



# Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer 

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Board of Investments Meeting  
March 13, 2024

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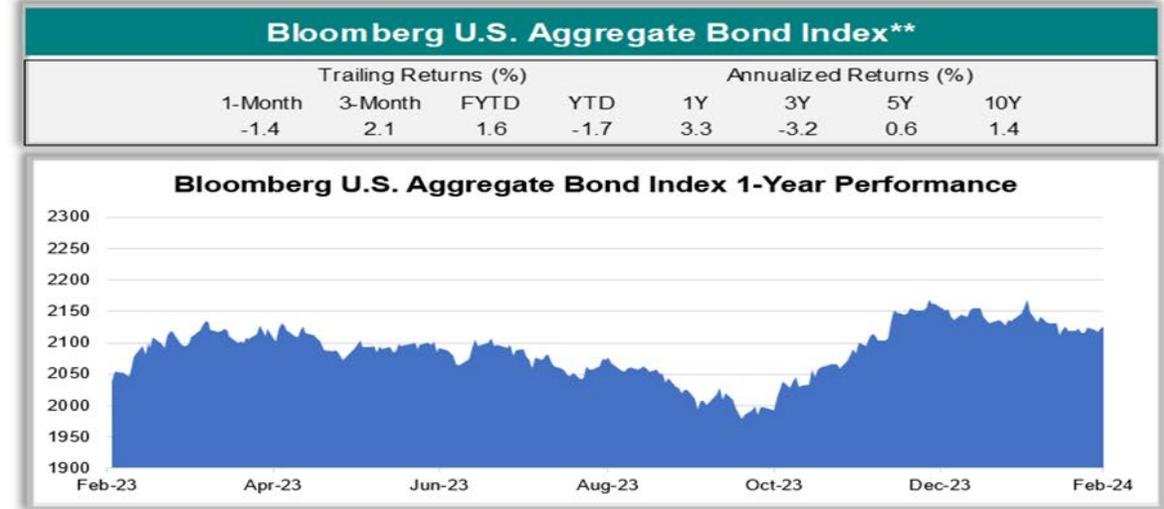
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# 01 Market Environment

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# Global Market Performance as of February 29, 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	1.9	6.7	7.9	2.0	14.1	2.5	6.5	5.6
<b>Equity</b>	Global All Cap	MSCI ACWI IMI Total Return	4.2	9.9	12.1	4.4	21.6	6.1	10.1	8.1
	U.S. All Cap	Russell 3000 Total Return	5.4	12.2	15.6	6.6	28.5	9.9	13.9	12.0
	U.S. Large Cap	S&P 500 Total Return	5.3	12.0	15.7	7.1	30.4	11.9	14.7	12.7
	U.S. Small Cap	Russell 2000 Total Return	5.7	14.0	9.9	1.5	10.0	-0.9	6.9	7.1
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	2.3	6.5	7.3	1.2	12.1	1.1	5.5	4.0
	Emerging Markets	MSCI Emerging Markets Total Return	4.8	3.8	4.6	-0.1	8.7	-6.3	1.9	3.0
<b>Private Equity</b>	Private Equity Buyout	Thomson Reuters PE Buyout Index	8.9	20.5	24.6	12.7	24.5	1.2	9.3	11.2
<b>Fixed Income</b>	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	-1.4	2.1	1.6	-1.7	3.3	-3.2	0.6	1.4
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	0.3	4.0	8.0	0.3	11.0	1.8	4.2	4.3
	U.S. Long Term Treasury Bonds	Bloomberg Long Term U.S. Treasury Total Return Index	-2.3	3.8	-5.0	-4.4	-2.8	-10.0	-2.0	1.2
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.9	3.3	8.1	1.7	11.3	5.5	5.1	4.5
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	-1.1	1.8	1.1	-0.9	2.5	-0.9	2.7	2.1
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.4	1.4	3.7	0.9	5.4	2.5	2.0	1.3
<b>Commodity</b>	Commodity Prices Index	Bloomberg Commodity Index Total Return	-1.5	-3.7	-1.2	-1.1	-3.9	7.1	5.6	-1.8
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	-0.1	-3.0	-2.6	-6.4	-6.5	7.0	7.8	4.2
<b>Infrastructure</b>	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	-0.1	-0.1	0.9	-2.5	2.6	6.1	3.8	4.1
<b>Real Estate</b>	U.S. REITs	MSCI U.S. REIT Index	2.0	7.4	5.5	-2.2	5.6	4.9	4.4	6.4

Source: Bloomberg

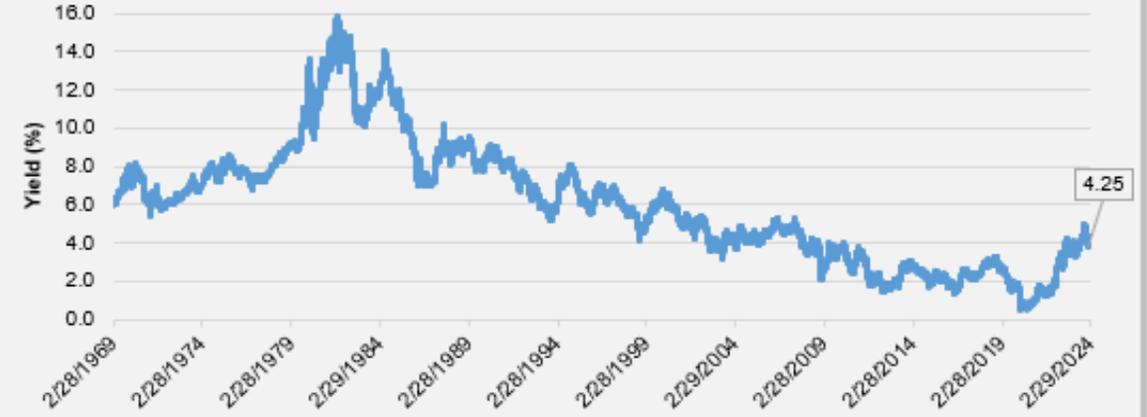
# Key Macro Indicators\*



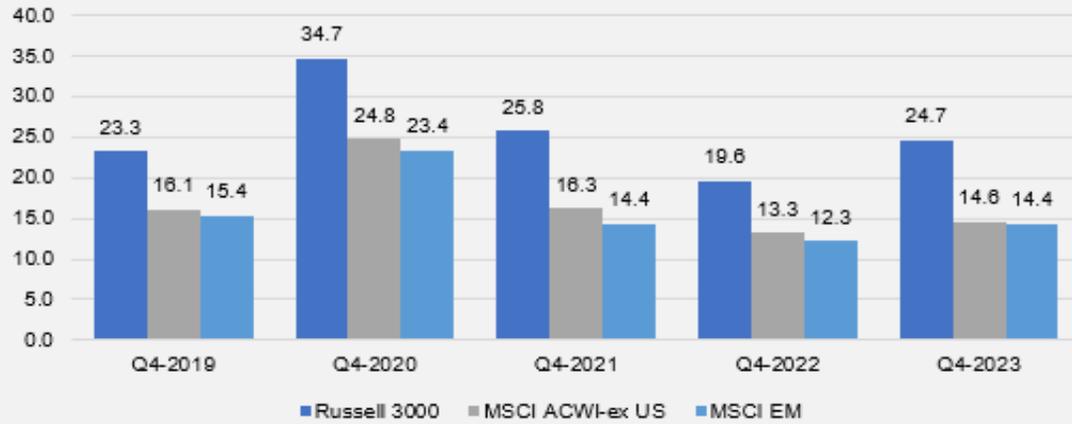
### Real GDP Growth YoY (%) - Last Five Years<sup>1</sup>



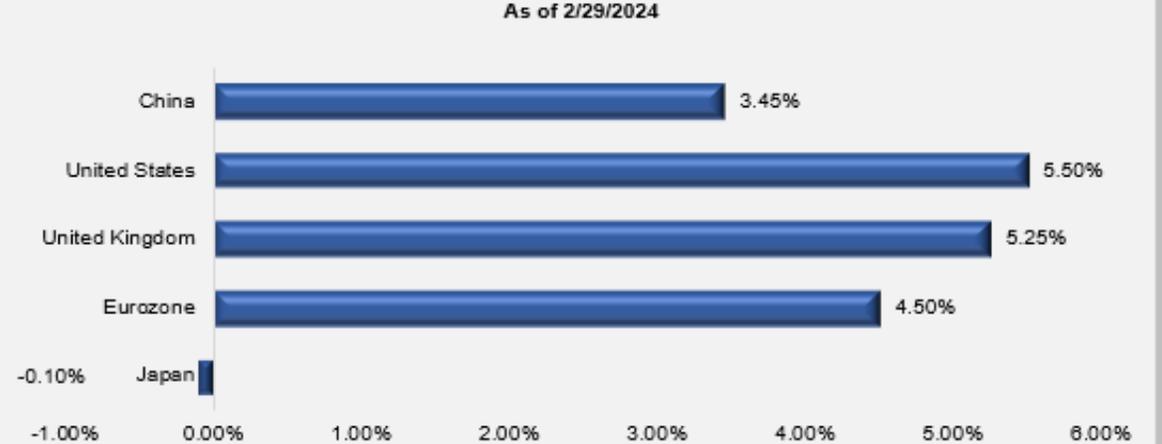
### Historical 10-Year Treasury Yield<sup>2</sup>



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



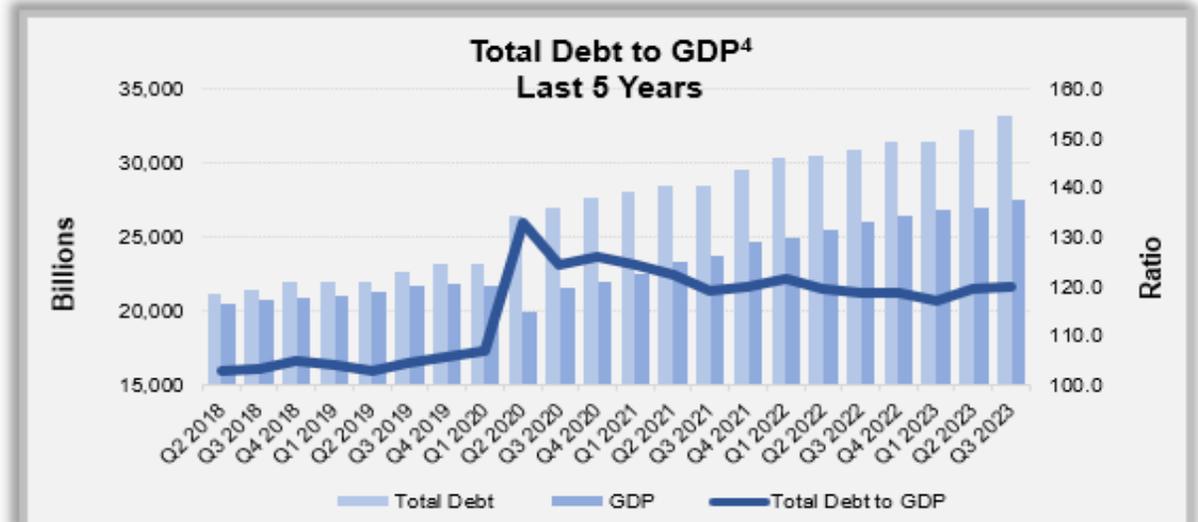
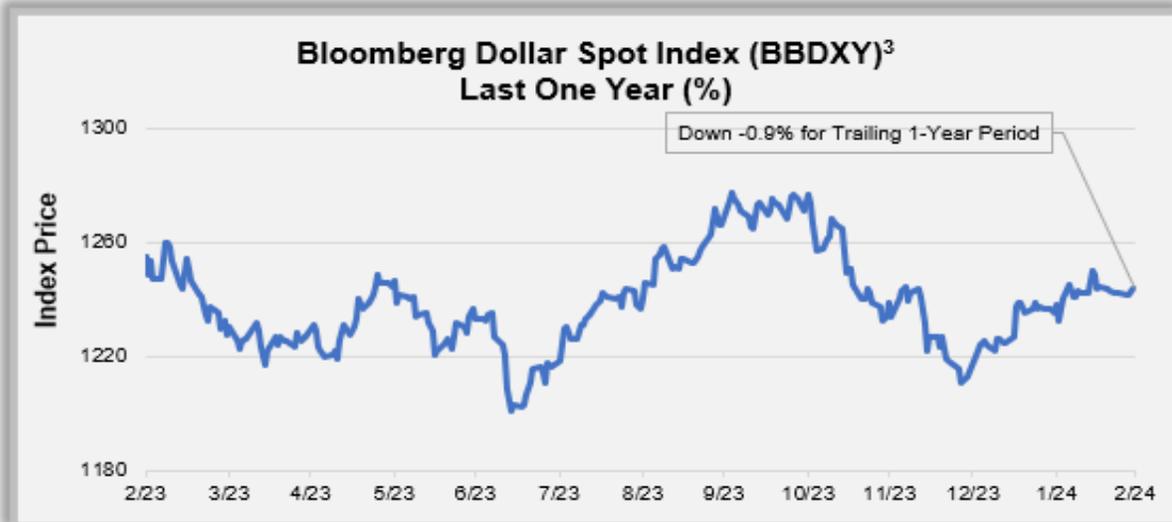
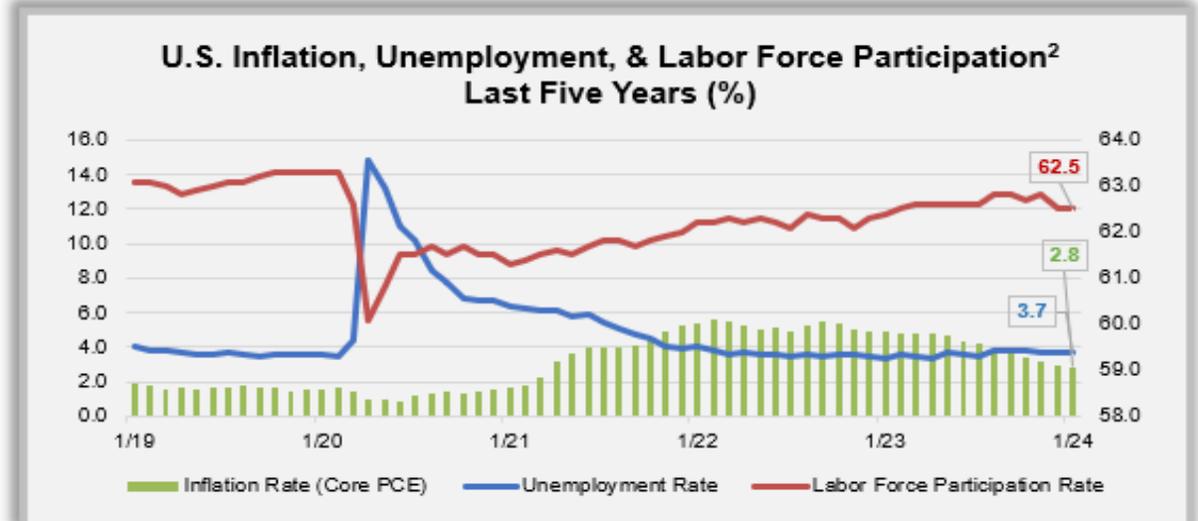
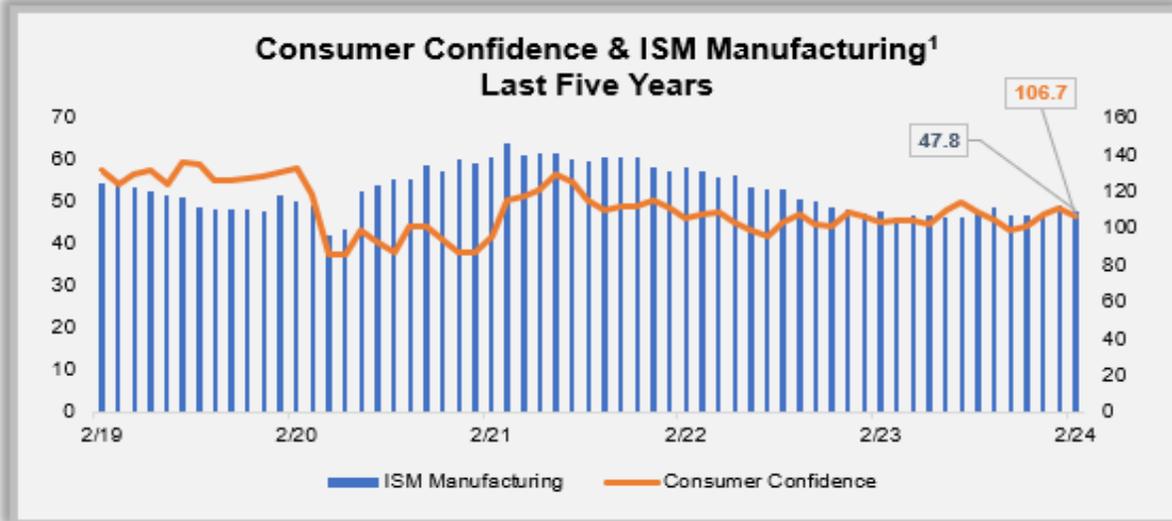
### Central Bank Rates<sup>4</sup>



\*The information on the "Key Macro Indicators" charts is the best available data as of 2/29/24 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\*



Sources: 1. Bloomberg 3. Bloomberg  
2. Bloomberg 4. Office of Management and Budget; St. Louis Federal Reserve

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# 02 Portfolio Performance & Risk Updates

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# Market Themes and Notable Items to Watch



## Recent Themes

- In February, the U.S. Bureau of Labor Statistics released data indicating an unemployment rate of 3.7% and a labor force participation rate of 62.5%
  - This data suggests a healthy labor market and is a component of economic well-being and growth
- Both the broad S&P500 and technology-focused Nasdaq equity indices closed February at an all-time high level
  - Inflation reports and trends continue to reinforce the investor belief that the U.S. Federal Reserve would begin cutting interest rates later this year
  - Earnings releases from large and significant companies helped to bolster investor sentiment
- The U.S. 10-year Treasury yield ended February at 4.25% 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) returned 4.2% in February

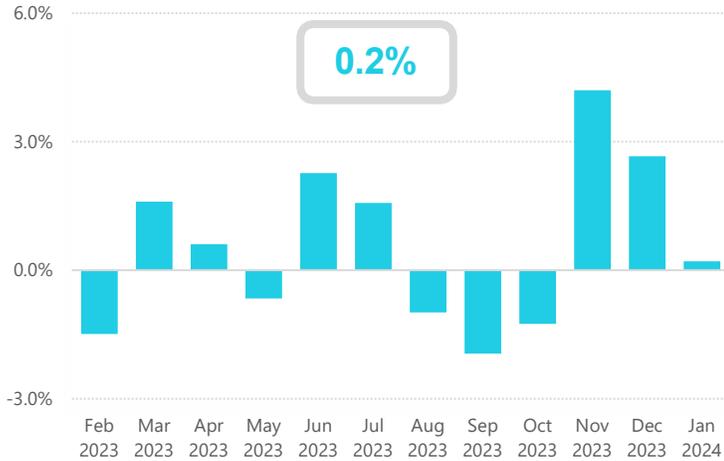
## What to Watch

- Interest rates and central bank actions
- Economic data and trends
  - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Stewardship and ESG-related developments
  - International Financial Reporting Standards (IFRS) publishes guidance for implementation of International Sustainability Standards Board standards to guide comparable ESG reporting
  - Exxon pursues legal action against two proponents of shareholder proposals, bypassing Securities and Exchange Commission process to review admissibility of shareholder proposals

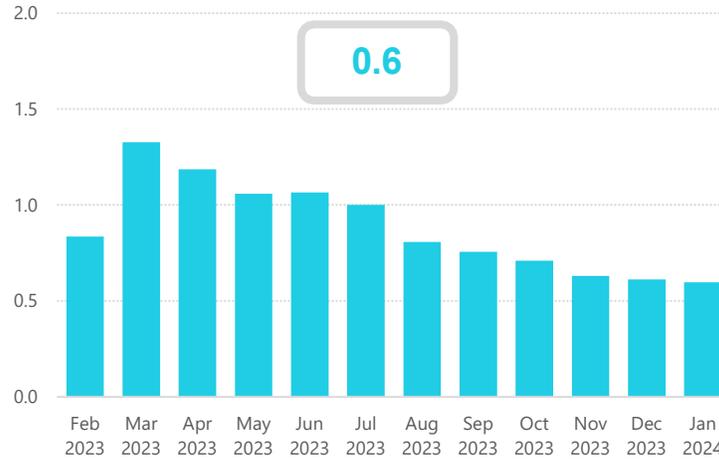
# Total Fund Summary as of January 2024



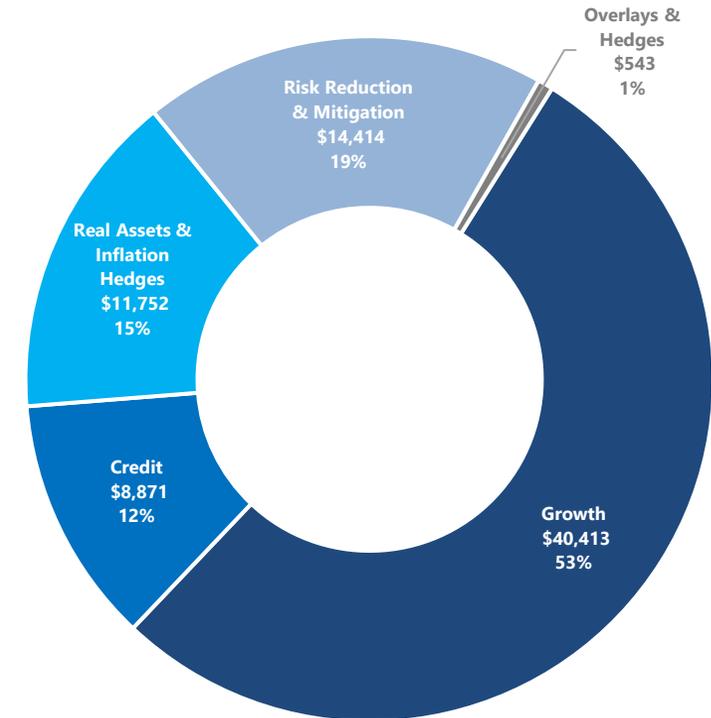
Monthly Return (net)



Sharpe Ratio (3-year annualized)



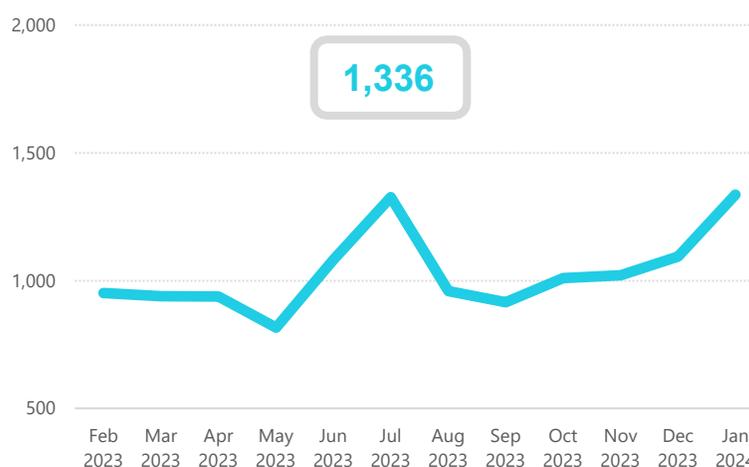
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

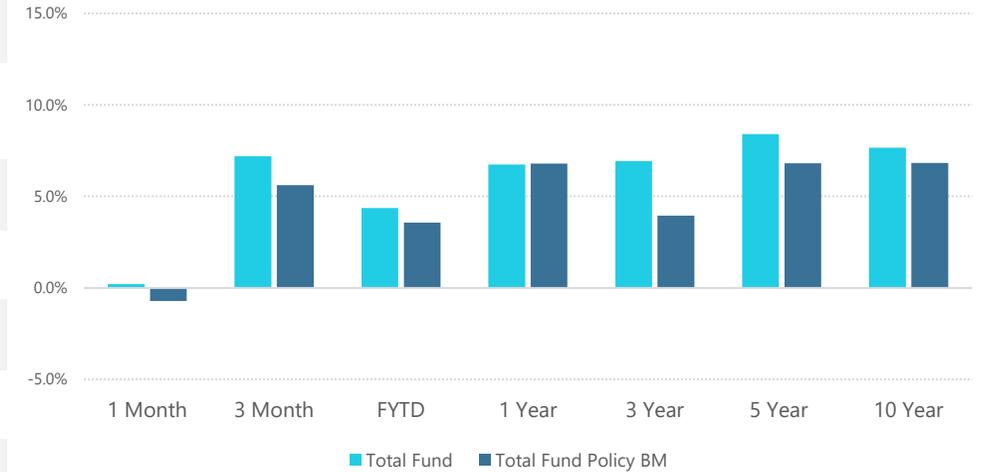


# Historical Net Performance as of January 2024



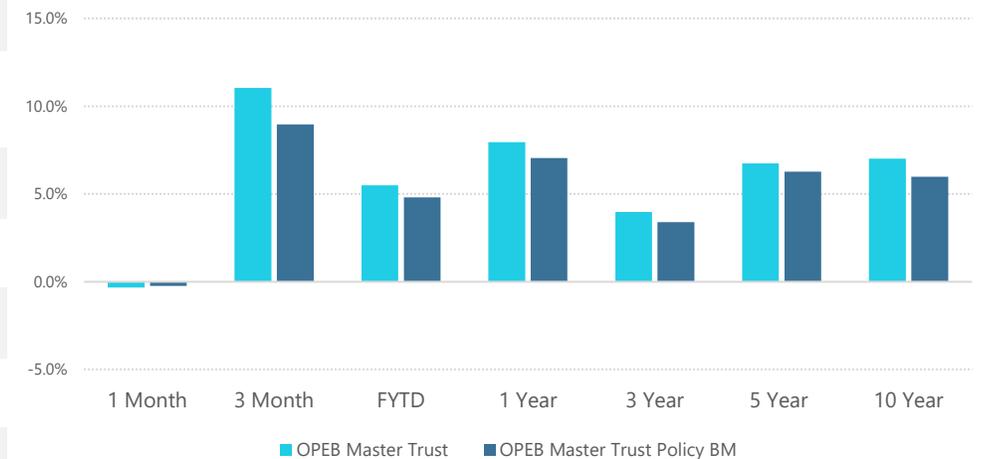
## LACERA Pension Fund

	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>75,994</b>	<b>100.0%</b>	<b>100.0%</b>	<b>0.2%</b>	<b>7.2%</b>	<b>4.4%</b>	<b>6.7%</b>	<b>6.9%</b>	<b>8.4%</b>	<b>7.7%</b>
Total Fund Policy BM				-0.7%	5.6%	3.6%	6.8%	3.9%	6.8%	6.8%
7% Annual Hurdle Rate				0.6%	0.6%	4.0%	7.0%	7.0%	7.0%	7.0%
<b>Growth</b>	<b>40,413</b>	<b>53.2%</b>	<b>53.0%</b>	<b>0.2%</b>	<b>9.5%</b>	<b>5.5%</b>	<b>10.3%</b>	<b>10.0%</b>		
Growth Policy BM				-1.0%	5.5%	4.6%	11.6%	6.1%		
<b>Credit</b>	<b>8,871</b>	<b>11.7%</b>	<b>11.0%</b>	<b>1.1%</b>	<b>4.1%</b>	<b>8.4%</b>	<b>12.2%</b>	<b>5.5%</b>		
Credit Policy BM				2.0%	6.2%	8.8%	12.7%	2.6%		
<b>Real Assets &amp; Inflation Hedges</b>	<b>11,752</b>	<b>15.5%</b>	<b>17.0%</b>	<b>-0.6%</b>	<b>2.0%</b>	<b>-0.8%</b>	<b>-3.9%</b>	<b>7.0%</b>		
Real Assets & Inflation Hedges Policy BM				-1.9%	2.8%	-1.3%	-6.1%	6.0%		
<b>Risk Reduction &amp; Mitigation</b>	<b>14,414</b>	<b>19.0%</b>	<b>19.0%</b>	<b>-0.1%</b>	<b>7.1%</b>	<b>2.3%</b>	<b>1.6%</b>	<b>-1.8%</b>		
Risk Reduction & Mitigation Policy BM				-0.4%	7.9%	2.2%	2.3%	-2.1%		
<b>Overlays &amp; Hedges</b>	<b>543</b>	<b>0.7%</b>		<b>16.4%</b>	<b>18.5%</b>	<b>34.6%</b>	<b>84.1%</b>			



## OPEB Trust

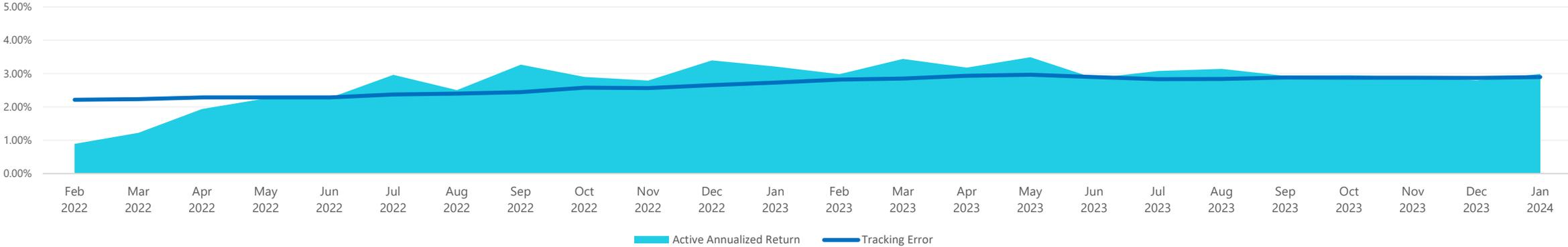
	Market Value (\$ millions)	% of Master Trust	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>OPEB Master Trust</b>	<b>3,522</b>			<b>-0.3%</b>	<b>11.1%</b>	<b>5.5%</b>	<b>7.9%</b>	<b>4.0%</b>	<b>6.7%</b>	<b>7.0%</b>
OPEB Master Trust Policy BM				-0.2%	9.0%	4.8%	7.0%	3.4%	6.3%	6.0%
6% Annual Hurdle Rate				0.5%	0.5%	3.5%	6.0%	6.0%	6.0%	6.0%
<b>OPEB Growth</b>	<b>1,602</b>	<b>45.5%</b>	<b>45.0%</b>	<b>0.2%</b>	<b>15.3%</b>	<b>7.7%</b>	<b>13.8%</b>	<b>5.8%</b>	<b>10.1%</b>	
OPEB Growth Policy BM				-0.2%	12.3%	6.9%	13.2%	5.0%	9.5%	
<b>OPEB Credit</b>	<b>641</b>	<b>18.2%</b>	<b>18.0%</b>	<b>0.0%</b>	<b>5.4%</b>	<b>6.0%</b>	<b>9.1%</b>	<b>2.4%</b>	<b>3.7%</b>	
OPEB Credit Policy BM				1.0%	6.1%	7.8%	10.8%	2.5%	3.9%	
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>690</b>	<b>19.6%</b>	<b>20.0%</b>	<b>-1.7%</b>	<b>8.6%</b>	<b>2.4%</b>	<b>-1.5%</b>	<b>5.0%</b>	<b>4.2%</b>	
OPEB RA & IH Policy BM				-1.1%	3.6%	0.0%	-5.0%	4.1%	3.6%	
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>588</b>	<b>16.7%</b>	<b>17.0%</b>	<b>-0.6%</b>	<b>9.6%</b>	<b>1.8%</b>	<b>1.0%</b>	<b>-2.4%</b>	<b>0.9%</b>	
OPEB RR & M Policy BM				-0.8%	9.7%	1.5%	0.7%	-3.0%	0.5%	
OPEB HL PM Cash	0	0.0%								



# Active and Excess Return as of January 2024



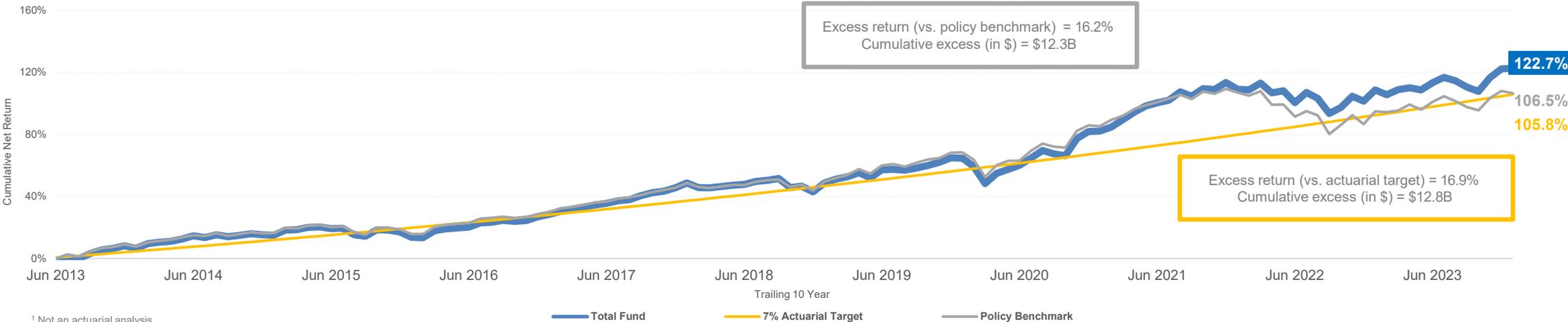
## Active Return vs. Tracking Error<sup>1,2,3</sup>



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
1/31/2024	6.9%	3.9%	3.0%	2.9%

<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 January 2024\*



**TOTAL FUND VOLATILITY**  
12.3%

**BENCHMARK VOLATILITY**  
11.8%

## Forecasted Total Fund Volatility Trend

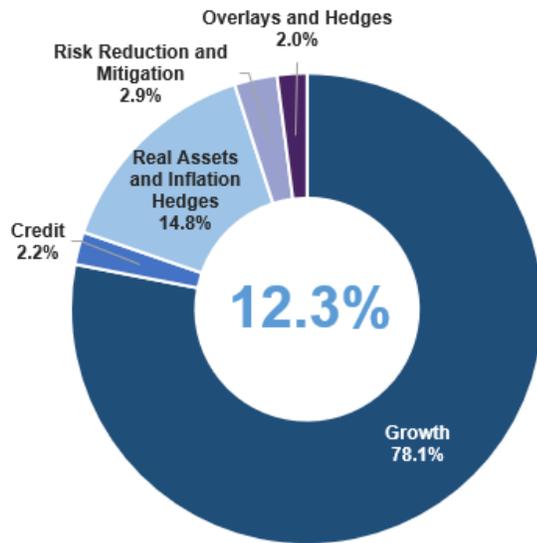


## Subcategory Volatility

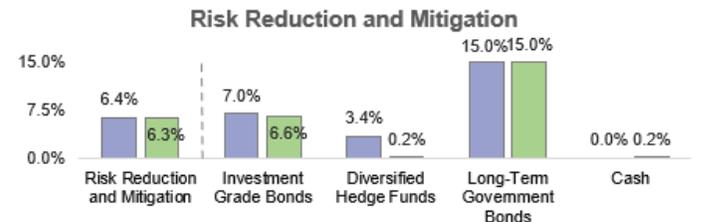
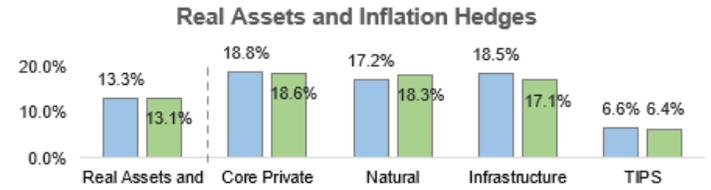
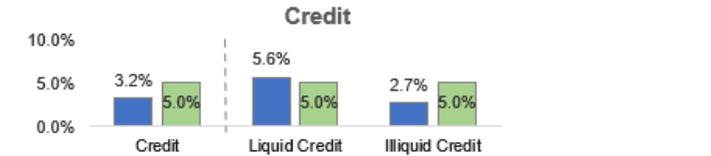
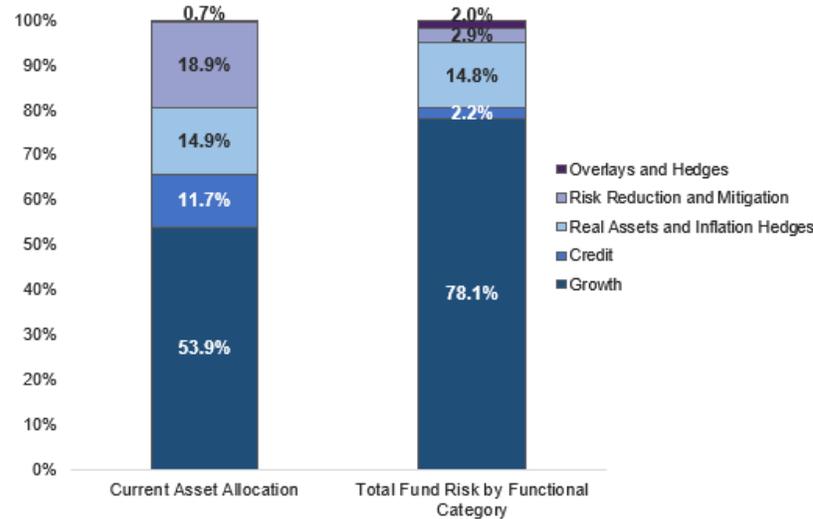
1 Subcategory volatility is on the left bar and benchmark risk is on the right bar.



## Functional Category Contributions to Total Fund Volatility



## Total Fund Asset Allocation Capital-based versus Risk-based



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 January 2024\*



**TOTAL FUND TRACKING ERROR**

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**1.29%**

**ALLOCATION RISK**

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**0.19%**

**SELECTION RISK**

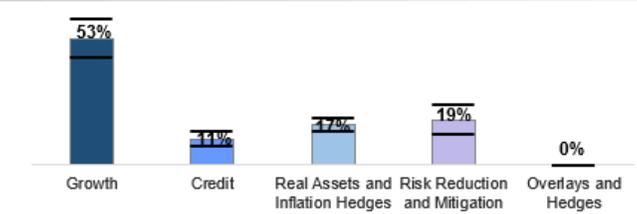
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**1.09%**

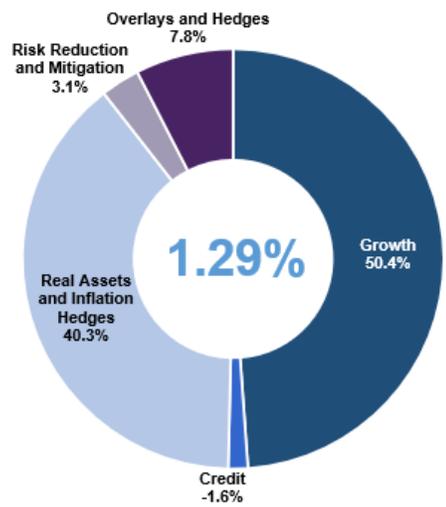


### Policy Target Weight for each Functional Category

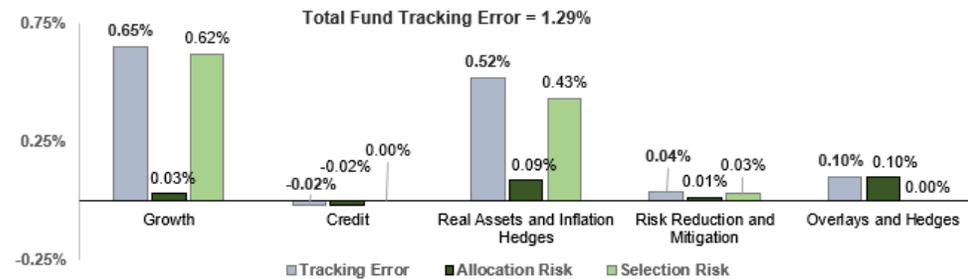
Maximum and Minimum Bands



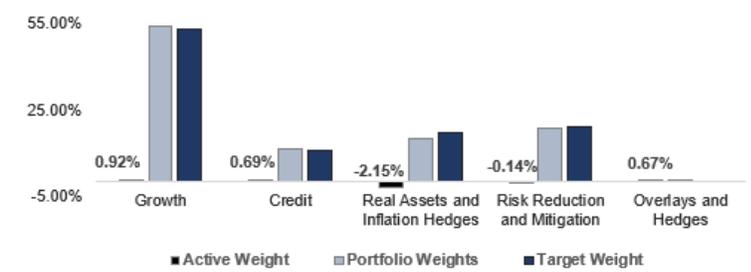
### Functional Category Contributions to Tracking Error



### Tracking Error Attribution



### Active Weights for each Functional Category



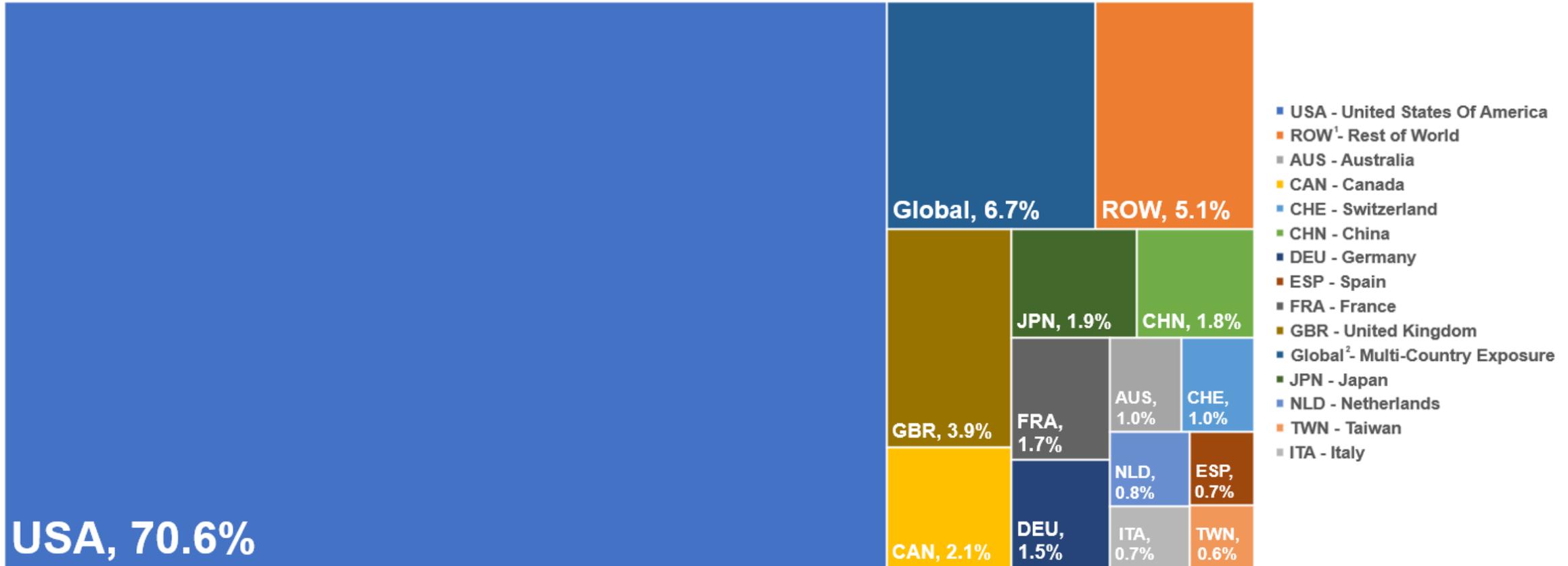
### Subcategory Tracking Error

Category	Subcategory	Tracking Error (%)
Global	Growth	1.35%
	Global Equity	0.46%
	Private Equity	3.06%
	Non-Core Private Real Estate	13.57%
	Total Fund	1.29%
Credit	Credit	0.03%
	Liquid Credit	0.88%
	Illiquid Credit	4.12%
Real Assets and Inflation Hedges	Real Assets and Inflation Hedges	3.76%
	Core Private Real Estate	4.12%
	Natural Resources and Commodities	4.39%
	Infrastructure	8.51%
	TIPS	0.25%
Risk Reduction and Mitigation	Risk Reduction and Mitigation	0.96%
	Investment Grade Bonds	0.44%
	Diversified Hedge Funds	3.36%
	Long-Term Government Bonds	0.05%
	Cash	0.24%

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 January 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.

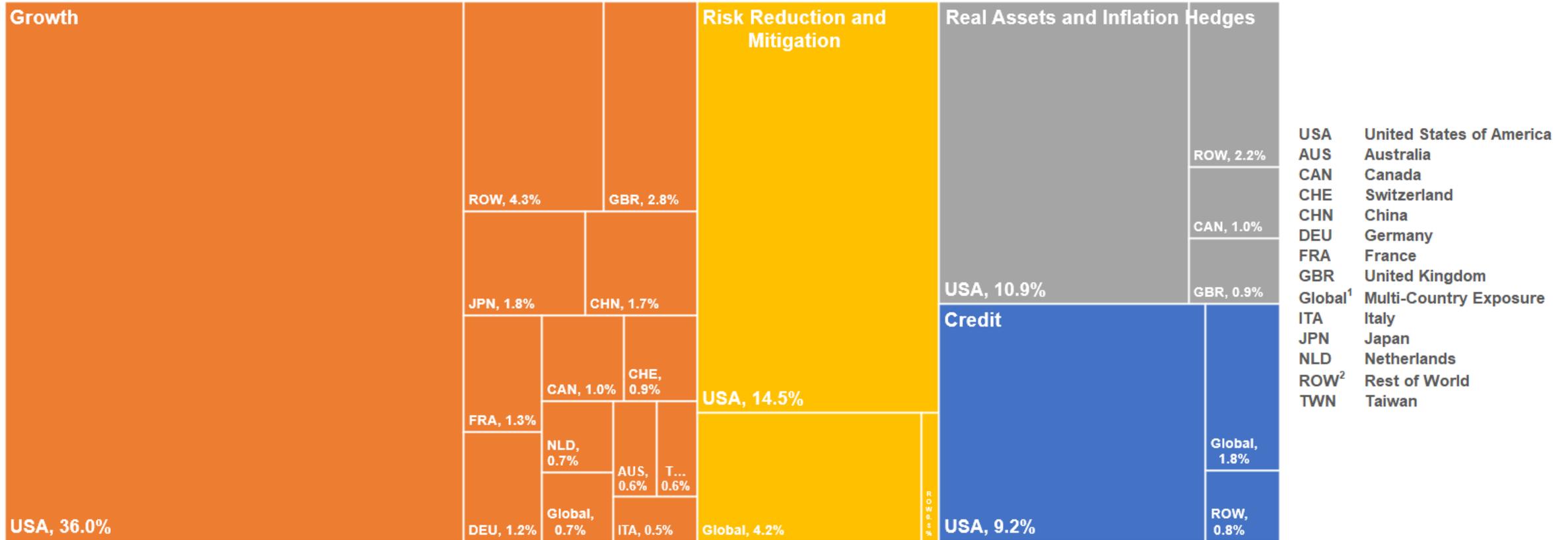
<sup>1</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

<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 January 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.

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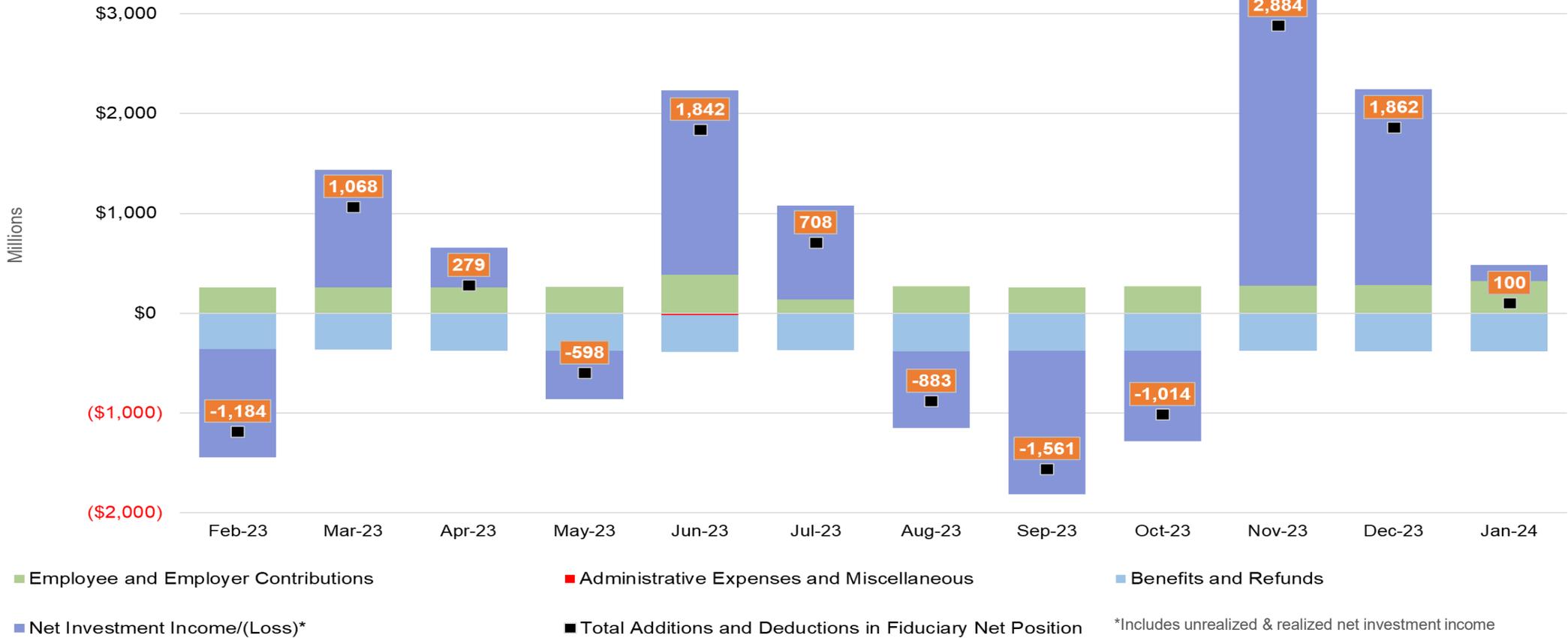
<sup>2</sup> "ROW - Rest of World" is sum of countries with weights below 0.5%.

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	3	4	\$2.1 billion



# 03 Portfolio Structural Updates

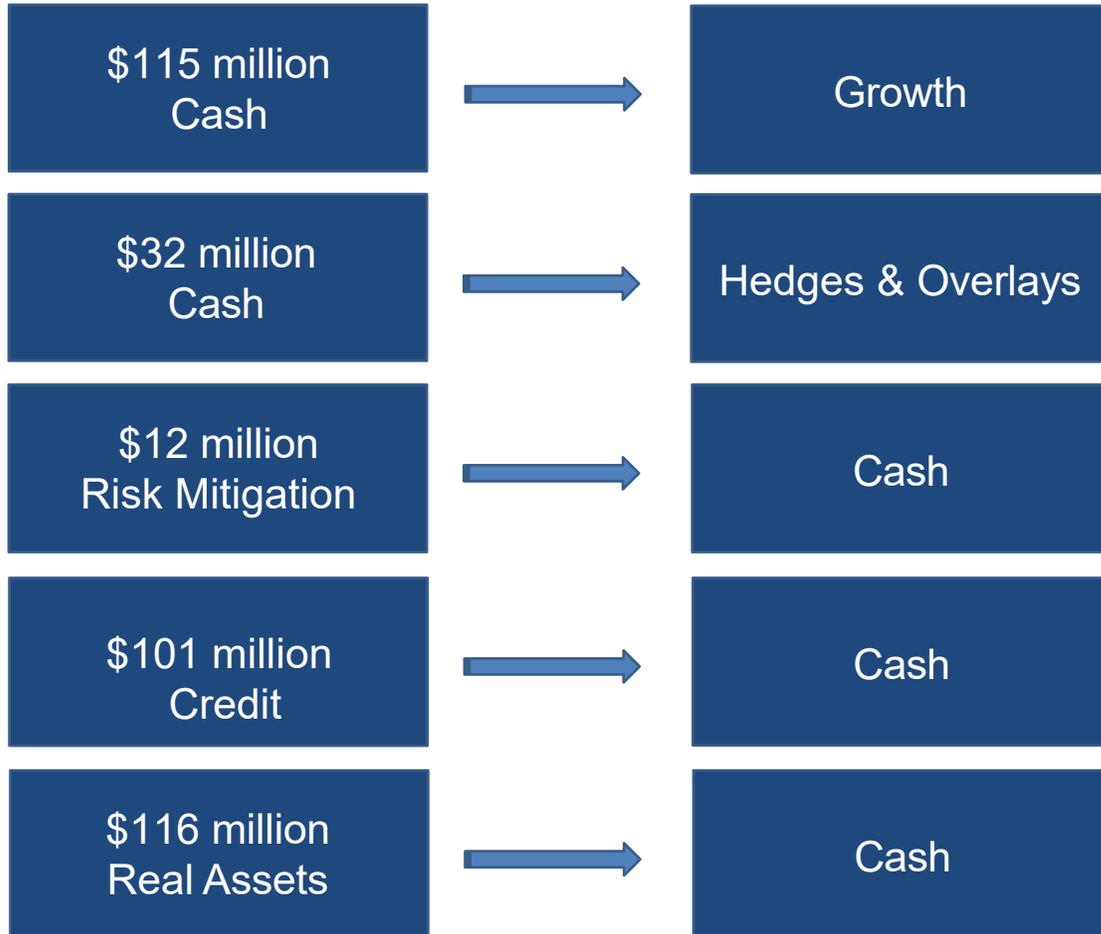
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# Portfolio Structural Updates



## Portfolio Movements

### Rebalancing Activity



## Hedges & Overlays

### Monthly Activity

Program	January Return	January Gain/(Loss)	Inception <sup>1</sup> Gain/(Loss)
Currency Hedge <sup>2</sup>	1.1%	(\$32.5 Million)	\$1.5 Billion
Cash/Rebalance Overlay <sup>3</sup>	0.1%	(\$2.0 Million)	\$440.1 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	✓	✓	TBD
Risk, Analytics, and ESG Research and Analytics Services Search			



# 04 Key Initiatives & Operational Updates

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# Notable Initiatives and Operational Updates



## Key Initiative Updates

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- Jonathan Grabel has been appointed to the Investor Advisory Group (IAG) for the Public Company Accounting Oversight Board (PCAOB). The IAG provides investor insights to inform the PCAOB's agenda.
- The 2024 Strategic Asset Allocation study is underway
- Adhering to the BOI-approved 2024 Work Plan and Strategic Initiatives

## Operational Updates

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- Annual contract compliance is in progress
- Budget review is in process

## Manager/Consultant Updates

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No material updates at this time

## Team Searches and Vacancies

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



# 05 Commentary

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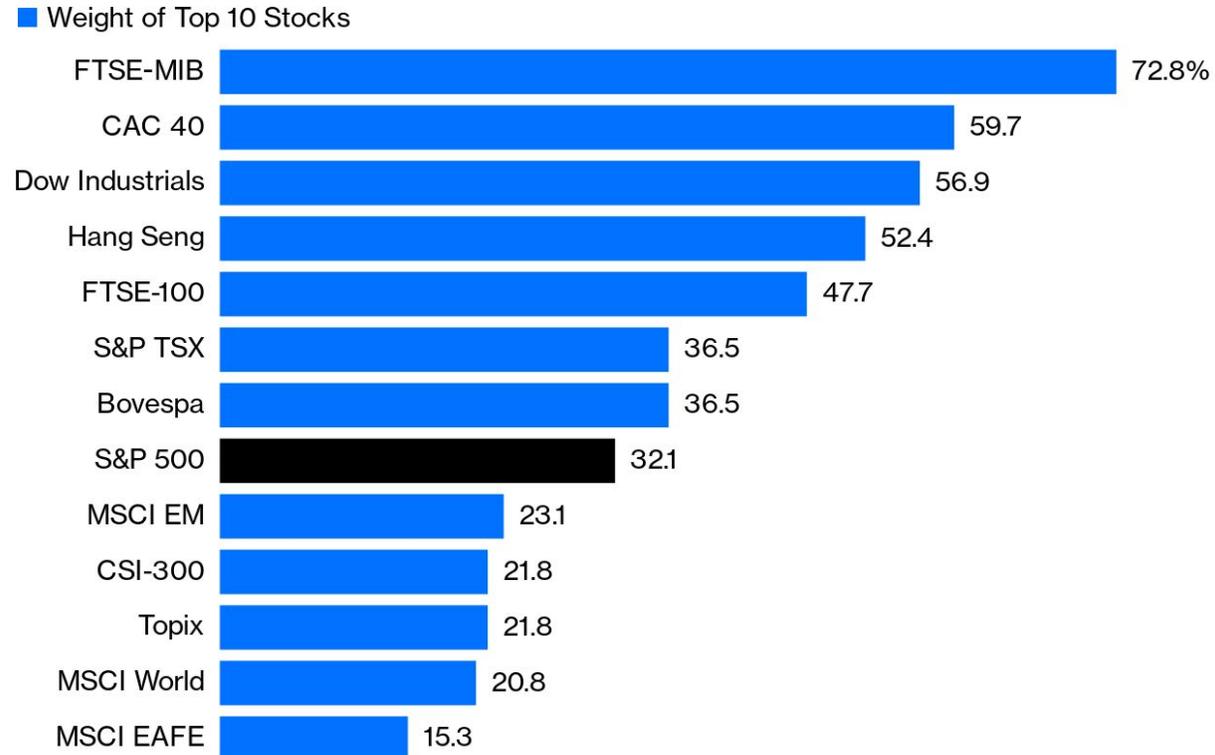
# Staff Chart of the Month

## Major Global Indexes Market Concentration



### If You Think the S&P 500 Is Top-Heavy...

Other major country indexes are more concentrated; not so global indexes



Source: Bloomberg

Bloomberg Opinion

# Quiet Period for Search Respondents



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

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