



Metropolitan Government of Nashville  
and Davidson County

December 31, 2023

Performance Report

## Agenda

1. Economic and Market Update
2. Executive Summary
3. Performance Report as of December 31, 2023
4. Disclaimer

# **4Q Market Review**

Data as of December 31, 2023

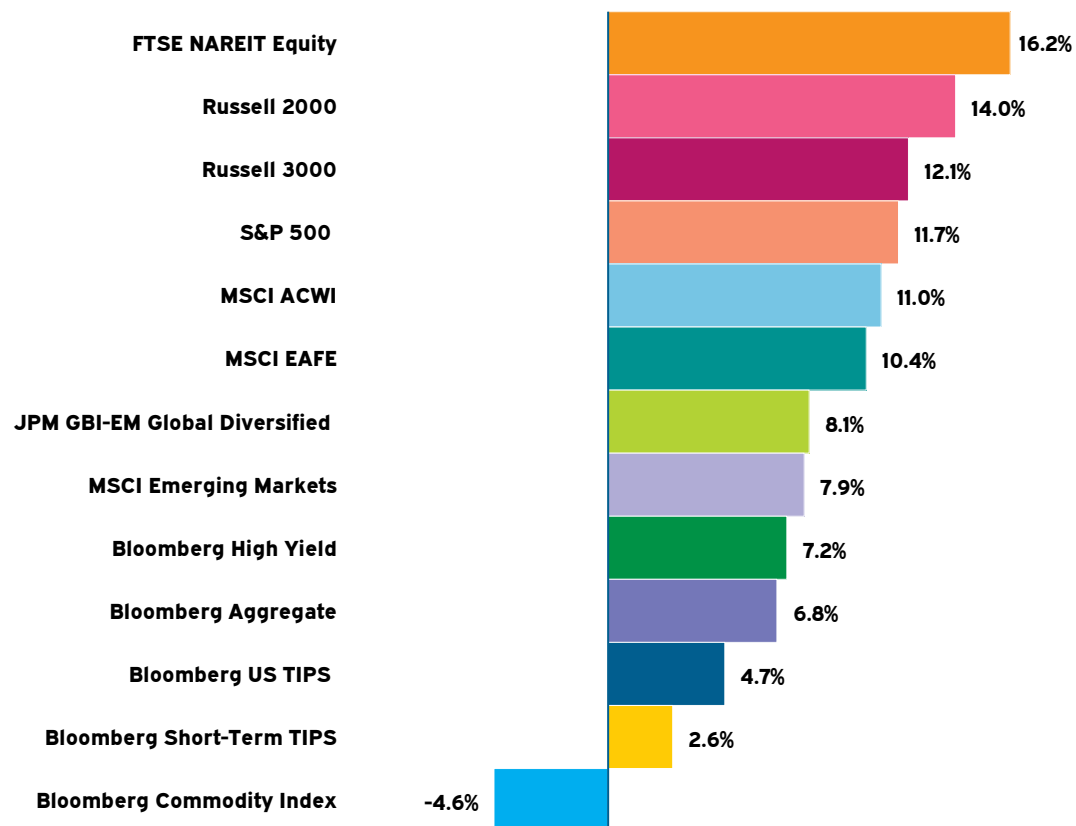
## Commentary

→ Most markets rallied in the fourth quarter in anticipation that policy rates cuts were ahead in 2024.

- Major central banks have largely paused interest rates hikes. Markets are now largely expecting the FOMC to maintain interest rates at the current levels and begin cutting rates as soon as Q1 2024.
- Inflation rose in December in the US and Europe, but both finished the year much lower than where they started. China remained in deflationary territory (-0.3%) at year-end.
- US equity markets (Russell 3000 index) posted strong gains for the quarter (12.1%), raising full year results to +26.0%. Most sectors rallied, with more defensive sectors lagging.
- Non-US developed equity markets also rallied in the fourth quarter (MSCI EAFE 10.4%), with the weakening of the US dollar contributing meaningfully (10.4% versus 5.0% ex.-US dollar influence). The performance difference between US and international developed equities for the year remained wide (26.0% versus 18.2%).
- Emerging market equities were up 7.9% in the fourth quarter and 9.8% for calendar 2023 but trailed developed markets due to lagging returns in China (-4.2% Q4/-11.2% one-year). Emerging market equities ex.-China returned 20% in 2023.
- Interest rates generally fell in the fourth quarter, particularly for longer-dated maturities. The broad US bond market rallied (6.8%) for the quarter, lifting 2023 returns into positive territory (5.5%).

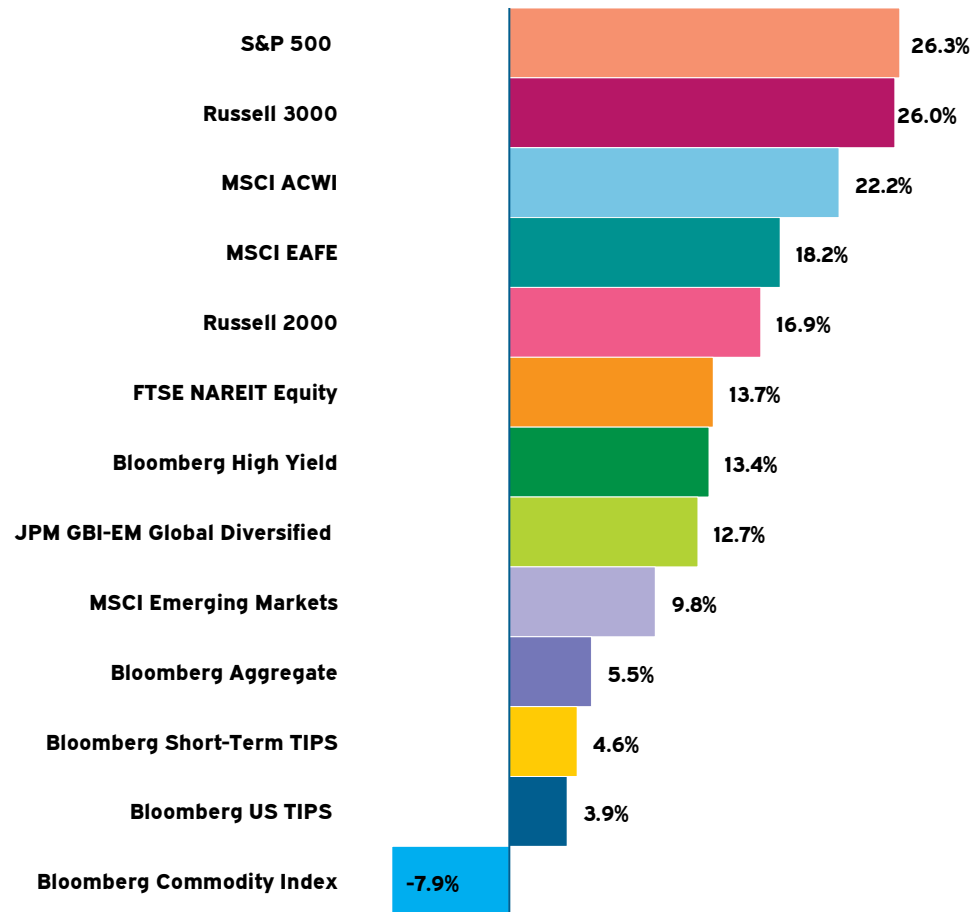
→ Looking to 2024, the paths of inflation and monetary policy, China's economic disorder and slowing economic growth, and the wars in Ukraine and Israel, will be key.

### 4Q 23 Index Returns



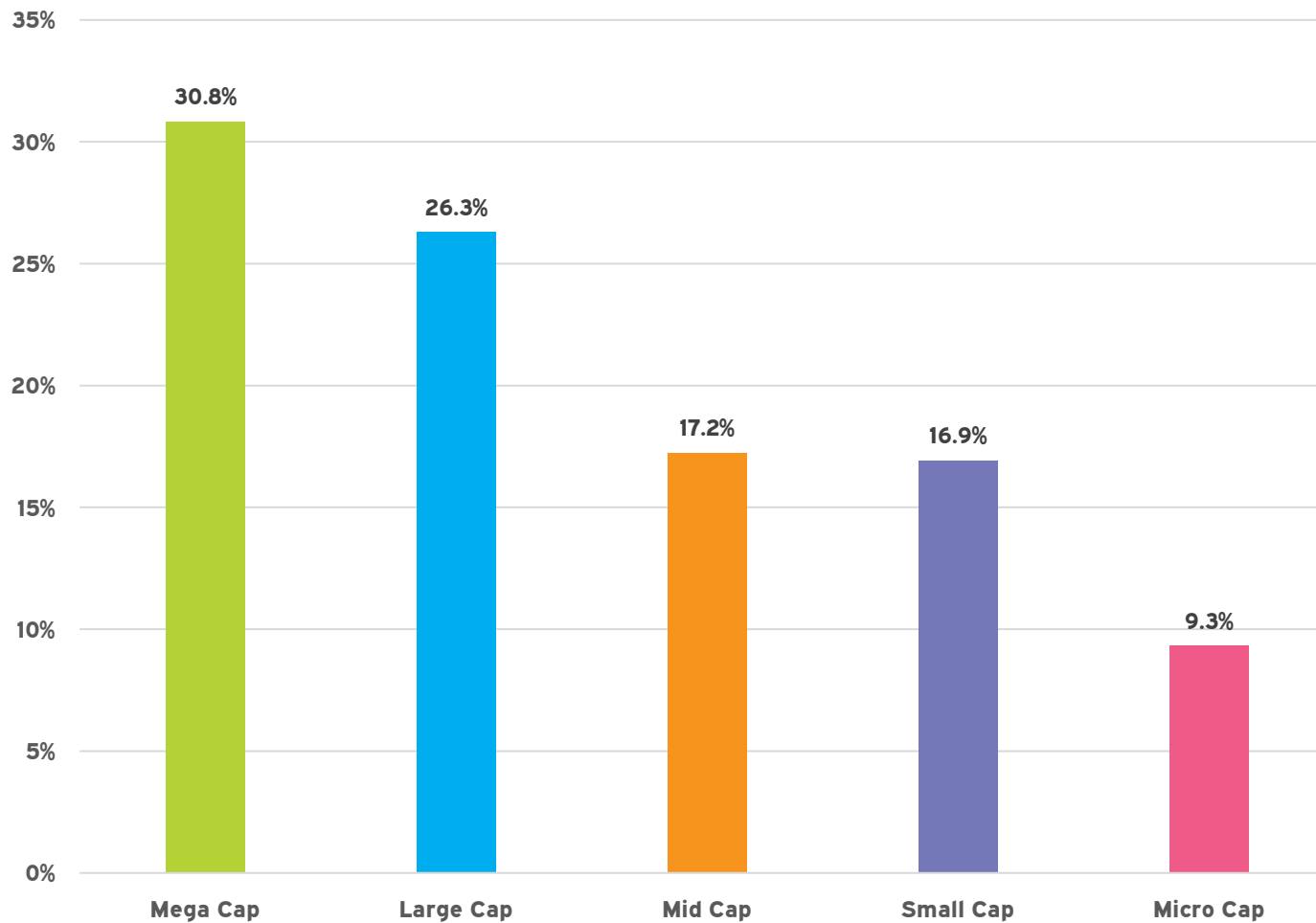
→ Nearly all asset classes were positive in 4Q23. Equities produced double digit returns.

**2023 Index Returns**



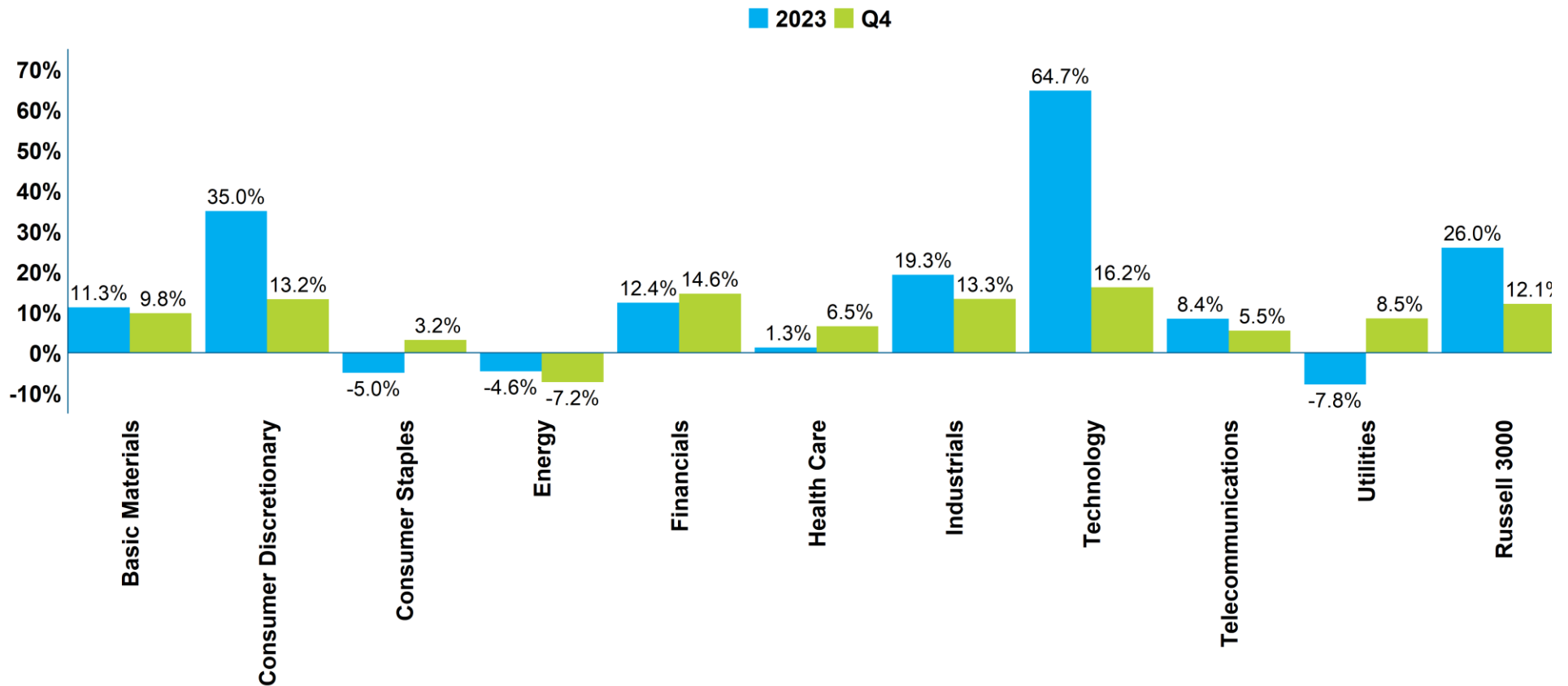
→ Led by the strong results in 4Q23, returns for the full 2023 calendar year look similar, led by US equities .

**Large Cap Led the Way – 2023 Returns**



→ Performance was very different for mega/large cap US companies vs. small cap US companies in 2023. .

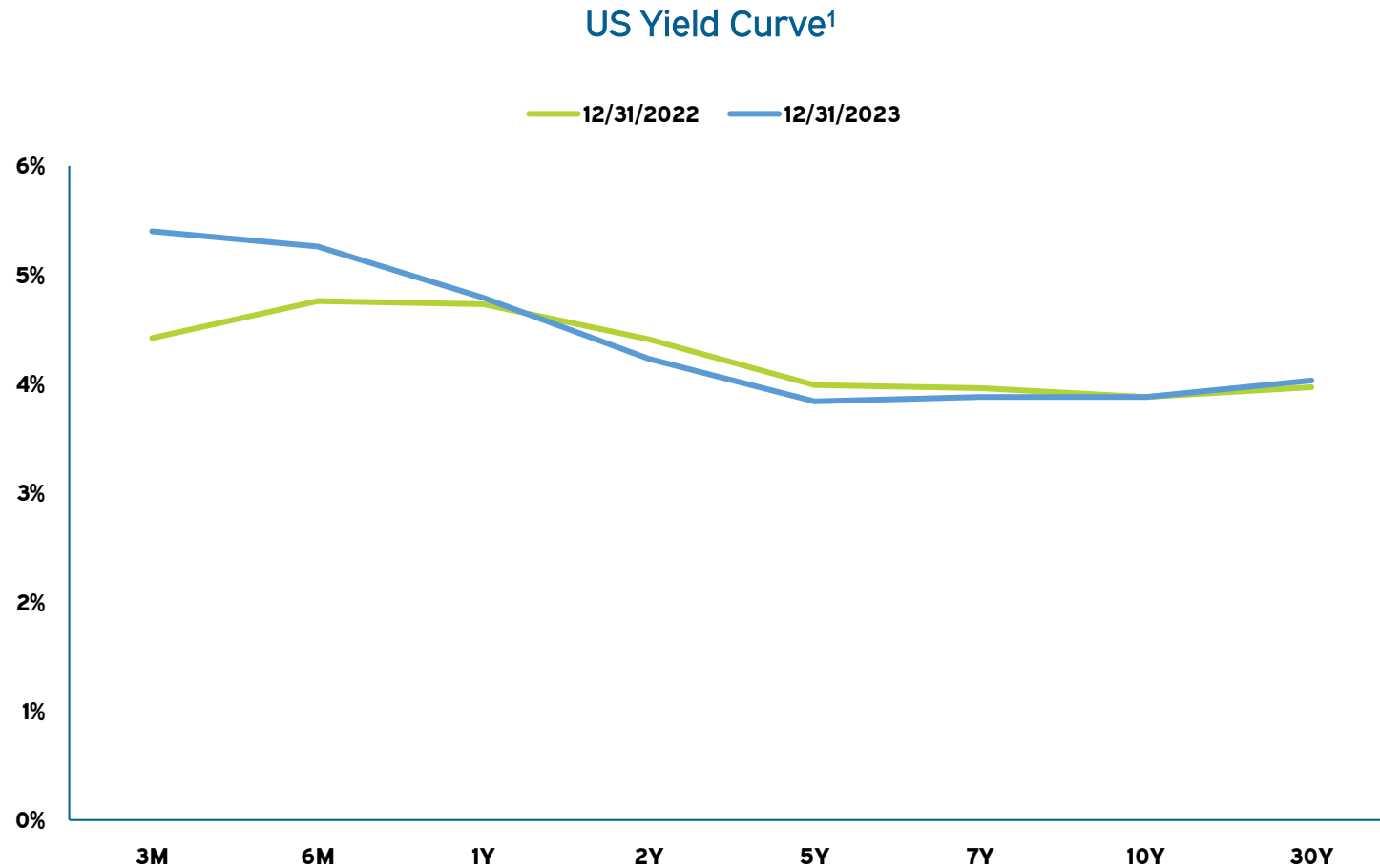
### Russell 3000 Sector Returns<sup>1</sup>



→ All sectors posted gains for the fourth quarter, except for energy (-7.2%) given oil's recent declines.

<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2023.

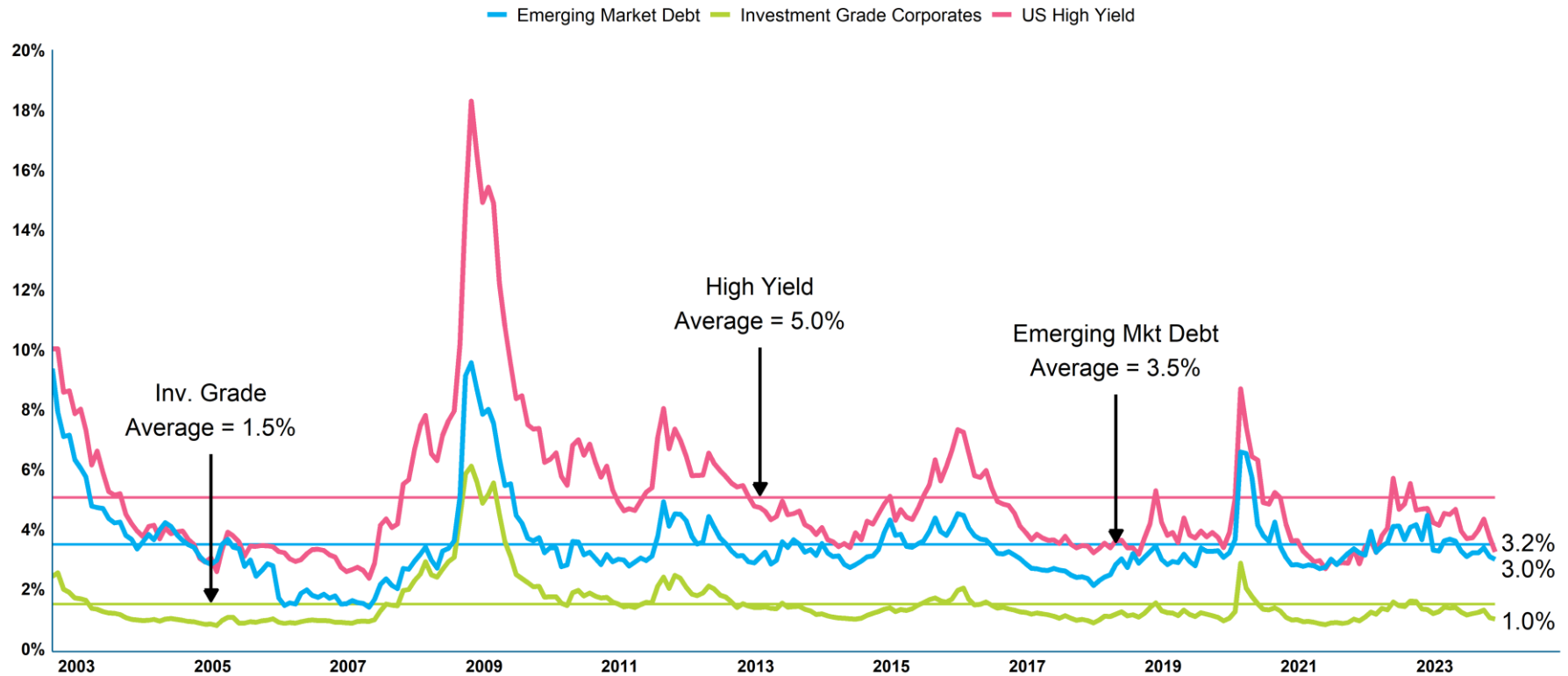




→ The more policy sensitive short-term maturities were higher this year while longer-term maturities finished the year where they started.

<sup>1</sup> Source: Bloomberg. Data is as of December 31, 2023.

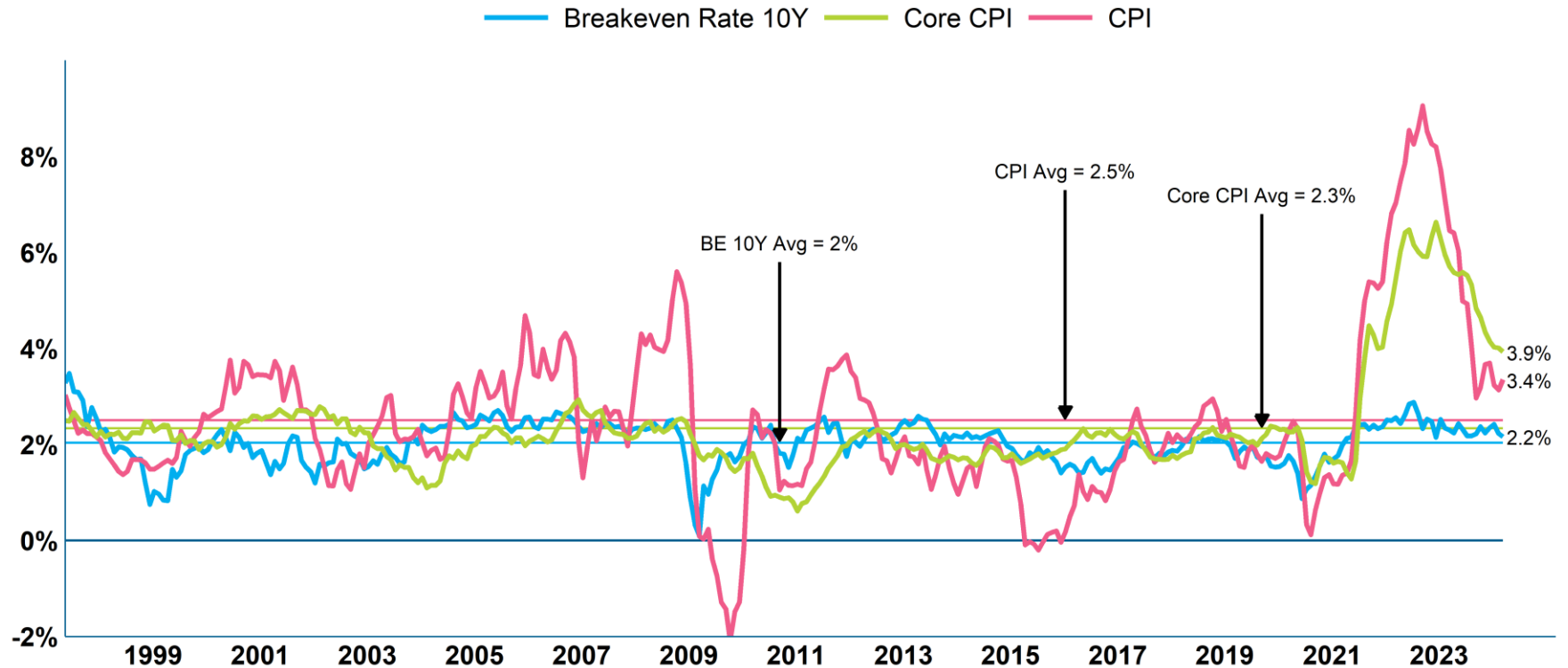
**Credit Spreads vs. US Treasury Bonds<sup>1</sup>**



→ All spreads remain below their respective long run averages. Expectations of peaking policy rates and the corresponding increase in risk appetite benefited credit in the fourth quarter with spreads (the added yield above a comparable maturity Treasury) narrowing.

<sup>1</sup> Sources: Bloomberg. Data is as of December 31, 2023. Average lines denote the average of the investment grade, high yield, and emerging market spread values from September 2002 to the recent month-end, respectively.

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

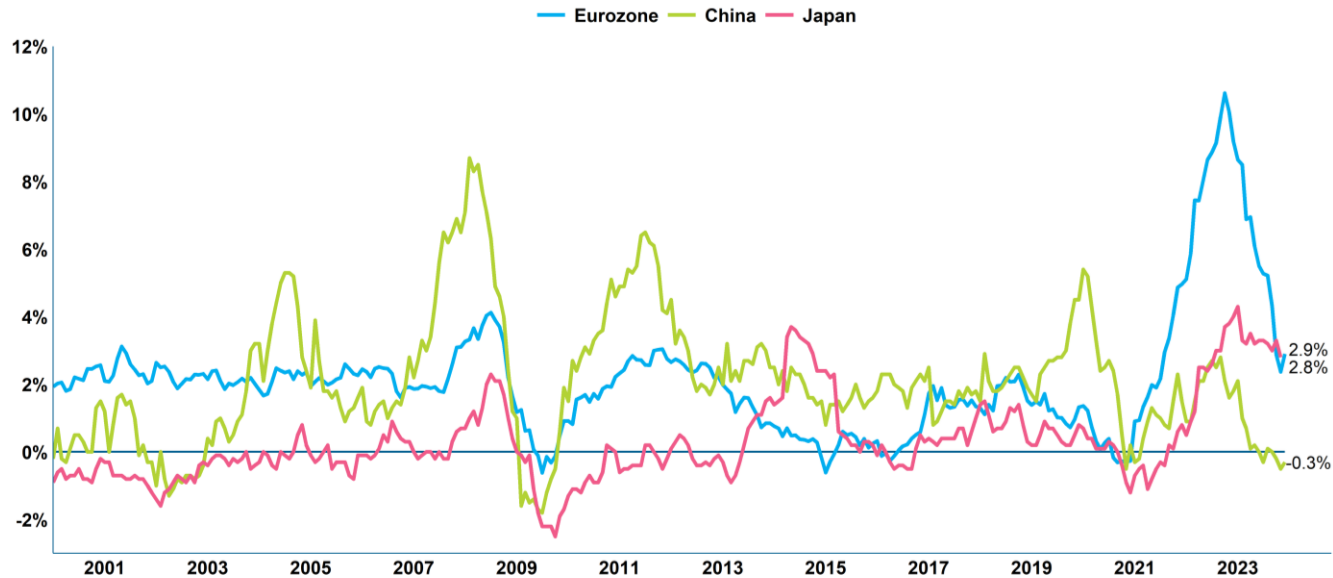


→ Both CPI and Core CPI declined meaningfully in 2023.

→ Inflation expectations (breakevens – the blue line) have remained relatively stable despite the significant volatility in inflation.

<sup>1</sup> Source: FRED. Data is as December 2023. The CPI and 10 Year Breakeven average lines denote the average values from February 1997 to the present month-end, respectively. Breakeven values represent month-end values for comparative purposes.

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

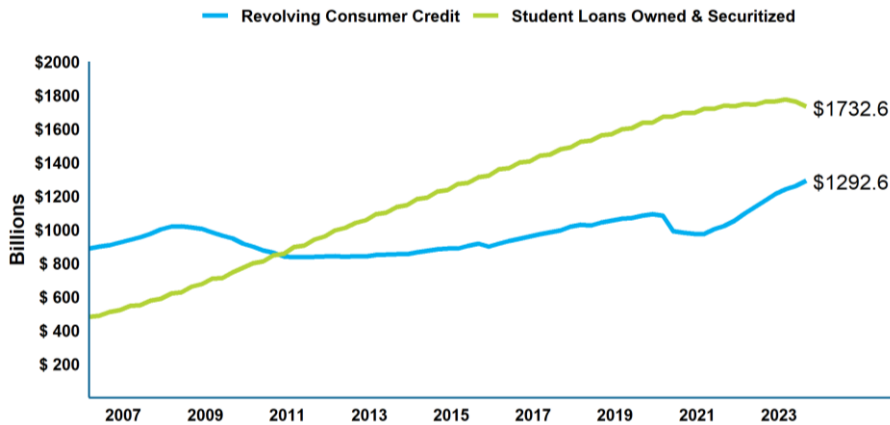


→ Outside the US, inflation is also falling across major economies with China slipping into deflation.

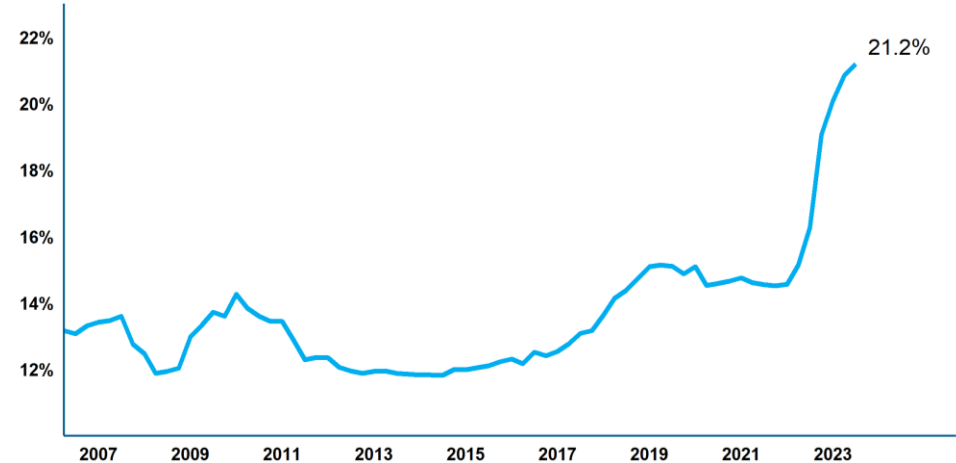
<sup>1</sup> Source: FRED for United States CPI and Eurozone CPI. Source: Bloomberg for Japan CPI, China CPI, and Eurozone December flash estimate. Data is as December 31, 2023, except Japan which is as of November 30, 2023.

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

#### Revolving Consumer Credit & Student Loans (\$B)

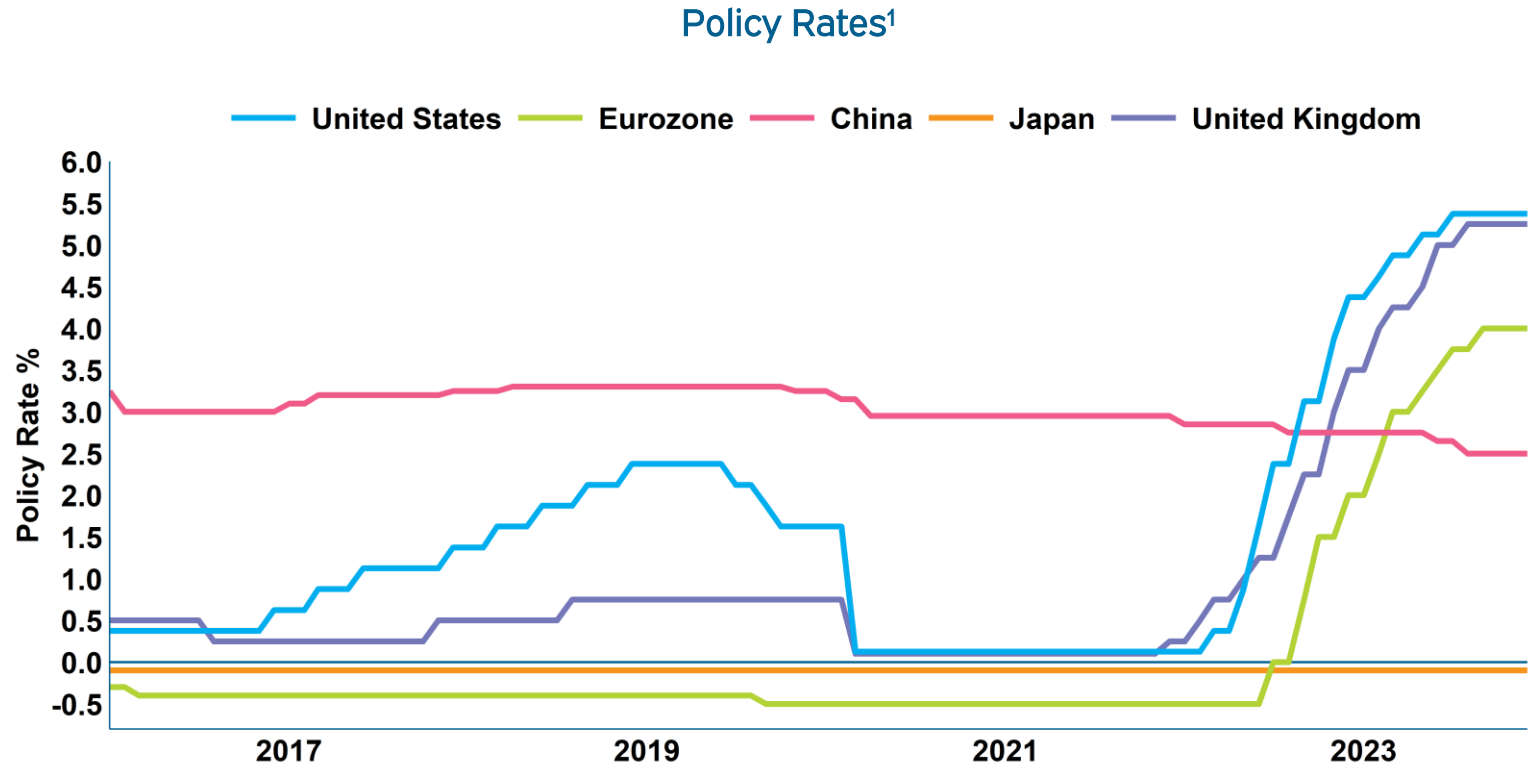


#### Consumer Credit Card Interest Rates (%)



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

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



- The Fed has been on hold since July 2023 when it raised rates to a range of 5.25%-5.50%.
- Markets are pricing in six rate cuts next year given the track of economic data and recent comments from the Fed, while the Fed itself is only predicting three.
- How this discrepancy is resolved will be key in 2024.

<sup>1</sup> Source: Bloomberg. Data is as of December 2023.

# Executive Summary

#### → Asset Growth

- The Metropolitan Government of Nashville and Davidson County Plan was valued at \$4.2 billion at the end of 4Q23, an investment gain of approximately \$186.2 million over the three-month period.

#### → Asset Allocation

- All asset classes ended the quarter within policy ranges.
- Domestic Equity, Private Debt and Cash ended the year slightly overweight.
- Real Assets and Private Equity were moderately underweight compared to policy targets.

#### → Notable Changes in the quarter

- There were no new commitments approved at the November investment meeting:

#### → 2023 Calendar Year Summary

- The Plan was valued at \$4.1 billion to start 2023 and ended the year valued at \$4.2 billion.
- The absolute performance over calendar year 2023 was 7%, which fell below the policy index performance.



→ Net Performance

	1 YR	3 YR	5 YR	10 YR
Metro Nashville (net)	7.0%	6.1%	8.7%	7.7%
Policy Benchmark	13.2%	3.4%	7.9%	6.5%
Excess Return	-6.2%	2.7%	0.8%	1.2%
Peer Ranking	98 <sup>th</sup>	14 <sup>th</sup>	36 <sup>th</sup>	8 <sup>th</sup>

- Longer term results remain strong (absolute, relative and peer rankings).

→ Positive notables during the quarter

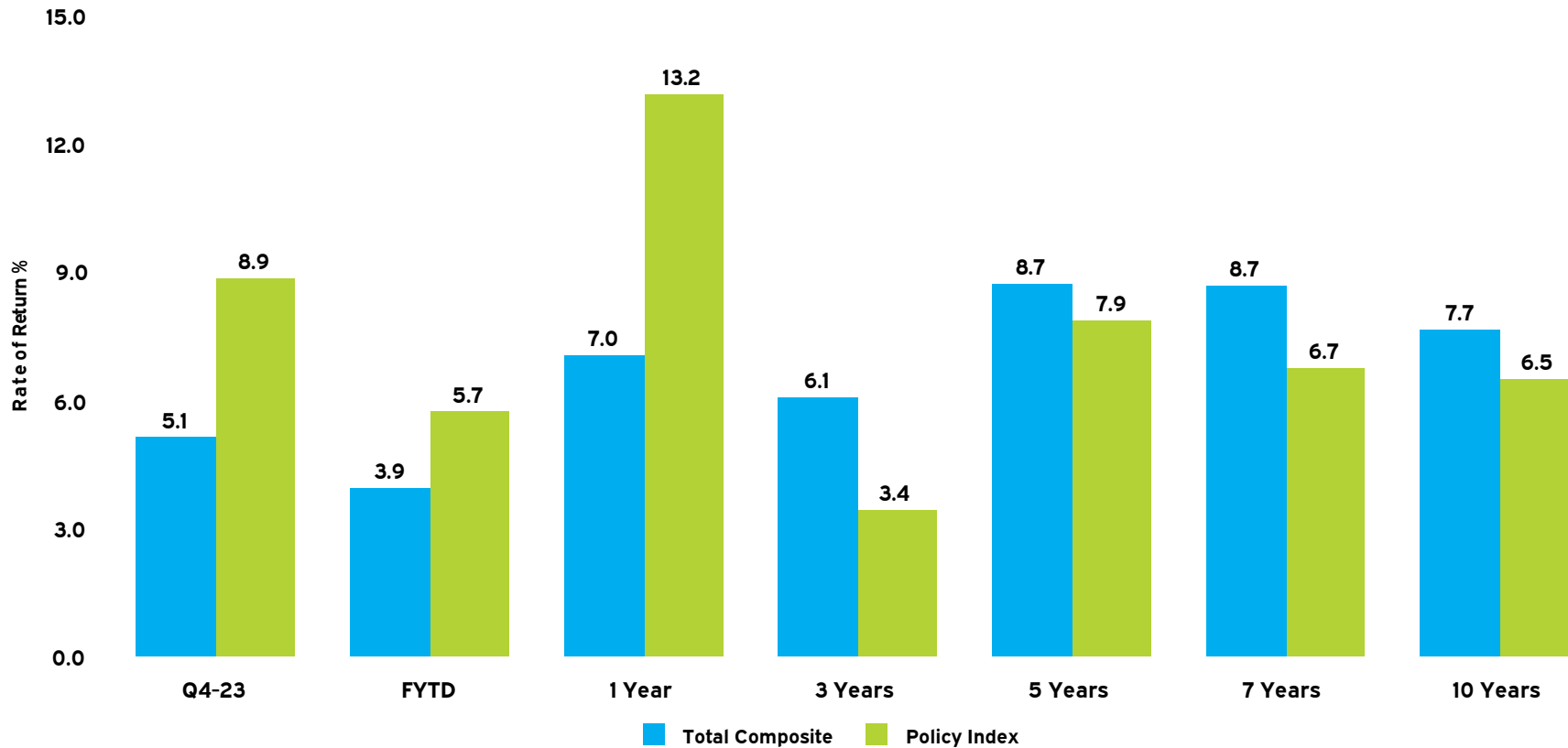
- Absolute performance was driven primarily by Domestic Equity which returned 13.1% in the quarter, outperforming its benchmark by 1.0%.
- Within US Domestic Equity, the PIMCO Managed Volatility strategy outperformed its benchmark by 2.4%.
- A bright spot within Fixed Income during the quarter was the PIMCO Unconstrained Bond fund which outperformed its index by 2.9%.

→ Negative notables during the quarter

- Illiquid asset classes like Private Equity and Private Debt (as expected) did not keep pace with the public markets rally in the fourth quarter.

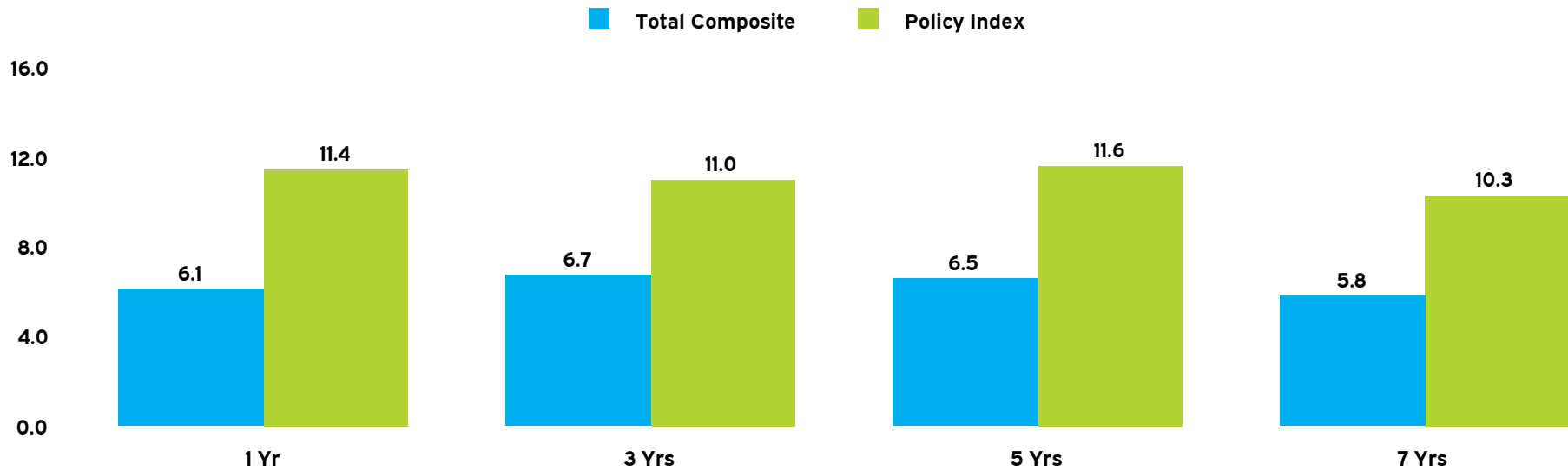
## **Performance Report as of December 31, 2023**

### Net Return Summary

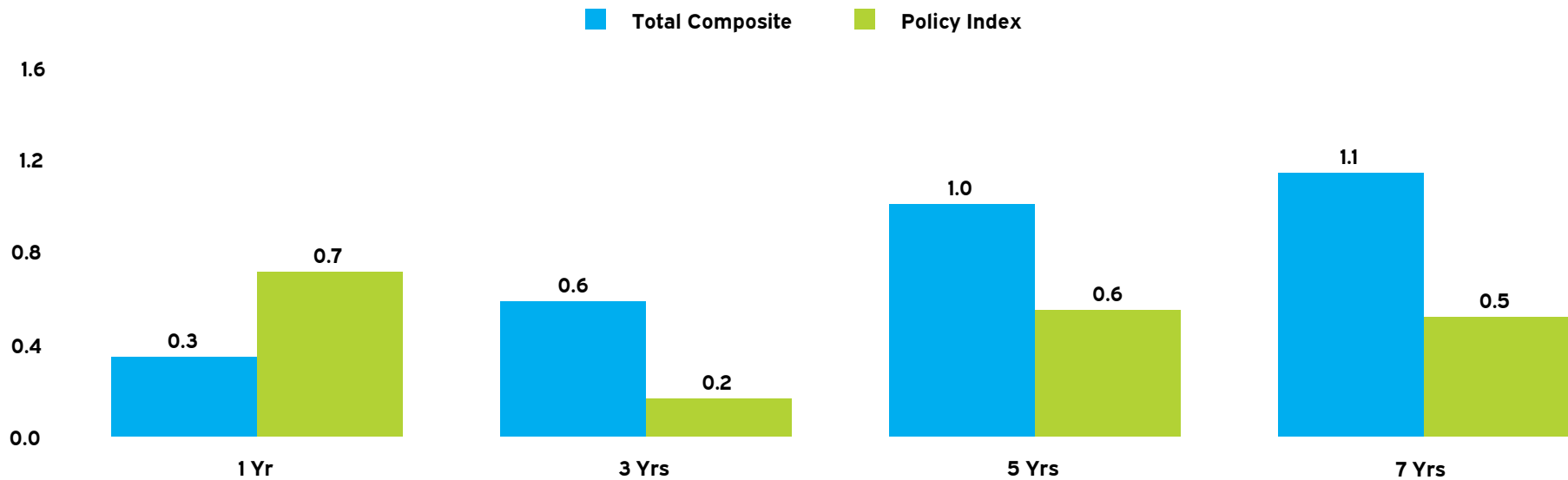


All returns in report are net of fees unless explicitly noted otherwise.

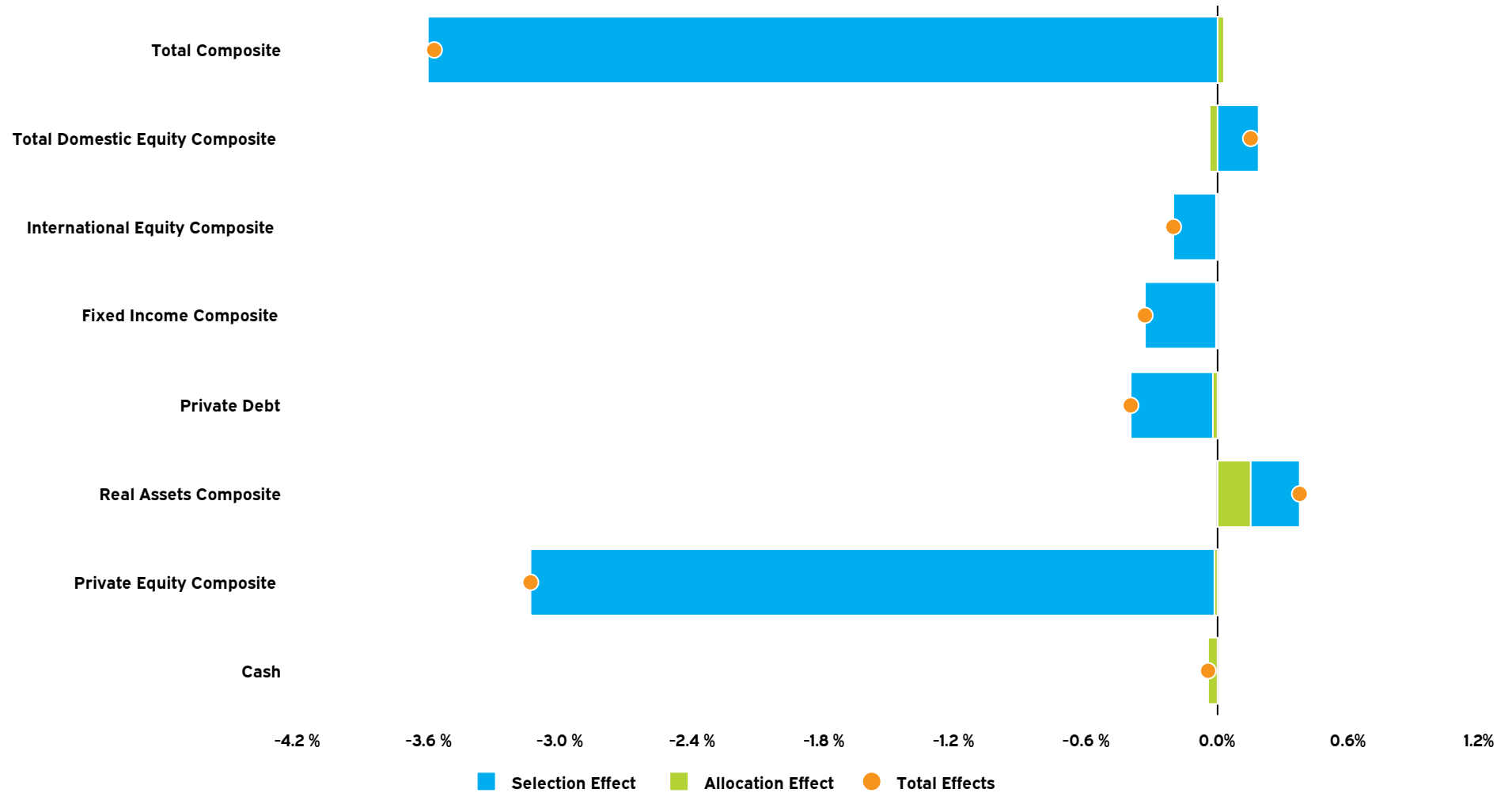
### Annualized Standard Deviation



### Sharpe Ratio

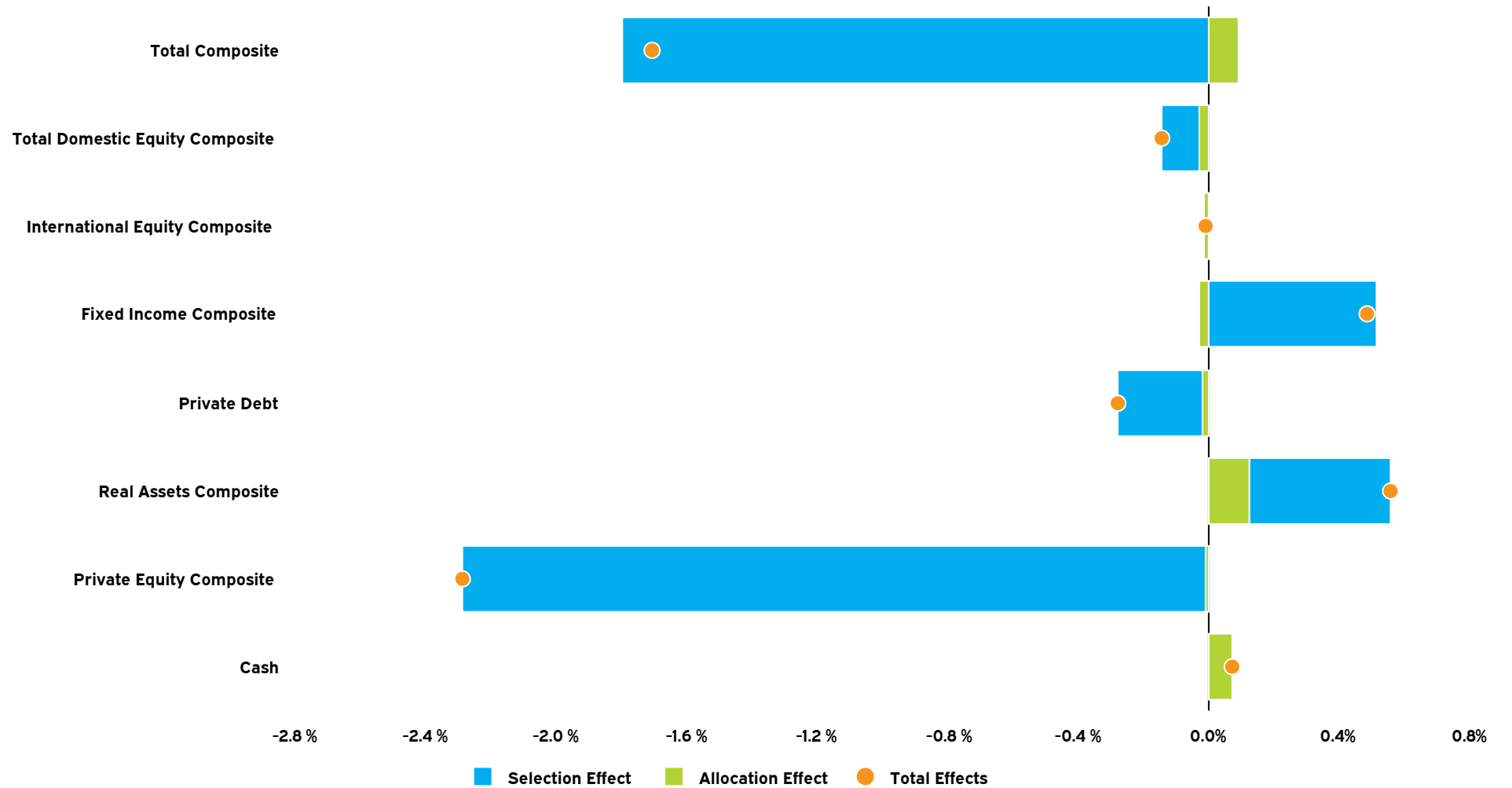


#### Attribution Effects Quarter To Date



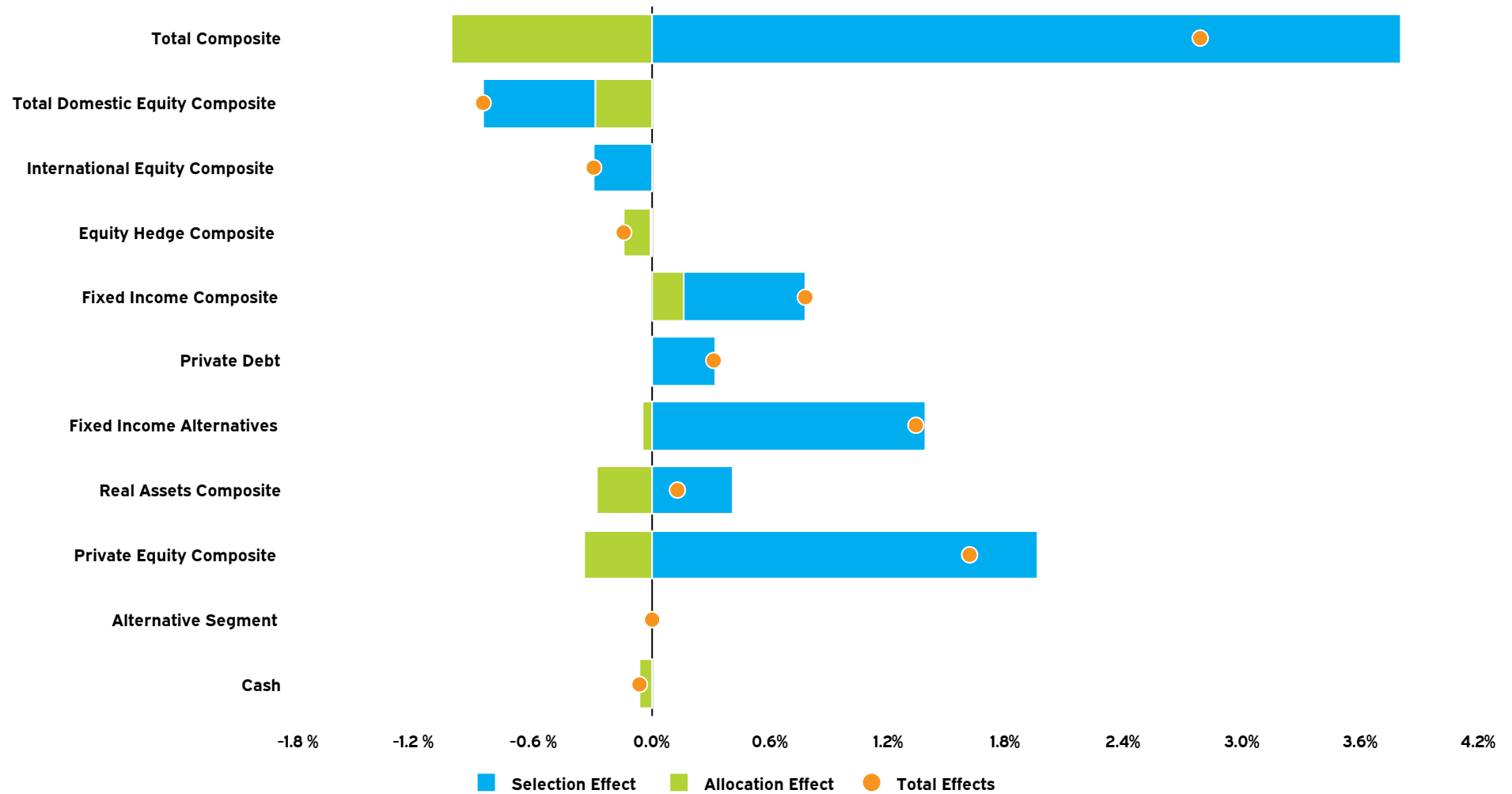
The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

#### Attribution Effects Fiscal Year to Date

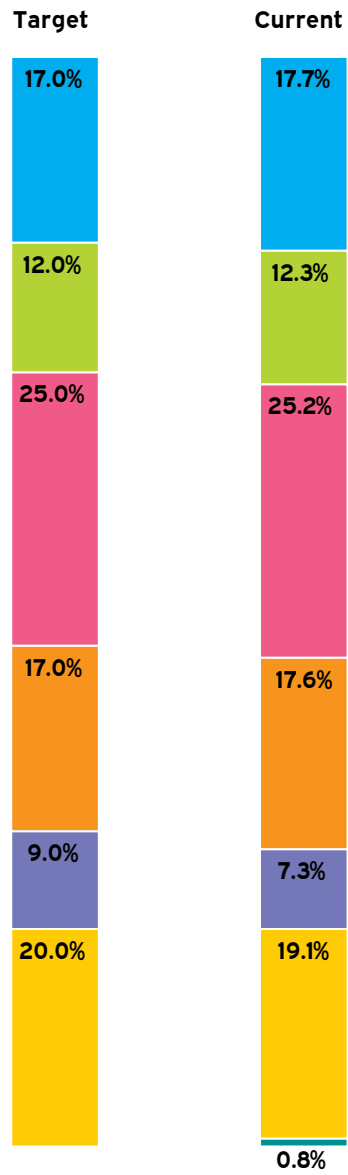


The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.

#### Attribution Effects 3 Years Ending December 31, 2023



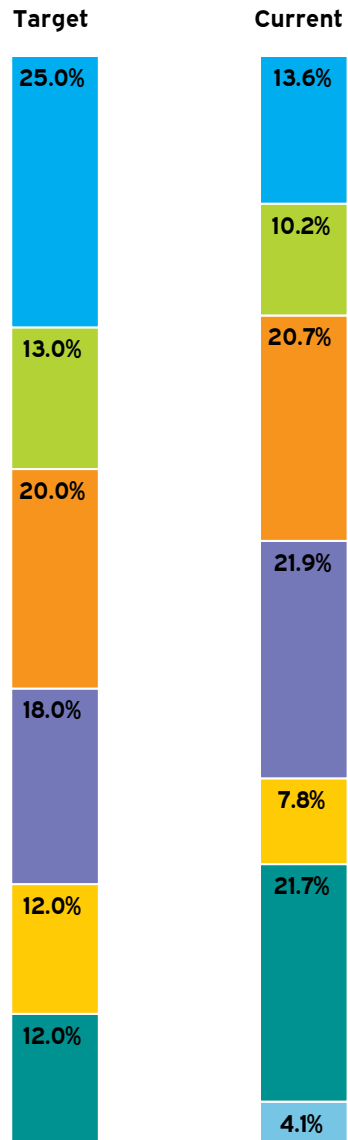
The performance calculation methodology in attribution tables is different from the standard time weighted returns (geometric linkage of monthly returns) found throughout the rest of the report. In attribution tables, the average weight of each asset class (over the specified time period) is multiplied by the time period performance of that asset class and summed. Values may not sum due to rounding.



Allocation vs. Policy				
	Current Balance (\$)	Current Allocation (%)	Policy (%)	Within IPS Range?
Domestic Equity	\$747,015,840	18	17	Yes
International Equity	\$517,700,838	12	12	Yes
Fixed Income	\$1,065,528,721	25	25	Yes
Private Debt	\$742,464,795	18	17	Yes
Real Assets	\$307,781,922	7	9	Yes
Private Equity	\$807,402,524	19	20	Yes
Cash	\$34,683,441	1	0	Yes
<b>Total Composite</b>	<b>\$4,222,786,054</b>	<b>100</b>	<b>100</b>	



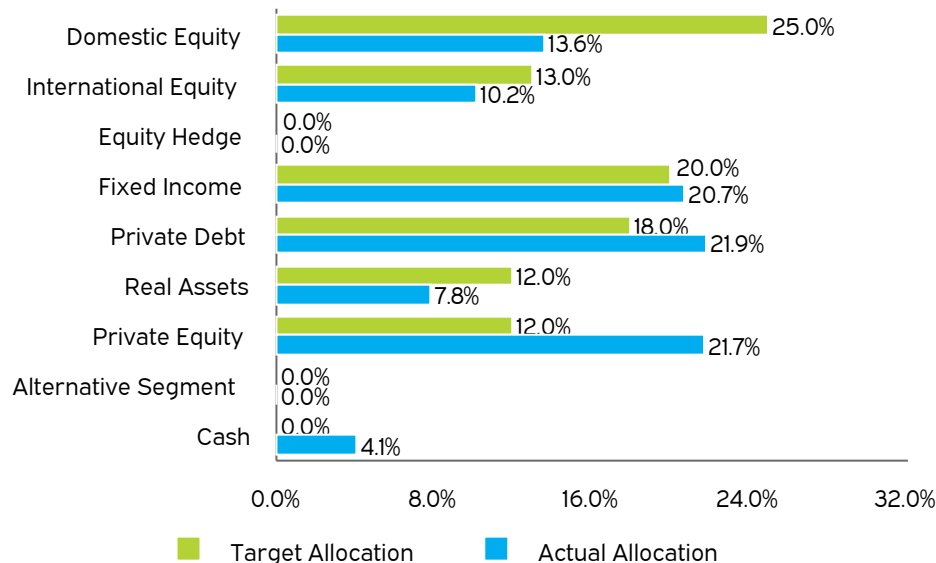
### Asset Allocation vs. Policy | As of December 31, 2022



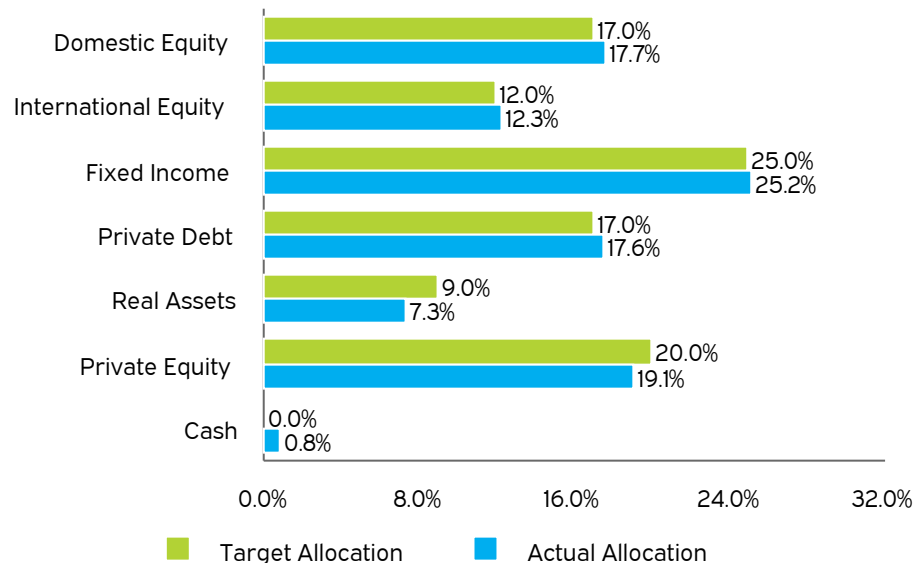
Allocation vs Policy				
	Current Balance (\$)	Current Allocation (%)	Policy (%)	Within IPS Range?
Domestic Equity	\$552,282,372	14	25	No
International Equity	\$411,636,560	10	13	Yes
Equity Hedge	\$157,135	0	0	Yes
Fixed Income	\$840,534,482	21	20	Yes
Private Debt	\$885,804,271	22	18	No
Real Assets	\$316,395,226	8	12	Yes
Private Equity	\$880,764,286	22	12	No
Alternative Segment	\$32,611	0	0	Yes
Cash	\$165,148,987	4	0	Yes
<b>Total Composite</b>	<b>\$4,052,755,929</b>	<b>100</b>	<b>100</b>	

### Asset Allocation Compliance | As of December 31, 2023

**Actual vs. Target Allocation (%)**  
As of December 31, 2022



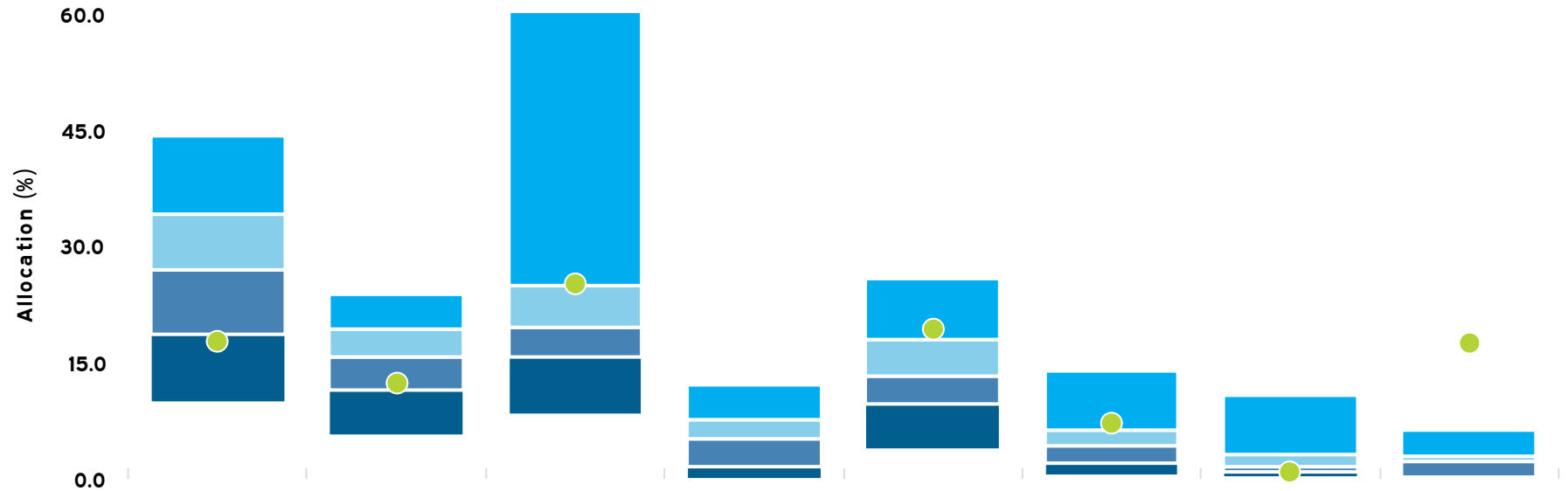
**Actual vs. Target Allocation (%)**  
As of December 31, 2023



	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	14	25	-11	20 - 30	No
International Equity	10	13	-3	8 - 18	Yes
Equity Hedge	0	0	0	0 - 100	Yes
Fixed Income	21	20	1	15 - 25	Yes
Private Debt	22	18	4	0 - 21	No
Real Assets	8	12	-4	0 - 15	Yes
Private Equity	22	12	10	0 - 15	No
Alternative Segment	0	0	0	0 - 100	Yes
Cash	4	0	4	0 - 5	Yes
<b>Total Composite</b>	<b>100</b>	<b>100</b>	<b>0</b>		

	Current Allocation (%)	Policy (%)	Difference (%)	Policy Range (%)	Within IPS Range?
Domestic Equity	18	17	1	12 - 22	Yes
International Equity	12	12	0	7 - 17	Yes
Fixed Income	25	25	0	17 - 33	Yes
Private Debt	18	17	1	12 - 20	Yes
Real Assets	7	9	-2	5 - 12	Yes
Private Equity	19	20	-1	15 - 23	Yes
Cash	1	0	1	0 - 5	Yes
<b>Total Composite</b>	<b>100</b>	<b>100</b>	<b>0</b>		

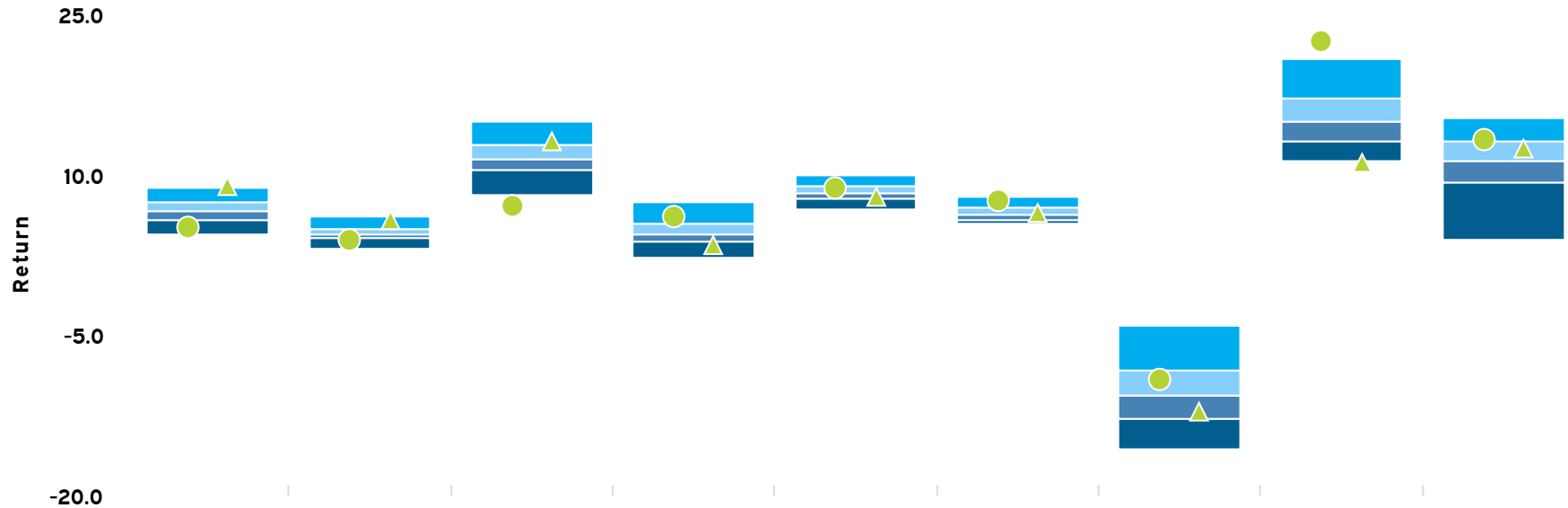
Asset Allocation vs. All Public Plans > \$1B-Total Fund



	US Equity	Global ex-US Equity	US Fixed	Hedge Funds	Private Equity	Real Assets/Commod	Cash & Equivalents	Other
● Total Composite	17.7 (78)	12.3 (73)	25.2 (24)	-	19.3 (19)	7.2 (24)	0.8 (78)	17.4 (1)
5th Percentile	44.4	23.8	60.8	12.2	25.9	13.9	10.8	6.3
1st Quartile	34.3	19.3	24.9	7.6	17.9	6.4	3.1	3.0
Median	26.9	15.7	19.5	5.2	13.2	4.2	1.7	2.2
3rd Quartile	18.7	11.4	15.8	1.5	9.8	2.1	0.9	0.3
95th Percentile	9.9	5.5	8.4	0.0	3.9	0.4	0.3	0.2
Population	138	135	138	43	71	52	116	14

Other represents Private Debt allocation.  
Parentheses contain percentile rankings.

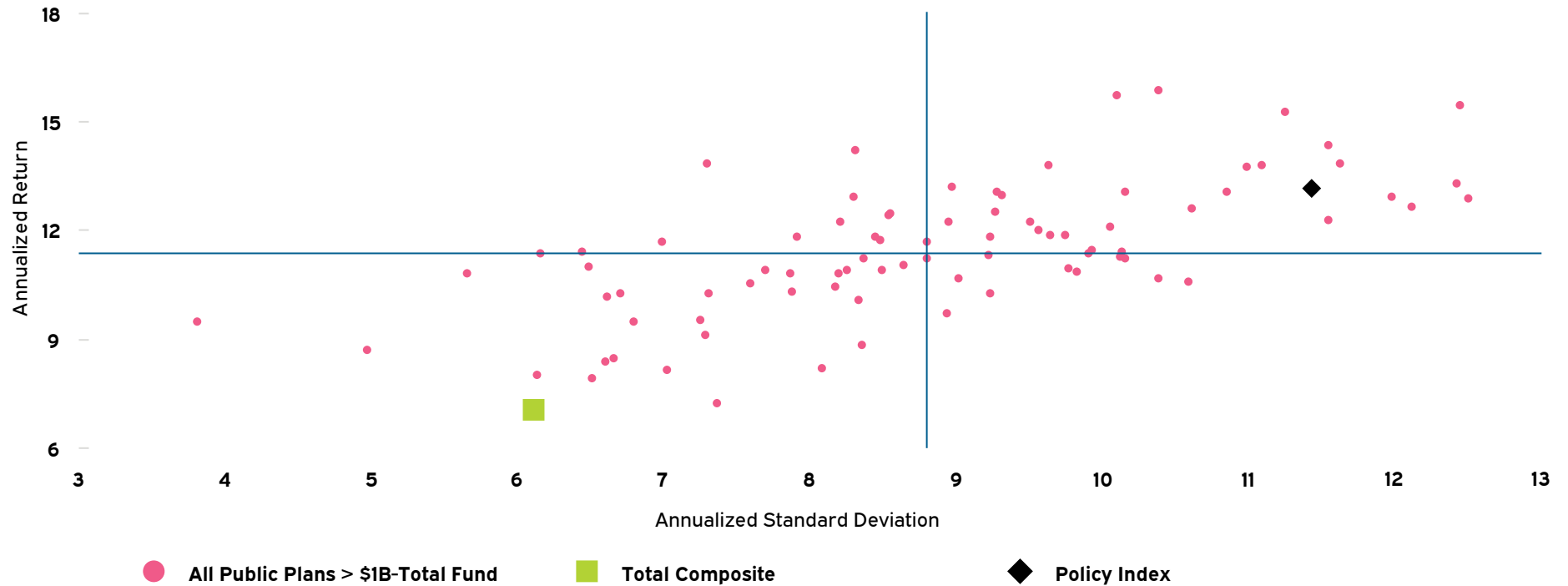
#### Net Performance vs. All Public Plans > \$1B-Total Fund



	QTD (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	2022	2021	2020
● Total Composite	5.1 (89)	3.9 (77)	7.0 (98)	6.1 (14)	8.7 (36)	7.7 (8)	-9.1 (33)	22.6 (3)	13.2 (23)
▲ Policy Index	8.9 (5)	5.7 (8)	13.2 (17)	3.4 (82)	7.9 (66)	6.5 (39)	-12.1 (68)	11.1 (97)	12.4 (33)
5th Percentile	8.8	6.1	14.9	7.5	10.0	7.9	-4.1	20.8	15.2
1st Quartile	7.5	4.9	12.7	5.4	8.9	6.9	-8.4	17.2	13.0
Median	6.6	4.5	11.4	4.5	8.3	6.3	-10.6	15.0	11.2
3rd Quartile	5.8	4.0	10.4	3.7	7.7	5.8	-12.8	13.2	9.2
95th Percentile	4.4	3.1	8.1	2.3	6.7	5.4	-15.6	11.2	3.8
Population	97	94	88	75	71	65	102	138	154

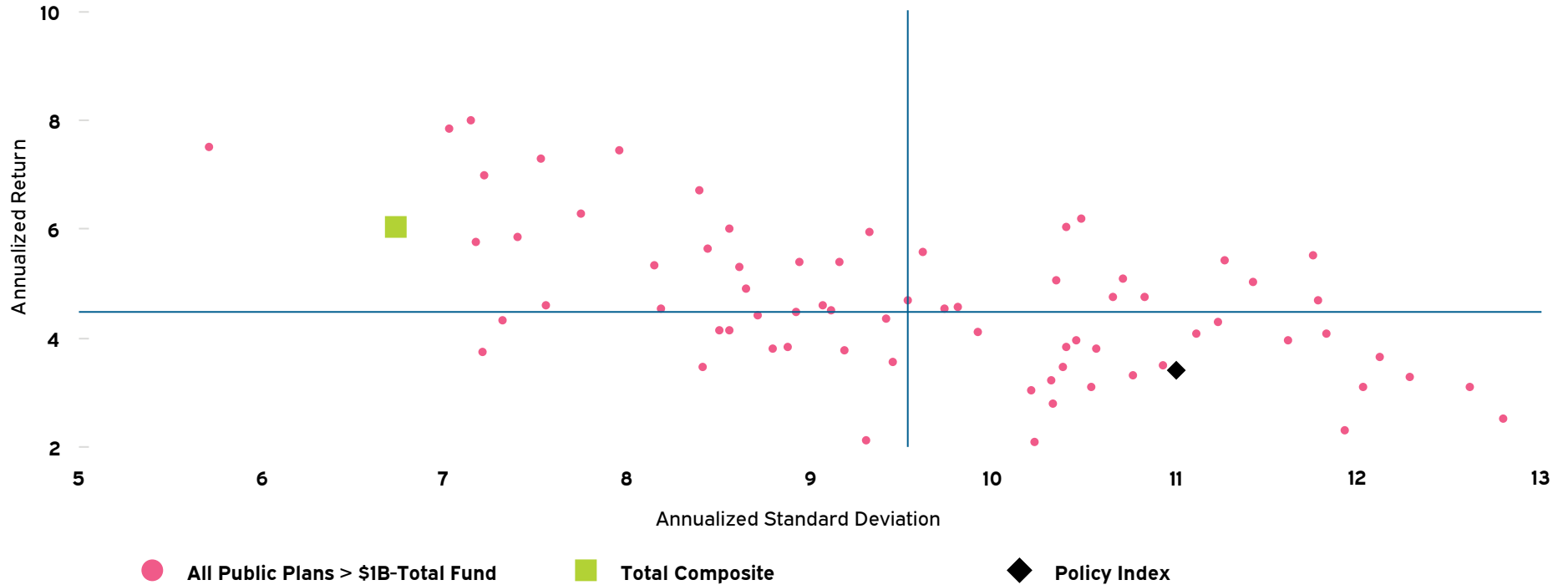
Parenteses contain percentile rankings.  
Calculation based on monthly periodicity.

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



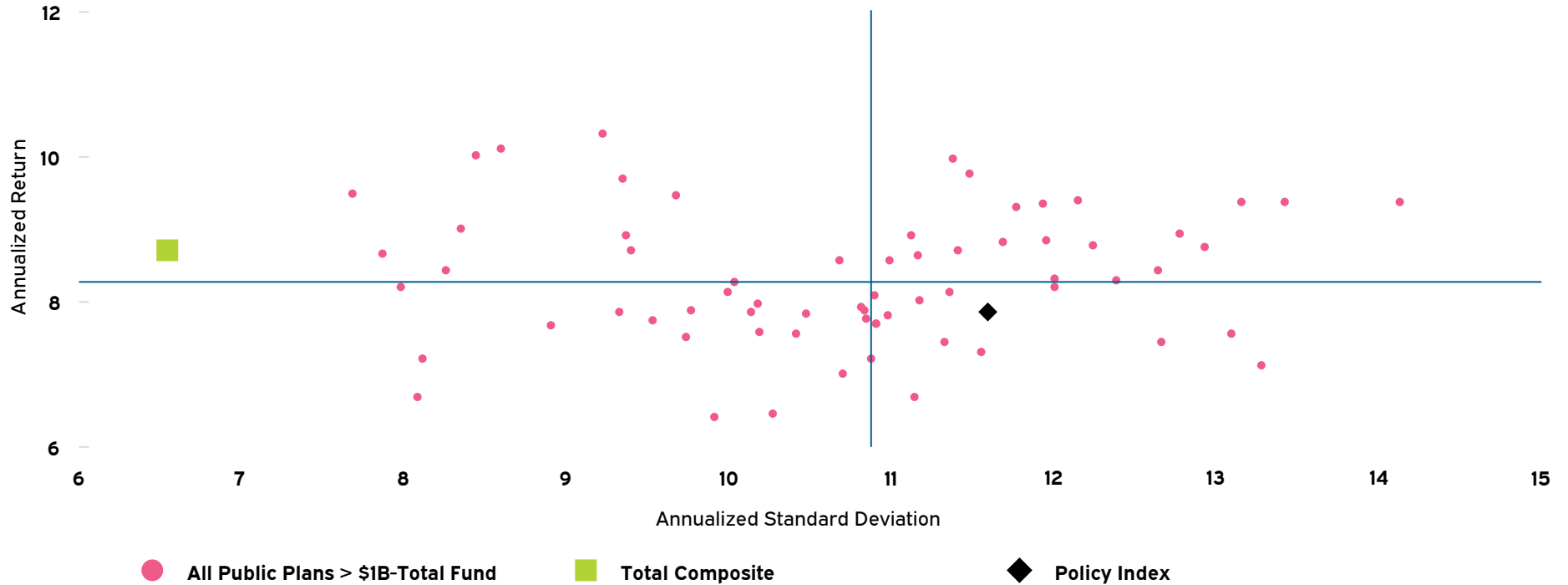
	1 Year Return	1 Year Standard Deviation	1 Year Sharpe Ratio	1 Year Information Ratio
Total Composite	7.0 (98)	6.1 (5)	0.3 (98)	-1.1 (92)
All Public Plans > \$1B-Total Fund Median	11.4	8.8	0.7	-0.5
Policy Index	13.2	11.4	0.7	-

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



	3 Years Return	3 Years Standard Deviation	3 Years Sharpe Ratio	3 Years Information Ratio
Total Composite	6.1 (14)	6.7 (2)	0.6 (10)	0.3 (45)
All Public Plans > \$1B-Total Fund Median	4.5	9.5	0.3	0.3
Policy Index	3.4	11.0	0.2	-

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



	5 Years Return	5 Years Standard Deviation	5 Years Sharpe Ratio	5 Years Information Ratio
Total Composite	8.7 (36)	6.5 (1)	1.0 (2)	0.0 (56)
All Public Plans > \$1B-Total Fund Median	8.3	10.9	0.6	0.1
Policy Index	7.9	11.6	0.6	-

	Market Value (\$)	% of Portfolio	Total Plan (Net Returns)							Inception (%)	Inception Date
			3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)			
<b>Total Composite</b>	<b>4,222,786,054</b>	<b>100.0</b>	<b>5.1 (89)</b>	<b>3.9 (77)</b>	<b>7.0 (98)</b>	<b>6.1 (14)</b>	<b>8.7 (36)</b>	<b>7.7 (8)</b>	<b>8.4 (13)</b>	<b>Jun-91</b>	
<i>Policy Index</i>			8.9 (5)	5.7 (8)	13.2 (17)	3.4 (82)	7.9 (66)	6.5 (39)	--		
Over/Under			-3.8	-1.8	-6.2	2.7	0.8	1.2	--		
<b>Domestic Equity</b>	<b>747,015,840</b>	<b>17.7</b>	<b>13.1 (29)</b>	<b>7.4 (57)</b>	<b>21.9 (50)</b>	<b>4.7 (76)</b>	<b>15.5 (25)</b>	<b>11.7 (19)</b>	<b>9.0 (36)</b>	<b>Apr-01</b>	
<i>Russell 3000 Index</i>			12.1 (44)	8.4 (42)	26.0 (32)	8.5 (42)	15.2 (29)	11.5 (20)	8.6 (50)		
Over/Under			1.0	-1.0	-4.1	-3.8	0.3	0.2	0.4		
<b>International Equity</b>	<b>517,700,838</b>	<b>12.3</b>	<b>8.2 (89)</b>	<b>5.7 (43)</b>	<b>13.2 (82)</b>	<b>-1.1 (70)</b>	<b>5.6 (91)</b>	<b>2.6 (95)</b>	<b>6.9 (65)</b>	<b>Jul-93</b>	
<i>International Equity Policy Index</i>			9.8 (62)	5.6 (44)	15.6 (60)	1.5 (50)	7.1 (73)	3.8 (79)	5.4 (100)		
Over/Under			-1.6	0.1	-2.4	-2.6	-1.5	-1.2	1.5		
<b>Fixed Income</b>	<b>1,065,528,721</b>	<b>25.2</b>	<b>5.5 (56)</b>	<b>5.4 (20)</b>	<b>8.2 (28)</b>	<b>-0.4 (45)</b>	<b>2.5 (35)</b>	<b>3.5 (25)</b>	<b>5.6 (20)</b>	<b>Aug-91</b>	
<i>Bimbg. U.S. Aggregate Index</i>			6.8 (35)	3.4 (65)	5.5 (64)	-3.3 (84)	1.1 (88)	1.8 (68)	4.9 (48)		
Over/Under			-1.3	2.0	2.7	2.9	1.4	1.7	0.7		
<b>Private Debt</b>	<b>742,464,795</b>	<b>17.6</b>	<b>4.9 (83)</b>	<b>6.1 (83)</b>	<b>8.3 (97)</b>	<b>10.5 (1)</b>	<b>7.2 (4)</b>	<b>7.1 (1)</b>	<b>13.0 (1)</b>	<b>Jan-09</b>	
<i>Private Debt Policy Index</i>			7.1 (20)	7.6 (21)	13.5 (18)	2.0 (54)	5.2 (44)	4.4 (37)	4.4 (100)		
Over/Under			-2.2	-1.5	-5.2	8.5	2.0	2.7	8.6		
<b>Real Assets</b>	<b>307,781,922</b>	<b>7.3</b>	<b>-0.1</b>	<b>1.0</b>	<b>1.5</b>	<b>10.2</b>	<b>3.8</b>	<b>6.5</b>	<b>6.1</b>	<b>Jul-01</b>	
<i>NCREIF Property Index</i>			-3.0	-4.3	-7.9	4.6	4.3	6.8	7.7		
Over/Under			2.9	5.3	9.4	5.6	-0.5	-0.3	-1.6		
<b>Private Equity</b>	<b>807,374,636</b>	<b>19.1</b>	<b>-1.3</b>	<b>-2.6</b>	<b>-5.4</b>	<b>9.5</b>	<b>14.1</b>	<b>14.5</b>	<b>11.9</b>	<b>Oct-01</b>	
<i>Russell 2000 Index</i>			14.0	8.2	16.9	2.2	10.0	7.2	9.0		
Over/Under			-15.3	-10.8	-22.3	7.3	4.1	7.3	2.9		
<b>Cash</b>	<b>34,683,441</b>	<b>0.8</b>	<b>1.5</b>	<b>1.9</b>	<b>1.8</b>	<b>1.4</b>	<b>1.6</b>	<b>0.7</b>	<b>4.1</b>	<b>Jul-09</b>	
<i>FTSE 3 Month T-Bill</i>			1.4	2.8	5.3	2.2	1.9	1.3	0.9		
Over/Under			0.1	-0.9	-3.5	-0.8	-0.3	-0.6	3.2		



Trailing Net Performance										
	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Total Composite</b>	<b>4,222,786,054</b>	<b>100.0</b>	<b>5.1 (89)</b>	<b>3.9 (77)</b>	<b>7.0 (98)</b>	<b>6.1 (14)</b>	<b>8.7 (36)</b>	<b>7.7 (8)</b>	<b>8.4 (13)</b>	<b>Jun-91</b>
<i>Policy Index</i>			<i>8.9 (5)</i>	<i>5.7 (8)</i>	<i>13.2 (17)</i>	<i>3.4 (82)</i>	<i>7.9 (66)</i>	<i>6.5 (39)</i>	--	
Over/Under			-3.8	-1.8	-6.2	2.7	0.8	1.2	--	
<b>Domestic Equity</b>	<b>747,015,840</b>	<b>17.7</b>	<b>13.1 (29)</b>	<b>7.4 (57)</b>	<b>21.9 (50)</b>	<b>4.7 (76)</b>	<b>15.5 (25)</b>	<b>11.7 (19)</b>	<b>9.0 (36)</b>	<b>Apr-01</b>
<i>Russell 3000 Index</i>			<i>12.1 (44)</i>	<i>8.4 (42)</i>	<i>26.0 (32)</i>	<i>8.5 (42)</i>	<i>15.2 (29)</i>	<i>11.5 (20)</i>	<i>8.6 (50)</i>	
Over/Under			1.0	-1.0	-4.1	-3.8	0.3	0.2	0.4	
BlackRock Large Cap ETF	75,543,868	1.8	11.6 (46)	8.3 (48)	25.6 (36)	9.8 (37)	15.3 (34)	11.7 (30)	13.1 (40)	Aug-10
<i>S&amp;P 500 Index</i>			<i>11.7 (45)</i>	<i>8.0 (53)</i>	<i>26.3 (34)</i>	<i>10.0 (33)</i>	<i>15.7 (29)</i>	<i>12.0 (24)</i>	<i>13.7 (27)</i>	
Over/Under			-0.1	0.3	-0.7	-0.2	-0.4	-0.3	-0.6	
PIMCO Managed Volatility	415,649,760	9.8	14.1 (15)	8.9 (37)	25.4 (36)	6.9 (75)	18.8 (5)	--	13.6 (10)	Jan-15
<i>S&amp;P 500 Index</i>			<i>11.7 (45)</i>	<i>8.0 (53)</i>	<i>26.3 (34)</i>	<i>10.0 (33)</i>	<i>15.7 (29)</i>	<i>12.0 (24)</i>	<i>11.9 (26)</i>	
Over/Under			2.4	0.9	-0.9	-3.1	3.1	--	1.7	
Champlain Mid Cap Core	181,199,549	4.3	11.9 (48)	4.7 (82)	15.7 (67)	2.2 (69)	12.0 (67)	11.0 (14)	12.9 (24)	Dec-09
<i>Russell Midcap Index</i>			<i>12.8 (35)</i>	<i>7.5 (46)</i>	<i>17.2 (58)</i>	<i>5.9 (58)</i>	<i>12.7 (55)</i>	<i>9.4 (46)</i>	<i>12.2 (41)</i>	
Over/Under			-0.9	-2.8	-1.5	-3.7	-0.7	1.6	0.7	
William Blair SMID	74,606,919	1.8	12.5 (34)	5.7 (56)	18.3 (38)	-0.1 (79)	11.7 (63)	10.5 (13)	12.9 (12)	Dec-12
<i>Russell 2500 Growth Index</i>			<i>12.6 (34)</i>	<i>4.9 (65)</i>	<i>18.9 (34)</i>	<i>-2.7 (88)</i>	<i>11.4 (66)</i>	<i>8.8 (45)</i>	<i>11.5 (38)</i>	
Over/Under			-0.1	0.8	-0.6	2.6	0.3	1.7	1.4	

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>International Equity</b>	<b>517,700,838</b>	<b>12.3</b>	<b>8.2 (86)</b>	<b>5.7 (33)</b>	<b>13.2 (85)</b>	<b>-1.1 (71)</b>	<b>5.6 (93)</b>	<b>2.6 (95)</b>	<b>6.9 (66)</b>	<b>Jul-93</b>
<i>International Equity Policy Index</i>			<i>9.8 (58)</i>	<i>5.6 (33)</i>	<i>15.6 (62)</i>	<i>1.5 (50)</i>	<i>7.1 (73)</i>	<i>3.8 (80)</i>	<i>5.4 (100)</i>	
Over/Under			-1.6	0.1	-2.4	-2.6	-1.5	-1.2	1.5	
Arrowstreet EAFE Fund	249,741,036	5.9	8.8	8.2	--	--	--	--	8.6	Apr-23
<i>MSCI EAFE (Net)</i>			<i>10.4</i>	<i>5.9</i>	<i>18.2</i>	<i>4.0</i>	<i>8.2</i>	<i>4.3</i>	<i>9.0</i>	
Over/Under			-1.6	2.3	--	--	--	--	-0.4	
Arrowstreet EM	76,980,229	1.8	5.9	8.1	--	--	--	--	10.0	Apr-23
<i>MSCI Emerging Markets Index</i>			<i>7.9</i>	<i>4.9</i>	<i>10.3</i>	<i>-4.7</i>	<i>4.1</i>	<i>3.0</i>	<i>6.0</i>	
Over/Under			-2.0	3.2	--	--	--	--	4.0	
Oaktree EM	136,685,584	3.2	6.6 (79)	0.9 (91)	5.7 (91)	-4.2 (57)	4.9 (54)	2.4 (77)	2.9 (68)	Oct-13
<i>MSCI Emerging Markets (Net)</i>			<i>7.9 (51)</i>	<i>4.7 (49)</i>	<i>9.8 (63)</i>	<i>-5.1 (61)</i>	<i>3.7 (76)</i>	<i>2.7 (72)</i>	<i>2.8 (72)</i>	
Over/Under			-1.3	-3.8	-4.1	0.9	1.2	-0.3	0.1	
William Blair International Growth	51,858,394	1.2	13.2 (43)	3.7 (76)	--	--	--	--	3.7 (76)	Jul-23
<i>MSCI AC World Index Growth</i>			<i>12.8 (48)</i>	<i>7.3 (36)</i>	<i>33.5 (16)</i>	<i>3.9 (23)</i>	<i>14.9 (15)</i>	<i>10.4 (23)</i>	<i>7.3 (36)</i>	
Over/Under			0.4	-3.6	--	--	--	--	-3.6	

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Fixed Income</b>	<b>1,065,528,721</b>	<b>25.2</b>	<b>5.5 (56)</b>	<b>5.4 (20)</b>	<b>8.2 (28)</b>	<b>-0.4 (45)</b>	<b>2.5 (35)</b>	<b>3.5 (25)</b>	<b>5.6 (20)</b>	<b>Aug-91</b>
<i>Blmbg. U.S. Aggregate Index</i>			<i>6.8 (35)</i>	<i>3.4 (65)</i>	<i>5.5 (64)</i>	<i>-3.3 (84)</i>	<i>1.1 (88)</i>	<i>1.8 (68)</i>	<i>4.9 (48)</i>	
Over/Under			-1.3	2.0	2.7	2.9	1.4	1.7	0.7	
PIMCO Core Plus Total Return	297,692,165	7.0	7.0 (51)	3.9 (50)	6.8 (39)	-1.9 (15)	1.6 (72)	2.1 (76)	3.9 (47)	Oct-06
<i>Blmbg. U.S. Aggregate Index</i>			<i>6.8 (65)</i>	<i>3.4 (81)</i>	<i>5.5 (91)</i>	<i>-3.3 (80)</i>	<i>1.1 (97)</i>	<i>1.8 (94)</i>	<i>3.1 (98)</i>	
Over/Under			0.2	0.5	1.3	1.4	0.5	0.3	0.8	
PIMCO Corporate Credit	307,928,624	7.3	8.0 (3)	5.3 (1)	9.1 (1)	-1.8 (7)	3.8 (1)	4.2 (1)	5.6 (1)	Jun-09
<i>PIMCO Corporate Credit Policy Index</i>			<i>7.8 (4)</i>	<i>5.6 (1)</i>	<i>9.5 (1)</i>	<i>-1.7 (7)</i>	<i>3.3 (1)</i>	<i>3.5 (1)</i>	<i>4.8 (2)</i>	
Over/Under			0.2	-0.3	-0.4	-0.1	0.5	0.7	0.8	
PIMCO Unconstrained Bond	244,616,434	5.8	4.3 (77)	4.6 (59)	6.5 (74)	0.2 (46)	1.9 (72)	2.6 (37)	2.6 (45)	Sep-13
<i>ICE BofA LIBOR 3-month Constant Maturity</i>			<i>1.4 (97)</i>	<i>2.7 (86)</i>	<i>5.1 (88)</i>	<i>2.2 (12)</i>	<i>2.0 (65)</i>	<i>1.4 (75)</i>	<i>1.4 (77)</i>	
Over/Under			2.9	1.9	1.4	-2.0	-0.1	1.2	1.2	
PIMCO Private Income Fund	103,121,145	2.4	1.8 (100)	3.8 (100)	5.5 (100)	7.8 (1)	--	--	7.0 (1)	Apr-19
<i>ICE BofA High Yield Master II</i>			<i>7.1 (47)</i>	<i>7.6 (3)</i>	<i>13.5 (1)</i>	<i>2.0 (6)</i>	<i>5.2 (3)</i>	<i>4.5 (3)</i>	<i>3.9 (9)</i>	
Over/Under			-5.3	-3.8	-8.0	5.8	--	--	3.1	
PIMCO Tactical Opportunities Fund	110,612,237	2.6	0.7 (100)	10.6 (1)	15.2 (1)	7.8 (1)	--	--	10.2 (1)	Jun-20
<i>ICE BofA High Yield Master II</i>			<i>7.1 (47)</i>	<i>7.6 (3)</i>	<i>13.5 (1)</i>	<i>2.0 (6)</i>	<i>5.2 (3)</i>	<i>4.5 (3)</i>	<i>5.1 (4)</i>	
Over/Under			-6.4	3.0	1.7	5.8	--	--	5.1	

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Private Debt</b>	<b>742,464,795</b>	<b>17.6</b>	<b>4.9 (83)</b>	<b>6.1 (83)</b>	<b>8.3 (97)</b>	<b>10.5 (1)</b>	<b>7.2 (4)</b>	<b>7.1 (1)</b>	<b>13.0 (1)</b>	<b>Jan-09</b>
<i>Private Debt Policy Index</i>			<i>7.1 (20)</i>	<i>7.6 (21)</i>	<i>13.5 (18)</i>	<i>2.0 (54)</i>	<i>5.2 (44)</i>	<i>4.4 (37)</i>	<i>4.4 (100)</i>	
Over/Under			-2.2	-1.5	-5.2	8.5	2.0	2.7	8.6	
Accel Growth Fund, L.P.	32,478	0.0								
Accel-KKR Credit Partners, L.P. - Series 1	28,712,420	0.7								
Accel-KKR Growth Capital Partners II, L.P.	8,249,902	0.2								
AKKR NV SMA	25,805,394	0.6								
Anchorage Illiquid Opps IV	654,902	0.0								
Anchorage Illiquid Opps V	20,070,416	0.5								
Anchorage Illiquid Opps VII	58,590,038	1.4								
Arcmont SMA	100,403,775	2.4								
Athyrium Opps Fund II	5,441,688	0.1								
Centerbridge Capital Partners III	29,058,703	0.7								
Courage Capital IV	14,603,152	0.3								
Courage Credit Opportunities Fund III	1	0.0								
Cowen Healthcare Royalty II	1	0.0								
EIG-Energy Fund XV	2,983,217	0.1								
EIG-Energy Fund XVI	16,599,644	0.4								
Energy Cap Mezz Opps Fund A	1,931,446	0.0								
Garrison Distressed Fund II	1	0.0								
Garrison Opp. Fund III	1,400,138	0.0								
GSO Capital Opp. Fund II	1,127,084	0.0								
Hayfin Direct Lending Fund	1	0.0								
Hygieia SMA	101,108,864	2.4								
Marathon CLO Managed	24,380,472	0.6								
Marathon European Credit Opps II	153	0.0								
Marathon European Credit Opps III	19,105,919	0.5								
Mount Logan Opportunities Fund IV	3,965,195	0.1								
Oaktree EPOF III	6,289,843	0.1								
Oaktree Euro Principal IV	24,245,755	0.6								

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Oaktree European Principal Fund V	19,939,354	0.5								
Oaktree Opps Fund X	47,214,763	1.1								
OSP Value Fund	4,452,134	0.1								
OSP Value Fund II	4,998,917	0.1								
OSP Value Fund III	28,771,233	0.7								
OSP Value Fund IV, L.P.	6,000,000	0.1								
PIMCO COF II	31,777,152	0.8								
PIMCO COF III	42,076,877	1.0								
Principal RE Debt	1	0.0								
Waterfall Eden Fund	305,523	0.0								

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Real Assets</b>	<b>307,781,922</b>	<b>7.3</b>	<b>-0.1</b>	<b>1.0</b>	<b>1.5</b>	<b>10.2</b>	<b>3.8</b>	<b>6.5</b>	<b>6.1</b>	<b>Jul-01</b>
<i>NCREIF Property Index</i>			-3.0	-4.3	-7.9	4.6	4.3	6.8	7.7	
Over/Under			2.9	5.3	9.4	5.6	-0.5	-0.3	-1.6	
AG Realty Fund VIII	3,914,454	0.1								
AG Realty Fund IX	11,371,083	0.3								
AG Realty Fund X	13,800,064	0.3								
Ares Energy Opp Fd	9,952,371	0.2								
ARES European RE IV	4,239,085	0.1								
Centerbridge RE II	10,368,260	0.2								
Chambers Energy III	15,444,578	0.4								
EIG Energy XVII	22,069,945	0.5								
EIG Private Debt	5,966,968	0.1								
GSO Energy Select Opportunities Fund, L.P.	1,602,024	0.0								
Michelson Multifamily Fund, L.P.	30,663,249	0.7								
Oaktree European Capital Solutions Fund, L.P.	13,057,461	0.3								
Oaktree European Capital Solutions Fund II, L.P	15,120,842	0.4								
PIMCO Bravo II	1,458,224	0.0								
PIMCO Bravo III	29,636,218	0.7								
Principal RE Debt II	3,535,648	0.1								

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
RCP II NEPC SYND P	3,053,309	0.1								
Riverstone CP II	9,554,001	0.2								
Riverstone GL Energy & Power Fund V	6,582,466	0.2								
Riverstone GL Energy & Power Fund VI	14,261,535	0.3								
Sheridan Prod Ptrs III	7,354,000	0.2								
Soundmark Horizon	36,735,828	0.9								
Stonelake Fund VI	18,208,193	0.4								
True North RE III	10,873,731	0.3								
True North HY II	1	0.0								

Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Private Equity</b>	<b>807,374,636</b>	<b>19.1</b>	<b>-1.3</b>	<b>-2.6</b>	<b>-5.4</b>	<b>9.5</b>	<b>14.1</b>	<b>14.5</b>	<b>11.9</b>	<b>Oct-01</b>
<i>Russell 2000 Index</i>			<i>14.0</i>	<i>8.2</i>	<i>16.9</i>	<i>2.2</i>	<i>10.0</i>	<i>7.2</i>	<i>9.0</i>	
Over/Under			<i>-15.3</i>	<i>-10.8</i>	<i>-22.3</i>	<i>7.3</i>	<i>4.1</i>	<i>7.3</i>	<i>2.9</i>	
Accel-KKR Capital Partners V, L.P.	22,591,690	0.5								
Accel KKR Credit Partners VI	8,984,253	0.2								
Astorg VI	6,228,783	0.1								
Axiom Asia Co-Investment I	9,584,519	0.2								
Axiom Colnv Fund II	3,796,215	0.1								
Axiom Asia III	25,740,529	0.6								
Axiom Asia IV	67,120,477	1.6								
Axiom Asia V	26,149,657	0.6								
Axiom Asia VI	22,611,215	0.5								
Axiom Opportunities	5,996,457	0.1								
Columbia Capital VI	19,550,461	0.5								
Columbia Capital VII	9,063,018	0.2								
Columbia CAP EP VIII	2,163,255	0.1								
Fort Washington Fund VII	12,660,723	0.3								
Greycroft Growth	6,145,188	0.1								
HarbourVest Dover Street VII	12,459	0.0								
HarbourVest 2013 Direct Fund	1	0.0								
Helios Investors III	29,072,044	0.7								
LGT CESB IV	13,800,399	0.3								
LGT Co-Investment Fund	13,933,686	0.3								
LGT Crown Co Inv Opps II	11,012,069	0.3								
LGT Crown Europe Small Buyout III	9,689,732	0.2								
LGT Crown Europe Small Buyout V	5,950,632	0.1								
Openview V	7,433,759	0.2								
Openview Venture Partners VI	6,455,650	0.2								
Raine Partners II	26,819,674	0.6								
Raine Partners III	10,392,384	0.2								



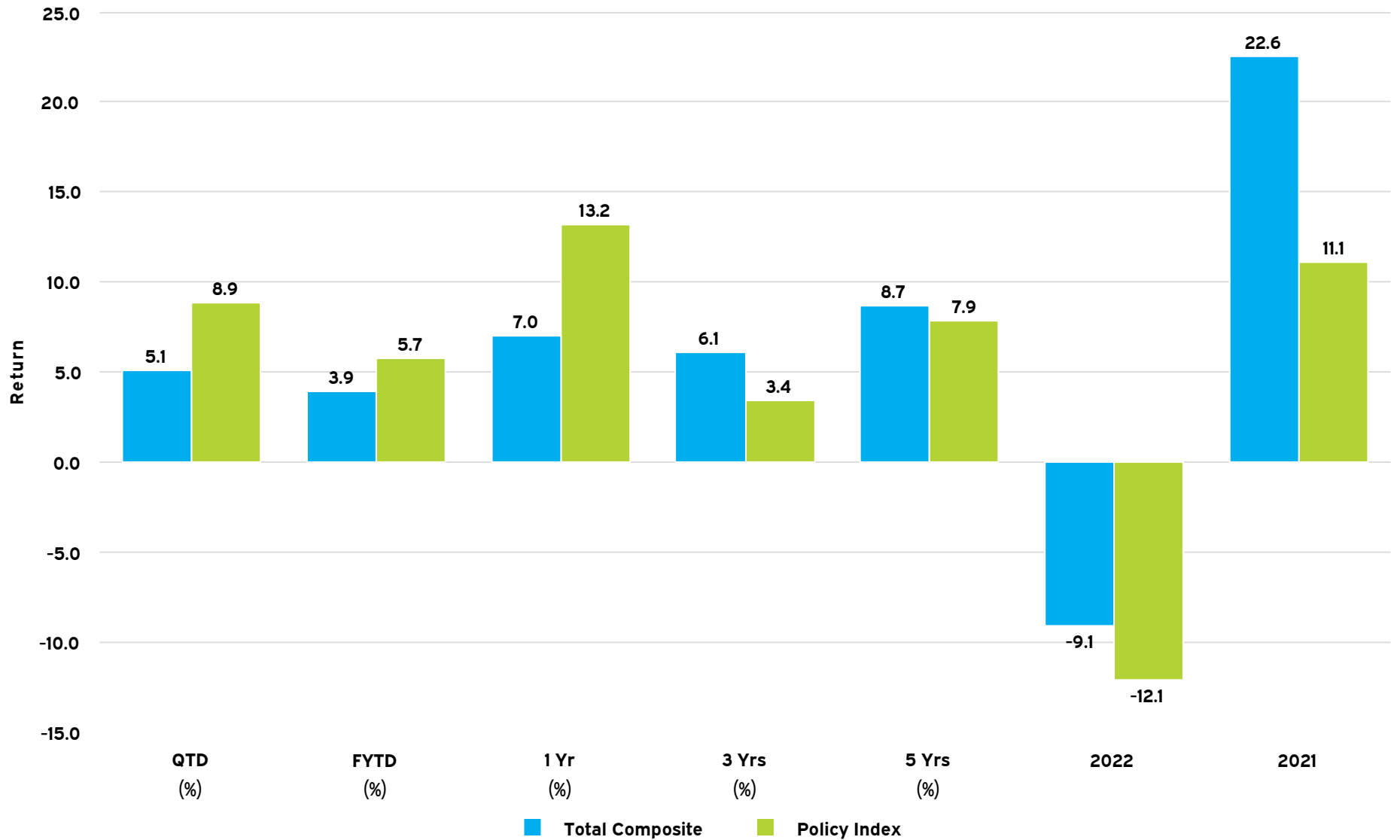
Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
StepStone GE III	7,966,943	0.2								
StepStone GE V	13,180,897	0.3								
StepStone Global Partners V	40,163,553	1.0								
StepStone Global Partners VI	70,251,704	1.7								
StepStone Global Partners VII	66,910,386	1.6								
StepStone Global Partners IX	41,934,578	1.0								
StepStone Global Partners X	27,266,271	0.6								
StepStone Growth Equity IV	12,061,292	0.3								
StepStone Growth Equity VI	3,386,042	0.1								
StepStone Growth Equity VI, Leaders	6,286,538	0.1								
StepStone Growth Equity VI, Redpoint	4,556,155	0.1								
Stepstone Growth Equity VIII	1,518,868	0.0								
StepStone Opportunities II	14,620,754	0.3								
StepStone Opportunities III	7,752,174	0.2								
StepStone Opportunities VI	19,414,846	0.5								
StepStone Opportunities IV	7,261,705	0.2								
StepStone Secondaries Fund I	12,220,571	0.3								
StepStone Secondaries IV	23,441,459	0.6								
StepStone Secondaries V	17,989,567	0.4								
StepStone SPV IX	9,585,730	0.2								
StepStone VC F-II	2,591,625	0.1								
Stepstone VC GP XI	1,066,325	0.0								

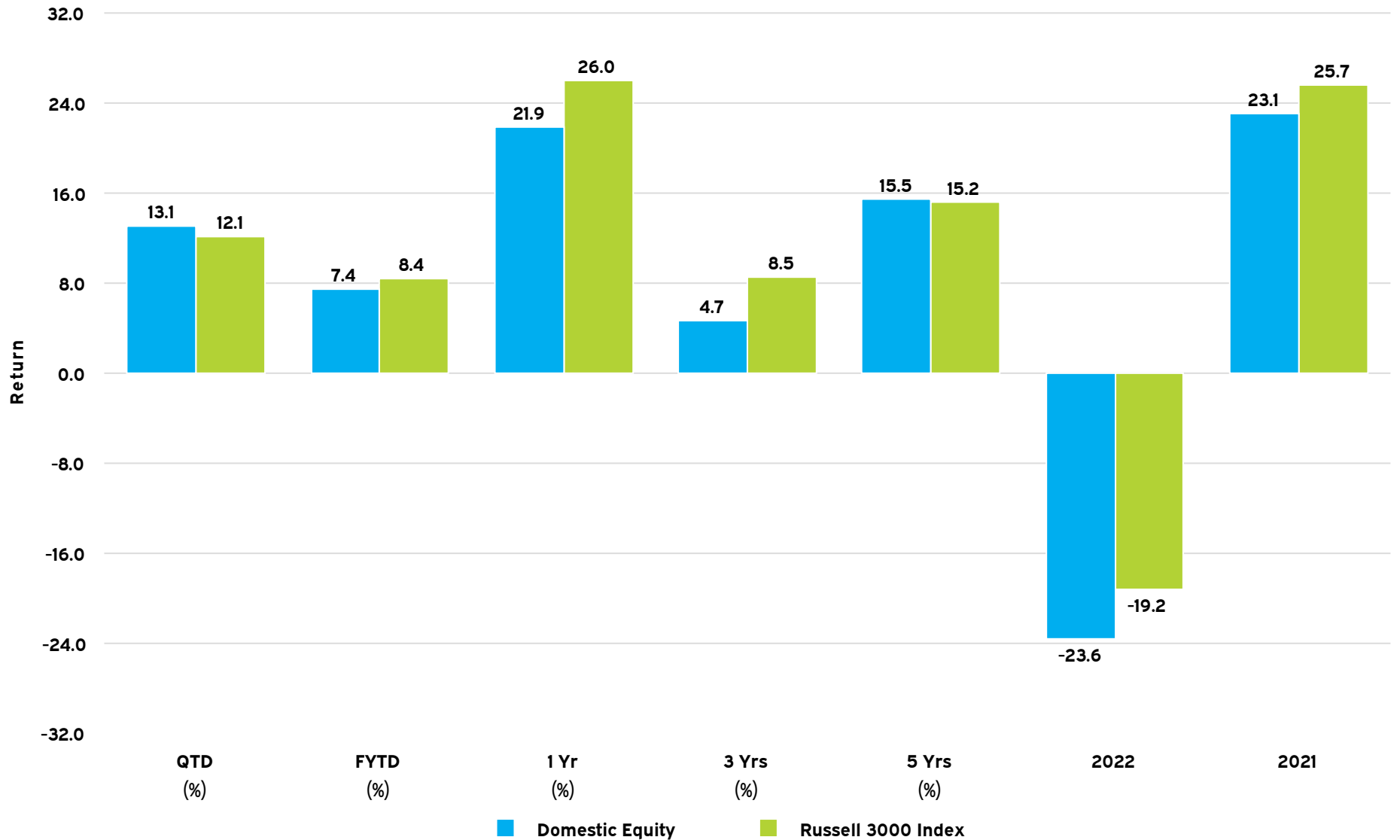
Total Plan (Net of Fees) | As of December 31, 2023

	Market Value (%)	% of Portfolio	3 Mo (%)	FYTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
<b>Cash</b>	<b>34,683,441</b>	<b>0.8</b>	<b>1.5</b>	<b>1.9</b>	<b>1.8</b>	<b>1.4</b>	<b>1.6</b>	<b>0.7</b>	<b>4.1</b>	<b>Jul-09</b>
<i>FTSE 3 Month T-Bill</i>			<i>1.4</i>	<i>2.8</i>	<i>5.3</i>	<i>2.2</i>	<i>1.9</i>	<i>1.3</i>	<i>0.9</i>	
Over/Under			0.1	-0.9	-3.5	-0.8	-0.3	-0.6	3.2	
Cash Account	33,914,744	0.8	1.5	1.8	1.7	0.8	0.5	0.2	3.4	Jul-09
<i>FTSE 3 Month T-Bill</i>			<i>1.4</i>	<i>2.8</i>	<i>5.3</i>	<i>2.2</i>	<i>1.9</i>	<i>1.3</i>	<i>0.9</i>	
Over/Under			0.1	-1.0	-3.6	-1.4	-1.4	-1.1	2.5	
Miscellaneous Cash	768,697	0.0	2.6	3.2	5.7	8.7	8.1	3.0	3.3	May-12

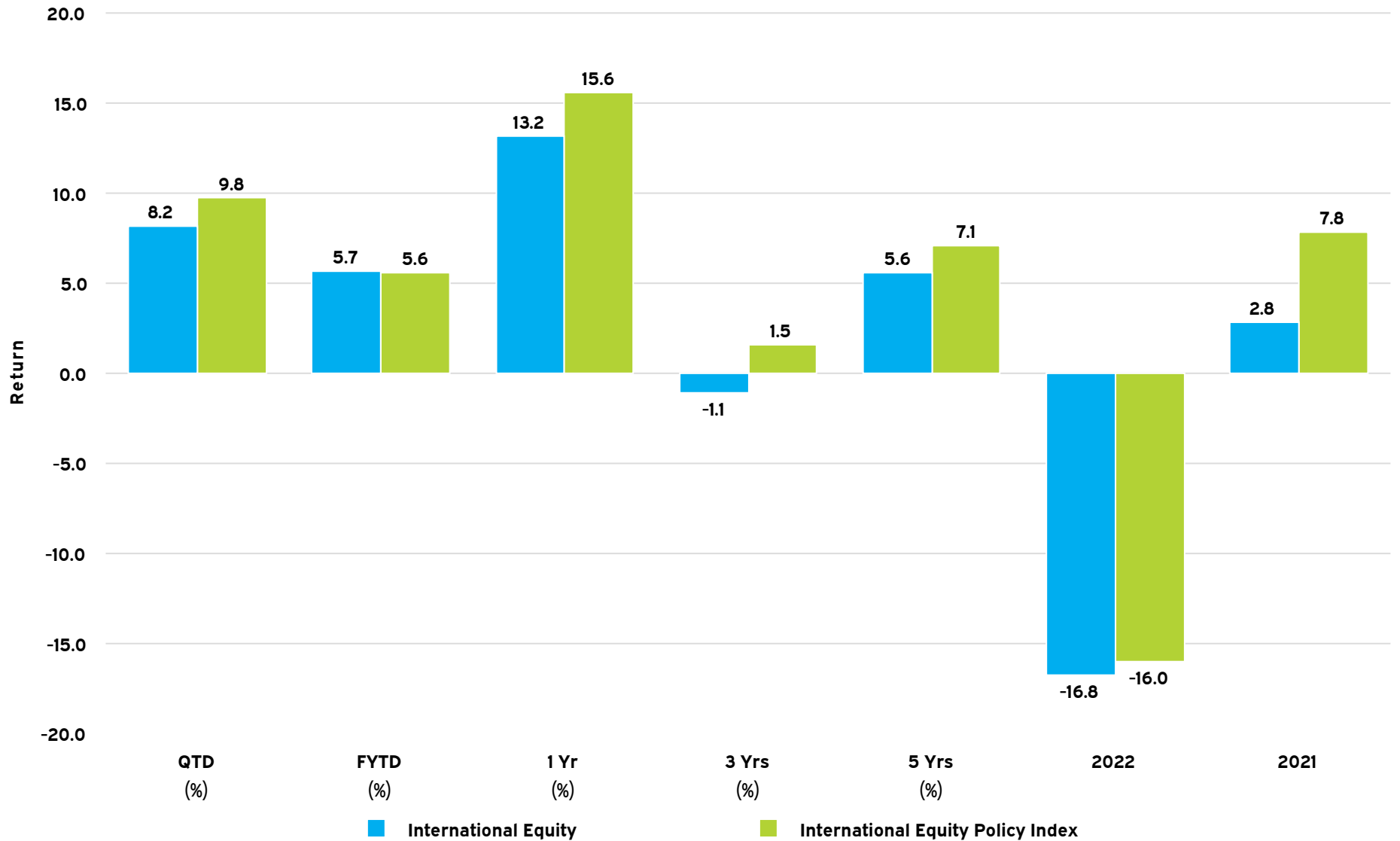
#### Total Plan Composite Return Summary (net of fees)



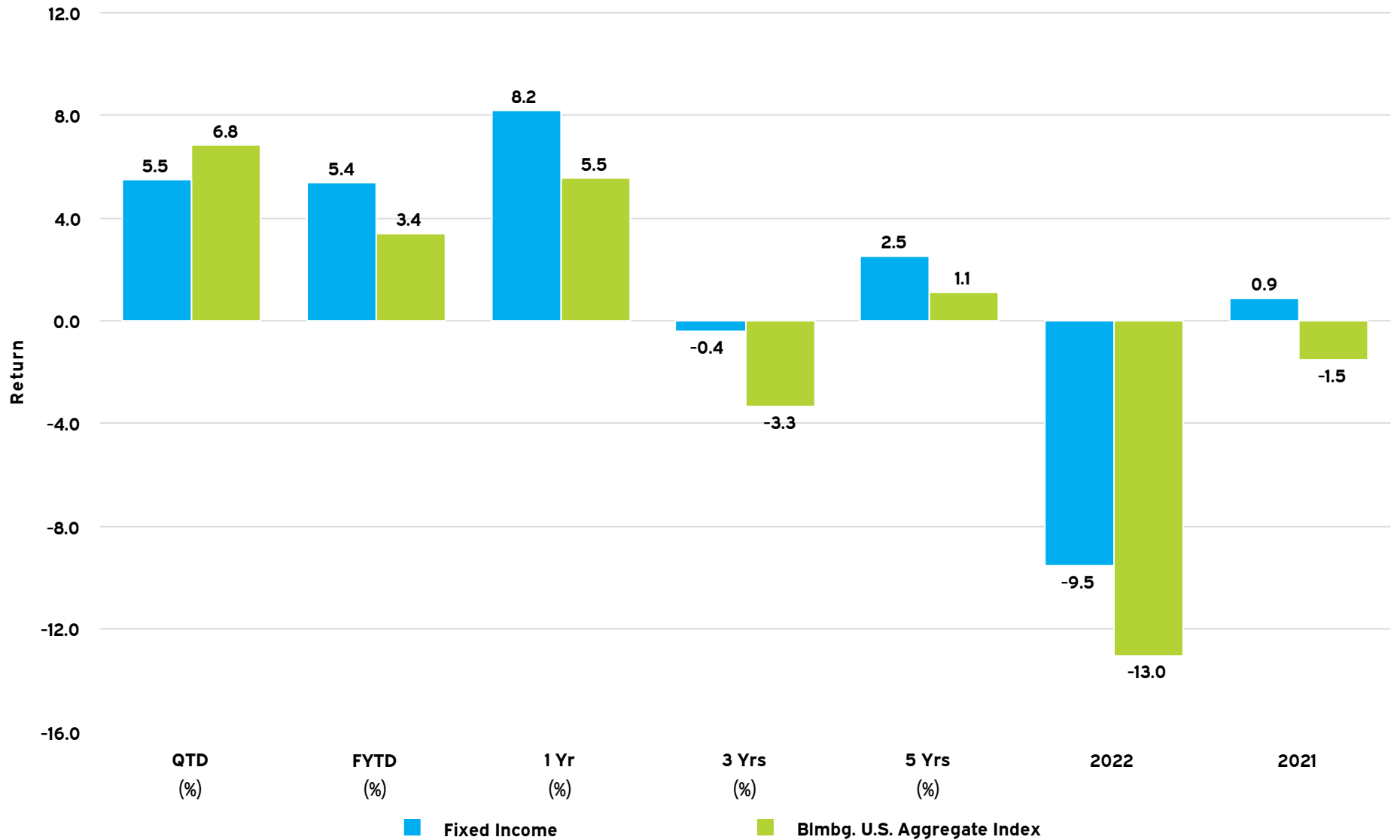
#### Total Domestic Equity Composite Return Summary (net of fees)



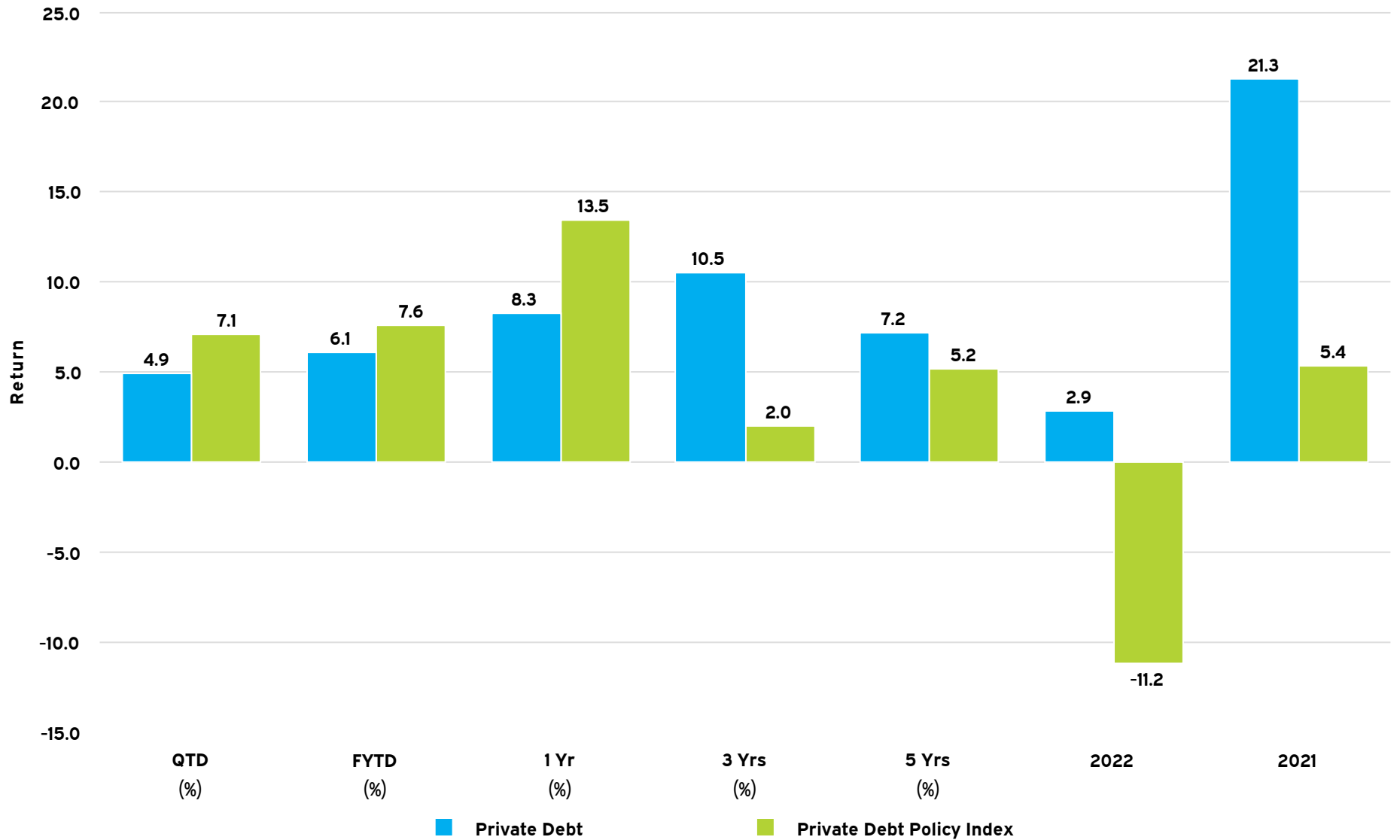
#### Total International Equity Return Summary (net of fees)



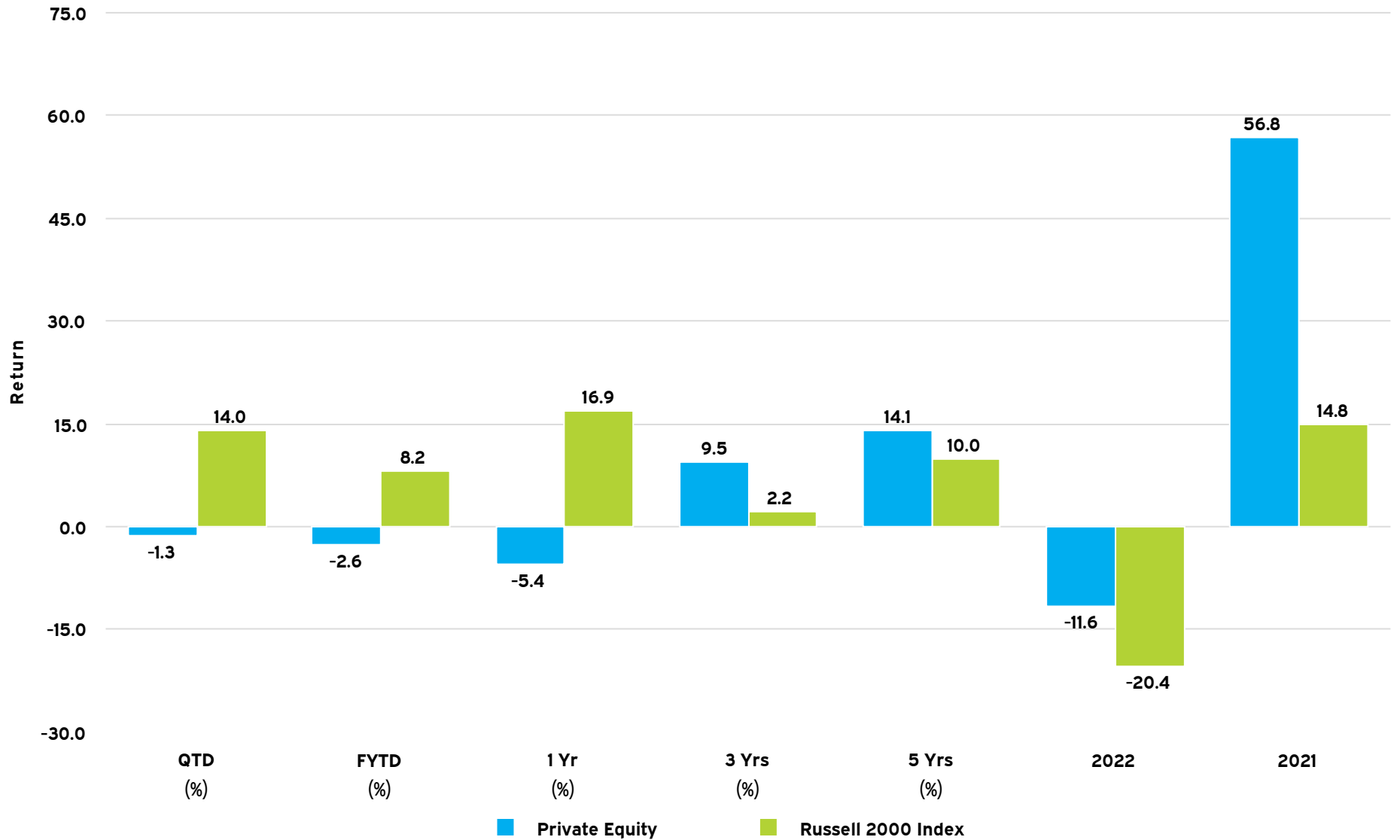
#### Total Fixed Income Composite Return Summary (net of fees)



#### Total Private Debt Return Summary (net of fees)

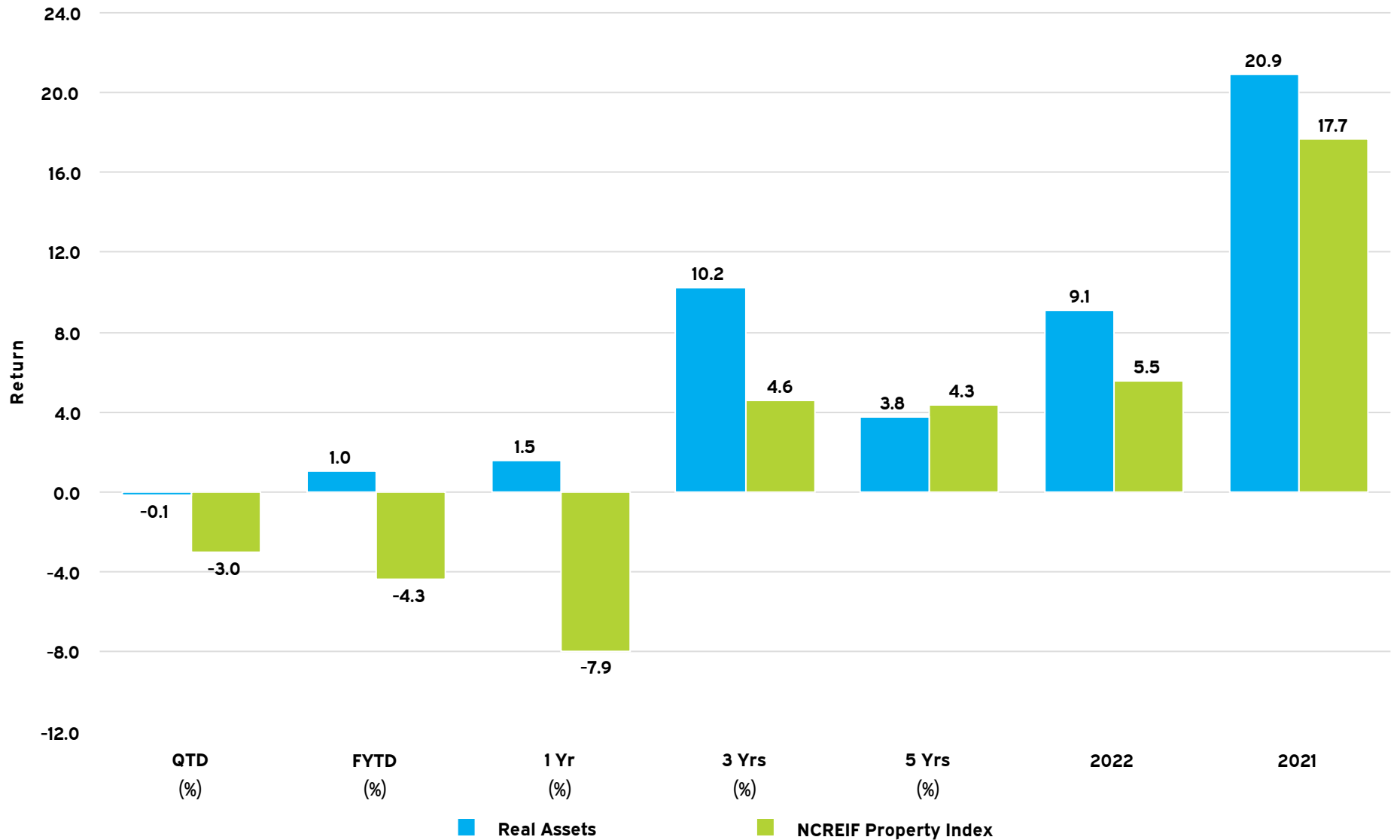


#### Total Private Equity Composite (net of fees)



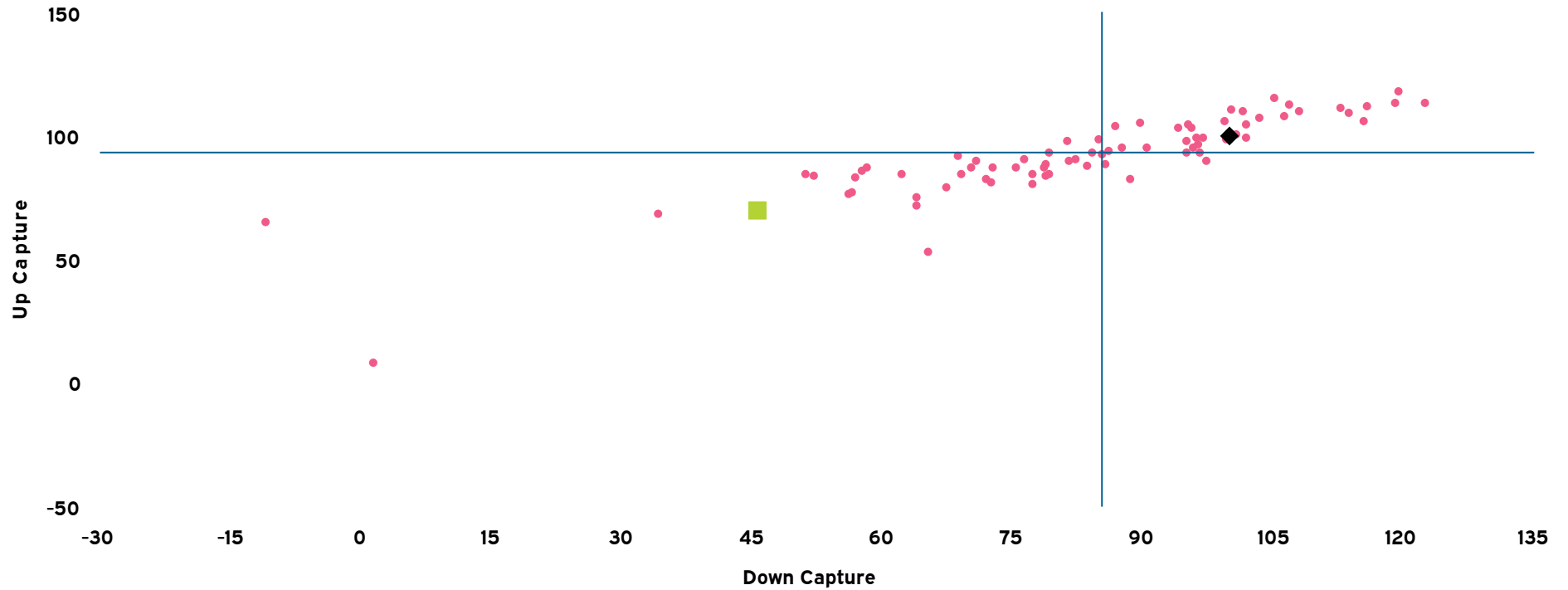


#### Total Real Assets Composite Return Summary (net of fees)



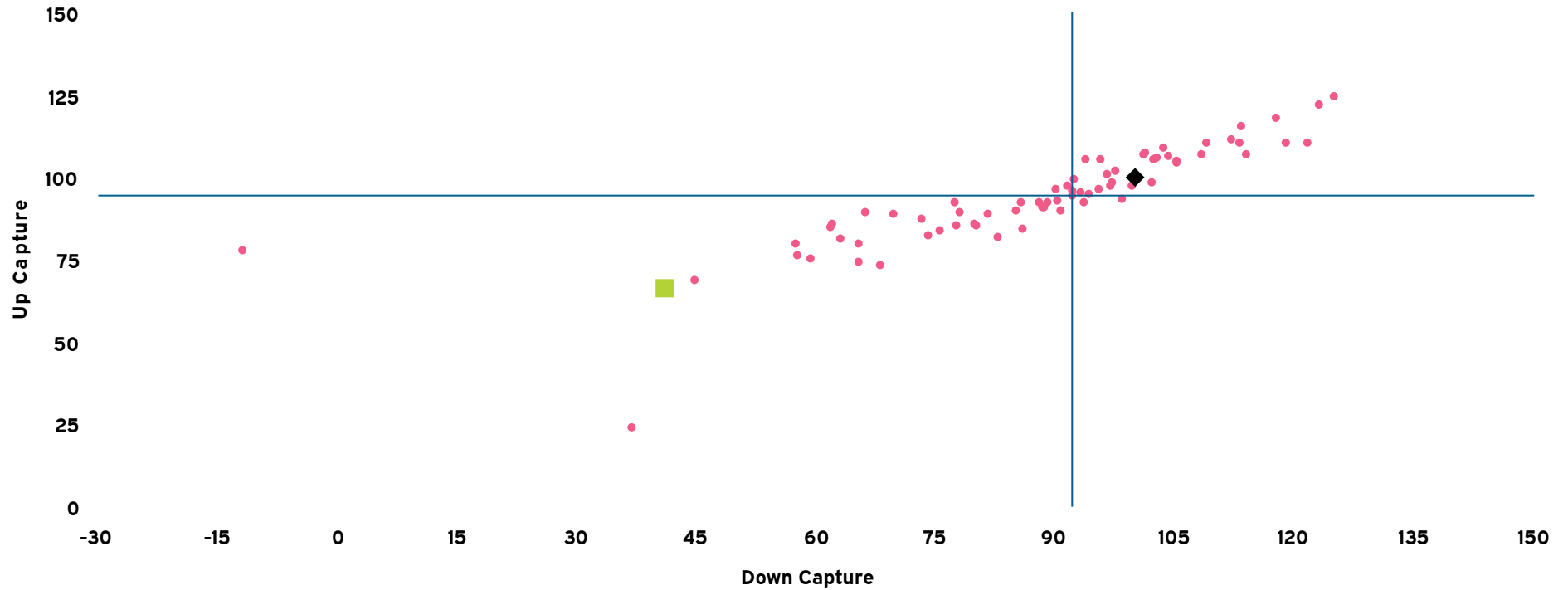
	Risk Return Statistics			
	3 Years		5 Yrs	
	Total Composite	Policy Index	Total Composite	Policy Index
<b>Return Summary Statistics</b>				
Maximum Return	5.8	6.4	5.8	7.8
Minimum Return	-4.3	-6.0	-4.3	-9.7
Return	6.1	3.4	8.7	7.9
Excess Return	4.0	1.8	6.7	6.4
Excess Performance	2.6	0.0	0.8	0.0
<b>Risk Summary Statistics</b>				
Beta	0.5	1.0	0.5	1.0
Up Capture	69.9	100.0	66.3	100.0
Down Capture	45.6	100.0	41.1	100.0
<b>Risk/Return Summary Statistics</b>				
Standard Deviation	6.7	11.0	6.5	11.6
Sortino Ratio	1.0	0.2	1.8	0.8
Alpha	4.2	0.0	4.6	0.0
Sharpe Ratio	0.6	0.2	1.0	0.6
Excess Risk	6.8	10.9	6.7	11.6
Tracking Error	6.5	0.0	6.8	0.0
Information Ratio	0.3	-	0.0	-
<b>Correlation Statistics</b>				
R-Squared	0.7	1.0	0.7	1.0
Actual Correlation	0.8	1.0	0.9	1.0

### Downside Capture vs. Upside Capture 3 Years Ending December 31, 2023



	3 Years Return	3 Years Up Capture	3 Years Down Capture
Total Composite	6.1	69.9	45.6
Policy Index	3.4	100.0	100.0

## Downside Capture vs. Upside Capture 5 Years Ending December 31, 2023



	5 Years Return	5 Years Up Capture	5 Years Down Capture
Total Composite	8.7	66.3	41.1
Policy Index	7.9	100.0	100.0

### Benchmark History

#### June 2023

Russell 2000 Index	20.0%
Russell 3000 Index	17.0%
Blmbg. US Aggregate Index	25.0%
ICEBofa High Yield Master II	17.0%
NCREIF Property Index	9.0%
MSCI AC World ex USA (Net)	12.0%

#### April 2021

Russell 2000 Index	12.0%
Russell 3000 Index	25.0%
Blmbg. US Aggregate Index	20.0%
ICEBofa High Yield Master II	18.0%
NCREIF Property Index	12.0%
MSCI AC World ex USA (Net)	13.0%

#### April 2018

Russell 2000 Index	12.0%
Russell 3000 Index	17.0%
Blmbg. US Aggregate Index	21.0%
ICEBofa High Yield Master II	15.0%
HFRI Equity Hedge (Total) Index	7.0%
NCREIF Property Index	12.0%
MSCI AC World ex USA (Net)	16.0%

#### June 2017

Russell 2000 Index	12.0%
Russell 3000 Index	20.0%
Blmbg. US Aggregate Index	21.0%
ICEBofa High Yield Master II	15.0%
NCREIF Property Index	12.0%
MSCI AC World ex USA (Net)	13.0%

# **Private Market Performance Summary as of September 30, 2023**

**Total Private Market Performance**  
As of September 30, 2023

Asset Class	Committed <sup>1</sup> (\$ MM)	Contributed (\$ MM)	Unfunded (\$ MM)	Distributed (\$ MM)	Remaining Value (\$ MM)	TVPI (X)	Net IRR (%)	PME <sup>2</sup> (%)
Private Equity	1,269.2	1,016.3	264.0	1,155.8	794.9	1.92	14.9%	7.7%
Private Debt <sup>3</sup>	1,792.8	1,501.8	329.9	1,314.2	750.5	1.37	9.7%	5.1%
Real Estate and Real Assets	1,066.1	781.6	288.4	716.9	308.3	1.31	5.8%	8.2%
<b>Total</b>	<b>4,128.1</b>	<b>3,299.7</b>	<b>882.3</b>	<b>3,186.9</b>	<b>1,853.7</b>	<b>1.53</b>	<b>10.2%</b>	

1 Recent commitments appearing on this report for the first time: Crown Europe Small Buyouts VI Master SCSP (\$10mm), Stepstone VC Secondaries Fund VI (\$10mm), OSP Value Fund IV, L.P. (\$30mm), Stonelake Opportunity Fund VII, L.P. (\$20mm)

2 Public Market Equivalent benchmarks are: MSCI ACWI IMI Index for Private Equity, Merrill Lynch High Yield Index for Private Debt, and NCREIF NPI for Real Estate/Real Assets.

3 Note effective May 2023 the Investment Committee voted to reclassify two private debt strategies to traditional fixed income (PIMCO Tactical Opps \$100 mm commitment and PIMCO PIF \$100 mm commitment). The corresponding commitment, contributed, distributed and NAVs are no longer included in the private debt composite.

## Disclaimer



WE HAVE PREPARED THIS REPORT FOR THE SOLE BENEFIT OF THE METROPOLITAN GOVERNMENT OF NASHVILLE AND DAVIDSON COUNTY.

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.