

Chief Investment Officer Monthly Report

Board of Investments

May 19, 2021



Jonathan Grabel 
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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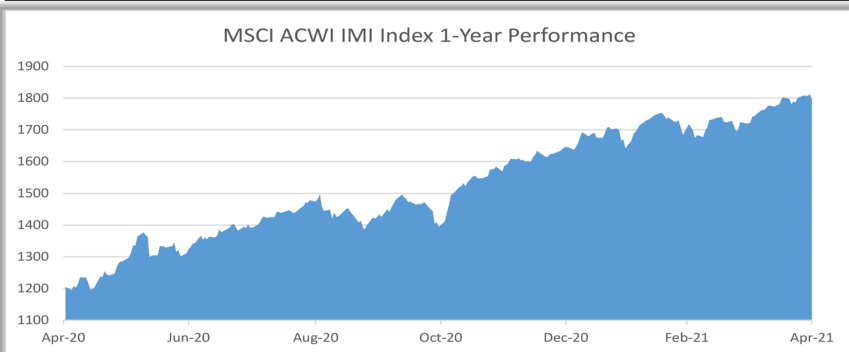
Market Environment



Global Market Performance as of April 30, 2021

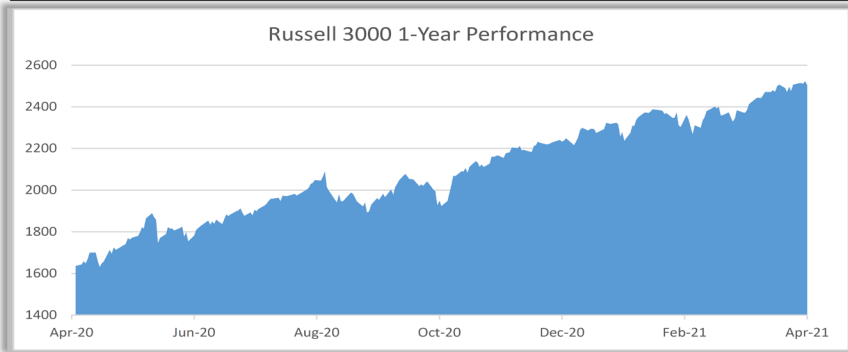
MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
4.3	9.9	9.7	48.1	13.1	13.8	9.2



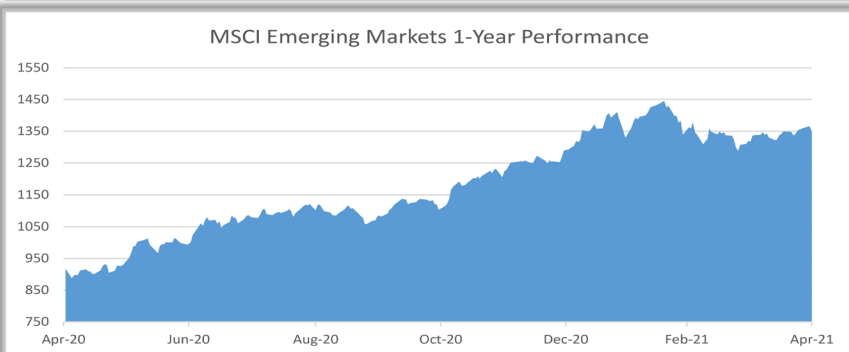
Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
5.2	12.3	11.8	50.9	19.0	17.7	14.0



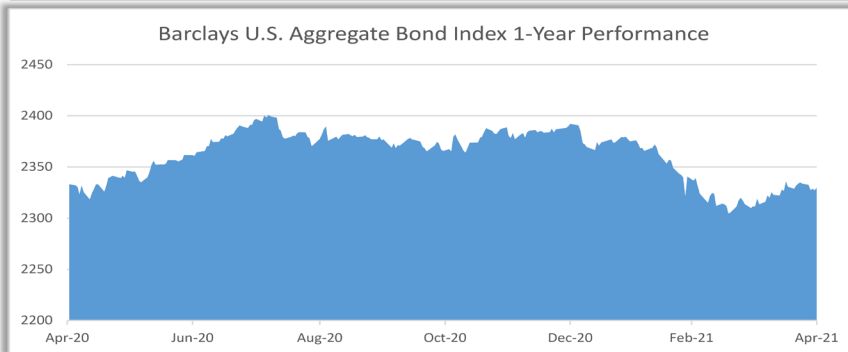
MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
2.5	1.7	4.8	48.7	7.5	12.5	3.6



Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
0.8	-1.9	-2.6	-0.3	5.2	3.2	3.4



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

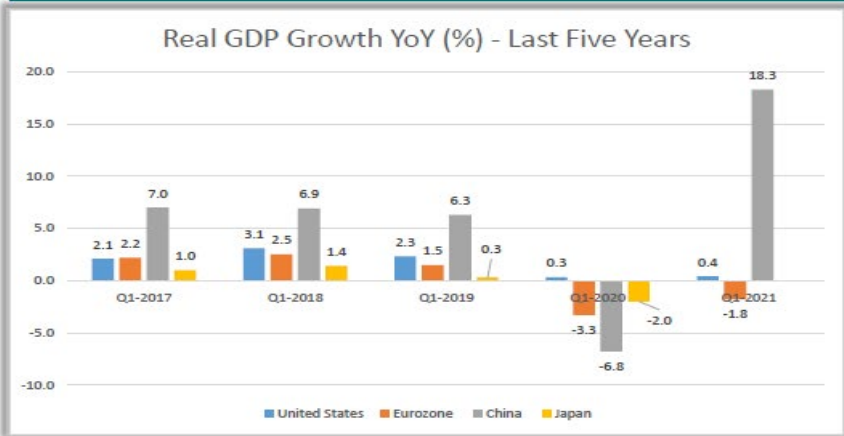
**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

Source: Bloomberg

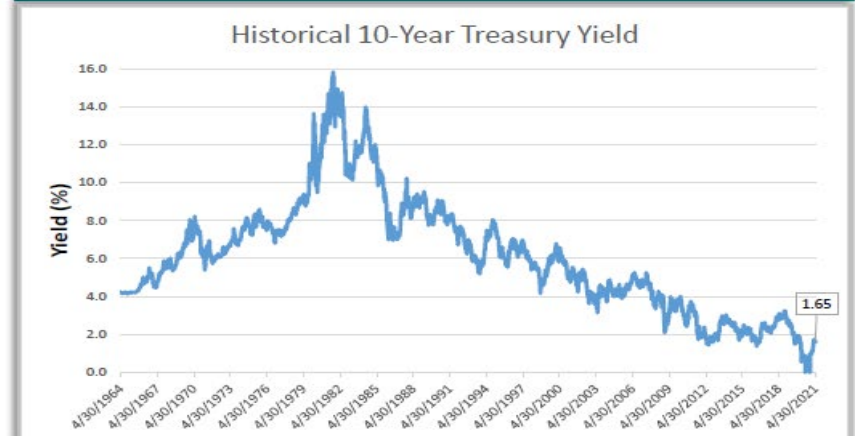


Key Macro Indicators*

GDP Growth of Major Economies¹



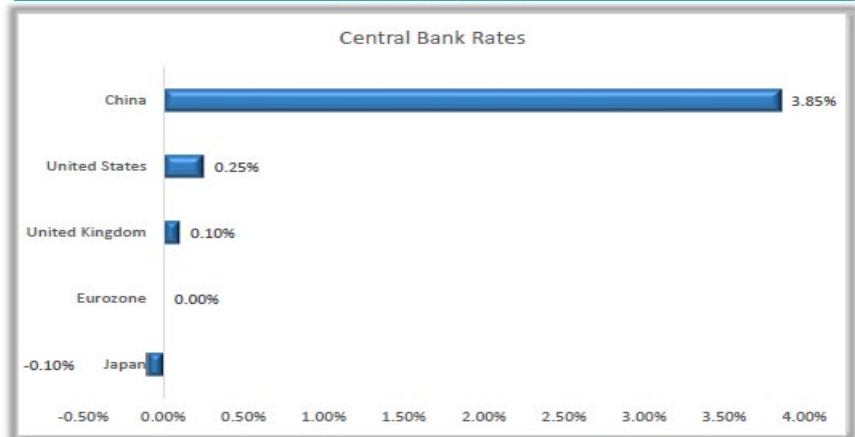
Historical Low for 10-Year Treasury Yield²



World Equity Valuation³



Central Bank Rates⁴ (as of 4/30/2021)



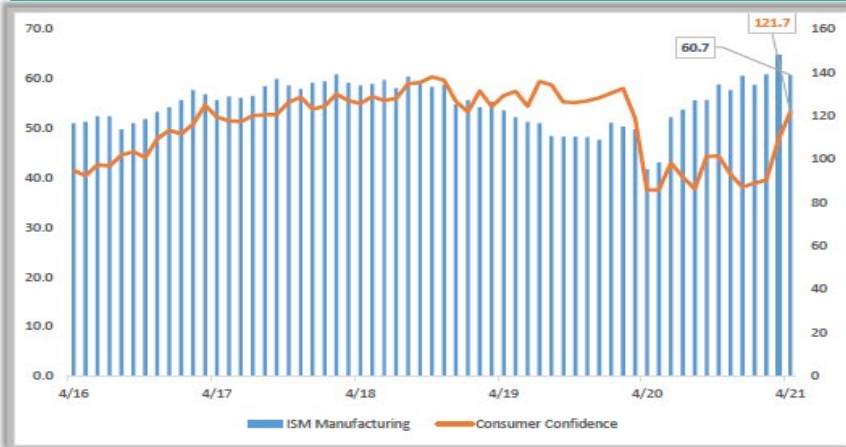
*The information on the "Key Macro Indicators" charts is the best available data as of 4/30/21 and may not reflect the current market and economic environment. Japan 1Q2021 GDP data not yet available.

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

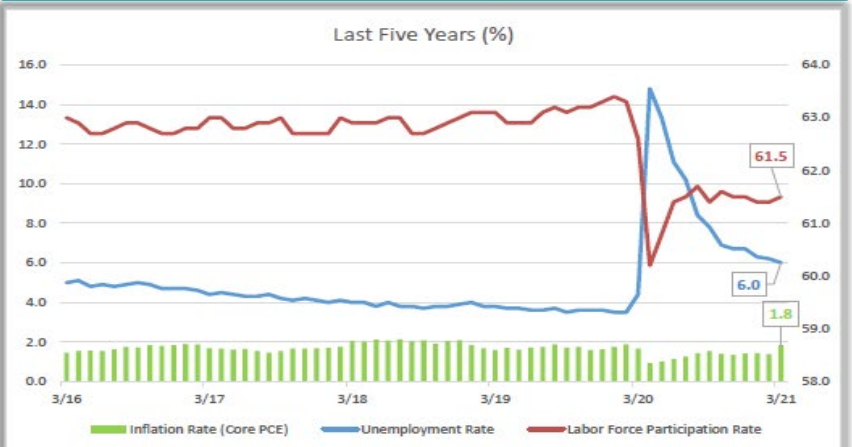


Key Macro Indicators*

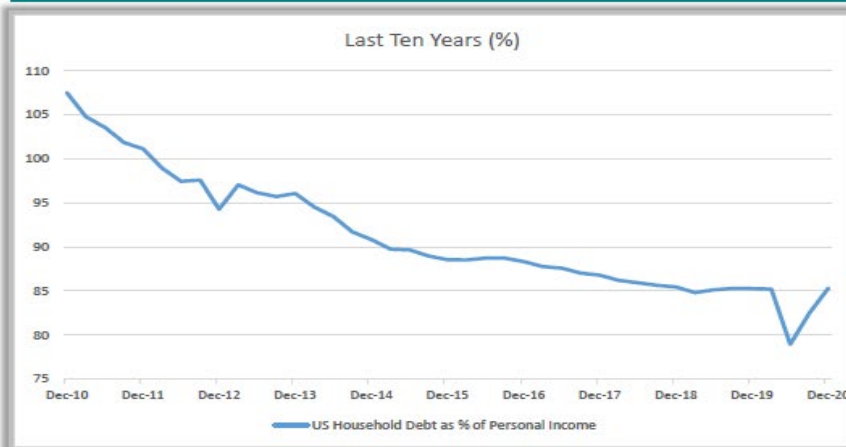
Consumer Confidence & ISM Manufacturing¹



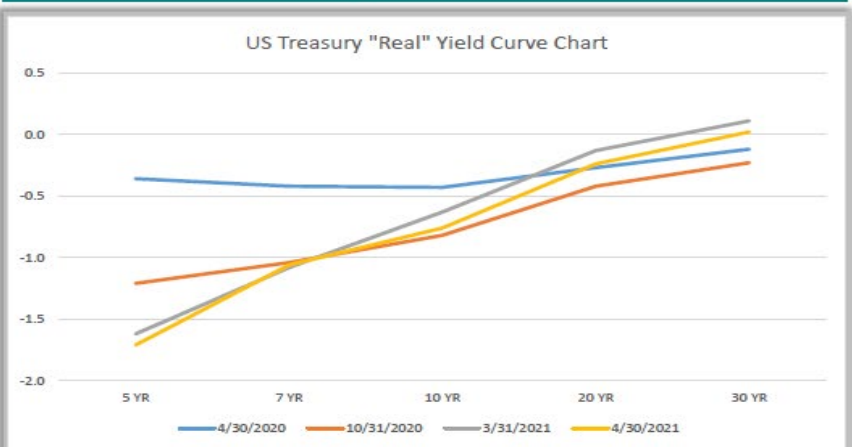
U.S. Inflation, Unemployment, & Labor Force Participation²



U.S. Household Debt as % of Personal Income³



U.S. Treasury "Real" Yield Curve⁴



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

*The information on the "Key Macro Indicators" charts is the best available data as of 4/30/21 and may not reflect the current market and economic environment.



Market Themes and Notable Items to Watch

Recent Themes

- COVID-19
 - More than 150 million cases and 3.1 million deaths worldwide
 - Surge in cases in India (over 300,000 new cases each day during the last week of April)
 - Increase in vaccine options and availability
 - Over 30% of U.S. population has been fully vaccinated against the coronavirus
- The U.S. 10-year treasury yield ended April at 1.65%, up from 0.93% at the end of 2020
- Global equities up 4% during April
- Real gross domestic product in the U.S. increased at an annual rate of 6.4 percent in the first quarter of 2021
 - Driven by continued economic recovery, reopening of establishments, and continued government response related to the COVID-19 pandemic
- \$2.3 trillion "American Jobs Plan" and \$1.8 trillion "Families Plan" unveiled in U.S.

What to Watch

- COVID-19
- Global GDP growth rate
- Social equity and civil rights initiatives
- Unemployment and consumer spending
- Potential government infrastructure spending
- State of liquidity across financial markets
- Inflation pressures and trends
- Geopolitical risks and trade arrangements
- Potential continued rising interest rates
- Economic and consumer behavior impacts as vaccination rates increase
- Central bank activity



Portfolio Performance & Risk Updates

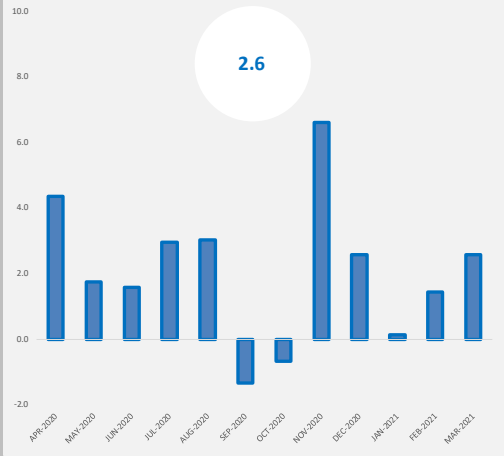


Total Fund Summary

as of March 2021

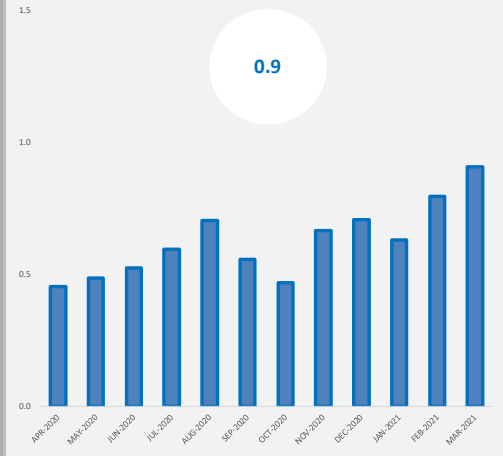
Monthly Return

(% net)



Sharpe Ratio

(3-Year Annualized)

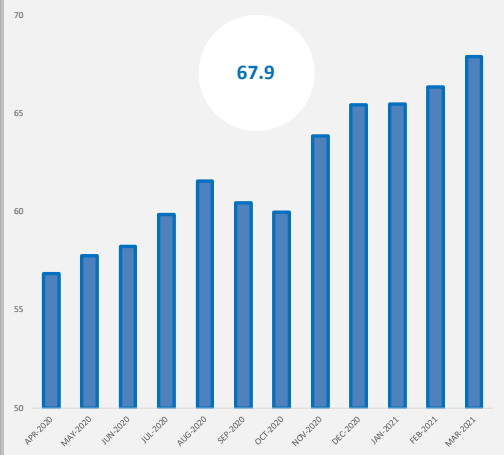


Asset Allocation

	Market Value ¹ (\$ millions)	% of Total	Final Target ²
TOTAL FUND	67,895	100.0%	
Growth	34,619	51.0%	47.0%
Global Equity	25,094	37.0%	35.0%
Private Equity ³	8,908	13.1%	10.0%
Opportunistic Real Estate ⁴	616	0.9%	2.0%
Credit	7,342	10.8%	12.0%
High Yield	2,183	3.2%	3.0%
Bank Loans	2,589	3.8%	4.0%
Emerging Market Debt	852	1.3%	2.0%
Illiquid Credit ^{3,4,5}	1,718	2.5%	3.0%
Real Assets & Inflation Hedges	11,123	16.4%	17.0%
Core & Value Added Real Estate ⁵	4,535	6.7%	7.0%
Natural Resources & Commodities	2,824	4.2%	4.0%
Infrastructure	1,950	2.9%	3.0%
Treasury Inflation-Protected Securities	1,814	2.7%	3.0%
Risk Reduction & Mitigation	14,269	21.0%	24.0%
Investment Grade Bonds	10,641	15.7%	19.0%
Diversified Hedge Fund Portfolio ⁵	2,297	3.4%	4.0%
Cash	1,332	2.0%	1.0%
Overlay Composite ⁶	541	0.8%	—

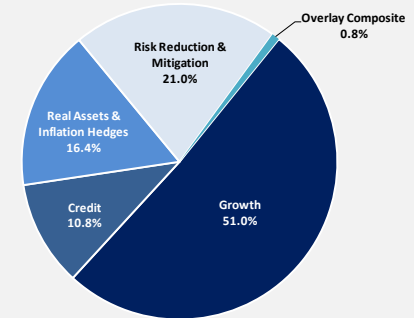
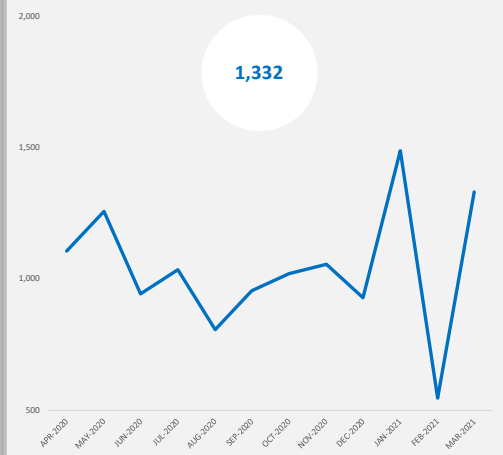
Total Market Value

(\$ billions)



Cash

(\$ millions)



1. Transition balances are included in each subcategory total, if applicable
 2. Final target weights effective as of 10/1/19
 3. Private Equity market values reflect latest available and are adjusted for cash flows

4. Real Estate market values reflect a 3-month lag and best available values
 5. Hedge Fund market values reflect a 1-month lag
 6. Reflects net cash position for overlay investing

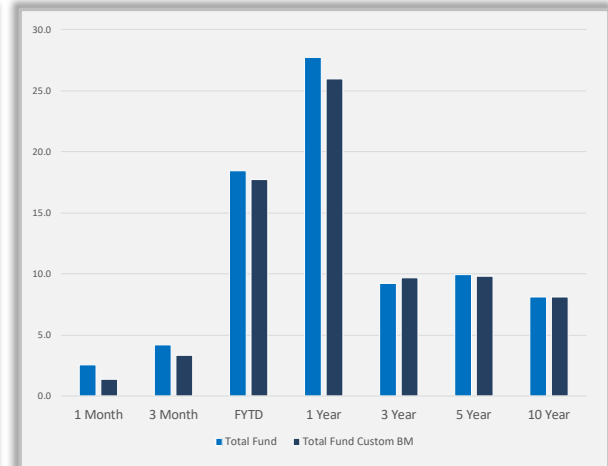
Historical Net Performance

as of March 2021

LACERA Pension Fund (% net)

	Market Value (\$ millions)	% of Total Fund	Final Target ¹	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year	10 Year
TOTAL FUND	67,895	100.0%	100.0%	2.6	4.2	18.4	27.7	9.2	10.0	8.1
<i>Total Fund Custom BM</i>				<i>1.4</i>	<i>3.4</i>	<i>17.8</i>	<i>25.9</i>	<i>9.7</i>	<i>9.8</i>	<i>8.1</i>
<i>7% Annual Hurdle Rate</i>				<i>0.57</i>	<i>1.71</i>	<i>5.21</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>	<i>7.00</i>
Functional Composites²				1 Month	3 Month	FYTD	1 Year			
GROWTH	34,619	51.0%	47.0%	4.7	7.4	31.3	47.5			
<i>Growth Custom BM</i>				<i>3.0</i>	<i>7.4</i>	<i>34.6</i>	<i>46.9</i>			
CREDIT	7,342	10.8%	12.0%	1.2	3.3	14.6	20.5			
<i>Credit Custom BM</i>				<i>-0.5</i>	<i>-0.2</i>	<i>7.4</i>	<i>16.3</i>			
REAL ASSETS & INFLATION HEDGES	11,123	16.4%	17.0%	1.5	3.5	10.3	14.7			
<i>Real Assets & Inflation Hedges Custom BM</i>				<i>1.3</i>	<i>3.5</i>	<i>10.2</i>	<i>17.1</i>			
RISK REDUCTION & MITIGATION	14,269	21.0%	24.0%	-0.6	-1.9	0.9	3.9			
<i>Risk Reduction & Mitigation Custom BM</i>				<i>-1.0</i>	<i>-2.6</i>	<i>-1.4</i>	<i>1.0</i>			
OVERLAY COMPOSITE	541	0.8%	—							

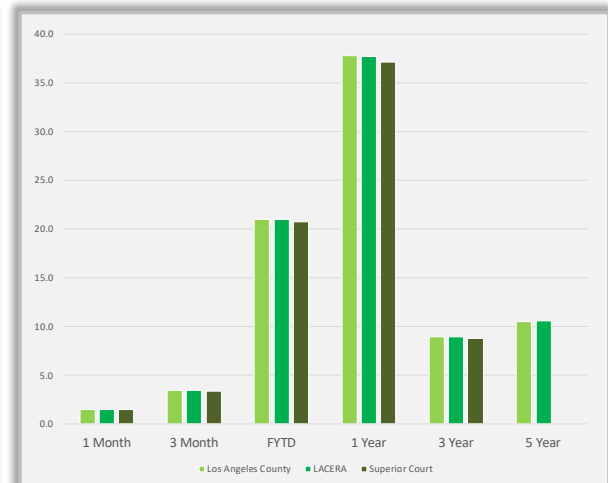
Historical Returns (% net)



OPEB Master Trust Fund (% net)

Sub-Trusts	Market Value (\$ millions) ³	Trust Ownership %	Final Target	1 Month	3 Month	FYTD	1 Year	3 Year	5 Year
TOTAL OPEB MASTER TRUST	2,052								
Los Angeles County	1,989	97.0%	—	1.5	3.5	21.0	37.8	9.0	10.5
LACERA	8	0.4%	—	1.5	3.5	21.0	37.7	9.0	10.5
Superior Court	55	2.7%	—	1.5	3.4	20.8	37.1	8.8	—
Functional Composites				1 Month	3 Month	FYTD	1 Year	3 Year	
OPEB Growth	1,025	50.0%	50.0%	2.6	5.2	31.7	57.9	12.2	
<i>Custom OPEB MT Growth Pool</i>				<i>2.6</i>	<i>5.1</i>	<i>31.5</i>	<i>57.6</i>	<i>11.9</i>	
OPEB Credit	412	20.1%	20.0%	-0.6	-0.5	8.3	17.9	—	
<i>Custom OPEB MT Credit Pool</i>				<i>-0.6</i>	<i>-0.2</i>	<i>9.3</i>	<i>20.1</i>	<i>—</i>	
OPEB Real Assets & Inflation Hedges	408	19.9%	20.0%	1.8	5.9	19.1	27.3	—	
<i>Custom OPEB MT RA & IH Pool</i>				<i>1.8</i>	<i>5.9</i>	<i>19.1</i>	<i>27.3</i>	<i>—</i>	
OPEB Risk Reduction & Mitigation	206	10.1%	10.0%	-1.0	-2.7	-1.6	0.9	4.4	
<i>Custom OPEB MT RR & M Pool</i>				<i>-1.0</i>	<i>-2.7</i>	<i>-1.7</i>	<i>0.7</i>	<i>4.2</i>	
Operating Cash	0.3	0.0%	—						

Historical Returns (% net)

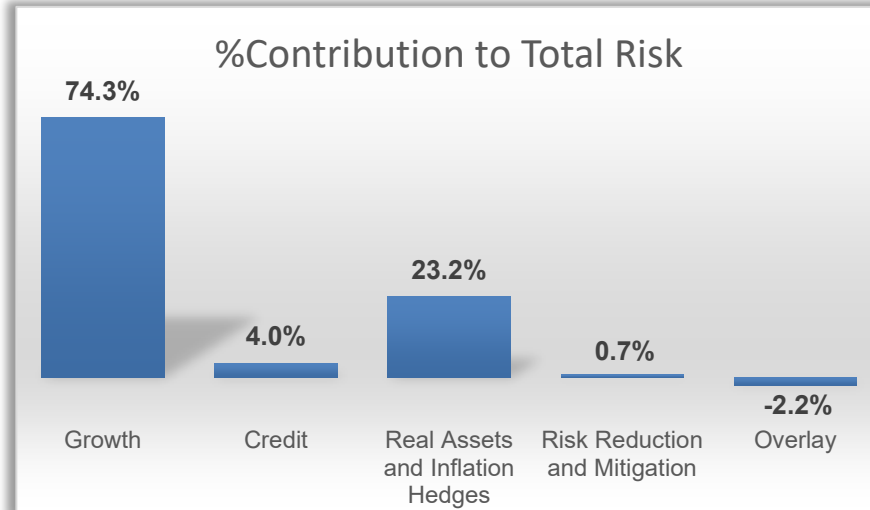


1. Final target weights effective as of 10/1/19
2. Functional composites were adopted on 4/1/19

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

Total Fund Forecast Risk*

as of March 2021



	%Weight	% Cont. to Total Risk	Standalone Total Risk	Standalone BMK Risk**
Total Fund			14.4	13.0
Growth	51.1%	74.3%	21.5	21.5
Global Equity	37.2%	51.9%	20.9	21.2
Private Equity	13.0%	21.5%	28.2	28.9
Opportunistic Real Estate	0.9%	1.0%	23.7	21.3
Credit	10.9%	4.0%	6.2	5.1
High Yield Bonds	10.9%	4.0%	6.2	5.9
Bank Loans	3.8%	0.9%	5.5	6.9
Illiquid Credit	2.6%	1.3%	9.5	4.0
Emerging Market Debt	1.3%	0.6%	10.3	9.1
Real Assets & Inflation Hedges	16.1%	23.2%	23.4	15.7
Core & VA Real Estate	6.8%	13.9%	40.5	21.3
Natural Resources & Commodities	3.8%	4.6%	20.8	21.5
Infrastructure	2.9%	4.3%	23.3	23.5
TIPS	2.7%	0.3%	5.0	5.0
Risk Reduction and Mitigation	21.1%	0.7%	3.5	3.1
Investment Grade Bonds	15.8%	0.5%	4.3	4.0
Diversified Hedge Funds	3.3%	0.2%	4.9	0.2
Cash	2.0%	0.0%	0.0	0.2
Overlay	0.8%	-2.2%	-	-

*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 preliminary for lagged quarter 12/31/2020

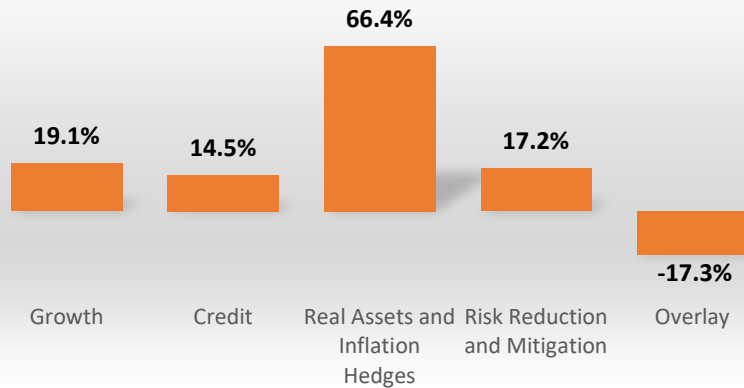
**BMK Risk stands for Benchmark Risk



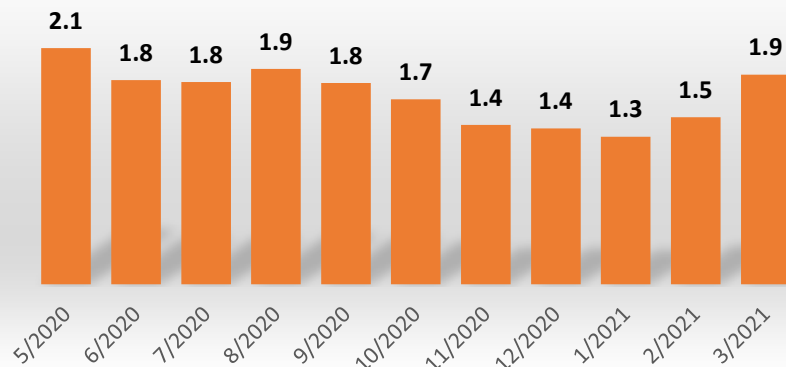
Total Fund Forecast Active Risk*

as of March 2021

%Contribution to Active Risk



Active Risk Trend



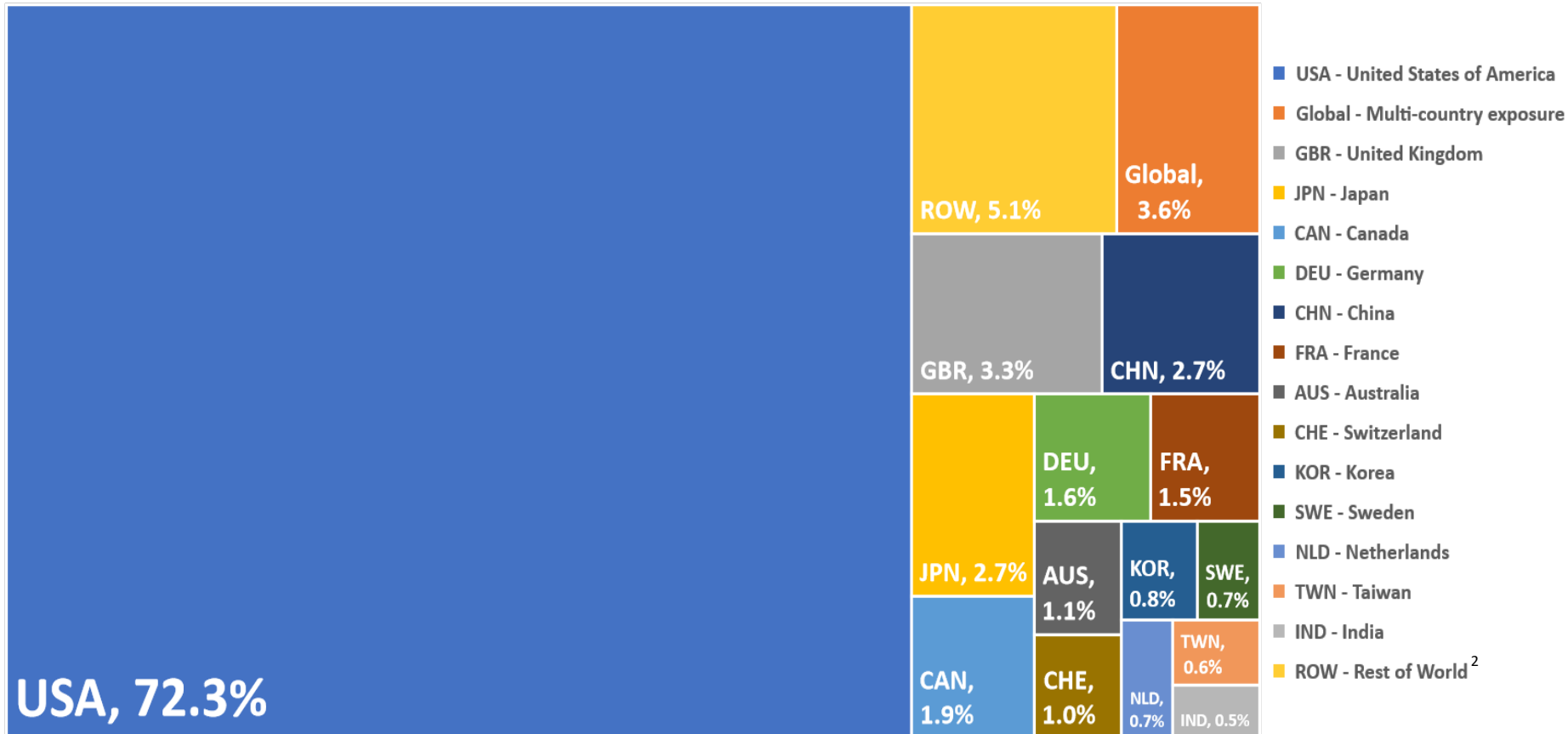
	%Weight	Active Weight%	Active Risk	Active Risk Allocation	Active Risk Selection
Total Fund			1.87	0.28	1.59
Growth	51.1%	4.06%	0.36	0.25	0.11
Global Equity	37.2%				
Private Equity	13.0%				
Opportunistic Real Estate	0.9%				
Credit	10.9%	-1.09%	0.27	0.08	0.19
High Yield Bonds	10.9%				
Bank Loans	3.8%				
Illiquid Credit	2.6%				
Emerging Market Debt	1.3%				
Real Assets & Inflation Hedges	16.1%	-0.87%	1.24	-0.02	1.26
Core & VA Real Estate	6.8%				
Natural Resources & Commodities	3.8%				
Infrastructure	2.9%				
TIPS	2.7%				
Risk Reduction and Mitigation	21.1%	-2.93%	0.32	0.28	0.04
Investment Grade Bonds	15.8%				
Diversified Hedge Funds	3.3%				
Cash	2.0%				
Overlay	0.8%	0.83%	-0.32	-0.32	0.00

*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 preliminary for lagged quarter 12/31/2020



Geographic Exposures by AUM* - Total Fund

as of March 2021 ex-overlay



*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 preliminary for lagged quarter 12/31/2020

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

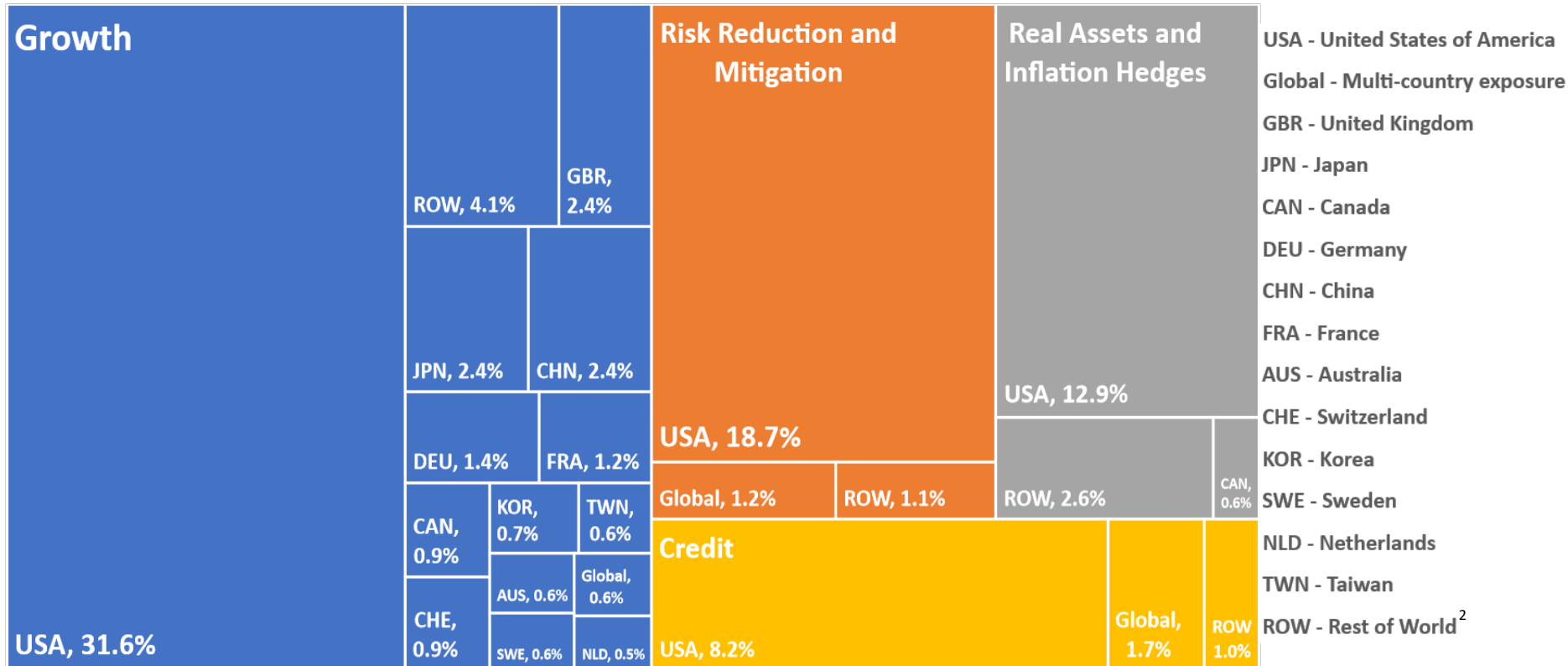
³ Geographic exposure is based on the domicile country of a given security/asset



Geographic Exposures by AUM* - Asset Categories

as of March 2021 ex-overlay

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



*AUM = assets under management

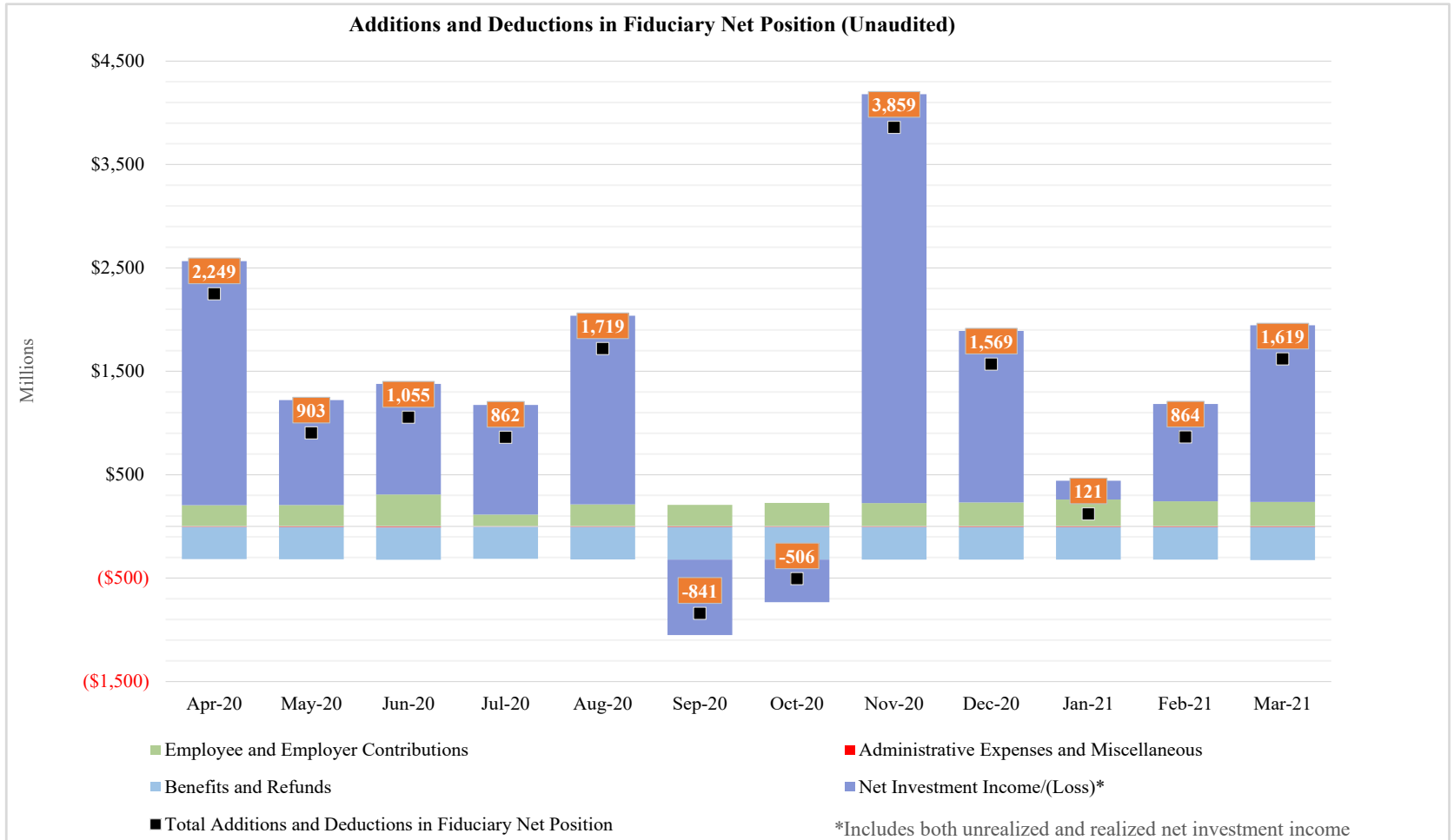
¹ *Implementation of the MSCI Risk Platform is ongoing; reconciliation and refinement of the data is progressing and subject to change. Real estate and private equity data used is preliminary for lagged quarter 12/31/2020

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-19	4	8	\$1.9 billion
FY-20	5	7	-
FY-21	2	8	\$9.3 billion



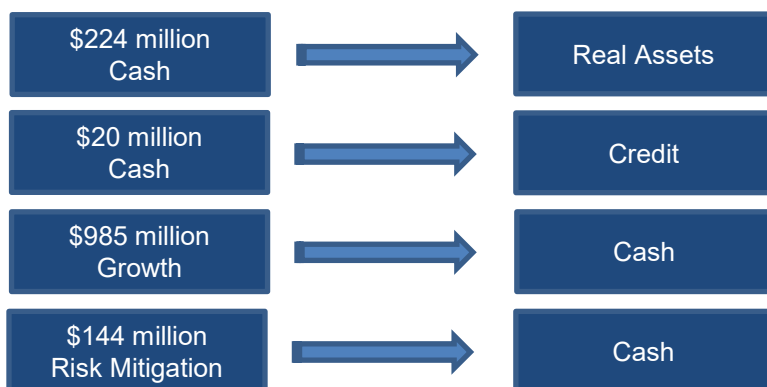
Portfolio Structural Updates



Portfolio Structural Updates

Portfolio Movements

Rebalancing Activity



Hedges and Overlays

Program	March Return	March Gain/Loss	Inception* Gain/Loss
Currency Hedge**	1.2%	-\$22.8 Million	\$793.8 Million
Cash/Rebalance Overlay***	-1.5%	-\$57.6 Million	-\$33.1 Million

Current Search Activity

Status of Active Searches – Subject to Change

Name	RFP Issued	Due Diligence	BOI Review
Private Equity Advisor Services	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Anticipated Summer 2021

Quiet Period for Search Respondents

Private Equity Advisor Services

- ✓ Albourne America LLC
- ✓ StepStone Global LLC
- ✓ Wilshire Associates Inc

*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

- Onboarding process of new risk system continues
- Ongoing implementation and development of LACERA TIDE initiative
- Strategic Asset Allocation Study is ongoing
- Chief Investment Officer Jonathan Grabel was named to the Technical Asset Owner Advisory Committee of the Principles for Responsible Investment

Completed Actions

- The real estate administrator onboarding process has been completed
- The new performance system onboarding process has been completed

Operational Updates

- Completed the Annual Contract Compliance exercise for public markets
- Investments formed a “Back To Office” working group
- Financial Analyst III search
 - Credit

Manager/Consultant Updates

- No material updates for this month’s report



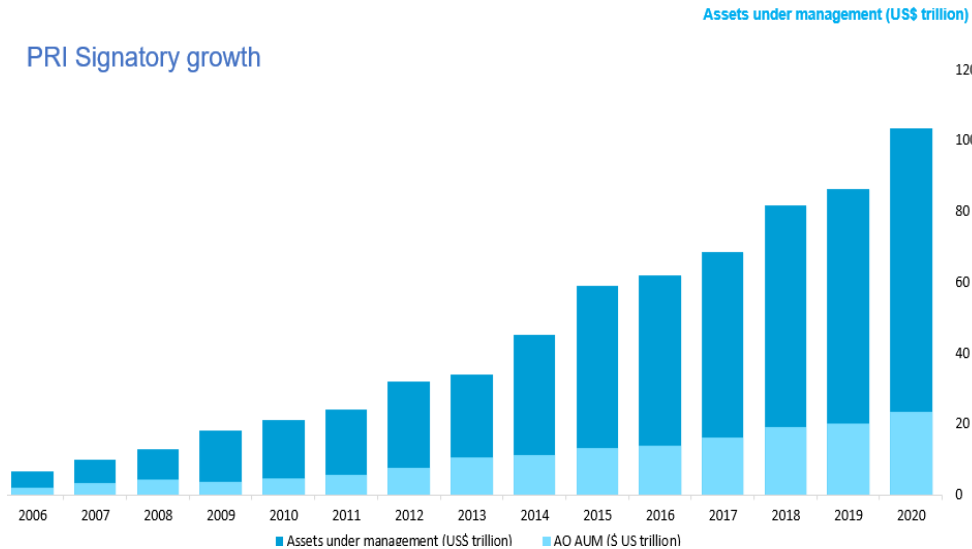
Commentary



Staff Chart of the Month*

Importance of ESG Integration *Process* versus *Product*

PRI Signatory growth

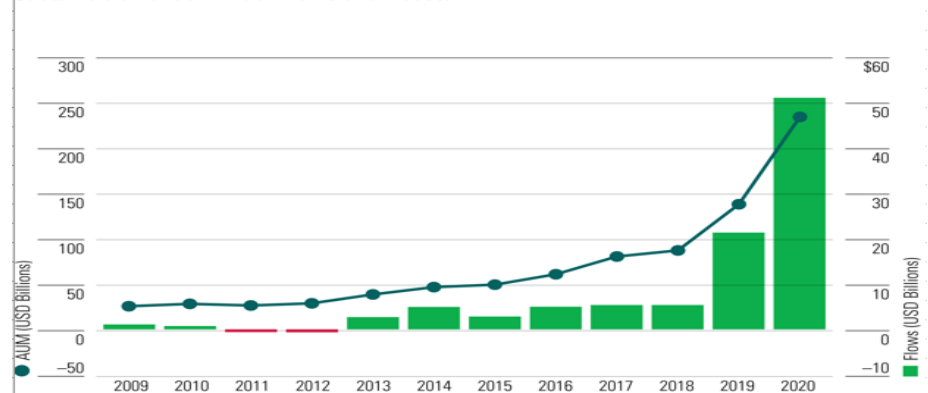


Assets of PRI signatories committed to evaluating ESG throughout investments has risen to about US\$120 trillion in 15 years

Meanwhile, assets in “sustainable” funds represent only a fraction of total PRI assets committed to evaluating ESG in investment process

“Process” versus “product” not necessarily mutually exclusive

Sustainable Funds Annual Flows and Assets



Source: Morningstar. Data as of 12/31/2020.
Includes Sustainable Funds as defined in Sustainable Funds U.S. Landscape Report, Feb. 2020.
Includes funds that have been liquidated; does not include funds of funds.



Staff Chart of the Month*

Are Managers Trying to Replace Active Fee Loss?

Figure 2: Cumulative flows: US equities

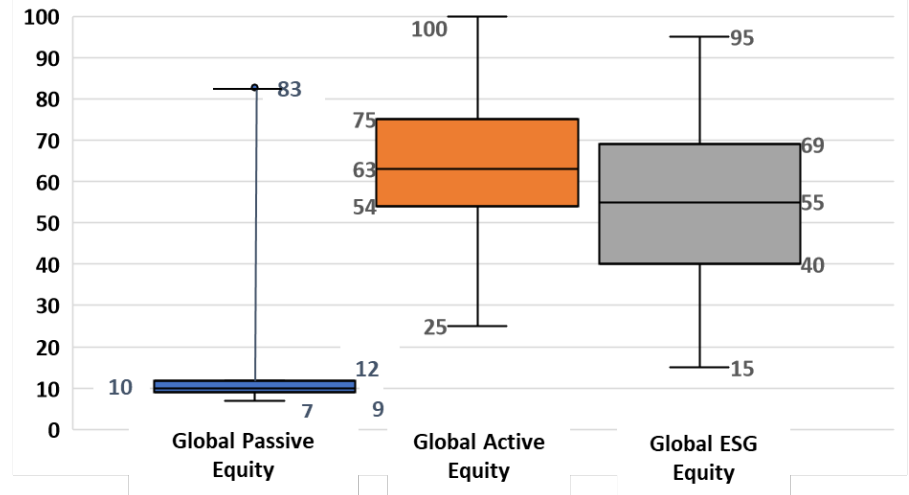


Source: BofA Global Research, EPFR Global

Meanwhile assets have shifted out of active mandates and into passive strategies

ESG “labeled” funds have wide dispersion of fees, with many resembling “active” fees

Fee Quartiles in basis points for \$100 million mandate



Analysis using eVestment database



Appendix



Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2021*

LACERA PENSION FUND

12

GROWTH
Total # of Advisory

GROWTH

Global Equity

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

Quarterly Review Status

of Advisory

Notes

✓

✓

✓

✓

11

11 issuers held, totaling \$29.2 mm in market value.

Private Equity - Growth**

- Asset Allocation Policy Compliance
- Guideline Compliance by Strategy
- Guideline Compliance by Geographic Location
- Investment Exposure Limit

✓

✓

✓

✓

1

above 7-13% policy range by 0.1% at March period-end; back within range 4/21/21

Opportunistic Real Estate**

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

0

CREDIT
Total # of Advisory

CREDIT

High Yield, Bank Loans, EM Debt, Illiquid Credit**

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

Quarterly Review Status

of Advisory

Notes

✓

✓

✓

✓

Compliance Monitor

This report highlights operational and compliance metrics monitored by the Investment Division
As of March 2021*

LACERA PENSION FUND

2

REAL ASSETS & INFLATION HEDGES

Total # of Advisory

REAL ASSETS & INFLATION HEDGES	Quarterly Review Status	# of Advisory	Notes
Core & Value Added Real Estate**			
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	✓		
Guideline Compliance by Leverage	✓	2	Two value-add mandates are above 65% LTV limit; Both mandates make up less than 0.05% of total fund and one manager was terminated 1/21/2021
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 2021*

LACERA PENSION FUND

1

RISK REDUCTION & MITIGATION

Total # of Advisory

RISK REDUCTION & MITIGATION	Quarterly Review Status	# of Advisory	Notes
Investment Grade Bonds			
Asset Allocation Policy Compliance	✓		
Investment Guideline Compliance	✓		
Emerging Manager Program	✓		
# of Sudan/Iran Holdings Held by Managers	✓	1	1 issuer held, totaling \$2.6 mm in market value.
Diversified Hedge Funds**			
Asset Allocation Policy Compliance	✓		
Portfolio Level Compliance	✓		
HFOF Manager Guideline Compliance	✓		N/A as the GSAM & GCM diversified HF portfolios are currently winding down
Direct Portfolio Manager Guideline Compliance	✓		
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 2021*

INVESTMENT OPERATIONS

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INVESTMENT OPERATIONS

Total # of Advisory

INVESTMENT OPERATIONS	Quarterly Review Status	# Advisory	Notes
Securities Lending			
Investment Guideline Compliance	✓		
\$ Value on Loan	✓	1	GSAL \$432.7 mm; State Street \$1245.3 mm
\$ Value of Cash Collateral	✓	1	GSAL \$442.7 mm; State Street \$1,308.7 mm
Total Income - Calendar YTD	✓	1	GSAL \$0.5 mm; State Street \$2.4 mm
Total Fund Overlay			
Investment Guideline Compliance	✓		
Proxy Voting			
Number of Meetings Voted	✓	1	1,207 meetings voted
Tax Reclaims			
Total Paid Reclaims - Calendar YTD	✓	1	\$104,716
Total Pending Reclaims	✓	1	\$14.4 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 2021*

OPEB MASTER TRUST

Functional Asset Categories	Quarterly Review Status	# Advisory	Notes
(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

**** 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.