



# QUARTERLY PERFORMANCE REPORT

SAN BERNARDINO COUNTY  
EMPLOYEES' RETIREMENT  
ASSOCIATION

MARCH 31, 2024

Sam Austin, Partner

Thao Nguyen, Senior Consulting Specialist



# MARKET ENVIRONMENT

# TRAILING ANNUAL INDEX PERFORMANCE

Equity						
	1 MTH	YTD	1 YR	3 YR	5 YR	10 YR
MSCI ACWI	3.1%	8.2%	23.2%	7.0%	10.9%	8.7%
S&P 500	3.2%	10.6%	29.9%	11.5%	15.0%	13.0%
Russell 1000	3.2%	10.3%	29.9%	10.5%	14.8%	12.7%
Russell 2000	3.6%	5.2%	19.7%	-0.1%	8.1%	7.6%
Russell 2500	4.1%	6.9%	21.4%	3.0%	9.9%	8.8%
MSCI EAFE	3.3%	5.8%	15.3%	4.8%	7.3%	4.8%
MSCI EM	2.5%	2.4%	8.2%	-5.1%	2.2%	2.9%

Credit						
	1 MTH	YTD	1 YR	3 YR	5 YR	10 YR
BBG Global Agg	0.6%	-2.1%	0.5%	-4.7%	-1.2%	-0.1%
BBG US Agg	0.9%	-0.8%	1.7%	-2.5%	0.4%	1.5%
BBG Credit	1.2%	-0.4%	4.1%	-1.9%	1.4%	2.5%
BBG US HY	1.2%	1.5%	11.2%	2.2%	4.2%	4.4%
BBG Muni	0.0%	-0.4%	3.1%	-0.4%	1.6%	2.7%
BBG Muni HY	1.2%	1.5%	7.9%	0.6%	3.0%	4.6%
BBG TIPS	0.8%	-0.1%	0.5%	-0.5%	2.5%	2.2%
BBG 20+ STRIPS	1.1%	-6.0%	-12.2%	-12.6%	-5.1%	1.2%
BBG Long Treasuries	1.2%	-3.3%	-6.1%	-8.0%	-2.8%	1.2%
BBG Long Credit	1.9%	-1.6%	3.3%	-4.3%	0.8%	3.1%
BBG Govt/Credit 1-3 Yr	0.4%	0.4%	3.5%	0.2%	1.4%	1.3%
JPM EMBI Glob Div	2.1%	2.0%	11.3%	-1.4%	0.7%	3.0%
JPM GBI-EM Glob Div	0.0%	-2.1%	4.9%	-1.6%	0.1%	-0.3%

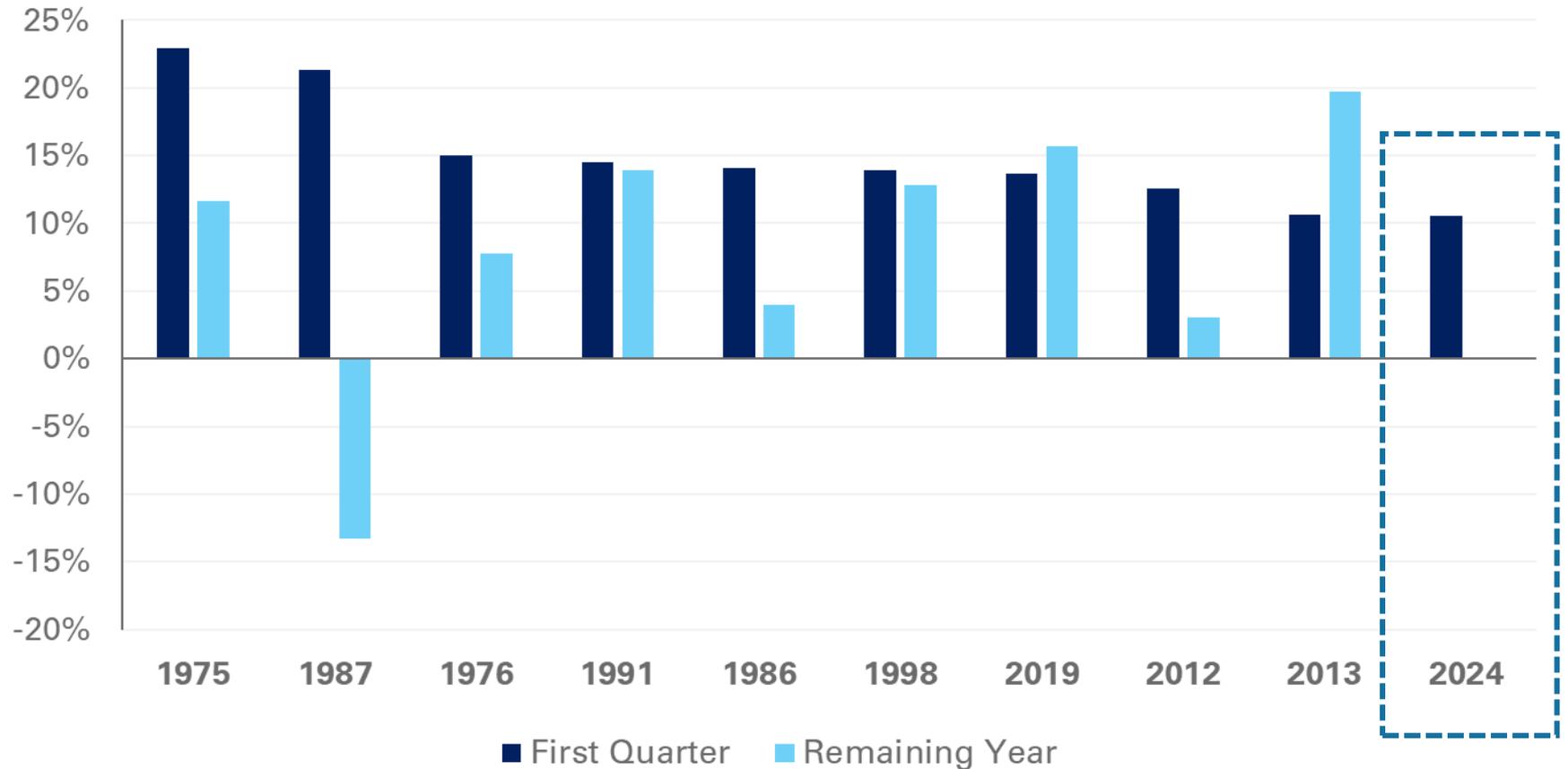
Real Assets						
	1 MTH	YTD	1 YR	3 YR	5 YR	10 YR
BBG Commodity	3.3%	2.2%	-0.6%	9.1%	6.4%	-1.6%
Alerian Midstream Index	6.5%	10.2%	24.6%	20.5%	10.5%	4.8%
NAREIT Composite Index	1.9%	-1.3%	8.4%	2.1%	3.6%	6.7%

Data as of March 31, 2024  
 Source: S&P, MSCI, Russell, Bloomberg, JPM, Alerian, FTSE, FactSet



# STRONG START TO THE YEAR FOR THE S&P 500

BEST FIRST QUARTER TOTAL RETURNS: S&P 500

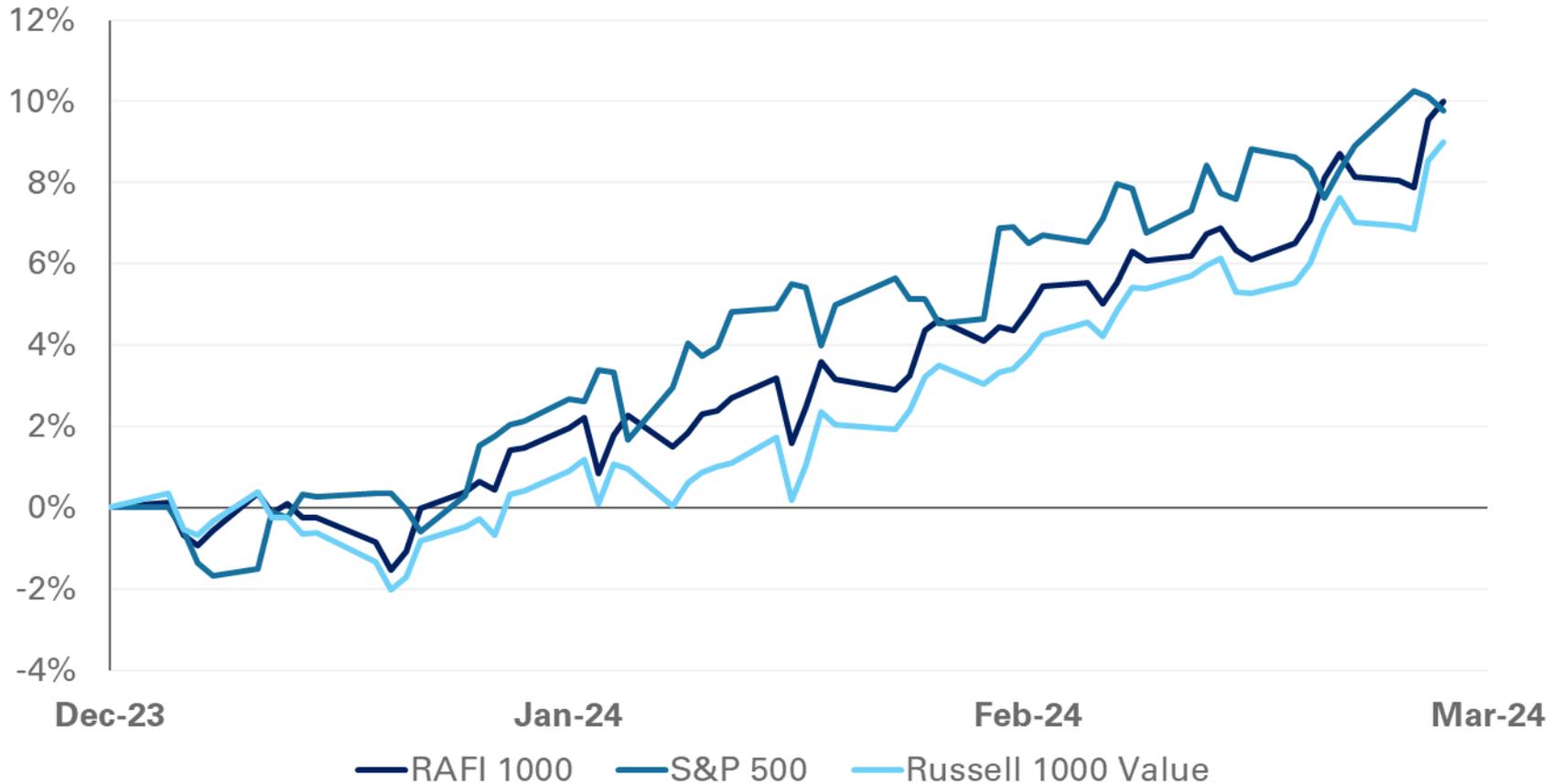


Calculated from 1/1/1970 – 3/31/2024  
Sources: S&P, FactSet



# THE S&P RALLY EXPANDED BEYOND THE MAG-7

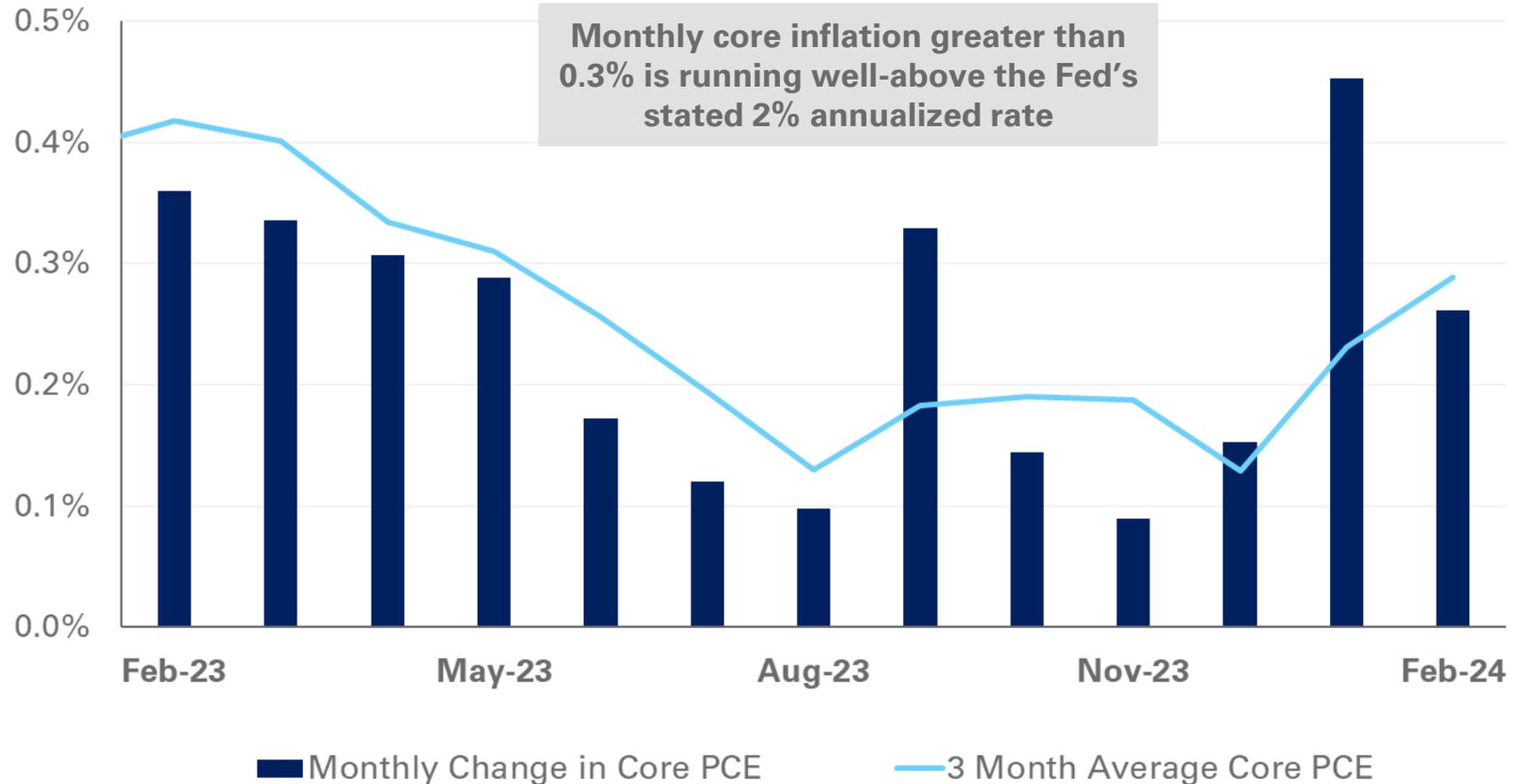
## CUMULATIVE TOTAL RETURNS



Sources: FTSE, S&P, Russell, FactSet

# CORE INFLATION IS RUNNING ABOVE FED TARGET

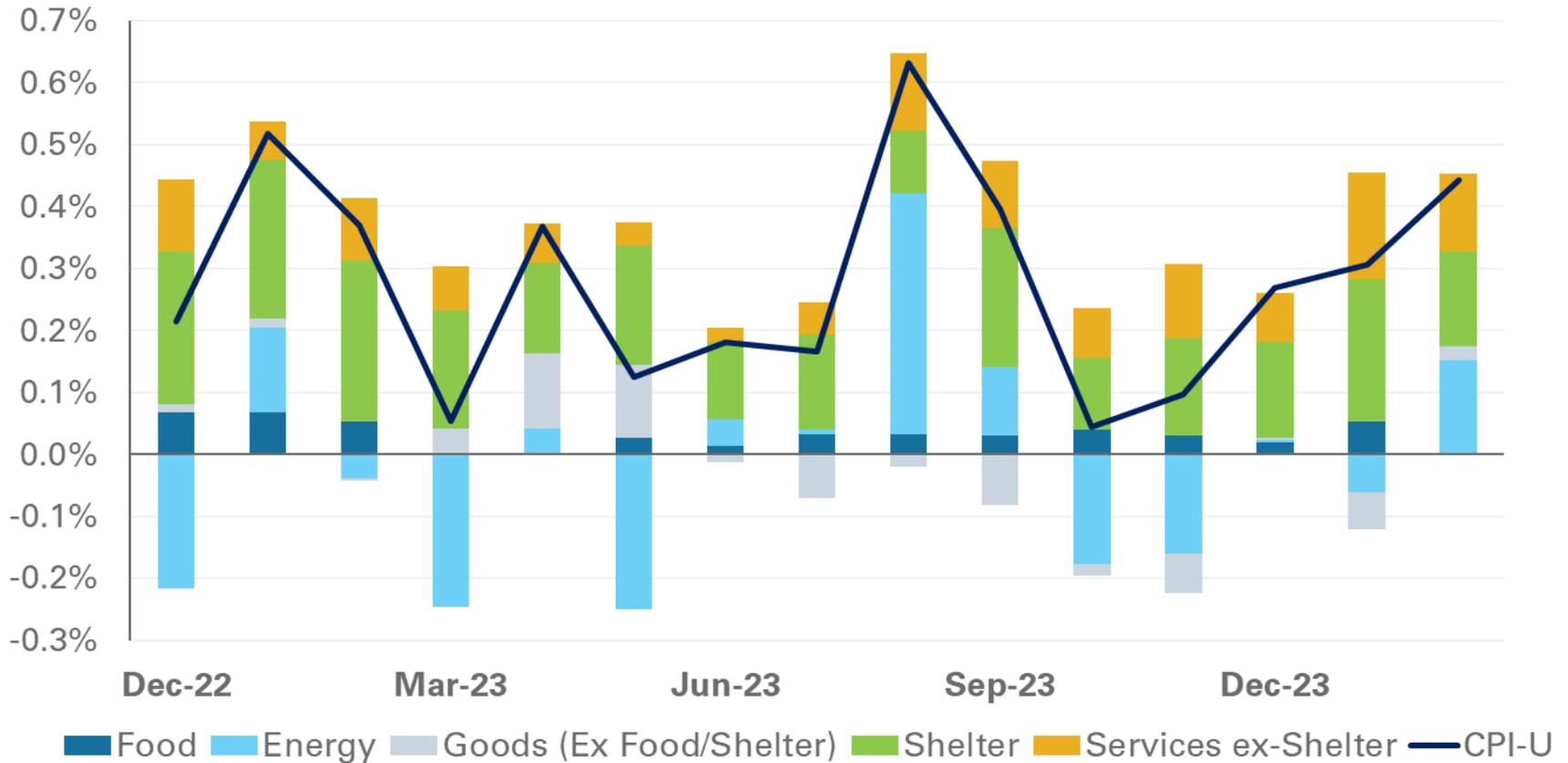
## MONTHLY CHANGE IN CORE PCE (EX-FOOD AND ENERGY)



Sources: Department of Labor, FactSet

# U.S. INFLATION METRICS HAVE RE-ACCELERATED

## MONTHLY CHANGES IN CPI-U BY CATEGORY



Sources: Department of Labor, FactSet

# MARKET RATE EXPECTATIONS ROSE

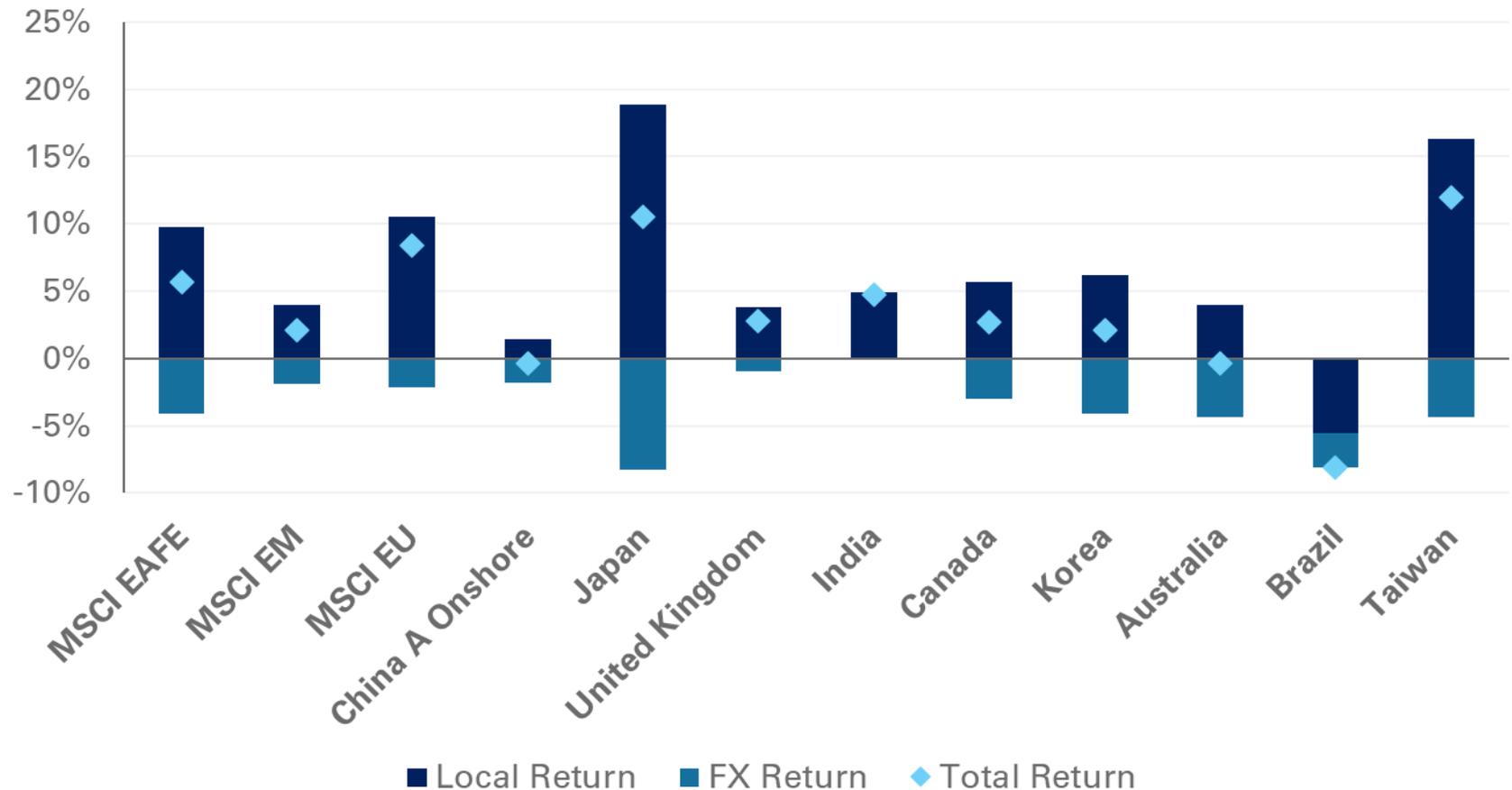
FED FUND FUTURES IMPLIED RATES: 2024 AND 2025 YEAR-END



Source: FactSet

# A STRONG DOLLAR WEIGHED ON NON-U.S. ASSETS

## QUARTERLY TOTAL RETURNS



Sources: MSCI, FactSet

# TOTAL FUND PERFORMANCE



PROPRIETARY & CONFIDENTIAL

# TOTAL FUND PERFORMANCE SUMMARY

## NET OF FEES

	Allocation	Performance (%)					
	Market Value (\$)	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Total Fund</b>	<b>14,983,773,816</b>	<b>2.3 (95)</b>	<b>7.1 (84)</b>	<b>8.1 (91)</b>	<b>6.3 (4)</b>	<b>8.2 (24)</b>	<b>7.1 (27)</b>
<i>Policy Index</i>		3.6 (52)	9.3 (23)	12.0 (32)	2.8 (93)	5.9 (100)	5.4 (100)
<i>S&amp;P 500 Index</i>		10.6 (1)	19.4 (1)	29.9 (1)	11.5 (1)	15.0 (2)	13.0 (2)
<i>Blmbg. U.S. Aggregate Index</i>		-0.8 (100)	2.6 (98)	1.7 (100)	-2.5 (100)	0.4 (100)	1.5 (100)
<i>60% MSCI World/40% FTSE WGBI</i>		4.3 (28)	10.7 (8)	14.5 (7)	2.9 (90)	6.8 (76)	5.8 (100)
<i>InvMetrics Public DB &gt; \$1 Billion Median</i>		3.6	8.6	11.5	4.3	7.3	6.5

### 3 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
<b>Total Fund</b>	<b>6.30 (4)</b>	<b>5.62 (1)</b>	<b>0.66 (2)</b>	<b>0.99 (4)</b>
<i>Policy Index</i>	2.75 (93)	10.94 (72)	0.07 (93)	0.09 (93)
<i>InvMetrics Public DB &gt; \$1 Billion Median</i>	4.27	10.19	0.21	0.30

### 5 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
<b>Total Fund</b>	<b>8.17 (24)</b>	<b>7.46 (1)</b>	<b>0.81 (4)</b>	<b>1.24 (4)</b>
<i>Policy Index</i>	5.89 (100)	10.55 (35)	0.41 (95)	0.59 (92)
<i>InvMetrics Public DB &gt; \$1 Billion Median</i>	7.34	11.03	0.52	0.77

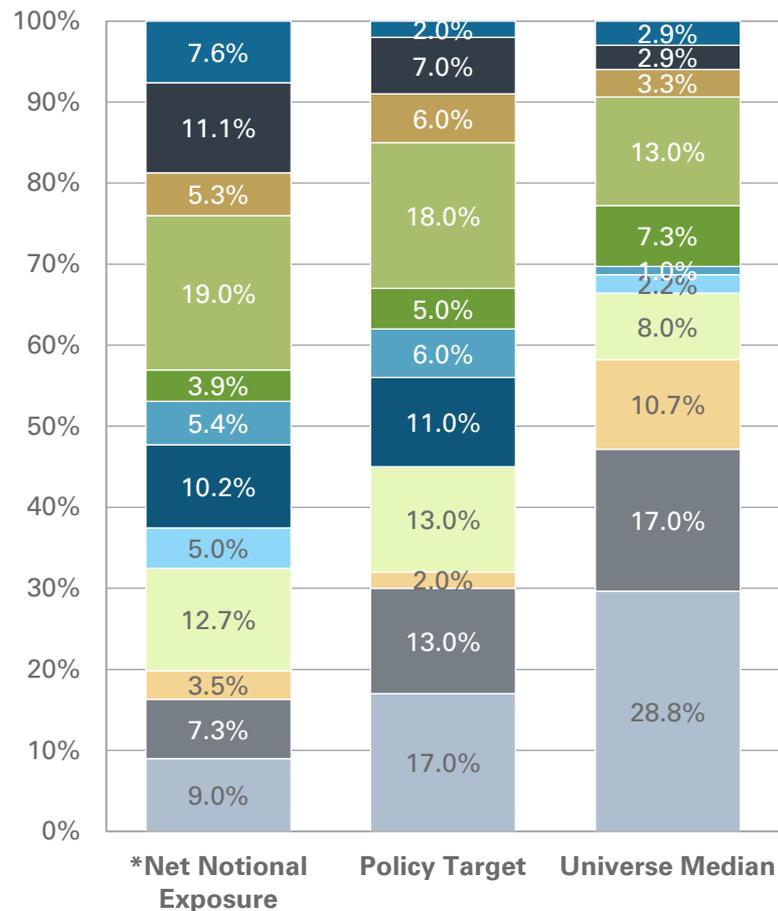
### 10 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
<b>Total Fund</b>	<b>7.14 (27)</b>	<b>5.85 (1)</b>	<b>0.97 (4)</b>	<b>1.51 (5)</b>
<i>Policy Index</i>	5.38 (100)	8.37 (35)	0.51 (97)	0.76 (93)
<i>InvMetrics Public DB &gt; \$1 Billion Median</i>	6.51	8.93	0.60	0.89



Note: Risk statistics are measured on a monthly basis.

# ASSET ALLOCATION COMPLIANCE



Asset Class	*Net Notional Exposure	Net Notional Exposure	Policy Target	Difference	Policy Ranges	Within Range
US Equities	1,344,947	9.0%	17.0%	-8.0%	10%-27%	No
Int'l Equities	1,096,438	7.3%	13.0%	-5.7%	8%-18%	No
US Core Fixed Income	526,930	3.5%	2.0%	1.5%	-3%-7%	Yes
US Credit	1,895,544	12.7%	13.0%	-0.3%	8%-18%	Yes
Non-US Core Fixed Income	749,189	5.0%	0.0%	5.0%	-5%-5%	Yes
Non-US Credit	1,534,572	10.2%	11.0%	-0.8%	6%-16%	Yes
Emerging Market Debt	805,296	5.4%	6.0%	-0.6%	1%-10%	Yes
Real Estate	582,251	3.9%	5.0%	-1.1%	0%-10%	Yes
Private Equity	2,847,280	19.0%	18.0%	1.0%	6%-23%	Yes
Real Assets	796,905	5.3%	6.0%	-0.7%	0%-10%	Yes
Absolute Return	1,663,587	11.1%	7.0%	4.1%	0%-12%	Yes
Cash	1,140,836	7.6%	2.0%	5.6%	0%-10%	Yes
<b>Total</b>	<b>14,983,774</b>	<b>100.00%</b>	<b>100.00%</b>			

- US Equities
- Int'l Equities
- U.S. Core
- US Credit
- Non-US Core Fixed Income
- Non-US Credit
- Emerging Market Debt
- Real Estate
- Private Equity
- Real Assets
- Absolute Return
- Cash

Note: Notional values are sourced from Russell Investments. Net synthetic exposure applied to Non-US Core Fixed Income and Non-US Credit.



# INVESTMENT EXPOSURE SUMMARY

OVERLAY AS OF MARCH 31, 2024

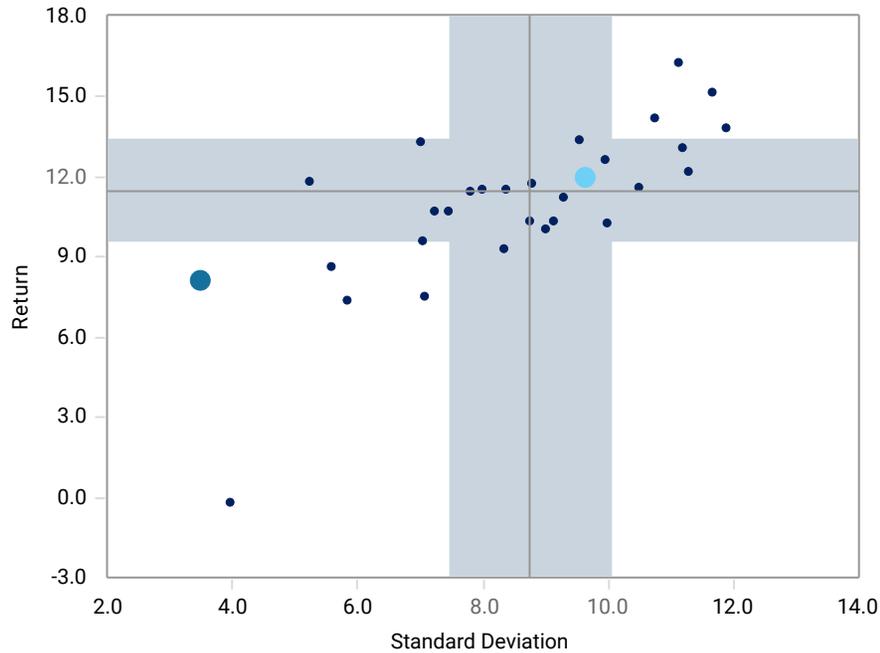
Asset Class	Physical Exposure		Delta Adjusted Synthetic Exposure		Net Position		Overlay Target		Policy Target	
	Value	%	Value	%	Value	%	Value	%	Value	%
<b>Total Market Value</b>	<b>14,897.2</b>	<b>100.0%</b>	<b>0.0</b>	<b>0.0%</b>	<b>14,897.2</b>	<b>100.0%</b>	<b>14,897.2</b>	<b>100.0%</b>	<b>14,897.2</b>	<b>100.00%</b>
Cash	1,713.1	11.5%	-1,403.8	-9.4%	309.3	2.1%	0.0	0.0%	0.0	0.00%
Cash	1,713.1	11.5%	-1,403.8	-9.4%	309.3	2.1%	0.0	0.0%	0.0	0.00%
Equity	2,733.9	18.4%	-292.7	-2.0%	2,441.3	16.4%	3,187.4	21.4%	3,217.8	21.60%
Emerging Markets	490.6	3.3%	105.3	0.7%	595.9	4.0%	590.3	4.0%	595.9	4.00%
International Developed	449.4	3.0%	56.0	0.4%	505.4	3.4%	590.3	4.0%	595.9	4.00%
US Large Cap	1,793.7	12.0%	-549.6	-3.7%	1,244.0	8.4%	1,844.6	12.4%	1,862.2	12.50%
US Small Cap	0.3	0.0%	95.7	0.6%	95.9	0.6%	162.3	1.1%	163.9	1.10%
Fixed	3,920.0	26.3%	1,696.5	11.4%	5,616.5	37.7%	5,179.6	34.8%	5,228.9	35.10%
Global ex US Fixed Income	1,882.5	12.6%	1,169.5	7.9%	3,052.1	20.5%	3,025.1	20.3%	3,053.9	20.50%
High Yield	1,791.7	12.0%	0.0	0.0%	1,791.7	12.0%	1,387.1	9.3%	1,400.3	9.40%
US Fixed Income	245.8	1.7%	526.9	3.5%	772.8	5.2%	767.3	5.2%	774.7	5.20%
Other	6,530.2	43.8%	0.0	0.0%	6,530.2	43.8%	6,530.2	43.8%	6,450.5	43.30%
Alternatives	4.0	0.0%	0.0	0.0%	4.0	0.0%	4.0	0.0%	0.0	0.00%
Commodities	659.4	4.4%	0.0	0.0%	659.4	4.4%	659.4	4.4%	655.5	4.40%
Infrastructure	159.8	1.1%	0.0	0.0%	159.8	1.1%	159.8	1.1%	119.2	0.80%
Private Equity	2,821.8	18.9%	0.0	0.0%	2,821.8	18.9%	2,821.8	18.9%	2,785.8	18.70%
Real Estate	561.2	3.8%	0.0	0.0%	561.2	3.8%	561.2	3.8%	566.1	3.80%
Tactical Cash	2,324.0	15.6%	0.0	0.0%	2,324.0	15.6%	2,324.0	15.6%	2,324.0	15.60%



Source: Russell Investments

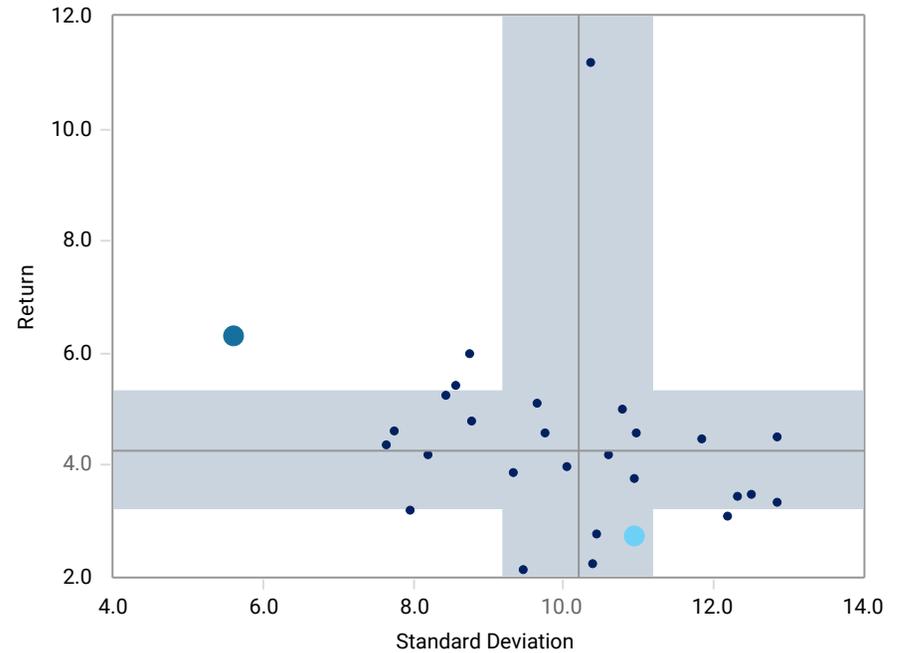
# RISK VS. RETURN

1 Year Ending March 31, 2024



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

3 Years Ending March 31, 2024



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

1 Year Ending March 31, 2024

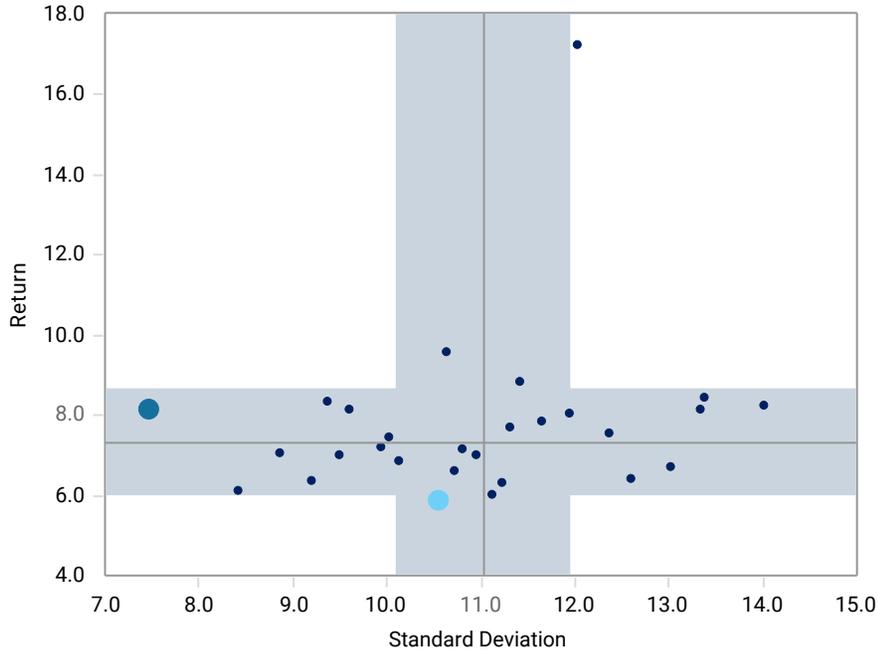
	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	8.1 (91)	3.5 (1)	0.8 (21)	1.5 (13)
Policy Index	12.0 (32)	9.6 (67)	0.7 (53)	1.2 (51)
Population	28	28	28	28

3 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	6.3 (4)	5.6 (1)	0.7 (2)	1.0 (4)
Policy Index	2.8 (93)	10.9 (72)	0.1 (93)	0.1 (93)
Population	26	26	26	26

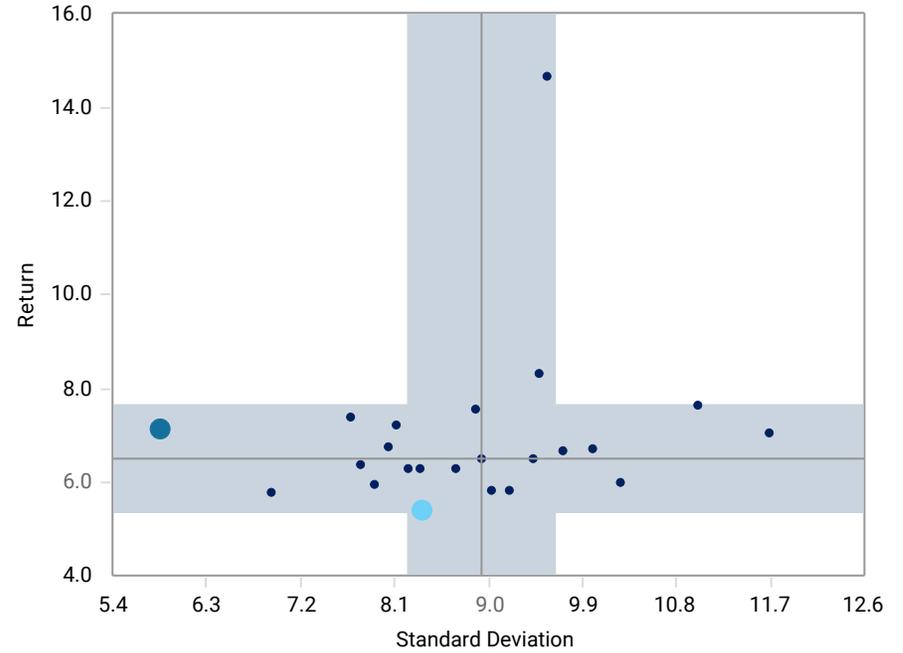
# RISK VS. RETURN

5 Years Ending March 31, 2024



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

10 Years Ending March 31, 2024



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

5 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	8.2 (24)	7.5 (1)	0.8 (4)	1.2 (4)
Policy Index	5.9 (100)	10.6 (35)	0.4 (95)	0.6 (92)
Population	26	26	26	26

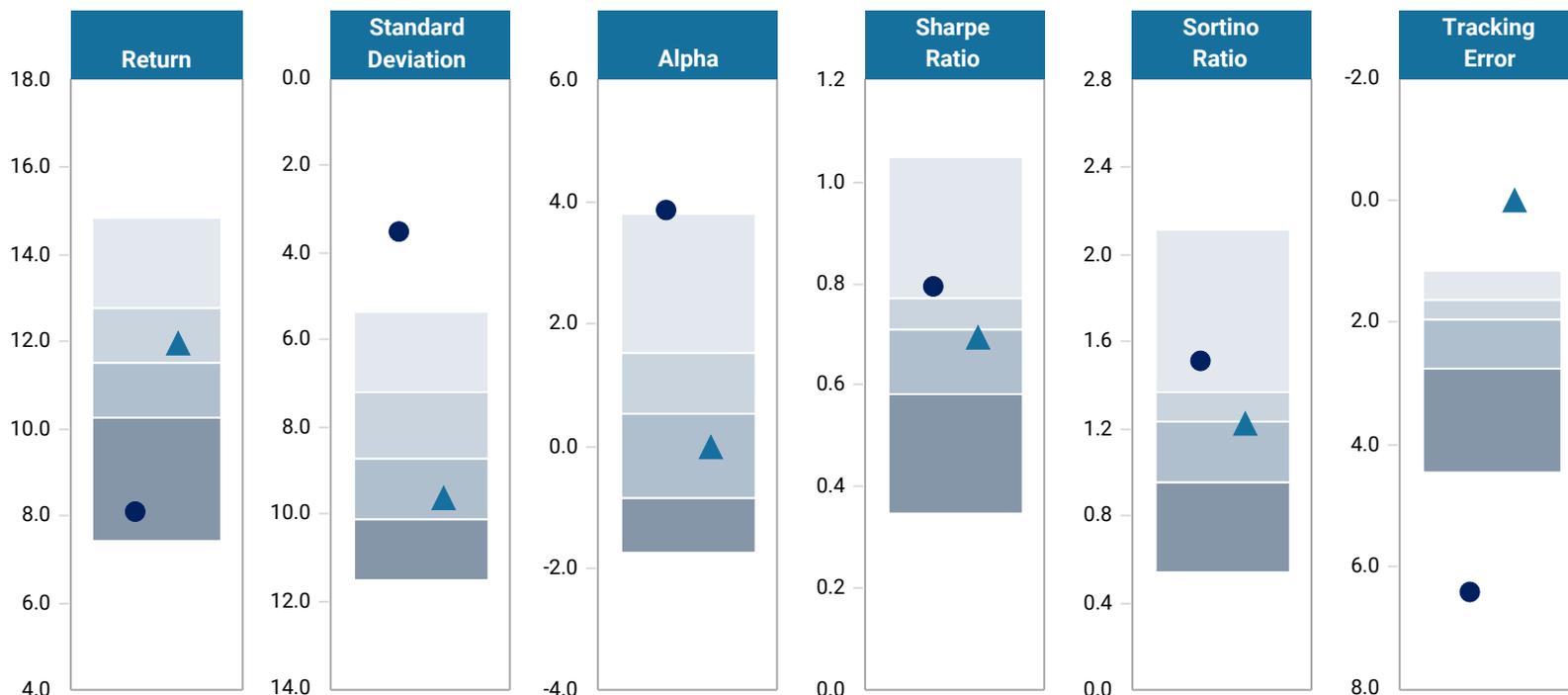
10 Years Ending March 31, 2024

	Return	Standard Deviation	Sharpe Ratio	Sortino Ratio
Total Fund	7.1 (27)	5.9 (1)	1.0 (4)	1.5 (5)
Policy Index	5.4 (100)	8.4 (35)	0.5 (97)	0.8 (93)
Population	21	21	21	21



# RISK STATISTICS VS. PEER UNIVERSE

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

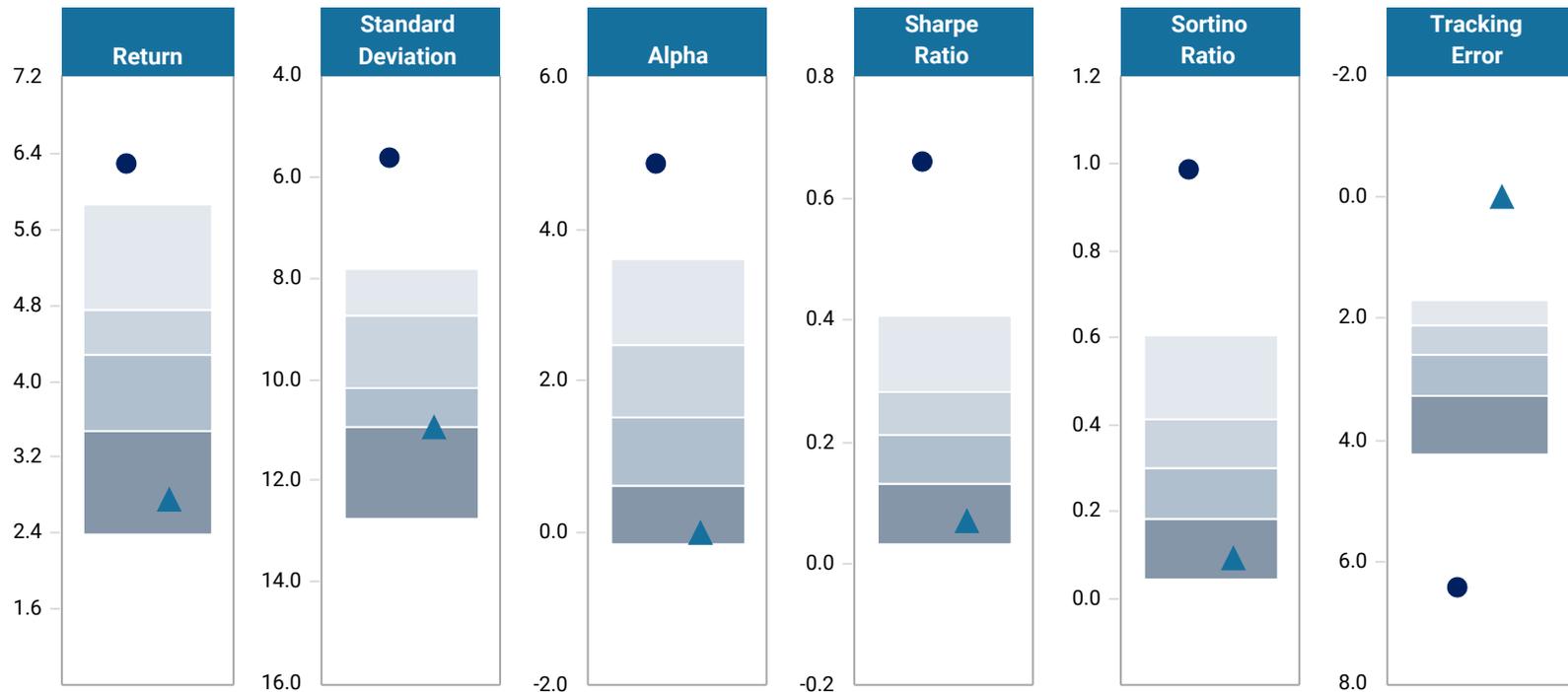


	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)	1 Yr (%)
● Total Fund	8.1 (91)	3.5 (1)	3.9 (5)	0.8 (21)	1.5 (13)	6.4 (98)
▲ Policy Index	12.0 (32)	9.6 (67)	0.0 (58)	0.7 (53)	1.2 (51)	0.0 (1)
5th Percentile	14.9	5.3	3.8	1.0	2.1	1.2
1st Quartile	12.8	7.2	1.5	0.8	1.4	1.6
Median	11.5	8.8	0.5	0.7	1.2	1.9
3rd Quartile	10.2	10.1	-0.8	0.6	1.0	2.8
95th Percentile	7.4	11.5	-1.8	0.3	0.5	4.5
Population	28	28	28	28	28	28



# RISK STATISTICS VS. PEER UNIVERSE

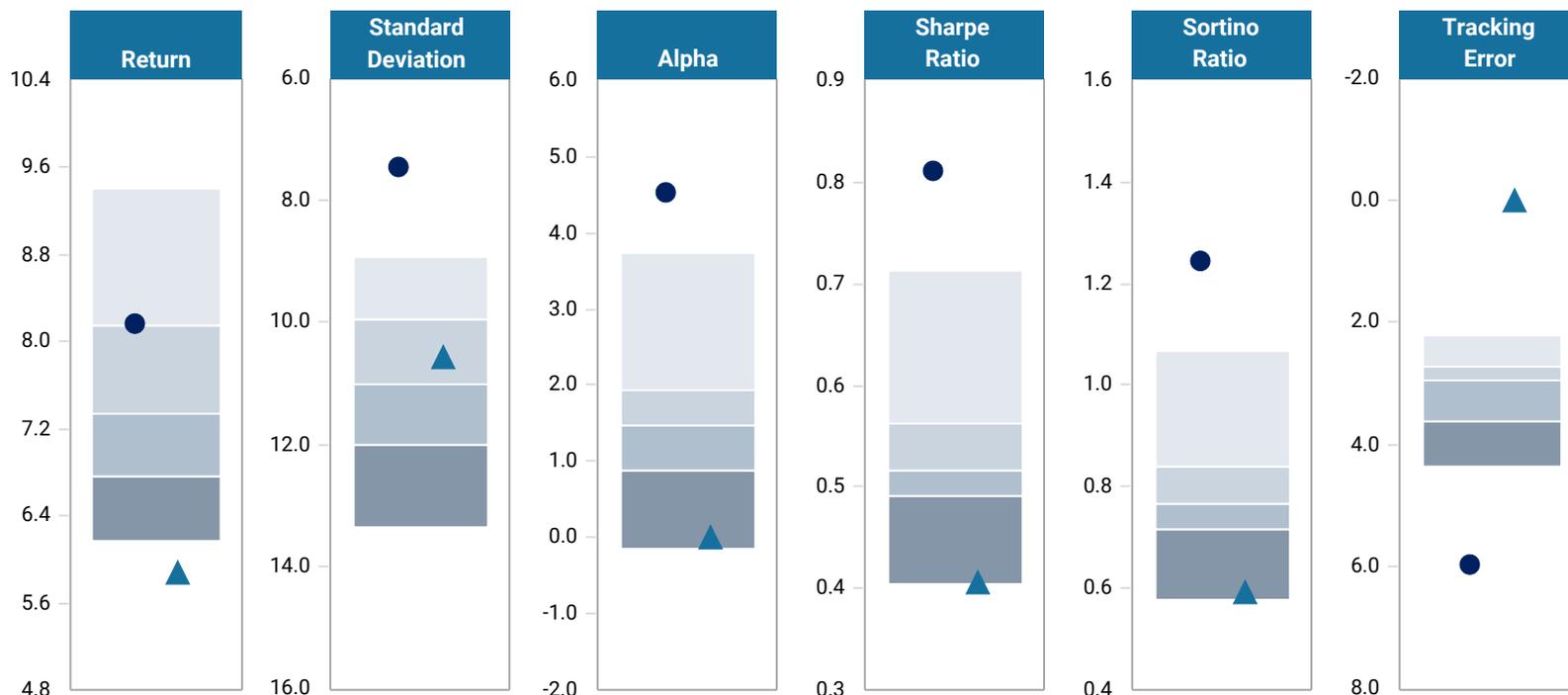
## Total Fund vs. InvMetrics Public DB > \$1 Billion



	3 Yrs (%)					
● Total Fund	6.3 (4)	5.6 (1)	4.9 (4)	0.7 (2)	1.0 (4)	6.4 (96)
▲ Policy Index	2.8 (93)	10.9 (72)	0.0 (94)	0.1 (93)	0.1 (93)	0.0 (1)
5th Percentile	5.9	7.8	3.6	0.4	0.6	1.7
1st Quartile	4.8	8.8	2.5	0.3	0.4	2.1
Median	4.3	10.2	1.5	0.2	0.3	2.6
3rd Quartile	3.5	11.0	0.6	0.1	0.2	3.3
95th Percentile	2.4	12.7	-0.1	0.0	0.0	4.2
Population	26	26	26	26	26	26

# RISK STATISTICS VS. PEER UNIVERSE

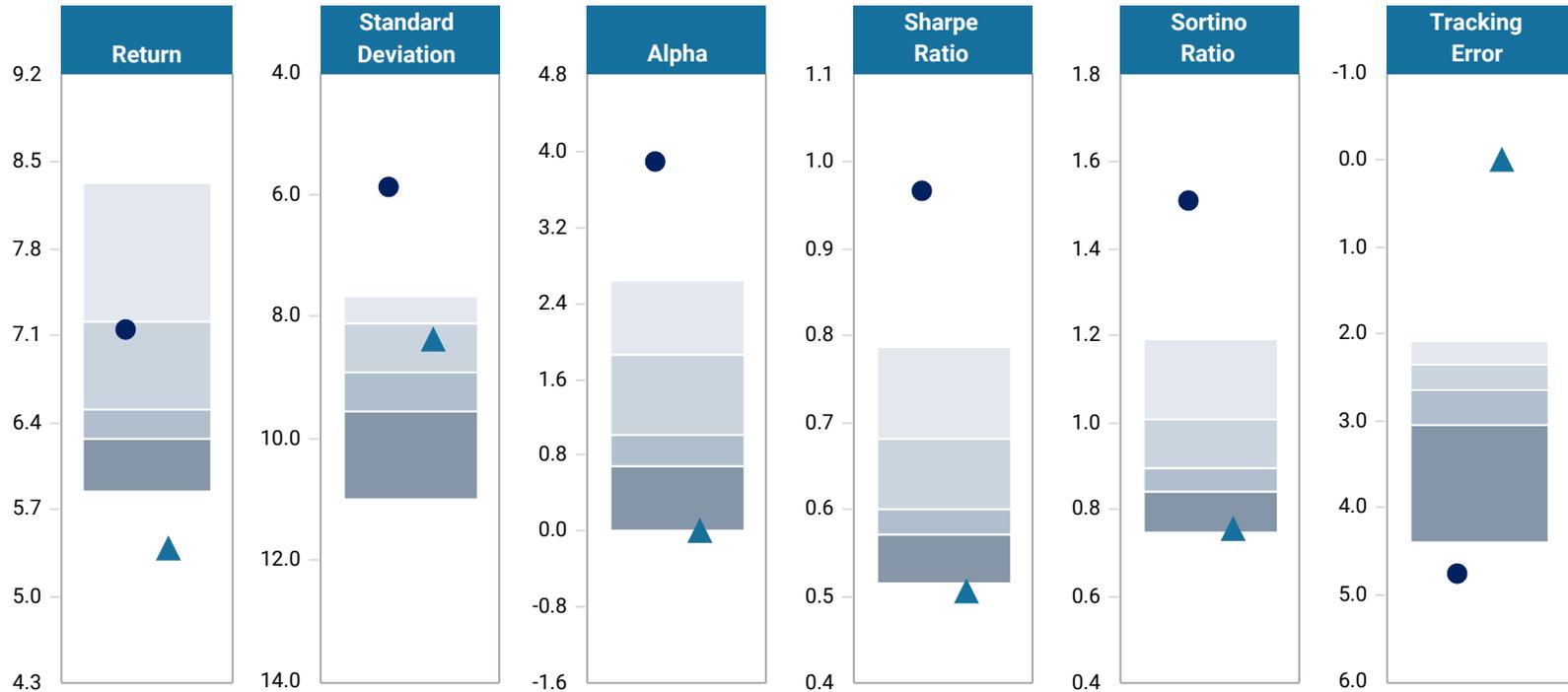
## Total Fund vs. InvMetrics Public DB > \$1 Billion



	5 Yrs (%)					
● Total Fund	8.2 (24)	7.5 (1)	4.5 (4)	0.8 (4)	1.2 (4)	6.0 (96)
▲ Policy Index	5.9 (100)	10.6 (35)	0.0 (92)	0.4 (95)	0.6 (92)	0.0 (1)
5th Percentile	9.4	8.9	3.7	0.7	1.1	2.2
1st Quartile	8.2	10.0	1.9	0.6	0.8	2.7
Median	7.3	11.0	1.5	0.5	0.8	3.0
3rd Quartile	6.8	12.0	0.9	0.5	0.7	3.6
95th Percentile	6.2	13.4	-0.2	0.4	0.6	4.4
Population	26	26	26	26	26	26

# RISK STATISTICS VS. PEER UNIVERSE

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



	10 Yrs (%)					
● Total Fund	7.1 (27)	5.9 (1)	3.9 (5)	1.0 (4)	1.5 (5)	4.8 (95)
▲ Policy Index	5.4 (100)	8.4 (35)	0.0 (96)	0.5 (97)	0.8 (93)	0.0 (1)
5th Percentile	8.3	7.7	2.6	0.8	1.2	2.1
1st Quartile	7.2	8.1	1.9	0.7	1.0	2.4
Median	6.5	8.9	1.0	0.6	0.9	2.6
3rd Quartile	6.3	9.6	0.7	0.6	0.8	3.0
95th Percentile	5.8	11.0	0.0	0.5	0.7	4.4
Population	21	21	21	21	21	21

# TOTAL PLAN RISK STATISTICS

1 Years Ending March 31, 2024				
	Return	Standard Deviation	Tracking Error	Information Ratio
<b>Domestic Equity With Beta Overlay</b>	<b>24.0</b>	<b>13.5</b>	<b>2.1</b>	<b>-2.1</b>
<i>Russell 3000 Index</i>	29.3	14.4	0.0	
<b>International Equity With Beta Overlay</b>	<b>8.9</b>	<b>13.2</b>	<b>2.4</b>	<b>-1.9</b>
<i>MSCI AC World ex USA index</i>	13.8	15.1	0.0	
<b>Global Fixed Income With Beta Overlay</b>	<b>4.9</b>	<b>2.3</b>	<b>7.1</b>	<b>0.6</b>
<i>Blmbg. Global Aggregate</i>	0.5	8.3	0.0	
<b>U.S. Credit Strategies</b>	<b>10.5</b>	<b>1.6</b>	<b>3.6</b>	<b>-0.2</b>
<i>50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index</i>	11.3	3.8	0.0	
<b>Non-U.S. Credit Composite</b>	<b>4.0</b>	<b>6.0</b>	<b>10.4</b>	<b>-0.6</b>
<i>ICE BofA Euro High Yield Constrained TR</i>	10.2	9.3	0.0	
<b>Emerging Markets Debt Composite</b>	<b>4.9</b>	<b>2.4</b>	<b>8.1</b>	<b>-0.4</b>
<i>50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified</i>	8.1	8.9	0.0	
<b>Alpha Pool Composite</b>	<b>12.5</b>	<b>1.9</b>	<b>1.9</b>	<b>2.0</b>
<i>91 Day T-Bill + 3%</i>	8.4	0.1	0.0	
<b>Private Equity Composite</b>	<b>4.9</b>	<b>3.2</b>	<b>4.1</b>	<b>-0.2</b>
<i>CJA Global All PE (Qtr Lag)</i>	5.6	3.4	0.0	
<b>Real Estate Composite</b>	<b>-6.7</b>	<b>2.6</b>	<b>5.5</b>	<b>0.2</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>	-7.9	3.7	0.0	
<b>Real Assets Composite</b>	<b>11.3</b>	<b>3.8</b>	<b>10.5</b>	<b>0.3</b>
<i>Real Assets Custom Blend</i>	7.9	11.2	0.0	

# TOTAL PLAN RISK STATISTICS

3 Years Ending March 31, 2024				
	Return	Standard Deviation	Tracking Error	Information Ratio
<b>Domestic Equity With Beta Overlay</b>	<b>6.4</b>	<b>16.7</b>	<b>2.5</b>	<b>-1.3</b>
<i>Russell 3000 Index</i>	9.8	17.8	0.0	
<b>International Equity With Beta Overlay</b>	<b>0.7</b>	<b>12.9</b>	<b>4.2</b>	<b>-0.5</b>
<i>MSCI AC World ex USA index</i>	2.4	16.4	0.0	
<b>Global Fixed Income With Beta Overlay</b>	<b>5.7</b>	<b>3.7</b>	<b>7.0</b>	<b>1.4</b>
<i>Blmbg. Global Aggregate</i>	-4.7	8.7	0.0	
<b>U.S. Credit Strategies</b>	<b>6.7</b>	<b>3.9</b>	<b>4.5</b>	<b>0.6</b>
<i>50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index</i>	4.0	5.6	0.0	
<b>Non-U.S. Credit Composite</b>	<b>11.0</b>	<b>6.6</b>	<b>11.7</b>	<b>1.0</b>
<i>ICE BofA Euro High Yield Constrained TR</i>	-2.0	12.6	0.0	
<b>Emerging Markets Debt Composite</b>	<b>1.0</b>	<b>4.4</b>	<b>9.3</b>	<b>0.2</b>
<i>50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified</i>	-1.5	10.5	0.0	
<b>Alpha Pool Composite</b>	<b>5.7</b>	<b>3.8</b>	<b>3.6</b>	<b>0.0</b>
<i>91 Day T-Bill + 3%</i>	5.7	0.7	0.0	
<b>Private Equity Composite</b>	<b>14.3</b>	<b>7.3</b>	<b>10.1</b>	<b>0.4</b>
<i>CJA Global All PE (Qtr Lag)</i>	10.0	10.1	0.0	
<b>Real Estate Composite</b>	<b>5.4</b>	<b>5.0</b>	<b>8.9</b>	<b>0.1</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>	4.6	7.1	0.0	
<b>Real Assets Composite</b>	<b>14.7</b>	<b>5.0</b>	<b>11.4</b>	<b>0.5</b>
<i>Real Assets Custom Blend</i>	7.6	12.3	0.0	

# TOTAL PLAN RISK STATISTICS

5 Years Ending March 31, 2024				
	Return	Standard Deviation	Tracking Error	Information Ratio
<b>Domestic Equity With Beta Overlay</b>	<b>11.4</b>	<b>18.8</b>	<b>2.8</b>	<b>-0.9</b>
<i>Russell 3000 Index</i>	14.3	18.9	0.0	
<b>International Equity With Beta Overlay</b>	<b>4.8</b>	<b>15.3</b>	<b>3.7</b>	<b>-0.5</b>
<i>MSCI AC World ex USA index</i>	6.5	17.6	0.0	
<b>Global Fixed Income With Beta Overlay</b>	<b>5.8</b>	<b>6.4</b>	<b>8.0</b>	<b>0.8</b>
<i>Blmbg. Global Aggregate</i>	-1.2	7.5	0.0	
<b>U.S. Credit Strategies</b>	<b>7.8</b>	<b>6.8</b>	<b>5.8</b>	<b>0.5</b>
<i>50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index</i>	4.7	7.6	0.0	
<b>Non-U.S. Credit Composite</b>	<b>7.1</b>	<b>8.6</b>	<b>12.2</b>	<b>0.4</b>
<i>ICE BofA Euro High Yield Constrained TR</i>	1.7	13.4	0.0	
<b>Emerging Markets Debt Composite</b>	<b>0.6</b>	<b>6.1</b>	<b>9.6</b>	<b>0.0</b>
<i>50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified</i>	0.5	11.2	0.0	
<b>Alpha Pool Composite</b>	<b>5.2</b>	<b>6.2</b>	<b>6.2</b>	<b>0.0</b>
<i>91 Day T-Bill + 3%</i>	5.1	0.6	0.0	
<b>Private Equity Composite</b>	<b>15.6</b>	<b>8.3</b>	<b>12.7</b>	<b>0.1</b>
<i>CJA Global All PE (Qtr Lag)</i>	14.0	12.8	0.0	
<b>Real Estate Composite</b>	<b>5.5</b>	<b>4.2</b>	<b>7.2</b>	<b>0.1</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>	4.3	5.6	0.0	
<b>Real Assets Composite</b>	<b>11.4</b>	<b>9.4</b>	<b>10.6</b>	<b>0.4</b>
<i>Real Assets Custom Blend</i>	6.1	11.7	0.0	

# TOTAL PLAN RISK STATISTICS

10 Years Ending March 31, 2024				
	Return	Standard Deviation	Tracking Error	Information Ratio
<b>Domestic Equity</b>	<b>6.6</b>	<b>13.5</b>	<b>8.1</b>	<b>-0.7</b>
<i>Russell 3000 Index</i>	12.3	15.6	0.0	
<b>International Equity</b>	<b>2.2</b>	<b>15.8</b>	<b>8.3</b>	<b>-0.7</b>
<i>MSCI AC World Index (Net)</i>	8.7	14.7	0.0	
<b>International Emerging</b>	<b>0.9</b>	<b>15.2</b>	<b>5.3</b>	<b>-0.4</b>
<i>MSCI Emerging Markets (Net)</i>	2.9	17.2	0.0	
<b>U.S. Credit Strategies</b>	<b>6.7</b>	<b>5.3</b>	<b>5.0</b>	<b>0.4</b>
<i>50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index</i>	4.5	6.0	0.0	
<b>Non-U.S. Credit Composite</b>	<b>6.6</b>	<b>6.5</b>	<b>11.0</b>	<b>0.5</b>
<i>ICE BofA Euro High Yield Constrained TR</i>	0.8	11.5	0.0	
<b>Emerging Markets Debt Composite</b>	<b>2.1</b>	<b>5.7</b>	<b>7.9</b>	<b>0.0</b>
<i>50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified</i>	1.4	9.6	0.0	
<b>Alpha Pool Composite</b>	<b>4.7</b>	<b>5.0</b>	<b>5.0</b>	<b>0.1</b>
<i>91 Day T-Bill + 3%</i>	4.4	0.5	0.0	
<b>Private Equity Composite</b>	<b>14.2</b>	<b>6.5</b>	<b>10.2</b>	<b>0.1</b>
<i>CJA Global All PE (Qtr Lag)</i>	12.4	9.9	0.0	
<b>Real Estate Composite</b>	<b>7.1</b>	<b>3.7</b>	<b>6.2</b>	<b>0.0</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>	6.8	4.9	0.0	
<b>Real Assets Composite</b>	<b>6.2</b>	<b>7.9</b>	<b>8.6</b>	<b>0.5</b>
<i>Real Assets Custom Blend</i>	2.0	9.3	0.0	

# INVESTMENT MANAGER TOP 10

ASSETS UNDER MANAGEMENT AS OF MARCH 31, 2024

Manager	Market Value	Portfolio %
SSGA	\$1,915,915,992.37	12.79%
GoldenTree	\$1,469,867,535.96	9.81%
Russell	\$812,724,130.47	5.42%
Alcentra	\$744,488,340.95	4.97%
Ares	\$720,577,572.05	4.81%
Zais	\$713,343,613.46	4.76%
Partners Group	\$690,894,338.87	4.61%
Pinnacle	\$661,307,676.63	4.41%
Tobam	\$653,151,160.86	4.36%
Pathway	\$648,767,504.67	4.33%
<b>Total</b>	<b>\$9,031,037,866.29</b>	<b>60.27%</b>

# PUBLIC EQUITY PORTFOLIO

Public Equity Portfolio (30% Target)	US Equities (17% Target)	<b>Large Cap (14.5%)</b>	Russell Investments Russell 1000 Index	Overlay exposure to an index of largest 1,000 stocks (by market cap) in the Russell 3000	
			SSGA S&P500 Index Fund		Index of 500 of the largest US publicly-traded companies in US
			TOBAM Anti-Benchmark US Equity Fund		
	International Equities (13% Target)	<b>Small Cap (2.5%)</b>	Russell Investments Russell 2000 Index	Overlay exposure to an index of smallest 2,000 stocks (by market cap) in the Russell 3000	
			<b>Developed Markets (7%)</b>	Russell Investments MSCI EAFE Index	Overlay exposure to an index of large/mid-cap stocks across 21 developed markets ex-US/Canada
				SSGA MSCI World ex-USA Index Fund	Index of publicly-traded large-cap and mid-cap equities in 22 developed countries ex-US
<b>Emerging Markets (6%)</b>	TOBAM Anti-Benchmark World ex-US Fund	Rules-based index focused on a more efficiently diversified benchmark vs. MSCI World ex-US			
	Russell Investments MSCI EM Index	Overlay exposure to an index of large/mid-cap stocks across 27 emerging markets			
	TOBAM Anti-Benchmark EM Equity Fund	Rules-based index focused on a more efficiently diversified benchmark vs. MSCI Emerging Markets			
		William Blair EM Growth Fund	Diversified, all-cap portfolio investing in high quality growth companies in emerging markets		
		Wasatch EM Select Fund	Concentrated portfolio investing in emerging market opportunities over a 3-5 year investment horizon		

# GLOBAL EQUITY STRATEGIES - NET

	Allocation		Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Total Equity</b>	<b>2,731,370,612</b>	<b>18.2</b>	<b>7.8</b>	<b>13.9</b>	<b>19.0</b>	<b>4.3</b>	<b>8.7</b>	<b>5.6</b>
<i>MSCI AC World Index (Net)</i>			<u>8.2</u>	<u>16.0</u>	<u>23.2</u>	<u>7.0</u>	<u>10.9</u>	<u>8.7</u>
Over/Under			-0.4	-2.1	-4.2	-2.7	-2.2	-3.1
<b>Domestic Equity With Beta Overlay</b>	<b>1,344,946,665</b>	<b>9.0</b>	<b>10.0</b>	<b>17.4</b>	<b>24.0</b>	<b>6.4</b>	<b>11.4</b>	
<i>Russell 3000 Index</i>			<u>10.0</u>	<u>19.3</u>	<u>29.3</u>	<u>9.8</u>	<u>14.3</u>	
Over/Under			0.0	-1.9	-5.3	-3.4	-2.9	
<b>Domestic Equity</b>	<b>1,796,811,150</b>	<b>12.0</b>	<b>10.1</b>	<b>16.9</b>	<b>24.3</b>	<b>8.3</b>	<b>12.3</b>	<b>6.6</b>
<i>Russell 3000 Index</i>			<u>10.0</u>	<u>19.3</u>	<u>29.3</u>	<u>9.8</u>	<u>14.3</u>	<u>12.3</u>
Over/Under			0.1	-2.4	-5.0	-1.5	-2.0	-5.7
Tobam AB US Equity	365,707,251	2.4	8.6 (52)	9.1 (90)	8.7 (96)	0.6 (90)	7.8 (89)	
<i>Russell 3000 Index</i>			<u>10.0</u> (37)	<u>19.3</u> (36)	<u>29.3</u> (28)	<u>9.8</u> (31)	<u>14.3</u> (25)	
Over/Under			-1.4	-10.2	-20.6	-9.2	-6.5	
<b>Large Cap Equity</b>	<b>1,430,833,723</b>	<b>9.5</b>	<b>10.5 (30)</b>	<b>19.4 (34)</b>	<b>29.9 (24)</b>	<b>11.3 (17)</b>	<b>14.6 (23)</b>	<b>8.4 (75)</b>
<i>S&amp;P 500 Index</i>			<u>10.6</u> (30)	<u>19.4</u> (34)	<u>29.9</u> (24)	<u>11.5</u> (15)	<u>15.0</u> (17)	<u>13.0</u> (15)
Over/Under			-0.1	0.0	0.0	-0.2	-0.4	-4.6
SSgA S&P500	1,429,812,307	9.5	10.5 (30)	19.4 (34)	29.9 (24)	11.3 (17)	15.0 (19)	10.6 (42)
<i>S&amp;P 500 Index</i>			<u>10.6</u> (30)	<u>19.4</u> (34)	<u>29.9</u> (24)	<u>11.5</u> (15)	<u>15.0</u> (17)	<u>13.0</u> (15)
Over/Under			-0.1	0.0	0.0	-0.2	0.0	-2.4
Russell US Large Cap Volatility	1,021,416	0.0						
<b>Small Cap Equity</b>	<b>270,175</b>	<b>0.0</b>						
Russell US Small Cap Volatility	270,175	0.0	1.4	4.2	5.6	2.8	2.1	-3.5

# GLOBAL EQUITY STRATEGIES - NET

	Allocation		Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>International Equity With Beta Overlay</b>	<b>1,096,438,343</b>	<b>7.3</b>	<b>2.8</b>	<b>6.8</b>	<b>8.9</b>	<b>0.7</b>	<b>4.8</b>	
<i>MSCI AC World ex USA index</i>			<u>4.8</u>	<u>10.9</u>	<u>13.8</u>	<u>2.4</u>	<u>6.5</u>	
Over/Under			-2.0	-4.1	-4.9	-1.7	-1.7	
<b>International Equity</b>	<b>934,559,462</b>	<b>6.2</b>	<b>2.8</b>	<b>7.6</b>	<b>9.1</b>	<b>-3.7</b>	<b>1.3</b>	<b>2.2</b>
<i>MSCI AC World Index (Net)</i>			<u>8.2</u>	<u>16.0</u>	<u>23.2</u>	<u>7.0</u>	<u>10.9</u>	<u>8.7</u>
Over/Under			-5.4	-8.4	-14.1	-10.7	-9.6	-6.5
<b>International Developed</b>	<b>446,707,464</b>	<b>3.0</b>	<b>4.3</b>	<b>9.0</b>	<b>11.3</b>	<b>0.1</b>	<b>2.5</b>	<b>2.3</b>
<i>MSCI EAFE (Net)</i>			<u>5.8</u>	<u>12.0</u>	<u>15.3</u>	<u>4.8</u>	<u>7.3</u>	<u>4.8</u>
Over/Under			-1.5	-3.0	-4.0	-4.7	-4.8	-2.5
Russell International Volatility	17,878	0.0						
Tobam AB World Ex-US Equity	183,900,461	1.2	2.3 (82)	4.9 (92)	5.6 (94)	-3.0 (86)	0.4 (99)	
<i>MSCI AC World ex USA (Net)</i>			<u>4.7</u> (55)	<u>10.6</u> (46)	<u>13.3</u> (49)	<u>1.9</u> (53)	<u>6.0</u> (69)	
Over/Under			-2.4	-5.7	-7.7	-4.9	-5.6	
SSGA MSCI World Ex-US Equity	262,789,124	1.8	5.7 (38)	12.1 (34)	15.7 (33)			
<i>MSCI World ex U.S.</i>			<u>5.7</u> (38)	<u>12.2</u> (33)	<u>15.9</u> (32)			
Over/Under			0.0	-0.1	-0.2			
<b>International Emerging</b>	<b>487,851,998</b>	<b>3.3</b>	<b>0.9</b>	<b>5.9</b>	<b>6.9</b>	<b>-6.3</b>	<b>-0.3</b>	<b>0.9</b>
<i>MSCI Emerging Markets (Net)</i>			<u>2.4</u>	<u>7.2</u>	<u>8.2</u>	<u>-5.1</u>	<u>2.2</u>	<u>2.9</u>
Over/Under			-1.5	-1.3	-1.3	-1.2	-2.5	-2.0
Tobam	103,543,448	0.7	1.8 (69)	3.8 (82)	4.8 (81)	-7.7 (81)	-1.9 (99)	
<i>MSCI Emerging Markets (Net)</i>			<u>2.4</u> (58)	<u>7.2</u> (54)	<u>8.2</u> (61)	<u>-5.1</u> (60)	<u>2.2</u> (74)	
Over/Under			-0.6	-3.4	-3.4	-2.6	-4.1	
Wasatch EM Select	216,761,504	1.4	-3.3	4.5	5.2			
<i>MSCI Emerging Markets (Net)</i>			<u>2.4</u>	<u>7.2</u>	<u>8.2</u>			
Over/Under			-5.7	-2.7	-3.0			
William Blair EM Growth	167,547,047	1.1	4.4	9.5	11.4			
<i>MSCI Emerging Markets (Net)</i>			<u>2.4</u>	<u>7.2</u>	<u>8.2</u>			
Over/Under			2.0	2.3	3.2			

# GLOBAL DEBT STRATEGIES

Global Debt Strategies (32% Target)	US Fixed Income (15% Target)	<b>Core Fixed Income (2%)</b>	Russell Investments Bloomberg Barclays US Agg Bond TR Index	Broad-based bond market index of intermediate-term investment grade bonds in US
		<b>Credit Strategies/ High Yield Strategies (13%)</b>	<p>Apollo Atlas Warehouse Co (MCA)                      Apollo Asset-Backed Finance Fund (MCA)                      Apollo Credit Strategies Fund LP (MCA)                      Apollo Offshore Credit Fund LTD (MCA)                      Bardin Hill Direct Portfolio (MCA)                      Bardin Hill Opportunistic Credit Fund (MCA)                      Bardin Hill Opportunistic Credit Fund II (MCA)                      Bardin Hill Solutions Fund LP (MCA)                      Beach Point Select Fund LP                      GoldenTree Distressed Debt Fund 2010</p> <p>GoldenTree Asset Management SMA                      Kayne Anderson BDC (MCA)                      Waterfall Ready Capital Corp. (MCA)                      Waterfall Asset Management SMA (MCA)                      Waterfall Mortgage Loan Opportunity Fund (MCA)                      Waterfall Victoria Fund LP (MCA)</p>	<p>Global lending franchise (formerly CSFB securitized products group) originating warehouse assets                      Diversified portfolio of asset-backed products across consumer finance, resi/commercial, and hard/financial assets                      Long/short credit fund focused on capital structure arbitrage, defensive credit, stressed credit and distressed credit                      Global credit fund focused on bank loans, structured credit, and bonds                      Co-investments in event-driven/special situation and mispriced credit opportunities                      Investments in quality, stable businesses trading at discounts and/or creative structured situations                      Investments in quality, stable businesses trading at discounts and/or creative structured situations                      Credit fund with focus on event-driven/special situations                      Credit fund with focus on mispriced credit opportunities                      Fund focused on global distressed, restructuring and turnaround opportunities</p> <p>SMA with opportunistic relative-value approach to bonds, loans, structured credit, distressed debt and emerging markets                      BDC investing in third-party and secondary market CLO opportunities                      Publicly traded REIT specializing in small balance commercial real estate loans                      Separate account focused on multi-sector high yield loans and bonds                      Fund investing in assets sold by non-bank mortgage companies given interest rate-related liquidity stress                      Fund investing in ABS, primarily residential whole loans originated on a primary or secondary basis</p>
Global Fixed Income (17% Target)	International Core (0%)	<b>International Core (0%)</b>	Russell Investments (Barclays Global Aggregate ex-US Unhedged)	Broad-based bond market index of investment grade debt from 24 local currency markets ex-US
		<b>International Credit (11%)</b>	<p>Alcentra Limited SMA                      Alcentra European Direct Lending Fund                      Alcentra Strategic Credit Fund                      Alcentra Structured Credit Opportunity Fund III                      Alcentra Viaduct Fund LP                      Cairn Capital Limited SMA                      Cairn Capstone Special Opportunities Fund                      Cairn Loan Investments                      Cairn Loan Investments II                      Cairn Pathfinder I                      Cairn Pathfinder III</p>	<p>SMA investing in European and US performing and non-performing bonds/loans, and CLO equity                      2013 fund investing in European direct lending opportunities                      2015 fund investing in European CLOs and stressed/distressed credit opportunities                      2017 fund investing in European CLO opportunities                      2018 fund investing in European CLO opportunities including CLO warehousing, risk retention, and equity                      SMA focused on opportunistic European credit, private asset backed, regulatory risk transfer, European CLOs                      Fund focused on cash-flow oriented regulatory risk transfer, private asset backed loans, and structured credit                      European CLO Risk Retention vehicle                      European CLO Risk Retention vehicle                      Barclays regulatory capital risk transfer on UK mid cap corporate RCF                      Barclays regulatory capital risk transfer on global (70% US) large cap corporate RCF</p>
		<b>Emerging Market Debt (6%)</b>	<p>Marathon Asset Management SMA                      Marathon CLO Equity Fund                      Marathon European Credit Opportunity Fund III                      Marathon Structured Product Strategies Fund II                      Marathon Structured Product Strategies Fund III</p> <p>Finisterre EM Debt Total Return Fund                      Gramercy Capital Solutions Fund (MCA)                      Gramercy Capital Solutions Fund II (MCA)                      Gramercy Distressed Argentina Fund III Private (MCA)                      Gramercy Distressed Argentina Fund IV Private (MCA)                      Gramercy Distressed Opportunity Fund II (MCA)                      Gramercy Distressed Opportunity Fund III (MCA)                      Gramercy Separate Account (MCA)                      Gramercy Venezuela Opportunity Fund (MCA)                      Gramercy Emerging Markets Dynamic Credit Fund (MCA)                      Gramercy Venezuela Opportunity Fund II (MCA)                      Gramercy Venezuela Special Situations Fund (MCA)                      PGIM Emerging Market Debt Opportunities Fund</p>	<p>SMA focused on opportunistic global stressed and distressed credit, restructured real estate, and credit-related real assets                      Legacy risk retention vehicle that maintains an economic interest in Marathon issued CLO equity                      Fund focused on European commercial real estate credit                      Fund focused on private asset-backed secured debt across multiple sectors                      Fund focused on private asset-backed secured debt across multiple sectors (transports, real estate, healthcare, etc.)                      Fund focused on an all-weather strategy across the cycle in emerging markets                      2018 fund engaged in emerging markets corporate direct lending                      2021 fund engaged in emerging markets corporate direct lending                      Fund engaged in Argentina-focused corporate direct lending                      Fund engaged in opportunistic Argentina focused sovereign positions                      Diversified emerging markets hedge fund                      Diversified emerging markets hedge fund                      Stressed and distressed emerging market credit investments in public and private assets.                      Venezuelan sovereign-focused fund                      Performing and opportunistic credit in public and private markets weighted with a top-down view                      OFAC-compliant distressed credit related to Venezuela                      Litigation financing (e.g. ICSID claims) related to Venezuela                      Fund investing in sovereign bonds, local bonds, corporate bonds and currencies in emerging economies.</p>



# GLOBAL DEBT STRATEGIES - NET

	Allocation		Performance (%)						
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	
<b>Global Fixed Income With Beta Overlay</b>	<b>5,502,009,412</b>	<b>36.7</b>	<b>1.1</b>	<b>5.5</b>	<b>4.9</b>	<b>5.7</b>	<b>5.8</b>		
<i>Blmbg. Global Aggregate</i>			<u>-2.1</u>	<u>2.1</u>	<u>0.5</u>	<u>-4.7</u>	<u>-1.2</u>		
Over/Under			3.2	3.4	4.4	10.4	7.0		
<b>Total Fixed</b>	<b>3,860,631,613</b>	<b>25.8</b>	<b>2.1</b>	<b>7.3</b>	<b>6.9</b>	<b>5.8</b>	<b>5.1</b>	<b>5.2</b>	
<i>Blmbg. U.S. Aggregate Index</i>			<u>-0.8</u>	<u>2.6</u>	<u>1.7</u>	<u>-2.5</u>	<u>0.4</u>	<u>1.5</u>	
Over/Under			2.9	4.7	5.2	8.3	4.7	3.7	
<b>U.S. Credit Strategies</b>	<b>1,745,317,389</b>	<b>11.6</b>	<b>2.2 (6)</b>	<b>8.2 (11)</b>	<b>10.5 (10)</b>	<b>6.7 (1)</b>	<b>7.8 (1)</b>	<b>6.7 (1)</b>	
<i>50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index</i>			<u>1.9 (7)</u>	<u>8.9 (5)</u>	<u>11.3 (9)</u>	<u>4.0 (2)</u>	<u>4.7 (2)</u>	<u>4.5 (1)</u>	
Over/Under			0.3	-0.7	-0.8	2.7	3.1	2.2	
Stone Tower Offshore Credit (Apollo)	182,727,070	1.2	3.2	9.7	11.9	6.0	6.4	5.6	
Beach Point Capital (Formerly Post)	316,676,624	2.1	3.3	7.4	9.0	5.5	8.0	7.3	
Mackay / Gold Coast	1,667	0.0							
Stone Tower Credit (Apollo)	145,024,960	1.0	2.0	4.3	8.1	5.4	9.5	7.3	
Gold Coast Capital IV	95,756	0.0	-34.9	-32.0	-30.5	-12.1	-5.4		
Waterfall Asset Management	53,909,341	0.4	-5.2	-6.2	4.9	2.8	5.9		
Waterfall Victoria	69,318,125	0.5	-1.0	-7.3	-11.5	-2.3	0.9		
KAYNE ANDERSON BDC, LLC	64,567,569	0.4	3.2	23.9	24.1	15.2			
Apollo Asset Backed Finance Fund	50,000,000	0.3							
Apollo Atlas Warehouse CO	5,099,712	0.0							
Golden Tree Asset Management	728,743,276	4.9	2.1	10.3	13.3	9.7	10.6	9.8	

# GLOBAL DEBT STRATEGIES - NET

	Allocation		Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Non-U.S. Fixed Income Composite</b>	<b>2,115,314,224</b>	<b>14.1</b>	<b>2.0</b>	<b>6.5</b>	<b>4.4</b>	<b>6.8</b>	<b>4.3</b>	<b>4.8</b>
Blmbg. Global Aggregate Ex USD			-3.2	1.5	-0.7	-6.5	-2.5	-1.4
Over/Under			5.2	5.0	5.1	13.3	6.8	6.2
<b>Non-U.S. Credit Composite</b>	<b>1,310,018,586</b>	<b>8.7</b>	<b>2.3</b>	<b>8.8</b>	<b>4.0</b>	<b>11.0</b>	<b>7.1</b>	<b>6.6</b>
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	0.8
Over/Under			2.9	0.8	-6.2	13.0	5.4	5.8
Marathon/Gold Coast	226,670,893	1.5	0.0	0.3	-0.4	5.2	6.1	7.2
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	0.8
Over/Under			0.6	-7.7	-10.6	7.2	4.4	6.4
Halcyon Asset Management	222,071,672	1.5	-1.0 (93)	0.6 (100)	0.2 (100)	13.3 (1)	4.7 (2)	
ICE BofA Euro High Yield Constrained TR			-0.6 (83)	8.0 (12)	10.2 (10)	-2.0 (59)	1.7 (50)	
Over/Under			-0.4	-7.4	-10.0	15.3	3.0	
Cairn Composite	116,787,679	0.8	-0.3 (74)	12.0 (4)	18.2 (2)	11.3 (1)	7.8 (1)	6.4 (1)
ICE BofA Euro High Yield Constrained TR			-0.6 (83)	8.0 (12)	10.2 (10)	-2.0 (59)	1.7 (50)	0.8 (91)
Over/Under			0.3	4.0	8.0	13.3	6.1	5.6
Alcentra - KT1	637,355,198	4.3	4.8	13.6	-0.1	12.5	8.3	
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	
Over/Under			5.4	5.6	-10.3	14.5	6.6	
Alcentra SP1 - KT1	116,913	0.0	62.6	75.0	83.8	51.2	3.5	
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	
Over/Under			63.2	67.0	73.6	53.2	1.8	
Alcentra SP2 - KT1	13,300,723	0.1	-6.4	-3.8	-5.8	10.4	-4.1	
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	
Over/Under			-5.8	-11.8	-16.0	12.4	-5.8	
Alcentra SP4 - KT1	93,715,507	0.6	8.7	12.8	15.7	15.2	11.6	
ICE BofA Euro High Yield Constrained TR			-0.6	8.0	10.2	-2.0	1.7	
Over/Under			9.3	4.8	5.5	17.2	9.9	

# GLOBAL DEBT STRATEGIES - NET

	Allocation		Performance (%)						
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	
<b>Emerging Markets Debt Composite</b>	<b>805,295,639</b>	<b>5.4</b>	<b>1.5 (56)</b>	<b>3.1 (85)</b>	<b>4.9 (92)</b>	<b>1.0 (13)</b>	<b>0.6 (80)</b>	<b>2.1 (63)</b>	
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified			<u>-0.1</u> (76)	<u>5.6</u> (67)	<u>8.1</u> (67)	<u>-1.5</u> (76)	<u>0.5</u> (81)	<u>1.4</u> (71)	
Over/Under			1.6	-2.5	-3.2	2.5	0.1	0.7	
<b>Ashmore Emerging Markets Liquid Investments</b>	<b>6,803</b>	<b>0.0</b>							
JP Morgan GBI - EM Global Diversified Index			<u>-2.1</u> (90)	<u>2.3</u> (91)	<u>4.9</u> (92)	<u>-1.6</u> (78)	<u>0.1</u> (87)	<u>-0.3</u> (91)	
Over/Under									
Gramercy Funds Management LLC	572,208,816	3.8	1.7 (53)	2.0 (95)	3.8 (99)	2.9 (5)	1.1 (64)	3.1 (30)	
JP Morgan ELM+ TR USD			<u>-1.1</u> (83)	<u>3.1</u> (84)	<u>4.0</u> (98)	<u>-0.3</u> (46)	<u>0.3</u> (85)	<u>-0.2</u> (89)	
Over/Under			2.8	-1.1	-0.2	3.2	0.8	3.3	
PGIM Fixed Income	114,349,920	0.8	1.3 (58)	7.5 (54)	8.6 (62)	-1.3 (72)	2.7 (18)		
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>-0.1</u> (76)	<u>5.6</u> (67)	<u>8.1</u> (67)	<u>-1.5</u> (76)	<u>0.5</u> (81)		
Over/Under			1.4	1.9	0.5	0.2	2.2		
Finisterre EM Debt Total Return Fund	118,730,100	0.8	1.0	4.9	7.9				
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>-0.1</u>	<u>5.6</u>	<u>8.1</u>				
Over/Under			1.1	-0.7	-0.2				

# ABSOLUTE RETURN (ALPHA POOL)

<p style="text-align: center;">Absolute Return (Alpha Pool) (7% Target)</p>	<p style="text-align: center;"><b>Core &amp; Credit Strategies (7%)</b></p>	Apollo Global SMA (MCA)	Credit focused separate account investing in bespoke credit opportunities
		Apollo Accord+ (MCA)	2021 credit fund focused on opportunities across structured credits, special situations, performing credit and origination
		Ares ECO Master Fund II, LTD (MCA)	Corporate debt investments in non-investment grade companies, with a focus on senior bank debt
		Birch Grove Credit Strategies Fund	All-weather approach to credit/portfolio construction across capital structure and across all market cycles
		Corrum Capital Global Credit Opportunities Fund	Yield-paying principal-protected transactions with collateralization by hard and soft assets
		Corrum Capital GCO Co-Invest Fund	Yield-paying principal-protected transactions with collateralization by hard and soft assets
		SSGA Short-Term Treasury Strategy SMA	Short term treasury vehicle
		Zais Group SMA	Long only structured credit SMA that focuses on stable cash flows and low duration, includes student housing
		Zais Opportunity Fund, LTD	Diversified structured credit fund with the ability to use hedges and derivative strategies
		Zais Zephyr A-8, LP	Closed-end fund focused on CLO equity post risk retention requirements
Zais Zephyr A-9, LP	2022 closed-end fund focused on CLO equity post risk retention requirements		

# ALPHA POOL STRATEGIES - NET

	Allocation		Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Alpha Pool Composite</b>	<b>2,229,830,198</b>	<b>14.9</b>	<b>3.7</b>	<b>9.2</b>	<b>12.5</b>	<b>5.7</b>	<b>5.2</b>	<b>4.7</b>
91 Day T-Bill + 3%			2.0	6.4	8.4	5.7	5.1	4.4
Over/Under			1.7	2.8	4.1	0.0	0.1	0.3
Alpha Liquidity (Ssga)	223,314,561	1.5	1.2	4.1	5.3	2.6	2.2	1.5
Apollo Global Management	2,385,620	0.0						
Ares Eco Master Fund II	600,349,262	4.0	2.9	8.9	11.3	4.3	5.4	
Birch Grove Credit Strategies	264,190,260	1.8	3.3	12.0	12.8	3.3	6.2	5.7
Corrum Capital	274,988,995	1.8	2.1	-1.5	0.2	3.0	-0.3	2.8
Zais	152,463,327	1.0	4.6	12.9	16.1	4.7	2.4	3.7
Zais Group Invest Advisors	495,617,173	3.3	8.3	19.7	25.8	12.8	9.9	8.7
Zais Zephyr 8	32,595,530	0.2	4.7	14.7	18.4	7.9		
Zais Zephyr 9	32,667,584	0.2	-2.2	-2.9	10.6			
Apollo Accord+	151,257,887	1.0	0.0	7.0	16.4			

# PRIVATE ASSETS

Private Assets (18% Target)	Private Equity	<b>Diversified</b>	Adams Street SMA (MCA) Industry Ventures Arrowhead LP (MCA) Partners Group SMA (MCA) Pathway Capital SMA (MCA) Pathway PE Fund VII LLC SL Capital European Strategic Partners 2008	Global investment opportunities in venture, growth equity, buyout, and private credit Fund investing in direct and secondary co-investments across the venture and buyout sectors Global SMA in private markets; primarily in private equity but also includes infrastructure and real estate Private equity investments in primary/secondary funds and co-investment opportunities Fund of funds focused on mid/large buyout funds in the US 2008 fund of funds investing in European-focused primary funds
		<b>Buyout Funds</b>	Industry Ventures Tech Buyout, LP (MCA) Industry Ventures Tech Buyout II, LP (MCA) Kayne Partners Fund IV LP (MCA) Kayne Partners Fund V LP (MCA) Kayne Growth Co-Investments (MCA) Partners Group Direct Equity 2016 (MCA) Partners Group Direct Equity Fund IV (MCA) Partners Group Direct Equity Fund V (MCA) Partners Group Direct Investments 2012 LP (MCA) Waterfall PE Co-Investments (MCA) Waterfall Sentinel Fund (MCA)	2018 fund investing in small high growth tech companies 2022 fund investing in small high growth tech companies 2016 fund investing in middle market growth equity opportunities in US companies 2020 fund investing in middle market growth equity opportunities in US companies Co-investment commitments (2022 and later) invested alongside Kayne Partners Funds Global portfolio of direct private equity deals Global portfolio of direct private equity deals (previously Direct Equity 2019) Global portfolio of direct private equity deals (2024) Global portfolio of direct private equity deals Co-investment opportunities in US lower middle market specialty finance companies 2019 fund investing in US lower middle market specialty finance focused companies
		<b>Venture Funds</b>	Industry Ventures Direct LP (MCA) Industry Ventures Direct II LP (MCA) Industry Ventures Direct III LP (MCA) Industry Ventures Fund V LP (MCA) Industry Ventures Fund VI LP (MCA) Industry Ventures Partnership Holdings II LP (MCA) Industry Ventures Partnership Holdings III LP (MCA) Industry Ventures Partnership Holdings III-A LP (MCA) Industry Ventures Partnership Holdings IV LP (MCA) Industry Ventures Partnership Holdings V LP (MCA) Industry Ventures Partnership Holdings VI LP (MCA) Industry Ventures Partnership Holdings VII LP (MCA) Industry Ventures Special Opportunities Fund II-A LP (MCA)	2016 fund investing in venture capital opportunities 2019 fund investing in venture capital opportunities 2021 fund investing in venture capital opportunities Fund of funds focused on small but well-established US venture capital funds Fund of funds focused on small but well-established US venture capital funds 2011 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2013 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2014 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2016 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2019 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2021 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2024 fund investing in venture capital primary funds, secondary funds and direct investments, and direct investments 2016 fund investing in venture capital opportunistic transactions in the secondary market
		<b>Secondary Funds</b>	Aberdeen Standard Secondary Opportunities Fund IV Industry Ventures Secondary VII LP (MCA) Industry Ventures Secondary VIII LP (MCA) Industry Ventures Secondary IX LP (MCA) Industry Ventures Secondary X LP (MCA) Lexington Capital Partners VII Lexington Middle Market Investors II SL Capital Secondary Opportunities Fund III	2020 fund investing in secondary purchases of PE fund of funds and other complex transactions 2013 fund investing in secondary transactions in venture capital opportunities 2017 fund investing in secondary transactions in venture capital opportunities 2021 fund investing in secondary transactions in venture capital opportunities 2023 fund investing in secondary transactions in venture capital opportunities Fund of funds focused mainly on buyout funds in US and Western Europe Fund of funds focused on secondary interest in US middle-market buyouts Fund of funds focused on secondary purchase of mid and large-cap buyout funds in Europe
		<b>Sector Specific Funds</b>	Kayne Anderson Energy Fund VII LP Kayne Anderson Private Energy Income Fund II (MCA) Kayne Anderson Private Energy Income Fund III (MCA) Tennenbaum Energy Opportunities Fund LP (MCA)	2017 fund investing in US upstream energy companies with a focus on growing enterprise value 2018 fund investing in US upstream energy companies, focused on income from large asset acq/development 2023 fund investing in US upstream energy companies, focused on income from large asset acq/development 2015 fund investing in senior secured notes and first/second lien debt of US companies in the energy sector
		<b>Direct Lending</b>	Ares Private Credit Solutions Fund (MCA) Ares Private Credit Solutions Fund 2 (MCA) Ares Senior Direct Lending Fund III (MCA) Irradiant Renewables Opportunities Partners Tennenbaum Direct Lending Fund VIII, LLC (MCA) Tennenbaum Direct Lending Fund IX, LLC Tennenbaum Waterman Fund LP (MCA)	Junior debt investments in large private companies Junior debt investments in large private companies Senior secured 1L loans to primarily sponsor-backed private companies 2020 fund investing in the equity and debt of renewable power generating companies Privately-originated, performing senior secured debt in mid-market (100mm-1.5bn) companies in NA (levered share class) Privately-originated, performing senior secured debt in mid-market (100mm-1.5bn) companies in NA (unlevered share class) Senior 1L loans to middle-market companies, primarily in the US
	Private Debt	<b>Credit/Distressed/ Opportunistic/ Special Situations</b>	Ares ICOF II (MCA) Ares ICOF III (MCA) Ares SMA (MCA) Ares Special Situations Fund IV (MCA) Catalyst Fund LP II Crestline Portfolio Financing Fund Crestline Portfolio Financing Fund II Irradiant CLO Partners II (MCA) Irradiant CLO Partners III (MCA) Irradiant Partners Climate Co (MCA) Irradiant Solutions Fund (MCA) Irradiant Solutions Fund II (MCA) LuminArx Opportunistic Alternative Solutions Fund Siguler Guff Distressed Opportunity Fund III LP Tennenbaum Co-Investments (MCA) Tennenbaum Special Situations Fund IX LLC (MCA)	Structured credit in CLO vehicles and private asset-backed credits Structured credit in CLO vehicles and private asset-backed credits Separate account in liquid credit and income-focused opportunities Global distressed debt and special situations 2006 fund investing in Canadian stressed/distressed investment opportunities Financing to late-stage private equity funds and GPs Financing to late-stage private equity funds and GPs 2020 fund investing in CLOs issued by Irradiant 2023 fund investing in CLOs issued by Irradiant 2023 fund investing in climate-oriented solutions focused on energy transition opportunity 2017 fund investing in special situation opportunities in US credit 2023 fund investing in special situation opportunities in US credit Hybrid fund investing in capital solutions opportunities globally, with a focus on the US 2009 fund of funds investing in US and international opportunistic credit funds and co-investments Co-investment opportunities driven from Tennenbaum funds Distressed and rescue-financing in mid-market companies in NA



# REAL ESTATE PORTFOLIO

Real Estate Portfolio (5% Target)	Core Real Estate (2.5%)	<b>Core Real Estate</b> 348 West Hospitality Lane Invesco Real Estate Asia Fund Kayne Anderson Real Estate Debt III (MCA) Kayne Anderson Real Estate Debt IV (MCA) Kayne Anderson Commercial Real Estate Debt (MCA) Marathon Real Estate Debt Fund PGIM Real Estate Capital VI LP PGIM Real Estate Capital VII LP PRISA II TPG Angelo Gordon Essential Housing Fund III	SBCERA headquarters Asia-focused open-ended core real estate fund 2018 fund investing in first-lien US residential mortgage debt 2020 fund investing in first-lien US residential mortgage debt
			Open-ended fund investing in direct loan origination and Freddie-Mac structured products Fund investing in senior secured first mortgage loans in the US European (UK and Germany focused) mezzanine lending fund for value-add real estate projects European (UK and Germany focused) mezzanine lending fund for value-add real estate projects US core-plus open-ended real estate equity fund with low leverage 2024 fund providing homebuilders with off-balance sheet financing for short duration, close-to-production land
	Non-Core Real Estate (2.5%)	<b>Enhanced Real Estate/ High Return</b> Apollo Real Estate Fund II LP (MCA) Apollo Real Estate Fund III LP (MCA) Fortress Japan Opportunity Fund II Invesco US Real Estate VI Kayne Anderson Real Estate Partners V LP (MCA) Kayne Anderson Real Estate Partners VI LP (MCA) Morgan Stanley RE Fund V International PRISA III	2015 fund investing in value-add US real estate opportunities 2020 fund investing in value-add US real estate opportunities 2011 fund investing in value-add Japanese real estate opportunities 2020 fund investing in value-add US real estate opportunities 2017 fund investing in value-add US real estate opportunities 2021 fund investing in value-add US real estate opportunities 2005 fund investing in value-add International real estate opportunities Value-add US real estate equity fund
<b>Real Estate Secondaries</b> Partners Group Real Estate Secondary 2013 A LP (MCA) Partners Group Real Estate Secondary 2017 A LP (MCA)			Global private real estate fund interests purchased on the secondary market at discounts to intrinsic value Global private real estate fund interests purchased on the secondary market at discounts to intrinsic value

# REAL ASSETS PORTFOLIO

Real Asset Portfolio (6% Target)	<b>Commodities (4% Target)</b>	Pinnacle Natural Resources LP	Commodity fund of funds with both directional and relative value exposure across multiple commodities
		Pinnacle Physicals & Financing LTD	Multi-manager fund focused on physical commodities (livestock, metals, energy and agriculture)
	<b>Infrastructure (2%)</b>	Kayne Anderson MLP Strategy (MCA)	Separate account opportunistically investing in publicly traded US MLP securities
		<b>Timber (0% Target)</b>	Domain Environmental Investors II



**ALTERNATIVES - NET**

	Allocation		Performance (%)					
	Market Value (\$)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)
<b>Private Equity Composite</b>	<b>2,847,280,080</b>	<b>19.0</b>	<b>0.4</b>	<b>5.0</b>	<b>4.9</b>	<b>14.3</b>	<b>15.6</b>	<b>14.2</b>
<i>CJA Global All PE (Qtr Lag)</i>			<u>2.7</u>	<u>3.5</u>	<u>5.6</u>	<u>10.0</u>	<u>14.0</u>	<u>12.4</u>
Over/Under			-2.3	1.5	-0.7	4.3	1.6	1.8
<i>Russell 3000 Index</i>			<u>10.0</u>	<u>19.3</u>	<u>29.3</u>	<u>9.8</u>	<u>14.3</u>	<u>12.3</u>
Over/Under			-9.6	-14.3	-24.4	4.5	1.3	1.9
<i>CJA US All PE (1 Qtr Lag)</i>			<u>2.9</u>	<u>6.1</u>	<u>8.9</u>	<u>14.5</u>	<u>15.7</u>	<u>13.6</u>
Over/Under			-2.5	-1.1	-4.0	-0.2	-0.1	0.6
<b>Real Estate Composite</b>	<b>582,251,037</b>	<b>3.9</b>	<b>-2.8</b>	<b>-5.1</b>	<b>-6.7</b>	<b>5.4</b>	<b>5.5</b>	<b>7.1</b>
<i>NCREIF Property Index 1 Qtr. Lag</i>			<u>-3.0</u>	<u>-6.2</u>	<u>-7.9</u>	<u>4.6</u>	<u>4.3</u>	<u>6.8</u>
Over/Under			0.2	1.1	1.2	0.8	1.2	0.3
<b>Real Assets Composite</b>	<b>796,904,941</b>	<b>5.3</b>	<b>6.8</b>	<b>9.9</b>	<b>11.3</b>	<b>14.7</b>	<b>11.4</b>	<b>6.2</b>
<i>Real Assets Custom Blend</i>			<u>6.8</u>	<u>10.3</u>	<u>7.9</u>	<u>7.6</u>	<u>6.1</u>	<u>2.0</u>
Over/Under			0.0	-0.4	3.4	7.1	5.3	4.2
<b>Infrastructure</b>	<b>131,577,521</b>	<b>0.9</b>	<b>15.4</b>	<b>25.9</b>	<b>29.8</b>	<b>20.9</b>	<b>15.2</b>	<b>8.5</b>
<i>Real Assets Custom Blend</i>			<u>6.8</u>	<u>10.3</u>	<u>7.9</u>	<u>7.6</u>	<u>6.1</u>	<u>2.0</u>
Over/Under			8.6	15.6	21.9	13.3	9.1	6.5
<b>Commodities</b>	<b>661,719,836</b>	<b>4.4</b>	<b>5.4</b>	<b>7.7</b>	<b>8.8</b>	<b>13.8</b>	<b>12.7</b>	<b>7.3</b>
<i>S&amp;P GSCI Composite TR Index</i>			<u>10.4</u>	<u>14.3</u>	<u>11.1</u>	<u>18.1</u>	<u>7.8</u>	<u>-2.9</u>
Over/Under			-5.0	-6.6	-2.3	-4.3	4.9	10.2

# APPENDIX: PERFORMANCE SUMMARY

Real Estate

Real Assets

Private Equity



# REAL ESTATE PERFORMANCE

## AS OF SEPTEMBER 30, 2023

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
American Realty Advisors	1996	128,009,773	128,009,773	0	0	278,446,295	0	278,446,295	2.18	6.89%
Tuckerman Multi-Family Development Fund III	2002	10,000,000	10,219,311	0	0	16,939,699	0	16,939,699	1.66	26.67%
CBRE Strategic Partners III	2003	10,000,000	10,000,000	0	0	12,698,783	0	12,698,783	1.27	8.02%
Prudential PRISA III	2003	75,000,000	75,550,285	-550,285	3,778,589	72,972,734	76,798,127	149,770,861	1.89	16.88%
Walton Street Real Estate Fund IV, LP	2003	10,000,000	9,770,890	0	0	15,987,617	0	15,987,617	1.64	10.71%
Bryanston Retail Opportunity Fund, L.P.	2004	20,000,000	8,228,165	11,771,835	0	39,932,161	116,135	40,048,296	4.87	70.73%
Prudential PRISA II	2004	140,000,000	140,000,000	0	6,102,942	68,899,053	183,384,587	252,283,639	1.73	7.02%
RREEF America REIT III	2004	20,000,000	20,539,309	0	0	23,658,675	0	23,658,675	1.15	3.00%
BlackRock Diamond Property Fund	2005	25,000,000	25,000,000	0	0	15,233,347	0	15,233,347	0.61	-9.31%
CBRE Strategic Partners IV	2005	40,000,000	40,000,000	0	0	2,609,685	0	2,609,685	0.07	-27.76%
INVESCO Real Estate Fund I	2005	10,000,000	9,248,390	0	0	10,015,656	0	10,015,656	1.08	1.54%
LaSalle Income & Growth Fund IV	2005	20,000,000	19,469,417	0	0	13,482,024	0	13,482,024	0.69	-5.51%
North Haven Real Estate Fund V International	2005	27,500,000	27,377,414	122,586	86,449	33,112,232	282,345	33,394,577	1.22	6.83%
Prologis Japan Fund	2005	25,290,819	25,290,819	0	0	33,126,118	0	33,126,118	1.31	4.81%
Tri Continental Capital VII	2005	23,000,000	22,277,928	722,072	0	3,168,198	471,659	3,639,857	0.16	-14.42%
American Realty Value Add	2006	13,125,215	13,125,215	0	0	32,080,321	0	32,080,321	2.44	10.92%
Beacon Capital Strategic Partners IV, L.P.	2006	38,000,000	38,000,000	0	0	31,424,699	0	31,424,699	0.83	-3.26%
Fillmore East Fund	2006	25,000,000	31,403,818	0	0	20,777,177	0	20,777,177	0.66	-9.78%
Starwood Capital Hospitality Fund I-2	2006	30,000,000	30,000,000	0	0	27,879,087	2,564,513	30,443,600	1.01	0.19%
Starwood Opportunity Fund VII - A	2006	25,000,000	25,000,000	0	0	19,601,350	468,312	20,069,662	0.80	-2.37%
Walton Street Real Estate Fund V, LP	2006	40,000,000	40,000,000	0	0	27,760,957	830,681	28,591,638	0.71	-3.63%
Beacon Capital Strategic Partners V, L.P.	2007	18,000,000	18,000,000	0	0	11,174,695	0	11,174,695	0.62	-7.87%
Invesco Asian Real Estate Partners II (USD), LP	2007	20,000,000	8,412,833	0	-11,533	11,465,147	0	11,465,147	1.36	7.52%
Invesco High Yield Debt Fund I	2007	20,000,000	20,000,000	0	0	8,567,605	0	8,567,605	0.43	-35.57%
Square Mile Partners II	2007	19,831,232	19,831,232	0	0	5,311,330	0	5,311,330	0.27	-19.11%
Fillmore West Fund	2008	20,000,000	19,561,557	0	0	21,175,799	0	21,175,799	1.08	1.14%
Square Mile Partners III LP	2008	20,000,000	19,730,190	0	0	28,873,622	0	28,873,622	1.46	11.52%
Starwood Debt Fund II, LP	2008	20,000,000	17,599,882	0	0	21,912,511	0	21,912,511	1.25	6.45%
Structured Real Estate III, LP (Guggenheim)	2008	20,000,000	20,000,000	0	0	16,320,664	0	16,320,664	0.82	-4.99%
Bryanston Real Estate Opportunity Fund II, L.P.	2009	20,000,000	8,589,256	0	0	11,851,333	0	11,851,333	1.38	10.20%
Fortress Japan Opportunity Fund II	2012	5,472,095	1,212,284	4,259,811	302,777	22,652,992	4,109,882	26,762,874	17.66	25.32%
Oaktree Real Estate Opportunities V	2012	25,000,000	25,000,000	0	503,255	39,431,074	177,816	39,608,890	1.55	12.69%
Invesco Real Estate Asia Fund	2014	51,732,500	51,732,500	0	2,601,837	16,636,572	60,952,903	77,589,476	1.43	4.61%
Partners Group RE Secondary 2013 (USD) A	2014	65,000,000	49,541,590	15,458,410	-349,081	37,986,927	31,073,045	69,059,972	1.40	7.19%
Apollo US Real Estate Fund II	2015	20,000,000	16,422,684	3,577,316	29,763	8,765,993	14,900,699	23,666,692	1.44	8.54%
Pramerica Real Estate Capital VI	2016	24,890,077	22,583,937	2,306,140	58,392	14,775,416	9,231,651	24,007,068	1.06	2.52%
Kayne Anderson Real Estate Fund V, L.P.	2017	20,000,000	19,272,676	727,324	-120,110	13,814,886	17,770,422	31,585,308	1.65	16.73%
Partners Group RE Secondary 2017 (USD) A	2017	75,000,000	45,071,281	29,928,719	44,125	753,447	62,236,773	62,990,220	1.40	8.22%
Kayne Anderson Real Estate Debt III	2018	20,000,000	19,947,473	0	45,464	25,318,141	0	25,318,141	1.27	11.24%
Apollo US Real Estate Fund III	2021	50,000,000	28,812,820	21,187,180	415,331	5,330,711	33,115,938	38,446,649	1.32	23.09%
Kayne Anderson Real Estate Debt IV	2021	30,000,000	27,540,157	2,459,843	0	8,898,541	21,647,121	30,545,662	1.11	10.28%
Kayne Anderson Real Estate Fund VI	2021	20,000,000	10,077,049	9,922,951	0	0	11,435,177	11,435,177	1.13	14.61%
Pramerica Real Estate Capital VII	2021	55,182,939	29,204,077	25,978,862	118,086	7,980,888	20,059,437	28,040,325	0.96	-4.39%
<b>Total: San Bernardino</b>		<b>1,395,034,651</b>	<b>1,246,654,213</b>	<b>127,872,763</b>	<b>13,606,286</b>	<b>1,138,804,164</b>	<b>551,627,224</b>	<b>1,690,431,388</b>	<b>1.34</b>	<b>4.47%</b>



# REAL ASSETS PERFORMANCE

AS OF SEPTEMBER 30, 2023

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
Hancock Timberland VII	2005	90,000,000	90,000,000	0	0	101,142,900	0	101,142,900	1.12	1.02%
Hancock Timberland VIII	2006	40,000,000	40,000,000	0	200	45,947,325	0	45,947,325	1.15	1.11%
Highstar Capital III, L.P.	2007	60,000,000	59,119,119	0	0	63,302,361	0	63,302,361	1.07	0.87%
RREEF North American Infrastructure Fund	2007	50,000,000	50,000,000	0	846,289	55,238,754	0	55,238,754	1.09	12.09%
Timbervest Partners II, L.P.	2007	50,000,000	50,000,000	0	0	51,855,967	0	51,855,967	1.04	0.38%
Pinnacle Natural Resources Offshore Fund Ltd.	2008	135,000,000	135,000,000	0	0	0	268,176,353	268,176,353	1.99	8.27%
Timbervest Environmental Investments II, L.P.	2008	30,000,000	30,000,000	0	50,548	21,494,831	4,007,356	25,502,187	0.85	-2.12%
Pinnacle Physicals and Financing Master, Ltd	2009	205,800,000	205,800,000	0	15,984	2,018,221	335,654,916	337,673,137	1.64	7.86%
Fortress Transportation Infrastructure LLC	2015	45,403,354	45,403,354	0	0	41,902,882	0	41,902,882	0.92	-1.99%
<b>Total: San Bernardino</b>		<b>706,203,354</b>	<b>705,322,473</b>	<b>0</b>	<b>913,021</b>	<b>382,903,241</b>	<b>607,838,625</b>	<b>990,741,866</b>	<b>1.40</b>	<b>4.17%</b>



# PRIVATE EQUITY PERFORMANCE

## AS OF SEPTEMBER 30, 2023

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
European Strategic Partners 2004	2004	238,688,631	222,037,366	16,651,266	88,078	280,950,879	167,980	281,118,859	1.27	3.95%
Partners Group MCA	2004	1,000,000,000	1,001,287,215	-1,287,215	0	894,000,516	659,469,110	1,553,469,626	1.55	9.07%
Pathway Private Equity Fund VII, L.P.	2004	904,500,000	863,418,340	41,081,660	0	1,495,648,131	186,609,812	1,682,257,943	1.95	11.55%
Aurora Equity Partners III, L.P.	2005	25,000,000	23,544,536	0	1,422,824	41,738,196	0	41,738,196	1.67	13.61%
Lexington Middle Market I	2005	25,000,000	24,771,942	228,058	0	40,464,141	50,631	40,514,772	1.64	11.38%
NB Secondary Opportunities I, LP	2005	20,000,000	18,500,843	0	0	24,330,105	0	24,330,105	1.32	6.49%
Lexington Capital Partners VI-B	2006	25,000,000	24,591,319	408,681	3,012	35,008,201	129,138	35,137,339	1.43	6.87%
Siguler Guff DOF II	2006	30,000,000	30,000,000	0	-43,638	42,440,278	0	42,440,278	1.42	8.64%
TCW/Crescent Mezzanine IV, L.P.	2006	40,000,000	39,590,976	0	-81,547	45,049,090	0	45,049,090	1.14	3.03%
Catalyst Fund II, L.P.	2007	10,000,000	9,956,944	43,056	65,604	3,859,103	33,909,279	37,768,382	3.77	11.22%
Energy Spectrum Partners V, LP	2007	15,000,000	13,840,666	0	12,744	25,811,900	0	25,811,900	1.86	31.80%
Tennenbaum Opportunities Fund V, L.P.	2007	10,000,000	10,000,000	0	0	14,435,464	791,369	15,226,833	1.52	5.69%
Apollo Investment Fund VII, L.P.	2008	10,000,000	8,789,116	1,210,884	-15,638	17,808,629	104,046	17,912,675	2.04	22.79%
Aurora Resurgence Fund, L.P.	2008	15,000,000	5,653,009	0	40,630	10,350,965	0	10,350,965	1.82	17.60%
Industry Ventures Fund V	2008	10,000,000	9,500,000	0	0	27,399,602	0	27,399,602	2.88	29.29%
Lexington Middle Market II - Offshore	2008	10,000,000	9,773,736	226,264	40,771	16,036,242	2,121,680	18,157,922	1.85	14.51%
NB Secondary Opportunities II, LP	2008	20,000,000	17,080,642	0	430,639	26,888,038	0	26,888,038	1.54	14.40%
Siguler Guff DOF III	2008	10,000,000	9,700,000	300,000	-234	14,706,025	1,099,628	15,805,653	1.63	10.34%
TCW/Crescent Mezzanine V, L.P.	2008	20,000,000	19,949,723	50,277	-51,494	27,301,678	155,801	27,457,479	1.38	9.81%
Apollo European Principal Finance Fund (Feeder), LP	2009	53,001,432	46,434,825	6,566,607	13,022	69,417,013	108,147	69,525,160	1.50	11.81%
DRI II, L.P.	2009	20,000,000	19,917,669	0	-100,096	26,302,807	0	26,302,807	1.33	19.64%
Starwood Energy Infrastructure Fund	2009	15,000,000	14,750,000	0	93,463	20,239,979	0	20,239,979	1.36	7.88%
Apollo PCPL Webb V	2010	4,844,398	4,844,398	0	0	5,196,757	0	5,196,757	1.07	6.04%
Apollo PCPL Webb VIII	2010	4,734,303	4,734,303	0	32	12,146,258	0	12,146,258	2.57	46.47%
Energy Spectrum Partners VI, LP	2010	20,000,000	17,240,577	2,759,423	288	20,704,680	401,740	21,106,420	1.22	5.68%
European Strategic Partners 2008	2010	31,213,747	29,629,636	1,584,111	160,998	40,016,130	3,194,821	43,210,951	1.45	8.13%
Industry Ventures Fund VI	2011	20,000,000	18,400,000	1,600,000	0	24,850,771	260,710	25,111,481	1.36	7.99%
Lexington Capital Partners VII (Offshore)	2011	25,000,000	20,465,470	4,534,530	118,325	31,724,234	2,749,027	34,473,261	1.67	14.59%
Tennenbaum Opportunities Fund VI, L.P.	2011	20,000,000	7,882,885	12,117,115	0	16,804,926	81,276	16,886,202	2.14	8.06%
Aurora Equity Partners IV, L.P.	2012	20,000,000	17,262,661	2,737,339	2,654,902	40,094,037	488,438	40,582,475	2.04	18.10%
BNY Mellon - Alcentra Mezzanine III	2012	25,000,000	23,254,658	0	0	26,736,979	0	26,736,979	1.15	12.73%
Industry Ventures Partnership Holdings Fund II, L.P.	2012	25,000,000	23,500,000	1,500,000	0	57,600,139	47,695,285	105,295,424	4.48	22.60%
Tennenbaum Waterman Fund, LP	2012	70,000,000	70,000,000	0	1,152	72,203,734	60,224,541	132,428,275	1.89	10.00%
Industry Ventures Partnership Holdings Fund III, L.P.	2013	25,000,000	23,277,042	1,722,958	0	42,166,060	34,991,237	77,157,297	3.31	22.58%
Industry Ventures Secondary VII, L.P.	2013	25,000,000	23,175,000	1,825,000	0	38,456,740	7,123,421	45,580,161	1.97	16.30%
Industry Ventures Partnership Holdings Fund III-A, L.P.	2014	12,500,000	11,162,500	1,337,500	0	7,375,723	5,753,945	13,129,668	1.18	3.19%



# PRIVATE EQUITY PERFORMANCE

## AS OF SEPTEMBER 30, 2023

Investment Name	Vintage Year	Commitment Amount	Paid in Capital	Capital to be Funded	Additional Fees	Cumulative Distributions	Valuation	Total Value	TVPI Ratio	IRR
Pathway SBCERA MCA	2014	350,000,000	317,518,072	32,481,928	0	110,909,445	641,969,879	752,879,324	2.37	19.94%
SL Capital SOF I LP	2014	25,000,000	21,382,263	3,617,737	0	27,177,838	2,554,419	29,732,257	1.39	9.90%
ARES European Loan Opp Fund	2015	15,000,000	8,413,136	0	0	7,613,498	0	7,613,498	0.90	-6.02%
Ares Special Situations Fund IV, LP	2015	50,000,000	47,686,469	2,313,531	0	37,362,661	35,810,367	73,173,028	1.53	8.25%
Tennenbaum Special Situations Fund IX	2015	50,000,000	32,057,933	17,942,067	85,183	32,877,330	20,649,735	53,527,065	1.67	10.30%
Industry Ventures Direct, LP	2016	25,000,000	23,920,425	1,079,575	0	11,577,501	39,521,119	51,098,620	2.14	18.81%
Industry Ventures Partnership Holdings IV, LP	2016	25,000,000	22,750,000	2,250,000	0	8,419,172	44,144,708	52,563,880	2.31	20.47%
Industry Ventures Special Opportunities II-A	2016	12,500,000	1,694,029	10,805,971	0	2,755,554	2,300,237	5,055,791	2.98	38.46%
TCP Direct Lending Fund VIII-L, LLC	2016	40,000,000	21,606,919	18,393,081	148,810	12,008,863	19,880,495	31,889,358	1.47	6.52%
Tennenbaum Energy Opportunities Fund, LP	2016	20,000,000	4,170,678	15,829,322	0	6,620,045	4,597,025	11,217,070	2.69	11.57%
Apollo Accord Fund, LP	2017	30,000,000	7,500,000	0	-7,580	8,310,474	0	8,310,474	1.11	7.44%
Industry Ventures Secondary VIII	2017	25,000,000	22,525,000	2,475,000	0	22,736,717	20,041,350	42,778,067	1.90	25.22%
Kayne Anderson Energy Fund VII, L.P.	2017	10,000,000	8,638,804	1,361,196	0	649,301	6,292,993	6,942,294	0.80	-3.74%
Kayne Partners Fund IV (QP), LP	2017	20,000,000	19,700,828	299,172	127,793	17,322,762	20,724,664	38,047,426	1.92	20.82%
Kayne SBCERA MLP	2017	130,000,000	126,225,037	3,774,963	0	69,921,028	76,636,251	146,557,279	1.16	3.23%
SL Capital SOF III LP	2017	25,000,000	17,774,188	7,225,812	-440	18,781,230	17,844,603	36,625,833	2.06	21.58%
Crestline Portfolio Financing Fund	2018	50,000,000	33,107,629	16,892,371	0	21,639,887	24,772,862	46,412,749	1.40	10.37%
Industry Ventures Partnership Holdings V, LP	2018	25,000,000	22,625,000	2,375,000	0	626,933	44,714,488	45,341,421	2.00	26.80%
Industry Ventures Tech Buyout LP	2018	50,000,000	45,553,986	4,446,014	0	0	59,937,165	59,937,165	1.32	12.56%
Kayne Anderson Private Energy Income Fund II, L.P.	2018	20,000,000	17,127,193	2,872,807	0	8,715,980	24,034,042	32,750,022	1.91	41.29%
Kayne Flywheel Co-investment LLC	2018	8,000,000	6,600,000	1,400,000	0	10,560,993	11,108,737	21,669,730	3.28	39.37%
Kayne SBCERA (D.I.)	2018	45,000,000	40,660,422	4,339,578	0	44,714,031	3,513,679	48,227,710	1.19	15.52%
Kayne Solutions Fund LP	2018	20,000,000	9,809,659	0	19,174	10,797,587	0	10,797,587	1.10	9.14%
Industry Ventures Direct II, LP	2019	50,000,000	45,034,012	4,965,988	0	0	72,920,128	72,920,128	1.62	21.91%
Kayne Renewable Opportunities Partners (TE), LP	2019	100,000,000	20,704,033	0	0	27,857,425	0	27,857,425	1.35	21.72%
Waterfall Sentinel Co-Investments	2019	30,000,000	23,890,124	6,109,877	140,580	18,331,939	45,468,050	63,799,989	2.65	30.24%
Waterfall Sentinel Fund	2019	30,000,000	25,498,523	4,501,477	0	7,274,164	33,264,288	40,538,452	1.59	14.93%
Adams Street SBCERA	2020	150,000,000	136,775,298	13,224,702	0	19,168,594	145,979,656	165,148,250	1.21	14.20%
Kayne Anderson FRG	2020	30,000,000	30,000,000	0	0	45,283,966	0	45,283,966	1.51	44.79%
Kayne CLO Partners II, LP	2020	50,000,000	44,721,625	0	-97,167	52,848,194	0	52,848,194	1.18	13.44%
Industry Ventures Partnership Holdings VI, LP	2021	40,000,000	17,214,599	22,785,401	0	72,800	19,912,724	19,985,524	1.16	13.93%
Industry Ventures Secondary IX, LP	2021	50,000,000	43,050,049	6,949,951	-578	1,091,888	52,778,237	53,870,125	1.25	18.21%
Industry Ventures Direct III, L.P.	2022	40,000,000	6,898,035	33,101,965	-1,408	0	5,561,828	5,561,828	0.81	-23.93%
Industry Ventures IV Arrowhead, L.P.	2022	25,000,000	5,000,000	20,000,000	0	0	5,549,042	5,549,042	1.11	9.09%
Industry Ventures Tech Buyout II, L.P.	2022	100,000,000	25,028,556	74,971,444	-178,349	0	25,626,862	25,626,862	1.03	5.44%
<b>Total: San Bernardino</b>		<b>4,619,982,511</b>	<b>4,040,780,517</b>	<b>435,983,446</b>	<b>5,089,854</b>	<b>4,300,291,947</b>	<b>2,575,790,695</b>	<b>6,876,082,642</b>	<b>1.70</b>	<b>10.92%</b>





# APPENDIX



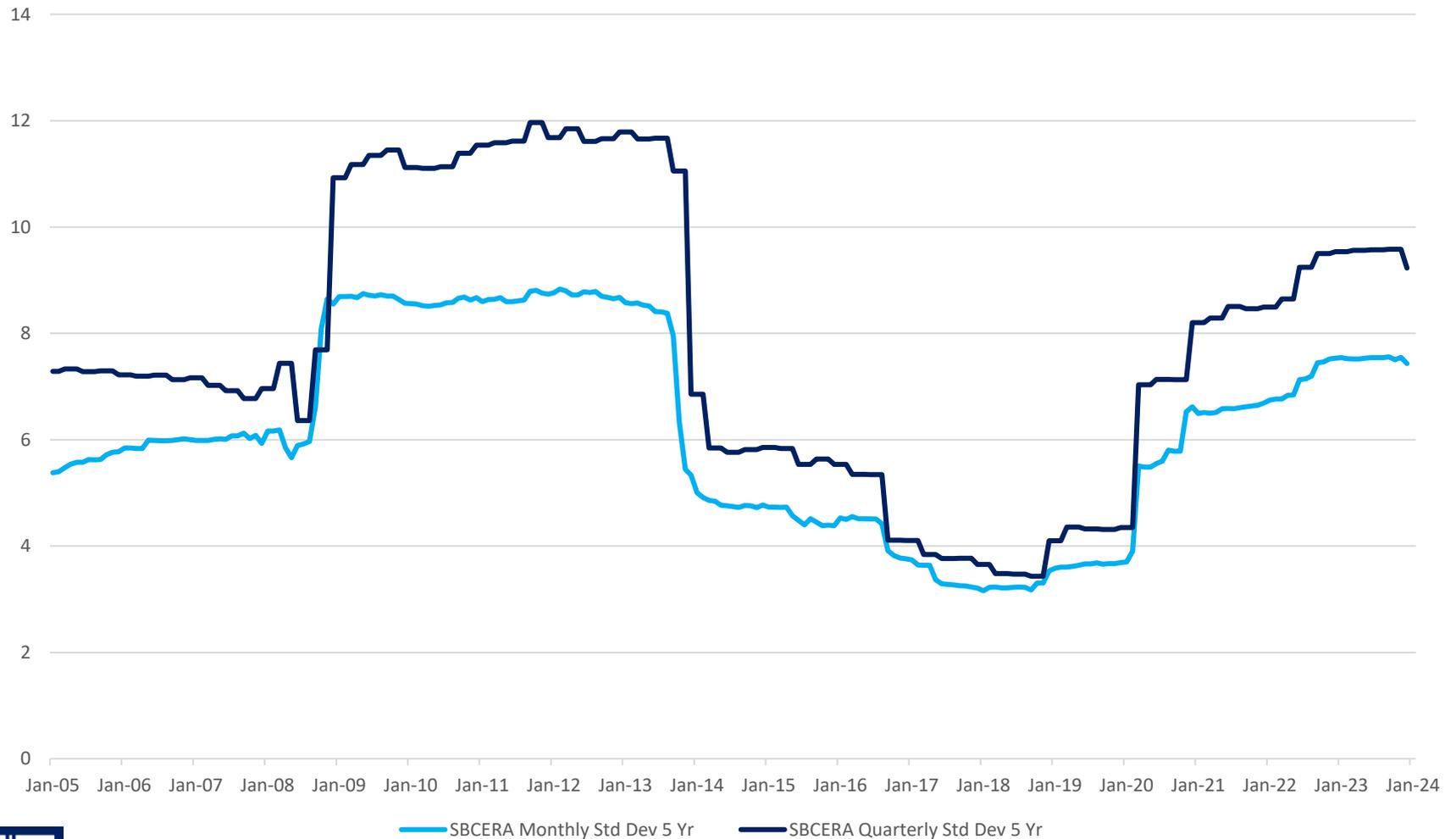
# POLICY INDEX COMPOSITION

Index	7/1/ 2022	7/1/ 2021	7/1/ 2019	7/1/ 2018	7/1/ 2014	7/1/ 2012	6/1/ 2012	6/1/ 2010	6/1/ 2009	6/1/ 2008	9/1/ 2006	7/1/ 2005	4/1/ 2004	6/1/ 2002
Russell 3000 Index	35	31	29	29	29	30	29	29	28	34	38	38	43	43
MSCI ACWI ex USA Index	13	15	15	15	15	13	7	7	7	11	13	13	18	18
MSCI Emerging Markets Index							4	4	3	4	3	3		
Bloomberg US Aggregate Bond Index	22	22	22	22	22	24	13	13	18	15	21	21	18	26
Bloomberg Global Aggregate Bond ex US Index	17	19	20	20	18	16	10	10	9	8	5			
Bloomberg Global Aggregate Bond Index Hedged												5	5	5
Merrill Lynch High Yield Master II Index							13	13	13	8	8	8	8	
JP Morgan EMBI Global Diversified Index							6	6	4	4	2	2		
NCREIF Property Index	5	5	7	7	9	9	12.5	12.5	13	11	10	10	8	8
67% S&P GSCI + 33% BBG US TIPS Index	6													
67% Bloomberg Commodity Index+ 33% BBG US TIPS Index		6	5											
NCREIF Timberland 1Q Lag				2.5	2.5	3								
Bloomberg Commodity Index				2.5	2.5	3	3.5	3.5	3	3				
91 Day T-Bill Index	2	2	2	2	2	2	2	2	2	2				

# 5 YEAR STANDARD DEVIATION

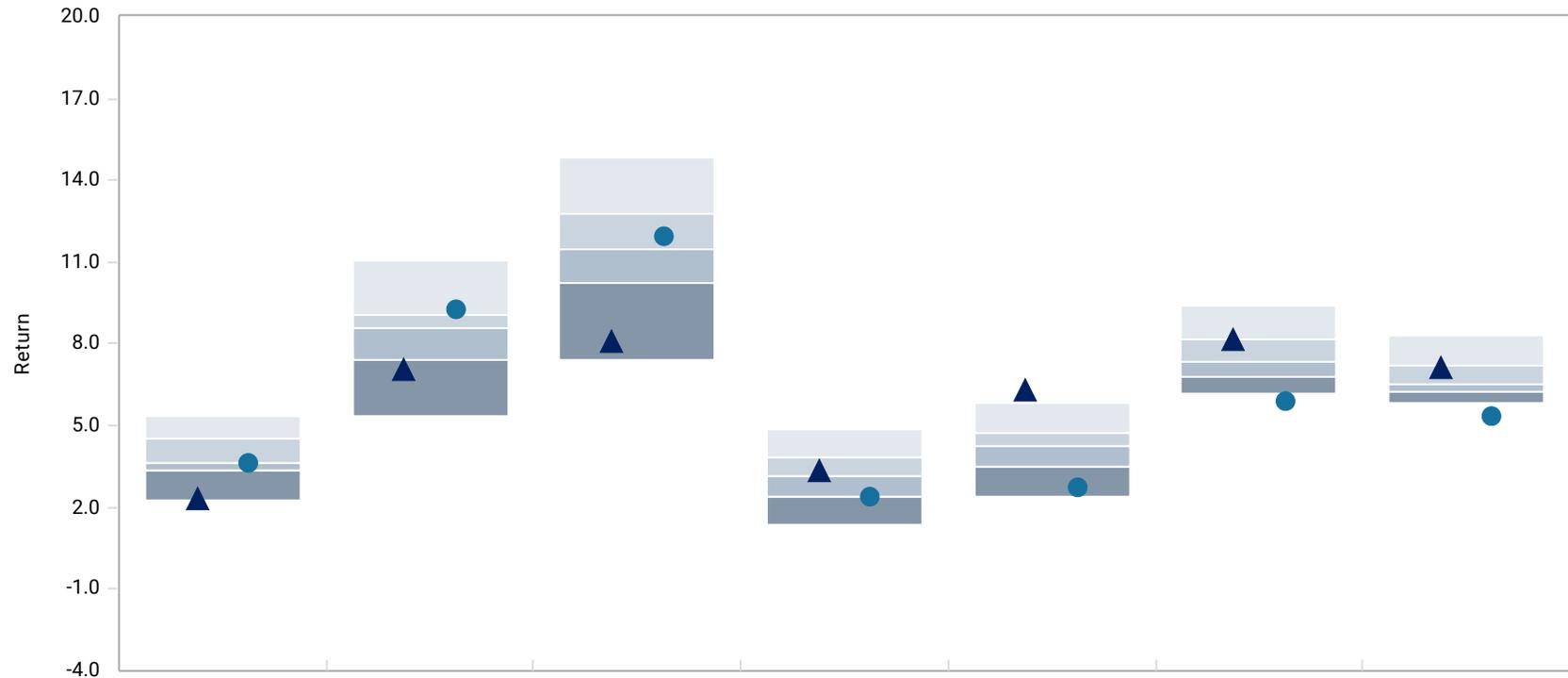
## MONTHLY TIME SERIES VS. QUARTERLY TIME SERIES

Standard Deviation Rolling 5 Yr



# RETURN SUMMARY VS. PEER UNIVERSE

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

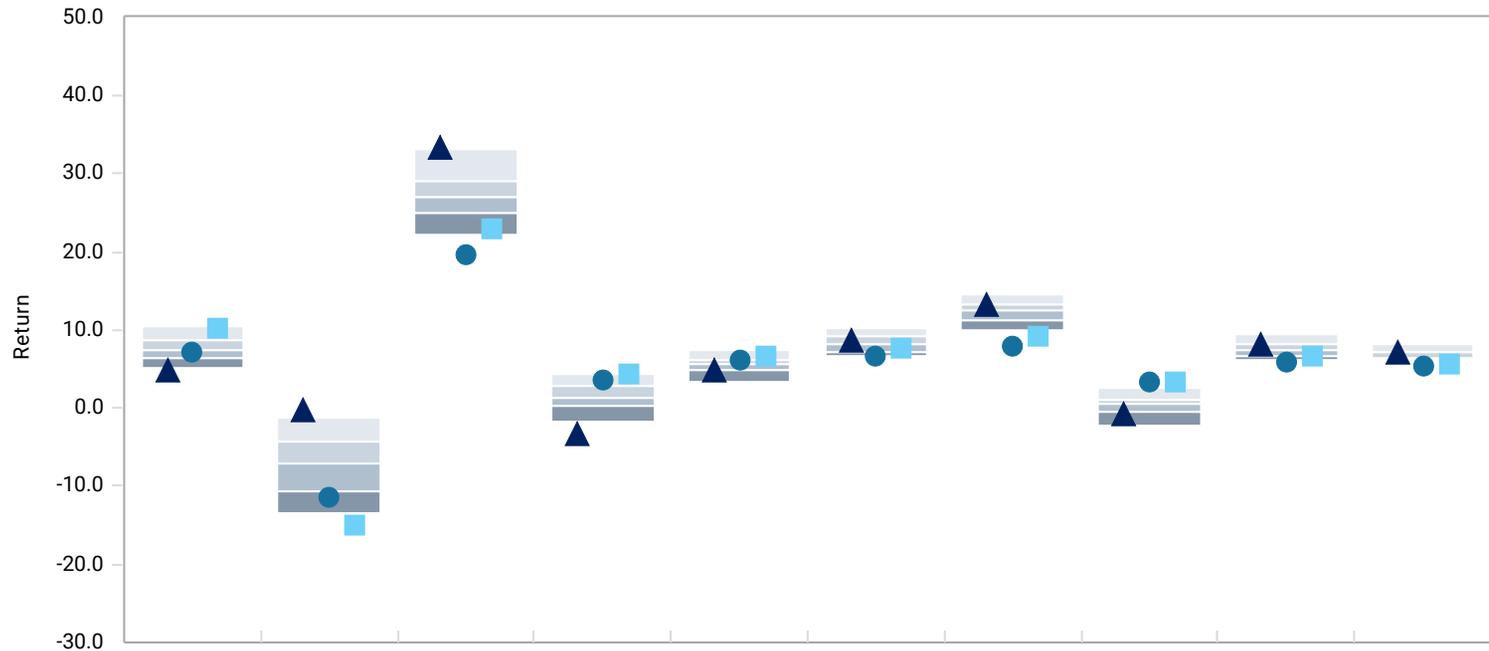


	3 Mo	FYTD (%)	1 Year	2 Years	3 Years	5 Years	10 Years
▲ Total Fund	2.3 (95)	7.1 (84)	8.1 (91)	3.3 (45)	6.3 (4)	8.2 (24)	7.1 (27)
● Policy Index	3.6 (52)	9.3 (23)	12.0 (32)	2.4 (75)	2.8 (93)	5.9 (100)	5.4 (100)
5th Percentile	5.3	11.0	14.9	4.9	5.9	9.4	8.3
1st Quartile	4.5	9.1	12.8	3.8	4.8	8.2	7.2
Median	3.6	8.6	11.5	3.2	4.3	7.3	6.5
3rd Quartile	3.3	7.4	10.2	2.4	3.5	6.8	6.3
95th Percentile	2.2	5.3	7.4	1.3	2.4	6.2	5.8
Population	38	29	28	27	26	26	21



# RETURN SUMMARY VS. PEER UNIVERSE

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



	Fiscal 2023 (%)	Fiscal 2022 (%)	Fiscal 2021 (%)	Fiscal 2020 (%)	Fiscal 2019 (%)	Fiscal 2018 (%)	Fiscal 2017 (%)	Fiscal 2016 (%)	5 Yrs (%)	10 Yrs (%)
▲ Total Fund	5.0 (96)	-0.1 (4)	33.3 (5)	-3.2 (99)	4.8 (77)	8.8 (34)	13.3 (27)	-0.8 (87)	8.2 (24)	7.1 (27)
● Policy Index	7.2 (55)	-11.3 (86)	19.7 (99)	3.7 (13)	6.2 (27)	6.8 (95)	8.0 (100)	3.4 (2)	5.9 (100)	5.4 (100)
■ 60% MSCI World/40% FTSE WGBI	10.2 (7)	-14.9 (99)	23.0 (92)	4.4 (5)	6.7 (17)	7.8 (66)	9.2 (99)	3.3 (2)	6.8 (76)	5.8 (100)
5th Percentile	10.5	-1.1	33.3	4.4	7.6	10.3	14.5	2.6	9.4	8.3
1st Quartile	8.7	-4.2	29.2	2.9	6.3	9.2	13.4	1.0	8.2	7.2
Median	7.5	-7.0	27.0	1.4	5.8	8.2	12.5	0.6	7.3	6.5
3rd Quartile	6.4	-10.5	25.1	0.3	5.0	7.3	11.4	-0.4	6.8	6.3
95th Percentile	5.1	-13.5	22.2	-1.7	3.3	6.8	10.0	-2.2	6.2	5.8
Population	72	80	123	110	78	56	54	51	26	21

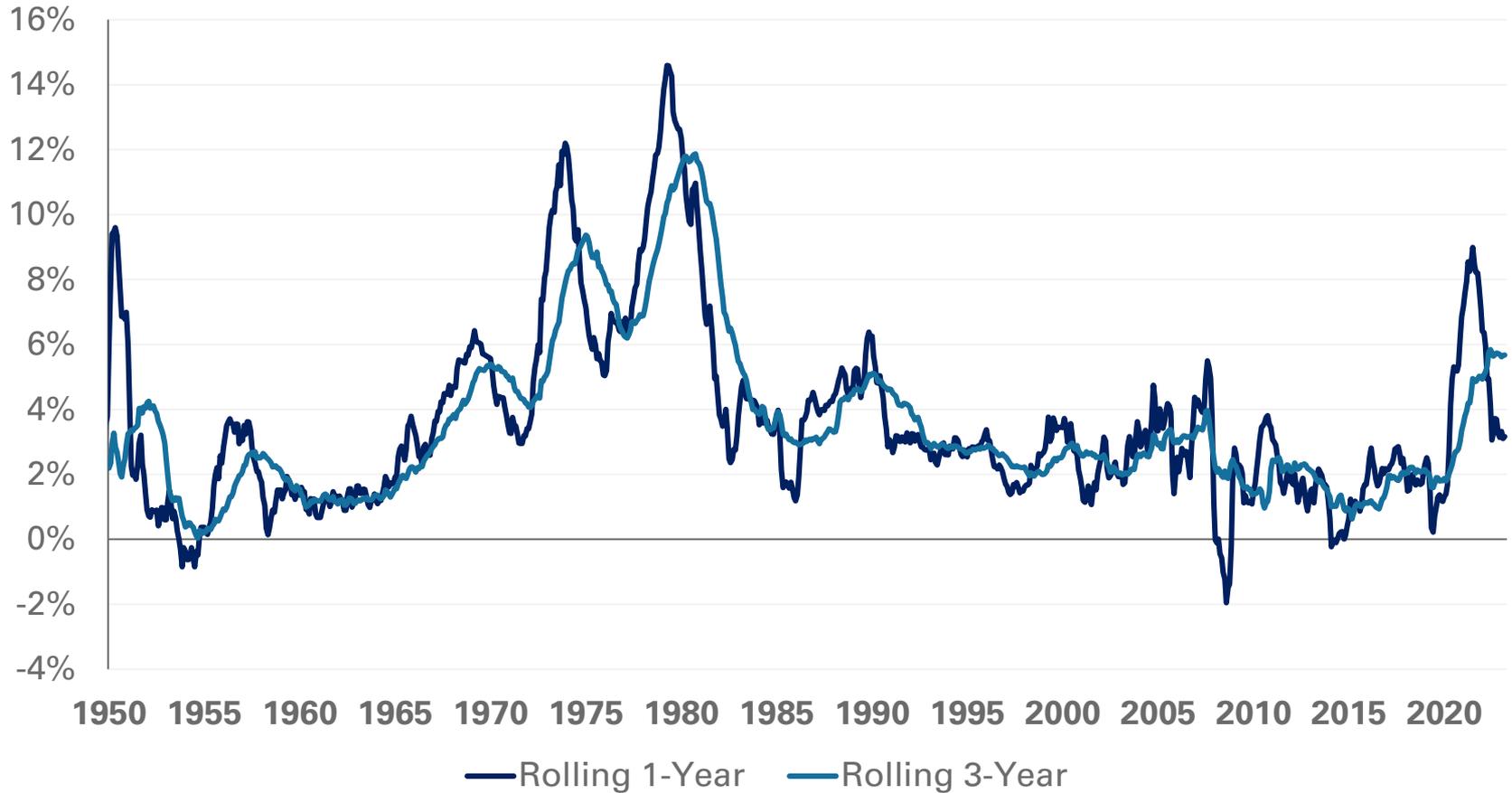


# MACRO

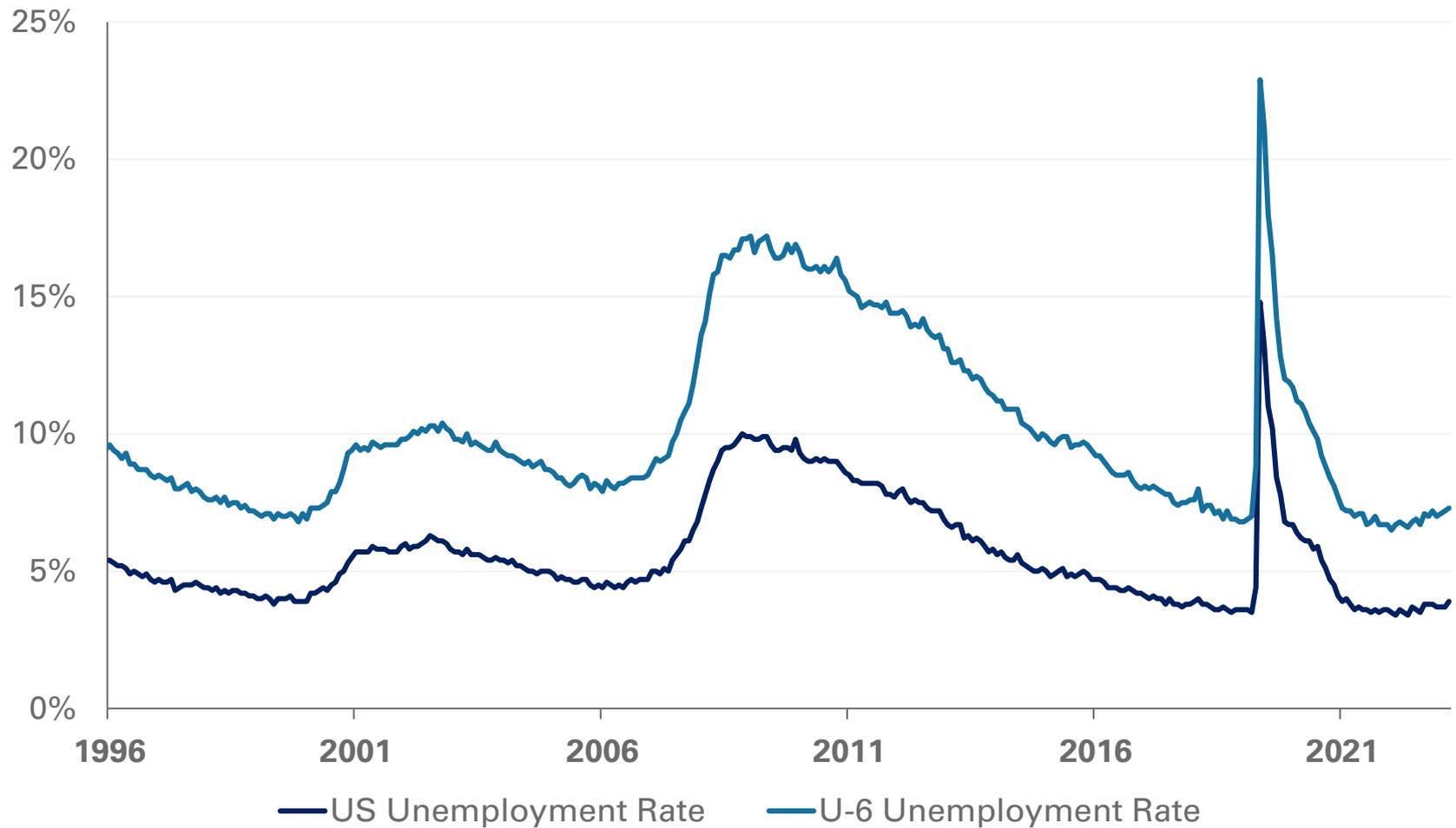


# INFLATION

## U.S. CONSUMER PRICE INDEX



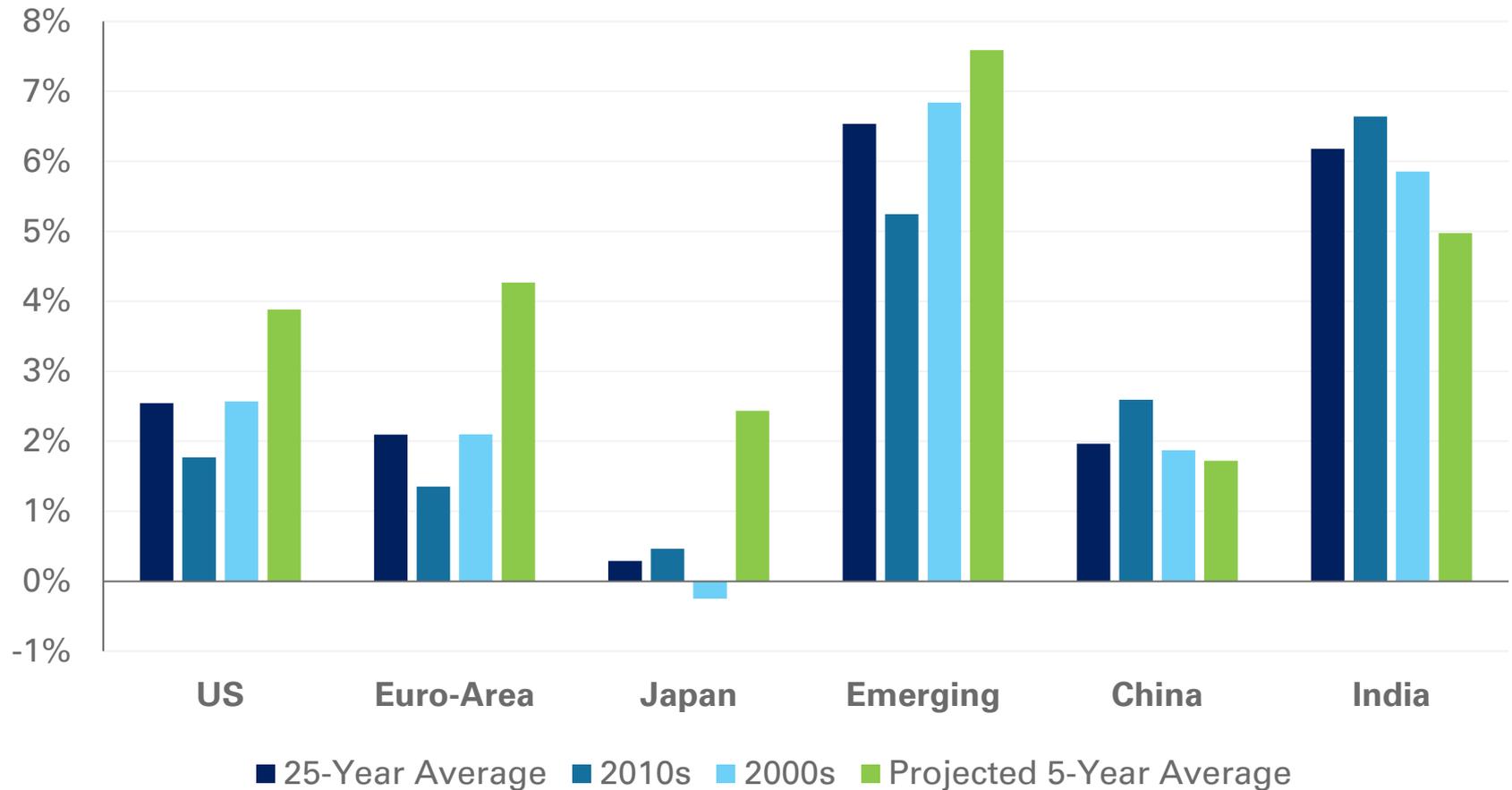
# U.S. UNEMPLOYMENT RATES



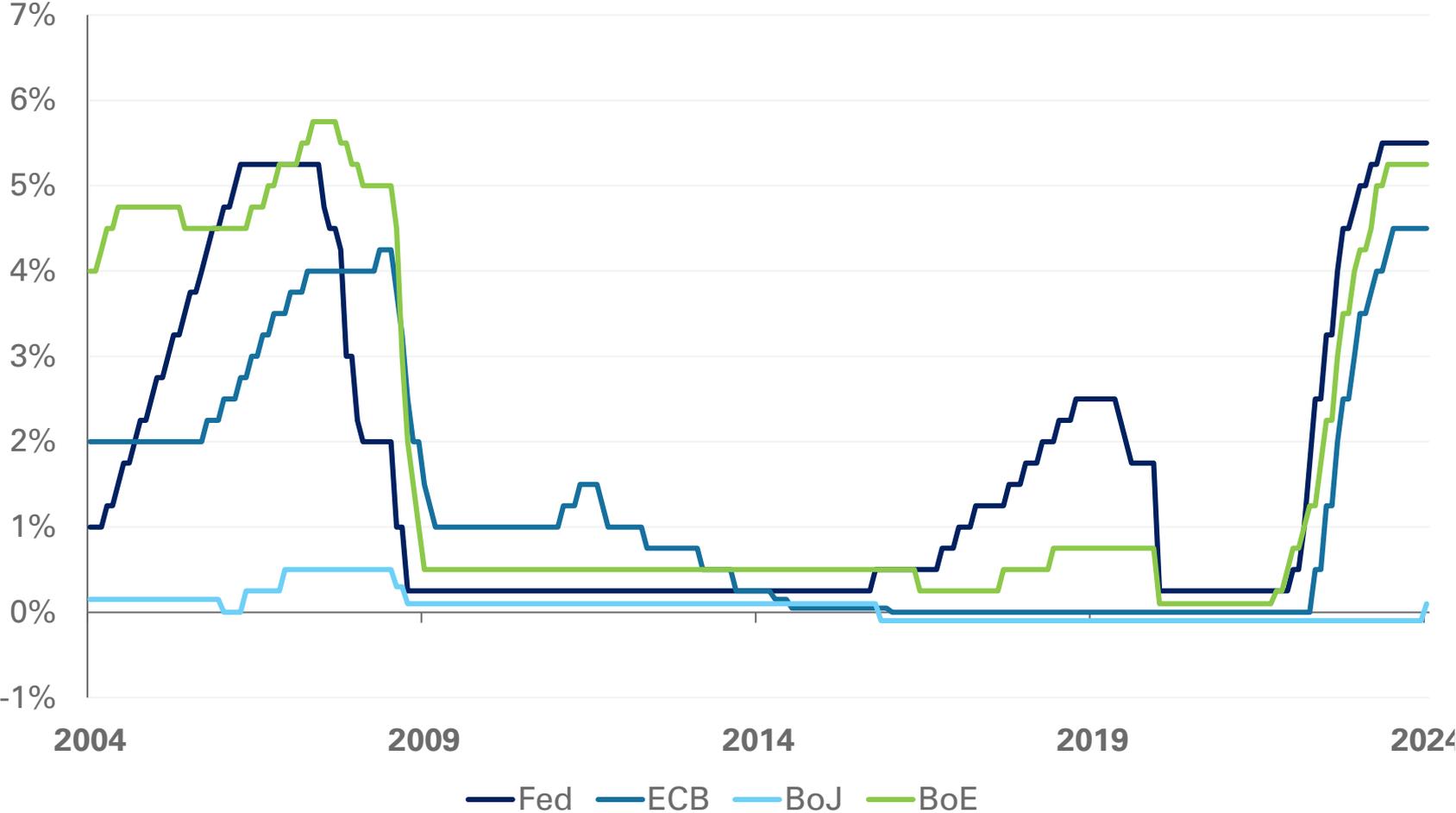
Source: FactSet

# HISTORICAL INFLATION

## IMF PROJECTIONS



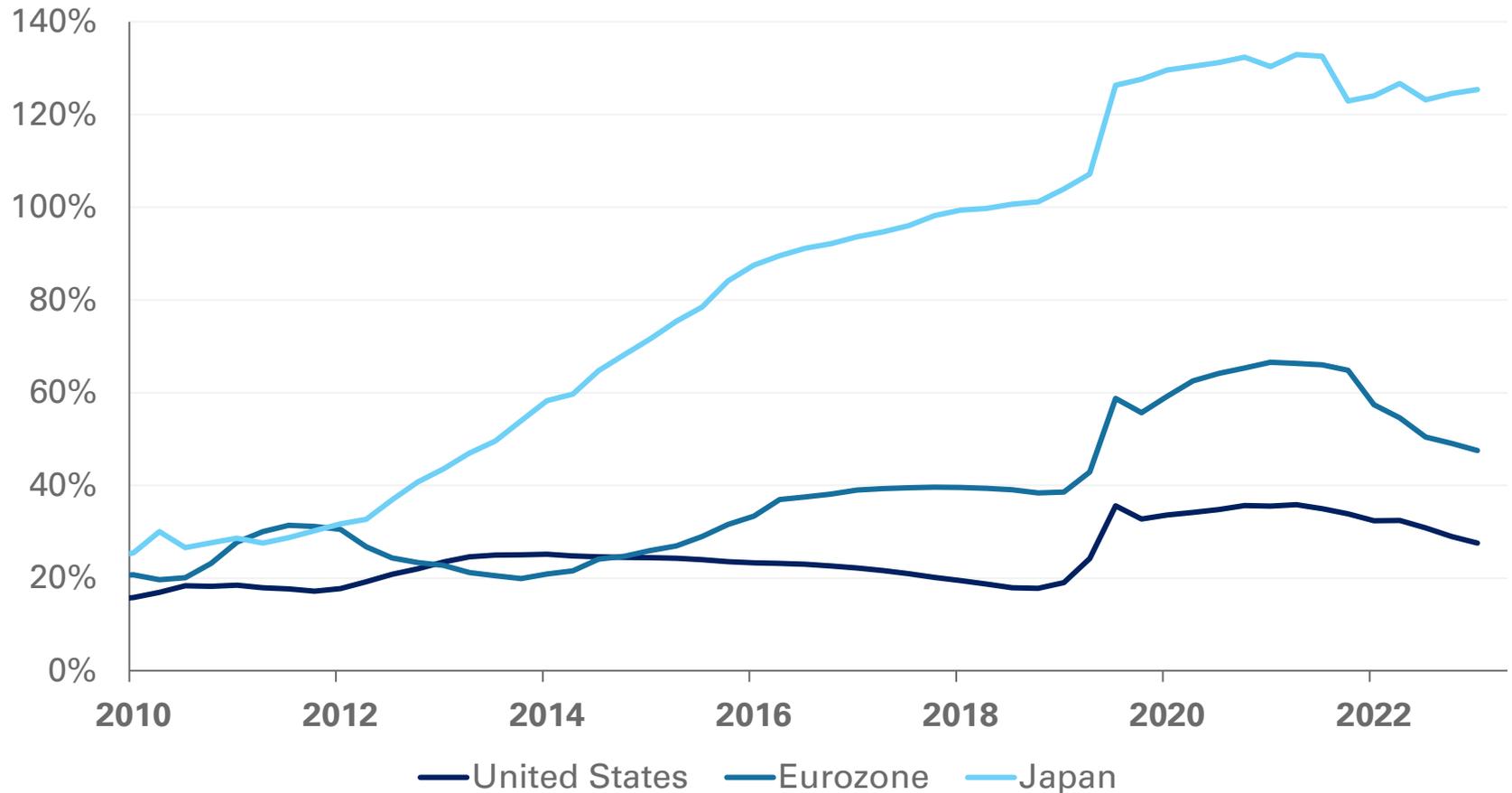
# CENTRAL BANK POLICY RATES



Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet

# CENTRAL BANK BALANCE SHEETS

AS A PERCENTAGE OF GDP



# CURRENCIES

## RELATIVE TO THE U.S. DOLLAR

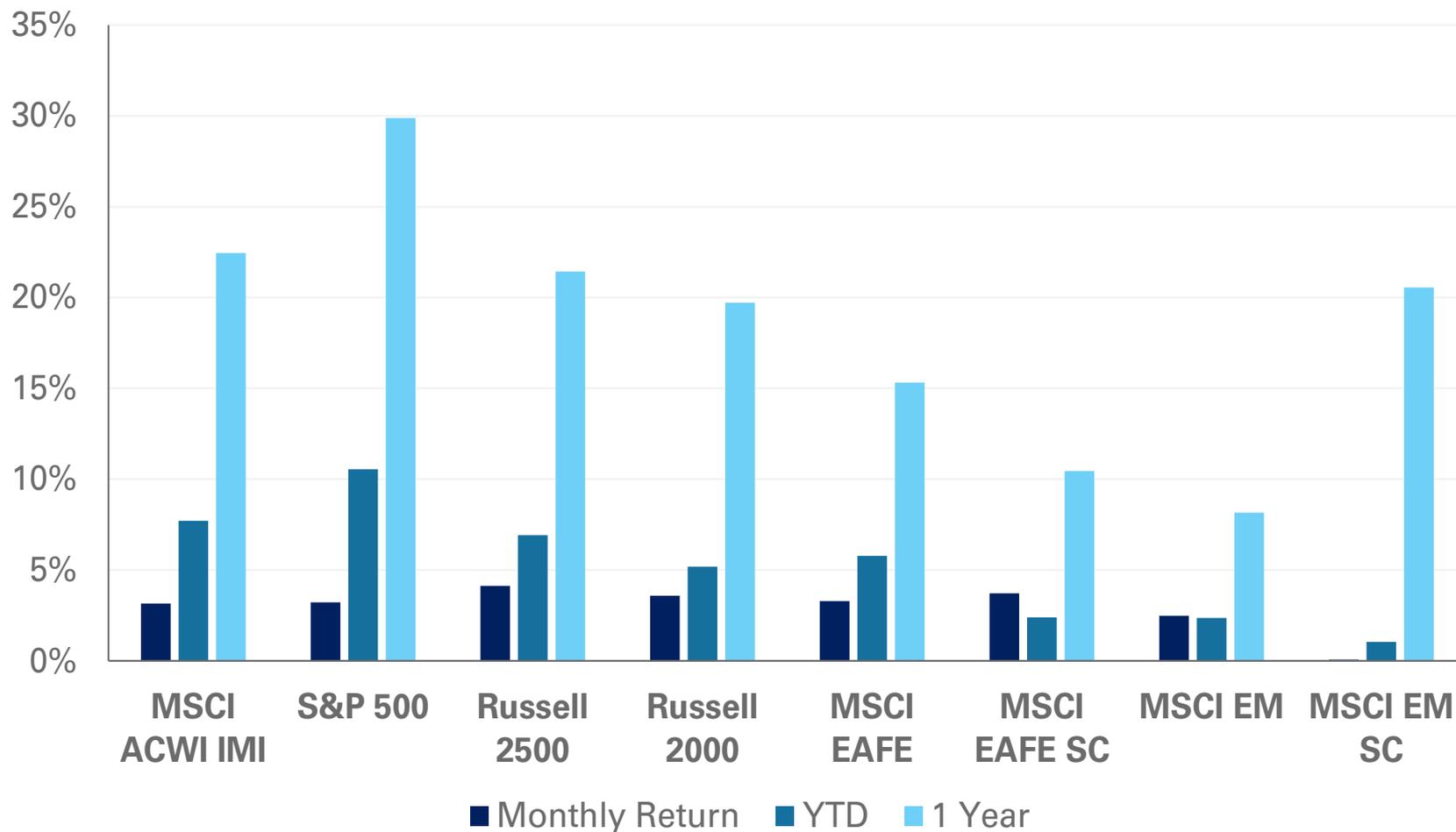
Currencies	Spot	1 Month	YTD	1 Year
<b>Euro</b>	<b>1.08</b>	-0.2%	-2.2%	-0.6%
<b>British Pound</b>	<b>1.26</b>	-0.1%	-0.9%	2.2%
<b>Japanese Yen</b>	<b>151.35</b>	-1.1%	-6.8%	-12.1%
<b>Swiss Franc</b>	<b>0.90</b>	-2.2%	-6.6%	1.4%
<b>Australian Dollar</b>	<b>0.65</b>	0.2%	-4.4%	-2.6%
<b>New Zealand Dollar</b>	<b>1.67</b>	-1.8%	-5.5%	-4.4%
<b>Canadian Dollar</b>	<b>1.35</b>	0.2%	-2.6%	0.0%
<b>Chinese Yuan</b>	<b>7.23</b>	-0.5%	-1.9%	-4.9%
<b>Taiwanese Dollar</b>	<b>32.00</b>	-1.2%	-4.1%	-4.9%
<b>Korean Won</b>	<b>1346</b>	-1.1%	-4.3%	-3.3%
<b>Vietnamese Dong</b>	<b>24795</b>	-0.6%	-2.1%	-5.4%
<b>Thai Baht</b>	<b>36.49</b>	-1.7%	-6.5%	-6.3%
<b>Philippines Peso</b>	<b>56.22</b>	0.0%	-1.5%	-3.3%
<b>Indian Rupee</b>	<b>83.40</b>	-0.6%	-0.2%	-1.5%
<b>Russian Ruble</b>	<b>92.58</b>	-1.6%	-3.4%	-16.1%
<b>Mexican Peso</b>	<b>16.62</b>	2.7%	1.9%	8.6%
<b>Brazilian Real</b>	<b>5.01</b>	-0.7%	-3.0%	1.3%
<b>Chilean Peso</b>	<b>0.03</b>	0.7%	-8.8%	-15.9%
<b>Argentine Peso</b>	<b>857.51</b>	-1.8%	-5.7%	-75.6%
<b>South African Rand</b>	<b>18.94</b>	1.3%	-3.4%	-6.3%



# EQUITY



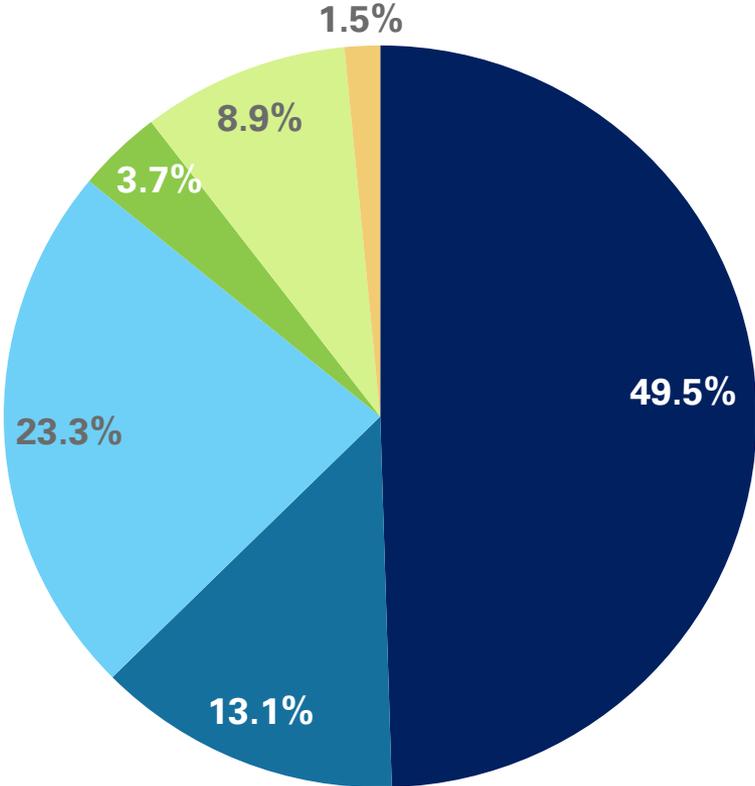
# EQUITY INDEX PERFORMANCE



Source: MSCI, S&P, Russell, FactSet



# MSCI ACWI IMI WEIGHTS



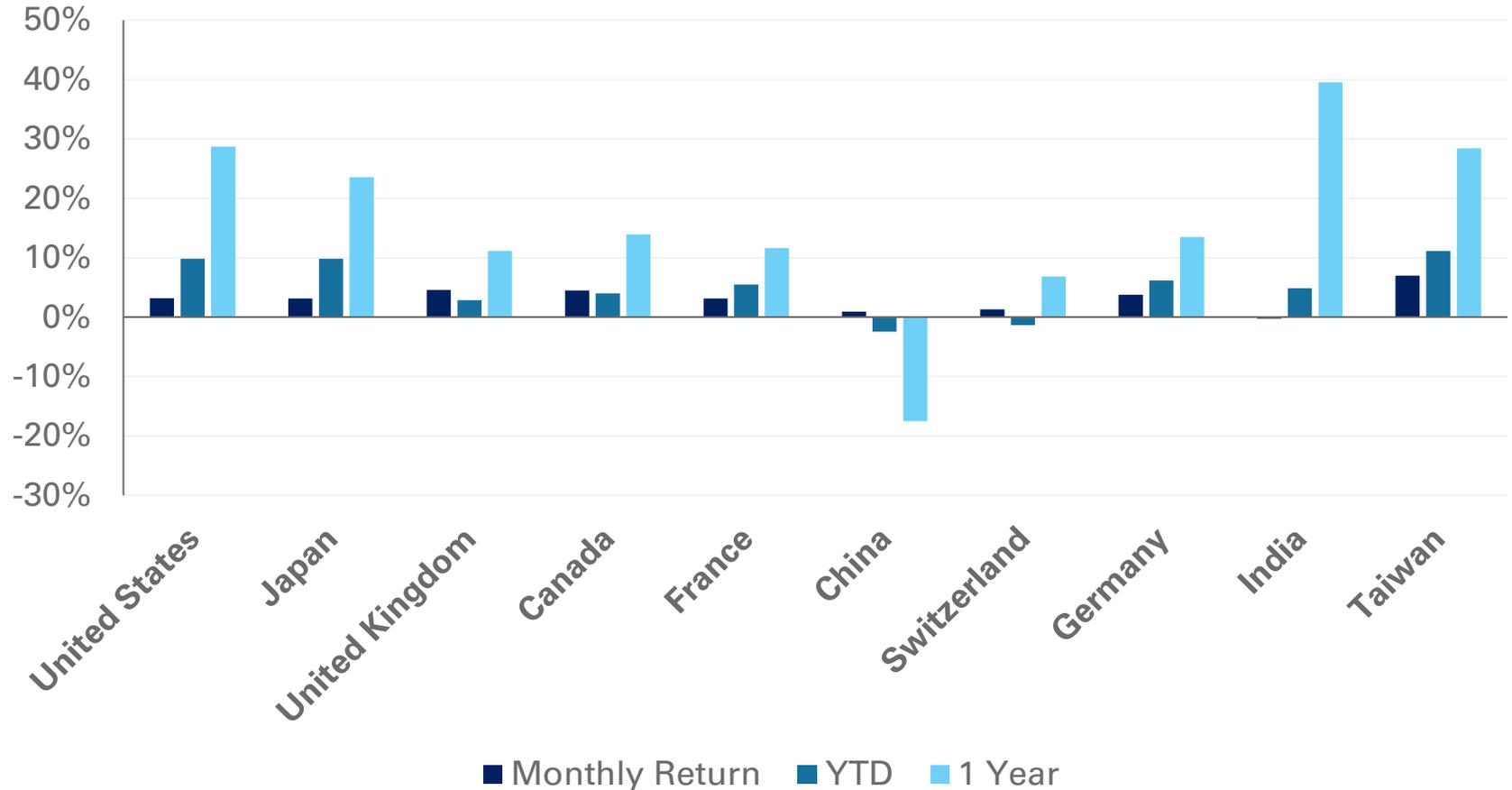
■ US Large Cap ■ US Small Cap ■ EAFE ■ EAFE Small Cap ■ EM ■ EM Small Cap



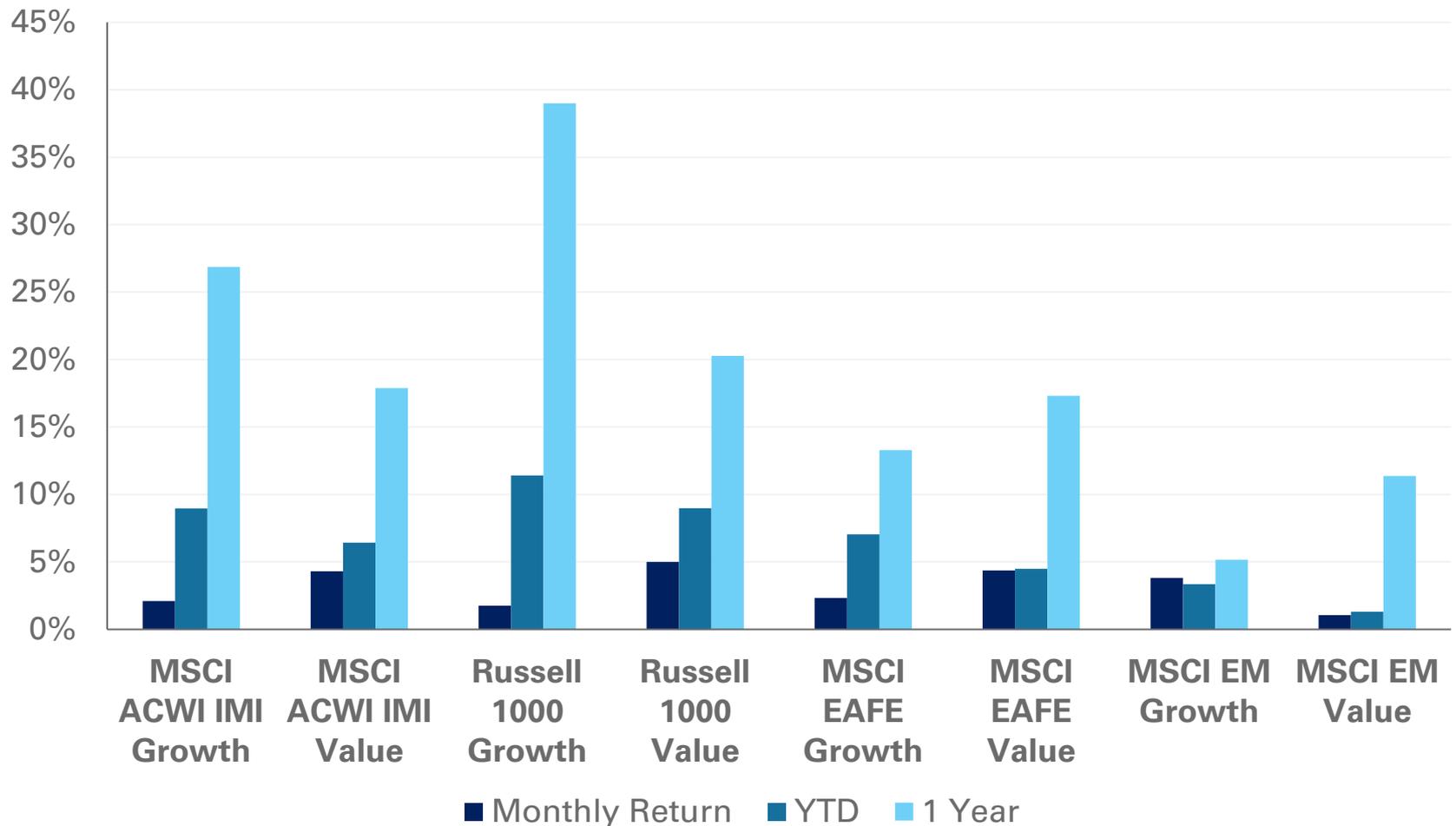
Source: MSCI, FactSet

# EQUITY INDEX PERFORMANCE

## TOP 10 COUNTRIES BY MARKET CAP IN MSCI ACWI IMI INDEX



# STYLE INDEX PERFORMANCE



Source: MSCI, Russell, FactSet

# SECTOR INDEX PERFORMANCE

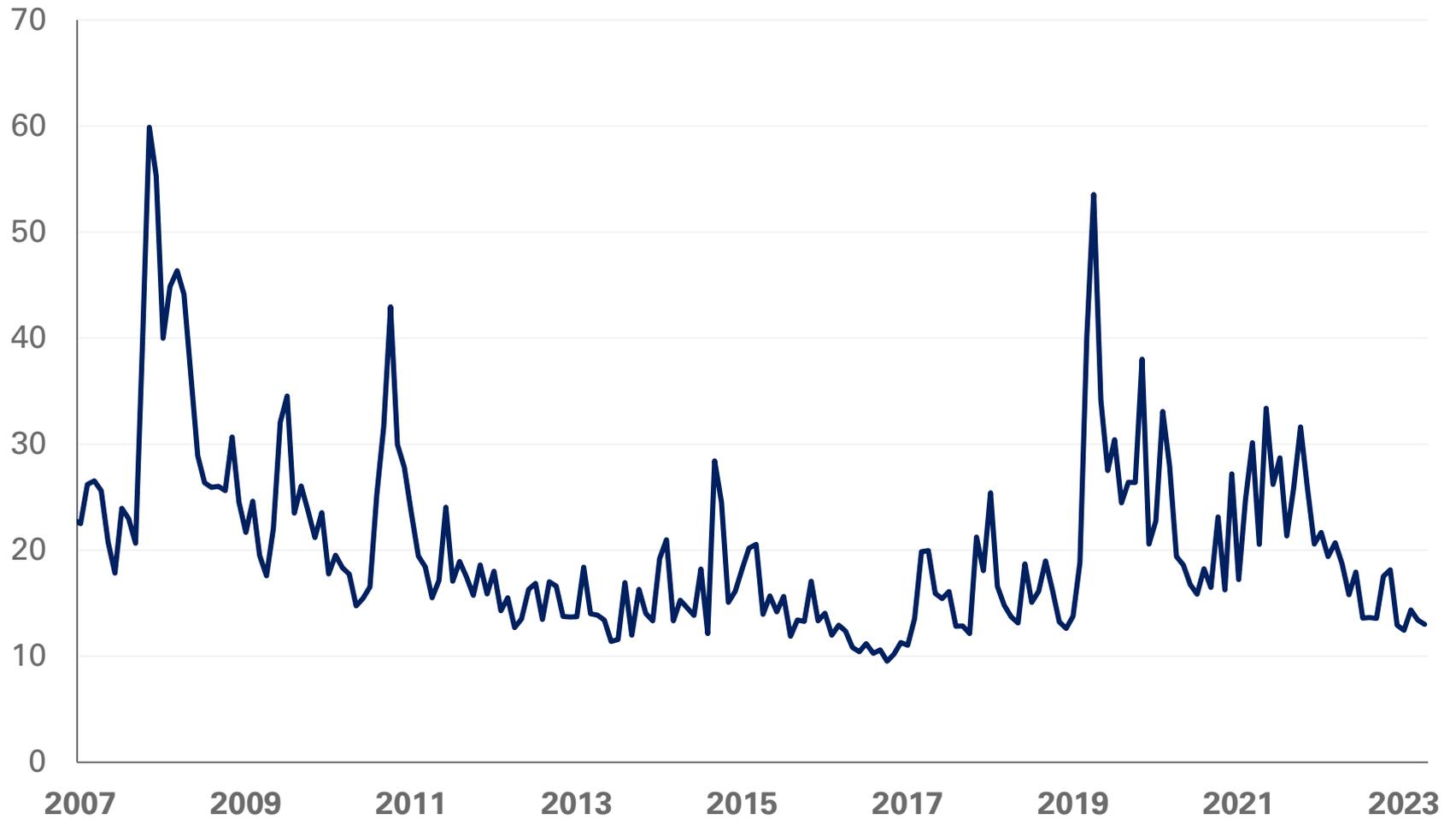
	Monthly Return	YTD	1 Year	Index Weight
<b>MSCI ACWI IMI</b>	<b>3.2%</b>	<b>7.7%</b>	<b>22.5%</b>	<b>100.0%</b>
Communication Services	3.5%	10.7%	29.2%	7.1%
Consumer Discretionary	1.1%	5.8%	19.5%	11.2%
Consumer Staples	2.0%	2.7%	2.5%	6.3%
Energy	8.0%	9.4%	19.2%	4.6%
Financials	4.3%	8.7%	27.9%	15.9%
Health Care	2.1%	6.6%	12.5%	11.0%
Industrials	3.8%	8.9%	24.4%	11.8%
Information Technology	2.2%	11.5%	39.2%	22.4%
Materials	5.8%	1.7%	8.6%	4.6%
Real Estate	2.8%	-1.3%	6.8%	2.8%
Utilities	5.0%	1.2%	2.1%	2.5%

	Monthly Return	YTD	1 Year	Index Weight
<b>S&amp;P 500</b>	<b>3.2%</b>	<b>10.6%</b>	<b>29.9%</b>	<b>100.0%</b>
Communication Services	4.3%	15.8%	49.8%	9.0%
Consumer Discretionary	0.1%	5.0%	28.7%	10.3%
Consumer Staples	3.5%	7.5%	7.2%	6.0%
Energy	10.6%	13.7%	17.7%	3.9%
Financials	4.8%	12.5%	33.5%	13.2%
Health Care	2.4%	8.8%	16.1%	12.4%
Industrials	4.4%	11.0%	26.7%	8.8%
Information Technology	2.0%	12.7%	46.0%	29.6%
Materials	6.5%	8.9%	17.6%	2.4%
Real Estate	1.8%	-0.5%	9.6%	2.3%
Utilities	6.6%	4.6%	0.4%	2.2%

Source (Top): MSCI, FactSet  
Source (Bottom): S&P, FactSet



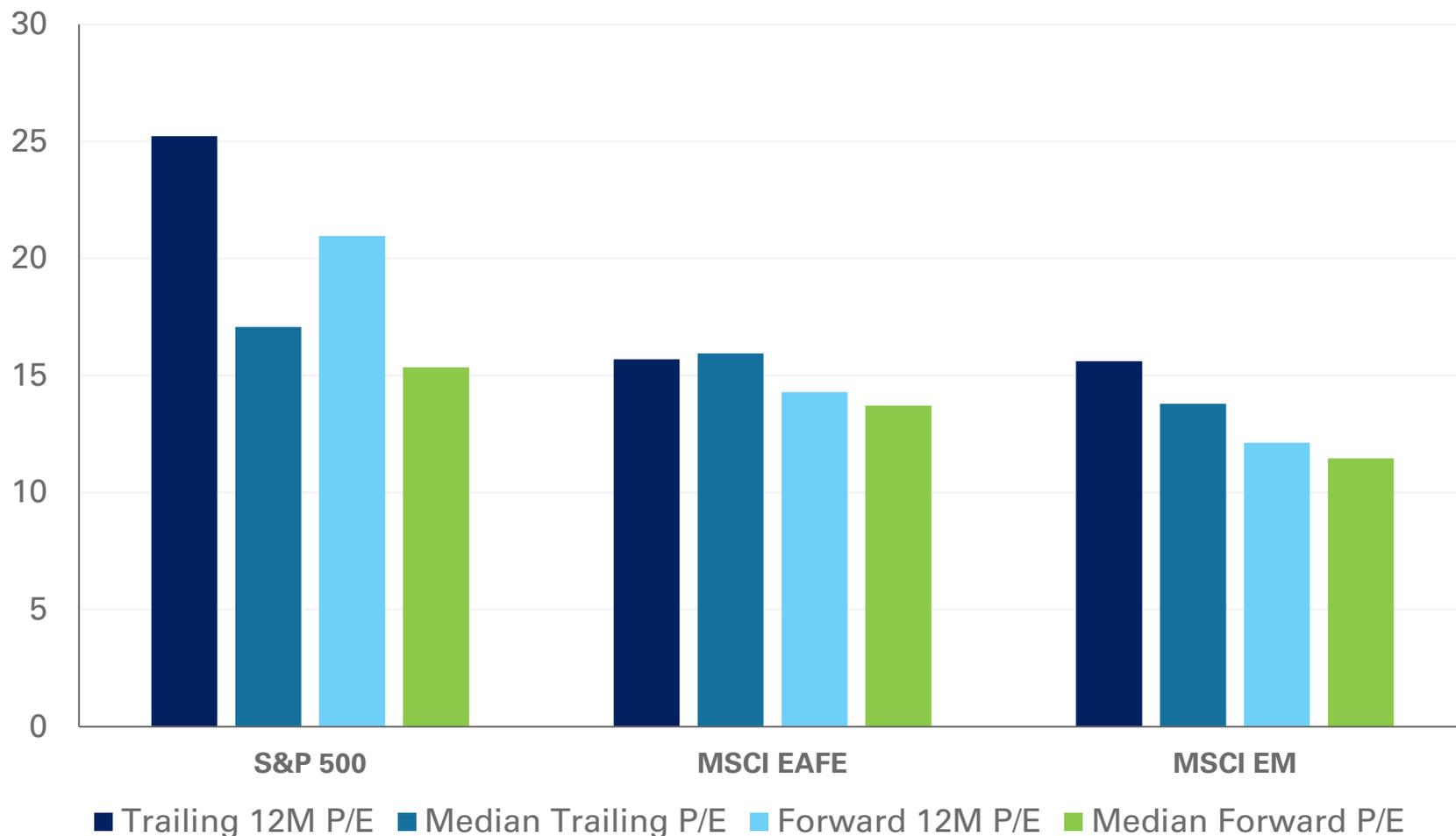
# EQUITY VOLATILITY INDEX (VIX)



Source: CBOE, FactSet



# GLOBAL EQUITY VALUATIONS



Median calculated based on 20-year monthly data  
Source: S&P, MSCI, FactSet

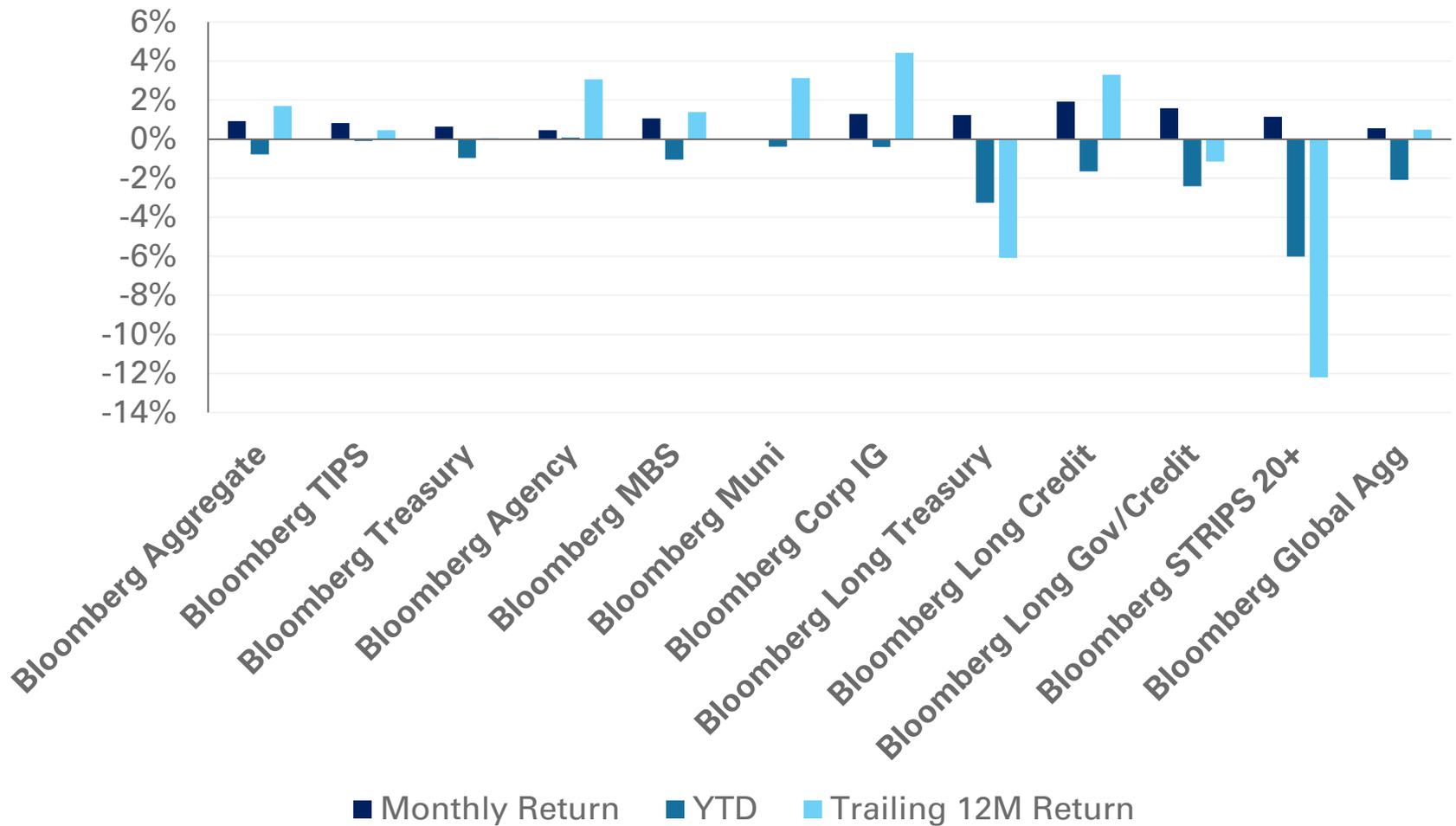


# SAFE-HAVEN FIXED INCOME



PROPRIETARY & CONFIDENTIAL

# SAFE-HAVEN FIXED INCOME PERFORMANCE

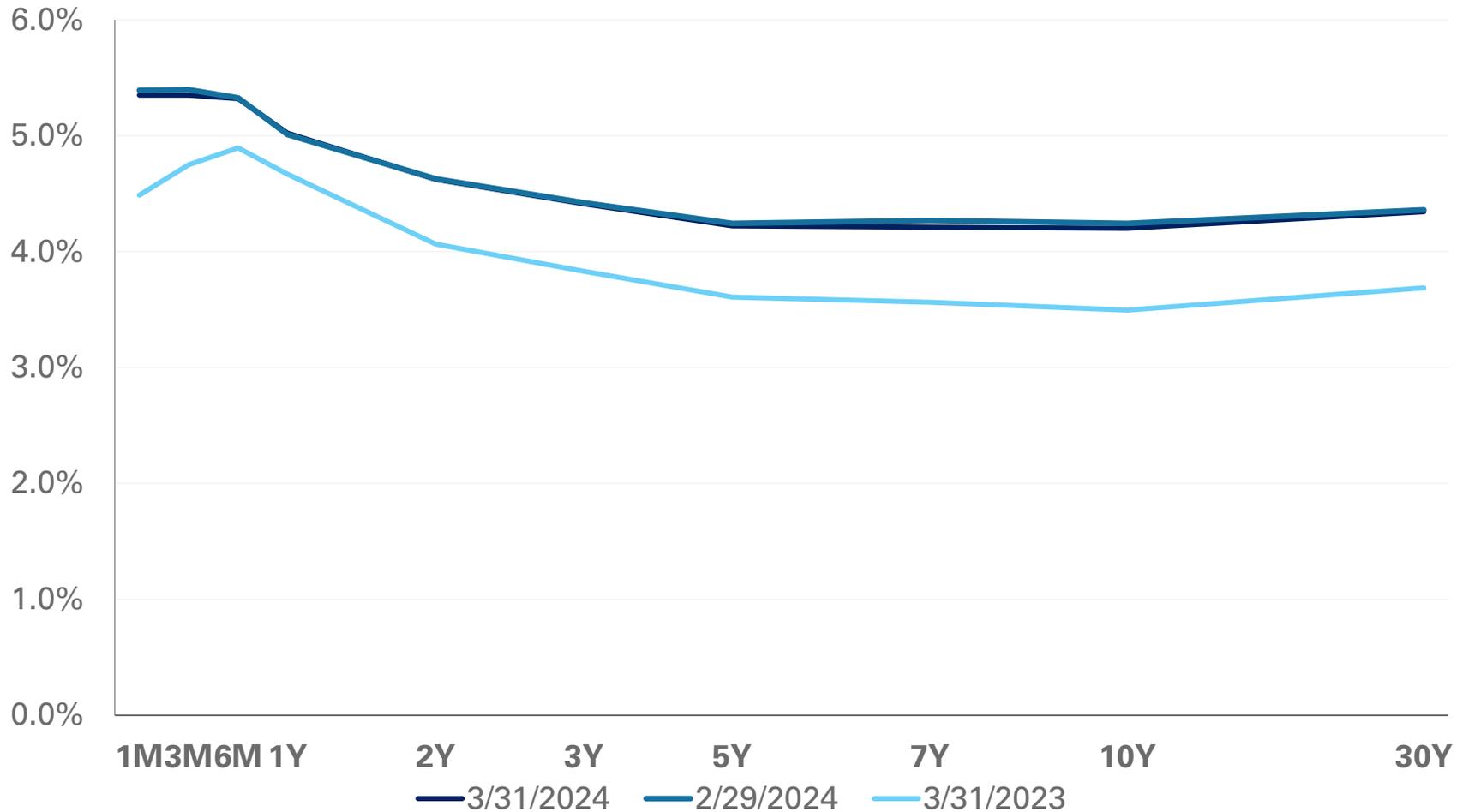


Source: Bloomberg, FactSet

# FIXED INCOME CHARACTERISTICS

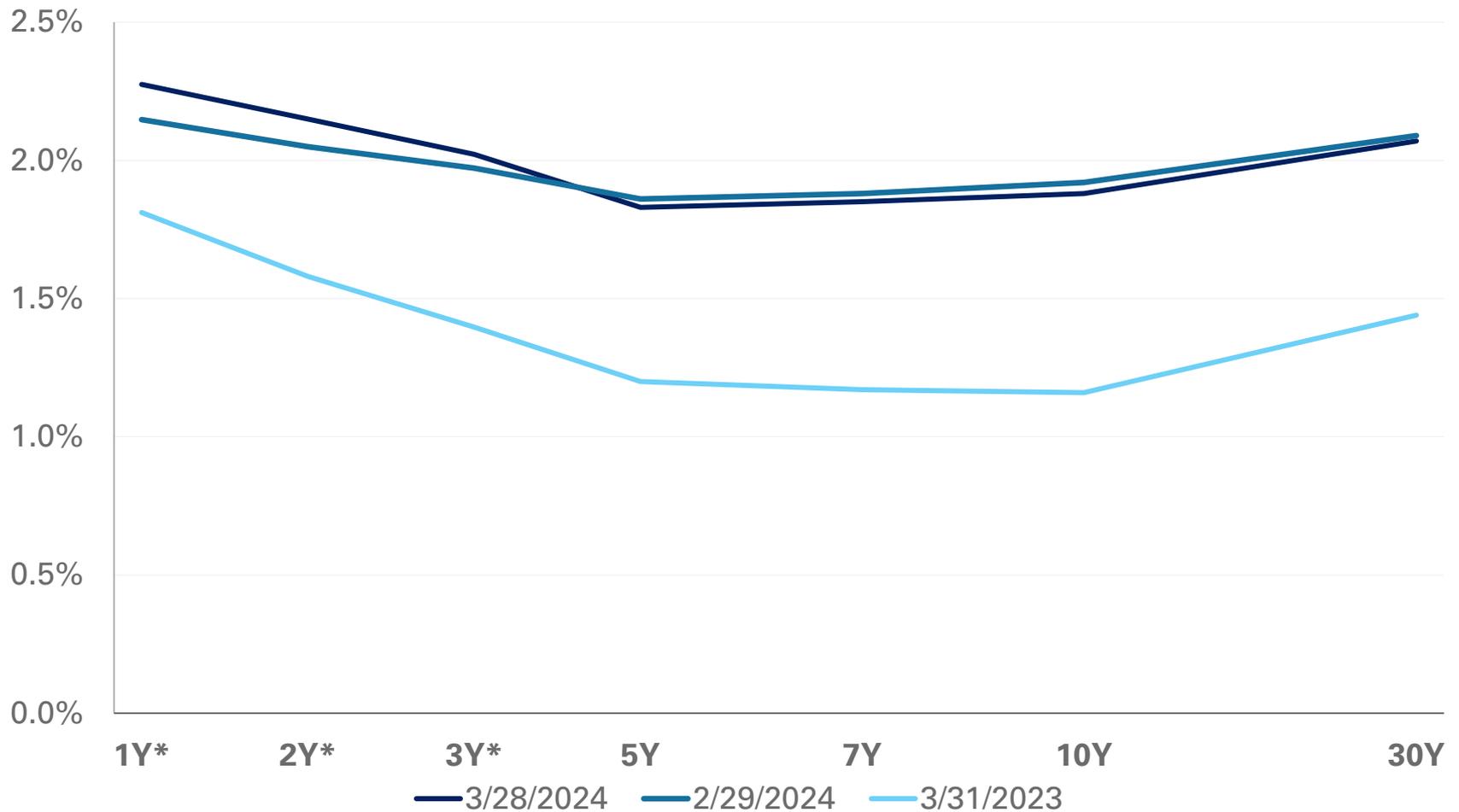
	Yield to Worst	Spread (bps)	Duration (Years)
<b>Bloomberg Aggregate</b>	4.85%	39	6.2
<b>Bloomberg TIPS</b>	4.61%	-	4.6
<b>Bloomberg Treasury</b>	4.43%	-	6.0
<b>Bloomberg Agency</b>	4.79%	15	3.2
<b>Bloomberg MBS</b>	5.04%	49	6.1
<b>Bloomberg Muni</b>	3.49%	-	6.1
<b>Bloomberg Corp IG</b>	5.30%	90	7.0
<b>Bloomberg Long Treasury</b>	4.42%	-	15.3
<b>Bloomberg Long Credit</b>	5.46%	109	12.8
<b>Bloomberg Long Gov/Credit</b>	4.96%	57	14.0
<b>Bloomberg STRIPS 20+</b>	4.42%	-	25.1
<b>Bloomberg Global Agg</b>	3.74%	39	6.7

# US TREASURY YIELD CURVE



Source: FactSet

# US TREASURY REAL YIELD CURVE



Notes: \*Real yields are calculated based on a weighted average of select off-the-run TIPS yields  
Source: NEPC, Bloomberg, FactSet



# MUNI -TO-TREASURY RATIO



Numerator represents yield-to-worst for municipal bonds  
Source: Bloomberg, FactSet



# LONG DURATION YIELDS



Source: Bloomberg, FactSet

# LONG DURATION CORPORATE SPREADS



Median calculated based on 20-year of monthly data  
Source: Bloomberg, FactSet



# RETURN-SEEKING CREDIT



PROPRIETARY & CONFIDENTIAL

# RETURN-SEEKING CREDIT INDEX PERFORMANCE

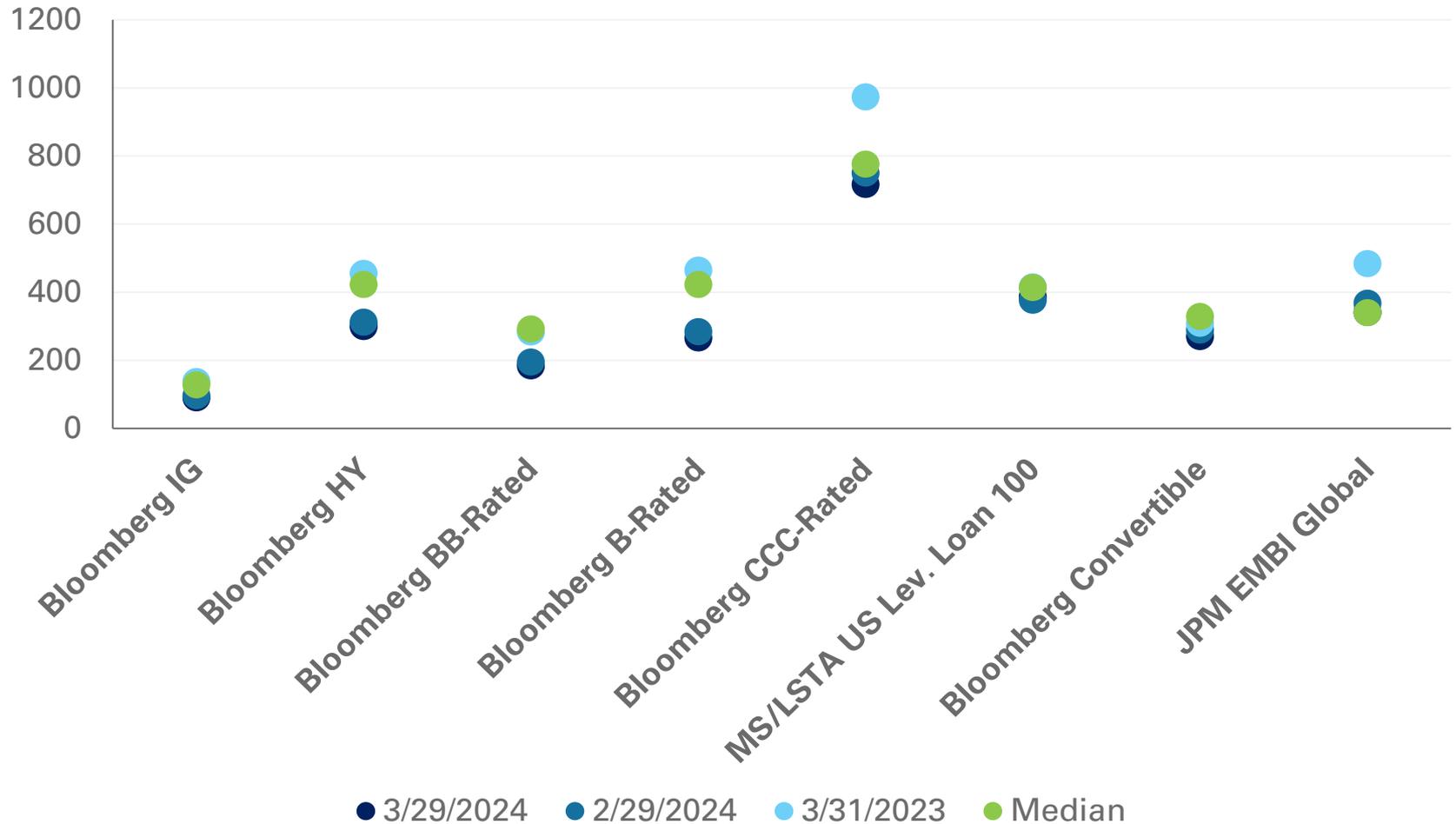


Source: Bloomberg, S&P, JPM, FactSet

# RETURN-SEEKING CREDIT CHARACTERISTICS

	Yield to Worst	Spread (bps)	Duration (Years)
<b>Bloomberg HY Muni</b>	5.50%	-	6.9
<b>Bloomberg High-Yield</b>	7.66%	299	3.2
<b>Bloomberg BB-Rated</b>	6.49%	184	3.4
<b>Bloomberg B-Rated</b>	7.38%	266	2.9
<b>Bloomberg CCC-Rated</b>	11.87%	717	2.8
<b>MS/LSTA Leveraged Loan 100</b>	9.43%	387	-
<b>Bloomberg Convertible Bond</b>	0.84%	270	1.8
<b>JPM EMBI Global</b>	7.75%	341	6.7
<b>JPM GBI - EM</b>	4.49%	-	5.6

# CREDIT SPREADS



Median calculated based on 20-year of monthly data  
 Source: Bloomberg, S&P, JPM, FactSet

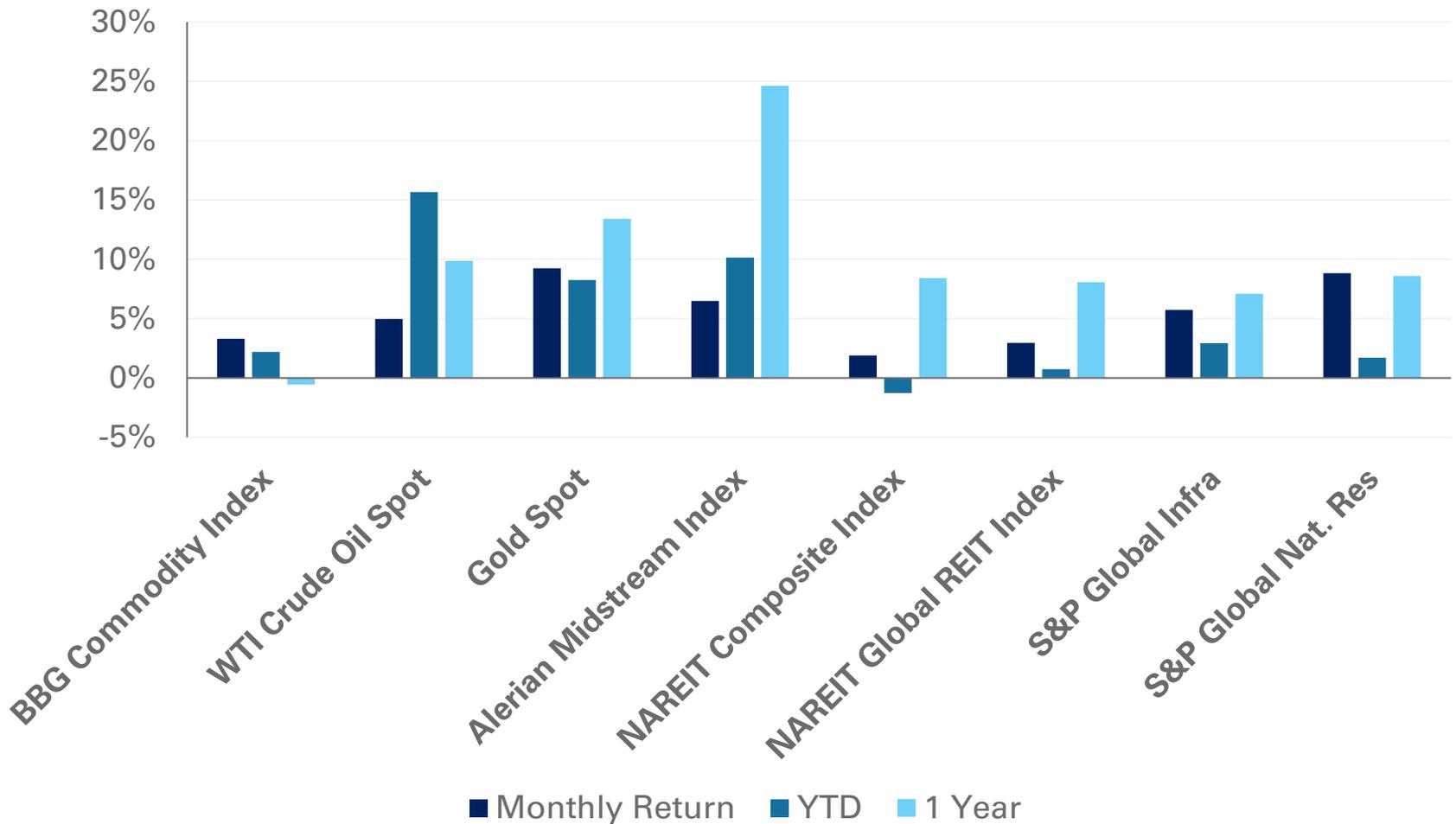




# REAL ASSETS



# REAL ASSETS INDEX PERFORMANCE



Source: Bloomberg, Alerian, NAREIT, S&P, FactSet



# REAL ASSETS INDEX PERFORMANCE

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
<b>Bloomberg Commodity Index</b>	<b>3.3%</b>	<b>2.2%</b>	<b>2.2%</b>	<b>-0.6%</b>	<b>9.1%</b>	<b>6.4%</b>
<b>Bloomberg Sub Agriculture Index</b>	<b>2.5%</b>	<b>-3.0%</b>	<b>-3.0%</b>	<b>-7.3%</b>	<b>8.3%</b>	<b>10.6%</b>
Coffee	2.9%	3.8%	3.8%	25.9%	20.5%	13.2%
Corn	3.3%	-7.6%	-7.6%	-22.9%	2.5%	7.5%
Cotton	-7.8%	13.5%	13.5%	15.3%	14.4%	8.1%
Soybean	4.9%	-7.5%	-7.5%	-6.0%	6.2%	12.0%
Soybean Oil	6.5%	-0.1%	-0.1%	-5.1%	8.5%	17.2%
Sugar	4.3%	14.3%	14.3%	13.5%	23.4%	14.8%
Wheat	-2.4%	-10.1%	-10.1%	-24.2%	-8.5%	-0.5%
<b>Bloomberg Sub Energy</b>	<b>2.4%</b>	<b>4.8%</b>	<b>4.8%</b>	<b>1.0%</b>	<b>13.2%</b>	<b>-1.2%</b>
Brent Crude	7.1%	15.6%	15.6%	20.8%	29.6%	14.7%
Heating Oil	1.5%	13.1%	13.1%	27.4%	41.2%	16.8%
Natural Gas	-11.8%	-28.7%	-28.7%	-50.1%	-28.3%	-31.5%
Unleaded Gas	6.2%	18.7%	18.7%	25.1%	35.6%	20.4%
WTI Crude Oil	7.8%	17.7%	17.7%	21.8%	23.8%	3.5%
<b>Bloomberg Sub Industrial Metals</b>	<b>1.8%</b>	<b>-0.7%</b>	<b>-0.7%</b>	<b>-7.9%</b>	<b>2.2%</b>	<b>4.8%</b>
Aluminum	4.9%	-2.2%	-2.2%	-4.3%	1.0%	2.0%
Copper	4.6%	3.7%	3.7%	0.3%	1.7%	7.1%
Nickel	-6.4%	0.7%	0.7%	-29.6%	2.1%	5.5%
Zinc	0.4%	-8.7%	-8.7%	-14.1%	-1.2%	-0.9%
<b>Bloomberg Sub Precious Metals</b>	<b>8.6%</b>	<b>6.6%</b>	<b>6.6%</b>	<b>9.9%</b>	<b>6.6%</b>	<b>10.0%</b>
Gold	8.2%	6.4%	6.4%	14.5%	5.3%	9.5%
Silver	9.3%	3.8%	3.8%	2.8%	0.2%	9.2%
<b>Bloomberg Sub Livestock</b>	<b>-0.8%</b>	<b>11.0%</b>	<b>11.0%</b>	<b>13.7%</b>	<b>4.8%</b>	<b>-2.7%</b>
Lean Hogs	-2.2%	15.0%	15.0%	11.7%	-0.1%	-8.0%
Live Cattle	-0.1%	9.0%	9.0%	14.8%	7.2%	0.4%



Source: Bloomberg, FactSet

# OIL MARKETS

## WTI VERSUS BRENT CRUDE SPOT PRICES



Source: WTI, Brent, FactSet

# GOLD SPOT PRICE



Source: FactSet





# DISCLAIMERS & DISCLOSURES

# DISCLAIMERS & DISCLOSURES

Past performance is no guarantee of future results.

Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.

A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.

NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.

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

The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.

This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Source of private fund performance benchmark data: Cambridge Associates, via Refinitiv