

# **Chief Investment Officer Monthly Report**

**Board of Investments  
December 14, 2022**



Jonathan Grabel   
Chief Investment Officer

**LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION**

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# Market Environment



# Global Market Performance as of November 30, 2022

## MSCI ACWI IMI Index (Global Equity Market)\*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
7.6	3.2	-15.1	-11.8	6.5	6.1	8.6

### MSCI ACWI IMI Index 1-Year Performance



## Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
5.2	3.3	-14.2	-10.8	10.3	10.3	13.0

### Barclays U.S. Aggregate Bond Index 1-Year Performance



## MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
14.8	-1.8	-19.0	-17.4	0.1	-0.4	2.1

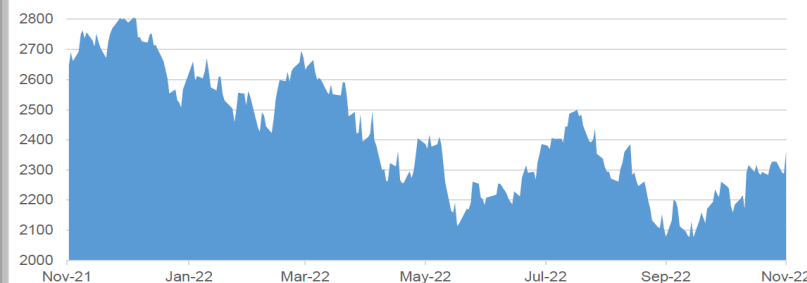
### MSCI Emerging Markets 1-Year Performance



## Barclays U.S. Aggregate Bond Index\*\*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
3.7	-2.1	-12.6	-12.8	-2.6	0.2	1.1

### Russell 3000 1-Year Performance



\*Global Equity Policy Benchmark - MSCI ACWI IMI Index

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

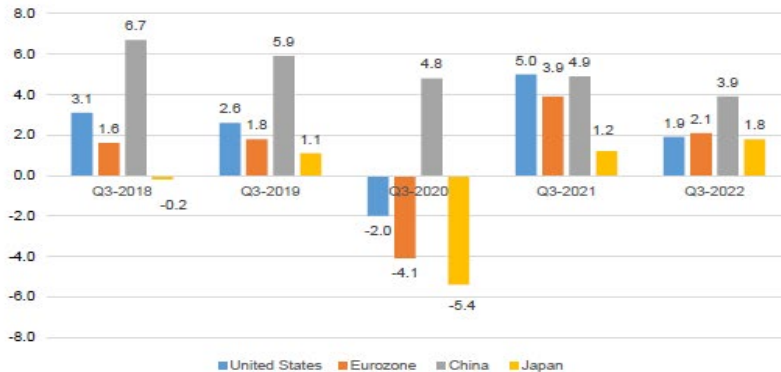
Source: Bloomberg



# Key Macro Indicators\*

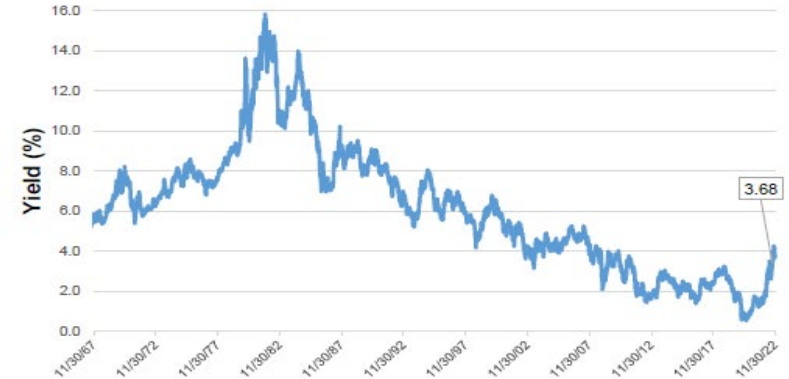
## GDP Growth of Major Economies<sup>1</sup>

Real GDP Growth YoY (%) - Last Five Years



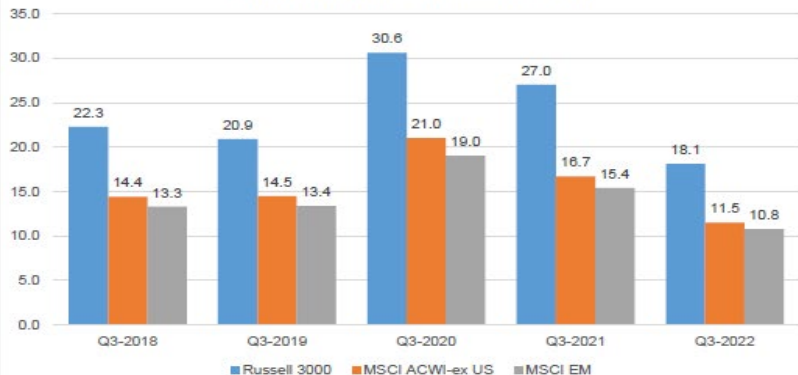
## 10-Year Treasury Yield<sup>2</sup>

Historical 10-Year Treasury Yield



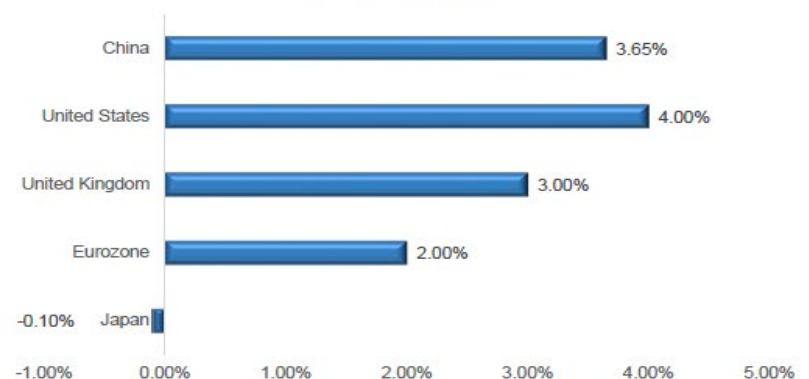
## World Equity Valuation<sup>3</sup>

Price-to-Earnings - Last Five Years



## Central Bank Rates<sup>4</sup> (as of 11/30/2022)

Central Bank Rates



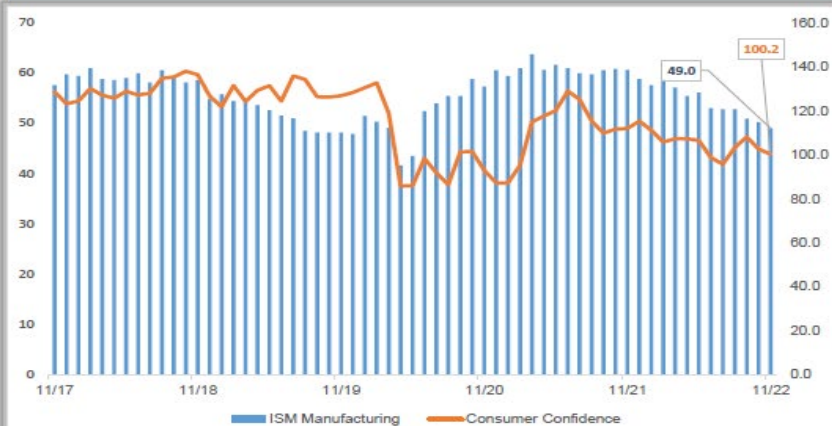
\*The information on the "Key Macro Indicators" charts is the best available data as of 11/30/22 and may not reflect the current market and economic environment.

Sources: 1. Bloomberg  
2. St. Louis Federal Reserve  
3. FactSet  
4. FactSet



# Key Macro Indicators\*

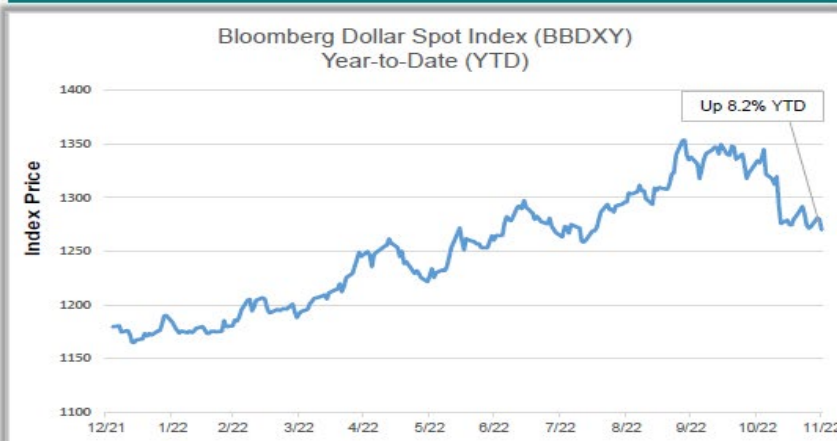
## Consumer Confidence & ISM Manufacturing<sup>1</sup>



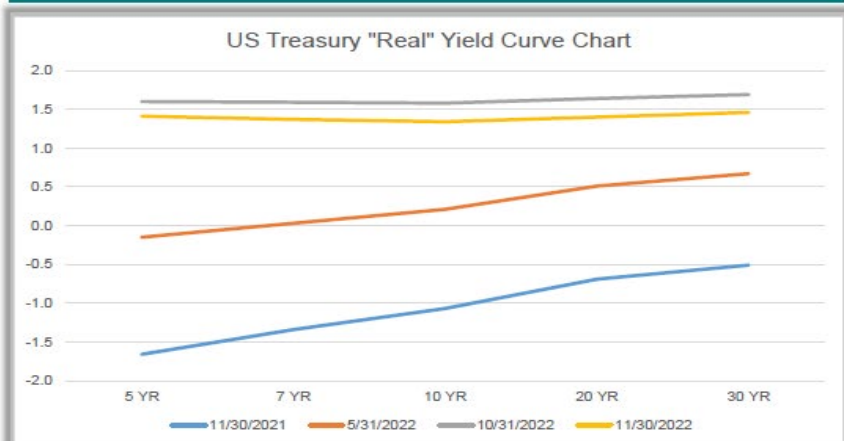
## U.S. Inflation, Unemployment, & Labor Force Participation<sup>2</sup>



## Performance of US Dollar vs. Leading Global Currencies<sup>3</sup>



## U.S. Treasury "Real" Yield Curve<sup>4</sup>



Sources: 1. Bloomberg 3. Bloomberg  
2. Bloomberg 4. U.S. Treasury

\*The information on the "Key Macro Indicators" charts is the best available data as of 11/30/22 and may not reflect the current market and economic environment.



# Market Themes and Notable Items to Watch

## Recent Themes

- On November 2<sup>nd</sup>, the Federal Reserve announced a 0.75% interest rate hike while citing elevated inflation
- Federal Reserve Chair Jerome Powell said on November 30<sup>th</sup> that smaller interest rate increases are likely ahead
  - He additionally cautioned that monetary policy is likely to remain restrictive for some time until positive signs of progress emerge regarding inflation
- The U.S. 10-year Treasury yield ended November at 3.68%, up from 1.52% at the end of 2021 and 0.93% at the end of 2020
- Global equities (MSCI All Country World Investable Market Index) gained 7.6% in November and are now down 15.1% in 2022

## What to Watch

- Interest rates and central bank actions
- Economic data and trends
  - Inflation, supply chains, and labor developments
- Macro conditions and geopolitical risks
- Environmental, social, and governance
  - PwC annual director survey finds about half (48%) of corporate directors would like to replace one board member; 19% would replace two or more
- Covid-19
  - Covid variants, cases, transmission, vaccines
  - Economic and consumer behavior implications



# Portfolio Performance & Risk Updates

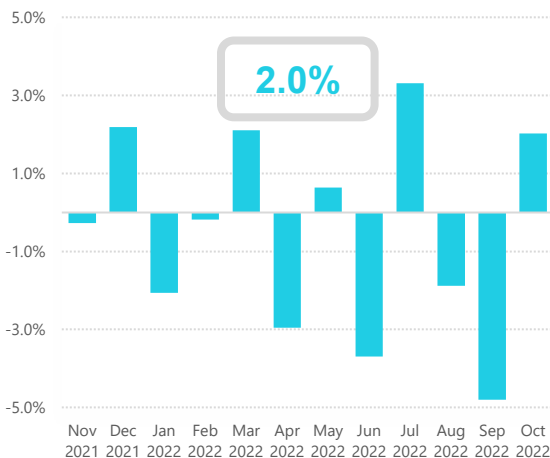




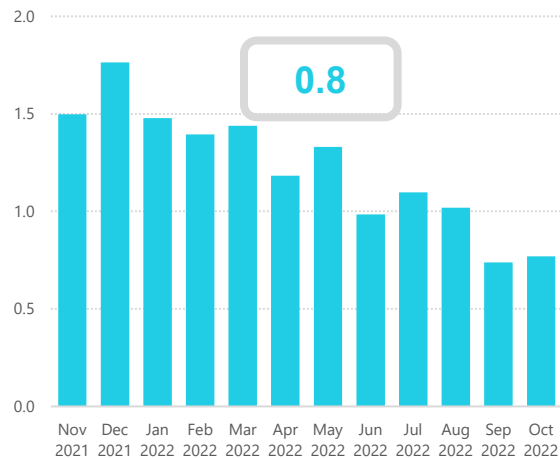
# Total Fund Summary

as of October 2022

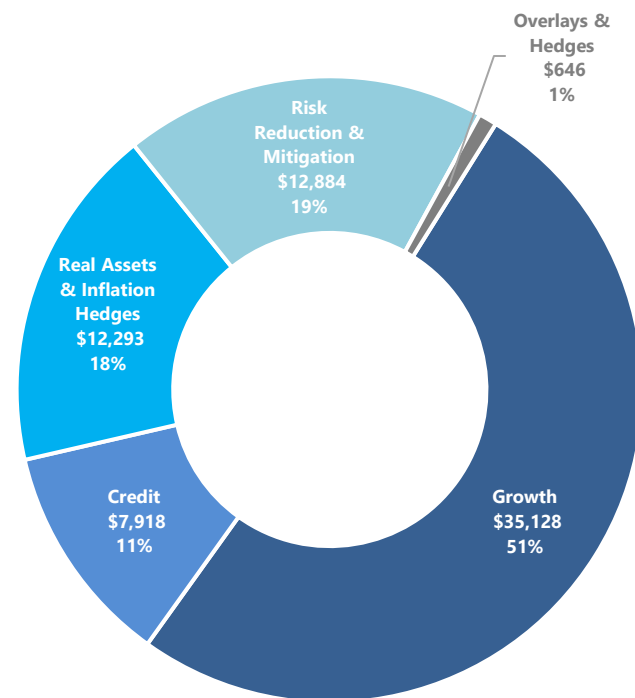
## Monthly Return (net)



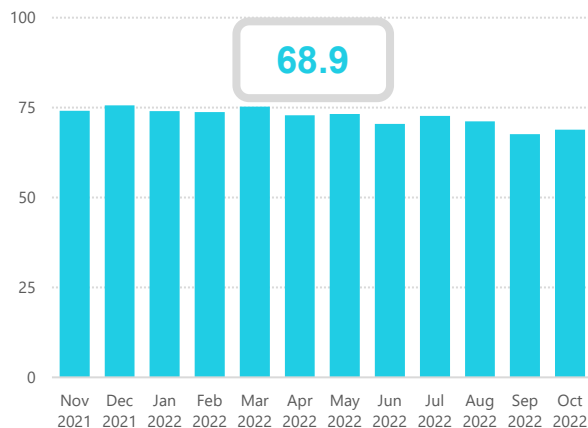
## Sharpe Ratio (3-year annualized)



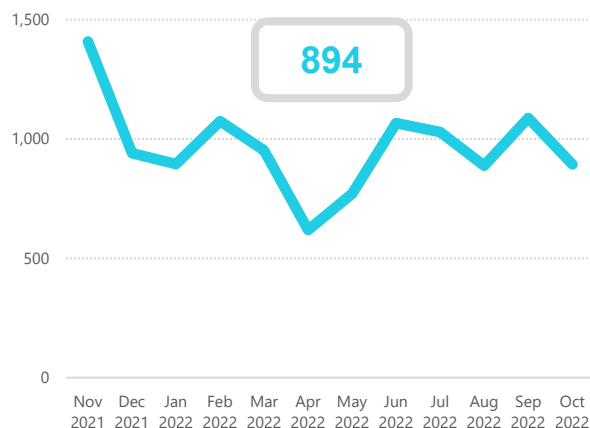
## Asset Allocation (\$ millions)



## Total Market Value (\$ billions)



## Cash (\$ millions)

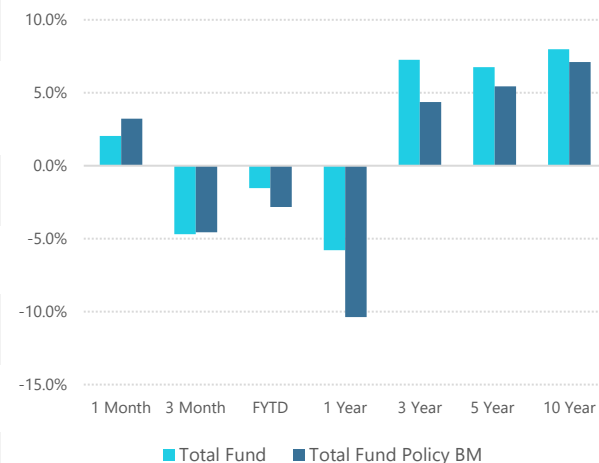


# Historical Net Performance

## as of October 2022

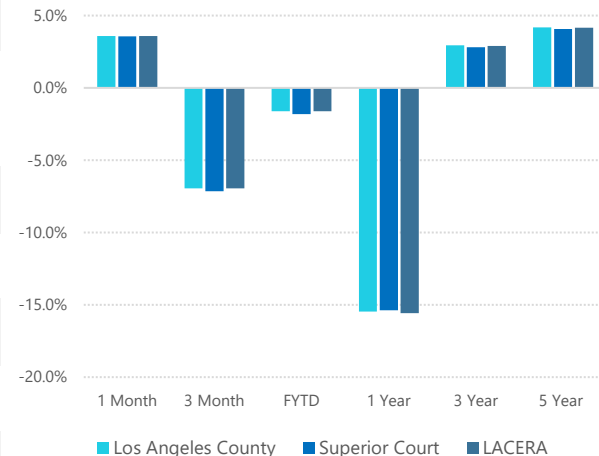
### LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
<b>Total Fund</b>	<b>68,869</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2.0%</b>	<b>-4.7%</b>	<b>-1.5%</b>	<b>-5.8%</b>	<b>7.3%</b>	<b>6.8%</b>	<b>8.0%</b>
Total Fund Policy BM				3.2%	-4.6%	-2.8%	-10.4%	4.4%	5.4%	7.1%
7% Annual Hurdle Rate				0.6%	1.7%	2.3%	7.0%	7.0%	7.0%	7.0%
<b>Growth</b>	<b>35,128</b>	<b>51.0%</b>	<b>53.0%</b>	<b>3.8%</b>	<b>-5.4%</b>	<b>-1.3%</b>	<b>-9.5%</b>	<b>11.0%</b>		
Growth Policy BM				6.1%	-4.7%	-2.9%	-14.6%	7.5%		
<b>Credit</b>	<b>7,918</b>	<b>11.5%</b>	<b>11.0%</b>	<b>0.2%</b>	<b>-1.3%</b>	<b>-0.4%</b>	<b>-6.1%</b>	<b>2.7%</b>		
Credit Policy BM				-1.7%	-1.1%	-2.6%	-10.7%	-0.3%		
<b>Real Assets &amp; Inflation Hedges</b>	<b>12,293</b>	<b>17.9%</b>	<b>17.0%</b>	<b>1.5%</b>	<b>-3.5%</b>	<b>-0.6%</b>	<b>8.0%</b>	<b>8.0%</b>		
Real Assets & Inflation Hedges Policy BM				3.1%	-3.7%	-0.1%	6.6%	8.3%		
<b>Risk Reduction &amp; Mitigation</b>	<b>12,884</b>	<b>18.7%</b>	<b>19.0%</b>	<b>-1.7%</b>	<b>-6.8%</b>	<b>-5.3%</b>	<b>-12.3%</b>	<b>-1.8%</b>		
Risk Reduction & Mitigation Policy BM				-1.8%	-7.3%	-5.7%	-13.3%	-2.8%		
<b>Overlays &amp; Hedges</b>	<b>646</b>	<b>0.9%</b>		<b>21.0%</b>	<b>11.2%</b>					



### OPEB Master Trust<sup>1</sup>

	Market Value (\$ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
<b>OPEB MASTER TRUST</b>	<b>2,464</b>			<b>3.6%</b>	<b>-6.9%</b>	<b>-1.6%</b>	<b>-15.5%</b>	<b>2.9%</b>	<b>4.2%</b>
Los Angeles County	2,398	97.3%	—	3.6%	-6.9%	-1.6%	-15.5%	2.9%	4.2%
Superior Court	55	2.2%	—	3.6%	-7.1%	-1.8%	-15.4%	2.8%	4.1%
LACERA	11	0.4%	—	3.6%	-6.9%	-1.6%	-15.6%	2.9%	4.2%
<b>OPEB Growth</b>	<b>1,175</b>	<b>47.7%</b>	<b>47.5%</b>	<b>6.2%</b>	<b>-7.4%</b>	<b>-0.8%</b>	<b>-20.0%</b>	<b>5.0%</b>	<b>5.3%</b>
OPEB MT Growth Policy BM				6.2%	-7.2%	-1.3%	-20.5%	4.6%	4.9%
<b>OPEB Credit</b>	<b>472</b>	<b>19.1%</b>	<b>19.0%</b>	<b>1.4%</b>	<b>-2.1%</b>	<b>1.1%</b>	<b>-8.7%</b>	<b>-0.7%</b>	<b>--</b>
OPEB MT Credit Policy BM				0.7%	-2.0%	0.3%	-9.6%	-0.5%	--
<b>OPEB Real Assets &amp; Inflation Hedges</b>	<b>486</b>	<b>19.7%</b>	<b>20.0%</b>	<b>3.0%</b>	<b>-10.9%</b>	<b>-4.9%</b>	<b>-11.1%</b>	<b>2.6%</b>	<b>--</b>
OPEB MT RA & IH Policy BM				1.9%	-3.8%	-0.5%	-7.4%	3.9%	--
<b>OPEB Risk Reduction &amp; Mitigation</b>	<b>330</b>	<b>13.4%</b>	<b>13.5%</b>	<b>-1.0%</b>	<b>-6.5%</b>	<b>-4.7%</b>	<b>-12.5%</b>	<b>-2.8%</b>	<b>0.3%</b>
OPEB MT RR & M Policy BM				-1.9%	-8.6%	-6.7%	-14.4%	-3.6%	-0.2%
Operational Cash	0	0.0%							

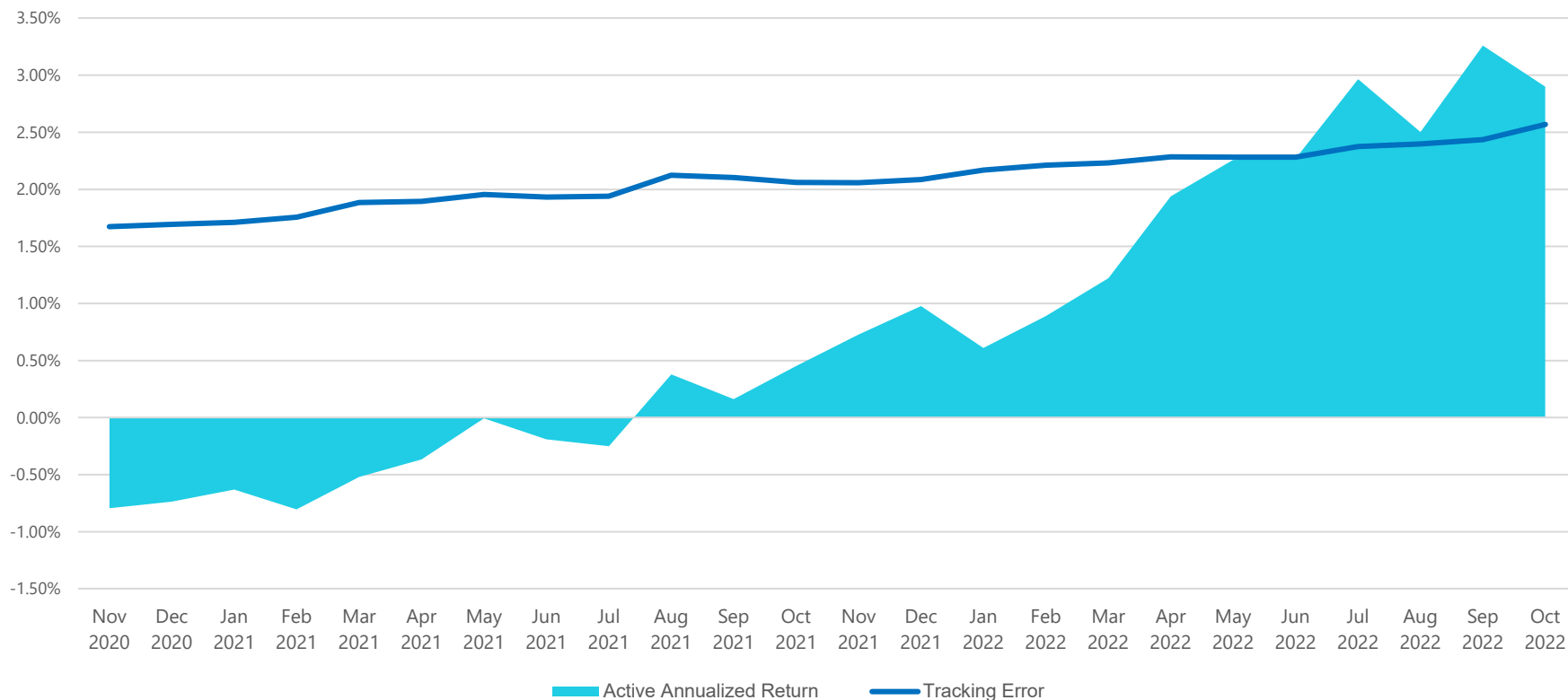


1. Market value differences between the sub-trusts and functional composites are due to operational cash.

# Performance Based Risk

## as of October 2022

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



Period Ending	Annualized Return	Annualized Benchmark Return	Annualized Active Return	Tracking Error
Oct 2022	7.3%	4.4%	2.9%	2.6%

1. Rolling 36 months.

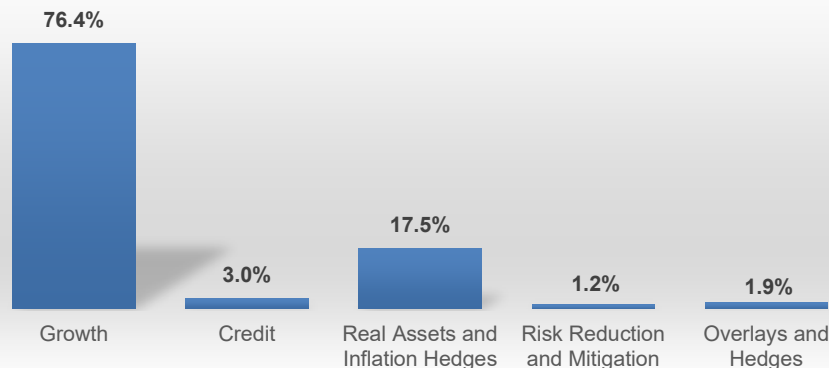
2. Active return equals the difference in return between a portfolio and its benchmark.

3. Tracking error (or active risk) measures the volatility of active returns.

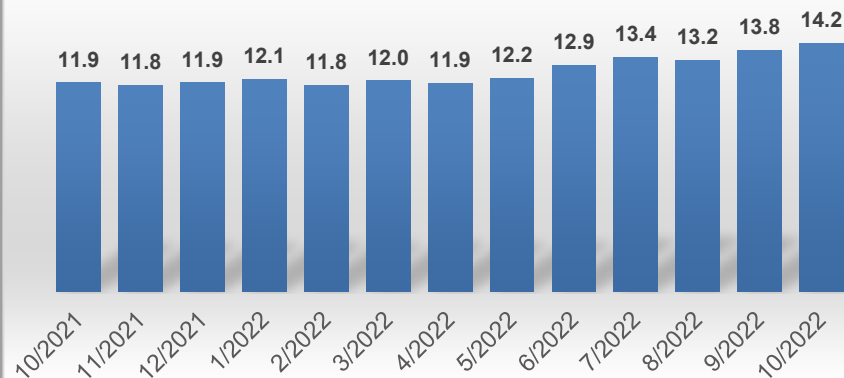
# Total Fund Forecast Risk\*

as of October 2022

%Contribution to Total Risk



Total Risk



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
<b>Total Fund</b>			<b>14.2</b>	<b>13.4</b>
<b>Growth</b>	<b>51.1%</b>	<b>76.4%</b>	<b>21.5</b>	<b>20.2</b>
Global Equity	31.6%	39.8%	18.8	19.2
Private Equity	18.0%	33.5%	29.8	28.1
Non-Core Private Real Estate	1.5%	3.2%	44.6	20.2
<b>Credit</b>	<b>11.5%</b>	<b>3.0%</b>	<b>4.9</b>	<b>5.5</b>
Liquid Credit	6.6%	2.2%	6.3	5.5
Illiquid Credit	4.9%	0.8%	4.2	5.5
<b>Real Assets &amp; Inflation Hedges</b>	<b>18.0%</b>	<b>17.5%</b>	<b>15.3</b>	<b>14.7</b>
Core Private Real Estate	6.6%	7.3%	22.3	20.2
Natural Resources & Commodities	3.4%	3.2%	17.7	21.5
Infrastructure	5.3%	6.5%	18.9	19.0
TIPS	2.7%	0.5%	6.4	6.5
<b>Risk Reduction and Mitigation</b>	<b>18.4%</b>	<b>1.2%</b>	<b>5.6</b>	<b>5.6</b>
Investment Grade Bonds	7.1%	0.5%	6.3	6.2
Diversified Hedge Funds	6.0%	0.5%	3.8	0.2
Long-Term Government Bonds	4.0%	0.1%	13.0	12.9
Cash	1.3%	0.0%	-	-
<b>Overlays and Hedges</b>	<b>1.1%</b>	<b>1.9%</b>	<b>-</b>	<b>-</b>

\*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 used is as of 6/30/2022

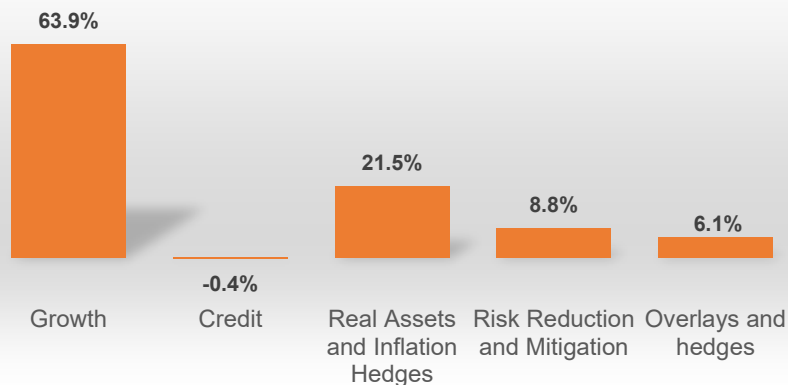
\*\*BMK Risk stands for Benchmark Risk



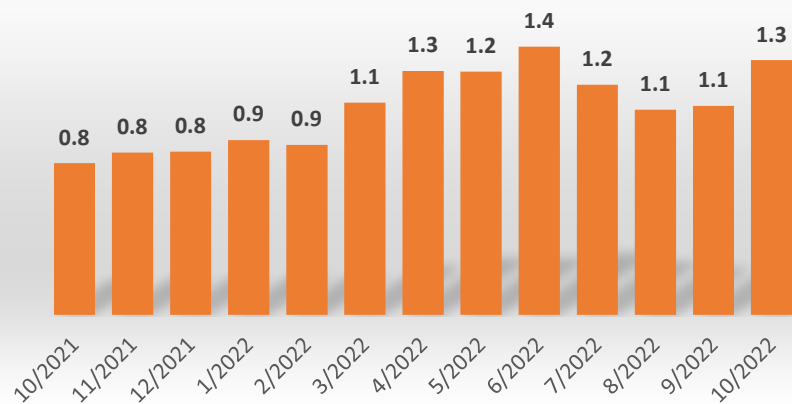
# Total Fund Forecast Active Risk\*

as of October 2022

## Active Risk Contribution



## Active Risk



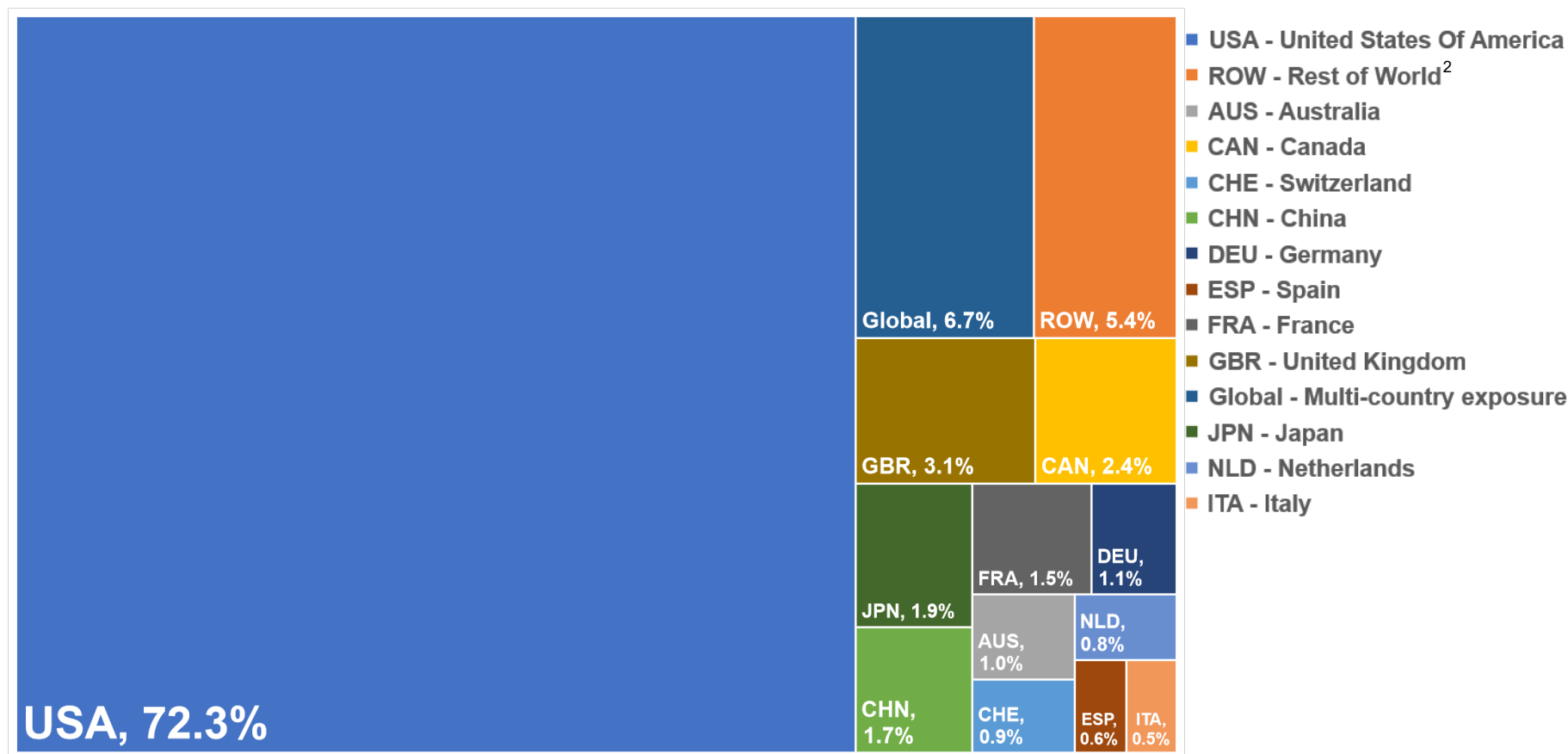
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
<b>Total Fund</b>			<b>1.31</b>	<b>-0.03</b>	<b>1.34</b>
<b>Growth</b>	<b>51.1%</b>	<b>-1.93%</b>	<b>0.84</b>	<b>-0.09</b>	<b>0.93</b>
Global Equity	31.6%				
Private Equity	18.0%				
Non-Core Private Real Estate	1.5%				
<b>Credit</b>	<b>11.5%</b>	<b>0.45%</b>	<b>-0.01</b>	<b>-0.03</b>	<b>0.02</b>
Liquid Credit	6.6%				
Illiquid Credit	4.9%				
<b>Real Assets &amp; Inflation Hedges</b>	<b>18.0%</b>	<b>0.99%</b>	<b>0.28</b>	<b>-0.03</b>	<b>0.31</b>
Core Private Real Estate	6.6%				
Natural Resources & Commodities	3.4%				
Infrastructure	5.3%				
TIPS	2.7%				
<b>Risk Reduction and Mitigation</b>	<b>18.4%</b>	<b>-0.58%</b>	<b>0.12</b>	<b>0.04</b>	<b>0.07</b>
Investment Grade Bonds	7.1%				
Diversified Hedge Funds	6.0%				
Long-Term Government Bonds	4.0%				
Cash	1.3%				
<b>Overlays and Hedges</b>	<b>1.1%</b>	<b>1.06%</b>	<b>0.08</b>	<b>0.08</b>	<b>-</b>

\*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 used is as of 6/30/2022



# Geographic Exposures by AUM\* - Total Fund

as of October 2022 ex-overlays and hedges



\*AUM = assets under management

<sup>1</sup> \*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 used is as of 6/30/2022

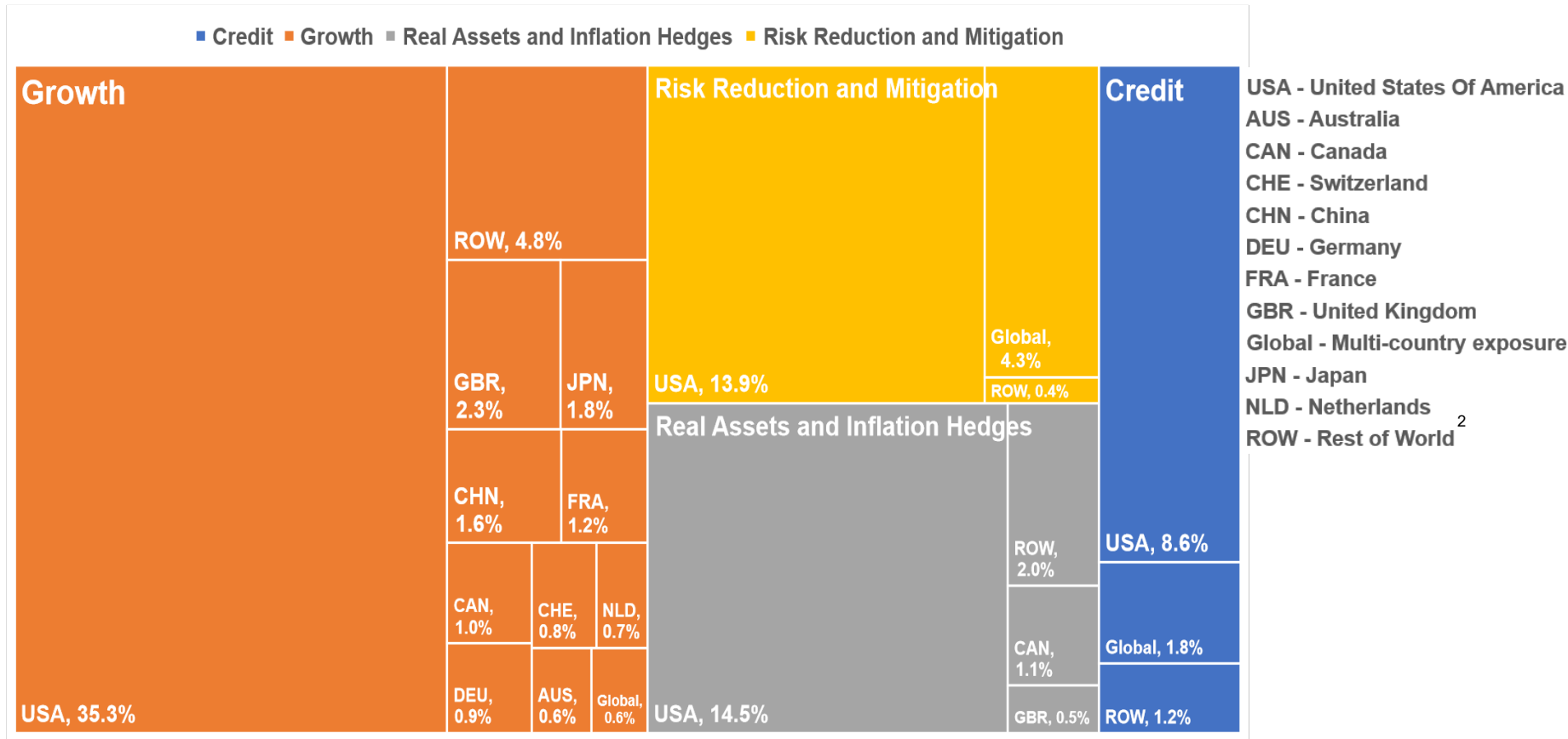
<sup>2</sup> "ROW - Rest of World" is sum of countries with weight below 0.5%

<sup>3</sup> Geographic exposure is based on the domicile country of a given security/asset



# Geographic Exposures by AUM\* - Asset Categories

## as of October 2022 ex-overlays and hedges



\*AUM = assets under management

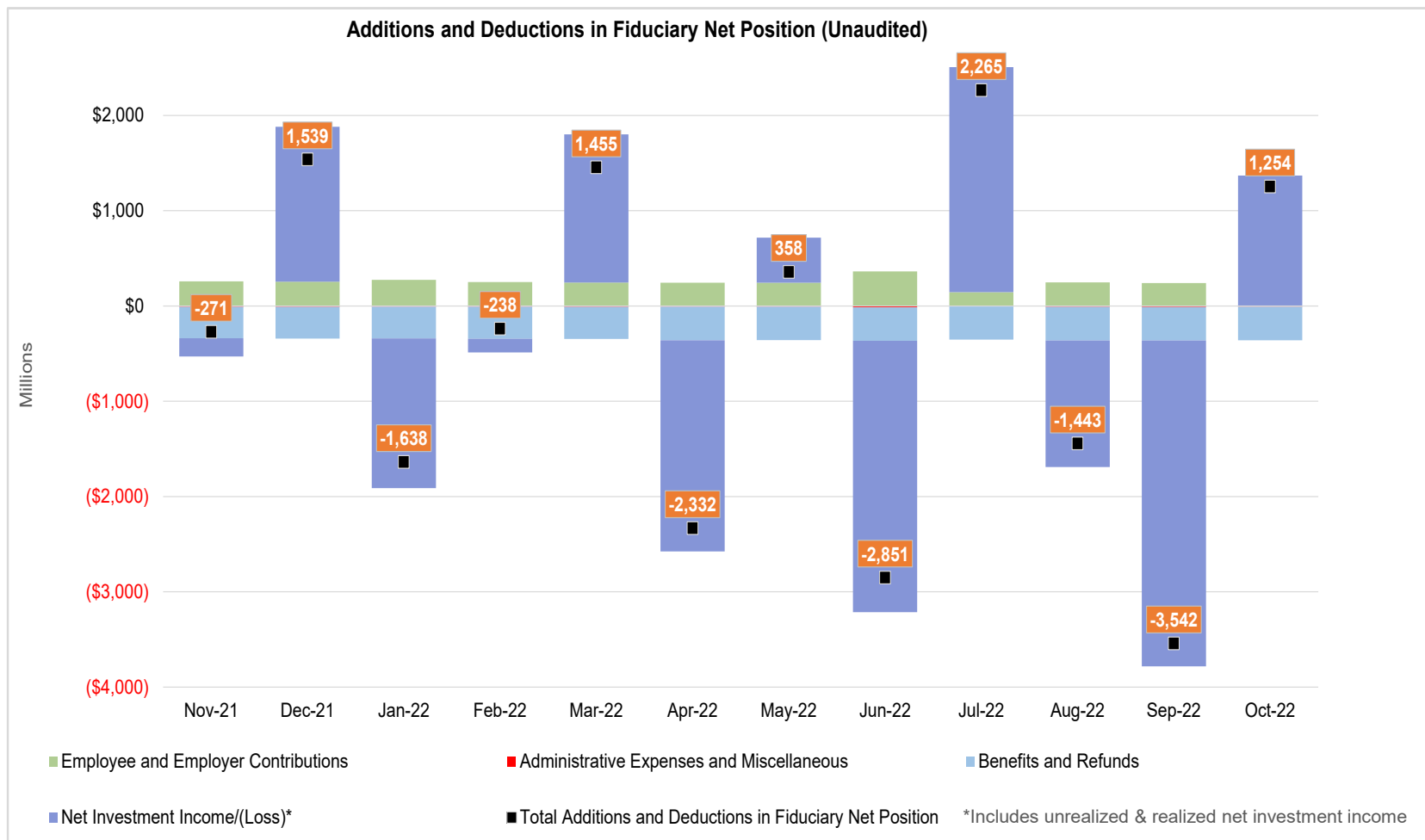
<sup>1</sup> \*Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 6/30/2022

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

<sup>3</sup> Geographic exposure is based on the domicile country of a given security/asset



# Change In Fiduciary Net Position



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-21	2	10	\$13.8 billion
FY-22	7	5	(\$2.5 billion)
FY-23	2	2	(\$1.5 billion)





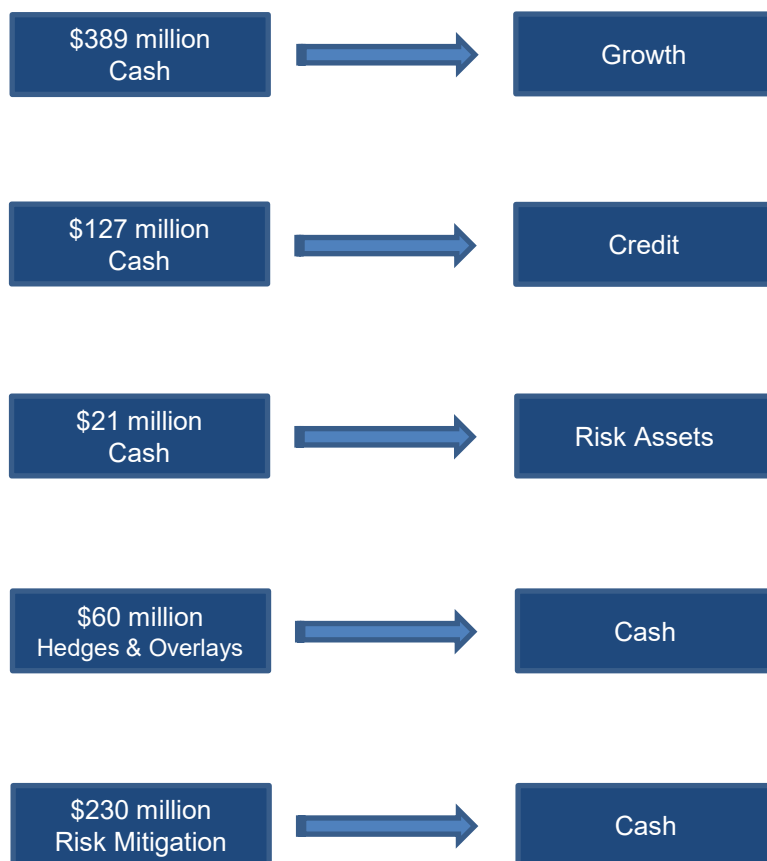
# Portfolio Structural Updates



# Portfolio Structural Updates

## Portfolio Movements

### Rebalancing Activity



## Hedges & Overlays

### Monthly Activity

Program	Oct Return	Oct Gain/(Loss)	Inception* Gain/(Loss)
Currency Hedge**	0.0%	\$59.7 Million	\$1.4 Billion
Cash/Rebalance Overlay***	4.9%	\$118.2 Million	\$174.4 Million

## Current Search Activity

There are no active public searches at this time.

The quiet period list will be updated when the next public search is released.

\*Currency and overlay program inception dates are 8/2010 & 7/2019, respectively.

\*\* 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.

\*\*\* LACERA's overlay program's 1-month return includes interest earned on the cash that supports the futures contracts.



# Key Initiatives and Operational Updates



# Notable Initiatives and Operational Updates

## Key Initiative Updates

- Implementation is ongoing for the new strategic asset allocation final policy targets and benchmarks
- Annual Work Plan and Strategic Initiatives development is underway

## Operational Updates

- Annual contract compliance review underway
- Preparation for operational due diligence review

## Team Searches and Open Positions

- Working on launching new searches
  - 1 – Deputy Chief Investment Officer
  - 1 – Principal Investment Officer
  - 2 – Senior Investment Officer
    - 1 search in progress
  - 2 – Financial Analyst-III
    - 2 searches in progress
  - 3 – Financial Analyst-II
  - 1 – Financial Analyst-I

## Manager/Consultant Updates

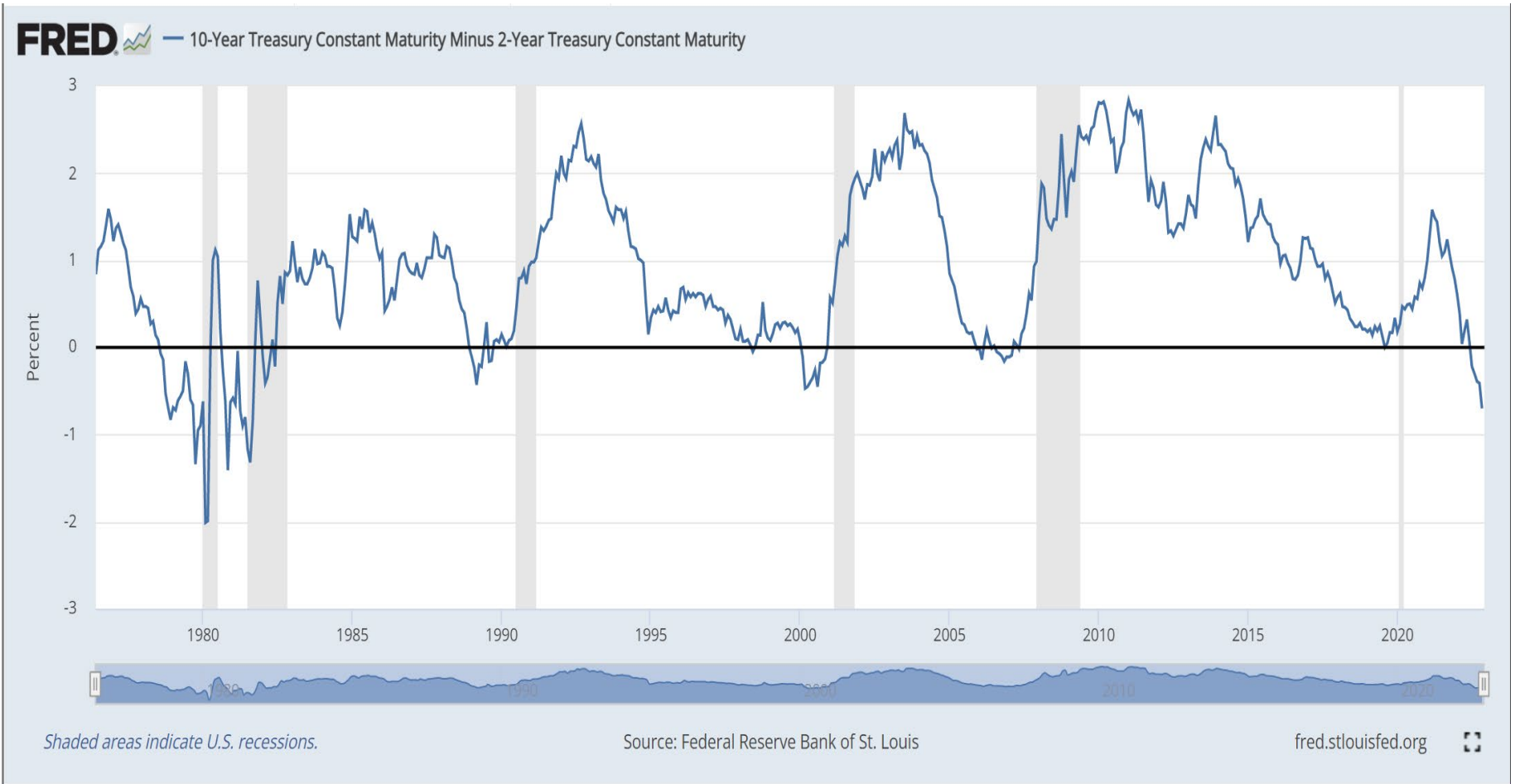
Lazard - Growth – Informed LACERA of the sudden passing of a portfolio manager. Responsibilities will be assumed by existing portfolio managers. If warranted, Lazard may add additional resources to the team.

# Commentary



# Staff Chart of the Month

## 10-year Treasury minus two-year Treasury yield



Time Period: June 1, 1976 to November 30, 2022

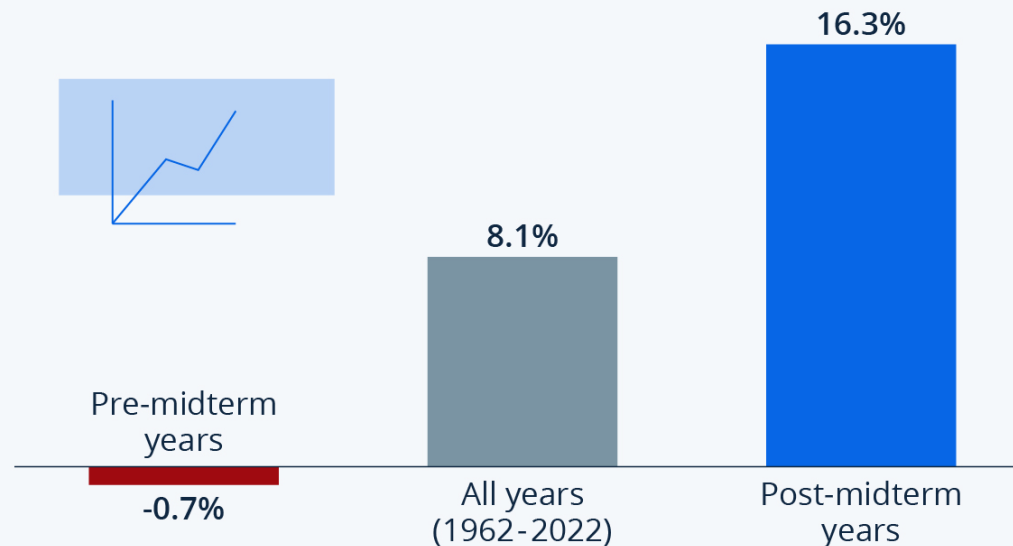


# Staff Chart of the Month

## US Stocks Rally Post Midterms (1962-2022)

### The Midterms Are Over, Let the Stock Rally Begin!

Average price return of the S&P 500 in  
the 12 months ending Oct. 31 since 1962



Sources: Yahoo Finance, U.S. Bank



statista