



# Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer 

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Board of Investments Meeting

June 12, 2024

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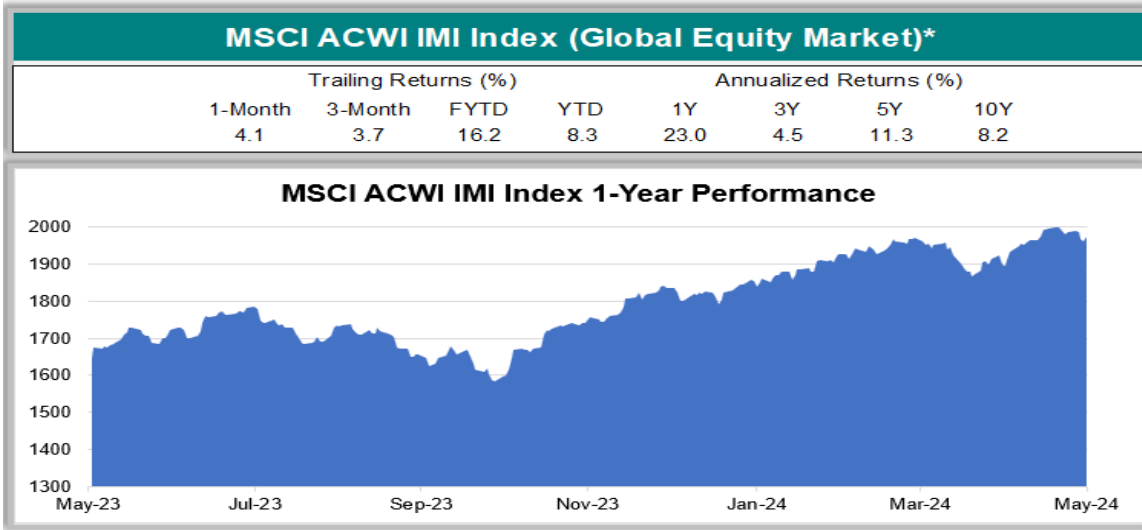
1. Market Environment
2. Portfolio Performance & Risk Updates
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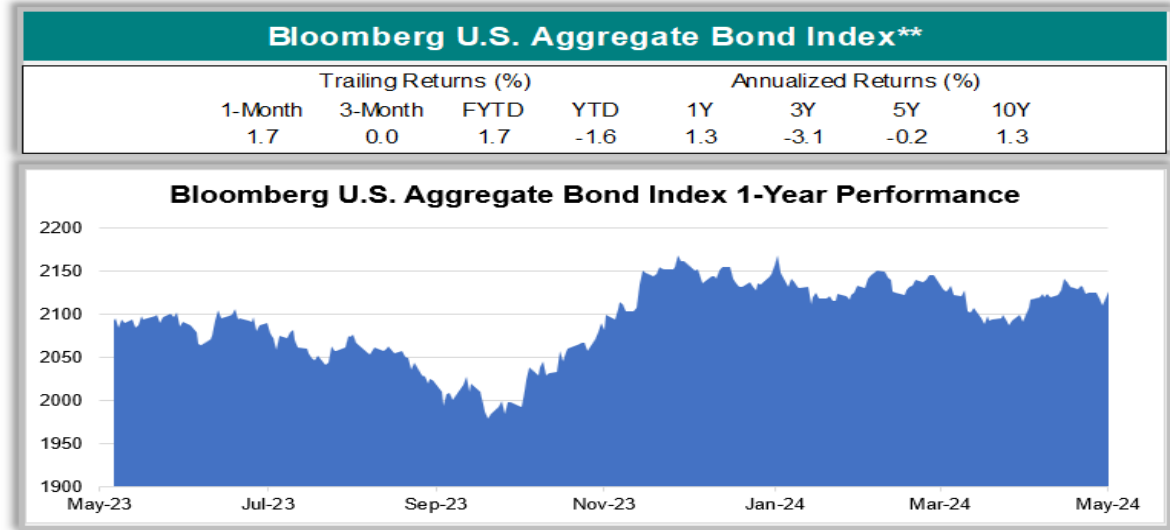
# 01 Market Environment

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# Global Market Performance as of May 31, 2024



\*Global Equity Policy Benchmark - MSCI ACWI IMI Index

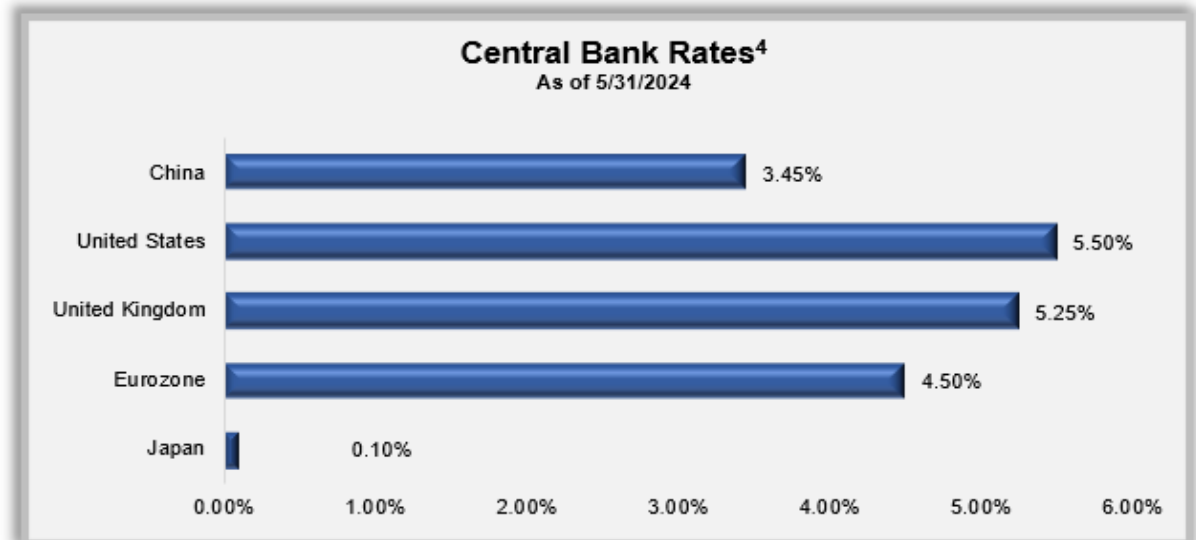
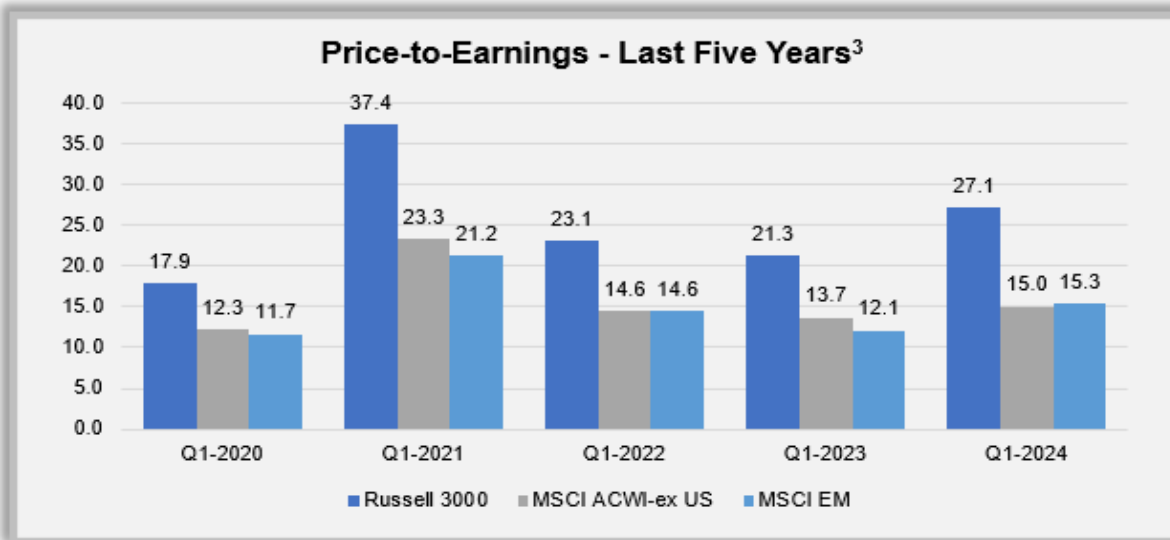
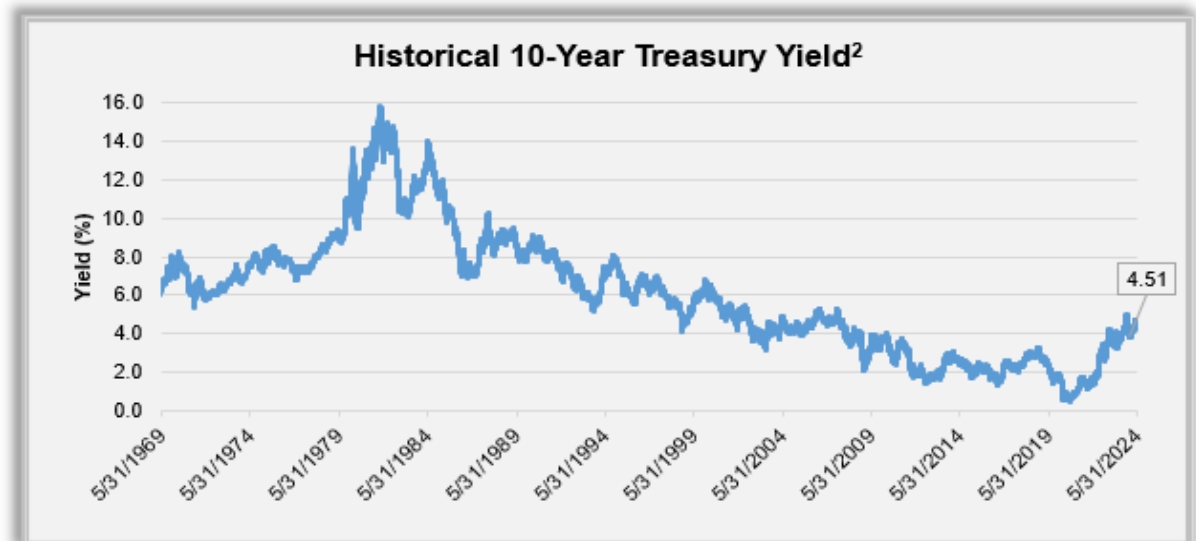
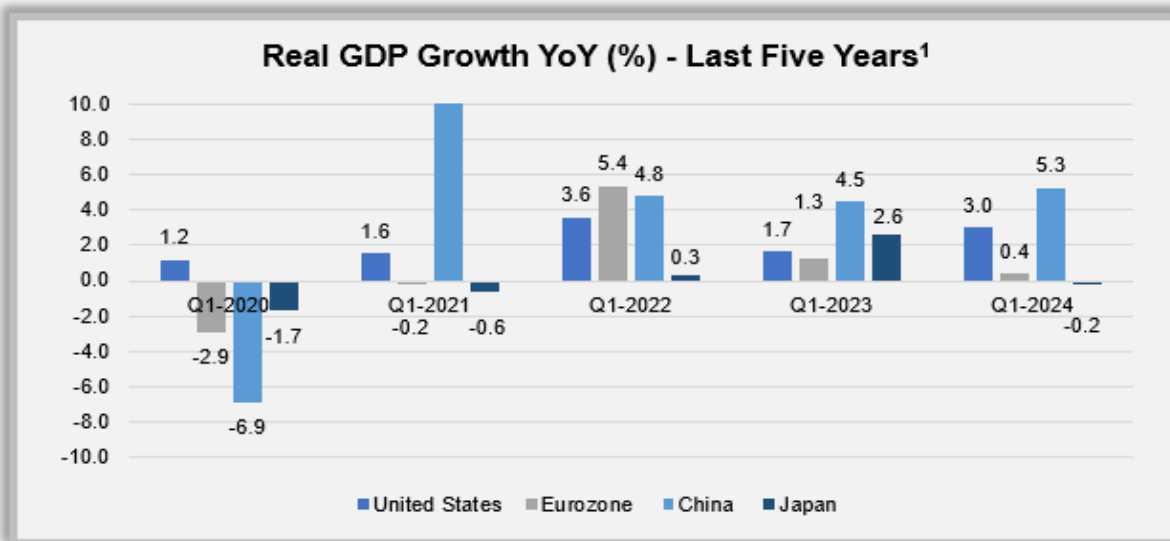


\*\*Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

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	3.1	2.2	10.3	4.2	14.0	1.6	6.9	5.6
<b>Equity</b>	Global All Cap	MSCI ACWI IMI Total Return	4.1	3.7	16.2	8.3	23.0	4.5	11.3	8.2
	U.S. All Cap	Russell 3000 Total Return	4.7	3.3	19.4	10.1	27.5	7.8	15.0	12.1
	U.S. Large Cap	S&P 500 Total Return	5.0	3.9	20.2	11.3	28.1	9.6	15.8	12.7
	U.S. Small Cap	Russell 2000 Total Return	5.0	1.1	11.1	2.7	20.1	-1.6	8.6	7.7
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	3.0	4.3	11.8	5.5	16.6	0.1	6.9	4.1
	Emerging Markets	MSCI Emerging Markets Total Return	0.6	3.5	8.3	3.4	12.4	-6.2	3.5	2.7
<b>Private Equity</b>	Private Equity Buyout	Thomson Reuters PE Buyout Index	6.1	3.2	28.6	16.3	40.8	-0.2	11.6	10.9
<b>Fixed Income</b>	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	1.7	0.0	1.7	-1.6	1.3	-3.1	-0.2	1.3
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	1.1	1.3	9.4	1.6	11.2	1.8	4.2	4.3
	U.S. Long Term Treasury Bonds	Bloomberg Long Term U.S. Treasury Total Return Index	2.9	-2.2	-7.1	-6.6	-7.1	-9.9	-4.3	0.4
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.9	2.4	10.7	4.2	13.2	6.0	5.3	4.6
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	1.7	0.8	1.9	-0.1	1.6	-1.4	2.1	1.9
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.5	1.4	5.2	2.3	5.6	3.0	2.2	1.5
<b>Commodity</b>	Commodity Prices Index	Bloomberg Commodity Index Total Return	1.8	8.0	6.6	6.8	10.9	6.8	8.1	-1.1
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	2.4	13.0	10.0	5.7	16.7	8.1	11.9	5.0
<b>Infrastructure</b>	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	4.3	4.6	5.5	1.9	8.8	2.9	4.1	3.8
<b>Real Estate</b>	U.S. REITs	MSCI U.S. REIT Index	4.7	-0.8	4.6	-3.0	9.8	0.1	3.6	5.7

Source: Bloomberg

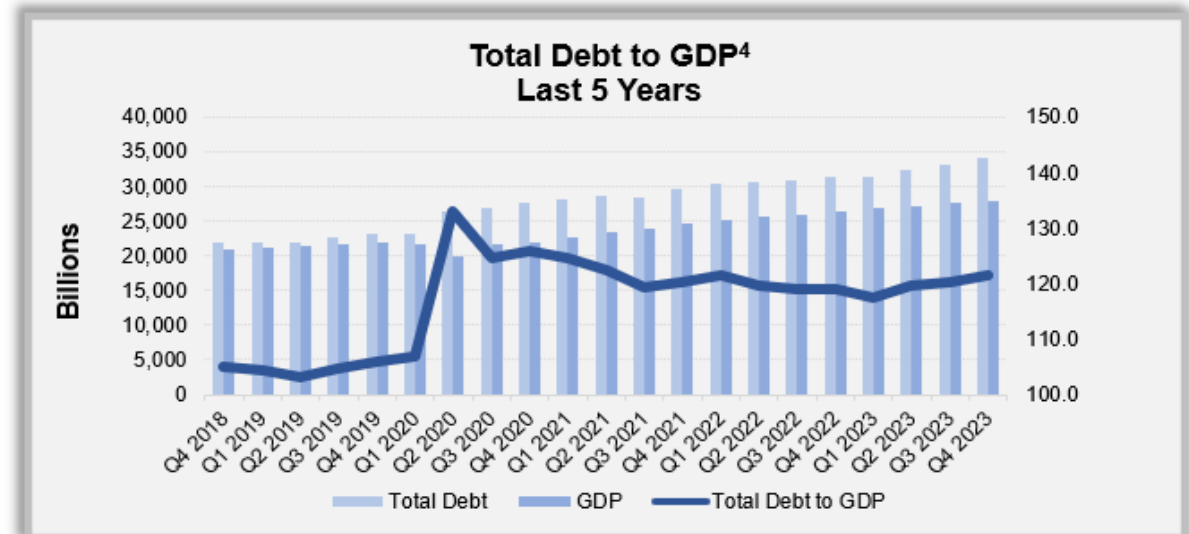
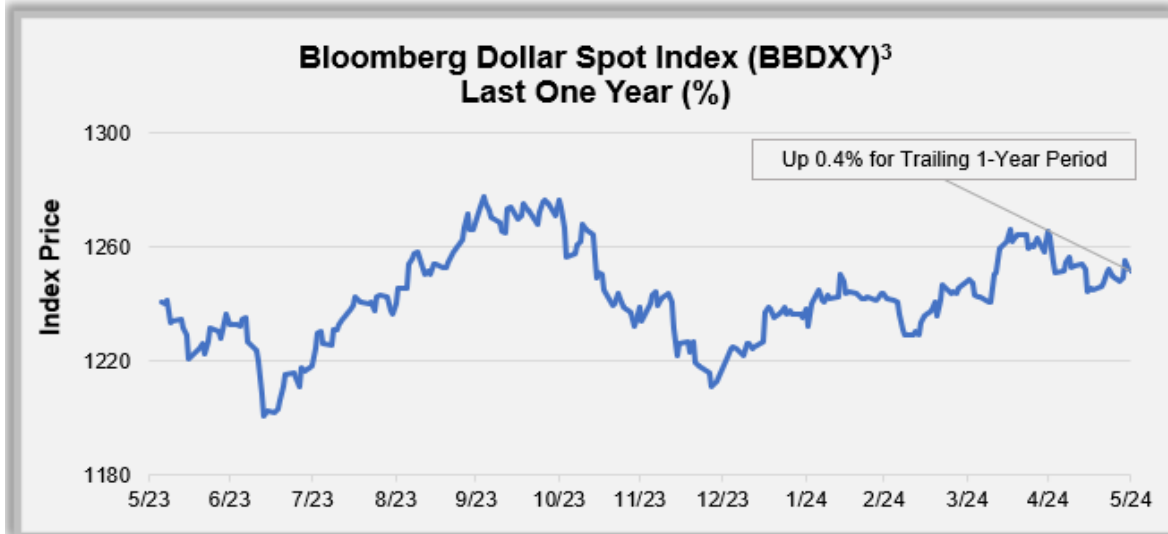
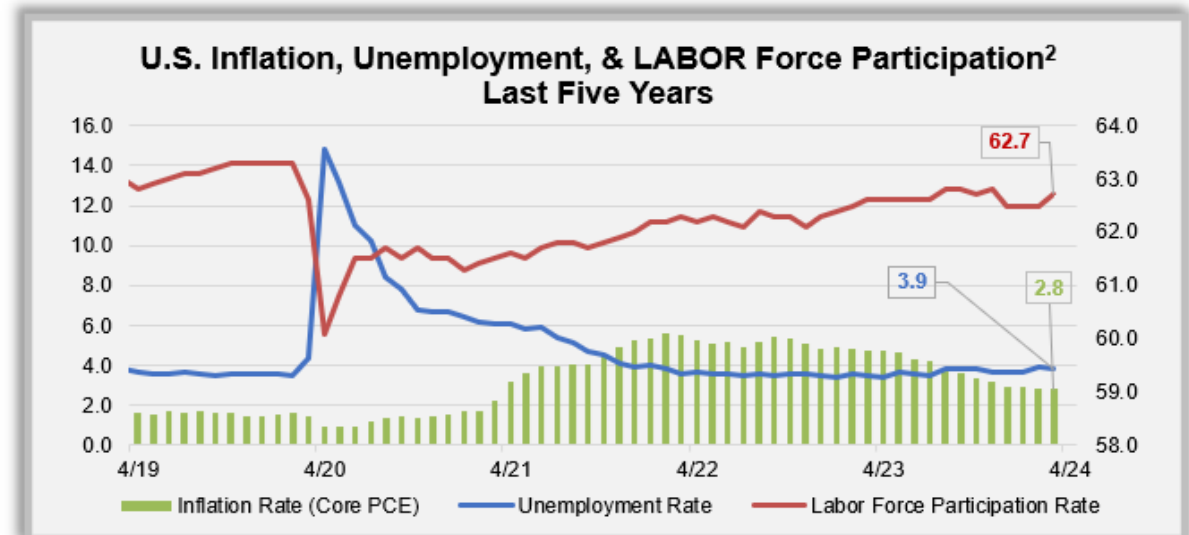
# Key Macro Indicators\*



\*The information on the "Key Macro Indicators" charts is the best available data as of 5/31/24 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 5/31/24 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 Bureau of Economic Analysis released a second estimate for U.S. Gross Domestic Product (“GDP”) indicating that real GDP increased at an annual rate of 1.3% in the first quarter of 2024
- Select global stock market indices reached record highs in May, including the MSCI All Country World Index and the Nasdaq Composite Index
- The U.S. 10-year Treasury yield ended May at 4.51% 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 4.1% in May

## What to Watch

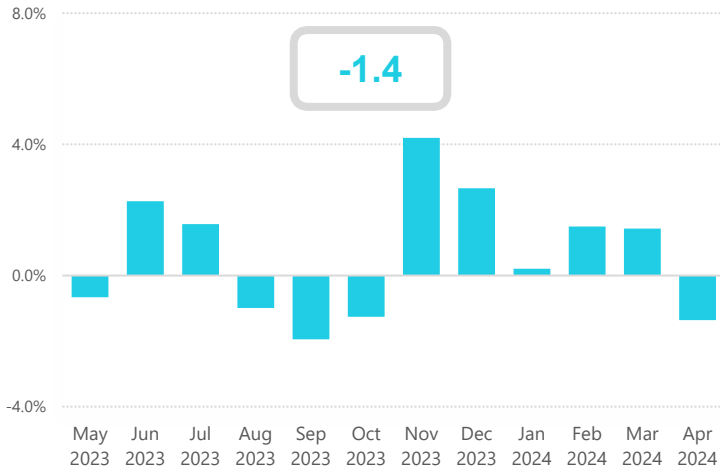
- Interest rates and central bank actions
- Economic data and trends
  - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Artificial intelligence including research developments, applications, and infrastructure investment
- Stewardship and ESG-related developments
  - Further convergence of global reporting frameworks, with the International Financial Reporting Standards (IFRS) and the International Sustainability Standards Board (ISSB) announcing they will work with the Global Reporting Initiative to facilitate companies to report both ESG-related financial risks and risks that may arise from a company’s impacts



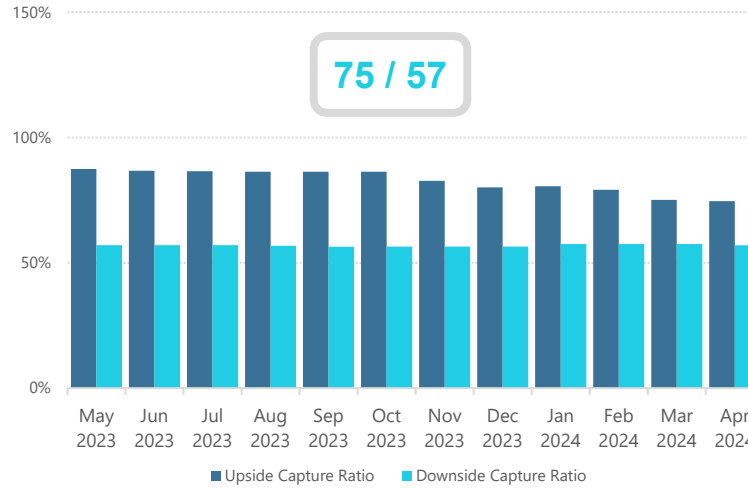
# Total Fund Summary as of April 2024



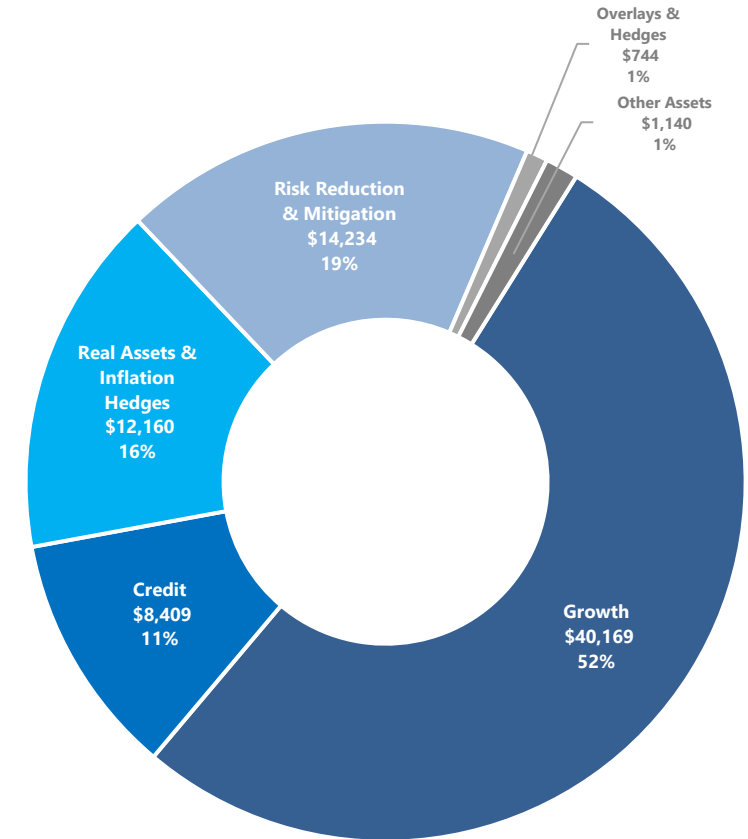
Monthly Return (net)



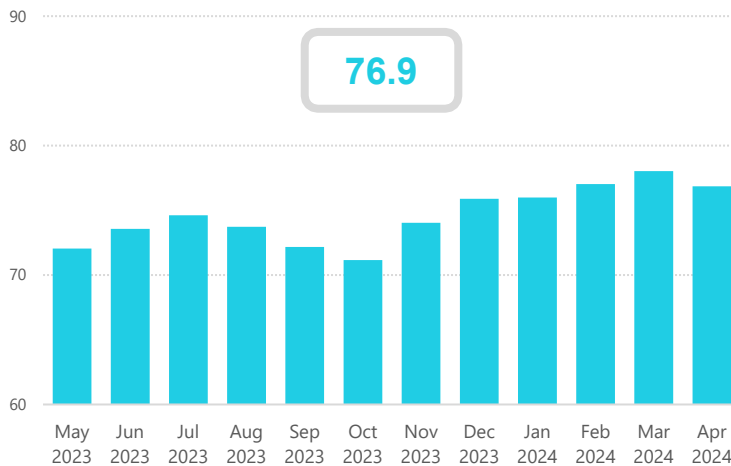
Upside / Downside Capture (%)<sup>1</sup>



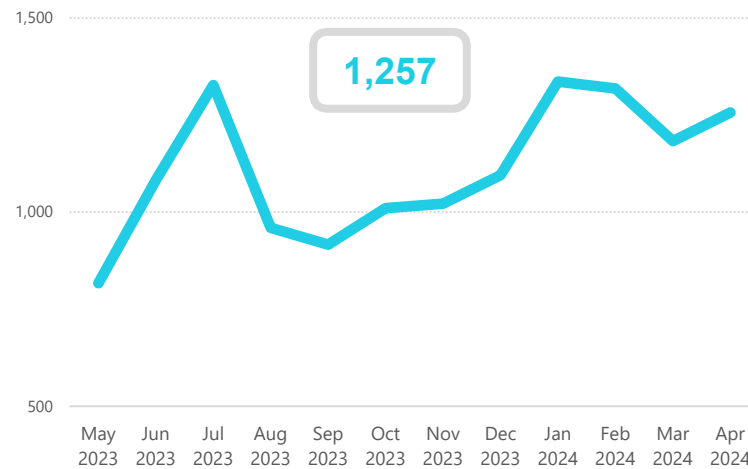
Asset Allocation (\$ millions)<sup>2</sup>



Total Market Value (\$ billions)



Cash (\$ millions)



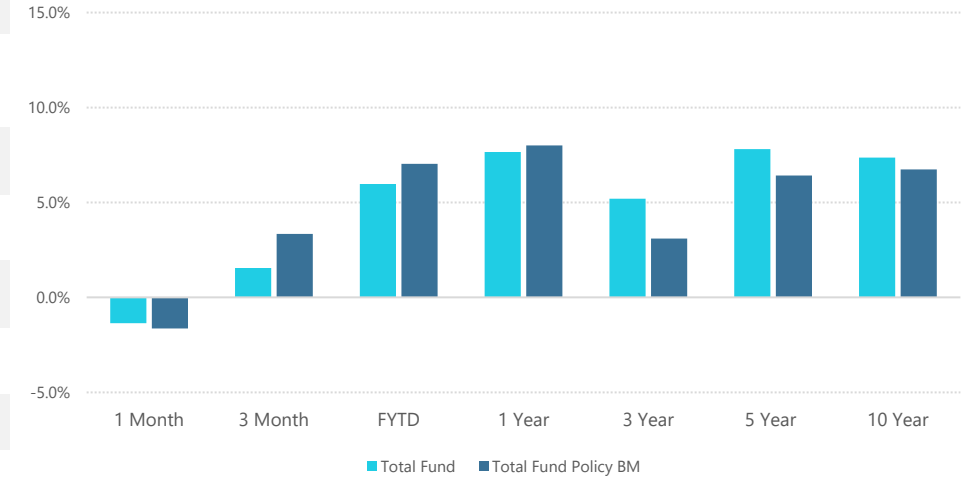
<sup>1</sup> Reference portfolio = 60% MSCI ACWI IMI / 40% Bloomberg US Aggregate Bond Index  
<sup>2</sup> Other Assets include receivables due to deferred sales and rebalancing activity pending settlement.

# Historical Net Performance as of April 2024



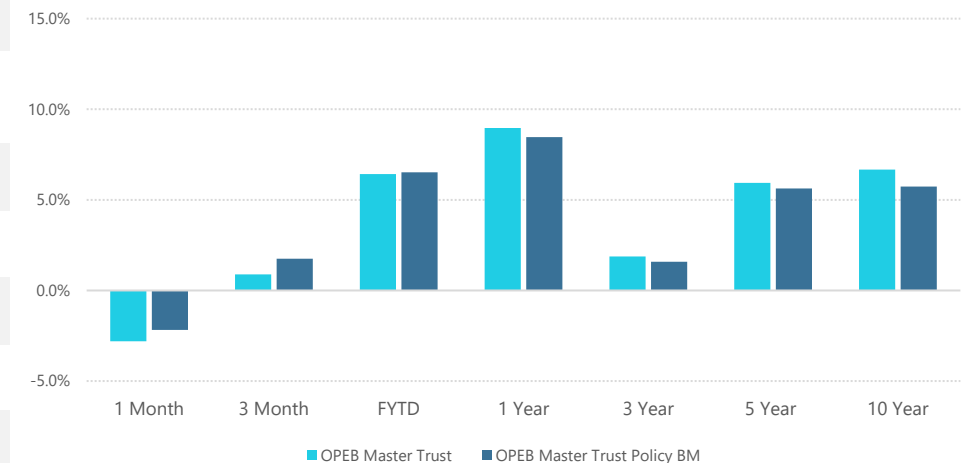
## LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>Total Fund</b>	<b>76,856</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-1.4%</b>	<b>1.5%</b>	<b>6.0%</b>	<b>7.7%</b>	<b>5.2%</b>	<b>7.8%</b>	<b>7.4%</b>
Total Fund Policy BM				-1.6%	3.3%	7.0%	8.0%	3.1%	6.4%	6.7%
7% Annual Hurdle Rate				0.6%	0.6%	5.8%	7.0%	7.0%	7.0%	7.0%
<b>Growth</b>	<b>40,169</b>	<b>52.3%</b>	<b>53.0%</b>	<b>-2.2%</b>	<b>2.4%</b>	<b>8.1%</b>	<b>11.8%</b>	<b>7.0%</b>		
Growth Policy BM				-2.0%	7.0%	11.9%	14.8%	4.7%		
<b>Credit</b>	<b>8,409</b>	<b>10.9%</b>	<b>11.0%</b>	<b>1.5%</b>	<b>3.9%</b>	<b>12.6%</b>	<b>14.7%</b>	<b>5.8%</b>		
Credit Policy BM				0.6%	1.8%	10.8%	11.8%	3.3%		
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,160</b>	<b>15.8%</b>	<b>17.0%</b>	<b>-0.7%</b>	<b>-0.3%</b>	<b>-1.1%</b>	<b>-3.0%</b>	<b>4.8%</b>		
Real Assets & Inflation Hedges Policy BM				-1.3%	-0.6%	-1.9%	-4.3%	3.8%		
<b>Risk Reduction &amp; Mitigation</b>	<b>14,234</b>	<b>18.5%</b>	<b>19.0%</b>	<b>-1.7%</b>	<b>-1.8%</b>	<b>0.4%</b>	<b>-0.9%</b>	<b>-2.1%</b>		
Risk Reduction & Mitigation Policy BM				-2.3%	-2.3%	-0.1%	-1.0%	-2.4%		
<b>Overlays &amp; Hedges</b>	<b>744</b>	<b>1.0%</b>								
Other Assets	1,140	1.5%								



## OPEB Trust

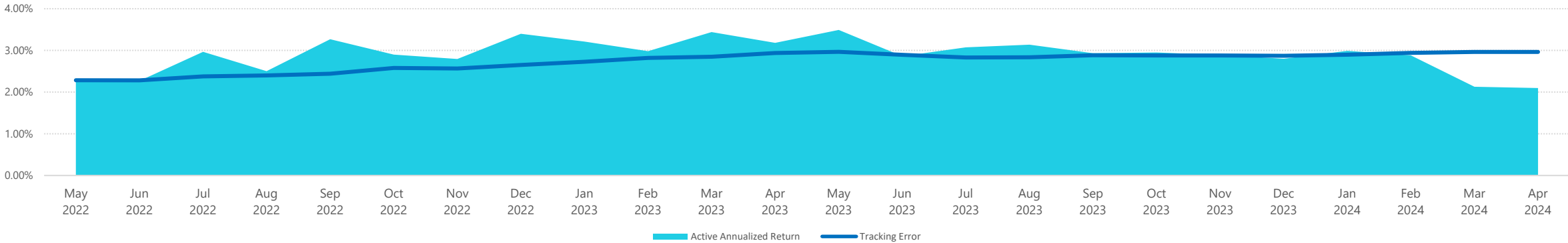
	Market Value (\$ millions)	% of Master Trust	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>OPEB Master Trust</b>	<b>3,683</b>			<b>-2.8%</b>	<b>0.9%</b>	<b>6.4%</b>	<b>9.0%</b>	<b>1.9%</b>	<b>5.9%</b>	<b>6.7%</b>
OPEB Master Trust Policy BM				-2.2%	1.7%	6.5%	8.5%	1.6%	5.6%	5.7%
6% Annual Hurdle Rate				0.5%	0.5%	5.0%	6.0%	6.0%	6.0%	6.0%
<b>OPEB Growth</b>	<b>1,661</b>	<b>45.1%</b>	<b>45.0%</b>	<b>-3.4%</b>	<b>3.8%</b>	<b>11.9%</b>	<b>17.0%</b>	<b>3.8%</b>	<b>9.3%</b>	
OPEB Growth Policy BM				-3.0%	5.1%	12.4%	17.3%	3.5%	9.0%	
<b>OPEB Credit</b>	<b>672</b>	<b>18.2%</b>	<b>18.0%</b>	<b>-0.4%</b>	<b>0.7%</b>	<b>6.8%</b>	<b>8.4%</b>	<b>2.6%</b>	<b>3.3%</b>	
OPEB Credit Policy BM				0.1%	1.6%	9.5%	11.1%	2.9%	3.8%	
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>737</b>	<b>20.0%</b>	<b>20.0%</b>	<b>-3.4%</b>	<b>-1.6%</b>	<b>0.7%</b>	<b>1.0%</b>	<b>-0.5%</b>	<b>2.5%</b>	
OPEB RA & IH Policy BM				-1.5%	-1.0%	-1.5%	-3.0%	-0.3%	2.7%	
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>612</b>	<b>16.6%</b>	<b>17.0%</b>	<b>-3.1%</b>	<b>-3.8%</b>	<b>-2.0%</b>	<b>-3.4%</b>	<b>-3.1%</b>	<b>-0.1%</b>	
OPEB RR & M Policy BM				-3.2%	-3.7%	-2.3%	-3.6%	-3.7%	-0.6%	
OPEB HL PM Cash	0	0.0%								



# Active and Excess Return as of April 2024



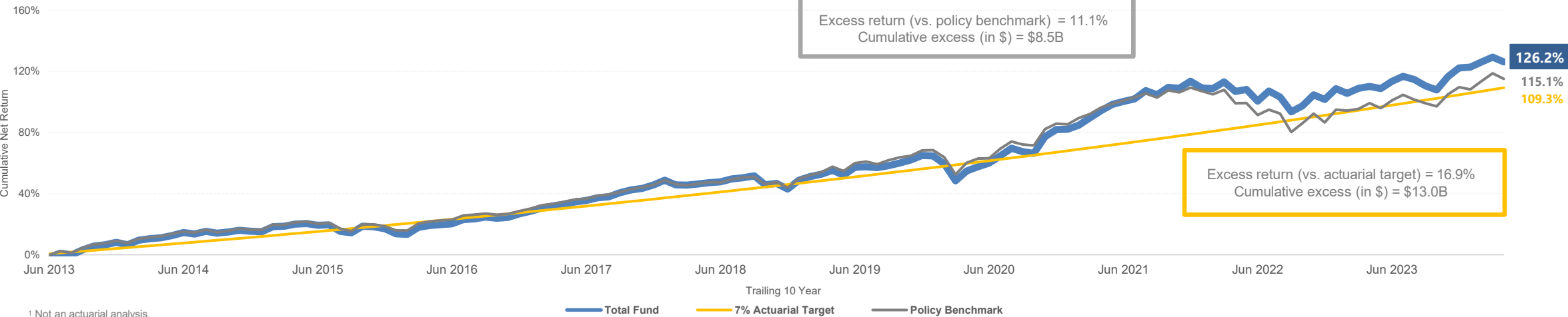
## Active Return vs. Tracking Error<sup>1,2,3</sup>



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Apr 2024	5.2%	3.1%	2.1%	3.0%

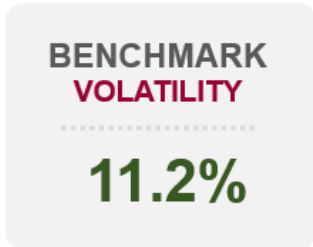
<sup>1</sup> Rolling 36 months.  
<sup>2</sup> Active return equals the difference in return between a portfolio and its benchmark.  
<sup>3</sup> Tracking error (or active risk) measures the volatility of active returns.

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

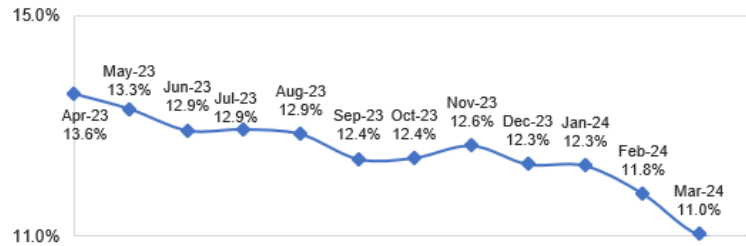


<sup>1</sup> Not an actuarial analysis.

# Total Fund Forecast Volatility as of April 2024\*

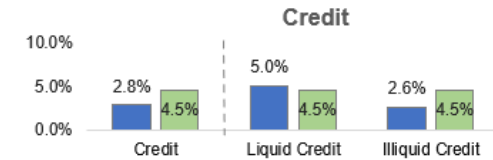
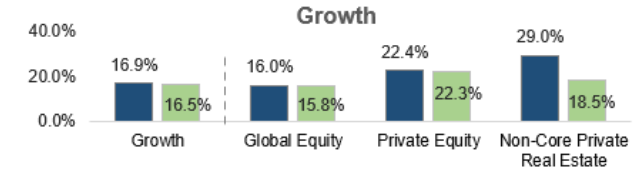


Forecasted Total Fund Volatility Trend

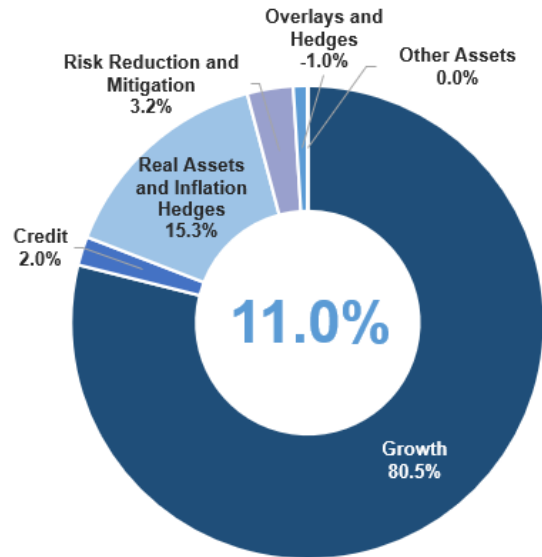


Subcategory Volatility

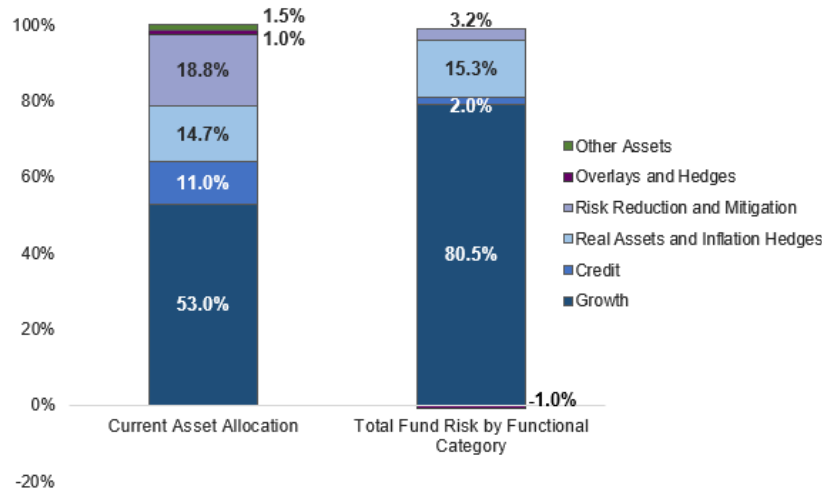
1 Subcategory volatility is on the left bar and benchmark risk is on the right bar.



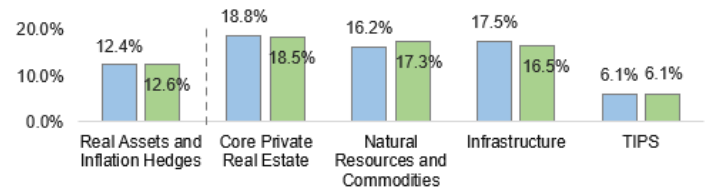
Functional Category Contributions to Total Fund Volatility



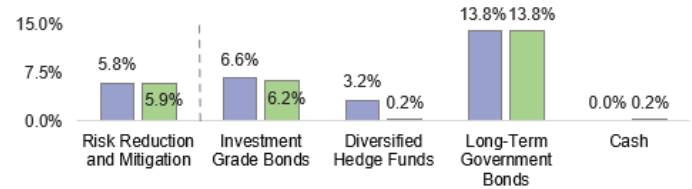
Total Fund Asset Allocation  
Capital-based versus Risk-based



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 April 2024\*



**TOTAL FUND TRACKING ERROR**

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**1.10%**

**ALLOCATION RISK**

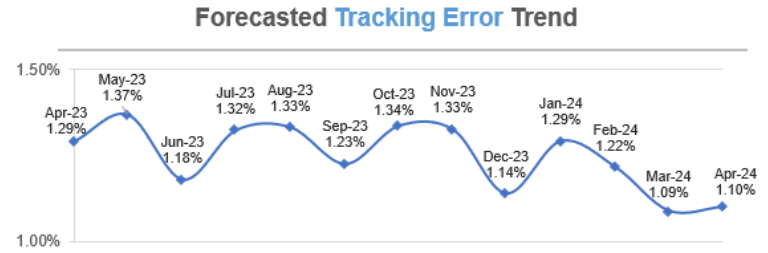
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**0.19%**

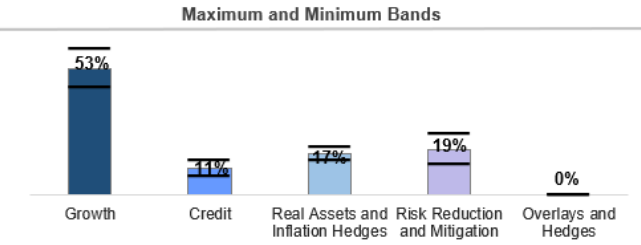
**SELECTION RISK**

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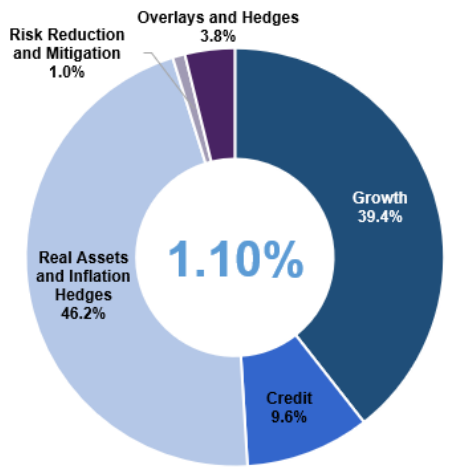
**0.91%**



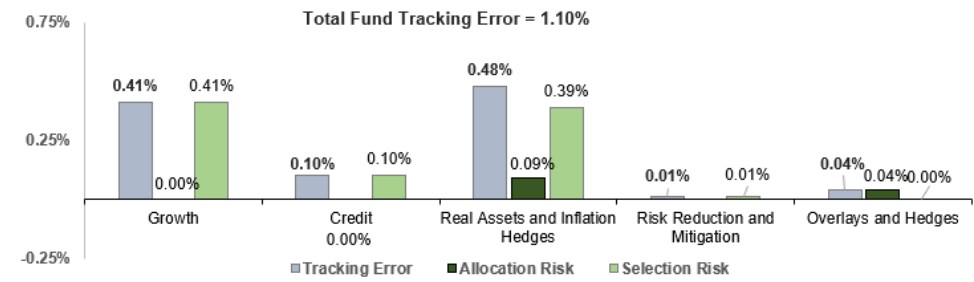
### Policy Target Weight for each Functional Category



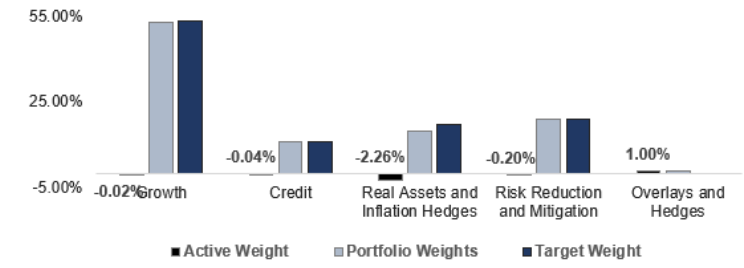
### Functional Category Contributions to Tracking Error



### Tracking Error Attribution



### Active Weights for each Functional Category



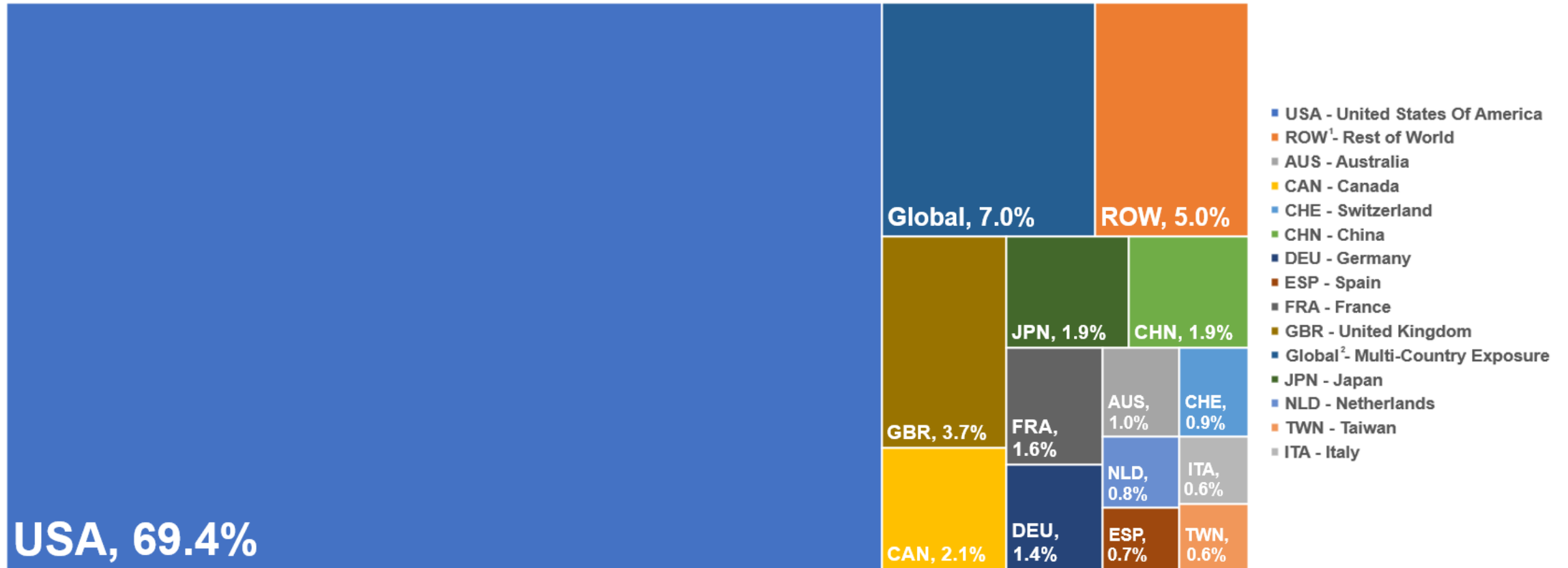
### Subcategory Tracking Error

Total Fund	Global				Credit			Real Assets and Inflation Hedges				Risk Reduction and Mitigation					
1.10%	1.22%	0.47%	3.17%	12.37%	0.03	0.84%	3.78%	3.73%	4.07%	3.96%	8.29%	0.06%	0.95%	0.43%	3.02%	0.02%	0.21%
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 April 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.

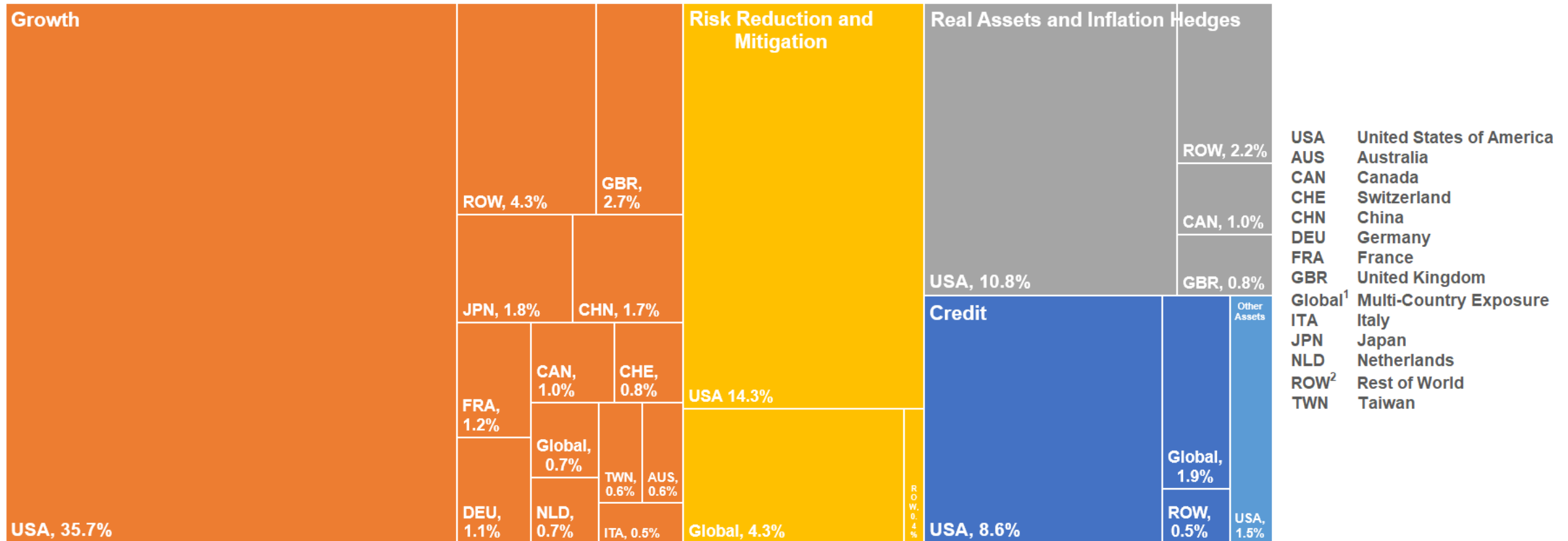
<sup>1</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

<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 April 2024\* Ex-Overlays and Hedges



AUM = Assets under management.

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

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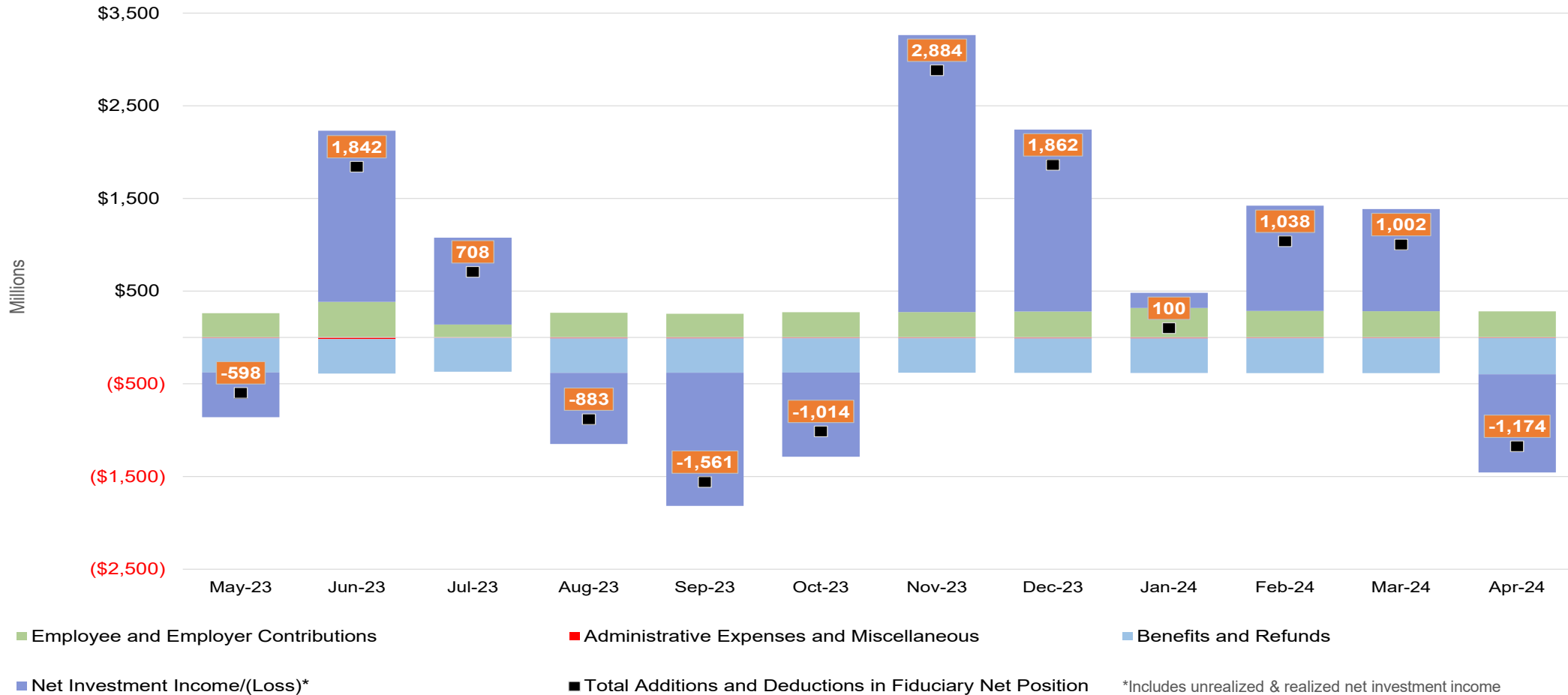
<sup>2</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

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-22	7	5	(\$2.5 billion)
FY-23	5	7	\$3.3 billion
FY-24	4	6	\$3.0 billion





# 03 Portfolio Structural Updates

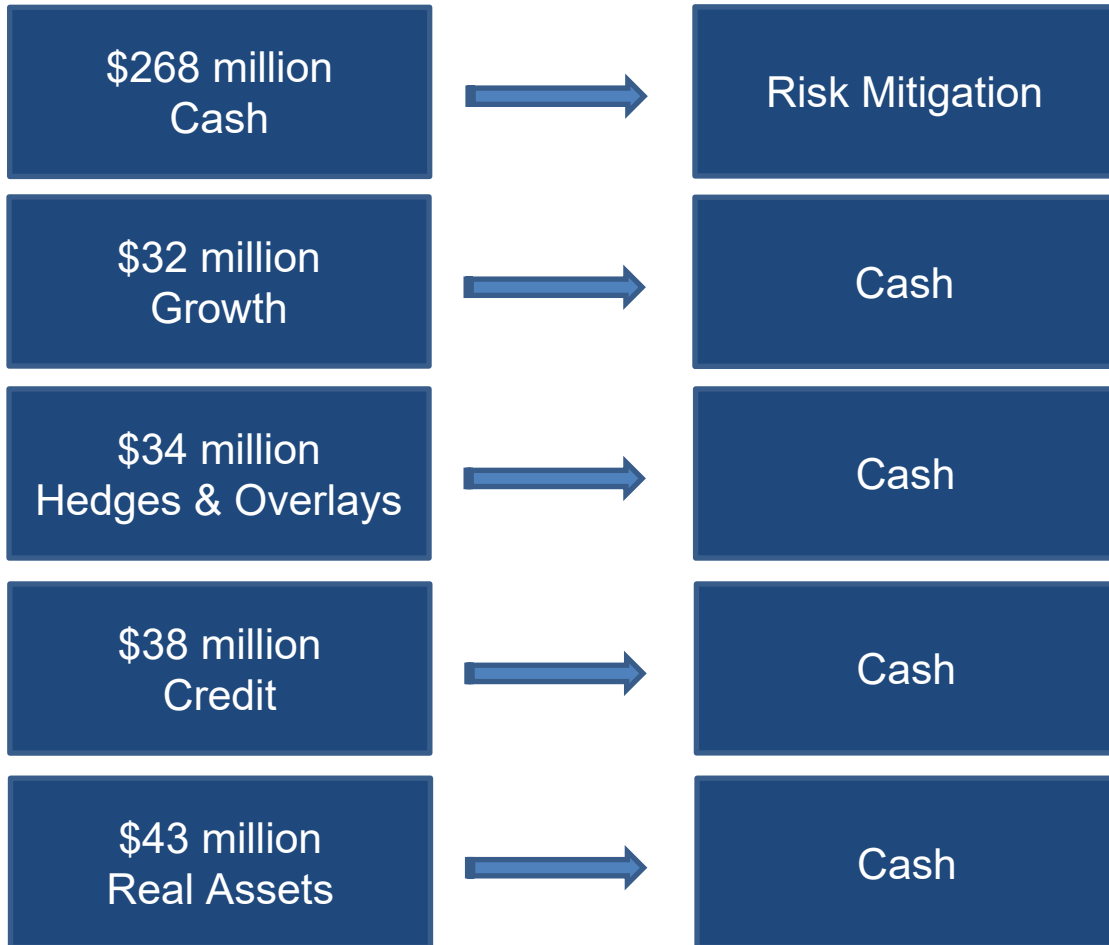
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# Portfolio Structural Updates



## Portfolio Movements

### Rebalancing Activity



## Hedges & Overlays

### Monthly Activity

Program	April Return	April Gain/(Loss)	Inception <sup>1</sup> Gain/(Loss)
Currency Hedge <sup>2</sup>	1.0%	\$33.7 Million	\$1.5 Billion
Cash/Rebalance Overlay <sup>3</sup>	0.4%	\$0.0 Million	\$504.3 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
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

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# Notable Initiatives and Operational Updates



## Key Initiative Updates

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- 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

## Operational Updates

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

## Manager/Consultant Updates

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No material updates

## Team Searches and Vacancies

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



# 05 **Commentary**

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# Staff Chart of the Month

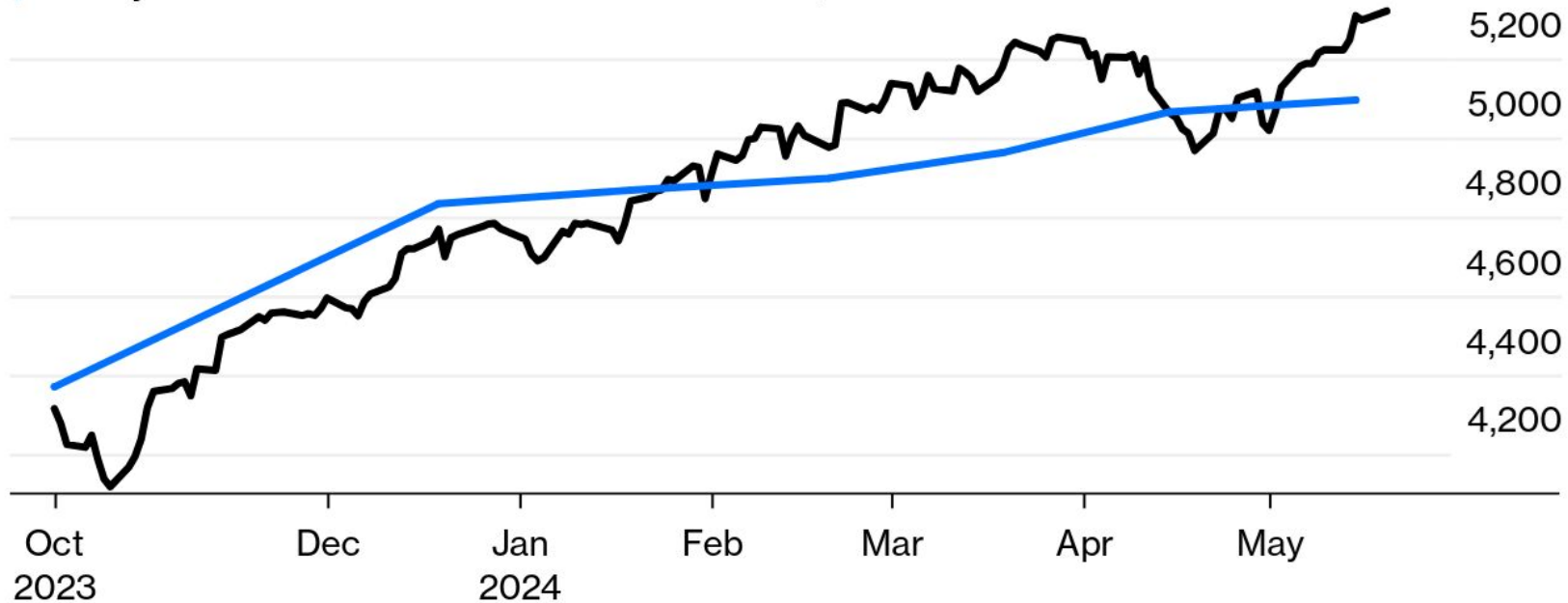
## S&P 500 Surpasses Analyst Forecasts for the Full Year



### One Up on Wall Street

The S&P 500 is well ahead of forecasters' predictions for the full year

End-year 2024 S&P 500 Wall Street Forecast S&P 500



Source: Bloomberg

Bloomberg Opinion



# 06 Appendix

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# Quiet Period for Search Respondents



## Hedge Funds, Credit, and Real Assets Consultant Search

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

## Real Assets Emerging Manager Program Discretionary Separate Account Manager

- ✓ 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

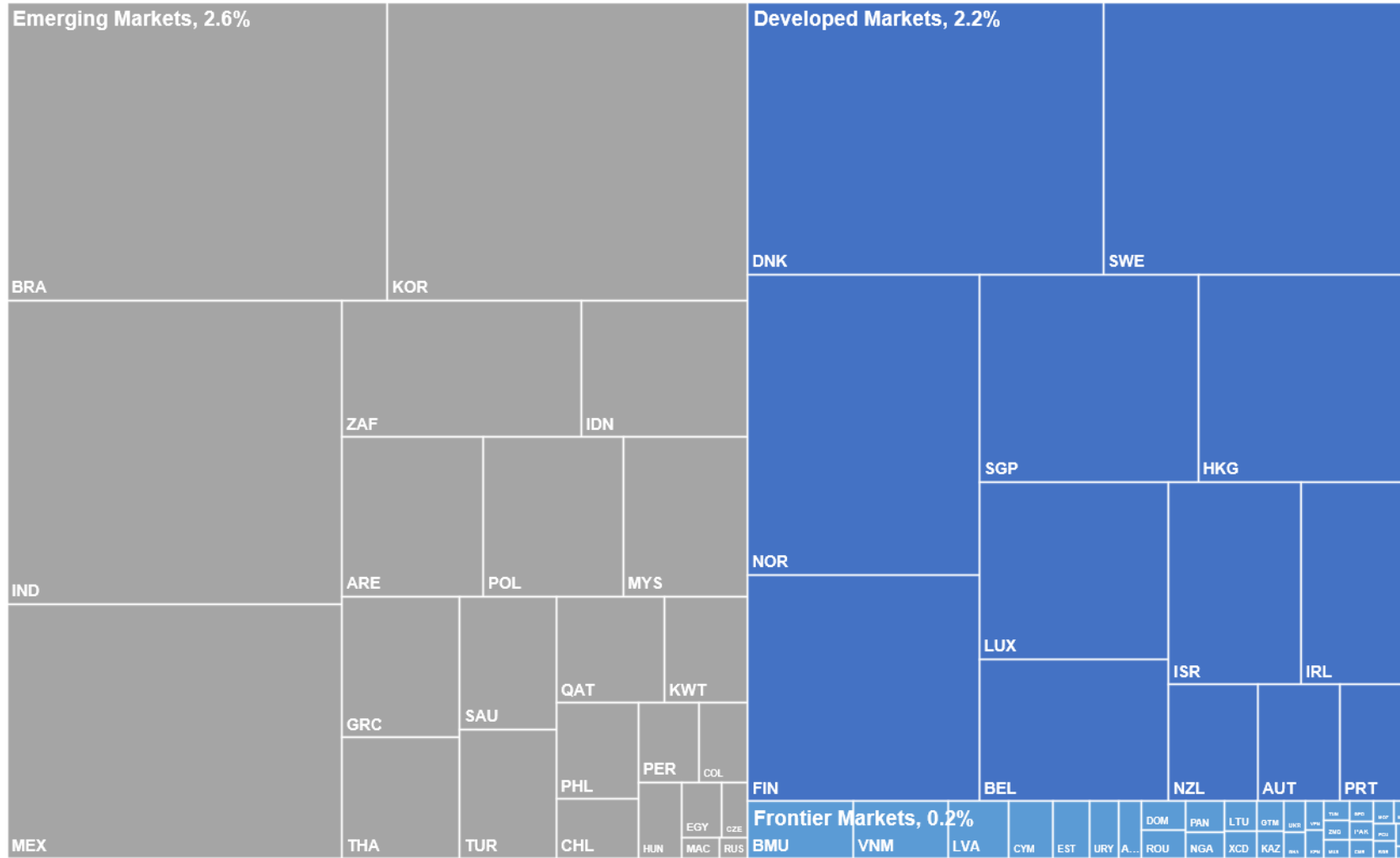
## Risk and Analytics System, and ESG Research Services Search

- ✓ 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.



# Rest of World Geographic Exposures by AUM

## Total Fund as of April 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.

SOURCE: MSCI BarraOne

# Rest Of World Glossary



## 5.0% Rest of World

- 2.2% Developed Markets
- 2.6% Emerging Markets
- 0.2% Frontier Markets

## 2.2% Developed Markets

- 0.040% AUT - Austria
- 0.112% BEL - Belgium
- 0.403% DNK - Denmark
- 0.014% EMU - European Monetary Union
- 0.218% FIN - Finland
- 0.186% HKG - Hong Kong
- 0.094% IRL - Ireland
- 0.112% ISR - Israel
- 0.140% LUX - Luxembourg
- 0.290% NOR - Norway
- 0.043% NZL - New Zealand
- 0.036% PRT - Portugal
- 0.189% SGP - Singapore
- 0.351% SWE - Sweden

## 2.6% Emerging Markets

- 0.094% ARE - United Arab Emirates
- 0.473% BRA - Brazil
- 0.020% CHL - Chile
- 0.016% COL - Colombia
- 0.006% CZE - Czech Republic
- 0.009% EGY - Egypt
- 0.069% GRC - Greece
- 0.014% HUN - Hungary
- 0.095% IDN - Indonesia
- 0.424% IND - India
- 0.448% KOR - Korea
- 0.037% KWT - Kuwait
- 0.003% MAC - Macao
- 0.354% MEX - Mexico
- 0.083% MYS - Malaysia
- 0.020% PER - Peru
- 0.033% PHL - Phillipines
- 0.093% POL - Poland
- 0.048% QAT - Qatar
- 0.002% RUS - Russia
- 0.054% SAU - Saudi Arabia
- 0.059% THA - Thailand
- 0.052% TUR - Turkey
- 0.136% ZAF - South Africa

## 0.2% Frontier Markets

- 0.006% ARG - Argentina
- 0.002% BGR - Bulgaria
- 0.002% BHR - Bahrain
- 0.025% BMU - Bermuda
- 0.002% CMR - Cameroon
- 0.010% CYM - Cayman Islands
- 0.005% DOM - Dominican Republic
- 0.002% ECU - Ecuador
- 0.009% EST - Estonia
- 0.002% GEO - Georgia
- 0.002% GHA - Ghana
- 0.003% GTM - Guatemala
- 0.000% ISL - Iceland
- 0.001% JEY - Jersey
- 0.003% KAZ - Kazakhstan
- 0.002% KEN - Kenya
- 0.004% LTU - Lithuania
- 0.015% LVA - Latvia
- 0.002% MAR - Morocco
- 0.002% MOZ - Mozambique
- 0.002% MUS - Mauritius
- 0.004% NGA - Nigeria
- 0.002% PAK - Pakistan
- 0.005% PAN - Panama
- 0.005% ROU - Romania
- 0.002% TUN - Tunisia
- 0.003% UKR - Ukraine
- 0.007% URY - Uruguay
- 0.002% VEN - Venezuela
- 0.023% VNM - Vietnam
- 0.004% XCD - Eastern Caribbean Dollar