

## Investment Board Meeting Agenda

Friday, March 27, 2026

10:30 a.m. – 2:30 p.m.

IPERS Board Room

Conference Telephone #: 646-931-3860

Meeting ID: 853 2607 7318

- 10:30 a.m. Call to Order**
- 10:35 a.m. Approval of Previous Board Meeting Minutes – December 5, 2025 and January 14, 2026**
- 10:40 a.m. CEO Report**  
Greg Samorajski, IPERS
- 11:00 a.m. Legislative Session Update**  
Megan Schlesky, IPERS
- 11:15 a.m. Calendar Year 2025 Investment Performance Review**  
Thomas Toth and Ali Kazemi, Wilshire
- 11:45 a.m. Closed Session: CEO and CIO Compensation**
- 12:30 p.m. Lunch Break**
- 1:00 p.m. Active Risk Presentation**  
Thomas Toth and Ali Kazemi, Wilshire  
Sriram Lakshminarayanan, IPERS
- 1:45 p.m. IPERS Investment Staff Reports**
- Beta Report – Sriram Lakshminarayanan
  - Alpha Report – Investment Team
  - Private Market Program – Investment Team
  - Risk Report – Sriram Lakshminarayanan
- 2:20 p.m. Public Comments**
- 2:25 p.m. Other Business**
- Confirm Next Meeting Dates – Thursday, June 18, 2026
  - Next BAC Meeting – Monday, March 30, 2026
- 2:30 p.m. Adjourn**



INVESTMENT BOARD AND BENEFITS ADVISORY COMMITTEE MINUTES  
IPERS Headquarters  
7401 Register Drive, Des Moines, Iowa  
December 5, 2025

The following people attended the IPERS Investment Board Meeting held on Friday, December 5, 2025.

**Members of the Board – Present**

Bill Bemis, Chair

Kris Rowley, Vice Chair

Tami Loge

Brent Mathisen

Sara Meinders

Treasurer Roby Smith

Matt Watters

Representative Michael Bergan

Senator Mark Lofgren

Senator Molly Donahue

**Members of the Board – Absent**

Representative Elizabeth Wilson

**Administration and Staff**

Greg Samorajski, Chief Executive Officer

Sriram Lakshminarayanan, CIO

John Fujiwara, Head of Strategy

Marcus Dong, Senior Investment Officer

Sheldon Lien, Senior Investment Officer

Craig Payne, Senior Investment Officer

Pat Reinhardt, Senior Investment Officer

Keith Scholten, Senior Investment Officer

Kate Fishman, Investment Officer

Ankit Saw, Investment Officer

Melinda McElroy, Executive Assistant

Elizabeth Hennessey, General Counsel

Shawna Lode, Chief Strategy Officer

Steve Herbert, Chief Benefits Officer

Amanda Schwarz, CFAO

Megan Schlesky, Legislative Liaison

**Consultant – Wilshire**

Ali Kazemi

Thomas Toth

**Actuary – Cavanaugh Macdonald**

Patrice Beckham

Brent Banister

Bryan Hoge

## **Call to Order**

Chairperson Bill Bemis called the IPERS Investment Board meeting to order at 10:30 a.m.

## **Approval of Minutes from the Previous Meetings**

Tami Loge moved to approve the meeting minutes from the Investment Board's September 24, 2025, and September 25, 2025, meetings. Brent Mathisen seconded. The motion carried by unanimous voice vote.

## **CEO's Report**

Greg Samorajski announced Rick Hindman's upcoming retirement in January. Rick serves as IPERS' Deputy Chief Executive Officer. Staff who previously reported to Rick will now report to Greg.

## **2025 Actuarial Valuation Report**

Cavanaugh Macdonald presented the results of the 2025 actuarial valuation. IPERS' funded status improved from 90.75% to 92.17%, and the unfunded actuarial liability declined from \$4.38 billion to \$3.84 billion. The valuation establishes the required contribution rates for FY2027. Rates for Regular and Protection Occupation members remain the same, while contribution rates for Sheriffs and Deputy Sheriffs increased 0.24%.

## **Annual Asset Allocation Review**

Discussion on asset allocation continued from the September Investment Board meeting, focusing on whether to reallocate the 5% Global Smart Beta position. Wilshire and staff completed further analysis showing that, despite different assumptions, the portfolio structures changed very little in the three portfolio options reviewed. Cavanaugh Macdonald presented actuarial results indicating that the funded-ratio and contribution rate projections were nearly identical across all options. Brent Mathisen moved that the Investment Board adopt Portfolio C, which removes the 5% Global Smart Beta allocation and reallocates 2% to core fixed income and 3% to public credit. Kris Rowley seconded, and the motion carried by unanimous roll call vote.

**Ayes:** Bill Bemis, Kris Rowley, Tami Loge, Brent Mathisen, Sara Meinders, Treasurer Roby Smith and Matt Watters

**Nays:** None

**Absent:** None

**MOTION PASSED**

## **Active Risk Budget Review**

Greg Samorajski expressed concerns about IPERS' low level of active risk, noting that although the Board established a tracking-error target of 150 basis points, with an upper limit of 300 basis points, the Fund is currently at 23 basis points. He pointed out that the gap creates uncertainty about whether staff are meeting the Board's expectations or if the target may be outdated. To address this, he suggested a multi-meeting review process to evaluate and potentially revise the active-risk policy.

### Absolute Return Search Manager Hiring Recommendations

John Fujiwara and Sheldon Lien reported that RFP I-2025-1 to identify absolute return investment products suitable for a portable alpha strategy was issued on February 21, 2025. IPERS received 125 responses. The evaluation committee recommended that the Investment Board approve hiring the following three investment firms/strategies, subject to final due diligence and successful contract negotiations:

Firm Name	Strategy Name
Florin Court Capital	Florin Court Capital Programme
Capital Fund Management SA	CFM ISTECH Program
AHL Partners LLP	AHL Cat Bond Program

Matt Watters moved to approve the proposed hiring recommendations. Brent Mathisen seconded. The motion carried by roll call vote.

**Ayes:** Bill Bemis, Kris Rowley, Tami Loge, Brent Mathisen, Sara Meinders, Treasurer Roby Smith and Matt Watters

**Nays:** None

**Absent:** None

**MOTION PASSED**

### CY2024 CEM Investment Benchmarking Review

Christopher Doll of CEM Benchmarking reviewed IPERS' investment benchmarking results for the 5-year period ending December 31, 2024. IPERS once again ranked as a low-cost fund based on CEM's analysis for the calendar year. IPERS' 5-year net value added was 0.8%. This was equal to the U.S. Public median and above the peer median of 0.7%.

### CY2026 Private Markets Commitments

Pat Reinhardt, Marcus Dong and Craig Payne reviewed the private markets program commitment plan for calendar year 2026, noting estimated maximum commitments plan of \$750 million to private real assets, \$700 million to private equity and \$575 million to private credit.

### Real Estate Equity Search Manager Hiring Recommendations

Pat Reinhart, Marcus Dong and Craig Payne reported that the RFP was issued on March 7, 2025, to identify core and/or core-plus real estate equity products. IPERS received 44 responses. The evaluation committee recommended that the Investment Board approve hiring the following two firms, subject to final due diligence and successful contract negotiations:

Firm Name	Strategy Name
BentallGreenOak (BGO)	U.S. Core Plus
CBRE Group, Inc.	U.S. Core

Tami Loge moved to approve the proposed hiring recommendations. Brent Mathisen seconded. The motion carried by roll call vote.

**Ayes:** Bill Bemis, Kris Rowley, Tami Loge, Brent Mathisen, Sara Meinders, Treasurer Roby Smith and Matt Watters

**Nays:** None

**Absent:** None

**MOTION PASSED**

## **IPERS Investment Staff Reports**

### *Beta Report*

Sriram Lakshminarayanan reviewed the Fund's asset allocation and reported all asset classes were within their established policy ranges. The estimated market value of the IPERS Trust Fund is \$48.42 billion.

### *Alpha Report*

The investment staff reviewed the alpha report and noted minor concerns with fixed-income managers Man and Mesirov, as well as the LARS manager Welton Global.

### *Private Markets Program Risk Report*

The investment staff reviewed the private markets report, noting minor concerns with several managers and material concerns with real assets manager Heitman CREDIT.

### *Risk Report*

Sriram Lakshminarayanan reviewed IPERS' standard risk reports.

### *FY2025 Investment Management Expenses*

Keith Scholten reported IPERS' FY2025 preliminary investment management expenses were \$62.08 million, 0.137% of the IPERS Trust Fund's average market value. Investment management expenses decreased 33.1% from FY2024.

## **Public Comments**

The Board heard public comments from Pat Deluhery and Mike Finley.

## **Confirm Next Meeting Date and Adjournment**

The Investment Board's next meeting is Friday, March 27, 2026. With no further business to address, the Board adjourned the meeting at 3:25 p.m.



**INVESTMENT BOARD MEETING MINUTES**  
Virtual Video Meeting  
January 14, 2026

The following people participated in the virtual IPERS Investment Board meeting held on Wednesday, January 14, 2026

**Members of the Board – Present**

Bill Bemis, Chair  
Kris Rowley, Vice Chair  
Tami Loge  
Brent Mathisen  
Sara Meinders

Treasurer Roby Smith  
Matt Watters  
Representative Michael Bergan  
Senator Mark Lofgren  
Senator Molly Donahue

**IPERS Administration and Staff**

Greg Samorajski, CEO  
Sriram Lakshminarayanan, CIO  
Elizabeth Hennessey, General Counsel  
Melinda McElroy, Executive Assistant

**External Legal Counsel**

Jeffrey Peterzalek, Iowa Attorney General's Office  
Steven Blankinship, Iowa Attorney General's Office  
Cynthia Lande, BrownWinick

## **Proceedings**

Bill Bemis, chair, called the meeting to order at 2:00 p.m.

### **Closed Session - Litigation Review**

Kris Rowley moved that the IPERS Investment Board go into a closed session of this public meeting to discuss litigation with attorneys from the Iowa Attorney General's Office and the BrownWinick Law Firm as authorized by Iowa Code §21.5(1)(c). Matt Watters seconded. The motion carried by unanimous roll call vote.

**Ayes:** Bill Bemis, Kris Rowley, Tami Loge, Brent Mathisen, Sara Meinders, Treasurer Roby Smith and Matt Watters

**Nays:** None

#### **MOTION PASSED**

Kris Rowley moved that the IPERS Investment Board end its closed session and resume the open session of the meeting. No action was taken by the Board in closed session. Sara Meinders seconded. The motion carried by a unanimous roll call vote.

**Ayes:** Bill Bemis, Kris Rowley, Tami Loge, Brent Mathisen, Sara Meinders, Treasurer Roby Smith and Matt Watters

**Nays:** None

#### **MOTION PASSED**

## **Adjourn**

With no additional business to come before the Investment Board, Kris Rowley moved to adjourn the meeting. Bill Bemis seconded. The motion was approved by unanimous voice vote. Meeting adjourned at 2:30 p.m.

**Wilshire**

# Iowa Public Employees' Retirement System

Calendar Year 2025 Investment Summary

December 2025

# Quarterly Market Review

December 31, 2025

## Market Commentary

### U.S. Equity

The U.S. stock market was up 2.3% for the fourth quarter and 17.1% for the past twelve months. Sector performance was mostly positive for the quarter, with eight of eleven sectors producing a gain. The two best performing sectors were health care (+11.8%) and communication services (+6.1%). From a size perspective, small caps underperformed large by 80 basis points. Growth stocks outperformed value by a modest amount, in aggregate.

As 2025 comes to an end, the U.S. economy continues to report positive gains. The real GDP measures 2.5% (annualized) through September and expectations are for continued growth. However, signs of concern are present in some data. While the unemployment rate remains low, nonfarm payrolls are only up 600,000 through November, well below longer trends. Two closely watched measures of consumer sentiment – from the University of Michigan and Conference Board thinktank – have fallen this year and are close to their ten-year lows as of December. While sentiment and spending do not always move in unison, U.S. consumers have an outsized importance on economic growth, representing approximately 70% of GDP. As such, all eyes will be focused on any indicator of a household's ability to spend entering the new year.

### Non-U.S. Equity

Economic growth in the United Kingdom weakened during the second half of 2025 as most businesses and consumers awaited the central government's latest budget. Announced in November – and despite tax-raising measures – early PMI indicators suggest businesses are comfortable with the results. China's economy is proving to be resilient, despite continued weakness in property prices that are hampering many in the middle class. An effective "trade truce" was announced by U.S. and Chinese leaders following an October meeting.

### Fixed Income

The U.S. Treasury yield curve rotated during the quarter with the 10-year Treasury yield up two basis points to 4.17% while the short-to-intermediate end fell. Credit spreads were little changed as high-yield bond spreads were up in October but fell again by year-end. The FOMC met twice during the quarter and dropped the overnight rate by a total of 50 basis points, targeting a range of 3.50% to 3.75%. The Fed's "dot plot" is messaging that the current expectation is for a decrease in rates of only 0.25% in 2026.

# December 2025 Asset Class Assumptions

	Equity						Fixed Income						Real Assets						
	U.S. Stock	Dev ex-U.S. Stock	Emg Stock	Global ex-U.S. Stock	Global Stock	Private Equity	Cash	Core Bond	LT Core Bond	TIPS	High Yield	Private Credit	Dev ex-U.S. Bond (Hdg)	U.S. RES	Global RES	Private RE	Cmdty	Real Assets	U.S. CPI
<b>Compound Return (%)</b>	4.45	5.45	5.70	5.80	5.05	6.30	3.25	4.90	5.15	4.45	6.05	7.45	3.25	5.80	5.95	6.55	4.80	6.90	2.30
<b>Arithmetic Return (%)</b>	5.80	6.95	8.70	7.45	6.40	10.10	3.25	5.05	5.65	4.60	6.50	8.20	3.35	7.20	7.20	7.45	6.00	7.60	2.30
<b>Risk (%)</b>	17.00	18.00	26.00	19.15	17.05	29.65	0.75	4.75	9.95	6.00	10.00	12.75	4.00	17.50	16.55	13.95	16.00	12.20	1.75
<b>Yield (%)</b>	1.20	2.70	2.05	2.50	1.65	0.00	3.25	5.75	5.85	5.15	9.70	4.70	4.40	4.05	4.05	2.95	3.25	3.75	0.00
<b>Growth Factor Exposure</b>	8.00	8.00	8.00	8.00	8.00	14.00	0.00	-1.00	-2.75	-3.00	4.00	5.10	-1.00	6.00	6.00	3.70	0.00	2.90	0.00
<b>Inflation Factor Exposure</b>	-3.00	-1.00	3.00	0.20	-1.85	-4.25	0.00	-2.65	-7.10	2.50	-1.00	-1.50	-3.00	1.00	1.65	1.00	12.00	5.25	1.00

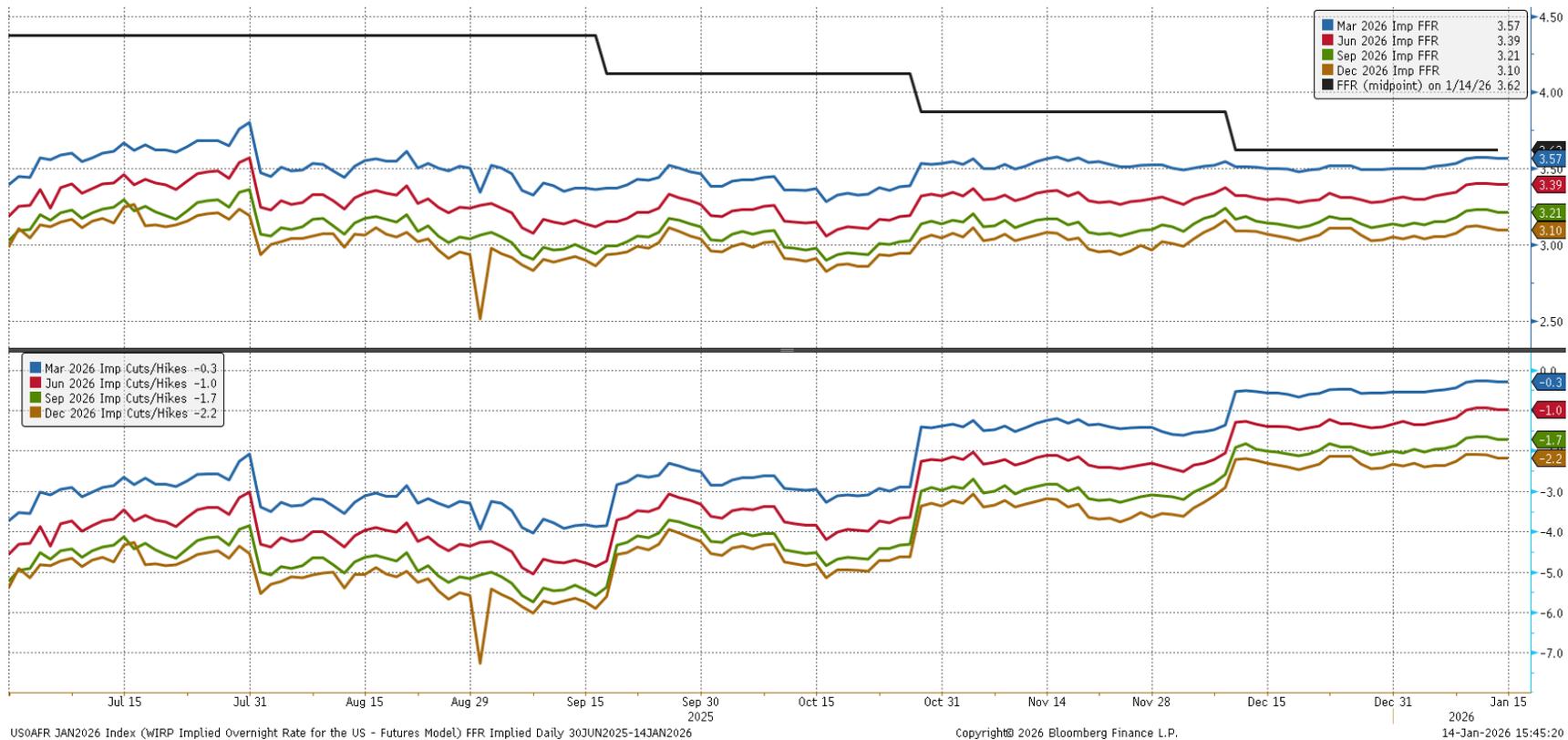
## Correlations

<b>U.S. Stock</b>	1.00																			
<b>Dev ex-U.S. Stock (USD)</b>	0.81	1.00																		
<b>Emerging Mkt Stock</b>	0.74	0.74	1.00																	
<b>Global ex-U.S. Stock</b>	0.84	0.96	0.90	1.00																
<b>Global Stock</b>	0.98	0.90	0.83	0.94	1.00															
<b>Private Equity</b>	0.72	0.63	0.61	0.66	0.73	1.00														
<b>Cash Equivalents</b>	-0.05	-0.09	-0.05	-0.08	-0.06	0.00	1.00													
<b>Core Bond</b>	0.27	0.12	-0.01	0.08	0.20	0.29	0.18	1.00												
<b>LT Core Bond</b>	0.29	0.15	0.00	0.10	0.23	0.30	0.11	0.95	1.00											
<b>TIPS</b>	-0.05	0.00	0.15	0.06	-0.01	-0.03	0.20	0.59	0.47	1.00										
<b>High Yield Bond</b>	0.54	0.39	0.49	0.46	0.53	0.31	-0.10	0.24	0.31	0.05	1.00									
<b>Private Credit</b>	0.68	0.55	0.58	0.60	0.68	0.44	0.00	0.23	0.29	0.00	0.76	1.00								
<b>Dev ex-U.S. Bond (Hdg)</b>	0.16	0.25	-0.01	0.16	0.17	0.26	0.10	0.68	0.66	0.39	0.26	0.22	1.00							
<b>U.S. RE Securities</b>	0.57	0.47	0.44	0.49	0.56	0.49	-0.05	0.16	0.21	0.10	0.56	0.62	0.05	1.00						
<b>Global RE Securities</b>	0.62	0.55	0.52	0.58	0.63	0.54	-0.05	0.16	0.21	0.11	0.61	0.67	0.04	0.99	1.00					
<b>Private Real Estate</b>	0.55	0.45	0.45	0.49	0.54	0.50	-0.05	0.18	0.24	0.09	0.58	0.63	0.05	0.79	0.79	1.00				
<b>Commodities</b>	0.25	0.34	0.39	0.38	0.31	0.28	0.00	-0.03	-0.04	0.25	0.29	0.29	-0.10	0.25	0.28	0.25	1.00			
<b>Real Assets</b>	0.62	0.62	0.64	0.67	0.66	0.57	-0.03	0.24	0.25	0.32	0.64	0.69	0.06	0.79	0.84	0.78	0.64	1.00		
<b>Inflation (CPI)</b>	-0.10	-0.15	-0.13	-0.15	-0.13	-0.10	0.10	-0.12	-0.12	0.15	-0.08	0.00	-0.08	0.05	0.04	0.05	0.44	0.21	1.00	

## U.S. Objectives (and Their Related Risks)

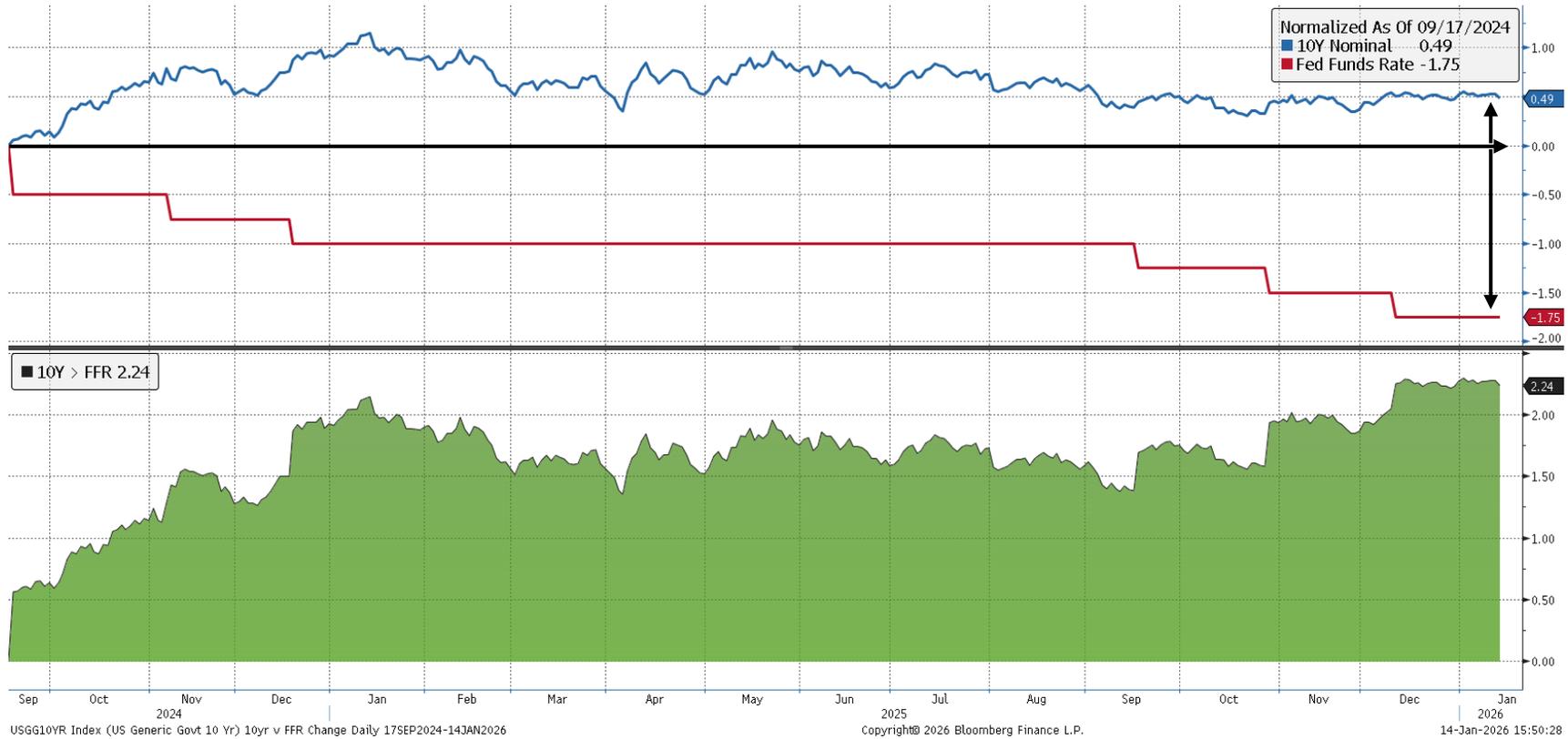
- **U.S. Strategic Objectives (largely tied to geopolitical positioning vs China)**
  - AI Dominance: Win the AI arms race
    - Requires massive investment in compute, energy & rare earth minerals
  - Rebuild Industrial Base: Onshore U.S. manufacturing and reduce external dependencies/vulnerabilities
    - Requires massive investment (internal & FDI)
  - Financial Stability: Address unsustainability of current deficit/debt path
    - Reduce annual % deficits (sustained real growth > rate of expenditure increases)
- **Risks & Tradeoffs (to achieving those objectives)**
  - Rising Interest Rates: Impact on net interest payments makes deficit & debt management challenging
  - Market Drawdown: Government revenues (i.e., tax receipts) are heavily impacted by capital market performance
  - Inflation: Rebuild of U.S. manufacturing (and AI spend) is inflationary (with longer-term offsets from AI efficiency gains)

# Implied Fed Funds Rate (and expected easing)



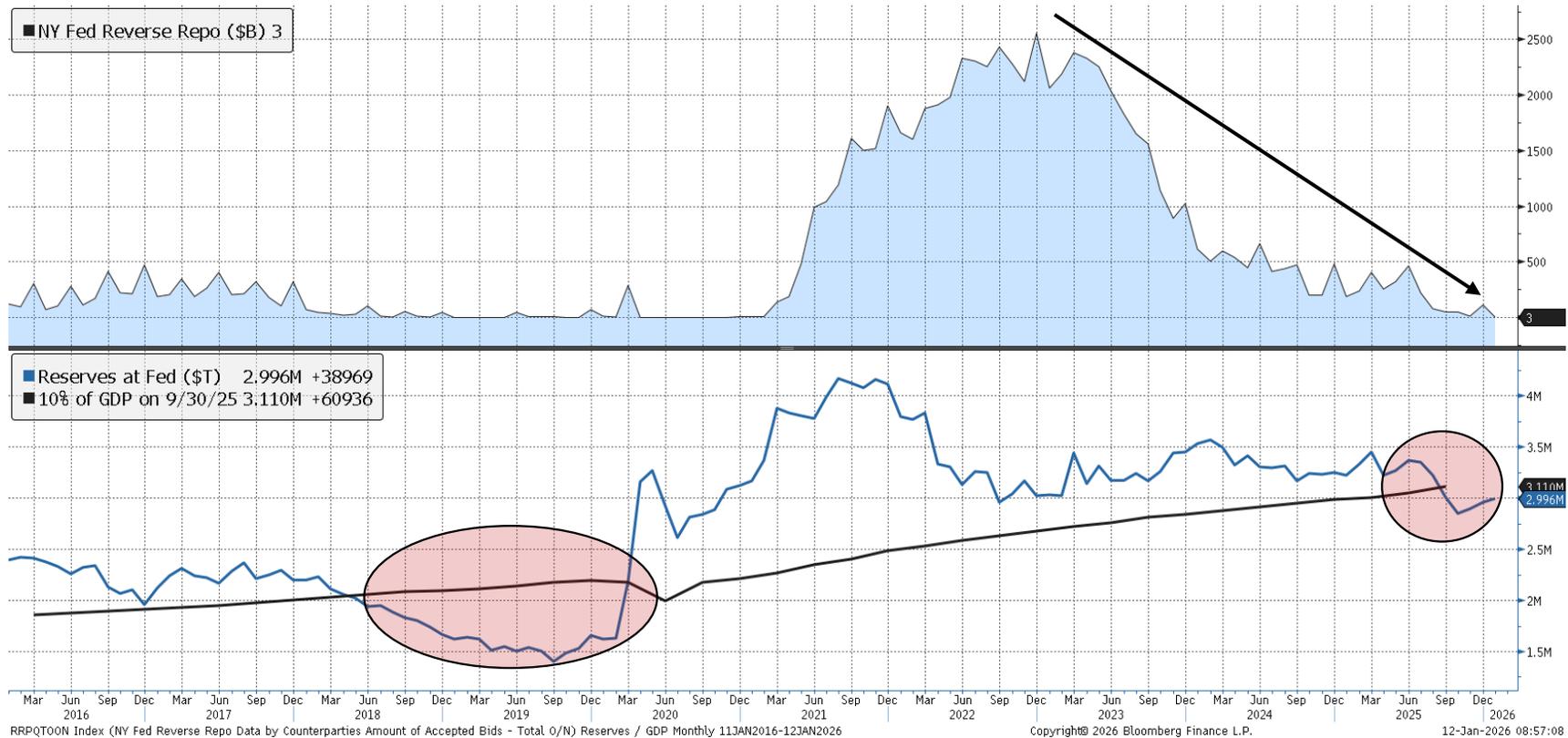
Data Source: Bloomberg

# Fed Cuts Don't Necessarily Lead to Lower Long Rates



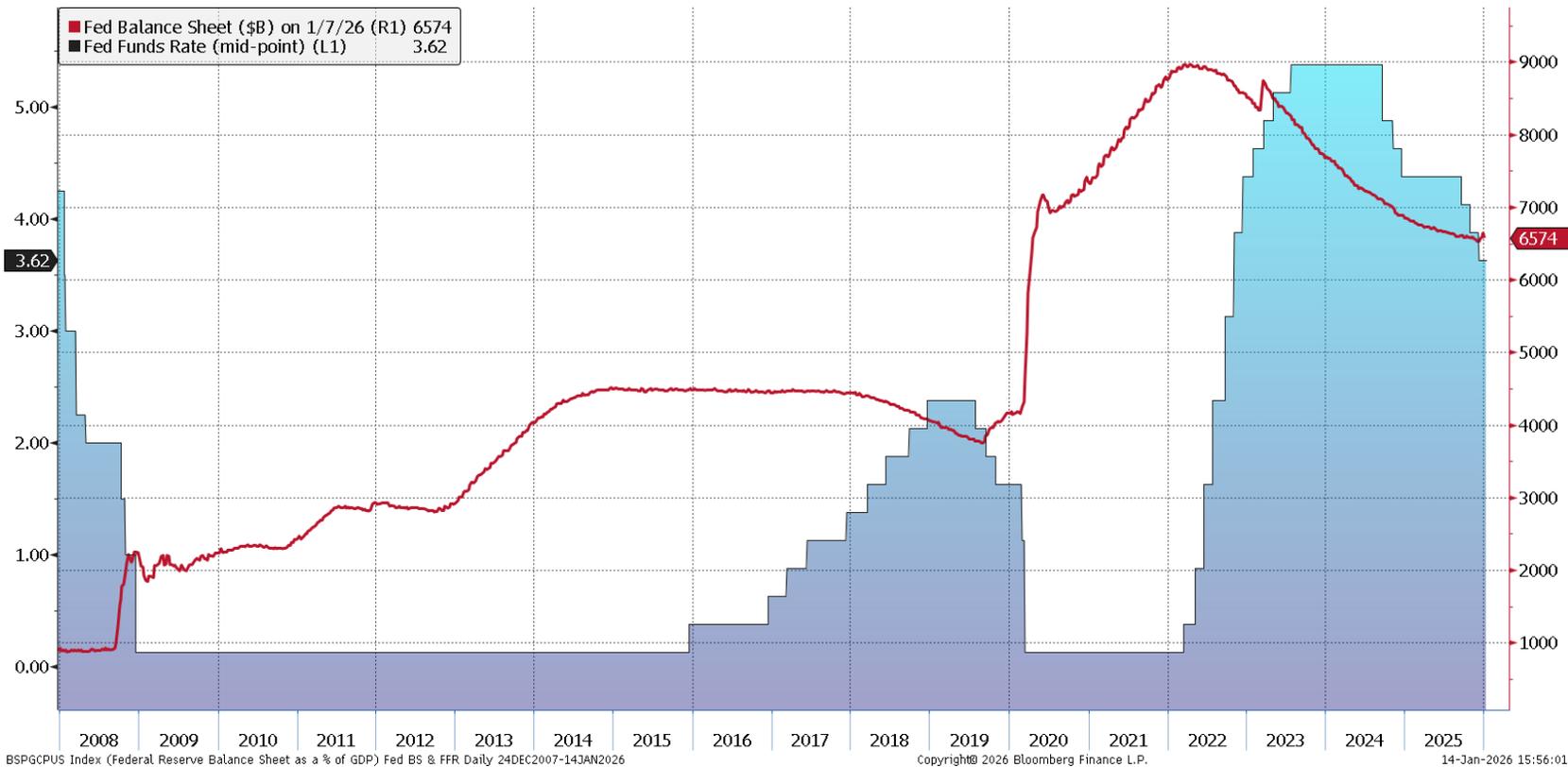
Data Source: Bloomberg

# Liquidity Conditions: Reserve Management Purchases (RMP)



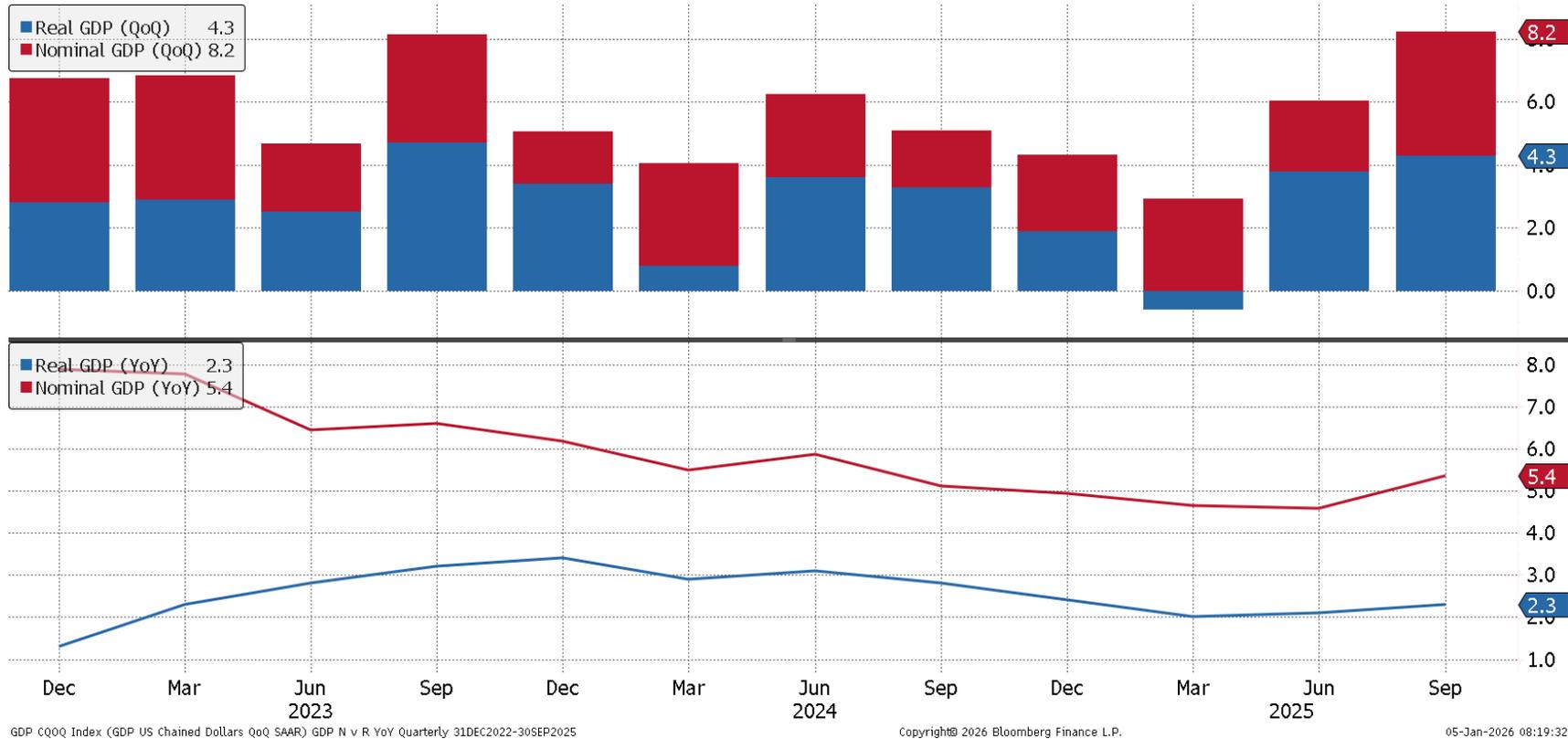
Data Source: Bloomberg

# Liquidity Conditions: Fed Balance Sheet



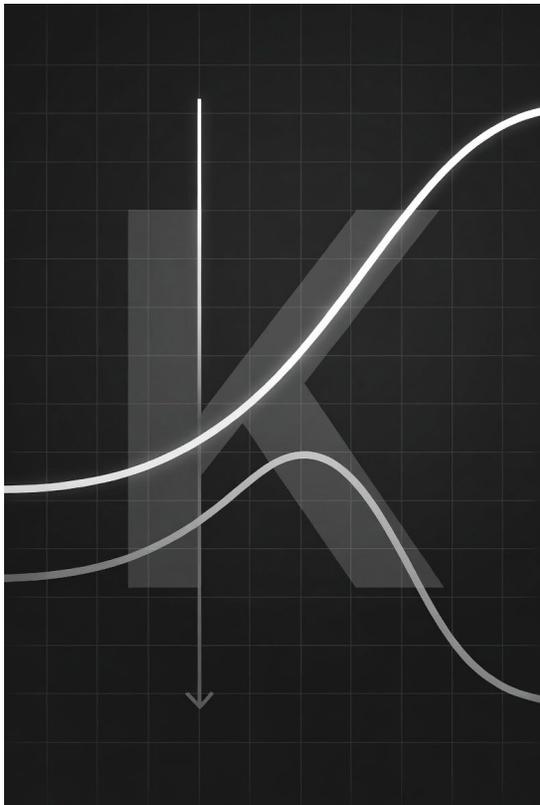
Data Source: Bloomberg

# A Glimpse of How “Running it Hot” Might Look



Data Source: Bloomberg

## K-Shaped Economy: A Tale of Two Economies



### K-Up: The “Haves”

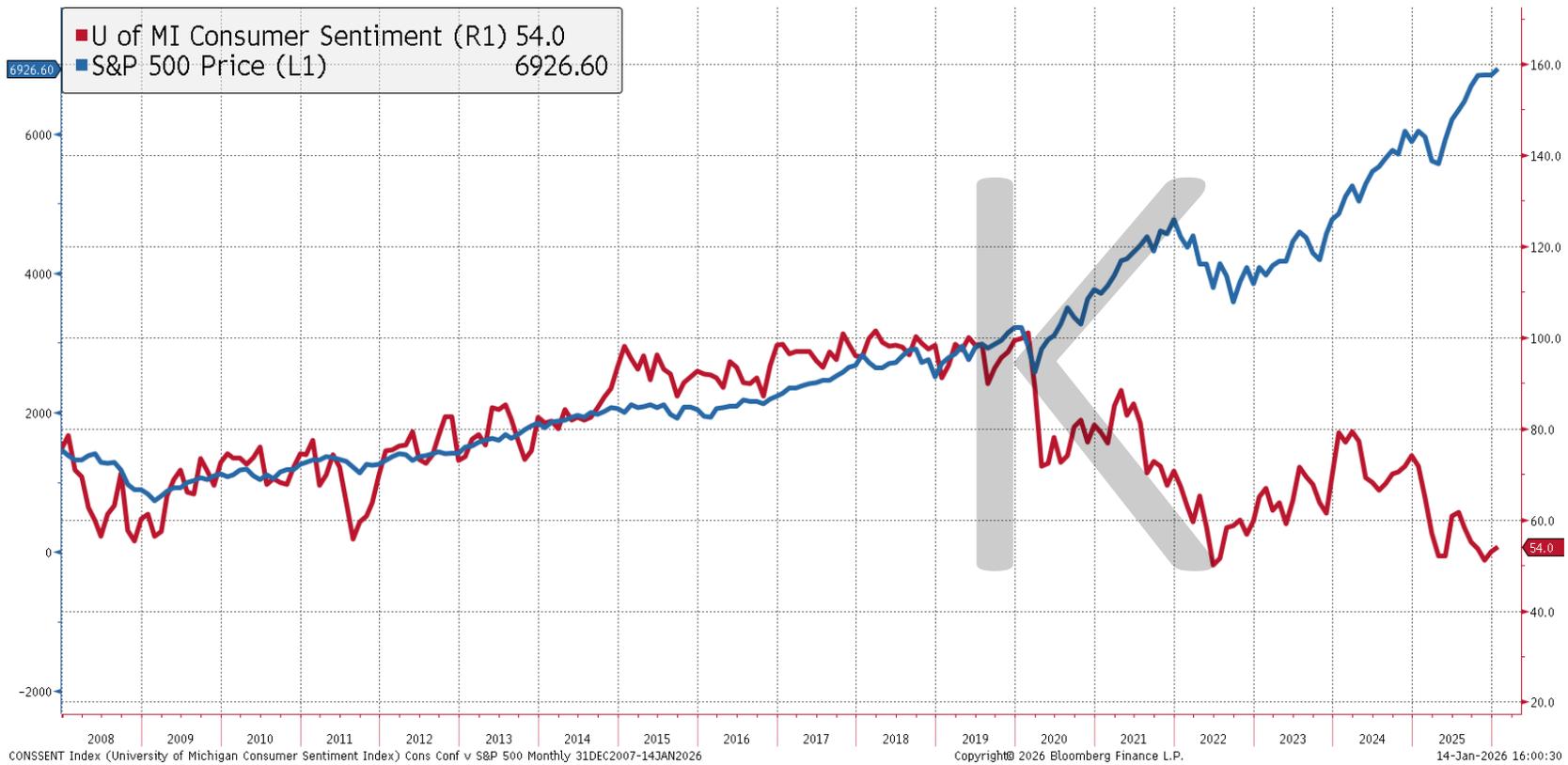
- Who: Own assets/homes, white-collar jobs (i.e., Tech/Finance)
- Situation: Protected/Benefit from inflation. Vulnerable to AI efficiency.
- Impact: Drive aggregate economic output (i.e., concentrated / cap-weighted)

### K-Down: The “Have Nots”

- Who: Don’t hold meaningful assets, blue-collar jobs, carry relatively large debt burdens
- Situation: Have suffered from globalization/outsourcing, struggle to keep pace with inflation
- Impact: Muted impact on aggregate economic output but large in # so drive overall confidence stats (i.e., equal-weighted measures)

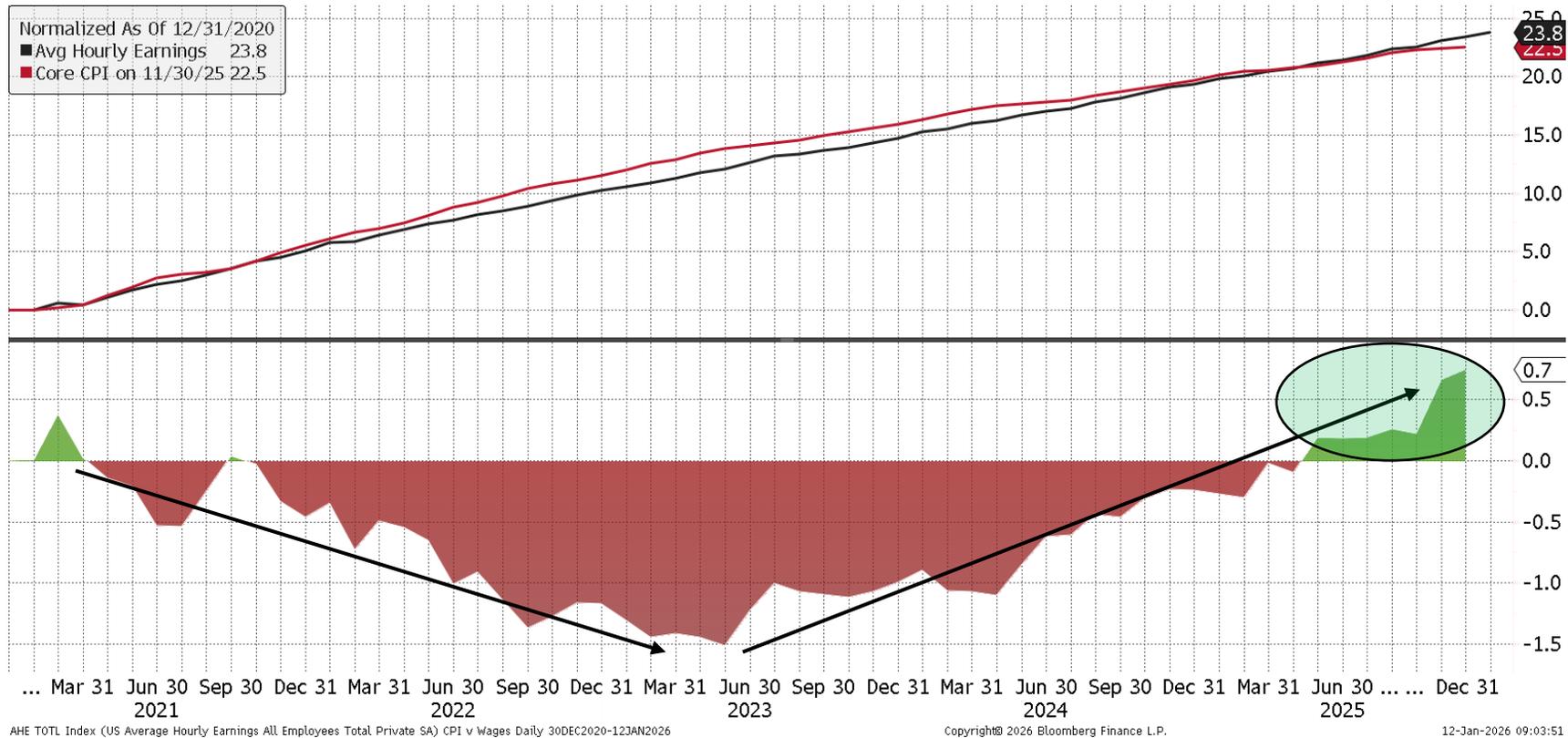
Image Source: Grok

# S&P 500 v Consumer Sentiment



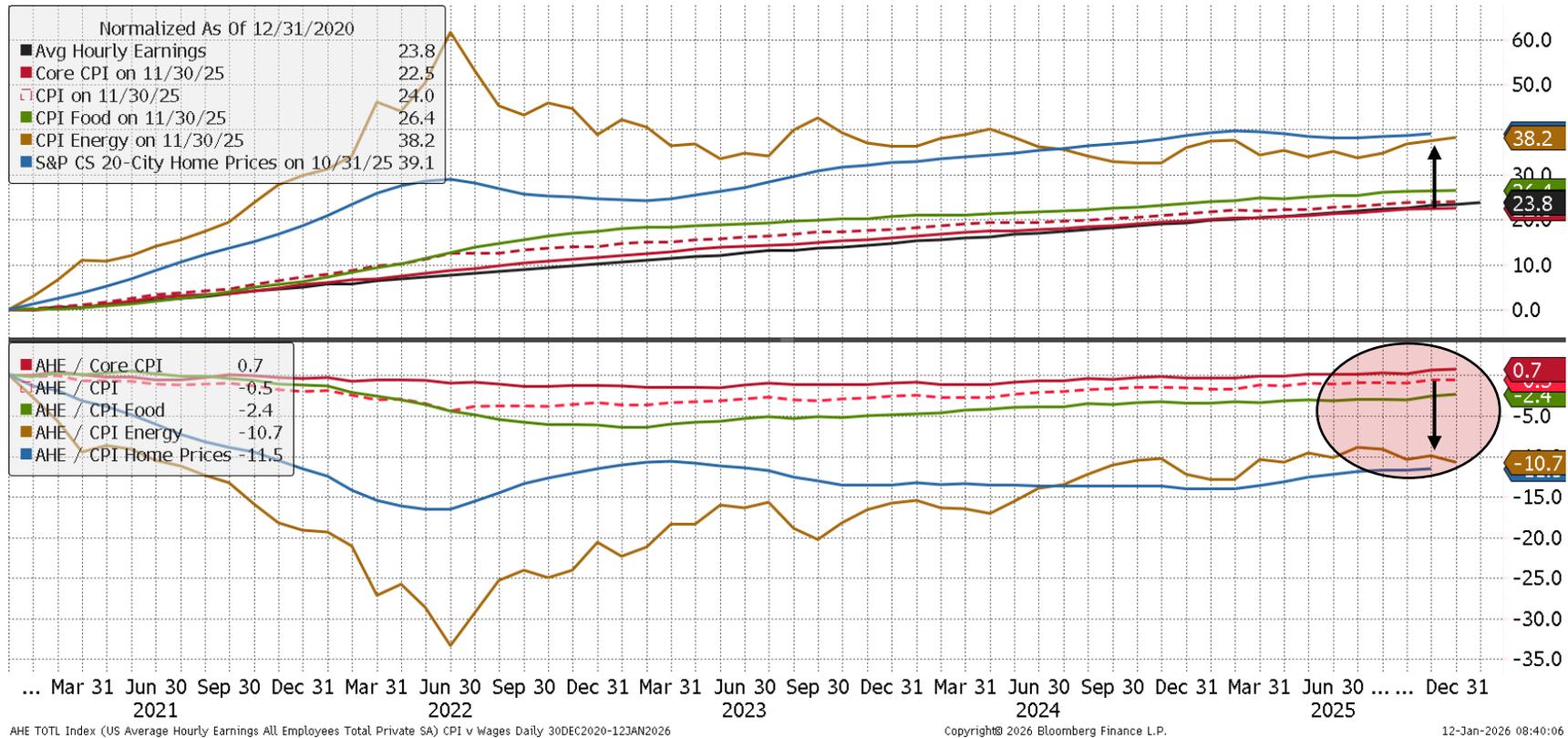
Data Source: Bloomberg

# “Affordability” Driving K-Down’s Sentiment... But this Doesn’t Look So Bad



Data Source: Bloomberg

# “Affordability” Driving K-Down’s Sentiment... This Looks Much Worse



Data Source: Bloomberg

# Asset Class Performance

## Asset Class Returns - Best to Worst

2020	2021	2022	2023	2024	2025 YTD	Annualized 5-Year as of 12/25
U.S. Equity 20.8%	REITs 46.2%	Commodities 16.1%	U.S. Equity 26.1%	U.S. Equity 23.8%	Emrg Mrkts 34.4%	U.S. Equity 13.4%
Emrg Mrkts 18.7%	Commodities 27.1%	T-Bills 1.3%	Developed 18.9%	REITs 9.1%	Developed 31.9%	Commodities 10.6%
U.S. TIPS 11.0%	U.S. Equity 26.7%	High Yield -11.2%	REITs 16.1%	High Yield 8.2%	U.S. Equity 17.1%	Developed 9.5%
Developed 8.3%	Developed 11.8%	U.S. TIPS -11.8%	High Yield 13.4%	Emrg Mrkts 8.1%	Commodities 15.8%	REITs 6.9%
Core Bond 7.5%	U.S. TIPS 6.0%	Core Bond -13.0%	Emrg Mrkts 10.3%	Commodities 5.4%	High Yield 8.6%	Emrg Mrkts 4.7%
High Yield 7.1%	High Yield 5.3%	Developed -14.0%	Core Bond 5.5%	T-Bills 5.3%	Core Bond 7.3%	High Yield 4.5%
T-Bills 0.7%	T-Bills 0.0%	U.S. Equity -19.0%	T-Bills 5.1%	Developed 4.3%	U.S. TIPS 7.0%	T-Bills 3.2%
Commodities -3.1%	Core Bond -1.5%	Emrg Mrkts -19.7%	U.S. TIPS 3.9%	U.S. TIPS 1.8%	T-Bills 4.3%	U.S. TIPS 1.1%
REITs -7.9%	Emrg Mrkts -2.2%	REITs -26.8%	Commodities -1.3%	Core Bond 1.3%	REITs 2.7%	Core Bond -0.4%

Data Sources: Bloomberg

Note: Developed asset class is developed equity markets ex-U.S., ex-Canada

# Total Fund

## Executive Summary (as of 12/31/2025)

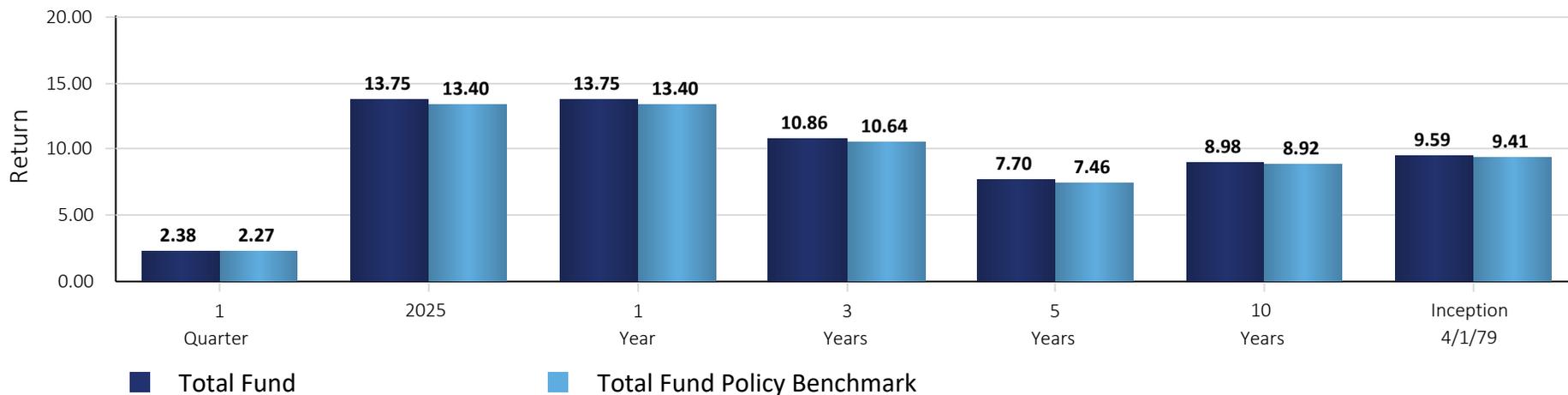
- Total Fund returned 13.75% during CY 2025, outperforming the Total Fund Policy Benchmark<sup>1</sup> (“policy”) return of 13.40% over the same period.
- Manager performance across public markets was strong for the year with positive double-digit returns and relative against their benchmarks. U.S. Equity, International Equity, Core Fixed Income, and Public Credit led their policies, while Global Smart Beta slightly trailed their respective index.
- 10-year annualized returns were 9.0% for Total Fund, slightly outpacing the policy return.
- IPERS ranks favorably versus peers across most time horizons. Total Fund return has ranked in or near the top quartile against all public plans with greater than \$1 billion in assets over 5-, and 10-years.
- IPERS’ 5-year risk-adjusted returns remain top-third relative to all public plans greater than \$1 billion in Total Fund assets—outpacing almost 68% of peers.

# Total Fund Summary

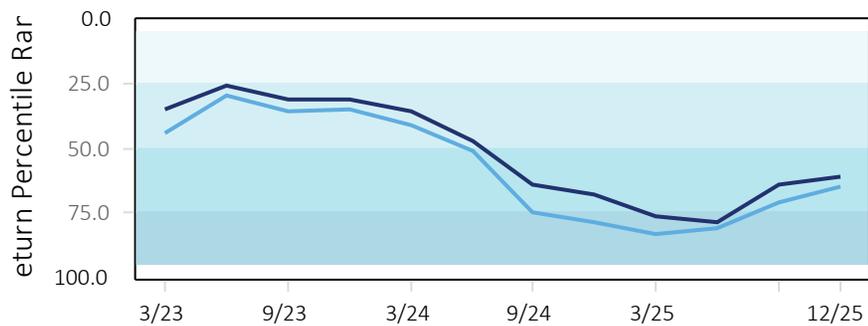
Total Fund

Periods Ended December 31, 2025

## Comparative Performance

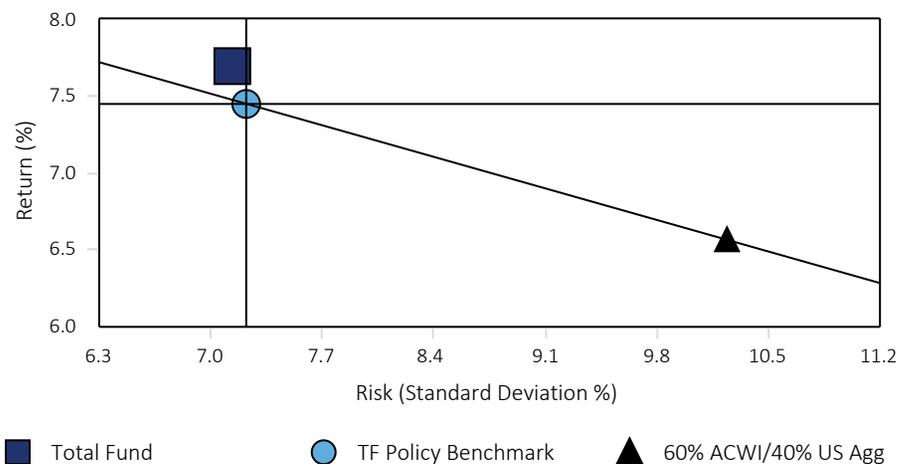


## Rolling Percentile Rank: All Public Plans >\$1B-Total Fund



	Total Period	5-25 Count	25-Median Count	Median-75 Count	75-95 Count
— Total Fund	12	0 (0%)	6 (50%)	4 (33%)	2 (17%)
— Benchmark	12	0 (0%)	5 (42%)	4 (33%)	3 (25%)

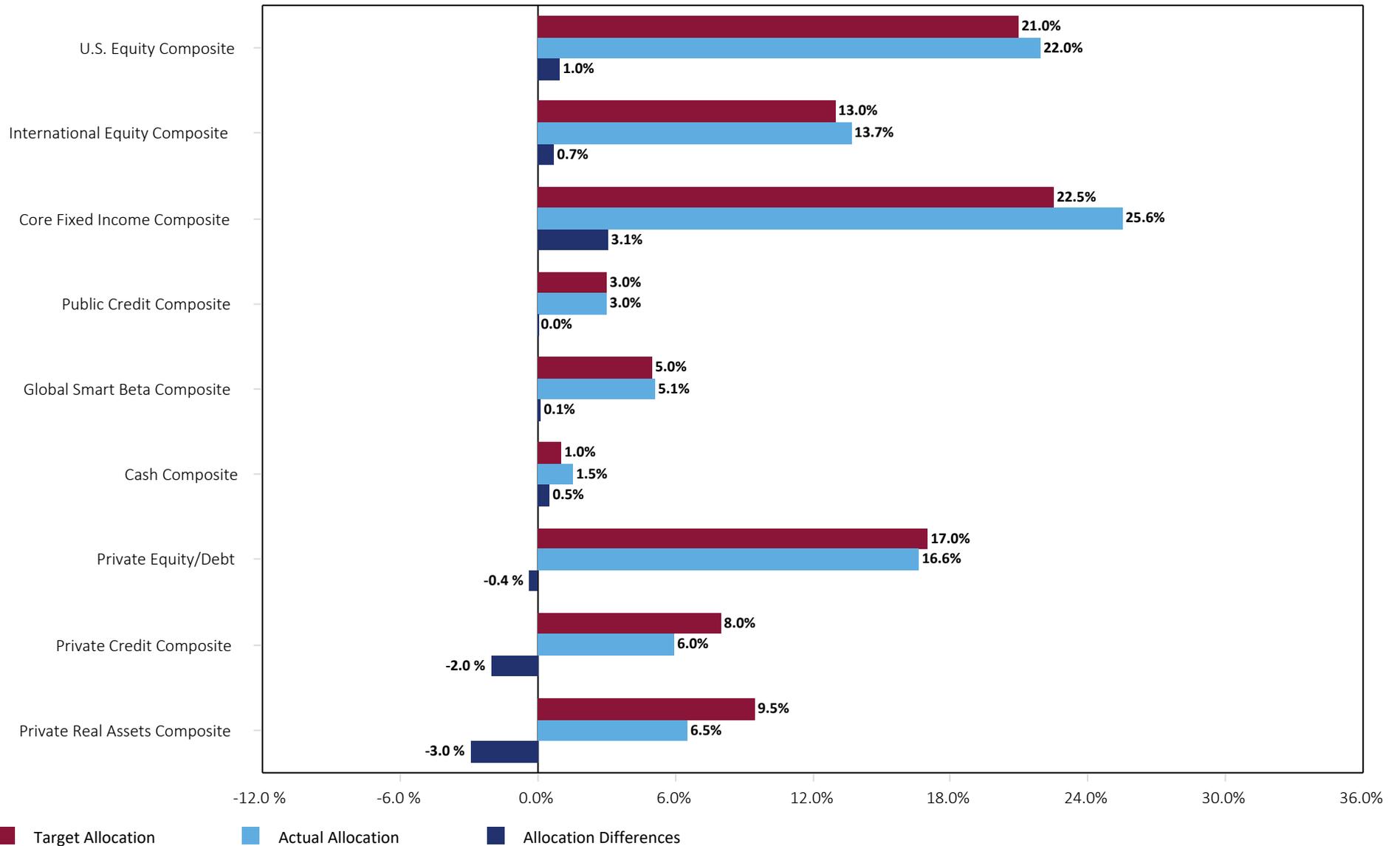
## Risk and Return (5-year)



# Asset Allocation Compliance

Total Fund

Periods Ended As of December 31, 2025



# Asset Allocation & Performance

## Total Fund

Periods Ended December 31, 2025

	Performance (%) Net of Fees										Market Value \$	%
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date		
<b>Total Fund</b>	<b>2.38</b>	<b>7.22</b>	<b>13.75</b>	<b>10.86</b>	<b>7.70</b>	<b>8.98</b>	<b>7.65</b>	<b>8.30</b>	<b>9.59</b>	<b>4/1/1979</b>	<b>49,385,298,897</b>	<b>100.00</b>
Total Fund Policy Benchmark	2.27	6.93	13.40	10.64	7.46	8.92	7.80	8.10	9.41			
Public Markets Reference Index	2.52	8.00	16.99	13.73	6.35	7.94	6.72	6.98				
CPI + 3%	0.51	1.96	5.76	6.06	7.60	6.29	5.60	5.60	6.44			
All Public Plans > \$1B-Total Fund Median	2.20	6.76	13.44	11.27	7.25	8.27	6.82	7.40				
Actuarial Rate	1.71	3.44	7.00	7.00	7.00	7.03	7.26	7.34	7.06			
<b>Public Markets Composite</b>	<b>2.53</b>	<b>7.95</b>	<b>16.18</b>	<b>13.72</b>	<b>6.77</b>				<b>7.86</b>	<b>10/1/2016</b>	<b>35,201,851,046</b>	<b>71.28</b>
Public Markets Reference Index	2.52	8.00	16.99	13.73	6.35				7.84			
<b>U.S. Equity Composite</b>	<b>2.93</b>	<b>11.66</b>	<b>17.78</b>	<b>22.74</b>	<b>13.86</b>	<b>14.40</b>	<b>10.33</b>	<b>10.24</b>	<b>11.72</b>	<b>4/1/1975</b>	<b>10,841,107,253</b>	<b>21.95</b>
U.S. Equity Composite Benchmark	2.40	10.78	17.15	22.25	13.41	14.46	10.86	10.29	12.19			
<b>International Equity Composite</b>	<b>4.82</b>	<b>12.54</b>	<b>33.21</b>	<b>18.21</b>	<b>8.72</b>	<b>8.69</b>	<b>5.89</b>	<b>6.49</b>	<b>6.08</b>	<b>10/1/1989</b>	<b>6,827,364,373</b>	<b>13.82</b>
International Equity Policy Index	5.05	12.29	32.39	17.33	7.91	8.56	5.94	6.09	5.94			
<b>Core Fixed Income Composite</b>	<b>1.15</b>	<b>3.22</b>	<b>7.49</b>	<b>4.68</b>	<b>-0.43</b>	<b>2.40</b>	<b>3.63</b>	<b>4.64</b>	<b>6.24</b>	<b>7/1/1985</b>	<b>12,526,208,748</b>	<b>25.36</b>
Core Fixed Income Policy Index	1.10	3.15	7.30	4.74	-0.23	2.29	3.48	4.42	5.88			
<b>Public Credit Composite</b>	<b>1.90</b>	<b>5.07</b>	<b>10.82</b>	<b>10.34</b>	<b>4.12</b>	<b>5.97</b>	<b>6.02</b>		<b>5.97</b>	<b>4/1/1998</b>	<b>3,091,107,434</b>	<b>6.26</b>
Public Credit Policy Index	1.89	5.10	10.22	9.99	3.60	5.78	6.00		5.84			
<b>Global Smart Beta Composite</b>	<b>2.17</b>	<b>6.47</b>	<b>17.51</b>	<b>14.71</b>	<b>9.55</b>				<b>9.02</b>	<b>8/1/2017</b>	<b>920,084,860</b>	<b>1.86</b>
Global Smart Beta Policy Index	2.19	6.55	17.61	14.92	9.77				9.15			
MSCI AC World Index (Net)	3.29	11.17	22.34	20.65	11.19				11.24			

# Asset Allocation & Performance

Total Fund

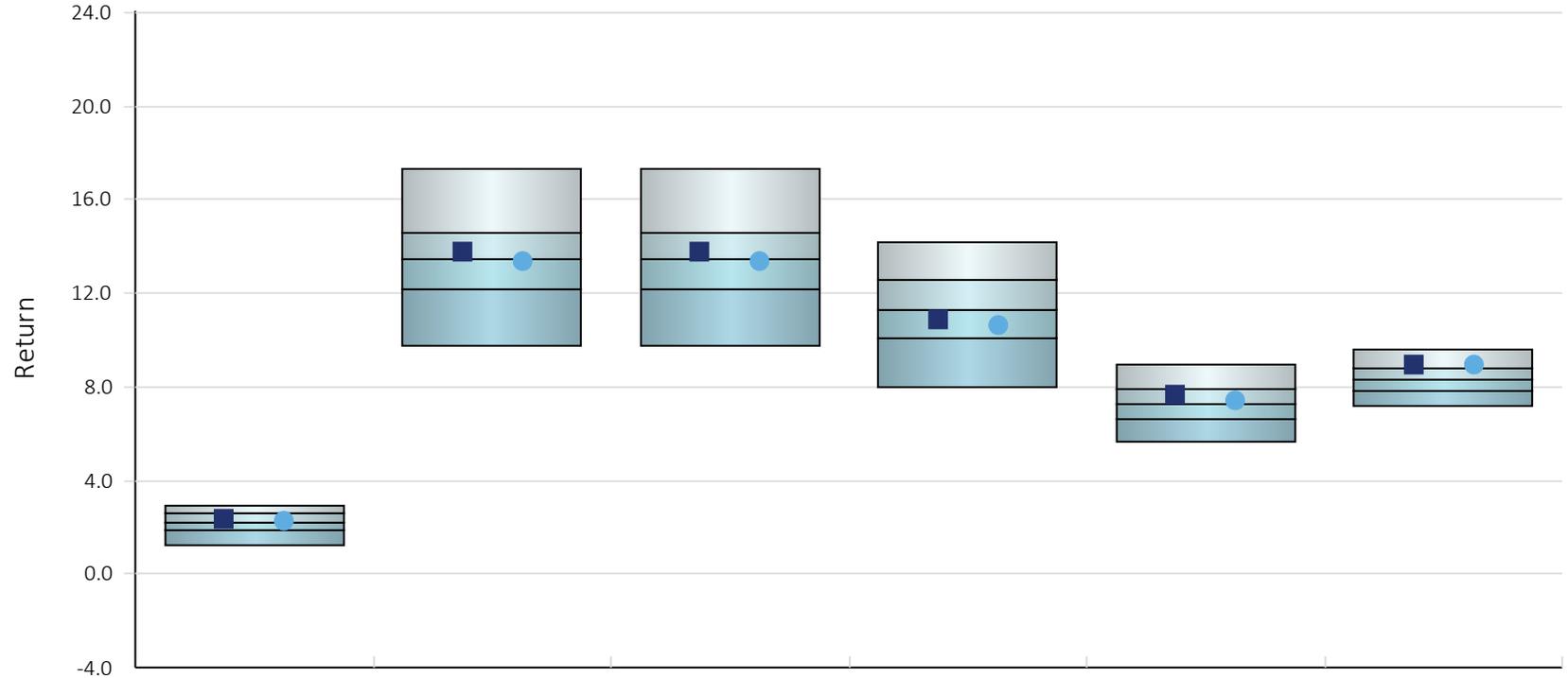
Periods Ended December 31, 2025

	Performance (%) Net of Fees										Market Value \$	%
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	Since Inception	Inception Date		
<b>LARS</b>	<b>3.50</b>	<b>16.17</b>	<b>-6.88</b>	<b>-0.21</b>	<b>7.95</b>				<b>5.92</b>	<b>1/1/2017</b>	<b>222,934,523</b>	<b>0.45</b>
90 Day U.S. Treasury Bill	0.97	2.06	4.18	4.81	3.17				2.39			
<b>Staff Directed Trades</b>	<b>11.38</b>	<b>35.85</b>							<b>35.85</b>	<b>7/1/2025</b>	<b>41,119,058</b>	<b>0.08</b>
90 Day U.S. Treasury Bill	0.97	2.06							2.06			
<b>Cash Composite</b>	<b>2.28</b>	<b>7.52</b>	<b>1.23</b>	<b>3.55</b>	<b>4.86</b>	<b>4.19</b>	<b>2.89</b>	<b>3.38</b>	<b>3.42</b>	<b>7/1/1995</b>	<b>995,978,379</b>	<b>2.02</b>
90 Day U.S. Treasury Bill	0.97	2.06	4.18	4.81	3.17	2.17	1.69	2.39	2.45			
<b>Private Markets Composite</b>	<b>2.03</b>	<b>5.47</b>	<b>7.85</b>	<b>4.62</b>	<b>10.86</b>				<b>12.84</b>	<b>10/1/2016</b>	<b>14,183,447,851</b>	<b>28.72</b>
<b>Private Equity/Debt</b>	<b>2.50</b>	<b>7.74</b>	<b>9.50</b>	<b>6.66</b>	<b>12.66</b>	<b>15.59</b>	<b>14.43</b>	<b>13.99</b>	<b>12.77</b>	<b>10/1/1985</b>	<b>8,019,914,571</b>	<b>16.24</b>
Private Equity Policy Index	2.50	7.74	9.50	6.66	12.66	15.59	12.99	12.76	14.31			
<b>Private Credit Composite</b>	<b>1.78</b>	<b>3.77</b>	<b>7.46</b>	<b>8.09</b>	<b>7.67</b>				<b>7.53</b>	<b>10/1/2016</b>	<b>2,895,183,272</b>	<b>5.86</b>
Private Credit Policy Index	1.78	3.77	7.46	8.09	7.67				7.53			
<b>Private Real Assets Composite</b>	<b>1.04</b>	<b>1.44</b>	<b>4.13</b>	<b>-2.63</b>	<b>6.29</b>				<b>6.52</b>	<b>10/1/2016</b>	<b>3,268,350,008</b>	<b>6.62</b>
Private Real Assets Policy Index	1.04	1.44	4.13	-2.63	6.29				6.52			

# Plan Sponsor Peer Group Analysis

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

Periods Ended December 31, 2025



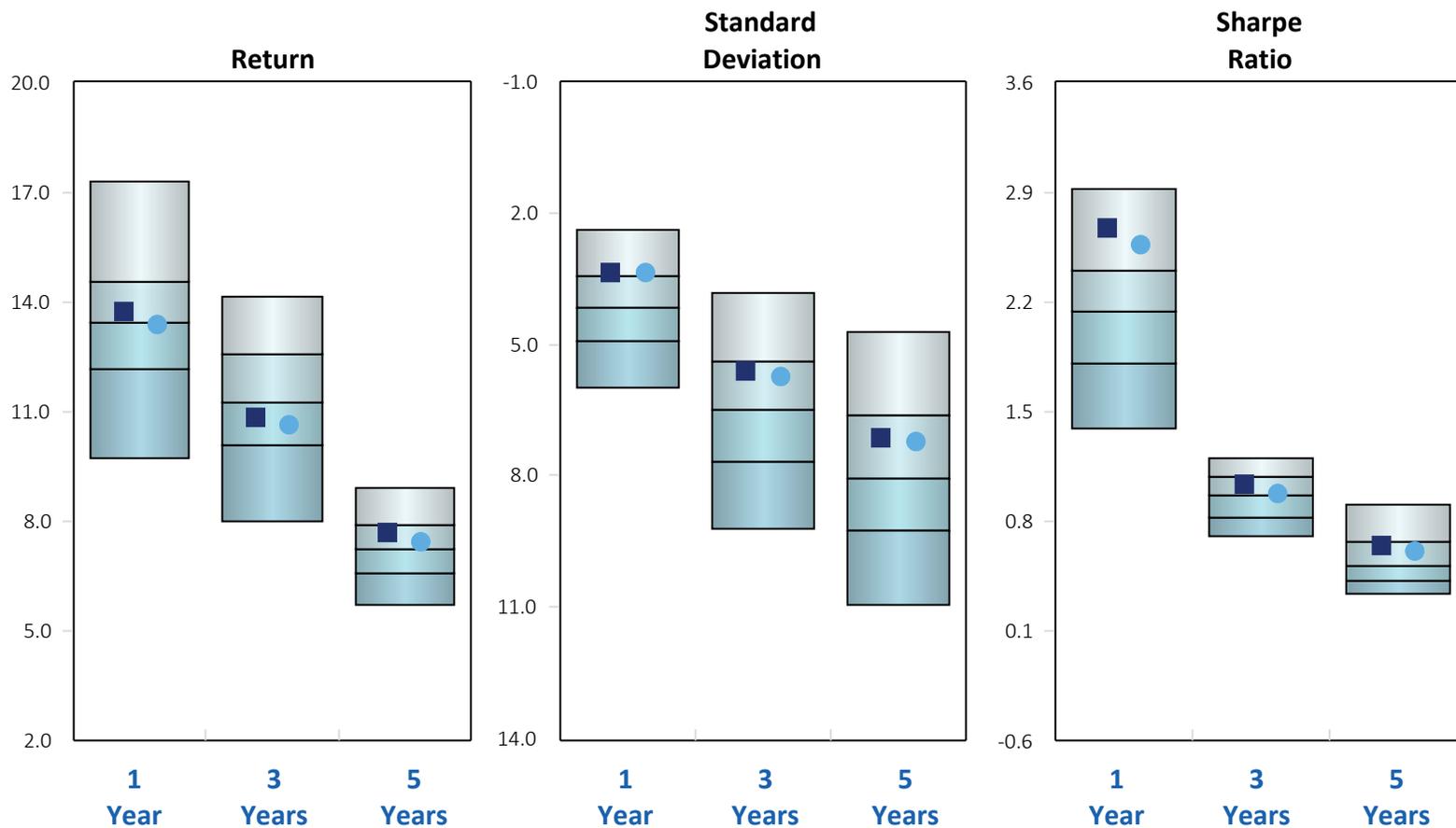
	<b>QTD</b>	<b>YTD</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>
■ Total Fund	2.38 (35)	13.75 (41)	13.75 (41)	10.86 (61)	7.70 (31)	8.98 (19)
● Total Fund Policy Benchmark	2.27 (43)	13.40 (53)	13.40 (53)	10.64 (65)	7.46 (39)	8.92 (20)
5th Percentile	2.94	17.30	17.30	14.17	8.94	9.60
1st Quartile	2.58	14.55	14.55	12.59	7.92	8.81
Median	2.20	13.44	13.44	11.27	7.25	8.27
3rd Quartile	1.85	12.18	12.18	10.07	6.59	7.80
95th Percentile	1.24	9.72	9.72	7.99	5.69	7.16
Population	115	115	115	115	112	106

Parenteses contain percentile rankings.  
Calculation based on quarterly periodicity.

# Plan Sponsor Peer Group Analysis - Multi Statistics

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

Periods Ended December 31, 2025



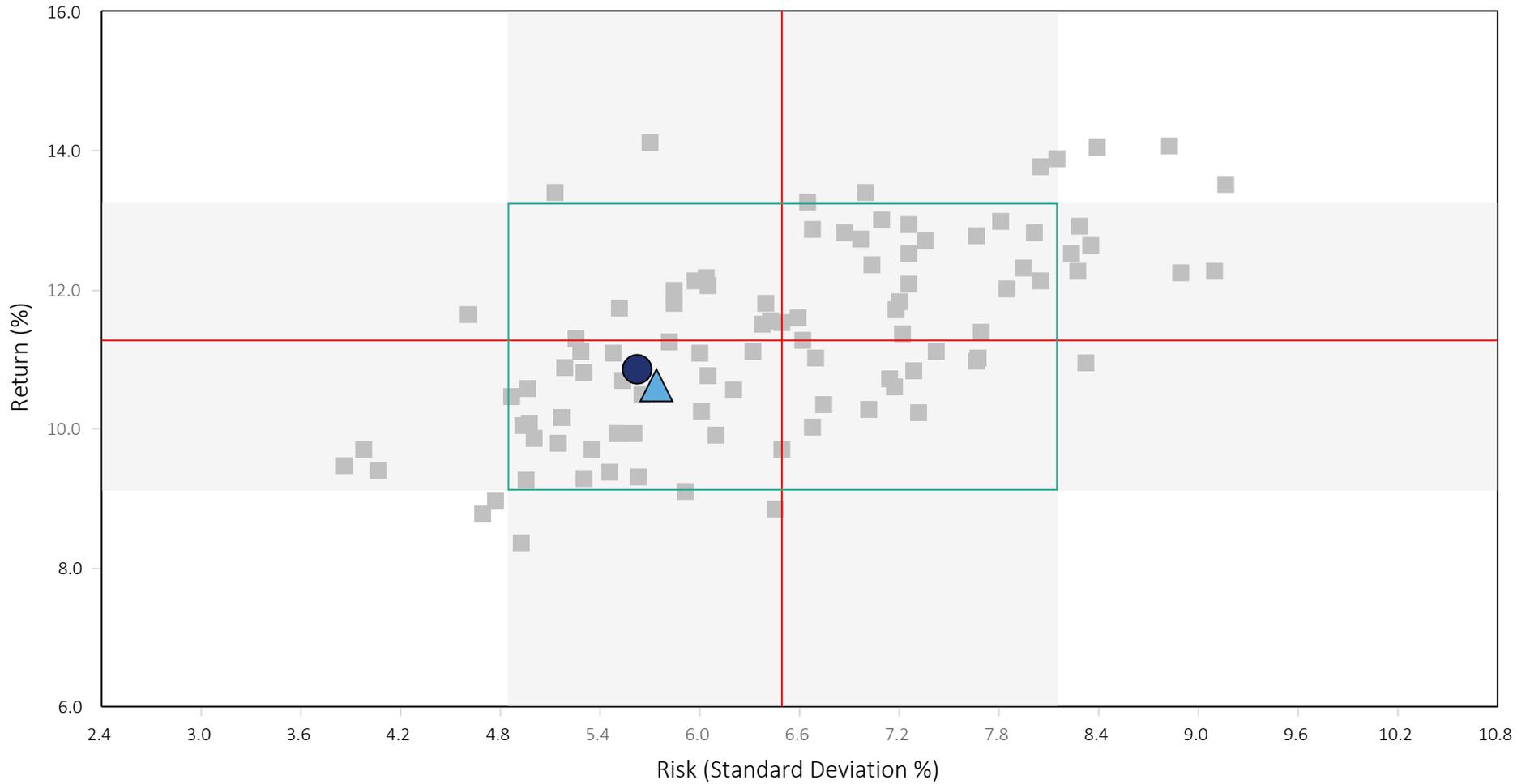
	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years	1 Year	3 Years	5 Years
■ Total Fund	13.75 (41)	10.86 (61)	7.70 (31)	3.36 (22)	5.62 (31)	7.13 (34)	2.68 (15)	1.03 (35)	0.64 (32)
● Total Fund Policy Benchmark	13.40 (53)	10.64 (65)	7.46 (39)	3.38 (22)	5.74 (33)	7.22 (37)	2.57 (18)	0.98 (47)	0.60 (37)
5th Percentile	17.30	14.17	8.94	2.38	3.84	4.72	2.92	1.20	0.90
1st Quartile	14.55	12.59	7.92	3.45	5.40	6.64	2.40	1.08	0.67
Median	13.44	11.27	7.25	4.17	6.50	8.08	2.14	0.97	0.52
3rd Quartile	12.18	10.07	6.59	4.94	7.68	9.24	1.80	0.83	0.42
95th Percentile	9.72	7.99	5.69	6.01	9.21	10.95	1.39	0.71	0.33

Parenteses contain percentile rankings.  
Calculation based on monthly periodicity.

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2023 To December 31, 2025



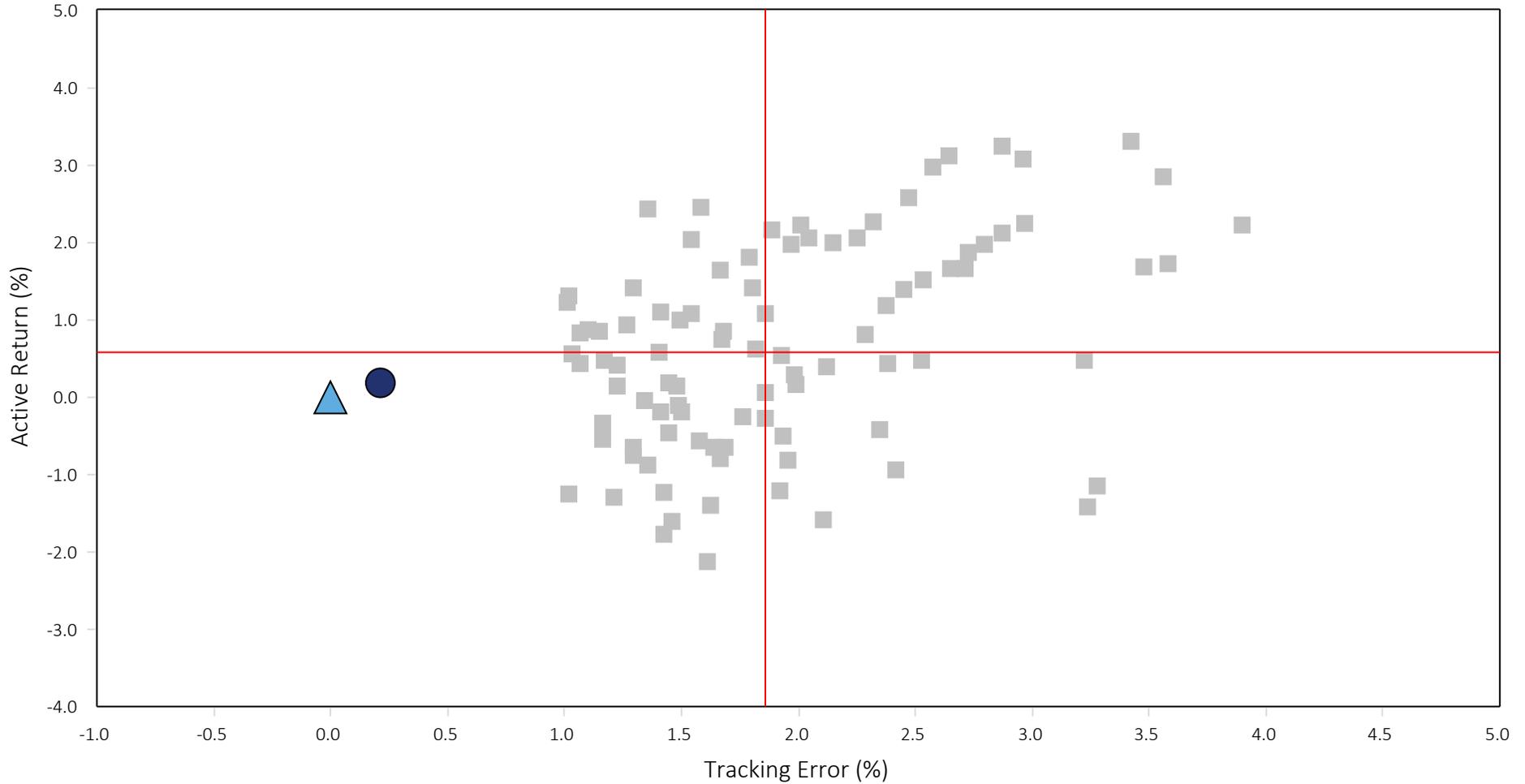
	Return	Standard Deviation
● Total Fund	10.86	5.62
▲ Total Fund Policy Benchmark	10.64	5.74
— Median	11.27	6.50

Calculation based on monthly periodicity.

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2023 To December 31, 2025

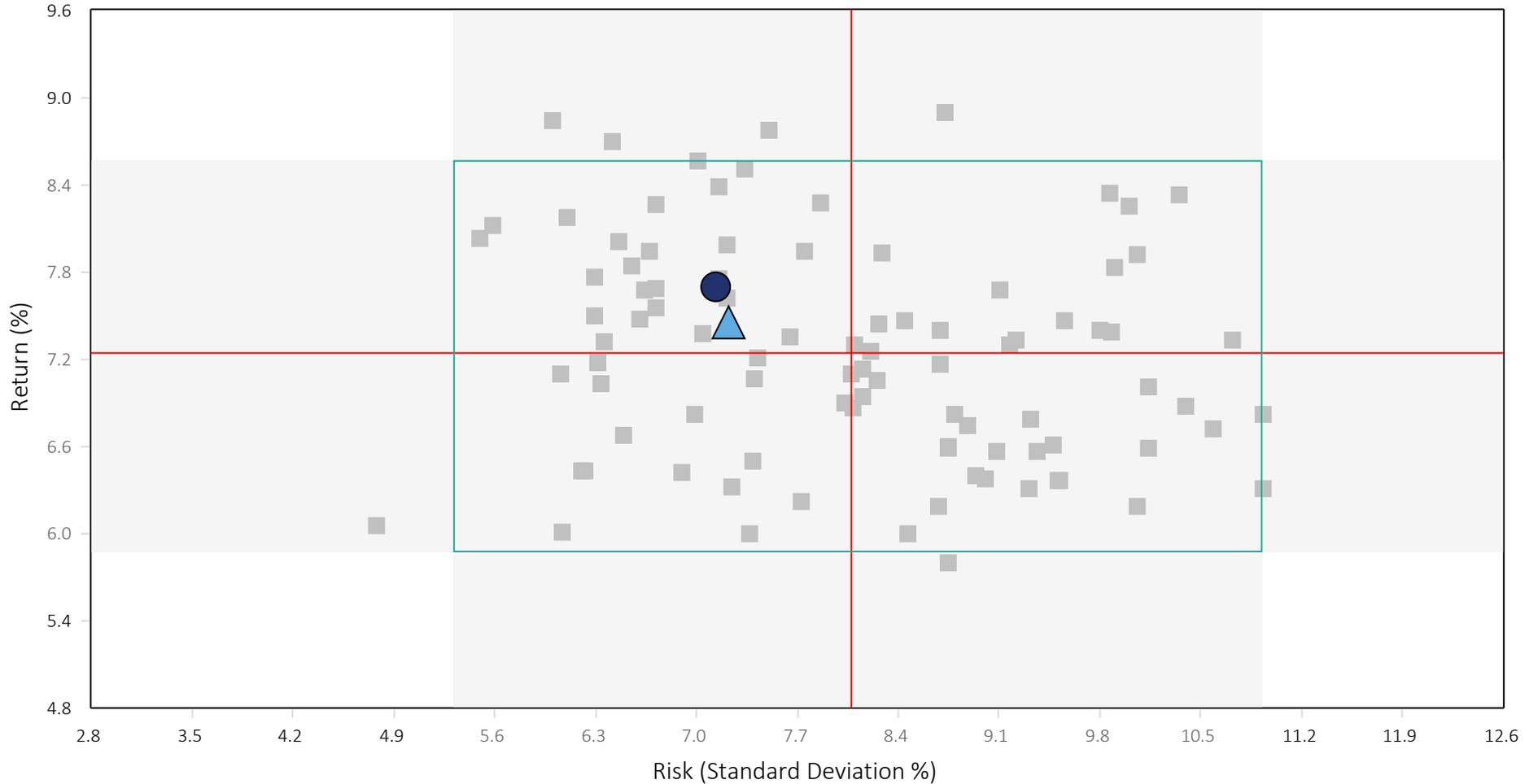


	Active Return	Tracking Error
● Total Fund	0.19	0.21
▲ Total Fund Policy Benchmark	0.00	0.00
— Median	0.59	1.86

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2021 To December 31, 2025

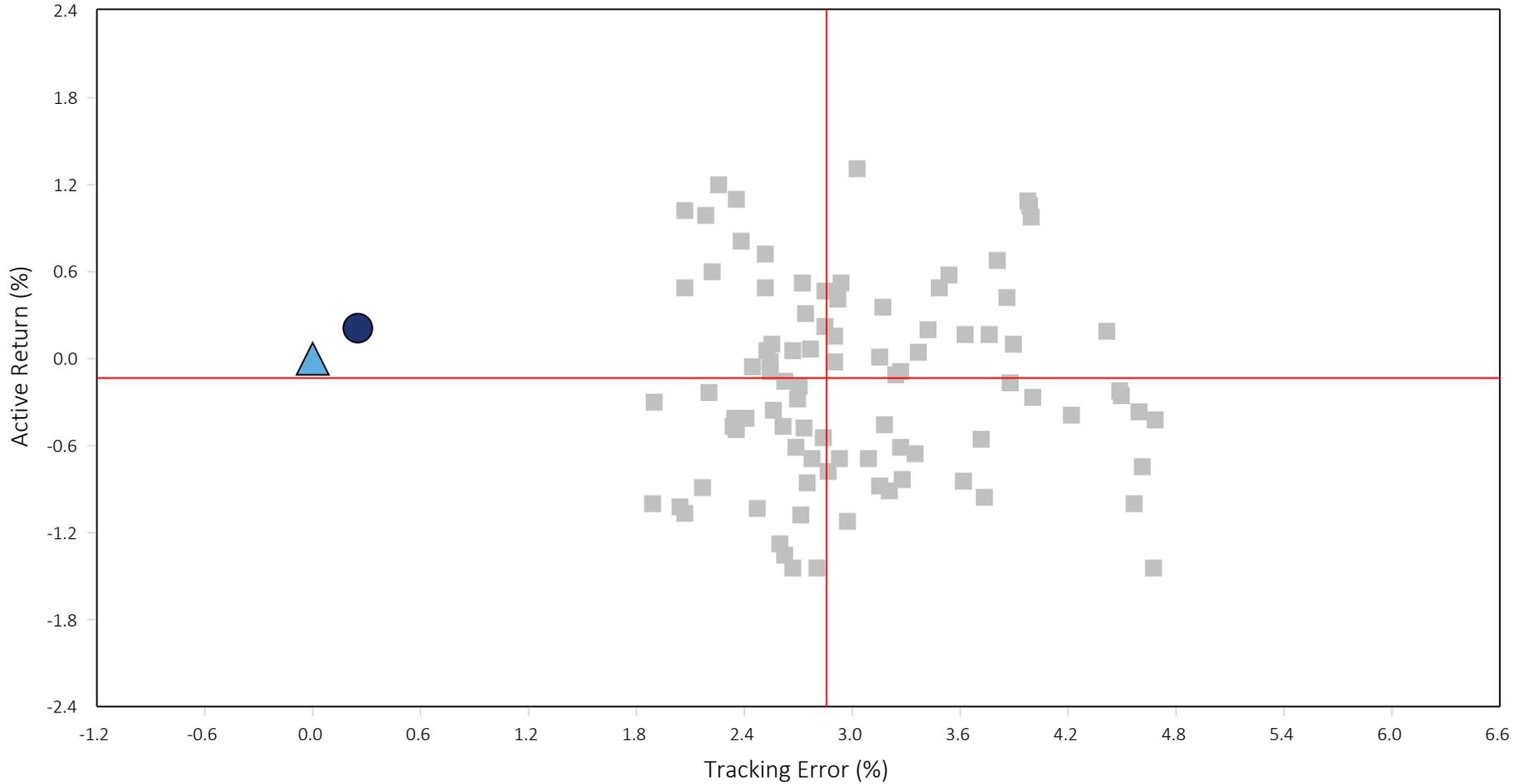


	Return	Standard Deviation
● Total Fund	7.70	7.13
▲ Total Fund Policy Benchmark	7.46	7.22
— Median	7.25	8.08

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2021 To December 31, 2025



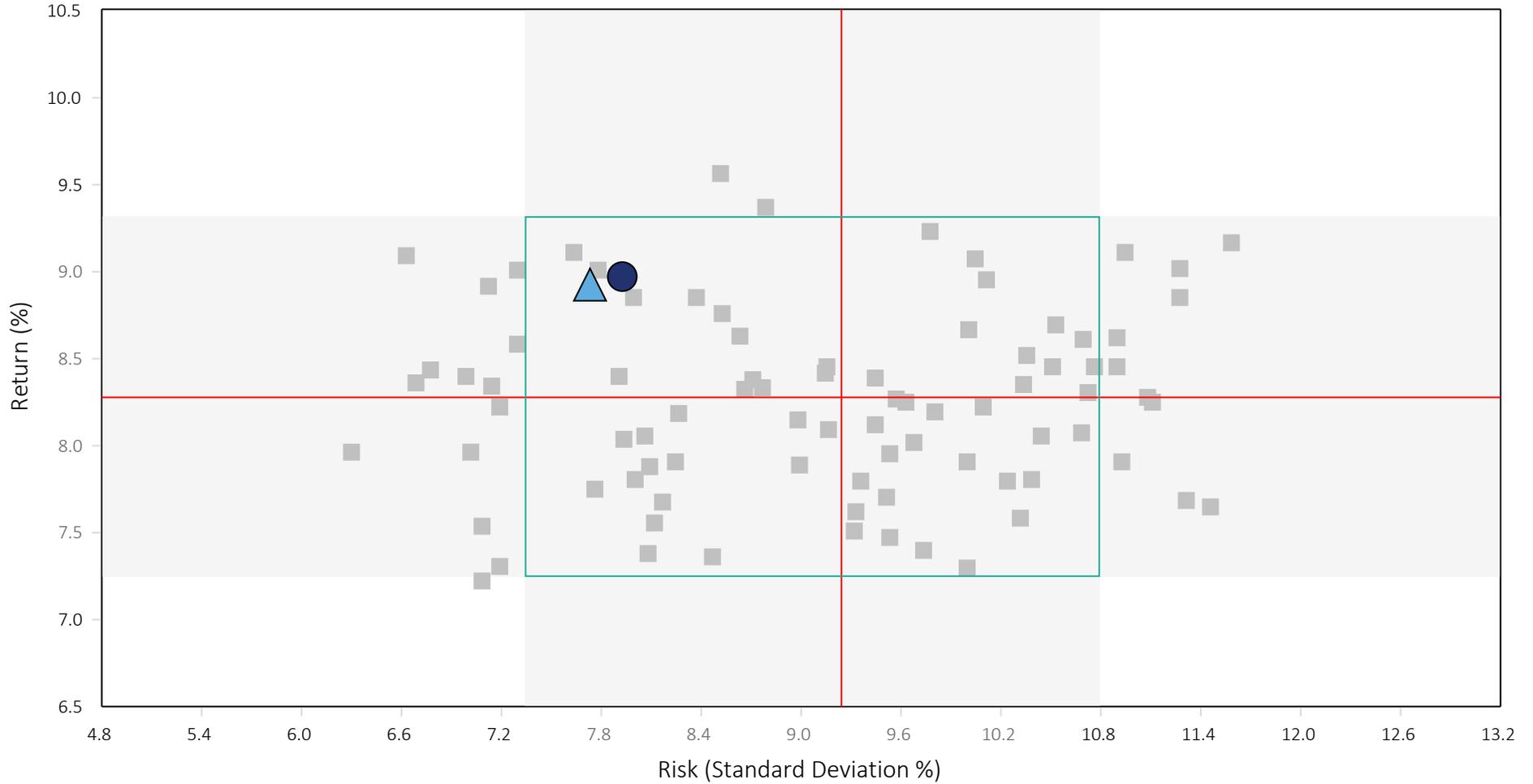
	Active Return	Tracking Error
● Total Fund	0.21	0.25
▲ Total Fund Policy Benchmark	0.00	0.00
— Median	-0.13	2.86

Calculation based on monthly periodicity.

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2016 To December 31, 2025



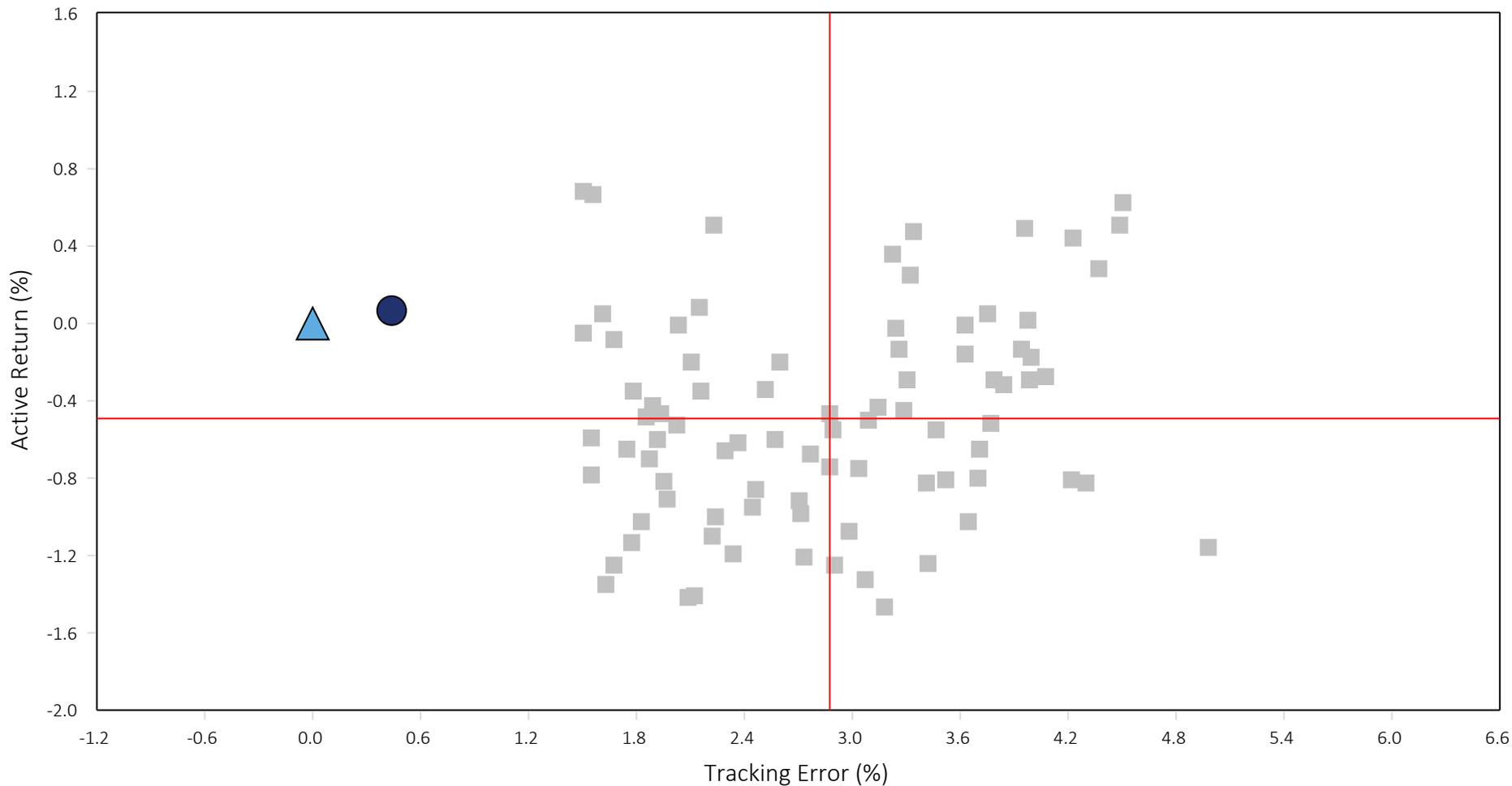
	Return	Standard Deviation
● Total Fund	8.98	7.93
▲ Total Fund Policy Benchmark	8.92	7.73
— Median	8.27	9.24

Calculation based on quarterly periodicity.

# Plan Sponsor Scattergram

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

Periods Ended January 1, 2016 To December 31, 2025



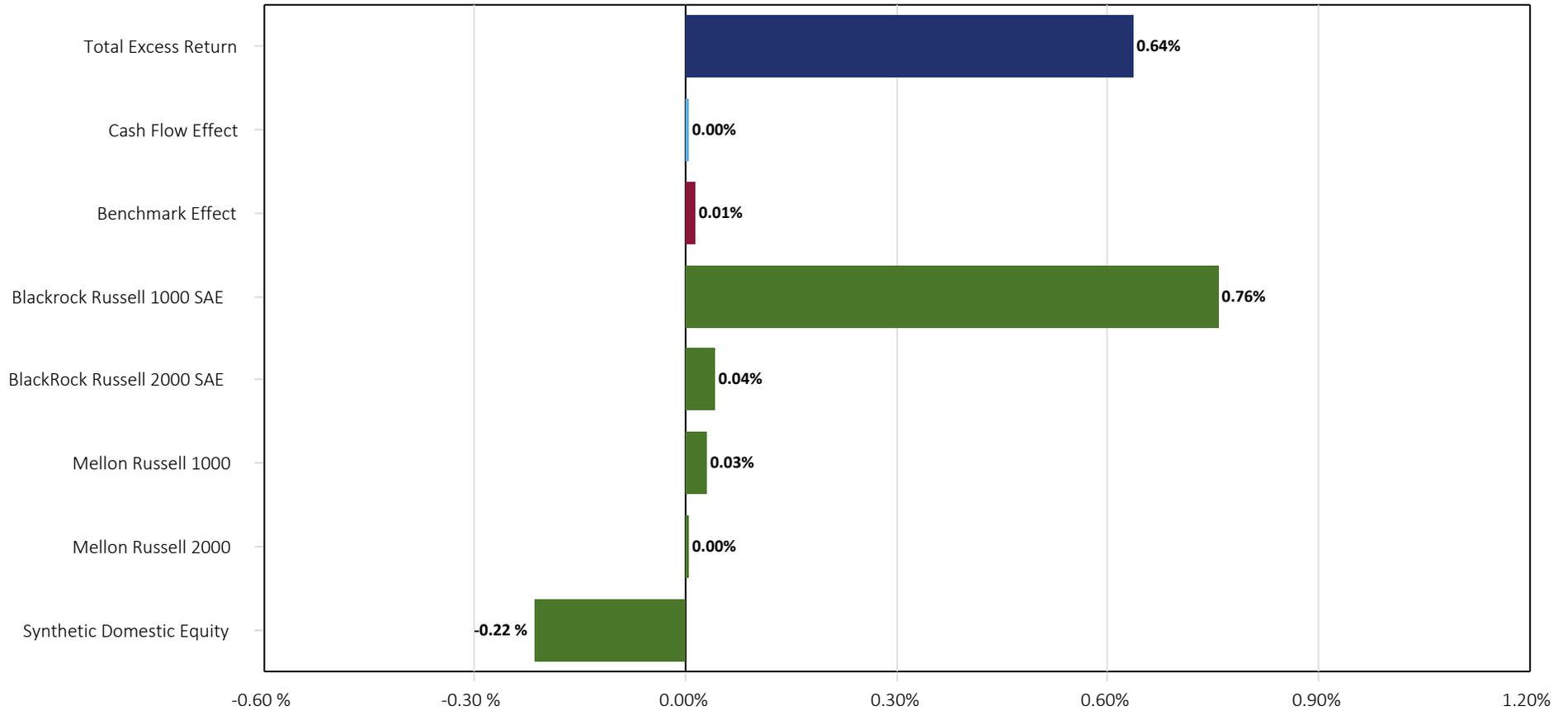
	Active Return	Tracking Error
● Total Fund	0.07	0.44
▲ Total Fund Policy Benchmark	0.00	0.00
— Median	-0.49	2.87

# Asset Class Attribution

U.S. Equity Composite

Periods Ended 1 Year Ending December 31, 2025

1 Year

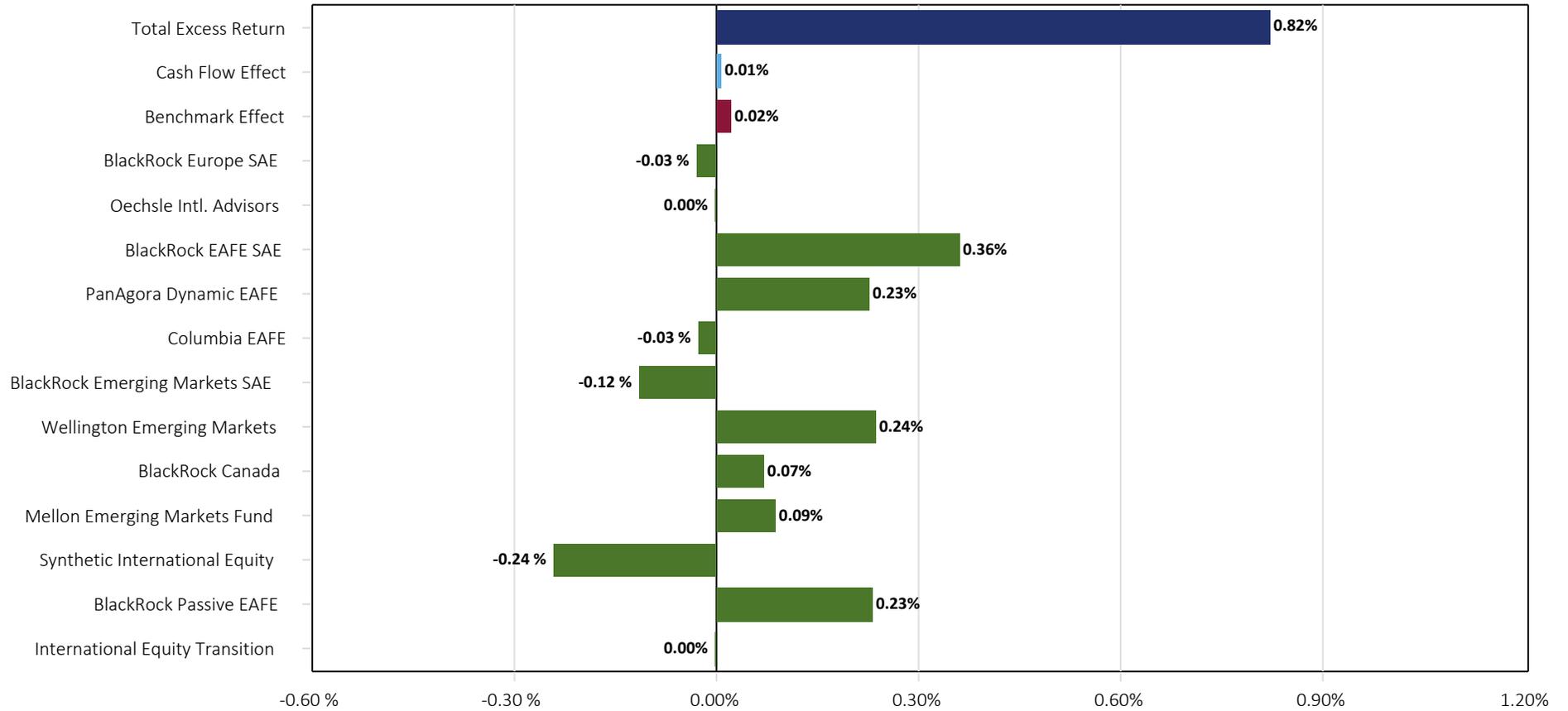


# Asset Class Attribution

## International Equity Composite

Periods Ended 1 Year Ending December 31, 2025

1 Year

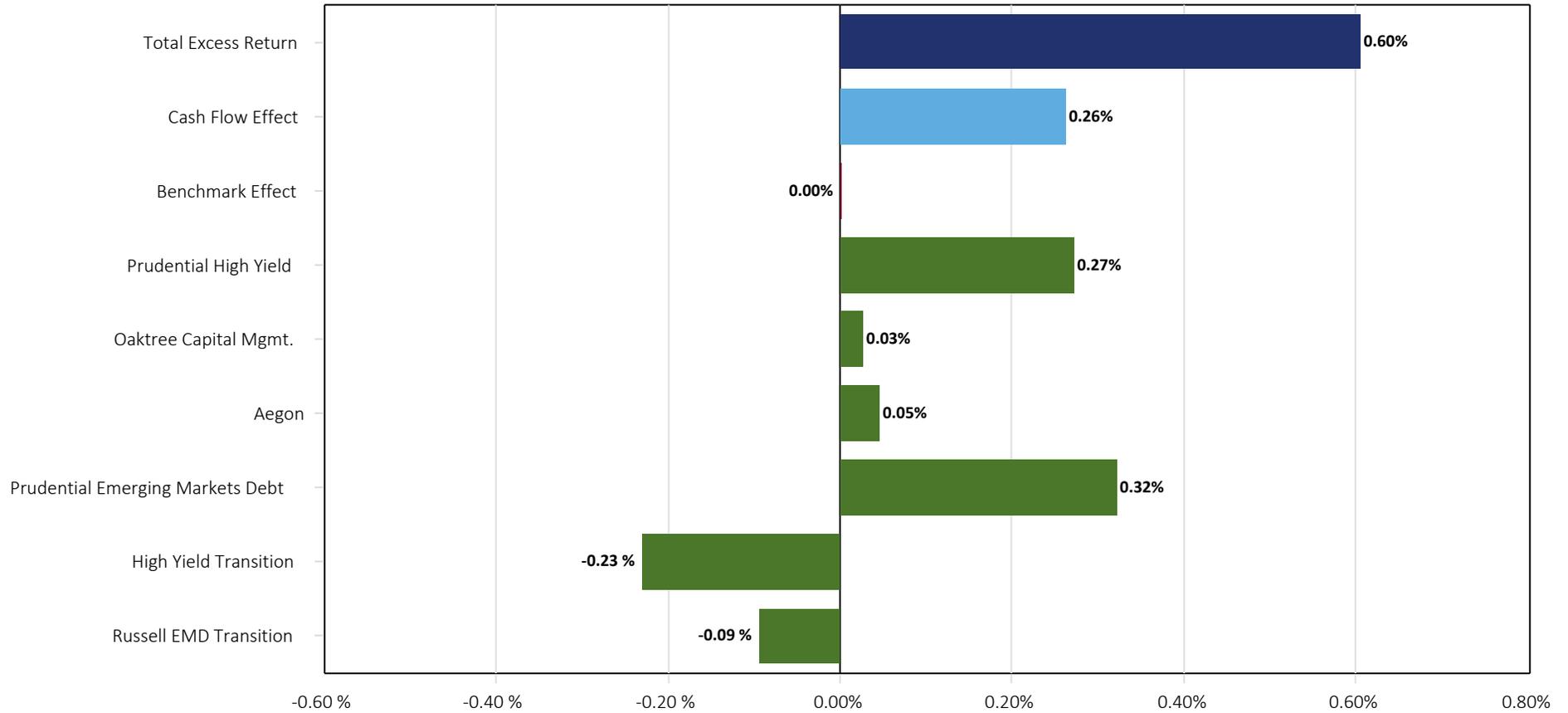


# Asset Class Attribution

Public Credit Composite

Periods Ended 1 Year Ending December 31, 2025

1 Year

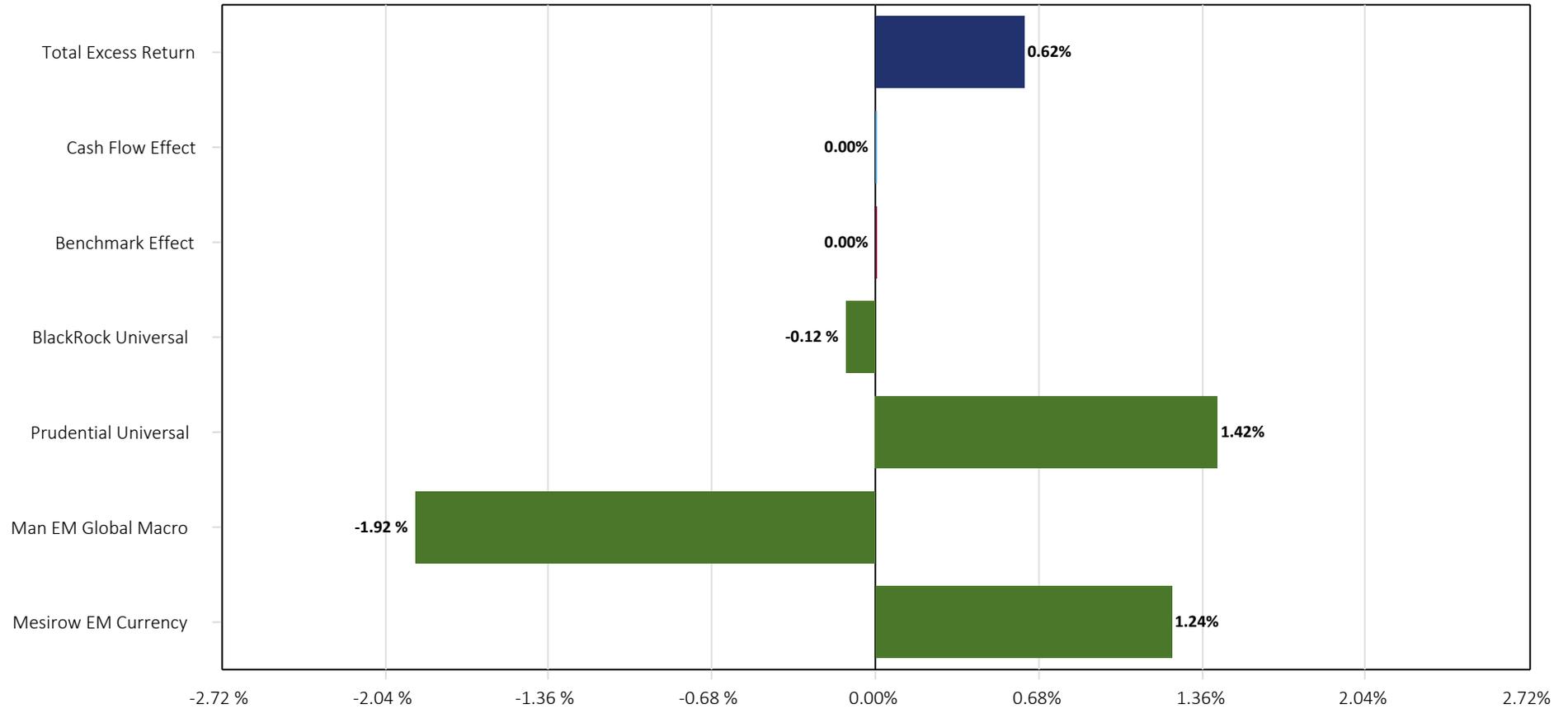


# Asset Class Attribution

Relative Value Composite

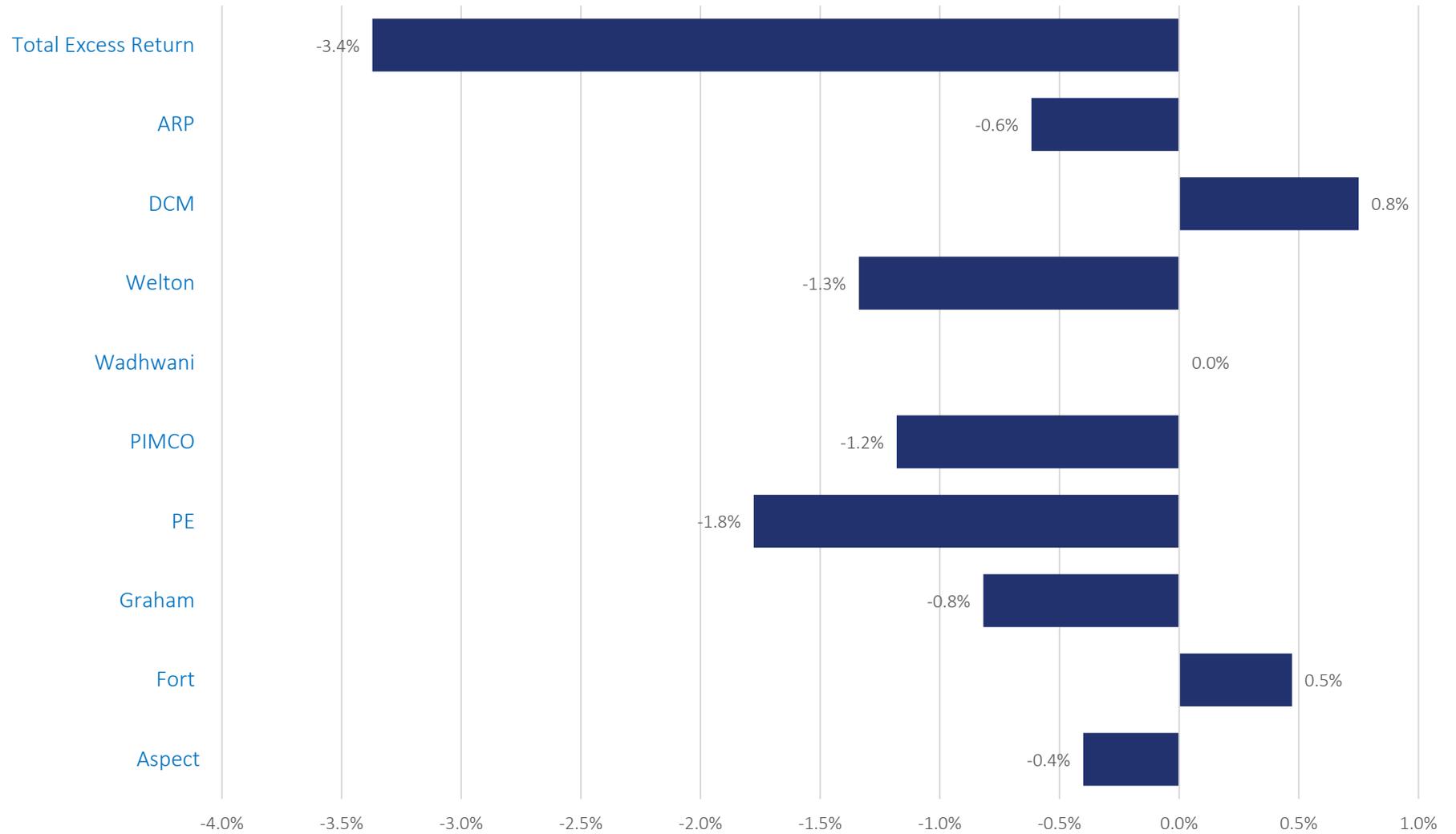
Periods Ended 1 Year Ending December 31, 2025

**1 Year**



# LARS Program Attribution

LARS 1 Year Excess Return Contribution



# Public Markets Composite

# Asset Allocation & Performance

## U.S. Equity Composite

Periods Ended December 31, 2025

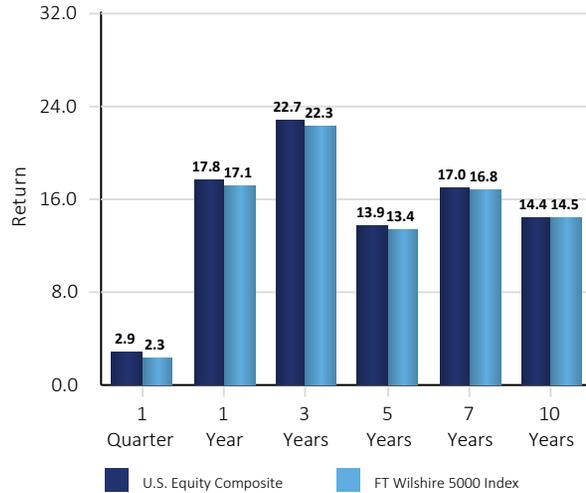
	Performance (%) Net of Fees									Market Value \$	%
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date		
<b>U.S. Equity Composite</b>	<b>2.93</b>	<b>11.66</b>	<b>17.78</b>	<b>22.74</b>	<b>13.86</b>	<b>14.40</b>	<b>10.33</b>	<b>11.72</b>	<b>4/1/1975</b>	<b>10,841,107,253</b>	<b>100.00</b>
Equity Composite Benchmark	2.40	10.78	17.15	22.25	13.41	14.46	10.86	12.19			
<b>Active Equity Composite</b>	<b>4.41</b>	<b>14.17</b>	<b>20.05</b>	<b>23.25</b>	<b>12.47</b>	<b>13.58</b>	<b>9.36</b>	<b>7.72</b>	<b>1/1/1999</b>	<b>2,873,501,739</b>	<b>26.51</b>
<b>Blackrock Russell 1000 SAE</b>	<b>4.55</b>	<b>14.00</b>	<b>20.67</b>	<b>24.19</b>				<b>17.28</b>	<b>5/1/2022</b>	<b>2,605,244,306</b>	<b>24.03</b>
Russell 1000 Index	2.41	10.60	17.37	22.74				16.13			
<b>BlackRock Russell 2000 SAE</b>	<b>3.05</b>	<b>15.86</b>	<b>14.36</b>	<b>14.28</b>	<b>6.95</b>			<b>9.72</b>	<b>5/1/2019</b>	<b>268,257,434</b>	<b>2.47</b>
Russell 2000 Index	2.19	14.86	12.81	13.73	6.09			8.36			
<b>Passive Equity Composite</b>	<b>2.41</b>	<b>10.79</b>	<b>17.01</b>	<b>22.53</b>	<b>13.31</b>	<b>14.34</b>	<b>10.96</b>	<b>9.12</b>	<b>1/1/1999</b>	<b>7,967,605,514</b>	<b>73.49</b>
<b>Mellon Russell 1000</b>	<b>2.41</b>	<b>10.63</b>	<b>17.41</b>	<b>22.81</b>				<b>16.20</b>	<b>5/1/2022</b>	<b>7,750,943,119</b>	<b>71.50</b>
Russell 1000 Index	2.41	10.60	17.37	22.74				16.13			
<b>Mellon Russell 2000</b>	<b>2.22</b>	<b>14.94</b>	<b>13.01</b>	<b>13.91</b>				<b>9.91</b>	<b>5/1/2022</b>	<b>200,906,275</b>	<b>1.85</b>
Russell 2000 Index	2.19	14.86	12.81	13.73				9.72			
<b>Synthetic Domestic Equity</b>	<b>3.32</b>	<b>23.21</b>	<b>-4.66</b>	<b>24.98</b>	<b>18.04</b>			<b>31.00</b>	<b>4/1/2017</b>	<b>15,756,119</b>	<b>0.15</b>
<b>Northern Trust Domestic Equity Transition</b>											<b>0.00</b>
All Public Plans > \$1B-US Equity Segment Median	2.40	9.36	16.11	19.84	11.37	12.71	9.78				
Russell 3000 Index	2.40	10.78	17.15	22.25	13.15	14.29	10.77	12.24	1/1/1979		
Wilshire 4500 Completion Index	-0.34	8.58	11.86	17.77	7.61	11.91	9.90	10.74	1/1/1984		
FT Wilshire 5000 Index	2.34	10.78	17.13	22.27	13.40	14.45	10.86	11.24	1/1/1971		

# Performance Summary

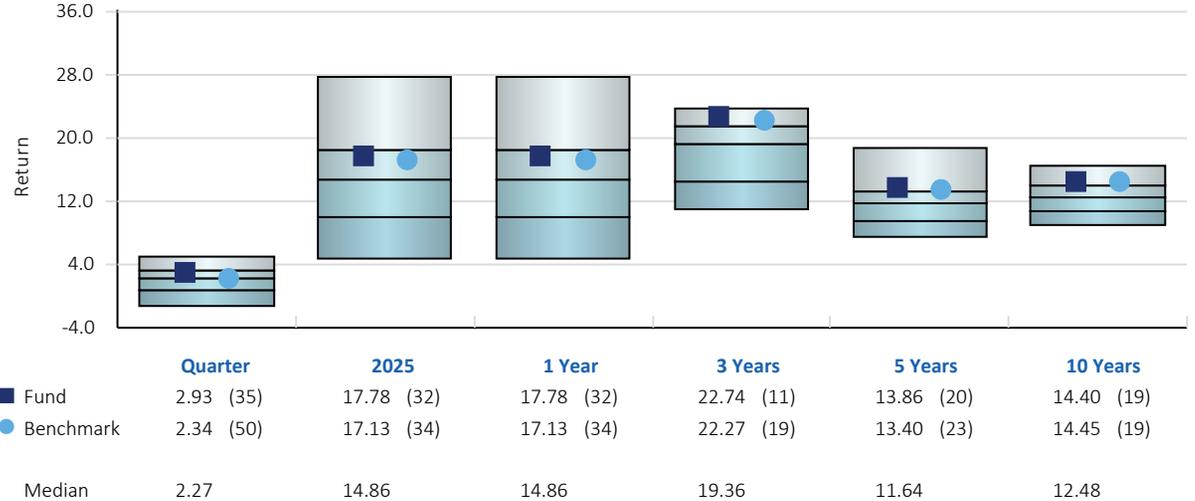
U.S. Equity Composite

Periods Ended December 31, 2025

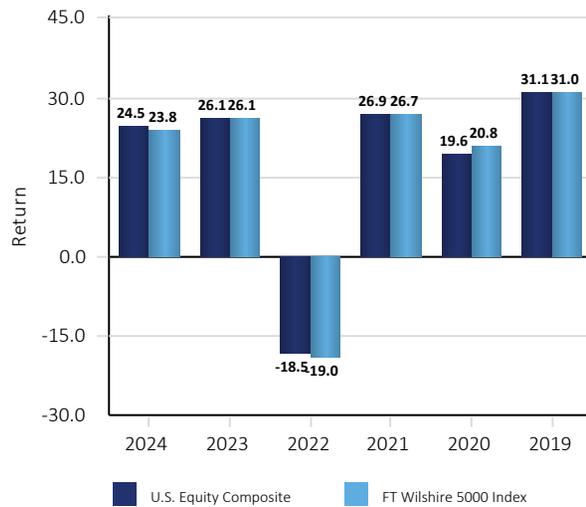
## Comparative Performance



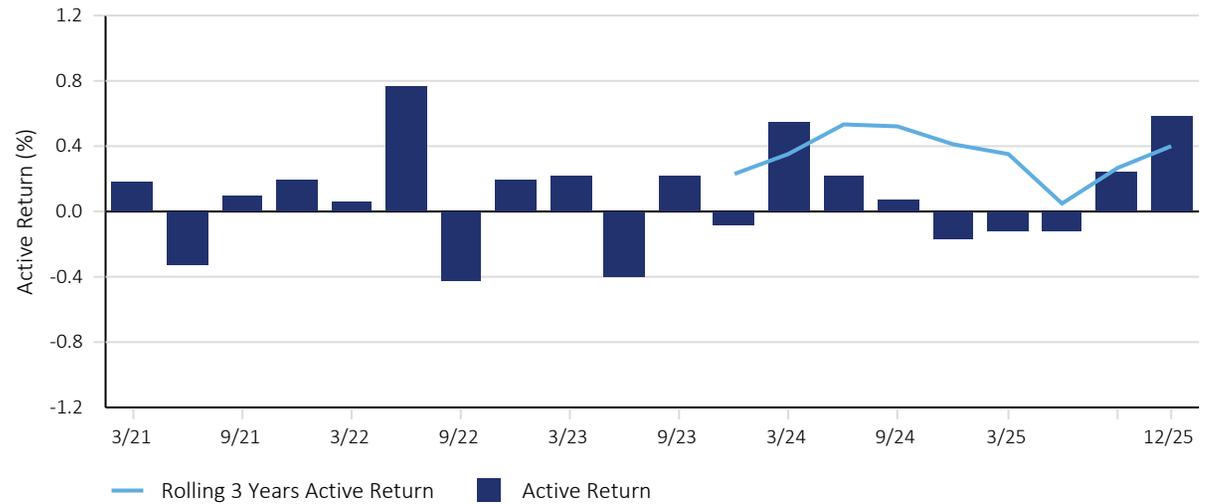
## Peer Group Analysis: IM U.S. All Cap Core Equity (SA+CF)



## Comparative Performance



## Rolling 3 Years Performance



# Asset Allocation & Performance

## International Equity Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$	%
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date		
<b>International Equity Composite</b>	<b>4.82</b>	<b>12.54</b>	<b>33.21</b>	<b>18.21</b>	<b>8.72</b>	<b>8.69</b>	<b>5.89</b>	<b>6.08</b>	<b>10/1/1989</b>	<b>6,827,364,373</b>	<b>100.00</b>
International Equity Policy Index	5.05	12.29	32.39	17.33	7.91	8.56	5.94	5.94			
<b>BlackRock Canada</b>	<b>7.87</b>	<b>18.54</b>	<b>37.38</b>	<b>21.71</b>	<b>14.99</b>	<b>12.87</b>	<b>7.58</b>	<b>8.41</b>	<b>12/1/2000</b>	<b>587,422,518</b>	<b>8.60</b>
MSCI Canada (Net)	7.69	18.18	36.47	20.80	14.11	12.02	6.86	7.71			
<b>BlackRock Passive EAFE</b>	<b>4.73</b>	<b>9.77</b>	<b>31.86</b>	<b>17.56</b>	<b>9.29</b>			<b>9.78</b>	<b>4/1/2019</b>	<b>2,102,913,819</b>	<b>30.80</b>
MSCI EAFE (Net)	4.86	9.86	31.22	17.22	8.92			9.40			
<b>BlackRock EAFE SAE</b>	<b>3.82</b>	<b>9.57</b>	<b>33.01</b>	<b>19.42</b>	<b>10.93</b>			<b>10.55</b>	<b>5/1/2019</b>	<b>1,552,697,867</b>	<b>22.74</b>
MSCI EAFE (Net)	4.86	9.86	31.22	17.22	8.92			9.07			
<b>BlackRock Emerging Markets SAE</b>	<b>5.17</b>	<b>15.65</b>	<b>31.92</b>	<b>16.17</b>	<b>3.57</b>			<b>6.09</b>	<b>5/1/2019</b>	<b>524,573,523</b>	<b>7.68</b>
MSCI Emerging Markets (Net)	4.73	15.88	33.57	16.40	4.20			6.62			
<b>Columbia EAFE</b>										<b>8,138,933</b>	<b>0.12</b>
<b>PanAgora Dynamic EAFE</b>	<b>5.27</b>	<b>11.76</b>	<b>34.50</b>	<b>19.90</b>	<b>11.27</b>			<b>10.28</b>	<b>5/1/2019</b>	<b>494,595,352</b>	<b>7.24</b>
MSCI EAFE (Net)	4.86	9.86	31.22	17.22	8.92			9.07			
<b>Wellington Emerging Markets</b>	<b>4.21</b>	<b>18.52</b>	<b>38.84</b>	<b>17.00</b>	<b>4.26</b>	<b>9.61</b>		<b>9.32</b>	<b>3/1/2009</b>	<b>347,878,782</b>	<b>5.10</b>
Wellington EM Custom Benchmark	4.73	15.88	33.57	16.40	4.20	8.42		9.07			
<b>Mellon Emerging Markets Fund</b>	<b>4.73</b>	<b>16.26</b>	<b>34.08</b>	<b>16.38</b>	<b>4.13</b>	<b>8.39</b>		<b>6.04</b>	<b>7/1/2015</b>	<b>1,197,792,239</b>	<b>17.54</b>
MSCI Emerging Markets (Net)	4.73	15.88	33.57	16.40	4.20	8.42		6.06			
<b>Oechsle Intl. Advisors</b>										<b>797,987</b>	<b>0.01</b>
<b>BlackRock Europe SAE</b>										<b>4,094,109</b>	<b>0.06</b>
<b>Synthetic International Equity</b>	<b>5.14</b>	<b>16.26</b>	<b>6.43</b>	<b>18.21</b>	<b>19.32</b>			<b>-143.77</b>	<b>4/1/2017</b>	<b>6,113,813</b>	<b>0.09</b>
<b>Active International Equity</b>	<b>4.33</b>	<b>11.95</b>	<b>33.58</b>	<b>18.74</b>	<b>8.67</b>	<b>8.47</b>	<b>5.63</b>	<b>6.60</b>	<b>1/1/2004</b>	<b>2,932,776,552</b>	<b>42.96</b>
<b>Passive International Equity</b>	<b>5.19</b>	<b>12.98</b>	<b>33.07</b>	<b>17.78</b>	<b>9.01</b>	<b>9.08</b>	<b>5.93</b>	<b>7.05</b>	<b>1/1/2004</b>	<b>3,894,242,389</b>	<b>57.04</b>

# Asset Allocation & Performance

## International Equity Composite

*Periods Ended December 31, 2025*

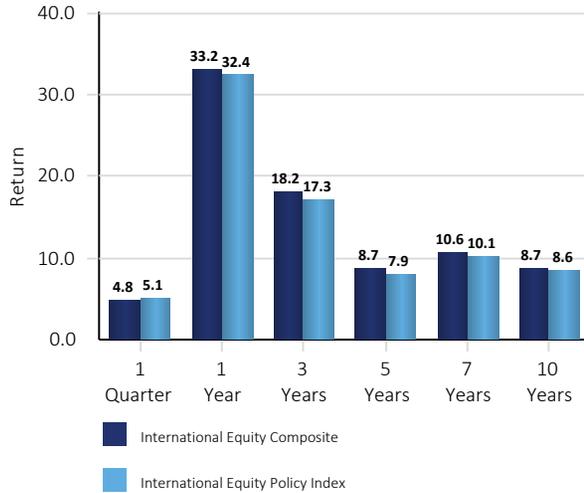
	Performance (%) Net of Fees									Market Value \$	%
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date		
All Public Plans > \$1B-Intl. Equity Segment Median	3.98	10.30	29.57	17.24	7.46	9.00	6.47				
MSCI AC World ex USA (Net)	5.05	12.29	32.39	17.33	7.91	8.41	5.63		1/1/1999		
MSCI EAFE (Net)	4.86	9.86	31.22	17.22	8.92	8.18	5.58	8.69	1/1/1970		
MSCI Emerging Markets (Net)	4.73	15.88	33.57	16.40	4.20	8.42	5.99	8.41	1/1/1999		

# Performance Summary

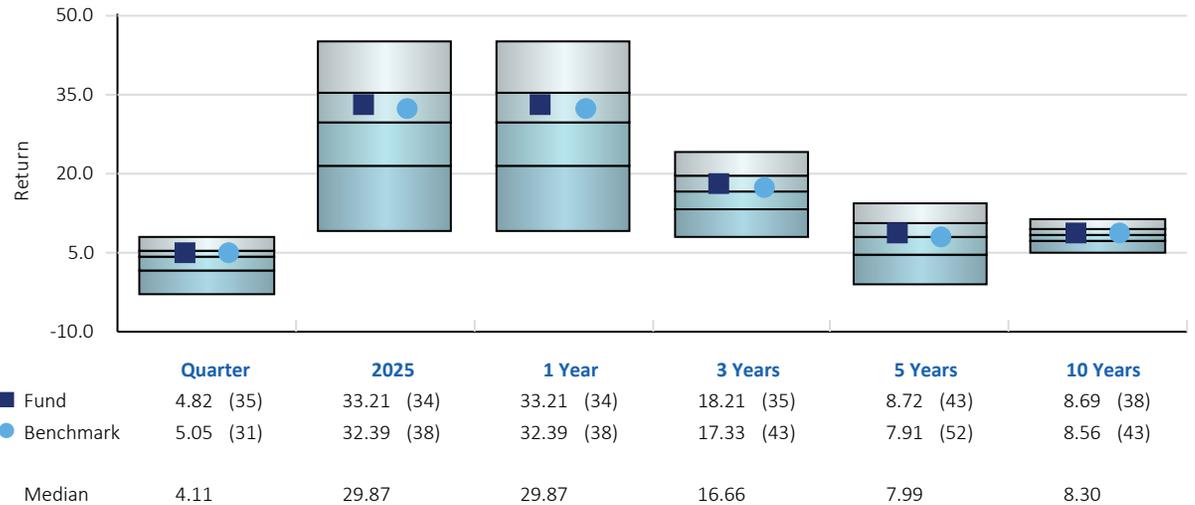
## International Equity Composite

Periods Ended December 31, 2025

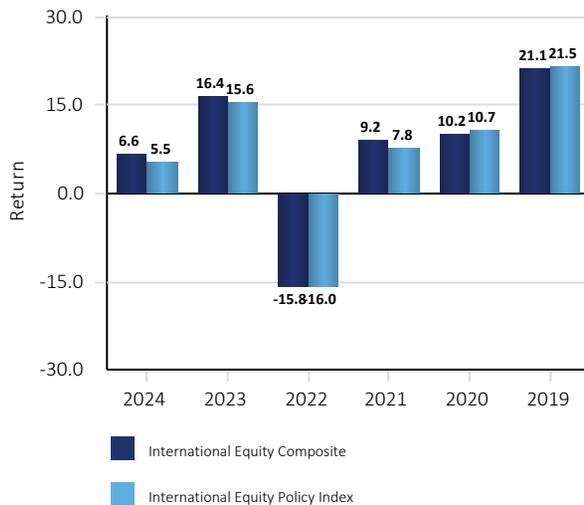
### Comparative Performance



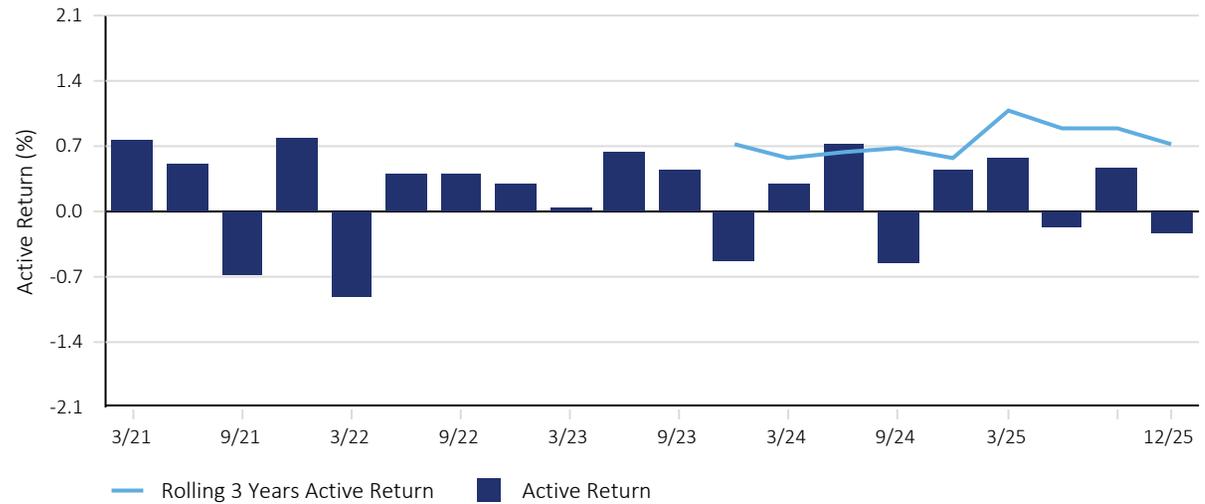
### Peer Group Analysis: IM International Equity (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance



# Asset Allocation & Performance

## Total Fixed Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Total Fixed Composite</b>	<b>1.23</b>	<b>3.41</b>	<b>7.84</b>	<b>5.30</b>	<b>0.10</b>	<b>2.86</b>	<b>3.95</b>	<b>6.46</b>	<b>7/1/1985</b>	<b>15,617,316,182</b>
Fixed Income Policy Index	1.18	3.36	7.61	5.21	0.04	2.43	3.54	5.91		
<b>Total US Fixed Income Composite</b>	<b>1.16</b>	<b>3.26</b>	<b>7.61</b>	<b>5.08</b>	<b>0.01</b>	<b>2.77</b>	<b>3.92</b>	<b>6.43</b>	<b>7/1/1985</b>	<b>14,860,542,526</b>
Fixed Income Policy Index	1.18	3.36	7.61	5.21	0.04	2.43	3.54	5.91		
<b>Core Fixed Income Composite</b>	<b>1.15</b>	<b>3.22</b>	<b>7.49</b>	<b>4.68</b>	<b>-0.43</b>	<b>2.40</b>	<b>3.63</b>	<b>6.24</b>	<b>7/1/1985</b>	<b>12,526,208,748</b>
Core Fixed Income Policy Index	1.10	3.15	7.30	4.74	-0.23	2.29	3.48	5.88		
<b>Active Core Fixed Composite</b>	<b>1.63</b>	<b>3.51</b>	<b>7.91</b>	<b>4.54</b>	<b>-0.45</b>	<b>2.52</b>	<b>3.77</b>	<b>4.03</b>	<b>9/1/1995</b>	<b>1,703,139,494</b>
<b>Blackrock</b>										<b>18,388</b>
<b>Principal Global Investors</b>										<b>161,872</b>
<b>Mackay Shields Core Plus</b>										<b>62</b>
<b>Prudential Fixed Income</b>										<b>12,212</b>
<b>TCW Asset Management</b>										<b>109,072</b>
<b>Western Asset Mgmt</b>										<b>19,146</b>
<b>Passive Fixed Composite</b>	<b>1.08</b>	<b>3.17</b>	<b>7.41</b>	<b>4.68</b>	<b>-0.62</b>	<b>1.69</b>	<b>3.12</b>	<b>4.99</b>	<b>7/1/1990</b>	<b>10,823,069,254</b>
<b>Mellon Aggregate</b>	<b>1.08</b>	<b>3.14</b>	<b>7.32</b>	<b>4.69</b>	<b>-0.34</b>	<b>2.03</b>	<b>3.29</b>	<b>5.10</b>	<b>7/1/1990</b>	<b>10,815,814,408</b>
Blmbg. U.S. Aggregate Index	1.10	3.15	7.30	4.66	-0.36	2.01	3.25	5.05		
<b>Synthetic Fixed Income</b>	<b>-0.13</b>	<b>17.48</b>	<b>46.44</b>	<b>-1.30</b>	<b>-20.54</b>			<b>-11.69</b>	<b>4/1/2017</b>	<b>7,254,847</b>
<b>Relative Value Composite</b>	<b>1.63</b>	<b>3.50</b>	<b>7.92</b>	<b>4.72</b>	<b>-0.23</b>			<b>0.10</b>	<b>11/1/2020</b>	<b>1,702,818,742</b>
Relative Value Policy Index	1.10	3.15	7.30	4.74	-0.23			0.10		

# Asset Allocation & Performance

## Total Fixed Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>BlackRock Universal</b>	<b>0.69</b>	<b>2.88</b>	<b>7.01</b>	<b>5.04</b>	<b>0.58</b>			<b>0.88</b>	<b>11/1/2020</b>	<b>704,152,277</b>
Core Fixed Income Policy Index	1.10	3.15	7.30	4.74	-0.23			0.10		
<b>Prudential Universal</b>	<b>2.59</b>	<b>5.76</b>	<b>11.51</b>	<b>6.86</b>				<b>1.01</b>	<b>3/1/2021</b>	<b>592,403,828</b>
Core Fixed Income Policy Index	1.10	3.15	7.30	4.74				0.17		
<b>Man EM Global Macro</b>	<b>-2.76</b>	<b>-12.39</b>	<b>-13.03</b>					<b>-9.63</b>	<b>10/1/2023</b>	<b>129,078,695</b>
Blmbg. U.S. Aggregate Index	1.10	3.15	7.30					6.84		
<b>Mesirow EM Currency</b>	<b>4.22</b>	<b>9.44</b>	<b>15.41</b>					<b>8.18</b>	<b>10/1/2023</b>	<b>277,183,943</b>
Blmbg. U.S. Aggregate Index	1.10	3.15	7.30					6.84		
<b>Public Credit Composite</b>	<b>1.90</b>	<b>5.07</b>	<b>10.82</b>	<b>10.34</b>	<b>4.12</b>	<b>5.97</b>	<b>6.02</b>	<b>5.97</b>	<b>4/1/1998</b>	<b>3,091,107,434</b>
Public Credit Policy Index	1.89	5.10	10.22	9.99	3.60	5.78	6.00	5.84		
<b>High Yield Composite</b>	<b>1.29</b>	<b>3.81</b>	<b>9.12</b>	<b>9.90</b>	<b>4.91</b>	<b>6.41</b>	<b>6.42</b>	<b>6.26</b>	<b>4/1/1998</b>	<b>2,034,990,135</b>
High Yield Policy Index	1.31	3.88	8.62	10.06	4.50	6.50	6.41	6.14		
<b>Aegon</b>	<b>1.84</b>	<b>4.11</b>	<b>8.89</b>	<b>9.47</b>	<b>4.48</b>	<b>6.30</b>		<b>5.91</b>	<b>2/1/2012</b>	<b>490,232,568</b>
High Yield Policy Index	1.31	3.88	8.62	10.06	4.50	6.50		5.70		
<b>Prudential High Yield</b>	<b>0.96</b>	<b>3.67</b>	<b>9.48</b>	<b>10.29</b>	<b>5.20</b>			<b>5.80</b>	<b>7/1/2019</b>	<b>743,693,102</b>
Blmbg. U.S. High Yield - 2% Issuer Cap	1.31	3.88	8.62	10.06	4.50			5.17		
<b>High Yield Transition</b>									<b>12/1/2025</b>	<b>799,140,656</b>
<b>Emerging Market Debt Composite</b>	<b>3.11</b>	<b>7.60</b>	<b>14.27</b>	<b>11.21</b>	<b>2.41</b>	<b>5.03</b>		<b>3.44</b>	<b>10/1/2012</b>	<b>1,056,117,299</b>
JPM EMBI Global Index (USD)	3.04	7.56	13.45	9.83	1.74	4.26		3.44		
<b>Prudential Emerging Markets Debt</b>	<b>3.25</b>	<b>7.75</b>	<b>14.42</b>	<b>11.26</b>	<b>2.44</b>			<b>4.53</b>	<b>5/1/2016</b>	<b>756,773,655</b>
JPM EMBI Global Index (USD)	3.04	7.56	13.45	9.83	1.74			3.66		
<b>Russell EMD Transition</b>									<b>12/1/2025</b>	<b>299,343,643</b>

# Asset Allocation & Performance

## Total Fixed Composite

Periods Ended December 31, 2025

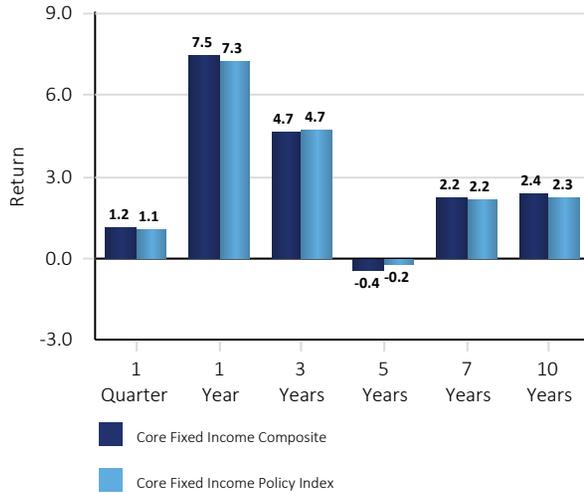
	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Active Fixed Composite</b>	<b>1.76</b>	<b>4.23</b>	<b>9.24</b>	<b>7.20</b>	<b>1.26</b>	<b>3.60</b>	<b>4.41</b>	<b>6.71</b>	<b>7/1/1985</b>	<b>4,794,246,928</b>
All Public Plans > \$1B-US Fixed Income Segment Median	1.10	3.16	7.15	5.05	0.42	3.00	4.02			
Blmbg. U.S. Universal Index	1.20	3.35	7.58	5.24	0.06	2.44	3.55	5.30	1/1/1990	
Blmbg. U.S. Aggregate Index	1.10	3.15	7.30	4.66	-0.36	2.01	3.25	6.52	1/1/1976	
Bloomberg U.S. Government/Credit Index	0.90	2.82	6.88	4.56	-0.59	2.16	3.31	6.43	1/1/1973	
Blmbg. U.S. Credit Index	0.87	3.46	7.83	5.98	-0.05	3.15	4.16	6.93	1/1/1973	
Blmbg. U.S. Treasury Index	0.90	2.43	6.32	3.62	-0.99	1.36	2.76	6.19	1/1/1973	
Blmbg. U.S. Mortgage Backed Securities	1.71	4.18	8.58	4.90	0.15	1.59	3.10	6.53	1/1/1976	
Blmbg. U.S. High Yield - 2% Issuer Cap	1.31	3.88	8.62	10.06	4.50	6.52	6.74	7.14	1/1/1993	
FTSE High Yield Cash Pay	1.27	3.71	8.50	10.09	4.61	6.45	6.48	7.49	1/1/1989	
JPM EMBI Global Index (USD)	3.04	7.56	13.45	9.83	1.74	4.26	5.48	7.52	1/1/1994	

# Performance Summary

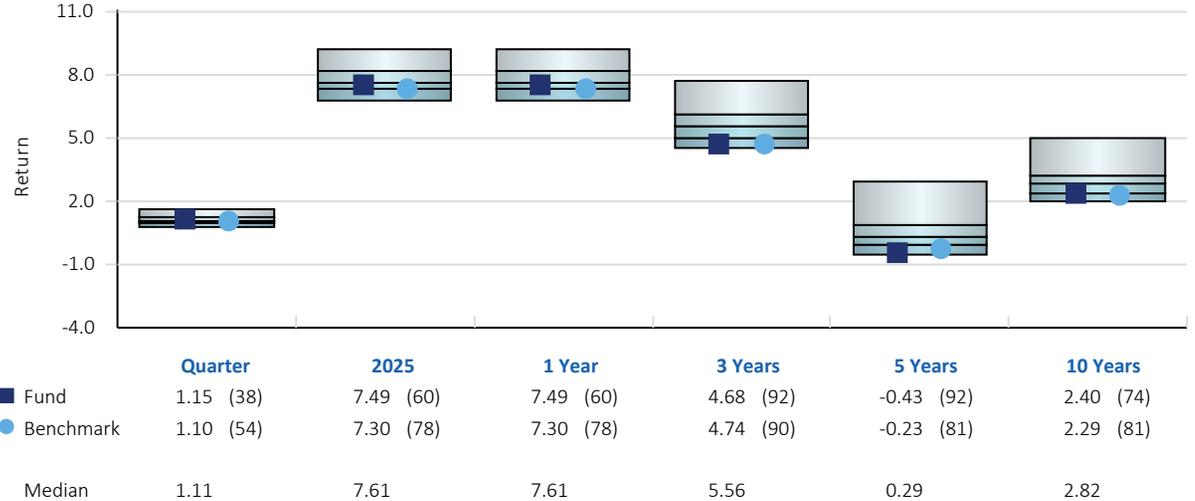
## Core Fixed Income Composite

Periods Ended December 31, 2025

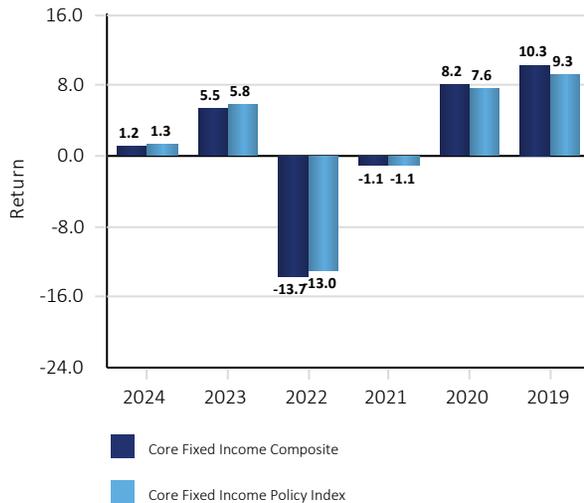
### Comparative Performance



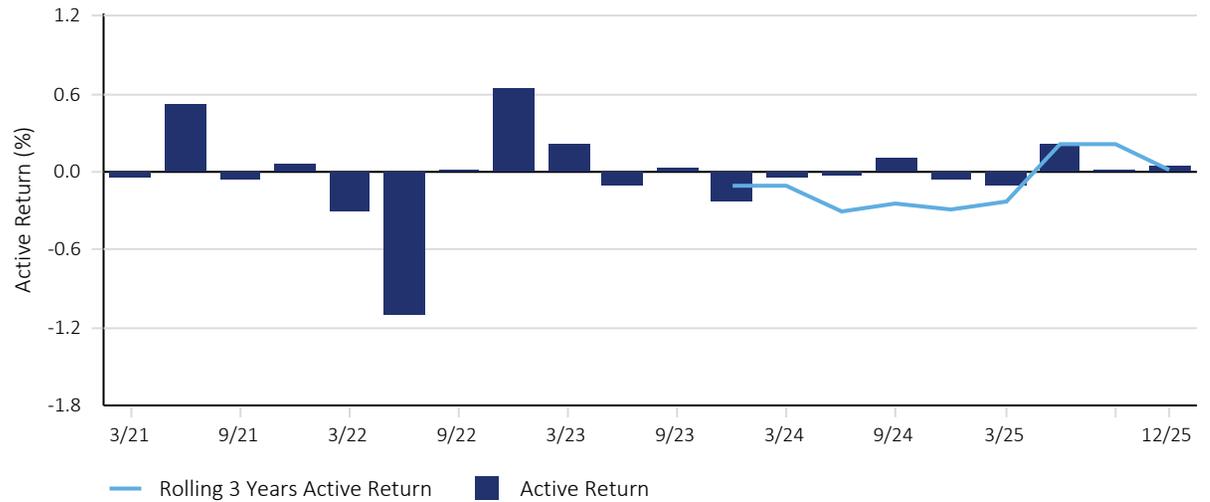
### Peer Group Analysis: IM U.S. Broad Market Core+ Fixed Income (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance

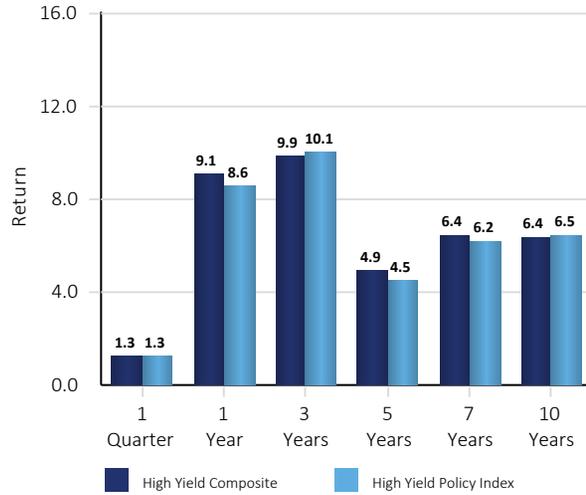


# Performance Summary

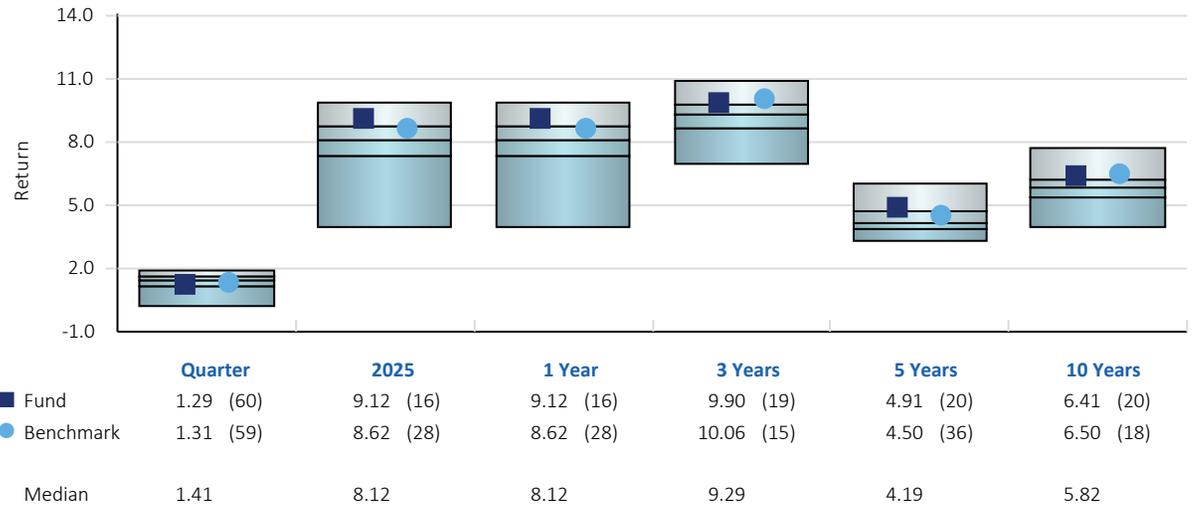
## High Yield Composite

Periods Ended December 31, 2025

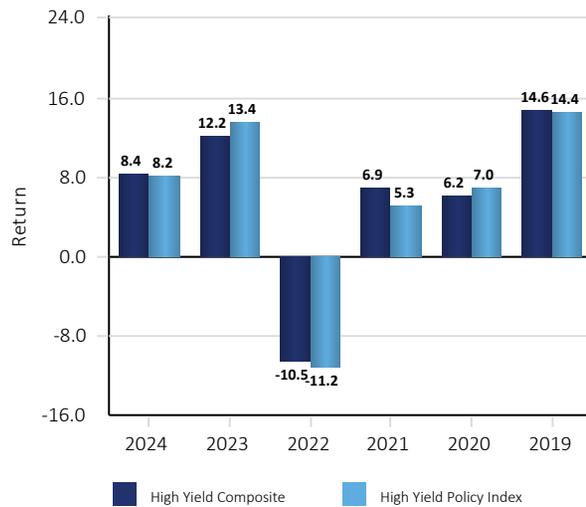
### Comparative Performance



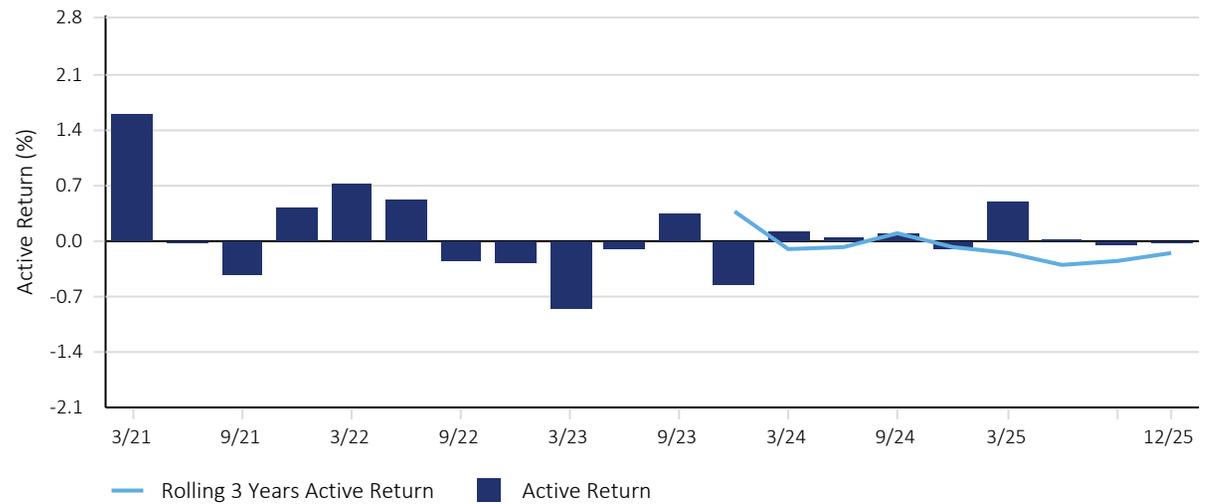
### Peer Group Analysis: IM U.S. High Yield Bonds (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance



# Asset Allocation & Performance

## Global Smart Beta Composite

Periods Ended December 31, 2025

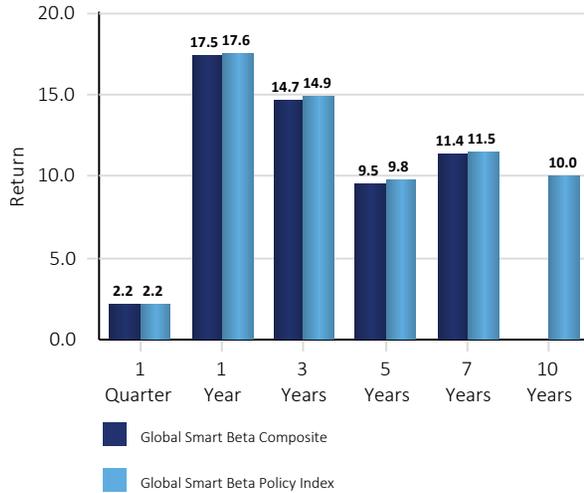
	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Global Smart Beta Composite</b>	<b>2.17</b>	<b>6.47</b>	<b>17.51</b>	<b>14.71</b>	<b>9.55</b>			<b>9.02</b>	<b>8/1/2017</b>	920,084,860
Global Smart Beta Policy Index	2.19	6.55	17.61	14.92	9.77			9.15		
MSCI AC World Index (Net)	3.29	11.17	22.34	20.65	11.19			11.24		
<b>U.S. Equity Smart Beta</b>	<b>1.09</b>	<b>4.99</b>	<b>10.73</b>	<b>13.35</b>	<b>10.43</b>			<b>10.35</b>	<b>8/1/2017</b>	798,622,306
Russell 1000 Comprehensive Factor Index	0.60	4.52	10.24	13.19	10.35			10.29		
<b>Developed Ex-U.S. Equity Smart Beta</b>	<b>3.71</b>	<b>8.17</b>	<b>30.40</b>	<b>16.65</b>	<b>7.73</b>			<b>7.09</b>	<b>8/1/2017</b>	26,092,456
FTSE Dev. Ex-U.S. Comprehensive Factor Index (N)	4.80	9.25	31.77	17.10	8.13			7.28		
<b>Emerging Markets Smart Beta</b>	<b>1.36</b>	<b>7.56</b>	<b>18.44</b>	<b>14.94</b>	<b>10.07</b>			<b>6.78</b>	<b>8/1/2017</b>	3,656,712
FTSE Emerging Comprehensive Factor Index (N)	3.90	10.71	22.10	17.13	11.46			7.68		
<b>Synthetic Smart Beta</b>									<b>12/1/2025</b>	91,713,385
Russell 1000 Comprehensive Factor Index	0.60	4.52	10.24	13.19	10.35	11.00	10.84	11.23	8/1/2001	
FTSE Dev. Ex-U.S. Comprehensive Factor Index (N)	4.80	9.25	31.77	17.10	8.13	8.12	7.75	10.27	10/1/2001	
FTSE Emerging Comprehensive Factor Index (N)	3.90	10.71	22.10	17.13	11.46	9.48	9.44	13.85	10/1/2001	

# Performance Summary

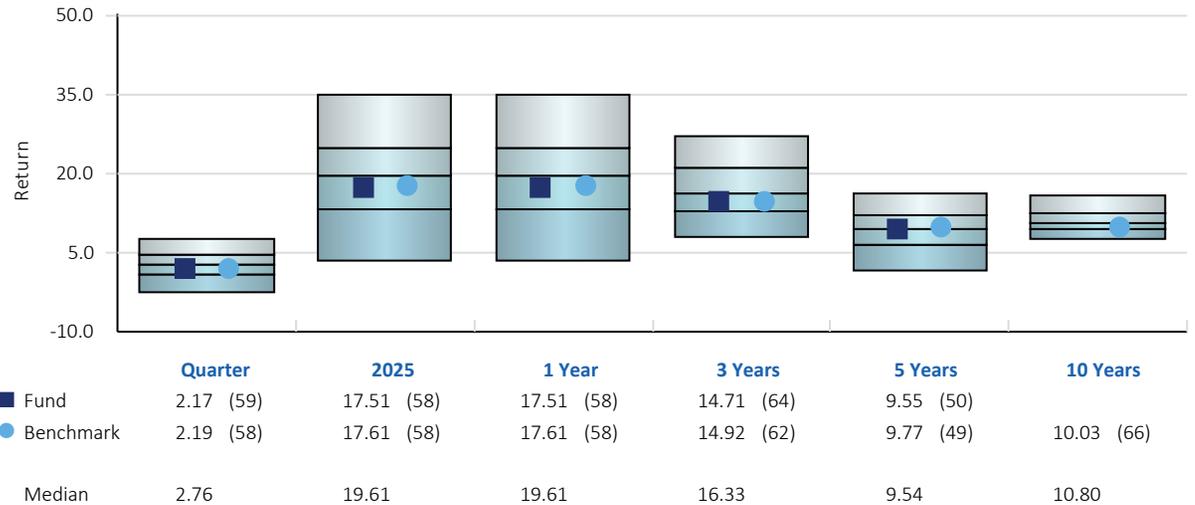
## Global Smart Beta Composite

Periods Ended December 31, 2025

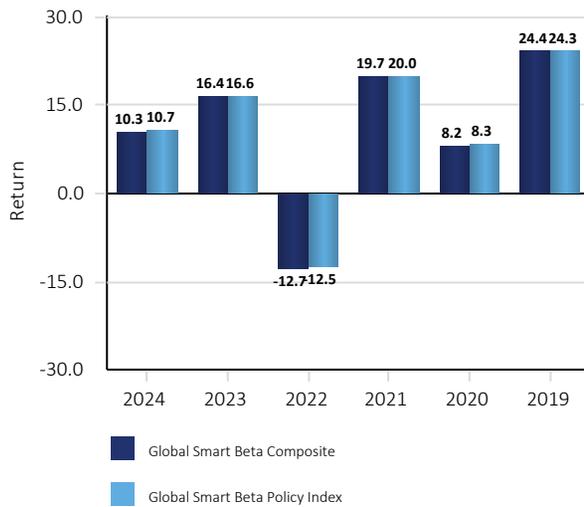
### Comparative Performance



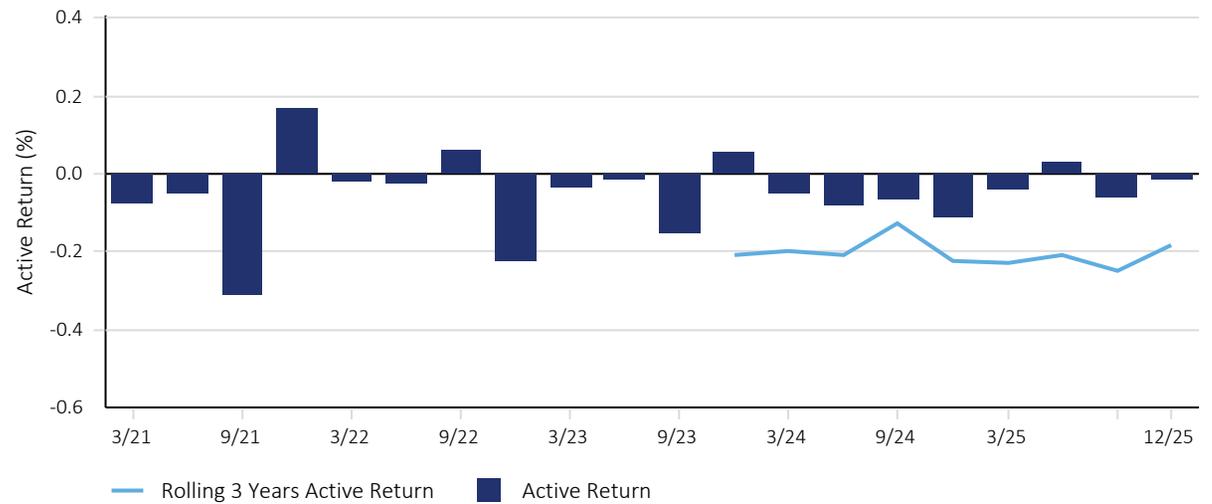
### Peer Group Analysis: IM Global Equity (SA+CF)



### Comparative Performance



### Rolling 3 Years Performance



# Appendix

# Cash Flow Summary

Total Fund

1 Quarter Ending December 31, 2025

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
<b>Total Fund</b>	<b>48,543,062,849</b>	<b>695,827,773</b>	<b>-1,006,546,149</b>		<b>-13,984,674</b>	<b>-218,128</b>	<b>1,167,157,226</b>	<b>49,385,298,897</b>
<b>Public Markets Composite</b>	<b>34,396,664,970</b>	<b>814,144,835</b>	<b>-942,733,565</b>	<b>63,447,966</b>	<b>-636,866</b>	<b>-218,128</b>	<b>871,181,835</b>	<b>35,201,851,046</b>
<b>U.S. Equity Composite</b>	<b>10,661,090,642</b>	<b>-24,606</b>		<b>-130,000,000</b>	<b>24,606</b>		<b>310,016,611</b>	<b>10,841,107,253</b>
<b>Active Equity Composite</b>	<b>2,752,191,512</b>						<b>121,310,227</b>	<b>2,873,501,739</b>
Blackrock Russell 1000 SAE	2,491,863,127						113,381,179	2,605,244,306
BlackRock Russell 2000 SAE	260,328,386						7,929,048	268,257,434
<b>Passive Equity Composite</b>	<b>7,908,899,130</b>	<b>-24,606</b>		<b>-130,000,000</b>	<b>24,606</b>		<b>188,706,384</b>	<b>7,967,605,514</b>
Mellon Russell 1000	7,658,368,306	-41,538		-90,000,000	41,538		182,574,814	7,750,943,119
Mellon Russell 2000	206,377,495	5,837		-10,000,000	-5,837		4,528,780	200,906,275
Synthetic Domestic Equity	44,153,329	11,095		-30,000,000	-11,095		1,602,791	15,756,119
Northern Trust Domestic Equity Transition								
<b>International Equity Composite</b>	<b>6,641,297,952</b>	<b>336,480</b>		<b>-130,000,000</b>	<b>-336,480</b>	<b>-7,374</b>	<b>316,073,795</b>	<b>6,827,364,373</b>
<b>Active International Equity</b>	<b>2,810,836,946</b>	<b>156,971</b>			<b>-156,971</b>	<b>-7,374</b>	<b>121,946,980</b>	<b>2,932,776,552</b>
BlackRock Europe SAE	4,096,044						-1,935	4,094,109
Oechsle Intl. Advisors	798,360						-374	797,987
BlackRock EAFE SAE	1,495,500,805						57,197,063	1,552,697,867
PanAgora Dynamic EAFE	469,834,671						24,760,681	494,595,352
Columbia EAFE	8,144,383					-5,759	309	8,138,933
<b>Active Emerging Markets Equity Composite</b>	<b>832,462,683</b>	<b>156,971</b>			<b>-156,971</b>	<b>-1,615</b>	<b>39,991,236</b>	<b>872,452,305</b>
BlackRock Emerging Markets SAE	498,782,335						25,791,188	524,573,523
Wellington Emerging Markets	333,680,348	156,971			-156,971	-1,615	14,200,049	347,878,782
<b>Passive International Equity</b>	<b>3,830,119,071</b>	<b>179,509</b>		<b>-130,000,000</b>	<b>-179,509</b>		<b>194,123,318</b>	<b>3,894,242,389</b>
BlackRock Canada	554,541,607	26,805		-10,000,000	-26,805		42,880,911	587,422,518
Mellon Emerging Markets Fund	1,183,197,973	45,465		-40,000,000	-45,465		54,594,265	1,197,792,239

# Cash Flow Summary

Total Fund

1 Quarter Ending December 31, 2025

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Synthetic International Equity	34,726,107	5,106		-30,000,000	-5,106		1,387,706	6,113,813
BlackRock Passive EAFE	2,057,653,383	102,133		-50,000,000	-102,133		95,260,436	2,102,913,819
International Equity Transition	341,935						3,496	345,431
<b>Active Fixed Composite</b>	<b>3,138,781,706</b>	<b>143,230</b>		<b>1,600,000,000</b>	<b>-143,230</b>		<b>55,465,222</b>	<b>4,794,246,928</b>
<b>Total US Fixed Income Composite</b>	<b>13,379,041,535</b>	<b>95,730</b>		<b>1,325,000,000</b>	<b>-95,730</b>		<b>156,500,992</b>	<b>14,860,542,526</b>
<b>Total Fixed Composite</b>	<b>13,869,863,180</b>	<b>95,730</b>		<b>1,575,000,000</b>	<b>-95,730</b>		<b>172,453,001</b>	<b>15,617,316,182</b>
<b>Core Fixed Income Ex RV</b>	<b>11,130,110,339</b>	<b>-47,499</b>		<b>-25,000,000</b>	<b>47,499</b>		<b>124,542,304</b>	<b>11,229,652,643</b>
<b>Core Fixed Income Composite</b>	<b>12,406,913,565</b>	<b>-47,499</b>		<b>-25,000,000</b>	<b>47,499</b>		<b>144,295,182</b>	<b>12,526,208,748</b>
<b>Passive Fixed Composite</b>	<b>10,731,081,475</b>	<b>-47,499</b>		<b>-25,000,000</b>	<b>47,499</b>		<b>116,987,780</b>	<b>10,823,069,254</b>
Mellon Aggregate	10,698,800,310	-62,592			62,592		117,014,097	10,815,814,408
Synthetic Fixed Income	32,281,164	15,093		-25,000,000	-15,093		-26,318	7,254,847
<b>Active Core Fixed Composite</b>	<b>1,675,832,091</b>						<b>27,307,403</b>	<b>1,703,139,494</b>
MacKay Shields Core Plus	61						1	62
Prudential Fixed Income	28,960						-16,749	12,212
Principal Global Investors	154,831						7,041	161,872
TCW Asset Management	109,049						23	109,072
Western Asset Mgmt	18,954						192	19,146
Blackrock	18,163						226	18,388
<b>Relative Value Composite</b>	<b>1,675,502,073</b>						<b>27,316,669</b>	<b>1,702,818,742</b>
BlackRock Universal	699,357,536						4,794,741	704,152,277
Prudential Universal	577,445,690						14,958,138	592,403,828
Man EM Global Macro	132,747,515						-3,668,820	129,078,695
Mesirow EM Currency	265,951,332						11,232,611	277,183,943
<b>Public Credit Composite</b>	<b>1,462,949,615</b>	<b>143,230</b>		<b>1,600,000,000</b>	<b>-143,230</b>		<b>28,157,819</b>	<b>3,091,107,434</b>
<b>High Yield Composite</b>	<b>972,127,970</b>	<b>143,230</b>		<b>1,050,000,000</b>	<b>-143,230</b>		<b>12,862,166</b>	<b>2,034,990,135</b>

# Cash Flow Summary

Total Fund

1 Quarter Ending December 31, 2025

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
Prudential High Yield	488,976,320			250,000,000			4,716,782	743,693,102
Oaktree Capital Mgmt.	1,922,585						1,226	1,923,811
Aegon	481,229,065	143,230			-143,230		9,003,503	490,232,568
High Yield Transition				800,000,000			-859,344	799,140,656
<b>Emerging Market Debt Composite</b>	<b>490,821,645</b>			<b>550,000,000</b>			<b>15,295,653</b>	<b>1,056,117,299</b>
Prudential Emerging Markets Debt	490,821,645			250,000,000			15,952,010	756,773,655
Russell EMD Transition				300,000,000			-656,357	299,343,643
<b>Global Smart Beta Composite</b>	<b>2,481,088,328</b>	<b>201,341</b>		<b>-1,615,000,000</b>	<b>-201,341</b>	<b>-323</b>	<b>53,996,854</b>	<b>920,084,860</b>
Developed Ex-U.S. Equity Smart Beta	748,580,521	60,603		-750,000,000	-60,603	-61	27,511,996	26,092,456
Emerging Markets Smart Beta	250,177,144	20,285		-250,000,000	-20,285	-262	3,479,830	3,656,712
U.S. Equity Smart Beta	1,482,330,663	120,453		-700,000,000	-120,453		16,291,643	798,622,306
Synthetic Smart Beta				85,000,000			6,713,385	91,713,385
<b>Managed Short Term Cash Composite</b>	<b>743,324,868</b>	<b>813,535,889</b>	<b>-942,733,565</b>	<b>363,447,966</b>	<b>-27,921</b>	<b>-210,432</b>	<b>18,641,573</b>	<b>995,978,379</b>
STIF	479,144,645	813,507,968	-942,733,565	376,746,620		-210,432	5,469,561	731,924,799
LARS	215,393,057						7,541,466	222,934,523
Cash - Securities Lending Income				-298,654			298,654	
Staff Directed Trades	48,787,165	27,921		-13,000,000	-27,921		5,331,892	41,119,058
<b>Private Markets Composite</b>	<b>14,146,397,879</b>	<b>-118,317,061</b>	<b>-63,812,584</b>	<b>-63,447,966</b>	<b>-13,347,808</b>		<b>295,975,391</b>	<b>14,183,447,851</b>
<b>Private Equity/Debt</b>	<b>8,081,404,987</b>	<b>-259,876,542</b>			<b>-3,127,209</b>		<b>201,513,335</b>	<b>8,019,914,571</b>
Pathway Fund of Funds	7,335,107,662	-130,409,486			-3,025,991		193,448,804	7,395,120,989
<b>Private Equity/Debt Long Perf</b>	<b>746,297,325</b>	<b>-129,467,056</b>			<b>-101,218</b>		<b>8,064,531</b>	<b>624,793,582</b>
LBO Composite	356,837,136	-83,011,372			-68,625		11,434,810	285,191,949
Venture Capital Composite	389,460,189	-46,455,684			-32,593		-3,370,279	339,601,633
<b>Private Credit Composite</b>	<b>2,891,424,205</b>	<b>16,382,182</b>		<b>-63,447,966</b>	<b>-5,521,938</b>		<b>56,346,789</b>	<b>2,895,183,272</b>

# Cash Flow Summary

Total Fund

1 Quarter Ending December 31, 2025

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
<b>Private Corporate Debt Composite</b>	<b>1,000,280,152</b>			<b>-9,757,507</b>	<b>-1,744,687</b>		<b>14,227,733</b>	<b>1,003,005,691</b>
Tennenbaum CP Direct Lending	319,368,312			-8,466,135	-733,122		4,015,394	314,184,448
Monroe Capital	416,931,748			-5,889,008	-698,268		4,272,197	414,616,669
PPEF XXV B	263,980,092			4,597,636	-313,296		5,940,142	274,204,574
loway Private Credit		16,382,182					187,230	16,569,412
<b>Private Real Asset Debt Composite</b>	<b>721,163,985</b>			<b>-11,859,626</b>	<b>-1,510,833</b>		<b>9,673,707</b>	<b>717,467,233</b>
Principal Real Estate Debt II				8,945,091	-204,994		204,994	121,886,595
PGIM Real Estate Global Debt	112,941,504			-6,945,272	-222,562		1,951,211	65,951,220
Kayne Anderson Real Estate Debt IV	71,167,843			-22,248,606	-190,525		1,461,893	87,136,984
Heitman Credit	108,114,222			-1,680,772	-107,558		-547,042	92,489,884
IFM US Infrastructure Debt Fund	94,825,256			-2,102,089	-265,386		2,874,445	105,611,436
JP Morgan Global Transport Income Fund	68,032,865			-987,892	-261,219		1,705,099	68,488,853
ITE Rail Fund IA	72,004,112			-1,401,382	-139,580		139,580	70,602,730
PGIM PREDS	64,786,799			7,698,271	-94,668		1,437,578	73,827,980
Oaktree RECIF	24,186,916			6,863,025	-24,340		445,949	31,471,551
Principal OEDF								
loway Private Real Assets		15,000,000						15,000,000
<b>Opportunistic Credit Composite</b>	<b>1,169,980,068</b>			<b>-41,830,833</b>	<b>-2,266,418</b>		<b>32,258,119</b>	<b>1,158,140,937</b>
KKR Global Corporate Debt	283,524,332			-4,318,832	-445,286		8,285,075	287,045,289
Crestline Opportunistic Credit	179,519,166			-27,486,138	-525,802		822,837	152,330,063
ARES PCS II	78,843,685			-8,418,465	-239,353		2,805,698	72,991,565
Audax Mezzanine Coinvest	13,123,396			-4,828,213			406,970	8,702,153
Marathon SPS	245,042,489			18,750,000	-635,596		7,460,025	270,616,918
Arrowmark	222,590,013			-7,178,843			7,980,966	223,392,136
Audax Mezzanine V	46,631,978			-370,539	-171,023		867,123	46,957,539
Crestline Opportunistic Credit - Series 2	100,705,010			-7,979,803	-249,358		3,629,425	96,105,274

# Cash Flow Summary

Total Fund

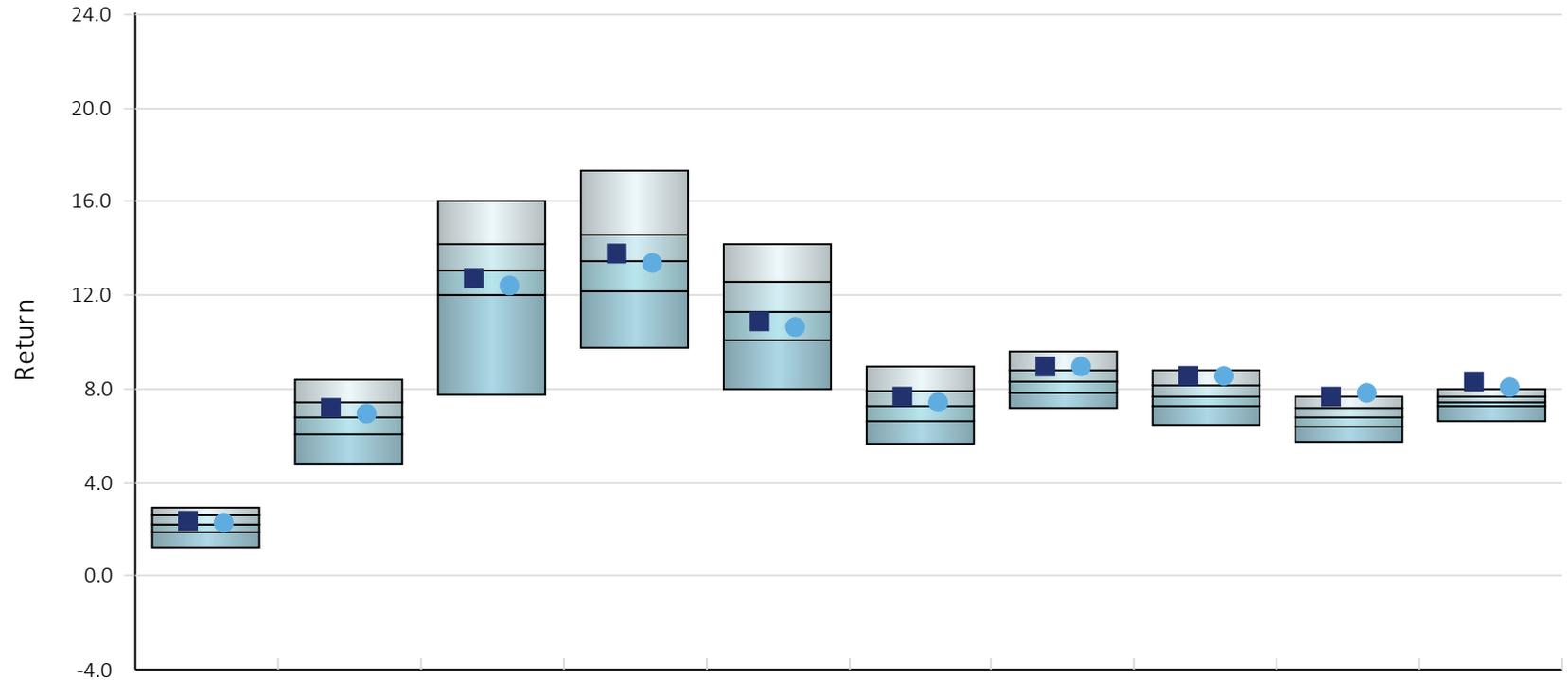
1 Quarter Ending December 31, 2025

	Begin Value	Contributions	Distributions	Net Transfers	Fees	Expenses	Capital Apprec./ Deprec.	End Value
<b>Private Real Assets Composite</b>	<b>3,173,568,687</b>	<b>125,177,299</b>	<b>-63,812,584</b>		<b>-4,698,661</b>		<b>38,115,267</b>	<b>3,268,350,008</b>
<b>Private Other Real Assets Composite</b>	<b>761,150,695</b>	<b>40,665,299</b>	<b>-4,368,884</b>		<b>-2,116,455</b>		<b>9,899,114</b>	<b>805,229,769</b>
UBS Farmland Investors	111,849,045		-1,100,000		-236,470		888,222	111,400,798
Forest Investment Associates	178,445,273				-281,923		-4,508,626	173,654,724
Brookfield Super-Core Infrastructure	344,964,721		-3,090,848		-816,501		8,025,012	349,082,383
MIP VI	125,891,656	40,665,299	-178,036		-781,561		5,494,506	171,091,864
<b>Private Real Estate Composite</b>	<b>2,412,417,992</b>	<b>69,512,000</b>	<b>-59,443,700</b>		<b>-2,582,206</b>		<b>28,216,153</b>	<b>2,448,120,239</b>
UBS	503,856,728		-4,170,000		-509,475		12,575,255	511,752,507
Clarion Partners	54,220,863		-3,077,000				1,835,681	52,979,544
RREEF America LLC	962,965,437	36,840,000	-6,432,700		-845,651		2,652,718	995,179,804
Invesco Separate Account	857,689,228	372,000	-45,764,000		-914,580		9,840,759	821,223,407
KAREP VII	33,685,737	32,300,000			-312,500		1,311,740	66,984,977
Settlement Proceeds								

# Plan Sponsor Peer Group Analysis

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

Periods Ended December 31, 2025



	<b>1 Quarter</b>	<b>2 Quarters</b>	<b>3 Quarters</b>	<b>1 Year</b>	<b>3 Years</b>	<b>5 Years</b>	<b>10 Years</b>	<b>15 Years</b>	<b>20 Years</b>	<b>30 Years</b>
■ Total Fund	2.38 (35)	7.22 (31)	12.77 (59)	13.75 (41)	10.86 (61)	7.70 (31)	8.98 (19)	8.52 (9)	7.65 (6)	8.30 (4)
● Total Fund Policy Benchmark	2.27 (43)	6.93 (42)	12.40 (71)	13.40 (53)	10.64 (65)	7.46 (39)	8.92 (20)	8.59 (8)	7.80 (5)	8.10 (4)
5th Percentile	2.94	8.37	16.05	17.30	14.17	8.94	9.60	8.83	7.69	7.96
1st Quartile	2.58	7.39	14.21	14.55	12.59	7.92	8.81	8.13	7.20	7.64
Median	2.20	6.76	13.09	13.44	11.27	7.25	8.27	7.68	6.82	7.40
3rd Quartile	1.85	6.06	11.97	12.18	10.07	6.59	7.80	7.23	6.40	7.24
95th Percentile	1.24	4.80	7.76	9.72	7.99	5.69	7.16	6.45	5.77	6.62
Population	115	115	115	115	115	112	106	91	76	27

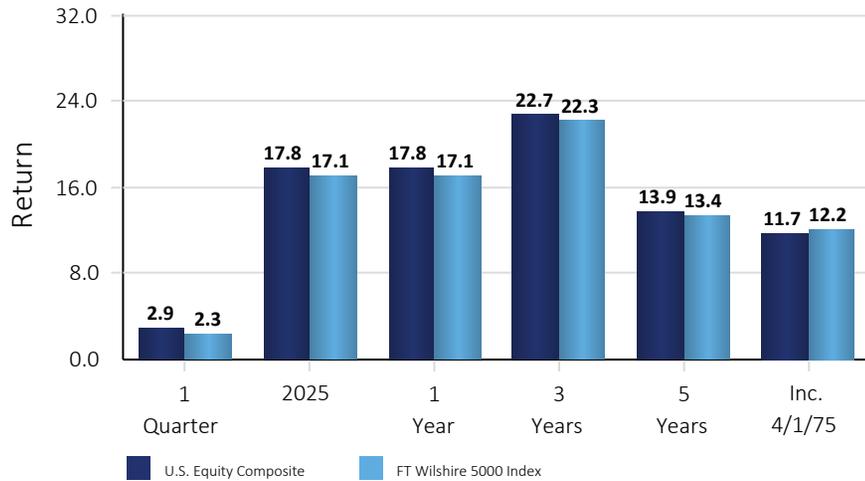
Parenteses contain percentile rankings.  
Calculation based on quarterly periodicity.

# Manager Summary

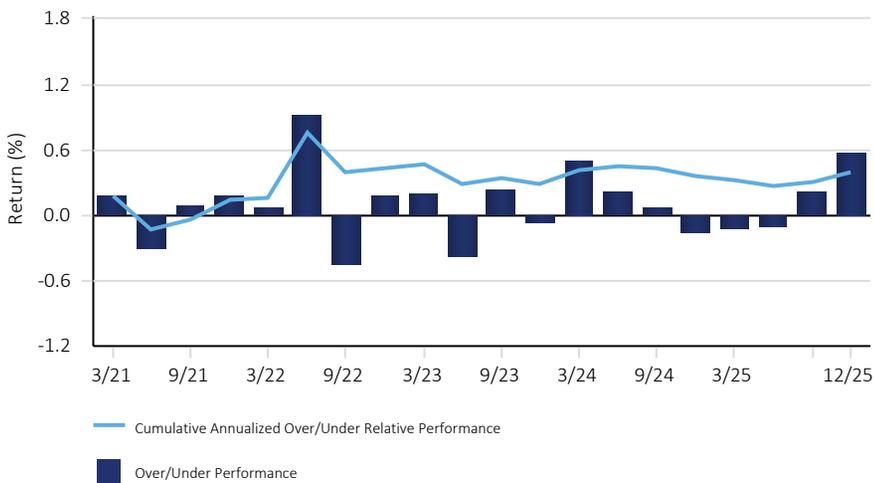
U.S. Equity Composite vs IM U.S. All Cap Equity (SA+CF)

Periods Ended December 31, 2025

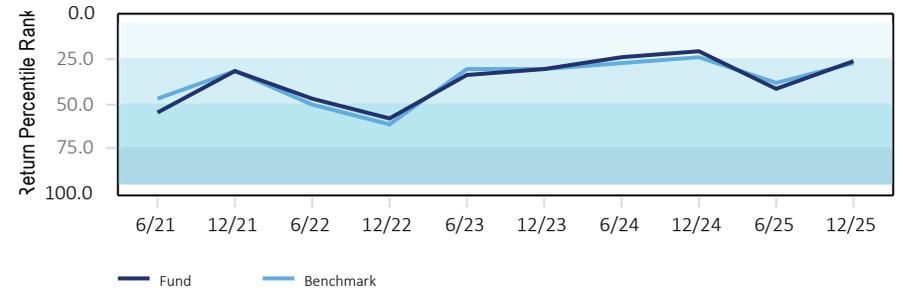
## Comparative Performance



## Relative Performance



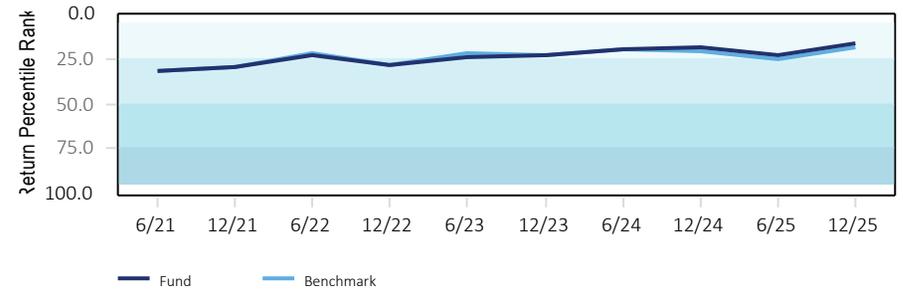
## 1 Year Rolling Percentile Ranking



## 3 Year Rolling Percentile Ranking



## 5 Year Rolling Percentile Ranking

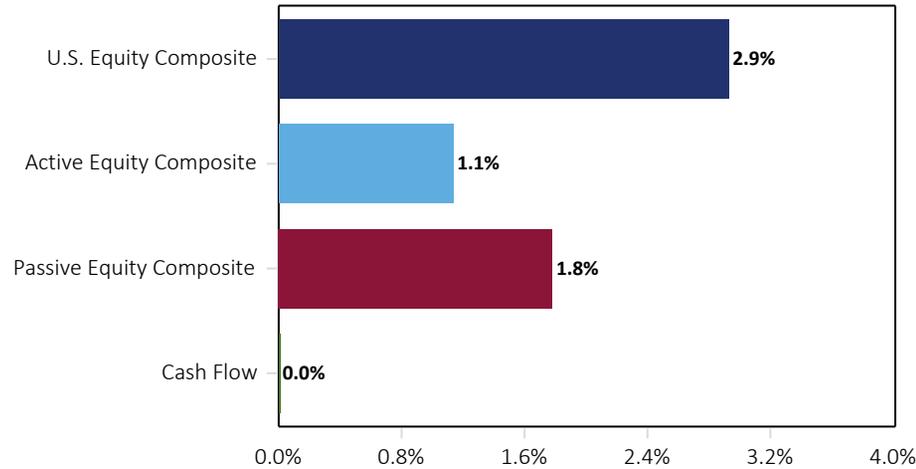


# Return and Risk Contribution

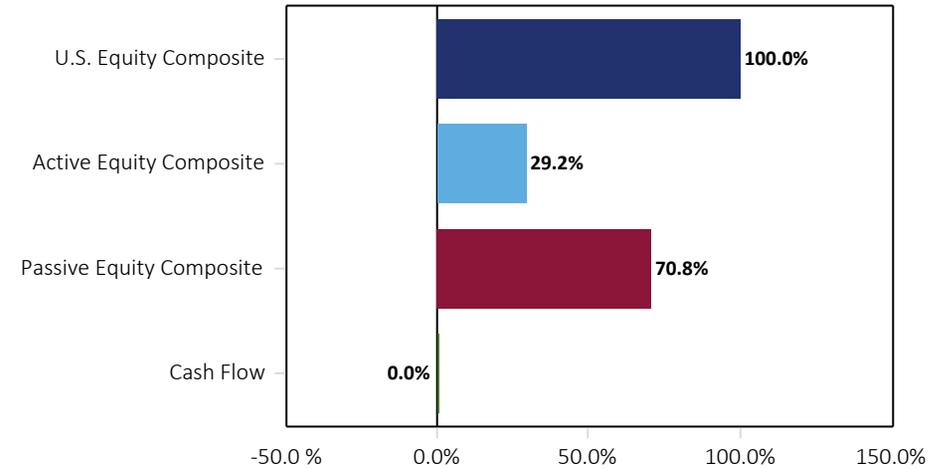
U.S. Equity Composite

Periods Ended 1 Quarter December 31, 2025

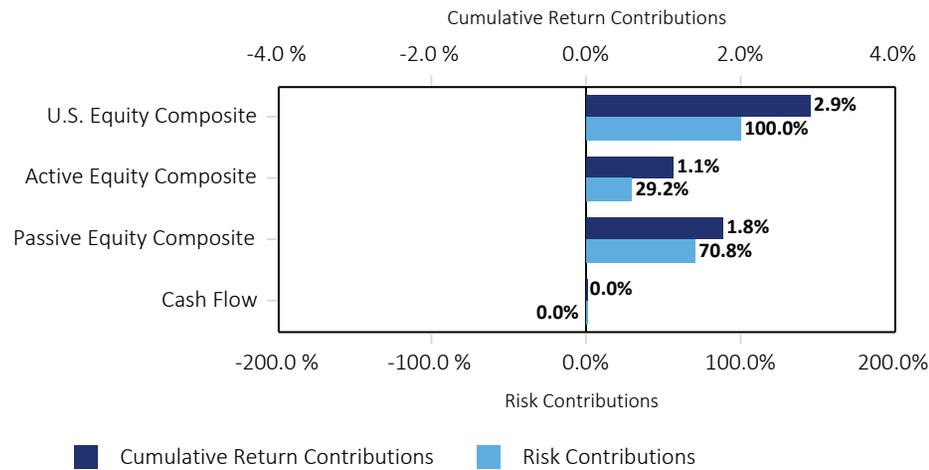
## Cumulative Return Contributions



## Risk Contributions



## Cumulative Return and Risk Contributions



## Cumulative Return Contributions History

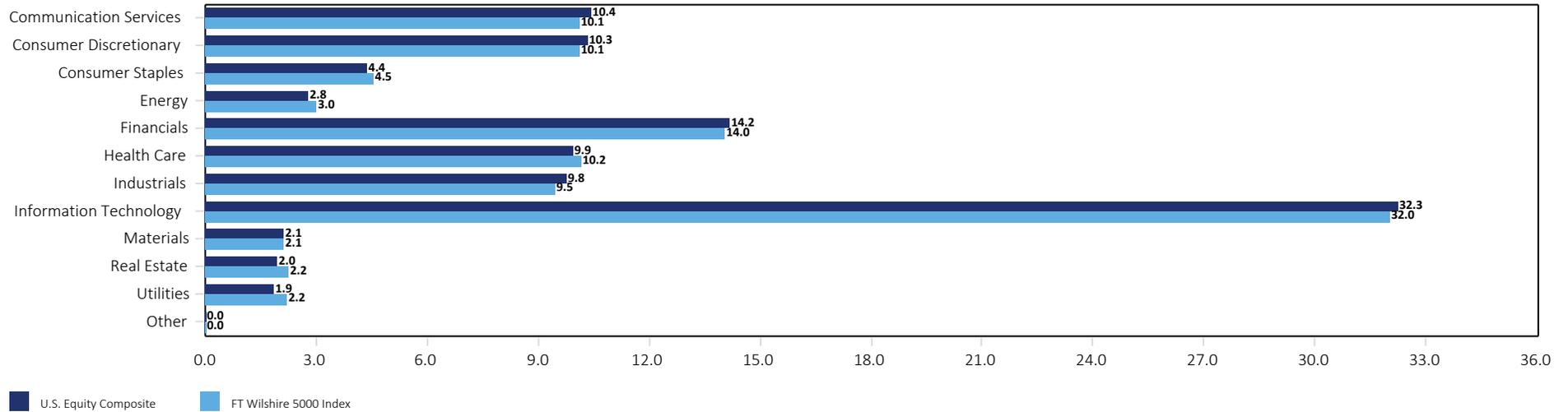


# Portfolio Characteristics

## U.S. Equity Composite

Periods Ended As of December 31, 2025

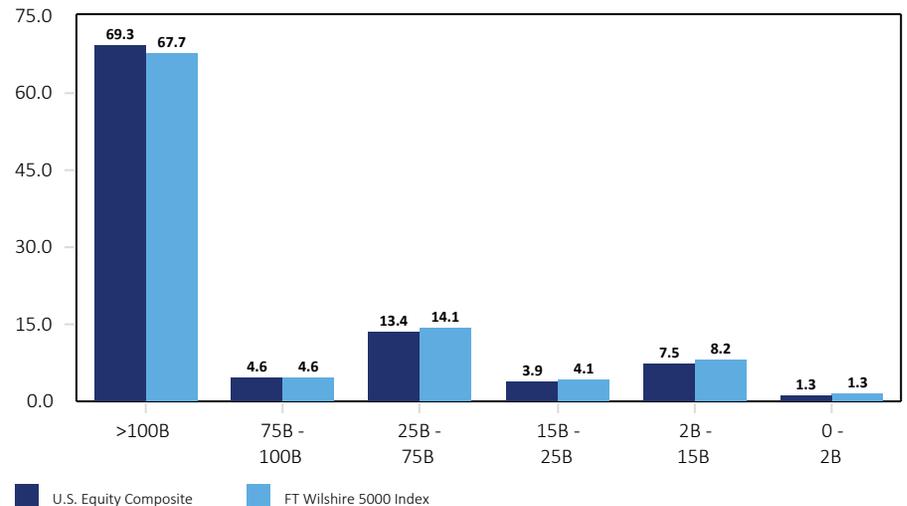
### Sector Weights (%)



### Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$	1,268,028,360,274	1,235,212,747,347
Median Mkt. Cap \$	2,311,129,170	1,627,227,810
Price/Earnings ratio	27.2	27.2
Price/Book ratio	4.9	4.8
5 Yr. EPS Growth Rate (%)	25.3	25.0
Current Yield (%)	1.2	1.2
Beta (5 Years, Monthly)	0.98	1.00
Number of Stocks	3,009	3,414

### Distribution of Market Capitalization (%)

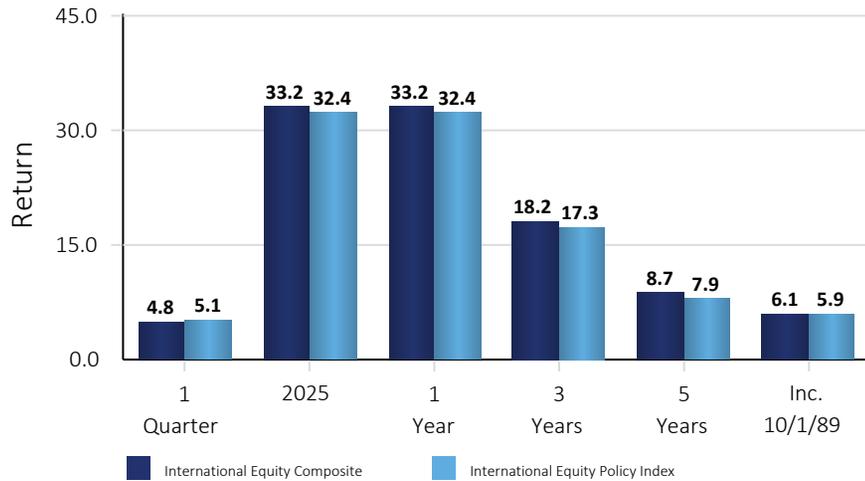


# Manager Summary

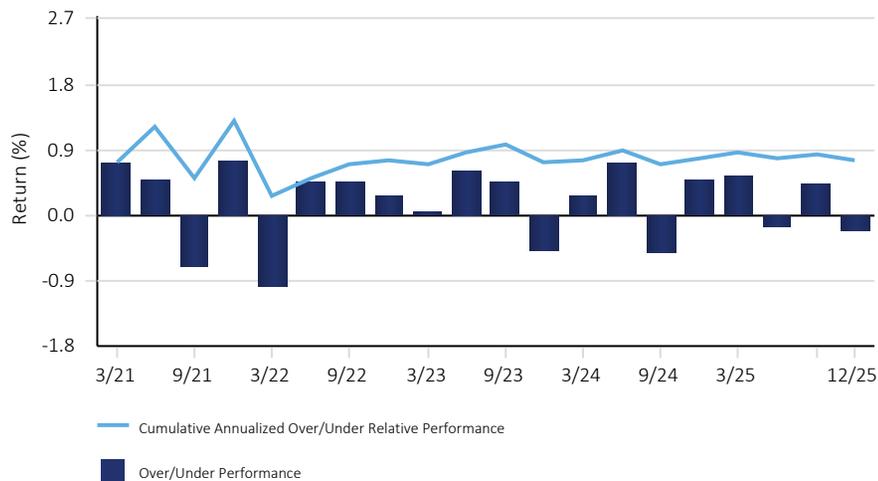
International Equity Composite vs IM International Equity (SA+CF)

Periods Ended December 31, 2025

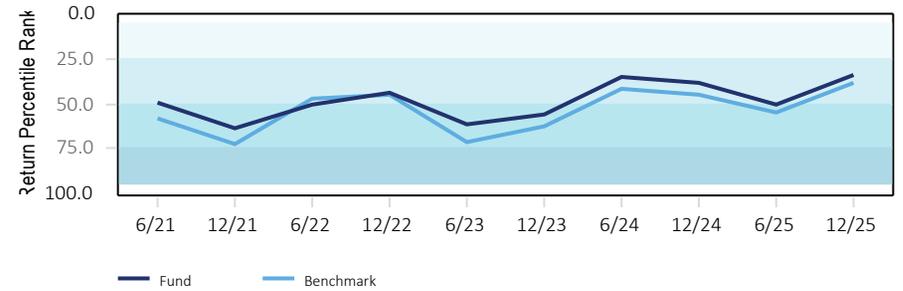
## Comparative Performance



## Relative Performance



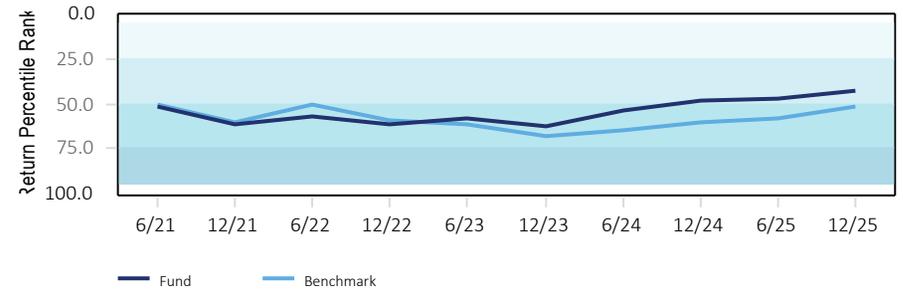
## 1 Year Rolling Percentile Ranking



## 3 Year Rolling Percentile Ranking



## 5 Year Rolling Percentile Ranking

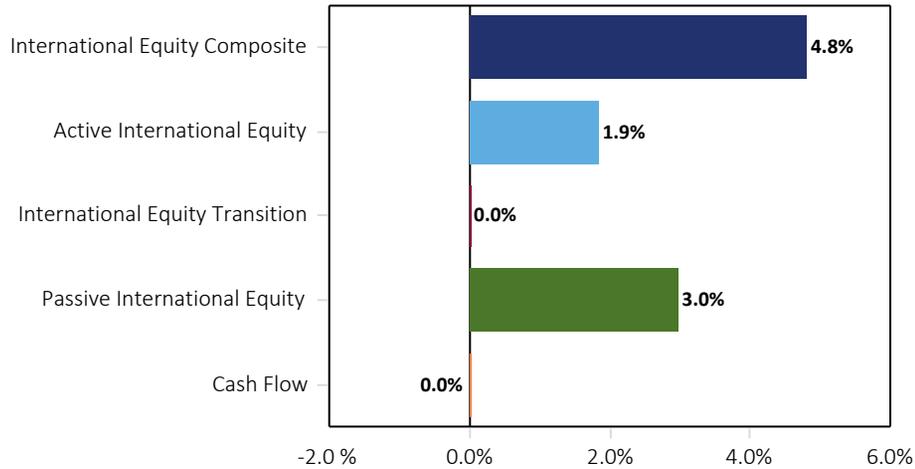


# Return and Risk Contribution

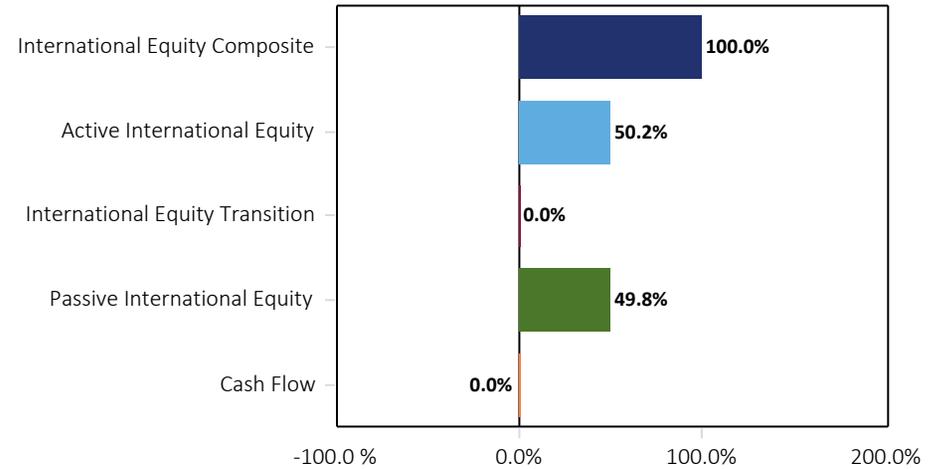
## International Equity Composite

Periods Ended 1 Quarter December 31, 2025

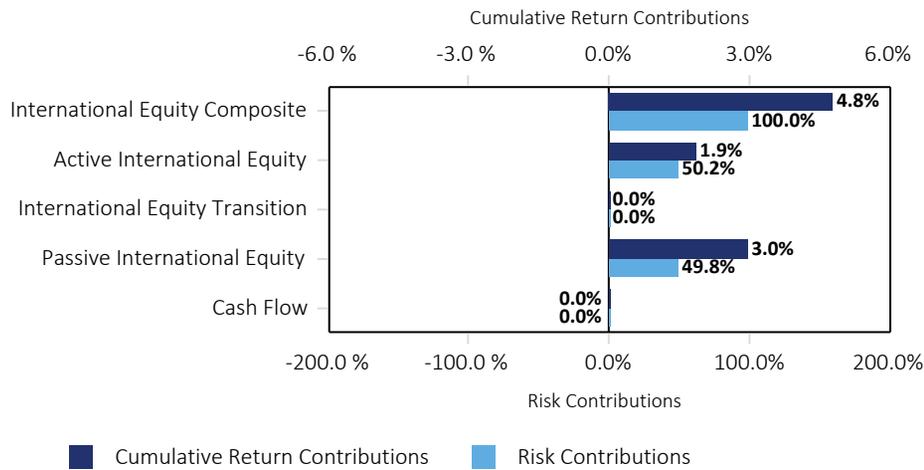
### Cumulative Return Contributions



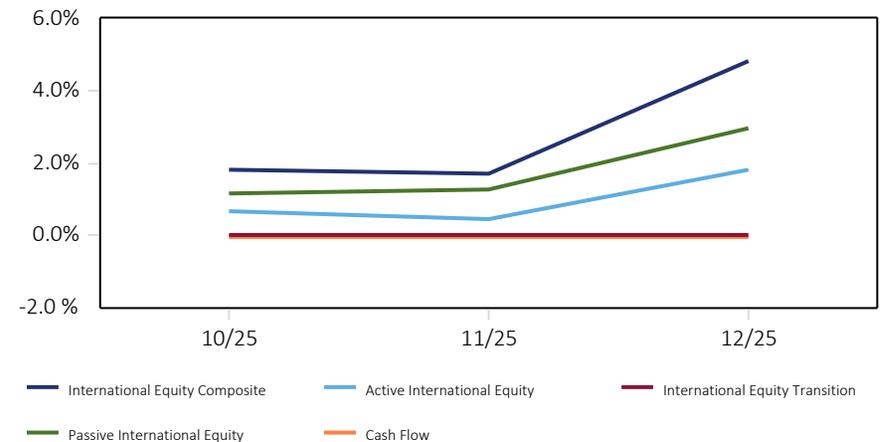
### Risk Contributions



### Cumulative Return and Risk Contributions



### Cumulative Return Contributions History

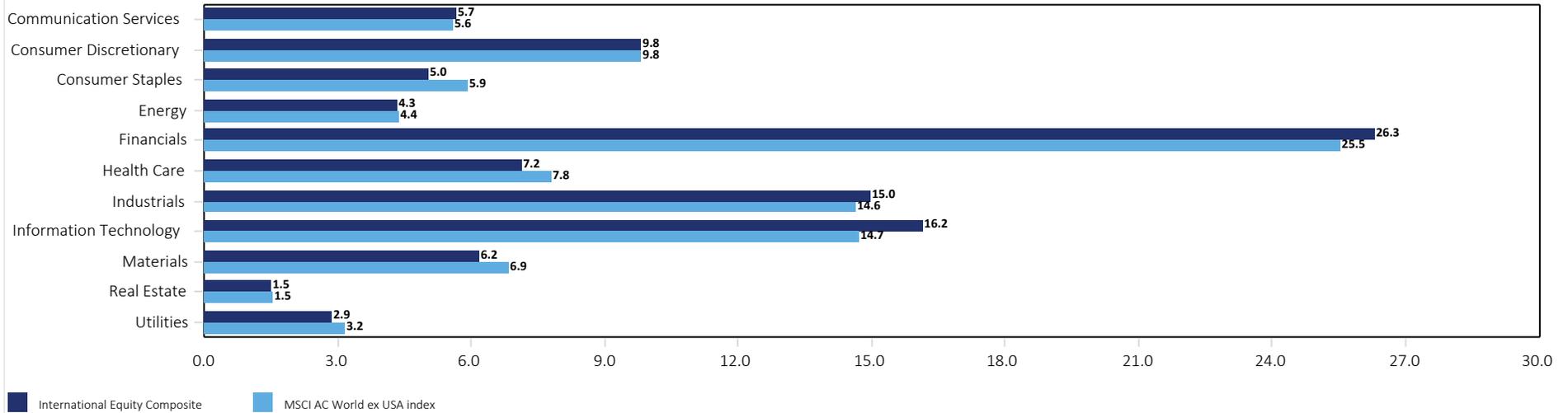


# Portfolio Characteristics

## International Equity Composite

Periods Ended As of December 31, 2025

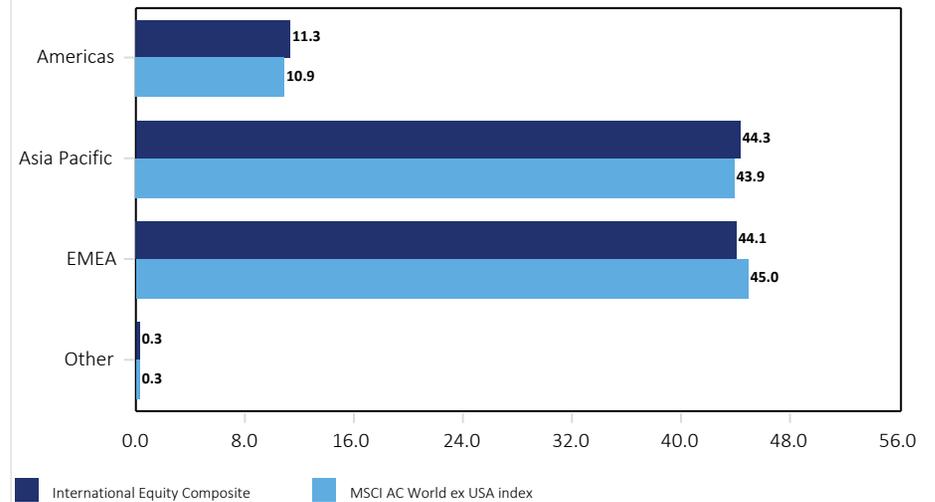
### Sector Weights (%)



### Portfolio Characteristics

	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap \$	158,183,582,157	154,072,335,084
Median Mkt. Cap \$	13,357,331,177	13,184,959,301
Price/Earnings ratio	16.2	17.0
Price/Book ratio	2.9	2.7
5 Yr. EPS Growth Rate (%)	19.5	19.4
Current Yield (%)	2.6	2.7
Beta (5 Years, Monthly)	0.98	1.00
Number of Stocks	2,513	1,973

### Region Allocation



# Country/Region Allocation

## International Equity Composite

Periods Ended December 31, 2025

	International Equity Composite	MSCI AC World ex USA index		International Equity Composite	MSCI AC World ex USA index
Canada	8.63	8.49	Brazil	1.22	1.28
United States	0.48	0.17	Chile	0.14	0.17
<b>Americas</b>	<b>9.11</b>	<b>8.66</b>	Colombia	0.03	0.04
Australia	4.00	3.78	Mexico	0.69	0.62
Hong Kong	1.85	1.67	Peru	0.10	0.07
Japan	14.20	13.50	<b>Americas</b>	<b>2.17</b>	<b>2.19</b>
New Zealand	0.11	0.14	China	7.10	7.55
Singapore	0.97	1.16	India	4.56	4.60
<b>Asia Pacific</b>	<b>21.14</b>	<b>20.25</b>	Indonesia	0.38	0.36
Austria	0.06	0.17	Korea	4.05	4.06
Belgium	0.43	0.53	Malaysia	0.31	0.37
Denmark	0.90	1.18	Philippines	0.10	0.11
Finland	0.75	0.72	Taiwan	6.30	6.31
France	6.49	5.95	Thailand	0.41	0.31
Germany	5.57	5.93	<b>Asia Pacific</b>	<b>23.21</b>	<b>23.66</b>
Ireland	0.85	0.75	Czech Republic	0.03	0.05
Israel	0.66	0.67	Egypt	0.01	0.02
Italy	1.78	1.93	Greece	0.12	0.17
Netherlands	3.45	3.72	Hungary	0.15	0.10
Norway	0.46	0.35	Kuwait	0.17	0.21
Portugal	0.16	0.11	Poland	0.27	0.31
Spain	2.43	2.30	Qatar	0.16	0.20
Sweden	2.05	2.27	Saudi Arabia	0.78	0.87
Switzerland	5.71	6.10	South Africa	0.90	1.01
United Kingdom	9.03	8.79	Turkey	0.20	0.13
<b>EMEA</b>	<b>40.80</b>	<b>41.45</b>	United Arab Emirates	0.45	0.44
<b>Developed Markets</b>	<b>71.04</b>	<b>70.36</b>	<b>EMEA</b>	<b>3.24</b>	<b>3.51</b>
			<b>Emerging Markets</b>	<b>28.62</b>	<b>29.36</b>
			<b>Frontier Markets</b>	<b>0.06</b>	<b>0.00</b>

# Country/Region Allocation

International Equity Composite

*Periods Ended December 31, 2025*

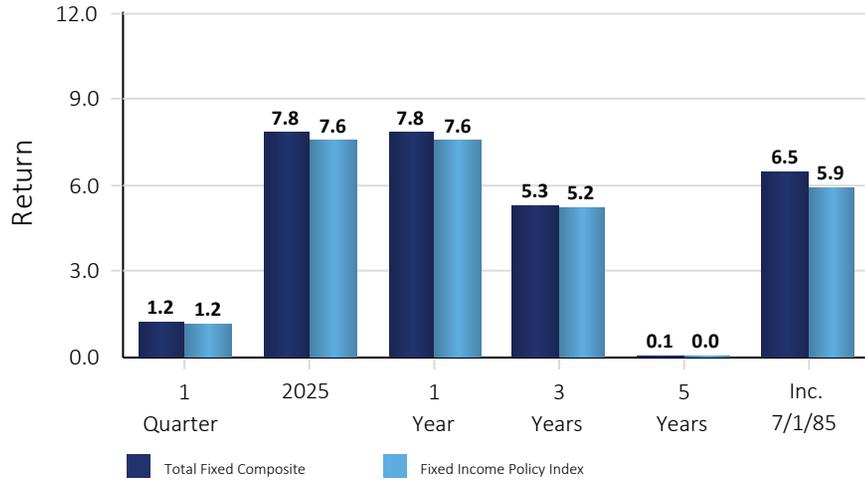
	<b>International Equity Composite</b>	<b>MSCI AC World ex USA index</b>
Cash	0.00	0.00
Other	0.28	0.28
<b>Total</b>	<b>100.00</b>	<b>100.00</b>

# Manager Summary

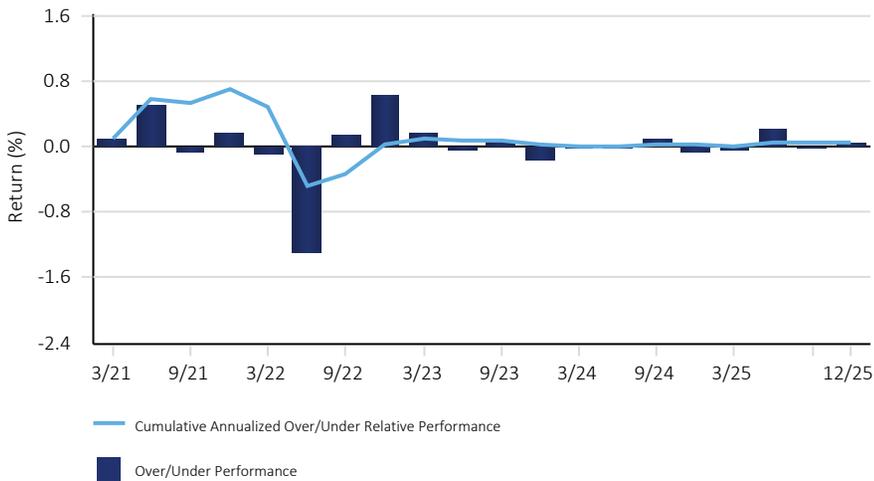
Total Fixed Composite vs IM U.S. Fixed Income (SA+CF)

Periods Ended December 31, 2025

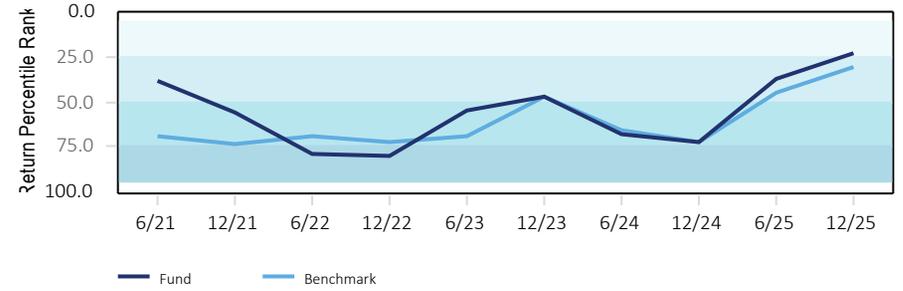
## Comparative Performance



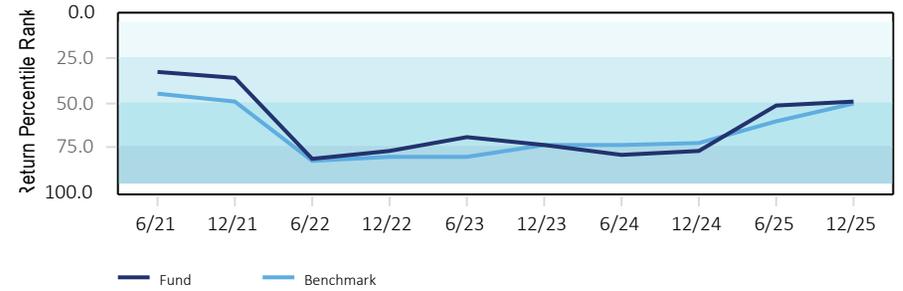
## Relative Performance



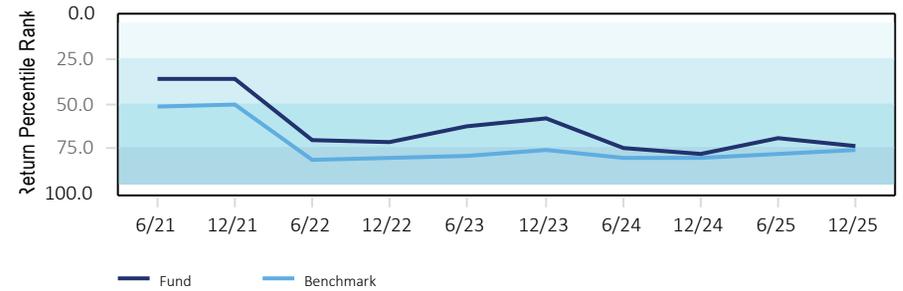
## 1 Year Rolling Percentile Ranking



## 3 Year Rolling Percentile Ranking



## 5 Year Rolling Percentile Ranking

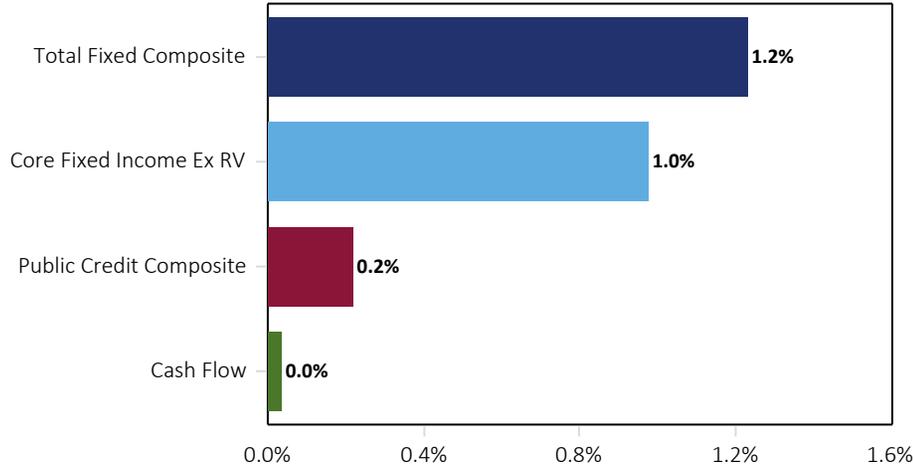


# Return and Risk Contribution

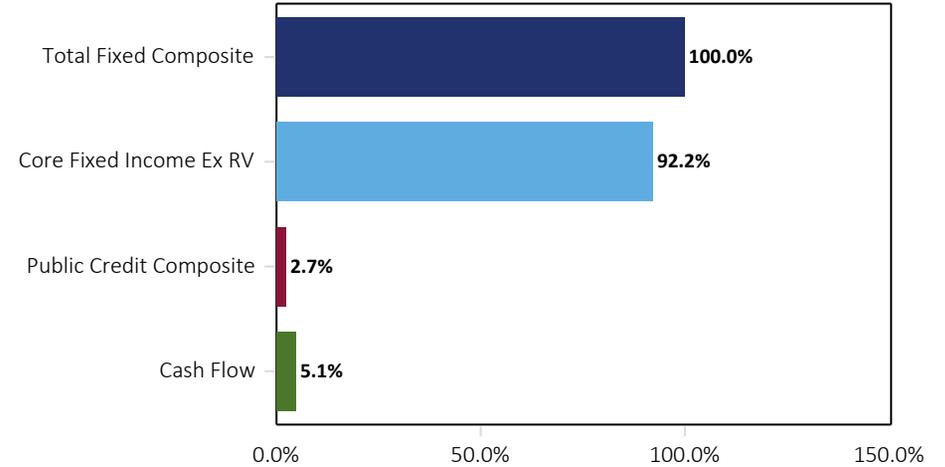
Total Fixed Composite

Periods Ended 1 Quarter December 31, 2025

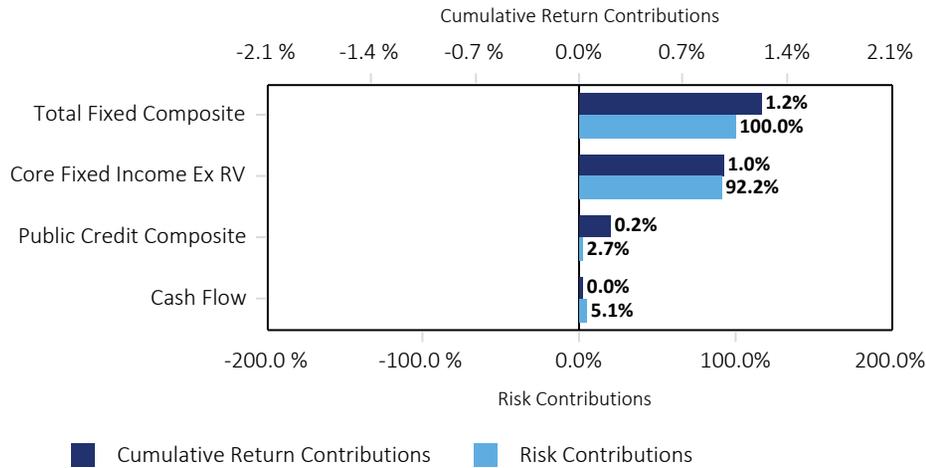
## Cumulative Return Contributions



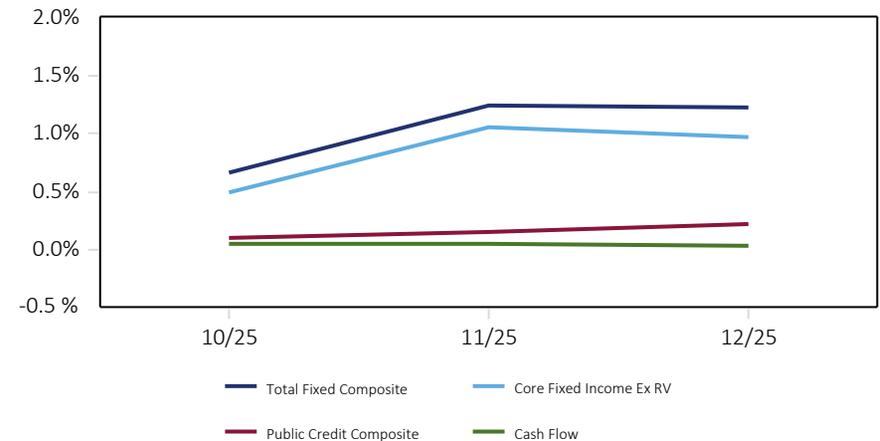
## Risk Contributions



## Cumulative Return and Risk Contributions



## Cumulative Return Contributions History



# Portfolio Characteristics

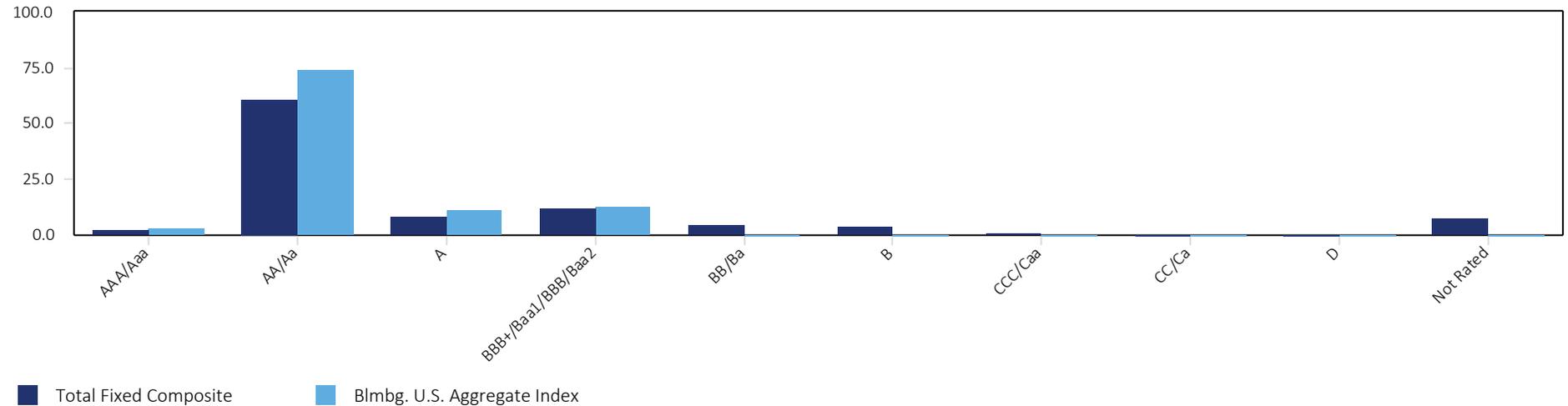
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of December 31, 2025

## Portfolio Characteristics

	Portfolio	Benchmark
Avg. Quality	AA	AA
Convexity	0.31	0.26
Coupon Rate (%)	3.94	3.76
Current Yield	4.29	4.30
Effective Duration	6.14	5.82
Yield To Maturity (%)	4.64	4.30
Years to Maturity	8.66	8.12
Holdings Count	14,503	13,940

## Credit Quality Distribution (%)



# Portfolio Characteristics

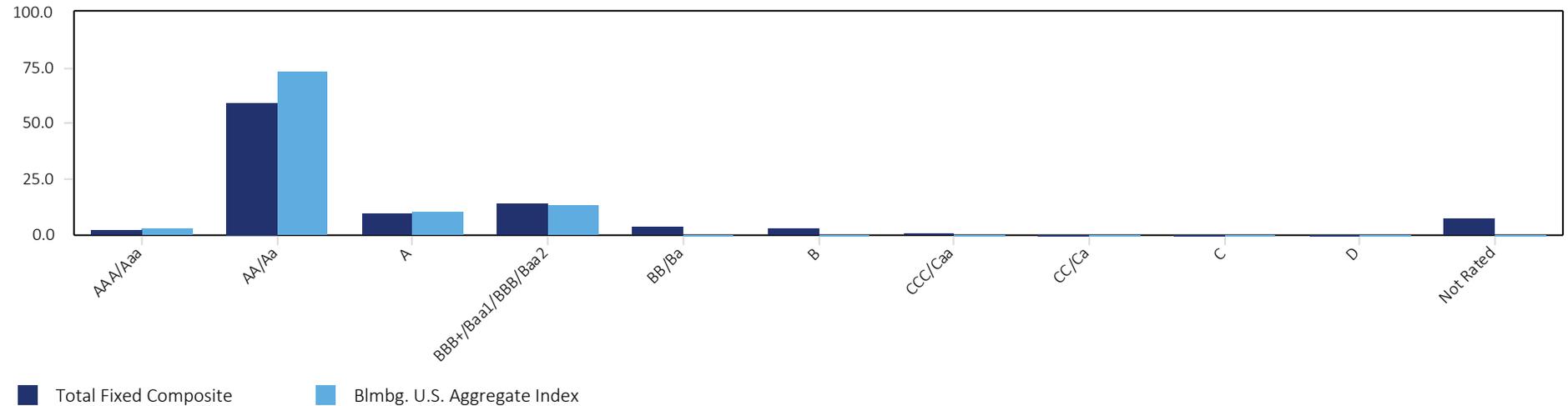
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of December 31, 2024

## Portfolio Characteristics

	Portfolio	Benchmark
Avg. Quality	AA	AA
Convexity	0.27	0.28
Coupon Rate (%)	3.74	3.54
Current Yield	3.77	4.88
Effective Duration	5.89	5.90
Yield To Maturity (%)	5.10	4.88
Years to Maturity	8.40	8.40
Holdings Count	15,048	13,630

## Credit Quality Distribution (%)



# Portfolio Characteristics

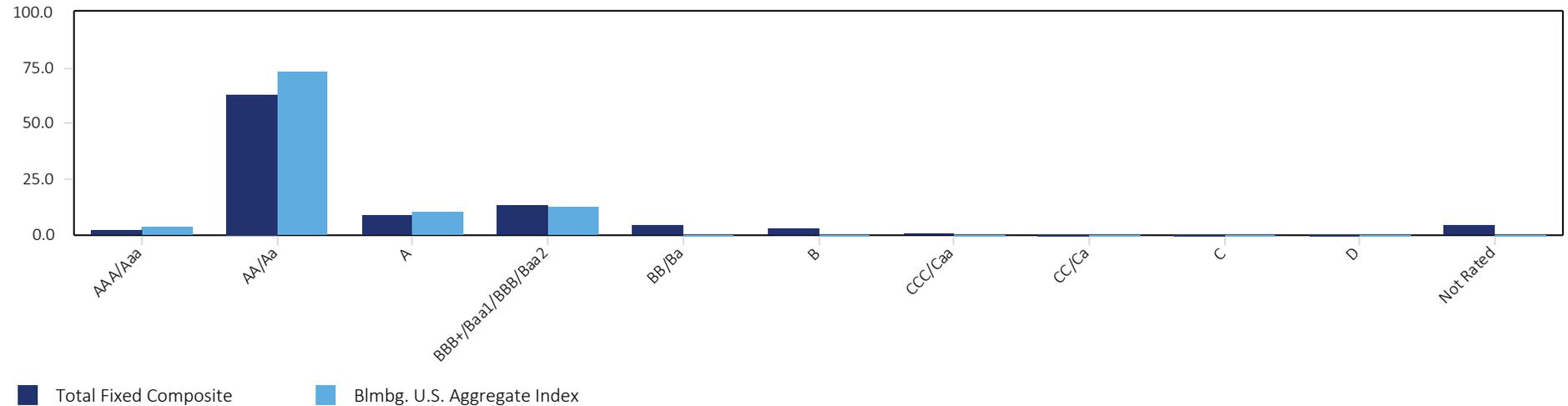
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of March 31, 2025

## Portfolio Characteristics

	Portfolio	Benchmark
Avg. Quality	AA	AA
Convexity	0.25	0.27
Coupon Rate (%)	3.87	3.61
Current Yield	3.85	4.58
Effective Duration	5.80	5.89
Yield To Maturity (%)	4.96	4.58
Years to Maturity	8.24	8.34
Holdings Count	15,147	13,783

## Credit Quality Distribution (%)



# Portfolio Characteristics

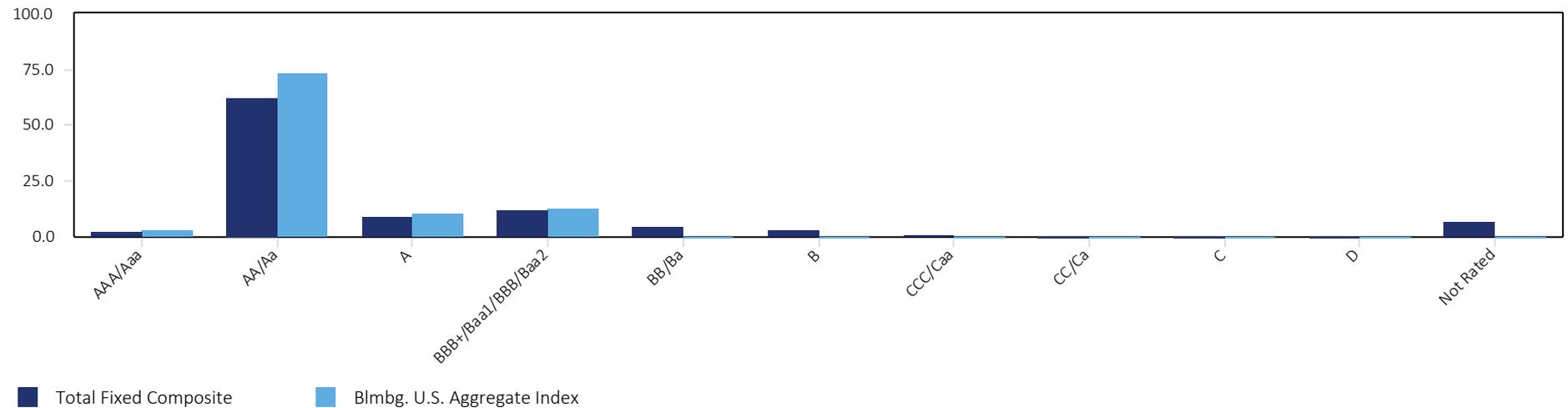
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of June 30, 2025

## Portfolio Characteristics

	Portfolio	Benchmark
Avg. Quality	AA	AA
Convexity	0.24	0.27
Coupon Rate (%)	3.89	3.67
Current Yield	4.20	4.49
Effective Duration	5.65	5.91
Yield To Maturity (%)	4.80	4.49
Years to Maturity	8.18	8.32
Holdings Count	14,630	13,874

## Credit Quality Distribution (%)



# Portfolio Characteristics

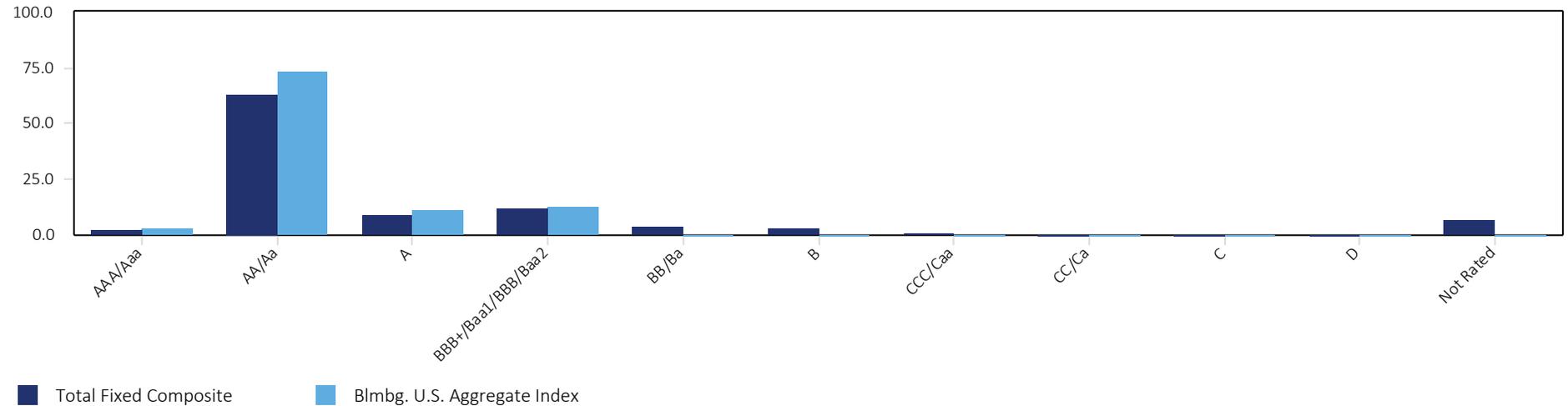
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of September 30, 2025

## Portfolio Characteristics

	Portfolio	Benchmark
Avg. Quality	AA	AA
Convexity	0.24	0.27
Coupon Rate (%)	3.94	3.72
Current Yield	3.88	4.30
Effective Duration	5.70	5.86
Yield To Maturity (%)	4.60	4.30
Years to Maturity	8.08	8.17
Holdings Count	14,652	13,899

## Credit Quality Distribution (%)

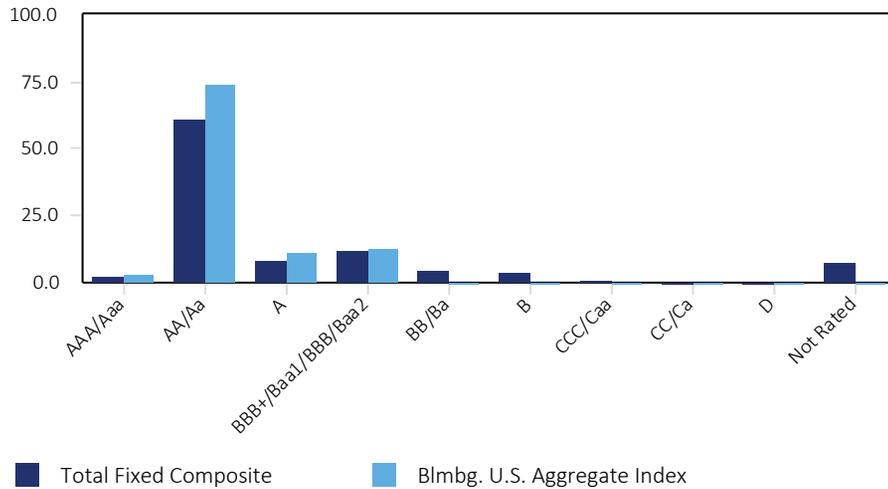


# Portfolio Characteristics

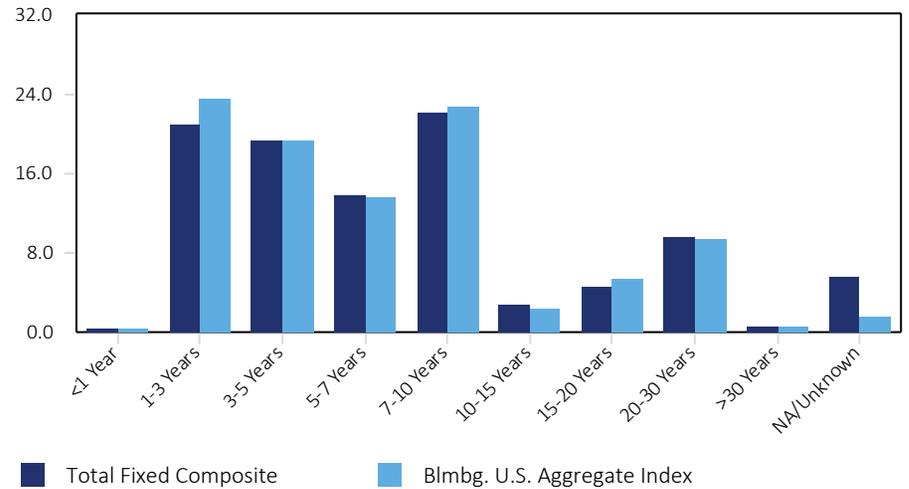
Total Fixed Composite vs Blmbg. U.S. Aggregate Index

Periods Ended As of December 31, 2025

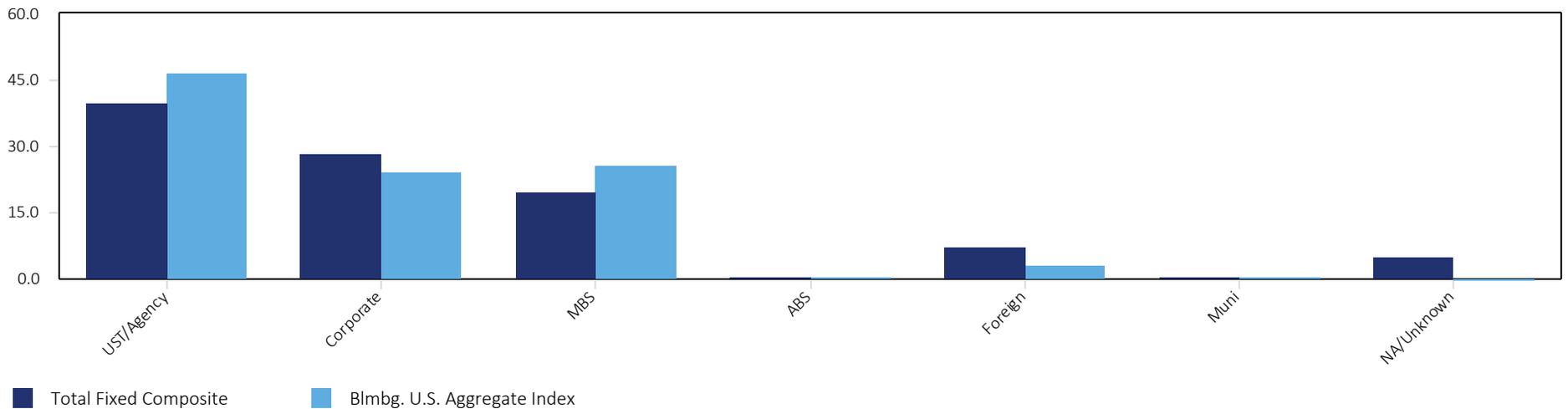
## Credit Quality Distribution (%)



## Maturity Distribution (%)



## Sector Distribution (%)

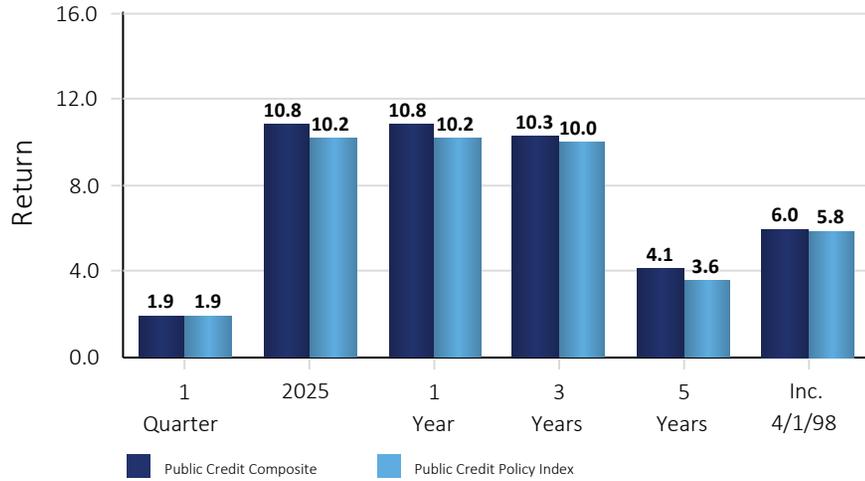


# Manager Summary

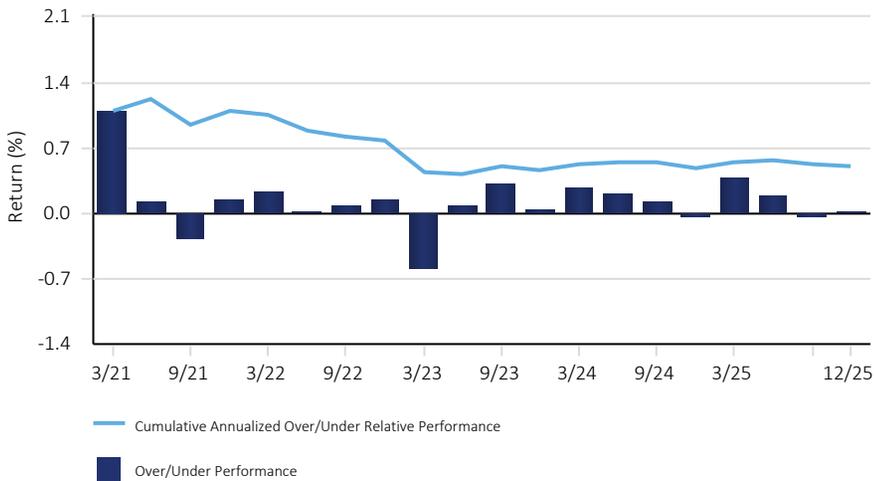
Public Credit Composite vs IM U.S. High Yield Bonds (SA+CF)

Periods Ended December 31, 2025

## Comparative Performance



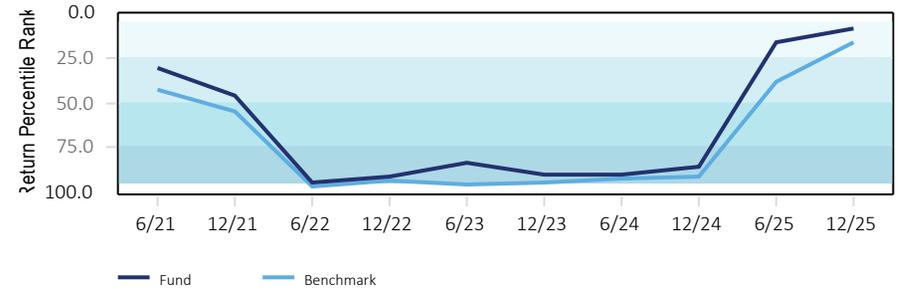
## Relative Performance



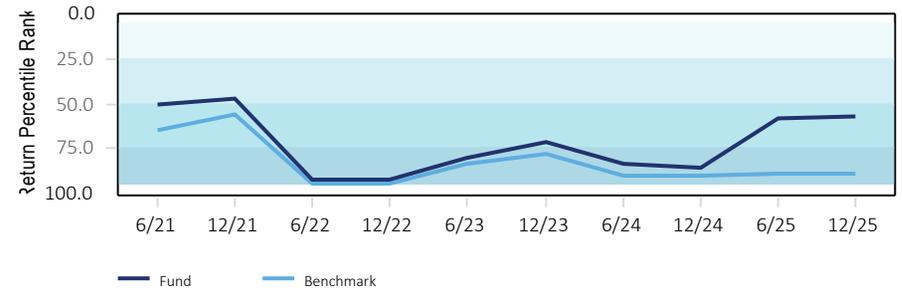
## 1 Year Rolling Percentile Ranking



## 3 Year Rolling Percentile Ranking



## 5 Year Rolling Percentile Ranking

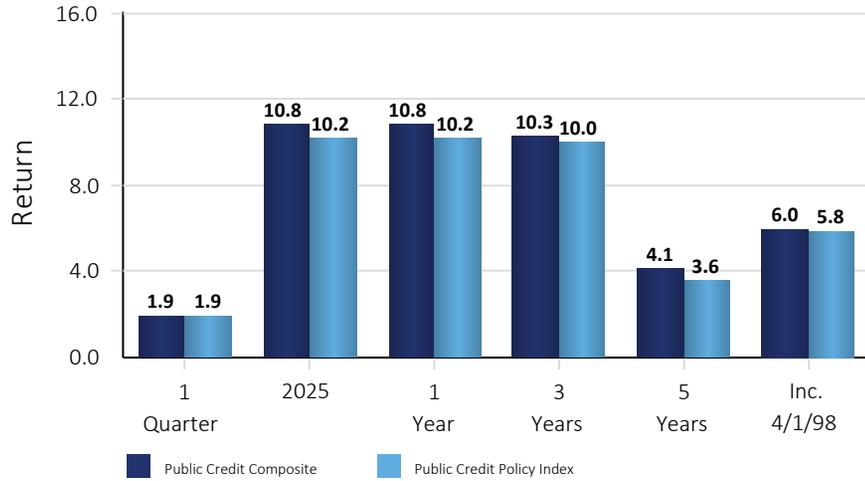


# Manager Summary

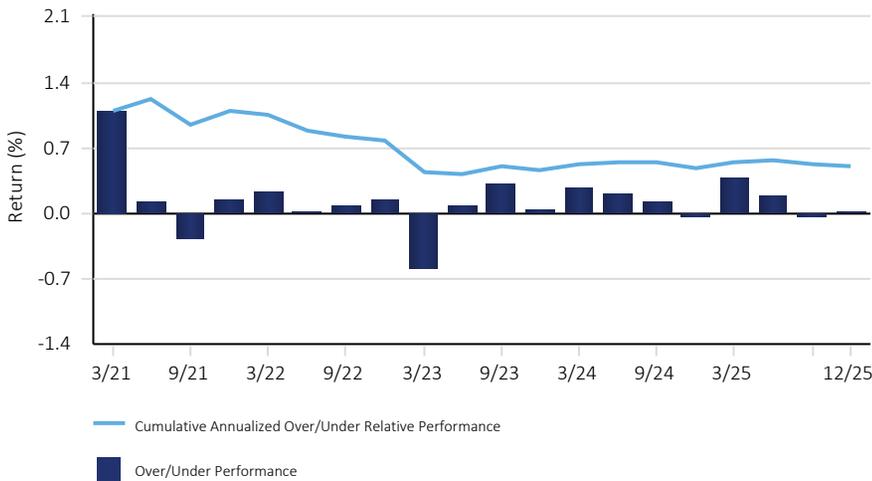
Public Credit Composite vs IM Emerging Markets Debt (SA+CF)

Periods Ended December 31, 2025

## Comparative Performance



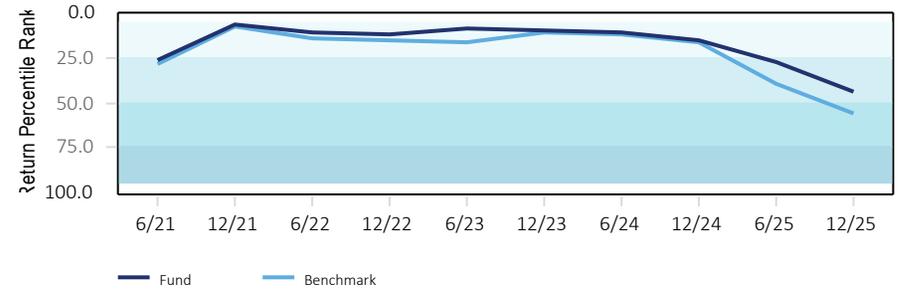
## Relative Performance



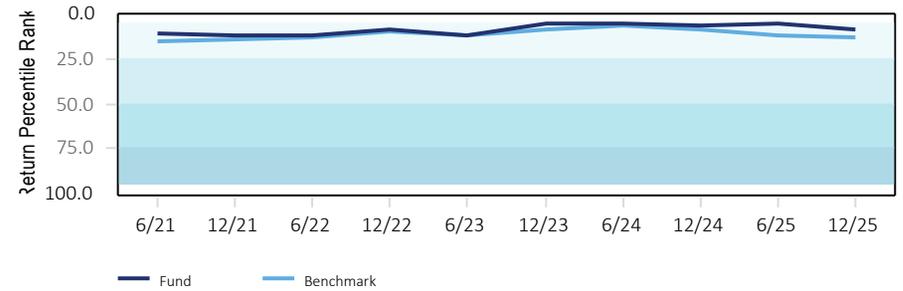
## 1 Year Rolling Percentile Ranking



## 3 Year Rolling Percentile Ranking



## 5 Year Rolling Percentile Ranking

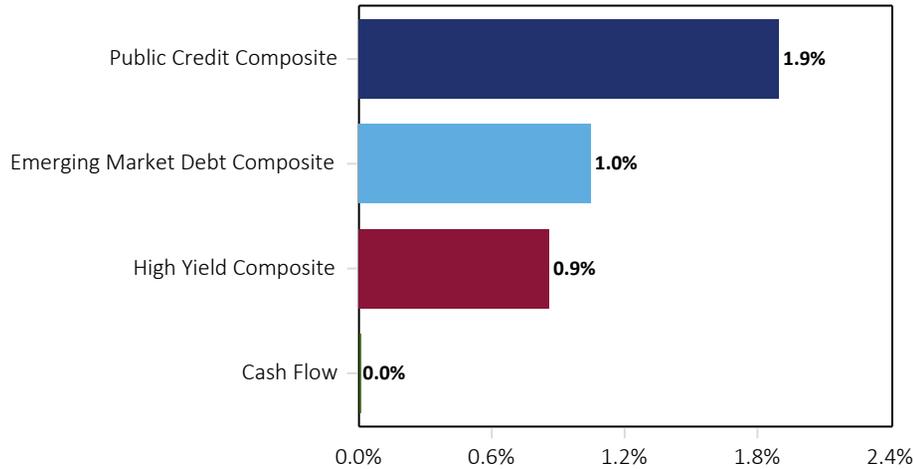


# Return and Risk Contribution

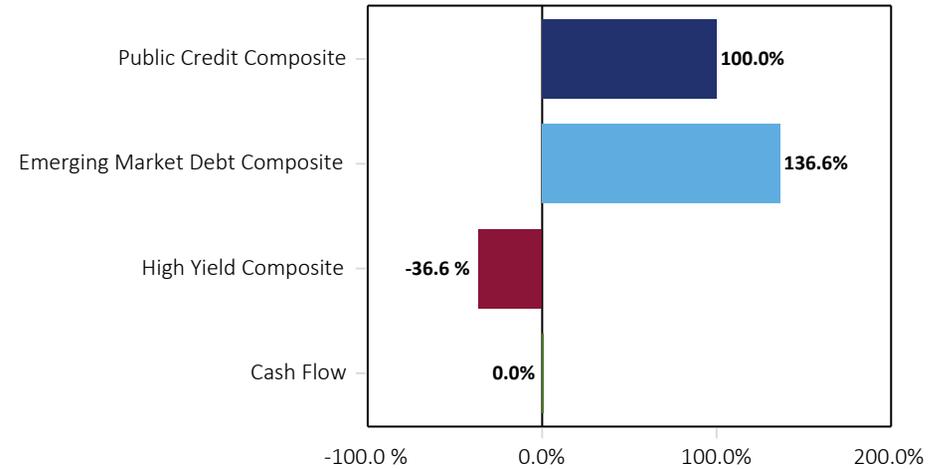
Public Credit Composite

Periods Ended 1 Quarter December 31, 2025

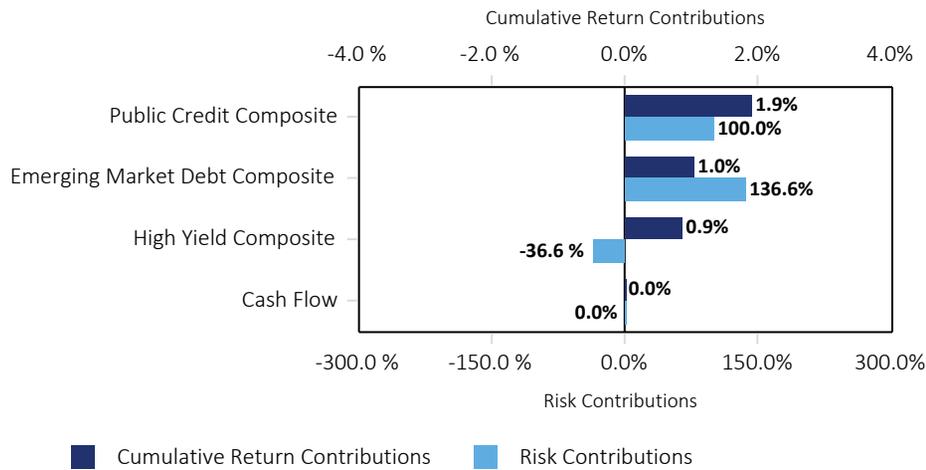
## Cumulative Return Contributions



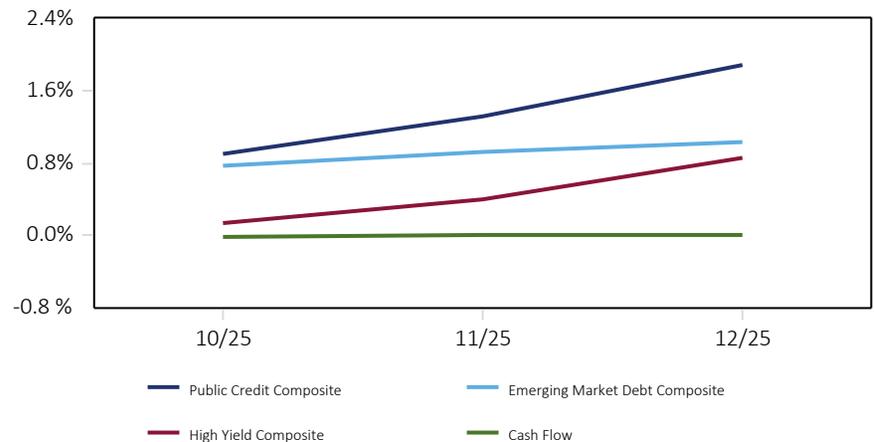
## Risk Contributions



## Cumulative Return and Risk Contributions



## Cumulative Return Contributions History



# Asset Allocation & Performance

## Private Markets Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Private Markets Composite</b>	2.03	5.47	7.85	4.62	10.86			12.84	10/1/2016	14,183,447,851
<b>Private Equity/Debt</b>	2.50	7.74	9.50	6.66	12.66	15.59	14.43	12.77	10/1/1985	8,019,914,571
Private Equity Policy Index	2.50	7.74	9.50	6.66	12.66	15.59	12.99	14.31		
<b>Private Credit Composite</b>	1.78	3.77	7.46	8.09	7.67			7.53	10/1/2016	2,895,183,272
Private Credit Policy Index	1.78	3.77	7.46	8.09	7.67			7.53		
<b>Private Real Assets Composite</b>	1.04	1.44	4.13	-2.63	6.29			6.52	10/1/2016	3,268,350,008
Private Real Assets Policy Index	1.04	1.44	4.13	-2.63	6.29			6.52		
Russell 3000 + 3%	3.16	12.42	20.66	25.91	16.54	17.71	14.09	15.61	1/1/1979	
Morningstar LSTA US Leveraged Loan + 1%	1.47	3.52	6.96	10.44	7.48	6.88	6.11	6.18	1/1/1997	
NCREIF Fund Index-ODCE (VW) (Net)	0.70	1.23	2.92	-4.25	2.51	3.88	4.71	6.88	1/1/1978	

# Asset Allocation & Performance

## Private Credit Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
Private Credit Composite	1.78	3.77	7.46	8.09	7.67			7.53	10/1/2016	2,895,183,272
Private Corporate Debt Composite	1.26	2.86	6.18	7.88	7.58			7.28	1/1/2017	1,003,005,691
Tennenbaum CP Direct Lending	1.04	2.26	4.49	6.44	6.61			6.89	1/1/2017	314,184,448
Monroe Capital	0.87	2.32	5.78	7.87	7.45			7.25	4/1/2017	414,616,669
PPEF XXV B	2.16	4.44	8.98	9.66				9.18	3/1/2022	274,204,574
Private Real Asset Debt Composite	1.13	3.71	7.10	6.59	6.42	7.00		7.46	7/1/2013	717,467,233
PGIM Real Estate Global Debt	0.00	5.52	10.74	9.08	8.16			7.56	10/1/2018	121,886,595
Kayne Anderson Real Estate Debt IV	2.65	5.00	10.60	10.78				9.34	6/1/2022	65,951,220
Heitman Credit	1.37	2.66	3.24	-0.75				-0.69	10/1/2022	87,136,984
IFM US Infrastructure Debt Fund	-0.70	0.60	4.00	4.10				4.10	1/1/2023	92,489,884
JP Morgan Global Transport Income Fund	2.53	5.12	8.33					9.62	5/1/2023	105,611,436
ITE Rail Fund IA	2.13	4.01	5.91					9.43	9/1/2023	68,488,853
PGIM PREDS	0.00	3.79	7.35					6.00	12/1/2023	70,602,730
Oaktree RECIF	1.82	3.62	6.92					5.54	1/1/2024	73,827,980
Principal OEDF	1.34	2.64	6.54					5.08	4/1/2024	31,471,551
Opportunistic Credit Composite	2.65	4.59	8.85	9.16				8.29	8/1/2021	1,158,140,937
KKR Global Corporate Debt	2.78	3.72	8.18	8.59	8.30			7.96	4/1/2019	287,045,289
Crestline Opportunistic Credit	0.19	0.84	3.25	7.39				6.91	8/1/2021	152,330,063
ARES PCS II	3.64	7.58	11.53	11.62				7.94	10/1/2021	72,991,565
Audax Mezzanine Coinvest	4.91	7.07	14.78	13.31				12.85	11/1/2021	8,702,153
Marathon SPS	2.68	4.63	8.93	8.48				6.98	11/1/2021	270,616,918
Arrowmark	3.71	7.17	11.58	12.37				10.31	1/1/2022	223,392,136
Audax Mezzanine V	1.50	3.09	8.11	7.92				14.57	6/1/2022	46,957,539
Crestline Opportunistic Credit - Series 2	3.46	6.07	12.62					8.59	5/1/2024	96,105,274
loway Private Credit								1.77	12/1/2025	16,569,412

# Asset Allocation & Performance

Private Credit Composite

*Periods Ended December 31, 2025*

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
Morningstar LSTA US Leveraged Loan + 1%	1.47	3.52	6.96	10.44	7.48	6.88	6.11	6.18	1/1/1997	

# Asset Allocation & Performance

## Private Real Assets Composite

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Private Real Assets Composite</b>	<b>1.04</b>	<b>1.44</b>	<b>4.13</b>	<b>-2.63</b>	<b>6.29</b>			<b>6.52</b>	<b>10/1/2016</b>	3,268,350,008
Private Real Assets Policy Index	1.04	1.44	4.13	-2.63	6.29			6.52		
<b>Private Real Estate Composite</b>	<b>1.06</b>	<b>1.83</b>	<b>4.36</b>	<b>-4.62</b>	<b>5.54</b>	<b>6.76</b>	<b>6.49</b>	<b>6.52</b>	<b>4/1/1987</b>	2,448,120,239
Private Real Estate Policy Index	0.70	1.23	2.92	-4.25	2.51	3.88	5.88	7.87		
<b>Private Other Real Assets Composite</b>	<b>0.98</b>	<b>0.27</b>	<b>3.46</b>	<b>5.91</b>	<b>6.88</b>			<b>5.03</b>	<b>10/1/2016</b>	805,229,769
CPI + 5%	0.99	2.94	7.81	8.12	9.69			8.39		
NCREIF Fund Index-ODCE (VW) (Net)	0.70	1.23	2.92	-4.25	2.51	3.88	4.71	6.88	1/1/1978	
CPI - All Urban Consumers (Unadjusted)	-0.23	0.46	2.68	2.97	4.46	3.20	2.52	3.15	2/1/1913	
CPI + 5%	0.99	2.94	7.81	8.12	9.69	8.36	7.65		2/1/1913	

# Asset Allocation & Performance

Private Real Estate Composite (G)

Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
Private Real Estate Composite (G)	1.17	2.04	4.81	-4.23	5.99	7.27	7.18	7.35	4/1/1987	2,448,120,239
Private Real Estate Composite (N)	1.06	1.83	4.36	-4.62	5.54	6.76	6.49	6.52		
Private Real Estate Policy Index	0.70	1.23	2.92	-4.25	2.51	3.88	5.88	7.87		
Clarion Partners (G)	3.57	5.03	15.05	-15.72	-5.76	-1.06	3.86	3.97	7/1/2005	52,979,544
Clarion Partners (N)	3.57	5.03	15.05	-15.84	-6.01	-1.49	3.15	3.26		
Invesco Separate Account (G)	1.20	2.26	2.96	-2.71	10.29	11.51	9.15	10.77	7/1/1996	821,223,407
Invesco Separate Account (N)	1.09	2.04	2.50	-3.16	9.78	10.95	8.51	9.83		
RREEF America LLC (G)	0.27	0.11	3.68	-3.36	6.22	7.53	7.83	9.77	4/1/1997	995,179,804
RREEF America LLC (N)	0.18	-0.05	3.33	-3.73	5.79	7.05	7.13	8.86		
UBS (G)	2.50	4.91	9.17	0.93	10.28	10.66	9.40	10.28	10/1/1998	511,752,507
UBS (N)	2.40	4.70	8.74	0.53	9.84	10.18	8.81	9.68		
KAREP VII (G)	2.02	5.05	3.14					3.14	1/1/2025	66,984,977
KAREP VII (N)	1.54	3.58	-1.50					-1.50		
NCREIF Fund Index-ODCE (VW) (Net)	0.70	1.23	2.92	-4.25	2.51	3.88	4.71	6.88	1/1/1978	

# Asset Allocation & Performance

## Private Other Real Assets Composite

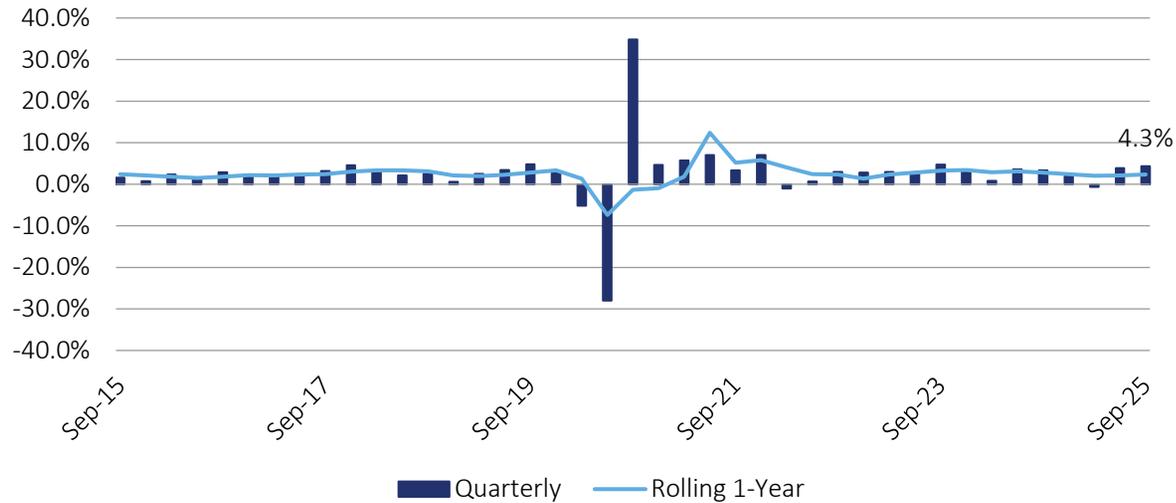
Periods Ended December 31, 2025

	Performance (%) Net of Fees									Market Value \$
	1 Quarter	FYTD	1 Year	3 Years	5 Years	10 Years	20 Years	Since Inception	Inception Date	
<b>Private Other Real Assets Composite</b> CPI + 5%	<b>0.98</b> 0.99	<b>0.27</b> 2.94	<b>3.46</b> 7.81	<b>5.91</b> 8.12	<b>6.88</b> 9.69			<b>5.03</b> 8.39	<b>10/1/2016</b>	<b>805,229,769</b>
<b>Forest Investment Associates</b> CPI + 5%	<b>-2.68</b> 0.99	<b>-3.37</b> 2.94	<b>-0.38</b> 7.81	<b>3.71</b> 8.12	<b>6.46</b> 9.69	<b>4.60</b> 8.36		<b>5.24</b> 7.72	<b>7/1/2012</b>	<b>173,654,724</b>
<b>UBS Farmland Investors</b> CPI + 5%	<b>0.58</b> 0.99	<b>1.09</b> 2.94	<b>2.50</b> 7.81	<b>5.20</b> 8.12	<b>5.31</b> 9.69			<b>6.47</b> 8.32	<b>7/1/2016</b>	<b>111,400,798</b>
<b>Brookfield Super-Core Infrastructure</b> CPI + 5%	<b>2.10</b> 0.99	<b>4.26</b> 2.94	<b>8.84</b> 7.81	<b>8.39</b> 8.12				<b>7.71</b> 8.40	<b>4/1/2022</b>	<b>349,082,383</b>
<b>MIP VI</b> CPI + 5%	<b>2.88</b> 0.99	<b>-5.96</b> 2.94						<b>-5.96</b> 2.94	<b>7/1/2025</b>	<b>171,091,864</b>
<b>Ioway Private Real Assets</b> Private Real Assets Policy Index								<b>0.00</b> 1.04	<b>12/1/2025</b>	<b>15,000,000</b>
NCREIF Farmland Index	-0.70	-0.19	0.20	1.34	4.20	4.89	9.57	7.38	10/1/1980	
NCREIF Timberland Index	1.59	2.27	4.57	6.98	8.58	5.39	6.15	10.57	4/1/1987	

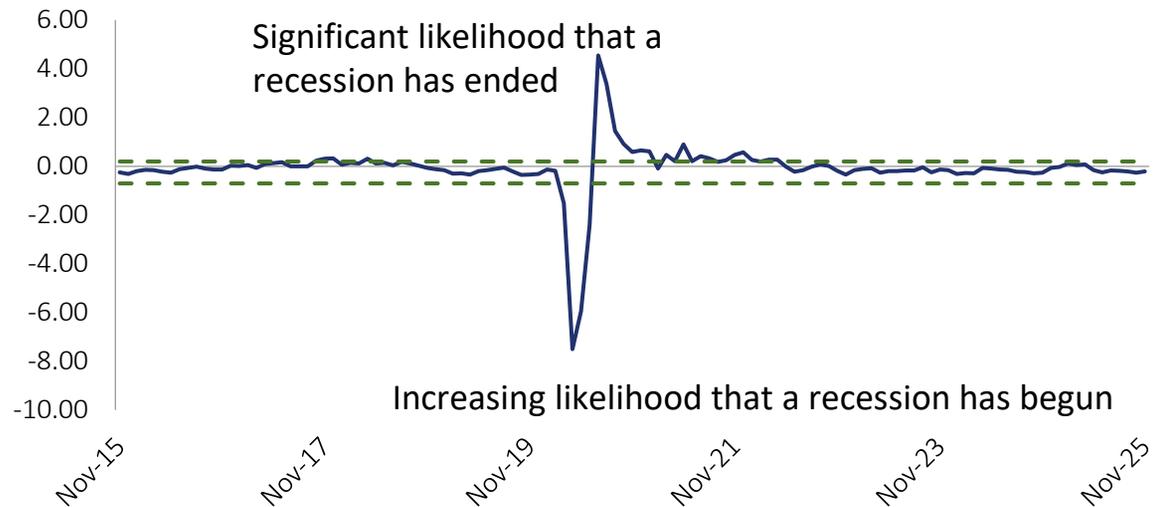
# Economic/Market Activity

# Economic Growth

Real GDP Growth



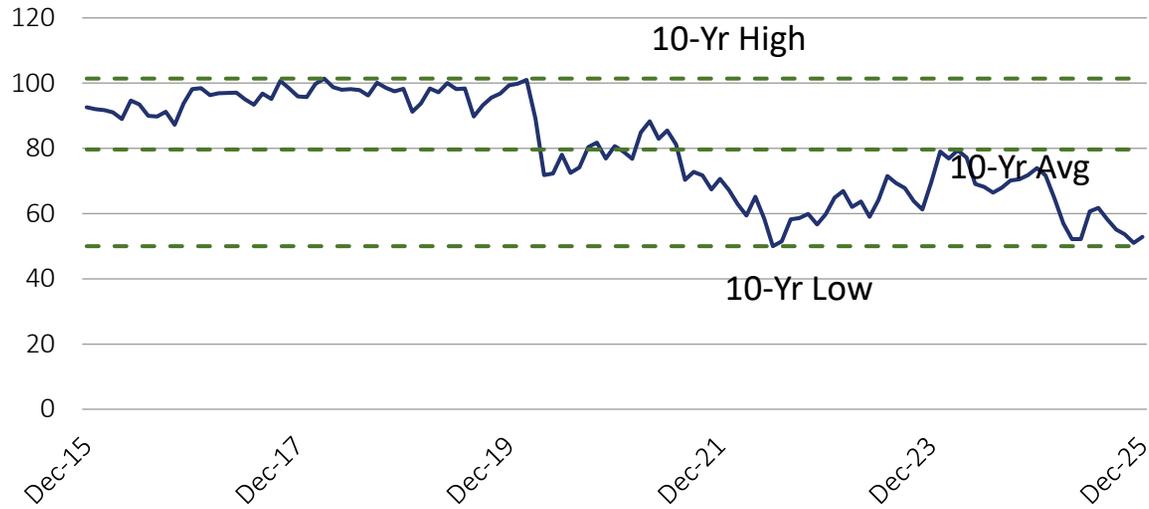
Chicago Fed. National Activity Index (3M MA)



Data Source: Bloomberg

# Consumer Activity

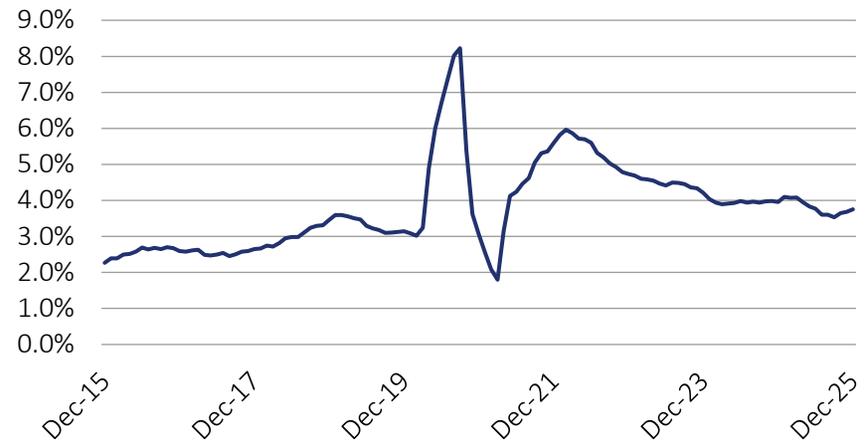
University of Michigan: Consumer Sentiment



Real Personal Consumption Expenditures



Average Hourly Earnings

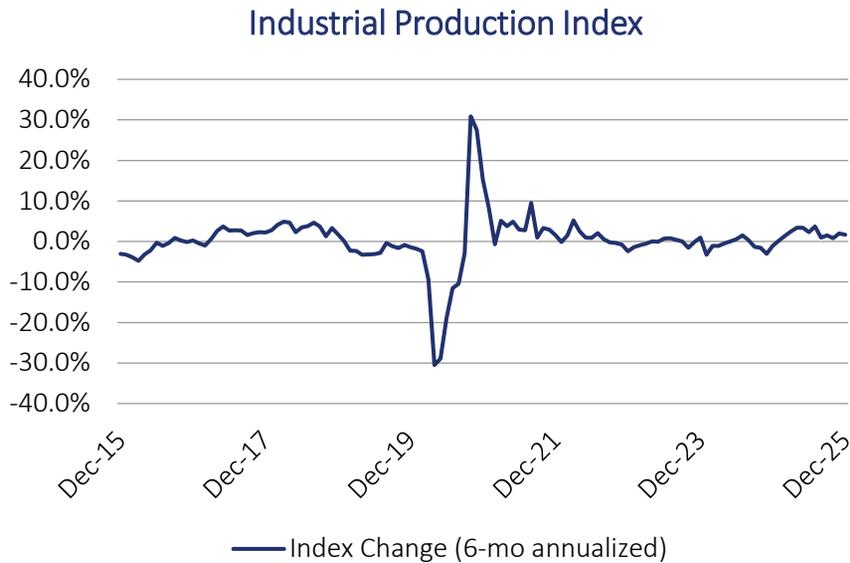
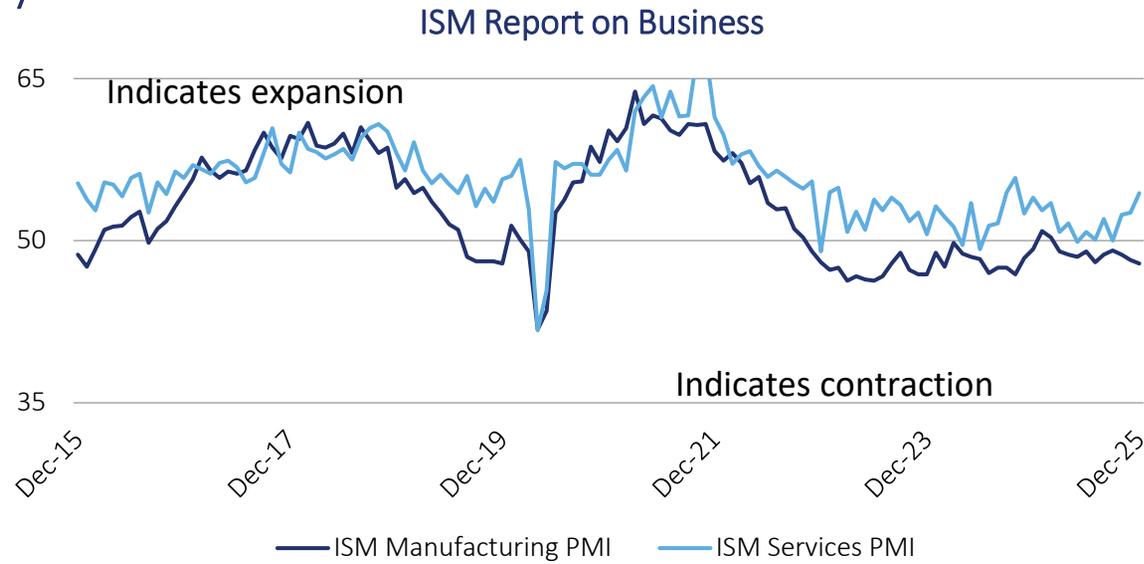


Data Source: Bloomberg

— Real PCE (6-mo annualized)

— Wage Growth (6-mo annualized)

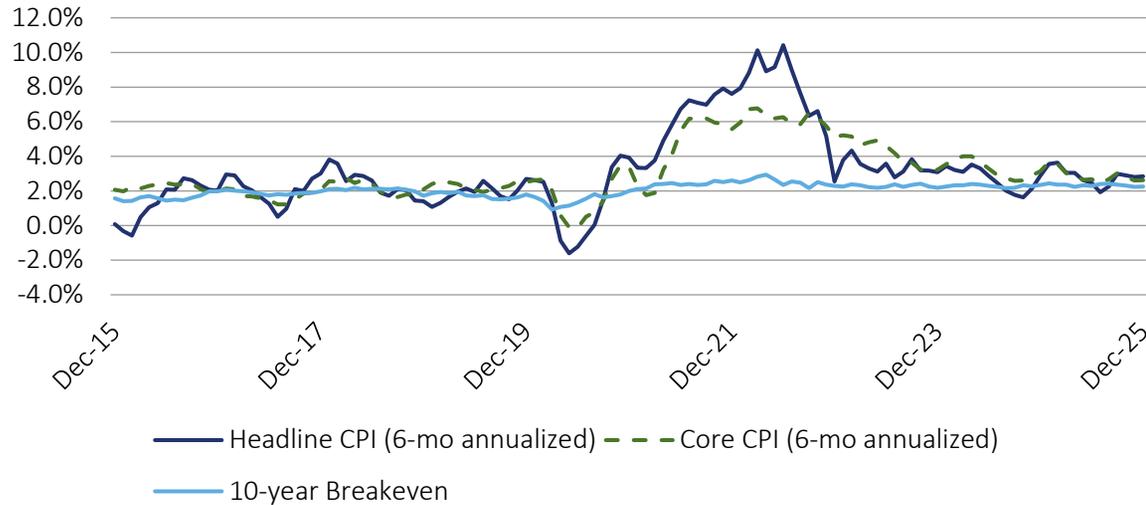
# Business Activity



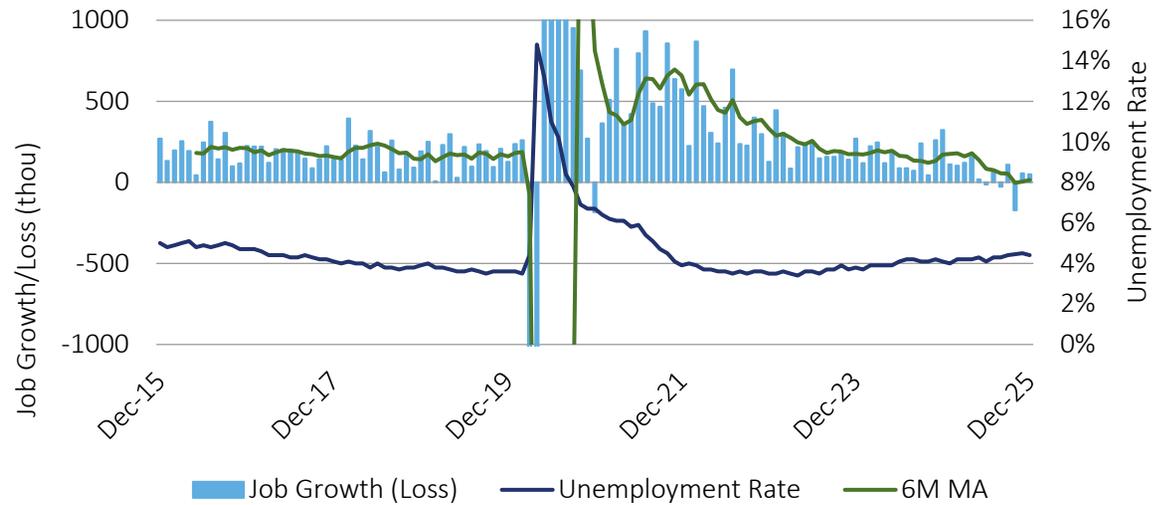
Data Source: Bloomberg

# Inflation and Employment

Inflation: Actual & Expected



Employment Gains/Losses



Data Source: Bloomberg

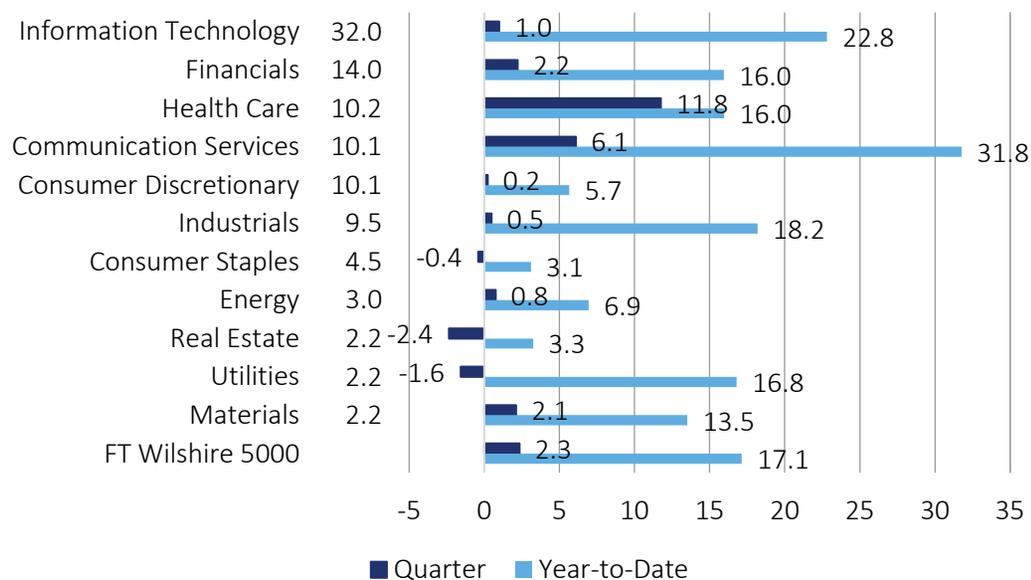
## U.S. Equity Market

As of 12/31/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
FT Wilshire 5000	2.3	17.1	17.1	22.3	13.4	14.5
FT Wilshire U.S. Large Cap	2.4	18.3	18.3	23.6	14.3	14.9
FT Wilshire U.S. Small Cap	1.6	8.5	8.5	14.0	7.8	10.6
FT Wilshire U.S. Large Growth	2.7	21.6	21.6	34.0	16.2	n/a
FT Wilshire U.S. Large Value	2.1	15.0	15.0	13.8	12.0	n/a
FT Wilshire U.S. Small Growth	1.0	7.7	7.7	14.9	4.8	n/a
FT Wilshire U.S. Small Value	2.2	9.4	9.4	13.0	10.6	n/a
Wilshire REIT Index	-1.7	2.7	2.7	9.2	6.9	5.5
MSCI USA Min. Vol. Index	-0.5	7.8	7.8	11.2	8.6	10.6
FTSE RAFI U.S. 1000 Index	3.8	16.9	16.9	16.7	14.1	12.9

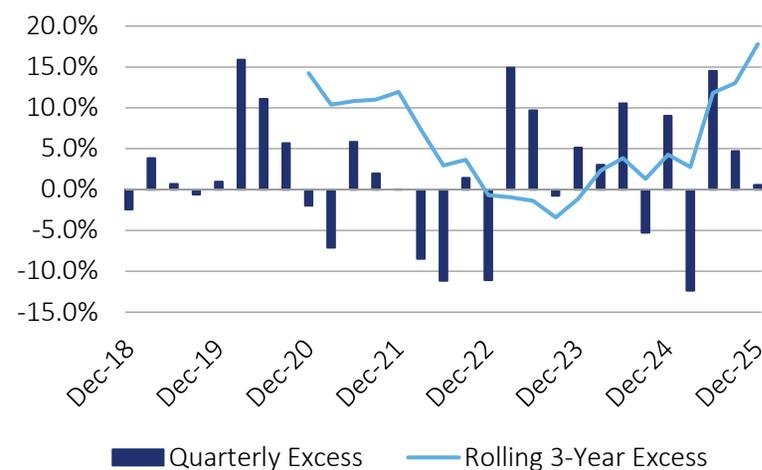
### Large Cap vs. Small Cap



### U.S. Sector Weight and Return (%)



### Large Growth vs Large Value

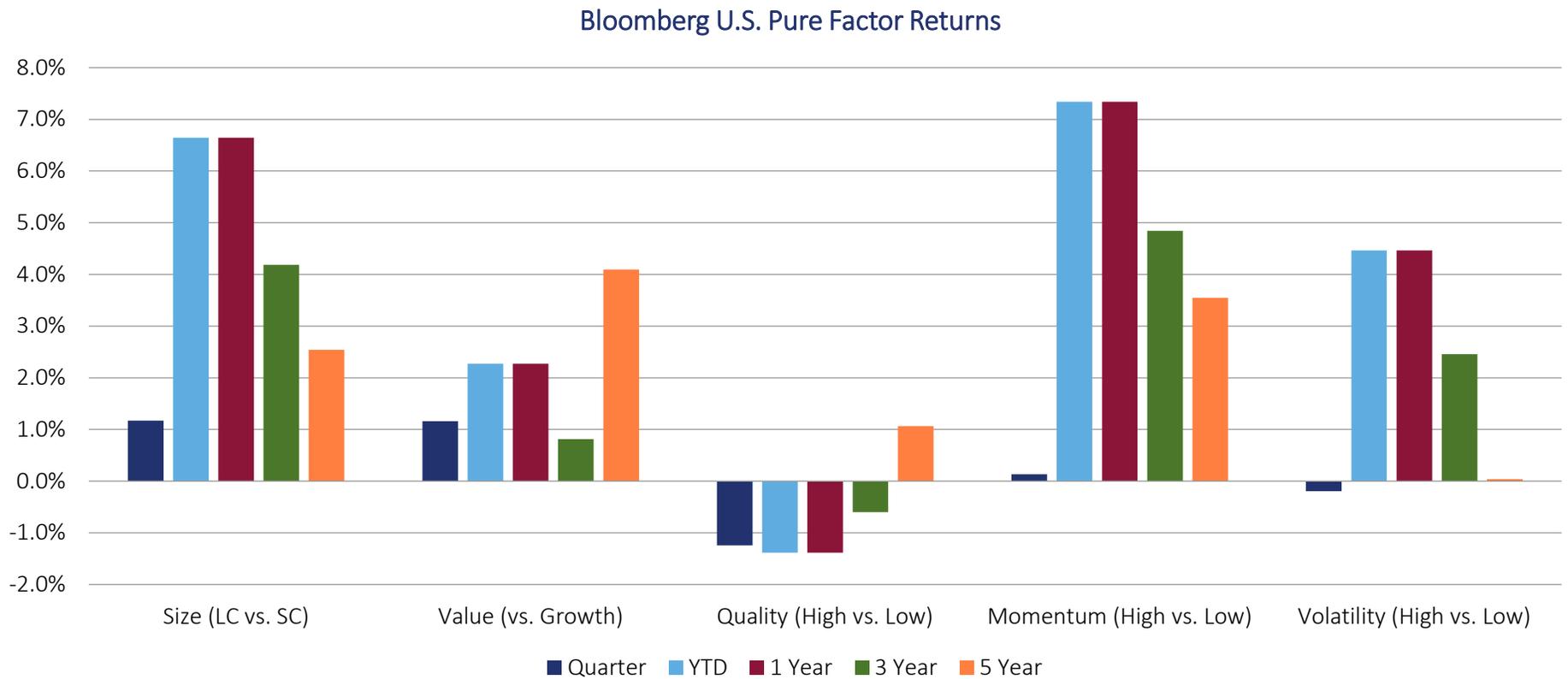


Data Sources: Bloomberg, Clearwater Wilshire Atlas

# U.S. Factor Returns

Factor returns represent the contribution from large cap, value, etc. stocks within Bloomberg's Portfolio & Risk Analytics module

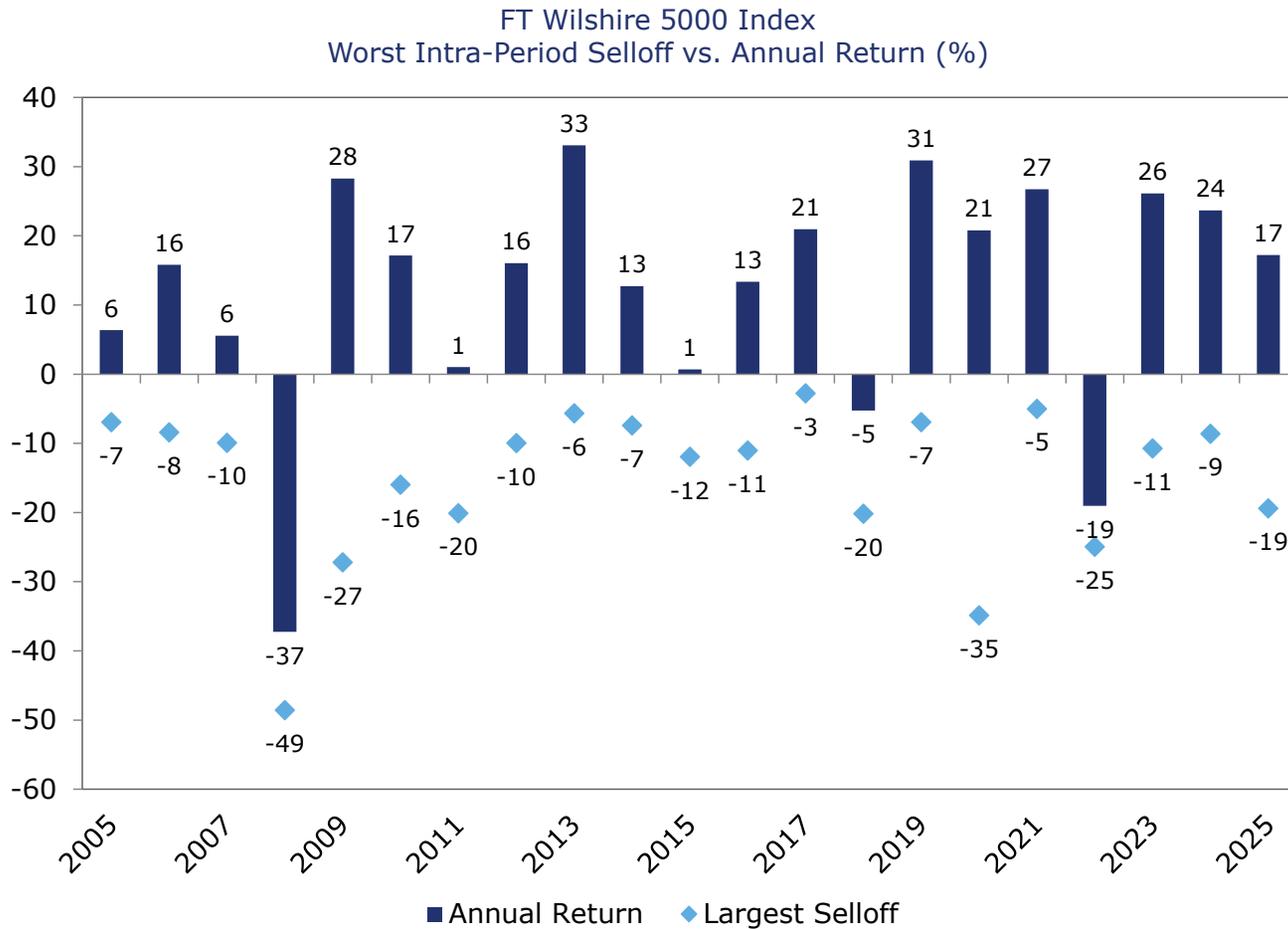
Size and value contributed positively for the quarter



Data Source: Bloomberg

# Annual Equity Market Selloffs

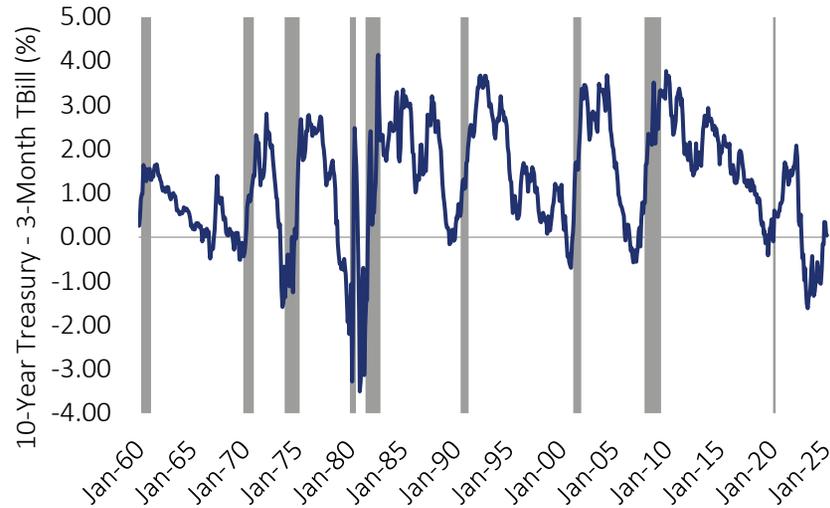
U.S. equity initially reached correction territory in mid-March and then worsened into April; recovering in May and June and up 17% for 2025



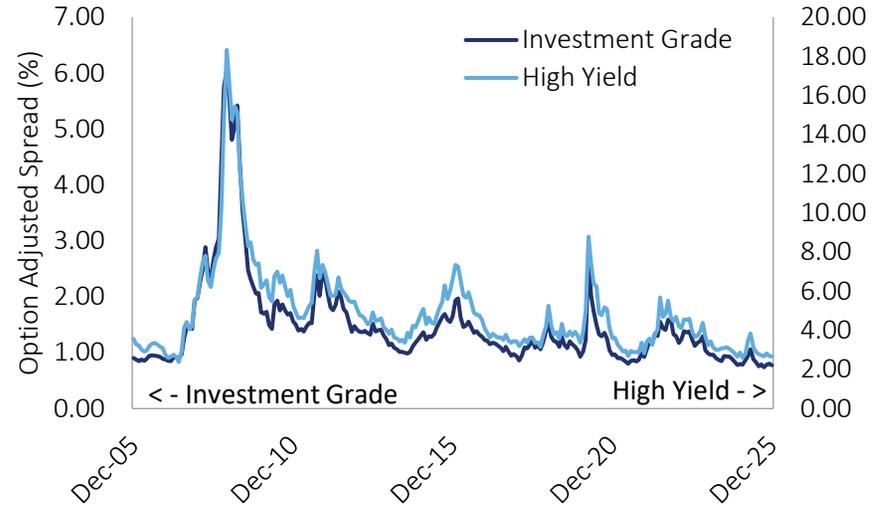
Data Sources: Wilshire Web, Bloomberg

# Risk Monitor

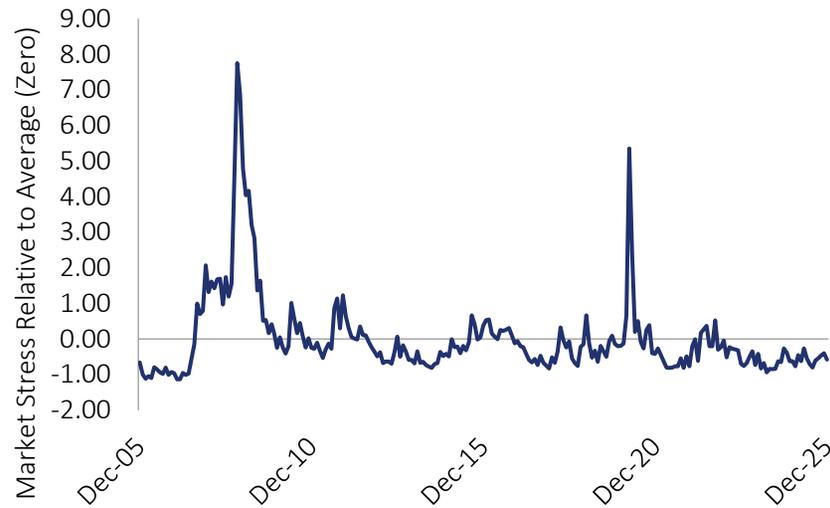
Yield Curve Slope vs Recessions (IN GRAY)



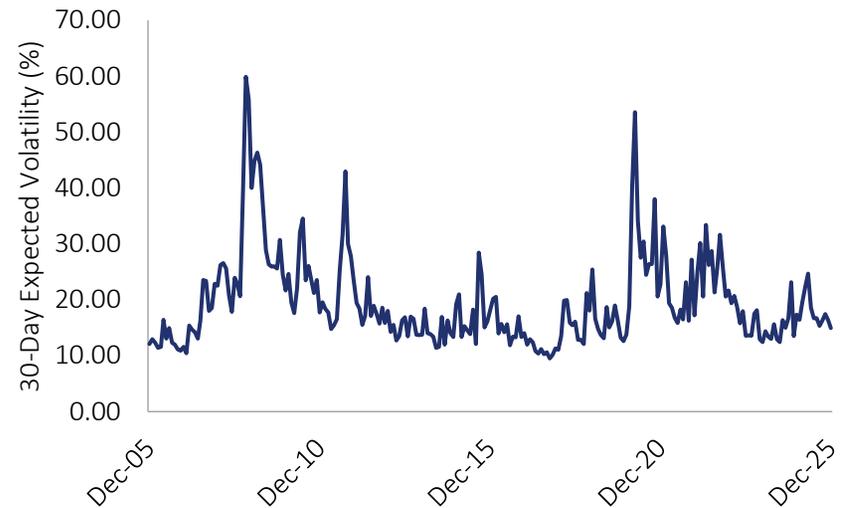
Bloomberg Credit Indexes



St. Louis Fed. Financial Stress Index



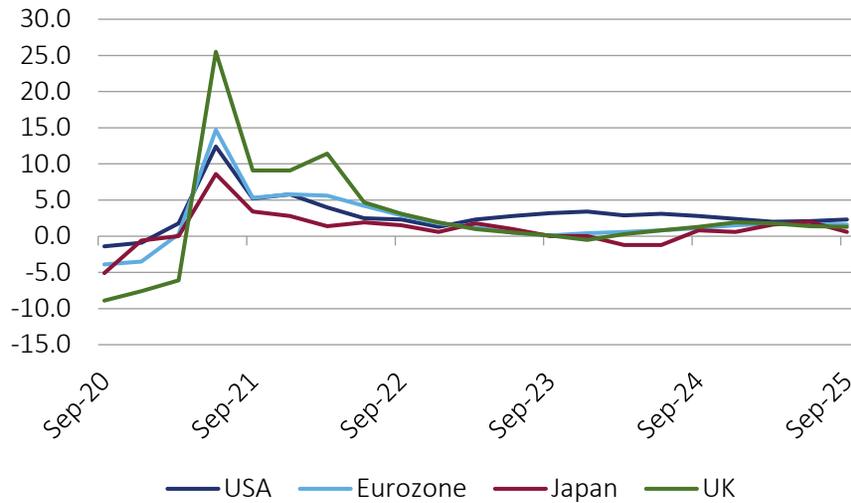
CBOE Volatility Index



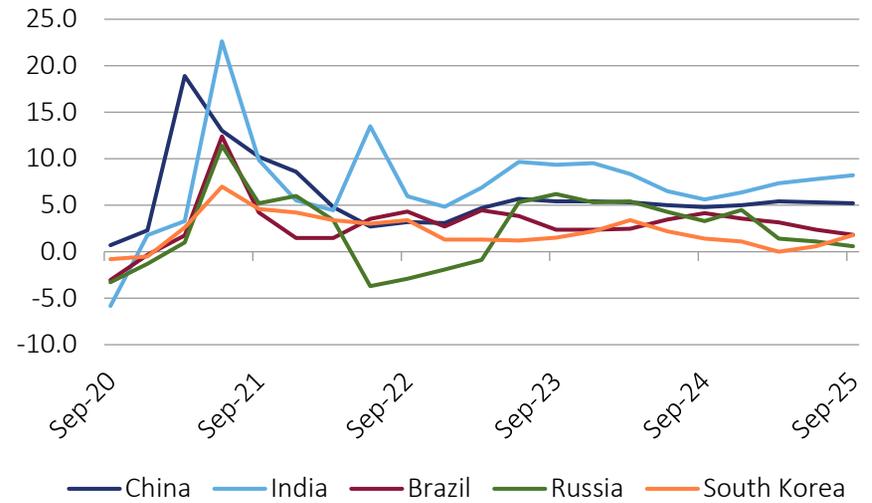
Data Source: Bloomberg

# Non-U.S. Growth and Inflation

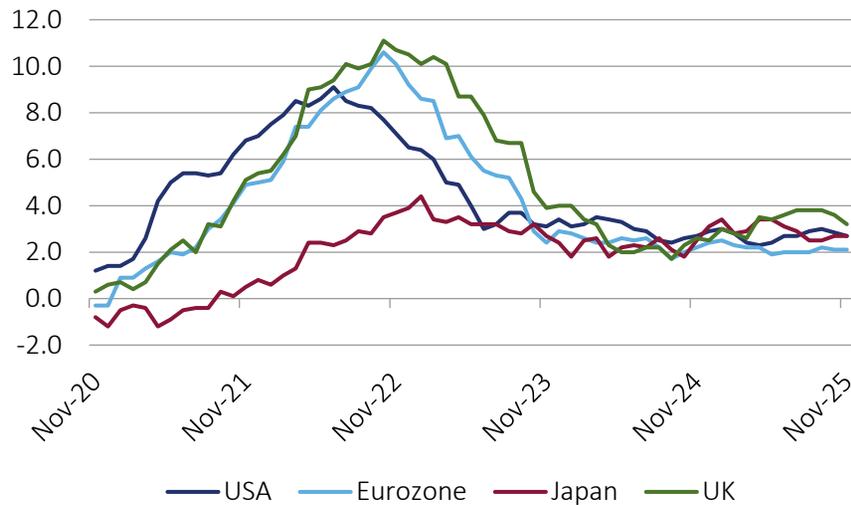
Developed Markets Real GDP Growth YoY (%)



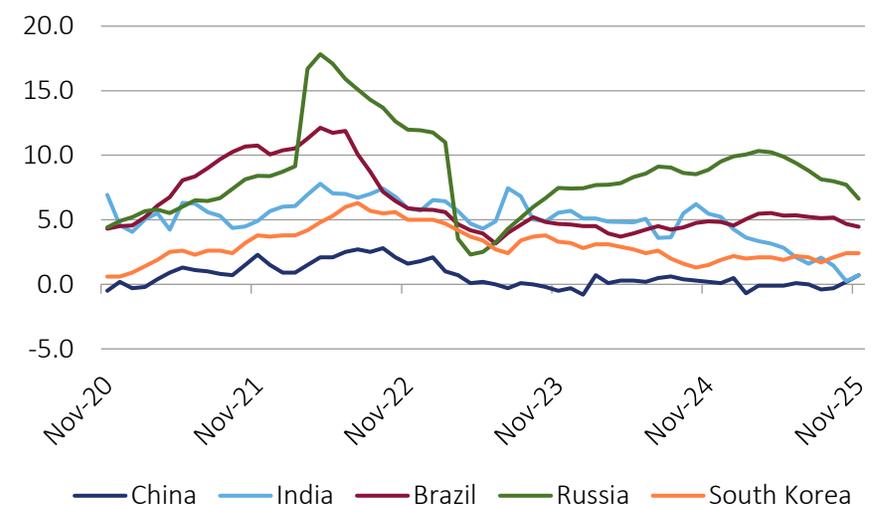
Emerging Markets Real GDP Growth YoY (%)



Developed Markets CPI Growth YoY (%)



Emerging Markets CPI Growth YoY (%)



Data Source: Bloomberg

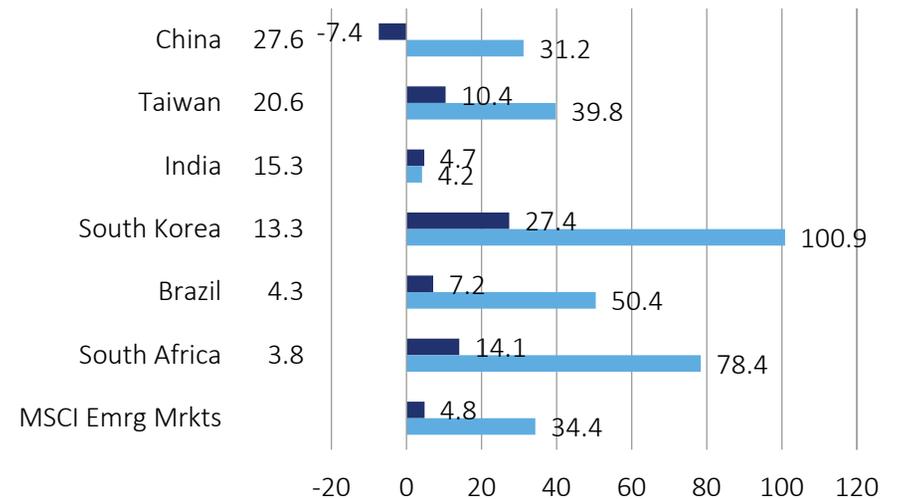
# Non-U.S. Equity Market

As of 12/31/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
MSCI ACWI ex-US (\$G)	5.1	33.1	33.1	18.0	8.5	8.9
MSCI EAFE (\$G)	4.9	31.9	31.9	17.8	9.5	8.7
MSCI Emerging Markets (\$G)	4.8	34.4	34.4	17.0	4.7	8.9
MSCI Frontier Markets (\$G)	7.7	43.7	43.7	19.9	8.2	6.6
MSCI ACWI ex-US Growth (\$G)	2.6	26.0	26.0	15.0	4.3	8.3
MSCI ACWI ex-US Value (\$G)	7.2	39.6	39.6	20.6	12.3	9.4
MSCI ACWI ex-US Small (\$G)	3.0	29.9	29.9	16.2	7.4	8.6
MSCI All Country World Index	3.4	22.9	22.9	21.2	11.7	12.3
MSCI ACWI Minimum Volatility	0.2	11.2	11.2	10.5	6.9	8.3
MSCI EAFE Minimum Volatility	3.2	26.5	26.5	14.7	6.7	6.4
FTSE RAFI Developed ex-US	8.3	41.7	41.7	20.8	13.1	9.8
MSCI EAFE LC (G)	6.2	21.2	21.2	16.5	12.0	9.1
MSCI Emerging Markets LC (G)	5.7	32.1	32.1	18.3	7.1	10.0

Developed Markets Weight and Return (%)



Emerging Markets Weight and Return (%)



Data Source: Bloomberg

■ Quarter ■ Year-to-Date

■ Quarter ■ Year-to-Date

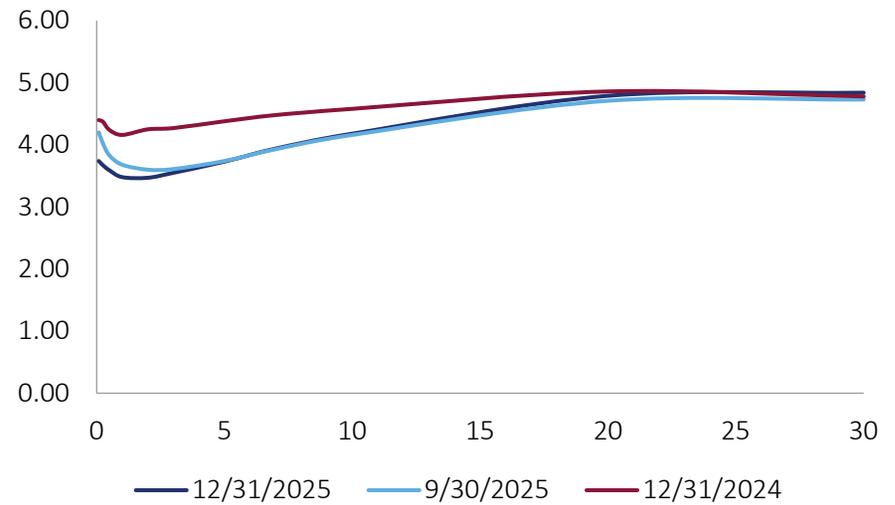
# U.S. Fixed Income

As of 12/31/2025	YTW	Dur.	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg Aggregate	4.3	6.0	1.1	7.3	7.3	4.7	-0.4	2.0
Bloomberg Treasury	3.9	5.9	0.9	6.3	6.3	3.6	-1.0	1.4
Bloomberg Gov't-Rel.	4.3	5.3	1.1	7.9	7.9	5.1	0.4	2.4
Bloomberg Securitized	4.6	5.5	1.7	8.5	8.5	5.0	0.2	1.7
Bloomberg Corporate	4.8	6.8	0.8	7.8	7.8	6.1	-0.1	3.3
Bloomberg LT Gov't/Credit	5.2	13.6	0.0	6.6	6.6	3.1	-4.9	2.0
Bloomberg LT Treasury	4.8	14.6	0.0	5.6	5.6	0.6	-7.2	0.0
Bloomberg LT Gov't-Rel.	5.5	11.5	1.0	10.6	10.6	5.5	-2.2	2.9
Bloomberg LT Corporate	5.6	12.7	-0.1	7.4	7.4	5.3	-3.0	3.4
Bloomberg U.S. TIPS*	3.9	6.1	0.1	7.0	7.0	4.2	1.1	3.1
Bloomberg High Yield	6.5	2.8	1.3	8.6	8.6	10.1	4.5	6.5
S&P/LSTA Leveraged Loan	7.0	0.3	1.2	5.9	5.9	9.4	6.4	5.8
Treasury Bills	3.6	0.3	1.0	4.3	4.3	4.9	3.2	2.2

Fixed Income Option Adjusted Spread (bps)



Treasury Yield Curve (%)



\*Yield and Duration statistics are for a proxy index based on similar maturity, the Bloomberg Barclays U.S. Treasury 5-10 Year Index.

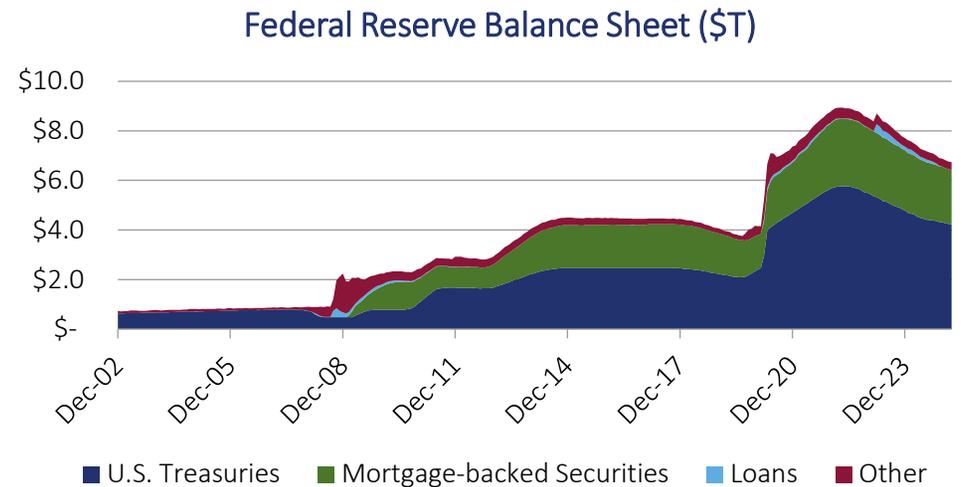
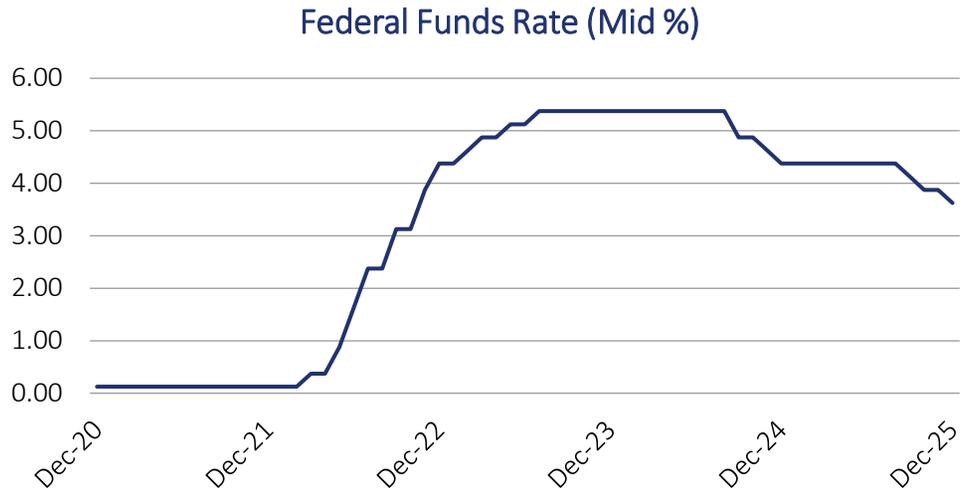
Data Source: Bloomberg

## Federal Reserve

The Federal Open Market Committee decreased their overnight rate by 0.50% during Q4

QE4 was larger than the 3 phases of quantitative easing – combined – following the global financial crisis

The Fed’s balance sheet is roughly equal to its level following the COVID spike



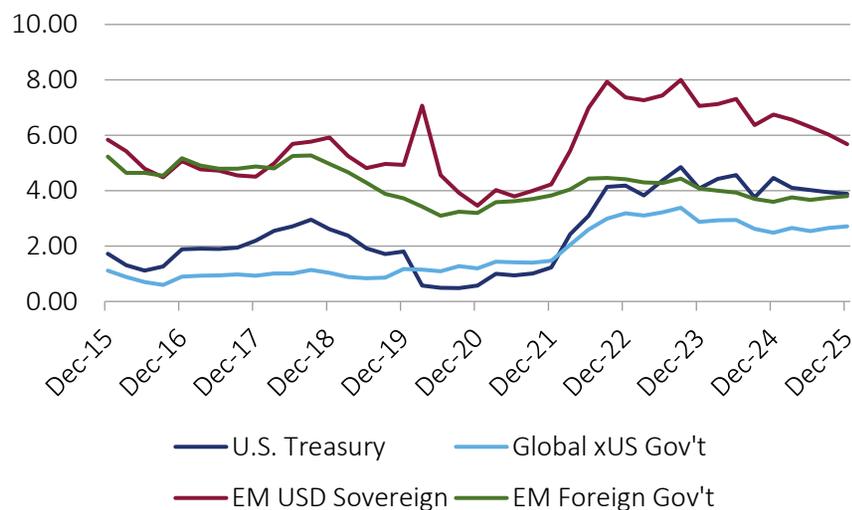
	Announced	Closed	Amount (bil)
QE1	11/25/2008	3/31/2010	\$1,403
QE2	11/3/2010	6/29/2012	\$568
QE3	9/13/2012	10/29/2014	\$1,674
QE4	3/23/2020	3/15/2022	\$4,779

Data Source: Bloomberg

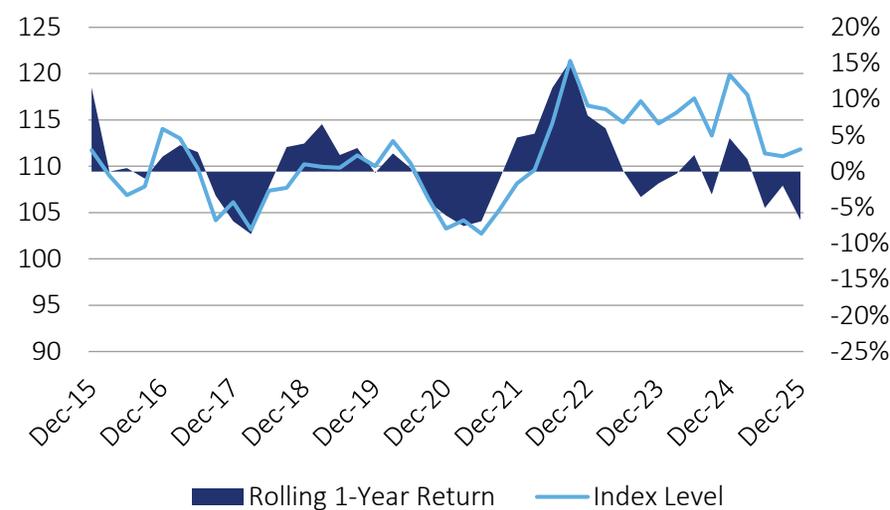
# Non-U.S. Fixed Income

As of 12/31/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
<b>Developed Markets</b>						
Bloomberg Global Aggregate xUS	-0.5	8.8	8.8	3.3	-3.6	0.6
Bloomberg Global Aggregate xUS*	0.5	2.8	2.8	5.3	0.8	2.6
Bloomberg Global Inflation Linked xUS	1.3	11.0	11.0	3.0	-5.0	0.4
Bloomberg Global Inflation Linked xUS*	1.8	2.3	2.3	1.6	-2.8	2.0
<b>Emerging Markets (Hard Currency)</b>						
Bloomberg EM USD Aggregate	2.4	11.1	11.1	8.9	1.5	4.2
<b>Emerging Markets (Foreign Currency)</b>						
Bloomberg EM Local Currency Gov't	1.7	9.3	9.3	5.9	1.4	3.7
Bloomberg EM Local Currency Gov't*	0.7	4.5	4.5	7.4	3.5	3.9
Euro vs. Dollar	0.1	13.4	13.4	3.1	-0.8	0.8
Yen vs. Dollar	-5.6	0.3	0.3	-5.8	-8.0	-2.6
Pound vs. Dollar	0.2	7.7	7.7	3.7	-0.3	-0.9

Global Fixed Income Yield to Worst (%)



U.S. Dollar Index: Advanced Economies

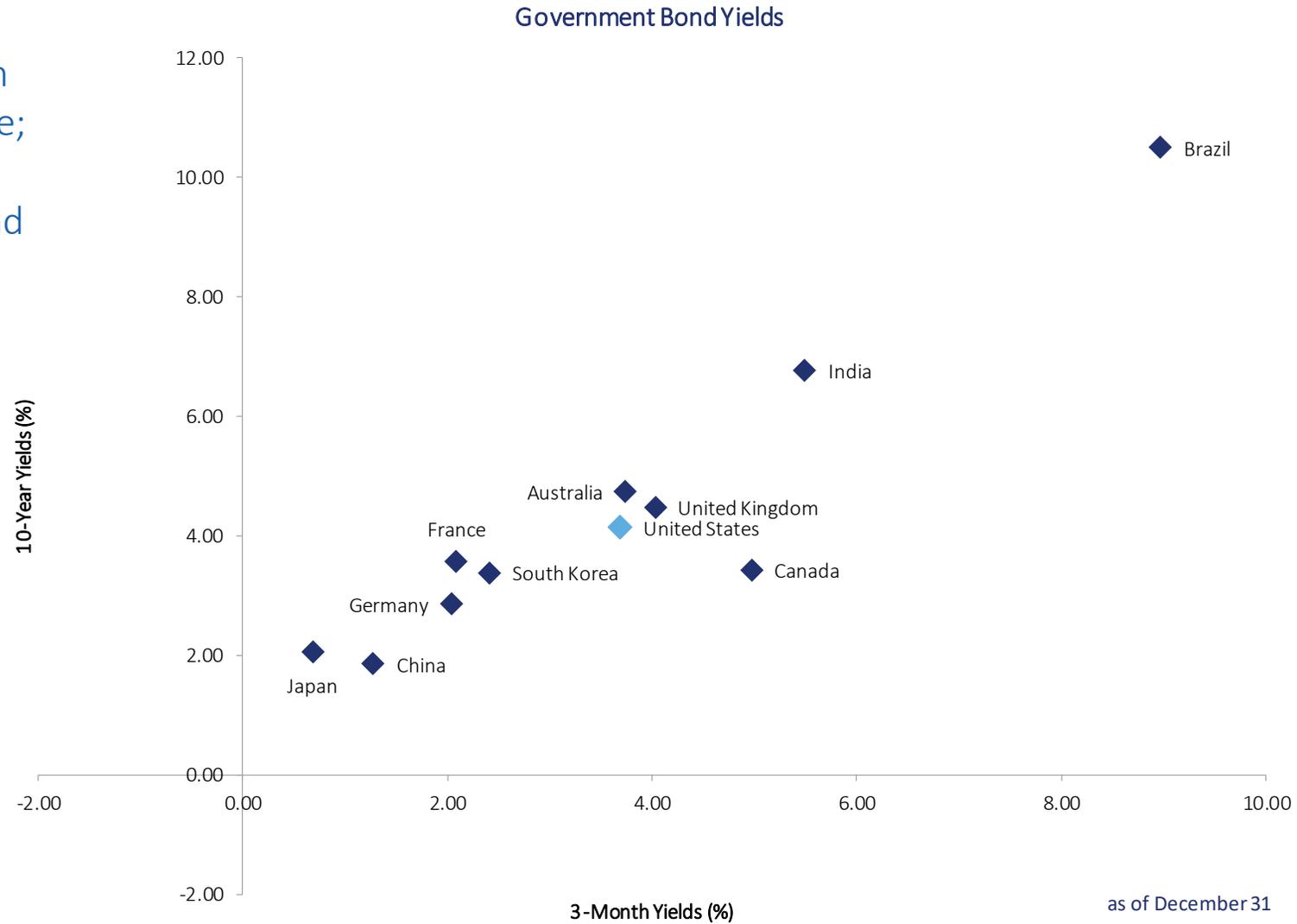


\*Returns are reported in terms of local market investors, which removes currency effects.

Data Source: Bloomberg

# Global Interest Rates

Short-term rates remain positive across the globe; longer-term rates near 4.0% in the U.S., U.K. and Australia

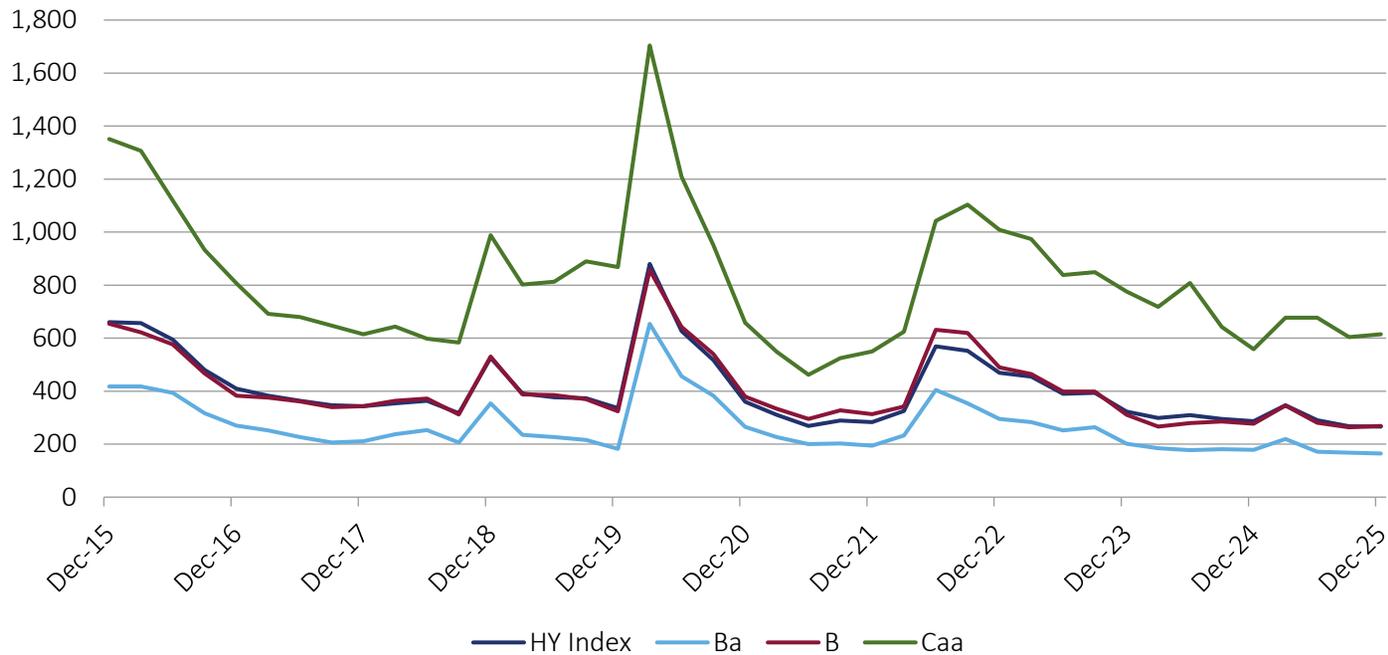


Data Source: Bloomberg

# High Yield Bond Market

As of 12/31/2025	Weight	YTW	QTR	YTD	1 YR	3 YR	5 YR	10 YR
Bloomberg High Yield		6.5	1.3	8.6	8.6	10.1	4.5	6.5
S&P LSTA Leveraged Loan		7.0	1.8	7.2	7.2	9.7	6.3	5.8
<b>High Yield Quality Distribution</b>								
Ba U.S. High Yield	54.8%	5.6	1.5	9.0	9.0	9.0	3.8	6.1
B U.S. High Yield	33.2%	6.5	1.6	8.4	8.4	9.8	4.5	6.2
Caa U.S. High Yield	11.3%	9.8	0.2	8.3	8.3	14.3	6.3	7.8
Ca to D U.S. High Yield	0.7%	30.5	-6.8	-2.9	-2.9	18.8	11.1	13.5

Fixed Income Option Adjusted Spread (bps)

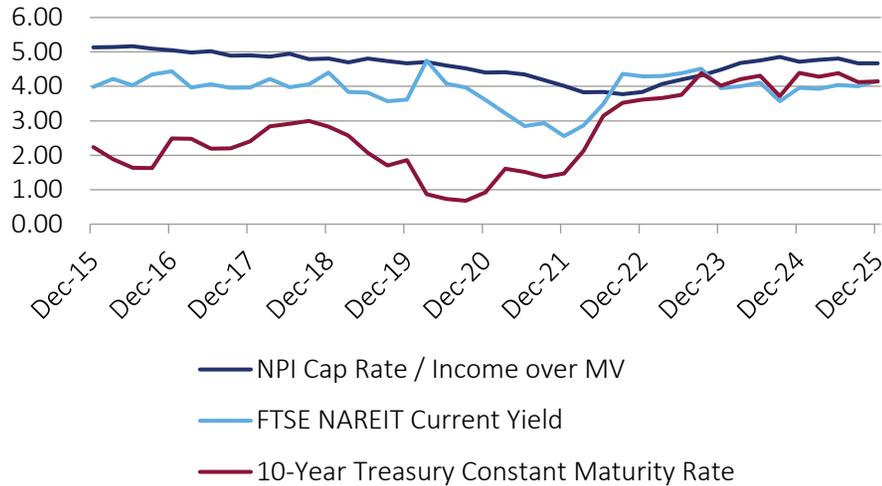


Data Source: Bloomberg

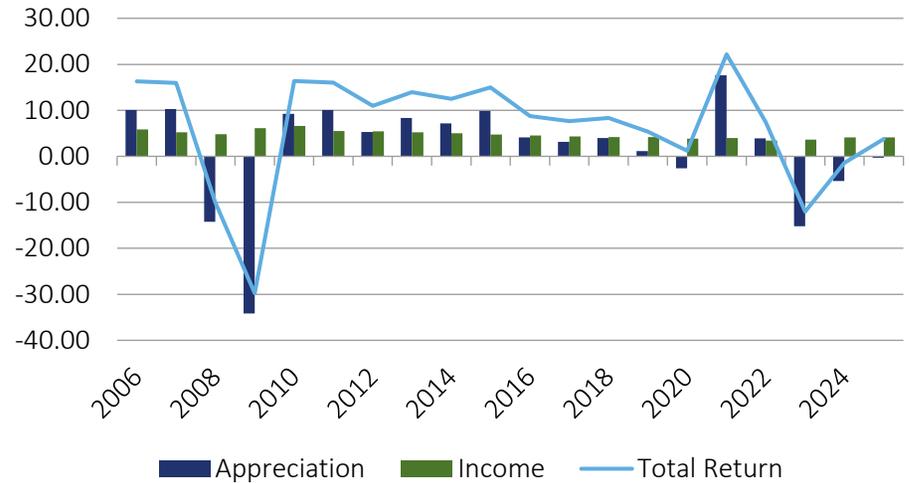
# Real Assets

As of 12/31/2025	Quarter	YTD	1 Year	3 Year	5 Year	10 Year
Bloomberg U.S. TIPS	0.1	7.0	7.0	4.2	1.1	3.1
Bloomberg Commodity Index	5.8	15.8	15.8	4.0	10.6	5.7
Bloomberg Gold Index	12.2	62.5	62.5	32.4	17.1	14.0
Wilshire Global RESI Index	-1.5	6.3	6.3	8.8	5.3	5.0
NCREIF ODCE Fund Index	0.9	3.8	3.8	-3.4	3.4	4.8
NCREIF Timberland Index	1.6	4.6	4.6	7.0	8.6	5.4
FTSE Global Core Infrastructure 50/50	1.0	15.3	15.3	9.5	7.8	8.6
Alerian Midstream Energy	-1.4	5.0	5.0	20.0	23.8	12.1
Bitcoin	-23.5	-6.5	-6.5	74.3	24.8	70.1

Real Estate Valuation (%)



NCREIF ODCE Fund Index Return (%)



Data Sources: Bloomberg, National Council of Real Estate Investment Fiduciaries

# Glossary & Policy Definitions

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

<b>Policy Index</b>	<b>Weight (%)</b>
<b>Oct-2025</b>	
Russell 3000 Index	21.88
Blmbg. U.S. Aggregate Index	26.05
MSCI AC World ex USA (Net)	13.55
Global Smart Beta Policy Index	5.21
Private Equity Policy Index	16.65
90 Day U.S. Treasury Bill	1.04
Private Credit Policy Index	5.96
Private Real Assets Policy Index	6.54
Public Credit Policy Index	3.12

<b>Jul-2025</b>	
Russell 3000 Index	21.66
Blmbg. U.S. Aggregate Index	25.78
MSCI AC World ex USA (Net)	13.41
Global Smart Beta Policy Index	5.16
Private Equity Policy Index	16.89
90 Day U.S. Treasury Bill	1.03
Private Credit Policy Index	6.13
Private Real Assets Policy Index	6.85
Public Credit Policy Index	3.09

<b>Policy Index</b>	<b>Weight (%)</b>
<b>Apr-2025</b>	
Russell 3000 Index	21.32
Blmbg. U.S. Aggregate Index	25.38
MSCI AC World ex USA (Net)	13.20
Global Smart Beta Policy Index	5.08
Private Equity Policy Index	17.72
90 Day U.S. Treasury Bill	1.01
Private Credit Policy Index	6.35
Private Real Assets Policy Index	6.90
Public Credit Policy Index	3.04

<b>Jan-2025</b>	
Russell 3000 Index	21.35
Blmbg. U.S. Aggregate Index	25.41
MSCI AC World ex USA (Net)	13.21
Global Smart Beta Policy Index	5.08
Private Equity Policy Index	17.75
90 Day U.S. Treasury Bill	1.02
Private Credit Policy Index	6.26
Private Real Assets Policy Index	6.87
Public Credit Policy Index	3.05

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

Policy Index	Weight (%)
<b>Oct-2024</b>	
Russell 3000 Index	21.39
Blmbg. U.S. Aggregate Index	25.98
MSCI AC World ex USA (Net)	13.24
Global Smart Beta Policy Index	5.09
Private Equity Policy Index	17.58
90 Day U.S. Treasury Bill	1.02
Private Credit Policy Index	5.92
Private Real Assets Policy Index	6.72
Public Credit Policy Index	3.06
<b>Jul-2024</b>	
Russell 3000 Index	21.04
Blmbg. U.S. Aggregate Index	25.54
MSCI AC World ex USA (Net)	13.02
Global Smart Beta Policy Index	5.01
Private Equity Policy Index	18.38
90 Day U.S. Treasury Bill	1.00
Private Credit Policy Index	5.93
Private Real Assets Policy Index	7.07
Public Credit Policy Index	3.01

Policy Index	Weight (%)
<b>Apr-2024</b>	
Russell 3000 Index	21.03
Blmbg. U.S. Aggregate Index	25.54
MSCI AC World ex USA (Net)	13.02
Global Smart Beta Policy Index	5.01
Private Equity Policy Index	18.34
90 Day U.S. Treasury Bill	1.00
Private Credit Policy Index	5.70
Private Real Assets Policy Index	7.35
Public Credit Policy Index	3.01
<b>Jan-2024</b>	
Russell 3000 Index	20.97
Blmbg. U.S. Aggregate Index	25.47
MSCI AC World ex USA (Net)	12.98
Global Smart Beta Policy Index	4.99
Private Equity Policy Index	18.58
90 Day U.S. Treasury Bill	1.00
Private Credit Policy Index	5.65
Private Real Assets Policy Index	7.36
Public Credit Policy Index	3.00

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

Policy Index	Weight (%)
<b>Oct-2023</b>	
Russell 3000 Index	20.41
Blmbg. U.S. Aggregate Index	24.79
MSCI AC World ex USA (Net)	12.64
Global Smart Beta Policy Index	4.86
Private Equity Policy Index	19.71
90 Day U.S. Treasury Bill	0.97
Private Credit Policy Index	5.69
Private Real Assets Policy Index	8.01
Public Credit Policy Index	2.92
<b>Jul-2023</b>	
Russell 3000 Index	20.75
Blmbg. U.S. Aggregate Index	21.74
MSCI AC World ex USA (Net)	16.30
Global Smart Beta Policy Index	4.94
Private Equity Policy Index	19.12
90 Day U.S. Treasury Bill	0.99
Private Credit Policy Index	5.30
Private Real Assets Policy Index	7.90
Public Credit Policy Index	2.96

Policy Index	Weight (%)
<b>Apr-2023</b>	
Russell 3000 Index	20.42
Blmbg. U.S. Universal Index	22.36
MSCI AC World ex USA (Net)	16.04
Global Smart Beta Policy Index	4.86
Private Equity Policy Index	19.22
90 Day U.S. Treasury Bill	0.97
Private Credit Policy Index	4.86
Private Real Assets Policy Index	8.35
Public Credit Policy Index	2.92
<b>Jan-2023</b>	
Russell 3000 Index	20.16
Blmbg. U.S. Universal Index	22.09
MSCI AC World ex USA (Net)	15.84
Global Smart Beta Policy Index	4.80
Private Equity Policy Index	19.81
90 Day U.S. Treasury Bill	0.96
Private Credit Policy Index	4.69
Private Real Assets Policy Index	8.77
Public Credit Policy Index	2.88

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

<b>Policy Index</b>	<b>Weight (%)</b>	<b>Policy Index</b>	<b>Weight (%)</b>
<b>Oct-2022</b>		<b>Apr-2022</b>	
Russell 3000 Index	19.68	Russell 3000 Index	20.17
Blmbg. U.S. Universal Index	21.56	Blmbg. U.S. Universal Index	23.84
MSCI AC World ex USA (Net)	15.46	MSCI AC World ex USA (Net)	16.04
Global Smart Beta Policy Index	4.69	Global Smart Beta Policy Index	5.50
Private Equity Policy Index	20.78	Private Equity Policy Index	19.65
90 Day U.S. Treasury Bill	0.94	90 Day U.S. Treasury Bill	0.92
Private Credit Policy Index	4.66	Private Credit Policy Index	3.39
Private Real Assets Policy Index	9.42	Private Real Assets Policy Index	6.82
Public Credit Policy Index	2.81	Public Credit Policy Index	3.67
<b>Jul-2022</b>		<b>Jan-2022</b>	
Russell 3000 Index	19.35	Wilshire 5000 Total Market Index	20.77
Blmbg. U.S. Universal Index	21.54	Blmbg. U.S. Universal Index	24.55
MSCI AC World ex USA (Net)	15.39	MSCI AC World ex USA (Net)	16.52
Global Smart Beta Policy Index	5.28	Global Smart Beta Policy Index	5.67
Private Equity Policy Index	21.03	Private Equity Policy Index	18.60
90 Day U.S. Treasury Bill	0.88	90 Day U.S. Treasury Bill	0.94
Private Credit Policy Index	4.15	Private Credit Policy Index	3.04
Private Real Assets Policy Index	8.86	Private Real Assets Policy Index	6.13
Public Credit Policy Index	3.52	Public Credit Policy Index	3.78

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

Policy Index	Weight (%)
<b>Oct-2021</b>	
Wilshire 5000 Total Market Index	20.84
Blmbg. U.S. Universal Index	24.63
MSCI AC World ex USA (Net)	16.58
Global Smart Beta Policy Index	5.68
Private Equity Policy Index	18.90
90 Day U.S. Treasury Bill	0.95
Private Credit Policy Index	2.91
Private Real Assets Policy Index	5.72
Public Credit Policy Index	3.79
<b>Jul-2021</b>	
Wilshire 5000 Total Market Index	21.37
Blmbg. U.S. Universal Index	25.25
MSCI AC World ex USA (Net)	17.00
Global Smart Beta Policy Index	5.83
Private Equity Policy Index	17.51
90 Day U.S. Treasury Bill	0.97
Private Credit Policy Index	2.68
Private Real Assets Policy Index	5.51
Public Credit Policy Index	3.88

Policy Index	Weight (%)
<b>Apr-2021</b>	
Wilshire 5000 Total Market Index	21.63
Blmbg. U.S. Universal Index	25.56
MSCI AC World ex USA (Net)	17.21
Global Smart Beta Policy Index	5.90
Private Equity Policy Index	16.74
90 Day U.S. Treasury Bill	0.98
Private Credit Policy Index	2.75
Private Real Assets Policy Index	5.30
Public Credit Policy Index	3.93
<b>Jan-2021</b>	
Wilshire 5000 Total Market Index	21.94
Blmbg. U.S. Universal Index	25.93
MSCI AC World ex USA (Net)	17.45
Global Smart Beta Policy Index	5.98
Private Equity Policy Index	15.49
90 Day U.S. Treasury Bill	1.00
Private Credit Policy Index	2.86
Private Real Assets Policy Index	5.36
Public Credit Policy Index	3.99

# Historical Hybrid Composition

## Total Fund Policy Benchmark

*Periods Ended December 31, 2025*

<b>Policy Index</b>	<b>Weight (%)</b>
<b>Oct-2020</b>	
Wilshire 5000 Total Market Index	21.78
Blmbg. U.S. Universal Index	25.74
MSCI AC World ex USA (Net)	17.32
Global Smart Beta Policy Index	5.94
Private Equity Policy Index	15.37
90 Day U.S. Treasury Bill	0.99
Private Credit Policy Index	3.04
Private Real Assets Policy Index	5.86
Public Credit Policy Index	3.96
<b>Jul-2020</b>	
Wilshire 5000 Total Market Index	21.38
Blmbg. U.S. Universal Index	27.22
MSCI AC World ex USA (Net)	17.01
Global Smart Beta Policy Index	5.83
Private Equity Policy Index	14.44
90 Day U.S. Treasury Bill	0.97
Private Credit Policy Index	3.15
Private Real Assets Policy Index	6.11
Public Credit Policy Index	3.89
<b>Apr-1979</b>	
Total Fund Policy Benchmark	100.00

\* Policy weights prior to July 2020 available on following page

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**Wilshire**

# IPERS Active Risk Discussion

Ali Kazemi, Senior Consultant

March 27, 2026

## Why Active Risk Exists — and Why It Should Be Governed

- Strategic policy portfolios cannot be implemented passively for a combination of reasons
  - Rebalancing is costly and transaction costs should always be considered
  - Private markets are not directly investable in a passive vehicle and benchmarking remains a challenge
- The result of this implementation hurdle is that portfolio returns can deviate from policy returns – these are excess returns

### Active risk is equal to either the realized or expected volatility of the excess returns

- A plan should only accept active risk if they:
  - Expect to get compensated for that risk by generating additional return
  - If that risk is unavoidable in order to access the underlying beta (private markets)

# Risk Budgeting Roles

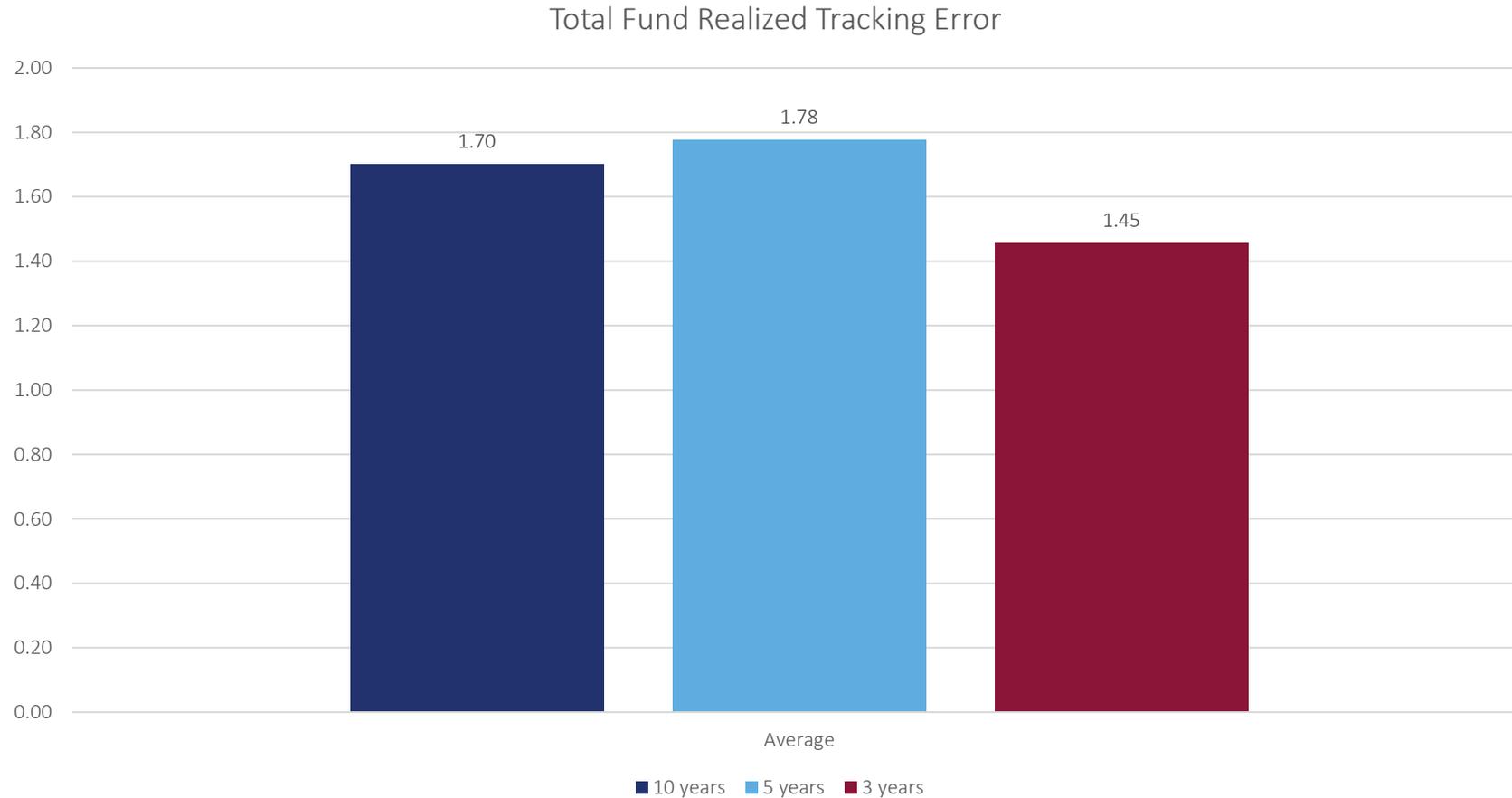
## Board Roles and Responsibilities

- Articulates expectations for potential alpha across the total fund and an acceptable level of active risk to achieve alpha expectations
- Monitor the usage of active risk budget, contribution of different sources of active risk, and the associated active returns

## Staff Roles and Responsibilities

- Identify and evaluate implementation options that best reflect the goal of the composite and can achieve active return above benchmark
  - Construct asset class composites with a manager structure that provides idiosyncratic and complementary styles
- Minimize unnecessary active risk and maximize alpha per unit of active risk taken
- Recommend an appropriate level of active risk to Board and the expected active return
- Utilize portfolio insights from active risk / return over time to increase portfolio efficiency

# Public Plan Realized Active Risk – Thru December 2025



- Based on sample of Wilshire Public DB Clients which include contributions from private markets
- The range of realized tracking errors is quite large (0.25% to 4.5%)

## Challenges Associated with Private Markets Active Risk

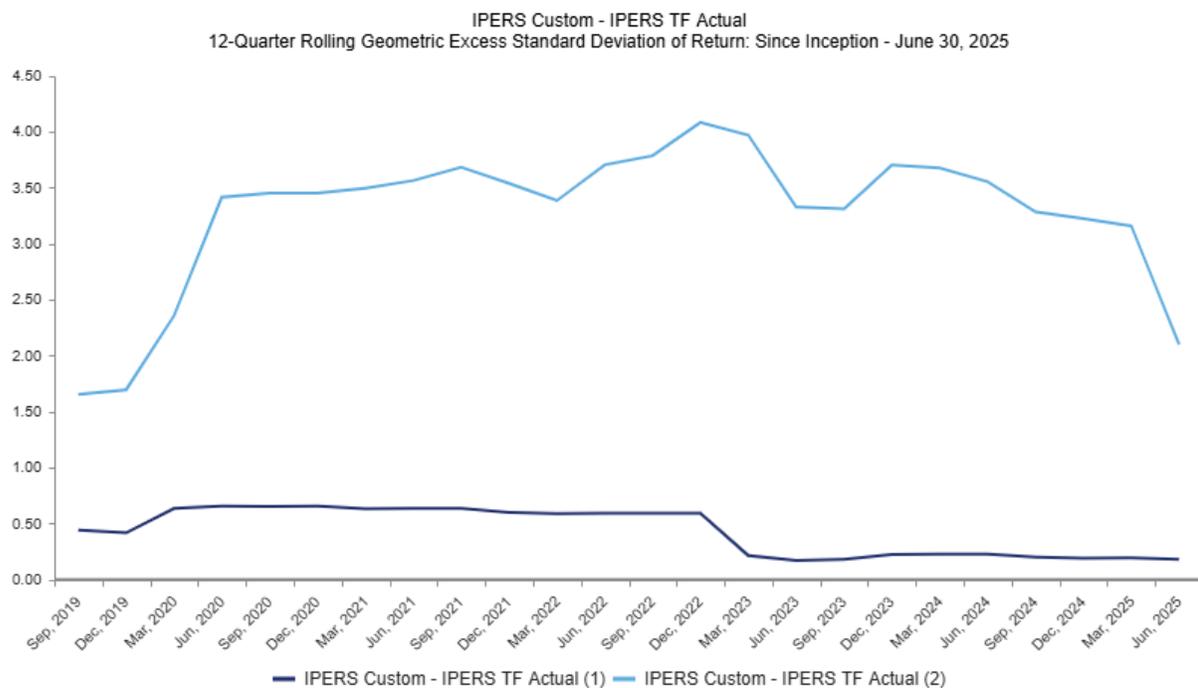
- Private investment performance measured against public market benchmark
- Private markets investments performance reported on a lagged basis
- Cannot readily rebalance or manage cash flow
- Hard to isolate “alpha” given benchmark challenges



- ✗ Benchmark mismatch cannot be eliminated (no pre-determined, investable, passive benchmark)
- ✗ Can use lagged public market benchmark but does not allow any action to be taken to manage active risk in a timely manner)
- ✗ Cannot actively rebalance (cash flow is not in staff control after commitment)
- ✓ Dissect actual manager risk vs. benchmark misfit, then determine course of appropriate action (adjust pacing, secondary market transactions)

***Private markets investments will exhibit a large tracking error and the sources of tracking error is confounded between actual investment risk and measurement mismatch***

# Actionable vs In-Actionable Active Risk



+ Quarterly data, Gross of Investment Management Fees  
Benchmarks Used: (1) IPERS TF Policy, (2) IPERS SAA Policy

- The difference between the lines on this chart are related to the challenges of managing private market TE
- Actionable (dark blue) is TE that staff has control over in the short term
- The light blue line is what many plan sponsors report
- The differential between these two lines is inactionable tracking error
  - Staff can't instantly get to Private Market target weights
  - Staff can't invest passively in Private Markets to capture the Public Equity + Premium return

## Total Fund Active Risk Budgets – Other Plans

Pension Plan	Level / Scope	Budget / Limit (Tracking Error)	Notes
CalPERS (CA)	Total Fund	4.00% (400 bps)	vs. Reference Portfolio
VRS (Virginia)	Total Fund	1.00% – 3.00%	
Ohio SERS	Total Fund	3.00% (300 bps)	
Norges Bank	Total Fund	1.25% (125 bps)	
STRS Ohio	Total Fund	0.60% – 1.20%	
Wisconsin	Total Fund	0.60% - 1.80%	vs. Reference Portfolio
Ohio PERS	Total Fund	1.00% Target, 3.00% Max	
Michigan SMRS	Total Fund	3.00% Max	
Oregon PERF	Total Fund	2.00% - 3.00%	
Texas TRS	Public Assets Only	1.00% Target, 3.00% Max	
Colorado PERA	Public Assets Only	1.50% Max	

- Institutions with formal active risk budgets typically skew to larger size
- Some plans may use risk budgets that are not in the IPS (Staff driven)
- Most active risk budgets do not account for actionable risk

# Active Risk Budget – Recalibration

Calibrating the right amount of active risk budgeting should factor in several things:

1. IPERS currently has a board approved risk budget (inclusive of illiquid / non-actionable risk)
  - 1% active risk budget for external managers
  - 1% active risk budget for Investment Staff
  - Staff have mitigated this risk using overlay
2. IPERS current active risk measurement excludes non-actionable
  - Board can recalibrate the budget to reflect reasonable amount of actionable active risk (lower the active risk budget)
  - Use the 75% (non-actionable) / 25% (actionable) ratio
3. On a 1% target assuming 25% should be actionable
  - In risk terms that amounts to a target of 0.50% (upper limit of 0.75%)
  - This would be a reasonable target that is consistent with the boards previous risk tolerance

## IPERS Current Risk Budget

	Target <sup>4</sup>	Upper Limit <sup>4</sup>
<b>Total Fund</b>	<b>1.50%</b>	<b>3.00%</b>
External Managers	1.00%	2.50%
Investment Staff	1.00%	2.50%

## Peer Implementation / Best Practices

- Total Fund active risk budget seldom used
  - Difficult to measure due to private markets and cross-asset class active implementation correlation
  - Some moving away from measuring and monitoring private markets active risk altogether
- Ex-ante vs ex-post monitoring
  - Incorporate forward looking modeling into the process for the risk estimates
- Public markets active risk budget
  - Typically monitored quarterly
  - Breach of range expected to be cured in 1-2 quarters

# Active Risk – A Policy Tool?

IPERS

Sri Lakshminarayanan, Chief Investment Officer

March 27, 2026



# Background

- **IPERS' policy only measures active risk in public markets**
- **Active risk is a measurement of the incremental risk/tracking error over and above a frictionless passive public market implementation**
- **Main sources**
  - **Deviations from policy targets**
  - **Benchmark misfits**
  - **Active strategies – internal and external**
  - **Passive implementation**

# Why is IPERS' active risk low compared to peers?

- **IPERS only measures active risk in public markets**
- **Intentionally passive in public market implementation**
- **Reduced misfits and adherence to policy targets**
- **Selective/skeptical in active strategies**
  - **Portable alpha**
  - **LARS + ARP**
  - **Internal programs**

# Purpose of active risk

- **All components should be intentional and accountable**
- **Downside protection – not insurance**
  - **Cannot guarantee drawdown mitigation when strategic asset allocation fails**
  - **Positive expected returns over long periods of time**
- **Adding active risk is easy, being disciplined is harder**
- **Cannot be static beta or factor exposures**
- **If performance is not a guarantee, then costs should also be conditional**

# How does the policy control active risk?

- **Ranges around asset allocation**
  - Every 1% range around EQ ~ 10bps of possible active risk
  - USEQ + INEQ = +/- 6% ~ 60 bps of active risk
- **Approval of active strategies (internal and external)**
- **Monitoring misfits and passive implementation by staff**

- **Overall active risk budget**

	Target*	Upper Limit*
Total Fund	1.50%	3.00%
External Managers	1.00%	1.50%
Investment Staff	1.00%	1.50%

\* Measured as tracking error (the standard deviation of excess return) at the Total Fund Level

- **Make sure all the above do not contradict each other**

# Staff plans for the next couple of years

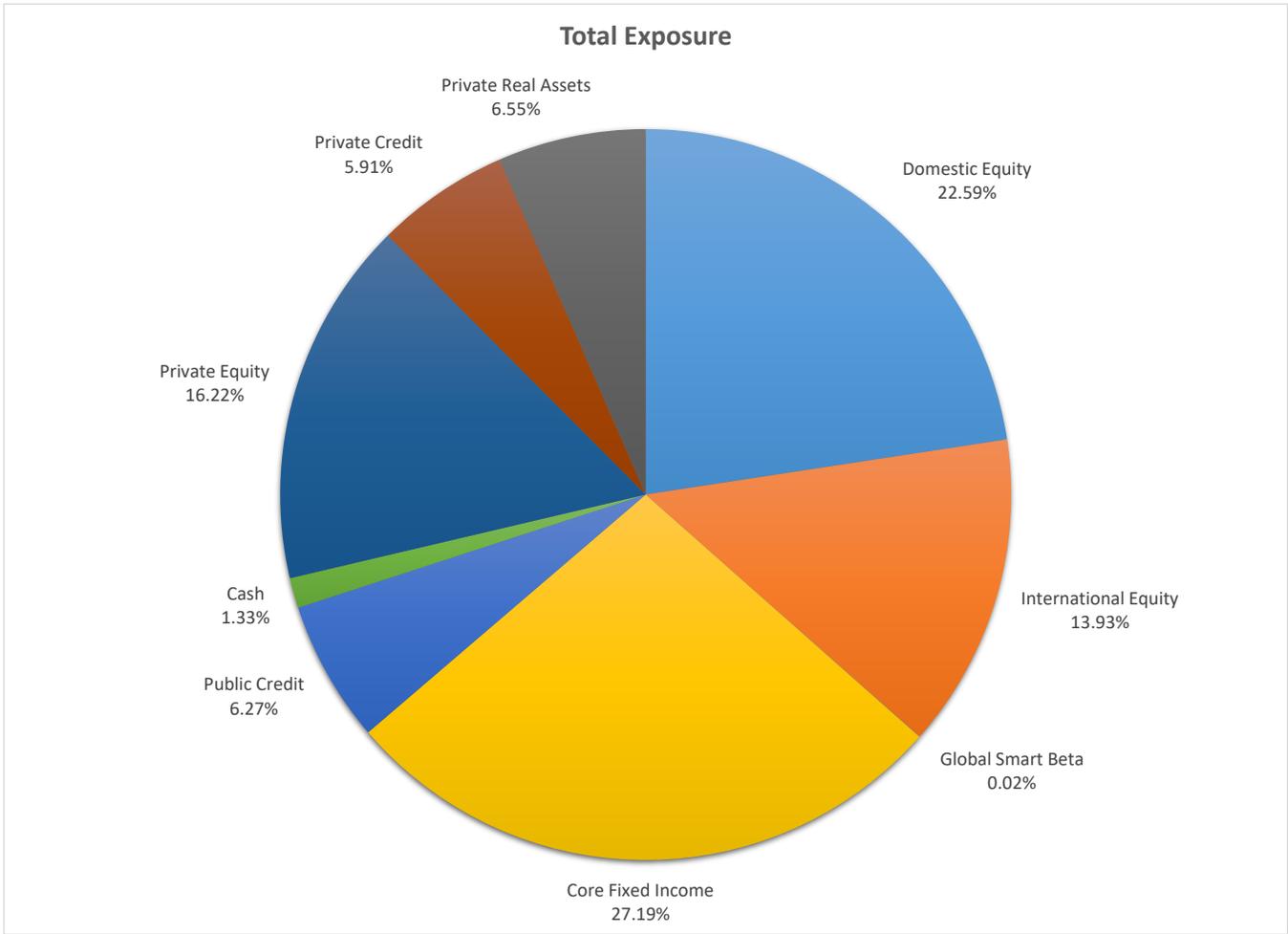
- Staff doesn't plan on dramatically increasing active risk by adding a lot of external active mandates
- Opportunistically increase the size of the LARS mandate
- Increase internal ARP and staff directed trades trading levels
- Keep looking for absolute return strategies that align with IPERS' philosophy

# Closing thoughts

- **All risk measurements are inherently deficient**
- **Targets may be reduced, but upper limits should be inline with other policy goals**
  - **Staff expects to deploy 30-45 basis points of risk in the next few years (normal market conditions)**
- **A relaxed upper limit will help staff manage active risk through crisis periods**

**BETA REPORT**  
**IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM PORTFOLIO**  
**PRELIMINARY (Unreconciled) MARKET VALUES AT**  
**3/20/2026**

	Actual	Overlay	Total	Policy	Difference
<b>PUBLIC MARKETS</b>					
Domestic Equity	22.55%	0.04%	22.59%	23.11%	-0.52%
International Equity	13.82%	0.11%	13.93%	14.31%	-0.38%
Global Smart Beta	0.02%	0.00%	0.02%	0.00%	0.02%
<b>Total Equities</b>	<b>36.39%</b>		36.54%	<b>37.42%</b>	<b>-0.88%</b>
Core Fixed Income	26.64%	0.55%	27.19%	26.96%	0.23%
Public Credit	6.27%		6.27%	6.60%	-0.33%
Cash	2.03%	-0.70%	1.33%	1.10%	0.23%
<b>PRIVATE MARKETS</b>					
Private Equity	16.22%		16.22%	15.74%	0.48%
Private Credit	5.91%		5.91%	5.74%	0.17%
Private Real Assets	6.55%		6.55%	6.44%	0.11%
<b>TOTAL FUND</b>	<b>100.00%</b>			<b>100.00%</b>	<b>0.00%</b>



BETA REPORT			
IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM PORTFOLIO			
PRELIMINARY (Unreconciled) MARKET VALUES AT			
3/20/2026			
<b>PUBLIC PORTFOLIO</b>	\$	34,729,451,727	
<b>Manager Name</b>		<b>Total Market Value</b>	<b>Manager Name</b>
BlackRock - Russell 1000 SAE	\$	2,502,656,402	Mesirow - EM Currency
BlackRock - Russell 2000 SAE	\$	266,036,616	Man - EM Global Macro
Terminated Managers	\$	-	BlackRock - Universal Alpha
<b>DOMESTIC EQUITY - ACTIVE</b>	\$	<b>2,768,693,018</b>	BlackRock - Universal Beta
Mellon - Russell 1000 Index	\$	7,982,933,223	PGIM - GLRV Alpha
Mellon - Russell 2000 Index	\$	221,067,513	PGIM - GLRV Beta
Parametric - Domestic Equity	\$	8,777,965	Terminated Managers
Terminated Managers	\$	-	<b>CORE FIXED INCOME - ACTIVE</b>
<b>DOMESTIC EQUITY - PASSIVE</b>	\$	<b>8,212,778,701</b>	\$
<b>TOTAL DOMESTIC EQUITY</b>	\$	<b>10,981,471,718</b>	Mellon - SLH Agg
BlackRock - Canada	\$	527,258,197	Parametric - Core Fixed Income
BlackRock - EAFE	\$	2,022,282,817	\$
Mellon - Emerging Markets	\$	1,326,842,905	<b>CORE FIXED INCOME - PASSIVE</b>
Parametric - International Equity	\$	9,897,041	\$
Terminated Managers	\$	-	<b>TOTAL CORE FIXED INCOME</b>
<b>INTERNATIONAL EQUITY - PASSIVE</b>	\$	<b>3,886,280,961</b>	\$
BlackRock - EAFE SAE	\$	1,514,883,510	PGIM - High Yield
BlackRock - EM SAE	\$	556,942,652	EMD Transition
PanAgora - Dynamic EAFE	\$	494,193,653	High Yield Transition
Wellington - Emerging Markets	\$	263,988,942	Aegon - USA High Yield
Terminated Managers	\$	13,270,408	Prudential - EMD
<b>INTERNATIONAL EQUITY - ACTIVE</b>	\$	<b>2,843,279,165</b>	Terminated Managers
<b>TOTAL INTERNATIONAL EQUITY</b>	\$	<b>6,729,560,126</b>	\$
			<b>TOTAL PUBLIC CREDIT</b>
			\$
			UBS - US
			Parametric Smart-Beta
			\$
			UBS - Developed ex US
			UBS - EM
			<b>TOTAL GLOBAL SMART BETA EQUITIES</b>
			\$
			Cash Account
			LARS Liquid Assets
			Staff Directed Trades
			Pending Cash
			<b>TOTAL CASH</b>
			\$
<b>PRIVATE PORTFOLIO</b>	\$	13,965,589,595	\$
<b>Manager Name</b>		<b>Total Market Value</b>	<b>Manager Name</b>
Pathway PE Fund XXV	\$	7,301,185,426	RREEF
Pathway Legacy Portfolio	\$	594,797,566	Clarion Partners
<b>TOTAL PRIVATE EQUITY</b>	\$	<b>7,895,982,992</b>	Kayne Anderson - KAREP VII
BlackRock	\$	294,264,130	Invesco
Pathway XXV - B	\$	261,739,124	UBS Realty
Monroe Capital	\$	414,616,669	<b>REAL ESTATE</b>
<b>DIRECT LENDING</b>	\$	<b>970,619,922</b>	\$
ArrowMark	\$	216,885,761	Brookfield - BSIP
Crestline Series I	\$	152,429,073	loway Investments
Crestline Series II	\$	118,063,002	Macquarie - MIP VI
Audax Mezzanine Fund V	\$	43,173,141	Forest Investment Associates
Marathon	\$	270,616,918	UBS Farmland Investors
KKR	\$	284,016,444	<b>OTHER REAL ASSETS</b>
Ares Private Credit Solutions II	\$	72,626,893	\$
Audax Mezzanine Co-Invest IA	\$	8,365,189	<b>TOTAL PRIVATE REAL ASSETS</b>
<b>OPPORTUNISTIC</b>	\$	<b>1,166,176,421</b>	\$
Oaktree - RECIF	\$	76,827,980	
Principal - OEDF	\$	31,471,551	
ITE	\$	68,488,853	
IFM - USIDF	\$	91,637,595	
PGIM - Real Estate Global Debt	\$	141,846,595	
PGIM - PREDS	\$	69,734,959	
Kayne Anderson - KARED IV	\$	58,536,082	
JP Morgan - GTIF	\$	103,499,214	
loway Investments	\$	16,909,660	
Heitman - CREDIT	\$	83,142,947	
Terminated Managers	\$	-	
<b>REAL ASSETS CREDIT</b>	\$	<b>742,095,437</b>	
<b>TOTAL PRIVATE CREDIT</b>	\$	<b>2,878,891,779</b>	
			<b>RECENT MARKET VALUES</b>
			3/20/2026
			\$
			3/13/2026
			\$
			3/6/2026
			\$
			2/27/2026
			\$
			2/20/2026
			\$
			2/13/2026
			\$
			2/6/2026
			\$
			1/30/2026
			\$
			1/23/2026
			\$
			1/16/2025
			\$
			<b>Public Markets</b>
			\$
			<b>Private Markets</b>
			\$
			<b>Total</b>
			\$

# Alpha Report

For periods ending December 31, 2025

*α*

# IPERS' Active Manager Alpha Scorecard

Net of Fees as of 4Q25	4Q25	1 Year	3 Year	5 Year	SI	Perf	Org	People	Process
<b>Domestic Equity</b>									
BlackRock - Russell 1000 SAE	2.14%	3.31%	1.45%	NA	1.14%				
BlackRock - Russell 2000 SAE	0.85%	1.55%	0.55%	0.86%	1.36%				
<b>International Equity</b>									
BlackRock – EAFE SAE	-1.03%	1.79%	2.19%	2.01%	1.48%				
PanAgora - Dynamic EAFE	0.41%	3.27%	2.68%	2.34%	1.21%				
Wellington - Emerging Markets	-0.52%	5.27%	0.60%	0.07%	0.25%				
BlackRock - Emerging Markets SAE	0.44%	-1.65%	-0.23%	-0.62%	-0.53%				
<b>Core Fixed Income</b>									
BlackRock - Universal	-0.41%	-0.29%	0.30%	0.80%	0.78%				
PGIM - Universal	1.49%	4.21%	2.11%	NA	0.85%				
Man EM Global Macro	-3.86%	-20.33%	NA	NA	-16.47%				
Mesirow EM Currency	3.12%	8.11%	NA	NA	1.34%				
<b>Public Credit</b>									
PGIM - High Yield	-0.34%	0.86%	0.22%	0.69%	0.63%				
Aegon USA - High Yield	0.53%	0.27%	-0.59%	-0.03%	0.21%				
PGIM - Emerging Market Debt	0.21%	0.97%	1.43%	0.69%	0.87%				
<b>LARS</b>									
Aspect Capital	1.81%	-3.78%	-0.13%	NA	2.77%				
Graham Capital Management	2.51%	-0.05%	-2.50%	0.38%	2.70%				
P/E Global	1.75%	-8.70%	0.12%	0.19%	3.00%				
PIMCO	-2.21%	-7.08%	5.87%	NA	5.71%				
Welton Global	1.47%	-8.45%	-8.00%	NA	-3.52%				
ARP	0.64%	-1.90%	-0.12%	NA	-1.71%				
DCM	0.56%	NA	NA	NA	11.03%				
<b>Staff Directed Trades</b>									
Staff Directed Trades	5.33%	NA	NA	NA	14.12%				

 No Concerns

 Minor Concerns

 Material Concerns

# IPERS' Active Manager Listing

MANAGER	INCEPTION DATE	MANDATE	BENCHMARK
<b>Domestic Equity</b>			
BlackRock - Russell 1000 SAE	May 2022	Large Cap	Russell 1000
BlackRock - Russell 2000 SAE	May 2019	Small Cap	Russell 2000
<b>International Equity</b>			
BlackRock – EAFE SAE	May 2019	Developed EAFE	MSCI EAFE Index (net)
PanAgora - Dynamic EAFE	May 2019	Developed EAFE	MSCI EAFE Index (net)
Wellington - Emerging Markets	February 2009	Global Emerging Markets	MSCI Emerging Markets (net)
BlackRock - Emerging Markets SAE	May 2019	Global Emerging Markets	MSCI Emerging Markets (net)
<b>Core Fixed Income</b>			
BlackRock - Universal	November 2020	Relative Value	Bloomberg U.S. Aggregate
PGIM - Universal	March 2021	Relative Value	Bloomberg U.S. Aggregate
Man EM Global Macro	October 2023	Relative Value	Bloomberg U.S. Aggregate
Mesirow EM Currency	October 2023	Relative Value	Bloomberg U.S. Aggregate
<b>Public Credit</b>			
PGIM - High Yield	June 2019	High Yield	Bloomberg U.S. HY 2% Capped Index
Aegon USA - High Yield	February 2012	High Yield	High Yield Policy Index
PGIM - Emerging Market Debt	April 2016	Emerging Market Debt	JP Morgan EMBI Global
<b>LARS</b>			
Aspect Capital	March 2022	Diversified Trend	Absolute Return
Graham Capital Management	December 2016	Tactical Trend	Absolute Return
P/E Global	December 2016	FX Strategy	Absolute Return
PIMCO	July 2022	Commodity Alpha	Absolute Return
Welton Global	June 2021	Welton Global	Absolute Return
ARP	November 2022	Alternative Risk Premium	Absolute Return
DCM	March 2025	Diversified Alpha	Absolute Return

# Private Market Program Manager Updates

For periods ending December 31, 2025

IOWA PUBLIC EMPLOYEES' RETIREMENT SYSTEM

March 27, 2026



# IPERS' PMP Manager Scorecard

	1 Year	5 Year	10 Year	SI	Performance	Organization	People	Process
<b>Private Equity</b>								
Multi-Strategy								
Pathway	9.50%	12.66%	15.59%	12.77%				
<b>Private Credit</b>								
Direct Lending								
BlackRock	4.49%	6.61%	N/A	6.89%				
Monroe Capital	5.78%	7.45%	N/A	7.25%				
Pathway XXV-B	8.98%	N/A	N/A	9.18%				
Opportunistic								
Arrowmark	11.58%	N/A	N/A	10.31%				
Ares Private Credit Solutions II	11.53%	N/A	N/A	7.94%				
Audax Mezzanine Fund V	8.11%	N/A	N/A	14.57%				
Audax Mezzanine Co-Invest IA	14.78%	N/A	N/A	12.85%				
Crestline Series I	3.25%	N/A	N/A	6.91%				
Crestline Series II	12.62%	N/A	N/A	8.59%				
KKR	8.18%	8.30%	N/A	7.96%				
Marathon	8.93%	N/A	N/A	6.98%				
Real Assets								
Heitman – CREDIT	3.24%	N/A	N/A	-0.69%				
IFM – USIDF	4.00%	N/A	N/A	4.10%				
PGIM Real Estate Global Debt	10.74%	8.16%	N/A	7.56%				
Principal – PREDF II	9.64%	7.42%	N/A	7.84%				
Kayne Anderson – KARED IV	10.60%	N/A	N/A	9.34%				
JP Morgan – GTIF	8.33%	N/A	N/A	9.62%				
ITE	5.91%	N/A	N/A	9.43%				
PGIM – PREDS	7.35%	N/A	N/A	6.00%				
Oaktree – RECIF	6.92%	N/A	N/A	5.54%				
Principal – OEDF	6.54%	N/A	N/A	5.08%				
Private Credit Co-Investments								
loway Private Credit	N/A	N/A	N/A	1.77%				

 No Concerns

 Minor Concerns

 Material Concerns

# IPERS' PMP Manager Scorecard

	1 Year	5 Year	10 Year	SI	Performance	Organization	People	Process
<b>Private Real Assets</b>								
<b>Real Estate</b>								
Clarion Partners	15.05%	-6.01%	-1.49%	3.26%				
Invesco	2.50%	9.78%	10.95%	9.83%				
RREEF	3.33%	5.79%	7.05%	8.86%				
UBS Realty	8.74%	9.84%	10.18%	9.68%				
Kayne Anderson – KAREP VII	-1.50%	N/A	N/A	-1.50%				
<b>Other Real Assets</b>								
Brookfield – BSIP	8.84%	N/A	N/A	7.71%				
Forest Investment Associates	-0.38%	6.46%	4.60%	5.24%				
UBS Farmland	2.50%	5.31%	N/A	6.47%				
Macquarie - MIP VI	N/A	N/A	N/A	-5.96%				
<b>Private Real Assets Co-Investments</b>								
loway Private Real Assets	N/A	N/A	N/A	0.00%				

 No Concerns

 Minor Concerns

 Material Concerns

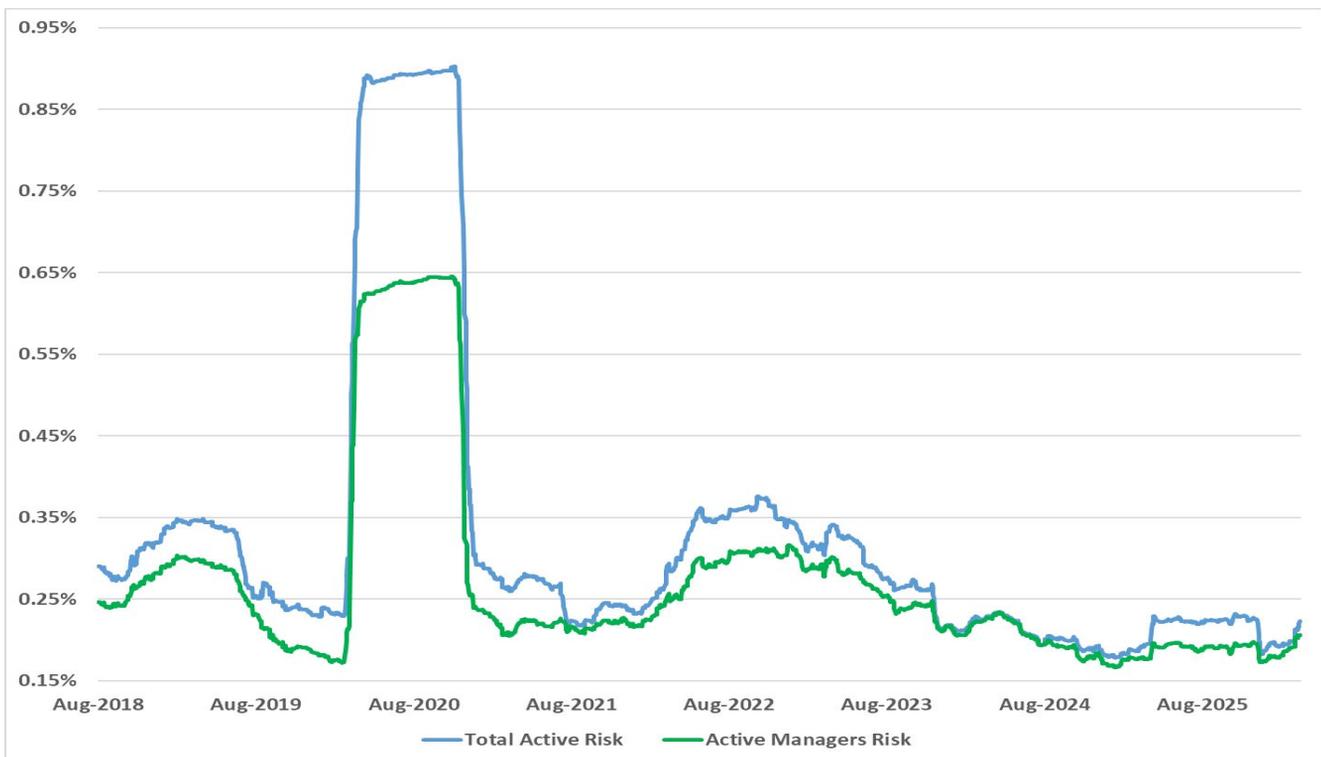
## Active Risk –180 Days (Mar 2026)

	Active	Passive	Misfit	Total
<b>Equities</b>				
Domestic Equities	0.08%	0.01%	0.00%	0.08%
International Equities	0.08%	0.03%	0.00%	0.09%
<b>Fixed Income</b>				
Core Fixed Income	0.10%	0.02%	0.00%	0.10%
Public Credit	0.02%	-	0.00%	0.02%
LARS (External)	0.06%	-	-	0.06%
<b>Internal (ARP+SDT)</b>	0.03%	-	-	0.03%
<b>Asset Allocation</b>	-	0.07%	-	0.07%
<b>Total Public Markets</b>	0.21%	0.09%	0.00%	0.22%

<b>Target</b>	1.50%
<b>Upper Limit</b>	3.00%

- Plan-level Total Public Market Active Risk at 0.22%
- Public Credit transition mandates are rolled up into the total plan active risk
- No new active mandates added. We hope to add one more in the upcoming quarter.

## Public Markets Active Risk –180 Days (Mar 2026)



# 2026

## Board Meetings

JANUARY						
S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

APRIL						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

MAY						
S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE						
S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

JULY						
S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST						
S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER						
S	M	T	W	T	F	S
			1	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

### March 27, 2026

CY2025 Investment Performance

### June 18, 2026

Private Markets Program Review

### September 23-24, 2026

Continuing Education Session

FY2025 Investment Performance Review

Asset Allocation

Investment Policy & Goal Statement

### December 4, 2026

Actuarial Valuation Presentation