

# **QUARTERLY PERFORMANCE REPORT**

## **VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION**

**May 24, 2021**



**VCERA**  
VENTURA COUNTY EMPLOYEES'  
RETIREMENT ASSOCIATION

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# MARKET ENVIRONMENT UPDATE & OUTLOOK

NEPC, LLC

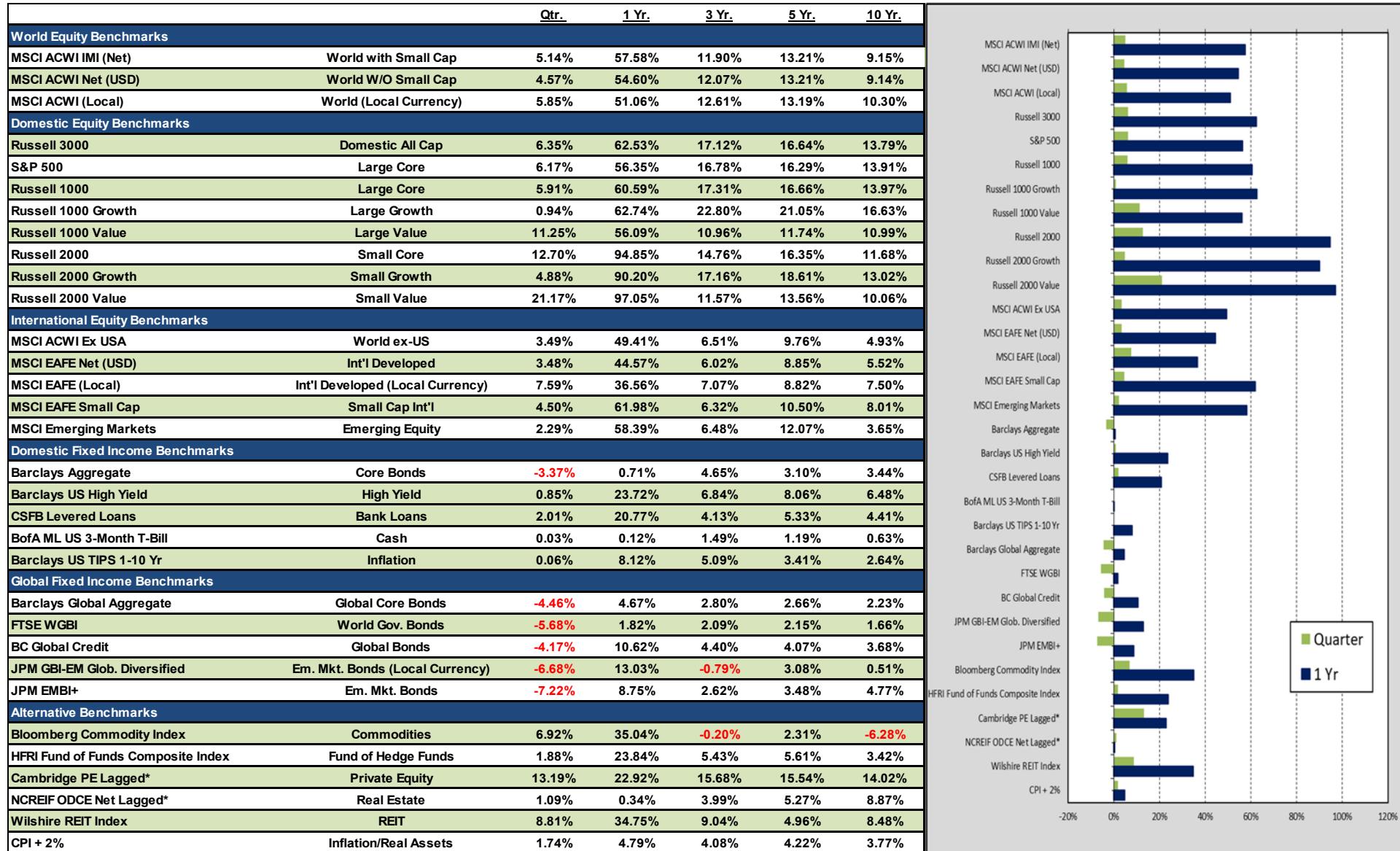
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# ECONOMIC ENVIRONMENT

- **Q1 Real GDP (first estimate) grew at an annual rate of +6.4%.**
  - Retail sales ended December at +9.9% on a YoY basis. In the same period last year the YoY growth rate was 4.7%.
  - Corporate profits as a percent of GDP ended Q3 at 10.0%, no change versus Q2, and remain elevated relative to historical levels.
  - The inventory-to-sales ratio ended February was 1.3. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April 2020.
  - The U.S. trade deficit widened 1.9% (ended January).
- **The unemployment rate was 6.0% in Q1, down from 6.7% in Q4; U-6, a broader measure of unemployment, decreased to 10.7% in Q1 from 11.7% in Q4.**
  - The labor force participation rate ended Q1 at 61.5, no change versus Q4, after declining to 60.2% in April 2020 and is at levels below the 10 year pre-pandemic average of 63.2%.
- **The Case-Shiller Home Price Index (ended January) increased to 236.3 from 232.4 (in November) and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw an uptick to 2.74% in Q1 from 1.29% in Q4; Capacity Utilization decreased to 74.4% in Q1 from 74.5% in Q4.**
- **Fed Funds rate remains at a targeted range of 0.00%-to-0.25%. The 10-year Treasury Yield (constant maturity) finished Q1 at 1.6% up from 0.9% in Q4.**
- **The Fed remains committed to continuing stimulative action as needed to support the US economy. The Fed's balance sheet continues to grow in the wake of the pandemic.**
- **S&P valuations increased in Q1 to 36.64 from 34.04 in Q4 and remains higher than the 10-year average of 26.86x.**
  - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.81x

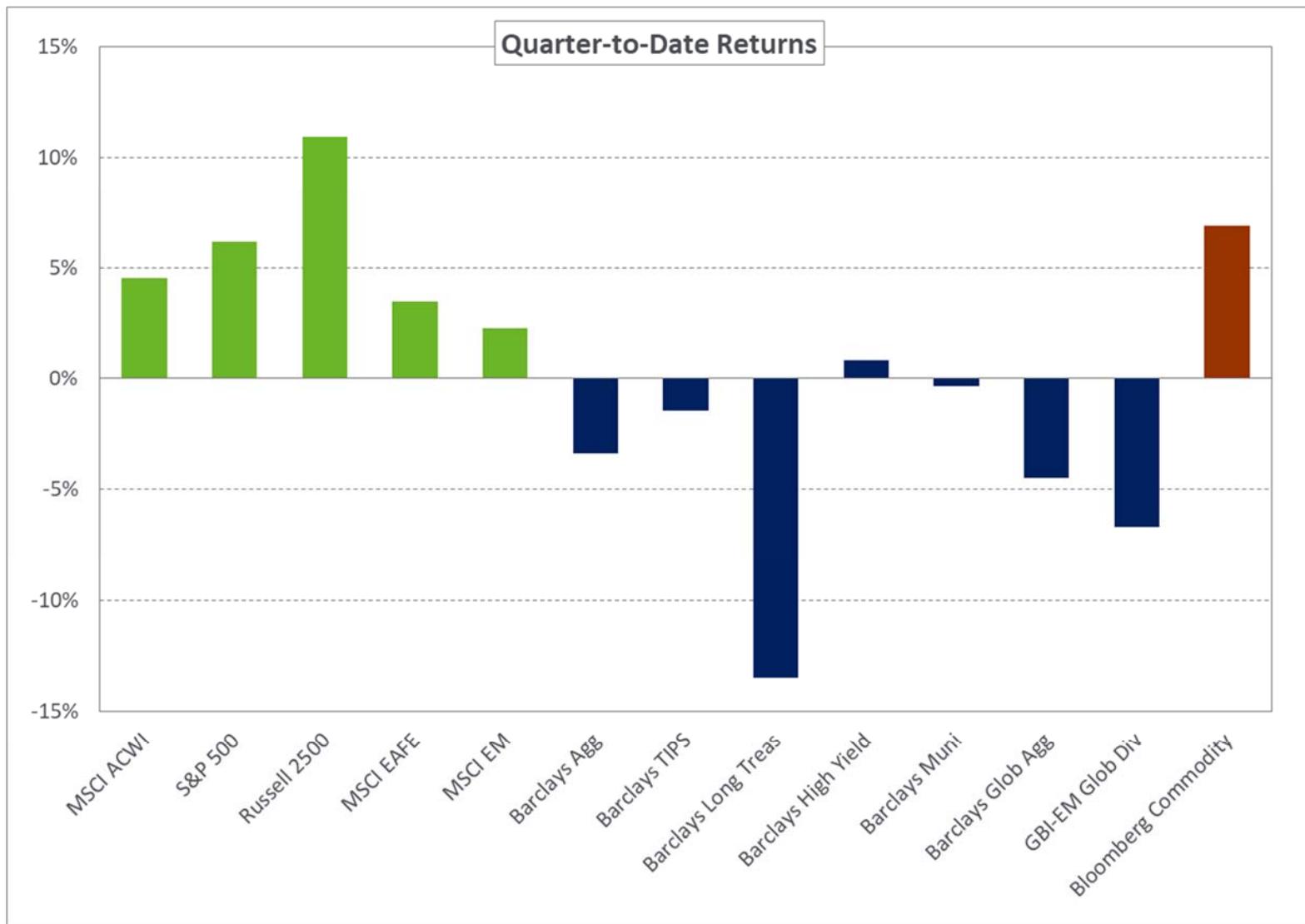


# MARKET ENVIRONMENT – Q1 2021 OVERVIEW



\* As of 12/31/2020

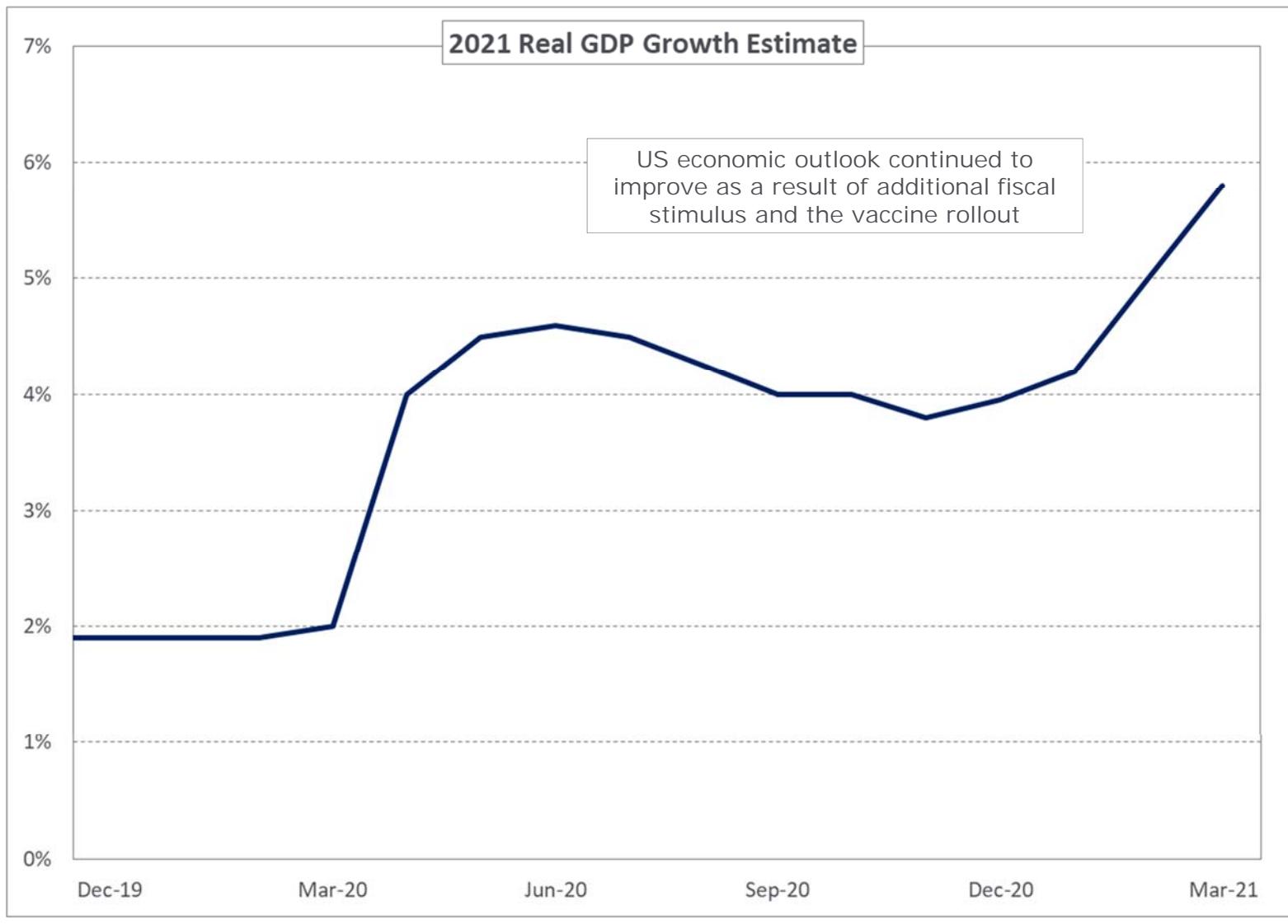
# FIXED INCOME UNDERPERFORMED



Source: S&P, Russell, MSCI, JPM, Bloomberg, FactSet



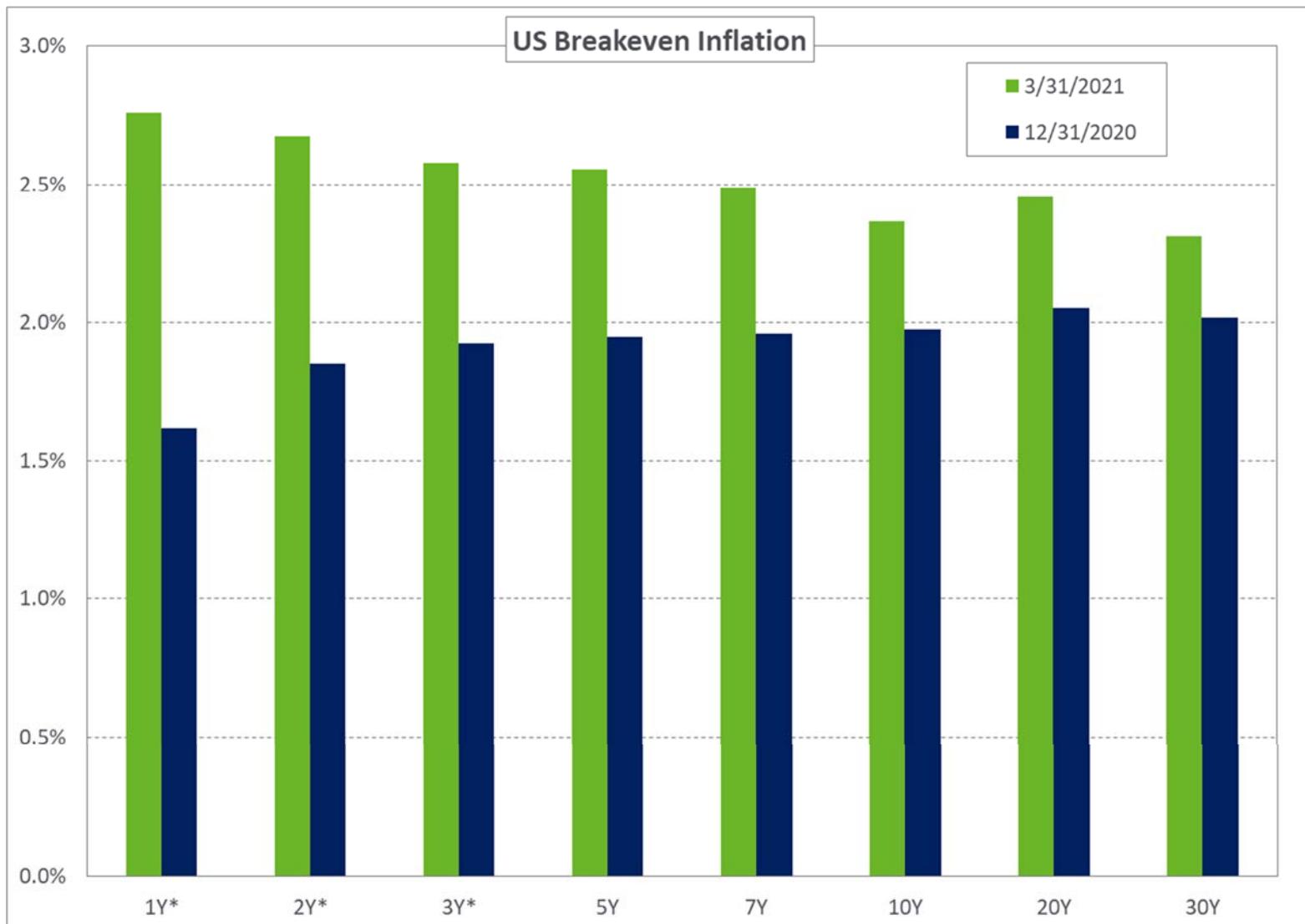
# THE U.S. ECONOMIC OUTLOOK IMPROVED



Source: FactSet



# NEAR-TERM INFLATION EXPECTATIONS ROSE

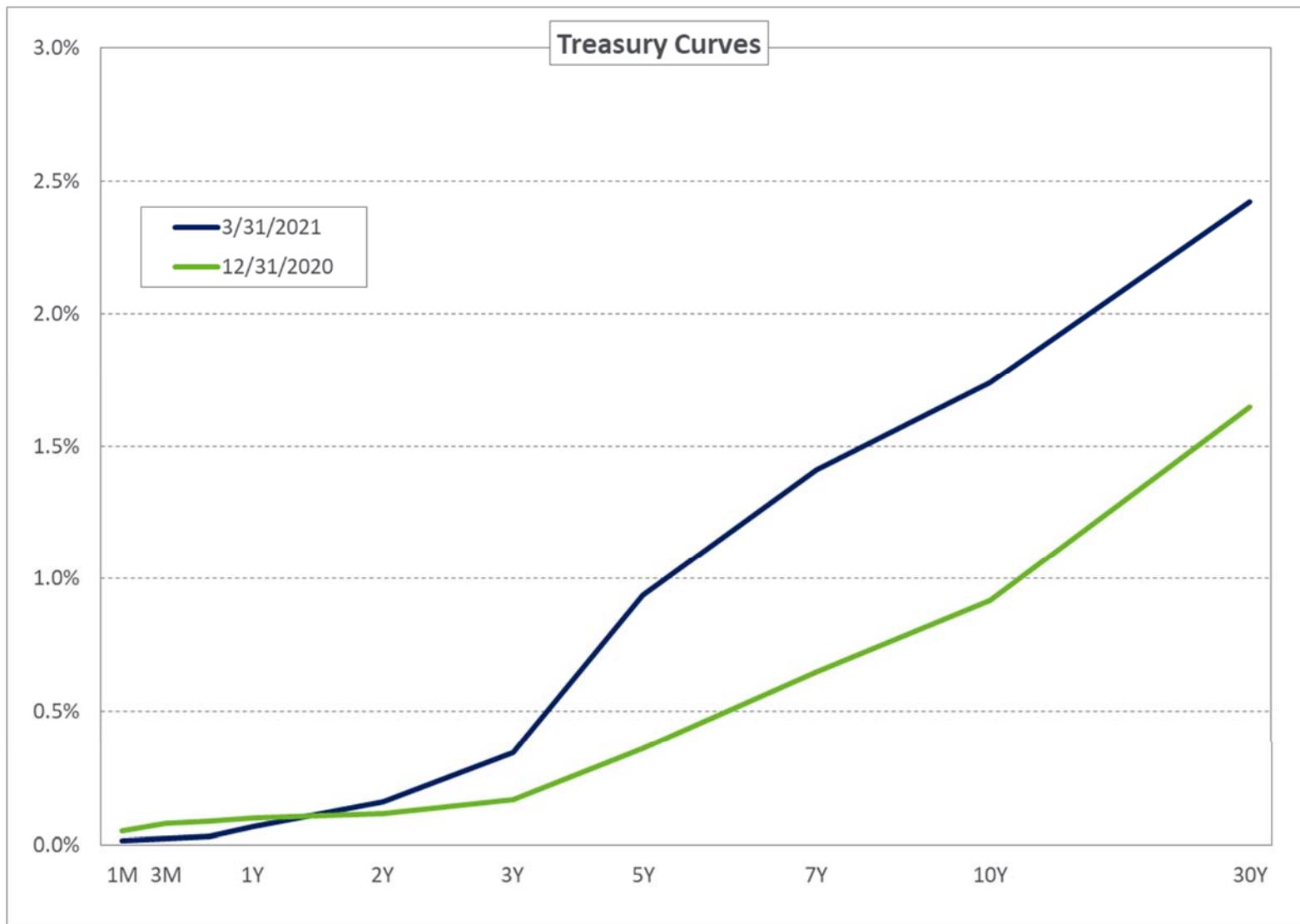


Source: NEPC, Bloomberg, FactSet

\*Real yields are calculated based on a weighted average of select off-the-run TIPS yields



# LONG-TERM INTEREST RATES ROSE



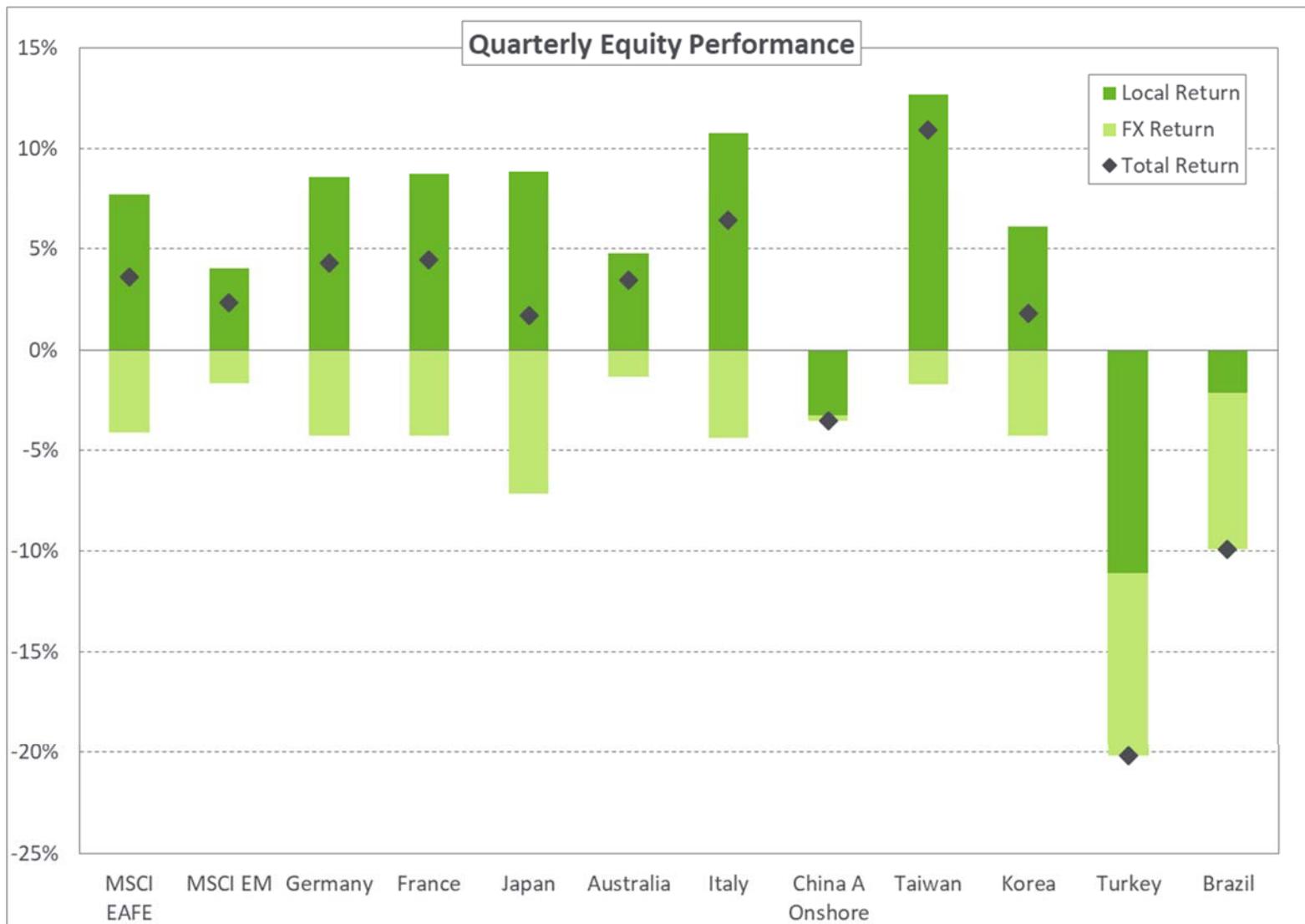
Source: FactSet



# THE U.S. YIELD CURVE STEEPENED



# USD STRENGTH WEIGHED ON NON-US EQUITIES



Source: MSCI, FactSet



# ASSESSING THE KEY MARKET THEMES

AS OF 03/31/21

	Dormant	Faded	Neutral	Prevalent	Dominant
Virus Trajectory <i>No Change in Status</i>	<ul style="list-style-type: none"> <li>• Virus Trajectory continues to be an influential force driving global economic outcomes</li> <li>• Market sentiment in the US has improved with a significant increase in vaccinations, but concerns remain outside the US regarding distribution, logistics, and access to vaccines</li> <li>• COVID-19 cases remain elevated and new virus strains may impact the timing of an economic recovery</li> </ul>				
Permanent Interventions <i>No Change in Status</i>	Dormant	Faded	Neutral	Prevalent	Dominant
Globalization Backlash <i>No Change in Status</i>	Dormant	Faded	Neutral	Prevalent	Dominant
China Transitions <i>No Change in Status</i>	Dormant	Faded	Neutral	Prevalent	Dominant

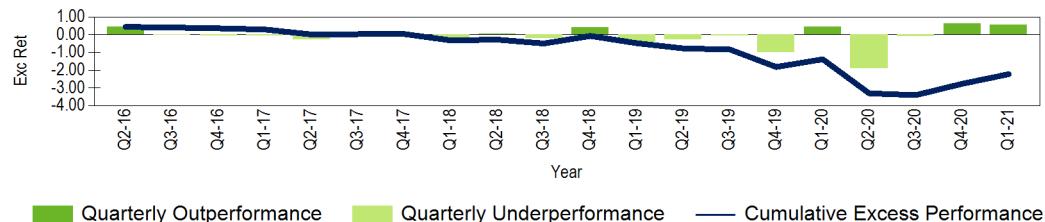


## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE SUMMARY (NET)

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Inception	Inception Date
<b>Total Fund</b>	<b>\$7,083,930,851</b>	<b>3.6%</b>	<b>37</b>	<b>21.7%</b>	<b>21</b>	<b>35.9%</b>	<b>22</b>	<b>10.7%</b>	<b>13</b>	<b>10.9%</b>	<b>14</b>	<b>8.8%</b>	<b>14</b>	<b>8.4%</b>	<b>Apr-94</b>
Policy Index		3.1%	61	20.5%	34	36.9%	21	11.3%	6	11.3%	9	9.1%	10	8.5%	Apr-94
60% MSCI ACWI (Net) / 40% FTSE WGBI		0.4%	99	17.1%	91	31.3%	57	8.4%	69	8.9%	84	6.3%	94	6.7%	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate		2.3%	85	16.2%	95	31.7%	51	12.2%	1	11.1%	10	9.9%	1	8.7%	Apr-94
InvMetrics Public DB > \$1B Net Median		3.4%		19.8%		31.7%		8.9%		9.7%		7.9%		7.8%	Apr-94

### Quarterly and Cumulative Excess Performance



- For the five year period ending March 31, 2021, the Fund returned 10.9%, trailing the policy index by 0.4% and ranking in the 14th percentile of its peers and outperforming the actuarial assumed rate of 7.25%. The Fund's volatility, as measured by standard deviation, ranked in the 73rd percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 42nd percentile. This means that the Fund has earned more return per unit of volatility taken than 58% of its peers.

- For the three-year period, the Fund returned 10.7%, underperforming the policy index and ranking in the 13th percentile of its peers. The Fund's volatility ranks in the 74th percentile of its peers over this period, with the Fund's Sharpe Ratio ranking in the 35th percentile.

- For the one-year period, the Fund returned 35.9%, underperforming the policy index by 1.0% and ranking in the 22nd percentile of the Investment Metrics Public Funds > \$1 Billion Universe (Net of fees).

- For the one-year period, the Fund experienced a net investment gain of \$1.91 billion which includes a net investment gain of \$252.7 million in the quarter. Assets increased from \$5.27 billion one year ago to \$7.08 billion.

	3 Years Ending March 31, 2021							
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	10.7%	13	11.4%	74	0.8	35	1.0	26
Policy Index	11.3%	6	12.0%	84	0.8	33	1.0	21
InvMetrics Public DB > \$1B Net Median	8.9%	--	10.6%	--	0.7	--	0.8	--

	5 Years Ending March 31, 2021							
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	10.9%	14	9.2%	73	1.1	42	1.1	33
Policy Index	11.3%	9	9.6%	83	1.1	42	1.1	31
InvMetrics Public DB > \$1B Net Median	9.7%	--	8.6%	--	1.0	--	1.0	--

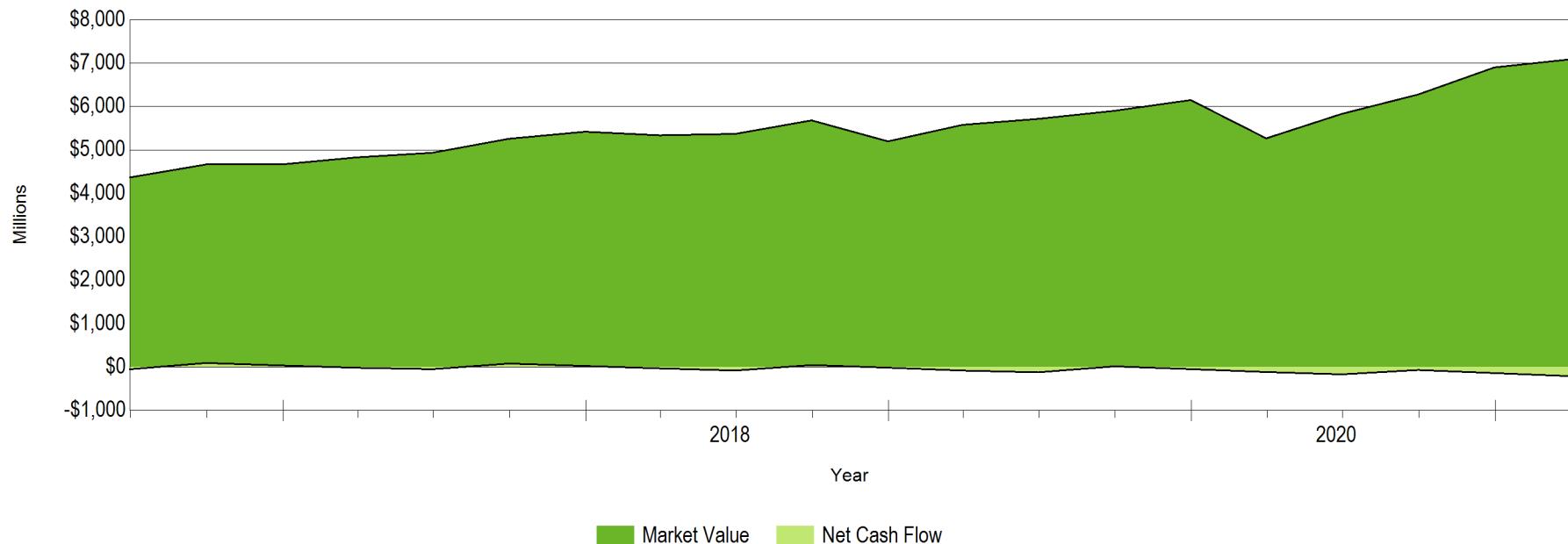
Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.



## Ventura County Employees' Retirement Association

# TOTAL FUND ASSET GROWTH SUMMARY

Market Value History  
5 Years Ending March 31, 2021



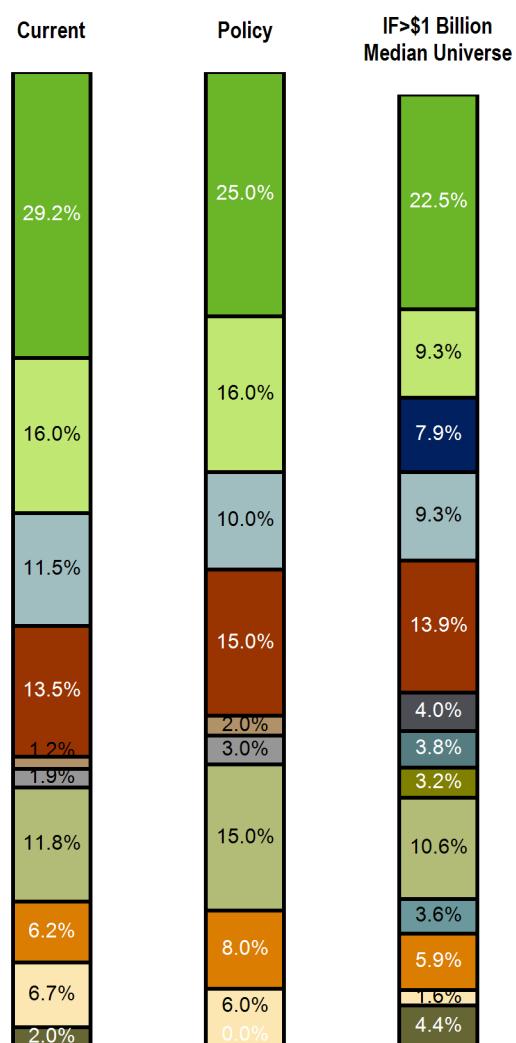
### Summary of Cash Flows

	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$6,900,518,282	\$5,830,640,053	\$5,267,482,093	\$5,337,941,269	\$4,309,978,136
Net Cash Flow	-\$69,308,847	-\$40,337,139	-\$93,282,442	-\$176,806,414	-\$207,662,484
Net Investment Change	\$252,721,416	\$1,293,627,937	\$1,909,731,200	\$1,922,795,996	\$2,981,615,199
Ending Market Value	\$7,083,930,851	\$7,083,930,851	\$7,083,930,851	\$7,083,930,851	\$7,083,930,851



## Ventura County Employees' Retirement Association

# ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target						
	Current	Current	Policy	Policy Range	Difference*	Within Range
U.S. Equity	\$2,070,969,666	29.2%	25.0%	20.0% - 30.0%	4.2%	Yes
Non-US Equity	\$1,131,591,685	16.0%	16.0%	12.0% - 20.0%	0.0%	Yes
Emerging Markets Equity	--	--	--	--	--	
Global Equity	\$817,498,706	11.5%	10.0%	7.0% - 13.0%	1.5%	Yes
U.S. Fixed Income	\$953,248,636	13.5%	15.0%	12.0% - 20.0%	-1.5%	Yes
Treasury	\$85,953,015	1.2%	2.0%	0.0% - 5.0%	-0.8%	Yes
Fixed Income - Emerging	--	--	--	--	--	
Fixed Income - Global	--	--	--	--	--	
GAA/Risk Parity	--	--	--	--	--	
Private Debt	\$134,899,160	1.9%	3.0%	0.0% - 7.0%	-1.1%	Yes
Private Equity	\$833,124,339	11.8%	15.0%	10.0% - 17.0%	-3.2%	Yes
Hedge Funds	--	--	--	--	--	
Real Estate	\$440,010,963	6.2%	8.0%	0.0% - 9.0%	-1.8%	Yes
Real Assets	\$472,755,797	6.7%	6.0%	0.0% - 8.0%	0.7%	Yes
Cash	\$143,878,885	2.0%	0.0%	0.0% - 3.0%	2.0%	Yes
<b>Total</b>	<b>\$7,083,930,851</b>	<b>100.0%</b>	<b>100.0%</b>			

\*Difference between Policy and Current Allocation

Cash represents assets in Parametric Overlay.

Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.

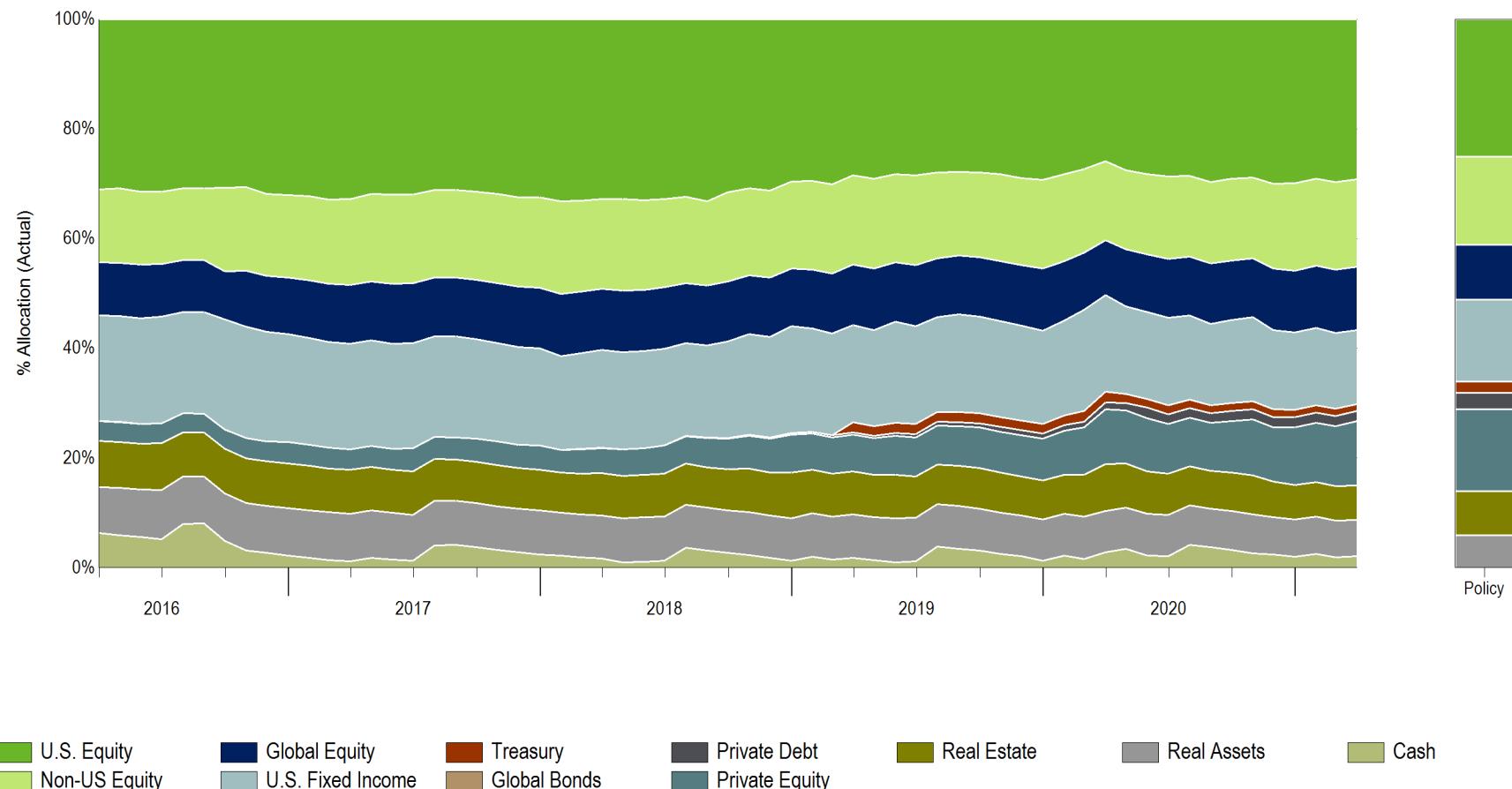
Asset Allocation vs. Policy Targets chart does not reflect Overlay adjusted weights.



## Ventura County Employees' Retirement Association

# TOTAL FUND ALLOCATION HISTORY

Asset Allocation History  
5 Years Ending March 31, 2021



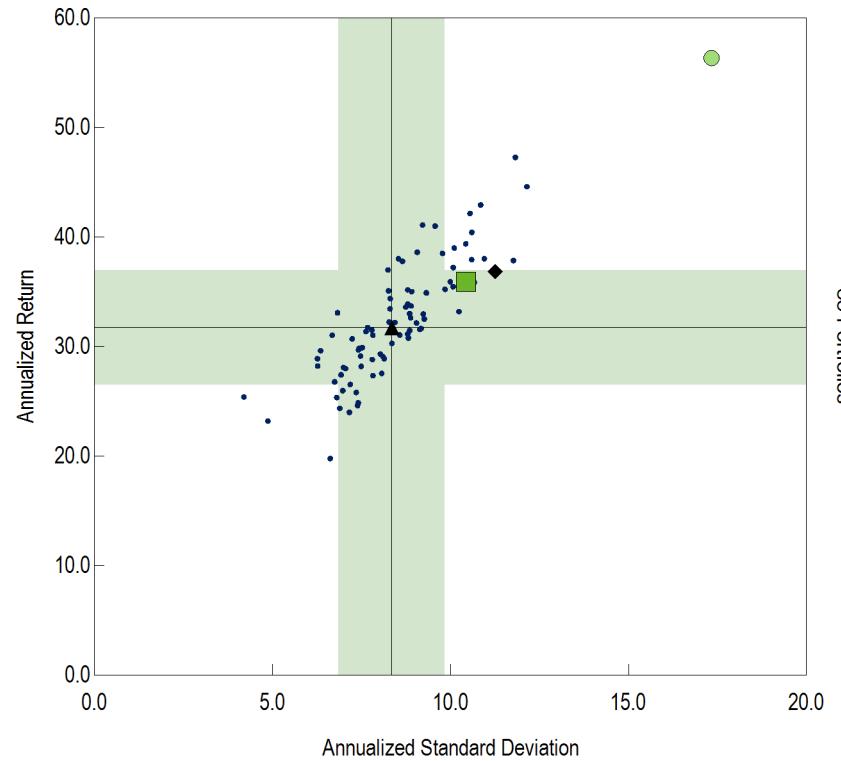
Policy Index shown is most recently approved index



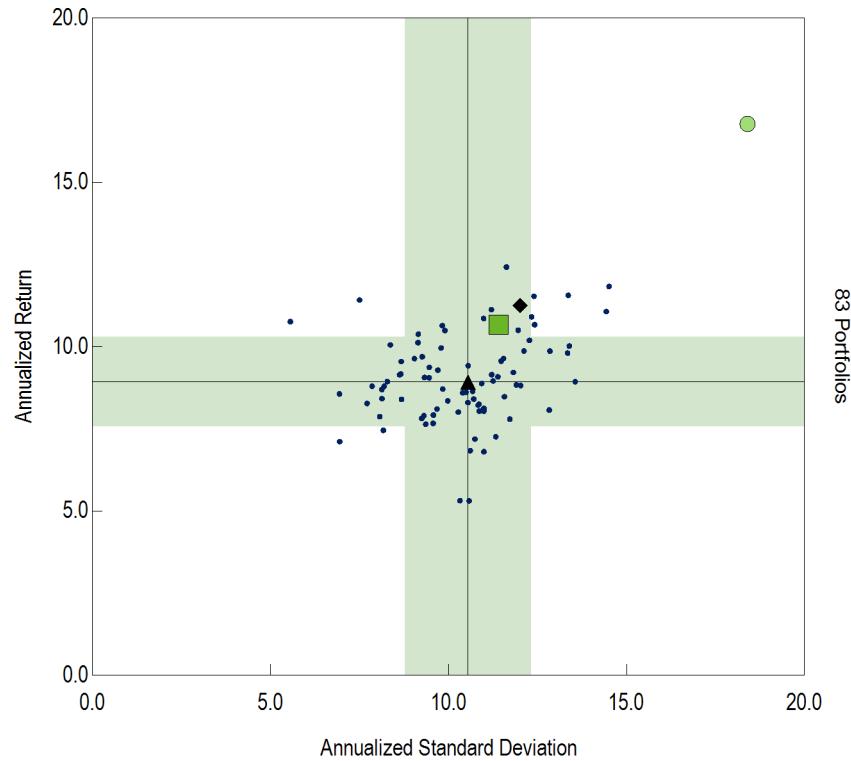
## Ventura County Employees' Retirement Association

# TOTAL FUND RISK/RETURN

1 Years Ending March 31, 2021

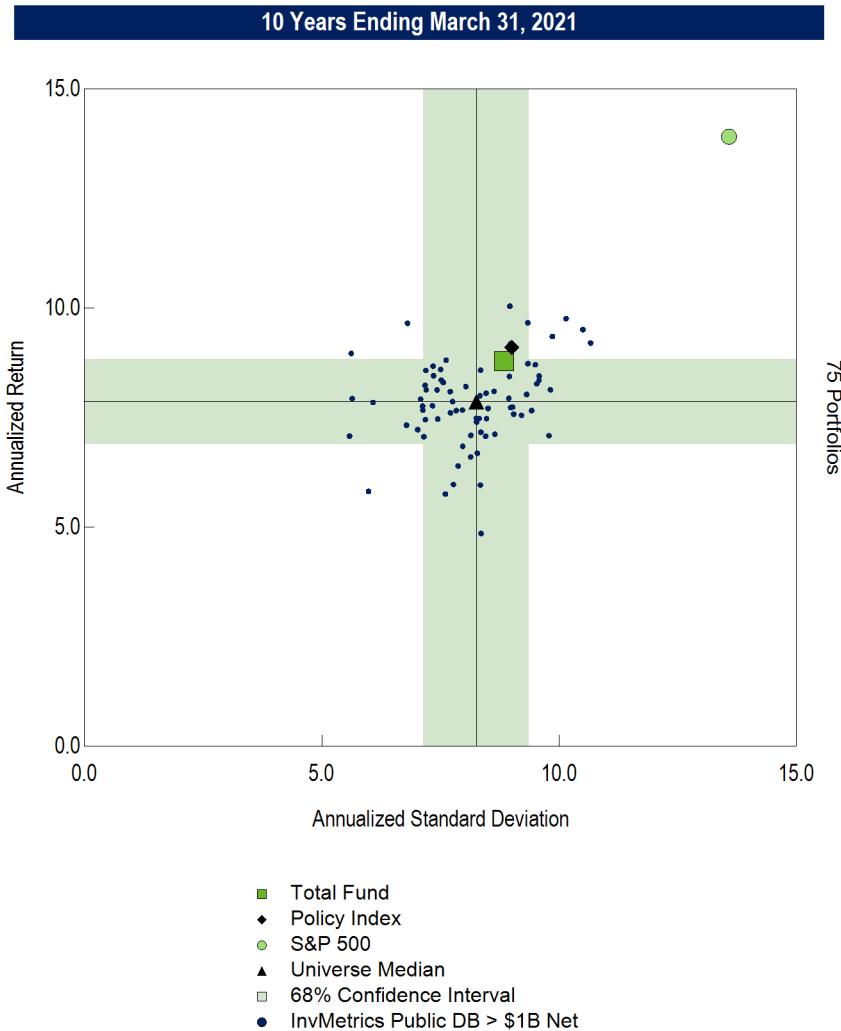
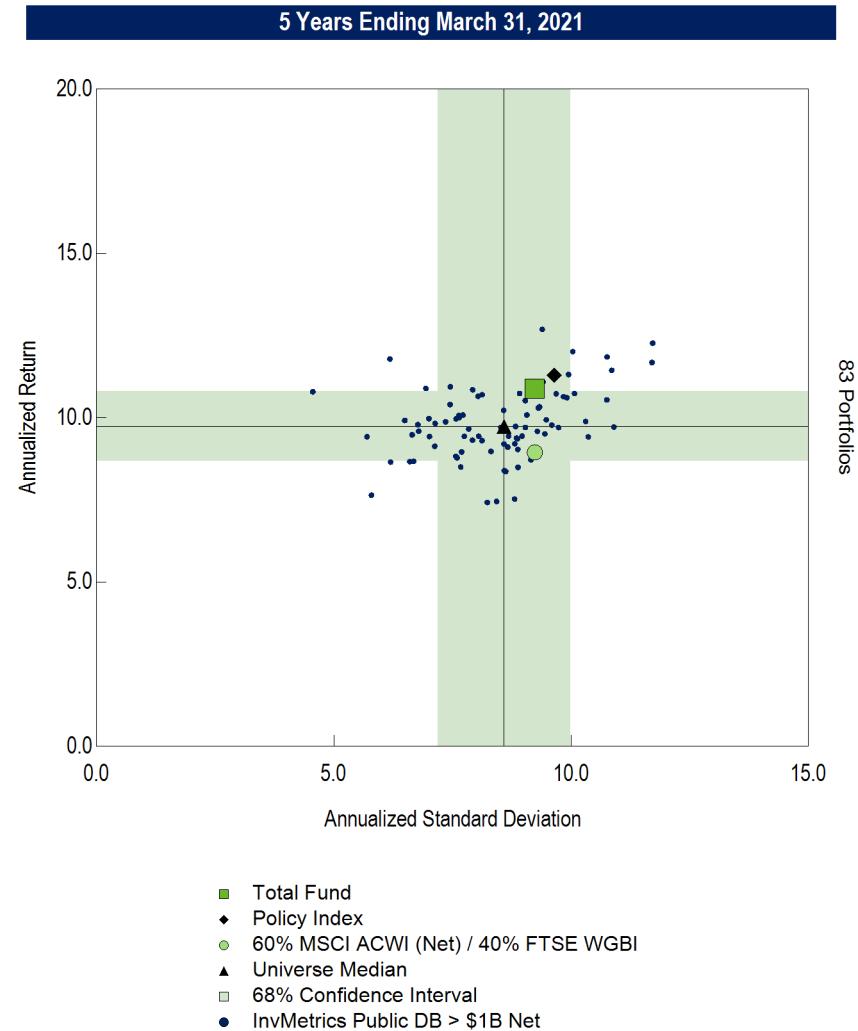


3 Years Ending March 31, 2021



## Ventura County Employees' Retirement Association

# TOTAL FUND RISK/RETURN



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net  
1 Year



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

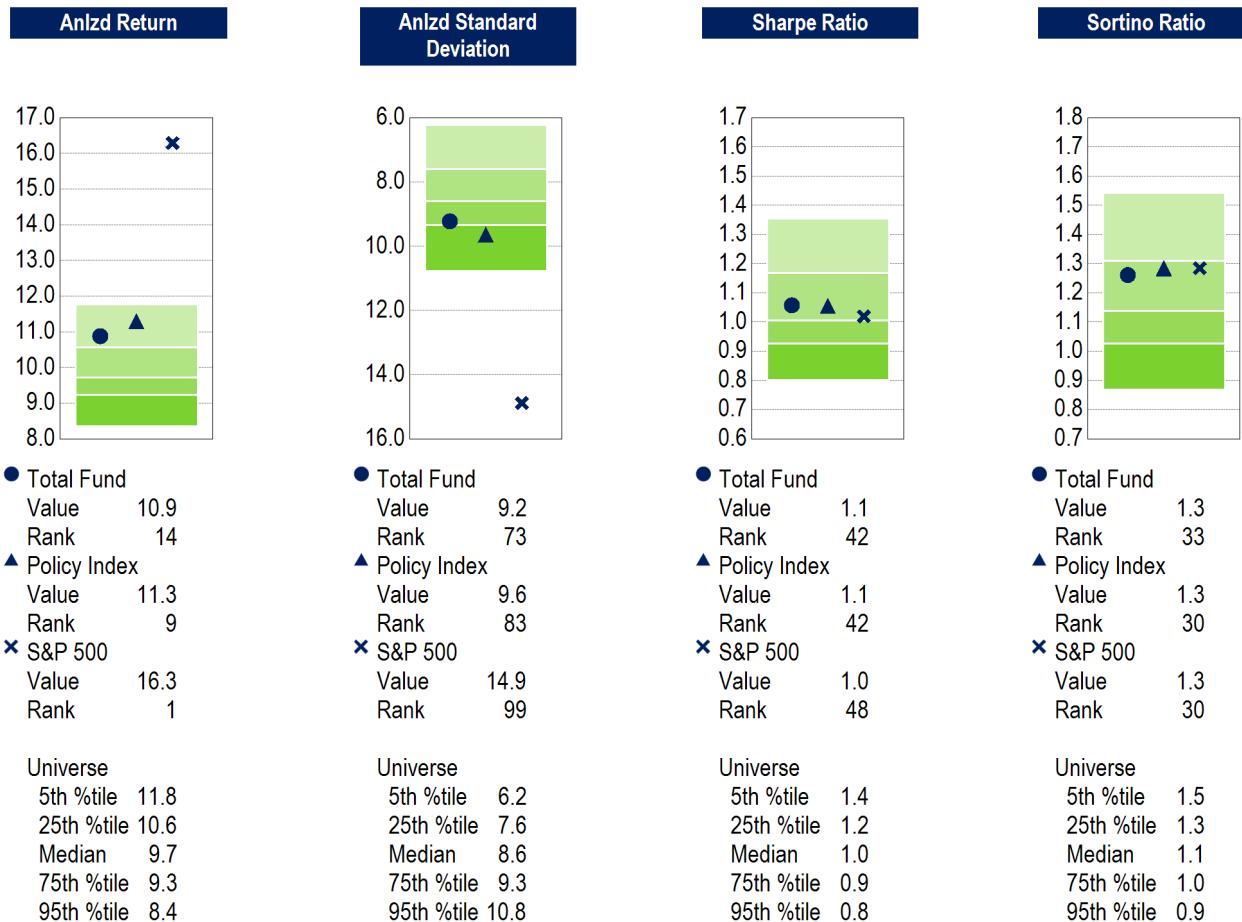
Total Fund vs. InvMetrics Public DB > \$1B Net  
3 Years



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net

5 Years



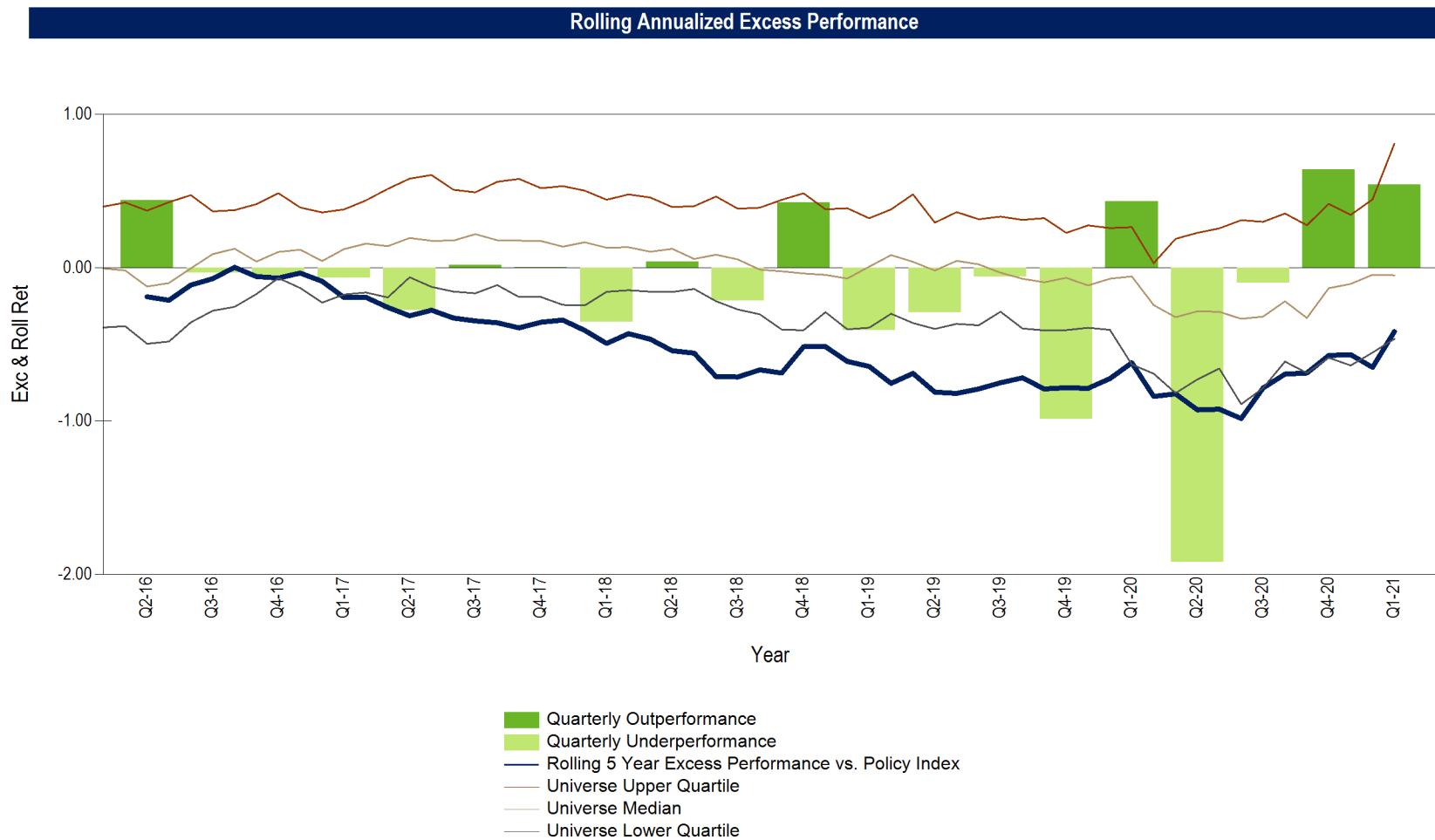
# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net  
10 Years



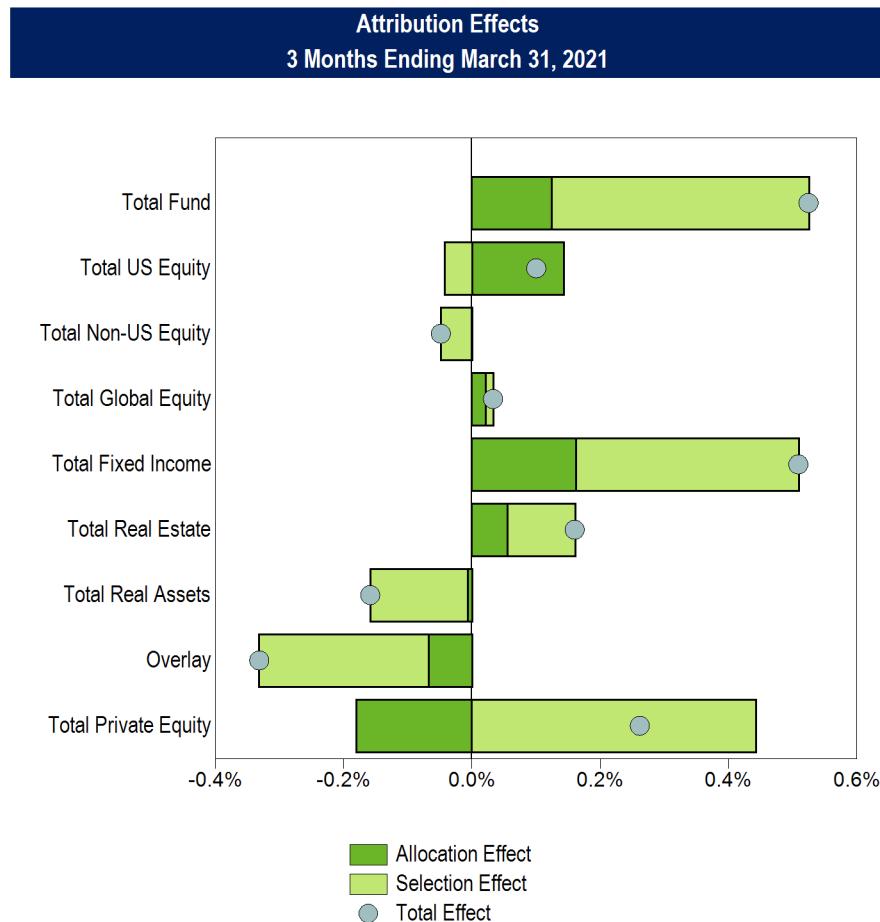
## Ventura County Employees' Retirement Association

# ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES



## Ventura County Employees' Retirement Association

# TOTAL FUND ATTRIBUTION ANALYSIS



**Attribution Summary**  
3 Months Ending March 31, 2021

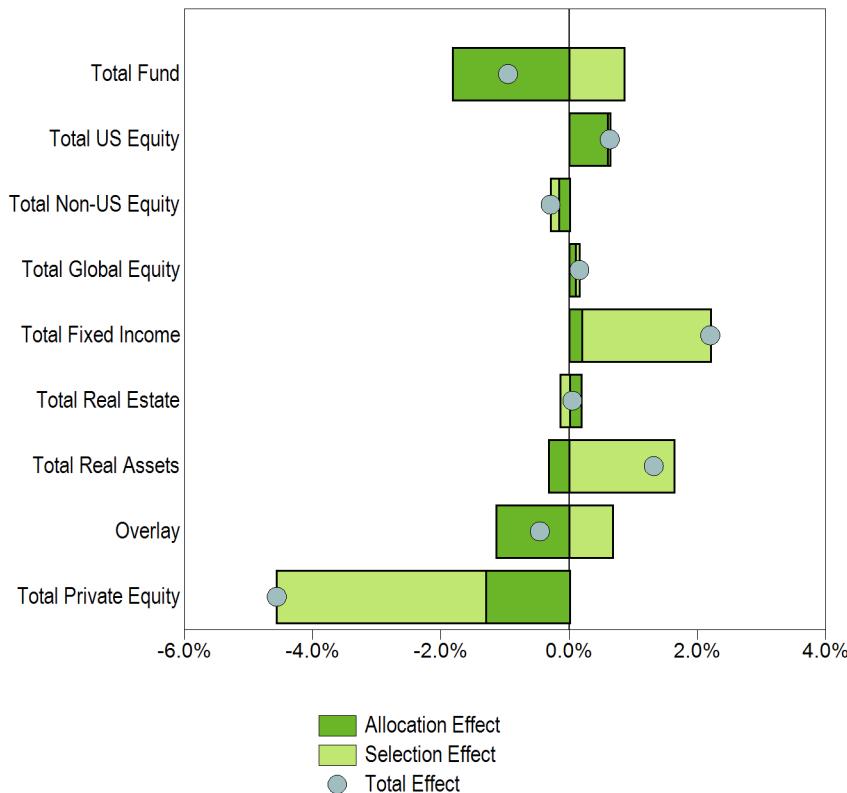
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	6.2%	6.3%	-0.1%	0.0%	0.1%	0.1%
Total Non-US Equity	3.2%	3.5%	-0.3%	0.0%	0.0%	0.0%
Total Global Equity	4.7%	4.6%	0.1%	0.0%	0.0%	0.0%
Total Fixed Income	-1.5%	-3.4%	1.9%	0.3%	0.2%	0.5%
Total Real Estate	1.7%	0.0%	1.7%	0.1%	0.1%	0.2%
Total Real Assets	0.0%	2.2%	-2.2%	-0.2%	0.0%	-0.2%
Overlay	-11.7%	0.0%	-11.7%	-0.3%	-0.1%	-0.3%
Total Private Equity	11.3%	7.1%	4.2%	0.4%	-0.2%	0.3%
<b>Total</b>	<b>3.6%</b>	<b>3.1%</b>	<b>0.5%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.5%</b>



## Ventura County Employees' Retirement Association

# TOTAL FUND ATTRIBUTION ANALYSIS

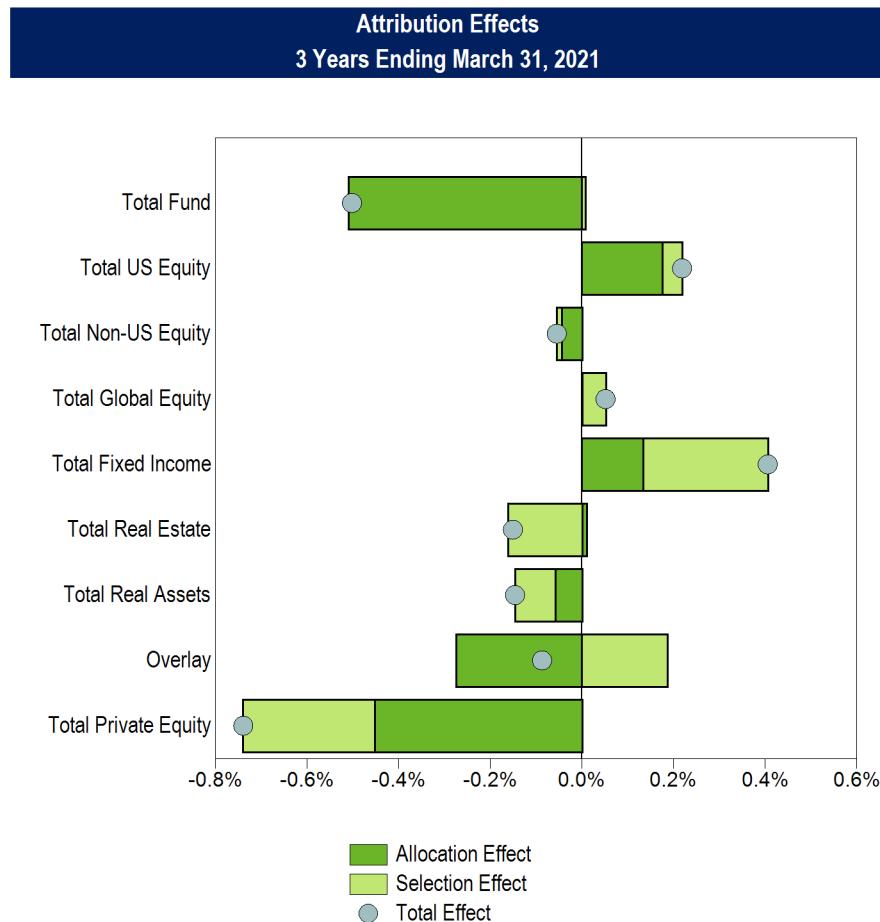
**Attribution Effects**  
1 Year Ending March 31, 2021



	Attribution Summary					
	1 Year Ending March 31, 2021					
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	62.7%	62.5%	0.2%	0.0%	0.6%	0.6%
Total Non-US Equity	48.4%	49.4%	-1.0%	-0.1%	-0.2%	-0.3%
Total Global Equity	55.1%	54.6%	0.5%	0.0%	0.1%	0.2%
Total Fixed Income	9.0%	0.7%	8.3%	2.0%	0.2%	2.2%
Total Real Estate	-1.8%	-0.4%	-1.4%	-0.1%	0.2%	0.1%
Total Real Assets	23.0%	4.7%	18.3%	1.6%	-0.3%	1.3%
Overlay	16.7%	0.1%	16.6%	0.7%	-1.2%	-0.5%
Total Private Equity	29.5%	67.2%	-37.7%	-3.3%	-1.3%	-4.6%
<b>Total</b>	<b>35.9%</b>	<b>36.9%</b>	<b>-1.0%</b>	<b>0.9%</b>	<b>-1.8%</b>	<b>-1.0%</b>

## Ventura County Employees' Retirement Association

# TOTAL FUND ATTRIBUTION ANALYSIS



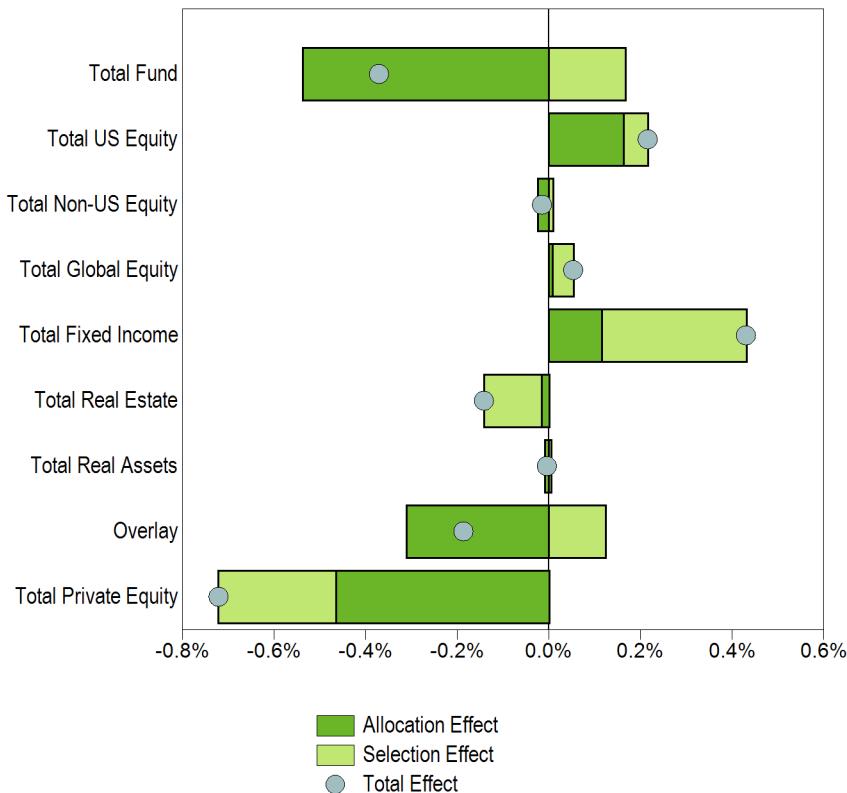
**Attribution Summary**  
3 Years Ending March 31, 2021

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	17.2%	17.1%	0.1%	0.0%	0.2%	0.2%
Total Non-US Equity	6.4%	6.5%	-0.1%	0.0%	0.0%	-0.1%
Total Global Equity	12.5%	12.1%	0.5%	0.0%	0.0%	0.1%
Total Fixed Income	6.2%	4.7%	1.5%	0.3%	0.1%	0.4%
Total Real Estate	1.4%	3.3%	-2.0%	-0.2%	0.0%	-0.1%
Total Real Assets	3.3%	4.9%	-1.6%	-0.1%	-0.1%	-0.1%
Overlay	6.9%	1.4%	5.6%	0.1%	-0.3%	-0.1%
Total Private Equity	19.3%	20.6%	-1.3%	-0.3%	-0.4%	-0.7%
<b>Total</b>	<b>10.7%</b>	<b>11.3%</b>	<b>-0.6%</b>	<b>0.0%</b>	<b>-0.5%</b>	<b>-0.6%</b>



# TOTAL FUND ATTRIBUTION ANALYSIS

**Attribution Effects**  
5 Years Ending March 31, 2021



	Attribution Summary					
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	16.8%	16.6%	0.2%	0.1%	0.2%	0.2%
Total Non-US Equity	9.9%	9.8%	0.1%	0.0%	0.0%	0.0%
Total Global Equity	13.6%	13.2%	0.4%	0.0%	0.0%	0.1%
Total Fixed Income	4.7%	3.1%	1.6%	0.3%	0.1%	0.4%
Total Real Estate	3.3%	4.9%	-1.5%	-0.1%	0.0%	-0.1%
Total Real Assets	4.9%	5.5%	-0.6%	0.0%	0.0%	0.0%
Overlay	5.1%	1.1%	4.0%	0.1%	-0.3%	-0.2%
Total Private Equity	17.4%	20.1%	-2.7%	-0.3%	-0.5%	-0.7%
<b>Total</b>	<b>10.9%</b>	<b>11.3%</b>	<b>-0.4%</b>	<b>0.1%</b>	<b>-0.6%</b>	<b>-0.4%</b>



## Ventura County Employees' Retirement Association

# TOTAL FUND RISK STATISTICS

	1 Year Ending March 31, 2021											
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Fund	100.0%	35.9%	22	10.4%	90	2.1%	55	1.8%	46	-0.5	69	0.9
Policy Index	--	36.9%	21	11.3%	97	0.0%	81	0.0%	1	--	--	1.0
Total Equity	56.7%	57.0%	61	16.5%	99	1.4%	60	0.7%	5	3.3	11	1.0
MSCI ACWI	--	54.6%	76	16.2%	96	0.0%	78	0.0%	1	--	--	1.0
Total US Equity	29.2%	62.7%	60	17.9%	98	-0.6%	83	0.6%	8	0.3	56	1.0
Russell 3000	--	62.5%	61	17.7%	98	0.0%	79	0.0%	1	--	--	1.0
Total Non-US Equity	16.0%	48.4%	89	15.4%	83	-1.8%	96	1.7%	12	-0.6	87	1.0
MSCI ACWI ex USA	--	49.4%	84	15.0%	71	0.0%	90	0.0%	1	--	--	1.0
Total Global Equity	11.5%	55.1%	34	16.1%	86	0.6%	52	0.2%	1	2.9	4	1.0
MSCI ACWI	--	54.6%	35	16.2%	86	0.0%	56	0.0%	1	--	--	1.0
Total Fixed Income	16.9%	9.0%	36	3.9%	36	8.3%	28	1.2%	47	6.7	3	1.0
Total Fixed Income Policy Index	--	0.7%	95	3.6%	29	0.0%	89	0.0%	1	--	--	1.0
Total US Fixed Income	13.5%	10.0%	8	5.0%	91	9.1%	7	1.9%	89	5.0	17	1.3
BBgBarc US Aggregate TR	--	0.7%	94	3.6%	48	0.0%	93	0.0%	1	--	--	1.0
Total Real Assets	6.7%	23.0%	--	11.2%	--	48.9%	--	12.1%	--	1.5	--	-5.7
Real Assets Index	--	4.7%	--	1.3%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.2%	-1.8%	97	3.1%	61	2.6%	68
NCREIF ODCE Net	--	-0.4%	93	2.2%	12	0.0%	1
Total Private Equity	11.4%	29.5%	27	13.7%	46	22.4%	81
Private Equity Benchmark	--	67.2%	1	17.7%	75	0.0%	1

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 70 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 147 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 110 portfolios), Total Global Equity (InvMetrics Public DB Glbl Eq consists of 31 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 82 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 89 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 54 portfolios ) and Total Private Equity(InvMetrics Public DB Private Eq consists of 42 portfolios).



## Ventura County Employees' Retirement Association

# TOTAL FUND RISK STATISTICS

	3 Years Ending March 31, 2021											
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Fund	100.0%	10.7%	13	11.4%	74	0.0%	50	1.3%	35	-0.4	69	0.9
Policy Index	--	11.3%	6	12.0%	84	0.0%	49	0.0%	1	--	--	1.0
Total Equity	56.7%	13.2%	31	18.3%	53	0.9%	15	0.9%	7	1.2	1	1.0
MSCI ACWI	--	12.1%	58	17.9%	43	0.0%	31	0.0%	1	--	--	1.0
Total US Equity	29.2%	17.2%	8	19.5%	55	0.0%	14	0.5%	5	0.2	6	1.0
Russell 3000	--	17.1%	12	19.3%	48	0.0%	13	0.0%	1	--	--	1.0
Total Non-US Equity	16.0%	6.4%	70	17.6%	30	-0.1%	56	1.3%	8	-0.1	70	1.0
MSCI ACWI ex USA	--	6.5%	62	17.7%	31	0.0%	52	0.0%	1	--	--	1.0
Total Global Equity	11.5%	12.5%	9	17.9%	62	0.5%	18	0.1%	1	3.6	1	1.0
MSCI ACWI	--	12.1%	18	17.9%	63	0.0%	25	0.0%	1	--	--	1.0
Total Fixed Income	16.9%	6.2%	3	3.6%	36	1.9%	14	1.9%	50	0.8	3	0.9
Total Fixed Income Policy Index	--	4.7%	57	3.6%	32	0.0%	67	0.0%	1	--	--	1.0
Total US Fixed Income	13.5%	6.0%	3	4.2%	78	1.6%	3	2.6%	83	0.5	16	0.9
BBgBarc US Aggregate TR	--	4.7%	49	3.6%	47	0.0%	59	0.0%	1	--	--	1.0
Total Real Assets	6.7%	3.3%	--	13.5%	--	0.2%	--	13.5%	--	-0.1	--	0.5
Real Assets Index	--	4.9%	--	1.1%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.2%	1.4%	97	2.8%	57	2.2%	49
NCREIF ODCE Net	--	3.3%	83	2.3%	45	0.0%	1
Total Private Equity	11.4%	19.3%	20	9.2%	40	21.8%	87
Private Equity Benchmark	--	20.6%	18	19.3%	97	0.0%	1

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 67 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 145 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 109 portfolios), Total Global Equity (InvMetrics Public DB Glbl Eq consists of 25 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 81 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 87 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 53 portfolios ) and Total Private Equity(InvMetrics Public DB Private Eq consists of 42 portfolios).



## Ventura County Employees' Retirement Association

# TOTAL FUND RISK STATISTICS

	5 Years Ending March 31, 2021											
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Fund	100.0%	10.9%	14	9.2%	73	0.1%	54	1.1%	24	-0.4	74	1.0
Policy Index	--	11.3%	9	9.6%	83	0.0%	55	0.0%	1	--	--	1.0
Total Equity	56.7%	14.2%	19	14.8%	54	0.8%	15	1.0%	11	1.0	2	1.0
MSCI ACWI	--	13.2%	65	14.5%	42	0.0%	36	0.0%	1	--	--	1.0
Total US Equity	29.2%	16.8%	13	15.7%	50	0.0%	14	0.5%	4	0.3	8	1.0
Russell 3000	--	16.6%	18	15.6%	40	0.0%	16	0.0%	1	--	--	1.0
Total Non-US Equity	16.0%	9.9%	61	14.5%	26	0.2%	51	1.1%	7	0.1	52	1.0
MSCI ACWI ex USA	--	9.8%	65	14.6%	28	0.0%	59	0.0%	1	--	--	1.0
Total Global Equity	11.5%	13.6%	6	14.4%	54	0.5%	17	0.2%	1	1.8	1	1.0
MSCI ACWI	--	13.2%	13	14.5%	55	0.0%	26	0.0%	1	--	--	1.0
Total Fixed Income	16.9%	4.7%	33	3.2%	33	1.9%	24	1.6%	42	1.0	1	0.8
Total Fixed Income Policy Index	--	3.1%	75	3.3%	35	0.0%	77	0.0%	1	--	--	1.0
Total US Fixed Income	13.5%	4.6%	16	3.6%	78	1.8%	15	2.1%	82	0.7	19	0.9
BBgBarc US Aggregate TR	--	3.1%	56	3.3%	53	0.0%	72	0.0%	1	--	--	1.0
Total Real Assets	6.7%	4.9%	--	11.2%	--	1.0%	--	11.2%	--	-0.1	--	0.6
Real Assets Index	--	5.5%	--	1.0%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.2%	3.3%	97	2.8%	53	1.7%	38
NCREIF ODCE Net	--	4.9%	85	2.6%	46	0.0%	1
Total Private Equity	11.4%	17.4%	24	7.9%	38	17.7%	81
Private Equity Benchmark	--	20.1%	12	15.6%	94	0.0%	1

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 61 portfolios), Total Us Equity (InvMetrics Public DB US Eq consists of 133 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 102 portfolios), Total Global Equity (InvMetrics Public DB Glbl Eq consists of 21 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 74 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 84 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 52 portfolios) and Total Private Equity(InvMetrics Public DB Private Eq consists of 40 portfolios).



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Fund</b>	7,083,930,851	100.0	100.0	3.6	37	21.7	21	35.9	22	10.7	13	10.9	14	8.8	14	8.4	Apr-94
Policy Index				3.1	61	20.5	34	36.9	21	11.3	6	11.3	9	9.1	10	8.5	Apr-94
Over/Under				0.5		1.2		-1.0		-0.6		-0.4		-0.3		-0.1	
60% MSCI ACWI (Net) / 40% FTSE WGBI				0.4	99	17.1	91	31.3	57	8.4	69	8.9	84	6.3	94	6.7	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				2.3	85	16.2	95	31.7	51	12.2	1	11.1	10	9.9	1	8.7	Apr-94
InvMetrics Public DB > \$1B Net Median				3.4		19.8		31.7		8.9		9.7		7.9		7.8	Apr-94
<b>Total Fund ex Parametric*</b>	7,017,561,634	99.1	--	3.9	--	21.8	--	35.1	--	10.5	--	10.7	--	8.7	--	8.3	Apr-94
<b>Total Fund ex Private Equity</b>	6,274,366,138	88.6	--	2.7	78	20.0	45	36.4	22	10.0	25	10.4	29	--	--	9.3	Jan-12
Policy Index				3.1	61	20.5	34	36.9	21	11.3	6	11.3	9	9.1	10	10.3	Jan-12
Over/Under				-0.4		-0.5		-0.5		-1.3		-0.9		-1.0		-1.0	
InvMetrics Public DB > \$1B Net Median				3.4		19.8		31.7		8.9		9.7		7.9		9.0	Jan-12
<b>Total US Equity</b>	2,070,969,666	29.2	25.0	6.2	92	32.7	81	62.7	60	17.2	8	16.8	13	13.9	4	10.1	Dec-93
Russell 3000				6.3	90	33.2	76	62.5	61	17.1	12	16.6	18	13.8	8	10.4	Dec-93
Over/Under				-0.1		-0.5		0.2		0.1		0.2		0.1		-0.3	
InvMetrics Public DB US Eq Net Median				7.5		34.3		63.4		15.9		15.8		13.0		10.0	Dec-93
Western U.S. Index Plus	293,176,160	4.1		5.6	59	32.0	40	66.8	20	16.7	37	16.6	32	14.4	26	8.0	May-07
S&P 500				6.2	56	29.7	50	56.4	55	16.8	37	16.3	34	13.9	31	9.4	May-07
Over/Under				-0.6		2.3		10.4		-0.1		0.3		0.5		-1.4	
eV US Large Cap Equity Net Median				6.8		29.5		57.2		14.8		14.7		12.6		9.1	May-07
Blackrock Russell 1000 Index	1,683,780,624	23.8		6.1	57	32.0	40	60.8	36	17.4	33	--	--	--	--	16.6	May-17
Russell 1000				5.9	57	31.8	41	60.6	37	17.3	34	16.7	31	14.0	30	16.5	May-17
Over/Under				0.2		0.2		0.2		0.1						0.1	
eV US Large Cap Equity Net Median				6.8		29.5		57.2		14.8		14.7		12.6		14.5	May-17
Blackrock Russell 2500 Index	94,012,883	1.3		10.9	51	49.7	40	89.4	37	15.4	45	--	--	--	--	14.7	May-17
Russell 2500				10.9	51	49.6	40	89.4	37	15.3	45	15.9	41	12.2	38	14.7	May-17
Over/Under				0.0		0.1		0.0		0.1						0.0	
eV US Small-Mid Cap Equity Net Median				11.0		45.4		83.4		14.1		14.9		11.4		14.1	May-17

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance / COLOR CODING: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result.

Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Non-US Equity</b>	<b>1,131,591,685</b>	<b>16.0</b>	<b>16.0</b>	<b>3.2</b>	<b>56</b>	<b>28.7</b>	<b>77</b>	<b>48.4</b>	<b>89</b>	<b>6.4</b>	<b>70</b>	<b>9.9</b>	<b>61</b>	<b>5.5</b>	<b>61</b>	<b>6.6</b>	<b>Mar-94</b>
MSCI ACWI ex USA				<u>3.5</u>	47	<u>28.7</u>	77	<u>49.4</u>	84	<u>6.5</u>	62	<u>9.8</u>	65	<u>4.9</u>	85	<u>5.6</u>	Mar-94
Over/Under				<u>-0.3</u>		0.0		<u>-1.0</u>		<u>-0.1</u>		0.1		0.6		1.0	
MSCI EAFE				<u>3.5</u>	47	<u>25.8</u>	91	<u>44.6</u>	91	<u>6.0</u>	78	<u>8.8</u>	94	<u>5.5</u>	59	<u>5.2</u>	Mar-94
MSCI ACWI ex USA NR LCL				<u>6.5</u>	1	<u>24.1</u>	97	<u>41.3</u>	99	<u>8.3</u>	14	<u>10.2</u>	43	<u>7.4</u>	4	--	Mar-94
MSCI EAFE NR LCL				<u>7.6</u>	1	<u>21.3</u>	99	<u>36.6</u>	99	<u>7.1</u>	36	<u>8.8</u>	94	<u>7.5</u>	3	<u>5.1</u>	Mar-94
InvMetrics Public DB ex-US Eq Net Median				<u>3.4</u>		<u>30.3</u>		<u>54.5</u>		<u>6.7</u>		<u>10.1</u>		<u>5.8</u>		<u>6.2</u>	Mar-94
BlackRock ACWI ex-U.S. Index	590,400,031	8.3		<b>3.8</b>	<b>33</b>	<b>29.9</b>	<b>59</b>	<b>52.1</b>	<b>68</b>	<b>6.8</b>	<b>72</b>	<b>10.1</b>	<b>69</b>	<b>5.3</b>	<b>82</b>	<b>3.9</b>	<b>Mar-07</b>
MSCI ACWI ex USA IMI				<u>3.8</u>	35	<u>29.9</u>	60	<u>51.9</u>	69	<u>6.5</u>	74	<u>9.8</u>	70	<u>5.1</u>	86	<u>3.7</u>	Mar-07
Over/Under				0.0		0.0		0.2		0.3		0.3		0.2		0.2	
MSCI ACWI ex USA NR LCL				<u>6.5</u>	19	<u>24.1</u>	82	<u>41.3</u>	93	<u>8.3</u>	62	<u>10.2</u>	69	<u>7.4</u>	51	<u>4.4</u>	Mar-07
eV ACWI ex-US All Cap Equity Net Median				<u>2.4</u>		<u>31.0</u>		<u>54.9</u>		<u>9.5</u>		<u>11.5</u>		<u>7.5</u>		<u>5.4</u>	Mar-07
Sprucegrove	266,789,421	3.8		<b>6.0</b>	<b>23</b>	<b>39.3</b>	<b>16</b>	<b>55.9</b>	<b>48</b>	<b>4.4</b>	<b>82</b>	<b>9.7</b>	<b>73</b>	<b>5.4</b>	<b>82</b>	<b>7.4</b>	<b>Mar-02</b>
MSCI ACWI ex USA				<u>3.5</u>	39	<u>28.7</u>	66	<u>49.4</u>	81	<u>6.5</u>	74	<u>9.8</u>	72	<u>4.9</u>	88	<u>6.8</u>	Mar-02
Over/Under				<u>2.5</u>		<u>10.6</u>		<u>6.5</u>		<u>-2.1</u>		<u>-0.1</u>		<u>0.5</u>		<u>0.6</u>	
MSCI EAFE				<u>3.5</u>	39	<u>25.8</u>	77	<u>44.6</u>	89	<u>6.0</u>	78	<u>8.8</u>	80	<u>5.5</u>	81	<u>6.2</u>	Mar-02
MSCI ACWI ex USA NR LCL				<u>6.5</u>	19	<u>24.1</u>	82	<u>41.3</u>	93	<u>8.3</u>	62	<u>10.2</u>	69	<u>7.4</u>	51	<u>5.9</u>	Mar-02
MSCI EAFE NR LCL				<u>7.6</u>	12	<u>21.3</u>	87	<u>36.6</u>	98	<u>7.1</u>	71	<u>8.8</u>	81	<u>7.5</u>	51	<u>4.9</u>	Mar-02
eV ACWI ex-US All Cap Equity Net Median				<u>2.4</u>		<u>31.0</u>		<u>54.9</u>		<u>9.5</u>		<u>11.5</u>		<u>7.5</u>		<u>7.7</u>	Mar-02
Hexavest	95,041,623	1.3		<b>0.4</b>	<b>84</b>	<b>13.9</b>	<b>99</b>	<b>30.5</b>	<b>98</b>	<b>0.4</b>	<b>97</b>	<b>3.9</b>	<b>98</b>	<b>3.3</b>	<b>93</b>	<b>3.4</b>	<b>Dec-10</b>
MSCI EAFE				<u>3.5</u>	55	<u>25.8</u>	59	<u>44.6</u>	67	<u>6.0</u>	60	<u>8.8</u>	59	<u>5.5</u>	77	<u>5.7</u>	Dec-10
Over/Under				<u>-3.1</u>		<u>-11.9</u>		<u>-14.1</u>		<u>-5.6</u>		<u>-4.9</u>		<u>-2.2</u>		<u>-2.3</u>	
MSCI EAFE NR LCL				<u>7.6</u>	15	<u>21.3</u>	86	<u>36.6</u>	95	<u>7.1</u>	40	<u>8.8</u>	60	<u>7.5</u>	33	<u>7.4</u>	Dec-10
eV EAFE All Cap Equity Net Median				<u>4.0</u>		<u>27.3</u>		<u>49.6</u>		<u>6.5</u>		<u>9.3</u>		<u>6.6</u>		<u>6.7</u>	Dec-10
Walter Scott	179,360,610	2.5		<b>-1.2</b>	<b>85</b>	<b>19.9</b>	<b>92</b>	<b>37.3</b>	<b>98</b>	<b>12.6</b>	<b>19</b>	<b>13.2</b>	<b>26</b>	<b>8.0</b>	<b>40</b>	<b>8.0</b>	<b>Dec-10</b>
MSCI ACWI ex USA				<u>3.5</u>	39	<u>28.7</u>	66	<u>49.4</u>	81	<u>6.5</u>	74	<u>9.8</u>	72	<u>4.9</u>	88	<u>5.1</u>	Dec-10
Over/Under				<u>-4.7</u>		<u>-8.8</u>		<u>-12.1</u>		<u>6.1</u>		<u>3.4</u>		<u>3.1</u>		<u>2.9</u>	
MSCI ACWI ex USA NR LCL				<u>6.5</u>	19	<u>24.1</u>	82	<u>41.3</u>	93	<u>8.3</u>	62	<u>10.2</u>	69	<u>7.4</u>	51	<u>7.3</u>	Dec-10
MSCI EAFE				<u>3.5</u>	39	<u>25.8</u>	77	<u>44.6</u>	89	<u>6.0</u>	78	<u>8.8</u>	80	<u>5.5</u>	81	<u>5.7</u>	Dec-10
eV ACWI ex-US All Cap Equity Net Median				<u>2.4</u>		<u>31.0</u>		<u>54.9</u>		<u>9.5</u>		<u>11.5</u>		<u>7.5</u>		<u>7.6</u>	Dec-10



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Global Equity</b>	<b>817,498,706</b>	<b>11.5</b>	<b>10.0</b>	<b>4.7</b>	<b>51</b>	<b>30.0</b>	<b>37</b>	<b>55.1</b>	<b>34</b>	<b>12.5</b>	<b>9</b>	<b>13.6</b>	<b>6</b>	<b>9.2</b>	<b>34</b>	<b>7.4</b>	<b>May-05</b>
MSCI ACWI				4.6	59	29.7	44	54.6	35	12.1	18	13.2	13	9.1	34	8.0	May-05
Over/Under				0.1		0.3		0.5		0.4		0.4		0.1		-0.6	
InvMetrics Public DB Glbl Eq Net Median				4.7		28.4		53.0		10.2		11.2		6.4		6.6	May-05
<b>BlackRock MSCI ACWI Equity Index</b>	<b>817,498,706</b>	<b>11.5</b>		<b>4.7</b>	<b>55</b>	<b>30.0</b>	<b>50</b>	<b>55.1</b>	<b>56</b>	<b>12.5</b>	<b>46</b>	<b>13.7</b>	<b>40</b>	--	--	<b>11.7</b>	<b>Aug-12</b>
MSCI ACWI				4.6	56	29.7	51	54.6	57	12.1	50	13.2	44	9.1	57	11.3	Aug-12
Over/Under				0.1		0.3		0.5		0.4		0.5		0.4		0.4	
eV All Global Equity Net Median				5.0		29.8		57.0		12.0		12.7		9.4		11.3	Aug-12



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Private Equity</b>	<b>809,564,713</b>	<b>11.4</b>	<b>15.0</b>	<b>11.3</b>	<b>27</b>	<b>38.1</b>	<b>20</b>	<b>29.5</b>	<b>27</b>	<b>19.3</b>	<b>20</b>	<b>17.4</b>	<b>24</b>	--	--	<b>16.1</b>	Jan-12
Private Equity Benchmark				7.1	59	36.1	26	67.2	1	20.6	18	20.1	12	17.1	6	19.0	Jan-12
Over/Under				4.2		2.0		-37.7		-1.3		-2.7				-2.9	
C A Global All PE (Qtr Lag)				17.3	3	41.5	11	28.8	31	17.3	31	16.0	35	13.7	38	14.4	Jan-12
InvMetrics Public DB Private Eq Net Median				8.0		27.9		23.3		14.3		13.5		13.1		13.6	Jan-12
Adams Street Global Fund Series	255,460,079	3.6		22.0	--	51.1	--	37.8	--	22.3	--	18.2	--	--	--	16.0	Jan-12
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	19.1	Jan-12
Over/Under				14.9		15.0		-29.4		1.7		-1.9				-3.1	
Harbourvest	120,140,944	1.7		-0.3	--	25.1	--	13.8	--	15.4	--	16.7	--	--	--	18.1	Aug-13
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	17.4	Aug-13
Over/Under				-7.4		-11.0		-53.4		-5.2		-3.4				0.7	
Pantheon Global Secondary Funds	52,018,194	0.7		5.5	--	20.0	--	10.2	--	9.4	--	13.4	--	--	--	11.3	Jan-12
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	19.1	Jan-12
Over/Under				-1.6		-16.1		-57.0		-11.2		-6.7				-7.8	
Drive Capital Fund II	22,551,218	0.3		9.4	--	8.3	--	22.8	--	22.4	--	--	--	--	--	-3.2	Sep-16
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	20.0	Sep-16
Over/Under				2.3		-27.8		-44.4		1.8						-23.2	
Abbott Secondary Opportunities	14,490,244	0.2		0.0	--	25.7	--	30.4	--	24.5	--	--	--	--	--	22.4	Jan-18
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	18.9	Jan-18
Over/Under				-7.1		-10.4		-36.8		3.9						3.5	
Clearlake Capital Partners V	14,726,452	0.2		17.2	--	53.9	--	33.1	--	42.9	--	--	--	--	--	41.5	Mar-18
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	19.3	Mar-18
Over/Under				10.1		17.8		-34.1		22.3						22.2	
Battery Ventures XII	22,080,923	0.3		22.0	--	63.2	--	63.3	--	20.3	--	--	--	--	--	20.3	Apr-18
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	20.6	Apr-18
Over/Under				14.9		27.1		-3.9		-0.3						-0.3	
Insight Venture Partners X	48,608,065	0.7		25.5	--	79.6	--	73.7	--	--	--	--	--	--	--	29.0	May-18
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	21.0	May-18
Over/Under				18.4		43.5		6.5								8.0	

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## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
GTCR Fund XII	21,241,170	0.3		5.6	--	56.5	--	56.5	--	--	--	--	--	--	--	-8.8	Jun-18
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	20.4	Jun-18
Buenaventure One, LLC	78,114,168	1.1		0.0	--	17.0	--	16.9	--	--	--	--	--	--	--	8.3	Jul-18
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	20.6	Jul-18
ECI 11	7,664,042	0.1		30.2	--	76.4	--	68.1	--	--	--	--	--	--	--	36.2	Dec-18
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	23.5	Dec-18
Buenaventure Two, LLC	789,492	0.0		0.0	--	16.7	--	20.6	--	--	--	--	--	--	--	42.1	Dec-18
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	23.5	Dec-18
The Resolute Fund IV L.P.	24,888,910	0.4		9.2	--	48.5	--	49.3	--	--	--	--	--	--	--	58.5	Jan-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	29.8	Jan-19
2.1				2.1		12.4		-17.9								28.7	
GGV Capital VII L.P.	11,058,572	0.2		29.3	--	38.2	--	37.1	--	--	--	--	--	--	--	4.2	Feb-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	26.1	Feb-19
22.2				22.2		2.1		-30.1								-21.9	
GGV Discovery II, L.P.	1,892,051	0.0		18.0	--	26.3	--	31.9	--	--	--	--	--	--	--	12.0	Feb-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	26.1	Feb-19
10.9				10.9		-9.8		-35.3								-14.1	
Drive Capital Overdrive Fund I	7,713,005	0.1		12.3	--	66.6	--	63.4	--	--	--	--	--	--	--	26.8	May-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	23.6	May-19
5.2				5.2		30.5		-3.8								3.2	
Riverside Micro Cap Fund V, LP	4,815,892	0.1		6.3		17.1		-0.4		--	--	--	--	--	--	-12.6	May-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	23.6	May-19
-0.8				-0.8		-19.0		-67.6								-36.2	
GGV Capital VII Plus, LP	2,649,275	0.0		9.9		27.3		27.3		--	--	--	--	--	--	14.2	Jun-19
Russell 3000 + 3% Over/Under				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	29.3	Jun-19
2.8				2.8		-8.8		-39.9								-15.1	

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## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Astorg VII L.P.	4,192,087	0.1		5.6	--	73.1	--	51.6	--	--	--	--	--	--	--	-4.1	Jul-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	25.7	Jul-19
Over/Under				-1.5		37.0		-15.6								-29.8	
M/C Partners Fund VIII LP. Limited Partnership	3,623,907	0.1		1.1	--	10.4	--	2.1	--	--	--	--	--	--	--	-30.0	Jul-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	25.7	Jul-19
Over/Under				-6.0		-25.7		-65.1								-55.7	
Genstar Capital Partners IX	3,708,321	0.1		9.8	--	39.7	--	32.0	--	--	--	--	--	--	--	--	Aug-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	25.9	Aug-19
Over/Under				2.7		3.6		-35.2									
Genstar IX Opportunities Fund I	1,782,425	0.0		7.8	--	22.1	--	17.7	--	--	--	--	--	--	--	12.1	Aug-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	25.9	Aug-19
Over/Under				0.7		-14.0		-49.5								-13.8	
ABRY Partners IX, LP	5,781,735	0.1		6.1	--	32.2	--	-10.2	--	--	--	--	--	--	--	-15.6	Sep-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	28.9	Sep-19
Over/Under				-1.0		-3.9		-77.4								-44.5	
Advent International GPE IX LP	5,444,097	0.1		19.2	--	58.6	--	57.8	--	--	--	--	--	--	--	29.7	Nov-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	28.8	Nov-19
Over/Under				12.1		22.5		-9.4								0.9	
Drive Capital Fund III LP	2,207,325	0.0		-2.1	--	7.8	--	-10.9	--	--	--	--	--	--	--	-8.3	Dec-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	27.0	Dec-19
Over/Under				-9.2		-28.3		-78.1								-35.3	
Oak HC/FT Partners III LP	14,944,933	0.2		24.8	--	45.1	--	42.6	--	--	--	--	--	--	--	20.8	Dec-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	27.0	Dec-19
Over/Under				17.7		9.0		-24.6								-6.2	
TA XIII A LP	6,816,522	0.1		4.4	--	26.9	--	12.4	--	--	--	--	--	--	--	5.1	Dec-19
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	25.9	Dec-19
Over/Under				-2.7		-9.2		-54.8								-20.8	
Dover Street X, LP	9,829,741	0.1		-0.5	--	56.5	--	40.5	--	--	--	--	--	--	--	32.8	Feb-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	27.8	Feb-20
Over/Under				-7.6		20.4		-26.7								5.0	

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## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Hellman & Friedman CP IX	14,669,074	0.2		3.8	--	31.6	--	1.2	--	--	--	--	--	--	--	1.2	Apr-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	67.2	Apr-20
Over/Under				-3.3		-4.5		-66.0								-66.0	
Clearlake Capital Partners VI	9,455,440	0.1		2.6	--	14.6	--	--	--	--	--	--	--	--	--	14.6	Jun-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	39.5	Jun-20
Over/Under				-4.5		-21.5										-24.9	
Flexpoint Fund IV	1,537,837	0.0		2.8	--	13.8	--	--	--	--	--	--	--	--	--	13.8	Jun-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	39.5	Jun-20
Over/Under				-4.3		-22.3										-25.7	
Battery Ventures XIII	6,569,676	0.1		2.9	--	5.1	--	--	--	--	--	--	--	--	--	5.1	Jun-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	39.5	Jun-20
Over/Under				-4.2		-31.0										-34.4	
Green Equity Investors VIII, L.P.	1,907,379	0.0		-4.9	--	--	--	--	--	--	--	--	--	--	--	-4.9	Nov-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	26.1	Nov-20
Over/Under				-12.0												-31.0	
CapVest Private Equity Partners IV, SCSp	2,753,726	0.0		15.8	--	--	--	--	--	--	--	--	--	--	--	18.5	Dec-20
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	12.2	Dec-20
Over/Under				8.7												6.3	
Great Hill Equity Partners VII	729,755	0.0		173.2	--	--	--	--	--	--	--	--	--	--	--	173.2	Jan-21
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	7.1	Jan-21
Over/Under				166.1												166.1	
Vitruvian Investment Partners IV	158,039	0.0		-43.2	--	--	--	--	--	--	--	--	--	--	--	-43.2	Jan-21
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	7.1	Jan-21
Over/Under				-50.3												-50.3	
CRV XVIII, L.P.	2,550,000	0.0		--	--	--	--	--	--	--	--	--	--	--	--	0.0	Mar-21
Russell 3000 + 3%				7.1	--	36.1	--	67.2	--	20.6	--	20.1	--	17.2	--	3.8	Mar-21
Over/Under																-3.8	

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## Ventura County Employees' Retirement Association

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<b>Total US Fixed Income</b>	953,248,636	13.5	15.0	-2.0	23	2.5	11	10.0	8	6.0	3	4.6	16	4.5	20	5.8	Feb-94
BBgBarc US Aggregate TR				-3.4	87	-2.1	95	0.7	94	4.7	49	3.1	56	3.4	58	5.2	Feb-94
Over/Under				1.4		4.6		9.3		1.3		1.5		1.1		0.6	
InvMetrics Public DB US Fix Inc Net Median				-2.3		-0.7		3.2		4.6		3.3		3.7		5.5	Feb-94
BlackRock U.S. Debt Fund	173,288,453	2.4		-3.4	84	-2.1	93	0.8	91	4.7	48	3.1	60	3.5	56	5.0	Nov-95
BBgBarc US Aggregate TR				-3.4	83	-2.1	93	0.7	92	4.7	50	3.1	61	3.4	58	5.0	Nov-95
Over/Under				0.0		0.0		0.1		0.0		0.0		0.1		0.0	
eV All US Fixed Inc Net Median				-0.6		0.8		5.2		4.6		3.6		3.7		4.9	Nov-95
Western	296,068,401	4.2		-4.3	90	-0.4	78	7.0	41	5.7	27	4.5	33	4.8	31	6.0	Dec-96
BBgBarc US Aggregate TR				-3.4	83	-2.1	93	0.7	92	4.7	50	3.1	61	3.4	58	5.0	Dec-96
Over/Under				-0.9		1.7		6.3		1.0		1.4		1.4		1.0	
eV All US Fixed Inc Net Median				-0.6		0.8		5.2		4.6		3.6		3.7		4.9	Dec-96
Reams	345,055,521	4.9		0.2	24	5.9	22	15.2	19	6.6	16	4.9	29	4.4	36	5.5	Sep-01
Reams Custom Index				0.0	30	0.2	64	0.3	94	1.6	98	1.5	95	1.9	85	3.5	Sep-01
Over/Under				0.2		5.7		14.9		5.0		3.4		2.5		2.0	
BBgBarc US Aggregate TR				-3.4	83	-2.1	93	0.7	92	4.7	50	3.1	61	3.4	58	4.3	Sep-01
3-Month LIBOR + 3%				0.8	17	2.4	33	3.3	67	4.7	49	4.5	33	3.9	45	4.7	Sep-01
eV All US Fixed Inc Net Median				-0.6		0.8		5.2		4.6		3.6		3.7		4.4	Sep-01
Loomis Strategic Alpha	48,476,298	0.7		0.0	30	8.1	18	17.5	16	4.9	42	4.9	28	--	--	3.6	Jul-13
BBgBarc US Aggregate TR				-3.4	83	-2.1	93	0.7	92	4.7	50	3.1	61	3.4	58	3.3	Jul-13
Over/Under				3.4		10.2		16.8		0.2		1.8		0.3		0.3	
3-Month LIBOR + 3%				0.8	17	2.4	33	3.3	67	4.7	49	4.5	33	3.9	45	4.1	Jul-13
eV All US Fixed Inc Net Median				-0.6		0.8		5.2		4.6		3.6		3.7		3.5	Jul-13
Loomis Sayles Multi Strategy	90,359,963	1.3		-0.9	55	6.5	21	18.0	15	6.9	12	6.8	13	5.9	17	6.5	Jul-05
Loomis Custom Index				-2.0	68	2.2	34	7.2	40	5.3	34	4.6	33	4.3	37	5.0	Jul-05
Over/Under				1.1		4.3		10.8		1.6		2.2		1.6		1.5	
BBgBarc US Govt/Credit TR				-4.3	90	-2.7	95	0.9	91	5.0	39	3.4	54	3.7	51	4.2	Jul-05
eV All US Fixed Inc Net Median				-0.6		0.8		5.2		4.6		3.6		3.7		4.1	Jul-05
<b>Treasuries</b>	85,953,015	1.2	2.0	-7.0	--	-8.1	--	-7.7	--	--	--	--	--	--	--	4.5	Apr-19
Reams 10-Year Treasuries	85,953,015	1.2		-7.0	--	-8.1	--	-7.7	--	--	--	--	--	--	--	4.5	Apr-19
BBgBarc US Treasury 7-10 Yr TR				-5.7	--	-6.7	--	-5.9	--	5.0	--	2.4	--	4.0	--	4.6	Apr-19
Over/Under				-1.3		-1.4		-1.8								-0.1	

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate

Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index

As of January 2016, Loomis Strategic Alpha was moved from the Total Global Fixed Income composite to the Total US Fixed Income composite.



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Private Debt</b>	<b>158,458,786</b>	<b>2.2</b>	<b>3.0</b>	<b>5.3</b>	--	<b>18.8</b>	--	<b>11.0</b>	--	<b>8.6</b>	--	--	--	--	--	<b>7.9</b>	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>6.7</u>	Jan-18
Over/Under				3.8		7.2		-11.7		1.6						1.2	
CVI Credit Value Fund IV	31,001,928	0.4		<b>6.7</b>	--	<b>24.2</b>	--	<b>6.7</b>	--	<b>6.9</b>	--	--	--	--	--	<b>6.3</b>	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>6.7</u>	Jan-18
Over/Under				5.2		12.6		-16.0		-0.1						-0.4	
Monroe Capital Private Credit Fund III	21,485,608	0.3		<b>3.6</b>	--	<b>15.5</b>	--	<b>12.1</b>	--	--	--	--	--	--	--	<b>11.2</b>	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>8.0</u>	Dec-18
Over/Under				2.1		3.9		-10.6								3.2	
Bluebay Direct Lending Fund III	10,120,127	0.1		<b>2.6</b>	--	<b>10.0</b>	--	<b>9.2</b>	--	--	--	--	--	--	--	<b>8.9</b>	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>7.3</u>	Apr-19
Over/Under				1.1		-1.6		-13.5								1.6	
Pimco Private Income Fund	62,806,095	0.9		<b>4.0</b>	--	<b>15.4</b>	--	<b>13.9</b>	--	--	--	--	--	--	--	<b>10.9</b>	Nov-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>7.2</u>	Nov-19
Over/Under				2.5		3.8		-8.8								3.7	
Bridge Debt Strategies III Limited Partner	23,559,626	0.3		<b>2.7</b>	--	<b>19.4</b>	--	<b>5.3</b>	--	--	--	--	--	--	--	<b>4.3</b>	Jan-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>6.1</u>	Jan-20
Over/Under				1.2		7.8		-17.4								-1.8	
PIMCO Corp Opps Fund III	6,985,402	0.1		<b>40.9</b>	--	<b>63.2</b>	--	--	--	--	--	--	--	--	--	<b>88.6</b>	May-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>17.6</u>	May-20
Over/Under				39.4		51.6										71.0	
Torchlight Debt Fund VII, L.P.	2,500,000	0.0		<b>0.0</b>	--	--	--	--	--	--	--	--	--	--	--	<b>0.0</b>	Jan-21
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				<u>1.5</u>	--	<u>11.6</u>	--	<u>22.7</u>	--	<u>7.0</u>	--	--	--	--	--	<u>1.5</u>	Jan-21
Over/Under				-1.5												-1.5	



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Real Estate</b>	<b>440,010,963</b>	<b>6.2</b>	<b>8.0</b>	<b>1.7</b>	<b>72</b>	<b>0.7</b>	<b>94</b>	<b>-1.8</b>	<b>97</b>	<b>1.4</b>	<b>97</b>	<b>3.3</b>	<b>97</b>	<b>7.2</b>	<b>84</b>	<b>7.1</b>	<b>Mar-94</b>
NCREIF ODCE Net				0.0	97	1.4	92	-0.4	93	3.3	83	4.9	85	8.5	64	7.6	Mar-94
Over/Under				1.7		-0.7		-1.4		-1.9		-1.6		-1.3		-0.5	
InvMetrics Public DB Real Estate Pub+Priv Net Median				2.2		4.1		2.5		4.9		6.3		8.9		8.3	Mar-94
<b>Prudential Real Estate</b>	<b>172,373,343</b>	<b>2.4</b>		<b>2.0</b>	--	<b>3.8</b>	--	<b>2.5</b>	--	<b>5.3</b>	--	<b>6.2</b>	--	<b>9.4</b>	--	<b>6.1</b>	Jun-04
NCREIF ODCE Net				0.0	--	1.4	--	-0.4	--	3.3	--	4.9	--	8.5	--	6.4	Jun-04
Over/Under				2.0		2.4		2.9		2.0		1.3		0.9		-0.3	
NCREIF ODCE				0.0	--	1.8	--	0.2	--	4.2	--	5.8	--	9.4	--	7.4	Jun-04
<b>UBS Real Estate</b>	<b>246,324,907</b>	<b>3.5</b>		<b>1.1</b>	--	<b>-1.3</b>	--	<b>-3.9</b>	--	<b>-0.7</b>	--	<b>1.8</b>	--	<b>5.9</b>	--	<b>6.0</b>	Mar-03
NCREIF ODCE Net				0.0	--	1.4	--	-0.4	--	3.3	--	4.9	--	8.5	--	6.6	Mar-03
Over/Under				1.1		-2.7		-3.5		-4.0		-3.1		-2.6		-0.6	
NCREIF ODCE				0.0	--	1.8	--	0.2	--	4.2	--	5.8	--	9.4	--	7.6	Mar-03
<b>LaSalle Income + Growth VIII Limited Partnership</b>	<b>21,312,712</b>	<b>0.3</b>		<b>5.8</b>	--	<b>-1.5</b>	--	<b>-14.3</b>	--	--	--	--	--	--	--	<b>-13.3</b>	Mar-20
NCREIF ODCE Net				0.0	--	1.4	--	-0.4	--	3.3	--	4.9	--	8.5	--	0.3	Mar-20
Over/Under				5.8		-2.9		-13.9								-13.6	
NCREIF ODCE				0.0	--	1.8	--	0.2	--	4.2	--	5.8	--	9.4	--	1.1	Mar-20

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.



## Ventura County Employees' Retirement Association

# TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date	
<b>Total Real Assets</b>	<b>472,755,797</b>	<b>6.7</b>	<b>6.0</b>	<b>0.0</b>	--	<b>11.7</b>	--	<b>23.0</b>	--	<b>3.3</b>	--	<b>4.9</b>	--	--	--	<b>3.8</b>	<b>Apr-13</b>	
Real Assets Index				<u>2.2</u>	--	<u>4.3</u>	--	<u>4.7</u>	--	<u>4.9</u>	--	<u>5.5</u>	--	<u>7.3</u>	--	<u>5.8</u>	<u>Apr-13</u>	
Over/Under				<u>-2.2</u>		7.4		18.3		<u>-1.6</u>		<u>-0.6</u>					<u>-2.0</u>	
Bridgewater All Weather Fund	371,359,665	5.2		<u>-2.9</u>	--	<u>9.5</u>	--	<u>18.2</u>	--	<u>6.2</u>	--	<u>7.3</u>	--	--	--	<u>5.6</u>	<u>Aug-13</u>	
CPI + 5% (Unadjusted)				<u>2.9</u>	--	<u>6.6</u>	--	<u>7.7</u>	--	<u>7.1</u>	--	<u>7.2</u>	--	--	--	<u>6.7</u>	<u>Aug-13</u>	
Over/Under				<u>-5.8</u>		2.9		10.5		<u>-0.9</u>		0.1				<u>-1.1</u>		
Tortoise Energy Infrastructure	68,849,336	1.0		<u>18.0</u>	--	<u>26.0</u>	--	<u>64.3</u>	--	<u>-4.7</u>	--	<u>-1.5</u>	--	--	--	<u>-2.4</u>	<u>Apr-13</u>	
Tortoise MLP Index				<u>21.3</u>	--	<u>35.5</u>	--	<u>102.4</u>	--	<u>-1.9</u>	--	<u>0.5</u>	--	<u>-0.6</u>	--	<u>-3.9</u>	<u>Apr-13</u>	
Over/Under				<u>-3.3</u>		<u>-9.5</u>		<u>-38.1</u>		<u>-2.8</u>		<u>-2.0</u>				1.5		
Brookfield Infra Fund IV B LP	24,677,746	0.3		<u>2.0</u>	--	<u>5.2</u>	--	<u>5.2</u>	--	--	--	--	--	--	--	<u>5.2</u>	<u>Apr-20</u>	
CPI + 2% (Unadjusted)				<u>2.2</u>	--	<u>4.3</u>	--	<u>4.7</u>	--	<u>4.0</u>	--	<u>4.2</u>	--	<u>3.7</u>	--	<u>4.7</u>	<u>Apr-20</u>	
Over/Under				<u>-0.2</u>		0.9		0.5								0.5		
Harbourvest Real Assets Fund IV L.P.	7,869,050	0.1			<u>2.2</u>	--	<u>4.3</u>	--	<u>4.7</u>	--	<u>4.0</u>	--	<u>4.2</u>	--	<u>3.7</u>	--	<u>4.1</u>	<u>Sep-19</u>
CPI + 2% (Unadjusted)																		
Over/Under																		
<b>Overlay</b>	<b>143,878,885</b>	<b>2.0</b>	<b>0.0</b>															
Parametric	66,369,217	0.9																
Abbott Capital Cash	77,509,668	1.1																

Overlay performance is not applicable on an individual account level.

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance

Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result



# VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

## PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Add'l Fees <sup>2</sup>	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$24,599,362	\$763,355	98%	—	\$18,750,000	\$14,490,243	\$33,240,243	\$8,640,881	21.2%	0.76x	1.35x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	\$25,000,000	—	\$25,000,000	—	—	\$0	\$605,838	\$605,838	—	—	—	—
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$5,837,353	\$4,762,647	55%	—	—	\$5,781,736	\$5,781,736	(\$55,617)	-0.9%	—	0.99x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$45,476,406	\$32,126,606	\$77,603,012	\$40,145,299	15.2%	1.21x	2.07x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,962,749	\$2,537,251	90%	\$1,589	\$24,305,483	\$15,011,050	\$39,316,533	\$16,352,195	12.3%	1.06x	1.71x
Adams Street 2010 Non-U.S. Eng Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	—	\$4,596,756	\$11,227,773	\$15,284,529	\$8,191,529	12.8%	0.6x	2.07x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$331,500	\$96%	\$6,697	\$10,468,780	\$5,419,957	\$15,888,737	\$7,713,540	13.2%	1.28x	1.95x	
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$24,950,902	\$98,267,461	\$123,218,363	\$61,857,635	15.7%	0.41x	2.01x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$40,842,000	\$19,158,000	68%	—	\$4,801,064	\$57,041,657	\$61,842,721	\$21,000,721	20.0%	0.12x	1.51x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$20,134,931	\$9,960,000	67%	\$6,708	—	\$23,254,408	\$23,254,408	\$0,051,669	13.2%	—	1.15x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$4,226,208	\$5,773,792	42%	—	\$319,600	\$5,444,098	\$5,763,698	\$5,157,490	40.1%	—	1.36x
Astorg VII	2019	12/17/2018	\$9,023,694	\$3,646,067	\$5,377,627	40%	—	—	\$3,566,825	\$3,566,825	(\$79,242)	-3.5%	—	0.98x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$7,672,590	\$1,377,410	85%	—	—	\$13,128,851	\$13,128,851	\$5,456,261	33.0%	—	1.71x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$4,469,755	\$580,224	89%	—	—	\$8,952,070	\$8,952,070	\$4,482,315	42.5%	—	2x
Battery Ventures XIII	2020	2/11/2020	\$9,240,000	\$3,696,000	\$5,544,000	40%	—	—	\$3,843,852	\$3,843,852	\$147,852	10.7%	—	1.04x
Buenaventure One, LLC	2018	1/5/2018	\$173,398,500	\$70,330,590	\$103,067,910	41%	—	\$2,878,156	\$78,114,186	\$80,992,341	\$10,661,751	11.8%	0.04x	1.15x
CapVest Equity Partners IV	2019	7/11/2018	\$12,967,564	\$2,776,892	\$10,190,672	21%	—	—	\$1,310,840	\$1,310,840	—	-100.0%	—	0.47x
Charlesbank Equity Fund X	2020	11/20/2020	\$24,000,000	—	\$24,000,000	—	—	—	—	—	—	—	—	—
Charlesbank Equity Overage Fund X	2020	11/20/2020	\$6,000,000	—	\$6,000,000	—	—	—	—	—	—	—	—	—
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$9,163,056	\$2,180,279	92%	\$46,158	\$2,797,682	\$14,726,450	\$17,524,132	\$8,314,918	43.9%	0.31x	1.91x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	\$9,073,299	\$9,681,226	49%	—	\$155,933	\$9,167,529	\$9,323,462	\$250,163	7.7%	0.02x	1.03x
CRV XVIII	2020	7/2/2020	\$15,000,000	\$2,550,000	\$12,450,000	17%	—	—	\$2,550,000	\$2,550,000	—	0.0%	—	1x
CVC Capital Partners VIII	2020	5/22/2020	\$21,597,368	—	\$21,597,368	—	—	—	—	—	—	—	—	—
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$14,476,970	\$526,240	97%	\$3,210	—	\$22,551,217	\$22,551,217	\$8,071,037	20.2%	—	1.56x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$2,262,290	\$5,237,710	30%	—	—	\$2,207,326	\$2,207,326	(\$5,964)	-5.1%	—	0.98x
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$5,167,303	\$2,332,697	69%	—	\$12,492	\$7,713,002	\$7,725,494	\$2,558,191	39.2%	0x	1.5x
EFC 11	2018	7/5/2018	\$9,994,824	\$5,458,182	\$4,536,642	55%	—	\$544,239	\$5,554,861	\$6,098,100	\$640,918	9.7%	0.1x	1.12x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	\$1,783,947	\$8,866,053	17%	—	—	\$1,537,837	\$1,537,837	(\$246,110)	-22.7%	—	0.86x
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	—	\$3,550,000	—	—	—	(\$4,747)	(\$4,747)	—	-100.0%	—	—
Genstar Capital Partners IX	2019	2/21/2019	\$7,500,000	\$2,944,241	\$4,728,882	39%	—	\$175,000	\$3,708,322	\$3,883,322	\$939,081	29.0%	0.06x	1.32x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$1,502,042	\$997,958	60%	—	—	\$1,782,425	\$1,782,425	\$280,383	17.8%	—	1.19x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$8,432,800	\$1,727,200	83%	—	—	\$11,058,575	\$11,058,575	\$7,625,775	31.3%	—	1.31x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$2,184,400	\$355,600	86%	—	—	\$2,649,275	\$2,649,275	\$464,875	23.1%	—	1.21x
GGV Capital VIII	2020	10/30/2020	\$9,180,000	—	\$9,180,000	—	—	—	—	—	—	—	—	—
GGV Capital VIII Plus	2020	10/30/2020	\$2,295,000	—	\$2,295,000	—	—	—	—	—	—	—	—	—
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$1,501,500	\$598,500	72%	—	—	\$1,892,050	\$1,892,050	\$390,550	25.0%	—	1.26x
GGV Discovery III	2020	10/30/2020	\$3,825,000	—	\$3,825,000	—	—	—	—	—	—	—	—	—
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	\$1,626,085	\$7,273,915	18%	—	\$2,458,521	\$820,183	\$3,278,704	\$1,652,619	—	—	2.02x
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	\$2,023,598	\$12,976,402	13%	—	—	\$1,907,378	\$1,907,378	(\$116,220)	-18.1%	—	0.94x
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$18,720,000	\$11,280,000	62%	—	\$4,079,641	\$21,241,168	\$24,320,809	\$8,600,809	22.1%	0.22x	1.35x
GTCR Fund XIII	2020	10/27/2020	\$30,000,000	—	\$30,000,000	—	—	—	\$19,819	\$19,819	—	-100.0%	—	—
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$62,184,954	\$5,400,000	92%	\$84,954	\$80,288,011	\$20,324,393	\$100,612,404	\$38,342,496	19.6%	1.29x	1.62x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$48,000,000	\$12,000,000	80%	—	\$28,577,164	\$41,041,749	\$69,618,913	\$21,618,913	21.7%	0.6x	1.45x
HarbourVest - Dover Street X	2019	5/31/2019	\$40,000,000	\$9,000,000	\$31,000,000	23%	—	\$1,379,000	\$9,877,494	\$11,256,454	\$2,256,454	44.5%	—	1.25x
HarbourVest - PRTNCS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	—	\$7,835,587	\$29,114,925	\$36,950,512	\$12,486,124	14.6%	0.32x	1.51x
HarbourVest - PRTNCS CO INVEST V L.P.	2019	7/31/2018	\$35,000,000	\$24,500,000	\$10,500,000	70%	—	—	\$31,375,921	\$31,375,921	\$6,875,921	32.1%	—	1.28x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	\$14,522,712	\$5,783,053	73%	—	\$696,172	\$14,669,077	\$15,365,249	\$842,537	11.7%	0.05x	1.06x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$25,093,372	\$169,314	100%	—	\$2,280,029	\$48,608,057	\$50,888,086	\$25,794,714	42.0%	0.09x	2.03x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$4,009,621	\$5,990,379	40%	—	—	\$3,623,906	\$3,623,906	(\$385,715)	-10.8%	—	0.9x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$11,226,485	\$3,773,515	75%	—	—	\$14,944,933	\$14,944,933	\$3,718,448	55.4%	—	1.33x
Oak HC/FT Partners IV	2021	2/17/2021	\$10,000,000	—	\$10,000,000	—	—	—	—	—	—	—	—	—
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$2,040,000	66%	—	\$13,970,793	\$1,763,888	\$15,734,678	\$5,774,678	13.0%	1.4x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$36,616,509	\$13,383,491	73%	(\$162,514)	\$18,392,521	\$31,819,912	\$50,212,433	\$13,758,438	10.8%	0.5x	1.37x
Pantheon Global Secondary Fund VI	2018	2/24/2020	\$25,000,000	\$14,047,805	\$11,187,113	56%	—	\$38,661	\$15,796,468	\$15,835,129	\$1,787,324	23.2%	0x	1.13x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$19,500,230	\$3,577,547	98%	—	\$5,099,201	\$24,888,908	\$29,988,107	\$10,487,877	57.0%	0.26x	1.54x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$4,667,946	\$5,322,064	47%	—	—	\$4,815,892	\$4,815,892	\$147,946	3.2%	—	1.03x
TA XII	2019	5/2/2019	\$10,000,000	\$6,500,000	\$3,500,000	65%	—	\$150,000	\$6,816,519	\$6,966,519	\$466,519	12.5%	0.02x	1.07x
Vitruvan Investment Partnership IV	2020	6/3/2020	\$21,609,078	\$278,517	\$21,330,561	1%	—	—	\$157,833	\$157,833	(\$120,684)	-88.2%	—	—
<b>Total VCERA Private Equity Program</b>	--	5/21/2010	<b>\$1,282,841,028</b>	<b>\$731,845,053</b>	<b>\$554,440,656</b>	<b>57%</b>	<b>\$73,843</b>	<b>\$305,477,794</b>	<b>\$790,996,138</b>	<b>\$1,096,473,931</b>	<b>\$365,439,814</b>	<b>17.2%</b>	<b>0.42x</b>	<b>1.5x</b>

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 3/31/2021 statement of investments produced by Abbott Capital.



# VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

## PRIVATE DEBT LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	Since Inception		
											Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)	IRR
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$11,849,228	\$13,150,772	47%	\$3,075,371	\$10,120,127	\$13,195,498	\$1,346,269	8.5%	0.26x	1.11x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$24,072,665	\$927,335	96%	\$1,903,159	\$23,559,626	\$25,462,786	\$1,390,121	5.1%	0.08x	1.06x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$29,100,000	\$900,000	97%	\$2,106,147	\$31,001,928	\$33,108,075	\$4,008,075	7.1%	0.07x	1.14x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$21,253,151	\$3,746,849	85%	\$3,854,026	\$21,485,608	\$25,339,634	\$4,086,483	12.0%	0.18x	1.19x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	\$50,000,000	\$3,750,000	\$46,250,000	8%	\$56,285	\$6,985,402	\$7,041,687	\$3,291,687	88.3%	0.02x	1.88x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$55,000,000	\$0	100%	\$0	\$62,806,095	\$62,806,095	\$7,806,095	13.8%	0x	1.14x
Torchlight Debt Fund VII	2021	1/25/2021	\$25,000,000	\$2,500,000	\$22,500,000	10%	\$0	\$2,500,000.00	\$2,500,000	\$0	0.0%	0x	1x
<b>Total VCERA Private Debt Program</b>	--		<b>\$235,000,000</b>	<b>\$147,525,044</b>	<b>\$87,474,956</b>	<b>63%</b>	<b>\$10,994,988</b>	<b>\$158,458,786</b>	<b>\$169,453,774</b>	<b>\$21,928,730</b>	<b>11.2%</b>	<b>0.07x</b>	<b>1.15x</b>

1. Includes recycled/recallable distributions received to date.

Note: Private debt performance data is reported net of fees.

Performance shown is based on 3/31/2021 cash-adjusted market values.



# VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

## PRIVATE REAL ESTATE LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Lasalle Income & Growth Fund VIII, LP <b>Total</b>	2019	2/26/2020	\$100,000,000	\$23,261,541	\$76,738,459	23%	\$0	\$21,312,712	\$21,312,712	-\$1,948,829	-10.5%	0x	0.92x
<b>VCERA Private Real Estate Program</b>	--		<b>\$100,000,000</b>	<b>\$23,261,541</b>	<b>\$76,738,459</b>	<b>23%</b>	<b>\$0</b>	<b>\$21,312,712</b>	<b>\$21,312,712</b>	<b>-\$1,948,829</b>	<b>-10.5%</b>	<b>0x</b>	<b>0.92x</b>

1. Includes recycled/recallable distributions received to date.

Note: Private Real Estate performance data is reported net of fees. Performance shown is based on 3/31/2021 cash-adjusted market values.



# VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

## PRIVATE REAL ASSETS LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date <sup>1</sup>	Outstanding Commitment <sup>1</sup>	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Brookfield Infrastructure Fund IV, LP	2019	10/21/2019	\$50,000,000	\$25,917,214	\$26,077,229	52%	\$2,511,321	\$24,677,746	\$27,189,067	\$1,271,853	5.9%	0.1x	1.05x
Harbourvest Real Assets Fund IV, LP	2019	7/15/2019	\$100,000,000	\$5,000,000	\$95,000,000	5%	\$986,842	\$7,869,050	\$8,855,892	\$3,855,892	57.4%	0.2x	1.77x
<b>Total VCERA Private Real Estate Program</b>	--		<b>\$150,000,000</b>	<b>\$30,917,214</b>	<b>\$121,077,229</b>	<b>21%</b>	<b>\$3,498,163</b>	<b>\$32,546,796</b>	<b>\$36,044,959</b>	<b>\$5,127,745</b>	<b>14.4%</b>	<b>0.11x</b>	<b>1.17x</b>

1. Includes recycled/recallable distributions received to date.

Note: Private Real Assets performance data is reported net of fees.

Performance shown is based on 3/31/2021 cash-adjusted market values.



# MANAGER DUE DILIGENCE

NEPC, LLC

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# DUE DILIGENCE MONITOR

The items below summarize the recent quarter's performance and any changes or announcements from the Plan's managers/products. A “-” indicates there were no material announcements. A “Yes” indicates there was an announcement and a brief summary is provided on the following pages. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determine if any action should be taken (by NEPC and/or by our clients). Events are rated: No Action, Watch, Hold, Client Review or Terminate. NEPC's recommendation in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data) is refreshed quarterly.

Investment Options	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
BlackRock Russell 1000 Index	-	-	-	-	
Western U.S. Index Plus	-	-	-	-	Loss of Personnel: Harris Trifon (Co-Head of Mortgage and Consumer Credit)
BlackRock Russell 2500 Index	-	-	-	-	
BlackRock MSCI ACWI ex-U.S. Index	-	-	-	-	
Sprucegrove	Top Quartile	-	-	-	
Hexavest	Bottom Quartile	Yes	FYI	Watch (Board Driven)	On Watch for Performance Issues
Walter Scott	Bottom Quartile	Yes	FYI	-	
BlackRock MSCI ACWI Index	-	-	-	-	
Adams Street	N/A	-	-	-	
HarbourVest	N/A	-	-	-	
Pantheon	N/A	-	-	-	
Drive	N/A	-	-	-	
Abbott Secondary Opps.	N/A	-	-	-	
Carval Credit Value	N/A	-	-	-	
PIMCO PIF	N/A	-	-	-	
Bridge Debt Strategies	N/A	-	-	-	
BlackRock U.S. Debt Fund	Bottom Quartile	-	-	-	
Western	Bottom Quartile	-	-	-	
Reams	Top Quartile	-	-	-	



# DUE DILIGENCE MONITOR

	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
Loomis Sayles Strategic Alpha	-	-	-	-	
Loomis Sayles Multi-Sector Full Discretion	-	-	-	-	
Reams 10-Year Treasuries	-	-	-	-	
Monroe	-	-	-	-	
BlueBay	-	-	-	-	
Prudential	N/A	-	-	-	
UBS	N/A	-	Watch	Watch	
Bridgewater	N/A	Yes	No Action	-	
Tortoise	N/A	-	Watch	-	Acquisition of Advisory Research Team
Parametric/Clifton	N/A	-	Watch	-	Morgan Stanley Acquisition of Eaton Vance

## NEPC Due Diligence Committee Recommendation Key

No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot participate in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with an Investment Manager; manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



# DUE DILIGENCE MONITOR

The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Bridgewater All Weather	Yes	No Action

## Manager Changes/Announcements

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

Bridgewater Associates (the "Firm")'s Chief Executive Officer David McCormick has recently announced the creation of three additional committees (in addition to the Executive Committee and the partnership), namely the Investment, Commercial and Business Strategy, and Operating Committees. Senior members of the Firm, who had been involved in various leadership roles, make up these new entities.

Importantly, the Investment Committee ("IC")'s will include investment leaders across the Firm. NEPC Research sees this expansion as a positive both from a talent retention/alignment of interests, collaborative decision-making, and idea generation points of view. As a reminder, the three current Chief Investment Officers, Ray Dalio, Bob Prince, and Greg Jensen, had essentially made up the original IC unit. A 'second-in-command' layer constituted of eight to ten senior members who are leaders in their respective working groups (that ranged from research and trading to general management) assisted the trio in managing Bridgewater's strategies. NEPC Research viewed these individuals as a pool of candidates for potential succession planning so we are comforted by their formal inclusion into the IC and think this move should be beneficial for the overall investment process.

A legend key to our recommendations is provided below.

## NEPC Due Diligence Committee Recommendation Key

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Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



# DUE DILIGENCE MONITOR

The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Hexavest International Equity	Yes	FYI

## Manager Changes/Announcements

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

Hexavest Inc. notified NEPC on March 1, 2021 that they have ended their partnership with Eaton Vance Corp. The partnership has been in effect since Eaton Vance acquired 49% of Hexavest's shares in August 2012. As a result of the 2012 transaction, a holding company (Holdco) controlled by Hexavest employees was established to hold 51% of the firm's shares, with Eaton Vance holding a 49% minority ownership interest as well as acting as the distribution representative for Hexavest's investment strategies outside Canada. As Eaton Vance will no longer handle Hexavest's U.S. distribution, they will take that responsibility inhouse. With the announcement of Morgan Stanley's acquisition of Eaton Vance, Hexavest decided the time was right to reassess the mutual benefits of the partnership. Morgan Stanley indicated to them during their discussion that they had no interest in holding a minority ownership share in a small Canadian firm. As a result, it was agreed that Holdco will buy back the Hexavest shares held by Eaton Vance. Hexavest repurchased the shares without debt using Holdco's retained dividends. According to the manager they are in discussion with another Canadian firm as potential partners. Although it is not clear whether they will have a majority -, minority ownership or if they will be seed investors in some of Hexavest's strategies.

A legend key to our recommendations is provided below.

NEPC Due Diligence Committee Recommendation Key	
No Action	Informational items have surfaced; no action is recommended.
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Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



# DUE DILIGENCE MONITOR

The items below summarize any changes or announcements from your Plan managers/funds. A "Yes" indicates there was an announcement and a brief summary is provided separately. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
Walter Scott International Equity	Yes	No Action

## Manager Changes/Announcements

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

DD FYI Walter Scott notified NEPC Research that Yuanli Chen will be leaving the firm and industry completely for personal reason. This came as a surprise to Walter Scott especially since they just announced her promotion to be part of the Investment Management Committee in recognition of her contribution over 15 years she was with the firm. The Investment Management Committee will revert back to having three original members before the addition; Ms. Chen's stock coverage will be absorbed by the broader team. There is a non-compete in place though the firm will not be enforcing it since she is leaving the industry altogether to attend to her personal matters. A bit of a strange situation but given the personal nature, the short duration of her appointment as an Investment Executive, and the appropriate reallocation of her stock coverage we do not have major concerns and recommend No Action.

A legend key to our recommendations is provided below.

NEPC Due Diligence Committee Recommendation Key	
No Action	Informational items have surfaced; no action is recommended.
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Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
<b>Total Fund</b>	<b>13.6</b>	<b>18.7</b>	<b>-3.6</b>	<b>16.0</b>	<b>8.6</b>	<b>-0.9</b>	<b>6.3</b>	<b>18.1</b>	<b>14.0</b>	<b>0.3</b>	<b>15.1</b>
Policy Index	<u>14.4</u>	<u>20.7</u>	<u>-3.6</u>	<u>16.3</u>	<u>8.4</u>	<u>0.8</u>	<u>6.8</u>	<u>17.2</u>	<u>12.9</u>	<u>0.5</u>	<u>13.2</u>
Over/Under	<u>-0.8</u>	<u>-2.0</u>	<u>0.0</u>	<u>-0.3</u>	<u>0.2</u>	<u>-1.7</u>	<u>-0.5</u>	<u>0.9</u>	<u>1.1</u>	<u>-0.2</u>	<u>1.9</u>
60% MSCI ACWI (Net) / 40% FTSE WGBI	14.5	18.2	-5.8	17.1	5.5	-2.6	2.3	11.4	10.3	-1.8	10.0
60% S&P 500 / 40% BBgBarc Aggregate	14.7	22.2	-2.3	14.2	8.3	1.3	10.6	17.6	11.3	4.7	12.1
<b>Total Fund ex Parametric*</b>	<b>13.1</b>	<b>18.4</b>	<b>-3.7</b>	<b>15.9</b>	<b>8.6</b>	<b>-0.9</b>	<b>6.3</b>	<b>17.8</b>	<b>13.7</b>	<b>0.6</b>	<b>14.5</b>
<b>Total Fund ex Private Equity</b>	<b>12.7</b>	<b>19.6</b>	<b>-4.8</b>	<b>15.0</b>	<b>8.6</b>	<b>-1.4</b>	<b>6.1</b>	<b>16.2</b>	<b>13.3</b>	--	--
Policy Index	<u>14.4</u>	<u>20.7</u>	<u>-3.6</u>	<u>16.3</u>	<u>8.4</u>	<u>0.8</u>	<u>6.8</u>	<u>17.2</u>	<u>12.9</u>	<u>0.5</u>	<u>13.2</u>
Over/Under	<u>-1.7</u>	<u>-1.1</u>	<u>-1.2</u>	<u>-0.4</u>	<u>0.2</u>	<u>-2.2</u>	<u>-0.7</u>	<u>-1.0</u>	<u>0.4</u>		
<b>Total US Equity</b>	<b>20.5</b>	<b>31.6</b>	<b>-5.0</b>	<b>21.4</b>	<b>13.0</b>	<b>0.5</b>	<b>12.5</b>	<b>34.0</b>	<b>16.9</b>	<b>0.9</b>	<b>18.5</b>
Russell 3000	<u>20.9</u>	<u>31.0</u>	<u>-5.2</u>	<u>21.1</u>	<u>12.7</u>	<u>0.4</u>	<u>12.4</u>	<u>33.5</u>	<u>16.4</u>	<u>1.1</u>	<u>17.5</u>
Over/Under	<u>-0.4</u>	<u>0.6</u>	<u>0.2</u>	<u>0.3</u>	<u>0.3</u>	<u>0.1</u>	<u>0.1</u>	<u>0.5</u>	<u>0.5</u>	<u>-0.2</u>	<u>1.0</u>
Western U.S. Index Plus	<b>17.9</b>	<b>33.5</b>	<b>-5.3</b>	<b>22.7</b>	<b>13.8</b>	<b>1.1</b>	<b>14.2</b>	<b>32.9</b>	<b>20.7</b>	<b>1.0</b>	<b>24.7</b>
S&P 500	<u>18.4</u>	<u>31.5</u>	<u>-4.4</u>	<u>21.8</u>	<u>12.0</u>	<u>1.4</u>	<u>13.7</u>	<u>32.4</u>	<u>16.0</u>	<u>2.1</u>	<u>15.1</u>
Over/Under	<u>-0.5</u>	<u>2.0</u>	<u>-0.9</u>	<u>0.9</u>	<u>1.8</u>	<u>-0.3</u>	<u>0.5</u>	<u>0.5</u>	<u>4.7</u>	<u>-1.1</u>	<u>9.6</u>
Blackrock Russell 1000 Index	<b>21.0</b>	<b>31.4</b>	<b>-4.7</b>	--	--	--	--	--	--	--	--
Russell 1000	<u>21.0</u>	<u>31.4</u>	<u>-4.8</u>	<u>21.7</u>	<u>12.1</u>	<u>0.9</u>	<u>13.2</u>	<u>33.1</u>	<u>16.4</u>	<u>1.5</u>	<u>16.1</u>
Over/Under	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>								
Blackrock Russell 2500 Index	<b>20.0</b>	<b>27.8</b>	<b>-9.9</b>	--	--	--	--	--	--	--	--
Russell 2500	<u>20.0</u>	<u>27.8</u>	<u>-10.0</u>	<u>16.8</u>	<u>17.6</u>	<u>-2.9</u>	<u>7.1</u>	<u>36.8</u>	<u>17.9</u>	<u>-2.5</u>	<u>26.7</u>
Over/Under	<u>0.0</u>	<u>0.0</u>	<u>0.1</u>								



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
<b>Total Non-US Equity</b>	<b>9.3</b>	<b>21.0</b>	<b>-13.0</b>	<b>26.5</b>	<b>6.6</b>	<b>-4.8</b>	<b>-3.6</b>	<b>16.3</b>	<b>17.9</b>	<b>-13.6</b>	<b>13.5</b>
MSCI ACWI ex USA	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2
Over/Under	-1.4	-0.5	1.2	-0.7	2.1	0.9	0.3	1.0	1.1	0.1	2.3
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
<b>BlackRock ACWI ex-U.S. Index</b>	<b>11.2</b>	<b>21.9</b>	<b>-14.6</b>	<b>28.1</b>	<b>4.7</b>	<b>-4.5</b>	<b>-3.8</b>	<b>16.0</b>	<b>17.2</b>	<b>-14.1</b>	<b>12.8</b>
MSCI ACWI ex USA IMI	11.1	21.6	-14.8	27.8	4.4	-4.6	-3.9	15.8	17.0	-14.3	12.7
Over/Under	0.1	0.3	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.1
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
<b>Sprucegrove</b>	<b>4.0</b>	<b>17.3</b>	<b>-13.8</b>	<b>27.5</b>	<b>11.9</b>	<b>-9.1</b>	<b>-3.2</b>	<b>17.1</b>	<b>17.2</b>	<b>-10.7</b>	<b>18.8</b>
MSCI ACWI ex USA	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2
Over/Under	-6.7	-4.2	0.4	0.3	7.4	-3.4	0.7	1.8	0.4	3.0	7.6
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
<b>Hexavest</b>	<b>-4.3</b>	<b>16.5</b>	<b>-11.3</b>	<b>17.4</b>	<b>3.8</b>	<b>-1.4</b>	<b>-4.3</b>	<b>20.2</b>	<b>13.7</b>	<b>-9.6</b>	--
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
Over/Under	-12.1	-5.5	2.5	-7.6	2.8	-0.6	0.6	-2.6	-3.6	2.5	
MSCI EAFE NR LCL	0.8	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8
<b>Walter Scott</b>	<b>20.4</b>	<b>27.5</b>	<b>-7.1</b>	<b>26.6</b>	<b>5.1</b>	<b>-0.4</b>	<b>-3.5</b>	<b>11.8</b>	<b>20.4</b>	<b>-9.3</b>	--
MSCI ACWI ex USA	10.7	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2
Over/Under	9.7	6.0	7.1	-0.6	0.6	5.3	0.4	-3.5	3.6	4.4	
MSCI ACWI ex USA NR LCL	6.0	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6
MSCI EAFE	7.8	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8
<b>Total Global Equity</b>	<b>16.7</b>	<b>27.1</b>	<b>-9.0</b>	<b>24.5</b>	<b>9.0</b>	<b>-3.8</b>	<b>1.9</b>	<b>22.0</b>	<b>14.4</b>	<b>-3.9</b>	<b>11.4</b>
MSCI ACWI	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1	-7.3	12.7
Over/Under	0.4	0.5	0.4	0.5	1.1	-1.4	-2.3	-0.8	-1.7	3.4	-1.3
<b>BlackRock MSCI ACWI Equity Index</b>	<b>16.7</b>	<b>27.1</b>	<b>-9.0</b>	<b>24.5</b>	<b>8.4</b>	<b>-2.0</b>	<b>4.6</b>	<b>23.2</b>	--	--	--
MSCI ACWI	16.3	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1	-7.3	12.7
Over/Under	0.4	0.5	0.4	0.5	0.5	0.4	0.4	0.4			



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
<b>Total Private Equity</b>	<b>24.5</b>	<b>8.3</b>	<b>18.7</b>	<b>16.9</b>	<b>7.6</b>	<b>14.7</b>	<b>19.0</b>	<b>17.9</b>	<b>10.3</b>	--	--
Private Equity Benchmark	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.8</u>	<u>16.0</u>	<u>3.5</u>	<u>15.8</u>	<u>37.4</u>	<u>19.8</u>	<u>4.1</u>	<u>21.0</u>
Over/Under	0.0	<u>-26.6</u>	21.1	<u>-7.9</u>	<u>-8.4</u>	11.2	3.2	<u>-19.5</u>	<u>-9.5</u>		
CJA Global All PE (Qtr Lag)	15.0	7.8	16.4	15.9	8.5	7.0	16.3	15.9	13.0	12.6	17.1
<b>Adams Street Global Fund Series</b>	<b>26.9</b>	<b>4.1</b>	<b>19.6</b>	<b>13.4</b>	<b>7.1</b>	<b>10.3</b>	<b>19.6</b>	<b>15.7</b>	<b>10.8</b>	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	2.4	<u>-30.8</u>	22.0	<u>-11.3</u>	<u>-9.0</u>	6.8	3.7	<u>-21.8</u>	<u>-9.1</u>		
<b>Harbourvest</b>	<b>19.6</b>	<b>12.2</b>	<b>22.7</b>	<b>23.2</b>	<b>6.7</b>	<b>28.5</b>	<b>18.5</b>	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>-4.9</u>	<u>-22.7</u>	25.1	<u>-1.5</u>	<u>-9.4</u>	25.0	2.6				
<b>Pantheon Global Secondary Funds</b>	<b>6.4</b>	<b>-0.4</b>	<b>17.3</b>	<b>24.1</b>	<b>15.5</b>	<b>6.4</b>	<b>16.7</b>	<b>14.9</b>	<b>0.9</b>	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>-18.1</u>	<u>-35.3</u>	19.7	<u>-0.6</u>	<u>-0.6</u>	2.9	0.8	<u>-22.6</u>	<u>-19.0</u>		
<b>Drive Capital Fund II</b>	<b>12.3</b>	<b>53.0</b>	<b>-2.5</b>	<b>-33.1</b>	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>-12.2</u>	18.1	<u>-0.1</u>	<u>-58.4</u>							
<b>Abbott Secondary Opportunities</b>	<b>40.5</b>	<b>8.9</b>	<b>26.0</b>	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	16.0	<u>-26.0</u>	28.4								
<b>Clearlake Capital Partners V</b>	<b>27.8</b>	<b>50.2</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	3.3	15.3									
<b>Battery Ventures XII</b>	<b>46.7</b>	<b>5.7</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	22.2	<u>-29.2</u>									
<b>Insight Venture Partners X</b>	<b>46.2</b>	<b>21.4</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	21.7	<u>-13.5</u>									
<b>GTCR Fund XII</b>	<b>55.6</b>	<b>-18.8</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	31.1	<u>-53.7</u>									
<b>Buenaventure One, LLC</b>	<b>17.7</b>	<b>6.7</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>-6.8</u>	<u>-28.2</u>									
<b>ECI 11</b>	<b>20.8</b>	<b>34.2</b>	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>24.5</u>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>
Over/Under	<u>-3.7</u>	<u>-0.7</u>									



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Buenaventure Two, LLC	16.0	16.8	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-8.5	-18.1									
The Resolute Fund IV L.P.	42.2	81.6	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	17.7	46.7									
GGV Capital VII L.P.	9.7	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-14.8										
GGV Discovery II, L.P.	11.2	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-13.3										
Drive Capital Overdrive Fund I	45.4	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	20.9										
Riverside Micro Cap Fund V, LP	1.7	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-22.8										
GGV Capital VII Plus, LP	15.7	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-8.8										
Astorg VII L.P.	62.3	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	37.8										
M/C Partners Fund VIII LP. Limited Partnership	-35.1	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-59.6										
Genstar Capital Partners IX	27.1	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	2.6										
Genstar IX Opportunities Fund I	12.6	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-11.9										
ABRY Partners IX, LP	-15.0	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-39.5										



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Advent International GPE IX LP	29.0	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	4.5										
Drive Capital Fund III LP	-9.0	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-33.5										
Oak HC/FT Partners III LP	3.2	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-21.3										
TA XIII A LP	1.9	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under	-22.6										
Dover Street X, LP	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Hellman & Friedman CP IX	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Clearlake Capital Partners VI	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Flexpoint Fund IV	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Battery Ventures XIII	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Green Equity Investors VIII, L.P.	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
CapVest Private Equity Partners IV, SCSp	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
Great Hill Equity Partners VII	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											



**Ventura County Employees' Retirement Association**

# **TOTAL FUND CALENDAR YEAR RETURN SUMMARY**

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Vitruvian Investment Partners IV	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											
CRV XVIII, L.P.	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	24.5	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4
Over/Under											



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total US Fixed Income	11.1	8.5	0.0	4.4	4.9	0.3	3.0	-0.1	9.6	7.3	10.6
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
Over/Under	3.6	-0.2	0.0	0.9	2.3	-0.2	-3.0	1.9	5.4	-0.5	4.1
BlackRock U.S. Debt Fund	7.6	8.7	0.0	3.6	2.7	0.6	6.2	-2.0	4.3	7.9	6.7
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
Over/Under	0.1	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.2
Western	10.9	10.6	-0.6	6.0	4.1	0.9	7.4	-1.2	9.7	7.3	11.3
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
Over/Under	3.4	1.9	-0.6	2.5	1.5	0.4	1.4	0.8	5.5	-0.5	4.8
Reams	12.0	6.6	0.7	2.5	6.0	0.3	-3.6	2.5	10.0	8.4	10.0
Reams Custom Index	0.6	2.4	2.4	1.3	0.7	0.3	0.2	-0.5	4.2	7.8	6.5
Over/Under	11.4	4.2	-1.7	1.2	5.3	0.0	-3.8	3.0	5.8	0.6	3.5
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
3-Month LIBOR + 3%	3.6	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4
Loomis Strategic Alpha	10.9	4.3	0.6	3.3	6.1	-1.0	2.4	--	--	--	--
BBgBarc US Aggregate TR	7.5	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5
Over/Under	3.4	-4.4	0.6	-0.2	3.5	-1.5	-3.6	--	--	--	--
3-Month LIBOR + 3%	3.6	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4
Loomis Sayles Multi Strategy	12.9	9.4	-0.8	8.4	8.2	-2.3	6.8	1.4	16.7	4.2	13.6
Loomis Custom Index	7.3	10.2	-0.6	4.5	7.0	-1.2	4.6	0.8	7.5	7.1	8.7
Over/Under	5.6	-0.8	-0.2	3.9	1.2	-1.1	2.2	0.6	9.2	-2.9	4.9
BBgBarc US Govt/Credit TR	8.9	9.7	-0.4	4.0	3.0	0.1	6.0	-2.4	4.8	8.7	6.6
Treasuries	11.4	--	--	--	--	--	--	--	--	--	--
Reams 10-Year Treasuries	11.4	--	--	--	--	--	--	--	--	--	--
BBgBarc US Treasury 7-10 Yr TR	10.0	8.5	0.9	2.6	1.1	1.6	9.0	-6.0	4.2	15.6	9.4
Over/Under		1.4									



## Ventura County Employees' Retirement Association

# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
<b>Private Debt</b>	<b>7.1</b>	<b>8.4</b>	<b>4.7</b>	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	1.0	-4.9	3.6								
<b>CVI Credit Value Fund IV</b>	<b>2.1</b>	<b>7.1</b>	<b>4.6</b>	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	-4.0	-6.2	3.5								
<b>Monroe Capital Private Credit Fund III</b>	<b>11.2</b>	<b>11.2</b>	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	5.1	-2.1									
<b>Bluebay Direct Lending Fund III</b>	<b>7.1</b>	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	1.0										
<b>Pimco Private Income Fund</b>	<b>11.3</b>	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	5.2										
<b>Bridge Debt Strategies III Limited Partner</b>	<b>2.6</b>	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under	-3.5										
<b>PIMCO Corp Opps Fund III</b>	--	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under											
<b>Torchlight Debt Fund VII, L.P.</b>	--	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	6.1	13.3	1.1	--	--	--	--	--	--	--	--
Over/Under											



## Ventura County Employees' Retirement Association

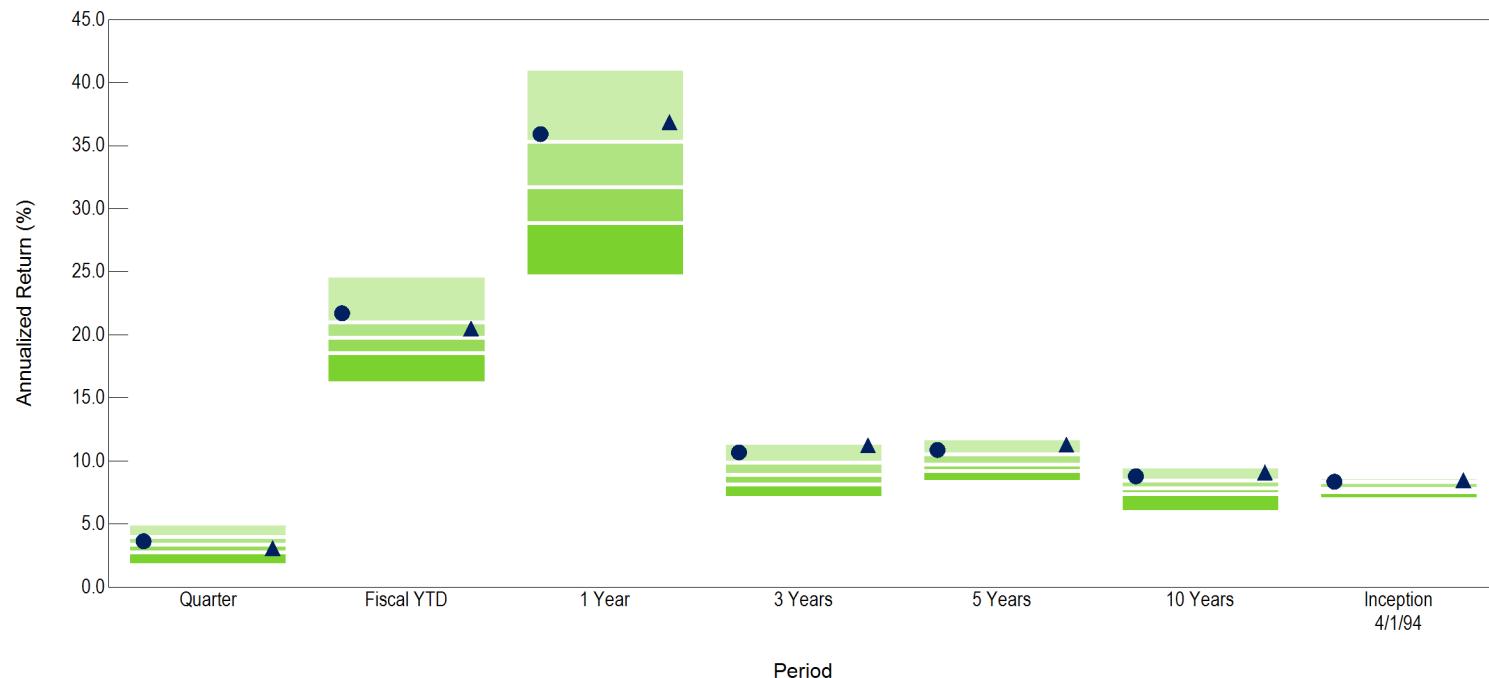
# TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
<b>Total Real Estate</b>	<b>-2.7</b>	<b>0.3</b>	<b>6.9</b>	<b>5.9</b>	<b>6.8</b>	<b>12.8</b>	<b>11.6</b>	<b>10.6</b>	<b>9.1</b>	<b>14.4</b>	<b>15.4</b>
NCREIF ODCE Net	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3
Over/Under	-3.0	-4.1	-0.5	-0.8	-1.0	-1.2	0.1	-2.3	-0.7	-0.6	0.1
<b>Prudential Real Estate</b>	<b>2.1</b>	<b>5.9</b>	<b>8.2</b>	<b>7.0</b>	<b>8.2</b>	<b>14.5</b>	<b>12.5</b>	<b>13.8</b>	<b>8.8</b>	<b>18.0</b>	<b>17.2</b>
NCREIF ODCE Net	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3
Over/Under	1.8	1.5	0.8	0.3	0.4	0.5	1.0	0.9	-1.0	3.0	1.9
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
<b>UBS Real Estate</b>	<b>-4.7</b>	<b>-2.8</b>	<b>6.2</b>	<b>5.4</b>	<b>6.2</b>	<b>11.9</b>	<b>10.6</b>	<b>9.3</b>	<b>9.0</b>	<b>12.1</b>	<b>15.9</b>
NCREIF ODCE Net	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3
Over/Under	-5.0	-7.2	-1.2	-1.3	-1.6	-2.1	-0.9	-3.6	-0.8	-2.9	0.6
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
<b>LaSalle Income + Growth VIII Limited Partnership</b>	--	--	--	--	--	--	--	--	--	--	--
NCREIF ODCE Net	0.3	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3
Over/Under											
NCREIF ODCE	1.2	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4
<b>Total Real Assets</b>	<b>0.0</b>	<b>14.4</b>	<b>-7.3</b>	<b>7.2</b>	<b>11.7</b>	<b>-13.8</b>	<b>10.2</b>	--	--	--	--
Real Assets Index	3.4	5.3	6.0	6.2	6.2	4.8	4.8	28.8	5.4	8.8	--
Over/Under	-3.4	9.1	-13.3	1.0	5.5	-18.6	5.4				
<b>Bridgewater All Weather Fund</b>	<b>9.6</b>	<b>16.7</b>	<b>-5.0</b>	<b>11.9</b>	<b>10.0</b>	<b>-6.8</b>	<b>7.6</b>	--	--	--	--
CPI + 5% (Unadjusted)	6.4	7.4	7.0	7.2	7.2	5.8	5.8	--	--	--	--
Over/Under	3.2	9.3	-12.0	4.7	2.8	-12.6	1.8				
<b>Tortoise Energy Infrastructure</b>	<b>-29.4</b>	<b>8.0</b>	<b>-13.3</b>	<b>-3.5</b>	<b>15.9</b>	<b>-27.1</b>	<b>15.7</b>	--	--	--	--
Tortoise MLP Index	-27.9	10.9	-13.7	-5.7	21.0	-34.1	8.0	28.8	5.4	8.8	--
Over/Under	-1.5	-2.9	0.4	2.2	-5.1	7.0	7.7				
<b>Brookfield Infra Fund IV B LP</b>	--	--	--	--	--	--	--	--	--	--	--
CPI + 2% (Unadjusted)	3.4	4.3	3.9	4.1	4.1	2.7	2.8	3.5	3.8	5.0	3.5
Over/Under											
<b>Harbourvest Real Assets Fund IV L.P.</b>											
CPI + 2% (Unadjusted)	3.4	4.3	3.9	4.1	4.1	2.7	2.8	3.5	3.8	5.0	3.5
Over/Under											
<b>Overlay</b>											
Parametric											
Abbott Capital Cash											



# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net

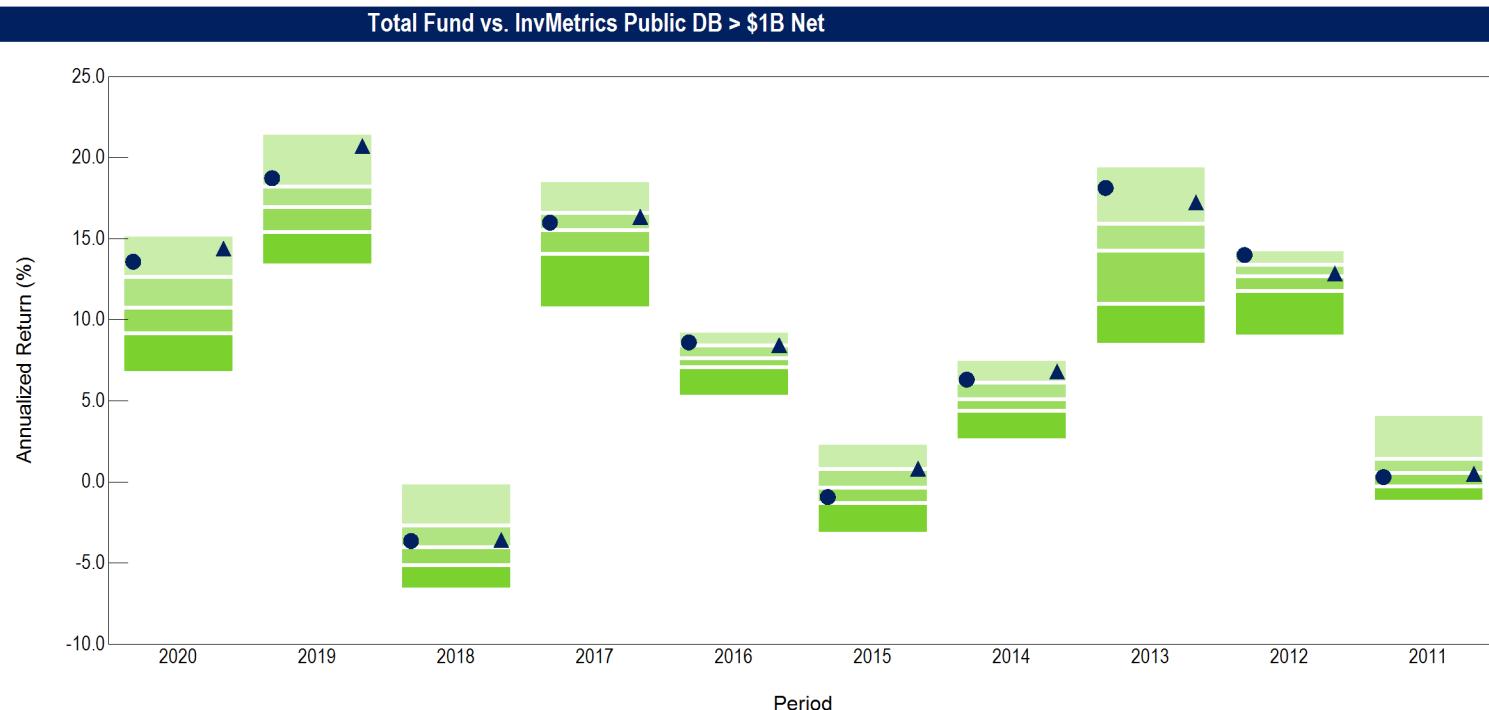


	Return (Rank)							
5th Percentile	5.0	24.6	41.1	11.4	11.8	9.6	8.7	
25th Percentile	4.0	21.0	35.4	9.9	10.6	8.4	8.4	
Median	3.4	19.8	31.7	8.9	9.7	7.9	7.8	
75th Percentile	2.8	18.6	28.9	8.2	9.3	7.4	7.6	
95th Percentile	1.7	16.2	24.6	7.1	8.4	6.0	7.0	
# of Portfolios	83	83	83	83	83	75	36	
● Total Fund	3.6 (37)	21.7 (21)	35.9 (22)	10.7 (13)	10.9 (14)	8.8 (14)	8.4 (26)	
▲ Policy Index	3.1 (61)	20.5 (34)	36.9 (21)	11.3 (6)	11.3 (9)	9.1 (10)	8.5 (14)	



## Ventura County Employees' Retirement Association

# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



Return (Rank)											
5th Percentile	15.2	21.5	-0.1	18.6	9.3	2.4	7.6	19.5	14.3	4.2	
25th Percentile	12.7	18.2	-2.7	16.6	8.4	0.8	6.1	16.0	13.4	1.5	
Median	10.8	17.0	-4.0	15.6	7.7	-0.4	5.1	14.3	12.7	0.6	
75th Percentile	9.2	15.4	-5.1	14.1	7.1	-1.3	4.4	11.0	11.8	-0.3	
95th Percentile	6.8	13.4	-6.6	10.7	5.3	-3.2	2.6	8.5	9.0	-1.2	
# of Portfolios	80	69	63	61	62	57	55	48	44	42	
● Total Fund	13.6	(14)	18.7	(17)	-3.6	(42)	16.0	(37)	8.6	(10)	
▲ Policy Index	14.4	(12)	20.7	(9)	-3.6	(41)	16.3	(29)	8.4	(25)	



# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net

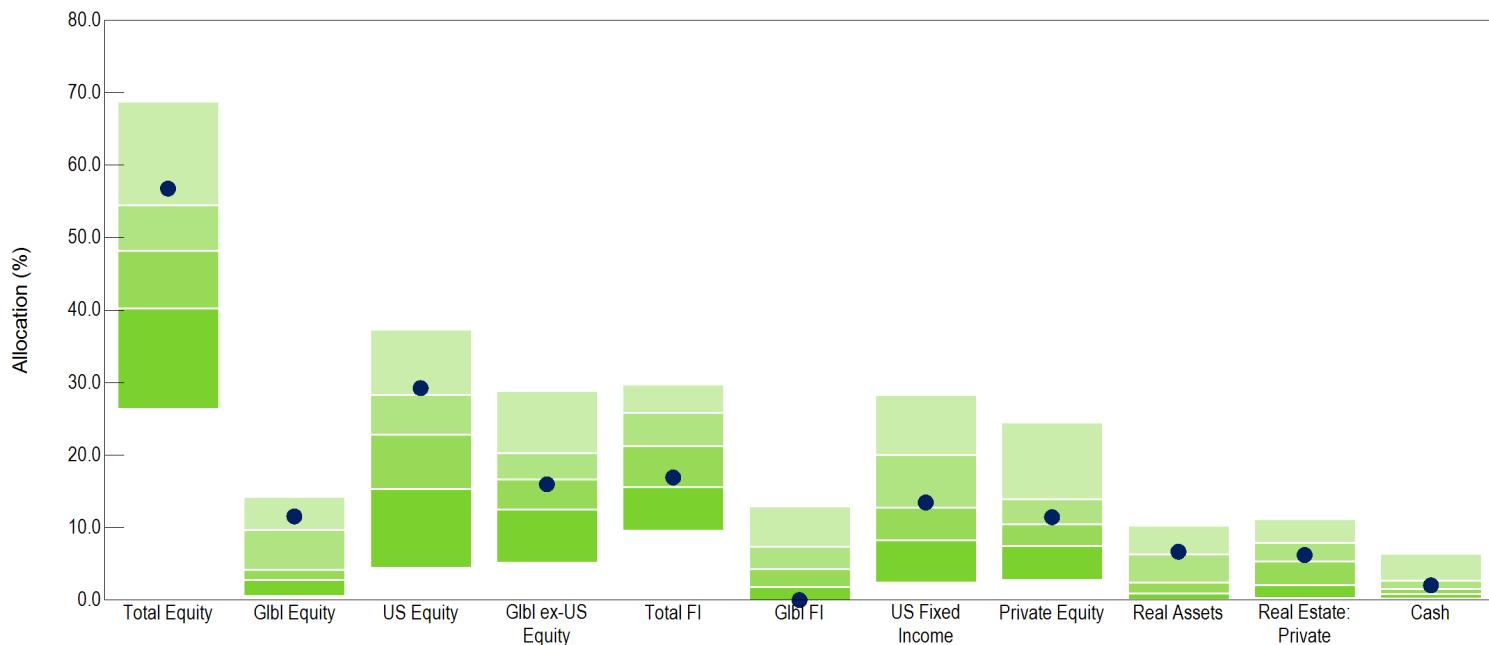


	Return (Rank)					
5th Percentile	4.2	7.7	10.5	14.9	2.7	11.8
25th Percentile	2.6	6.3	8.8	13.7	0.8	10.6
Median	1.3	5.4	8.0	12.7	-0.5	9.7
75th Percentile	0.0	4.6	7.3	11.9	-1.2	9.3
95th Percentile	-2.2	3.5	6.5	9.2	-2.4	8.4
# of Portfolios	71	77	51	65	55	83
● Total Fund	2.5	(29)	7.0	(15)	12.6	(53)
▲ Policy Index	4.8	(2)	7.4	(7)	13.1	(37)



# TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvMetrics Public DB > \$1B Net



Allocation (Rank)

5th Percentile	68.8	14.2	37.3	28.9	29.7	12.9	28.3	24.5	10.3	11.2	6.4	--
25th Percentile	54.5	9.8	28.4	20.4	25.9	7.5	20.1	14.0	6.4	8.0	2.8	--
Median	48.3	4.3	22.9	16.7	21.3	4.4	12.9	10.6	2.5	5.4	1.7	--
75th Percentile	40.3	2.9	15.4	12.6	15.6	1.9	8.3	7.5	1.0	2.2	0.9	--
95th Percentile	26.4	0.7	4.5	5.3	9.7	0.0	2.5	2.9	0.1	0.4	0.3	--
# of Portfolios	60	31	43	56	60	24	41	53	32	47	60	--
● Total Fund	56.7	(20)	11.5	(10)	29.2	(22)	16.0	(55)	16.9	(69)	0.0	(96)



# APPENDIX

NEPC, LLC



# INVESTMENT GUIDELINES

- **Blackrock Russell 1000 Index Fund**
  - The Blackrock Russell 1000 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 1000 Index (large cap companies).
- **Blackrock Russell 2500 Index Fund**
  - The Blackrock Russell 2500 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 2500 Index (mid and small cap companies).
- **Western Asset Management Index Plus Separate Account**
  - The objective of the Portfolio is to maximize the long term total return in the Portfolio while providing a core domestic equity exposure to the Standard & Poor's ("S&P") 500 Index and managing Portfolio risk. The Manager shall aim to exceed the total return of the S&P 500 index with all dividends reinvested in the index by 75 basis points on an annualized basis over a full market cycle.
- **Blackrock MSCI ACWI ex-U.S. IMI Index Fund**
  - The BlackRock MSCI ACWI ex-U.S. IMI Index Fund shall be invested and reinvested in a portfolio of International Equity Securities whose total rates of return will approximate as closely as practicable the capitalization-weighted total rates of return of the equity markets of selected non-U.S. developed and emerging countries.
- **Blackrock MSCI ACWI Equity Index Fund**
  - The BlackRock MSCI ACWI Equity Index Fund shall be invested and reinvested primarily in a portfolio of U.S. Equity Securities and International Equity Securities with the objective of approximating as closely as practicable the capitalization-weighted total rates of return of the equity markets of the U.S., non-U.S. developed and emerging countries.
- **Hexavest EAFE Equity Fund**
  - The Fund seeks to provide investors with capital appreciation and income generation by using a top-down approach and investing primarily in equity and quasi equity securities located in Europe, Australasia and the Far East ("EAFE") and which form part of the MSCI EAFE Index. The Fund seeks to achieve a rate of return that will exceed that of the index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.



# INVESTMENT GUIDELINES

- **Sprucegrove U.S. International Pooled Fund**
  - The Fund seeks to maximize the long-term rate of return while seeking to preserve investment capital by investing primarily in equity and quasi-equity securities of companies with more value characteristics located in developed markets in the Europe, Australasia and the Far East ("EAFE") Index and to outperform the index, net of fees and achieve a high ranking relative to similar funds over a full market cycle.
- **Walter Scott & Partners International Fund**
  - The Fund will invest in equity securities that meet certain quantitative and qualitative investment criteria and will seek long-term capital appreciation. The Fund will tend to focus on those industries or sectors with more growth characteristics and experiencing upper quartile economic growth and may avoid industries which are in secular economic decline. The Fund seeks to outperform the MSCI Europe, Australasia and the Far East ("EAFE") Index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.
- **Blackrock U.S. Debt Index Fund**
  - The U.S. Debt Index Fund shall be invested and reinvested primarily in a portfolio of Debt Securities with the objective of approximating as closely as practicable the total rate of return of the market for Debt Securities as defined by the Bloomberg Barclays U.S. Aggregate Bond Index.
- **Western Asset Management Core Plus Fixed Income Separate Account**
  - The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The Fund will seek to outperform the Bloomberg Barclays U.S. Aggregate Index, net of fees, over a full market cycle.
- **Reams Unconstrained Fixed Income Separate Account**
  - The Portfolio will be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to maximize risk-adjusted total return by systematically pursuing relative value opportunities throughout all sectors of the fixed income market. The Portfolio will seek returns in excess of the Bloomberg/Barclays U.S Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.



# INVESTMENT GUIDELINES

- **Loomis, Sayles & Company Multisector Full Discretion Separate Account**
  - The fixed income portfolio should be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The return of the Manager should exceed that of the custom benchmark (30% of the rate of return of the Citigroup High-Yield Index, 5% of the rate of return of the J.P. Morgan Non-U.S. Hedged Bond Index and 65% of the rate of return of the Bloomberg Barclays U.S. Aggregate Bond Index), net of fees, over a full market cycle.
- **Loomis, Sayles & Company Strategic Alpha Fund**
  - The objective of the Fund is to provide absolute returns in excess of the Bloomberg/Barclays U.S. Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.
- **Reams 10-Year Treasuries**
  - The portfolio shall be invested in 10-Year U.S. Treasury Debt Securities with the objective of returning the rate of return on a 10-Year U.S. Treasury Debt Security.
- **Bridgewater Associates All Weather Portfolio**
  - The investment objective of the Fund is to seek to provide attractive returns with relatively limited risks, with no material bias to perform better or worse in any particular type of economic environment. In other words, the portfolio seeks to perform approximately as well in rising or falling inflation periods, or in periods of strong or weak economic growth. To achieve this objective, the Fund holds investments in different asset classes that have different biases to economic conditions. The Manager will seek to outperform the CPI + 4% (Unadjusted) benchmark net of fees over a full market cycle.
- **Tortoise Energy Infrastructure Master Limited Partnership**
  - The Manager will invest in master limited partnerships with an investment approach that emphasizes a long-term, buy-and-hold philosophy with low turnover in an effort to achieve a portfolio characterized by high current income, high growth and low volatility. The Manager invests primarily in long-haul pipelines and gathering & processing pipelines. The Manager will seek to outperform the Wells Fargo MLP Index net of fees over a full market cycle.



# INVESTMENT GUIDELINES

- **PGIM Real Estate Property Investment Separate Account**
  - PRISA is a broadly diversified equity real estate portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. The Fund's performance objective is to produce a total return each year that meets or exceeds the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") net of fees, while maintaining the benefits of a broadly diversified, core real estate portfolio.
- **UBS Realty Investors Trumbull Property Fund**
  - The Fund seeks to provide investors with strategic market access to high-quality private commercial real estate with the financial objective of providing superior risk-adjusted returns across the real estate cycles. Maximize the quality and growth of the Fund's income by acquiring and aggressively managing high quality assets in major US metropolitan markets to minimize risk through diversification by property type, geographic location and economic sector. The Fund's performance objective is to outperform the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") index net of fees, and a 5% real rate of return (inflation-adjusted return) over a full market cycle.

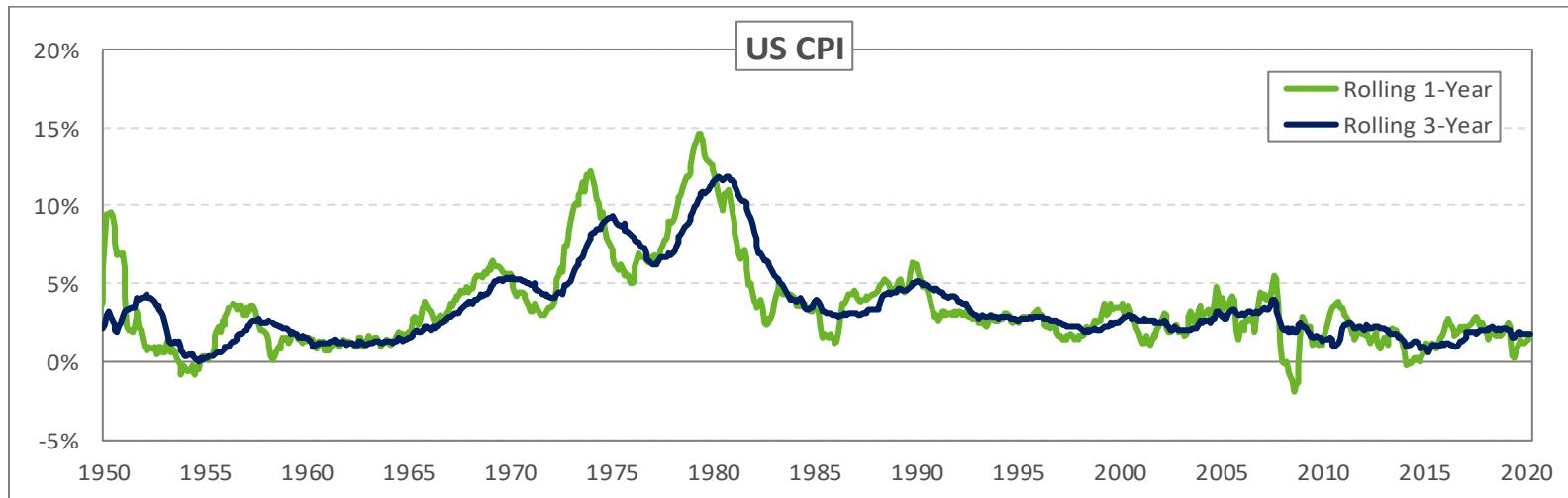


# MACRO

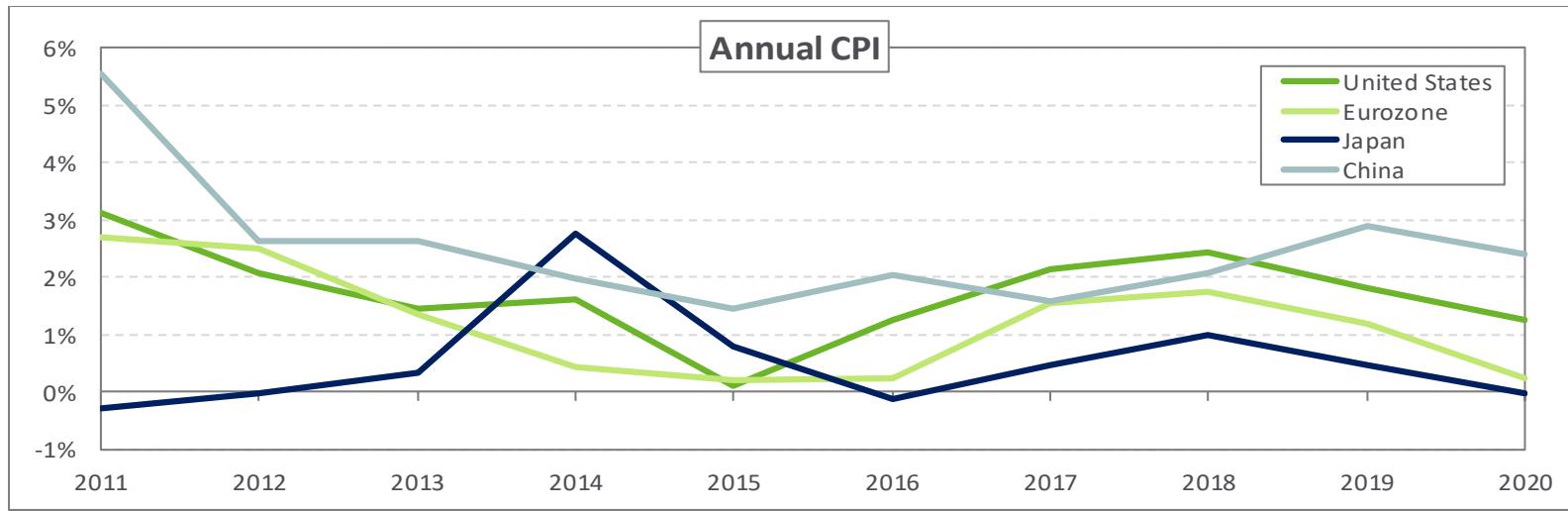
NEPC, LLC

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# INFLATION



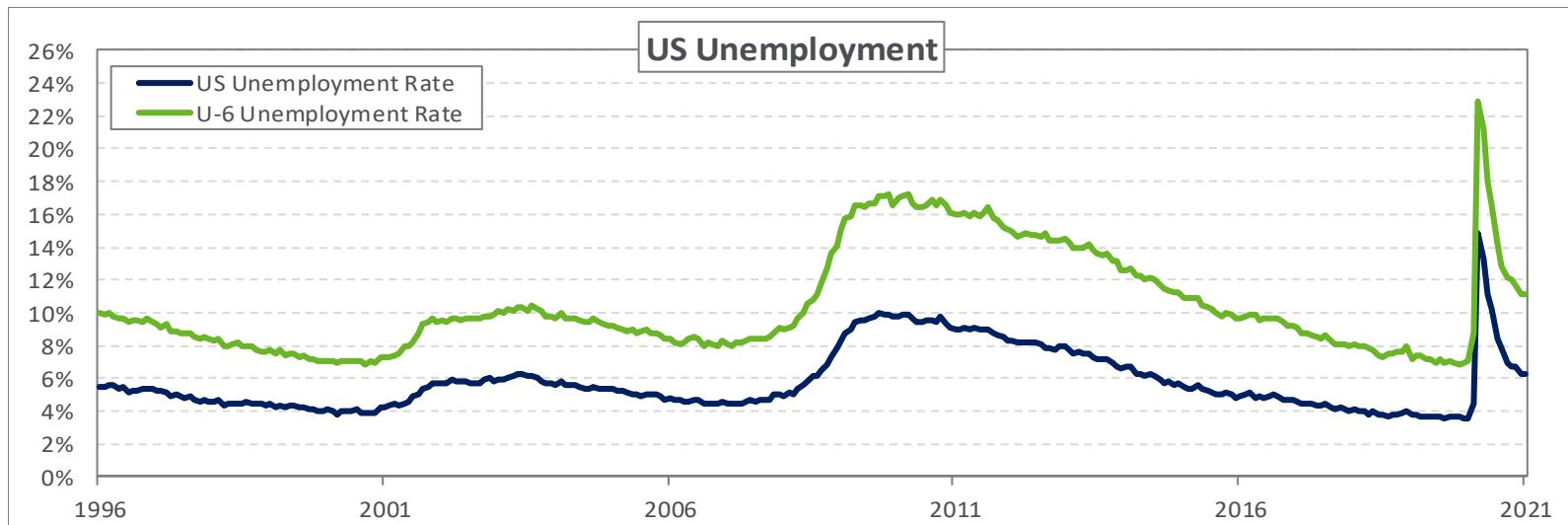
Source: Bureau of Labor Statistics, FactSet



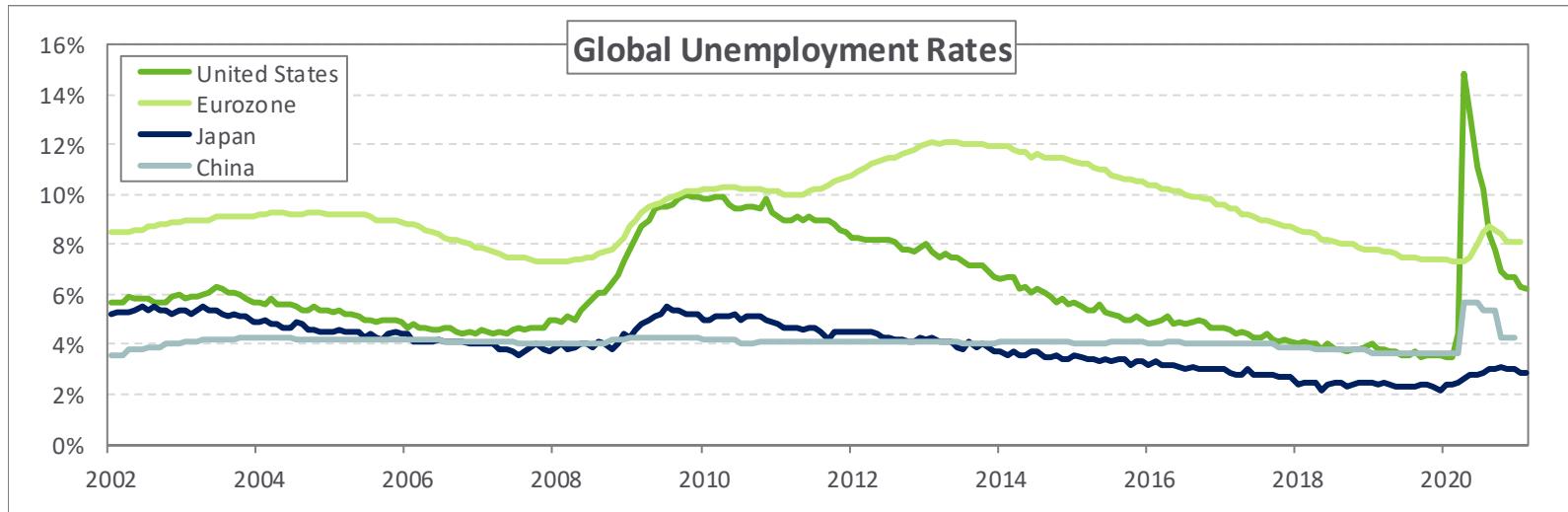
Source: FactSet



# UNEMPLOYMENT



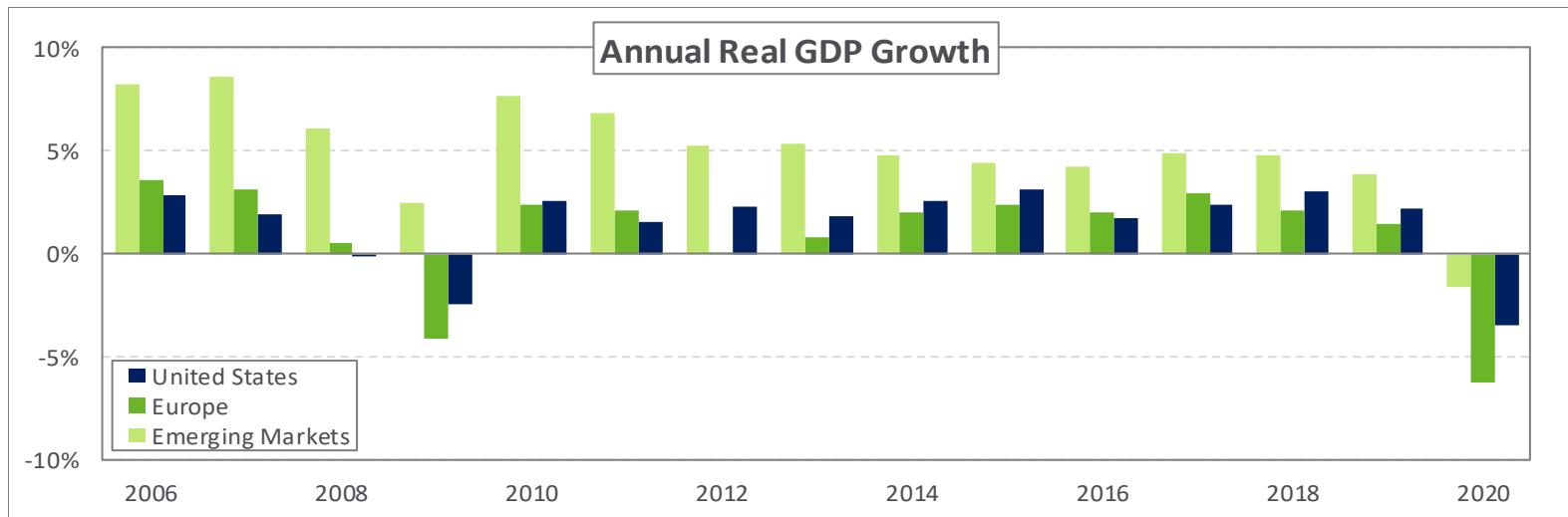
Source: FactSet



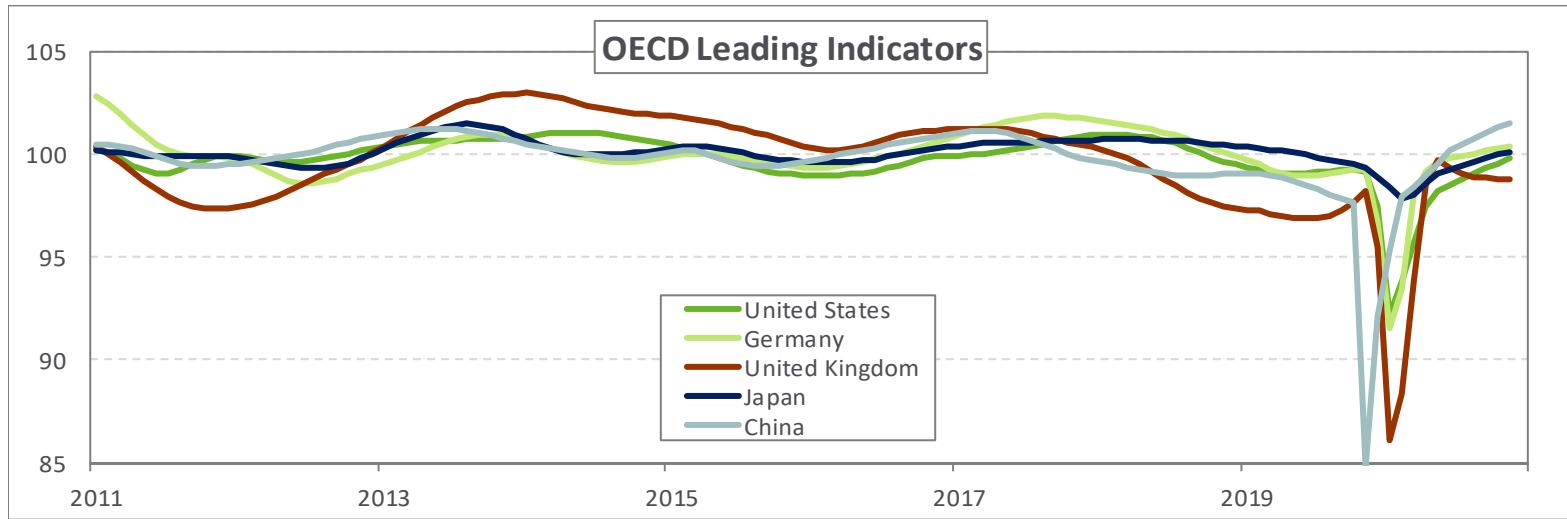
Source: FactSet



# ECONOMIC INDICATORS



Source: Bureau of Economic Analysis, Oxford Economics, FactSet



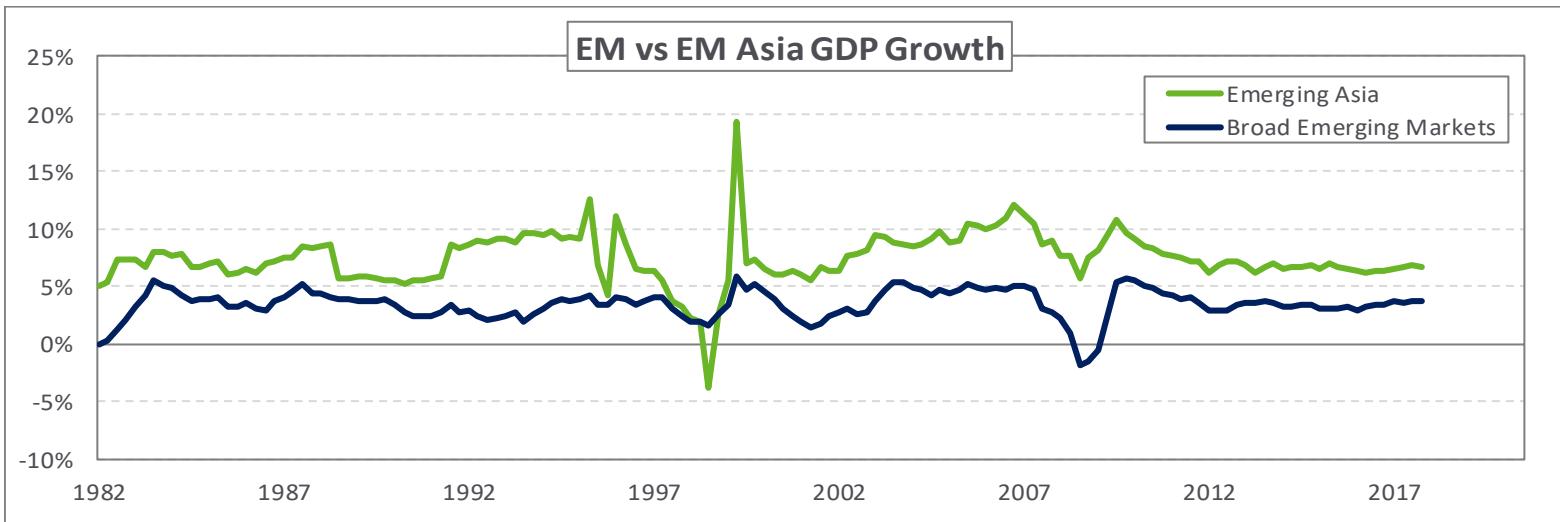
Source: OECD, FactSet



# GROSS DOMESTIC PRODUCT



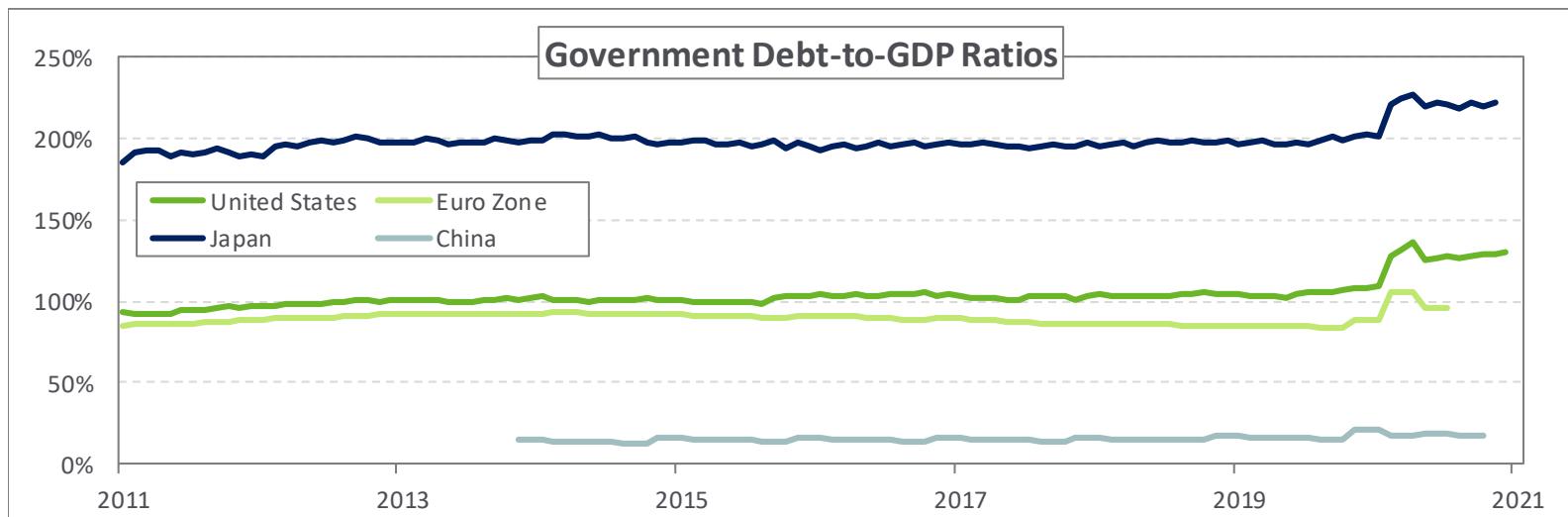
Source: Bureau of Economic Analysis, FactSet



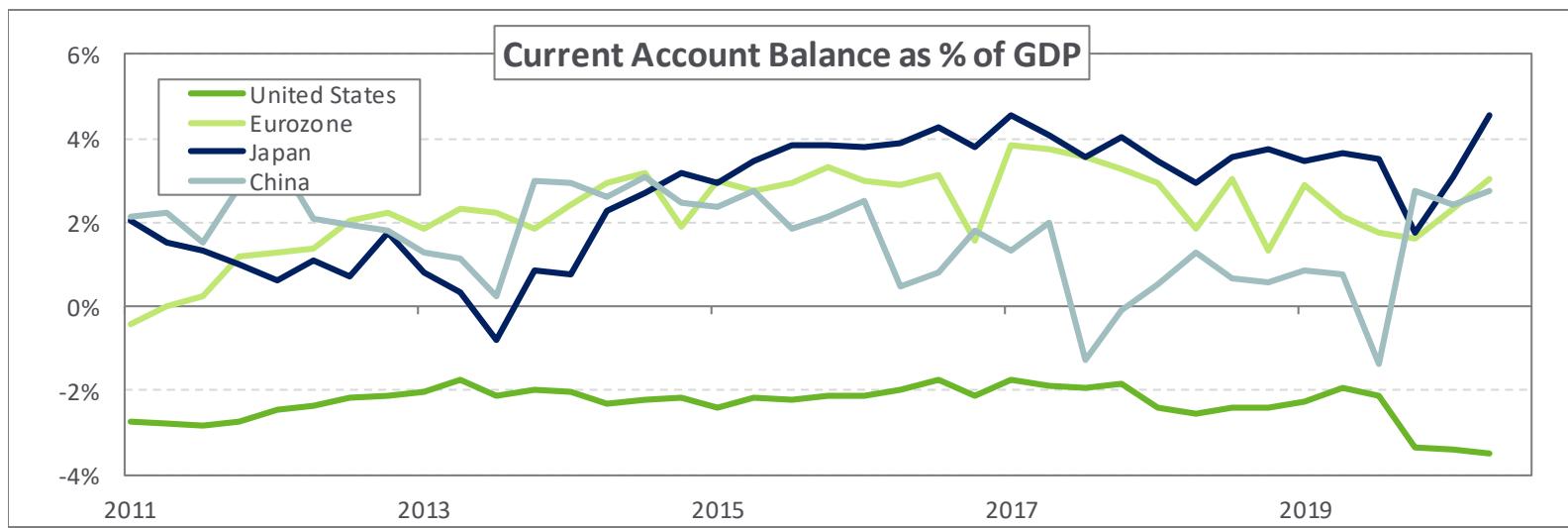
Source: IMF, FactSet



# GROSS DOMESTIC PRODUCT METRICS



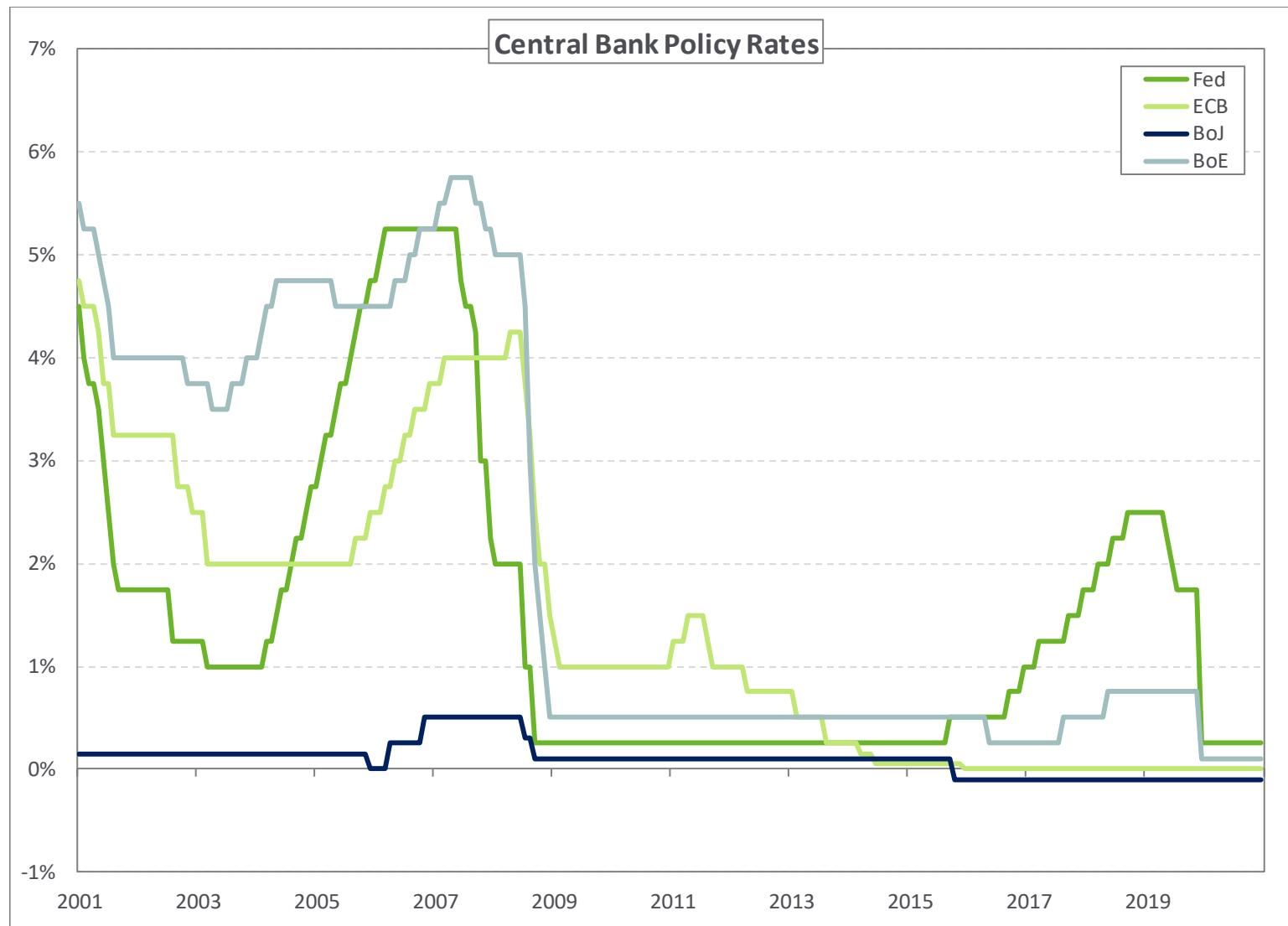
Source: IMF, FactSet



Source: FactSet



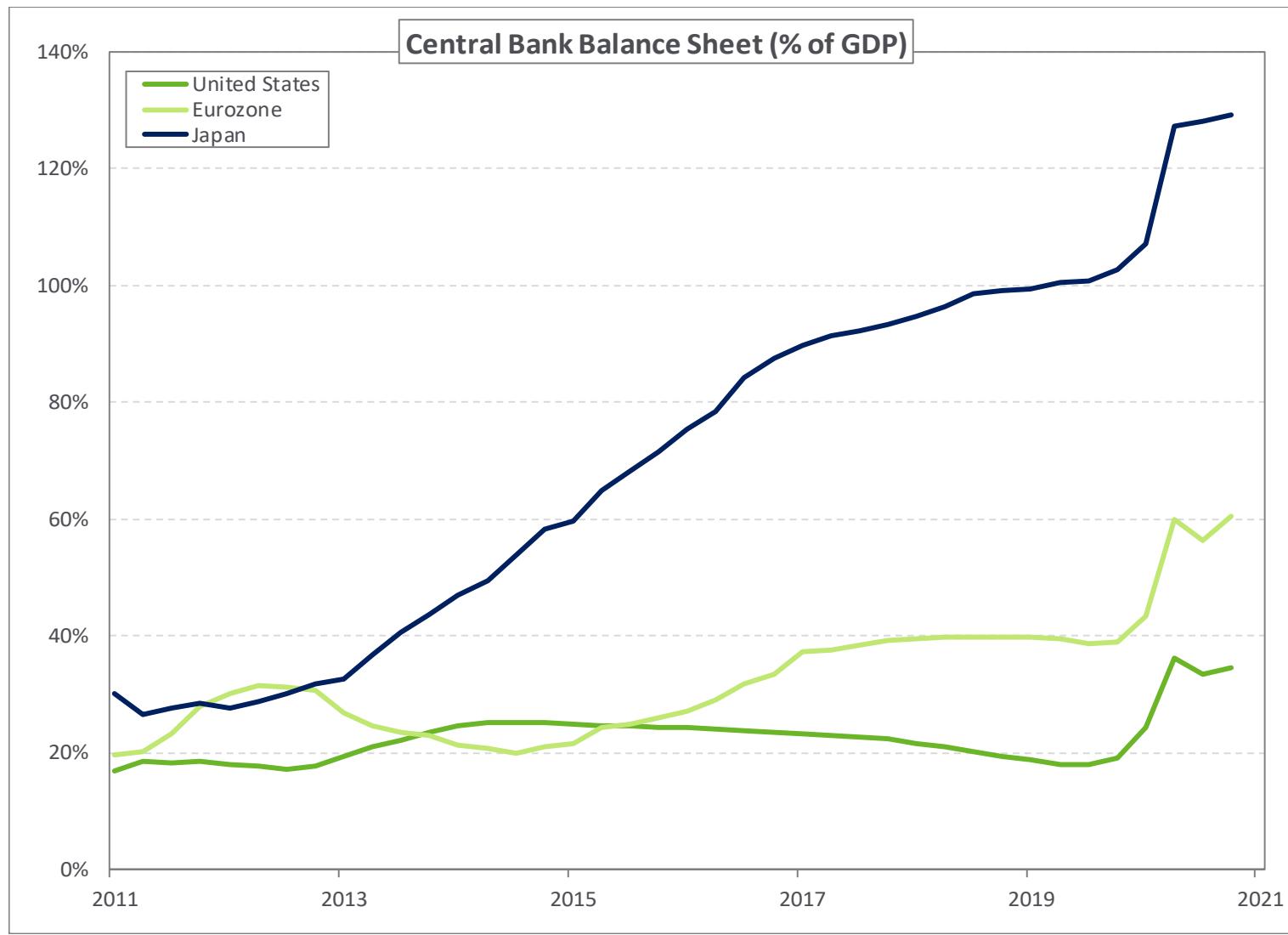
# CENTRAL BANK RATES



Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet



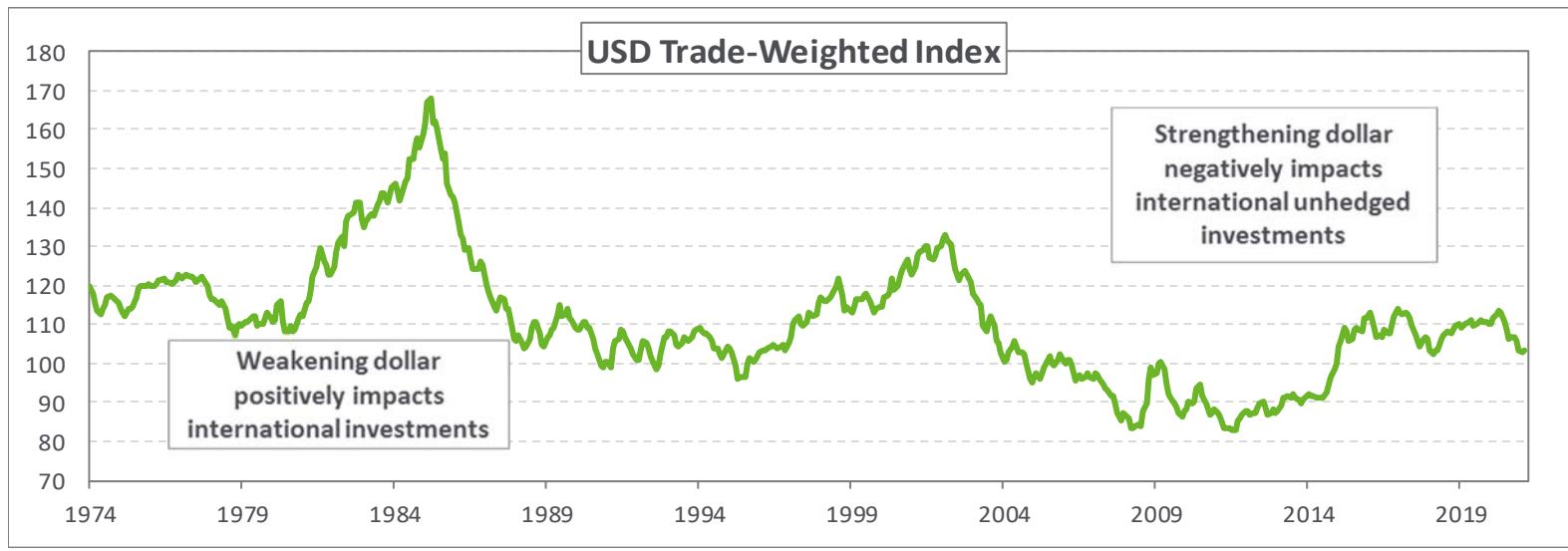
# CENTRAL BANK BALANCE SHEETS



# CURRENCIES

Currencies	% Change Relative to USD			
	Spot	1 Month	YTD	1 Year
Euro	1.18	-3.2%	-3.9%	7.1%
British Pound	1.38	-1.3%	0.9%	11.3%
Japanese Yen	110.50	-3.6%	-6.6%	-2.3%
Swiss Franc	0.94	-3.8%	-6.1%	2.8%
Australian Dollar	0.76	-1.6%	-1.3%	24.4%
Chinese Yuan	6.56	-1.4%	-0.2%	8.2%
Brazilian Real	5.64	-1.2%	-8.0%	-8.1%
Russian Ruble	75.52	-1.3%	-2.1%	3.5%
Indian Rupee	73.11	0.5%	-0.1%	3.5%
Mexican Peso	20.46	2.2%	-2.6%	14.7%
South African Rand	14.77	2.6%	-0.5%	21.0%

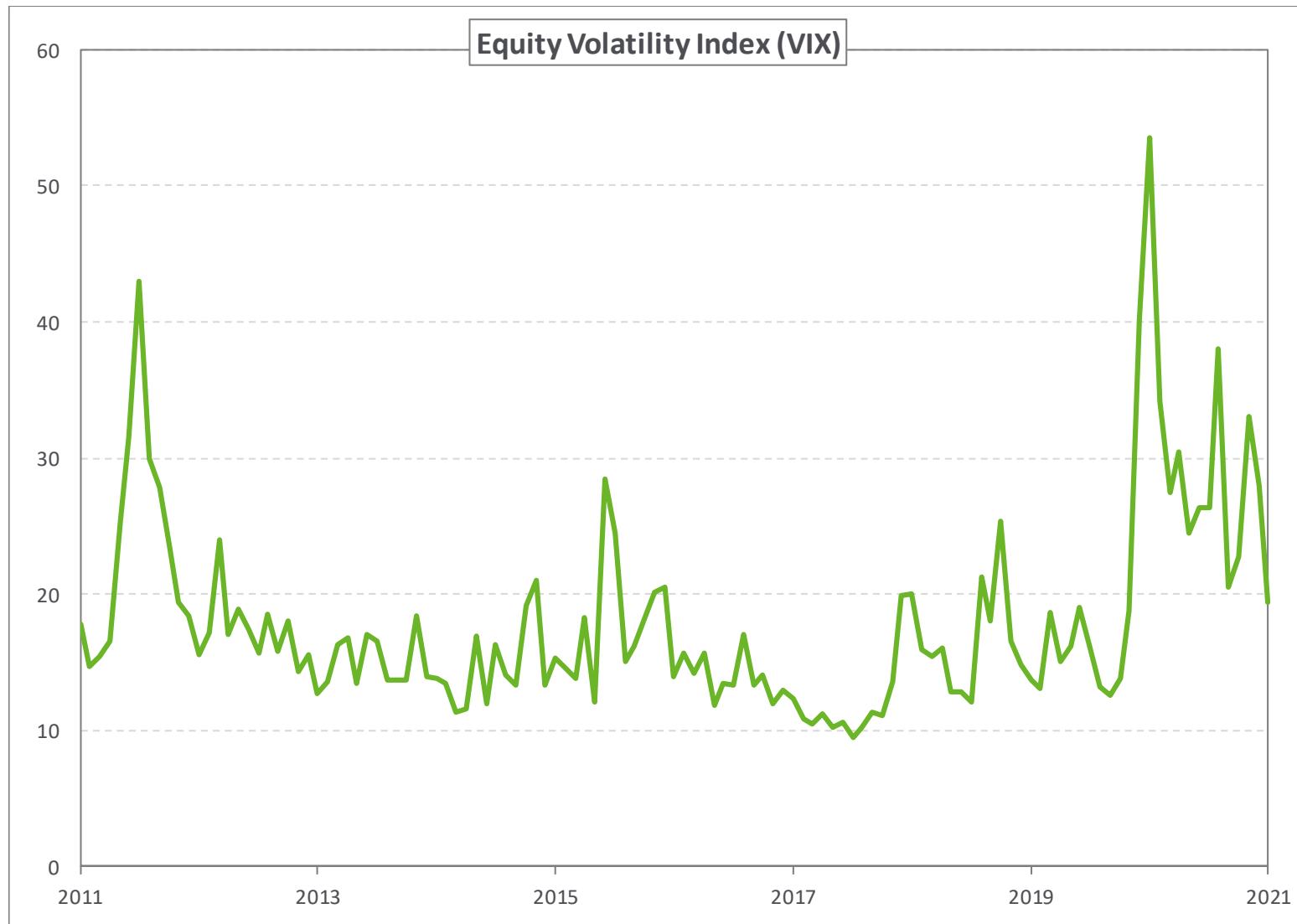
Source: FactSet



Source: FactSet



# VOLATILITY



Source: CBOE, FactSet

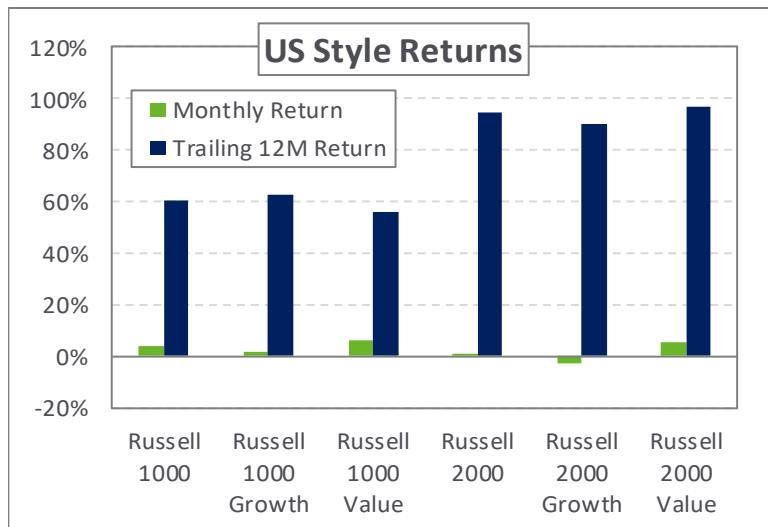


# EQUITY

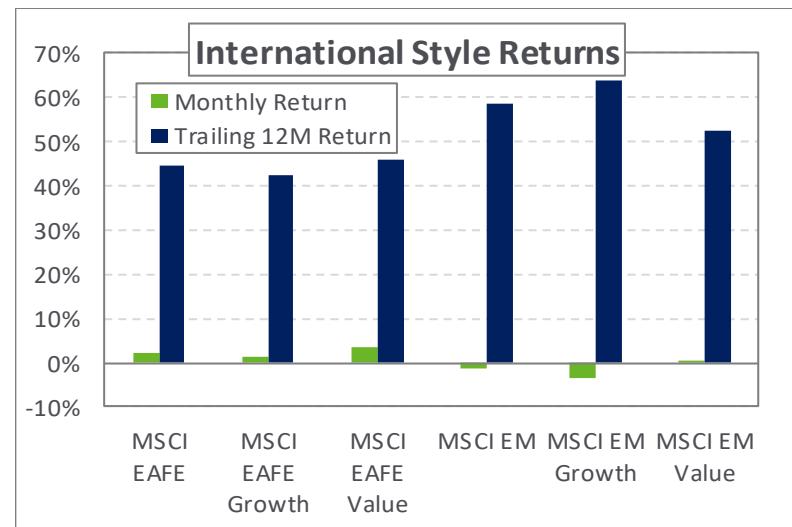
NEPC, LLC

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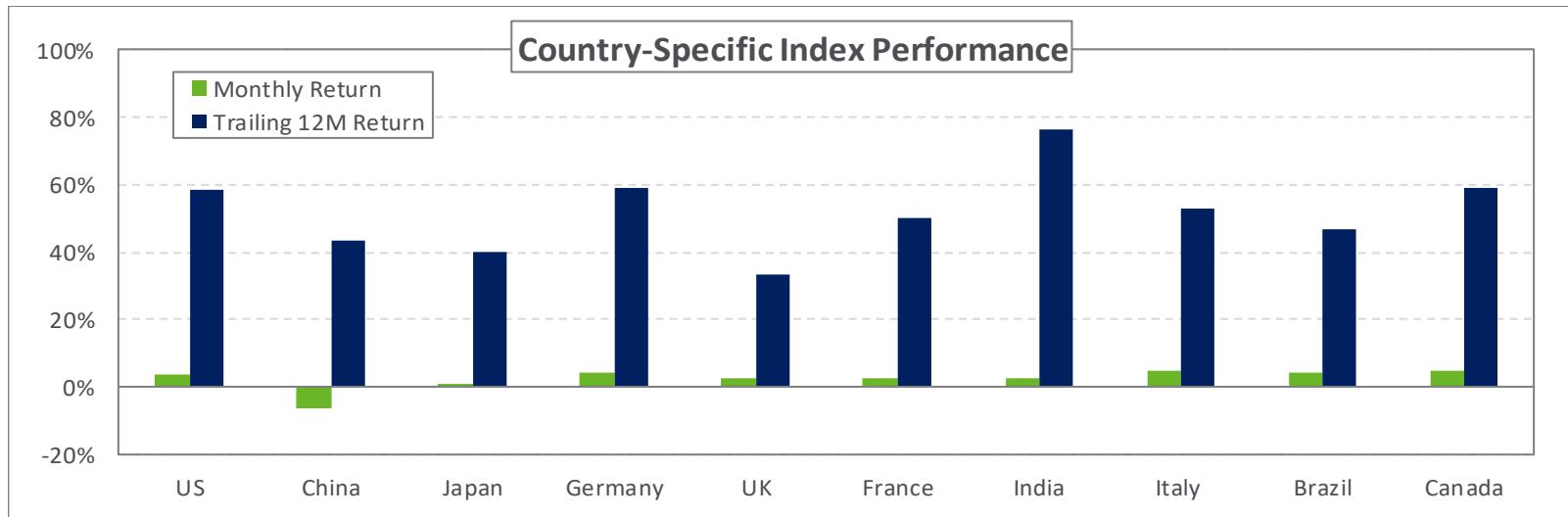
# EQUITY INDEX PERFORMANCE



Source: Russell, FactSet



Source: MSCI, FactSet



Source: MSCI, FactSet  
Represents returns in USD



# INDEX COMPOSITION

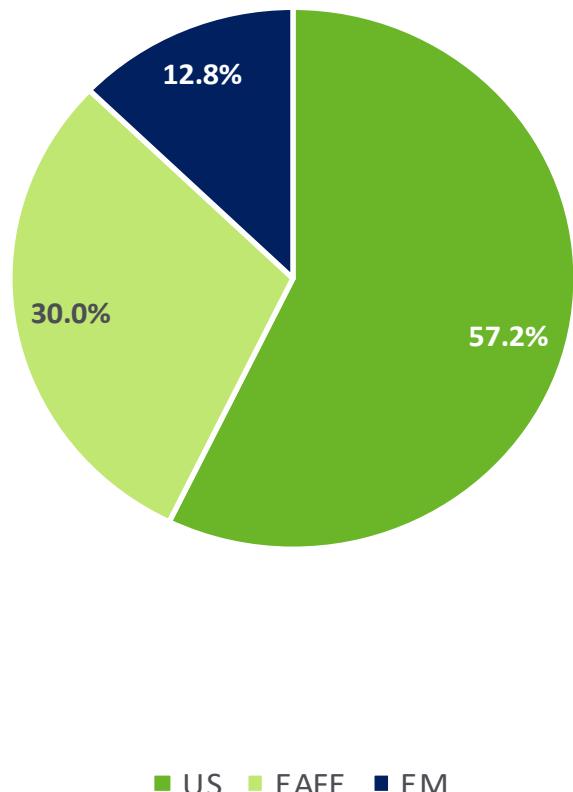
	MTD	QTD	YTD	Index Weight
S&P 500	4.4%	6.2%	6.2%	100.0%
Communication Services	0.3%	0.9%	0.9%	10.9%
Consumer Discretionary	0.4%	0.4%	0.4%	12.4%
Consumer Staples	0.5%	0.0%	0.0%	6.1%
Energy	0.1%	0.7%	0.7%	2.8%
Financials	0.7%	1.7%	1.7%	11.3%
Health Care	0.5%	0.4%	0.4%	13.0%
Industrials	0.8%	0.9%	0.9%	8.9%
Information Technology	0.4%	0.5%	0.5%	26.6%
Materials	0.2%	0.2%	0.2%	2.7%
Real Estate	0.2%	0.2%	0.2%	2.5%
Utilities	0.3%	0.1%	0.1%	2.7%

Source: S&P, FactSet

	MTD	QTD	YTD	Index Weight
MSCI ACWI	2.7%	4.6%	4.6%	100.0%
Communication Services	0.0%	0.6%	0.6%	9.4%
Consumer Discretionary	0.2%	0.3%	0.3%	12.8%
Consumer Staples	0.4%	-0.1%	-0.1%	7.0%
Energy	0.1%	0.5%	0.5%	3.4%
Financials	0.6%	1.5%	1.5%	14.3%
Health Care	0.3%	0.1%	0.1%	11.4%
Industrials	0.6%	0.7%	0.7%	10.0%
Information Technology	0.1%	0.4%	0.4%	21.3%
Materials	0.2%	0.3%	0.3%	5.0%
Real Estate	0.1%	0.1%	0.1%	2.6%
Utilities	0.2%	0.0%	0.0%	2.9%

Source: MSCI, FactSet

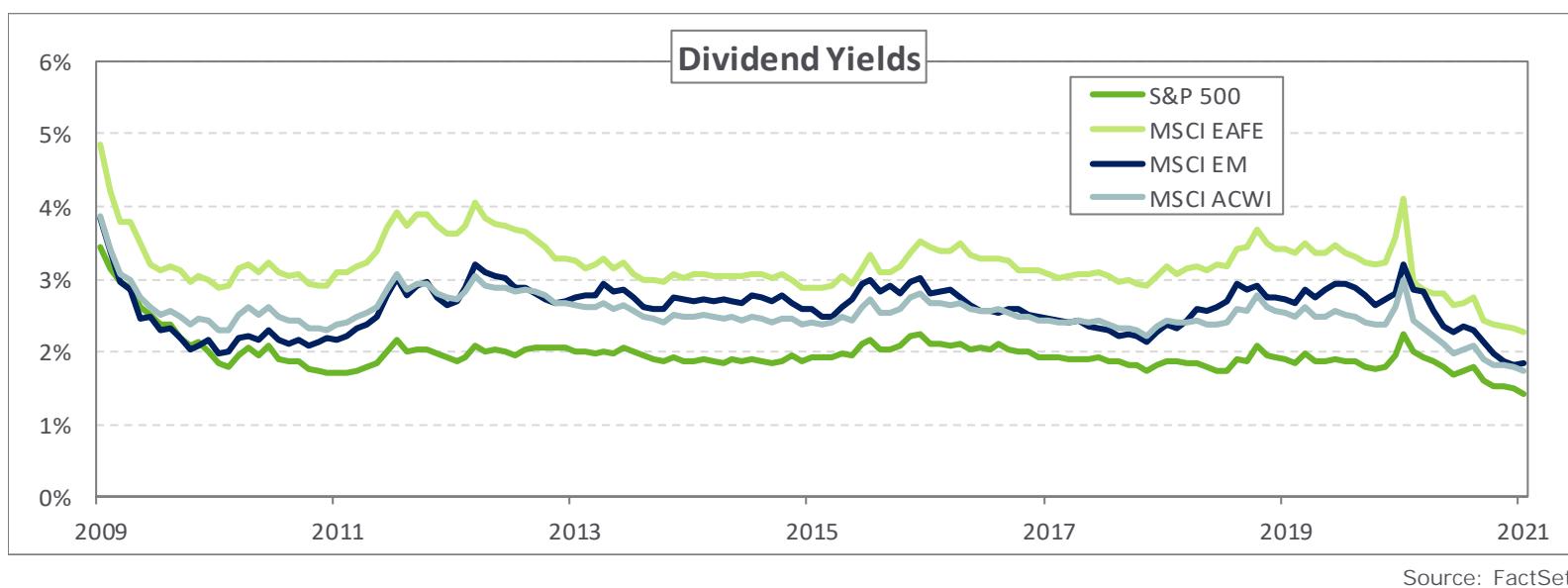
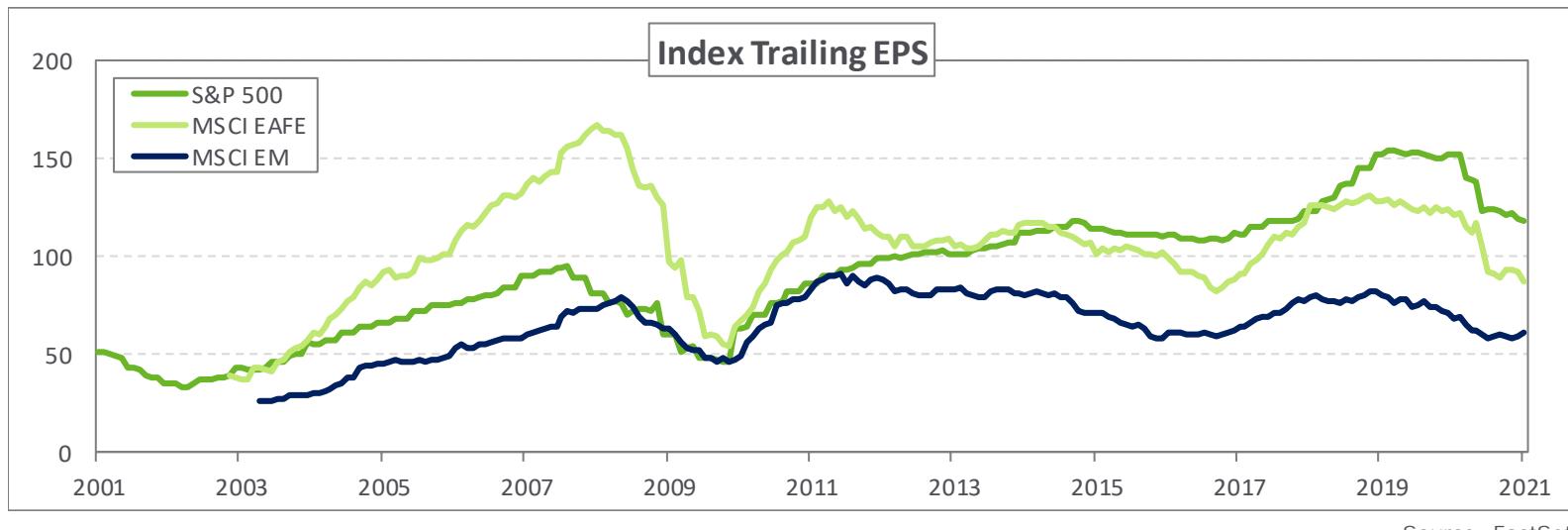
MSCI ACWI Weights



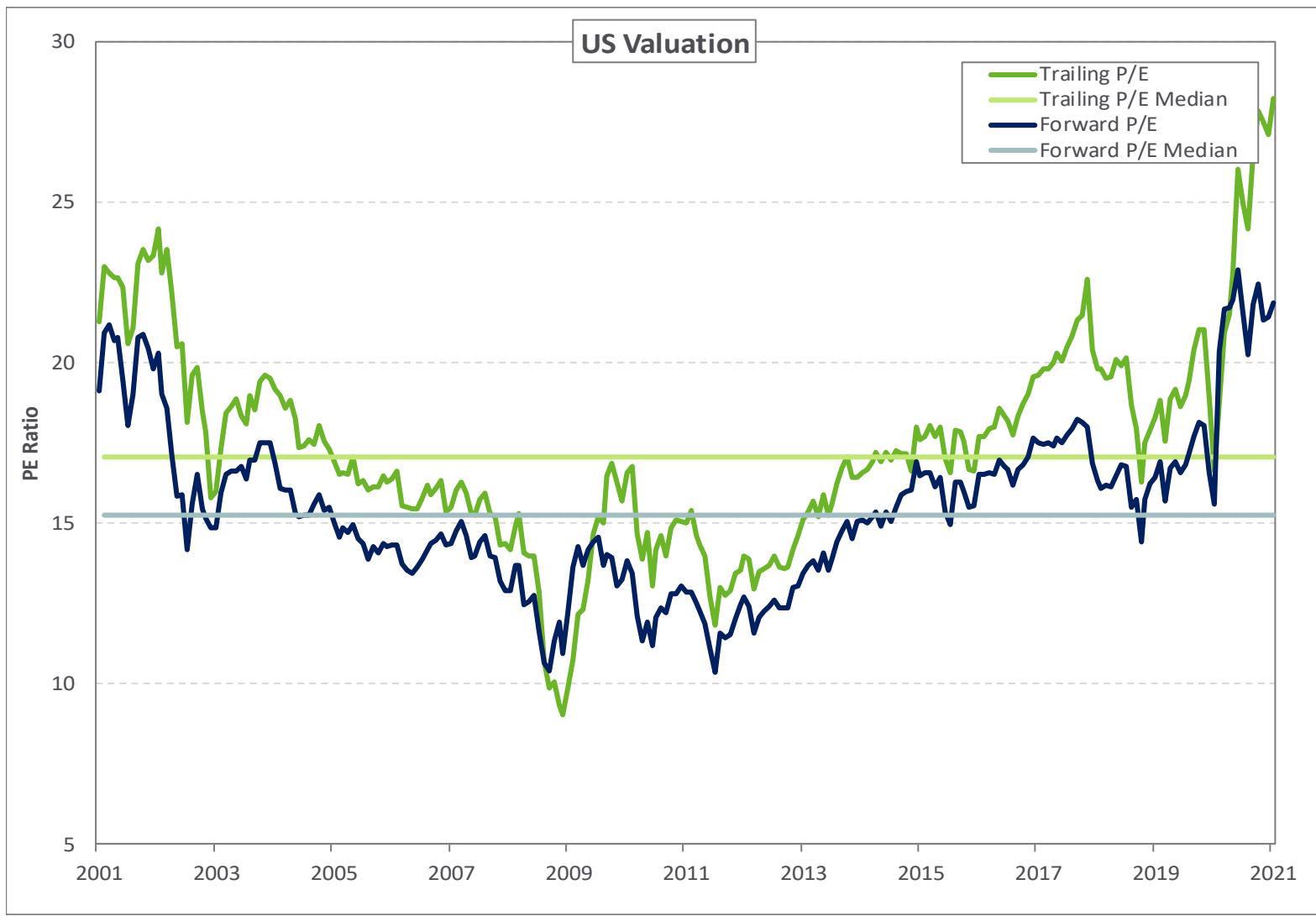
Source: MSCI, FactSet



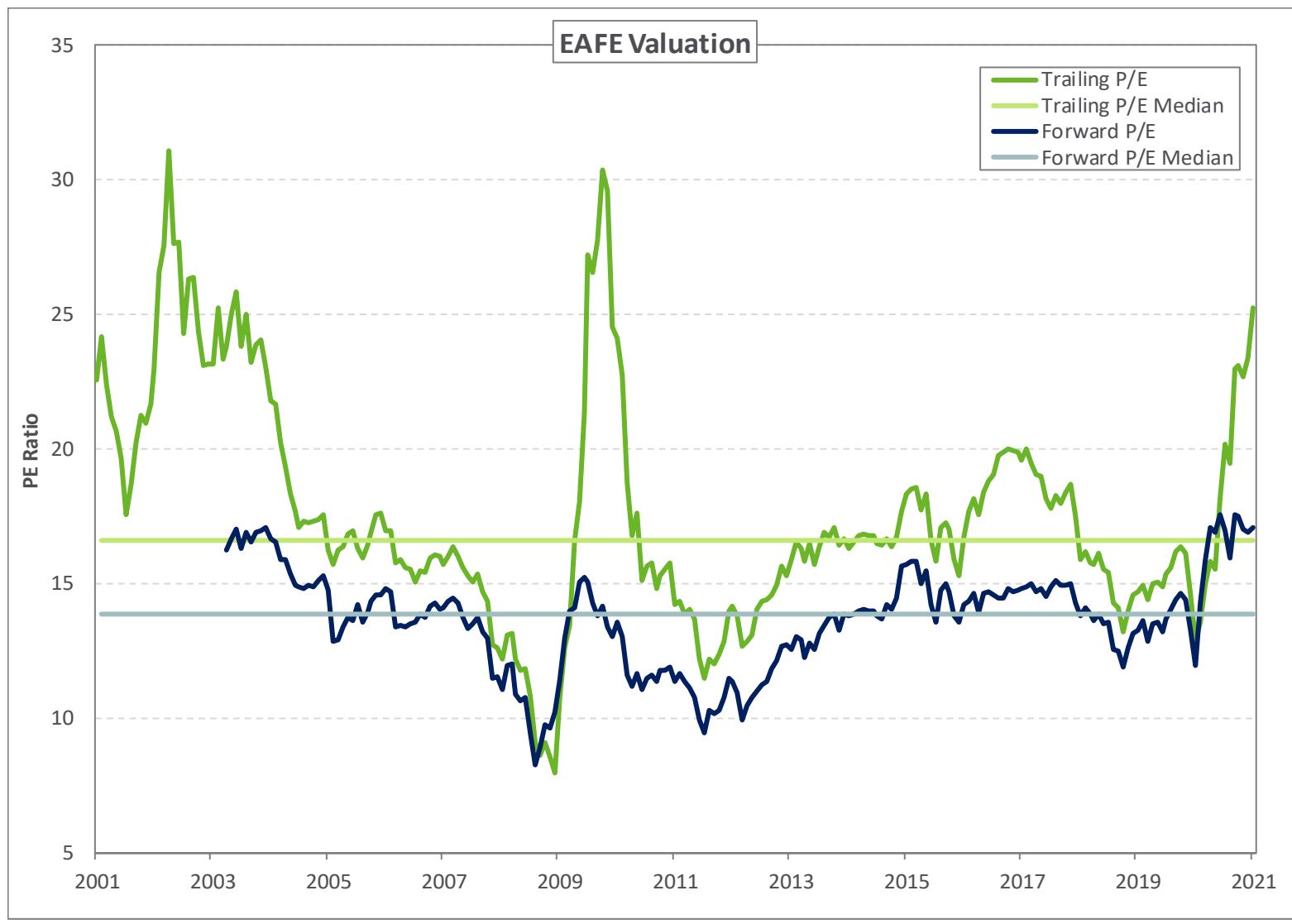
# EARNINGS & YIELDS



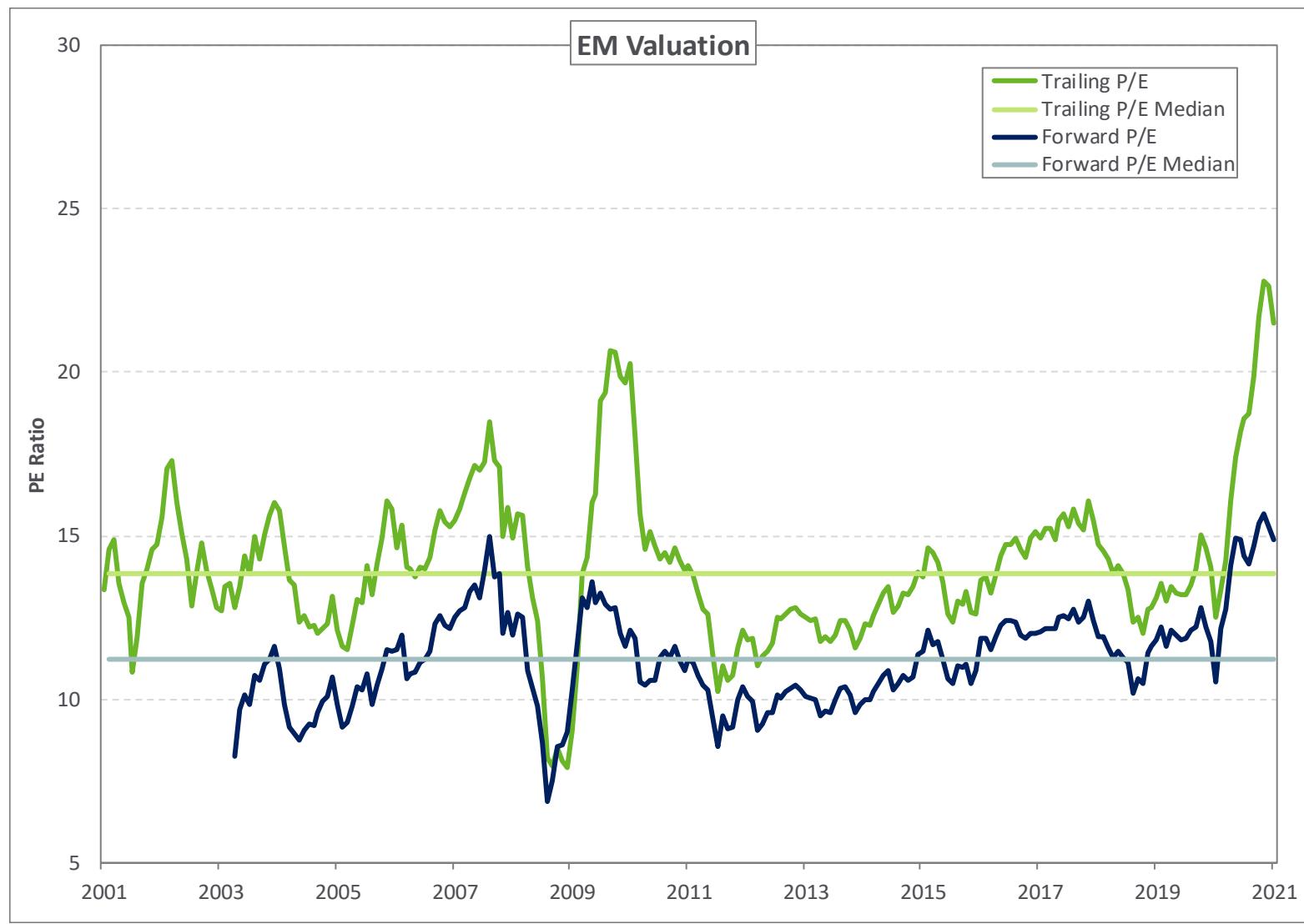
# US EQUITY VALUATIONS



# EAFE EQUITY VALUATIONS



# EM EQUITY VALUATIONS



# CREDIT

NEPC, LLC

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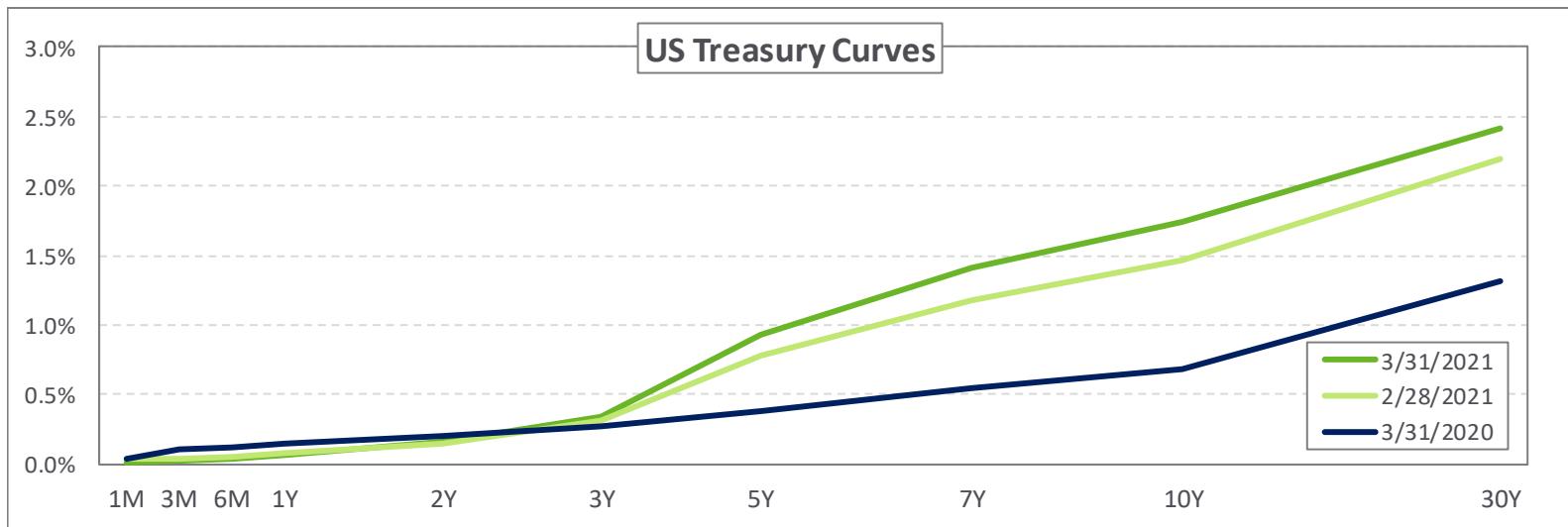
# FIXED INCOME CHARACTERISTICS

	Averages			Total Returns (%)		
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	1.61%	31	6.4	-1.2%	-3.4%	0.7%
Barclays Treasury	1.00%	-	6.8	-1.5%	-4.3%	-4.4%
Barclays Agency	0.80%	4	3.9	-0.7%	-1.6%	-0.3%
Barclays MBS	1.82%	12	4.1	-0.5%	-1.1%	-0.1%
Barclays ABS	0.56%	35	2.1	-0.2%	-0.2%	4.6%
Barclays CMBS	1.50%	37	5.8	-1.2%	-2.8%	2.3%
Barclays Corp IG	2.28%	91	8.5	-1.7%	-4.6%	8.7%
Barclays Muni	1.18%	-	5.3	0.6%	-0.4%	5.5%
Barclays HY Muni	3.64%	-	7.4	1.1%	2.1%	15.0%
Barclays TIPS	1.11%	-	8.1	-0.2%	-1.5%	7.5%
Barclays HY	4.23%	310	3.9	0.1%	0.8%	23.6%
Barclays Global Agg	1.16%	33	7.4	-1.9%	-4.5%	4.6%
JPM EMBI Glob Div	-	353	7.6	-1.0%	-4.5%	15.9%
JPM GBI - EM	4.71%	-	5.5	-3.1%	-6.7%	13.0%

Source: Barclays, JP Morgan, FactSet



# TREASURIES



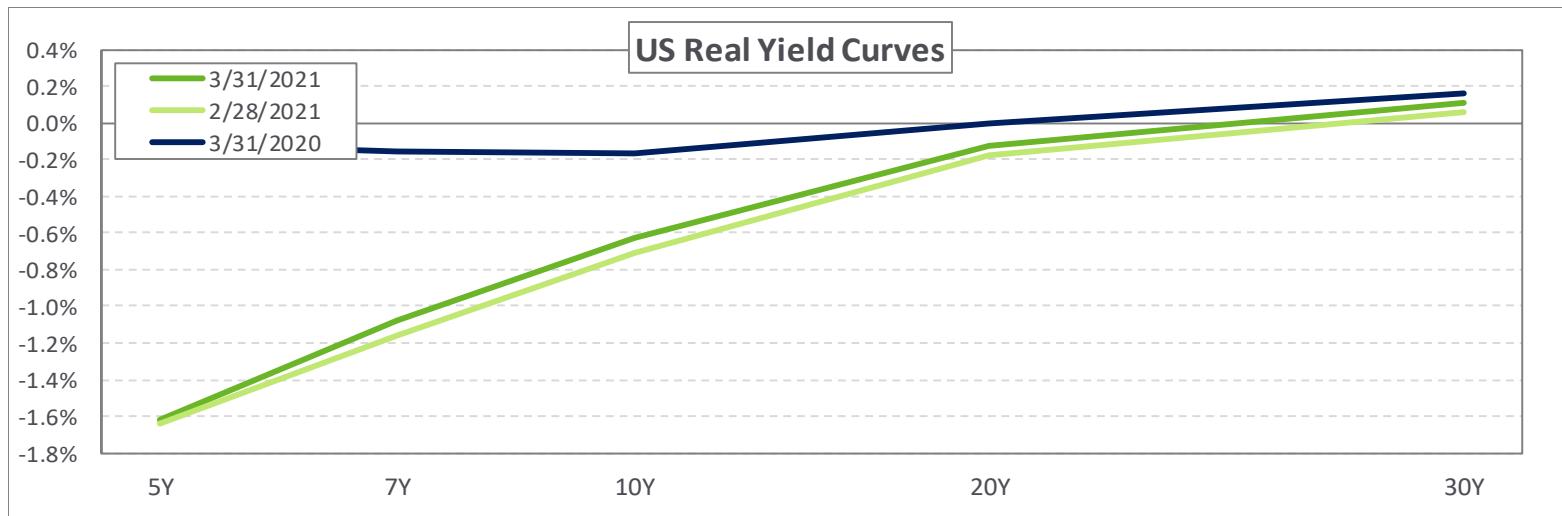
Source: FactSet

	Yield (%)			Total Return (%)	
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	0.03%	0.04%	0.10%	0.01%	0.12%
6M Treasury	0.03%	0.06%	0.11%	0.02%	0.16%
2Y Treasury	0.16%	0.14%	0.20%	0.00%	0.19%
5Y Treasury	0.94%	0.78%	0.37%	-0.60%	-1.91%
10Y Treasury	1.74%	1.46%	0.68%	-2.50%	-8.23%
30Y Treasury	2.42%	2.19%	1.32%	-4.97%	-21.04%

Source: FactSet



# REAL YIELDS



Source: FactSet

	Real Rates			Breakeven Rates	
	Current	1 Month Ago	12 Months Ago	Current	12 Months
5-Year	-1.62%	-1.64%	-0.12%	2.56%	-0.12%
7-Year	-1.08%	-1.16%	-0.16%	2.49%	-0.16%
10-Year	-0.63%	-0.71%	-0.17%	2.37%	-0.17%
30-Year	0.11%	0.06%	0.16%	2.31%	0.16%

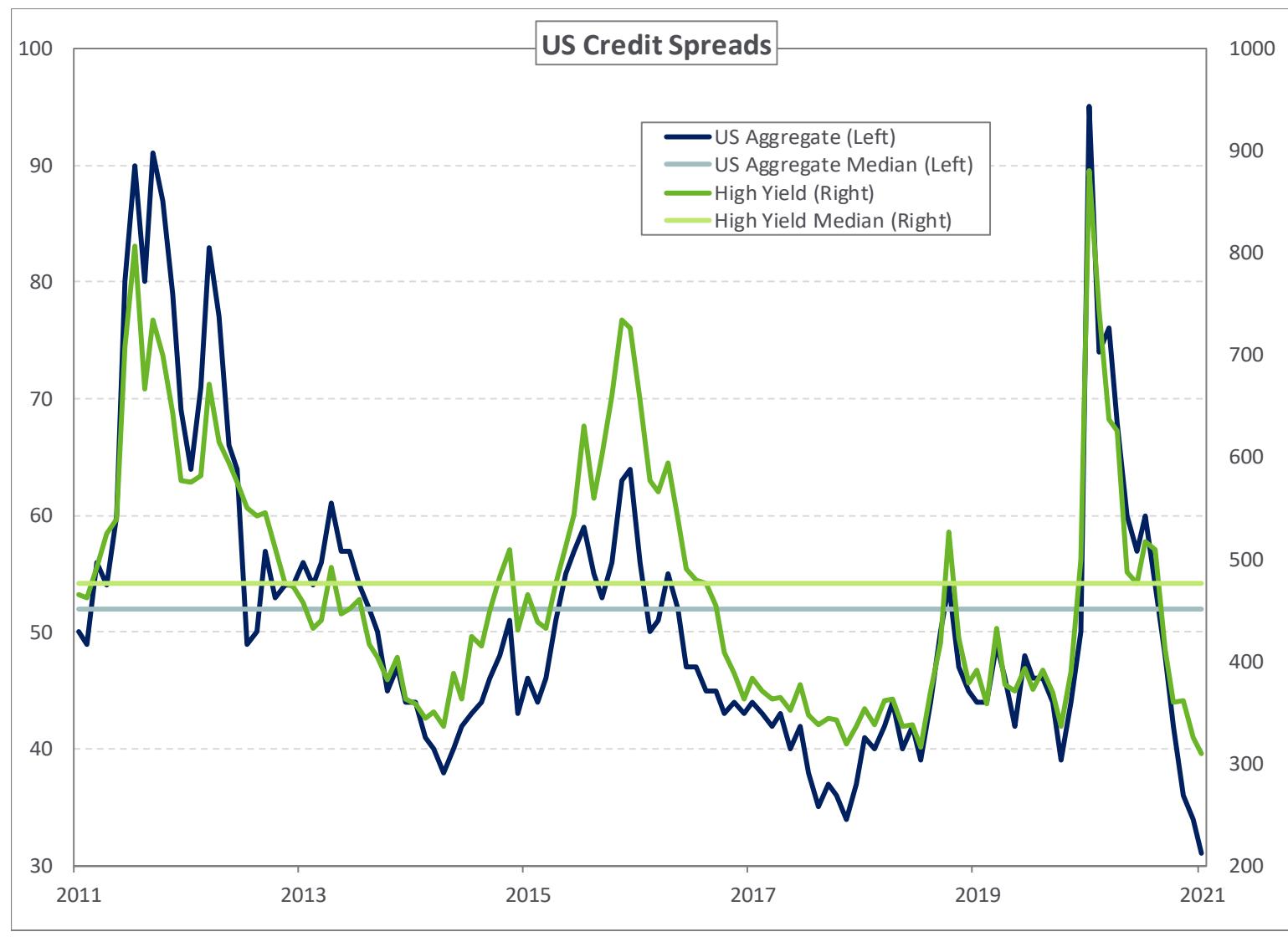
Source: FactSet



# NOMINAL YIELDS



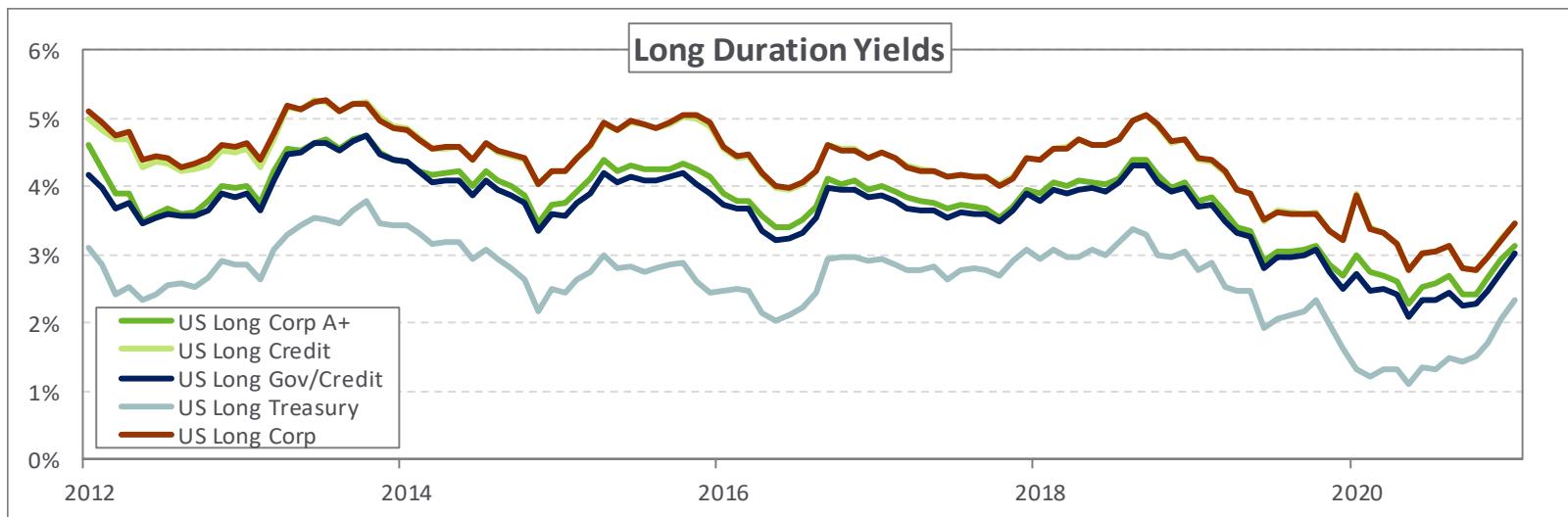
# CREDIT SPREADS



# LONG DURATION

Index	Current	1 Month Ago	12 Months Ago	Duration
Barclays Long Treasury	2.3%	2.0%	1.3%	18.6
Barclays 20+ STRIPS	2.5%	2.2%	1.4%	26.9
Barclays Long Credit	3.5%	3.2%	3.9%	14.7
Barclays Long Gov/Credit	3.0%	2.8%	2.7%	16.2
Barclays Long Corp A+	3.2%	3.0%	3.3%	15.5

Source: Barclays, FactSet



Source: Barclays, FactSet



# REAL ASSETS

NEPC, LLC



# REAL ASSETS INDEX PERFORMANCE

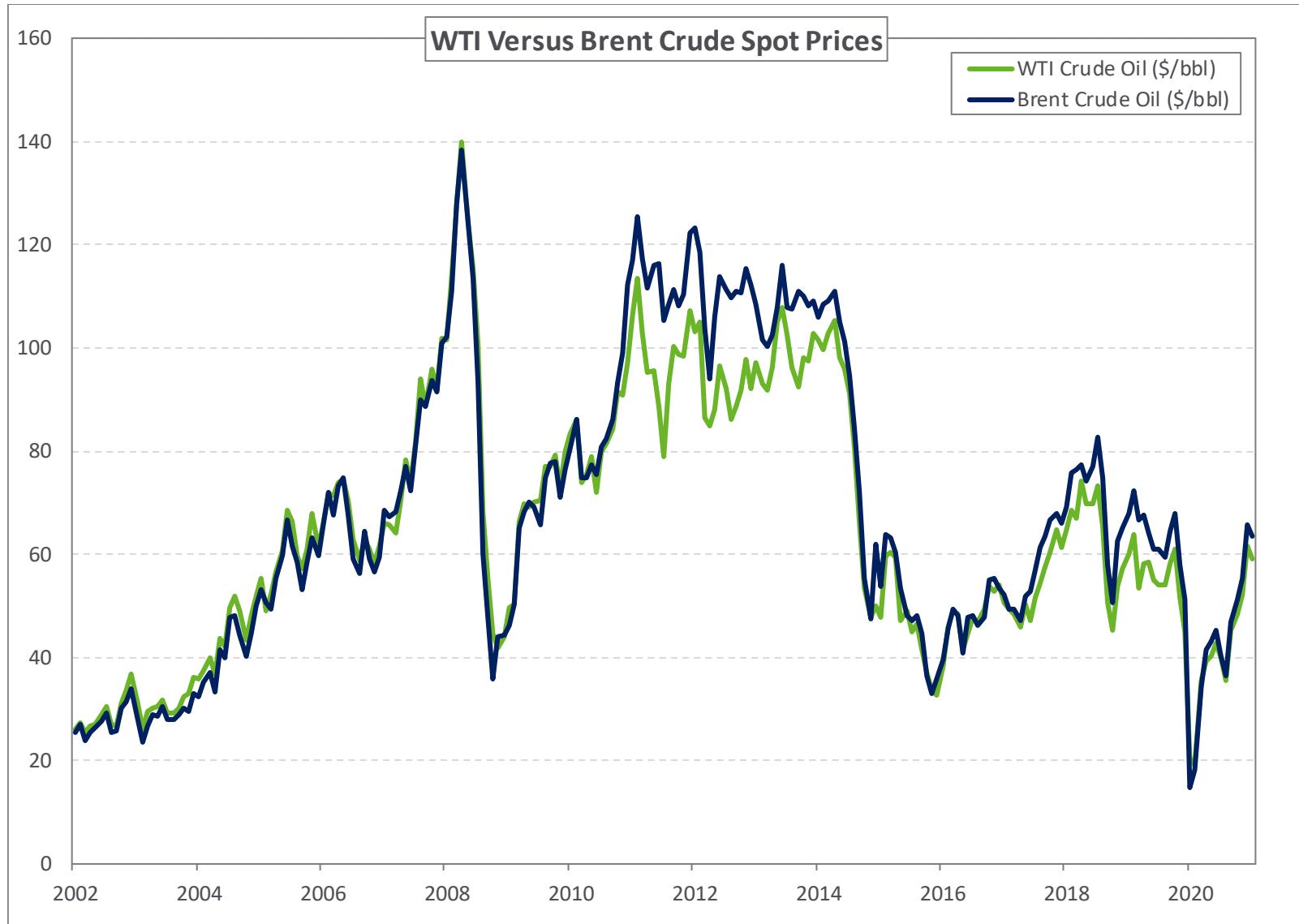
Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	-2.1%	6.9%	6.9%	34.9%	-0.2%	2.3%
Bloomberg Sub Agriculture Index	-1.8%	6.8%	6.8%	37.8%	3.0%	0.4%
Coffee	-10.2%	-5.3%	-5.3%	-5.3%	-8.5%	-9.9%
Corn	3.1%	16.9%	16.9%	51.4%	3.2%	-0.4%
Cotton	-8.9%	1.9%	1.9%	52.0%	-1.8%	5.7%
Soybean	2.3%	9.7%	9.7%	57.7%	5.7%	5.0%
Soybean Oil	6.0%	26.7%	26.7%	90.4%	14.1%	5.1%
Sugar	-10.2%	-0.2%	-0.2%	37.9%	0.4%	-5.5%
Wheat	-6.4%	-4.2%	-4.2%	3.5%	5.0%	-4.5%
Bloomberg Sub Energy	-3.6%	17.3%	17.3%	37.3%	-13.6%	-4.2%
Brent Crude	-1.3%	23.3%	23.3%	92.4%	-2.6%	6.9%
Heating Oil	-3.5%	20.1%	20.1%	48.2%	-7.9%	3.5%
Natural Gas	-7.2%	3.0%	3.0%	-17.5%	-26.1%	-19.5%
Unleaded Gas	0.9%	29.0%	29.0%	178.3%	-2.9%	2.7%
WTI Crude Oil	-3.4%	22.5%	22.5%	80.0%	-15.9%	-3.9%
Bloomberg Sub Industrial Metals	-2.4%	7.5%	7.5%	53.1%	4.7%	10.3%
Aluminum	2.2%	10.6%	10.6%	38.0%	1.4%	5.8%
Copper	-2.4%	13.5%	13.5%	75.4%	8.9%	11.6%
Nickel	-13.6%	-3.5%	-3.5%	37.7%	6.2%	12.8%
Zinc	0.7%	1.8%	1.8%	44.0%	-1.8%	11.2%
Bloomberg Sub Precious Metals	-2.4%	-9.3%	-9.3%	15.2%	8.5%	6.0%
Gold	-0.9%	-9.8%	-9.8%	4.4%	7.4%	5.5%
Silver	-7.2%	-7.2%	-7.2%	67.3%	12.5%	7.8%
Bloomberg Sub Livestock	5.3%	10.4%	10.4%	17.6%	-4.6%	-4.9%
Lean Hogs	10.4%	27.5%	27.5%	37.9%	-11.0%	-10.2%
Live Cattle	2.4%	2.3%	2.3%	8.4%	-0.9%	-2.0%

Source: Bloomberg, FactSet

Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



# OIL MARKETS



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- Returns for pooled funds, e.g. mutual funds and collective investment trusts, are collected from third parties; they are not generally calculated by NEPC. Returns for separate accounts, with some exceptions, are calculated by NEPC. Returns are reported net of manager fees unless otherwise noted.
- A “since inception” return, if reported, begins with the first full month after funding, although actual inception dates (e.g. the middle of a month) and the timing of cash flows are taken into account in Composite return calculations.
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