



Executive Summary First Quarter 2023

Arkansas Judicial Retirement System

Brianne Weymouth, CAIA
Senior Vice President

John Jackson, CFA
Senior Vice President

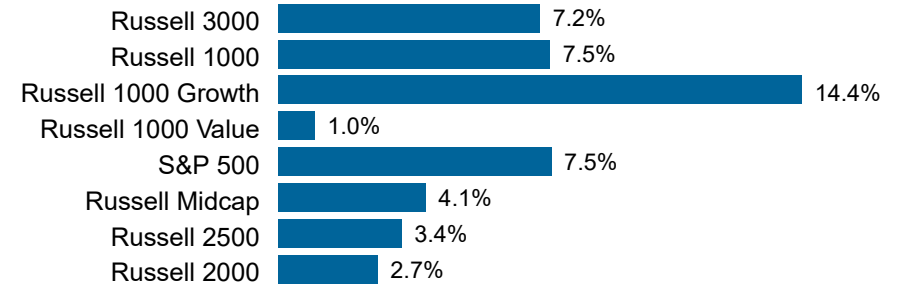
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U.S. Equity Performance: 1Q23

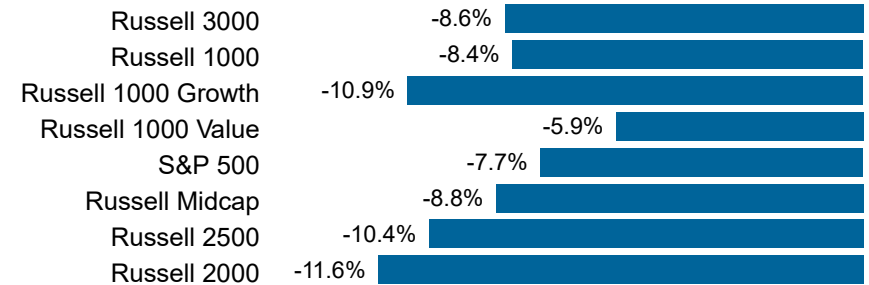
Large cap growth stocks lead broad indices higher; small cap indices hurt by regional bank sell-off

- ▶ The S&P 500 posted a second straight quarter of positive performance, gaining 7.5%; large cap growth led all styles, advancing 14.4%; Russell 2000 Value was an exception with a slight decline (0.7%) due to greater exposure to Financials, specifically small banks.
- ▶ Three sectors comprising 44% of S&P 500 (63% of Russell 1000 Growth) drove performance: Technology (+21.8%), Communication Services (+20.5%), and Consumer Discretionary (+16.1%). Financials, Energy, and Health Care were negative but had only a modest impact given smaller weights in these benchmarks.
- ▶ Small caps (Russell 2000) underperformed large caps (Russell 1000) and growth outperformed value during the quarter, a reversal of trend from 2022. Greater exposure to small banks in Russell 2000 (8.3%) versus Russell 1000 (3.3%) was one differentiator; strong returns for mega-cap Technology also increased divergence.

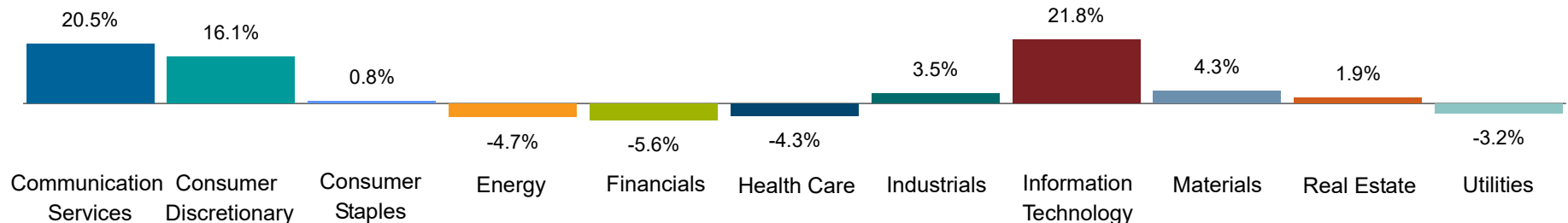
U.S. Equity: Quarter Ended 3/31/23



U.S. Equity: One-Year Returns Ended 3/31/23



Industry Sector Quarterly Performance (S&P 500) as of 3/31/23



Sources: FTSE Russell, S&P Dow Jones Indices

Global/Global ex-U.S. Equity Performance: 1Q23

A reversal of 2022

1Q23 brought global and global ex-U.S. equity markets back to black.

Positive results despite hiccups

- ▶ The first quarter of the year was marked by the collapse of Silicon Valley Bank and Credit Suisse, which sent fears of a banking crisis across global markets.
- ▶ Despite a Fed hike during the period, investors began to price in lower rate expectations.
- ▶ Europe outperformed other regions, making up ground lost in 2022 as inflation eased and recession fears lessened.

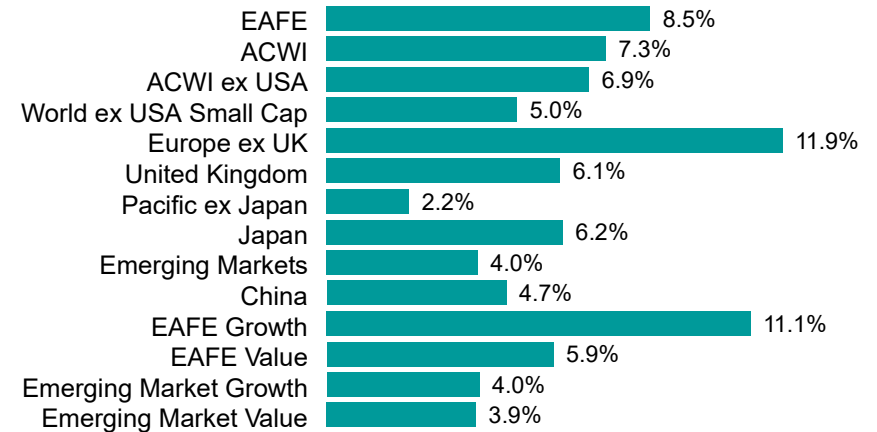
Growth vs. value

- ▶ Growth outpaced value across developed and emerging markets.
 - In a reversal from 2022, investors preferred growth alongside a drawdown in banks; Information Technology was the largest outperformer.

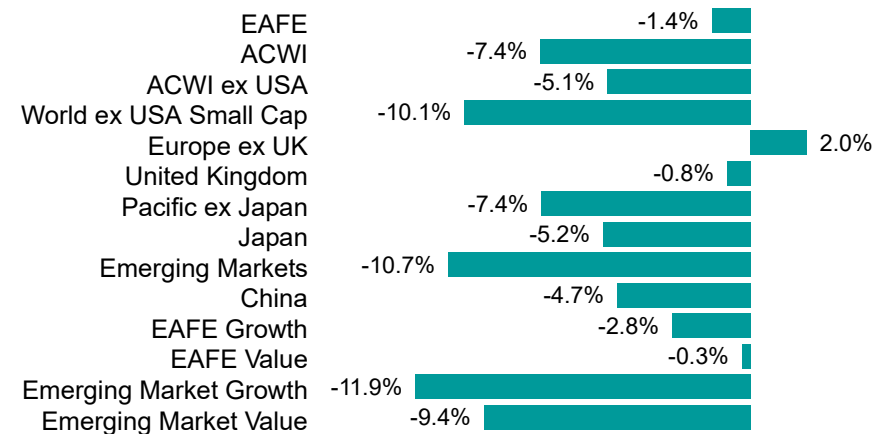
U.S. dollar vs. other currencies

- ▶ After some strength early in the quarter, the U.S. dollar declined 1% as interest rate differentials narrowed globally.

Global Equity Returns: Quarter Ended 3/31/23



Global Equity Returns: One Year Ended 3/31/23



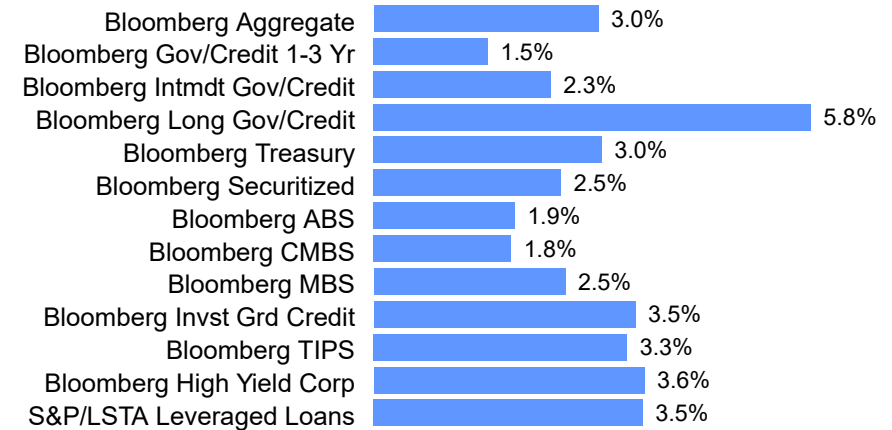
Source: MSCI

U.S. Fixed Income Performance: 1Q23

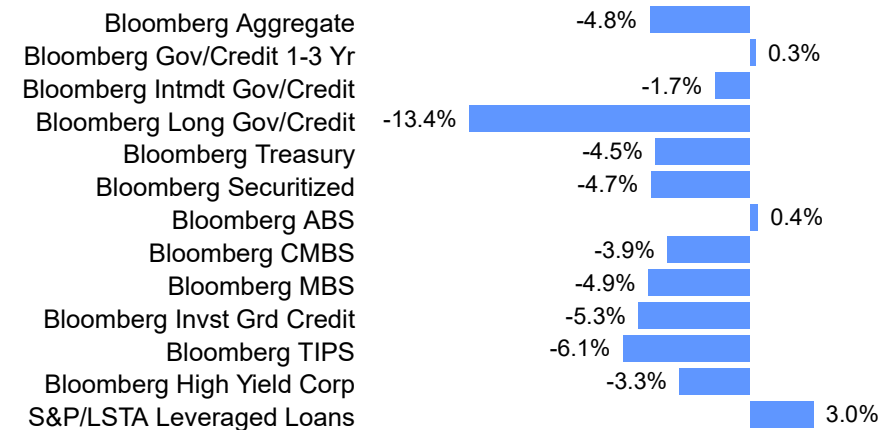
U.S. Fed remains hawkish as it looks to stem inflation

- ▶ The Bloomberg Aggregate rose 3.0% in 1Q, but monthly returns were mixed.
 - January: + 3.1%
 - February: - 2.6%
 - March: +2.5%
- ▶ Sector performance was mixed over the quarter with residential and commercial mortgages underperforming U.S Treasuries and corporates outperforming.
- ▶ The U.S. Fed delivered another 0.25% hike in March, taking the policy range to 4.75% – 5.00%, the highest since September 2007.
 - Median expectation from Fed is 5.1% for year-end 2023; the is market pricing in Fed cuts by year-end
 - Inflation moderated but still high and job market remains tight
- ▶ The 10-year U.S. Treasury yield fell by 0.41% and yields fell across the curve as fears of another banking crisis developed.
 - The yield curve remained inverted as of quarter-end by 0.58% for the 2-year/10-year and 1.16% bps for the 1-year/10-year.
- ▶ TIPS (Bloomberg TIPS: +3.3%) did well; 10-year breakeven spreads were 2.3% as of quarter-end.
- ▶ High yield (Bloomberg High Yield Index: +3.6%) outperformed, but dispersion within the Index is meaningfully higher than it was two years ago.

U.S. Fixed Income Returns: Quarter Ended 3/31/23



U.S. Fixed Income Returns: One Year Ended 3/31/23



Sources: Bloomberg, S&P Dow Jones Indices

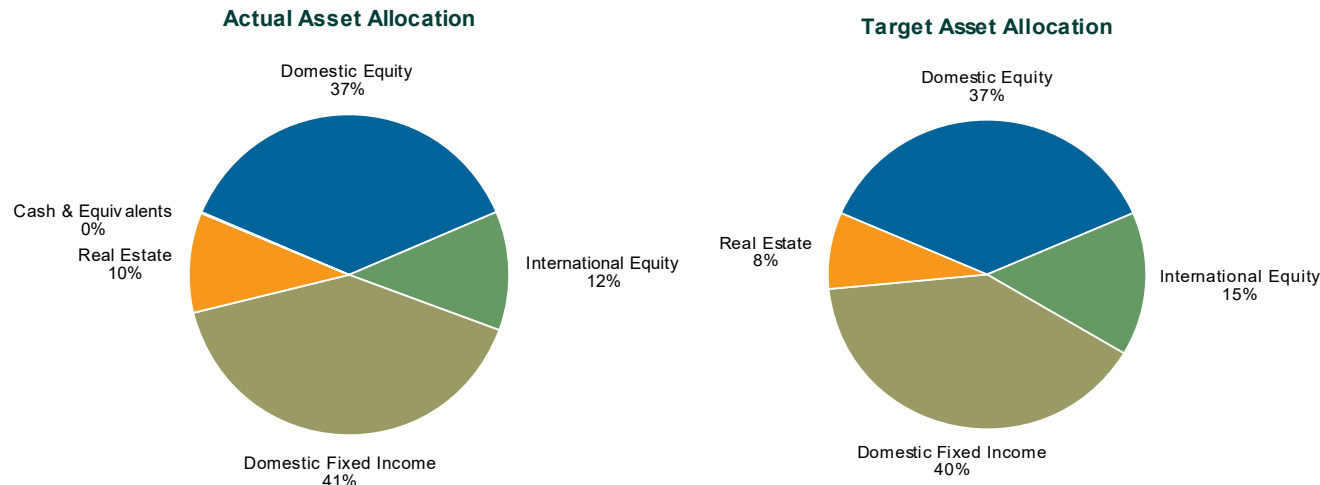
Asset Allocation Review

Change in AJRS Market Value during the Quarter :

Beginning-of-Quarter Market Value:	\$ 296,595,292
Net Increase in Market Value:	+ \$8,328,176
End-of-Quarter Market Value:	\$ 304,923,468

Asset Allocation of AJRS Assets as of March 31, 2023

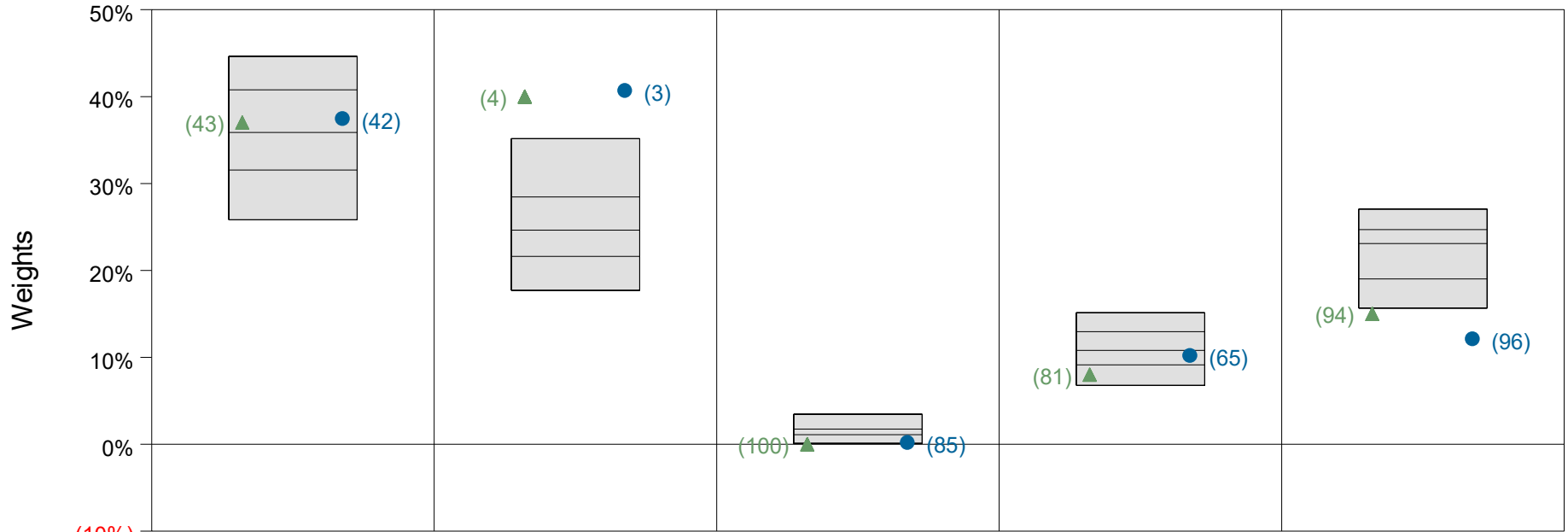
As of quarter-end, all asset classes are within the target allocation range established in the Investment Policy. International Equity is the largest underweight asset class at 3.0% below the target allocation. This position is offset by overweights to Real Estate (+2.1%), Fixed Income (+0.6%), Domestic Equity (+0.3%) and Cash (+0.1%).



Asset Class	\$000s Actual	Weight Actual	Target	Percent Difference	\$000s Difference
Domestic Equity	113,849	37.3%	37.0%	0.3%	1,027
International Equity	36,567	12.0%	15.0%	(3.0%)	(9,171)
Domestic Fixed Income	123,648	40.6%	40.0%	0.6%	1,679
Real Estate	30,681	10.1%	8.0%	2.1%	6,287
Cash & Equivalents	178	0.1%	0.0%	0.1%	178
Total	304,923	100.0%	100.0%		

Asset Allocation Review

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



(10%)

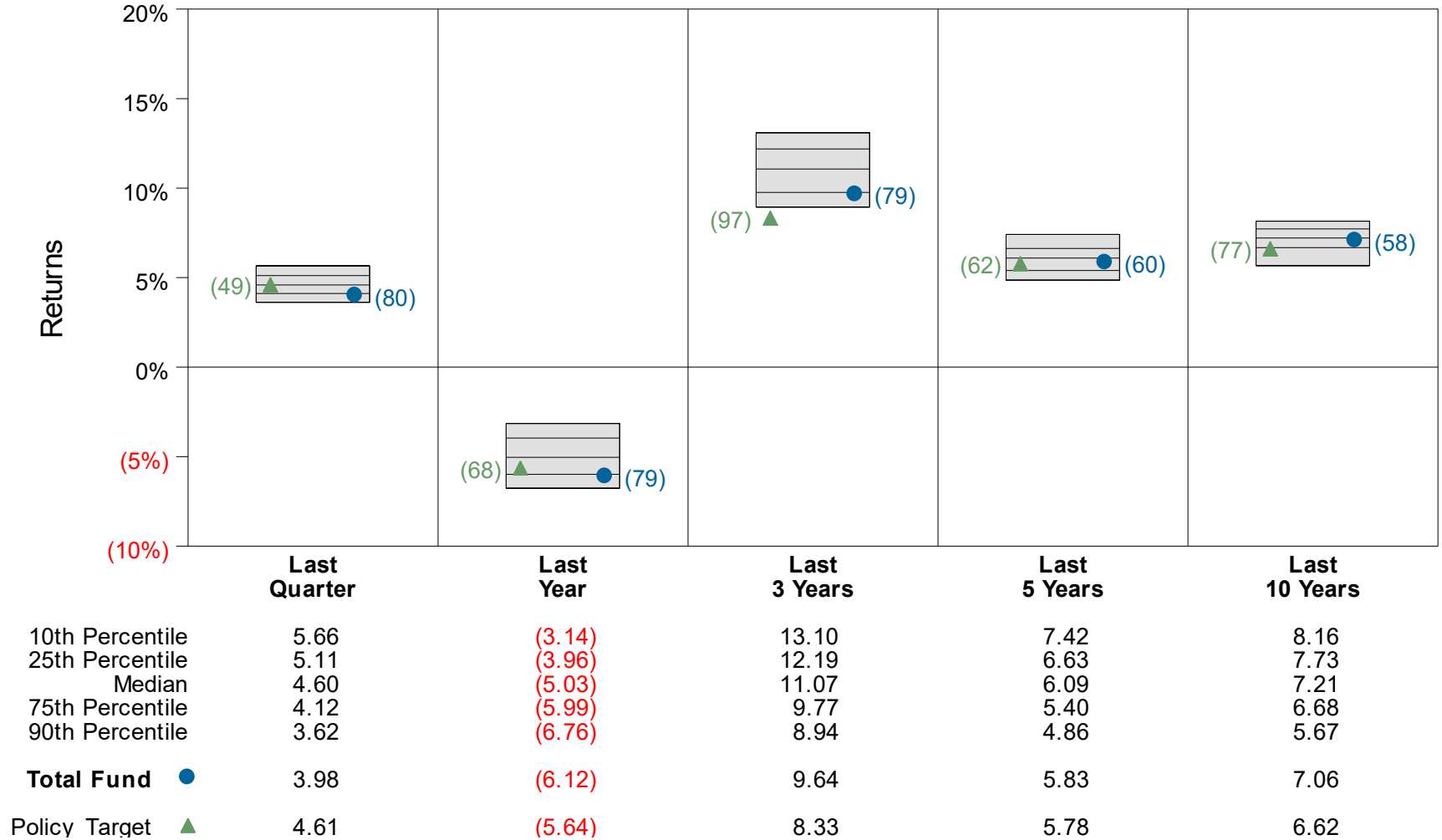
	Domestic Equity	Domestic Fixed Income	Cash & Equivalents	Real Estate	International Equity
10th Percentile	44.64	35.15	3.45	15.13	27.04
25th Percentile	40.76	28.45	1.74	12.95	24.69
Median	35.86	24.63	1.09	10.79	23.09
75th Percentile	31.56	21.61	0.14	9.11	19.01
90th Percentile	25.82	17.68	0.04	6.77	15.64
Fund ●	37.34	40.55	0.06	10.06	11.99
Target ▲	37.00	40.00	0.00	8.00	15.00
% Group Invested	100.00%	100.00%	78.57%	75.00%	100.00%

Asset Allocation Review

	March 31, 2023				December 31, 2022	
	Market Value	Weight	Net New Inv.	Inv. Return	Market Value	Weight
Domestic Equity	\$113,848,717	37.34%	\$(3,311,318)	\$5,553,642	\$111,606,392	37.63%
Mellon Russell 1000 Growth Index	41,997,502	13.77%	(3,204,136)	5,510,415	39,691,223	13.38%
Boston Partners	53,843,172	17.66%	(71,511)	(153,490)	54,068,172	18.23%
Aristotle Capital Boston	18,008,043	5.91%	(35,671)	196,717	17,846,997	6.02%
International Equity	\$36,567,212	11.99%	\$0	\$3,448,475	\$33,118,738	11.17%
Baillie Gifford	36,567,212	11.99%	0	3,448,475	33,118,738	11.17%
Fixed Income	\$123,648,077	40.55%	\$(89,081)	\$4,093,036	\$119,644,121	40.34%
MacKay Shields LLC	123,648,077	40.55%	(89,081)	4,093,036	119,644,121	40.34%
Real Estate	\$30,681,327	10.06%	\$(27,840)	\$(1,299,482)	\$32,008,649	10.79%
Invesco Core Real Estate	30,681,327	10.06%	(27,840)	(1,299,482)	32,008,649	10.79%
Cash & Equivalents	\$178,136	0.06%	\$(44,397)	\$5,140	\$217,393	0.07%
AJRS General Fund	178,136	0.06%	(44,397)	5,140	217,393	0.07%
Total Fund	\$304,923,468	100.0%	\$(3,472,635)	\$11,800,811	\$296,595,292	100.0%

Total Fund Performance Review

Callan Public Fund Spons- Mid (100M-1B)



Policy Target consists of 40% Blmbg Aggregate, 37% Russell 3000 Index, 15% MSCI ACWI ex-US and 8% NCREIF NFI-ODCE Equal Weight Net.

Note: Numbers adjacent to return number represent the portfolio's rank relative to the corresponding peer group. 1 = Highest Ranking; 100 = Lowest Ranking.

Investment Manager Performance Review

	Last Quarter		Fiscal YTD		Last Year		Last 3 Years		Last 5 Years	
Domestic Equity	4.99%	94	9.38%	71	(7.48%)	28	20.40%	12	10.30%	36
Domestic Equity Benchmark	7.18%	15	9.75%	44	(8.58%)	76	18.48%	70	10.45%	26
Russell 3000 Index	7.18%	15	9.75%	44	(8.58%)	76	18.48%	70	10.45%	26
S&P 500 Index	7.50%	10	9.98%	39	(7.73%)	34	18.60%	65	11.19%	5
Med Public Fd - Dom Eqty	6.62%		9.69%		(7.98%)		18.95%		10.09%	
Mellon Russell 1000 Growth Index	14.25%	30	12.54%	37	(11.00%)	41	18.46%	21	-	
Russell 1000 Growth Index	14.37%	28	12.67%	37	(10.90%)	40	18.58%	20	13.66%	14
Callan Large Cap Growth	13.09%		11.56%		(11.85%)		15.62%		11.62%	
Boston Partners	(0.29%)	67	6.97%	65	(4.81%)	57	22.11%	35	8.41%	45
Russell 1000 Value Index	1.01%	37	7.17%	61	(5.91%)	74	17.93%	84	7.50%	70
Callan Large Cap Value	0.42%		8.02%		(4.52%)		20.57%		8.28%	
Aristotle Capital Boston	1.09%	89	10.24%	45	(3.28%)	17	21.81%	52	-	
Russell 2000 Index	2.74%	66	6.75%	76	(11.61%)	86	17.51%	94	4.71%	89
Callan Small Cap Core	3.42%		9.95%		(7.68%)		21.88%		6.82%	
International Equity	10.41%	2	13.77%	24	(6.14%)	87	9.02%	99	2.83%	68
International Equity Benchmark	7.00%	74	10.38%	82	(4.57%)	83	12.32%	58	2.97%	63
Med Public Fd - Int Eqty	7.45%		12.66%		(3.07%)		12.84%		3.12%	
Baillie Gifford Intl Choice Fd	10.41%	19	13.77%	59	(6.14%)	88	9.02%	96	2.83%	76
MSCI ACWixUS Gross	7.00%	86	10.38%	92	(4.57%)	79	12.32%	74	2.97%	74
Callan NonUS Eq	8.76%		14.61%		(1.87%)		13.77%		3.99%	

Investment Manager Performance Review

	Last Quarter		Fiscal YTD		Last Year		Last 3 Years		Last 5 Years	
Domestic Fixed Income	3.42%	9	1.12%	19	(5.52%)	95	(0.13%)	19	1.77%	27
Domestic Fixed Income Benchmark	2.96%	69	(0.09%)	90	(4.78%)	67	(2.77%)	100	0.91%	93
Med Public Fd - Dom Fixed	3.07%		0.59%		(4.52%)		(1.40%)		1.40%	
Mackay Shields LLC	3.42%	34	1.12%	44	(5.52%)	82	(0.13%)	29	1.77%	32
Blmbg Aggregate Index	2.96%	83	(0.09%)	86	(4.78%)	48	(2.77%)	99	0.91%	96
Callan Core Plus FI	3.31%		0.83%		(4.79%)		(0.64%)		1.63%	
Real Estate	(4.06%)	91	(7.49%)	65	(3.00%)	54	6.61%	94	6.97%	53
Med Public Fd - Real Est	(1.81%)		(6.24%)		(2.45%)		8.47%		7.06%	
Invesco Core Real Estate	(4.06%)	89	(7.49%)	70	(3.00%)	72	6.61%	78	6.97%	67
NFI-ODCE Equal Weight Net	(3.50%)	83	(7.70%)	74	(3.69%)	80	8.17%	43	7.13%	57
Callan OE Core Cmngld RE	(1.45%)		(5.04%)		(0.87%)		7.75%		7.21%	
Total Fund	3.98%	80	4.57%	86	(6.12%)	79	9.64%	79	5.83%	60
Callan Public Fd Mid DB	4.60%		5.90%		(5.03%)		11.07%		6.09%	
Total Fund ex Cash	3.98%	80	4.55%	86	(6.14%)	79	9.72%	77	5.87%	60
Target Benchmark*	4.61%	49	4.55%	86	(5.64%)	68	8.33%	97	5.78%	62
Callan Public Fd Mid DB	4.60%		5.90%		(5.03%)		11.07%		6.09%	

*Current Quarter Target = 40.0% Blmbg Aggregate, 37.0% Russell 3000 Index, 15.0% MSCI ACWI ex-US Gross and 8.0% NCREIF NFI-ODCE Eq Wt Net.

**NFI-ODCE Equal Weight Idx return is based on preliminary data.

Investment Manager Performance Review

	Last Quarter	Last Year	Last 3 Years	Last 5 Years	Last 15-3/4 Years
NET OF FEE RETURNS					
Domestic Equity					
Mellon Russell 1000 Growth Index	14.24%	(11.03%)	18.41%	-	-
Russell 1000 Growth Index	14.37%	(10.90%)	18.58%	13.66%	10.98%
Boston Partners Russell 1000 Value	(0.42%) 1.01%	(5.33%) (5.91%)	21.46% 17.93%	7.82% 7.50%	7.56% 6.26%
Aristotle Capital Boston Russell 2000 Index	0.89% 2.74%	(4.06%) (11.61%)	20.85% 17.51%	- 4.71%	- 6.46%
International Equity					
Baillie Gifford Intl Choice Fd MSCI ACWixUS Gross	10.28% 7.00%	(6.60%) (4.57%)	8.48% 12.32%	2.31% 2.97%	- 2.59%
Domestic Fixed Income					
MacKay Shields LLC Blmbg Aggregate Index	3.34% 2.96%	(5.80%) (4.78%)	(0.43%) (2.77%)	1.47% 0.91%	- 3.10%
Real Estate					
Invesco Core Real Estate NFI-ODCE Equal Weight Net	(4.13%) (3.50%)	(3.27%) (3.69%)	6.31% 8.17%	6.56% 7.13%	- 5.26%
Total Fund	3.89%	(6.45%)	9.27%	5.42%	5.53%
Total Fund ex Cash	3.89%	(6.47%)	9.34%	5.46%	5.73%
Target Benchmark*	4.61%	(5.64%)	8.33%	5.78%	5.80%

*Current Quarter Target = 40.0% Blmbg Aggregate, 37.0% Russell 3000 Index, 15.0% MSCI ACWI ex-US Gross and 8.0% NCREIF NFI-ODCE Eq Wt Net.

Total Fund Performance Attribution

Relative Attribution Effects for Quarter ended March 31, 2023

Asset Class	Effective Actual Weight	Effective Target Weight	Actual Return	Target Return	Manager Effect	Asset Allocation	Total Relative Return
Domestic Equity	38%	37%	4.99%	7.18%	(0.82%)	0.01%	(0.81%)
Domestic Fixed Income	40%	40%	3.42%	2.96%	0.19%	(0.01%)	0.18%
Real Estate	11%	8%	(4.06%)	(3.50%)	(0.06%)	(0.23%)	(0.29%)
International Equity	11%	15%	10.41%	7.00%	0.38%	(0.09%)	0.29%
Cash & Equivalents	0%	0%	1.02%	1.02%	0.00%	(0.00%)	(0.00%)
Total			3.98%	4.61%	+ (0.32%)	+ (0.31%)	(0.63%)

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%	(7.48%)	(8.58%)	0.39%	(0.16%)	0.23%
Domestic Fixed Income	40%	40%	(5.52%)	(4.78%)	(0.32%)	(0.06%)	(0.37%)
Real Estate	11%	8%	(3.00%)	(3.69%)	0.08%	(0.14%)	(0.06%)
International Equity	11%	15%	(6.14%)	(4.57%)	(0.15%)	(0.14%)	(0.29%)
Cash & Equivalents	0%	0%	2.60%	2.60%	0.00%	0.01%	0.01%
Total			(6.12%)	(5.64%)	+ 0.01%	+ (0.49%)	(0.48%)

Total Fund Performance Attribution

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%	20.40%	18.48%	0.68%	(0.07%)	0.61%
Domestic Fixed Income	39%	40%	(0.13%)	(2.77%)	1.04%	0.23%	1.27%
Real Estate	9%	8%	6.61%	8.17%	(0.13%)	(0.16%)	(0.30%)
International Equity	14%	15%	9.02%	12.32%	(0.27%)	0.06%	(0.21%)
Cash & Equivalents	0%	0%	0.91%	0.91%	0.00%	(0.05%)	(0.05%)
Total			9.64%	= 8.33%	+ 1.31%	+ 0.01%	1.32%

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%	10.30%	10.45%	(0.04%)	(0.12%)	(0.16%)
Domestic Fixed Income	38%	40%	1.77%	0.91%	0.27%	(0.03%)	0.24%
Real Estate	9%	8%	6.97%	7.13%	(0.01%)	(0.10%)	(0.11%)
International Equity	14%	15%	2.83%	2.97%	0.10%	(0.01%)	0.10%
Cash & Equivalents	0%	0%	1.39%	1.39%	0.00%	(0.02%)	(0.02%)
Total			5.83%	= 5.78%	+ 0.32%	+ (0.28%)	0.04%

Investment Manager Performance Review

The Total Fund returned 3.98% in the first quarter and lagged the benchmark return of 4.61%. The Total Fund's first quarter performance ranked at the 80th percentile of peers. For the last year, the Total Fund declined 6.12% and underperformed the benchmark return of -5.64%, ranking at the 79th percentile of peers. The Fund has outperformed the benchmark over the last 3-, 5-, 10-, 15-, 20-, and 31.75-year periods on an annualized basis.

The AJRS Domestic Equity Composite returned 4.99% in the quarter and underperformed the Russell 3000 Index return of 7.18%. First quarter returns ranked at the 94th percentile of peers. Over the last year, Domestic Equity returned -7.48% and outperformed the benchmark (-8.58%). The composite leads its benchmark over the last 3-, 7-, 20-, and 31.75-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 (14.25%) modestly trailed the benchmark return of 14.37% for the quarter and finished at the 30th percentile of the Callan Large Cap Growth peer universe. Over the trailing year, the Fund declined -11.00% and ranked at the 41st percentile of peers.
- In large cap value equity, **Boston Partners** fell 0.29% for the quarter and underperformed the benchmark return of 1.01%. First quarter results ranked at the 67th percentile of the Callan Large Cap Value peer group. Over the last year, the Fund returned -4.81% versus the benchmark return of -5.91% and ranked at the 57th percentile of peers. The Fund leads its benchmark and ranks in the top third of its peer group over longer periods.
- In small cap equity, **Aristotle Capital** finished the quarter up 1.09% which trailed the benchmark return of 2.74% and placed them in the 89th percentile of the Callan Small Cap Core peer group. Over the trailing year, the Fund (-3.28%) ranked in the top quartile of peers and provided strong downside protection against the benchmark return of -11.61%. Over the last three years, the fund has outperformed the benchmark on an annualized basis and ranks just behind its peer group median.

Investment Manager Performance Review

The AJRS International Equity Composite experienced a strong quarter, up 10.41% versus the benchmark return of 7.00%. First quarter performance ranked at the 2nd percentile of peers. For the last year, the International Equity Composite declined 6.14% and underperformed the benchmark (-4.57%). The Composite outperformed the benchmark over the trailing 7-, 10-, and 15-year periods.

- **Baillie Gifford** is the only manager in the international equity composite. The Fund outpaced the index for the quarter and ranked at the 19th percentile of peers. The Fund trails its benchmark and peers over longer annualized periods.

The AJRS Domestic Fixed Income Composite returned 3.42% in the quarter versus the 2.96% return of the Bloomberg Aggregate Index and ranked in the 9th percentile of peers. Over the trailing year, Fixed Income returned -5.52% and trailed the benchmark (-4.78%). The Composite has outperformed its benchmark across longer-term periods and ranks in the top half of peers over the last 3-, 5-, 7-, 10-, and 15-year periods.

- **MacKay Shields**, the only manager in the fixed income composite, outperformed the Bloomberg Aggregate and ranked at the 34th percentile of its peer group for the quarter. Over the last year, the Fund lags the benchmark and ranks at the 82nd percentile of peers. The Fund leads its benchmark and ranks in the top third of peers across longer time periods.

The AJRS Real Estate Composite declined 4.06% for the quarter and ranked at the 91st percentile of the Callan Medium Public Fund Real Estate peer universe. The Composite returned -3.00% over the last year and finished just below its peer group median.

- **Invesco Core Real Estate** is the lone fund within the real estate composite. The Fund underperformed the NFI-ODCE Equal Weight Net Index (-3.50%) and ranked at the 89th percentile of peers for the quarter. Over the last year, the fund outperformed the -3.69% return of the benchmark and ranked at the 72nd percentile of peers. The Fund leads the index and ranks in the top half of its peer group over the trailing 7- and 10-year periods.

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