INVESTMENT PERFORMANCE ANALYSIS FOR PERIOD ENDING JUNE 30, 2020

NEW MEXICO EDUCATIONAL RETIREMENT BOARD



August 14, 2020

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

TABLE OF CONTENTS

	PAGE
Market Environment Update and Outlook	3
Third Party Placement Agent Disclosure	13
Total Fund Performance	16
Appendix: Market Environment	55



MARKET ENVIRONMENT UPDATE & OUTLOOK



ECONOMIC ENVIRONMENT

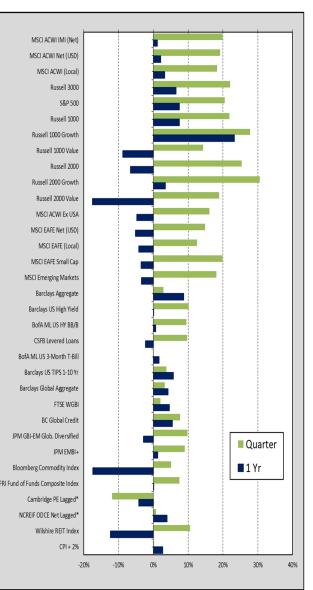
• Q2 Real GDP (advance estimate) plunged at an annual rate of -32.9%.

- Retail sales ended May at -1.3% on a YoY basis (April retail sales were down 15.5% YoY). In the same period last year the YoY growth rate was 5.7%.
- Corporate profits (ended January) as a percent of GDP decreased to 7.6% from 8.7% (in October) and remain elevated relative to historical levels.
- The inventory-to-sales ratio ended May at 1.5 up from 1.4 in December. Levels have remained relatively constant since early 2010 with a spike to 1.7 in April.
- The U.S. trade deficit widened (ended May) as the value of exports decreased by 4.4%.
- The unemployment rate spiked up to 11.1% ended June, up from 4.4% in Q1; U-6, a broader measure of unemployment, increased to 18.0% in Q2 from 8.7% in Q1.
- The Case-Shiller Home Price Index (ended May) increased to 218.9 from 215.2 (in March) 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 0.71% in Q2 from 1.52% ended Q1; Capacity Utilization decreased to 68.6 in Q2 from 73.5% in Q1.
- Fed Funds rate remains at a targeted range of 0.00%-to-0.25%. The 10-year Treasury Yield (constant maturity) finished Q2 down to 0.7% from 0.9% in Q1.
- The Fed remains committed to continuing stimulative action as needed to support the US economy. The Fed's balance sheet continues to grow in wake of the pandemic.
- S&P valuations increased in Q2 to 29.96x, and is higher than the 10-year average of 25.9x.
 - Cyclically adjusted Shiller PE ratio remains above the long-term average of 16.7x



MARKET ENVIRONMENT – Q2 2020 OVERVIEW

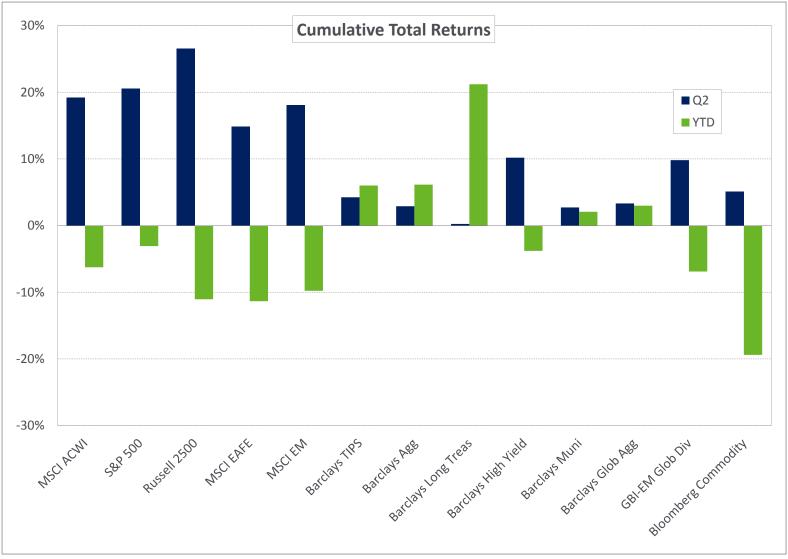
		<u>Qtr.</u>	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	
World Equity Benchmarks							4
MSCIACWIIMI (Net)	World with Small Cap	19.83%	1.17%	5.55%	6.11%	9.10%	
MSCI ACWI Net (USD)	World W/O Small Cap	19.22%	2.11%	6.14%	6.46%	9.16%	
MSCI ACWI (Local)	World (Local Currency)	18.27%	3.27%	6.45%	6.78%	9.82%	
Domestic Equity Benchmarks							
Russell 3000	Domestic All Cap	22.03%	6.53%	10.04%	10.03%	13.72%	
S&P 500	Large Core	20.54%	7.50%	10.73%	10.73%	13.99%	
Russell 1000	Large Core	21.82%	7.48%	10.64%	10.47%	13.97%	
Russell 1000 Growth	Large Growth	27.84%	23.28%	18.99%	15.89%	17.23%	
Russell 1000 Value	Large Value	14.29%	-8.84%	1.82%	4.64%	10.41%	
Russell 2000	Small Core	25.42%	-6.63%	2.01%	4.29%	10.50%	
Russell 2000 Growth	Small Growth	30.58%	3.48%	7.86%	6.86%	12.92%	Ī
Russell 2000 Value	Small Value	18.91%	-17.48%	-4.35%	1.26%	7.82%	
International Equity Benchmarks							
MSCI ACWI Ex USA	World ex-US	16.12%	-4.80%	1.13%	2.26%	4.97%	1
MSCI EAFE Net (USD)	Int'l Developed	14.88%	-5.13%	0.81%	2.05%	5.73%	
MSCI EAFE (Local)	Int'l Developed (Local Currency)	12.60%	-4.24%	1.26%	2.63%	6.86%	1
MSCI EAFE Small Cap	Small Cap Int'l	19.88%	-3.52%	0.53%	3.81%	8.02%	1
MSCI Emerging Markets	Emerging Equity	18.08%	-3.39%	1.90%	2.86%	3.27%]
Domestic Fixed Income Benchmarks							
Barclays Aggregate	Core Bonds	2.90%	8.74%	5.32%	4.30%	3.82%	
Barclays US High Yield	High Yield	10.18%	0.03%	3.33%	4.79%	6.68%	I
BofAML US HY BB/B	High Yield	9.52%	0.69%	3.67%	4.81%	6.57%	
CSFB Levered Loans	Bank Loans	9.71%	-2.27%	2.13%	2.94%	4.33%	Ī
BofAML US 3-Month T-Bill	Cash	0.02%	1.63%	1.77%	1.19%	0.64%	1
Barclays US TIPS 1-10 Yr	Inflation	3.76%	5.75%	3.94%	2.97%	2.66%	1
Global Fixed Income Benchmarks							
Barclays Global Aggregate	Global Core Bonds	3.32%	4.22%	3.79%	3.55%	2.81%]
FTSE WGBI	World Gov. Bonds	2.04%	4.60%	3.98%	3.70%	2.37%	
BC Global Credit	Global Bonds	7.68%	5.49%	4.49%	4.23%	4.26%	1
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	9.82%	-2.82%	1.14%	2.34%	1.64%	
JPM EMBI+	Em. Mkt. Bonds	9.06%	1.23%	2.66%	4.91%	5.53%	HFR
Alternative Benchmarks							
Bloomberg Commodity Index	Commodities	5.08%	-17.38%	-6.14%	-7.69%	-5.82%	
HFRI Fund of Funds Composite Index	Fund of Hedge Funds	7.48%	0.09%	2.12%	1.41%	2.75%	
Cambridge PE Lagged*	Private Equity	-11.88%	-4.18%	7.89%	8.72%	11.88%	
NCREIF ODCE Net Lagged*	Real Estate	0.75%	3.93%	5.85%	7.48%	10.42%	
Wilshire REIT Index	REIT	10.56%	-12.31%	0.23%	3.98%	9.22%	
CPI + 2%	Inflation/Real Assets	0.21%	2.72%	3.81%	3.63%	3.74%	1





* As of 3/31/2020

RISK ASSETS RALLIED SIGNIFICANTLY IN Q2



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



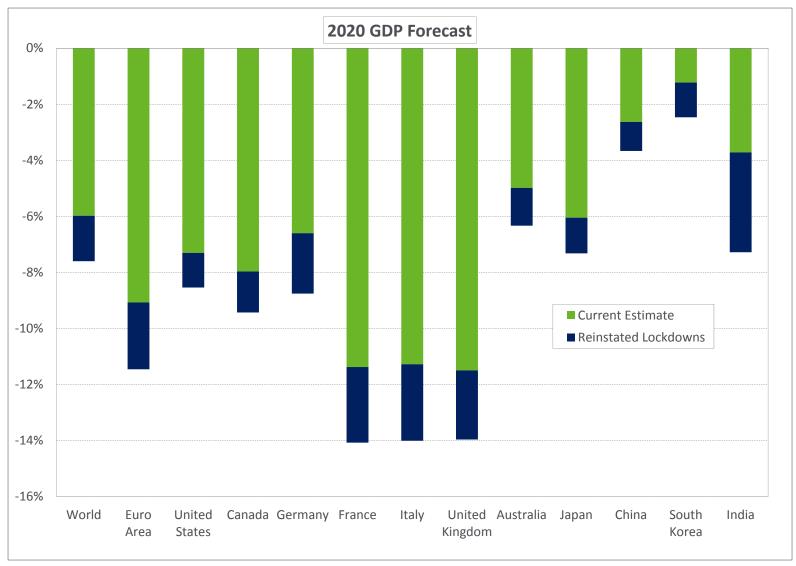
THE ECONOMIC BACKDROP IS CHALLENGED

Metric	12/31/19	03/31/20	06/30/20	Trend
S&P 500 CY 2020 Earnings Estimate	\$177.81	\$160.40	\$126.89	$\overline{}$
US Real GDP (QoQ%)	2.1%	-5.0%	-33.4%*	www.hard
US CY 2020 Real GDP Growth Consensus	1.8%	-0.7%	-5.2%	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
US Unemployment Rate	3.5%	4.4%	11.1%	
Continued Claims for Unemployment	1.7M	3.5M	19.1M	
Federal Reserve Balance Sheet as % of Nominal GDP	19.2%	24.4%	32.9%	

Source: US Bureau of Labor Statistics, Federal Reserve, FactSet, NEPC *The 06/30/20 real GDP figure represents the consensus estimate from FactSet



COVID WEIGHS ON GROWTH FORECASTS

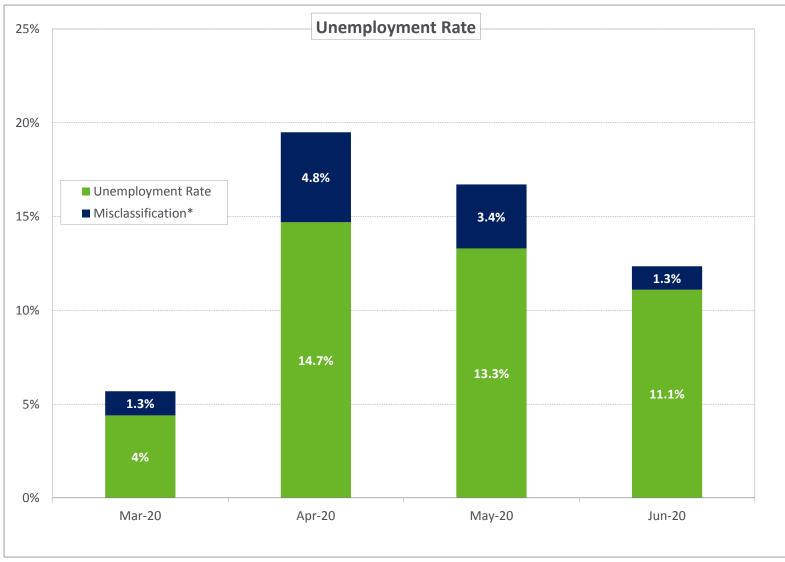


Source: OECD



The additional decline in economic growth from reinstated lockdowns represents a renewed outbreak of infections that forces economies to re-implement restrictions.

UNEMPLOYMENT MAY BE WORSE THAN REPORTED

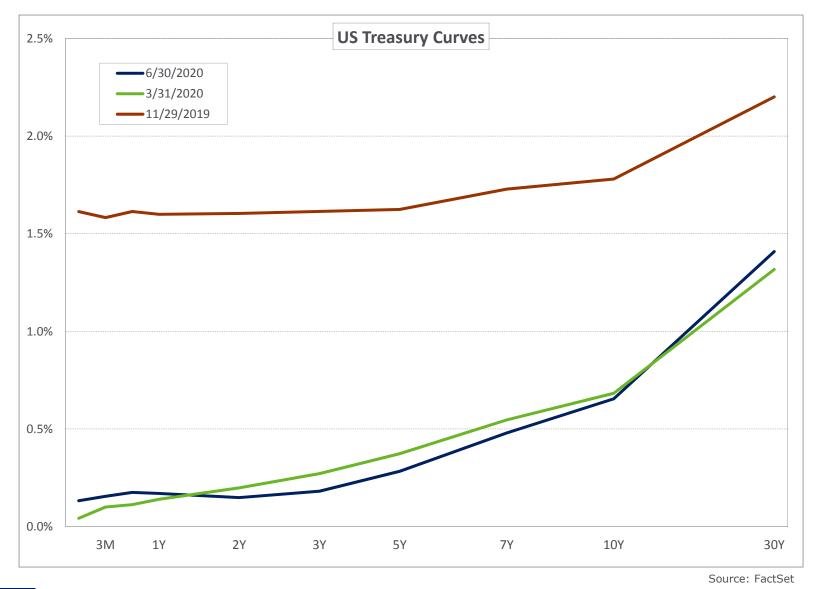


Source: Department of Labor

Misclassification* represents an estimate of "unemployed on temporary leave" mislabeled as "employed but absent from work"

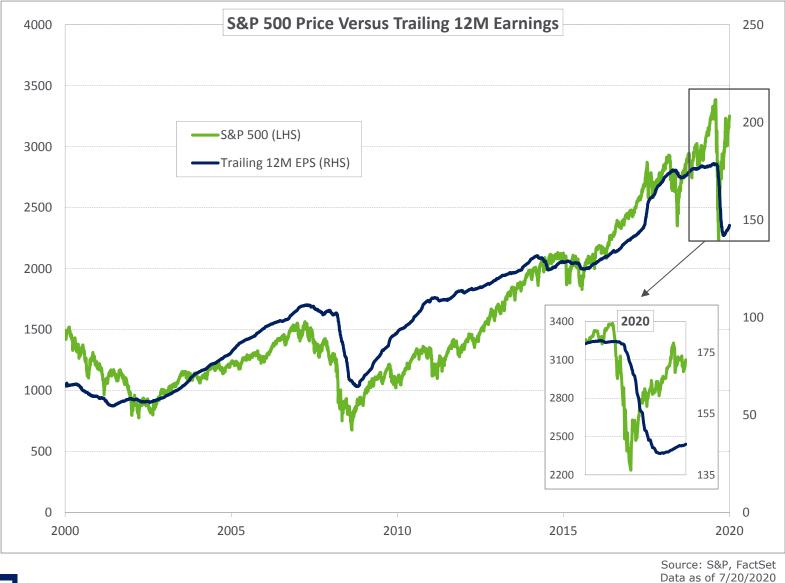


INTEREST RATES REFLECT ECONOMIC CONCERNS



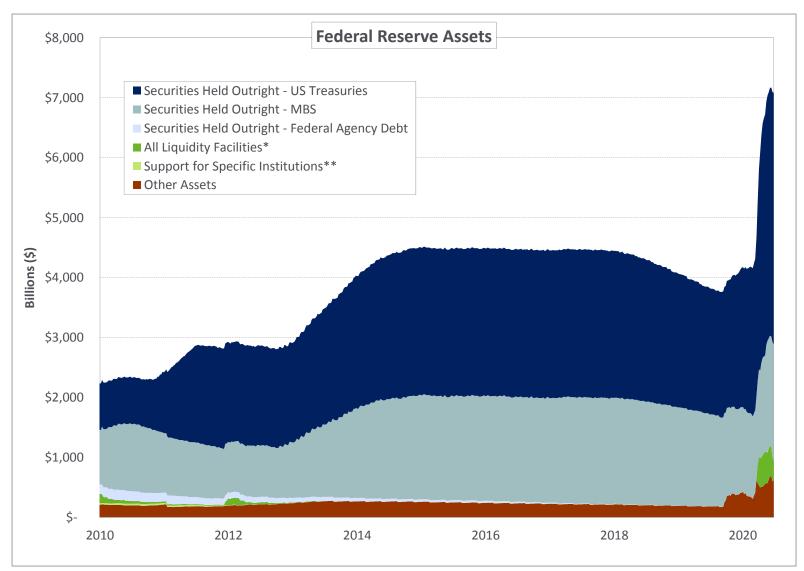


EQUITY PRICES DETACHED FROM FUNDAMENTALS





FED BALANCE SHEET GROWTH



Sources: Federal Reserve, FactSet, NEPC; *All Liquidity Facilities includes term auction credit, primary credit, secondary credit, seasonal credit, Primary Dealer Credit Facility, Asset-Backed Commercial Paper, Money Market Mutual Fund Liquidity Facility, and central bank liquidity swaps; **Support for Specific Institutions includes credit extended to AIG and Maiden Lane LLCs



THIRD PARTY PLACEMENT AGENT DISCLOSURE

The New Mexico Educational Retirement Board Policy Regarding Placement Agent Disclosures requires that quarterly performance reports to the Board include information regarding any third-party marketers that were used by recipients of investments including any fee, commission or retainer paid by the hired fund to the third-party marketer for services rendered. These fees are not paid by NMERB but are paid by the hired funds for marketing services to the third-party.

The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

Vista Credit Partners Fund III

The investment was approved for a \$100 million commitment on April 16, 2020 as part of the Fund's allocation to Opportunistic Credit.

Vista has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Vista has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Beach Point Tactical Opportunities Fund

The investment was approved for a \$75 million commitment on April 16, 2020 as part of the Fund's allocation to Opportunistic Credit.

Beach Point has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Beach Point has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Ares ACOF VI

The investment was approved for a \$50 million commitment on April 16, 2020 as part of the Fund's allocation to Private Equity.

Ares has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Ares has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Light Year V

The investment was approved for a \$50 million commitment on April 16, 2020 as part of the Fund's allocation to Private Equity.

Light Year has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Light Year has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



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The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

Orchard Liquid Credit

The investment was approved for a \$50 million commitment on April 16, 2020 as part of the Fund's allocation to Diversifying Assets.

Orchard has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Orchard has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Stone Peak Infrastructure IV

The investment was approved for a \$50 million commitment on April 16, 2020 as part of the Fund's allocation to Infrastructure.

Stone Peak has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Stone Peak has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Banner Ridge DSCO

The investment was approved for a \$40 million commitment on April 16, 2020 as part of the Fund's allocation to Private Equity.

Banner Ridge has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Banner Ridge has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.

Industry Ventures IX

The investment was approved for a \$50 million commitment on May 21, 2020 as part of the Fund's allocation to Private Equity.

Industry Ventures has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Industry Ventures has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



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The following investments were approved by the NMERB Investment Committee during the quarter, with disclosures made under the policy:

Raith Core Plus Real Estate Credit SMA

The investment was approved for a \$50 million commitment on May 21, 2020 as part of the Fund's allocation to Real Estate.

Raith has provided documentation confirming no placement agent was used in connection with NMERB's investment.

Additionally, Raith has completed the ERB Campaign Contribution Disclosure and reports no applicable campaign contributions.



New Mexico Educational Retirement Board TOTAL FUND PERFORMANCE SUMMARY (NET)

	Market Value	3 Mo F	Rank	YTD F	Rank	1 Yr F	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs I	Rank	15 Yrs I	Rank	20 Yrs	Rank	30 Yrs	Rank	Inception	Inception Date
Total Fund	\$12,752,949,305	3.69%	99	-5.86%	79	-0.97%	90	4.74%	60	5.71%	37	7.75%	54	6.36%	30	5.06%	75	8.16%	12	8.75%	Jul-83
Policy Index		7.31%	86	-3.18%	26	1.89%	36	5.87%	23	6.21%	19	7.72%	57	6.06%	41	5.31%	54	7.42%	62		Jul-83
60% MSCI ACWI (Net) / 40% FTSE WGBI		12.16%	16	-1.78%	10	3.67%	14	5.62%	26	5.64%	39	6.64%	96	5.48%	82	4.71%	89	6.68%	87		Jul-83
S&P 500		20.54%	1	-3.08%	22	7.50%	1	10.73%	1	10.73%	1	13.99%	1	8.83%	1	5.91%	22	9.74%	1	10.84%	Jul-83
BBgBarc US Aggregate TR		2.90%	99	6.13%	1	8.74%	1	5.32%	33	4.30%	94	3.82%	99	4.39%	99	5.14%	67	6.02%	90	7.10%	Jul-83
InvMetrics Public DB > \$1B Net Median		10.14%		-4.29%		1.26%		4.97%		5.39%		7.78%		5.90%		5.38%		7.58%		8.29%	Jul-83

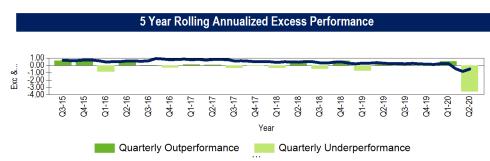
Over the past five years, the Fund returned 5.7% per annum, underperforming the policy index by 49 basis points and ranking in the 37^{th} percentile of the Investment Metrics Public Funds > \$1 Billion universe and underperforming the actuarial assumed rate of 7.00%. The Fund's volatility was 5.9%, which ranks in the 4th percentile of its peers over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio, ranks in the 4th percentile of its peers.

Over the past three years, the Fund returned 4.7% per annum, underperforming the policy index by 114 basis points and ranking in the 60th percentile of its peer group. Over the same period, the Fund's volatility ranks in the 4th percentile of its peers, resulting in a three-year Sharpe Ratio of 0.5, which ranks in the 19th percentile.

For the year ending June 30, 2020, the Fund experienced a net investment loss of \$106.2 million, which includes a net investment gain of \$455.2 million during the quarter. Assets decreased from \$13.3 billion twelve months ago, to \$12.8 billion on June 30, 2020, with \$470 million in net distributions during the year. The Fund returned -0.97%, underperforming the policy index by 287 basis points and ranking in the 90th percentile of its peers.

The InvMetrics Public Funds >\$1 Billion Net Universe contains 71 observations for the period ending June 30, 2020, with total assets of \$508.6 billion.

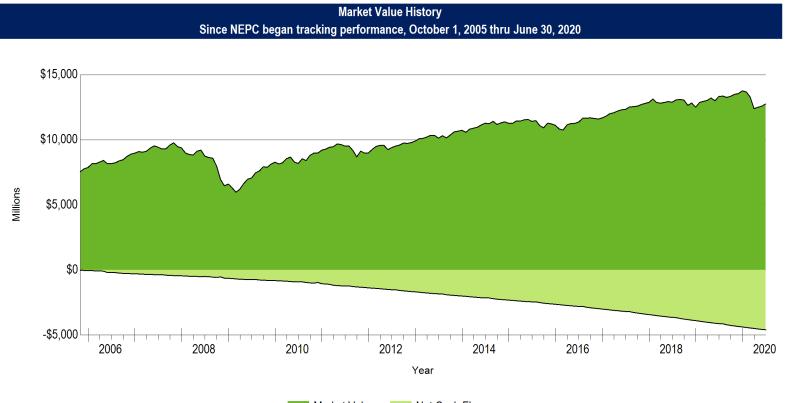




		5 Yea	rs Ending Ju	ne 30, 202	20			
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	5.7%	37	5.9%	4	0.8	4	1.0	6
Policy Index	6.2%	19	6.6%	10	0.8	5	1.0	5
InvMetrics Public DB > \$1B Net Median	5.4%		8.3%		0.5		0.7	

		3 Yea	rs Ending Ju	ne 30, 202	20			
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	4.7%	60	6.3%	4	0.5	19	0.7	20
Policy Index	5.9%	23	7.1%	10	0.6	10	0.8	9
InvMetrics Public DB > \$1B Net Median	5.0%		9.3%		0.4		0.5	

New Mexico Educational Retirement Board TOTAL FUND ASSET GROWTH SUMMARY



Market Value 🛛 Net Cash Flow

	Last Three Months	Year-To-Date	One Year	Three Years	Five Years	Since 10/1/05
Beginning Market Value	\$12,397,673,687	\$13,763,653,160	\$13,329,141,720	\$12,333,534,379	\$11,416,629,337	\$7,694,652,364
Net Cash Flow	-\$99,940,321	-\$213,101,108	-\$470,040,296	-\$1,405,178,486	-\$2,145,744,680	-\$4,581,415,860
Net Investment Change	\$455,215,939	-\$797,602,747	-\$106,152,119	\$1,824,593,412	\$3,482,064,648	\$9,639,712,801
Ending Market Value	\$12,752,949,305	\$12,752,949,305	\$12,752,949,305	\$12,752,949,305	\$12,752,949,305	\$12,752,949,305



15.0%

9.0%

TOTAL FUND ASSET ALLOCATION VS. POLICY

<u>Current</u> Allocation	<u>Policy</u> Target							
Anocation	Target		Current Mkt Value	Current Allocation	Policy Target ¹	Difference	Policy Range	Within Range
		Equity	\$3,788,876,970	29.7%	31.0%	-1.3%	15% - 55%	Yes
10.5%		U.S. Equity	\$2,113,342,339	16.6%	17.0%	-0.4%	8% - 30%	Yes
13.6%	14.0%	U.S. Large Cap Equity	\$1,739,309,493	13.6%	14.0%	-0.4%	7% - 25%	Yes
		U.S. Small/Mid Cap Equity	\$374,032,846	2.9%	3.0%	-0.1%	0% - 5%	Yes
		Non-U.S. Equity	\$1,675,534,632	13.1%	14.0%	-0.9%	5% - 25%	Yes
2.9%	3.0%	Non-U.S. Developed Mkts	\$600, 366, 975	4.7%	5.0%	-0.3%	0% - 10%	Yes
		Non-U.S. Emerging Mkts	\$1,075,167,656	8.4%	9.0%	-0.6%	2% - 15%	Yes
4.7%	5.0%							
		Fixed Income	\$3,309,112,267	25.9%	24.0%	1.9%	10% - 58%	Yes
		Core Fixed Income	\$781,261,631	6.1%	6.0%	0.1%	0% - 20%	Yes
8.4%	9.0%	Opportunistic Credit	\$2, 300, 805, 249	18.0%	16.0%	2.0%	0% - 30%	Yes
		Emerging Mkts Debt	\$227,045,386	1.8%	2.0%	-0.2%	0% - 8%	Yes
6.1%	6.0%	Alternatives	\$5,519,198,823	43.3%	44.0%	-0.7%	10% - 65%	Yes
	6.0%	Absolute Return	\$338,345	0.0%	0.0%	0.0%	0% - 10%	Yes
		Diversifying Assets	\$1,601,468,055	12.6%	12.0%	0.6%		
		Global Asset Allocation	\$381,842,886	3.0%	2.0%	1.0%	0% - 6%	Yes
18.0%	16.0%	Risk Parity	\$738,284,208	5.8%	3.0%	2.8%	0% - 6%	Yes
10.070	10.0%	Other Diversifying Assets	\$481,340,961	3.8%	7.0%	-3.2%	0% - 12%	Yes
			\$101,010,001	0.070	1.070	0.270	0/0 12/0	100
		Real Estate	\$769.449.283	6.0%	8.0%	-2.0%	0% - 15%	Yes
	2.9%	REITS	\$246,955,051	1.9%	2.0%	-0.1%	078 - 1378	165
<u></u>	0:0%	Private Real Estate	\$522,494,232	4.1%	6.0%	-1.9%		
			+,,					
12.6%	12.0%	Private Equity	\$2,066,888,858	16.2%	15.0%	1.2%	0% - 24%	Yes
		Inflation-Linked Assets	\$1,081,054,283	8.5%	9.0%	-0.5%	0% - 16%	Yes
6.0%	8.0%	Cash	\$135,703,236	1.1%	1.0%	0.1%	-20% - 15%	Yes
		Total	\$12,752,949,305	100.0%	100.0%	0.0%		

¹Long-Term Policy Target approved by the Board in August 2019.

Note: Allocations shown here include cash held in separately managed portfolios.

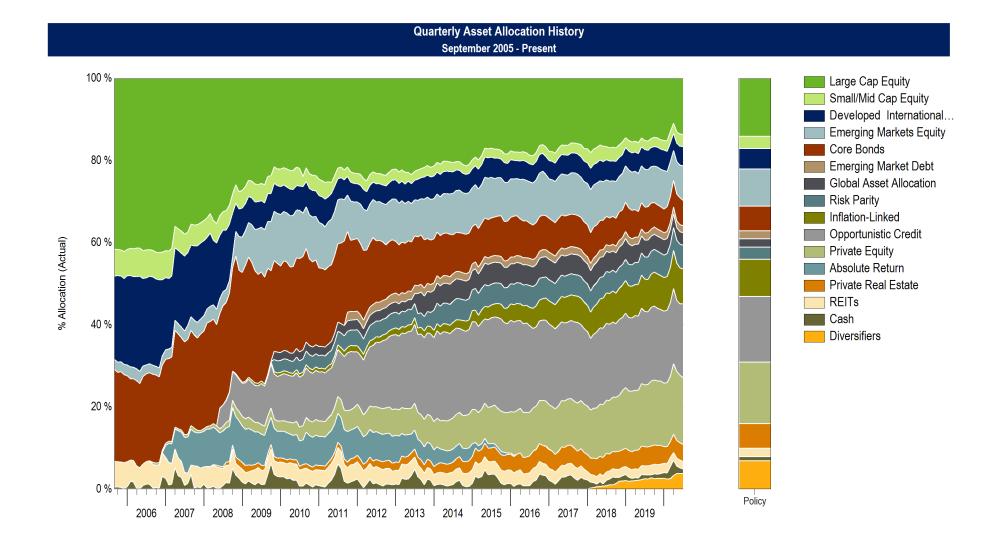
Totals may not add to 100% due to rounding. Total Plan includes Legacy Assets portfolio totaling \$58,008.



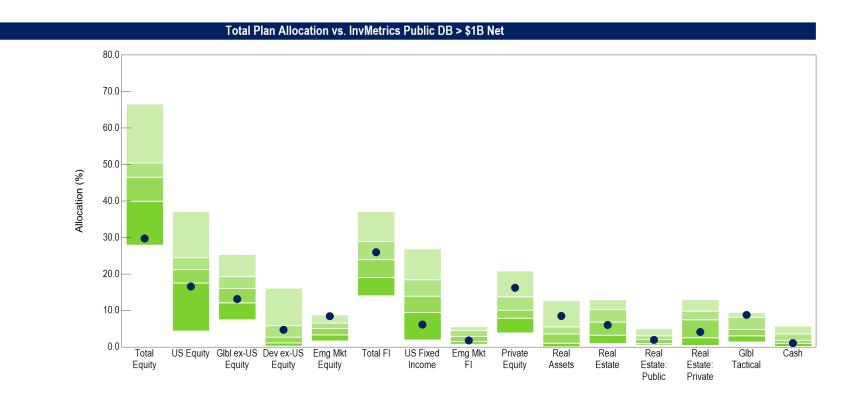
16.2%

8.5%

New Mexico Educational Retirement Board TOTAL FUND ASSET ALLOCATION HISTORY



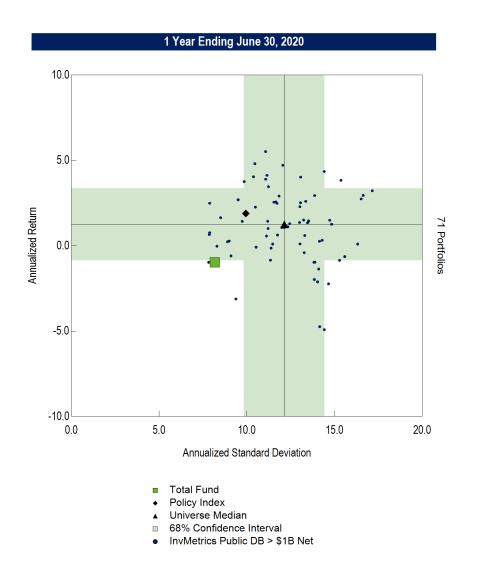
New Mexico Educational Retirement Board TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE



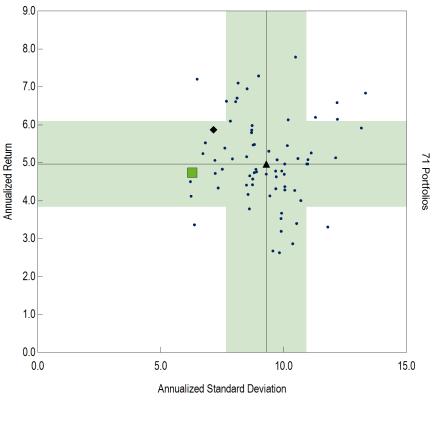
	Allocatio	on (Rank)														
5th Percentile	66.5	37.1	25.3	16.1	8.8	37.1	26.9	5.6	20.8	12.7	13.0	5.0	13.0	9.5	5.7	
25th Percentile	50.5	24.5	19.3	6.0	6.6	29.0	18.5	4.6	13.8	5.6	10.3	3.1	9.9	8.2	3.6	
Median	46.6	21.3	16.1	2.8	5.2	24.0	14.0	3.0	10.2	3.6	6.9	2.2	7.5	4.9	1.9	
75th Percentile	39.9	17.6	12.1	1.2	3.4	19.1	9.6	1.6	8.0	1.1	3.3	1.0	2.6	3.2	1.1	
95th Percentile	27.9	4.4	7.5	0.4	1.7	14.1	2.0	0.8	3.9	0.1	1.0	0.6	0.5	1.5	0.2	
# of Portfolios	50	40	49	29	39	50	41	28	46	27	47	17	43	10	50	
 Total Fund 	29.7 (9	2) 16.6 (7	7) 13.1 (71)	4.7 (41)	8.4	(8) 25.9 (39)	6.1 (87)	1.8 (73)	16.2 (11)	8.5 (15)	6.0 (58)	1.9 (57)	4.1 (70)	8.8 (23)	1.1 (76)	



New Mexico Educational Retirement Board TOTAL FUND RISK/RETURN



3 Years Ending June 30, 2020



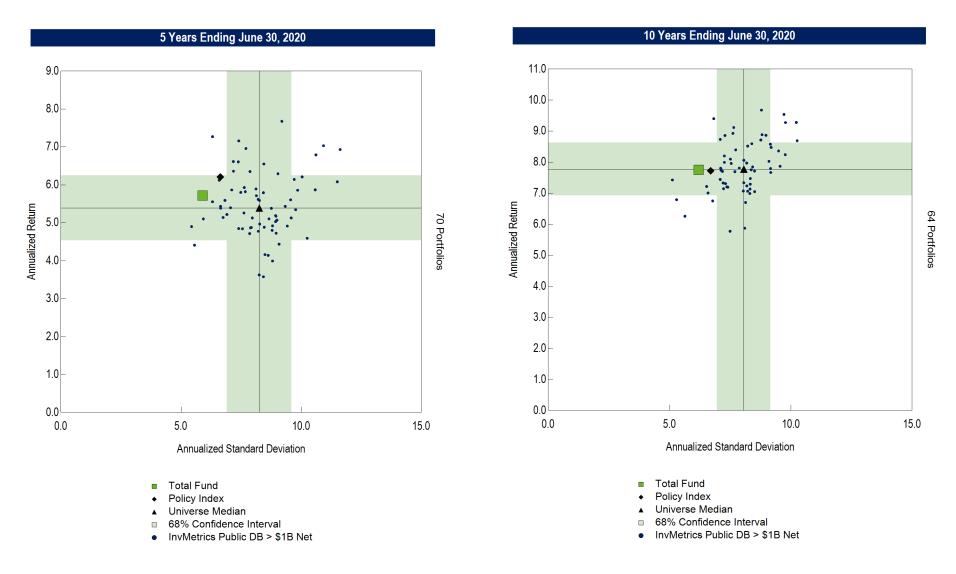
Total Fund

- Policy Index
- Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

Note: Ranks are based on net returns.



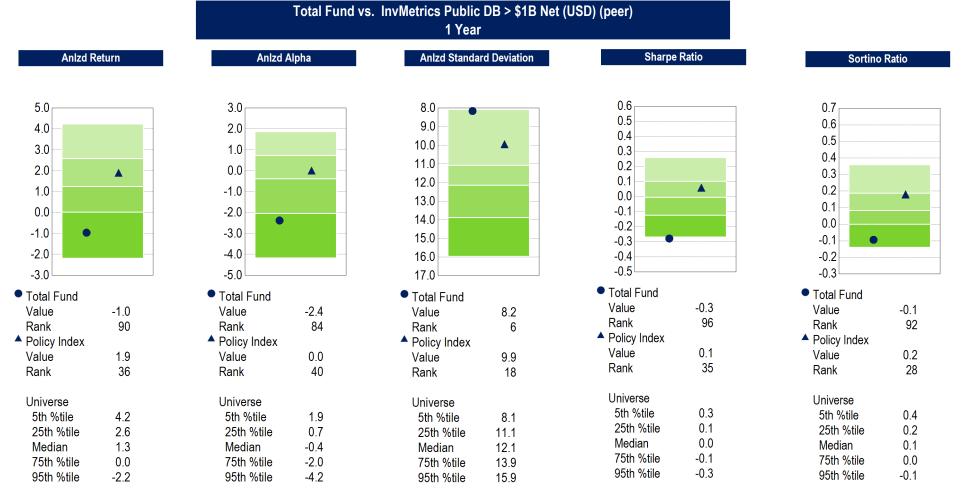
New Mexico Educational Retirement Board TOTAL FUND RISK/RETURN



Note: Ranks are based on net returns.



TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE



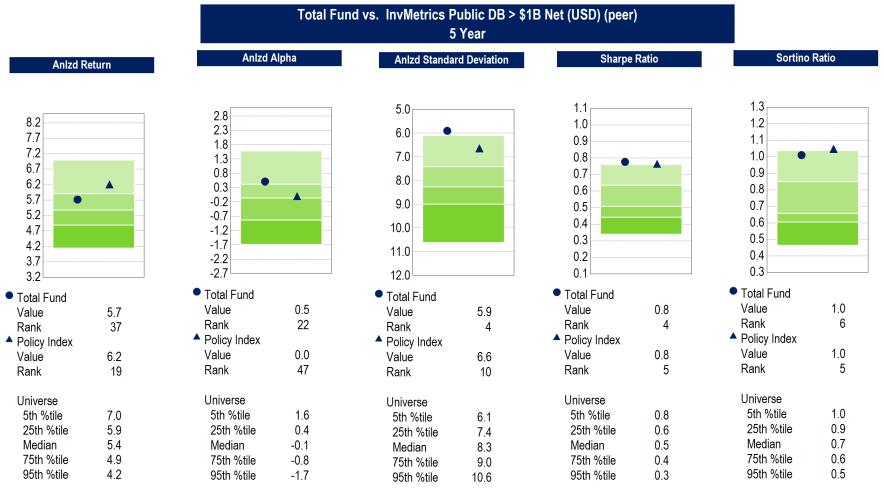


TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE





TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE



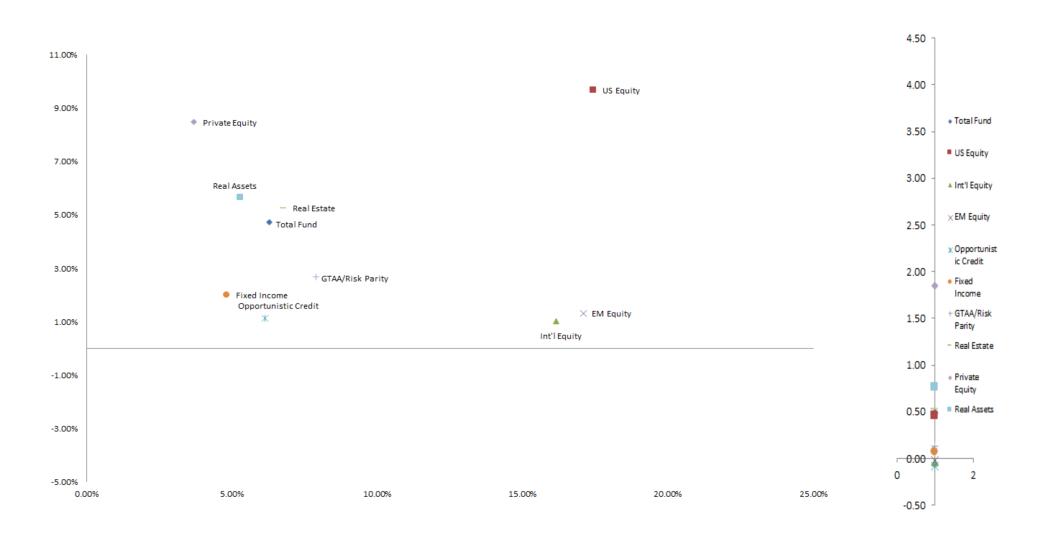


TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Anizd ReturnAnizd AlphaAnizd Standard DeviationSharpe RatioSortino Ratio10.7 12.9 9.7 9.2 9.7 9.2 6.7 6.2 6.7 6.2 6.7 6.7 6.2 6.7 6.74.0 0.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 1.0 0.0 0.0 1.125.2 5.7 1.1 0.0 0.0 0.7 0.615 1.4 1.1 0.0 0.0 0.615 1.4 1.1 0.0 0.0 0.6• Total Fund Value Value Value Value 0.0 0.6• Total Fund Value 0.0 0.6• Total Fund Value 0.0• Total Fund Value 0.0 0.6• Total Fund Value 0.0• Total Fund Value<				Total Fund vs. InvMetrics Public DB > \$1B Net (USD) (peer) 10 Year										
10.1 10.2	Anlzd F	Return	Anizd A	lpha	AnIzd Standa	rd Deviation	Sharpe	Ratio	Sortino	Ratio				
Value 7.8 Value 0.8 Value 6.2 Value 1.2 Value 1.5 Rank 54 Rank 18 Rank 5 Rank 6 Rank 8 Policy Index	10.2 9.7 9.2 8.7 8.2 7.7 7.2 6.7 6.2		3.0 2.0 1.0 0.0 -1.0		5.7 6.2 6.7 7.2 7.7 8.2 8.7 9.2 9.7 10.2 10.7		1.4 1.3 1.2 1.1 1.0 0.9 0.8 0.7		1.8 1.7 1.6 1.5 1.4 1.3 1.2 1.1 1.0 0.9					
Rank54Rank18Rank5Rank6Rank8Policy IndexPolicy Index </th <th></th>														
Policy IndexPolicy IndexPolicy IndexPolicy IndexPolicy IndexPolicy IndexValue7.7Value0.0Value6.7Value1.1Value1.5Rank57Rank48Rank9Rank13Rank9UniverseUniverseUniverseUniverseUniverseUniverseUniverse5th %tile9.35th %tile2.95th %tile6.25th %tile1.25th %tile1.625th %tile8.525th %tile0.725th %tile7.325th %tile1.025th %tile1.4Median7.8Median0.0Median8.1Median0.9Median1.275th %tile7.275th %tile-0.475th %tile8.675th %tile0.875th %tile1.1														
Value 7.7 Value 0.0 Value 6.7 Value 1.1 Value 1.5 Rank 57 Rank 48 Rank 9 Rank 13 Rank 9 Universe <		54		18		5		6		8				
Rank 57 Rank 48 Rank 9 Rank 13 Rank 9 Universe Un		7.7		0.0		67		11		15				
5th %tile 9.3 5th %tile 2.9 5th %tile 6.2 5th %tile 1.2 5th %tile 1.6 25th %tile 8.5 25th %tile 0.7 25th %tile 7.3 25th %tile 1.0 25th %tile 1.4 Median 7.8 Median 0.0 Median 8.1 Median 0.9 Median 1.2 75th %tile 7.2 75th %tile -0.4 75th %tile 8.6 75th %tile 0.8 75th %tile 1.1														
25th %tile 8.5 25th %tile 0.7 25th %tile 7.3 25th %tile 1.0 25th %tile 1.4 Median 7.8 Median 0.0 Median 8.1 Median 0.9 Median 1.2 75th %tile 7.2 75th %tile -0.4 75th %tile 8.6 75th %tile 0.8 75th %tile 1.1			Universe		Universe				Universe					
Median 7.8 Median 0.0 Median 8.1 Median 0.9 Median 1.2 75th %tile 7.2 75th %tile -0.4 75th %tile 8.6 75th %tile 0.8 75th %tile 1.1			5th %tile		5th %tile	6.2			5th %tile	1.6				
75th %tile 7.2 75th %tile -0.4 75th %tile 8.6 75th %tile 0.8 75th %tile 1.1			25th %tile		25th %tile	7.3			25th %tile	1.4				
					Median	8.1			Median					
					75th %tile				75th %tile	1.1				
95th %tile 6.7 95th %tile -1.1 95th %tile 9.8 95th %tile 0.8 95th %tile 1.0	95th %tile	6.7	95th %tile	-1.1	95th %tile	9.8	95th %tile	0.8	95th %tile	1.0				



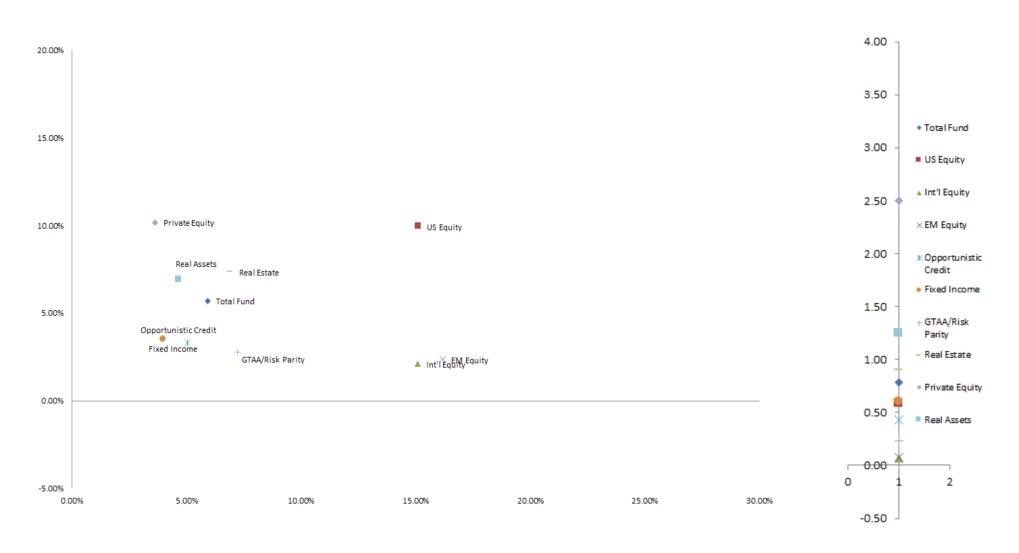
3 YEAR RISK/RETURN PROFILE



Note: Returns are net of fees. The graph on the right side shows composite level sharpe ratios.



5 YEAR RISK/RETURN PROFILE

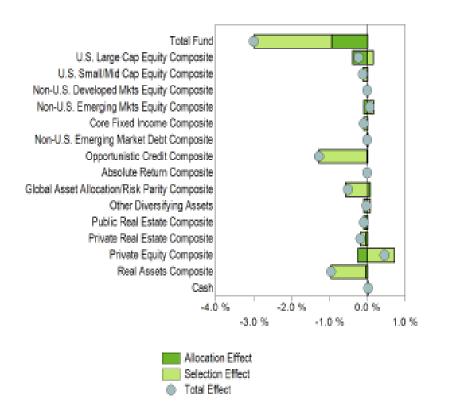


Note: Returns are net of fees. The graph on the right side shows composite level sharpe ratios.



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects 1 Year Ending June 30, 2020



<u>1 Year Excess Return: -2.87%</u>

- Allocation Effect: -0.77%
 - Non-U.S. Emerging Markets Equity overweight (-0.10%)
 - Private Equity overweight (-0.27%)
 - U.S. Large Cap Equity underweight (-0.30%)
- Manager Selection Effect: -2.10%
 - Private Equity outperformed (+0.70%)
 - Non-U.S. Emerging Markets Equity outperformed (+0.17%)
 - U.S. Large Cap Equity outperformed (+0.14%)
 - U.S. Small/Mid Cap Equity underperformed (-0.11%)
 - Private Real Estate outperformed (-0.14%)
 - Global Asset Allocation/Risk Parity underperformed (-0.59%)
 - Real Assets underperformed (-0.92%)
 - Opportunistic Credit outperformed (-1.28%)
- Residual: 0.00%

The Brinson-Fachler Attribution model explains excess return by identifying the size of contributors or detractors from excess return based on the three effects defined below:

Allocation Effect: Measures the impact of the decision to over/under weight asset classes relative to Interim SAAP benchmark weights. (Return Asset Class Index – Total Interim Policy Index Return) × (Weight Asset Class Portfolio – Weight Asset Class Interim Policy Index).

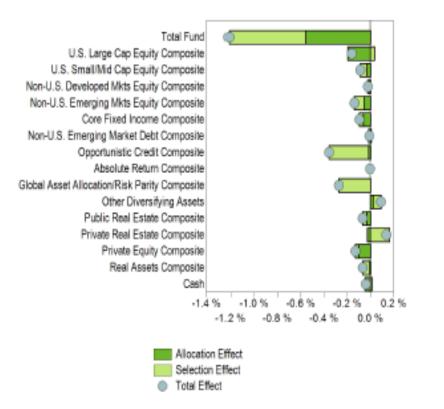
Manager Selection Effect: Measures the impact of over/under performance of asset classes in the portfolio relative to the asset class benchmarks in the Interim SAAP benchmark. [Weight Asset Class Benchmark × (Return Portfolio Asset Class – Return Asset Class in Interim Policy Index)] + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance. (Return Asset Class Portfolio (Weight Asset Class Portfolio – Weight Asset Class Policy Index))–(Return Asset Class Index (Weight Asset Class Portfolio – Weight Asset Class Index)).

Residual: Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects 3 Years Ending June 30, 2020



3 Year Excess Return: -1.14%

- Allocation Effect: -0.47%
 - Non U.S. Emerging Markets Equity overweight (-0.05%)
 - Core Fixed Income overweight (-0.06%)
 - Private Equity underweight (-0.11%)
 - U.S. Large Cap Equity underweight (-0.15%)
- Manager Selection Effect: -0.67%
 - Private Real Estate outperformed (+0.16%)
 - Other Diversifying Assets outperformed (+0.07%)
 - Real Assets underperformed (-0.05%)
 - U.S. Small/Mid Cap Equity underperformed (-0.06%)
 - Non U.S. Emerging Mkts Equity underperformed (-0.08%)
 - Global Asset Allocation/Risk Parity underperformed (-0.27%)
 - Opportunistic Credit underperformed (-0.34%)
- Residual: 0.00%

The Brinson-Fachler Attribution model explains excess return by identifying the size of contributors or detractors from excess return based on the three effects defined below:

Allocation Effect: Measures the impact of the decision to over/under weight asset classes relative to Interim SAAP benchmark weights. (Return Asset Class Index – Total Interim Policy Index Return) × (Weight Asset Class Portfolio – Weight Asset Class Interim Policy Index).

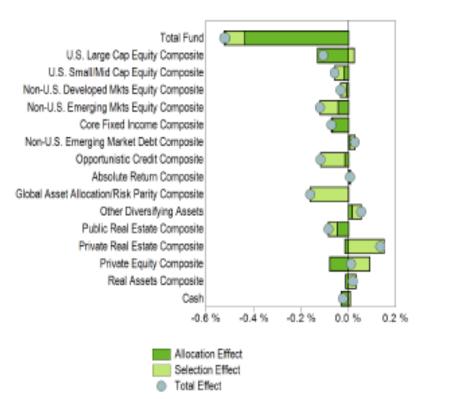
Manager Selection Effect: Measures the impact of over/under performance of asset classes in the portfolio relative to the asset class benchmarks in the Interim SAAP benchmark. [Weight Asset Class Benchmark × (Return Portfolio Asset Class – Return Asset Class in Interim Policy Index)] + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance. (Return Asset Class Portfolio (Weight Asset Class Portfolio – Weight Asset Class Policy Index))–(Return Asset Class Index (Weight Asset Class Portfolio – Weight Asset Class Index)).

Residual: Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects 5 Years Ending June 30, 2020



5 Year Excess Return: -0.49%

- Allocation Effect: -0.40%
 - Core Fixed Income overweight (-0.07%)
 - Private Equity underweight (-0.09%)
 - U.S. Large Cap Equity underweight (-0.11%)
 - Manager Selection Effect: -0.08%
 - Private Real Estate outperformed (+0.15%)
 - Private Equity outperformed (+0.09%)
 - Non U.S. Emerging Mkts Equity underperformed (-0.07%)
 - Opportunistic Credit underperformed (-0.11%)
 - Global Asset Allocation/Risk Parity underperformed (-0.16%)
- Residual: 0.00%

The Brinson-Fachler Attribution model explains excess return by identifying the size of contributors or detractors from excess return based on the three effects defined below:

Allocation Effect: Measures the impact of the decision to over/under weight asset classes relative to Interim SAAP benchmark weights. (Return Asset Class Index – Total Interim Policy Index Return) × (Weight Asset Class Portfolio – Weight Asset Class Interim Policy Index).

Manager Selection Effect: Measures the impact of over/under performance of asset classes in the portfolio relative to the asset class benchmarks in the Interim SAAP benchmark. [Weight Asset Class Benchmark × (Return Portfolio Asset Class – Return Asset Class in Interim Policy Index)] + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance. (Return Asset Class Portfolio (Weight Asset Class Portfolio – Weight Asset Class Policy Index))–(Return Asset Class Index (Weight Asset Class Portfolio – Weight Asset Class Index)).

Residual: Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



TOTAL FUND RISK STATISTICS

				3 Yea	ars Ending J	une 30, 2020						
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
U.S. Large Cap Equity Composite	13.6%	11.1%	5	16.7%	2	0.5%	9	0.6%	7	0.6	11	1.0
S&P 500		10.7%	6	17.0%	4	0.0%	17	0.0%	1			1.0
U.S. Small/Mid Cap Equity Composite	2.9%	2.2%	99	22.2%	99	-1.9%	61	3.2%	86	-0.6		1.0
NMERB Small/Mid Cap Equity Blended Index		4.1%	96	22.4%	99	0.0%	17	0.0%	1			1.0
Non-U.S. Developed Mkts Equity Composite	4.7%	0.5%	74	15.6%	48	-0.3%	73	1.0%	6	-0.3		1.0
MSCI EAFE		0.8%	69	15.2%	15	0.0%	62	0.0%	1			1.0
Non-U.S. Emerging Mkts Equity Composite	8.4%	1.3%	29	17.1%	3	-0.6%	29	3.1%	43	-0.2		0.9
MSCI Emerging Markets		1.9%	19	18.5%	47	0.0%	18	0.0%	1			1.0
Core Fixed Income Composite	6.1%	4.8%	56	4.0%	57	-1.0%	96	1.7%	42	-0.3		1.1
BBgBarc US Aggregate TR	-	5.3%	33	3.3%	10	0.0%	40	0.0%	1			1.0
Non-U.S. Emerging Market Debt Composite	1.8%	1.5%	51	10.8%	47	-0.9%	35	2.5%	36	-0.4		1.0
Non-U.S. EMD Custom Benchmark		2.4%	24	10.6%	46	0.0%	5	0.0%	1			1.0
Opportunistic Credit Composite	18.0%	1.1%		6.1%		-0.8%		8.3%		-0.2		0.3
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index		2.9%		8.3%		0.0%		0.0%				1.0
Global Asset Allocation/Risk Parity Composite	8.8%	2.7%		7.9%		-1.3%		7.9%		-0.4	-	0.5
GAA/Risk Parity Custom Index		5.9%		1.4%		0.0%		0.0%				1.0

		3 Years E	nding June 30, 2020				
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank
Real Estate Composite	6.0%	5.3%	53	6.8%	97	3.5%	23
NCREIF Property Index		5.4%	50	2.7%	29	0.0%	63
Private Equity Composite	16.2%	8.4%	68	3.6%	1	6.4%	38
C A US All PE (1 Qtr Lag)	-	8.6%	65	9.1%	81	0.0%	82
Real Assets Composite	8.5%	5.7%	24	5.3%	19	-0.8%	67
CPI + 4% (Seasonally Adjusted)	-	5.8%	23	0.8%	1	0.0%	65

1 - Performance for Equity, Fixed Income, and Emerging Mkt Debt, Opportunistic Credit and GAA/Risk Parity composites are net of fees. Note: Percent of Total equals 95% because Absolute Return Composite, Diversifying Assets Composite, and Cash Composite are not included.



TOTAL FUND RISK STATISTICS

5 Years Ending June 30, 2020														
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta		
U.S. Large Cap Equity Composite	13.6%	11.0%	3	14.5%	3	0.4%	5	0.5%	4	0.5	6	1.0		
S&P 500		10.7%	3	14.8%	5	0.0%	15	0.0%	1			1.0		
U.S. Small/Mid Cap Equity Composite	2.9%	4.1%	99	19.2%	99	-1.2%	55	3.3%	87	-0.4		1.0		
NMERB Small/Mid Cap Equity Blended Index		5.4%	97	19.3%	99	0.0%	15	0.0%	1		-	1.0		
Non-U.S. Developed Mkts Equity Composite	4.7%	1.5%	84	14.5%	31	-0.5%	84	1.1%	1	-0.5		1.0		
MSCI EAFE		2.1%	74	14.4%	28	0.0%	74	0.0%	1			1.0		
Non-U.S. Emerging Mkts Equity Composite	8.4%	2.4%	27	16.2%	8	-0.3%	37	3.2%	43	-0.2		0.9		
MSCI Emerging Markets		2.9%	23	17.9%	63	0.0%	25	0.0%	1			1.0		
Core Fixed Income Composite	6.1%	4.2%	63	3.6%	59	-0.4%	92	1.4%	35	-0.1		1.1		
BBgBarc US Aggregate TR		4.3%	39	3.1%	11	0.0%	82	0.0%	1			1.0		
Non-U.S. Emerging Market Debt Composite	1.8%	4.2%	19	9.3%	42	1.6%	1	3.4%	43	0.4	1	0.9		
Non-U.S. EMD Custom Benchmark		2.8%	46	10.4%	45	0.0%	31	0.0%	1			1.0		
Opportunistic Credit Composite	18.0%	3.3%		5.0%		1.4%		6.7%		-0.1		0.3		
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index		3.9%		6.9%		0.0%		0.0%				1.0		
Global Asset Allocation/Risk Parity Composite	8.8%	2.8%		7.2%		-1.5%		6.7%		-0.5		0.6		
GAA/Risk Parity Custom Index		5.9%		4.8%		0.0%		0.0%				1.0		

5 Years Ending June 30, 2020														
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank							
Real Estate Composite	6.0%	7.4%	35	6.9%	99	4.5%	14							
NCREIF Property Index		6.8%	67	3.1%	33	0.0%	76							
Private Equity Composite	16.2%	10.2%	55	3.6%	1	9.0%	22							
C A US All PE (1 Qtr Lag)		9.2%	60	7.9%	77	0.0%	83							
Real Assets Composite	8.5%	6.9%	11	4.6%	11	0.6%	75							
CPI + 4% (Seasonally Adjusted)	-	5.7%	15	0.8%	1	0.0%	78							

1 - Performance for Equity, Fixed Income, and Emerging Mkt Debt, Opportunistic Credit and GAA/Risk Parity composites are net of fees.

Note: Percent of Total equals 95% because Absolute Return Composite, Diversifying Assets Composite, and Cash Composite are not included.



PERFORMANCE DETAIL - TOTAL FUND & U.S. EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fund	12,752,949,305	100.0	3.7	99	-5.9	79	-1.0	90	4.7	60	5.7	37	7.8	54	8.8	Jul-83
Policy Index			<u>7.3</u>	86	<u>-3.2</u>	26	<u>1.9</u>	36	<u>5.9</u>	23	<u>6.2</u>	19	<u>7.7</u>	57		Jul-83
Over/Under			-3.6		-2.7		-2.9		-1.2		-0.5		0.1			
60% MSCI ACWI (Net) / 40% FTSE WGBI			12.2	16	-1.8	10	3.7	14	5.6	26	5.6	39	6.6	96		Jul-83
InvMetrics Public DB > \$1B Net Median			10.1		-4.3		1.3		5.0		5.4		7.8		8.3	Jul-83
U.S. Equity Composite	2,113,342,339	16.6	21.1	77	-3.9	22	6.0	18	9.7	20	10.0	16	13.6	17	11.1	Jan-85
Russell 3000			<u>22.0</u>	49	<u>-3.5</u>	12	<u>6.5</u>	14	<u>10.0</u>	14	<u>10.0</u>	13	<u>13.7</u>	9	<u>11.0</u>	Jan-85
Over/Under			-0.9		-0.4		-0.5		-0.3		0.0		-0.1		0.1	
InvMetrics Public DB > \$1 Billion US Equity Net Median			21.8		-4.8		4.0		8.7		9.0		13.1		11.2	Jan-85
U.S. Large Cap Equity Composite	1,739,309,493	13.6	20.5	87	-1.6	5	8.9	3	11.1	5	11.0	3	14.1	3	6.7	Aug-99
S&P 500			<u>20.5</u>	86	<u>-3.1</u>	10	<u>7.5</u>	8	<u>10.7</u>	6	<u>10.7</u>	3	<u>14.0</u>	5	<u>6.2</u>	Aug-99
Over/Under			0.0		1.5		1.4		0.4		0.3		0.1		0.5	
InvMetrics Public DB > \$1 Billion US Equity Net Median			21.8		-4.8		4.0		8.7		9.0		13.1		6.4	Aug-99
S&P 500 Index Fund	1,739,309,493	13.6	20.5	39	-1.6	19	8.9	15	11.1	19	11.0	8	14.1	12	5.7	Jan-00
S&P 500			<u>20.5</u>	38	<u>-3.1</u>	32	<u>7.5</u>	23	<u>10.7</u>	21	<u>10.7</u>	12	<u>14.0</u>	12	<u>5.7</u>	Jan-00
Over/Under			0.0		1.5		1.4		0.4		0.3		0.1		0.0	
eV US Large Cap Core Equity Net Median			19.6		-5.1		3.9		8.7		8.8		12.8		6.7	Jan-00
U.S. Small/Mid Cap Equity Composite	374,032,846	2.9	23.8	9	-15.6	99	-8.5	99	2.2	99	4.1	99	10.3	98	6.6	Aug-99
NMERB Small/Mid Cap Equity Blended Index			<u>26.6</u>	3	<u>-11.1</u>	93	<u>-4.7</u>	96	<u>4.1</u>	96	<u>5.4</u>	97	<u>11.3</u>	92	<u>7.6</u>	Aug-99
Over/Under			-2.8		-4.5		-3.8		-1.9		-1.3		-1.0		-1.0	
InvMetrics Public DB > \$1 Billion US Equity Net Median			21.8		-4.8		4.0		8.7		9.0		13.1		6.4	Aug-99
S&P 400 Mid-Cap	374,032,846	2.9	23.8	46	-15.6	66	-8.5	65							0.2	Nov-17
Russell 2500			<u>26.6</u>	34	<u>-11.1</u>	54	<u>-4.7</u>	55	<u>4.1</u>	55	<u>5.4</u>	54	<u>11.5</u>	54	<u>2.2</u>	Nov-17
Over/Under			-2.8		-4.5		-3.8								-2.0	
eV US Mid Cap Equity Net Median			23.2		-9.3		-2.3		5.8		6.3		11.8		3.9	Nov-17

1 - U.S. Small/Mid Cap Equity Composite includes the performance history of the U.S. Small Cap Equity Composite through November 2011.

2 - NMERB Small/Mid Cap Equity Blended Benchmark is the Russell 2000 Index through November 2011 and the Russell 2500 Index from December 2011 - forward.

3 - Total Fund market value includes \$58,008.92 from Legacy Assets.

Note: Performance shown is net of fees. Fiscal year ends June 30.



PERFORMANCE DETAIL - NON-U.S. EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Equity Composite	1,675,534,632	13.1	17.6	49	-9.9	43	-2.9	46	1.0	64	2.1	79	3.1	99	5.8	Jul-95
MSCI ACWI ex USA			<u>16.1</u>	84	<u>-11.0</u>	69	<u>-4.8</u>	71	<u>1.1</u>	63	<u>2.3</u>	73	<u>5.0</u>	92	<u>4.9</u>	Jul-95
Over/Under			1.5		1.1		1.9		-0.1		-0.2		-1.9		0.9	
InvMetrics Public DB > \$1 Billion Global ex-US Equity Net Median			17.6		-10.4		-3.2		1.5		2.8		5.7		5.2	Jul-95
Non-U.S. Developed Mkts Equity Composite	600,366,975	4.7	15.4	90	-12.2	79	-5.2	79	0.5	74	1.5	84	5.2	93	5.5	Sep-95
MSCI EAFE			<u>14.9</u>	91	<u>-11.3</u>	70	<u>-5.1</u>	79	<u>0.8</u>	69	<u>2.1</u>	74	<u>5.7</u>	75	<u>4.5</u>	Sep-95
Over/Under			0.5		-0.9		-0.1		-0.3		-0.6		-0.5		1.0	
InvMetrics Public DB > \$1 Billion Dev Mkt ex-US Eq Net Median			16.9		-9.9		-3.2		1.7		2.9		6.6		5.4	Sep-95
BlackRock MSCI EAFE	489,379,599	3.8	15.1	70	-11.2	46	-5.1	53	1.1	43	2.4	48			3.5	Aug-13
MSCI EAFE			<u>14.9</u>	73	<u>-11.3</u>	50	<u>-5.1</u>	53	<u>0.8</u>	47	<u>2.1</u>	53	<u>5.7</u>	72	<u>3.2</u>	Aug-13
Over/Under			0.2		0.1		0.0		0.3		0.3				0.3	
eV All EAFE Equity Net Median			16.6		-11.6		-5.0		0.7		2.2		6.6		3.6	Aug-13
Global Alpha International Small Cap	110,987,376	0.9	16.7	47	-16.5	82									-12.8	Dec-19
MSCI EAFE			<u>14.9</u>	73	<u>-11.3</u>	50	<u>-5.1</u>	53	<u>0.8</u>	47	<u>2.1</u>	53	<u>5.7</u>	72	<u>-8.5</u>	Dec-19
Over/Under			1.8		-5.2										-4.3	
MSCI EAFE Small Cap			19.9	24	-13.1	62	-3.5	42	0.5	52	3.8	30	8.0	24	-9.3	Dec-19
eV All EAFE Equity Net Median			16.6		-11.6		-5.0		0.7		2.2		6.6		-8.3	Dec-19

Note: Performance shown is net of fees. Fiscal year ends June 30.



PERFORMANCE DETAIL - EMERGING MARKET EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Emerging Mkts Equity Composite	1,075,167,656	8.4	18.9	67	-8.7	24	-1.6	15	1.3	29	2.4	27	2.0	77	5.9	Sep-00
MSCI Emerging Markets Over/Under			<u>18.1</u> 0.8	81	<u>-9.8</u> 1.1	29	<u>-3.4</u> 1.8	23	<u>1.9</u> -0.6	19	<u>2.9</u> -0.5	23	<u>3.3</u> -1.3	30	<u>6.9</u> -1.0	Sep-00
InvMetrics Public DB > \$1 Billion Emg Mkt Eq Net Median			20.1		-11.4		-5.4		-0.4		1.5		2.4		5.9	Sep-00
Neuberger Berman Emerging Markets	374,264,556	2.9	18.2	67	-9.7	47	-3.3	48	1.6	44	3.9	34			3.6	Aug-13
MSCI Emerging Markets Over/Under			<u>18.1</u> 0.1	68	<u>-9.8</u> 0.1	48	<u>-3.4</u> 0.1	48	<u>1.9</u> -0.3	41	<u>2.9</u> 1.0	49	<u>3.3</u>	61	<u>3.1</u> 0.5	Aug-13
eV Emg Mkts Equity Net Median			20.3		-10.1		-3.7		1.2		2.7		3.7		3.0	Aug-13
State Street Bank + Trust Co	1,964	0.0	0.1		6.1		7.2								6.7	Jun-19
MSCI Emerging Markets Over/Under			<u>18.1</u> -18.0		<u>-9.8</u> 15.9		<u>-3.4</u> 10.6		<u>1.9</u>		<u>2.9</u>		<u>3.3</u>		<u>2.4</u> 4.3	Jun-19
RBC GAM EME Fund	327,056,136	2.6	17.1	79	-9.8	48									-4.9	Aug-19
MSCI Emerging Markets Over/Under			<u>18.1</u> -1.0	68	<u>-9.8</u> 0.0	48	<u>-3.4</u>	48	<u>1.9</u>	41	<u>2.9</u>	49	<u>3.3</u>	61	<u>-2.2</u> -2.7	Aug-19
eV Emg Mkts Equity Net Median			20.3		-10.1		-3.7		1.2		2.7		3.7		-2.5	Aug-19
UBS Emerging Markets EQ OPP	373,842,512	2.9	21.4	43	-7.1	28									8.2	Aug-19
MSCI Emerging Markets Over/Under			<u>18.1</u> 3.3	68	<u>-9.8</u> 2.7	48	<u>-3.4</u>	48	<u>1.9</u>	41	<u>2.9</u>	49	<u>3.3</u>	61	<u>-2.2</u> 10.4	Aug-19
eV Emg Mkts Equity Net Median			20.3		-10.1		-3.7		1.2		2.7		3.7		-2.5	Aug-19

1 - State Street Bank + Trust Co was funded with \$1.5M in June 2019.

2 - RBC GAM EME fund was funded with \$285M in July 2019.

3 - UBS Emerging Markets EQ OPP funded with \$95M in July 2019.

Note: Performance shown is net of fees. Fiscal year ends June 30.



PERFORMANCE DETAIL - TOTAL FI AND CORE FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Fixed Income Composite	3,309,112,267	25.9	-1.3	97	-5.8	97	-3.7	97	2.0	97	3.5	88	5.2	12	2.9	Jan-85
BBgBarc US Aggregate TR Over/Under			<u>2.9</u> -4.2	89	<u>6.1</u> -11.9	1	<u>8.7</u> -12.4	3	<u>5.3</u> -3.3	10	<u>4.3</u> -0.8	46	<u>3.8</u> 1.4	80	<u>6.9</u> -4.0	Jan-85
InvMetrics Public DB > \$1 Billion Fixed Income Net Median			5.6		2.7		5.3		4.5		4.2		4.5		5.1	Jan-85
Core Fixed Income Composite	781,261,631	6.1	4.0	74	4.1	54	7.1	54	4.8	56	4.2	63	4.3	51	5.3	Dec-99
BBgBarc US Aggregate TR Over/Under InvMetrics Public DB > \$1 Billion US Fixed Income Net			<u>2.9</u> 1.1	94	<u>6.1</u> -2.0	25	<u>8.7</u> -1.6	22	<u>5.3</u> -0.5	33	<u>4.3</u> -0.1	39	<u>3.8</u> 0.5	82	<u>5.2</u> 0.1	Dec-99
Median			4.8		4.7		7.2		4.9		4.3		4.3		5.2	Dec-99
Core Fixed Income	781,261,631	6.1	4.0	65	4.1	92	7.1	89	4.8	89	4.2	76			3.6	Apr-15
BBgBarc US Aggregate TR Over/Under			<u>2.9</u> 1.1	93	<u>6.1</u> -2.0	47	<u>8.7</u> -1.6	45	<u>5.3</u> -0.5	50	<u>4.3</u> -0.1	60	<u>3.8</u>	72	<u>3.8</u> -0.2	Apr-15
eV US Core Fixed Inc Net Median			4.4		6.1		8.6		5.3		4.4		4.1		3.8	Apr-15



PERFORMANCE DETAIL - EMERGING MARKET DEBT

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Emerging Market Debt Composite	227,045,386	1.8	11.2	42	-5.0	35	-2.1	41	1.5	51	4.2	19			1.6	Sep-11
Non-U.S. EMD Custom Benchmark			<u>11.0</u>	45	<u>-4.8</u>	31	<u>-1.1</u>	26	<u>2.4</u>	24	<u>2.8</u>	46			<u>-0.1</u>	Sep-11
Over/Under			0.2		-0.2		-1.0		-0.9		1.4				1.7	
InvMetrics All DB Emg Mkt Fix Inc Net Median			11.0		-7.2		-3.5		1.5		2.5		3.2		1.6	Sep-11
EMSO	104,909,327	0.8	7.3	97	-2.1	28	0.1	39	1.3	67	5.2	17			3.9	Sep-11
JP Morgan GBI - EM Global Diversified Index			<u>9.8</u>	90	<u>-6.9</u>	76	<u>-2.8</u>	67	<u>1.1</u>	68	<u>2.3</u>	77	<u>1.6</u>	79	<u>-0.3</u>	Sep-11
Over/Under			-2.5		4.8		2.9		0.2		2.9				4.2	
eV All Emg Mkts Fixed Inc Net Median			12.5		-4.2		-1.2		2.4		4.3		5.1		4.0	Sep-11
Prudential	122,118,330	1.0	14.9	25	-7.3	80	-3.9	81	1.8	60					6.1	Feb-16
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>11.0</u>	73	<u>-4.8</u>	61	<u>-1.1</u>	50	<u>2.4</u>	47	<u>3.9</u>	57	<u>3.9</u>	65	<u>5.8</u>	Feb-16
Over/Under			3.9		-2.5		-2.8		-0.6						0.3	
eV All Emg Mkts Fixed Inc Net Median			12.5		-4.2		-1.2		2.4		4.3		5.1		5.9	Feb-16

1 - Non-U.S. Emerging Market Debt Composite market value includes \$17,729 in terminated manager account.

2 - InvMetrics Public DB > \$1B Emerging Mkt Fixed Income unavailable, universe includes all DB plans.

3 - Non-U.S. EMD Custom Benchmark Composition from 9/1/2011-1/31/2016: JP Morgan GBI-EM Diversified. 2/1/2016 - Current: 50% JPM EMBI Global Diversified / 50% JPM GBI-EM Global Diversified.



	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Opportunistic Credit Composite	2,300,805,249	18.0	-4.2		-9.1		-7.4		1.1		3.3		6.3		6.9	May-08
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.5</u>	May-08
Over/Under			-13.8		-4.9		-6.5		-1.8		-0.6		0.9		1.4	
ICE BofA BB-B US High Yield Constrained TR			9.4		-3.6		0.6		3.6		4.8		6.5		6.6	May-08
Beachpoint Combined	454,794,070	3.6	10.7		-7.8		-3.7		2.5		3.7		6.2		6.1	Mar-04
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.4</u>	Mar-04
Over/Under			1.1		-3.6		-2.8		-0.4		-0.2		0.8		0.7	
Beachpoint Total Return	454,794,070	3.6	10.7		-7.8		-3.7		2.5		3.7		6.2		6.2	Jun-08
50% CS Leveraged Loan / 50% ICE BofA US HY BB- B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.5</u>	Jun-08
Over/Under			1.1		-3.6		-2.8		-0.4		-0.2		0.8		0.7	
Pimco Disco Combined	120,334,317	0.9	6.3		-0.5		2.9		6.2		7.9		9.6		10.8	Jul-08
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.6</u>	Jul-08
Over/Under			-3.3		3.7		3.8		3.3		4.0		4.2		5.2	
Pimco Disco II	120,334,317	0.9	6.3		-0.5		2.9		6.2		7.9				11.7	Oct-11
50% CS Leveraged Loan / 50% ICE BofA US HY BB- B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.4</u>	Oct-11
Over/Under			-3.3		3.7		3.8		3.3		4.0				6.3	
GoldenTree Combined	191,513,718	1.5	-4.6		-2.4		-3.3		3.3		3.5		7.7		7.6	Oct-09
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.8</u>	Oct-09
Over/Under			-14.2		1.8		-2.4		0.4		-0.4		2.3		1.8	
Goldentree II	191,513,718	1.5	-4.6		-2.4		-3.3		3.3		3.5				7.0	Sep-11
50% CS Leveraged Loan / 50% ICE BofA US HY BB- B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.2</u>	Sep-11
Over/Under			-14.2		1.8		-2.4		0.4		-0.4				1.8	
Medley Capital	43,225,194	0.3	-6.2		-9.1		-19.1		-12.4		-5.7				0.3	Aug-11
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.7</u>	Aug-11
Over/Under			-15.8		-4.9		-18.2		-15.3		-9.6				-4.4	



	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Waterfall - Eden	272,129,179	2.1	-15.0		-13.8		-11.1		0.6		2.5				6.9	Aug-11
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index Over/Under			<u>9.6</u> -24.6		<u>-4.2</u> -9.6		<u>-0.9</u> -10.2		<u>2.9</u> -2.3		<u>3.9</u> -1.4		<u>5.4</u>		<u>4.7</u> 2.2	Aug-11
Waterfall - Victoria	87.661.901	0.7	-24.0		-9.0		-10.2		-2.5		-1.4				8.8	Aug-11
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index	07,001,301	0.7	<u>9.6</u>		-0.2 -4.2		-2.2 -0.9		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.7</u>	Aug-11
Over/Under			-19.1		-4.0		-1.3		5.1		4.4				4.1	
Gramercy Distressed Opp II	68,196,382	0.5	-6.8		-9.6		-23.2		-12.3		-6.7				-1.6	Jul-12
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.7</u>	Jul-12
Over/Under			-16.4		-5.4		-22.3		-15.2		-10.6				-6.3	
ICE Canyon	1,247,932	0.0	-8.6		1.1		-0.1		1.4		3.5				2.4	Jun-12
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.8</u>	Jun-12
Over/Under			-18.2		5.3		0.8		-1.5		-0.4				-2.4	
Lone Star VIII	16,780,476	0.1	-21.7		-22.5		-23.8		-8.7		-6.9				2.4	Oct-13
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.1</u>	Oct-13
Over/Under			-31.3		-18.3		-22.9		-11.6		-10.8				-1.7	
Marathon European Credit Opportunity II	34,439,141	0.3	0.4		2.4		4.8		10.3		9.0				8.0	Mar-14
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>3.6</u>	Mar-14
Over/Under			-9.2		6.6		5.7		7.4		5.1				4.4	
Lone Star IX	29,926,964	0.2	-31.9		-28.8		-27.4		-8.2		0.4				-17.3	Apr-15
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>3.8</u>	Apr-15
Over/Under			-41.5		-24.6		-26.5		-11.1		-3.5				-21.1	



	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Kildare European Partners I LP	7,777,373	0.1	-38.9		-36.9		-35.1		-2.0		4.7				3.6	May-14
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index Over/Under			<u>9.6</u> -48.5		<u>-4.2</u> -32.7		<u>-0.9</u> -34.2		<u>2.9</u> -4.9		<u>3.9</u> 0.8		<u>5.4</u>		<u>3.6</u> 0.0	May-14
Black Forest	43,912,412	0.3	-7.1		-9.9		-5.9		3.0		5.9				5.3	Aug-14
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index Over/Under			<u>9.6</u> -16.7		<u>-4.2</u> -5.7		<u>-0.9</u> -5.0		<u>2.9</u> 0.1		<u>3.9</u> 2.0		<u>5.4</u>		<u>3.6</u> 1.7	Aug-14
Gramercy Distressed Opp III	79,272,500	0.6	-10.7 -4.7		- 5.7 -7.7		- 5.0 -17.7		-7.5		2.0				-5.3	Jan-16
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B	19,212,500	0.0														
Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>5.3</u>	Jan-16
Over/Under			-14.3		-3.5		-16.8		-10.4						-10.6	
GSO Capital Opp III	59,499,662	0.5	-9.5		-6.5		-1.9		6.7						5.8	Oct-16
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>3.7</u>	Oct-16
Over/Under			-19.1		-2.3		-1.0		3.8						2.1	
Cross Ocean ESS II	50,400,417	0.4	-5.4		-3.8		0.3		4.8						7.7	May-17
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.9</u>	May-17
Over/Under			-15.0		0.4		1.2		1.9						4.8	
OWS CREDIT OPPORTUNITY FD	109,735,500	0.9	-11.1		-9.7		-7.8		3.1						3.1	Jul-17
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.9</u>	Jul-17
Over/Under			-20.7		-5.5		-6.9		0.2						0.2	
TAIGA SPECIAL OPP DAC LP	183,135,937	1.4	0.1		-8.0		-4.7								5.6	Aug-17
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.7</u>	Aug-17
Over/Under			-9.5		-3.8		-3.8								2.9	
Sutherland Asset Management	37,289,759	0.3	18.7		-41.4		-36.3		-12.8						-12.8	Jul-17
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.9</u>	Jul-17
Over/Under			9.1		-37.2		-35.4		-15.7						-15.7	
OHA Strategic Credit II	46,855,950	0.4	-15.2		-14.4		-14.5								9.2	Dec-17
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index Over/Under			<u>9.6</u> -24.8		<u>-4.2</u> -10.2		<u>-0.9</u> -13.6		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.6</u> 6.6	Dec-17
			21.0		10.2		10.0								0.0	



	arket Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%) F	Rank	1 Yr (%) F	Rank	3 Yrs (%) F	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Lone Star X	63,948,919	0.5	-20.1		-18.6		-12.8								-23.5	Jan-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index Over/Under			<u>9.6</u> -29.7		<u>-4.2</u> -14.4	-	<u>-0.9</u> -11.9		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.5</u> -26.0	Jan-18
Kildare European Partners II LP	41,293,189	0.3	2.5		6.6		11.5								7.0	Nov-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>2.4</u>	Nov-18
Over/Under			-7.1		10.8		12.4								4.6	
Riverstone Credit Partners II	51,790,911	0.4	-12.0		-11.1		-7.0								-6.8	Dec-18
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>3.0</u>	Dec-18
Over/Under			-21.6		-6.9		-6.1								-9.8	
RCP II N Strategic Credit	15,030,641	0.1	-4.4		0.6		6.9								8.4	Jan-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>4.6</u>	Jan-19
Over/Under			-14.0		4.8		7.8								3.8	
OLEA SPECIAL OPPS OFFSHORE I	58,002,450	0.5	10.3		6.4		16.3								21.7	Jun-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>0.5</u>	Jun-19
Over/Under			0.7		10.6		17.2								21.2	
Cross Ocean USD ESS III	54,234,659	0.4	-0.7		2.1										1.0	Nov-19
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>-2.1</u>	Nov-19
Over/Under			-10.3		6.3										3.1	
The Varde Fund XIII, L.P.	49,350,950	0.4	-2.6		0.3										0.3	Jan-20
50% CS Leveraged Loan / 50% ICE BofA US HY BB-B Rated Constrained Index			<u>9.6</u>		<u>-4.2</u>		<u>-0.9</u>		<u>2.9</u>		<u>3.9</u>		<u>5.4</u>		<u>-4.2</u>	Jan-20
Over/Under			-12.2		4.5										4.5	
PIMCO Corp Opps Fund III BPC Tactical Fund LP	12,995,606 16,029,090	0.1 0.1														

Note: Performance shown is net of fees. Fiscal year ends June 30. Cross Ocean US ESS III funded 10/17/2019. The Varde Fund XIII, L.P. funded 12/31/2019. PIMCO Corp Opps Fund III funded 4/9/2020. BPC Tactical Fund LP funded 6/16/2020.



PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Absolute Return Composite	338,345	0.0														
GAA, Risk Parity, and Other Diversifying Assets	1,601,468,055	12.6	6.0		-4.3		-1.1		3.6		3.3		5.8		6.4	Oct-09
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>2.9</u>	Oct-09
Over/Under			5.4		-5.8		-4.7		-0.4		-0.2		2.9		3.5	
Global Asset Allocation/Risk Parity Composite	1,120,127,093	8.8	7.3		-6.3		-3.0		2.7		2.8		5.5		6.1	Oct-09
GAA/Risk Parity Custom Index			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>5.9</u>		<u>5.9</u>		<u>7.0</u>		<u>6.3</u>	Oct-09
Over/Under			6.7		-7.8		-6.6		-3.2		-3.1		-1.5	_	-0.2	
Global Asset Allocation Composite	381,842,886	3.0	5.1		-12.6		-10.0	-	-1.2		-0.1				0.6	Nov-12
Credit Suisse Hedge Global Macro			<u>4.6</u>		<u>-3.9</u>		<u>-1.1</u>		<u>3.2</u>		<u>1.8</u>		<u>3.9</u>		<u>2.8</u>	Nov-12
Over/Under	0== (00,000		0.5		-8.7		-8.9		-4.4		-1.9				-2.2	0 / 00
Bridgewater Pure Alpha	275,438,600	2.2	2.4	93	-13.3	96	-10.1	95	-0.2	81	-0.5	94	3.9	76	4.6	Oct-09
Credit Suisse Hedge Global Macro			<u>4.6</u>	83	<u>-3.9</u>	47	<u>-1.1</u>	53	<u>3.2</u>	40	<u>1.8</u>	70	<u>3.9</u>	76	<u>4.2</u>	Oct-09
Over/Under			-2.2		-9.4		-9.0		-3.4		-2.3		0.0		0.4	0 (00
eV Global TAA Net Median	400 404 005	0.0	9.3	07	-5.1	05	-0.7	00	2.4	05	2.9	04	5.8		5.1	Oct-09
PIMCO All Asset All Authority	106,404,285	0.8	12.3	27 83	-9.5	85 47	-7.8	92 53	-1.2	95 40	0.7	81		 76	0.1	Jul-13 <i>Jul-13</i>
Credit Suisse Hedge Global Macro Over/Under			<u>4.6</u> 7.7	03	<u>-3.9</u>	47	<u>-1.1</u> -6.7	53	<u>3.2</u> -4.4	40	<u>1.8</u> -1.1	70	<u>3.9</u>	70	<u>2.5</u> -2.4	Jui-13
eV Global TAA Net Median			9.3		-5.6 -5.1		-0.7 -0.7		-4.4 2.4		-1.1		5.8		-2.4 3.9	Jul-13
Risk Parity	738,284,208	5.8	9.3 8.4		-0.1 -2.2		-0.7 1.8		2.4 5.5		2.9 5.0		0.0 		3.9 4.4	Nov-12
GAA/Risk Parity Custom Index	/ 30,204,200	5.0	<u>0.4</u>		-2.2 <u>1.5</u>		<u>3.6</u>		5.5 <u>5.9</u>		<u>5.9</u>		 <u>7.0</u>		4.4 <u>6.3</u>	Nov-12 Nov-12
Over/Under			<u>0.0</u> 7.8		<u>-3.7</u>		<u>-1.8</u>		-0.4		<u>-0.9</u>		<u>7.0</u>		<u>0.3</u> -1.9	1000-12
Bridgewater All Weather	489,500,015	3.8	7.9	63	-2.7	38	-1.0	37	-0.4	17	4.2	23	6.7	32	7.2	Oct-09
60% MSCI World (Gross) / 40% FTSE WGBI	403,300,013	5.0	<u>12.4</u>	27	-2.1 -1.3	29	<u>4.4</u>	12	<u>6.3</u>	14	<u>6.3</u>	23	<u>7.5</u>	22	<u>6.5</u>	Oct-09
Over/Under			<u>-4.5</u>	21	- <u>1.3</u> -1.4	23	- <u></u> -3.0	12	-1.2	14	<u>-2.1</u>	0	-0.8	22	<u>0.0</u> 0.7	001-03
eV Global TAA Net Median			9.3		-5.1		-0.7		2.4		2.9		5.8		5.1	Oct-09
PanAgora	248,784,193	2.0	9.4	49	-1.2	28	2.7	30	6.2	14	6.6	7			7.5	Dec-13
GAA/Risk Parity Custom Index	2-10,104,100	2.0	<u>0.6</u>	96	<u>1.5</u>	7	<u>3.6</u>	21	<u>5.9</u>	14	<u>5.9</u>	9	<u>7.0</u>	28	<u>5.0</u>	Dec-13 Dec-13
Over/Under			<u>0.0</u> 8.8	00	-2.7	,	-0.9	<i>L</i> 1	<u>0.3</u>		<u>0.0</u> 0.7	v	<u>1.0</u>	20	<u>0.0</u> 2.5	200 10
eV Global TAA Net Median			9.3		-5.1		-0.7		2.4		2.9		5.8		3.0	Dec-13

1 - Absolute Return Composite includes \$338,345 in liquidating assets.

2 - GAA/Risk Parity Custom Index: 60% MSCI World Half Hedged/ 40% CITI WGBI Half Hedged Inception - 6/30/2014; 60% MSCI World/ 40% CITI WGBI from 7/1/2014 - present.

3 - InvMetrics Public DB > \$1 Billion Global Tactical Net universe does not have enough observations to rank the GAA and Risk Parity Composites.



PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Other Diversifying Assets	481,340,961	3.8	2.9		2.8		5.5								9.0	Feb-18
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>4.1</u>	Feb-18
Over/Under			2.3		1.3		1.9								4.9	
EIG Energy Fund XVII	41,554,919	0.3	-9.6		-9.0		1.7								3.8	Apr-18
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>4.1</u>	Apr-18
Over/Under			-10.2		-10.5		-1.9								-0.3	
The 1609 Fund LTD.	127,605,386	1.0	0.4		0.1		-5.9								2.2	Feb-18
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>4.1</u>	Feb-18
Over/Under			-0.2		-1.4		-9.5								-1.9	
OLEA SPECIAL OPPS OFFSHORE I	164,988,764	1.3	10.4		6.4		16.4								19.3	Oct-18
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>4.1</u>	Oct-18
Over/Under			9.8		4.9		12.8								15.2	
Orchard Liquid Credit Fund	109,484,300	0.9	1.7		12.5		13.8								11.6	Oct-18
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>4.1</u>	Oct-18
Over/Under			1.1		11.0		10.2								7.5	
Orbimed Royalty Credit Opp III	17,707,572	0.1	3.6		-2.3										11.8	Oct-19
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>2.5</u>	Oct-19
Over/Under			3.0		-3.8										9.3	
AE Industrial Partners Aerospace	20,000,020	0.2	0.0												0.0	Apr-20
3-Month LIBOR + 2%			<u>0.6</u>		<u>1.5</u>		<u>3.6</u>		<u>4.0</u>		<u>3.5</u>		<u>2.9</u>		<u>0.6</u>	Apr-20
Over/Under			-0.6												-0.6	



OTHER DIVERSIFYING ASSETS PERFORMANCE

					Time Weighted	
Vintage Year	Investment	Commitment	Paid In Capital	Current MV	Returns Since Inception	Inception Date
2017	EIG Energy Fund XVII	100,000,000	40,499,406	41,554,919	3.8	Apr-18
2017	1609 Fund	125,000,000	125,000,000	127,605,386	2.2	Feb-18
2018	Olea Special Opportunities Offshore Fund	135,000,000	135,000,000	164,988,764	19.3	Oct-18
2018	Orchard Liquid Credit Fund	100,000,000	100,000,000	109,484,300	11.6	Nov-18
2019	OrbiMed Royalty & Credit Opps. III	100,000,000	20,000,000	17,707,572	11.8	Oct-19
2019	AE Industrial AA	150,000,000	20,000,000	20,000,020	-	Apr-20
2019	Cloverlay	150,000,000				
Total	Other Diversifying Assets	860,000,000	420,499,406	481,340,961	9.0	Feb-18

*Market Values and Performance data are through 6/30/2020

Correlation of Monthly Returns Since Inception

	Total Fund	U.S. Equity	Non U.S. Developed Markets	Non U.S. Emerging Markets	Core Fixed Income	Non U.S. Emerging Markets Debt	Opportunistic Credit	Real Estate	Private Equity	Real Assets	Other Diversifying Assets	EIG Energy Fund	1609 Fund	OLEA	Orchard
Other Diversifying Assets	0.03	0.04	0.08	0.00	-0.16	-0.07	0.11	-0.15	0.04	-0.08	1.00				
EIG Energy Fund	-0.29	-0.51	-0.41	-0.37	-0.28	-0.20	0.36	-0.28	0.52	0.14	0.18	1.00			
1609 Fund	-0.14	-0.11	-0.11	-0.23	-0.15	-0.11	0.00	0.01	0.11	0.06	0.40	-0.05	1.00		
OLEA	0.39	0.44	0.44	0.38	0.10	0.20	0.13	0.14	-0.31	-0.13	0.76	-0.28	-0.20	1.00	
Orchard	-0.75	-0.52	-0.63	-0.66	-0.62	-0.80	-0.59	-0.52	0.12	-0.18	0.11	-0.08	0.31	-0.19	1.00



PERFORMANCE DETAIL - REAL ESTATE

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Real Estate Composite	769,449,283	6.0	-4.2	87	-11.2	99	-6.1	99	5.3	53	7.4	35	11.5	6	9.2	Dec-03
NCREIF Property Index			<u>-1.0</u>	40	<u>-0.3</u>	42	<u>2.7</u>	26	<u>5.4</u>	50	<u>6.8</u>	67	<u>9.7</u>	70	<u>8.6</u>	Dec-03
Over/Under			-3.2		-10.9		-8.8		-0.1		0.6		1.8		0.6	
Wilshire REIT			10.6	1	-17.8	99	-12.3	99	0.2	98	4.0	97	9.2	75	7.8	Dec-03
InvMetrics Public DB > \$1 Billion Real Estate Net Median			-1.6		-0.9		1.4		5.4		7.2		10.4		7.5	Dec-03
Public Real Estate Composite	246,955,051	1.9	10.1	1	-20.3	99	-14.9	99	-1.3	99	2.5	98	8.5	85	7.4	Dec-03
Wilshire REIT			<u>10.6</u>	1	<u>-17.8</u>	99	<u>-12.3</u>	99	<u>0.2</u>	98	<u>4.0</u>	97	<u>9.2</u>	75	<u>7.8</u>	Dec-03
Over/Under			-0.5		-2.5		-2.6		-1.5		-1.5		-0.7		-0.4	
InvMetrics Public DB > \$1 Billion Real Estate Net Median			-1.6		-0.9		1.4		5.4		7.2		10.4		7.5	Dec-03
Brookfield	246,955,051	1.9	10.1	80	-20.3	88	-14.9	91	-1.4	86	2.0	87			6.3	Jul-11
MSCI US REIT			<u>11.4</u>	62	<u>-19.0</u>	83	<u>-13.9</u>	86	<u>-1.2</u>	85	<u>2.7</u>	83	<u>7.7</u>	92	<u>5.3</u>	Jul-11
Over/Under			-1.3		-1.3		-1.0		-0.2		-0.7				1.0	
eV US REIT Net Median			12.0		-13.9		-7.1		2.1		5.2		9.8		7.3	Jul-11
Private Real Estate Composite	522,494,232	4.1	-10.0	99	-5.7	96	-0.8	93	9.0	4	10.2	3	12.8	1	8.0	Jan-08
NCREIF Property Index			<u>-1.0</u>	31	<u>-0.3</u>	24	<u>2.7</u>	21	<u>5.4</u>	52	<u>6.8</u>	66	<u>9.7</u>	44	<u>5.9</u>	Jan-08
Over/Under			-9.0		-5.4		-3.5		3.6		3.4		3.1		2.1	
InvMetrics Public DB Real Estate Priv Net Median			-1.5		-1.1		1.7		5.5		7.2		9.6		4.4	Jan-08
U.S. Private Real Estate	522,494,232	4.1	-10.0		-5.7		-0.8		9.0		10.2		12.9		8.5	Jan-08
NCREIF Property Index			<u>-1.0</u>		<u>-0.3</u>		<u>2.7</u>		<u>5.4</u>		<u>6.8</u>		<u>9.7</u>		<u>5.9</u>	Jan-08
Over/Under			-9.0		-5.4		-3.5		3.6		3.4		3.2		2.6	

1 - InvMetrics Public DB > B Real Estate Private is unavailable, universe includes all public funds. Note: Performance is shown net of fees. Fiscal year ends June 30.



PERFORMANCE DETAIL - PE & RA

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Private Equity Composite	2,066,888,858	16.2	-4.4	30	-2.5	36	2.6	48	8.4	68	10.2	55	12.5	23	6.9	Jun-06
C A US All PE (1 Qtr Lag) Over/Under			<u>-10.1</u> 5.7	96	<u>-6.7</u> 4.2	82	<u>-2.3</u> 4.9	84	<u>8.6</u> -0.2	65	<u>9.2</u> 1.0	60	<u>12.1</u> 0.4	40	<u>11.2</u> -4.3	Jun-06
InvMetrics Public DB > \$1 Billion Private Equity Net Median			-6.3		-2.9		2.3		10.6		10.4		11.3		9.6	Jun-06
Real Assets Composite	1,081,054,283	8.5	-6.9	78	-7.9	55	-5.7	50	5.7	24	6.9	11	5.3	56	2.6	Jul-08
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>	59	<u>1.5</u>	9	<u>4.7</u>	10	<u>5.8</u>	23	<u>5.7</u>	15	<u>5.8</u>	46	<u>5.5</u>	Jul-08
Over/Under			-7.6		-9.4		-10.4		-0.1		1.2		-0.5		-2.9	
InvMetrics Public DB > \$1 Billion Real Assets/Commodities Net Median			1.3		-7.5		-5.7		2.8		2.7		5.5		2.6	Jul-08
Infrastructure Composite	458,709,245	3.6	-1.6		-2.0		3.0		6.2		8.0		5.8		3.5	Jul-08
Infrastructure	446,977,882	3.5	-1.7		-2.1		2.7		6.1		6.6		5.4		3.1	Jul-08
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>		<u>1.5</u>		<u>4.7</u>		<u>5.8</u>		<u>5.7</u>		<u>5.8</u>		<u>5.5</u>	Jul-08
Over/Under			-2.4		-3.6		-2.0		0.3		0.9		-0.4		-2.4	
International Infrastructure	11,731,363	0.1	2.3		2.9		9.8		8.6		30.3				0.2	Jan-13
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>		<u>1.5</u>		<u>4.7</u>		<u>5.8</u>		<u>5.7</u>		<u>5.8</u>		<u>5.5</u>	Jan-13
Over/Under			1.6		1.4		5.1		2.8		24.6				-5.3	
Natural Resources	622,345,038	4.9	-10.4		-11.7		-11.1		5.4		6.1		5.2		3.6	Mar-09
Harvest Fund	33,281,779	0.3	32.9		-32.1		-36.2		-13.5						-10.1	Aug-16
Alerian MLP Index			<u>50.2</u>		<u>-35.7</u>		<u>-41.4</u>		<u>-16.8</u>		<u>-12.9</u>		<u>-1.4</u>		<u>-13.2</u>	Aug-16
Over/Under			-17.3		3.6		5.2		3.3						3.1	
Energy	205,542,359	1.6	-30.1		-32.3		-31.8		6.6		8.0				-0.7	Jan-14
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>		<u>1.5</u>		<u>4.7</u>		<u>5.8</u>		<u>5.7</u>		<u>5.8</u>		<u>5.5</u>	Jan-14
Over/Under			-30.8		-33.8		-36.5		0.8		2.3				-6.2	
Agriculture Composite	156,104,147	1.2	2.2		3.7		6.8		5.0		5.0				4.5	Aug-12
NCREIF Farmland			<u>0.6</u>		<u>0.5</u>		<u>3.9</u>		<u>5.4</u>		<u>6.4</u>		<u>10.9</u>		<u>10.1</u>	Aug-12
Over/Under			1.6		3.2		2.9		-0.4		-1.4				-5.6	
Timber Composite	105,393,327	0.8	-0.2		0.0		1.7		4.9		4.6		5.5		3.9	Mar-09
NCREIF Timberland Index			<u>0.1</u>		<u>0.2</u>		<u>0.3</u>		<u>2.3</u>		<u>2.7</u>		<u>4.4</u>		<u>3.5</u>	Mar-09
Over/Under			-0.3		-0.2		1.4		2.6		1.9		1.1		0.4	

Energy composite includes Five Point Cap, Lime Rock, Enervest, BP Natural Gas, and Bluescape Energy.
 Agriculture Composite contains Halderman Farm Mgmt Services, Hancock Agriculture, and Blue Road Capital L.P.
 Timber Composite contains Brookfield Brazil Timber, Conservation Forestry II, Conservation Forestry IV, and ETO II Operating Partnership.



PERFORMANCE DETAIL - CASH

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Mitigation Banking	55,740,319	0.4	-0.9		-0.9		0.4		8.5		9.6				2.3	Mar-11
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>		<u>1.5</u>		<u>4.7</u>		<u>5.8</u>		<u>5.7</u>		<u>5.8</u>		<u>5.7</u>	Mar-11
Over/Under			-1.6		-2.4		-4.3		2.7		3.9				-3.4	
Water Property Investor, L.P.	66,283,108	0.5	0.7		45.0		43.2		12.4		6.8				9.1	Jan-15
CPI + 4% (Seasonally Adjusted)			<u>0.7</u>		<u>1.5</u>		<u>4.7</u>		<u>5.8</u>		<u>5.7</u>		<u>5.8</u>		<u>5.6</u>	Jan-15
Over/Under			0.0		43.5		38.5		6.6		1.1				3.5	
Cash	135,703,236	1.1														
Cash	132,617,928	1.0	0.0		0.4		2.3		2.4		1.7		1.2		1.2	Dec-99
91 Day T-Bills			<u>0.0</u>		<u>0.4</u>		<u>1.3</u>		<u>1.7</u>		<u>1.1</u>		<u>0.6</u>		<u>1.6</u>	Dec-99
Over/Under			0.0		0.0		1.0		0.7		0.6		0.6		-0.4	
NM ERB Cash	2,979,108	0.0	0.0		-0.1		2.2		0.8		0.5		0.7		1.0	Jun-00
91 Day T-Bills			<u>0.0</u>		<u>0.4</u>		<u>1.3</u>		<u>1.7</u>		<u>1.1</u>		<u>0.6</u>		<u>1.5</u>	Jun-00
Over/Under			0.0		-0.5		0.9		-0.9		-0.6		0.1		-0.5	
Local Government Investment Pool (LGIP) at STO	106,200	0.0	0.2		0.6		1.7		1.6		1.1				1.1	Jul-15
91 Day T-Bills			<u>0.0</u>		<u>0.4</u>		<u>1.3</u>		<u>1.7</u>		<u>1.1</u>		<u>0.6</u>		<u>1.1</u>	Jul-15
Over/Under			0.2		0.2		0.4		-0.1		0.0				0.0	



New Mexico Educational Retirement Board PRIVATE MARKETS PERFORMANCE SUMMARY

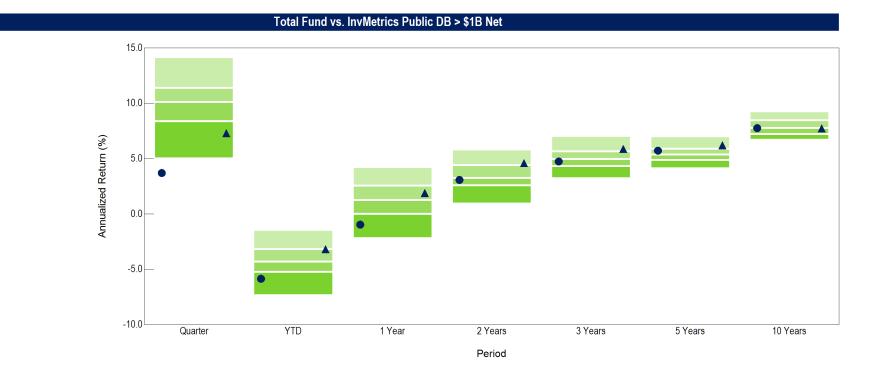
			Private Equity Dollar Weighted vs. Time Weighted Performance								
3 Mo (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	Inception (%)	Inception Date					
4.5	12.4	12.0	12.3	13.5	12.4	Jun-06					
2.0	11.1	11.7	12.1	13.5	7.4	Jun-06					
	Real Estate	e Dollar Weig	hted vs. Time	e Weighted P							
3 Mo (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	Inception (%)	Inception Date					
2.5	16.8	11.0	9.8	13.5	10.9	Jan-08					
4.7	13.6	14.5	13.7	14.2	9.1	Jan-08					
	Infrastructu	re Dollar Wei	ghted vs. Tin	ne Weighted	Performance						
3 Mo (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	Inception (%)	Inception Date					
					6.0	Jul-08					
-0.4	11.0	8.0	8.8	5.7	3.7	Jul-08					
	4.5 2.0 3 Mo (%) 2.5 4.7 3 Mo (%)	4.5 12.4 2.0 11.1 Real Estate 3 Mo (%) 1 Yr (%) 2.5 16.8 4.7 13.6 Infrastructur 3 Mo (%) 1 Yr (%) -0.4 11.0	4.5 12.4 12.0 2.0 11.1 11.7 Real Estate Dollar Weig 3 Mo (%) 1 Yr (%) 3 Yr (%) 2.5 16.8 11.0 4.7 13.6 14.5 Infrastructure Dollar Weig 3 Mo (%) 1 Yr (%) 3 Yr (%) 4.7 13.6 14.5 -0.4 1 Yr (%) 3 Yr (%)	4.5 12.4 12.0 12.3 2.0 11.1 11.7 12.1 Real Estate Dollar Weighted vs. Time 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 2.5 16.8 11.0 9.8 4.7 13.6 14.5 13.7 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 4.7 13.6 14.5 13.7 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) -0.4 11.0 8.0 8.8	4.5 12.4 12.0 12.3 13.5 2.0 11.1 11.7 12.1 13.5 Real Estate Dollar Weighted vs. Time Weighted P 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) 2.5 16.8 11.0 9.8 13.5 4.7 13.6 14.5 13.7 14.2 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) -0.4 11.0 8.0 8.8 5.7	3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) $(\%)$ 4.5 12.4 12.0 12.3 13.5 12.4 2.0 11.1 11.7 12.1 13.5 7.4 Real Estate Dollar Weighted vs. Time Weighted Performance 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) Inception (%) 2.5 16.8 11.0 9.8 13.5 10.9 4.7 13.6 14.5 13.7 14.2 9.1 Infrastructure Dollar Weighted vs. Time Weighted Performance 3 Mo (%) 1 Yr (%) 3 Yr (%) 5 Yr (%) 10 Yr (%) Inception (%) Genetation of the time of the tim of the time of the time of the time of the time of th					

	Na	Natural Resources Dollar Weighted vs. Time Weighted Performance								
	3 Mo (%)	1 Yr (%)	3 Yr (%)	5 Yr (%)	10 Yr (%)	Inception (%)	Inception Date			
Dollar Weighted										
Total Net IRR	1.6	7.4	10.4	10.1	9.3	9.2	Mar-09			
Time Weighted										
Net Time Weighted Return	-1.5	6.5	9.9	9.0	6.3	4.7	Mar-09			



*Time weighted performance as of 3/31/2020 except for Private Equity which is reported as of 9/30/2019 *Dollar weighted performance is as of 12/31/2019

New Mexico Educational Retirement Board TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

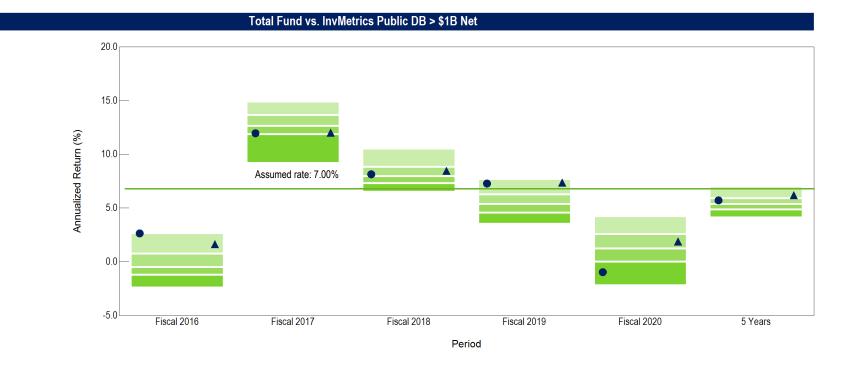


		Return (Rank)													
5	ith Percentile	14.2		-1.5		4.2		5.8		7.0		7.0		9.3	
2	25th Percentile	11.4		-3.2		2.6		4.4		5.7		5.9		8.5	
Ν	/ledian	10.1		-4.3		1.3		3.3		5.0		5.4		7.8	
7	/5th Percentile	8.4		-5.2		0.0		2.6		4.4		4.9		7.2	
9	95th Percentile	5.0		-7.3		-2.2		1.0		3.2		4.2		6.7	
#	of Portfolios	71		71		71		71		71		70		64	
٠	Total Fund	3.7	(99)	-5.9	(79)	-1.0	(90)	3.1	(63)	4.7	(60)	5.7	(37)	7.8	(54)
A	Policy Index	7.3	(86)	-3.2	(26)	1.9	(36)	4.6	(24)	5.9	(23)	6.2	(19)	7.7	(57)

Note: Ranks are based on net returns.



New Mexico Educational Retirement Board TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE



	Return (Rank)						
5th Percentile	2.7	14.9		10.5	7.7	4.2	7.0
25th Percentile	0.8	13.7		8.8	6.3	2.6	5.9
Median	-0.5	12.7		8.0	5.4	1.3	5.4
75th Percentile	-1.2	11.9		7.3	4.6	0.0	4.9
95th Percentile	-2.4	9.2		6.5	3.5	-2.2	4.2
# of Portfolios	55	65		51	77	71	70
 Total Fund 	2.6	(6) 12.0	(71)	8.1 (46)	7.3 (9)	-1.0 (90)	5.7 (37)
Policy Index	1.7	(9) 12.0	(68)	8.5 (33)	7.4 (7)	1.9 (36)	6.2 (19)

Note: Ranks are based on net returns.



New Mexico Educational Retirement Board TOTAL FUND ATTRIBUTION ANALYSIS

	3.Mc	Attribution sonths Ending)20		
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	20.5%	20.5%	-0.1%	0.0%	-0.5%	-0.6%
U.S. Small/Mid Cap Equity Composite	23.8%	26.6%	-2.8%	-0.1%	-0.1%	-0.1%
Non-U.S. Developed Mkts Equity Composite	15.4%	14.9%	0.5%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	18.9%	18.1%	0.8%	0.1%	-0.1%	-0.1%
Core Fixed Income Composite	4.0%	2.9%	1.1%	0.1%	0.0%	0.1%
Non-U.S. Emerging Market Debt Composite	11.2%	11.0%	0.2%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	-4.2%	9.6%	-13.8%	-2.5%	0.0%	-2.5%
Absolute Return Composite	-4.4%	0.6%	-5.0%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	7.3%	0.6%	6.7%	0.6%	-0.1%	0.5%
Other Diversifying Assets	2.9%	0.6%	2.3%	0.1%	0.1%	0.2%
Public Real Estate Composite	10.1%	10.6%	-0.5%	0.0%	0.0%	0.0%
Private Real Estate Composite	-10.0%	-1.0%	-9.0%	-0.4%	0.1%	-0.4%
Private Equity Composite	-4.4%	-10.1%	5.7%	0.9%	-0.7%	0.3%
Real Assets Composite	-6.9%	0.7%	-7.6%	-0.7%	-0.1%	-0.8%
Cash	0.0%	0.0%	0.0%	0.0%	-0.2%	-0.2%
Total	3.7%	7.3%	-3.6%	-1.9%	-1.7%	-3.6%

		Attribution				
	Y Wtd. Actual Return	TD Ending Ju Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	-1.6%	-3.1%	1.5%	0.2%	-0.3%	-0.1%
U.S. Small/Mid Cap Equity Composite	-15.6%	-11.1%	-4.5%	-0.1%	0.0%	-0.1%
Non-U.S. Developed Mkts Equity Composite	-12.2%	-11.3%	-0.9%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	-8.7%	-9.8%	1.1%	0.1%	-0.1%	0.0%
Core Fixed Income Composite	4.1%	6.1%	-2.0%	-0.1%	0.0%	-0.1%
Non-U.S. Emerging Market Debt Composite	-5.0%	-4.8%	-0.2%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	-9.1%	-4.2%	-4.9%	-0.9%	0.0%	-1.0%
Absolute Return Composite	-4.9%	1.5%	-6.4%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	-6.3%	1.5%	-7.8%	-0.7%	0.1%	-0.6%
Other Diversifying Assets	2.8%	1.5%	1.3%	0.1%	-0.2%	-0.1%
Public Real Estate Composite	-20.3%	-17.8%	-2.6%	-0.1%	0.0%	-0.1%
Private Real Estate Composite	-5.7%	-0.3%	-5.4%	-0.2%	-0.1%	-0.3%
Private Equity Composite	-2.5%	-6.7%	4.2%	0.6%	-0.2%	0.4%
Real Assets Composite	-7.9%	1.5%	-9.4%	-0.8%	0.0%	-0.9%
Cash	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%
Total	-6.0%	-3.2%	-2.8%	-2.0%	-0.8%	-2.8%



New Mexico Educational Retirement Board TOTAL FUND ATTRIBUTION ANALYSIS

	1 Y	Attribution Sear Ending J		0		
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	8.9%	7.5%	1.4%	0.1%	-0.3%	-0.2%
U.S. Small/Mid Cap Equity Composite	-8.5%	-4.7%	-3.8%	-0.1%	0.0%	-0.1%
Non-U.S. Developed Mkts Equity Composite	-5.2%	-5.1%	-0.1%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	-1.6%	-3.4%	1.8%	0.2%	-0.1%	0.1%
Core Fixed Income Composite	7.1%	8.7%	-1.7%	-0.1%	0.0%	-0.1%
Non-U.S. Emerging Market Debt Composite	-2.1%	-1.1%	-1.0%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	-7.4%	-0.9%	-6.6%	-1.3%	0.0%	-1.3%
Absolute Return Composite	-4.9%	3.5%	-8.4%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	-3.0%	3.6%	-6.5%	-0.6%	0.1%	-0.5%
Other Diversifying Assets	5.5%	3.6%	1.9%	0.1%	-0.1%	0.0%
Public Real Estate Composite	-14.9%	-12.3%	-2.6%	-0.1%	0.0%	-0.1%
Private Real Estate Composite	-0.8%	2.7%	-3.5%	-0.1%	-0.1%	-0.2%
Private Equity Composite	2.6%	-2.3%	4.9%	0.7%	-0.3%	0.4%
Real Assets Composite	-5.7%	4.7%	-10.4%	-0.9%	0.0%	-1.0%
Cash	2.3%	1.3%	1.0%	0.0%	0.1%	0.1%
Total	-1.0%	1.9%	-2.9%	-2.1%	-0.8%	-2.9%

	2 V.	Attribution		20		
	Wtd. Actual Return	ears Ending Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	11.1%	10.7%	0.4%	0.0%	-0.2%	-0.2%
U.S. Small/Mid Cap Equity Composite	2.2%	4.1%	-1.9%	-0.1%	0.0%	-0.1%
Non-U.S. Developed Mkts Equity Composite	0.5%	0.8%	-0.4%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	1.3%	1.9%	-0.6%	-0.1%	-0.1%	-0.1%
Core Fixed Income Composite	4.8%	5.3%	-0.5%	0.0%	-0.1%	-0.1%
Non-U.S. Emerging Market Debt Composite	1.5%	2.4%	-0.9%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	1.1%	2.9%	-1.7%	-0.3%	0.0%	-0.4%
Absolute Return Composite	-3.0%	3.7%	-6.7%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	2.7%	5.6%	-2.9%	-0.3%	0.0%	-0.3%
Other Diversifying Assets				0.1%	0.0%	0.1%
Public Real Estate Composite	-1.3%	0.2%	-1.6%	0.0%	0.0%	-0.1%
Private Real Estate Composite	9.0%	5.4%	3.6%	0.2%	0.0%	0.1%
Private Equity Composite	8.4%	8.6%	-0.3%	0.0%	-0.1%	-0.1%
Real Assets Composite	5.7%	5.8%	-0.2%	-0.1%	0.0%	-0.1%
Cash	2.1%	1.7%	0.5%	0.0%	0.0%	0.0%
Total	4.7%	5.9%	-1.2%	-0.7%	-0.6%	-1.2%



TOTAL FUND ATTRIBUTION ANALYSIS

	5 V	Attribution ears Ending		20		
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	11.0%	10.7%	0.2%	0.0%	-0.1%	-0.1%
U.S. Small/Mid Cap Equity Composite	4.1%	5.4%	-1.3%	0.0%	0.0%	-0.1%
Non-U.S. Developed Mkts Equity Composite	1.5%	2.1%	-0.5%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	2.4%	2.9%	-0.5%	-0.1%	0.0%	-0.1%
Core Fixed Income Composite	4.2%	4.3%	-0.1%	0.0%	-0.1%	-0.1%
Non-U.S. Emerging Market Debt Composite	4.2%	2.8%	1.3%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	3.3%	3.9%	-0.6%	-0.1%	0.0%	-0.1%
Absolute Return Composite	-1.2%	3.1%	-4.4%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	2.8%	4.5%	-1.7%	-0.2%	0.0%	-0.2%
Other Diversifying Assets	-			0.0%	0.0%	0.1%
Public Real Estate Composite	2.5%	4.0%	-1.5%	0.0%	0.0%	-0.1%
Private Real Estate Composite	10.2%	6.8%	3.4%	0.2%	0.0%	0.1%
Private Equity Composite	10.2%	9.2%	1.0%	0.1%	-0.1%	0.0%
Real Assets Composite Cash	6.9% 1.5%	5.7% 1.1%	1.2% 0.3%	0.0% 0.0%	0.0% 0.0%	0.0% 0.0%
Total	5.7%	6.2%	-0.5%	-0.1%	-0.4%	-0.5%



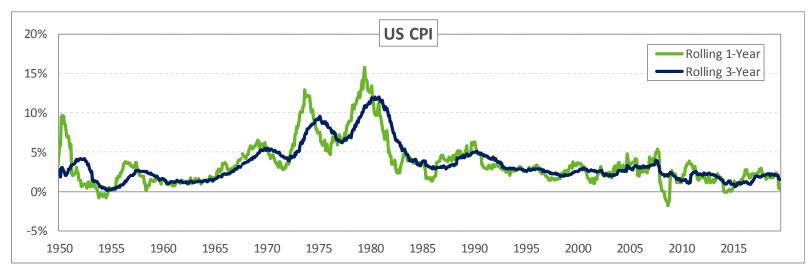




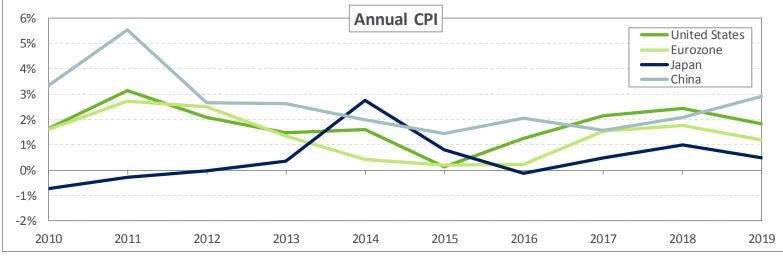




INFLATION



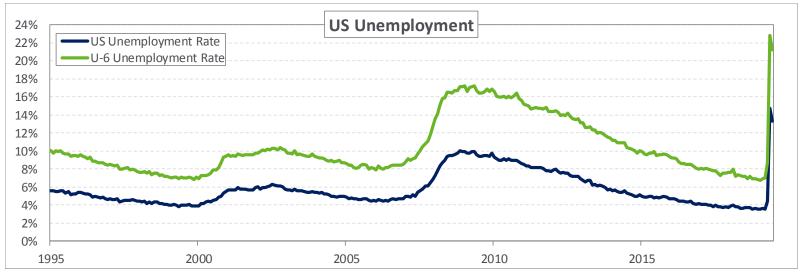
Source: Bureau of Labor Statistics, FactSet



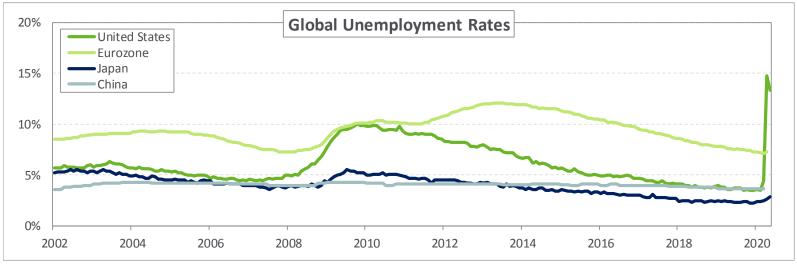
Source: FactSet



UNEMPLOYMENT



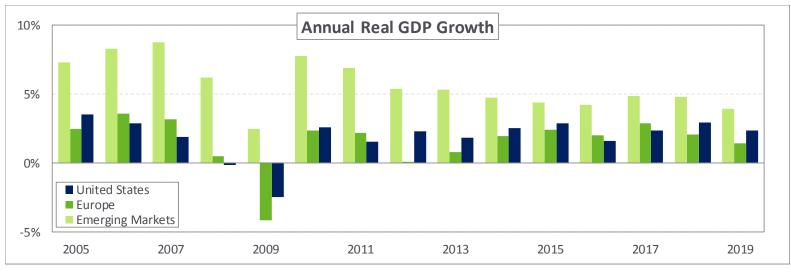
Source: FactSet



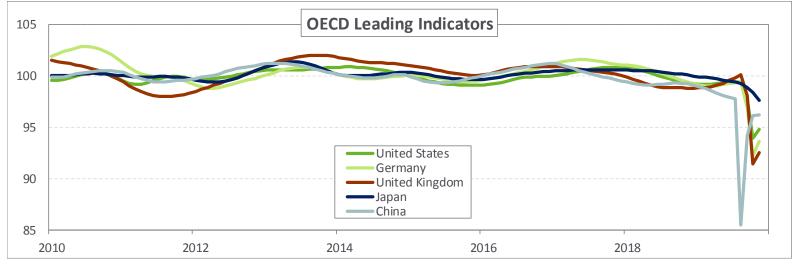
Source: FactSet



ECONOMIC INDICATORS



Source: Bureau of Economic Analysis, Oxford Economics, FactSet



Source: OECD, FactSet



GROSS DOMESTIC PRODUCT



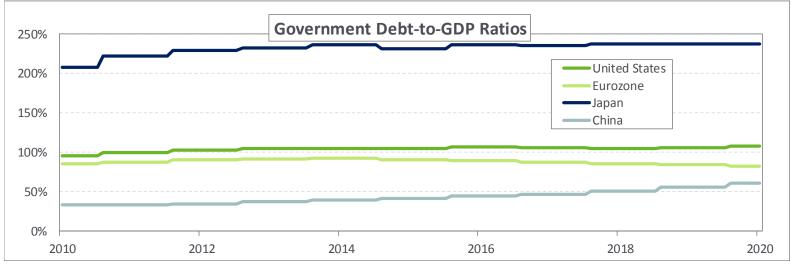
Source: Bureau of Economic Analysis, FactSet



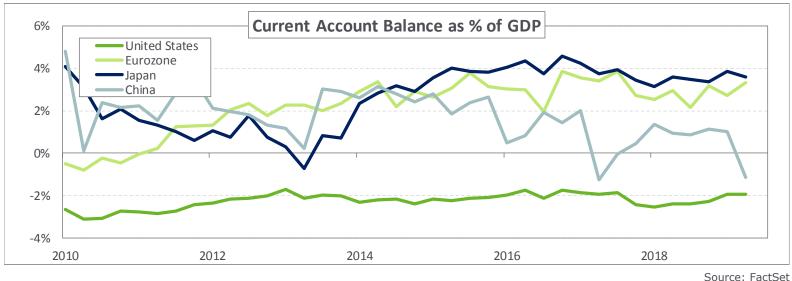
Source: IMF, FactSet



GROSS DOMESTIC PRODUCT METRICS

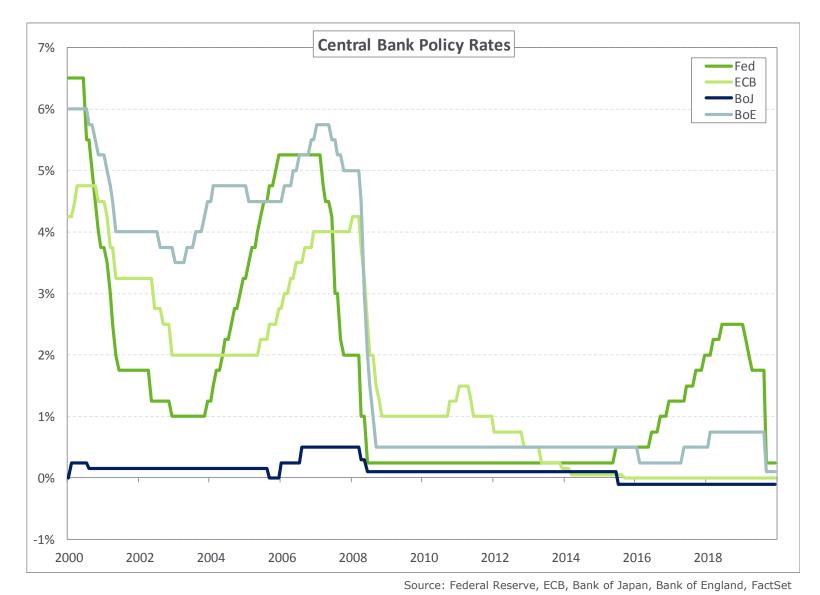


Source: IMF, FactSet



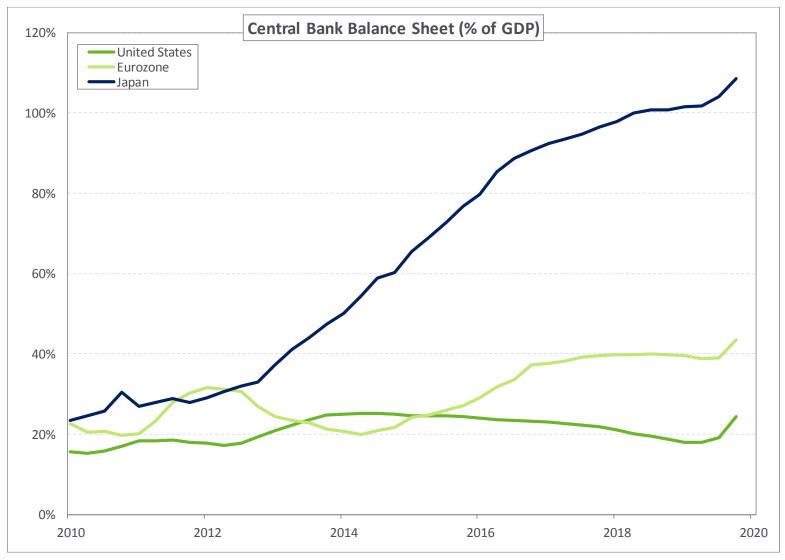


CENTRAL BANK RATES



NE

CENTRAL BANK BALANCE SHEETS



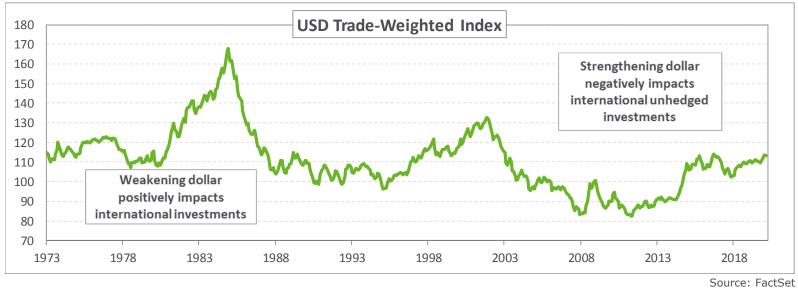
Source: FactSet



CURRENCIES

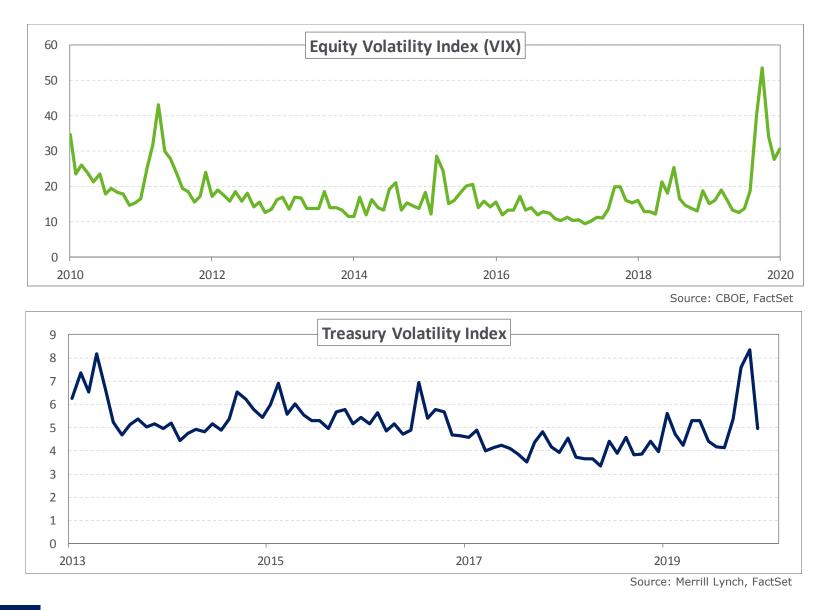
		% CI	hange Relative to	USD
Currencies	Spot	1 Month	YTD	1 Year
Euro	1.12	1.0%	0.1%	-1.4%
British Pound	1.24	-0.1%	-6.7%	-2.9%
Japanese Yen	107.89	-0.1%	0.7%	-0.1%
Swiss Franc	0.95	1.4%	2.2%	2.9%
Australian Dollar	0.69	3.7%	-2.1%	-1.9%
Chinese Yuan	7.07	1.0%	-1.5%	-2.9%
Brazilian Real	5.49	-1.1%	-26.7%	-30.2%
Russian Ruble	71.25	-0.9%	-12.8%	-11.5%
Indian Rupee	75.50	0.1%	-5.5%	-8.6%
Mexican Peso	23.11	-4.2%	-18.3%	-16.9%
South African Rand	17.38	1.5%	-19.5%	-18.8%

Source: FactSet





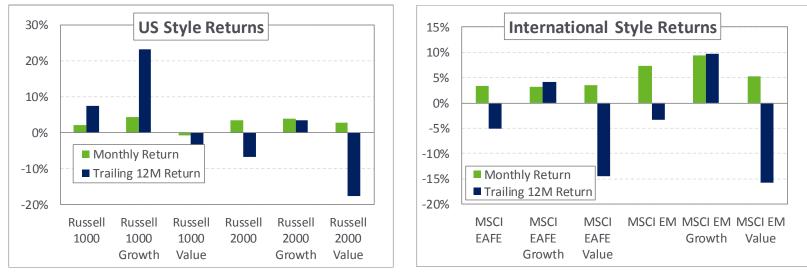
VOLATILITY





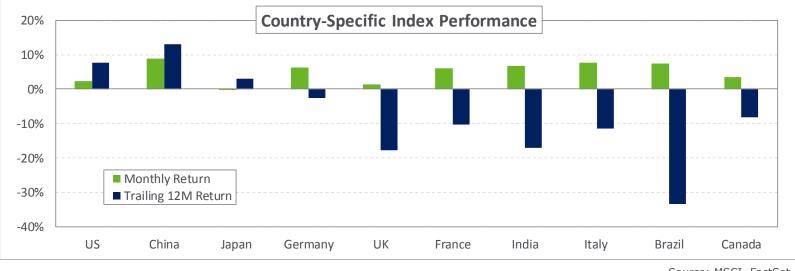


EQUITY INDEX PERFORMANCE



Source: Russell, FactSet





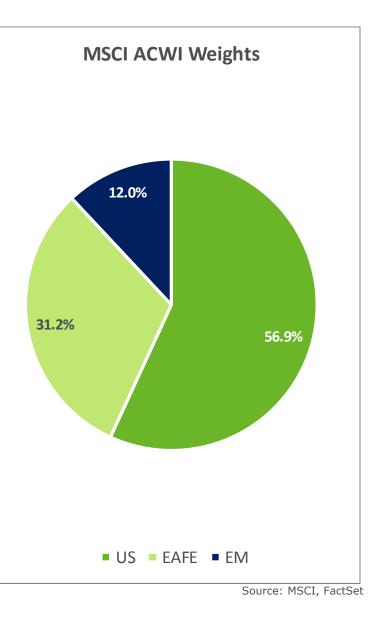
Source: MSCI, FactSet Represents returns in USD



INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
S&P 500	2.0%	20.5%	-3.1%	100.0%
Communication Services	-0.1%	2.2%	0.0%	10.8%
Consumer Discretionary	0.5%	3.1%	1.0%	10.8%
Consumer Staples	0.0%	0.7%	-0.6%	7.0%
Energy	0.0%	0.9%	-1.5%	2.8%
Financials	0.0%	1.4%	-3.5%	10.1%
Health Care	-0.4%	2.2%	0.0%	14.6%
Industrials	0.2%	1.4%	-1.5%	8.0%
Information Technology	1.8%	7.5%	4.3%	27.5%
Materials	0.1%	0.6%	-0.2%	2.5%
Real Estate	0.0%	0.4%	-0.5%	2.8%
Utilities	-0.1%	0.1%	-0.6%	3.1%
		-	Source: S	&P, FactSet

	MTD	QTD	YTD	Index Weight
MSCI ACWI	3.2%	19.2%	-6.3%	100.0%
Communication Services	0.2%	1.9%	0.2%	9.4%
Consumer Discretionary	0.6%	3.1%	0.4%	11.8%
Consumer Staples	0.1%	0.8%	-0.6%	8.1%
Energy	0.0%	0.7%	-1.7%	3.6%
Financials	0.5%	1.6%	-4.7%	13.4%
Health Care	-0.1%	2.2%	0.5%	12.9%
Industrials	0.2%	1.6%	-1.5%	9.4%
Information Technology	1.5%	5.6%	2.8%	20.7%
Materials	0.2%	1.1%	-0.3%	4.6%
Real Estate	0.1%	0.4%	-0.8%	2.9%
Utilities	0.0%	0.2%	-0.5%	3.2%
	Source: MSCI, FactSet			



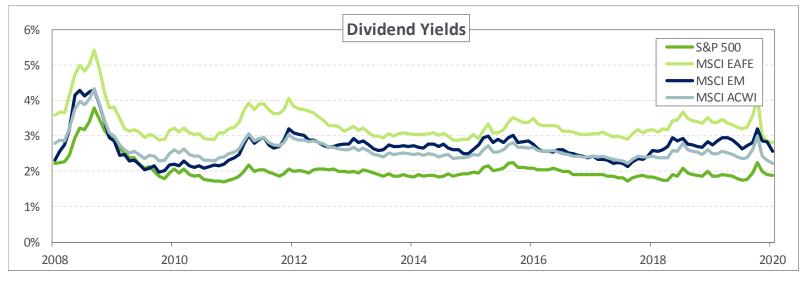


June 30, 2020

EARNINGS & YIELDS



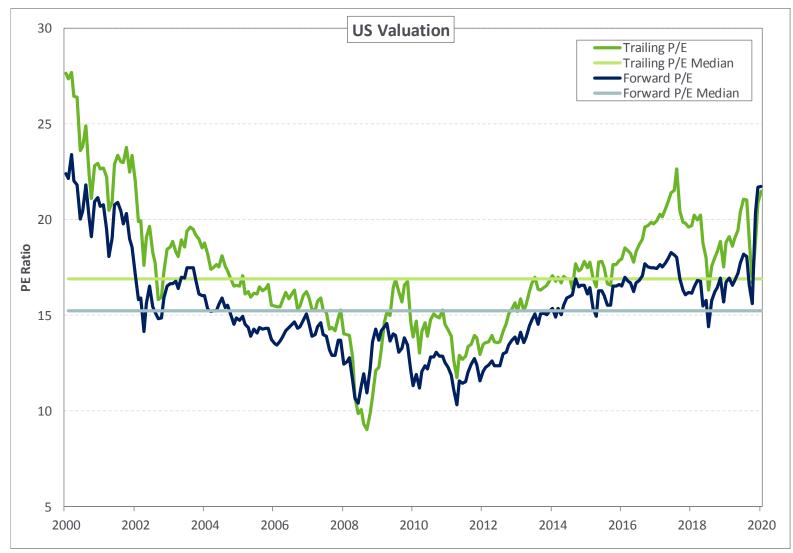
Source: FactSet



Source: FactSet



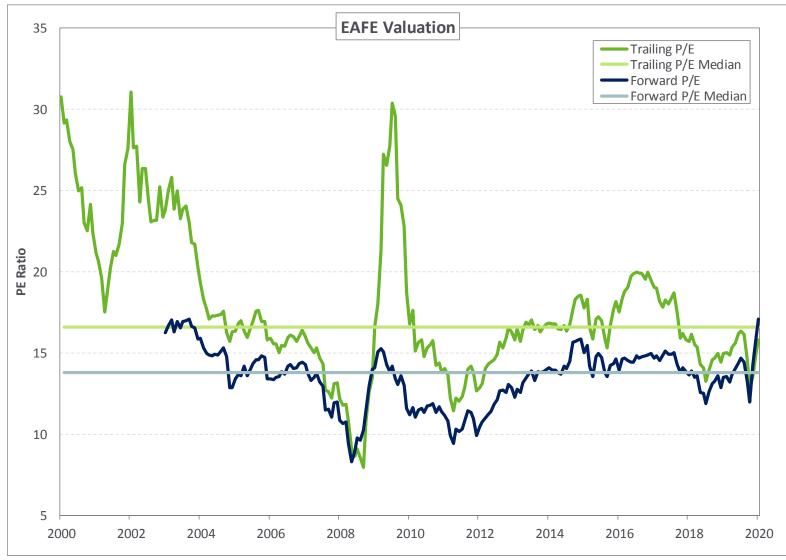
US EQUITY VALUATIONS



Source: S&P, FactSet



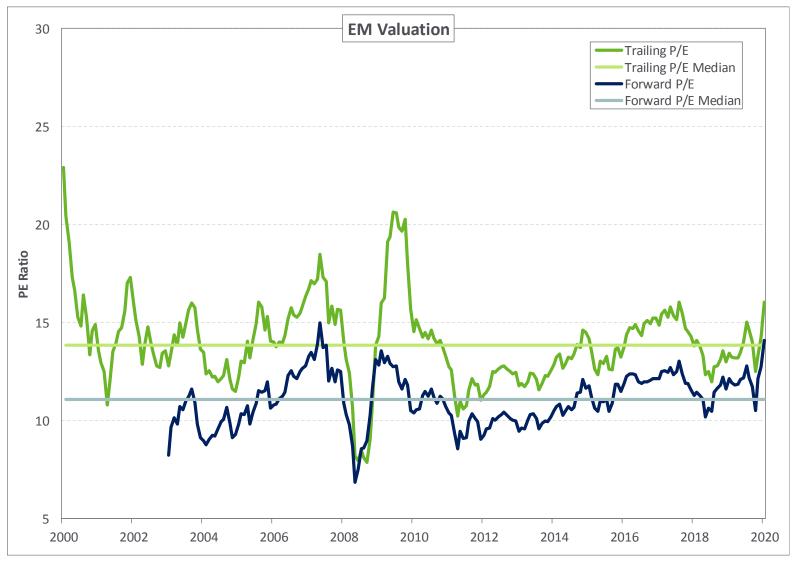
EAFE EQUITY VALUATIONS



Source: MSCI, FactSet



EM EQUITY VALUATIONS



Source: MSCI, FactSet







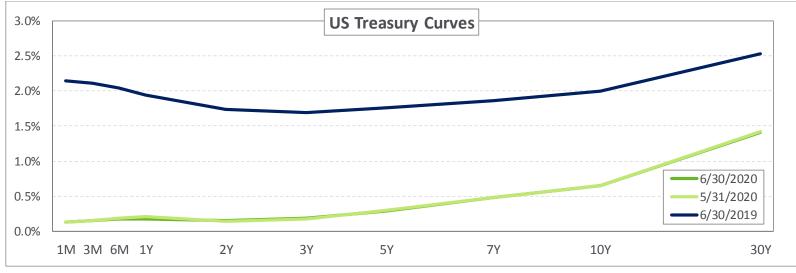
FIXED INCOME CHARACTERISTICS

	Averages			Το	otal Returns (%)
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	1.25%	68	6.0	0.6%	6.1%	8.7%
Barclays Treasury	0.50%	-	7.2	0.1%	8.7%	10.4%
Barclays Agency	0.54%	21	3.7	0.2%	5.1%	6.7%
Barclays MBS	1.36%	70	2.1	-0.1%	3.5%	5.6%
Barclays ABS	0.85%	68	2.1	1.1%	3.3%	4.6%
Barclays CMBS	1.18%	77	5.7	1.1%	7.6%	9.0%
Barclays Corp IG	2.15%	150	8.5	2.0%	5.0%	9.4%
Barclays Muni	1.50%	-	5.4	0.8%	2.1%	4.4%
Barclays HY Muni	4.89%	-	9.5	4.0%	-2.6%	1.0%
Barclays TIPS	0.72%	-	4.4	1.1%	6.0%	8.2%
Barclays HY	6.87%	626	3.9	1.0%	-3.8%	0.0%
Barclays Global Agg	0.95%	58	7.3	0.9%	3.0%	4.2%
JPM EMBI Glob Div	-	474	7.7	3.5%	-2.8%	0.5%
JPM GBI - EM	4.29%	-	5.6	0.5%	-6.9%	-2.8%

Source: Barclays, JP Morgan, FactSet



TREASURIES



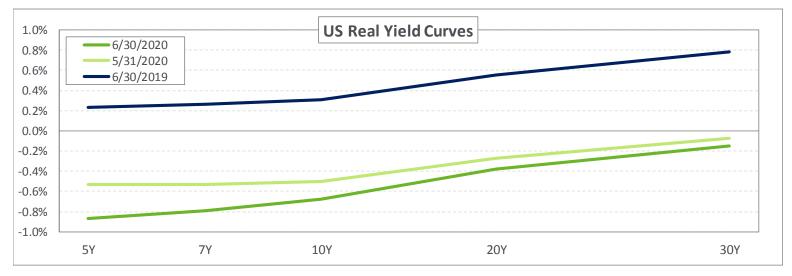
Source: FactSet

		Yield (%)	Total Return (%)		
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	0.16%	0.15%	2.12%	0.01%	1.63%
6M Treasury	0.18%	0.18%	2.04%	0.02%	2.11%
2Y Treasury	0.15%	0.14%	1.73%	0.00%	3.96%
5Y Treasury	0.28%	0.30%	1.75%	0.17%	8.44%
10Y Treasury	0.65%	0.65%	2.00%	-0.01%	14.21%
30Y Treasury	1.41%	1.42%	2.53%	-0.04%	29.60%



Source: FactSet

REAL YIELDS



Source: FactSet

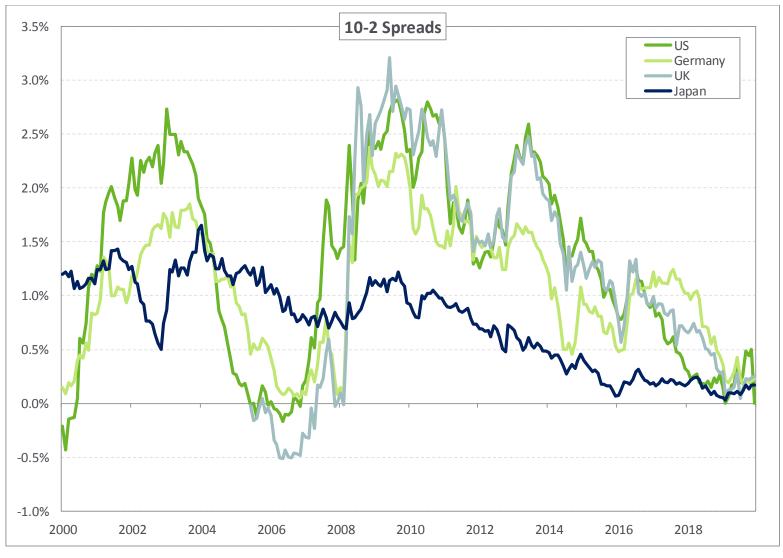
		Real Rates	Breakeven Rates		
	Current	1 Month Ago	12 Months Ago	Current	12 Months
5-Year	-0.87%	-0.53%	0.23%	1.15%	1.52%
7-Year	-0.79%	-0.53%	0.26%	1.27%	1.61%
10-Year	-0.68%	-0.50%	0.31%	1.33%	1.69%
30-Year	-0.15%	-0.07%	0.78%	1.56%	1.75%

Source: FactSet



June 30, 2020

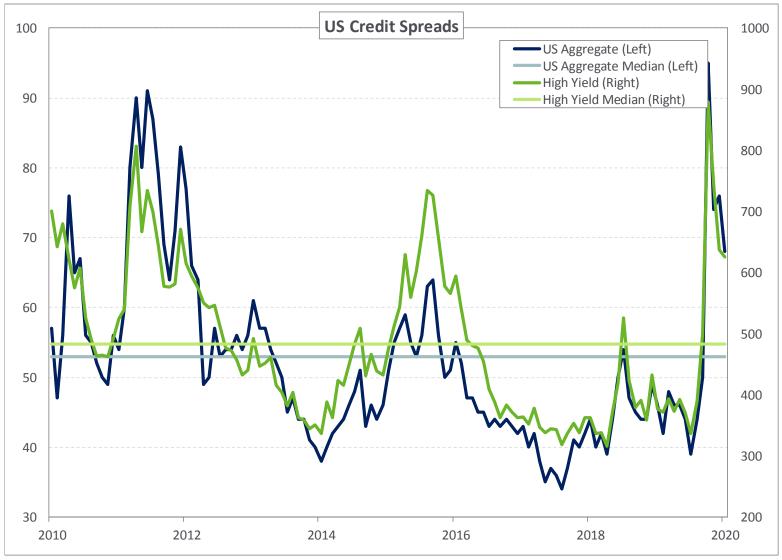
NOMINAL YIELDS



Source: FactSet



CREDIT SPREADS



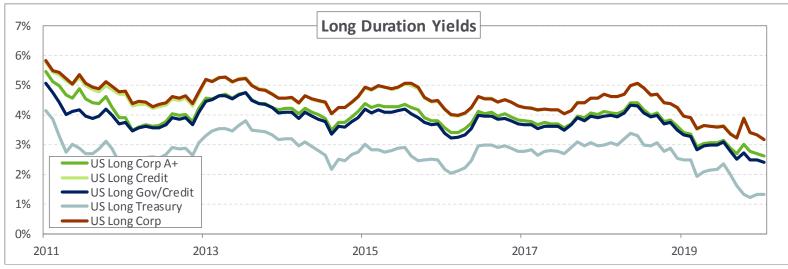
Source: Barclays, FactSet



LONG DURATION

Index	Index Current		L Month Ago 12 Months Ago	
Barclays Long Treasury	1.3%	1.3%	2.5%	19.4
Barclays 20+ STRIPS	rclays 20+ STRIPS 1.5%		2.6%	27.3
Barclays Long Credit	rs Long Credit 3.1%		3.9%	14.8
Barclays Long Gov/Credit	vs Long Gov/Credit 2.4%		3.3%	16.6
Barclays Long Corp A+	Barclays Long Corp A+ 2.8%		3.6%	15.8

Source: Barclays, FactSet



Source: Barclays, FactSet



REAL ASSETS



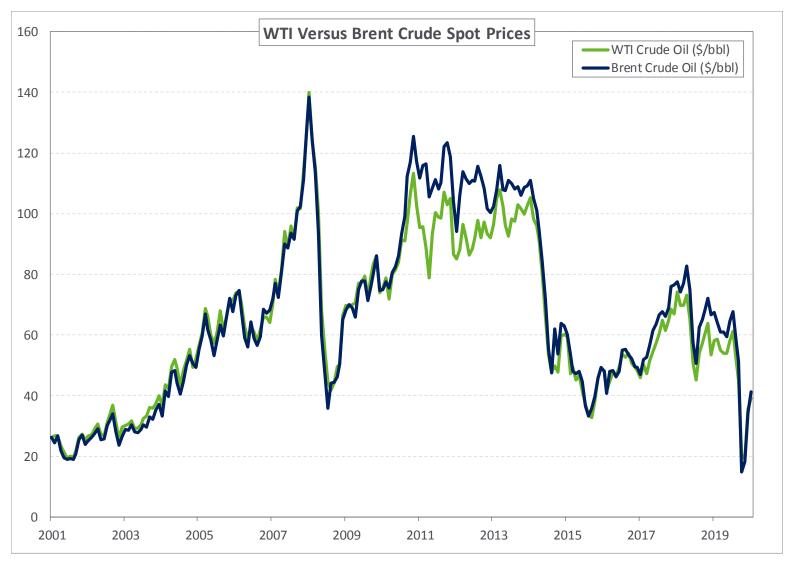
REAL ASSETS INDEX PERFORMANCE

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	2.3%	5.1%	-19.4%	-17.3%	-6.1%	-7.7%
Bloomberg Sub Agriculture Index	1.8%	-4.8%	-14.2%	-13.7%	-10.5%	-9.6%
Coffee	3.0%	-17.8%	-25.5%	-16.4%	-16.1%	-14.2%
Corn	3.3%	-2.8%	-15.4%	-25.3%	-13.0%	-13.2%
Cotton	6.6%	19.5%	-12.0%	-9.6%	-4.3%	-2.5%
Soybean	3.5%	-2.6%	-10.6%	-9.4%	-8.0%	-7.3%
Soybean Oil	1.9%	1.9%	-21.5%	-6.0%	-8.9%	-7.6%
Sugar	8.5%	12.8%	-9.8%	-11.5%	-10.2%	-6.7%
Wheat	-6.6%	-14.5%	-12.7%	-8.0%	-9.9%	-13.1%
Bloomberg Sub Energy	2.2%	9.8%	-46.3%	-45.5%	-14.4%	-18.9%
Brent Crude	8.1%	31.3%	-42.6%	-37.0%	-3.0%	-12.4%
Heating Oil	11.1%	6.4%	-46.9%	-43.2%	-8.3%	-14.0%
Natural Gas	-10.8%	-14.2%	-37.8%	-49.1%	-30.8%	-28.8%
Unleaded Gas	9.1%	69.5%	-45.9%	-41.1%	-9.9%	-14.7%
WTI Crude Oil	8.7%	23.6%	-58.6%	-55.8%	-17.0%	-22.6%
Bloomberg Sub Industrial Metals	6.9%	12.3%	-8.4%	-6.4%	-1.4%	0.0%
Aluminum	4.0%	4.0%	-13.5%	-13.4%	-6.8%	-2.9%
Copper	11.9%	21.2%	-3.5%	-0.3%	-0.5%	-0.2%
Nickel	3.7%	10.8%	-9.6%	0.9%	10.6%	0.6%
Zinc	2.6%	6.8%	-10.6%	-16.7%	-5.4%	2.4%
Bloomberg Sub Precious Metals	2.2%	15.0%	13.8%	24.0%	9.8%	6.7%
Gold	2.8%	12.1%	17.1%	25.4%	12.1%	8.0%
Silver	-0.3%	29.2%	1.9%	18.0%	2.2%	2.0%
Bloomberg Sub Livestock	-8.5%	-8.6%	-34.3%	-33.5%	-16.6%	-11.0%
Lean Hogs	-19.1%	-23.9%	-51.9%	-57.4%	-30.6%	-19.4%
Live Cattle	-3.3%	-0.6%	-23.1%	-16.4%	-8.7%	-6.6%

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



OIL MARKETS



Source: FactSet



POLICY INDEX HISTORY

- 4/1/2012 6/30/2012: 23% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 18% Barclays Aggregate, 15% Bank of America Merrill Lynch US High BB-B Constrained Index, 2% JP Morgan GBI - EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 8% (90 Day T-Bill + 2%), 3% Wilshire REIT, 2% NCREIF Property Index, 5% Cambridge Associates US All PE 1 Quarter Lag, 1% (CPI + 4% Seasonally Adjusted), 1% 90 Day T-Bill.
- 7/1/2012 6/30/2013: 23% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 18% Barclays Aggregate Index, 15% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI - EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 3% Wilshire REIT, 2% NCREIF Property Index, 8% (91 Day T-Bill + 2% 1 month lag), 5% Cambridge Associates All US PE 1 Quarter Lag, 1% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2013 6/30/2014: 20% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 7% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 5% (60% MSCI World HH / 40% CITI WGBI HH), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 2% NCREIF Property Index, 3% (91 Day T-Bill + 2% 1 Month Lag), 8% Cambridge Associates US All PE 1 Quarter Lag, 7% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2014 9/30/2014: 20% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 7% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 2% NCREIF Property Index, 3% (91 Day T-Bill + 2% 1 Month Lag), 8% Cambridge Associates US All PE 1 Quarter Lag, 7% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.



POLICY INDEX HISTORY

- 10/1/2014 1/31/2016: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 4% Wilshire REIT Index, 3% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 2/1/2016 12/31/2016: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% (50% JP Morgan EMBI Global Diversified Index / 50% JP Morgan GBI – EM Global Diversified Index), 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 4% Wilshire REIT Index, 3% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 1/1/2017 9/30/2017: 18% S&P 500 Index, 2% Russell 2500 Index, 5% MSCI EAFE Index, 10% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 20% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% (50% JP Morgan EMBI Global Diversified Index / 50% JP Morgan GBI - EM Global Diversified Index), 5% (60% MSCI World / 40% CITI WGBI), 5% Credit Suisse Hedge Global Macro Index, 3% Wilshire REIT Index, 4% NCREIF Property Index, 11% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 10/1/2017 12/31/2017: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 7% (60% MSCI World / 40% CITI WGBI), 5% Libor + 2%, 3% Wilshire REIT Index, 4% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 1/1/2018 6/30/2019: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI – EM Global Diversified Index, 12% Libor + 2%, 3% Wilshire REIT Index, 4% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.
- 7/1/2019 Present: 16% S&P 500 Index, 3% Russell 2500 Index, 5% MSCI EAFE Index, 9% MSCI Emerging Markets Index, 6% Barclays Aggregate Index, 18% (50% Credit Suisse Leveraged Loan Index / 50% Bank of America Merrill Lynch US HY BB-B Rated Constrained Index), 2% JP Morgan GBI - EM Global Diversified Index, 12% Libor + 2%, 2% Wilshire REIT Index, 5% NCREIF Property Index, 13% Cambridge Associates US All PE 1 Quarter Lag, 8% (CPI + 4% Seasonally Adjusted), 1% 91 Day T-Bill.



Alpha - Measures the relationship between the fund performance and the performance of another fund or benchmark index and equals the excess return while the other fund or benchmark index is zero.

Alpha Jensen - The average return on a portfolio over and above that predicted by the capital asset pricing model (CAPM), given the portfolio's beta and the average market return. Also known as the abnormal return or the risk adjusted excess return.

Annualized Excess Return over Benchmark - Annualized fund return minus the annualized benchmark return for the calculated return.

Annualized Return - A statistical technique whereby returns covering periods greater than one year are converted to cover a 12 month time span.

Beta - Measures the volatility or systematic risk and is equal to the change in the fund's performance in relation to the change in the assigned index's performance.

Information Ratio - A measure of the risk adjusted return of a financial security, asset, or portfolio.

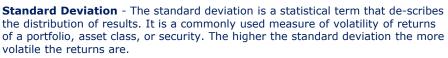
Formula: (Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return – Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals 12 and quarterly returns is four periods per year.

R-Squared – Represents the percentage of a fund's movements that can be explained by movements in an index. R-Squared values range from 0 to 100. An R-Squared of 100 denotes that all movements of a fund are completely explained by movements in the index.

Sharpe Ratio - A measure of the excess return or risk premium per unit of risk in an investment asset or trading strategy.

Sortino Ratio - A method to differentiate between good and bad volatility in the Sharpe Ratio. The differentiation of up and down volatility allows the calculation to provide a risk adjusted measure of a security or fund's performance without upward price change penalties.

Formula: Calculation Average (X-Y)/Downside Deviation (X-Y) * 2 Where X=Return Series X Y = Return Series Y which is the risk free return (91 day T-bills)



Formula: (Annualized Return of Portfolio – Annualized Return of Risk Free) / Annualized Standard Deviation (Portfolio Returns)

Tracking Error - Tracking error, also known as residual risk, is a measure of the degree to which a portfolio tracks its benchmark. It is also a measure of consistency of excess returns. Tracking error is computed as the annualized standard deviation of the difference between a portfolio's return and that of its benchmark.

Formula: Tracking Error = Standard Deviation $(X-Y) * \sqrt{\#}$ of periods per year) Where X = periods portfolio return and Y = the period's benchmark return For monthly returns, the periods per year = 12 For quarterly returns, the periods per year = 4

Treynor Ratio - A risk-adjusted measure of return based on systematic risk. Similar to the Sharpe ratio with the difference being the Treynor ratio uses beta as the measurement of volatility.

Formula: (Portfolio Average Return - Average Return of Risk-Free Rate)/Portfolio Beta

Up/Down Capture Ratio - A measure of what percentage of a market's re-turns is "captured" by a portfolio. For example, if the market declines 10% over some period, and the manager declines only 9%, then his or her capture ratio is 90%. In down markets, it is advantageous for a manager to have as low a capture ratio as possible. For up markets, the higher the capture ratio the better. Looking at capture ratios can provide insight into how a manager achieves excess returns. A value manager might typically have a lower capture ratio in both up and down markets, achieving excess returns by protecting on the downside, whereas a growth manager might fall more than the overall market in down markets, but achieve above-market returns in a rising market.

 $\label{eq:upsideCapture} UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) \ when \ Period Benchmark \ Return \ is \ > = \ 0$

 $\label{eq:upsideCapture} UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) \ when \ Period Benchmark \ Return \ is \ > = 0$



Of Portfolios/Observations¹ - The total number of data points that make up a specified universe

Allocation Index³ - The allocation index measures the value added (or subtracted) to each portfolio by active management. It is calculated monthly: The portfolio asset allocation to each category from the prior month-end is multiplied by a specified market index.

Asset Allocation Effect² - Measures an investment manager's ability to effectively allocate their portfolio's assets to various sectors. The allocation effect determines whether the overweighting or underweighting of sectors relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is over weighted in a sector that outperforms the benchmark and underweighted in a sector that underperforms the benchmark. Negative allocation occurs when the portfolio is over weighted in a sector that underperforms the benchmark and under weighted in a sector that outperforms the benchmark.

Agency Bonds (Agencies)³ - The full faith and credit of the United States government is normally not pledged to payment of principal and interest on the majority of government agencies issuing these bonds, with maturities of up to ten years. Their yields, therefore, are normally higher than government and their marketability is good, thereby qualifying them as a low risk-high liquidity type of investment. They are eligible as security for advances to the member banks by the Federal Reserve, which attests to their standing.

Asset Backed Securities (ABS)³ - Bonds which are similar to mortgagebacked securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

Attribution³ - Attribution is an analytical technique that allows us to evaluate the performance of the portfolio relative to the benchmark. A proper attribution tells us where value was added or subtracted as a result of the manager's decisions. Average Effective Maturity⁴ - For a single bond, it is a measure of maturity that takes into account the possibility that a bond might be called back to the issuer.

For a portfolio of bonds, average effective maturity is the weighted average of the maturities of the underlying bonds. The measure is computed by weighing each bond's maturity by its market value with respect to the portfolio and the likelihood of any of the bonds being called. In a pool of mortgages, this would also account for the likelihood of prepayments on the mortgages.

Batting Average¹ - A measurement representing an investment manager's ability to meet or beat an index.

Formula: Divide the number of days (or months, quarters, etc.) in which the manager beats or matches the index by the total number of days (or months, quarters, etc.) in the period of question and multiply that factor by 100.

Brinson Fachler (BF) Attribution¹ - The BF methodology is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance. The main advantage of the BF methodology is that rather than using the overall return of the benchmark, it goes a level deeper than BHB and measures whether the benchmark sector, country, etc. outperformed/or underperformed the overall benchmark.

Brinson Hood Beebower (BHB) Attribution¹ - The BHB methodology shows that excess return must be equal to the sum of all other factors (i.e., allocation effect, selection effect, interaction effect, etc.). The advantage to using the BHB methodology is that it is a highly accepted industry standard for calculating the allocation, selection, and interaction effects within a portfolio that collectively explains a portfolio's underlying performance.

Corporate Bond (Corp)⁴ - A debt security issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations. In some cases, the company's physical assets may be used as collateral for bonds.

Correlation¹ - A range of statistical relationships between two or more random variables or observed data values. A correlation is a single number that describes the degree of relationship between variables.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



Coupon⁴ – The interest rate stated on a bond when it is issued. The coupon is typically paid semiannually. This is also referred to as the "coupon rate" or "coupon percent rate."

Currency Effect¹ - Is the effect that changes in currency exchange rates over time affect excess performance.

Derivative Instrument³ - A financial obligation that derives its precise value from the value of one or more other instruments (or assets) at the same point of time. For example, the relationship between the value of an S&P 500 futures contract (the derivative instrument in this case) is determined by the value of the S&P 500 Index and the value of a U.S. Treasury bill that matures at the expiration of the futures contract.

Downside Deviation¹ - Equals the standard deviation of negative return or the measure of downside risk focusing on the standard deviation of negative returns.

Formula:

Annualized Standard Deviation (Fund Return - Average Fund Return) where average fund return is greater than individual fund returns, monthly or quarterly.

Duration³ - Duration is a measure of interest rate risk. The greater the duration of a bond, or a portfolio of bonds, the greater its price volatility will be in response to a change in interest rates. A bond's duration is inversely related to interest rates and directly related to time to maturity.

Equity/Debt/Cash Ratio¹ – The percentage of an investment or portfolio that is in Equity, Debt, and/or Cash (i.e. A 7/89/4 ratio represents an investment that is made up of 7% Equity, 89% Debt, and 4% Cash).

Foreign Bond³ - A bond that is issued in a domestic market by a foreign entity, in the domestic market's currency. A foreign bond is most often issued by a foreign firm to raise capital in a domestic market that would be most interested in purchasing the firm's debt. For foreign firms doing a large amount of business in the domestic market, issuing foreign bonds is a common practice.

Hard Hurdle⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee on only the funds above the specified hurdle rate.

High-Water Mark⁴ - The highest peak in value that an investment fund/ account has reached. This term is often used in the context of fund manager compensation, which is performance based. Some performance-based fees only get paid when fund performance exceeds the high-water mark. The high-water mark ensures that the manager does not get paid large sums for poor performance.

Hurdle Rate⁴ - The minimum rate of return on an investment required, in order for a manager to collect incentive fees from the investor, which is usually tied to a benchmark.

Interaction Effects² - The interaction effect measures the combined impact of an investment manager's selection and allocation decisions within a sector. For example, if an investment manager had superior selection and over weighted that particular sector, the interaction effect is positive. If an investment manager had superior selection, but underweighted that sector, the interaction effect is negative. In this case, the investment manager did not take advantage of the superior selection by allocating more assets to that sector. Since many investment managers consider the interaction effect to be part of the selection or the allocation, it is often combined with the either effect.

Median³ - The value (rate of return, market sensitivity, etc.) that exceeds onehalf of the values in the population and that is exceeded by one-half of the values. The median has a percentile rank of 50.

Modified Duration³ - The percentage change in the price of a fixed income security that results from a change in yield.

Mortgage Backed Securities (MBS)³ - Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

Municipal Bond (Muni) ⁴ - A debt security issued by a state, municipality or county to finance its capital expenditures.

Net Investment Change¹ – Is the change in an investment after accounting for all Net Cash Flows.

Performance Fee⁴ - A payment made to a fund manager for generating positive returns. The performance fee is generally calculated as a percentage of investment profits, often both realized and unrealized.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



Policy Index³ - A custom benchmark designed to indicate the returns that a passive investor would earn by consistently following the asset allocation targets set forth in this investment policy statement.

Price to Book (P/B)⁴ - A ratio used to compare a stock's market value to its book value. It is calculated by dividing the current closing price of the stock by the latest quarter's book value per share, also known as the "price-equity ratio".

Price to Earnings (P/E)³ - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

Price to Sales (P/S)⁴ - A ratio for valuing a stock relative to its own past performance, other companies, or the market itself. Price to sales is calculated by dividing a stock's current price by its revenue per share for the trailing 12 months.

Return on Equity (ROE)⁴ - The amount of net income returned as a percentage of shareholders equity. Return on equity measures a corporation's profitability by revealing how much profit a company generates with the money shareholders have invested.

Selection (or Manager) Effect² - Measures the investment manager's ability to select securities within a given sector relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by the manager's allocation to the sector. The weight of the sector in the portfolio determines the size of the effect—the larger the sector, the larger the effect is, positive or negative.

Soft Hurdle rate⁵ – is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

Tiered Fee¹ – A fee structure that is paid to fund managers based on the size of the investment (i.e. 1.00% fee on the first \$10M invested, 0.90% on the next \$10M, and 0.80% on the remaining balance).

Total Effects² - The active management (total) effect is the sum of the selection, allocation, and interaction effects. It is also the difference between the total portfolio return and the total benchmark return. You can use the active management effect to determine the amount the investment manager has added to a portfolio's return.

Total Return¹ - The actual rate of return of an investment over a specified time period. Total return includes interest, capital gains, dividends, and distributions realized over a defined time period.

Universe³ - The list of all assets eligible for inclusion in a portfolio.

Upside Deviation¹ - Standard Deviation of Positive Returns

Weighted Avg. Market Cap.⁴ - A stock market index weighted by the market capitalization of each stock in the index. In such a weighting scheme, larger companies account for a greater portion of the index. Most indexes are constructed in this manner, with the best example being the S&P 500.

Yield (%)³ - The current yield of a security is the current indicated annual dividend rate divided by current price.

Yield to Maturity³ -The discount rate that equates the present value of cash flows, both principal and interest, to market price.

Data Source: ¹InvestorForce, ²Interaction Effect Performance Attribution, ³NEPC, LLC, ⁴Investopedia, ⁵Hedgeco.net



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