25.0
Emerging Markets Debt	99,404,156	2.0%	2.0%	2.0
High Yield Bonds	101,628,054	2.1%	2.1%	2.0
Low Beta	725,304,527	14.7%	15.6%	16.0
Market Neutral Strategies	147,042,530	3.0%	3.0%	3.0
Immunized Cash Flows	617,757,184	12.5%	12.5%	13.0
Cash	-39,495,186	-0.8%	0.1%	0.0
Other	638,644,093	13.0%	13.1%	13.0
Core Real Estate	253,402,355	5.1%	5.1%	5.0
TIPS	99,666,543	2.0%	2.0%	2.0
Investment Grade Bonds	213,220,246	4.3%	4.5%	4.5
Long Term Govt Bonds	72,354,949	1.5%	1.5%	1.5
Total	4,929,592,054	100%	100%	100.0

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

<sup>2.</sup> Policy Targets represent approved asset allocation from March of 2022.

<sup>3.</sup> All data on this page is from Russell Investments and reflects trades made on or before 12/31/2023. Data on subsequent pages is from the custodian and may not reflect all trades made on or before 12/31/2023 depending on the settlement date of transaction.



Total Fund | As of December 31, 2023

As	set Class Net P	erforman	ce Sui	nmary						
	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Total Fund	4,956,375,061	100.0	5.5	4.2	11.3	5.1	8.5	5.8	8.3	Mar-71
Policy Benchmark			5.9	4.4	11.2	5.0	8.0	6.0		
Investable Benchmark Portolio			5.8	4.4	10.9	4.3	8.1	5.7		
Low-Cost Passive Portfolio			9.1	6.4	15.1	3.3	7.2			
60/40 MSCI ACWI IMI/BBgBarc Global Aggregate			9.9	6.1	15.1	1.1	6.9	5.0		
Liability Benchmark Portfolio			12.7	-0.6	3.1	-11.4	-1.2			
InvMetrics All Public DB Plans > \$1B Median			6.6	4.5	11.4	4.5	8.3	6.3		
InvMetrics All Public DB Plans > \$1B Rank			80	71	55	33	45	76		
Growth	3,590,880,562	72.4	6.9	5.3	15.8	6.5	11.3		8.4	Jul-15
Growth Benchmark			7.1	5.5	15.3	6.6	10.9		8.6	
Public Equity	2,148,798,596	43.4	11.1	7.1	22.7	4.6	11.5	7.7	6.8	Apr-08
Public Equity Benchmark			10.9	7.3	21.0	4.9	10.9	7.7	6.9	
Global Equity	442,841,198	8.9	12.7	8.1	25.7	4.8	13.2	9.6	10.9	Mar-13
MSCI All Country World Investable Market Net Index			11.1	7.4	21.6	5.5	11.5	7.8	8.8	
eV All Global Equity Median			11.1	6.8	18.6	5.0	11.5	7.6	8.8	
eV All Global Equity Rank			30	30	17	53	25	18	17	
U.S. Equity	946,142,319	19.1	11.9	8.3	26.4	8.8	15.5	11.4	10.1	Jun-95
MSCI USA IMI (Net)			12.0	8.2	25.6	8.3	14.8	11.0	9.6	
eV All US Equity Median			11.8	7.8	18.1	8.0	13.0	9.2	10.2	
eV All US Equity Rank			48	41	22	41	22	22	54	

Fiscal Year begins July 1.

Please see the Appendix for composition of the Policy Benchmark, Low-Cost Passive Portfolio, Liability Benchmark Portfolio, Growth Benchmark, and Public Equity Benchmark. Returns for the Equity Aggregate are gross of fees through June 2015 and net of fees thereafter.



Total Fund | As of December 31, 2023

					•					,
	Market Value \$	% of Portfolio	<b>QTD</b> (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
International Equity	465,565,418	9.4	9.9	3.2	15.4	0.3	8.6	4.2	7.2	Jun-95
MSCI World ex U.S. IMI Index (Net)			10.5	6.1	17.2	3.7	8.2	4.3	5.3	
eV ACWI ex-US All Cap Equity Median			10.2	4.7	16.7	1.4	8.1	4.6	7.1	
eV ACWI ex-US All Cap Equity Rank			55	78	63	60	40	66	48	
Emerging Markets Equity	294,249,662	5.9	7.8	7.9	16.9	-1.0	6.3	3.6	8.1	Sep-01
MSCI Emerging Markets IMI (Net)			8.0	5.7	11.7	<i>-3.7</i>	4.5	3.0	8.5	
eV Emg Mkts Equity Median			7.9	4.6	12.0	<i>-3.3</i>	5.1	3.3	9.0	
eV Emg Mkts Equity Rank			53	22	27	37	<i>35</i>	42	76	
Private Markets	1,240,521,674	25.0	0.6	2.0	5.8	12.1	11.2		8.9	Jul-15
Private Markets Benchmark			0.6	2.0	5.8	12.1	11.2		9.3	
MSCI ACWI IMI (Net) +1%			11.4	7.9	22.8	6.5	12.6	8.8	9.4	
Private Markets ex Proxy	1,079,118,659	21.8	0.0	1.7	4.6	14.7	12.0		10.5	Jul-15
Private Equity	437,123,818	8.8	-1.2	1.6	6.3	15.2	15.3	13.5	11.5	Oct-05
Custom PE Benchmark			0.6	3.4	7.2	17.9	15.2	14.3	12.9	
Venture Capital	63,396,333	1.3	-0.9	-0.3	-6.9	6.6			7.7	Sep-20
Private Debt	228,808,232	4.6	2.5	4.3	7.3	13.1	8.4		6.6	Oct-15
S&P Global Leveraged Loan + 2%			3.8	7.5	15.4	7.3	7.9	6.1	6.9	
Growth Real Estate	223,172,076	4.5	-0.1	-0.3	0.6	14.5	10.0		9.8	Jul-15
NCREIF Property Index			-3.0	-4.3	-7.9	4.6	4.3	6.8	5.8	
Private Real Assets	126,618,200	2.6	0.0	1.9	7.6	16.5	10.4		8.7	Jun-16

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

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



Total Fund | As of December 31, 2023

							<u> </u>			<u> </u>
	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Northern Trust Russell 3000	51,500,853	1.0	12.1	8.5	26.0	8.6	15.2		11.6	Apr-14
Russell 3000 Index			12.1	8.4	26.0	8.5	15.2	11.5	11.6	
BlackRock 3 Month T-Bill Private Markets	109,902,162	2.2	1.4	2.7					4.0	Apr-23
High Yield Bonds	101,627,044	2.1	7.0	7.3	13.1	2.4			5.1	Jun-20
Blmbg. U.S. Corp: High Yield Index			7.2	7.7	13.4	2.0	5.4	4.6	5.0	
eV US High Yield Fixed Inc Median			6.5	7.0	12.2	2.1	5.1	4.3	4.9	
eV US High Yield Fixed Inc Rank			22	37	26	40			42	
Emerging Market Debt	99,933,248	2.0	3.0	3.6	4.3	2.6	6.4	4.1	2.7	Jan-13
50% JPM EMBI GD / 50% JPM GBI-EM			8.6	5.6	11.9	<i>-3.3</i>	1.4	1.7	0.9	
eV All Emg Mkts Fixed Inc Median			8.5	5.7	11.5	-2.3	2.3	2.7	1.8	
eV All Emg Mkts Fixed Inc Rank			98	91	99	3	1	7	19	
Low Beta	719,981,245	14.5	1.4	2.6	4.3	3.4	3.6		2.8	Jul-15
Low Beta Benchmark			2.7	3.2	4.8	0.9	1.4		1.0	
Immunized Cash Flows	352,207,214	7.1	2.9	3.2	4.4	-0.4	1.2		1.4	Oct-18
Immunized Cash Flow Benchmark			2.9	3.2	4.4	-0.4	1.2		1.4	
Market Neutral Strategies	145,536,406	2.9	-1.6	1.2	3.6	13.0	10.6	6.3	6.0	Nov-12
Market Neutral Strategies Benchmark			1.7	3.4	6.7	3.2	2.5	1.9	1.7	

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



Total Fund | As of December 31, 2023

	Market	% of	QTD	FYTD	1 Yr	3 Yrs	E Vre	10 Vro	C.L.	Inception
	Warket Value \$	% or Portfolio	(%)	(%)	(%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Date
Relative Value	145,536,406	2.9	-1.6	1.2	3.6	13.0	10.3	(70) 	7.4	Jul-15
HFRI Relative Value (Total) Index			2.6	4.3	7.0	4.6	4.9	4.0	4.0	
Relative Value Arbitrage Median			2.2	3.2	6.9	2.3	4.6	3.5	3.6	
Relative Value Arbitrage Rank			100	100	100	1	1		1	
Cash	43,878,867	0.9	0.9	2.1	3.9	1.8	1.7	1.2		Jul-02
90 Day U.S. Treasury Bill			1.4	2.7	5.0	2.2	1.9	1.2	1.4	
Short Term IG Bonds	178,358,758	3.6	1.4	2.7	5.3				4.1	May-22
ICE BofA 3 Month U.S. T-Bill			1.4	2.7	5.0	2.2	1.9	1.3	3.8	
Other	634,101,654	12.8	3.1	-0.3	-2.5	0.3	0.9		1.4	Jul-15
Other Benchmark			3.4	-0.3	-2.1	0.0	0.6		1.1	
Core Real Estate	248,788,614	5.0	-1.8	-4.9	-12.3	7.9	6.8		7.0	Jul-15
Core Real Estate Benchmark			-2.1	-4.9	-12.9	5.8	4.4		5.9	
TIPS	99,666,494	2.0	2.6	3.1	4.6	2.4	3.5		3.2	Oct-18
Blmbg. U.S. TIPS 0-5 Year			2.6	3.0	4.6	2.3	3.4	2.0	3.2	
Investment Grade Bonds	213,442,206	4.3	6.5	4.1	6.4	-2.8			-1.4	May-20
Custom IG Bonds Benchmark			6.9	3.3	5.4	-2.9			-1.9	
Long-Term Government Bonds	72,204,340	1.5	12.5	-0.8	3.4	-11.4			-10.3	Jun-20
Long-Term Government Bonds Benchmark			12.7	-0.6	3.1	-11.4			-10.2	
Overlay	11,411,600	0.2								

Please see the Appendix for composition of the Other Benchmark. Core Real Estate values are one-quarter lagged.



Total Fund | As of December 31, 2023

										· · · · · · · · · · · · · · · · · · ·
	Trailing Net Performance									
	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Total Fund	4,956,375,061	100.0	5.5	4.2	11.3	5.1	8.5	5.8	8.3	Mar-71
Policy Benchmark			5.9	4.4	11.2	5.0	8.0	6.0		
Investable Benchmark Portolio			5.8	4.4	10.9	4.3	8.1	5.7		
Low-Cost Passive Portfolio			9.1	6.4	15.1	<i>3.3</i>	7.2			
60/40 MSCI ACWI IMI/BBgBarc Global Aggregate			9.9	6.1	15.1	1.1	6.9	5.0		
Liability Benchmark Portfolio			12.7	-0.6	3.1	-11.4	-1.2			
InvMetrics All Public DB Plans > \$1B Median			6.6	4.5	11.4	4.5	<i>8.3</i>	6.3		
InvMetrics All Public DB Plans > \$1B Rank			80	71	55	33	45	76		
Growth	3,590,880,562	72.4	6.9	5.3	15.8	6.5	11.3		8.4	Jul-15
Growth Benchmark			7.1	5.5	15.3	6.6	10.9		8.6	
Public Equity	2,148,798,596	43.4	11.1	7.1	22.7	4.6	11.5	7.7	6.8	Apr-08
Public Equity Benchmark			10.9	7.3	21.0	4.9	10.9	7.7	6.9	
Global Equity	442,841,198	8.9	12.7	8.1	25.7	4.8	13.2	9.6	10.9	Mar-13
MSCI All Country World Investable Market Net Index			11.1	7.4	21.6	5.5	11.5	7.8	8.8	
eV All Global Equity Median			11.1	6.8	18.6	5.0	11.5	7.6	8.8	
eV All Global Equity Rank			30	30	17	53	25	18	17	
Artisan Global Value	218,106,190	4.4	12.3	9.2	28.7	9.8	12.7	8.5	10.1	Mar-13
MSCI AC World Index Value (Net)			9.2	7.2	11.8	7.3	8.2	5.5	6.6	
eV All Global Equity Median			11.1	6.8	18.6	5.0	11.5	7.6	8.8	
eV All Global Equity Rank			33	17	11	11	32	34	28	

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 December 31, 2023

										<u> </u>
	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Artisan Global Opportunities	224,735,008	4.5	13.0	7.0	23.3	-0.6	13.4	10.2	10.9	May-13
MSCI AC World Index Growth (Net)	224,700,000	4.0	12.7	7.2	33.2	3.7	14.6	10.1	10.7	May 10
eV All Global Equity Median			11.1	6.8	18.6	5.0	11.5	7.6	8.5	
eV All Global Equity Rank			26	48	27	85	23	12	15	
U.S. Equity	946,142,319	19.1	11.9	8.3	26.4	8.8	15.5	11.4	10.1	Jun-95
MSCI USA IMI (Net)			12.0	8.2	25.6	8.3	14.8	11.0	9.6	
eV All US Equity Median			11.8	7.8	18.1	8.0	13.0	9.2	10.2	
eV All US Equity Rank			48	41	22	41	22	22	54	
Northern Trust Russell 3000	890,600,747	18.0	12.1	8.5	26.0	8.6			19.6	Apr-20
Russell 3000 Index			12.1	8.4	26.0	8.5			19.6	
Burgundy US Small Cap	55,541,276	1.1	8.7	7.2					11.1	Jun-23
Russell 2000 Value Index			15.3	11.8					20.7	
eV US Small Cap Value Equity Median			12.6	9.3					18.3	
eV US Small Cap Value Equity Rank			92	76					94	
International Equity	465,565,418	9.4	9.9	3.2	15.4	0.3	8.6	4.2	7.2	Jun-95
MSCI World ex U.S. IMI Index (Net)			10.5	6.1	17.2	<i>3.7</i>	8.2	4.3	5.3	
eV ACWI ex-US All Cap Equity Median			10.2	4.7	16.7	1.4	8.1	4.6	7.1	
eV ACWI ex-US All Cap Equity Rank			55	78	63	60	40	66	48	
Northern Trust MSCI World ex US	252,496,873	5.1	10.5	5.9	18.3	4.9	9.0		4.7	Apr-14
MSCI World ex U.S. (Net)			10.5	6.0	17.9	4.4	8.5		4.4	



## Total Fund | As of December 31, 2023

										-, = - = -
	Market	% of	QTD	FYTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	S.I.	Inception
	Value \$	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Oberweis Intl Opportunities	55,645,549	1.1	8.1	1.8	6.4	-11.1	7.5		4.9	Mar-14
MSCI World ex U.S. Small Cap Growth Index (Net)			11.2	4.6	10.6	-4.2	6.7		4.6	
eV ACWI ex-US All Cap Equity Median			10.2	4.7	16.7	1.4	8.1		4.5	
eV ACWI ex-US All Cap Equity Rank			88	86	100	99	66		35	
Morgan Stanley International Equity	72,374,668	1.5	13.4	-2.9	19.6				-5.1	Feb-22
MSCI ACWI ex US			9.8	5.6	15.6				0.4	
eV ACWI ex-US All Cap Equity Median			10.2	4.7	16.7				0.1	
eV ACWI ex-US All Cap Equity Rank			12	100	23				90	
First Eagle International Equity	85,048,329	1.7	6.5	1.8	10.4				8.3	Jun-22
MSCI World ex U.S. (Net)			10.5	6.0	17.9				7.9	
eV ACWI ex-US All Cap Equity Median			10.2	4.7	16.7				6.1	
eV ACWI ex-US All Cap Equity Rank			98	86	97				19	
Emerging Markets Equity	294,249,662	5.9	7.8	7.9	16.9	-1.0	6.3	3.6	8.1	Sep-01
MSCI Emerging Markets IMI (Net)			8.0	5.7	11.7	- <i>3.7</i>	4.5	3.0	8.5	
eV Emg Mkts Equity Median			7.9	4.6	12.0	<i>-3.3</i>	5.1	3.3	9.0	
eV Emg Mkts Equity Rank			53	22	27	37	35	42	76	
Northern Trust MSCI EM IMI	11,328,725	0.2	7.9	5.4	11.9	-3.7	4.6		2.8	Oct-18
MSCI Emerging Markets IMI (Net)			8.0	5.7	11.7	-3.7	4.5		2.7	
Dimensional Fund Adv EM Value	60,241,500	1.2	7.2	7.3	16.5	5.3	5.6		4.7	Jul-15
MSCI Emerging Markets Value (Net)			8.1	7.2	14.2	0.0	3.4		2.5	
eV Emg Mkts Equity Median			7.9	4.6	12.0	<i>-3.3</i>	5.1		3.9	
eV Emg Mkts Equity Rank			68	26	29	15	43		31	



#### Total Fund | As of December 31, 2023

	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
GQG Global Emerging Markets	58,300,789	1.2	11.7	13.6	28.7	-1.3	9.4		7.2	Jul-17
MSCI Emerging Markets (Net)			7.9	4.7	9.8	-5.1	3.7		2.7	
eV Emg Mkts Equity Median			7.9	4.6	12.0	<i>-3.3</i>	5.1		3.3	
eV Emg Mkts Equity Rank			9	4	6	39	14		8	
Redwheel Emerging Markets Equity	58,085,727	1.2	3.5	2.8	5.9	-8.4			3.9	Sep-19
MSCI Emerging Markets (Net)			7.9	4.7	9.8	-5.1			3.3	
eV Emg Mkts Equity Median			7.9	4.6	12.0	-3.3			4.4	
eV Emg Mkts Equity Rank			99	70	90	84			58	
Wellington Emerging Markets Systematic	59,803,059	1.2	7.1	6.7	16.2	-0.1			5.8	Sep-19
MSCI Emerging Markets (Net)			7.9	4.7	9.8	-5.1			3.3	
eV Emg Mkts Equity Median			7.9	4.6	12.0	<i>-3.3</i>			4.4	
eV Emg Mkts Equity Rank			71	31	30	33			36	
Kotak India Midcap	18,527,585	0.4	12.0	18.0	30.5				8.8	Jul-21
MSCI India Midcap			13.7	19.7	36.0				9.6	
eV Emg Mkts Equity Median			7.9	4.6	12.0				-7.6	
eV Emg Mkts Equity Rank			7	1	4				2	
Unifi India	27,962,276	0.6	10.4	16.7					32.0	Apr-23
MSCI India (Net)			11.9	14.9					29.0	
eV Emg Mkts Equity Median			7.9	4.6					6.8	
eV Emg Mkts Equity Rank			14	1					1	



Total Fund | As of December 31, 2023

								0. 500	• · · · · · · · · · · ·	0.,
	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Private Markets	1,240,521,674	25.0	0.6	2.0	5.8	12.1	11.2	<u>-</u>	8.9	Jul-15
Private Markets Benchmark			0.6	2.0	5.8	12.1	11.2		9.3	
MSCI ACWI IMI (Net) +1%			11.4	7.9	22.8	6.5	12.6		9.4	
Private Markets ex Proxy	1,079,118,659	21.8	0.0	1.7	4.6	14.7	12.0		10.5	Jul-15
Private Equity	437,123,818	8.8	-1.2	1.6	6.3	15.2	15.3	13.5	11.5	Oct-05
Custom PE Benchmark			0.6	3.4	7.2	17.9	15.2	14.3	12.9	
PE Strategic Partnership, LP	363,215,762	7.3	-1.1	2.2	7.8	22.5	18.4		15.2	Aug-17
Pantheon USA Fund VI, LP	376,377	0.0	-0.2	-1.9	-4.9	-9.2	-11.1	-2.5	1.4	Sep-05
Portfolio Advisors Private Eq III	2,347,175	0.0	-0.3	-0.9	-9.4	2.1	1.9	4.4	4.4	Oct-05
TCW/Crescent Mezzanine V	17,689	0.0	1.1	4.0	55.3	54.1	38.0	22.1	17.4	Dec-08
TPG Opportunities Partners II	128,217	0.0	-1.8	-1.7	22.7	19.0	9.2	12.6	12.1	Oct-12
Crescent Mezzanine Partners VI	2,061,849	0.0	-2.6	0.0	9.6	10.8	10.2	9.4	8.0	Jan-13
Warburg Pincus (Europa) XI	6,703,701	0.1	-2.7	3.3	19.9	6.7	5.6	8.9	9.2	May-13
57 Stars Global Opportunity III	22,808,735	0.5	-1.9	-1.9	-3.3	3.1	3.6	1.9	1.9	Jan-14
TPG Opportunities Partners III	2,386,178	0.0	-9.3	-9.0	-12.8	3.8	3.1		3.8	Feb-14
CCMP Capital Investors III, LP	199,262	0.0	-15.2	-30.9	-11.6	-5.5	-1.3		3.6	Aug-14
Francisco Partners IV	14,838,478	0.3	1.7	-2.6	0.3	-9.7	15.8		15.9	Apr-15
Innovation Endeavors III	11,140,330	0.2	-8.0	-5.1	-10.6	38.8	32.3		20.5	Jun-18
Crestline Portfolio Financing	10,900,065	0.2	5.4	7.9	9.0	8.0	9.2		9.3	Jul-18



Total Fund | As of December 31, 2023

	Market	% of	QTD	FYTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	S.I.	Inception
	Value \$	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Venture Capital	63,396,333	1.3	-0.9	-0.3	-6.9	6.6			7.7	Sep-20
Top Tier Capital Partners IX	7,905,049	0.2	-2.1	-2.9	-7.1	7.1			10.7	Sep-20
Northgate Venture Partners IX LP	9,741,481	0.2	-0.8	-0.8	-3.5	4.0			2.4	Oct-20
Canvas III	3,381,272	0.1	-4.3	-4.2	-11.5	1.5			1.4	Nov-20
Innovation Endeavors IV	1,733,115	0.0	-1.6	1.9	-0.7				-4.0	Jun-21
Invesco Alpha II	6,948,872	0.1	-1.9	2.3	-15.3				16.7	Oct-21
Next Play Capital III	5,369,243	0.1	-1.3	-2.3	-8.8				-6.6	Dec-21
Tiger Iron SJPF	10,385,671	0.2	2.6	3.2	-0.1				-7.0	Mar-22
Bow Capital Fund II	1,770,737	0.0	-1.6	1.3	-3.2				-6.6	Jun-22
Lerer Hippeau VIII	1,049,068	0.0	-2.2	-5.3	-20.2				-15.6	Sep-22
BSF II	1,875,050	0.0	2.3	5.4	3.5				-3.1	Jul-22
Signia Venture Partners IV	484,302	0.0	-3.7	-7.2	-12.0				-15.7	Oct-22
Next Play SJPF	2,641,684	0.1	-3.2	-5.2	-14.6				-12.7	Nov-22
Crosslink Ventures X	194,022	0.0	-20.8						-20.8	Sep-23
Sierra Ventures XIII	240,413	0.0	-3.8						-3.8	Sep-23
Collective Global I	9,676,353	0.2							0.0	Nov-23



Total Fund | As of December 31, 2023

	Market	% of	QTD	FYTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	S.I.	Inception
	Value \$	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Private Debt	228,808,232	4.6	2.5	4.3	7.3	13.1	8.4		6.6	Oct-15
S&P Global Leveraged Loan + 2%			3.8	7.5	15.4	7.3	7.9		6.9	
White Oak Direct Lending	29,921,443	0.6	-1.6	-8.3	-12.9	23.8	26.5	9.3	8.3	Nov-10
Blackstone/GSO Cap Partners	4,379,822	0.1	-3.2	-2.9	9.8	-1.9	-14.5	-5.6	-0.7	Dec-10
Medley Opportunity Fund II LP	606,823	0.0	21.5	21.5	16.7	4.4	-5.1	-1.8	0.1	Mar-11
Cross Ocean USD ESS Fund I, LP	4,051,908	0.1	-1.2	-2.9	-3.4	9.6	6.2		6.7	Apr-14
Shoreline China Value III, LP	4,163,254	0.1	-8.5	-10.6	-8.1	-10.0	-6.5		-1.3	Jul-15
Cross Ocean USD ESS Fund II LP	11,210,105	0.2	8.0	0.5	0.0	4.2	4.0		6.5	May-16
Cross Ocean USD ESS Fund III, LP	27,285,347	0.6	5.2	10.8	16.0	15.4			12.9	Jul-19
Arbour Lane Credit Opportunity Fund II, L.P.	13,562,493	0.3	1.5	4.6	11.0	12.8			16.1	May-20
Eagle Point Defensive Income Fund	11,189,864	0.2	1.3	6.0	8.7	2.0			4.0	Jul-20
HPS Special Situations Opportunity	11,888,954	0.2	3.2	4.9	14.6	19.3			18.7	Dec-20
Crestline Portfolio Fin II	6,029,829	0.1	2.9	5.3	13.6	10.2			9.9	Dec-20
SVP Special Situations V	9,754,891	0.2	4.3	9.4	17.7				8.5	Jun-21
Arbour Lane COF III	14,417,033	0.3	3.8	7.4	14.4				1.6	Nov-21
Angelo Gordon CS II	16,751,192	0.3	3.4	11.7	13.9				3.8	Feb-22
Octagon CLO Opp Fund IV	21,249,485	0.4	7.8	11.5	19.3				9.7	Mar-22
Eagle Point Defensive II	18,122,782	0.4	2.0	6.1	14.8				8.2	Sep-22



Total Fund | As of December 31, 2023

	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
HPS Special Situations Opportunity Fund II	6,832,344	0.1	2.6	8.9	11.0				10.1	Dec-22
Octagon CLO Opportunity Fund V, L.P.	17,390,662	0.4	2.3	2.3					2.3	Jul-23
Growth Real Estate	223,172,076	4.5	-0.1	-0.3	0.6	14.5	10.0		9.8	Jul-15
NCREIF Property Index			-3.0	-4.3	-7.9	4.6	4.3		5.8	
Brookfield SREP I	1,611,739	0.0	-15.6	-18.7	-31.1	-6.6	-4.2	8.5	8.7	Aug-13
Tristan - EPISO III	2,530,481	0.1	-0.8	-7.7	-11.6	-0.9	-7.0	-1.1	-1.1	Dec-13
Orion Euro Real Estate IV LP	5,306,191	0.1	3.9	1.6	50.0	12.6	-2.3		-1.1	Mar-14
Sculptor Real Estate Fund III	2,007,673	0.0	-3.0	-1.2	23.4	50.0	34.3		24.1	Sep-14
Tristan - EPISO IV	17,649,044	0.4	2.3	-0.2	-1.8	4.5	6.8		7.0	Jan-16
KSL Capital Partners IV, LP	20,500,327	0.4	5.0	6.1	8.4	26.4	13.9		6.2	Apr-16
Brookfield SREP II	12,626,000	0.3	-1.7	-1.4	-5.3	12.7	11.5		11.0	Jul-16
DRA Growth & Income Fund IX	11,892,088	0.2	-5.5	-4.9	-4.2	19.9	14.7		15.0	Feb-17
GEM Realty Fund VI	7,772,155	0.2	-0.3	-1.6	-10.1	14.8	6.1		5.9	Dec-17
Torchlight Debt Opportunity VI	22,499,037	0.5	0.6	1.4	3.6	10.6	3.7		5.9	May-18
Tristan - EPISO V	18,543,010	0.4	1.4	-0.7	4.1	4.5			-39.4	May-19
DRA Growth and Income Fund X, LLC	17,940,807	0.4	0.8	0.7	2.7	21.2			20.6	Apr-20
Rockpoint Real Estate Fund VI, L.P.	10,568,182	0.2	-0.6	-2.1	-4.1	15.2			10.6	Jun-20
Exeter Industrial Value Fund V	13,970,377	0.3	-2.0	0.1	5.9	25.3			23.2	Oct-20



Total Fund | As of December 31, 2023

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Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
4,787,087	0.1	0.1	0.2	2.6				3.4	Feb-21
12,496,106	0.3	-0.1	-0.5	7.1				50.7	Feb-22
9,331,742	0.2	-4.0	-5.4	-19.1				-11.8	Apr-22
15,998,423	0.3	-2.8	-4.0	-5.3				15.4	Jun-22
5,656,718	0.1	5.8	18.8	-14.1				-8.5	Sep-22
2,605,263	0.1							0.0	Dec-23
1,700,000	0.0							0.0	Dec-23
5,179,626	0.1	-0.8	-1.2	5.8				-6.3	Jul-22
126,618,200	2.6	0.0	1.9	7.6	16.5	10.4		8.7	Jun-16
21,216,023	0.4	3.2	7.2	16.7	14.5	12.6		11.3	Jun-16
20,209,456	0.4	0.1	0.4	8.3	15.8	9.1		6.4	Sep-16
6,580,956	0.1	10.0	11.9	11.8	27.7	11.2		11.0	Dec-18
10,811,700	0.2	9.8	12.3	33.1	41.7			16.8	Aug-19
5,371,805	0.1	1.2	2.0	4.3	0.4			-70.6	Oct-19
5,284,682	0.1	3.1	7.9	34.6	8.6			7.5	Aug-20
8,698,944	0.2	-4.3	5.9	21.6	10.8			11.6	Sep-20
68,000	0.0	0.0	0.0	-96.2	-66.4			-63.5	Oct-20
1,881,180	0.0	-60.8	-66.7	-67.9	-15.9			-15.9	Jan-21
	Value \$ 4,787,087 12,496,106 9,331,742 15,998,423 5,656,718 2,605,263 1,700,000 5,179,626 126,618,200 21,216,023 20,209,456 6,580,956 10,811,700 5,371,805 5,284,682 8,698,944 68,000	Value \$         Portfolio           4,787,087         0.1           12,496,106         0.3           9,331,742         0.2           15,998,423         0.3           5,656,718         0.1           2,605,263         0.1           1,700,000         0.0           5,179,626         0.1           126,618,200         2.6           21,216,023         0.4           6,580,956         0.1           10,811,700         0.2           5,371,805         0.1           5,284,682         0.1           8,698,944         0.2           68,000         0.0	Value \$         Portfolio         (%)           4,787,087         0.1         0.1           12,496,106         0.3         -0.1           9,331,742         0.2         -4.0           15,998,423         0.3         -2.8           5,656,718         0.1         5.8           2,605,263         0.1            1,700,000         0.0            5,179,626         0.1         -0.8           126,618,200         2.6         0.0           21,216,023         0.4         3.2           20,209,456         0.4         0.1           6,580,956         0.1         10.0           10,811,700         0.2         9.8           5,371,805         0.1         1.2           5,284,682         0.1         3.1           8,698,944         0.2         -4.3           68,000         0.0         0.0	Value \$         Portfolio         (%)         (%)           4,787,087         0.1         0.1         0.2           12,496,106         0.3         -0.1         -0.5           9,331,742         0.2         -4.0         -5.4           15,998,423         0.3         -2.8         -4.0           5,656,718         0.1         5.8         18.8           2,605,263         0.1             1,700,000         0.0             5,179,626         0.1         -0.8         -1.2           126,618,200         2.6         0.0         1.9           21,216,023         0.4         3.2         7.2           20,209,456         0.4         0.1         0.4           6,580,956         0.1         10.0         11.9           10,811,700         0.2         9.8         12.3           5,371,805         0.1         1.2         2.0           5,284,682         0.1         3.1         7.9           8,698,944         0.2         -4.3         5.9           68,000         0.0         0.0         0.0	Value \$         Portfolio         (%)         (%)           4,787,087         0.1         0.1         0.2         2.6           12,496,106         0.3         -0.1         -0.5         7.1           9,331,742         0.2         -4.0         -5.4         -19.1           15,998,423         0.3         -2.8         -4.0         -5.3           5,656,718         0.1         5.8         18.8         -14.1           2,605,263         0.1              1,700,000         0.0              5,179,626         0.1         -0.8         -1.2         5.8           126,618,200         2.6         0.0         1.9         7.6           21,216,023         0.4         3.2         7.2         16.7           20,209,456         0.4         0.1         0.4         8.3           6,580,956         0.1         10.0         11.9         11.8           10,811,700         0.2         9.8         12.3         33.1           5,284,682         0.1         3.1         7.9         34.6           8,698,944         0.2         -4.3 <t< td=""><td>Value \$         Portfolio         (%)         (%)         (%)           4,787,087         0.1         0.1         0.2         2.6            12,496,106         0.3         -0.1         -0.5         7.1            9,331,742         0.2         -4.0         -5.4         -19.1            15,998,423         0.3         -2.8         -4.0         -5.3            5,656,718         0.1         5.8         18.8         -14.1            2,605,263         0.1               1,700,000         0.0               5,179,626         0.1         -0.8         -1.2         5.8            126,618,200         2.6         0.0         1.9         7.6         16.5           21,216,023         0.4         3.2         7.2         16.7         14.5           20,209,456         0.4         0.1         0.4         8.3         15.8           6,580,956         0.1         10.0         11.9         11.8         27.7           10,811,700         0.2         9.8</td><td>Value \$         Portfolio         (%)         &lt;</td><td>Value \$         Portfolio         (%)         &lt;</td><td>Value \$         Portfolio         (%)         &lt;</td></t<>	Value \$         Portfolio         (%)         (%)         (%)           4,787,087         0.1         0.1         0.2         2.6            12,496,106         0.3         -0.1         -0.5         7.1            9,331,742         0.2         -4.0         -5.4         -19.1            15,998,423         0.3         -2.8         -4.0         -5.3            5,656,718         0.1         5.8         18.8         -14.1            2,605,263         0.1               1,700,000         0.0               5,179,626         0.1         -0.8         -1.2         5.8            126,618,200         2.6         0.0         1.9         7.6         16.5           21,216,023         0.4         3.2         7.2         16.7         14.5           20,209,456         0.4         0.1         0.4         8.3         15.8           6,580,956         0.1         10.0         11.9         11.8         27.7           10,811,700         0.2         9.8	Value \$         Portfolio         (%)         <	Value \$         Portfolio         (%)         <	Value \$         Portfolio         (%)         <



Total Fund | As of December 31, 2023

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	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Tembo Cap Mining III	5,313,753	0.1	10.3	18.1	45.0				10.2	Oct-21
Mountain Capital II	3,538,306	0.1	-0.8	-1.9	-7.9				0.3	Jan-22
Aether Seed Partners I	7,247,819	0.1	4.7	4.7	2.8				135.1	May-22
Hull Street Energy II	5,874,999	0.1	-0.6	-2.0	-35.8				-25.6	Jul-22
Kimmeridge Fund VI	10,103,624	0.2	0.8	1.7	7.8				6.2	Oct-22
HIG Infrastructure Partners	3,296,791	0.1	3.6	35.3	-21.7				-21.7	Jan-23
Paine Schwartz VI	2,571,958	0.1	3.1	-1.3					-7.3	Apr-23
Ridgewood Water & Strategic Infrastructure Fund II, L.P.	3,273,625	0.1	-22.0						-24.0	Sep-23
Scout Energy VI	2,504,111	0.1	0.0						0.0	Oct-23
Orion Mine Fin IV	1,730,575	0.0	0.0						0.0	Oct-23
Lime Rock IX	1,039,894	0.0							0.0	Dec-23
Northern Trust Russell 3000	51,500,853	1.0	12.1	8.5	26.0	8.6	15.2	-	11.6	Apr-14
Russell 3000 Index			12.1	8.4	26.0	8.5	15.2		11.6	
BlackRock 3 Month T-Bill Private Markets	109,902,162	2.2	1.4	2.7					4.0	Apr-23
Black Rock 3 Month T-Bill Private Market	109,902,162	2.2	1.4	2.7					4.0	Apr-23
High Yield Bonds	101,627,044	2.1	7.0	7.3	13.1	2.4			5.2	Jul-20
Blmbg. U.S. Corp: High Yield Index			7.2	7.7	13.4	2.0			4.9	
eV US High Yield Fixed Inc Median			6.5	7.0	12.2	2.1			4.7	
eV US High Yield Fixed Inc Rank			22	37	26	40			33	



Total Fund | As of December 31, 2023

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	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Mellon High Yield Beta	10,025,102	0.2	7.5	7.8	13.8	2.3			5.3	Jul-20
Blmbg. U.S. Corp: High Yield Index			7.2	7.7	13.4	2.0			4.9	
eV US High Yield Fixed Inc Median			6.5	7.0	12.2	2.1			4.7	
eV US High Yield Fixed Inc Rank			9	15	11	41			32	
Columbia High Yield Fixed Income	91,601,942	1.8	6.9	7.2	13.0	2.4			2.8	Dec-20
Blmbg. U.S. Corp: High Yield Index			7.2	7.7	13.4	2.0			2.5	
eV US High Yield Fixed Inc Median			6.5	7.0	12.2	2.1			2.6	
eV US High Yield Fixed Inc Rank			25	40	30	40			42	
Emerging Market Debt	99,933,248	2.0	3.0	3.6	4.3	2.6	6.4	4.1	2.7	Jan-13
50% JPM EMBI GD / 50% JPM GBI-EM			8.6	5.6	11.9	-3.3	1.4	1.7	0.9	
eV All Emg Mkts Fixed Inc Median			8.5	5.7	11.5	-2.3	2.3	2.7	1.8	
eV All Emg Mkts Fixed Inc Rank			98	91	99	3	1	7	19	
Wellington Iguazu Partners LP Fund	46,880,105	0.9	-3.7	-0.5	-1.5	4.7	8.3		7.2	Feb-14
50% JPM EMBI GD + 50% JPM GBI EM GD			8.6	5.6	11.9	<i>-3.3</i>	1.4		2.0	
eV All Emg Mkts Fixed Inc Median			8.5	5.7	11.5	-2.3	2.3		2.8	
eV All Emg Mkts Fixed Inc Rank			100	100	100	1	1		1	
Payden EMD Blended Currency	53,053,143	1.1	9.7	6.2	12.2	-2.8			-2.4	Dec-20
50% JPM EMBI GD / 50% JPM GBI-EM			8.6	5.6	11.9	<i>-3.3</i>			- <u>2</u> .4	
eV Emg Mkts Fixed Inc - Blended Currency Median			8.9	5.9	12.1	-2.2			-1.2	
eV Emg Mkts Fixed Inc - Blended Currency Rank			25	44	46	75			83	
Low Beta	719,981,245	14.5	1.4	2.6	4.3	3.4	3.6		2.8	Jul-15
Low Beta Benchmark			2.7	3.2	4.8	0.9	1.4		1.0	



Total Fund | As of December 31, 2023

1 Yr (%) 4.4 4.4 4.4	3 Yrs (%) -0.4	5 Yrs (%) 1.2	10 Yrs (%)	S.I. (%)	Inception Date
<b>4.4</b> 4.4	-0.4	1.2			
4.4				1.4	
	-0.4			1.4	Oct-18
4.4		1.2		1.4	
	-0.4			0.8	Jun-19
4.6	0.1			1.2	
3.6	13.0	10.6	6.3	6.0	Nov-12
6.7	3.2	2.5	1.9	1.7	
3.6	13.0	10.3		7.4	Jul-15
7.0	4.6	4.9		4.0	
6.9	<i>2.3</i>	4.6		3.6	
100	1	1		1	
-6.4	-2.6	4.9	2.3	3.0	Jan-13
7.0	4.6	4.9	4.0	4.3	
10.6	18.9	17.8	14.3	14.0	Apr-13
8.1	4.5	7.1	4.6	4.8	
4.5	7.5	10.1		9.0	Aug-17
7.0	4.6	4.9		4.0	
-4.5				5.2	Jul-21
-0.3				3.0	
3.9	1.8	1.7	1.2		Jul-02
5.0	2.2	1.9	1.2	1.4	
3.9	1.8	1.7	1.2	1.1	Apr-08
5.0	2.2	1.9	1.3	0.9	
	4.6  3.6 6.7  3.6 7.0 6.9 100  -6.4 7.0 10.6 8.1 4.5 7.0 -4.5 -0.3 3.9 5.0 3.9	4.6     0.1       3.6     13.0       6.7     3.2       3.6     13.0       7.0     4.6       6.9     2.3       100     1       -6.4     -2.6       7.0     4.6       10.6     18.9       8.1     4.5       4.5     7.5       7.0     4.6       -4.5        -0.3        3.9     1.8       5.0     2.2       3.9     1.8	4.6       0.1          3.6       13.0       10.6         6.7       3.2       2.5         3.6       13.0       10.3         7.0       4.6       4.9         6.9       2.3       4.6         100       1       1         -6.4       -2.6       4.9         7.0       4.6       4.9         10.6       18.9       17.8         8.1       4.5       7.1         4.5       7.5       10.1         7.0       4.6       4.9         -4.5           -0.3           3.9       1.8       1.7         5.0       2.2       1.9         3.9       1.8       1.7	4.6       0.1           3.6       13.0       10.6       6.3         6.7       3.2       2.5       1.9         3.6       13.0       10.3          7.0       4.6       4.9          6.9       2.3       4.6          100       1       1          -6.4       -2.6       4.9       2.3         7.0       4.6       4.9       4.0         10.6       18.9       17.8       14.3         8.1       4.5       7.1       4.6         4.5       7.5       10.1          7.0       4.6       4.9          -4.5            -0.3            -0.3            5.0       2.2       1.9       1.2         3.9       1.8       1.7       1.2         3.9       1.8       1.7       1.2	4.6       0.1         1.2         3.6       13.0       10.6       6.3       6.0         6.7       3.2       2.5       1.9       1.7         3.6       13.0       10.3        7.4         7.0       4.6       4.9        4.0         6.9       2.3       4.6        3.6         100       1       1        1         -6.4       -2.6       4.9       2.3       3.0         7.0       4.6       4.9       4.0       4.3         10.6       18.9       17.8       14.3       14.0         8.1       4.5       7.1       4.6       4.8         4.5       7.5       10.1        9.0         7.0       4.6       4.9        4.0         -4.5         5.2         -0.3         5.2         -0.3         5.2         -0.3         5.2         -0.3         3.0         3.9       1.8       1.7       1.2



Total Fund | As of December 31, 2023

										,
	Market	% of	QTD	FYTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	S.I.	Inception
	Value \$	Portfolio	(%)	(%)	(%)	(%)	(%)	(%)	(%)	Date
Short Term IG Bonds	178,358,758	3.6	1.4	2.7	5.3				4.1	May-22
ICE BofA 3 Month U.S. T-Bill			1.4	2.7	5.0				3.8	
Blackrock 3-Month T-Bill	178,358,758	3.6	1.4	2.7	5.3				4.1	May-22
ICE BofA 3 Month U.S. T-Bill			1.4	2.7	5.0				3.8	
Other	634,101,654	12.8	3.1	-0.3	-2.5	0.3	0.9		1.4	Jul-15
Other Benchmark			3.4	-0.3	-2.1	0.0	0.6		1.1	
Core Real Estate	248,788,614	5.0	-1.8	-4.9	-12.3	7.9	6.8		7.0	Jul-15
Core Real Estate Benchmark			-2.1	-4.9	-12.9	5.8	4.4		5.9	
BlackRock Core Property Fund	46,951,306	0.9	-3.9	-8.2	-15.4	7.1			5.9	Feb-19
Core Real Estate Benchmark 2			-2.1	-4.9	-12.9	5.8			4.4	
Clarion Lion Properties Fund	87,778,585	1.8	-1.3	-7.3	-17.0	6.1			4.9	Mar-19
Core Real Estate Benchmark 2			-2.1	-4.9	-12.9	5.8			4.5	
Clarion Lion Industrial Trust	24,512,709	0.5	0.7	-0.1	-2.4				15.9	Jan-22
Core Real Estate Benchmark 2			-2.1	-4.9	-12.9				2.7	
TA Realty Core Property Fund	89,546,015	1.8	-1.9	-1.5	-7.6				6.5	Jan-22
Core Real Estate Benchmark 2			-2.1	-4.9	-12.9				2.7	
TIPS	99,666,494	2.0	2.6	3.1	4.6	2.4	3.5		3.2	Oct-18
Blmbg. U.S. TIPS 0-5 Year			2.6	3.0	4.6	2.3	3.4		3.2	
Northern Trust 0-5 Year TIPS	99,666,494	2.0	2.6	3.1	4.6	2.4	3.5		3.3	Nov-18
BBg U.S. TIPS 0-5 Years			2.6	3.0	4.6	2.3	3.4		3.3	



### Total Fund | As of December 31, 2023

	Market Value \$	% of Portfolio	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	S.I. (%)	Inception Date
Investment Grade Bonds	213,442,206	4.3	6.5	4.1	6.4	-2.8			-1.4	May-20
Custom IG Bonds Benchmark			6.9	3.3	5.4	-2.9			-1.9	
Voya Securitized Credit	49,925,219	1.0	5.3	4.7	9.1	-1.5			0.4	May-20
Blmbg. U.S. Securitized: MBS, ABS, and CMBS			7.3	3.2	5.1	-2.8			-2.1	
Invesco Core Bonds	163,516,987	3.3	6.9	3.9	5.8				-2.9	Mar-21
Blmbg. U.S. Aggregate Index			6.8	3.4	5.5				-2.8	
Long-Term Government Bonds	72,204,340	1.5	12.5	-0.8	3.4	-11.4			-10.3	Jun-20
Long-Term Government Bonds Benchmark			12.7	-0.6	3.1	-11.4			-10.2	
BlackRock Long-Term Gov Bonds	72,204,340	1.5	12.5	-0.8	3.4	-11.4			-10.3	Jun-20
Blmbg. U.S. Government: Long Term Bond Index			12.7	-0.6	3.1	-11.3			-10.3	
Overlay	11,411,600	0.2								
Russell Overlay	11,199,858	0.2								



Total Fund | As of December 31, 2023

Cash Flow Summary											
	Quarter Endir	ig December	31, 2023								
	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value					
57 Stars Global Opportunity III	23,893,505	-	-653,092	-653,092	-431,678	22,808,735					
Aether Seed Partners I	6,921,105	-	-	-	326,714	7,247,819					
AIGGRE Fund IV	15,942,801	622,565	-	622,565	-566,943	15,998,423					
Angelo Gordon CS II	13,989,621	2,625,000	-347,635	2,277,365	484,206	16,751,192					
Arbour Lane COF III	11,707,857	2,218,786	-	2,218,786	490,390	14,417,033					
Arbour Lane Credit Opportunity Fund II, L.P.	14,313,548	-	-966,645	-966,645	215,590	13,562,493					
Artisan Global Opportunities	198,841,894	-	-	-	25,893,114	224,735,008					
Artisan Global Value	194,252,047	-	-	-	23,854,143	218,106,190					
Black Rock 3 Month T-Bill Private Market	108,651,228	32,000,000	-32,000,000	-	1,250,933	109,902,162					
Blackrock 3-Month T-Bill	175,919,518	-	-	-	2,439,240	178,358,758					
BlackRock Core Property Fund	49,132,408	-	-264,408	-264,408	-1,916,694	46,951,306					
BlackRock Long-Term Gov Bonds	64,183,030	-	-	-	8,021,310	72,204,340					
Blackstone/GSO Cap Partners	4,525,826	-	-	-	-146,004	4,379,822					
Bow Capital Fund II	1,761,725	37,604	-	37,604	-28,592	1,770,737					
Brookfield Infrastructure III	21,015,614	-	-476,852	-476,852	677,261	21,216,023					
Brookfield SREP I	1,909,972	33,328	-	33,328	-331,561	1,611,739					
Brookfield SREP II	12,847,199	54,000	-	54,000	-275,199	12,626,000					
BSF II	1,833,534	-	-	-	41,516	1,875,050					
Burgundy US Small Cap	51,080,721	-	-	-	4,460,555	55,541,276					
Canvas III	3,533,462	-	-	-	-152,190	3,381,272					
Cash	129,773,121	127,349,381	-214,280,789	-86,931,407	1,037,154	43,878,867					
CCMP Capital Investors III, LP	235,067	9,694	-	9,694	-45,499	199,262					
Centerbridge RE II	5,220,711	-	-	-	-41,085	5,179,626					
Clarion Lion Industrial Trust	24,448,103	-	-94,691	-94,691	159,297	24,512,709					



### Total Fund | As of December 31, 2023

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	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
Clarion Lion Properties Fund	89,527,384	-	-629,682	-629,682	-1,119,117	87,778,585
Columbia High Yield Fixed Income	85,693,688	2,697	-2,697	-	5,908,254	91,601,942
Collective Global I	-	9,676,353	-	9,676,353	-	9,676,353
Cove Street Small Cap Value	296	-	-	-	-	296
Crabel Advanced Trend	60,578,068	-	-	-	-4,728,433	55,849,635
Crescent Mezzanine Partners VI	2,302,093	15,124	-179,750	-164,626	-75,618	2,061,849
Crestline Co-Investment II	4,794,389	179,045	-	179,045	-3,092,255	1,881,180
Crestline Portfolio Fin II	5,857,085	-	-	-	172,744	6,029,829
Crestline Portfolio Financing	10,344,717	-	-	-	555,348	10,900,065
Cross Ocean USD ESS Fund I, LP	4,101,641	-	-	-	-49,732	4,051,908
Cross Ocean USD ESS Fund II LP	12,288,717	-	-1,178,134	-1,178,134	99,522	11,210,105
Cross Ocean USD ESS Fund III, LP	33,289,049	-	-7,671,924	-7,671,924	1,668,222	27,285,347
Crosslink Ventures X	245,000	-	-	-	-50,978	194,022
DE Shaw Composite Fund, LLC	71,762,988	-	-	-	2,135,318	73,898,306
Dimensional Fund Adv EM Value	56,209,096	-	-	-	4,032,404	60,241,500
DRA Growth & Income Fund IX	13,098,181	-	-496,525	-496,525	-709,568	11,892,088
DRA Growth and Income Fund X, LLC	17,807,345	142,105	-146,966	-4,861	138,323	17,940,807
DRA GR IN FD XI	-	2,605,263	-	2,605,263	-	2,605,263
Eagle Point Defensive II	12,243,113	5,544,000	-	5,544,000	335,669	18,122,782
Eagle Point Defensive Income Fund	11,250,168	-	-204,120	-204,120	143,816	11,189,864
Exeter Industrial Value Fund V	14,257,021	71,105	-	71,105	-357,749	13,970,377
EQTExetrIndValueV	-	1,700,000	-	1,700,000	-	1,700,000
First Eagle International Equity	79,871,004	-	-	-	5,177,325	85,048,329
Francisco Partners IV	14,596,333	-	-	-	242,145	14,838,478
GCP SecureSpace Property Partners, L.P	5,347,329	-	-	-	309,389	5,656,718
GEM Realty Fund VI	7,795,172	120,954	-	120,954	-143,971	7,772,155
Global Infra Part III-A/B, LP	20,508,315	33,964	-316,104	-282,140	-16,719	20,209,456



### Total Fund | As of December 31, 2023

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	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
Global Infra Partners IV	5,346,944	-	-41,338	-41,338	66,199	5,371,805
GQG Global Emerging Markets	42,171,194	10,000,000	-	10,000,000	6,129,595	58,300,789
HarbourVest Partners VII	124,165	-	-127,565	-127,565	3,400	-
HIG Infrastructure Partners	3,181,427	-	-	-	115,364	3,296,791
HIG Realty Partners IV	11,636,165	876,744	-	876,744	-16,803	12,496,106
HPS Special Situations Opportunity	11,745,191	-	-228,373	-228,373	372,136	11,888,954
HPS Special Situations Opportunity Fund II	6,773,606	-	-120,479	-120,479	179,217	6,832,344
Hudson Bay	15,354,243	-	-	-	163,839	15,518,082
Hull Street Energy II	5,110,633	801,973	-	801,973	-37,607	5,874,999
Innovation Endeavors III	12,102,837	240,627	-	240,627	-1,203,134	11,140,330
Innovation Endeavors IV	1,761,871	-	-	-	-28,756	1,733,115
Insight Immunized Cash Flow	354,838,809	-	-12,812,768	-12,812,768	10,181,173	352,207,214
Invesco Alpha II	7,085,253	7,405	-	7,405	-143,786	6,948,872
Invesco Core Bonds	152,982,610	857	-857	-	10,534,376	163,516,987
Kimmeridge Energy Fund V, L.P.	10,124,637	-	-309,843	-309,843	996,906	10,811,700
Kimmeridge Fund VI	8,636,769	1,413,641	-	1,413,641	53,214	10,103,624
Kotak India Midcap	16,536,254	-	-	-	1,991,330	18,527,585
KSL Capital Partners IV, LP	18,862,492	783,530	-80,532	702,998	934,837	20,500,327
Lerer Hippeau VIII	822,290	250,000	-	250,000	-23,222	1,049,068
Lime Rock New Energy, L.P	5,162,285	-	-38,691	-38,691	161,088	5,284,682
Lime Rock Partners VIII	6,220,400	-	-262,458	-262,458	623,014	6,580,956
Lime Rock IX	-	1,039,894	-	1,039,894	-	1,039,894
Medley Opportunity Fund II LP	1,221,623	-	-877,763	-877,763	262,963	606,823
Mellon High Yield Beta	9,328,156	-	-	-	696,946	10,025,102
Morgan Stanley International Equity	63,837,035		-	-	8,537,633	72,374,668
Mountain Capital II	3,529,553	38,830	-	38,830	-30,077	3,538,306
Next Play Capital III	4,441,337	1,000,000	-	1,000,000	-72,094	5,369,243



### Total Fund | As of December 31, 2023

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	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
Next Play SJPF	2,028,021	700,000	-	700,000	-86,337	2,641,684
Northern Trust 0-5 Year TIPS	97,187,517	-	-	-	2,478,977	99,666,494
Northern Trust MSCI EM IMI	20,617,528	-	-10,004,639	-10,004,639	715,836	11,328,725
Northern Trust MSCI World ex US	217,412,480	12,000,000	-16,306	11,983,694	23,100,698	252,496,873
Northern Trust Russell 3000	45,946,670	-	-2,872	-2,872	5,557,055	51,500,853
Northern Trust Russell 3000	815,647,925	-	-23,050,978	-23,050,978	98,003,800	890,600,747
Northgate Venture Partners IX LP	9,618,428	200,000	-	200,000	-76,947	9,741,481
Oberweis Intl Opportunities	51,497,740	-	-	-	4,147,808	55,645,549
Octagon CLO Opp Fund IV	20,511,710	-	-849,451	-849,451	1,587,226	21,249,485
Octagon CLO Opportunity Fund V, L.P.	17,000,000	-	-	-	390,662	17,390,662
Orion Mine Fin IV	-	1,730,575	-	1,730,575	-	1,730,575
Orion Euro Real Estate IV LP	5,108,478	-	-	-	197,712	5,306,191
Orion Mine Finance Fund III, L.P.	8,976,898	223,520	-16,339	207,181	-485,135	8,698,944
Paine Schwartz VI	2,097,475	481,405	-73,704	407,701	66,782	2,571,958
Pantheon USA Fund VI, LP	377,207	-	-	-	-830	376,377
Payden EMD Blended Currency	38,335,483	10,002,314	-	10,002,314	4,715,346	53,053,143
PE Strategic Partnership, LP	356,660,586	13,468,377	-2,477,999	10,990,378	-4,435,202	363,215,762
Pine River Fund, Ltd	269,103	-	-	-	1,280	270,383
Portfolio Advisors Private Eq III	2,353,342	-	-	-	-6,167	2,347,175
Praedium X MidInc	9,797,463	-	-74,167	-74,167	-391,554	9,331,742
Real Assets Coinvest I	68,000	-	-	-	-	68,000
Redwheel Emerging Markets Equity	56,143,952	-	-	-	1,941,775	58,085,727
Ridgewood Water & Strategic Infrastructure Fund II, L.P.	1,182,843	2,351,025	-	2,351,025	-260,243	3,273,625
Rockpoint Real Estate Fund VI, L.P.	10,189,311	441,910		441,910	-63,039	10,568,182
Russell Overlay	9,798,769	-	-	-	1,401,089	11,199,858
Scout Energy VI		2,634,580	-130,655	2,503,925	186	2,504,111
Sculptor Real Estate Fund III	2,337,090	5,364	-272,252	-266,888	-62,529	2,007,673

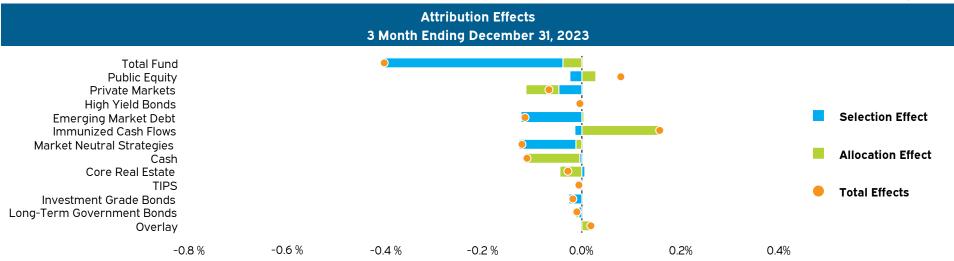


### Total Fund | As of December 31, 2023

	Beginning Market Value	Contributions	Distributions	Net Cash Flow	Net Investment Change	Ending Market Value
Shoreline China Value III, LP	4,906,268	-	-326,250	-326,250	-416,764	4,163,254
Sierra Ventures XIII	250,000	-	-	-	-9,587	240,413
Signia Venture Partners IV	502,741	-	-	-	-18,439	484,302
SVP Special Situations V	8,986,229	387,500	-7,750	379,750	388,912	9,754,891
TA Realty Core Property Fund	92,187,746	21,671	-926,176	-904,505	-1,737,226	89,546,015
TCW/Crescent Mezzanine V	110,174	-	-93,701	-93,701	1,216	17,689
Tembo Cap Mining III	4,571,087	257,083	-	257,083	485,583	5,313,753
Terminated Manager Assets	211,434	-	-	-	308	211,742
Tiger Iron SJPF	9,440,073	690,695	-	690,695	254,903	10,385,671
Top Tier Capital Partners IX	7,807,565	262,733	-	262,733	-165,249	7,905,049
Torchlight Debt Fund VII	4,783,813	-	-	-	3,274	4,787,087
Torchlight Debt Opportunity VI	22,357,576	102,709	-	102,709	38,752	22,499,037
TPG Opportunities Partners II	170,041	572	-39,537	-38,965	-2,859	128,217
TPG Opportunities Partners III	2,703,671	61,994	-69,518	-7,524	-309,969	2,386,178
Tristan - EPISO III	2,552,069	-	-	-	-21,588	2,530,481
Tristan - EPISO IV	17,245,771	-	-	-	403,273	17,649,044
Tristan - EPISO V	18,597,379	-	-304,645	-304,645	250,277	18,543,010
Unifi India	17,924,100	8,000,000	-	8,000,000	2,038,176	27,962,276
Voya Securitized Credit	47,427,793	-	-	-	2,497,426	49,925,219
Warburg Pincus (Europa) XI	7,163,905	-	-269,764	-269,764	-190,440	6,703,701
Wellington Emerging Markets Systematic	46,105,635	10,000,000	-403,987	9,596,013	4,101,411	59,803,059
Wellington Iguazu Partners LP Fund	58,657,049	-	-10,000,000	-10,000,000	-1,776,943	46,880,105
White Oak Direct Lending	30,312,482	90,615		90,615	-481,654	29,921,443
Total	4,754,778,210	265,609,112	-324,221,372	-58,612,259	260,209,111	4,956,375,061



Total Fund | As of December 31, 2023



3 Month Ending December 31, 2023							
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effect	
Public Equity	11.1	10.9	0.1	0.0	0.0	0.1	
Private Markets	0.6	0.6	0.0	0.0	-0.1	-0.1	
High Yield Bonds	7.0	7.2	-0.2	0.0	0.0	0.0	
Emerging Market Debt	3.0	8.6	-5.6	-0.1	0.0	-0.1	
Immunized Cash Flows	2.9	2.9	0.0	0.0	0.2	0.2	
Market Neutral Strategies	-1.6	1.7	-3.4	-0.1	0.0	-0.1	
Cash	0.9	0.9	0.0	0.0	-0.1	-0.1	
Core Real Estate	-1.8	-2.1	0.3	0.0	0.0	0.0	
TIPS	2.6	2.6	0.0	0.0	0.0	0.0	
Investment Grade Bonds	6.5	6.9	-0.4	0.0	0.0	0.0	
Long-Term Government Bonds	12.5	12.7	-0.2	0.0	0.0	0.0	
Overlay	14.0	1.4	12.6	0.0	0.0	0.0	
Total Fund	5.5	5.9	-0.4	-0.4	0.0	-0.4	

Difference in attribution returns and returns in performance summary may occur as a result of the different calculation methodologies that are applied by Paris. Selection effect for each asset class includes prorated residual effects of total portfolio timing and trading.



Total Fund | As of December 31, 2023



Attribution Summary  1 Year Ending December 31, 2023						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effect
Public Equity	22.7	21.0	1.7	0.6	0.0	0.6
Private Markets	5.8	5.8	0.0	0.0	-0.1	-0.1
High Yield Bonds	13.1	13.4	-0.4	0.0	0.0	0.0
Emerging Market Debt	4.3	11.9	-7.6	-0.2	0.0	-0.2
Immunized Cash Flows	4.4	4.4	0.0	0.0	0.3	0.3
Market Neutral Strategies	3.6	6.7	-3.1	-0.1	0.0	-0.1
Cash	3.9	3.9	0.0	0.0	-0.1	-0.1
Core Real Estate	-12.3	-12.9	0.6	0.0	-0.2	-0.2
TIPS	4.6	4.6	0.0	0.0	0.0	0.0
Investment Grade Bonds	6.4	5.4	1.0	0.0	0.0	0.0
Long-Term Government Bonds	3.4	3.1	0.3	0.0	0.0	0.0
Overlay	-2.5	5.0	-7.5	0.0	0.0	0.0
Total Fund	11.3	11.2	0.1	0.4	-0.3	0.1



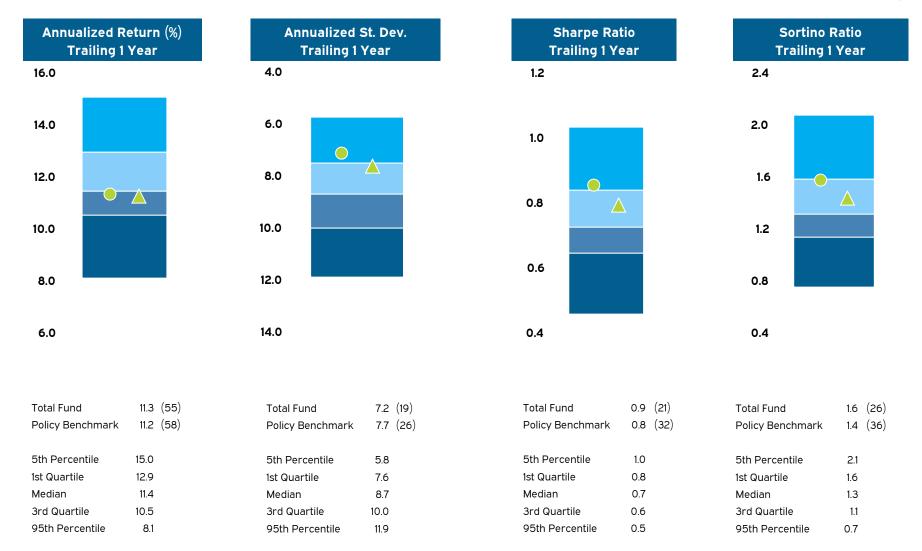
Total Fund | As of December 31, 2023



	3	Attribution Su Years Ending Dece				
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effect
Public Equity	4.6	4.9	-0.3	0.0	-0.1	-0.2
Private Markets	12.1	12.1	0.0	0.1	-0.1	-0.1
Emerging Market Debt	2.6	-3.3	5.9	0.1	0.0	0.1
High Yield Bonds	2.4	2.0	0.4	0.0	0.0	0.0
Market Neutral Strategies	13.0	3.2	9.8	0.3	0.0	0.3
Immunized Cash Flows	-0.4	-0.4	0.0	0.0	0.0	0.0
Core Real Estate	7.9	5.8	2.1	0.1	-0.1	0.0
TIPS	2.4	2.3	0.0	0.0	0.0	0.0
Investment Grade Bonds	-2.8	-2.9	0.1	0.0	-0.1	-0.1
Commodities	0.0	7.3	-7.3	0.0	-0.1	-0.1
Long-Term Government Bonds	-11.4	-11.4	-0.1	0.0	0.0	0.0
Overlay	-14.4	2.2	-16.6	0.0	-0.1	-0.1
Cash	1.8	1.8	0.0	0.0	0.1	0.1
Total Fund	5.1	4.9	0.2	0.7	-0.4	0.2



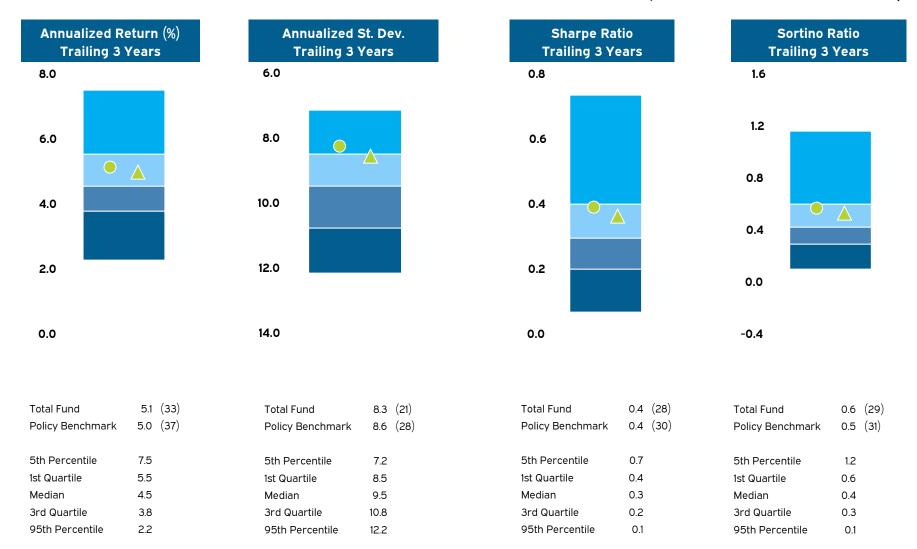
#### Total Fund | One Year As of December 31, 2023



Data are compared to the InvMetrics Public DB >\$1B Net Universe. Parentheses contain percentile rankings.



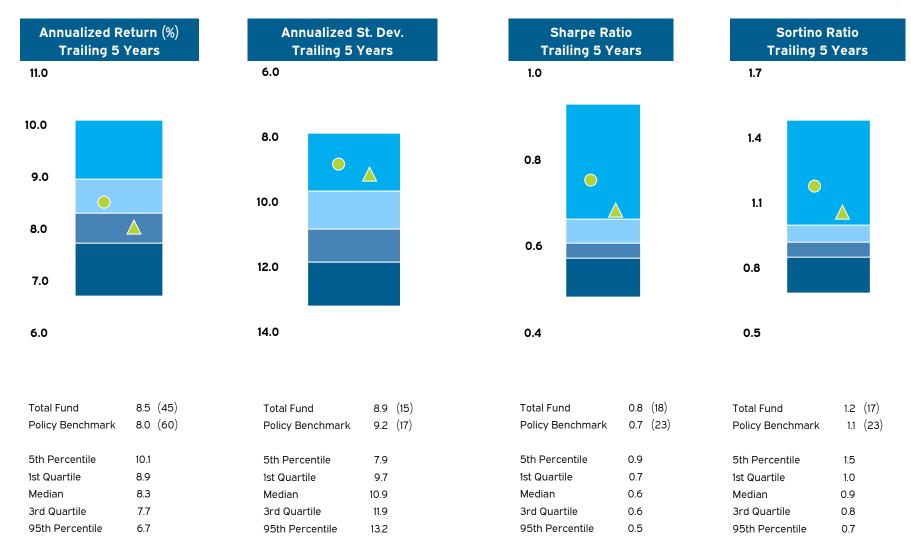
#### Total Fund | Three Years As of December 31, 2023



Data are compared to the InvMetrics Public DB >\$1B Net Universe. Parentheses contain percentile rankings.



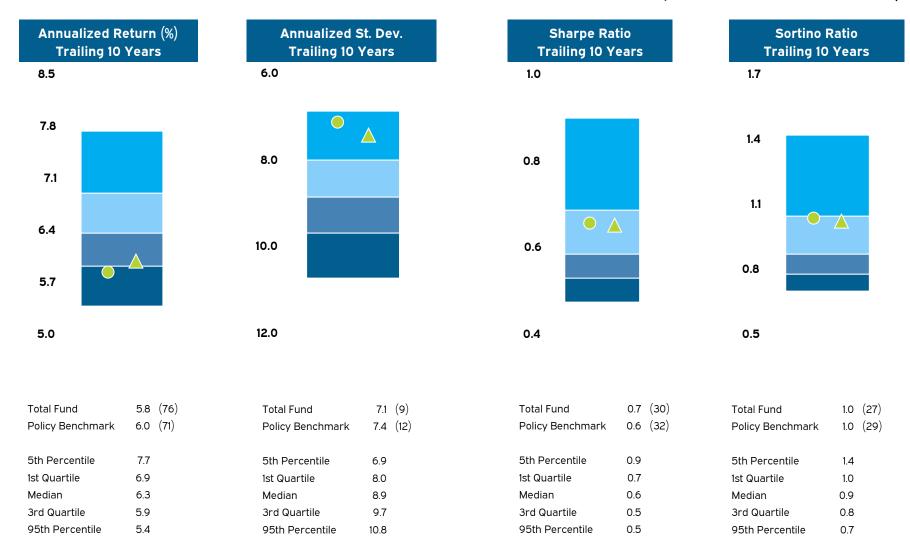
#### Total Fund | Five Years As of December 31, 2023



Data are compared to the InvMetrics Public DB >\$1B Net Universe. Parentheses contain percentile rankings.



#### Total Fund | Ten Years As of December 31, 2023



Data are compared to the InvMetrics Public DB >\$1B Net Universe. Parentheses contain percentile rankings.



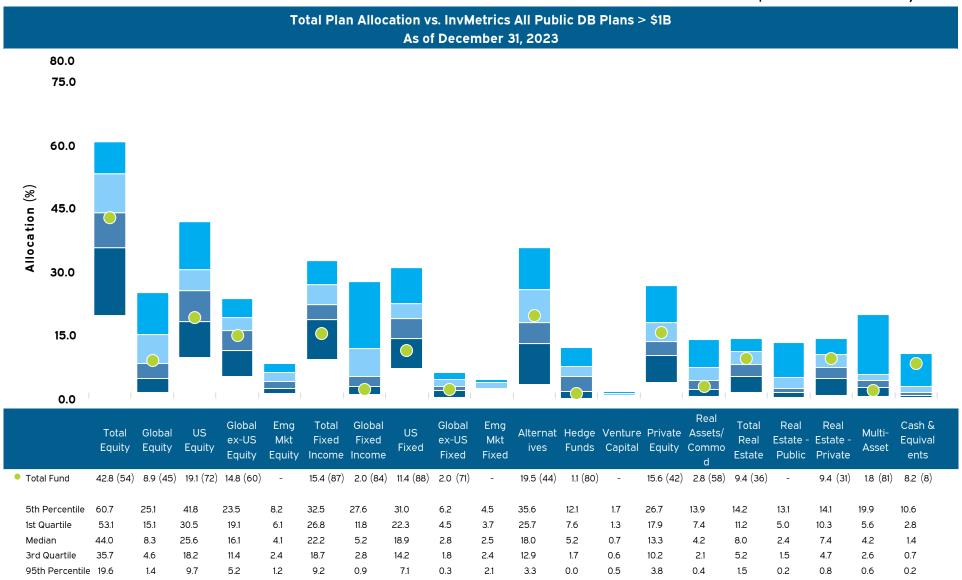
Total Fund | As of December 31, 2023

#### InvMetrics All Public DB Plans > \$1B Net Return Comparison Ending December 31, 2023 16.0 12.0 8.0 4.0 0.0 10 Yrs **QTD** 3 Yrs 5 Yrs 1Yr (%) (%) (%) (%) (%) 5.5 (80) 11.3 (55) 8.5 (45) 5.8 (76) Total Fund 5.1 (33) 5.9 (71) 11.2 (58) 6.0 (71) 5.0 (37) 8.0 (60) Policy Benchmark X Investable Benchmark Portolio 5.8 (77) 10.9 (65) 4.3 (56) 8.1 (58) 5.7 (79) 5th Percentile 8.8 15.0 7.5 10.1 7.7 1st Quartile 7.4 5.5 12.9 8.9 6.9 Median 6.6 11.4 4.5 8.3 6.3 3rd Quartile 5.8 10.5 3.8 7.7 5.9 95th Percentile 4.4 8.1 2.2 6.7 5.4 Population 95 86 74 70 64

Parentheses contain percentile rankings.
Calculation based on monthly periodicity. Fiscal Year begins July 1.



Total Fund | As of December 31, 2023



Parentheses contain percentile rankings.



Total Fund | As of December 31, 2023

#### **Benchmark History**

		Deficilitative in the second of the second o
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



Total Fund | As of December 31, 2023

ı-Cost Passiv	e 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% BBgBard Aggregate TR / 2% BBgBard US Corporate High Yield TR 8% / 3% FTSE EPRA/NAREIT Global NR USD / 2% BBgBard US Govt Long TR / 5% ICE BofAML 91 Days T-Bills TR / 5% 3-Month Libor +1% / 2% BBgBard 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 Driv	ven Benchmar	k Portfolio
10/1/2018	Present	BBgBarc US Treasury Long TR



Total Fund | As of December 31, 2023

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 Globa 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 Equit	У	
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 Equ	ity	
3/1/2013	Present	MSCI ACWI IMI Index
U.S. Equity		
6/1/1995	Present	MSCI USA IMI NR USD



Total Fund | As of December 31, 2023

Internatio	onal 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 Mar	kets			
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 M	larkets ex Russ	sell 3000		
		No Benchmark Selected		
Private	Equity			
10/1/2023	Present	Burgiss PE		
11/1/2016	9/30/2023	Custom Private Equity BM (100% Cambridge US PE)		
10/1/2005	10/31/2016	Cambridge Associates US All PE (1 Qtr Lag)		
Priva	nte Equity ex Ru	ussell 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)		
North	nern Trust Rus	sell 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		



Total Fund | As of December 31, 2023

High Yield E	Bonds	
6/1/2020	Present	BBgBarc US Corporate High Yield TR
Emerging N	larket 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 Neu	tral 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 \	/alue	
7/1/2015	Present	HFRI Relative Value (Total) Index
Cash		
7/1/2002	Present	ICE BofA 91 Days T-Bills TR



Total Fund | As of December 31, 2023

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% BBgBac 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



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. Portfolio Return- [Risk Free Rate+Beta\*(market return-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 is 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%.

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.