



## **Executive Summary Third Quarter 2023**

Arkansas Judicial Retirement  
System

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# Equity Markets Down in 3Q, Following Rebound in First Half of 2023

Stocks and bonds still have ground to make up after declines in 2022

## S&P 500 down 3.3% in 3Q23.

- Loss through first three quarters of 2022 was 23.9%; rebound in the following three quarters reduced the loss to 2.9% by September, but decline in 3Q shows S&P is still over 7% below 1/2022 high-water mark

## Fixed income recovered in first half of 2023 as high inflation began to ease; speculation about interest rate cuts evaporated

- Bloomberg Aggregate: up 3% in 1Q, but declined 0.8% in 2Q and another 3.2% in 3Q as Fed continued to raise rates
- CPI-U: +3.7% year-over year for 3Q, and still up 5.8% since the start of 2022

## Economic data defied expectations of recession in 2023; GDP growth came in at 2.1% in 1Q and 2.2% in 2Q, and surged to a stunning 4.9% in 3Q

- Job market remains solid, providing support to Fed efforts to fight inflation

## Returns for Periods ended 9/30/23

	Quarter	YTD	Last Year	5 Years	10 Years	25 Years
<b>U.S. Equity</b>						
Russell 3000	-3.25	12.39	20.46	9.14	11.28	8.09
S&P 500	-3.27	13.07	21.62	9.92	11.91	7.92
Russell 2000	-5.13	2.54	8.93	2.40	6.65	8.00
<b>Global ex-U.S. Equity</b>						
MSCI World ex USA	-4.10	6.73	24.00	3.44	3.84	4.98
MSCI Emerging Markets	-2.93	1.82	11.70	0.56	2.07	--
MSCI ACWI ex USA Small Cap	-1.70	5.03	19.01	2.58	4.35	7.41
<b>Fixed Income</b>						
Bloomberg Aggregate	-3.23	-1.21	0.64	0.10	1.13	3.59
90-day T-Bill	1.31	3.60	4.47	1.72	1.11	1.89
Bloomberg Long Gov/Credit	-9.37	-5.40	-2.93	-1.21	1.94	4.67
Bloomberg Global Agg ex-US	-4.00	-3.20	3.39	-3.10	-1.73	2.04
<b>Real Estate</b>						
NCREIF Property	-1.37	-5.07	-8.39	5.26	7.40	8.31
NCREIF:NFI-ODCE Eq Wt Net	-2.12	-8.42	-13.08	5.22	7.55	6.94
<b>Alternatives</b>						
CS Hedge Fund Index	1.81	3.71	4.66	4.77	4.08	5.96
Cambridge Private Equity*	1.59	3.71	0.39	15.37	14.91	13.67
Bloomberg Commodity	4.71	-3.44	-1.30	6.13	-0.75	2.45
Gold Spot Price	-3.28	2.18	11.61	9.30	3.47	7.60
<b>Inflation - CPI-U</b>	0.88	3.70	3.70	4.04	2.77	2.56

\*Cambridge PE data as of 2Q23

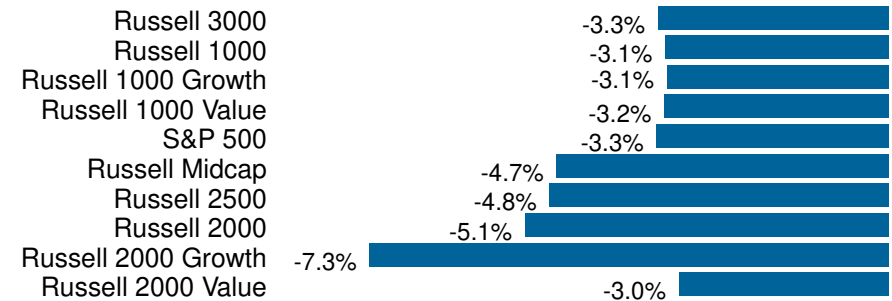
Sources: Bloomberg, Callan, Cambridge, Credit Suisse, FTSE Russell, MSCI, NCREIF, S&P Dow Jones Indices

# U.S. Equity Performance: 3Q23

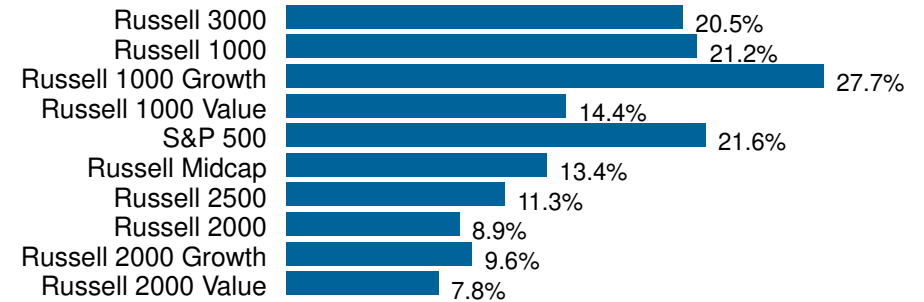
The U.S. equity markets cooled in 3Q after an exuberant start to the year

- ▶ All U.S. equity indices posted losses during 3Q23. August and September were marked by investor fears about the potential of a “higher for longer” interest rate environment, leading to broader market declines.
- ▶ While all indices were negative, the Russell 2000 Value Index led the pack during the quarter, a reversal of the previous two quarters when the Russell 1000 Growth Index led.
- ▶ Only two of the 11 S&P 500 Index sectors generated positive 3Q returns; Energy was up 12% and Communication Services was up 3%. However, on a YTD basis, six sectors generated positive returns, with Information Technology, Communication Services and Consumer Discretionary substantially leading the group.

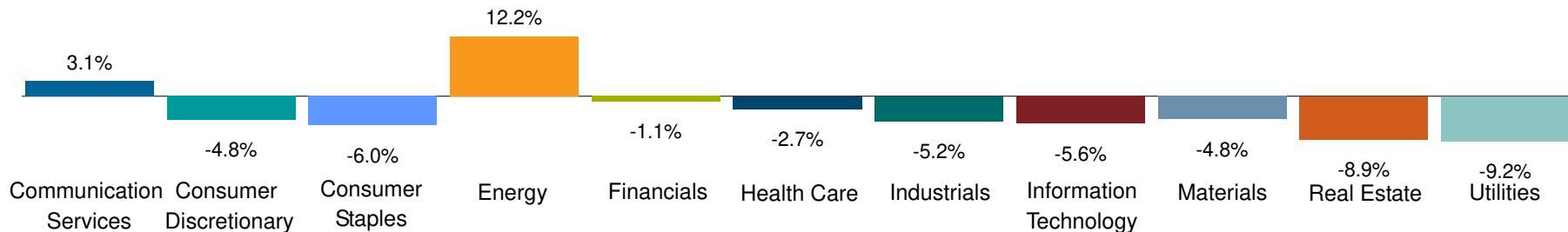
## U.S. Equity: Quarter Ended 9/30/23



## U.S. Equity: One-Year Returns Ended 9/30/23



## Industry Sector Quarterly Performance (S&P 500) as of 9/30/23



Sources: FTSE Russell, S&P Dow Jones Indices

# Global/Global ex-U.S. Equity Performance: 3Q23

## Global growth concerns

Most global markets were in the red for 3Q23.

### Narrow market

- ▶ Global markets retreated in 3Q23 amid fears of a global recession driven by higher interest rates and slowing growth in regions outside the U.S.
- ▶ Emerging markets outperformed developed markets, buoyed by good results from India, whose economy grew nearly 8% on the heels of supportive infrastructure spending.
- ▶ Japan was strong again in local currency as it continues to benefit from post-COVID exuberance, easy monetary policy, and a new economic stimulus plan.

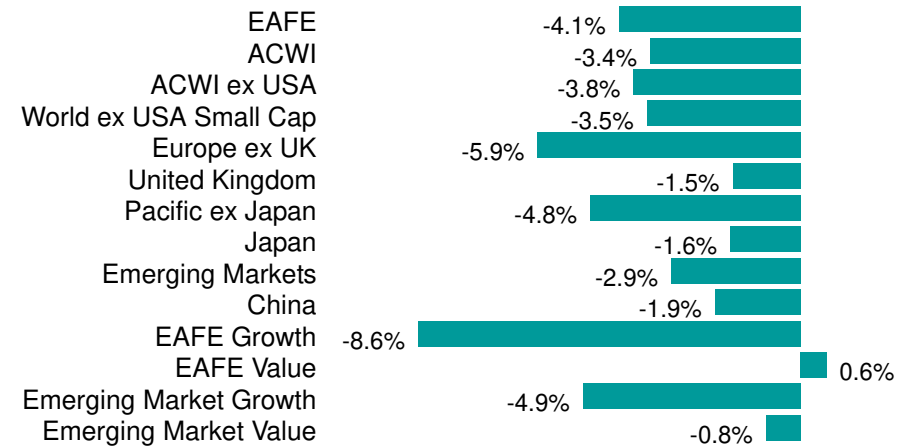
### Growth vs. value

- ▶ With energy as a strong outperformer on the heels of oil price increases, value outpaced growth by a wide margin in global ex-U.S. markets.

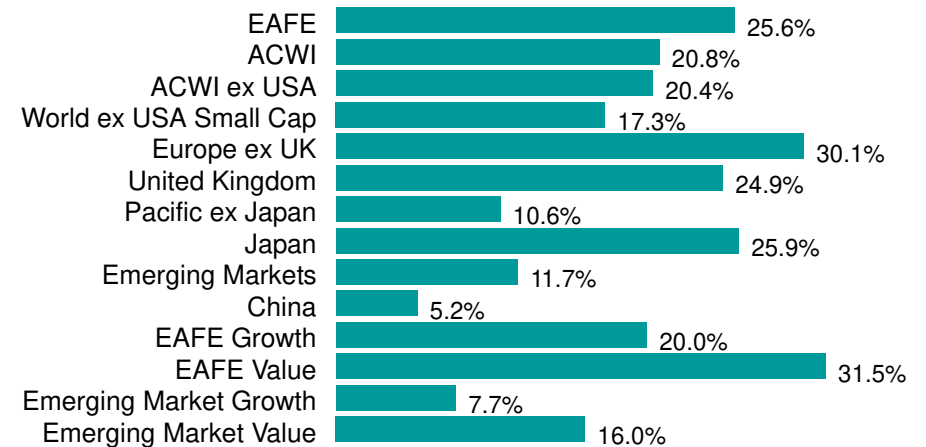
### U.S. dollar vs. other currencies

- ▶ The stronger U.S. dollar, which gained 3% over the quarter, was a notable headwind for the period.

### Global Equity Returns: Quarter Ended 9/30/23



### Global Equity Returns: One Year Ended 9/30/23



Source: MSCI

# U.S. Fixed Income Performance: 3Q23

Yields continue to march upward as spreads remain range-bound

U.S. fixed income fell for a second straight quarter

- ▶ The Bloomberg Aggregate Index is on track for a third calendar year of negative returns, with the rise in yields continuing to detract from performance.

## U.S. Treasury 10-year yield climbed roughly 80 bps

- ▶ 10-year ended the quarter at 4.59%, its highest level since 2007.
- ▶ The yield curve's inversion narrowed as long-term rates rose more than short-term rates.

## TIPS outperformed nominal Treasuries

- ▶ 10-year break-even spreads widened over 10 bps.

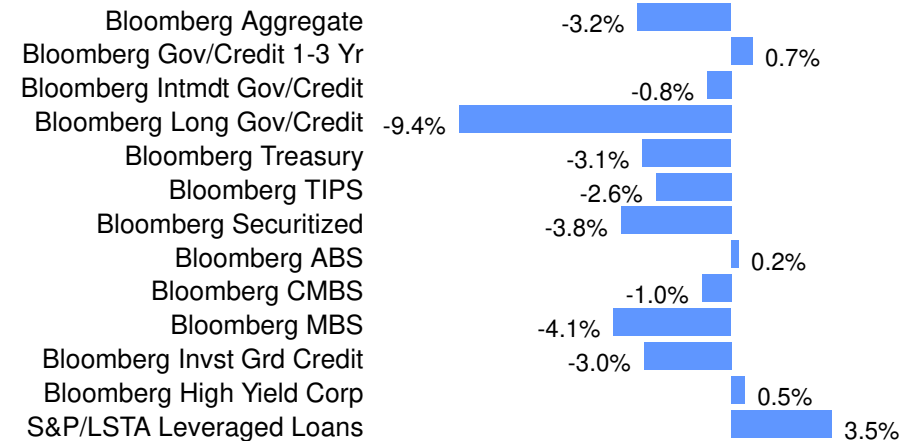
## Fed policy rate held to 5.25%-5.50%

- ▶ The updated dot plot suggested an additional rate hike may be in the cards before year-end.

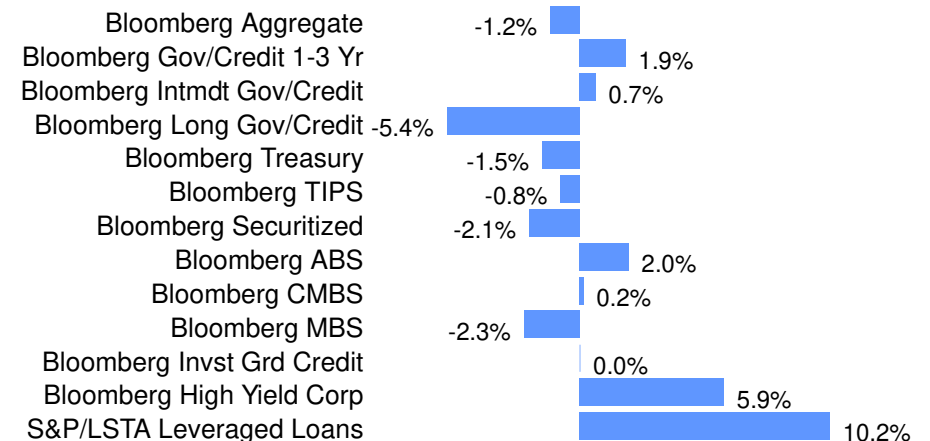
## Lower-quality credit continued to outperform

- ▶ High yield spreads were flat, but the sector was buoyed by strong performance in July. Additionally, a combination of higher yields and no duration continued to drive bank loan outperformance.
- ▶ IG corporate spreads tightened slightly and remained close to their 10-year average.
- ▶ Agency RMBS underperformed other securitized sectors as interest rate volatility weighed on the sector.

## U.S. Fixed Income Returns: Quarter Ended 9/30/23



## U.S. Fixed Income Returns: YTD Ending 9/30/23



Sources: Bloomberg, S&P Dow Jones Indices

# Asset Allocation Review

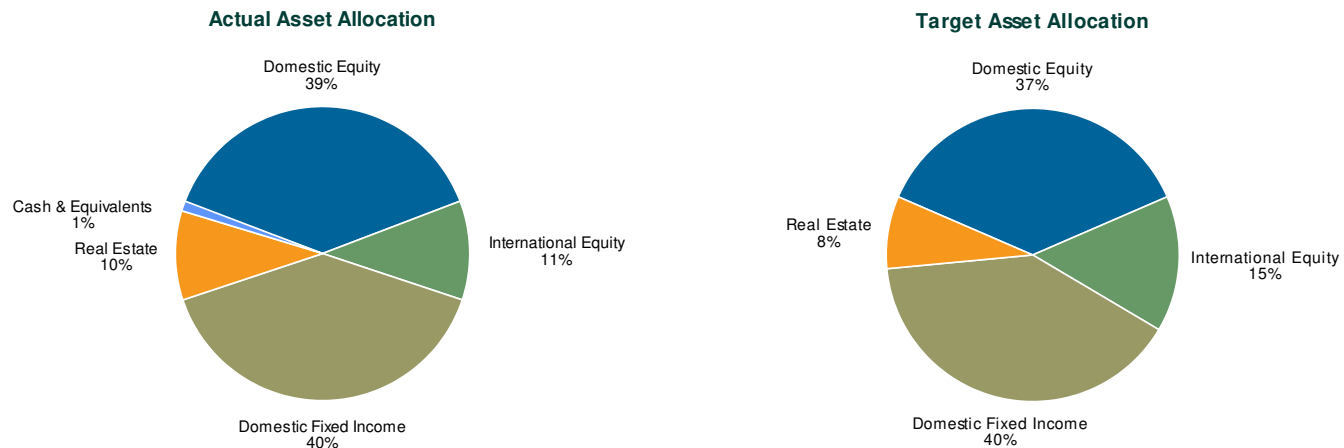
September 30, 2023

## Change in AJRS Market Value during the Quarter :

Beginning-of-Quarter Market Value:	\$ 308,408,935
Net Increase in Market Value:	- \$6,717,839
<b>End-of-Quarter Market Value:</b>	<b>\$ 301,691,096</b>

## Asset Allocation of AJRS Assets as of September 30, 2023

As of quarter-end, all asset classes are within the target allocation range established in the Investment Policy. International Equity is the largest underweight asset class at 4.1% below the target allocation. This position is offset by overweights to Real Estate (+1.8%), Domestic Equity (+1.5%), and Cash (+1.1%).



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	116,247	38.5%	37.0%	1.5%	4,621
International Equity	32,742	10.9%	15.0%	(4.1%)	(12,512)
Domestic Fixed Income	119,966	39.8%	40.0%	(0.2%)	(710)
Real Estate	29,416	9.8%	8.0%	1.8%	5,280
Cash & Equivalents	3,320	1.1%	0.0%	1.1%	3,320
<b>Total</b>	<b>301,691</b>	<b>100.0%</b>	<b>100.0%</b>		

# Asset Allocation Review

September 30, 2023

	September 30, 2023		Net New Inv.	Inv. Return	June 30, 2023	
	Market Value	Weight			Market Value	Weight
<b>Domestic Equity</b>	<b>\$116,247,153</b>	<b>38.53%</b>	<b>\$(114,699)</b>	<b>\$(1,914,486)</b>	<b>\$118,276,339</b>	<b>38.35%</b>
Mellon Russell 1000 Growth Index	42,406,616	14.06%	(4,565)	(1,369,209)	43,780,390	14.20%
Boston Partners	56,663,124	18.78%	(73,746)	446,144	56,290,726	18.25%
Aristotle Capital Boston	17,177,414	5.69%	(36,388)	(991,421)	18,205,223	5.90%
<b>International Equity</b>	<b>\$32,742,161</b>	<b>10.85%</b>	<b>\$0</b>	<b>\$(3,962,528)</b>	<b>\$36,704,688</b>	<b>11.90%</b>
Baillie Gifford	32,742,161	10.85%	0	(3,962,528)	36,704,688	11.90%
<b>Fixed Income</b>	<b>\$119,966,465</b>	<b>39.76%</b>	<b>\$(91,804)</b>	<b>\$(3,139,636)</b>	<b>\$123,197,905</b>	<b>39.95%</b>
MacKay Shields LLC	119,966,465	39.76%	(91,804)	(3,139,636)	123,197,905	39.95%
<b>Real Estate</b>	<b>\$29,415,743</b>	<b>9.75%</b>	<b>\$(26,795)</b>	<b>\$(465,779)</b>	<b>\$29,908,317</b>	<b>9.70%</b>
Invesco Core Real Estate	29,415,743	9.75%	(26,795)	(465,779)	29,908,317	9.70%
<b>Cash &amp; Equivalents</b>	<b>\$3,319,575</b>	<b>1.10%</b>	<b>\$2,932,190</b>	<b>\$65,698</b>	<b>\$321,687</b>	<b>0.10%</b>
AJRS Cash Account	3,319,575	1.10%	2,932,190	65,698	321,687	0.10%
<b>Total Fund</b>	<b>\$301,691,096</b>	<b>100.0%</b>	<b>\$2,698,892</b>	<b>\$(9,416,732)</b>	<b>\$308,408,935</b>	<b>100.0%</b>

# Total Fund Performance Review

September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 10 Years	Last 20 Years
10th Percentile	(1.56)	14.23	6.61	6.58	7.59	7.48
25th Percentile	(2.07)	12.82	6.07	6.04	7.17	7.25
Median	(2.43)	11.46	4.91	5.34	6.63	7.12
75th Percentile	(3.07)	9.96	3.86	4.69	6.15	6.78
90th Percentile	(3.50)	8.49	3.00	4.15	5.47	6.30
<span style="color: yellow;">●</span> <b>Total Fund</b>	<b>(3.04)</b> (73)	<b>8.43</b> (90)	<b>2.64</b> (93)	<b>4.72</b> (73)	<b>6.33</b> (66)	<b>6.85</b> (66)
<span style="color: green;">●</span> <b>Total Fund Target</b>	<b>(3.22)</b> (83)	9.58 (82)	2.72 (93)	4.85 (66)	6.08 (78)	6.46 (89)

- The above chart shows the distribution of returns for the Callan Public Fund Mid DB (100M -1B) Peer Group across time periods ended September 30, 2023. Returns longer than one year annualized.
- The returns and peer group ranking for the APERS Total Fund and Total Fund Target are shown in the bottom two rows.
  - **The 25th percentile return** represents the value above which 25% of the returns fall. In other words, it's the point where a quarter of the peer group earned a higher return, and three-quarters of the peer group earned a lower return.
  - **The median return** represents the middle value in a distribution of returns. If we arrange all the returns in ascending order, the median is the value that separates the lower half from the higher half.
  - **The 75th percentile return** represents the value above which 75% of the returns fall. In other words, it's the point where three-quarters of the peer group earned a higher return, and a quarter of the peer group earned a lower return.
- Over the last 1-, 3-, and 5-year periods, the fund trailed its benchmark and finished below its peer group median.
- Over the last 10 years, the Fund outperformed its benchmark and ranked at the 66<sup>th</sup> percentile of its peer group.

*Policy Target consists of 40% Blmbg Aggregate Index, 37% Russell 3000 Index, 15% MSCI ACWI xUS GD, and 8% NCREIF NFI-ODCE Eq Wt Net*



# Investment Manager Performance Review

September 30, 2023

	Last Quarter		Last Year		Last 3 Years		Last 5 Years	
<b>Domestic Equity</b>	<b>(1.62%)</b>	<b>1</b>	<b>20.09%</b>	<b>27</b>	<b>11.30%</b>	<b>8</b>	<b>9.13%</b>	<b>18</b>
Domestic Equity Benchmark	(3.25%)	23	20.46%	17	9.38%	67	9.14%	18
Russell 3000 Index	(3.25%)	23	20.46%	17	9.38%	67	9.14%	18
S&P 500 Index	(3.27%)	29	21.62%	1	10.15%	35	9.92%	6
Med Public Fd - Dom Eqty	(3.42%)		19.33%		9.96%		8.59%	
Mellon Russell 1000 Growth Index	(3.13%)	36	27.39%	45	7.84%	28	-	
Russell 1000 Growth Index	(3.13%)	36	27.72%	43	7.97%	26	12.42%	15
Callan Large Cap Growth	(3.42%)		26.41%		5.97%		10.53%	
Boston Partners	0.79%	1	18.64%	27	16.46%	15	7.95%	28
Russell 1000 Value Index	(3.16%)	86	14.44%	66	11.05%	83	6.23%	78
Callan Large Cap Value	(2.07%)		16.45%		13.95%		6.97%	
Aristotle Capital Boston	(5.46%)	81	8.78%	82	10.93%	62	-	
Russell 2000 Index	(5.13%)	78	8.93%	82	7.16%	93	2.40%	95
Callan Small Cap Core	(3.95%)		13.36%		11.50%		4.89%	
<b>International Equity</b>	<b>(10.80%)</b>	<b>99</b>	<b>12.91%</b>	<b>98</b>	<b>(6.81%)</b>	<b>100</b>	<b>0.88%</b>	<b>94</b>
International Equity Benchmark	(3.68%)	44	21.02%	59	4.24%	32	3.07%	62
Med Public Fd - Int Eqty	(3.71%)		22.64%		3.75%		3.42%	
Baillie Gifford Intl Choice Fd	(10.80%)	97	12.91%	100	(6.81%)	97	0.88%	95
MSCI ACWI xUS Gross	(3.68%)	36	21.02%	69	4.24%	57	3.07%	71
Callan NonUS Eq	(4.58%)		23.96%		4.97%		3.76%	

Domestic Equity Benchmark: Russell 3000 Index

International Equity Benchmark: MSCI ACWI xUS (Gross)

# Investment Manager Performance Review

September 30, 2023

	Last Quarter		Last Year		Last 3 Years		Last 5 Years	
<b>Domestic Fixed Income</b>	<b>(2.55%)</b>	52	<b>3.26%</b>	19	<b>(3.91%)</b>	52	<b>1.14%</b>	33
Domestic Fixed Income Benchmark	(3.23%)	78	0.64%	98	(5.21%)	92	0.10%	94
Med Public Fd - Dom Fixed	(2.54%)		2.14%		(3.78%)		0.85%	
MacKay Shields LLC	(2.55%)	20	3.26%	8	(3.91%)	37	1.14%	27
Blmbg Aggregate Index	(3.23%)	82	0.64%	91	(5.21%)	96	0.10%	97
Callan Core Plus FI	(2.88%)		1.84%		(4.13%)		0.91%	
<b>Real Estate</b>	<b>(1.56%)</b>	55	<b>(12.39%)</b>	67	<b>6.89%</b>	36	<b>5.19%</b>	40
Med Public Fd - Real Est	(1.39%)		(11.24%)		6.57%		5.01%	
Invesco Core Real Estate	(1.56%)	85	(12.39%)	62	6.89%	45	5.19%	59
NFI-ODCE Equal Weight Net	(2.12%)	87	(13.08%)	66	6.69%	49	5.22%	58
Callan OE Core Cmngld RE	(0.61%)		(11.40%)		6.64%		5.38%	
<b>Total Fund</b>	<b>(3.04%)</b>	73	<b>8.43%</b>	90	<b>2.64%</b>	93	<b>4.72%</b>	73
Callan Public Fd Mid DB	(2.43%)		11.46%		4.91%		5.34%	
<b>Total Fund ex Cash</b>	<b>(3.08%)</b>	76	<b>8.41%</b>	91	<b>2.65%</b>	93	<b>4.74%</b>	71
Target Benchmark*	(3.22%)	83	9.58%	82	2.72%	93	4.85%	66
Callan Public Fd Mid DB	(2.43%)		11.46%		4.91%		5.34%	

Domestic Fixed Income Benchmark: Bloomberg Aggregate Index

\*Policy Target consists of 40% Blmbg Aggregate Index, 37% Russell 3000 Index, 15% MSCI ACWI xUS GD, and 8% NCREIF NFI-ODCE Eq Wt Net

# Investment Manager Performance Review

September 30, 2023

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 16-1/4 Years
<b>NET OF FEE RETURNS</b>					
<b>Domestic Equity</b>					
Mellon Russell 1000 Growth Index	(3.14%)	27.34%	7.80%	-	-
Russell 1000 Growth Index	(3.13%)	27.72%	7.97%	12.42%	11.23%
Boston Partners Russell 1000 Value	0.65% (3.16%)	18.02% 14.44%	15.84% 11.05%	7.37% 6.23%	7.66% 6.12%
Aristotle Capital Boston Russell 2000 Index	(5.65%) (5.13%)	7.92% 8.93%	10.05% 7.16%	- 2.40%	- 6.24%
<b>International Equity</b>					
Baillie Gifford Intl Choice Fd MSCI ACWIxUS Gross	(10.91%) (3.68%)	12.37% 21.02%	(7.27%) 4.24%	0.38% 3.07%	- 2.44%
<b>Domestic Fixed Income</b>					
Mackay Shields LLC Blmbg Aggregate Index	(2.62%) (3.23%)	2.95% 0.64%	(4.19%) (5.21%)	0.84% 0.10%	- 2.74%
<b>Real Estate</b>					
Invesco Core Real Estate NFI-ODCE Equal Weight Net	(1.63%) (2.12%)	(12.64%) (13.08%)	6.59% 6.69%	4.83% 5.22%	- 4.75%
<b>Total Fund</b>	<b>(3.13%)</b>	<b>8.05%</b>	<b>2.28%</b>	<b>4.33%</b>	<b>5.29%</b>
<b>Total Fund ex Cash</b>	<b>(3.17%)</b>	<b>8.03%</b>	<b>2.29%</b>	<b>4.35%</b>	<b>5.48%</b>
Target Benchmark*	(3.22%)	9.58%	2.72%	4.85%	5.59%

\*Policy Target consists of 40% Blmbg Aggregate Index, 37% Russell 3000 Index, 15% MSCI ACWI xUS GD, and 8% NCREIF NFI-ODCE Eq Wt Net

# Total Fund Performance Attribution

September 30, 2023

## Relative Attribution Effects for Quarter ended September 30, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	38%	37%	(1.62%)	(3.25%)	0.62%	(0.00%)	0.62%
Domestic Fixed Income	40%	40%	(2.55%)	(3.23%)	0.27%	0.00%	0.27%
Real Estate	10%	8%	(1.56%)	(2.12%)	0.05%	0.02%	0.07%
International Equity	12%	15%	(10.80%)	(3.68%)	(0.84%)	0.01%	(0.83%)
Cash & Equivalents	1%	0%	1.33%	1.33%	0.00%	0.04%	0.04%
<b>Total</b>			<b>(3.04%)</b>	<b>(3.22%)</b>	<b>+ 0.10%</b>	<b>+ 0.07%</b>	<b>0.18%</b>

## One Year Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	37%	37%	20.09%	20.46%	(0.14%)	(0.00%)	(0.15%)
Domestic Fixed Income	40%	40%	3.26%	0.64%	1.11%	(0.07%)	1.04%
Real Estate	11%	8%	(12.39%)	(13.08%)	0.08%	(0.76%)	(0.68%)
International Equity	11%	15%	12.91%	21.02%	(0.85%)	(0.53%)	(1.39%)
Cash & Equivalents	0%	0%	4.43%	4.43%	0.00%	0.02%	0.02%
<b>Total</b>			<b>8.43%</b>	<b>9.58%</b>	<b>+ 0.20%</b>	<b>+ (1.35%)</b>	<b>(1.15%)</b>

# Total Fund Performance Attribution

September 30, 2023

## Three Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	38%	37%	11.30%	9.38%	0.69%	0.02%	0.71%
Domestic Fixed Income	39%	40%	(3.91%)	(5.21%)	0.48%	0.19%	0.67%
Real Estate	9%	8%	6.89%	6.69%	0.03%	(0.09%)	(0.06%)
International Equity	13%	15%	(6.81%)	4.24%	(1.46%)	0.07%	(1.39%)
Cash & Equivalents	0%	0%	1.73%	1.73%	0.00%	(0.00%)	(0.00%)
<b>Total</b>			<b>2.64%</b>	<b>= 2.72%</b>	<b>+ (0.27%)</b>	<b>+ 0.18%</b>	<b>(0.09%)</b>

## Five Year Annualized Relative Attribution Effects

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	38%	37%	9.13%	9.14%	0.01%	(0.15%)	(0.14%)
Domestic Fixed Income	38%	40%	1.14%	0.10%	0.34%	(0.08%)	0.27%
Real Estate	9%	8%	5.19%	5.22%	0.01%	(0.12%)	(0.12%)
International Equity	14%	15%	0.88%	3.07%	(0.14%)	0.01%	(0.13%)
Cash & Equivalents	0%	0%	1.69%	1.69%	0.00%	(0.01%)	(0.01%)
<b>Total</b>			<b>4.72%</b>	<b>= 4.85%</b>	<b>+ 0.22%</b>	<b>+ (0.35%)</b>	<b>(0.13%)</b>

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# Investment Manager Performance Overview

*September 30, 2023*

The Total Fund return of -3.04% (gross of fees) ranked in the third quartile of peers and outperformed the benchmark return of -3.22%. All broad asset classes were down for the quarter, but AJRS' active managers added value overall. For the last year, the Total Fund returned 8.43% versus the benchmark return of 9.58% and ranked at the 90<sup>th</sup> percentile of peers. The Fund has outperformed the benchmark over the last 7-, 10-, 15-, 20-, and 32.25-year periods on an annualized basis.

The AJRS Domestic Equity Composite returned -1.62% in the quarter and outperformed the Russell 3000 (-3.25%). Third quarter returns for the composite ranked at the top of the peer group. Over the last year, Domestic Equity returned 20.09% but trailed the benchmark (20.46%). The composite leads its benchmark over the last 3-, 5-, 7-, 20-, and 32.25-year periods and has consistently outperformed its peer group median.

- The **Mellon** Russell 1000 Growth Index Fund is passively invested in the Russell 1000 Growth Index. The Fund (-3.13%) matched the index return for the quarter and finished at the 36<sup>th</sup> percentile of the Callan Large Cap Growth peer universe. Over the trailing year, the Fund returned 27.39% and ranked at the 45<sup>th</sup> percentile of peers.
- In large cap value equity, **Boston Partners** earned a 0.79% return and outperformed the benchmark (-3.16%) for the quarter. Third quarter results ranked in the 1<sup>st</sup> percentile of the Callan Large Cap Value peer group. Over the last year, the Fund notched a return of 18.64% versus the benchmark return of 14.44% and ranked at the 27<sup>th</sup> percentile of peers. The Fund leads its benchmark and ranks in the top third of its peer group across longer time periods.
- In small cap equity, **Aristotle Capital's** -5.46% return trailed the benchmark (-5.13%) and placed at the 81<sup>st</sup> percentile of the Callan Small Cap Core peer group. For the last year, Aristotle posted a gain of 8.78%, slightly behind the benchmark return of 8.93%. Despite near term underperformance, the strategy has outperformed the benchmark by 3.77% on an annualized basis over the last three years.

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# Investment Manager Performance Overview

*September 30, 2023*

The AJRS International Equity Composite declined 10.80% for the quarter and underperformed the benchmark return of -3.68%. International Equity returned 12.91% over the last year and lagged the benchmark return of 21.02%. The Composite outperformed the benchmark over the trailing 15-year period, but recent underperformance has weighed on results across other trailing periods.

- **Baillie Gifford** is the only manager in the international equity composite. The Fund trailed the benchmark and ranked in the bottom quartile of peers for the quarter and has not kept up with the benchmark over longer periods.

The AJRS Domestic Fixed Income Composite returned -2.55% for the quarter but protected well in a down-market as the Bloomberg Aggregate Index fell 3.23%. The composite ranked at the 62<sup>nd</sup> percentile of its peer group for the quarter. Over the trailing year, Fixed Income returned 3.26% and outpaced the benchmark return of 0.64%. AJRS' Fixed Income return for the last year ranked in the top quartile of peers. The Composite has outperformed its benchmark across longer-term periods and ranks in the top half of peers over the last 5-, 7-, 10-, 15-, and 20-year periods.

- **Mackay Shields**, the only manager in the fixed income composite, outperformed the Bloomberg Aggregate and ranked at the 20<sup>th</sup> percentile of its peer group for the quarter. Over the last year, the Fund added value over the benchmark and earned a higher return than 92% of peers. The Fund leads its benchmark and ranks in the top half of peers across longer time periods.

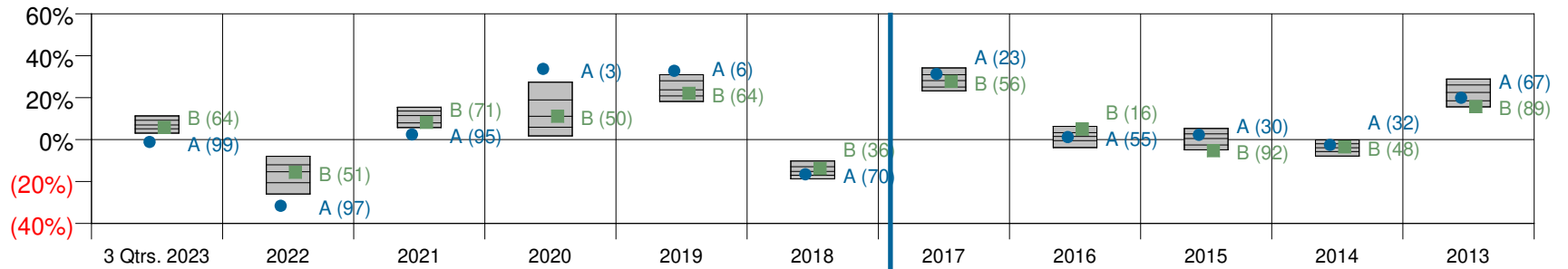
The AJRS Real Estate Composite declined 1.56% versus the benchmark return of -2.12% for the quarter and ranked at the 55<sup>th</sup> percentile of the Callan Medium Public Fund Real Estate peer universe. Real Estate returned -12.39% over the last year and beat the benchmark.

- **Invesco Core Real Estate** is the lone fund within the real estate composite. The Fund ranked at the 85<sup>th</sup> percentile of peers for the quarter. Over the last year, the fund outperformed the -13.08% return of the benchmark and ranked at the 62<sup>nd</sup> percentile of peers. The Fund leads the index and ranks in the top half of its peer group over the trailing 3-, 7-, and 10-year periods.

# Manager Spotlight

## Baillie Gifford

Calendar Year Returns  
Group: Callan Non-US Equity



10th Percentile	11.33	(7.90)	15.44	27.39	31.03	(10.17)	34.21	6.37	5.38	(0.13)	28.94
25th Percentile	9.25	(11.97)	13.69	19.00	28.11	(12.90)	30.96	3.40	2.76	(1.97)	26.07
Median	7.02	(15.29)	11.50	11.19	23.78	(15.12)	28.16	1.50	0.54	(3.85)	22.49
75th Percentile	5.16	(20.51)	7.98	5.93	20.88	(17.01)	25.08	(0.47)	(2.53)	(5.70)	18.56
90th Percentile	3.07	(25.95)	5.73	1.81	18.19	(18.73)	23.28	(3.82)	(4.89)	(7.82)	15.61
<b>Baillie Gifford*</b>	<b>● A</b>	<b>(1.14)</b>	<b>(31.56)</b>	<b>2.42</b>	<b>33.74</b>	<b>(16.52)</b>	<b>31.31</b>	<b>1.18</b>	<b>2.31</b>	<b>(2.53)</b>	<b>19.94</b>
MSCI:ACWI xUS GD	<b>■ B</b>	5.82	(15.57)	8.29	11.13	22.13	(13.77)	27.77	5.01	(5.25)	15.78

- Baillie Gifford outperformed the benchmark in 6 of the last 10 full calendar years, and has placed in the top third of its peer group in 5 of those years.
- Recently, Baillie Gifford has underperformed the benchmark and ranked in the bottom decile of peers in two consecutive calendar years. The strategy trails the benchmark and ranks in the 99<sup>th</sup> percentile of its peer group year-to-date.

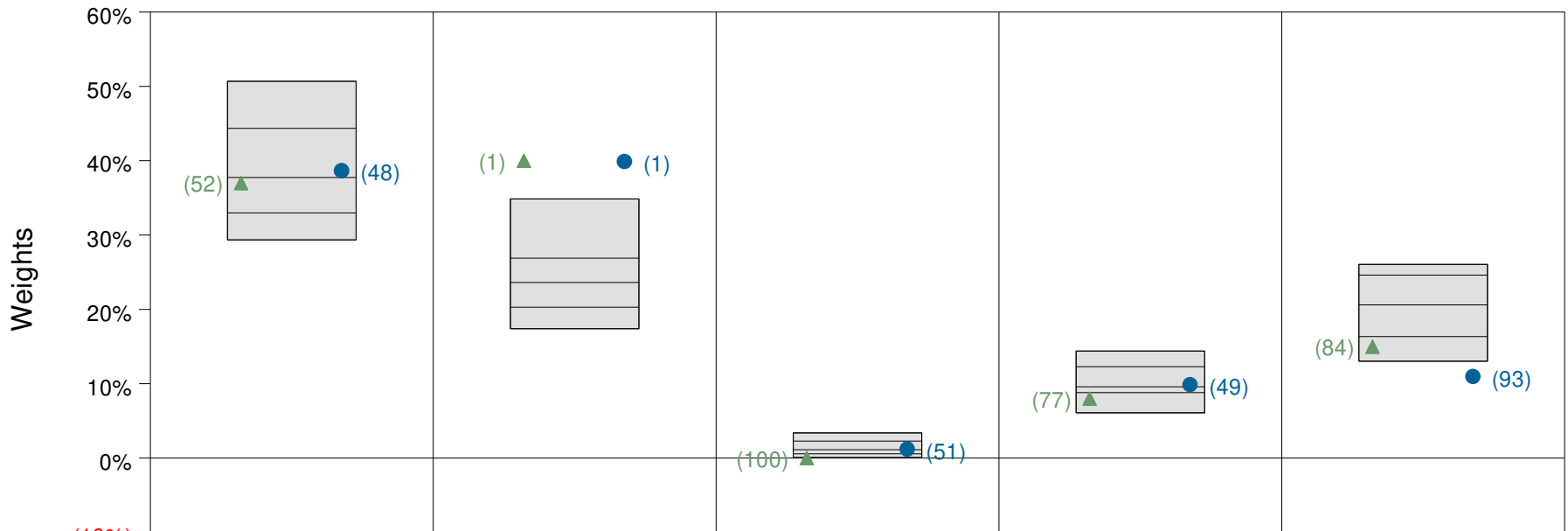
\*AJRS investment occurred on 7/1/2017, prior returns represent strategy performance



# Asset Allocation Review

September 30, 2023

## Asset Class Weights vs Callan Public Fund Spons- Mid (100M-1B)



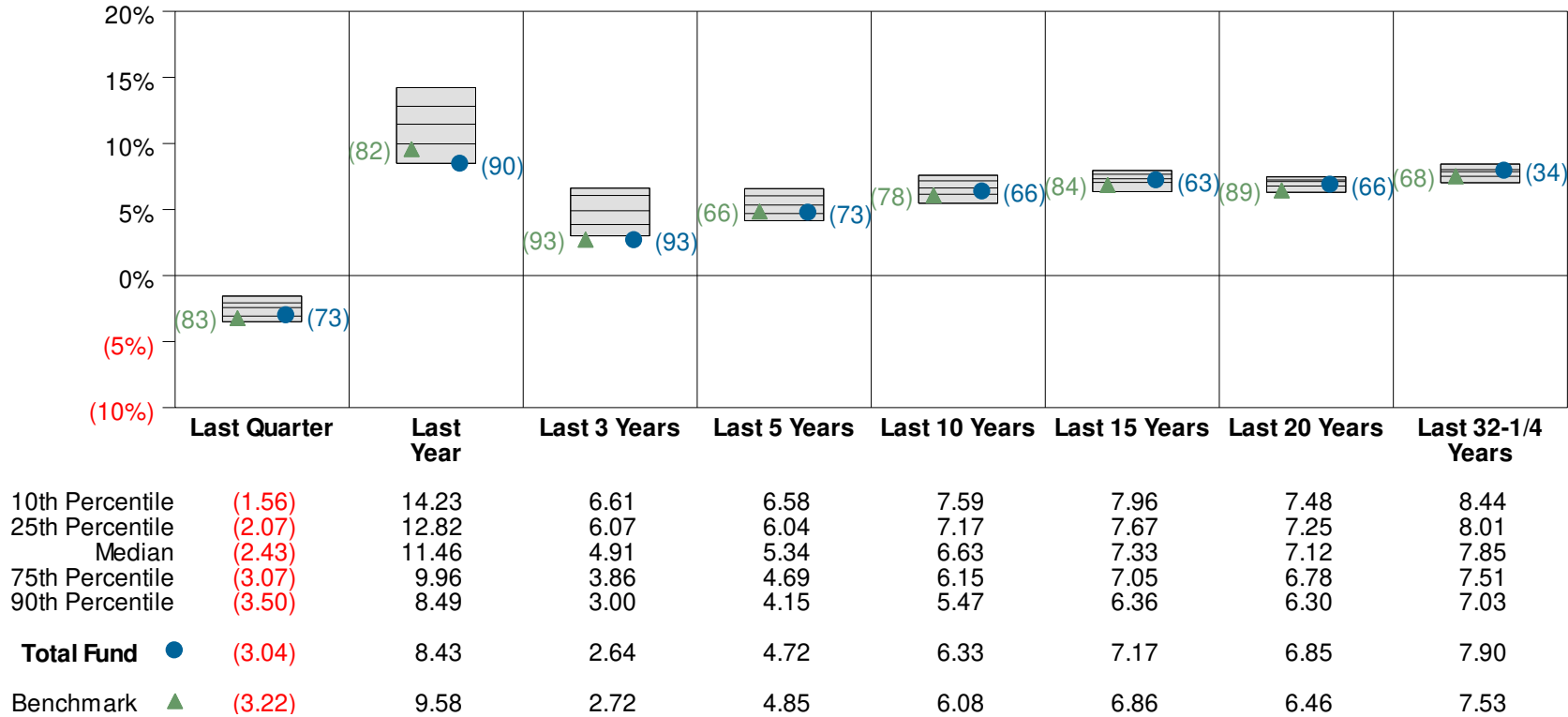
(10%)

	Domestic Equity	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equity
10th Percentile	50.69	34.86	3.39	14.41	26.05
25th Percentile	44.35	26.89	2.29	12.28	24.61
Median	37.73	23.61	1.14	9.58	20.62
75th Percentile	32.97	20.30	0.58	8.80	16.34
90th Percentile	29.35	17.40	0.07	6.09	13.04
<b>Fund</b> ●	38.53	39.76	1.10	9.75	10.85
<b>Target</b> ▲	37.00	40.00	0.00	8.00	15.00
% Group Invested	100.00%	100.00%	82.35%	67.65%	100.00%

# AJRS Long-Term Performance

September 30, 2023

## Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)

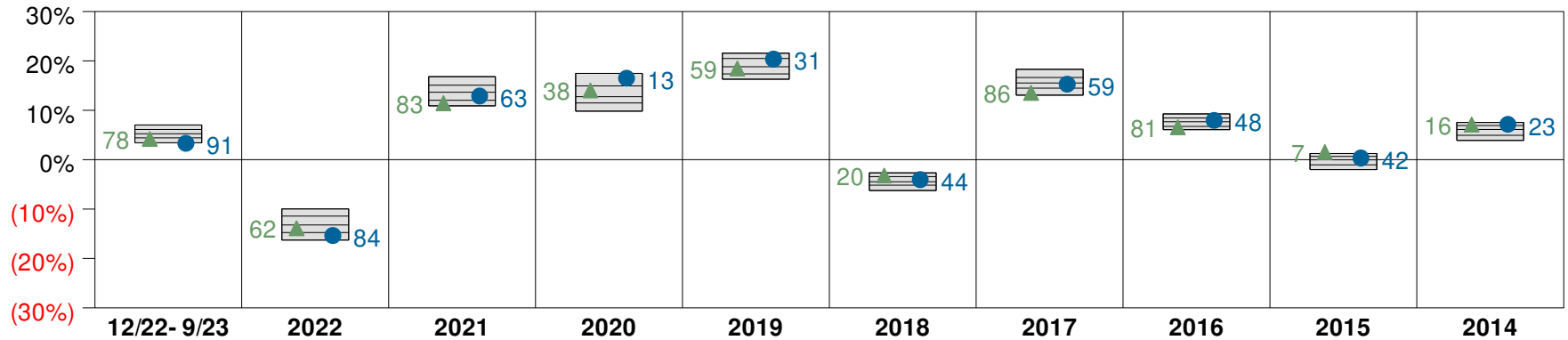


- The Total Fund and the Benchmark both rank in the bottom half of peers over the last 3-, 5-, 10-, 15-, and 20-year periods due to the asset allocation difference of AJRS versus peers.
  - The benchmark represents the market performance of the asset allocation for AJRS.
  - The peer group consists of public funds of similar size, but each constituent has a unique asset allocation that influences their risk/return profile. The peers largely have higher allocations to equities which have outperformed fixed income over the periods measured.

\*Policy Target consists of 40% Blmbg Aggregate Index, 37% Russell 3000 Index, 15% MSCI ACWI xUS GD, and 8% NCREIF NFI-ODCE Eq Wt Net

# AJRS Calendar Year Performance

## Performance vs Callan Public Fund Spons- Mid (100M-1B) (Gross)



	12/22- 9/23	2022	2021	2020	2019	2018	2017	2016	2015	2014
10th Percentile	7.03	(9.97)	16.80	17.48	21.58	(2.68)	18.30	9.29	1.27	7.54
25th Percentile	6.13	(11.42)	15.08	14.95	20.48	(3.44)	16.63	8.44	0.67	6.92
Median	5.23	(13.21)	13.64	12.75	18.82	(4.47)	15.51	7.67	(0.03)	6.11
75th Percentile	4.42	(14.77)	12.03	11.49	17.35	(5.17)	14.48	6.75	(1.05)	4.93
90th Percentile	3.40	(16.26)	10.91	9.84	16.29	(6.23)	13.06	6.08	(2.00)	3.89
<b>Total Fund</b> ●	3.11	(15.54)	12.68	16.31	20.20	(4.23)	15.08	7.75	0.15	6.95
<b>Benchmark</b> ▲	4.20	(13.86)	11.45	14.03	18.48	(3.19)	13.53	6.58	1.54	7.13

- The Total Fund has outpaced the benchmark in 5 of the last 9 calendar years, but this does not always guarantee favorable performance relative to its peer group.

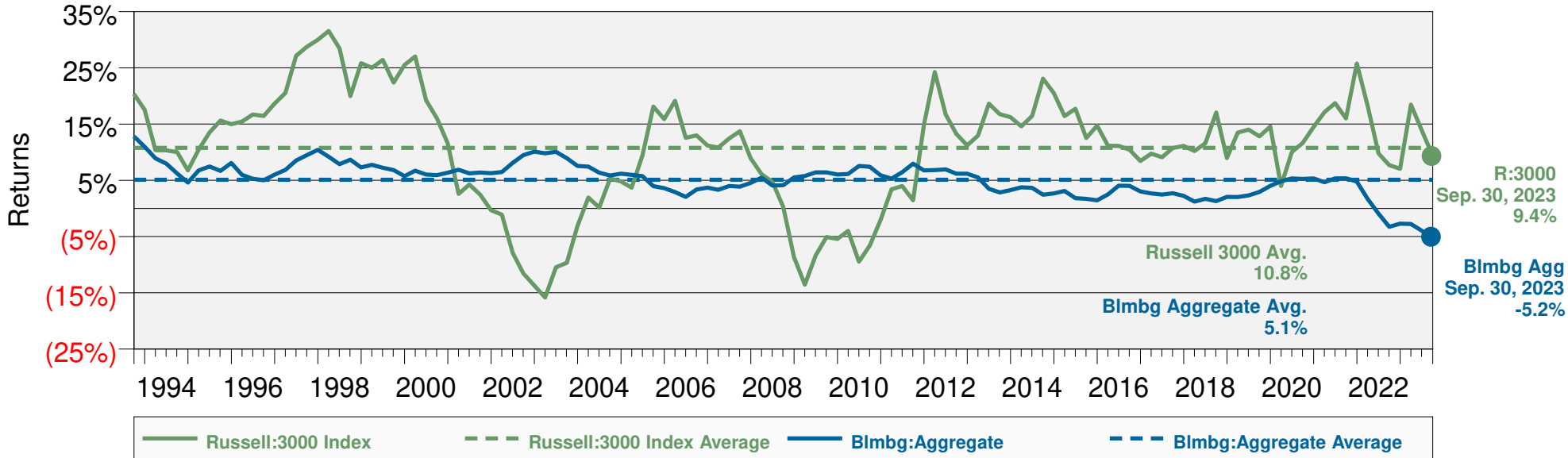
- AJRS' benchmark is a blended mix of asset class public indices that reflect the Fund's strategic asset allocation.

\*Policy Target consists of 40% Blmbg Aggregate Index, 37% Russell 3000 Index, 15% MSCI ACWI xUS GD, and 8% NCREIF NFI-ODCE Eq Wt Net

# Historical Relationship Between Domestic Equity and Fixed Income

Rolling 12 Quarter Returns for 30 Years Ended September 30, 2023  
Equity vs Fixed Income

Rolling 3-year return difference	3Q23	30-year Average
R:3000 vs Blmbg Agg	14.6%	5.7%



- The above chart shows rolling 3-year returns of the Russell 3000 Index versus the Bloomberg Aggregate Index.
- As of September 30, 2023, the Bloomberg Aggregate Index was trailing the Russell 3000 by 14.6% over the last three years, more than double the average differential for the last 30-year period.
- Because AJRS has a higher allocation to Fixed Income relative to other Funds, AJRS will lag peers during periods when equity markets are in favor.

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## Important Disclosures

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