Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer

Board of Investments Meeting
April 12, 2023

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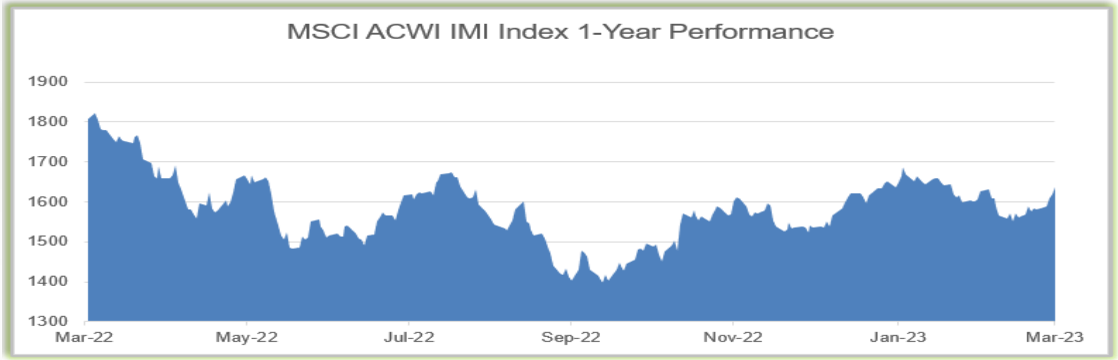
01 Market Environment

Global Market Performance as of March 31, 2023

MSCI ACWI IMI Index (Global Equity Market)*

Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
2.5	6.9	9.7	6.9	-7.7	15.6	6.6	7.9



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
2.5	3.0	-0.1	3.0	-4.8	-2.8	0.9	1.4

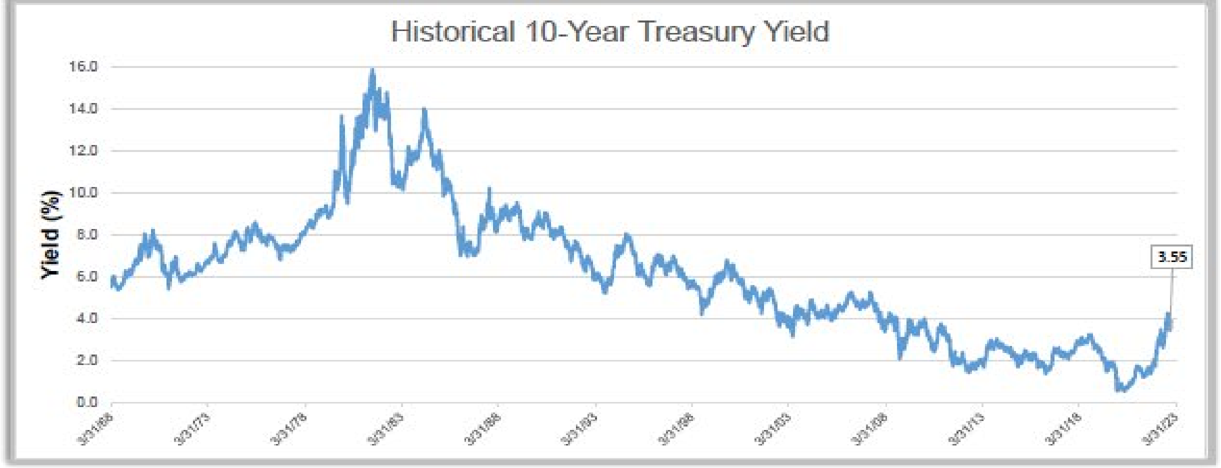
**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

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	2.5	6.9	9.7	6.9	-7.7	15.6	6.6	7.9
	U.S. All Cap	Russell 3000 Total Return	2.7	7.2	9.7	7.2	-8.6	18.5	10.4	11.7
	U.S. Large Cap	S&P 500 Total Return	3.7	7.5	10.0	7.5	-7.7	18.6	11.2	12.2
	U.S. Small Cap	Russell 2000 Total Return	-4.8	2.7	6.8	2.7	-11.6	17.5	4.7	8.0
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	2.1	6.6	9.9	6.6	-5.8	12.2	2.4	4.3
	Emerging Markets	MSCI Emerging Markets Total Return	3.0	4.0	0.8	4.0	-10.7	7.8	-0.9	2.0
Private Equity	Private Equity Buyout	Thomson Reuters PE Buyout Index	-2.2	-7.7	1.8	-7.7	-27.2	15.8	5.7	10.7
Fixed Income	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	2.5	3.0	-0.1	3.0	-4.8	-2.8	0.9	1.4
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	1.1	3.6	7.2	3.6	-3.3	5.9	3.2	4.1
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	-0.1	3.1	6.8	3.1	2.1	8.4	3.5	3.9
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	2.9	3.3	0.0	3.3	-6.1	1.8	2.9	1.5
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.4	1.1	2.5	1.1	2.6	1.0	1.4	0.9
Commodity	Commodity Prices Index	Bloomberg Commodity Index Total Return	-0.2	-5.4	-7.2	-5.4	-12.5	20.8	5.4	-1.7
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	-0.4	-1.3	10.9	-1.3	-5.8	29.7	10.1	4.9
Infrastructure	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	2.1	3.1	1.2	3.1	-6.1	12.2	5.6	5.2
Real Estate	U.S. REITs	MSCI U.S. REIT Index	-2.5	2.7	-2.7	2.7	-19.2	12.0	6.1	6.0

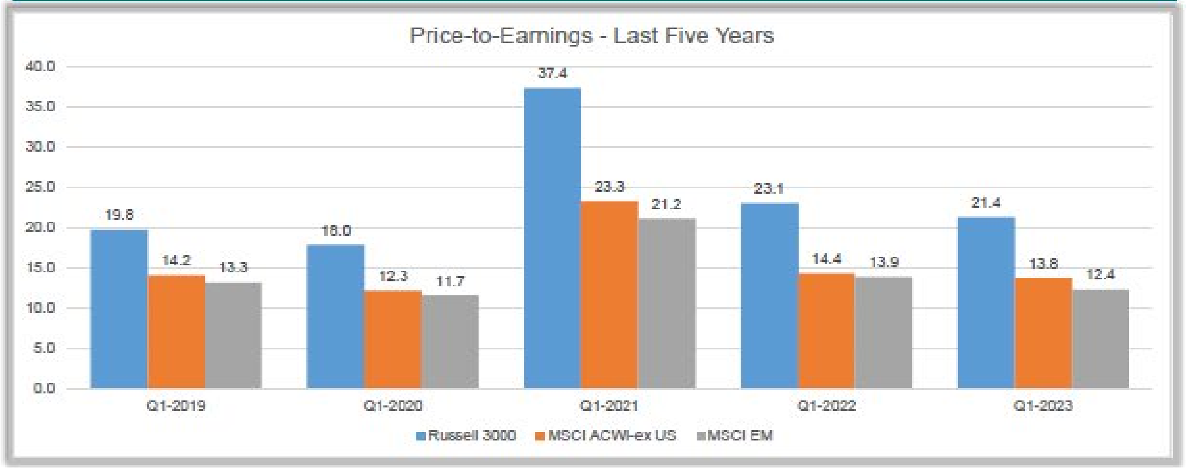
Key Macro Indicators*

GDP Growth of Major Economies[1]

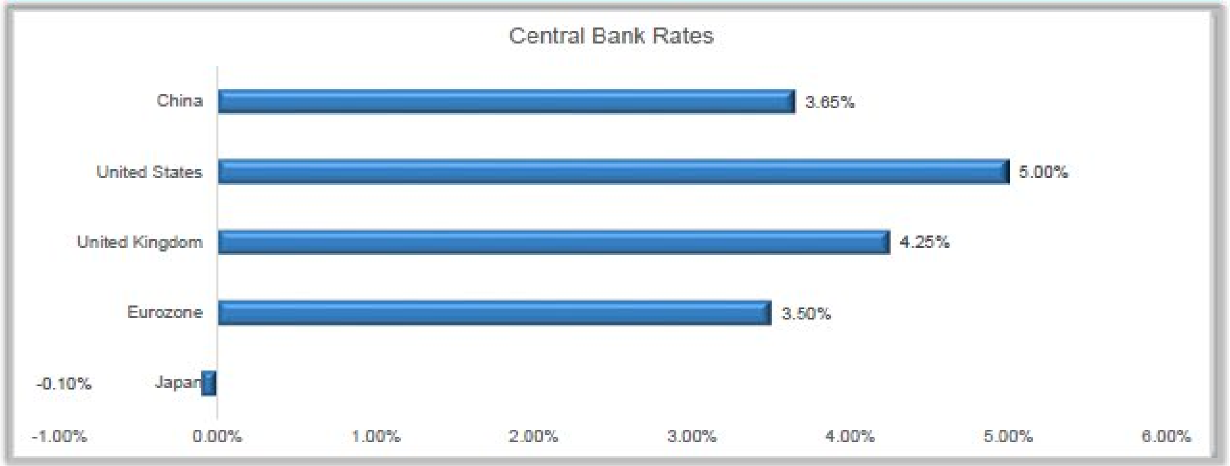
10-Year Treasury Yield[2]



World Equity Valuation[3]



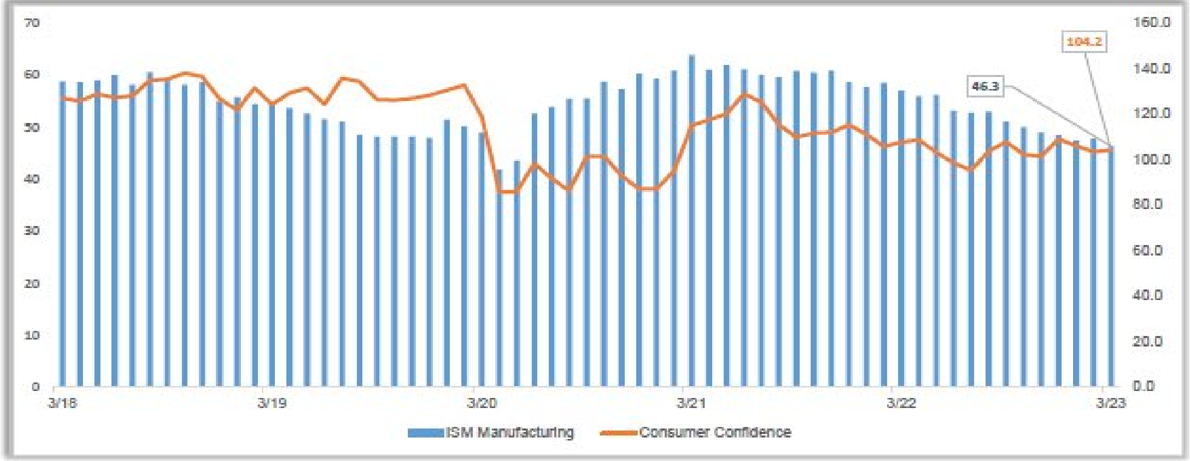
Central Bank Rates[4]
(as of 3/31/2023)



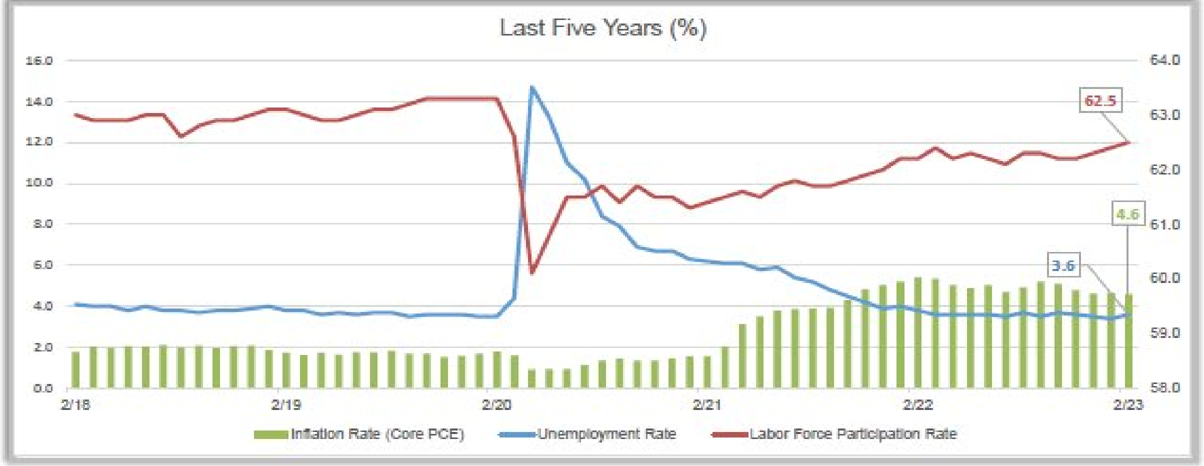
*The information on the "Key Macro Indicators" charts is the best available data as of 3/31/23 and may not reflect the current market and economic environment

Key Macro Indicators*

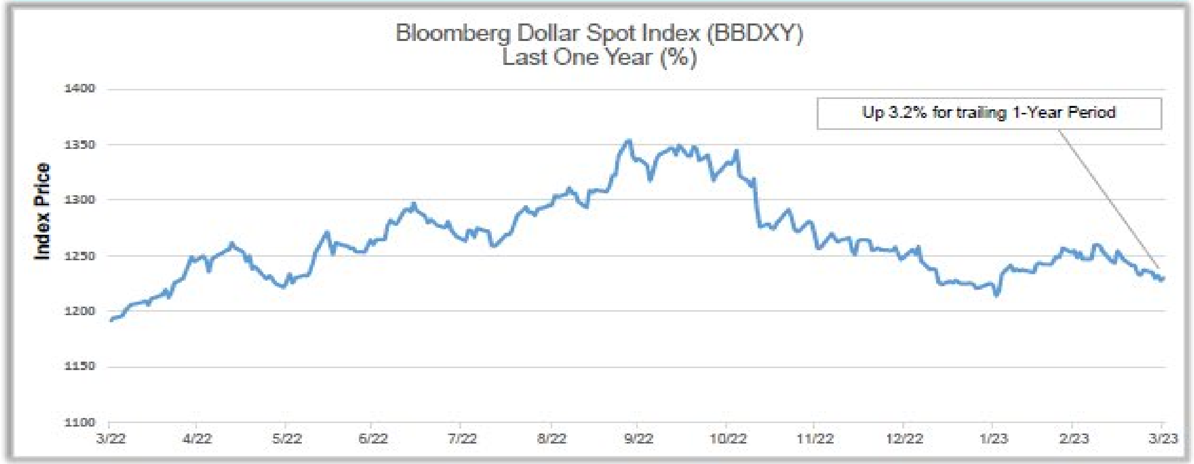
Consumer Confidence & ISM Manufacturing[1]



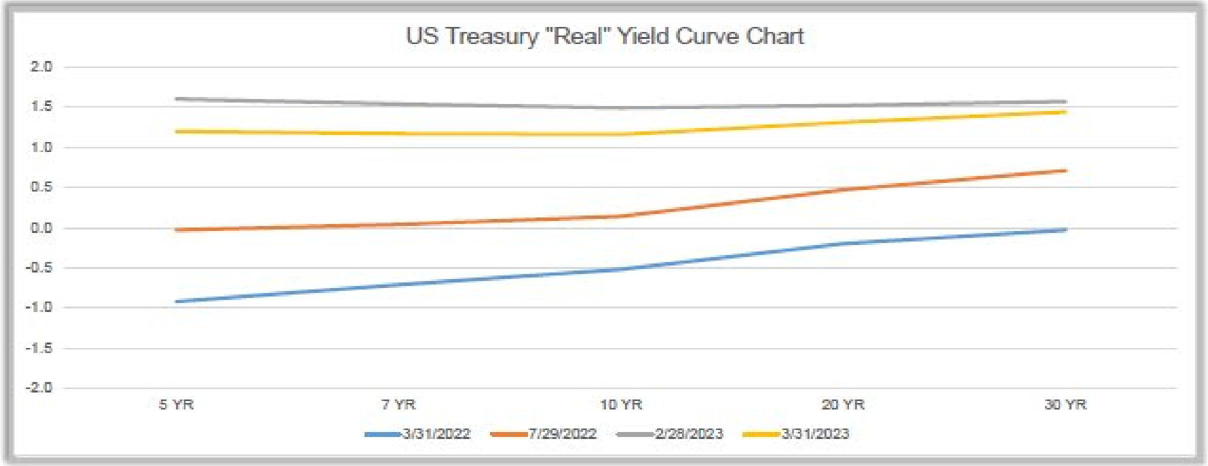
U.S. Inflation, Unemployment, & Labor Force Participation[2]



Performance of US Dollar vs. Leading Global Currencies[3]



U.S. Treasury "Real" Yield Curve[4]



*The information on the "Key Macro Indicators" charts is the best available data as of 3/31/23 and may not reflect the current market and economic environment

Market Themes and Notable Items to Watch

Recent Themes

- Regulators and central bankers acted to calm investors and depositors after an abrupt collapse of Silicon Valley Bank incited stress throughout the banking sector and financial markets
- In March the Federal Reserve announced a 0.25% interest rate increase to a target range of 4.75% to 5%, the highest since 2007
- Inflation remains elevated, with the Consumer Price Index rising 6% in February and core services ex-housing inflation (which Federal Reserve Chair Jerome Powell has cited as the “most important” measure of inflation) up 5% year over year
- The U.S. labor market has also shown strength, with unemployment hovering near multi-decade lows and more than 300,000 new jobs added in February
- The U.S. 10-year Treasury yield ended March at 3.55%, 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) gained 2.5% in March

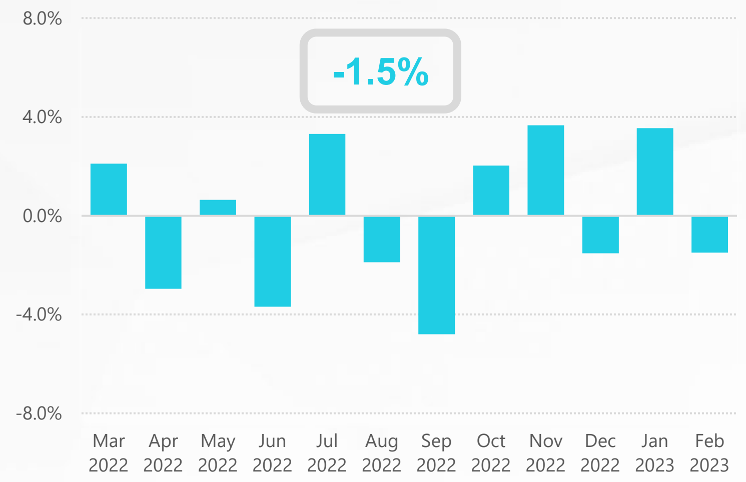
What to Watch

- 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
  - Securities and Exchange Commission insider trading rule (10b5-1) revised last fall is effective April 1 and requires longer time between pre-set trading plan adoption and permissible trading, and would have constrained Q1 SVB CEO stock sales
- Level of stress within and overall health of the global banking system

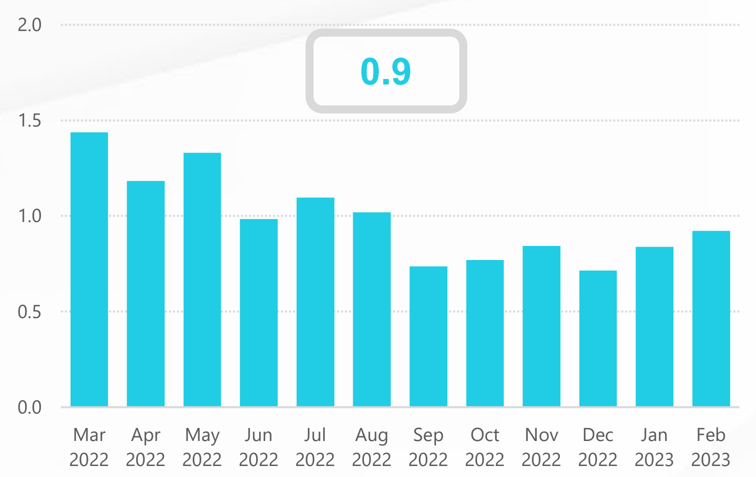
02 Portfolio Performance & Risk Updates

Total Fund Summary as of February 2023

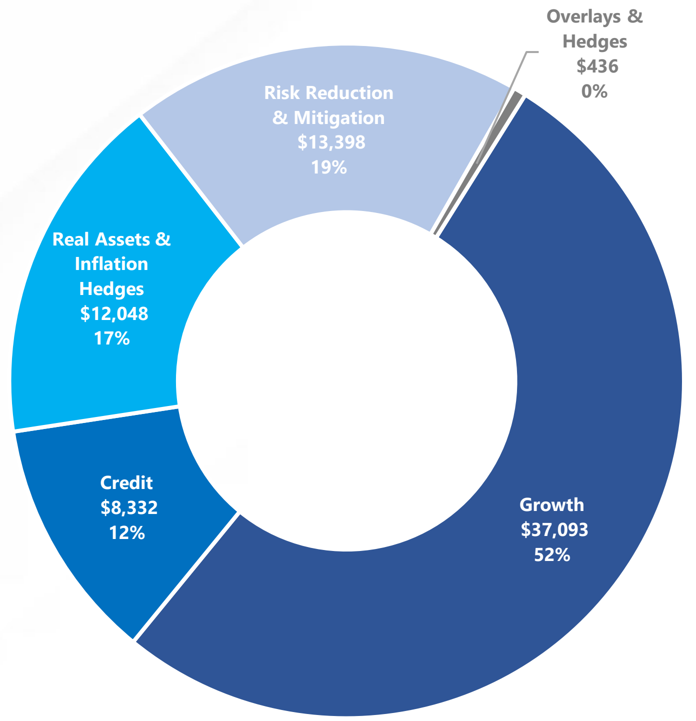
Monthly Return (net)



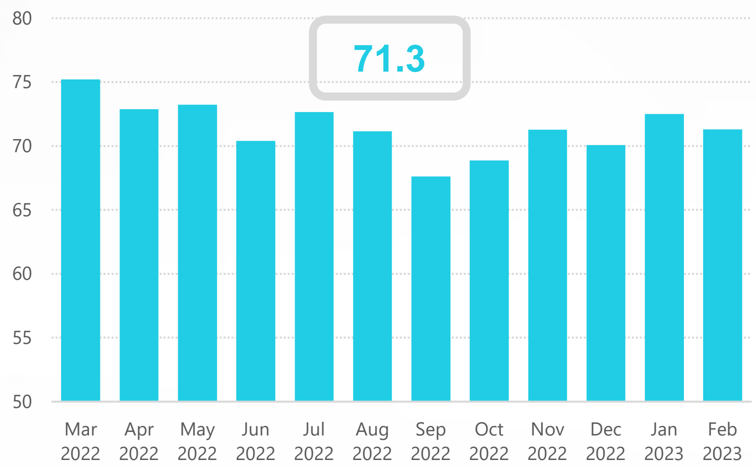
Sharpe Ratio (3-year annualized)



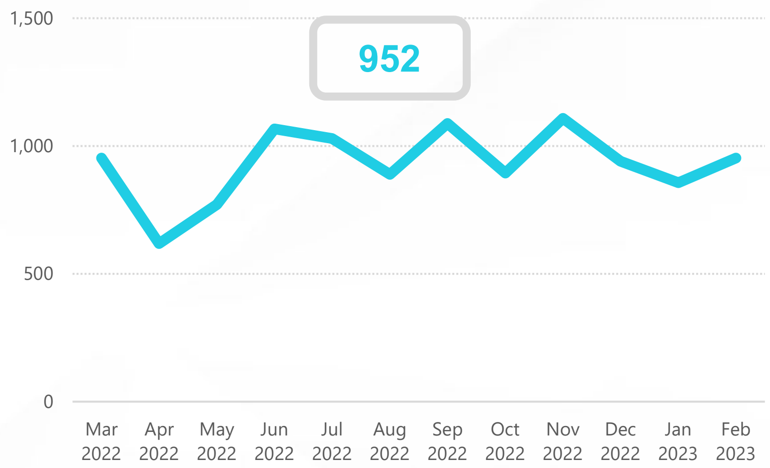
Asset Allocation ($ millions)



Total Market Value ($ billions)



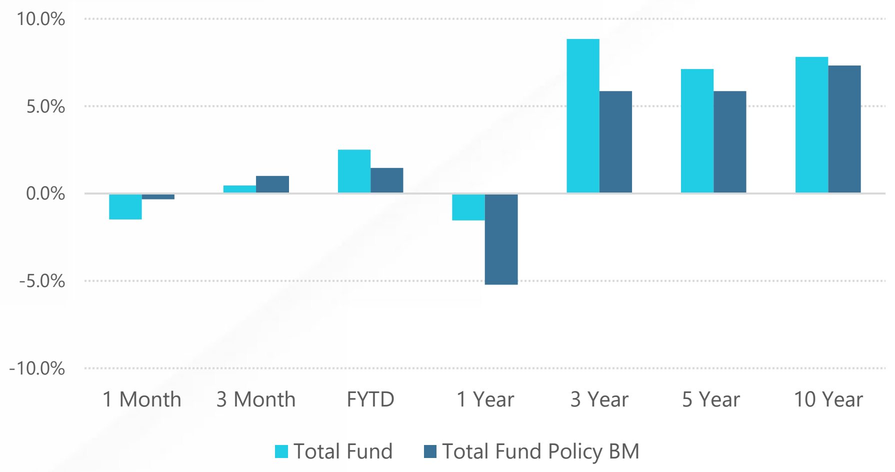
Cash ($ millions)



Historical Net Performance as of February 2023

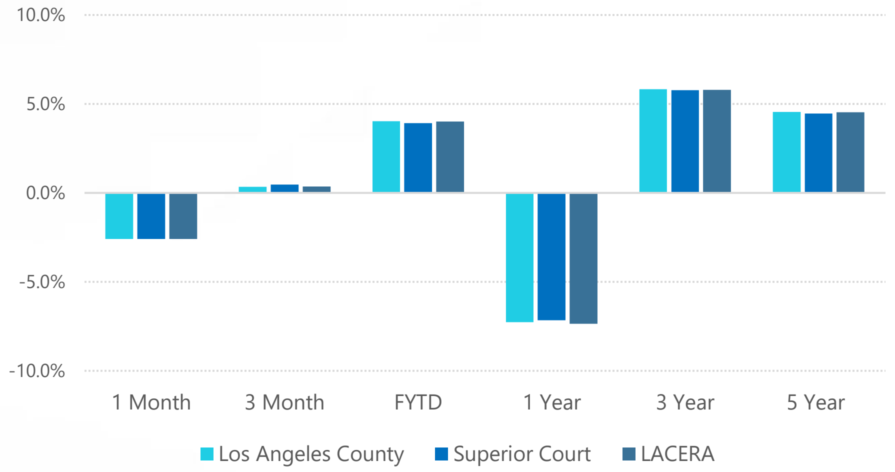
LACERA Pension Fund

	Market Value ($ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	**71,307**	**100.0%**	**100.0%**	**-1.5%**	**0.5%**	**2.5%**	**-1.5%**	**8.8%**	**7.1%**	**7.8%**
Total Fund Policy BM				-0.3%	1.0%	1.5%	-5.2%	5.9%	5.9%	7.3%
7% Annual Hurdle Rate				0.6%	1.7%	4.6%	7.0%	7.0%	7.0%	7.0%
Growth	**37,093**	**52.0%**	**53.0%**	**-1.4%**	**0.8%**	**3.9%**	**-2.5%**	**13.8%**		
Growth Policy BM				0.7%	1.4%	1.9%	-7.5%	9.8%		
Credit	**8,332**	**11.7%**	**11.0%**	**0.3%**	**2.9%**	**4.3%**	**-1.5%**	**3.8%**		
Credit Policy BM				1.9%	5.1%	4.2%	-2.8%	1.4%		
Real Assets & Inflation Hedges	**12,048**	**16.9%**	**17.0%**	**-3.2%**	**-2.7%**	**0.0%**	**1.9%**	**8.9%**		
Real Assets & Inflation Hedges Policy BM				-3.1%	-2.5%	1.1%	1.7%	9.3%		
Risk Reduction & Mitigation	**13,398**	**18.8%**	**19.0%**	**-1.6%**	**1.4%**	**-1.2%**	**-6.4%**	**-1.4%**		
Risk Reduction & Mitigation Policy BM				-2.0%	0.5%	-2.0%	-7.9%	-2.6%		
Overlays & Hedges	**436**	**0.6%**		**12.8%**	**-9.3%**					



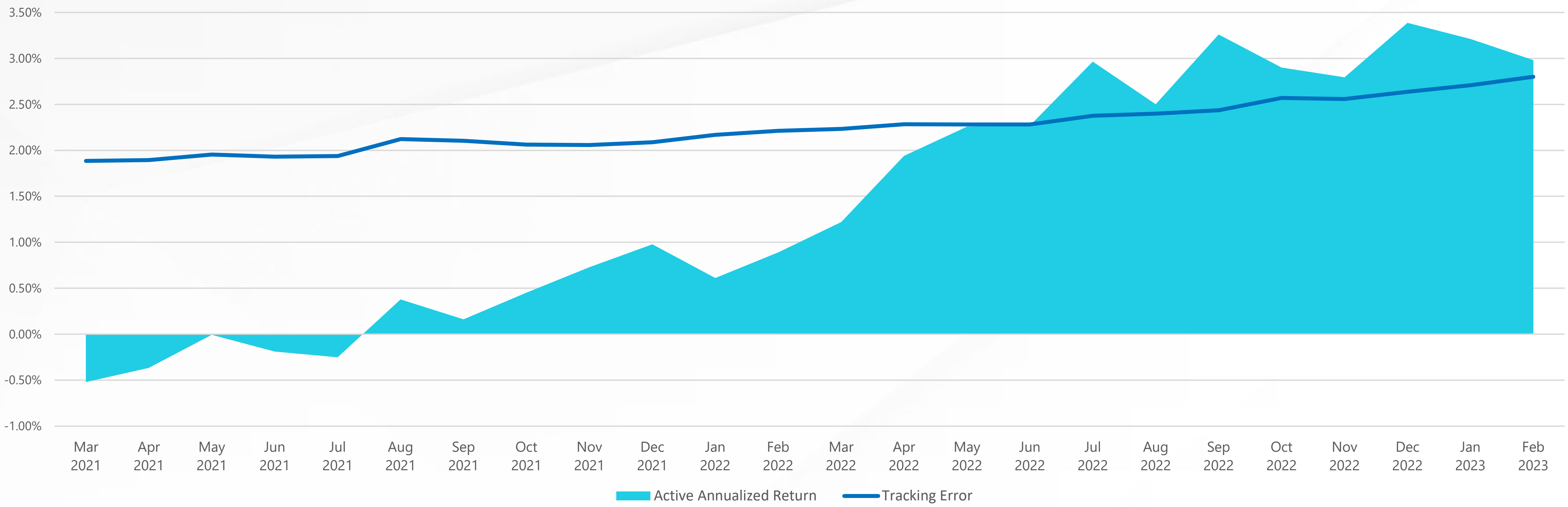
OPEB Master Trust

	Market Value ($ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB Master Trust	**2,718**			**-2.6%**	**0.3%**	**4.0%**	**-7.3%**	**5.8%**	**4.5%**
Los Angeles County	2,648	97.4%	—	-2.6%	0.3%	4.0%	-7.3%	5.8%	4.6%
Superior Court	58	2.1%	—	-2.6%	0.5%	3.9%	-7.2%	5.8%	4.5%
LACERA	12	0.4%	—	-2.6%	0.4%	4.0%	-7.4%	5.8%	4.5%
LACERA Master OPEB Trust Fund	**2,717**		**100.0%**	**-2.6%**	**0.4%**	**3.8%**	**-7.3%**	**5.9%**	**4.6%**
OPEB Master Trust Policy Benchmark				-1.8%	0.7%	3.9%	-7.3%	5.6%	4.2%
OPEB Growth	**1,305**	**48.0%**	**47.5%**	**-2.8%**	**0.3%**	**7.1%**	**-7.9%**	**9.1%**	**5.9%**
OPEB Growth Policy Benchmark				-2.2%	0.6%	6.3%	-8.7%	8.6%	5.5%
OPEB Credit	**516**	**19.0%**	**19.0%**	**-0.8%**	**2.8%**	**6.7%**	**-1.5%**	**1.1%**	--
OPEB Credit Policy Benchmark				-0.1%	3.2%	5.9%	-2.4%	1.1%	--
OPEB Real Assets & Inflation Hedges	**538**	**19.8%**	**20.0%**	**-3.9%**	**-1.5%**	**-2.6%**	**-10.2%**	**5.5%**	--
OPEB RA & IH Policy Benchmark				-2.2%	-1.3%	0.6%	-7.6%	6.4%	--
OPEB Risk Reduction & Mitigation	**357**	**13.2%**	**13.5%**	**-2.6%**	**0.3%**	**-1.5%**	**-7.2%**	**-2.7%**	**0.9%**
OPEB RR & M Policy Benchmark				-2.6%	0.1%	-3.0%	-8.7%	-3.3%	0.5%



Performance Based Risk as of February 2023

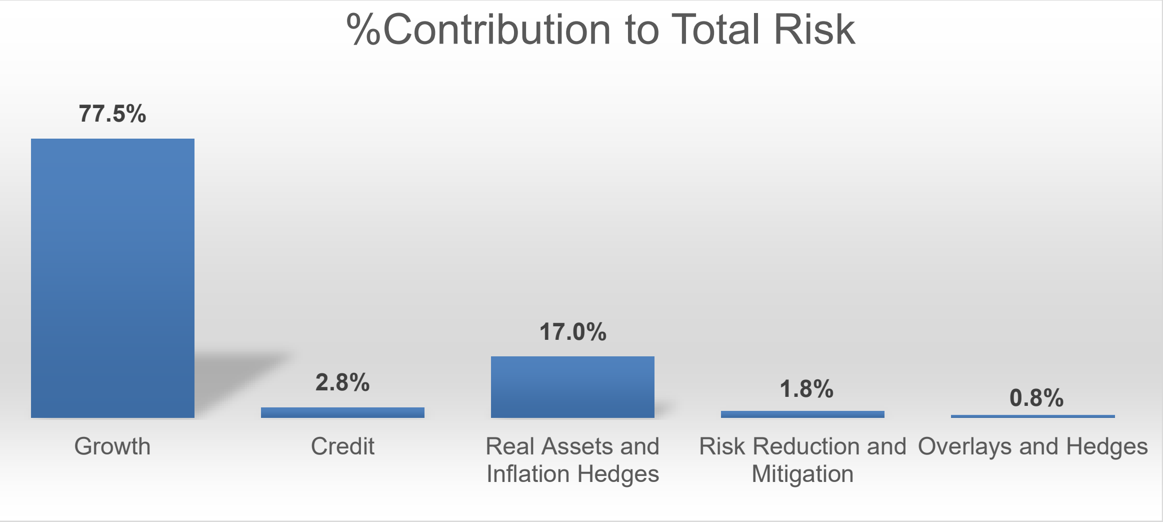
Active Return vs. Tracking Error[1,2,3]

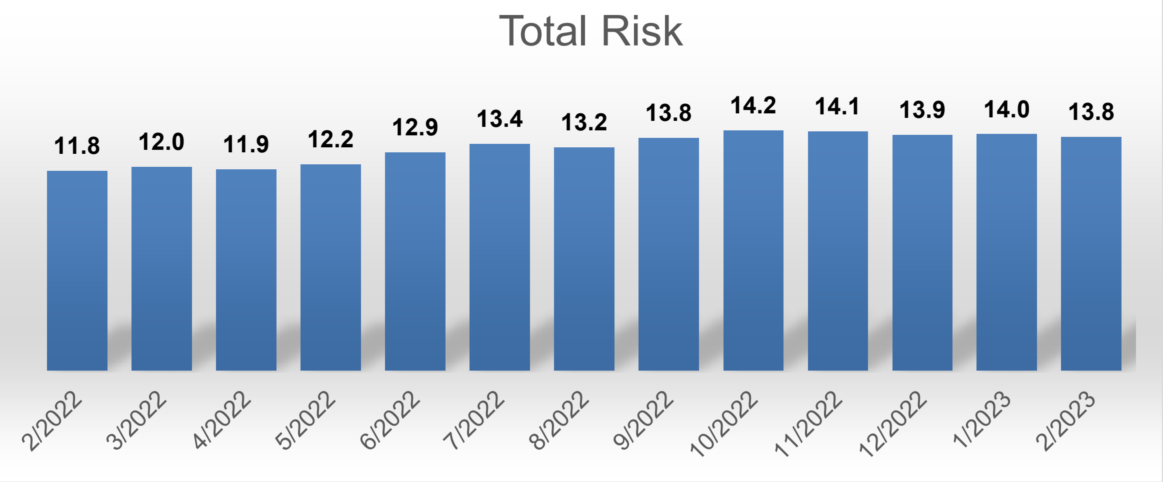


Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Feb 2023	8.8%	5.9%	3.0%	2.8%

[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.

Total Fund Forecast Risk*
as of February 2023



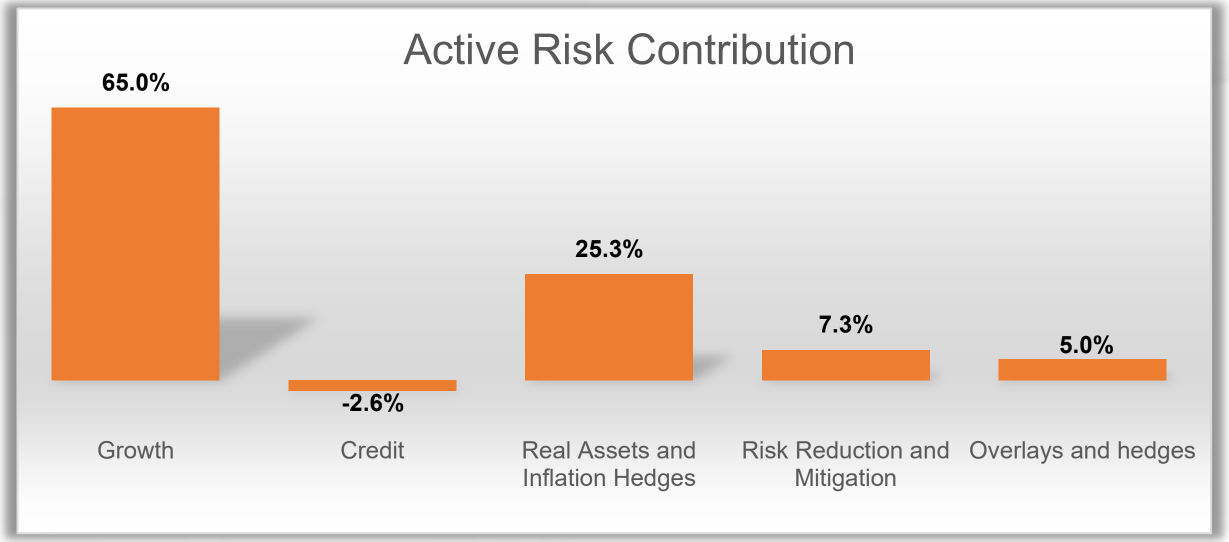


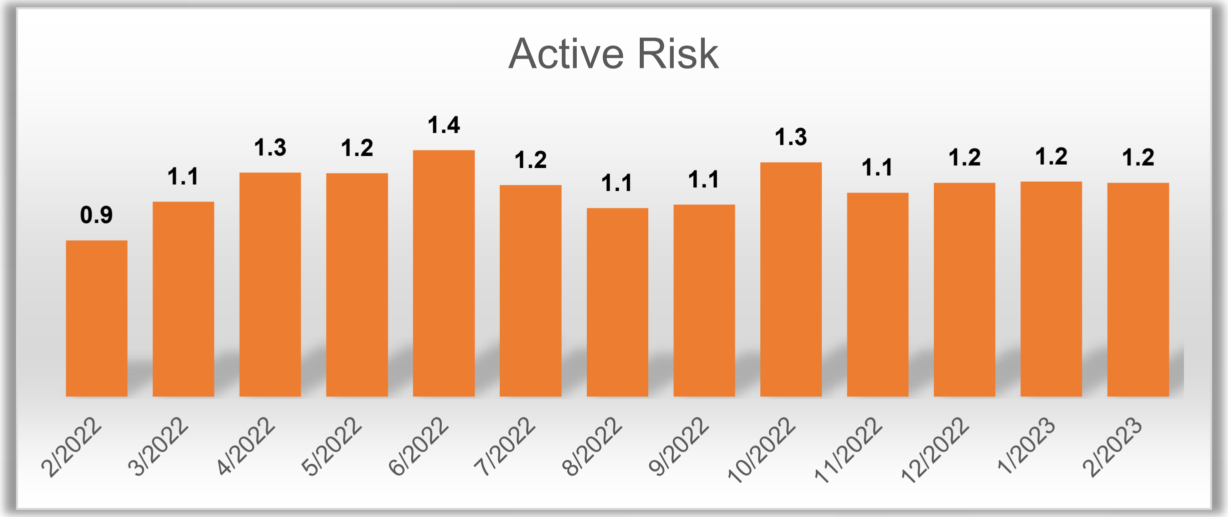
	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone Benchmark Risk
Total Fund			**13.8**	**13.1**
Growth	**52.2%**	**77.5%**	**20.7**	**19.7**
Global Equity	32.9%	42.2%	18.6	18.7
Private Equity	17.6%	32.0%	28.3	27.1
Non-Core Private Real Estate	1.6%	3.4%	41.4	19.5
Credit	**11.4%**	**2.8%**	**4.5**	**5.6**
Liquid Credit	5.9%	2.0%	6.2	5.6
Illiquid Credit	5.5%	0.8%	3.8	5.6
Real Assets & Inflation Hedges	**17.2%**	**17.0%**	**15.0**	**14.1**
Core Private Real Estate	5.9%	6.5%	21.6	19.5
Natural Resources & Commodities	3.1%	3.3%	18.5	20.2
Infrastructure	5.5%	6.6%	18.0	18.1
TIPS	2.7%	0.6%	6.8	6.8
Risk Reduction and Mitigation	**18.6%**	**1.8%**	**6.2**	**6.1**
Investment Grade Bonds	7.0%	0.8%	6.6	6.5
Diversified Hedge Funds	6.1%	0.5%	3.9	0.2
Long-Term Government Bonds	4.1%	0.5%	14.5	14.5
Cash	1.4%	0.0%	-	-
Overlays and Hedges	**0.6%**	**0.8%**	**-**	**-**

*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 9/30/2022

SOURCE: MSCI BarraOne

Total Fund Forecast Active Risk*
as of February 2023



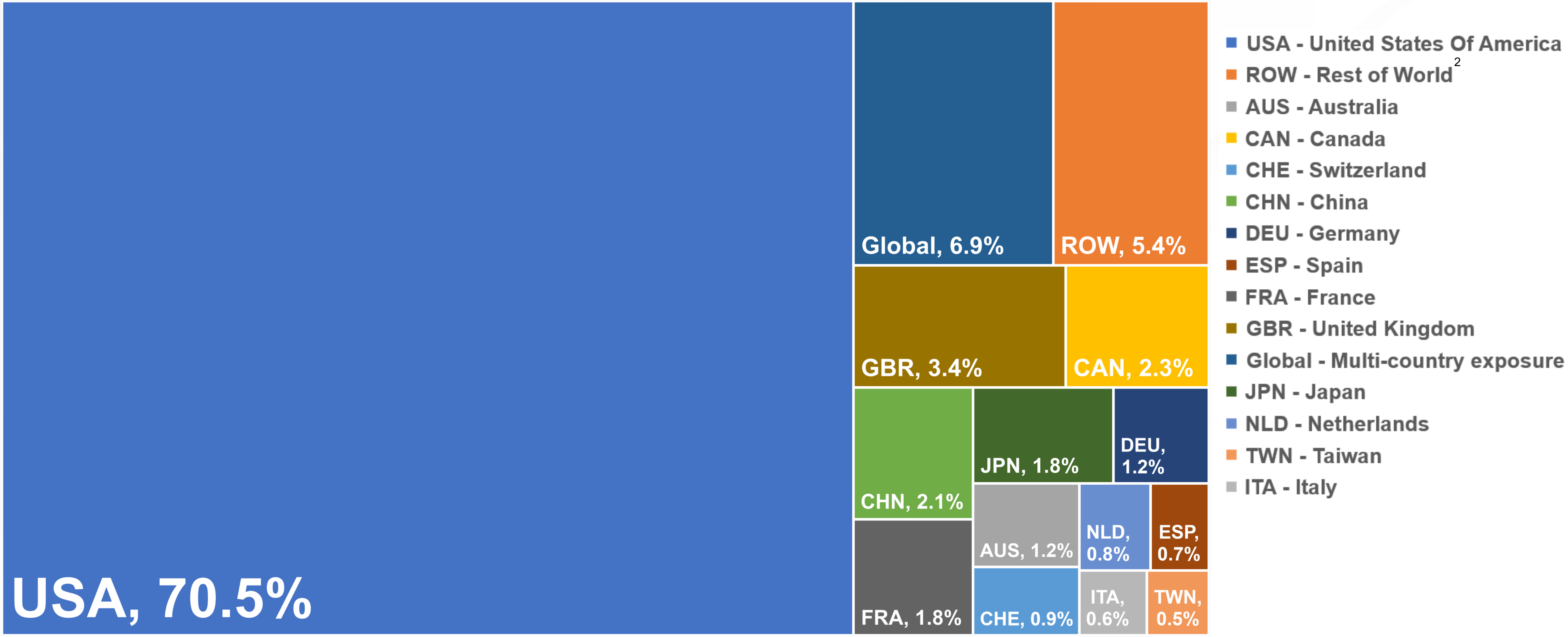


	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			**1.20**	**0.02**	**1.18**
Growth	**52.2%**	**-0.83%**	**0.78**	**-0.04**	**0.82**
Global Equity	32.9%				
Private Equity	17.6%				
Non-Core Private Real Estate	1.6%				
Credit	**11.4%**	**0.42%**	**-0.03**	**-0.02**	**-0.01**
Liquid Credit	5.9%				
Illiquid Credit	5.5%				
Real Assets & Inflation Hedges	**17.2%**	**0.16%**	**0.30**	**0.00**	**0.31**
Core Private Real Estate	5.9%				
Natural Resources & Commodities	3.1%				
Infrastructure	5.5%				
TIPS	2.7%				
Risk Reduction and Mitigation	**18.6%**	**-0.36%**	**0.09**	**0.03**	**0.06**
Investment Grade Bonds	7.0%				
Diversified Hedge Funds	6.1%				
Long-Term Government Bonds	4.1%				
Cash	1.4%				
Overlays and Hedges	**0.6%**	**0.61%**	**0.06**	**0.06**	**-**

*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 9/30/2022

SOURCE: MSCI BarraOne

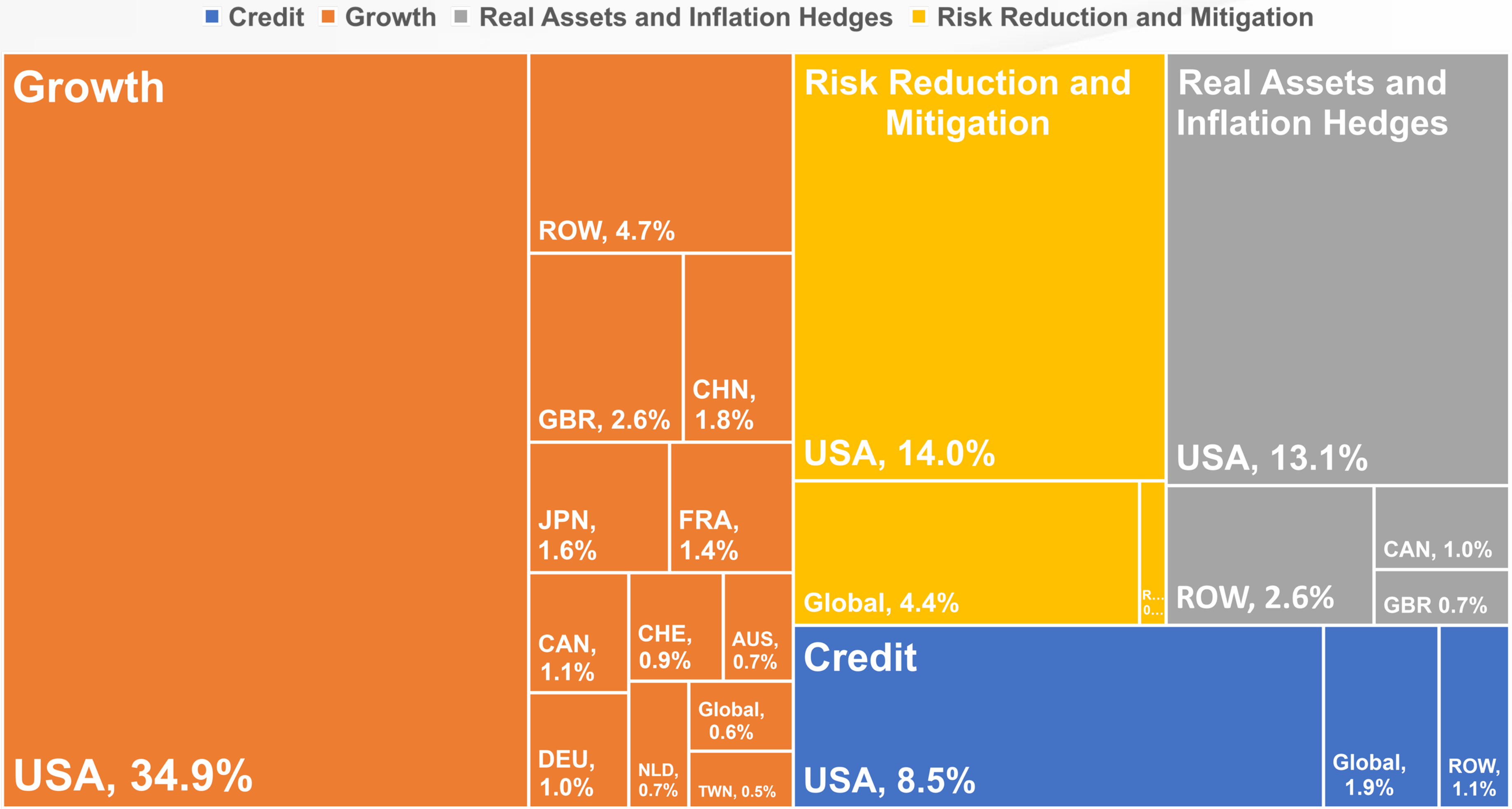
Geographic Exposures by AUM* - Total Fund
as of February 2023 ex-overlays & hedges



*AUM = assets under management
[1] *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 9/30/2022
[2] "ROW - Rest of World" is sum of countries with weight below 0.5%
[3] Geographic exposure is based on the domicile country of a given security/asset

SOURCE: MSCI BarraOne

Geographic Exposures by AUM* - Asset Categories
as of February 2023 ex-overlays & hedges

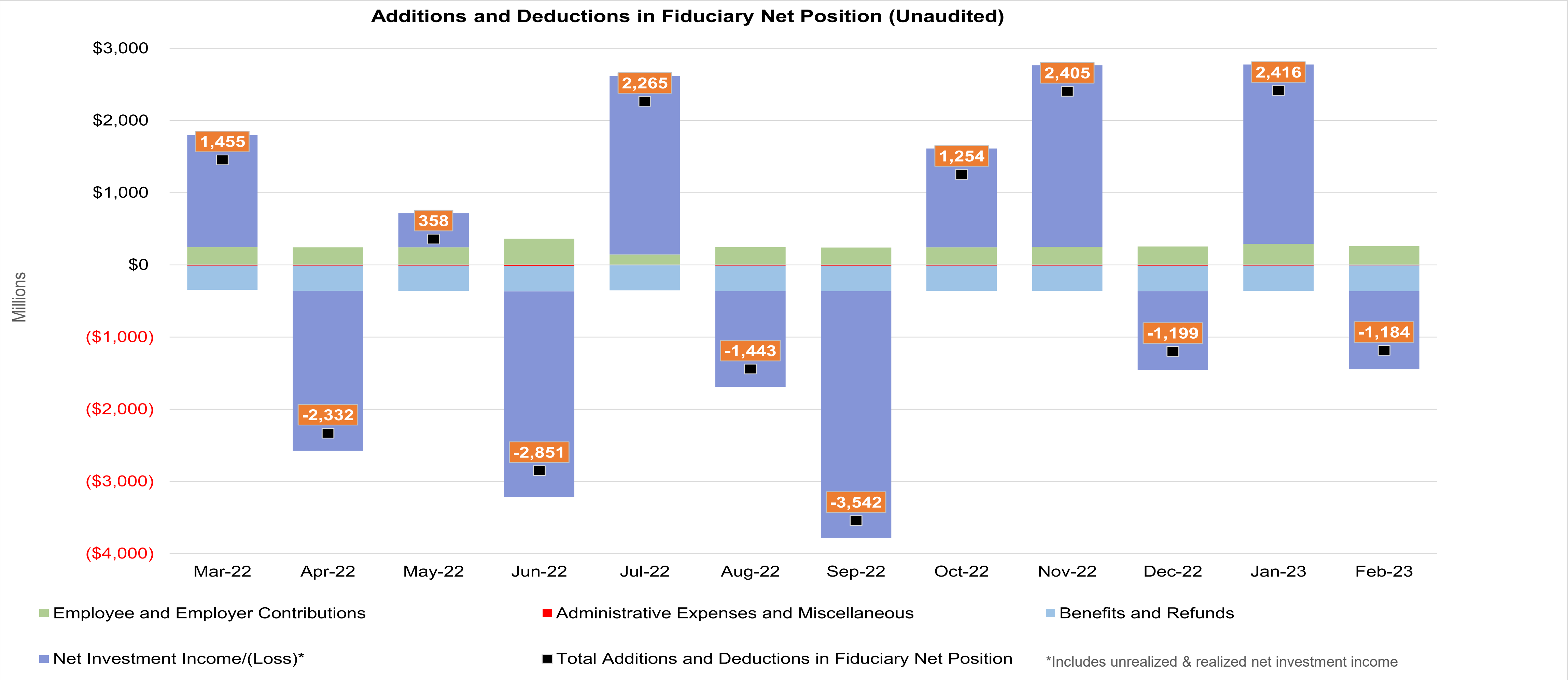


USA - United States Of America
AUS - Australia
CAN - Canada
CHE - Switzerland
CHN - China
DEU - Germany
FRA - France
GBR - United Kingdom
Global - Multi-country exposure
JPN - Japan
NLD - Netherlands
ROW - Rest of World [2]
TWN - Taiwan

*AUM = assets under management
[1] *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 9/30/2022
[2] "ROW - Rest of World" is sum of countries with weight below 0.5%
[3] Geographic exposure is based on the domicile country of a given security/asset

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	4	4	$972 million

03 Portfolio Structural Updates

Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity

From		To
$345 million Cash	→	Growth
$2 million Cash	→	Real Assets
$0 million Risk Mitigation	→	Cash
$158 million Hedges & Overlays	→	Cash
$194 million Credit	→	Cash

Hedges & Overlays

Monthly Activity

Program	February Return	February Gain/(Loss)	Inception[1] Gain/(Loss)
Currency Hedge[2]	1.4%	($92.3 Million)	$1.4 Billion
Cash/Rebalance Overlay[3]	-1.7%	($38.1 Million)	$275.8 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
OPEB Public Markets Passive Investment Management Search	✓		Anticipated Q3 2023

04 Key Initiatives & Operational Updates

Notable Initiatives and Operational Updates

Key Initiative Updates

- The 2024 Strategic asset allocation study will begin in the Q3 of this year
- The Investment Division is adhering to the 2023 Work Plan and Strategic Initiatives approved at the January 2023 BOI

Operational Updates

- Annual contract compliance review is complete
- Operational due diligence review in progress

Team Searches and Vacancies

- Working on launching new searches
  - 1 – Deputy Chief Investment Officer
    - Search in progress
  - 1 – Principal Investment Officer
  - 2 – Senior Investment Officer
    - 1 search in progress
  - 2 – Financial Analyst-III
    - 2 searches in progress
  - 3 – Financial Analyst-II
    - 3 searches in progress
  - 1 – Financial Analyst-I

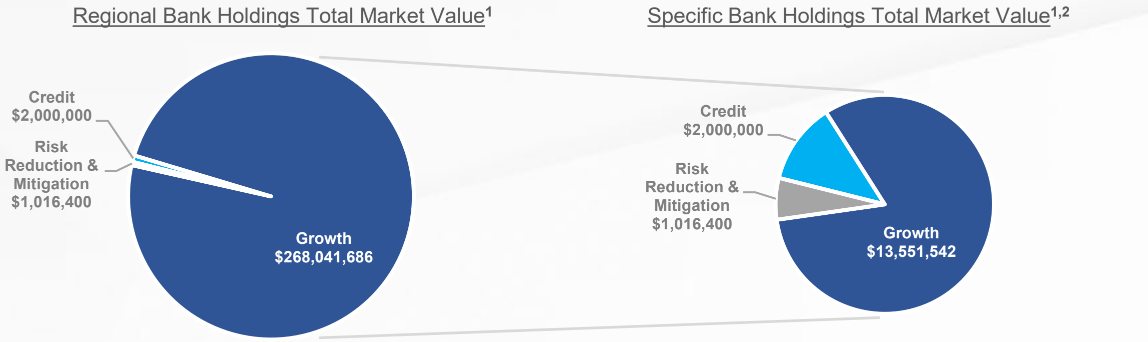
Manager/Consultant Updates

Credit Suisse – Credit & Real Assets – agreed to a merger with UBS. As part of this merger, the asset management divisions of the two banks will be combined and will have more than $1.5 trillion in assets under management. Credit Suisse Asset Management currently manages two mandates for LACERA.

05 Commentary

Banking "Event" Update
Total Fund

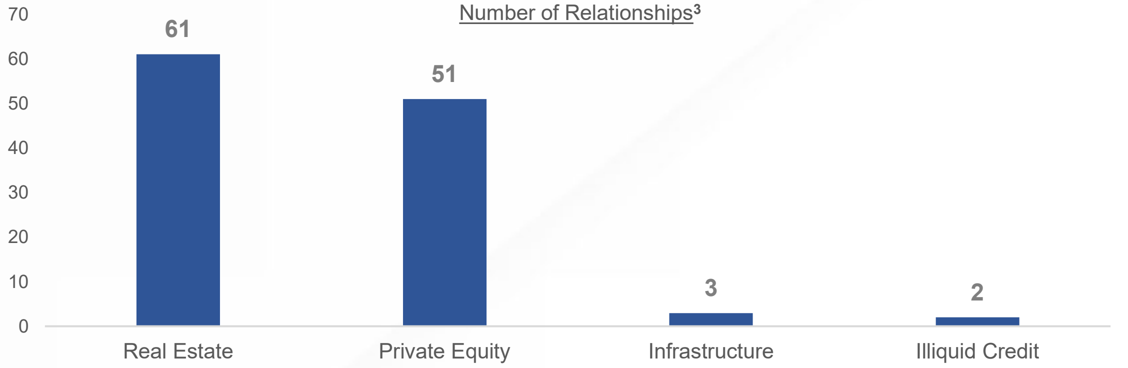
Direct Exposure



[1] Market values are as of 2/28/2023; Left chart represents total US regional bank equity and debt exposures; Right chart represents equity and debt exposures specific to First Republic Bank, Signature Bank, Silvergate Bank, and Silicon Valley Bank.

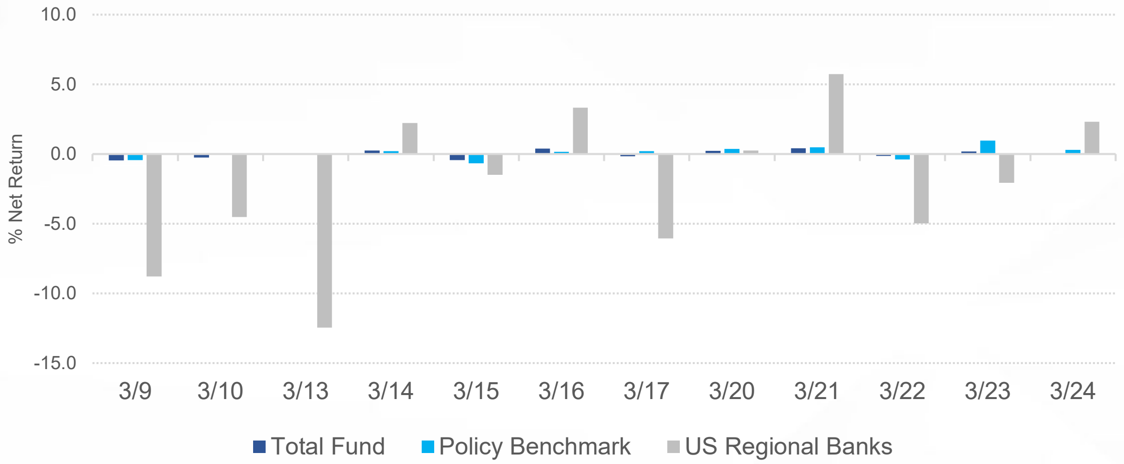
[2] Losses estimated to be $9 million (or 0.01% of the Total Fund) as of 3/31/2023.

Indirect Exposure



[3] Relationships include bank deposits, credit facilities, and asset level exposures with First Republic Bank, Signature Bank, and Silicon Valley Bank. No known losses or cancelled transactions.

Performance Impact

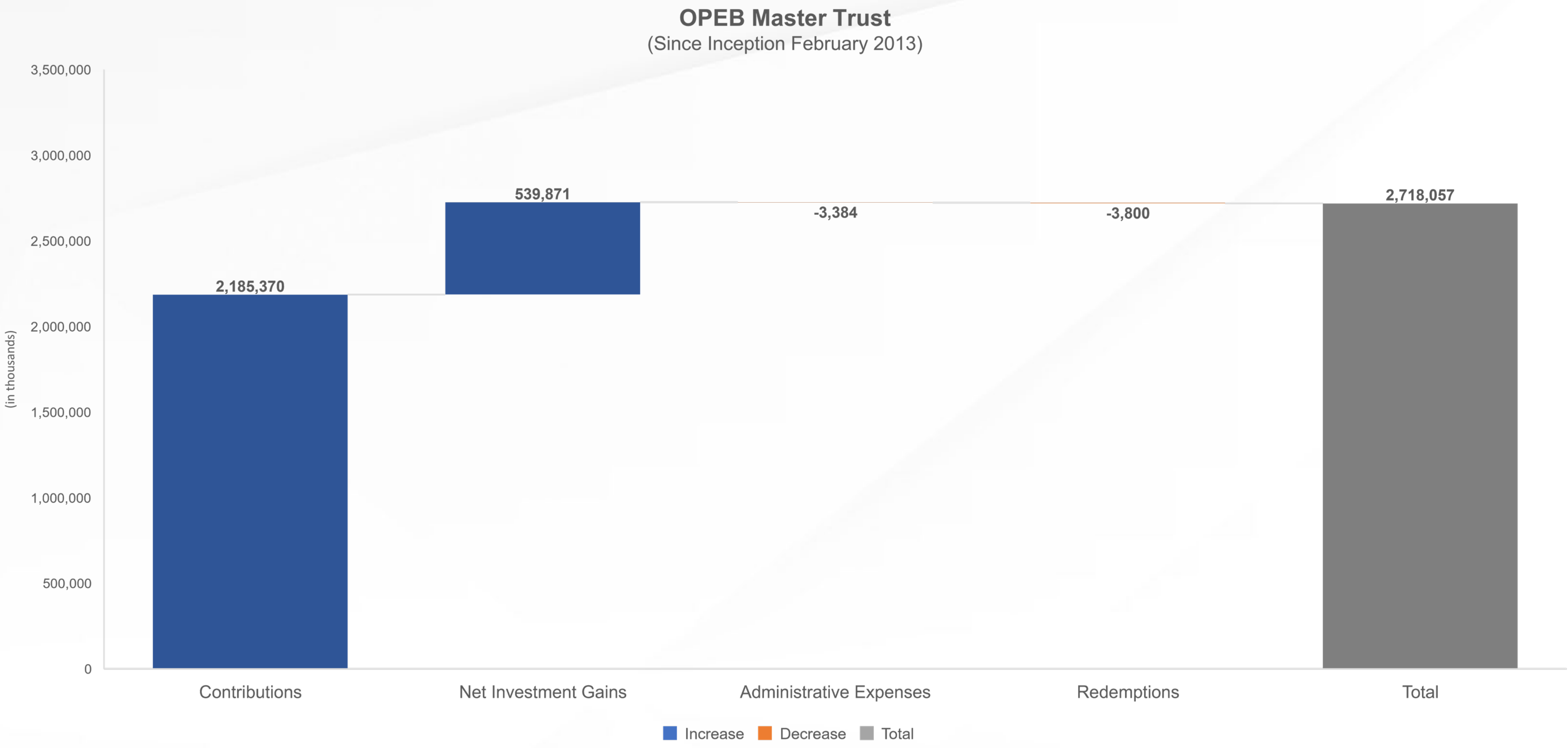


Custody Bank Relationship

- State Street Bank and Trust Company is a Globally Systemically Important Financial Institution ("GSIFI") that meets the regulatory and capital requirements required by the Federal Reserve Board.
- GSIFIs are held to higher standards and undergo stricter testing to ensure continued financial strength and maintain FDIC insurance coverage.
- LACERA's Total Fund cash is considered a deposit at the bank and carried on State Street's balance sheet. State Street assumes the credit risk for such cash balances.

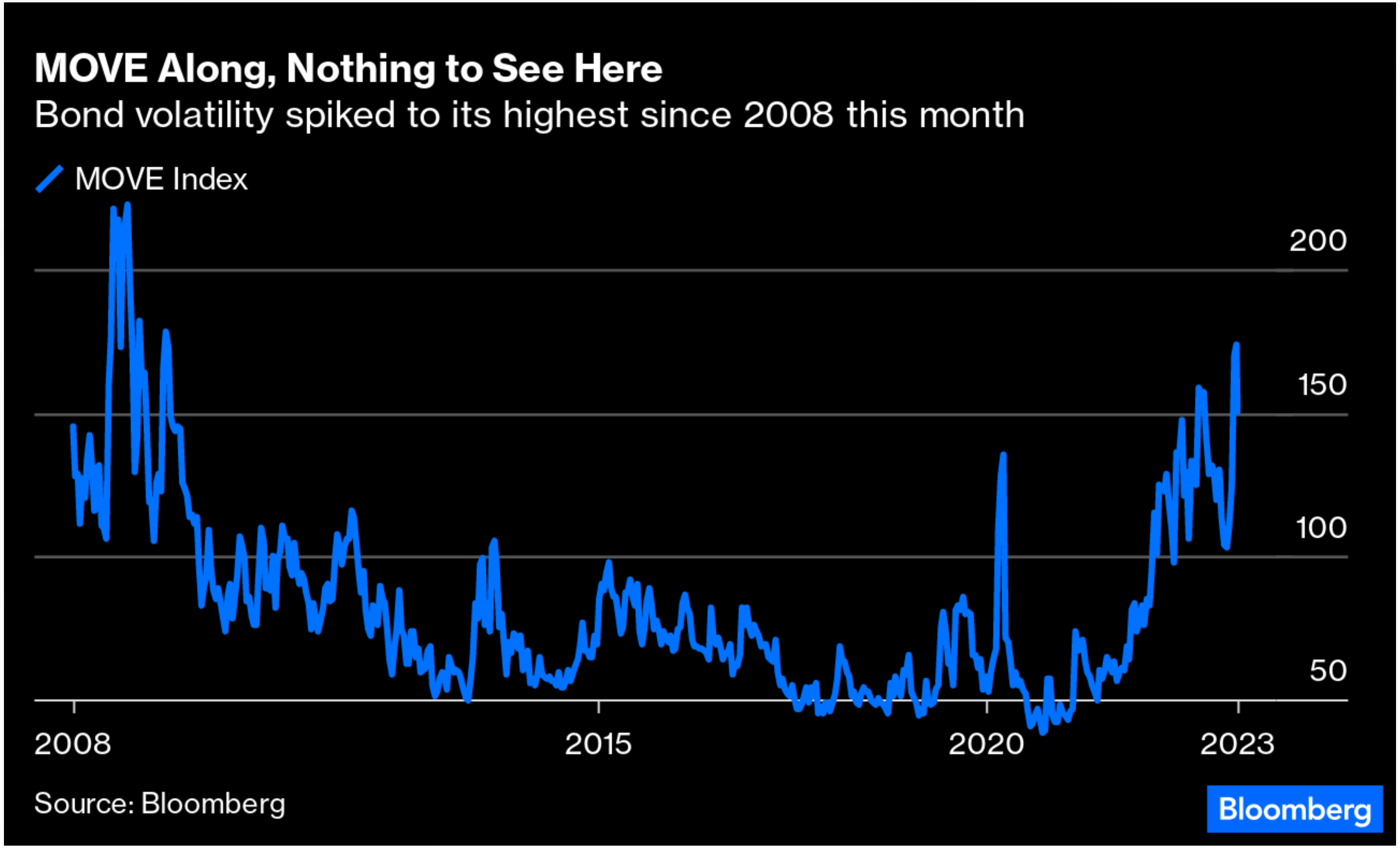
OPEB Master Trust

Historical Growth as of February 2023



Staff Chart of the Month

Bond Volatility Spiked to Highest Level Since 2008



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