INVESTMENT PERFORMANCE ANALYSIS FOR PERIOD ENDING MARCH 31, 2019

NEW MEXICO EDUCATIONAL RETIREMENT BOARD

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May 24, 2019

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MARKET ENVIRONMENT UPDATE AND OUTLOOK



ECONOMIC ENVIRONMENT

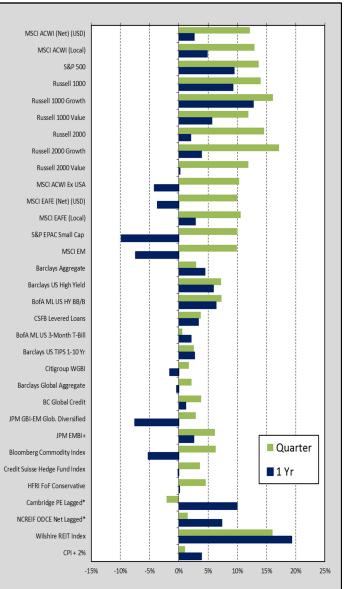
• Real GDP (fourth quarter) increased at an annual rate of 2.2%.

- Retail sales ended February at +1.8% on a YoY basis. In the same period last year the YoY growth rate was 5.1%.
- Corporate profits (ended October) as a percent of GDP decreased to 9.33% from 9.59% (in July) and remain elevated relative to historical levels.
- The inventory-to-sales ratio ended February flat at 1.4 from December levels and has remained relatively constant since early 2010.
- The U.S. trade deficit narrowed ended February as exports increased at a greater pace than imports amidst China trade tensions
- The unemployment rate decreased slightly to 3.8% from 3.9% ended Q1; U-6, a broader measure of unemployment, decreased to 7.3% from 7.6% during the first quarter.
- The Case-Shiller Home Price Index (ended January) decreased to 204.7 from 205.1 and remains at levels higher than that of pre-financial crisis levels of 150.9.
- Rolling 12-month seasonally-adjusted CPI saw a down-tick to 1.87% from 1.94% ended Q1; Capacity Utilization decreased to 78.8% from 79.5% in Q1.
- Fed Funds rate remained unchanged at a targeted range of 2.25% -to- 2.50%. The 10-year Treasury Yield (constant maturity) finished Q1 down to 2.6% from 2.8%.
- The Fed continues its planned reduction in balance sheet size, while the European Central Bank balance sheet continues to grow.
 - ECB held its benchmark refinance rate at 0%, deposit rates -0.4%.
- S&P valuations decreased in Q1, remaining above the 10-year and long-term averages.
 - Cyclically adjusted Shiller PE ratio (29.91x) is above the long-term average of 16.6x and above the 10-year average of 24.7x.



MARKET ENVIRONMENT – Q1 2019 OVERVIEW

		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>
World Equity Benchmarks						
MSCI ACWI (Net) (USD)	World w/o Small Cap	12.2%	2.6%	10.7%	6.5%	12.0%
MSCI ACWI (Local)	World (Local Currency)	12.9%	4.9%	10.9%	8.0%	12.2%
MSCI ACWI IMI (Net)	World with Small Cap	12.3%	1.9%	10.6%	6.3%	12.3%
Domestic Equity Benchmarks						
S&P 500	Large Core	13.7%	9.5%	13.5%	10.9%	15.9%
Russell 1000	Large Core	14.0%	9.3%	13.5%	10.6%	16.1%
Russell 1000 Growth	Large Growth	16.1%	12.8%	16.5%	13.5%	17.5%
Russell 1000 Value	Large Value	11.9%	5.7%	10.5%	7.7%	14.5%
Russell 2000	Small Core	14.6%	2.1%	12.9%	7.1%	15.4%
Russell 2000 Growth	Small Growth	17.1%	3.9%	14.9%	8.4%	16.5%
Russell 2000 Value	Small Value	11.9%	0.2%	10.9%	5.6%	14.1%
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	10.3%	-4.2%	8.1%	2.6%	8.9%
MSCI EAFE (Net) (USD)	Int'l Developed	10.0%	-3.7%	7.3%	2.3%	9.0%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	10.6%	2.8%	8.5%	6.0%	9.8%
S&P EPAC Small Cap	Small Cap Int'l	10.0%	-9.9%	7.2%	4.5%	12.6%
MSCI EM	Emerging Equity	9.9%	-7.4%	10.7%	3.7%	8.9%
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	2.9%	4.5%	2.0%	2.7%	3.8%
Barclays US High Yield	High Yield	7.3%	5.9%	8.6%	4.7%	11.3%
BofA ML US HY BB/B	High Yield	7.3%	6.4%	7.8%	4.7%	10.1%
CSFB Levered Loans	Bank Loans	3.8%	3.3%	5.9%	3.8%	8.0%
BofA ML US 3-Month T-Bill	Cash	0.6%	2.1%	1.2%	0.7%	0.4%
Barclays US TIPS 1-10 Yr	Inflation	2.6%	2.7%	1.5%	1.5%	2.7%
Global Fixed Income Benchmarks						
Citigroup WGBI	World Gov. Bonds	1.7%	-1.6%	1.0%	0.6%	2.2%
Barclays Global Aggregate	Global Core Bonds	2.2%	-0.4%	1.5%	1.0%	3.1%
BC Global Credit	Global Bonds	3.8%	1.2%	2.8%	1.9%	5.2%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	2.9%	-7.6%	3.3%	-0.8%	4.4%
JPM EMBI+	Em. Mkt. Bonds	6.2%	2.6%	4.0%	4.5%	7.7%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	6.3%	-5.3%	2.2%	-8.9%	-2.6%
Credit Suisse Hedge Fund Index	Hedge Fund	3.6%	-0.2%	3.6%	2.2%	5.4%
HFRI FoF Conservative	Fund of Hedge Funds	4.6%	0.1%	3.9%	2.2%	3.5%
Cambridge PE Lagged*	Private Equity	-2.1%	10.0%	13.5%	11.4%	13.7%
NCREIF ODCE Net Lagged*	Real Estate	1.5%	7.4%	7.3%	9.4%	6.0%
Wilshire REIT Index	REIT	16.0%	19.3%	5.5%	9.0%	18.7%
CPI + 2%	Inflation/Real Assets	1.1%	3.9%	4.3%	3.5%	3.8%

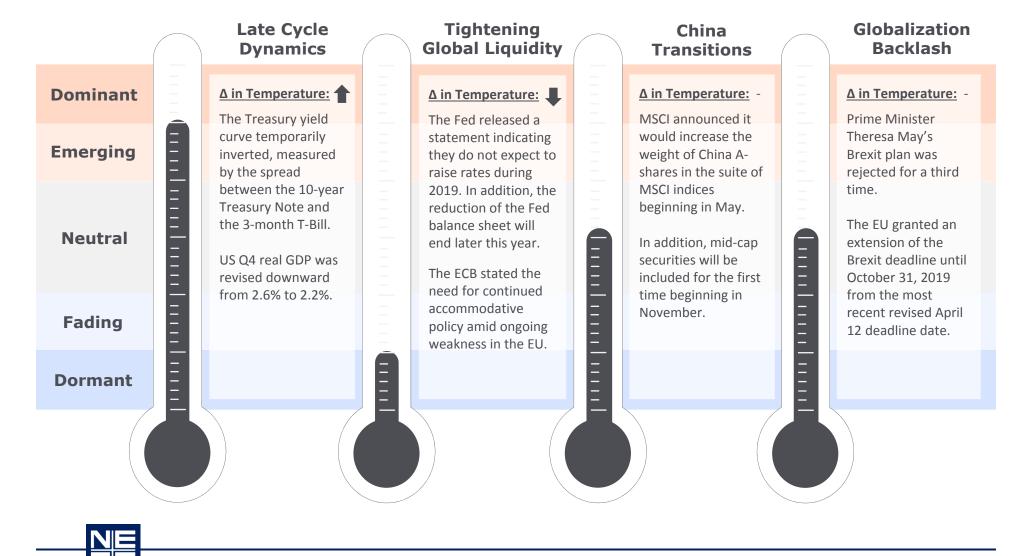




* As of 9/30/2018

ASSESSING THE KEY MARKET THEMES

Current Temperature



KEY MARKET THEMES

Late Cycle Dynamics

The US economy has transitioned from a mid- to late-cycle environment

Late-cycle does not mean end of cycle; equity markets can offer strong returns and abandoning risk assets early may detract from long-term results

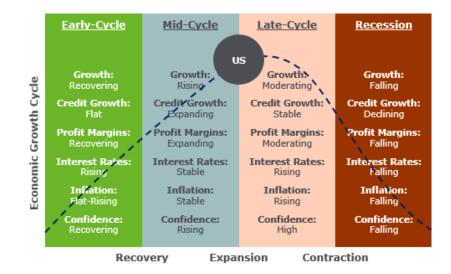
Positive economic data can support continued US economic expansion and further equity gains

However, moving into a late cycle negatively skews the range of outcomes and our investment outlook reflects a more riskaverse posture with a bias toward selling low-quality credit and increasing safe-haven fixed income exposure

Trends among key indicators suggest a transition to late-cycle has occurred

These indicators provide a useful guide to recognize changes in the economic cycle

Despite the recent trend, there is minimal evidence in economic/financial indicators to suggest that a US recession is imminent



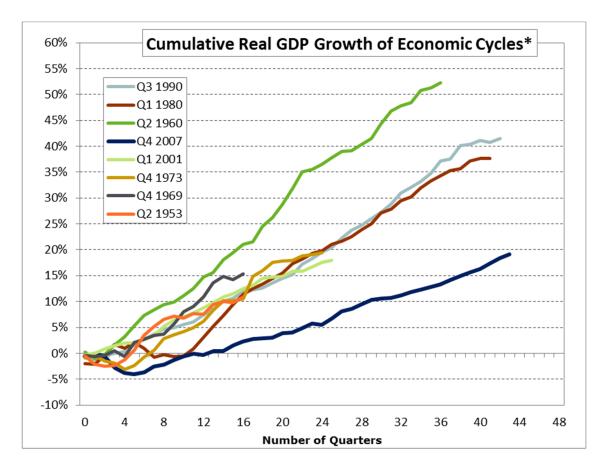
US Indicators	Late-Cycle Trend	Current Trend*
Equities	Peaking	Rising
Interest Rates	Rising	Rising
Yield Curve	Flattening	Flattening
Inflation	Rising	Falling
GDP Growth	Moderating	Rising
Credit Spreads	Stable/Rising	Rising
Output Gap	Near/Above Potential	Rising
Unemployment	Falling/Bottoming	Falling

Source: (Top) NEPC

Source: (Bottom) NEPC; *Trend represents changes over the previous two quarters

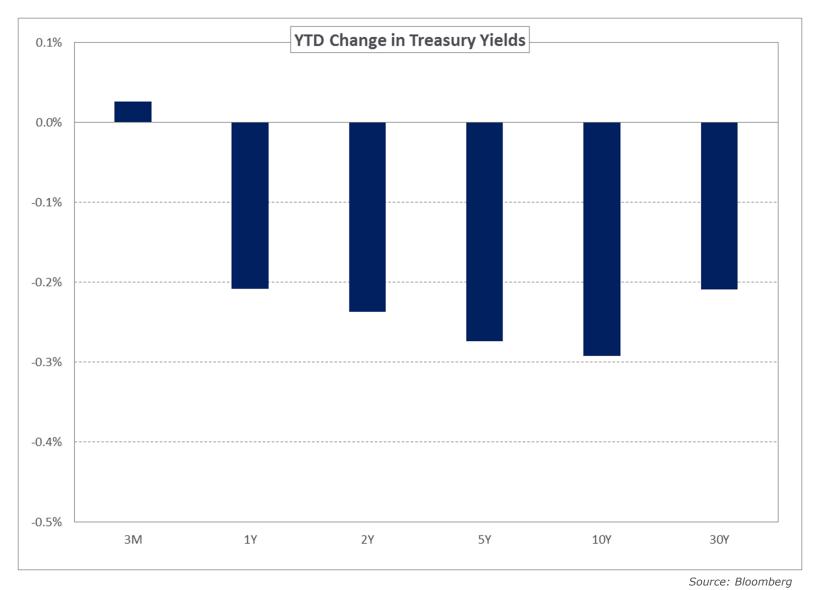


CUMULATIVE REAL GDP GROWTH OVER VARIOUS CYCLES





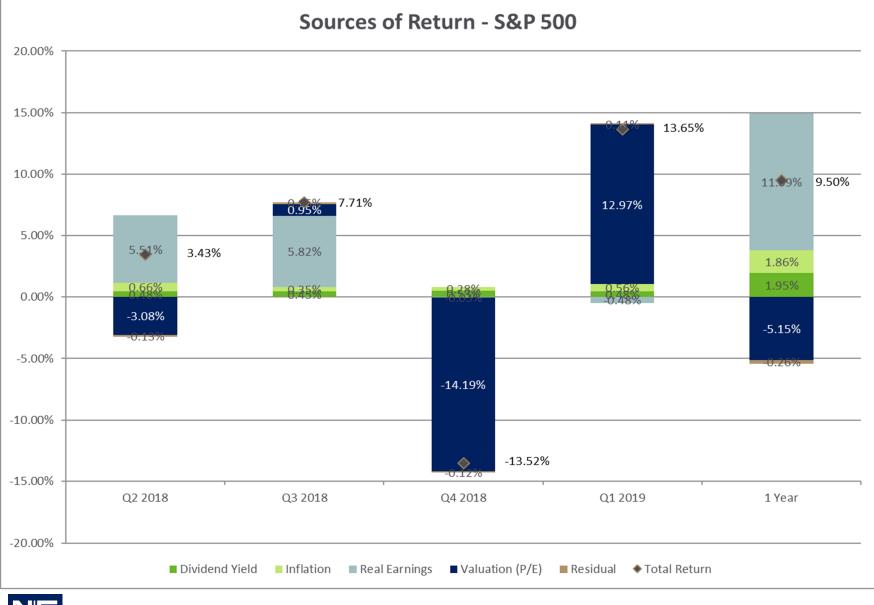
THE US YIELD CURVE TEMPORARILY INVERTED





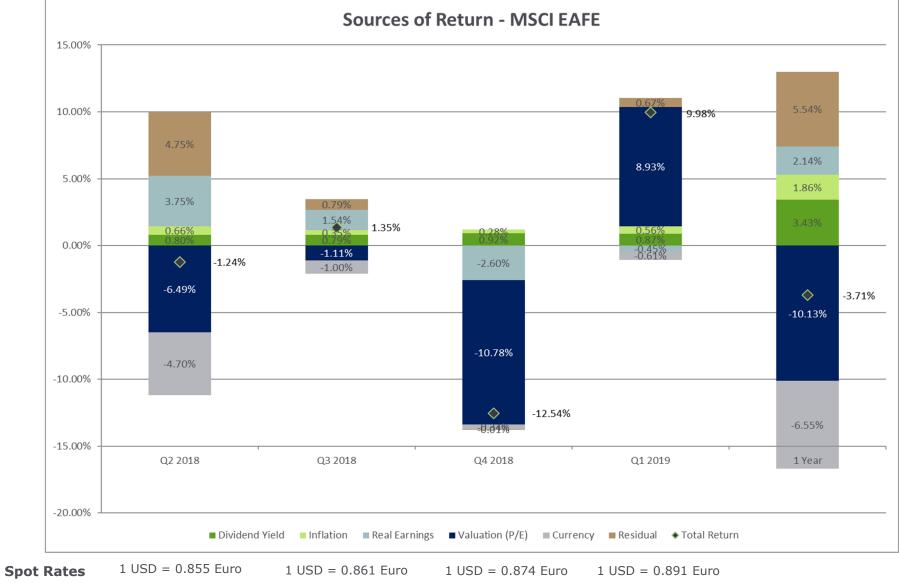
March 31, 2019

1 YEAR ATTRIBUTION OF S&P 500 RETURNS





1 YEAR ATTRIBUTION OF MSCI EAFE RETURNS





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:

<u>B Capital II</u>

The investment was approved for a \$30 million commitment on January 17, 2019 as part of the Fund's allocation to Private Equity.

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

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

<u>NovaQuest</u>

The investment was approved for a \$40 million commitment on January 17, 2019 as part of the Fund's allocation to Private Equity.

NovaQuest has provided documentation confirming Eaton Partners was used as a placement agent in connection with NMERB's investment.

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

<u>Robeco</u>

The contract extension was approved on February 15, 2019 as part of the Fund's allocation to Emerging Markets Equity.

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

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

Eaton Vance

The contract extension was approved on February 15, 2019 as part of the Fund's allocation to Emerging Markets Equity.

Eaton Vance has provided documentation confirming Benjamin Lazarus, Daniel Ryan Corporate Affiliates and employees of Parametric have been engaged as placement agents for the fund.

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



THIRD PARTY PLACEMENT AGENT DISCLOSURE

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

Bluescape Energy Partners

The investment was approved for a \$50 million commitment on March 21, 2019 as part of the Fund's allocation to Real Assets.

Bluescape has provided documentation confirming a placement agent was used, but not compensated in connection with NMERB's investment.

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



	Market Value	3 Mo F	Rank	Fiscal YTD F	Rank	1 Yr I	Rank	3 Yrs I	Rank	5 Yrs F	Rank	10 Yrs I	Rank	15 Yrs I	Rank	20 Yrs	Rank	30 Yrs	Rank	Inception	Inception Date
Total Fund	\$13,020,197,300	5.1%	97	4.0%	6	5.4%	6	8.9%	23	6.9%	9	10.7%	17	6.8%	21	5.8%	44	8.8%	9	9.0%	Jul-83
Policy Index		5.8%	95	4.4%	4	5.3%	6	9.0%	20	6.5%	18	9.8%	50	6.4%	45	5.6%	62	7.8%	46		Jul-83
60% MSCI ACWI (Net) / 40% FTSE WGBI		7.9%	28	2.2%	63	1.2%	92	6.8%	99	4.2%	99	8.2%	95	5.5%	89	4.9%	94				Jul-83
BBgBarc US Aggregate TR		2.9%	99	4.6%	2	4.5%	15	2.0%	99	2.7%	99	3.8%	99	3.9%	99	4.7%	95	6.2%	83	7.0%	Jul-83
S&P 500		13.6%	1	5.9%	1	9.5%	1	13.5%	1	10.9%	1	15.9%	1	8.6%	1	6.0%	35	10.2%	1	10.9%	Jul-83
InvestorForce Public DB > \$1B Net Median		7.2%		2.5%		3.4%		8.3%		5.8%		9.8%		6.3%		5.7%		7.8%		8.4%	Jul-83

Over the past five years, the Fund returned 6.9% per annum, outperforming the policy index by 36 basis points and ranking in the 9th percentile of the InvestorForce Public Funds > \$1 Billion universe and underperforming the actuarial assumed rate of 7.25%. The Fund's volatility was 4.8%, which ranks in the 6th 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 8.9% per annum, underperforming the policy index by 9 basis points and ranking in the 23rd percentile of its peer group. Over the same period, the Fund's volatility ranks in the 5th percentile of its peers, resulting in a three-year Sharpe Ratio of 1.9, which ranks in the 5th percentile.

For the year ending March 31, 2019, the Fund experienced a net investment gain of \$684.3 million, which includes a net investment gain of \$640.7 million during the quarter. Assets increased from \$12.8 billion twelve months ago, to \$13.0 billion on March 31, 2019, with \$476 million in net distributions during the year. The Fund returned 5.4%, outperforming the policy index by 6 basis points and ranking in the 6th percentile of its peers.

The InvestorForce Public Funds >\$1 Billion Net Universe contains 78 observations for the period ending March 31, 2019, with total assets of \$826 billion.

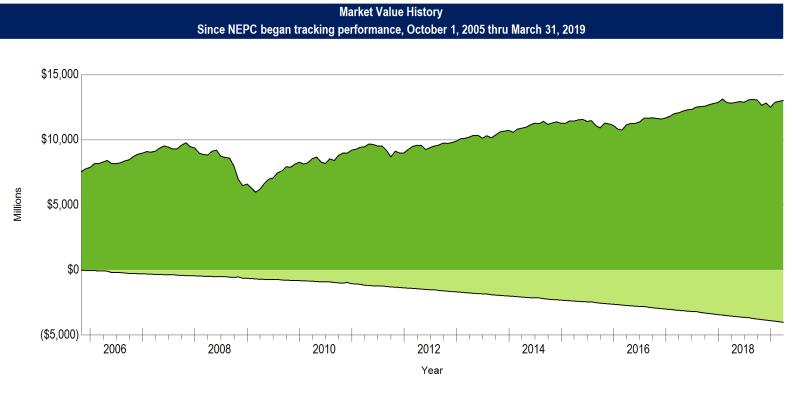
5 Year Rolling Annualized Excess Performance 2.00 Exc &... 1.00 0.00 -1.00 Q1-16 Q3-16 Q4-16 23-15 24-15 Q2-16 21-17 22-17 33-17 31-18 24-17 Yea Quarterly Outperformance Quarterly Underperformance

		5 Yea	rs Ending Ma	rch 31, 20	19			
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	6.9%	9	4.8%	6	1.3	4	2.0	5
Policy Index	6.5%	18	5.0%	8	1.1	7	1.9	6
InvestorForce Public DB > \$1B Net Median	5.8%		6.1%		0.8		1.2	

		3 Yea	rs Ending Ma	rch 31, 20	19			
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	8.9%	23	4.1%	5	1.9	5	2.2	6
Policy Index	9.0%	20	4.1%	5	1.9	5	2.9	2
InvestorForce Public DB > \$1B Net Median	8.3%		5.5%		1.3		1.5	



New Mexico Educational Retirement Board TOTAL FUND ASSET GROWTH SUMMARY



Market Value Net Cash Flow

	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years	Since 10/1/05
Beginning Market Value	\$12,504,945,863	\$12,886,225,133	\$12,812,114,116	\$11,145,741,106	\$10,895,435,490	\$7,694,652,364
Net Cash Flow	-\$125,427,106	-\$375,384,880	-\$476,231,981	-\$1,293,789,157	-\$1,939,167,915	-\$4,006,797,175
Net Investment Change	\$640,678,543	\$509,357,047	\$684,315,165	\$3,168,245,350	\$4,063,929,726	\$9,332,342,112
Ending Market Value	\$13,020,197,300	\$13,020,197,300	\$13,020,197,300	\$13,020,197,300	\$13,020,197,300	\$13,020,197,300



8.0%

TOTAL FUND ASSET ALLOCATION VS. POLICY

<u>Current</u> <u>Allocation</u>	Policy Target		Current Mkt Value	Current Allocation	Policy Target ¹	Difference	Policy Range	Within Range
		Equity	\$4,162,824,441	32.0%	33.0%	-1.0%	15% - 55%	Yes
		U.S. Equity	\$2,331,966,167	17.9%	19.0%	-1.1%	10% - 30%	Yes
15.3%	16.0%	U.S. Large Cap Equity	\$1,989,526,284	15.3%	16.0%	-0.7%	10% - 25%	Yes
13.370	10.0%	U.S. Small/Mid Cap Equity	\$342, 439, 883	2.6%	3.0%	-0.4%	0% - 5%	Yes
		Non-U.S. Equity	\$1,830,858,274	14.1%	14.0%	0.1%	5% - 25%	Yes
		Non-U.S. Developed Mkts	\$612,723,499	4.7%	5.0%	-0.3%	0% - 10%	Yes
2.6%	3.0%	Non-U.S. Emerging Mkts	\$1,218,134,775	9.4%	9.0%	0.4%	2% - 15%	Yes
4.7%	5.0%	Fixed Income	\$3,451,803,655	26.5%	26.0%	0.5%	10% - 58%	Yes
		Core Fixed Income		6.7%	6.0%	0.7%	0% - 20%	Yes
9.4%	9.0%	Opportunistic Credit	\$2,360,594,208	18.1%	18.0%	0.1%	0% - 30%	Yes
	9.0%	Emerging Mkts Debt		1.7%	2.0%	-0.3%	0% - 8%	Yes
6.7%	6.0%	Alternatives	\$5,309,800,081	40.8%	40.0%	0.8%	10% - 60%	Yes
	6.0%	Absolute Return	\$400,836	0.0%	0.0%	0.0%	0% - 10%	Yes
		Diversifying Assets	\$1,546,795,211	11.9%	12.0%	-0.1%		
		Global Asset Allocation		4.5%	4.0%	0.5%	0% - 8%	Yes
18.1%	18.0%	Risk Parity	\$695, 120, 020	5.3%	3.0%	2.3%	0% - 8%	Yes
		Other Diversifying Assets	\$265,033,977	2.0%	5.0%	-3.0%	0% - 10%	Yes
		Real Estate	\$869,094,559	6.7%	7.0%	-0.3%	0% - 14%	Yes
<u></u>	2.0%	REITs	\$284,159,594	2.2%	3.0%	-0.8%		
		Private Real Estate	\$584,934,966	4.5%	4.0%	0.5%		
11.9%	12.0%	Private Equity	\$1,904,430,050	14.6%	13.0%	1.6%	0% - 22%	Yes
6.7%		Inflation-Linked Assets	\$989,079,424	7.6%	8.0%	-0.4%	0% - 15%	Yes
	7.0%	Cash	\$95,705,999	0.7%	1.0%	-0.3%	0% - 15%	Yes
		Total	\$13,020,197,300	100.0%	100.0%	0.0%		
14.6%	13.0%	¹ I ong-Term Policy Target approved by	the Board in June	2016				

¹Long-Term Policy Target approved by the Board in June 2016.

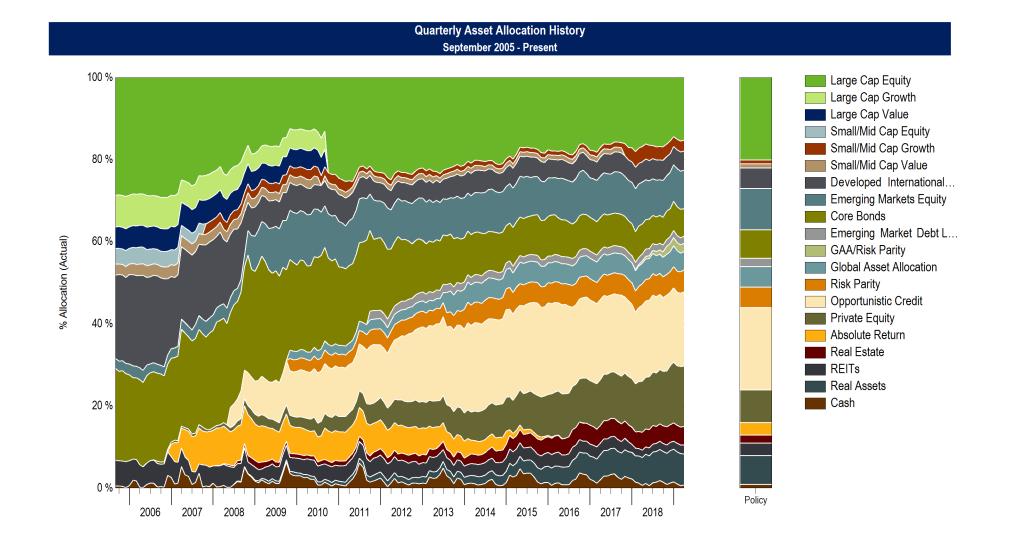
Note: Allocations shown here include cash held in separately managed portfolios.

Totals may not add to 100% due to rounding. Total Plan includes Legacy Assets portfolio totaling \$63,124.

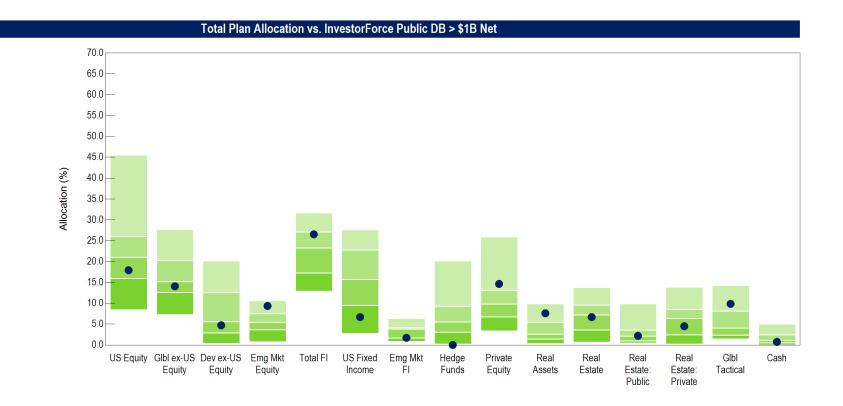


7.6%

New Mexico Educational Retirement Board TOTAL FUND ASSET ALLOCATION HISTORY



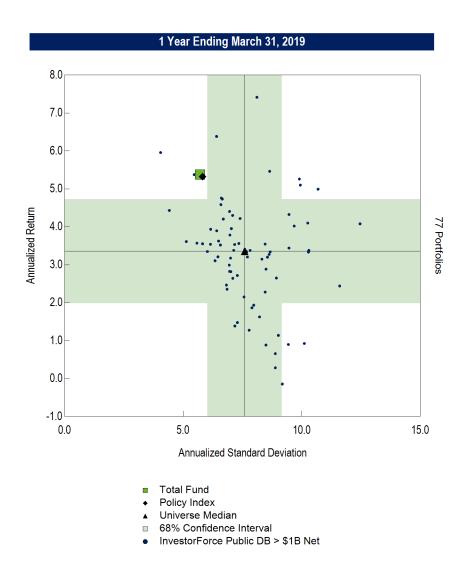
New Mexico Educational Retirement Board TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE



	Allocatio	n (Rank)														
5th Percentile	45.5	27.6	20.1	10.7	31.7	27.6	6.4	20.1	25.9	9.9	13.8	9.8	13.8	14.2	5.0	
25th Percentile	26.1	20.3	12.7	7.5	27.1	22.8	4.2	9.3	13.2	5.5	9.7	3.7	8.6	8.2	2.5	
Median	21.1	15.2	5.7	5.5	23.3	15.8	3.8	5.6	9.8	2.6	7.3	2.2	6.4	4.1	1.2	
75th Percentile	16.0	12.6	3.0	3.7	17.3	9.6	1.7	3.1	6.8	1.5	3.6	1.1	2.5	2.4	0.6	
95th Percentile	8.5	7.4	0.5	0.8	13.0	2.8	0.9	0.2	3.4	0.3	0.8	0.5	0.3	1.5	0.1	
# of Portfolios	51	59	37	50	60	49	30	43	55	32	54	19	50	14	59	
 Total Fund 	17.9 (6	8) 14.1 (66)	4.7 (62)	9.4 (11) 26.5 (31)	6.7 (85)	1.7 (76)	0.0 (99)	14.6 (19)	7.6	9) 6.7 (56)	2.2 (50)	4.5 (68)	9.8 (16)	0.7 (65)	

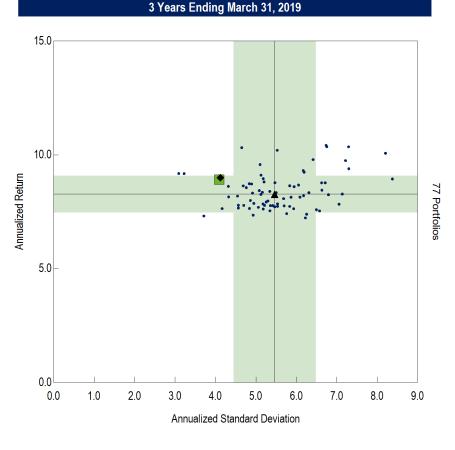


New Mexico Educational Retirement Board TOTAL FUND RISK/RETURN



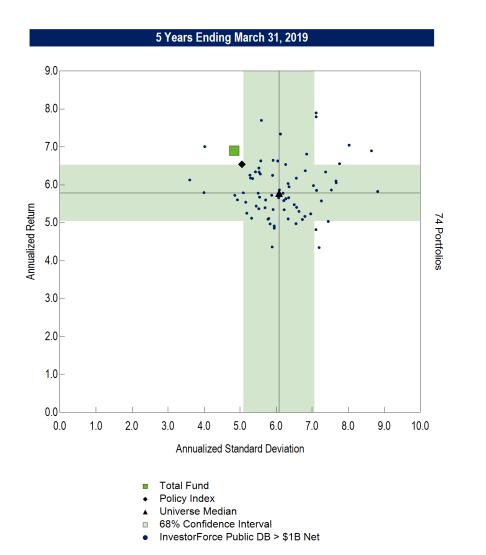
Note: Ranks are based on net returns.

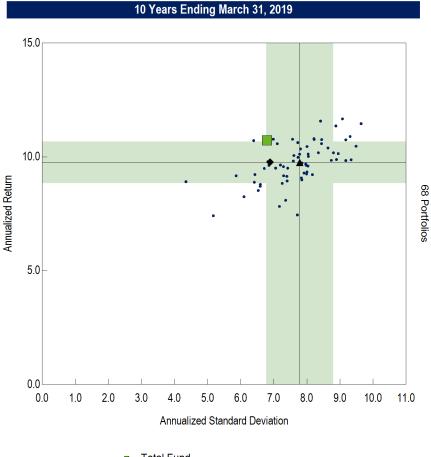




- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net

New Mexico Educational Retirement Board TOTAL FUND RISK/RETURN



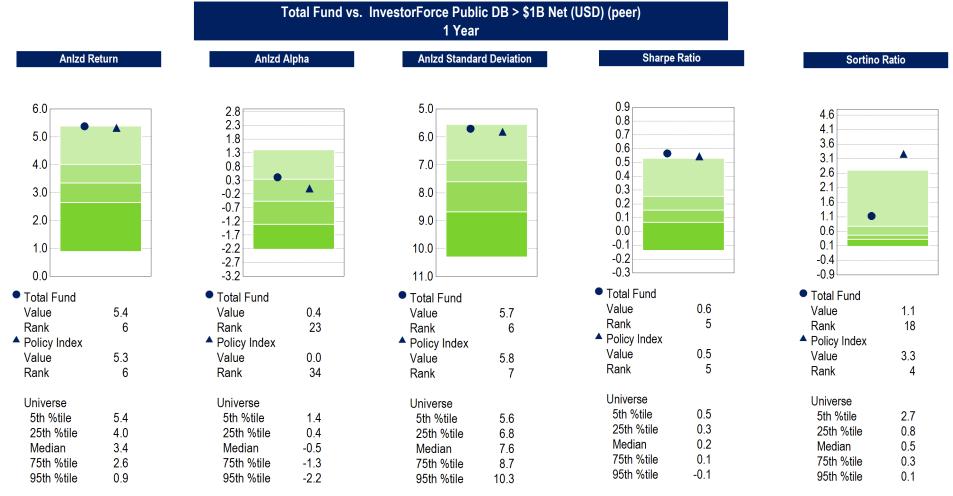


- Total Fund
- Policy Index
- Universe Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net

Note: Ranks are based on net returns.

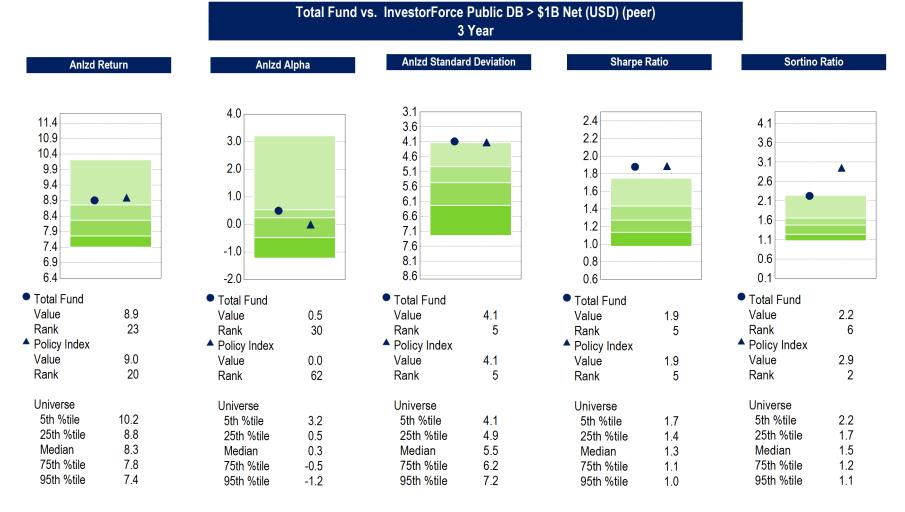


TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE



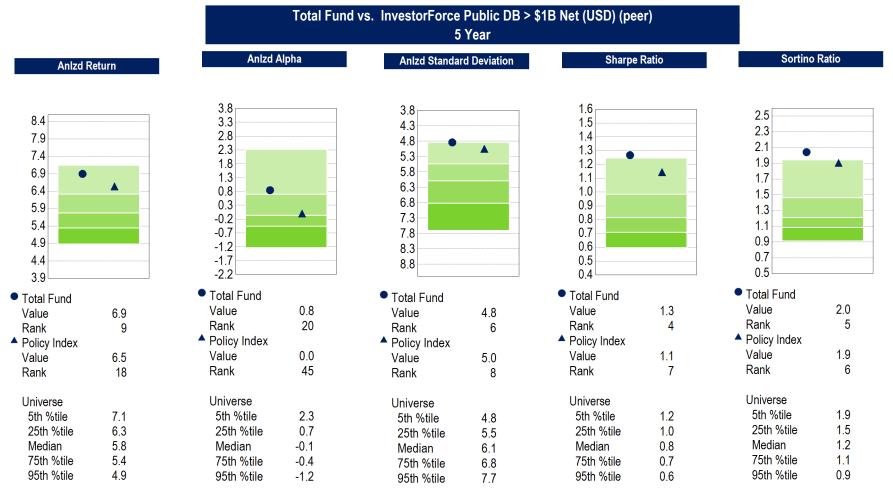


TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE





TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE



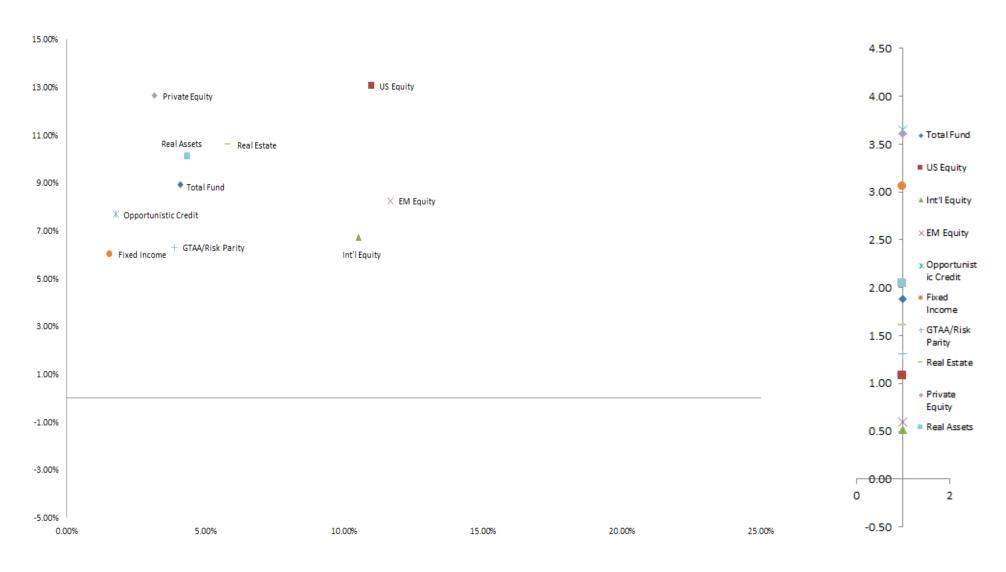


TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE





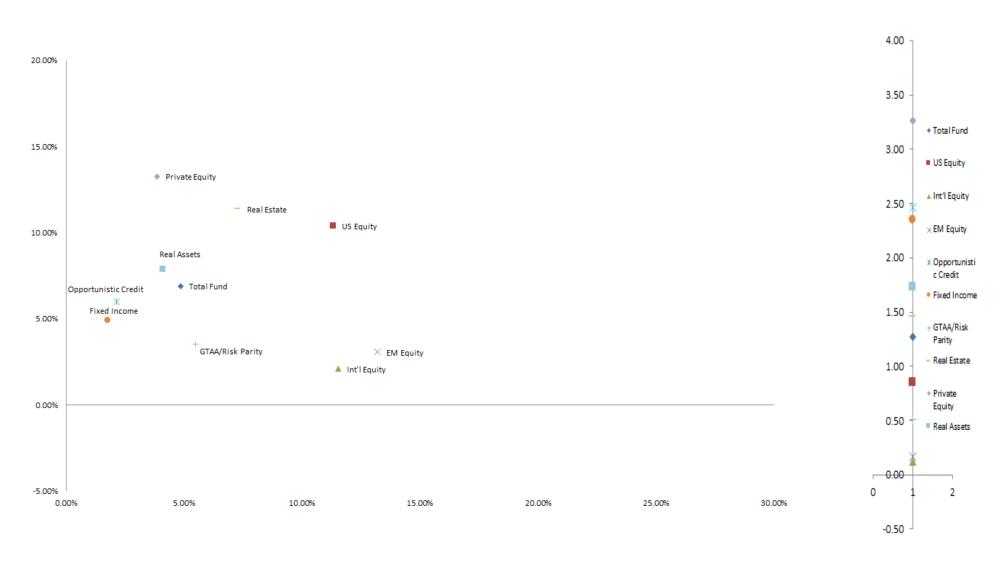
3 YEAR RISK/RETURN PROFILE



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



5 YEAR RISK/RETURN PROFILE



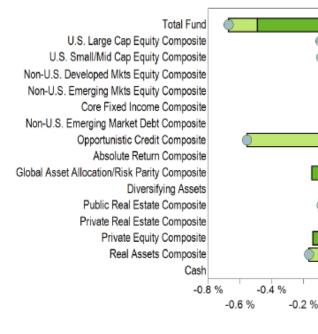
Note: Returns are net of fees. The graph on the right side shows composite level sharpe ratios.



Attribution Effects 3 Months Ending March 31, 2019



- Allocation Effect: -0.49%
 - Diversifying Assets underweight (+0.14%)
 - U.S. Small/Mid Cap Equity underweight (-0.06%)
 - U.S. Large Cap Equity underweight (-0.09%)
 - Public Real Estate underweight (-0.10%)
 - Private Equity overweight (-0.14%)
 - Global Asset Allocation/Risk Parity overweight (-0.15%)
 - Manager Selection Effect: -0.18%
 - Global Asset Allocation/Risk Parity outperformed (+0.35%)
 - Private Equity outperformed (+0.18%)
 - Real Assets underperformed (-0.17%)
 - Opportunistic Credit underperformed (-0.56%)
 - Residual: 0.00%



Allocation Effect Selection Effect

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.

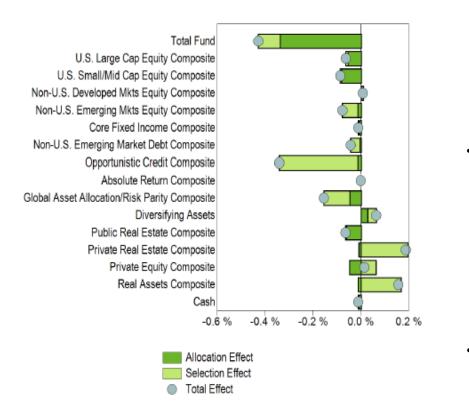
0.0%

0.2 %

0.4 %



Attribution Effects FYTD Ending March 31, 2019



Fiscal YTD Excess Return: -0.43%

- Allocation Effect: -0.34%
 - Private Equity overweight (-0.05%)
 - Global Asset Allocation/Risk Parity overweight (-0.05%)
 - Public Real Estate underweight (-0.06%)
 - U.S. Large Cap Equity underweight (-0.06%)
 - U.S. Small/Mid Cap Equity overweight (-0.08%)
- Manager Selection Effect: -0.09%
 - Private Real Estate outperformed (+0.19%)
 - Real Assets outperformed (+0.17%)
 - Private Equity outperformed (+0.06%)
 - Non-U.S. Emerging Markets Equity underperformed (-0.06%)
 - Global Asset Allocation/Risk Parity underperformed (-0.11%)
 - Opportunistic Credit underperformed (-0.33%)
- 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)).



Attribution Effects 1 Year Ending March 31, 2019



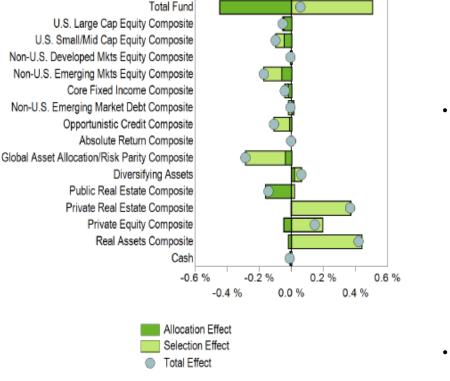
- Allocation Effect: -0.45%
 - U.S. Large Cap Equity underweight (-0.05%)
 - U.S. Small/Mid Cap Equity overweight (-0.05%)
 - Private Equity overweight (-0.05%)
 - Non-U.S. Emerging Mkts Equity overweight (-0.06%)
 - Public Real Estate underweight (-0.16%)
- Manager Selection Effect: +0.50%
 - Real Assets outperformed (+0.44%)
 - Private Real Estate outperformed (+0.37%)
 - Private Equity outperformed (+0.19%)
 - U.S. Small/Mid Cap Equity underperformed (-0.05%)
 - Opportunistic Credit underperformed (-0.09%)
 - Non-U.S. Emerging Mkts Equity underperformed (-0.11%)
 - Global Asset Allocation/Risk Parity underperformed (-0.25%)
- 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:

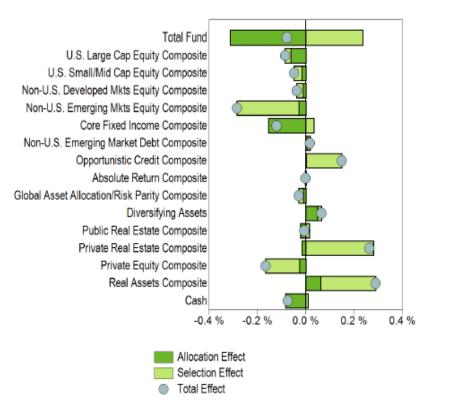
Allocation Effect: Measures the impact of the decision to over/under weight asset classes relative to Interim SAAP benchmark weights. (Return Asset Class Index – Total Interim Policy Index Return) × (Weight Asset Class Portfolio – Weight Asset Class Interim Policy Index).

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)).





Attribution Effects 3 Years Ending March 31, 2019



3 Year Excess Return: -0.08%

- Allocation Effect: -0.31%
 - Real Assets underweight (+0.06%)
 - Diversifying Assets underweight (+0.05%)
 - U.S. Large Cap Equity underweight (-0.06%)
 - Cash overweight (-0.08%)
 - Core Fixed Income overweight (-0.15%)
- Manager Selection Effect: +0.23%
 - Private Real Estate outperformed (+0.28%)
 - Real Assets outperformed (+0.23%)
 - Opportunistic Credit outperformed (+0.15%)
 - Private Equity underperformed (-0.14%)
 - Non U.S. Emerging Mkts Equity underperformed (-0.26%)
- 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)).

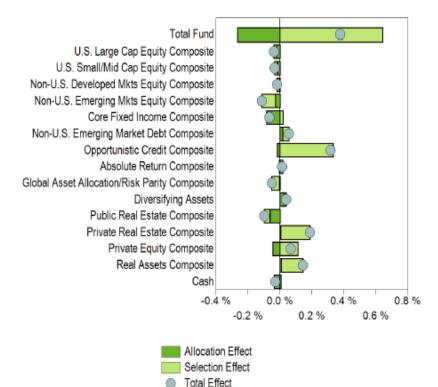


Attribution Effects

5 Years Ending March 31, 2019

5 Year Excess Return: +0.38%

- Allocation Effect: -0.26%
 - Public Real Estate underweight (-0.06%)
 - Core Fixed Income overweight (-0.08%)
 - Manager Selection Effect: +0.64%
 - Opportunistic Credit outperformed (+0.33%)
 - Private Real Estate outperformed (+0.18%)
 - Real Assets outperformed (+0.13%)
 - Private Equity outperformed (+0.11%)
 - Non-U.S. Emerging Mkts Equity underperformed (-0.08%)
- 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)).



TOTAL FUND RISK STATISTICS

				3 Yea	rs Ending Ma	arch 31, 2019						
	% 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	15.3%	13.4%	43	10.7%	4	-0.1%	30	0.1%	1	-1.1		1.0
S&P 500	-	13.5%	35	10.7%	5	0.0%	24	0.0%	1			1.0
U.S. Small/Mid Cap Equity Composite	2.6%	11.4%	95	13.6%	99	-0.3%	35	3.2%	92	-0.3		0.9
NMERB Small/Mid Cap Equity Blended Index		12.6%	78	14.3%	99	0.0%	24	0.0%	1			1.0
Non-U.S. Developed Mkts Equity Composite	4.7%	6.7%	67	10.5%	58	-0.6%	57	0.8%	1	-0.7		1.0
MSCI EAFE	-	7.3%	43	10.5%	56	0.0%	40	0.0%	1			1.0
Non-U.S. Emerging Mkts Equity Composite	9.4%	8.3%	55	11.6%	11	-1.3%	41	2.7%	23	-0.9		0.9
MSCI Emerging Markets	-	10.7%	9	13.0%	64	0.0%	12	0.0%	1			1.0
Core Fixed Income Composite	6.7%	2.4%	72	3.1%	83	0.3%	71	0.6%	30	0.6	75	1.0
BBgBarc US Aggregate TR	-	2.0%	94	3.0%	75	0.0%	99	0.0%	1			1.0
Non-U.S. Emerging Market Debt Composite	1.7%	5.1%	45	6.2%	37	1.3%	24	2.6%	77	0.2	34	0.8
Non-U.S. EMD Custom Benchmark		4.6%	57	7.6%	61	0.0%	55	0.0%	1			1.0
Opportunistic Credit Composite	18.1%	7.7%		1.8%		4.1%		2.2%		0.4		0.4
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index		6.8%		3.3%		0.0%		0.0%				1.0
Global Asset Allocation/Risk Parity Composite	9.8%	6.3%	58	3.9%	15	1.6%	29	3.9%	58	-0.4		0.5
GAA/Risk Parity Custom Index		8.0%	7	3.2%	1	0.0%	65	0.0%	1			1.0

		3 Years Er	nding March 31, 2019				
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank
Real Estate Composite	6.7%	10.6%	4	5.8%	90	9.7%	8
NCREIF Property Index		7.1%	66	2.9%	38	0.0%	88
Private Equity Composite	14.6%	12.6%	56	3.2%	1	13.0%	22
Cambridge Associates US All PE (1 Qtr Lag)		13.5%	40	6.8%	85	0.0%	79
Real Assets Composite	7.6%	10.1%	22	4.3%	20	12.8%	12
CPI + 4% (Seasonally Adjusted)	-	6.3%	50	0.6%	1	0.0%	62

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 97.2% because Absolute Return Composite and Cash Composite are not included.



TOTAL FUND RISK STATISTICS

				5 Yea	rs Ending Ma	arch 31, 2019						
	% 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	15.3%	10.8%	3	11.1%	6	0.0%	11	0.2%	1	-0.5		1.0
S&P 500		10.9%	2	11.2%	7	0.0%	11	0.0%	1			1.0
U.S. Small/Mid Cap Equity Composite	2.6%	7.3%	99	13.7%	99	0.0%	10	3.2%	94	-0.2		0.9
NMERB Small/Mid Cap Equity Blended Index		7.8%	95	14.4%	99	0.0%	11	0.0%	1			1.0
Non-U.S. Developed Mkts Equity Composite	4.7%	2.1%	54	11.5%	64	-0.2%	56	1.1%	1	-0.2		1.0
MSCI EAFE		2.3%	49	11.8%	82	0.0%	49	0.0%	1			1.0
Non-U.S. Emerging Mkts Equity Composite	9.4%	3.1%	45	13.2%	21	-0.2%	20	3.2%	40	-0.2		0.9
MSCI Emerging Markets		3.7%	15	15.3%	83	0.0%	15	0.0%	1			1.0
Core Fixed Income Composite	6.7%	2.9%	62	2.9%	69	0.2%	81	0.5%	21	0.4	51	1.0
BBgBarc US Aggregate TR		2.7%	76	2.9%	60	0.0%	90	0.0%	1			1.0
Non-U.S. Emerging Market Debt Composite	1.7%	1.9%	40	6.4%	31	2.0%	6	3.6%	79	0.7	1	0.7
Non-U.S. EMD Custom Benchmark		-0.5%	59	8.9%	62	0.0%	39	0.0%	1			1.0
Opportunistic Credit Composite	18.1%	6.0%		2.1%		3.8%		2.7%		0.6		0.4
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index		4.3%		3.7%		0.0%		0.0%				1.0
Global Asset Allocation/Risk Parity Composite	9.8%	3.5%	62	5.5%	17	-0.1%	31	4.4%	54	-0.4		0.7
GAA/Risk Parity Custom Index		5.1%	1	5.6%	21	0.0%	19	0.0%	1	-		1.0

5 Years Ending March 31, 2019														
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank							
Real Estate Composite	6.7%	11.4%	8	7.3%	99	12.3%	1							
NCREIF Property Index		9.1%	79	3.9%	43	0.0%	81							
Private Equity Composite	14.6%	13.3%	38	3.8%	5	13.9%	11							
Cambridge Associates US All PE (1 Qtr Lag)		11.4%	54	6.2%	77	0.0%	90							
Real Assets Composite	7.6%	7.9%	15	4.1%	21	6.7%	20							
CPI + 4% (Seasonally Adjusted)	-	5.6%	39	0.7%	1	0.0%	72							

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 97.2% because Absolute Return Composite and Cash Composite are not included.



PERFORMANCE DETAIL - TOTAL FUND & U.S. EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fund	13,020,197,300	100.0	5.1	97	4.0	6	5.4	6	8.9	23	6.9	9	10.7	17	9.0	Jul-83
Policy Index			<u>5.8</u>	95	<u>4.4</u>	4	<u>5.3</u>	6	<u>9.0</u>	20	<u>6.5</u>	18	<u>9.8</u>	50		Jul-83
Over/Under			-0.7		-0.4		0.1		-0.1		0.4		0.9			
60% MSCI ACWI (Net) / 40% FTSE WGBI			7.9	28	2.2	63	1.2	92	6.8	99	4.2	99	8.2	95		Jul-83
InvestorForce Public DB > \$1B Net Median			7.2		2.5		3.4		8.3		5.8		9.8		8.4	Jul-83
U.S. Equity Composite	2,331,966,167	17.9	13.7	76	4.6	19	8.4	26	13.0	57	10.4	9	15.7	39	11.2	Jan-85
Russell 3000			<u>14.0</u>	52	<u>4.7</u>	18	<u>8.8</u>	21	<u>13.5</u>	36	<u>10.4</u>	10	<u>16.0</u>	18	<u>11.1</u>	Jan-85
Over/Under			-0.3		-0.1		-0.4		-0.5		0.0		-0.3		0.1	
InvestorForce Public DB > \$1 Billion US Equity Net			14.1		3.2		7.4		13.2		9.8		15.4		11.2	Jan-85
Median																
U.S. Large Cap Equity Composite	1,989,526,284	15.3	13.6	78	5.8	2	9.5	8	13.4	43	10.8	3	15.9	30	6.5	Aug-99
S&P 500			<u>13.6</u>	78	<u>5.9</u>	2	<u>9.5</u>	7	<u>13.5</u>	35	<u>10.9</u>	2	<u>15.9</u>	25	<u>5.9</u>	Aug-99
Over/Under			0.0		-0.1		0.0		-0.1		-0.1		0.0		0.6	
InvestorForce Public DB > \$1 Billion US Equity Net			14.1		3.2		7.4		13.2		9.8		15.4		6.4	Aug-99
Median S&P 500 Index Fund	1,989,526,284	15.3	13.6	25	E 0	25	9.5	28	13.4	05	10.8	17	15.9	17	5.4	Jan-00
S&P 500 Index Fund	1,909,020,204	10.0		35 35	5.8	35 35		20 28		25 21		17 17		16		Jan-00 Jan-00
Over/Under			<u>13.6</u> 0.0	30	<u>5.9</u> -0.1	30	<u>9.5</u> 0.0	20	<u>13.5</u> -0.1	21	<u>10.9</u> -0.1	17	<u>15.9</u> 0.0	10	<u>5.5</u> -0.1	Jan-00
eV US Large Cap Core Equity Net Median			0.0 13.1		-0.1 4.1		0.0 6.9		-0.1 12.1		-0.1 9.4		0.0 14.8		-0.1 6.6	Jan-00
U.S. Small/Mid Cap Equity Composite	342.439.883	2.6	13.1 14.4	28	-1.4	99	0.9 3.0	99	11.4	95	9.4 7.3	99	14.0 14.4	97	7.3	Aug-99
NMERB Small/Mid Cap Equity Composite NMERB Small/Mid Cap Equity Blended Index	342,439,003	2.0	<u>14.4</u> <u>15.8</u>	4	<u>-1.4</u>	99 99		98 98	<u>11.4</u>	95 78	7.8	95	<u>14.4</u> <u>15.8</u>	35	<u>8.2</u>	Aug-99
Over/Under			<u>15.6</u> -1.4	4	<u>-1.2</u> -0.2	99	<u>4.5</u> -1.5	90	<u>-1.2</u>	70	<u>7.0</u> -0.5	90	<u>15.0</u> -1.4	30	<u>0.2</u> -0.9	Aug-99
InvestorForce Public DB > \$1 Billion US Equity Net			-1.4		-0.2		-1.5		-1.2		-0.5		-1.4		-0.9	
Median			14.1		3.2		7.4		13.2		9.8		15.4		6.4	Aug-99
S&P 400 Mid-Cap	342,439,665	2.6	14.4	65	-1.4	70	3.0	61							4.3	Nov-17
Russell 2500	012,100,000	2.5	<u>15.8</u>	49	<u>-1.2</u>	68	<u>4.5</u>	51	<u>12.6</u>	40	<u>7.8</u>	55	<u>16.2</u>	40	<u>5.6</u>	Nov-17
Over/Under			-1.4	10	-0.2	50	-1.5	01	12.0	10	<u>1.0</u>	00	<u>10.2</u>	10	-1.3	
eV US Mid Cap Equity Net Median			15.7		2.2		4.6		11.2		8.1		15.7		6.4	Nov-17
			10.1		2.2		1.0		11.2		0.1		10.1		0.7	1107 11

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 \$63,124 from Legacy Assets.

4 - U.S. Small/Mid Cap Equity Composite includes \$218 from Lord Abbett.

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	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Equity Composite	1,830,858,274	14.1	9.9	74	-0.8	27	-6.7	71	7.8	59	2.8	73	7.8	95	6.2	Jul-95
MSCI ACWI ex USA Over/Under			<u>10.3</u> -0.4	55	<u>-1.6</u> 0.8	52	<u>-4.2</u> -2.5	42	<u>8.1</u> -0.3	39	<u>2.6</u> 0.2	86	<u>8.8</u> -1.0	76		Jul-95
InvestorForce Public DB > \$1 Billion Global ex-US Equity Net Median			10.5		-1.6		-5.0		7.9		3.0		9.4		5.8	Jul-95
Non-U.S. Developed Mkts Equity Composite	612,723,499	4.7	10.3	49	-2.4	60	-3.9	38	6.7	67	2.1	54	8.3	79	5.9	Sep-95
MSCI EAFE Over/Under			<u>10.0</u> 0.3	65	<u>-2.5</u> 0.1	67	<u>-3.7</u> -0.2	37	<u>7.3</u> -0.6	43	<u>2.3</u> -0.2	49	<u>9.0</u> -0.7	58	<u>4.8</u> 1.1	Sep-95
InvestorForce Public DB Dev Mkt ex-US Eq Net Median			10.3		-2.4		-4.6		7.0		2.2		9.6		6.0	Sep-95
Pyramis	294,202,548	2.3	10.6	41	-2.5	32	-4.6	43	5.7	75	1.5	83	8.5	84	6.9	Jun-03
MSCI EAFE Over/Under			<u>10.0</u> 0.6	53	<u>-2.5</u> 0.0	32	<u>-3.7</u> -0.9	33	<u>7.3</u> -1.6	43	<u>2.3</u> -0.8	67	<u>9.0</u> -0.5	74	<u>6.9</u> 0.0	Jun-03
eV All EAFE Equity Net Median			10.1		-4.5		-5.6		6.9		3.0		9.9		7.5	Jun-03
BlackRock MSCI EAFE	318,520,952	2.4	10.1	50	-2.4	31	-3.2	29	7.7	31	2.7	57			4.6	Aug-13
MSCI EAFE Over/Under			<u>10.0</u> 0.1	53	<u>-2.5</u> 0.1	32	<u>-3.7</u> 0.5	33	<u>7.3</u> 0.4	43	<u>2.3</u> 0.4	67	<u>9.0</u>	74	<u>4.2</u> 0.4	Aug-13
eV All EAFE Equity Net Median			10.1		-4.5		-5.6		6.9		3.0		9.9		4.8	Aug-13

1 - InvestorForce Public DB > B > Dev Mkt ex-US Eq Net is unavailable, universe includes all public funds. Note: Performance shown is net of fees. Fiscal year ends June 30.



PERFORMANCE DETAIL - EMERGING MARKET EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Emerging Mkts Equity Composite	1,218,134,775	9.4	9.7	40	0.0	53	-8.3	44	8.3	55	3.1	45	7.5	91	6.4	Sep-00
MSCI Emerging Markets			<u>9.9</u>	20	<u>0.6</u>	43	<u>-7.4</u>	26	<u>10.7</u>	9	<u>3.7</u>	15	<u>8.9</u>	51	<u>7.6</u>	Sep-00
Over/Under			-0.2		-0.6		-0.9		-2.4		-0.6		-1.4		-1.2	
InvestorForce Public DB > \$1 Billion Emg Mkt Eq Net Median			9.3		0.0		-8.8		8.3		3.0		9.0		6.5	Sep-00
Robeco	349,253,203	2.7	12.6	24	4.0	8	-6.2	27	12.6	18	5.0	21	9.2	64	8.7	Nov-08
MSCI Emerging Markets			<u>9.9</u>	57	<u>0.6</u>	38	<u>-7.4</u>	36	<u>10.7</u>	40	<u>3.7</u>	51	<u>8.9</u>	72	<u>8.6</u>	Nov-08
Over/Under			2.7		3.4		1.2		1.9		1.3		0.3		0.1	
eV Emg Mkts Equity Net Median			10.3		-0.3		-8.6		9.9		3.7		9.8		9.1	Nov-08
Neuberger Berman Emerging Markets	354,998,200	2.7	10.6	45	-1.4	62	-10.1	66	11.1	33	4.3	35			4.8	Aug-13
MSCI Emerging Markets			<u>9.9</u>	57	<u>0.6</u>	38	<u>-7.4</u>	36	<u>10.7</u>	40	<u>3.7</u>	51	<u>8.9</u>	72	<u>4.3</u>	Aug-13
Over/Under			0.7		-2.0		-2.7		0.4		0.6				0.5	
eV Emg Mkts Equity Net Median			10.3		-0.3		-8.6		9.9		3.7		9.8		4.3	Aug-13
Mondrian Emerging Markets Small Cap	247,989,670	1.9	7.0	89	-3.5	39	-8.5	21	2.3	98	0.0	90			1.0	Aug-13
MSCI Emerging Markets Small Cap			<u>7.8</u>	82	<u>-4.2</u>	52	<u>-12.4</u>	59	<u>5.9</u>	73	<u>1.8</u>	76	<u>10.4</u>	99	<u>2.9</u>	Aug-13
Over/Under			-0.8		0.7		3.9		-3.6		-1.8				-1.9	
eV Emg Mkts Small Cap Equity Net Median			9.5		-3.9		-11.3		7.7		3.6		13.7		3.9	Aug-13
Parametric Emerging Markets Equity	265,893,702	2.0	7.4	87	0.3	41	-8.6	50	7.6	82					2.7	Jun-15
MSCI Emerging Markets			<u>9.9</u>	57	<u>0.6</u>	38	<u>-7.4</u>	36	<u>10.7</u>	40	<u>3.7</u>	51	<u>8.9</u>	72	<u>3.8</u>	Jun-15
Over/Under			-2.5		-0.3		-1.2		-3.1						-1.1	
eV Emg Mkts Equity Net Median			10.3		-0.3		-8.6		9.9		3.7		9.8		3.5	Jun-15

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	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Fixed Income Composite	3,451,803,655	26.5	2.8	89	3.0	92	3.9	26	6.0	6	4.9	6	8.2	4	3.1	Jan-85
BBgBarc US Aggregate TR Over/Under			<u>2.9</u> -0.1	81	<u>4.6</u> -1.6	15	<u>4.5</u> -0.6	8	<u>2.0</u> 4.0	98	<u>2.7</u> 2.2	71	<u>3.8</u> 4.4	99	<u>6.8</u> -3.7	Jan-85
InvestorForce Public DB > \$1 Billion Fixed Income Net Median			3.3		4.0		3.4		4.1		3.1		6.0		7.3	Jan-85
Core Fixed Income Composite	868,997,873	6.7	3.1	57	4.6	22	4.2	50	2.4	72	2.9	62	5.3	61	5.2	Dec-99
BBgBarc US Aggregate TR Over/Under			<u>2.9</u> 0.2	68	<u>4.6</u> 0.0	15	<u>4.5</u> -0.3	23	<u>2.0</u> 0.4	94	<u>2.7</u> 0.2	76	<u>3.8</u> 1.5	97	<u>4.9</u> 0.3	Dec-99
InvestorForce Public DB > \$1 Billion US Fixed Income Net Median			3.2		4.2		4.2		2.9		3.1		5.6		5.3	Dec-99
Core Fixed Income	868,997,873	6.7	3.1	55	4.6	49	4.2	70	2.4	39					2.2	Apr-15
BBgBarc US Aggregate TR Over/Under			<u>2.9</u> 0.2	72	<u>4.6</u> 0.0	44	<u>4.5</u> -0.3	42	<u>2.0</u> 0.4	64	<u>2.7</u>	58	<u>3.8</u>	80	<u>2.0</u> 0.2	Apr-15
eV US Core Fixed Inc Net Median			3.2		4.6		4.4		2.2		2.8		4.3		2.1	Apr-15



PERFORMANCE DETAIL - EMERGING MARKET DEBT

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Non-U.S. Emerging Market Debt Composite	222,211,575	1.7	4.4	61	3.6	56	-2.9	52	5.1	45	1.9	40			1.6	Sep-11
Non-U.S. EMD Custom Benchmark Over/Under			<u>4.9</u> -0.5	55	<u>5.6</u> -2.0	32	<u>-1.8</u> -1.1	45	<u>4.6</u> 0.5	57	<u>-0.5</u> 2.4	59			<u>-0.6</u> 2.2	Sep-11
InvestorForce All DB Emg Mkt Fix Inc Net Median	100 170 010	0.0	5.0	00	4.2	00	-2.6	00	4.9	05	0.4	40			2.2	Sep-11
EMSO	102,479,042	0.8	2.8	93	0.7	99	-3.2	63	4.6	65	4.0	43			4.2	Sep-11
JP Morgan GBI - EM Global Diversified Index Over/Under			<u>2.9</u> -0.1	91	<u>3.2</u> -2.5	79	<u>-7.6</u> 4.4	83	<u>3.3</u> 1.3	85	<u>-0.8</u> 4.8	85	<u>4.4</u>	80	<u>-0.8</u> 5.0	Sep-11
eV All Emg Mkts Fixed Inc Net Median			5.4		5.7		0.1		5.3		3.4		7.8		3.8	Sep-11
Prudential	119,714,467	0.9	5.8	38	6.1	45	-2.6	60	5.6	47					8.0	Feb-16
50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified			<u>4.9</u>	62	<u>5.6</u>	51	<u>-1.8</u>	57	<u>4.6</u>	64	<u>2.4</u>	57	<u>6.5</u>	66	<u>6.9</u>	Feb-16
Over/Under eV All Emg Mkts Fixed Inc Net Median			0.9 5.4		0.5 5.7		- <mark>0.8</mark> 0.1		1.0 5.3		3.4		7.8		1.1 6.9	Feb-16

1 - Non-U.S. Emerging Market Debt Composite market value includes \$18,076 in terminated manager account.

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



PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Opportunistic Credit Composite	2,360,594,208	18.1	2.5		2.4		4.4		7.7		6.0		11.4		8.3	May-08
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.0</u>	May-08
Over/Under			-3.0		-1.7		-0.4		0.9		1.7		2.4		2.3	
ICE BofAML BB-B US High Yield Constrained TR			7.3		5.7		6.4		7.8		4.7		10.1		7.0	May-08
Beachpoint Combined	508,416,665	3.9	4.0		2.3		3.8		7.5		4.8		10.6		6.7	Mar-04
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.7</u>	Mar-04
Over/Under			-1.5		-1.8		-1.0		0.7		0.5		1.6		1.0	
Beachpoint Total Return	508,416,665	3.9	4.0		2.3		3.8		7.5		4.8		10.6		7.0	Jun-08
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.0</u>	Jun-08
Over/Under			-1.5		-1.8		-1.0		0.7		0.5		1.6		1.0	
Pimco Disco Combined	115,017,816	0.9	2.5		4.2		5.9		11.0		8.3		13.8		11.7	Jul-08
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.2</u>	Jul-08
Over/Under			-3.0		0.1		1.1		4.2		4.0		4.8		5.5	
Pimco Disco II	115,017,816	0.9	2.5		4.2		5.9		11.0		8.3				13.1	Oct-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.1</u>	Oct-11
Over/Under			-3.0		0.1		1.1		4.2		4.0				7.0	
GoldenTree Combined	194,634,242	1.5	2.9		3.9		5.4		8.4		5.7				8.9	Oct-09
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.5</u>	Oct-09
Over/Under			-2.6		-0.2		0.6		1.6		1.4				2.4	
Goldentree II	194,634,242	1.5	2.9		3.9		5.4		8.4		5.7				8.5	Sep-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.9</u>	Sep-11
Over/Under			-2.6		-0.2		0.6		1.6		1.4				2.6	
Medley Capital	75,052,621	0.6	0.0		-8.3		-9.6		-2.4		1.2				3.7	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.3</u>	Aug-11
Over/Under			-5.5		-12.4		-14.4		-9.2		-3.1				-1.6	



New Mexico Educational Retirement Board

PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Waterfall - Eden	298,472,519	2.3	0.5		2.7		4.2		10.1		6.7				9.4	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index Over/Under			<u>5.5</u> -5.0		<u>4.1</u> -1.4		<u>4.8</u> -0.6		<u>6.8</u> 3.3		<u>4.3</u> 2.4		<u>9.0</u>		<u>5.3</u> 4.1	Aug-11
Waterfall - Victoria	87,972,654	0.7	0.8		5.0		9.2		11.8		10.5				10.4	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index Over/Under	0, 10, 700, 700, 700, 700, 700, 700, 700		<u>5.5</u> -4.7		<u>4.1</u> 0.9		<u>4.8</u> 4.4	-	<u>6.8</u> 5.0		<u>4.3</u> 6.2		<u>9.0</u>	-	<u>5.3</u> 5.1	Aug-11
Elegantree Fund	18.013.286	0.1	-4.7		4.6		4.4 6.8		7.9		8.1				9.7	Mar-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index	10,013,200	0.1	<u>5.5</u>		4.0 <u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.3</u>	Mar-12
Over/Under			-3.7		0.5		2.0		1.1		3.8				4.4	
Gramercy Distressed Opp II	101,035,705	0.8	2.2		-4.9		-5.1		-0.7		-1.2				2.0	Jul-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.4</u>	Jul-12
Over/Under			-3.3		-9.0		-9.9		-7.5		-5.5				-3.4	
ICE Canyon	60,262,275	0.5	3.5		1.1		1.7		10.9		1.6				2.7	Jun-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.5</u>	Jun-12
Over/Under Lone Star VIII	23.152.880	0.2	-2.0 -0.9		-3.0 1.7		-3.1 0.8		4.1 -4.8		-2.7 7.6				<mark>-2.8</mark> 8.7	Oct-13
50% CS Leveraged Loan / 50% ICE BofA ML US HY	23,152,000	0.2	-0.9		1.7		0.0		-4.0		1.0				0.7	Oct-13
BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.8</u>	Oct-13
Over/Under	40,400,007	0.4	-6.4		-2.4		-4.0		-11.6		3.3				3.9	0.144
Marathon European Credit Opportunity I 50% CS Leveraged Loan / 50% ICE BofA ML US HY	19,426,887	0.1	6.8		27.4		29.3		16.5		11.9				11.3	Oct-11
BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>6.1</u>	Oct-11
Over/Under			1.3		23.3		24.5		9.7		7.6				5.2	
Marathon European Credit Opportunity II	87,624,331	0.7	9.5		9.0		12.1		12.7		9.3				9.1	Mar-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.3</u>	Mar-14
Over/Under			4.0		4.9		7.3		5.9		5.0				4.8	



New Mexico Educational Retirement Board

PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Lone Star IX	49,197,330	0.4	-2.9		-1.9		-1.0		9.8						-15.2	Apr-15
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.6</u>	Apr-15
Over/Under			-8.4		-6.0		-5.8		3.0						-19.8	
Kildare European Partners I LP	20,578,467	0.2	6.9		20.8		27.4		19.8						14.2	May-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.3</u>	May-14
Over/Under			1.4		16.7		22.6		13.0						9.9	
Black Forest	55,392,408	0.4	3.2		5.4		7.5		8.9						7.6	Aug-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.3</u>	Aug-14
Over/Under			-2.3		1.3		2.7		2.1						3.3	
Gramercy Distressed Opp III	95,017,400	0.7	1.3		-3.3		-3.4		1.4						-1.9	Jan-16
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>7.0</u>	Jan-16
Over/Under			-4.2		-7.4		-8.2		-5.4						-8.9	
GSO Capital Opp III	56,520,419	0.4	0.9		6.2		9.1								8.0	Oct-16
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.0</u>	Oct-16
Over/Under			-4.6		2.1		4.3								3.0	



PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Cross Ocean ESS II	84,452,216	0.6	-1.9		-0.4		1.3								10.8	May-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.2</u>	May-17
Over/Under OWS CREDIT OPPORTUNITY FD	116,171,800	0.9	-7.4 0.9		-4.5 4.3		-3.5 6.6								6.6 8.9	Jul-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index	110,171,000	0.9	<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		 <u>6.8</u>		<u>4.3</u>		 <u>9.0</u>		<u>4.2</u>	Jul-17
Over/Under	00.070.000	0.0	-4.6		0.2		1.8								4.7	A 47
TAIGA SPECIAL OPP DAC LP	82,078,628	0.6	1.7		3.9		9.0								11.5	Aug-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>3.9</u>	Aug-17
Over/Under	62,858,688	0.5	- <mark>3.8</mark> 8.6		-0.2 -2.5		4.2 7.3								7.6 -0.1	Jul-17
Sutherland Asset Management 50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index	02,030,000	0.5	0.0 <u>5.5</u>		-2.5 <u>4.1</u>		7.5 <u>4.8</u>		 <u>6.8</u>		 <u>4.3</u>		 <u>9.0</u>		-0.1	Jul-17 Jul-17
Over/Under			3.1		-6.6		2.5								-4.3	
OHA Strategic Credit II	16.786.515	0.1	3.6		17.1		21.0								29.7	Dec-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>	-	<u>4.0</u>	Dec-17
Over/Under			-1.9		13.0		16.2								25.7	
Lone Star X	71,400,748	0.5	1.3		5.8		19.7								-34.8	Jan-18
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>4.0</u>	Jan-18
Over/Under			-4.2		1.7		14.9								-38.8	
Kildare European Partners II LP	12,530,109	0.1	2.8												0.5	Nov-18
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>2.6</u>	Nov-18
Over/Under			-2.7												-2.1	
Riverstone Credit Partners II	44,594,630	0.3	7.5												-7.4	Dec-18
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>3.3</u>	Dec-18
Over/Under			2.0												-10.7	
RCP II N Strategic Credit	3,932,967	0.0	-1.2												-1.2	Jan-19
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>5.5</u>		<u>4.1</u>		<u>4.8</u>		<u>6.8</u>		<u>4.3</u>		<u>9.0</u>		<u>5.5</u>	Jan-19
Over/Under			-6.7												-6.7	



PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Absolute Return Composite	400,836	0.0													- 0	0 (00
Global Asset Allocation/Risk Parity Composite	1,281,761,234	9.8	4.6	72	2.3	36	2.1	36	6.3	58 7	3.5	62			7.0	Oct-09
GAA/Risk Parity Custom Index Over/Under			<u>1.2</u> 3.4	86	<u>3.5</u> -1.2	12	<u>4.6</u> -2.5	20	<u>8.0</u> -1.7	7	<u>5.1</u> -1.6	1	<u>8.6</u>	14	<u>6.6</u> 0.4	Oct-09
InvestorForce Public DB > \$1 Billion Global Tactical Net Median			7.8		1.2		0.7		6.6		3.6		8.0		7.0	Oct-09
Global Asset Allocation Composite	586,641,213	4.5	0.0	93	1.0	53	-0.2	85	5.4	84	2.0	96			2.2	Nov-12
Credit Suisse Hedge Global Macro Over/Under			<u>6.5</u> -6.5	65	<u>2.3</u> -1.3	36	<u>3.6</u> -3.8	29	<u>4.0</u> 1.4	93	<u>2.2</u> -0.2	95	<u>4.7</u>	99	<u>2.6</u> -0.4	Nov-12
InvestorForce Public DB > \$1 Billion Global Tactical Net Median			7.8		1.2		0.7		6.6		3.6		8.0		3.6	Nov-12
Bridgewater Pure Alpha	303,354,677	2.3	-3.7	99	1.8	37	2.8	24	5.1	56	3.0	47			6.3	Oct-09
Credit Suisse Hedge Global Macro			<u>6.5</u>	60	<u>2.3</u>	26	<u>3.6</u>	15	<u>4.0</u>	64	<u>2.2</u>	69	<u>4.7</u>	86	<u>4.3</u>	Oct-09
Over/Under			-10.2		-0.5		-0.8		1.1		0.8				2.0	
eV Global TAA Net Median			7.8		0.7		0.0		5.4		3.0		7.6		5.7	Oct-09
PIMCO All Asset All Authority	283,286,537	2.2	3.7	85	0.4	56	-2.8	80	5.5	47	0.9	84			1.2	Jul-13
Credit Suisse Hedge Global Macro			<u>6.5</u>	60	<u>2.3</u>	26	<u>3.6</u>	15	<u>4.0</u>	64	<u>2.2</u>	69	<u>4.7</u>	86	<u>2.3</u>	Jul-13
Over/Under			-2.8		-1.9		-6.4		1.5		-1.3				-1.1	
eV Global TAA Net Median			7.8		0.7		0.0		5.4		3.0		7.6		4.1	Jul-13
Risk Parity	695,120,020	5.3	9.1	24	3.4	13	4.2	24	7.2	14	5.0	1			4.3	Nov-12
GAA/Risk Parity Custom Index Over/Under			<u>1.2</u> 7.9	86	<u>3.5</u> -0.1	12	<u>4.6</u> -0.4	20	<u>8.0</u> -0.8	7	<u>5.1</u> -0.1	1	<u>8.6</u>	14	<u>6.9</u> -2.6	Nov-12
InvestorForce Public DB > \$1 Billion Global Tactical Net Median			7.8		1.2		0.7		6.6		3.6		8.0		3.6	Nov-12
Bridgewater All Weather	465,433,034	3.6	7.9	49	2.8	23	3.9	13	7.2	29	4.1	34			7.6	Oct-09
60% MSCI World (Gross) / 40% FTSE WGBI			<u>8.2</u>	44	<u>2.6</u>	24	<u>2.4</u>	26	<u>7.2</u>	29	<u>4.8</u>	25	<u>8.8</u>	33	<u>6.4</u>	Oct-09
Over/Under			-0.3		0.2		1.5		0.0		-0.7				1.2	
eV Global TAA Net Median			7.8		0.7		0.0		5.4		3.0		7.6		5.7	Oct-09
PanAgora	229,686,987	1.8	11.4	13	4.6	6	4.6	10	7.0	30	6.9	2			7.7	Dec-13
GAA/Risk Parity Custom Index			<u>1.2</u>	95	<u>3.5</u>	12	<u>4.6</u>	10	<u>8.0</u>	15	<u>5.1</u>	20	<u>8.6</u>	37	<u>5.2</u>	Dec-13
Over/Under			10.2		1.1		0.0		-1.0		1.8				2.5	
eV Global TAA Net Median			7.8		0.7		0.0		5.4		3.0		7.6		3.3	Dec-13

1 - Absolute Return Composite includes \$400,836 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.



New Mexico Educational Retirement Board

PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Diversifying Assets	265,033,977	2.0	1.6		7.8		10.1								10.3	Feb-18
3-Month LIBOR + 2% Over/Under			<u>1.2</u> 0.4		<u>3.5</u> 4.3		<u>4.6</u> 5.5		<u>3.7</u>		<u>3.1</u>		<u>2.8</u>		<u>4.5</u> 5.8	Feb-18
EIG Energy Fund XVII	37,823,509	0.3	-7.8		5.4		4.5								4.5	Apr-18
3-Month LIBOR + 2% Over/Under			<u>1.2</u> -9.0		<u>3.5</u> 1.9		<u>4.6</u> -0.1		<u>3.7</u>		<u>3.1</u>		<u>2.8</u>		<u>4.6</u> -0.1	Apr-18
The 1609 Fund LTD.	110,071,469	0.8	0.0		5.8		9.3								9.7	Feb-18
3- <i>Month LIBOR</i> + 2% Over/Under			<u>1.2</u> -1.2		<u>3.5</u> 2.3		<u>4.6</u> 4.7		<u>3.7</u>		<u>3.1</u>		<u>2.8</u>		<u>4.5</u> 5.2	Feb-18
OLEA SPECIAL OPPS OFFSHORE I	76,200,799	0.6	10.4												7.2	Oct-18
3-Month LIBOR + 2% Over/Under			<u>1.2</u> 9.2		<u>3.5</u>		<u>4.6</u>		<u>3.7</u>		<u>3.1</u>		<u>2.8</u>		<u>2.4</u> 4.8	Oct-18
Orchard Liquid Credit Fund	40,938,200	0.3	1.6												2.3	Oct-18
3-Month LIBOR + 2% Over/Under			<u>1.2</u> 0.4		<u>3.5</u>		<u>4.6</u>		<u>3.7</u>		<u>3.1</u>		<u>2.8</u>		<u>2.4</u> -0.1	Oct-18



PERFORMANCE DETAIL - REAL ESTATE

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Real Estate Composite	869,094,559	6.7	6.8	4	9.1	1	17.1	1	10.6	4	11.4	8	18.1	1	10.3	Dec-03
NCREIF Property Index			<u>1.8</u>	36	<u>4.9</u>	46	<u>6.8</u>	62	<u>7.1</u>	66	<u>9.1</u>	79	<u>8.5</u>	30	<u>9.0</u>	Dec-03
Over/Under			5.0		4.2		10.3		3.5		2.3		9.6		1.3	
Wilshire REIT			16.0	1	8.7	1	19.3	1	5.4	94	9.0	80	18.7	1	9.3	Dec-03
InvestorForce Public DB > \$1 Billion Real Estate Net Median			1.5		4.8		7.6		7.7		9.7		7.5		7.5	Dec-03
Public Real Estate Composite	284,159,594	2.2	16.8	1	8.5	2	20.3	1	5.6	94	7.7	93	18.3	1	9.0	Dec-03
Wilshire REIT			<u>16.0</u>	1	<u>8.7</u>	1	<u>19.3</u>	1	<u>5.4</u>	94	<u>9.0</u>	80	<u>18.7</u>	1	<u>9.3</u>	Dec-03
Over/Under			0.8		-0.2		1.0		0.2		-1.3		-0.4		-0.3	
InvestorForce Public DB > \$1 Billion Real Estate Net Median			1.5		4.8		7.6		7.7		9.7		7.5		7.5	Dec-03
Brookfield	284,159,594	2.2	16.8	31	8.5	68	20.3	13	5.9	47	7.2	96			9.3	Jul-11
MSCI US REIT			<u>15.9</u>	56	<u>8.6</u>	68	<u>19.2</u>	33	<u>4.6</u>	86	<u>7.6</u>	86	<u>17.0</u>	78	<u>8.1</u>	Jul-11
Over/Under			0.9		-0.1		1.1		1.3		-0.4				1.2	
eV US REIT Net Median			16.2		9.3		18.4		5.7		9.3		18.6		9.5	Jul-11
Private Real Estate Composite	584,934,966	4.5	2.4	9	9.3	2	15.6	2	13.6	1	13.7	1	12.7	12	8.7	Jan-08
NCREIF Property Index			<u>1.8</u>	15	<u>4.9</u>	56	<u>6.8</u>	67	<u>7.1</u>	66	<u>9.1</u>	73	<u>8.5</u>	27	<u>6.2</u>	Jan-08
Over/Under			0.6		4.4		8.8		6.5		4.6		4.2		2.5	
InvestorForce Public DB Real Estate Priv Net Median			1.6		5.2		7.2		7.8		9.9		7.8		4.3	Jan-08
U.S. Private Real Estate	584,934,966	4.5	2.4		9.3		15.6		13.6		13.8		13.1		9.3	Jan-08
NCREIF Property Index			<u>1.8</u>		<u>4.9</u>		<u>6.8</u>		<u>7.1</u>		<u>9.1</u>		<u>8.5</u>		<u>6.2</u>	Jan-08
Over/Under			0.6		4.4		8.8		6.5		4.7		4.6		3.1	

1 - InvestorForce 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	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Private Equity Composite	1,904,430,050	14.6	-0.9	57	7.7	45	11.9	45	12.6	56	13.3	38	13.9	24	7.1	Jun-06
Cambridge Associates US All PE (1 Qtr Lag)			<u>-2.1</u>	98	<u>7.1</u>	59	<u>10.0</u>	68	<u>13.5</u>	40	<u>11.4</u>	54	<u>13.7</u>	30	<u>12.1</u>	Jun-06
Over/Under			1.2		0.6		1.9		-0.9		1.9		0.2		-5.0	
InvestorForce Public DB > \$1 Billion Private Equity Net Median			-0.5		7.6		11.6		12.9		12.1		12.0		10.3	Jun-06
Real Assets Composite	989,079,424	7.6	-0.6	89	6.3	17	12.2	5	10.1	22	7.9	15	5.6	56	2.9	Jul-08
CPI + 4% (Seasonally Adjusted)			<u>1.6</u>	56	<u>4.2</u>	31	<u>5.9</u>	43	<u>6.3</u>	50	<u>5.6</u>	39	<u>5.9</u>	37	<u>5.5</u>	Jul-08
Over/Under			-2.2		2.1		6.3		3.8		2.3		-0.3		-2.6	
InvestorForce Public DB > \$1 Billion Real Assets/Commodities Net Median			3.2		2.5		5.3		6.3		4.9		5.6		2.7	Jul-08
Infrastructure Composite	381,704,778	2.9	0.2		3.6		5.0		8.8		8.0		5.4		3.0	Jul-08
Infrastructure	354,130,523	2.7	1.2		4.3		6.3		8.0		7.1		5.0		2.7	Jul-08
CPI + 4% (Seasonally Adjusted)			<u>1.6</u>		<u>4.2</u>		<u>5.9</u>		<u>6.3</u>		<u>5.6</u>		<u>5.9</u>		<u>5.5</u>	Jul-08
Over/Under			-0.4		0.1		0.4		1.7		1.5		-0.9		-2.8	
International Infrastructure	27,574,255	0.2	-11.1		-4.4		-10.2		29.3		20.3				-2.4	Jan-13
CPI + 4% (Seasonally Adjusted)			<u>1.6</u>		<u>4.2</u>		<u>5.9</u>		<u>6.3</u>		<u>5.6</u>		<u>5.9</u>		<u>5.6</u>	Jan-13
Over/Under			-12.7		-8.6		-16.1		23.0		14.7				-8.0	
Natural Resources	607,374,646	4.7	-1.0		8.2		17.4		10.7		7.0		4.6		4.5	Mar-09
Harvest Fund	52,225,774	0.4	20.9		1.5		15.5								1.3	Aug-16
Alerian MLP Index			<u>16.8</u>		<u>3.0</u>		<u>15.1</u>		<u>5.7</u>		<u>-4.7</u>		<u>10.1</u>		<u>-0.7</u>	Aug-16
Over/Under			4.1		-1.5		0.4								2.0	
Energy	245,578,790	1.9	-6.2		19.0		44.1		27.6		4.9				4.1	Jan-14
CPI + 4% (Seasonally Adjusted)			<u>1.6</u>		<u>4.2</u>		<u>5.9</u>		<u>6.3</u>		<u>5.6</u>		<u>5.9</u>		<u>5.6</u>	Jan-14
Over/Under			-7.8		14.8		38.2		21.3		-0.7				-1.5	
Agriculture Composite	113,237,987	0.9	-0.1		2.1		5.1		2.9		3.7				3.9	Aug-12
NCREIF Farmland			<u>0.7</u>		<u>4.9</u>		<u>6.1</u>		<u>6.4</u>		<u>8.2</u>		<u>11.1</u>		<u>11.4</u>	Aug-12
Over/Under			-0.8		-2.8		-1.0		-3.5		-4.5				-7.5	
Timber Composite	95,119,591	0.7	1.2		3.5		3.2		4.5		5.3		4.0		4.0	Mar-09
NCREIF Timberland Index			<u>0.1</u>		<u>2.1</u>		<u>2.6</u>		<u>3.4</u>		<u>4.7</u>		<u>3.8</u>		<u>3.8</u>	Mar-09
Over/Under			1.1		1.4		0.6		1.1		0.6		0.2		0.2	

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.

3 - Timber Composite contains Brookfield Brazil Timber, Conservation Forestry II, Conservation Forestry IV, and ETO II Operating Partnership.

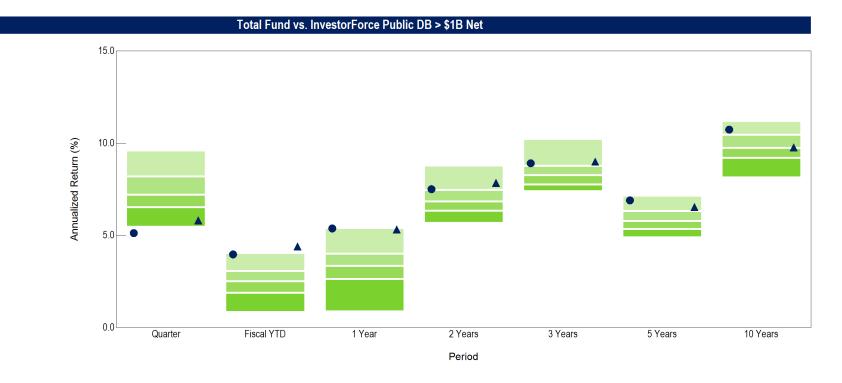


PERFORMANCE DETAIL - CASH

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Mitigation Banking	53,776,429	0.4	-0.7		2.7		1.1		7.3		8.8				1.2	Mar-11
CPI + 4% (Seasonally Adjusted) Over/Under			<u>1.6</u> -2.3		<u>4.2</u> -1.5		<u>5.9</u> -4.8		<u>6.3</u> 1.0		<u>5.6</u> 3.2		<u>5.9</u>		<u>5.8</u> -4.6	Mar-11
Water Property Investor, L.P.	47,436,075	0.4	0.1		0.0		-2.3		0.5						3.1	Jan-15
CPI + 4% (Seasonally Adjusted) Over/Under			<u>1.6</u> -1.5		<u>4.2</u> -4.2		<u>5.9</u> -8.2		<u>6.3</u> -5.8		<u>5.6</u>		<u>5.9</u>		<u>5.8</u> -2.7	Jan-15
Cash	95,705,999	0.7														
Cash	93,437,846	0.7	0.6		1.8		2.3		1.7		1.2		0.9		1.1	Dec-99
91 Day T-Bills			<u>0.6</u>		<u>1.7</u>		<u>2.1</u>		<u>1.2</u>		<u>0.8</u>		<u>0.4</u>		<u>1.6</u>	Dec-99
Over/Under			0.0		0.1		0.2		0.5		0.4		0.5		-0.5	
NM ERB Cash	2,164,319	0.0	-0.1		0.2		0.1		0.1		0.1		0.5		0.9	Jun-00
91 Day T-Bills			<u>0.6</u>		<u>1.7</u>		<u>2.1</u>		<u>1.2</u>		<u>0.8</u>		<u>0.4</u>		<u>1.5</u>	Jun-00
Over/Under			-0.7		-1.5		-2.0		-1.1		-0.7		0.1		-0.6	
Local Government Investment Pool (LGIP) at STO	103,835	0.0	0.6		1.6		2.0		1.0						0.8	Jul-15
91 Day T-Bills Over/Under			<u>0.6</u> 0.0		<u>1.7</u> -0.1		<u>2.1</u> -0.1		<u>1.2</u> -0.2		<u>0.8</u>		<u>0.4</u>		<u>1.0</u> -0.2	Jul-15



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

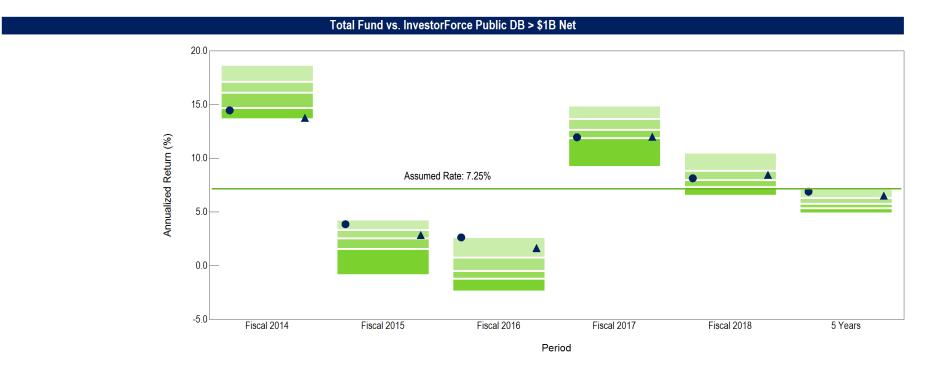


	Return (Rank)												
5th Percentile	9.6	4.0		5.4		8.8		10.2		7.1		11.2	
25th Percentile	8.2	3.1		4.0		7.5		8.8		6.3		10.5	
Median	7.2	2.5		3.4		6.8		8.3		5.8		9.8	
75th Percentile	6.5	1.9		2.6		6.3		7.8		5.4		9.2	
95th Percentile	5.5	0.9		0.9		5.7		7.4		4.9		8.1	
# of Portfolios	78	77		77		77		77		74		68	
 Total Fund 	5.1	(97) 4.0	(6)	5.4	(6)	7.5	(24)	8.9	(23)	6.9	(9)	10.7	(17)
Policy Index	5.8	(95) 4.4	(4)	5.3	(6)	7.8	(14)	9.0	(20)	6.5	(18)	9.8	(50)

Note: Ranks are based on net returns.



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



		Return (Rank)									
5t	h Percentile	18.7		4.3		2.7		14.9	10.5	7.1	
2	5th Percentile	17.2		3.3		0.8		13.7	8.8	6.3	
Μ	edian	16.1		2.6		-0.5		12.7	8.0	5.8	
7	5th Percentile	14.7		1.6		-1.2		11.9	7.3	5.4	
95	5th Percentile	13.6		-0.9		-2.4		9.2	6.5	4.9	
#	of Portfolios	43		53		55		65	51	74	
•	Total Fund	14.5	(79)	3.9	(16)	2.6	(6)	12.0 (71)	8.1	(46) 6.9	(9)
A	Policy Index	13.8	(91)	2.9	(47)	1.7	(9)	12.0 (68)	8.5	(33) 6.5	(18)

Note: Ranks are based on net returns.



New Mexico Educational Retirement Board TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Summary 3 Months Ending March 31, 2019							
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects	
U.S. Large Cap Equity Composite	13.6%	13.6%	0.0%	0.0%	-0.1%	-0.1%	
U.S. Small/Mid Cap Equity Composite	14.4%	15.8%	-1.4%	0.0%	-0.1%	-0.1%	
Non-U.S. Developed Mkts Equity Composite	10.3%	10.0%	0.4%	0.0%	0.0%	0.0%	
Non-U.S. Emerging Mkts Equity Composite	9.7%	9.9%	-0.2%	0.0%	0.0%	0.0%	
Core Fixed Income Composite	3.1%	2.9%	0.2%	0.0%	0.0%	0.0%	
Non-U.S. Emerging Market Debt Composite	4.4%	4.9%	-0.5%	0.0%	0.0%	0.0%	
Opportunistic Credit Composite	2.5%	5.5%	-3.1%	-0.6%	0.0%	-0.6%	
Absolute Return Composite	-0.4%	1.1%	-1.5%	0.0%	0.0%	0.0%	
Global Asset Allocation/Risk Parity Composite	4.6%	1.2%	3.5%	0.4%	-0.1%	0.2%	
Diversifying Assets	1.6%	1.2%	0.4%	0.0%	0.1%	0.1%	
Public Real Estate Composite	16.8%	16.0%	0.8%	0.0%	-0.1%	-0.1%	
Private Real Estate Composite	2.4%	1.8%	0.6%	0.0%	0.0%	0.0%	
Private Equity Composite	-0.9%	-2.1%	1.2%	0.2%	-0.1%	0.0%	
Real Assets Composite	-0.6%	1.6%	-2.1%	-0.2%	0.0%	-0.2%	
Cash	0.5%	0.6%	-0.1%	0.0%	0.0%	0.0%	
Total	5.1%	5.8%	-0.7%	-0.2%	-0.5%	-0.7%	

	Attribution Summary						
	FY Wtd. Actual Return	TD Ending M Wtd. Index Return	arch 31, 201 Excess Return	9 Selection Effect	Allocation Effect	Total Effects	
U.S. Large Cap Equity Composite	5.8%	5.9%	0.0%	0.0%	-0.1%	-0.1%	
U.S. Small/Mid Cap Equity Composite	-1.4%	-1.2%	-0.2%	0.0%	-0.1%	-0.1%	
Non-U.S. Developed Mkts Equity Composite	-2.4%	-2.5%	0.1%	0.0%	0.0%	0.0%	
Non-U.S. Emerging Mkts Equity Composite	0.0%	0.6%	-0.6%	-0.1%	0.0%	-0.1%	
Core Fixed Income Composite	4.6%	4.6%	0.0%	0.0%	0.0%	0.0%	
Non-U.S. Emerging Market Debt Composite	3.6%	5.6%	-2.1%	0.0%	0.0%	0.0%	
Opportunistic Credit Composite	2.4%	4.1%	-1.7%	-0.3%	0.0%	-0.3%	
Absolute Return Composite	-0.7%	3.2%	-3.9%	0.0%	0.0%	0.0%	
Global Asset Allocation/Risk Parity Composite	2.3%	3.5%	-1.2%	-0.1%	0.0%	-0.2%	
Diversifying Assets	7.8%	3.5%	4.3%	0.0%	0.0%	0.1%	
Public Real Estate Composite	8.5%	8.7%	-0.2%	0.0%	-0.1%	-0.1%	
Private Real Estate Composite	9.3%	4.9%	4.4%	0.2%	0.0%	0.2%	
Private Equity Composite	7.7%	7.1%	0.7%	0.1%	0.0%	0.0%	
Real Assets Composite	6.3%	4.2%	2.1%	0.2%	0.0%	0.2%	
Cash	1.5%	1.7%	-0.1%	0.0%	0.0%	0.0%	
Total	4.0%	4.4%	-0.4%	-0.1%	-0.3%	-0.4%	



New Mexico Educational Retirement Board TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Summary 1 Year Ending March 31, 2019						
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	9.5%	9.5%	0.0%	0.0%	0.0%	-0.1%
U.S. Small/Mid Cap Equity Composite	3.0%	4.5%	-1.5%	-0.1%	0.0%	-0.1%
Non-U.S. Developed Mkts Equity Composite	-3.9%	-3.7%	-0.2%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	-8.3%	-7.4%	-0.9%	-0.1%	-0.1%	-0.2%
Core Fixed Income Composite	4.2%	4.5%	-0.3%	0.0%	0.0%	0.0%
Non-U.S. Emerging Market Debt Composite	-2.9%	-1.8%	-1.1%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	4.4%	4.8%	-0.5%	-0.1%	0.0%	-0.1%
Absolute Return Composite	-0.6%	4.1%	-4.8%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	2.1%	4.6%	-2.5%	-0.2%	0.0%	-0.3%
Diversifying Assets	10.1%	4.6%	5.4%	0.0%	0.0%	0.1%
Public Real Estate Composite	20.3%	19.3%	1.0%	0.0%	-0.2%	-0.1%
Private Real Estate Composite	15.6%	6.8%	8.7%	0.4%	0.0%	0.4%
Private Equity Composite	11.9%	10.0%	1.9%	0.2%	0.0%	0.1%
Real Assets Composite	12.2%	5.9%	6.2%	0.4%	0.0%	0.4%
Cash	2.0%	2.1%	-0.2%	0.0%	0.0%	0.0%
Total	5.4%	5.3%	0.1%	0.5%	-0.4%	0.1%

Attribution Summary 3 Years Ending March 31, 2019						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	13.4%	13.5%	-0.1%	0.0%	-0.1%	-0.1%
U.S. Small/Mid Cap Equity Composite	11.4%	12.6%	-1.1%	0.0%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	6.7%	7.3%	-0.6%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	8.3%	10.7%	-2.4%	-0.3%	0.0%	-0.3%
Core Fixed Income Composite	2.4%	2.0%	0.4%	0.0%	-0.2%	-0.1%
Non-U.S. Emerging Market Debt Composite	5.1%	4.6%	0.5%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	7.7%	6.8%	0.9%	0.1%	0.0%	0.1%
Absolute Return Composite	-0.5%	3.2%	-3.7%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	6.3%	6.6%	-0.3%	0.0%	0.0%	0.0%
Diversifying Assets				0.0%	0.0%	0.1%
Public Real Estate Composite	5.6%	5.4%	0.2%	0.0%	0.0%	0.0%
Private Real Estate Composite	13.6%	7.1%	6.5%	0.3%	0.0%	0.3%
Private Equity Composite	12.6%	13.5%	-0.9%	-0.1%	0.0%	-0.2%
Real Assets Composite	10.1%	6.3%	3.8%	0.2%	0.1%	0.3%
Cash	1.4%	1.2%	0.2%	0.0%	-0.1%	-0.1%
Total	8.9%	9.0%	-0.1%	0.2%	-0.3%	-0.1%



New Mexico Educational Retirement Board

TOTAL FUND ATTRIBUTION ANALYSIS

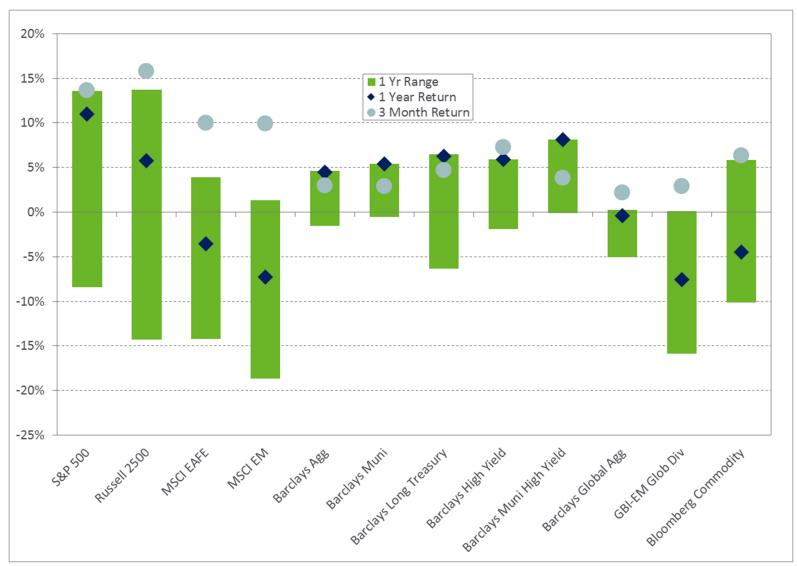
Attribution Summary 5 Years Ending March 31, 2019						
	Wtd. Actual Return		Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	10.8%	10.9%	-0.1%	0.0%	0.0%	0.0%
U.S. Small/Mid Cap Equity Composite	7.3%	7.8%	-0.5%	0.0%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	2.1%	2.3%	-0.2%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	3.1%	3.7%	-0.6%	-0.1%	0.0%	-0.1%
Core Fixed Income Composite	2.9%	2.7%	0.2%	0.0%	-0.1%	-0.1%
Non-U.S. Emerging Market Debt Composite	1.9%	-0.5%	2.4%	0.0%	0.0%	0.1%
Opportunistic Credit Composite	6.0%	4.3%	1.7%	0.3%	0.0%	0.3%
Absolute Return Composite	1.4%	2.7%	-1.3%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	3.5%	4.0%	-0.5%	0.0%	0.0%	-0.1%
Diversifying Assets				0.0%	0.0%	0.0%
Public Real Estate Composite	7.7%	9.0%	-1.3%	0.0%	-0.1%	-0.1%
Private Real Estate Composite	13.7%	9.1%	4.6%	0.2%	0.0%	0.2%
Private Equity Composite	13.3%	11.4%	1.9%	0.1%	0.0%	0.1%
Real Assets Composite	7.9%	5.6%	2.3%	0.1%	0.0%	0.1%
Cash	1.0%	0.8%	0.2%	0.0%	0.0%	0.0%
Total	6.9%	6.5%	0.4%	0.6%	-0.3%	0.4%



APPENDIX



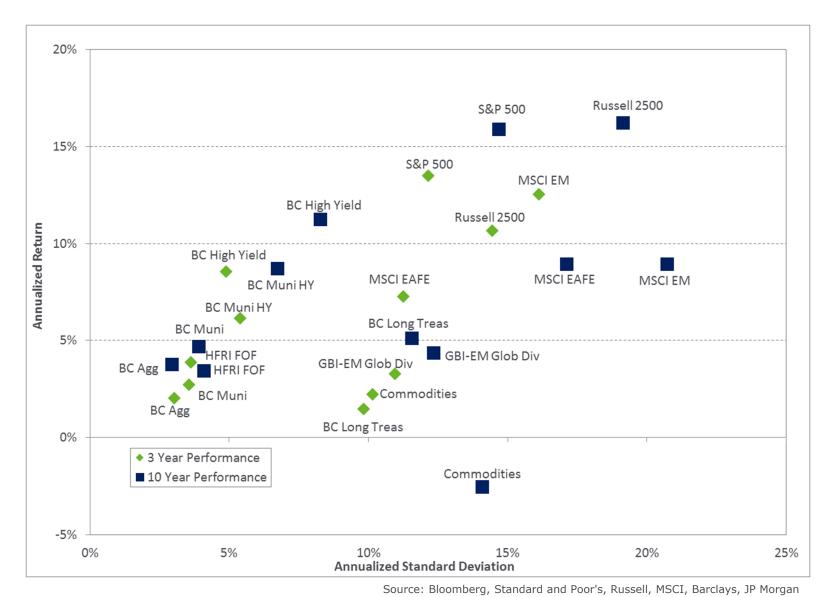
SHORT-TERM PERFORMANCE SUMMARY



Source: Bloomberg, Standard and Poor's, Russell, MSCI, Barclays, JP Morgan *1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago



LONG-TERM PERFORMANCE SUMMARY



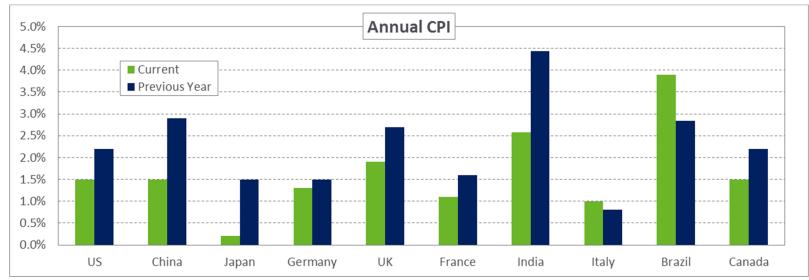




INFLATION



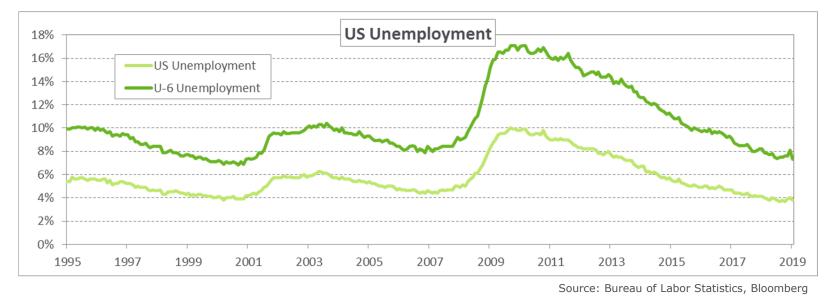
Source: Bureau of Labor Statistics, Bloomberg, NEPC

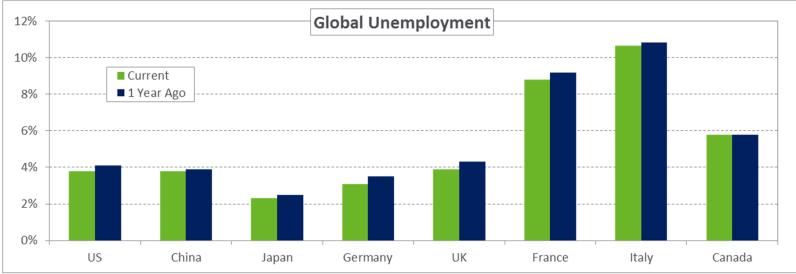


Source: Bureau of Labor Statistics, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, India Central Statistical Organization, ISTAT, IBGE, STCA, Bloomberg



UNEMPLOYMENT

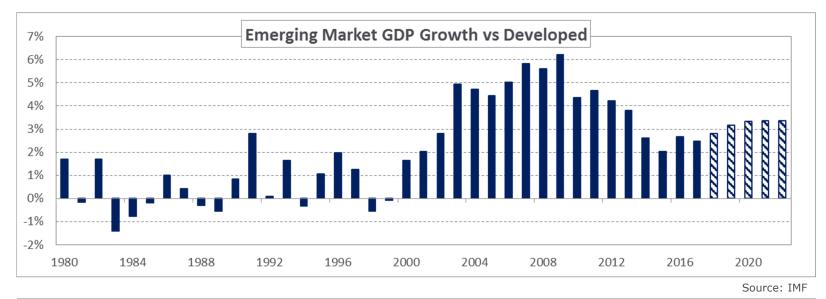


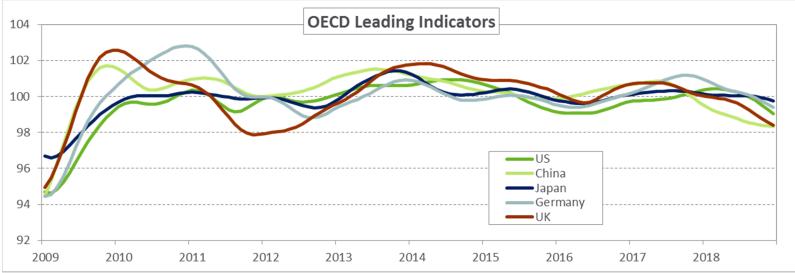


Source: Bureau of Labor Statistics, STA, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, ISTAT, IBGE, Bloomberg



ECONOMIC INDICATORS



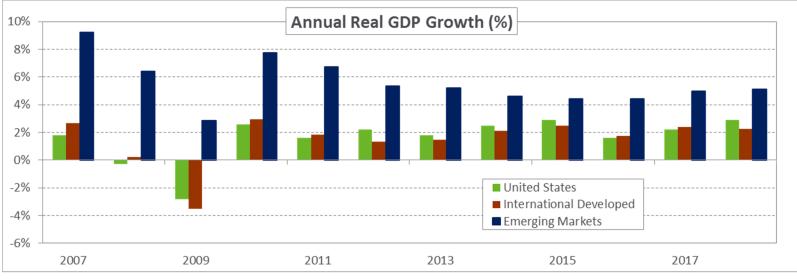


Source: OECD, Bloomberg



GROSS DOMESTIC PRODUCT

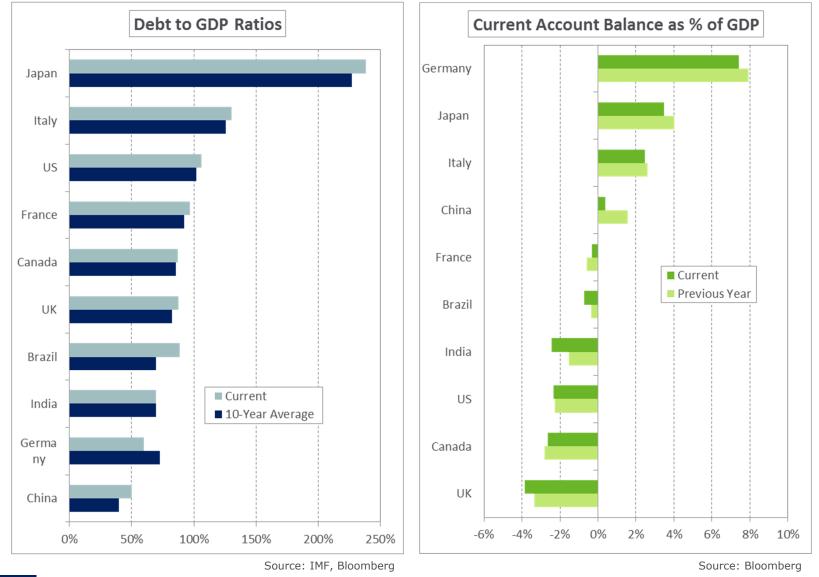






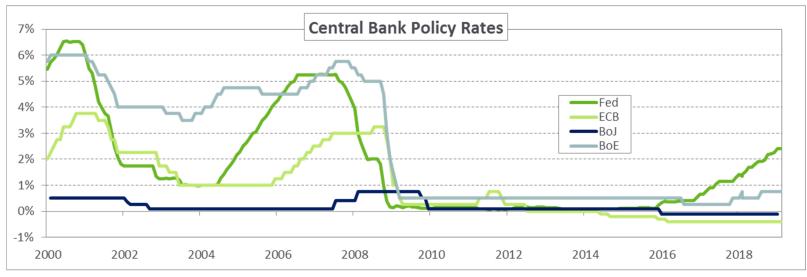


GROSS DOMESTIC PRODUCT METRICS

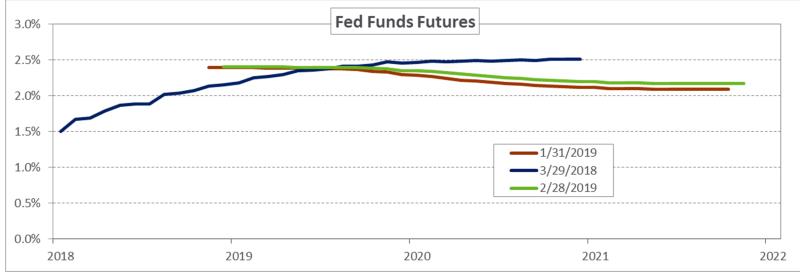




CENTRAL BANK RATES



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







CURRENCIES

	% Change Relative to USD					
Currencies	Spot	1 Month	YTD	1 Year		
Euro	1.12	-1.3%	-2.2%	-9.0%		
British Pound	1.30	-1.7%	2.2%	-7.0%		
Japanese Yen	110.86	0.5%	-1.1%	-4.1%		
Swiss Franc	1.00	0.3%	-1.3%	-4.1%		
Australian Dollar	0.71	0.0%	0.7%	-7.6%		
Chinese Yuan	6.71	-0.3%	2.5%	-6.5%		
Brazilian Real	3.92	-4.2%	-1.2%	-15.7%		
Russian Ruble	65.63	0.4%	6.2%	-13.0%		
Indian Rupee	69.15	2.3%	0.9%	-5.7%		
Mexican Peso	19.43	-0.8%	1.1%	-6.4%		
South African Rand	14.50	-2.9%	-1.1%	-18.3%		

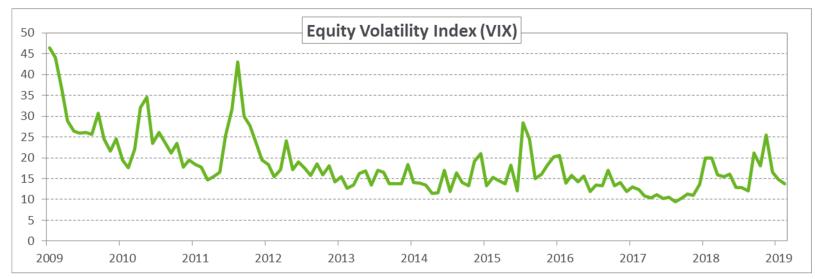
Source: Bloomberg



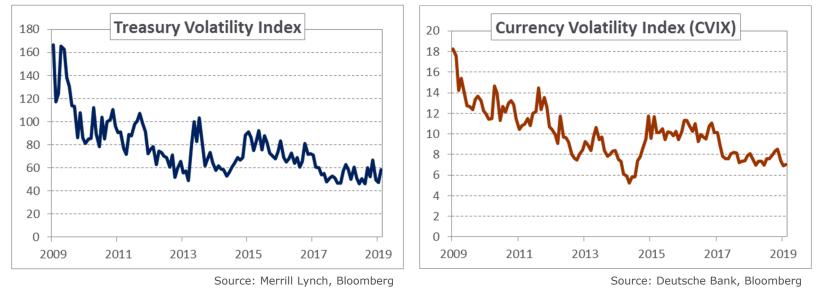
Source: Bloomberg



VOLATILITY



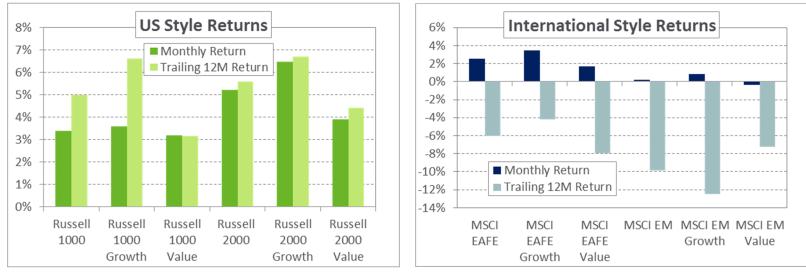
Source: CBOE, Bloomberg





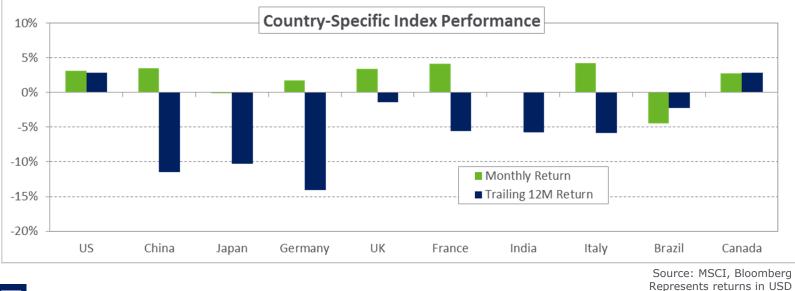


EQUITY INDEX PERFORMANCE



Source: Russell, Bloomberg



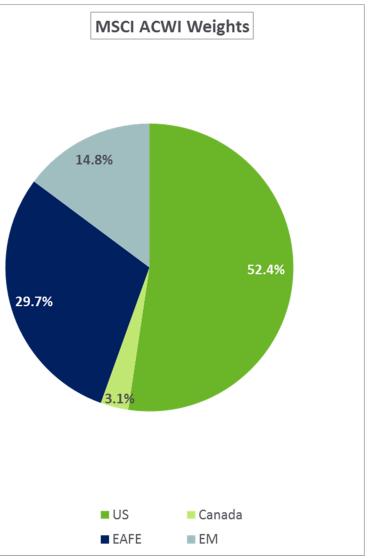




INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
S&P 500	3.2%	11.5%	11.5%	100%
Cons Disc	0.7%	11.1%	11.1%	10.0%
Cons Staples	2.2%	7.5%	7.5%	7.3%
Energy	2.4%	13.8%	13.8%	5.5%
Financials	2.3%	11.3%	11.3%	12.7%
Health Care	1.1%	6.0%	6.0%	15.0%
Industrials	6.3%	18.4%	18.4%	9.9%
Info Tech	6.8%	14.2%	14.2%	20.4%
Materials	3.2%	8.9%	8.9%	2.7%
Real Estate	1.0%	11.9%	11.9%	3.0%
Telecom	0.8%	11.2%	11.2%	10.2%
Utilities	4.0%	7.5%	7.5%	3.3%

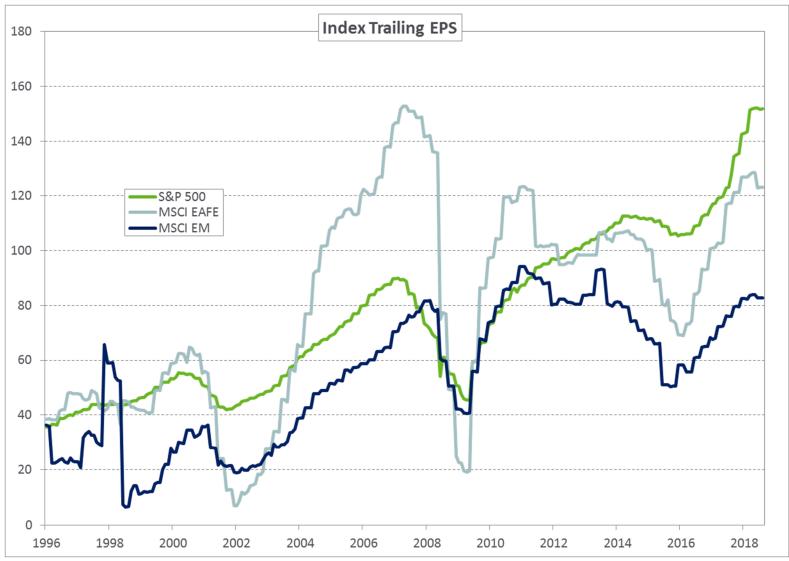
	MTD	QTD	YTD	Index Weight
MSCI ACWI	2.7%	10.9%	10.9%	100%
Cons Disc	1.6%	11.4%	11.4%	11.1%
Cons Staples	1.9%	7.1%	7.1%	8.1%
Energy	2.2%	12.8%	12.8%	6.1%
Financials	2.4%	10.8%	10.8%	17.7%
Health Care	1.9%	7.1%	7.1%	11.4%
Industrials	4.4%	14.2%	14.2%	10.9%
Info Tech	6.0%	14.3%	14.3%	14.5%
Materials	2.4%	10.0%	10.0%	4.9%
Real Estate	0.0%	10.5%	10.5%	3.3%
Telecom	0.3%	8.9%	8.9%	8.7%
Utilities	2.2%	7.5%	7.5%	3.3%



Source: S&P, MSCI, Bloomberg



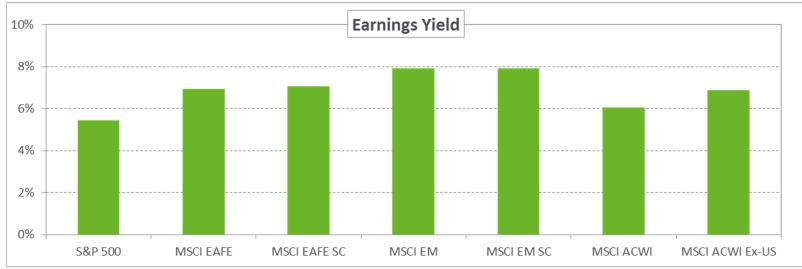
EARNINGS



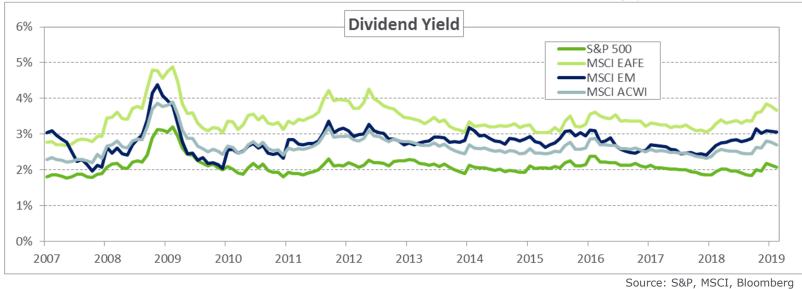
Source: S&P, MSCI, Bloomberg



YIELDS

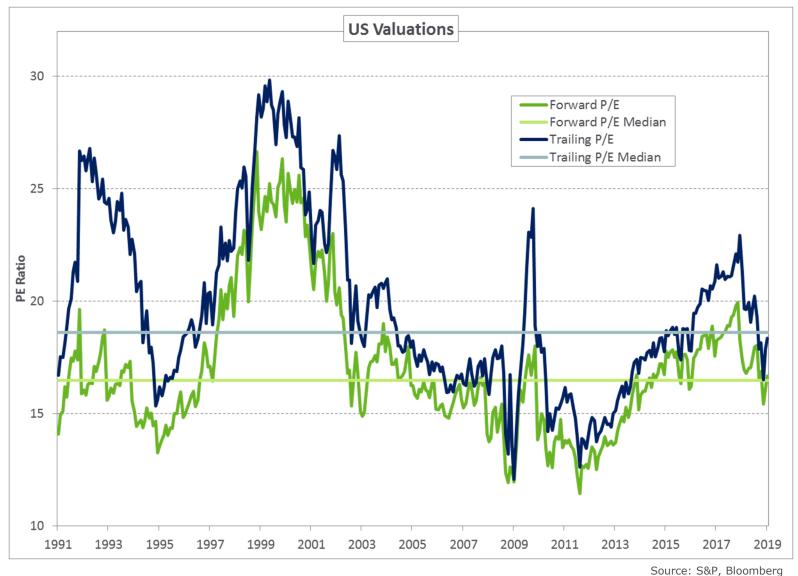


Source: S&P, MSCI, Bloomberg Earnings yield calculated as 1/PE Ratio





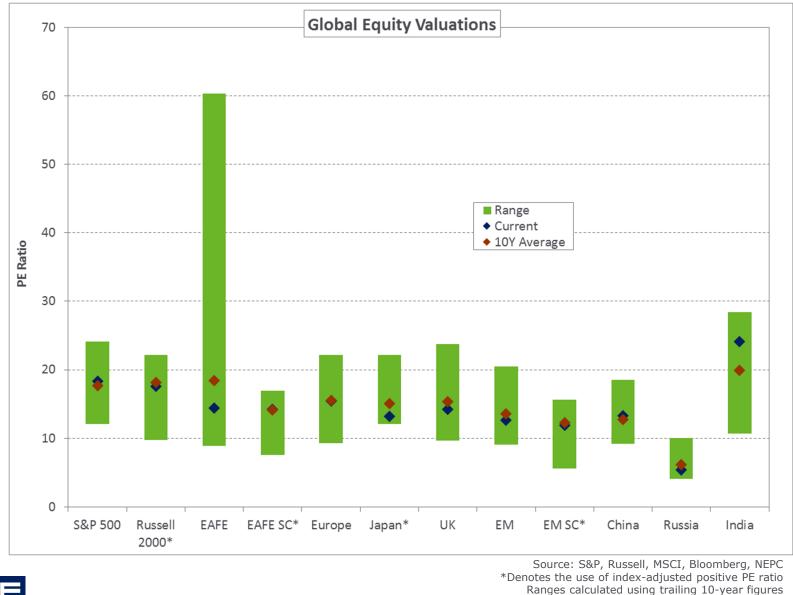
US EQUITY VALUATIONS



Medians calculated as of 01/31/1990



GLOBAL EQUITY VALUATIONS









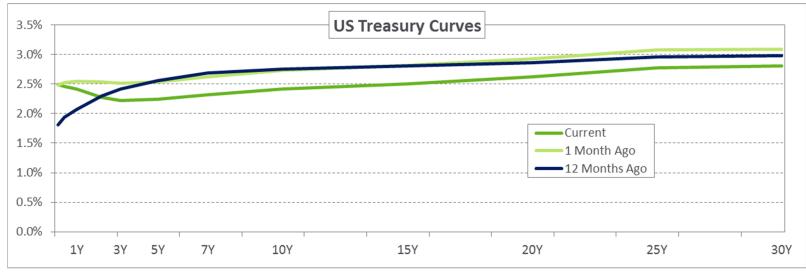
FIXED INCOME CHARACTERISTICS

	Averages			Т	otal Returns (%	6)
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	2.9%	44	5.8	1.9%	2.9%	4.5%
Barclays Treasury	2.4%	-	6.2	1.9%	2.1%	4.2%
Barclays Agency	2.5%	13	4.1	1.4%	1.8%	3.7%
Barclays MBS	3.1%	35	4.0	1.5%	2.2%	4.4%
Barclays ABS	2.6%	33	2.4	0.7%	1.5%	3.7%
Barclays CMBS	3.0%	69	5.3	1.8%	3.2%	5.4%
Barclays Corp IG	3.6%	119	7.4	2.5%	5.1%	4.9%
Barclays Muni	2.3%	-	5.8	1.6%	2.9%	5.4%
Barclays HY Muni	4.7%	-	8.8	2.6%	3.8%	8.1%
Barclays TIPS	2.6%	-	5.2	1.8%	3.2%	2.7%
Barclays HY	6.4%	391	3.4	0.9%	7.3%	5.9%
Barclays Global Agg	1.8%	48	7.0	1.3%	2.2%	-0.4%
JPM EMBI Glob Div	6.1%	372.77	7.4	1.4%	7.0%	4.2%
JPM CEMBI Broad	4.5%	282.7	4.5	1.3%	5.2%	4.6%
JPM GBI - EM	6.2%	-	5.2	-1.3%	2.9%	-7.6%



Source: Barclays, JPM, Bloomberg

TREASURIES



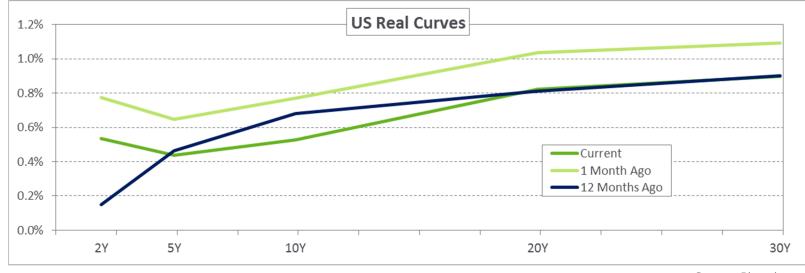
Source: Bloomberg

		Yield (%)	Total Return (%)		
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	2.49%	2.49%	1.81%	0.21%	2.09%
6M Treasury	2.46%	2.52%	1.94%	0.23%	2.22%
2Y Treasury	2.28%	2.54%	2.30%	0.63%	2.56%
5Y Treasury	2.24%	2.54%	2.56%	1.49%	4.37%
10Y Treasury	2.41%	2.73%	2.75%	2.84%	5.60%
30Y Treasury	2.81%	3.09%	2.98%	5.60%	6.26%



Source: Barclays, Bloomberg

REAL YIELDS



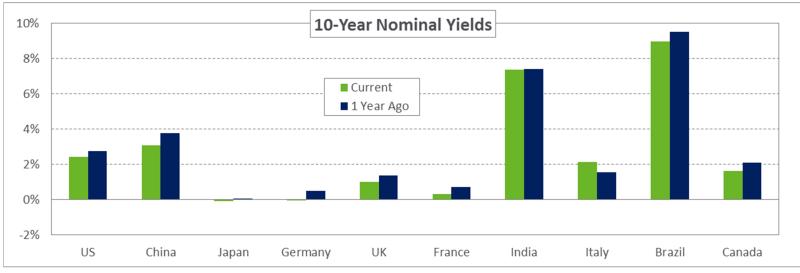
Source: Bloomberg

		Real Rates	Breakeven Rates		
	Current	1 Month Ago	12 Months Ago	Current	12 Months Ago
2Y Treasury	0.53%	0.78%	0.15%	1.83%	1.98%
5Y Treasury	0.44%	0.65%	0.47%	1.79%	2.04%
10Y Treasury	0.53%	0.77%	0.68%	1.87%	2.06%
20Y Treasury	0.82%	1.04%	0.81%	1.85%	2.00%
30Y Treasury	0.90%	1.09%	0.90%	1.92%	2.07%

Source: Barclays, Bloomberg



NOMINAL YIELDS

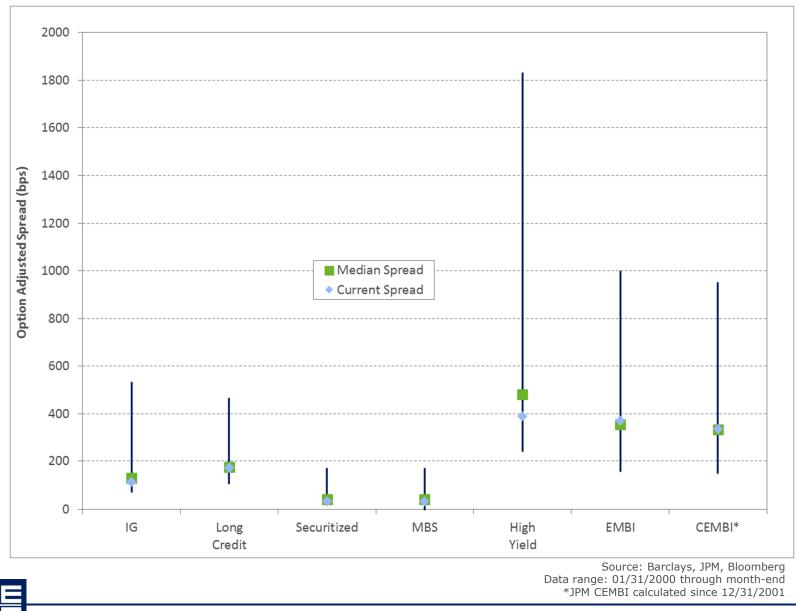


Source: Bloomberg



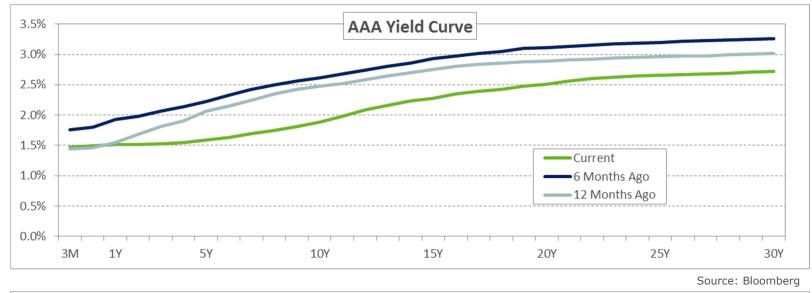
March 31, 2019

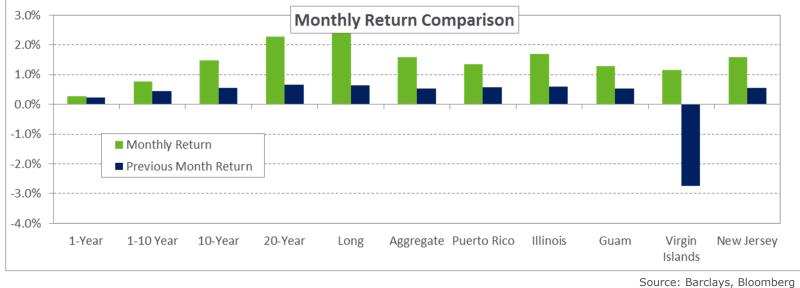
CREDIT SPREADS



March 31, 2019

MUNICIPAL BONDS

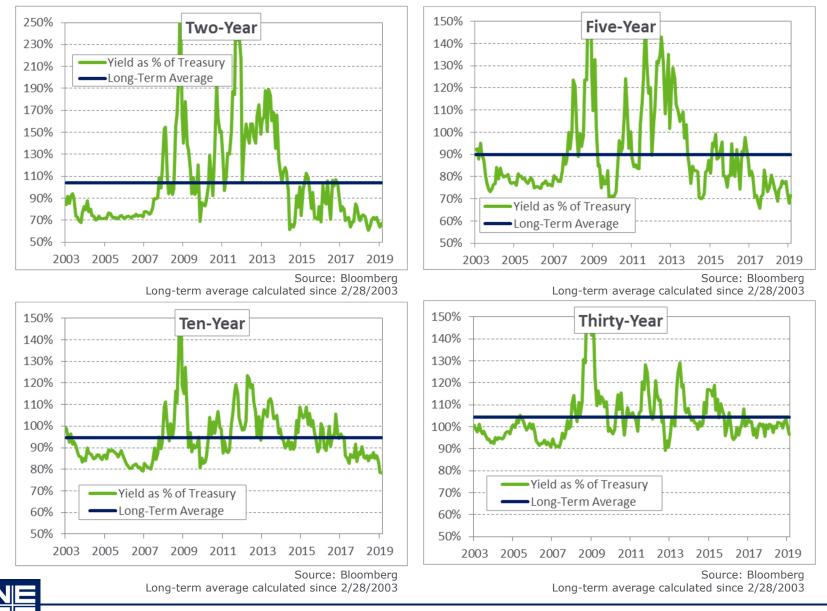






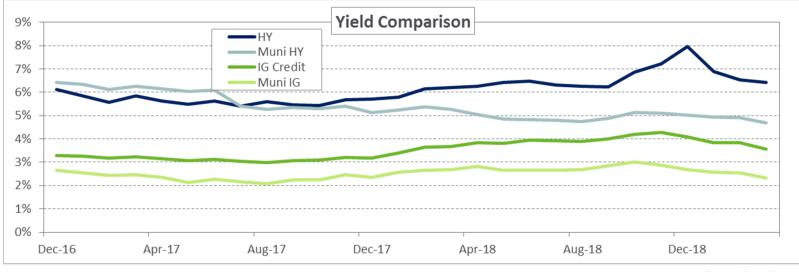
March 31, 2019

MUNICIPAL BOND YIELDS

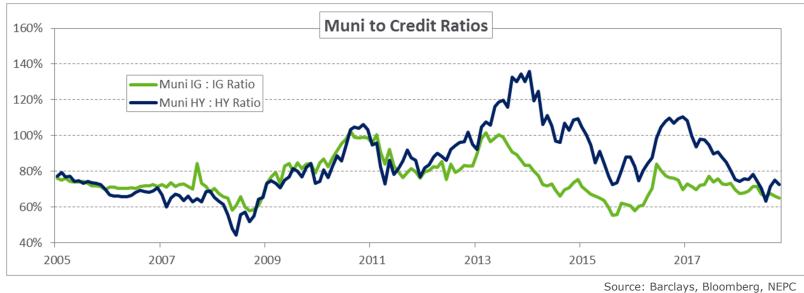




MUNICIPAL BOND RATIOS

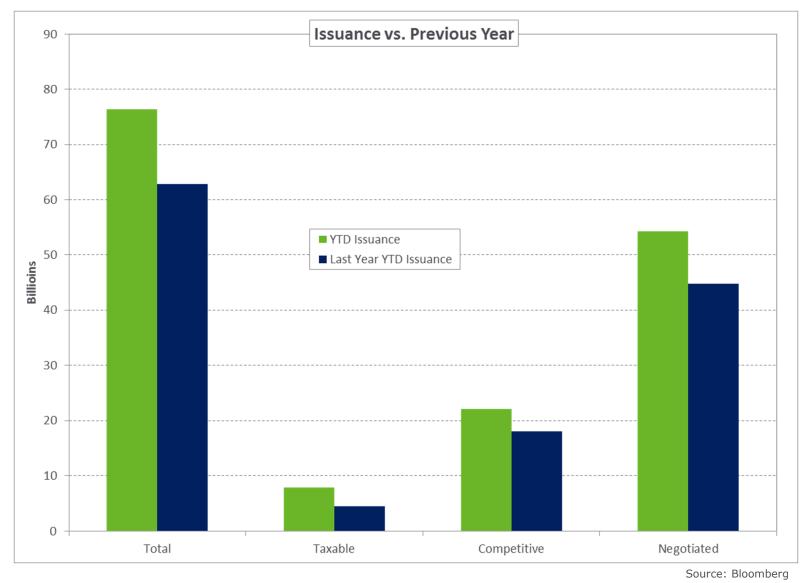


Source: Barclays, Bloomberg





MUNICIPAL BOND ISSUANCE

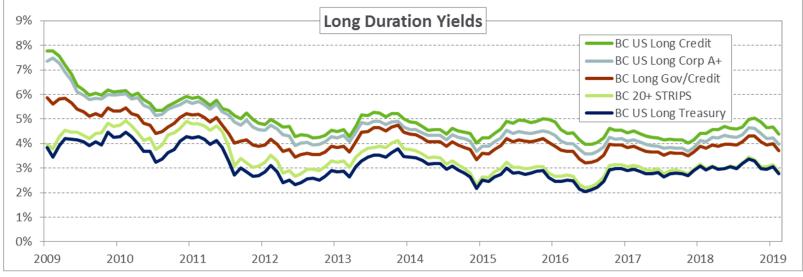




LONG DURATION

Index	Month-End Yield	1 Month Prior Yield	1 Year Prior Yield	Duration
Barclays Long Treasury	2.8%	3.1%	2.9%	17.7
Barclays 20+ STRIPS	2.9%	3.1%	3.0%	25.9
Barclays Long Gov/Credit	3.7%	4.0%	3.8%	15.3
Barclays Long Credit	4.4%	4.7%	4.4%	13.7
Barclays Long Corp A+	4.0%	4.2%	4.1%	14.5

Source: Barclays, Bloomberg



Source: Barclays, Bloomberg



REAL ASSETS



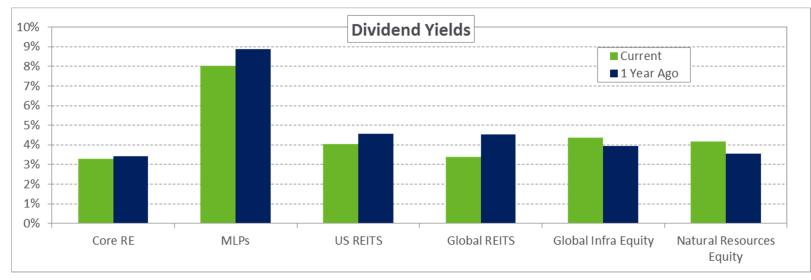
REAL ASSETS INDEX PERFORMANCE

Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	-0.2%	6.3%	6.3%	-5.3%	2.2%	-8.9%
Bloomberg Sub Agriculture Index	-2.2%	-3.2%	-3.2%	-16.3%	-8.0%	-12.4%
Coffee	-3.8%	-9.5%	-9.5%	-28.0%	-17.7%	-19.9%
Corn	-3.7%	-6.3%	-6.3%	-17.8%	-9.8%	-15.8%
Cotton	6.8%	6.2%	6.2%	-4.0%	10.2%	-2.0%
Soybean	-2.9%	-2.7%	-2.7%	-21.6%	-5.8%	-9.2%
Soybean Oil	-6.2%	0.7%	0.7%	-16.2%	-10.7%	-10.9%
Sugar	-1.8%	5.8%	5.8%	-4.8%	-10.9%	-15.0%
Wheat	-0.2%	-9.0%	-9.0%	-8.7%	-14.4%	-17.5%
Bloomberg Sub Energy	0.7%	15.9%	15.9%	-0.5%	7.5%	-16.7%
Brent Crude	1.9%	25.2%	25.2%	1.1%	15.3%	-15.0%
Heating Oil	-2.3%	19.3%	19.3%	0.9%	15.3%	-11.2%
Natural Gas	-5.5%	-7.9%	-7.9%	-1.3%	-6.2%	-24.8%
Unleaded Gas	6.8%	26.7%	26.7%	-9.9%	4.1%	-13.1%
WTI Crude Oil	4.6%	30.2%	30.2%	-4.9%	9.6%	-18.4%
Bloomberg Sub Industrial Metals	0.9%	12.8%	12.8%	-3.1%	11.3%	0.1%
Aluminum	-0.2%	3.2%	3.2%	-2.5%	7.3%	-1.0%
Copper	-0.2%	12.0%	12.0%	-3.6%	8.9%	-1.6%
Nickel	-0.5%	21.5%	21.5%	-2.5%	14.2%	-5.1%
Zinc	6.1%	20.6%	20.6%	-4.4%	19.9%	8.5%
Bloomberg Sub Precious Metals	-2.0%	0.0%	0.0%	-4.0%	0.2%	-1.9%
Gold	-1.6%	0.9%	0.9%	-2.8%	0.8%	-0.4%
Silver	-3.2%	-2.8%	-2.8%	-7.9%	-2.0%	-6.4%
Bloomberg Sub Livestock	6.3%	4.7%	4.7%	14.4%	0.7%	-4.3%
Lean Hogs	23.7%	6.8%	6.8%	6.5%	-4.0%	-12.6%
Live Cattle	-1.9%	2.4%	2.4%	17.2%	2.8%	0.7%

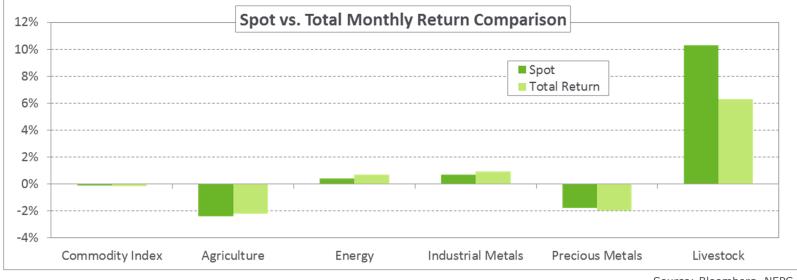
Source: Bloomberg Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



INCOME YIELD



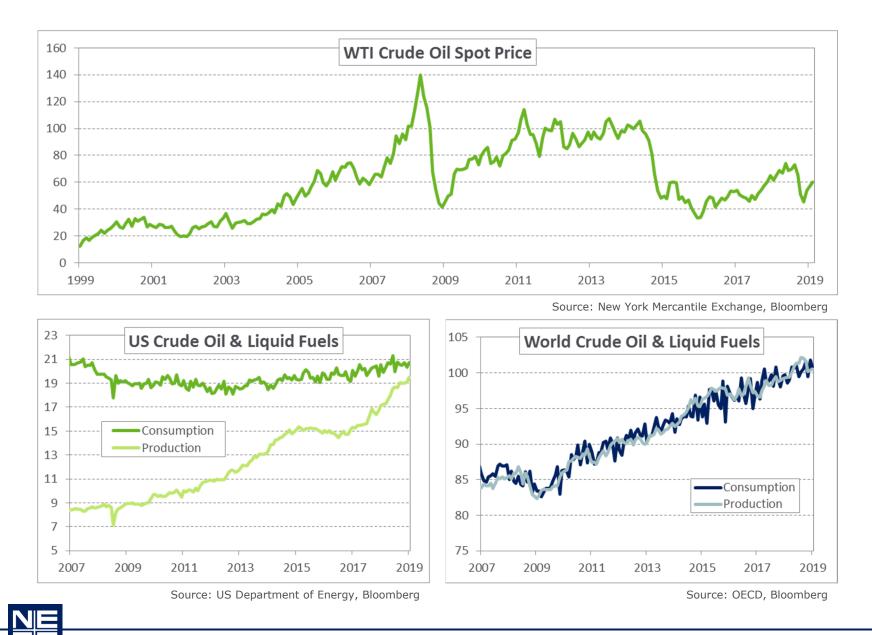
Source: Alerian, NAREIT, S&P, Bloomberg





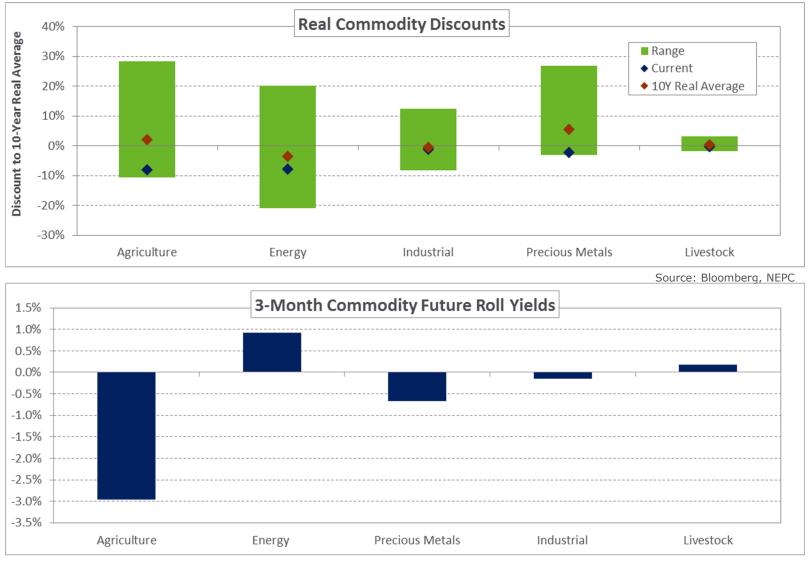


OIL MARKETS





VALUATIONS



Source: Bloomberg



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 Current: 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.



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.

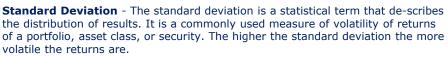
Formula: (Annualized Return of Portfolio - Annualized Return of Benchmark)/Annualized Standard Deviation(Period Portfolio Return – Period Benchmark Return). To annualize standard deviation, multiply the deviation by the square root of the number of periods per year where monthly returns per year equals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



Information Disclaimer

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Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



INFORMATION DISCLAIMER

- Past performance is no guarantee of future results.
- The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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