



Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer

Board of Investments Meeting
October 11, 2023

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01 Market Environment

Global Market Performance as of September 30, 2023

MSCI ACWI IMI Index (Global Equity Market)*

Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
-4.2	-3.4	-3.4	9.4	20.2	6.9	6.1	7.4

MSCI ACWI IMI Index 1-Year Performance



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

Bloomberg U.S. Aggregate Bond Index**

Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
-2.5	-3.2	-3.2	-1.2	0.6	-5.2	0.1	1.1

Bloomberg U.S. Aggregate Bond Index 1-Year Performance



**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

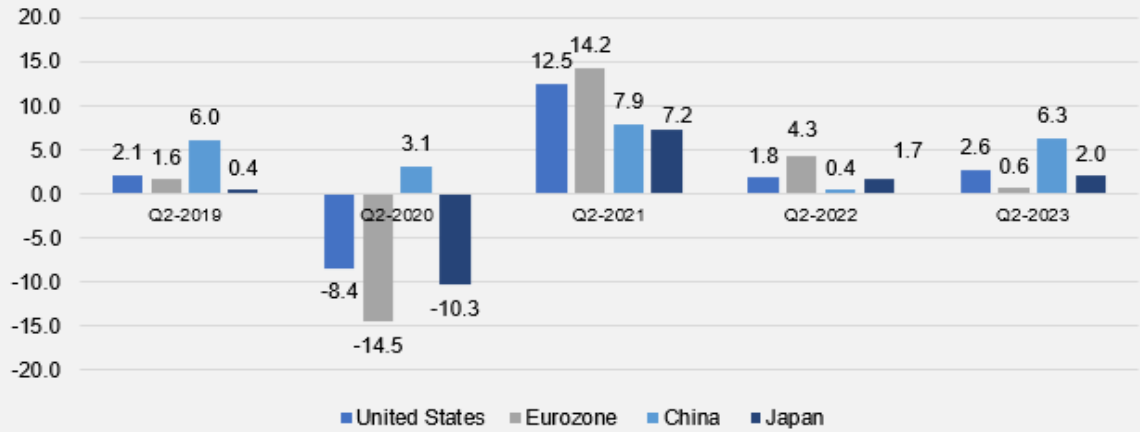
Market	Sub-Category	Index Name	1-Month	3-Month	FYTD	YTD	1 Y	3 Y	5 Y	10 Y
Equity	Global All Cap	MSCI ACWI IMI Total Return	-4.2	-3.4	-3.4	9.4	20.2	6.9	6.1	7.4
	U.S. All Cap	Russell 3000 Total Return	-4.8	-3.3	-3.3	12.4	20.5	9.4	9.1	11.3
	U.S. Large Cap	S&P 500 Total Return	-4.8	-3.3	-3.3	13.1	21.6	10.2	9.9	11.9
	U.S. Small Cap	Russell 2000 Total Return	-5.9	-5.1	-5.1	2.5	8.9	7.2	2.4	6.6
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	-3.2	-3.5	-3.5	5.3	20.2	3.8	2.6	3.5
	Emerging Markets	MSCI Emerging Markets Total Return	-2.6	-2.9	-2.9	1.8	11.7	-1.7	0.6	2.1
Private Equity	Private Equity Buyout	Thomson Reuters PE Buyout Index	-9.5	-7.4	-7.4	-12.6	3.4	-1.9	1.4	9.1
Fixed Income	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	-2.5	-3.2	-3.2	-1.2	0.6	-5.2	0.1	1.1
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	-1.2	0.5	0.5	5.9	10.3	1.8	3.0	4.2
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.9	3.4	3.4	9.9	12.5	5.9	4.3	4.3
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	-1.8	-2.6	-2.6	-0.8	1.2	-2.0	2.1	1.7
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.5	1.4	1.4	3.8	4.7	1.8	1.7	1.1
Commodity	Commodity Prices Index	Bloomberg Commodity Index Total Return	-0.7	4.7	4.7	-3.4	-1.3	16.2	6.1	-0.7
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	0.6	3.1	3.1	-1.9	11.8	20.3	8.4	5.3
Infrastructure	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	-4.0	-6.9	-6.9	-4.5	4.5	5.8	3.0	4.2
Real Estate	U.S. REITs	MSCI U.S. REIT Index	-6.8	-7.0	-7.0	-1.9	3.2	5.7	2.8	6.0

Source: Bloomberg

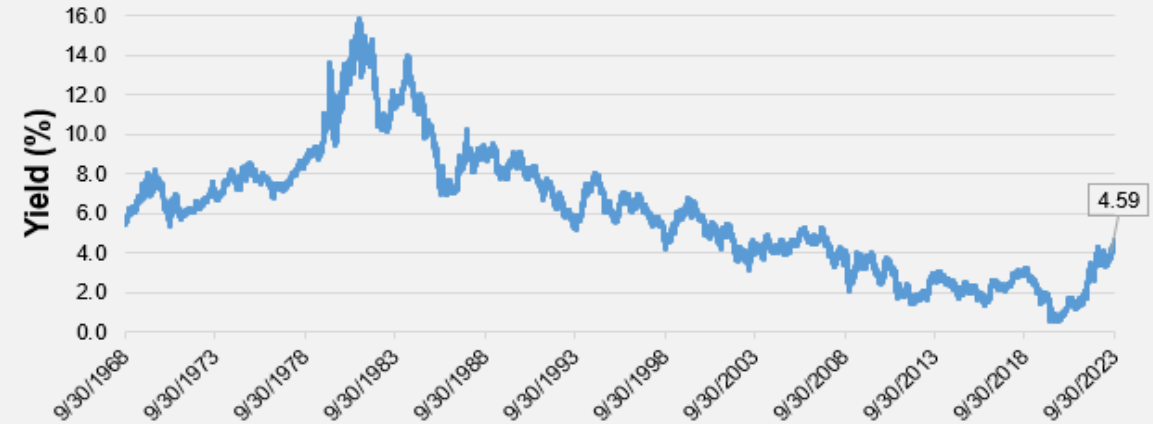
Key Macro Indicators*



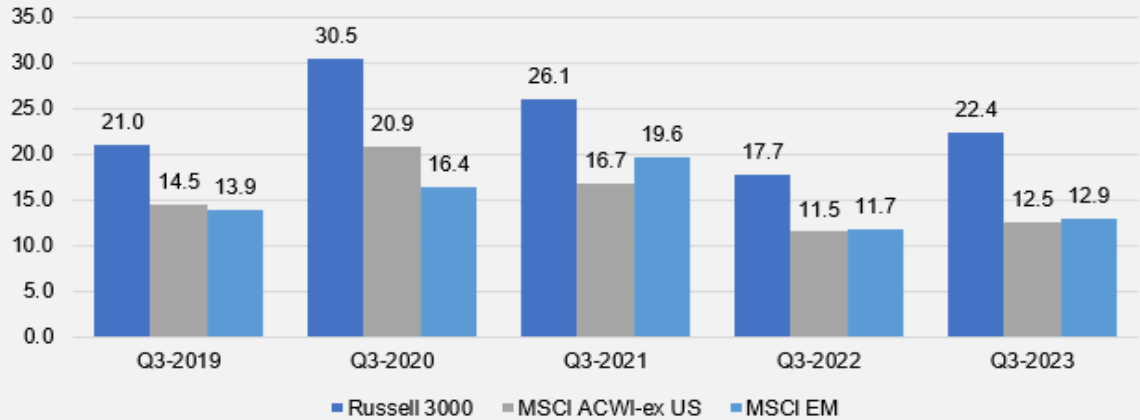
Real GDP Growth YoY (%) - Last Five Years¹



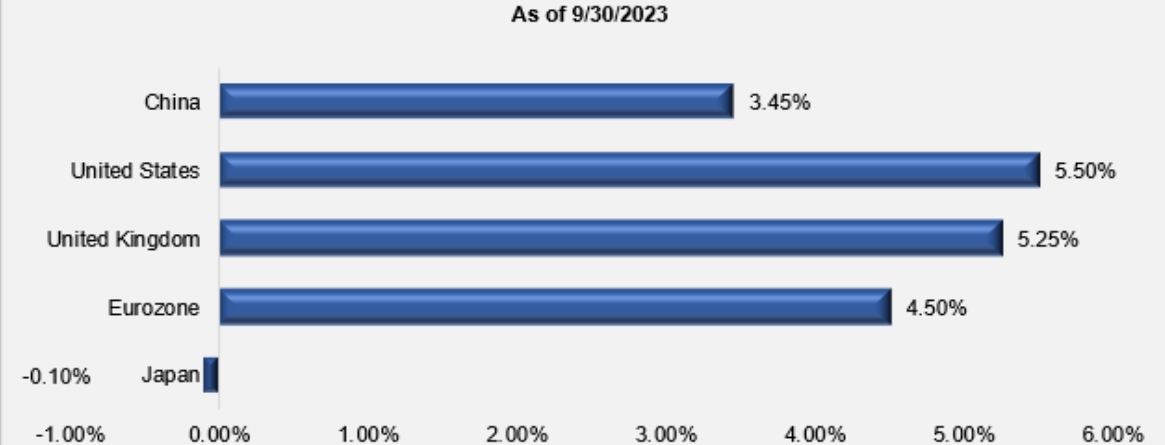
Historical 10-Year Treasury Yield²



Price-to-Earnings - Last Five Years³



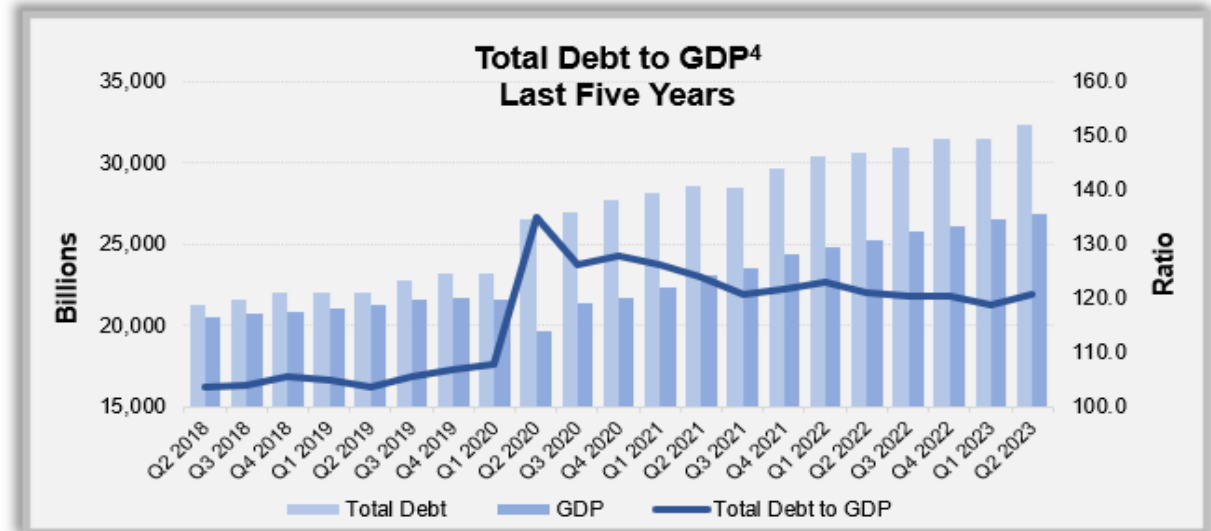
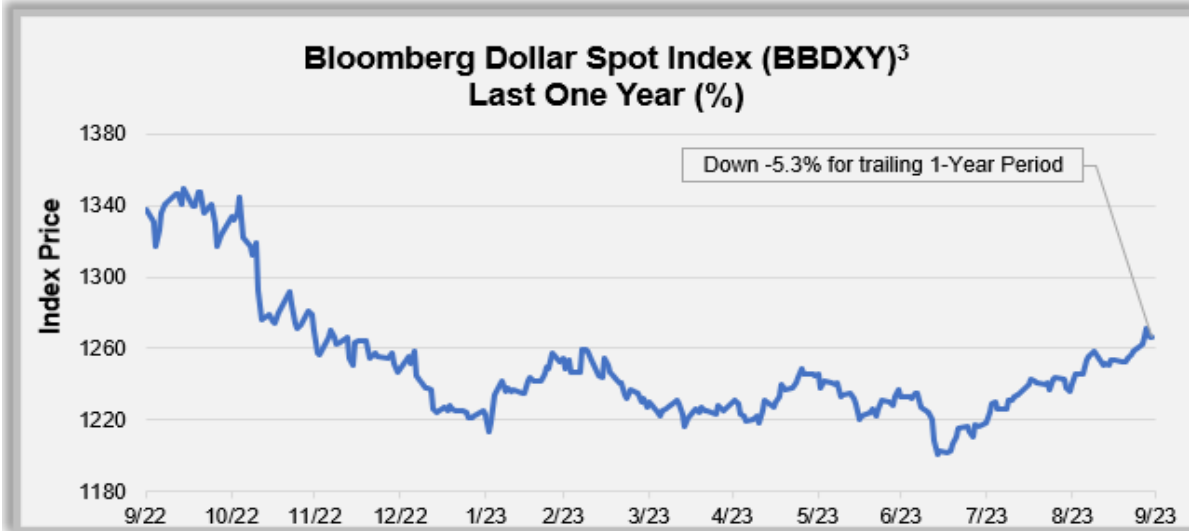
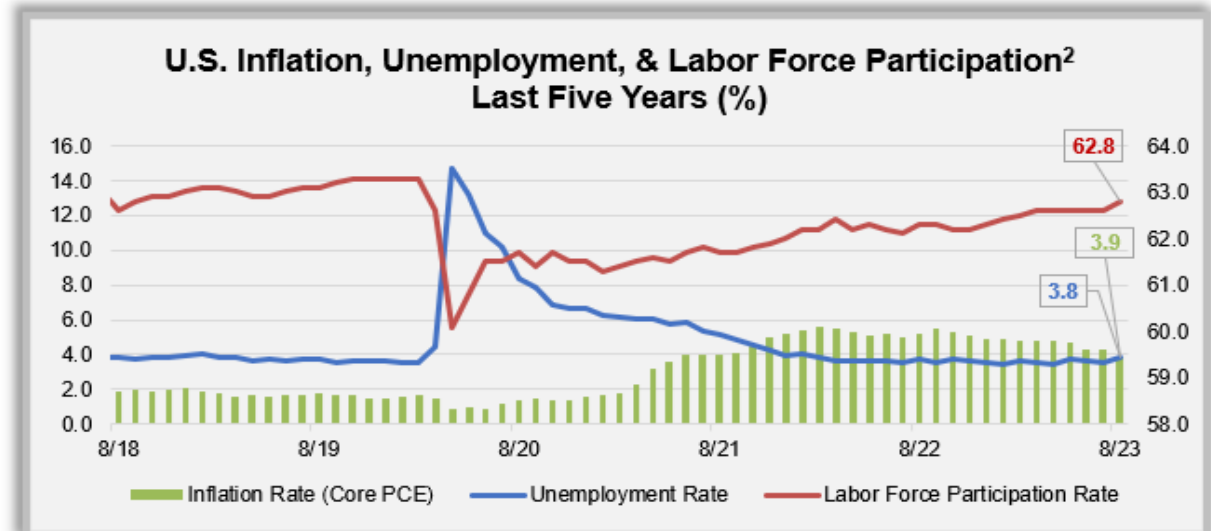
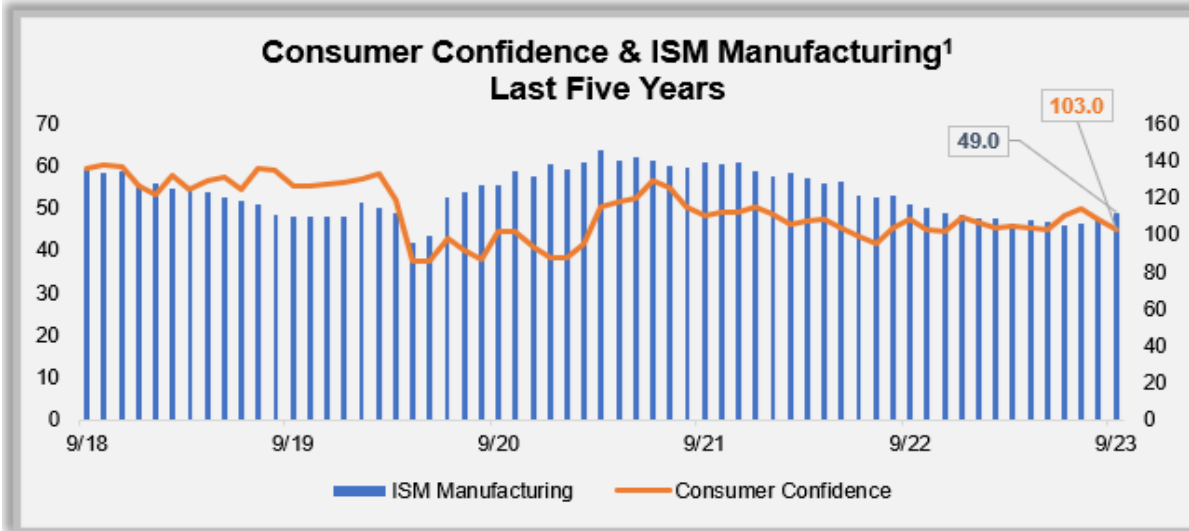
Central Bank Rates⁴



*The information on the "Key Macro Indicators" charts is the best available data as of 9/30/23 and may not reflect the current market and economic environment

Sources: 1. Bloomberg 2. St. Louis Federal Reserve 3. FactSet 4. FactSet

Key Macro Indicators*



*The information on the "Key Macro Indicators" charts is the best available data as of 9/30/23 and may not reflect the current market and economic environment

Sources: 1. Bloomberg 3. Bloomberg
2. Bloomberg 4. Office of Management and Budget; St. Louis Federal Reserve



02 Portfolio Performance & Risk Updates

Market Themes and Notable Items to Watch



Recent Themes

- In September, the Federal Open Market Committee left benchmark interest rates unchanged between 5.25% to 5.50%. Federal Reserve Chair Jerome Powell discussed interest rate levels and the economy at a September 20th press conference:
 - “We’ve covered a lot of ground, and the full effects of our tightening have yet to be felt. Today, we decided to leave our policy interest rate unchanged and to continue to reduce our securities holdings”
- Crude oil prices (West Texas Intermediate WTI) reached above \$93/barrel in September, up 39% from its lowest point in 2023 of \$67/barrel
- The U.S. 10-year Treasury yield ended September at 4.59%, 50 bps higher than at the end of last month, after being 3.88% at the end of 2022, 1.52% at the end of 2021 and 0.93% at the end of 2020
- Global equities (MSCI All Country World Investable Market Index) declined 4.2% in September

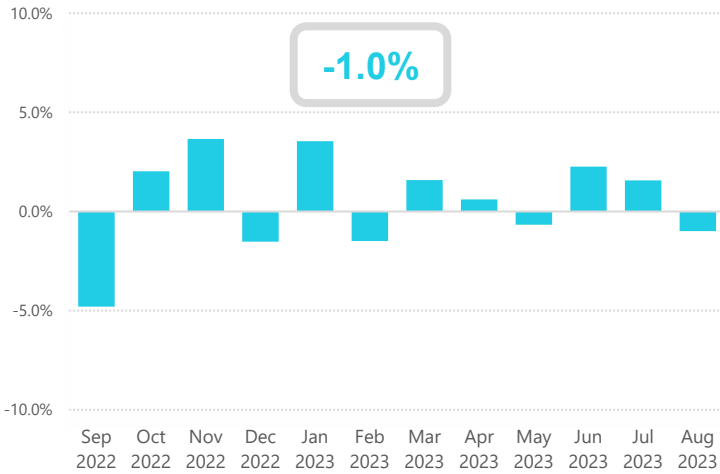
What to Watch

- Interest rates and central bank actions
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Stewardship and ESG-related developments
 - Financial Stability Board (global body of central bank leaders) initiated a review of systemic financial risks in growing private credit sector
 - California Assembly and Senate pass legislation that, if signed, would require firms with over \$1 billion in revenues and doing business in California to report carbon emissions and climate risks

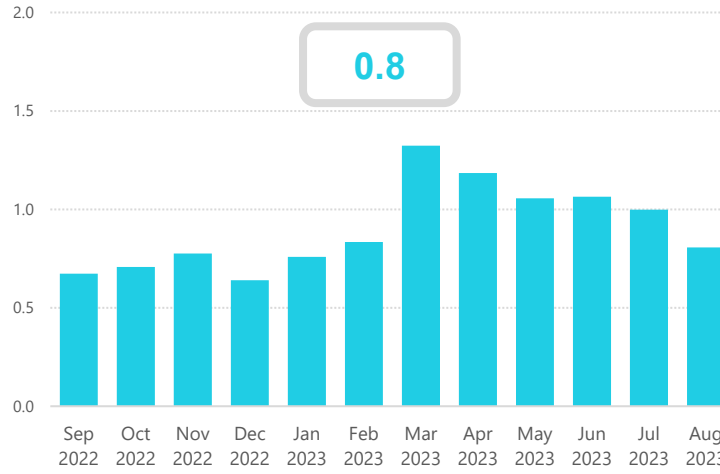
Total Fund Summary as of August 2023



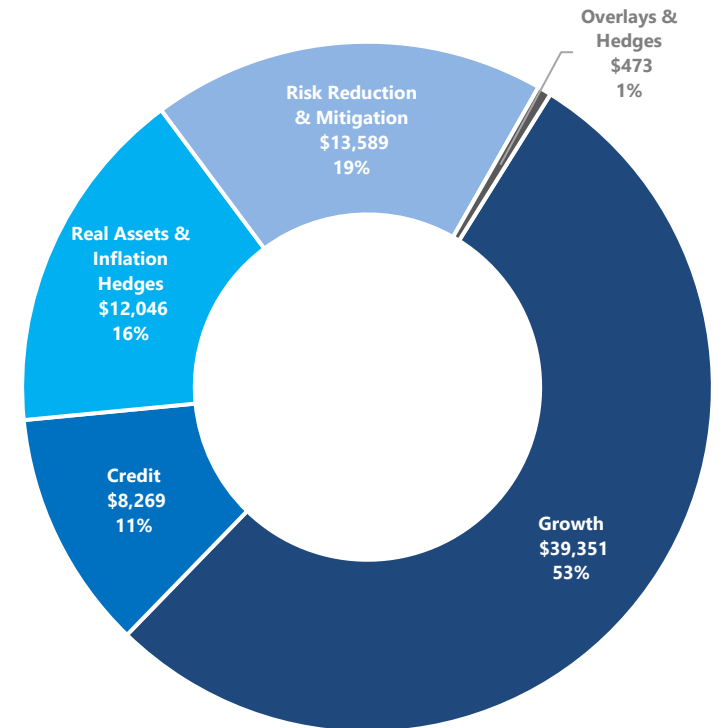
Monthly Return (net)



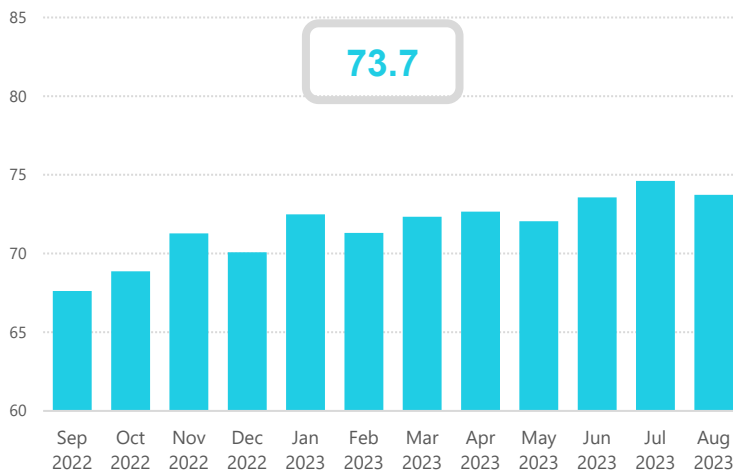
Sharpe Ratio (3-year annualized)



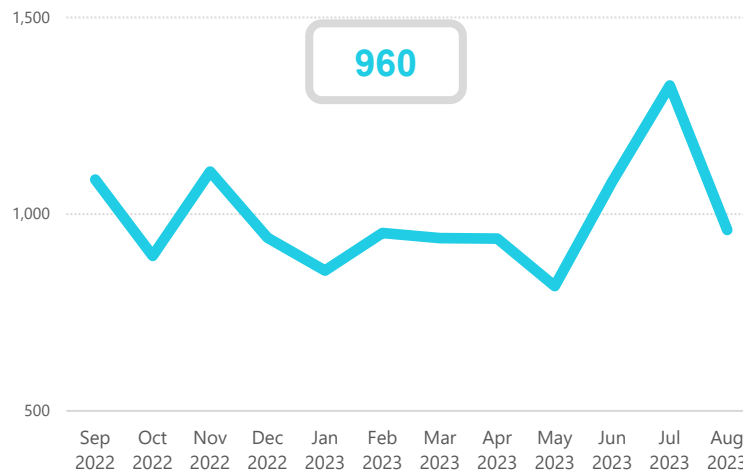
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

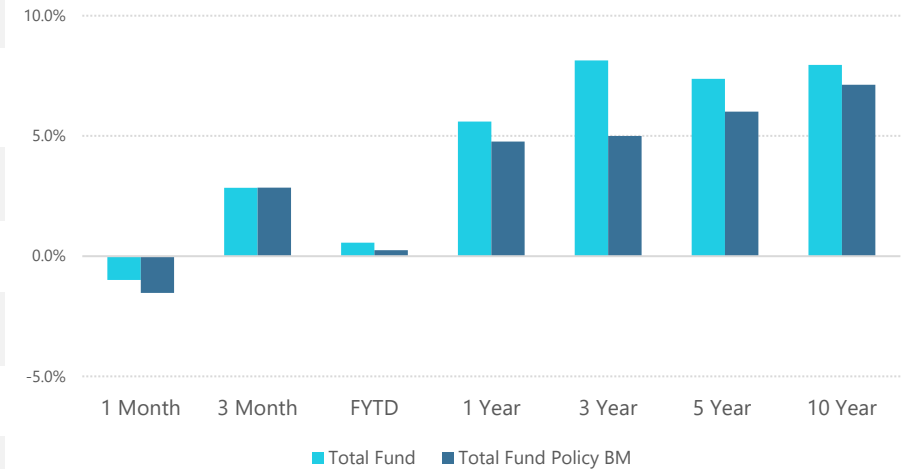


Historical Net Performance as of August 2023



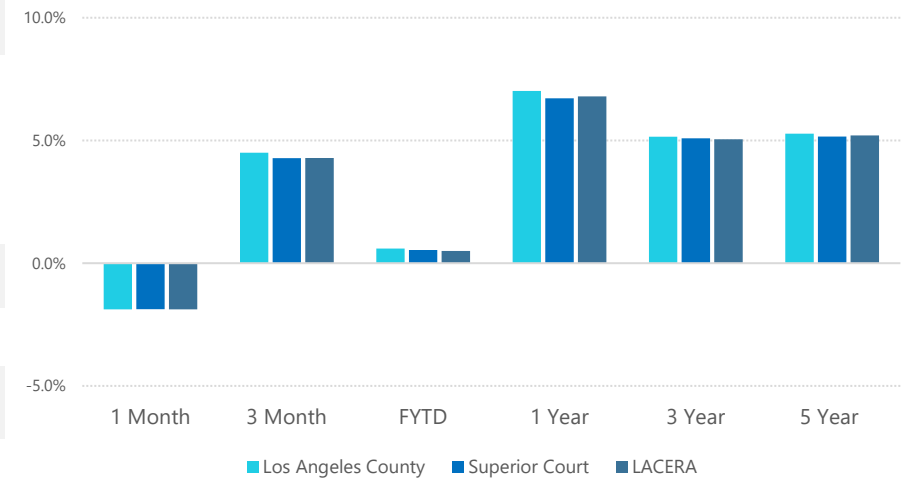
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	73,729	100.0%	100.0%	-1.0%	2.8%	0.6%	5.6%	8.1%	7.4%	8.0%
Total Fund Policy BM				-1.5%	2.8%	0.3%	4.8%	5.0%	6.0%	7.1%
7% Annual Hurdle Rate				0.6%	1.7%	1.1%	7.0%	7.0%	7.0%	7.0%
Growth	39,351	53.4%	53.0%	-1.3%	4.8%	1.2%	10.3%	12.5%		
Growth Policy BM				-2.1%	4.8%	0.5%	8.6%	8.5%		
Credit	8,269	11.2%	11.0%	0.9%	3.7%	2.3%	8.7%	6.0%		
Credit Policy BM				1.1%	3.5%	3.0%	8.6%	2.1%		
Real Assets & Inflation Hedges	12,046	16.3%	17.0%	-2.0%	0.2%	-1.1%	-4.2%	8.0%		
Real Assets & Inflation Hedges Policy BM				-2.2%	0.5%	-0.9%	-4.2%	7.5%		
Risk Reduction & Mitigation	13,589	18.4%	19.0%	-0.6%	-1.2%	-1.0%	-0.6%	-2.5%		
Risk Reduction & Mitigation Policy BM				-0.7%	-1.0%	-1.1%	-0.6%	-3.1%		
Overlays & Hedges	473	0.6%		8.1%	16.5%	7.5%	34.6%			



OPEB Master Trust

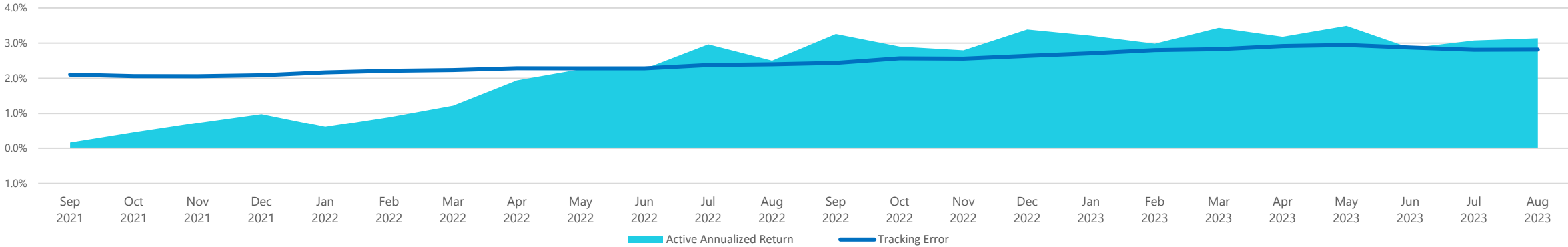
	Market Value (\$ millions)	% of Master Trust	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB Master Trust	3,110			-1.9%	4.5%	0.6%	7.0%	5.2%	5.3%
Los Angeles County	3,027	97.3%	—	-1.9%	4.5%	0.6%	7.0%	5.2%	5.3%
Superior Court	67	2.2%	—	-1.9%	4.3%	0.5%	6.7%	5.1%	5.2%
LACERA	16	0.5%	—	-1.9%	4.3%	0.5%	6.8%	5.0%	5.2%
LACERA Master OPEB Trust Fund	3,109		100.0%	-1.9%	4.4%	0.6%	6.8%	5.1%	5.3%
OPEB Master Trust Policy Benchmark				-1.6%	3.7%	0.6%	6.5%	4.8%	4.9%
OPEB Growth	1,402	45.1%	45.0%	-2.8%	6.7%	0.8%	13.5%	7.5%	7.3%
OPEB Growth Policy Benchmark				-2.7%	6.5%	0.8%	12.8%	6.9%	6.8%
OPEB Credit	566	18.2%	18.0%	0.0%	3.8%	1.6%	9.1%	2.7%	3.1%
OPEB Credit Policy Benchmark				0.7%	4.1%	2.4%	8.5%	2.6%	3.2%
OPEB Real Assets & Inflation Hedges	619	19.9%	20.0%	-2.0%	4.0%	0.7%	-4.2%	6.8%	3.9%
OPEB RA & IH Policy Benchmark				-1.4%	0.8%	0.4%	-3.6%	6.7%	3.7%
OPEB Risk Reduction & Mitigation	522	16.8%	17.0%	-1.1%	-1.7%	-1.5%	-0.9%	-3.5%	0.7%
OPEB RR & M Policy Benchmark				-1.1%	-1.9%	-1.8%	-2.4%	-4.1%	0.2%



Active and Excess Return as of August 2023



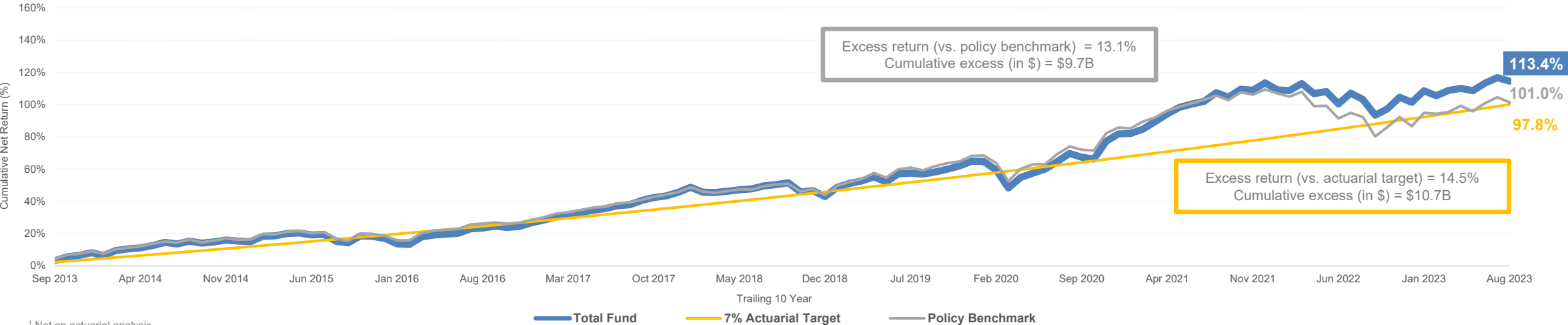
Active Return vs. Tracking Error^{1,2,3}



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Aug 2023	8.1%	5.0%	3.1%	2.8%

¹ Rolling 36 months.
² Active return equals the difference in return between a portfolio and its benchmark.
³ Tracking error (or active risk) measures the volatility of active returns.

Excess Return¹



¹ Not an actuarial analysis.

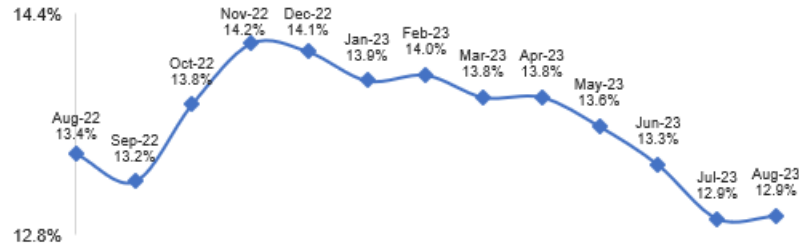
Total Fund Forecast Risk as of August 2023*



TOTAL FUND RISK
12.9%

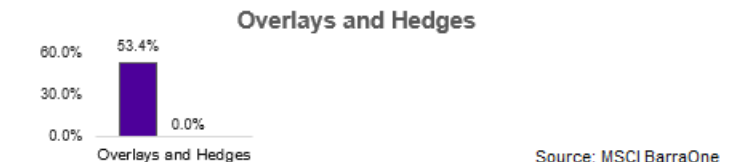
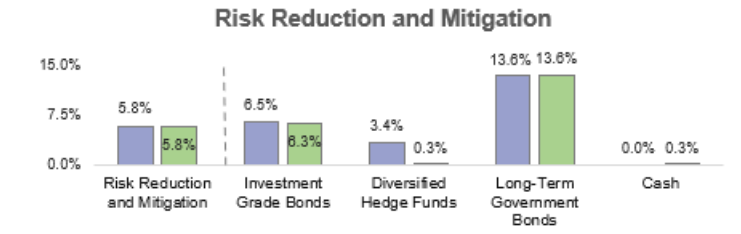
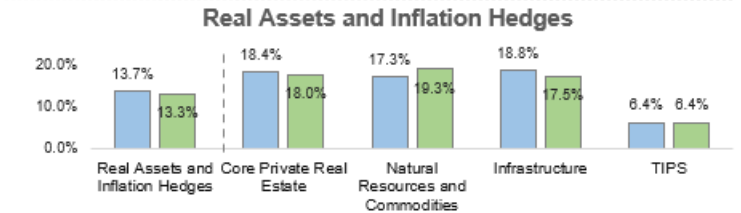
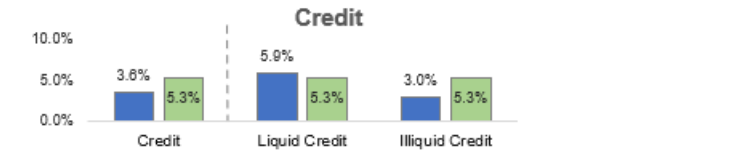
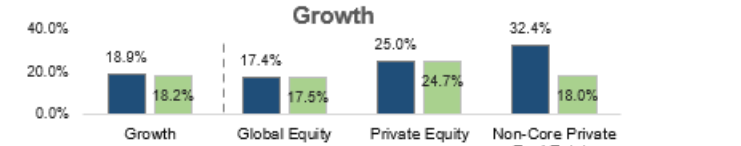
BENCHMARK RISK
12.2%

Forecasted Total Fund Risk Trend



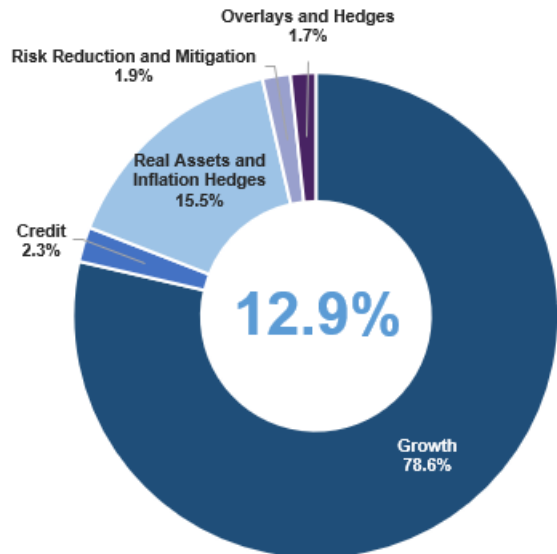
Subcategory Risk¹

¹ Subcategory risk is on the left bar and benchmark risk is on the right bar.

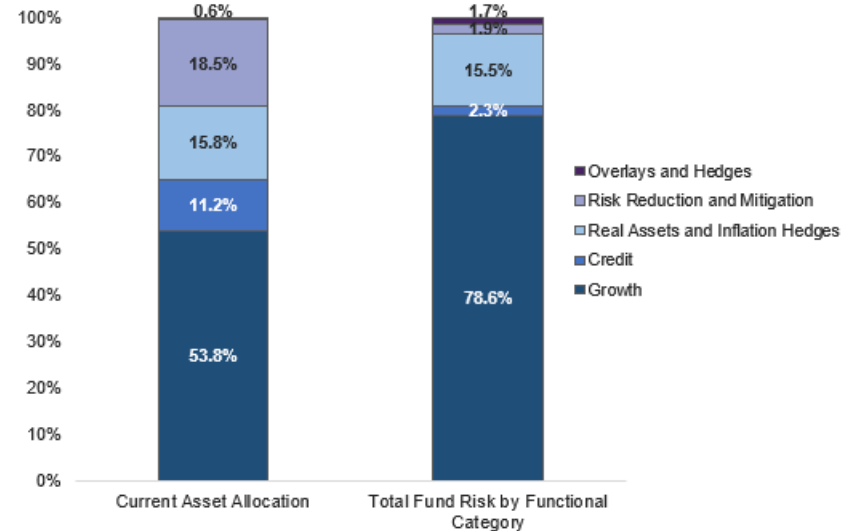


Source: MSCI BarraOne

Functional Category Contributions to Total Fund Risk



Total Fund Asset Allocation Capital-based versus Risk-based



* Real estate and private equity data is based on best available cash flow adjusted market values. Exposure data is based on security level holdings and/or proxies.

Total Fund Forecast Active Risk as of August 2023*



TOTAL FUND ACTIVE RISK

1.33%

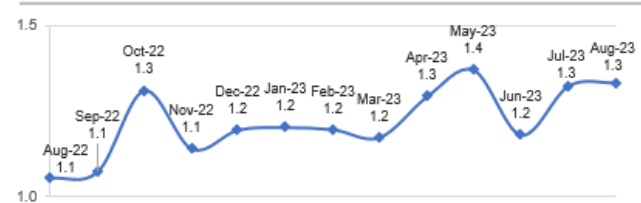
ALLOCATION RISK

0.19%

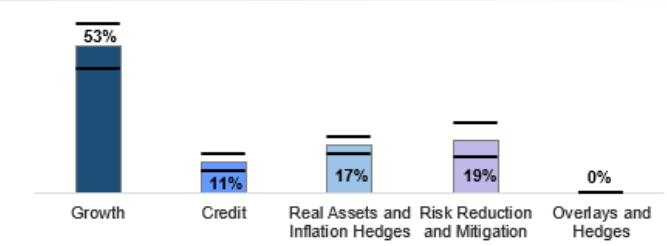
SELECTION RISK

1.14%

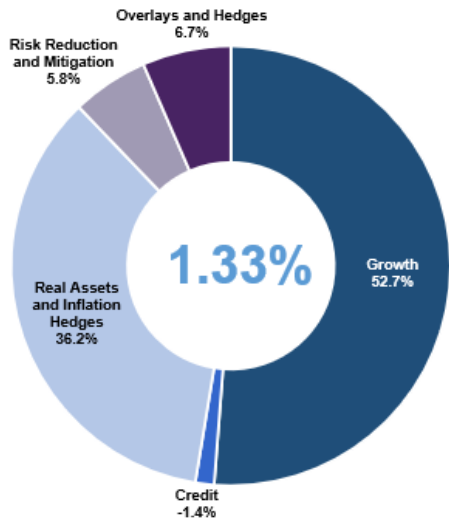
Forecasted Active Risk Trend (%)



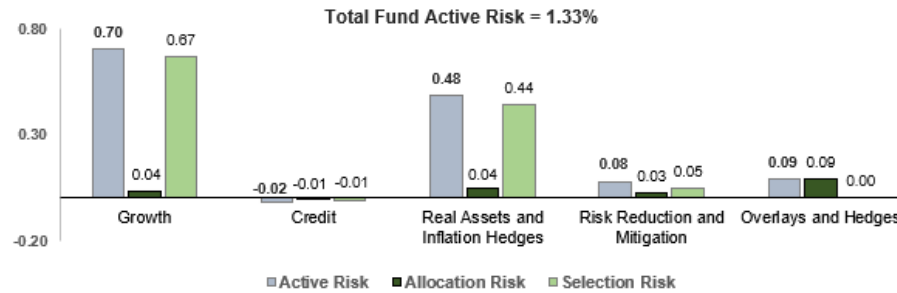
Policy Target Weight for each Functional Category Maximum and Minimum Bands



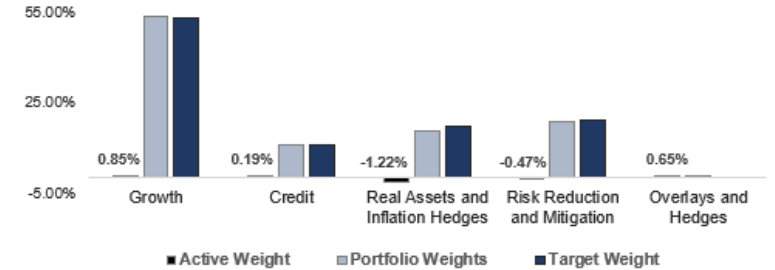
Functional Category Contributions to Active Risk



Active Risk Attribution (%)



Active Weights for each Functional Category



Subcategory Active Risk (%)

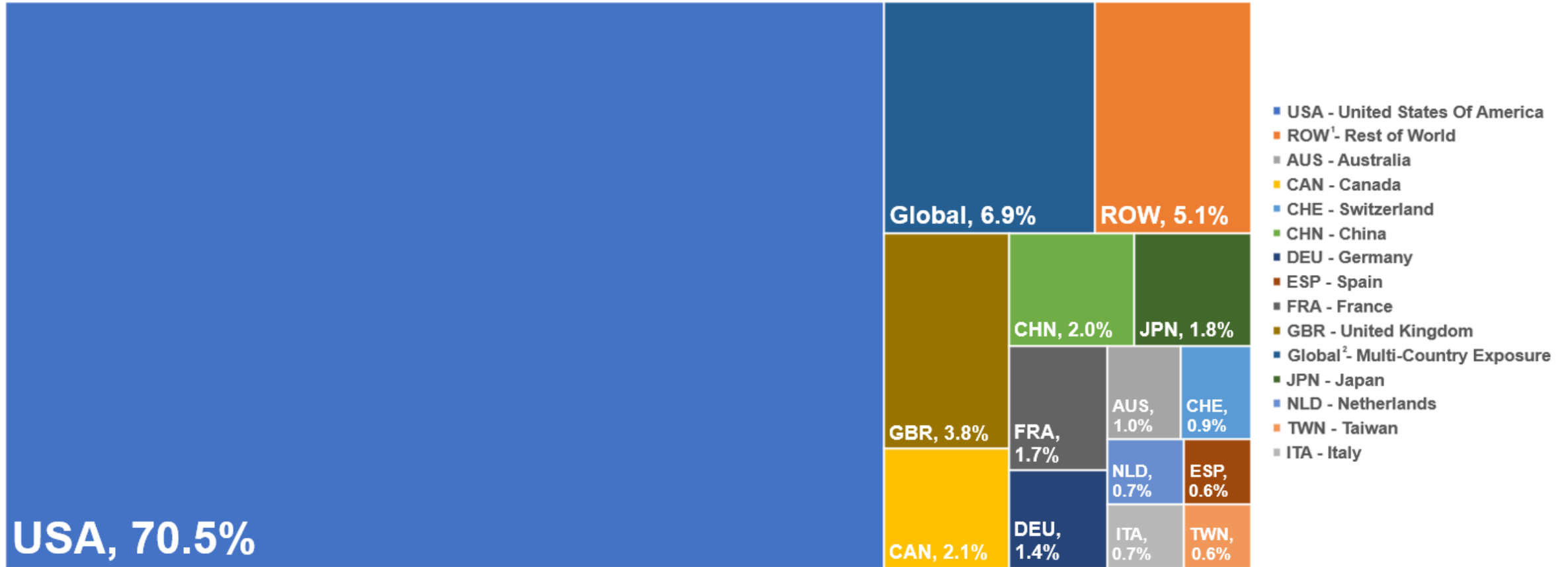
Total Fund	Global			Credit		Real Assets and Inflation Hedges					Risk Reduction and Mitigation					Overlays and Hedges		
1.33	1.42	0.38	3.25	16.01	2.45	0.94	4.23	3.53	4.02	4.62	8.43	0.08	1.11	0.22	3.36	0.03	0.27	53.35
Total Fund	Growth	Global Equity	Private Equity	Non-Core Private Real Estate	Credit	Liquid Credit	Illiquid Credit	Real Assets and Inflation Hedges	Core Private Real Estate	Natural Resources and Commodities	Infrastructure	TIPS	Risk Reduction and Mitigation	Investment Grade Bonds	Diversified Hedge Funds	Long-Term Government Bonds	Cash	Overlays and Hedges

Source: MSCI BarraOne

* Real estate and private equity data is based on best available cash flow adjusted market values. Exposure data is based on security level holdings and/or proxies.

Geographic Exposures by AUM

Total Fund as of August 2023* Ex-Overlays and Hedges



AUM = Assets under management.

Geographic exposure is based on the domicile country of a given security/asset.

* Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change.

Real Estate and Private Equity data is based on best available cash flow adjusted market values. Exposure data is based on security level holdings and/or proxies.

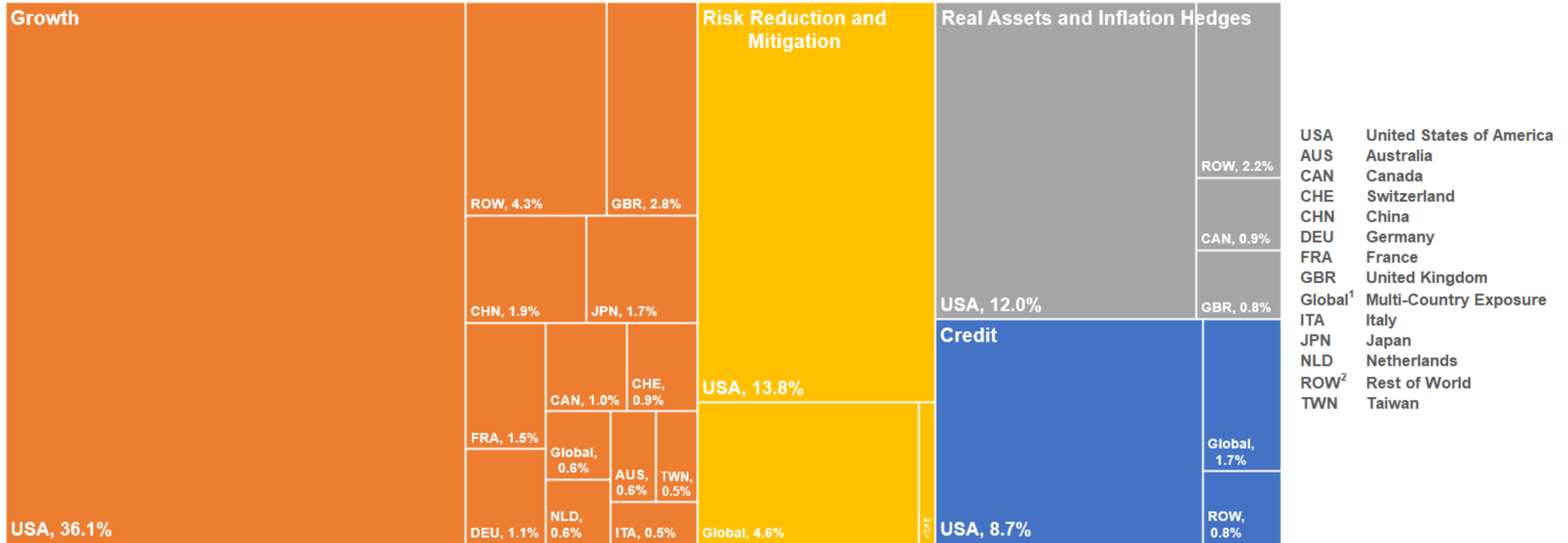
¹ "ROW - Rest of World" is sum of countries with weights below 0.5%.

² Global represents investments made in regions where specific country allocations are not available.

SOURCE: MSCI BarraOne

Geographic Exposures by AUM

Functional Categories as of August 2023* Ex-Overlays and Hedges



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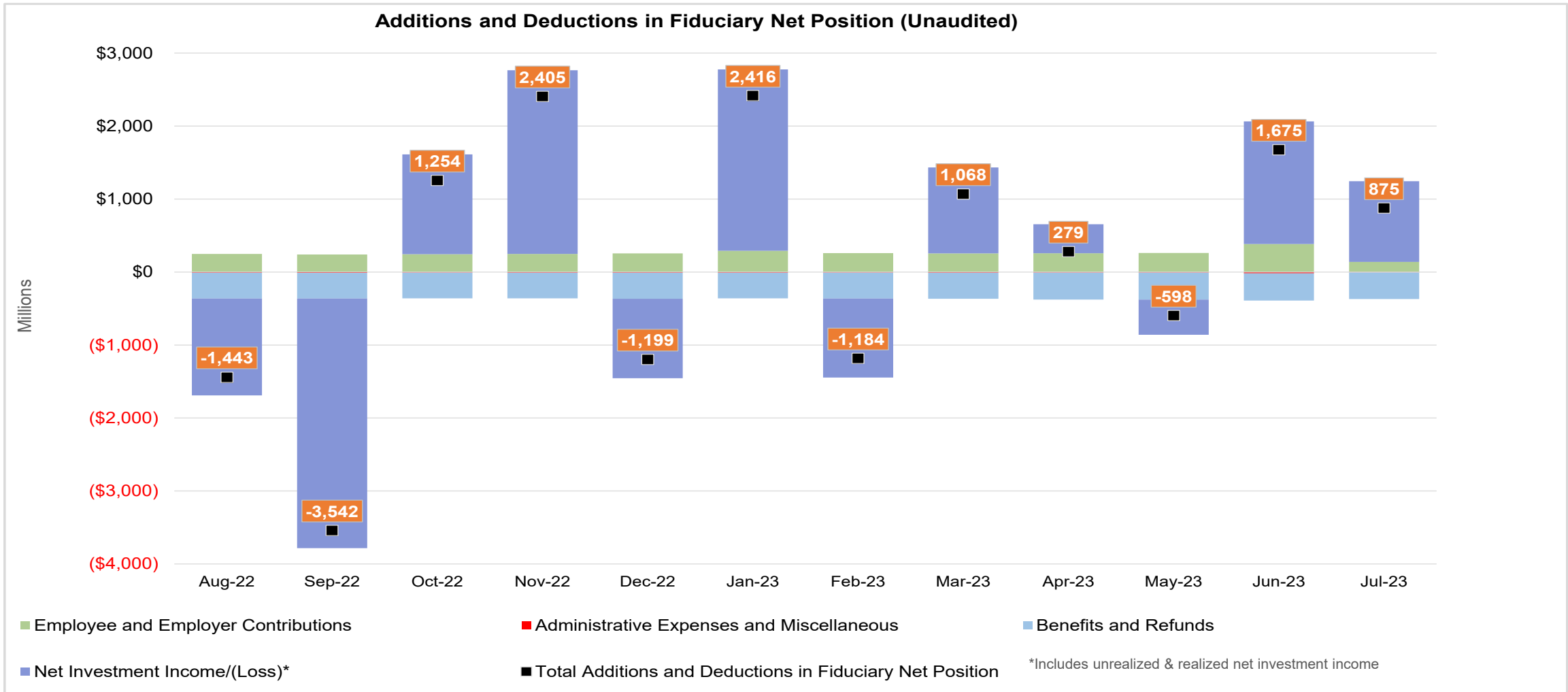
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SOURCE: MSCI BarraOne

Change In Fiduciary Net Position



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-22	7	5	(\$2.5 billion)
FY-23	5	7	\$3.3 billion
FY-24	1	1	(\$175 million)



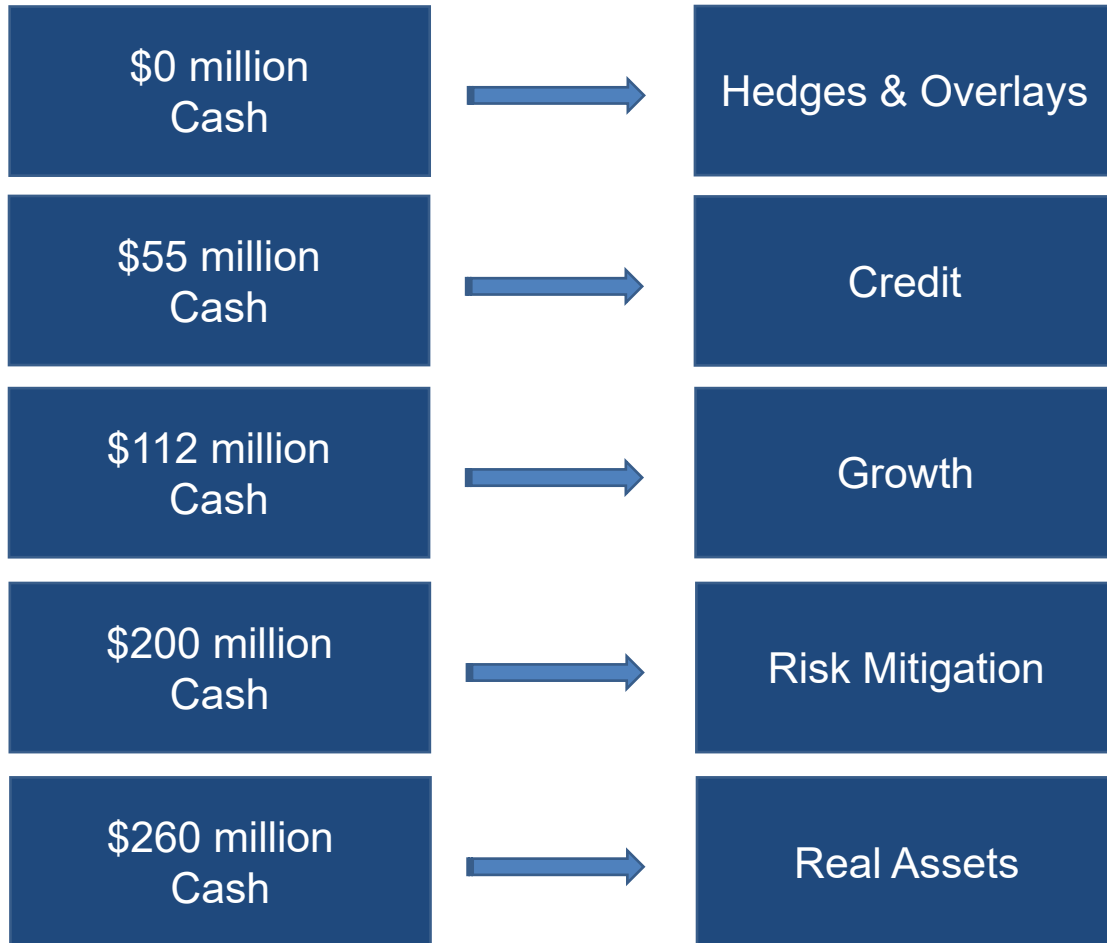
03 Portfolio Structural Updates

Portfolio Structural Updates



Portfolio Movements

Rebalancing Activity



Hedges & Overlays

Monthly Activity

Program	August Return	August Gain/(Loss)	Inception ¹ Gain/(Loss)
Currency Hedge ²	1.2%	(\$0.3 Million)	\$1.4 Billion
Cash/Rebalance Overlay ³	-2.3%	(\$49.3 Million)	\$340.2 Million

¹ Currency and overlay program inception dates are 8/2010 & 7/2019, respectively.

² LACERA's currency hedge program's 1-month return is calculated monthly whereas the monthly gain/loss amount for the same period is the net realized dollar amount at contract settlement over three monthly tranches.

³ LACERA's overlay program's 1-month return includes interest earned on the cash that supports the futures contracts.

Current Search Activity

Status of Active Searches – Subject to Change

Name	RFP Issued	Due Diligence	BOI Review
Real Assets Emerging Manager Program Search	✓	✓	Anticipated Q4 2023
Commercial Real Estate Brokers Search	✓	✓	Anticipated Q4 2023
Private Market Analytics Platform Search	✓	✓	Anticipated Q4 2023



04 Key Initiatives & Operational Updates

Notable Initiatives and Operational Updates



Key Initiative Updates

- The 2024 Strategic Asset Allocation study is underway
- The Investment Division is adhering to the 2023 Work Plan and Strategic Initiatives approved at the January 2023 BOI
- The 2024 Work Plan and Strategic Initiatives are in development
- NewOpportunities@LACERA.com was created to receive solicitations from outside investment firms

Operational Updates

- Annual contract compliance, fee report, and LACERA T.I.D.E. initiatives are in progress

Manager/Consultant Updates

Capital Group – Growth – Michael Cohen, one of the portfolio managers for the LACERA international equity portfolio will transition out of the strategy effective January 2, 2024. His responsibilities will be absorbed by the rest of the four remaining portfolio managers.

Hamilton Lane – Growth & OPEB – Erik Hirsch and Juan Delgado-Moreira have been appointed Co-Chief Executive Officers, effective 1/1/2024. Erik will lead the firm’s strategic direction and manage its operations, while Juan will lead global sales and client service.

Team Searches and Vacancies

- Principal Investment Officer
- 4 – Senior Investment Officer
 - 1 in progress - working with an outside recruiter
 - 1 in development
- 2 – Financial Analyst-III
 - 1 in progress - working with an outside recruiter
- Financial Analyst-II
 - 1 search in progress



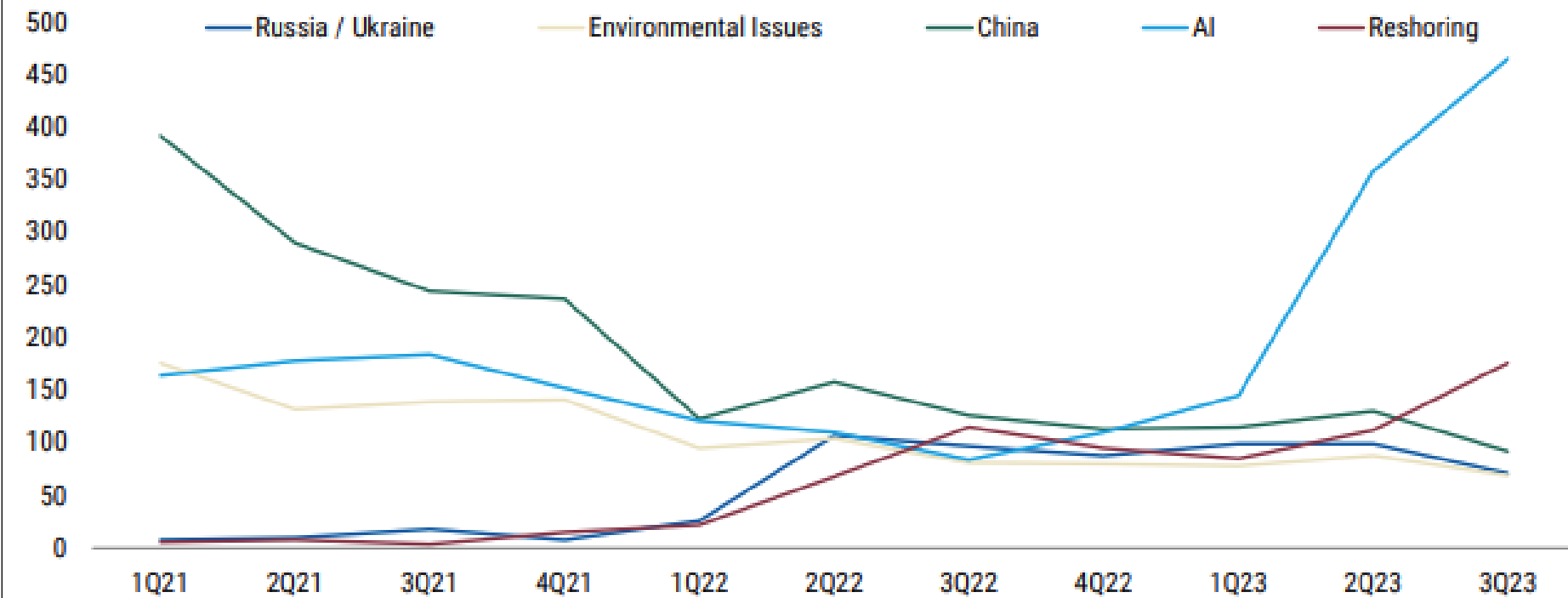
05 **Commentary**

Staff Chart of the Month

Increase of Artificial Intelligence Mentions in IPO Financial Filings



Exhibit 4: Mentions of various topics in company S-1 filings



Source: Bloomberg, Morgan Stanley Research

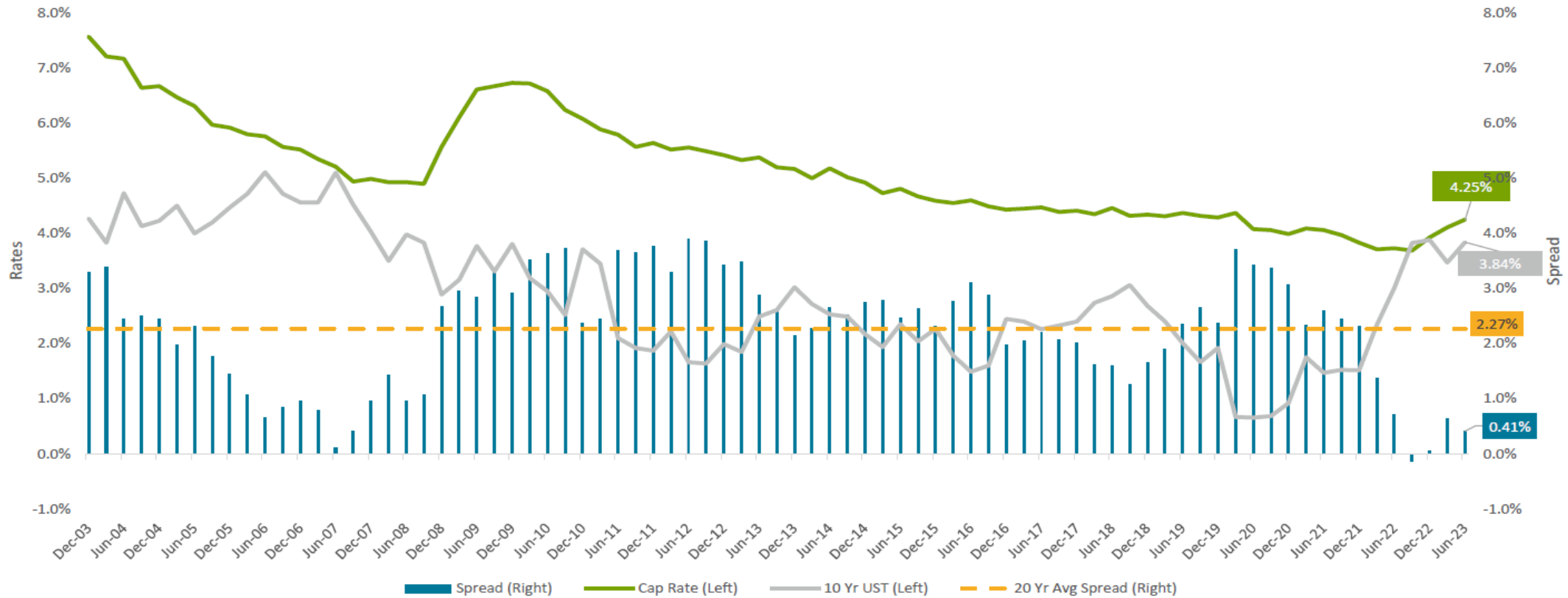
Staff Chart of the Month

US Cap Rate Spreads



US Cap Rate Spreads Compressed Further in 2Q23

NPI CAP RATE & 10 YEAR US TREASURY BOND YIELDS





06 Appendix

Quiet Period for Search Respondents



Real Assets Emerging Manager Program Discretionary Separate Account Manager Search

- ✓ BlackRock Investments, LLC
- ✓ ACRES Capital
- ✓ Aether Investment Partners
- ✓ Cloverlay
- ✓ ORG Portfolio Management
- ✓ Barings
- ✓ Belay Investment Group
- ✓ Encore Enterprises, Inc.
- ✓ Stable
- ✓ Cambridge Associates
- ✓ GCM Grosvenor
- ✓ The Townsend Group
- ✓ Cypress Creek Partners
- ✓ Hamilton Lane Advisors
- ✓ Neuberger Berman Group
- ✓ Wafra Inc.
- ✓ Artemis Real Estate Partners
- ✓ Hawkeye Partners, LP
- ✓ Astarte Capital Partners
- ✓ Bentall Green Oak
- ✓ Clear Sky Advisers
- ✓ Clear Investment Group
- ✓ Poverni Sheikh Group
- ✓ Trilogy
- ✓ Stepstone
- ✓ Oak Street
- ✓ White Deer

Commercial Real Estate Brokers Search

- ✓ CBRE
- ✓ Cushman & Wakefield
- ✓ Eastdil
- ✓ JLL
- ✓ Newmark

Private Market Analytics Platform Search

- ✓ BlackRock
- ✓ Burgiss
- ✓ CEPRES
- ✓ Clearwater
- ✓ Dynamo
- ✓ Hamilton Lane
- ✓ Nasdaq