



Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer

Board of Investments Meeting

July 12, 2023

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01 Market Environment

Global Market Performance as of June 30, 2023



MSCI ACWI IMI Index (Global Equity Market)*

Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
5.8	5.9	16.1	13.2	16.1	11.0	7.6	8.6

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
-0.4	-0.8	-0.9	2.1	-0.9	-4.0	0.8	1.5

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

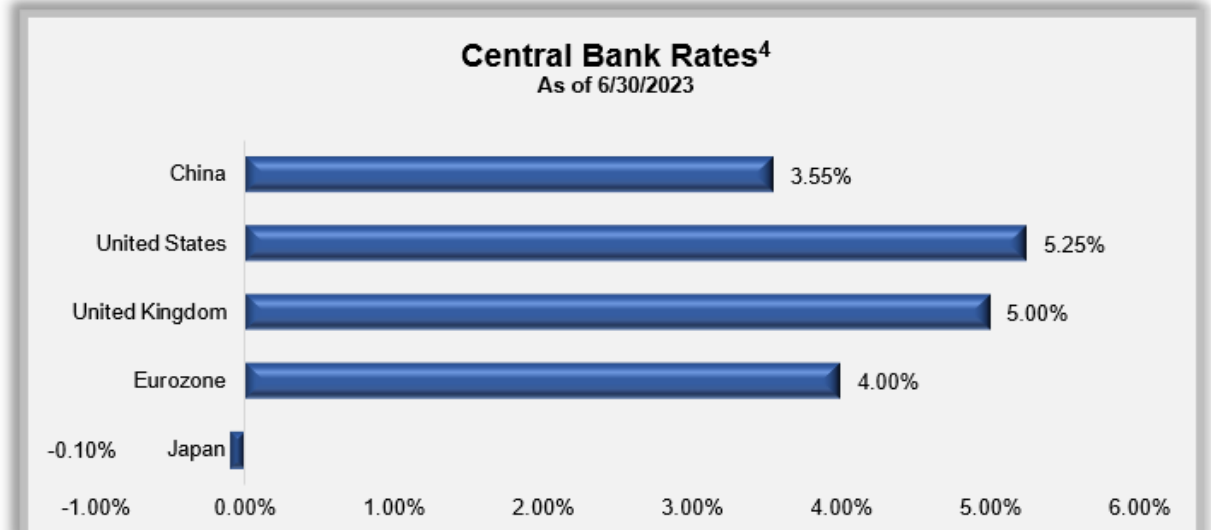
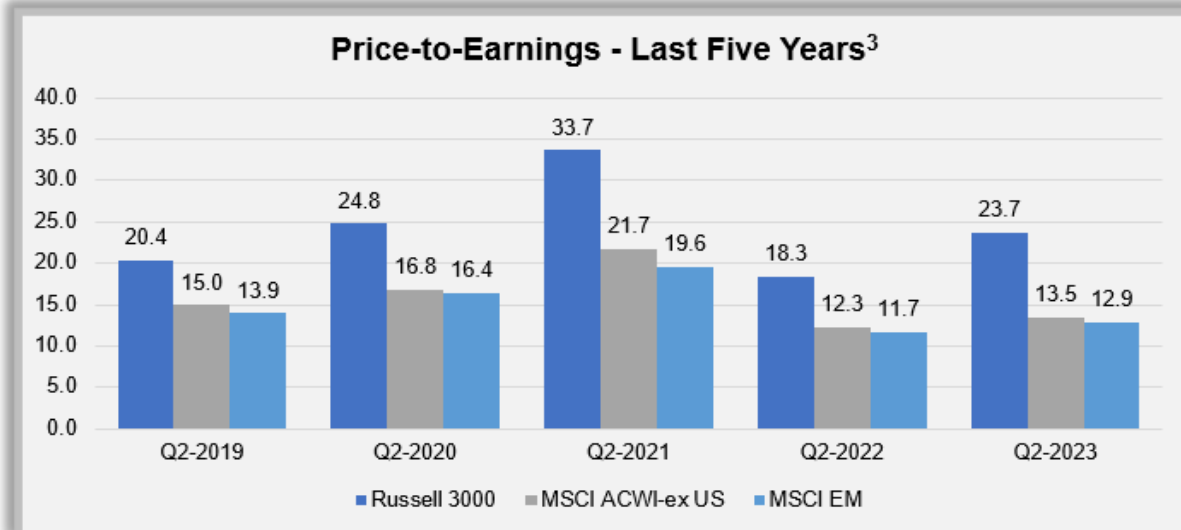
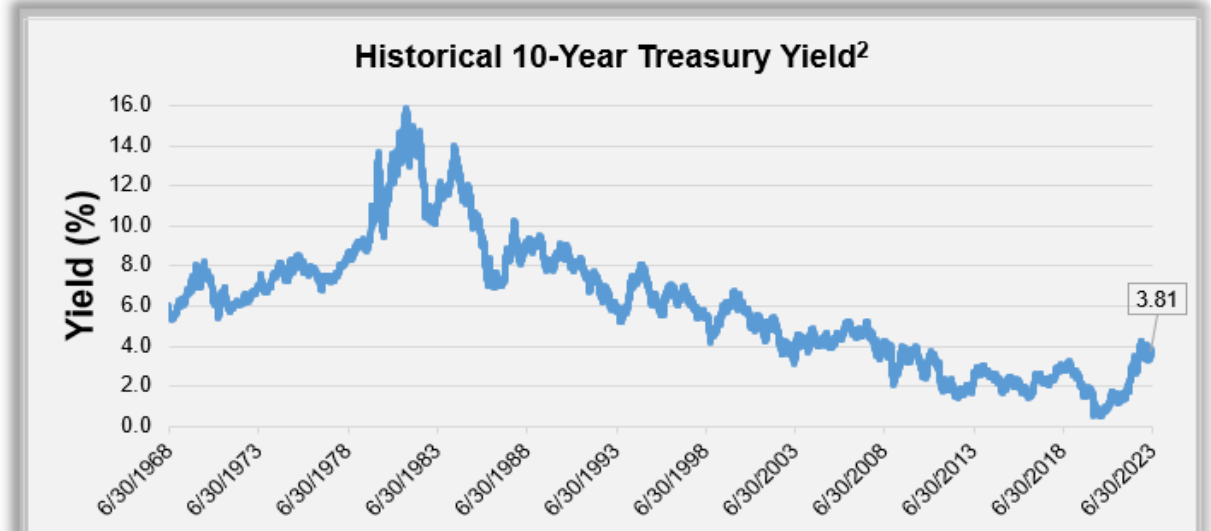
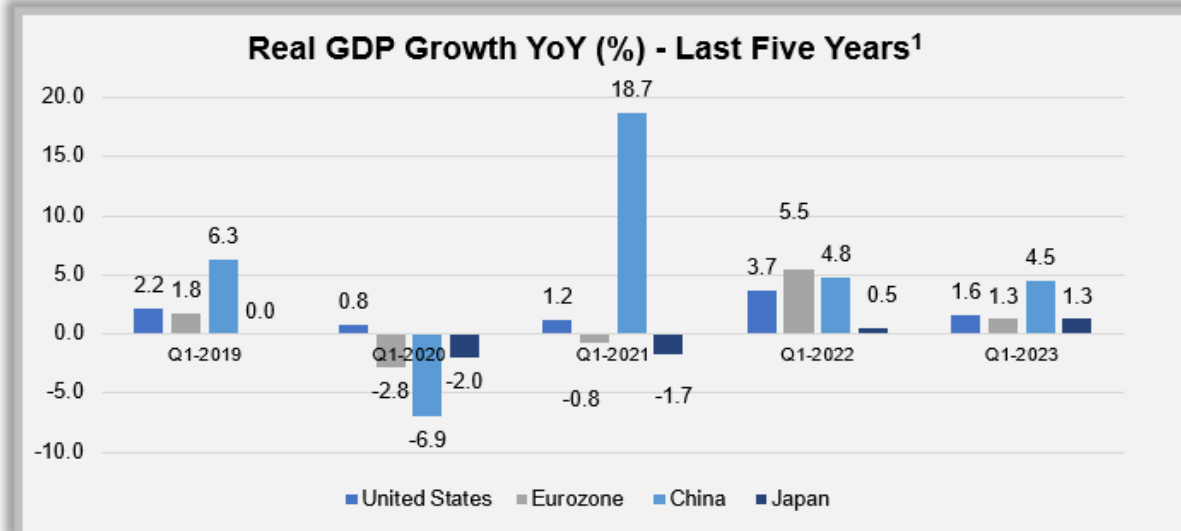


**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

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	5.8	5.9	16.1	13.2	16.1	11.0	7.6	8.6
	U.S. All Cap	Russell 3000 Total Return	6.8	8.4	19.0	16.2	19.0	13.9	11.4	12.3
	U.S. Large Cap	S&P 500 Total Return	6.6	8.7	19.6	16.9	19.6	14.6	12.3	12.9
	U.S. Small Cap	Russell 2000 Total Return	8.1	5.2	12.3	8.1	12.3	10.8	4.2	8.3
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	4.3	2.4	12.5	9.1	12.5	7.3	3.4	4.9
	Emerging Markets	MSCI Emerging Markets Total Return	3.8	0.9	1.7	4.9	1.7	2.3	0.9	2.9
Private Equity	Private Equity Buyout	Thomson Reuters PE Buyout Index	9.6	2.2	4.1	-5.6	4.1	6.1	5.4	10.7
Fixed Income	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	-0.4	-0.8	-0.9	2.1	-0.9	-4.0	0.8	1.5
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	1.7	1.7	9.1	5.4	9.1	3.1	3.4	4.4
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	2.2	3.1	10.1	6.3	10.1	6.2	4.0	4.1
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	-0.3	-1.4	-1.4	1.9	-1.4	-0.1	2.5	2.1
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.4	1.3	3.7	2.4	3.7	1.3	1.6	1.0
Commodity	Commodity Prices Index	Bloomberg Commodity Index Total Return	4.0	-2.6	-9.6	-7.8	-9.6	17.8	4.7	-1.0
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	6.2	-3.6	7.0	-4.9	7.0	20.1	8.0	5.7
Infrastructure	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	3.2	-0.4	0.8	2.7	0.8	7.4	4.5	5.3
Real Estate	U.S. REITs	MSCI U.S. REIT Index	5.0	2.7	-0.1	5.5	-0.1	8.9	4.6	6.4

Source: Bloomberg

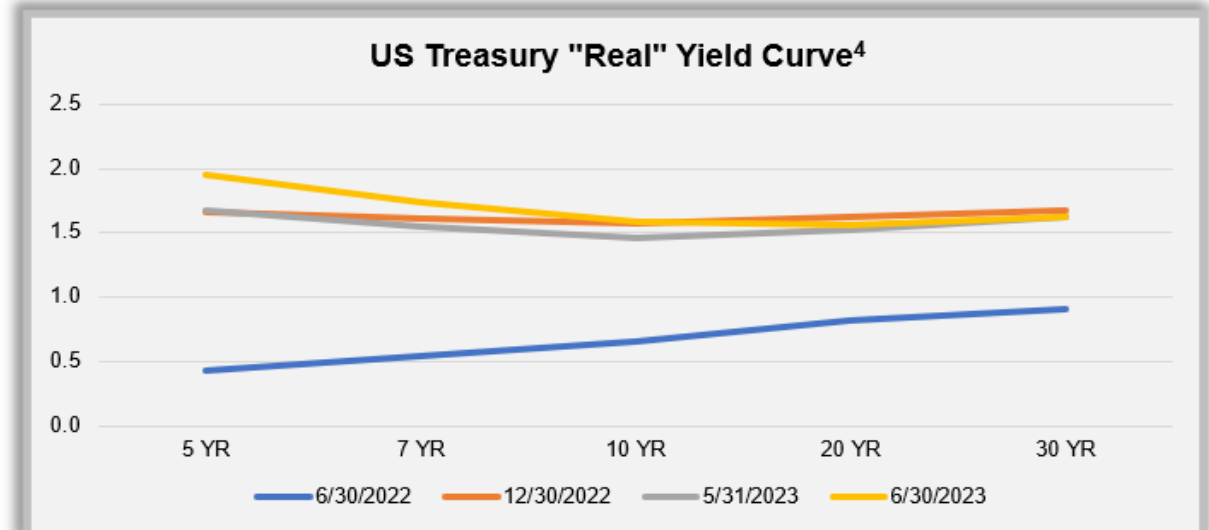
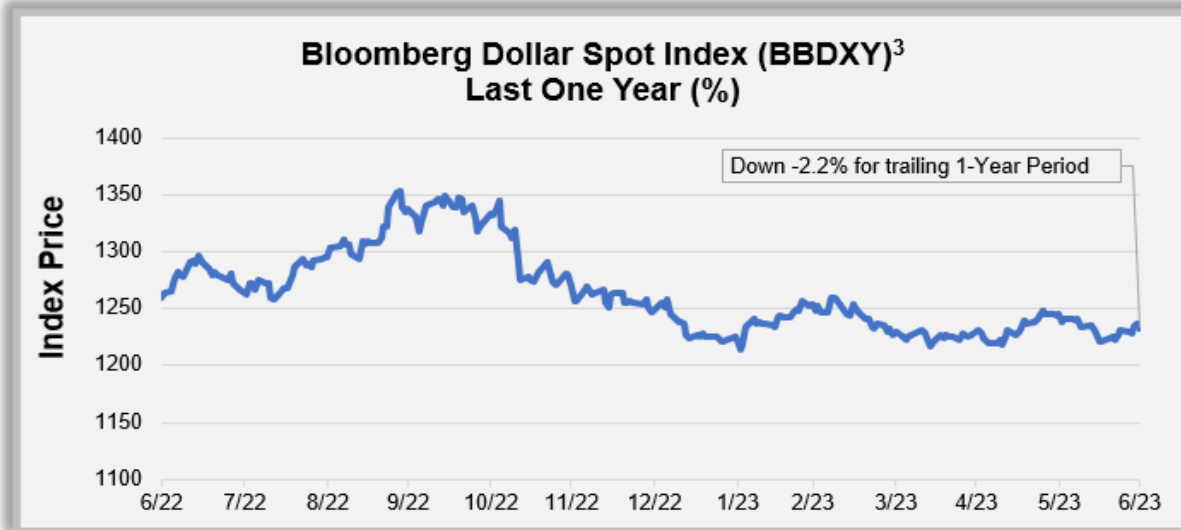
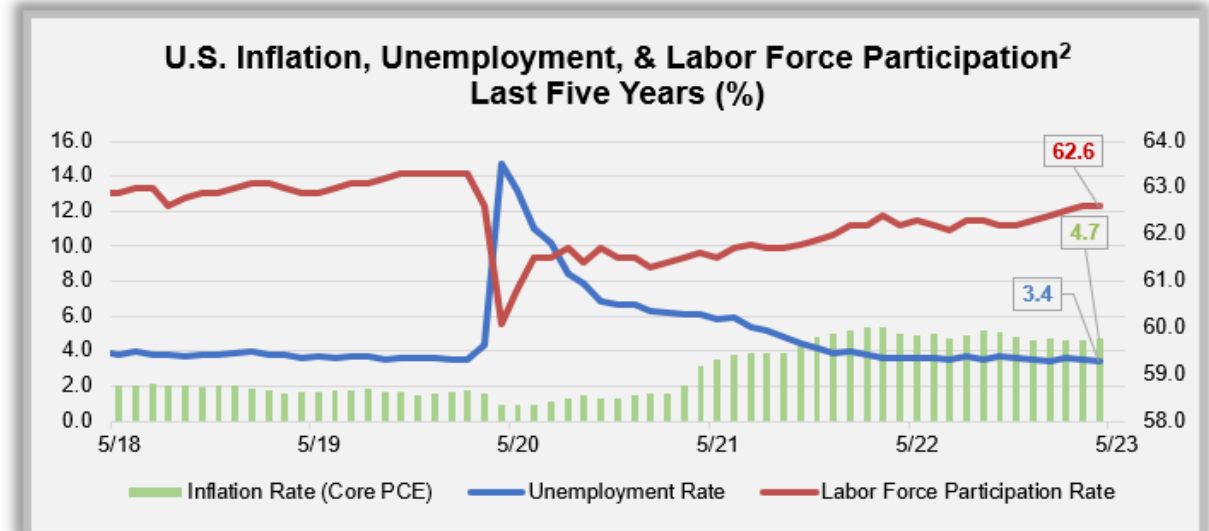
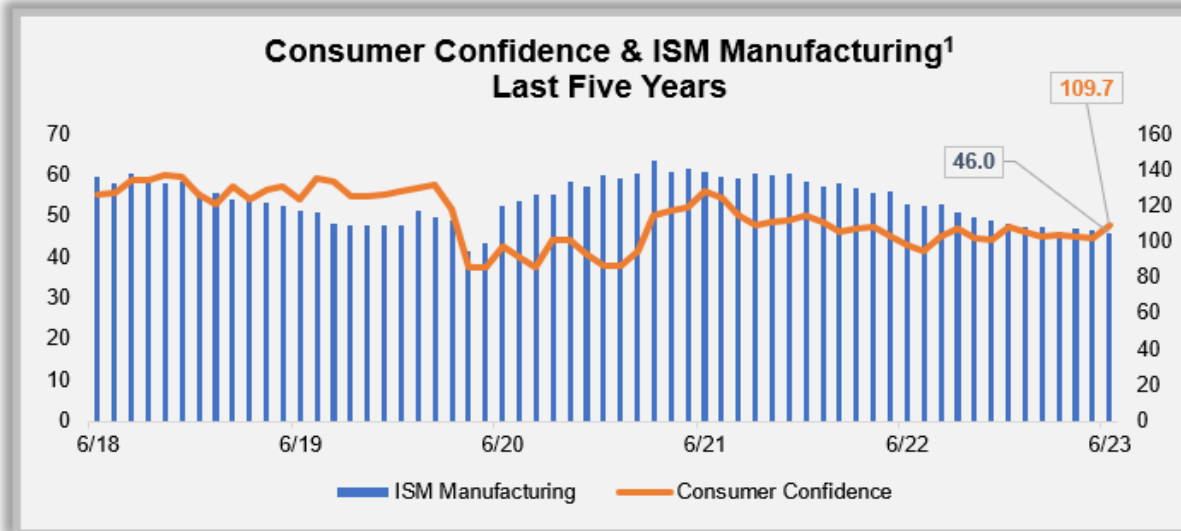
Key Macro Indicators*



*The information on the "Key Macro Indicators" charts is the best available data as of 6/30/23 and may not reflect the current market and economic environment

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

Key Macro Indicators*



*The information on the "Key Macro Indicators" charts is the best available data as of 6/30/23 and may not reflect the current market and economic environment

Sources: 1. Bloomberg 3. Bloomberg
2. Bloomberg 4. U.S. Treasury



Recent Themes

- The Federal Reserve held rates steady in June, keeping the benchmark funds rate at a range of 5% to 5.25%
- The central bank's dot plot diagram suggested that two more 0.25% rate hikes may be forthcoming this year
- Price increases are moderating as overall inflation (personal consumption expenditures or PCE price index) cooled to 3.8% for the twelve months ended in May, according to the Commerce Department. This is the first time this reading has slipped below 4% since early 2021
- The U.S. 10-year Treasury yield ended June at 3.81%, 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) increased 5.8% in June

What to Watch

- Interest rates and central bank actions
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Environmental, social, and governance
 - International Financial Reporting Standards International Sustainability Standards Board (successor to SASB standards and on which LACERA serves on the Investor Advisory Group) released ESG and climate reporting frameworks to guide corporate ESG disclosures

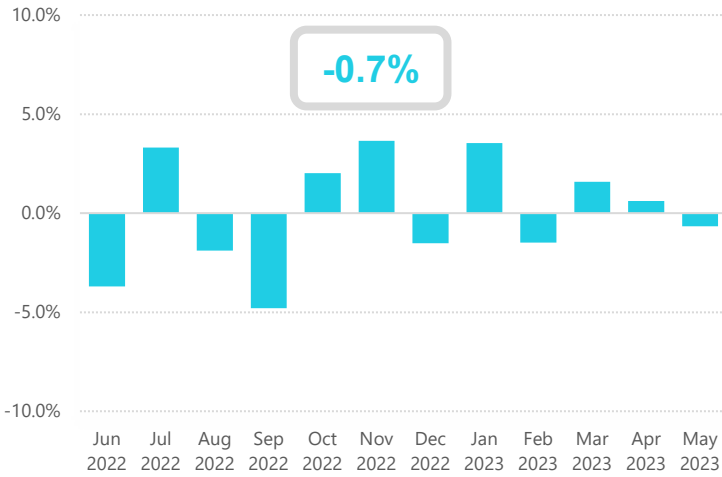


02 Portfolio Performance & Risk Updates

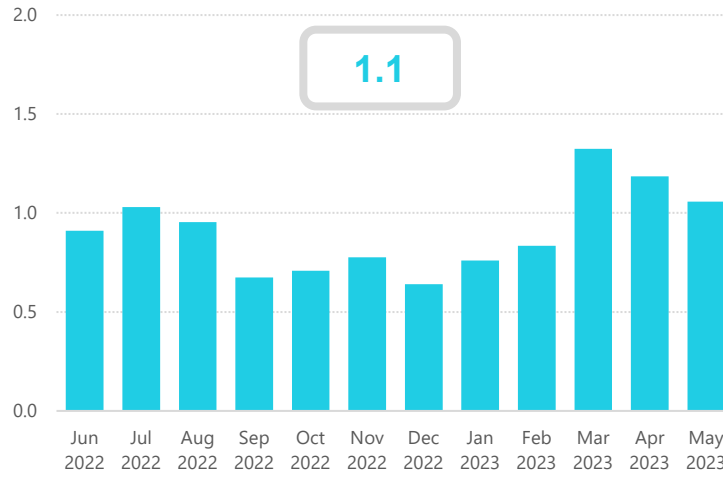
Total Fund Summary as of May 2023



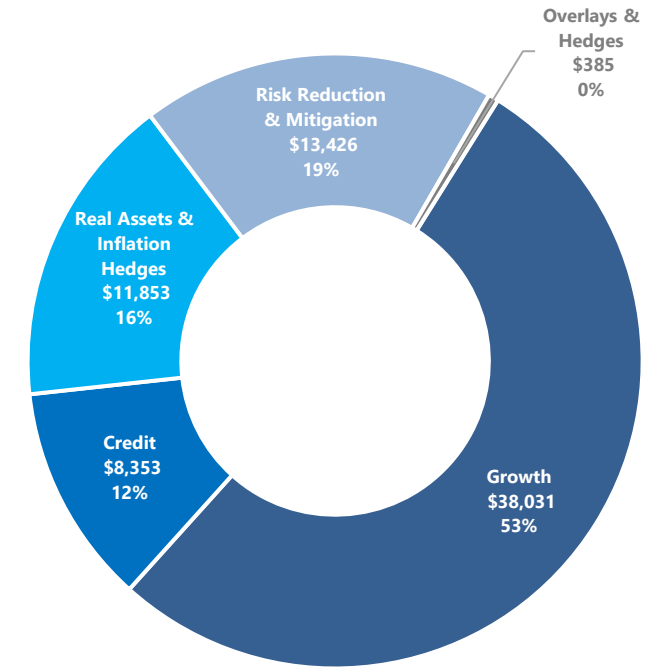
Monthly Return (net)



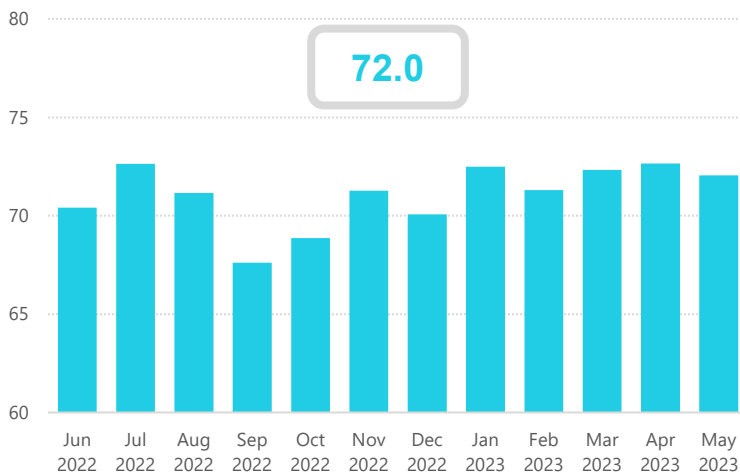
Sharpe Ratio (3-year annualized)



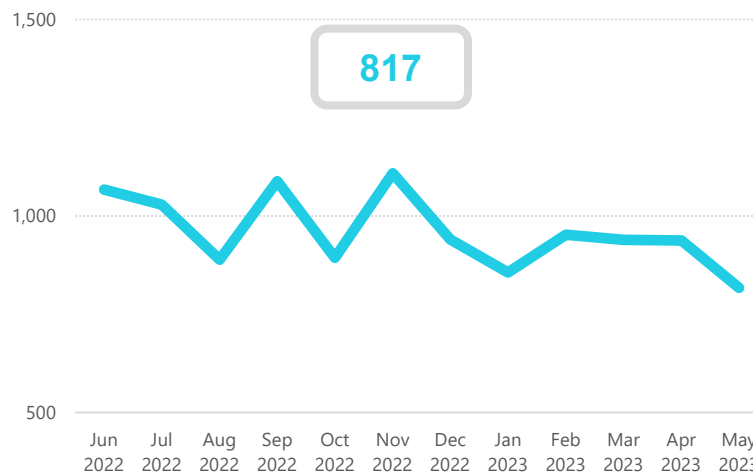
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

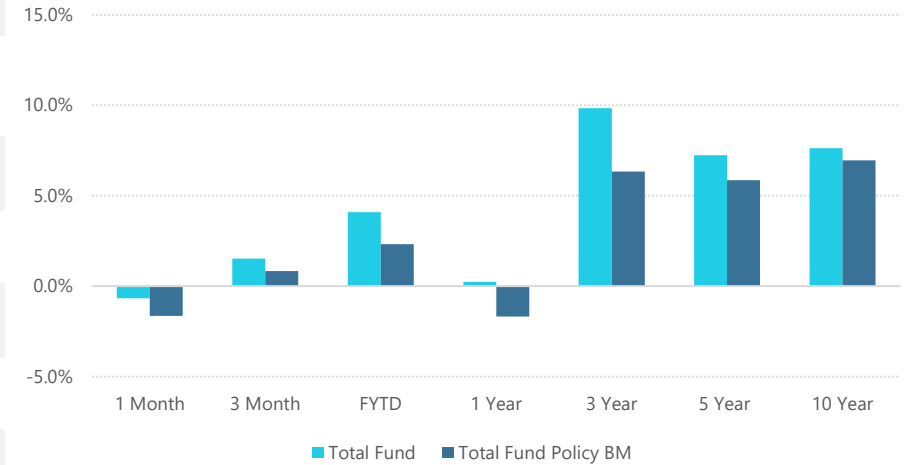


Historical Net Performance as of May 2023



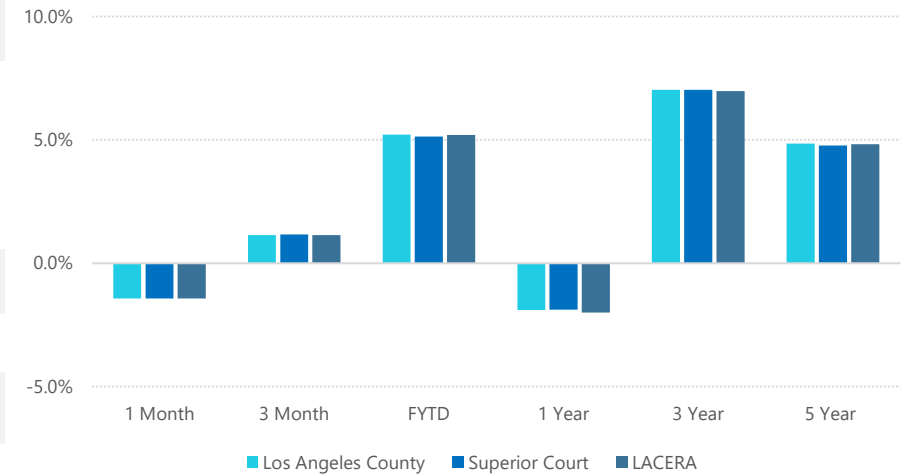
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	72,048	100.0%	100.0%	-0.7%	1.5%	4.1%	0.2%	9.8%	7.2%	7.6%
Total Fund Policy BM 7% Annual Hurdle Rate				-1.6%	0.8%	2.3%	-1.7%	6.3%	5.8%	7.0%
Growth	38,031	52.8%	53.0%	-0.2%	2.3%	6.3%	1.2%	15.1%		
Growth Policy BM				-1.6%	1.6%	3.6%	-1.6%	10.7%		
Credit	8,353	11.6%	11.0%	0.5%	1.9%	6.3%	2.9%	7.1%		
Credit Policy BM				0.5%	1.2%	5.5%	2.6%	2.7%		
Real Assets & Inflation Hedges	11,853	16.5%	17.0%	-3.1%	-1.2%	-1.2%	-6.0%	9.1%		
Real Assets & Inflation Hedges Policy BM				-3.8%	-3.2%	-2.1%	-6.8%	8.6%		
Risk Reduction & Mitigation	13,426	18.6%	19.0%	-1.1%	1.2%	0.0%	-1.1%	-1.3%		
Risk Reduction & Mitigation Policy BM				-0.9%	2.0%	-0.1%	-1.1%	-2.4%		
Overlays & Hedges	385	0.5%		20.2%	11.9%	39.9%	81.2%			



OPEB Master Trust

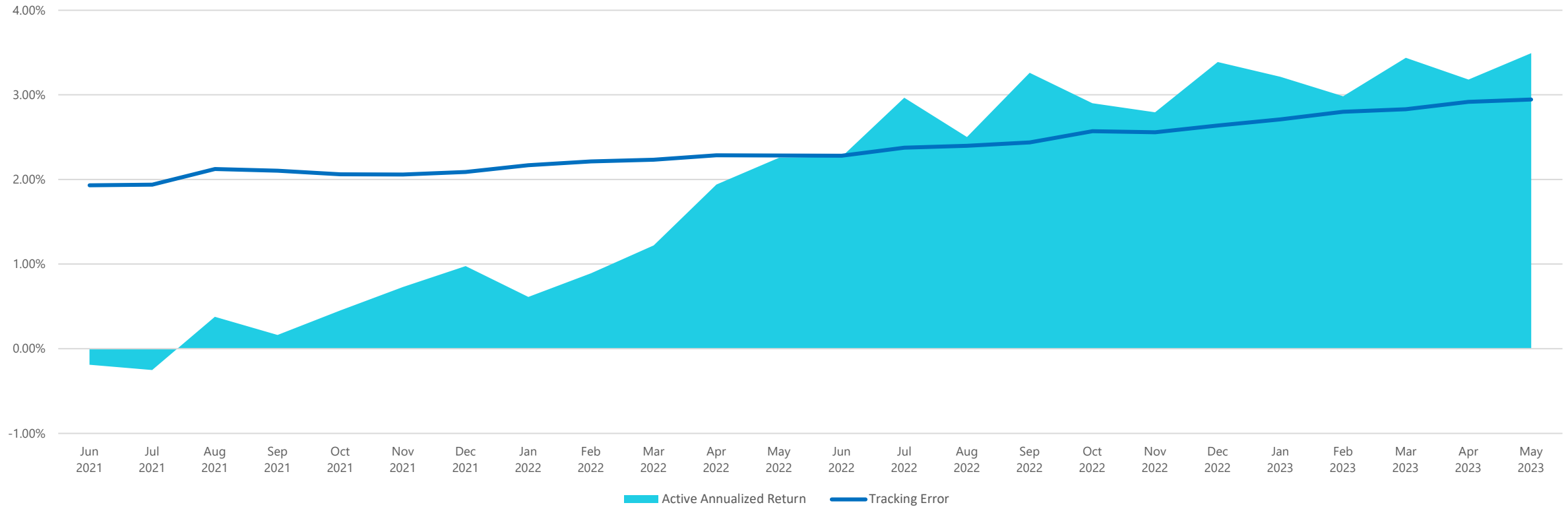
	Market Value (\$ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB Master Trust	2,863			-1.4%	1.1%	5.2%	-1.9%	7.0%	4.8%
Los Angeles County	2,791	97.5%	—	-1.4%	1.1%	5.2%	-1.9%	7.0%	4.8%
Superior Court	60	2.1%	—	-1.4%	1.2%	5.1%	-1.9%	7.0%	4.8%
LACERA	13	0.4%	—	-1.4%	1.1%	5.2%	-2.0%	7.0%	4.8%
LACERA Master OPEB Trust Fund	2,863		100.0%	-1.4%	1.2%	5.0%	-2.0%	7.0%	4.9%
OPEB Master Trust Policy Benchmark				-1.3%	1.0%	4.9%	-2.1%	6.9%	4.5%
OPEB Growth	1,374	48.0%	47.5%	-1.2%	2.6%	9.9%	0.4%	10.2%	6.6%
OPEB Growth Policy Benchmark				-1.3%	2.4%	8.9%	-0.5%	9.7%	6.1%
OPEB Credit	545	19.0%	19.0%	-0.7%	1.5%	8.3%	3.7%	2.9%	--
OPEB Credit Policy Benchmark				-0.3%	1.1%	7.0%	2.4%	2.9%	--
OPEB Real Assets & Inflation Hedges	564	19.7%	20.0%	-2.9%	-3.0%	-5.6%	-12.2%	7.9%	--
OPEB RA & IH Policy Benchmark				-2.3%	-3.3%	-2.7%	-9.5%	8.9%	--
OPEB Risk Reduction & Mitigation	380	13.3%	13.5%	-1.2%	2.0%	0.4%	-0.8%	-2.6%	1.2%
OPEB RR & M Policy Benchmark				-1.2%	2.0%	-1.1%	-2.3%	-3.1%	0.8%



Performance Based Risk as of May 2023



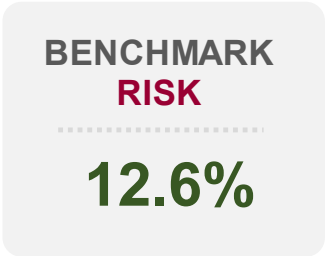
Active Return vs. Tracking Error^{1,2,3}



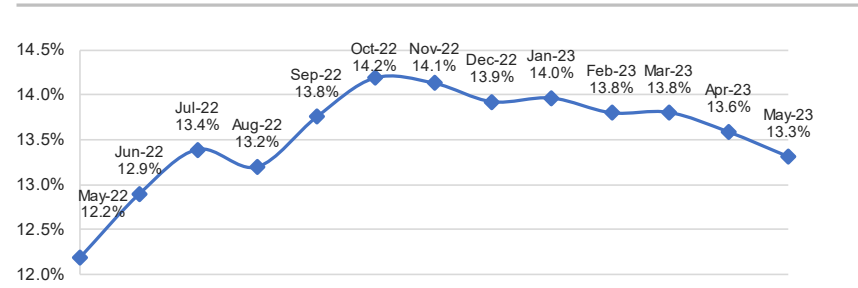
Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
May 2023	9.8%	6.3%	3.5%	2.9%

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.

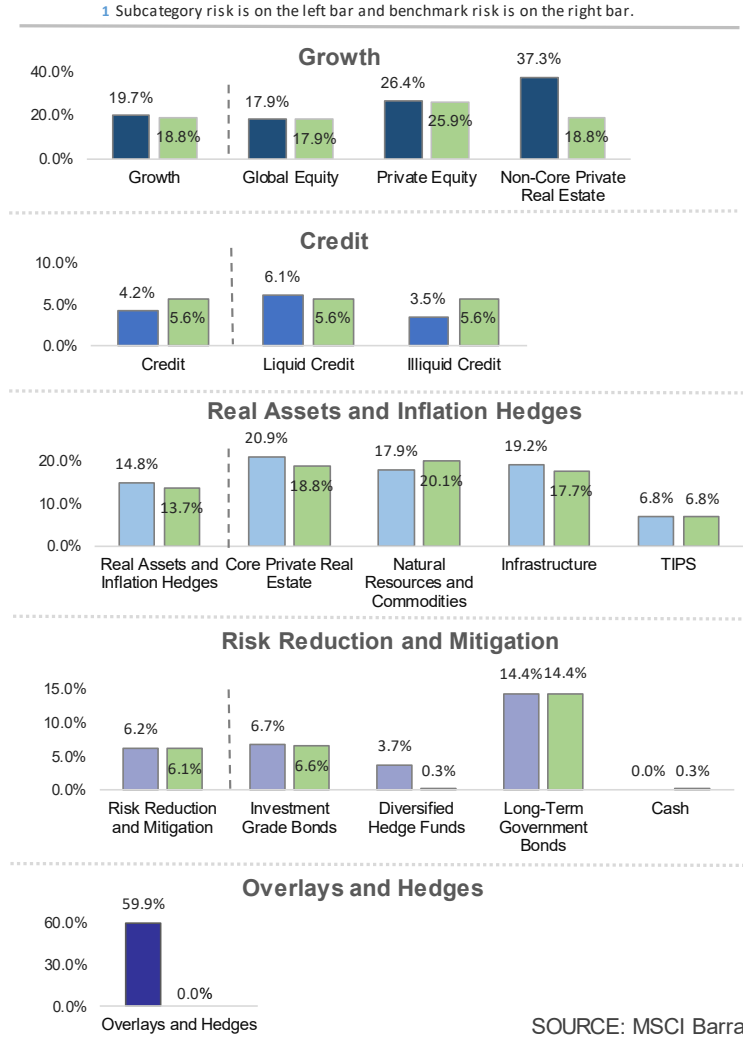
Total Fund Forecast Risk* as of May 2023



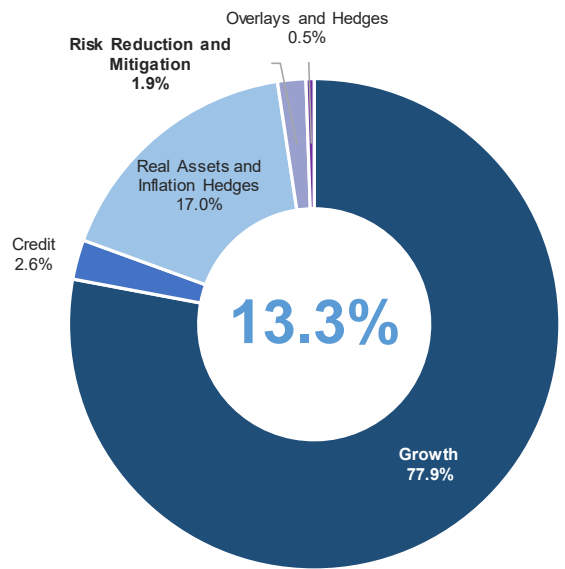
Forecasted Total Fund Risk Trend



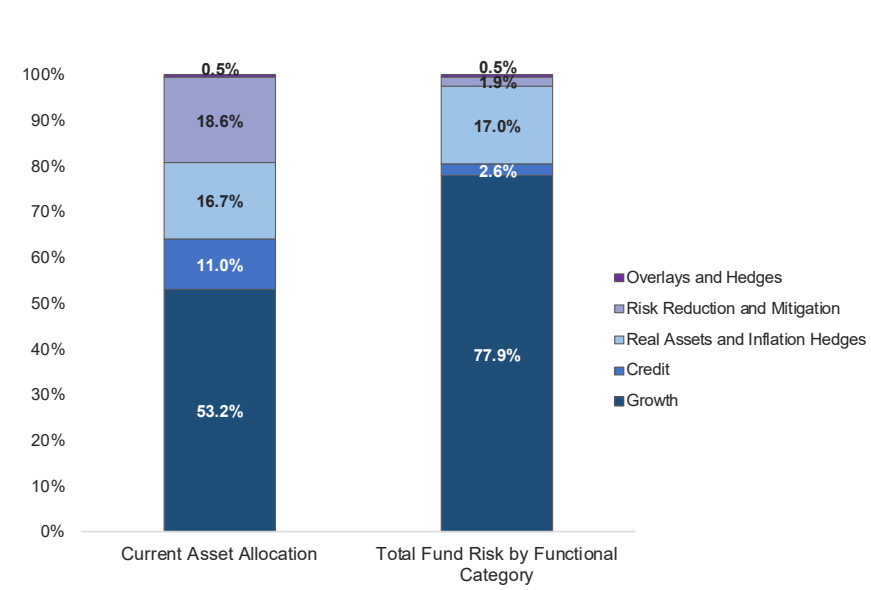
Subcategory Risk¹



Functional Category Contributions to Total Fund Risk



Total Fund Asset Allocation
Capital-based versus Risk-based



SOURCE: MSCI BarraOne

Total Fund Forecast Active Risk* as of May 2023



**TOTAL FUND
ACTIVE RISK**

1.37
(bps)

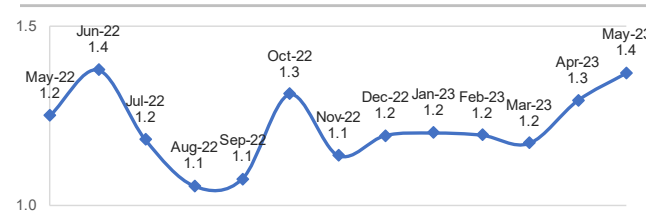
**ALLOCATION
RISK**

0.09
(bps)

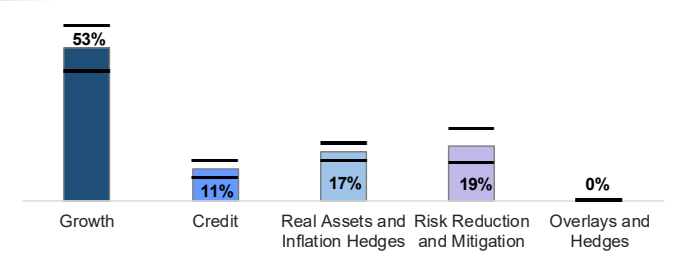
**SELECTION
RISK**

1.28
(bps)

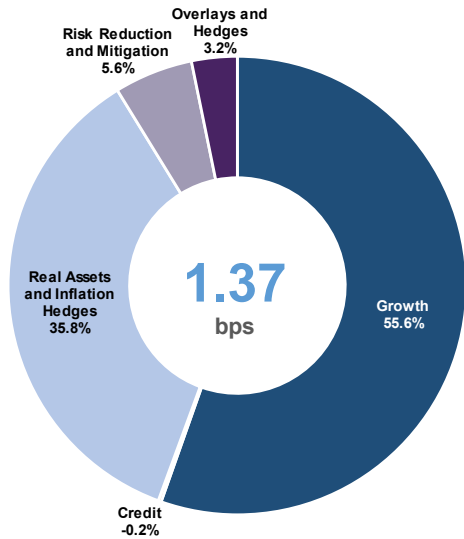
Forecasted Active Risk Trend
(bps)



Policy Target Weight for each Functional Category
Maximum and Minimum Bands

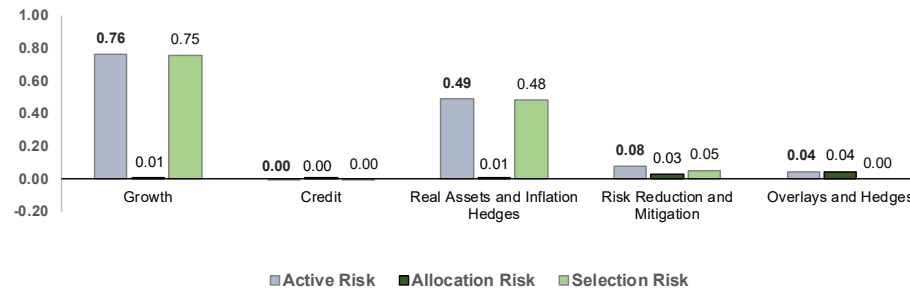


Functional Category Contributions to Active Risk

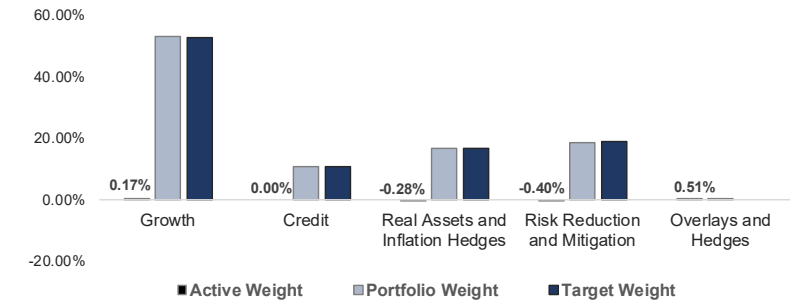


SOURCE: MSCI BarraOne

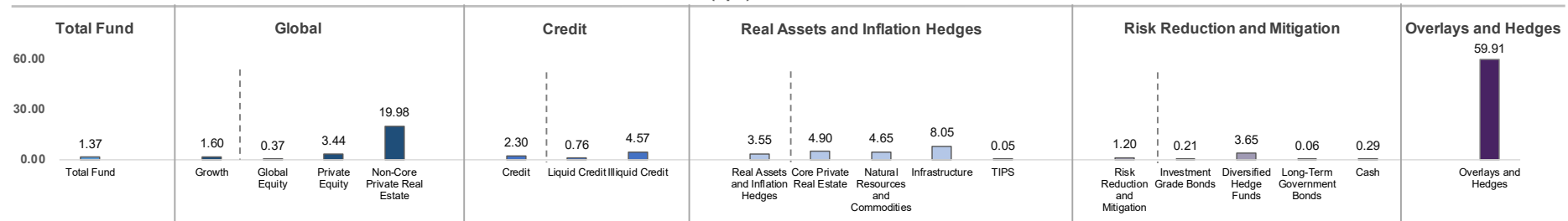
Active Risk Attribution
(bps)



Active Weights for each Functional Category

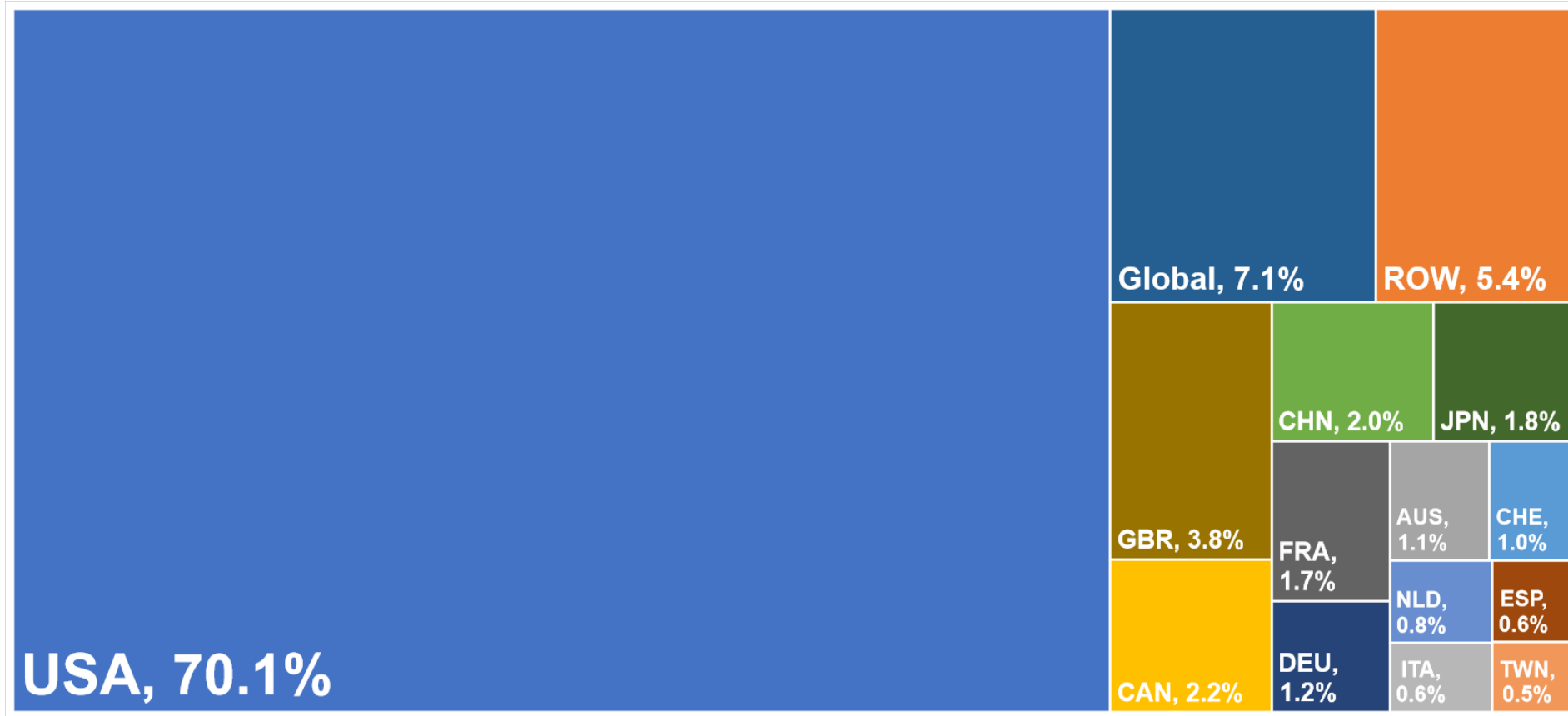


Subcategory Active Risk
(bps)



Geographic Exposures by AUM*

Total Fund as of May 2023 Ex-Overlays and Hedges



- USA - United States Of America
- ROW¹ - Rest of World
- AUS - Australia
- CAN - Canada
- CHE - Switzerland
- CHN - China
- DEU - Germany
- ESP - Spain
- FRA - France
- GBR - United Kingdom
- Global² - Multi-country exposure
- JPN - Japan
- NLD - Netherlands
- TWN - Taiwan
- ITA - Italy

* AUM = Assets under management.

** 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 used is as of 3/31/2023.

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

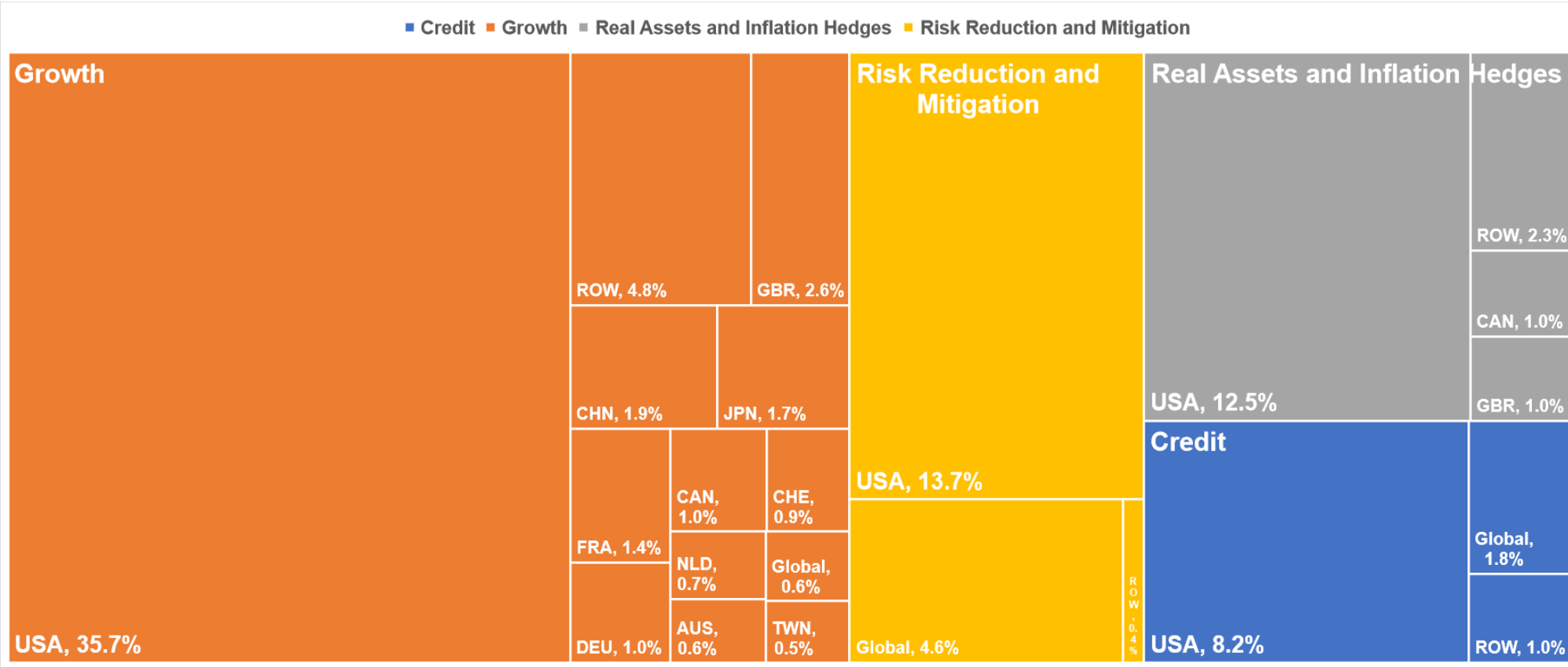
¹ Global represents investments made in regions where specific country allocations are not available.

² "ROW - Rest of World" is sum of countries with weights below 0.5%.

SOURCE: MSCI BarraOne

Geographic Exposures by AUM*

Functional Categories as of May 2023 Ex-Overlays and Hedges



USA	United States of America
AUS	Australia
CAN	Canada
CHE	Switzerland
CHN	China
DEU	Germany
FRA	France
GBR	United Kingdom
Global ¹	Multi-Country Exposure
JPN	Japan
NLD	Netherlands
ROW ²	Rest of World
TWN	Taiwan

* AUM = Assets under management.

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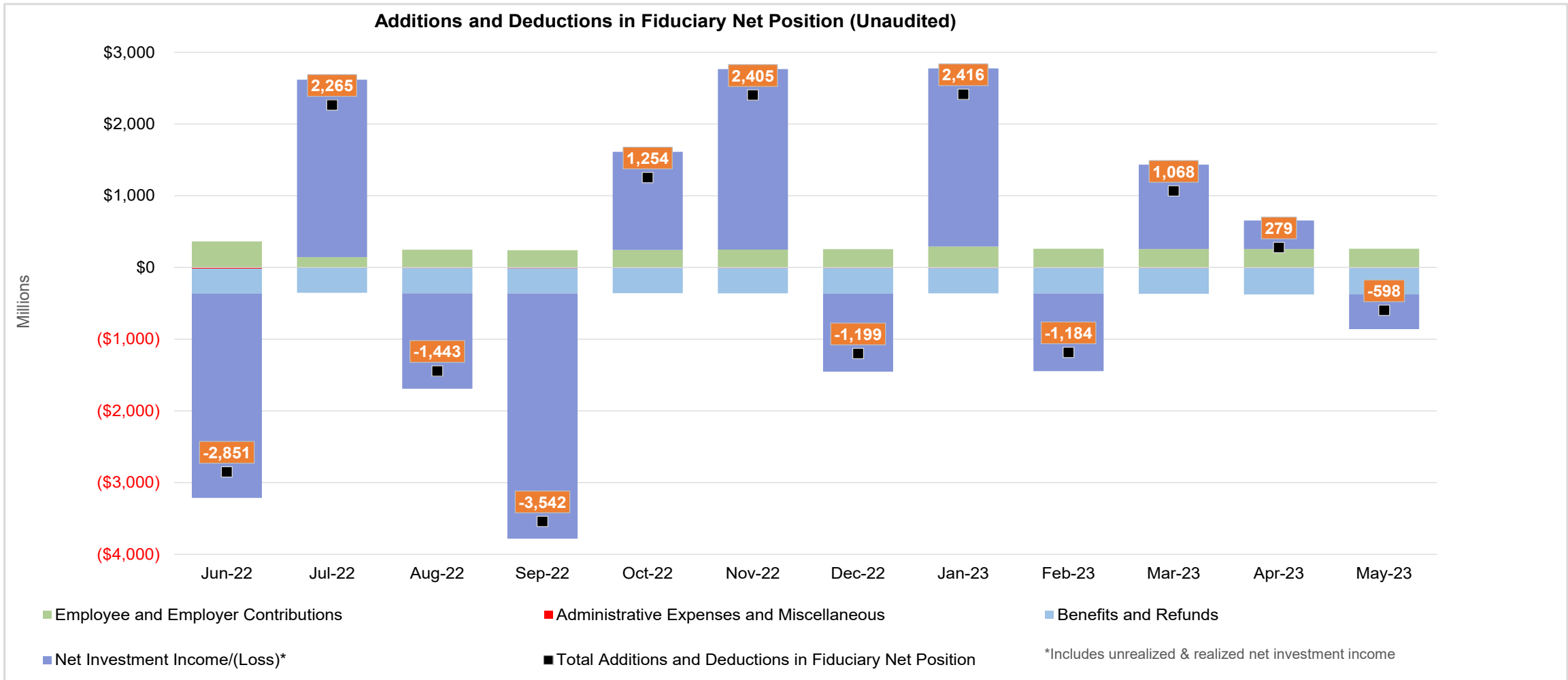
*** Geographic exposure is based on the domicile country of a given security/asset.

¹ Global represents investments made in regions where specific country allocations are not available.

² "ROW - Rest of World" is sum of countries with weights below 0.5%.

SOURCE: MSCI BarraOne

Change In Fiduciary Net Position



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-21	2	10	\$13.8 billion
FY-22	7	5	(\$2.5 billion)
FY-23	5	6	\$1.7 billion



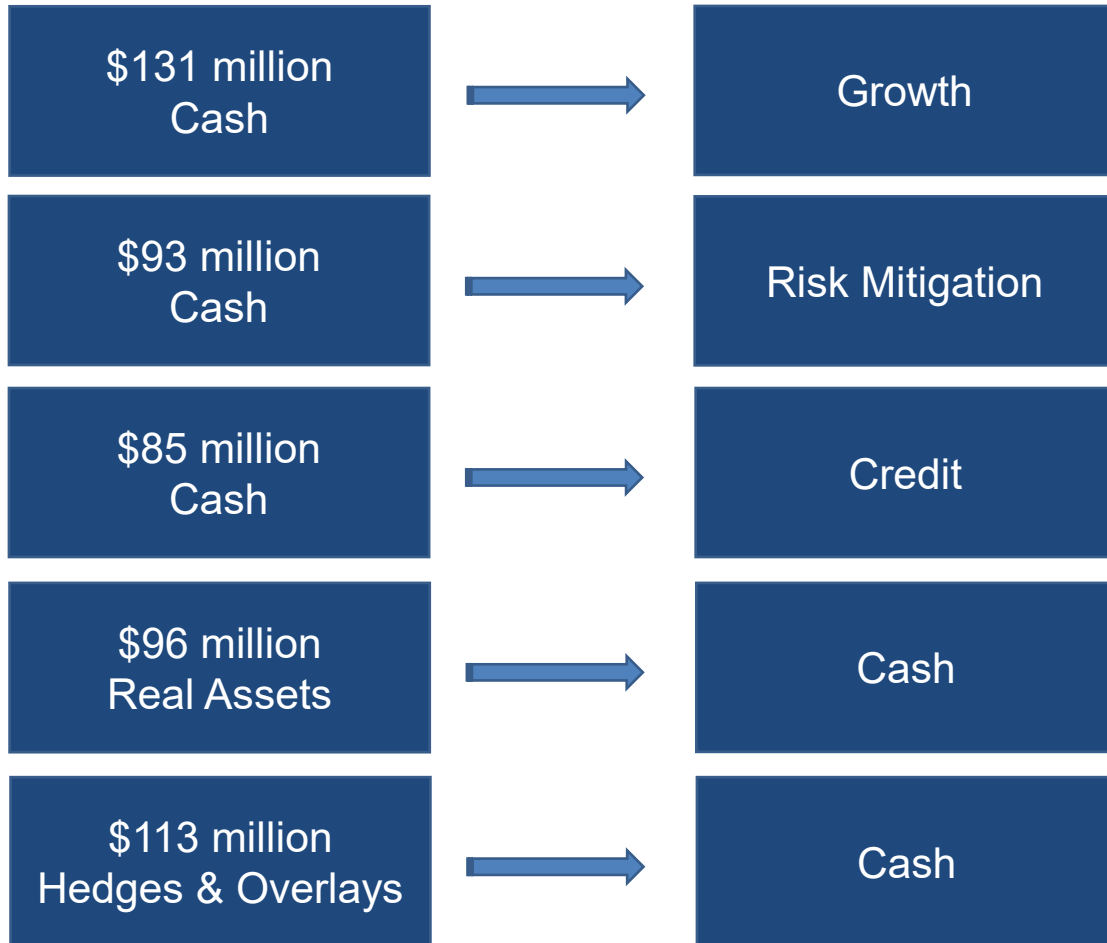
03 Portfolio Structural Updates

Portfolio Structural Updates



Portfolio Movements

Rebalancing Activity



Hedges & Overlays

Monthly Activity

Program	May Return	May Gain/(Loss)	Inception ¹ Gain/(Loss)
Currency Hedge ²	1.3%	\$13.2 Million	\$1.3 Billion
Cash/Rebalance Overlay ³	-0.7%	(\$18.0 Million)	\$285.3 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 Q3 2023
Commercial Real Estate Brokers Search	✓	✓	Anticipated Q3 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
- BOI Offsite preparations are underway

Operational Updates

- Operational due diligence review in progress

Manager/Consultant Updates

Acadian – Global Equity – Kurt Livermore, Senior Vice President and Portfolio Manager for Core Equities left Acadian in June 2023. Kurt's responsibilities were shifted to the remaining equity portfolio management team. Acadian intends to add to the team in the near future.

Team Searches and Vacancies

- Working on launching new searches
 - Deputy Chief Investment Officer
 - Completed
 - 2 – Principal Investment Officer
 - 2 – Senior Investment Officer
 - 2 – Financial Analyst-III
 - Financial Analyst-II
 - 2 searches in progress
 - 3 completed



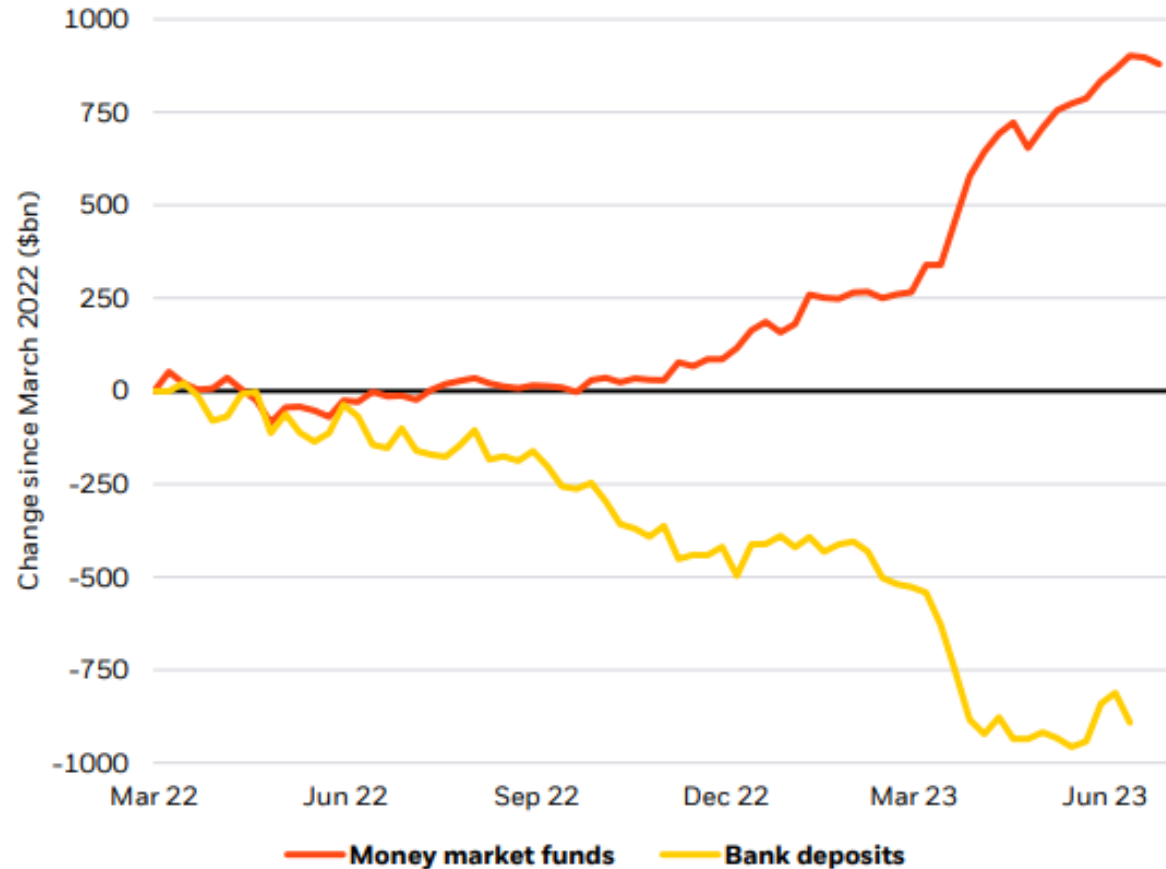
05 **Commentary**

Staff Chart of the Month

Banks Continue to Experience Outflows in Deposits



U.S. money market & bank deposit flows, 2022-2023



Sources: BlackRock Investment Institute, ICI and U.S. Federal Reserve, with data from Refinitiv Datastream, June 2023.

Notes: Orange line shows total U.S. money market funds. The yellow line shows domestic commercial bank deposits.



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
- ✓ BlackRock
- ✓ 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