



Los Angeles County Employees Retirement Association

Investments Division

TOTAL FUND

PERFORMANCE REPORT

For the quarter ended
June 30, 2022



review

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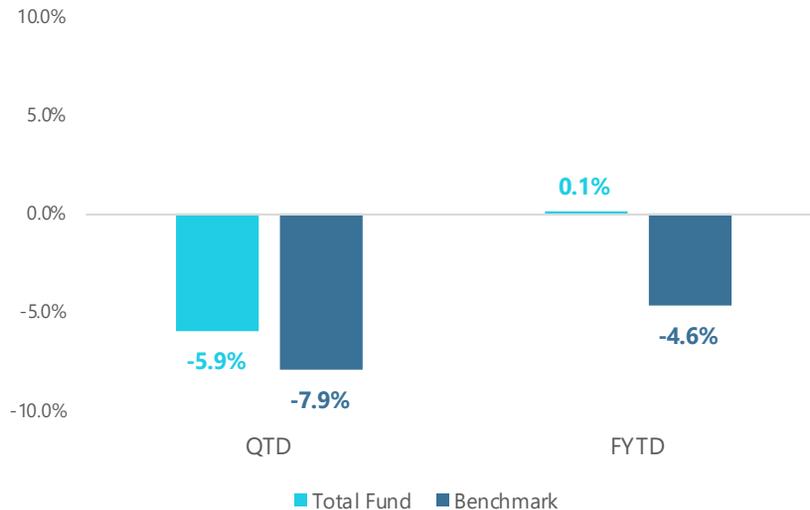
01	TOTAL FUND
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total fund

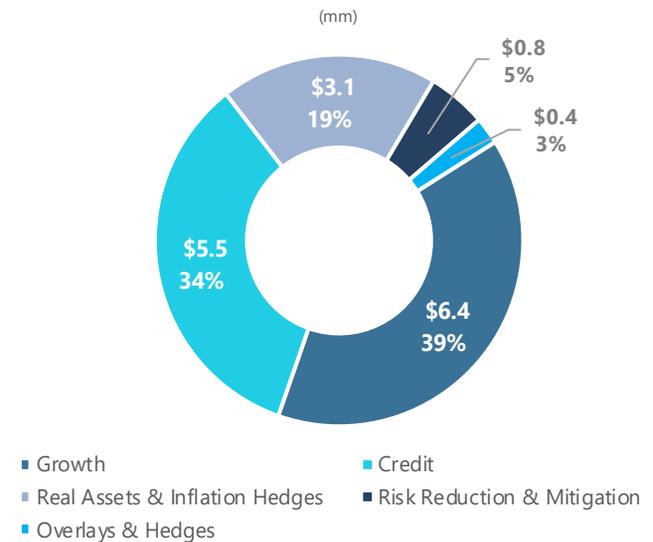
Quarterly Snapshot

for the quarter ended June 30, 2022

Performance (net)



Public Markets Fees¹



Ending Market Value

70,407

↓ -6%
from prior quarter

Sharpe Ratio²

0.9

↓ -30%
from prior quarter

Batting Average³

41%

↓ -19%
from prior quarter

Standard Deviation²

8.6

↑ 5%
from prior quarter

Tracking Error²

2.3

↑ 2%
from prior quarter

1. Reflects estimated investment management fees only. Additional details found in the appendix.

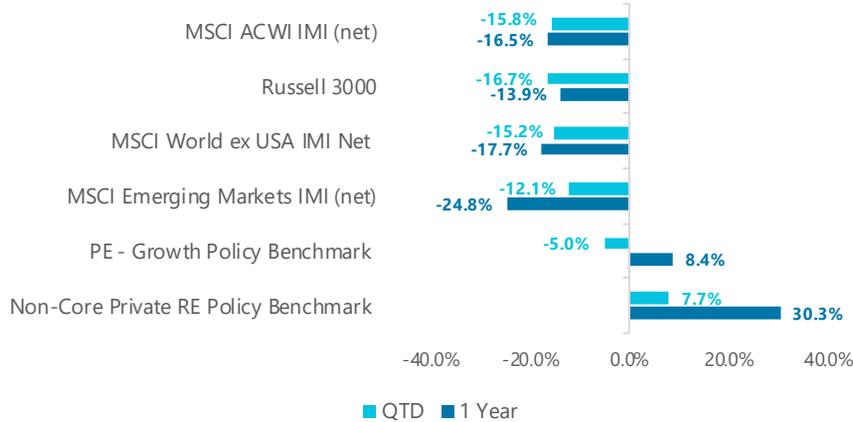
2. 3 Year Annualized.

3. Percentage of managers that outperformed the benchmark for the quarter.

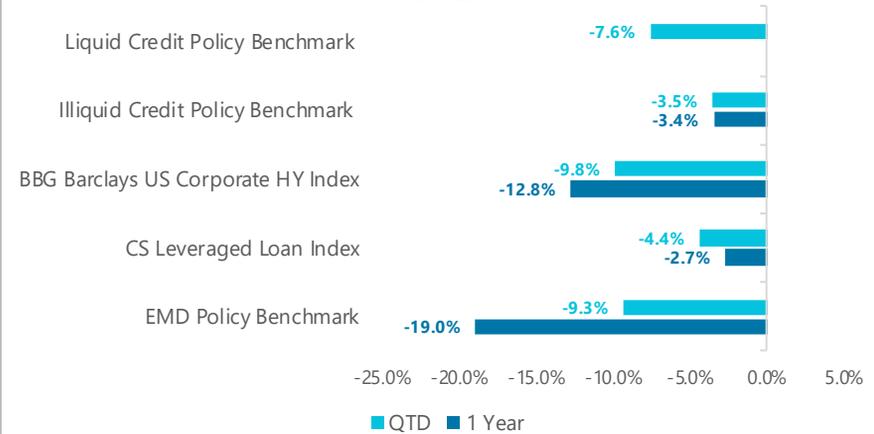
Market Environment

for the quarter ended June 30, 2022

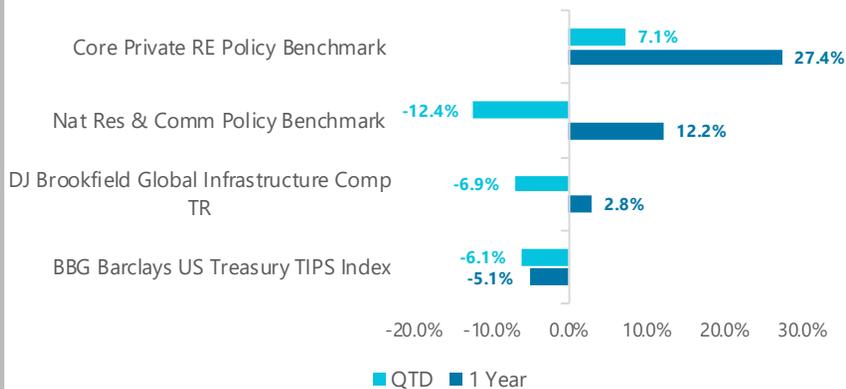
Growth



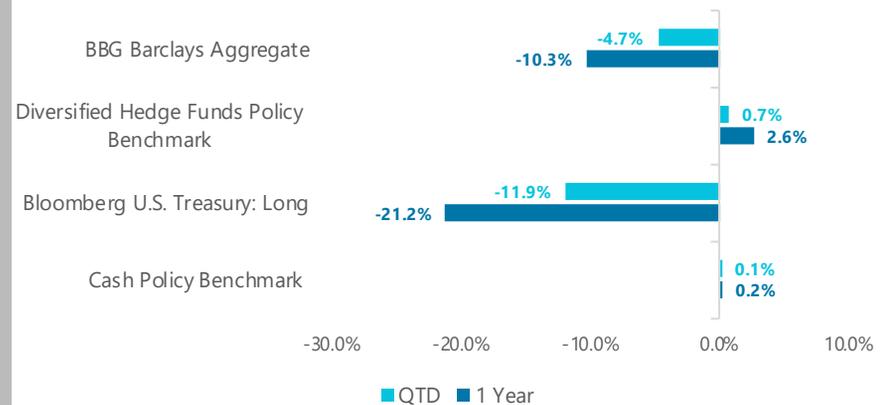
Credit



Real Assets & Inflation Hedges



Risk Reduction & Mitigation



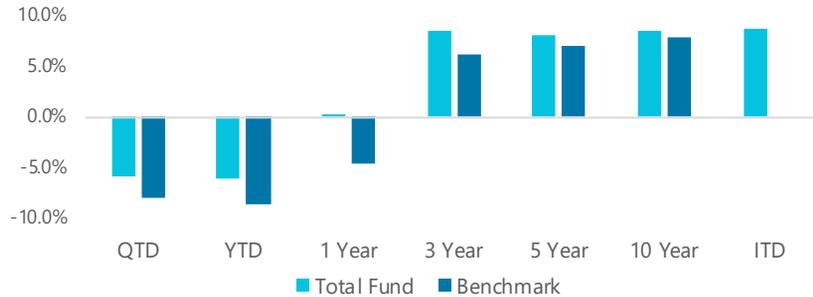
Summary

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Benchmark	-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Excess	2.0%	2.4%	4.7%	2.3%	1.2%	0.7%	--

	FY22	FY21	FY20	FY19	FY18
Total Fund	0.1%	25.2%	1.8%	6.4%	9.0%
Benchmark	-4.6%	23.1%	2.0%	8.6%	7.8%

Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Growth	-9.4%	-2.0%	-2.0%	12.6%
Growth Policy Benchmark	-11.6%	-8.1%	-8.1%	9.5%
Excess	2.2%	6.1%	6.1%	3.1%
Credit	-5.2%	-4.2%	-4.2%	3.1%
Credit Policy Benchmark	-5.7%	-7.5%	-7.5%	1.2%
Excess	0.5%	3.3%	3.3%	1.9%
Real Assets & Inflation Hedges	-1.6%	14.3%	14.3%	7.9%
RA & IH Policy Benchmark	-3.2%	12.4%	12.4%	8.7%
Excess	1.6%	1.9%	1.9%	-0.7%
Risk Reduction & Mitigation	-3.4%	-7.1%	-7.1%	0.8%
RR & M Policy Benchmark	-3.9%	-7.7%	-7.7%	-0.1%
Excess	0.5%	0.6%	0.6%	0.9%
Overlays & Hedges	73.9%	--	--	--

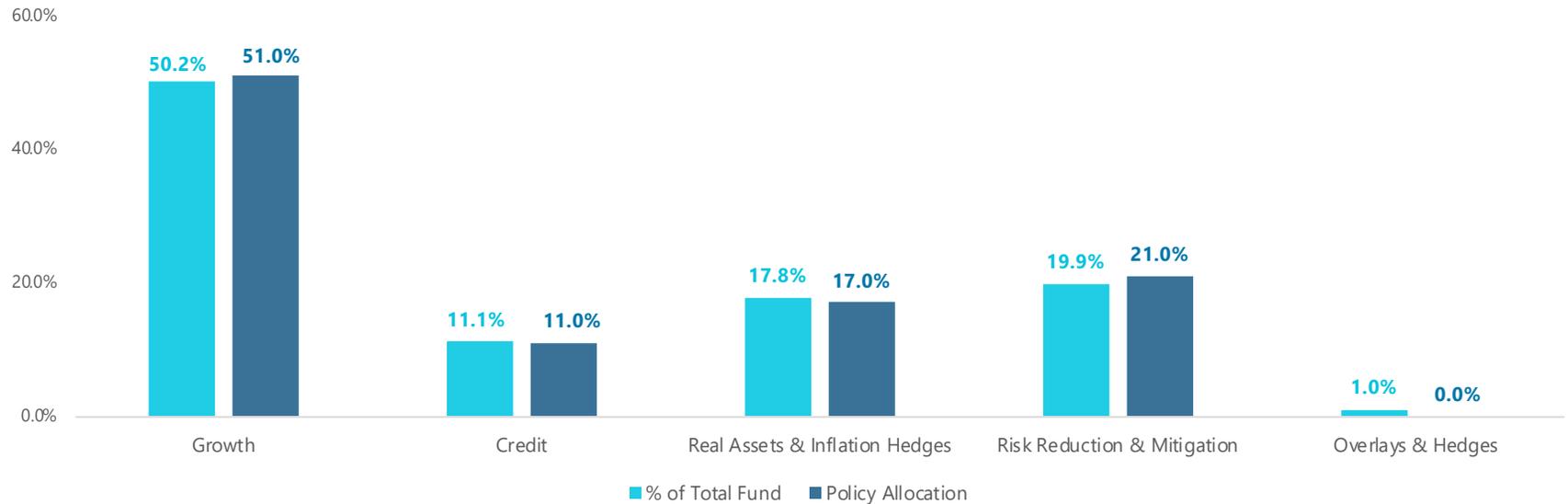
Peer Ranking (gross)

	QTD	1 Year	3 Year	5 Year	10 Year					
Total Fund	-5.9%	27	0.5%	18	8.8%	18	8.5%	19	8.9%	28
60/40 Portfolio	-11.5%	95	-13.9%	96	3.5%	87	4.7%	86	6.0%	88
S&P 500 Index	-16.1%	100	-10.6%	83	10.6%	7	11.3%	4	13.0%	4
5th Percentile	-3.9%		4.9%		11.6%		10.5%		10.3%	
25th Percentile	-5.8%		-1.9%		8.5%		5.3%		9.1%	
50th Percentile	-7.2%		-3.6%		7.5%		7.4%		8.3%	
75th Percentile	-9.1%		-9.2%		5.6%		6.1%		7.5%	
95th Percentile	-11.9%		-13.8%		0.2%		2.0%		3.9%	

Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

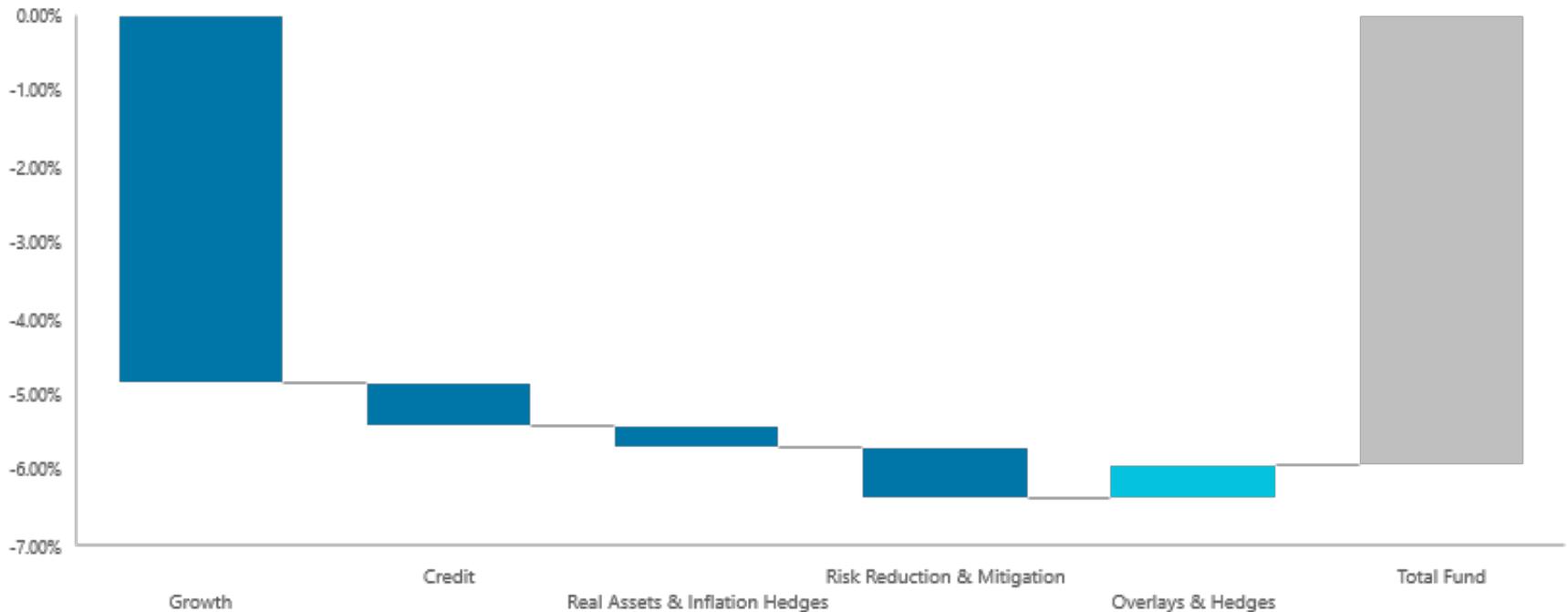


	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Over/Under (%)	Over/Under (mm)
Total Fund	70,407	100.0%	100.0%		
Growth	35,331	50.2%	51.0%	-0.8%	-576
Credit	7,824	11.1%	11.0%	0.1%	79
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	0.8%	570
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-1.1%	-765
Overlays & Hedges	692	1.0%	0.0%	1.0%	692

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Growth	-4.86%	Real Estate - Real Assets	0.45%	SSGA MSCI ACWI IMI	-3.20%
Credit	-0.57%	Private Equity - Growth	0.15%	JPMAM Strategic Beta US	-0.99%
Real Assets & Inflation Hedges	-0.29%	Brevan Howard Master Fund	0.08%	BTC Passive Currency Hedge	-0.95%
Risk Reduction & Mitigation	-0.65%	Parametric RA & IH Overlay	0.07%	BTC US Debt Index Fund	-0.32%
Overlays & Hedges	0.43%	Real Estate - Growth	0.07%	DWS Natural Resources	-0.30%
Total Fund	-5.94%				

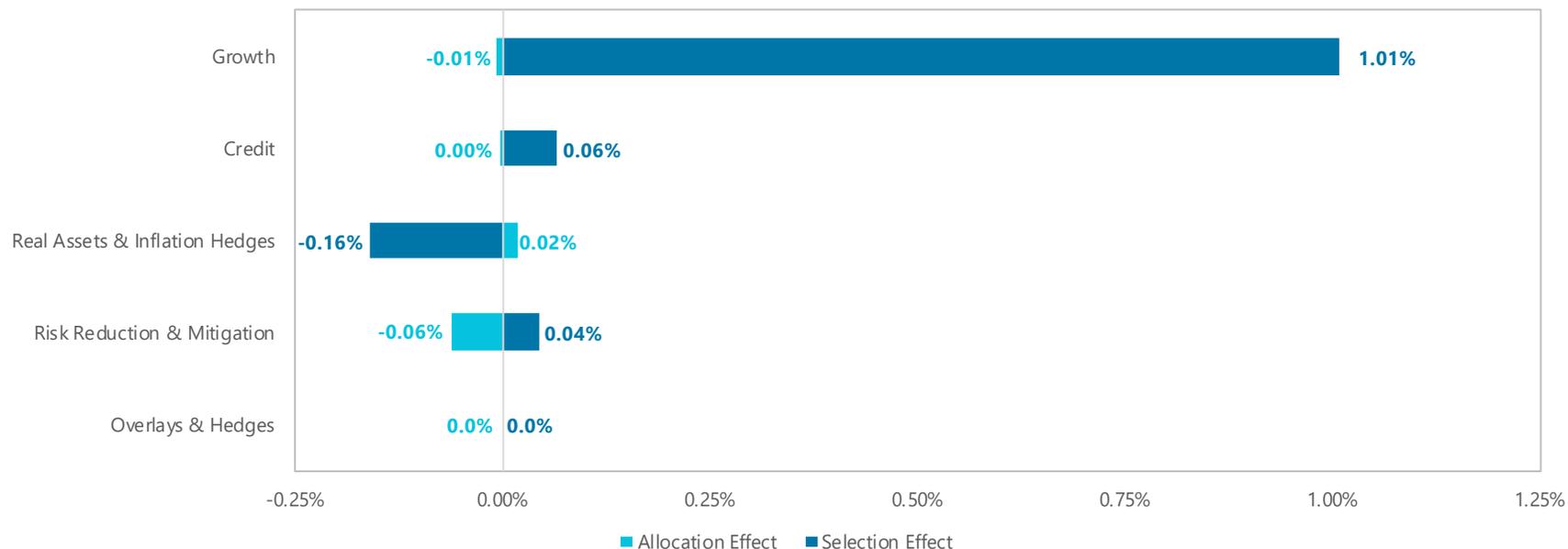
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



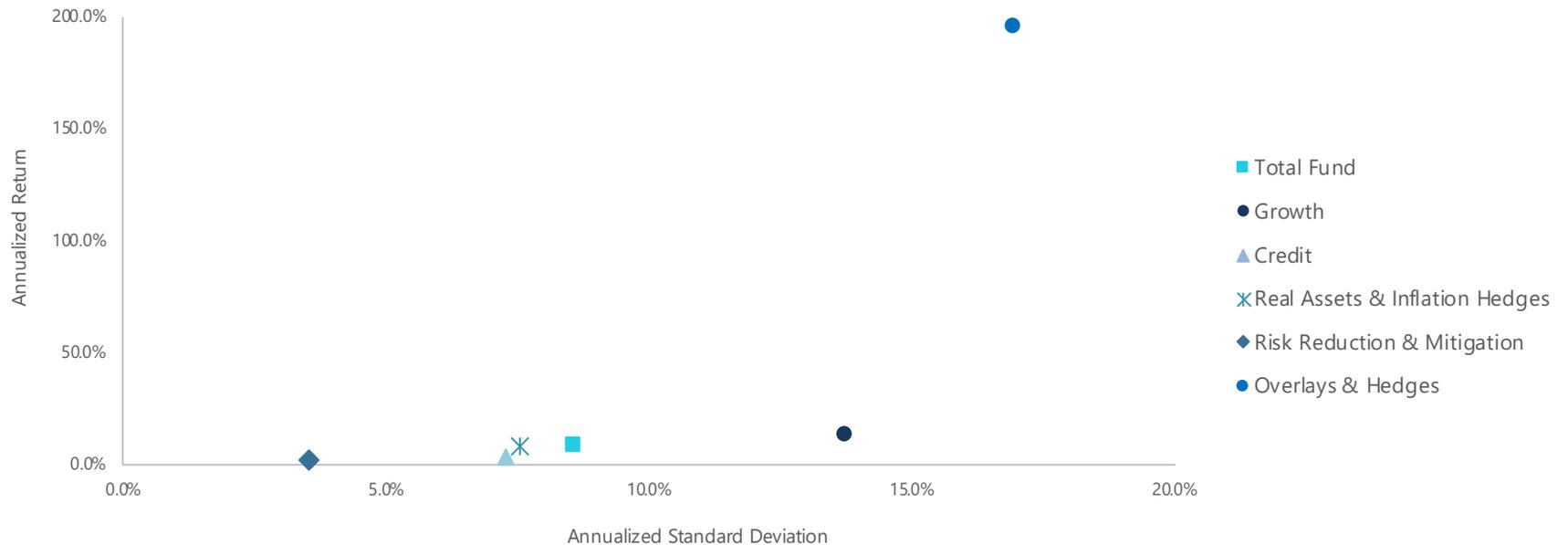
	Ending Market Value (mm)	% of Total Fund	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Total Fund	70,407	100.0%	100.0%	-5.9%	-7.9%	0.00%	0.96%	1.97%
Growth	35,331	50.2%	51.0%	-9.4%	-11.6%	-0.01%	1.01%	1.13%
Credit	7,824	11.1%	11.0%	-5.2%	-5.7%	0.00%	0.06%	0.05%
Real Assets & Inflation Hedges	12,539	17.8%	17.0%	-1.6%	-3.2%	0.02%	-0.16%	0.29%
Risk Reduction & Mitigation	14,020	19.9%	21.0%	-3.4%	-3.9%	-0.06%	0.04%	0.03%
Overlays & Hedges	692	1.0%	0.0%	73.9%	--	--	--	--

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Total Fund	8.5%	8.6%	0.92	0.99	0.96	2.3%
Growth	12.8%	13.7%	0.90	0.60	0.95	4.0%
Credit	3.6%	7.3%	0.44	0.64	1.00	2.8%
Real Assets & Inflation Hedges	7.8%	7.5%	0.95	(0.29)	0.95	2.2%
Risk Reduction & Mitigation	1.6%	3.5%	0.24	1.13	0.94	0.8%
Overlays & Hedges	195.6%	16.9%				

1. Functional composites risk statistics are since inception.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Total Fund	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Total Fund	100.0%	70,407	75,209	-5.9%	-6.1%	0.1%	8.5%	8.1%	8.6%	8.6%
Total Fund Policy Benchmark				-7.9%	-8.6%	-4.6%	6.2%	7.0%	7.9%	--
Growth	50.2%	35,331	38,682	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Growth Policy Benchmark				-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Global Equity	30.3%	21,343	25,137	-15.1%	-19.8%	-15.1%	6.6%	--	--	7.2%
Global Equity Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	--	--	6.6%
Private Equity - Growth	18.3%	12,901	12,457	0.8%	9.1%	30.2%	26.6%	--	--	24.1%
PE - Growth Policy Benchmark				-5.0%	1.3%	8.4%	15.7%	--	--	12.8%
Non-Core Private Real Estate	1.5%	1,087	1,088	4.7%	12.9%	23.5%	14.2%	13.2%	12.0%	4.7%
Non-Core Private RE Policy Benchmark				7.7%	16.6%	30.3%	13.4%	12.0%	13.1%	11.6%
Credit	11.1%	7,824	8,111	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Credit Policy Benchmark				-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Liquid Credit	6.5%	4,581	4,977	-7.9%	-10.9%	--	--	--	--	-10.7%
Liquid Credit Policy Benchmark				-7.6%	-11.0%	--	--	--	--	-10.7%
Illiquid Credit	4.6%	3,243	3,135	-1.0%	-0.7%	6.7%	11.2%	--	--	10.9%
Illiquid Credit Policy Benchmark				-3.5%	-5.0%	-3.4%	3.4%	--	--	4.5%
Real Assets & Inflation Hedges	17.8%	12,539	12,933	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
RA & IH Policy Benchmark				-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Core Private Real Estate	6.1%	4,323	4,079	8.4%	15.9%	27.9%	8.4%	8.3%	8.8%	7.3%
Core Private RE Policy Benchmark				7.1%	15.3%	27.4%	10.7%	9.4%	10.4%	7.2%
Natural Resources & Commodities	4.2%	2,958	3,796	-6.1%	11.4%	18.6%	12.5%	8.0%	-0.3%	-1.0%
Nat Res & Comm Policy Benchmark				-12.4%	4.7%	12.2%	11.2%	7.0%	-1.5%	-2.2%
Infrastructure	4.7%	3,327	2,999	-6.5%	-3.6%	4.1%	7.6%	--	--	8.9%
DJ Brookfield Global Infrastr Comp TR				-6.9%	-2.7%	2.8%	4.5%	--	--	5.7%
TIPS	2.7%	1,931	2,059	-6.3%	-8.6%	-4.8%	3.1%	--	--	3.7%
Bloomberg U.S. Treasury: U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.7%
Risk Reduction & Mitigation	19.9%	14,020	14,969	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
RR & M Policy Benchmark				-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Investment Grade Bonds	7.9%	5,556	8,649	-4.8%	-10.4%	-10.6%	-0.7%	1.1%	2.1%	5.3%
BBG BC Aggregate Bond Index				-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	4.8%
Diversified Hedge Funds	6.0%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
Long-Term Government Bonds	1.7%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Bloomberg U.S. Treasury: Long				-11.9%	-21.3%	--	--	--	--	-22.1%
Long Treasury Bonds Transition	2.8%	1,992	--	--	--	--	--	--	--	-0.4%
Bloomberg U.S. Treasury: Long				--	--	--	--	--	--	-0.3%
Cash	1.5%	1,067	953	0.7%	0.9%	1.5%	1.3%	1.6%	1.1%	1.8%
Cash Policy Benchmark				0.1%	0.2%	0.2%	0.6%	1.1%	0.7%	1.4%
Overlays & Hedges	1.0%	692	513	73.9%	174.0%	--	--	--	--	195.6%
Cash Overlay	0.7%	525	448	17.2%	59.5%	64.7%	--	--	--	-5.2%
Total Overlay Policy BM				-11.5%	-15.5%	-11.9%	--	--	--	4.2%
Currency Hedge	0.2%	167	65	3.6%	4.6%	--	--	--	--	5.2%
50% FX Hedge Custom Benchmark				3.6%	4.7%	--	--	--	--	5.3%

growth

Summary

for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Growth	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Benchmark	-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Excess	2.2%	2.3%	6.1%	3.1%	--	--	2.3%

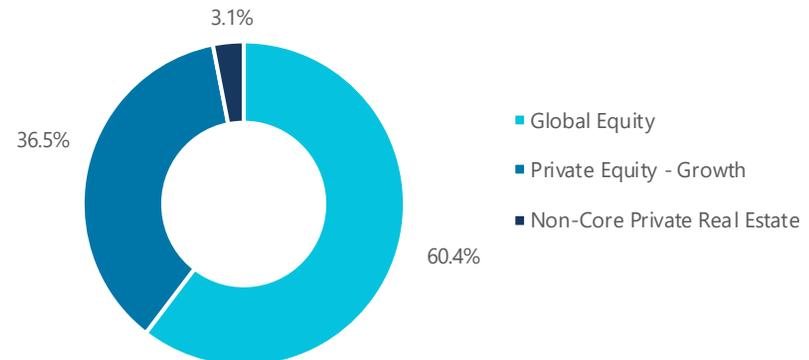
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Global Equity	-15.1%	-15.1%	-15.1%	6.6%
Global Equity Policy Benchmark	-15.8%	-16.5%	-16.5%	6.0%
Excess	0.7%	1.4%	1.4%	0.6%
Private Equity - Growth	0.8%	30.2%	30.2%	26.6%
PE - Growth Policy Benchmark	-5.0%	8.4%	8.4%	15.7%
Excess	5.8%	21.8%	21.8%	10.9%
Non-Core Private Real Estate	4.7%	23.5%	23.5%	14.2%
Non-Core Private RE Policy Benchmark	7.7%	30.3%	30.3%	13.4%
Excess	-3.0%	-6.8%	-6.8%	0.8%

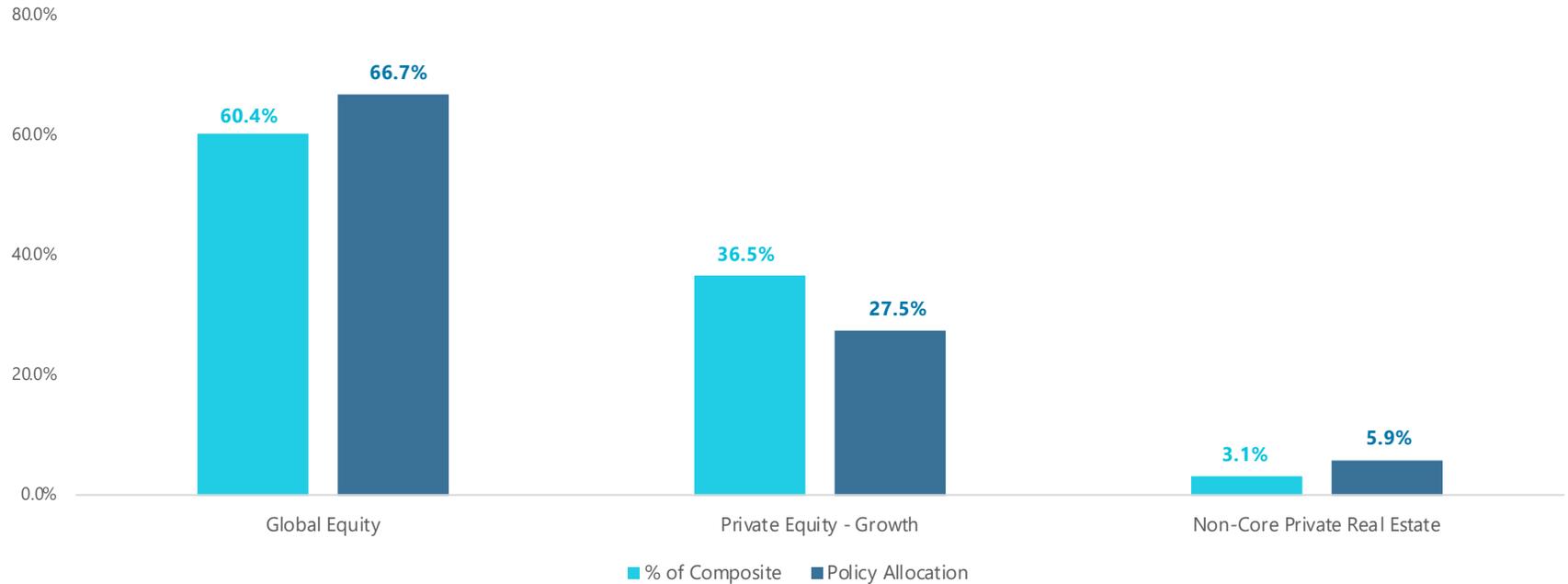
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

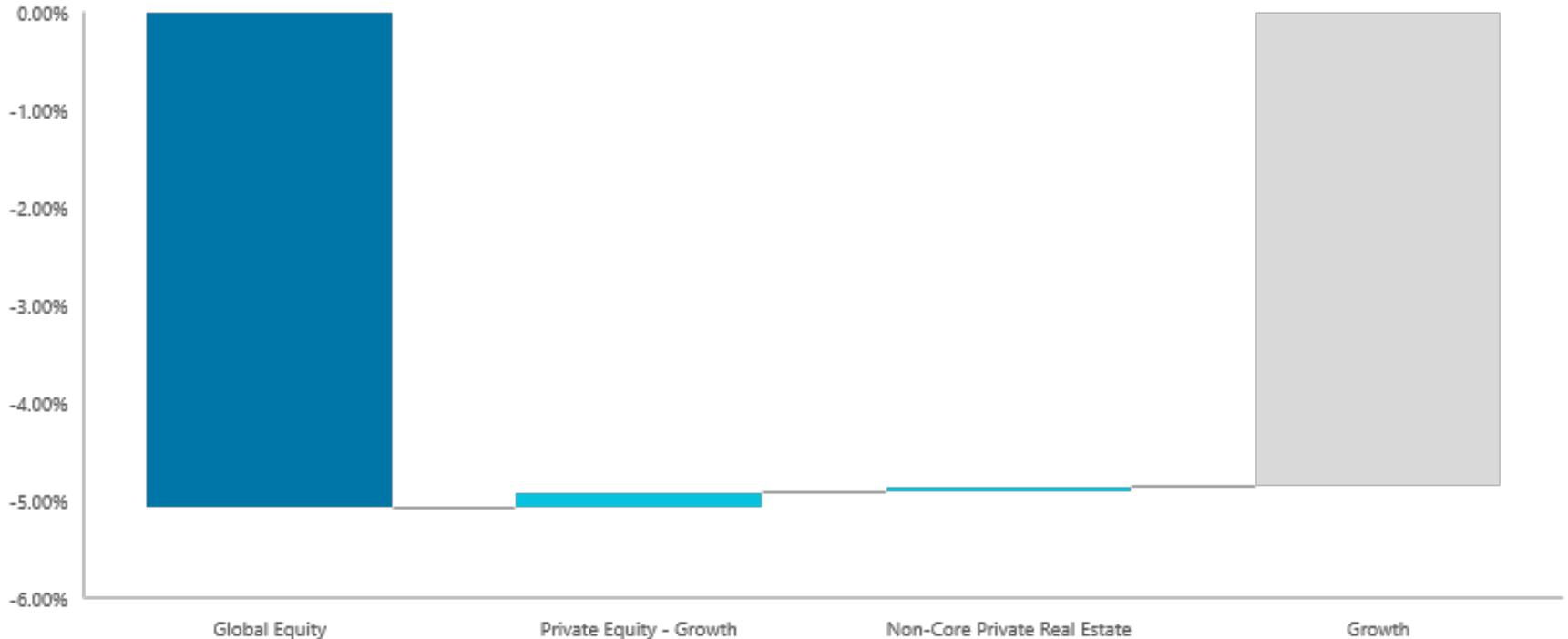


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Growth	35,331	100.0%	100.0%		
Global Equity	21,343	60.4%	66.7%	-6.3%	-2,212
Private Equity - Growth	12,901	36.5%	27.5%	9.1%	3,203
Non-Core Private Real Estate	1,087	3.1%	5.9%	-2.8%	-990

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return

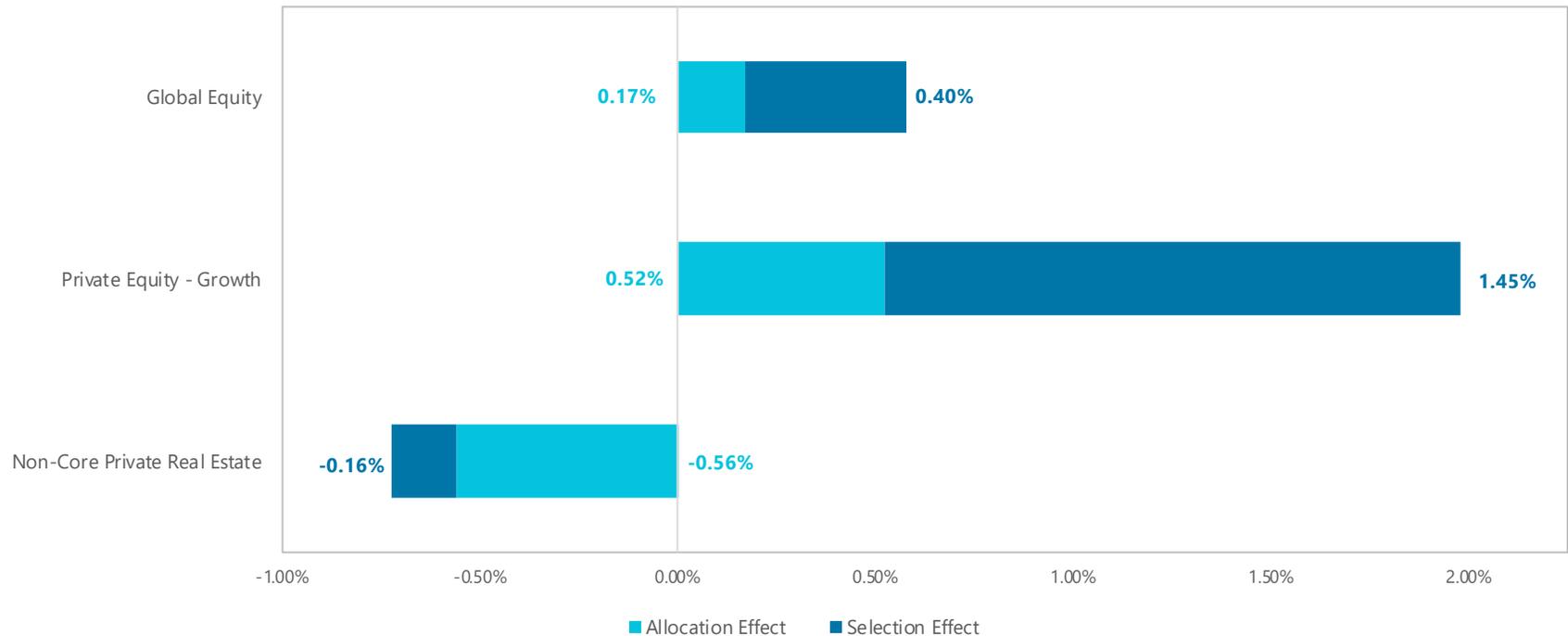


Functional Category	Contributors	Detractors
Global Equity	Private Equity - Growth 0.15%	SSGA MSCI ACWI IMI -3.20%
Private Equity - Growth	Real Estate - Growth 0.07%	JPMAM Strategic Beta US -0.99%
Non-Core Private Real Estate		Acadian Developed Markets -0.13%
Growth		JPMAM Strategic Beta Non-US -0.11%
		BTC Euro Tilts -0.10%

Return Attribution

for the quarter ended June 30, 2022

QTD Performance Attribution¹



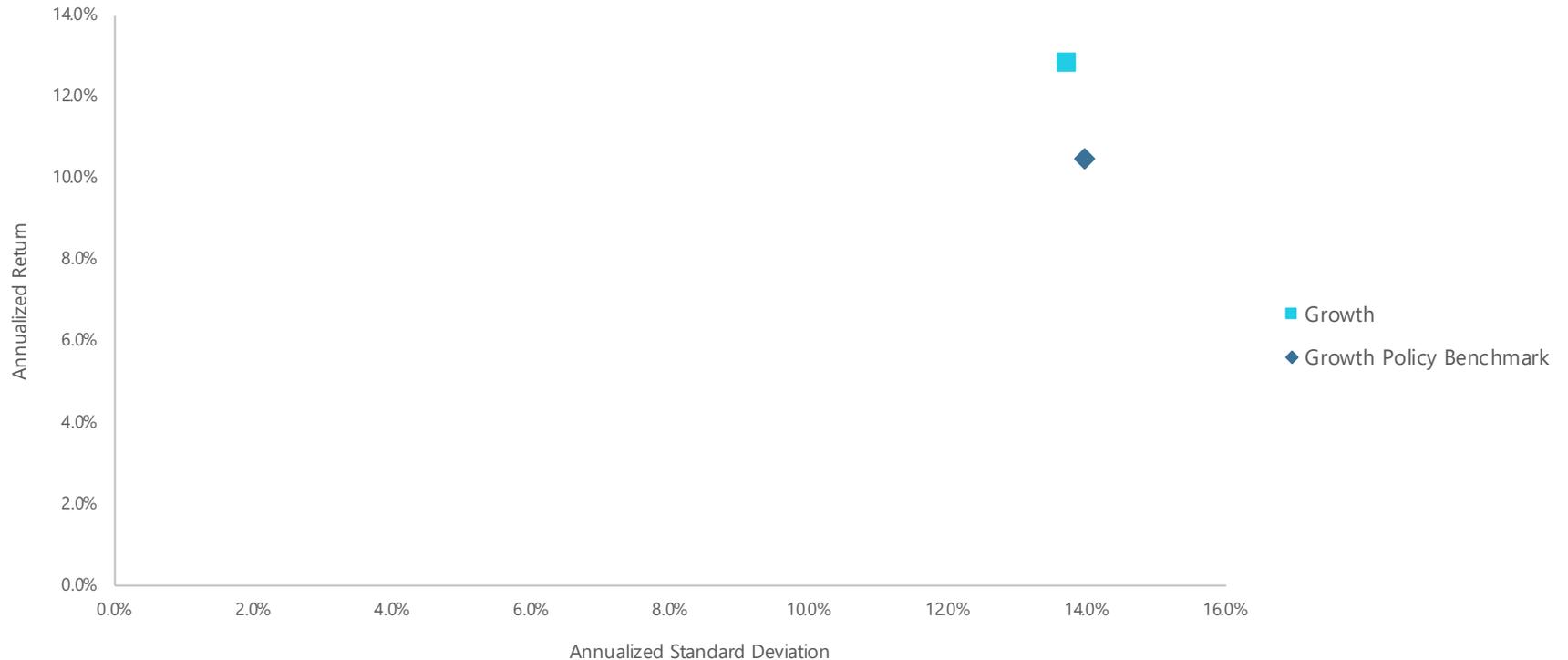
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Growth	35,331	100.0%	100.0%	-9.4%	-11.6%	0.14%	1.70%	2.17%
Global Equity	21,343	60.4%	66.7%	-15.1%	-15.8%	0.17%	0.40%	0.65%
Private Equity - Growth	12,901	36.5%	27.5%	0.8%	-5.0%	0.52%	1.45%	2.16%
Non-Core Private Real Estate	1,087	3.1%	5.9%	4.7%	7.7%	-0.56%	-0.16%	-0.63%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Growth	12.8%	13.7%				
Growth Policy Benchmark	10.5%	14.0%	0.90	0.60	0.95	4.0%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Growth	100.0%	35,331	38,682	-9.4%	-10.5%	-2.0%	12.6%	--	--	12.8%
Growth Policy Benchmark				-11.6%	-12.8%	-8.1%	9.5%	--	--	10.5%
Global Equity	60.4%	21,343	25,137	-15.1%	-19.8%	-15.1%	6.6%	--	--	7.2%
Global Equity Policy Benchmark				-15.8%	-20.4%	-16.5%	6.0%	--	--	6.6%
Passive										
SSGA MSCI ACWI IMI	37.1%	13,120	15,518	-15.5%	-20.0%	-15.6%	--	--	--	4.3%
Factor Based										
JPMAM Strategic Beta Non-US	1.5%	533	618	-13.8%	-17.3%	-17.3%	--	--	--	3.8%
JPMAM Strategic Beta US	11.0%	3,901	4,643	-16.0%	-19.9%	-11.2%	--	--	--	12.7%
Active										
Acadian Developed Markets	1.5%	531	632	-15.9%	-19.4%	-17.9%	4.3%	4.5%	8.2%	4.1%
BTC Euro Tilts	1.4%	483	560	-13.7%	-20.1%	-14.9%	2.8%	2.9%	7.1%	2.8%
Capital Group Developed Markets	1.0%	343	414	-17.2%	-27.8%	-28.3%	1.5%	4.4%	6.8%	--
Cevian Capital II - Activist	1.0%	359	393	-8.6%	-13.2%	-7.7%	6.9%	4.2%	--	6.4%
Cornercap US Small Cap - EMP	0.2%	77	86	-10.6%	-11.6%	-6.6%	9.9%	--	--	6.8%
Frontier US SMID Growth	0.7%	242	298	-18.9%	-22.6%	-20.2%	5.6%	5.5%	10.5%	9.6%
Genesis Emerging Markets	1.4%	491	557	-11.9%	-23.0%	-32.4%	-2.9%	1.0%	2.8%	3.1%
Global Alpha Intl Small Cap - EMP	0.5%	162	189	-14.1%	-20.9%	-21.1%	2.3%	--	--	4.2%
Jana JSI Fund V - Activist	0.3%	118	123	-8.0%	-7.1%	2.3%	17.8%	10.4%	--	17.4%
Lazard Emerging Markets	1.1%	374	413	-9.3%	-21.2%	-26.9%	2.2%	3.6%	--	2.3%
Parametric GE Market Cap	0.4%	134	139	-3.4%	0.0%	--	--	--	--	19.8%
Parametric GE Region	0.2%	80	124	-24.6%	-30.7%	--	--	--	--	-29.9%
Symphony Financial - Activist	0.6%	204	237	-14.3%	-22.6%	-10.4%	5.0%	9.2%	--	10.8%
Systematic US Small Cap Value	0.5%	174	197	-11.7%	-16.1%	-12.2%	7.4%	--	--	4.1%
Private Equity - Growth	36.5%	12,901	12,457	0.8%	9.1%	30.2%	26.6%	--	--	24.1%
PE - Growth Policy Benchmark				-5.0%	1.3%	8.4%	15.7%	--	--	12.8%
Non-Core Private Real Estate	3.1%	1,087	1,088	4.7%	12.9%	23.5%	14.2%	13.2%	12.0%	4.7%
Non-Core Private RE Policy Benchmark				7.7%	16.6%	30.3%	13.4%	12.0%	13.1%	11.6%

Growth Risk Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	20.26
Benchmark Risk	18.93
Active Risk	2.24
Portfolio Beta	1.07

Contribution to Risk

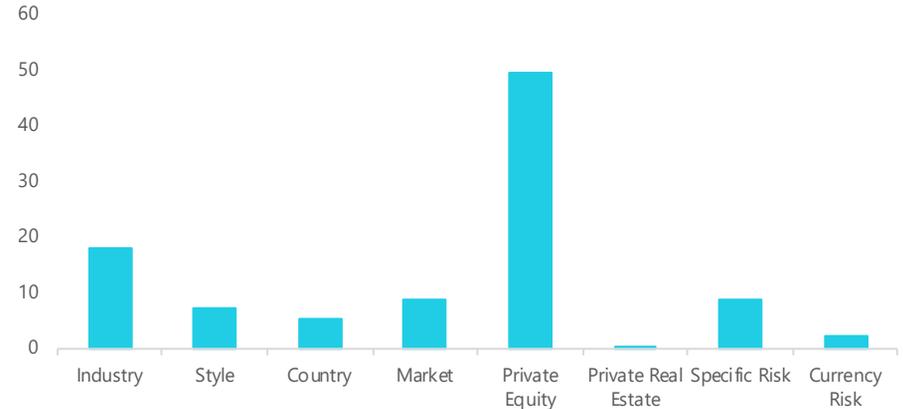


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Growth	34,694	100.00	20.26	20.26	100.00
Global Equity	21,253	61.26	18.07	10.50	51.83
Private Equity	12,391	35.72	27.44	9.09	44.84
Non-Core Private Real Estate	1,050	3.03	37.01	0.67	3.33

Risk Decomposition

Risk Source	Portfolio Risk		Active Risk	
	Contribution	%Risk	Contribution	%Risk
Total Risk	20.26	100.00	2.24	100.00
Local Market Risk	19.47	96.06	2.19	97.85
Common Factor Risk	19.42	95.83	1.99	88.91
Specific Risk	0.05	0.23	0.20	8.94
Currency Risk	0.80	3.94	0.05	2.15

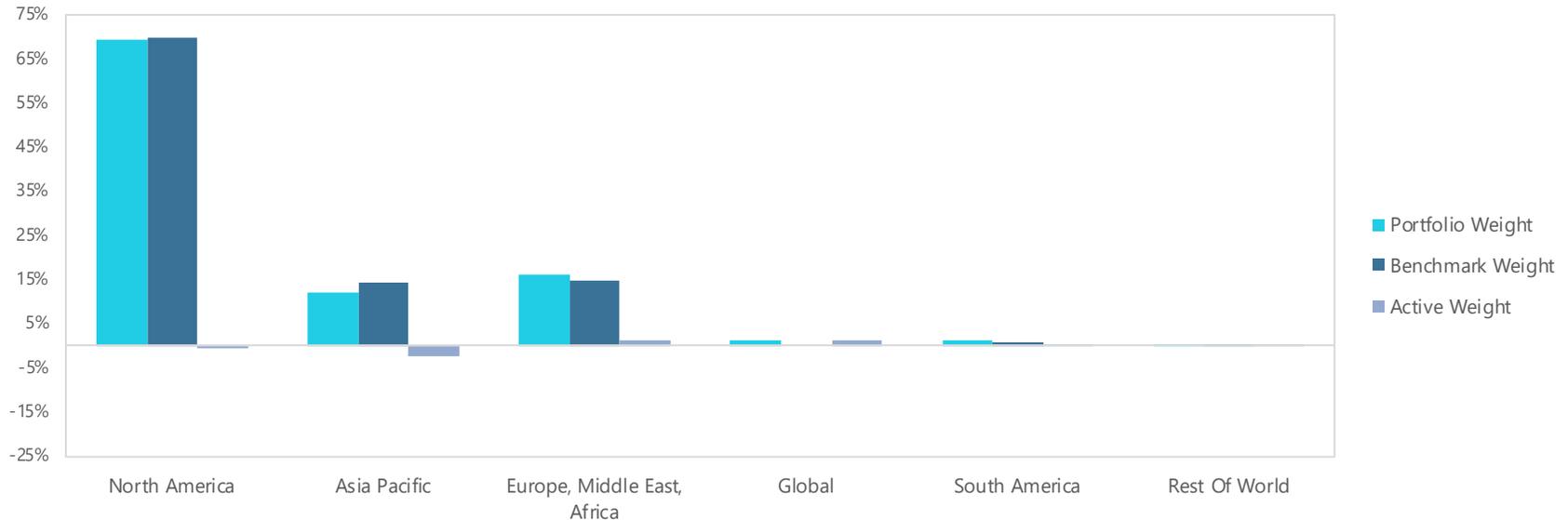
Active Risk from Common Factors



Growth Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Region

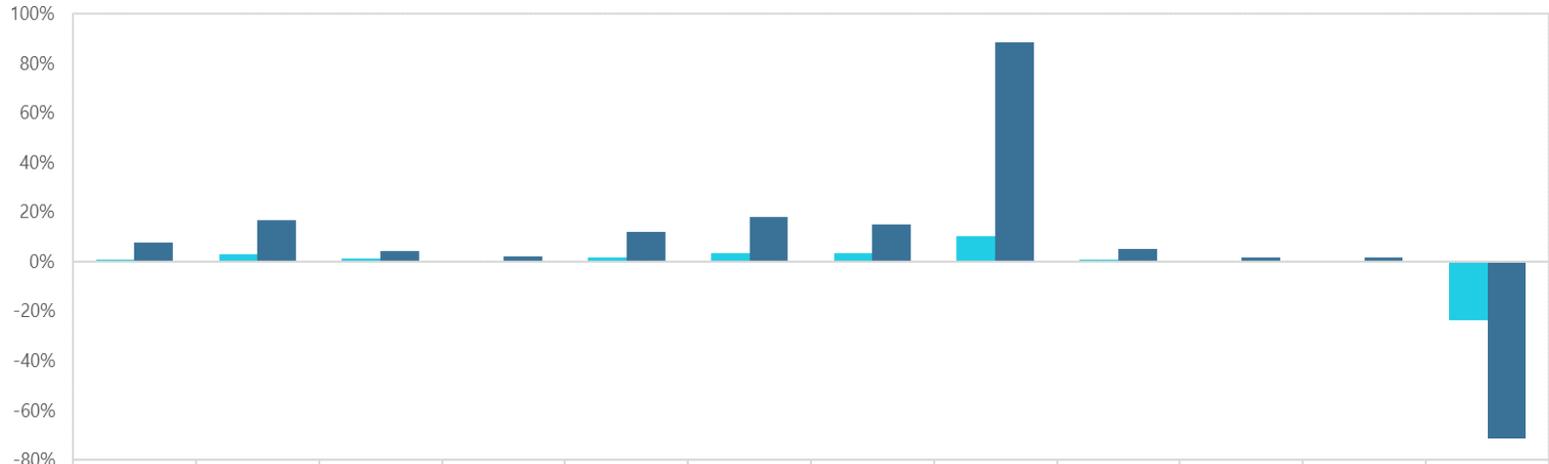


Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	20.26	2.24	100.00	0.02
North America	69.41%	70.03%	-0.62%	22.27	1.76	78.50	0.09
Asia Pacific	12.12%	14.50%	-2.39%	15.89	0.22	9.68	-0.05
Europe, Middle East, Africa	16.04%	14.61%	1.43%	21.27	0.22	9.85	0.01
Global	1.06%	0.00%	1.06%	21.29	-0.04	-1.57	-0.03
South America	1.10%	0.61%	0.49%	31.94	0.07	3.17	0.05
Rest Of World	0.28%	0.24%	0.03%	15.93	0.01	0.36	-0.05

Growth Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By GICS Sector



	Communicati on Services	Consumer Discretionary	Consumer Staples	Energy	Financials	Health Care	Industrials	Information Technology	Materials	Real Estate	Utilities	Others
Active Weight	0.88%	2.92%	1.25%	-0.12%	1.84%	3.53%	3.38%	10.20%	0.78%	-0.40%	-0.36%	-23.89%
Active Risk Contribution	7.63%	16.48%	4.16%	2.17%	12.05%	17.87%	14.81%	88.20%	4.94%	1.56%	1.57%	-71.44%

■ Active Weight ■ Active Risk Contribution

Growth – Global Equity Acadian Developed Markets

for the quarter ended June 30, 2022

Strategy

Seeks to capture mispriced opportunities through systematic stock, sector, and country valuation models that are customized to each market. The strategy may be suited to investors looking to gain exposure in non-U.S. developed markets and diversify portfolio through active quantitative investment approach.

Inception Date: April 2006

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	40,074.7	69,943.2
No. Of Issues	576.0	--
Dividend Yield	4.5	3.4
Return on Equity	25.6	18.0
Price to Sales	2.5	3.4
Price to Book	4.9	2.0
PE Ratio	9.6	14.5

Top Holdings (% of assets)

ROCHE HOLDING AG GENUSSCHEIN	3.3%
NOVO NORDISK A/S B	3.0%
WOLTERS KLUWER	1.8%
SOUTH32 LTD DI	1.7%
BHP GROUP LTD	1.6%

Top 5 Holdings

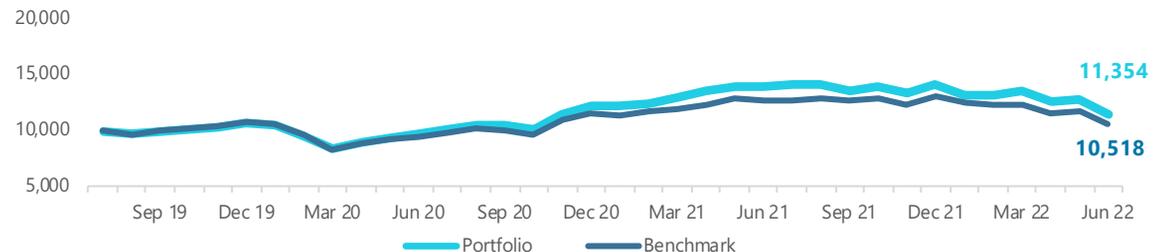
11.4%

Performance (net)¹

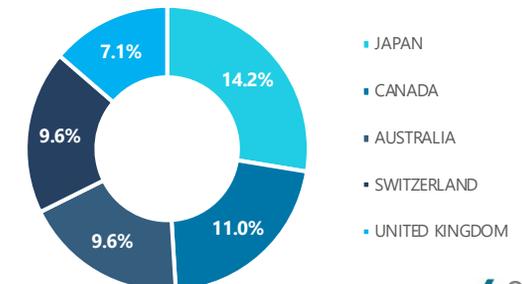
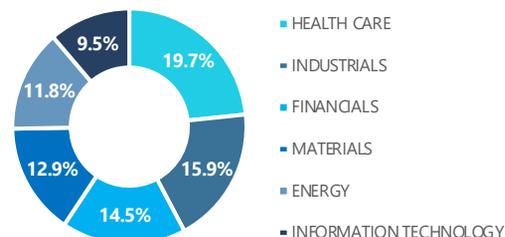
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Acadian Developed Markets	531.5	-15.9%	-17.9%	4.3%	4.5%
MSCI EAFE + Canada Net Index		-14.7%	-16.8%	1.7%	2.7%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Acadian Developed Markets	-15.9%	81	-17.6%	51	4.7%	48	4.9%	51
Median	-13.5%		-17.3%		4.3%		5.0%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

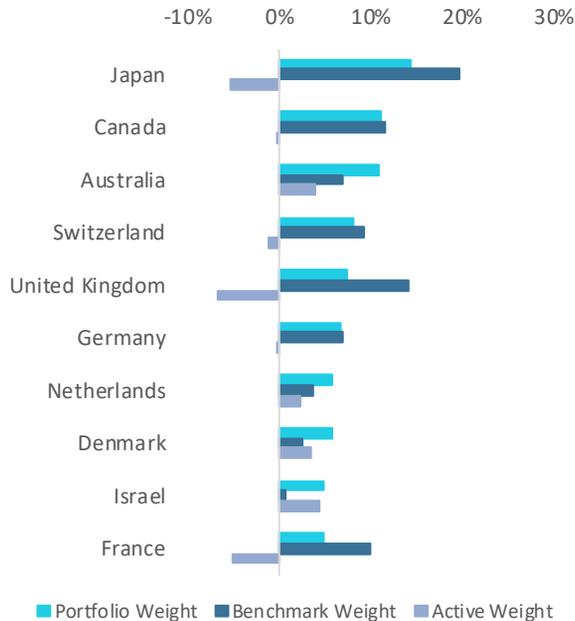
Acadian Developed Markets

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.99
Benchmark Risk	17.67
Active Risk	5.40
Portfolio Beta	1.09

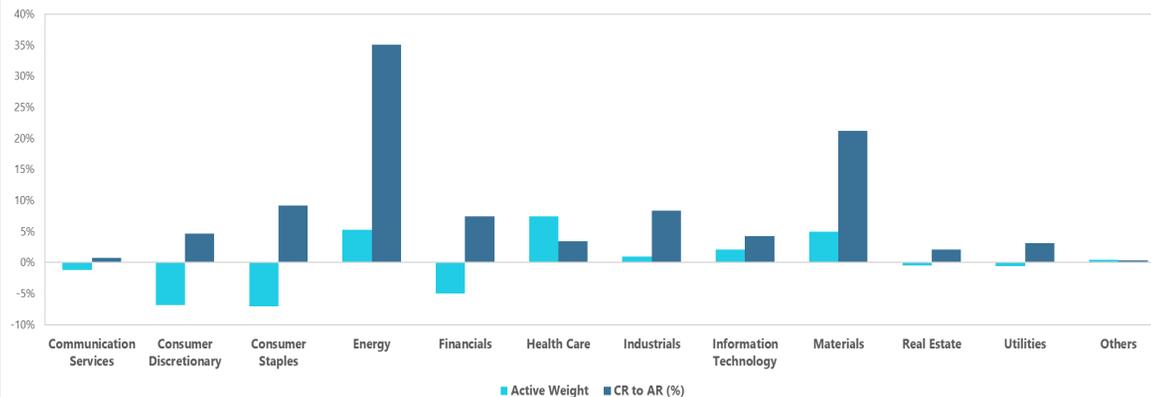
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
TOURMALINE OIL CORP	1.37%	0.11%	1.27%	47.10	5.53	0.289
SOUTH32 LIMITED	1.67%	0.08%	1.59%	41.47	5.27	0.233
MEG ENERGY CORP	0.72%	0.00%	0.72%	63.63	4.66	0.405
EQUINOR ASA	1.54%	0.22%	1.32%	39.92	4.13	0.223
BIRCHCLIFF ENERGY LTD	0.63%	0.00%	0.63%	63.59	3.52	0.358
WHITECAP RESOURCES INC	0.50%	0.00%	0.50%	59.34	3.00	0.381
ANGLO AMERICAN PLC	1.25%	0.29%	0.95%	44.85	2.64	0.203
BLUESCOPE STEEL LTD	1.01%	0.03%	0.97%	42.06	2.60	0.198
NESTLE SA	0.03%	2.13%	-2.10%	18.65	2.56	-0.012
AKER BP ASA	0.57%	0.07%	0.50%	53.01	2.41	0.313

Portfolio Risk by GICS Sector



Growth – Global Equity BTC Europe Alpha Tilts

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate risk-controlled and consistent active returns by using a unique blend of bottom-up stock selection insights and broader top-down thematic insights. The strategy may be suited to investors looking to capture active return opportunities in European region.

Inception Date: January 2007

Risk Statistics (since inception)

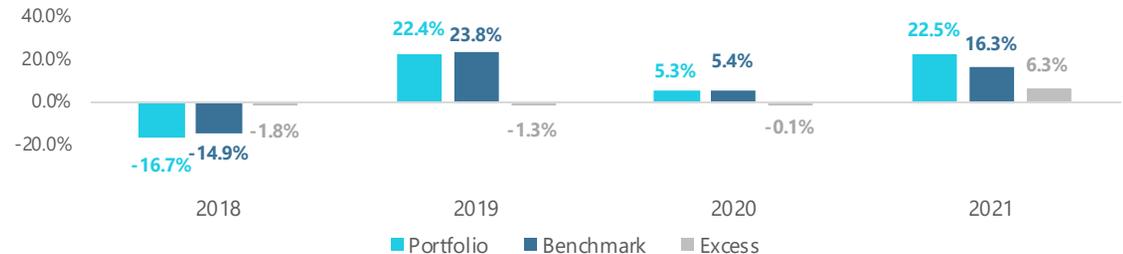
Standard Deviation	19.2%
Benchmark Standard Deviation	19.2%
Sharpe Ratio	0.20
Information Ratio	0.49
Beta	0.99
Tracking Error	1.9%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
BTC Euro Tilts	482.7	-13.7%	-14.9%	2.8%	2.9%
MSCI EUROPE		-14.5%	-17.6%	1.2%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Developed Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
BTC Euro Tilts	-13.6%	53	-14.5%	31	3.2%	28	3.3%	39
Median	-13.5%		-17.9%		1.8%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

BTC Europe Alpha Tilts

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.19
Benchmark Risk	19.65
Active Risk	1.48
Portfolio Beta	0.97

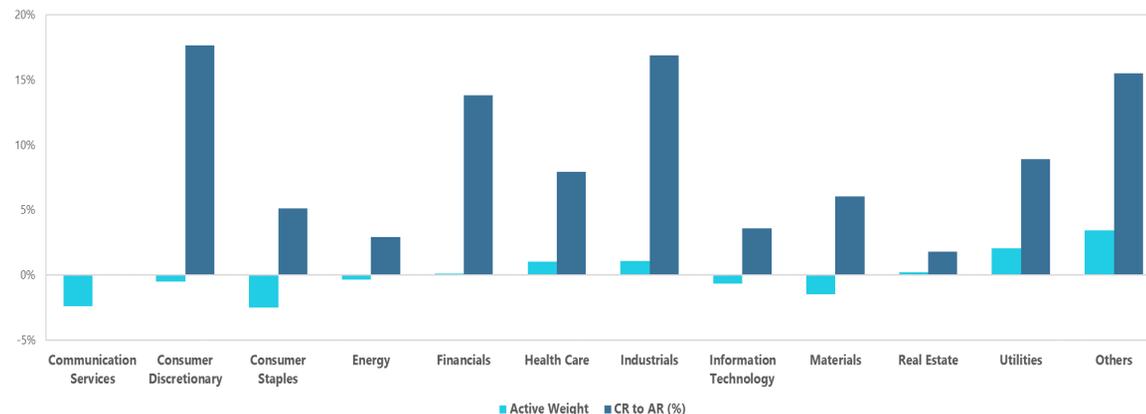
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
G L OTHER	3.21%	0.00%	3.21%	0.00	14.61	0.000
BRITISH AMERICAN TOBACCO PLC	2.49%	1.06%	1.42%	24.00	4.68	-0.019
HERMES INTERNATIONAL SCA	1.96%	0.40%	1.56%	32.14	4.16	-0.028
ENGIE	1.34%	0.24%	1.10%	34.79	3.91	-0.015
ACCIONA SA	0.96%	0.05%	0.91%	30.66	3.77	-0.006
PROSUS NV	0.00%	0.62%	-0.62%	43.41	3.74	-0.157
NOVO NORDISK A/S	2.94%	2.13%	0.81%	27.54	3.30	-0.007
WOLTERS KLUWER NV	1.32%	0.29%	1.03%	24.41	3.24	-0.021
TRYG A/S	1.04%	0.09%	0.95%	26.44	2.59	-0.027
HSBC HOLDINGS PLC	0.51%	1.51%	-1.00%	31.03	2.49	-0.104

Portfolio Risk by GICS Sector



Growth – Global Equity

Capital Group Developed Markets

for the quarter ended June 30, 2022

Strategy

Seeks to generate long-term capital appreciation through fundamental research and proprietary models for earnings estimates and valuations. The strategy may be suited to investors looking to gain exposures in non-U.S. developed markets with emphasis on bottom-up, fundamental investment analysis.

Inception Date: October 1987

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	102,050.9	69,943.2
No. Of Issues	166.0	--
Dividend Yield	2.5	3.4
Return on Equity	20.0	18.0
Price to Sales	5.5	3.4
Price to Book	6.2	2.0
PE Ratio	20.6	14.5

Top Holdings (% of assets)

ASML HOLDING NV	4.4%
NOVO NORDISK A/S B	3.5%
LVMH MOET HENNESSY LOUIS VUI	2.8%
EVOLUTION AB	2.8%
ASTRAZENECA PLC	2.4%
Top 5 Holdings	15.9%

1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Performance (net)¹

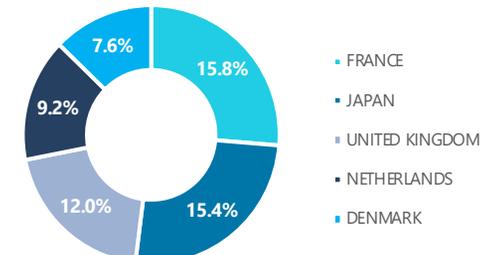
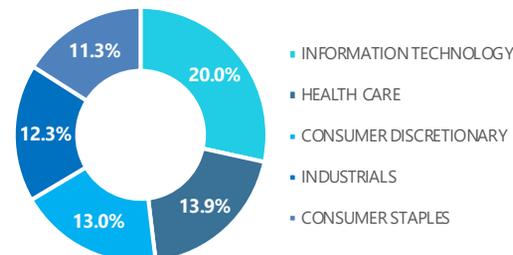
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Capital Group Developed Markets	343.0	-17.2%	-28.3%	1.5%	4.4%
EAFE Custom Benchmark		-14.7%	-16.8%	1.7%	2.7%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl/Global Equity Funds - Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Capital Group Developed Markets	-17.1%	89	-28.0%	92	1.8%	71	4.8%	52
Median	-13.5%		-17.3%		1.3%		5.0%	

Growth of \$10,000



Top Exposures (% of assets)²



Growth Risk Analysis – Global Equity Capital Group Developed Markets

for the quarter ended June 30, 2022

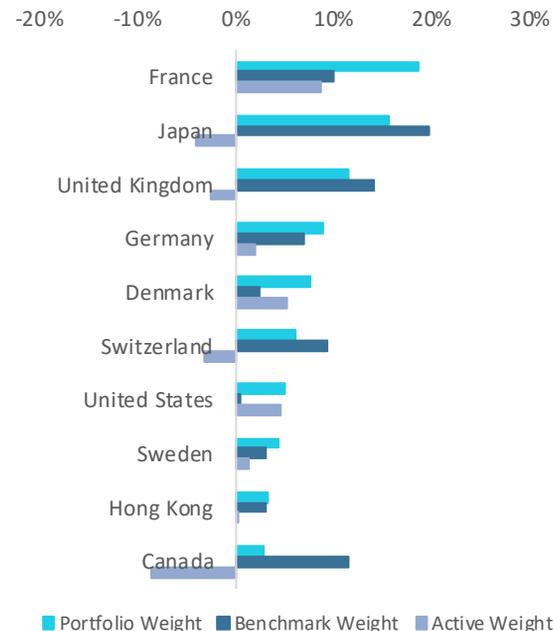


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	18.96
Benchmark Risk	17.67
Active Risk	4.73
Portfolio Beta	1.04

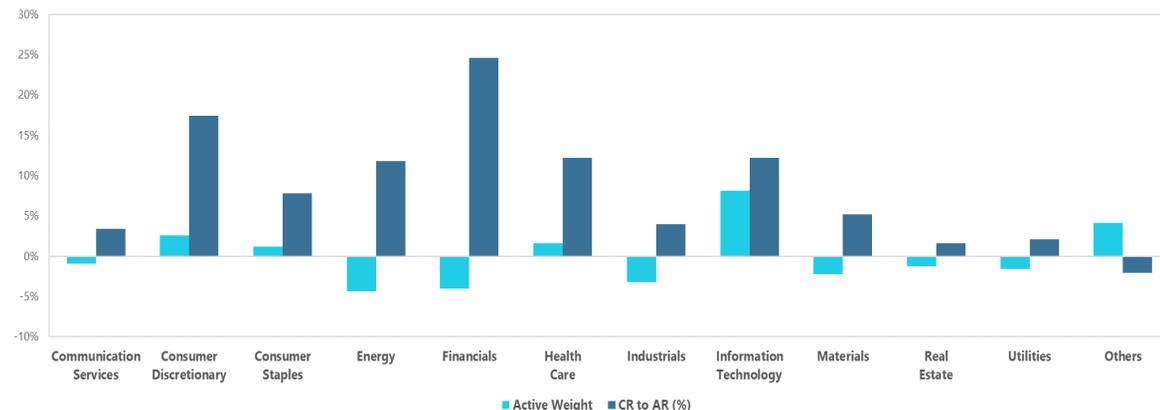
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
AURELIUS EQUITY OPPORTUNITIES SE & CO.	5.50%	0.00%	5.50%	41.86	14.35	0.150
EVOLUTION AB (PUBL)	2.77%	0.11%	2.67%	53.96	11.44	0.229
OCADO GROUP PLC	1.77%	0.04%	1.74%	46.86	5.49	0.176
GENMAB A/S	1.74%	0.14%	1.60%	33.86	3.87	0.141
SHELL PLC	0.00%	1.28%	-1.28%	34.00	2.96	-0.083
NOVO NORDISK A/S	3.47%	1.21%	2.25%	27.54	2.42	0.077
LVMH MOET HENNESSY LOUIS VUITTON SE	2.81%	1.10%	1.72%	29.20	2.38	0.092
KERING	1.58%	0.25%	1.33%	35.15	2.11	0.101
BEIGENE LTD	0.45%	0.00%	0.45%	53.30	1.85	0.219
L'OREAL SA	1.58%	0.54%	1.04%	24.32	1.79	0.081

Portfolio Risk by GICS Sector



Growth – Global Equity

Cevian Capital II

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate long-term returns by researching and investing in European companies that have profitable businesses and significant improvement potential. The strategy may be suited to investors looking to increase portfolio diversification through differentiated investment approach and take advantage of return opportunities in Europe.

Inception Date: October 2016

Risk Statistics (since inception)

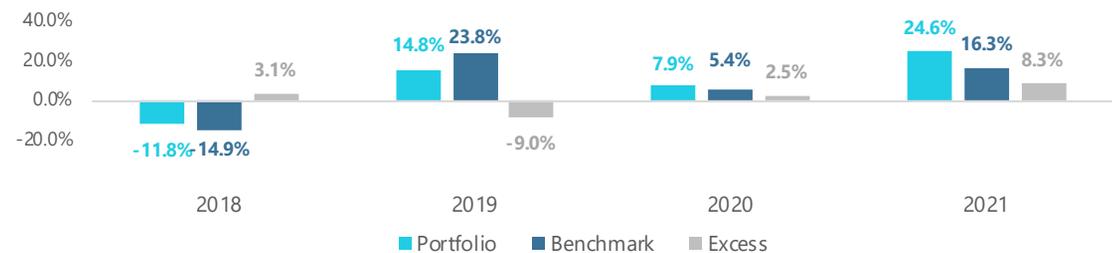
Standard Deviation	16.4%
Benchmark Standard Deviation	16.7%
Sharpe Ratio	0.40
Information Ratio	0.22
Beta	0.83
Tracking Error	9.3%

Performance (net)¹

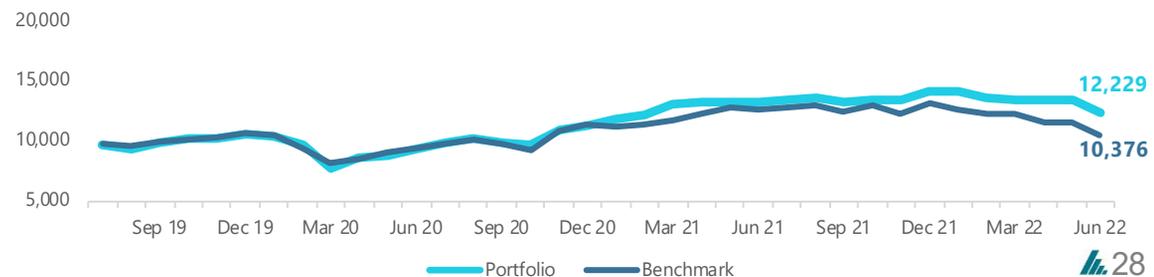
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Cevian Capital II - Activist	358.9	-8.6%	-7.7%	6.9%	4.2%
MSCI EUROPE		-14.5%	-17.6%	1.2%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Europe Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Cevian Capital II - Activist	-8.3%	18	-6.8%	7	8.1%	7	5.5%	16
Median	-13.5%		-17.9%		1.8%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

Cevian Capital II

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	21.77
Benchmark Risk	19.65
Active Risk	8.67
Portfolio Beta	1.02

Top Countries by Weight%

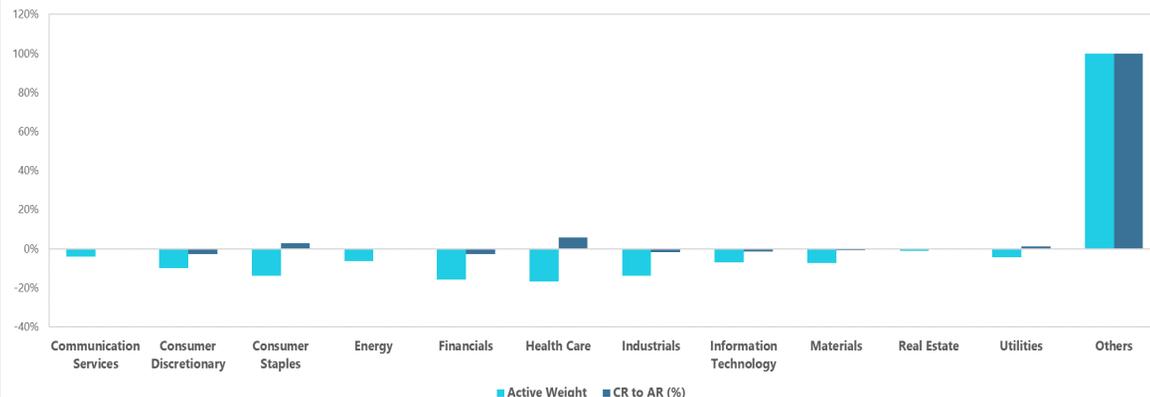


Note: Commingled fund account with no position-level transparency.

Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
CEVIAN CAPITAL II - ACTIVIST	100.00%	0.00%	100.00%	21.77	100.00	0.094
ASTRAZENECA PLC	0.00%	2.33%	-2.33%	27.03	1.48	-0.048
NESTLE SA	0.00%	3.75%	-3.75%	18.65	1.23	-0.021
ROCHE HOLDING AG	0.00%	2.67%	-2.67%	23.87	1.08	-0.028
NOVO NORDISK A/S	0.00%	2.13%	-2.13%	27.54	1.02	-0.034
NOVARTIS AG	0.00%	2.12%	-2.12%	19.80	0.84	-0.027
GSK PLC	0.00%	1.25%	-1.25%	22.38	0.59	-0.034
SANOFI SA	0.00%	1.31%	-1.31%	22.10	0.45	-0.023
UNILEVER PLC	0.00%	1.32%	-1.32%	22.99	0.44	-0.021
SHELL PLC	0.00%	2.26%	-2.26%	34.00	0.38	-0.007

Portfolio Risk by GICS Sector



Growth – Global Equity CornerCap US Small Cap

for the quarter ended June 30, 2022

Strategy

Seeks to exploit small cap market inefficiencies by using proprietary fundamental factors. The strategy may be suited to investors looking to increase U.S. small cap exposure and diversify portfolio through an active quantitative investment approach.

Inception Date: October 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	2,455.3	2,537.0
No. Of Issues	339.0	--
Dividend Yield	1.9	1.5
Return on Equity	12.6	10.9
Price to Sales	3.7	10.9
Price to Book	-0.7	3.1
PE Ratio	15.5	33.6

Top Holdings (% of assets)

PALOMAR HOLDINGS INC	0.5%
UNITED THERAPEUTICS CORP	0.5%
SP PLUS CORP	0.5%
SOLARIS OILFIELD INFRAST A	0.5%
DORMAN PRODUCTS INC	0.5%
Top 5 Holdings	2.5%

Performance (net)¹

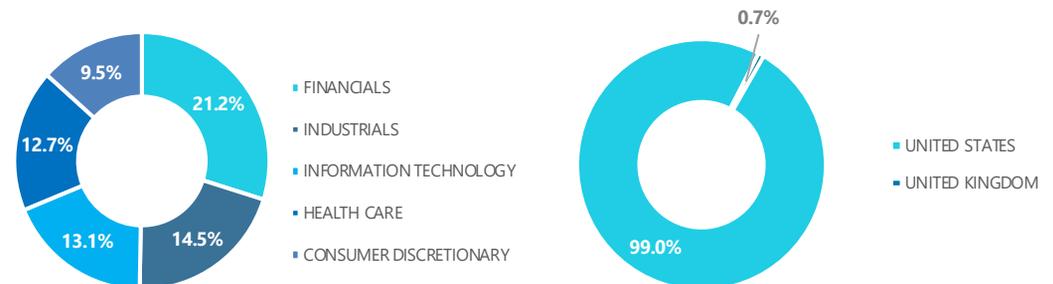
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Cornercap US Small Cap - EMP	76.6	-10.6%	-6.6%	9.9%	--
RUSSELL 2000		-17.2%	-25.2%	4.2%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Cornercap US Small Cap - EMP	-10.5%	5	-6.1%	7	10.5%	8	--	--
Median	-15.3%		-14.6%		6.9%		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

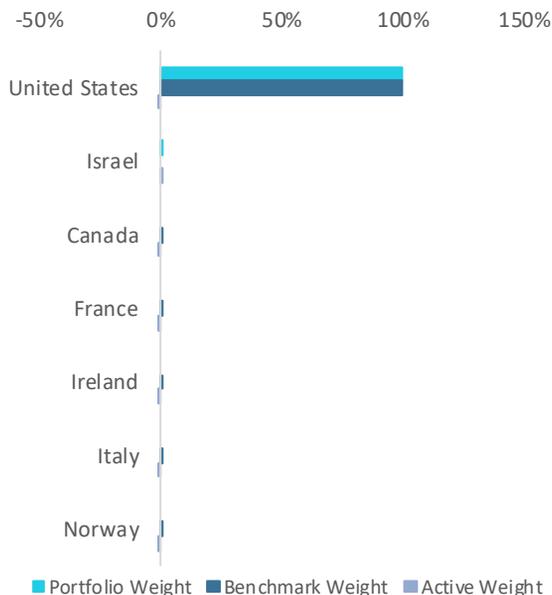
CornerCap US Small Cap

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	23.67
Benchmark Risk	25.20
Active Risk	5.04
Portfolio Beta	0.92

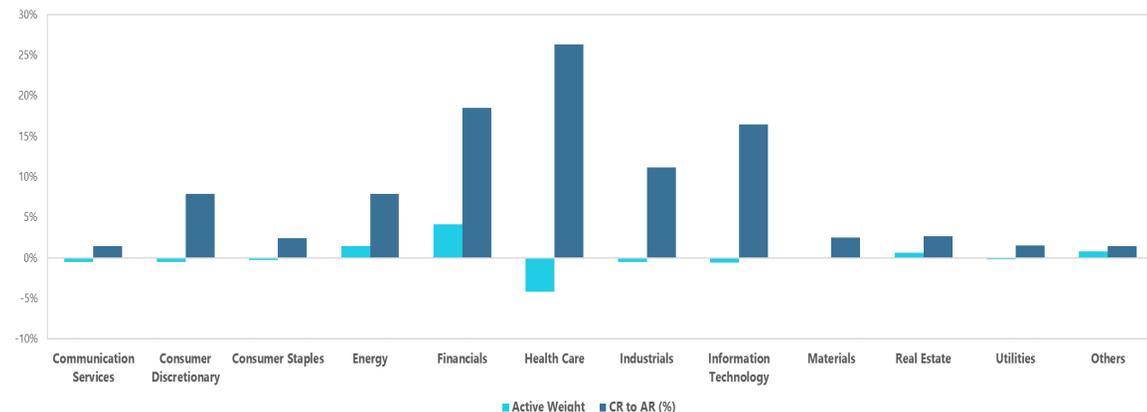
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
WHITING PETROLEUM CORPORATION	0.46%	0.00%	0.46%	61.00	1.60	0.075
APA CORP	0.45%	0.00%	0.45%	61.37	1.53	0.073
SSC GOVERNMENT MM GVMXX	0.75%	0.00%	0.75%	2.91	1.44	-0.003
BIOHAVEN PHARMACEUTICAL HLDG	0.00%	0.40%	-0.40%	56.54	1.34	-0.268
OVINTIV INC	0.48%	0.00%	0.48%	62.26	1.33	0.040
MIDLAND STS BANCORP INC	0.47%	0.02%	0.45%	31.54	1.25	0.041
SOLARIS OILFIELD INFRASTRUCTURE INC	0.50%	0.02%	0.48%	57.59	1.20	0.026
PROPETRO HOLDING CORP	0.41%	0.04%	0.37%	66.18	1.19	0.062
MERCANTILE BANK CORP	0.43%	0.02%	0.41%	32.42	1.17	0.045
CNB FINANCIAL CORP	0.39%	0.02%	0.38%	33.10	1.17	0.057

Portfolio Risk by GICS Sector



Growth – Global Equity Frontier US SMID Growth

for the quarter ended June 30, 2022

Strategy

Seeks to invest in high quality companies at attractive valuations and sustainable secular growth through fundamental analysis. The strategy may be suited to investors looking to increase U.S. mid and small cap exposures and generate returns through stock selection and low turnover.

Inception Date: June 2002

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	6,782.0	5,538.1
No. Of Issues	143.0	--
Dividend Yield	0.6	1.5
Return on Equity	13.1	14.4
Price to Sales	3.1	6.8
Price to Book	6.5	0.6
PE Ratio	26.0	23.7

Top Holdings (% of assets)

BUILDERS FIRSTSOURCE INC	2.0%
LPL FINANCIAL HOLDINGS INC	1.9%
KBR INC	1.9%
MACOM TECHNOLOGY SOLUTIONS H	1.7%
INSULET CORP	1.5%
Top 5 Holdings	9.0%

Performance (net)¹

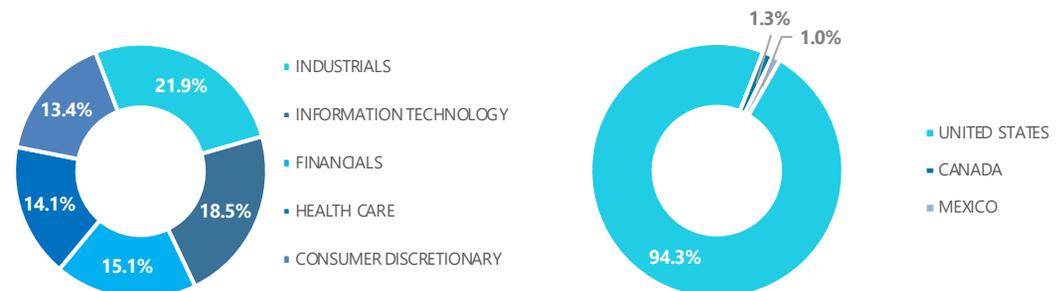
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Frontier US SMID Growth	241.7	-18.9%	-20.2%	5.6%	5.5%
RUSSELL 2500		-17.0%	-21.0%	5.9%	7.0%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Frontier US SMID Growth	-18.7%	83	-19.6%	74	6.4%	63	6.3%	68
Median	-15.3%		-14.6%		6.9%		7.1%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

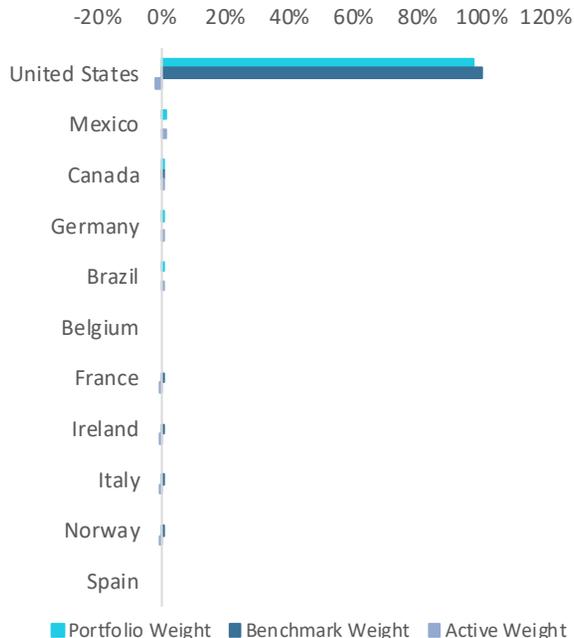
Frontier US SMID Growth

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	26.55
Benchmark Risk	24.21
Active Risk	4.22
Portfolio Beta	1.09

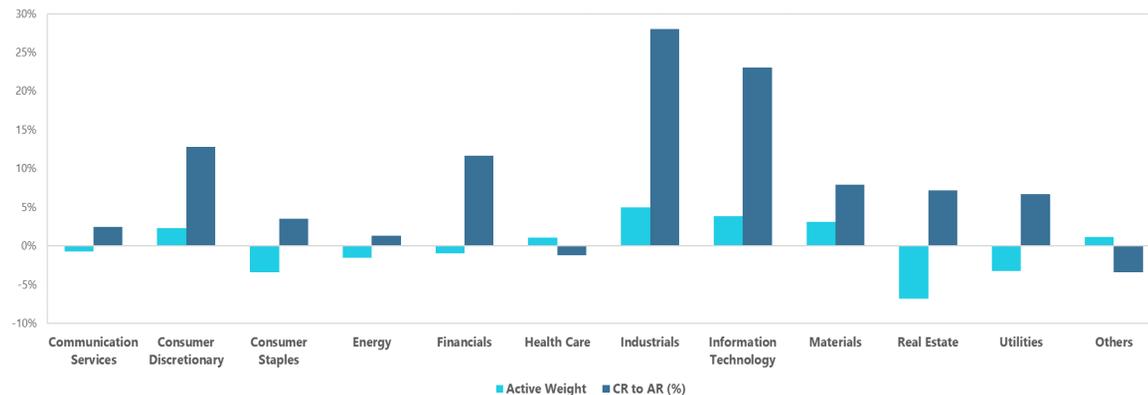
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ARRAY TECHNOLOGIES INC	1.11%	0.03%	1.08%	79.21	6.39	0.370
MRC GLOBAL INC	1.54%	0.02%	1.52%	56.66	4.85	0.254
WOLFSPEED INC	1.34%	0.14%	1.20%	54.46	4.74	0.287
BUILDERS FIRSTSOURCE INC	1.99%	0.18%	1.81%	43.02	3.93	0.211
MACOM TECHNOLOGY SOLUTIONS INC	1.71%	0.04%	1.66%	37.82	3.77	0.215
DANA INC	1.32%	0.03%	1.28%	48.24	3.74	0.243
CAESARS ENTERTAINMENT INC	1.12%	0.00%	1.12%	57.81	3.72	0.259
ALBEMARLE CORP	1.39%	0.00%	1.39%	46.01	3.24	0.218
CONTROLADORA VUELA	1.01%	0.00%	1.01%	59.71	3.02	0.246
STONERIDGE INC	0.95%	0.01%	0.94%	55.75	2.33	0.224

Portfolio Risk by GICS Sector



Growth – Global Equity Genesis Emerging Markets

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to generate long-term returns in emerging markets through independent bottom-up research and creating a diversified portfolio. The strategy may be suited to investors looking to take advantage of emerging market growth opportunities at attractive valuations.

Inception Date: September 2007

Risk Statistics (since inception)

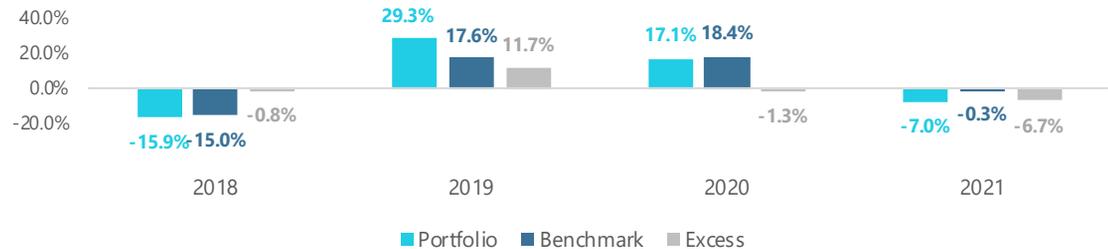
Standard Deviation	21.0%
Benchmark Standard Deviation	21.6%
Sharpe Ratio	0.22
Information Ratio	0.25
Beta	0.95
Tracking Error	4.3%

Performance (net)¹

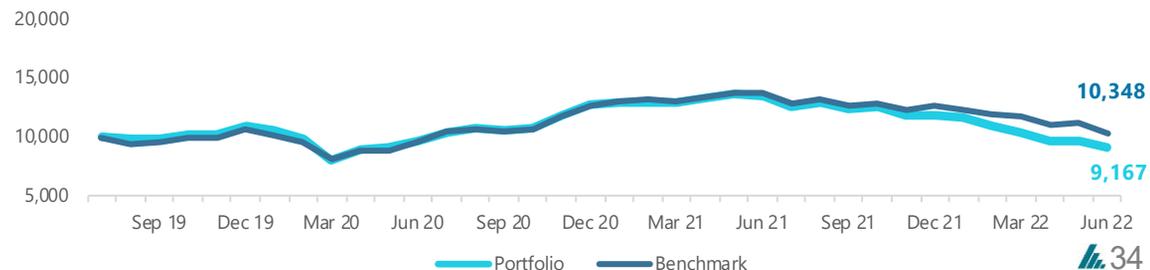
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Genesis Emerging Markets	490.9	-11.9%	-32.4%	-2.9%	1.0%
MSCI EM IMI Custom Benchmark		-12.1%	-24.8%	1.1%	2.3%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Emerging Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Genesis Emerging Markets	-11.7%	40	-31.9%	91	-2.1%	92	1.8%	82
Median	-12.1%		-24.9%		1.7%		2.7%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity Genesis Emerging Markets

for the quarter ended June 30, 2022

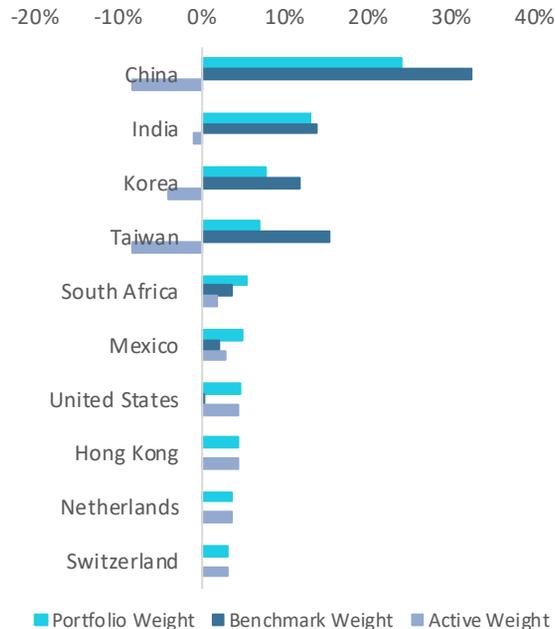


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	18.02
Benchmark Risk	18.76
Active Risk	5.09
Portfolio Beta	0.92

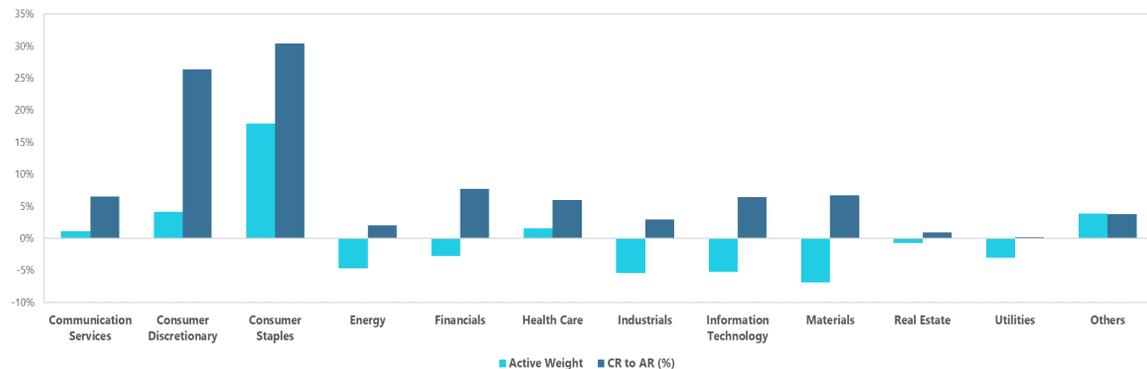
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
NEW ORIENTAL EDUCATION & TECH GRP	2.45%	0.00%	2.45%	73.67	9.65	0.149
COMPAGNIE FINANCIERE RICHEMONT SA	2.98%	0.00%	2.98%	36.69	5.47	0.041
HEINEKEN NV	1.92%	0.00%	1.92%	24.06	3.95	0.053
WULIANGYE YIBIN CO LTD	2.15%	0.00%	2.15%	37.25	3.87	0.040
HEINEKEN HOLDING NV	1.71%	0.00%	1.71%	23.94	3.46	0.051
YANDEX N.V.	0.68%	0.00%	0.68%	85.37	3.45	0.206
MAGNIT PAO	0.61%	0.00%	0.61%	75.32	2.94	0.193
MEDICLINIC INTERNATIONAL PLC	1.81%	0.00%	1.81%	32.18	2.84	0.028
GREEK ORGA OF FOOTBALL PROGNOSTICS	1.79%	0.04%	1.75%	33.63	2.67	0.025
US Dollar	2.49%	0.00%	2.49%	0.00	2.55	0.000

Portfolio Risk by GICS Sector



Growth – Global Equity

Global Alpha

for the quarter ended June 30, 2022

Strategy

Seeks to identify mispriced companies with high rates of growth, strong balance sheets, and high insider ownership using a bottom-up, research-based approach coupled with investment themes. The strategy may be suited to investors looking to increase exposure to international small cap stocks.

Inception Date: November 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	2,204.1	2,395.8
No. Of Issues	66.0	--
Dividend Yield	2.8	3.8
Return on Equity	9.8	13.0
Price to Sales	13.0	7.8
Price to Book	2.3	2.3
PE Ratio	18.0	14.6

Top Holdings (% of assets)

BIFFA PLC	4.0%
ORMAT TECHNOLOGIES INC	3.4%
L OCCITANE INTERNATIONAL SA	3.2%
SEGA SAMMY HOLDINGS INC	3.1%
INTERNET INITIATIVE JAPAN	3.1%
Top 5 Holdings	16.7%

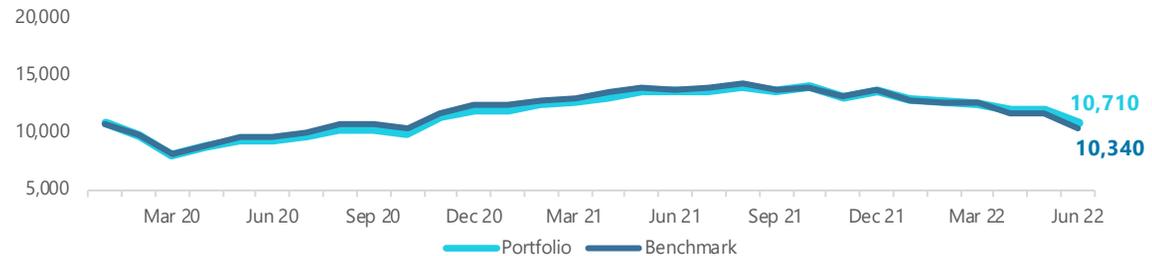
1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Performance (net)¹

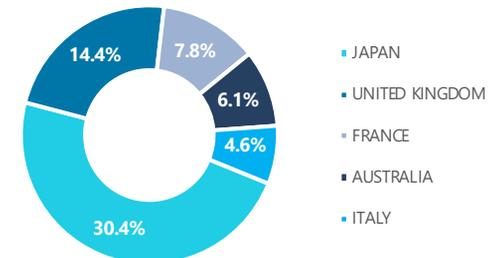
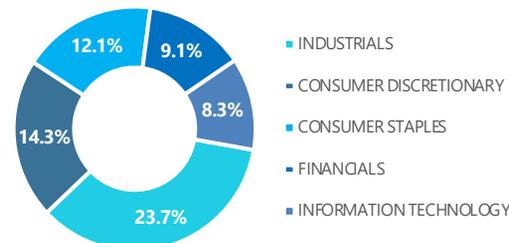
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Global Alpha Intl Small Cap - EMP	162.1	-14.1%	-21.1%	2.3%	--
MSCI EAFE SMALL CAP NET		-17.7%	-24.0%	1.1%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: International Equity Funds Core	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Global Alpha Intl Small Cap - EMP	-13.9%	60	-20.6%	64	3.1%	58	--	--
Median	-13.5%		-17.3%		4.3%		--	

Growth of \$10,000



Top Exposures (% of assets)²



Growth Risk Analysis – Global Equity

Global Alpha

for the quarter ended June 30, 2022

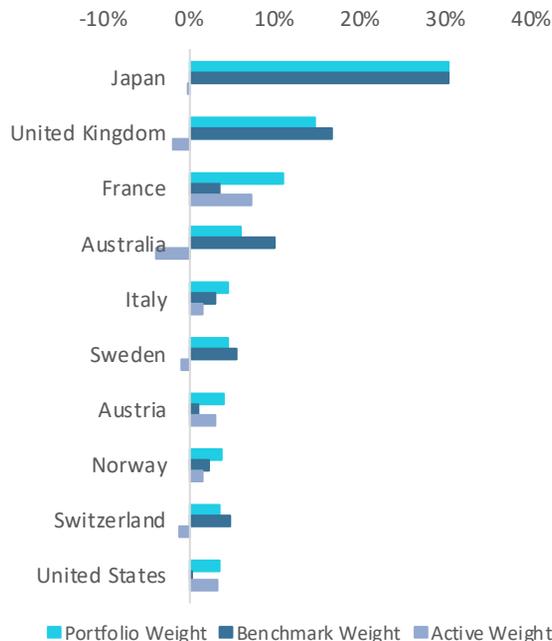


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	19.47
Benchmark Risk	19.67
Active Risk	4.35
Portfolio Beta	0.97

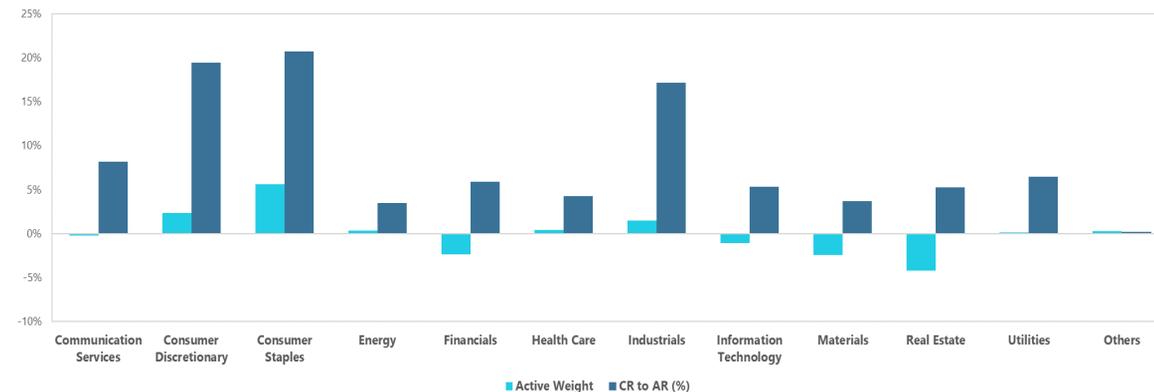
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
L'OCCITANE INTERNATIONAL SA	3.18%	0.00%	3.18%	38.23	8.20	0.082
NORWAY ROYAL SALMON ASA	3.01%	0.01%	3.00%	47.14	8.05	0.086
INTERNET INITIATIVE JAPAN INC	3.09%	0.08%	3.02%	37.66	7.46	0.077
ORMAT TECHNOLOGIES INC	3.36%	0.00%	3.36%	38.03	6.67	0.056
BIFFA PLC	3.97%	0.06%	3.91%	38.48	6.25	0.039
ASICS CORP	2.59%	0.12%	2.46%	45.95	5.81	0.072
SEGA SAMMY HOLDINGS INC	3.12%	0.12%	3.01%	30.51	5.01	0.042
AUTOGRILL SPA	2.50%	0.05%	2.45%	47.22	4.69	0.053
SOPRA STERIA GROUP SA	3.08%	0.10%	2.99%	30.55	3.30	0.017
AIN HOLDINGS	1.81%	0.06%	1.76%	32.78	2.92	0.042

Portfolio Risk by GICS Sector



Growth – Global Equity

JANA JSI Fund V

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to invest in undervalued public companies located primarily in North America, with a potential catalyst for value creation that management has not considered or is not executing. The strategy may be suited to investors looking to increase portfolio diversification through activist approach and focus on absolute return.

Inception Date: October 2016

Risk Statistics (since inception)

Standard Deviation	24.0%
Benchmark Standard Deviation	15.8%
Sharpe Ratio	0.73
Information Ratio	0.23
Beta	0.80
Tracking Error	20.7%

Performance (net)¹

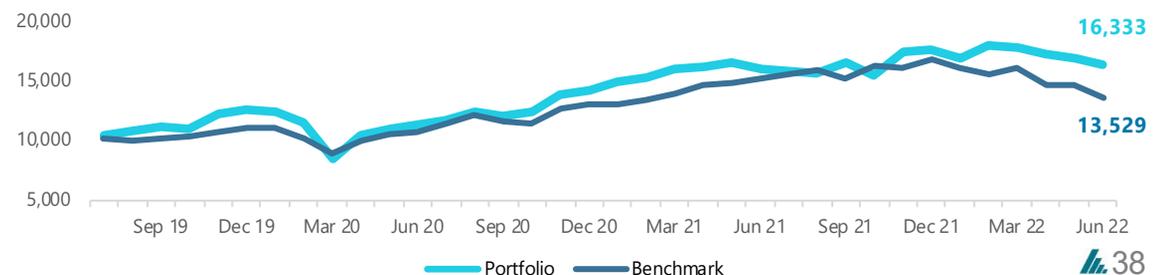
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Jana JSI Fund V - Activist	118.4	-8.0%	2.3%	17.8%	10.4%
S&P 500 INDEX		-16.1%	-10.6%	10.6%	11.3%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Large Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Jana JSI Fund V - Activist	-7.7%	3	6.1%	2	22.6%	2	14.5%	3
Median	-16.1%		-11.2%		9.5%		10.6%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

JANA JSI Fund V

for the quarter ended June 30, 2022

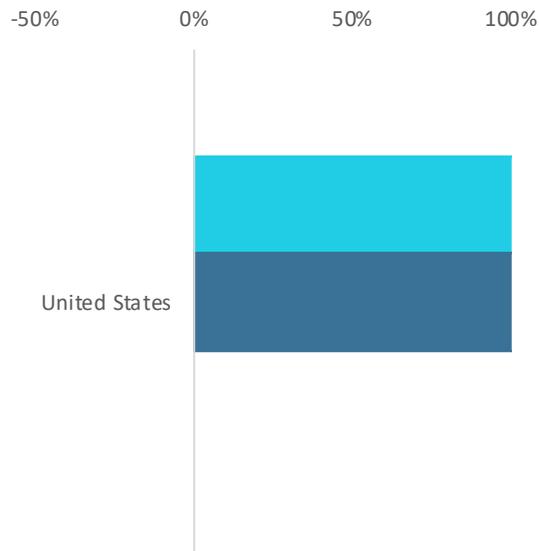


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	19.52
Benchmark Risk	17.77
Active Risk	12.95
Portfolio Beta	0.84

Top Countries by Weight%

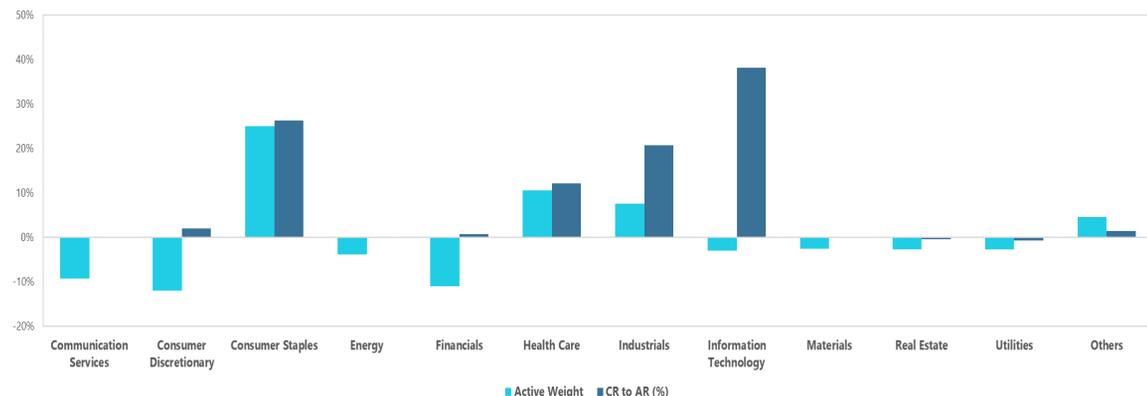


■ Portfolio Weight ■ Benchmark Weight ■ Active Weight

Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ZENDESK INC	20.95%	0.00%	20.95%	43.21	33.12	0.165
MERCURY SYSTEMS INC	15.34%	0.00%	15.34%	42.28	21.00	0.138
TREEHOUSE FOODS INC	12.50%	0.00%	12.50%	35.18	14.25	0.108
CONAGRA BRANDS	18.59%	0.04%	18.55%	21.11	13.36	0.054
ENCOMPASS HEALTH CORPORATION	14.21%	0.00%	14.21%	28.34	9.73	0.049
LABORATORY CORPORATION OF AMERICA	9.91%	0.06%	9.85%	25.48	5.38	0.031
APPLE INC	0.00%	7.07%	-7.07%	28.79	2.16	-0.079
NEW RELIC INC	3.97%	0.00%	3.97%	45.41	1.72	0.016
TESLA INC	0.00%	2.36%	-2.36%	52.63	1.24	-0.107
NVIDIA CORP	0.00%	1.78%	-1.78%	42.59	0.79	-0.097

Portfolio Risk by GICS Sector



■ Active Weight ■ CR to AR (%)

Note: Data is as of March 31, 2022 (one quarter lagged).

Growth – Global Equity

JPMorgan Strategic Beta Non-US

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to capture incremental alpha through investing in equity factors that are rule-based, transparent, and academically proven. This strategy may be suited to investors looking to gain equity factor exposures in non-U.S. markets at lower volatility and cost than active strategies.

Inception Date: August 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	68,387.5	67,474.5
No. Of Issues	1,644.0	--
Dividend Yield	3.9	3.4
Return on Equity	19.3	17.3
Price to Sales	3.6	4.4
Price to Book	2.2	2.6
PE Ratio	11.6	13.7

Top Holdings (% of assets)

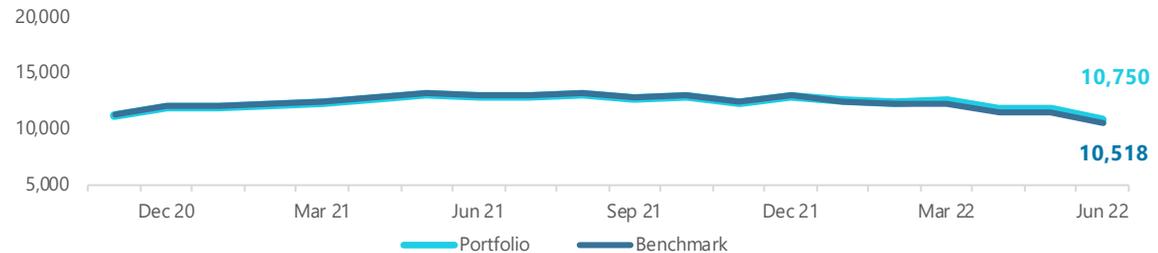
ISHARES MSCI INDIA ETF	3.8%
TAIWAN SEMICONDUCTOR MANUFAC	1.5%
ISHARES MSCI SAUDI ARABIA ETF	1.3%
NESTLE SA REG	1.3%
TENCENT HOLDINGS LTD	1.1%
Top 5 Holdings	9.0%

Performance (net)¹

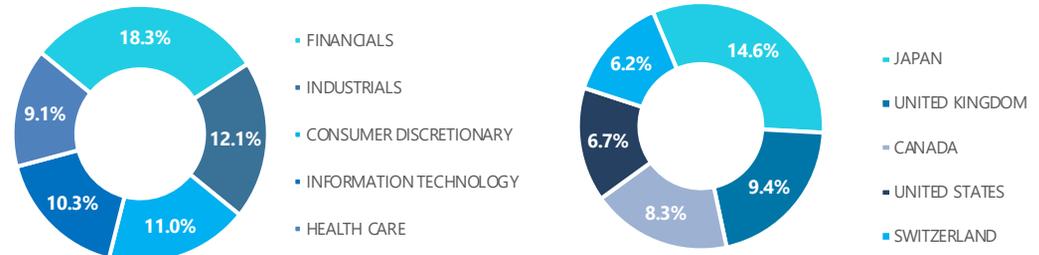
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
JPMAM Strategic Beta Non-US	532.5	-13.8%	-17.3%	--	--
MSCI ACWI ex USA IMI Net		-14.3%	-19.9%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: International Equity	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
JPMAM Strategic Beta Non-US	-13.8%	61	-17.3%	31	--	--	--	--
Median	-13.5%		-19.5%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

JPMorgan Strategic Beta Non-US

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	17.34
Benchmark Risk	17.51
Active Risk	1.07
Portfolio Beta	0.99

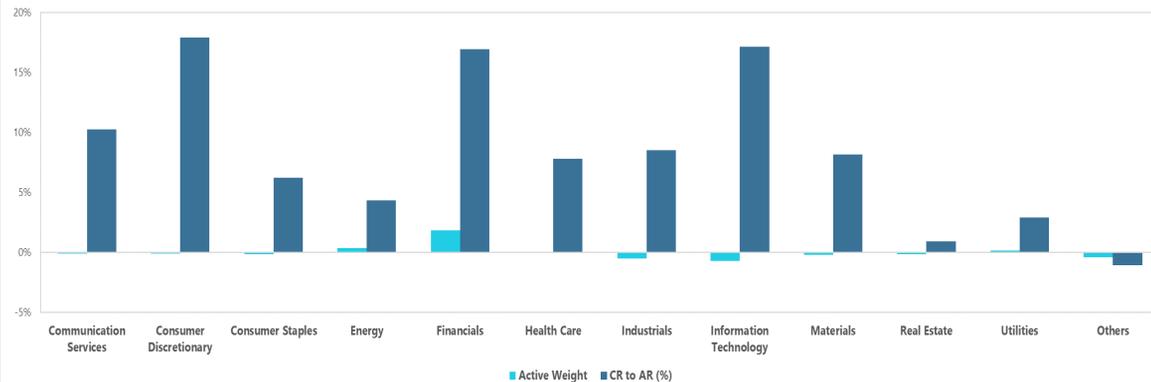
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
ALIBABA GROUP HOLDING LTD	0.00%	0.85%	-0.85%	50.36	17.65	-0.255
AURELIUS EQUITY OPPORTUNITIES SE & CO.	0.78%	0.00%	0.78%	41.86	8.01	0.077
ASML HOLDING NV	0.00%	0.76%	-0.76%	35.67	6.38	-0.123
JD.COM INC	0.04%	0.25%	-0.22%	51.78	4.58	-0.260
BAIDU INC	0.00%	0.17%	-0.17%	48.90	3.31	-0.246
NETEASE INC	0.00%	0.15%	-0.15%	40.67	1.83	-0.164
VALE SA COMMON STOC	0.25%	0.00%	0.25%	49.70	1.78	0.043
NIO INC	0.05%	0.11%	-0.06%	64.68	1.70	-0.320
XPENG INC	0.00%	0.05%	-0.05%	68.36	1.41	-0.320
KUAISHOU TECHNOLOGY	0.02%	0.08%	-0.05%	60.72	1.39	-0.310

Portfolio Risk by GICS Sector



Growth – Global Equity

JPMorgan Strategic Beta US

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to capture incremental alpha through investing in equity factors that are rule-based, transparent, and academically proven. This strategy may be suited to investors looking to gain equity factor exposures in the U.S. at lower volatility and cost than active strategies.

Inception Date: July 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	413,780.0	483,340.6
No. Of Issues	954.0	--
Dividend Yield	1.4	1.3
Return on Equity	30.4	31.3
Price to Sales	4.6	4.9
Price to Book	7.0	7.3
PE Ratio	17.7	19.0

Top Holdings (% of assets)

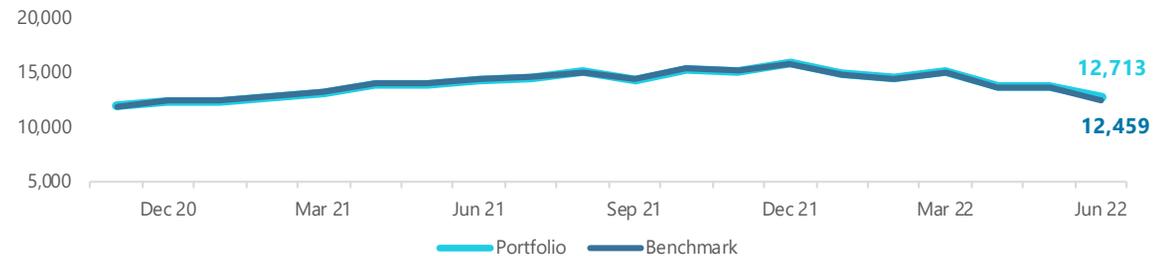
APPLE INC	5.9%
MICROSOFT CORP	4.9%
AMAZON.COM INC	2.5%
ALPHABET INC CL A	1.7%
ALPHABET INC CL C	1.6%
Top 5 Holdings	16.7%

Performance (net)¹

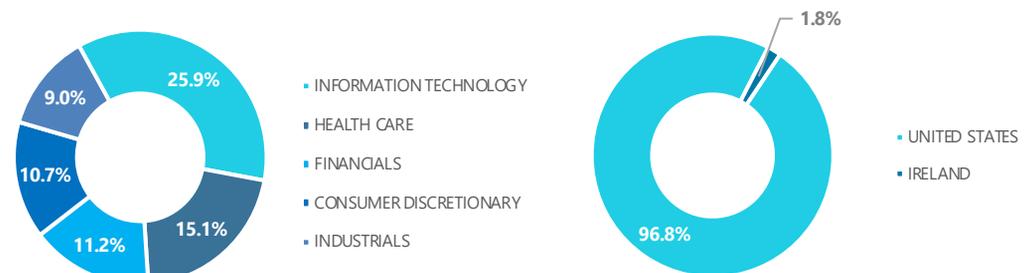
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
JPMAM Strategic Beta US	3,900.9	-16.0%	-11.2%	--	--
MSCI USA IMI Gross		-16.8%	-13.7%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: U.S. Equities Total Large Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
JPMAM Strategic Beta US	-16.0%	47	-11.2%	49	--	--	--	--
Median	-16.1%		-11.2%		--		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

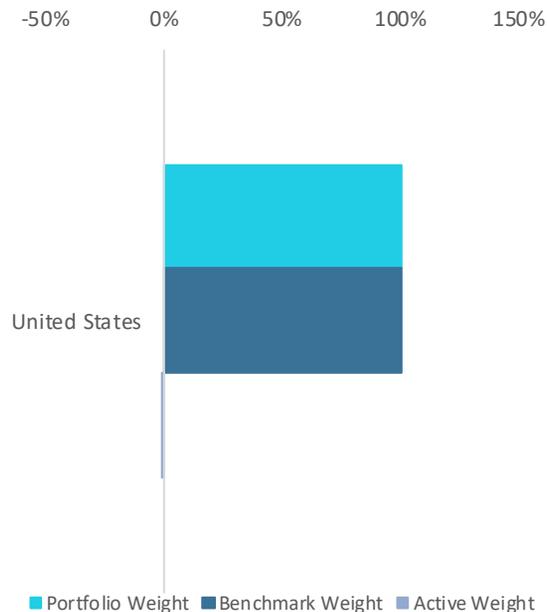
JPMorgan Strategic Beta US

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	19.33
Benchmark Risk	19.78
Active Risk	0.88
Portfolio Beta	0.98

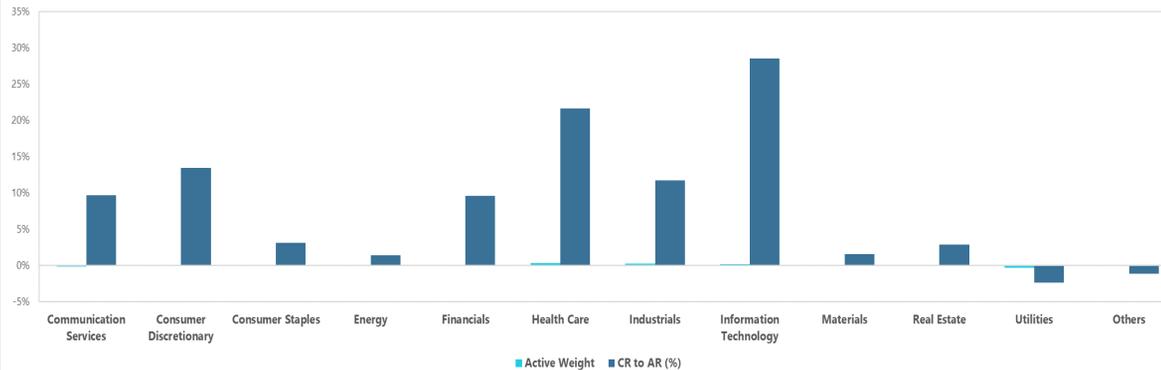
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
JPMORGAN CHASE & CO	0.00%	0.88%	-0.88%	28.19	4.48	-0.149
SSC GOVERNMENT MM GVMXX	0.13%	0.00%	0.13%	2.91	1.55	0.003
MONGODB INC	0.01%	0.05%	-0.04%	59.64	1.27	-0.394
OKTA INC	0.00%	0.04%	-0.04%	59.15	1.24	-0.412
PALANTIR TECHNOLOGIES INC	0.00%	0.04%	-0.04%	61.05	1.20	-0.374
TWILIO INC	0.01%	0.04%	-0.03%	56.58	1.15	-0.419
CROWDSTRIKE HOLDINGS INC	0.04%	0.09%	-0.04%	52.58	1.09	-0.319
BLOCK INC	0.05%	0.08%	-0.03%	56.66	1.06	-0.389
ROBLOX CORP	0.00%	0.03%	-0.03%	65.43	1.03	-0.401
ZOOM VIDEO COMMUNICATIONS	0.02%	0.06%	-0.04%	51.77	1.03	-0.326

Portfolio Risk by GICS Sector



Growth – Global Equity Lazard Emerging Markets

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide long-term capital appreciation by investing in companies trading at a discount to their estimated net asset value, sum of the parts valuation, and/or underlying investments/businesses. The strategy may be suited to investors looking to capture growth opportunities in emerging markets and increase portfolio diversification.

Inception Date: February 2013

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	34,346.6	97,423.5
No. Of Issues	52.0	--
Dividend Yield	5.0	3.3
Return on Equity	19.8	17.6
Price to Sales	9.4	4.8
Price to Book	2.4	4.2
PE Ratio	8.8	11.8

Top Holdings (% of assets)

PROSUS NV	9.6%
FIDELITY CHINA SPECIAL SITUATI	6.7%
CITIC SECURITIES CO LTD H	6.5%
JPMORGAN EMERGING MARKETS INVE	6.3%
TEMPLETON EMERGING MARKETS INV	5.6%
Top 5 Holdings	34.7%

Performance (net)¹

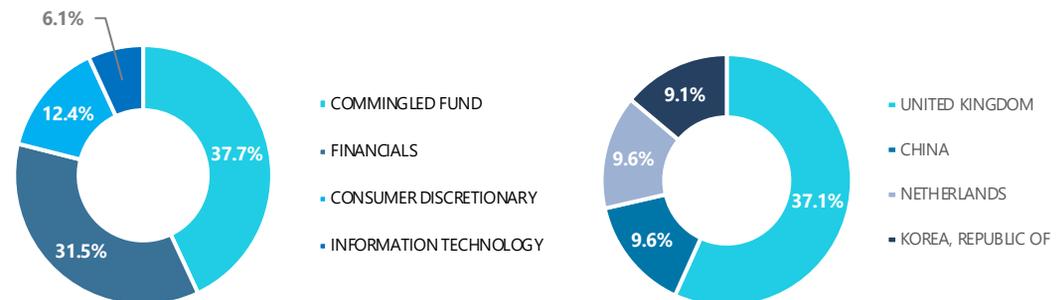
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Lazard Emerging Markets	374.3	-9.3%	-26.9%	2.2%	3.6%
MSCI EMERGING MARKETS		-11.4%	-25.3%	0.6%	2.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Emerging Mkt Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Lazard Emerging Markets	-9.2%	13	-26.5%	65	2.9%	37	4.3%	28
Median	-12.1%		-24.9%		1.7%		2.7%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

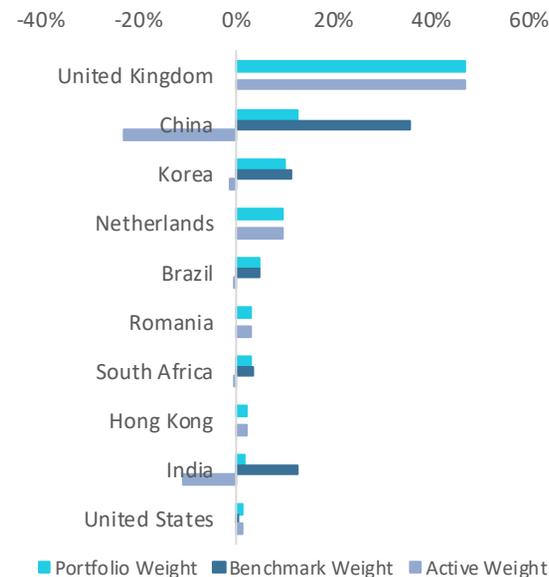
Lazard Emerging Markets

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	20.57
Benchmark Risk	18.74
Active Risk	11.08
Portfolio Beta	0.93

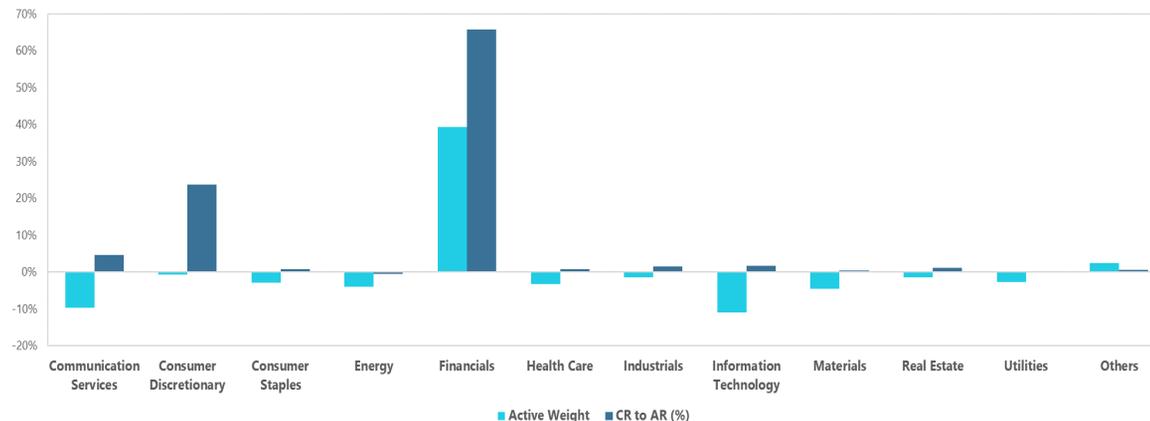
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
PROSUS NV	9.62%	0.00%	9.62%	43.41	15.26	0.153
FIDELITY CHINA SPECIAL SITUATIONS PLC	6.59%	0.00%	6.59%	40.01	11.25	0.166
JPMORGAN EMERGING MK	6.36%	0.00%	6.36%	30.56	9.42	0.141
TEMPLETON EMERG MARKETS INV TRUST	5.50%	0.00%	5.50%	30.71	7.08	0.120
VINACAPITAL VIETNAM OPPORTUNITY FD	3.97%	0.00%	3.97%	28.70	5.12	0.120
TENCENT HOLDINGS LTD	0.26%	4.33%	-4.06%	38.50	3.90	-0.129
ABRDN CHINA INVESTMENT COMPANY LTD	2.35%	0.00%	2.35%	35.30	3.70	0.152
SCHRODER ASIA PAC	2.81%	0.00%	2.81%	28.89	3.67	0.122
ASIA DRAGON TRUST PLC	2.59%	0.00%	2.59%	31.83	3.65	0.133
UTILICO EMERGING MARKETS TRUST PLC	2.34%	0.00%	2.34%	30.11	3.24	0.131

Portfolio Risk by GICS Sector



Note: Weights represent country of domicile of closed-end fund and not country of underlying fund holdings.

Growth – Global Equity

SSGA MSCI ACWI IMI

for the quarter ended June 30, 2022

Strategy

Seeks to provide global equity market exposure and passive index returns. This strategy may be suited to investors looking to gain passive, global equity exposures with low tracking error.

Inception Date: January 2020

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	275,242.0	274,587.5
No. Of Issues	6,523.0	--
Dividend Yield	2.2	2.1
Return on Equity	24.3	24.1
Price to Sales	5.0	4.9
Price to Book	5.3	5.3
PE Ratio	16.6	16.9

Top Holdings (% of assets)

APPLE INC	3.5%
MICROSOFT CORP	2.8%
AMAZON.COM INC	1.5%
ALPHABET INC CL A	1.0%
ALPHABET INC CL C	1.0%
Top 5 Holdings	9.8%

Performance (net)¹

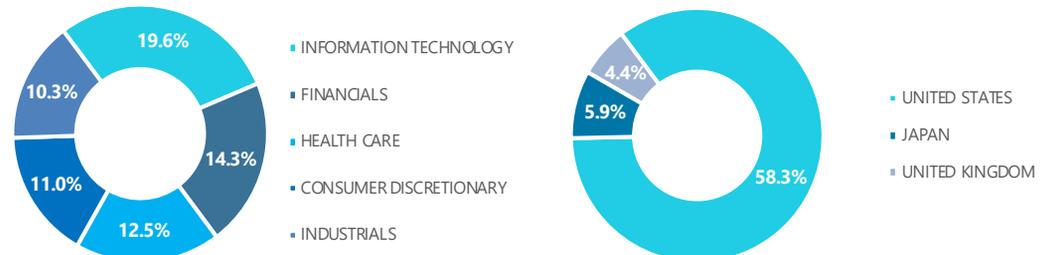
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
SSGA MSCI ACWI IMI	13,119.5	-15.5%	-15.6%	--	--
MSCI ACWI IMI Net		-15.8%	-16.5%	--	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Global Equity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
SSGA MSCI ACWI IMI	-15.5%	76	-15.6%	55	--	--	--	--
Median	-13.4%		-15.0%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Growth Risk Analysis – Global Equity

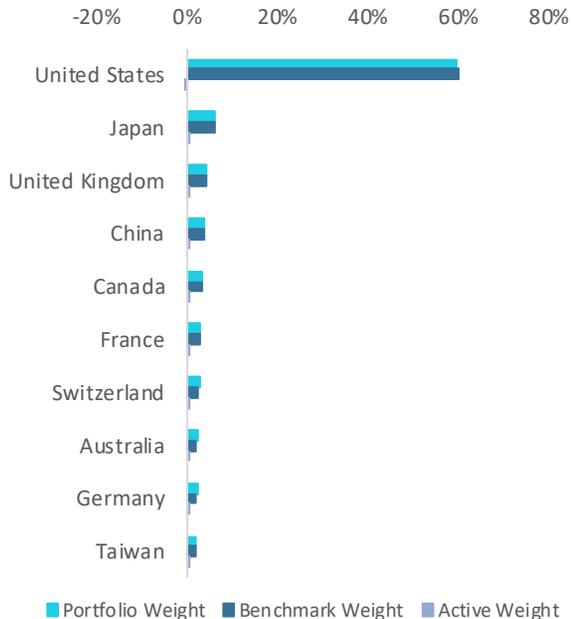
SSGA MSCI ACWI IMI

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	18.22
Benchmark Risk	18.25
Active Risk	0.24
Portfolio Beta	1.00

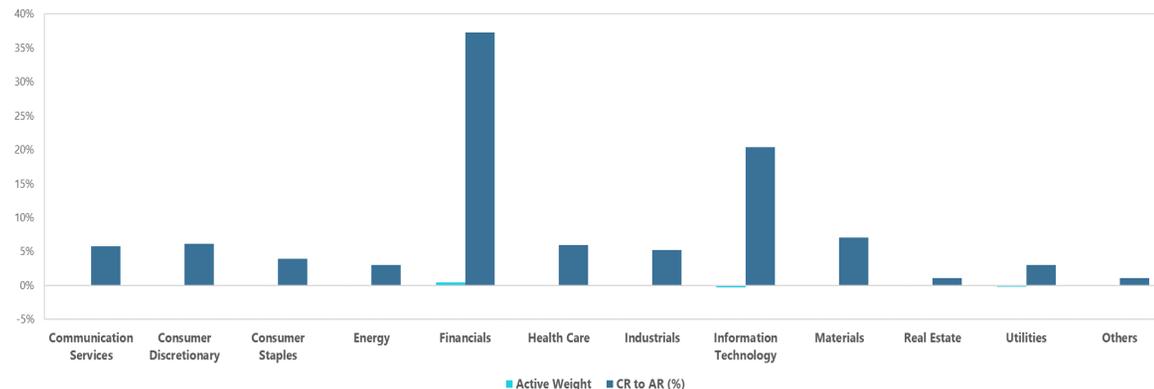
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
AURELIUS EQUITY OPPORTUNITIES SE & CO.	0.30%	0.00%	0.30%	41.86	20.48	0.138
ASML HOLDING NV	0.01%	0.31%	-0.30%	35.67	7.77	-0.086
SSC GOVERNMENT MM GVMXX	0.61%	0.00%	0.61%	2.91	6.45	0.001
EURO CURRENCY	0.14%	0.00%	0.14%	6.90	2.00	0.011
RELIANCE INDUSTRIES LTD	0.00%	0.16%	-0.16%	33.32	1.89	-0.053
AL RAJHI BANK	0.00%	0.07%	-0.07%	28.77	1.58	-0.080
MITSUBISHI UFJ FINANCIAL GRO	0.10%	0.00%	0.10%	22.45	1.32	0.007
SAUDI NATIONAL BANK	0.00%	0.06%	-0.06%	28.05	1.23	-0.073
POUND STERLING	0.09%	0.00%	0.09%	8.12	1.22	0.008
VALE SA COMMON STOC	0.08%	0.00%	0.08%	49.70	1.20	0.010

Portfolio Risk by GICS Sector



Growth – Global Equity Symphony Financial

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to invest in profitable Japanese companies where the share prices do not reflect the true value of the underlying business. The strategy may be suited to investors looking to capture return opportunities in Japan.

Inception Date: November 2016

Risk Statistics (since inception)

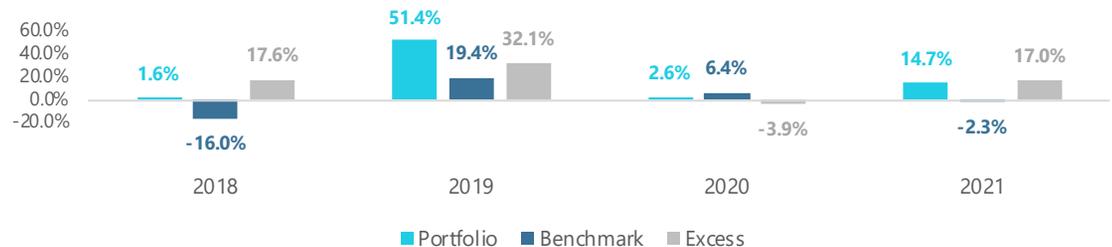
Standard Deviation	22.5%
Benchmark Standard Deviation	13.7%
Sharpe Ratio	0.52
Information Ratio	0.49
Beta	0.91
Tracking Error	18.6%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Symphony Financial - Activist	203.5	-14.3%	-10.4%	5.0%	9.2%
MSCI Japan Small Cap		-11.4%	-21.5%	-1.3%	-0.2%
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: Intl Equity Developed Mkt Funds (Active)	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Symphony Financial - Activist	-12.7%	45	-6.7%	8	8.6%	8	12.1%	1
Median	-13.3%		-17.9%		1.8%		2.6%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Growth Risk Analysis – Global Equity

Symphony Financial

for the quarter ended June 30, 2022

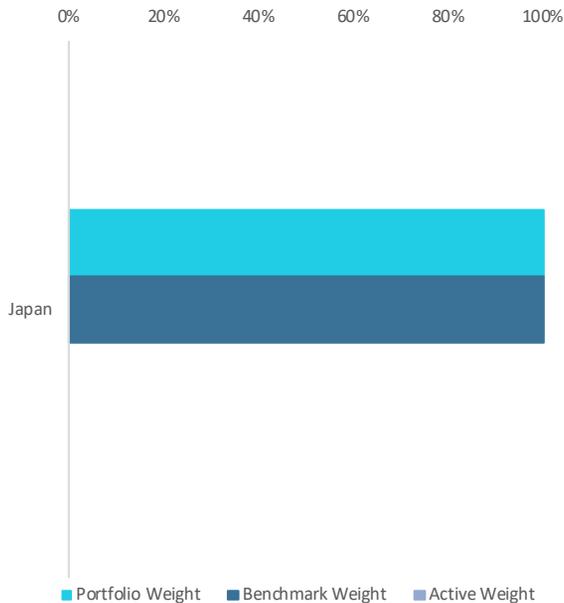


Los Angeles County Employees Retirement Association

Portfolio Risk Summary

	Value
Total Risk	20.57
Benchmark Risk	15.74
Active Risk	11.96
Portfolio Beta	1.07

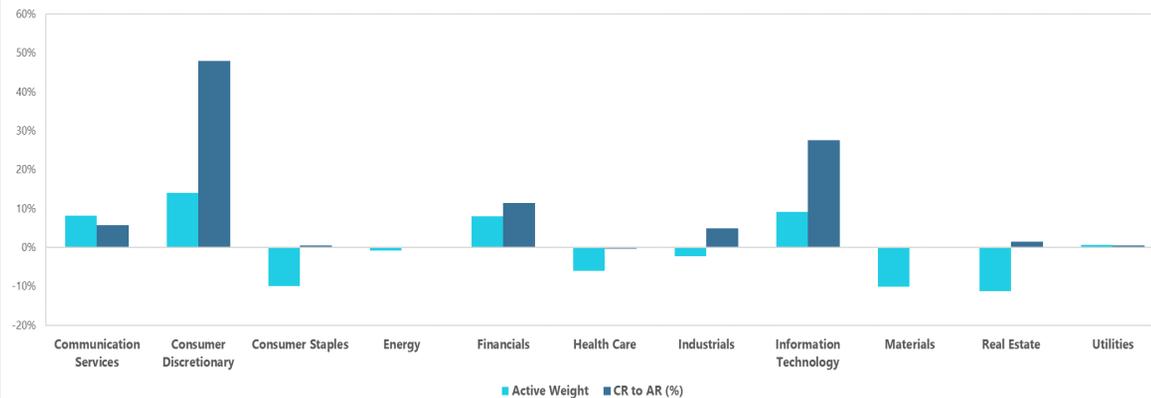
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
NAGAWA	24.89%	0.06%	24.83%	36.08	45.53	0.233
INFOMART	10.53%	0.07%	10.46%	52.09	18.74	0.228
JAPAN SECURITIES FINANCE CO LTD	14.75%	0.08%	14.67%	30.41	11.13	0.104
RIKEN KEIKI	8.88%	0.05%	8.84%	44.98	10.40	0.154
UNDISCLOSED – ENTERTAINMENT ¹	10.52%	0.11%	10.41%	29.38	6.04	0.083
ZUIKO	6.78%	0.00%	6.78%	30.55	2.79	0.063
KOMATSU MATERE CO LTD	5.70%	0.00%	5.70%	32.50	2.44	0.065
NISHIO RENT ALL	8.67%	0.05%	8.62%	25.17	1.70	0.037
DENYO	2.31%	0.00%	2.31%	27.40	0.28	0.028
KANAME KOGYO CO LTD	2.52%	0.00%	2.52%	23.95	0.20	0.023

Portfolio Risk by GICS Sector



¹ Security name undisclosed due to confidentiality reasons.

Growth – Global Equity Systematic US Small Cap Value

for the quarter ended June 30, 2022

Strategy

Seeks to identify high quality small cap companies capable of generating high rates of return with attractive valuations. The strategy may be suited for investors looking to increase U.S. small cap exposure with defensive characteristics.

Inception Date: July 2018

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	3,844.2	2,537.0
No. Of Issues	151.0	--
Dividend Yield	1.5	1.5
Return on Equity	16.9	10.9
Price to Sales	2.0	10.9
Price to Book	2.1	3.1
PE Ratio	13.1	33.6

Top Holdings (% of assets)

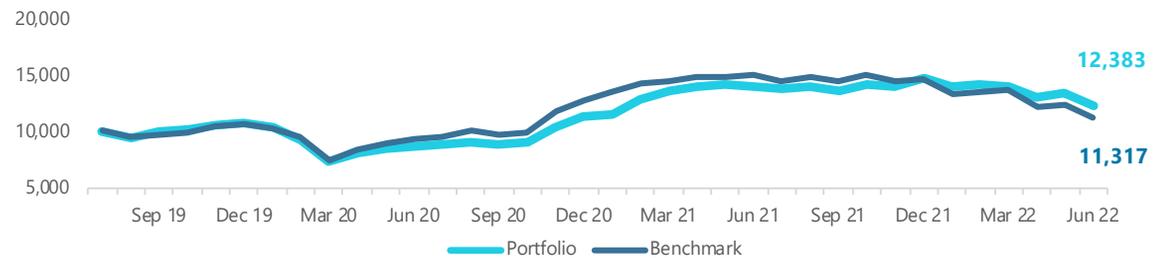
FIRST CITIZENS BCSHS CL A	3.1%
MAGNOLIA OIL + GAS CORP A	2.0%
KBR INC	1.6%
CROSS COUNTRY HEALTHCARE INC	1.6%
SILICON MOTION TECHNOL ADR	1.5%
Top 5 Holdings	9.8%

Performance (net)¹

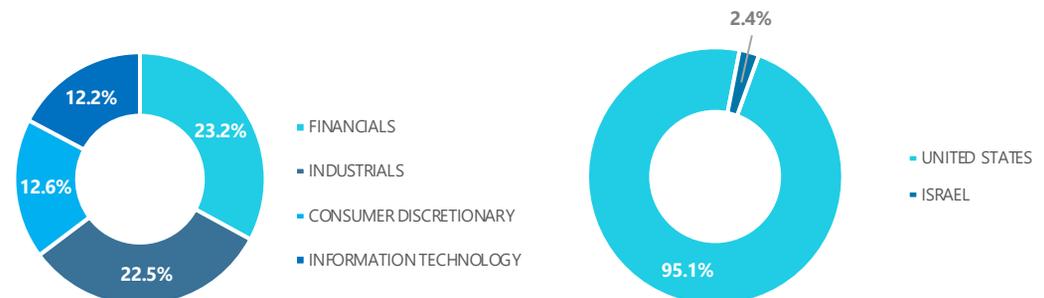
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Systematic US Small Cap Value	173.6	-11.7%	-12.2%	7.4%	--
RUSSELL 2000		-17.2%	-25.2%	4.2%	--
Growth Policy Benchmark		-11.6%	-8.1%	9.5%	--

Universe data: US Equity Funds - Small Cap	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Systematic US Small Cap Value	-11.6%	8	-11.7%	27	8.0%	31	--	--
Median	-15.3%		-14.6%		6.9%		7.1%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

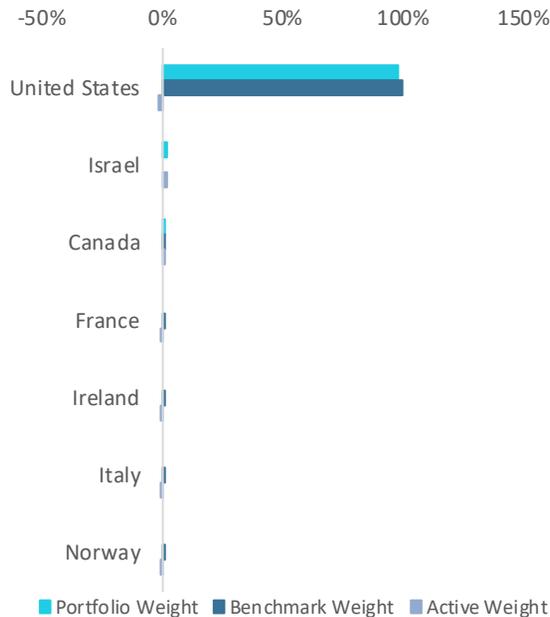
Growth Risk Analysis – Global Equity Systematic US Small Cap Value

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	22.44
Benchmark Risk	25.20
Active Risk	6.25
Portfolio Beta	0.87

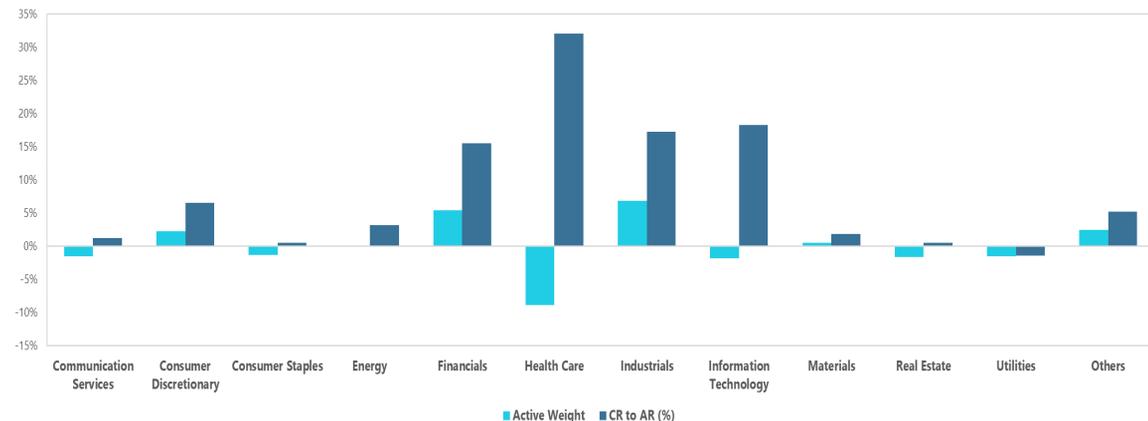
Top Countries by Weight%



Top 10 Assets by Contribution to Active Risk

Asset	Weight			Total Risk	%CR to Active TR	MC to Active TR
	Portfolio	Benchmark	Active			
SSC GOVERNMENT MM GVMXX	2.46%	0.00%	2.46%	2.91	5.35	0.000
FIRST CITIZENS BANCSHARES INC NRTH	3.14%	0.00%	3.14%	37.92	4.94	-0.038
NORTHWESTERN CORP	1.53%	0.14%	1.38%	23.82	2.68	-0.015
WASHINGTON FEDERAL INC	1.26%	0.09%	1.18%	30.38	2.34	-0.012
SILICON MOTION TECHNOLOGY CORP	1.54%	0.00%	1.54%	46.71	2.27	-0.044
MAGNOLIA OIL & GAS CORP	2.00%	0.15%	1.84%	53.62	1.82	-0.075
WEBSTER FINANCIAL CORP	1.27%	0.00%	1.27%	34.95	1.77	-0.049
EVEREST RE GROUP LTD	1.06%	0.00%	1.06%	26.59	1.74	-0.034
SELECTIVE INSURANCE GROUP INC	1.39%	0.23%	1.16%	27.27	1.68	-0.046
MUELLER INDUSTRIES INC	1.27%	0.13%	1.14%	33.23	1.65	-0.046

Portfolio Risk by GICS Sector

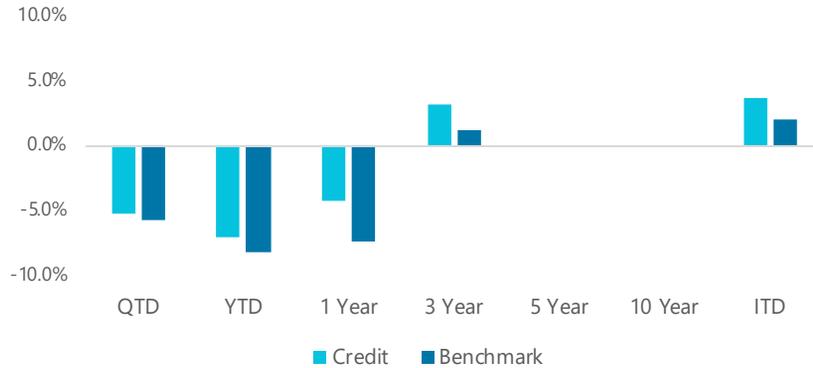


credit

Summary

for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Credit	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Benchmark	-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Excess	0.5%	1.3%	3.3%	1.9%	--	--	1.6%

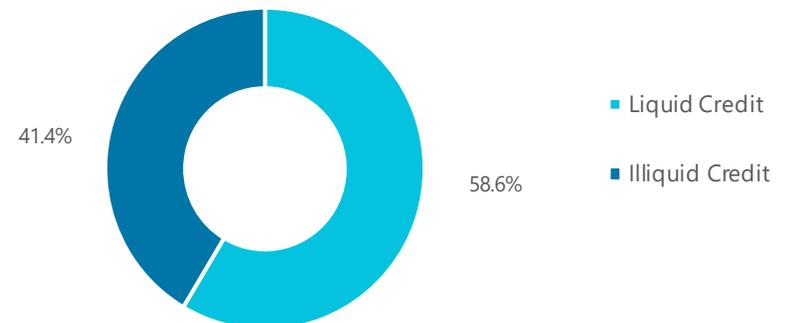
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Liquid Credit	-7.9%	--	--	--
Liquid Credit Policy Benchmark	-7.6%	--	--	--
Excess	-0.4%	--	--	--
Illiquid Credit	-1.0%	6.7%	6.7%	11.2%
Illiquid Credit Policy Benchmark	-3.5%	-3.4%	-3.4%	3.4%
Excess	2.5%	10.1%	10.1%	7.9%

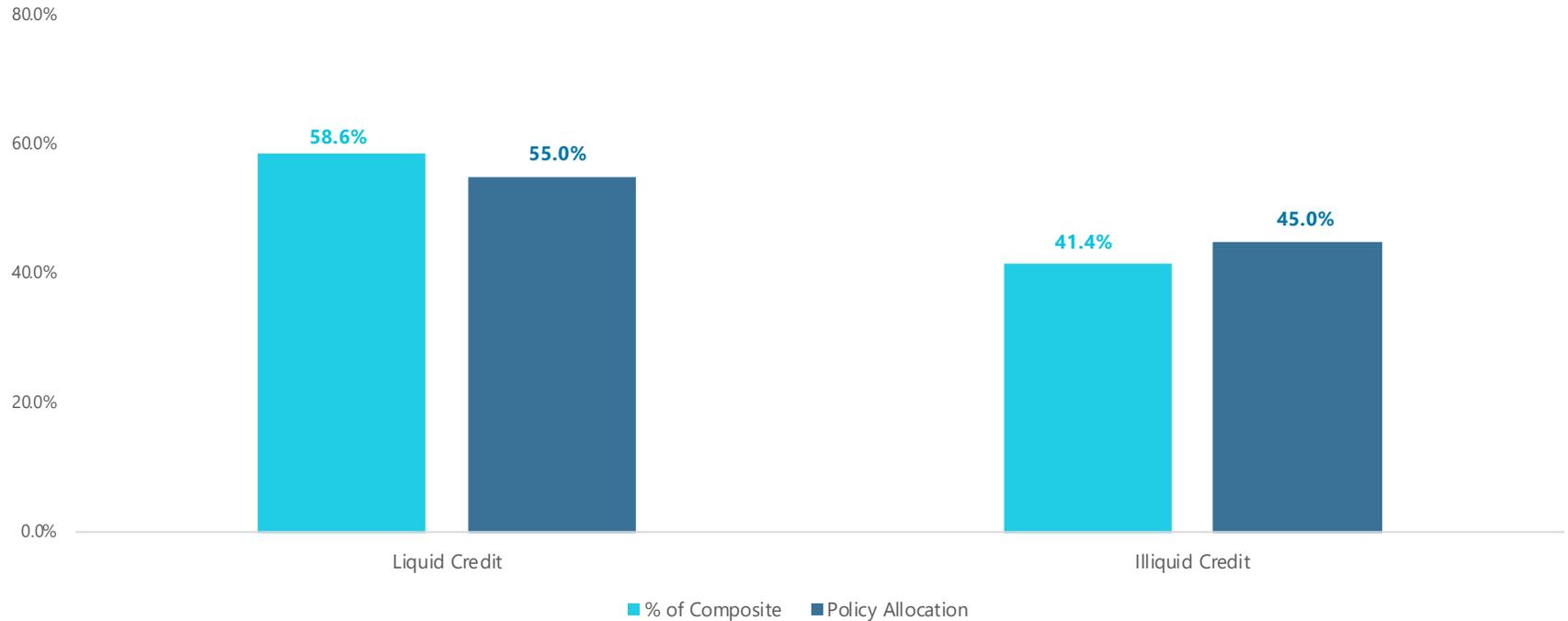
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

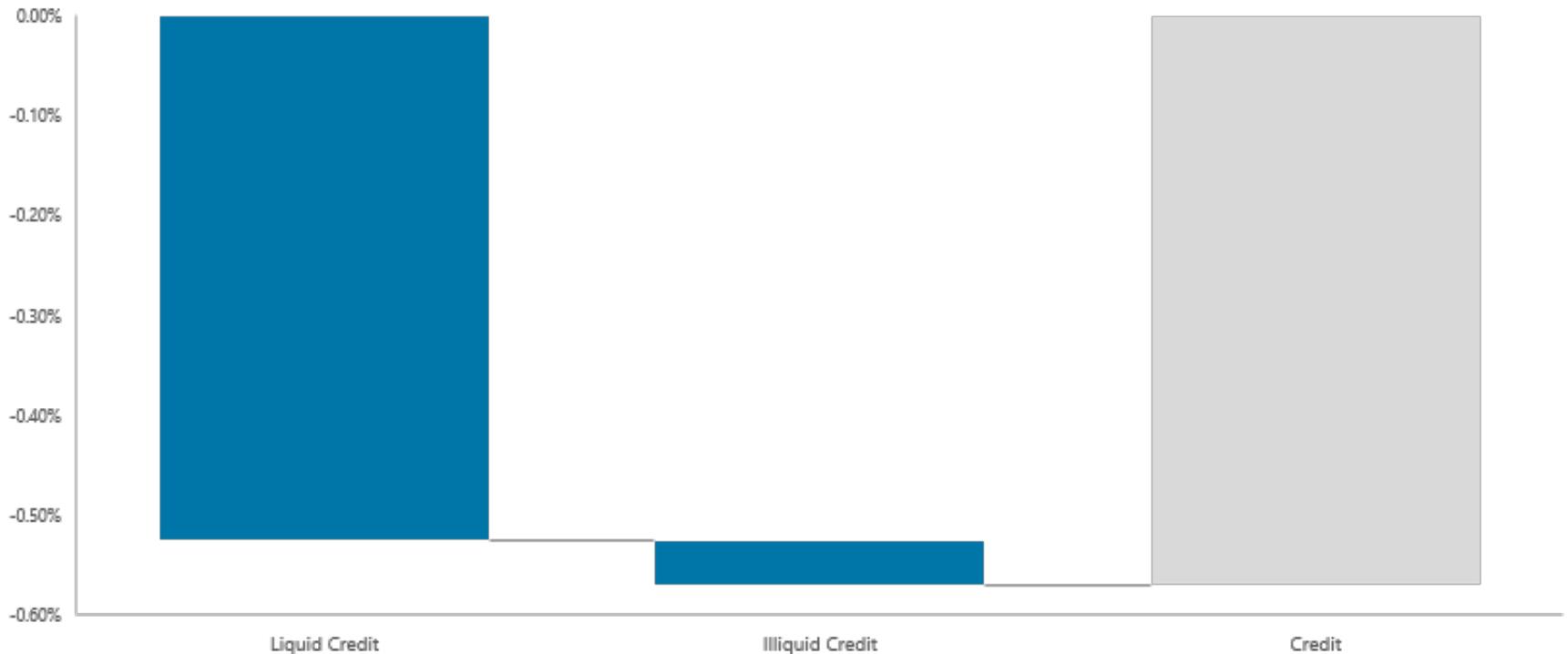


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Credit	7,824	100.0%	100.0%		
Liquid Credit	4,581	58.6%	55.0%	3.6%	278
Illiquid Credit	3,243	41.4%	45.0%	-3.6%	-278

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return

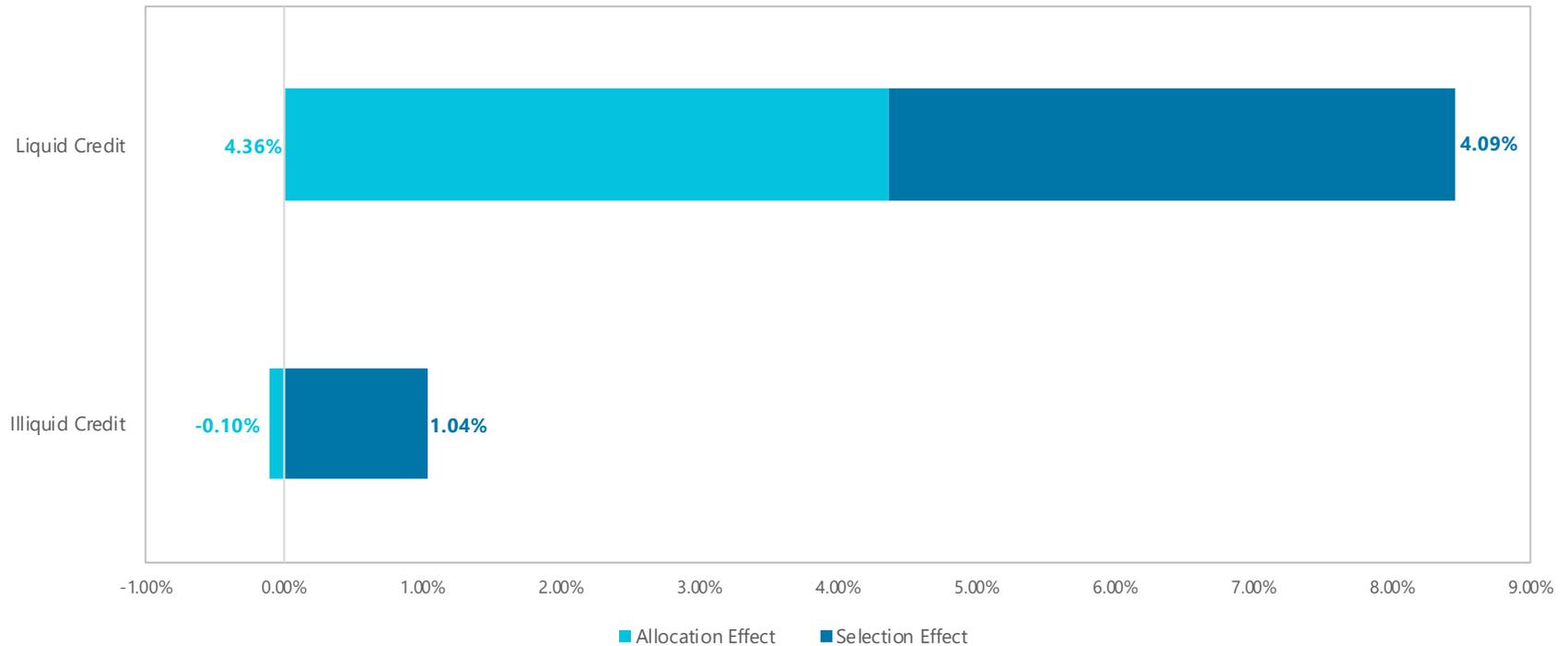


Functional Category		Contributors		Detractors	
Liquid Credit	-0.53%	Private Equity - Credit	0.02%	Brigade Cap Mgmt	-0.09%
Illiquid Credit	-0.04%	Tennenbaum Capital	0.01%	BlackRock HY ETF	-0.08%
Credit	-0.57%	Magnetar	0.01%	Credit Suisse Bank Loans	-0.07%
		Grosvenor OPCRD 2 HFOF	0.00%	Pinebridge Investments	-0.07%
		Real Estate - Credit	0.00%	Ashmore Investment Management	-0.06%

Return Attribution

for the quarter ended June 30, 2022

QTD Performance Attribution¹



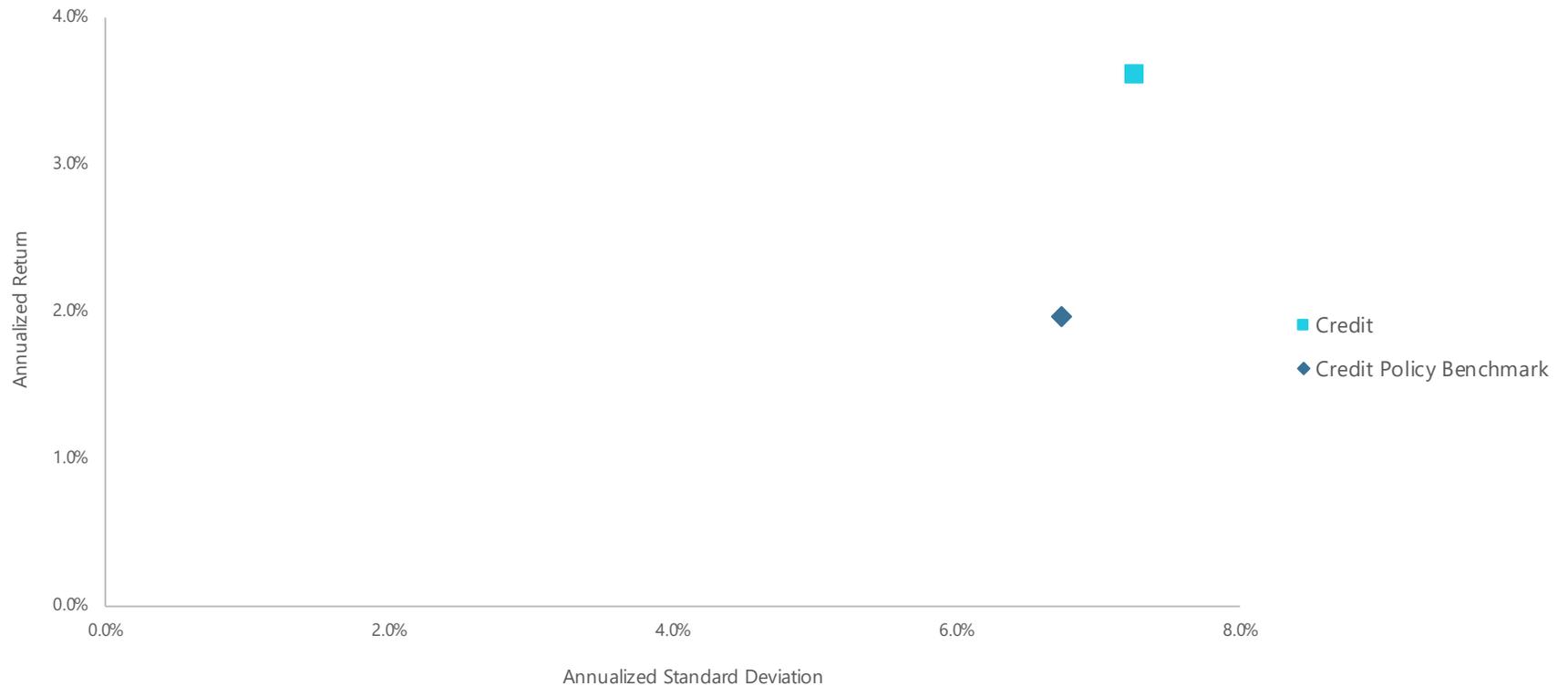
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Credit	7,824	100.0%	100.0%	-5.2%	-5.7%	4.26%	5.12%	0.52%
Liquid Credit	4,581	58.6%	55.0%	-7.9%	-7.6%	4.36%	4.09%	-0.32%
Illiquid Credit	3,243	41.4%	45.0%	-1.0%	-3.5%	-0.10%	1.04%	0.84%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Credit	3.6%	7.3%				
Credit Policy Benchmark	2.0%	6.7%	0.44	0.64	1.00	2.8%

1. Composite risk statistics are relative to the policy benchmark

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Credit	100.0%	7,824	8,111	-5.2%	-7.0%	-4.2%	3.1%	--	--	3.6%
Credit Policy Benchmark				-5.7%	-8.3%	-7.5%	1.2%	--	--	2.0%
Liquid Credit	58.6%	4,581	4,977	-7.9%	-10.9%	--	--	--	--	-10.7%
Liquid Credit Policy Benchmark				-7.6%	-11.0%	--	--	--	--	-10.7%
Aberdeen Asset Management	4.5%	356	401	-11.2%	-19.8%	-22.2%	-5.7%	-1.9%	--	-1.9%
Ashmore Investment Management	4.2%	330	377	-12.3%	-20.3%	-24.1%	-8.4%	-3.3%	--	-3.3%
Bain Capital	5.2%	407	421	-3.5%	-3.5%	-1.2%	3.1%	3.5%	--	3.4%
Beach Point	3.5%	273	304	-10.4%	-14.1%	-13.2%	-0.1%	2.1%	--	3.8%
BlackRock HY ETF	7.2%	561	619	-9.4%	-13.7%	-12.6%	--	--	--	-1.9%
Brigade Cap Mgmt	8.1%	632	696	-9.3%	-10.9%	-9.1%	2.5%	2.7%	4.8%	6.0%
Credit Suisse Bank Loans	14.1%	1,103	1,158	-4.8%	-4.8%	-3.1%	--	--	--	5.6%
Crescent Capital	6.2%	489	517	-5.4%	-6.0%	-4.4%	3.5%	3.6%	--	3.2%
Pinebridge Investments	5.5%	432	484	-10.7%	-14.9%	--	--	--	--	-14.2%
Illiquid Credit	41.4%	3,243	3,135	-1.0%	-0.7%	6.7%	11.2%	--	--	10.9%
Illiquid Credit Policy Benchmark				-3.5%	-5.0%	-3.4%	3.4%	--	--	4.5%
Beach Point - Fund II	0.2%	12	14	--	--	--	--	--	--	--
Beach Point - Fund III	2.3%	180	197	-3.1%	-5.0%	20.3%	15.5%	12.4%	--	12.7%
Grosvenor OPCRD 2 HFOF	0.4%	31	32	7.9%	5.8%	11.4%	4.8%	4.2%	--	5.9%
Lake Vineyard	1.7%	134	0	0.6%	--	--	--	--	--	0.6%
Magnetar	10.7%	840	810	0.5%	-1.1%	5.5%	--	--	--	23.4%
Napier Park	10.3%	805	848	-5.1%	-5.0%	-1.0%	--	--	--	18.9%
PIMCO Tac Opps	3.6%	282	290	-2.8%	-3.2%	4.2%	7.4%	--	--	7.0%
Private Equity - Credit	2.8%	221	212	5.4%	10.3%	28.2%	17.6%	--	--	15.1%
Real Estate - Credit	1.4%	109	107	0.9%	6.8%	13.0%	10.2%	9.7%	9.2%	9.1%
Tennenbaum Capital	8.0%	630	624	1.0%	2.5%	6.6%	6.8%	7.2%	--	7.2%

Liquid Credit Risk Summary

for the quarter ended June 30, 2022

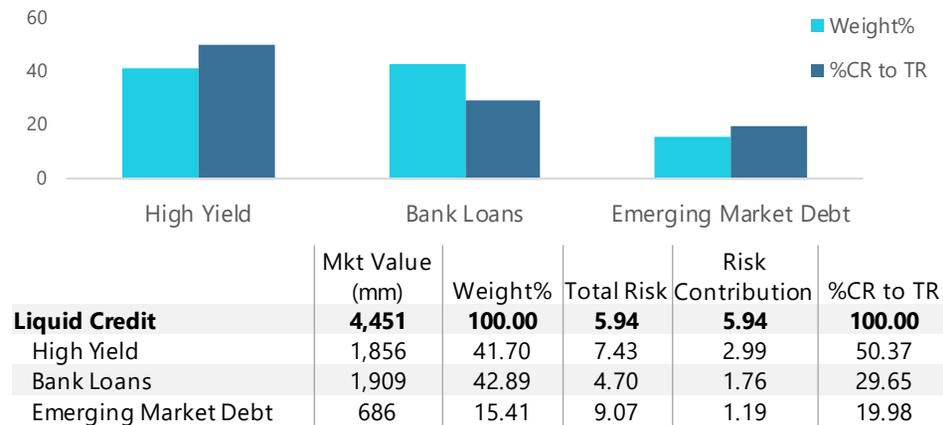
Risk Summary

	Value
Total Risk	5.94
Benchmark Risk	5.69
Active Risk	0.57
Portfolio Beta	1.04
Cont. to Eff. Duration	2.97
Convexity	0.17
Yield to Worst (%)	8.70
OAS to Swap (bp)	528

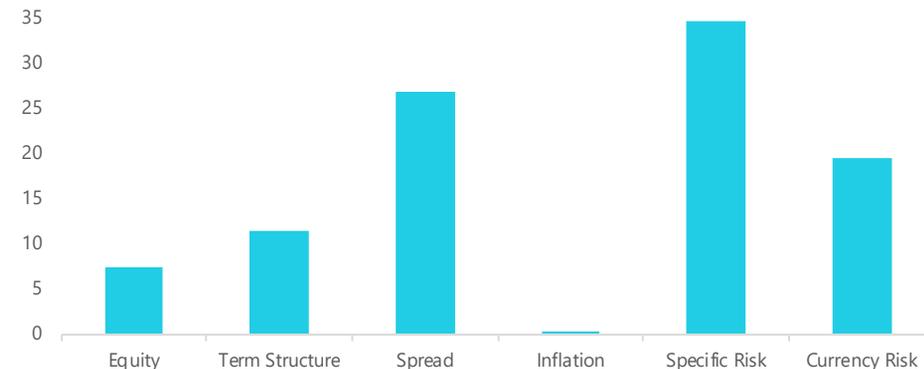
Risk Decomposition

Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
Total Risk	5.94	100.00	0.57	100.00
Local Market Risk	5.72	96.16	0.46	80.44
Common Factor Risk	5.69	95.76	0.26	45.78
Specific Risk	0.02	0.40	0.20	34.66
Currency Risk	0.23	3.84	0.11	19.56

Contribution to Risk



Active Risk from Common Factors



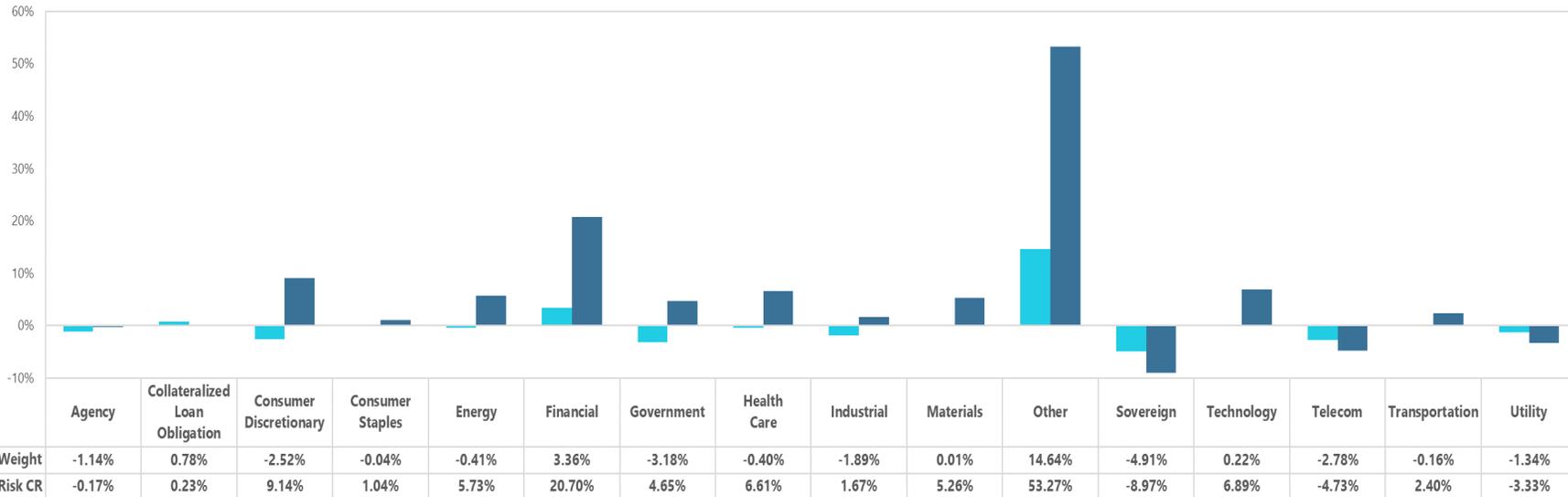
Liquid Credit Risk Summary

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

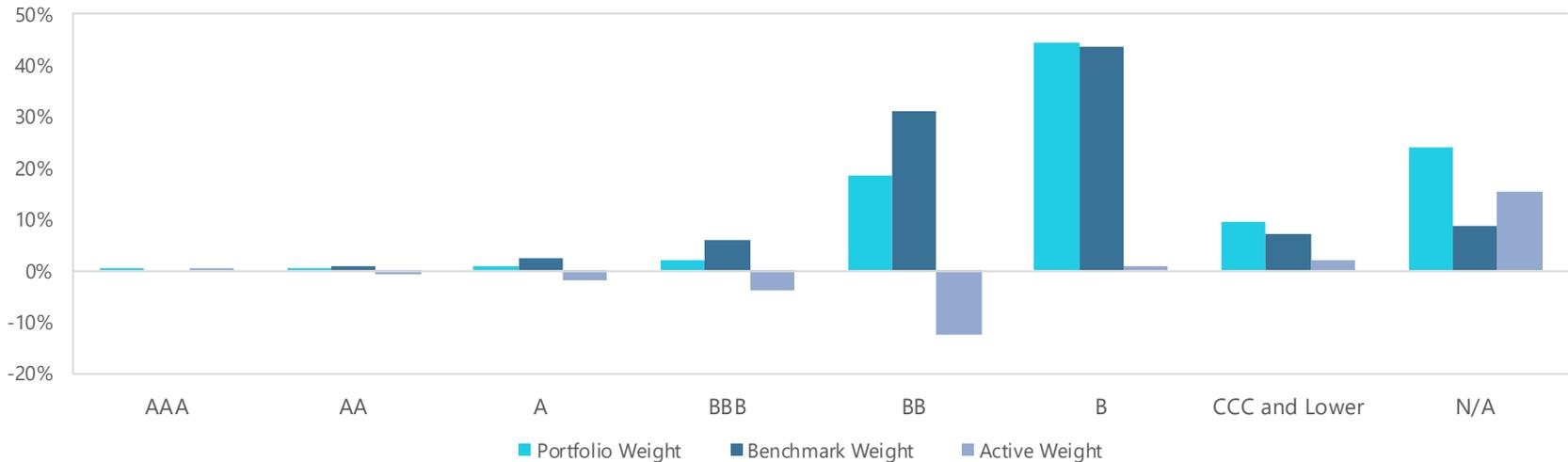
Portfolio Allocation By Bond Sector



Liquid Credit Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Moody's Rating



Rating	Weight%			Total Risk	Active Risk CR	% of Active TR	CR to Effective Duration
	Portfolio	Benchmark	Active				
Credit	100.00%	100.00%	0.00%	5.94	0.57	100.00	2.97
AAA	0.14%	0.00%	0.14%	13.65	0.00	-0.74%	0.02
AA	0.30%	0.94%	-0.64%	11.12	0.02	2.80%	0.04
A	0.75%	2.48%	-1.73%	10.62	0.04	6.34%	0.11
BBB	2.04%	5.81%	-3.76%	6.83	0.04	6.77%	0.14
BB	18.72%	31.32%	-12.60%	6.40	0.19	32.49%	0.84
B	44.59%	43.54%	1.06%	6.38	0.20	34.92%	0.88
CCC and Lower	9.49%	7.23%	2.26%	9.47	0.06	10.75	0.24
N/A	23.96%	8.68%	15.28%	4.30	0.04	6.67%	0.70

Credit – Liquid Credit

Aberdeen Asset Management

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

An emerging market debt strategy that invests in sovereigns, quasi-sovereigns, and corporate bonds denominated in US Dollar or local currencies.

Inception Date: July 2017

Risk Statistics (since inception)

Standard Deviation	11.0%
Benchmark Standard Deviation	9.2%
Sharpe Ratio	-0.22
Information Ratio	-0.47
Beta	1.19
Tracking Error	2.5%

Performance (net)¹

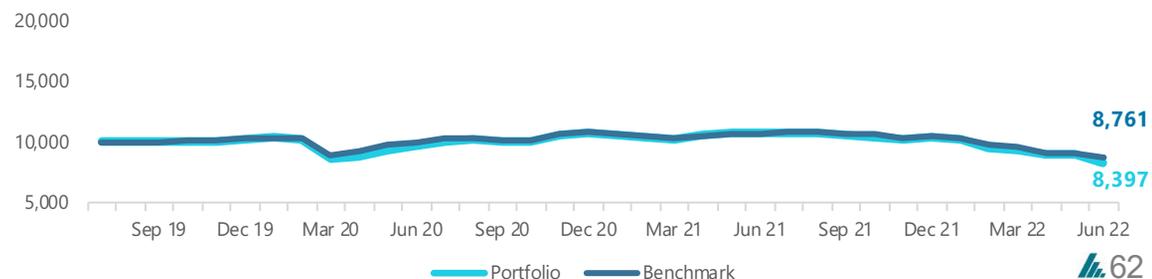
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Aberdeen Asset Management	355.6	-11.2%	-22.2%	-5.7%	-1.9%
EMD Custom Benchmark		-9.3%	-19.0%	-4.3%	-0.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Aberdeen Asset Management	-11.2%	90	-21.9%	97	-5.3%	98	-1.5%	97
Median	-3.6%		-7.2%		0.1%		1.4%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

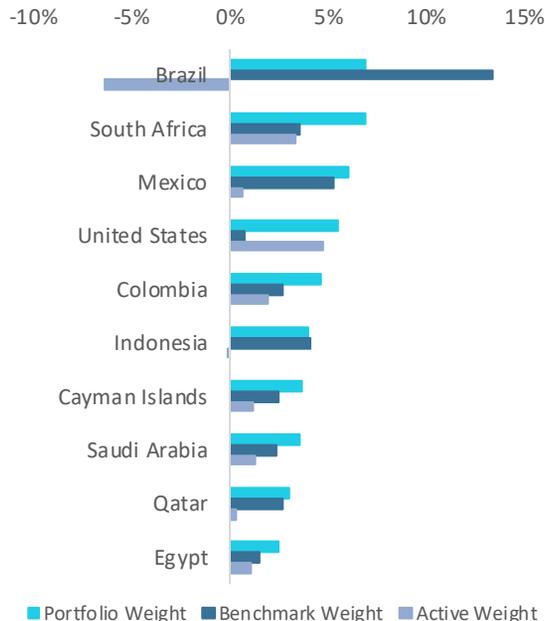
Credit Risk Analysis – Liquid Credit Aberdeen Asset Management

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	10.20
Benchmark Risk	7.58
Active Risk	3.53
Portfolio Beta	1.30
Cont. to Eff. Duration	5.75
Yield to Worst (%)	9.79
OAS to Swap (bp)	478

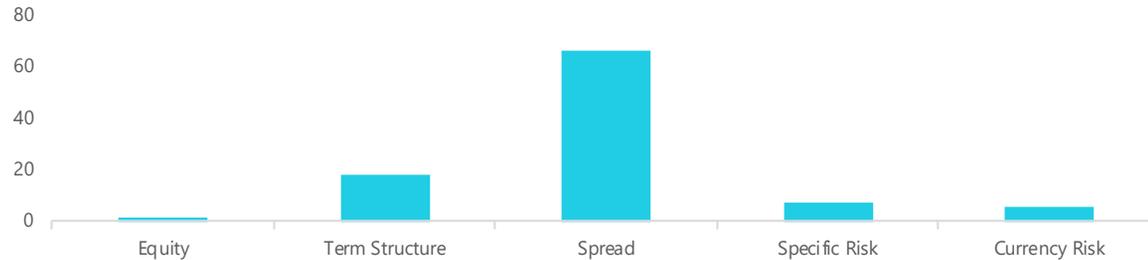
Top Countries by Weight%



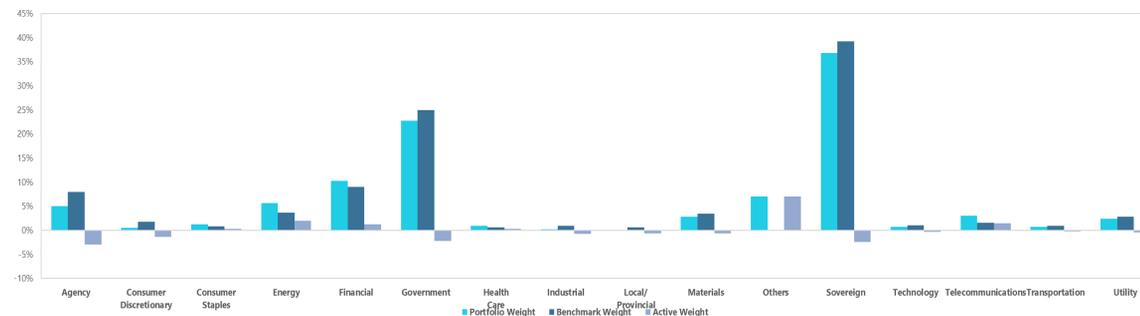
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Ashmore

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A value-driven emerging market debt strategy that applies a macro, top-down approach to build a well-diversified portfolio that adds value through asset rotation, security selection, and currency positioning utilizing a committee driven, systematic risk mitigating process.

Inception Date: June 2017

Risk Statistics (since inception)

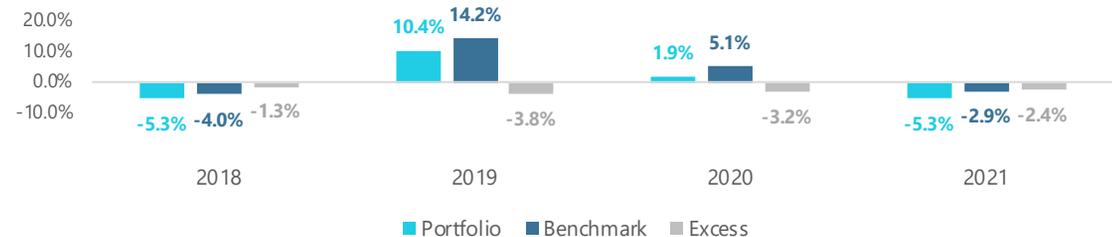
Standard Deviation	13.2%
Benchmark Standard Deviation	9.2%
Sharpe Ratio	-0.26
Information Ratio	-0.52
Beta	1.40
Tracking Error	4.6%

Performance (net)¹

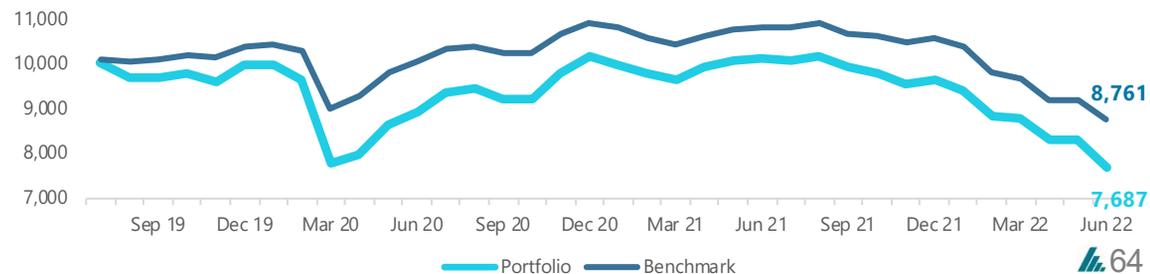
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Ashmore Investment Management	330.1	-12.3%	-24.1%	-8.4%	-3.3%
EMD Custom Benchmark		-9.3%	-19.0%	-4.3%	-0.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Ashmore Investment Management	-12.2%	93	-23.7%	98	-7.9%	99	-2.7%	98
Median	-3.6%		-7.2%		0.1%		1.4%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

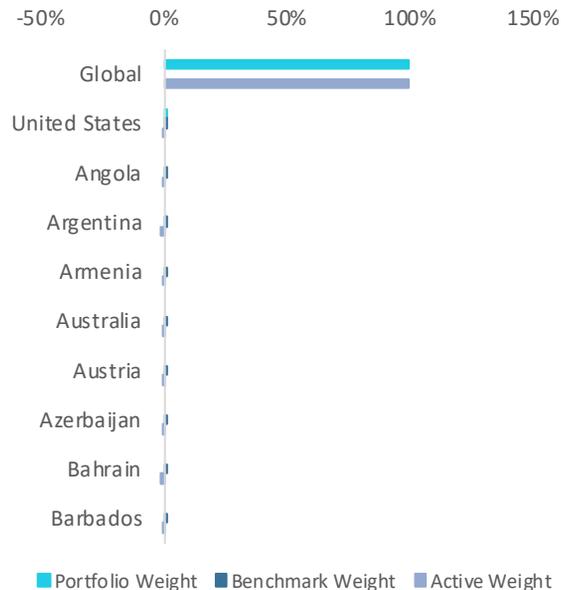
Credit Risk Analysis – Liquid Credit Ashmore

for the quarter ended June 30, 2022

Portfolio Risk Summary

	Value
Total Risk	8.86
Benchmark Risk	7.58
Active Risk	5.04
Portfolio Beta	0.96
Cont. to Eff. Duration	5.32
Yield to Worst (%)	0.00
OAS to Swap (bp)	-309

Top Countries by Weight%



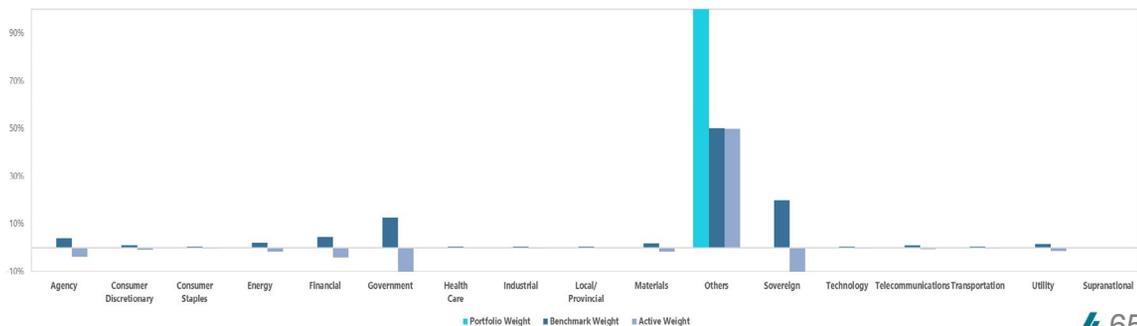
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Bain Capital

for the quarter ended June 30, 2022

Strategy

A long-only strategy designed to provide exposure to senior secured, floating-rate bank loans. The strategy takes a fundamental, active, and global approach to investing, capitalizing on opportunities in an inefficient asset class. The return objective is to outperform the Index through strong credit selection and active portfolio management.

Inception Date: June 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	555.0	--
Effective Duration	0.3	4.4
Convexity	0.0	0.1
Coupon Rate	4.3	5.7
Yield to Maturity	6.8	8.7
Current Yield	4.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

CPS GROUP HOLDINGS INC	0.9%
AQGEN ISLAND HOLDINGS INC	0.8%
NAVICURE INC	0.7%
CHAMBER BIDCO LIMITED	0.7%
CST BUYER COMPANY	0.6%
Top 5 Holdings	3.7%

1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Performance (net)¹

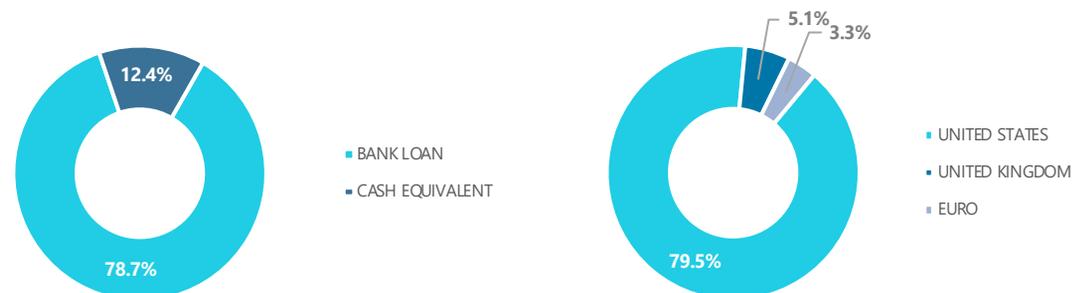
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Bain Capital	406.6	-3.5%	-1.2%	3.1%	3.5%
Bank Loans Custom Benchmark		-4.4%	-2.7%	2.4%	3.3%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Bain Capital	-3.4%	49	-0.7%	30	3.8%	19	4.2%	15
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



Credit Risk Analysis – Liquid Credit Bain Capital

for the quarter ended June 30, 2022

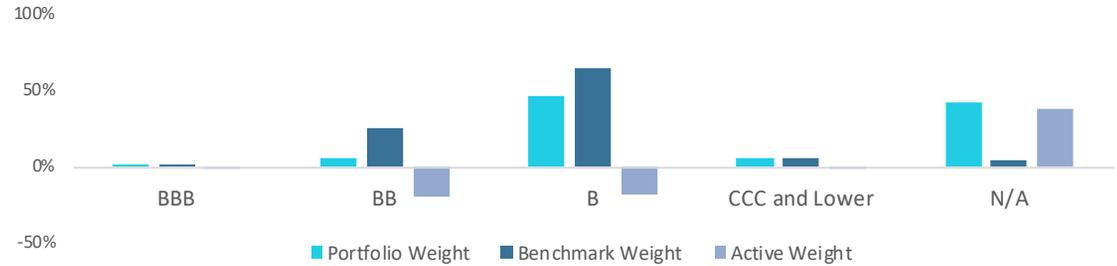
Portfolio Risk Summary

	Value
Total Risk	3.61
Benchmark Risk	5.32
Active Risk	1.93
Portfolio Beta	0.67
Cont. to Eff. Duration	0.69
Yield to Worst (%)	6.37
OAS to Swap (bp)	486

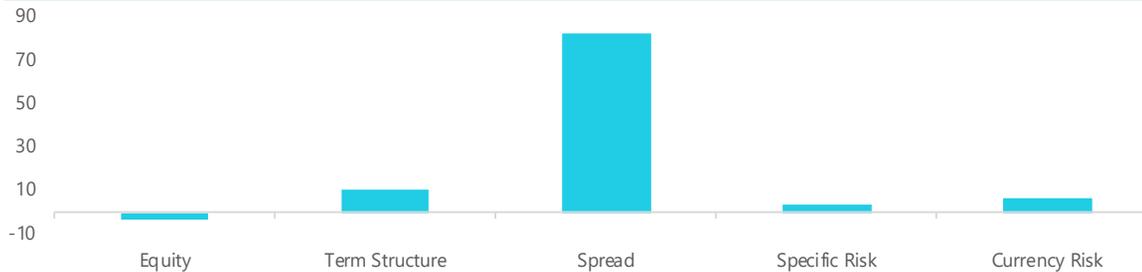
Top Countries by Weight%



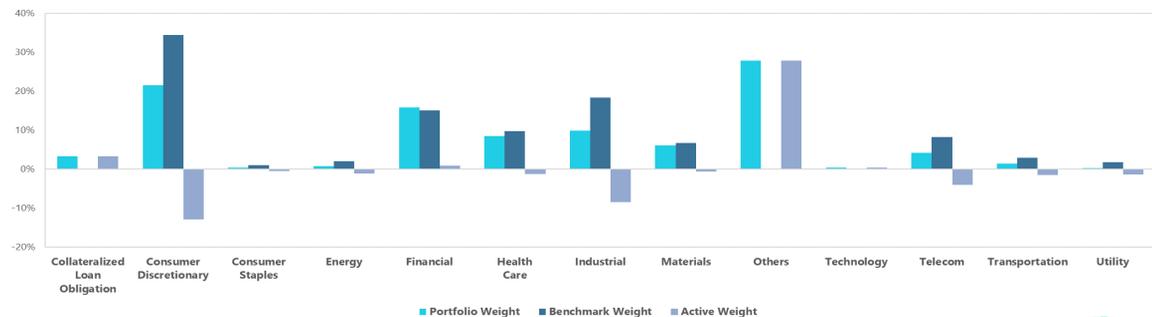
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Beach Point

for the quarter ended June 30, 2022

Strategy

A fundamental, value oriented high yield bond strategy that utilizes legal skills to identify market anomalies in bond covenants and indentures. The primary investment goal is to generate superior returns while controlling risk to minimize the possibility of capital impairment.

Inception Date: March 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	276.0	--
Effective Duration	4.2	4.4
Convexity	0.1	0.1
Coupon Rate	5.5	5.7
Yield to Maturity	9.0	8.7
Current Yield	6.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

AMERICAN GREETINGS CORP	1.9%
DEALER TIRE LLC/DT ISSR	1.5%
MPH ACQUISITION HOLDINGS	1.4%
COMPASS GROUP DIVERSIFIE	1.4%
SANDSTONE PEAK LTD.	1.2%
Top 5 Holdings	7.3%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Beach Point	272.7	-10.4%	-13.2%	-0.1%	2.1%
Beachpoint Custom Benchmark		-9.8%	-12.8%	-0.1%	1.8%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Beach Point	-10.3%	88	-12.8%	85	0.4%	41	2.7%	24
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

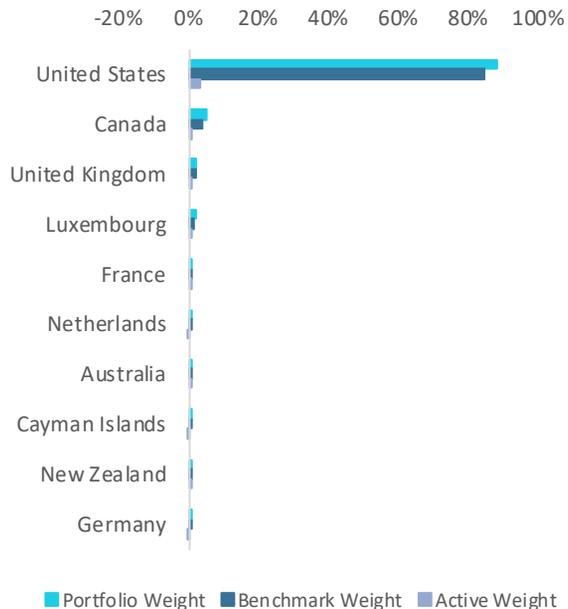
Credit Risk Analysis – Liquid Credit Beach Point

for the quarter ended June 30, 2022

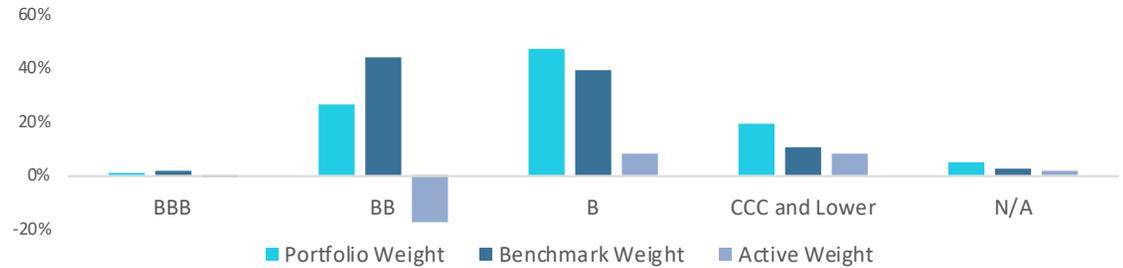
Portfolio Risk Summary

	Value
Total Risk	7.80
Benchmark Risk	6.91
Active Risk	1.41
Portfolio Beta	1.12
Cont. to Eff. Duration	4.34
Yield to Worst (%)	8.98
OAS to Swap (bp)	574

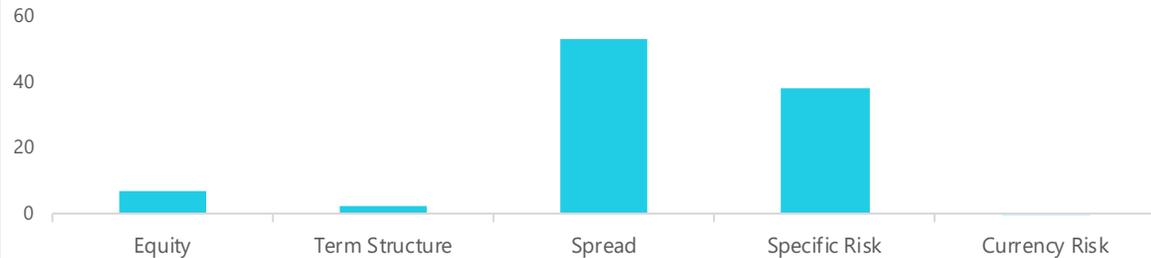
Top Countries by Weight%



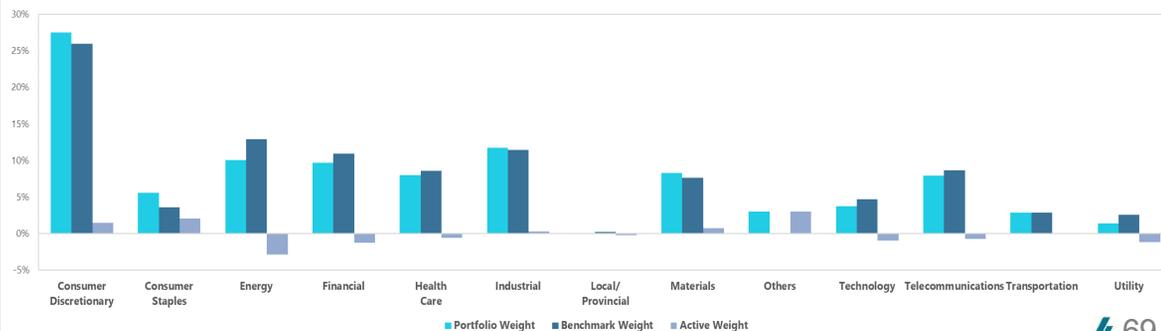
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Brigade Capital

for the quarter ended June 30, 2022

Strategy

A strategy that focuses on identifying attractive companies within the high yield bond marketplace. The strategy invests in companies that have a lower likelihood of default or are better able to recover from economic downturns because of their substantial asset value relative to debt.

Inception Date: July 2010

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	340.0	--
Effective Duration	4.1	4.4
Convexity	0.4	0.1
Coupon Rate	6.5	5.7
Yield to Maturity	10.9	8.7
Current Yield	7.9	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B-2	BB-

Top Holdings (% of assets)

CORNERSTONE CHEMICAL CO	2.0%
EPIC Y GRADE SERVICES, LP	1.8%
RAIN CII CARBON LLC/CII	1.2%
BAFFINLAND IRON CORP/LP	1.1%
MASHANTUCKET	0.9%
Top 5 Holdings	7.1%

Performance (net)¹

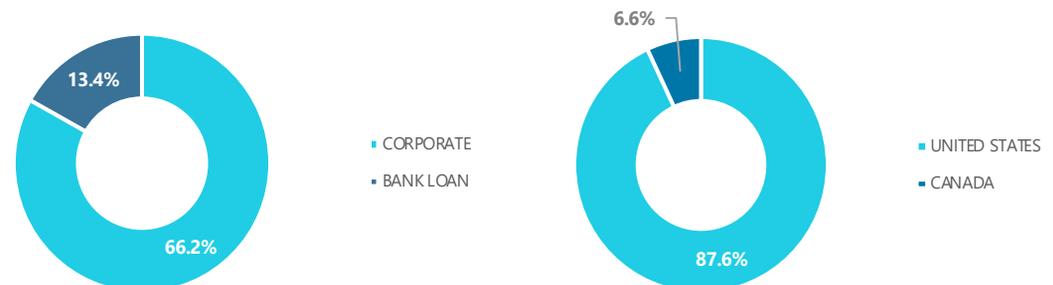
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Brigade Cap Mgmt	632.0	-9.3%	-9.1%	2.5%	2.7%
Brigade Custom Benchmark		-9.8%	-12.8%	0.2%	2.0%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Brigade Cap Mgmt	-9.2%	86	-8.8%	58	3.0%	22	3.4%	17
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

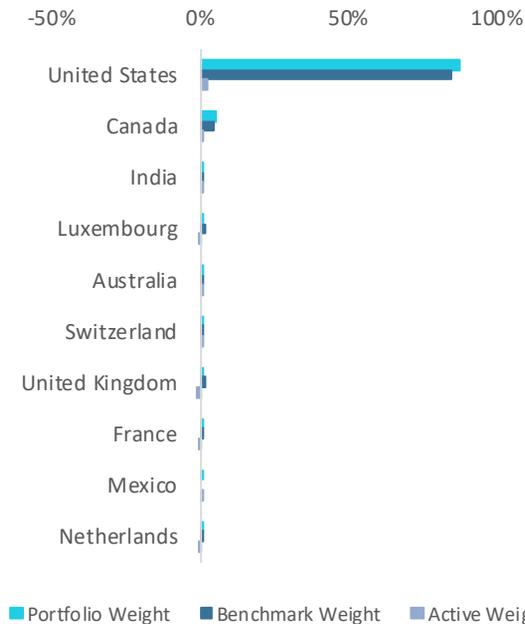
Credit Risk Analysis – Liquid Credit Brigade Capital

for the quarter ended June 30, 2022

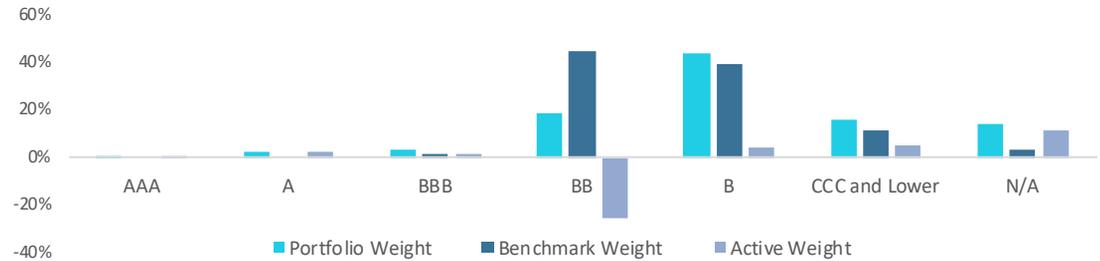
Portfolio Risk Summary

	Value
Total Risk	7.71
Benchmark Risk	6.91
Active Risk	1.70
Portfolio Beta	1.09
Cont. to Eff. Duration	4.18
Yield to Worst (%)	9.09
OAS to Swap (bp)	582

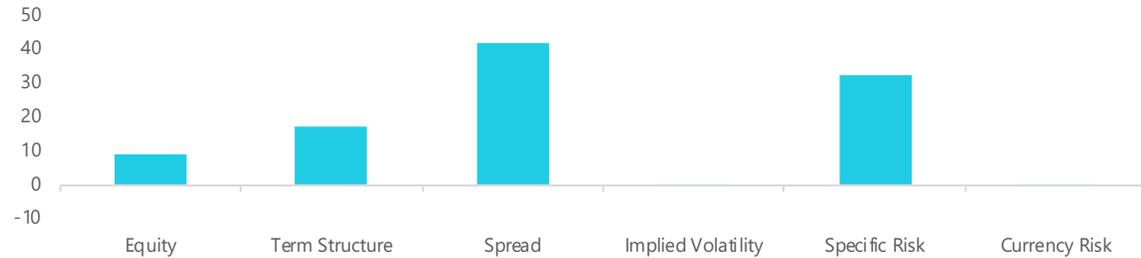
Top Countries by Weight%



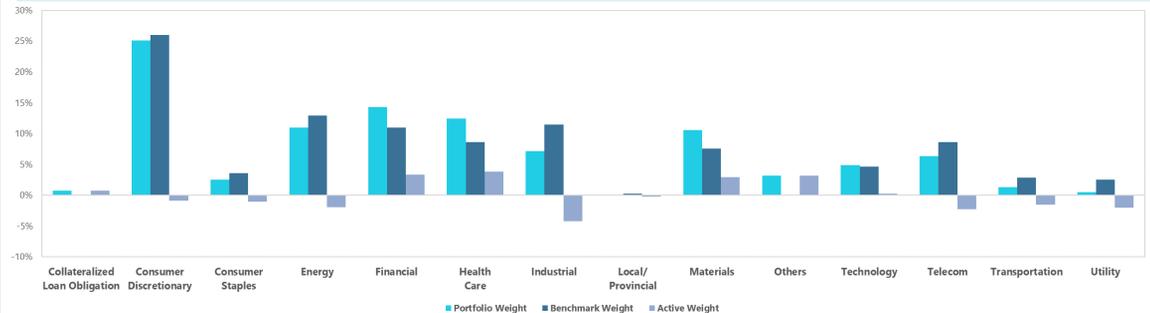
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit

Credit Suisse

for the quarter ended June 30, 2022

Strategy

A bank loan strategy that invests in senior floating rate loans whose primary performance objective is to generate alpha while mitigating loss, utilizing bottom-up, fundamental credit analysis emphasizing a relative value approach.

Inception Date: April 2020

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	514.0	--
Effective Duration	0.2	4.4
Convexity	--	0.1
Coupon Rate	4.7	5.7
Yield to Maturity	7.7	8.7
Current Yield	5.0	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B	BB-

Top Holdings (% of assets)

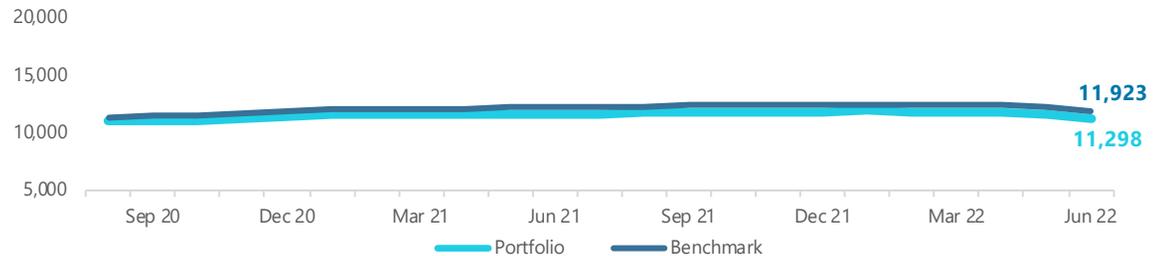
FINASTRA USA, INC.	0.8%
ATOTECH B.V.	0.8%
WILLIAM MORRIS ENDEAVOR ENTMT	0.7%
HORNBLOWER SUB LLC	0.7%
NFP CORP	0.7%
Top 5 Holdings	3.7%

Performance (net)¹

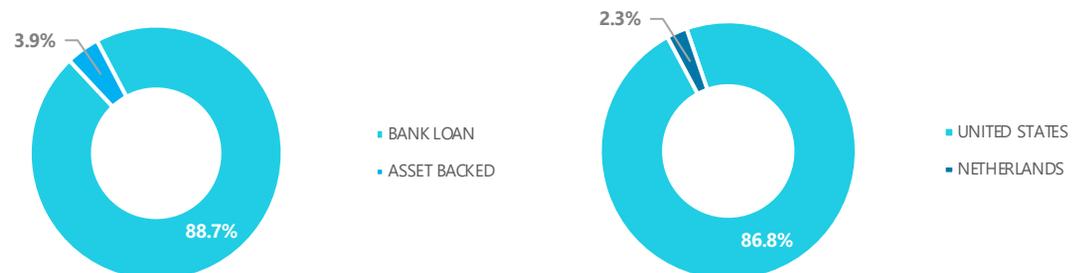
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Credit Suisse Bank Loans	1,102.5	-4.8%	-3.1%	--	--
CS Leveraged Loan Index		-4.4%	-2.7%	--	--
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Credit Suisse Bank Loans	-4.7%	64	-2.9%	35	--	--	--	--
Median	-3.6%		-7.2%		--	--	--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Credit Risk Analysis – Liquid Credit

Credit Suisse

for the quarter ended June 30, 2022

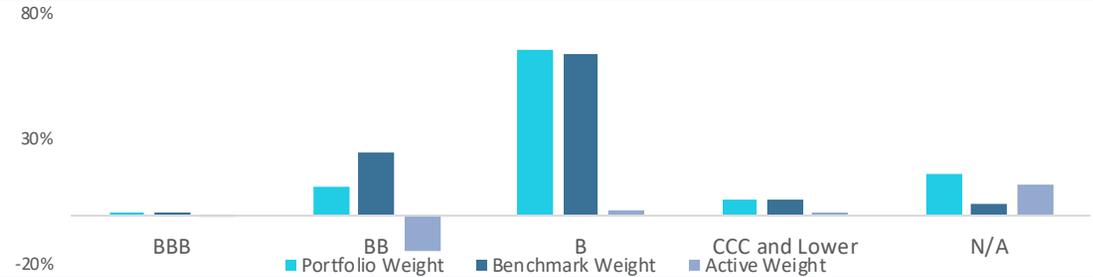
Portfolio Risk Summary

	Value
Total Risk	4.55
Benchmark Risk	5.32
Active Risk	0.98
Portfolio Beta	0.85
Cont. to Eff. Duration	0.52
Yield to Worst (%)	7.04
OAS to Swap (bp)	541

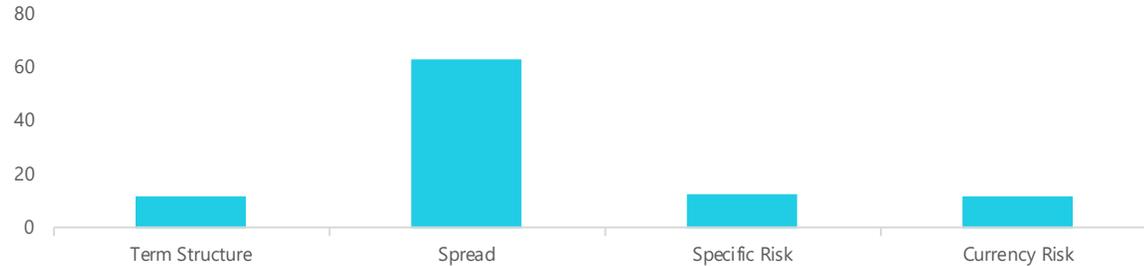
Top Countries by Weight%



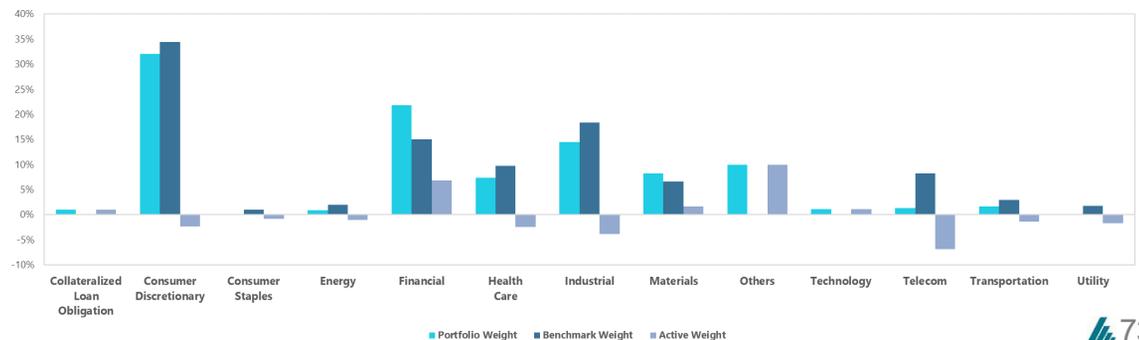
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Crescent Capital

for the quarter ended June 30, 2022

Strategy

A bank loan strategy that invests in privately negotiated, below investment grade, secured corporate debt. The primary target is U.S. based middle market companies whose EBITDA falls between \$30M to \$100M. The strategy's bottom-up credit research process emphasizes high current income and principal preservation.

Inception Date: May 2014

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	138.0	--
Effective Duration	0.4	4.4
Convexity	0.0	0.1
Coupon Rate	6.1	5.7
Yield to Maturity	9.4	8.7
Current Yield	6.6	6.7
Rating – Moody's	B-2	B-1
Rating – S & P	B-	BB-

Top Holdings (% of assets)

THE KNOT WORLDWIDE INC	1.9%
MAGNATE WORLDWIDE LLC	1.9%
EVERGREEN ACQCO 1 LP	1.8%
BARRACUDA NETWORKS INC	1.7%
KAMC HOLDINGS INC	1.6%
Top 5 Holdings	9.0%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Crescent Capital	488.8	-5.4%	-4.4%	3.5%	3.6%
Bank Loans Custom Benchmark		-4.4%	-2.7%	2.4%	3.3%
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: U.S. Fixed Income Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Crescent Capital	-5.3%	70	-3.9%	38	4.0%	19	4.2%	15
Median	-3.6%		-7.2%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Credit Risk Analysis – Liquid Credit Crescent Capital

for the quarter ended June 30, 2022

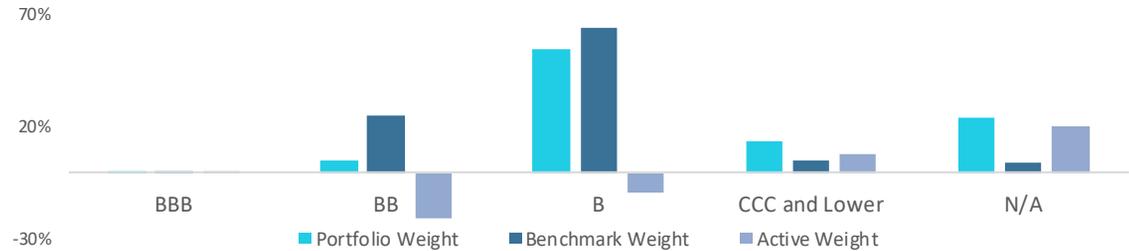
Portfolio Risk Summary

	Value
Total Risk	5.97
Benchmark Risk	5.32
Active Risk	1.40
Portfolio Beta	1.10
Cont. to Eff. Duration	0.66
Yield to Worst (%)	8.42
OAS to Swap (bp)	627

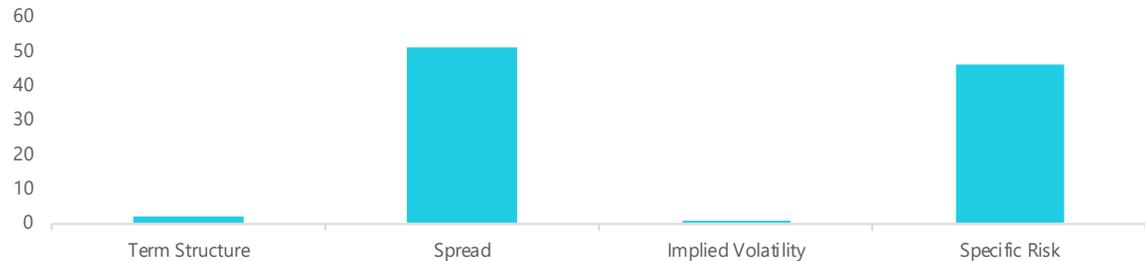
Top Countries by Weight%



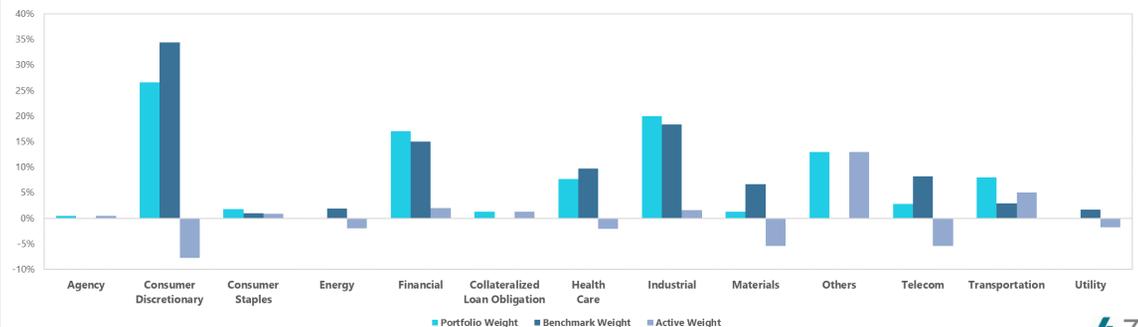
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



Credit – Liquid Credit Pinebridge

for the quarter ended June 30, 2022

Strategy

Active manager of a broadly diversified portfolio primarily of U.S. dollar denominated high yield securities.

Inception Date: August 2021

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	238.0	--
Effective Duration	6.5	6.4
Convexity	0.7	0.7
Coupon Rate	2.8	2.5
Yield to Maturity	3.8	3.6
Current Yield	3.0	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

OCCIDENTAL PETROLEUM COR	1.1%
AMERICAN AIRLINES INC	1.0%
ALTICE FINANCING SA	1.0%
FORD MOTOR COMPANY	1.0%
CALIFORNIA RESOURCES CRP	0.9%
Top 5 Holdings	5.0%

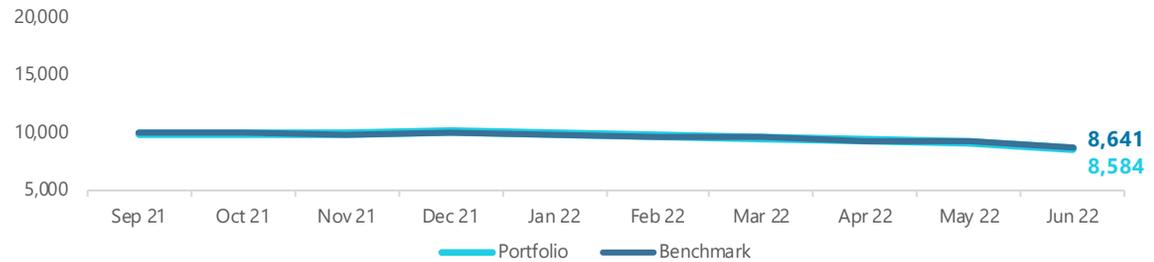
Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Performance (net)¹

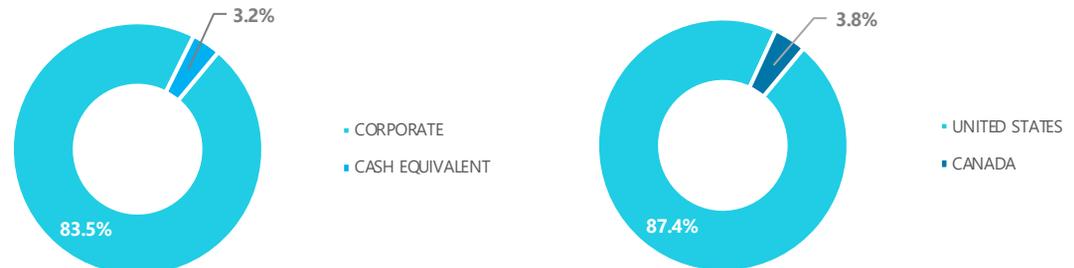
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Pinebridge Investments	432.0	-10.7%	--	--	--
BBG BARC US Corp HY Idx		-9.8%	--	--	--
Credit Policy Benchmark		-5.7%	-7.5%	1.2%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Pinebridge Investments	-10.6%	82	--	--	--	--	--	--
Median	-4.6%		--		--		--	

Growth of \$10,000



Top Exposures (% of assets)



Credit Risk Analysis – Liquid Credit Pinebridge

for the quarter ended June 30, 2022

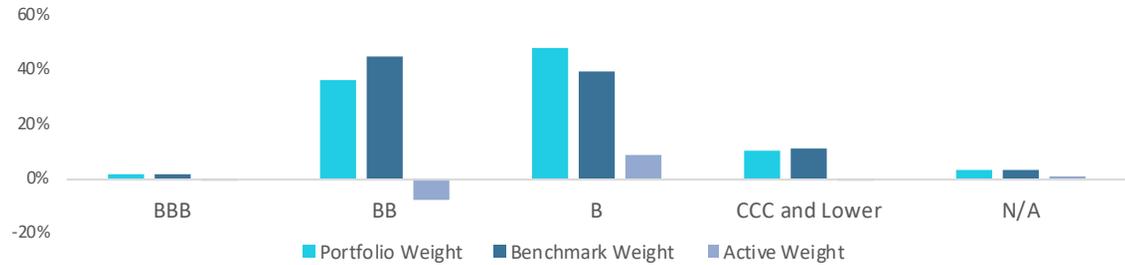
Portfolio Risk Summary

	Value
Total Risk	7.61
Benchmark Risk	6.91
Active Risk	1.01
Portfolio Beta	1.10
Cont. to Eff. Duration	4.67
Yield to Worst (%)	8.61
OAS to Swap (bp)	528

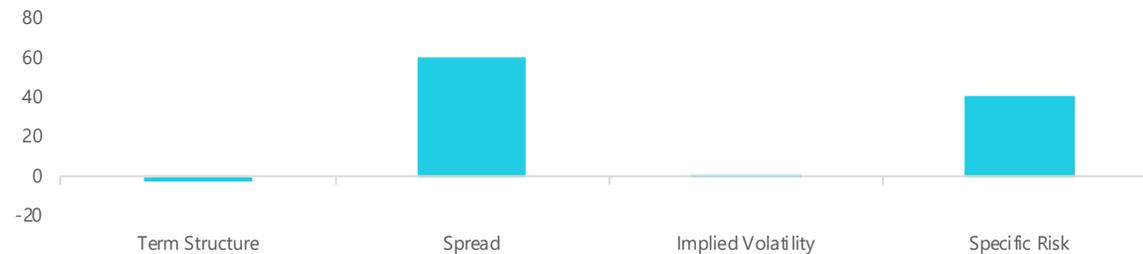
Top Countries by Weight%



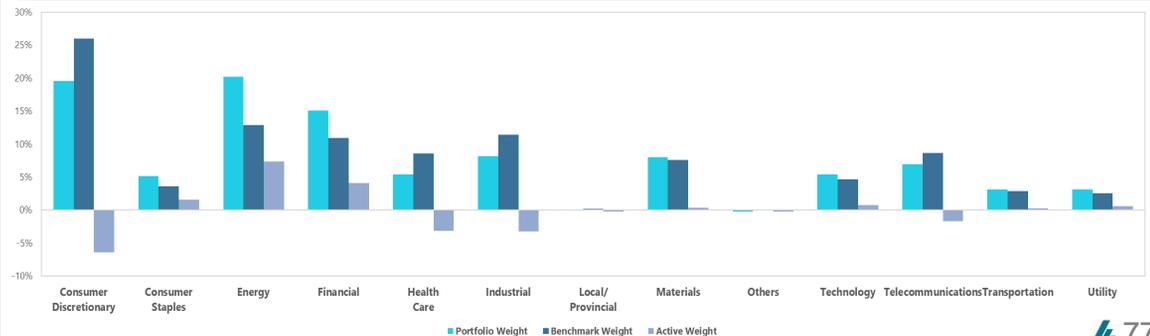
Allocation by Moody's Rating



Active Risk from Common Factors



Portfolio Risk by Bond Sector



real assets & inflation hedges

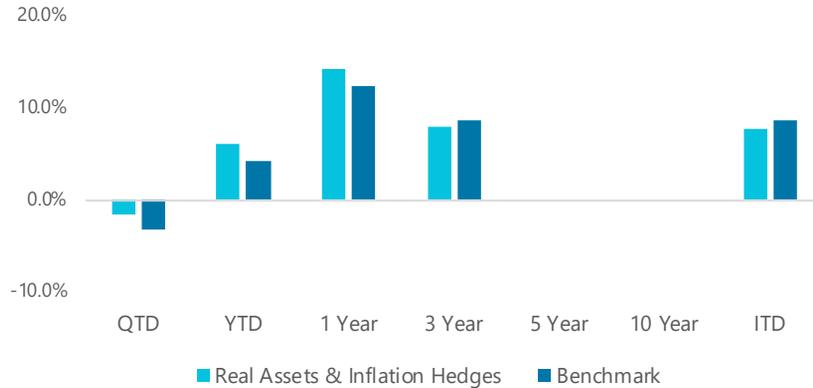
Summary

for the quarter ended June 30, 2022



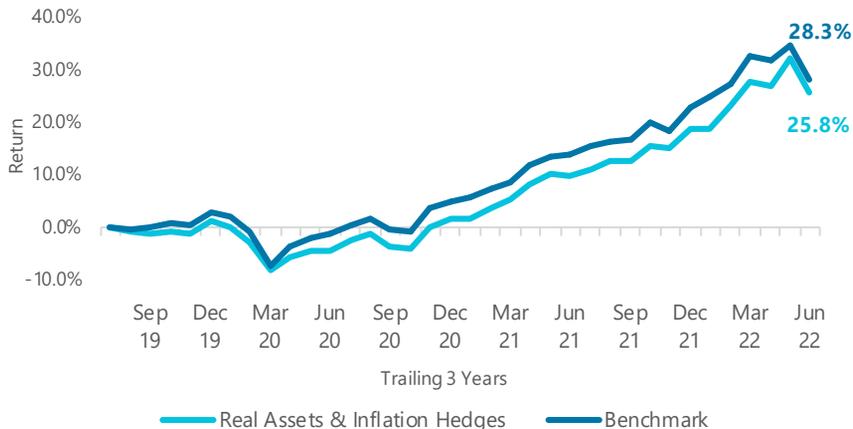
Los Angeles County Employees Retirement Association

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Assets & Inflation Hedges	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
Benchmark	-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Excess	1.6%	1.8%	1.9%	-0.7%	--	--	-0.8%

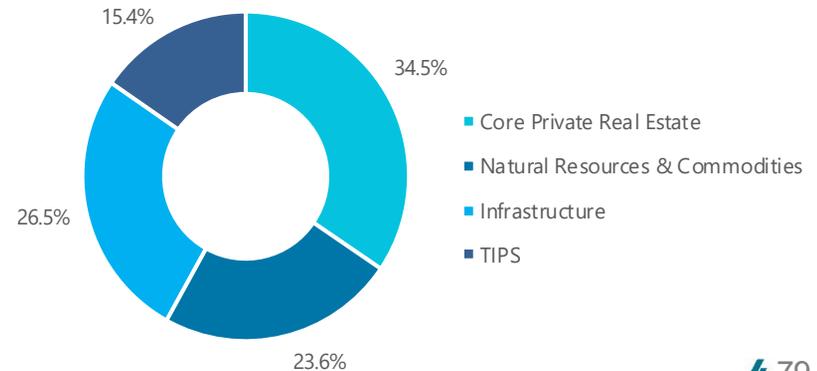
Cumulative Return



Functional Category

	QTD	FYTD	1 Year	3 Year
Core Private Real Estate	8.4%	27.9%	27.9%	8.4%
Core Private RE Policy Benchmark	7.1%	27.4%	27.4%	10.7%
Excess	1.2%	0.5%	0.5%	-2.3%
Natural Resources & Commodities	-6.1%	18.6%	18.6%	12.5%
Nat Res & Comm Policy Benchmark	-12.4%	12.2%	12.2%	11.2%
Excess	6.3%	6.3%	6.3%	1.3%
Infrastructure	-6.5%	4.1%	4.1%	7.6%
DJ Brookfield Global Infrastr Comp TR	-6.9%	2.8%	2.8%	4.5%
Excess	0.4%	1.3%	1.3%	3.1%
TIPS	-6.3%	-4.8%	-4.8%	3.1%
BBG BARC US Tsy TIPS Idx	-6.1%	-5.1%	-5.1%	3.0%
Excess	-0.2%	0.3%	0.3%	0.1%

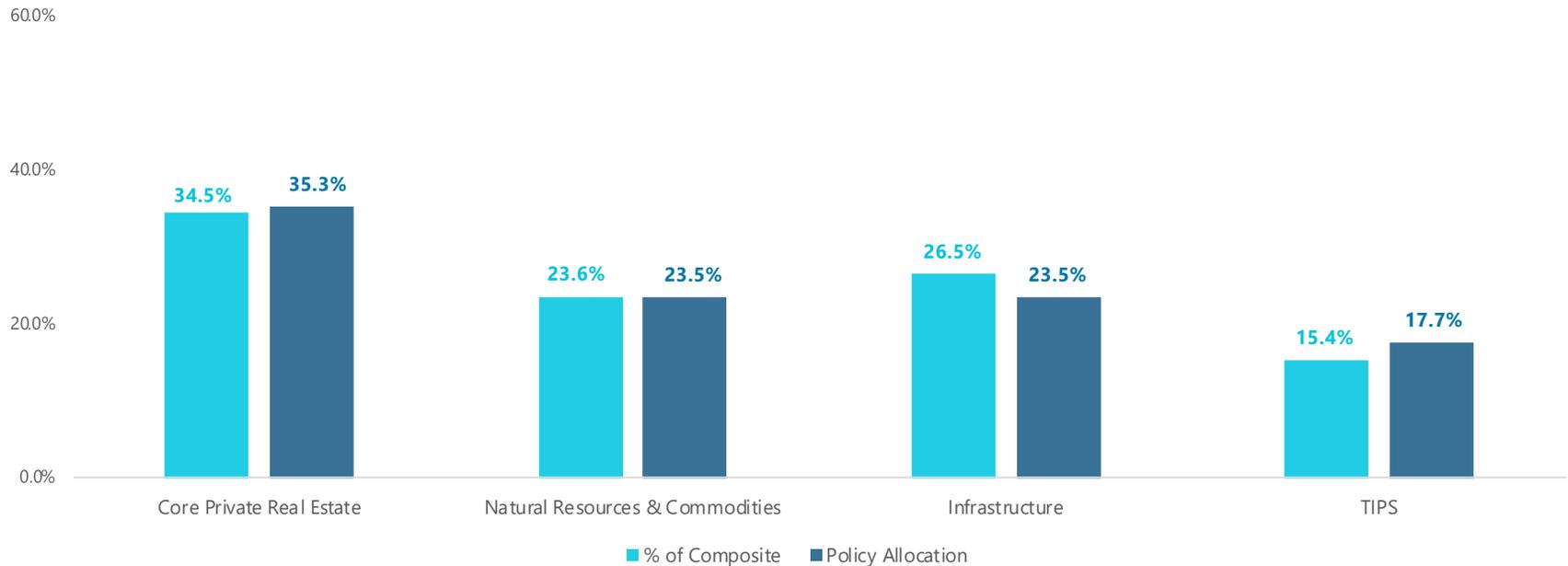
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

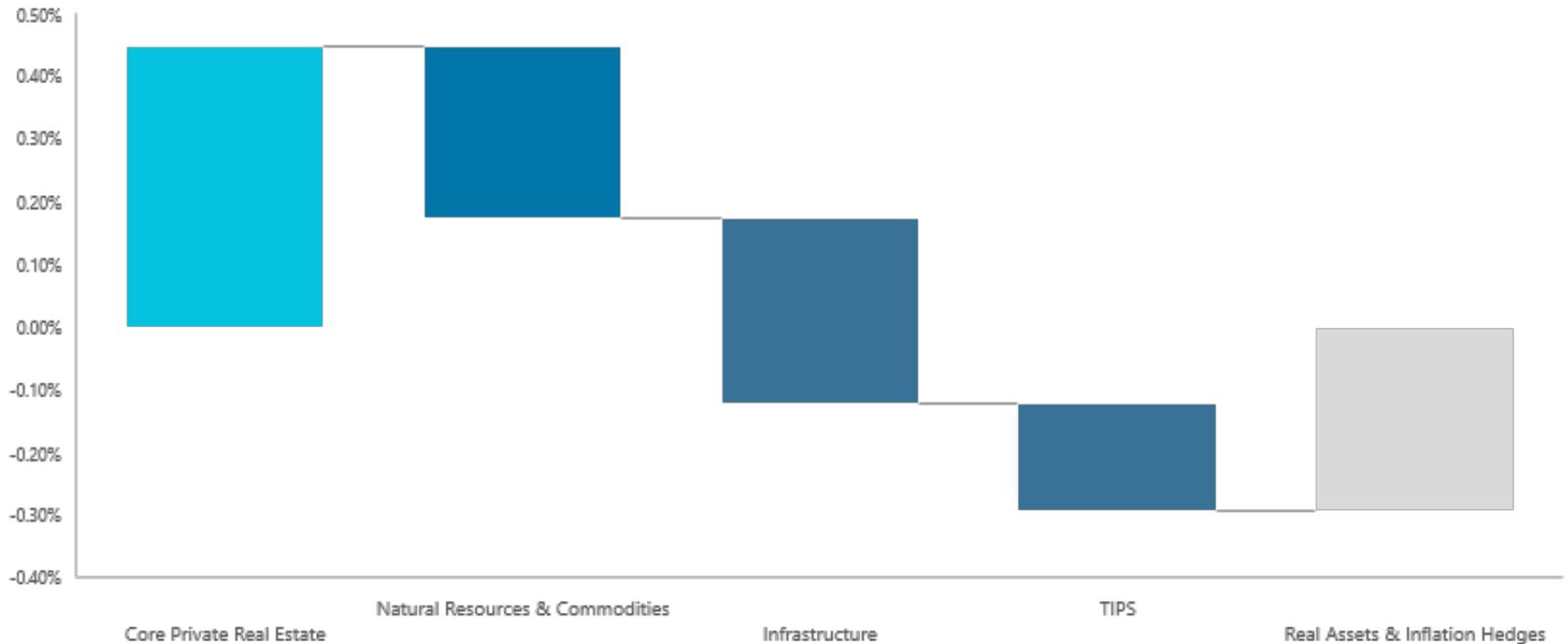


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Real Assets & Inflation Hedges	12,539	100.0%	100.0%		
Core Private Real Estate	4,323	34.5%	35.3%	-0.8%	-102
Natural Resources & Commodities	2,958	23.6%	23.5%	0.1%	7
Infrastructure	3,327	26.5%	23.5%	3.0%	377
TIPS	1,931	15.4%	17.7%	-2.3%	-283

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Core Private Real Estate	0.45%	Real Estate - Real Assets	0.45%	DWS Natural Resources	-0.30%
Natural Resources & Commodities	-0.27%	TIAA-CREF Global Agriculture II	0.04%	DWS Infrastructure	-0.29%
Infrastructure	-0.29%	Private Equity - Real Assets	0.01%	BlackRock TIPS	-0.17%
TIPS	-0.17%	DIF Infrastructure VI	0.00%	Credit Suisse Commodity	-0.04%
Real Assets & Inflation Hedges	-0.29%	Partners Grp Direct Infra 2020	0.00%	PIMCO Commodity Plus	-0.01%

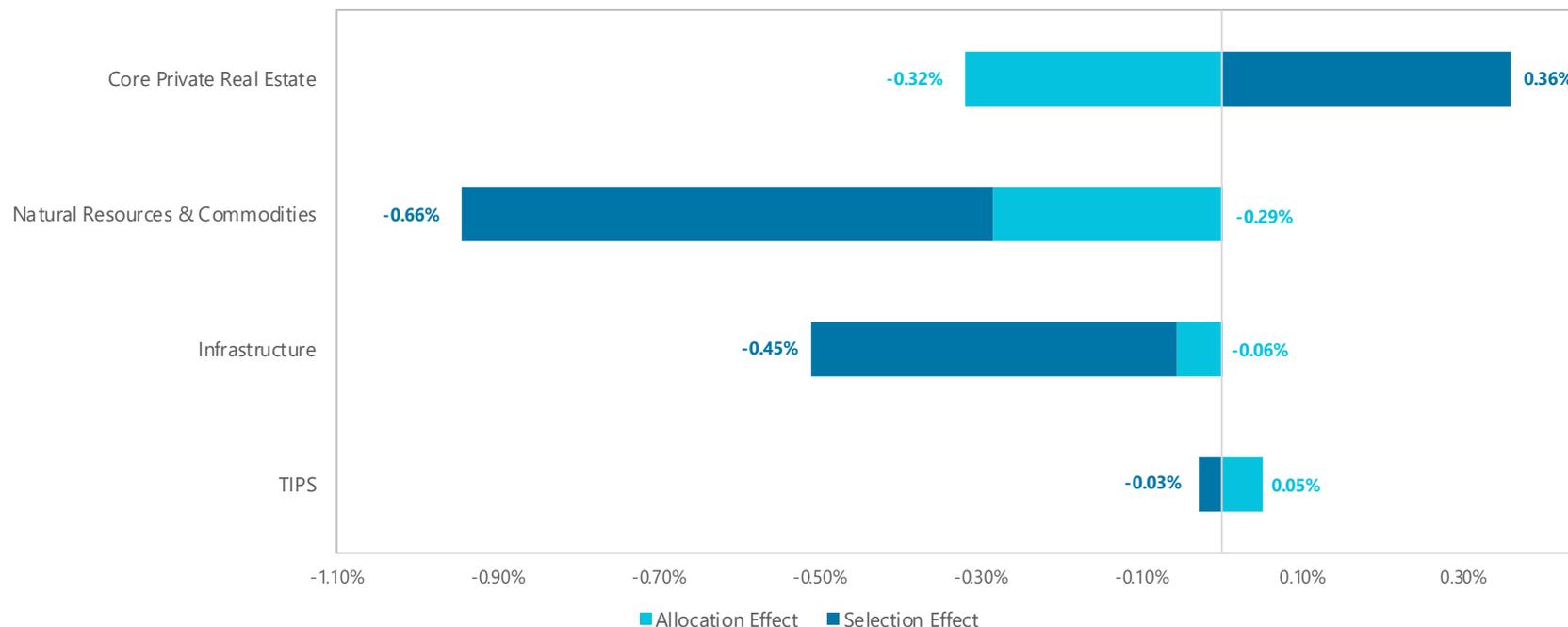
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



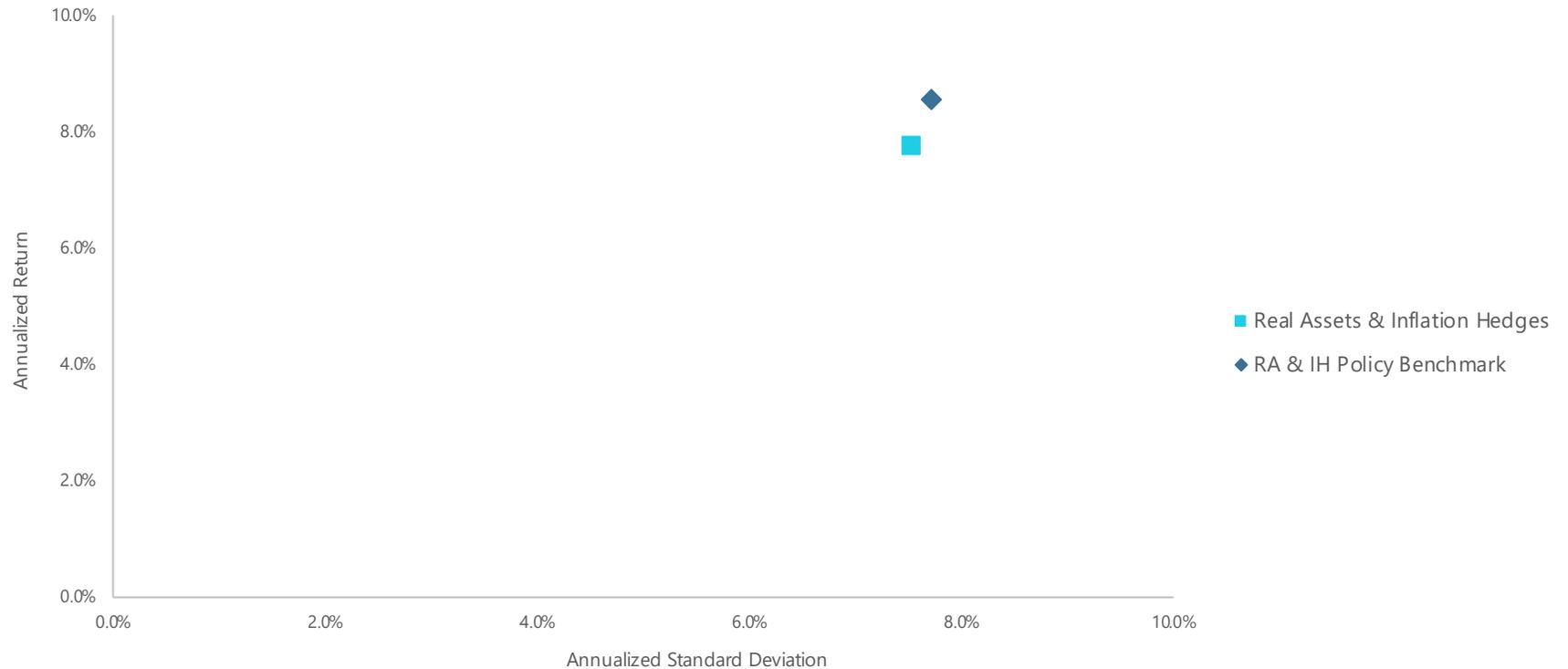
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Real Assets & Inflation Hedges	12,539	100.0%	100.0%	-1.6%	-3.2%	-0.61%	-0.78%	1.58%
Core Private Real Estate	4,323	34.5%	35.3%	8.4%	7.1%	-0.32%	0.36%	-0.01%
Natural Resources & Commodities	2,958	23.6%	23.5%	-6.1%	-12.4%	-0.29%	-0.66%	1.47%
Infrastructure	3,327	26.5%	23.5%	-6.5%	-6.9%	-0.06%	-0.45%	0.10%
TIPS	1,931	15.4%	17.7%	-6.3%	-6.1%	0.05%	-0.03%	0.02%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Real Assets & Inflation Hedges	7.8%	7.5%				
RA & IH Policy Benchmark	8.6%	7.7%	0.95	(0.29)	0.95	2.2%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Assets & Inflation Hedges	100.0%	12,539	12,933	-1.6%	6.0%	14.3%	7.9%	--	--	7.8%
RA & IH Policy Benchmark				-3.2%	4.2%	12.4%	8.7%	--	--	8.6%
Core Private Real Estate	34.5%	4,323	4,079	8.4%	15.9%	27.9%	8.4%	8.3%	8.8%	7.3%
Core Private RE Policy Benchmark				7.1%	15.3%	27.4%	10.7%	9.4%	10.4%	7.2%
Natural Resources & Commodities	23.6%	2,958	3,796	-6.1%	11.4%	18.6%	12.5%	8.0%	-0.3%	-1.0%
Nat Res & Comm Policy Benchmark				-12.4%	4.7%	12.2%	11.2%	7.0%	-1.5%	-2.2%
Cibus Enterprise II	0.0%	4	0	--	--	--	--	--	--	0.0%
Cibus Fund II	0.1%	18	0	--	--	--	--	--	--	0.0%
Credit Suisse Commodity	4.4%	551	580	-4.9%	19.4%	25.9%	15.7%	8.9%	-0.2%	-1.9%
DWS Natural Resources	7.4%	934	1,455	-17.0%	-0.3%	6.8%	9.6%	--	--	12.3%
Neuberger Berman/Gresham	4.3%	541	562	-3.7%	21.2%	26.4%	14.6%	9.5%	0.2%	-0.4%
Orion Mine Finance Fund III	0.9%	108	88	6.7%	6.7%	--	--	--	--	9.4%
Orion Mining Royalty Fund I	0.1%	15	14	1.2%	1.2%	--	--	--	--	12.5%
PIMCO Commodity Plus	1.7%	213	569	-5.3%	18.1%	24.5%	14.9%	9.3%	0.7%	-0.5%
Private Equity - Real Assets	0.7%	85	81	7.8%	11.2%	25.0%	-8.9%	--	--	-9.8%
TIAA-CREF Global Agriculture I	1.7%	211	183	16.8%	16.8%	--	--	--	--	16.8%
TIAA-CREF Global Agriculture II	2.2%	278	265	12.4%	12.4%	--	--	--	--	12.4%
Infrastructure	26.5%	3,327	2,999	-6.5%	-3.6%	4.1%	7.6%	--	--	8.9%
DJ Brookfield Global Infrastr Comp TR				-6.9%	-2.7%	2.8%	4.5%	--	--	5.7%
Antin Mid Cap	0.1%	17	12	1.2%	-15.2%	--	--	--	--	-15.0%
Axium Infrastructure	1.5%	193	14	1.8%	-0.8%	--	--	--	--	-0.8%
Axium Infrastructure Canada	0.0%	0	0	0.0%	-100.0%	--	--	--	--	-100.0%
DIF CIF III	0.1%	7	0	--	--	--	--	--	--	-0.9%
DIF Infrastructure VI	0.5%	66	65	1.9%	1.8%	56.6%	--	--	--	22.4%
DWS Infrastructure	21.3%	2,668	2,742	-8.0%	-4.7%	3.2%	7.5%	--	--	8.8%
Grain Communications Opportunity III	0.2%	27	29	-7.6%	-7.6%	-14.6%	--	--	--	--
Grain Spectrum Holdings III	0.4%	47	47	-0.1%	-0.3%	-0.5%	--	--	--	-1.1%
KKR DCIF	1.6%	200	0	0.0%	--	--	--	--	--	0.0%
Pan-European Infrastructure Fund III	0.4%	52	44	-3.4%	2.1%	6.3%	--	--	--	1.0%
Partners Grp Direct Infra 2020	0.4%	50	45	2.2%	--	--	--	--	--	2.2%
TIPS										
Blackrock TIPS	15.4%	1,931	2,059	-6.3%	-8.6%	-4.8%	3.1%	--	--	3.7%
Bloomberg U.S. Treasury: U.S. TIPS				-6.1%	-8.9%	-5.1%	3.0%	--	--	3.7%

1. Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Real Assets & Inflation Hedges

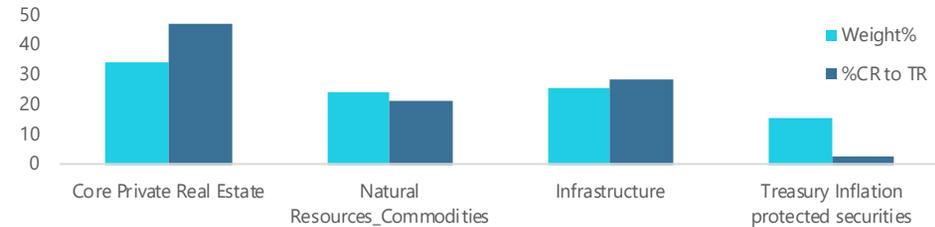
Risk Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	13.83
Benchmark Risk	13.77
Active Risk	1.81
Portfolio Beta	1.00

Contribution to Risk

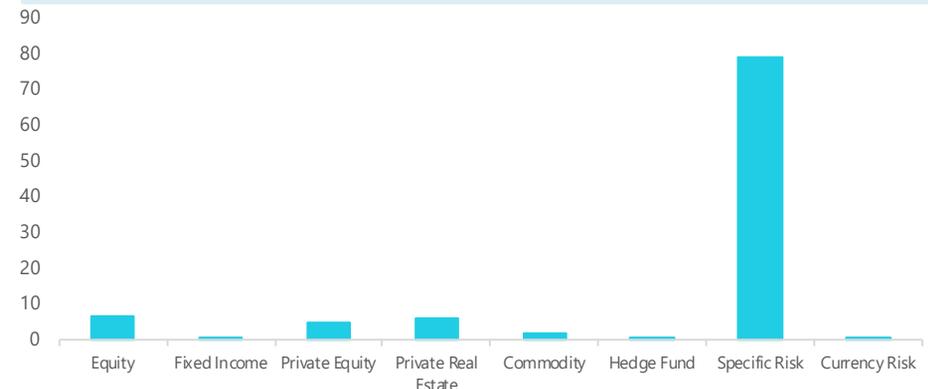


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Real Assets & Inflation Hedges	12,621	100.00	13.83	13.83	100.00
Core Private Real Estate	4,323	34.25	21.68	6.50	46.97
Natural Resources Commodities	3,095	24.53	15.82	3.00	21.70
Infrastructure	3,271	25.92	17.10	3.97	28.69
Treasury Inflation protected securities	1,932	15.30	5.72	0.37	2.65

Risk Decomposition

Risk Source	Portfolio		Active	
	Risk Contribution	%Risk	Risk Contribution	%Risk
Total Risk	13.83	100.00	1.81	100.00
Common Factor Risk	13.06	94.41	0.37	20.44
Specific Risk	0.09	0.63	1.43	79.14
Currency Risk	0.69	4.96	0.01	0.42

Active Risk from Common Factors

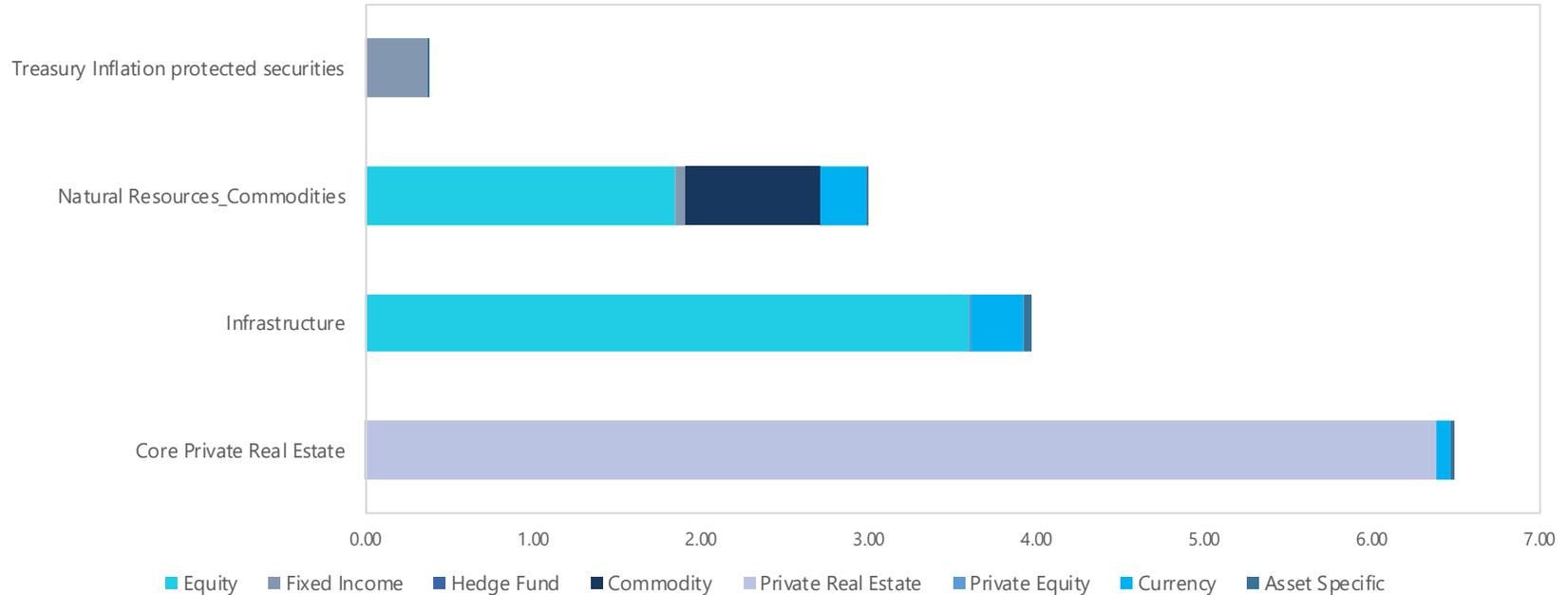


Real Assets & Inflation Hedges

Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Sector



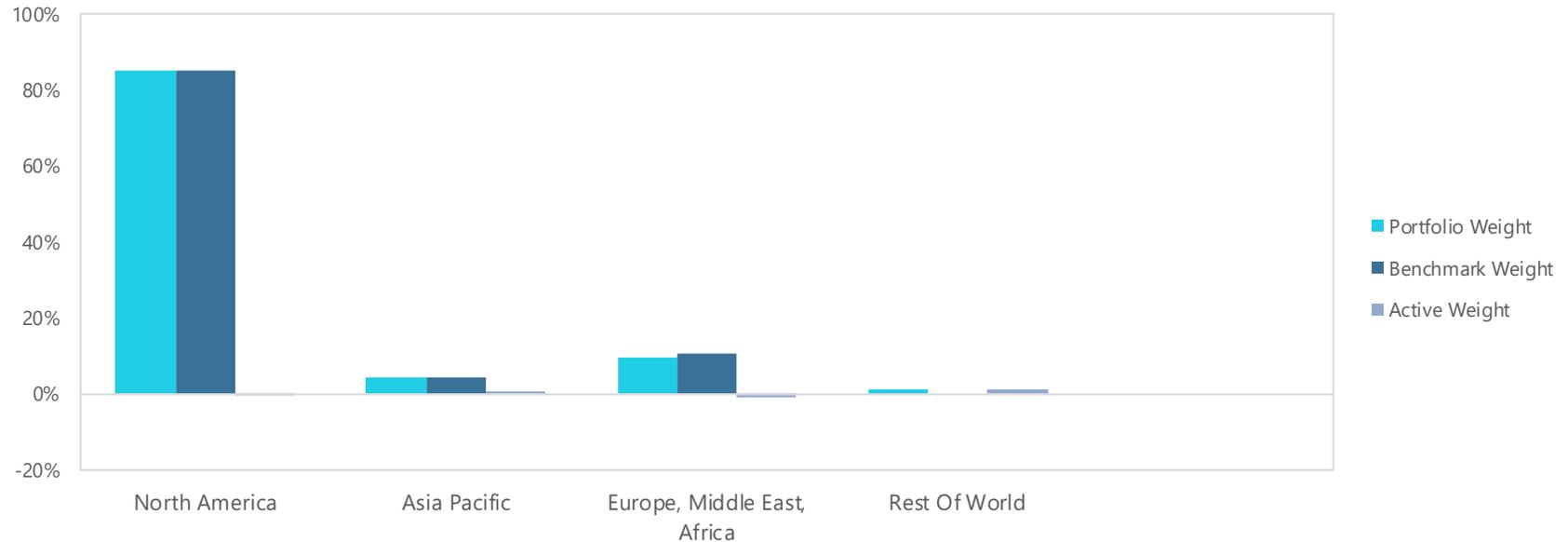
Functional Category	Port Risk Contribution	Equity	Fixed Income	Hedge Fund	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific
Total Fund	13.83	5.45	0.43	0.00	0.80	6.38	0.01	0.69	0.09
Core Private Real Estate	6.50	0.00	0.00	0.00	0.00	6.38	0.00	0.09	0.03
Infrastructure	3.97	3.60	0.00	0.00	0.00	0.00	0.01	0.31	0.05
Natural Resources_Commodities	3.00	1.85	0.06	0.00	0.80	0.00	0.00	0.28	0.01
Treasury Inflation protected securities	0.37	0.00	0.37	0.00	0.00	0.00	0.00	0.00	0.00

Real Assets & Inflation Hedges

Risk Summary

for the quarter ended June 30, 2022

Portfolio Allocation By Region



Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	13.83	1.81	100.00	0.02
North America	85.07%	85.27%	-0.20%	13.61	1.59	88.32	0.02
Asia Pacific	4.52%	4.32%	0.21%	16.18	0.04	1.93	0.01
Europe, Middle East, Africa	9.45%	10.41%	-0.96%	23.19	0.17	9.41	0.01
Rest Of World	0.96%	0.00%	0.96%	4.92	0.01	0.34	0.01

Real Assets & Inflation Hedges

Natural Resources & Commodities

Credit Suisse

for the quarter ended June 30, 2022

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining.

Inception Date: March 2011

Risk Statistics (since inception)

Standard Deviation	16.1%
Benchmark Standard Deviation	16.4%
Sharpe Ratio	0.53
Information Ratio	0.89
Beta	0.98
Tracking Error	0.9%

Top Holdings (% of assets)

GOLD 100 OZ FUTR AUG22	13.5%
US TREASURY FRN	11.8%
NATURAL GAS FUTR SEP22	10.4%
US TREASURY FRN	10.2%
US TREASURY FRN	10.1%
Top 5 Holdings	56.0%

Performance (net)¹

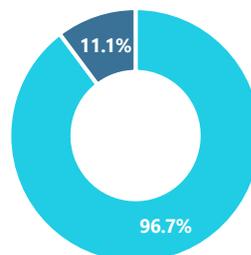
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Credit Suisse Commodity	551.2	-4.9%	25.9%	15.7%	8.9%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Credit Suisse Commodity	-4.9%	71	26.2%	44	16.1%	36	9.2%	43
Median	0.0%		25.2%		14.3%		7.9%	

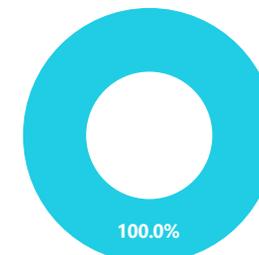
Growth of \$10,000



Top Exposures (% of assets)²



AGENCY
CASH EQUIVALENT



UNITED STATES

1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

Credit Suisse

for the quarter ended June 30, 2022

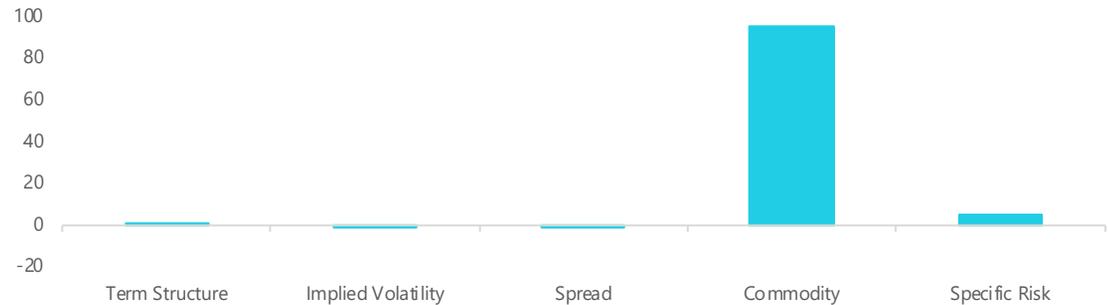


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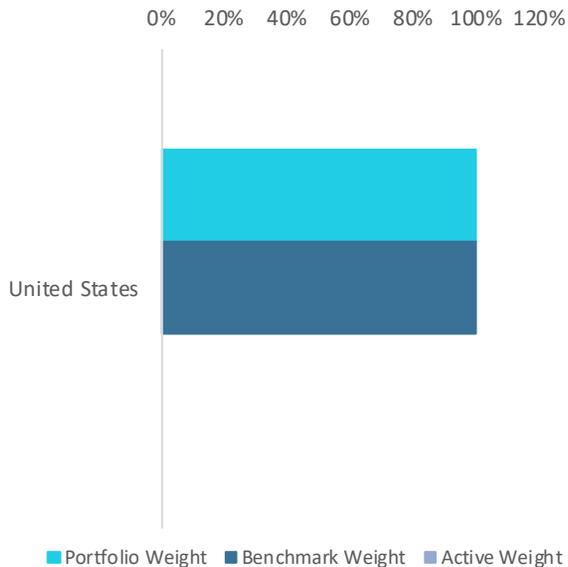
Portfolio Risk Summary

	Value
Total Risk	16.99
Benchmark Risk	18.88
Active Risk	4.88
Portfolio Beta	0.87

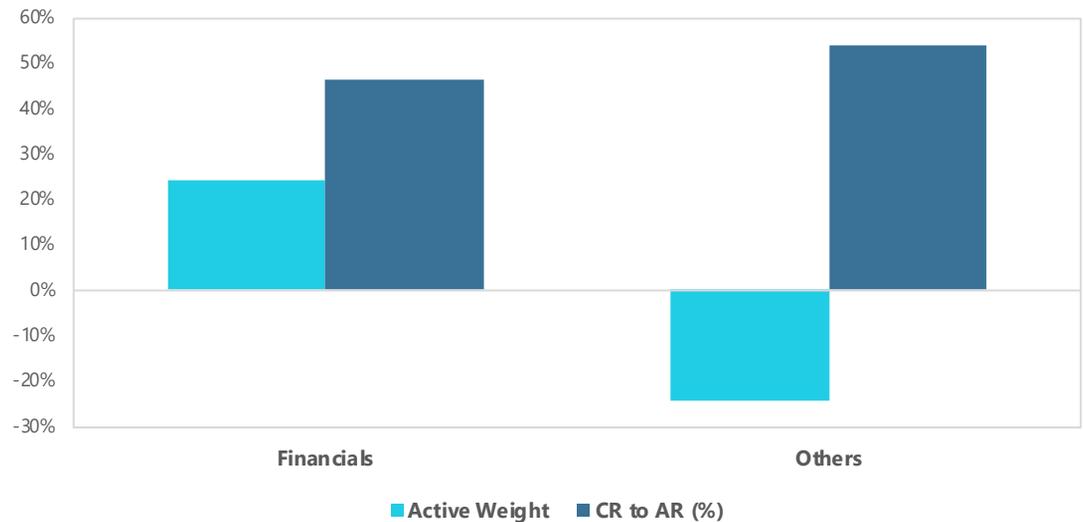
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

DWS

for the quarter ended June 30, 2022

Strategy

Seeks to provide capital appreciation and a hedge to inflation. A diversified approach within infrastructure to gain exposure to infrastructure related to telecommunication, transportation, utilities, waste and energy.

Inception Date: June 2019

Risk Statistics (since inception)

Standard Deviation	25.1%
Benchmark Standard Deviation	25.1%
Sharpe Ratio	0.56
Information Ratio	-0.34
Beta	0.98
Tracking Error	4.4%

Top Holdings (% of assets)

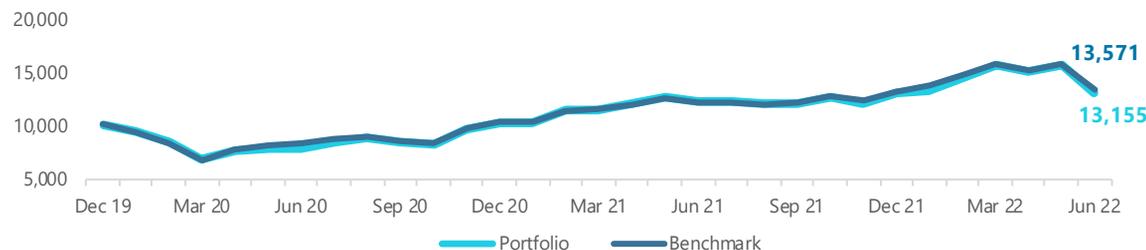
NUTRIEN LTD	9.0%
EXXON MOBIL CORP	7.7%
CORTEVA INC	6.7%
SHELL PLC	4.8%
VALE SA SP ADR	4.6%
Top 5 Holdings	32.8%

Performance (net)¹

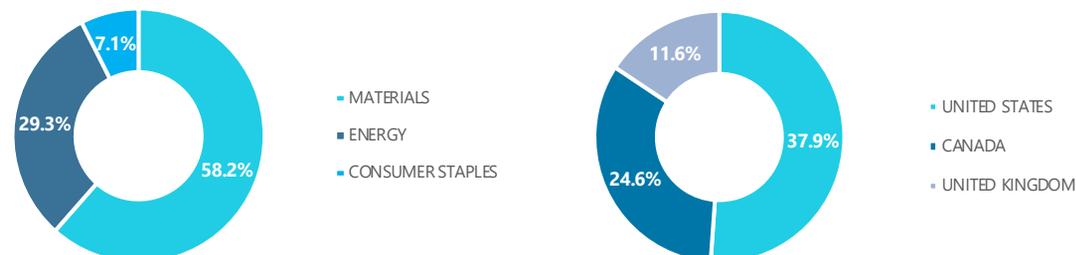
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DWS Natural Resources	933.6	-17.0%	6.8%	9.6%	--
S&P Glb LargeMidCap Commod & Resources		-15.1%	10.2%	10.7%	--
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DWS Natural Resources	-17.0%	100	7.0%	64	9.8%	60	--	--
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

DWS

for the quarter ended June 30, 2022

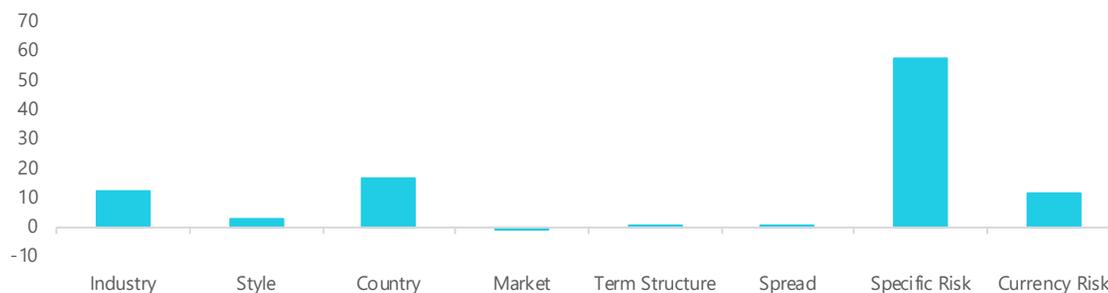


Los Angeles County Employees Retirement Association

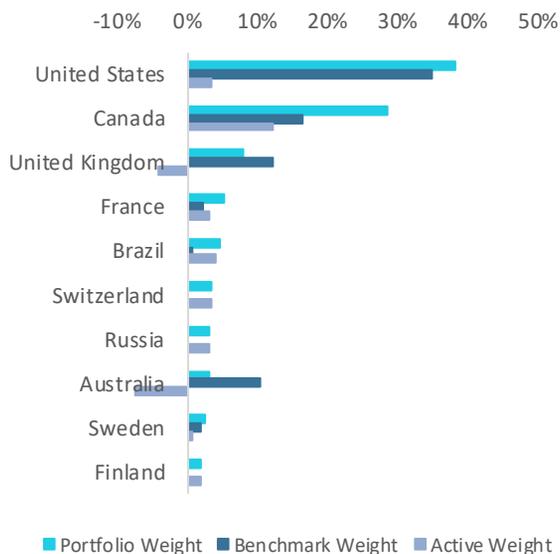
Portfolio Risk Summary

	Value
Total Risk	23.81
Benchmark Risk	23.80
Active Risk	4.63
Portfolio Beta	0.98

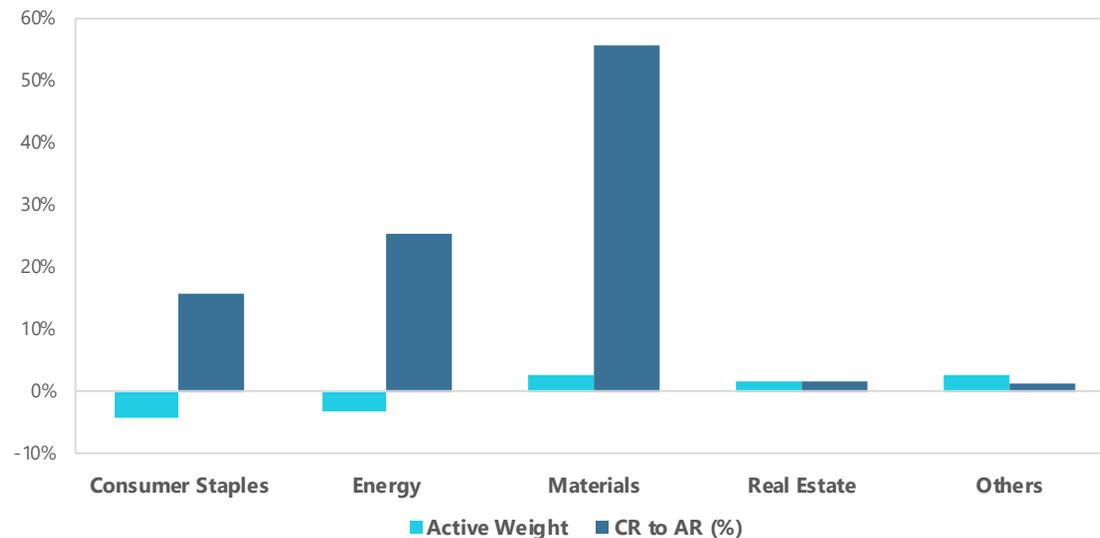
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

Neuberger Berman / Gresham

for the quarter ended June 30, 2022

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining. The collateral portfolio provides income with conservative fixed income exposure.

Inception Date: July 2007

Risk Statistics (since inception)

Standard Deviation	18.6%
Benchmark Standard Deviation	17.1%
Sharpe Ratio	0.14
Information Ratio	0.52
Beta	1.05
Tracking Error	5.0%

Top Holdings (% of assets)

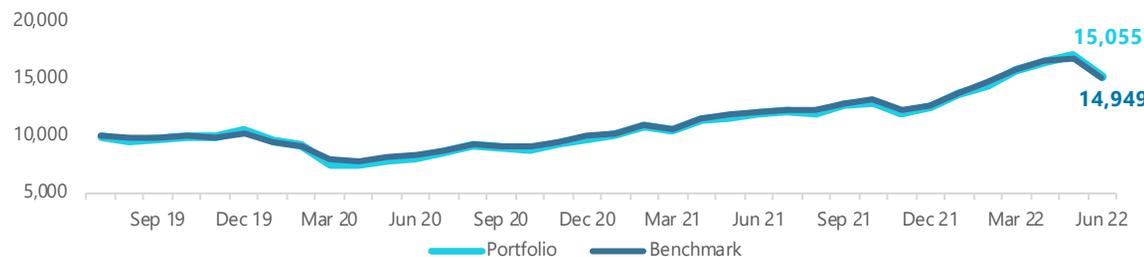
GOLD 100 OZ FUTR AUG22	10.6%
NATURAL GAS FUTR SEP22	9.7%
SOYBEAN FUTURE NOV22	6.6%
WTI CRUDE FUTURE SEP22	6.1%
TREASURY BILL	5.5%
Top 5 Holdings	38.6%

Performance (net)¹

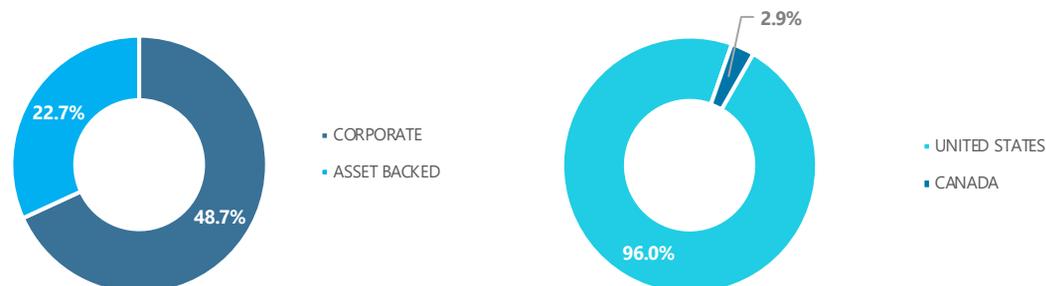
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Neuberger Berman/Gresham	541.4	-3.7%	26.4%	14.6%	9.5%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodities Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Neuberger Berman/Gresham	-3.6%	68	26.8%	43	15.0%	48	9.1%	40
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

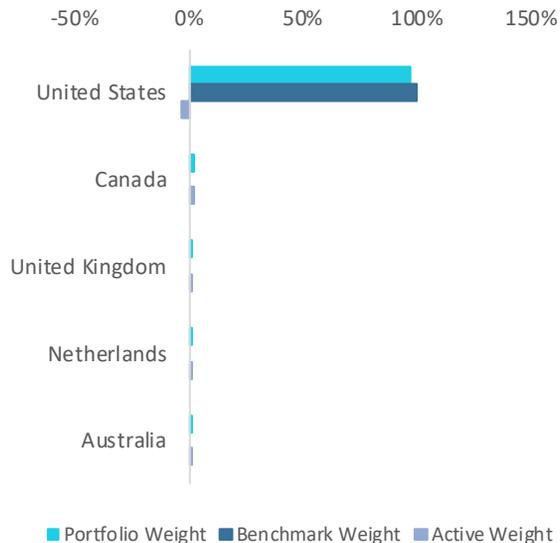
Neuberger Berman / Gresham

for the quarter ended June 30, 2022

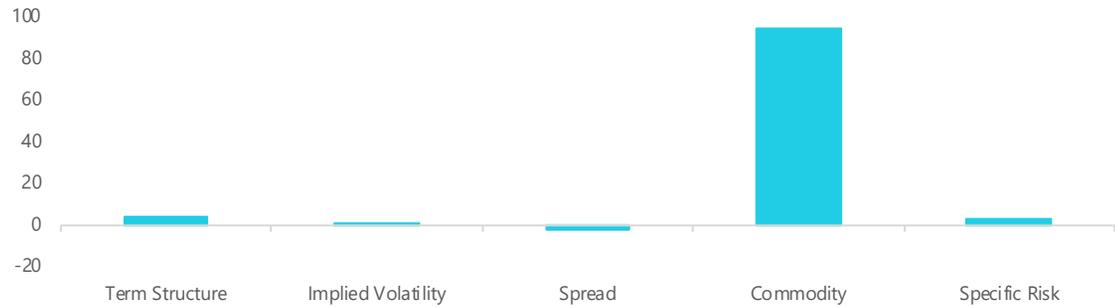
Portfolio Risk Summary

	Value
Total Risk	14.79
Benchmark Risk	19.34
Active Risk	5.05
Portfolio Beta	0.76

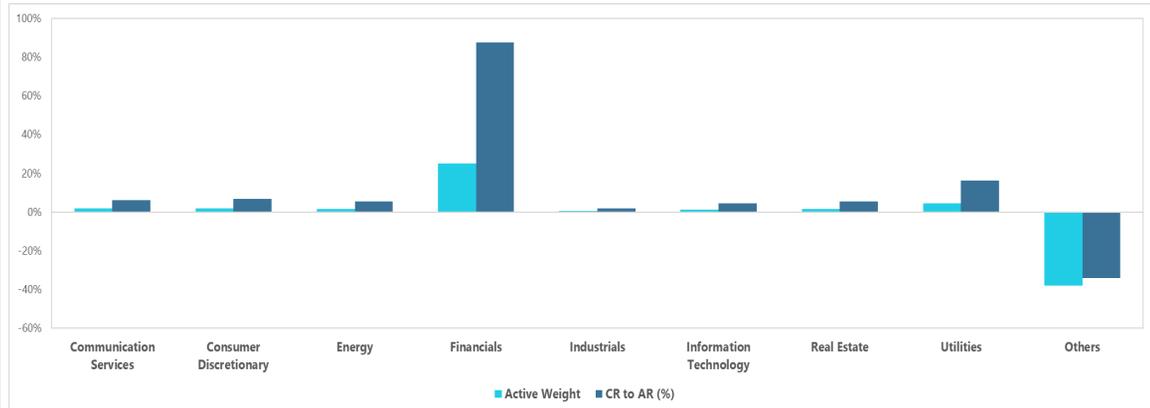
Top Countries by Weight%



Active Risk from Common Factors



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Natural Resources & Commodities

PIMCO

for the quarter ended June 30, 2022

Strategy

Seeks to provide a hedge against inflation and exposure to commodities markets such as energy, agriculture and timber, and metals and mining. The collateral portfolio provides income with conservative fixed income exposure.

Inception Date: July 2007

Risk Statistics (since inception)

Standard Deviation	18.2%
Benchmark Standard Deviation	17.1%
Sharpe Ratio	0.03
Information Ratio	0.51
Beta	1.05
Tracking Error	2.5%

Top Holdings (% of assets)

PIMCO FDS SHORT TERM FLTG NAV MUTUAL FUND	36.8%
SWU0SY268 TRS USD R E	22.8%
SWU0SY417 TRS USD R E	18.7%
SWU0SY425 TRS USD R E	13.3%
BRENT CRUDE FUTR DEC23	6.6%
Top 5 Holdings	98.3%

Performance (net)¹

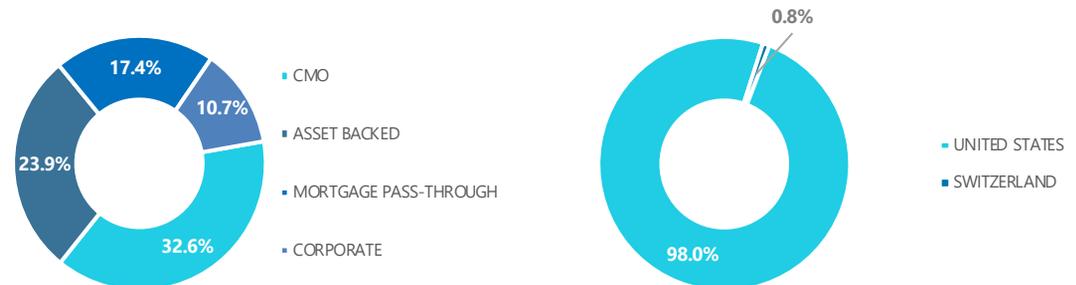
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
PIMCO Commodity Plus	212.8	-5.3%	24.5%	14.9%	9.3%
Bloomberg Commodity Index Total Return		-5.7%	24.3%	14.3%	8.4%
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Commodity Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
PIMCO Commodity Plus	-5.2%	71	25.0%	52	15.4%	47	9.7%	41
Median	0.0%		25.2%		14.3%		7.9%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Natural Resources & Commodities

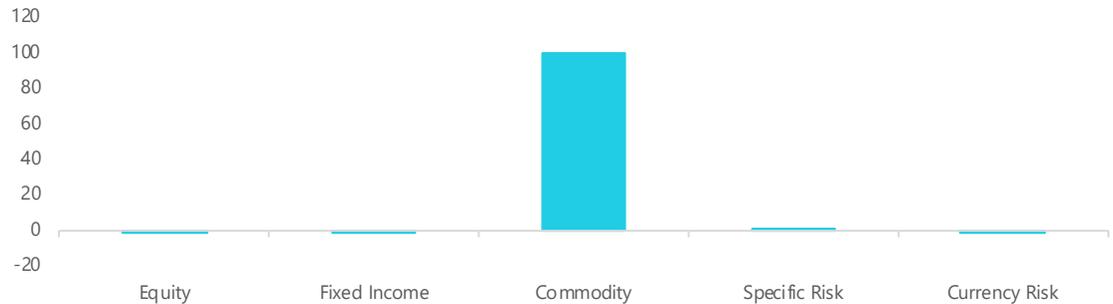
PIMCO

for the quarter ended June 30, 2022

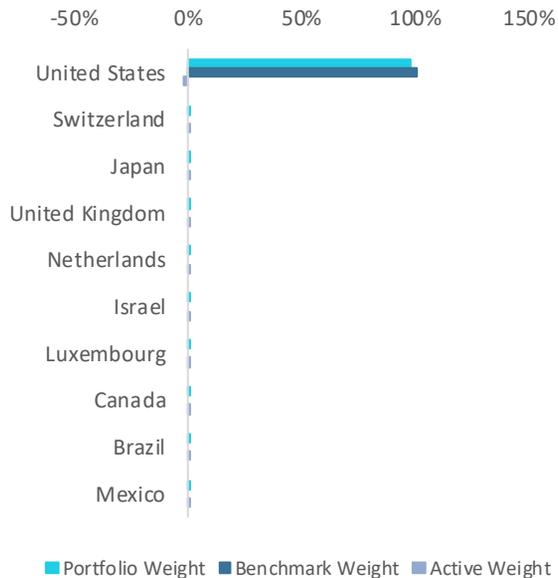
Portfolio Risk Summary

	Value
Total Risk	1.61
Benchmark Risk	18.88
Active Risk	19.00
Portfolio Beta	0.00

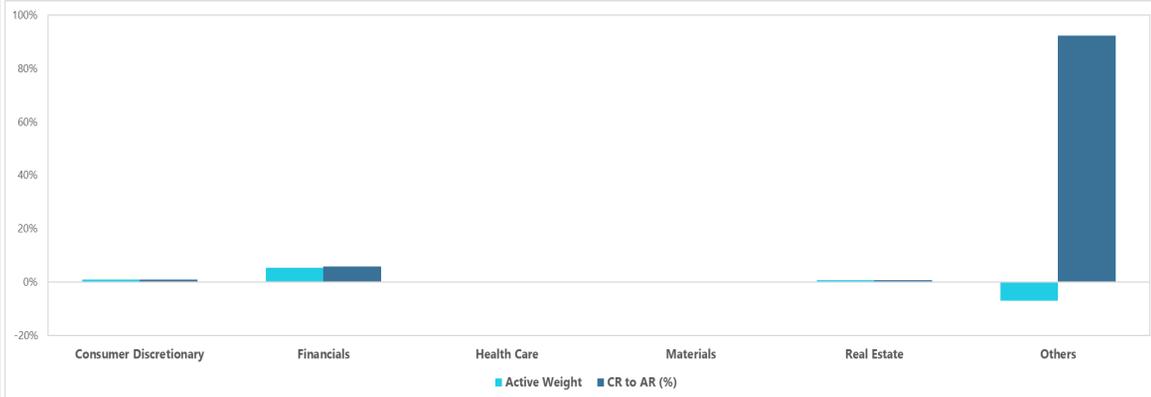
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

Infrastructure

DWS

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide capital appreciation and income with global infrastructure securities. The strategy takes a diversified approach within infrastructure to gain exposure to infrastructure related to telecommunication, transportation, utilities, waste and energy.

Inception Date: June 2019

Portfolio Characteristics

	Portfolio	Benchmark
Market Cap Wtd Average (mm)	43,813.9	41,933.7
No. Of Issues	46.0	--
Dividend Yield	2.5	3.2
Return on Equity	15.9	14.8
Price to Sales	5.9	5.5
Price to Book	3.7	4.0
PE Ratio	35.0	29.6

Top Holdings (% of assets)

CROWN CASTLE INTL CORP	7.6%
AMERICAN TOWER CORP	6.5%
ENBRIDGE INC	5.9%
SEMPRA ENERGY	5.3%
WILLIAMS COS INC	4.7%
Top 5 Holdings	30.0%

Performance (net)¹

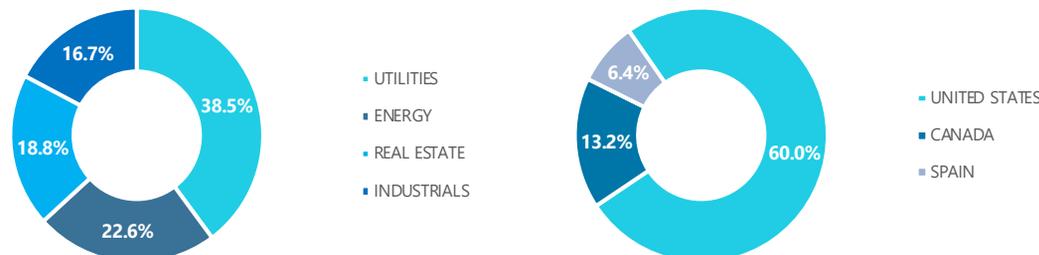
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DWS Infrastructure	2,668.3	-8.0%	3.2%	7.5%	--
DJ Brookfield Global Infrastr Comp TR		-6.9%	2.8%	4.5%	--
RA & IH Policy Benchmark		-3.2%	12.4%	8.7%	--

Universe data: Infrastructure	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DWS Infrastructure	-7.9%	--	3.4%	--	7.7%	--	--	--
Median	--	--	--	--	--	--	--	--

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data for infrastructure is unavailable.
 2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

Infrastructure

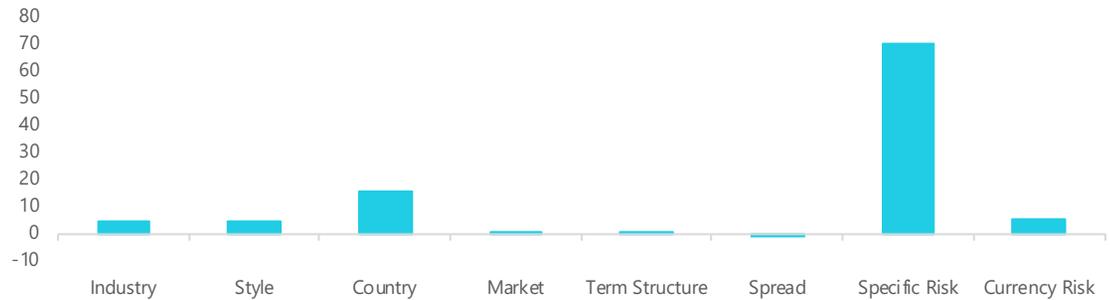
DWS

for the quarter ended June 30, 2022

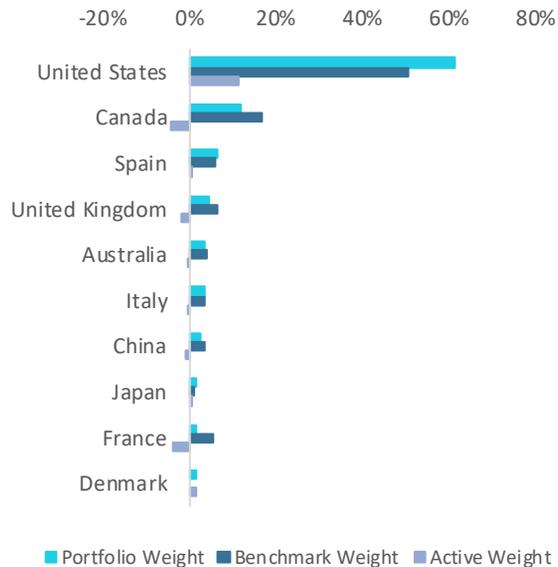
Portfolio Risk Summary

	Value
Total Risk	17.13
Benchmark Risk	17.29
Active Risk	2.18
Portfolio Beta	0.98

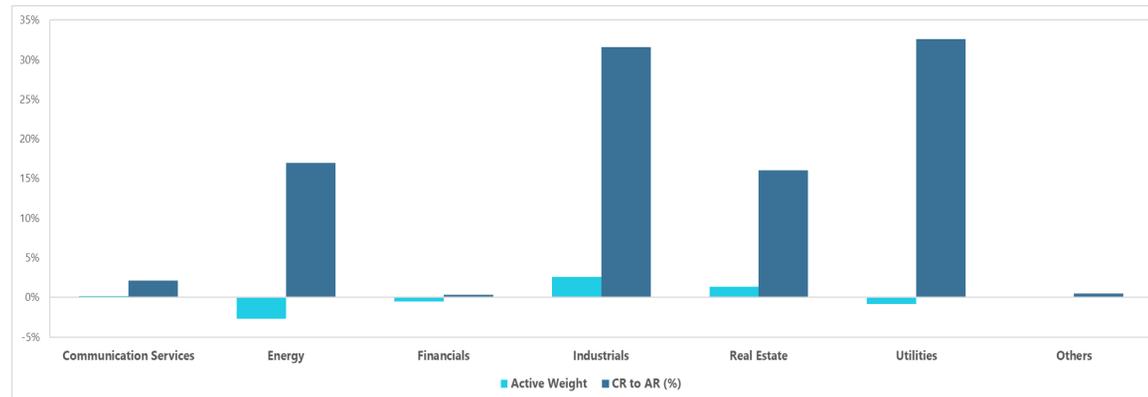
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector



Real Assets & Inflation Hedges

TIPS

BlackRock

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Seeks to provide income and a hedge against inflation with passive TIPS exposure.

Inception Date: May 2019

Risk Statistics (since inception)

Standard Deviation	5.0%
Benchmark Standard Deviation	4.9%
Sharpe Ratio	0.62
Information Ratio	0.08
Beta	1.00
Tracking Error	0.7%

Top Holdings (% of assets)

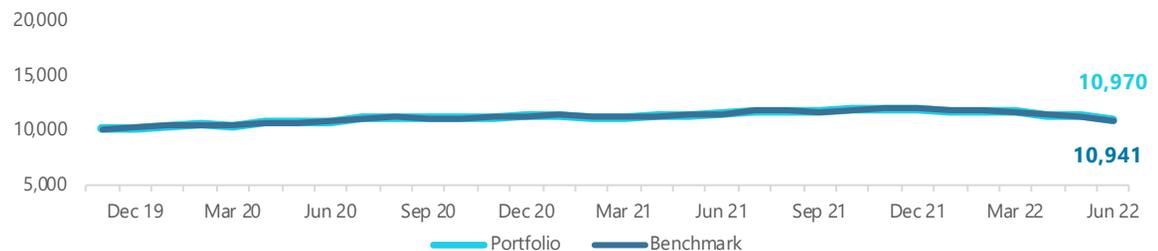
TSY INFL IX N/B	6.3%
TSY INFL IX N/B	4.8%
TSY INFL IX N/B	4.5%
TSY INFL IX N/B	4.0%
TSY INFL IX N/B	3.9%
Top 5 Holdings	23.5%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
BlackRock TIPS	1,930.6	-6.3%	-4.8%	3.1%	--
Bloomberg U.S. Treasury: U.S. TIPS		-6.1%	-5.1%	3.0%	--
Real Assets & Inflation Hedges Policy BM		-3.2%	12.4%	8.7%	--

Universe data: Inflation Linked Bond Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
BlackRock TIPS	-6.3%	--	-4.8%	--	3.1%	--	--	--
Median	--		--		--		--	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data for TIPS is unavailable.
2. Charts display top exposures and may not add up to 100%.

Real Assets & Inflation Hedges Risk Analysis

TIPS

BlackRock

for the quarter ended June 30, 2022

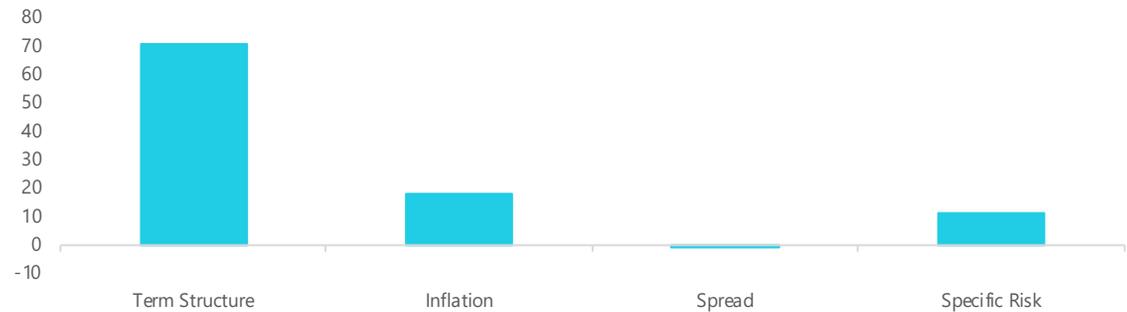


Los Angeles County Employees Retirement Association

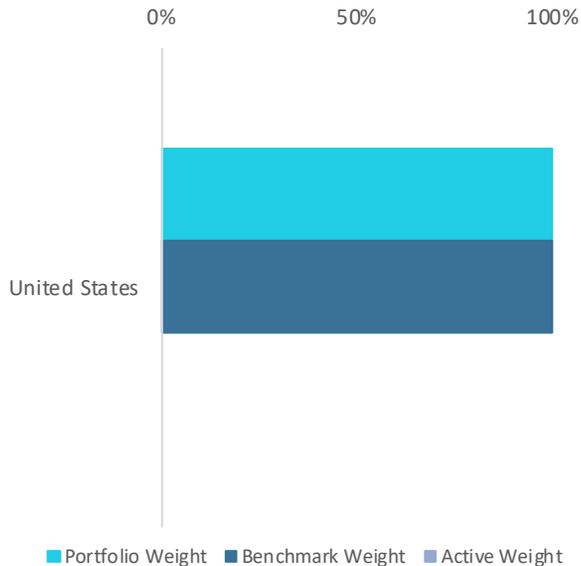
Portfolio Risk Summary

	Value
Total Risk	5.72
Benchmark Risk	5.78
Active Risk	0.08
Portfolio Beta	0.99

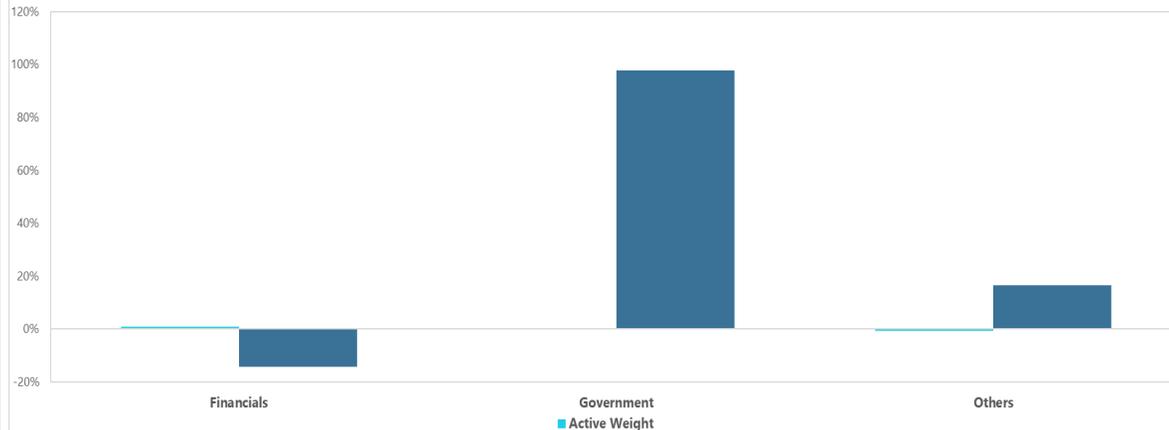
Active Risk from Common Factors



Top Countries by Weight%



Portfolio Risk by Sector

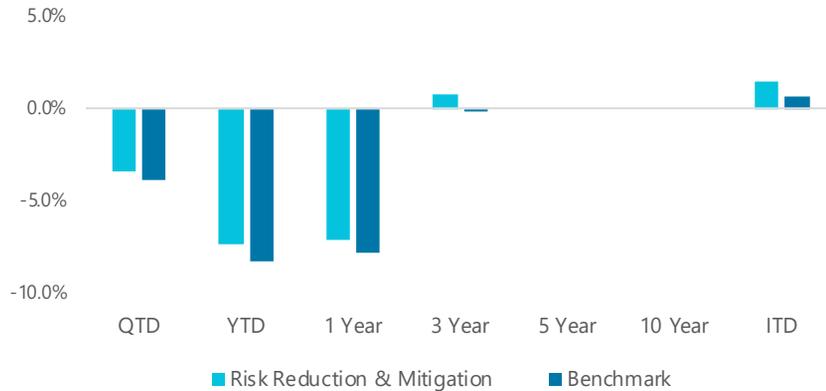


risk reduction & mitigation

Summary

for the quarter ended June 30, 2022

Performance (net)



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Risk Reduction & Mitigation	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
Benchmark	-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Excess	0.5%	1.0%	0.6%	0.9%	--	--	0.9%

Cumulative Return

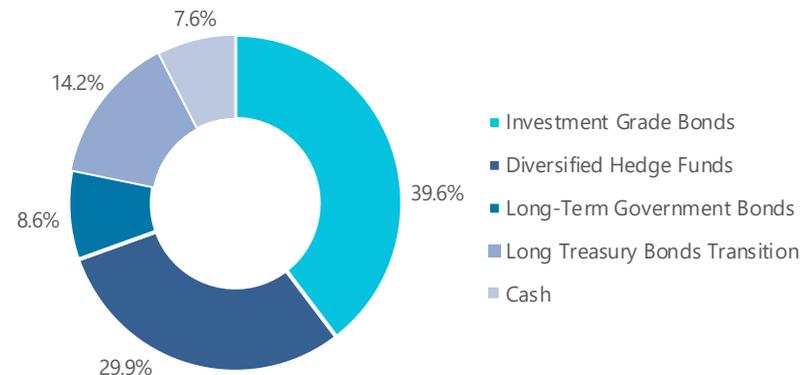


Functional Category¹

	QTD	FYTD	1 Year	3 Year
Investment Grade Bonds	-4.8%	-10.6%	-10.6%	-0.7%
BBG BC Aggregate Bond Index	-4.7%	-10.3%	-10.3%	-0.9%
Excess	-0.1%	-0.3%	-0.3%	0.2%
Diversified Hedge Funds	1.5%	4.0%	4.0%	7.1%
Diversified Hedge Funds Policy Benchmark	0.7%	2.6%	2.6%	3.2%
Excess	0.8%	1.4%	1.4%	3.9%
Long-Term Government Bonds	-11.4%	--	--	--
Bloomberg U.S. Treasury: Long	-11.9%	--	--	--
Excess	0.5%	--	--	--
Cash	0.7%	1.5%	1.5%	1.3%
Cash Policy Benchmark	0.1%	0.2%	0.2%	0.6%
Excess	0.5%	1.3%	1.3%	0.7%

1. Diversified Hedge Funds returns are net of all fees and expenses.

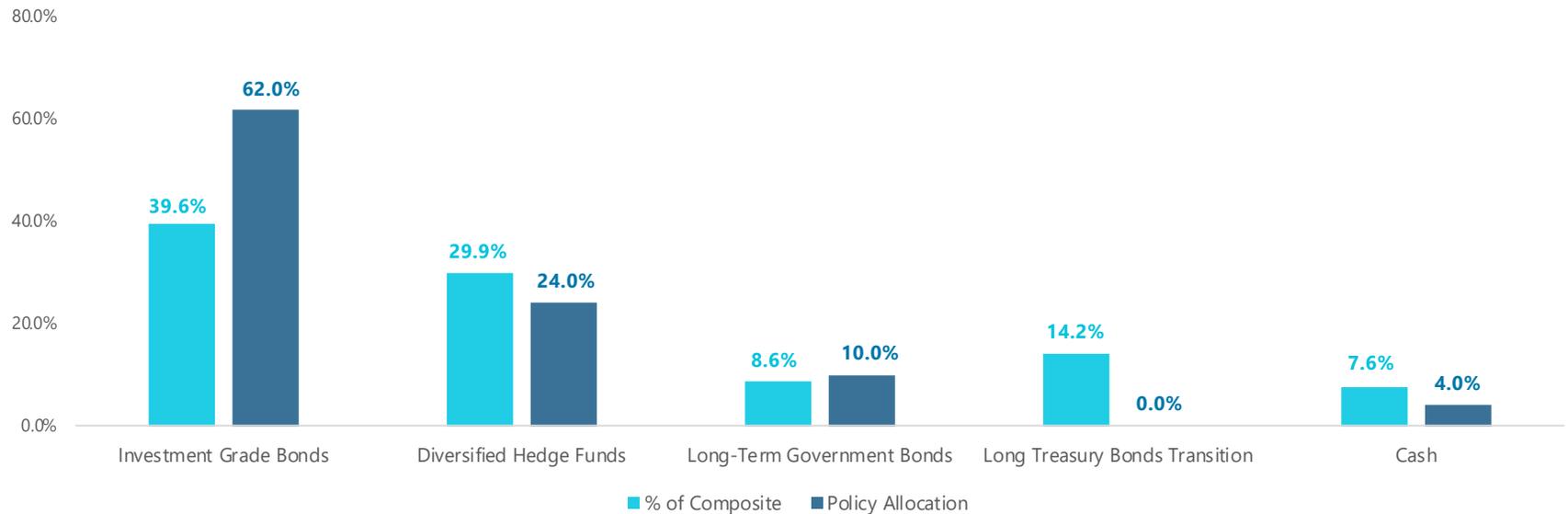
Exposure



Asset Allocation

for the quarter ended June 30, 2022

Actual vs. Policy

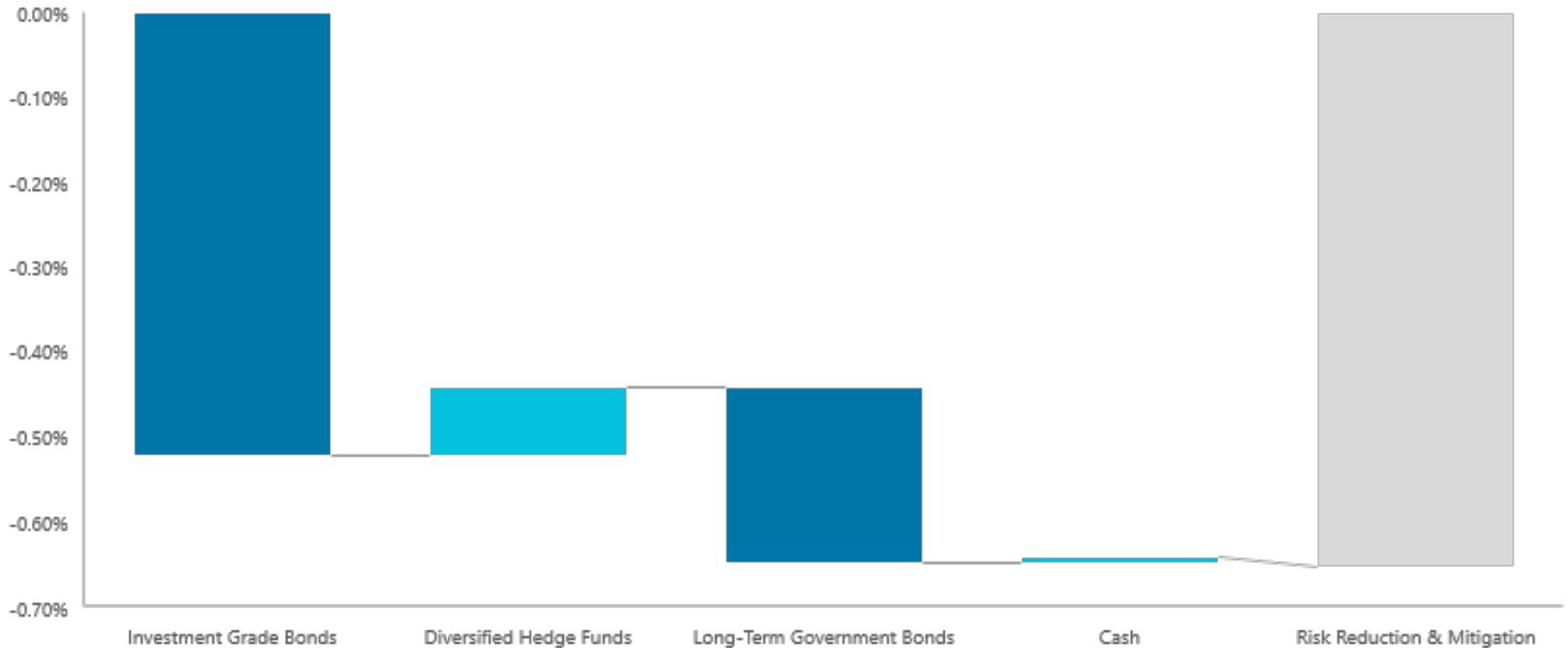


	Ending Market Value (mm)	% of Composite	Policy Allocation	Over / Under (%)	Over / Under (mm)
Risk Reduction & Mitigation	14,020	100.0%	100.0%		
Investment Grade Bonds	5,556	39.6%	62.0%	-22.4%	-3,137
Diversified Hedge Funds	4,196	29.9%	24.0%	5.9%	831
Long-Term Government Bonds	1,210	8.6%	10.0%	-1.4%	-192
Long Treasury Bonds Transition	1,992	14.2%	0.0%	14.2%	1,992
Cash	1,067	7.6%	4.0%	3.6%	506

Contribution to Return

for the quarter ended June 30, 2022

QTD Contribution to Return



Functional Category		Contributors		Detractors	
Investment Grade Bonds	-0.52%	Brevan Howard Master Fund	0.08%	BTC US Debt Index Fund	-0.32%
Diversified Hedge Funds	0.08%	Caxton Global Investments	0.02%	BlackRock Long Treasury Bonds	-0.21%
Long-Term Government Bonds	-0.21%	Capula GRV	0.02%	Allspring/Wells	-0.12%
Cash	0.01%	Cash	0.01%	Pugh Capital Mgmt	-0.07%
Risk Reduction & Mitigation	-0.65%	Linear B	0.00%	DK Institutional Partners	-0.01%

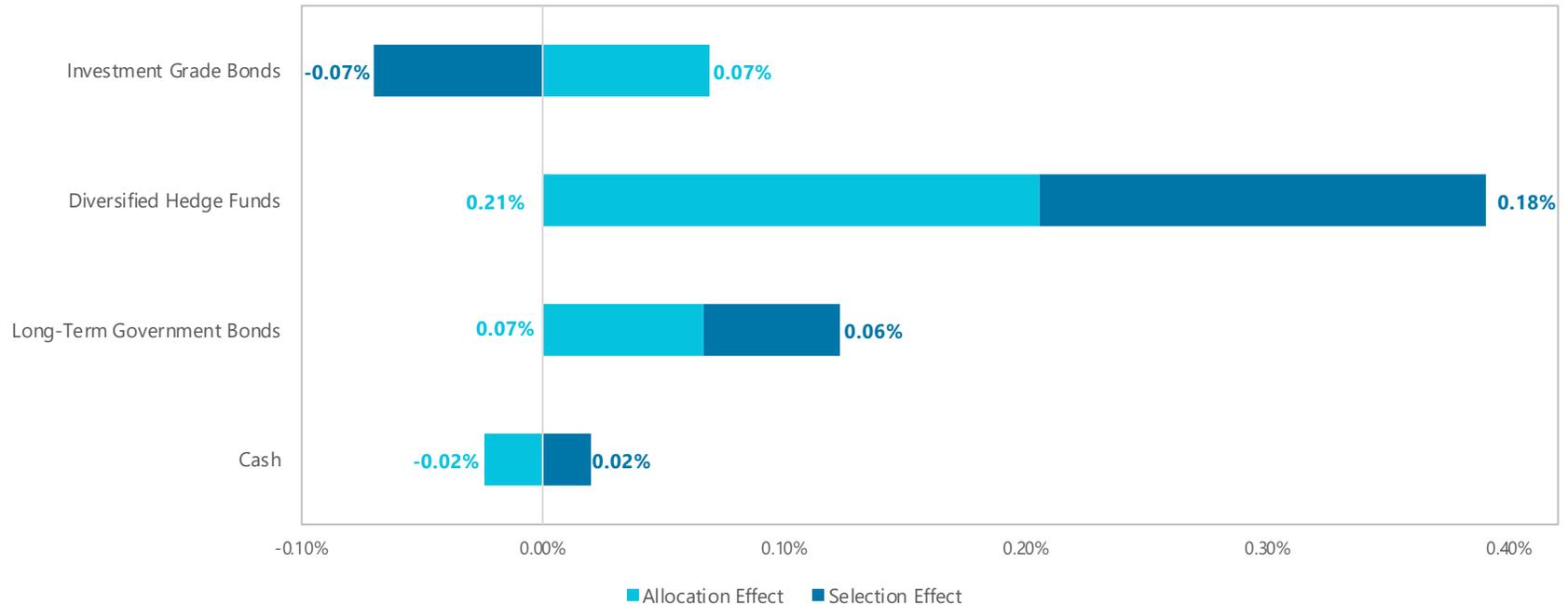
Return Attribution

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

QTD Performance Attribution¹



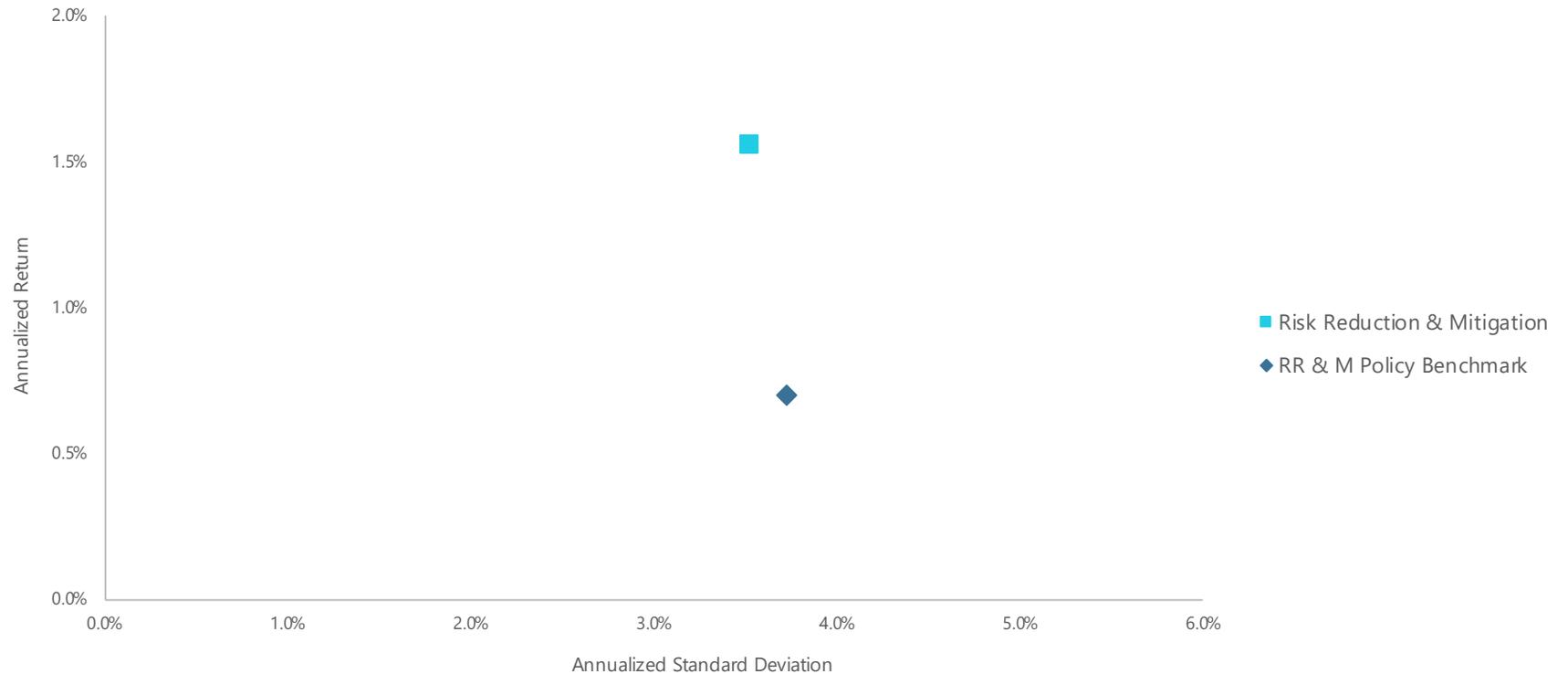
	Ending Market Value (mm)	% of Composite	Policy Allocation	Portfolio Return	Benchmark Return	Allocation Effect	Selection Effect	Total Value Add
Risk Reduction & Mitigation	14,020	100.0%	100.0%	-3.4%	-3.9%	0.39%	0.19%	0.57%
Investment Grade Bonds	5,556	39.6%	62.0%	-4.8%	-4.7%	0.07%	-0.07%	0.02%
Diversified Hedge Funds	4,196	29.9%	24.0%	1.5%	0.7%	0.21%	0.18%	0.42%
Long-Term Government Bonds	1,210	8.6%	10.0%	-11.4%	-11.9%	0.07%	0.06%	0.11%
Cash	1,067	7.6%	4.0%	0.7%	0.1%	-0.02%	0.02%	0.00%

1. Total Value Add includes Interaction Effect.

Risk vs. Return

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Risk Reduction & Mitigation	1.6%	3.5%				
RR & M Policy Benchmark	0.7%	3.7%	0.24	1.13	0.94	0.8%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Risk Reduction & Mitigation	100.0%	14,020	14,969	-3.4%	-7.3%	-7.1%	0.8%	--	--	1.6%
RR & M Policy Benchmark				-3.9%	-8.3%	-7.7%	-0.1%	--	--	0.7%
Investment Grade Bonds	39.6%	5,556	8,649	-4.8%	-10.4%	-10.6%	-0.7%	1.1%	2.1%	5.3%
BBG BARC Agg				-4.7%	-10.3%	-10.3%	-0.9%	0.9%	1.5%	4.8%
Allspring/Wells	12.0%	1,686	1,977	-4.7%	-10.4%	-10.4%	-0.4%	1.2%	2.1%	4.0%
BTC US Debt Index Fund	21.4%	2,998	5,549	-4.6%	-10.2%	-10.2%	-0.9%	0.9%	1.6%	4.0%
MHLP	0.1%	12	13	1.2%	2.4%	5.2%	5.3%	8.0%	5.2%	5.4%
Pugh Capital Mgmt	6.1%	861	1,110	-4.8%	-10.5%	-10.6%	-0.8%	1.0%	1.7%	3.5%
Diversified Hedge Funds	29.9%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
AM Asia Strategies	1.6%	220	229	-3.9%	-2.6%	-2.6%	--	--	--	-2.6%
Brevan Howard Master Fund	4.5%	625	566	10.5%	14.0%	12.3%	--	--	--	10.0%
Capula GRV	4.3%	608	543	2.6%	5.9%	5.8%	5.8%	--	--	5.9%
Caxton Global Investments	2.1%	289	273	5.9%	12.9%	12.9%	--	--	--	11.5%
DK Institutional Partners	3.5%	486	495	-1.8%	-1.2%	-1.2%	5.9%	--	--	5.2%
Grosvenor HFOF	0.3%	45	52	-5.9%	-5.8%	-3.0%	7.2%	5.3%	4.6%	4.4%
HBK Multi-Strategy	3.9%	549	558	-1.5%	-1.3%	2.5%	5.3%	--	--	4.9%
Hudson Bay	4.5%	632	631	0.2%	0.1%	3.7%	--	--	--	11.9%
Polar	3.3%	459	464	-1.1%	-0.6%	-0.3%	--	--	--	12.1%
Stable Asset Management	2.0%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Long-Term Government Bonds	8.6%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Bloomberg U.S. Treasury: Long				-11.9%	-21.3%	--	--	--	--	-22.1%
BlackRock Long Treasury Bonds	8.6%	1,210	1,366	-11.4%	-20.4%	--	--	--	--	-20.2%
Long Treasury Bonds Transition	14.2%	1,992	0	--	--	--	--	--	--	-0.4%
Cash	7.6%	1,067	953	0.7%	0.9%	1.5%	1.3%	1.6%	1.1%	1.8%
Cash Policy BM				0.1%	0.2%	0.2%	0.6%	1.1%	0.7%	1.4%

1. Diversified Hedge Funds returns are net of all fees and expenses.

Risk Reduction & Mitigation

Investment Grade Bonds

Allspring/Wells

for the quarter ended June 30, 2022

Strategy

A core fixed income strategy focusing on bottom-up quantitative and qualitative security selection and comprehensive risk management. Value is added primarily through security selection and sector rotation.

Inception Date: March 2004

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	865.0	--
Effective Duration	6.7	6.4
Convexity	0.7	0.7
Coupon Rate	2.6	2.5
Yield to Maturity	3.9	3.6
Current Yield	2.8	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

FNMA TBA 30 YR 5	3.0%
US TREASURY N/B	2.6%
US TREASURY N/B	2.3%
US TREASURY N/B	2.0%
US TREASURY N/B	1.9%
Top 5 Holdings	11.8%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Allspring/Wells	1,685.7	-4.7%	-10.4%	-0.4%	1.2%
BBG BARC Agg		-4.7%	-10.3%	-0.9%	0.9%
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Allspring/Wells	-4.7%	53	-10.3%	58	-0.3%	60	1.3%	56
Median	-4.6%		-9.0%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Risk Reduction & Mitigation

Investment Grade Bonds

Pugh Capital

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

A core fixed income strategy that invests in investment-grade securities, with an emphasis on higher credit quality and mortgage-backed securities. The strategy seeks to add value relative to the Index by minimizing downside risk across the portfolio while adding incremental return through issue selection.

Inception Date: July 2005

Portfolio Characteristics

	Portfolio	Benchmark
No. of Issues	238.0	--
Effective Duration	6.5	6.4
Convexity	0.7	0.7
Coupon Rate	2.8	2.5
Yield to Maturity	3.8	3.6
Current Yield	3.0	2.7
Rating – Moody's	AA-2	AA-2
Rating – S & P	AA-	AA-

Top Holdings (% of assets)

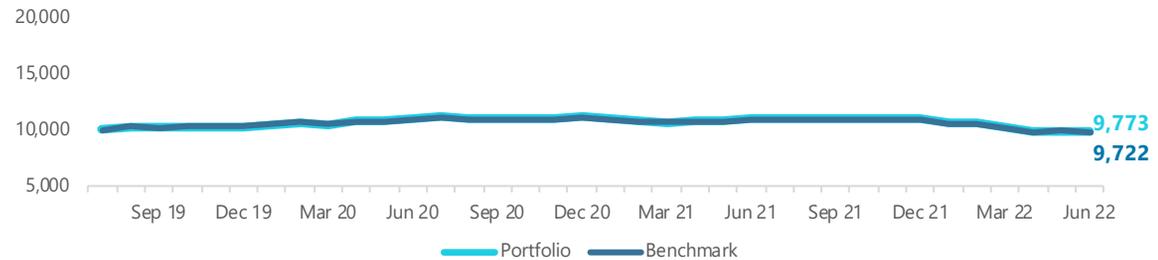
US TREASURY N/B	4.7%
US TREASURY N/B	3.5%
US TREASURY N/B	3.1%
US TREASURY N/B	2.7%
US TREASURY N/B	2.4%
Top 5 Holdings	16.3%

Performance (net)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Pugh Capital Mgmt	860.7	-4.8%	-10.6%	-0.8%	1.0%
BBG BARC Agg		-4.7%	-10.3%	-0.9%	0.9%
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: US Fixed Income Pools	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Pugh Capital Mgmt	-4.8%	53	-10.5%	62	-0.6%	67	1.1%	64
Median	-4.6%		-9.0%		0.1%		1.4%	

Growth of \$10,000



Top Exposures (% of assets)²



1. Universe data is gross-of-fees.
2. Charts display top exposures and may not add up to 100%.

Risk Reduction & Mitigation

Diversified Hedge Funds AM Asia Strategies Fund for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: June 2021

Risk Statistics (since inception)

Standard Deviation	1.4%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	-0.28
Information Ratio	-0.28
Beta	-29.72
Tracking Error	5.0%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
AM Asia Strategies	220.0	-3.9%	-2.6%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
AM Asia Strategies	-3.9%	71	-2.6%	62	--	--	--	--
Median	-0.1%		--		--		--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Brevan Howard

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Discretionary global macro fund with multiple portfolio manager teams that focus on both directional and relative value trading strategies.

Inception Date: March 2021

Risk Statistics (since inception)

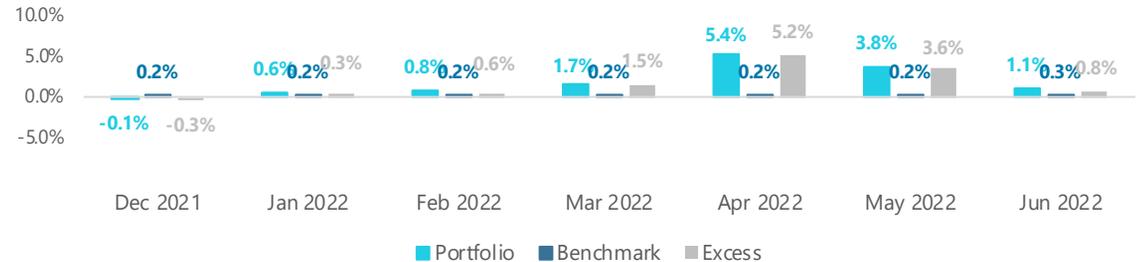
Standard Deviation	5.8%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	1.47
Information Ratio	1.08
Beta	-39.08
Tracking Error	5.7%

Performance (net all)¹

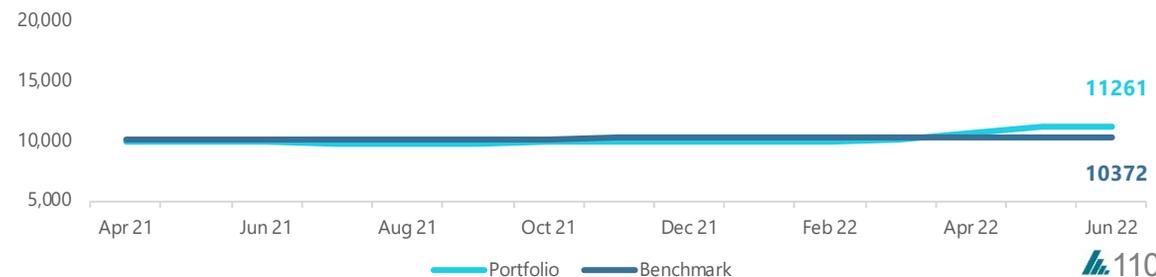
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Brevan Howard Master Fund	625.2	10.5%	12.3%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Brevan Howard Master Fund	10.6%	8	12.3%	31	--	--	--	--
Median	-0.1%		--		--	--	--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Capula GRV

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Global fixed income relative value hedge fund. The strategy seeks to benefit from pricing distortions generally caused by market flows in the government bond, interest rate swap and bond futures markets.

Inception Date: December 2018

Risk Statistics (since inception)

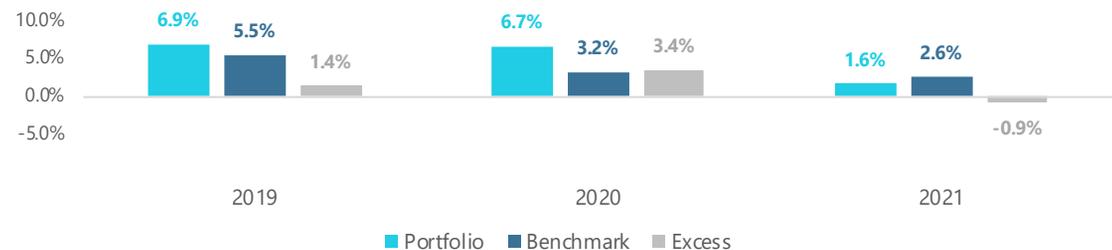
Standard Deviation	1.8%
Benchmark Standard Deviation	0.4%
Sharpe Ratio	2.71
Information Ratio	1.24
Beta	-0.51
Tracking Error	1.8%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Capula GRV	607.5	2.6%	5.8%	5.8%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Capula GRV	2.6%	23	5.8%	39	5.8%	39	--	--
Median	-0.1%		0.0%		4.8%		4.9%	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Caxton

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Discretionary global macro fund with multiple portfolio manager teams that focus on both directional and relative value trading strategies.

Inception Date: February 2021

Risk Statistics (since inception)

Standard Deviation	5.6%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	1.94
Information Ratio	1.58
Beta	-26.37
Tracking Error	5.6%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Caxton Global Investments	289.5	5.9%	12.9%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Caxton Global Investments	5.9%	14	13.0%	28	--	--	--	--
Median	-0.1%		--		--	--	--	

Monthly Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
 1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds DK Institutional Partners for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: May 2018

Risk Statistics (since inception)

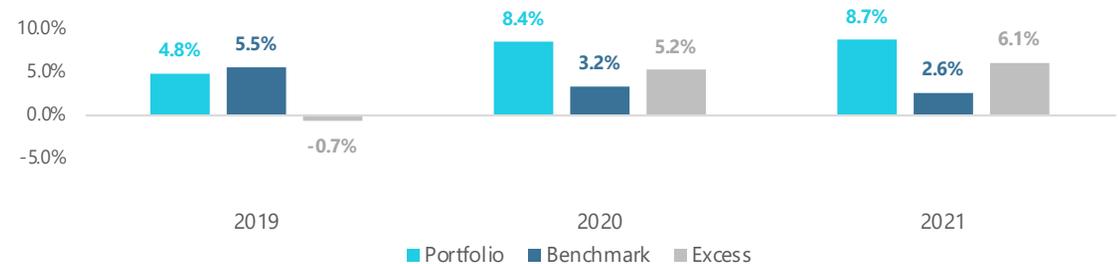
Standard Deviation	4.7%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.87
Information Ratio	0.22
Beta	-3.33
Tracking Error	4.8%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
DK Institutional Partners	486.3	-1.8%	-1.2%	5.9%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
DK Institutional Partners	-1.8%	60	-1.2%	56	5.9%	39	--	--
Median	-0.1%		0.0%		4.8%		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

HBK Multi-Strategy

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: June 2018

Risk Statistics (since inception)

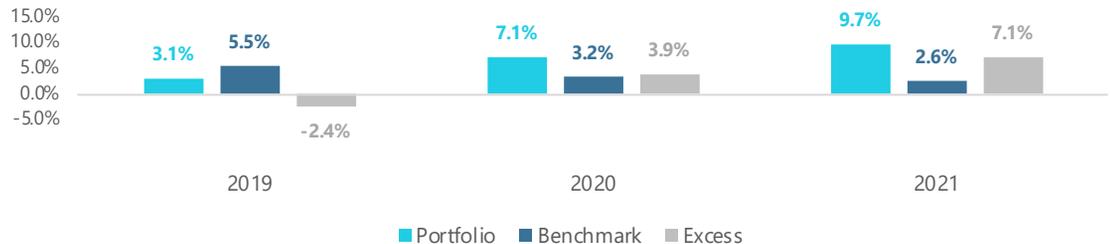
Standard Deviation	5.9%
Benchmark Standard Deviation	0.5%
Sharpe Ratio	0.63
Information Ratio	0.11
Beta	-2.31
Tracking Error	6.0%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
HBK Multi-Strategy	549.2	-1.5%	2.5%	5.3%	--
Custom Hedge Fund Benchmark		0.7%	2.6%	3.2%	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
HBK Multi-Strategy	-1.5%	59	2.5%	43	5.3%	42	--	--
Median	-0.1%		0.0%		4.8%		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Hudson Bay Fund

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: July 2020

Risk Statistics (since inception)

Standard Deviation	5.1%
Benchmark Standard Deviation	0.0%
Sharpe Ratio	2.33
Information Ratio	1.93
Beta	7.83
Tracking Error	5.1%

Performance (net all)¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Hudson Bay	632.6	0.3%	4.1%	--	--
Custom Hedge Fund Benchmark		0.5%	2.6%	--	--
RR & M Policy Benchmark		-3.2%	-7.6%	0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Hudson Bay	0.2%	41	3.7%	--	--	--	--	--
Median	-0.1%		--		--		--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

Risk Reduction & Mitigation

Diversified Hedge Funds

Polar

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Strategy

Relative value multi-strategy hedge fund. The strategy deploys capital opportunistically to relative value strategies such as convertible bond arbitrage, risk arbitrage, credit relative value, capital structure arbitrage, and equity long/short.

Inception Date: May 2020

Risk Statistics (since inception)

Standard Deviation	5.4%
Benchmark Standard Deviation	0.2%
Sharpe Ratio	1.60
Information Ratio	1.16
Beta	-0.74
Tracking Error	5.5%

Performance (net all)¹

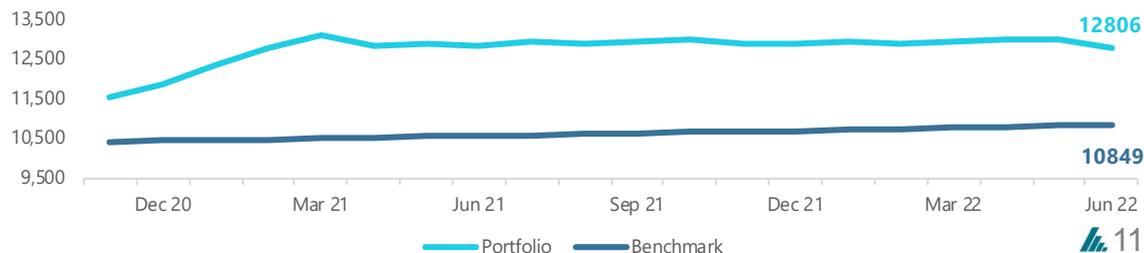
	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Polar	459.2	-1.1%	-0.3%	--	--
Custom Hedge Fund Benchmark		0.7%	2.6%	--	--
RR & M Policy Benchmark		-3.9%	-7.7%	-0.1%	--

Universe data: Hedge Funds	QTD	Rank	1 Year	Rank	3 Year	Rank	5 Year	Rank
Polar	-1.1%	56	-0.3%	54	--	--	--	--
Median	-0.1%		--		--	--	--	

Calendar Year Returns



Growth of \$10,000



Note: Commingled fund account with no position-level transparency.
1. Universe data is gross-of-fees.

private markets

Summary

Private Equity

for the quarter ended June 30, 2022

Performance (net)



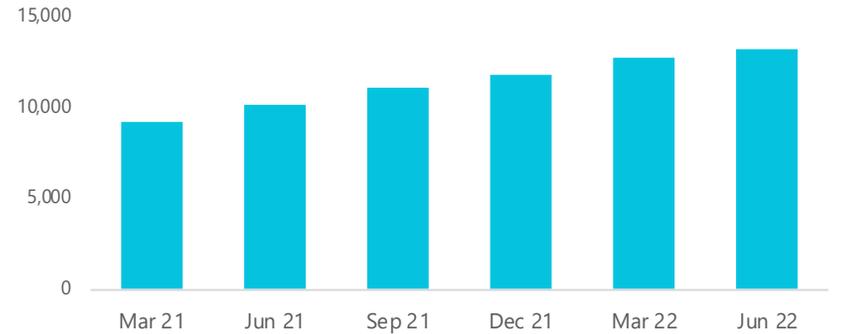
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Equity	1.0%	9.1%	30.1%	25.8%	22.3%	17.7%	15.9%
Benchmark	-4.8%	1.4%	8.4%	15.5%	17.3%	15.2%	--
Excess	5.8%	7.8%	21.7%	10.3%	5.0%	2.5%	--

Cumulative Return

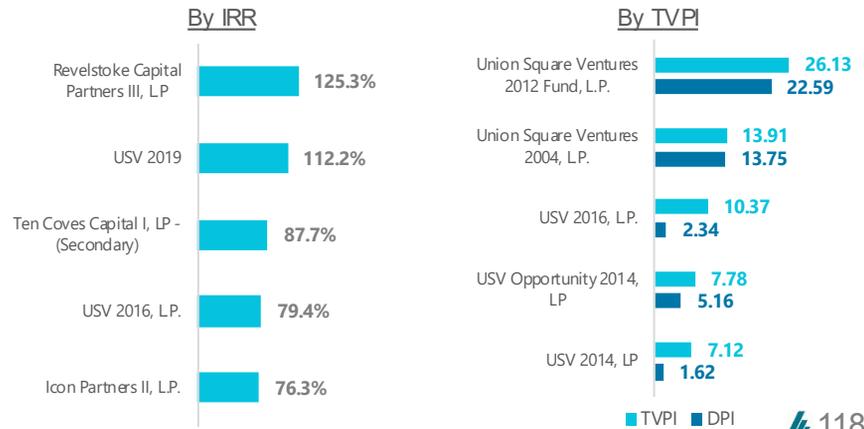


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	12,751	10,129	5,890
Net Cash Flow	330	95	812
Gain/Loss	126	2,983	6,505
Ending Market Value	13,207	13,207	13,207



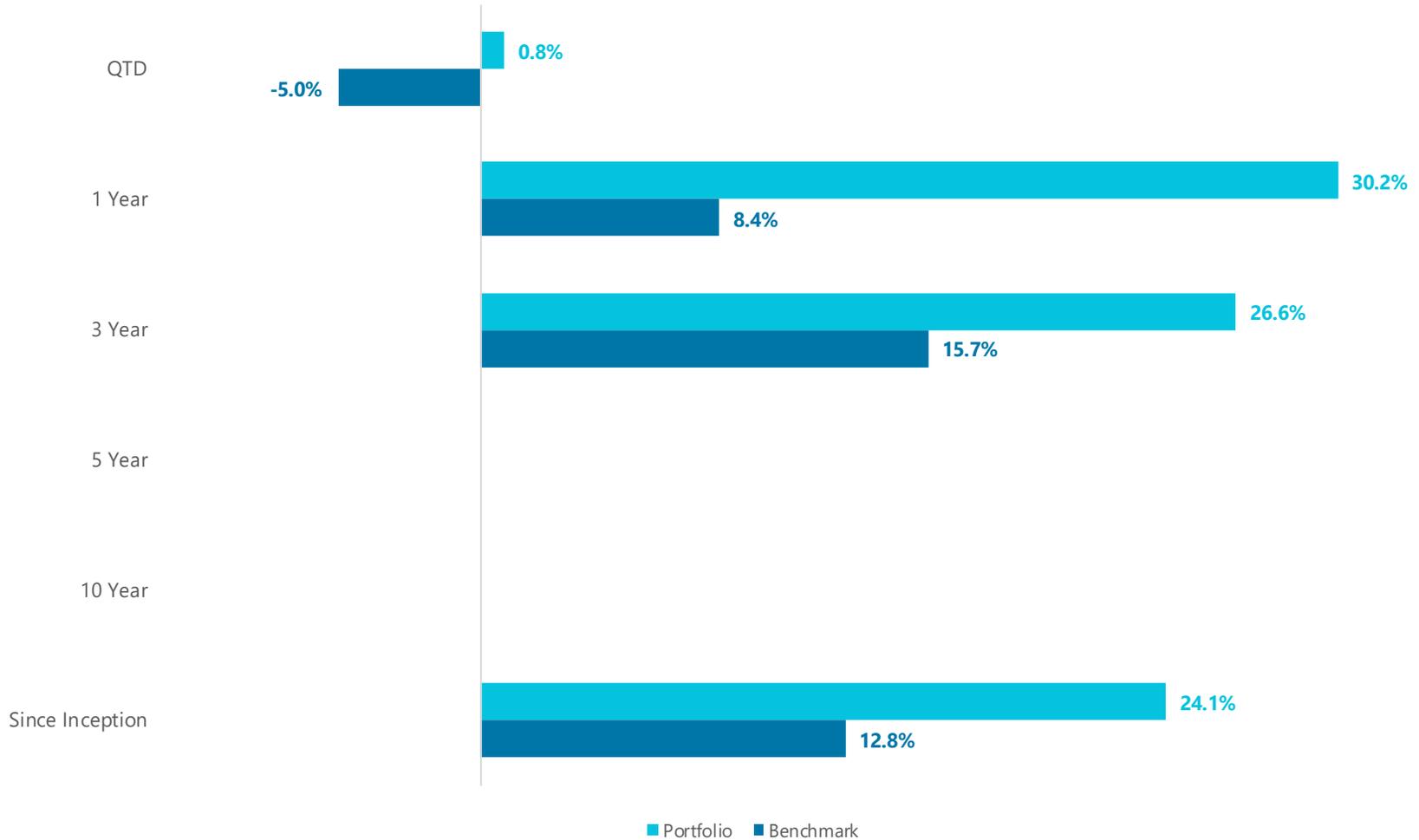
Top Performing Investments (since inception)



Historical Returns

Private Equity – Growth
for the quarter ended June 30, 2022

Time-Weighted Returns (net)



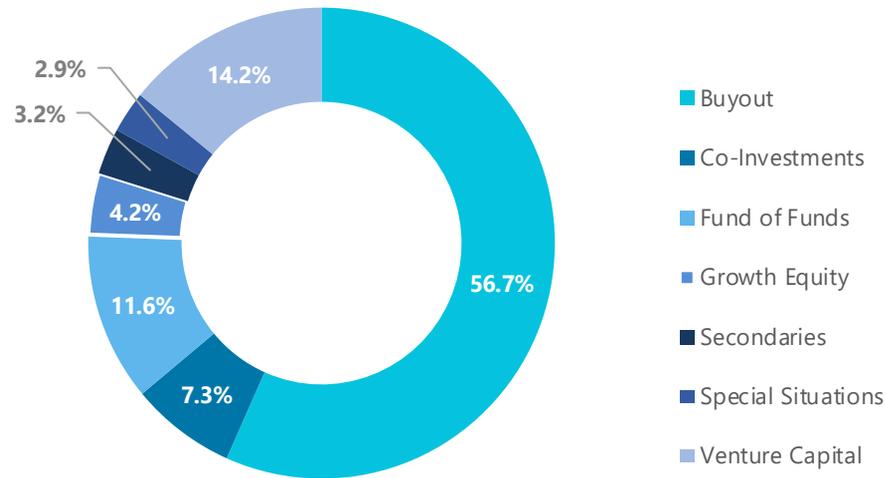
Performance by Strategy

Private Equity – Growth
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Strategy^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Buyout	199	14,079.1	12,314.1	13,695.9	7,197.2	20,893.1	8,579.0	1.11x	1.70x	14.2%	1.61
Co-Investments	12	1,177.4	1,110.8	927.1	925.6	1,852.7	741.9	0.83x	1.67x	18.6%	1.54
Fund of Funds	16	1,454.1	1,286.5	1,469.0	1,476.4	2,945.4	1,658.9	1.14x	2.29x	15.4%	1.70
Growth Equity	21	1,245.6	1,008.6	1,439.7	536.4	1,976.0	967.4	1.43x	1.96x	86.9%	1.75
Secondaries	15	733.1	567.1	360.9	403.0	763.9	196.8	0.64x	1.35x	17.7%	1.35
Special Situations	22	1,171.3	991.2	1,032.0	362.0	1,394.1	402.9	1.04x	1.41x	9.3%	1.15
Venture Capital	104	2,253.4	1,894.1	2,519.1	1,800.1	4,319.2	2,425.1	1.33x	2.28x	21.8%	2.11
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76

1. Based on best available cash flow adjusted market values.

2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

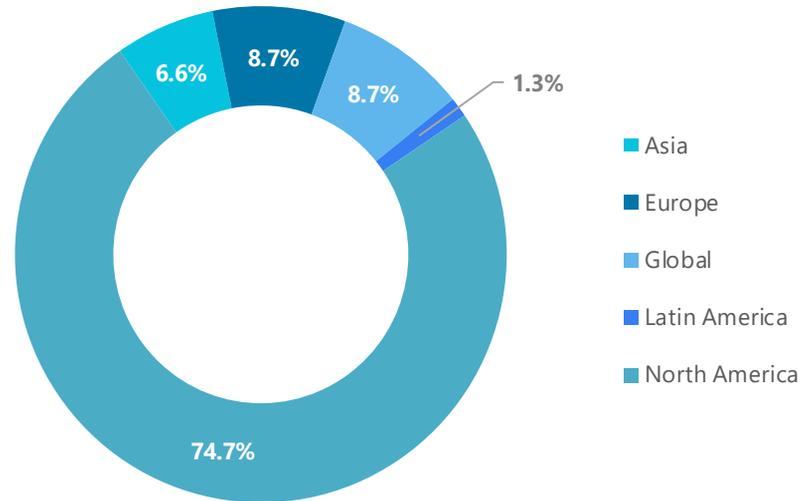
Performance by Geography

Private Equity – Growth
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Geography^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Asia	14	826.0	681.7	398.9	832.9	1,231.7	550.0	0.59x	1.81x	17.1%	1.43
Europe	34	2,279.3	2,083.2	2,174.4	1,110.3	3,284.7	1,201.4	1.04x	1.58x	15.7%	1.37
Global	25	2,033.0	1,234.2	765.3	1,102.3	1,867.6	633.4	0.62x	1.51x	16.6%	1.39
Latin America	2	200.0	176.1	49.1	163.4	212.5	36.4	0.28x	1.21x	7.7%	1.04
North America	314	16,775.7	14,997.2	18,056.1	9,492.0	27,548.1	12,550.9	1.20x	1.84x	16.6%	1.79
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76

1. Based on best available cash flow adjusted market values.
2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.

Performance by Vintage Year

Private Equity – Growth
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception IRR	Since Inception PME	Quartile Ranking
1986	3	80.0	80.0	267.5	0.0	267.5	187.5	3.34x	3.34x	15.7%	--	1st
1987	1	25.0	25.0	40.3	0.0	40.3	15.3	1.61x	1.61x	7.3%	--	3rd
1988	2	200.0	216.6	466.9	0.0	466.9	250.3	2.16x	2.16x	15.5%	89.91	2nd
1989	0	--	--	--	--	--	--	--	--	--	--	N/A
1990	1	7.5	7.5	16.7	0.0	16.7	9.2	2.22x	2.22x	13.0%	9.13	3rd
1991	0	--	--	--	--	--	--	--	--	--	--	N/A
1992	10	116.0	111.0	242.5	0.0	242.5	131.6	2.19x	2.19x	29.1%	3.78	2nd
1993	8	68.0	64.8	239.5	0.0	239.5	174.7	3.70x	3.70x	39.7%	3.22	1st
1994	5	56.9	58.8	237.6	0.0	237.6	178.8	4.04x	4.04x	54.1%	2.82	1st
1995	7	100.5	102.3	362.6	0.0	362.6	260.2	3.54x	3.54x	43.2%	2.58	1st
1996	12	222.9	225.2	608.8	0.0	608.8	383.6	2.70x	2.70x	37.5%	2.15	1st
1997	11	397.5	410.4	606.4	0.0	606.4	196.0	1.48x	1.48x	7.7%	1.20	3rd
1998	22	644.4	655.2	945.2	0.7	945.9	290.6	1.44x	1.44x	7.3%	1.19	2nd
1999	21	362.3	369.7	436.6	0.1	436.7	67.0	1.18x	1.18x	3.4%	0.96	2nd
2000	25	375.2	387.3	575.0	0.2	575.2	187.9	1.48x	1.49x	8.7%	1.07	2nd
2001	15	408.8	442.4	834.2	3.6	837.8	395.4	1.89x	1.89x	21.7%	1.38	1st
2002	8	220.4	230.3	537.4	0.0	537.4	307.1	2.33x	2.33x	19.0%	1.64	2nd
2003	8	308.2	339.2	700.6	1.2	701.9	362.7	2.07x	2.07x	21.3%	1.60	1st
2004	7	340.8	392.2	744.2	2.8	747.0	354.8	1.90x	1.90x	19.5%	1.58	1st
2005	15	502.2	506.2	1,038.8	3.9	1,042.7	536.5	2.05x	2.06x	13.4%	1.64	1st
2006	28	1,509.4	1,607.0	2,554.7	48.8	2,603.4	996.4	1.59x	1.62x	9.0%	1.25	2nd
2007	11	516.1	461.1	777.6	32.6	810.3	349.2	1.69x	1.76x	11.4%	1.20	2nd
2008	10	635.6	700.2	1,228.5	35.6	1,264.1	563.9	1.75x	1.81x	13.3%	1.21	2nd
2009	0	--	--	--	--	--	--	--	--	--	--	N/A
2010	2	450.0	470.6	671.0	340.0	1,011.0	540.4	1.43x	2.15x	16.9%	1.53	2nd
2011	7	391.0	413.2	792.6	174.9	967.5	554.3	1.92x	2.34x	18.9%	1.51	2nd
2012	7	435.0	577.0	1,030.0	155.4	1,185.4	608.4	1.79x	2.05x	22.2%	1.71	2nd
2013	10	893.4	966.0	1,102.8	597.9	1,700.7	734.7	1.14x	1.76x	15.2%	1.31	2nd
2014	11	1,245.0	1,370.3	1,375.7	1,289.3	2,665.0	1,294.7	1.00x	1.94x	18.4%	1.48	2nd
2015	10	1,087.0	1,199.1	1,202.7	1,655.8	2,858.5	1,659.4	1.00x	2.38x	26.2%	1.89	2nd
2016	12	1,126.0	1,275.3	813.7	1,488.3	2,302.0	1,026.7	0.64x	1.81x	20.1%	1.43	3rd
2017	8	594.0	552.8	314.6	765.5	1,080.1	527.3	0.57x	1.95x	25.2%	1.60	3rd
2018	9	1,282.1	1,083.6	281.6	1,420.9	1,702.4	618.9	0.26x	1.57x	26.0%	1.51	3rd
2019	32	2,574.8	2,043.7	258.5	2,790.9	3,049.4	1,005.7	0.13x	1.49x	27.5%	1.45	3rd
2020	10	1,018.4	631.6	97.5	684.0	781.6	150.0	0.15x	1.24x	24.8%	1.38	3rd
2021	35	2,689.5	1,022.9	41.6	1,037.9	1,079.5	56.6	0.04x	1.06x	9.4%	1.23	2nd
2022	6	1,229.9	174.0	--	170.5	--	--	0.00x	0.98x	-2.5%	1.13	2nd
Total Growth Portfolio	389	22,114.0	19,172.4	21,443.7	12,700.8	34,144.5	14,972.1	1.12x	1.78x	16.5%	1.76	

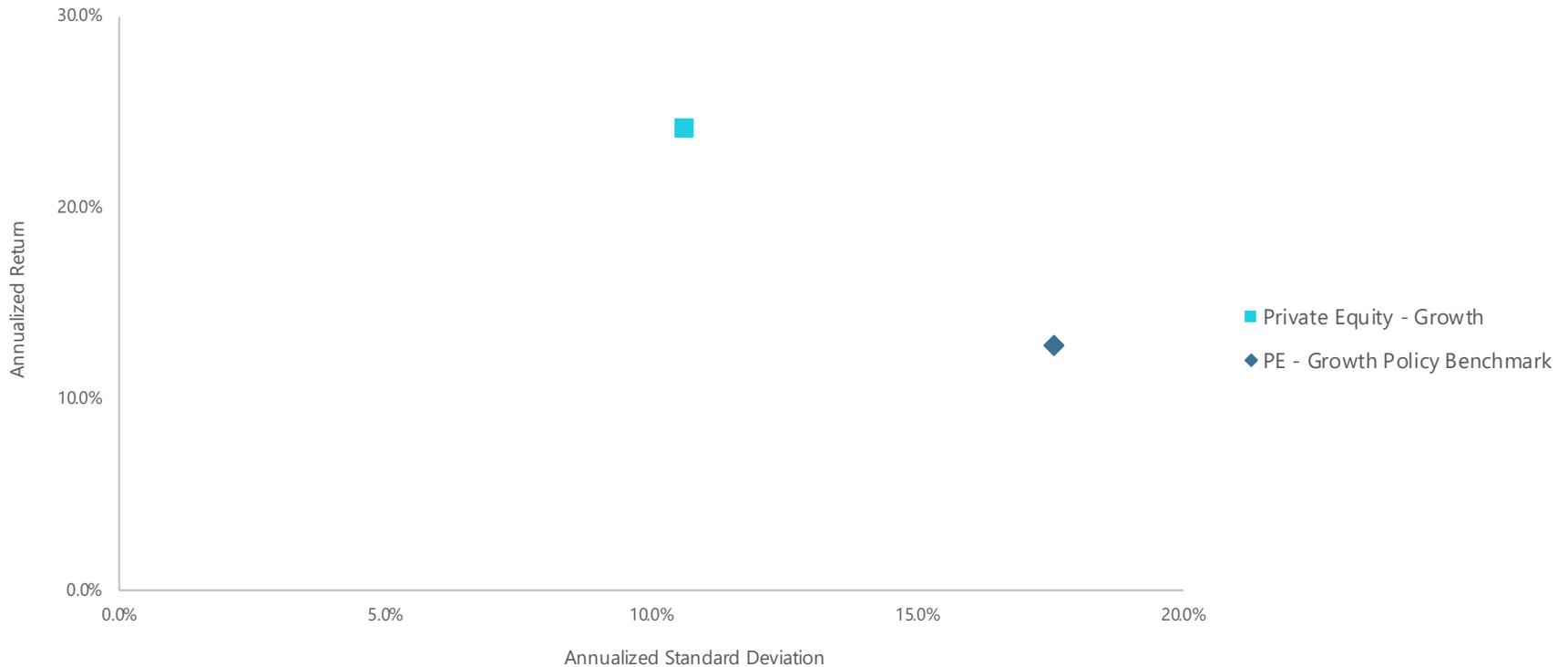
1. Based on best available cash flow adjusted market values.
2. Investment counts for Co-Investments and Fund of Funds do not include underlying funds.
3. Benchmark data used is latest available by Burgiss Private IQ. Quartile rankings are reported as not applicable (N/A) if commitment date is within 3 years of reporting date or if no commitments were made for the respective vintage year.

Risk vs. Return

Private Equity – Growth

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Equity - Growth	24.1%	10.6%				
PE - Growth Policy Benchmark	12.8%	17.6%	2.02	0.63	0.19	17.8%

1. Composite risk statistics are relative to the policy benchmark.

Annual Cash Flow Activity

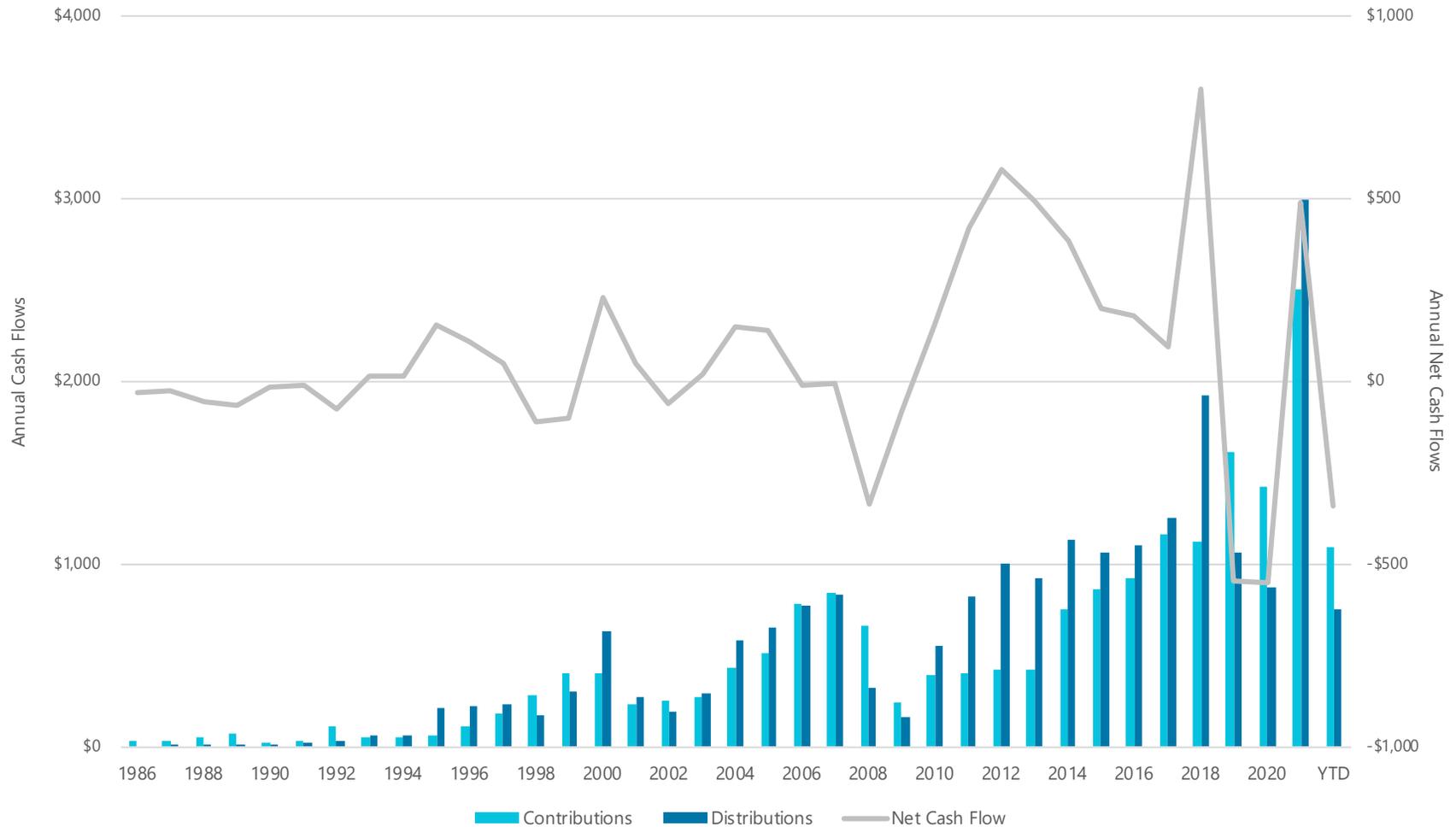
Private Equity

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



Summary

Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Performance (net)



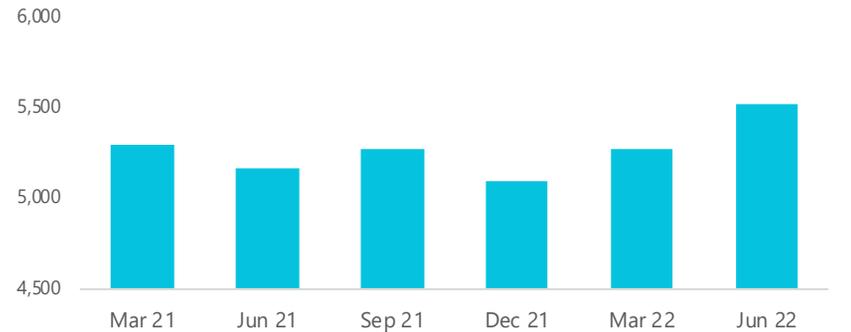
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Real Estate	7.5%	15.1%	26.4%	9.1%	8.9%	9.2%	8.1%
Benchmark	7.0%	15.1%	27.1%	10.9%	9.4%	10.3%	--
Excess	0.4%	0.0%	-0.7%	-1.8%	-0.5%	-1.1%	--

Cumulative Return

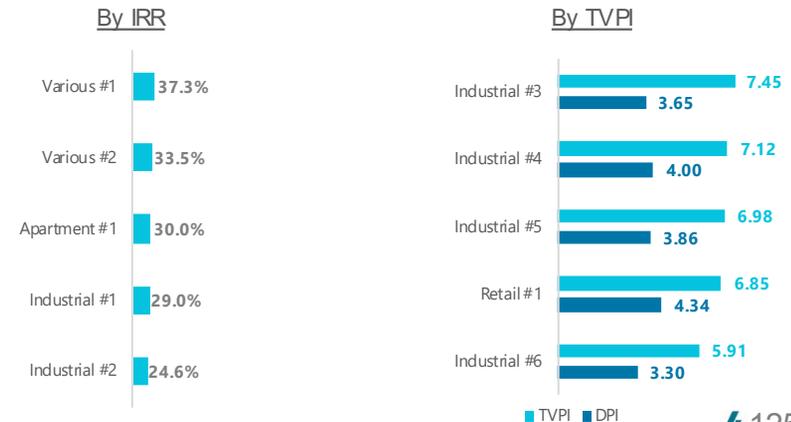


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	5,274	5,162	6,398
Net Cash Flow	-142	-884	-2,274
Gain/Loss	387	1,240	1,394
Ending Market Value	5,519	5,519	5,519



Top Performing Investments (since inception)¹



1. Property names removed due to confidentiality reasons.

Historical Returns

Real Estate

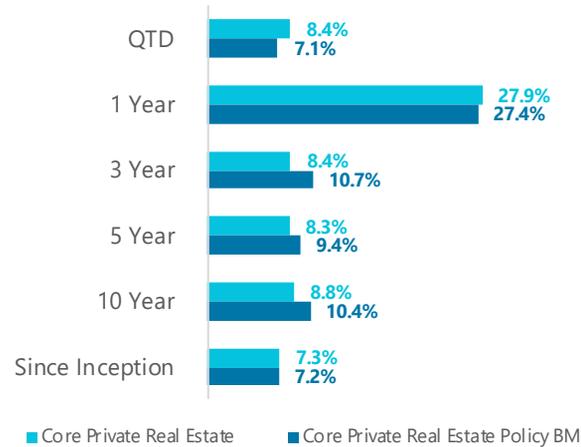
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Time-Weighted Returns (net)

Core



Debt



Non-Core

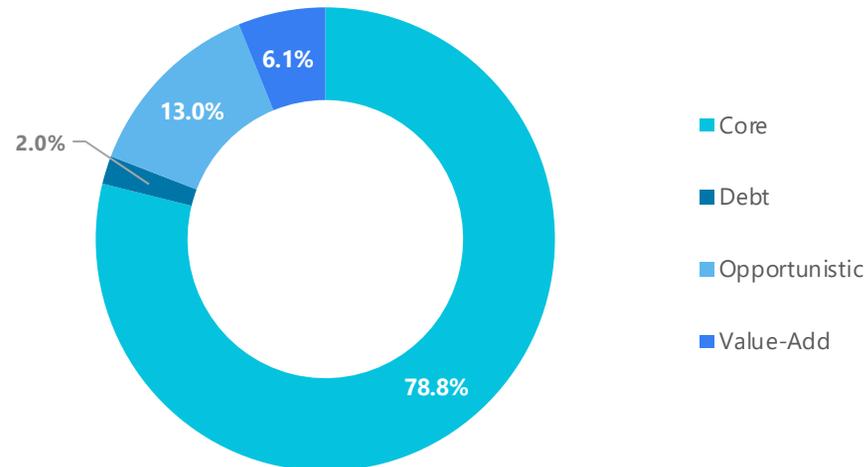


Performance by Strategy

Real Estate

for the quarter ended June 30, 2022

By Strategy^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Core	95	429.5	8,962.8	8,772.5	4,369.0	13,141.5	4,178.7	0.98x	1.47x	8.7%	1.09
Debt	12	0.0	586.6	526.4	109.0	635.3	48.8	0.90x	1.08x	8.7%	1.11
Opportunistic	22	1,000.1	1,313.4	1,070.3	722.2	1,792.6	479.2	0.81x	1.36x	7.8%	1.01
Value-Add	13	465.3	586.1	147.1	340.7	487.8	(98.3)	0.25x	0.83x	-4.5%	0.57
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

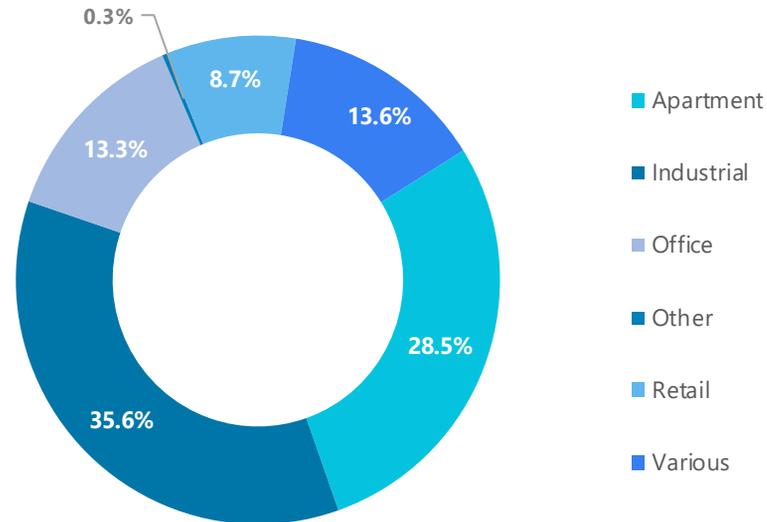
2. Commitment amounts reflect only commingled fund investments.

Performance by Property Type

Real Estate

for the quarter ended June 30, 2022

By Property Type^{1,2,3}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Apartment	51	384.0	4,097.6	4,015.3	1,578.6	5,593.9	1,496.3	0.98x	1.37x	8.7%	1.04
Industrial	25	229.5	1,770.2	1,391.4	1,973.3	3,364.8	1,594.5	0.79x	1.90x	13.3%	1.60
Office	27	0.0	2,820.7	2,866.0	738.4	3,604.4	783.7	1.02x	1.28x	6.7%	1.08
Other	4	100.0	170.2	185.3	17.6	202.8	32.6	1.09x	1.19x	3.9%	0.75
Retail	17	0.0	1,570.7	1,646.6	480.1	2,126.6	556.0	1.05x	1.35x	7.0%	0.82
Various	18	1,181.4	1,019.4	411.7	752.9	1,164.7	145.2	0.40x	1.14x	2.9%	0.79
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.
2. Commitment amounts reflect only commingled fund investments.
3. Various refers to commingled fund investments with more than one property type; Other refers to hotel.

Performance by Geography

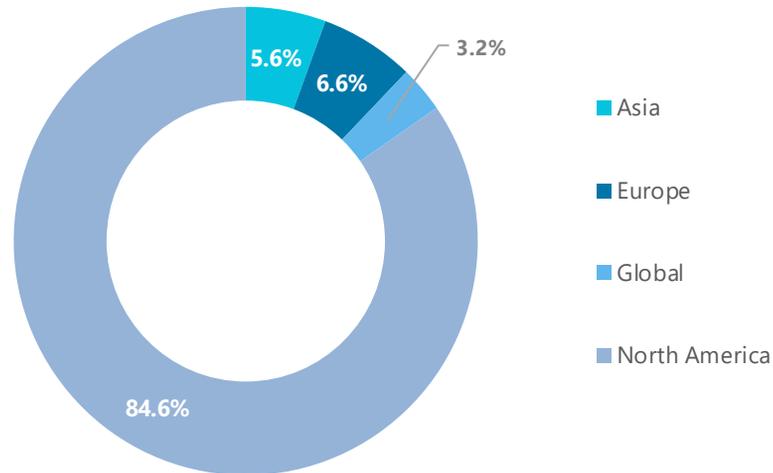
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Geography (non-US)^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Asia	4	300.0	302.5	98.6	309.2	407.8	105.3	0.33x	1.35x	7.3%	1.07
Europe	10	460.9	590.8	353.9	364.9	718.8	128.0	0.60x	1.22x	4.8%	0.86
Global	4	375.0	243.0	190.3	177.7	368.1	125.0	0.78x	1.51x	12.5%	1.11
North America	124	759.0	10,312.5	9,873.5	4,689.0	14,562.5	4,250.0	0.96x	1.41x	8.4%	1.07
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

2. Commitment amounts reflect only commingled fund investments.

Performance by Geography

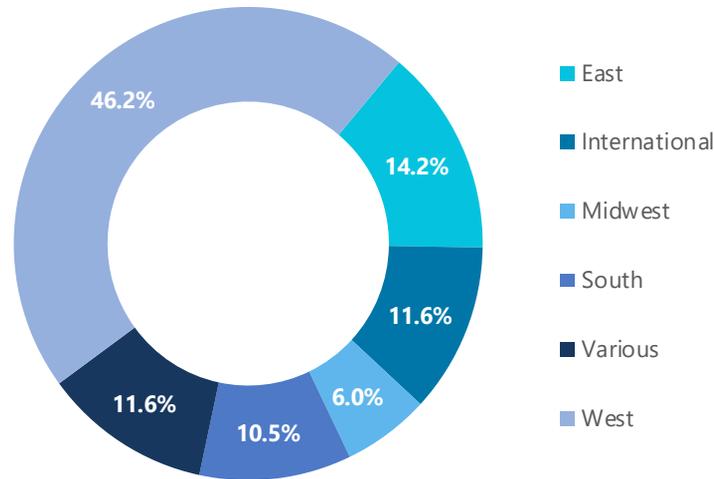
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Geography (US NCREIF)^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
East	36	0.0	3,586.9	3,828.9	784.2	4,613.2	1,026.3	1.07x	1.29x	7.1%	0.89
International	13	708.7	858.6	452.5	642.9	1,095.4	236.8	0.53x	1.28x	5.7%	0.93
Midwest	13	0.0	676.4	523.1	332.6	855.7	179.3	0.77x	1.27x	5.4%	0.86
South	19	0.0	1,665.1	1,769.0	580.8	2,349.7	684.6	1.06x	1.41x	9.6%	1.01
Various	10	802.3	656.9	320.6	641.8	962.3	305.5	0.49x	1.47x	7.5%	1.00
West	51	384.0	4,005.0	3,622.2	2,558.6	6,180.9	2,175.9	0.90x	1.54x	9.5%	1.35
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06

1. Based on best available cash flow adjusted market values and includes only active investments.

2. Commitment amounts reflect only commingled fund investments.

Performance by Vintage Year

Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year^{1,2,3}

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME	Quartile Ranking
1990	1	0.0	249.9	297.5	117.7	415.2	165.3	1.19x	1.66x	6.3%	4.53	N/A
1991	3	0.0	32.7	122.3	97.3	219.6	186.9	3.74x	6.72x	12.4%	13.82	N/A
1992	0	0.0	--	--	--	--	--	--	--	--	--	N/A
1993	0	0.0	--	--	--	--	--	--	--	--	--	N/A
1994	1	0.0	15.3	66.5	38.4	104.8	89.5	4.34x	6.85x	13.0%	1.44	N/A
1995	1	0.0	39.1	109.5	75.8	185.3	146.2	2.80x	4.74x	11.7%	1.25	N/A
1996	1	0.0	24.0	38.8	32.5	71.3	47.4	1.62x	2.98x	7.8%	0.80	N/A
1997	1	0.0	18.3	66.8	69.4	136.1	117.9	3.65x	7.45x	15.9%	2.06	N/A
1998	2	0.0	367.5	558.6	50.8	609.4	241.9	1.52x	1.66x	8.1%	0.77	N/A
1999	1	0.0	80.9	203.8	0.0	203.8	122.9	2.52x	2.52x	9.6%	0.90	N/A
2000	1	0.0	203.2	275.7	0.0	275.7	72.5	1.36x	1.36x	7.9%	0.78	N/A
2001	1	0.0	143.3	75.4	92.5	167.8	24.5	0.53x	1.17x	4.5%	0.71	N/A
2002	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2003	1	0.0	142.7	130.6	72.0	202.6	60.0	0.92x	1.42x	4.5%	0.71	N/A
2004	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2005	1	0.0	116.3	119.6	0.0	119.6	3.3	1.03x	1.03x	0.5%	0.64	N/A
2006	0	0.0	--	--	--	--	--	--	--	--	--	N/A
2007	3	36.4	454.5	401.8	1.1	402.9	(51.6)	0.88x	0.89x	-5.4%	0.54	4th
2008	1	150.0	150.0	95.5	0.9	96.4	(53.6)	0.64x	0.64x	-5.7%	0.34	4th
2009	1	18.1	22.3	28.5	0.4	28.8	6.5	1.27x	1.29x	8.2%	0.84	3rd
2010	1	100.0	97.1	138.3	17.7	156.1	58.9	1.42x	1.61x	9.5%	0.91	3rd
2011	4	16.7	213.4	114.9	40.6	155.5	(57.9)	0.54x	0.73x	-19.5%	0.34	4th
2012	5	134.0	734.3	543.7	160.6	704.3	(30.0)	0.74x	0.96x	-1.1%	0.69	4th
2013	8	100.0	524.2	662.7	111.3	773.9	249.7	1.26x	1.48x	9.1%	1.02	3rd
2014	19	256.8	1,079.6	914.4	696.7	1,611.0	531.5	0.85x	1.49x	8.7%	1.14	3rd
2015	13	0.0	1,396.1	1,209.4	689.0	1,898.5	502.3	0.87x	1.36x	12.3%	1.31	2nd
2016	10	150.0	551.0	357.1	500.8	858.0	307.0	0.65x	1.56x	14.5%	1.33	2nd
2017	15	177.3	1,434.3	992.7	937.8	1,930.5	496.2	0.69x	1.35x	11.9%	1.19	3rd
2018	12	150.0	405.3	230.9	274.9	505.8	100.5	0.57x	1.25x	9.9%	1.12	3rd
2019	30	427.3	2,822.3	2,744.6	1,344.1	4,088.7	1,266.4	0.97x	1.45x	9.6%	1.05	3rd
2020	3	0.0	77.8	16.7	59.3	76.0	(1.8)	0.21x	0.98x	-1.1%	1.00	4th
2021	2	178.4	53.4	0.0	59.6	59.6	6.1	0.00x	1.12x	17.0%	1.25	2nd
2022	0	0.0	--	--	--	--	--	--	--	--	--	N/A
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06	

1. Based on best available cash flow adjusted market values.
2. Commitment amounts reflect only commingled fund investments.
3. Benchmark data used is latest available by Burgiss Private IQ. Quartile rankings exclude IMAs and Core Funds.

Leverage Exposure

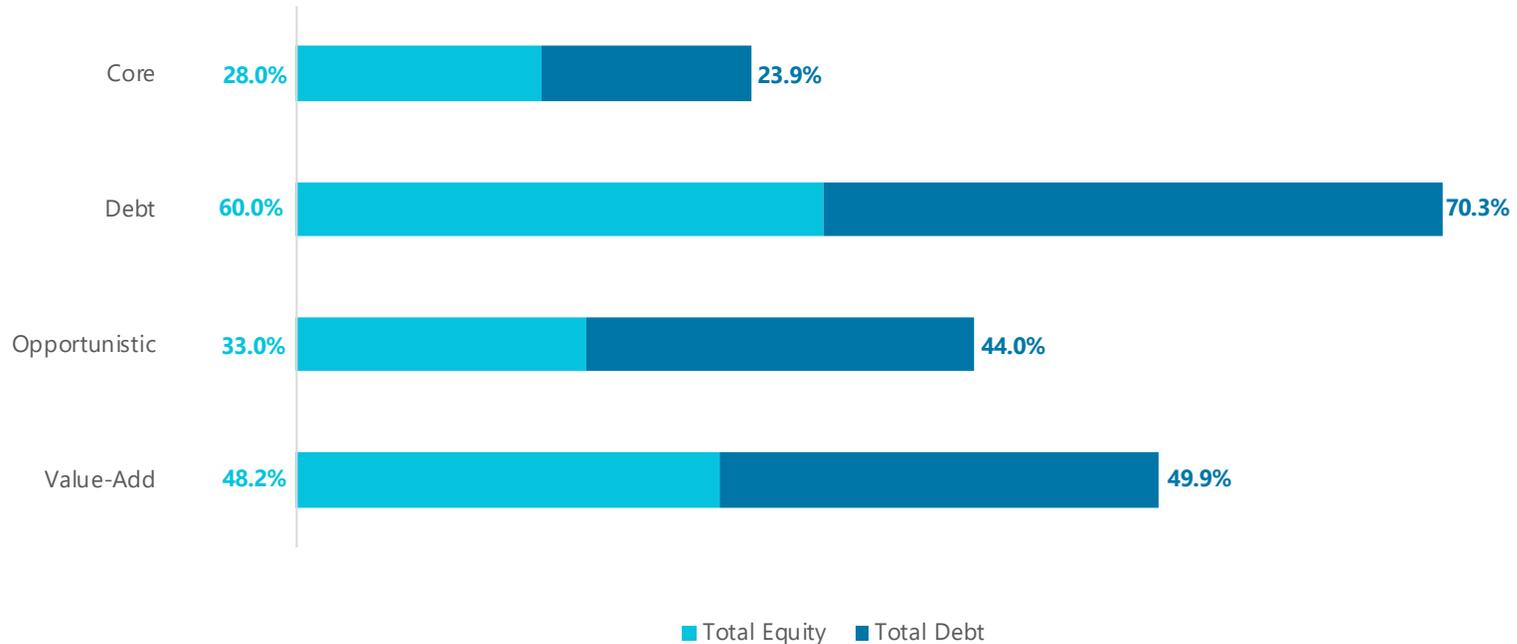
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Leverage Exposure^{1,2}



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / (Loss) (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME	Total Debt-Fund Level (mm)	Total Equity-Fund Level (mm)	Total Debt-Fund Level (%)	Total Equity-Fund Level (%)
Core	95	429.5	8,962.8	8,772.5	4,369.0	13,141.5	4,178.7	0.98x	1.47x	8.7%	1.09	7,022.8	8,215.5	23.9%	28.0%
Debt	12	0.0	586.6	526.4	109.0	635.3	48.8	0.90x	1.08x	8.7%	1.11	192.0	163.8	70.3%	60.0%
Opportunistic	22	1,000.1	1,313.4	1,070.3	722.2	1,792.6	479.2	0.81x	1.36x	7.8%	1.01	7,323.4	5,493.1	44.0%	33.0%
Value-Add	13	465.3	586.1	147.1	340.7	487.8	(98.3)	0.25x	0.83x	-4.5%	0.57	74,747.3	72,224.5	49.9%	48.2%
Total Real Estate	142	1,894.9	11,448.8	10,516.3	5,540.9	16,057.2	4,608.4	0.92x	1.40x	8.3%	1.06	89,285.5	86,097.0	45.6%	43.9%

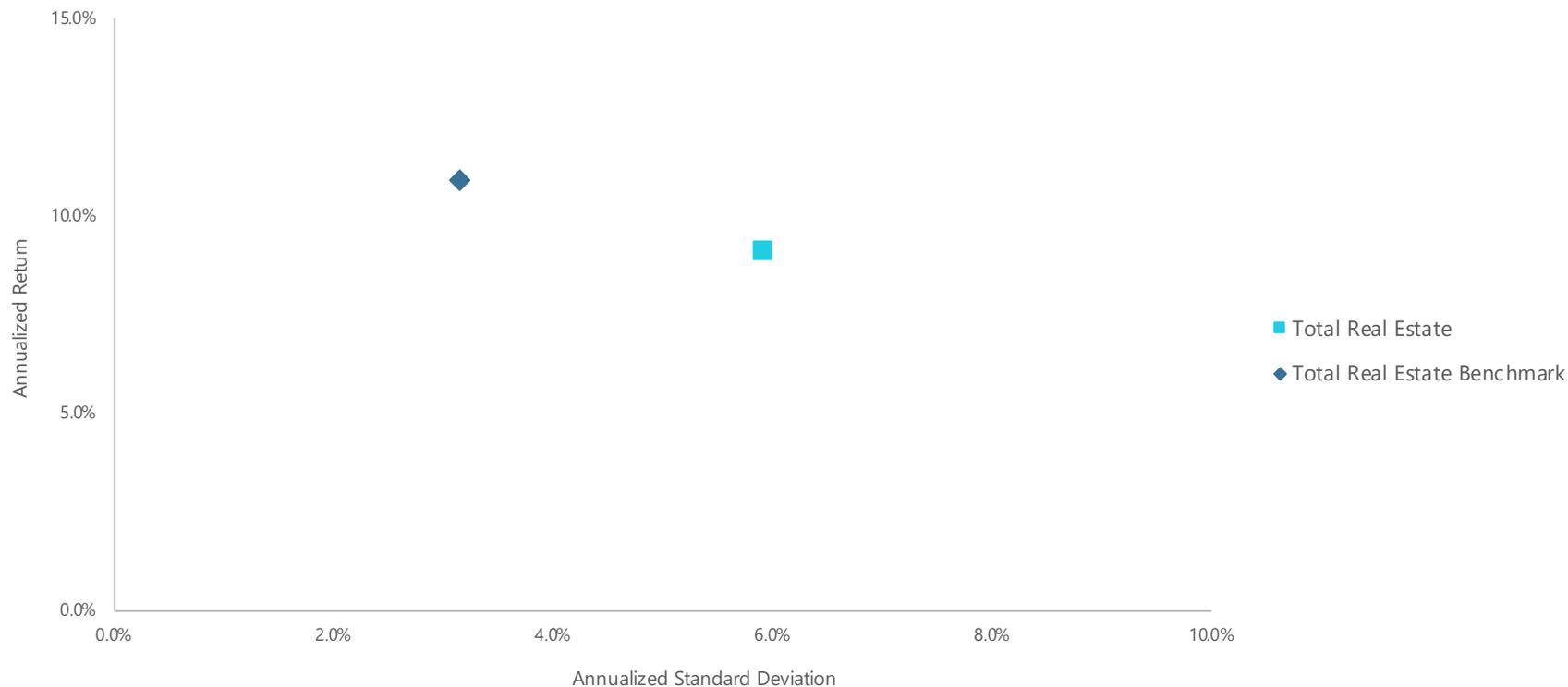
1. Based on best available cash flow adjusted market values and includes only active investments.
 2. Commitment amounts reflect only commingled fund investments.

Risk vs. Return

Real Estate

for the quarter ended June 30, 2022

3 Year (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Total Real Estate	9.1%	5.9%				
Total Real Estate Benchmark	10.9%	3.1%	1.40	(0.36)	1.03	17.1%

1. Composite risk statistics are relative to the policy benchmark.

Annual Cash Flow Activity

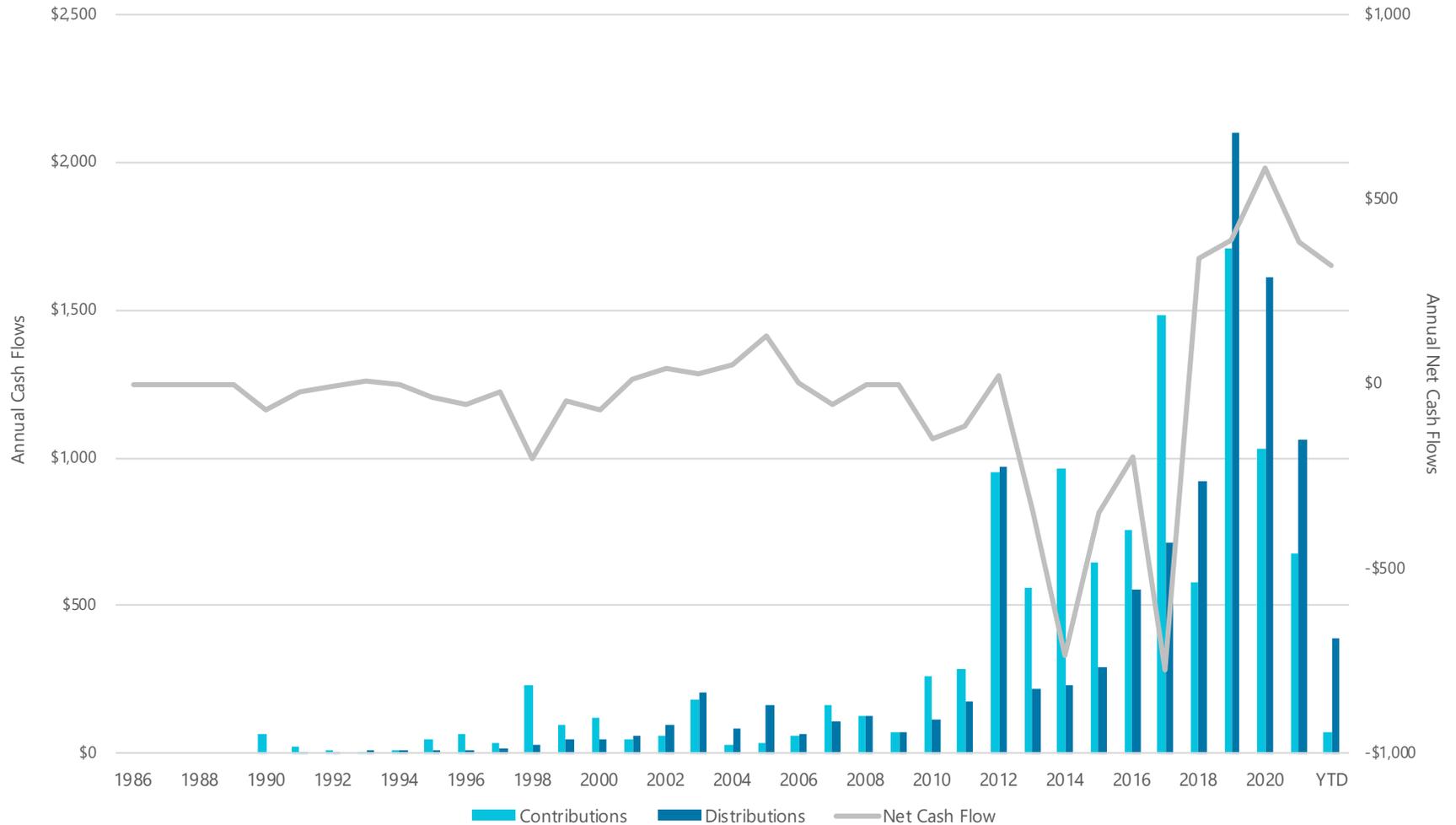
Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



Summary

Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Performance (net)¹



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Natural Resources & Commodities	12.0%	12.4%	23.0%	-9.4%	--	--	-8.4%
Benchmark	20.9%	30.9%	36.9%	19.4%	--	--	22.1%
Excess	-9.0%	-18.5%	-13.9%	-28.9%	--	--	-30.5%

Cumulative Return¹



Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	631	70	112
Net Cash Flow	-11	536	540
Gain/Loss	77	90.7	45.2
Ending Market Value	697	697	697



Top Performing Investments (since inception)¹

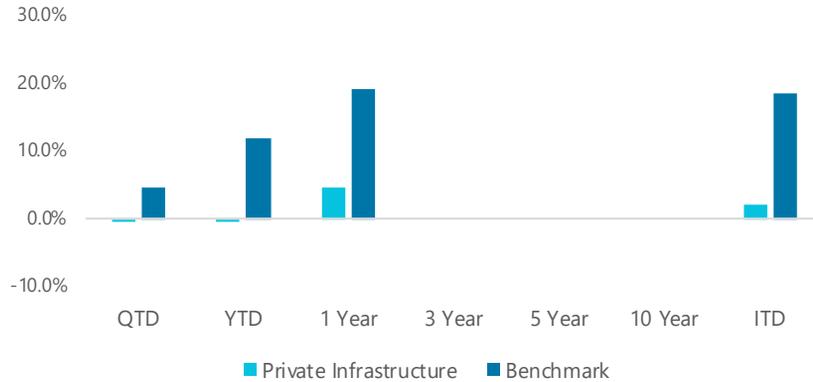


1. Private natural resources & commodities funds reflect early-stage life cycle performance.

Summary

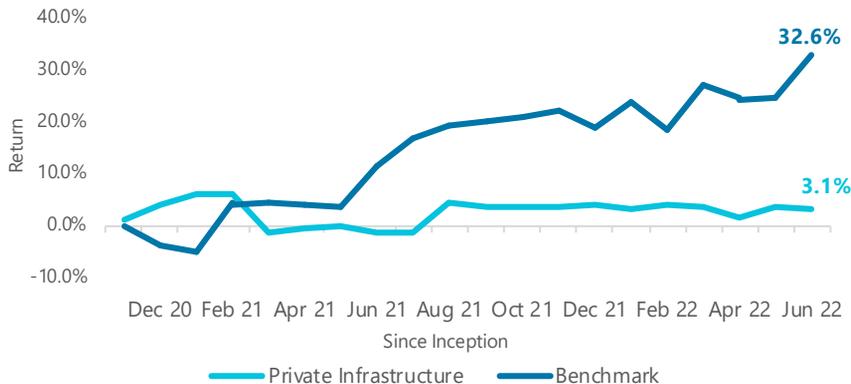
Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022

Performance (net)¹



	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Private Infrastructure	-0.1%	-0.5%	4.7%	--	--	--	2.1%
Benchmark	4.6%	11.8%	19.3%	--	--	--	18.5%
Excess	-4.7%	-12.3%	-14.6%	--	--	--	-16.5%

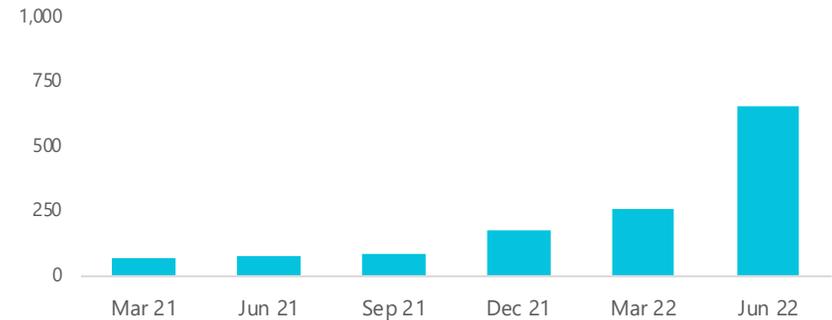
Cumulative Return¹



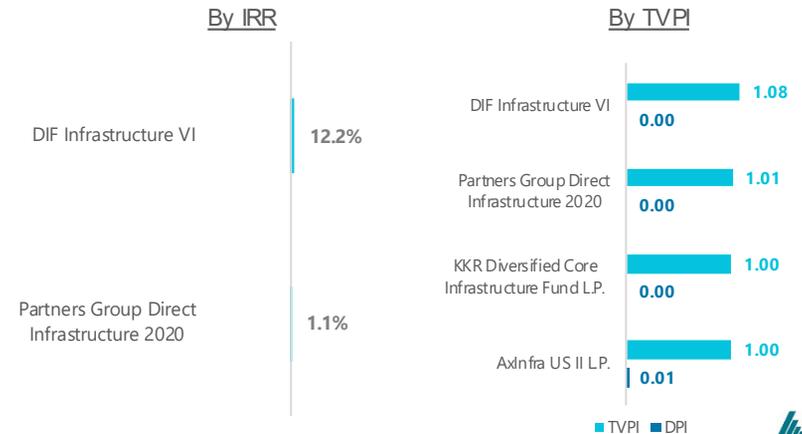
1. Private infrastructure funds reflect early-stage life cycle performance.

Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	257	74	--
Net Cash Flow	396	576	--
Gain/Loss	-1	3	--
Ending Market Value	652	652	--



Top Performing Investments (since inception)¹



Historical Returns

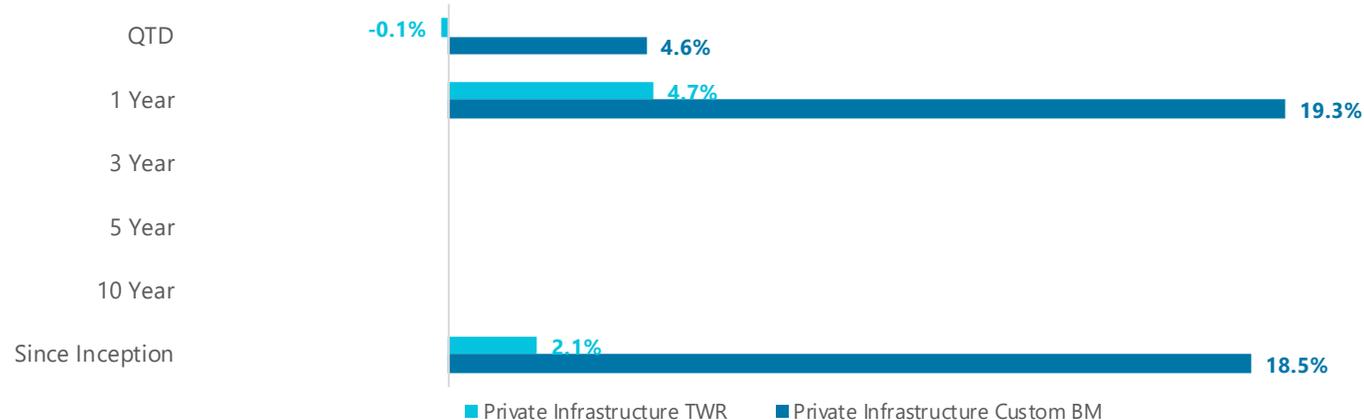
Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022

Time-Weighted Returns (net)¹

Private Natural Resources & Commodities



Private Infrastructure



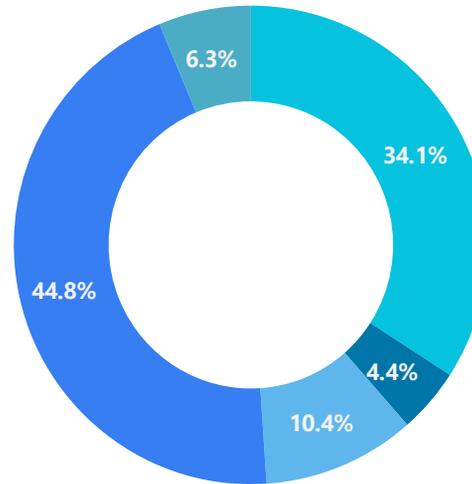
1. Private natural resources and infrastructure funds reflect early-stage life cycle performance.

Performance by Strategy

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022

By Strategy¹



- Infrastructure Core
- Infrastructure Core Plus/Value Add
- Infrastructure Opportunistic
- Natural Resources
- Special Situations

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Infrastructure Core	4	906.8	455.5	1.3	460.9	462.2	6.7	0.00x	1.01x	5.6%	1.16
Infrastructure Core Plus/Value Add	2	261.4	64.5	4.7	59.3	64.1	(0.4)	0.08x	0.99x	-0.8%	0.92
Infrastructure Opportunistic	4	432.0	146.8	0.0	140.5	140.5	(6.3)	0.00x	0.96x	-5.7%	0.95
Natural Resources	6	950.0	611.6	43.1	604.2	647.3	35.6	0.07x	1.06x	11.5%	1.09
Special Situations	2	200.0	204.3	113.4	85.0	198.4	(6.0)	0.56x	0.97x	-1.0%	0.78
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

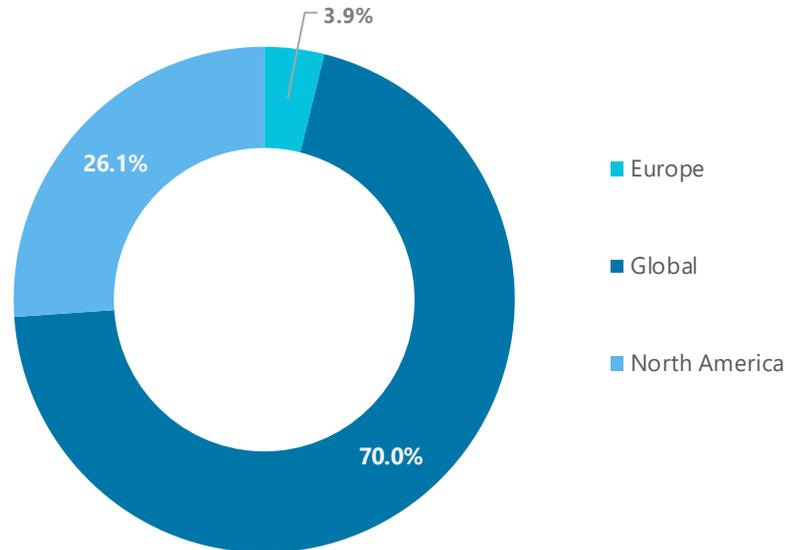
1. Based on best available cash flow adjusted market values.

Performance by Geography

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022

By Geography¹



	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
Europe	1	104.5	57.3	4.7	52.1	56.9	(0.4)	0.08x	0.99x	-0.8%	0.92
Global	11	2,068.2	948.2	43.1	945.5	988.6	40.4	0.05x	1.04x	12.1%	1.10
North America	6	577.5	477.4	114.7	352.2	466.9	(10.4)	0.24x	0.98x	-1.6%	0.91
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

1. Based on best available cash flow adjusted market values.

Performance by Vintage Year

Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Vintage Year¹

	Number of Investments	Commitments (mm)	Cumulative Contributions (mm)	Cumulative Distributions (mm)	Market Value (mm)	Total Value (mm)	Total Gain / Loss (mm)	Distributed to Paid-In	Total Value to Paid-In	Since Inception Net IRR	Since Inception PME
2004	1	50.0	50.0	91.4	0.0	91.4	41.4	1.83x	1.83x	31.1%	1.40
2011	1	300.0	--	--	--	--	--	--	--	--	--
2014	2	450.0	434.4	57.0	362.8	419.8	(14.6)	0.13x	0.97x	-1.4%	0.84
2020	3	321.4	166.9	4.7	165.8	170.5	3.6	0.03x	1.02x	2.4%	0.96
2021	6	672.0	365.0	1.9	360.5	362.4	(2.6)	0.01x	0.99x	4.2%	1.10
2022	5	956.8	278.5	0.0	280.4	280.4	1.9	0.00x	1.01x	1.1%	1.17
Total Private Real Assets ex. Real Estate	18	2,750.2	1,482.8	162.6	1,349.9	1,512.4	29.6	0.11x	1.02x	3.1%	1.02

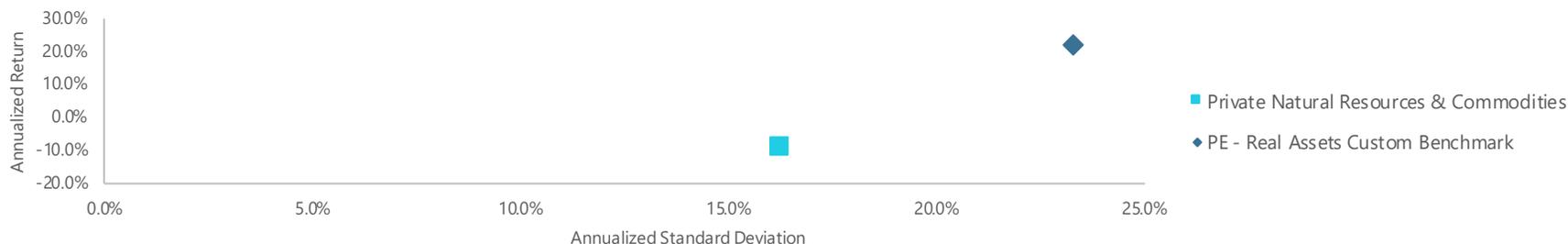
1. Based on best available cash flow adjusted market values.

Risk vs. Return

Private Real Assets ex. Real Estate
for the quarter ended June 30, 2022

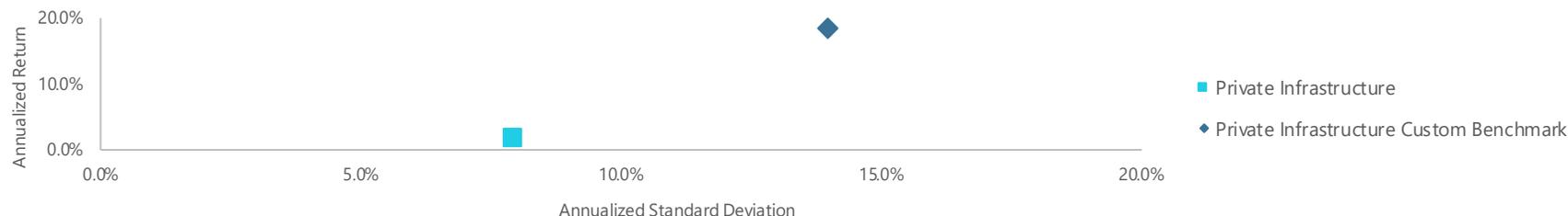
Since Inception (Annualized)¹

Private Natural Resources & Commodities



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Natural Resources & Commodities	-8.4%	16.2%				
PE - Real Assets Custom Benchmark	22.1%	23.3%	(0.50)	(1.27)	0.00	24.0%

Private Infrastructure



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Private Infrastructure	2.1%	7.9%				
Private Infrastructure Custom Benchmark	18.5%	14.0%	0.28	(0.98)	0.00	16.8%

1. Composite risk statistics are relative to the custom benchmark.

Annual Cash Flow Activity

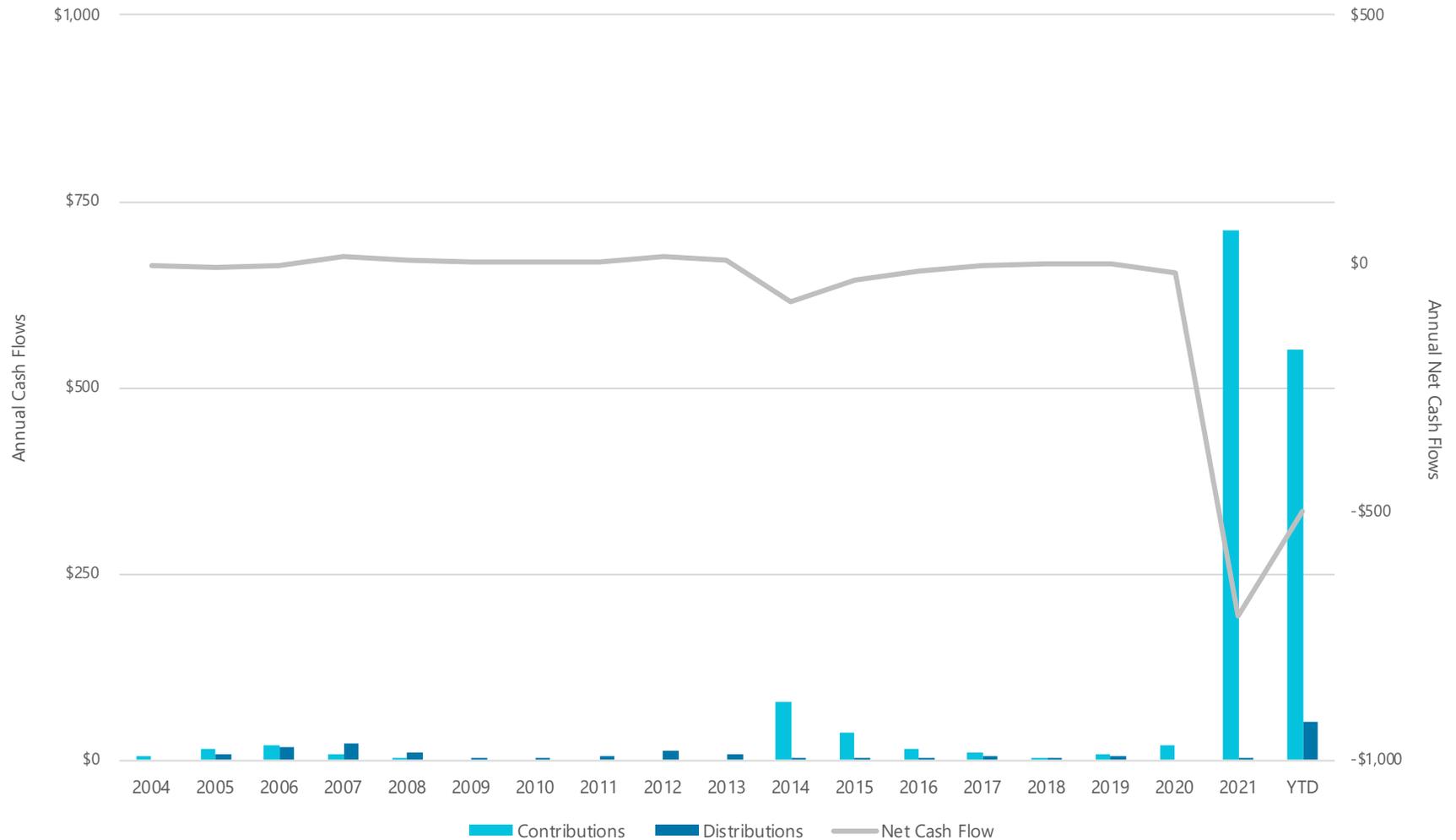
Private Real Assets ex. Real Estate

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Year (mm)



Summary

Diversified Hedge Funds
for the quarter ended June 30, 2022



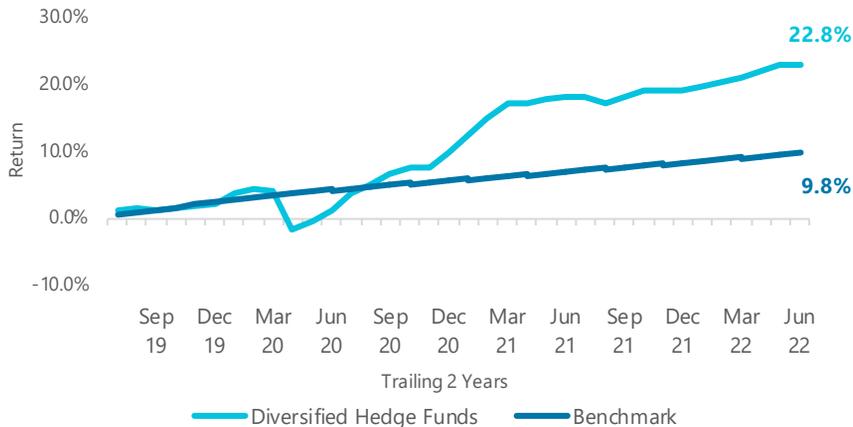
Los Angeles County Employees Retirement Association

Performance (net all)



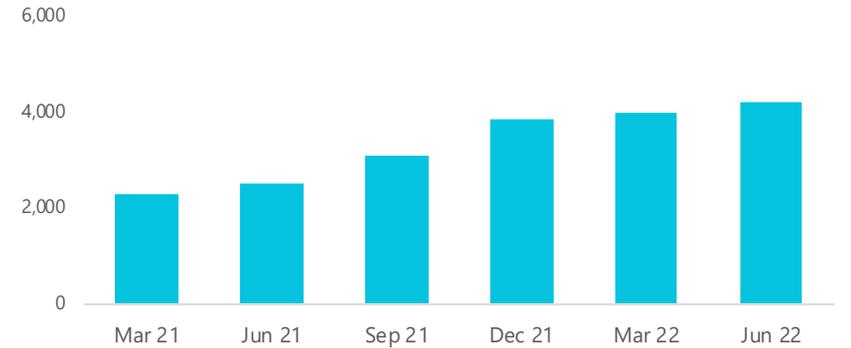
	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Benchmark	0.7%	1.4%	2.6%	3.2%	--	--	3.3%
Excess	0.8%	1.6%	1.4%	3.9%	--	--	3.6%

Cumulative Return

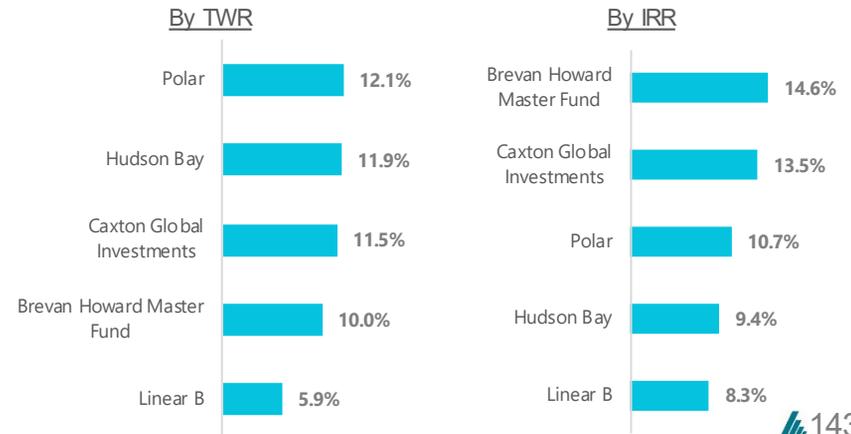


Asset Growth (mm)

	QTD	1 Year	3 Year
Beginning Market Value	4,001	2,526	1,545
Net Cash Flow	134	1,515	2,173
Gain/Loss	61	155	478
Ending Market Value	4,196	4,196	4,196



Top Performing Investments (since inception)

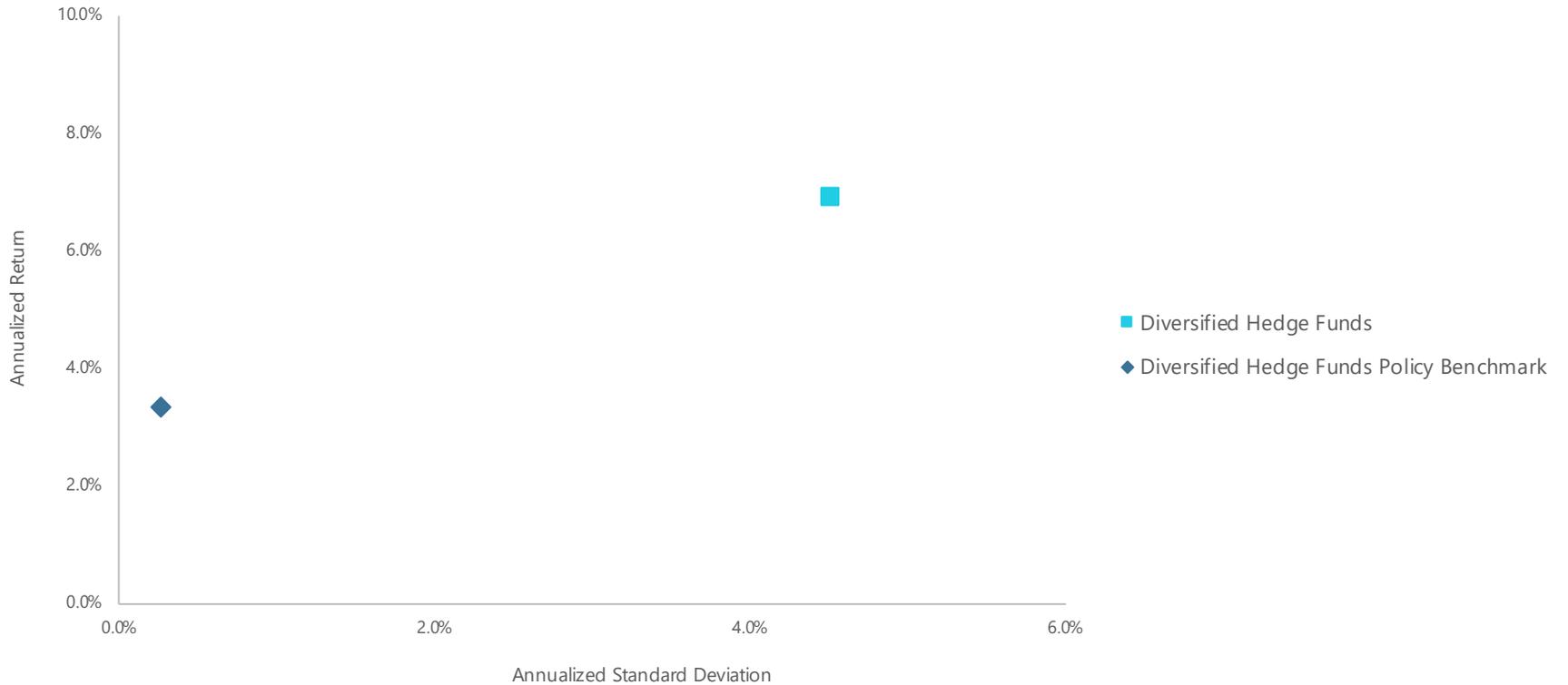


Risk vs. Return

Diversified Hedge Funds

for the quarter ended June 30, 2022

Since Inception (Annualized)¹



	Annualized Return	Standard Deviation	Sharpe Ratio	Information Ratio	Beta	Tracking Error
Diversified Hedge Funds	6.9%	4.5%				
Diversified Hedge Funds Policy Benchmark	3.3%	0.3%	1.33	0.78	(9.47)	4.6%

1. Composite risk statistics are relative to the policy benchmark.

Performance Detail

Diversified Hedge Funds
for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net All Returns

	% of Composite	Ending Market Value (mm)	Prior Quarter Ending MV (mm)	QTD	YTD	1 Year	3 Year	5 Year	10 Year	ITD
Diversified Hedge Funds	100.0%	4,196	4,001	1.5%	3.0%	4.0%	7.1%	--	--	6.9%
Diversified Hedge Funds Policy Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	3.3%
LACERA HF Direct	92.2%	3,869	3,759	1.6%	3.2%	4.3%	6.9%	--	--	5.0%
Custom Hedge Fund Benchmark				0.7%	1.4%	2.6%	3.2%	--	--	4.1%
AM Asia Strategies	5.2%	220	229	-3.9%	-2.6%	-2.6%	--	--	--	-2.6%
Brevan Howard Master Fund	14.9%	625	566	10.5%	14.0%	12.3%	--	--	--	10.0%
Capula GRV	14.5%	608	543	2.6%	5.9%	5.8%	5.8%	--	--	5.9%
Caxton Global Investments	6.9%	289	273	5.9%	12.9%	12.9%	--	--	--	11.5%
DK Institutional Partners	11.6%	486	495	-1.8%	-1.2%	-1.2%	5.9%	--	--	5.2%
HBK Multi-Strategy	13.1%	549	558	-1.5%	-1.3%	2.5%	5.3%	--	--	4.9%
Hudson Bay	15.1%	632	631	0.2%	0.1%	3.7%	--	--	--	11.9%
Polar	10.9%	459	464	-1.1%	-0.6%	-0.3%	--	--	--	12.1%
HF Emerging Managers Program	6.7%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Custom Hedge Fund Benchmark				0.7%	1.4%	--	--	--	--	2.6%
Stable Asset Management	6.7%	281	190	1.3%	0.1%	--	--	--	--	0.2%
Stable Fund Investments	6.7%	281	190	1.3%	0.2%	--	--	--	--	0.2%
Amundsen	1.5%	62	62	-1.4%	-8.4%	--	--	--	--	-5.2%
Clear Sky	1.7%	72	0	2.9%	--	--	--	--	--	2.9%
Linear B	1.6%	68	48	4.3%	5.4%	--	--	--	--	5.9%
Sparta	1.2%	51	51	0.3%	2.4%	--	--	--	--	1.8%
Trutino	0.7%	28	29	-1.9%	2.1%	--	--	--	--	-5.2%

emerging manager program

Emerging Manager Program

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Annualized Net Returns¹

	Ending Market Value (mm)	QTD	1 Year	3 Year	5 Year
Growth					
Global Equity					
Corner Cap	76.6	-10.6%	-6.6%	9.9%	--
Global Equity Policy Benchmark		-15.8%	-16.5%	6.0%	--
Private Equity					
J.P. Morgan Emerging Managers Program	87.9	1.7%	7.1%	27.8%	26.3%
J.P. Morgan Emerging Managers Program II	99.6	-0.1%	5.3%	20.3%	25.5%
J.P. Morgan Emerging Managers Program III	121.7	0.8%	25.4%	40.2%	40.2%
J.P. Morgan Emerging Managers Program IV	172.5	-0.1%	20.8%	18.1%	--
Total Private Equity Custom Benchmark		-4.8%	8.4%	15.5%	17.3%
Non-Core Private Real Estate					
Cityview Bay Area Fund II	78.0	2.3%	9.6%	3.0%	5.1%
Cityview Western Fund I, L.P	152.5	5.6%	23.7%	13.4%	-37.9%
CVBAF II Union City Co-Invest	23.5	1.9%	12.4%	0.5%	1.7%
Non-Core Private RE Policy Benchmark		7.7%	30.3%	13.4%	12.0%
Real Assets & Inflation Hedges					
Core Private Real Estate					
Cityview Core I.M.A	211.1	0.1%	15.2%	3.4%	6.4%
Core Private RE Policy Benchmark		7.1%	27.4%	10.7%	9.4%
Risk Reduction & Mitigation					
Hedge Funds					
Stable Asset Management	281.3	1.3%	--	--	--
Custom Hedge Fund Benchmark		0.7%	--	--	--

risk reports

Summary

for the quarter ended June 30, 2022

Risk Summary

	Value
Total Risk	12.89
Benchmark Risk	12.15
Active Risk	1.38
Portfolio Beta	1.06
Effective Duration	1.74

Contribution to Risk

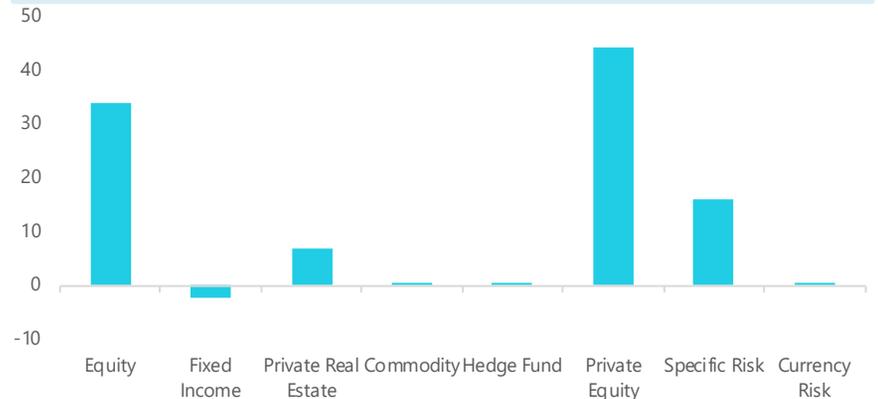


	Mkt Value (mm)	Weight%	Total Risk	Risk Contribution	%CR to TR
Total Fund	67,383	100.0%	12.89	12.89	100.00
Growth	34,694	51.5%	20.26	10.31	79.94
Credit	7,726	11.5%	4.63	0.40	3.12
Real Assets and Inflation Hedges	12,617	18.7%	13.84	2.28	17.65
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.11	0.82
Overlays and Hedges	676	1.0%	34.55	-0.20	(1.54)

Risk Decomposition

Risk Source	Portfolio			Active		
	Risk Contribution	%Risk	Correlation	Risk Contribution	%Risk	Correlation
Total Risk	12.89	100.00	1.00	1.38	100.00	1.00
Local Market Risk	12.39	96.09	1.00	1.38	99.88	0.99
Common Factor Risk	12.36	95.88	1.00	1.16	83.92	0.91
Equity	9.65	74.86	0.95	0.47	34.05	0.59
Fixed Income	0.46	3.53	0.35	-0.03	-2.22	-0.15
Private Real Estate	1.34	10.42	0.69	0.10	7.04	0.36
Commodity	0.10	0.75	0.38	0.00	0.18	0.03
Hedge Fund	0.00	0.01	0.01	0.01	0.52	0.07
Private Equity	0.81	6.32	0.25	0.61	44.36	0.67
Specific Risk	0.03	0.21	0.05	0.22	15.96	0.40
Currency Risk	0.50	3.91	0.53	0.00	0.12	0.01

Active Risk from Risk Factors



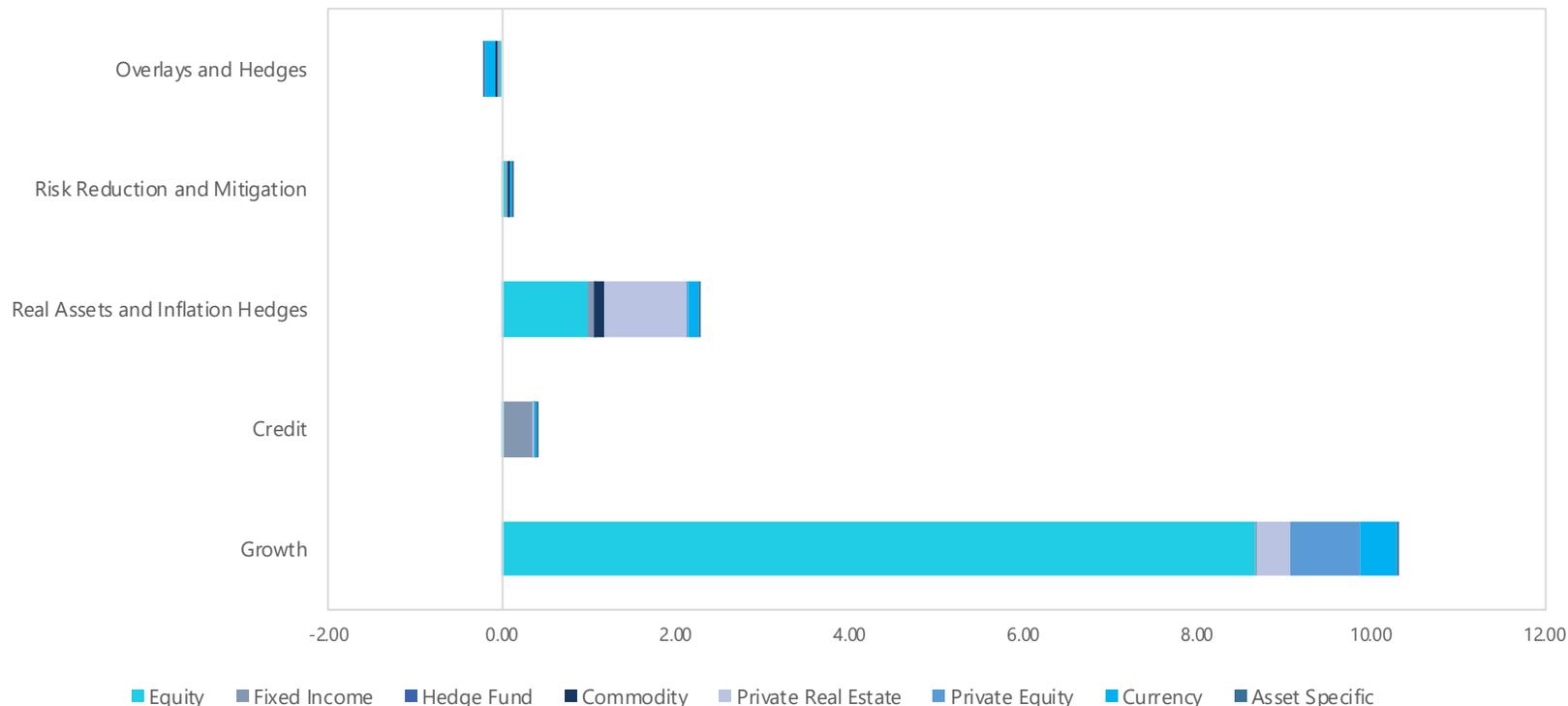
Risk Contribution Breakdown

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

By Risk Type

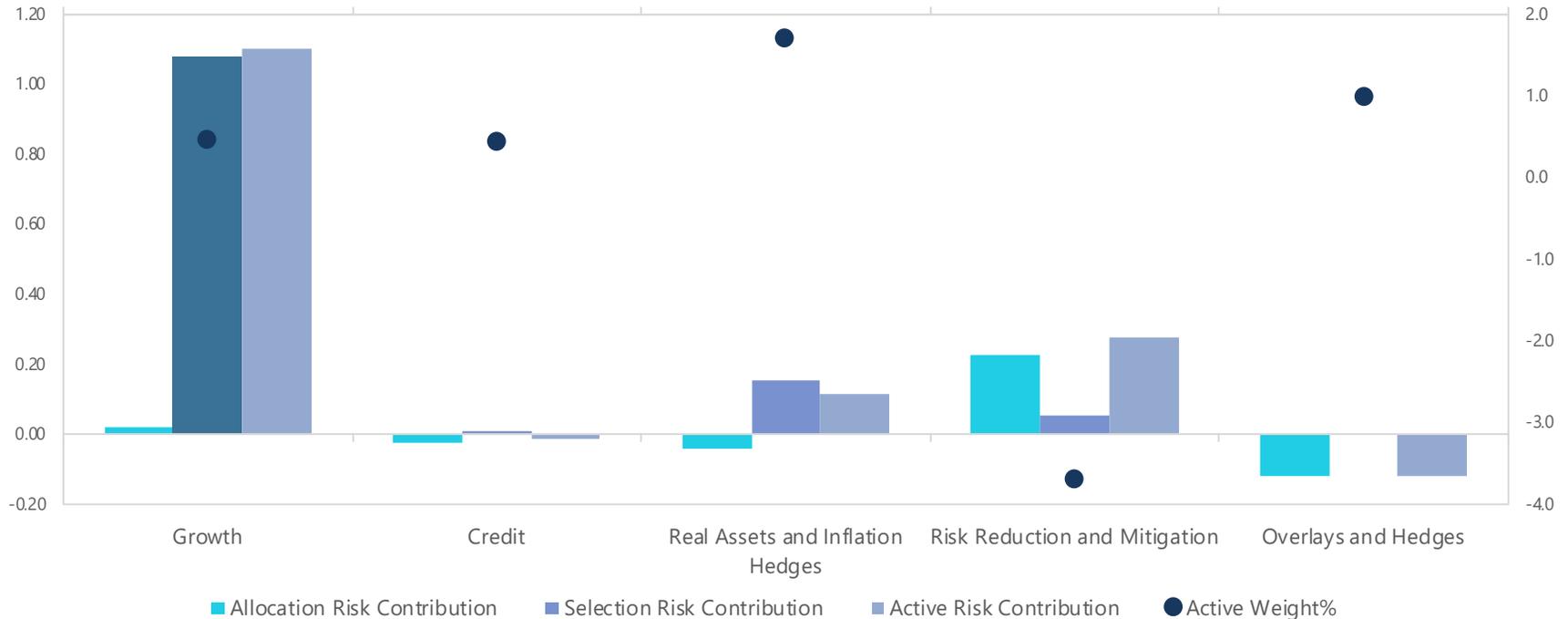


Functional Category	Mkt Value	Weight%	Total Risk	%CR to Total Risk	Port Risk Contribution	Equity	Fixed Income	Commodity	Private Real Estate	Private Equity	Currency	Asset Specific	Eff Weight%
Total Fund	67,383	100.0%	12.89	100.00	12.89	9.65	0.46	0.10	1.34	0.81	0.50	0.03	103.6%
Growth	34,694	51.5%	20.26	79.94	10.31	8.66	0.03	0.00	0.38	0.79	0.43	0.02	51.8%
Credit	7,726	11.5%	4.63	3.12	0.40	0.02	0.33	0.00	0.02	0.01	0.04	0.00	11.5%
Real Assets and Inflation Hedges	12,617	18.7%	13.84	17.65	2.28	0.99	0.07	0.11	0.95	0.02	0.13	0.00	20.2%
Risk Reduction and Mitigation	11,671	17.3%	4.38	0.82	0.11	0.03	0.03	0.01	0.00	0.00	0.03	0.00	17.3%
Overlays and Hedges	676	1.0%	34.55	(1.54)	-0.20	-0.04	-0.01	-0.03	0.00	0.00	-0.12	0.00	2.9%

Allocation Selection

for the quarter ended June 30, 2022

Active Total Risk

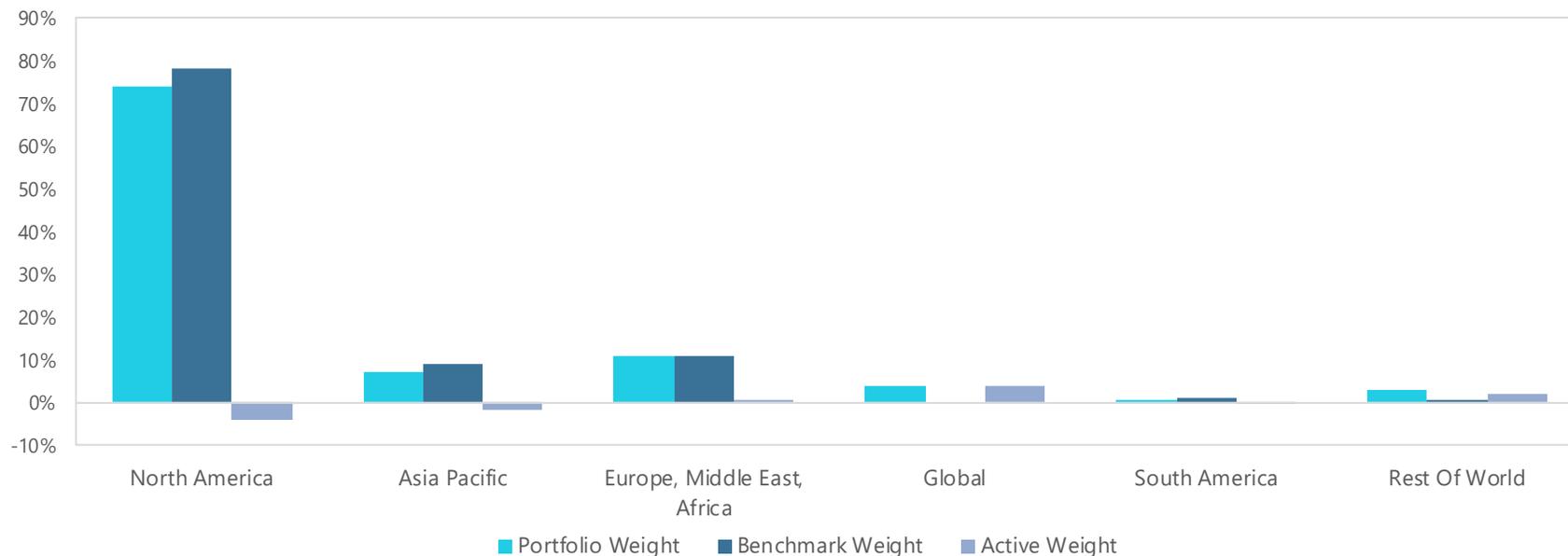


Functional Category	Active Weight%	Allocation			Selection			Active Risk Contribution
		Volatility	Correlation	Risk Contribution	Volatility	Correlation	Risk Contribution	
Active Total Risk				0.07			1.30	1.37
Growth	0.49	7.19	0.60	0.02	2.24	0.94	1.08	1.10
Credit	0.47	8.57	-0.57	-0.02	2.07	0.05	0.01	-0.01
Real Assets and Inflation Hedges	1.72	6.30	-0.34	-0.04	1.86	0.44	0.15	0.12
Risk Reduction and Mitigation	-3.68	12.73	-0.49	0.23	1.32	0.23	0.05	0.28
Overlays and Hedges	1.00	42.83	-0.27	-0.12	0.00	0.00	0.00	-0.12

Portfolio Allocation

for the quarter ended June 30, 2022

By Region

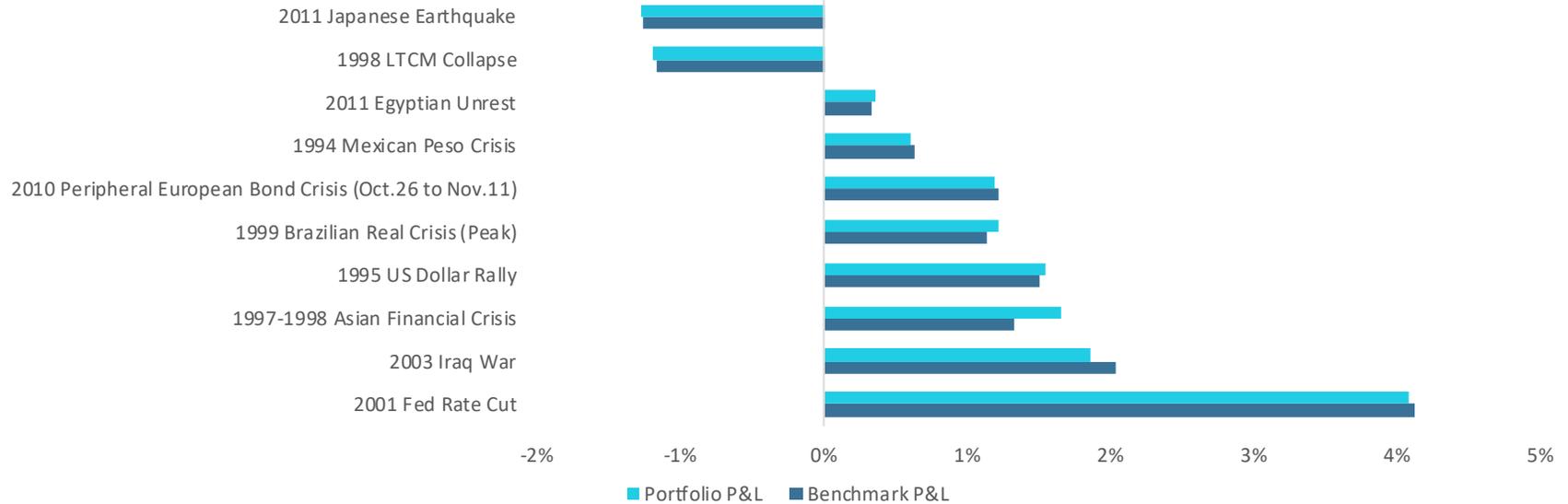


Region	Weight%			Total Risk	Active Risk CR	% of Active TR	MC to Total Tracking Error
	Portfolio	Benchmark	Active				
Total Fund	100.00%	100.00%	0.00%	12.89	1.38	100.00	0.01
North America	74.14%	78.35%	-4.21%	13.23	1.28	92.81	0.03
Asia Pacific	7.23%	8.91%	-1.68%	15.45	0.09	6.20	-0.02
Europe, Middle East, Africa	10.80%	10.79%	0.01%	20.18	0.21	15.26	0.02
Global	3.95%	0.00%	3.95%	6.40	-0.17	-12.02	-0.04
South America	0.78%	1.04%	-0.26%	26.27	0.07	5.08	-0.02
Rest Of World	3.10%	0.91%	2.19%	6.62	-0.10	-7.34	-0.05

Stress Tests

for the quarter ended June 30, 2022

Top 10 Best Stress Scenarios

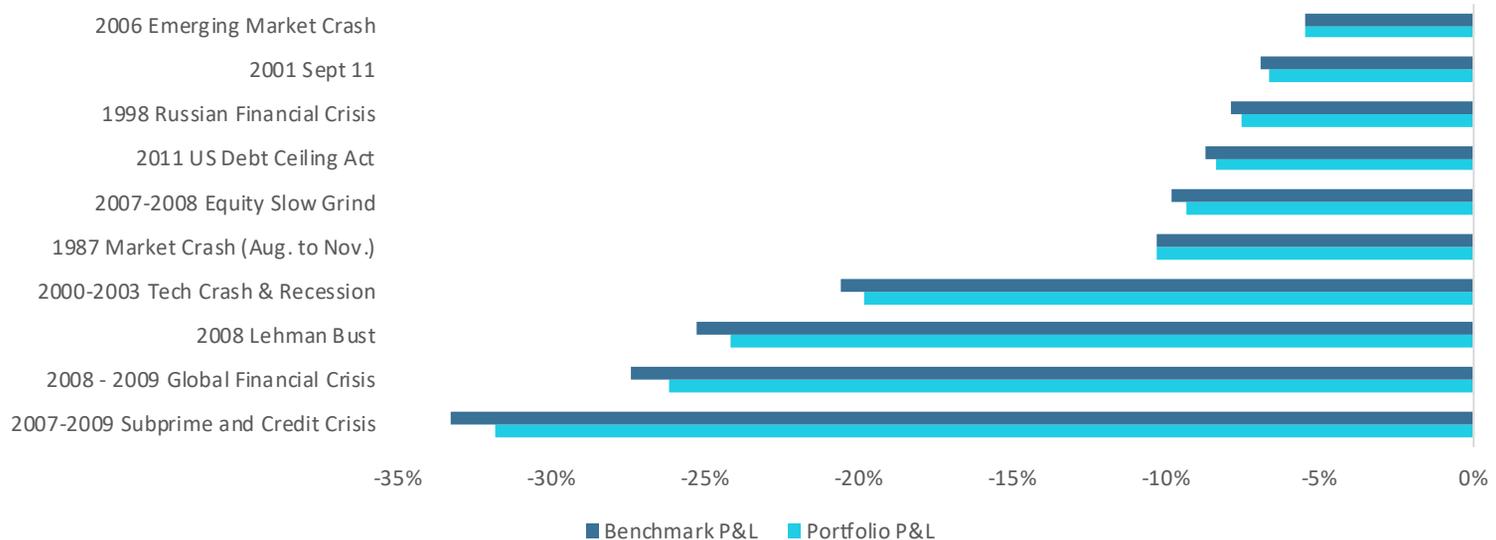


Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2001 Fed Rate Cut	4.09%	4.12%	3,054,699,403
2003 Iraq War	1.87%	2.04%	1,394,117,492
1997-1998 Asian Financial Crisis	1.66%	1.33%	1,239,081,388
1995 US Dollar Rally	1.55%	1.50%	1,157,093,547
1999 Brazilian Real Crisis (Peak)	1.21%	1.14%	906,904,701
2010 Peripheral European Bond Crisis (Oct.26 to Nov.11)	1.20%	1.22%	895,230,888
1994 Mexican Peso Crisis	0.60%	0.63%	451,546,508
2011 Egyptian Unrest	0.37%	0.33%	273,465,516
1998 LTCM Collapse	-1.19%	-1.16%	(888,384,639)
2011 Japanese Earthquake	-1.27%	-1.27%	(950,795,977)

Stress Tests

for the quarter ended June 30, 2022

Top 10 Worst Stress Scenarios



Scenario	Portfolio P&L	Benchmark P&L	Market Change (\$)
2007-2009 Subprime and Credit Crisis	-31.87%	-33.25%	(23,821,346,931)
2008 - 2009 Global Financial Crisis	-26.19%	-27.43%	(19,573,890,669)
2008 Lehman Bust	-24.19%	-25.31%	(18,084,969,086)
2000-2003 Tech Crash & Recession	-19.80%	-20.59%	(14,801,674,578)
1987 Market Crash (Aug. to Nov.)	-10.34%	-10.33%	(7,730,205,537)
2007-2008 Equity Slow Grind	-9.35%	-9.79%	(6,991,539,316)
2011 US Debt Ceiling Act	-8.38%	-8.74%	(6,261,858,907)
1998 Russian Financial Crisis	-7.55%	-7.89%	(5,640,036,103)
2001 Sept 11	-6.62%	-6.92%	(4,950,361,913)
2006 Emerging Market Crash	-5.48%	-5.47%	(4,093,577,998)

manager scorecards



Los Angeles County Employees Retirement Association

PUBLIC MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms		
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)		
			SCORE	SCORE	SCORE	SCORE	SCORE		
Manager	Market Value (in \$ millions)	% of Total Fund	Risk-Adjusted Return	ER					
GROWTH	GLOBAL EQUITY								
	ACADIAN DEVELOPED MARKETS	531.5	0.8%	5	●	S-	3	B	3
	BTC EURO TILTS	482.7	0.7%	5	●	S+	4	B	3
	CAPITAL GROUP DEVELOPED MARKETS	343.0	0.5%	3	●	S	2	B	3
	CEVIAN CAPITAL II - ACTIVIST	358.9	0.5%	3	●	S	4	B	1
	CORNERCAP US SC - EMP	76.6	0.1%	5	●	S-	1	A	3
	FRONTIER US SMID GROWTH	241.7	0.3%	2	●	S	2	B	1
	GENESIS EMERGING MARKETS	490.9	0.7%	1	●	S-	3	A	3
	GLOBAL ALPHA IE SC - EMP	162.1	0.2%	3	●	S+	3	B	3
	JANA JSI FUND V - ACTIVIST	118.4	0.2%	2	●	S-	2	B	1
	JPMAM STRATEGIC BETA NON-U.S.	532.5	0.8%	*	●	S	2	B	3
	JPMAM STRATEGIC BETA U.S.	3,900.9	5.5%	*	●	S	2	B	3
	LAZARD EMERGING MARKETS	374.3	0.5%	2	●	S	3	B	1
	SSGA MSCI ACWI IMI	13,119.5	18.6%	*	●	S	—	B	5
SYMPHONY FINANCIAL - ACTIVIST	203.5	0.3%	4	●	S	2	B	3	
SYSTEMATIC US SMALL CAP VALUE	173.6	0.2%	4	●	S-	2	A	3	
CREDIT	HIGH YIELD								
	BEACH POINT	272.7	0.4%	5	●	S	3	B	3
	BRIGADE CAP MGMT	632.0	0.9%	5	●	S	2	B	3
	PINEBRIDGE INVESTMENTS	432.0	0.6%	*	●	S	4	B	3
	BANK LOANS								
	BAIN CAPITAL CREDIT	406.6	0.6%	4	●	S	2	B	1
	CREDIT SUISSE BANK LOANS	1,102.5	1.6%	*	●	S	3	B	5
	CRESCENT CAPITAL	488.8	0.7%	3	●	S	2	B	3
EMERGING MARKET DEBT									
ABERDEEN ASSET MANAGEMENT	355.6	0.5%	1	●	S	3	B	3	
ASHMORE INVESTMENT MANAGEMENT	330.1	0.5%	1	●	S	3	B	3	
REAL ASSETS & INFLATION HEDGES	NATURAL RESOURCES & COMMODITIES								
	CREDIT SUISSE COMMODITY	551.2	0.8%	4	●	S-	3	A	3
	DWS NATURAL RESOURCES	933.6	1.3%	2	●	S	2	A	5
	NEUBERGER BERMAN/GRESHAM	541.4	0.8%	3	●	S	3	A	3
	PIMCO COMMODITY PLUS	212.8	0.3%	4	●	S-	3	C	1
	INFRASTRUCTURE								
	DWS INFRASTRUCTURE	2,668.3	3.8%	1	●	S	2	A	5
	TIPS								
	BLACKROCK TIPS	1,930.6	2.7%	3	●	S+	3	B	5

		Performance	Organization & Operations	ESG	Partnership	Fees & Terms
		1 to 5 <i>(with 5 the best)</i>	S+, S, or S-	1 to 5 <i>(with 5 the best)</i>	A, B, or C <i>(with A the best)</i>	1 to 5 <i>(with 5 the best)</i>
		SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund	Risk-Adjusted Return	ER		

RISK REDUCTION & MITIGATION	INVESTMENT GRADE BONDS								
	ALLSPRING/WELLS	1,685.7	2.4%	4	●	S	3	B	5
	BTC US DEBT INDEX FUND	2,997.8	4.3%	5	●	S+	—	B	5
	PUGH CAPITAL MGMT	860.7	1.2%	2	●	S	1	A	3
CASH									
	SSGA CASH	757.3	1.1%	* 3	●	S+	—	A	5
OVERLAYS & HEDGES	OVERLAYS								
	PARAMETRIC CASH OVERLAY	525.0	0.7%	—		S	—	A	5
	HEDGES								
BTC PASSIVE CURRENCY HEDGE	167.4	0.2%	—		S+	—	B	5	

	Exceeds 3-Year Net Excess Return
	Meets 3-Year Net Excess Return
	Below 3-Year Net Excess Return

For Organization and Partnership	
	Downgrade from the prior quarter
	Upgrade from the prior quarter

Footnotes

- Pillar methodologies in refinement and may evolve over time

Category Descriptions

Performance

- Quarterly score based on Sharpe and Information Ratios, which provide insight into a manager's risk-adjusted performance and performance relative to its benchmark, respectively
- '*' denotes a manager with an inception date of less than 3 years, resulting in a neutral score of 3
- Circle icons reflect trailing 3-year net excess returns against the manager's benchmark above or below a specified range

Organization & Operations

- Includes factors such as organization, professional staff, diversity & inclusion, investment philosophy & process, risk management, legal & compliance framework
- 'S' stands for Satisfactory

ESG

- Evaluates the extent to which material ESG factors are identified, assessed, and incorporated into risk/return analysis and portfolio construction
- '—' denotes passive index funds and cash where ESG scores are not relevant and/or reflect strategies that do not incorporate active decisions, including ESG considerations, in portfolio construction
- '+-' denotes mandates where ESG scores are currently under review

Partnership

- Blended score based on:
 - Value added services – e.g., providing education, distributing research, and performing analytics on portfolio
 - Client service – e.g., responsiveness, timeliness, competency, and approach
 - Size of LACERA's investment relative to the firm's assets under management

Fees & Terms

- Compared to a benchmark of median fees by asset category and/or investment structure

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
GLOBAL/LARGE BUYOUT							
Advent International Group	134.6	0.2%	*	S+	3	C	4
Blackstone Management	259.9	0.4%	1	S-	4	C	5
CVC Capital Partners	500.5	0.7%	5	S	4	A	4
Green Equity Investors	377.7	0.5%	5	S+	3	B	4
Hellman & Friedman	492.4	0.7%	3	S+	3	B	4
MBK	224.0	0.3%	1	S	4	A	2
Silver Lake Partners	598.3	0.8%	4	S+	3	B	5
Thoma Bravo LLC	140.5	0.2%	*	S+	3	B	3
Vista Equity Partners	916.2	1.3%	2	S-	3	A	2
MID-MARKET BUYOUT							
Accel-KKR Capital Partners	182.9	0.3%	*	S+	4	A	3
BlackFin Capital Partners	19.4	0.0%	*	S	3	B	3
Carlyle Group	283.3	0.4%	2	S+	4	B	4
Clearlake Capital	469.1	0.7%	5	S+	4	A	4
GHO Capital	17.9	0.0%	*	S	3	B	3
Gilde Partners	90.7	0.1%	5	S	2	C	5
Harvest Partners	110.3	0.2%	5	S	1	C	3
Marlin Equity	30.5	0.0%	1	S-	2	C	3
Novacap	10.5	0.0%	*	S	3	B	3
Onex Partners	335.5	0.5%	3	S	4	A	5
PAI	106.3	0.2%	*	S-	2	B	4
Revelstoke	130.8	0.2%	*	S	4	A	2
Riverside Capital	107.7	0.2%	2	S	3	C	3
Siris Capital Group	140.1	0.2%	2	S	3	A	4
Sterling Partners	113.2	0.2%	5	S	3	A	4
STG Partners	28.9	0.0%	*	S	3	A	3
Triton	124.7	0.2%	*	S-	3	C	5
TSG	0.0	0.0%	*	S+	3	C	2
Veritas Capital	9.7	0.0%	*	S+	3	A	3
Vinci Partners	55.7	0.1%	*	S	4	B	5
Webster Equity Partners	38.9	0.1%	*	S	3	B	3
Wynnchurch Capital	28.7	0.0%	*	S+	3	C	3
SMALL BUYOUT							
AE Industrial Partners	141.8	0.2%	*	S+	3	A	3
Atlantic Street Capital	57.9	0.1%	*	S	3	A	3
Clarion	15.4	0.0%	*	S+	2	B	4
Excellere Partners	96.7	0.1%	4	S-	3	A	3
Incline Equity Partners	30.8	0.0%	5	S-	2	C	4
Insignia Capital Partners	193.9	0.3%	5	S	1	B	5
Juggernaut Capital Partners	245.7	0.3%	3	S	3	A	4
Lightyear Capital	255.3	0.4%	3	S-	2	A	5
Livingbridge	53.3	0.1%	1	S+	4	A	3
Montefiore Investment	10.3	0.0%	*	S+	4	B	4
One Rock Capital Partners	175.3	0.2%	2	S	3	A	4
Palladium Equity Partners	96.4	0.1%	1	S-	4	C	2

PRIVATE EQUITY



Los Angeles County Employees Retirement Association

PRIVATE MARKETS MANAGER SCORECARD

2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
GROWTH EQUITY							
Australis Partners	102.0	0.1%	1	S-	4	B	5
Great Hill Partners	0.0	0.0%	*	S	4	A	4
JMI Equity	4.4	0.0%	2	S	3	C	2
RedBird Capital Partners	180.8	0.3%	*	S	4	A	3
Summit Partners	78.1	0.1%	5	S+	4	A	4
TA Associates	120.3	0.2%	*	S+	4	B	4
Technology Crossover Ventures	6.0	0.0%	4	S	2	B	3
VENTURE CAPITAL							
BlueRun Ventures	103.8	0.1%	1	S	2	A	2
Canaan Partners	160.2	0.2%	5	S+	3	A	4
GGV Capital	593.4	0.8%	2	S	3	A	3
Institutional Venture Partners	240.5	0.3%	3	S	1	C	5
Joy Capital	77.2	0.1%	*	S-	2	B	4
Lilly Asia Ventures	141.3	0.2%	3	S	4	B	2
Sinovation Ventures	92.2	0.1%	1	S-	2	C	2
Storm Ventures LLC	264.8	0.4%	4	S	3	A	4
Union Square	202.4	0.3%	5	S-	1	B	5
SPECIAL SITUATIONS							
Alchemy Partners	30.7	0.0%	*	S	3	B	4
Black Diamond	135.2	0.2%	1	S	3	B	4
Centerbridge	130.9	0.2%	5	S	4	A	2
FUND OF FUNDS							
Gateway	1,027.8	1.5%	5	S	3	B	4
MS GTB Capital Partners	281.6	0.4%	1	S	4	A	2
J.P. Morgan	495.6	0.7%	3	S+	+	B	4

PRIVATE EQUITY
(continued)



Los Angeles County Employees Retirement Association
PRIVATE MARKETS MANAGER SCORECARD
 2nd Quarter 2022

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
COMMINGLED FUNDS							
AERMONT Real Estate Fund IV	29.0	0.0%	2	S	4	B	3
AEW Value Investors Asia III	43.0	0.1%	1	S	4	B	4
AG Asia Realty Fund IV	74.0	0.1%	*	S-	2	B	3
AG Europe Realty Fund II	58.0	0.1%	4	S-	2	B	3
Bain Capital Real Estate Fund I	97.0	0.1%	5	S	3	B	3
Bain Capital Real Estate Fund II	37.0	0.1%	*	S	3	B	3
CapMan Nordic Real Estate Fund II	45.0	0.1%	4	S	3	A	3
CapMan Nordic Real Estate Fund III	16.0	0.0%	*	S	3	A	3
Capri Urban Investors	1.0	0.0%	3	S-	1	C	3
CityView Bay Area Fund II	80.0	0.1%	1	S	3	B	3
CityView Southern California Fund II	1.0	0.0%	3	S	3	B	3
CityView Western Fund I, L.P.	168.0	0.2%	4	S	3	B	3
Core Property Index Fund	126.0	0.2%	*	S	2	A	5
Europa Fund IV	11.0	0.0%	1	S	3	A	2
Heitman Asia-Pacific Property Investors	39.0	0.1%	2	S	3	B	4
Invesco Real Estate Asia Fund	165.0	0.2%	3	S	4	B	5
Prologis European Logistics Fund (PELF)	221.0	0.3%	5	S	4	B	1
RREEF Core Plus Industrial Fund (CPIF)	287.0	0.4%	5	S-	3	B	5
Starwood Capital Hospitality Fund	21.0	0.0%	1	S	2	C	3
TPG Real Estate Partners III	46.0	0.1%	*	S	3	C	3
SEPARATE ACCOUNTS							
Cityview Core I.M.A.	211.0	0.3%	1	S	3	B	1
Clarion I.M.A.	252.0	0.4%	5	S	4	B	4
Clarion Takeover Core IMA	372.0	0.5%	*	S	4	B	4
Clarion Takeover Value IMA	60.0	0.1%	*	S	4	B	3
Clarion Takeover Value IMA Vintage 2012	6.0	0.0%	*	S	4	B	4
Heitman I.M.A.	400.0	0.6%	4	S	3	B	4
RREEF Core/High Return I.M.A. III	907.0	1.3%	1	S-	3	C	5
RREEF Takeover I.M.A.	681.0	1.0%	4	S-	3	C	4
Stockbridge I.M.A.	630.0	0.9%	4	S	3	B	4
Stockbridge High I.M.A. Vintage 2014	109.0	0.2%	*	S	3	B	5
Stockbridge Value I.M.A. Vintage 2014	23.0	0.0%	*	S	3	B	3

REAL ESTATE

			Performance	Organization & Operations	ESG	Partnership	Fees & Terms
			1 to 5 (with 5 the best)	S+, S, or S- (with S+ the best)	1 to 5 (with 5 the best)	A, B, or C (with A the best)	1 to 5 (with 5 the best)
			SCORE	SCORE	SCORE	SCORE	SCORE
Manager	Market Value (in \$ millions)	% of Total Fund					
HEDGE FUNDS							
AM Asia	220.0	0.3%	4	S-	2	A	5
Brevan Howard	625.2	0.9%	4	S+	2	A	2
Capula GRV	607.5	0.9%	5	S-	1	A	3
Caxton	289.5	0.4%	5	S	3	B	3
DK Institutional Partners	486.3	0.7%	3	S	1	B	3
HBK Multistrategy	549.2	0.8%	3	S	1	B	3
Hudson Bay	632.1	0.9%	5	S	1	B	3
Polar	459.2	0.7%	4	S	2	B	4
Stable	281.3	0.4%	*	S	2	A	5
ILLIQUID CREDIT							
Barings	51.2	0.1%	5	S	3	A	5
Beach Point	465.3	0.7%	5	S	1	A	3
Glendon	130.4	0.2%	1	S	1	A	2
Magnetar	839.7	1.2%	*	S	2	A	3
Napier Park	804.6	1.1%	*	S	2	A	4
Oaktree	140.5	0.2%	1	S	2	B	2
PIMCO Tac Opps	494.9	0.7%	4	S-	1	C	3
Quadrant	56.8	0.1%	3	S	1	B	5
Silver Rock	0.0	0.0%	*	S	2	A	4
Tennenbaum	6,601.5	9.4%	2	S	2	B	5

For Organization and Partnership	
	Downgrade from the prior quarter
	Upgrade from the prior quarter

Footnotes

- Pillar methodologies in refinement and may evolve over time

Category Descriptions

Performance

- Quarterly score based on risk-adjusted performance metrics over time
- '*' denotes a manager with an inception date of less than 3 years

Organization & Operations

- Includes factors such as organization, professional staff, investment philosophy & process, risk management, legal & compliance framework, diversity & inclusion
- 'S' stands for Satisfactory

ESG

- Evaluates the extent to which material ESG factors are identified, assessed, and incorporated into risk/return analysis and portfolio construction
- '+-' denotes mandates where ESG scores are currently under review

Partnership

- Assesses the quality of investment manager relationships both quantitatively and qualitatively

Fees & Terms

- Compares various fees and terms within each asset category, strategy and/or investment structure

appendix

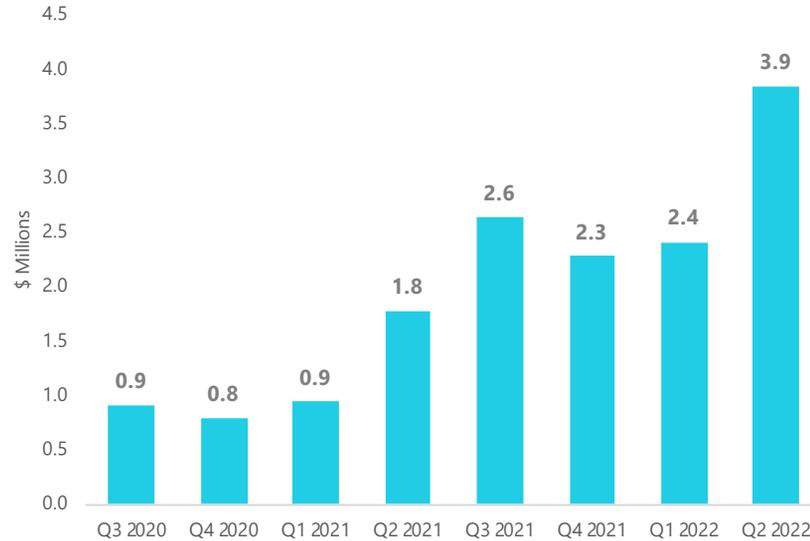
Summary

Securities Lending Income
for the quarter ended June 30, 2022

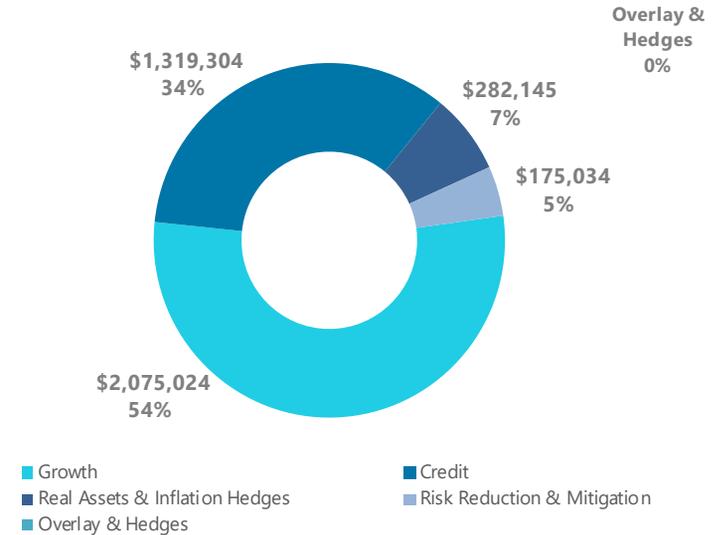


Los Angeles County Employees Retirement Association

Earnings by Quarter



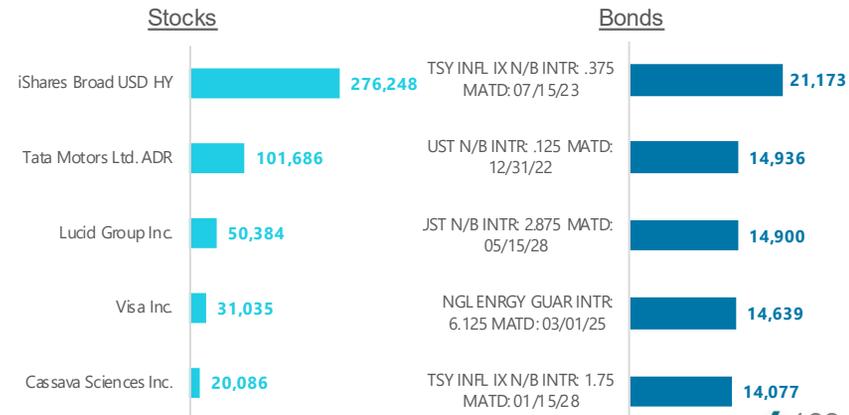
Earnings by Functional Category



Top Earning Funds

	% of Total Fund		Cash Earnings	Non-Cash Earnings
	Earnings	Total Earnings		
SSGA MSCI ACWI IMI	41.5%	1,599,914	827,780	772,134
BlackRock HY ETF	26.4%	1,018,673	584,969	433,705
JPMAM Strategic Beta US	6.1%	233,766	99,758	134,007
BlackRock TIPS	4.9%	188,389	101,248	87,141
Pinebridge Investments	4.1%	159,248	155,091	4,157

Top Earning Securities



Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Growth

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Active			
Acadian Asset Management	\$571.5	\$537,583	37.6
BTC Europe Alpha Tilts	\$517.1	\$451,188	34.9
Capital Guardian	\$376.7	\$326,669	34.7
Cevian Capital	\$382.7	\$1,029,512	107.6
CornerCap	\$80.1	\$105,806	52.8
Frontier Capital Management	\$260.8	\$488,934	75.0
Genesis Investment Management	\$511.1	\$806,379	63.1
Global Alpha	\$174.1	\$310,435	71.3
JANA Partners ²	\$120.0	\$300,000	100.0
Lazard Asset Management	\$380.4	\$608,106	63.9
Parametric GE Market Cap	\$910.7	\$60,774	2.7
Parametric GE Region	\$834.8	\$55,706	2.7
Symphony Financial	\$194.3	\$364,337	75.0
Systematic	\$181.9	\$250,148	55.0
Subtotal:	\$5,496.3	\$5,695,576	41.5
Factor-Based			
JPMAM Strategic Beta Non-US	\$567.0	\$48,553	3.4
JPMAM Strategic Beta US	\$4,135.7	\$354,151	3.4
Subtotal:	\$4,702.7	\$402,703	3.4
Passive			
SSGA MSCI ACWI IMI	\$13,916.6	\$274,478	0.8
Subtotal:	\$13,916.6	\$274,478	0.8

1. Reflects estimated investment management fees.

2. Based on committed capital of \$120 million.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Credit

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Liquid Credit			
Aberdeen Standard Investments	\$379.2	\$358,378	37.8
Ashmore Investment Management	\$330.1	\$407,716	49.4
Bain Capital	\$406.6	\$562,012	55.3
Beach Point Capital	\$286.1	\$321,828	45.0
Brigade Capital Management	\$659.5	\$670,810	40.7
Credit Suisse Bank Loan	\$1,130.1	\$558,524	19.8
Crescent Capital Group	\$501.3	\$582,578	46.5
Pinebridge	\$454.6	\$375,058	33.0
Subtotal:	\$4,147.4	\$3,836,903	37.0
Illiquid Credit			
Beach Point Capital - Fund II	\$13.5	\$153,774	457.1
Beach Point Capital - Fund III	\$181.2	\$314,890	69.5
Tennenbaum Capital Partners	\$629.3	\$1,233,939	78.4
Subtotal:²	\$2,492.3	\$1,702,603	27.3

1. Reflects estimated investment management fees.

2. Magnetar and Napier Park market values are included in the subtotal, but the fees are deducted directly from the fund by the manager.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Real Assets & Inflation Hedges

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Natural Resources & Commodities			
Credit Suisse	\$589.7	\$376,327	25.5
DWS Natural Resources	\$1,217.2	\$563,328	18.5
Neuberger Berman/Gresham	\$505.0	\$445,917	35.3
PIMCO	\$454.6	\$424,364	37.3
Subtotal:	\$2,766.5	\$1,809,936	26.2
Infrastructure			
DWS Infrastructure	\$2,691.7	\$1,245,684	18.5
Subtotal:	\$2,691.7	\$1,245,684	18.5
Treasury Inflation-Protected Securities			
BlackRock TIPS	\$1,976.7	\$49,281	1.0
Subtotal:	\$1,976.7	\$49,281	1.0

1. Reflects estimated investment management fees.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Risk Reduction & Mitigation

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Investment Grade Bonds			
Allspring/Wells	\$1,700.3	\$390,042	9.2
Pugh Capital Management	\$934.3	\$300,604	12.9
Subtotal:²	\$7,206.2	\$787,525	4.4
Cash			
SSGA Cash	\$515.5	\$51,549	4.0
Subtotal:	\$515.5	\$51,549	4.0

1. Reflects estimated investment management fees.
2. Includes BTC US Debt Index.

Public Markets Manager Fees

for the quarter ended June 30, 2022



Los Angeles County Employees Retirement Association

Overlays & Hedges

	Average Market Value (\$ mm)	Fees ¹	Annualized Effective Rate (bps)
Overlays			
Parametric Cash Overlay	\$1,915.6	\$127,826	2.7
Subtotal:	\$1,915.6	\$127,826	2.7
Hedges			
50% Developed Markets Currency Hedge	\$6,809.6	\$254,661	1.5
Subtotal:	\$6,809.6	\$254,661	1.5

1. Reflects estimated investment management fees.

A

ANNUAL RETURN

The total return of a security over a specified period, expressed as an annual rate of interest.

ACTIVE RISK

The expected standard deviation of the differential return between the portfolio and the benchmark. Active total risk arises from active management, and it is the result of active weights (deviations from the benchmark at the asset level) and therefore active exposures; for passively managed portfolios, it is referred to as “total tracking error.”

ACTIVE RISK CONTRIBUTION

Percent contribution to active total risk (or tracking error). The percent of active total risk that an individual asset or risk source contributes. For example, a % CR to Active Total Risk of 10% indicates that 10% of the portfolio’s active total risk is arising from the active position in that particular asset.

B

BASIS POINTS (BPS)

One one-hundredth of one percent. One hundred basis points equal one percent.

BETA

A measure of the volatility of a stock relative to the overall market. A beta of less than one indicates lower risk than the market; a beta of more than one indicates higher risk than the market.

BRIGADE CUSTOM INDEX

Inception – 3/31/20

50% Bloomberg Barclays Ba to B U.S. High Yield / 50% Credit Suisse Leveraged Loan Index

4/1/20 – Present

Bloomberg Barclays U.S. Corporate High Yield

C

CASH POLICY BM

Inception – 3/31/19

FTSE 6-Month U.S. T-Bill Index

4/1/19 – Present

FTSE 3-Month U.S. T-Bill Index

CORE PRIVATE REAL ESTATE POLICY BM

Inception-9/30/21

NFI ODCE + 50 bps (3-month lag)

10/1/21 – Present

NFI ODCE (3-month lag)

CREDIT POLICY BM

Inception-9/30/21

25% Bloomberg Barclays Ba to B U.S. High Yield / 33% Credit Suisse Leveraged Loan Index / 17% Emerging Markets Debt Custom BM / 25% Illiquid Credit Custom BM

10/1/21 – Present

Based on sub-asset market values

55% Liquid Credit Policy BM / 45% Illiquid Credit Policy BM

D

CUSTOM HEDGE FUND BM

Inception – 3/31/19

FTSE 3-Month U.S. T-Bill Index + 500 bps (1-month lag)

4/1/19 – Present

FTSE 3-Month U.S. T-Bill Index + 250 bps (1-month lag)

DIVERSIFIED HEDGE FUNDS POLICY BM

FTSE 3-Month U.S. T-Bill Index + 250 bps (1-month lag)

DURATION

A measure of the price sensitivity of a bond portfolio to changes in interest rates.

DISTRIBUTED TO PAID-IN (DPI)

A measure of distributions received relative to contributed capital.

E

EAFE CUSTOM INDEX

Inception - 6/30/06

MSCI EAFE (Net)

6/30/06 – Present

MSCI EAFE + Canada (Net)

EMERGING MARKET DEBT (EMD) POLICY BM

50% JP Morgan EMBI Global Diversified /
25% JP Morgan GBI-EM GD / 25% JP
Morgan CEMBI BD

F

FUTURES CONTRACT

Agreement to buy or sell a specific amount of a commodity or financial instrument at a particular price and a stipulated future date.

G

GLOBAL EQUITY POLICY BM

4/1/2019 – 6/31/2019

80% MSCI ACWI IMI Net / 20% MSCI WORLD IMI ex U.S. (100% Currency Hedged)

7/1/2019 – Present

MSCI ACWI IMI Net

GROWTH POLICY BM

Based on sub-asset market values

67% Global Equity Custom BM / 27% Private Equity - Growth Custom BM / 6% Non-Core Private Real Estate Custom BM

H

HIGH YIELD BOND

A bond with a low investment quality and credit worthiness, usually with a rating of BB or less.

I

ILLIQUID CREDIT POLICY BM

7/1/20188 – 9/30/2021

Bloomberg Barclays U.S. Aggregate Index + 250 bps (1-month lag)

10/1/21 – Present

Liquid Credit Policy BM + 150 bps (1-month lag)

INFORMATION RATIO

The excess return (alpha) per unit of active risk (tracking error).

INTERNAL RATE OF RETURN (IRR)

A total rate of return that gives full weight to the size and timing of cash flows over the period measured and fully reflects unrealized gains and losses in addition to realized gains and losses, interest and dividend income.

K

KAPLAN & SCHOAR PUBLIC MARKET EQUIVALENT (KS-PME)

A ratio that benchmarks the performance of a fund against an appropriate public market index while accounting for the timing of a fund's cash flows.

L

LIQUID CREDIT POLICY BM

40% BBG Barc US Corp HY Index / 40% Credit Suisse Leverage Loan Index / 10% JPM EMBI Global Diversified Index / 5% JPM GBI-EM Global Diversified Index / 5% JPM CEMBI Broad Diversified Index

M

MC TO TOTAL TRACKING ERROR

This value represents the change in the active risk of an asset's portfolio or group that would result from a one percent increase in the asset's effective position plus an equal short position in the benchmark.

MSCI EM IMI CUSTOM INDEX

Inception – 12/31/00

MSCI EM (Gross)

12/31/00 – 8/31/08

MSCI EM (Net)

8/31/08 – Present

MSCI EM IMI (Net)

N

NATURAL RESOURCES & COMMODITIES POLICY BM

Inception-9/30/21

50% Bloomberg Commodity Index / 50% S&P Global Large MidCap Commodity and Resources Index

10/1/21 – Present

33% Bloomberg Commodity Index / 67% S&P Global Natural Resources Index

NON-CORE PRIVATE REAL ESTATE POLICY BM

Inception-9/30/21

NFI ODCE + 300 bps (3-month lag)

10/1/21 – Present

NFI ODCE + 225 bps (3-month lag)

P

PRIVATE EQUITY – CREDIT CUSTOM BM

Bloomberg Barclays U.S. Aggregate + 250 bps (3-month lag)

PRIVATE EQUITY – GROWTH POLICY BM

MSCI ACWI IMI Net Index + 200 bps (3-month lag)

PRIVATE EQUITY – REAL ASSETS CUSTOM BM

S&P Global Large MidCap Commodity and Resources Index (3-month lag)

PRIVATE INFRASTRUCTURE CUSTOM BM

Inception-9/30/21

Dow Jones Brookfield Global Infrastructure Index (3-month lag)

10/1/21 – Present

Dow Jones Brookfield Global Composite Infrastructure Index (3-month lag)

R

REAL ASSETS & INFLATION HEDGES POLICY BM

Based on sub-asset market values

35% Core Private Real Estate Custom BM / 24% Natural Resources & Commodities Custom BM / 24% DJ Brookfield Global Composite Infrastructure / 17% Bloomberg Barclays U.S. TSY TIPS

RISK REDUCTION & MITIGATION POLICY BM

Based on sub-asset market values

Inception-9/30/21

79% Bloomberg Barclays Aggregate / 17% Diversified Hedge Funds Custom BM / 4% FTSE 3-month Treasury Bill
10/1/21 – Present

62% Bloomberg Barclays Aggregate / 24% Diversified Hedge Funds Custom BM / 9% Bloomberg US Treasury: Long / 5% FTSE 3-month Treasury Bill

S

SHARPE RATIO

Measures the performance of an investment compared to a risk-free asset, after adjusting for its risk. It is the difference between the returns of the investment and the risk-free return, divided by the standard deviation of the investment.

STANDARD DEVIATION

Statistical measure of the degree to which an individual value in a probability distribution tends to vary from the mean of the distribution. The greater the degree of dispersion, the greater the risk.

T

TIME-WEIGHTED RATE OF RETURN (TWR)

A measure of the compound rate of growth in a portfolio. Often used to compare the returns of investment managers because it eliminates the distorting effects on growth rates created by inflows and outflows of money.

TOTAL PRIVATE EQUITY BENCHMARK

Inception – 3/31/19

Private Equity Target (Russell 3000 rolling 10 year + 500 bps)

3/31/19 – Present

Composite weighted blend of Private Equity-Growth Policy BM, Private Equity-Credit Custom BM, and Private Equity-Real Assets Custom BM

Y

TOTAL REAL ESTATE BENCHMARK

Inception – 3/31/19

Real Estate Target (NCREIF ODCE Net + 40 bps)

3/31/19 – 9/30/21

Composite weighted blend of Opportunistic Real Estate Custom BM, NPI Income Lagged, and Core & Value-Added Real Estate Custom BM

10/1/21 – Present

Composite weighted blend of Non-Core Private Real Estate BM, NPI Income Lagged, and Core Private Real Estate BM

TOTAL RISK

The total (gross) risk to an asset (or portfolio), which is the standard deviation of the asset's total return distribution, expressed in percent. Total risk is forecasted using MSCI Barra's multiple factor models. The total risk for an asset depends on the asset's exposures to the risk factors, the factor variance/covariance matrix, and the forecast selection risk of the asset.

TOTAL RISK CONTRIBUTION

The percent of total risk that an individual asset or risk source contributes. For example, a % CR to Total Risk of 10% indicates that 10% of the portfolio's total risk is arising from the portfolio's position in that particular asset.

TOTAL VALUE TO PAID-IN (TVPI)

A measure of total value created relative to capital invested.

TRACKING ERROR

The volatility of a manager's excess return. It is measured by subtracting the benchmark return from the manager's return and calculating the standard deviation.

YIELD TO MATURITY

The return a bond earns on the price at which it was purchased if it were held to maturity. It assumes that coupon payments can be reinvested at the yield to maturity.