

QUARTERLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

February 22, 2021

Allan Martin, Partner

Dan Hennessy, CFA, CAIA, Senior Consultant

Michael Miranda, CFA, Senior Consulting Specialist

Corey Robinson, CAIA, Consulting Analyst



VCERA
VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

MARKET ENVIRONMENT UPDATE & OUTLOOK

NEPC, LLC

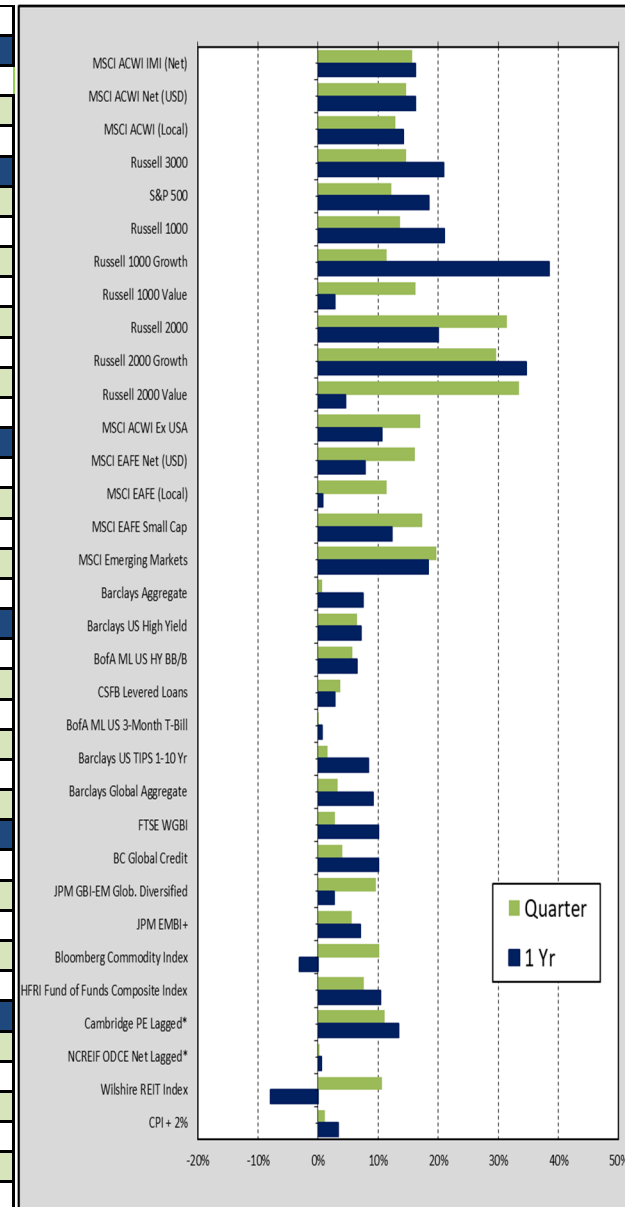
ECONOMIC ENVIRONMENT

- **Q4 Real GDP (advanced estimate) grew at a rate of +4.0%. In the third quarter, real GDP grew at an annual rate of +33.4%.**
 - Retail sales ended December at +5.5% on a YoY basis. In the same period last year the YoY growth rate was 3.9%.
 - Corporate profits as a percent of GDP increased to 10.0% in Q2, up from 7.98% in Q1 and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended November down to 1.3 from 1.4 in June. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April 2020.
 - The U.S. trade deficit widened 1.7% (ended October).
- **The unemployment rate was 6.7% in Q4, down from 7.8% in Q3 %; U-6, a broader measure of unemployment, decreased to 11.7% in Q4 from 12.8% in Q3.**
 - The labor force participation rate ended Q4 at 61.5%, up from 61.4% in Q3 after declining to 60.2% in April and is at levels below the 10 year pre-pandemic average of 63.2%.
- **The Case-Shiller Home Price Index (ended November) increased to 232.4 from 226.8 (in September) and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw a down-tick to 1.29% in Q4 from 1.41% in Q3; Capacity Utilization increased to 74.5% in Q4 from 72.3% in Q3.**
- **Fed Funds rate remains at a targeted range of 0.00%-to-0.25%. The 10-year Treasury Yield (constant maturity) finished Q4 at 0.9%, up from 0.7% in Q3.**
- **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 Q4 to 34.04 from 31.21 in Q3 and is higher than the 10-year average of 26.55x.**
 - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.77x



MARKET ENVIRONMENT – Q4 2020 OVERVIEW

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI IMI (Net)	World with Small Cap	15.70%	16.25%	9.72%	12.15%	9.09%
MSCI ACWI Net (USD)	World W/O Small Cap	14.68%	16.25%	10.06%	12.26%	9.13%
MSCI ACWI (Local)	World (Local Currency)	12.83%	14.21%	9.81%	11.52%	10.02%
Domestic Equity Benchmarks						
Russell 3000	Domestic All Cap	14.68%	20.89%	14.49%	15.43%	13.79%
S&P 500	Large Core	12.15%	18.40%	14.18%	15.22%	13.88%
Russell 1000	Large Core	13.69%	20.96%	14.82%	15.60%	14.01%
Russell 1000 Growth	Large Growth	11.39%	38.49%	22.99%	21.00%	17.21%
Russell 1000 Value	Large Value	16.25%	2.79%	6.07%	9.74%	10.50%
Russell 2000	Small Core	31.37%	19.96%	10.25%	13.26%	11.20%
Russell 2000 Growth	Small Growth	29.61%	34.63%	16.19%	16.36%	13.48%
Russell 2000 Value	Small Value	33.36%	4.63%	3.72%	9.65%	8.66%
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	17.01%	10.65%	4.88%	8.93%	4.92%
MSCI EAFE Net (USD)	Int'l Developed	16.05%	7.82%	4.28%	7.45%	5.51%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	11.35%	0.84%	2.98%	5.80%	6.82%
MSCI EAFE Small Cap	Small Cap Int'l	17.27%	12.34%	4.85%	9.40%	7.85%
MSCI Emerging Markets	Emerging Equity	19.70%	18.31%	6.17%	12.81%	3.63%
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	0.67%	7.51%	5.34%	4.44%	3.84%
Barclays US High Yield	High Yield	6.45%	7.11%	6.24%	8.59%	6.80%
BofA ML US HY BB/B	High Yield	5.73%	6.45%	6.30%	8.08%	6.65%
CSFB Levered Loans	Bank Loans	3.64%	2.78%	3.99%	5.19%	4.47%
BofA ML US 3-Month T-Bill	Cash	0.03%	0.67%	1.60%	1.20%	0.64%
Barclays US TIPS 1-10 Yr	Inflation	1.60%	8.39%	4.93%	4.13%	2.88%
Global Fixed Income Benchmarks						
Barclays Global Aggregate	Global Core Bonds	3.28%	9.20%	4.85%	4.79%	2.83%
FTSE WGBI	World Gov. Bonds	2.77%	10.11%	4.96%	4.78%	2.32%
BC Global Credit	Global Bonds	4.03%	10.03%	5.67%	5.91%	4.35%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	9.62%	2.69%	3.01%	6.72%	1.49%
JPM EMBI+	Em. Mkt. Bonds	5.64%	7.05%	4.50%	6.26%	5.64%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	10.19%	-3.12%	-2.53%	1.03%	-6.50%
HFRI Fund of Funds Composite Index	Fund of Hedge Funds	7.59%	10.34%	4.71%	4.46%	3.27%
Cambridge PE Lagged*	Private Equity	11.04%	13.37%	13.07%	12.96%	13.56%
NCREIF ODCE Net Lagged*	Real Estate	0.27%	0.51%	4.25%	5.69%	9.26%
Wilshire REIT Index	REIT	10.63%	-7.89%	3.30%	4.25%	8.27%
CPI + 2%	Inflation/Real Assets	1.10%	3.31%	3.87%	3.98%	3.77%



* As of 9/30/2020

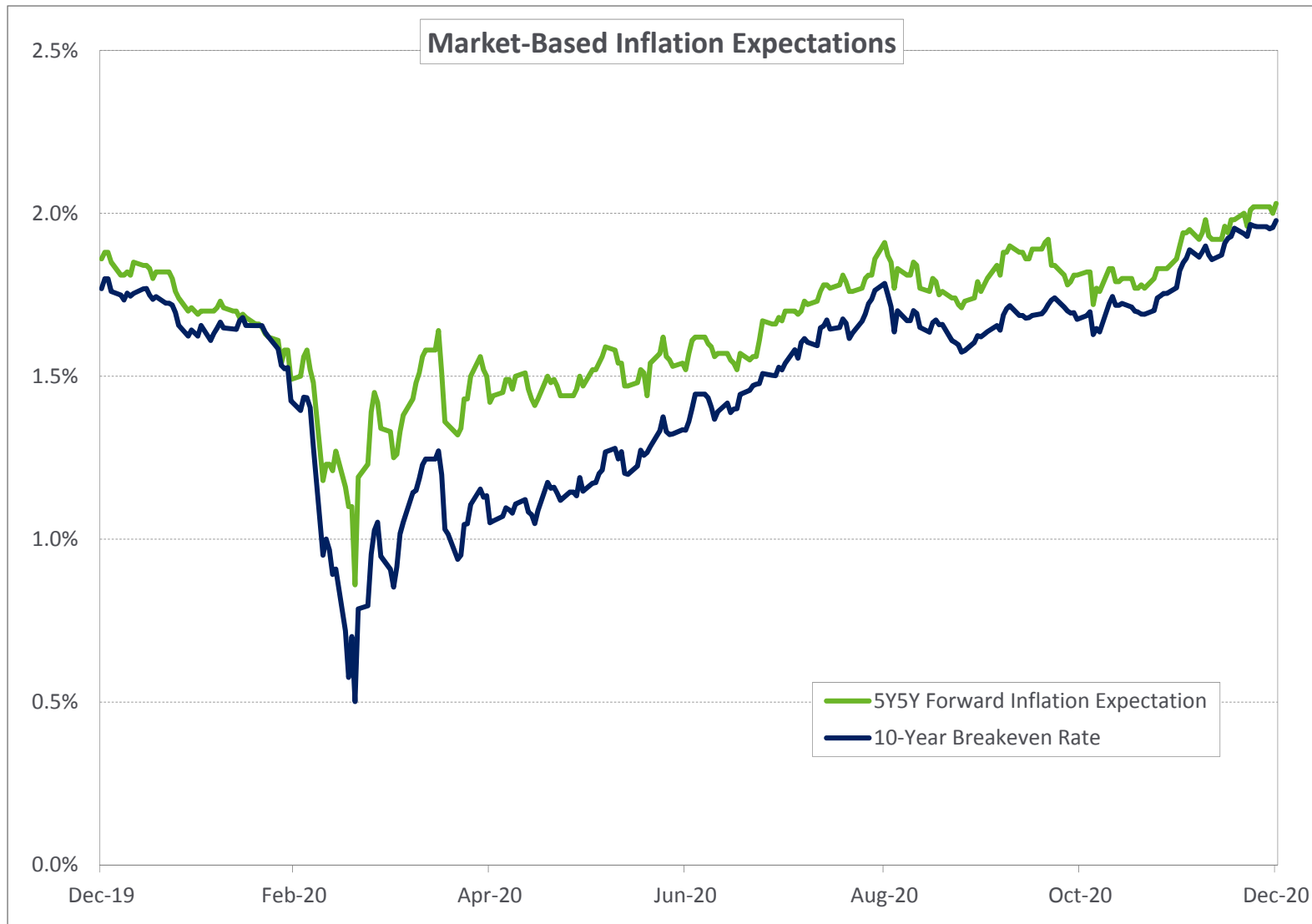
THE WORLD ECONOMY SHRANK IN 2020



Q4 2020 real GDP figure represents IMF forecast for 2020
GDP figures are seasonally adjusted and chained to 2005 dollars
Source: IMF, FactSet



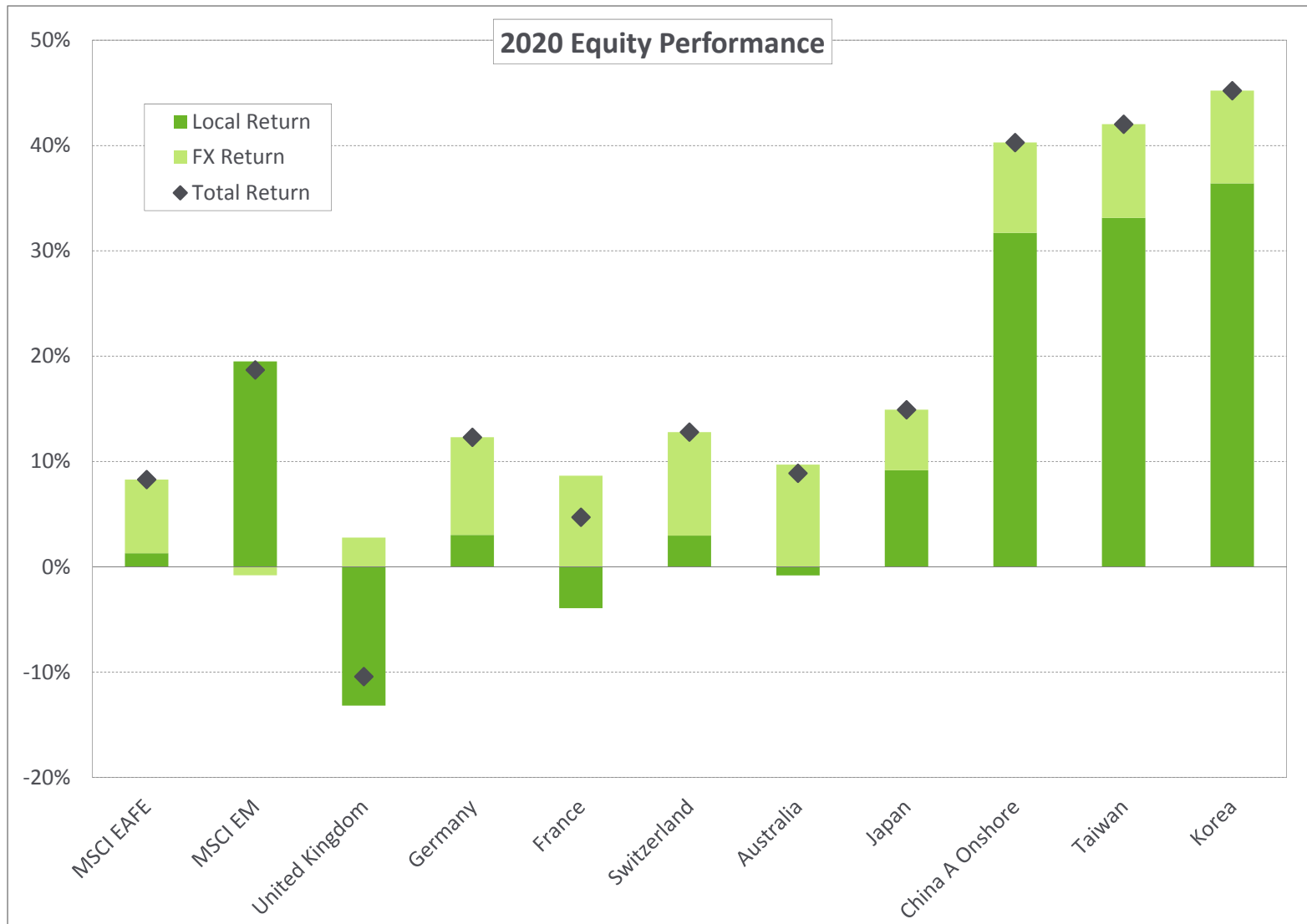
INFLATION EXPECTATIONS RECOVERED



Source: FactSet



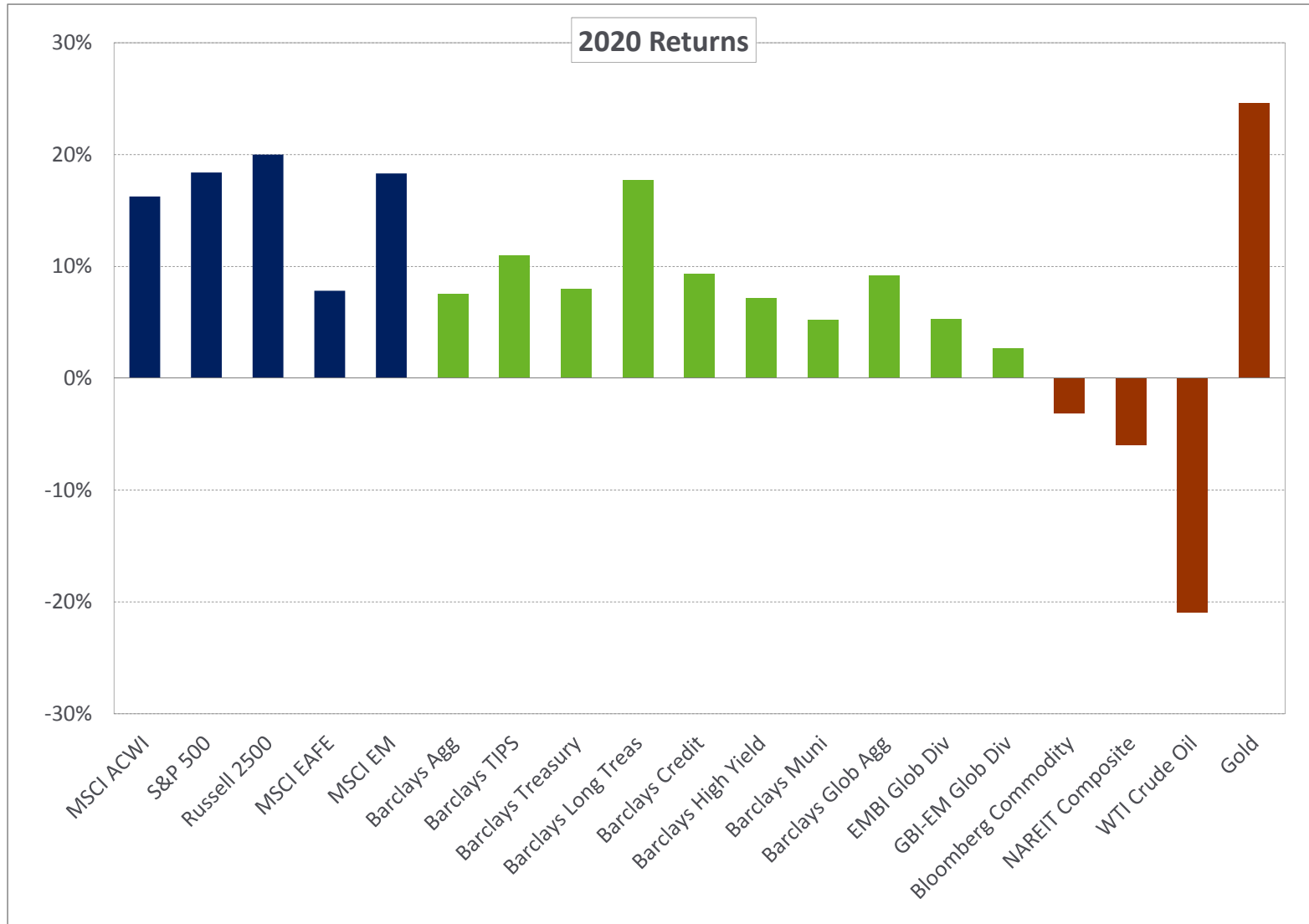
DOLLAR WEAKNESS SUPPORTED NON-US EQUITY



Source: MSCI, FactSet



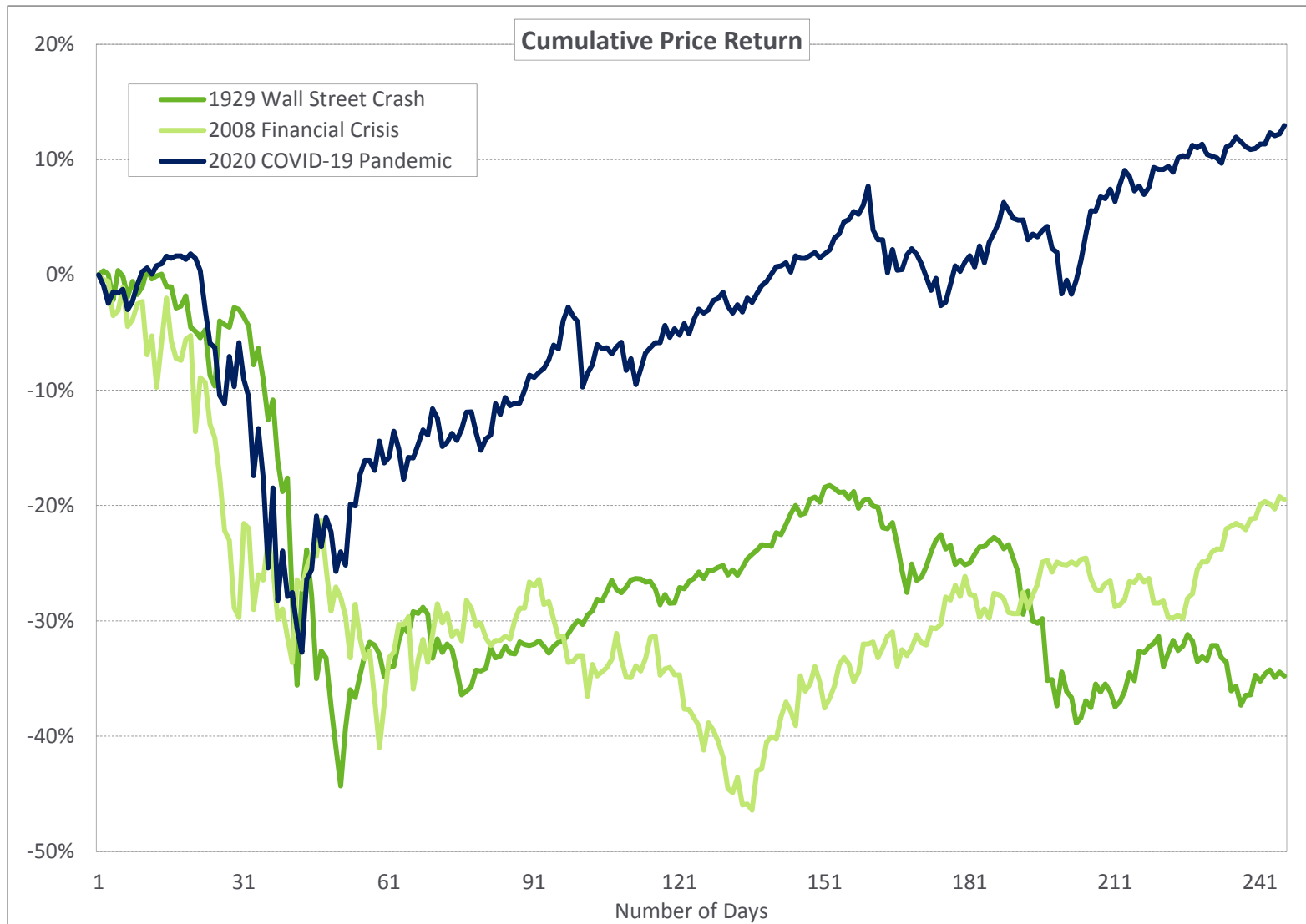
US AND EMERGING EQUITIES OUTPERFORMED



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



THE SHORTEST BEAR MARKET IN HISTORY

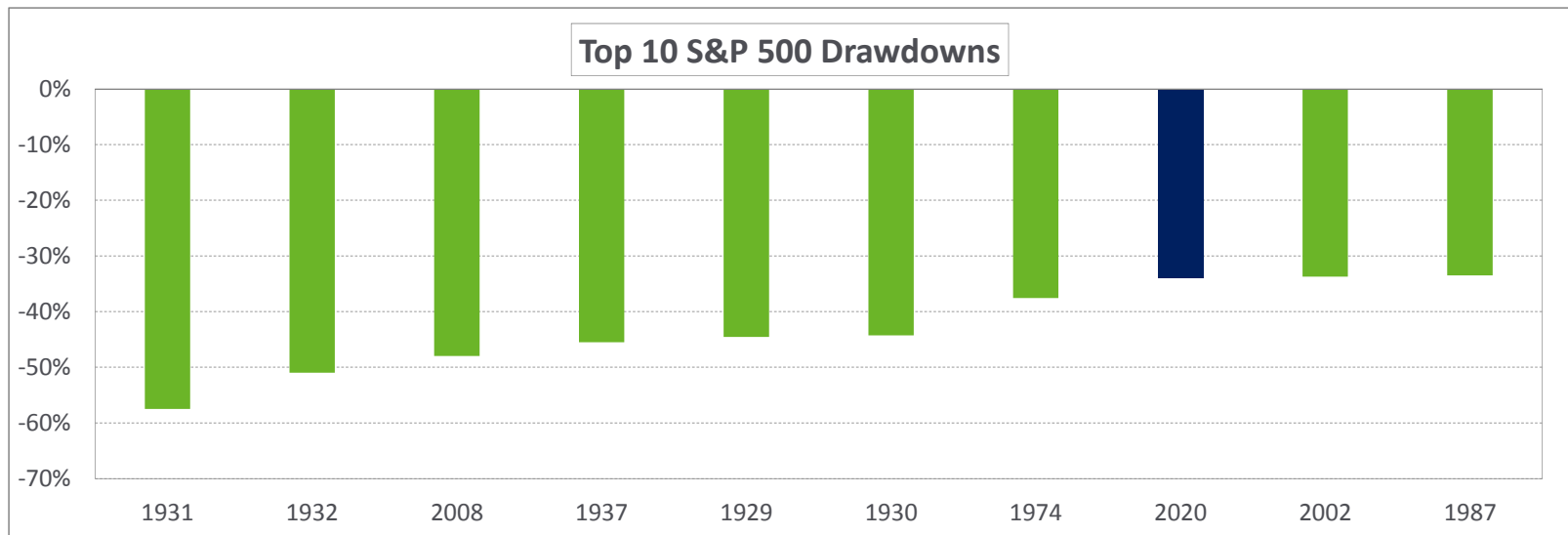
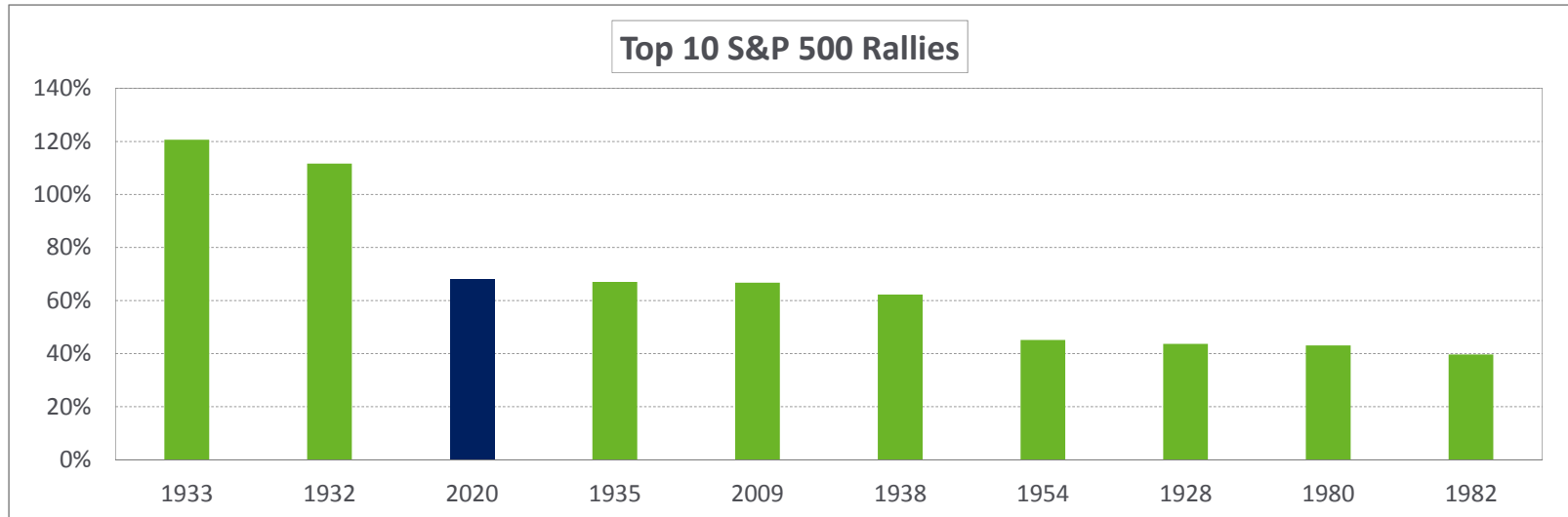


Source: S&P, FactSet

Financial Crisis represents S&P returns from 9/1/2008 – 8/10/2009; Wall Street Crash represents Dow Jones returns from 8/30/1929 – 8/25/1930; COVID-19 represents S&P returns from 1/23/2020 (representing the start of the Wuhan, China lockdown) – 12/31/2020



THE LARGEST EQUITY SWINGS SINCE 1932

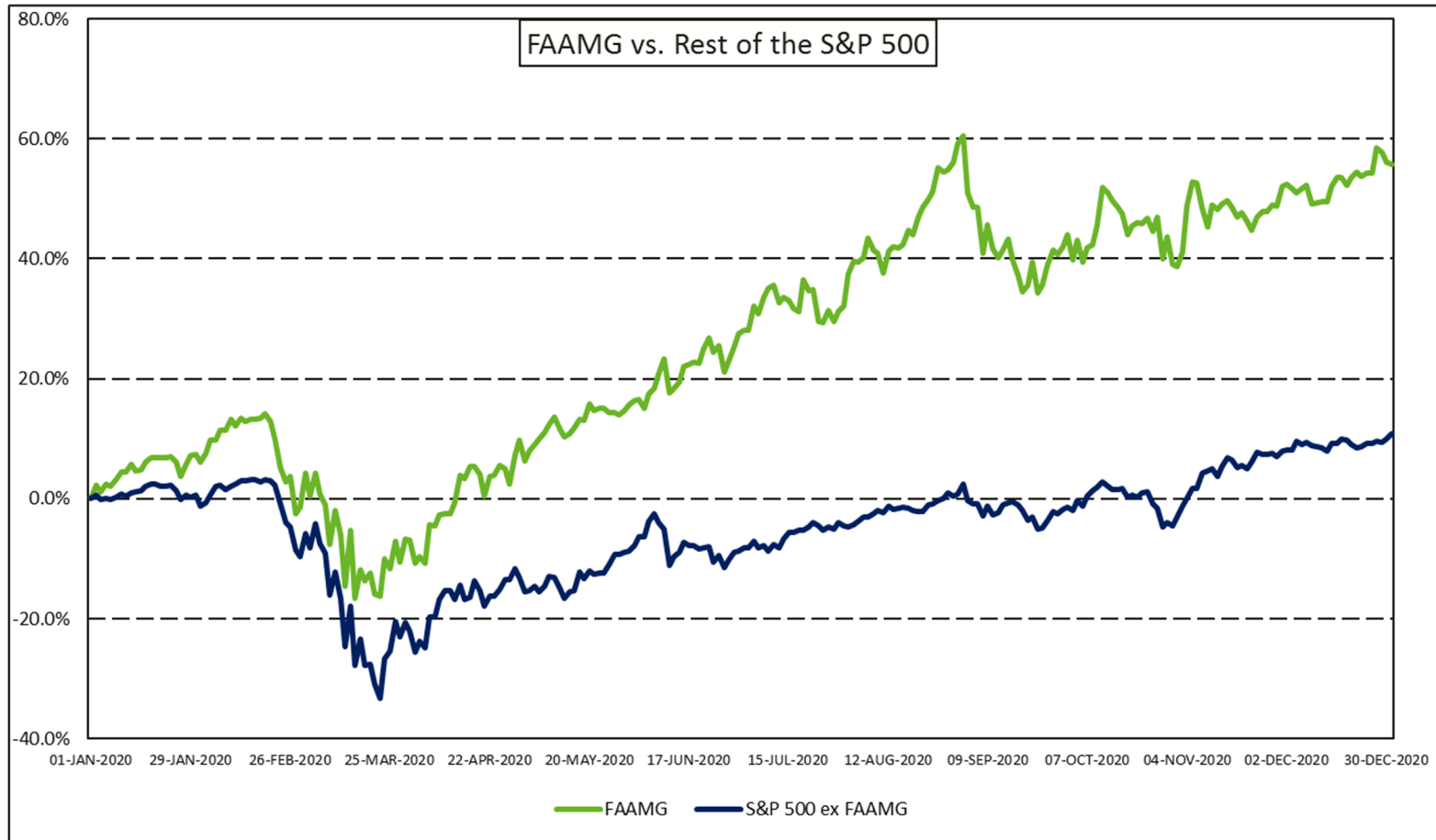


Source: S&P, FactSet

Rallies and drawdowns represent the largest trough-to-peak and peak-to-trough within a calendar year



FAAMG DROVE US EQUITY RETURNS HIGHER



QE PUSHED YIELDS INTO NEGATIVE TERRITORY

Government Bond Yields	6M	1Y	2Y	3Y	5Y	7Y	10Y	15Y	30Y
Germany	-0.7%	-0.7%	-0.7%	-0.8%	-0.7%	-0.7%	-0.6%	-0.4%	-
Netherlands	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.5%	-0.4%	-0.1%
France	-0.7%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.3%	-0.2%	0.4%
Austria	-0.6%	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-	0.1%
Switzerland	-	-0.8%	-0.8%	-0.8%	-0.7%	-0.6%	-0.5%	-	-0.3%
Belgium	-	-0.7%	-0.7%	-0.7%	-0.7%	-0.6%	-0.4%	-0.2%	0.3%
Japan	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	-0.1%	0.0%	0.2%	0.6%
Finland	-0.7%	-0.7%	-0.7%	-0.7%	-	-0.6%	-	-	0.0%
Portugal	-0.9%	-0.8%	-0.7%	-0.5%	-0.4%	-0.2%	0.0%	-	-
Italy	-0.6%	-0.6%	-0.4%	-0.3%	-0.0%	0.2%	0.5%	0.9%	1.4%
United Kingdom	-0.0%	-0.2%	-0.2%	-0.1%	-0.1%	0.0%	0.2%	0.4%	0.7%
Sweden	-0.2%	-	-0.4%	-	-0.2%	-0.2%	0.0%	-	-
Denmark	-	-	-0.6%	-0.6%	-0.6%	-	-0.5%	-	-
Spain	-	-	-0.6%	-0.6%	-0.4%	-0.3%	0.0%	-	0.9%
Australia	-	0.0%	0.1%	0.1%	0.3%	0.6%	1.0%	1.3%	2.0%
Canada	0.1%	0.2%	0.2%	0.3%	0.4%	0.5%	0.7%	-	1.2%
Hong Kong	0.0%	0.1%	0.1%	0.2%	0.3%	0.5%	0.8%	-	-
New Zealand	0.3%	-	0.3%	0.3%	0.4%	0.7%	1.0%	-	-
Norway	0.0%	-	0.3%	-	0.7%	0.7%	0.9%	-	-
Singapore	0.3%	0.4%	0.3%	0.3%	0.5%	0.8%	0.8%	-	1.1%
United States	0.1%	0.1%	0.1%	0.2%	0.4%	0.6%	0.9%	-	1.6%

Source: FactSet



TOTAL FUND PERFORMANCE SUMMARY

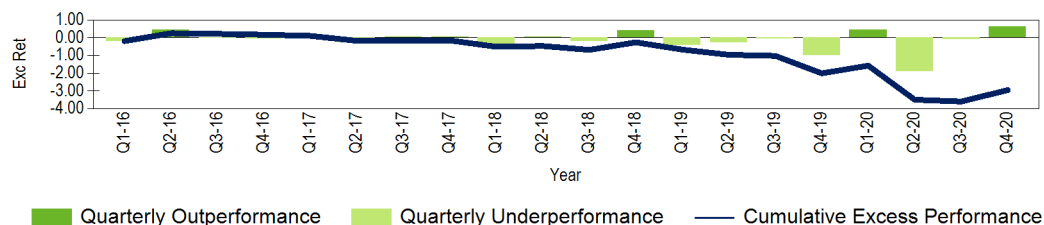
NEPC, LLC

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
Total Fund	\$6,900,496,861	11.0%	28	17.4%	16	13.6%	14	9.1%	18	10.4%	14	8.8%	16	8.3%	Apr-94
<i>Policy Index</i>		10.4%	42	16.9%	26	14.4%	12	10.0%	6	10.9%	8	9.2%	9	8.4%	Apr-94
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>		9.9%	55	16.6%	30	14.5%	11	8.4%	28	9.5%	34	6.6%	93	6.8%	Apr-94
<i>60% S&P 500 / 40% BBgBarc Aggregate</i>		7.5%	97	13.6%	89	14.7%	9	11.0%	1	11.1%	6	10.0%	1	8.7%	Apr-94
<i>InvMetrics Public DB > \$1B Net Median</i>		10.1%		15.5%		10.8%		7.4%		9.0%		7.9%		7.7%	Apr-94

Quarterly and Cumulative Excess Performance



- For the five year period ending December 31, 2020, the Fund returned 10.4% trailing the policy index by 0.5% 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 74th percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 38th percentile. This means that the Fund has earned more return per unit of volatility taken than 62% of its peers.

- For the three-year period, the Fund returned 9.1%, underperforming the policy index and ranking in the 18th percentile of its peers. The Fund's volatility ranks in the 75th 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 13.6%, underperforming the policy index by 0.8% and ranking in the 14th 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 \$842.4 million which includes a net investment gain of \$693.5 million in the quarter. Assets increased from \$6.15 billion one year ago to \$6.90 billion.

3 Years Ending December 31, 2020

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	9.1%	18	11.7%	75	0.7	35	0.8	23
Policy Index	10.0%	6	12.3%	85	0.7	24	0.9	12
InvMetrics Public DB > \$1B Net Median	7.4%	--	10.7%	--	0.6	--	0.7	--

5 Years Ending December 31, 2020

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	10.4%	14	9.6%	74	1.0	38	1.1	30
Policy Index	10.9%	8	10.0%	83	1.0	33	1.1	23
InvMetrics Public DB > \$1B Net Median	9.0%	--	8.8%	--	0.9	--	1.0	--

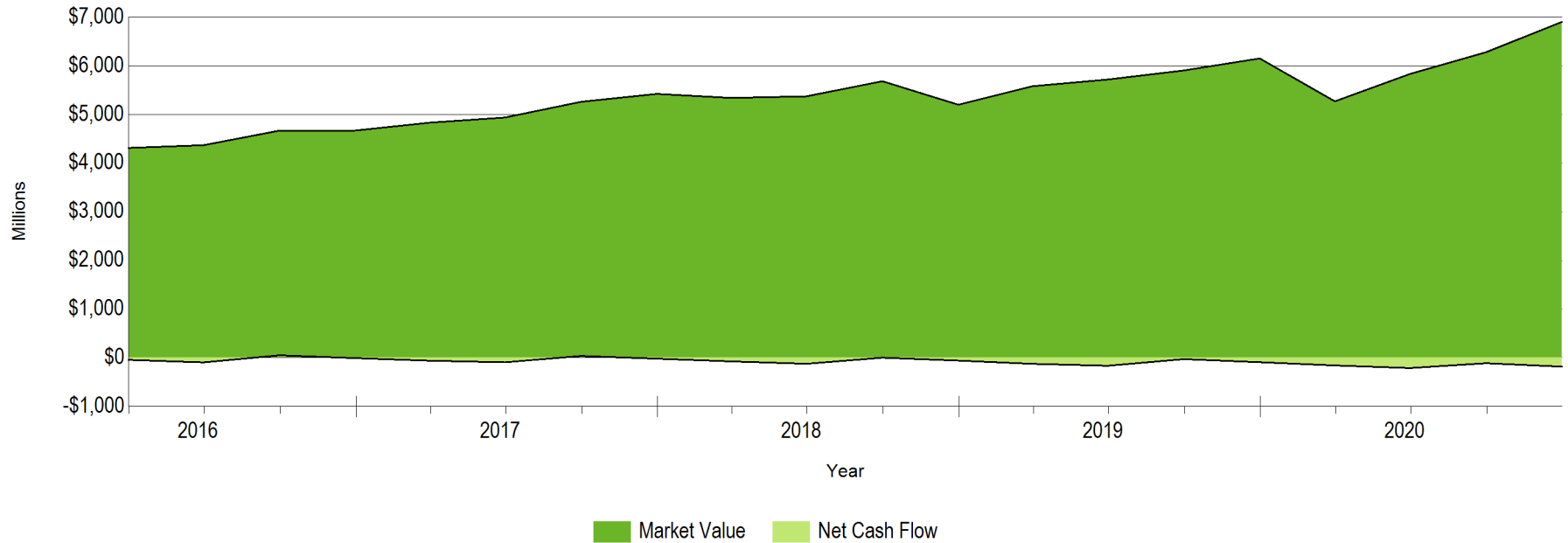
Policy Index as of July 2020: 25% Russell 3000 Index, 16% MSCI ACWI ex U.S., 10% MSCI ACWI, 15% Russell 3000 +3%, 20% BBgBarc US Aggregate, 8% NCREIF ODCE, 6% CPI +2%.



Ventura County Employees' Retirement Association

TOTAL FUND ASSET GROWTH SUMMARY

Market Value History
5 Years Ending December 31, 2020

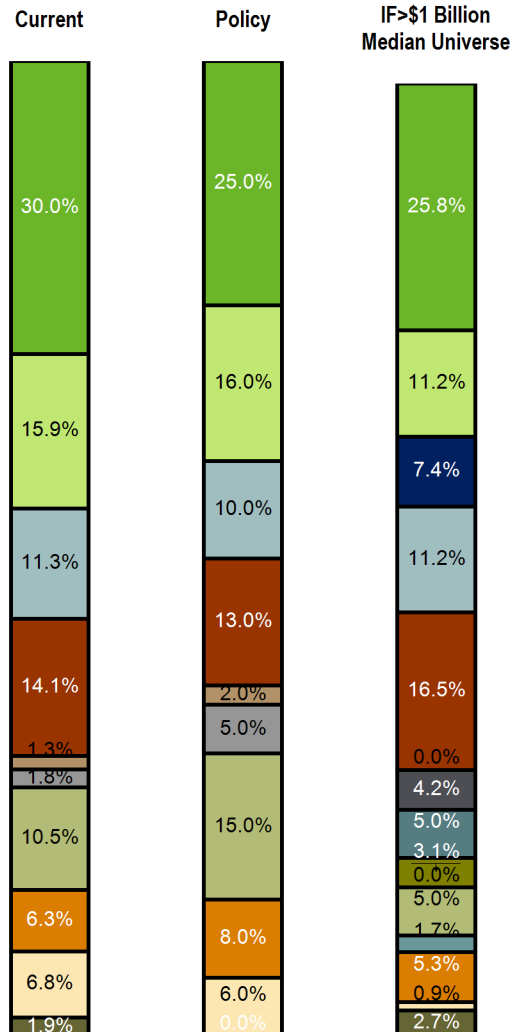


Summary of Cash Flows					
	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$6,276,976,535	\$5,830,640,053	\$6,149,016,410	\$5,420,490,945	\$4,290,811,595
Net Cash Flow	-\$69,975,532	\$28,971,713	-\$90,880,953	-\$163,198,358	-\$182,240,201
Net Investment Change	\$693,495,859	\$1,040,885,096	\$842,361,403	\$1,643,204,274	\$2,791,925,467
Ending Market Value	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861	\$6,900,496,861



Ventura County Employees' Retirement Association

ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target						
	Current	Current	Policy Difference*	Policy Range	Within Range	
U.S. Equity	\$2,067,698,804	30.0%	25.0%	5.0%	20.0% - 30.0%	Yes
Non-US Equity	\$1,095,860,295	15.9%	16.0%	-0.1%	12.0% - 20.0%	Yes
Emerging Markets Equity	--	--	--	0.0%		
Global Equity	\$780,924,031	11.3%	10.0%	1.3%	7.0% - 13.0%	Yes
U.S. Fixed Income	\$972,230,383	14.1%	13.0%	1.1%	12.0% - 20.0%	Yes
Treasury	\$92,433,897	1.3%	2.0%	-0.7%	0.0% - 5.0%	Yes
Fixed Income - Emerging	--	--	--	0.0%		
Fixed Income - Global	--	--	--	0.0%		
GAA/Risk Parity	--	--	--	0.0%		
Private Debt	\$127,312,331	1.8%	5.0%	-3.2%	0.0% - 7.0%	Yes
Private Equity	\$725,980,874	10.5%	15.0%	-4.5%	10.0% - 17.0%	Yes
Hedge Funds	--	--	--	0.0%		
Real Estate	\$436,183,870	6.3%	8.0%	-1.7%	0.0% - 9.0%	Yes
Real Assets	\$468,321,616	6.8%	6.0%	0.8%	0.0% - 8.0%	Yes
Cash	\$133,550,760	1.9%	0.0%	1.9%	0.0% - 3.0%	Yes
Total	\$6,900,496,861	100.0%	100.0%			

*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%.

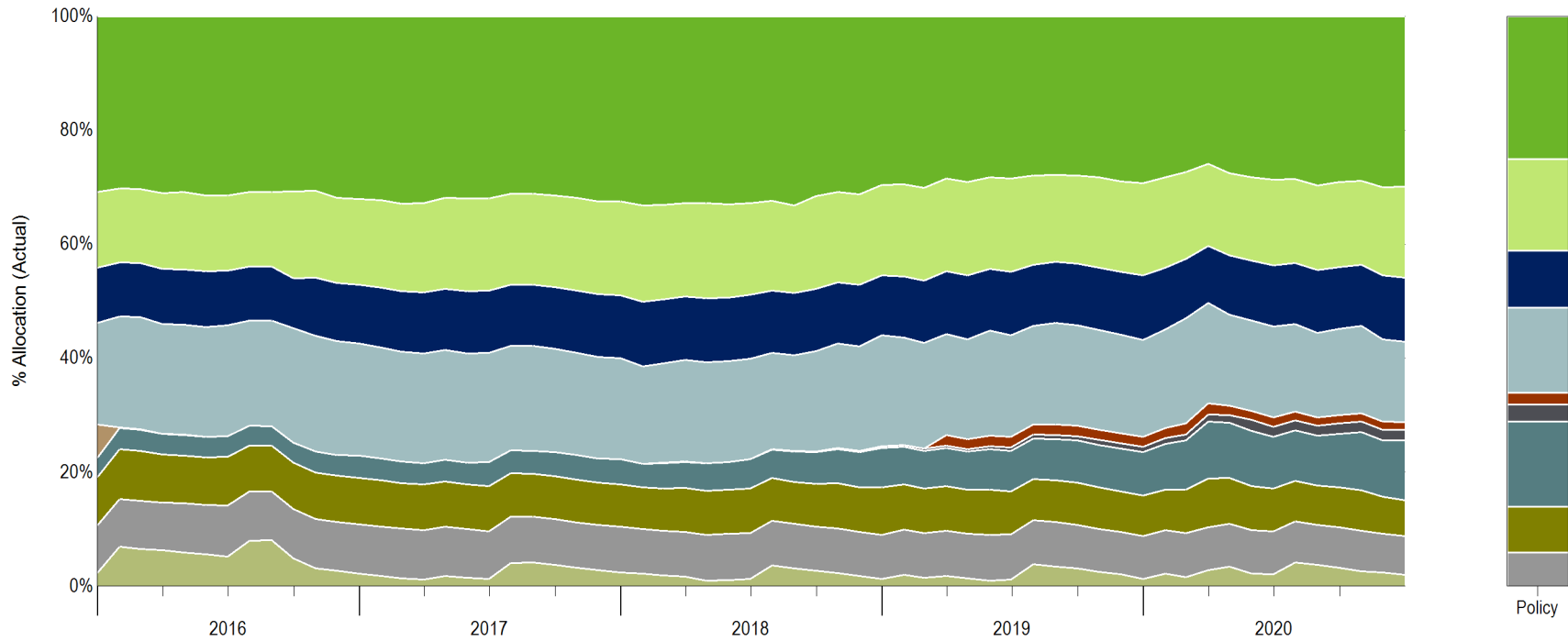
Asset Allocation vs. Policy Targets chart does not reflect Overlay adjusted weights.



Ventura County Employees' Retirement Association

TOTAL FUND ALLOCATION HISTORY

Asset Allocation History
5 Years Ending December 31, 2020



- U.S. Equity
- Global Equity
- Treasury
- Private Debt
- Real Estate
- Real Assets
- Cash
- Non-US Equity
- U.S. Fixed Income
- Global Bonds
- Private Equity

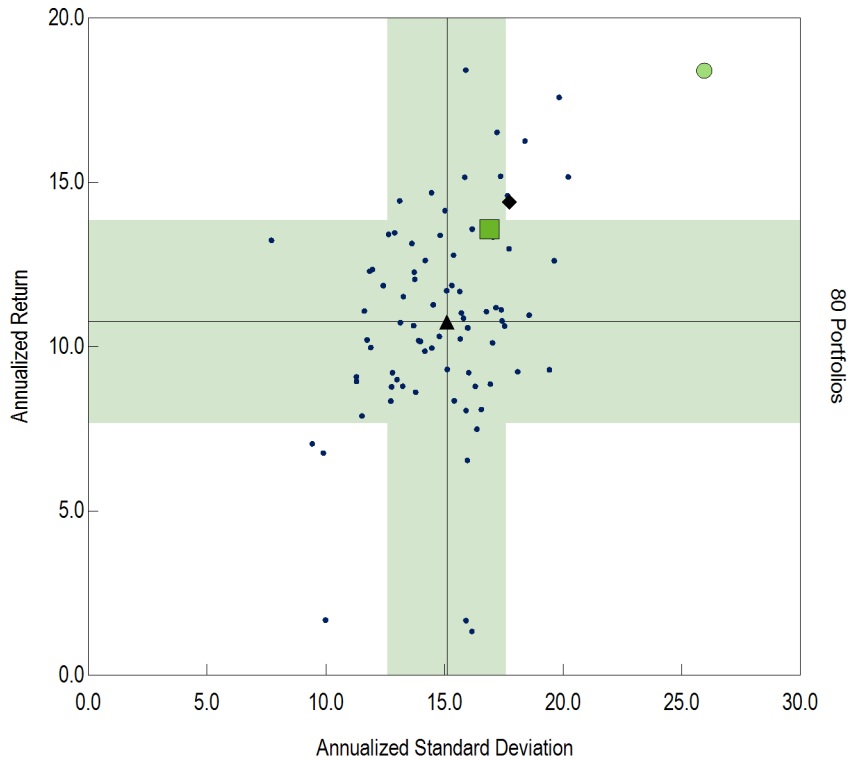
Policy Index shown is most recently approved index



Ventura County Employees' Retirement Association

TOTAL FUND RISK/RETURN

1 Years Ending December 31, 2020



- Total Fund
- ◆ Policy Index
- S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

3 Years Ending December 31, 2020



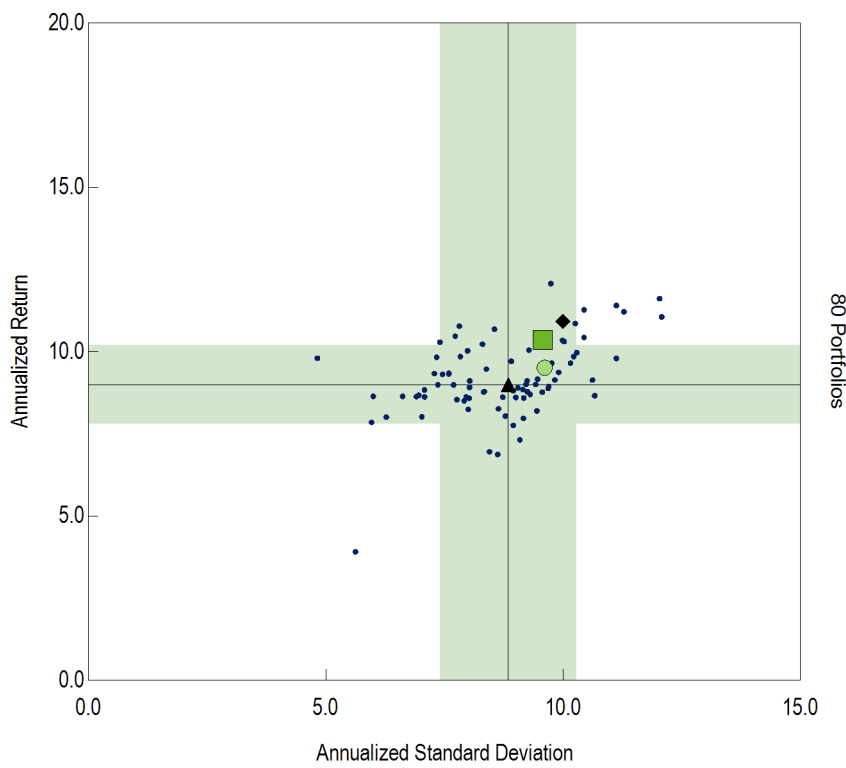
- Total Fund
- ◆ Policy Index
- S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net



Ventura County Employees' Retirement Association

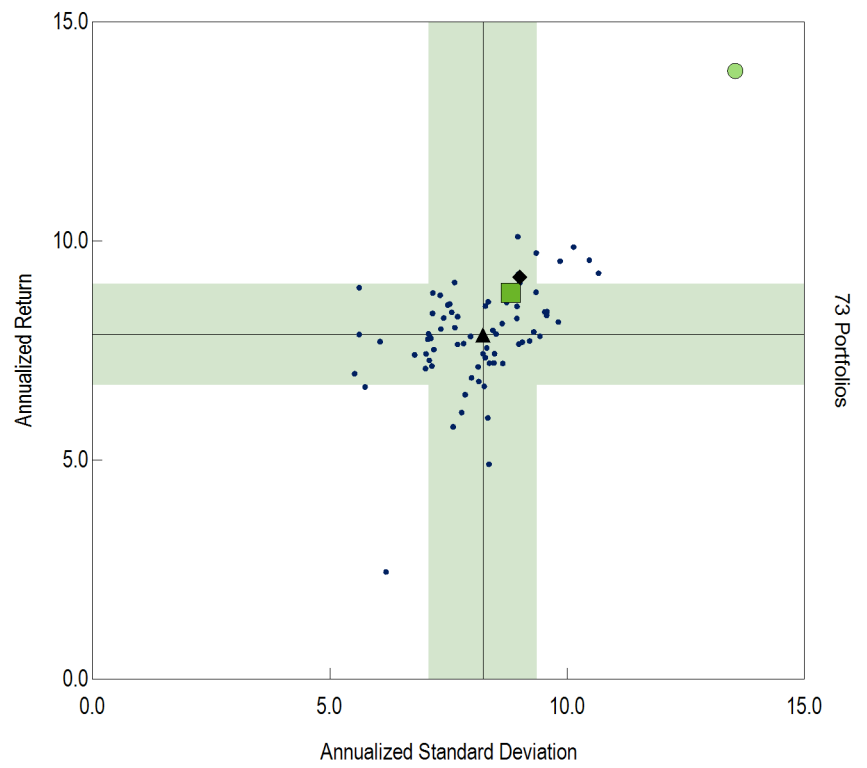
TOTAL FUND RISK/RETURN

5 Years Ending December 31, 2020



- Total Fund
- ◆ Policy Index
- 60% MSCI ACWI (Net) / 40% FTSE WGBI
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

10 Years Ending December 31, 2020



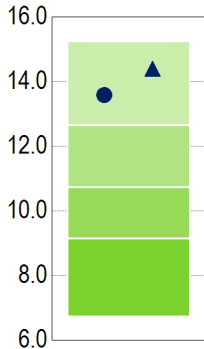
- Total Fund
- ◆ Policy Index
- S&P 500
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

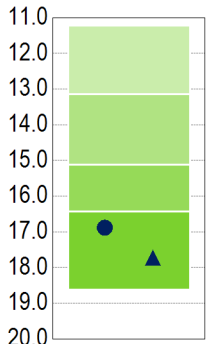
Total Fund vs. InvMetrics Public DB > \$1B Net
1 Year

Anlzd Return



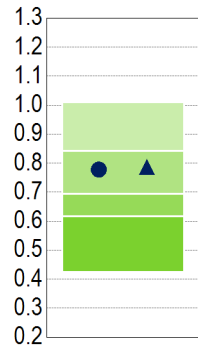
● Total Fund	
Value	13.6
Rank	14
▲ Policy Index	
Value	14.4
Rank	12
Universe	
5th %tile	15.2
25th %tile	12.7
Median	10.8
75th %tile	9.2
95th %tile	6.8

Anlzd Standard Deviation



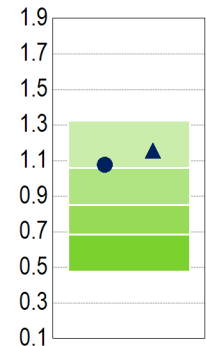
● Total Fund	
Value	16.9
Rank	79
▲ Policy Index	
Value	17.7
Rank	92
Universe	
5th %tile	11.2
25th %tile	13.1
Median	15.1
75th %tile	16.4
95th %tile	18.6

Sharpe Ratio



● Total Fund	
Value	0.8
Rank	35
▲ Policy Index	
Value	0.8
Rank	34
Universe	
5th %tile	1.0
25th %tile	0.8
Median	0.7
75th %tile	0.6
95th %tile	0.4

Sortino Ratio



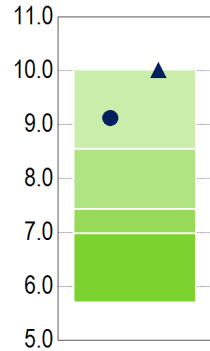
● Total Fund	
Value	1.1
Rank	23
▲ Policy Index	
Value	1.2
Rank	12
Universe	
5th %tile	1.3
25th %tile	1.1
Median	0.9
75th %tile	0.7
95th %tile	0.5



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

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

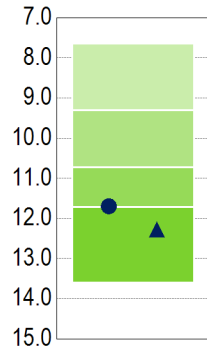
Anlzd Return



● Total Fund
Value 9.1
Rank 18
▲ Policy Index
Value 10.0
Rank 6

Universe
5th %tile 10.0
25th %tile 8.6
Median 7.4
75th %tile 7.0
95th %tile 5.7

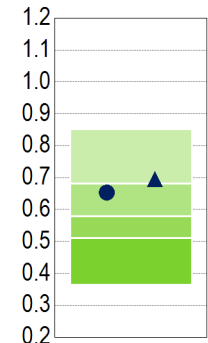
Anlzd Standard Deviation



● Total Fund
Value 11.7
Rank 75
▲ Policy Index
Value 12.3
Rank 85

Universe
5th %tile 7.6
25th %tile 9.3
Median 10.7
75th %tile 11.7
95th %tile 13.6

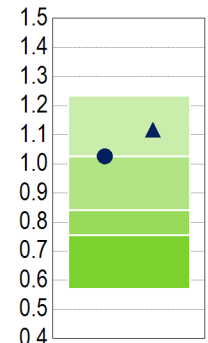
Sharpe Ratio



● Total Fund
Value 0.7
Rank 35
▲ Policy Index
Value 0.7
Rank 24

Universe
5th %tile 0.9
25th %tile 0.7
Median 0.6
75th %tile 0.5
95th %tile 0.4

Sortino Ratio



● Total Fund
Value 1.0
Rank 26
▲ Policy Index
Value 1.1
Rank 11

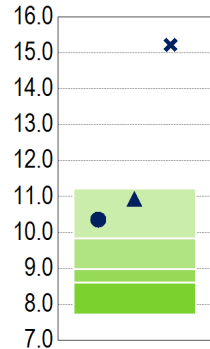
Universe
5th %tile 1.2
25th %tile 1.0
Median 0.8
75th %tile 0.8
95th %tile 0.6



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net 5 Years

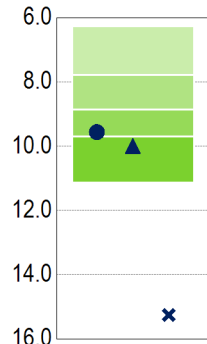
Anlzd Return



● Total Fund
Value 10.4
Rank 14
▲ Policy Index
Value 10.9
Rank 8
× S&P 500
Value 15.2
Rank 1

Universe
5th %tile 11.2
25th %tile 9.9
Median 9.0
75th %tile 8.6
95th %tile 7.7

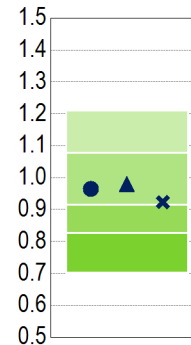
Anlzd Standard Deviation



● Total Fund
Value 9.6
Rank 74
▲ Policy Index
Value 10.0
Rank 83
× S&P 500
Value 15.3
Rank 99

Universe
5th %tile 6.3
25th %tile 7.8
Median 8.8
75th %tile 9.7
95th %tile 11.1

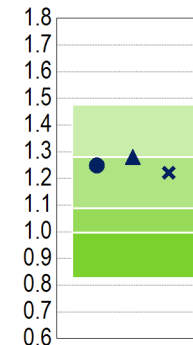
Sharpe Ratio



● Total Fund
Value 1.0
Rank 38
▲ Policy Index
Value 1.0
Rank 33
× S&P 500
Value 0.9
Rank 48

Universe
5th %tile 1.2
25th %tile 1.1
Median 0.9
75th %tile 0.8
95th %tile 0.7

Sortino Ratio



● Total Fund
Value 1.2
Rank 30
▲ Policy Index
Value 1.3
Rank 26
× S&P 500
Value 1.2
Rank 31

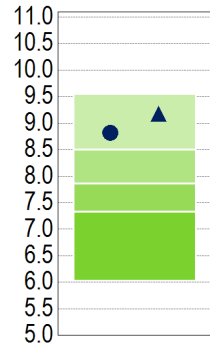
Universe
5th %tile 1.5
25th %tile 1.3
Median 1.1
75th %tile 1.0
95th %tile 0.8



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

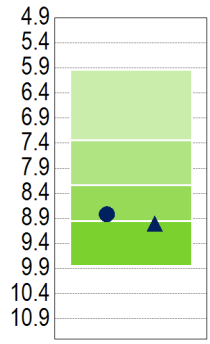
Total Fund vs. InvMetrics Public DB > \$1B Net 10 Years

Anlzd Return



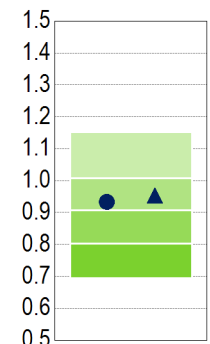
● Total Fund	
Value	8.8
Rank	16
▲ Policy Index	
Value	9.2
Rank	9
Universe	
5th %tile	9.6
25th %tile	8.5
Median	7.9
75th %tile	7.3
95th %tile	6.0

Anlzd Standard Deviation



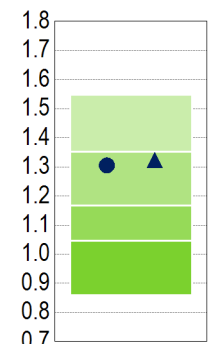
● Total Fund	
Value	8.8
Rank	73
▲ Policy Index	
Value	9.0
Rank	81
Universe	
5th %tile	5.9
25th %tile	7.3
Median	8.2
75th %tile	8.9
95th %tile	9.8

Sharpe Ratio



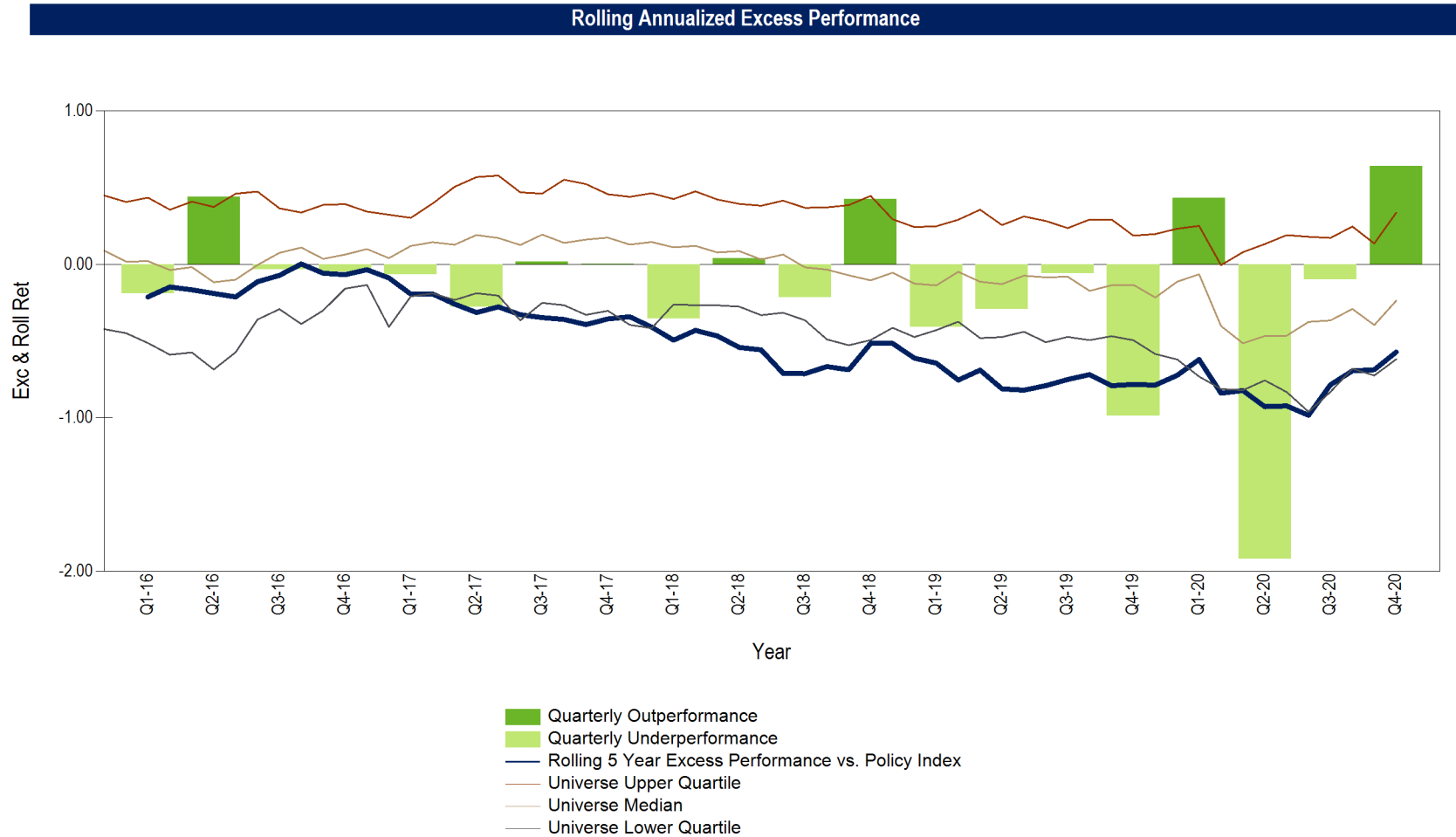
● Total Fund	
Value	0.9
Rank	43
▲ Policy Index	
Value	1.0
Rank	38
Universe	
5th %tile	1.2
25th %tile	1.0
Median	0.9
75th %tile	0.8
95th %tile	0.7

Sortino Ratio



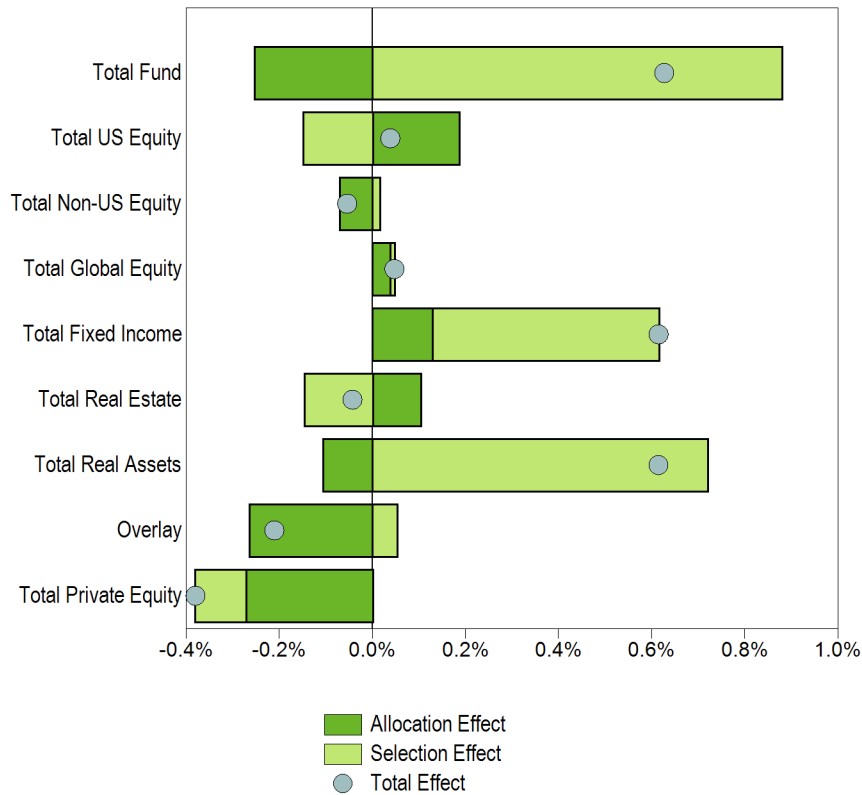
● Total Fund	
Value	1.3
Rank	32
▲ Policy Index	
Value	1.3
Rank	29
Universe	
5th %tile	1.5
25th %tile	1.4
Median	1.2
75th %tile	1.0
95th %tile	0.9

ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
3 Months Ending December 31, 2020



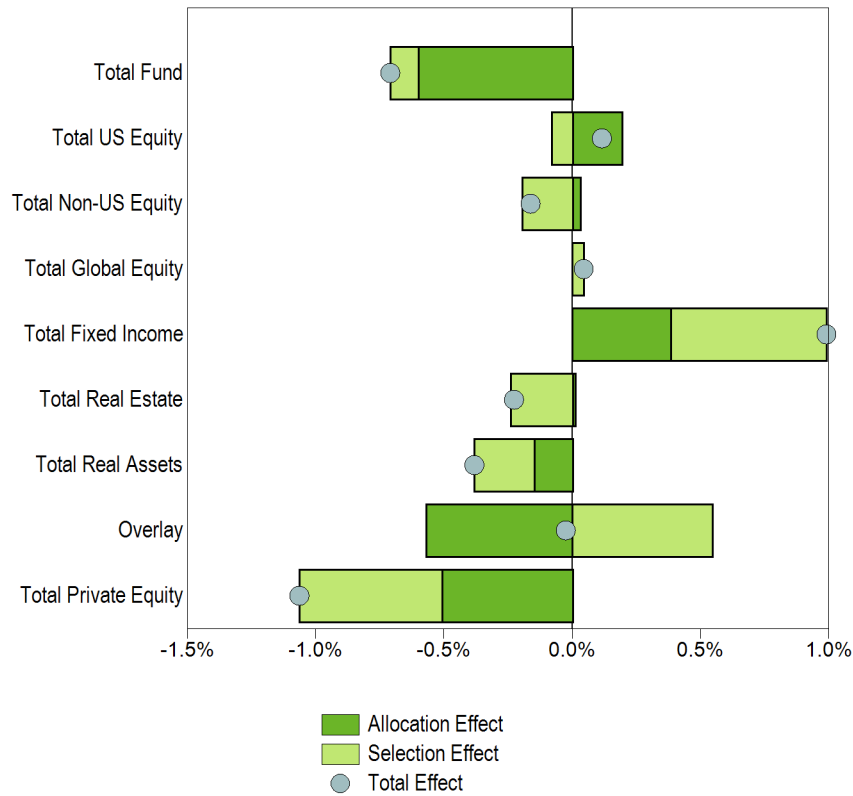
Attribution Summary						
3 Months Ending December 31, 2020						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	14.2%	14.7%	-0.5%	-0.1%	0.2%	0.0%
Total Non-US Equity	17.1%	17.0%	0.0%	0.0%	-0.1%	-0.1%
Total Global Equity	14.8%	14.7%	0.1%	0.0%	0.0%	0.0%
Total Fixed Income	3.1%	0.7%	2.4%	0.5%	0.1%	0.6%
Total Real Estate	-0.9%	1.1%	-2.0%	-0.1%	0.1%	0.0%
Total Real Assets	10.4%	0.6%	9.8%	0.7%	-0.1%	0.6%
Overlay	2.2%	0.0%	2.2%	0.1%	-0.3%	-0.2%
Total Private Equity	14.9%	15.5%	-0.6%	-0.1%	-0.3%	-0.4%
Total	11.0%	10.4%	0.6%	0.9%	-0.2%	0.6%



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
1 Year Ending December 31, 2020

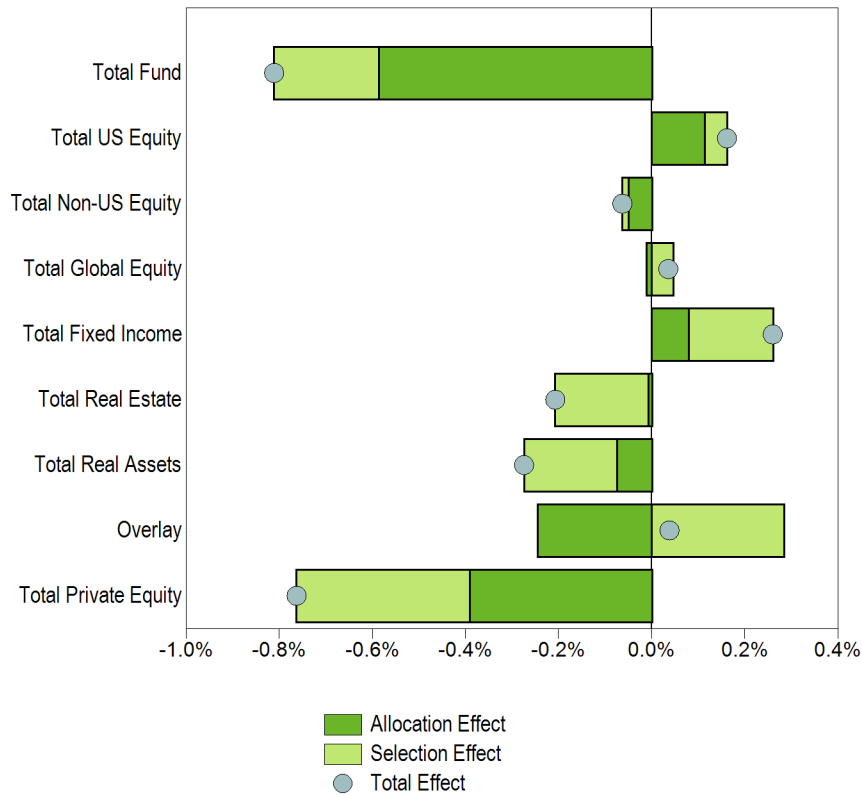


Attribution Summary						
1 Year Ending December 31, 2020						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	20.5%	20.9%	-0.4%	-0.1%	0.2%	0.1%
Total Non-US Equity	9.3%	10.7%	-1.3%	-0.2%	0.0%	-0.2%
Total Global Equity	16.7%	16.3%	0.4%	0.0%	0.0%	0.0%
Total Fixed Income	10.9%	7.5%	3.4%	0.6%	0.3%	1.0%
Total Real Estate	-2.7%	0.3%	-3.0%	-0.2%	0.0%	-0.2%
Total Real Assets	0.0%	3.4%	-3.4%	-0.3%	-0.1%	-0.4%
Overlay	10.6%	0.5%	10.1%	0.5%	-0.6%	-0.1%
Total Private Equity	24.5%	24.5%	0.0%	-0.6%	-0.5%	-1.1%
Total	13.6%	14.4%	-0.8%	-0.2%	-0.6%	-0.8%



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
3 Years Ending December 31, 2020



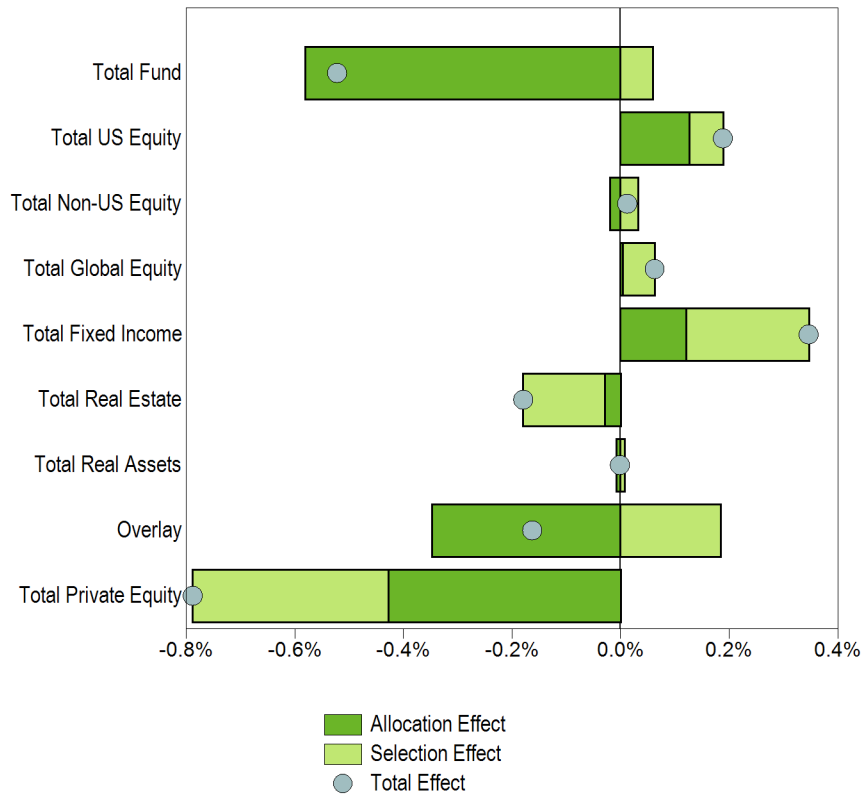
Attribution Summary						
3 Years Ending December 31, 2020						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	14.6%	14.5%	0.1%	0.0%	0.1%	0.1%
Total Non-US Equity	4.8%	4.9%	-0.1%	0.0%	0.0%	-0.1%
Total Global Equity	10.5%	10.1%	0.4%	0.0%	0.0%	0.0%
Total Fixed Income	6.4%	5.3%	1.0%	0.2%	0.1%	0.2%
Total Real Estate	1.4%	4.0%	-2.6%	-0.2%	0.0%	-0.2%
Total Real Assets	2.0%	4.9%	-2.9%	-0.2%	-0.1%	-0.3%
Overlay	11.8%	1.5%	10.3%	0.2%	-0.3%	0.0%
Total Private Equity	17.0%	17.9%	-0.9%	-0.4%	-0.4%	-0.8%
Total	9.1%	10.0%	-0.9%	-0.3%	-0.6%	-0.9%



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
5 Years Ending December 31, 2020



Attribution Summary						
5 Years Ending December 31, 2020						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	15.6%	15.4%	0.2%	0.1%	0.1%	0.2%
Total Non-US Equity	9.2%	8.9%	0.3%	0.0%	0.0%	0.0%
Total Global Equity	12.8%	12.3%	0.6%	0.1%	0.0%	0.1%
Total Fixed Income	5.7%	4.4%	1.2%	0.2%	0.1%	0.3%
Total Real Estate	3.4%	5.3%	-1.9%	-0.1%	0.0%	-0.2%
Total Real Assets	4.9%	5.4%	-0.5%	0.0%	0.0%	0.0%
Overlay	7.9%	1.1%	6.7%	0.2%	-0.3%	-0.2%
Total Private Equity	15.0%	18.8%	-3.8%	-0.4%	-0.4%	-0.8%
Total	10.4%	10.9%	-0.6%	0.0%	-0.6%	-0.6%



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

1 Year Ending December 31, 2020												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	16.5%	27	26.8%	91	-0.2%	32	1.0%	8	0.2	23	1.0
MSCI ACWI	--	16.3%	31	26.0%	80	0.0%	29	0.0%	1	--	--	1.0
Total US Equity	30.0%	20.5%	16	28.0%	83	-0.7%	21	0.8%	6	-0.5	--	1.0
Russell 3000	--	20.9%	13	27.5%	75	0.0%	16	0.0%	1	--	--	1.0
Total Non-US Equity	15.9%	9.3%	86	26.1%	55	-1.4%	84	1.5%	7	-0.9	--	1.0
MSCI ACWI ex USA	--	10.7%	72	25.8%	53	0.0%	69	0.0%	1	--	--	1.0
Total Global Equity	11.3%	16.7%	9	26.0%	86	0.4%	20	0.2%	1	2.2	3	1.0
MSCI ACWI	--	16.3%	11	26.0%	87	0.0%	28	0.0%	1	--	--	1.0
Total Fixed Income	17.6%	10.9%	4	4.7%	48	3.0%	9	3.0%	55	1.1	13	1.1
Total Fixed Income Policy Index	--	7.5%	55	3.4%	28	0.0%	34	0.0%	1	--	--	1.0
Total US Fixed Income	14.1%	11.1%	5	6.0%	84	1.7%	7	4.3%	85	0.8	21	1.3
BBgBarc US Aggregate TR	--	7.5%	47	3.4%	42	0.0%	38	0.0%	1	--	--	1.0
Total Real Assets	6.8%	0.0%	--	21.0%	--	4.7%	--	21.1%	--	-0.2	--	-1.8
Real Assets Index	--	3.4%	--	1.2%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.3%	-2.7%	95	2.6%	44	1.8%	42
NCREIF ODCE Net	--	0.3%	49	2.3%	37	0.0%	1
Total Private Equity	10.2%	24.5%	16	12.0%	36	30.8%	89
Private Equity Benchmark	--	24.5%	16	27.5%	98	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 87 portfolios), Total US Equity (InvMetrics Public DB US Eq consists of 161 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 108 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 48 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 87 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 95 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 RISK STATISTICS

3 Years Ending December 31, 2020

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	11.0%	23	18.8%	70	0.8%	17	0.9%	7	1.0	2	1.0
MSCI ACWI	--	10.1%	52	18.4%	59	0.0%	28	0.0%	1	--	--	1.0
Total US Equity	30.0%	14.6%	7	19.9%	63	0.0%	13	0.5%	3	0.3	7	1.0
Russell 3000	--	14.5%	12	19.7%	59	0.0%	14	0.0%	1	--	--	1.0
Total Non-US Equity	15.9%	4.8%	74	18.1%	30	-0.1%	64	1.2%	6	-0.1	--	1.0
MSCI ACWI ex USA	--	4.9%	71	18.2%	32	0.0%	62	0.0%	1	--	--	1.0
Total Global Equity	11.3%	10.5%	10	18.4%	78	0.4%	43	0.1%	1	3.3	1	1.0
MSCI ACWI	--	10.1%	33	18.4%	79	0.0%	69	0.0%	1	--	--	1.0
Total Fixed Income	17.6%	6.4%	4	3.6%	42	1.3%	12	1.8%	52	0.6	9	0.9
Total Fixed Income Policy Index	--	5.3%	44	3.4%	35	0.0%	66	0.0%	1	--	--	1.0
Total US Fixed Income	14.1%	6.4%	11	4.2%	83	1.2%	8	2.6%	84	0.4	18	1.0
BBgBarc US Aggregate TR	--	5.3%	38	3.4%	54	0.0%	59	0.0%	1	--	--	1.0
Total Real Assets	6.8%	2.0%	--	13.8%	--	0.0%	--	13.8%	--	-0.2	--	0.1
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	6.3%	1.4%	97	2.8%	55	1.9%	41
NCREIF ODCE Net	--	4.0%	66	2.5%	42	0.0%	1
Total Private Equity	10.2%	17.0%	24	8.2%	42	22.0%	80
Private Equity Benchmark	--	17.9%	20	19.7%	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 84 portfolios), Total US Equity (InvMetrics Public DB US Eq consists of 159 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 107 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 41 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 86 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 93 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 51 portfolios) and Total Private Equity (InvMetrics Public DB Private Eq consists of 40 portfolios).



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

5 Years Ending December 31, 2020

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	57.2%	13.3%	11	15.3%	66	0.9%	10	1.0%	11	1.0	1	1.0
MSCI ACWI	--	12.3%	51	15.1%	57	0.0%	29	0.0%	1	--	--	1.0
Total US Equity	30.0%	15.6%	7	16.1%	56	0.1%	8	0.5%	3	0.4	4	1.0
Russell 3000	--	15.4%	11	16.0%	52	0.0%	9	0.0%	1	--	--	1.0
Total Non-US Equity	15.9%	9.2%	60	15.2%	24	0.4%	50	1.2%	4	0.2	42	1.0
MSCI ACWI ex USA	--	8.9%	72	15.4%	32	0.0%	62	0.0%	1	--	--	1.0
Total Global Equity	11.3%	12.8%	3	15.1%	71	0.6%	17	0.4%	1	1.5	1	1.0
MSCI ACWI	--	12.3%	10	15.1%	71	0.0%	66	0.0%	1	--	--	1.0
Total Fixed Income	17.6%	5.7%	31	3.2%	41	1.7%	29	1.7%	46	0.7	5	0.9
Total Fixed Income Policy Index	--	4.4%	66	3.2%	36	0.0%	77	0.0%	1	--	--	1.0
Total US Fixed Income	14.1%	5.7%	15	3.6%	82	1.6%	13	2.2%	83	0.6	17	0.9
BBgBarc US Aggregate TR	--	4.4%	49	3.2%	58	0.0%	72	0.0%	1	--	--	1.0
Total Real Assets	6.8%	4.9%	--	11.5%	--	-0.1%	--	11.5%	--	0.0	--	0.9
Real Assets Index	--	5.4%	--	1.0%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Tracking Error	Rank
Total Real Estate	6.3%	3.4%	95	2.8%	46	1.5%	22
NCREIF ODCE Net	--	5.3%	71	2.7%	43	0.0%	1
Total Private Equity	10.2%	15.0%	28	7.2%	42	17.9%	82
Private Equity Benchmark	--	18.8%	17	16.0%	93	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 77 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 100 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 35 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 79 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 91 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 50 portfolios) and Total Private Equity (InvMetrics Public DB Private Eq consists of 38 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
Total Fund	6,900,496,861	100.0	100.0	11.0	28	17.4	16	13.6	14	9.1	18	10.4	14	8.8	16	8.3	Apr-94
Policy Index				10.4	42	16.9	26	14.4	12	10.0	6	10.9	8	9.2	9	8.4	Apr-94
Over/Under				0.6		0.5		-0.8		-0.9		-0.5		-0.4		-0.1	
60% MSCI ACWI (Net) / 40% FTSE WGBI				9.9	55	16.6	30	14.5	11	8.4	28	9.5	34	6.6	93	6.8	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				7.5	97	13.6	89	14.7	9	11.0	1	11.1	6	10.0	1	8.7	Apr-94
InvMetrics Public DB > \$1B Net Median				10.1		15.5		10.8		7.4		9.0		7.9		7.7	Apr-94
Total Fund ex Parametric*	6,816,908,400	98.8	--	11.0	--	17.2	--	13.1	--	8.8	--	10.2	--	8.7	--	8.2	Apr-94
Total Fund ex Private Equity	6,198,045,164	89.8	--	10.6	34	16.8	27	12.7	25	8.6	23	10.1	21	--	--	9.3	Jan-12
Policy Index				10.4	42	16.9	26	14.4	12	10.0	6	10.9	8	9.2	9	10.2	Jan-12
Over/Under				0.2		-0.1		-1.7		-1.4		-0.8				-0.9	
InvMetrics Public DB > \$1B Net Median				10.1		15.5		10.8		7.4		9.0		7.9		8.8	Jan-12
Total US Equity	2,067,698,804	30.0	25.0	14.2	94	24.9	48	20.5	16	14.6	7	15.6	7	14.0	4	10.0	Dec-93
Russell 3000				14.7	84	25.2	37	20.9	13	14.5	12	15.4	11	13.8	8	10.2	Dec-93
Over/Under				-0.5		-0.3		-0.4		0.1		0.2		0.2		-0.2	
InvMetrics Public DB US Eq Net Median				15.5		24.9		17.6		12.8		14.2		12.8		9.7	Dec-93
Western U.S. Index Plus	296,542,621	4.3		13.6	39	25.0	24	17.9	40	14.2	36	15.8	29	14.6	26	7.7	May-07
S&P 500				12.1	55	22.2	49	18.4	39	14.2	36	15.2	32	13.9	32	9.1	May-07
Over/Under				1.5		2.8		-0.5		0.0		0.6		0.7		-1.4	
eV US Large Cap Equity Net Median				12.5		22.1		14.0		11.3		13.0		12.5		8.6	May-07
Blackrock Russell 1000 Index	1,686,419,384	24.4		13.7	37	24.5	28	21.0	34	14.9	33	--	--	--	--	16.0	May-17
Russell 1000				13.7	37	24.5	28	21.0	34	14.8	33	15.6	30	14.0	30	15.9	May-17
Over/Under				0.0		0.0		0.0		0.1						0.1	
eV US Large Cap Equity Net Median				12.5		22.1		14.0		11.3		13.0		12.5		13.0	May-17
Blackrock Russell 2500 Index	84,736,799	1.2		27.4	27	34.9	30	20.0	44	11.4	47	--	--	--	--	12.6	May-17
Russell 2500				27.4	27	34.9	30	20.0	44	11.3	47	13.6	41	12.0	36	12.5	May-17
Over/Under				0.0		0.0		0.0		0.1						0.1	
eV US Small-Mid Cap Equity Net Median				24.2		31.6		16.5		10.1		12.4		11.1		11.7	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
Total Non-US Equity	1,095,860,295	15.9	16.0	17.1	57	24.8	71	9.3	86	4.8	74	9.2	60	5.4	63	6.6	Mar-94
MSCI ACWI ex USA				17.0	60	24.3	77	10.7	72	4.9	71	8.9	72	4.9	86	5.5	Mar-94
Over/Under				0.1		0.5		-1.4		-0.1		0.3		0.5		1.1	
MSCI EAFE				16.0	80	21.6	96	7.8	93	4.3	84	7.4	95	5.5	57	5.1	Mar-94
MSCI ACWI ex USA NR LCL				12.6	99	16.5	99	6.0	99	5.0	64	7.9	92	6.9	15	--	Mar-94
MSCI EAFE NR LCL				11.4	99	12.7	99	0.8	99	3.0	97	5.8	99	6.8	15	4.8	Mar-94
InvMetrics Public DB ex-US Eq Net Median				17.2		25.6		12.2		5.4		9.5		5.8		6.1	Mar-94
BlackRock ACWI ex-U.S. Index	568,537,973	8.2		17.2	41	25.1	69	11.2	69	5.0	73	9.2	65	5.3	81	3.7	Mar-07
MSCI ACWI ex USA IMI				17.2	41	25.2	69	11.1	69	4.8	73	9.0	70	5.1	83	3.5	Mar-07
Over/Under				0.0		-0.1		0.1		0.2		0.2		0.2		0.2	
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	4.0	Mar-07
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		5.5	Mar-07
Sprucegrove	251,477,366	3.6		24.5	9	31.4	24	4.0	84	1.7	87	8.5	73	4.9	83	7.1	Mar-02
MSCI ACWI ex USA				17.0	45	24.3	73	10.7	69	4.9	73	8.9	70	4.9	83	6.7	Mar-02
Over/Under				7.5		7.1		-6.7		-3.2		-0.4		0.0		0.4	
MSCI EAFE				16.0	55	21.6	82	7.8	76	4.3	74	7.4	80	5.5	79	6.1	Mar-02
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	5.6	Mar-02
MSCI EAFE NR LCL				11.4	90	12.7	98	0.8	88	3.0	77	5.8	89	6.8	64	4.6	Mar-02
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		7.7	Mar-02
Hexavest	94,582,105	1.4		9.6	93	13.5	96	-4.3	98	-0.3	92	3.8	92	3.5	92	3.5	Dec-10
MSCI EAFE				16.0	34	21.6	56	7.8	56	4.3	57	7.4	56	5.5	72	5.5	Dec-10
Over/Under				-6.4		-8.1		-12.1		-4.6		-3.6		-2.0		-2.0	
MSCI EAFE NR LCL				11.4	87	12.7	97	0.8	85	3.0	64	5.8	70	6.8	44	6.8	Dec-10
eV EAFE All Cap Equity Net Median				14.9		22.6		8.4		4.6		7.7		6.4		6.4	Dec-10
Walter Scott	181,262,851	2.6		11.3	90	21.4	84	20.4	45	12.6	15	13.7	22	8.3	36	8.3	Dec-10
MSCI ACWI ex USA				17.0	45	24.3	73	10.7	69	4.9	73	8.9	70	4.9	83	4.9	Dec-10
Over/Under				-5.7		-2.9		9.7		7.7		4.8		3.4		3.4	
MSCI ACWI ex USA NR LCL				12.6	85	16.5	93	6.0	81	5.0	73	7.9	79	6.9	63	6.9	Dec-10
MSCI EAFE				16.0	55	21.6	82	7.8	76	4.3	74	7.4	80	5.5	79	5.5	Dec-10
eV ACWI ex-US All Cap Equity Net Median				16.4		27.1		19.1		8.3		10.9		7.5		7.5	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
Total Global Equity	780,924,031	11.3	10.0	14.8	36	24.2	32	16.7	9	10.5	10	12.8	3	9.2	43	7.2	May-05
MSCI ACWI				<u>14.7</u>	37	<u>24.0</u>	33	<u>16.3</u>	11	<u>10.1</u>	33	<u>12.3</u>	10	<u>9.1</u>	44	<u>7.8</u>	May-05
Over/Under				0.1		0.2		0.4		0.4		0.5		0.1		-0.6	
InvMetrics Public DB Gbl Eq Net Median				14.2		22.5		13.2		9.4		10.9		7.8		7.2	May-05
BlackRock MSCI ACWI Equity Index	780,924,031	11.3		14.8	46	24.2	47	16.7	44	10.5	43	12.7	36	--	--	11.5	Aug-12
MSCI ACWI				<u>14.7</u>	47	<u>24.0</u>	48	<u>16.3</u>	47	<u>10.1</u>	47	<u>12.3</u>	42	<u>9.1</u>	52	<u>11.0</u>	Aug-12
Over/Under				0.1		0.2		0.4		0.4		0.4				0.5	
eV All Global Equity Net Median				14.3		23.6		15.2		9.2		10.9		9.2		10.8	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
Total Private Equity	702,451,697	10.2	15.0	14.9	6	24.0	18	24.5	16	17.0	24	15.0	28	--	--	15.2	Jan-12
Private Equity Benchmark				15.5	5	27.0	9	24.5	16	17.9	20	18.8	17	17.2	7	18.7	Jan-12
Over/Under				-0.6		-3.0		0.0		-0.9		-3.8				-3.5	
CJA Global All PE (Qtr Lag)				9.9	31	20.5	34	14.9	40	13.0	50	12.6	47	12.8	47	12.8	Jan-12
InvMetrics Public DB Private Eq Net Median				8.6		16.2		14.0		13.0		11.8		12.2		12.4	Jan-12
Adams Street Global Fund Series	213,989,642	3.1		11.2	--	23.8	--	26.9	--	16.5	--	13.9	--	--	--	14.0	Jan-12
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	18.7	Jan-12
Over/Under				-4.3		-3.2		2.4		-1.4		-5.0				-4.7	
Harbourvest	126,564,805	1.8		22.6	--	25.4	--	19.6	--	18.1	--	16.7	--	--	--	18.8	Aug-13
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	17.0	Aug-13
Over/Under				7.1		-1.6		-4.9		0.2		-2.2				1.8	
Pantheon Global Secondary Funds	48,918,540	0.7		9.7	--	13.8	--	6.4	--	7.5	--	12.2	--	--	--	11.0	Jan-12
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	18.7	Jan-12
Over/Under				-5.8		-13.2		-18.1		-10.4		-6.7				-7.7	
Drive Capital Fund II	20,288,053	0.3		0.1	--	-1.0	--	12.3	--	18.8	--	--	--	--	--	-5.4	Sep-16
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	19.4	Sep-16
Over/Under				-15.4		-28.0		-12.2		0.9						-24.8	
Abbott Secondary Opportunities	15,865,241	0.2		7.6	--	25.7	--	40.5	--	24.5	--	--	--	--	--	24.5	Jan-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	17.9	Jan-18
Over/Under				-7.9		-1.3		16.0		6.6						6.6	
Clearlake Capital Partners V	12,564,561	0.2		13.7	--	31.3	--	27.8	--	--	--	--	--	--	--	38.0	Mar-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	18.3	Mar-18
Over/Under				-1.8		4.3		3.3								19.7	
Battery Ventures XII	17,748,570	0.3		31.2	--	33.7	--	46.7	--	--	--	--	--	--	--	13.8	Apr-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	19.6	Apr-18
Over/Under				15.7		6.7		22.2								-5.8	

Private equity performance shown above is calculated using a time-weighted return methodology. Market values shown are cash-adjusted based on the current period's cash flows.

Adams Street Global Fund Series includes Adams Street 2010 U.S. Fund, 2010 Non-U.S. Developed Markets Fund, 2010 Non-U.S. Emerging Markets Fund, 2010 Direct Fund, 2013, and 2016 Global Fund.

Pantheon Global Secondary Funds includes Pantheon Global Secondary Fund IV and Global Secondary Fund V.



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
Insight Venture Partners X	38,815,057	0.6		27.5	--	43.1	--	46.2	--	--	--	--	--	--	--	21.3	May-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	20.0	May-18
Over/Under				12.0		16.1		21.7								1.3	
GTCR Fund XII	19,414,214	0.3		16.4	--	48.2	--	55.6	--	--	--	--	--	--	--	-11.5	Jun-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	19.3	Jun-18
Over/Under				0.9		21.2		31.1								-30.8	
Buenaventure One, LLC	70,689,207	1.0		12.8	--	17.0	--	17.7	--	--	--	--	--	--	--	9.2	Jul-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	19.6	Jul-18
Over/Under				-2.7		-10.0		-6.8								-10.4	
ECI 11	5,040,439	0.1		12.7	--	35.5	--	20.8	--	--	--	--	--	--	--	24.6	Dec-18
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	22.5	Dec-18
Over/Under				-2.8		8.5		-3.7								2.1	
The Resolute Fund IV L.P.	19,874,772	0.3		22.7	--	35.9	--	42.2	--	--	--	--	--	--	--	60.7	Jan-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	29.6	Jan-19
Over/Under				7.2		8.9		17.7								31.1	
GGV Capital VII L.P.	7,326,100	0.1		3.8	--	6.9	--	9.7	--	--	--	--	--	--	--	-8.4	Feb-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	25.4	Feb-19
Over/Under				-11.7		-20.1		-14.8								-33.8	
GGV Discovery II, L.P.	1,299,218	0.0		3.1	--	7.0	--	11.2	--	--	--	--	--	--	--	4.2	Feb-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	25.4	Feb-19
Over/Under				-12.4		-20.0		-13.3								-21.2	
Drive Capital Overdrive Fund I	5,794,870	0.1		48.3	--	48.3	--	45.4	--	--	--	--	--	--	--	22.5	May-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	22.5	May-19
Over/Under				32.8		21.3		20.9								0.0	
Riverside Micro Cap Fund V, LP	3,251,671	0.0		11.2	--	10.1	--	1.7	--	--	--	--	--	--	--	-17.5	May-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	22.5	May-19
Over/Under				-4.3		-16.9		-22.8								-40.0	
GGV Capital VII Plus, LP	1,827,953	0.0		10.7	--	15.8	--	15.7	--	--	--	--	--	--	--	9.9	Jun-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	28.9	Jun-19
Over/Under				-4.8		-11.2		-8.8								-19.0	

Private equity performance shown above is calculated using a time-weighted return methodology. Market values shown are cash-adjusted based on the current period's cash flows.



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.	3,524,548	0.1		27.9	--	63.8	--	62.3	--	--	--	--	--	--	--	-8.1	Jul-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.8	Jul-19
Over/Under				12.4		36.8		37.8								-32.9	
M/C Partners Fund VIII LP. Limited Partnership	2,653,350	0.0		-1.9	--	9.2	--	-35.1	--	--	--	--	--	--	--	-34.5	Jul-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.8	Jul-19
Over/Under				-17.4		-17.8		-59.6								-59.3	
Genstar Capital Partners IX	3,377,222	0.0		15.1	--	27.3	--	27.1	--	--	--	--	--	--	--	--	Aug-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.9	Aug-19
Over/Under				-0.4		0.3		2.6									
Genstar IX Opportunities Fund I	1,649,234	0.0		6.0	--	13.3	--	12.6	--	--	--	--	--	--	--	8.5	Aug-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.9	Aug-19
Over/Under				-9.5		-13.7		-11.9								-16.4	
ABRY Partners IX, LP	5,096,839	0.1		9.5	--	24.6	--	-15.0	--	--	--	--	--	--	--	-21.8	Sep-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	28.4	Sep-19
Over/Under				-6.0		-2.4		-39.5								-50.2	
Advent International GPE IX LP	4,419,336	0.1		11.0	--	33.0	--	29.0	--	--	--	--	--	--	--	18.0	Nov-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	28.2	Nov-19
Over/Under				-4.5		6.0		4.5								-10.2	
Drive Capital Fund III LP	1,562,200	0.0		10.1	--	10.1	--	-9.0	--	--	--	--	--	--	--	-8.4	Dec-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	25.9	Dec-19
Over/Under				-5.4		-16.9		-33.5								-34.3	
Oak HC/FT Partners III LP	10,491,077	0.2		18.6	--	16.3	--	3.2	--	--	--	--	--	--	--	2.9	Dec-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	25.9	Dec-19
Over/Under				3.1		-10.7		-21.3								-23.0	
TA XIII A LP	5,699,260	0.1		5.6	--	21.6	--	1.9	--	--	--	--	--	--	--	1.9	Dec-19
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.5	Dec-19
Over/Under				-9.9		-5.4		-22.6								-22.6	
Dover Street X, LP	10,320,708	0.1		57.8	--	57.2	--	--	--	--	--	--	--	--	--	39.9	Feb-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	24.3	Feb-20
Over/Under				42.3		30.2										15.6	
Hellman & Friedman CP IX	9,369,156	0.1		5.9	--	26.9	--	--	--	--	--	--	--	--	--	-2.5	Apr-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	56.1	Apr-20
Over/Under				-9.6		-0.1										-58.6	



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
Clearlake Capital Partners VI	4,928,572	0.1		11.7	--	11.7	--	--	--	--	--	--	--	--	--	11.7	Jun-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	30.3	Jun-20
Over/Under				-3.8		-15.3										-18.6	
Flexpoint Fund IV	1,496,237	0.0		-12.7	--	10.7	--	--	--	--	--	--	--	--	--	10.7	Jun-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	30.3	Jun-20
Over/Under				-28.2		-16.3										-19.6	
Battery Ventures XIII	4,396,013	0.1		6.4	--	2.2	--	--	--	--	--	--	--	--	--	2.2	Jun-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	30.3	Jun-20
Over/Under				-9.1		-24.8										-28.1	
Green Equity Investors VIII, L.P.	1,955,243	0.0		--	--	--	--	--	--	--	--	--	--	--	--	0.0	Nov-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	17.7	Nov-20
Over/Under																-17.7	
CapVest Private Equity Partners IV, SCSp	867,625	0.0		--	--	--	--	--	--	--	--	--	--	--	--	2.3	Dec-20
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	4.7	Dec-20
Over/Under																-2.4	
Great Hill Equity Partners VII	379,549	0.0		--	--	--	--	--	--	--	--	--	--	--	--	--	Jan-21
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	--	Jan-21
Over/Under																--	
Vitruvian Investment Partners IV	278,123	0.0		--	--	--	--	--	--	--	--	--	--	--	--	--	Jan-21
Russell 3000 + 3%				15.5	--	27.0	--	24.5	--	17.9	--	18.9	--	17.2	--	--	Jan-21
Over/Under																--	



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
Total US Fixed Income	972,230,383	14.1	13.0	2.6	11	4.6	10	11.1	5	6.4	11	5.7	15	4.8	21	6.0	Feb-94
BBgBarc US Aggregate TR				0.7	60	1.3	82	7.5	47	5.3	38	4.4	49	3.8	52	5.4	Feb-94
Over/Under				1.9		3.3		3.6		1.1		1.3		1.0		0.6	
InvMetrics Public DB US Fix Inc Net Median				0.8		1.7		7.3		5.0		4.3		3.9		5.4	Feb-94
BlackRock U.S. Debt Fund	179,368,681	2.6		0.7	71	1.3	75	7.6	35	5.4	38	4.5	49	3.9	54	5.2	Nov-95
BBgBarc US Aggregate TR				0.7	71	1.3	75	7.5	36	5.3	39	4.4	50	3.8	56	5.2	Nov-95
Over/Under				0.0		0.0		0.1		0.1		0.1		0.1		0.0	
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		5.0	Nov-95
Western	309,270,909	4.5		2.2	39	4.0	39	10.9	13	6.8	15	6.1	26	5.4	27	6.3	Dec-96
BBgBarc US Aggregate TR				0.7	71	1.3	75	7.5	36	5.3	39	4.4	50	3.8	56	5.2	Dec-96
Over/Under				1.5		2.7		3.4		1.5		1.7		1.6		1.1	
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		5.1	Dec-96
Reams	344,088,888	5.0		3.3	26	5.6	27	12.0	10	6.3	19	5.5	31	4.4	41	5.5	Sep-01
Reams Custom Index				0.1	95	0.1	96	0.6	97	1.8	97	1.5	96	1.9	85	3.6	Sep-01
Over/Under				3.2		5.5		11.4		4.5		4.0		2.5		1.9	
BBgBarc US Aggregate TR				0.7	71	1.3	75	7.5	36	5.3	39	4.4	50	3.8	56	4.6	Sep-01
3-Month LIBOR + 3%				0.8	67	1.6	69	3.6	75	4.8	49	4.5	49	3.9	53	4.8	Sep-01
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		4.6	Sep-01
Loomis Strategic Alpha	48,408,923	0.7		4.7	17	8.1	16	10.9	13	5.2	43	5.0	38	--	--	3.7	Jul-13
BBgBarc US Aggregate TR				0.7	71	1.3	75	7.5	36	5.3	39	4.4	50	3.8	56	3.9	Jul-13
Over/Under				4.0		6.8		3.4		-0.1		0.6				-0.2	
3-Month LIBOR + 3%				0.8	67	1.6	69	3.6	75	4.8	49	4.5	49	3.9	53	4.1	Jul-13
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		3.9	Jul-13
Loomis Sayles Multi Strategy	91,092,983	1.3		4.7	17	7.5	18	12.9	9	7.0	14	7.5	16	6.3	16	6.7	Jul-05
Loomis Custom Index				2.4	36	4.3	36	7.3	39	5.6	34	5.6	29	4.7	38	5.2	Jul-05
Over/Under				2.3		3.2		5.6		1.4		1.9		1.6		1.5	
BBgBarc US Govt/Credit TR				0.8	65	1.6	69	8.9	22	6.0	25	5.0	38	4.2	47	4.6	Jul-05
eV All US Fixed Inc Net Median				1.4		2.8		6.0		4.8		4.4		4.0		4.4	Jul-05
Treasuries	92,433,897	1.3	2.0	-1.8	--	-1.2	--	11.4	--	--	--	--	--	--	--	9.6	Apr-19
Reams 10-Year Treasuries	92,433,897	1.3		-1.8	--	-1.2	--	11.4	--	--	--	--	--	--	--	9.6	Apr-19
BBgBarc US Treasury 7-10 Yr TR				-1.3	--	-1.0	--	10.0	--	6.4	--	4.5	--	4.6	--	8.8	Apr-19
Over/Under				-0.5		-0.2		1.4								0.8	

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
Private Debt	150,841,508	2.2	5.0	9.7	--	12.8	--	7.1	--	6.7	--	--	--	--	--	6.7	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	6.7	Jan-18
Over/Under				4.7		2.9		1.0		0.0						0.0	
CVI Credit Value Fund	31,123,993	0.5		4.0	--	16.4	--	2.1	--	4.6	--	--	--	--	--	4.6	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	6.7	Jan-18
Over/Under				-1.0		6.5		-4.0		-2.1						-2.1	
Monroe Capital Private Credit Fund III	21,258,594	0.3		5.1	--	11.5	--	11.2	--	--	--	--	--	--	--	10.7	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	8.2	Dec-18
Over/Under				0.1		1.6		5.1		--						2.5	
Bluebay Direct Lending Fund III	9,552,910	0.1		2.3	--	7.2	--	7.1	--	--	--	--	--	--	--	8.6	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	7.5	Apr-19
Over/Under				-2.7		-2.7		1.0		--						1.1	
Pimco Private Income Fund	60,401,935	0.9		11.0	--	11.0	--	11.3	--	--	--	--	--	--	--	9.6	Nov-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	7.4	Nov-19
Over/Under				6.0		1.1		5.2		--						2.2	
Bridge Debt Strategies III Limited Partner	23,529,177	0.3		20.3	--	16.3	--	2.6	--	--	--	--	--	--	--	2.6	Jan-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	6.1	Jan-20
Over/Under				15.3		6.4		-3.5		--						-3.5	
PIMCO Corp Opps Fund III	4,974,898	0.1		15.8	--	15.8	--	--	--	--	--	--	--	--	--	33.8	May-20
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				5.0	--	9.9	--	6.1	--	6.7	--	--	--	--	--	15.8	May-20
Over/Under				10.8		5.9		--		--						18.0	

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
Total Real Estate	436,183,870	6.3	8.0	-0.9	99	-1.0	99	-2.7	95	1.4	97	3.4	95	7.4	78	7.1	Mar-94
<i>NCREIF ODCE Net</i>				<u>1.1</u>	71	<u>1.4</u>	71	<u>0.3</u>	49	<u>4.0</u>	66	<u>5.3</u>	71	<u>8.9</u>	55	<u>7.6</u>	<i>Mar-94</i>
Over/Under				-2.0		-2.4		-3.0		-2.6		-1.9		-1.5		-0.5	
<i>InvMetrics Public DB Real Estate Pub+Priv Net Median</i>				1.7		1.7		0.2		4.7		6.2		9.0		7.8	<i>Mar-94</i>
Prudential Real Estate	168,998,678	2.4		1.4	--	1.7	--	2.1	--	5.4	--	6.2	--	9.8	--	6.0	Jun-04
<i>NCREIF ODCE Net</i>				<u>1.1</u>	--	<u>1.4</u>	--	<u>0.3</u>	--	<u>4.0</u>	--	<u>5.3</u>	--	<u>8.9</u>	--	<u>6.5</u>	<i>Jun-04</i>
Over/Under				0.3		0.3		1.8		1.4		0.9		0.9		-0.5	
<i>NCREIF ODCE</i>				1.3	--	1.8	--	1.2	--	4.9	--	6.2	--	9.9	--	7.5	<i>Jun-04</i>
UBS Real Estate	250,043,963	3.6		-2.0	--	-2.4	--	-4.7	--	-0.5	--	1.9	--	6.2	--	6.0	Mar-03
<i>NCREIF ODCE Net</i>				<u>1.1</u>	--	<u>1.4</u>	--	<u>0.3</u>	--	<u>4.0</u>	--	<u>5.3</u>	--	<u>8.9</u>	--	<u>6.7</u>	<i>Mar-03</i>
Over/Under				-3.1		-3.8		-5.0		-4.5		-3.4		-2.7		-0.7	
<i>NCREIF ODCE</i>				1.3	--	1.8	--	1.2	--	4.9	--	6.2	--	9.9	--	7.7	<i>Mar-03</i>
LaSalle Income + Growth VIII Limited Partnership	17,141,229	0.2		-6.9	--	-6.9	--	--	--	--	--	--	--	--	--	-19.0	Mar-20
<i>NCREIF ODCE Net</i>				<u>1.1</u>	--	<u>1.4</u>	--	<u>0.3</u>	--	<u>4.0</u>	--	<u>5.3</u>	--	<u>8.9</u>	--	<u>0.3</u>	<i>Mar-20</i>
Over/Under				-8.0		-8.3										-19.3	
<i>NCREIF ODCE</i>				1.3	--	1.8	--	1.2	--	4.9	--	6.2	--	9.9	--	1.2	<i>Mar-20</i>

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
Total Real Assets	468,321,616	6.8	6.0	10.4	--	11.7	--	0.0	--	2.0	--	4.9	--	--	--	3.9	Apr-13
Real Assets Index				0.6	--	2.0	--	3.4	--	4.9	--	5.4	--	7.7	--	5.7	Apr-13
Over/Under				9.8		9.7		-3.4		-2.9		-0.5				-1.8	
Bridgewater All Weather Fund	382,289,714	5.5		8.2	--	12.7	--	9.6	--	6.7	--	8.4	--	--	--	6.2	Aug-13
CPI + 5% (Unadjusted)				1.3	--	3.5	--	6.4	--	6.9	--	7.0	--	--	--	6.5	Aug-13
Over/Under				6.9		9.2		3.2		-0.2		1.4				-0.3	
Tortoise Energy Infrastructure	58,244,205	0.8		26.6	--	6.8	--	-29.4	--	-12.9	--	-5.9	--	--	--	-4.5	Apr-13
Tortoise MLP Index				29.6	--	11.7	--	-27.9	--	-11.6	--	-4.6	--	-1.9	--	-6.4	Apr-13
Over/Under				-3.0		-4.9		-1.5		-1.3		-1.3				1.9	
Brookfield Infra Fund IV B LP	23,931,805	0.3		9.2	--	3.1	--	--	--	--	--	--	--	--	--	3.1	Apr-20
CPI + 2% (Unadjusted)				0.6	--	2.0	--	3.4	--	3.9	--	4.0	--	3.8	--	2.4	Apr-20
Over/Under				8.6		1.1										0.7	
Harbourvest Real Assets Fund IV L.P.	3,855,892	0.1															
CPI + 2% (Unadjusted)				0.6	--	2.0	--	3.4	--	3.9	--	4.0	--	3.8	--	3.2	Sep-19
Over/Under																	
Overlay	133,550,760	1.9	0.0														
Parametric	83,588,461	1.2															
Abbott Capital Cash	49,962,299	0.7															

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 ¹	Outstanding Commitment ¹	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
													Distributions Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$23,974,362	\$1,388,355	96%	--	\$12,750,000	\$15,865,243	\$32,615,243	\$8,640,881	22.8%	0.53x	1.36x
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	\$5,478,498	\$5,121,502	52%	--	--	\$5,096,839	\$5,096,839	(\$381,659)	-7.6%	--	0.93x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$42,488,544	\$35,114,468	\$77,603,012	\$40,145,299	15.4%	1.13x	2.07x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,000,000	\$22,962,749	\$2,537,251	90%	\$1,589	\$23,288,863	\$16,027,670	\$39,316,533	\$16,352,195	12.5%	1.01x	1.71x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	--	\$4,130,787	\$9,843,935	\$13,974,722	\$6,341,722	11.0%	0.54x	1.83x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,168,500	\$331,500	96%	\$6,697	\$10,372,022	\$4,534,409	\$14,906,431	\$6,731,234	12.4%	1.27x	1.82x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$20,799,168	\$82,341,378	\$103,140,546	\$41,779,818	12.3%	0.34x	1.68x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$39,492,000	\$20,508,000	66%	--	\$4,801,064	\$46,586,129	\$51,387,193	\$11,895,193	13.5%	0.12x	1.3x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$16,684,931	\$13,410,000	56%	\$67,808	--	\$19,804,408	\$19,804,408	\$3,051,669	16.2%	--	1.19x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$3,674,971	\$6,325,029	37%	--	--	\$4,419,336	\$4,419,336	\$744,365	26.4%	--	1.2x
Astorg VII	2019	12/17/2018	\$9,288,744	\$3,094,116	\$6,194,628	33%	--	--	\$2,880,591	\$2,880,591	(\$213,525)	-14.5%	--	0.93x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$7,428,240	\$1,621,760	82%	--	--	\$10,338,549	\$10,338,549	\$2,910,309	22.0%	--	1.39x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$4,368,755	\$681,245	87%	--	--	\$7,410,022	\$7,410,022	\$3,041,267	35.6%	--	1.7x
Battery Ventures XIII	2020	2/11/2020	\$9,240,000	\$2,439,360	\$6,800,640	26%	--	--	\$2,433,803	\$2,433,803	(\$5,557)	-0.7%	--	1x
Battery Ventures XIII Side Fund	2020	2/11/2020	\$6,160,000	\$1,850,464	\$4,309,536	30%	--	--	\$1,962,209	\$1,962,209	\$111,745	29.7%	--	1.06x
Buenaventure One, LLC	2018	1/5/2018	\$160,429,500	\$60,430,590	\$99,998,910	38%	--	\$403,156	\$70,689,186	\$71,092,341	\$10,661,751	14.4%	0.01x	1.18x
CapVest Equity Partners IV	2019	7/11/2018	\$13,496,827	\$826,432	\$12,670,395	6%	--	--	(\$250,227)	(\$250,227)	--	-100.0%	--	-0.3x
Charlesbank Equity Fund X	2020	11/20/2020	\$24,000,000	--	\$24,000,000	--	--	--	--	--	--	--	--	--
Charlesbank Equity Coverage 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	\$12,964,560	\$15,362,242	\$6,153,028	39.3%	0.31x	1.68x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	\$4,787,653	\$13,966,872	26%	--	\$155,933	\$4,896,529	\$5,052,462	\$264,809	18.8%	0.03x	1.06x
CRV XVIII	2020	7/2/2020	\$15,000,000	--	\$15,000,000	--	--	--	--	--	--	--	--	--
CVC Capital Partners VIII	2020	5/22/2020	\$22,599,616	--	\$22,599,616	--	--	--	--	--	--	--	--	--
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$14,142,517	\$860,693	94%	\$3,210	--	\$20,288,060	\$20,288,060	\$6,142,333	17.9%	--	1.43x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$1,570,001	\$5,929,999	21%	--	--	\$1,562,199	\$1,562,199	(\$7,802)	-1.5%	--	1x
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$4,096,821	\$3,403,179	55%	--	\$12,492	\$5,794,872	\$5,807,364	\$1,710,543	34.2%	0x	1.42x
ECI 11	2018	7/5/2018	\$9,927,209	\$3,715,640	\$6,211,569	37%	--	--	\$3,687,364	\$3,687,364	(\$28,276)	-0.6%	--	0.99x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	\$1,783,947	\$8,866,053	17%	--	--	\$1,496,238	\$1,496,238	(\$287,709)	-41.9%	--	0.84x
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	--	\$3,550,000	--	--	--	(\$4,699)	(\$4,699)	--	-100.0%	--	--
Genstar Capital Partners IX	2019	2/21/2019	\$7,500,000	\$2,944,241	\$4,728,882	39%	--	\$147,024	\$3,377,223	\$3,552,223	\$607,982	24.8%	0.05x	1.21x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$1,497,259	\$1,002,741	60%	--	--	\$1,649,234	\$1,649,234	\$151,975	12.9%	--	1.1x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$7,112,000	\$3,048,000	70%	--	--	\$7,326,101	\$7,326,101	\$214,101	3.6%	--	1.03x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$1,600,200	\$939,800	63%	--	--	\$1,827,953	\$1,827,953	\$227,753	15.1%	--	1.14x
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	\$1,197,000	\$903,000	57%	--	--	\$1,299,218	\$1,299,218	\$102,218	8.9%	--	1.09x
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	\$379,549	\$8,520,451	4%	--	--	\$1,708,832	\$1,708,832	--	--	--	--
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	\$1,974,297	\$13,025,703	13%	--	--	\$1,955,243	\$1,955,243	(\$19,054)	-16.8%	--	0.99x
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$19,640,202	\$10,359,798	65%	--	\$5,743,843	\$19,414,218	\$25,158,061	\$5,517,859	21.8%	0.29x	1.28x
GTCR Fund XIII	2020	10/27/2020	\$30,000,000	--	\$30,000,000	--	--	--	--	--	--	--	--	--
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$61,509,954	\$6,075,000	91%	\$84,954	\$76,846,255	\$23,091,149	\$99,937,404	\$38,342,496	19.9%	1.25x	1.62x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$48,000,000	\$12,000,000	80%	--	\$23,553,089	\$46,065,824	\$69,618,913	\$21,618,913	23.6%	0.49x	1.45x
HarbourVest - Dover Street X	2019	5/31/2019	\$40,000,000	\$9,000,000	\$31,000,000	23%	--	\$935,750	\$10,320,704	\$11,256,454	\$2,256,454	75.5%	--	1.25x
HarbourVest - PRINS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	--	\$6,050,893	\$30,899,619	\$36,950,512	\$12,486,124	15.7%	0.25x	1.51x
HarbourVest - PRINS CO INVEST V L.P.	2019	7/31/2018	\$35,000,000	\$21,000,000	\$14,000,000	60%	--	--	\$27,675,921	\$27,675,921	\$5,675,921	45.2%	--	1.33x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	\$9,059,432	\$10,740,568	46%	--	--	\$9,369,152	\$9,369,152	\$309,720	7.2%	--	1.03x
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$24,450,000	\$550,000	98%	--	\$1,654,457	\$38,815,052	\$40,469,509	\$16,019,509	32.3%	0.07x	1.66x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$3,080,253	\$6,919,747	31%	--	--	\$2,653,349	\$2,653,349	(\$426,904)	-15.8%	--	0.86x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$9,700,837	\$5,299,163	65%	--	--	\$10,491,077	\$10,491,077	\$790,240	18.4%	--	1.08x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,980,000	\$2,040,000	66%	--	\$13,694,043	\$2,040,635	\$15,734,678	\$5,774,678	13.0%	1.37x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$35,616,509	\$14,383,491	71%	(\$162,514)	\$15,982,534	\$33,229,899	\$49,212,433	\$13,758,438	11.4%	0.45x	1.38x
Pantheon Global Secondary Fund VI	2018	2/24/2020	\$25,000,000	\$11,897,805	\$13,337,113	48%	--	\$37,120	\$13,648,009	\$13,685,129	\$1,767,324	38.9%	0x	1.15x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$16,476,664	\$6,801,113	82%	--	\$5,070,815	\$19,874,775	\$24,945,590	\$8,468,926	59.2%	0.31x	1.51x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$3,390,672	\$6,609,328	34%	--	--	\$3,251,673	\$3,251,673	(\$138,999)	-3.9%	--	0.96x
TA XIII	2019	5/2/2019	\$10,000,000	\$5,500,000	\$4,500,000	55%	--	--	\$5,699,260	\$5,699,260	\$199,260	-3.9%	--	1.04x
Vitruvian Investment Partnership IV	2020	6/3/2020	\$22,598,944	\$278,517	\$22,320,427	1%	--	--	\$167,147	\$167,147	(\$111,370)	-100.0%	--	--
Total VCERA Private Equity Program	--	5/21/2010	\$1,262,590,840	\$676,288,882	\$588,978,188	54%	\$73,843	\$271,715,534	\$702,040,176	\$977,783,685	\$300,567,197	16.0%	0.4x	1.45x

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 12/31/2020 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 ¹	Outstanding Commitment ¹	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)
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$10,901,877	\$14,098,123	44%	\$2,438,679	\$9,552,910	\$11,991,590	\$1,089,713	8.1%	0.22x	1.1x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$24,072,665	\$927,335	96%	\$1,312,521	\$23,529,177	\$24,841,698	\$769,033	3.7%	0.05x	1.03x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$29,100,000	\$900,000	97%	\$6,147	\$31,123,993	\$31,130,140	\$2,030,140	4.2%	0x	1.07x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$21,253,151	\$3,746,849	85%	\$3,317,508	\$21,258,594	\$24,576,102	\$3,322,951	11.5%	0.16x	1.16x
PIMCO Corporate Opportunities Fund III	2020	1/26/2020	\$50,000,000	\$3,750,000	\$46,250,000	8%	\$37,190	\$4,974,898	\$5,012,088	\$1,262,088	33.8%	0.01x	1.34x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$55,000,000	\$0	100%	\$0	\$60,401,935	\$60,401,935	\$5,401,935	12.8%	0x	1.1x
Total VCERA Private Debt Program	--		\$210,000,000	\$144,077,693	\$65,922,307	69%	\$7,112,045	\$150,841,508	\$157,953,553	\$13,875,860	9.5%	0.05x	1.1x

1. Includes recycled/recallable distributions received to date.

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

Performance shown is based on 12/31/2020 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 ¹	Outstanding Commitment ¹	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	2019	2/26/2020	\$100,000,000	\$20,172,821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-19.0%	0x	0.85x
Total VCERA Private Real Estate Program	-		\$100,000,000	\$20,172,821	\$79,827,179	20%	\$0	\$17,141,229	\$17,141,229	-\$3,031,592	-19.0%	0x	0.85x

1. Includes recycled/recallable distributions received to date.

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

Performance shown is based on 12/31/2020 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 ¹	Outstanding Commitment ¹	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)
Brookfield Infrastructure Fund IV, LP	2019	10/21/2019	\$50,000,000	\$24,829,149	\$26,908,578	50%	\$2,511,321	\$23,931,805	\$26,443,126	\$1,613,977	7.9%	0.1x	1.07x
Harbourvest Real Assets Fund IV, LP	2019	7/15/2019	\$100,000,000	\$0	\$100,000,000	0%	\$0	\$3,855,892	\$3,855,892	--	--	--	--
Total VCERA Private Real Estate Program	--		\$74,829,149	\$24,829,149	\$126,908,578	33%	\$2,511,321	\$27,787,697	\$30,299,018	\$1,613,977	7.9%	0.1x	1.22x

1. Includes recycled/recallable distributions received to date.

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

Performance shown is based on 12/31/2020 cash-adjusted market values.



MANAGER DUE DILIGENCE

NEPC, LLC

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	-	Yes	No Action	-	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	-	-	Watch (Board Driven)	On Watch for Performance Issues
Walter Scott	Bottom Quartile	-	-	-	
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	Yes	Watch	-	Discrimination Lawsuit
Bridge Debt Strategies	N/A	-	-	-	
BlackRock U.S. Debt Fund	-	-	-	-	
Western	-	-	-	-	
Reams	-	-	-	-	



DUE DILIGENCE MONITOR

	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
Loomis Sayles Strategic Alpha	Top Quartile	Yes	Watch	-	Loss of Personnel: Jae Park (CIO) & Dan Fuss (PM)
Loomis Sayles Multi-Sector Full Discretion	Top Quartile	Yes	Watch	-	Loss of Personnel: Jae Park (CIO) & Dan Fuss (PM)
Reams 10-Year Treasuries	-	-	-	-	
Monroe	-	-	-	-	
BlueBay	-	-	-	-	
Prudential	N/A	-	-	-	
UBS	N/A	-	Watch	Watch	
Bridgewater	N/A	-	-	-	
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
Loomis Sayles Multi-Sector Full Discretion/ Loomis Sayles Strategic Alpha	Yes	Watch

Manager Changes/Announcements

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

11/2/2020: Loomis, Sayles has announced that Jae Park, CIO, will be retiring effective March 31, 2021. He will be succeeded by Deputy CIO, David Waldman. Jae joined Loomis in 2002 as CIO of Fixed Income from IBM’s pension group. David Waldman joined in 2007 from Putnam (and previously Lazard and GSAM) as director of quantitative research and risk analysis. In 2013, he was promoted to deputy CIO.

12/14/2020: Dan Fuss - Vice Chairman, with nearly 45 years at Loomis will be stepping back from day-to-day portfolio management. The relinquishing of portfolio management duties will be March 1st – the date of his 45th anniversary at Loomis. He is not retiring and will still be vice chair and board member at Loomis. 18 months ago a majority of separate accounts were transitioned away from Dan. In the last decade, new separate account relationships were hiring the team and Dan was not named primary portfolio manager for any accounts. There are 10 separate accounts left with Dan as named PM, and they are checking but don’t believe any are NEPC relationships. Specifically, he will also no longer have portfolio management responsibilities on mutual funds, including the Bond Fund and Fixed Income Fund. The full discretion team (Matt Eagan, Elaine Stokes, Brian Kennedy and Todd VanDam) will be the named portfolio managers and this includes offshore funds as well. Dan has not been managing the commingled funds (CITs, NHITs).

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.
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 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
PIMCO Corporate Opportunities III/ PIMCO Private Income Fund	Yes	Watch

Manager Changes/Announcements

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

PIMCO has been named in a complaint by two female employees in operations and client service capacities. The complaint alleges gender and disability discrimination. This follows on similar complaints in 2018 and 2019. The NEPC Unfavorable News Committee met on December 7, 2020 and recommends that the Due Diligence Committee place PIMCO on WATCH. NEPC will monitor the suit for resolution and any findings or other information pertaining to the issue. NEPC will engage with PIMCO on their specific efforts relating to diversity equity and inclusion, as well as metrics relating to the topic.

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.
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 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
Western U.S. Index Plus	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.

Harris Trifon, Co-Head of Mortgage and Consumer Credit investment team, will be leaving Western Asset on January 12, 2021 to pursue another opportunity. Harris has a background and focus on commercial real estate and CMBS and is co-head of securitized team. On the commercial real estate debt side, there are three dedicated investment professionals supporting the effort below Harris. Greg Handler, Co-Head of Mortgage and Consumer Credit whose focus is on consumer/residential, will assume Interim Head responsibilities. Greg joined Western Asset in 2002 and is a lead portfolio manager on Western Asset’s dedicated mortgage portfolios and a member of Western Asset’s US Broad Strategy Committee.

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.
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 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.



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

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



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

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



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Private Equity	24.5	8.3	18.7	16.9	7.6	14.7	19.0	17.9	10.3	--	--
Private Equity Benchmark	24.5	34.9	-2.4	24.8	16.0	3.5	15.8	37.4	19.8	4.1	21.0
Over/Under	0.0	-26.6	21.1	-7.9	-8.4	11.2	3.2	-19.5	-9.5		
CJA Global All PE (Qtr Lag)	14.9	7.8	16.4	15.9	8.5	7.0	16.3	15.9	13.0	12.6	17.1
Adams Street Global Fund Series	26.9	4.1	19.6	13.4	7.1	10.3	19.6	15.7	10.8	--	--
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	2.4	-30.8	22.0	-11.3	-9.0	6.8	3.7	-21.8	-9.1		
Harbourvest	19.6	12.2	22.7	23.2	6.7	28.5	18.5	--	--	--	--
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	-4.9	-22.7	25.1	-1.5	-9.4	25.0	2.6				
Pantheon Global Secondary Funds	6.4	-0.4	17.3	24.1	15.5	6.4	16.7	14.9	0.9	--	--
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	-18.1	-35.3	19.7	-0.6	-0.6	2.9	0.8	-22.6	-19.0		
Drive Capital Fund II	12.3	53.0	-2.5	-33.7	--	--	--	--	--	--	--
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	-12.2	18.1	-0.1	-58.4							
Abbott Secondary Opportunities	40.5	8.9	26.0	--	--	--	--	--	--	--	--
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	16.0	-26.0	28.4								
Clearlake Capital Partners V	27.8	50.2	--	--	--	--	--	--	--	--	--
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	3.3	15.3									
Battery Ventures XII	46.7	5.7	--	--	--	--	--	--	--	--	--
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	22.2	-29.2									
Insight Venture Partners X	46.2	21.4	--	--	--	--	--	--	--	--	--
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	21.7	-13.5									
GTCR Fund XII	55.6	-18.8	--	--	--	--	--	--	--	--	--
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	31.1	-53.7									
Buenaventure One, LLC	17.7	6.7	--	--	--	--	--	--	--	--	--
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	-6.8	-28.2									
ECI 11	20.8	34.2	--	--	--	--	--	--	--	--	--
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	-3.7	-0.7									



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
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										
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										



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
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											
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											



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
<i>BBgBarc US Aggregate TR</i>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
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
<i>BBgBarc US Aggregate TR</i>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
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
<i>BBgBarc US Aggregate TR</i>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
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
<i>Reams Custom Index</i>	<u>0.6</u>	<u>2.4</u>	<u>2.4</u>	<u>1.3</u>	<u>0.7</u>	<u>0.3</u>	<u>0.2</u>	<u>-0.5</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
Over/Under	11.4	4.2	-1.7	1.2	5.3	0.0	-3.8	3.0	5.8	0.6	3.5
<i>BBgBarc US Aggregate TR</i>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
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	--	--	--	--
<i>BBgBarc US Aggregate TR</i>	<u>7.5</u>	<u>8.7</u>	<u>0.0</u>	<u>3.5</u>	<u>2.6</u>	<u>0.5</u>	<u>6.0</u>	<u>-2.0</u>	<u>4.2</u>	<u>7.8</u>	<u>6.5</u>
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
<i>Loomis Custom Index</i>	<u>7.3</u>	<u>10.2</u>	<u>-0.6</u>	<u>4.5</u>	<u>7.0</u>	<u>-1.2</u>	<u>4.6</u>	<u>0.8</u>	<u>7.5</u>	<u>7.1</u>	<u>8.7</u>
Over/Under	5.6	-0.8	-0.2	3.9	1.2	-1.1	2.2	0.6	9.2	-2.9	4.9
<i>BBgBarc US Govt/Credit TR</i>	<u>8.9</u>	<u>9.7</u>	<u>-0.4</u>	<u>4.0</u>	<u>3.0</u>	<u>0.1</u>	<u>6.0</u>	<u>-2.4</u>	<u>4.8</u>	<u>8.7</u>	<u>6.6</u>



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
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										
Private Debt	7.1	8.4	4.7	--	--	--	--	--	--	--	--
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								
CVI Credit Value Fund	2.1	7.1	4.6	--	--	--	--	--	--	--	--
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								
Monroe Capital Private Credit Fund III	11.2	11.2	--	--	--	--	--	--	--	--	--
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									
Bluebay Direct Lending Fund III	7.1	--	--	--	--	--	--	--	--	--	--
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										
Pimco Private Income Fund	11.3	--	--	--	--	--	--	--	--	--	--
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										
Bridge Debt Strategies III Limited Partner	2.6	--	--	--	--	--	--	--	--	--	--
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										
PIMCO Corp Opps Fund III	--	--	--	--	--	--	--	--	--	--	--
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

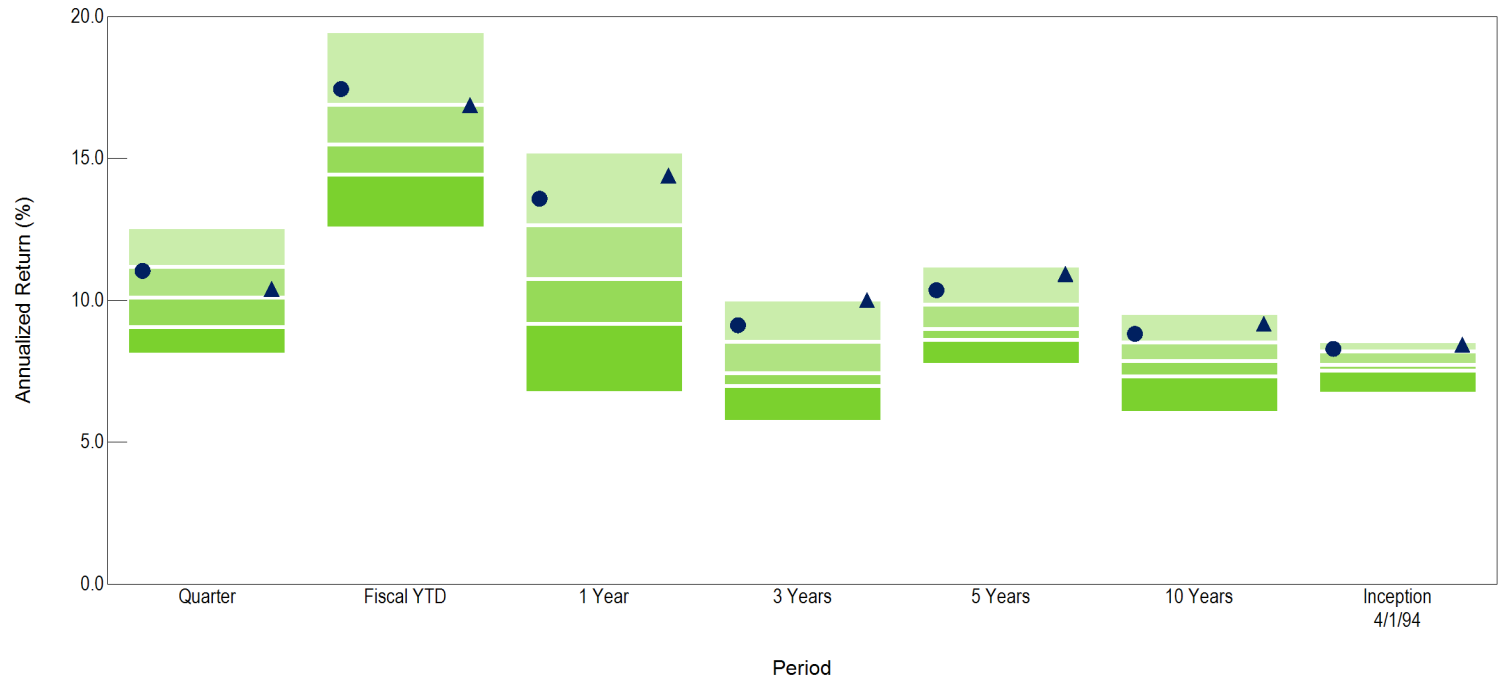
TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2020 (%)	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)
Total Real Estate	-2.7	0.3	6.9	5.9	6.8	12.8	11.6	10.6	9.1	14.4	15.4
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
Prudential Real Estate	2.1	5.9	8.2	7.0	8.2	14.5	12.5	13.8	8.8	18.0	17.2
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
UBS Real Estate	-4.7	-2.8	6.2	5.4	6.2	11.9	10.6	9.3	9.0	12.1	15.9
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
LaSalle Income + Growth VIII Limited Partnership	--	--	--	--	--	--	--	--	--	--	--
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
Total Real Assets	0.0	14.4	-7.3	7.2	11.7	-13.8	10.2	--	--	--	--
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				
Bridgewater All Weather Fund	9.6	16.7	-5.0	11.9	10.0	-6.8	7.6	--	--	--	--
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				
Tortoise Energy Infrastructure	-29.4	8.0	-13.3	-3.5	15.9	-27.1	15.7	--	--	--	--
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				
Brookfield Infra Fund IV B LP	--	--	--	--	--	--	--	--	--	--	--
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											
Harbourvest Real Assets Fund IV L.P.											
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											
Overlay											
Parametric											
Abbott Capital Cash											



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

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

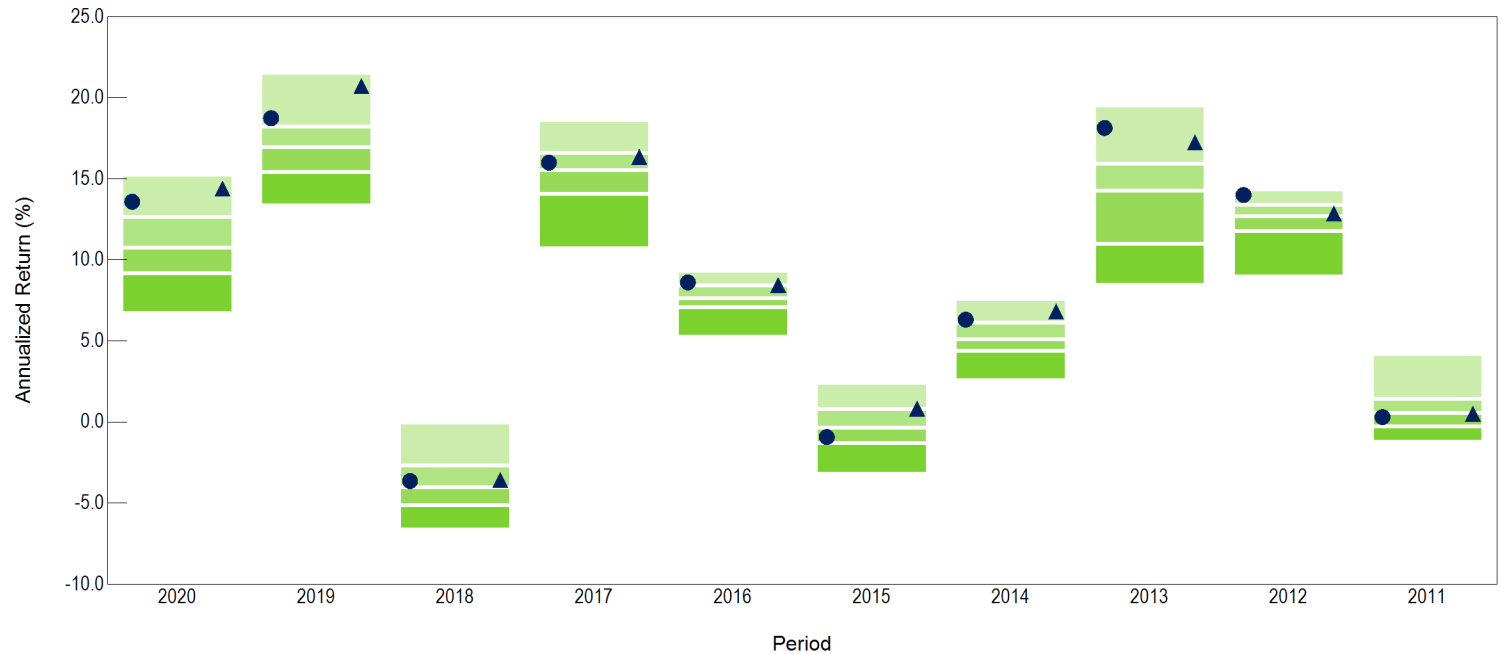


	Return (Rank)													
5th Percentile	12.6		19.5		15.2		10.0		11.2		9.6		8.5	
25th Percentile	11.2		16.9		12.7		8.6		9.9		8.5		8.2	
Median	10.1		15.5		10.8		7.4		9.0		7.9		7.7	
75th Percentile	9.1		14.4		9.2		7.0		8.6		7.3		7.5	
95th Percentile	8.1		12.5		6.8		5.7		7.7		6.0		6.7	
# of Portfolios	80		80		80		80		80		73		33	
● Total Fund	11.0	(28)	17.4	(16)	13.6	(14)	9.1	(18)	10.4	(14)	8.8	(16)	8.3	(22)
▲ Policy Index	10.4	(42)	16.9	(26)	14.4	(12)	10.0	(6)	10.9	(8)	9.2	(9)	8.4	(11)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

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

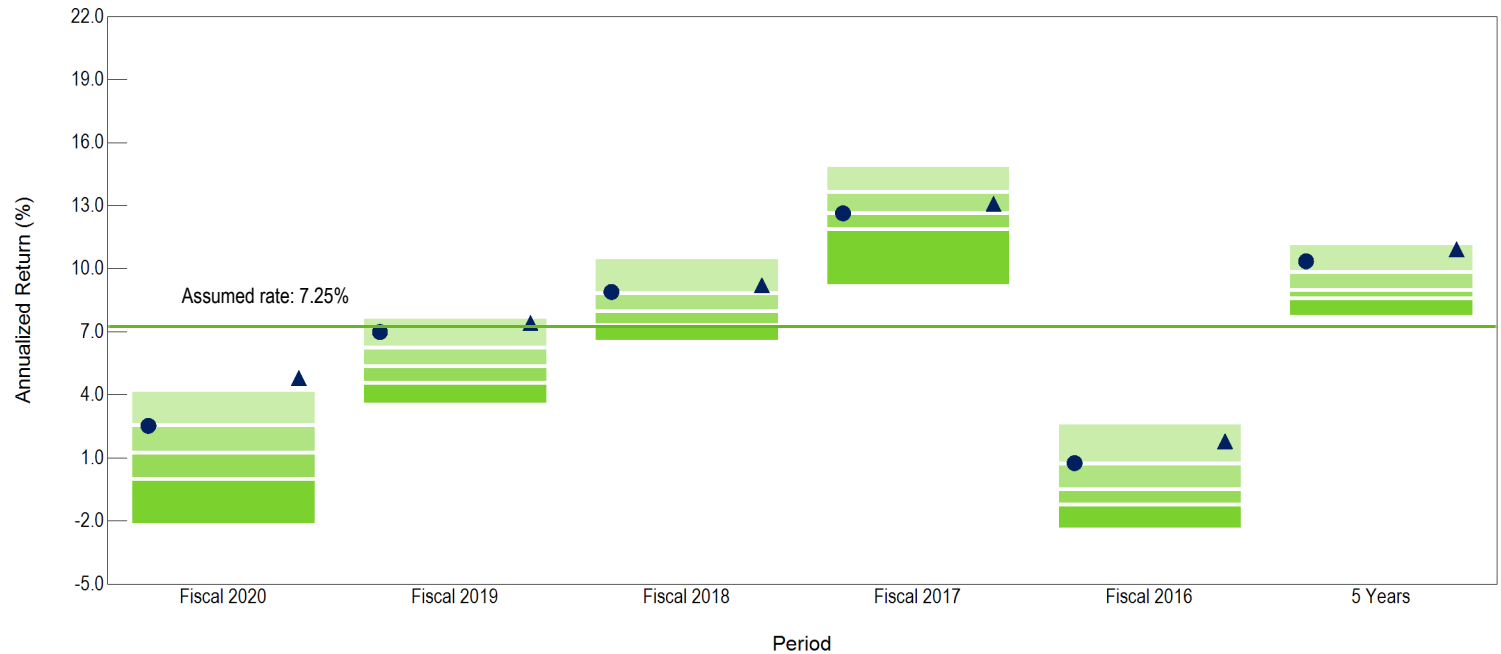


	Return (Rank)																			
5th Percentile	15.2	21.5	-0.1	18.6	9.3	2.4	7.6	19.5	14.3	4.2										
25th Percentile	12.7	18.2	-2.7	16.6	8.4	0.8	6.1	16.0	13.4	1.5										
Median	10.8	17.0	-4.0	15.6	7.7	-0.4	5.1	14.3	12.7	0.6										
75th Percentile	9.2	15.4	-5.1	14.1	7.1	-1.3	4.4	11.0	11.8	-0.3										
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	(15)	-0.9	(65)	6.3	(20)	18.1	(10)	14.0	(15)	0.3	(61)
▲ Policy Index	14.4	(12)	20.7	(9)	-3.6	(41)	16.3	(29)	8.4	(25)	0.8	(25)	6.8	(12)	17.2	(14)	12.9	(41)	0.5	(55)



TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

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

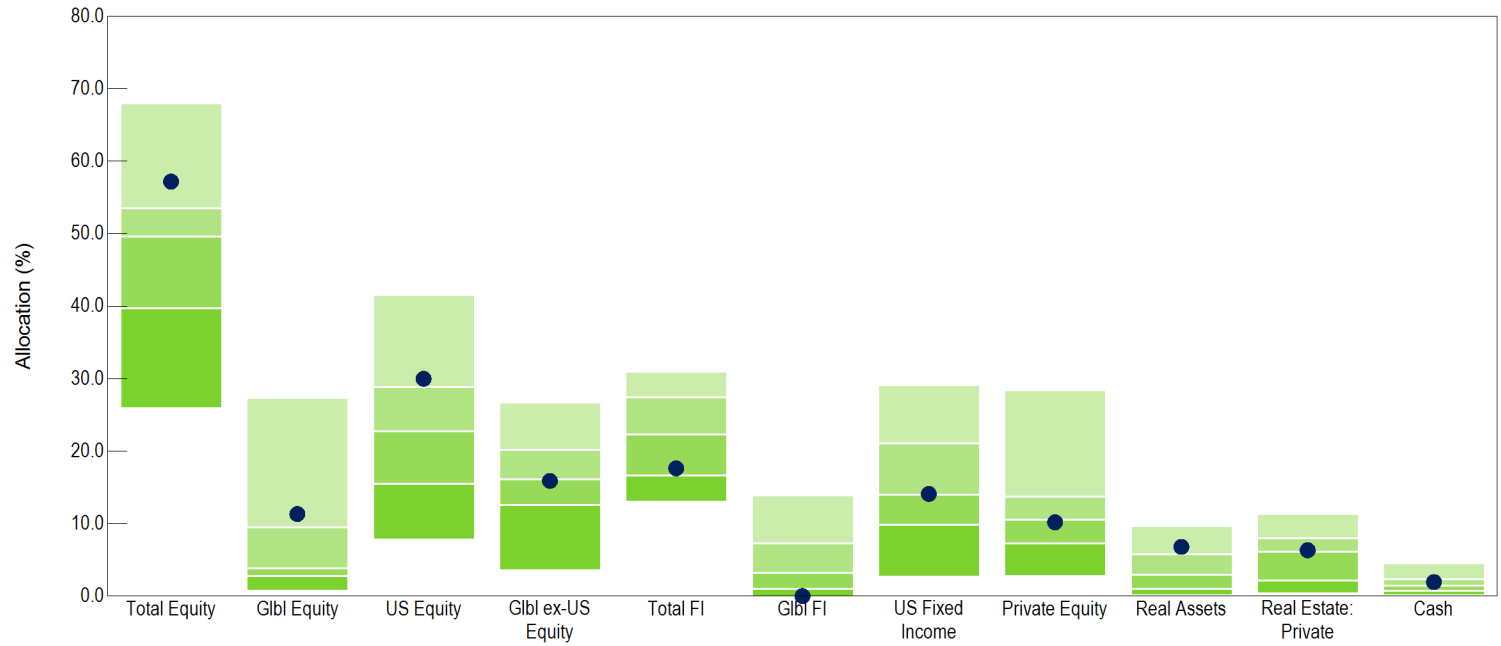


	Return (Rank)											
5th Percentile	4.2	7.7	10.5	14.9	2.7	11.2						
25th Percentile	2.6	6.3	8.8	13.7	0.8	9.9						
Median	1.3	5.4	8.0	12.7	-0.5	9.0						
75th Percentile	0.0	4.6	7.3	11.9	-1.2	8.6						
95th Percentile	-2.2	3.5	6.5	9.2	-2.4	7.7						
# of Portfolios	71	77	51	65	55	80						
● Total Fund	2.5	(29)	7.0	(15)	8.9	(23)	12.6	(53)	0.8	(26)	10.4	(14)
▲ Policy Index	4.8	(2)	7.4	(7)	9.2	(13)	13.1	(37)	1.8	(9)	10.9	(8)



TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

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



	Allocation (Rank)																						
5th Percentile	68.0	27.3	41.6	26.7	31.0	13.9	29.1	28.4	9.6	11.4	4.5	--											
25th Percentile	53.6	9.6	28.9	20.2	27.5	7.3	21.1	13.8	5.9	8.0	2.4	--											
Median	49.6	3.9	22.8	16.2	22.4	3.3	14.1	10.7	3.0	6.2	1.5	--											
75th Percentile	39.8	2.9	15.6	12.6	16.7	1.1	9.9	7.4	1.1	2.2	0.8	--											
95th Percentile	26.0	0.8	7.9	3.6	13.1	0.0	2.7	2.8	0.2	0.4	0.2	--											
# of Portfolios	58	27	42	54	58	25	41	51	31	47	58	--											
• Total Fund	57.2	(20)	11.3	(16)	30.0	(24)	15.9	(53)	17.6	(73)	0.0	(96)	14.1	(48)	10.2	(52)	6.8	(14)	6.3	(46)	1.9	(32)	--



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

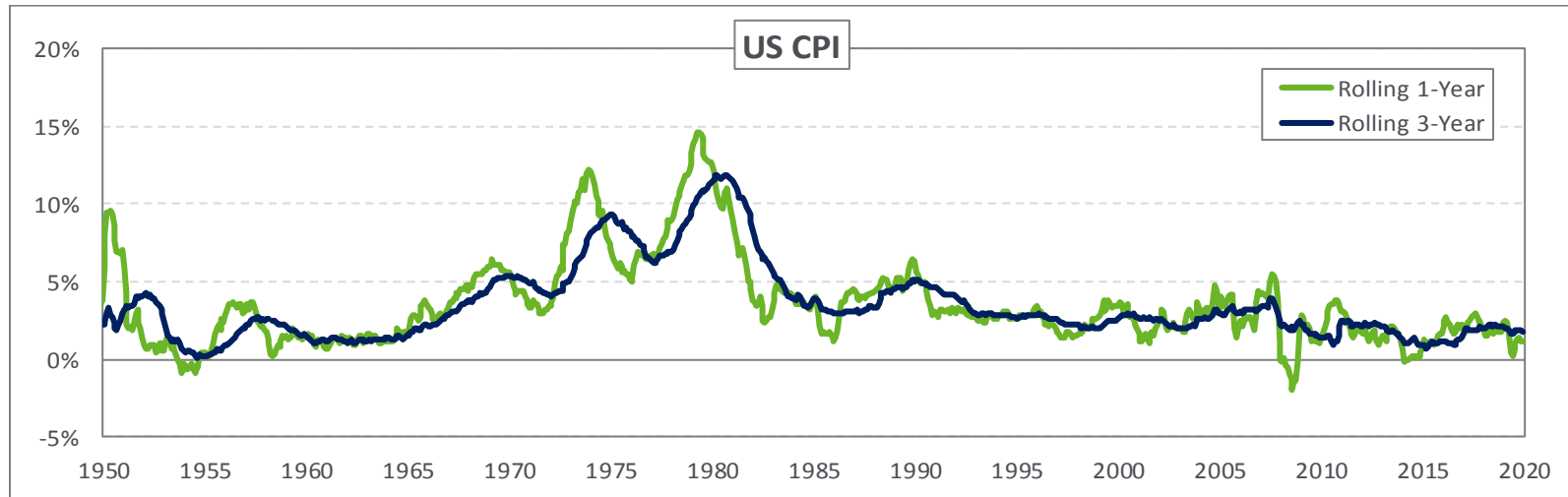
- **PGIM Real Estate Property Investment Separate Account**
 - PRISA is a broadly diversified equity real estate portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. 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.



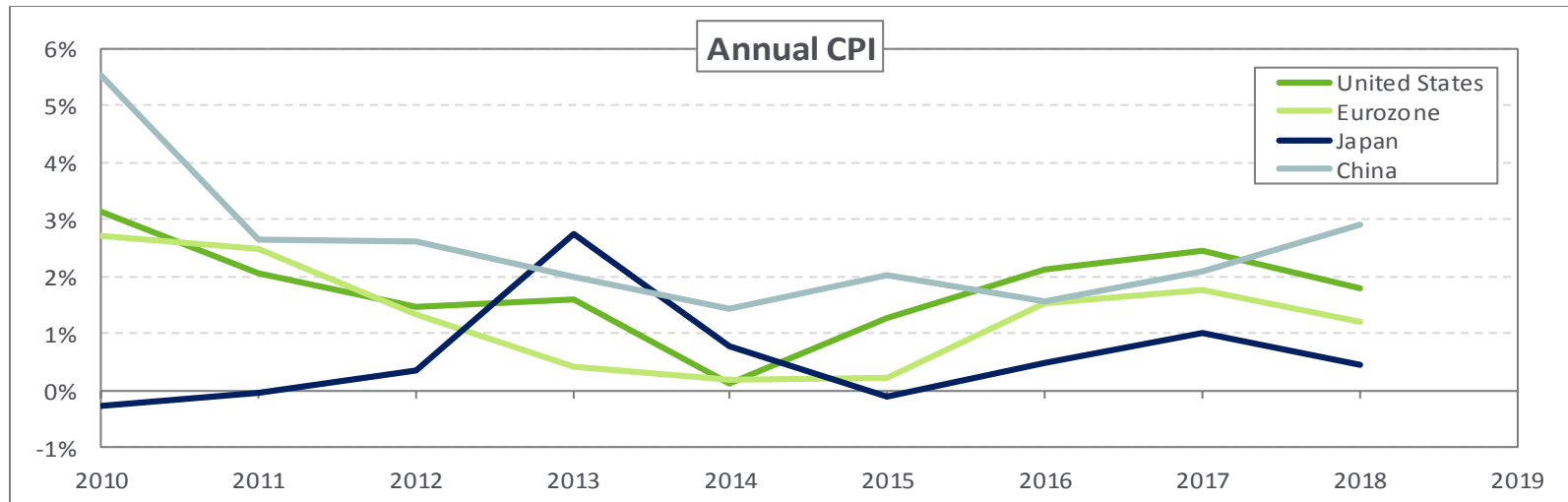
MACRO

NEPC, LLC

INFLATION



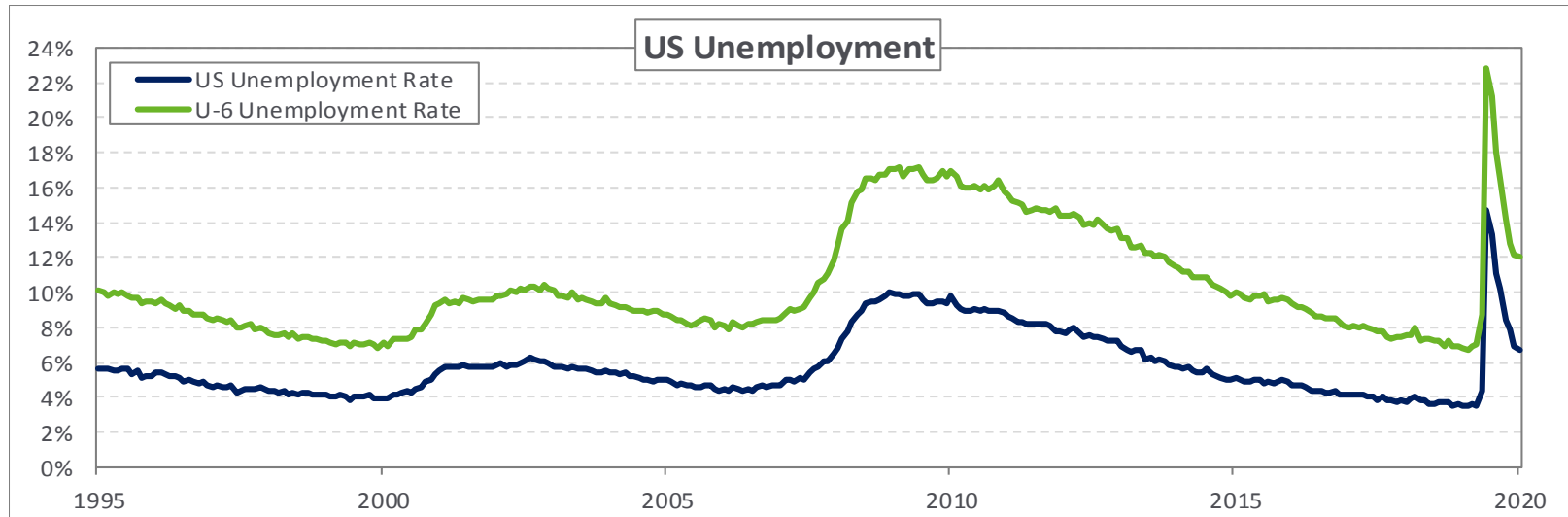
Source: Bureau of Labor Statistics, FactSet



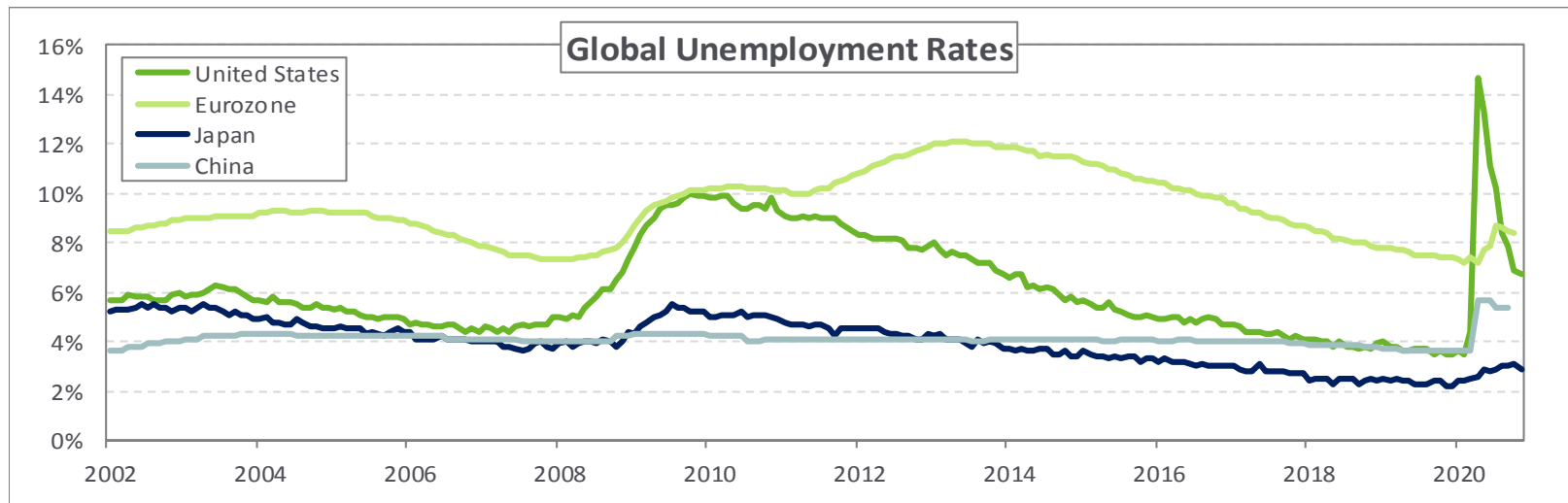
Source: FactSet



UNEMPLOYMENT



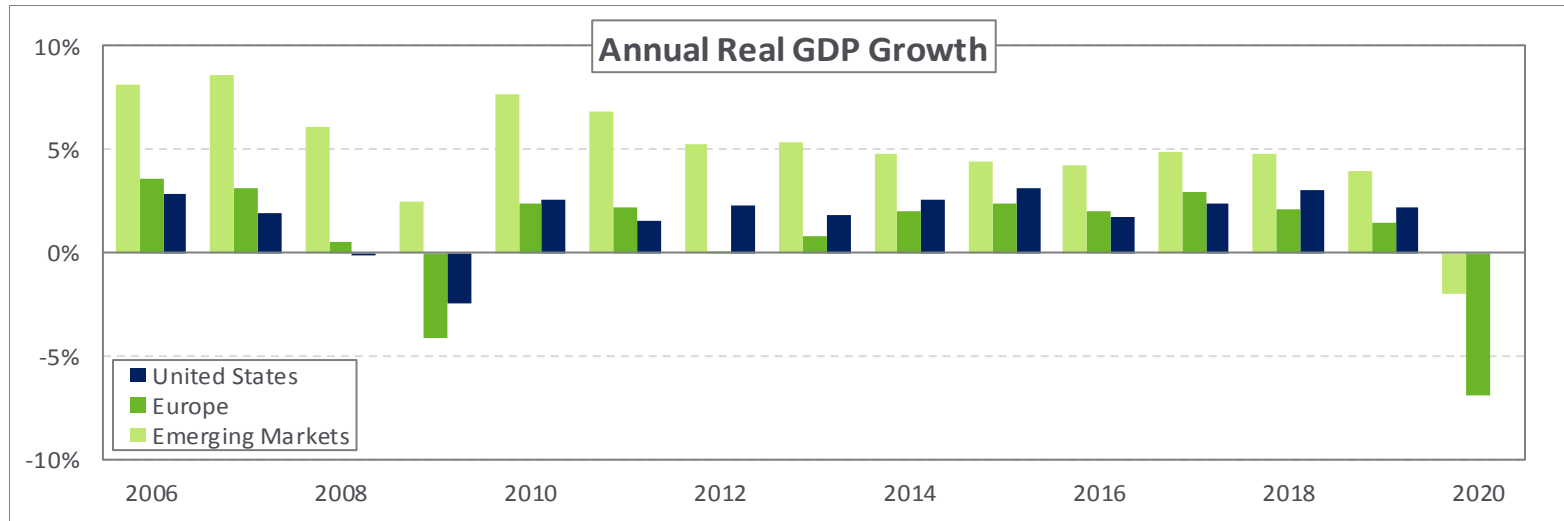
Source: FactSet



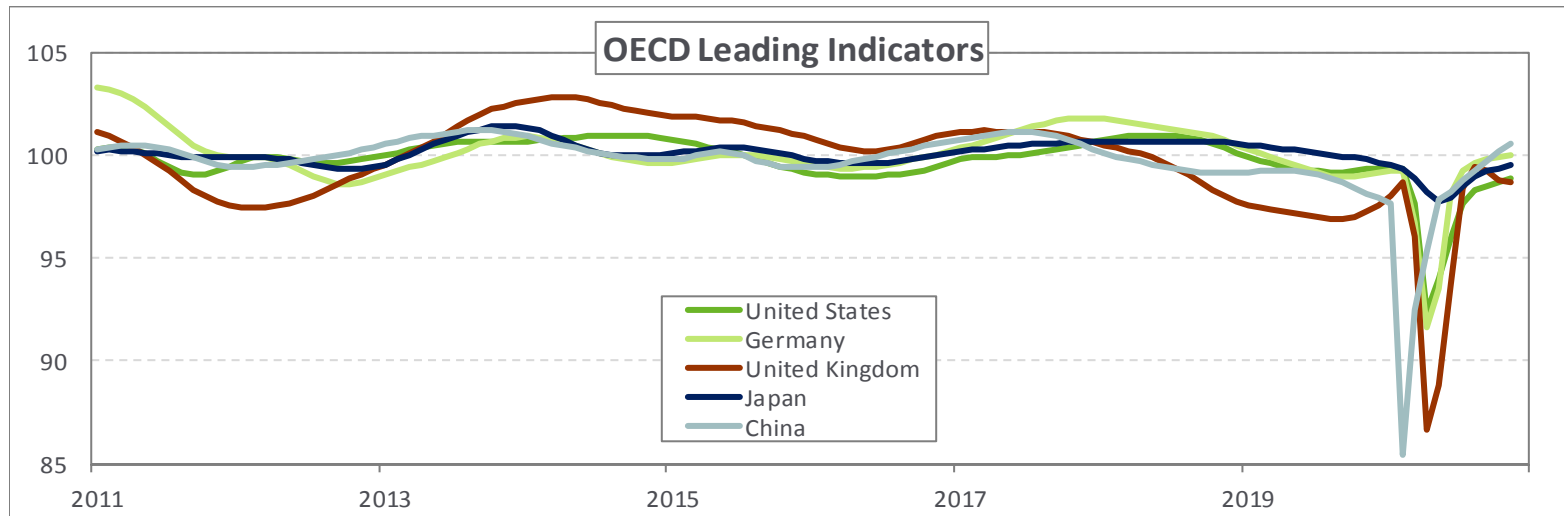
Source: FactSet



ECONOMIC INDICATORS



Source: Bureau of Economic Analysis, Oxford Economics, FactSet



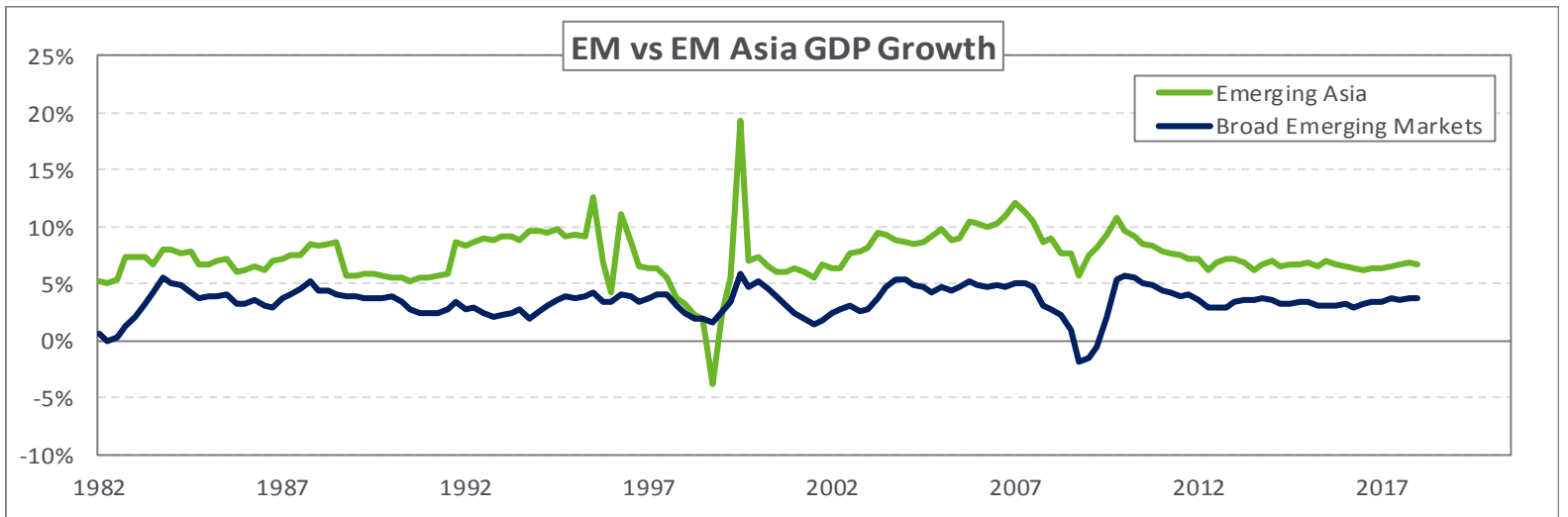
Source: OECD, FactSet



GROSS DOMESTIC PRODUCT



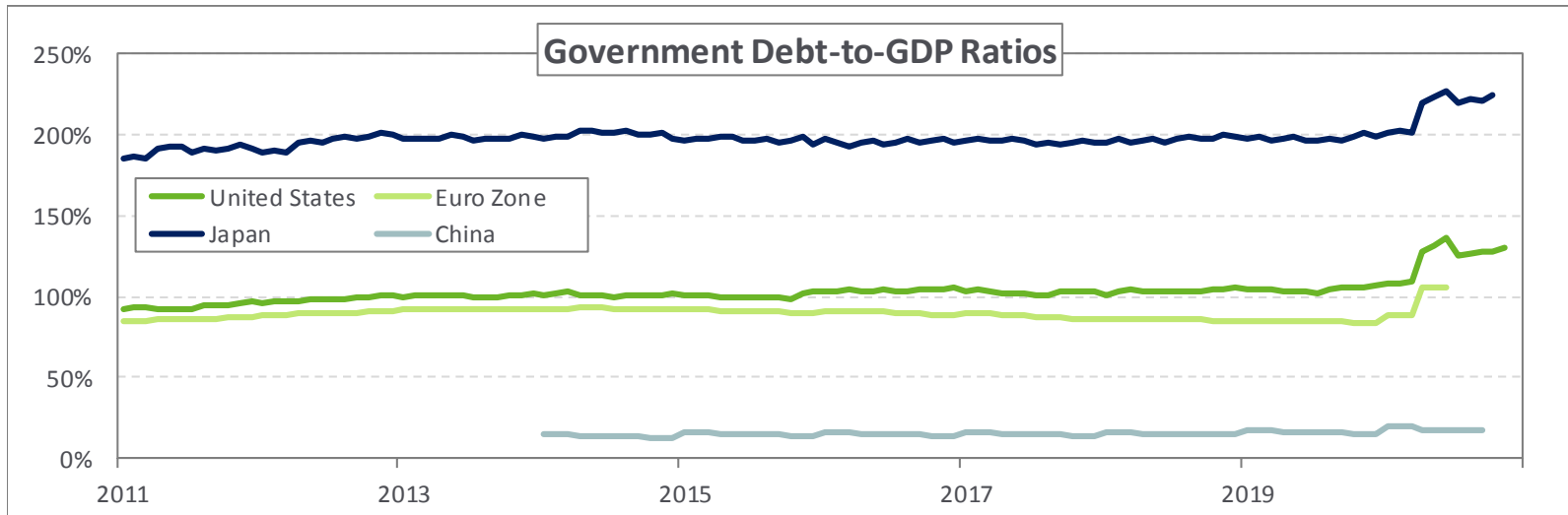
Source: Bureau of Economic Analysis, FactSet



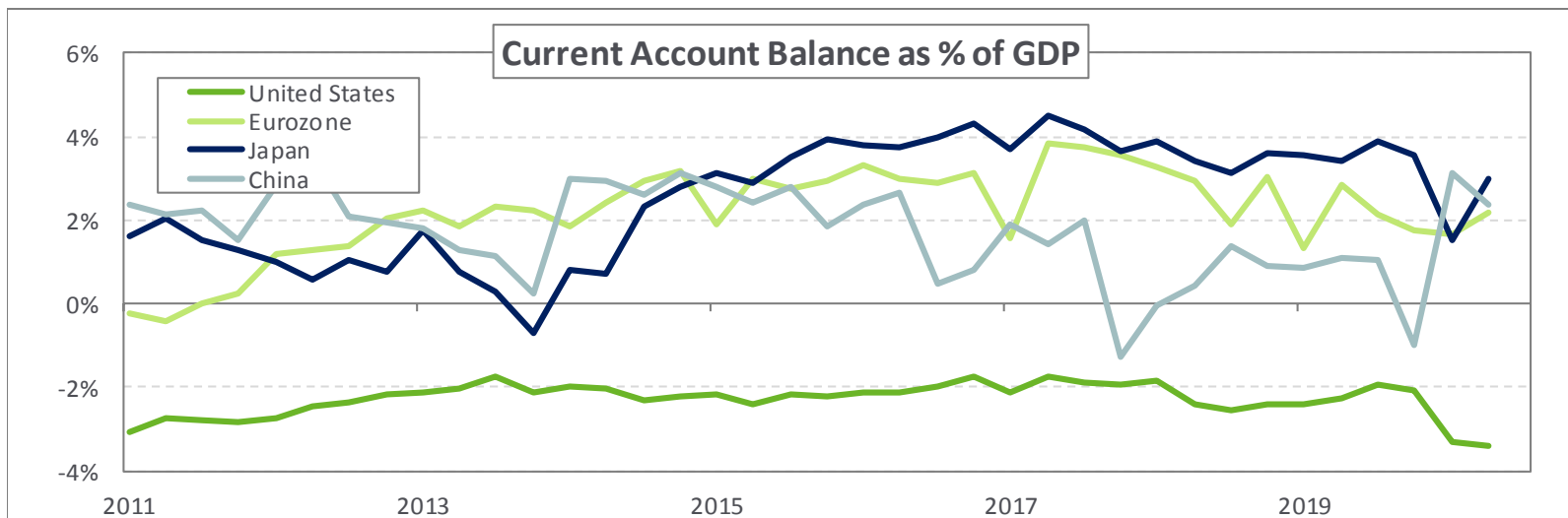
Source: IMF, FactSet



GROSS DOMESTIC PRODUCT METRICS



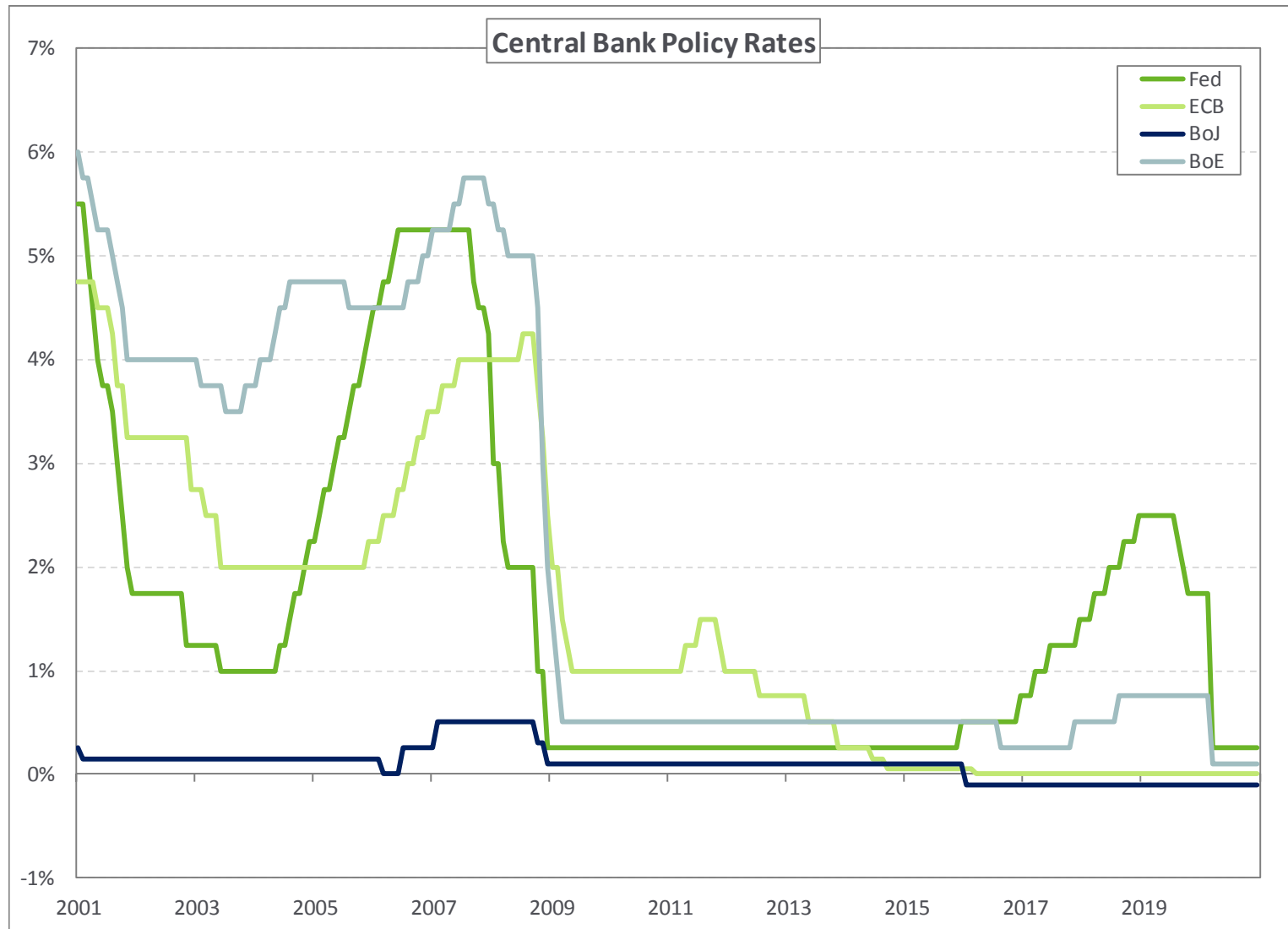
Source: IMF, FactSet



Source: FactSet



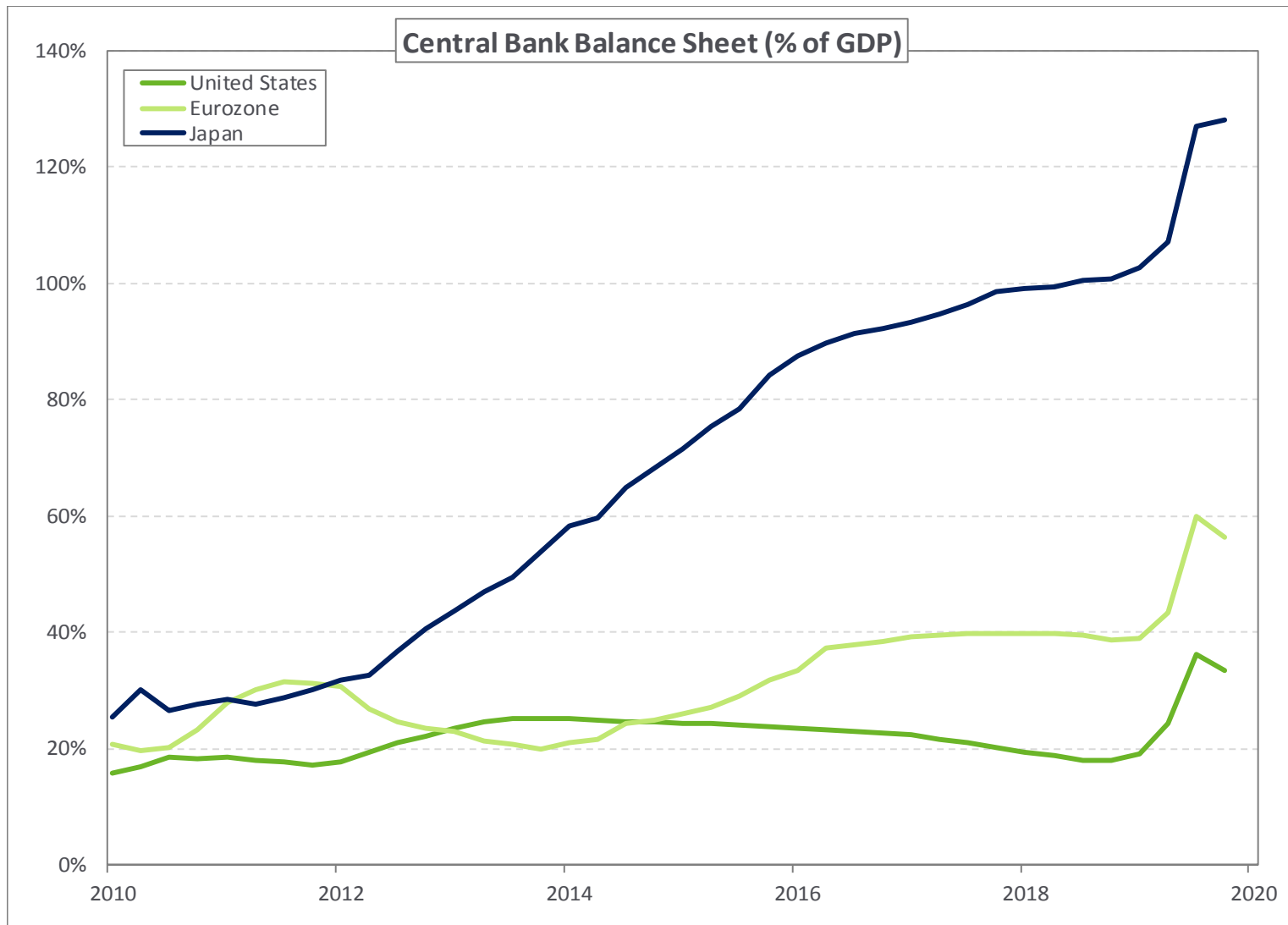
CENTRAL BANK RATES



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



CENTRAL BANK BALANCE SHEETS



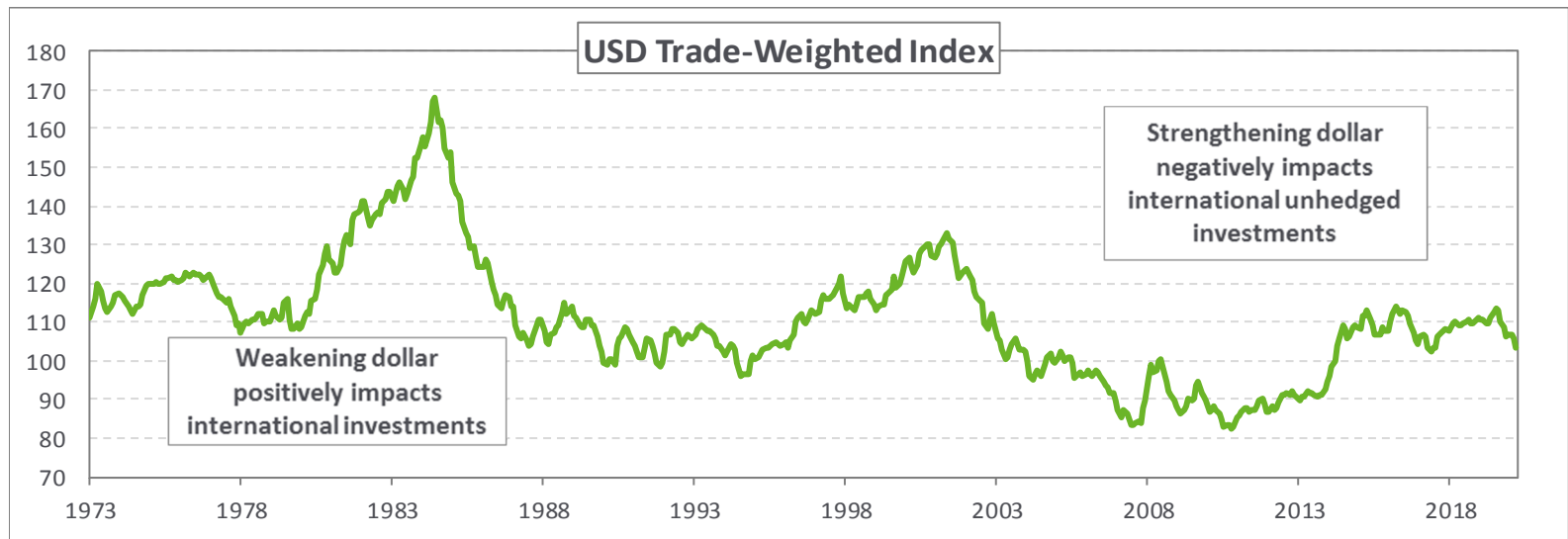
Source: FactSet



CURRENCIES

Currencies	% Change Relative to USD			
	Spot	1 Month	YTD	1 Year
Euro	1.22	2.3%	0.0%	9.0%
British Pound	1.37	2.4%	0.0%	3.2%
Japanese Yen	103.25	1.0%	0.0%	5.3%
Swiss Franc	0.88	2.4%	0.0%	9.5%
Australian Dollar	0.77	4.7%	0.0%	9.8%
Chinese Yuan	6.54	0.6%	0.0%	6.5%
Brazilian Real	5.19	3.7%	0.0%	-22.6%
Russian Ruble	73.96	3.4%	0.0%	-16.0%
Indian Rupee	73.07	1.4%	0.0%	-2.3%
Mexican Peso	19.93	1.2%	0.0%	-5.2%
South African Rand	14.69	5.4%	0.0%	-4.8%

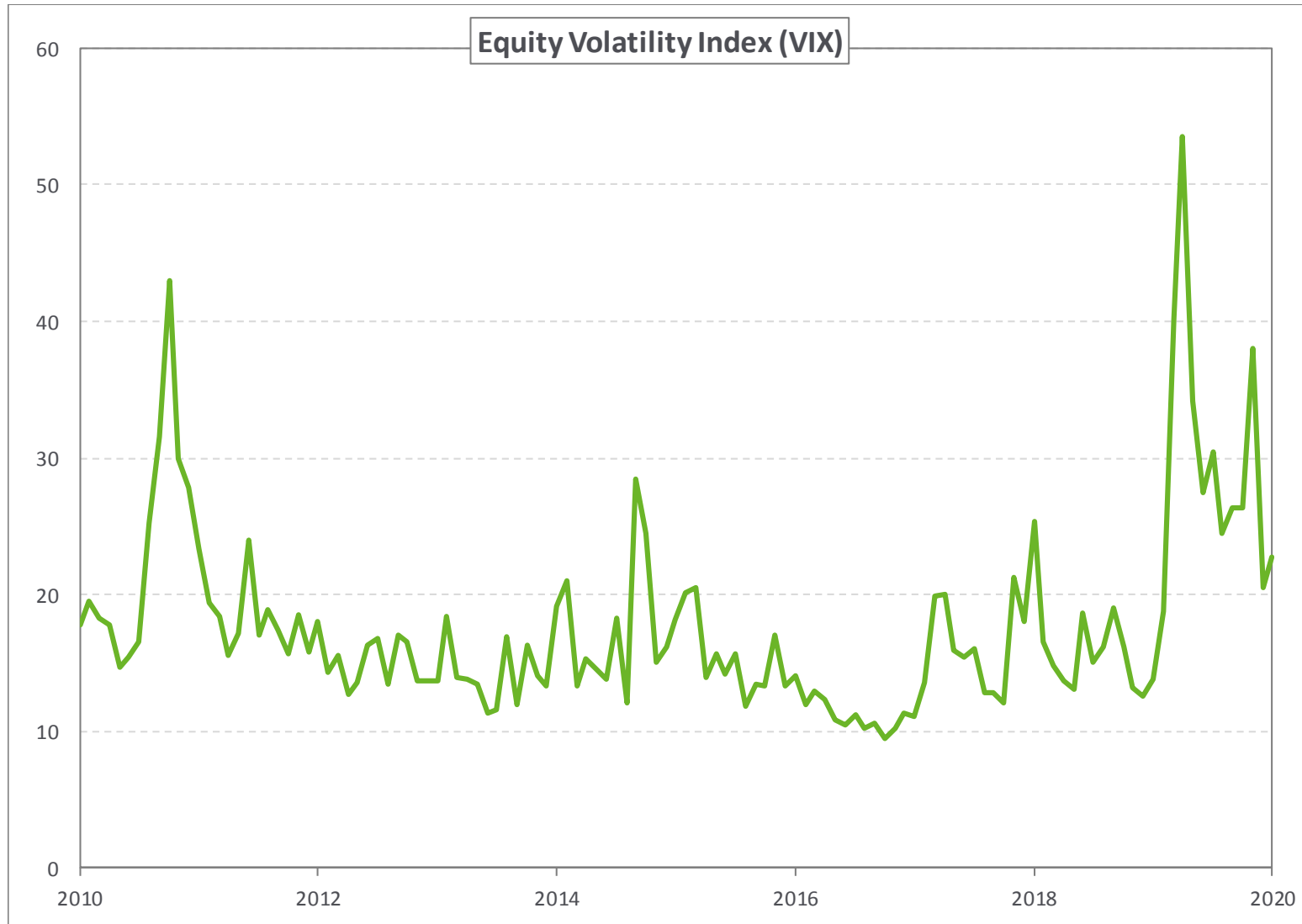
Source: FactSet



Source: FactSet



VOLATILITY



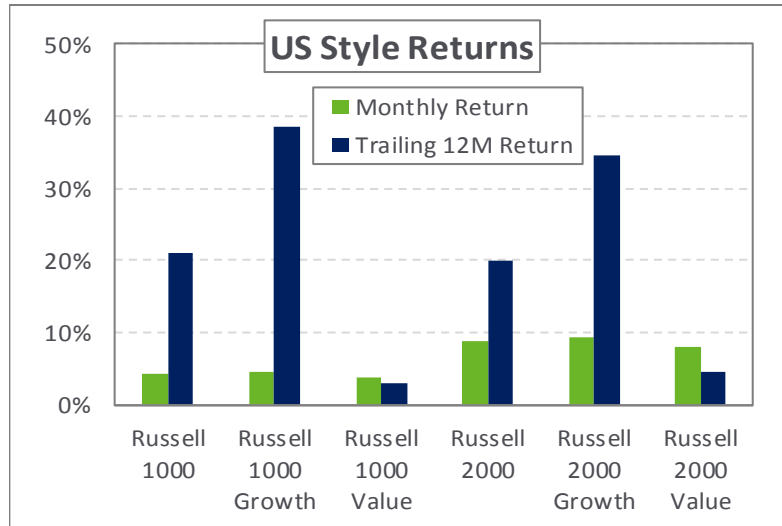
Source: CBOE, FactSet



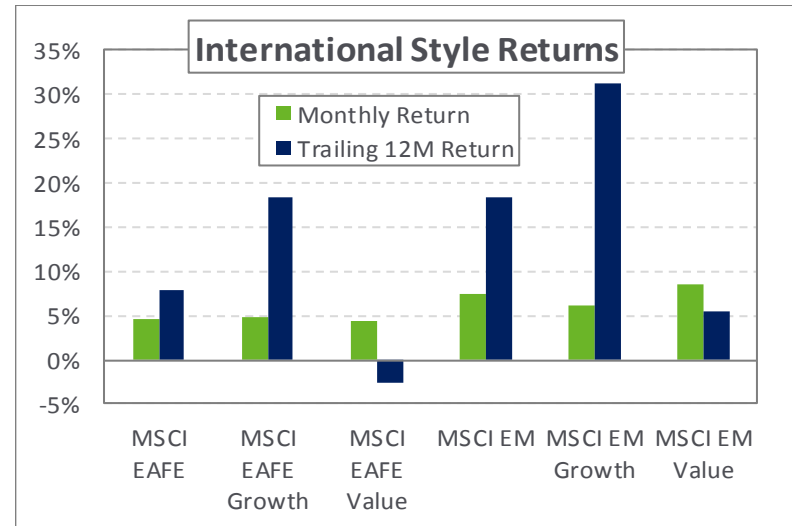
EQUITY

NEPC, LLC

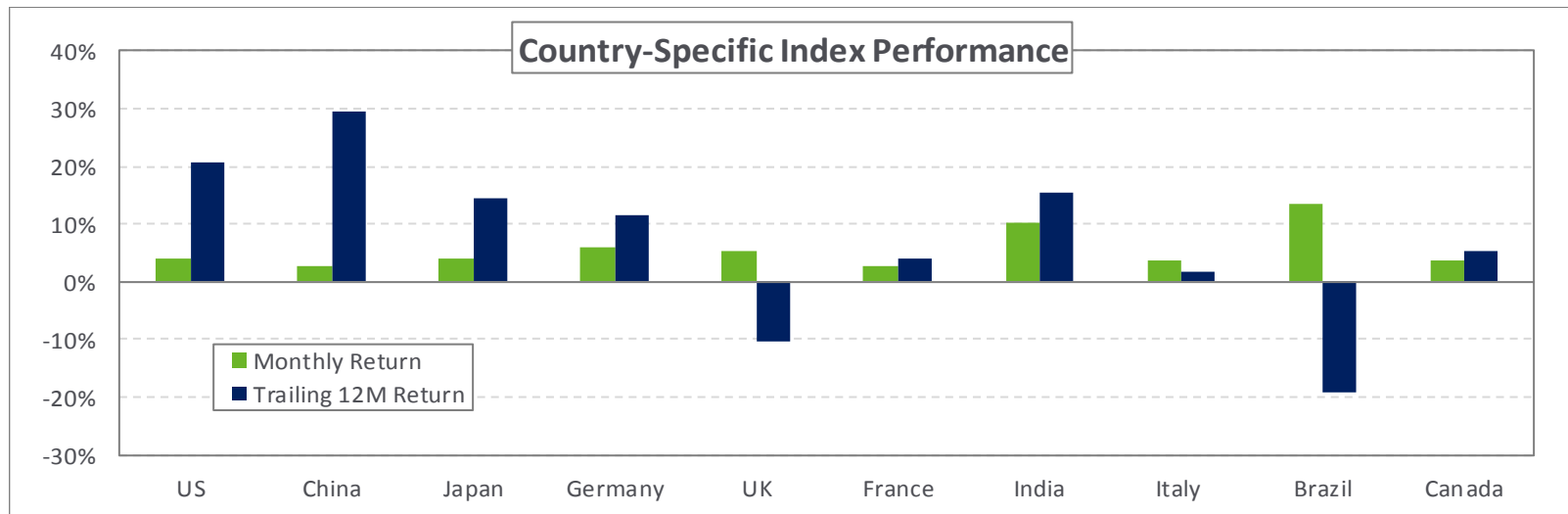
EQUITY INDEX PERFORMANCE



Source: Russell, FactSet



Source: MSCI, FactSet



Source: MSCI, FactSet
Represents returns in USD



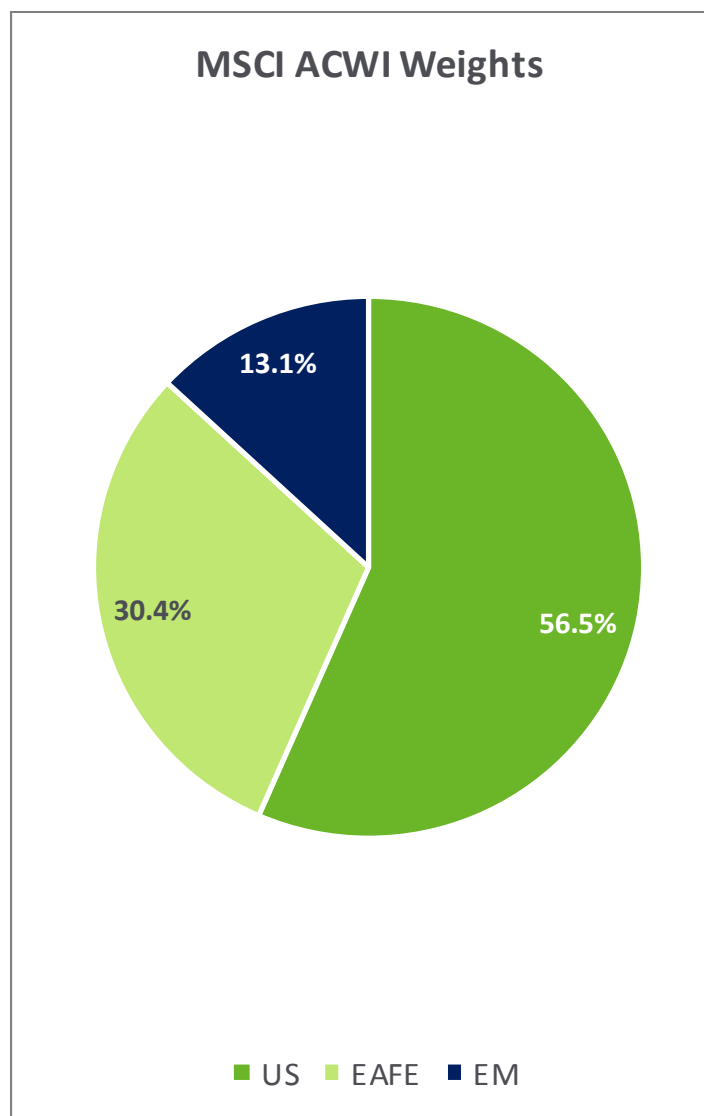
INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
S&P 500	3.8%	12.1%	18.4%	100.0%
Communication Services	0.3%	1.5%	2.7%	10.8%
Consumer Discretionary	0.3%	0.9%	4.0%	12.7%
Consumer Staples	0.1%	0.4%	0.5%	6.5%
Energy	0.1%	0.6%	-1.8%	2.3%
Financials	0.6%	2.3%	-1.5%	10.4%
Health Care	0.5%	1.1%	2.1%	13.5%
Industrials	0.1%	1.3%	0.6%	8.4%
Information Technology	1.6%	3.2%	12.1%	27.6%
Materials	0.1%	0.4%	0.6%	2.6%
Real Estate	0.0%	0.1%	-0.4%	2.4%
Utilities	0.0%	0.2%	-0.3%	2.8%

Source: S&P, FactSet

	MTD	QTD	YTD	Index Weight
MSCI ACWI	4.6%	14.7%	16.3%	100.0%
Communication Services	0.3%	1.4%	2.4%	9.3%
Consumer Discretionary	0.6%	1.9%	4.8%	13.0%
Consumer Staples	0.2%	0.6%	0.5%	7.4%
Energy	0.1%	0.7%	-1.9%	3.0%
Financials	0.7%	3.1%	-2.5%	13.5%
Health Care	0.4%	0.9%	2.3%	11.9%
Industrials	0.3%	1.6%	0.8%	9.7%
Information Technology	1.5%	3.1%	9.6%	21.9%
Materials	0.3%	0.9%	1.1%	4.9%
Real Estate	0.0%	0.2%	-0.6%	2.6%
Utilities	0.1%	0.3%	-0.1%	3.0%

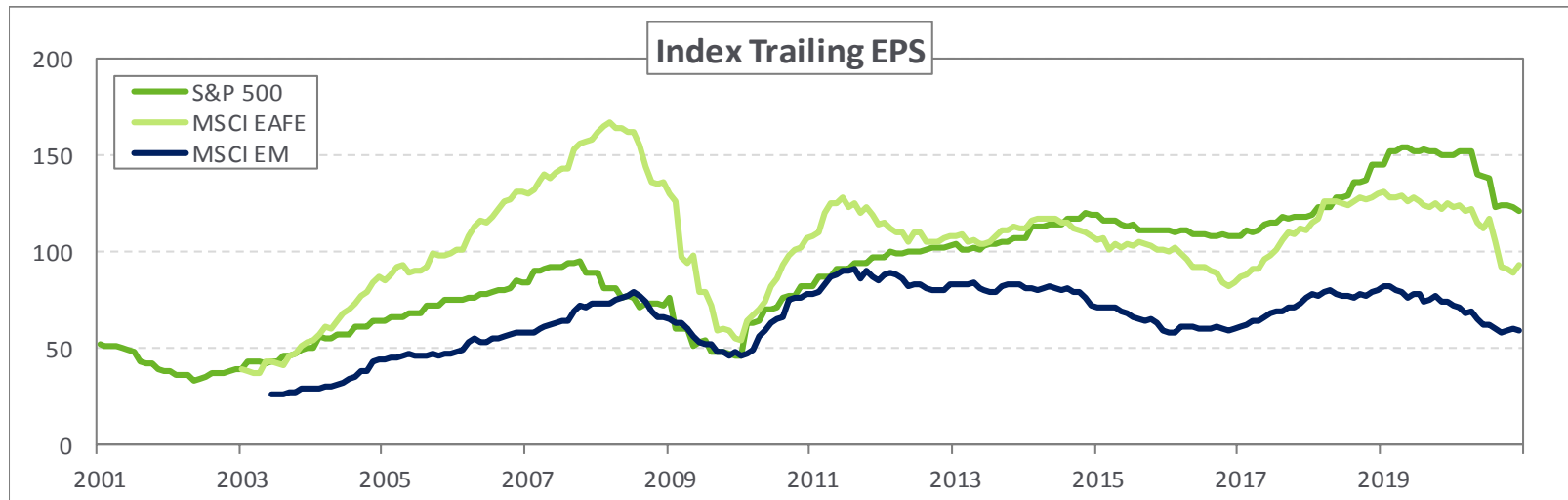
Source: MSCI, FactSet



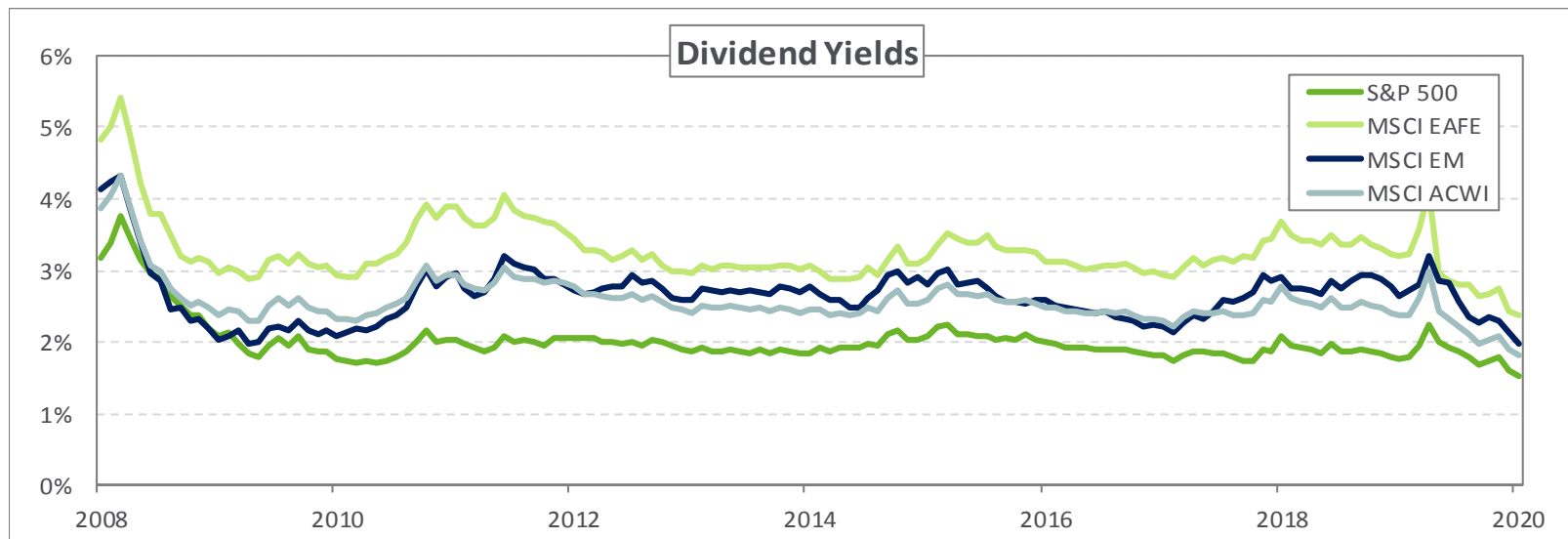
Source: MSCI, FactSet



EARNINGS & YIELDS



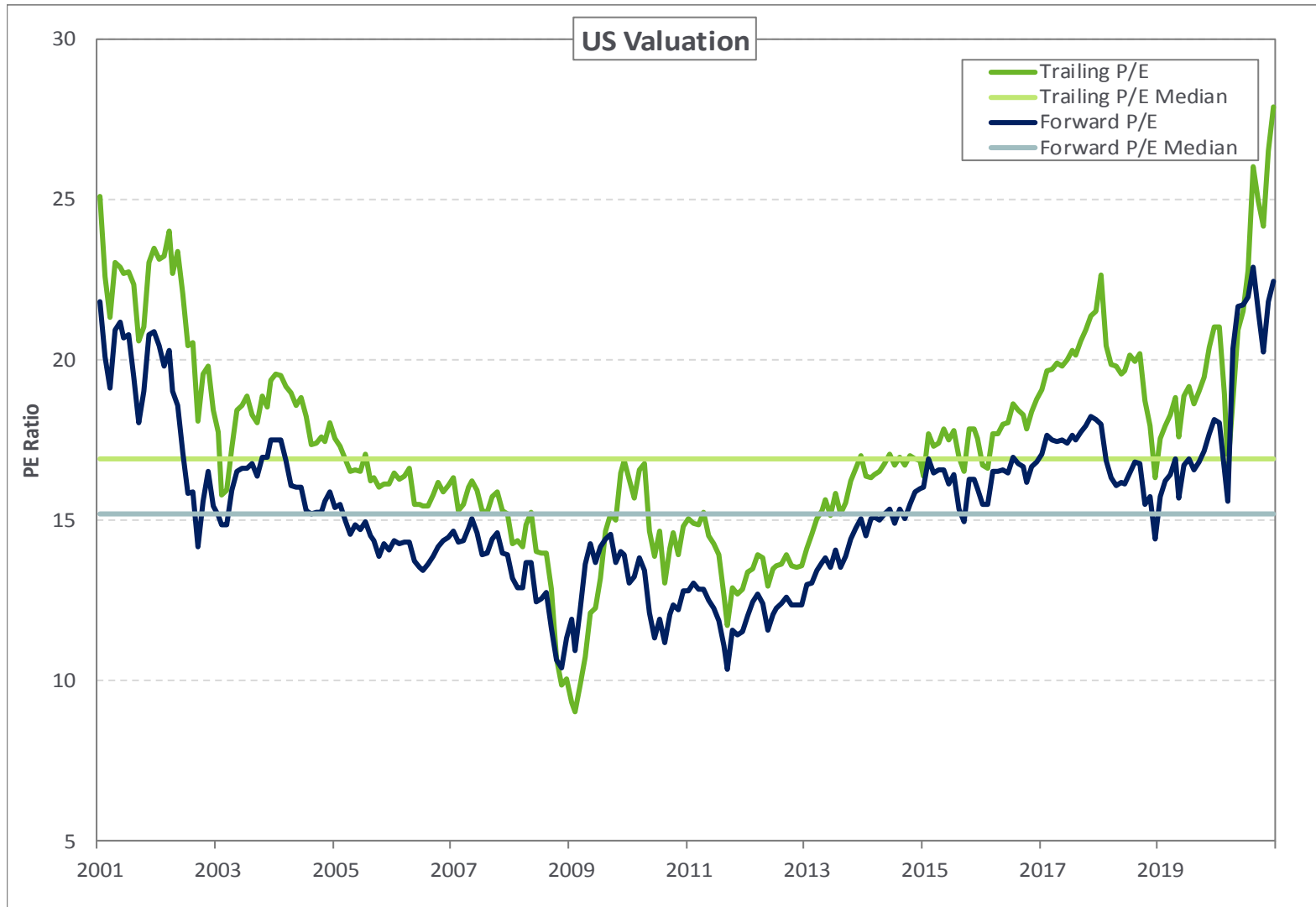
Source: FactSet



Source: FactSet



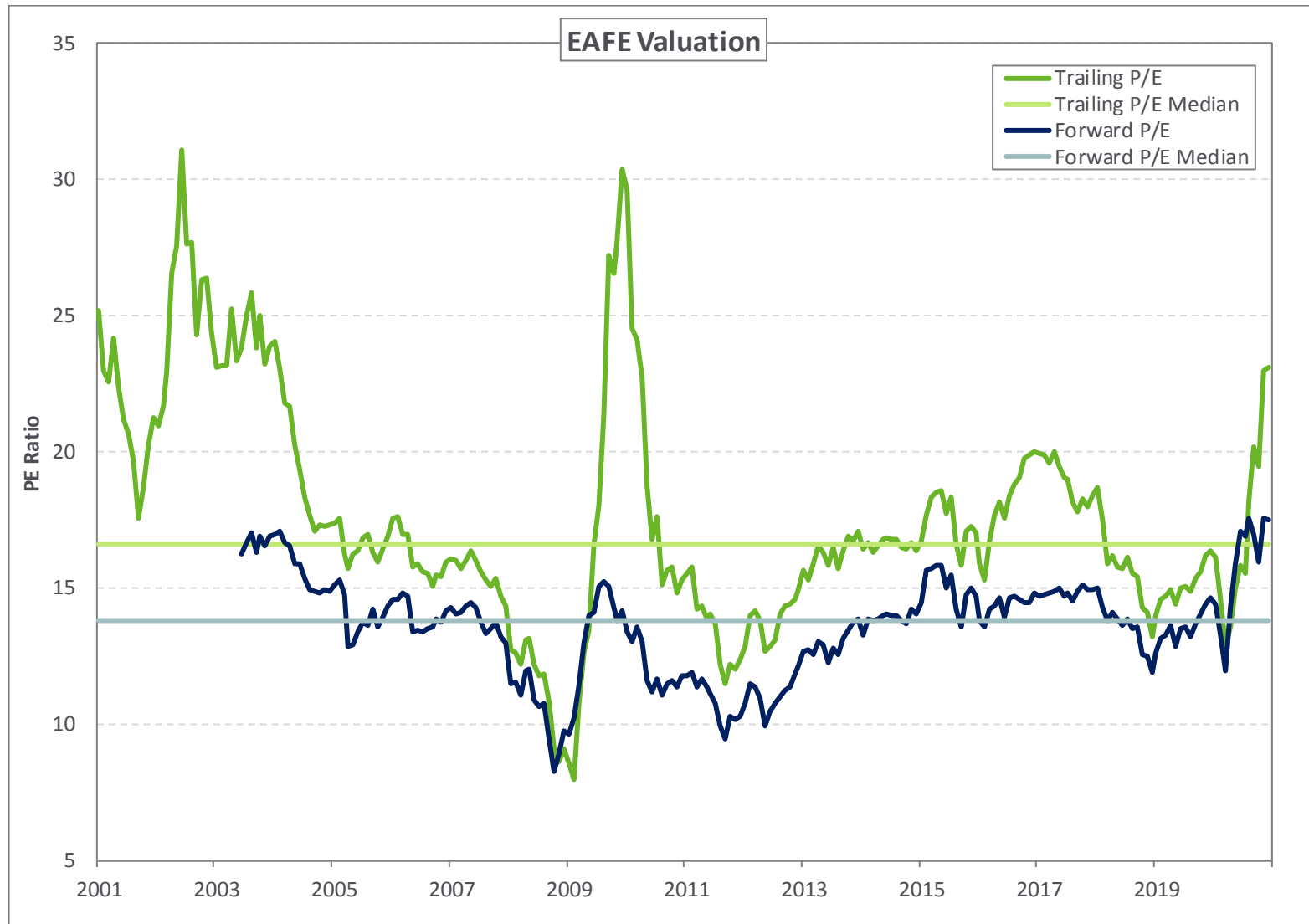
US EQUITY VALUATIONS



Source: S&P, FactSet



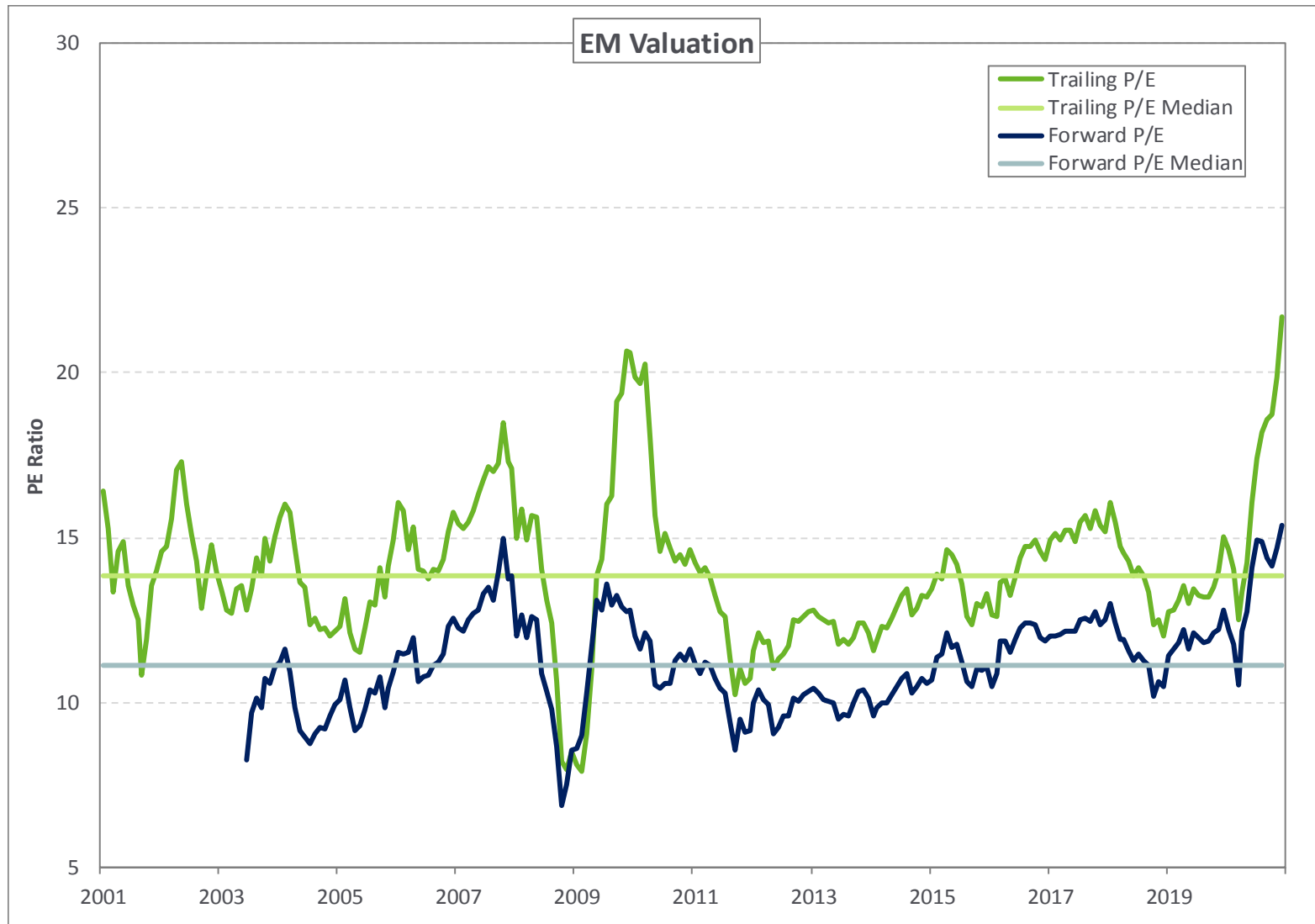
EAFE EQUITY VALUATIONS



Source: MSCI, FactSet



EM EQUITY VALUATIONS



Source: MSCI, FactSet



CREDIT

NEPC, LLC

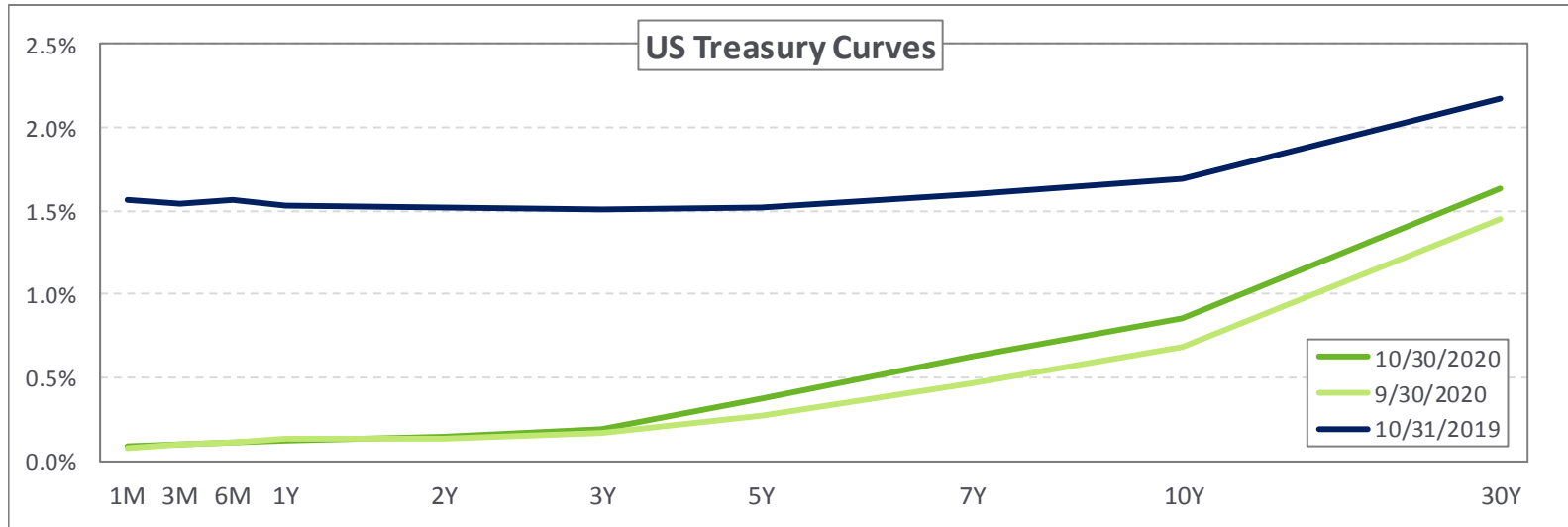
FIXED INCOME CHARACTERISTICS

	Averages			Total Returns (%)		
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	1.12%	42	6.2	0.1%	7.4%	7.4%
Barclays Treasury	0.57%	-	7.2	-0.2%	7.9%	7.9%
Barclays Agency	0.48%	10	3.7	0.1%	5.4%	5.4%
Barclays MBS	1.25%	39	2.3	0.2%	3.8%	3.8%
Barclays ABS	0.45%	33	2.1	0.2%	4.5%	4.5%
Barclays CMBS	1.02%	49	5.8	0.4%	8.9%	8.9%
Barclays Corp IG	1.74%	96	8.8	0.4%	9.8%	9.8%
Barclays Muni	1.07%	-	5.2	0.6%	5.2%	5.2%
Barclays HY Muni	3.82%	-	7.3	1.9%	4.9%	4.9%
Barclays TIPS	0.69%	-	3.4	1.1%	10.9%	10.9%
Barclays HY	4.18%	360	3.6	1.9%	7.1%	7.1%
Barclays Global Agg	0.83%	37	7.4	1.3%	9.1%	9.1%
JPM EMBI Glob Div	-	350	8.1	1.9%	5.2%	5.2%
JPM GBI - EM	4.30%	-	5.6	3.5%	2.7%	2.7%

Source: Barclays, JP Morgan, FactSet



TREASURIES



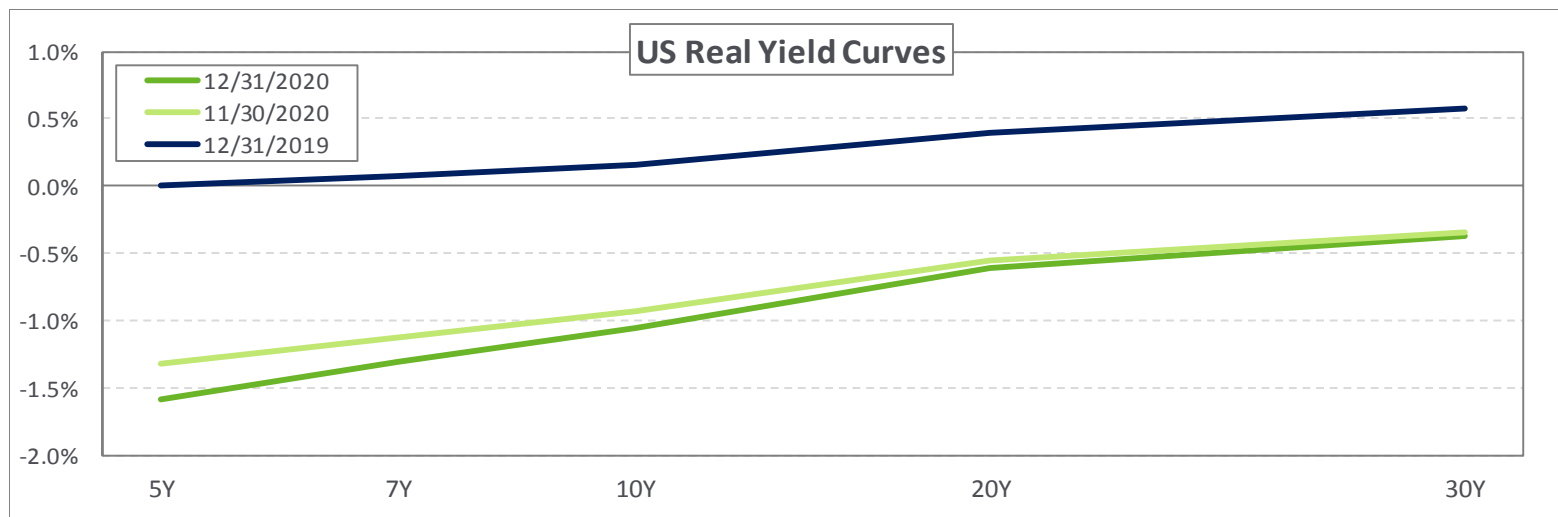
Source: FactSet

	Yield (%)			Total Return (%)	
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	0.08%	0.09%	1.55%	0.01%	0.67%
6M Treasury	0.09%	0.10%	1.59%	0.02%	1.05%
2Y Treasury	0.12%	0.14%	1.57%	0.07%	3.03%
5Y Treasury	0.36%	0.36%	1.69%	0.09%	7.20%
10Y Treasury	0.92%	0.84%	1.92%	-0.58%	10.58%
30Y Treasury	1.65%	1.58%	2.39%	-1.51%	18.65%

Source: FactSet



REAL YIELDS



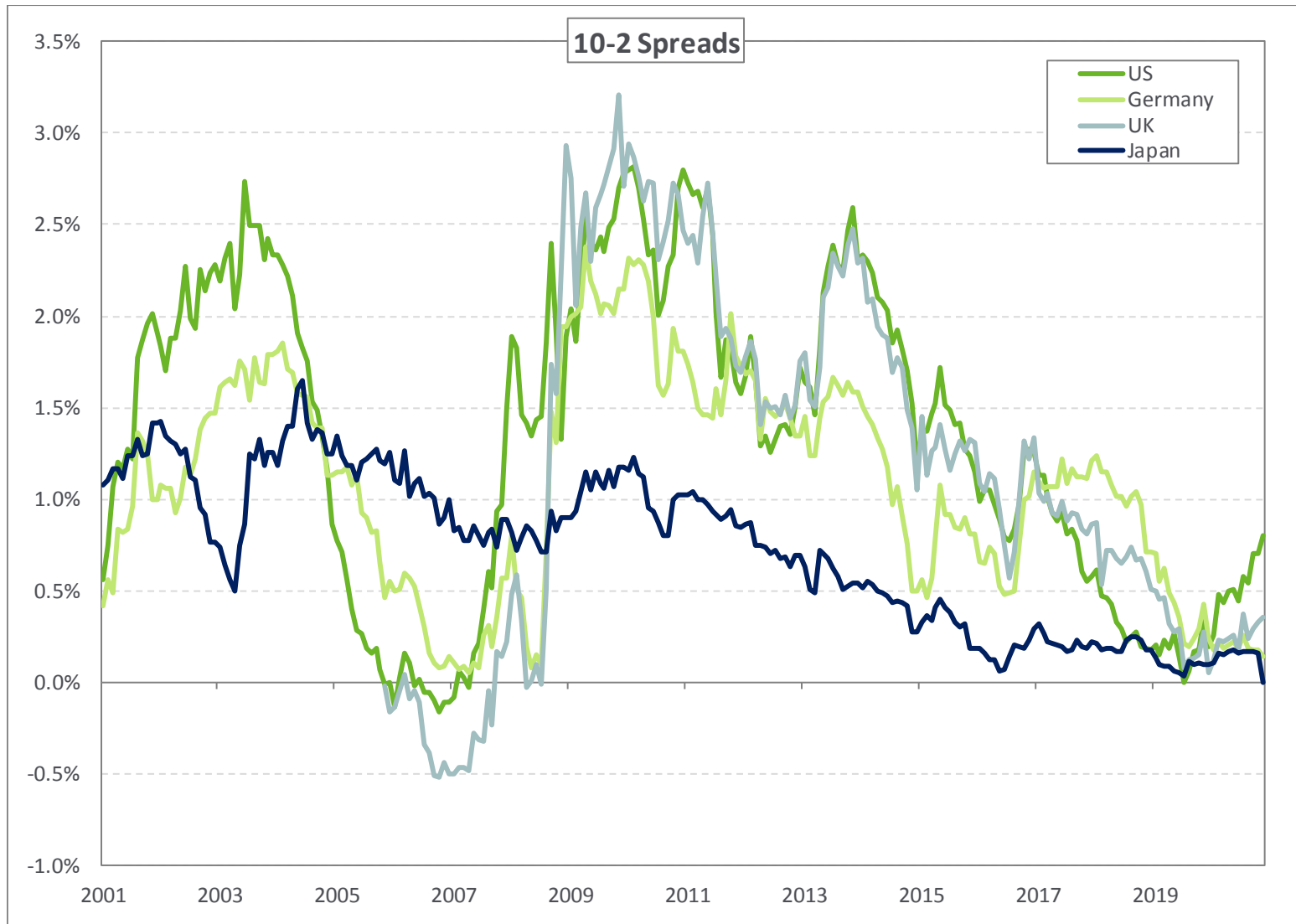
Source: FactSet

	Real Rates			Breakeven Rates	
	Current	1 Month Ago	12 Months Ago	Current	12 Months
5-Year	-1.59%	-1.32%	0.01%	1.95%	0.01%
7-Year	-1.31%	-1.13%	0.07%	1.96%	0.07%
10-Year	-1.06%	-0.93%	0.15%	1.98%	0.15%
30-Year	-0.37%	-0.35%	0.58%	2.02%	0.58%

Source: FactSet



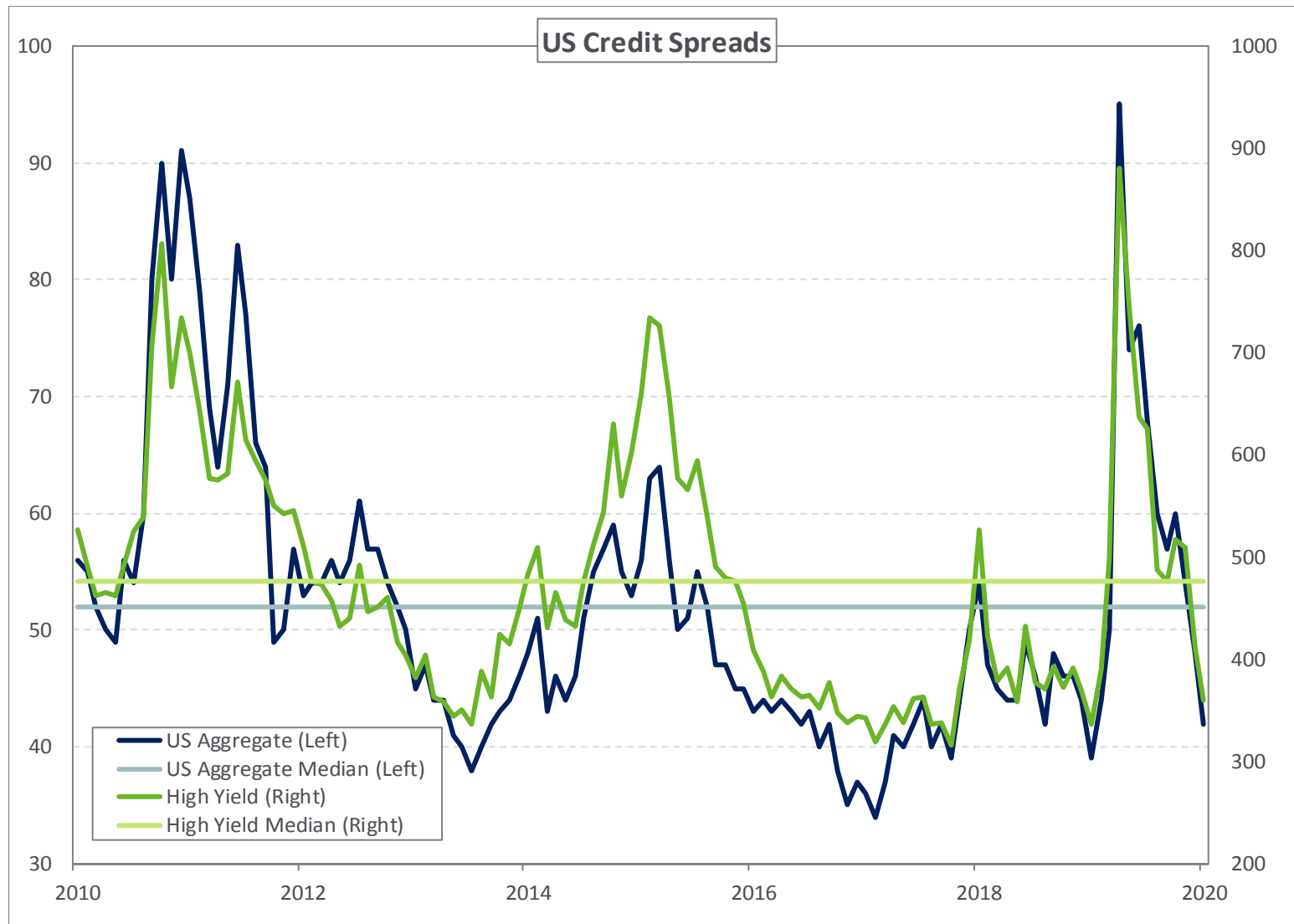
NOMINAL YIELDS



Source: FactSet



CREDIT SPREADS



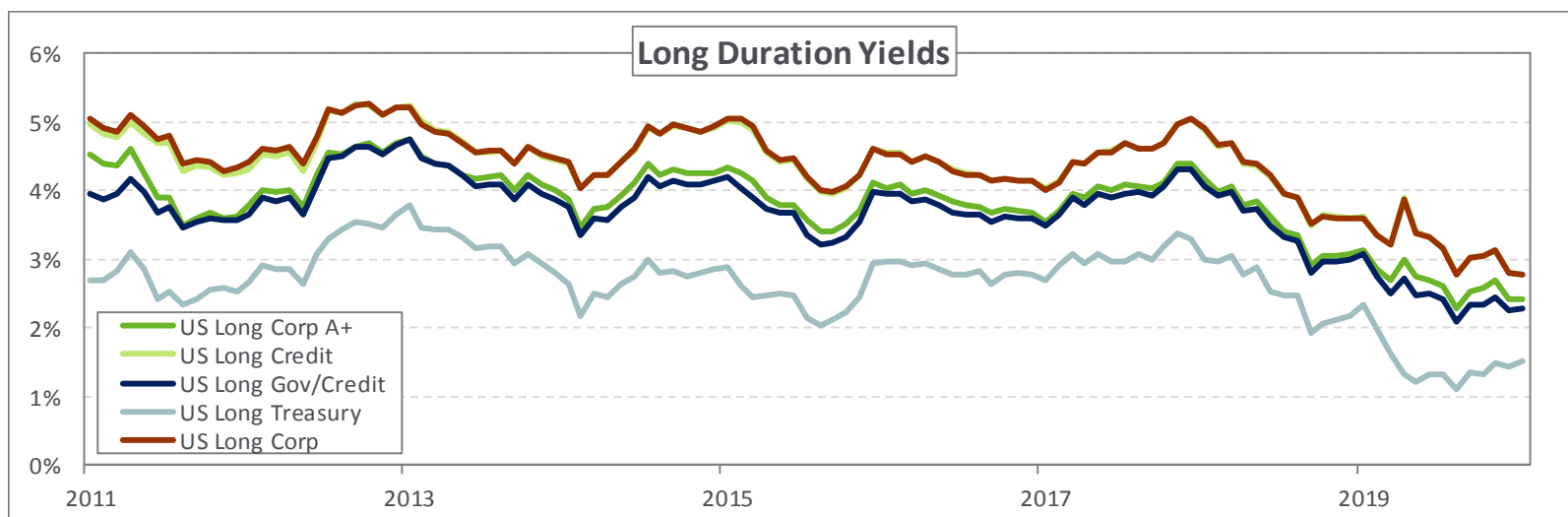
Source: Barclays, FactSet



LONG DURATION

Index	Current	1 Month Ago	12 Months Ago	Duration
Barclays Long Treasury	1.5%	1.4%	2.3%	19.2
Barclays 20+ STRIPS	1.6%	1.6%	2.4%	27.0
Barclays Long Credit	2.8%	2.8%	3.6%	15.3
Barclays Long Gov/Credit	2.3%	2.3%	3.1%	16.8
Barclays Long Corp A+	2.5%	2.5%	3.3%	16.1

Source: Barclays, FactSet



Source: Barclays, FactSet



REAL ASSETS

NEPC, LLC

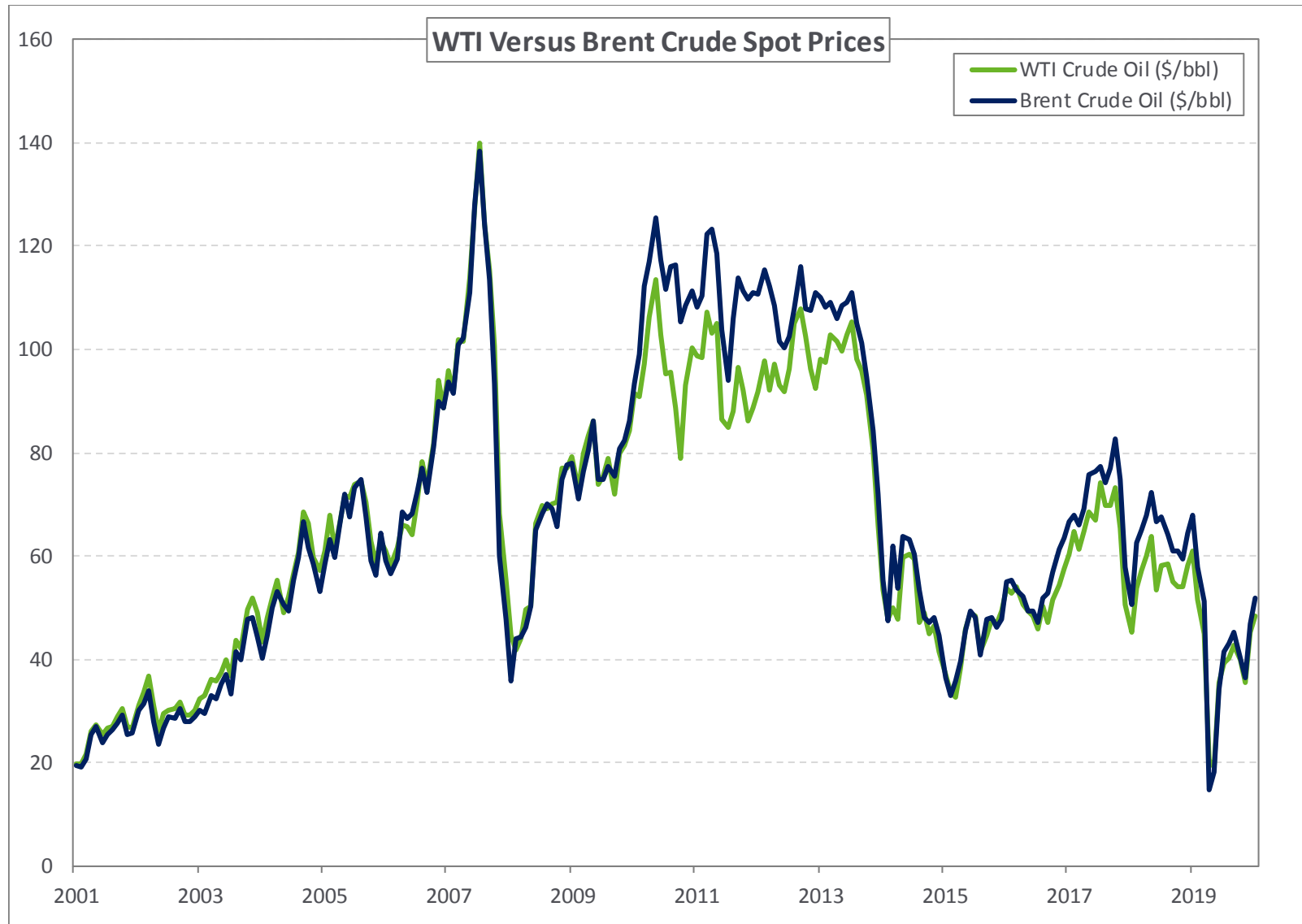
REAL ASSETS INDEX PERFORMANCE

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	5.0%	10.2%	-3.1%	-3.1%	-2.5%	1.0%
Bloomberg Sub Agriculture Index	10.4%	21.4%	16.3%	16.3%	1.9%	-0.8%
Coffee	4.0%	12.8%	-9.4%	-9.4%	-9.2%	-9.1%
Corn	13.6%	25.2%	12.8%	12.8%	0.7%	-4.1%
Cotton	8.3%	15.7%	9.9%	9.9%	-1.6%	3.5%
Soybean	11.7%	27.4%	31.9%	31.9%	5.1%	4.1%
Soybean Oil	13.6%	28.4%	15.8%	15.8%	3.9%	2.3%
Sugar	6.8%	14.7%	10.5%	10.5%	-5.9%	-5.2%
Wheat	9.5%	9.4%	10.2%	10.2%	7.6%	-3.7%
Bloomberg Sub Energy	-0.7%	2.2%	-42.5%	-42.5%	-17.5%	-9.0%
Brent Crude	8.0%	19.4%	-31.3%	-31.3%	-7.5%	2.5%
Heating Oil	7.6%	25.6%	-38.0%	-38.0%	-13.4%	-0.1%
Natural Gas	-12.9%	-18.8%	-41.7%	-41.7%	-28.5%	-23.8%
Unleaded Gas	11.9%	21.0%	-30.7%	-30.7%	-10.5%	-4.7%
WTI Crude Oil	6.5%	18.2%	-50.4%	-50.4%	-19.1%	-9.9%
Bloomberg Sub Industrial Metals	0.3%	14.2%	16.2%	16.2%	0.1%	9.2%
Aluminum	-3.6%	12.0%	3.9%	3.9%	-6.0%	3.6%
Copper	2.4%	15.8%	23.1%	23.1%	1.4%	9.2%
Nickel	3.5%	14.1%	16.5%	16.5%	8.9%	12.6%
Zinc	-1.7%	13.6%	18.4%	18.4%	-2.7%	13.4%
Bloomberg Sub Precious Metals	8.8%	2.4%	25.4%	25.4%	11.9%	11.2%
Gold	6.4%	-0.4%	20.8%	20.8%	11.5%	11.0%
Silver	16.9%	11.8%	42.1%	42.1%	13.3%	11.9%
Bloomberg Sub Livestock	2.1%	2.4%	-23.3%	-23.3%	-10.8%	-6.6%
Lean Hogs	2.5%	8.7%	-31.3%	-31.3%	-20.9%	-13.2%
Live Cattle	1.9%	-0.4%	-17.8%	-17.8%	-5.2%	-2.9%

Source: Bloomberg, FactSet
 Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



OIL MARKETS



Source: FactSet



DISCLAIMERS & DISCLOSURES

- Past performance is no guarantee of future results.
- 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.
- NEPC’s preferred data source is the plan’s custodian bank or record-keeper. If data cannot be obtained from one of the preferred data sources, data provided by investment managers may be used. Information on market indices and security characteristics is received from additional providers. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within. In addition, some index returns displayed in this report or used in calculation of a policy index, allocation index or other custom benchmark may be preliminary and subject to change.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- The opinions presented herein represent the good faith views of NEPC as of the date of this presentation and are subject to change at any time. Neither fund performance nor universe rankings contained in this report should be considered a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

