

Chief Investment Officer Monthly Report

Board of Investments

July 8, 2020



Jonathan Grabel 
Chief Investment Officer

LOS ANGELES COUNTY EMPLOYEES RETIREMENT ASSOCIATION

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Market Environment

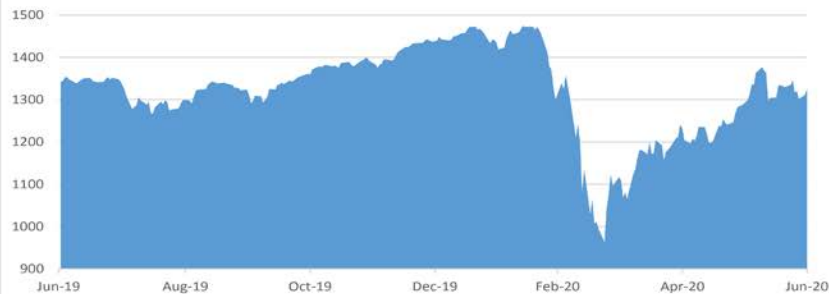


Global Market Performance as of June 30, 2020

MSCI ACWI Index (Global Equity Market)*

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
3.2	19.8	-7.1	1.2	5.6	6.1	9.1

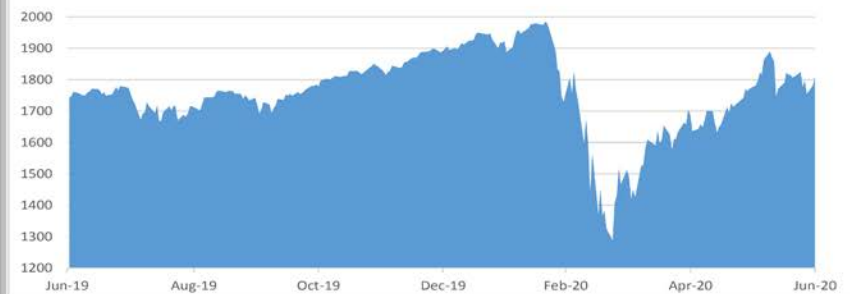
MSCI ACWI IMI Index - 1 Year Performance



Russell 3000 Index (U.S. Equity Market)

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
2.3	22.0	-3.5	6.5	10.0	10.0	13.7

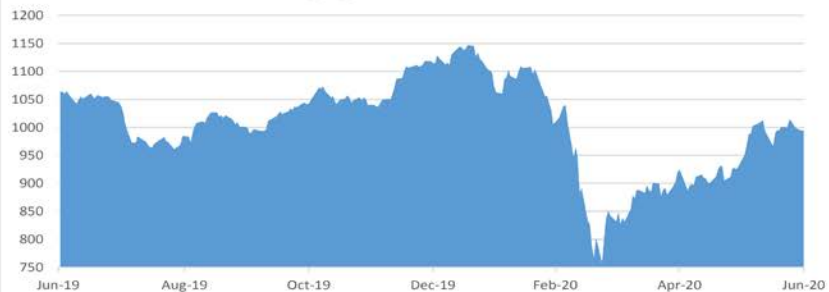
Russell 3000 1-Year Performance



MSCI Emerging Market Index

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
7.4	18.1	-9.8	-3.4	1.9	2.9	3.3

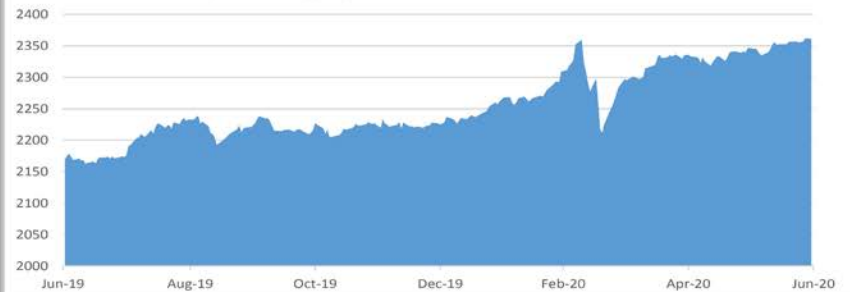
MSCI Emerging Markets 1-Year Performance



Barclays U.S. Aggregate Bond Index**

Trailing Returns (%)			Annualized Returns (%)			
1-month	3-month	YTD	1Y	3Y	5Y	10Y
0.6	2.9	6.1	8.7	5.3	4.3	3.8

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



*Global Equity Policy Benchmark - MSCI ACWI IMI Index

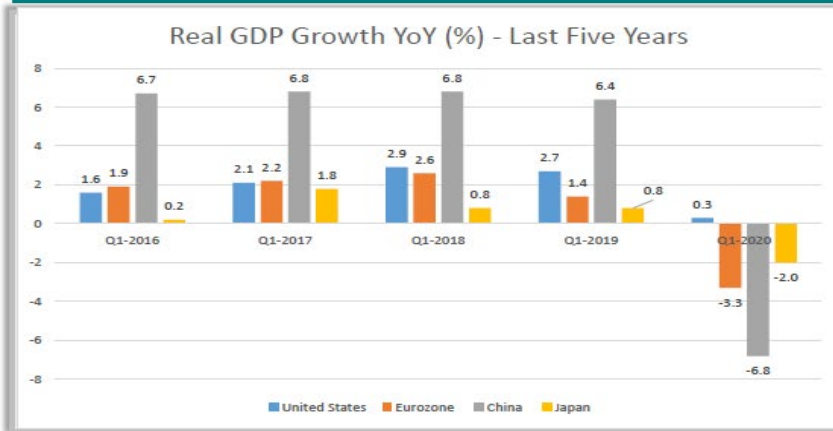
**Investment Grade Bonds Policy Benchmark - Barclays U.S. Aggregate Bond Index

Source: Bloomberg

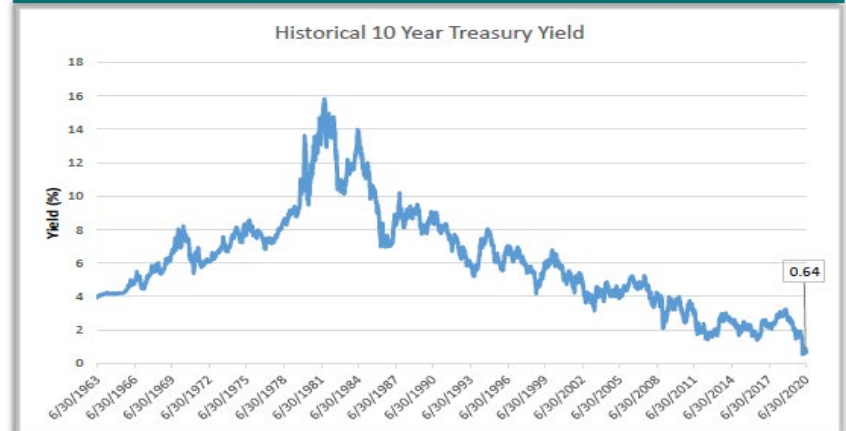


Key Macro Indicators*

GDP Growth of Major Economies¹



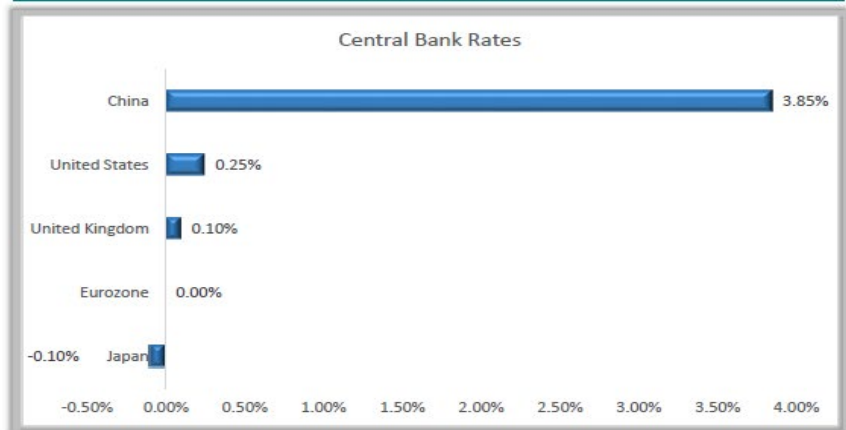
Historical Low for 10-Year Treasury Yield²



World Equity Valuation³



Central Bank Rates⁴ (as of 6/30/2020)



*The information on the "Key Macro Indicators" charts is the best available data as of 6/30/20 and may not reflect the current market and economic environment

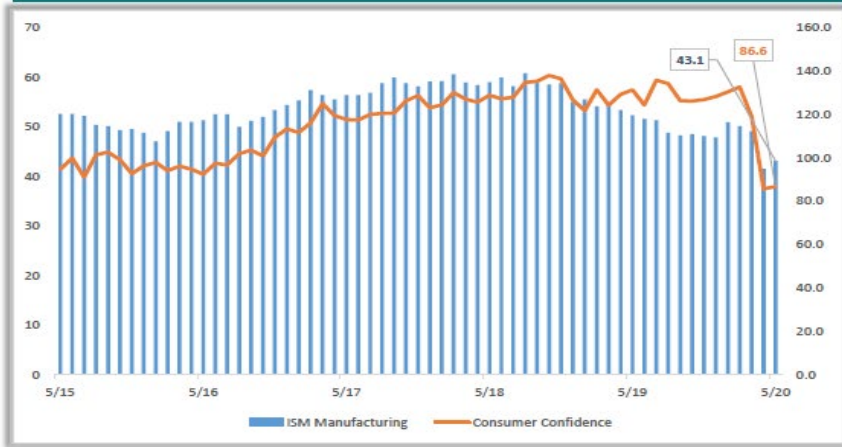
Sources: 1. Bloomberg
2. St. Louis Federal Reserve

3. FactSet
4. FactSet

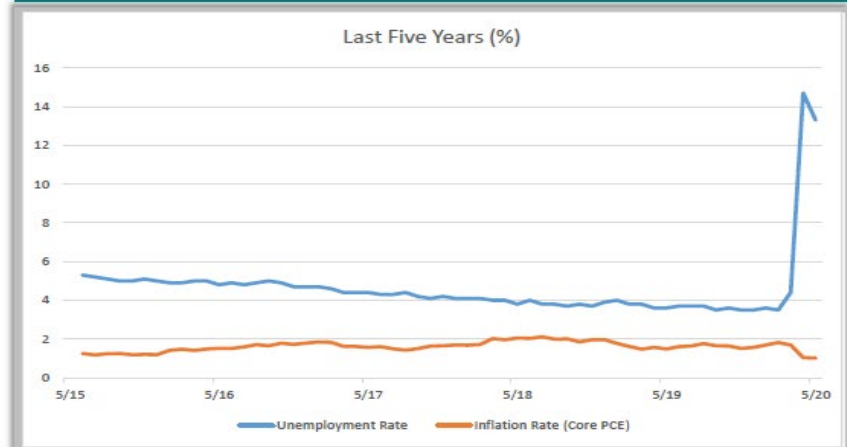


Key Macro Indicators*

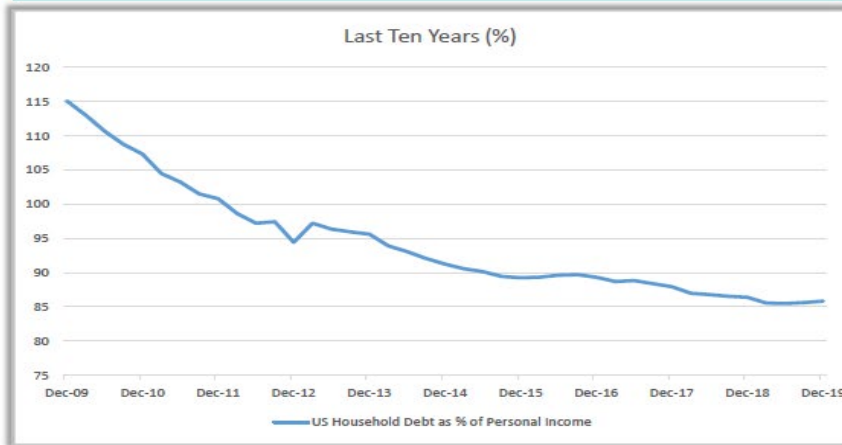
Consumer Confidence & ISM Manufacturing¹



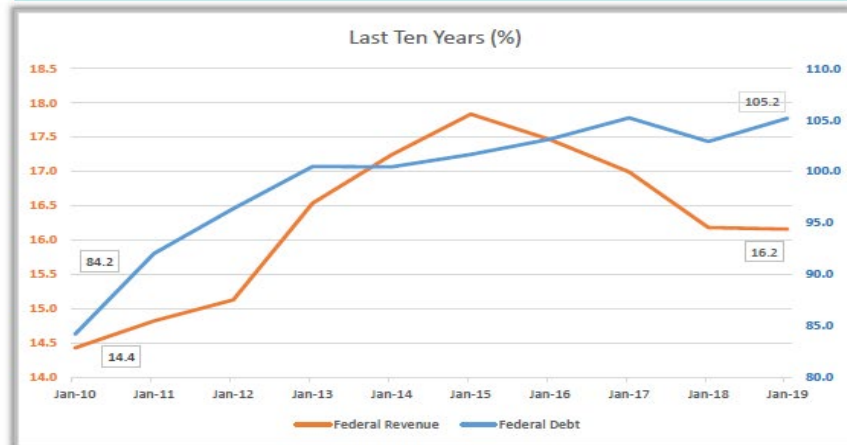
U.S. Inflation & Unemployment²



US Household Debt as % of Personal Income³



Federal Revenue and Federal Debt as % of GDP⁴



*The information on the "Key Macro Indicators" charts is the best available data as of 6/30/20 and may not reflect the current market and economic environment

Sources: 1. Bloomberg 3. Bloomberg
2. Bloomberg 4. Bloomberg & Federal Reserve



Market Themes and Notable Items to Watch

Recent Themes

- COVID-19
 - More than 10 million cases worldwide
 - U.S. approximately 25% of global cases
 - U.S. new daily cases approach 40,000 in late June
 - Uncertainty on infection trajectory and long-term economic impact
- Attempt to reopen traditional economic activity leads to spikes in COVID-19 cases in select geographic regions
- Social equality activism
- The World Bank estimates that more than 92% of countries are in a recession
- The S&P 500 gained 20.5% in Q2 – its best quarter since 1998
 - 180 companies in the index have withdrawn 2020 earnings forecasts

What to Watch

- COVID-19
 - Global spread
 - Treatment development
 - Reopening of economies
 - Lasting economic impact
- Social and civil rights initiatives
- Growing socioeconomic disparities
- Liquidity across investment markets
- Global unemployment
- Health of corporate balance sheets and credit availability
- Real estate mortgage defaults
- U.S. election uncertainty and impacts
- Geopolitical risks and trade arrangements



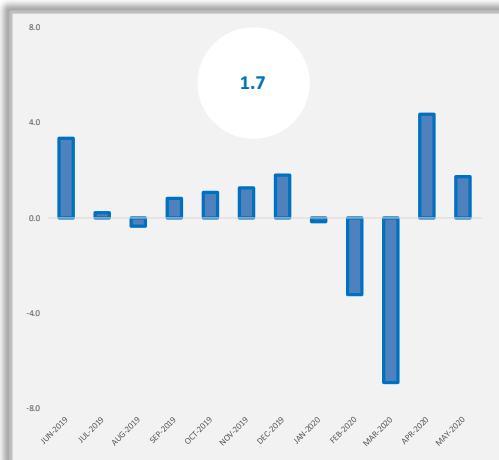
Portfolio Performance Update



Total Fund Summary as of May 2020

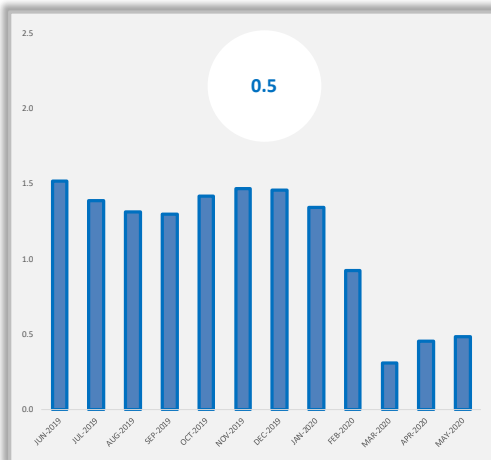
Monthly Return

(% net)



Sharpe Ratio

(3-Year Annualized)

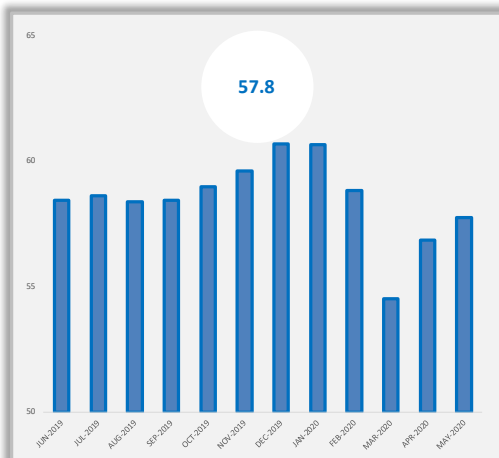


Asset Allocation

	Market Value ¹ (\$ millions)	% of Total	Final Target ²
TOTAL FUND	57,757	100.0%	
Growth	27,391	47.4%	47.0%
Global Equity	20,183	34.9%	35.0%
Private Equity ³	6,349	11.0%	10.0%
Opportunistic Real Estate ⁴	859	1.5%	2.0%
Credit	5,634	9.8%	12.0%
High Yield	1,879	3.3%	3.0%
Bank Loans	1,952	3.4%	4.0%
Emerging Market Debt	772	1.3%	2.0%
Illiquid Credit ^{3,4,5}	1,029	1.8%	3.0%
Real Assets & Inflation Hedges	9,755	16.9%	17.0%
Core & Value Added Real Estate ⁴	4,966	8.6%	7.0%
Natural Resources & Commodities	1,972	3.4%	4.0%
Infrastructure	1,741	3.0%	3.0%
Treasury Inflation-Protected Securities	1,076	1.9%	3.0%
Risk Reduction & Mitigation	14,426	25.0%	24.0%
Investment Grade Bonds	11,551	20.0%	19.0%
Diversified Hedge Fund Portfolio ⁵	1,618	2.8%	4.0%
Cash	1,257	2.2%	1.0%
Overlay Composite ⁶	551	1.0%	—

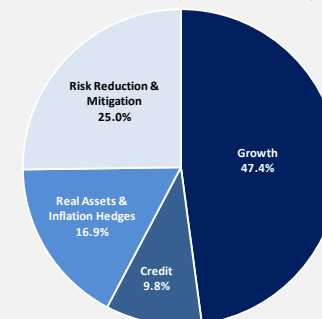
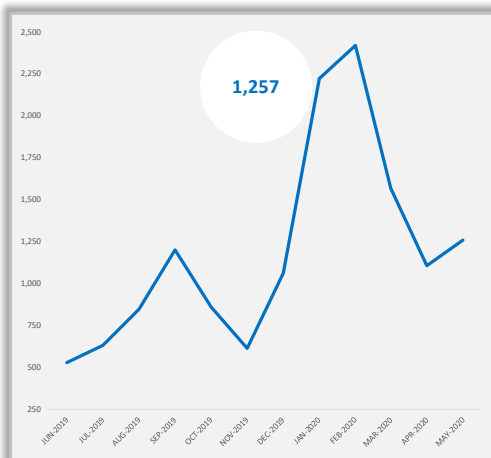
Total Market Value

(\$ 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

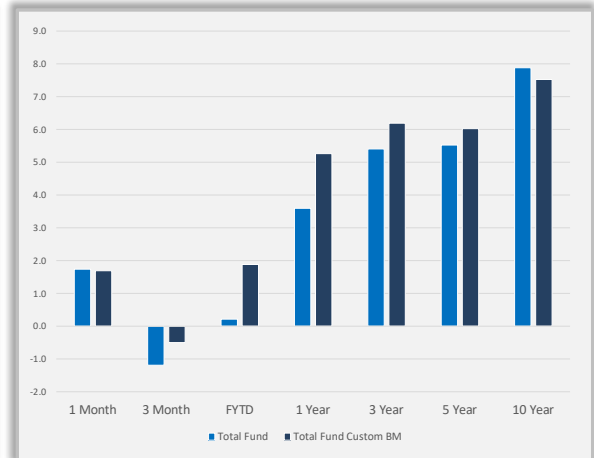


Historical Net Performance as of May 2020*

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	57,757	100.0%	100.0%	1.7	-1.2	0.2	3.6	5.4	5.5	7.9
<i>Total Fund Custom BM</i>				<i>1.7</i>	<i>-0.5</i>	<i>1.9</i>	<i>5.3</i>	<i>6.2</i>	<i>6.0</i>	<i>7.5</i>
<i>7.25% Annual Hurdle Rate</i>				<i>0.58</i>	<i>1.77</i>	<i>6.63</i>	<i>7.25</i>	<i>7.25</i>	<i>7.25</i>	<i>7.25</i>
Functional Composites²				1 Month	3 Month	FYTD	1 Year			
GROWTH	27,391	47.4%	47.0%	2.1	-1.1	-0.2	4.8			
<i>Growth Custom BM</i>				<i>1.7</i>	<i>-1.0</i>	<i>0.3</i>	<i>5.2</i>			
CREDIT	5,634	9.8%	12.0%	3.0	-7.3	-5.1	-3.8			
<i>Credit Custom BM</i>				<i>3.8</i>	<i>-2.4</i>	<i>1.1</i>	<i>2.8</i>			
REAL ASSETS & INFLATION HEDGES	9,755	16.9%	17.0%	1.4	-1.7	-4.4	-2.3			
<i>Real Assets & Inflation Hedges Custom BM</i>				<i>1.9</i>	<i>-1.3</i>	<i>-1.9</i>	<i>0.2</i>			
RISK REDUCTION & MITIGATION	14,426	25.0%	24.0%	0.8	0.9	6.5	7.7			
<i>Risk Reduction & Mitigation Custom BM</i>				<i>0.4</i>	<i>1.5</i>	<i>7.1</i>	<i>8.3</i>			
OVERLAY COMPOSITE	551	1.0%	—							

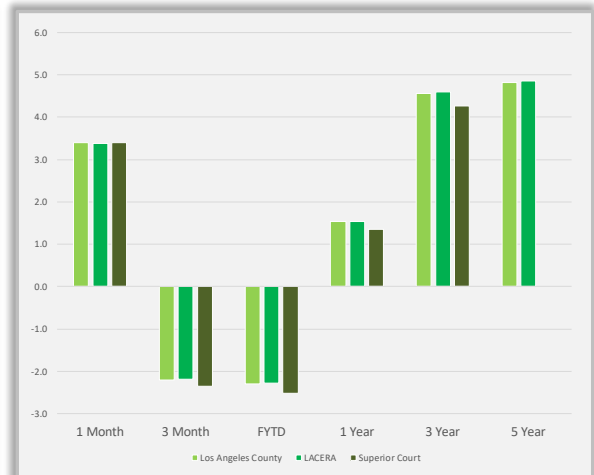
Historical Returns (net)



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	1,399								
Los Angeles County	1,350	96.5%	—	3.4	-2.2	-2.3	1.5	4.6	4.8
LACERA	5	0.4%	—	3.4	-2.2	-2.3	1.5	4.6	4.9
Superior Court	43	3.1%	—	3.4	-2.4	-2.5	1.4	4.3	—
Functional Composites				1 Month	3 Month	FYTD	1 Year	3 Year	
OPEB Growth	755	54.0%	50.0%	4.7	-0.5	-1.7	4.7	5.0	
<i>Custom OPEB MT Growth Pool</i>				<i>4.6</i>	<i>-0.6</i>	<i>-2.0</i>	<i>4.3</i>	<i>4.6</i>	
OPEB Credit	259	18.5%	20.0%	4.0	-3.7	-2.3	-0.4	—	
<i>Custom OPEB MT Credit Pool</i>				<i>4.3</i>	<i>-4.1</i>	<i>-2.5</i>	<i>-0.6</i>	<i>—</i>	
OPEB Real Assets & Inflation Hedges	262	18.7%	20.0%	0.6	-9.4	-11.0	-9.7	—	
<i>Custom OPEB MT RA & IH Pool</i>				<i>0.6</i>	<i>-9.8</i>	<i>-11.3</i>	<i>-10.0</i>	<i>—</i>	
OPEB Risk Reduction & Mitigation	123	8.8%	10.0%	0.4	1.5	7.0	8.1	5.2	
<i>Custom OPEB MT RR & M Pool</i>				<i>0.4</i>	<i>1.4</i>	<i>6.8</i>	<i>7.9</i>	<i>5.0</i>	
Operating Cash	0.1	0.0%	—						

Historical Returns (net)



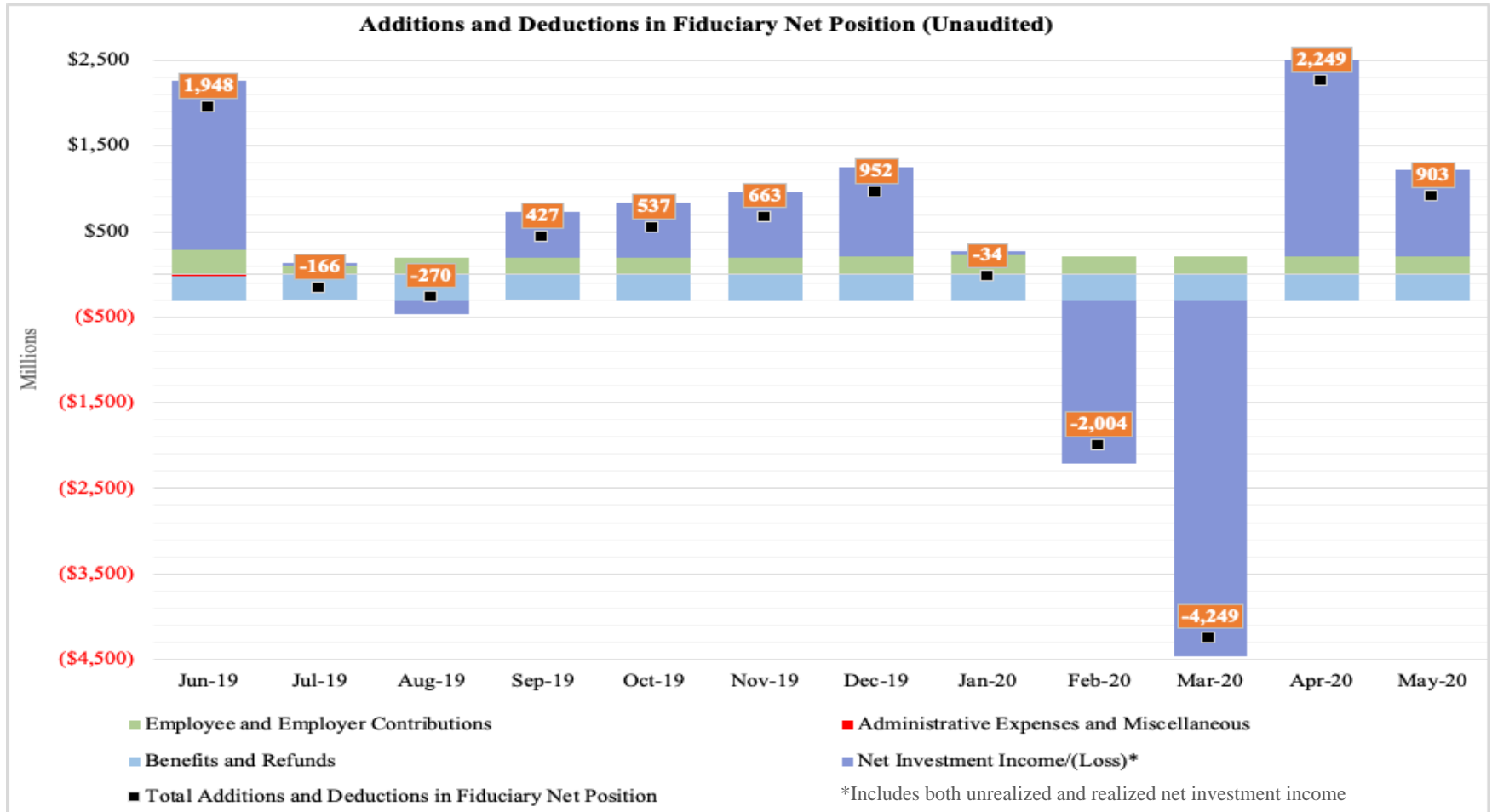
1. Final target weights effective as of 10/1/19
2. Functional composites were adopted on 4/1/19

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

* Historical real estate valuations are currently under review, therefore May 2020 total fund, composite, and benchmark returns are preliminary



Change In Fiduciary Net Position



Fiscal Year	Negative Months	Positive Months	Total Net Position Change \$
FY-18	3	9	\$3.0 billion
FY-19	4	8	\$1.9 billion
FY-20 YTD	5	6	-\$1.0 billion



Portfolio Structural Updates



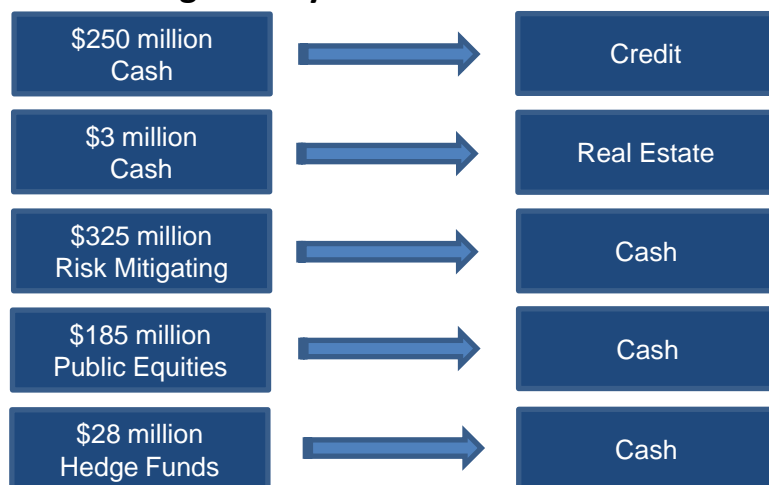
Portfolio Structural Updates

Portfolio Movements

Completed Actions

- Funded the U.S. equity factor mandate

Rebalancing Activity



Hedges and Overlays

Program	May Return	May Gain/Loss	Inception* Gain/Loss
Currency Hedge**	-0.1%	\$30.1 Million	\$1.1 Billion
Cash/Rebalance Overlay***	2.4%	\$27.4 Million	-\$23.5 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
Alternatives Administrative Services	●	●	Anticipated Fall 2020
Total Fund Performance Provider	●	●	Anticipated Fall 2020
Hedge Funds Emerging Manager Program Separate Account Manager	●	●	Anticipated Late 2020
Dedicated Managed Account Services	●	●	Anticipated Early 2021

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

- Onboarding process of new risk system continues
- Continuous improvements to the business continuity plan
- Completing climate analysis of public market holdings
- Executed cash IMA with State Street with planned transition in July

Operational Updates

- Investment team working from home during stay-at-home order
- Financial Analyst II & III searches
 - Public Equity, Real Assets and Portfolio Analytics (Corporate Governance)
- Investments working with FASD on reviewing and enhancing the investment-related sections of the CAFR
- Investments formed an Operational Due Diligence (“ODD”) Group to standardize and enhance ODD across the total Fund

Manager/Consultant Updates

- The Investment Division is proactively contacting managers and business partners



Commentary



Staff Chart of the Month*

Depth of the Covid-19 Global Recession

Current projections imply that the COVID-19 global recession will be the **fourth deepest** since 1870 and the most severe since the end of World War II. It is expected to involve per capita output contractions in an **unprecedentedly high share of countries**.

Figure A: Global per capita GDP growth

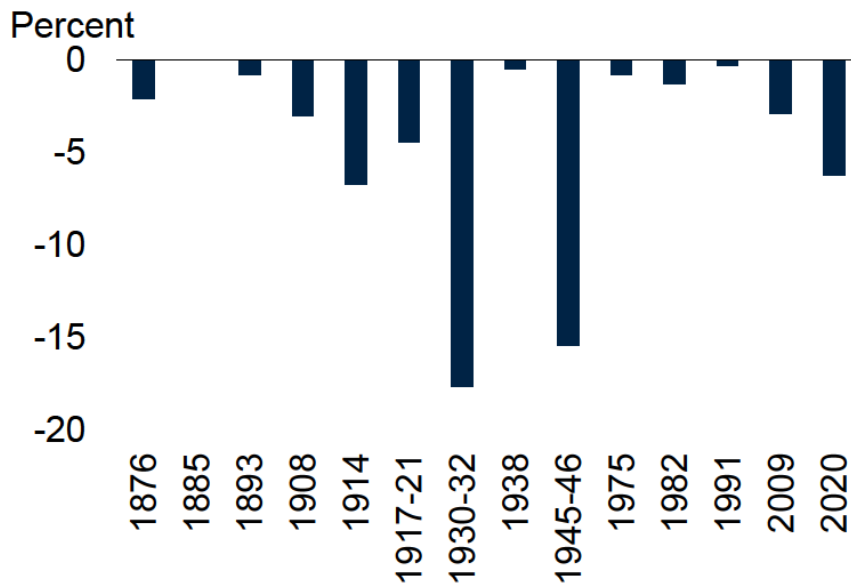
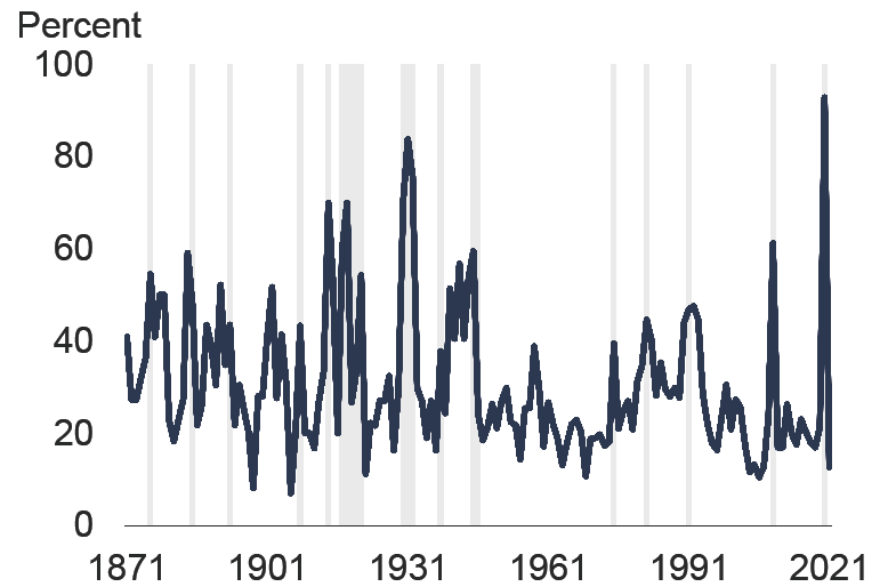


Figure B: Economies in recession



Note: Data for 2020-21 are forecasts. Shaded areas refer to global recessions.

A. For multi-year episodes, the cumulative contraction is shown. The per capita growth contraction in 1885 was less than -0.1 percent.

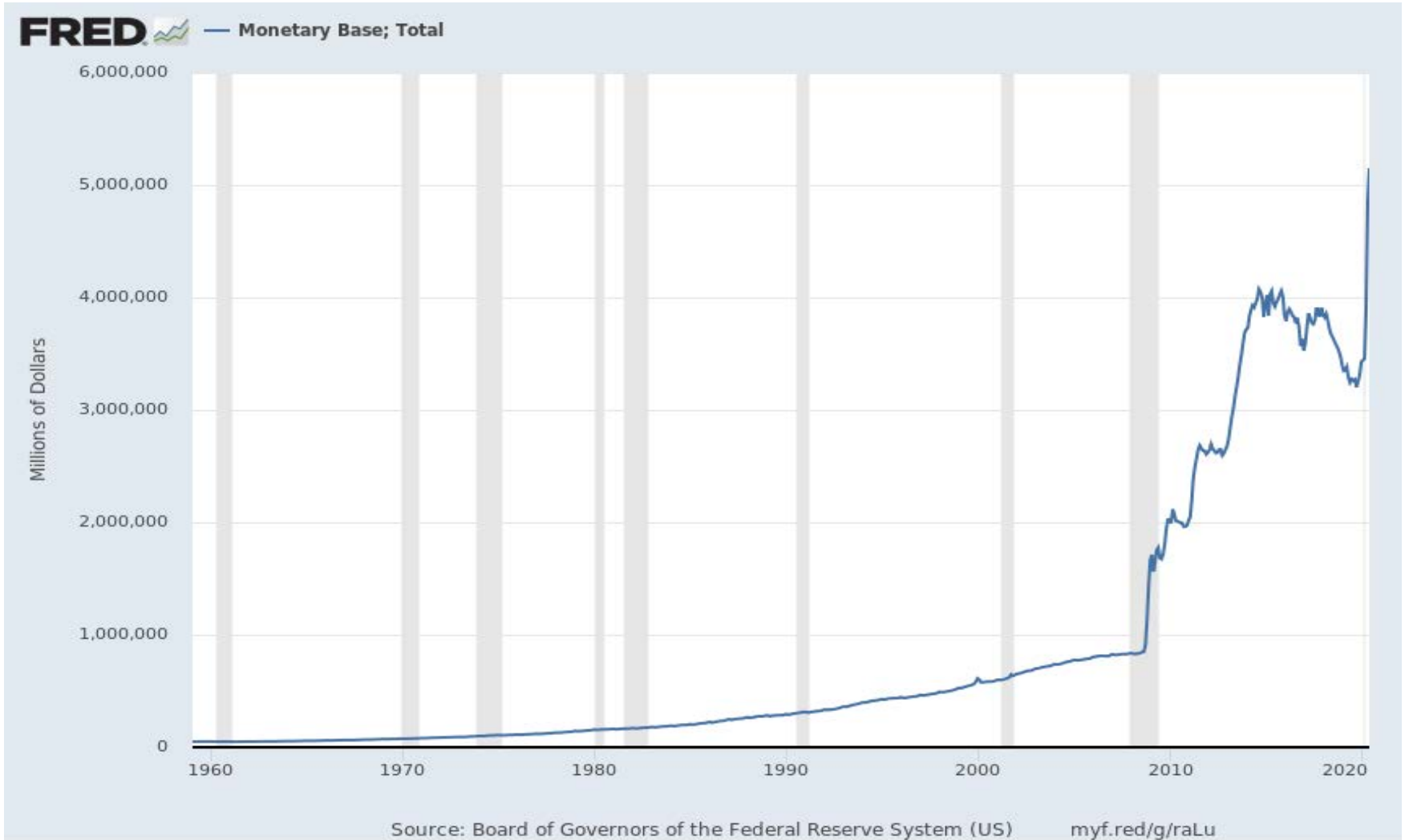
B. Figure shows the proportion of economies in recession, defined as an annual contraction in per capita GDP. Sample includes 183 economies, though the sample size varies significantly by year.

Source: World Bank. 2020. *Global Economic Prospects*, June 2020.



Staff Chart of the Month*

Monetary Base



Appendix



Quiet Period for Search Respondents

Alternative Administrative Services

- ✓ CITCO Fund Services USA, Inc.
- ✓ MUFG Capital Analytics, LLC
- ✓ SS&C Technologies, Inc
- ✓ State Street

Total Fund Performance Measurement Provider

- ✓ CITCO Fund Services USA, Inc.
- ✓ SS&C Technologies, Inc
- ✓ State Street

Hedge Funds Emerging Manager Program Separate Account Manager

- ✓ Appomattox Advisory, Inc
- ✓ BlackRock, Inc
- ✓ Goldman Sachs Asset Management
- ✓ GCM Grosvenor
- ✓ New Alpha Asset Management
- ✓ PAAMCO Prisma, LLC
- ✓ The Rock Creek Group, LP
- ✓ Stable Asset Management

Dedicated Managed Account Services

- ✓ Blueprint Capital Advisors
- ✓ HedgeMark Advisors LLC
- ✓ HFR Investments LLC
- ✓ Innocap
- ✓ Lighthouse Investment Partners LLC
- ✓ Lyxor Asset Management
- ✓ Man FRM
- ✓ Maples Group
- ✓ Monroe Capital
- ✓ Ultimus LeverPoint Private Fund Solutions
- ✓ Wilshire Associates Inc