

Chief Investment Officer Monthly Report

Board of Investments

May 11, 2022



Jonathan Grabel 
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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Market Environment



Global Market Performance as of April 30, 2022

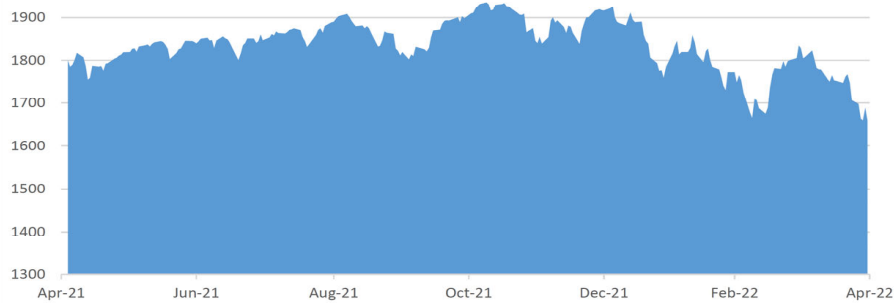
MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-7.9	-8.2	-13.0	-6.2	9.2	9.2	9.2

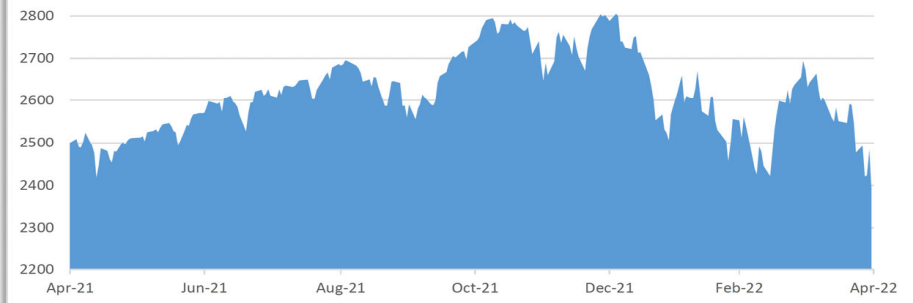
Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-9.0	-8.4	-13.8	-3.1	13.1	13.0	13.3

MSCI ACWI IMI Index 1-Year Performance



Russell 3000 1-Year Performance



MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-5.6	-10.5	-12.2	-18.3	2.2	4.3	2.9

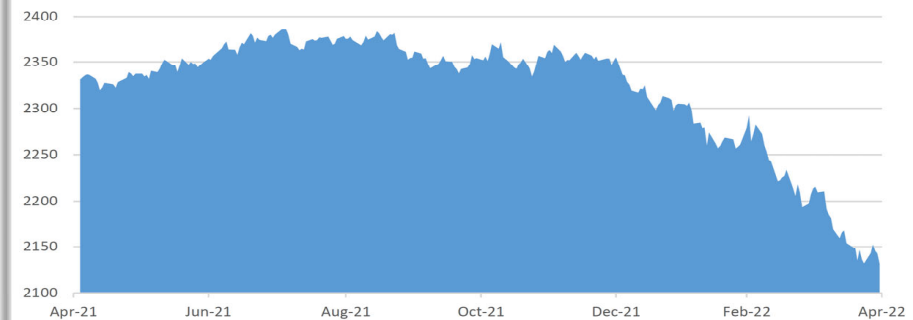
Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
-3.8	-7.5	-9.5	-8.5	0.4	1.2	1.7

MSCI Emerging Markets 1-Year Performance



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



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

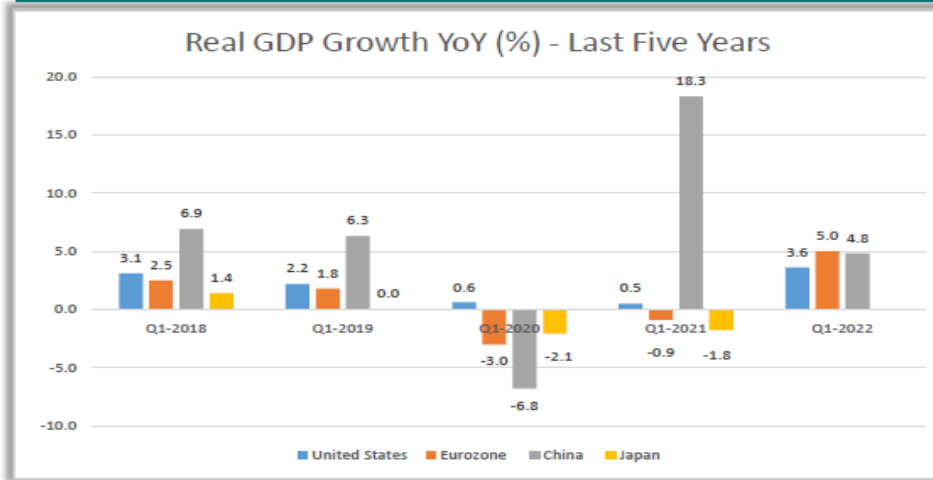
**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

Source: Bloomberg



Key Macro Indicators*

GDP Growth of Major Economies¹



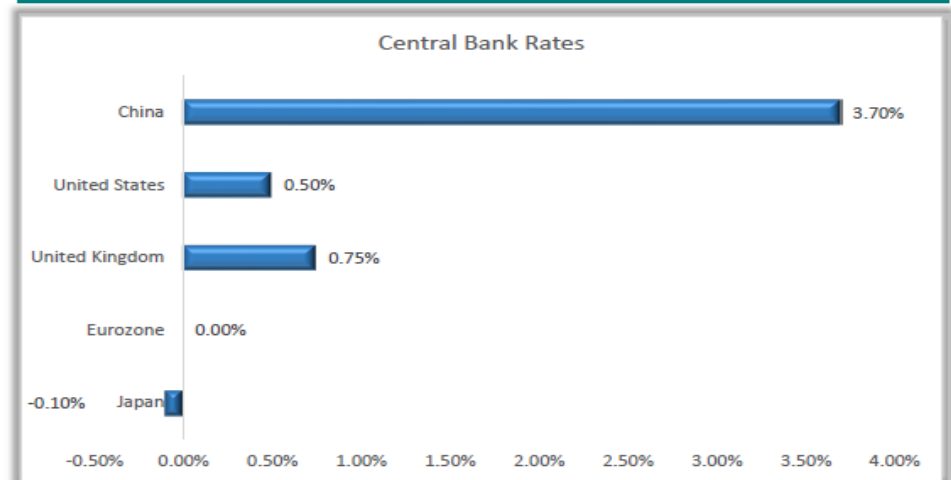
Historical Low for 10-Year Treasury Yield²



World Equity Valuation³



Central Bank Rates⁴ (as of 4/30/2022)



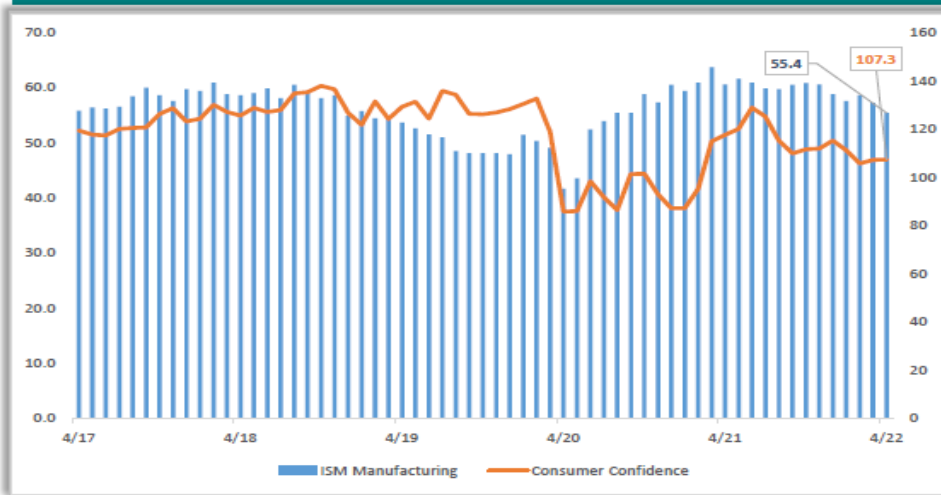
*The information on the "Key Macro Indicators" charts is the best available data as of 4/30/22 and may not reflect the current market and economic environment.

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

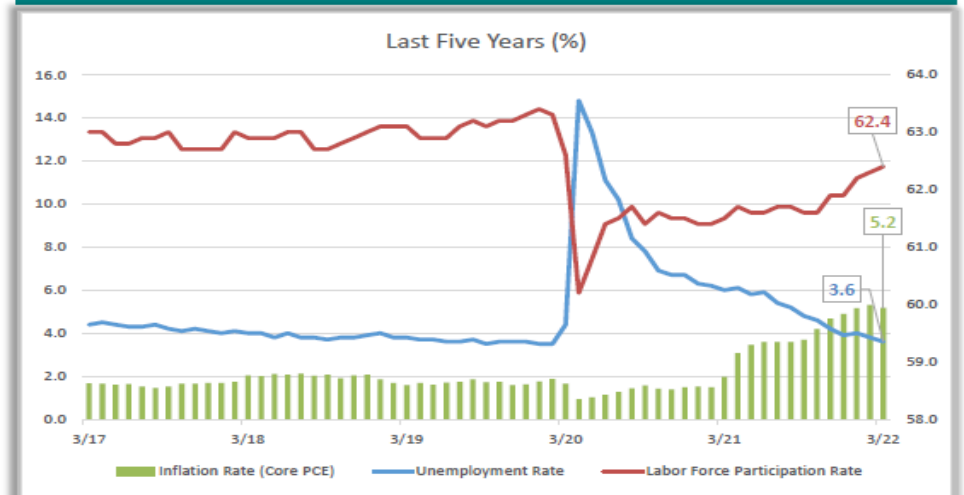


Key Macro Indicators*

Consumer Confidence & ISM Manufacturing¹



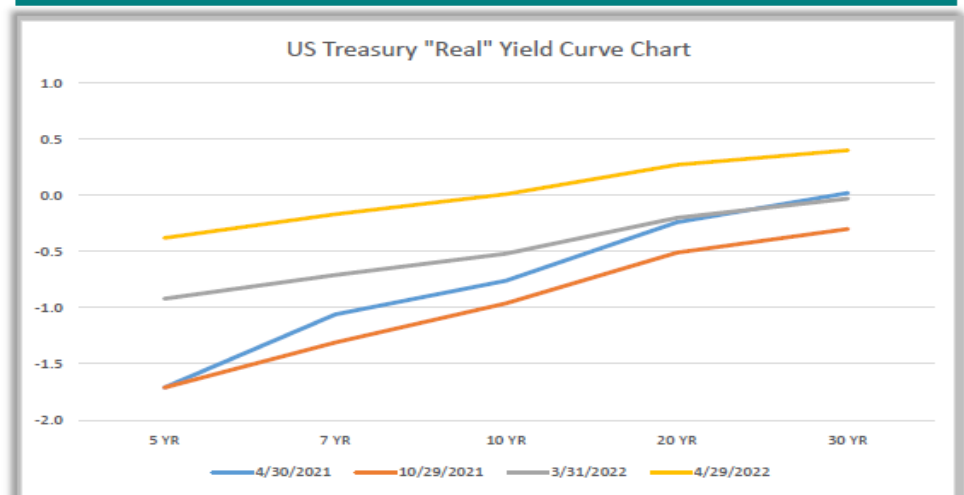
U.S. Inflation, Unemployment, & Labor Force Participation²



U.S. Household Debt as % of Personal Income³



U.S. Treasury "Real" Yield Curve⁴



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

*The information on the "Key Macro Indicators" charts is the best available data as of 4/30/22 and may not reflect the current market and economic environment.



Market Themes and Notable Items to Watch

Recent Themes

- Gross domestic product in the U.S. fell at an annualized rate of 1.4% in Q1 2022
 - The first economic decline since Q2 2020
- U.S. mortgage rates hover at their highest levels since 2010, approximately 5.4% for a 30-year fixed rate mortgage at the end of April
- The U.S. 10-year treasury yield ended April at 2.89%, 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) declined 7.9% in April and are now down 13.0% through four months in 2022
- Inflation and rising interest rates continue to put pressure on growth assets across markets
- Russia-Ukraine war
 - Impacting global markets and supply chains
- Covid-19
 - More than 513 million cases, 6.2 million deaths, and 11.3 billion vaccine doses

What to Watch

- Interest rates
- Economic data and trends
 - Inflation, supply chains, and labor developments
- Changing macro conditions
 - Central bank actions and geopolitical risks
- Environmental, social, governance
 - SEC joins China, EU, Japan, and UK on new IFRS International Sustainability Standards Board working group on ESG disclosure compatibility
 - SEC charges Vale for misleading safety disclosures preceding 2019 Brazil dam collapse
- Russia-Ukraine war
 - Continued geopolitical, global commerce, commodities, energy markets/transition impacts
- Covid-19
 - Economic and consumer behavior implications
 - Covid variants, transmission, vaccines



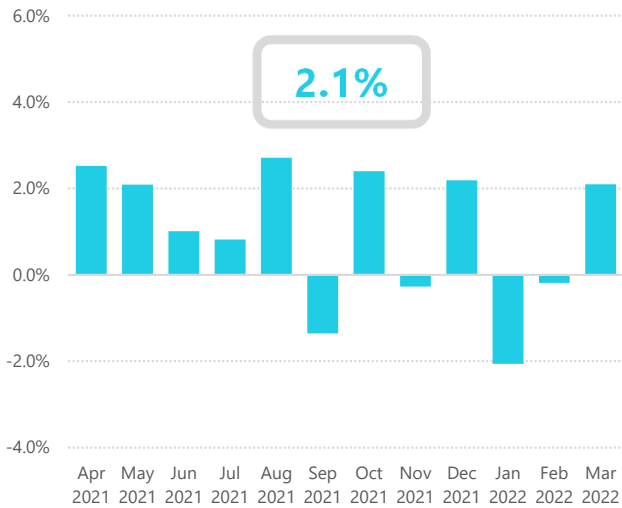
Portfolio Performance & Risk Updates



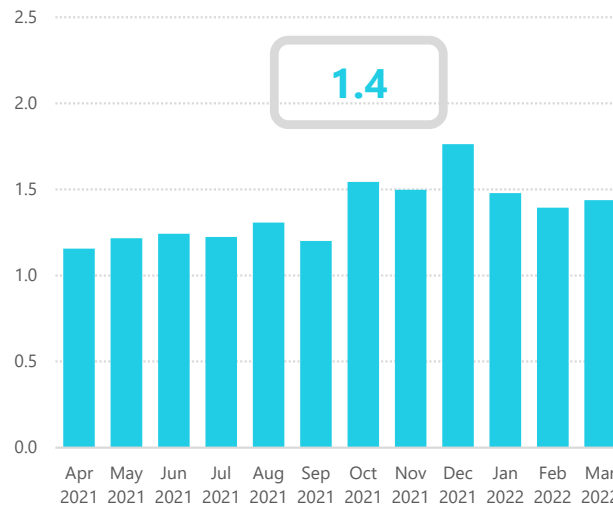
Total Fund Summary

as of March 2022

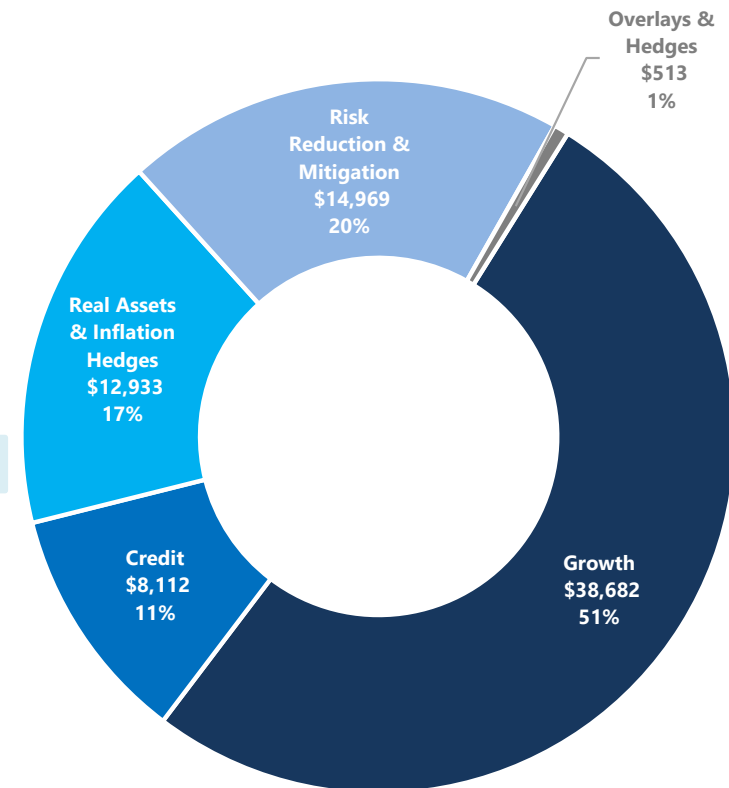
Monthly Return (net)



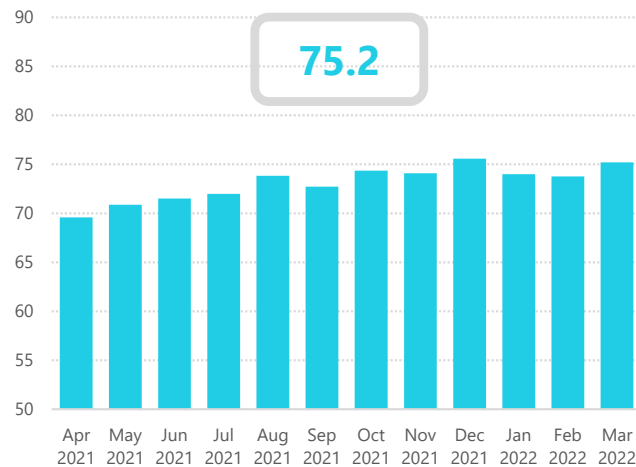
Sharpe Ratio (3-year annualized)



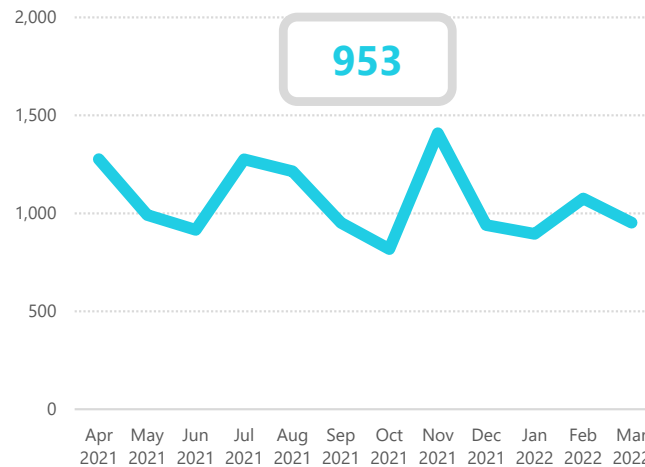
Asset Allocation (\$ millions)



Total Market Value (\$ billions)



Cash (\$ millions)

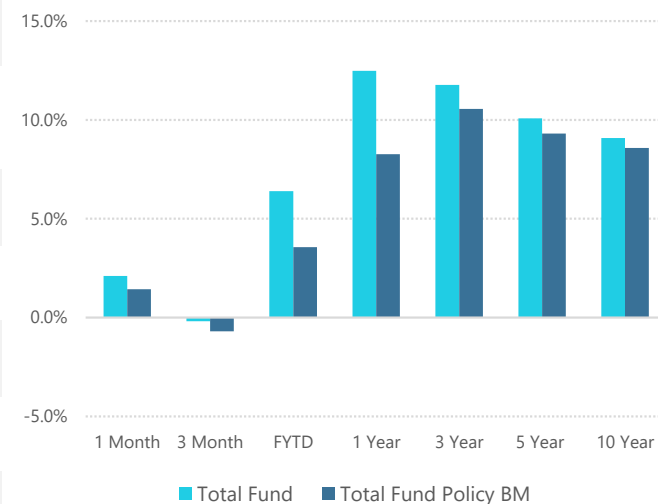


Historical Net Performance

as of March 2022

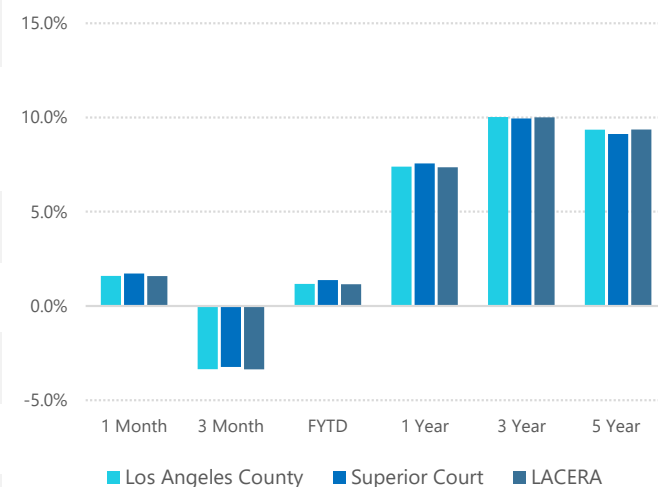
LACERA Pension Fund

	Market Value (\$ millions)	% of Total Fund	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
Total Fund	75,210	100.0%	100.0%	2.1%	-0.2%	6.4%	12.5%	11.8%	10.1%	9.1%
Total Fund Policy BM				1.4%	-0.7%	3.6%	8.3%	10.6%	9.3%	8.6%
7% Annual Hurdle Rate				0.6%	1.7%	5.2%	7.0%	7.0%	7.0%	7.0%
Growth	38,682	51.4%	51.0%	3.5%	-1.2%	8.2%	17.6%	17.8%		
Growth Policy BM				2.7%	-1.4%	3.9%	10.9%	16.1%		
Credit	8,112	10.8%	11.0%	-0.4%	-1.9%	1.1%	4.0%	5.8%		
Credit Policy BM				-1.1%	-2.7%	-1.9%	0.0%	4.2%		
Real Assets & Inflation Hedges	12,933	17.2%	17.0%	3.7%	7.7%	16.2%	21.3%	9.1%		
Real Assets & Inflation Hedges Policy BM				3.9%	7.7%	16.1%	21.8%	10.5%		
Risk Reduction & Mitigation	14,969	19.9%	21.0%	-1.9%	-4.1%	-3.8%	-2.3%	2.9%		
Risk Reduction & Mitigation Policy BM				-2.2%	-4.6%	-4.0%	-2.5%	2.1%		
Overlays & Hedges	513	0.7%		27.3%	57.6%					



OPEB Master Trust¹

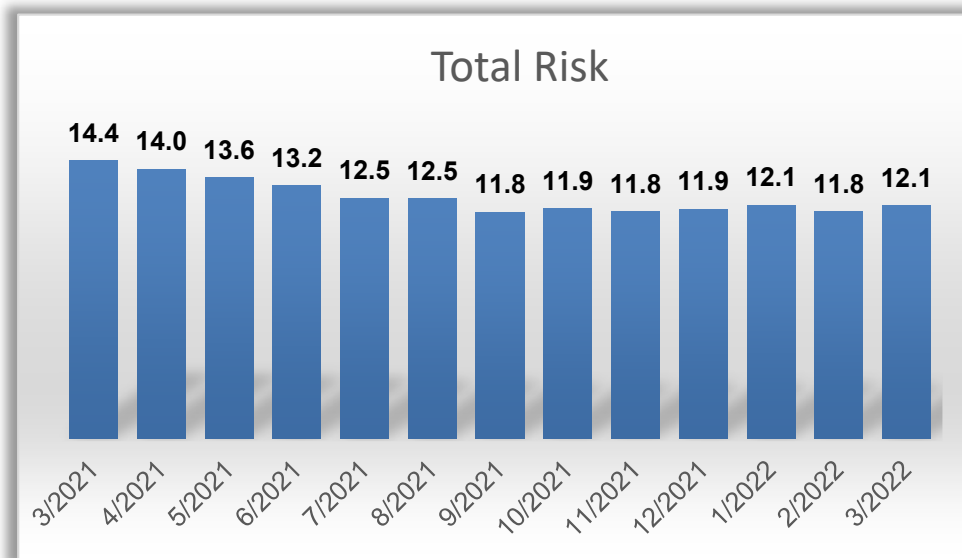
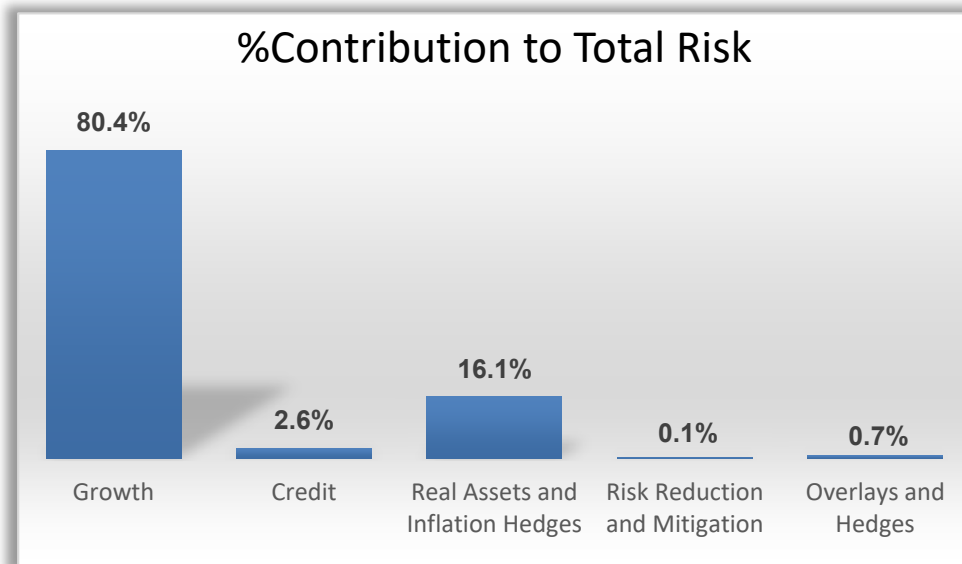
	Market Value (\$ millions)	% of Master Trust	Interim Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
OPEB MASTER TRUST	2,618			1.6%	-3.4%	1.2%	7.4%	10.0%	9.3%
Los Angeles County	2,545	97.2%	—	1.6%	-3.4%	1.2%	7.4%	10.0%	9.4%
Superior Court	63	2.4%	—	1.7%	-3.2%	1.4%	7.6%	9.9%	9.1%
LACERA	10	0.4%	—	1.6%	-3.4%	1.2%	7.4%	10.0%	9.4%
OPEB Growth	1,335	51.0%	50.0%	2.1%	-5.4%	-0.7%	6.5%	13.8%	11.7%
OPEB MT Growth Policy BM				2.0%	-5.5%	-0.8%	6.3%	13.5%	--
OPEB Credit	512	19.6%	20.0%	-0.5%	-2.8%	-2.8%	-0.6%	2.8%	--
OPEB MT Credit Policy BM				-0.6%	-3.3%	-2.7%	-0.5%	3.2%	--
OPEB Real Assets & Inflation Hedges	519	19.8%	20.0%	4.8%	2.5%	14.2%	25.1%	10.8%	--
OPEB MT RA & IH Policy BM				4.5%	2.1%	14.0%	24.8%	10.6%	--
OPEB Risk Reduction & Mitigation	251	9.6%	10.0%	-2.2%	-4.7%	-4.7%	-3.3%	1.6%	2.2%
OPEB MT RR & M Policy BM				-2.2%	-4.8%	-4.7%	-3.3%	1.5%	2.0%
Operational Cash	0	0.0%							



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

Total Fund Forecast Risk*

as of March 2022 (Preliminary)



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
Total Fund			12.1	11.4
Growth	51.3%	80.4%	19.2	18.2
Global Equity	33.9%	47.2%	17.6	17.7
Private Equity	15.9%	29.6%	25.6	24.7
Non-Core Private Real Estate	1.4%	3.7%	45.5	17.8
Credit	10.8%	2.6%	4.0	4.6
Liquid Credit	6.5%	2.0%	4.9	4.6
Illiquid Credit	4.3%	0.6%	4.0	4.6
Real Assets & Inflation Hedges	17.6%	16.1%	12.6	12.7
Core Private Real Estate	5.5%	6.5%	20.4	17.8
Natural Resources & Commodities	5.3%	4.8%	14.6	19.4
Infrastructure	4.0%	4.5%	15.9	16.2
TIPS	2.8%	0.4%	5.3	5.3
Risk Reduction and Mitigation	19.8%	0.1%	4.2	4.0
Investment Grade Bonds	11.6%	-0.1%	4.7	4.7
Diversified Hedge Funds	5.1%	0.5%	4.0	0.1
Long-Term Government Bonds	1.9%	-0.3%	12.2	12.2
Cash	1.3%	0.0%	-	-
Overlays and Hedges	0.6%	0.7%	-	-

*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 9/30/2021

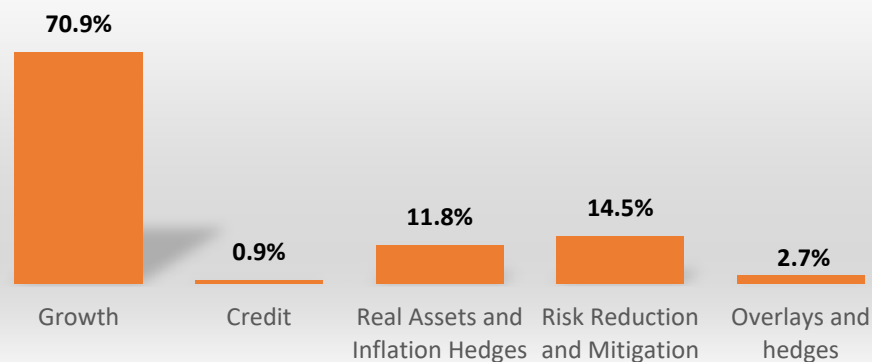
**BMK Risk stands for Benchmark Risk



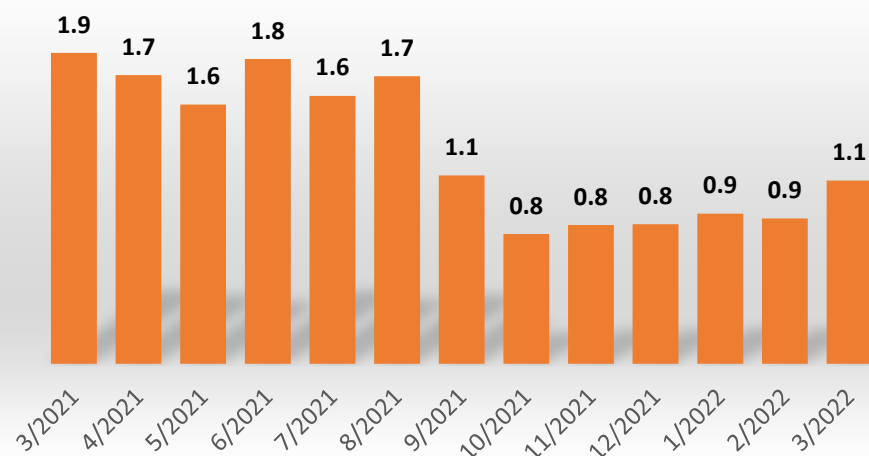
Total Fund Forecast Active Risk*

as of March 2022 (Preliminary)

Active Risk Contribution



Active Risk



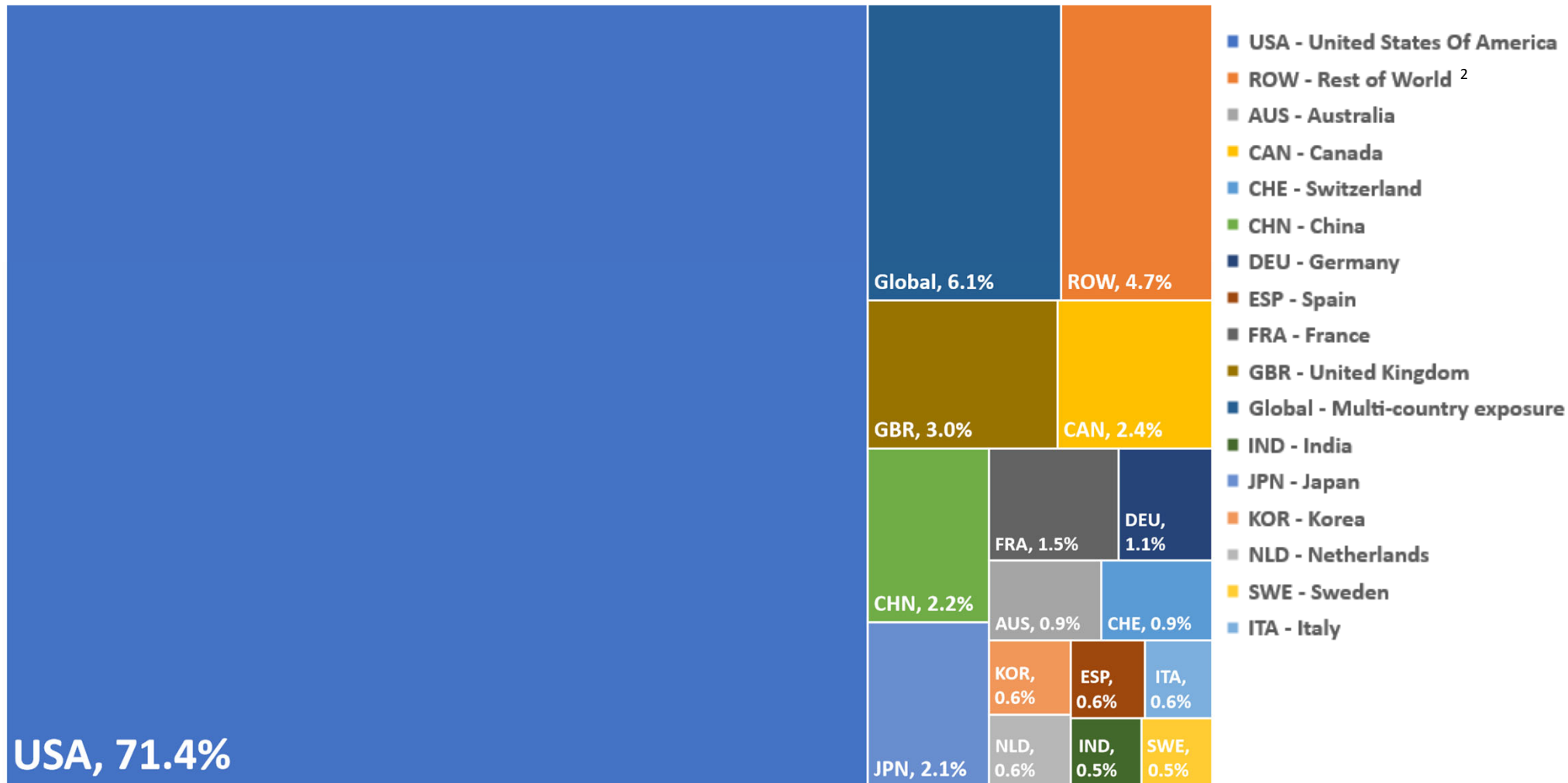
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			1.10	0.13	0.97
Growth	51.3%	0.25%	0.78	0.01	0.76
Global Equity	33.9%				
Private Equity	15.9%				
Non-Core Private Real Estate	1.4%				
Credit	10.8%	-0.22%	0.01	0.01	0.00
Liquid Credit	6.5%				
Illiquid Credit	4.3%				
Real Assets & Inflation Hedges	17.6%	0.55%	0.13	-0.01	0.14
Core Private Real Estate	5.5%				
Natural Resources & Commodities	5.3%				
Infrastructure	4.0%				
TIPS	2.8%				
Risk Reduction and Mitigation	19.8%	-1.18%	0.16	0.09	0.07
Investment Grade Bonds	11.6%				
Diversified Hedge Funds	5.1%				
Long-Term Government Bonds	1.9%				
Cash	1.3%				
Overlays and Hedges	0.6%	0.60%	0.03	0.03	-

*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 9/30/2021



Geographic Exposures by AUM* - Total Fund

as of March 2022 (Preliminary) ex-overlays and hedges



*AUM = assets under management

¹ *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 9/30/2021

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

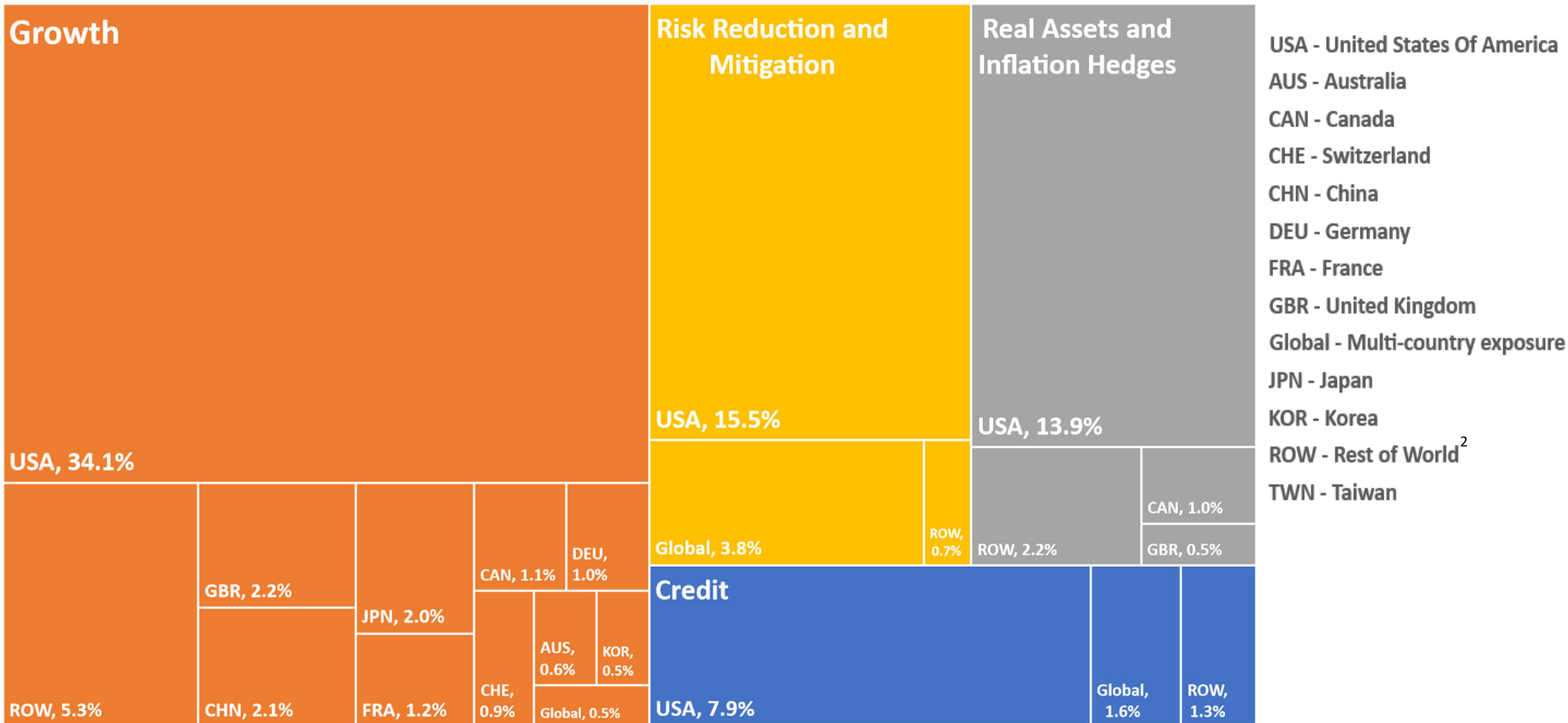
³ Geographic exposure is based on the domicile country of a given security/asset



Geographic Exposures by AUM* - Asset Categories

as of March 2022 (Preliminary) ex-overlays and hedges

■ Credit ■ Growth ■ Real Assets and Inflation Hedges ■ Risk Reduction and Mitigation



USA - United States Of America
 AUS - Australia
 CAN - Canada
 CHE - Switzerland
 CHN - China
 DEU - Germany
 FRA - France
 GBR - United Kingdom
 Global - Multi-country exposure
 JPN - Japan
 KOR - Korea
 ROW - Rest of World²
 TWN - Taiwan

*AUM = assets under management

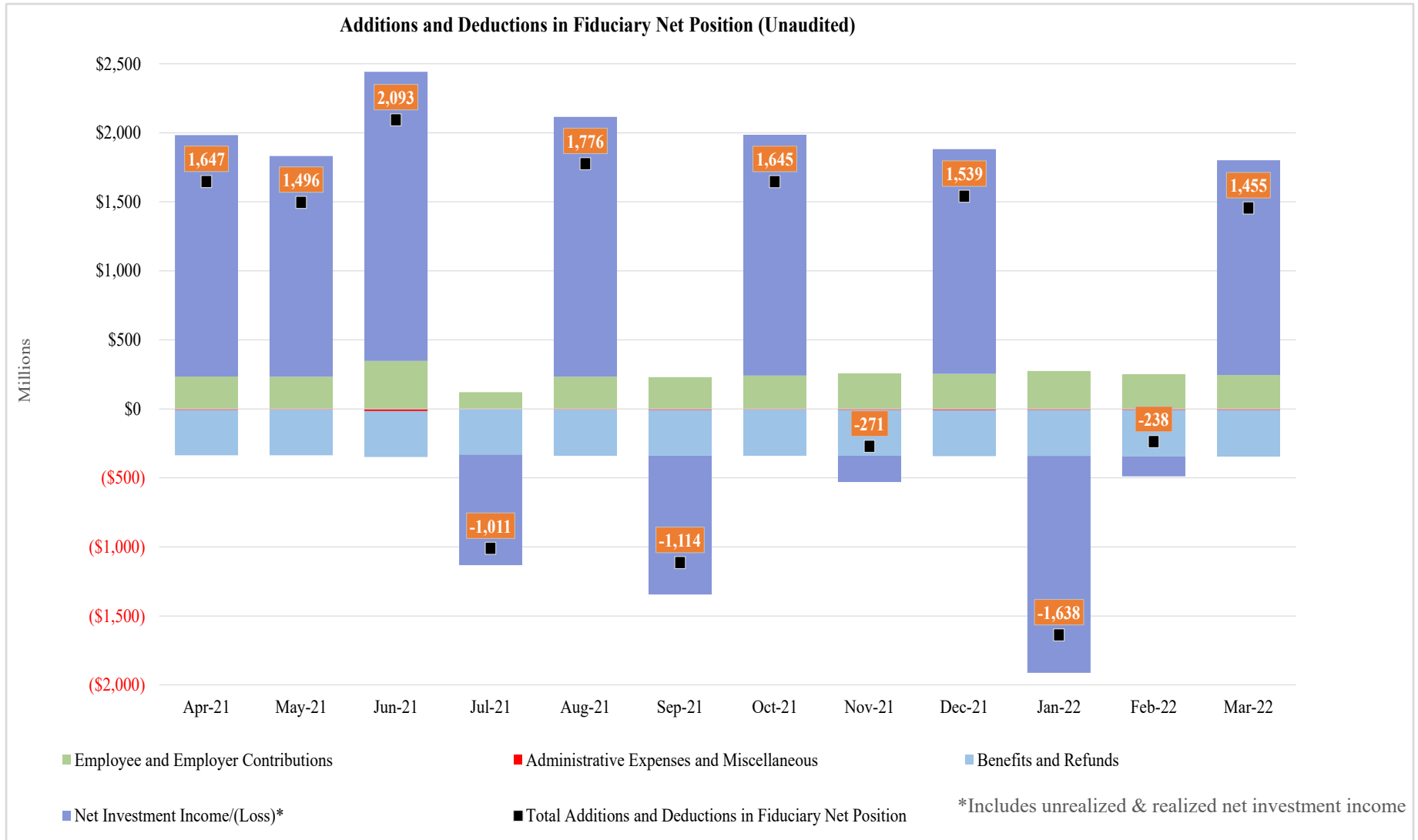
¹ *Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is as of 9/30/2021

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

³ 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-20	5	7	-
FY-21	2	10	\$13.8 billion
FY-22	5	4	\$2.1 billion



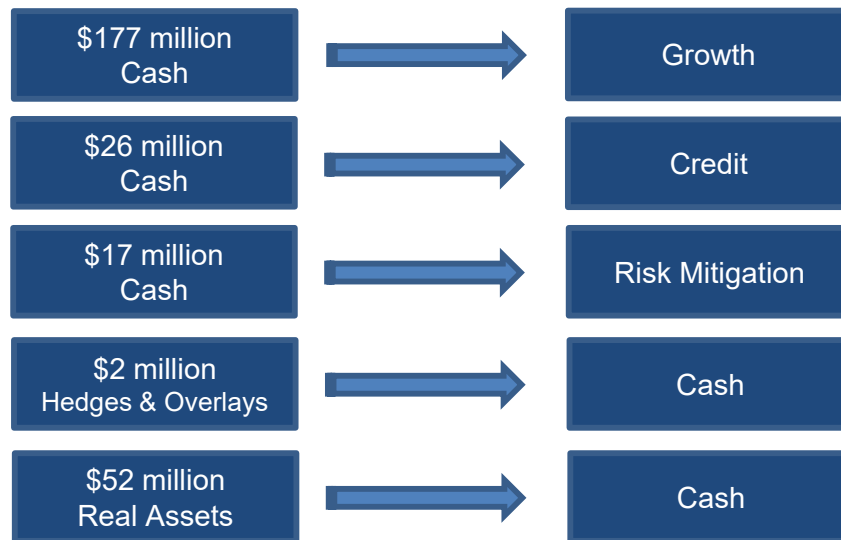
Portfolio Structural Updates



Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity



Hedges and Overlays

Program	March Return	March Gain/Loss	Inception* Gain/Loss
Currency Hedge**	0.6%	\$1.8 Million	\$1.0 Billion
Cash/Rebalance Overlay***	3.8%	\$68.0 Million	\$80.0 Million

*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.

Current Search Activity

Status of Active Searches – Subject to Change

Name	RFP Issued	Due Diligence	BOI Review
Illiquid Credit Emerging Manager Program Search	●	●	Anticipated Mid 2022
Custody Bank Search	●	●	Anticipated Late 2022
OPEB Private Markets Investments Search	●	●	Anticipated Mid 2022

Quiet Period for Search Respondents

Please see the Appendix for this month's list of respondents to active searches



Key Initiatives and Operational Updates



Notable Initiatives and Operational Updates

Key Initiative Updates

- Implementation is ongoing for the new strategic asset allocation interim policy targets and benchmarks
- Preparations for the BOI Offsite in September are underway

Operational Updates

- Annual contract compliance review underway
- Working on the annual budget process

Manager/Consultant Updates

Parametric - Total Fund – Justin Henne, Managing Partner, and Head of the Overlay Services team, will be leaving Parametric effective May 30, 2022. Clint Talmo, Director of Investment Strategy, and Ricky Fong, Director of Investment Strategy, will co-lead the team.

Lazard – Growth – announced that Ashish Bhutani, CEO will retire effective June 1, 2022. Evan Russo, current CFO, will become the new CEO. Mr. Bhutani will remain Chairman of Asset Management and Vice-Chairman.

Acadian – Growth – Harry Gakidis, Senior Vice President and Lead Portfolio Manager for Core Equities will be leaving at the end of April 2022. Mr. Gakidis's responsibilities will be absorbed by Ryan Taliaferro, Director of Equity Strategies, and the remaining equity portfolio management team.

Completed Actions

- Onboarded LACERA's first dedicated managed account

Team Searches and Open Positions

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

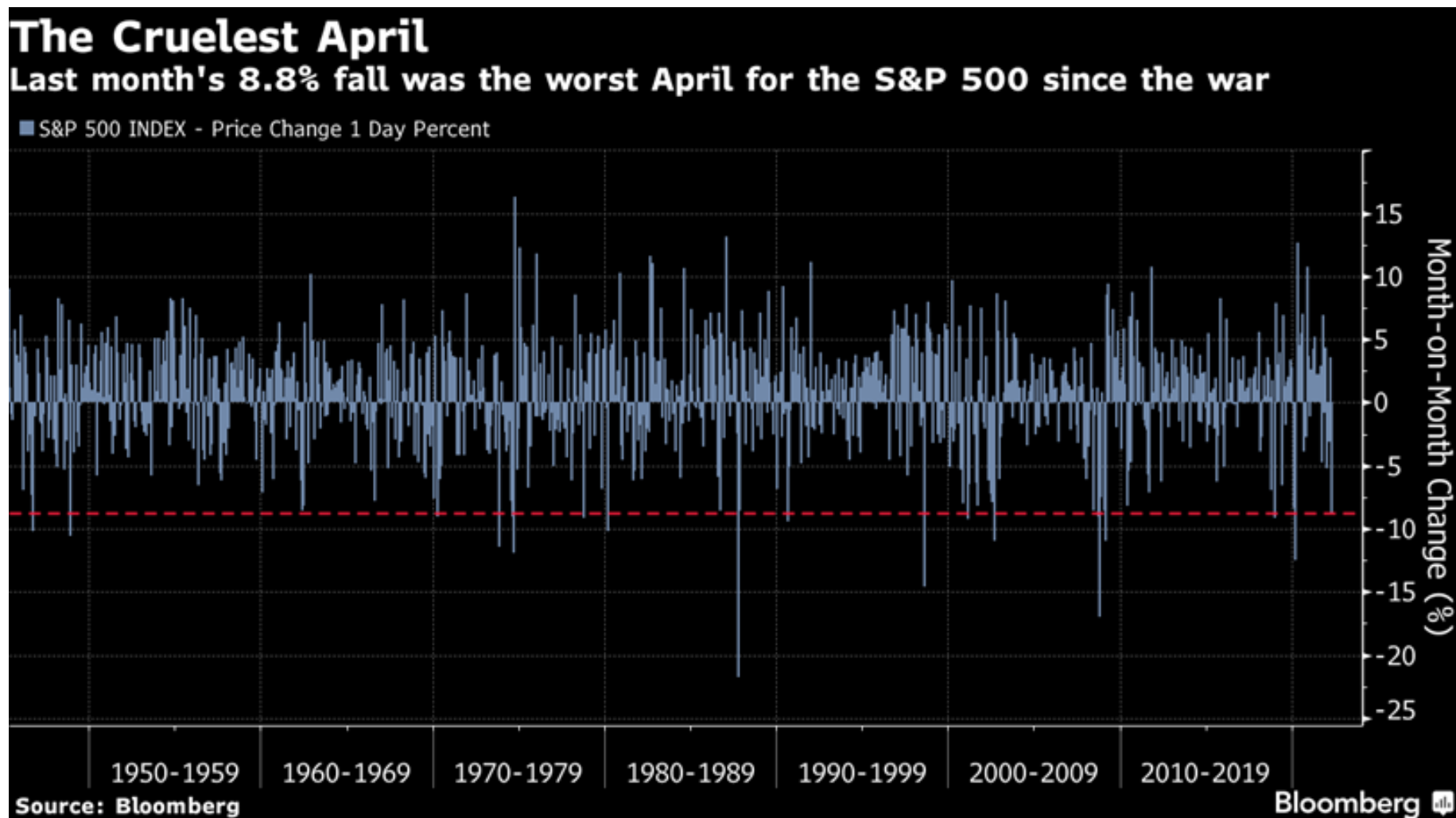


Commentary



Staff Chart of the Month*

Worst April for the S&P 500 Index Since World War II



Source: Bloomberg Opinion, April 30, 2022.



Appendix



Quiet Period for Search Respondents

Custody Bank Search

- ✓ State Street Bank and Trust Co.

Illiquid Credit Emerging Manager Program Search

- ✓ BlackRock Alternative Advisors
- ✓ Blackstone Alternative Asset Management
- ✓ Cambridge Associates
- ✓ GCM Grosvenor
- ✓ Stable Asset Management

OPEB Private Markets Investments Search

- ✓ BlackRock Financial Management Inc.
- ✓ Cambridge Associates LLC
- ✓ Goldman Sachs Asset Management, L.P.
- ✓ Hamilton Lane Advisors, LLC
- ✓ HarbourVest Partners, LLC
- ✓ J.P. Morgan Asset Management
- ✓ Morgan Stanley Investment Management
- ✓ Neuberger Berman Alternatives Advisers, LLC
- ✓ Pathway Capital Management, LP
- ✓ StepStone Group Holdings, LLC

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2022*

LACERA PENSION FUND

10

GROWTH
Total # of Advisory

GROWTH

Global Equity

Asset Allocation Policy Compliance

✓

Investment Guideline Compliance

✓

1

One manager had guideline violations that resulted from securities breaching maximum individual weights relative to the portfolio's average position size during March. The manager was back within compliance by month-end.

Emerging Manager Program

✓

of Sudan/Iran Holdings Held by Managers

✓

9

9 issuers held, totaling \$20.7 mm in market value

Private Equity - Growth**

Asset Allocation Policy Compliance

✓

Guideline Compliance by Strategy

✓

Guideline Compliance by Geographic Location

✓

Investment Exposure Limit

✓

Non-Core Private Real Estate**

(See Real Assets & Inflation Hedges - Core Private Real Estate section)

0

CREDIT
Total # of Advisory

CREDIT

Liquid Credit, Illiquid Credit**

Asset Allocation Policy Compliance

✓

Investment Guideline Compliance

✓

Emerging Manager Program

✓

of Sudan/Iran Holdings Held by Managers

✓

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2022*

LACERA PENSION FUND

2

REAL ASSETS & INFLATION HEDGES

Total # of Advisory

REAL ASSETS & INFLATION HEDGES****

Core Private Real Estate**

	Quarterly Review Status	# of Advisory	Notes
Asset Allocation Policy Compliance	✓		
Guideline Compliance by Strategy (Core/Non-Core)	✓		
Guideline Compliance by Manager	✓		
Guideline Compliance by Property Type	✓		
Guideline Compliance by Geographic Location	✓	1	Core East US region has variance of 0.4%; Outside of +/-10% range
Guideline Compliance by Leverage	✓	1	One value-add mandate has LTV of 103%, above the 65% LTV limit. The value is \$1.0 mm and makes up less than 0.04% of the total fund

Natural Resources & Commodities***

Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
# of Sudan/Iran Holdings Held by Managers	✓		

Infrastructure

Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
# of Sudan/Iran Holdings Held by Managers	✓		

TIPS

Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
# of Sudan/Iran Holdings Held by Managers	✓		

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2022*

LACERA PENSION FUND

0

RISK REDUCTION & MITIGATION

Total # of Advisory

RISK REDUCTION & MITIGATION

Investment Grade Bonds

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- Emerging Manager Program
- # of Sudan/Iran Holdings Held by Managers

Quarterly Review Status

of Advisory

Notes

✓

✓

✓

✓

Diversified Hedge Funds**

- Asset Allocation Policy Compliance
- Portfolio Level Compliance
- Direct Portfolio Manager Guideline Compliance

✓

✓

✓

Long-term Government Bonds

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- Emerging Manager Program
- # of Sudan/Iran Holdings Held by Managers

✓

✓

✓

✓

Cash

- Asset Allocation Policy Compliance
- Investment Guideline Compliance
- # of Sudan/Iran Holdings Held by Managers

✓

✓

✓

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2022*

INVESTMENT OPERATIONS

6
INVESTMENT OPERATIONS
Total # of Advisory

INVESTMENT OPERATIONS	Quarterly Review Status	# Advisory	Notes
Securities Lending			
Investment Guideline Compliance	✓		
\$ Value on Loan	✓	1	State Street \$4,002.1 mm
\$ Value of Cash/Non-Cash Collaterals	✓	1	State Street \$4,286.7 mm
Total Income - Calendar YTD	✓	1	State Street \$2.3 mm
Total Fund Overlays and Hedges			
Investment Guideline Compliance	✓		
Proxy Voting			
Number of Meetings Voted	✓	1	1,088 meetings voted
Tax Reclaims			
Total Paid Reclaims - Calendar YTD	✓	1	\$1,418
Total Pending Reclaims	✓	1	\$23.0 mm
Fee Validation			
Fee Reconciliation Project	✓		
AB 2833	✓		
Investment Manager Meetings*****			
Manager Meeting Requests	✓		

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2022*

OPEB MASTER TRUST

	Quarterly Review Status	# Advisory	Notes
Functional Asset Categories (Growth, Credit, Inflation Hedges, Risk Reduction & Mitigation)			
Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
# of Sudan/Iran Holdings Held by Managers	✓		

* This list is not exhaustive as various compliance processes are completed throughout the year. Each quarter, different items may appear on the compliance monitor.

** Represents the comprehensive Private Equity (3-month lag), Real Estate (3-month lag), Illiquid Credit (1- and 3-month lags), and Hedge Funds (1-month lag) programs across the total plan.

*** Investment guideline compliance based on public market exposure.

**** Reflects the most recent data available.

***** Advisory noted if the CEO or a Board member recommends staff to meet with a specific manager three or more times in a year. The purpose of notifying the activity is to promote transparency and governance best practices designed to preserve the integrity of the decision-making process.