



VCERA
VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION

FOURTH QUARTER 2022 PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION

DECEMBER 31, 2022

Allan Martin, Partner

Dan Hennessy, CFA, CAIA, Senior Consultant

Leah Tongco, Consulting Analyst



MARKET ENVIRONMENT

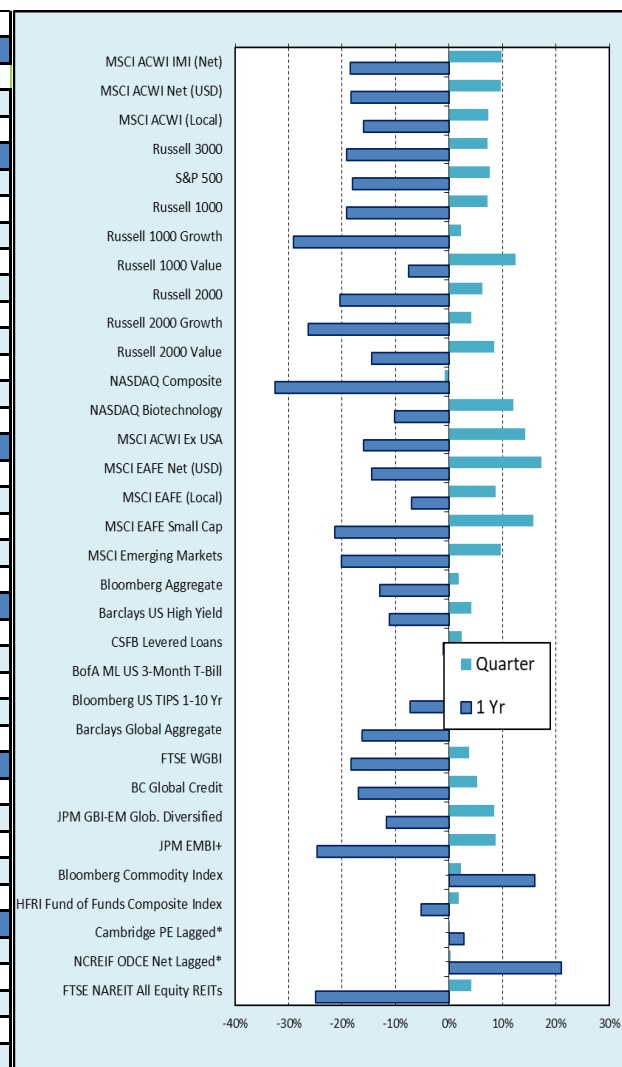
ECONOMIC ENVIRONMENT

- **Q4 Real GDP (advance estimate) increased at an annual rate of 2.9%.**
 - Retail sales ended October at +6.4% on a YoY basis. In the same period last year the YoY growth rate was +16.0%.
 - Corporate profits as a percent of GDP ended June 2022 at 11.2%, down from 12.0% in the same period last year and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended October was 1.35 up from 1.26 one year ago. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April 2020.
 - The U.S. trade deficit narrowed in November as imports decreased more than exports.
- **The unemployment rate was 3.5% ended Q4, down from 3.7% in Q3; U-6, a broader measure of unemployment, decreased to 6.5% in Q4 from 6.7% in Q3.**
 - The labor force participation rate ended Q4 unchanged from Q3 at 62.3%. Labor force participation declined to 60.2% in April 2020 and is at levels below the 10 year pre-pandemic average of 63.0%.
- **The Case-Shiller Home Price Index (ended October) declined to 298.99 from 300.59 in September and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI ended Q4 at 6.42% down from Q3 at 8.2%. In the same period last year, it was 7.09%; Capacity Utilization decreased to 78.75% in Q4 from 80.07% in Q3.**
- **Fed Funds rate increased in Q4 by 1.25% to a targeted range of 4.25%-to-4.50% up from a targeted range of 3.00%-to-3.25% ended Q3. The 10-year Treasury Yield (constant maturity) finished Q4 at 3.62% up from 3.52% in Q3.**
- **The Fed continues scaling back asset purchases. The Fed continues to reduce the size of its balance sheet after a period of rapid growth post-pandemic.**
- **S&P valuations decreased in Q4 to 27.96 from 28.42x in Q3 and are lower than the 10-year average of 28.99x.**
 - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.99x.

MARKET ENVIRONMENT

Q4 2022 OVERVIEW

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI IMI (Net)	World with Small Cap	9.84%	-18.40%	3.89%	4.96%	7.94%
MSCI ACWI Net (USD)	World W/O Small Cap	9.76%	-18.36%	4.00%	5.23%	7.98%
MSCI ACWI (Local)	World (Local Currency)	7.36%	-15.98%	5.07%	6.10%	9.33%
Domestic Equity Benchmarks						
Russell 3000	Domestic All Cap	7.18%	-19.21%	7.07%	8.79%	12.13%
S&P 500	Large Core	7.56%	-18.11%	7.66%	9.42%	12.56%
Russell 1000	Large Core	7.24%	-19.13%	7.35%	9.13%	12.37%
Russell 1000 Growth	Large Growth	2.20%	-29.14%	7.79%	10.96%	14.10%
Russell 1000 Value	Large Value	12.42%	-7.54%	5.96%	6.67%	10.29%
Russell 2000	Small Core	6.23%	-20.44%	3.10%	4.13%	9.01%
Russell 2000 Growth	Small Growth	4.13%	-26.36%	0.65%	3.51%	9.20%
Russell 2000 Value	Small Value	8.42%	-14.48%	4.70%	4.13%	8.48%
NASDAQ Composite	Large Growth	-0.79%	-32.54%	6.10%	9.67%	14.43%
NASDAQ Biotechnology	Biotech	12.01%	-10.12%	4.36%	5.32%	11.92%
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	14.28%	-16.00%	0.07%	0.88%	3.80%
MSCI EAFE Net (USD)	Int'l Developed	17.34%	-14.45%	0.87%	1.54%	4.67%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	8.72%	-7.00%	3.64%	3.81%	7.56%
MSCI EAFE Small Cap	Small Cap Int'l	15.79%	-21.39%	-0.93%	-0.05%	6.21%
MSCI Emerging Markets	Emerging Equity	9.70%	-20.09%	-2.69%	-1.40%	1.44%
Domestic Fixed Income Benchmarks						
Bloomberg Aggregate	Core Bonds	1.87%	-13.01%	-2.71%	0.02%	1.06%
Barclays US High Yield	High Yield	4.17%	-11.19%	0.05%	2.31%	4.03%
CSFB Levered Loans	Bank Loans	2.33%	-1.06%	2.34%	3.24%	3.78%
BofA ML US 3-Month T-Bill	Cash	0.84%	1.46%	0.72%	1.26%	0.76%
Bloomberg US TIPS 1-10 Yr	Inflation	1.64%	-7.34%	2.01%	2.50%	1.29%
Global Fixed Income Benchmarks						
Barclays Global Aggregate	Global Core Bonds	4.55%	-16.25%	-4.48%	-1.66%	-0.44%
FTSE WGBI	World Gov. Bonds	3.82%	-18.26%	-5.75%	-2.54%	-1.22%
BC Global Credit	Global Bonds	5.28%	-16.96%	-4.01%	-1.06%	0.60%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	8.45%	-11.69%	-6.11%	-2.51%	-2.03%
JPM EMBI+	Em. Mkt. Bonds	8.70%	-24.67%	-8.34%	-3.87%	-0.35%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	2.22%	16.09%	12.65%	6.44%	-1.28%
HFRI Fund of Funds Composite Index	Fund of Hedge Funds	1.79%	-5.25%	3.71%	3.02%	3.51%
Cambridge PE Lagged*	Private Equity	0.08%	2.86%	19.37%	16.75%	15.02%
NCREIF ODCE Net Lagged*	Real Estate	0.35%	21.05%	11.41%	9.28%	9.92%
FTSE NAREIT All Equity REITs	REIT	4.14%	-24.95%	0.20%	4.43%	7.10%

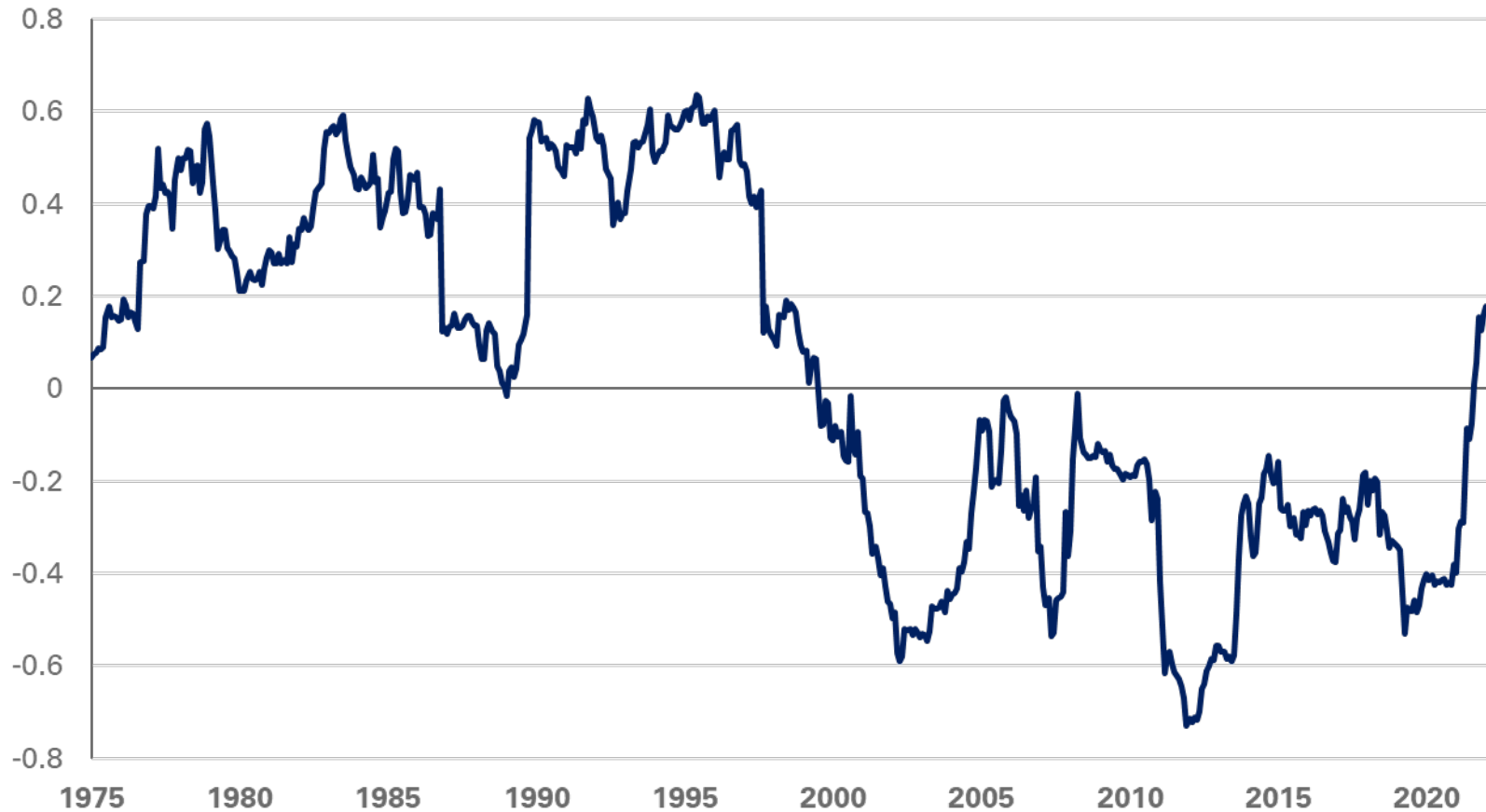


* As of 9/30/2022



ASSET CLASS CORRELATIONS SHIFTED

ROLLING CORRELATION BETWEEN THE S&P 500 AND TREASURIES

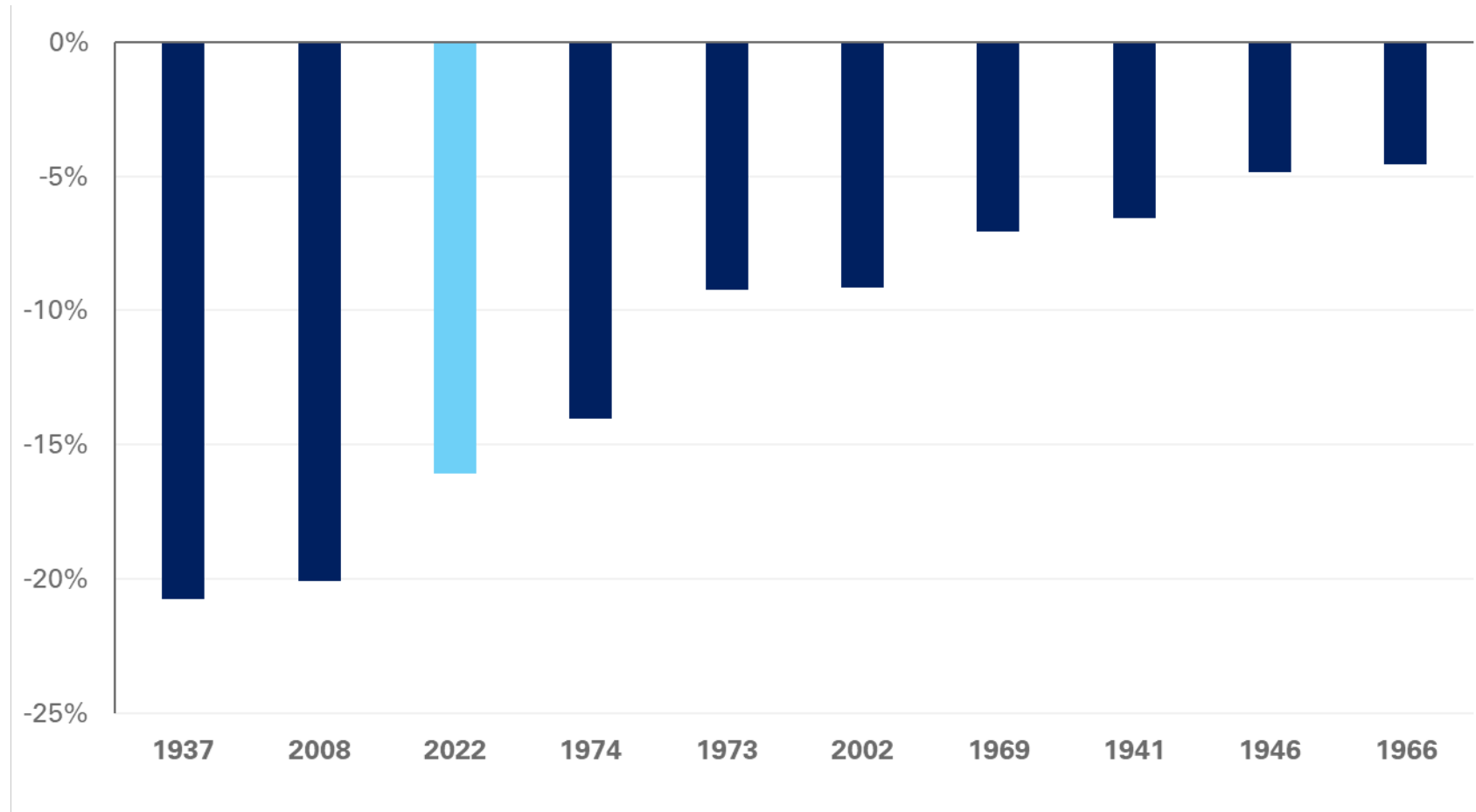


Correlations are calculated based on a rolling 3-year time horizon
Source: S&P, Bloomberg, FactSet



MOST ASSET CLASS RETURNS WERE CHALLENGED

WORST ANNUAL RETURNS: 60/40 PORTFOLIO



60/40 Portfolio represents 60% S&P 500 and 40% U.S. Aggregate Bonds (post 1975) and 40% Treasury (prior to 1974)

Data calculated from 12/31/1936

Sources: S&P, Bloomberg, FactSet



THE S&P 500 INDEX REMAINS IN A BEAR MARKET

LENGTH AND DEPTH OF S&P 500 BEAR MARKETS

Start	End	Length of Bear Market (Months)	Length of Recovery* (Months)	S&P 500 Decline
01/03/2022	?	12*	?	-18%
02/19/2020	03/23/2020	1	5	-34%
10/09/2007	03/09/2009	17	59	-57%
03/24/2000	10/09/2002	31	80	-49%
08/25/1987	12/04/1987	3	20	-34%
11/28/1980	08/12/1982	21	3	-27%
01/11/1973	10/03/1974	21	69	-48%

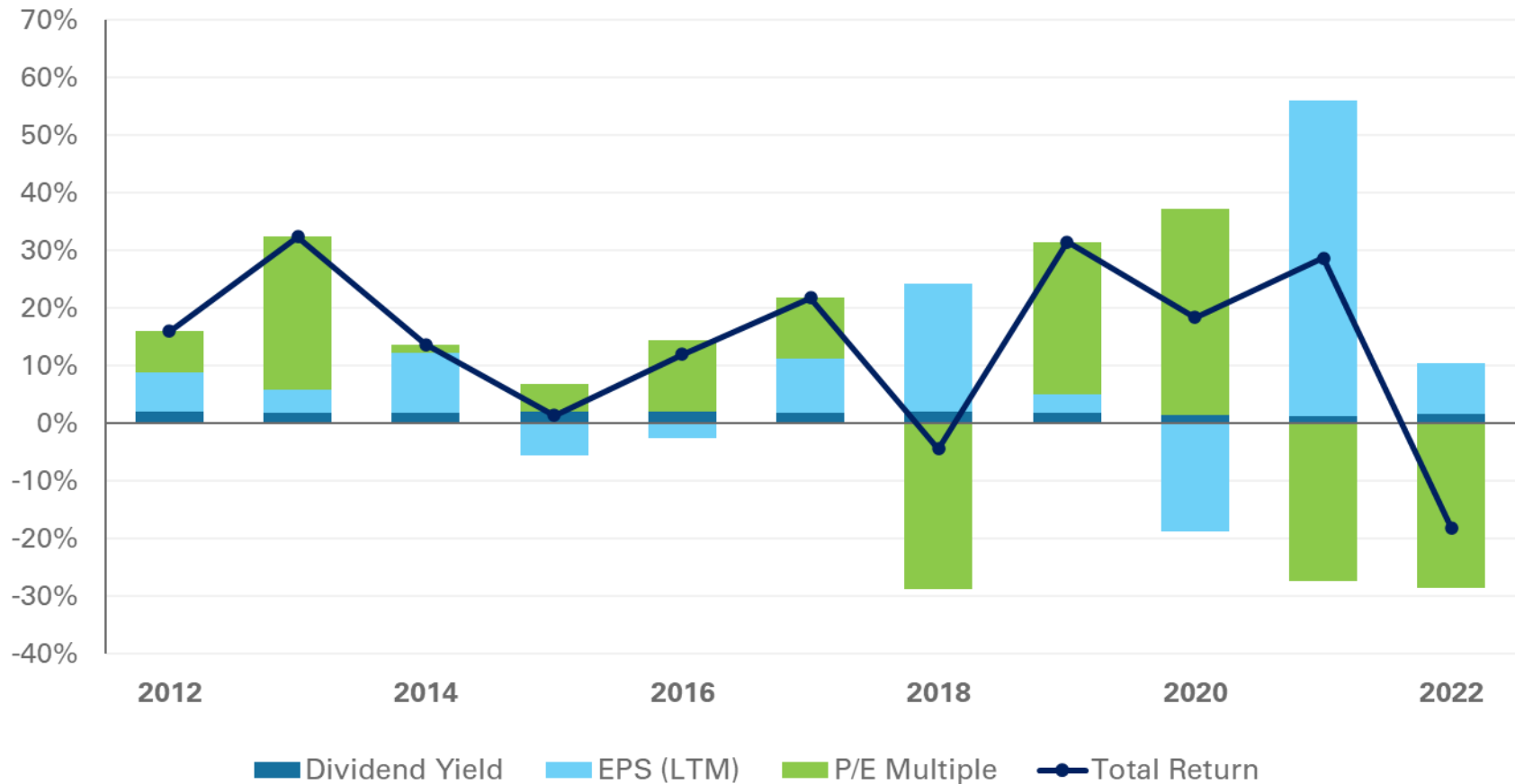
Notes: 2022 bear market is ongoing; represents historical bear markets since 1970. *Length of Recovery represents time to recoup losses from the start of the bear market.

Sources: S&P, FactSet, NEPC



P/E RATIO CONTRACTION LED TO LOWER RETURNS

S&P 500 ATTRIBUTION TO TOTAL RETURNS

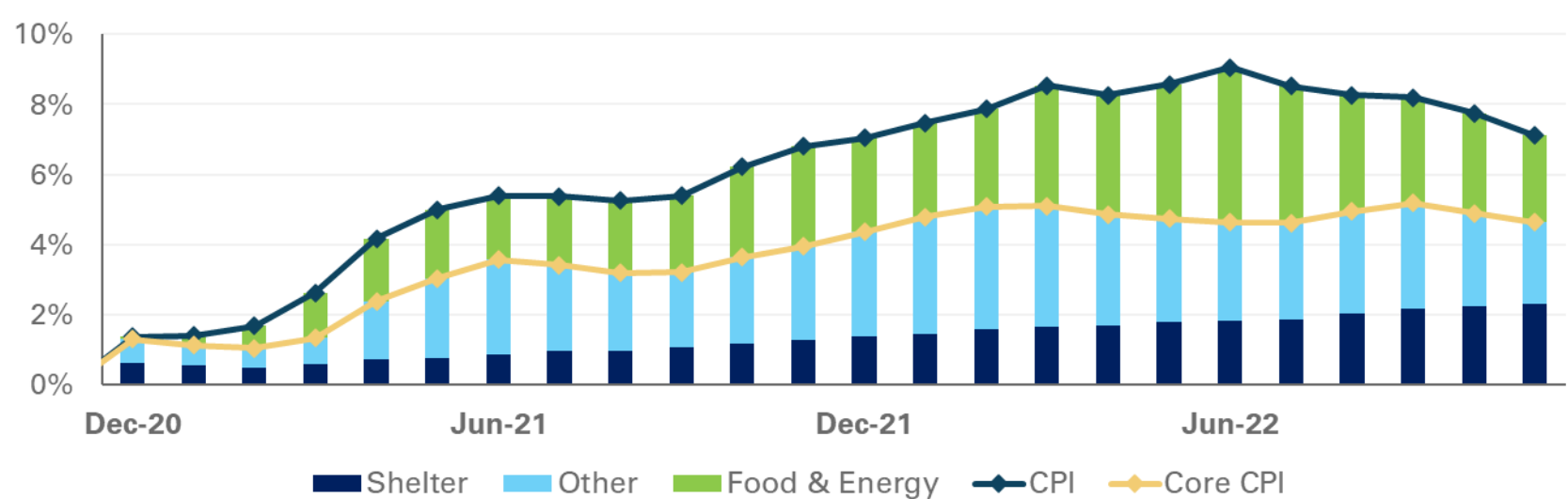


Source: S&P, FactSet



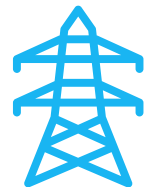
U.S. HEADLINE AND CORE CPI REMAIN ELEVATED

ANNUAL U.S. CPI-U CHANGES



Annual Change in U.S. CPI-U Subcategories

 **+11.2%**
Food

 **+33.5%**
Utilities

 **+14.7%**
Transportation Services

 **+19.7%**
Motor Fuel

 **+7.4%**
Used Cars and Trucks

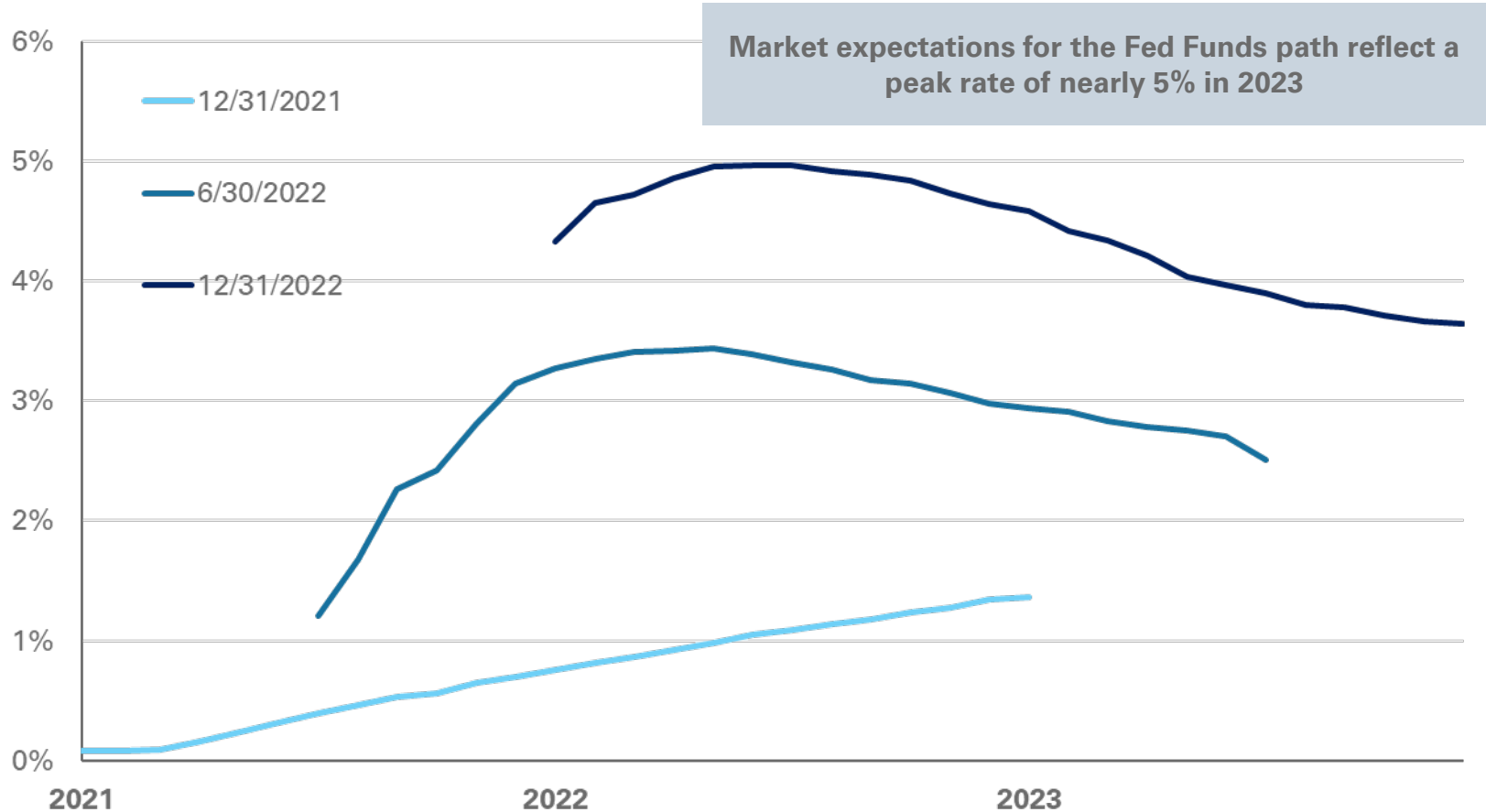
 **+6.6%**
Shelter

Sources: Bureau of Labor Statistics, FactSet



RATE EXPECTATIONS INCREASED DRAMATICALLY

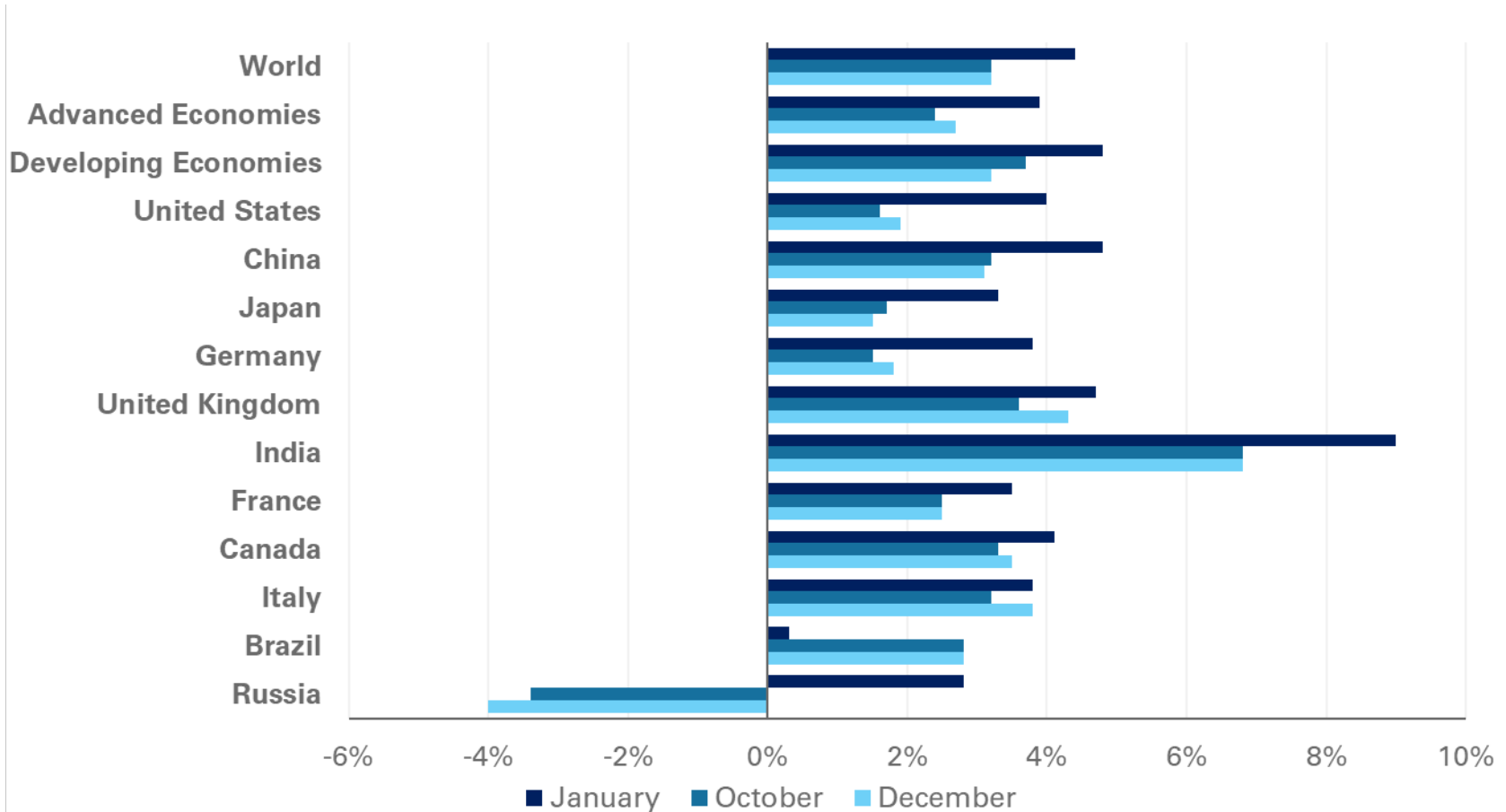
FED FUNDS EXPECTATIONS



Source: FactSet

GLOBAL GROWTH EXPECTATIONS WEAKENED

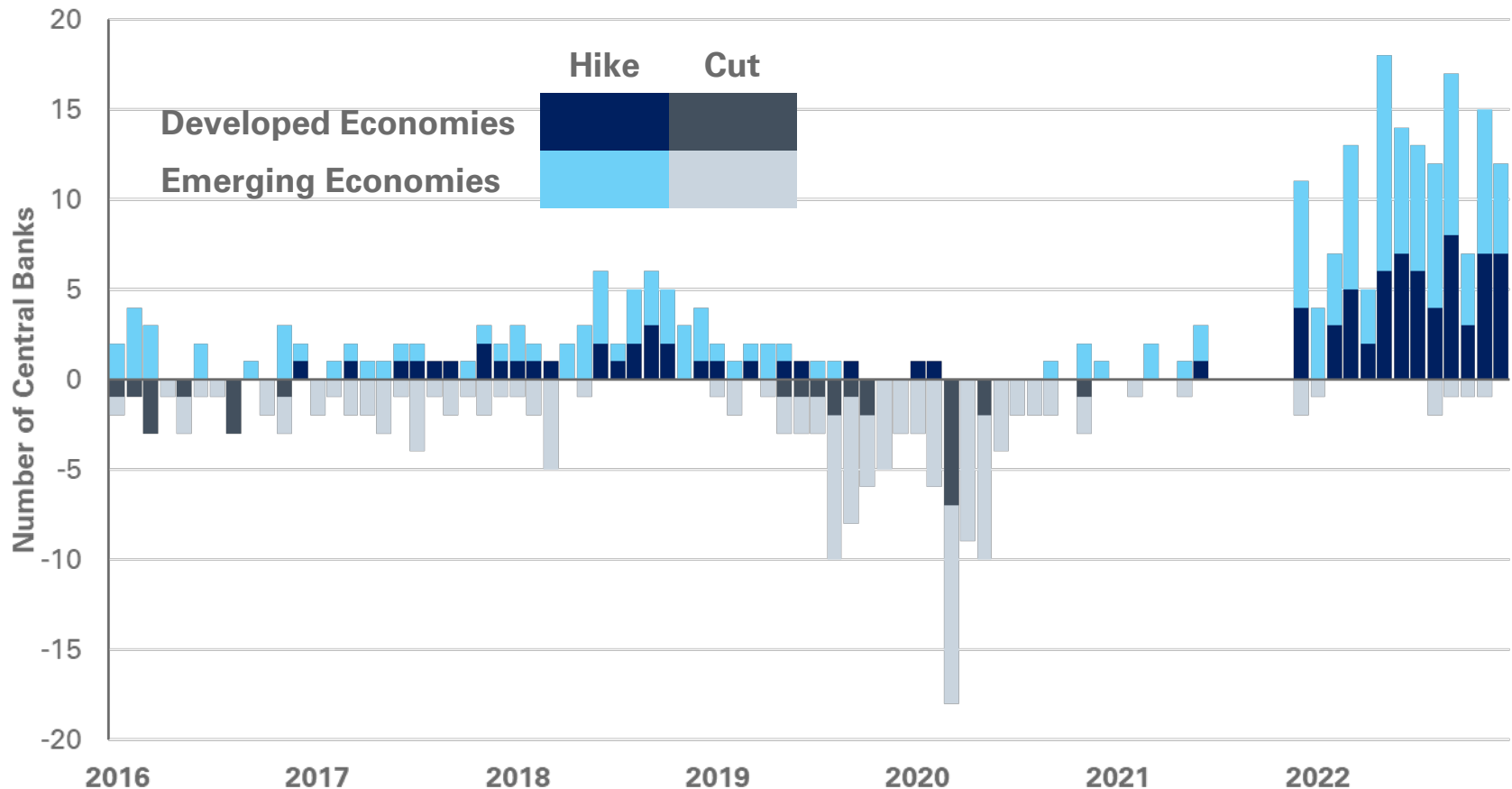
2022 REAL GDP PROJECTIONS



Source: IMF World Economic Outlook (January and October 2022), December estimates reflect FactSet Economics consensus

THE MONETARY POLICY BACKDROP IS TIGHTER

INTEREST RATE CHANGES BY GLOBAL CENTRAL BANKS



Notes: Developed Economies include Australia, Canada, countries governed by the European Central Bank, Japan, New Zealand, Norway, Sweden, Switzerland, United Kingdom, and the United States. Emerging Economies include Argentina, Brazil, Chile, China, Egypt, Ghana, India, Malaysia, Mexico, Pakistan, Peru, Philippines, South Africa, Thailand, and Turkey.
Source: FactSet



2023 KEY INVESTMENT THEMES

NEPC MARKET OUTLOOK



Stagflation Trends

Stagflation trends challenge the investment landscape and are the driving force for market dynamics



Recession Outlook

Changes in unemployment, wages, and service sector inflation will inform the likelihood and potential severity of a U.S. recession



European Energy Transition

Europe is on the clock to secure new sources of natural gas supply or face severe energy shortages



China Reopening

China's reopening will have global implications for growth, trade, and inflation and may drive a consumer resurgence in China



U.S. Dollar Trajectory

U.S. Dollar strength reveals risks in the global financial system and is a tightening of financial conditions



TOTAL FUND PERFORMANCE



TOTAL FUND PERFORMANCE SUMMARY

	Market Value (\$)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	7 Yrs (%)	10 Yrs (%)
Total Fund	7,091,598,557	5.63 (36)	0.54 (67)	-11.72 (59)	6.09 (18)	6.44 (15)	8.06 (12)	7.91 (6)
<i>Policy Index</i>		6.40 (16)	1.86 (10)	-12.92 (73)	4.89 (38)	6.08 (22)	7.65 (23)	7.75 (15)
<i>60% MSCI ACWI (Net)/ 40% Bloomberg Global Agg</i>		7.74 (2)	0.39 (76)	-17.33 (100)	0.84 (100)	2.71 (100)	5.08 (100)	4.74 (100)
<i>InvMetrics Public DB > \$1 Billion Median</i>		5.09	0.83	-11.15	4.47	5.38	7.05	7.05

- For the five-year period ending December 31, 2022, the Fund returned 6.44%, outperforming the Policy Index by 0.36% and ranking in the 15th percentile among its peers. The Fund's volatility, measured by standard deviation, ranked in the 69th percentile among its peers. The risk-adjusted return, or Sharpe Ratio, ranked in the 31st percentile, indicating that the Fund earned more return per unit of volatility than 69% of its peers.
- For the three-year period ending December 31, 2022, the Fund returned 6.09%, outperforming the Policy Index by 1.2% and ranking in the 18th percentile among its peers. Over this period, the Fund's volatility ranked in the 74th percentile, and the Fund's Sharpe Ratio ranked in the 27th percentile.
- For the one-year period ending December 31, 2022, the Fund returned -11.72%, outperforming the Policy Index by 1.2% and ranking in the 59th percentile among its peers.
- For the one-year period, the Fund experienced a net investment loss of \$927 million, which includes a net investment gain of \$383 million within the fourth calendar quarter of 2022. Assets decreased from \$8.12 billion one year ago to \$7.09 billion.
- The Fund returned 7.91% over the ten-year period ending December 31, 2022, exceeding the current actuarial rate of return of 7.25%.

*Fiscal Year ends June 30.

*Performance returns are reported net of fees unless otherwise noted

**As of 5/1/2022, the policy index was changed to 26% Russell 3000, 9% MSCI ACWI Index, 15% MSCI ACWI ex US, 10% Bloomberg Agg, 8% (50% CS Lev Loan/50% ICE BofA US HY BBB Rated Constrained Index), 18% Russell 3000+2%, 6% CPI+2%, 8% NCREIF ODCE Index.

3 Years Ending December 31, 2022

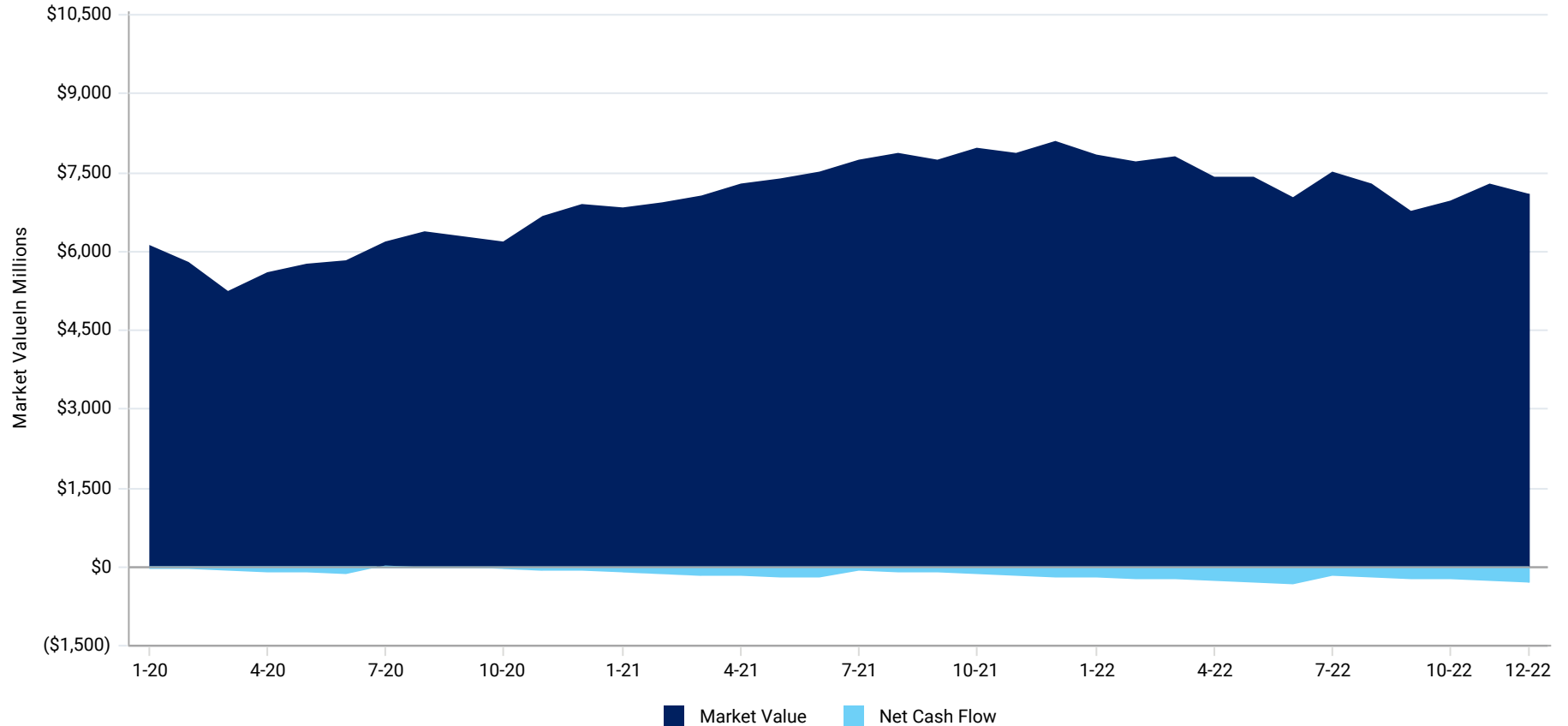
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	6.09 (18)	13.21 (74)	0.45 (27)	0.67 (27)
<i>Policy Index</i>	4.89 (38)	14.36 (87)	0.35 (56)	0.51 (50)
<i>60% MSCI ACWI (Net)/ 40% Bloomberg Global Agg</i>	0.84 (100)	14.24 (86)	0.08 (100)	0.11 (100)

5 Years Ending December 31, 2022

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	6.44 (15)	11.44 (69)	0.49 (31)	0.72 (31)
<i>Policy Index</i>	6.08 (22)	12.36 (87)	0.44 (40)	0.63 (40)
<i>60% MSCI ACWI (Net)/ 40% Bloomberg Global Agg</i>	2.71 (100)	12.20 (83)	0.18 (100)	0.25 (100)

TOTAL FUND ASSET GROWTH SUMMARY

3 Years Ending December 31, 2022

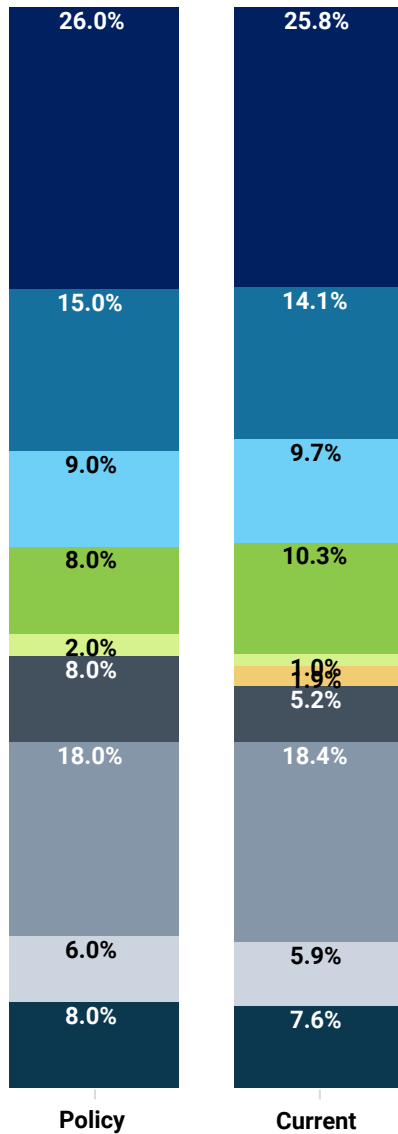


	Last Three Months	FYTD	1 Year	3 Years
Beginning Market Value	6,769,441,433	7,027,344,063	8,119,222,205	6,149,016,410
Net Cash Flow	-61,479,268	23,242,886	-100,560,980	-258,180,651
Net Investment Change	383,636,392	41,011,608	-927,062,668	1,230,521,823
Ending Market Value	7,091,598,557	7,091,598,557	7,091,598,557	7,091,598,557
Net Change	322,157,124	64,254,494	-1,027,623,647	942,582,147



ASSET ALLOCATION VS. POLICY TARGETS

Asset Allocation vs. Target



	Current (\$)	Current (%)	Policy (%)	Differences* (%)	Policy Range (%)	Within Range
■ U.S. Equity	1,832,388,113	25.8	26.0	-0.2	20.0 - 32.0	Yes
■ Non-US Equity	997,442,527	14.1	15.0	-0.9	12.0 - 20.0	Yes
■ Global Equity	687,396,248	9.7	9.0	0.7	7.0 - 13.0	Yes
■ U.S. Fixed Income	733,931,115	10.3	8.0	2.3	6.0 - 12.0	Yes
■ Treasury	74,271,778	1.0	2.0	-1.0	0.0 - 5.0	Yes
■ Overlay	135,477,158	1.9	0.0	1.9	0.0 - 3.0	Yes
■ Private Credit	366,683,029	5.2	8.0	-2.8	4.0 - 12.0	Yes
■ Private Equity	1,306,290,117	18.4	18.0	0.4	14.0 - 22.0	Yes
■ Real Assets	418,662,713	5.9	6.0	-0.1	4.0 - 8.0	Yes
■ Real Estate	539,055,759	7.6	8.0	-0.4	5.0 - 11.0	Yes
Total	7,091,598,557	100.0	100.0	0.0		

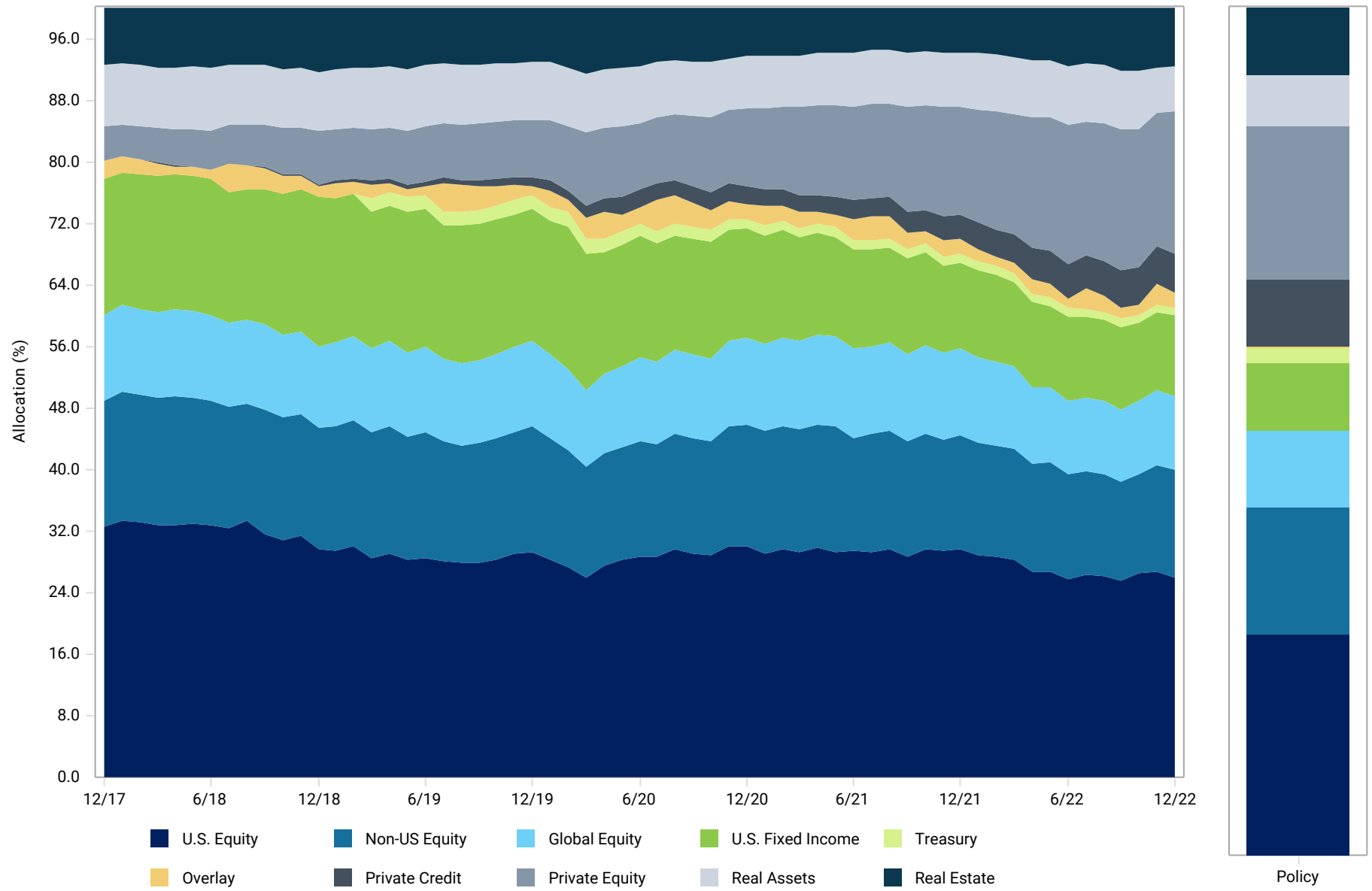
*Difference between Policy and Current Allocation

Cash represents assets in Parametric Overlay.

Policy Index as of 5/1/2022: 26% Russell 3000, 9% MSCI ACWI Index, 15% MSCI ACWI ex US, 10% Bloomberg Agg, 8% (50% CS Lev Loan/ 50% ICE BofA US HY BBB Rated Constrained Index), 18% Russell 3000+2%, 6% CPI+2%, 8% NCREIF ODCE Index



TOTAL FUND ALLOCATION HISTORY

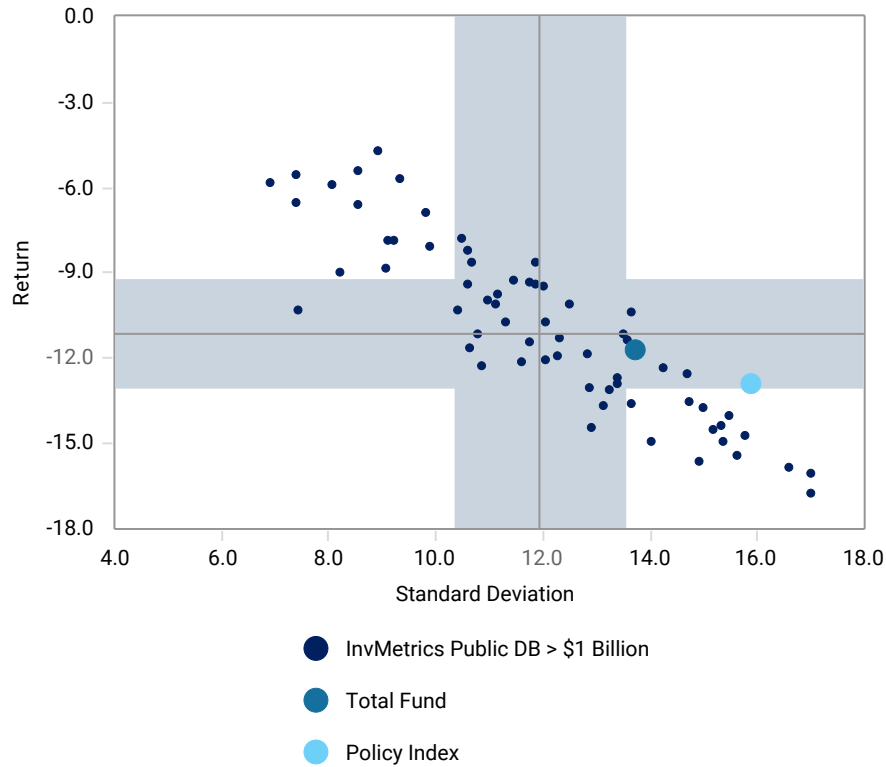


Ventura County Employees' Retirement Association

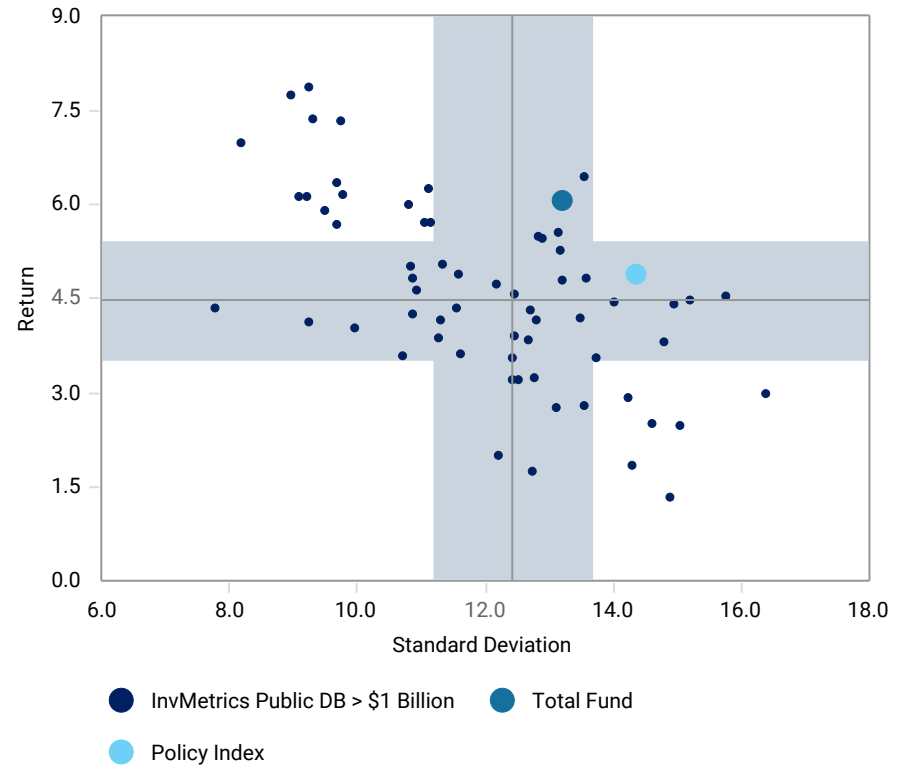
TOTAL FUND RISK/RETURN

December 31, 2022

1 Year Ending December 31, 2022



3 Years Ending December 31, 2022



1 Year Ending December 31, 2022				
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	-11.7 (59)	13.7 (76)	-1.0 (33)	-1.1 (31)
Policy Index	-12.9 (73)	15.9 (95)	-0.9 (11)	-1.1 (15)
Population	66	66	66	66

3 Years Ending December 31, 2022				
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	6.1 (18)	13.2 (74)	0.5 (27)	0.7 (27)
Policy Index	4.9 (38)	14.4 (87)	0.3 (56)	0.5 (50)
Population	64	64	64	64

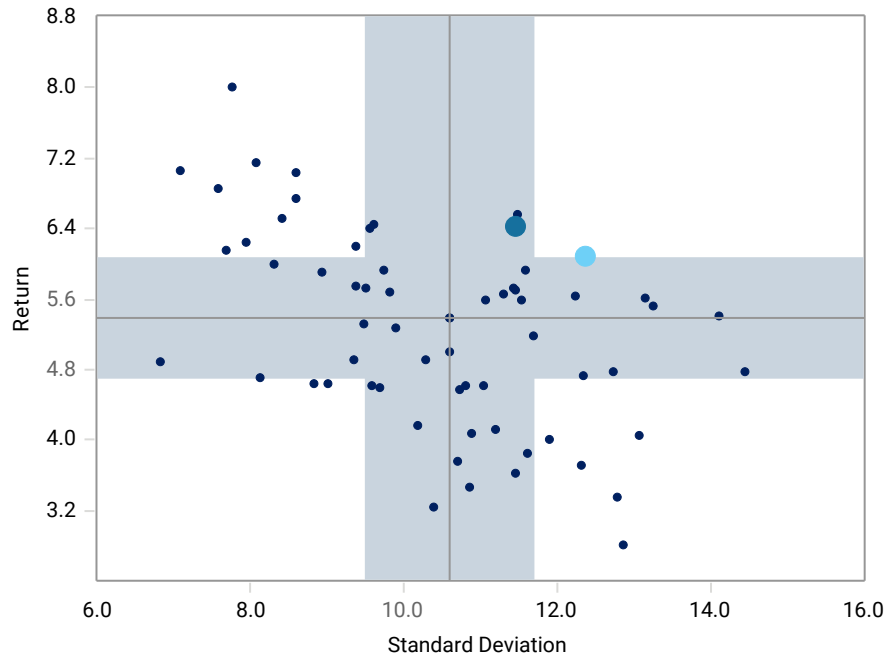


Ventura County Employees' Retirement Association

TOTAL FUND RISK/RETURN

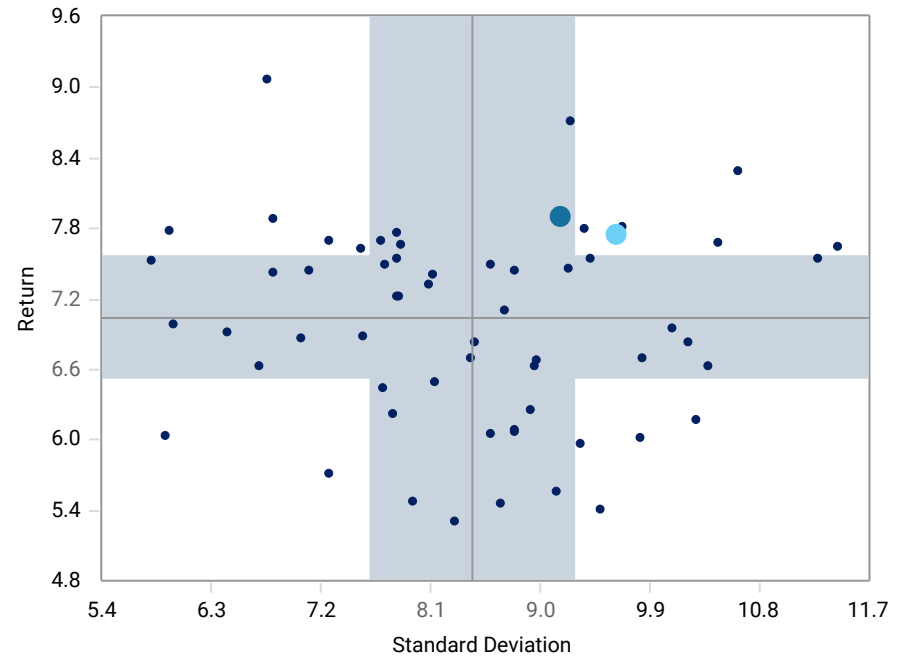
December 31, 2022

5 Years Ending December 31, 2022



- InvMetrics Public DB > \$1 Billion
- Total Fund
- Policy Index

10 Years Ending December 31, 2022



- InvMetrics Public DB > \$1 Billion
- Total Fund
- Policy Index

5 Years Ending December 31, 2022

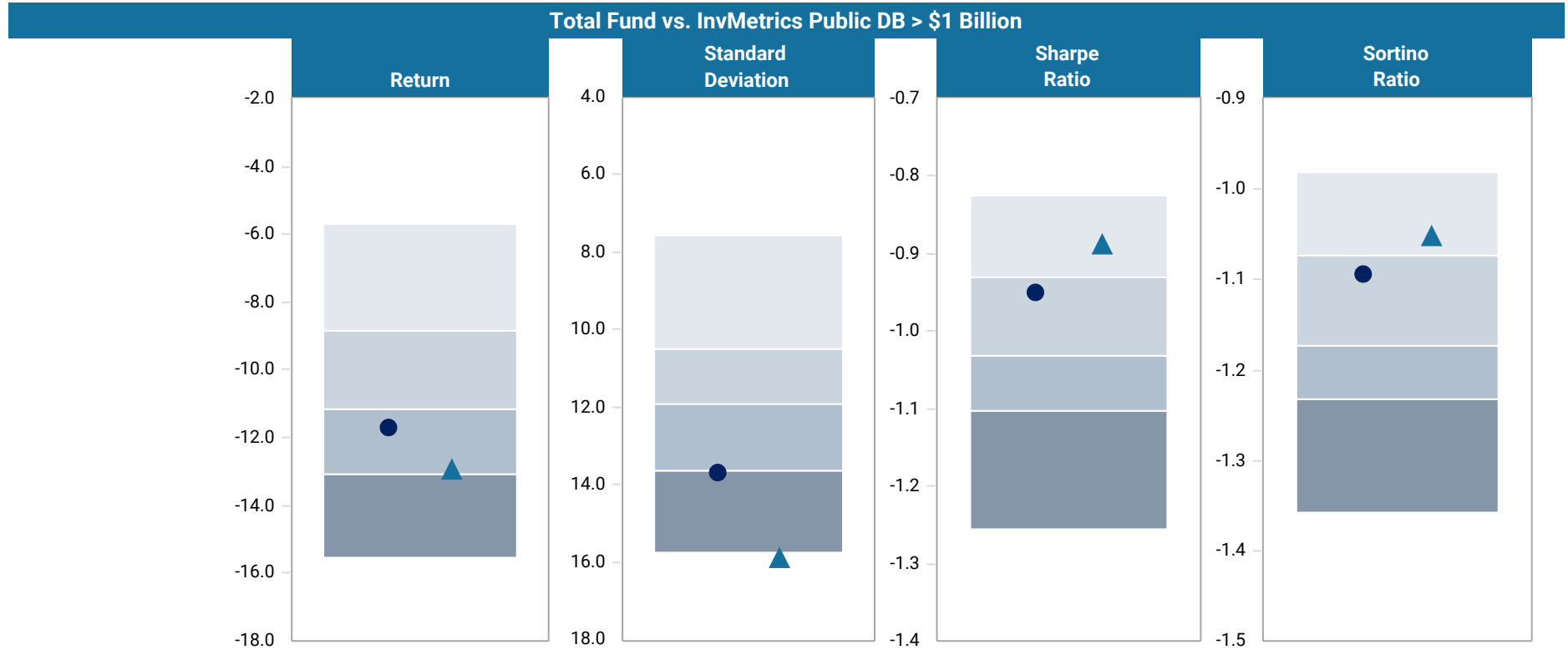
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	6.4 (15)	11.4 (69)	0.5 (31)	0.7 (31)
Policy Index	6.1 (22)	12.4 (87)	0.4 (40)	0.6 (40)
Population	63	63	63	63

10 Years Ending December 31, 2022

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	7.9 (6)	9.2 (71)	0.8 (43)	1.2 (41)
Policy Index	7.7 (15)	9.6 (82)	0.7 (52)	1.1 (48)
Population	60	60	60	60



RISK STATISTICS VS. PEER UNIVERSE - 1 YEAR

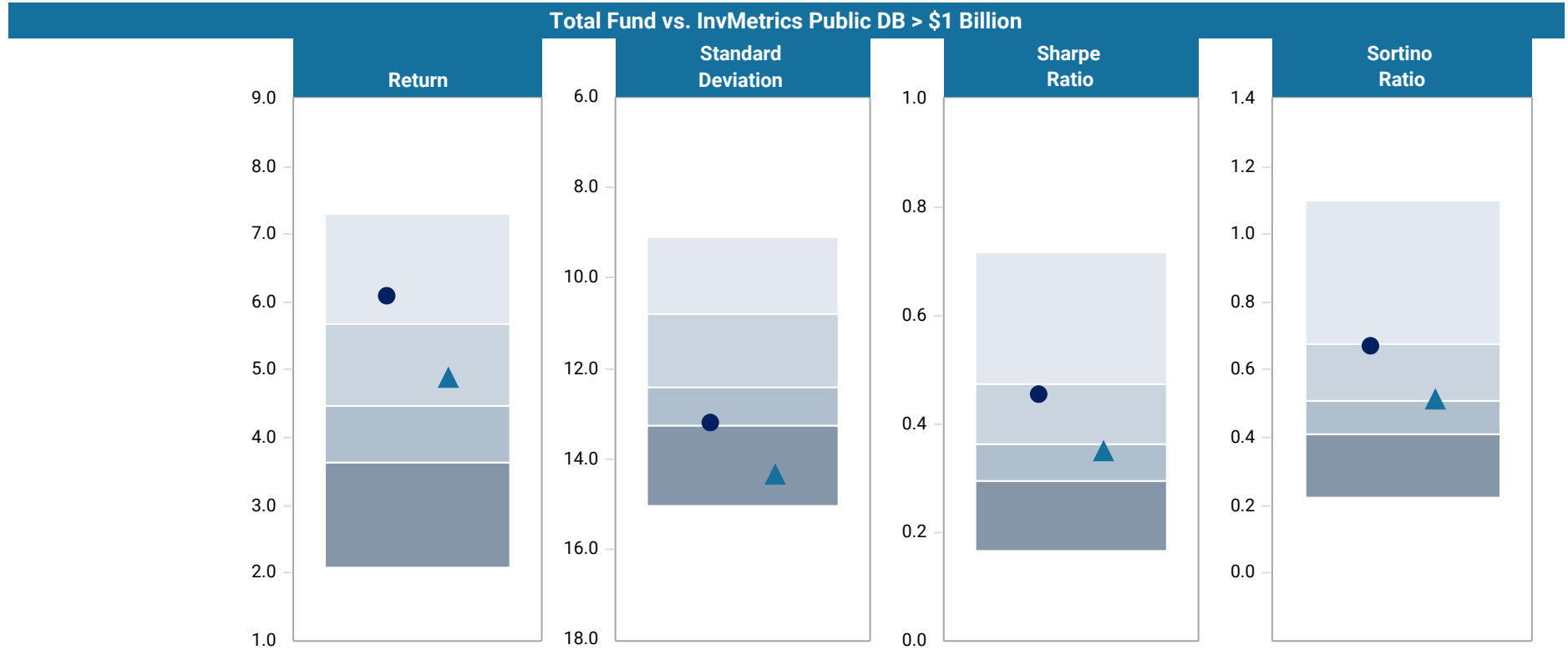


	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)
● Total Fund	-11.7 (59)	13.7 (76)	-1.0 (33)	-1.1 (31)
▲ Policy Index	-12.9 (73)	15.9 (95)	-0.9 (11)	-1.1 (15)
5th Percentile	-5.7	7.6	-0.8	-1.0
1st Quartile	-8.8	10.5	-0.9	-1.1
Median	-11.1	11.9	-1.0	-1.2
3rd Quartile	-13.1	13.6	-1.1	-1.2
95th Percentile	-15.5	15.7	-1.3	-1.4

Population 66 66 66 66



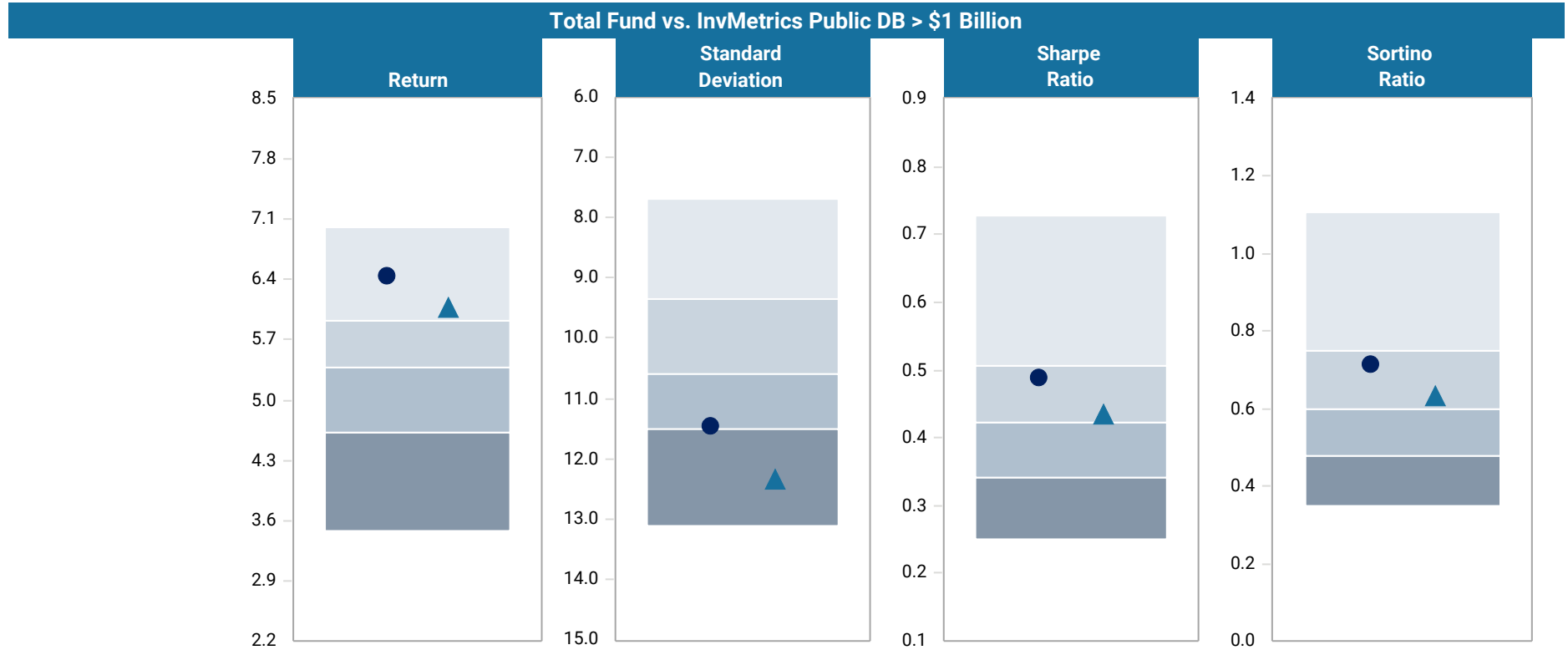
RISK STATISTICS VS. PEER UNIVERSE - 3 YEARS



	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)	3 Yrs (%)
● Total Fund	6.1 (18)	13.2 (74)	0.5 (27)	0.7 (27)
▲ Policy Index	4.9 (38)	14.4 (87)	0.3 (56)	0.5 (50)
5th Percentile	7.3	9.1	0.7	1.1
1st Quartile	5.7	10.8	0.5	0.7
Median	4.5	12.4	0.4	0.5
3rd Quartile	3.6	13.3	0.3	0.4
95th Percentile	2.1	15.0	0.2	0.2
Population	64	64	64	64



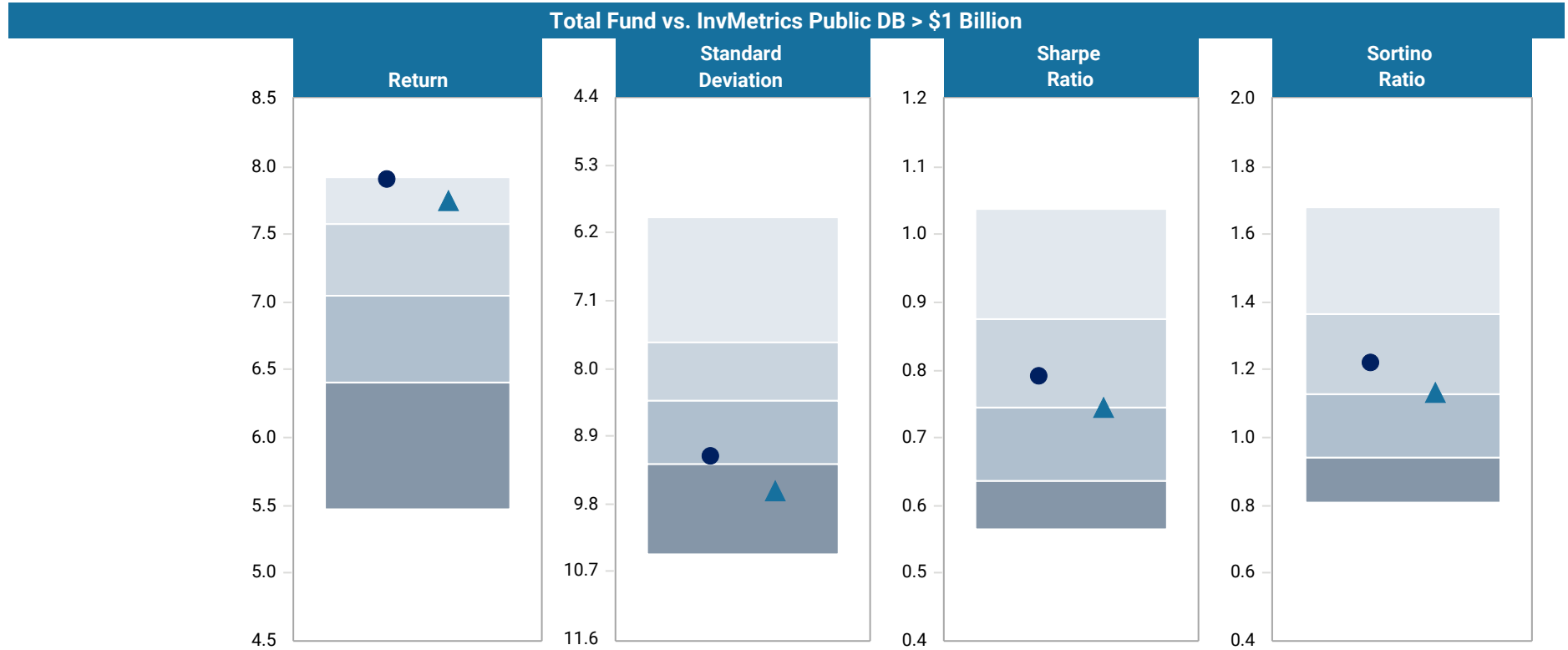
RISK STATISTICS VS. PEER UNIVERSE - 5 YEARS



	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)	5 Yrs (%)
● Total Fund	6.4 (15)	11.4 (69)	0.5 (31)	0.7 (31)
▲ Policy Index	6.1 (22)	12.4 (87)	0.4 (40)	0.6 (40)
5th Percentile	7.0	7.7	0.7	1.1
1st Quartile	5.9	9.4	0.5	0.8
Median	5.4	10.6	0.4	0.6
3rd Quartile	4.6	11.5	0.3	0.5
95th Percentile	3.5	13.1	0.3	0.3
Population	63	63	63	63



RISK STATISTICS VS. PEER UNIVERSE - 10 YEARS

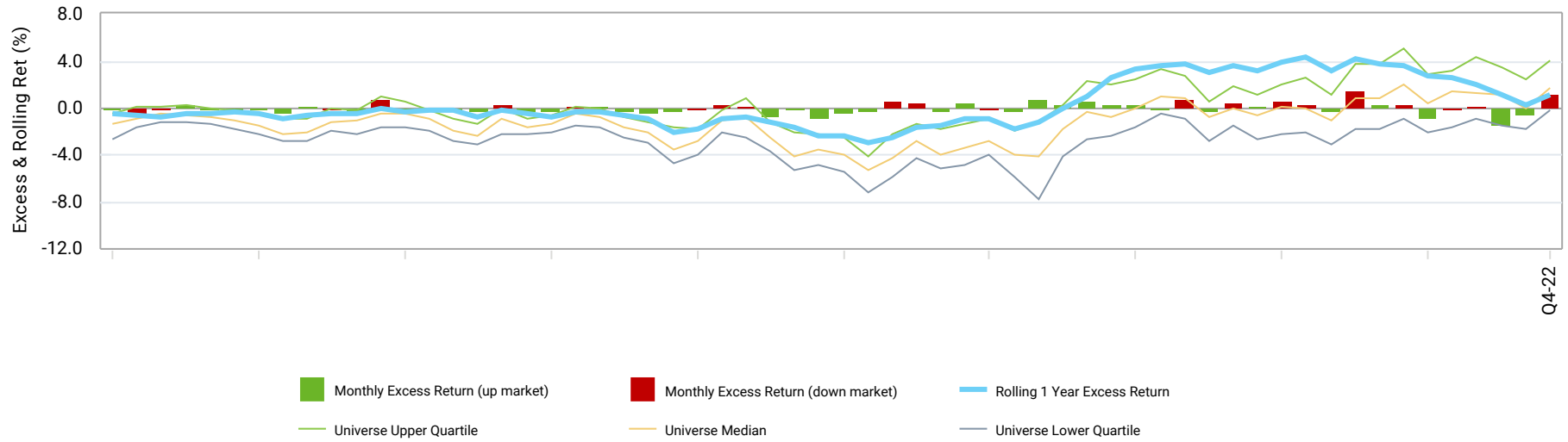


	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)	10 Yrs (%)
● Total Fund	7.9 (6)	9.2 (71)	0.8 (43)	1.2 (41)
▲ Policy Index	7.7 (15)	9.6 (82)	0.7 (52)	1.1 (48)
5th Percentile	7.9	6.0	1.0	1.7
1st Quartile	7.6	7.7	0.9	1.4
Median	7.0	8.4	0.7	1.1
3rd Quartile	6.4	9.3	0.6	0.9
95th Percentile	5.5	10.5	0.6	0.8
Population	60	60	60	60

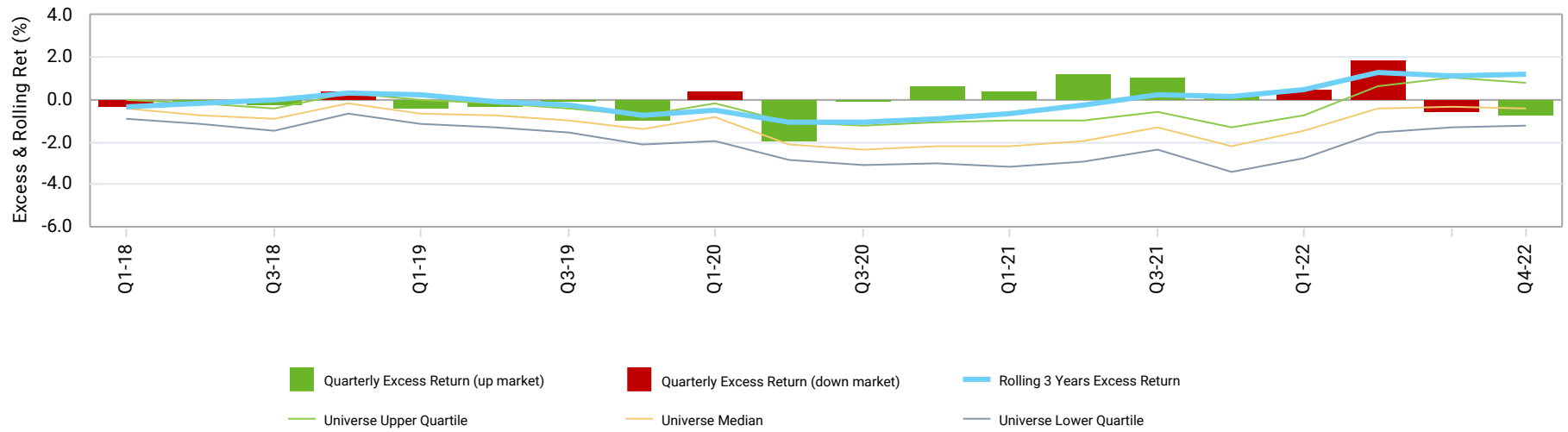


ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES

Quarter Excess Return with a Rolling 1 Year Excess Return vs. Policy Index over 5 Years Ending December 31, 2022
Comparison with the InvMetrics Public DB > \$1 Billion



Quarter Excess Return with a Rolling 3 Years Excess Return vs. Policy Index over 5 Years Ending December 31, 2022
Comparison with the InvMetrics Public DB > \$1 Billion



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
1 Year Ending December 31, 2022



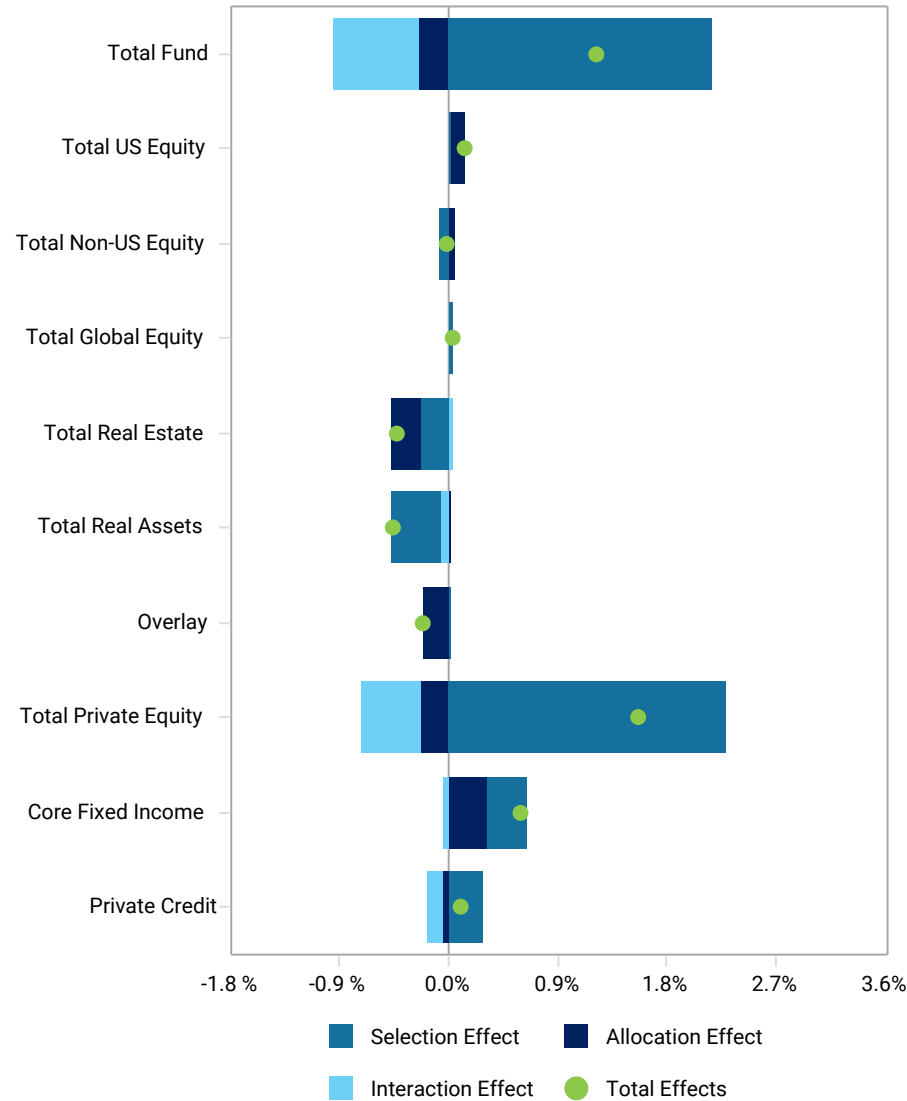
Attribution Summary
1 Year Ending December 31, 2022

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Total US Equity	-19.4	-19.2	-0.2	-0.1	-0.2	0.0	-0.2
Total Non-US Equity	-17.0	-16.0	-1.0	-0.2	0.0	0.0	-0.1
Total Global Equity	-18.1	-18.4	0.3	0.0	-0.1	0.0	0.0
Total Real Estate	3.6	6.5	-2.9	-0.2	-0.4	0.0	-0.6
Total Real Assets	-9.7	8.6	-18.3	-1.2	0.2	-0.2	-1.0
Overlay	-5.2	1.5	-6.6	0.0	0.0	0.0	0.0
Total Private Equity	1.6	-17.6	19.2	2.7	0.1	-0.3	2.8
Private Credit	3.4	-5.8	9.3	0.3	-0.2	-0.2	0.1
Core Fixed Income	-11.2	-13.0	1.8	0.2	-0.1	0.0	0.2
Total Fund	-11.7	-13.0	1.2	1.6	-0.6	-0.7	1.2

*Total Actual and Index returns are weighted average calculations.

TOTAL FUND ATTRIBUTION ANALYSIS

**Attribution Effects
3 Years Ending December 31, 2022**



**Attribution Summary
3 Years Ending December 31, 2022**

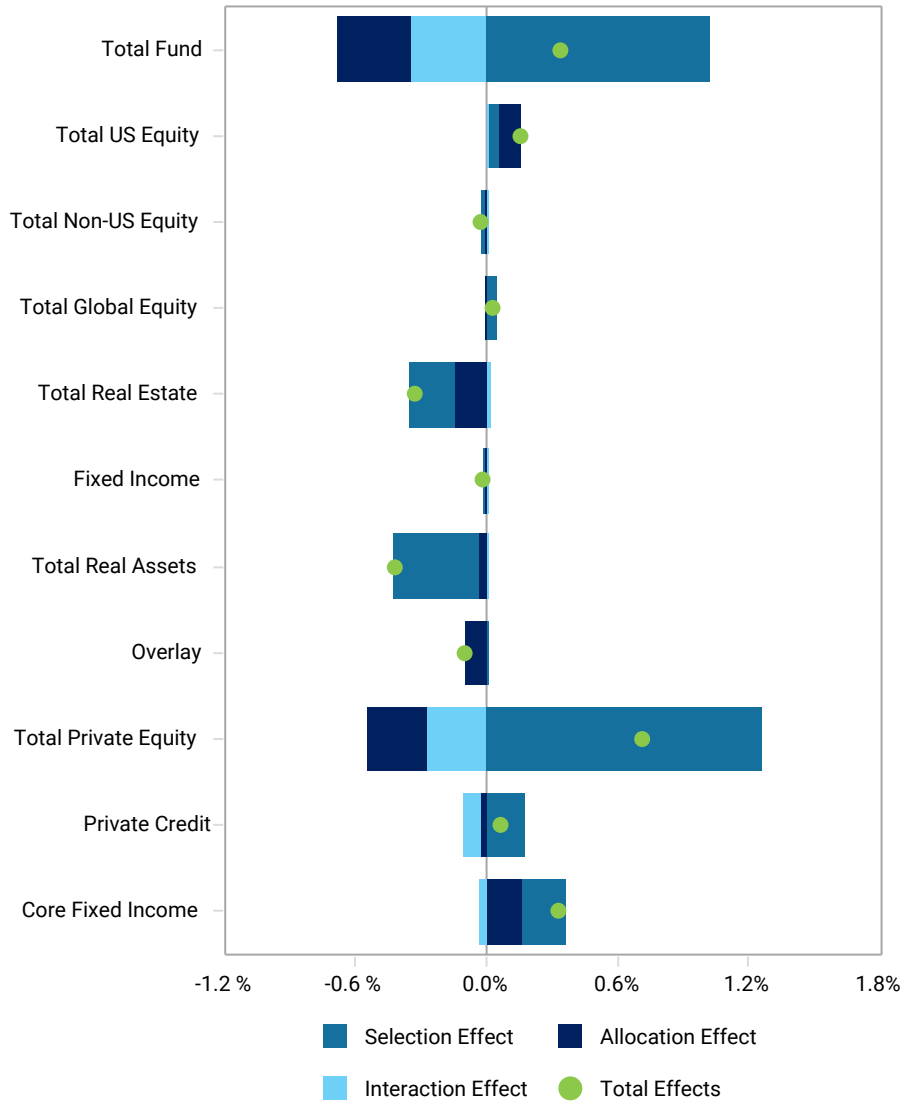
	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Total US Equity	7.1	7.1	0.0	0.0	0.1	0.0	0.1
Total Non-US Equity	-0.4	0.1	-0.4	-0.1	0.1	0.0	0.0
Total Global Equity	4.4	4.0	0.4	0.0	0.0	0.0	0.0
Total Real Estate	6.2	9.0	-2.7	-0.2	-0.2	0.0	-0.4
Total Real Assets	1.6	7.0	-5.4	-0.5	0.0	-0.1	-0.5
Overlay	-3.8	0.7	-4.5	0.0	-0.2	0.0	-0.2
Total Private Equity	25.1	9.7	15.4	1.8	-0.2	-0.5	1.6
Core Fixed Income	-0.7	-2.7	2.0	0.3	0.3	-0.1	0.6
Private Credit	3.0	-1.1	4.1	0.1	0.0	-0.1	0.1
Total Fund	6.1	4.9	1.2	1.5	-0.2	-0.7	1.2

*Total Actual and Index returns are weighted average calculations.



TOTAL FUND ATTRIBUTION ANALYSIS

**Attribution Effects
5 Years Ending December 31, 2022**



**Attribution Summary
5 Years Ending December 31, 2022**

	Wtd. Actual Return (%)	Wtd. Index Return (%)	Excess Return (%)	Selection Effect (%)	Allocation Effect (%)	Interaction Effects (%)	Total Effects (%)
Total US Equity	9.0	8.8	0.2	0.1	0.1	0.0	0.2
Total Non-US Equity	0.8	0.9	-0.1	0.0	0.0	0.0	0.0
Total Global Equity	5.6	5.2	0.4	0.0	0.0	0.0	0.0
Total Real Estate	5.2	7.7	-2.6	-0.2	-0.1	0.0	-0.3
Fixed Income	0.9	0.9	0.0	0.0	0.0	0.0	0.0
Total Real Assets	2.2	6.5	-4.3	-0.4	0.0	0.0	-0.4
Overlay	2.4	1.3	1.1	0.0	-0.1	0.0	-0.1
Total Private Equity	20.3	11.7	8.6	1.0	-0.3	-0.3	0.7
Private Credit	1.8	-0.7	2.5	0.1	0.0	-0.1	0.1
Core Fixed Income	0.3	-0.9	1.2	0.2	0.2	0.0	0.3
Total Fund	6.4	6.1	0.3	0.7	-0.3	-0.3	0.3

*Total Actual and Index returns are weighted average calculations.

ASSET CLASS RISK STATISTICS

	1 Year Ending December 31, 2022					
	1 Year Return	1 Year Standard Deviation	1 Year Jensen Alpha	1 Year Tracking Error	1 Year Information Ratio	1 Year Beta
Total Equity	-18.48 (51)	21.63 (35)	0.40 (52)	0.97 (1)	-0.04	1.02 (47)
<i>MSCI AC World Index (Net)</i>	<i>-18.36 (50)</i>	<i>21.13 (28)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total US Equity	-19.43 (62)	23.21 (46)	-0.18 (60)	0.46 (1)	-0.55	1.00 (39)
<i>Russell 3000</i>	<i>-19.21 (61)</i>	<i>23.11 (44)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total Non-US Equity	-16.97 (42)	21.06 (25)	-0.58 (44)	2.13 (3)	-0.48	1.03 (59)
<i>MSCI ACWI ex USA</i>	<i>-16.00 (37)</i>	<i>20.43 (12)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total Global Equity	-18.08 (49)	21.15 (28)	0.36 (52)	0.25 (1)	1.38 (18)	1.00 (55)
<i>MSCI AC World Index (Net)</i>	<i>-18.36 (50)</i>	<i>21.13 (28)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Fixed Income	-7.95 (41)	6.38 (40)	0.91 (30)	1.42 (1)	2.00 (2)	0.84 (56)
<i>Total Fixed Income Policy Index</i>	<i>-10.62 (58)</i>	<i>7.50 (50)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
US Fixed Income	-10.68 (58)	8.53 (64)	2.73 (19)	1.67 (16)	1.58 (37)	1.00 (30)
<i>Blmbg. U.S. Aggregate Index</i>	<i>-13.01 (74)</i>	<i>8.33 (60)</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total Real Assets	-9.75	17.43	-1.69	18.01	-0.95	-2.00
<i>Real Assets Index</i>	<i>8.58</i>	<i>2.03</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total Real Estate	3.64	9.02	-2.10	2.80	-1.03	0.86
<i>NCREIF ODCE Net</i>	<i>6.55</i>	<i>10.15</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>
Total Private Equity	1.65	6.45	0.77	23.57	0.79	0.02
<i>Private Equity Benchmark</i>	<i>-17.59</i>	<i>23.15</i>	<i>0.00</i>	<i>0.00</i>	<i>-</i>	<i>1.00</i>

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.

Peer universe: InvMetrics Public DB \$5-50B Gross (USD)



ASSET CLASS RISK STATISTICS

	3 Years Ending December 31, 2022					
	3 Years Return	3 Years Standard Deviation	3 Years Jensen Alpha	3 Years Tracking Error	3 Years Information Ratio	3 Years Beta
Total Equity	4.43 (48)	20.70 (37)	0.38 (54)	0.88 (1)	0.59 (16)	1.03 (44)
<i>MSCI AC World Index (Net)</i>	4.00 (55)	20.14 (27)	0.00	0.00	-	1.00
Total US Equity	7.10 (41)	22.05 (35)	-0.01 (48)	0.59 (1)	0.15 (28)	1.01 (49)
<i>Russell 3000</i>	7.07 (41)	21.79 (32)	0.00	0.00	-	1.00
Total Non-US Equity	-0.36 (69)	19.93 (16)	-0.38 (71)	1.91 (1)	-0.19	1.02 (62)
<i>MSCI ACWI ex USA</i>	0.07 (67)	19.53 (8)	0.00	0.00	-	1.00
Total Global Equity	4.35 (49)	20.13 (27)	0.34 (54)	0.18 (1)	1.85 (1)	1.00 (58)
<i>MSCI AC World Index (Net)</i>	4.00 (55)	20.14 (27)	0.00	0.00	-	1.00
Fixed Income	1.14 (13)	5.07 (35)	2.58 (15)	2.01 (11)	1.38 (1)	0.88 (52)
<i>Total Fixed Income Policy Index</i>	-1.65 (66)	5.32 (36)	0.00	0.00	-	1.00
US Fixed Income	-0.46 (43)	6.48 (55)	2.41 (23)	2.68 (22)	0.87 (5)	1.01 (31)
<i>Blmbg. U.S. Aggregate Index</i>	-2.71 (85)	5.85 (43)	0.00	0.00	-	1.00
Total Real Assets	1.64	15.94	1.31	16.15	-0.24	-0.89
<i>Real Assets Index</i>	7.02	1.57	0.00	0.00	-	1.00
Total Real Estate	6.22	7.16	-1.22	2.60	-1.02	0.82
<i>NCREIF ODCE Net</i>	8.97	8.28	0.00	0.00	-	1.00
Total Private Equity	25.13	10.47	24.16	23.30	0.49	0.05
<i>Private Equity Benchmark</i>	9.74	21.86	0.00	0.00	-	1.00

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.
Peer universe: InvMetrics Public DB \$5-50B Gross (USD)



ASSET CLASS RISK STATISTICS

	5 Years Ending December 31, 2022					
	Return	Standard Deviation	Jensen Alpha	Tracking Error	Information Ratio	Beta
Total Equity	5.99 (40)	18.12 (37)	0.69 (46)	0.88 (1)	0.91 (3)	1.02 (43)
<i>MSCI AC World Index (Net)</i>	5.23 (51)	17.72 (28)	0.00	0.00	-	1.00
Total US Equity	8.95 (28)	19.37 (33)	0.12 (35)	0.51 (1)	0.36 (8)	1.01 (53)
<i>Russell 3000</i>	8.79 (30)	19.22 (31)	0.00	0.00	-	1.00
Total Non-US Equity	0.81 (65)	17.36 (12)	-0.05 (69)	1.59 (1)	-0.03	1.00 (69)
<i>MSCI ACWI ex USA</i>	0.88 (65)	17.23 (8)	0.00	0.00	-	1.00
Total Global Equity	5.61 (45)	17.71 (28)	0.37 (50)	0.15 (1)	2.42 (1)	1.00 (53)
<i>MSCI AC World Index (Net)</i>	5.23 (51)	17.72 (28)	0.00	0.00	-	1.00
Fixed Income	2.35 (13)	4.33 (36)	1.58 (14)	1.67 (10)	0.97 (1)	0.86 (49)
<i>Total Fixed Income Policy Index</i>	0.68 (64)	4.69 (40)	0.00	0.00	-	1.00
US Fixed Income	1.36 (31)	5.32 (53)	1.31 (29)	2.17 (21)	0.62 (4)	0.96 (31)
<i>Blmbg. U.S. Aggregate Index</i>	0.02 (85)	5.09 (47)	0.00	0.00	-	1.00
Total Real Assets	2.18	13.47	0.16	13.60	-0.24	-0.43
<i>Real Assets Index</i>	6.48	1.36	0.00	0.00	-	1.00
Total Real Estate	5.15	5.80	-1.35	2.36	-1.04	0.82
<i>NCREIF ODCE Net</i>	7.72	6.59	0.00	0.00	-	1.00
Total Private Equity	20.29	8.91	18.90	20.88	0.29	0.02
<i>Private Equity Benchmark</i>	11.72	19.28	0.00	0.00	-	1.00

Sortino Ratio RF = Sortino Ratio Risk Free. The risk free rate is the Citi 91 Day T-Bill Index.

Peer universe: InvMetrics Public DB \$5-50B Gross (USD)



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)								Inception Date
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)		
Total Fund	7,091,598,557	100.0	100.0	5.6 (36)	0.5 (67)	-11.7 (59)	6.1 (18)	6.4 (15)	7.9 (6)	7.9 (21)	Apr-94	
Policy Index				6.4 (16)	1.9 (10)	-12.9 (73)	4.9 (38)	6.1 (22)	7.7 (15)	7.8 (23)		
Over/Under				-0.8	-1.4	1.2	1.2	0.3	0.2	0.1		
60% S&P 500 / 40% Bloomberg Aggregate				5.4 (42)	0.4 (76)	-15.8 (97)	3.8 (73)	6.0 (24)	8.1 (5)	8.0 (1)		
Over/Under				0.2	0.1	4.1	2.3	0.4	-0.2	-0.1		
InvMetrics Public DB > \$1 Billion Median				5.1	0.8	-11.1	4.5	5.4	7.0	7.3		
Total Fund ex Parametric	7,015,640,269	98.9	100.0	5.2	0.3	-11.9	6.2	6.4		7.1	Nov-13	
Total Fund ex Private Equity	5,785,308,440	81.6	82.0	6.7 (11)	1.5 (15)	-14.0 (84)	3.6 (76)	4.8 (63)	6.8 (60)	7.4 (58)	Jan-12	
Policy Index				6.4 (16)	1.9 (10)	-12.9 (73)	4.9 (38)	6.1 (22)	7.7 (15)	8.2 (15)		
Over/Under				0.3	-0.4	-1.1	-1.3	-1.3	-0.9	-0.8		
InvMetrics Public DB > \$1 Billion Median				5.1	0.8	-11.1	4.5	5.4	7.0	7.7		
Total US Equity	1,832,388,113	25.8	26.0	7.3 (63)	2.4 (66)	-19.4 (62)	7.1 (41)	9.0 (28)	12.3 (22)	9.3 (70)	Jan-94	
Russell 3000				7.2 (64)	2.4 (66)	-19.2 (61)	7.1 (41)	8.8 (30)	11.9 (31)	9.5 (65)		
Over/Under				0.1	0.0	-0.2	0.0	0.2	0.4	-0.2		
eV All US Equity Median				8.7	3.9	-17.0	6.4	7.4	10.9	9.7		
Western U.S. Index Plus	205,623,769	2.9		7.8 (63)	2.4 (63)	-20.9 (71)	6.2 (61)	8.7 (44)	12.5 (26)	6.8 (76)	Jun-07	
S&P 500 Index				7.6 (65)	2.3 (63)	-18.1 (62)	7.7 (37)	9.4 (30)	12.6 (24)	8.2 (40)		
Over/Under				0.2	0.1	-2.8	-1.5	-0.7	-0.1	-1.4		
eV US Large Cap Equity Median				9.7	3.8	-15.0	6.9	8.4	11.5	7.9		
Blackrock Russell 1000 Index	1,544,892,742	21.8		7.2 (68)	2.3 (63)	-19.2 (66)	7.4 (43)	9.2 (34)		10.5 (35)	May-17	
Russell 1000 Index				7.2 (68)	2.3 (63)	-19.1 (66)	7.3 (43)	9.1 (34)		10.5 (36)		
Over/Under				0.0	0.0	-0.1	0.1	0.1		0.0		
eV US Large Cap Equity Median				9.7	3.8	-15.0	6.9	8.4		9.8		
Blackrock Russell 2500 Index	81,871,602	1.2		7.4 (66)	4.4 (55)	-18.3 (54)	5.0 (63)	5.9 (58)		7.3 (58)	May-17	
Russell 2500 Index				7.4 (66)	4.4 (55)	-18.4 (55)	5.0 (63)	5.9 (59)		7.3 (58)		
Over/Under				0.0	0.0	0.1	0.0	0.0		0.0		
eV US Small-Mid Cap Equity Median				9.1	4.8	-17.6	6.0	6.5		7.8		

*As of 5/1/2022, the policy index was changed to 26% Russell 3000, 9% MSCI ACWI Index , 15% MSCI ACWI ex US, 10% Bloomberg Agg, 8% (50% CS Lev Loan/ 50% ICE BofA US HY BBB Rated Constrained Index), 18% Russell 3000+2%, 6% CPI+2%, 8% NCREIF ODCE Index.



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	997,442,527	14.1	15.0	14.6 (46)	4.0 (40)	-17.0 (42)	-0.4 (69)	0.8 (65)	4.1 (75)	5.7 (54)	Mar-94
MSCI ACWI ex USA				14.3 (53)	3.0 (64)	-16.0 (37)	0.1 (67)	0.9 (65)	3.8 (82)	4.7 (100)	
Over/Under				0.3	1.0	-1.0	-0.5	-0.1	0.3	1.0	
MSCI AC World x USA in LC (Net)				7.8 (100)	2.6 (69)	-9.6 (11)	2.7 (21)	3.2 (16)	6.7 (16)		
Over/Under				6.8	1.4	-7.4	-3.1	-2.4	-2.6		
eV ACWI ex-US All Cap Equity Median				14.4	3.4	-18.9	1.0	1.4	5.0	5.8	
BlackRock ACWI ex-U.S. Index	517,826,400	7.3		14.2 (54)	3.1 (58)	-16.4 (38)	0.4 (59)	1.0 (59)	4.2 (73)	2.6 (62)	Apr-07
MSCI AC World ex USA IMI (Net)				14.1 (55)	3.1 (59)	-16.6 (41)	0.2 (63)	0.8 (65)	4.0 (78)	2.4 (70)	
Over/Under				0.1	0.0	0.2	0.2	0.2	0.2	0.2	
eV ACWI ex-US All Cap Equity Median				14.4	3.4	-18.9	1.0	1.4	5.0	3.0	
Sprucegrove	238,234,533	3.4		16.0 (25)	6.0 (8)	-12.0 (21)	-0.7 (75)	-0.2 (81)	3.8 (81)	6.1 (49)	Apr-02
MSCI EAFE (Net)				17.3 (14)	6.4 (7)	-14.5 (31)	0.9 (53)	1.5 (47)	4.7 (65)	5.3 (78)	
Over/Under				-1.3	-0.4	2.5	-1.6	-1.7	-0.9	0.8	
eV ACWI ex-US All Cap Equity Median				14.4	3.4	-18.9	1.0	1.4	5.0	6.0	
Walter Scott	241,381,594	3.4		14.0 (59)	3.8 (43)	-22.6 (70)	1.2 (40)	4.2 (9)	5.8 (28)	5.6 (26)	Jan-11
MSCI EAFE (Net)				17.3 (14)	6.4 (7)	-14.5 (31)	0.9 (53)	1.5 (47)	4.7 (65)	4.1 (60)	
Over/Under				-3.3	-2.6	-8.1	0.3	2.7	1.1	1.5	
eV ACWI ex-US All Cap Equity Median				14.4	3.4	-18.9	1.0	1.4	5.0	4.6	
Total Global Equity	687,396,248	9.7	9.0	9.8 (62)	2.4 (62)	-18.1 (49)	4.4 (49)	5.6 (45)	7.9 (56)	6.2 (68)	May-05
MSCI AC World Index (Net)				9.8 (64)	2.3 (64)	-18.4 (50)	4.0 (55)	5.2 (51)	8.0 (54)	6.7 (55)	
Over/Under				0.0	0.1	0.3	0.4	0.4	-0.1	-0.5	
eV All Global Equity Median				10.8	3.3	-18.5	4.3	5.3	8.1	6.9	
BlackRock MSCI ACWI Equity Index	687,396,248	9.7		9.8 (62)	2.4 (62)	-18.1 (49)	4.4 (49)	5.6 (45)	8.4 (45)	8.9 (47)	Aug-12
MSCI AC World Index (Net)				9.8 (64)	2.3 (64)	-18.4 (50)	4.0 (55)	5.2 (51)	8.0 (54)	8.5 (55)	
Over/Under				0.0	0.1	0.3	0.4	0.4	0.4	0.4	
eV All Global Equity Median				10.8	3.3	-18.5	4.3	5.3	8.1	8.7	
Total Private Equity	1,306,290,117	18.4	18.0	0.8	-3.7	1.6	25.1	20.3	17.7	17.0	Jan-12
Private Equity Benchmark				7.7	3.4	-17.6	9.7	11.7	15.3	15.7	
Over/Under				-6.9	-7.1	19.2	15.4	8.6	2.4	1.3	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)								Inception Date
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)		
US Fixed Income	733,931,115	10.3	8.0	2.9 (30)	-0.7 (50)	-10.7 (58)	-0.5 (43)	1.4 (31)	1.9 (38)	5.1 (17)	Mar-94	
Blmbg. U.S. Aggregate Index				<u>1.9</u> (52)	<u>-3.0</u> (81)	<u>-13.0</u> (74)	<u>-2.7</u> (85)	<u>0.0</u> (85)	<u>1.1</u> (73)	<u>4.4</u> (39)		
Over/Under				1.0	2.3	2.3	2.2	1.4	0.8	0.7		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9	1.5	4.3		
BlackRock U.S. Debt Fund	153,571,855	2.2		1.7 (58)	-3.1 (85)	-13.1 (75)	-2.7 (85)	0.0 (86)	1.1 (71)	4.2 (42)	Dec-95	
Blmbg. U.S. Aggregate Index				<u>1.9</u> (52)	<u>-3.0</u> (81)	<u>-13.0</u> (74)	<u>-2.7</u> (85)	<u>0.0</u> (85)	<u>1.1</u> (73)	<u>4.2</u> (44)		
Over/Under				-0.2	-0.1	-0.1	0.0	0.0	0.0	0.0		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9	1.5	4.1		
Western	183,995,462	2.6		1.9 (49)	-3.2 (86)	-16.1 (90)	-2.9 (88)	0.1 (83)	1.7 (42)	5.0 (18)	Jan-97	
Blmbg. U.S. Aggregate Index				<u>1.9</u> (52)	<u>-3.0</u> (81)	<u>-13.0</u> (74)	<u>-2.7</u> (85)	<u>0.0</u> (85)	<u>1.1</u> (73)	<u>4.2</u> (44)		
Over/Under				0.0	-0.2	-3.1	-0.2	0.1	0.6	0.8		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9	1.5	4.1		
Reams	268,650,871	3.8		4.6 (5)	1.9 (16)	-5.0 (28)	2.1 (6)	2.7 (8)	2.1 (33)	4.7 (22)	Oct-01	
Reams Custom Index				<u>0.9</u> (88)	<u>1.2</u> (22)	<u>1.2</u> (4)	<u>0.8</u> (16)	<u>1.4</u> (29)	<u>0.9</u> (84)	<u>3.3</u> (59)		
Over/Under				3.7	0.7	-6.2	1.3	1.3	1.2	1.4		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9	1.5	3.5		
Loomis Strategic Alpha	45,612,861	0.6		2.1 (45)	1.5 (18)	-7.9 (40)	1.2 (12)	1.7 (24)		2.2 (40)	Aug-13	
Blmbg. U.S. Aggregate Index				<u>1.9</u> (52)	<u>-3.0</u> (81)	<u>-13.0</u> (74)	<u>-2.7</u> (85)	<u>0.0</u> (85)		<u>1.4</u> (70)		
Over/Under				0.2	4.5	5.1	3.9	1.7		0.8		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9		1.8		
Loomis Sayles Multi Strategy	82,100,066	1.2		2.6 (35)	-0.3 (45)	-11.5 (63)	0.4 (25)	1.9 (21)	3.1 (17)	5.2 (13)	Aug-05	
Loomis Custom Index				<u>2.5</u> (36)	<u>-1.0</u> (54)	<u>-12.2</u> (67)	<u>-1.8</u> (68)	<u>0.8</u> (60)	<u>1.9</u> (38)	<u>3.9</u> (27)		
Over/Under				0.1	0.7	0.7	2.2	1.1	1.2	1.3		
eV All US Fixed Inc Median				1.9	-0.7	-9.3	-0.8	0.9	1.5	3.1		
Treasuries	74,271,778	1.0	2.0	0.1	-5.8	-16.6	-3.6			-1.5	Apr-19	
Reams 10-Year Treasuries	74,271,778	1.0		0.1	-5.8	-16.6	-3.6			-1.5	Apr-19	
Blmbg. U.S. Treasury: 7-10 Year				<u>1.0</u>	<u>-4.6</u>	<u>-14.9</u>	<u>-3.2</u>			<u>-1.2</u>		
Over/Under				-0.9	-1.2	-1.7	-0.4			-0.3		
Private Credit	366,683,029	5.2	8.0	0.8	0.6	3.4	8.7	7.8		7.8	Jan-18	
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>	<u>3.9</u>		<u>3.9</u>		
Over/Under				-2.5	-3.0	9.2	6.8	3.9		3.9		



TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	539,055,759	7.6	8.0	-4.8	-4.8	3.6	6.2	5.2	7.3	7.4	Apr-94
NCREIF ODCE Net				<u>-5.2</u>	<u>-4.9</u>	<u>6.5</u>	<u>9.0</u>	<u>7.7</u>	<u>9.1</u>	<u>8.1</u>	
Over/Under				0.4	0.1	-2.9	-2.8	-2.5	-1.8	-0.7	
Prudential Real Estate	216,785,651	3.1		-5.7	-5.6	5.9	9.4	8.4	9.8	6.8	Jul-04
NCREIF ODCE Net				<u>-5.2</u>	<u>-4.9</u>	<u>6.5</u>	<u>9.0</u>	<u>7.7</u>	<u>9.1</u>	<u>7.3</u>	
Over/Under				-0.5	-0.7	-0.6	0.4	0.7	0.7	-0.5	
UBS Real Estate	253,972,102	3.6		-5.3	-5.5	5.3	5.1	3.7	6.1	6.5	Apr-03
NCREIF ODCE Net				<u>-5.2</u>	<u>-4.9</u>	<u>6.5</u>	<u>9.0</u>	<u>7.7</u>	<u>9.1</u>	<u>7.4</u>	
Over/Under				-0.1	-0.6	-1.2	-3.9	-4.0	-3.0	-0.9	
LaSalle Income + Growth VIII Limited Partnership	46,409,528	0.7		1.7	2.1	23.6				13.9	Mar-20
NCREIF ODCE Net				<u>-5.2</u>	<u>-4.9</u>	<u>6.5</u>				<u>9.5</u>	
Over/Under				6.9	7.0	17.1				4.4	
Alterra IOS Venture II	21,888,479	0.3		-1.3	-5.3					-5.3	Apr-22
NCREIF ODCE Net				<u>-5.2</u>	<u>-4.9</u>					<u>-0.6</u>	
Over/Under				3.9	-0.4					-4.7	
Total Real Assets	418,662,713	5.9	6.0	5.8	1.8	-9.7	1.6	2.2		3.6	May-13
Real Assets Index				<u>0.5</u>	<u>1.2</u>	<u>8.6</u>	<u>7.0</u>	<u>6.5</u>		<u>6.3</u>	
Over/Under				5.3	0.6	-18.3	-5.4	-4.3		-2.7	
Bridgewater All Weather Fund	202,599,547	2.9		7.1	-4.2	-21.9	-1.5	1.2		3.3	Sep-13
CPI + 5% (Unadjusted)				<u>1.2</u>	<u>2.6</u>	<u>11.8</u>	<u>10.2</u>	<u>9.0</u>		<u>7.7</u>	
Over/Under				5.9	-6.8	-33.7	-11.7	-7.8		-4.4	
Tortoise Energy Infrastructure	108,767,864	1.5		9.7	16.7	30.4	9.2	4.0		2.7	May-13
Tortoise MLP Index				<u>9.1</u>	<u>18.6</u>	<u>26.4</u>	<u>8.9</u>	<u>4.3</u>		<u>0.7</u>	
Over/Under				0.6	-1.9	4.0	0.3	-0.3		2.0	
Brookfield Infra Fund IV B LP	42,480,889	0.6		-4.1	-1.5	6.6				8.5	Apr-20
CPI + 2% (Unadjusted)				<u>0.5</u>	<u>1.2</u>	<u>8.6</u>				<u>7.3</u>	
Over/Under				-4.6	-2.7	-2.0				1.2	
Harbourvest Real Assets Fund IV L.P.	64,814,414	0.9		5.9	26.4	26.4				41.2	Apr-21
CPI + 2% (Unadjusted)				<u>0.5</u>	<u>1.2</u>	<u>8.6</u>				<u>8.9</u>	
Over/Under				5.4	25.2	17.8				32.3	
Overlay	135,477,158	1.9	0.0								
Parametric	75,958,288	1.1									
Abbott Capital Cash	59,518,870	0.8									

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Private Equity	1,306,290,117	18.4	18.0	0.8	-3.7	1.6	25.1	20.3	17.7	17.0	Jan-12
Private Equity Benchmark				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.7</u>	<u>11.7</u>	<u>15.3</u>	<u>15.7</u>	
Over/Under				-6.9	-7.1	19.2	15.4	8.6	2.4	1.3	
CIA Global All PE (Qtr Lag)				<u>-1.7</u>	<u>-6.7</u>	<u>-2.9</u>	<u>18.3</u>	<u>15.7</u>	<u>14.2</u>	<u>14.1</u>	
Over/Under				2.5	3.0	4.5	6.8	4.6	3.5	2.9	
Adams Street Global Fund Series	256,254,065	3.6		-0.8	-7.6	-7.0	25.7	19.9	16.4	15.9	Jan-12
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>	<u>11.0</u>	<u>14.4</u>	<u>14.8</u>	
Over/Under				-8.5	-11.0	10.6	16.5	8.9	2.0	1.1	
Harbourvest	107,693,849	1.5		23.4	-3.6	-3.3	16.3	16.7		17.9	Aug-13
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>	<u>11.0</u>		<u>12.9</u>	
Over/Under				15.7	-7.0	14.3	7.1	5.7		5.0	
Pantheon Global Secondary Funds	87,799,736	1.2		3.7	8.7	3.2	15.5	12.4	13.9	12.7	Jan-12
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>	<u>11.0</u>	<u>14.4</u>	<u>14.8</u>	
Over/Under				-4.0	5.3	20.8	6.3	1.4	-0.5	-2.1	
Drive Capital Fund II	29,760,745	0.4		0.5	1.8	-9.0	19.8	20.8		3.0	Sep-16
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>	<u>11.0</u>		<u>13.1</u>	
Over/Under				-7.2	-1.6	8.6	10.6	9.8		-10.1	
Abbott Secondary Opportunities	10,609,192	0.1		0.0	-5.4	-10.6	26.2	22.5		22.5	Jan-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>	<u>11.0</u>		<u>11.0</u>	
Over/Under				-7.7	-8.8	7.0	17.0	11.5		11.5	
Clearlake Capital Partners V	12,541,051	0.2		-6.2	-12.0	-35.5	17.1			26.6	Mar-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.0</u>	
Over/Under				-13.9	-15.4	-17.9	7.9			15.6	
Battery Ventures XII	29,556,064	0.4		-9.6	-12.4	4.4	45.8			26.1	Apr-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.6</u>	
Over/Under				-17.3	-15.8	22.0	36.6			14.5	
Insight Venture Partners X	51,437,953	0.7		-20.0	-20.0	-10.2	30.6			22.2	May-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.7</u>	
Over/Under				-27.7	-23.4	7.4	21.4			10.5	
GTCR Fund XII	32,264,261	0.5		-0.3	-3.6	6.0	34.4			2.9	Jun-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.2</u>	
Over/Under				-8.0	-7.0	23.6	25.2			-8.3	
Buenaventure One, LLC	193,909,152	2.7		1.2	-1.2	11.1	24.3			17.1	Jul-18
Russell 3000 + 2%				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.2</u>	
Over/Under				-6.5	-4.6	28.7	15.1			5.9	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
ECI 11	7,412,380	0.1		-6.0	-8.4	5.7	19.7			23.1	Jan-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>14.9</u>	
Over/Under				-13.7	-11.8	23.3	10.5			8.2	
Buenaventure Two, LLC	1,958,680	0.0		2.8	0.1	12.9	21.0			35.6	Dec-18
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.9</u>	
Over/Under				-4.9	-3.3	30.5	11.8			23.7	
The Resolute Fund IV L.P.	30,317,298	0.4		11.6	11.6	24.7	33.7			44.3	Jan-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>14.9</u>	
Over/Under				3.9	8.2	42.3	24.5			29.4	
GGV Capital VII L.P.	13,847,882	0.2		-1.6	-5.3	5.9	17.7			6.0	Feb-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>12.8</u>	
Over/Under				-9.3	-8.7	23.5	8.5			-6.8	
GGV Discovery II, L.P.	3,921,640	0.1		-1.0	-1.2	36.1	31.2			22.3	Feb-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>12.8</u>	
Over/Under				-8.7	-4.6	53.7	22.0			9.5	
Drive Capital Overdrive Fund I	13,914,068	0.2		-0.5	-1.1	1.6	34.1			25.8	May-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>10.8</u>	
Over/Under				-8.2	-4.5	19.2	24.9			15.0	
Riverside Micro Cap Fund V, LP	11,731,408	0.2		4.6	4.6	34.1	21.6			7.1	May-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>10.8</u>	
Over/Under				-3.1	1.2	51.7	12.4			-3.7	
GGV Capital VII Plus, LP	3,080,682	0.0		-0.2	-7.3	0.9	10.0			8.4	Jun-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>13.1</u>	
Over/Under				-7.9	-10.7	18.5	0.8			-4.7	
Astorg VII L.P.	10,587,347	0.1		-10.3	-16.4	-2.4	22.0			-0.4	Jul-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.2</u>	
Over/Under				-18.0	-19.8	15.2	12.8			-11.6	
M/C Partners Fund VIII LP. Limited Partnership	7,941,748	0.1		1.7	1.7	28.8	-2.8			-7.9	Jul-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.2</u>	
Over/Under				-6.0	-1.7	46.4	-12.0			-19.1	
Genstar Capital Partners IX	9,694,200	0.1		6.0	20.6	31.8	34.9			-192.1	Aug-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.0</u>	
Over/Under				-1.7	17.2	49.4	25.7			-203.1	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Genstar IX Opportunities Fund I	2,925,589	0.0		5.5	22.2	32.4	26.3			22.7	Aug-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.0</u>	
Over/Under				-2.2	18.8	50.0	17.1			11.7	
ABRY Partners IX, LP	11,904,070	0.2		12.8	12.9	25.2	11.7			5.1	Sep-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.9</u>	
Over/Under				5.1	9.5	42.8	2.5			-6.8	
Advent International GPE IX LP	12,634,210	0.2		-9.3	-17.4	-30.4	36.9			32.0	Nov-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>11.1</u>	
Over/Under				-17.0	-20.8	-12.8	27.7			20.9	
Drive Capital Fund III LP	7,934,235	0.1		-2.0	10.2	16.0	8.5			8.3	Dec-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>10.0</u>	
Over/Under				-9.7	6.8	33.6	-0.7			-1.7	
Oak HC/FT Partners III LP	23,440,571	0.3		-2.9	-29.6	-6.6	23.1			22.4	Dec-19
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>10.0</u>	
Over/Under				-10.6	-33.0	11.0	13.9			12.4	
TA XIII A LP	12,371,026	0.2		0.5	3.0	12.8	26.0			26.0	Jan-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>	<u>9.2</u>			<u>9.2</u>	
Over/Under				-7.2	-0.4	30.4	16.8			16.8	
Dover Street X, LP	29,797,484	0.4		-1.5	3.6	14.7				37.6	Feb-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>9.5</u>	
Over/Under				-9.2	0.2	32.3				28.1	
Hellman & Friedman CP IX	22,737,190	0.3		-3.1	-8.2	0.2				6.5	Apr-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>19.7</u>	
Over/Under				-10.8	-11.6	17.8				-13.2	
Clearlake Capital Partners VI	26,297,210	0.4		-2.7	-4.8	2.9				28.8	Jun-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>12.9</u>	
Over/Under				-10.4	-8.2	20.5				15.9	
Flexpoint Fund IV	7,987,624	0.1		-1.0	17.5	37.3				31.7	Jun-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>12.9</u>	
Over/Under				-8.7	14.1	54.9				18.8	
Battery Ventures XIII	16,798,338	0.2		-2.1	-2.7	19.4				18.1	Jun-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>12.9</u>	
Over/Under				-9.8	-6.1	37.0				5.2	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Green Equity Investors VIII, L.P.	13,769,676	0.2		0.0	-0.2	3.0				2.4	Nov-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>10.5</u>	
Over/Under				-7.7	-3.6	20.6				-8.1	
CapVest Private Equity Partners IV, SCSp	9,855,075	0.1		16.4	9.0	29.8				48.3	Dec-20
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>4.9</u>	
Over/Under				8.7	5.6	47.4				43.4	
Drive Capital Fund IV LP	3,628,598	0.1		-1.5	-2.9	-5.4				-5.4	Jan-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-17.6</u>	
Over/Under				-9.2	-6.3	12.2				12.2	
Great Hill Equity Partners VII	7,069,170	0.1		1.4	-2.8	-11.3				103.9	Jan-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>2.8</u>	
Over/Under				-6.3	-6.2	6.3				101.1	
Great Hill Equity Partners VIII	1,288,109	0.0								0.0	Dec-22
<i>Russell 3000 + 2%</i>										<u>-5.7</u>	
Over/Under										5.7	
Vitruvian Investment Partners IV	13,941,574	0.2		14.7	8.6	34.0				-100.0	Jan-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>2.8</u>	
Over/Under				7.0	5.2	51.6				-102.8	
CRV XVIII, L.P.	15,278,875	0.2		-1.8	-0.9	13.1				7.6	Mar-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>1.4</u>	
Over/Under				-9.5	-4.3	30.7				6.2	
GGV Capital VIII, L.P.	5,685,365	0.1		3.5	1.3	8.8				13.1	May-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-3.7</u>	
Over/Under				-4.2	-2.1	26.4				16.8	
GGV Discovery III, L.P.	2,506,721	0.0		12.0	14.7	29.0				32.9	May-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-3.7</u>	
Over/Under				4.3	11.3	46.6				36.6	
Oak HC/FT Partners IV, L.P.	8,587,276	0.1		-0.4	5.6	22.9				9.9	May-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-3.7</u>	
Over/Under				-8.1	2.2	40.5				13.6	
Prairie Capital VII, LP	4,032,289	0.1		-2.6	-0.5	13.6				2.9	Jun-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-4.3</u>	
Over/Under				-10.3	-3.9	31.2				7.2	
GGV Capital VIII Plus, L.P.	1,111,244	0.0		2.0	1.6	5.8				3.9	Jul-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-6.2</u>	
Over/Under				-5.7	-1.8	23.4				10.1	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Flexpoint Overage Fund IV A, L.P.	2,530,080	0.0		-3.4	-0.3	11.6				7.4	Jul-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-6.2</u>	
Over/Under				-11.1	-3.7	29.2				13.6	
Abbott Secondary Opportunities II, L.P.	15,965,750	0.2		2.3	31.0	29.5				81.3	Jul-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-6.2</u>	
Over/Under				-5.4	27.6	47.1				87.5	
Genstar X Opportunities Fund I, LP	3,024,953	0.0		1.6	-0.7	10.0				7.1	Sep-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-10.2</u>	
Over/Under				-6.1	-4.1	27.6				17.3	
Charlesbank Overage Fund X	4,647,139	0.1		2.7	5.2	10.9				9.5	Sep-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-10.2</u>	
Over/Under				-5.0	1.8	28.5				19.7	
Charlesbank Equity Fund X	10,472,111	0.1		4.7	3.4	7.3				4.8	Sep-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-10.2</u>	
Over/Under				-3.0	0.0	24.9				15.0	
GTCR Fund XIII	15,196,449	0.2		-1.5	0.6	27.8				49.4	Sep-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-10.2</u>	
Over/Under				-9.2	-2.8	45.4				59.6	
Hellman & Friedman CP X	9,811,763	0.1		-2.9	-8.6	-10.0				-8.6	Nov-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-13.3</u>	
Over/Under				-10.6	-12.0	7.6				4.7	
Genstar Capital Partners X LP	7,742,612	0.1		2.1	0.0	12.6				12.8	Dec-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-13.2</u>	
Over/Under				-5.6	-3.4	30.2				26.0	
TA XIV A LP	5,357,866	0.1		-4.8	-11.6	-11.6				-10.8	Dec-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-13.2</u>	
Over/Under				-12.5	-15.0	6.0				2.4	
CVC Capital Partners VIII A LP	12,522,325	0.2		14.2	18.0	16.5				29.7	Dec-21
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>	<u>-17.6</u>				<u>-13.2</u>	
Over/Under				6.5	14.6	34.1				42.9	
Drive Capital Overdrive	3,989,911	0.1		-2.0	-3.7					-6.3	Feb-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-12.6</u>	
Over/Under				-9.7	-7.1					6.3	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Drive Capital Fund IV LP	3,628,598	0.1		-1.5	-2.9					-5.4	Feb-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-12.6</u>	
Over/Under				-9.2	-6.3					7.2	
Kinderhook Capital Fund 7	2,679,129	0.0		-6.3	-7.7					-21.9	Mar-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-10.5</u>	
Over/Under				-14.0	-11.1					-11.4	
Pantheon Global Secondary Funds VII	4,940,091	0.1		0.0	14.1					14.1	Apr-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-13.4</u>	
Over/Under				-7.7	10.7					27.5	
Harbourvest PTN Co Inv VI LP	8,096,603	0.1		-9.9	-8.5					-8.5	Apr-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-13.4</u>	
Over/Under				-17.6	-11.9					4.9	
Clearlake Capital Partners VII	8,090,058	0.1		-1.7	-1.7					-1.7	May-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>-5.1</u>	
Over/Under				-9.4	-5.1					3.4	
Battery Ventures XIV	685,318	0.0		-8.2							Jul-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>3.4</u>	
Over/Under				-15.9							
Oak HC/FT Partners V	627,467	0.0		71.7							Jul-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>	<u>3.4</u>					<u>3.4</u>	
Over/Under				64.0							
Advent International GPE X LP	580,992	0.0		-17.0						-17.0	Oct-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>						<u>7.7</u>	
Over/Under				-24.7						-24.7	
GTCR Strategic Growth 1/A	68,000	0.0		0.0						0.0	Oct-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>						<u>7.7</u>	
Over/Under				-7.7						-7.7	
GTCR Strategic Growth 1/B	250,670	0.0		2.3						2.3	Oct-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>						<u>7.7</u>	
Over/Under				-5.4						-5.4	
Riverside Micro Cap Fund VI, LP	1,195,911	0.0		-10.0						-10.0	Oct-22
<i>Russell 3000 + 2%</i>				<u>7.7</u>						<u>7.7</u>	
Over/Under				-17.7						-17.7	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							Inception Date
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	
Private Credit	366,683,029	5.2	8.0	0.8	0.6	3.4	8.7	7.8	7.8	7.8	Jan-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>	<u>3.9</u>	<u>3.9</u>	<u>3.9</u>	
Over/Under				-2.5	-3.0	9.2	6.8	3.9	3.9	3.9	
CVI Credit Value Fund IV	27,458,338	0.4		2.0	6.6	7.7	8.0	7.1	7.1	7.1	Jan-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>	<u>3.9</u>	<u>3.9</u>	<u>3.9</u>	
Over/Under				-1.3	3.0	13.5	6.1	3.2	3.2	3.2	
Monroe Capital Private Credit Fund III	21,522,017	0.3		2.1	3.0	9.2	11.4		11.1	11.1	Dec-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>		<u>4.0</u>	<u>4.0</u>	
Over/Under				-1.2	-0.6	15.0	9.5		7.1	7.1	
Bluebay Direct Lending Fund III	16,978,894	0.2		1.6	3.4	8.4	10.0		10.2	10.2	Apr-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>		<u>3.3</u>	<u>3.3</u>	
Over/Under				-1.7	-0.2	14.2	8.1		6.9	6.9	
Pimco Private Income Fund	71,099,567	1.0		-0.9	0.3	1.6	9.4		8.9	8.9	Nov-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>		<u>2.5</u>	<u>2.5</u>	
Over/Under				-4.2	-3.3	7.4	7.5		6.4	6.4	
Bridge Debt Strategies III Limited Partner	16,530,145	0.2		1.5	1.5	3.3	6.9		6.9	6.9	Jan-20
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>	<u>1.9</u>		<u>1.9</u>	<u>1.9</u>	
Over/Under				-1.8	-2.1	9.1	5.0		5.0	5.0	
PIMCO Corp Opps Fund III	50,042,692	0.7		2.1	-4.2	1.9			35.5	35.5	May-20
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>			<u>5.5</u>	<u>5.5</u>	
Over/Under				-1.2	-7.8	7.7			30.0	30.0	
Torchlight Debt Fund VII, L.P.	13,149,725	0.2		1.1	4.3	6.0			3.6	3.6	Jan-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>			<u>-0.2</u>	<u>-0.2</u>	
Over/Under				-2.2	0.7	11.8			3.8	3.8	
Crayhill Principal Strategies Fund II	12,230,042	0.2		0.5	4.1	30.1			20.9	20.9	May-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>			<u>-1.7</u>	<u>-1.7</u>	
Over/Under				-2.8	0.5	35.9			22.6	22.6	
CVI Credit Value Fund A V	19,905,306	0.3		-1.0	0.3	-1.0			4.3	4.3	Jun-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				<u>3.3</u>	<u>3.6</u>	<u>-5.8</u>			<u>-2.1</u>	<u>-2.1</u>	
Over/Under				-4.3	-3.3	4.8			6.4	6.4	

TOTAL FUND PERFORMANCE DETAIL (NET)

	Allocation			Performance (%)							
	Market Value (\$)	% of Portfolio	Policy (%)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Bridge Debt Strategies Fund IV LP	19,617,349	0.3		1.3	0.8	6.2				4.9	Aug-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-3.1	
Over/Under				-2.0	-2.8	12.0				8.0	
Cross Ocean USD ESS Fund IV	15,358,332	0.2		1.0	1.6	8.4				6.2	Sep-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-3.7	
Over/Under				-2.3	-2.0	14.2				9.9	
Harbourvest Direct Lending L	18,144,633	0.3		1.3	1.3	1.3				0.9	Sep-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-3.7	
Over/Under				-2.0	-2.3	7.1				4.6	
Bain Capital Special Situations Asia Fund II	2,769,804	0.0		0.2	2.1	9.5				8.1	Nov-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-4.5	
Over/Under				-3.1	-1.5	15.3				12.6	
Arbour Lane Credit Opp III A	11,482,304	0.2		-1.2	-9.7	-10.6				-9.9	Dec-21
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-4.3	
Over/Under				-4.5	-13.3	-4.8				-5.6	
Monroe Private Capital Fund IV	25,153,684	0.4		2.0	1.9	6.1				6.1	Jan-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6	-5.8				-5.8	
Over/Under				-1.3	-1.7	11.9				11.9	
Crescent Cove Opportunity Fund LP	12,323,946	0.2		-0.4	-1.1					-1.1	May-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index				3.3	3.6					-1.9	
Over/Under				-3.7	-4.7					0.8	
VWH Partners III LP	12,916,252	0.2								0.0	Dec-22
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index										-0.2	
Over/Under										0.2	

Policy Index as of May, 2022: 26% Russell 3000 Index, 15% MSCI ACWI ex U.S., 9% MSCI ACWI, 18% Private Equity Benchmark, 10% Bloomberg US Aggregate, 8% 50% CS Leveraged Loan/50% ICE BofA US HY BB-B Rated Constrained Index, 8% NCREIF ODCE, 6% Real Assets Index.

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Bloomberg Aggregate.

Loomis Custom Index: 65% Bloomberg US Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.

Total Real Assets Benchmark CPI + 4% from inception until 6/30/2019; CPI +2% from 6/30/2019 to present.

Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. Fiscal year ends 6/30.

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Fund	-11.7 (59)	19.1 (11)	13.6 (14)	18.7 (21)	-3.6 (49)	16.0 (40)	8.6 (18)	-0.9 (63)	6.3 (34)	18.1 (18)
Policy Index	-12.9 (73)	15.8 (46)	14.4 (10)	20.7 (7)	-3.6 (47)	16.2 (32)	7.4 (65)	0.7 (24)	6.6 (24)	17.2 (29)
Over/Under	1.2	3.3	-0.8	-2.0	0.0	-0.2	1.2	-1.6	-0.3	0.9
60% S&P 500 / 40% Bloomberg Aggregate	-15.8 (97)	15.9 (46)	14.7 (8)	22.2 (2)	-2.3 (20)	14.2 (72)	8.3 (24)	1.3 (13)	10.6 (1)	17.6 (23)
Over/Under	4.1	3.2	-1.1	-3.5	-1.3	1.8	0.3	-2.2	-4.3	0.5
InvMetrics Public DB > \$1 Billion Median	-11.1	15.3	11.4	17.1	-3.7	15.7	7.6	-0.4	5.7	15.6
Total Fund ex Parametric	-11.9	19.7	13.4	18.6	-3.7	16.3	9.2	-1.0	6.3	
Total Fund ex Private Equity	-14.0 (84)	14.8 (56)	12.7 (30)	19.6 (14)	-4.8 (72)	15.9 (43)	8.6 (16)	-1.4 (75)	6.1 (42)	16.2 (39)
Policy Index	-12.9 (73)	15.8 (46)	14.4 (10)	20.7 (7)	-3.6 (47)	16.2 (32)	7.4 (65)	0.7 (24)	6.6 (24)	17.2 (29)
Over/Under	-1.1	-1.0	-1.7	-1.1	-1.2	-0.3	1.2	-2.1	-0.5	-1.0
InvMetrics Public DB > \$1 Billion Median	-11.1	15.3	11.4	17.1	-3.7	15.7	7.6	-0.4	5.7	15.6
Total US Equity	-19.4 (62)	26.5 (44)	20.5 (38)	31.6 (28)	-5.0 (35)	21.4 (38)	13.0 (47)	0.5 (37)	12.5 (29)	34.0 (56)
Russell 3000	-19.2 (61)	25.7 (49)	20.9 (36)	31.0 (32)	-5.2 (38)	21.1 (39)	12.7 (48)	-0.5 (45)	11.3 (39)	33.5 (59)
Over/Under	-0.2	0.8	-0.4	0.6	0.2	0.3	0.3	1.0	1.2	0.5
eV All US Equity Median	-17.0	25.6	15.3	28.2	-7.2	19.1	12.4	-1.1	9.7	34.8
Western U.S. Index Plus	-20.9 (71)	28.5 (28)	17.9 (42)	33.5 (20)	-5.3 (50)	22.7 (37)	13.8 (28)	1.1 (41)	14.2 (20)	32.9 (52)
S&P 500 Index	-18.1 (62)	28.7 (27)	18.4 (40)	31.5 (34)	-4.4 (41)	21.8 (43)	12.0 (39)	1.4 (39)	13.7 (25)	32.4 (57)
Over/Under	-2.8	-0.2	-0.5	2.0	-0.9	0.9	1.8	-0.3	0.5	0.5
eV US Large Cap Equity Median	-15.0	26.0	14.4	29.1	-5.4	20.7	10.1	0.0	11.6	33.1
Blackrock Russell 1000 Index	-19.2 (66)	26.6 (46)	21.0 (34)	31.4 (34)	-4.7 (44)					
Russell 1000 Index	-19.1 (66)	26.5 (48)	21.0 (34)	31.4 (35)	-4.8 (45)					
Over/Under	-0.1	0.1	0.0	0.0	0.1					
eV US Large Cap Equity Median	-15.0	26.0	14.4	29.1	-5.4					
Blackrock Russell 2500 Index	-18.3 (54)	18.2 (69)	20.0 (44)	27.8 (53)	-9.9 (49)					
Russell 2500 Index	-18.4 (55)	18.2 (69)	20.0 (44)	27.8 (53)	-10.0 (50)					
Over/Under	0.1	0.0	0.0	0.0	0.1					
eV US Small-Mid Cap Equity Median	-17.6	23.7	17.1	28.3	-10.4					

*As of 5/1/2022, the policy index was changed to 26% Russell 3000, 9% MSCI ACWI Index, 15% MSCI ACWI ex US, 10% Bloomberg Agg, 8% (50% CS Lev Loan/ 50% ICE BofA US HY BBB Rated Constrained Index), 18% Russell 3000+2%, 6% CPI+2%, 8% NCREIF ODCE Index.

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Non-US Equity	-17.0	9.0	9.3	21.0	-13.0	26.5	6.6	-4.8	-3.6	16.3
MSCI ACWI ex USA	-16.0	7.8	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3
Over/Under	-1.0	1.2	-1.4	-0.5	1.2	-0.7	2.1	0.9	0.3	1.0
MSCI AC World x USA in LC (Net)	-9.6	13.0	6.0	20.8	-10.6	18.2	7.0	1.9	6.0	20.1
Over/Under	-7.4	-4.0	3.3	0.2	-2.4	8.3	-0.4	-6.7	-9.6	-3.8
BlackRock ACWI ex-U.S. Index	-16.4 (38)	8.7 (56)	11.2 (66)	21.9 (72)	-14.6 (45)	28.1 (58)	4.7 (27)	-4.5 (74)	-3.8 (46)	16.0 (76)
MSCI AC World ex USA IMI (Net)	-16.6 (41)	8.5 (58)	11.1 (66)	21.6 (73)	-14.8 (47)	27.8 (59)	4.4 (30)	-4.6 (75)	-3.9 (47)	15.8 (77)
Over/Under	0.2	0.2	0.1	0.3	0.2	0.3	0.3	0.1	0.1	0.2
eV ACWI ex-US All Cap Equity Median	-18.9	9.8	15.8	24.7	-15.2	29.0	1.5	-0.6	-4.1	20.0
Sprucegrove	-12.0 (21)	6.9 (71)	4.0 (85)	17.3 (87)	-13.8 (38)	27.5 (62)	11.9 (2)	-9.1 (95)	-3.2 (42)	17.1 (69)
MSCI EAFE (Net)	-14.5 (31)	11.3 (35)	7.8 (76)	22.0 (71)	-13.8 (38)	25.0 (78)	1.0 (55)	-0.8 (53)	-4.9 (61)	22.8 (34)
Over/Under	2.5	-4.4	-3.8	-4.7	0.0	2.5	10.9	-8.3	1.7	-5.7
eV ACWI ex-US All Cap Equity Median	-18.9	9.8	15.8	24.7	-15.2	29.0	1.5	-0.6	-4.1	20.0
Walter Scott	-22.6 (70)	11.3 (35)	20.4 (37)	27.5 (31)	-7.1 (2)	26.6 (67)	5.1 (25)	-0.4 (48)	-3.5 (44)	11.8 (92)
MSCI EAFE (Net)	-14.5 (31)	11.3 (35)	7.8 (76)	22.0 (71)	-13.8 (38)	25.0 (78)	1.0 (55)	-0.8 (53)	-4.9 (61)	22.8 (34)
Over/Under	-8.1	0.0	12.6	5.5	6.7	1.6	4.1	0.4	1.4	-11.0
eV ACWI ex-US All Cap Equity Median	-18.9	9.8	15.8	24.7	-15.2	29.0	1.5	-0.6	-4.1	20.0
Total Global Equity	-18.1	18.9	16.7	27.1	-9.0	24.5	9.0	-3.8	1.9	22.0
MSCI AC World Index (Net)	-18.4	18.5	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8
Over/Under	0.3	0.4	0.4	0.5	0.4	0.5	1.1	-1.4	-2.3	-0.8
BlackRock MSCI ACWI Equity Index	-18.1 (49)	18.9 (49)	16.7 (46)	27.1 (47)	-9.0 (49)	24.5 (41)	8.4 (33)	-2.0 (65)	4.6 (44)	23.2 (62)
MSCI AC World Index (Net)	-18.4 (50)	18.5 (52)	16.3 (48)	26.6 (50)	-9.4 (52)	24.0 (44)	7.9 (37)	-2.4 (67)	4.2 (47)	22.8 (64)
Over/Under	0.3	0.4	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4
eV All Global Equity Median	-18.5	18.7	15.6	26.5	-9.2	23.1	6.1	-0.4	3.7	25.8
Total Private Equity	1.6	54.8	24.5	8.3	18.7	16.9	7.6	14.7	19.0	17.9
Private Equity Benchmark	-17.6	28.8	24.5	34.9	-2.4	24.8	16.0	3.5	15.8	37.5
Over/Under	19.2	26.0	0.0	-26.6	21.1	-7.9	-8.4	11.2	3.2	-19.6

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
US Fixed Income	-10.7	-0.6	11.1	8.5	0.0	4.4	4.9	0.3	3.0	-0.1
<i>Blmbg. U.S. Aggregate Index</i>	<u>-13.0</u>	<u>-1.5</u>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>
Over/Under	2.3	0.9	3.6	-0.2	0.0	0.9	2.3	-0.2	-3.0	1.9
BlackRock U.S. Debt Fund	-13.1 (75)	-1.6 (87)	7.6 (35)	8.7 (43)	0.0 (56)	3.6 (54)	2.7 (55)	0.6 (47)	6.2 (29)	-2.0 (77)
<i>Blmbg. U.S. Aggregate Index</i>	<u>-13.0</u> (74)	<u>-1.5</u> (85)	<u>7.5</u> (36)	<u>8.7</u> (44)	<u>0.0</u> (56)	<u>3.5</u> (55)	<u>2.6</u> (56)	<u>0.5</u> (47)	<u>6.0</u> (32)	<u>-2.0</u> (77)
Over/Under	-0.1	-0.1	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.0
eV All US Fixed Inc Median	-9.3	-0.7	5.9	8.1	0.3	3.8	3.1	0.5	3.9	-0.3
Western	-16.1 (90)	-1.6 (86)	10.9 (14)	10.6 (27)	-0.6 (68)	6.0 (28)	4.1 (40)	0.9 (34)	7.4 (19)	-1.2 (64)
<i>Blmbg. U.S. Aggregate Index</i>	<u>-13.0</u> (74)	<u>-1.5</u> (85)	<u>7.5</u> (36)	<u>8.7</u> (44)	<u>0.0</u> (56)	<u>3.5</u> (55)	<u>2.6</u> (56)	<u>0.5</u> (47)	<u>6.0</u> (32)	<u>-2.0</u> (77)
Over/Under	-3.1	-0.1	3.4	1.9	-0.6	2.5	1.5	0.4	1.4	0.8
eV All US Fixed Inc Median	-9.3	-0.7	5.9	8.1	0.3	3.8	3.1	0.5	3.9	-0.3
Reams	-5.0 (28)	0.1 (44)	12.0 (11)	6.6 (66)	0.7 (43)	2.5 (70)	6.0 (29)	0.3 (56)	-3.6 (100)	2.5 (21)
<i>Reams Custom Index</i>	<u>1.2</u> (4)	<u>0.2</u> (42)	<u>1.1</u> (94)	<u>2.6</u> (94)	<u>2.1</u> (5)	<u>1.1</u> (91)	<u>0.7</u> (88)	<u>0.2</u> (59)	<u>0.2</u> (94)	<u>-0.4</u> (52)
Over/Under	-6.2	-0.1	10.9	4.0	-1.4	1.4	5.3	0.1	-3.8	2.9
eV All US Fixed Inc Median	-9.3	-0.7	5.9	8.1	0.3	3.8	3.1	0.5	3.9	-0.3
Loomis Strategic Alpha	-7.9 (40)	1.5 (31)	10.9 (13)	4.3 (83)	0.6 (46)	3.3 (60)	6.1 (29)	-1.0 (76)	2.4 (66)	
<i>Blmbg. U.S. Aggregate Index</i>	<u>-13.0</u> (74)	<u>-1.5</u> (85)	<u>7.5</u> (36)	<u>8.7</u> (44)	<u>0.0</u> (56)	<u>3.5</u> (55)	<u>2.6</u> (56)	<u>0.5</u> (47)	<u>6.0</u> (32)	
Over/Under	5.1	3.0	3.4	-4.4	0.6	-0.2	3.5	-1.5	-3.6	
eV All US Fixed Inc Median	-9.3	-0.7	5.9	8.1	0.3	3.8	3.1	0.5	3.9	
Loomis Sayles Multi Strategy	-11.5 (63)	1.3 (32)	12.9 (10)	9.4 (35)	-0.8 (71)	8.4 (12)	8.2 (20)	-2.3 (85)	6.8 (23)	1.4 (24)
<i>Loomis Custom Index</i>	<u>-12.2</u> (67)	<u>0.5</u> (37)	<u>7.3</u> (39)	<u>10.2</u> (29)	<u>-0.6</u> (67)	<u>4.5</u> (40)	<u>7.0</u> (25)	<u>-1.2</u> (78)	<u>4.6</u> (44)	<u>0.8</u> (29)
Over/Under	0.7	0.8	5.6	-0.8	-0.2	3.9	1.2	-1.1	2.2	0.6
eV All US Fixed Inc Median	-9.3	-0.7	5.9	8.1	0.3	3.8	3.1	0.5	3.9	-0.3
Treasuries	-16.6	-3.6	11.4							
Reams 10-Year Treasuries	-16.6	-3.6	11.4							
<i>Blmbg. U.S. Treasury: 7-10 Year</i>	<u>-14.9</u>	<u>-3.7</u>	<u>10.0</u>							
Over/Under	-1.7	-0.5	1.4							
Private Credit	3.4	15.9	7.1	8.4	4.7					
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8	5.8	6.1	13.3	1.0					
Over/Under	9.2	10.1	1.0	-4.9	3.7					

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Real Estate	3.6	18.8	-2.7	0.3	6.9	5.9	6.8	12.8	11.6	10.6
NCREIF ODCE Net	<u>6.5</u>	<u>21.0</u>	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>
Over/Under	-2.9	-2.2	-3.0	-4.1	-0.5	-0.8	-1.0	-1.2	0.1	-2.3
Prudential Real Estate	5.9	21.1	2.1	5.9	8.2	7.0	8.2	14.5	12.5	13.8
NCREIF ODCE Net	<u>6.5</u>	<u>21.0</u>	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>
Over/Under	-0.6	0.1	1.8	1.5	0.8	0.3	0.4	0.5	1.0	0.9
UBS Real Estate	5.3	15.6	-4.7	-2.8	6.2	5.4	6.2	11.9	10.6	9.3
NCREIF ODCE Net	<u>6.5</u>	<u>21.0</u>	<u>0.3</u>	<u>4.4</u>	<u>7.4</u>	<u>6.7</u>	<u>7.8</u>	<u>14.0</u>	<u>11.5</u>	<u>12.9</u>
Over/Under	-1.2	-5.4	-5.0	-7.2	-1.2	-1.3	-1.6	-2.1	-0.9	-3.6
LaSalle Income + Growth VIII Limited Partnership	23.6	44.5								
NCREIF ODCE Net	<u>6.5</u>	<u>21.0</u>								
Over/Under	17.1	23.5								
Alterra IOS Venture II										
NCREIF ODCE Net										
Over/Under										
Total Real Assets	-9.7	16.4	0.0	14.4	-7.3	7.2	11.7	-13.8	10.2	
Real Assets Index	<u>8.6</u>	<u>9.2</u>	<u>3.4</u>	<u>5.3</u>	<u>6.0</u>	<u>6.2</u>	<u>6.2</u>	<u>4.8</u>	<u>4.8</u>	
Over/Under	-18.3	7.2	-3.4	9.1	-13.3	1.0	5.5	-18.6	5.4	
Bridgewater All Weather Fund	-21.9	11.8	9.6	16.7	-5.0	11.9	10.0	-6.8	7.6	
CPI + 5% (Unadjusted)	<u>11.8</u>	<u>12.4</u>	<u>6.4</u>	<u>7.4</u>	<u>7.0</u>	<u>7.2</u>	<u>7.2</u>	<u>5.8</u>	<u>5.8</u>	
Over/Under	-33.7	-0.6	3.2	9.3	-12.0	4.7	2.8	-12.6	1.8	
Tortoise Energy Infrastructure	30.4	41.4	-29.4	8.0	-13.3	-3.5	15.9	-27.1	15.7	
Tortoise MLP Index	<u>26.4</u>	<u>41.6</u>	<u>-27.9</u>	<u>10.9</u>	<u>-13.7</u>	<u>-5.7</u>	<u>21.0</u>	<u>-34.1</u>	<u>8.0</u>	
Over/Under	4.0	-0.2	-1.5	-2.9	0.4	2.2	-5.1	7.0	7.7	
Brookfield Infra Fund IV B LP	6.6	13.9								
CPI + 2% (Unadjusted)	<u>8.6</u>	<u>9.2</u>								
Over/Under	-2.0	4.7								
Harbourvest Real Assets Fund IV L.P.	26.4									
CPI + 2% (Unadjusted)	<u>8.6</u>									
Over/Under	17.8									
Overlay										
Parametric										
Abbott Capital Cash										

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Total Private Equity	1.6	54.8	24.5	8.3	18.7	16.9	7.6	14.7	19.0	17.9
Private Equity Benchmark	<u>-17.6</u>	<u>28.8</u>	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.8</u>	<u>16.0</u>	<u>3.5</u>	<u>15.8</u>	<u>37.5</u>
Over/Under	19.2	26.0	0.0	-26.6	21.1	-7.9	-8.4	11.2	3.2	-19.6
C/A Global All PE (Qtr Lag)	<u>-2.9</u>	<u>48.2</u>	<u>15.0</u>	<u>7.8</u>	<u>16.4</u>	<u>15.9</u>	<u>8.5</u>	<u>7.0</u>	<u>16.3</u>	<u>15.9</u>
Over/Under	4.5	6.6	9.5	0.5	2.3	1.0	-0.9	7.7	2.7	2.0
Adams Street Global Fund Series	<u>-7.0</u>	<u>68.4</u>	<u>26.9</u>	<u>4.1</u>	<u>19.6</u>	<u>13.4</u>	<u>7.1</u>	<u>10.3</u>	<u>19.6</u>	<u>15.7</u>
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>	<u>-3.3</u>	<u>23.6</u>	<u>15.0</u>	<u>2.5</u>	<u>14.8</u>	<u>36.2</u>
Over/Under	10.6	40.2	3.6	-29.5	22.9	-10.2	-7.9	7.8	4.8	-20.5
Harbourvest	<u>-3.3</u>	<u>36.0</u>	<u>19.6</u>	<u>12.2</u>	<u>22.7</u>	<u>23.2</u>	<u>6.7</u>	<u>28.5</u>	<u>18.5</u>	
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>	<u>-3.3</u>	<u>23.6</u>	<u>15.0</u>	<u>2.5</u>	<u>14.8</u>	
Over/Under	14.3	7.8	-3.7	-21.4	26.0	-0.4	-8.3	26.0	3.7	
Pantheon Global Secondary Funds	<u>3.2</u>	<u>40.2</u>	<u>6.4</u>	<u>-0.4</u>	<u>17.3</u>	<u>24.1</u>	<u>15.5</u>	<u>6.4</u>	<u>16.7</u>	<u>14.9</u>
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>	<u>-3.3</u>	<u>23.6</u>	<u>15.0</u>	<u>2.5</u>	<u>14.8</u>	<u>36.2</u>
Over/Under	20.8	12.0	-16.9	-34.0	20.6	0.5	0.5	3.9	1.9	-21.3
Drive Capital Fund II	<u>-9.0</u>	<u>68.3</u>	<u>12.3</u>	<u>53.0</u>	<u>-2.5</u>	<u>-33.7</u>				
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>	<u>-3.3</u>	<u>23.6</u>				
Over/Under	8.6	40.1	-11.0	19.4	0.8	-57.3				
Abbott Secondary Opportunities	<u>-10.6</u>	<u>59.9</u>	<u>40.5</u>	<u>8.9</u>	<u>26.0</u>					
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>	<u>-3.3</u>					
Over/Under	7.0	31.7	17.2	-24.7	29.3					
Clearlake Capital Partners V	<u>-35.5</u>	<u>94.9</u>	<u>27.8</u>	<u>50.2</u>						
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	-17.9	66.7	4.5	16.6						
Battery Ventures XII	<u>4.4</u>	<u>102.2</u>	<u>46.7</u>	<u>5.7</u>						
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	22.0	74.0	23.4	-27.9						
Insight Venture Partners X	<u>-10.2</u>	<u>69.7</u>	<u>46.2</u>	<u>21.4</u>						
Russell 3000 + 2%	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	7.4	41.5	22.9	-12.2						

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
GTCR Fund XII	6.0	47.4	55.6	-18.8						
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	23.6	19.2	32.3	-52.4						
Buenaventure One, LLC	11.1	46.9	17.7	6.7						
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	28.7	18.7	-5.6	-26.9						
ECI 11	5.7	34.2	20.8	34.2						
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	23.3	6.0	-2.5	0.6						
Buenaventure Two, LLC	12.9	35.3	16.0	16.8						
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	30.5	7.1	-7.3	-16.8						
The Resolute Fund IV L.P.	24.7	34.6	42.2	81.6						
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>	<u>33.6</u>						
Over/Under	42.3	6.4	18.9	48.0						
GGV Capital VII L.P.	5.9	40.2	9.7							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	23.5	12.0	-13.6							
GGV Discovery II, L.P.	36.1	49.2	11.2							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	53.7	21.0	-12.1							
Drive Capital Overdrive Fund I	1.6	63.1	45.4							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	19.2	34.9	22.1							
Riverside Micro Cap Fund V, LP	34.1	32.0	1.7							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	51.7	3.8	-21.6							
GGV Capital VII Plus, LP	0.9	14.2	15.7							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	18.5	-14.0	-7.6							

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Astorg VII L.P.	-2.4	14.7	62.3							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	15.2	-13.5	39.0							
M/C Partners Fund VIII LP. Limited Partnership	28.8	9.7	-35.1							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	46.4	-18.5	-58.4							
Genstar Capital Partners IX	31.8	46.4	27.1							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	49.4	18.2	3.8							
Genstar IX Opportunities Fund I	32.4	35.1	12.6							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	50.0	6.9	-10.7							
ABRY Partners IX, LP	25.2	30.9	-15.0							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	42.8	2.7	-38.3							
Advent International GPE IX LP	-30.4	185.4	29.0							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	-12.8	157.2	5.7							
Drive Capital Fund III LP	16.0	21.1	-9.0							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	33.6	-7.1	-32.3							
Oak HC/FT Partners III LP	-6.6	93.6	3.2							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	11.0	65.4	-20.1							
TA XIII A LP	12.8	74.1	1.9							
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>	<u>23.3</u>							
Over/Under	30.4	45.9	-21.4							

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Dover Street X, LP	14.7	58.0								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	32.3	29.8								
Hellman & Friedman CP IX	0.2	21.7								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	17.8	-6.5								
Clearlake Capital Partners VI	2.9	67.4								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	20.5	39.2								
Flexpoint Fund IV	37.3	33.9								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	54.9	5.7								
Battery Ventures XIII	19.4	26.0								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	37.0	-2.2								
Green Equity Investors VIII, L.P.	3.0	2.2								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	20.6	-26.0								
CapVest Private Equity Partners IV, SCSp	29.8	71.2								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	47.4	43.0								
Drive Capital Fund IV LP	-5.4									
<i>Russell 3000 + 2%</i>	<u>-17.6</u>									
Over/Under	12.2									
Great Hill Equity Partners VII	-11.3	368.6								
<i>Russell 3000 + 2%</i>	<u>-17.6</u>	<u>28.2</u>								
Over/Under	6.3	340.4								

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Great Hill Equity Partners VIII										
<i>Russell 3000 + 2%</i>										
Over/Under										
Vitruvian Investment Partners IV	34.0	-100.0								
<i>Russell 3000 + 2%</i>	-17.6	28.2								
Over/Under	51.6	-128.2								
CRV XVIII, L.P.	13.1									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	30.7									
GGV Capital VIII, L.P.	8.8									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	26.4									
GGV Discovery III, L.P.	29.0									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	46.6									
Oak HC/FT Partners IV, L.P.	22.9									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	40.5									
Prairie Capital VII, LP	13.6									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	31.2									
GGV Capital VIII Plus, L.P.	5.8									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	23.4									
Flexpoint Overage Fund IV A, L.P.	11.6									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	29.2									
Abbott Secondary Opportunities II, L.P.	29.5									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	47.1									
Genstar X Opportunities Fund I, LP	10.0									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	27.6									
Charlesbank Overage Fund X	10.9									
<i>Russell 3000 + 2%</i>	-17.6									
Over/Under	28.5									

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Charlesbank Equity Fund X	7.3									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	24.9									
GTCR Fund XIII	27.8									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	45.4									
Hellman & Friedman CP X	-10.0									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	7.6									
Genstar Capital Partners X LP	12.6									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	30.2									
TA XIV A LP	-11.6									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	6.0									
CVC Capital Partners VIII A LP	16.5									
<i>Russell 3000 + 2%</i>	<i>-17.6</i>									
Over/Under	34.1									
Drive Capital Overdrive										
<i>Russell 3000 + 2%</i>										
Over/Under										
Drive Capital Fund IV LP										
<i>Russell 3000 + 2%</i>										
Over/Under										
Kinderhook Capital Fund 7										
<i>Russell 3000 + 2%</i>										
Over/Under										
Pantheon Global Secondary Funds VII										
<i>Russell 3000 + 2%</i>										
Over/Under										
Harbourvest PTN Co Inv VI LP										
<i>Russell 3000 + 2%</i>										
Over/Under										
Clearlake Capital Partners VI	2.9	67.4								
<i>Russell 3000 + 2%</i>	<i>-17.6</i>	<u>28.2</u>								
Over/Under	20.5	39.2								

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Battery Ventures XIV										
<i>Russell 3000 + 2%</i>										
Over/Under										
Oak HC/FT Partners V										
<i>Russell 3000 + 2%</i>										
Over/Under										
Advent International GPE X LP										
<i>Russell 3000 + 2%</i>										
Over/Under										
GTCR Strategic Growth 1/A										
<i>Russell 3000 + 2%</i>										
Over/Under										
GTCR Strategic Growth 1/B										
<i>Russell 3000 + 2%</i>										
Over/Under										
Riverside Micro Cap Fund VI, LP										
<i>Russell 3000 + 2%</i>										
Over/Under										

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Private Credit	3.4	15.9	7.1	8.4	4.7					
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>	<u>13.3</u>	<u>1.0</u>					
Over/Under	9.2	10.1	1.0	-4.9	3.7					
CVI Credit Value Fund IV	7.7	14.7	2.1	7.1	4.6					
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>	<u>13.3</u>	<u>1.0</u>					
Over/Under	13.5	8.9	-4.0	-6.2	3.6					
Monroe Capital Private Credit Fund III	9.2	13.9	11.2	11.2						
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>	<u>13.3</u>						
Over/Under	15.0	8.1	5.1	-2.1						
Bluebay Direct Lending Fund III	8.4	14.8	7.1							
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>							
Over/Under	14.2	9.0	1.0							
Pimco Private Income Fund	1.6	15.9	11.3							
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>							
Over/Under	7.4	10.1	5.2							
Bridge Debt Strategies III Limited Partner	3.3	15.4	2.6							
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>	<u>6.1</u>							
Over/Under	9.1	9.6	-3.5							
PIMCO Corp Opps Fund III	1.9	64.7								
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>								
Over/Under	7.7	58.9								
Torchlight Debt Fund VII, L.P.	6.0	1.4								
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>	<u>5.8</u>								
Over/Under	11.8	-4.4								
Crayhill Principal Strategies Fund II	30.1									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>									
Over/Under	35.9									
CVI Credit Value Fund A V	-1.0									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	<u>-5.8</u>									
Over/Under	4.8									

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	Performance (%)									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Bridge Debt Strategies Fund IV LP	6.2									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	12.0									
Cross Ocean USD ESS Fund IV	8.4									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	14.2									
Harbourvest Direct Lending L	1.3									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	7.1									
Bain Capital Special Situations Asia Fund II	9.5									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	15.3									
Arbour Lane Credit Opp III A	-10.6									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	-4.8									
Monroe Private Capital Fund IV	6.1									
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	-5.8									
Over/Under	11.9									
Crescent Cove Opportunity Fund LP										
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index										
Over/Under										
VWH Partners III LP										
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index										
Over/Under										

PRIVATE EQUITY LP PERFORMANCE

Fund Name	Vintage Year	Initial Closing Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$24,984,164	\$378,552	98%	\$29,843,875	\$10,834,528	\$40,678,403	\$15,694,239	25.3%	1.19x	1.63x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	\$40,000,000	\$15,606,722	\$24,393,278	--	\$4,200,000	\$15,881,796	\$20,081,796	\$4,475,074	62.8%	0.27x	1.29x
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$9,925,619	\$2,282,491	94%	\$1,608,110	\$11,832,833	\$13,440,943	\$3,515,324	16.6%	0.16x	1.35x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$67,869,468	\$29,004,020	\$96,873,488	\$59,415,775	17.2%	1.81x	2.59x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,962,749	\$2,537,251	90%	\$33,107,393	\$10,945,204	\$44,052,597	\$21,088,259	13.1%	1.44x	1.92x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	\$7,605,239	\$8,045,840	\$15,651,079	\$8,018,079	10.9%	1x	2.05x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,168,500	\$331,500	96%	\$11,837,557	\$3,705,077	\$15,542,634	\$7,367,437	12.1%	1.45x	1.9x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$69,319,741	\$5,680,259	92%	\$63,903,906	\$85,653,267	\$149,557,173	\$80,226,704	15.1%	0.92x	2.16x
Adams Street 2016 Global Fund	2016	8/16/2016	\$60,000,000	\$49,384,776	\$10,615,224	82%	\$21,068,412	\$73,061,096	\$94,129,508	\$44,744,732	21.3%	0.43x	1.91x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$28,267,931	\$5,062,521	94%	\$9,740,499	\$34,196,907	\$43,937,406	\$15,601,667	22.5%	0.34x	1.55x
Adams Street Co-Investment Fund V	2022	9/30/2021	\$35,000,000	\$1,750,000	\$33,250,000	5%	--	\$1,711,841	\$1,711,841	(\$38,159)	-3.8%	--	0.98x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$8,700,722	\$1,299,278	87%	\$799,600	\$12,634,207	\$13,433,807	\$4,733,085	29.3%	0.09x	1.54x
Advent International GPE X	2022	4/28/2022	\$20,000,000	\$700,000	\$19,300,000	4%	--	\$580,992	\$580,992	(\$119,008)	-50.8%	--	0.83x
Astorg VII	2019	12/17/2018	\$8,715,479	\$7,770,216	\$945,263	89%	--	\$9,311,945	\$9,311,945	\$1,541,729	11.6%	--	1.2x
Astorg VIII	2022	2/1/2022	\$18,138,577	\$2,987,691	\$15,150,886	16%	--	\$2,801,322	\$2,801,322	\$1,566,369	-19.6%	--	0.94x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$8,161,290	\$888,710	90%	\$4,839,132	\$19,560,158	\$24,399,290	\$16,238,000	37.9%	0.59x	2.99x
Battery Ventures XIII Side Fund	2018	2/1/2018	\$5,050,000	\$4,772,755	\$277,245	95%	\$5,433,191	\$9,995,905	\$15,429,096	\$10,656,341	41.8%	1.14x	3.23x
Battery Ventures XIII	2020	2/11/2020	\$9,240,000	\$7,331,940	\$1,908,060	79%	--	\$9,785,554	\$9,785,554	\$2,453,614	19.5%	--	1.33x
Battery Ventures XIII Side Fund	2020	2/11/2020	\$6,160,000	\$4,918,144	\$1,241,856	80%	--	\$7,012,784	\$7,012,784	\$2,094,640	23.5%	--	1.43x
Battery Ventures XIV	2022	2/24/2022	\$10,000,000	\$800,000	\$9,200,000	8%	--	\$685,318	\$685,318	(\$114,682)	-40.1%	--	0.86x
Buenaventure One, LLC	2018	1/5/2018	\$289,599,750	\$140,620,590	\$148,979,160	49%	\$17,233,156	\$193,909,186	\$211,142,342	\$70,521,752	22.1%	0.12x	1.5x
CapVest Equity Partners IV	2019	7/11/2018	\$12,398,348	\$7,966,915	\$4,431,433	64%	--	\$9,857,297	\$9,857,297	\$1,890,382	16.1%	--	1.24x
CapVest Equity Partners V	2021	11/23/2021	\$18,467,577	--	\$18,467,577	--	--	(\$234,113)	(\$234,113)	--	-100.00%	--	--
Charlesbank Equity Fund X	2020	11/20/2020	\$24,000,000	\$10,074,622	\$13,925,378	42%	\$73,953	\$10,343,538	\$10,417,491	\$342,869	4.4%	0.01x	1.03x
Charlesbank Equity Overage Fund X	2020	11/20/2020	\$6,000,000	\$4,337,517	\$1,662,483	72%	\$31,636	\$4,647,078	\$4,678,714	\$341,197	11.8%	0.01x	1.08x
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$14,059,510	\$2,129,324	79%	\$17,758,524	\$12,535,892	\$30,294,416	\$16,188,748	44.5%	1.26x	2.15x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	\$18,922,043	\$522,109	101%	\$1,566,382	\$26,297,215	\$27,863,597	\$8,941,554	28.6%	0.08x	1.47x
Clearlake Capital Partners VII	2021	9/17/2021	\$20,000,000	\$8,205,789	\$11,794,211	41%	\$487	\$8,090,062	\$8,090,549	(\$115,240)	-2.7%	0x	0.99x
CRV XVIII	2020	7/2/2020	\$15,000,000	\$12,112,500	\$2,887,500	81%	--	\$14,136,943	\$14,136,943	\$2,024,443	12.4%	--	1.17x
CRV XIX	2022	1/27/2022	\$10,000,000	\$1,275,000	\$8,725,000	13%	--	\$1,141,928	\$1,141,928	(\$133,072)	-22.5%	--	0.9x
CVC Capital Partners VIII	2020	5/22/2020	\$19,775,665	\$11,476,347	\$8,299,318	58%	--	\$11,856,241	\$11,856,241	\$379,894	6.6%	--	1.03x
Drive Capital Fund II	2016	8/19/2016	\$15,000,000	\$14,946,053	\$57,157	100%	\$3,410,764	\$29,760,749	\$33,171,513	\$18,222,250	22.0%	--	2.22x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$6,190,327	\$1,309,673	83%	--	\$7,934,232	\$7,934,232	\$1,743,905	16.5%	--	1.28x
Drive Capital Fund IV	2021	12/27/2021	\$10,000,000	\$3,833,000	\$6,167,000	38%	--	\$3,628,599	\$3,628,599	(\$204,401)	-7.1%	--	0.95x
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$7,316,687	\$183,313	98%	\$12,492	\$13,914,070	\$13,926,562	\$6,609,875	29.0%	--	1.9x
Drive Capital Overdrive Fund II	2021	12/27/2021	\$10,000,000	\$4,169,953	\$5,830,047	42%	--	\$3,989,912	\$3,989,912	(\$180,041)	-8.0%	--	0.96x
ECI 11	2018	7/5/2018	\$9,710,273	\$7,720,670	\$1,989,603	80%	\$3,884,612	\$7,430,370	\$11,314,982	\$3,594,312	19.3%	0.5x	1.47x
ECI 12	2022	7/15/2022	\$20,137,194	--	\$20,137,194	--	--	--	--	--	--	--	--
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	\$6,105,377	\$4,544,623	57%	\$1,412,900	\$7,987,625	\$9,400,525	\$3,295,148	31.7%	--	1.54x
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	\$2,271,591	\$1,278,409	64%	--	\$2,530,081	\$2,530,081	\$258,490	9.4%	--	1.11x



PRIVATE EQUITY LP PERFORMANCE

Fund Name	Vintage Year	Initial Closing Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Genstar Capital Partners IX	2019	2/21/2019	\$7,500,000	\$7,113,299	\$386,701	95%	\$3,147,426	\$9,670,235	\$12,817,661	\$5,704,362	36.2%	0.44x	1.8x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$2,152,214	\$347,786	86%	\$940,541	\$2,921,107	\$3,861,648	\$1,709,434	28.6%	--	1.79x
Genstar Capital Partners X	2021	4/1/2021	\$15,000,000	\$7,507,769	\$7,492,231	50%	--	\$7,742,611	\$7,742,611	\$234,842	5.8%	--	1.03x
Genstar Capital Partners X Opportunities Program	2021	4/1/2021	\$5,000,000	\$2,919,779	\$2,080,221	58%	--	\$3,024,952	\$3,024,952	\$105,173	5.6%	--	1.04x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$9,550,400	\$609,600	94%	\$69,608	\$13,847,881	\$13,917,489	\$4,367,089	15.8%	0.01x	1.46x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$2,476,500	\$63,500	98%	--	\$3,080,683	\$3,080,683	\$604,183	9.0%	--	1.24x
GGV Capital VIII	2020	10/30/2020	\$9,180,000	\$4,911,300	\$4,268,700	54%	--	\$5,685,363	\$5,685,363	\$774,063	13.7%	--	1.16x
GGV Capital VIII Plus	2020	10/30/2020	\$2,295,000	\$1,055,700	\$1,239,300	46%	--	\$1,111,244	\$1,111,244	\$55,544	4.8%	--	1.05x
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$1,953,000	\$147,000	93%	--	\$3,921,640	\$3,921,640	\$1,968,640	32.1%	--	2.01x
GGV Discovery III	2020	10/30/2020	\$3,825,000	\$1,740,375	\$2,084,625	46%	--	\$2,506,721	\$2,506,721	\$766,346	34.6%	--	1.44x
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	\$8,007,493	\$892,507	90%	\$2,458,521	\$8,282,070	\$10,740,591	\$2,733,098	73.6%	0.31x	1.34x
Great Hill Equity Partners VIII	2021	11/1/2021	\$25,000,000	\$1,288,109	\$23,711,891	--	--	(\$266,479)	(\$266,479)	--	-100.0%	--	-0.21x
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	\$13,070,155	\$2,049,081	87%	\$119,236	\$13,919,777	\$14,039,013	\$968,858	5.5%	0.01x	1.07x
Green Equity Investors IX	2022	3/1/2022	\$13,300,000	--	\$13,300,000	--	--	--	--	--	--	--	--
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$24,532,892	\$5,467,108	82%	\$12,846,870	\$32,264,256	\$45,111,126	\$20,578,234	27.4%	0.52x	1.84x
GTCR Fund XIII	2020	10/27/2020	\$30,000,000	\$15,343,652	\$14,656,348	51%	\$3,268,145	\$14,616,588	\$17,884,733	\$2,541,081	29.8%	0.21x	1.17x
GTCR Strategic Growth Fund I	2022	1/18/2022	\$10,000,000	\$313,000	\$9,687,000	3%	--	\$185,823	\$185,823	--	-87.1%	--	0.59x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$62,184,954	\$5,400,000	92%	\$97,765,779	\$7,828,058	\$105,593,837	\$43,323,929	19.9%	1.57x	1.7x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$52,200,000	\$7,800,000	87%	\$53,689,599	\$37,847,724	\$91,537,323	\$39,337,323	23.8%	1.03x	1.75x
HarbourVest - Dover Street X	2019	5/31/2019	\$40,000,000	\$25,300,000	\$14,700,000	63%	\$8,766,500	\$29,797,485	\$38,563,985	\$13,263,985	38.7%	0.35x	1.52x
HarbourVest Partners Co-Investment IV	2017	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	\$23,670,200	\$22,264,117	\$45,934,317	\$21,469,929	16.9%	0.97x	1.88x
HarbourVest Partners Co-Investment V	2019	7/31/2018	\$35,000,000	\$27,125,000	\$7,875,000	78%	\$5,592,394	\$9,753,940	\$45,346,334	\$18,221,334	23.6%	0.21x	1.67x
HarbourVest Partners Co-Investment VI	2021	6/24/2021	\$35,000,000	\$8,750,000	\$26,250,000	25%	--	\$8,096,604	\$8,096,604	(\$653,396)	-19.6%	--	0.93x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	\$20,256,309	\$592,948	102%	\$1,156,489	\$22,737,189	\$23,893,678	\$3,637,369	9.2%	0.06x	1.18x
Hellman & Friedman Capital Partners X	2021	5/10/2021	\$20,000,000	\$10,901,910	\$9,098,090	--	--	\$9,811,766	\$9,811,766	(\$1,090,144)	-10.3%	--	0.9x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$25,680,872	\$1,235,312	103%	\$10,857,572	\$51,437,950	\$62,295,522	\$36,614,650	29.4%	0.42x	2.43x
Jade Equity Investors II	2022	3/1/2022	\$6,700,000	--	\$6,700,000	--	--	--	--	--	--	--	--
Kinderhook Capital Fund 7	2022	1/28/2022	\$10,000,000	\$2,893,578	\$7,106,422	29%	\$4,083	\$2,615,886	\$2,619,969	-\$273,609	-29.4%	0x	0.91x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$7,328,792	\$2,671,208	73%	\$929,368	\$7,941,750	\$8,871,118	\$1,542,326	11.0%	0.13x	1.21x
M/C Partners IX	2022	5/6/2022	\$10,000,000	--	\$10,000,000	--	--	--	--	--	--	--	--
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$14,526,349	\$1,821,841	97%	\$1,348,190	\$23,440,565	\$24,788,755	\$10,262,406	29.8%	0.09x	1.71x
Oak HC/FT Partners IV	2021	2/17/2021	\$10,000,000	\$7,836,872	\$2,163,128	78%	--	\$8,539,947	\$8,539,947	\$703,075	8.0%	--	1.09x
Oak HC/FT Partners V	2022	5/11/2022	\$10,000,000	\$416,298	\$9,583,702	4%	--	\$547,410	\$547,410	\$131,112	117.7%	--	1.31x
Pantheon Global Secondary Fund IV	2010	6/24/2010	\$15,000,000	\$9,960,000	\$2,040,000	66%	\$14,929,293	\$998,926	\$15,928,219	\$5,968,219	12.9%	1.5x	1.6x
Pantheon Global Secondary Fund V	2015	2/6/2015	\$50,000,000	\$39,616,509	\$10,383,491	79%	\$30,059,454	\$34,716,063	\$64,775,517	\$25,321,522	13.4%	0.76x	1.64x
Pantheon Global Secondary Fund VI	2018	2/24/2020	\$25,000,000	\$16,847,805	\$8,637,113	67%	\$3,224,621	\$24,405,127	\$27,629,748	\$10,781,943	27.8%	0.19x	1.64x
Pantheon Global Secondary Fund VII	2022	10/28/2021	\$25,000,000	\$4,473,346	\$20,526,654	18%	\$48,551	\$4,942,979	\$4,991,530	\$518,184	20.5%	0.01x	1.12x
Prairie Capital VII QP	2021	4/6/2021	\$10,800,000	\$3,672,000	\$7,128,000	34%	--	\$4,032,289	\$4,032,289	\$360,289	9.3%	--	1.1x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$21,313,069	\$2,358,372	107%	\$12,324,946	\$30,181,994	\$42,506,940	\$21,193,871	41.1%	0.58x	1.99x
Ridgmont Equity Partners IV	2021	10/29/2021	\$20,000,000	--	\$20,000,000	--	--	\$149,866	\$149,866	--	--	--	--
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$8,061,200	\$1,938,800	81%	--	\$11,664,917	\$11,664,917	\$3,603,717	19.5%	--	1.45x
Riverside Micro-Cap Fund VI	2021	8/26/2021	\$20,000,000	\$1,328,389	\$18,671,611	7%	--	\$1,195,911	\$1,195,911	--	-34.1%	--	0.9x
TA XIII	2019	5/2/2019	\$10,000,000	\$9,800,000	\$200,000	98%	\$3,650,000	\$12,371,024	\$16,021,024	\$6,221,024	34.5%	0.37x	1.63x
TA XIV	2021	5/27/2021	\$10,000,000	\$5,800,000	\$4,200,000	--	--	\$5,357,865	\$5,357,865	--	-13.3%	--	0.92x
Vitruvian Investment Partnership IV	2020	6/3/2020	\$20,193,551	\$12,374,480	\$7,819,071	61%	--	\$13,502,888	\$13,502,888	\$1,128,408	10.1%	--	1.09x
Total VCERA Private Equity Program		5/21/2010	\$1,827,186,414	\$1,130,240,708	\$715,104,100	62%	\$598,108,674	\$1,265,692,211	\$1,863,800,885	\$733,486,334	18.9%	0.53x	1.65x

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private Equity performance data is reported net of fees.

Performance shown is based on 12/31/2022 statement of investments produced by Abbott Capital.



PRIVATE CREDIT LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Arbour Lane Credit Opp III A	2021	11/15/2021	\$30,000,000	\$12,662,011	\$17,337,989	42%	\$0	\$11,482,304	\$11,482,304	-\$1,179,707	-12.5%	0x	0.91x
Bain Capital Special Situations Asia Fund II	2021	7/26/2021	\$25,000,000	\$2,529,966	\$22,470,034	10%	\$0	\$2,769,804	\$2,769,804	\$0	8.6%	0x	1.09x
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$16,105,933	\$8,894,067	64%	\$3,075,371	\$16,978,894	\$20,054,264	\$3,948,331	10.1%	0.19x	1.25x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$24,072,665	\$927,335	96%	\$9,437,807	\$16,530,145	\$25,967,952	\$1,895,287	0.0%	0.39x	1.08x
Bridge Debt Strategies Fund IV	2021	7/26/2021	\$25,000,000	\$21,877,399	\$3,122,601	88%	\$3,379,815	\$19,617,349	\$22,997,164	\$1,119,765	5.2%	0.15x	1.05x
Crayhill Principal Strategies II	2021	4/23/2021	\$25,000,000	\$19,274,476	\$5,725,524	77%	7,518,297.58	\$12,149,719	\$19,668,016	\$393,540	0.0%	0.39x	1.02x
Crescent Cove Opportunity Fund LP	2022	5/20/2022	\$25,000,000	\$12,500,000	\$12,500,000	50%	\$41,250	\$12,323,946	\$12,365,196	-\$134,804	0.0%	0x	0.99x
Cross Ocean USD ESS Fund IV	2021	6/21/2021	\$25,000,000	\$16,423,006	\$8,576,994	66%	\$1,742,488	\$15,358,332	\$17,100,820	\$677,814	8.1%	0.11x	1.04x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$33,600,000	-\$3,600,000	112%	\$14,889,955	\$27,635,013	\$42,524,969	\$8,924,969	8.2%	0.44x	1.27x
CVI Credit Value Fund V	2021	3/29/2021	\$30,000,000	\$19,674,333	\$10,325,667	66%	\$1,618	\$20,134,139	\$20,135,757	\$461,424	0.0%	0x	1.02x
Harbourvest Direct Lending L	2021	6/21/2021	\$25,000,000	\$18,974,922	\$6,025,078	76%	\$641,229	\$18,144,633	\$18,785,862	-\$189,060	-1.5%	0.03x	0.99x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$21,253,151	\$3,746,849	85%	7,819,655.00	\$21,522,017	\$29,341,672	\$8,088,521	11.6%	0.37x	1.38x
Monroe Capital Private Credit Fund IV	2022	1/10/2022	\$30,000,000	\$31,672,755	-\$1,672,755	106%	7,525,319.00	\$25,153,684	\$32,679,003	\$1,006,248	5.5%	0.24x	1.03x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	\$50,000,000	\$45,000,000	\$5,000,000	90%	126,147.96	\$50,042,692	\$50,168,840	\$5,168,840	9.2%	0x	1.11x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$55,000,000	\$0	100%	\$22,651	\$71,099,567	\$71,122,218	\$16,122,218	9.7%	0x	1.29x
Torchlight Debt Fund VII	2021	1/25/2021	\$25,000,000	\$13,765,285	\$11,234,715	55%	\$1,265,285	\$13,149,725	\$14,415,010	\$649,725	4.7%	0.09x	1.05x
VWH Partners III LP	2022	12/1/2022	\$50,000,000	\$20,459,950	\$29,540,050	41%	\$0	\$12,916,252	\$12,916,252	-\$7,543,698	0.0%	0x	0.63x
Total VCERA Private Credit Program			\$565,000,000	\$386,845,853	\$178,154,147	68%	\$57,486,889	\$367,008,213	\$424,495,103	\$37,409,412	7.5%	0.15x	1.1x

1. Includes recycled/recallable distributions received to date.

Note: Private Credit performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.



PRIVATE REAL ASSETS LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Brookfield Infrastructure Fund IV, LP	2019	10/21/2019	\$50,000,000	\$46,461,990	\$3,538,010	93%	\$8,312,802	\$42,480,889	\$50,793,690	\$4,331,700	8.4%	0.18x	1.09x
Harbourvest Real Assets Fund IV, LP	2019	7/15/2019	\$100,000,000	\$52,052,632	\$47,947,368	52%	\$9,317,655	\$64,814,414	\$74,132,069	\$22,079,437	54.4%	0.18x	1.42x
Total VCERA Private Real Assets Program			\$150,000,000	\$98,514,622	\$51,485,378	66%	\$17,630,457	\$107,295,302	\$124,925,759	\$26,411,136	23.3%	0.18x	1.27x

1. Includes recycled/recallable distributions received to date.

Note: Private Real Assets performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.



PRIVATE REAL ESTATE LP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Alterra IOS Venture II LP	2022	4/7/2022	\$35,000,000	\$22,527,540	\$12,472,460	64%	\$0	\$21,888,479	\$21,888,479	-\$639,061	-6.5%	0x	0.97x
LaSalle Income & Growth Fund VIII, LP	2019	2/26/2020	\$100,000,000	\$60,067,784	\$41,522,854	60%	\$24,390,944	\$46,409,528	\$70,800,472	\$10,732,688	16.4%	0.41x	1.18x
Total VCERA Private Real Estate Program			\$135,000,000	\$82,595,324	\$53,995,314	61%	\$24,390,944	\$68,298,006	\$92,688,950	\$10,093,626	15.2%	0.3x	1.12x

1. Includes recycled/recallable distributions received to date.

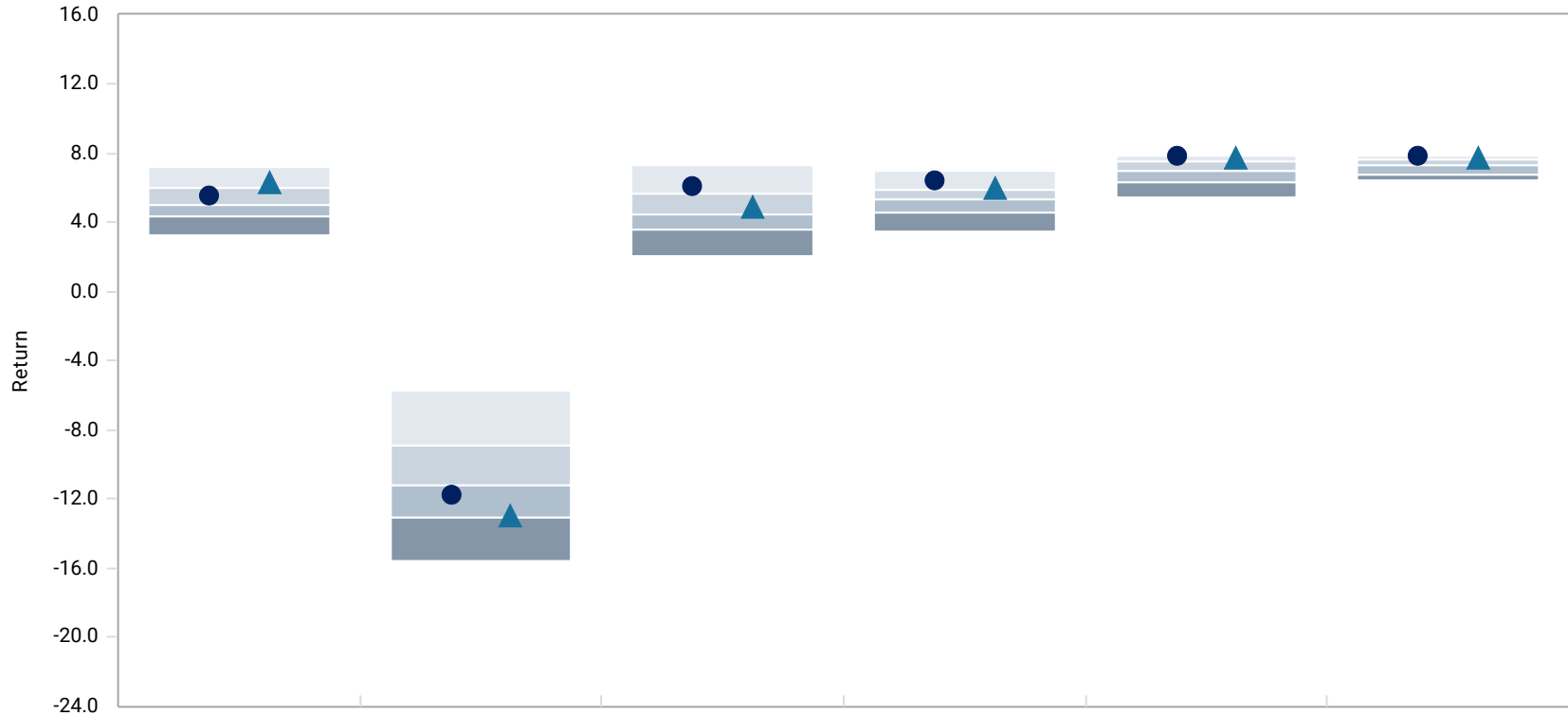
Note: Private Real Estate performance data is reported net of fees.

Performance shown is based on 12/31/2022 cash-adjusted market values.



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

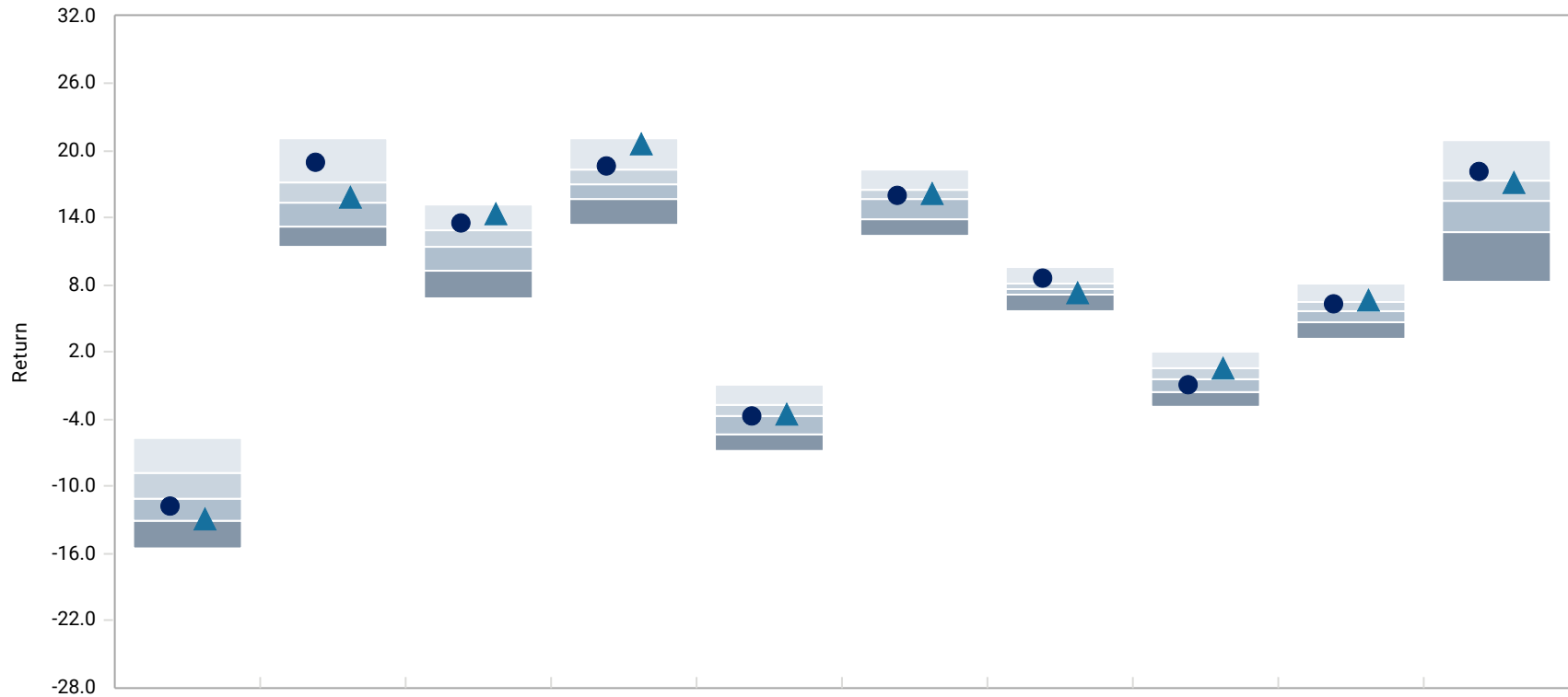
Total Fund vs. InvMetrics Public DB > \$1 Billion



	3 Mo	1 Year	3 Years	5 Years	10 Years	Inception
● Total Fund	5.6 (36)	-11.7 (59)	6.1 (18)	6.4 (15)	7.9 (6)	7.9 (21)
▲ Policy Index	6.4 (16)	-12.9 (73)	4.9 (38)	6.1 (22)	7.7 (15)	7.8 (23)
5th Percentile	7.3	-5.7	7.3	7.0	7.9	7.9
1st Quartile	6.1	-8.8	5.7	5.9	7.6	7.7
Median	5.1	-11.1	4.5	5.4	7.0	7.3
3rd Quartile	4.4	-13.1	3.6	4.6	6.4	6.8
95th Percentile	3.3	-15.5	2.1	3.5	5.5	6.4
Population	66	66	64	63	60	30

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1 Billion

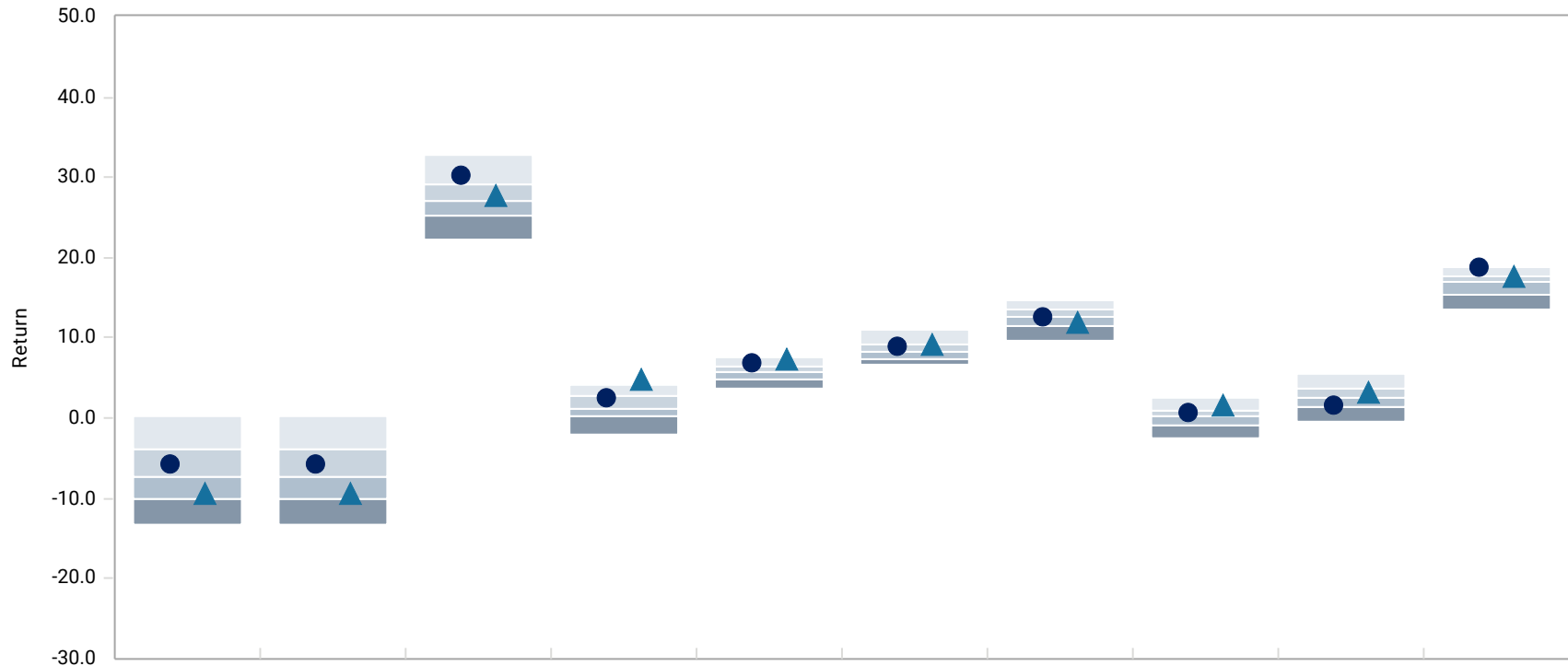


	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
● Total Fund	-11.7 (59)	19.1 (11)	13.6 (14)	18.7 (21)	-3.6 (49)	16.0 (40)	8.6 (18)	-0.9 (63)	6.3 (34)	18.1 (18)
▲ Policy Index	-12.9 (73)	15.8 (46)	14.4 (10)	20.7 (7)	-3.6 (47)	16.2 (32)	7.4 (65)	0.7 (24)	6.6 (24)	17.2 (29)
5th Percentile	-5.7	21.1	15.2	21.2	-0.8	18.3	9.7	2.1	8.1	21.0
1st Quartile	-8.8	17.2	13.0	18.4	-2.7	16.5	8.2	0.6	6.6	17.4
Median	-11.1	15.3	11.4	17.1	-3.7	15.7	7.6	-0.4	5.7	15.6
3rd Quartile	-13.1	13.3	9.3	15.7	-5.3	14.0	7.1	-1.6	4.7	12.8
95th Percentile	-15.5	11.4	6.9	13.4	-6.7	12.5	5.7	-2.9	3.3	8.3
Population	66	130	148	131	111	121	118	113	113	107



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1 Billion

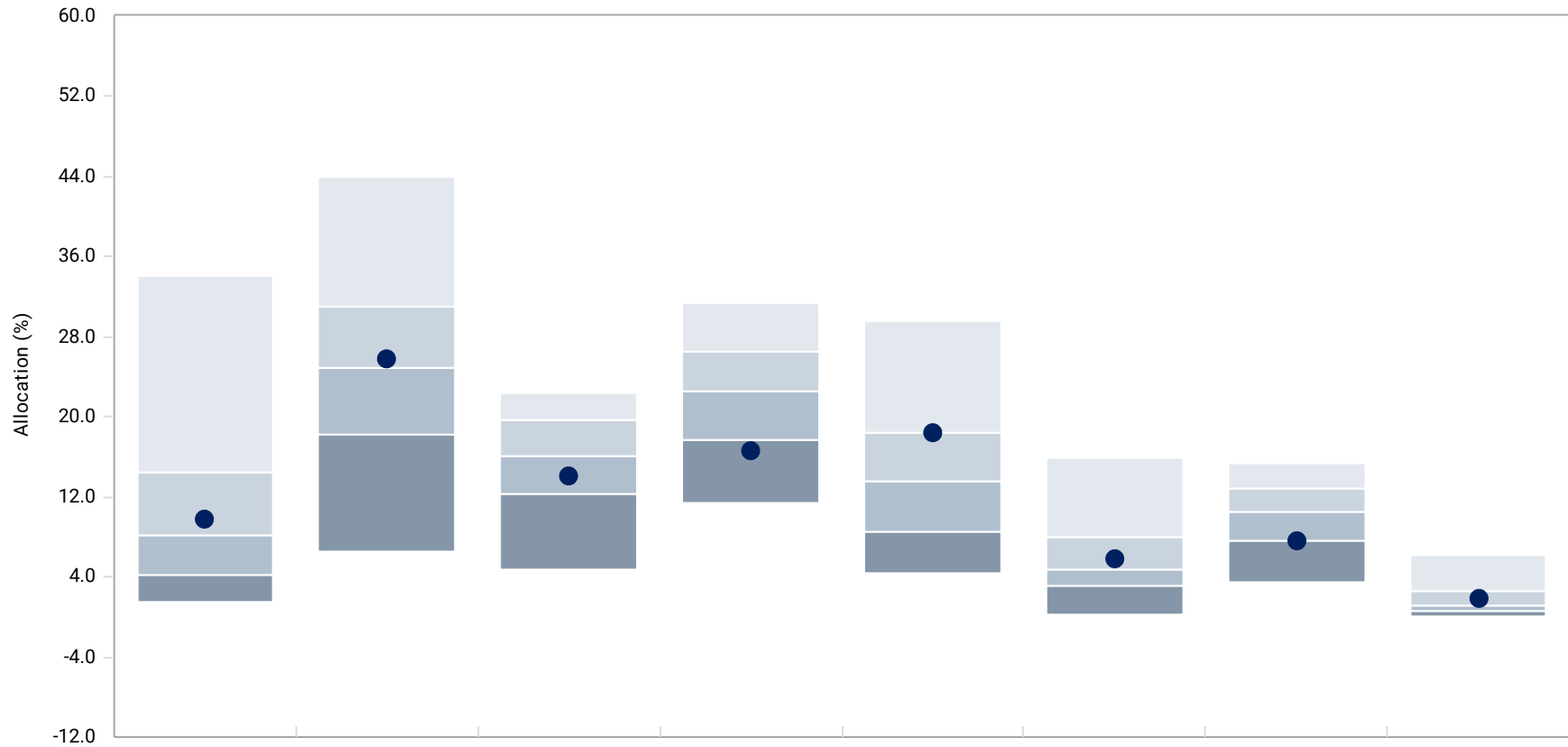


	Fiscal 2022	Fiscal 2021	Fiscal 2020	Fiscal 2019	Fiscal 2018	Fiscal 2017	Fiscal 2016	Fiscal 2015	Fiscal 2014	Fiscal 2013
● Total Fund	-5.8 (41)	-5.8 (41)	30.3 (19)	2.5 (32)	7.0 (13)	8.9 (32)	12.6 (47)	0.8 (35)	1.7 (70)	18.8 (5)
▲ Policy Index	-9.4 (72)	-9.4 (72)	27.8 (39)	4.8 (1)	7.4 (7)	9.2 (22)	12.0 (61)	1.6 (8)	3.2 (37)	17.6 (26)
5th Percentile	0.2	0.2	32.9	4.2	7.6	10.9	14.8	2.6	5.5	18.8
1st Quartile	-3.9	-3.9	29.1	2.8	6.5	9.1	13.5	1.0	3.6	17.7
Median	-7.2	-7.2	27.0	1.3	5.7	8.2	12.6	0.2	2.5	17.0
3rd Quartile	-10.0	-10.0	25.3	0.3	4.8	7.4	11.4	-0.9	1.5	15.5
95th Percentile	-13.3	-13.3	22.2	-2.1	3.7	6.7	9.6	-2.5	-0.4	13.6
Population	108	108	146	134	108	86	83	79	77	70



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Fund Allocation vs. InvMetrics Public DB > \$1 Billion



	Global Equity	US Equity	Global ex-US Equity	Total Fixed Income	Private Equity	Real Assets/Commod	Total Real Estate	Cash & Equivalents
● Total Fund	9.7 (34)	25.8 (48)	14.1 (63)	16.6 (79)	18.4 (26)	5.9 (36)	7.6 (75)	1.9 (33)
5th Percentile	34.1	44.0	22.4	31.4	29.6	15.9	15.3	6.2
1st Quartile	14.4	31.1	19.6	26.5	18.5	8.0	12.9	2.6
Median	8.1	25.0	16.0	22.6	13.6	4.7	10.6	1.2
3rd Quartile	4.3	18.2	12.2	17.7	8.6	3.1	7.6	0.5
95th Percentile	1.5	6.5	4.7	11.5	4.4	0.3	3.5	0.1
Population	22	69	70	75	48	32	56	53



MANAGER DUE DILIGENCE

DUE DILIGENCE MONITOR

The items below summarize the recent quarter's performance and any changes or announcements from the Plan's managers/products. A "-" indicates there were no material announcements. A "Yes" indicates there was an announcement and a brief summary is provided on the following pages. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determine if any action should be taken (by NEPC and/or by our clients). Events are rated: No Action, Watch, Hold, Client Review or Terminate. NEPC's recommendation in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data) is refreshed quarterly.

Investment Options	Performance (One Year Period)	Changes/ Announcements (Recent Quarter)	Comments
Western U.S. Index Plus	-	-	
BlackRock Russell 1000 Index	-	-	
BlackRock Russell 2500 Index	-	-	
BlackRock MSCI ACWI ex-U.S. Index	-	-	
Sprucegrove	Top Quartile	-	
Walter Scott	-	-	
BlackRock MSCI ACWI Index	-	-	
Adams Street	N/A	-	
HarbourVest	N/A	-	
Pantheon	N/A	-	
Drive	N/A	-	
Abbott Secondary Opps.	N/A	-	
CarVal Credit Value	N/A	-	
PIMCO PIF	N/A	-	
Bridge Debt Strategies	N/A	-	
BlackRock U.S. Debt Fund	Bottom Quartile	-	
Western	Bottom Quartile	-	
Reams	-	-	



DUE DILIGENCE MONITOR

Investment Options	Performance (One Year Period)	Changes/ Announcements (Recent Quarter)	Comments
Loomis Sayles Strategic Alpha	-	-	
Loomis Sayles Multi-Sector Full Discretion	-	-	
Reams 10-Year Treasuries	N/A	-	
Monroe	N/A	-	
BlueBay	N/A	-	
Prudential	N/A	-	
UBS	N/A	-	
Bridgewater	N/A	-	
Tortoise	N/A	-	
Parametric/Clifton	N/A	-	

NEPC Due Diligence Committee Recommendation Key

No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot participate in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with an Investment Manager; manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



INVESTMENT GUIDELINES

- **Blackrock Russell 1000 Index Fund**

- The Blackrock Russell 1000 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 1000 Index (large cap companies).

- **Blackrock Russell 2500 Index Fund**

- The Blackrock Russell 2500 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 2500 Index (mid and small cap companies).

- **Western Asset Management Index Plus Separate Account**

- The objective of the Portfolio is to maximize the long term total return in the Portfolio while providing a core domestic equity exposure to the Standard & Poor's ("S&P") 500 Index and managing Portfolio risk. The Manager shall aim to exceed the total return of the S&P 500 index with all dividends reinvested in the index by 75 basis points on an annualized basis over a full market cycle.

- **Blackrock MSCI ACWI ex-U.S. IMI Index Fund**

- The BlackRock MSCI ACWI ex-U.S. IMI Index Fund shall be invested and reinvested in a portfolio of International Equity Securities whose total rates of return will approximate as closely as practicable the capitalization-weighted total rates of return of the equity markets of selected non-U.S. developed and emerging countries.

- **Blackrock MSCI ACWI Equity Index Fund**

- The BlackRock MSCI ACWI Equity Index Fund shall be invested and reinvested primarily in a portfolio of U.S. Equity Securities and International Equity Securities with the objective of approximating as closely as practicable the capitalization-weighted total rates of return of the equity markets of the U.S, non- U.S. developed and emerging countries.

INVESTMENT GUIDELINES

- **Sprucegrove U.S. International Pooled Fund**

- The Fund seeks to maximize the long-term rate of return while seeking to preserve investment capital by investing primarily in equity and quasi-equity securities of companies with more value characteristics located in developed markets in the Europe, Australasia and the Far East ("EAFE") Index and to outperform the index, net of fees and achieve a high ranking relative to similar funds over a full market cycle.

- **Walter Scott & Partners International Fund**

- The Fund will invest in equity securities that meet certain quantitative and qualitative investment criteria and will seek long-term capital appreciation. The Fund will tend to focus on those industries or sectors with more growth characteristics and experiencing upper quartile economic growth and may avoid industries which are in secular economic decline. The Fund seeks to outperform the MSCI Europe, Australasia and the Far East ("EAFE") Index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.

- **Blackrock U.S. Debt Index Fund**

- The U.S. Debt Index Fund shall be invested and reinvested primarily in a portfolio of Debt Securities with the objective of approximating as closely as practicable the total rate of return of the market for Debt Securities as defined by the Bloomberg Barclays U.S. Aggregate Bond Index.

- **Western Asset Management Core Plus Fixed Income Separate Account**

- The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The Fund will seek to outperform the Bloomberg Barclays U.S. Aggregate Index, net of fees, over a full market cycle.

- **Reams Unconstrained Fixed Income Separate Account**

- The Portfolio will be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to maximize risk-adjusted total return by systematically pursuing relative value opportunities throughout all sectors of the fixed income market. The Portfolio will seek returns in excess of the Bloomberg/Barclays U.S. Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.

INVESTMENT GUIDELINES

- **Loomis, Sayles & Company Multisector Full Discretion Separate Account**

- The fixed income portfolio should be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The return of the Manager should exceed that of the custom benchmark (30% of the rate of return of the Citigroup High-Yield Index, 5% of the rate of return of the J.P. Morgan Non-U.S. Hedged Bond Index and 65% of the rate of return of the Bloomberg Barclays U.S. Aggregate Bond Index), net of fees, over a full market cycle.

- **Loomis, Sayles & Company Strategic Alpha Fund**

- The objective of the Fund is to provide absolute returns in excess of the Bloomberg/Barclays U.S Aggregate Bond Index and/or the three month London Interbank Offered Rate (“LIBOR”) in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.

- **Reams 10-Year Treasuries**

- The portfolio shall be invested in 10-Year U.S. Treasury Debt Securities with the objective of returning the rate of return on a 10-Year U.S. Treasury Debt Security.

- **Bridgewater Associates All Weather Portfolio**

- The investment objective of the Fund is to seek to provide attractive returns with relatively limited risks, with no material bias to perform better or worse in any particular type of economic environment. In other words, the portfolio seeks to perform approximately as well in rising or falling inflation periods, or in periods of strong or weak economic growth. To achieve this objective, the Fund holds investments in different asset classes that have different biases to economic conditions. The Manager will seek to outperform the CPI + 4% (Unadjusted) benchmark net of fees over a full market cycle.

- **Tortoise Energy Infrastructure Master Limited Partnership**

- The Manager will invest in master limited partnerships with an investment approach that emphasizes a long-term, buy-and-hold philosophy with low turnover in an effort to achieve a portfolio characterized by high current income, high growth and low volatility. The Manager invests primarily in long-haul pipelines and gathering & processing pipelines. The Manager will seek to outperform the Wells Fargo MLP Index net of fees over a full market cycle.

INVESTMENT GUIDELINES

- **PGIM Real Estate Property Investment Separate Account**

– PRISA is a broadly diversified equity real estate portfolio that invests primarily in existing, incomeproducing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. The Fund’s performance objective is to produce a total return each year that meets or exceeds the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity (“NCREIF-ODCE”) net of fees, while maintaining the benefits of a broadly diversified, core real estate portfolio.

- **UBS Realty Investors Trumbull Property Fund**

– The Fund seeks to provide investors with strategic market access to high-quality private commercial real estate with the financial objective of providing superior risk-adjusted returns across the real estate cycles. Maximize the quality and growth of the Fund’s income by acquiring and aggressively managing high quality assets in major US metropolitan markets to minimize risk through diversification by property type, geographic location and economic sector. The Fund’s performance objective is to outperform the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity (“NCREIF-ODCE”) index net of fees, and a 5% real rate of return (inflation-adjusted return) over a full market cycle.



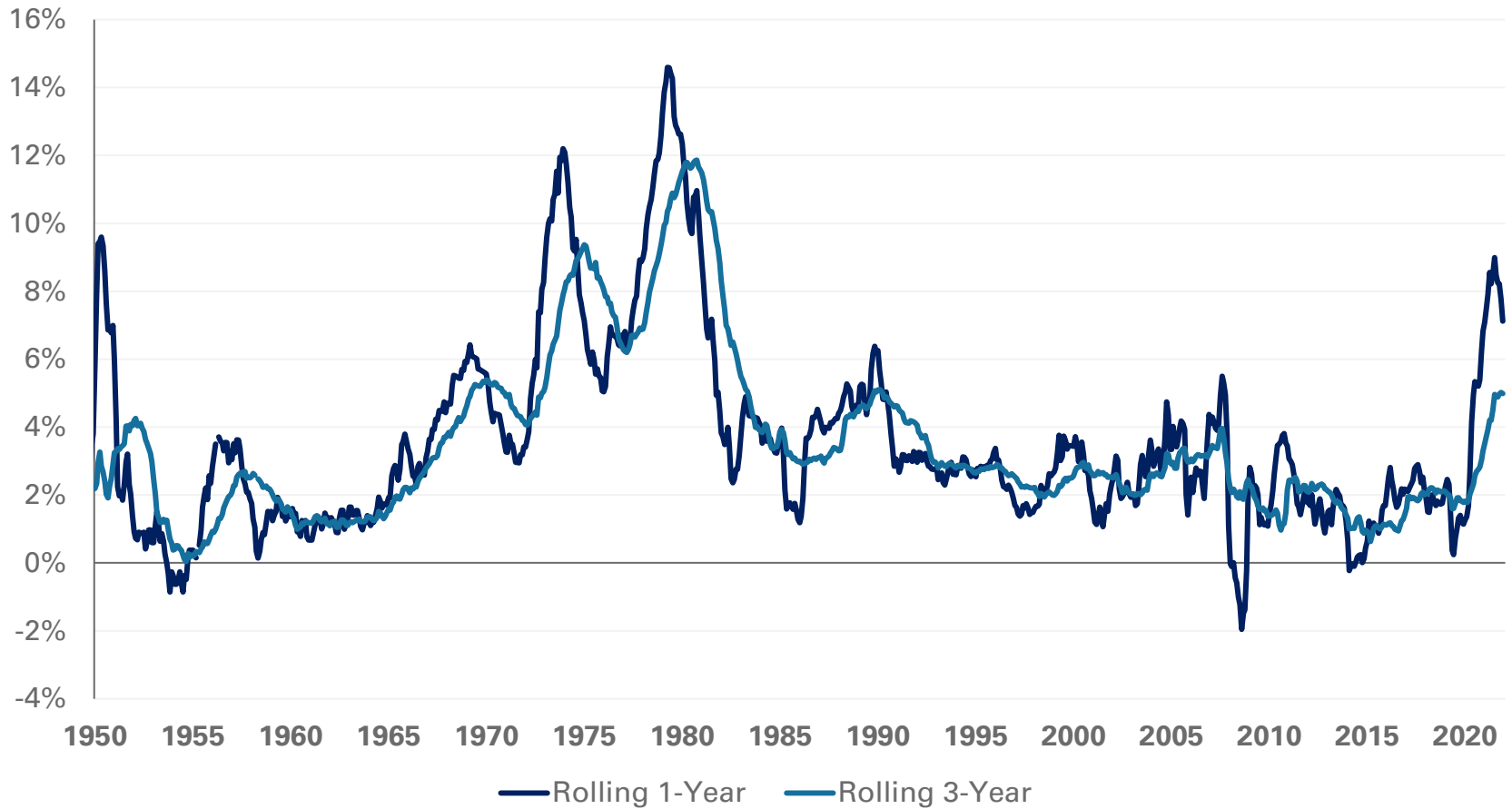


MACRO

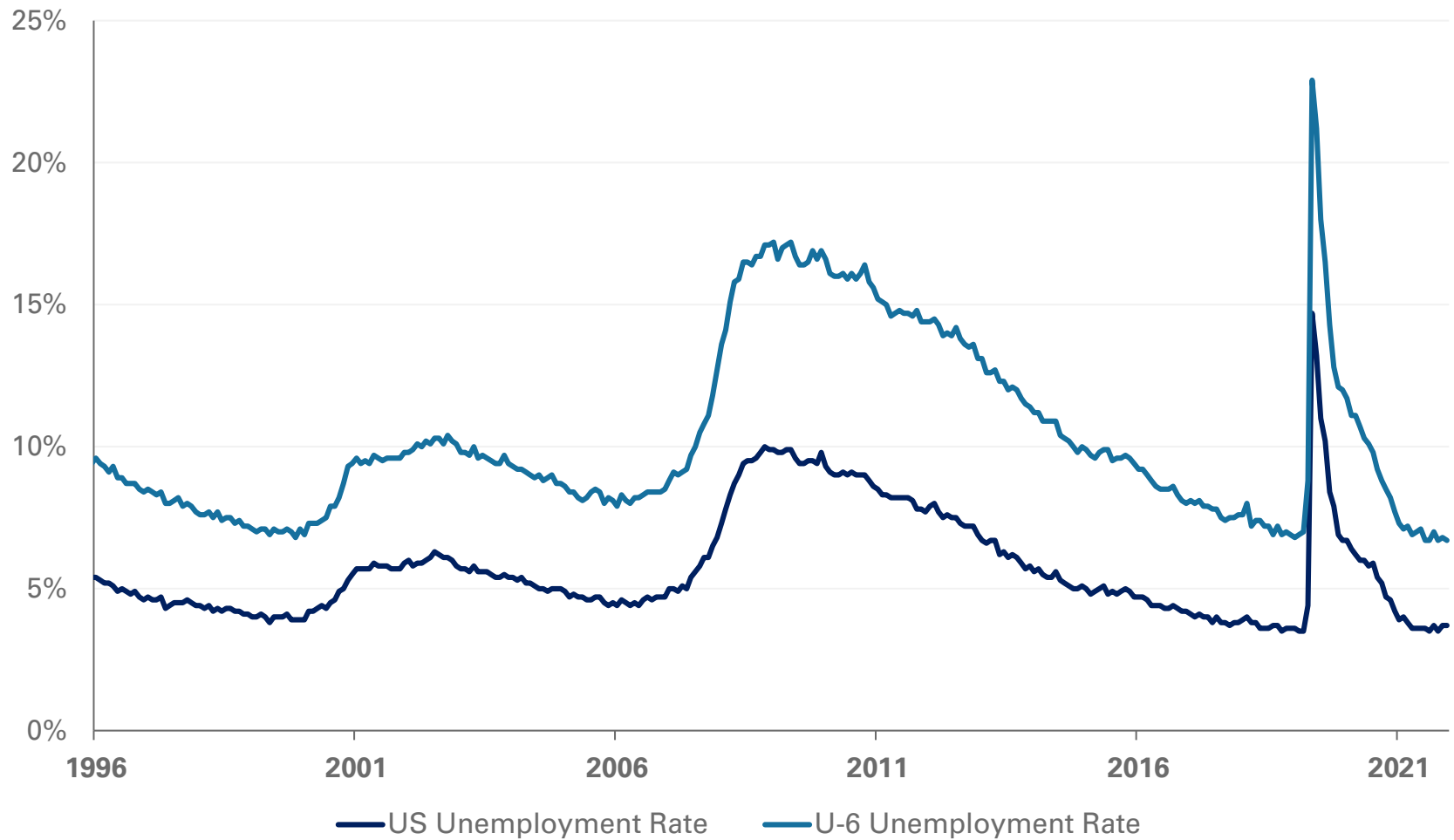


INFLATION

U.S. CONSUMER PRICE INDEX

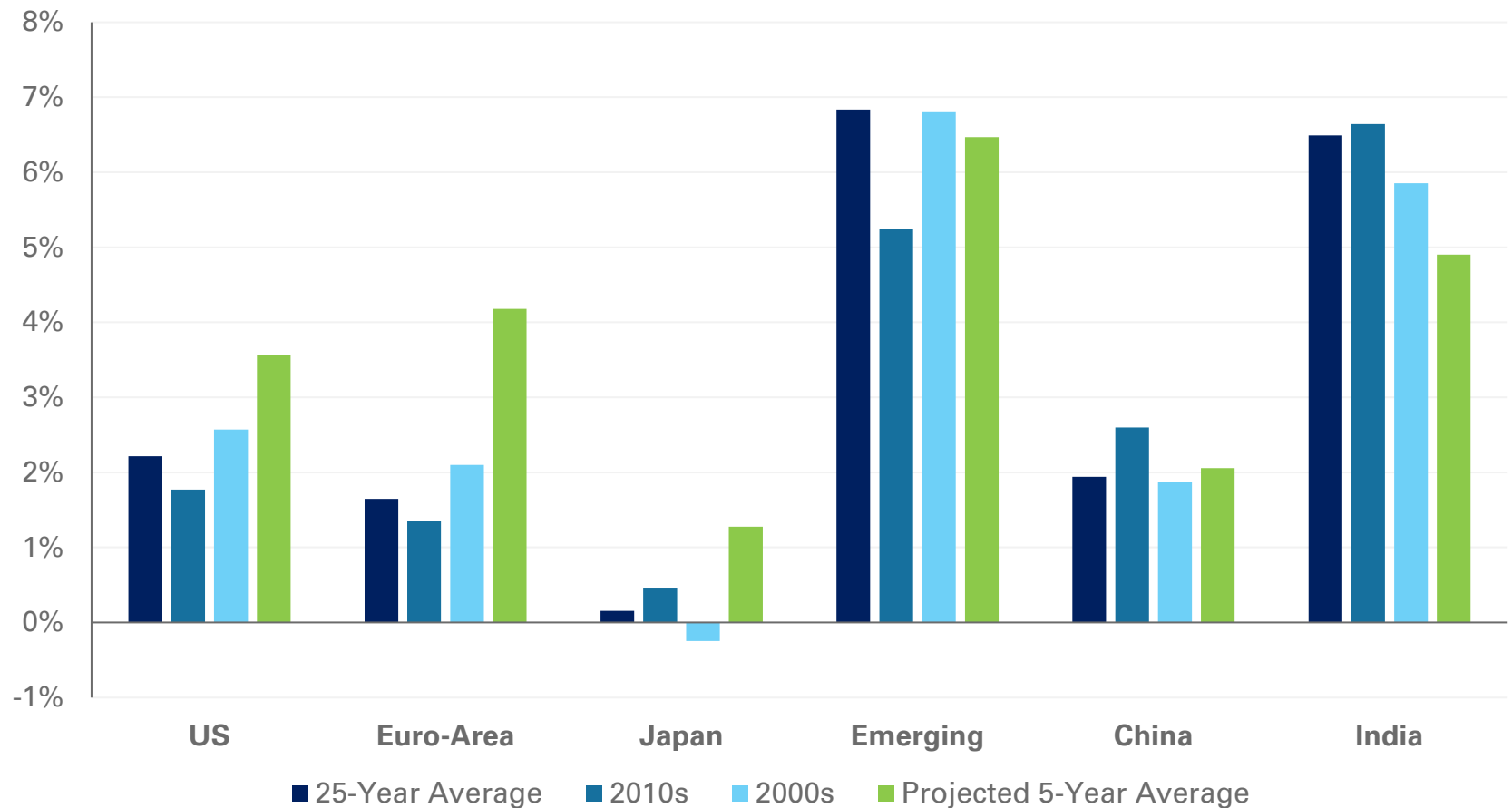


U.S. UNEMPLOYMENT RATES

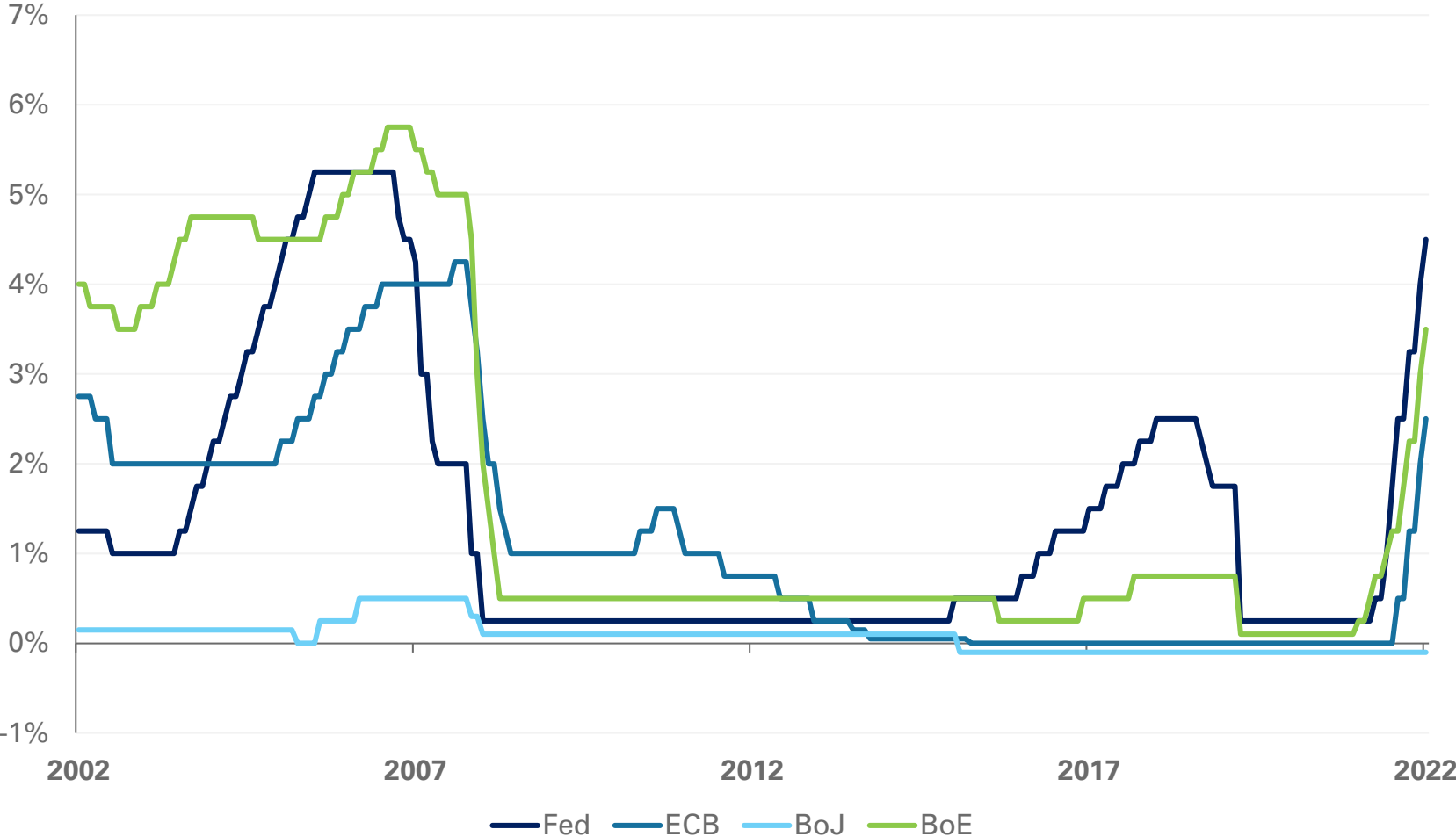


HISTORICAL INFLATION

IMF PROJECTIONS

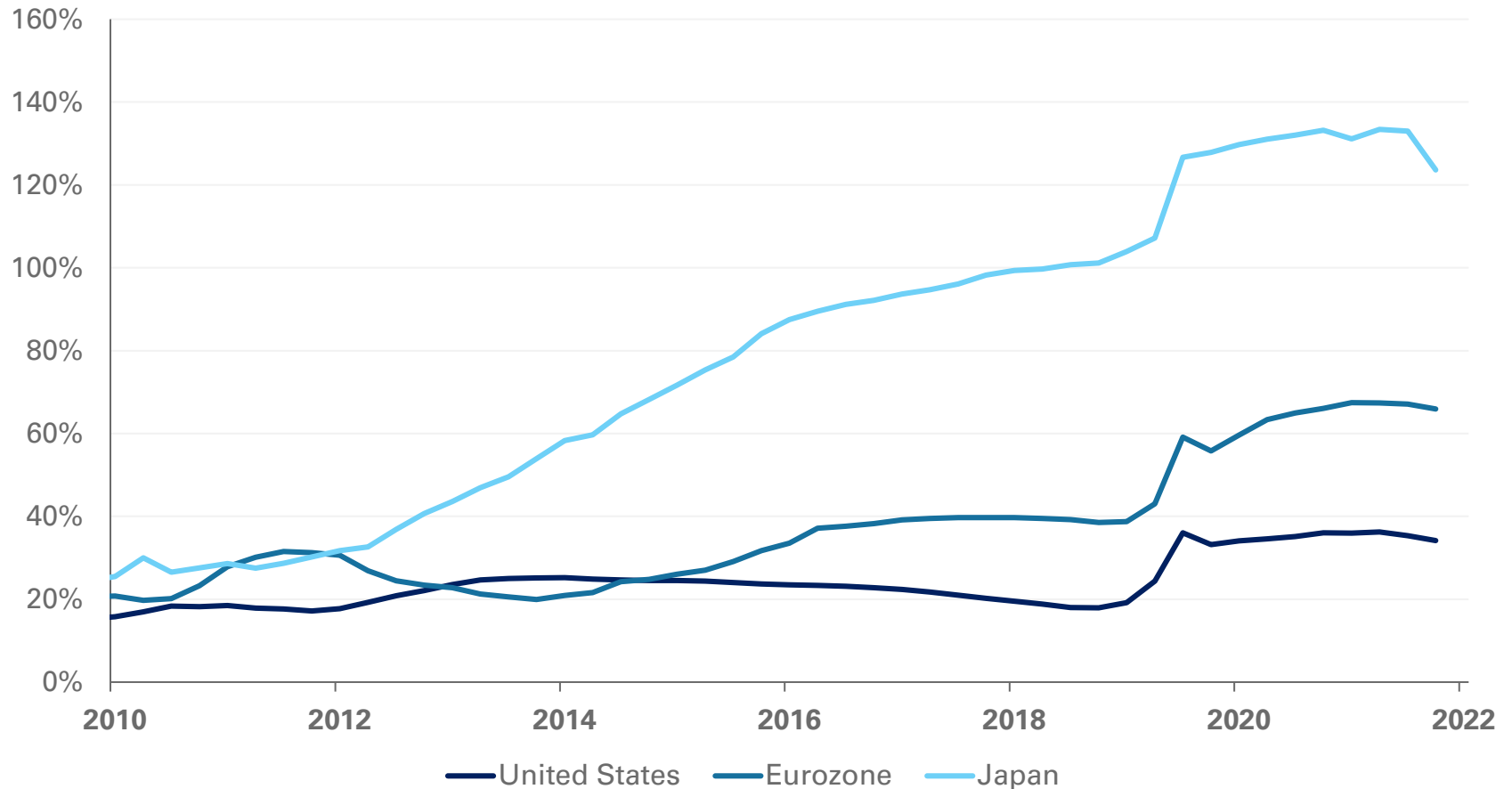


CENTRAL BANK POLICY RATES



CENTRAL BANK BALANCE SHEETS

AS A PERCENTAGE OF GDP



CURRENCIES

RELATIVE TO THE U.S. DOLLAR

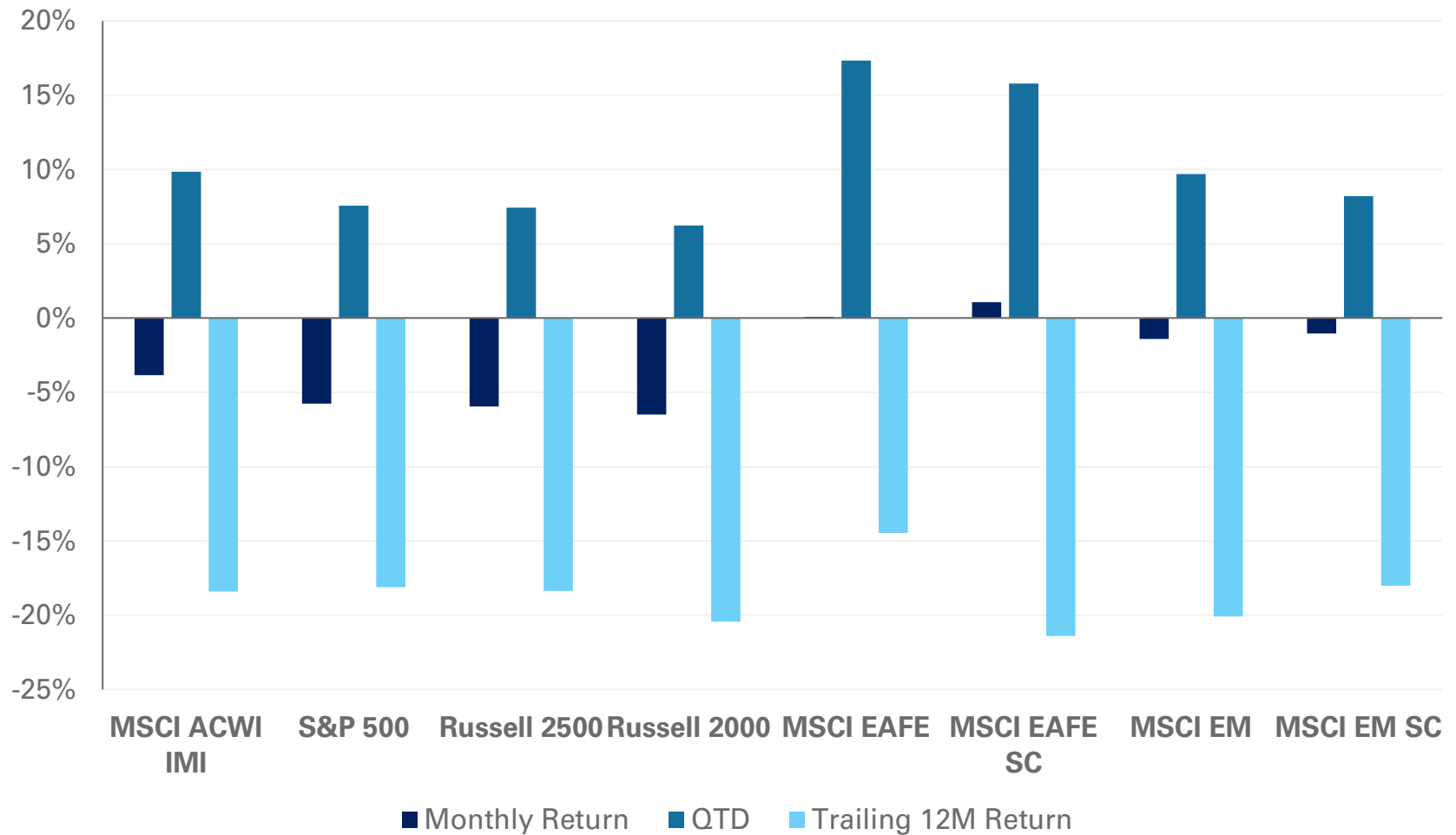
Currencies	Spot	1 Month	QTD	1 Year
Euro	1.07	3.7%	8.9%	-6.2%
British Pound	1.20	1.0%	7.8%	-11.2%
Japanese Yen	131.95	5.8%	9.7%	-12.7%
Swiss Franc	0.93	3.0%	6.4%	-1.5%
Australian Dollar	0.68	1.3%	5.5%	-6.7%
New Zealand Dollar	1.58	1.8%	11.8%	-7.6%
Canadian Dollar	1.35	0.1%	1.4%	-6.8%
Chinese Yuan	6.95	2.8%	2.0%	-8.3%
Taiwanese Dollar	30.74	0.6%	3.3%	-10.0%
Korean Won	1265	4.3%	13.1%	-6.0%
Vietnamese Dong	23575	4.5%	1.2%	-3.3%
Thai Baht	34.64	1.8%	8.9%	-3.6%
Philippines Peso	55.73	1.5%	5.2%	-8.5%
Indian Rupee	82.73	-1.6%	-1.7%	-10.1%
Russian Ruble	73.00	-16.6%	-16.3%	2.7%
Mexican Peso	19.49	-0.6%	3.2%	5.0%
Brazilian Real	5.28	-0.4%	2.4%	5.5%
Chilean Peso	0.02	6.0%	14.5%	12.6%
Argentine Peso	177.11	-5.6%	-16.8%	-42.0%
South African Rand	17.02	-0.1%	5.6%	-6.2%



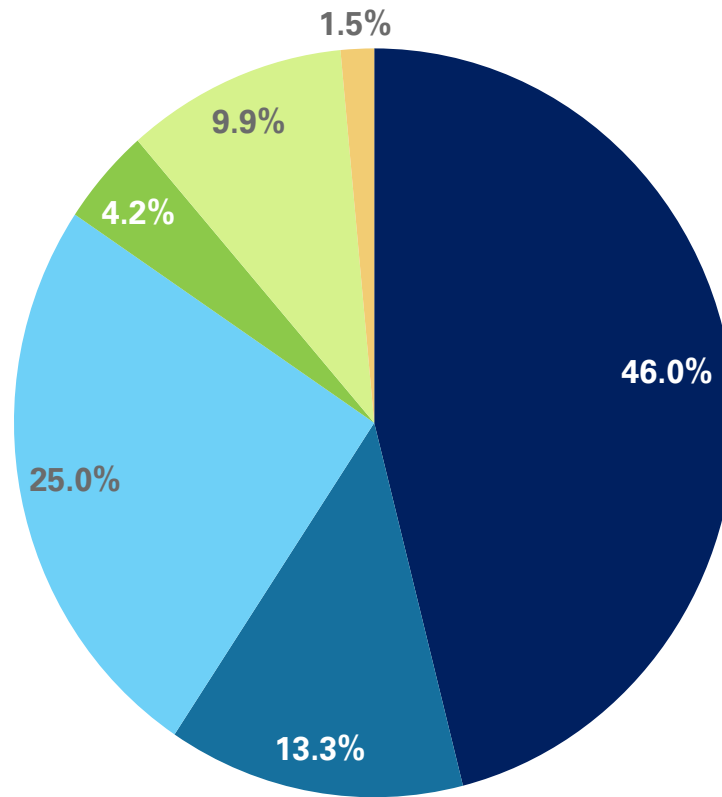
EQUITY



EQUITY INDEX PERFORMANCE



MSCI ACWI IMI WEIGHTS

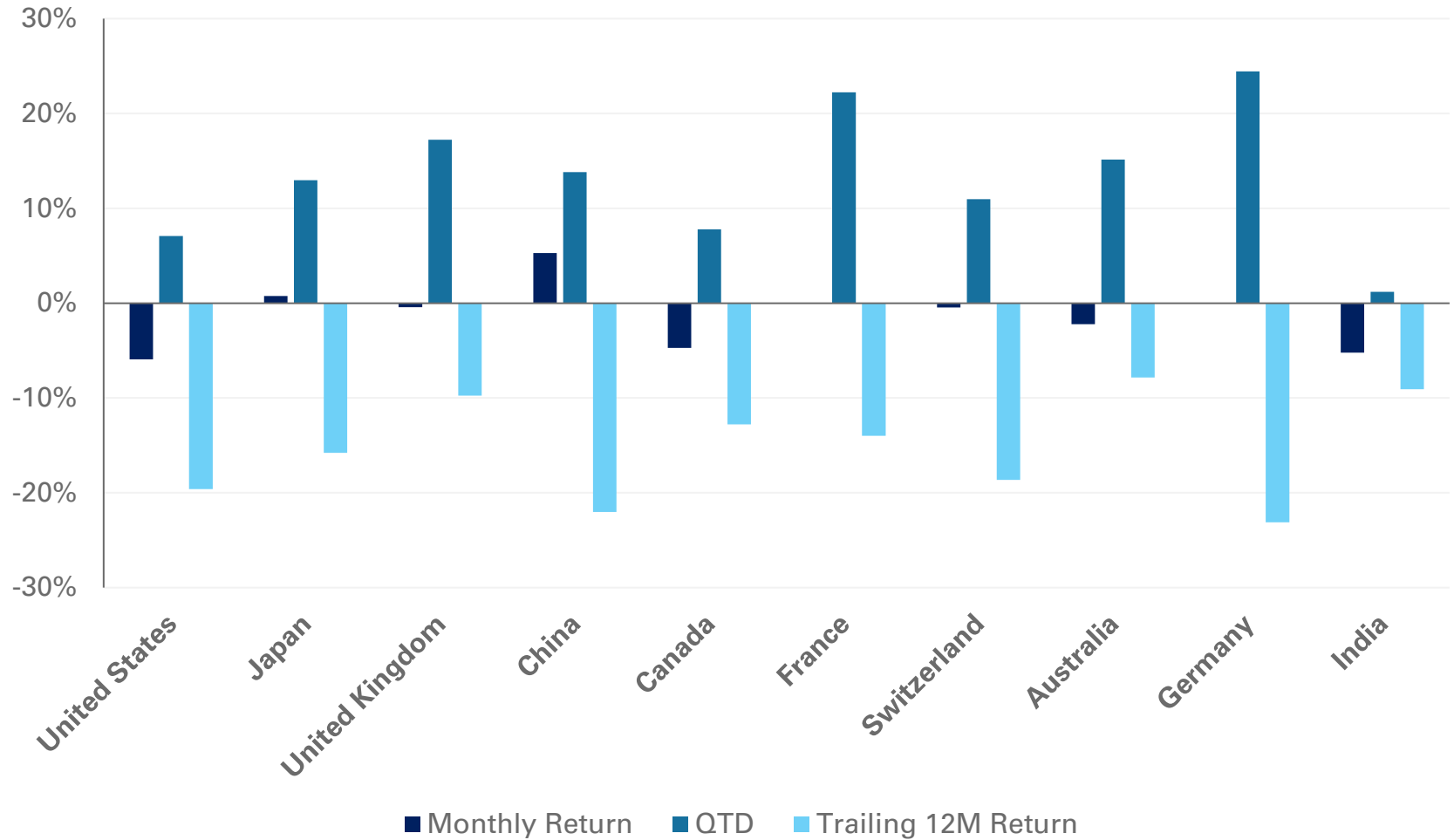


■ US Large Cap ■ US Small Cap ■ EAFE ■ EAFE Small Cap ■ EM ■ EM Small Cap

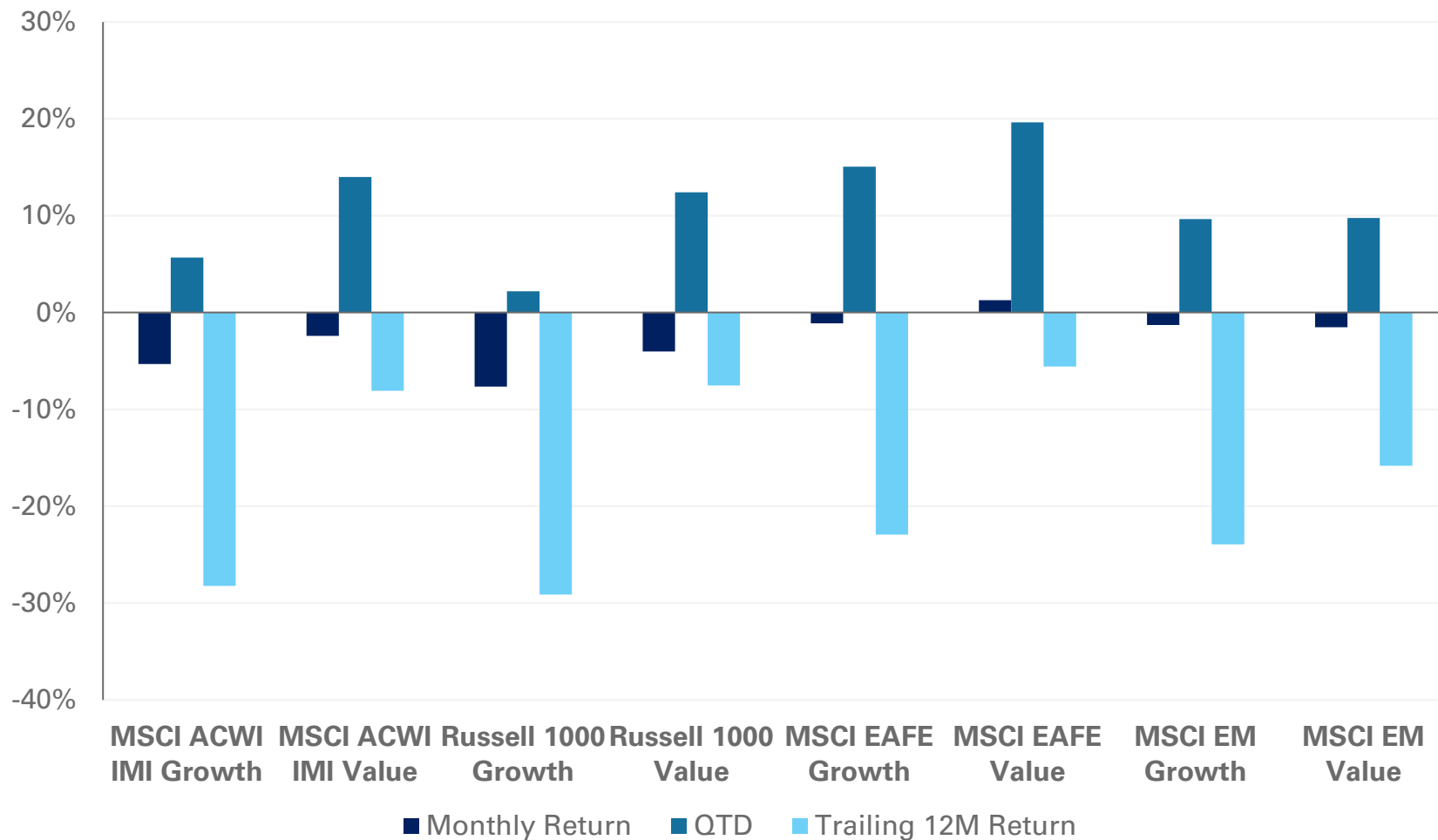


EQUITY INDEX PERFORMANCE

TOP 10 COUNTRIES BY MARKET CAP IN MSCI ACWI IMI INDEX



STYLE INDEX PERFORMANCE

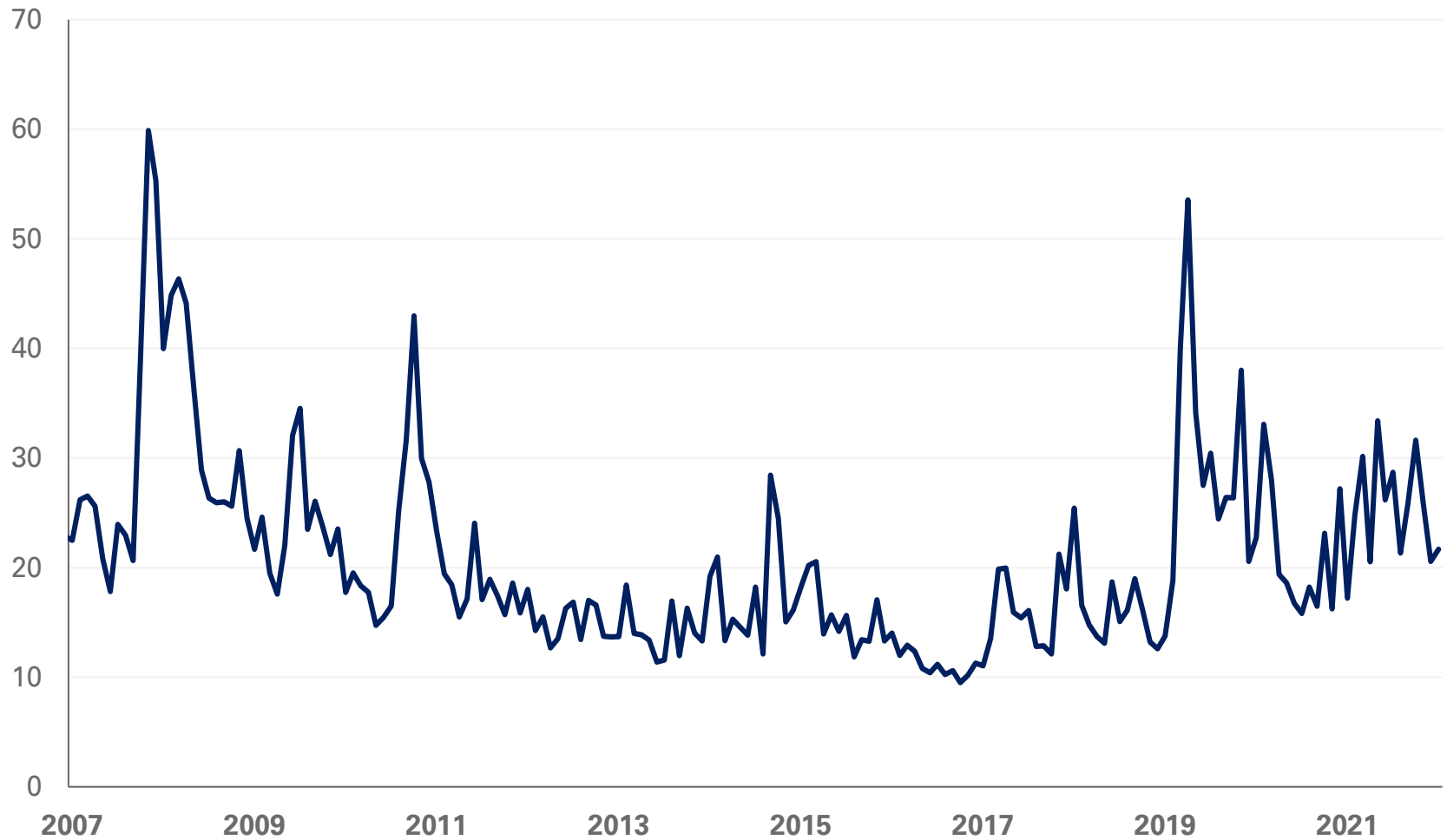


SECTOR INDEX PERFORMANCE

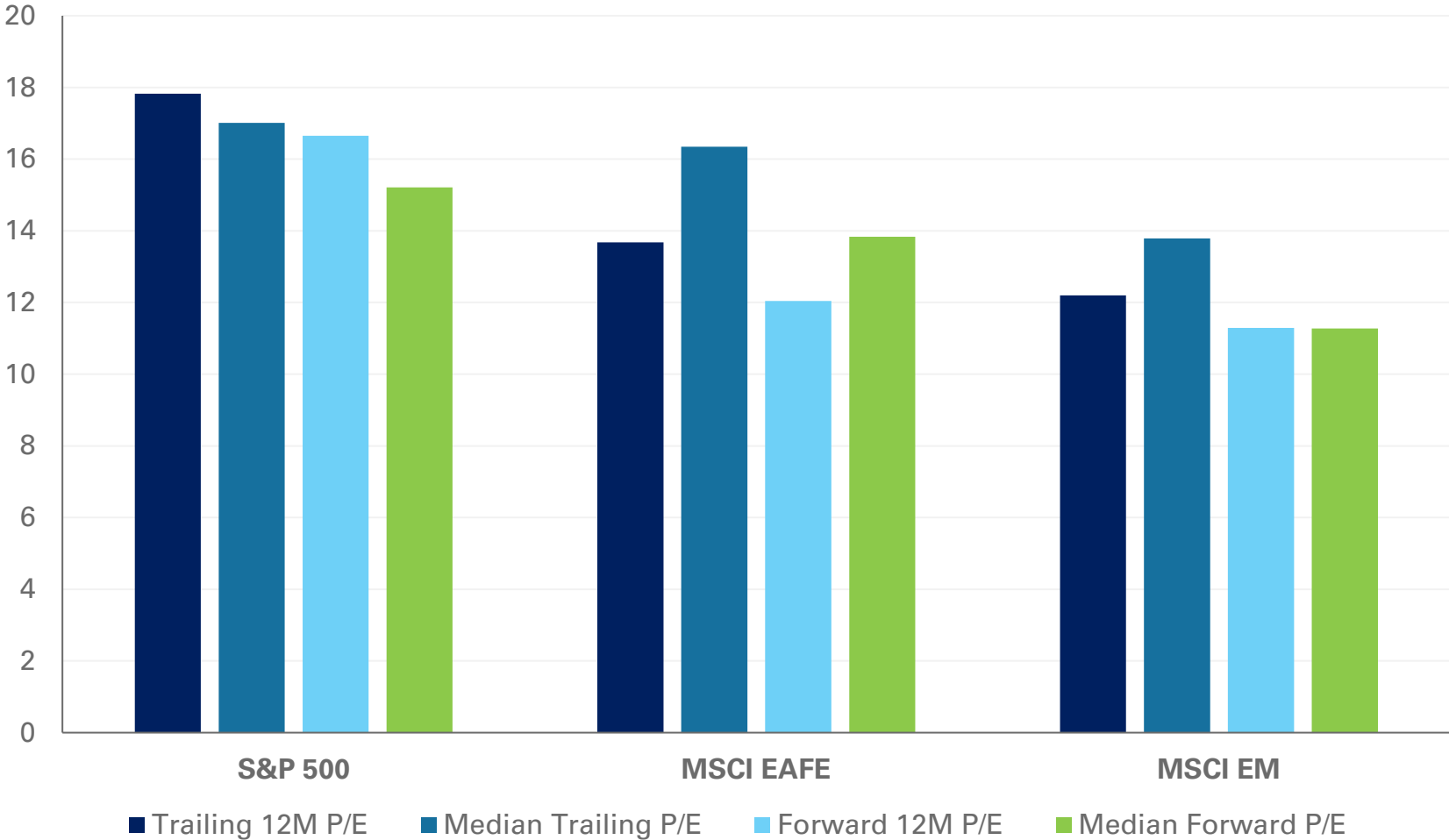
	Monthly Return	QTD	Trailing 12M Return	Index Weight
MSCI ACWI IMI	-3.8%	9.8%	-18.4%	100.0%
Communication Services	-4.4%	2.7%	-35.3%	6.3%
Consumer Discretionary	-6.7%	0.8%	-31.0%	10.7%
Consumer Staples	-1.4%	11.3%	-6.8%	7.4%
Energy	-3.9%	17.3%	34.1%	5.5%
Financials	-2.6%	14.0%	-10.1%	15.0%
Health Care	-1.3%	12.1%	-8.7%	13.0%
Industrials	-2.1%	16.7%	-13.6%	11.2%
Information Technology	-7.6%	6.0%	-30.9%	19.0%
Materials	-2.6%	15.7%	-12.1%	5.4%
Real Estate	-3.1%	6.4%	-25.5%	3.3%
Utilities	-0.2%	10.2%	-4.7%	3.2%

	Monthly Return	QTD	Trailing 12M Return	Index Weight
S&P 500	-5.8%	7.6%	-18.1%	100.0%
Communication Services	-7.8%	-1.4%	-39.9%	7.3%
Consumer Discretionary	-11.3%	-10.2%	-37.0%	9.8%
Consumer Staples	-2.8%	12.7%	-0.6%	7.2%
Energy	-2.9%	22.8%	65.7%	5.2%
Financials	-5.2%	13.6%	-10.5%	11.7%
Health Care	-1.9%	12.8%	-2.0%	15.8%
Industrials	-3.0%	19.2%	-5.5%	8.7%
Information Technology	-8.4%	4.7%	-28.2%	25.7%
Materials	-5.6%	15.0%	-12.3%	2.7%
Real Estate	-4.8%	3.8%	-26.1%	2.7%
Utilities	-0.5%	8.6%	1.6%	3.2%

EQUITY VOLATILITY INDEX (VIX)



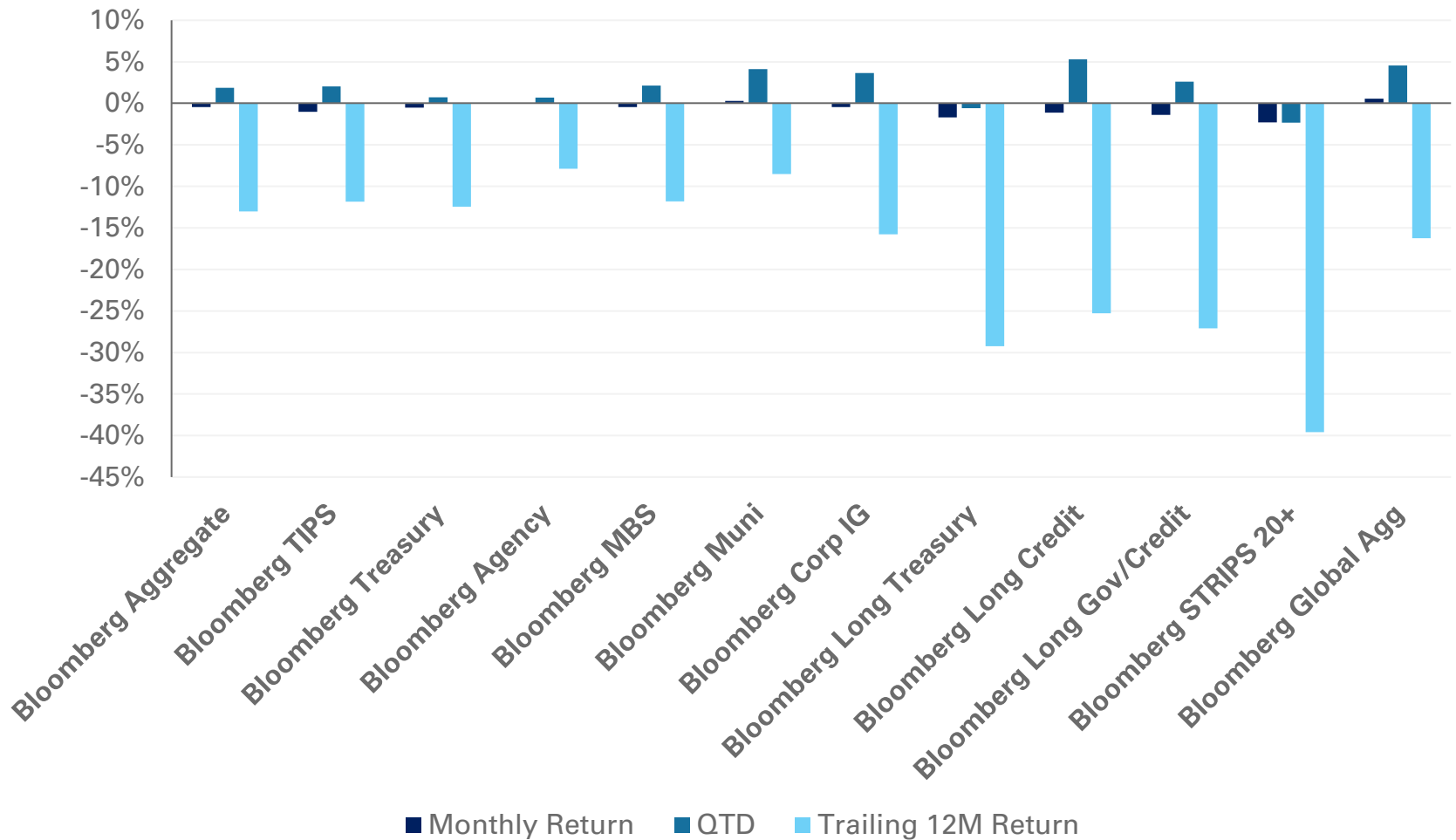
GLOBAL EQUITY VALUATIONS



SAFE-HAVEN FIXED INCOME



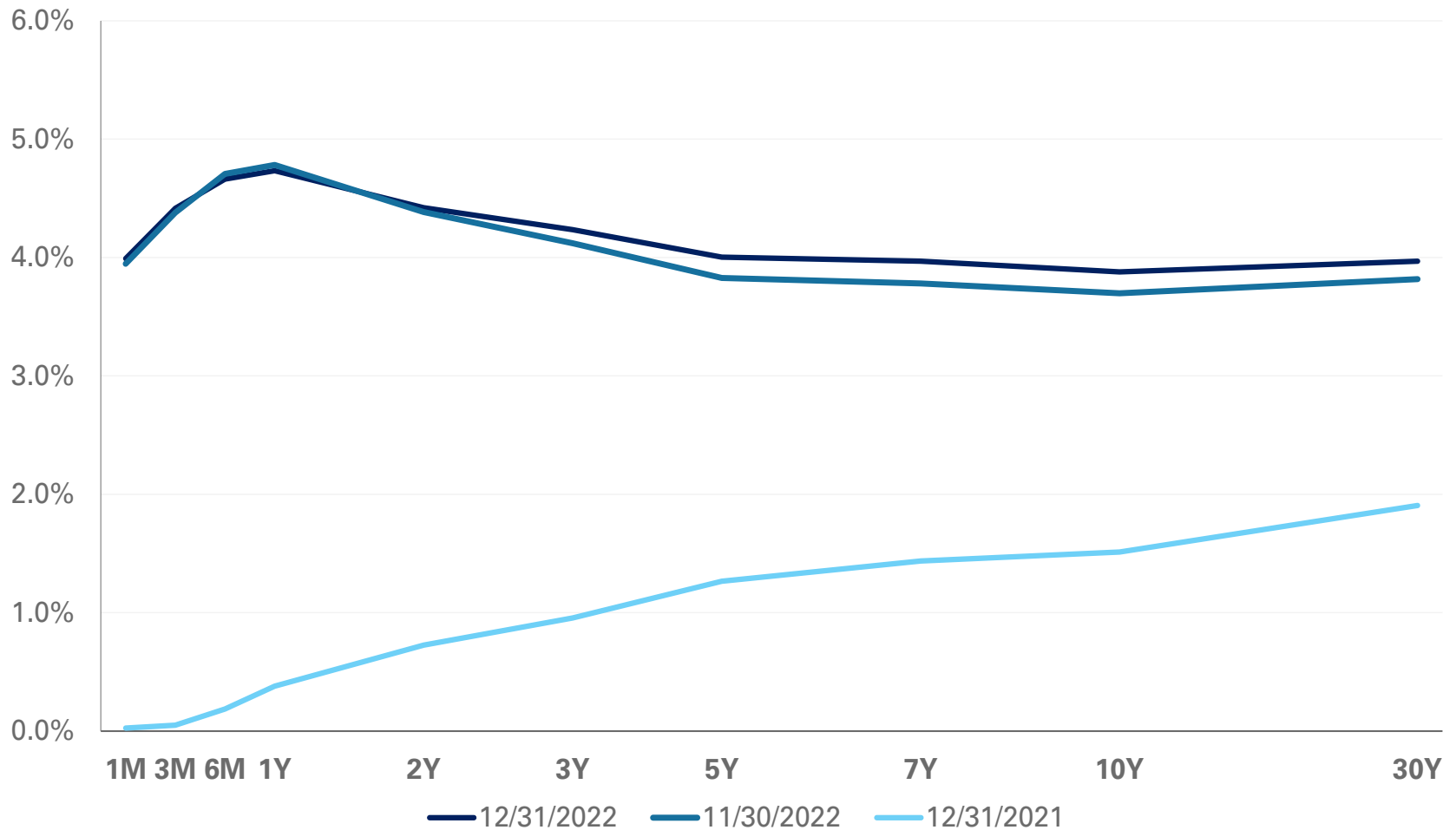
SAFE-HAVEN FIXED INCOME PERFORMANCE



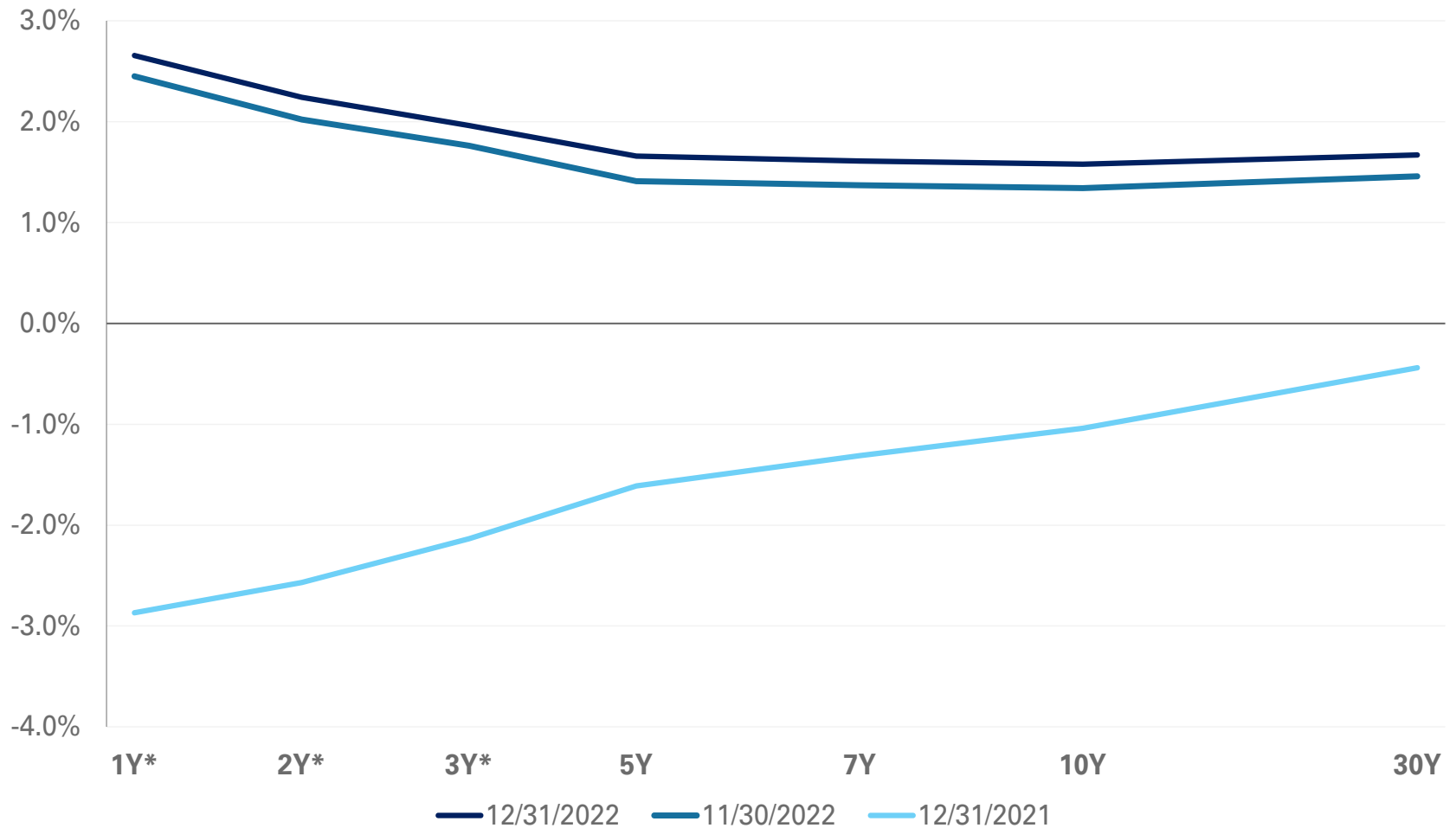
FIXED INCOME CHARACTERISTICS

	Yield to Worst	Spread (bps)	Duration (Years)
Bloomberg Aggregate	4.68%	51	6.2
Bloomberg TIPS	4.38%	-	5.4
Bloomberg Treasury	4.18%	-	6.1
Bloomberg Agency	4.58%	26	3.4
Bloomberg MBS	4.71%	51	5.8
Bloomberg Muni	3.55%	-	6.2
Bloomberg Corp IG	5.42%	130	7.1
Bloomberg Long Treasury	4.08%	-	16.2
Bloomberg Long Credit	5.59%	157	12.8
Bloomberg Long Gov/Credit	4.91%	87	14.3
Bloomberg STRIPS 20+	4.06%	-	25.0
Bloomberg Global Agg	3.73%	51	6.7

US TREASURY YIELD CURVE



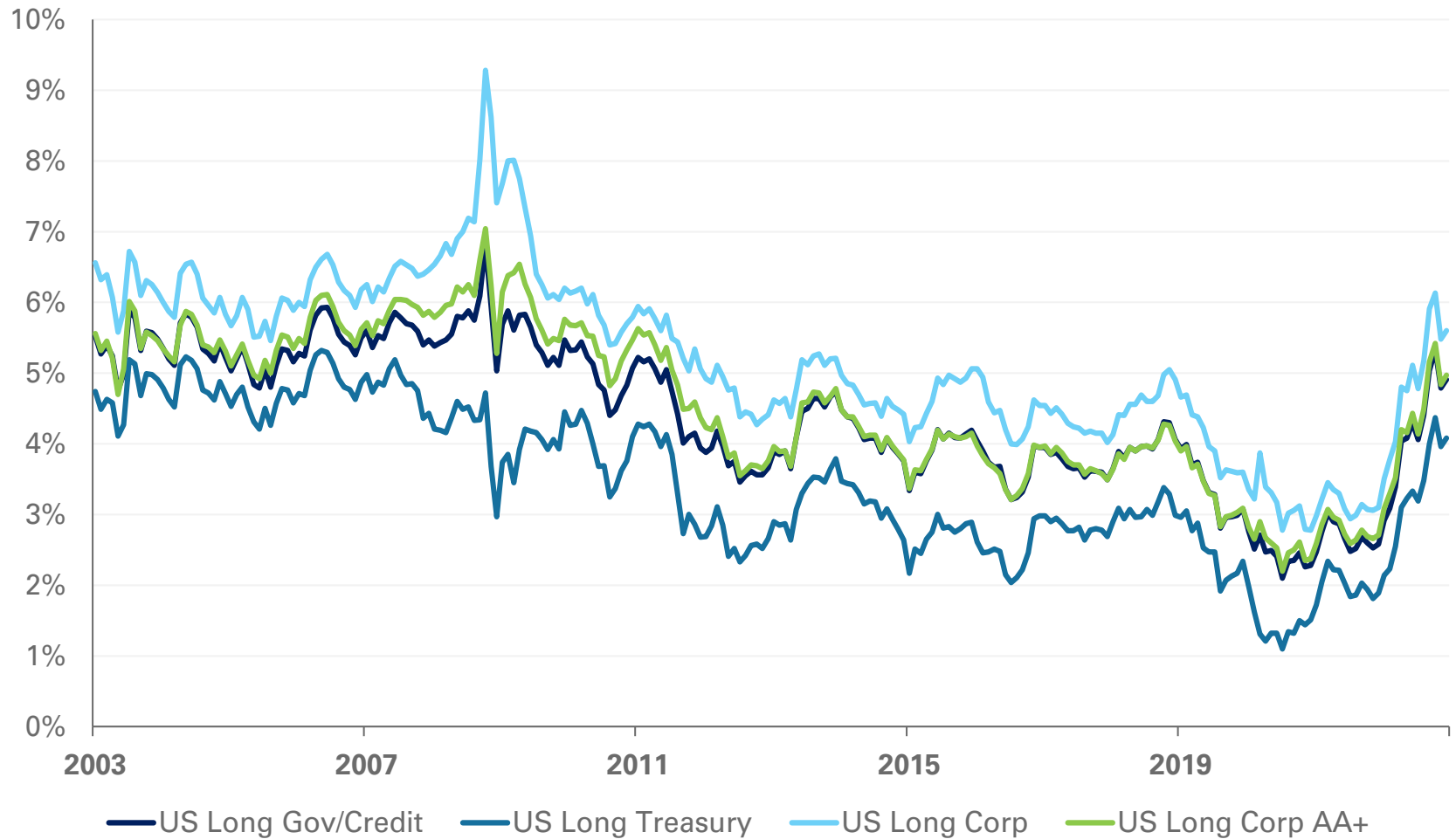
US TREASURY REAL YIELD CURVE



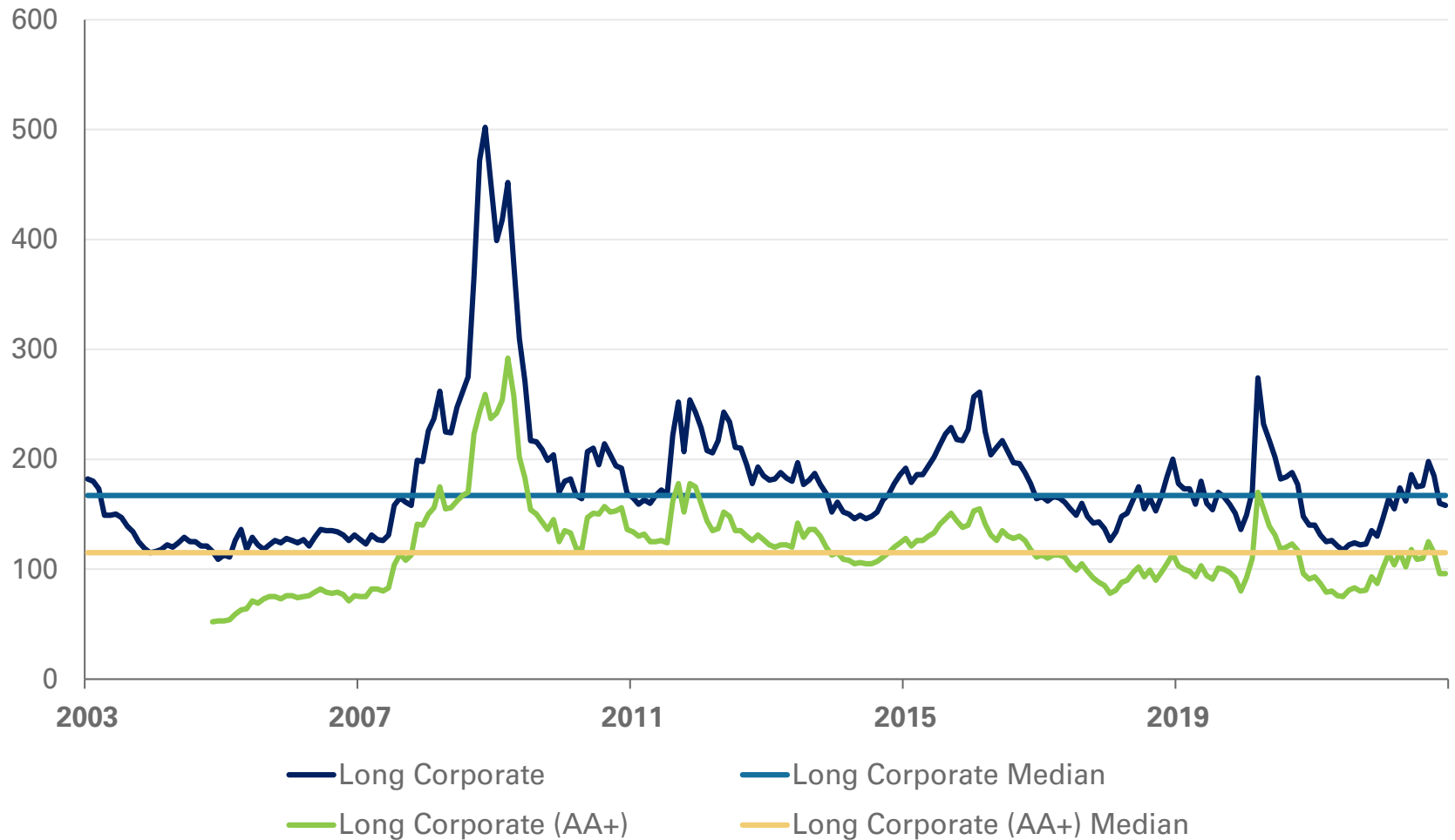
MUNI -TO-TREASURY RATIO



LONG DURATION YIELDS

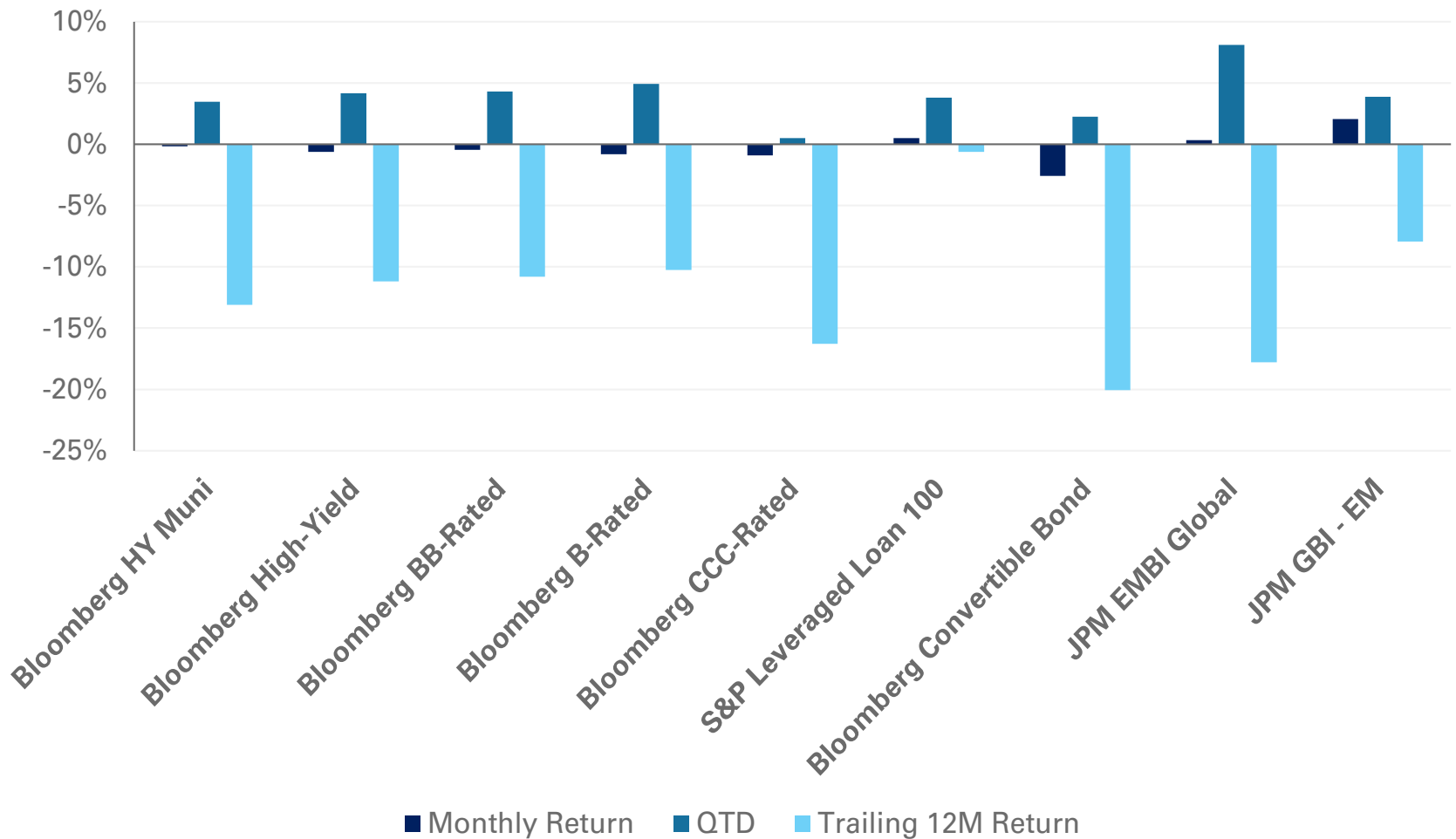


LONG DURATION CORPORATE SPREADS



RETURN-SEEKING CREDIT

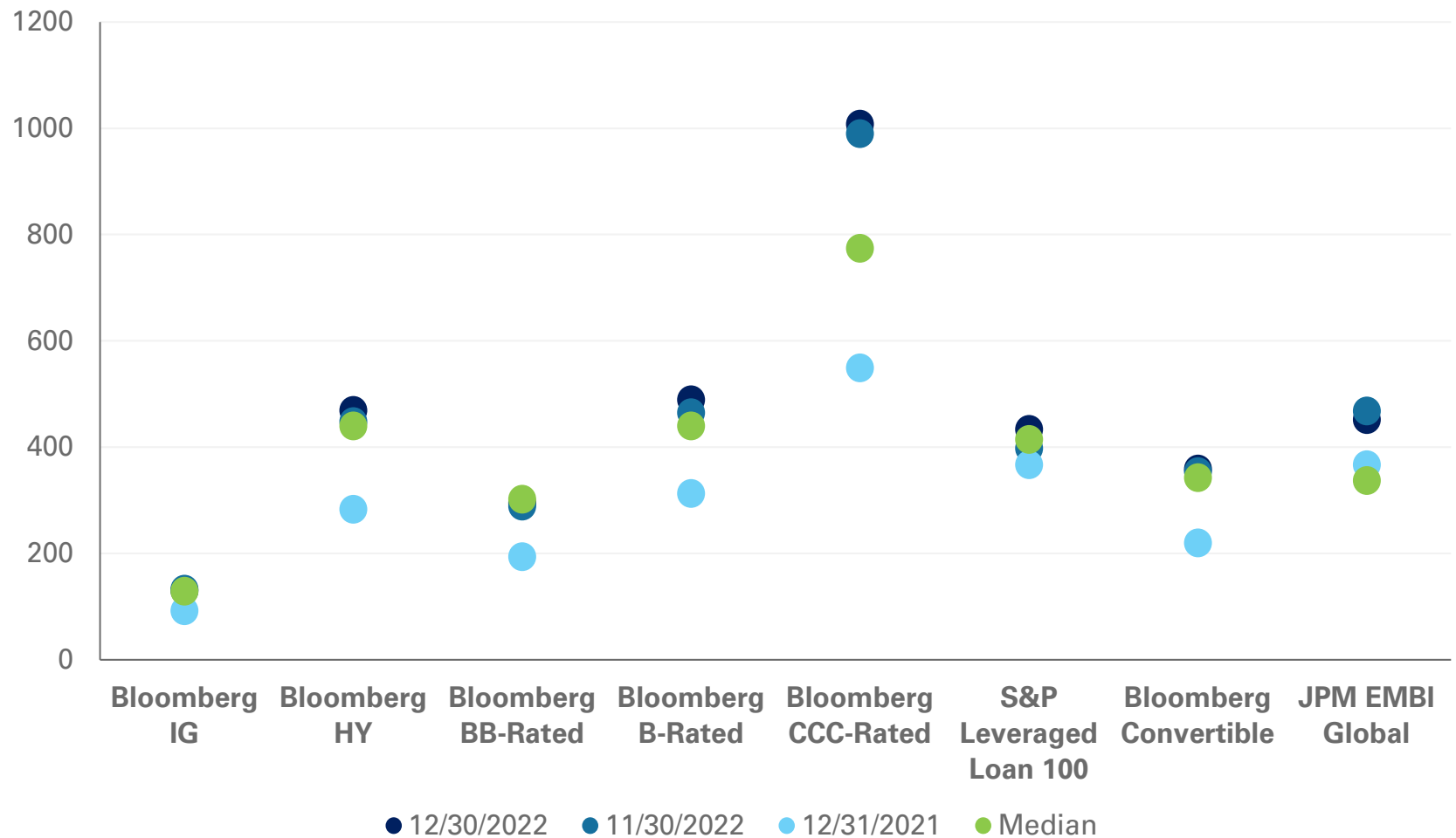
RETURN-SEEKING CREDIT INDEX PERFORMANCE



RETURN-SEEKING CREDIT CHARACTERISTICS

	Yield to Worst	Spread (bps)	Duration (Years)
Bloomberg HY Muni	5.83%	-	7.9
Bloomberg High-Yield	8.96%	469	3.9
Bloomberg BB-Rated	7.21%	295	4.3
Bloomberg B-Rated	9.21%	489	3.6
Bloomberg CCC-Rated	14.26%	1008	3.4
S&P/LSTA Leveraged Loan 100	9.10%	434	-
Bloomberg Convertible Bond	0.67%	359	2.2
JPM EMBI Global	8.56%	452	6.8
JPM GBI - EM	5.04%	-	5.4

CREDIT SPREADS

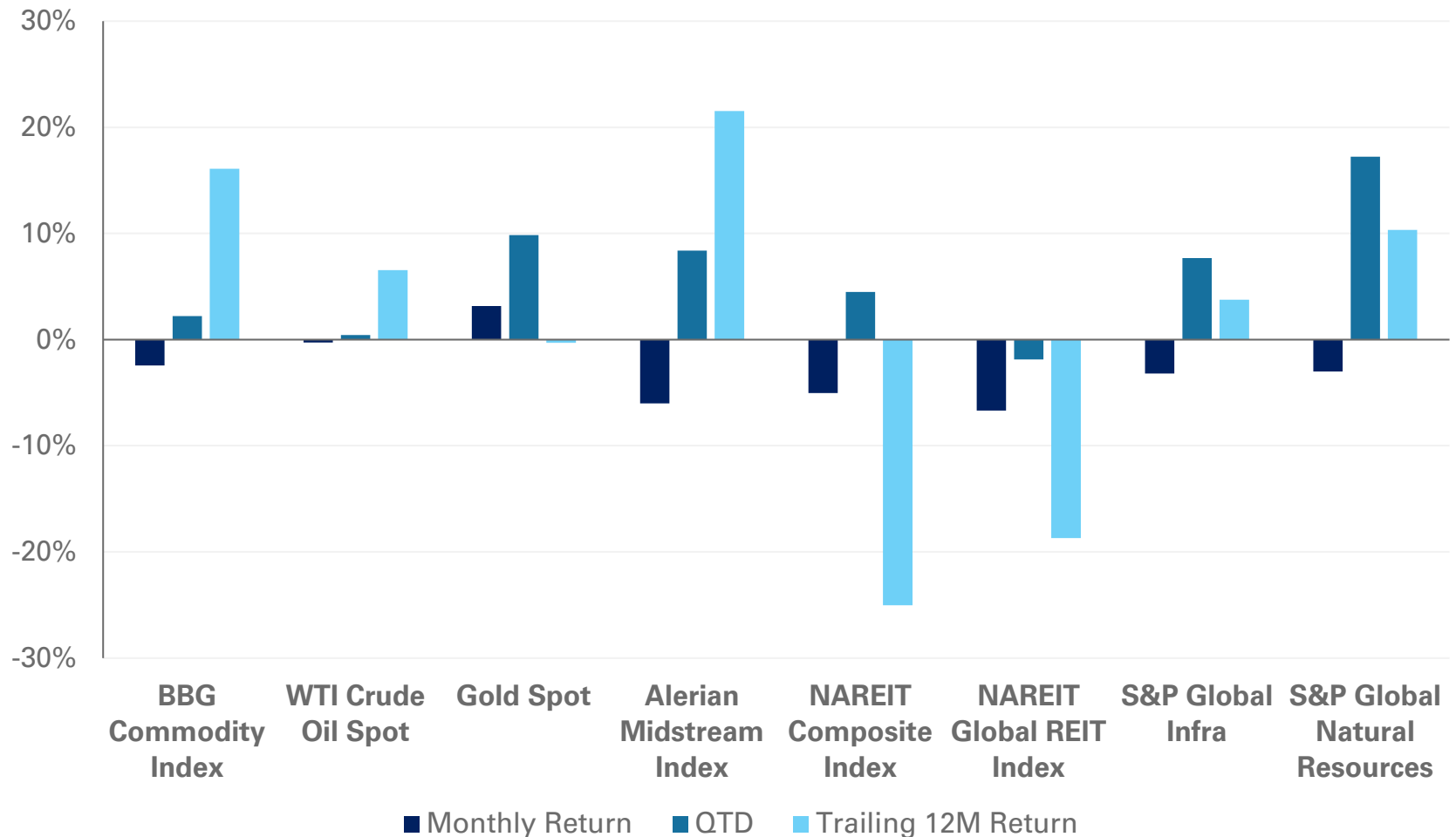




REAL ASSETS



REAL ASSETS INDEX PERFORMANCE



REAL ASSETS INDEX PERFORMANCE

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	-2.4%	2.2%	16.1%	16.1%	12.6%	6.4%
Bloomberg Sub Agriculture Index	1.6%	2.4%	15.5%	15.5%	19.4%	9.1%
Coffee	-1.2%	-22.3%	-21.9%	-21.9%	5.0%	-0.9%
Corn	2.1%	0.3%	23.0%	23.0%	23.0%	11.0%
Cotton	-1.1%	0.8%	-6.9%	-6.9%	13.4%	4.8%
Soybean	3.8%	11.6%	28.9%	28.9%	22.5%	10.1%
Soybean Oil	-9.5%	9.2%	29.6%	29.6%	31.1%	16.9%
Sugar	2.5%	14.5%	12.2%	12.2%	15.0%	2.8%
Wheat	-0.1%	-15.3%	-2.7%	-2.7%	6.9%	6.7%
Bloomberg Sub Energy	-12.2%	-9.1%	36.2%	36.2%	5.9%	3.0%
Brent Crude	-0.9%	7.2%	41.8%	41.8%	17.1%	13.1%
Heating Oil	-2.3%	14.6%	94.9%	94.9%	23.9%	14.8%
Natural Gas	-33.2%	-36.0%	19.4%	19.4%	-3.9%	-11.0%
Unleaded Gas	2.9%	12.8%	48.7%	48.7%	20.2%	12.5%
WTI Crude Oil	-0.2%	4.9%	24.9%	24.9%	-0.2%	1.3%
Bloomberg Sub Industrial Metals	2.2%	16.4%	-2.4%	-2.4%	13.9%	5.0%
Aluminum	-4.2%	9.8%	-15.1%	-15.1%	7.0%	-0.4%
Copper	2.3%	13.0%	-13.5%	-13.5%	10.6%	2.7%
Nickel	11.3%	42.6%	46.7%	46.7%	28.8%	18.8%
Zinc	-1.4%	1.7%	-10.5%	-10.5%	10.7%	1.1%
Bloomberg Sub Precious Metals	5.7%	13.3%	0.1%	0.1%	5.7%	5.7%
Gold	4.1%	9.5%	-0.7%	-0.7%	4.7%	5.7%
Silver	10.8%	26.7%	2.6%	2.6%	8.6%	5.6%
Bloomberg Sub Livestock	2.2%	8.5%	7.4%	7.4%	-3.7%	-3.7%
Lean Hogs	3.1%	11.8%	13.0%	13.0%	-1.1%	-6.9%
Live Cattle	1.8%	7.1%	4.7%	4.7%	-4.9%	-2.3%

OIL MARKETS

WTI VERSUS BRENT CRUDE SPOT PRICES



GOLD SPOT PRICE



INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

This report is provided as a management aid for the client's internal use only. This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

