



Chief Investment Officer Monthly Report

Jonathan Grabel – Chief Investment Officer 

Board of Investments Meeting

April 10, 2024

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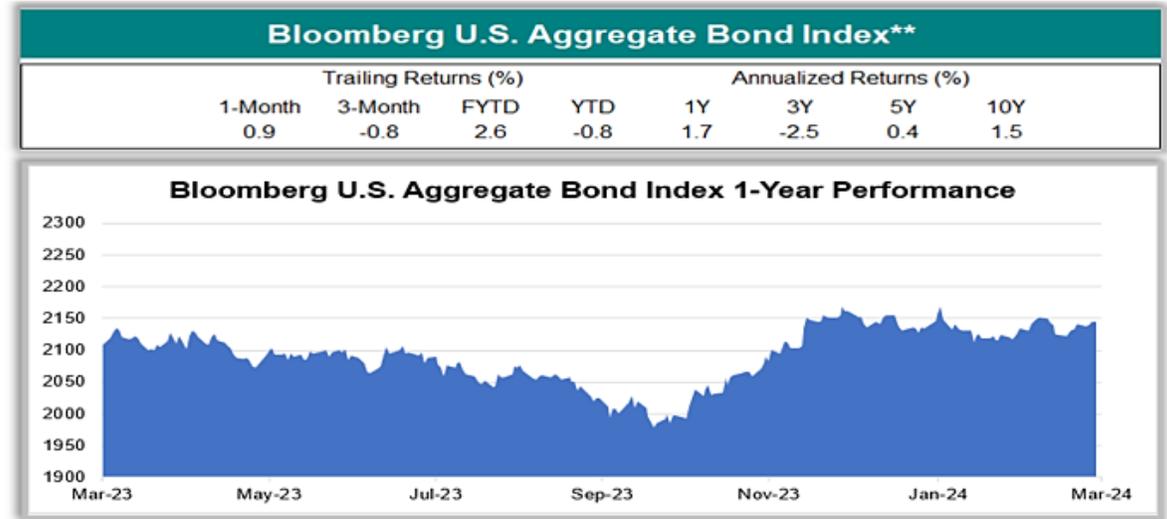


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01 Market Environment

Global Market Performance as of March 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
Reference Portfolio	60:40 Equity:Bond Portfolio	60% MSCI ACWI IMI/ 40% Bloomberg U.S. Aggregate Index	2.3	4.3	10.3	4.3	13.8	2.9	6.7	5.9
Equity	Global All Cap	MSCI ACWI IMI Total Return	3.2	7.7	15.6	7.7	22.4	6.3	10.6	8.4
	U.S. All Cap	Russell 3000 Total Return	3.2	10.0	19.3	10.0	29.2	9.8	14.3	12.3
	U.S. Large Cap	S&P 500 Total Return	3.2	10.6	19.4	10.6	29.8	11.5	15.0	12.9
	U.S. Small Cap	Russell 2000 Total Return	3.6	5.2	13.8	5.2	19.6	-0.1	8.1	7.6
	Non-U.S. All Cap	MSCI ACWI-ex U.S. IMI Total Return	3.1	4.3	10.6	4.3	13.2	1.7	6.0	4.3
	Emerging Markets	MSCI Emerging Markets Total Return	2.5	2.4	7.2	2.4	8.1	-5.0	2.2	2.9
Private Equity	Private Equity Buyout	Thomson Reuters PE Buyout Index	5.2	18.6	31.2	18.6	34.0	1.9	10.4	11.7
Fixed Income	U.S. Investment Grade Bonds	Bloomberg U.S. Aggregate Index	0.9	-0.8	2.6	-0.8	1.7	-2.5	0.4	1.5
	U.S. Corporate High Yield Bonds	Bloomberg U.S. Corporate High Yield Total Return	1.2	1.5	9.2	1.5	11.1	2.2	4.2	4.4
	U.S. Long Term Treasury Bonds	Bloomberg Long Term U.S. Treasury Total Return Index	1.2	-3.3	-3.9	-3.3	-6.1	-8.0	-2.8	1.2
	Developed Markets Leveraged Loans	Credit Suisse Leveraged Loan Total Return	0.8	2.5	9.0	2.5	12.4	5.8	5.3	4.6
	U.S. Treasury Inflation Protected Securities	Bloomberg U.S. Treasury TIPS Total Return Index	0.8	-0.1	1.9	-0.1	0.5	-0.5	2.5	2.2
	U.S. 3 Month Treasury Bill	FTSE 3 Month Treasury Bill	0.5	1.4	4.2	1.4	5.5	2.7	2.1	1.4
Commodity	Commodity Prices Index	Bloomberg Commodity Index Total Return	3.3	2.2	2.1	2.2	-0.6	9.1	6.4	-1.6
	Natural Resources	S&P Global LargeMidCap Commodity & Resources Index	8.2	1.3	5.4	1.3	1.6	9.4	9.3	4.9
Infrastructure	Global Infrastructure	Dow Jones Brookfield Global Infrastructure Composite Index	3.2	0.6	4.1	0.6	3.7	4.8	3.8	4.3
Real Estate	U.S. REITs	MSCI U.S. REIT Index	2.0	-0.3	7.5	-0.3	10.3	4.0	4.2	6.6

Source: Bloomberg

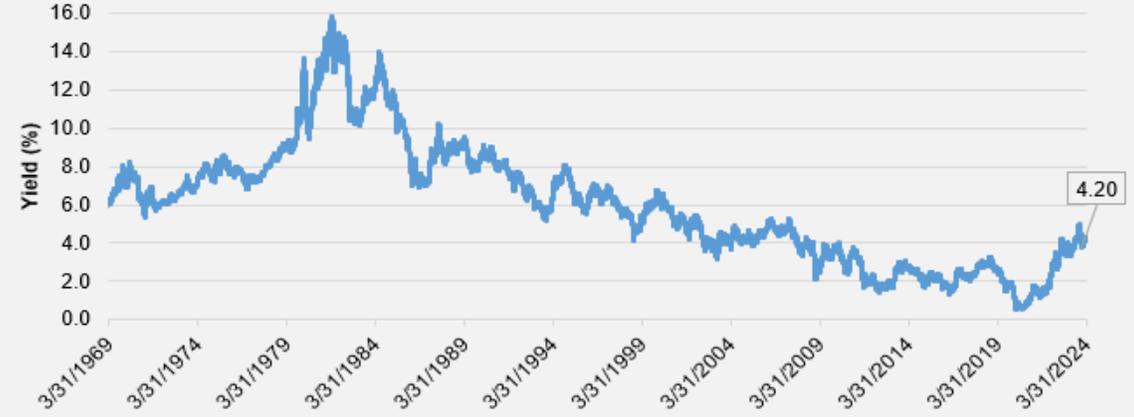
Key Macro Indicators*



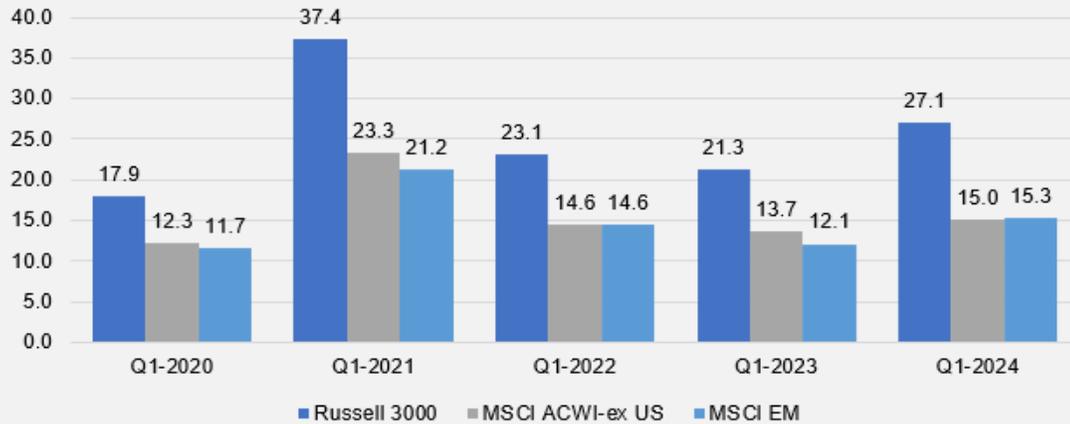
Real GDP Growth YoY (%) - Last Five Years¹



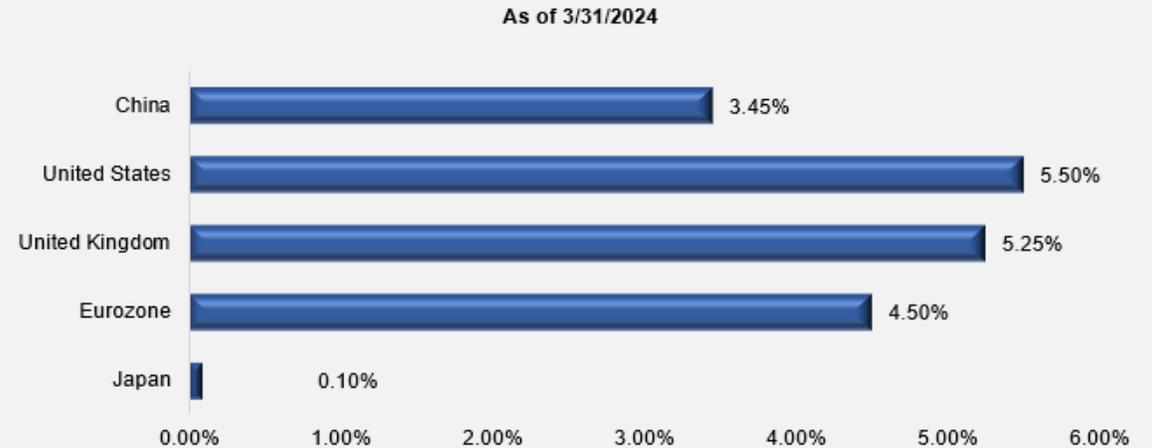
Historical 10-Year Treasury Yield²



Price-to-Earnings - Last Five Years³



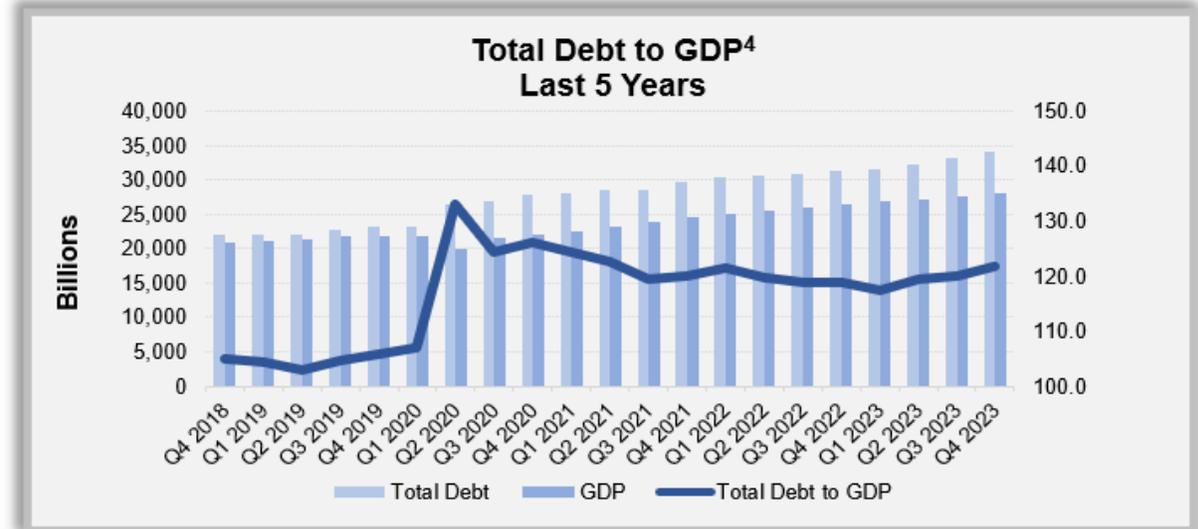
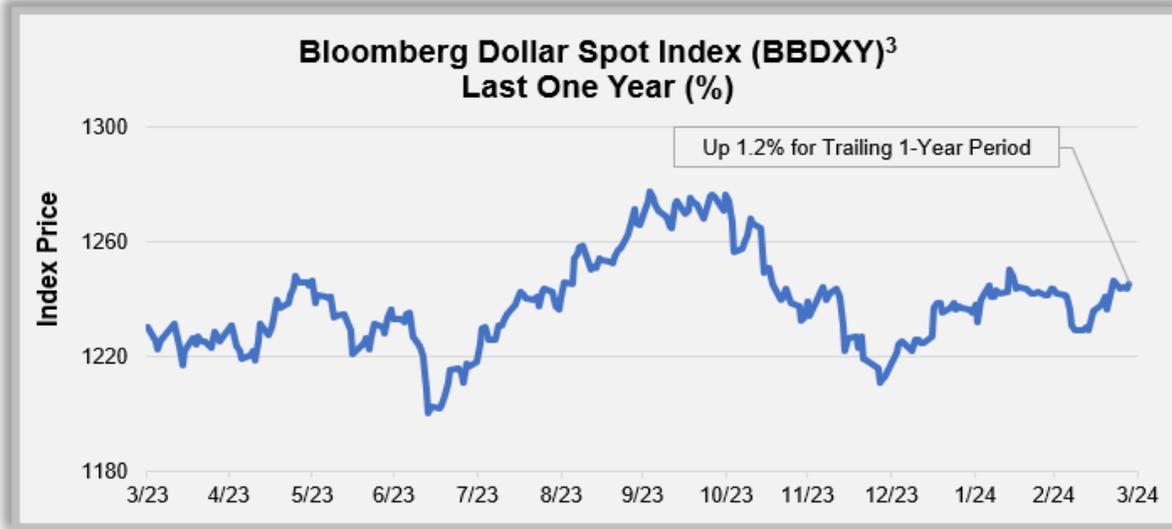
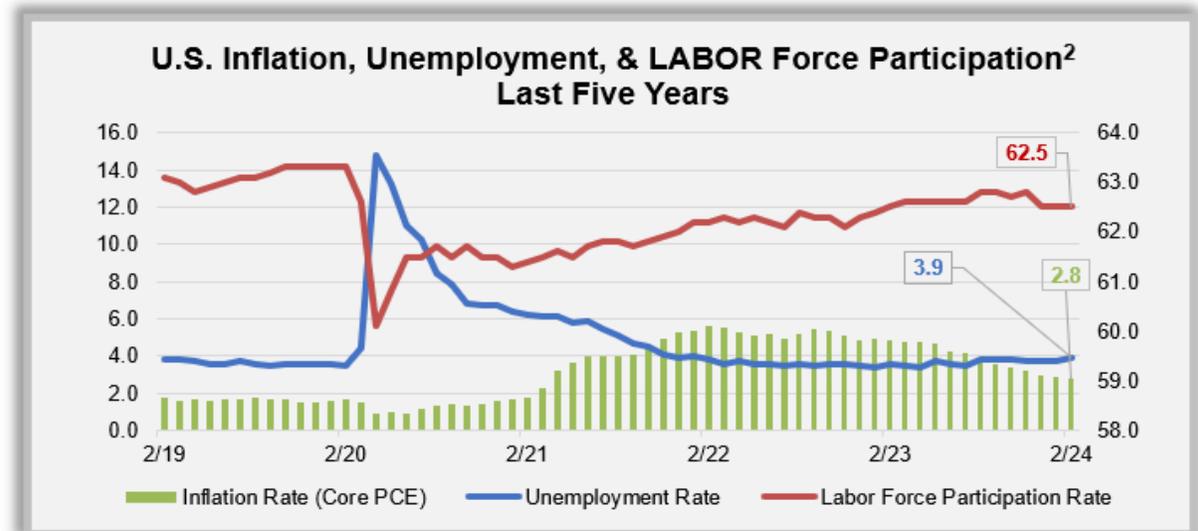
Central Bank Rates⁴



*The information on the "Key Macro Indicators" charts is the best available data as of 3/31/24 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 3/31/24 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



Recent Themes

- U.S. Federal Reserve held its benchmark overnight borrowing rate in a range between 5.25% and 5.5% during their mid-March meeting
 - Rate unchanged since July 2023 and the highest in more than 23 years
- Anonymous projections from U.S. Federal Reserve officials indicated that three quarter-percentage point rate cuts are expected this calendar year
 - Chair Jerome Powell struck a watchful tone by indicating that incoming data is being monitored and considered
- The U.S. 10-year Treasury yield ended March at 4.20% 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 3.2% in March

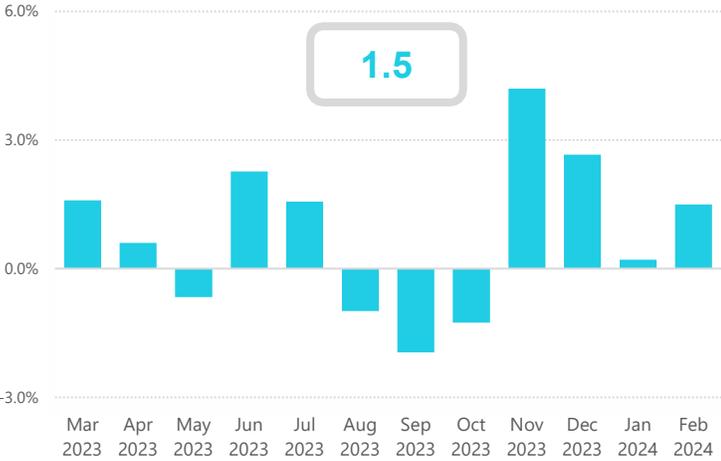
What to Watch

- Interest rates and central bank actions
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Stewardship and ESG-related developments
 - U.S. Securities and Exchange Commission approved new rules for climate-related risk reporting from public companies, including Scope 1 and 2 emissions. The new rule has been stayed pending judicial review. LACERA commented on the proposed SEC rules in 2022, available [here](#).

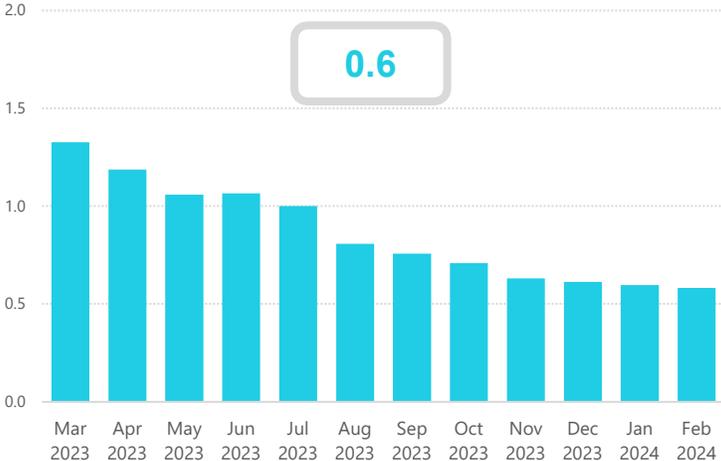
Total Fund Summary as of February 2024



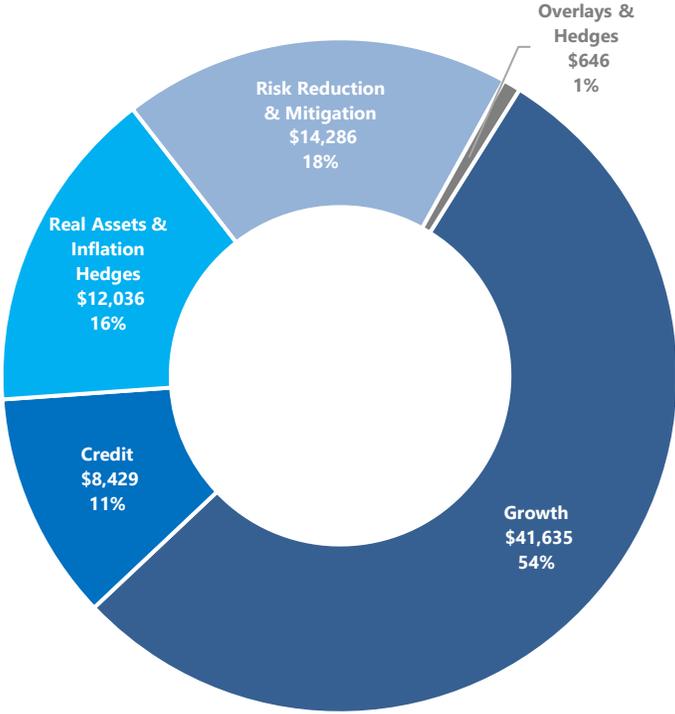
Monthly Return (net)



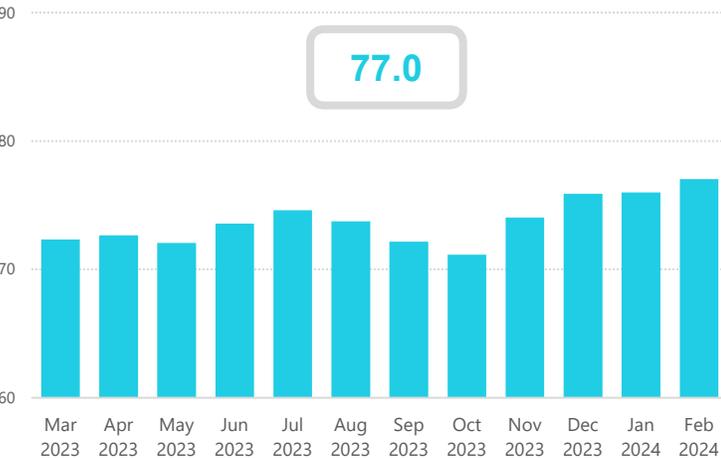
Sharpe Ratio (3-year annualized)



Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

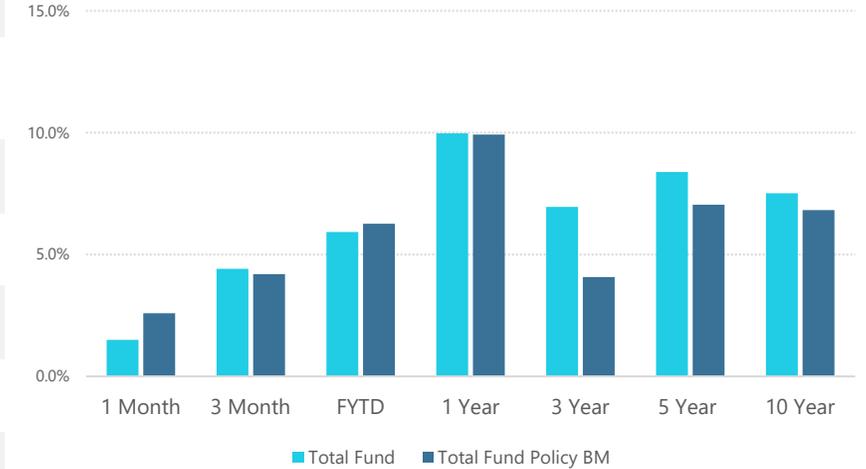


Historical Net Performance as of February 2024



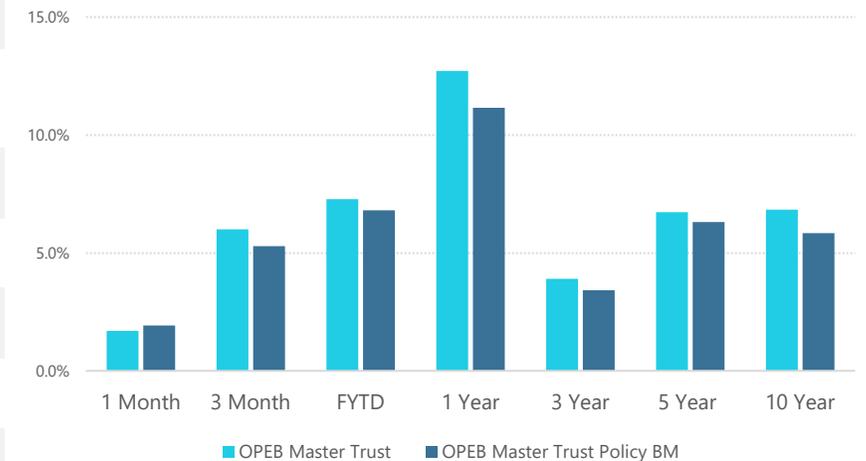
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	77,032	100.0%	100.0%	1.5%	4.4%	5.9%	10.0%	7.0%	8.4%	7.5%
Total Fund Policy BM				2.6%	4.2%	6.3%	9.9%	4.1%	7.0%	6.8%
7% Annual Hurdle Rate				0.6%	1.1%	4.6%	7.0%	7.0%	7.0%	7.0%
Growth	41,635	54.0%	53.0%	2.9%	6.4%	8.6%	15.2%	10.1%		
Growth Policy BM				5.4%	6.3%	10.2%	16.8%	6.4%		
Credit	8,429	10.9%	11.0%	1.2%	4.0%	9.7%	13.3%	5.6%		
Credit Policy BM				0.4%	5.7%	9.2%	11.1%	2.8%		
Real Assets & Inflation Hedges	12,036	15.6%	17.0%	-1.1%	-0.8%	-1.9%	-1.8%	5.9%		
Real Assets & Inflation Hedges Policy BM				-0.9%	-1.6%	-2.3%	-4.0%	5.1%		
Risk Reduction & Mitigation	14,286	18.5%	19.0%	-0.7%	2.6%	1.6%	2.6%	-1.7%		
Risk Reduction & Mitigation Policy BM				-0.9%	2.5%	1.3%	3.4%	-2.0%		
Overlays & Hedges	646	0.8%		15.1%	30.5%	54.9%	87.8%			



OPEB Trust

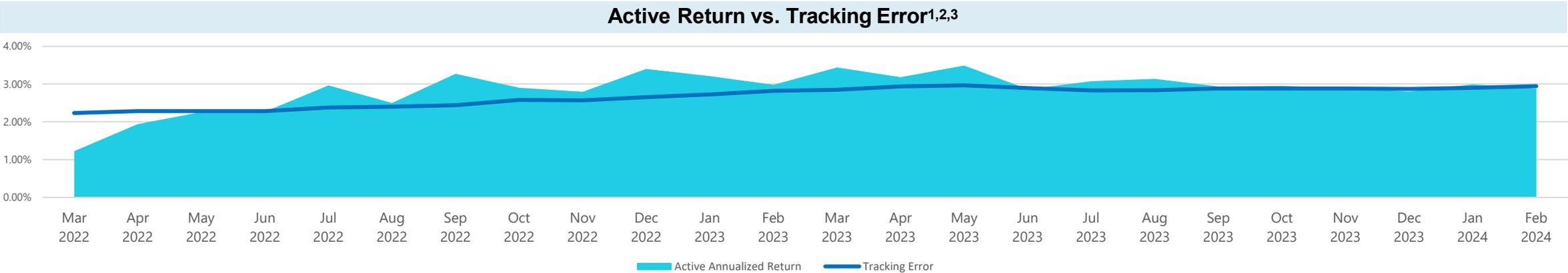
	Market Value (\$ millions)	% of Master Trust	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
OPEB Master Trust	3,588			1.7%	6.0%	7.3%	12.7%	3.9%	6.7%	6.8%
OPEB Master Trust Policy BM				1.9%	5.3%	6.8%	11.2%	3.4%	6.3%	5.8%
6% Annual Hurdle Rate				0.5%	1.0%	4.0%	6.0%	6.0%	6.0%	6.0%
OPEB Growth	1,638	45.7%	45.0%	4.1%	9.9%	12.2%	21.9%	6.3%	10.3%	
OPEB Growth Policy BM				4.8%	9.0%	12.0%	21.3%	5.8%	9.9%	
OPEB Credit	642	17.9%	18.0%	0.3%	3.0%	6.4%	10.3%	2.6%	3.5%	
OPEB Credit Policy BM				0.5%	4.5%	8.4%	11.5%	2.7%	3.8%	
OPEB Real Assets & Inflation Hedges	723	20.2%	20.0%	0.2%	3.3%	2.6%	2.7%	3.8%	4.1%	
OPEB RA & IH Policy BM				-0.3%	0.1%	-0.4%	-3.2%	2.8%	3.4%	
OPEB Risk Reduction & Mitigation	584	16.3%	17.0%	-1.6%	2.4%	0.2%	2.0%	-2.5%	0.6%	
OPEB RR & M Policy BM				-1.5%	2.5%	0.0%	1.8%	-3.1%	0.2%	
OPEB HL PM Cash	0	0.0%								



Active and Excess Return as of February 2024



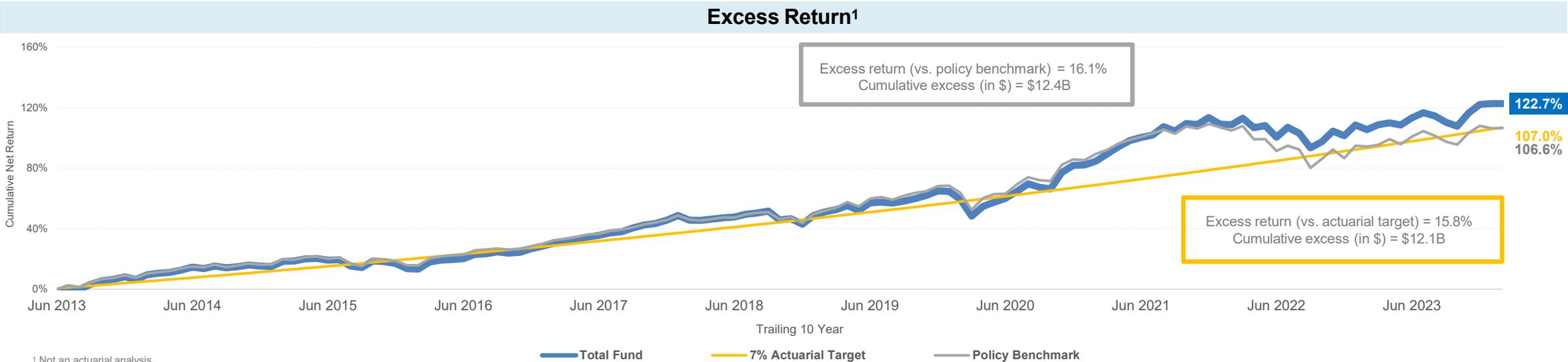
Active Return vs. Tracking Error^{1,2,3}



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Feb 2024	7.0%	4.1%	2.9%	2.9%

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



Excess return (vs. policy benchmark) = 16.1%
 Cumulative excess (in \$) = \$12.4B

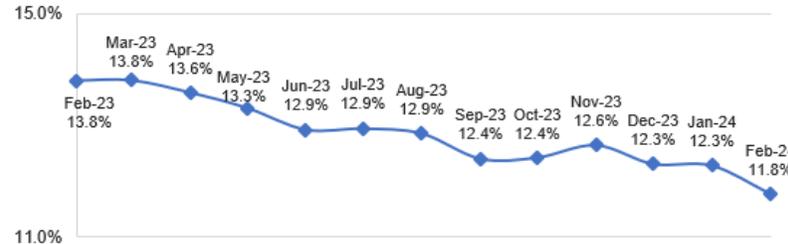
Excess return (vs. actuarial target) = 15.8%
 Cumulative excess (in \$) = \$12.1B

¹ Not an actuarial analysis.

Total Fund Forecast Volatility as of February 2024*

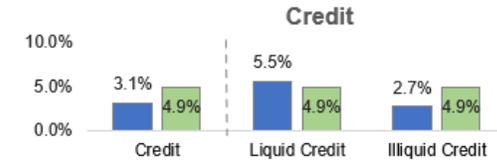


Forecasted Total Fund Volatility Trend

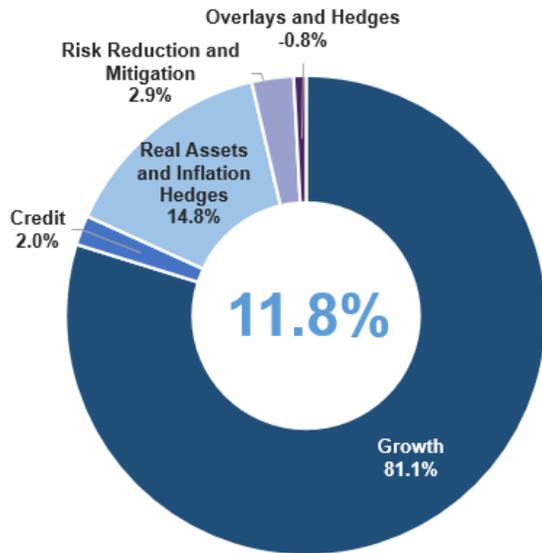


Subcategory Volatility

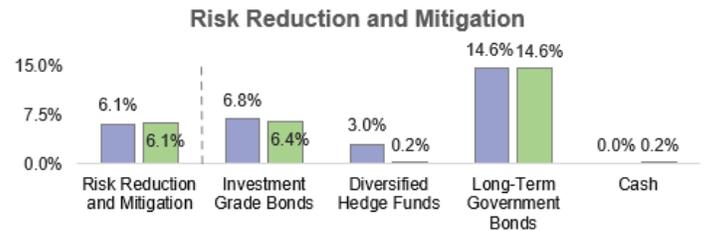
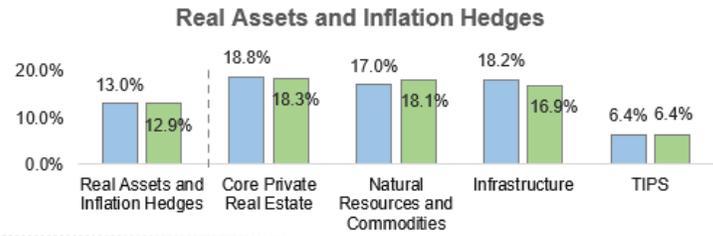
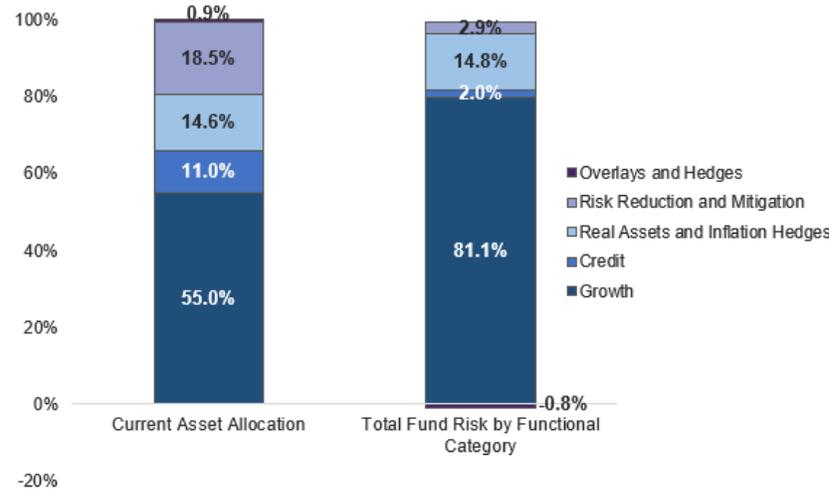
1 Subcategory volatility is on the left bar and benchmark risk is on the right bar.



Functional Category Contributions to Total Fund Volatility



Total Fund Asset Allocation
Capital-based versus Risk-based



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 February 2024*



TOTAL FUND TRACKING ERROR
1.22%

ALLOCATION RISK
0.15%

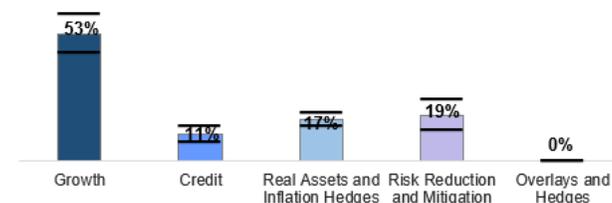
SELECTION RISK
1.07%

Forecasted Tracking Error Trend

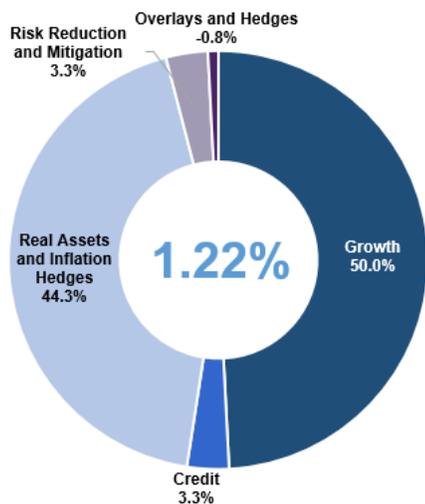


Policy Target Weight for each Functional Category

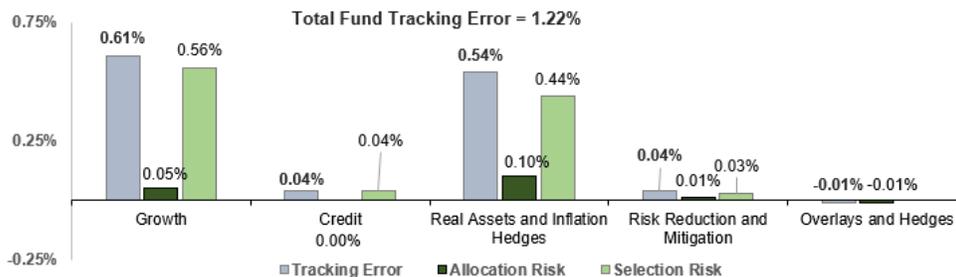
Maximum and Minimum Bands



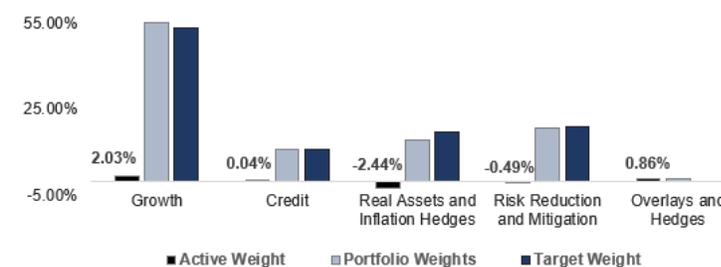
Functional Category Contributions to Tracking Error



Tracking Error Attribution



Active Weights for each Functional Category



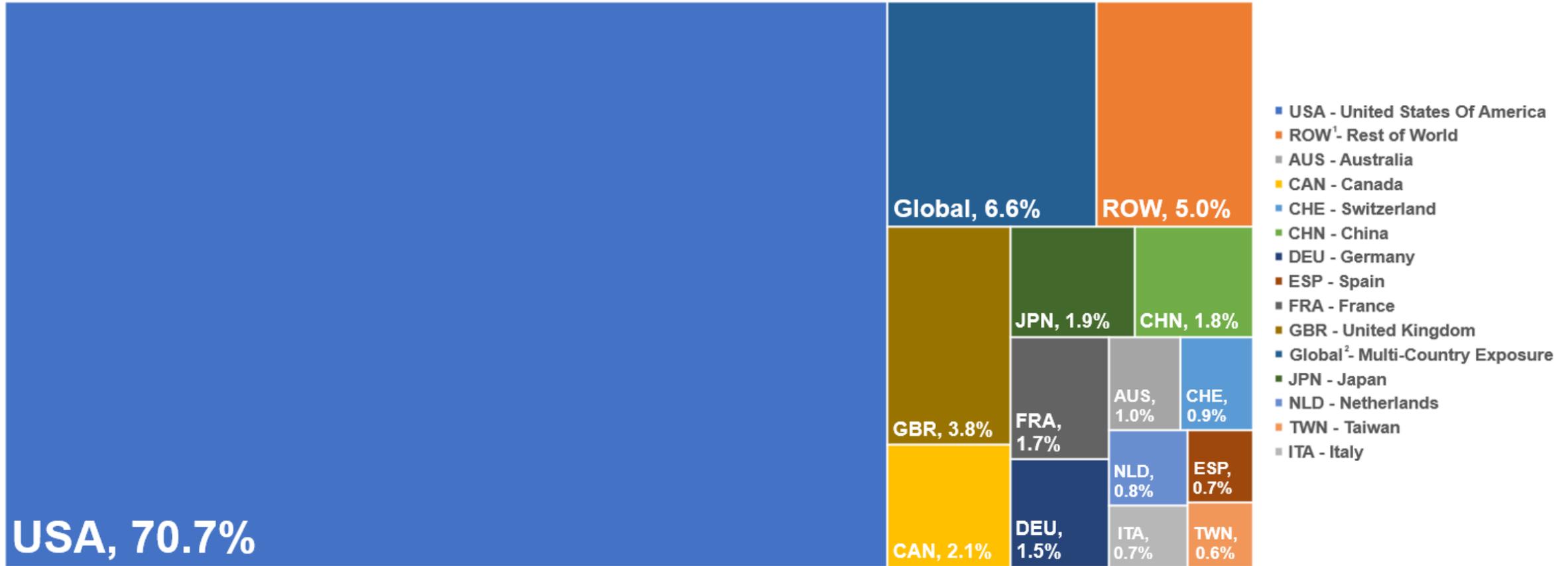
Subcategory Tracking Error

Total Fund	Global				Credit			Real Assets and Inflation Hedges					Risk Reduction and Mitigation				
1.22%	1.30%	0.45%	3.04%	13.27%	0.03%	0.97%	4.00%	3.79%	4.10%	4.48%	8.37%	0.08%	0.92%	0.45%	2.97%	0.04%	0.23%
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 February 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.

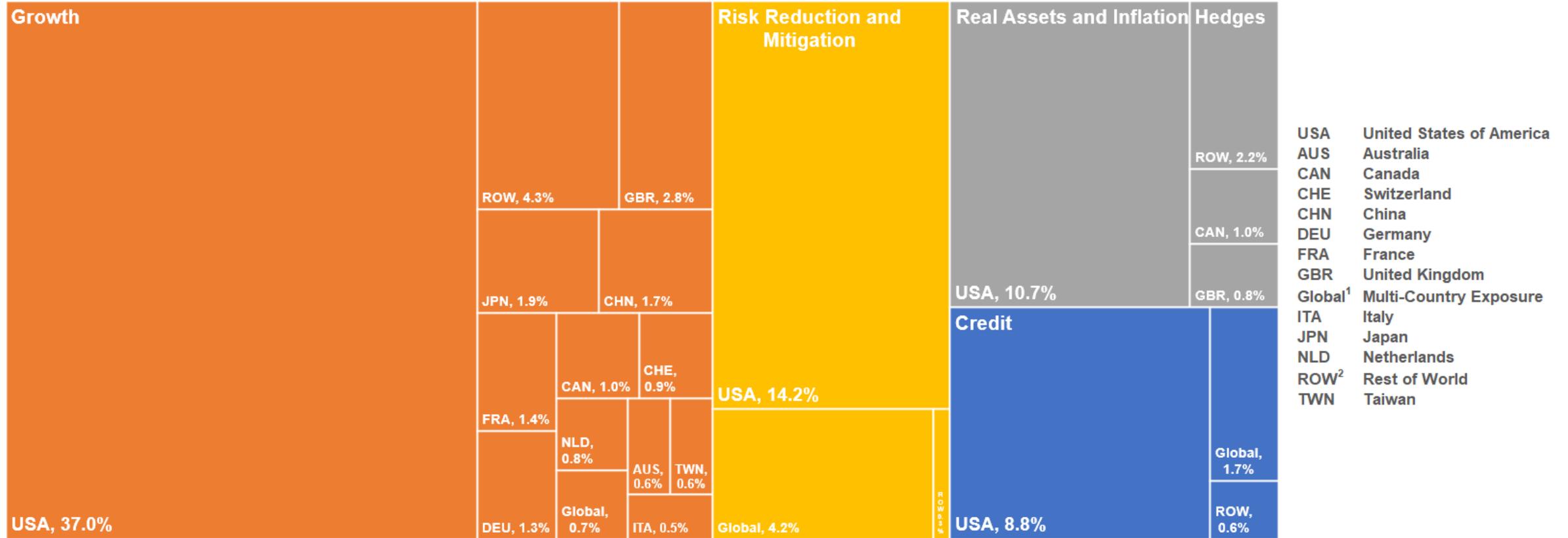
¹ "ROW - Rest of World" is sum of countries with weights below 0.5%.

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 February 2024* Ex-Overlays and Hedges



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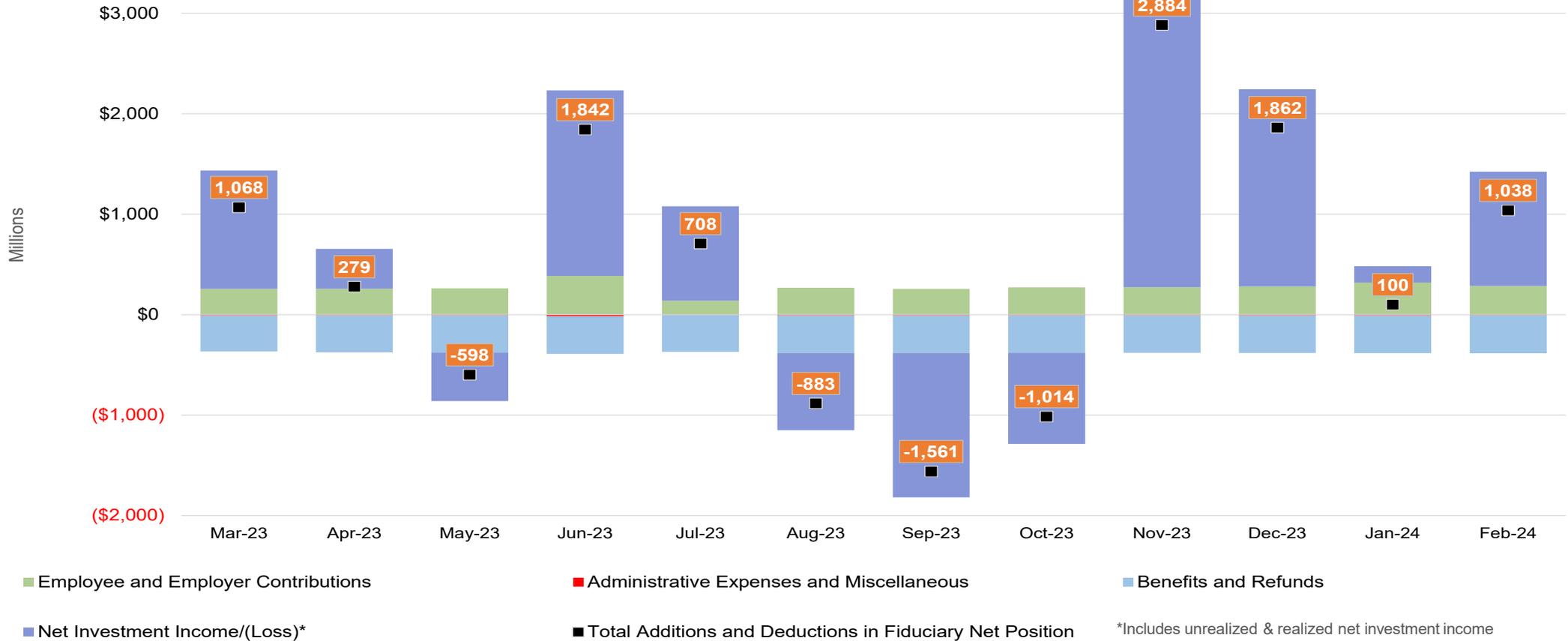
² "ROW - Rest of World" is sum of countries with weights below 0.5%.

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	5	\$3.1 billion



03 Portfolio Structural Updates

Portfolio Structural Updates



Portfolio Movements

Rebalancing Activity



Hedges & Overlays

Monthly Activity

Program	February Return	February Gain/(Loss)	Inception ¹ Gain/(Loss)
Currency Hedge ²	0.7%	(\$21.6 Million)	\$1.5 Billion
Cash/Rebalance Overlay ³	1.3%	\$30.4 Million	\$470.5 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	✓	✓	TBD
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

- The 2024 Strategic Asset Allocation study is 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

- Annual contract compliance has been completed
- Budget review is in process

Manager/Consultant Updates

State Street Global Advisors – Global Equities and Cash – Informed LACERA that Jackie Collier, Chief Compliance Officer (“CCO”), State Street Global Advisors, will be resigning, effective May 3, 2024. Tim Corbett, Chief Risk Officer, will assume interim CCO responsibilities until a replacement is found.



05 **Commentary**

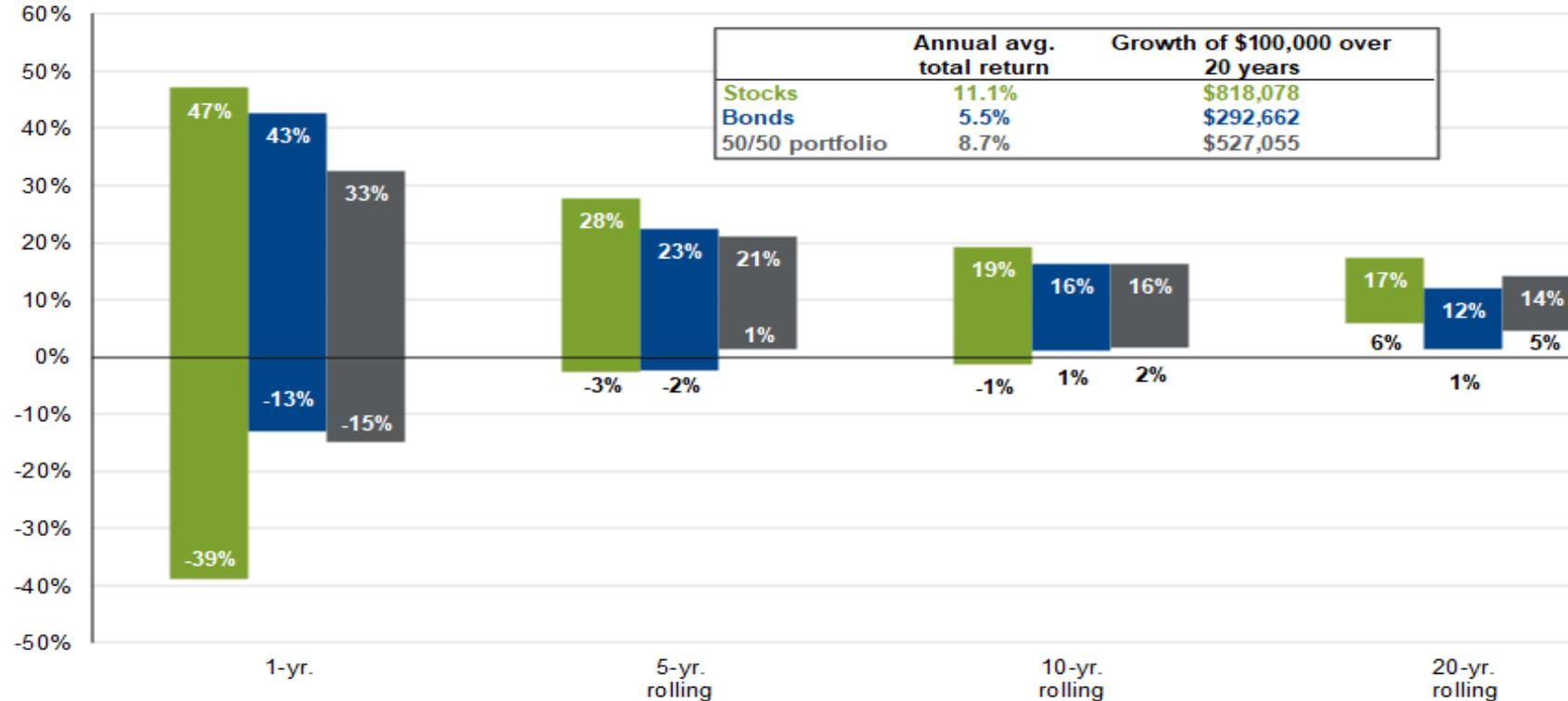
Staff Chart of the Month

Time, Diversification and the Volatility of Returns



Range of stock, bond and blended total returns

Annual total returns, 1950-2022



Source: Bloomberg, FactSet, Federal Reserve, Robert Shiller, Strategas/Ibbotson, J.P. Morgan Asset Management. Returns shown are based on calendar year returns from 1950 to 2021. Stocks represent the S&P 500 Shiller Composite and Bonds represent Strategas/Ibbotson for periods from 1950 to 2010 and Bloomberg Aggregate thereafter. Growth of \$100,000 is based on annual average total returns from 1950 to 2022. Guide to the Markets – U.S. Data are as of September 30, 2023.

J.P.Morgan
ASSET MANAGEMENT

Quiet Period for Search Respondents



Hedge Funds, Credit, and Real Assets Consultant Search

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