



Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer 

Board of Investments Meeting
May 8, 2024

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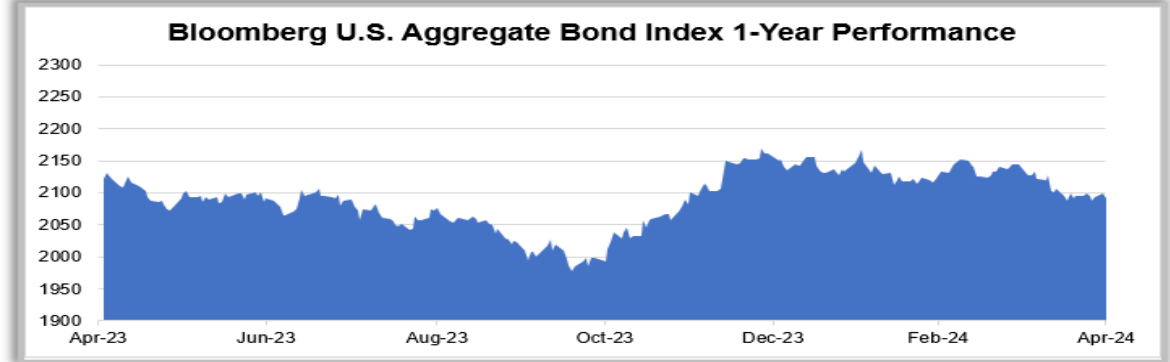
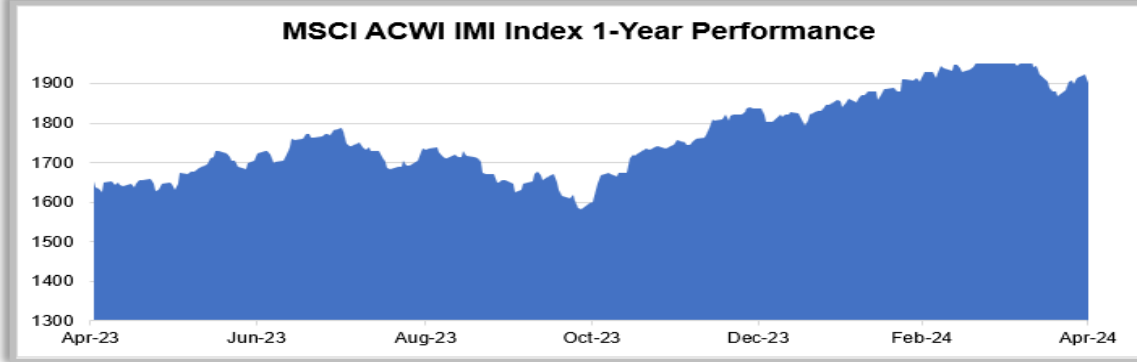
01 Market Environment

Global Market Performance as of April 30, 2024



MSCI ACWI IMI Index (Global Equity Market)*							
Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
-3.4	3.8	11.7	4.1	16.8	3.6	9.1	8.0

Bloomberg U.S. Aggregate Bond Index**							
Trailing Returns (%)				Annualized Returns (%)			
1-Month	3-Month	FYTD	YTD	1Y	3Y	5Y	10Y
-2.5	-3.0	0.0	-3.3	-1.5	-3.5	-0.2	1.2



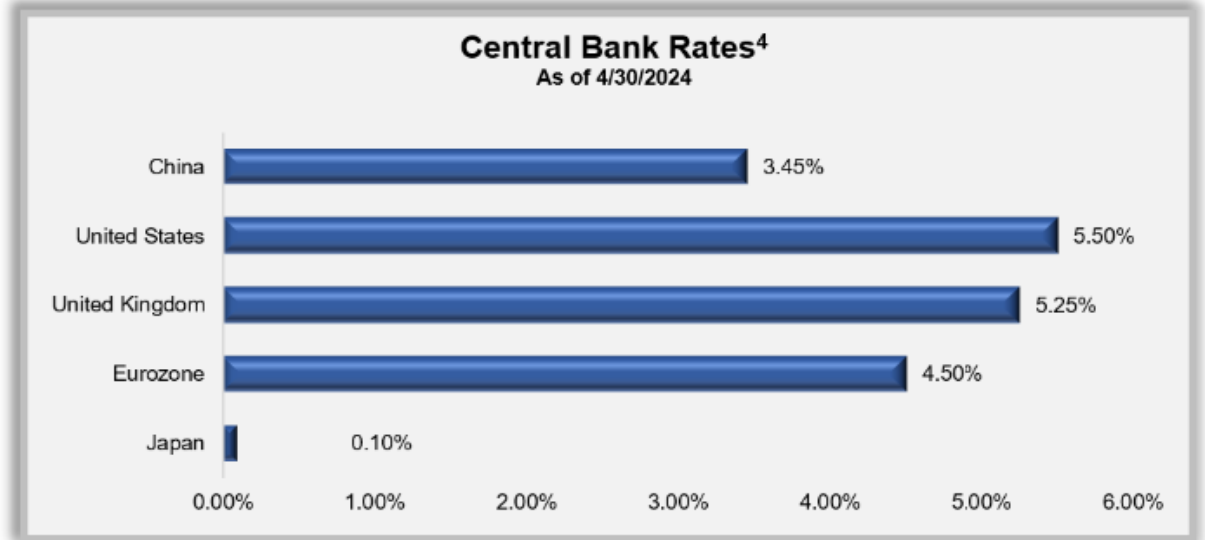
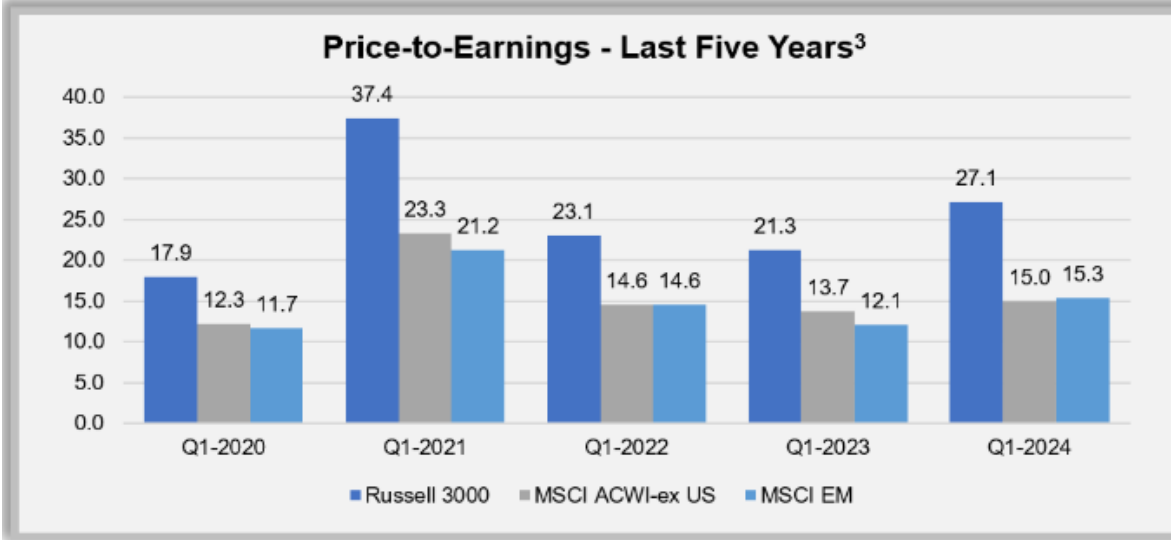
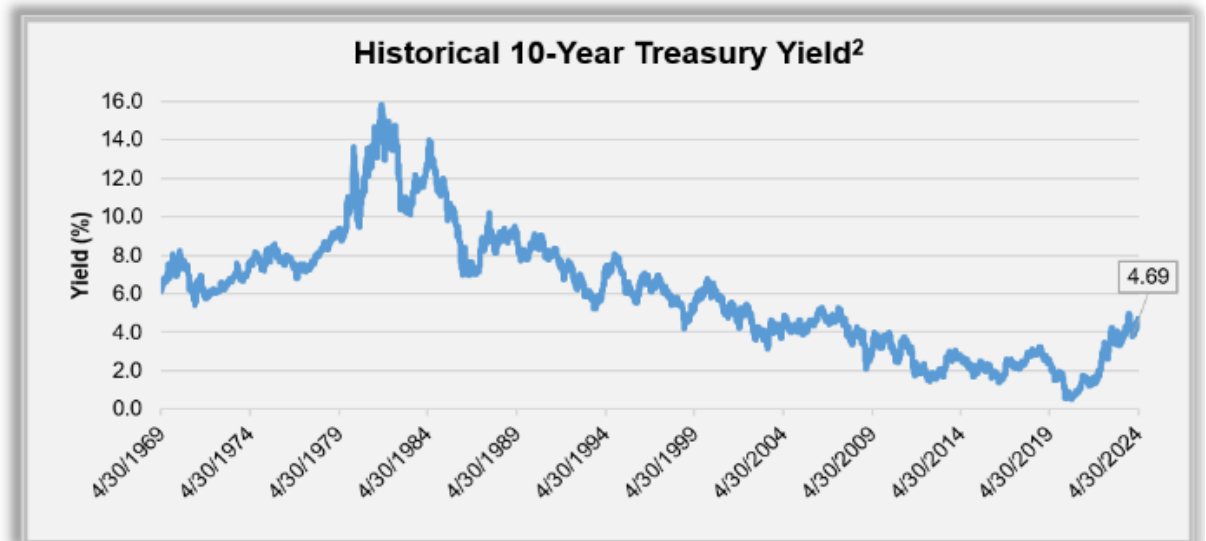
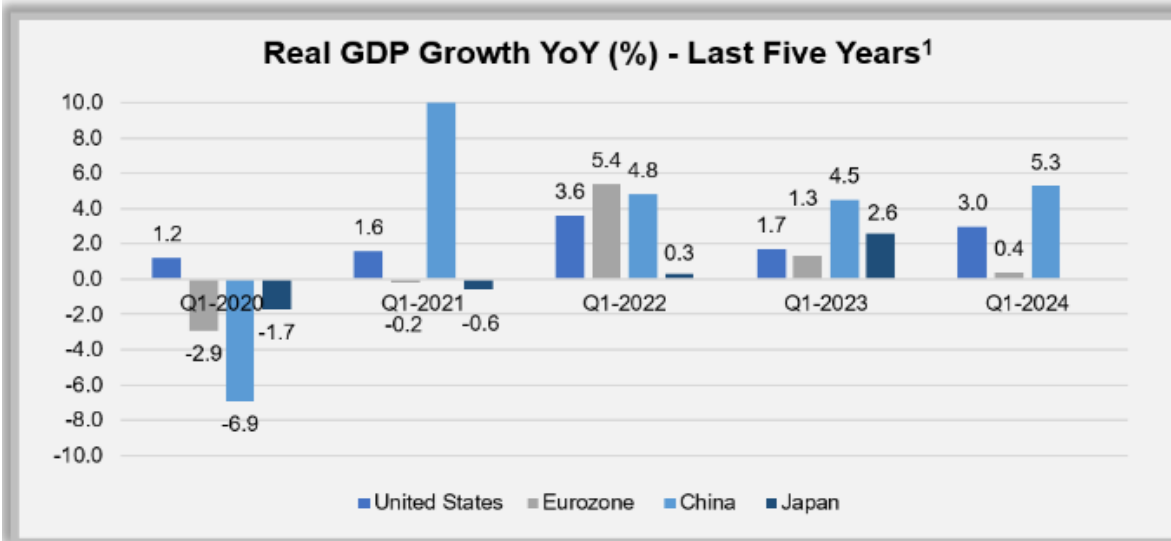
*Global Equity Policy Benchmark - MSCI ACWIIMI Index

**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
Reference Portfolio	60:40 Equity:Bond Portfolio	60% MSCI ACWI IMI/ 40% Bloomberg U.S. Aggregate Index	-3.0	1.1	7.0	1.1	9.5	0.8	5.4	5.3
Equity	Global All Cap	MSCI ACWI IMI Total Return	-3.4	3.8	11.7	4.1	16.8	3.6	9.1	8.0
	U.S. All Cap	Russell 3000 Total Return	-4.4	4.0	14.0	5.2	22.2	6.3	12.4	11.8
	U.S. Large Cap	S&P 500 Total Return	-4.1	4.3	14.6	6.0	22.6	8.1	13.2	12.4
	U.S. Small Cap	Russell 2000 Total Return	-7.0	1.7	5.8	-2.2	13.3	-3.2	5.8	7.2
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	-1.7	3.6	8.6	2.5	9.3	0.1	5.1	4.0
	Emerging Markets	MSCI Emerging Markets Total Return	0.4	7.8	7.7	2.8	9.9	-5.7	1.9	3.0
Private Equity	Private Equity Buyout	Thomson Reuters PE Buyout Index	-7.6	5.9	21.2	9.6	19.2	-2.2	7.7	10.7
Fixed Income	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	-2.5	-3.0	0.0	-3.3	-1.5	-3.5	-0.2	1.2
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	-0.9	0.5	8.2	0.5	9.0	1.5	3.7	4.3
	U.S. Long Term Treasury Bonds	Bloomberg Long Term U.S. Treasury Total Return Index	-6.1	-7.1	-9.7	-9.2	-12.2	-10.6	-3.6	0.4
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.7	2.4	9.7	3.2	12.1	5.9	5.1	4.6
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	-1.7	-1.9	0.2	-1.8	-1.3	-1.6	2.1	1.9
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.4	1.4	4.7	1.8	5.6	2.9	2.1	1.4
Commodity	Commodity Prices Index	Bloomberg Commodity Index Total Return	2.7	4.5	4.8	4.9	2.9	7.2	7.0	-1.5
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	1.9	10.1	7.4	3.2	2.6	8.8	9.7	4.8
Infrastructure	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	-2.9	0.2	1.2	-2.2	-1.9	2.2	3.1	3.7
Real Estate	U.S. REITs	MSCI U.S. REIT Index	-7.1	-3.4	-0.1	-7.4	1.7	-1.1	2.7	5.4

Source: Bloomberg

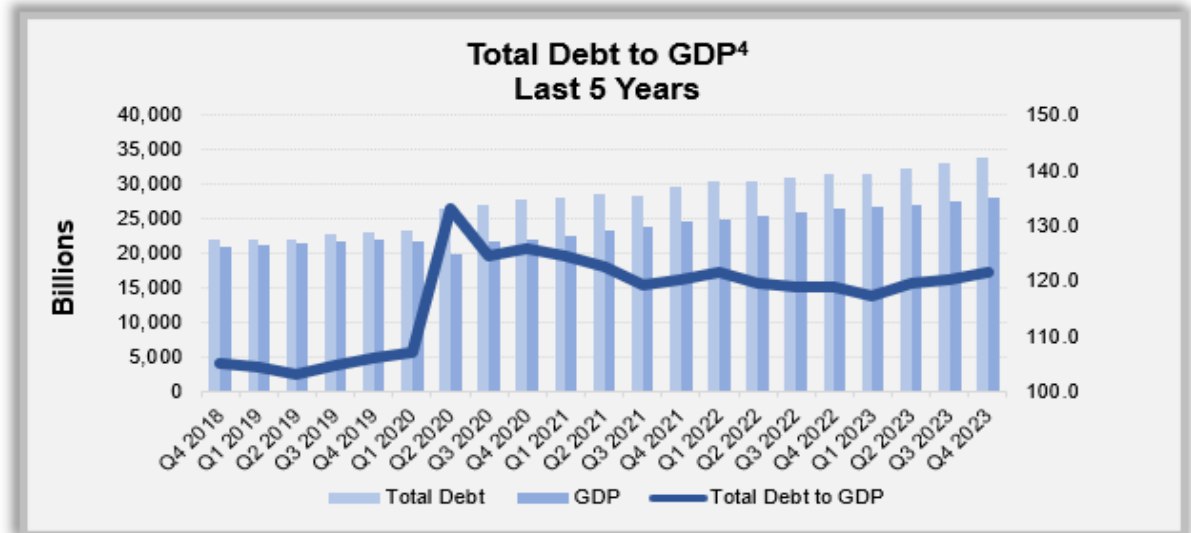
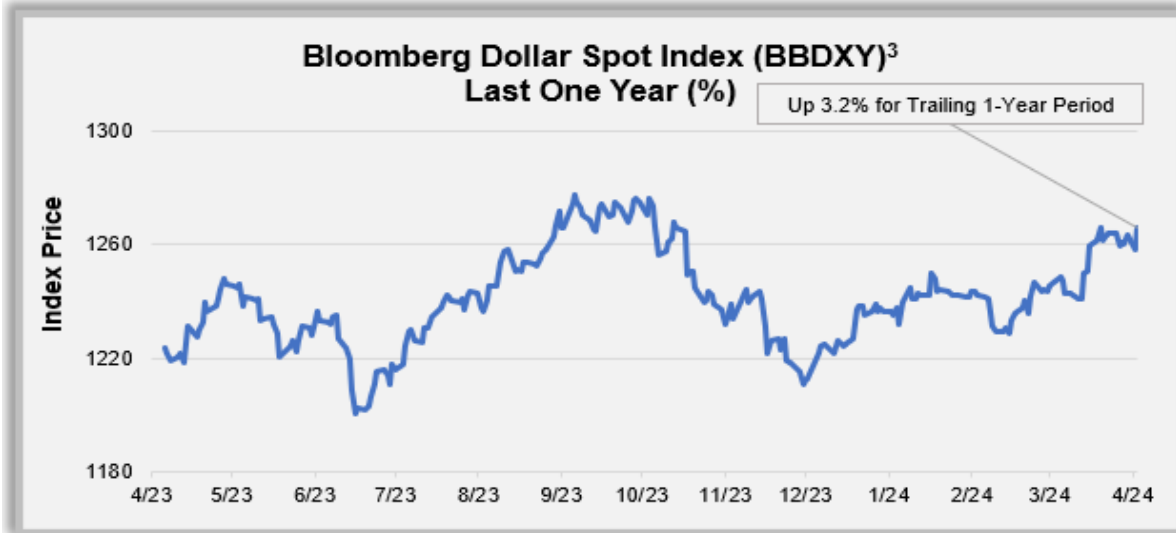
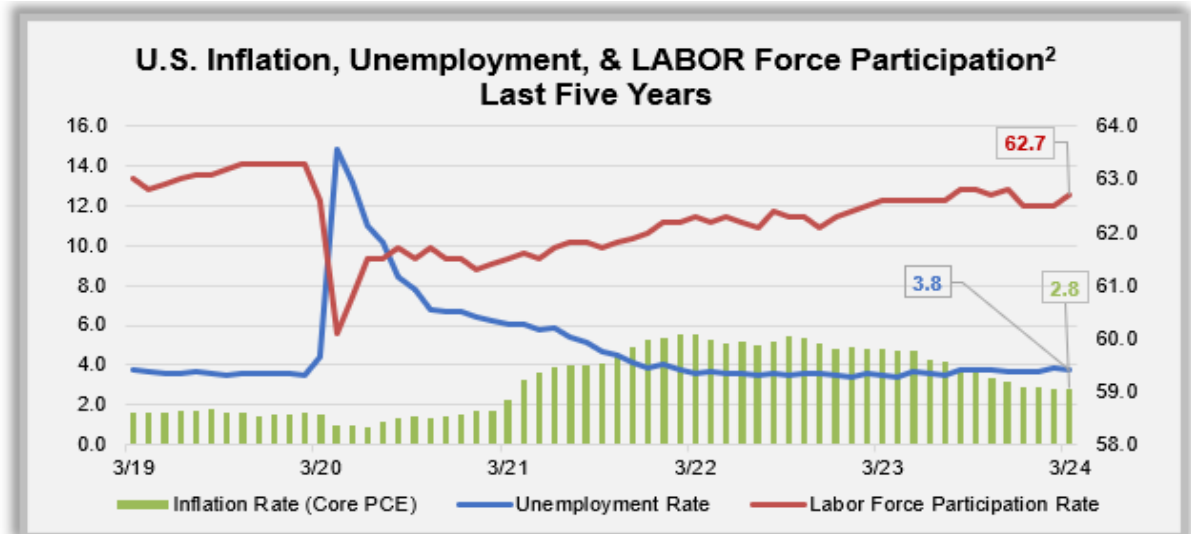
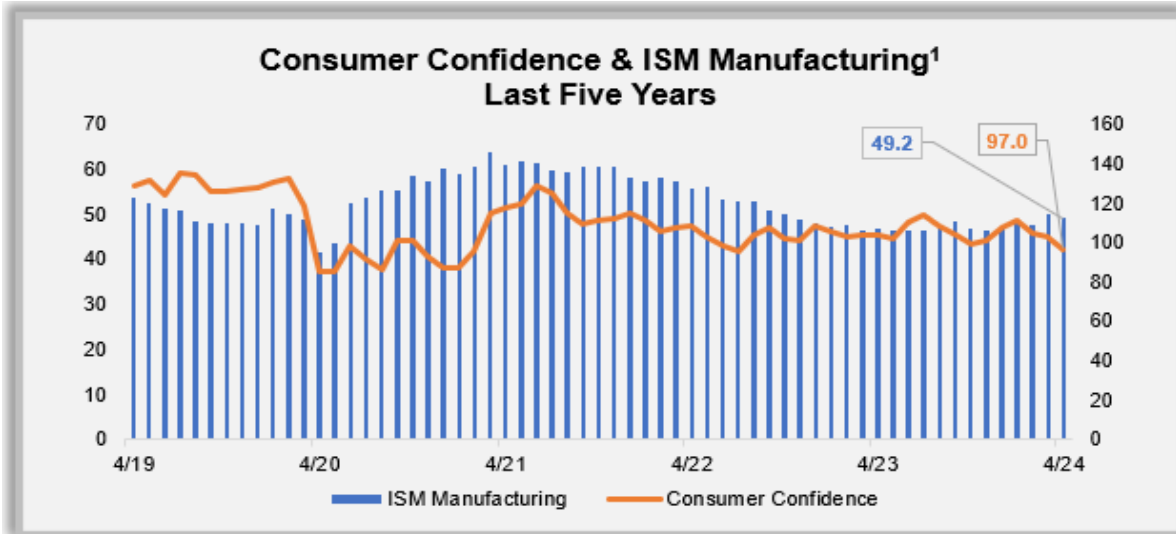
Key Macro Indicators*



*The information on the "Key Macro Indicators" charts is the best available data as of 4/30/24 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 4/30/24 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



Recent Themes

- The U.S. Federal Reserve held its benchmark overnight borrowing rate unchanged in a range between 5.25% and 5.5% during its recent meeting ending May 1
 - “Inflation has eased over the past year but remains elevated. In recent months, there has been a lack of further progress toward the Committee’s 2 percent inflation objective,” the U.S. Federal Reserve statement said
- The U.S. 10-year Treasury yield ended April at 4.69% after being 3.88% at the end of both 2022 and 2023, 1.52% at the end of 2021, and 0.93% at the end of 2020
- Global equities (MSCI All Country World Investable Index) declined 3.4% in April

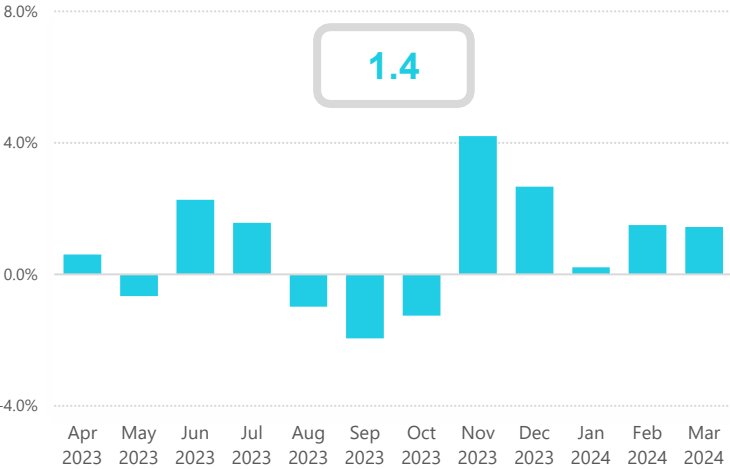
What to Watch

- Interest rates and central bank actions
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Artificial intelligence including research developments, applications, and infrastructure investment
- Stewardship and ESG-related developments
 - Two-thirds (67%) of public company directors report increasing their board composition disclosures—including director skillsets and diversity—in response to investor focus on board quality, per National Association of Corporate Directors [research](#)

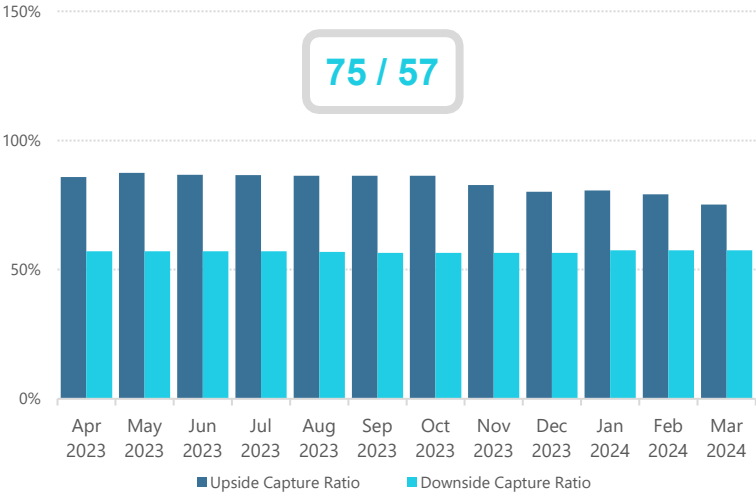
Total Fund Summary as of March 2024



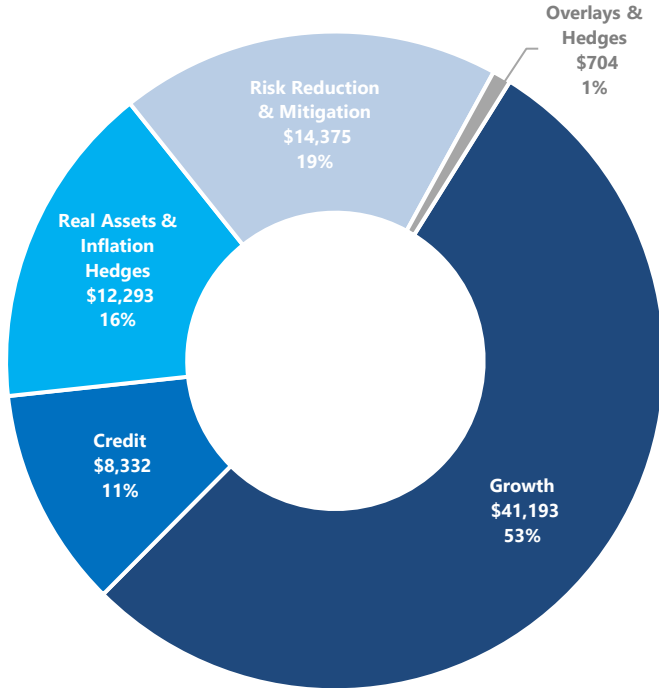
Monthly Return (net)



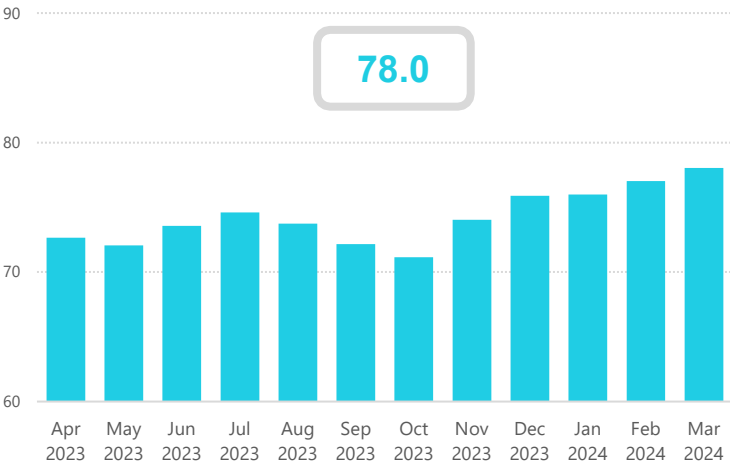
Upside / Downside Capture (%)



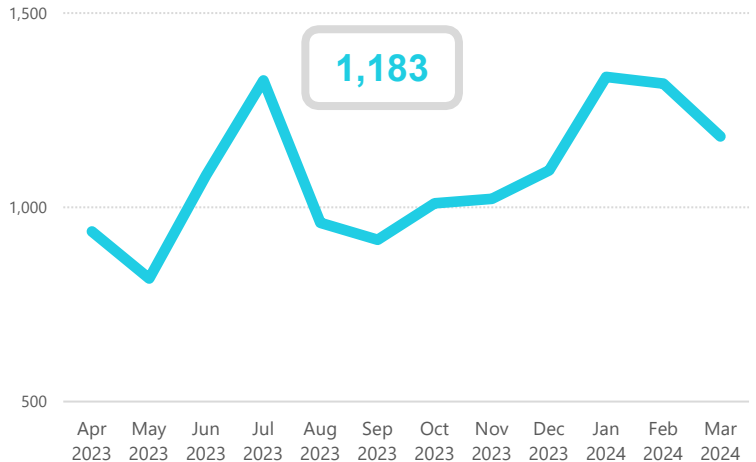
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

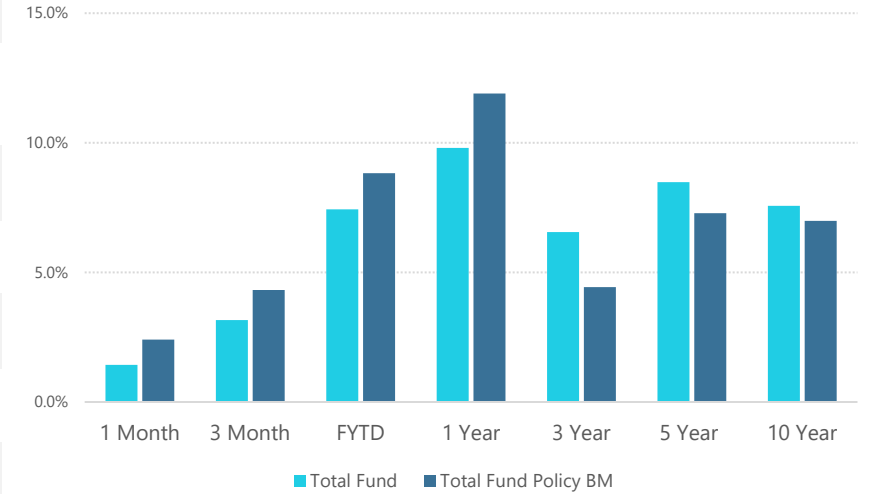


Historical Net Performance as of March 2024



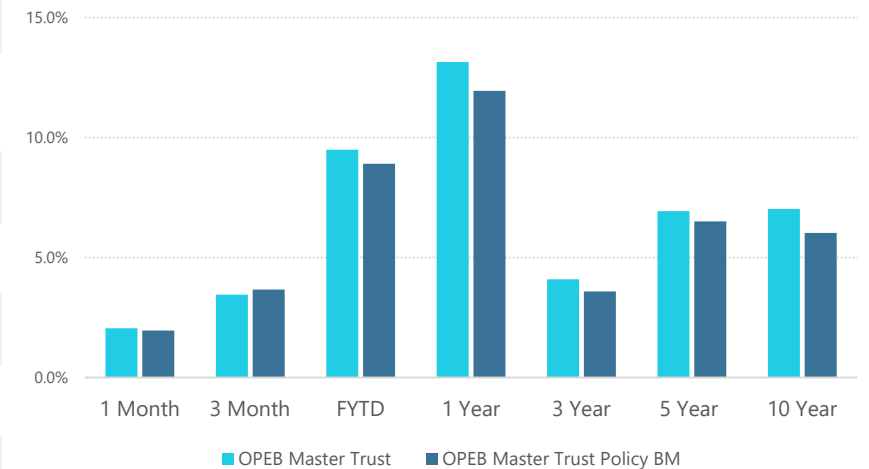
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	78,031	100.0%	100.0%	1.4%	3.2%	7.4%	9.8%	6.6%	8.5%	7.6%
Total Fund Policy BM				2.4%	4.3%	8.8%	11.9%	4.4%	7.3%	7.0%
7% Annual Hurdle Rate				0.6%	1.7%	5.2%	7.0%	7.0%	7.0%	7.0%
Growth	41,193	52.8%	53.0%	1.8%	5.0%	10.6%	15.2%	9.1%		
Growth Policy BM				3.5%	8.1%	14.1%	20.7%	6.5%		
Credit	8,332	10.7%	11.0%	1.2%	3.4%	10.9%	13.6%	5.6%		
Credit Policy BM				0.8%	3.3%	10.2%	12.1%	3.2%		
Real Assets & Inflation Hedges	12,293	15.8%	17.0%	1.5%	-0.2%	-0.4%	-1.6%	5.9%		
Real Assets & Inflation Hedges Policy BM				1.7%	-1.2%	-0.7%	-2.7%	5.2%		
Risk Reduction & Mitigation	14,375	18.4%	19.0%	0.6%	-0.2%	2.2%	1.0%	-1.3%		
Risk Reduction & Mitigation Policy BM				0.9%	-0.4%	2.2%	1.9%	-1.4%		
Overlays & Hedges	704	0.9%								



OPEB Trust

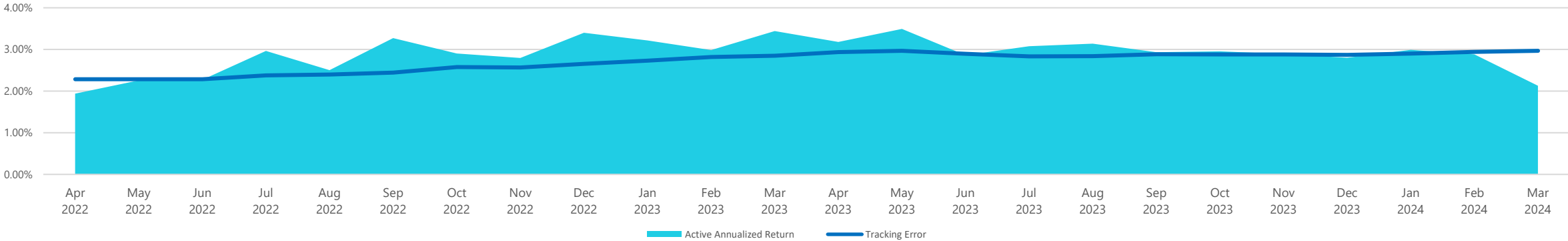
	Market Value (\$ millions)	% of Master Trust	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
OPEB Master Trust	3,790			2.1%	3.4%	9.5%	13.1%	4.1%	6.9%	7.0%
OPEB Master Trust Policy BM				2.0%	3.7%	8.9%	12.0%	3.6%	6.5%	6.0%
6% Annual Hurdle Rate				0.5%	1.5%	4.5%	6.0%	6.0%	6.0%	6.0%
OPEB Growth	1,719	45.4%	45.0%	3.2%	7.7%	15.7%	22.6%	6.5%	10.8%	
OPEB Growth Policy BM				3.4%	8.2%	15.9%	22.8%	6.0%	10.4%	
OPEB Credit	674	17.8%	18.0%	0.9%	1.1%	7.3%	9.9%	3.1%	3.7%	
OPEB Credit Policy BM				1.0%	2.5%	9.5%	12.0%	3.2%	4.0%	
OPEB Real Assets & Inflation Hedges	763	20.1%	20.0%	1.7%	0.1%	4.2%	4.8%	2.9%	3.2%	
OPEB RA & IH Policy BM				1.4%	-1.1%	0.0%	-1.8%	2.3%	3.0%	
OPEB Risk Reduction & Mitigation	632	16.7%	17.0%	0.9%	-1.2%	1.1%	0.3%	-1.9%	0.5%	
OPEB RR & M Policy BM				1.0%	-1.3%	1.0%	0.1%	-2.5%	0.1%	
OPEB HL PM Cash	0	0.0%								



Active and Excess Return as of March 2024



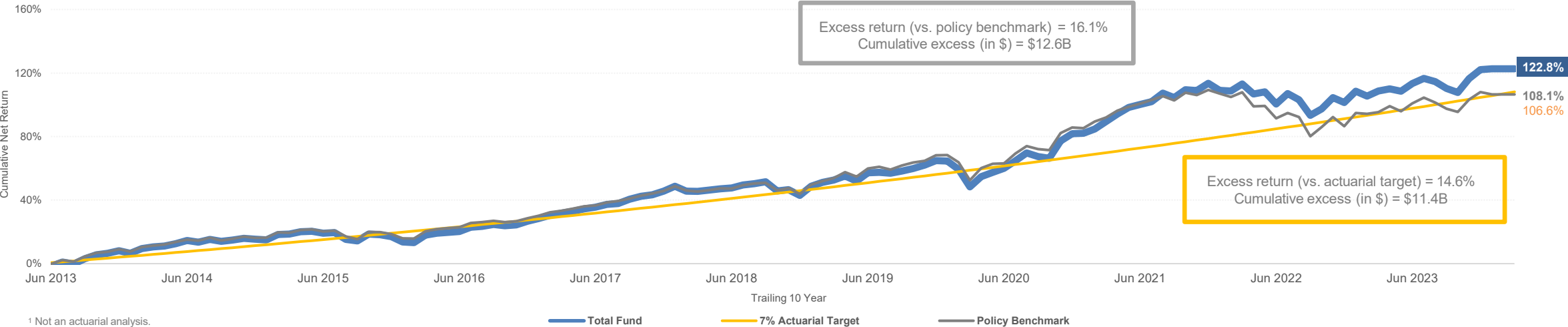
Active Return vs. Tracking Error^{1,2,3}



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Mar 2024	6.6%	4.4%	2.1%	3.0%

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.

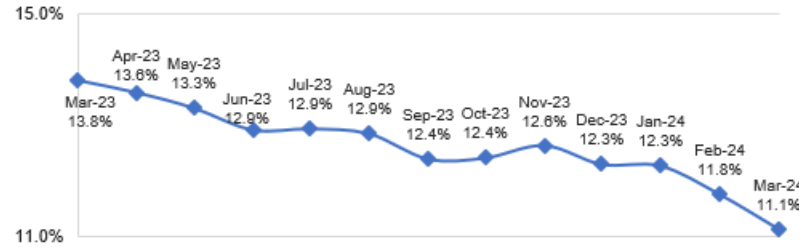
Total Fund Forecast Volatility as of March 2024*



TOTAL FUND VOLATILITY
11.2%

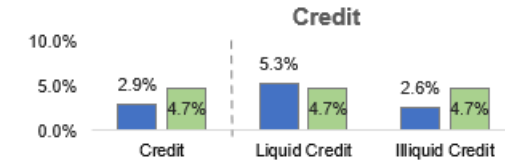
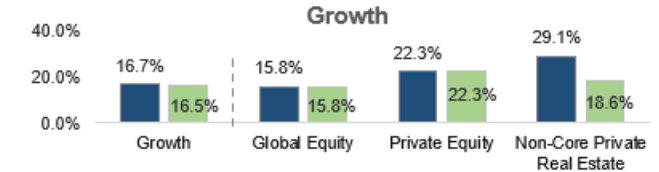
BENCHMARK VOLATILITY
11.3%

Forecasted Total Fund Volatility Trend

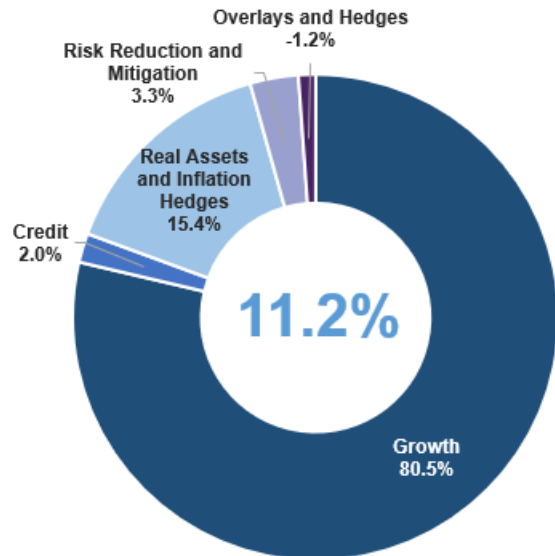


Subcategory Volatility

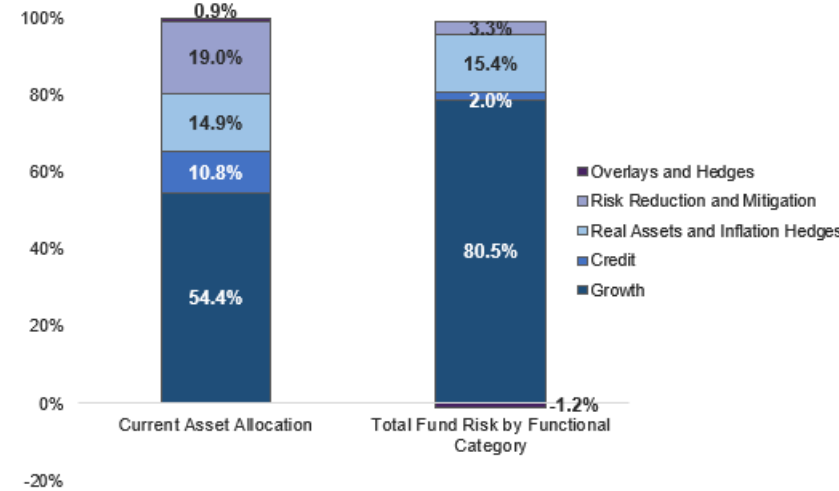
1 Subcategory volatility is on the left bar and benchmark risk is on the right bar.



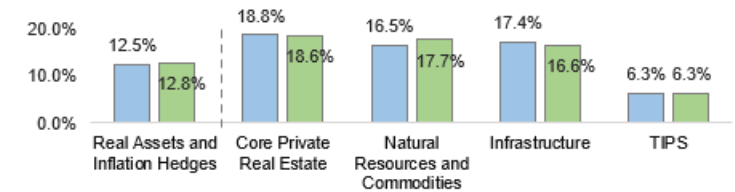
Functional Category Contributions to Total Fund Volatility



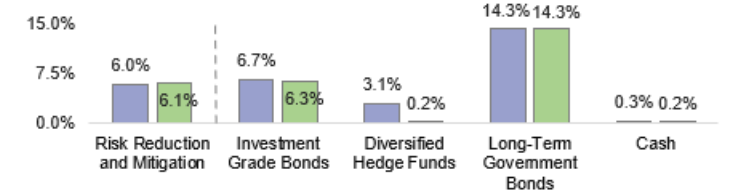
Total Fund Asset Allocation Capital-based versus Risk-based



Real Assets and Inflation Hedges



Risk Reduction and Mitigation



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.

Total Fund Forecast Tracking Error as of March 2024*



TOTAL FUND TRACKING ERROR

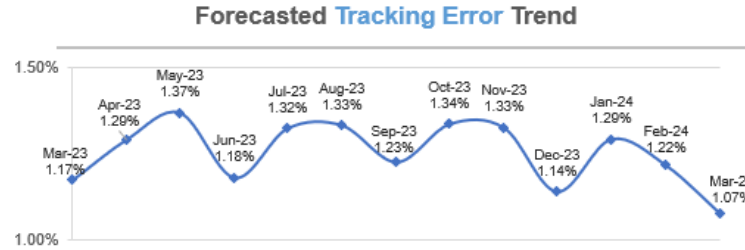
1.07%

ALLOCATION RISK

0.12%

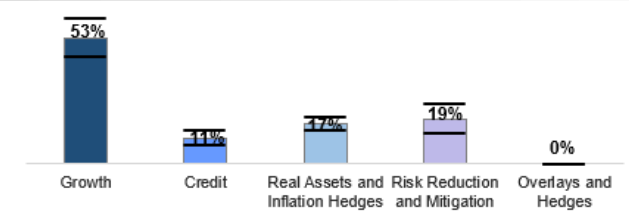
SELECTION RISK

0.96%

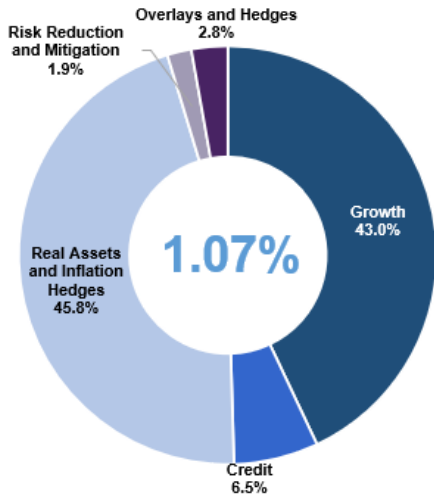


Policy Target Weight for each Functional Category

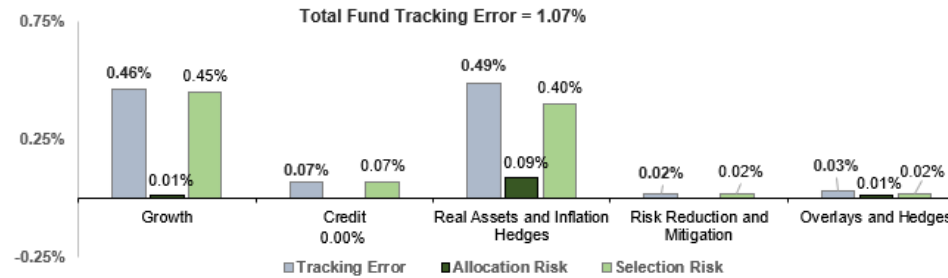
Maximum and Minimum Bands



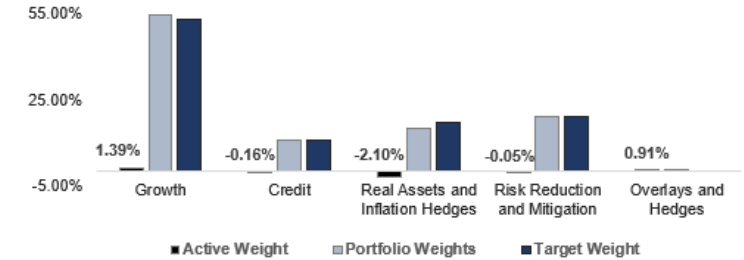
Functional Category Contributions to Tracking Error



Tracking Error Attribution



Active Weights for each Functional Category



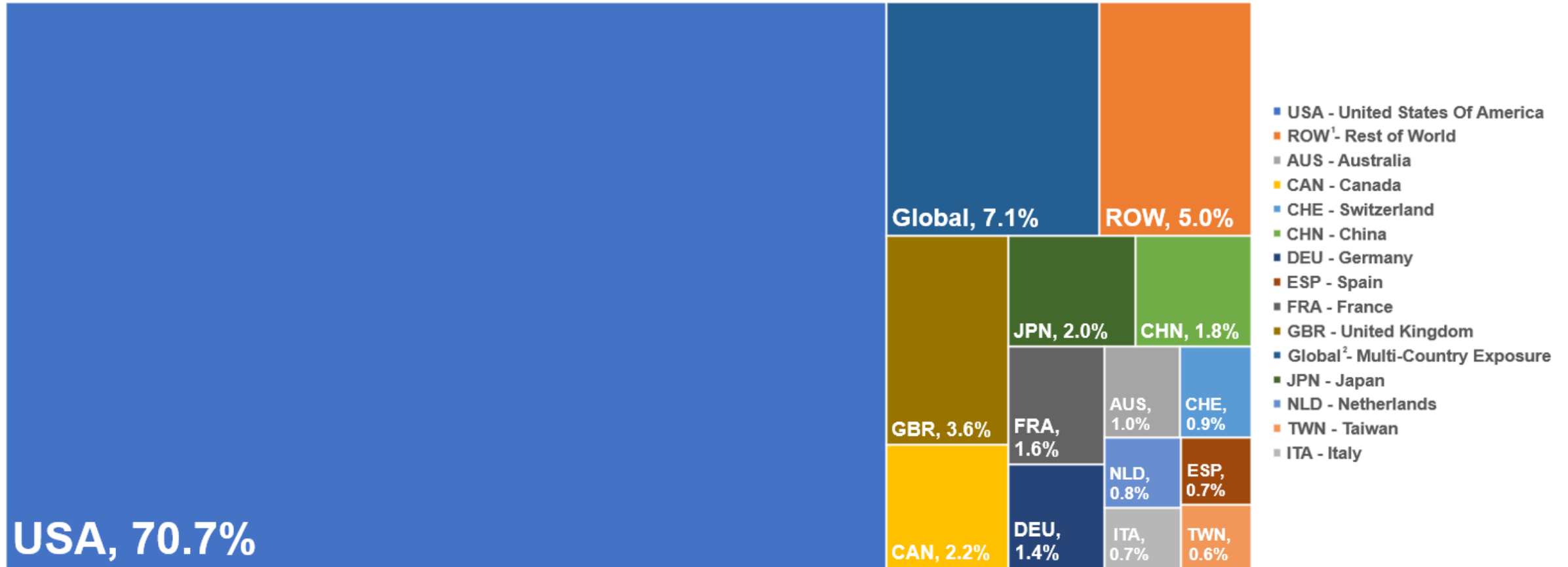
Subcategory Tracking Error

Total Fund	Global				Credit			Real Assets and Inflation Hedges				Risk Reduction and Mitigation					
1.07%	1.18%	0.43%	3.17%	12.39%	0.03	1.02%	3.90%	3.69%	4.04%	4.02%	7.91%	0.05%	0.95%	0.42%	2.92%	0.02%	0.26%
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

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 March 2024* 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.

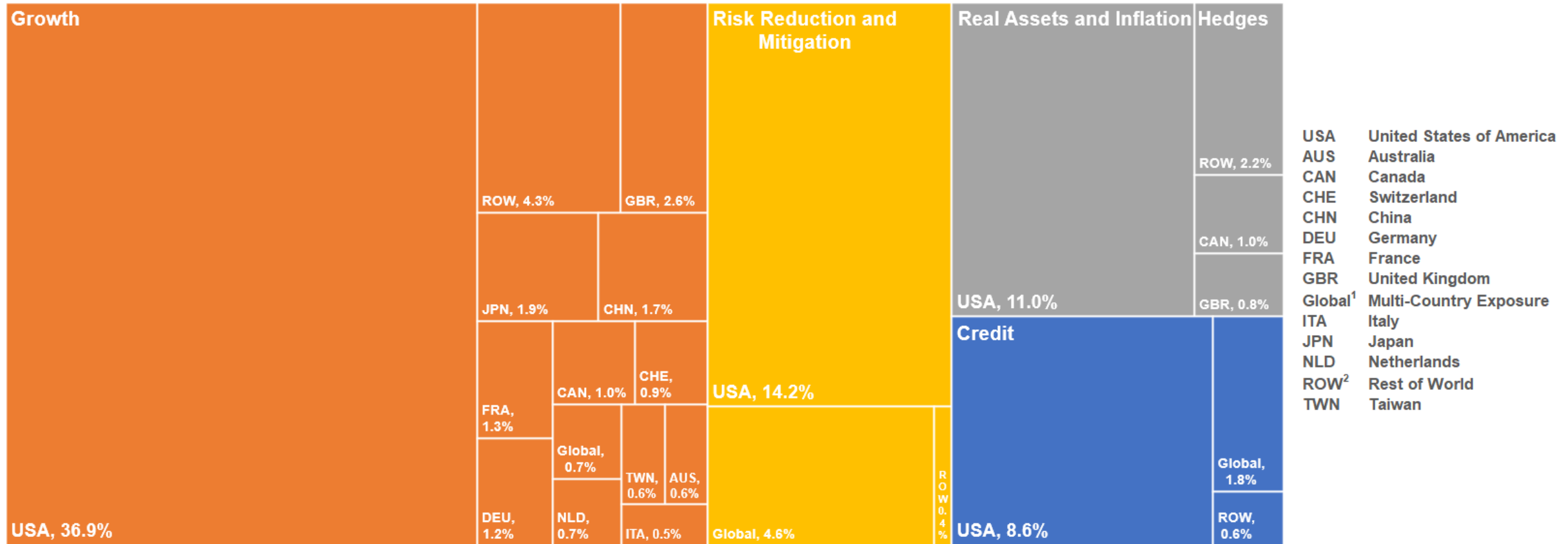
¹ "ROW - Rest of World" is sum of countries with weights below 0.5%.

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 March 2024* Ex-Overlays and Hedges



- USA United States of America
- AUS Australia
- CAN Canada
- CHE Switzerland
- CHN China
- DEU Germany
- FRA France
- GBR United Kingdom
- Global¹ Multi-Country Exposure
- ITA Italy
- JPN Japan
- NLD Netherlands
- ROW² Rest of World
- TWN Taiwan

AUM = Assets under management.

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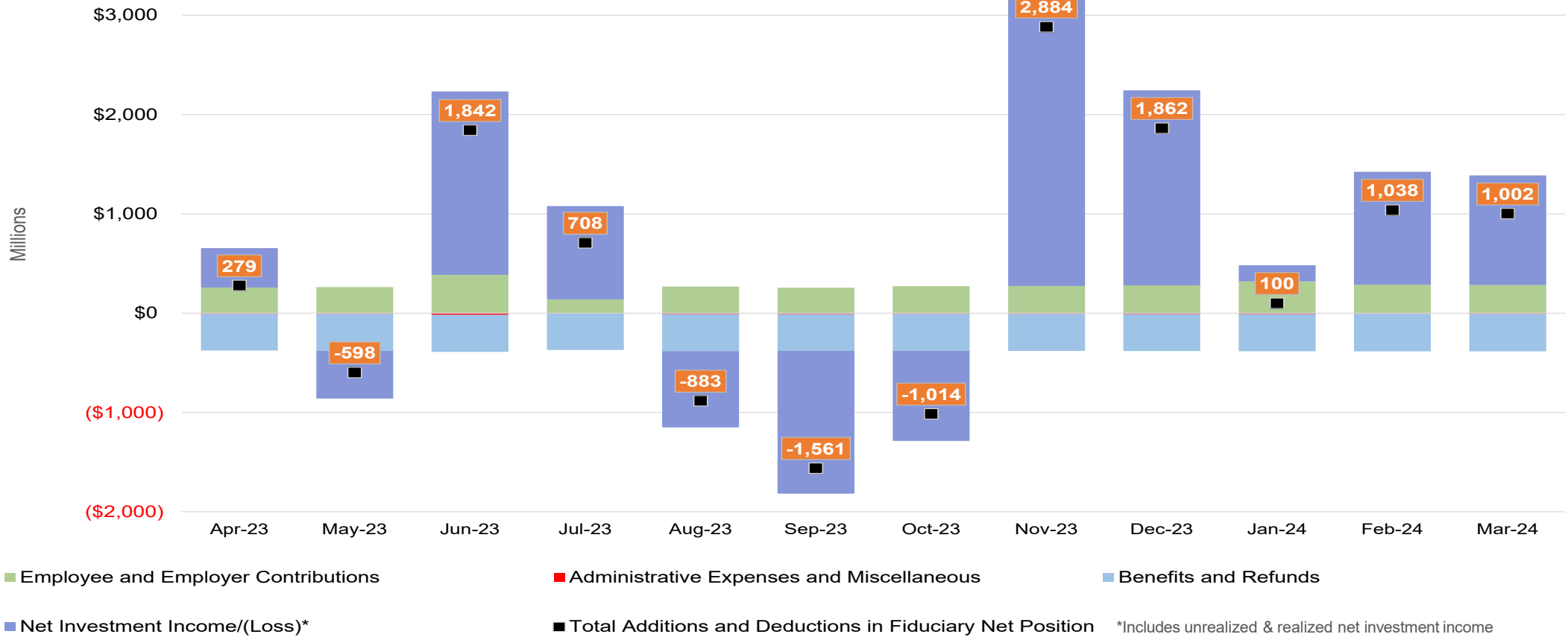
² "ROW - Rest of World" is sum of countries with weights below 0.5%.

SOURCE: MSCI BarraOne

Change In Fiduciary Net Position



Additions and Deductions in Fiduciary Net Position (Unaudited)



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	3	6	\$4.1 billion



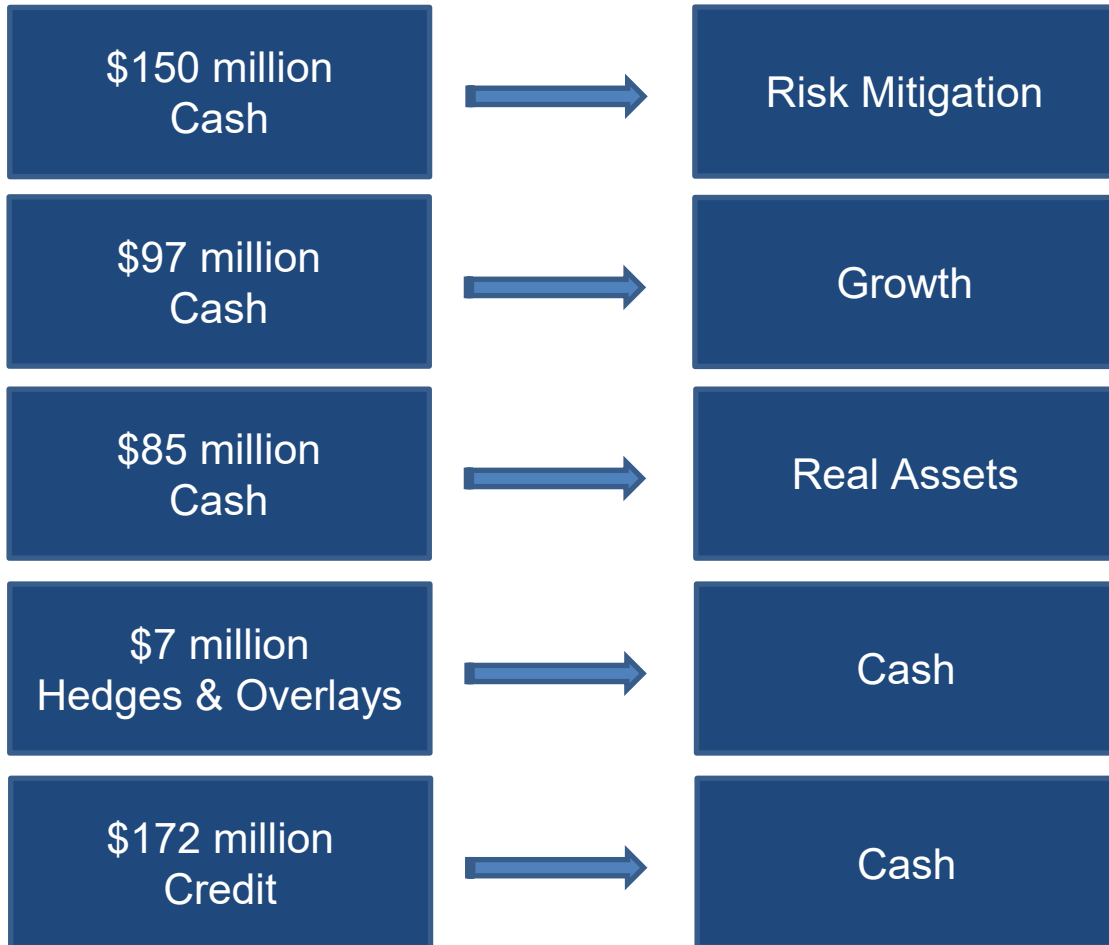
03 Portfolio Structural Updates

Portfolio Structural Updates



Portfolio Movements

Rebalancing Activity



Hedges & Overlays

Monthly Activity

Program	March Return	March Gain/(Loss)	Inception ¹ Gain/(Loss)
Currency Hedge ²	0.4%	\$6.7 Million	\$1.5 Billion
Cash/Rebalance Overlay ³	2.2%	\$33.9 Million	\$504.4 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	Selection/ Review
Hedge Funds, Credit, & Real Assets Consultant Search	✓	✓	June BOI
Risk and Analytics System, and ESG Research Services Search	✓		TBD
Real Assets Emerging Manager Program Separate Account Manager Search	✓		TBD



04 Key Initiatives & Operational Updates

Notable Initiatives and Operational Updates



Key Initiative Updates

- Planning for the April 2024 approved Strategic Asset Allocation implementation has begun.
- 2024 Offsite preparations are underway
- Adhering to the BOI-approved 2024 Work Plan and Strategic Initiatives

Team Searches and Vacancies

- Principal Investment Officer
- 4 – Senior Investment Officer
 - 2 in progress
- 2 – Financial Analyst-III
 - 2 in progress

Operational Updates

- Budget review is in process

Manager/Consultant Updates

No material updates



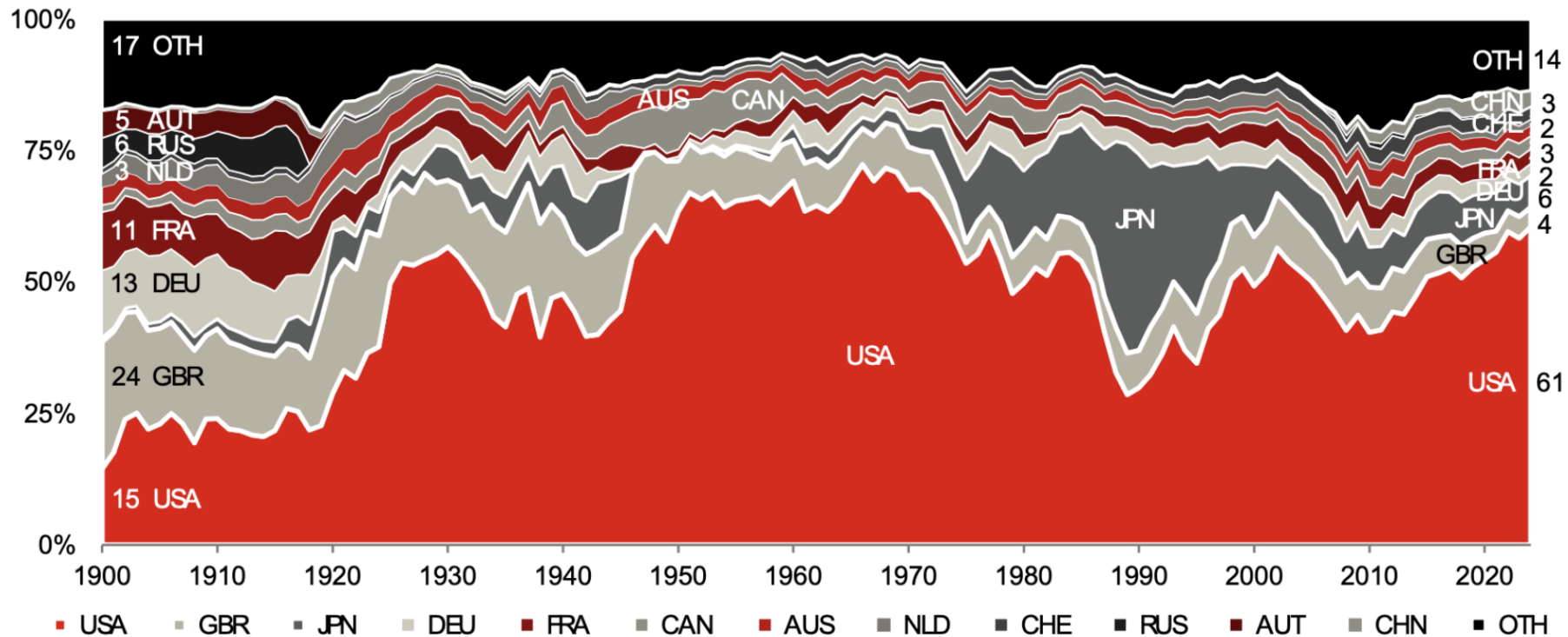
05 Commentary

Staff Chart of the Month

Evolution of Equity Markets Over Time



Figure 3: The evolution of equity markets over time from end-1899 to start-2024



Sources: Elroy Dimson, Paul Marsh and Mike Staunton, DMS Database 2024 and FTSE Russell All-World Index Series weights (recent years). Not to be reproduced without express written permission from the authors.

Quiet Period for Search Respondents



Hedge Funds, Credit, and Real Assets Consultant Search

- ✓ Albourne
- ✓ Meketa
- ✓ Mercer
- ✓ Wilshire