



For Information Only

# Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer 

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Board of Investments Meeting  
September 11, 2024

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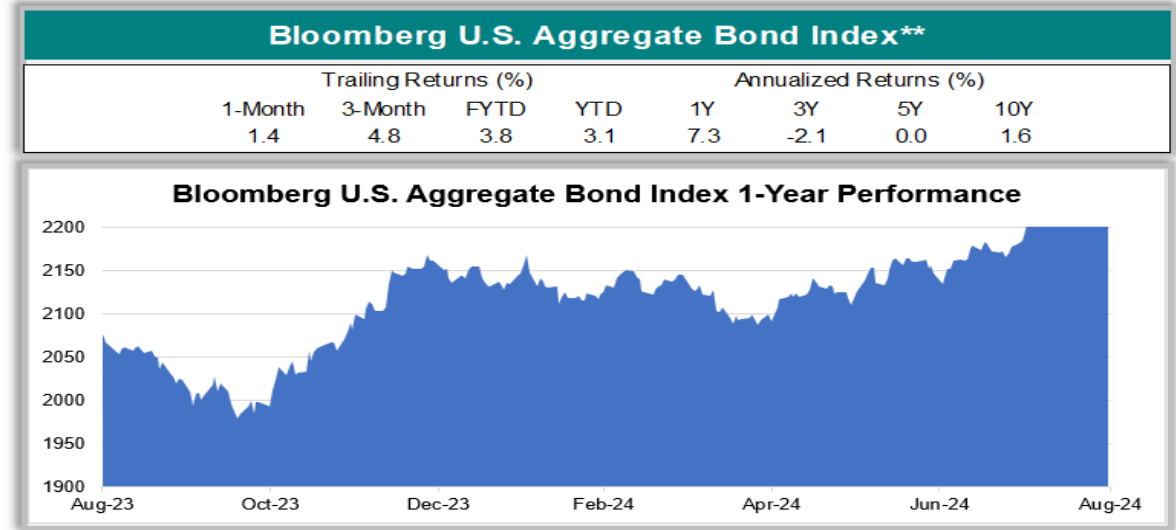
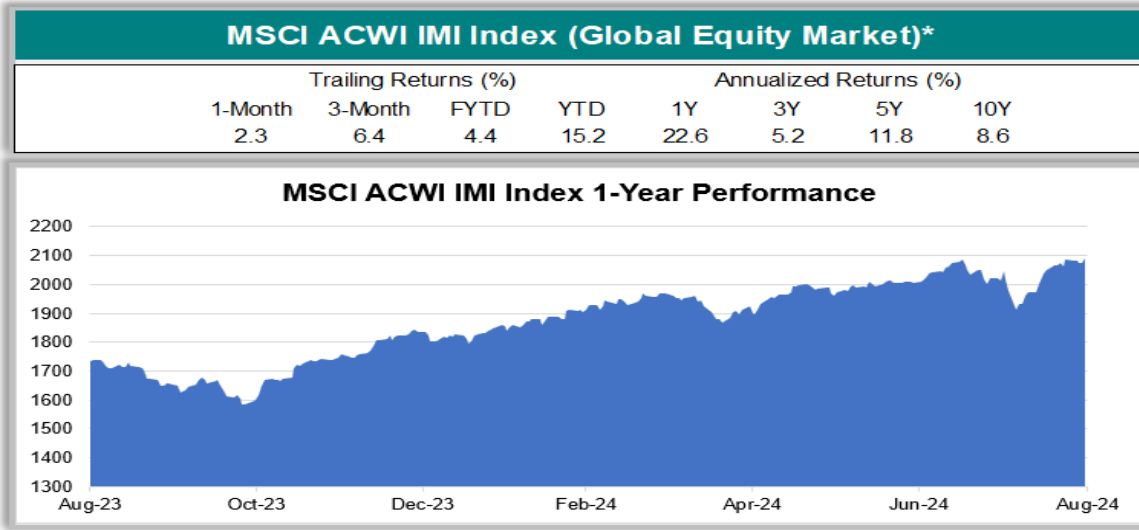
1. Market Environment
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3. Portfolio Structural Updates
4. Key Initiatives & Operational Updates
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# 01 Market Environment

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# Global Market Performance as of August 31, 2024



\*Global Equity Policy Benchmark - MSCI ACWIIMI Index

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

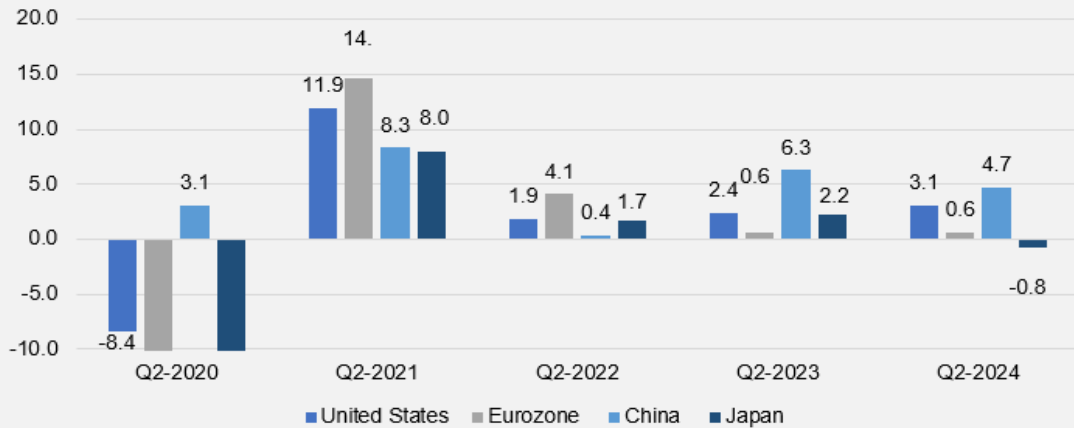
Market	Sub-Category	Index Name	1-Month	3-Month	FYTD	YTD	1 Y	3 Y	5 Y	10 Y
<b>Reference Portfolio</b>	60:40 Equity:Bond Portfolio	60% MSCI ACWI IMI/ 40% Bloomberg U.S. Aggregate Index	2.0	5.7	4.2	10.2	16.3	2.4	7.2	6.0
<b>Equity</b>	Global All Cap	MSCI ACWI IMI Total Return	2.3	6.4	4.4	15.2	22.6	5.2	11.8	8.6
	U.S. All Cap	Russell 3000 Total Return	2.2	7.3	4.1	18.2	26.1	7.9	15.2	12.3
	U.S. Large Cap	S&P 500 Total Return	2.4	7.4	3.7	19.5	27.1	9.4	15.9	13.0
	U.S. Small Cap	Russell 2000 Total Return	-1.5	7.5	8.5	10.4	18.4	0.6	9.7	8.0
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	2.7	5.1	5.3	10.9	17.7	1.7	7.6	4.5
	Emerging Markets	MSCI Emerging Markets Total Return	1.6	5.9	1.9	9.5	15.0	-3.1	4.8	2.6
<b>Private Equity</b>	Private Equity Buyout	Thomson Reuters PE Buyout Index	3.0	10.0	4.2	27.9	38.0	0.4	11.3	11.2
<b>Fixed Income</b>	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	1.4	4.8	3.8	3.1	7.3	-2.1	0.0	1.6
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	1.6	4.6	3.6	6.3	12.5	2.5	4.5	4.7
	U.S. Long Term Treasury Bonds	Bloomberg Long Term U.S. Treasury Total Return Index	2.0	7.4	5.7	0.4	4.9	-9.8	-5.1	0.7
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.6	1.6	1.3	5.8	9.8	6.3	5.5	4.7
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	0.8	3.4	2.6	3.3	6.2	-1.3	2.0	2.1
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.5	1.4	0.9	3.7	5.6	3.5	2.3	1.6
<b>Commodity</b>	Commodity Prices Index	Bloomberg Commodity Index Total Return	0.0	-5.5	-4.0	0.9	-4.4	3.7	7.0	-1.1
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	0.2	-2.3	1.6	3.3	4.9	8.9	11.1	4.5
<b>Infrastructure</b>	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	4.3	9.0	10.8	11.1	18.6	5.2	5.0	3.9
<b>Real Estate</b>	U.S. REITs	MSCI U.S. REIT Index	6.4	16.4	13.1	12.8	22.0	2.1	5.5	6.8

Source: Bloomberg

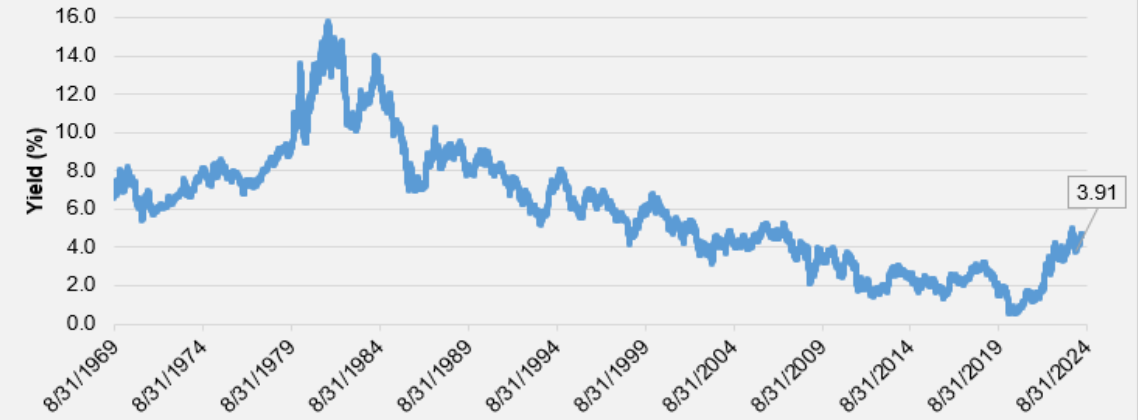
# Key Macro Indicators\*



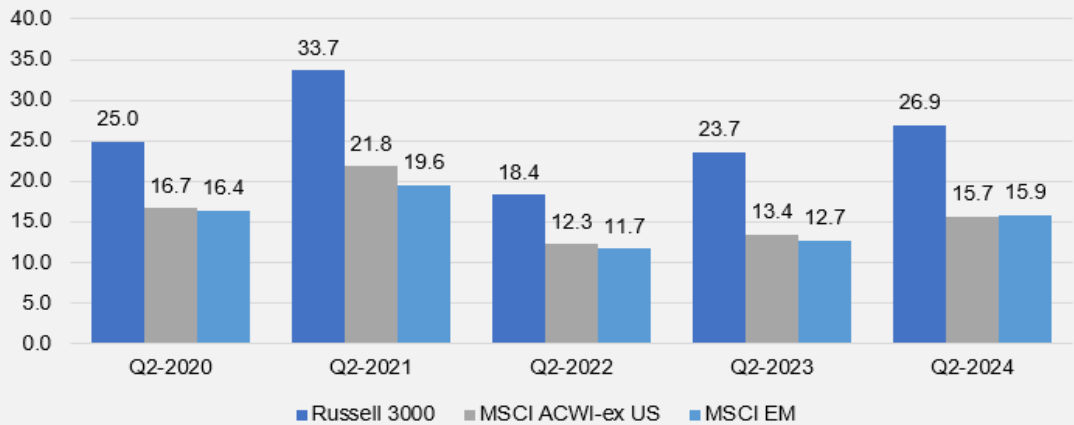
### Real GDP Growth YoY (%) - Last Five Years<sup>1</sup>



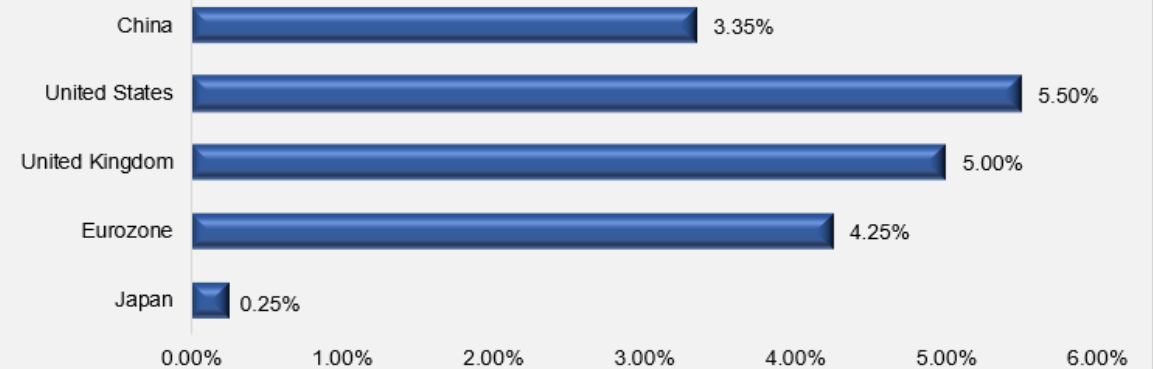
### Historical 10-Year Treasury Yield<sup>2</sup>



### Price-to-Earnings - Last Five Years<sup>3</sup>



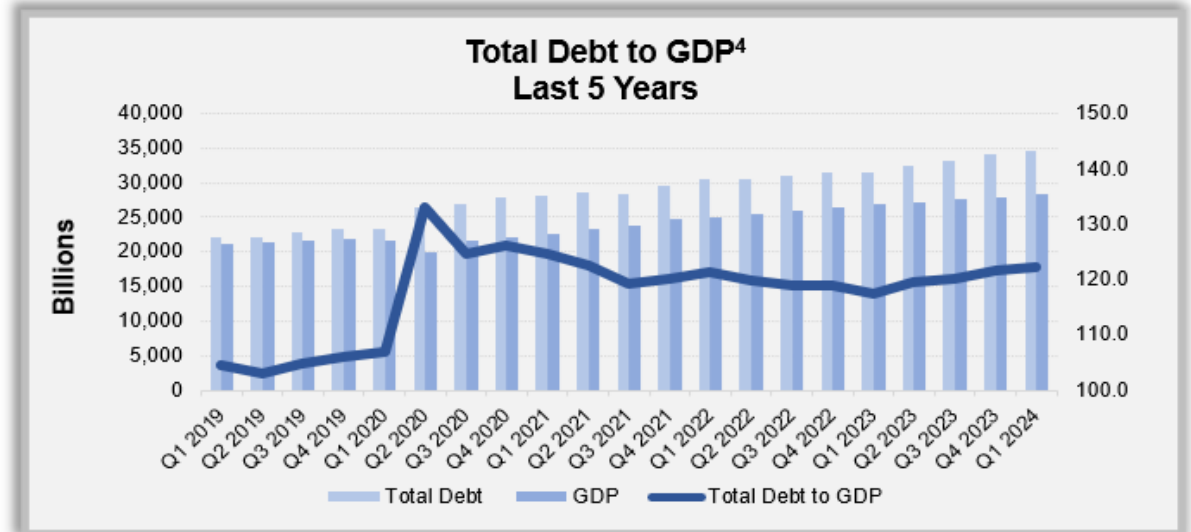
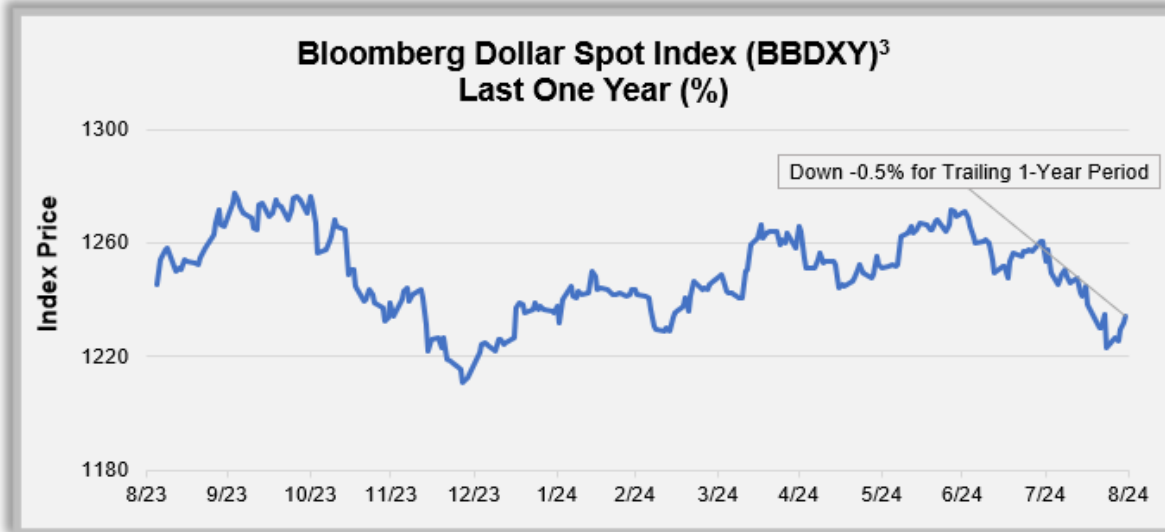
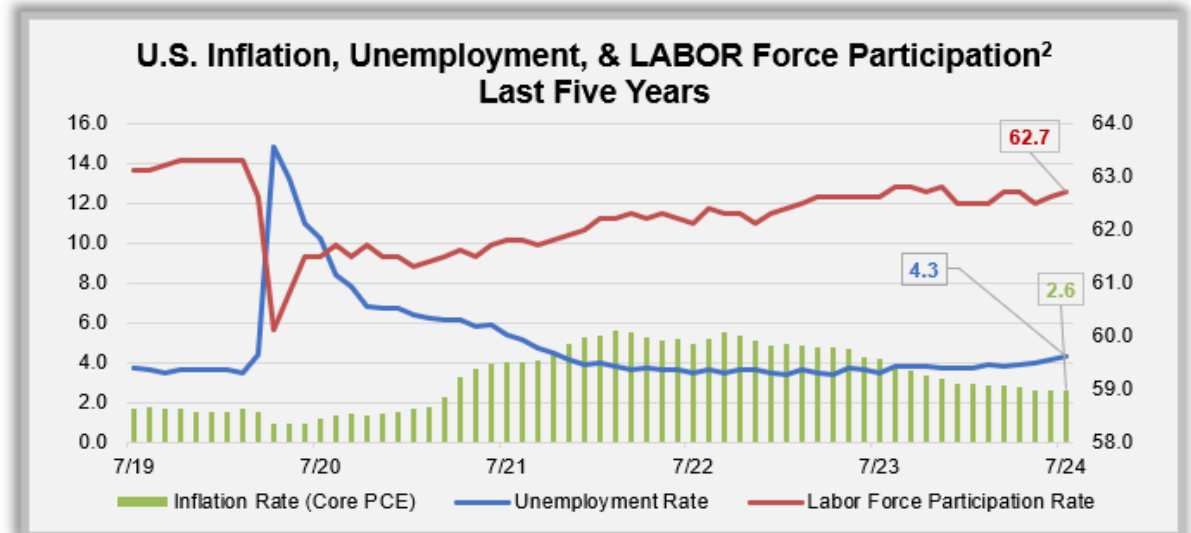
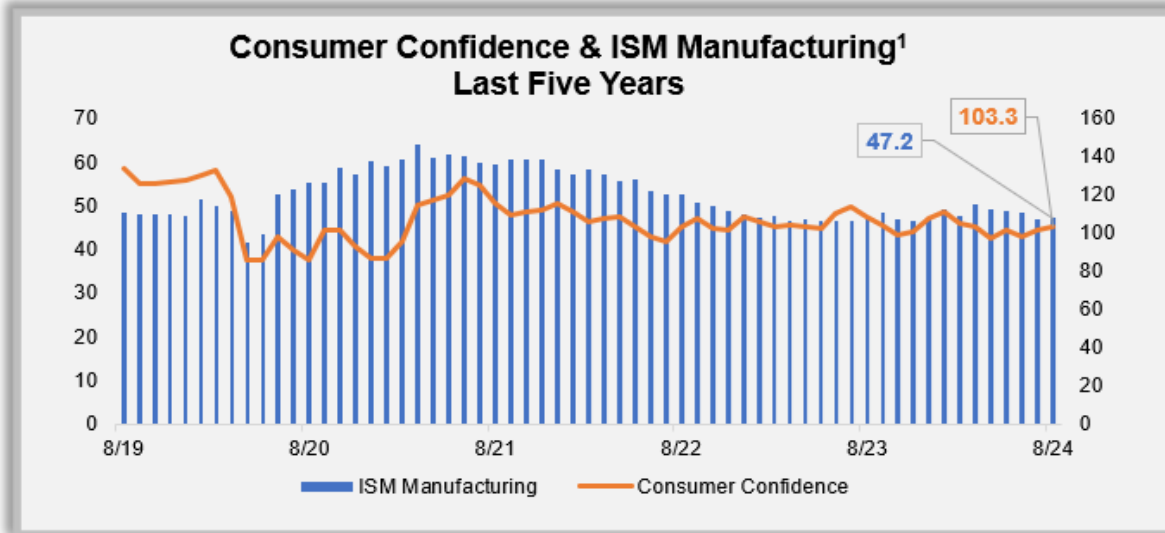
### Central Bank Rates<sup>4</sup> As of 8/31/2024



\*The information on the "Key Macro Indicators" charts is the best available data as of 8/31/24 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 8/31/24 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

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## Recent Themes

- The Federal Reserve met in July and kept its key interest rate unchanged at 5.25% to 5.50% for the 12<sup>th</sup> consecutive month
- In August, Fed Chair Jerome Powell gave a speech in Jackson Hole indicating that while the economy continues to grow at a solid pace, the inflation and labor market data show an evolving situation.
  - "The time has come for policy to adjust. The direction of travel is clear, and the timing and pace of rate cuts will depend on incoming data, the evolving outlook, and the balance of risks," Chair Powell said
- The U.S. 10-year Treasury yield ended August at 3.91% 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) increased 2.3% in August

## What to Watch

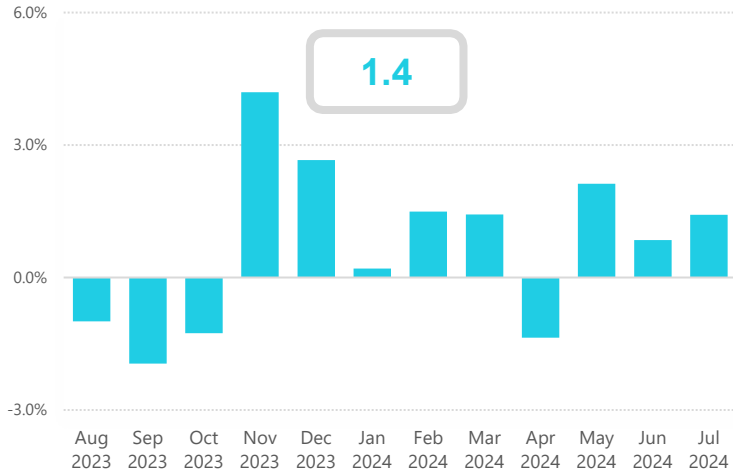
- Interest rates and central bank actions
- Economic data and trends
  - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Artificial intelligence including research developments, applications, and infrastructure investment
- Stewardship and ESG-related developments
  - Securities and Exchange Commission declined to appeal a federal appeals court decision vacating the SEC's private fund advisor rule requiring increased fee disclosures and prohibiting certain fee arrangements



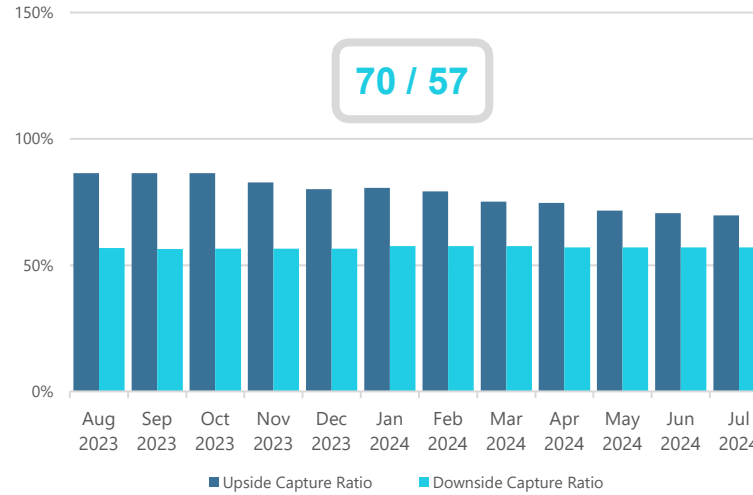
# Total Fund Summary as of July 2024



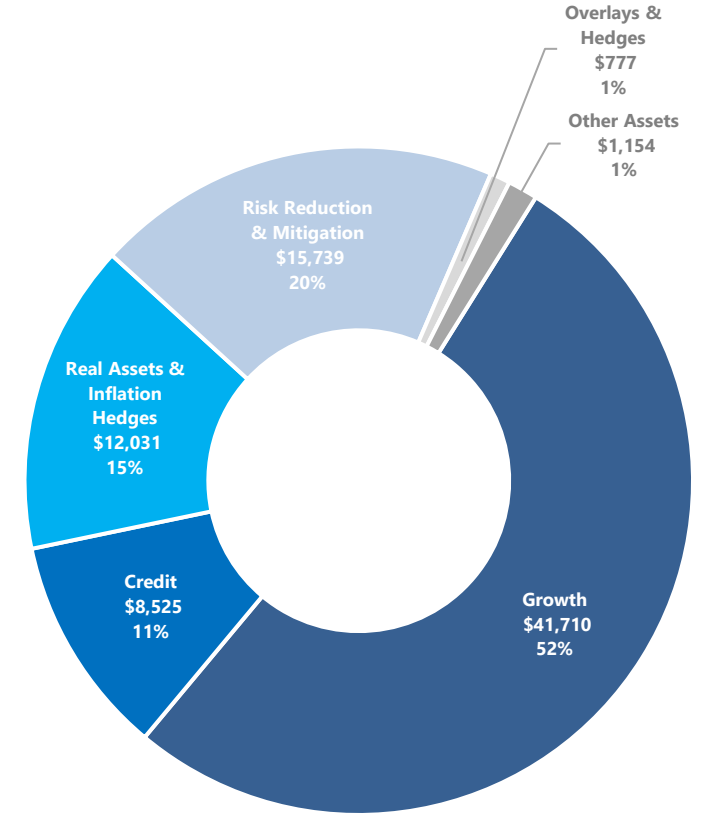
## Monthly Return (net)



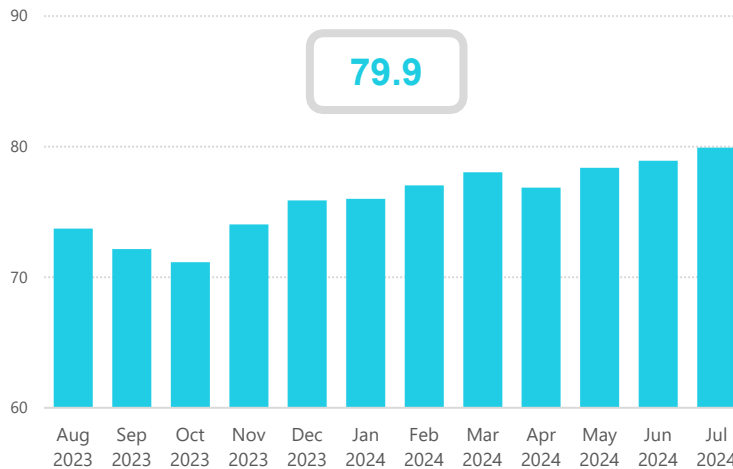
## Upside / Downside Capture (%)<sup>1</sup>



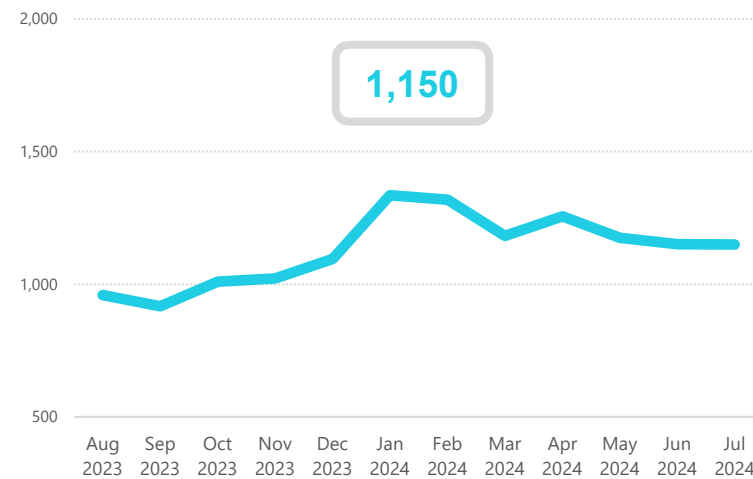
## Asset Allocation (\$ millions)<sup>2</sup>



## Total Market Value (\$ billions)



## Cash (\$ millions)



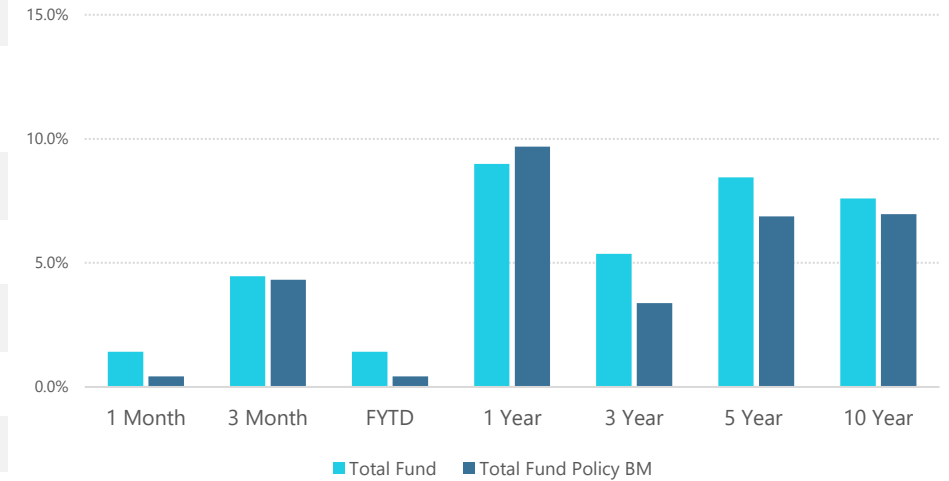
<sup>1</sup> Reference portfolio = 60% MSCI ACWI IMI / 40% Bloomberg US Aggregate Bond Index  
<sup>2</sup> Other Assets include receivables due to deferred sales and rebalancing activity pending settlement.

# Historical Net Performance as of July 2024



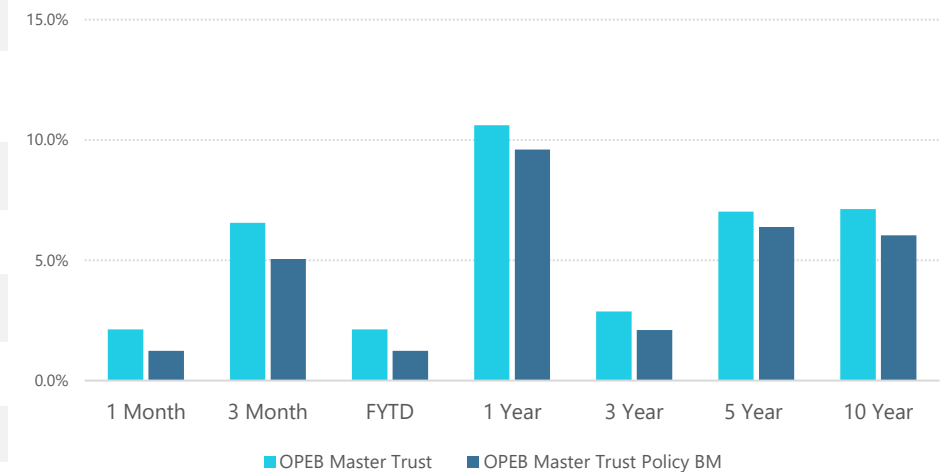
## LACERA Pension Fund

	Market Value (\$ mm)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>Total Fund</b>	<b>79,936</b>	<b>100.0%</b>	<b>100.0%</b>	<b>1.4%</b>	<b>4.5%</b>	<b>1.4%</b>	<b>9.0%</b>	<b>5.4%</b>	<b>8.4%</b>	<b>7.6%</b>
Total Fund Policy BM				0.4%	4.3%	0.4%	9.7%	3.4%	6.9%	7.0%
7% Annual Hurdle Rate				0.6%	1.7%	0.6%	7.0%	7.0%	7.0%	7.0%
<b>Growth</b>	<b>41,710</b>	<b>52.2%</b>	<b>50.5%</b>	<b>1.4%</b>	<b>5.8%</b>	<b>1.4%</b>	<b>11.6%</b>	<b>7.0%</b>	<b>12.4%</b>	
Growth Policy BM				0.2%	6.2%	0.2%	15.6%	5.2%	10.8%	
<b>Credit</b>	<b>8,525</b>	<b>10.7%</b>	<b>12.0%</b>	<b>1.8%</b>	<b>4.3%</b>	<b>1.8%</b>	<b>15.8%</b>	<b>6.4%</b>	<b>6.7%</b>	
Credit Policy BM				0.6%	1.8%	0.6%	10.7%	3.3%	4.2%	
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,031</b>	<b>15.1%</b>	<b>16.0%</b>	<b>1.3%</b>	<b>1.4%</b>	<b>1.3%</b>	<b>-0.6%</b>	<b>4.3%</b>	<b>4.8%</b>	
Real Assets & Inflation Hedges Policy BM				-0.7%	-0.3%	-0.7%	-3.6%	2.5%	4.5%	
<b>Risk Reduction &amp; Mitigation</b>	<b>15,739</b>	<b>19.7%</b>	<b>21.5%</b>	<b>1.8%</b>	<b>4.2%</b>	<b>1.8%</b>	<b>5.0%</b>	<b>-1.3%</b>	<b>1.3%</b>	
Risk Reduction & Mitigation Policy BM				1.9%	4.6%	1.9%	4.8%	-1.5%	0.7%	
<b>Overlays &amp; Hedges</b>	<b>777</b>	<b>1.0%</b>								
<b>Other Assets</b>	<b>1,154</b>	<b>1.4%</b>								



## OPEB Trust

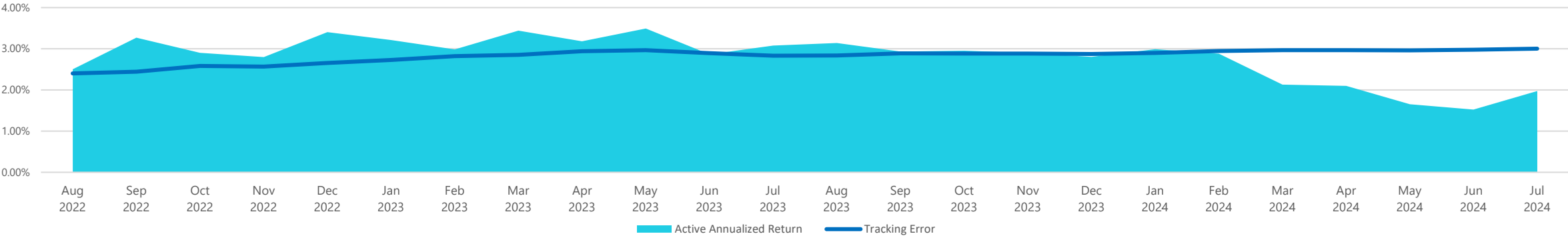
	Market Value (\$ mm)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>OPEB Master Trust</b>	<b>4,061</b>			<b>2.1%</b>	<b>6.6%</b>	<b>2.1%</b>	<b>10.6%</b>	<b>2.9%</b>	<b>7.0%</b>	<b>7.1%</b>
OPEB Master Trust Policy BM				1.2%	5.1%	1.2%	9.6%	2.1%	6.4%	6.0%
6% Annual Hurdle Rate				0.5%	1.5%	0.5%	6.0%	6.0%	6.0%	6.0%
<b>OPEB Growth</b>	<b>1,784</b>	<b>43.9%</b>	<b>45.0%</b>	<b>2.1%</b>	<b>8.3%</b>	<b>2.1%</b>	<b>16.8%</b>	<b>5.5%</b>	<b>11.0%</b>	
OPEB Growth Policy BM				1.5%	7.7%	1.5%	17.0%	5.0%	10.6%	
<b>OPEB Credit</b>	<b>687</b>	<b>16.9%</b>	<b>17.0%</b>	<b>1.4%</b>	<b>2.8%</b>	<b>1.4%</b>	<b>8.1%</b>	<b>3.1%</b>	<b>3.4%</b>	
OPEB Credit Policy BM				0.6%	2.0%	0.6%	10.0%	3.2%	3.7%	
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>663</b>	<b>16.3%</b>	<b>16.5%</b>	<b>2.4%</b>	<b>6.7%</b>	<b>2.4%</b>	<b>4.6%</b>	<b>-0.8%</b>	<b>3.4%</b>	
OPEB RA & IH Policy BM				-0.2%	0.8%	-0.2%	-2.2%	-2.2%	2.5%	
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>925</b>	<b>22.8%</b>	<b>21.5%</b>	<b>2.5%</b>	<b>5.7%</b>	<b>2.5%</b>	<b>4.0%</b>	<b>-1.9%</b>	<b>0.4%</b>	
OPEB RR & M Policy BM				2.5%	5.5%	2.5%	3.8%	-2.5%	0.0%	
<b>OPEB HL PM Cash</b>	<b>0</b>	<b>0.0%</b>								



# Active and Excess Return as of July 2024



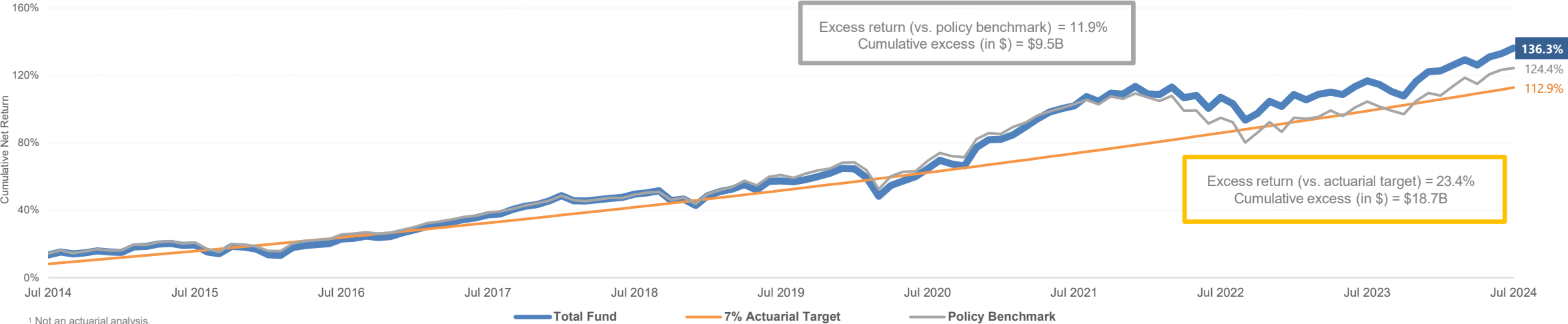
## Active Return vs. Tracking Error<sup>1,2,3</sup>



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Jul 2024	5.4%	3.4%	2.0%	3.0%

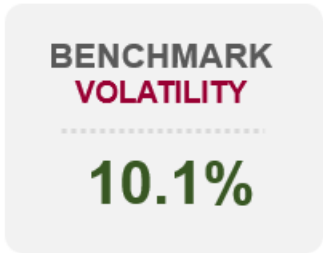
<sup>1</sup> Rolling 36 months.  
<sup>2</sup> Active return equals the difference in return between a portfolio and its benchmark.  
<sup>3</sup> Tracking error (or active risk) measures the volatility of active returns.

## Excess Return<sup>1</sup>

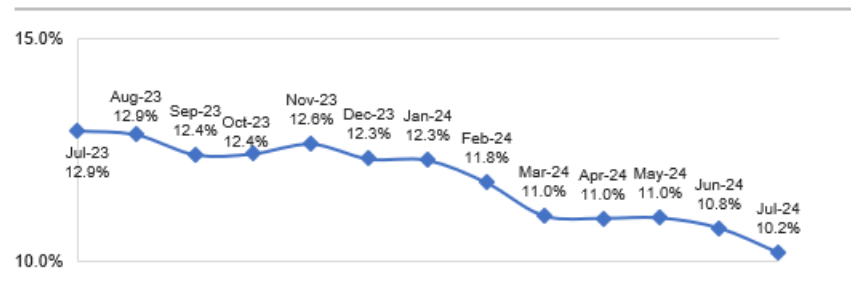


<sup>1</sup> Not an actuarial analysis.

# Total Fund Forecast Volatility as of July 2024\*

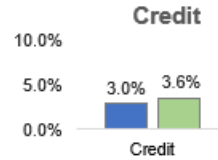
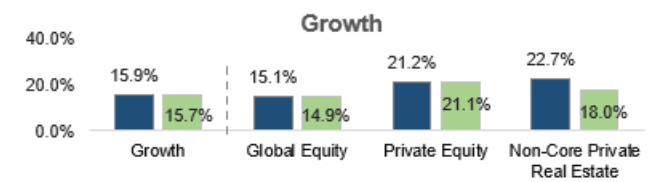


Forecasted Total Fund Volatility Trend

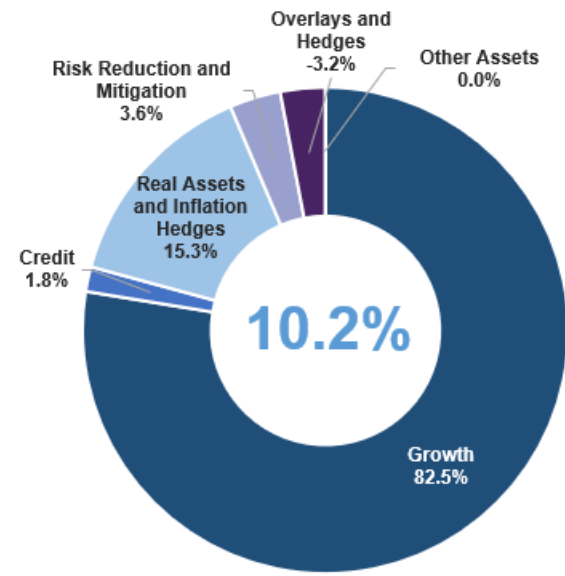


Subcategory Volatility

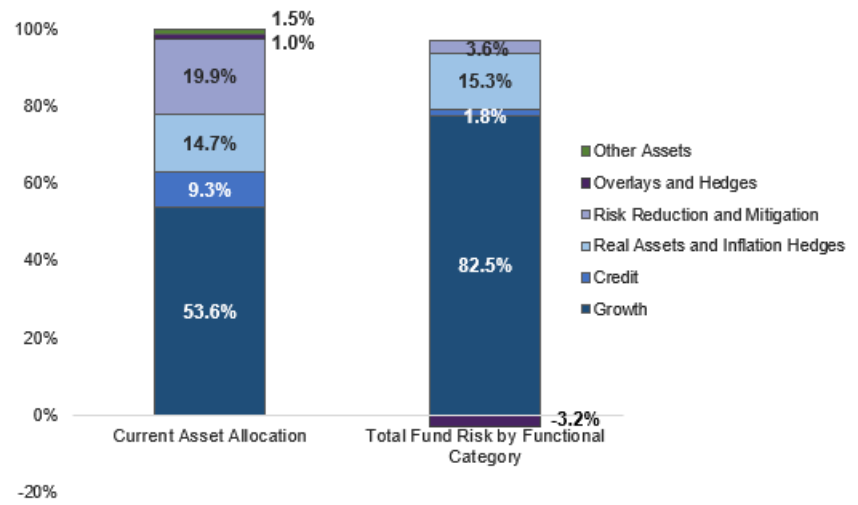
1 Subcategory volatility is on the left bar and benchmark risk is on the right bar.



Functional Category Contributions to Total Fund Volatility



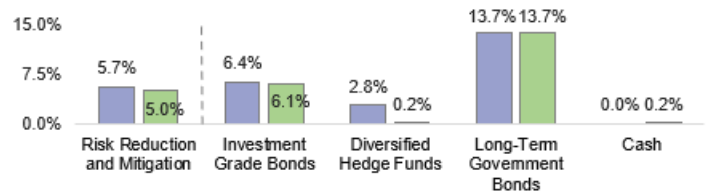
Total Fund Asset Allocation  
Capital-based versus Risk-based



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 July 2024\*



**TOTAL FUND TRACKING ERROR**

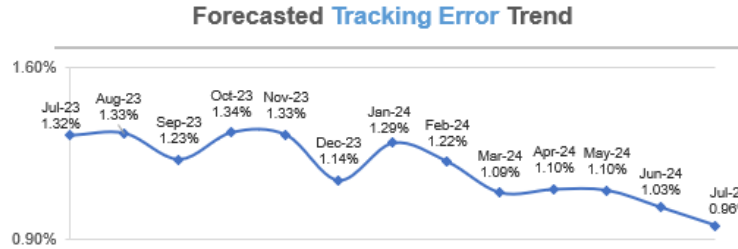
**0.96%**

**ALLOCATION RISK**

**0.12%**

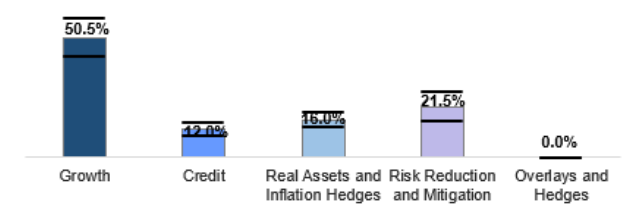
**SELECTION RISK**

**0.84%**

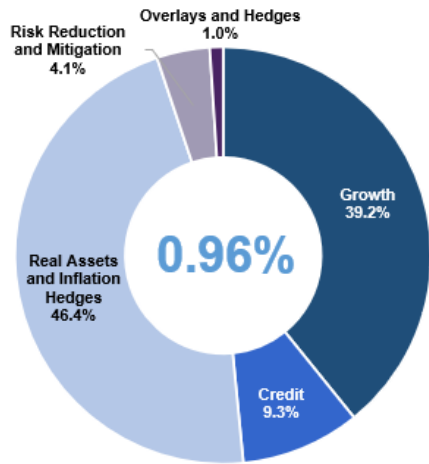


### Policy Target Weight for each Functional Category

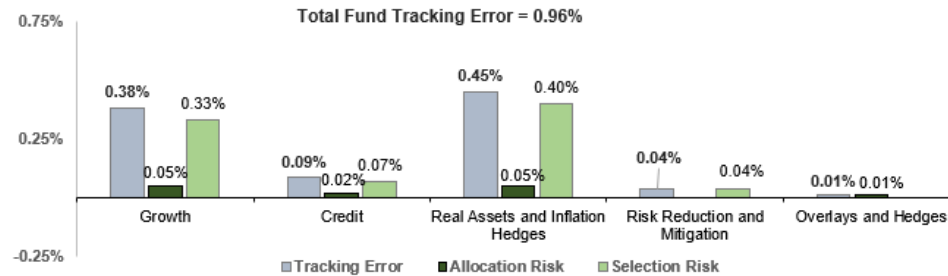
Maximum and Minimum Bands



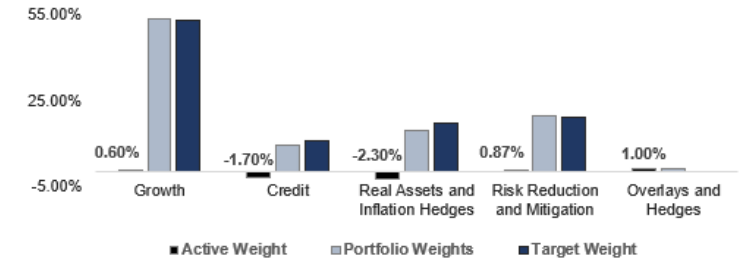
### Functional Category Contributions to Tracking Error



### Tracking Error Attribution



### Active Weights for each Functional Category



### Subcategory Tracking Error

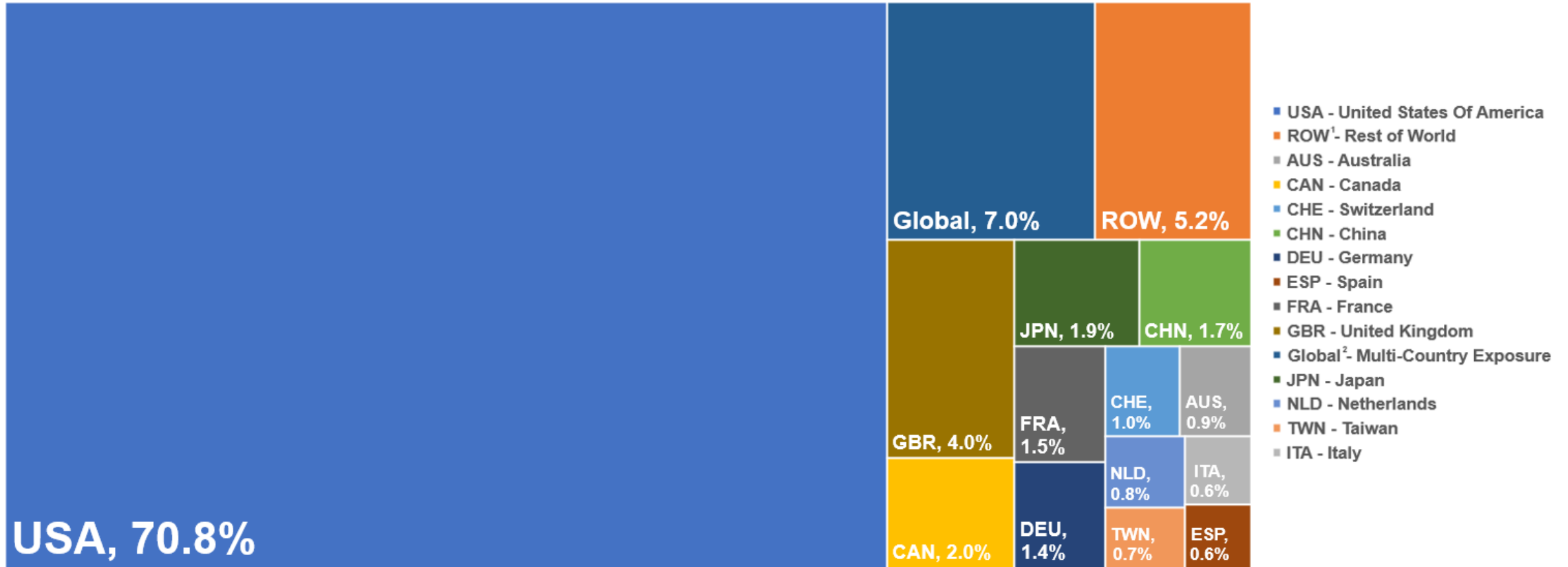
Total Fund	Global				Credit	Real Assets and Inflation Hedges					Risk Reduction and Mitigation				
0.96%	1.11%	0.49%	2.81%	7.89%	0.03	3.66%	3.81%	5.58%	8.66%	2.26%	1.01%	0.44%	2.82%	0.03%	0.19%
Total Fund	Growth	Global Equity	Private Equity	Non-Core Private Real Estate	Credit	Real Assets and Inflation Hedges	Core Private Real Estate	Natural Resources	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 July 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.

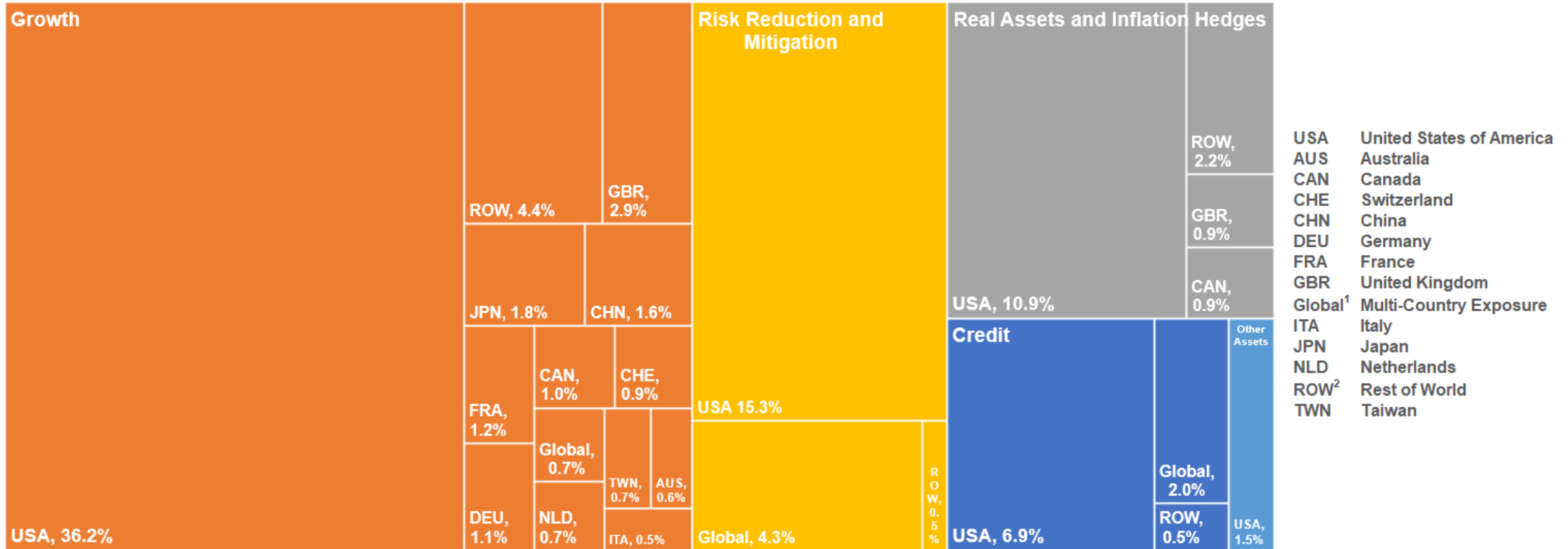
<sup>1</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

<sup>2</sup> Global represents investments made in regions where specific country allocations are not available.

SOURCE: MSCI BarraOne

# Geographic Exposures by AUM

## Functional Categories as of July 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
- Global<sup>1</sup> Multi-Country Exposure
- ITA Italy
- JPN Japan
- NLD Netherlands
- ROW<sup>2</sup> Rest of World
- TWN Taiwan

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.

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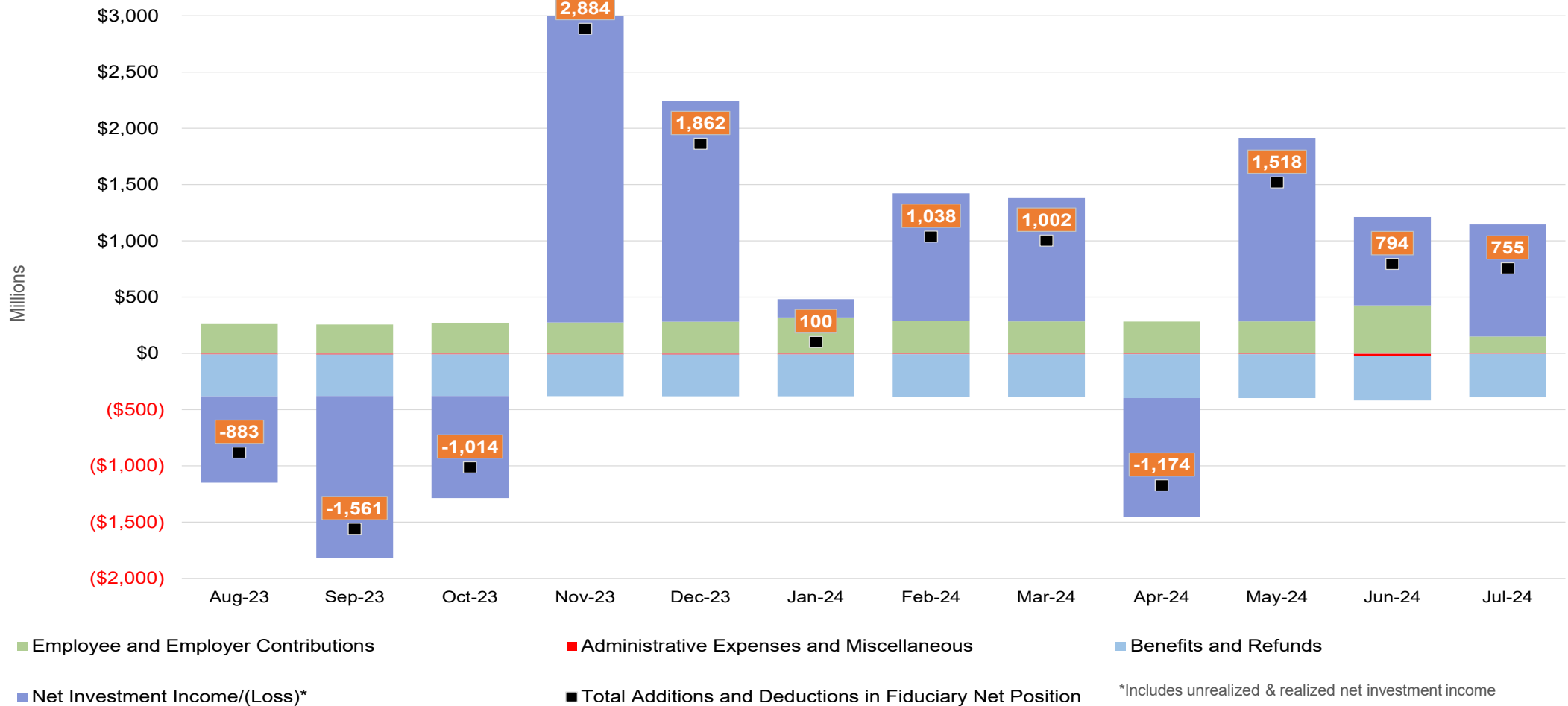
<sup>2</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

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-23	5	7	\$3.3 billion
FY-24	4	8	\$5.2 billion
FY-25	0	1	\$755.3 million





# 03 Portfolio Structural Updates

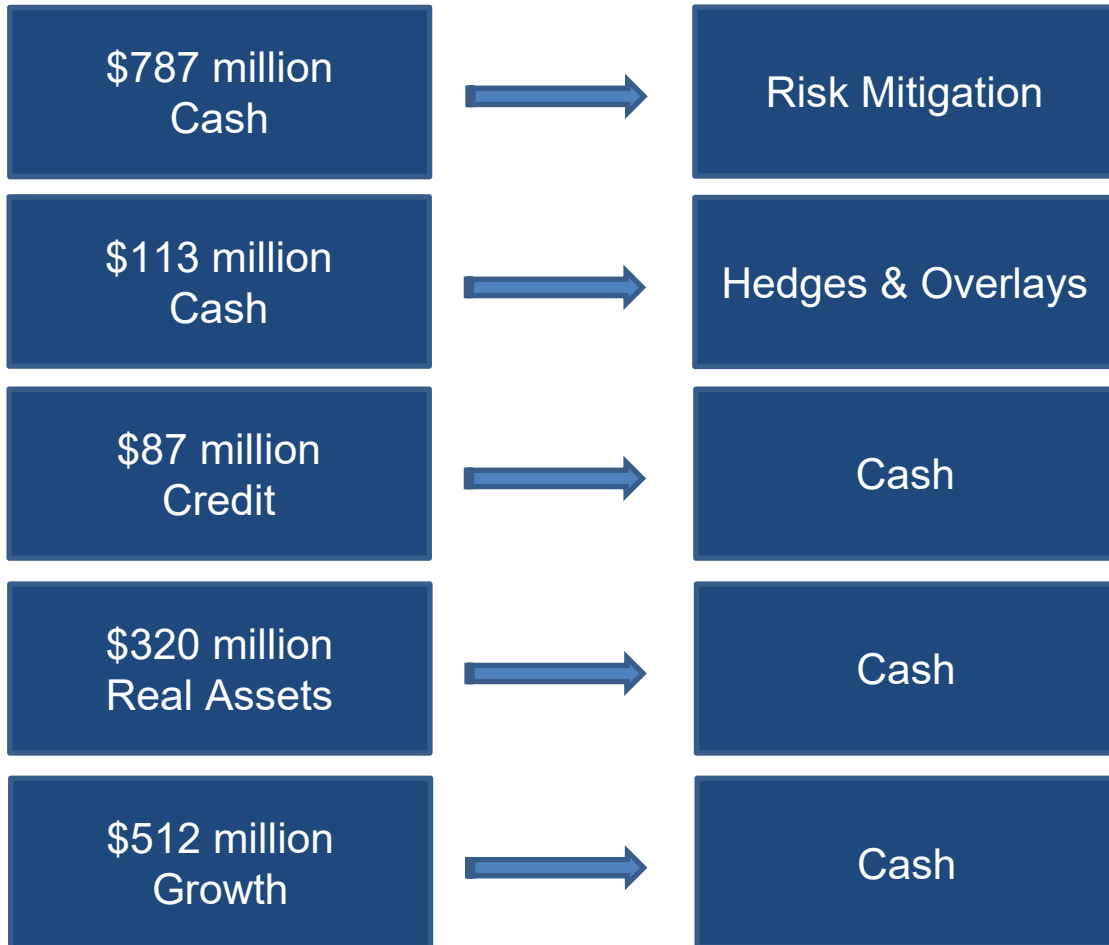
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# Portfolio Structural Updates



## Portfolio Movements

### Rebalancing Activity



## Hedges & Overlays

### Monthly Activity

Program	July Return	July Gain/(Loss)	Inception <sup>1</sup> Gain/(Loss)
Currency Hedge <sup>2</sup>	-0.8%	\$36.9 Million	\$1.6 Billion
Cash/Rebalance Overlay <sup>3</sup>	0.4%	\$19.9 Million	\$519.3 Million

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

<sup>2</sup> 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.

<sup>3</sup> 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
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

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# Notable Initiatives and Operational Updates



## Key Initiative Updates

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- The April 2024 approved Strategic Asset Allocation implementation has begun
- Adhering to the BOI-approved 2024 Work Plan and Strategic Initiatives

## Team Searches and Vacancies

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

## Operational Updates

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- Annual LACERA T.I.D.E. data collection exercise has begun

## Manager/Consultant Updates

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State Street Corporation – Total Fund – In August, Joerg Ambrosius was named President of Investment Services (IS). Joerg has been with State Street for 23 years and served as chief commercial officer in his most recent position. Joerg will continue to report to Ronald O’Hanley, Chairman and Chief Executive Officer.

Western Asset – OPEB Program – Ken Leech, Chief Investment Officer, went on leave due to an investigation into past trade allocations involving treasury derivatives. Mike Buchanan has been promoted to Chief Investment Officer, overseeing global investment management. Mike has two decades of experience at Western Asset.



# 05 Commentary

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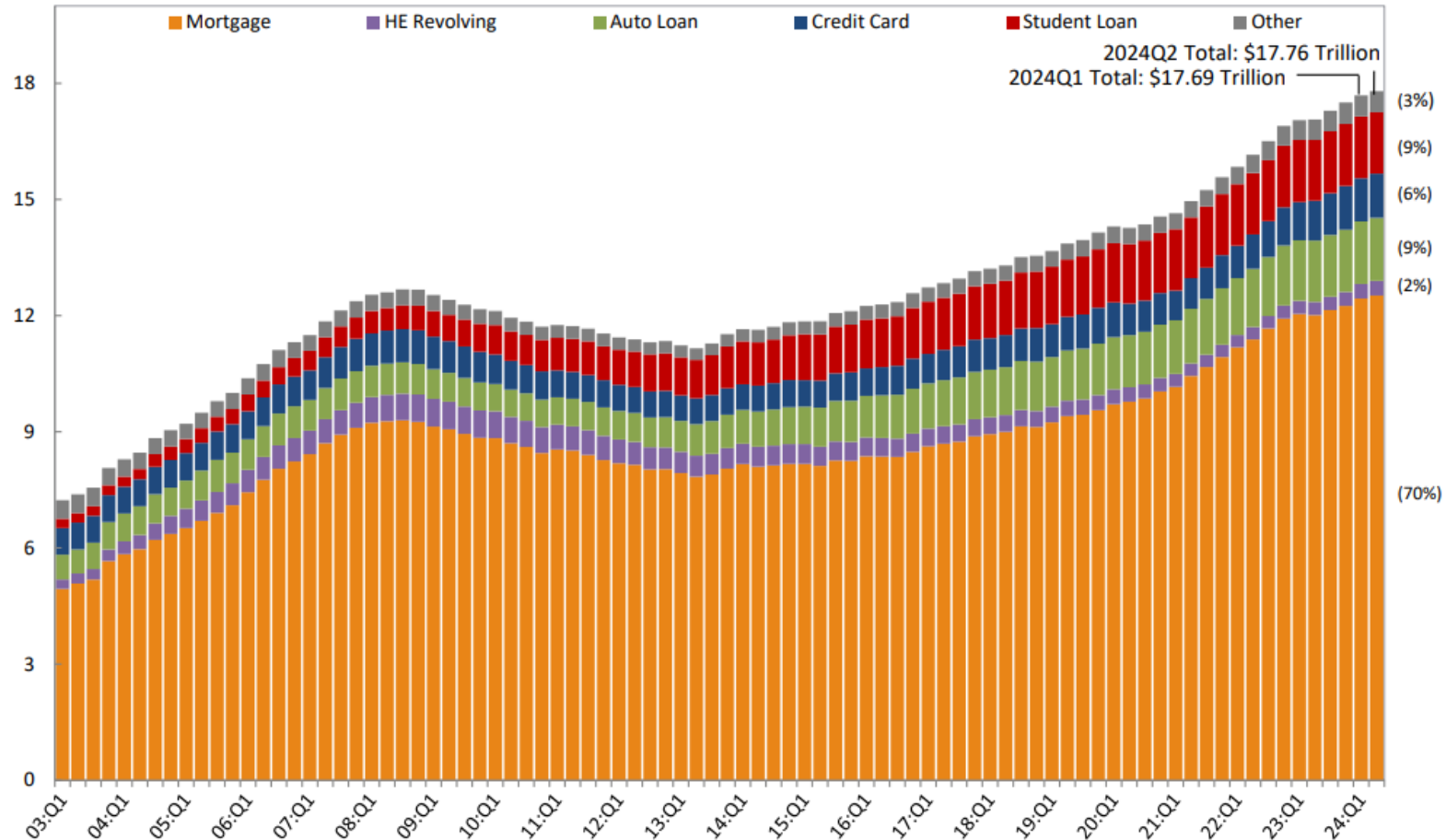
# Staff Chart of the Month

## US Aggregate Household Debt Balance Over Time



### Total Debt Balance and its Composition

Trillions of Dollars



Source: New York Fed Consumer Credit Panel/Equifax



# 06 Appendix

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# Quiet Period for Search Respondents



## Real Assets Emerging Manager Program Discretionary Separate Account Manager

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- ✓ ORG Portfolio Management
- ✓ Barings
- ✓ Belay Investment Group
- ✓ Hamilton Lane
- ✓ Cambridge Associates
- ✓ Seed Partners
- ✓ Stable Asset Management
- ✓ Wafra Inc.
- ✓ Artemis Real Estate Partners
- ✓ Aether Investment Partners
- ✓ Neuberger Berman Group
- ✓ The Townsend Group
- ✓ BGO Strategic Capital Partners
- ✓ BlackRock
- ✓ StepStone
- ✓ GCM Grosvenor

## Risk and Analytics System, and ESG Research Services Search

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- ✓ BlackRock Financial Management Inc.
- ✓ Barra, LLC
- ✓ Bloomberg Finance L.P.
- ✓ Clearwater Analytics
- ✓ eVestment Alliance, LLC
- ✓ FactSet Research Systems Inc.
- ✓ ISS STOXX GmbH
- ✓ MSCI ESG Research LLC
- ✓ Northfield Information Systems, Inc.
- ✓ Solovis, Inc.