

**INVESTMENT PERFORMANCE ANALYSIS  
FOR PERIOD ENDING JUNE 30, 2018**

# **NEW MEXICO EDUCATIONAL RETIREMENT BOARD**

**August 2018**

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# MARKET ENVIRONMENT UPDATE AND OUTLOOK

NEPC, LLC

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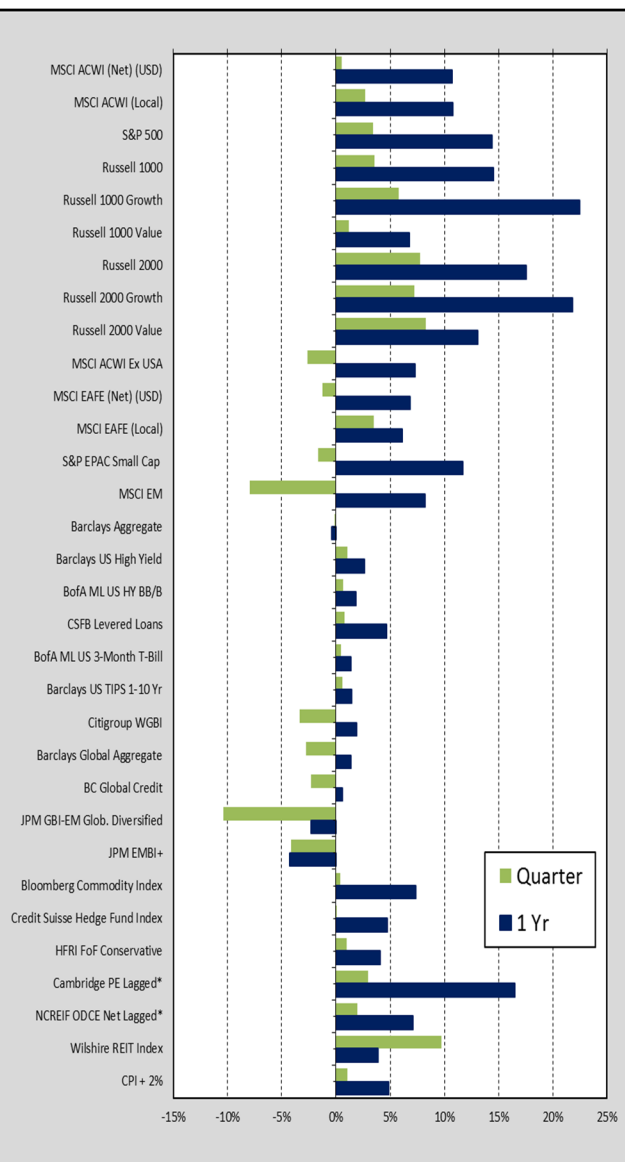
# ECONOMIC ENVIRONMENT

- **Second quarter GDP growth rate (advance estimate) increased at a robust 4.1%.**
  - Retail sales ended May at +6.0% on a YoY basis. In the same period last year the YoY growth rate was 3.1%.
  - Corporate profits (ended January) as a percent of GDP increased to 9.3% from 8.5% (in October) and remain elevated relative to historical levels.
  - The inventory-to-sales ratio ended May down at 1.3 from 1.4 and has remained relatively flat since early 2010.
  - The U.S. trade deficit narrowed to the smallest deficit since October 2016.
- **The unemployment rate decreased to 4.0% ended Q2 from 4.1%; U-6, a broader measure of unemployment, decreased to 7.8% from 8.0% during the first quarter.**
- **The Case-Shiller Home Price Index (ended April) increased to 200.9 from 196.3 and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw an up-tick to 2.9% from 2.4% at the end of June; Capacity Utilization increased to 78.0% from 77.5% in Q2.**
- **Fed Funds rate was increased 0.25% to a targeted range of 1.75% - to – 2.00%. The 10-year Treasury Yield (constant maturity) finished Q2 at 2.9% up from 2.8% in June.**
- **The Fed balance sheet decreased slightly during Q2 2018, while the European Central Bank balance sheet continues to increase.**
  - ECB held its benchmark refinancing rate at 0%, deposit rates -0.4% and signaled that asset purchases may end in December
- **S&P valuations increased slightly in Q2, remaining above the 10-year and long-term averages.**
  - Cyclically adjusted Shiller PE ratio (32.0x) is above the long-term average of 16.9x and above the 10-year average of 23.5x.



# MARKET ENVIRONMENT – Q2 2018 OVERVIEW

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>World Equity Benchmarks</b>						
MSCI ACWI (Net) (USD)	World	0.5%	10.7%	8.2%	9.4%	5.8%
MSCI ACWI (Local)	World (Local Currency)	2.7%	10.8%	8.4%	10.8%	7.0%
<b>Domestic Equity Benchmarks</b>						
S&P 500	Large Core	3.4%	14.4%	11.9%	13.4%	10.2%
Russell 1000	Large Core	3.6%	14.5%	11.6%	13.4%	10.2%
Russell 1000 Growth	Large Growth	5.8%	22.5%	15.0%	16.4%	11.8%
Russell 1000 Value	Large Value	1.2%	6.8%	8.3%	10.3%	8.5%
Russell 2000	Small Core	7.8%	17.6%	11.0%	12.5%	10.6%
Russell 2000 Growth	Small Growth	7.2%	21.9%	10.6%	13.6%	11.2%
Russell 2000 Value	Small Value	8.3%	13.1%	11.2%	11.2%	9.9%
<b>International Equity Benchmarks</b>						
MSCI ACWI Ex USA	World ex-US	-2.6%	7.3%	5.1%	6.0%	2.5%
MSCI EAFE (Net) (USD)	Int'l Developed	-1.2%	6.8%	4.9%	6.4%	2.8%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	3.5%	6.1%	5.2%	8.9%	5.0%
S&P EPAC Small Cap	Small Cap Int'l	-1.6%	11.7%	9.6%	11.5%	6.5%
MSCI EM	Emerging Equity	-8.0%	8.2%	5.6%	5.0%	2.3%
<b>Domestic Fixed Income Benchmarks</b>						
Barclays Aggregate	Core Bonds	-0.2%	-0.4%	1.7%	2.3%	3.7%
Barclays US High Yield	High Yield	1.0%	2.6%	5.5%	5.5%	8.2%
BofA ML US HY BB/B	High Yield	0.7%	1.8%	4.9%	5.3%	7.3%
CSFB Levered Loans	Bank Loans	0.8%	4.7%	4.3%	4.2%	5.0%
BofA ML US 3-Month T-Bill	Cash	0.5%	1.4%	0.7%	0.4%	0.4%
Barclays US TIPS 1-10 Yr	Inflation	0.6%	1.5%	1.5%	1.2%	2.3%
<b>Global Fixed Income Benchmarks</b>						
Citigroup WGBI	World Gov. Bonds	-3.4%	1.9%	2.8%	1.1%	2.1%
Barclays Global Aggregate	Global Core Bonds	-2.8%	1.4%	2.6%	1.5%	2.6%
BC Global Credit	Global Bonds	-2.3%	0.6%	2.8%	2.5%	3.6%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	-10.4%	-2.3%	2.0%	-1.4%	2.6%
JPM EMBI+	Em. Mkt. Bonds	-4.1%	-4.3%	4.0%	4.0%	6.2%
<b>Alternative Benchmarks</b>						
Bloomberg Commodity Index	Commodities	0.4%	7.3%	-4.5%	-6.4%	-9.0%
Credit Suisse Hedge Fund Index	Hedge Fund	0.1%	4.8%	2.0%	3.6%	3.3%
HFRI FoF Conservative	Fund of Hedge Funds	1.0%	4.1%	1.9%	3.0%	1.2%
Cambridge PE Lagged*	Private Equity	3.0%	16.5%	12.1%	13.2%	10.4%
NCREIF ODCE Net Lagged*	Real Estate	2.0%	7.1%	9.0%	10.4%	4.2%
Wilshire REIT Index	REIT	9.7%	3.9%	7.8%	8.4%	7.8%
CPI + 2%	Inflation/Real Assets	1.1%	4.8%	3.9%	3.6%	3.5%















\* As of 3/31/2018



# PERFORMANCE OVERVIEW

## Q2 Market Summary

Macro			Equity			Credit			Real Assets		
US Dollar	VIX	US 10-Yr	S&P 500	MSCI EAFE	MSCI EM	US Agg.	High Yield	Dollar EMD	Oil	Gold	REITS
											
5.0%	-3.9	12 bps	3.4%	-1.2%	-8.0%	-0.2%	1.0%	-3.5%	14.2%	-5.4%	8.3%

- **US stocks increased on the quarter, supported by strong earnings growth**
- **Emerging market equities and currencies weakened this quarter as trade concerns and Federal Reserve interest rate increases weighed on markets**
  - The US dollar reversed its first quarter decline and increased relative to a basket of major developed market currencies
- **The US yield curve continued to flatten as the second Fed rate hike of 2018 pushed short-term interest rates higher**

Market segment (index representation) as follows: US Dollar (DXY Index), VIX (CBOE Volatility Index), US 10-Year (US 10-Year Treasury Yield), S&P 500 (US Equity), MSCI EAFE Index (International Developed Equity), MSCI Emerging Markets (Emerging Markets Equity), US Agg (Barclays US Aggregate Bond Index), High Yield (Barclays US High Yield Index), Dollar EMD (JPM Emerging Market Bond Index), Crude Oil (WTI Crude Oil Spot), Gold (Gold Price Spot), and REITs (NAREIT Composite Index).



# MACRO PERFORMANCE OVERVIEW

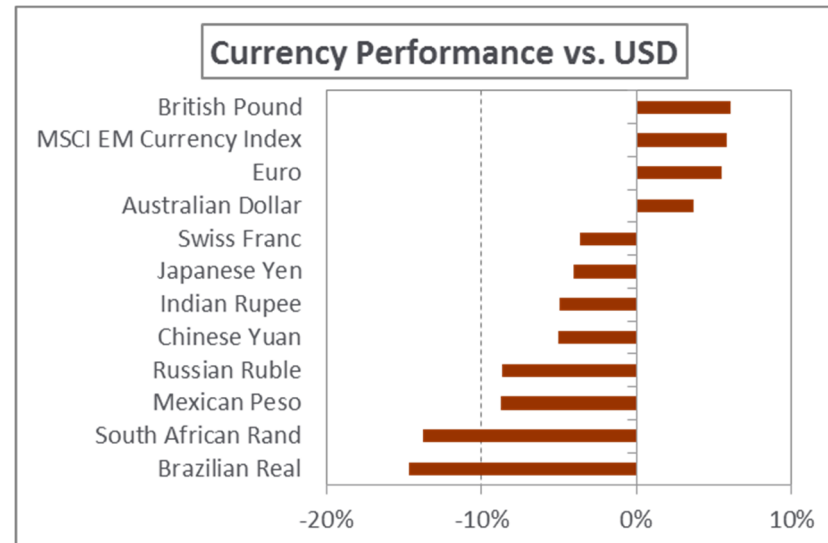
## Q2 Macro Market Summary

- The global growth outlook remains strong, particularly in the US
- Global equity market volatility fell, despite escalating tensions related to the US-China trade dispute
- The US Treasury curve continued to flatten raising concerns of an inverted curve should the Fed hike rates beyond market expectations

	Yield 03/31/18	Yield 06/30/18	Δ
US 10-Yr	2.74%	2.86%	0.12%
US 30-Yr	2.97%	2.99%	0.02%
US Real 10-Yr	0.68%	0.74%	0.05%
German 10-Yr	0.50%	0.30%	-0.20%
Japan 10-Yr	0.05%	0.04%	-0.01%
China 10-Yr	3.75%	3.48%	-0.27%
EM Local Debt	6.00%	6.59%	0.59%

Source: Bloomberg

Central Banks	Current Rate	CPI YOY	Notes from the Quarter
Federal Reserve	1.75% - 2.00%	2.9%	The Fed increased its benchmark interest rate to 1.75% - 2.00% in June and is expected to hike rates two more times in 2018
European Central Bank	0.0%	1.7%	The ECB maintained its current benchmark interest rate, while indicating rates would remain steady at least through mid-2019.
Bank of Japan	-0.1%	1.3%	The BoJ will continue its ultra-easy QE program with inflation remaining well below target.



Source: Bloomberg



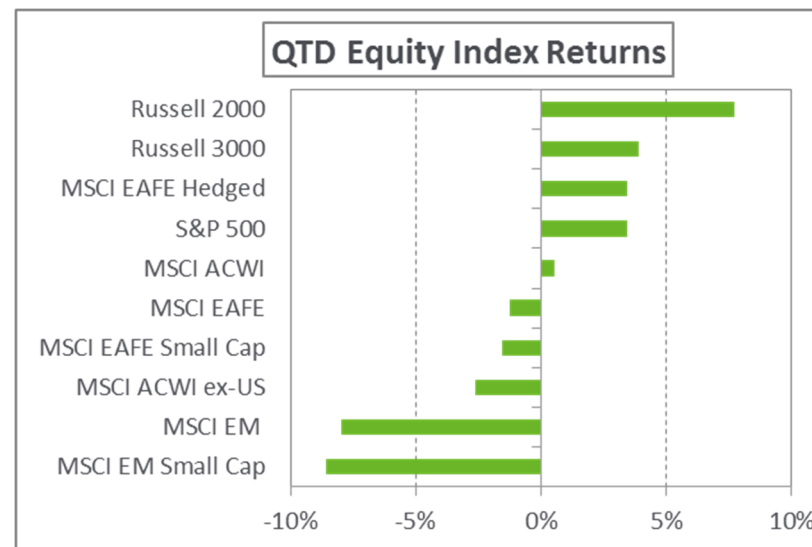
# EQUITY PERFORMANCE OVERVIEW

## Q2 Equity Market Summary

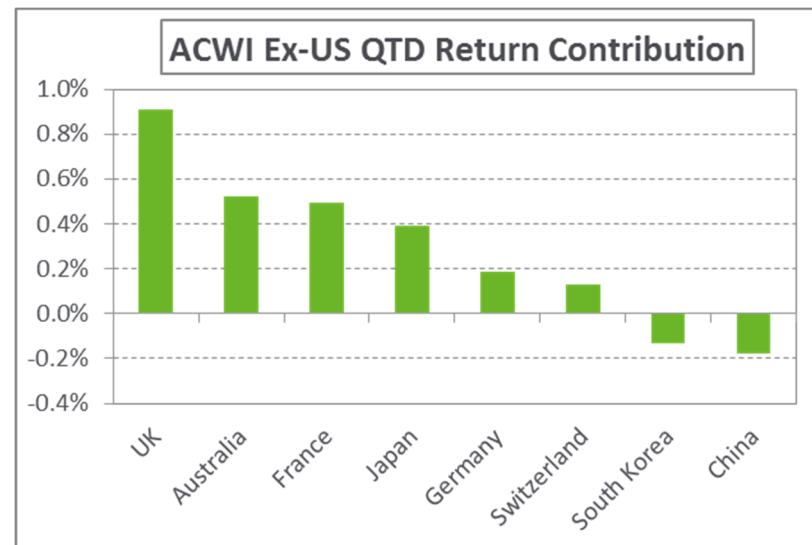
- **US small cap outperformed large cap as tax reform benefits helped boost earnings**
- **Trade concerns and yuan weakness weighed on Chinese returns as equity markets neared bear market territory**

Russell 3000 QTD Sector Return Contribution	
Information Technology	1.5%
Consumer Discretionary	0.0%
Financials	0.1%
Industrials	0.4%
Consumer Staples	0.9%
Energy	0.4%
Materials	0.1%
Health Care	0.2%
Real Estate	0.0%
Telecommunication	-0.0%
Utilities	-0.1%

Source: Russell, Bloomberg



Source: MSCI, Russell, S&P, Bloomberg



Source: MSCI, Bloomberg. QTD top country contributors to index return





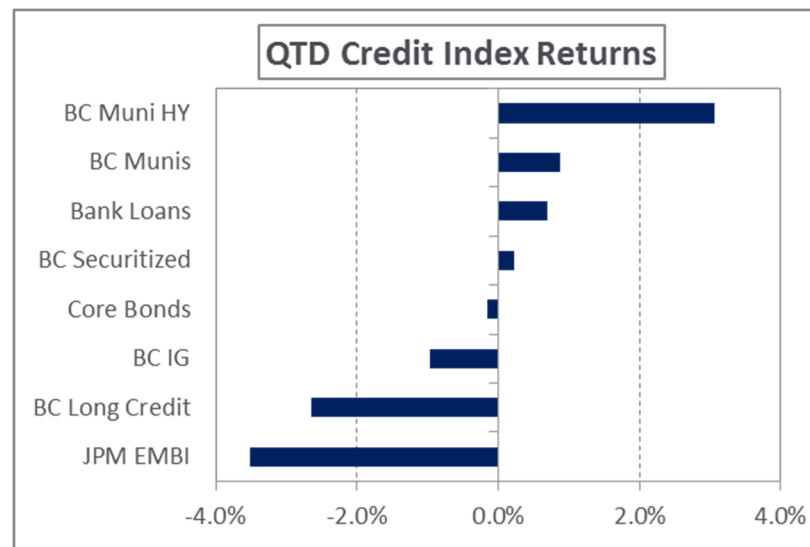
# CREDIT PERFORMANCE OVERVIEW

## Q2 Credit Market Summary

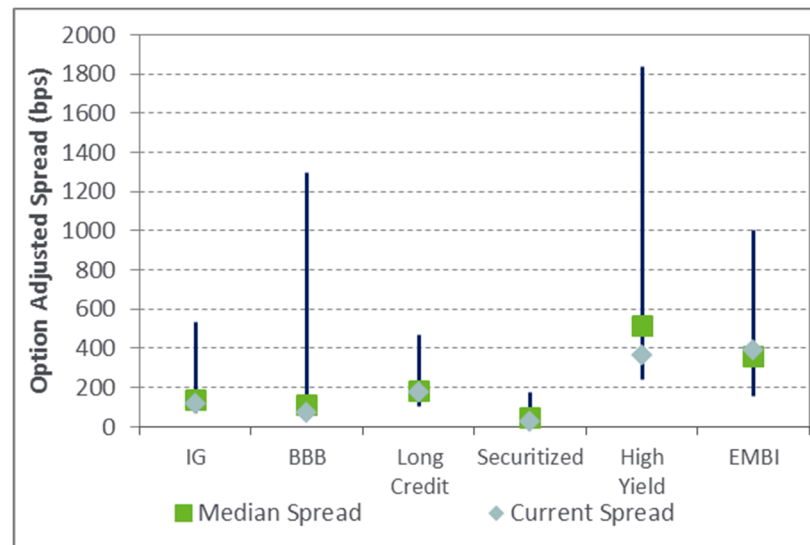
- **Credit spreads increased slightly, but remain below medians in most areas of the credit market**
- **Dollar-denominated EMD spreads increased 62 bps during the quarter, resulting in a decline of 3.5%**
- **Local currency EMD declined 10.4% as currency weakness weighed on returns**

Credit Spread (Basis Points)	03/31/18	06/30/18	Δ
BC IG Credit	103	116	13
BC Long Credit	148	174	26
BC Securitized	29	28	-1
BC High Yield	354	363	9
Muni HY	253	198	-55
JPM EMBI	326	388	62
Bank Loans - Libor	257	303	46

Source: Barclays, Merrill Lynch, JPM, Bloomberg, NEPC



Source: Barclays, JPM, S&P, Bloomberg



Source: Barclays, JPM, S&P, Bloomberg. As of 01/31/2000



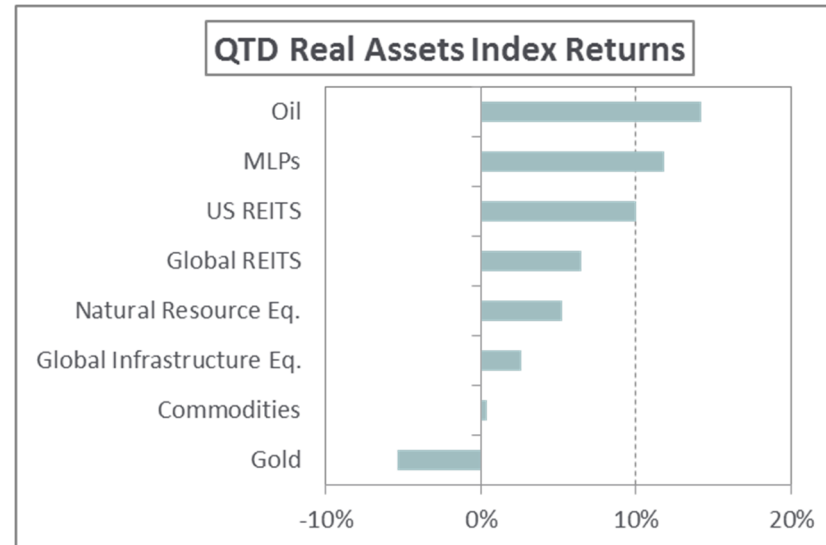
# REAL ASSETS PERFORMANCE OVERVIEW

## Q2 Real Assets Market Summary

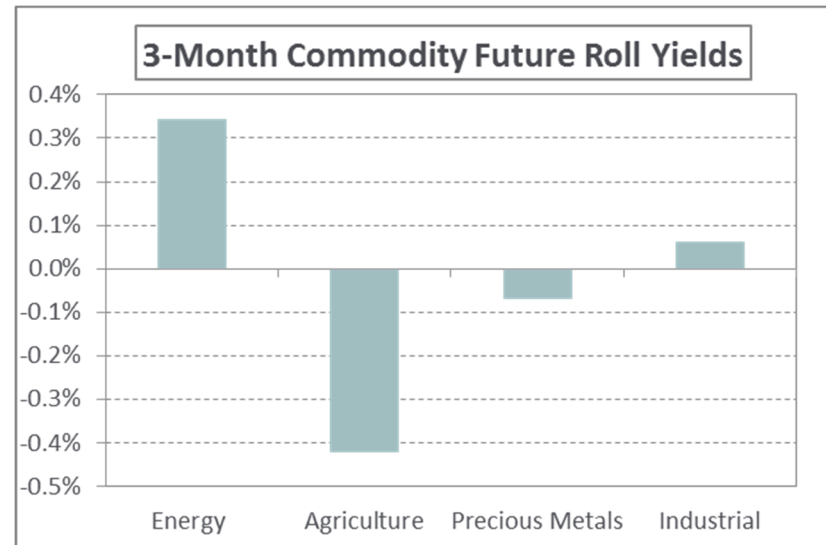
- **Crude oil increased 14.2% during the quarter as a result of tighter global supply and US-imposed sanctions on Iran**
- **Agricultural commodities broadly declined, as Chinese tariffs specifically targeted soybeans**
- **MLPs reversed steep losses from earlier in the year as industry consolidation and simplification continues**

Real Asset Yields	03/31/18	06/30/18
MLPs	8.9%	8.1%
Core Real Estate	4.5%	4.2%
US REITs	4.6%	4.4%
Global REITs	4.0%	3.7%
Global Infrastructure Equities	3.9%	4.4%
Natural Resource Equities	3.6%	3.5%
US 10-Yr Breakeven Inflation	2.1%	2.1%
Commodity Index Roll Yield	-1.6%	0.1%

Source: NCREIF, Alerian, NAREIT, S&P, Bloomberg



Source: S&P, NAREIT, Alerian, Bloomberg



Source: Bloomberg, NEPC Calculated as of 07/11/2018



# KEY MARKET THEMES

## Extended US Economic Cycle

### Economic cycles do not die of old age

The US economy is in an extended expansionary cycle despite being nine years removed from the last recession

Fiscal stimulus, health of US consumers, and ongoing recovery of the housing market continue to drive economic growth

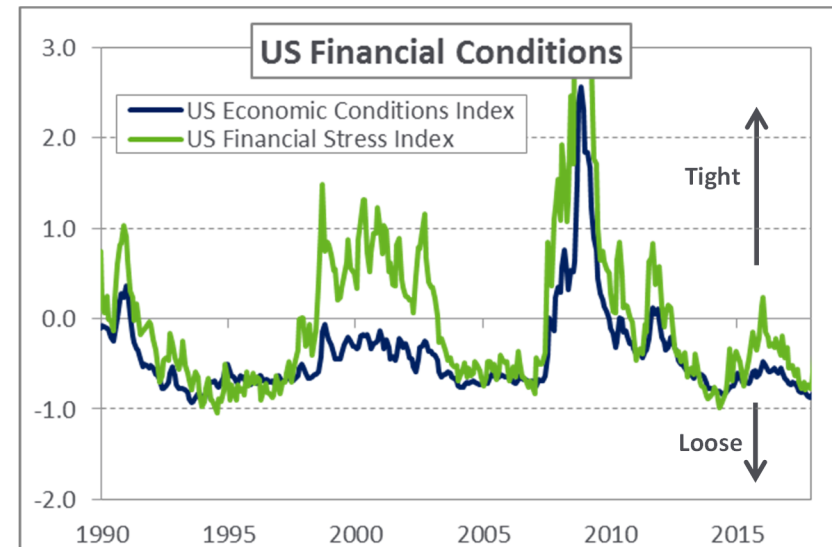
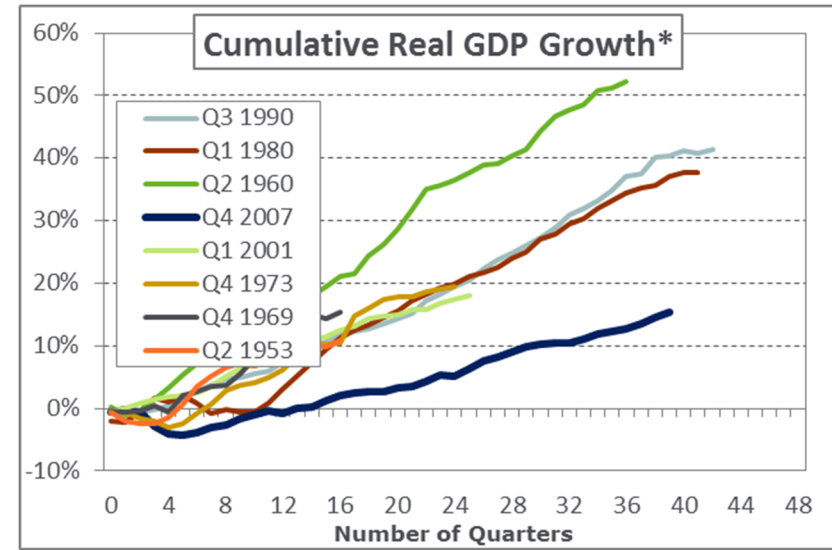
A prolonged US economic expansion can support a continued rally for US equities despite elevated valuation levels

### US financial conditions remain loose and support steady economic gains

An acceleration in inflation leading to Fed tightening has historically been a catalyst to end economic expansions

US recession concerns are muted as strong global economic conditions and growth rates reinforce an expansion of the US economy

Reversal in these easy conditions may be fueled from a misstep by the Fed, strong dollar, and/or increased volatility in the Chinese yuan

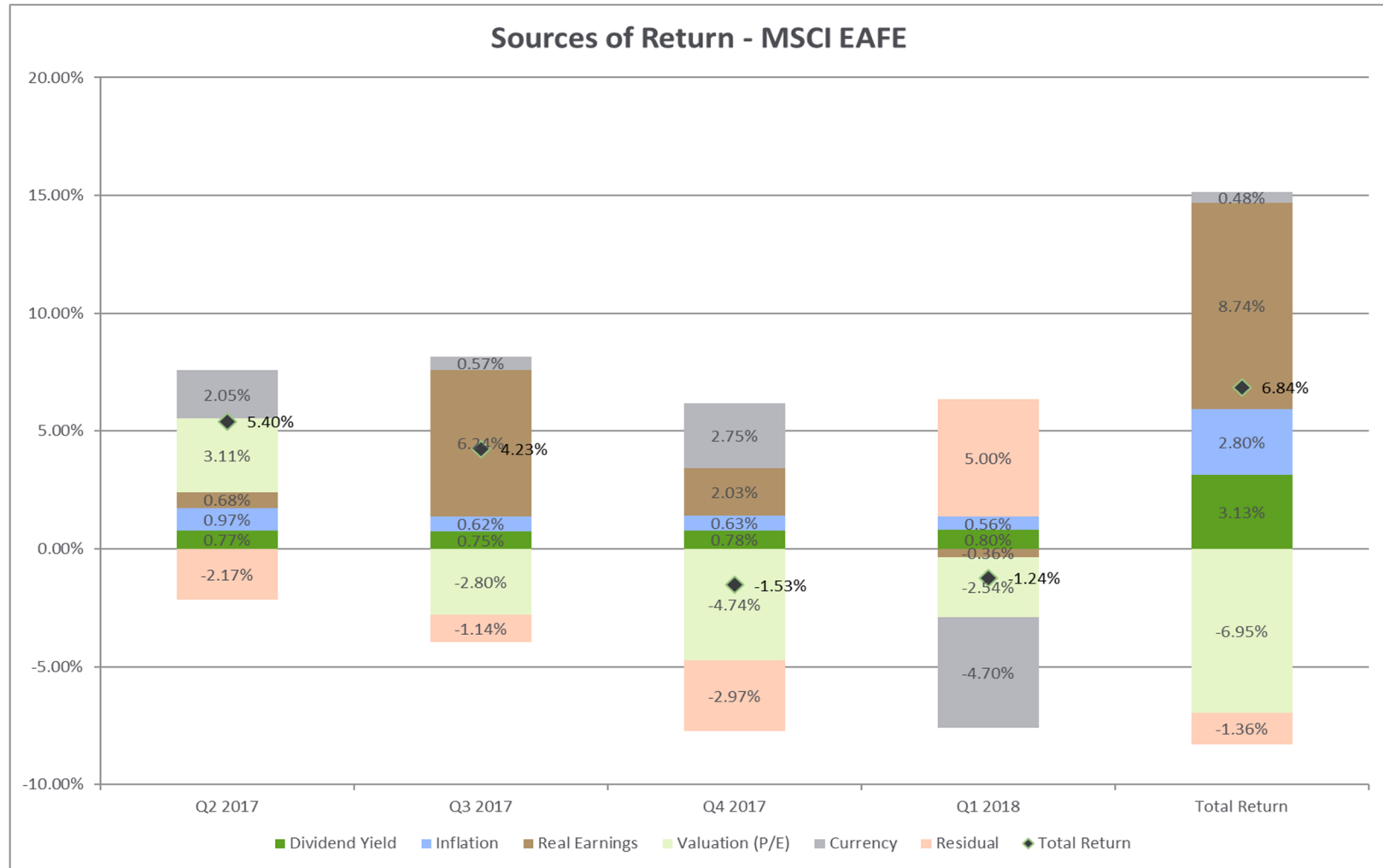


Source: (Top) Bloomberg, \*Cumulative GDP growth from prior cycle peak

Source: (Bottom) Federal Reserve Bank of Chicago and Kansas City



# 1 YEAR ATTRIBUTION OF MSCI EAFE RETURNS



**Spot Rates**

1 USD = 0.846 Euro

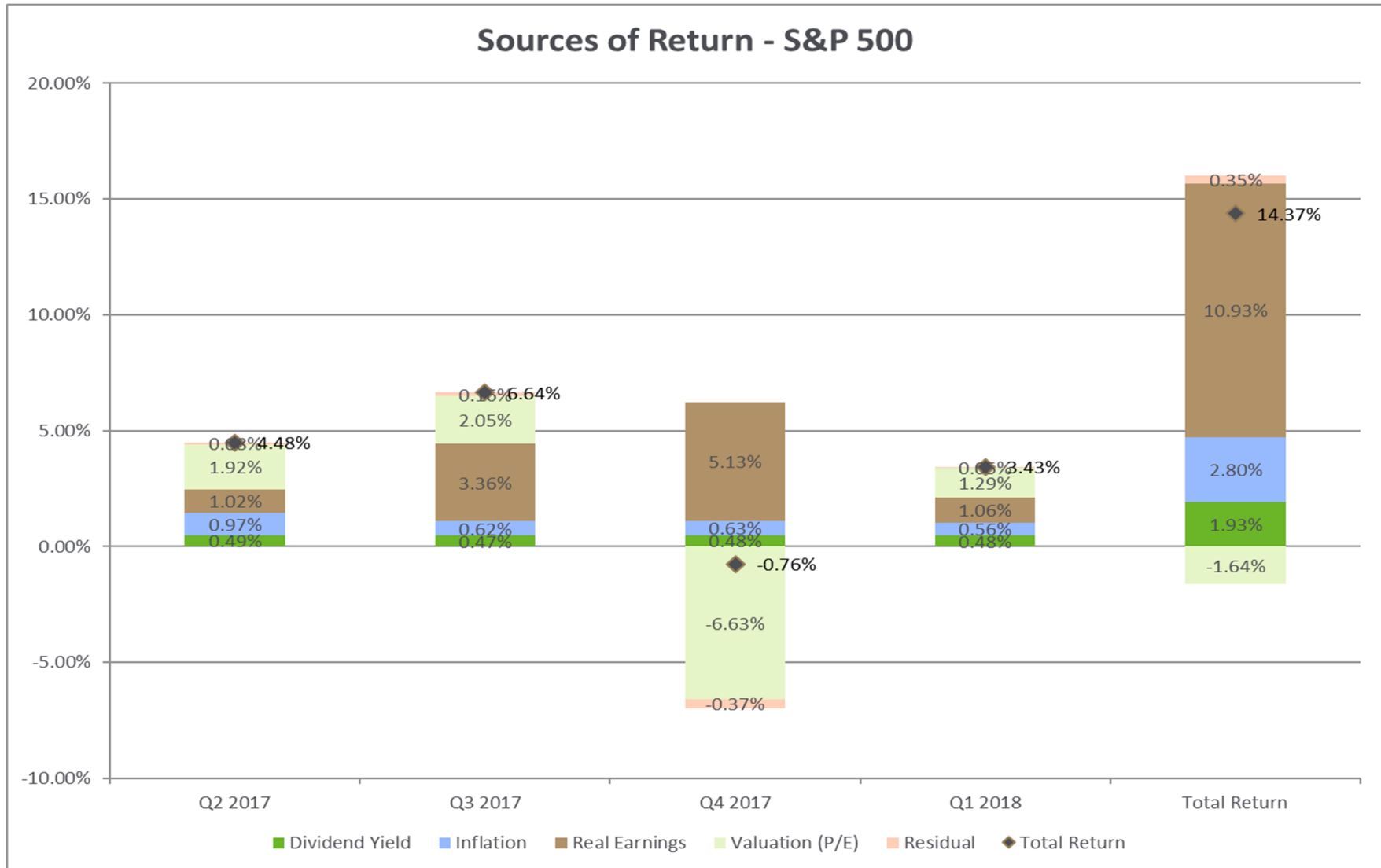
1 USD = 0.833 Euro

1 USD = 0.811 Euro

1 USD = 0.858 Euro



# 1 YEAR ATTRIBUTION OF S&P 500 RETURNS



# US-CHINA TRADE ESCALATION



<p>The US proposes 25% tariffs on \$50B of Chinese goods totaling 1300 products (Implemented in July)</p>	<p><b>April</b></p>	<p><b>Retaliatory tariffs of ~\$3B worth of US exports. In response to implementation of US tariffs in Q1 on solar panels, washing machines, steel, and aluminum</b></p>
<p><b>US appears to reach broad agreement with China and holds off on additional tariffs. Agreement is never finalized.</b></p>	<p><b>May</b></p>	<p>China offers to cut import duties on cars and remove tariffs on US farm products</p>
<p>US restricts Chinese acquisition of US firms with sensitive technology</p> <p>US threatens tariffs on another \$200 billion worth of Chinese goods</p>	<p><b>June</b></p>	<p>China details tariff on \$50 billion worth of exports on 659 US goods in response to the US April announcement (Implemented in July)</p>
<p><b>25% tariff levied on \$34 billion of imports from China with tariffs expected on another \$16 billion in two weeks.</b></p> <p>Potential tariffs on \$200B worth of imports from China is announced with possible implementation in late Q3</p>	<p><b>July</b></p>	<p><b>China responds with tariffs of 25% on \$34 billion worth of US exports with soybeans being a sizable target. Tariffs on \$16 billion worth of goods dependent on US response.</b></p> <p>Micro Technology ordered to temporarily halt sales in China due to a patent dispute</p>

# US-CHINA TRADE: POTENTIAL OUTCOMES

Outcome	Description	Implications
<p><b><u>Base Case:</u></b> Elevated Tariffs and/or Trade Limitations</p>	<p>A “cold war” in the ongoing “trade battle” between the US and China</p>	<ul style="list-style-type: none"> <li>- Tariffs and restrictions on trade are implemented – leading to marginally higher inflation and marginally lower growth rates</li> <li>- Equity and currency volatility is elevated, but valuations may provide attractive investment opportunities</li> </ul>
<p><b><u>Favorable Case:</u></b> Negotiated Settlement</p>	<p>The US and China agree to a mutually beneficial pact</p>	<ul style="list-style-type: none"> <li>- Some tariffs or trade limitations may be implemented, but the pact allows for broader access to local China and US markets for each nation</li> <li>- Volatility may persist throughout negotiations, though this is the most appealing outcome for global equities</li> </ul>
<p><b><u>Tail Risks:</u></b> US – China Trade War</p>	<p>The countries escalate to implementing more severe protectionist policies</p>	<ul style="list-style-type: none"> <li>- Results in destabilization of global equity markets and the global economy</li> <li>- It would likely result in a global recession as economic growth rates are hampered with the potential for stagflation</li> <li>- Investors are encouraged to rebalance to “safe haven” fixed-income exposure, such as TIPS and government debt</li> </ul>
<p>Full-Blown Trade War</p>	<p>Other countries become involved levying additional tariffs and materially reducing global trade flows (e.g. 1930s style global trade restrictions)</p>	

# BEYOND US-CHINA TRADE

- **Should dynamics shift toward the tail-risk outcomes, there are other important aspects of the United States' role in the global economy that should be considered:**

## Chinese Ownership of US Treasuries

Measured about \$1.2T at the end of 2017

Provides some leverage if China threatened to sell

However, materially reducing Treasuries could negatively impact the Yuan

## Degree of Political Control

Known political stability affords China the opportunity to take a harsher negotiation posture

China can effectively control local sentiment if needed – for example, to implement boycotts on American goods

## Yuan Devaluation

Competitiveness of goods and exports would increase

However, could trigger large capital outflows from China. Likely requires capital controls, which runs counter to goal of opening local financial markets

## Currency Reserves

The USD status as a reserve currency allows it to benefit from safe-haven flows that could result from a reduction in trade

This status could be jeopardized if other key countries shift reserves elsewhere

## US Companies Operating Internationally

Companies such as Apple, Disney, or Nike could face additional hurdles from the Chinese government to operate locally

China's manufacturing base could allow them to cut off key parts of the global supply chain

## Europe

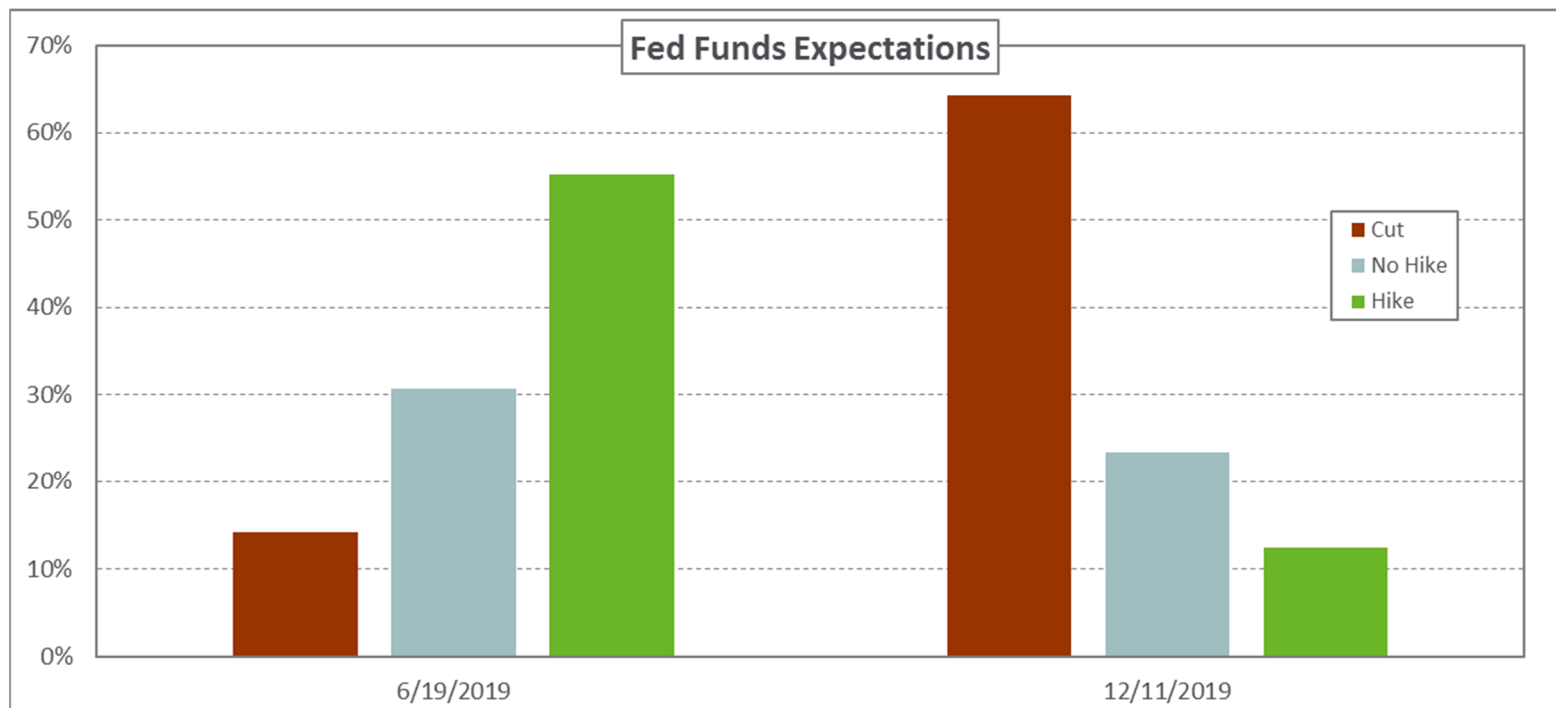
The US and the EU have a trade partnership worth over \$1.1T annually

Tensions have escalated – leading the EU to respond with retaliatory measures on American products such as motorcycles and denim



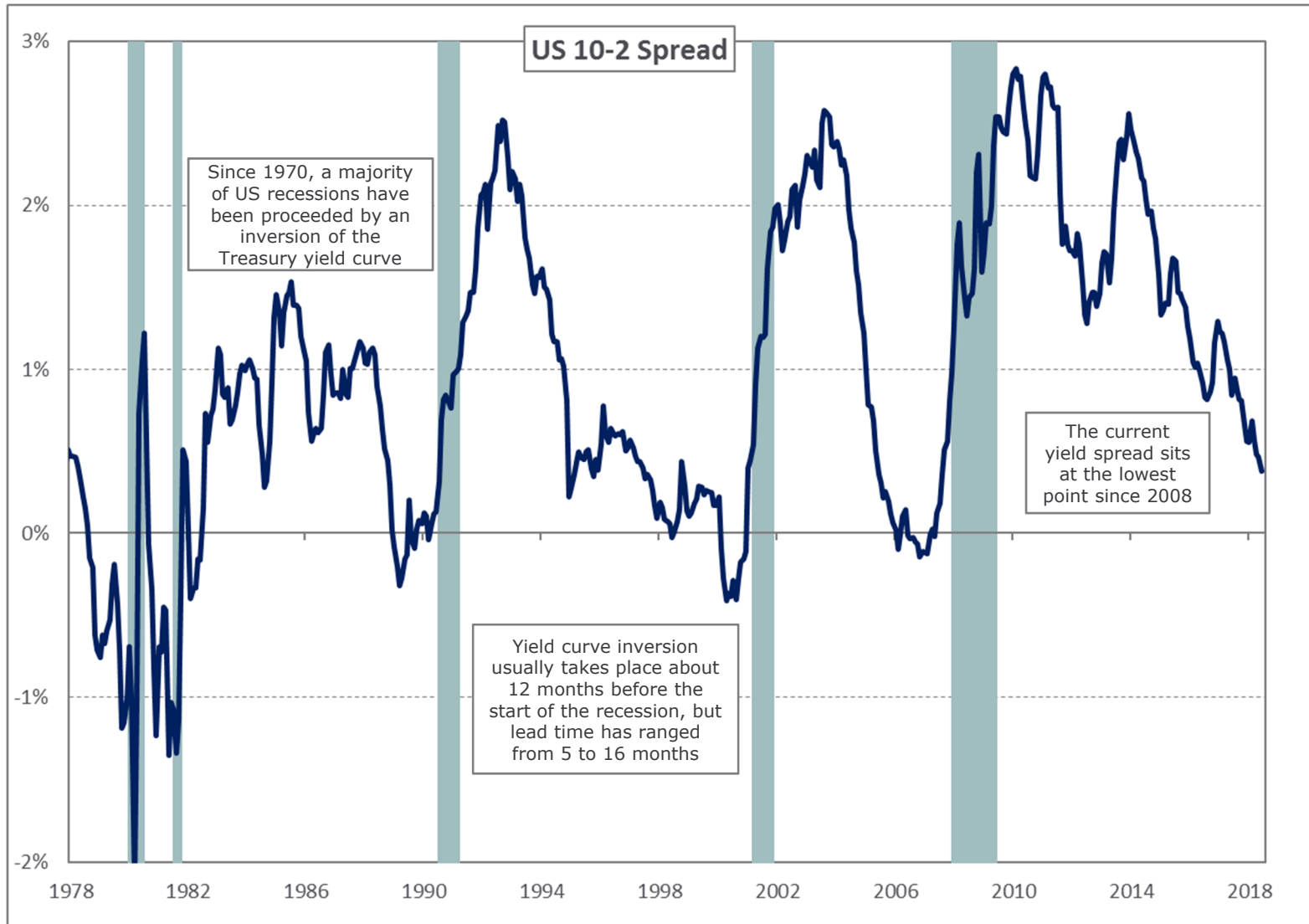
# THE PATH OF FEDERAL RESERVE HIKES

- **The current target federal funds level is 1.75%-2.00%, following two rate increases in March and June of 2018**
  - Fed funds expectations imply a minimum of one additional hike and potentially a second in 2018 based on both market expectations and Fed policy makers estimates
- **New Fed Chair Jerome Powell has promised greater transparency but market expectations highlight a large disconnect in the back half of 2019 for the Fed Funds target level**



Data as of 7/13/2018; Data assumes Fed Funds rate at 6/19/2019 is 2.25-2.50 and Fed Funds rate at 12/11/2019 is 2.75-3.00  
Source: Fed, Bloomberg, NEPC

# THE YIELD CURVE IS A STRONG SIGNAL

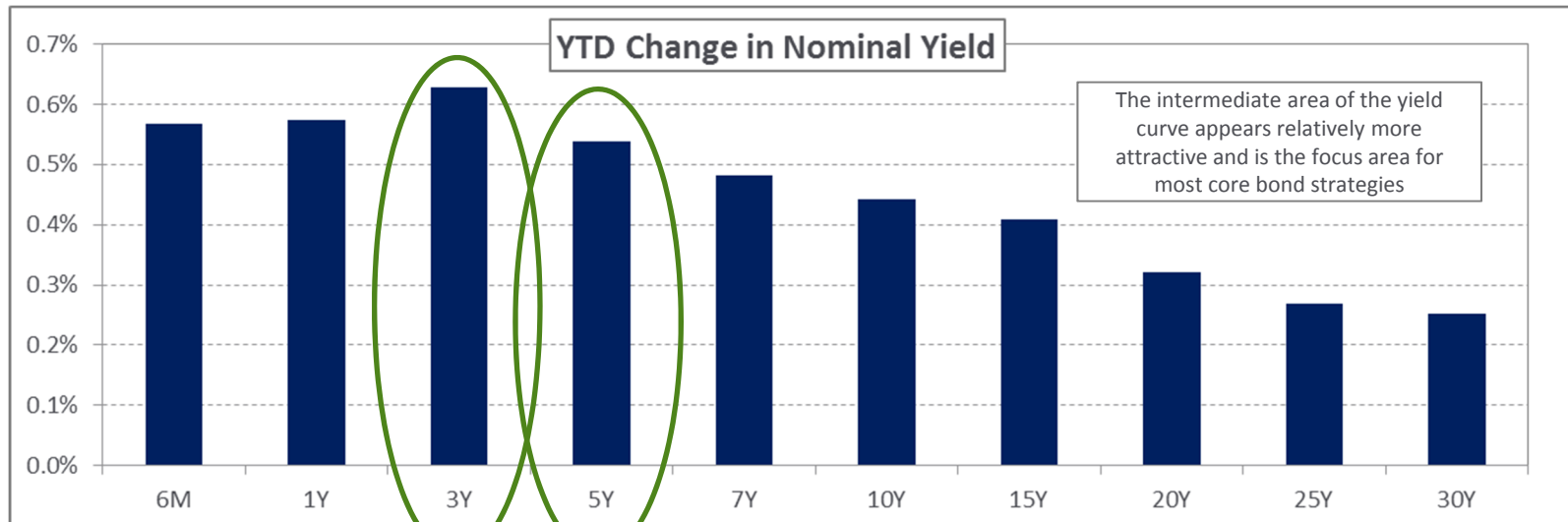


Source: FRED

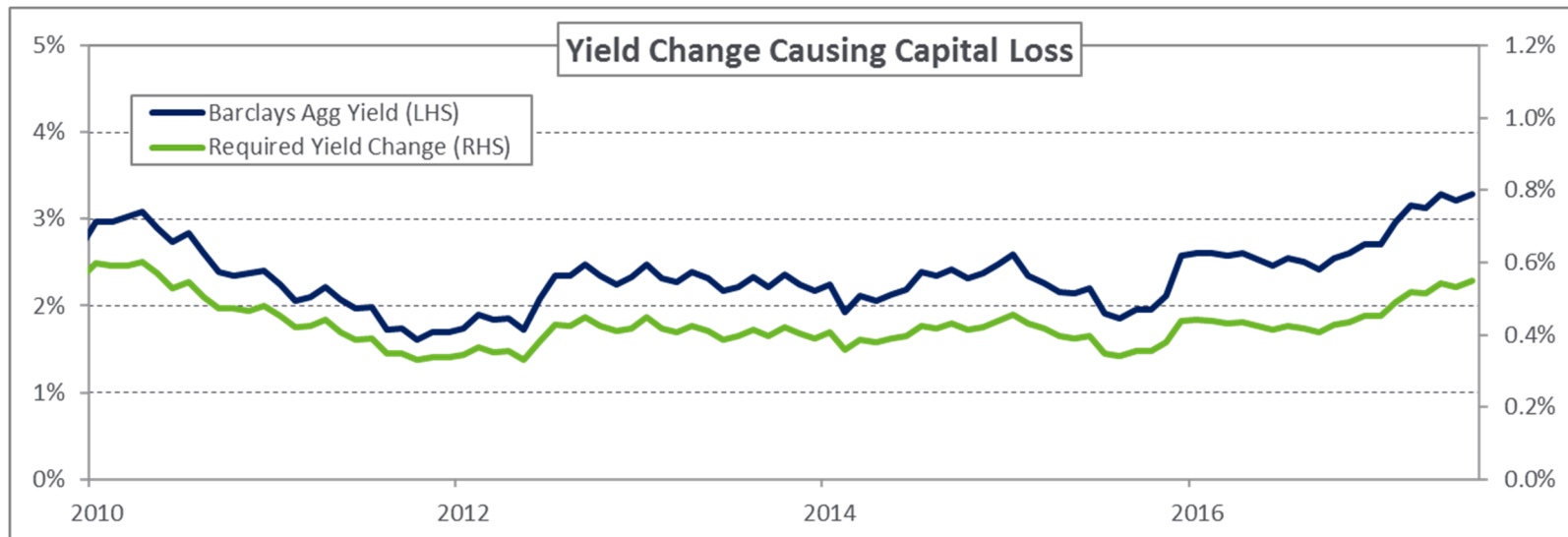
Light blue shading indicates recession; 10-2 spread is calculated as 10-year minus 2-year Treasury



# US YIELDS ARE MORE ATTRACTIVE



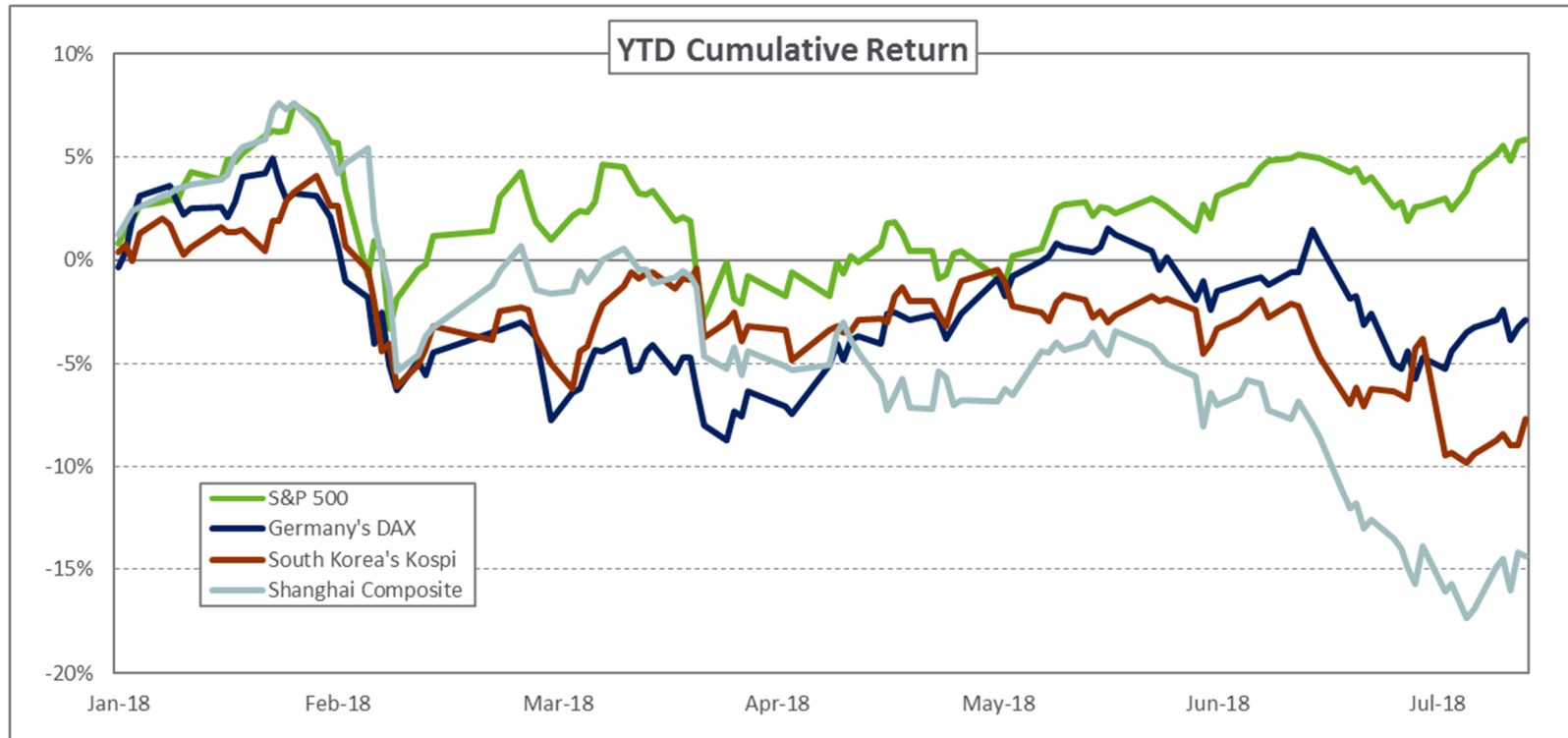
Source: Bloomberg, NEPC; Change calculated using 06/29/18 and 12/29/17 values



Source: Barclays, Bloomberg, NEPC



# GLOBAL EQUITIES IN 2018

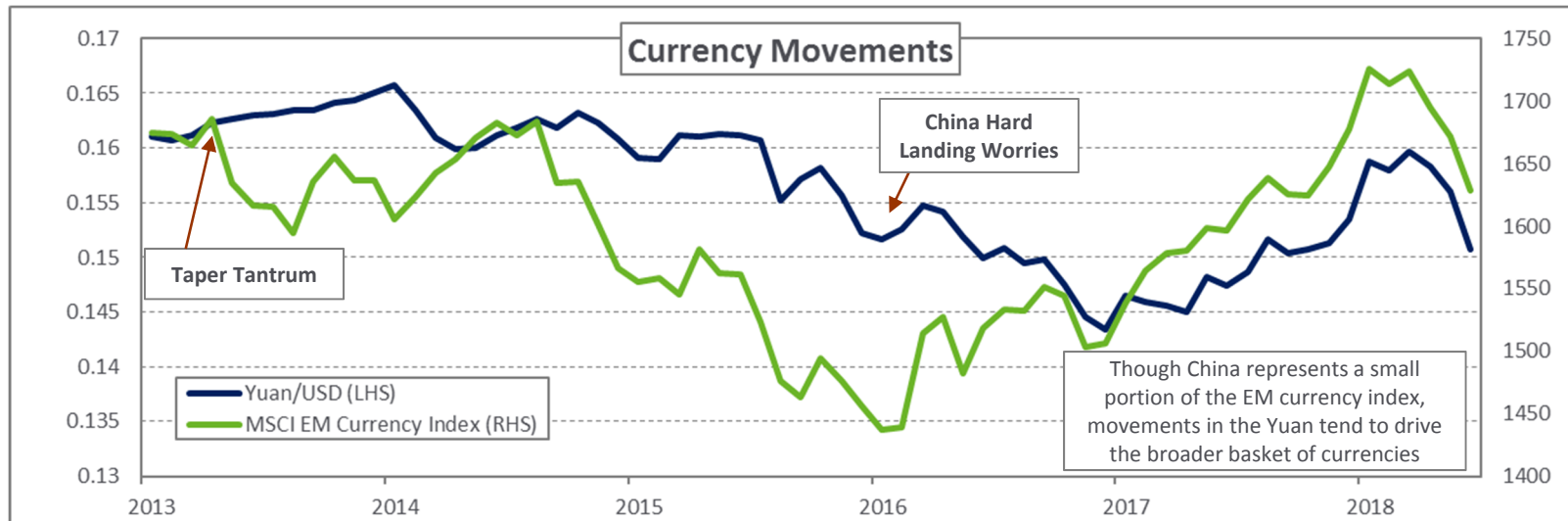


Source: S&P, Russell, Bloomberg, NEPC; Cumulative return calculated through 07/16/2018

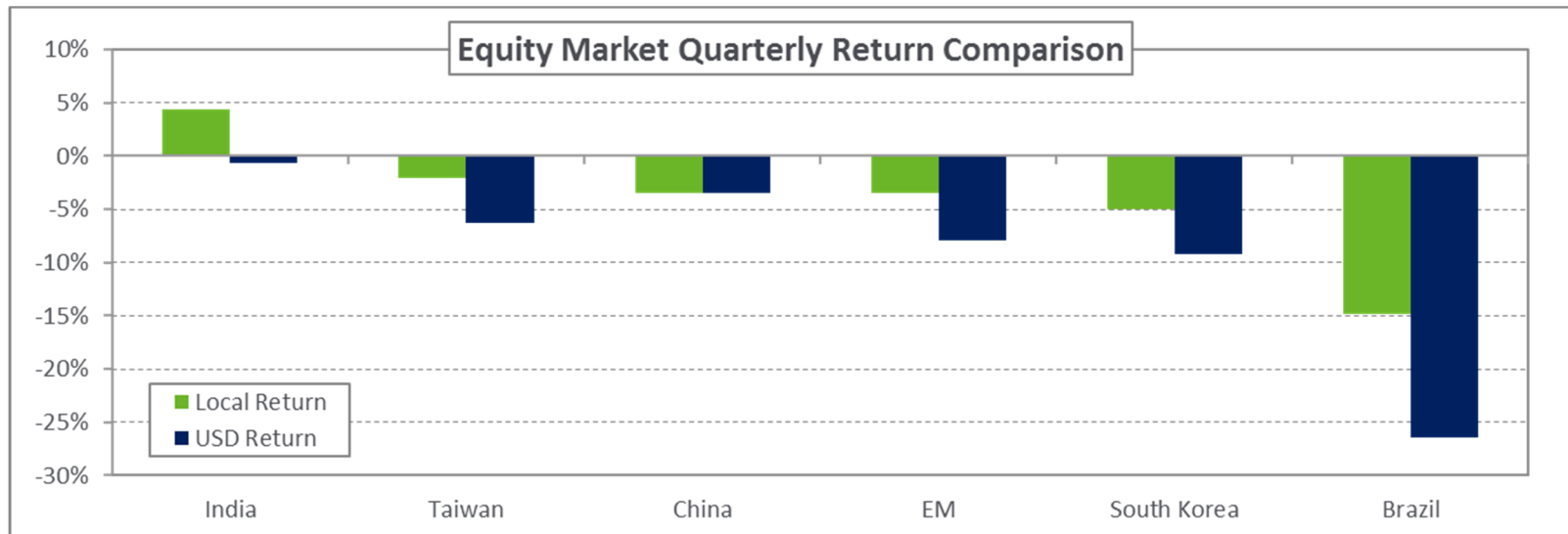
- **With the US economy performing well, 2018 was set to be a strong year for earnings even before the tax reform was enacted**
  - First quarter US corporate earnings reached near historic levels and earnings for 2018 are expected to increase 20% relative to the year prior as tax cuts offer a tailwind
- **International and emerging markets are also experiencing strong earnings growth, but have suffered from the negative sentiment associated with US-China trade tensions**



# CHINA DRIVES EMERGING MARKET SENTIMENT



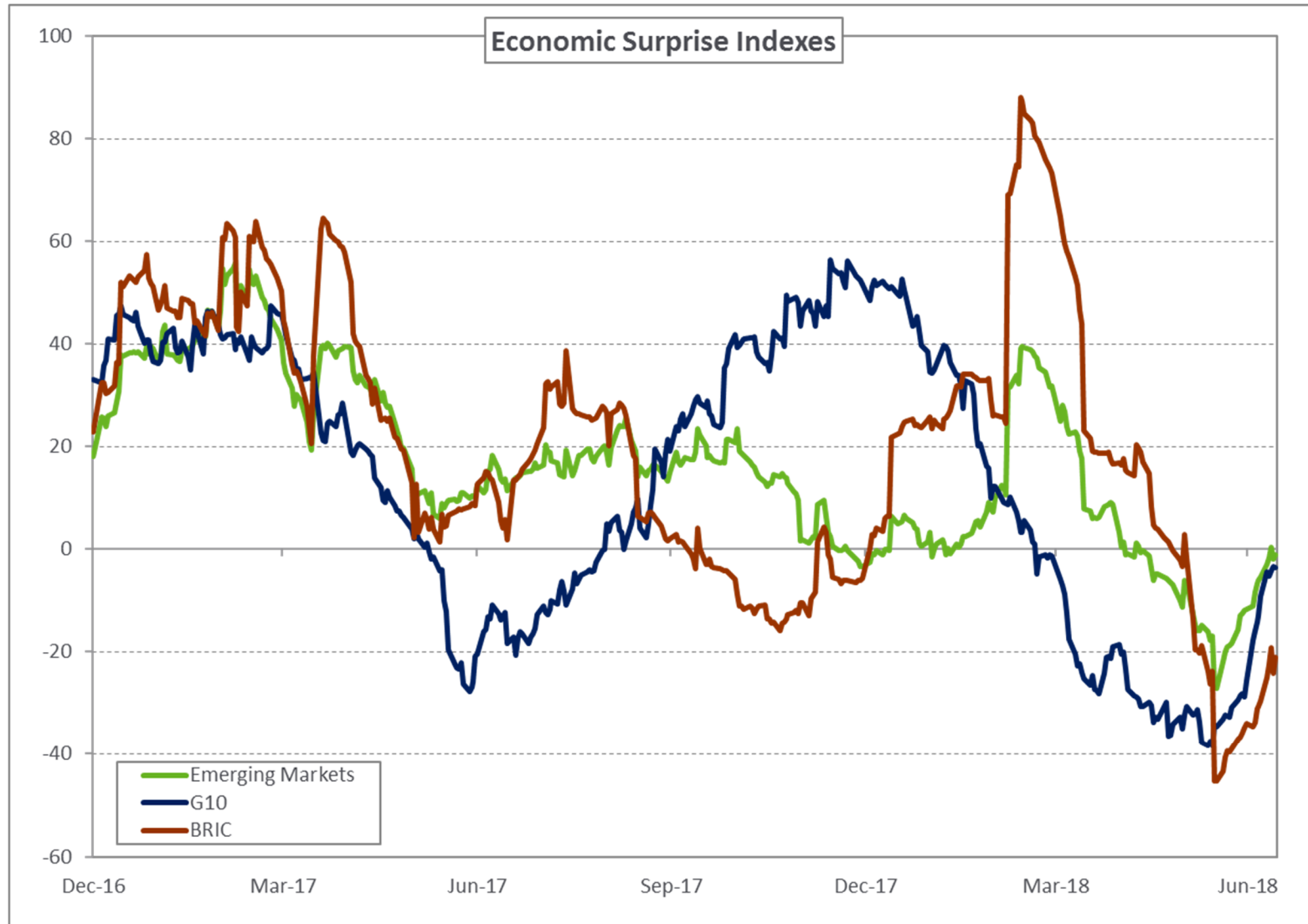
Source: MSCI, Bloomberg, NEPC



Source: MSCI, Bloomberg, NEPC



# EMERGING ECONOMIES SHOW RESILIENCY



Source: Citi, Bloomberg



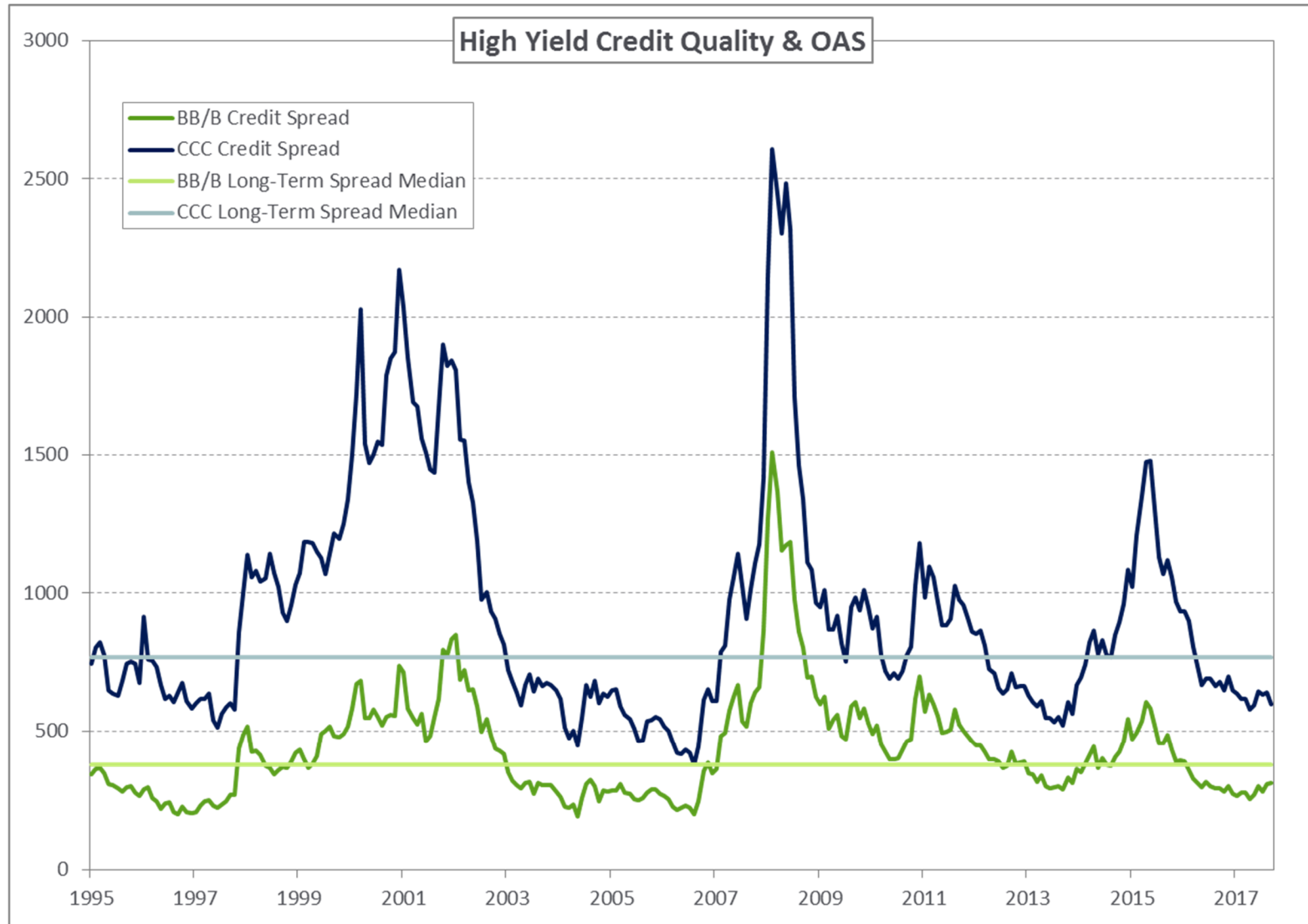
# GLOBAL TRADE IS STILL EXPANDING



Source: OECD



# CREDIT SPREADS APPEAR UNATTRACTIVE

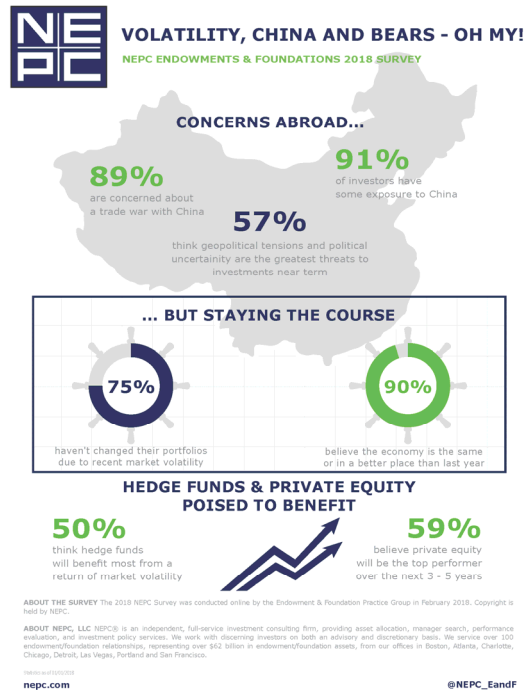


Source: Barclays, Bloomberg, NEPC





# HIGHLIGHTS OF SECOND QUARTER HAPPENINGS AT NEPC



## NEPC INSIGHTS

- Taking Stock: Globalization Backlash: Tariffs are a Dangerous Game
- Taking Stock: A Millennial's Take on ESG and Defined Contribution Plans
- The Need for Investment Discipline: Review, Revise and Repeat
- 2018 First Quarter Market Thoughts
- The State of Strategic Investing in Healthcare
- Taking Stock: Corporate Pension Plans: A Changing Yield Curve and Q1 Liability Performance
- Nothing Ventured, Nothing Gained: The European VC Opportunity
- Taking Stock: Megatrends – The Forces Driving Our Future
- May 2018 – Endowment & Foundation Survey Results & Infographic
- Taking Stock: A Roundup of NEPC's 2018 Investment Conference
- Taking Stock: Holding the Investment Industry to a Higher Standard
- Taking Stock: China's Demographic Solution: Too Little Too Late?
- Putting the Pieces Together: Equity Portfolio Construction for Private Wealth Clients
- Taking Stock: Is This the Ghost of Taper Tantrums Past?
- Taking Stock: What's 'Appening with Financial Wellness?

## WEBINAR REPLAYS

- 8th Annual Investment Manager Webinar Replay
- NEPC Q1 2018 Quarterly Markets Call

To download NEPC's recent insights and webinar replays, visit: [www.NEPC.com/insights](http://www.NEPC.com/insights)



# 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:

## **Edison IX**

The investment was approved for a \$50 million commitment on April 19, 2018 as part of the Fund's allocation to Private Equity.

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

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

## **Bernhard II**

The investment was approved for a \$30 million commitment on April 19, 2018 as part of the Fund's allocation to Private Equity.

Bernhard has provided documentation confirming Metric Point Capital was used in connection with NMERB's investment and will be paid approximately \$90,000 for NMERB's commitment.

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

## **Hadelman Ag**

The investment was approved for a \$25 million commitment on April 19, 2018 as part of the Fund's allocation to Real Assets.

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

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

## **Orchard "Olea"**

The investment was approved for a \$100 million commitment on June 28, 2018 as part of the Fund's allocation to Diversifying Assets.

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

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



# 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:

## **TPG Real Estate III**

The investment was approved for a \$50 million commitment on June 28, 2018 as part of the Fund's allocation to Diversifying Assets.

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

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



## New Mexico Educational Retirement Board

# TOTAL FUND PERFORMANCE SUMMARY (NET)

	Market Value	3 Mo Rank	YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	10 Yrs Rank	15 Yrs Rank	20 Yrs Rank	30 Yrs Rank	Inception	Inception Date									
<b>Total Fund</b>	<b>\$12,902,525,115</b>	<b>1.5%</b>	<b>14</b>	<b>1.9%</b>	<b>15</b>	<b>8.3%</b>	<b>37</b>	<b>7.6%</b>	<b>11</b>	<b>8.1%</b>	<b>35</b>	<b>6.8%</b>	<b>21</b>	<b>7.6%</b>	<b>25</b>	<b>5.9%</b>	<b>40</b>	<b>8.6%</b>	<b>12</b>	<b>9.1%</b>	<b>Jul-83</b>
<i>Policy Index</i>		<i>0.9%</i>	<i>41</i>	<i>1.6%</i>	<i>22</i>	<i>8.5%</i>	<i>33</i>	<i>7.3%</i>	<i>23</i>	<i>7.6%</i>	<i>50</i>	<i>6.0%</i>	<i>51</i>	<i>7.2%</i>	<i>46</i>	<i>5.8%</i>	<i>62</i>	<i>7.8%</i>	<i>63</i>	--	<i>Jul-83</i>
<i>60% MSCI ACWI (Net) / 40% CITI WGBI</i>		<i>-1.0%</i>	<i>99</i>	<i>-0.6%</i>	<i>98</i>	<i>7.2%</i>	<i>79</i>	<i>6.2%</i>	<i>76</i>	<i>6.2%</i>	<i>96</i>	<i>4.6%</i>	<i>98</i>	<i>6.6%</i>	<i>73</i>	<i>5.3%</i>	<i>77</i>	--	--	--	<i>Jul-83</i>
<i>InvestorForce Public DB &gt; \$1B Net Median</i>		<i>0.6%</i>		<i>0.6%</i>		<i>8.0%</i>		<i>6.7%</i>		<i>7.5%</i>		<i>6.1%</i>		<i>7.1%</i>		<i>5.8%</i>		<i>7.9%</i>		<i>8.5%</i>	<i>Jul-83</i>

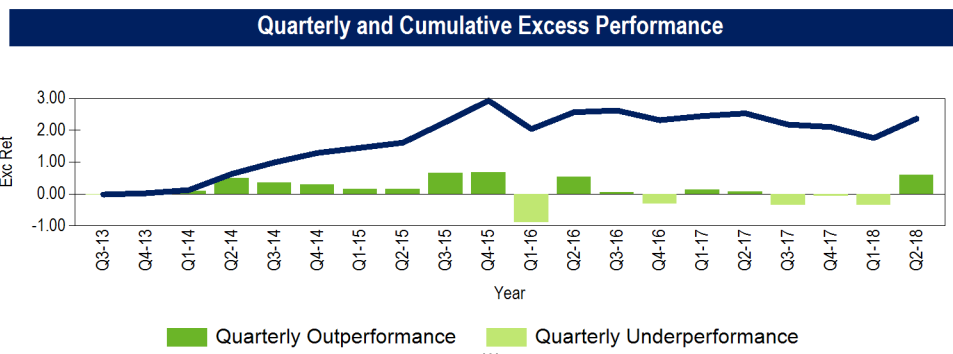
Over the past five years, the Fund returned 8.1% per annum, outperforming the policy index by 51 basis points and ranking in the 35<sup>th</sup> percentile of the InvestorForce Public Funds > \$1 Billion universe and outperforming the actuarial assumed rate of 7.25%. The Fund's volatility was 4.6%, which ranks in the 7<sup>th</sup> percentile of its peers over this period. The Fund's risk-adjusted performance, as measured by the Sharpe Ratio, ranks in the 6<sup>th</sup> percentile of its peers.

Over the past three years, the Fund returned 7.6% per annum, outperforming the policy index by 27 basis points and ranking in the 11<sup>th</sup> percentile of its peer group. Over the same period, the Fund's volatility ranks in the 7<sup>th</sup> percentile of its peers, resulting in a three-year Sharpe Ratio of 1.4, which ranks in the 7<sup>th</sup> percentile.

For the year ending June 30, 2018, the Fund experienced a net investment gain of \$1.02 billion, which includes a net investment gain of \$190.0 million during the quarter. Assets increased from \$12.3 billion twelve months ago to \$12.9 billion on June 30, 2018, with \$454 million in net distributions during the year. The Fund returned 8.3%, underperforming the policy index by 16 basis points and ranking in the 37<sup>th</sup> percentile of its peers.

All asset classes were within policy range as of June 30, 2018.

The InvestorForce Public Funds >\$1 Billion Net Universe contains 52 observations for the period ending June 30, 2018, with total assets of \$420 billion.



5 Years Ending June 30, 2018								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	8.1%	35	4.6%	7	1.7	6	2.8	7
Policy Index	7.6%	50	4.9%	9	1.5	19	2.5	13
InvestorForce Public DB > \$1B Net Median	7.5%	--	5.7%	--	1.2	--	2.1	--

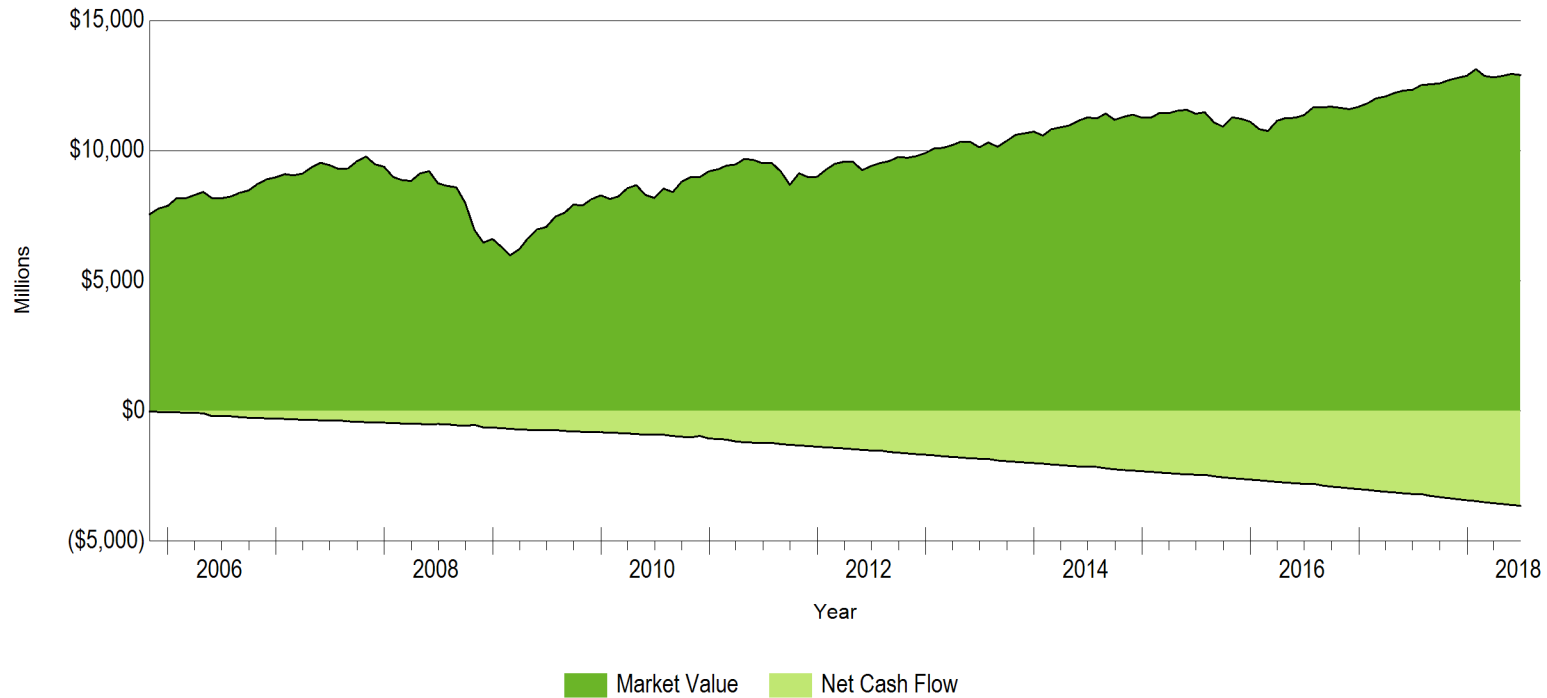
3 Years Ending June 30, 2018								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	7.6%	11	4.8%	7	1.4	7	2.2	5
Policy Index	7.3%	23	5.2%	20	1.3	16	2.0	10
InvestorForce Public DB > \$1B Net Median	6.7%	--	5.7%	--	1.0	--	1.5	--



## New Mexico Educational Retirement Board

# TOTAL FUND ASSET GROWTH SUMMARY

**Market Value History**  
Since NEPC began tracking performance, October 1, 2005 thru June 30, 2018

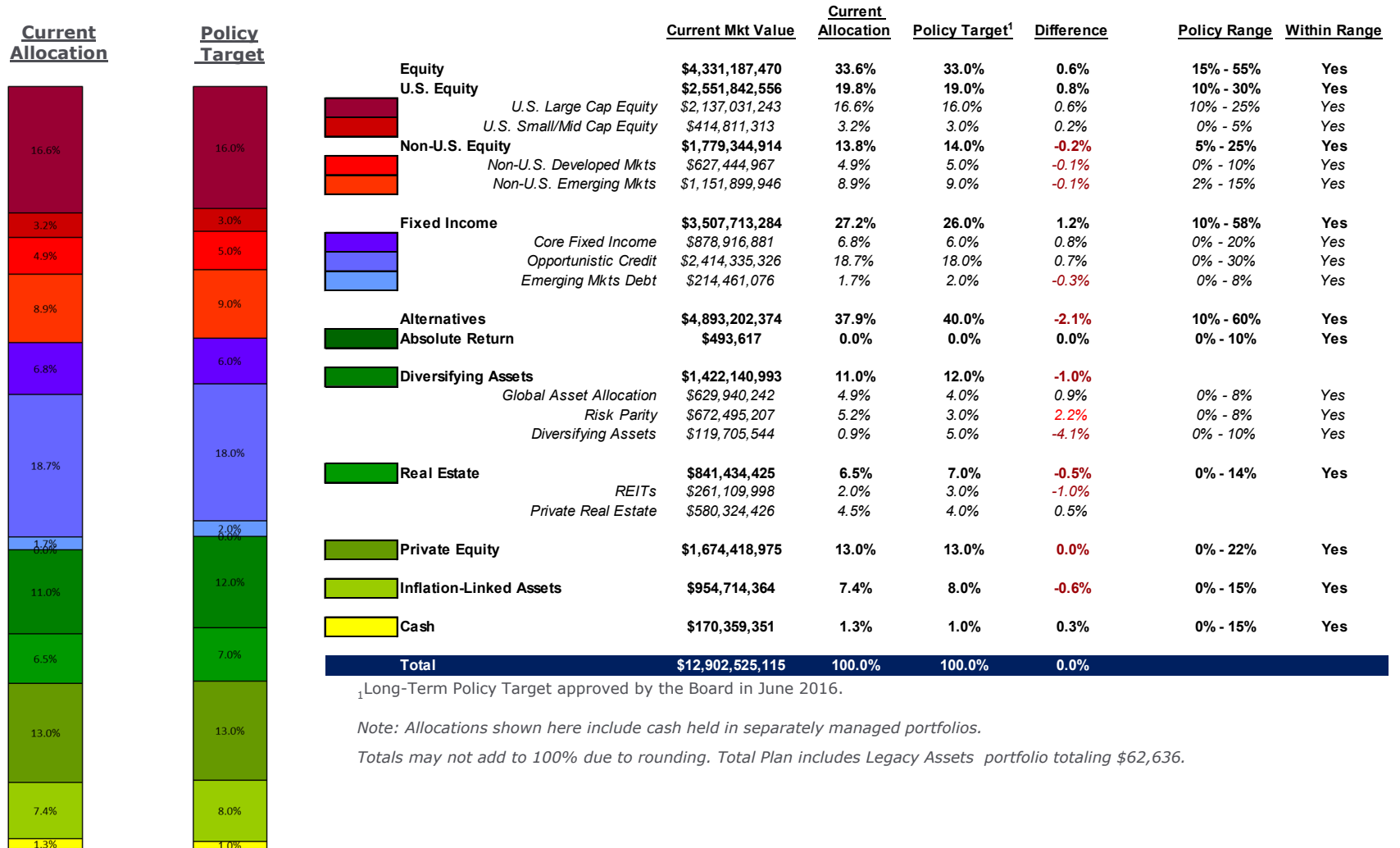


	Last Three Months	Year-To-Date	One Year	Three Years	Five Years	Since 10/1/05
Beginning Market Value	\$12,812,028,104	\$12,873,637,262	\$12,333,534,379	\$11,416,629,337	\$10,123,852,370	\$7,694,652,364
Net Cash Flow	-\$99,530,353	-\$212,595,799	-\$453,858,173	-\$1,194,424,367	-\$1,809,250,715	-\$3,630,095,547
Net Investment Change	\$190,027,363	\$241,483,651	\$1,022,848,908	\$2,680,320,145	\$4,587,923,460	\$8,837,968,297
Ending Market Value	\$12,902,525,115	\$12,902,525,115	\$12,902,525,115	\$12,902,525,115	\$12,902,525,115	\$12,902,525,115



New Mexico Educational Retirement Board

# TOTAL FUND ASSET ALLOCATION VS. POLICY



<sup>1</sup>Long-Term Policy Target approved by the Board in June 2016.

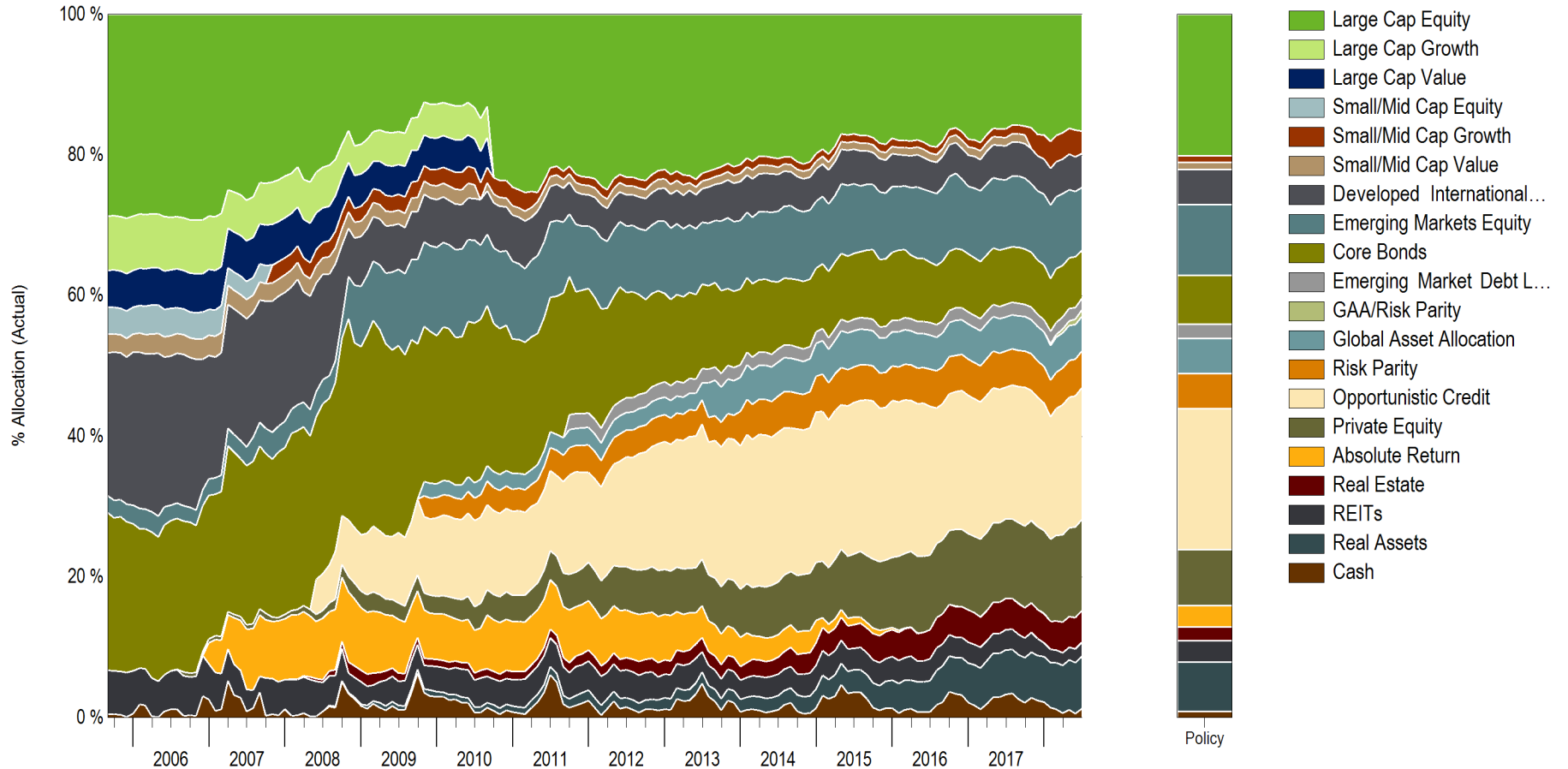
Note: Allocations shown here include cash held in separately managed portfolios.

Totals may not add to 100% due to rounding. Total Plan includes Legacy Assets portfolio totaling \$62,636.



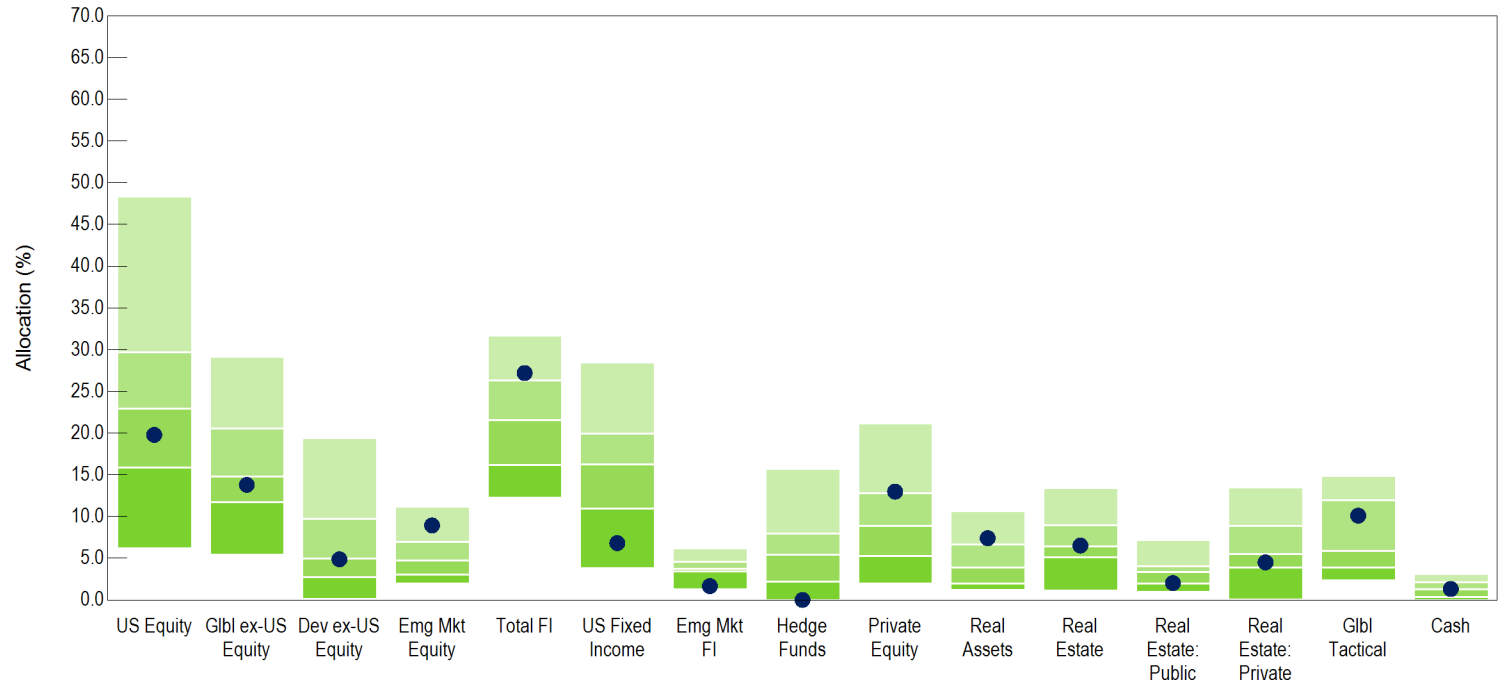
# TOTAL FUND ASSET ALLOCATION HISTORY

Quarterly Asset Allocation History  
September 2005 - Present



# TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

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



	Allocation (Rank)															
5th Percentile	48.3	29.1	19.4	11.2	31.7	28.5	6.2	15.7	21.1	10.7	13.4	7.1	13.5	14.9	3.1	--
25th Percentile	29.8	20.6	9.8	7.1	26.4	20.0	4.6	8.0	12.9	6.7	9.0	4.1	9.0	12.0	2.2	--
Median	23.0	14.9	5.1	4.8	21.6	16.4	3.8	5.5	8.9	4.0	6.5	3.5	5.6	5.9	1.3	--
75th Percentile	15.9	11.8	2.8	3.1	16.2	11.0	3.5	2.2	5.3	2.0	5.2	2.0	4.0	3.9	0.4	--
95th Percentile	6.3	5.5	0.2	2.0	12.3	3.9	1.4	0.1	2.0	1.3	1.2	1.0	0.1	2.4	0.1	--
# of Portfolios	43	47	27	39	50	44	22	35	44	26	42	14	39	14	49	--
● Total Fund	19.8 (68)	13.8 (61)	4.9 (55)	8.9 (14)	27.2 (24)	6.8 (86)	1.7 (91)	0.0 (99)	13.0 (22)	7.4 (23)	6.5 (50)	2.0 (77)	4.5 (71)	10.1 (29)	1.3 (50)	--

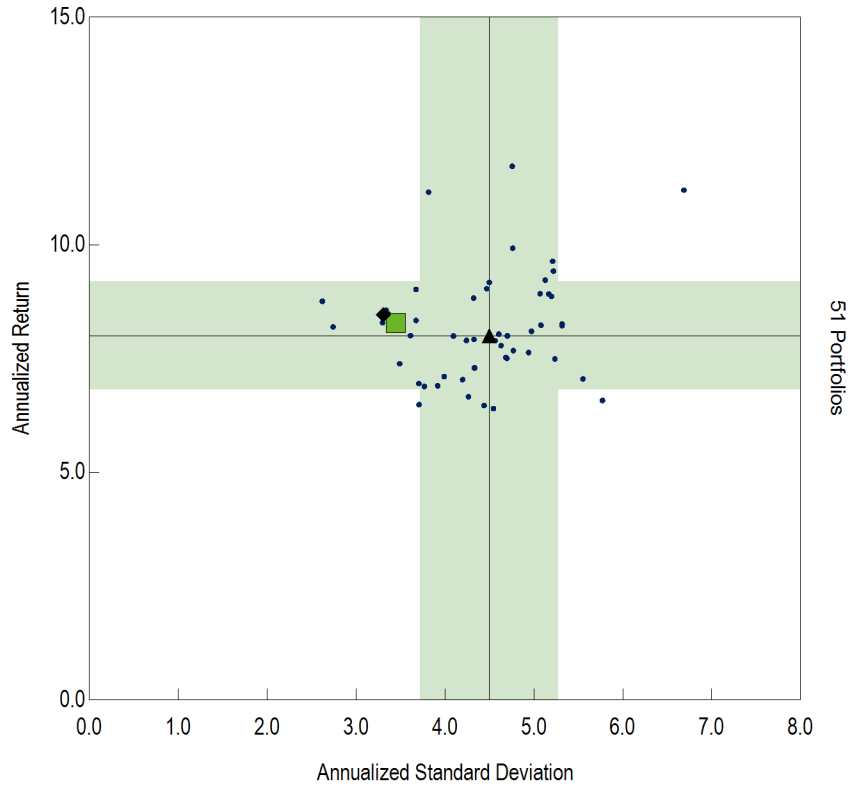




# New Mexico Educational Retirement Board

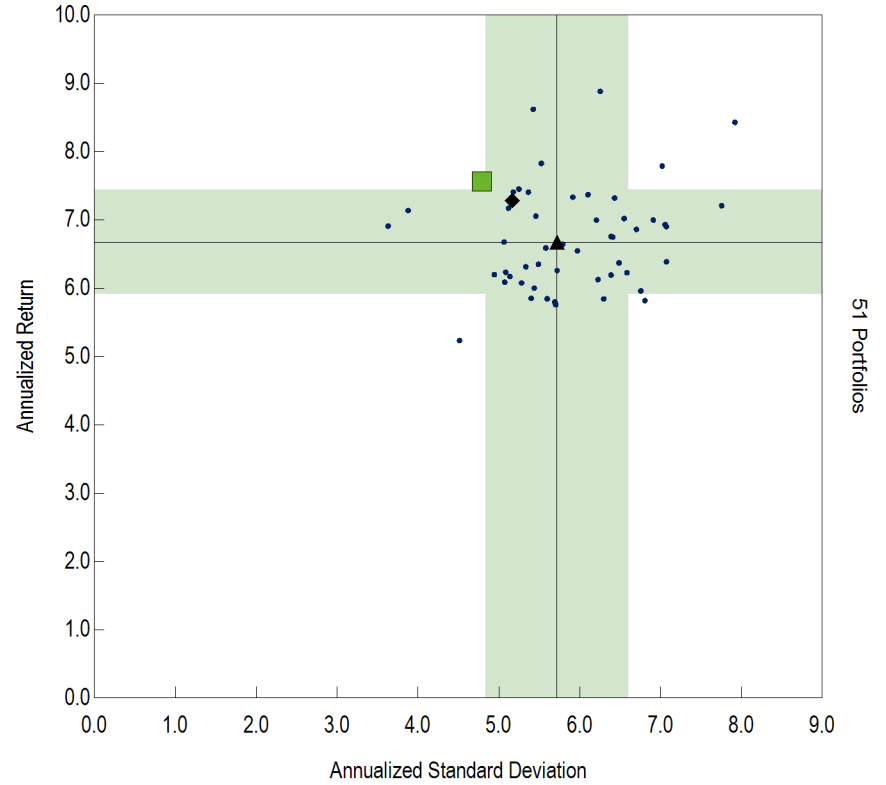
## TOTAL FUND RISK/RETURN

1 Year Ending June 30, 2018



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

3 Years Ending June 30, 2018



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

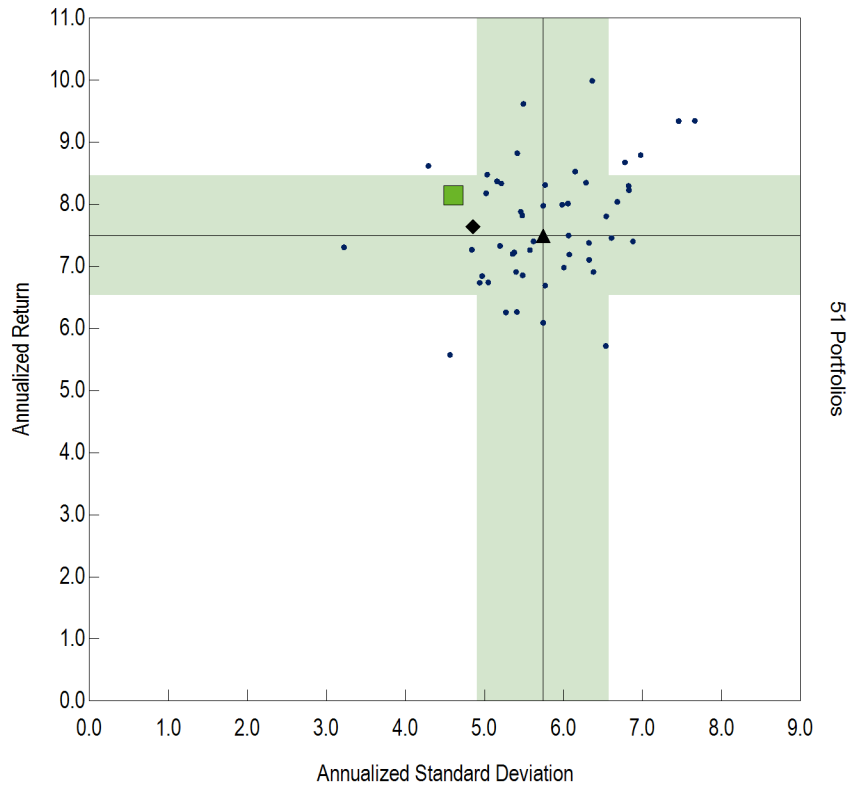
Note: Ranks are based on net returns.



# New Mexico Educational Retirement Board

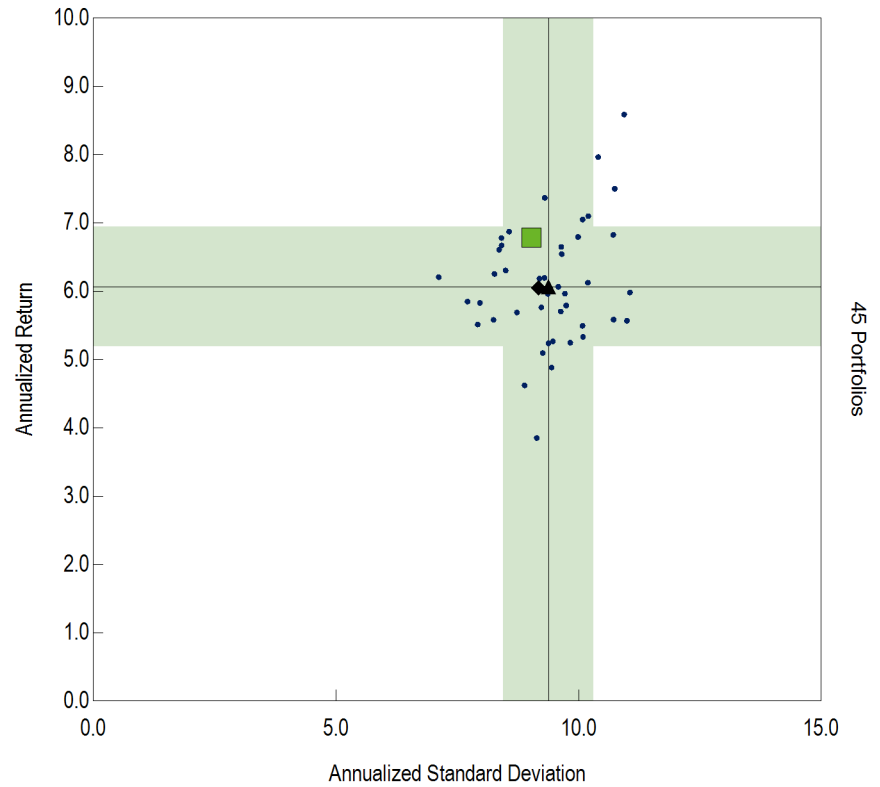
## TOTAL FUND RISK/RETURN

5 Years Ending June 30, 2018



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

10 Years Ending June 30, 2018



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

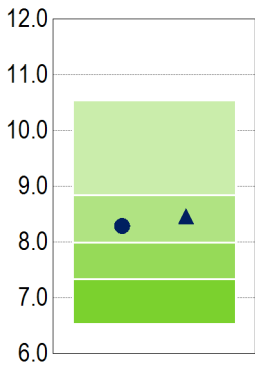
Note: Ranks are based on net returns.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

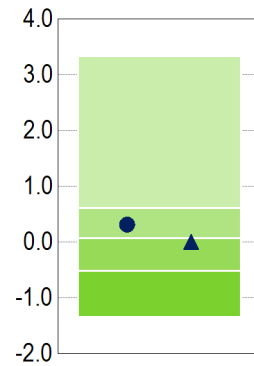
Total Fund vs. InvestorForce Public DB > \$1B Net (USD) (peer)  
1 Year

Anlzd Return



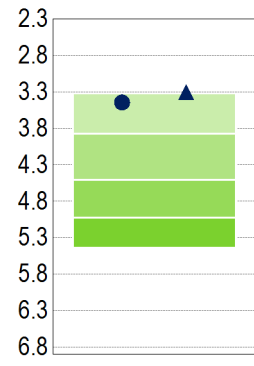
● Total Fund	
Value	8.3
Rank	37
▲ Policy Index	
Value	8.5
Rank	33
Universe	
5th %tile	10.5
25th %tile	8.8
Median	8.0
75th %tile	7.3
95th %tile	6.5

Anlzd Alpha



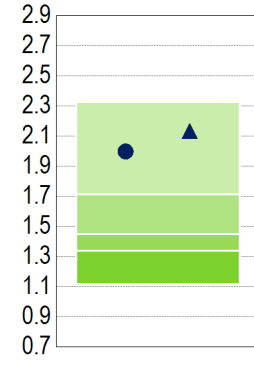
● Total Fund	
Value	0.3
Rank	37
▲ Policy Index	
Value	0.0
Rank	53
Universe	
5th %tile	3.3
25th %tile	0.6
Median	0.1
75th %tile	-0.5
95th %tile	-1.3

Anlzd Standard Deviation



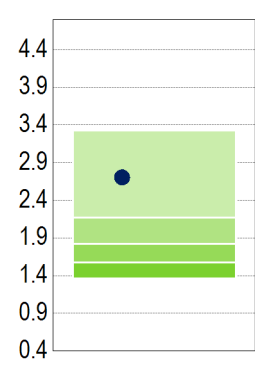
● Total Fund	
Value	3.4
Rank	10
▲ Policy Index	
Value	3.3
Rank	5
Universe	
5th %tile	3.3
25th %tile	3.9
Median	4.5
75th %tile	5.0
95th %tile	5.4

Sharpe Ratio



● Total Fund	
Value	2.0
Rank	15
▲ Policy Index	
Value	2.1
Rank	9
Universe	
5th %tile	2.3
25th %tile	1.7
Median	1.5
75th %tile	1.3
95th %tile	1.1

Sortino Ratio



● Total Fund	
Value	2.7
Rank	11
▲ Policy Index	
Value	--
Rank	--
Universe	
5th %tile	3.3
25th %tile	2.2
Median	1.8
75th %tile	1.6
95th %tile	1.4

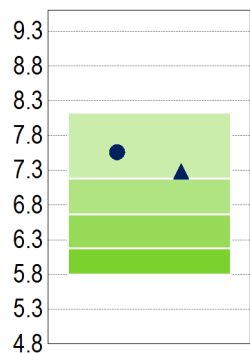
Note: Ranks are based on net returns. Universe contains 52 observations with total assets of \$420 billion. Sortino ratio needs two negative periods to populate.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvestorForce Public DB > \$1B Net (USD) (peer)  
3 Year

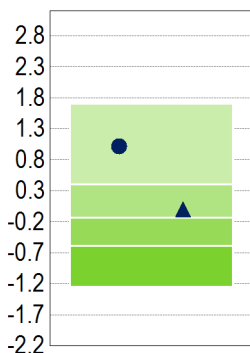
Anlzd Return



● Total Fund	
Value	7.6
Rank	11
▲ Policy Index	
Value	7.3
Rank	23

Universe	
5th %tile	8.1
25th %tile	7.2
Median	6.7
75th %tile	6.2
95th %tile	5.8

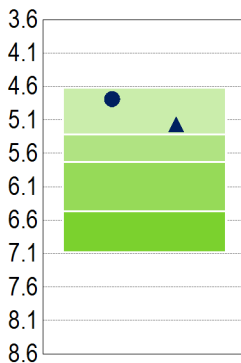
Anlzd Alpha



● Total Fund	
Value	1.0
Rank	12
▲ Policy Index	
Value	0.0
Rank	43

Universe	
5th %tile	1.7
25th %tile	0.4
Median	-0.1
75th %tile	-0.6
95th %tile	-1.2

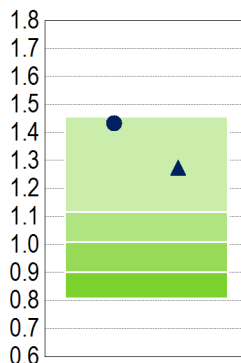
Anlzd Standard Deviation



● Total Fund	
Value	4.8
Rank	7
▲ Policy Index	
Value	5.2
Rank	20

Universe	
5th %tile	4.6
25th %tile	5.3
Median	5.7
75th %tile	6.5
95th %tile	7.1

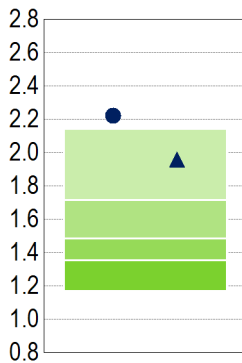
Sharpe Ratio



● Total Fund	
Value	1.4
Rank	7
▲ Policy Index	
Value	1.3
Rank	16

Universe	
5th %tile	1.5
25th %tile	1.1
Median	1.0
75th %tile	0.9
95th %tile	0.8

Sortino Ratio



● Total Fund	
Value	2.2
Rank	5
▲ Policy Index	
Value	2.0
Rank	10

Universe	
5th %tile	2.1
25th %tile	1.7
Median	1.5
75th %tile	1.4
95th %tile	1.2

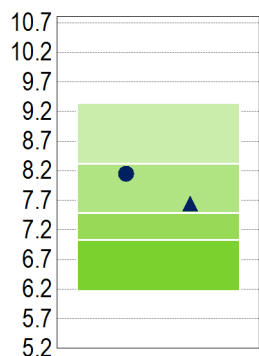
Note: Ranks are based on net returns. Universe contains 52 observations with total assets of \$420 billion. Sortino ratio needs two negative periods to populate.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

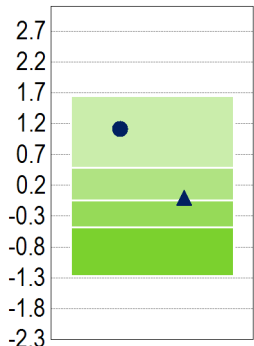
## Total Fund vs. InvestorForce Public DB > \$1B Net (USD) (peer) 5 Year

### Anlzd Return



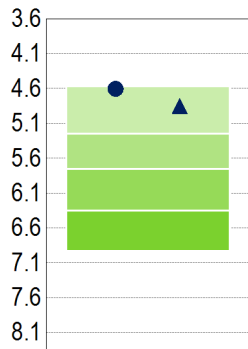
● Total Fund	
Value	8.1
Rank	35
▲ Policy Index	
Value	7.6
Rank	50
Universe	
5th %tile	9.3
25th %tile	8.3
Median	7.5
75th %tile	7.0
95th %tile	6.2

### Anlzd Alpha



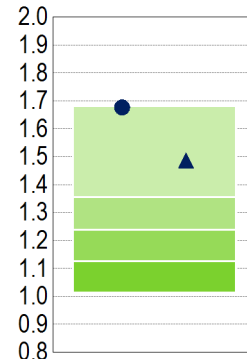
● Total Fund	
Value	1.1
Rank	11
▲ Policy Index	
Value	0.0
Rank	48
Universe	
5th %tile	1.6
25th %tile	0.5
Median	0.0
75th %tile	-0.5
95th %tile	-1.3

### Anlzd Standard Deviation



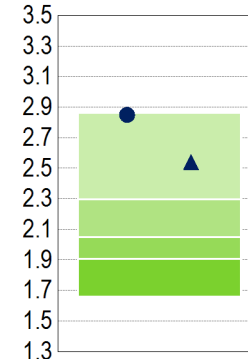
● Total Fund	
Value	4.6
Rank	7
▲ Policy Index	
Value	4.9
Rank	9
Universe	
5th %tile	4.6
25th %tile	5.2
Median	5.7
75th %tile	6.3
95th %tile	6.9

### Sharpe Ratio



● Total Fund	
Value	1.7
Rank	6
▲ Policy Index	
Value	1.5
Rank	19
Universe	
5th %tile	1.7
25th %tile	1.4
Median	1.2
75th %tile	1.1
95th %tile	1.0

### Sortino Ratio



● Total Fund	
Value	2.8
Rank	7
▲ Policy Index	
Value	2.5
Rank	13
Universe	
5th %tile	2.9
25th %tile	2.3
Median	2.1
75th %tile	1.9
95th %tile	1.7

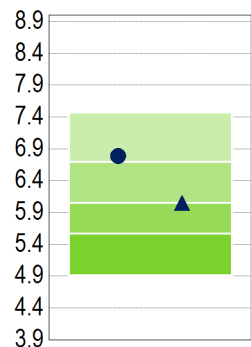
Note: Ranks are based on net returns. Universe contains 52 observations with total assets of \$420 billion. Sortino ratio needs two negative periods to populate.



# TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

## Total Fund vs. InvestorForce Public DB > \$1B Net (USD) (peer) 10 Year

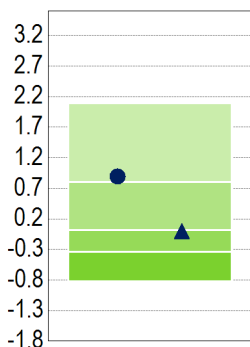
### Anlzd Return



● Total Fund	
Value	6.8
Rank	21
▲ Policy Index	
Value	6.0
Rank	51

Universe	
5th %tile	7.5
25th %tile	6.7
Median	6.1
75th %tile	5.6
95th %tile	4.9

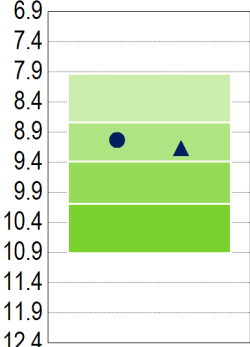
### Anlzd Alpha



● Total Fund	
Value	0.9
Rank	19
▲ Policy Index	
Value	0.0
Rank	51

Universe	
5th %tile	2.1
25th %tile	0.8
Median	0.0
75th %tile	-0.3
95th %tile	-0.8

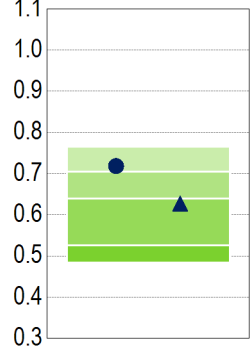
### Anlzd Standard Deviation



● Total Fund	
Value	9.0
Rank	31
▲ Policy Index	
Value	9.2
Rank	34

Universe	
5th %tile	7.9
25th %tile	8.7
Median	9.4
75th %tile	10.1
95th %tile	10.9

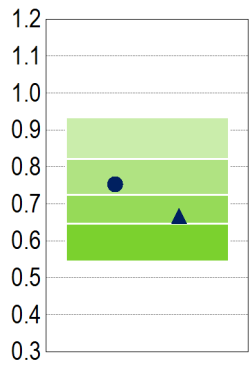
### Sharpe Ratio



● Total Fund	
Value	0.7
Rank	24
▲ Policy Index	
Value	0.6
Rank	54

Universe	
5th %tile	0.8
25th %tile	0.7
Median	0.6
75th %tile	0.5
95th %tile	0.5

### Sortino Ratio



● Total Fund	
Value	0.8
Rank	39
▲ Policy Index	
Value	0.7
Rank	71

Universe	
5th %tile	0.9
25th %tile	0.8
Median	0.7
75th %tile	0.6
95th %tile	0.5

Note: Ranks are based on net returns. Universe contains 52 observations with total assets of \$420 billion. Sortino ratio needs two negative periods to populate.



# New Mexico Educational Retirement Board

## 3 YEAR RISK/RETURN PROFILE

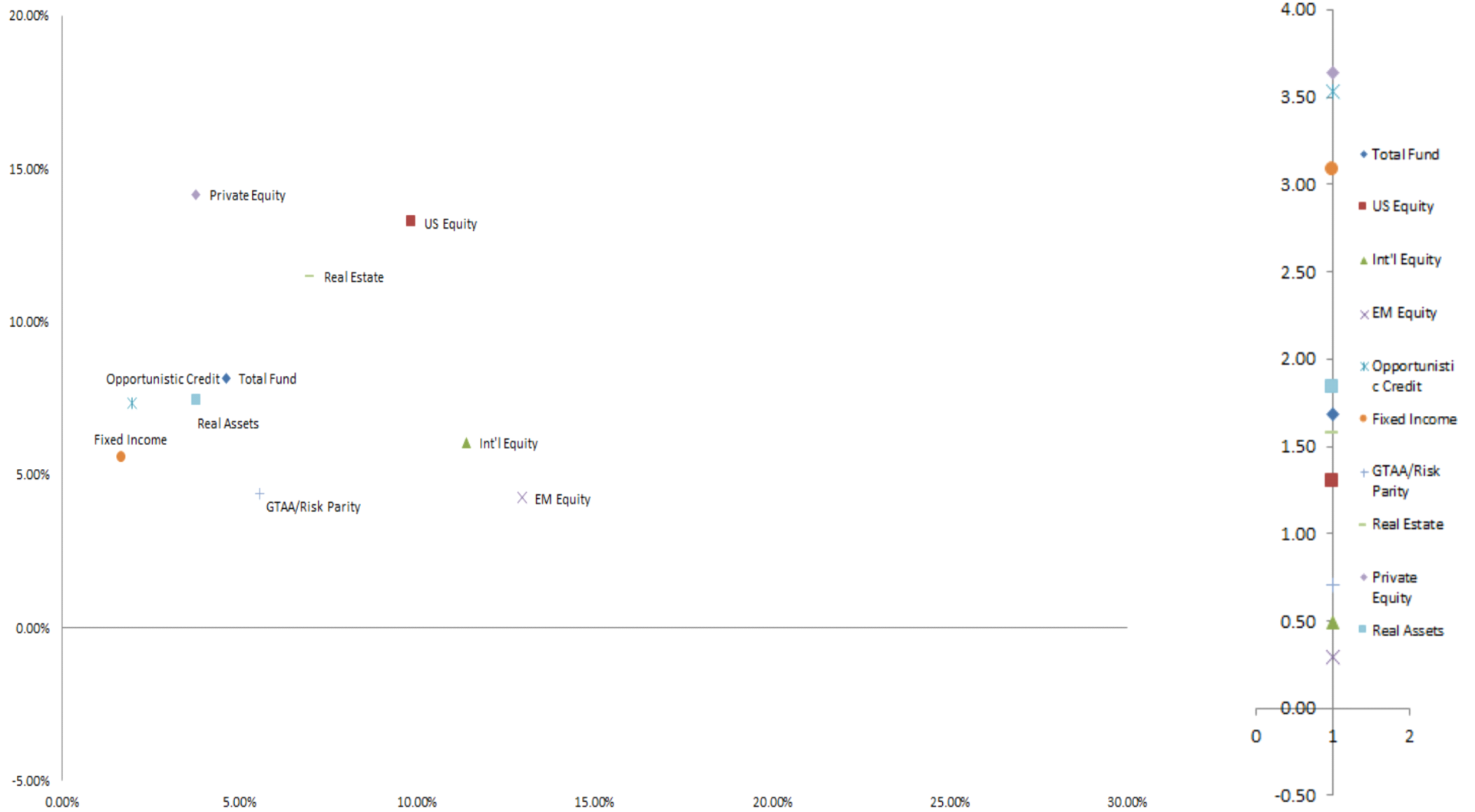


Note: Returns are net of fees. The graph on the right side shows composite level sharpe ratios.



# New Mexico Educational Retirement Board

## 5 YEAR RISK/RETURN PROFILE

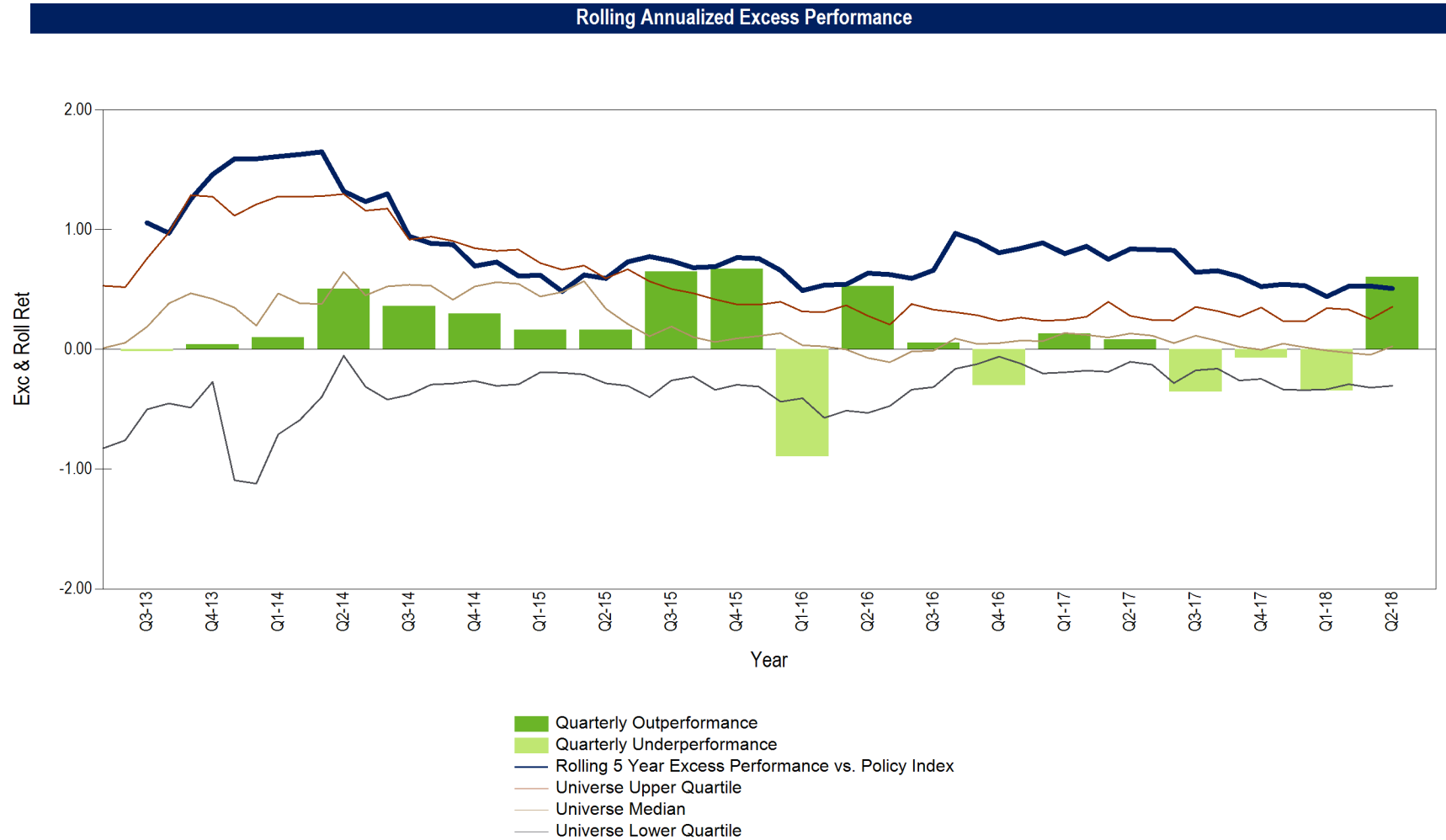


Note: Returns are net of fees. The graph on the right side shows composite level sharpe ratios.





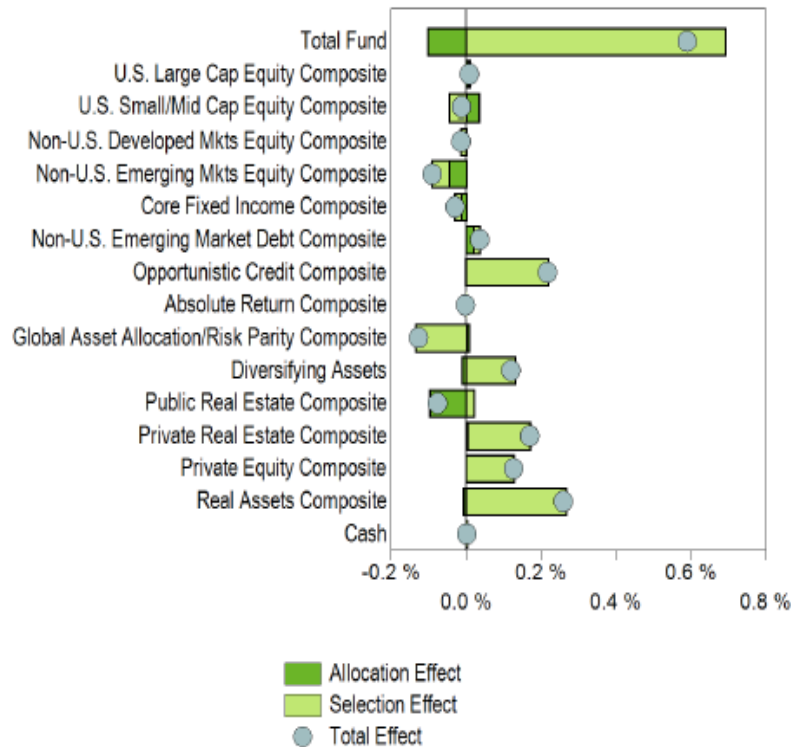
# ROLLING 5 YEAR EXCESS RETURNS - NET



# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects  
3 Months Ending June 30, 2018

**3 Month Excess Return: +0.59%**



- Allocation Effect: -0.10%
  - Non-U.S. Emerging Mkts Equity overweight (-0.05%)
  - Public Real Estate underweight (-0.10%)
- Manager Selection Effect: +0.69%
  - Real Assets outperformed (+0.27%)
  - Opportunistic Credit outperformed (+0.22%)
  - Private Real Estate outperformed (+0.16%)
  - Private Equity outperformed (+0.13%)
  - Diversifying Assets outperformed (+0.13%)
  - U.S. Small/Mid Cap Equity underperformed (-0.05%)
  - Global Asset Allocation/Risk Parity underperformed (-0.13%)
- 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.  $(\text{Return Asset Class Index} - \text{Total Interim Policy Index Return}) \times (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Interim Policy Index})$ .

**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.  $[\text{Weight Asset Class Benchmark} \times (\text{Return Portfolio Asset Class} - \text{Return Asset Class in Interim Policy Index})]$  + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance.  $(\text{Return Asset Class Portfolio} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Policy Index})) - (\text{Return Asset Class Index} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Index}))$ .

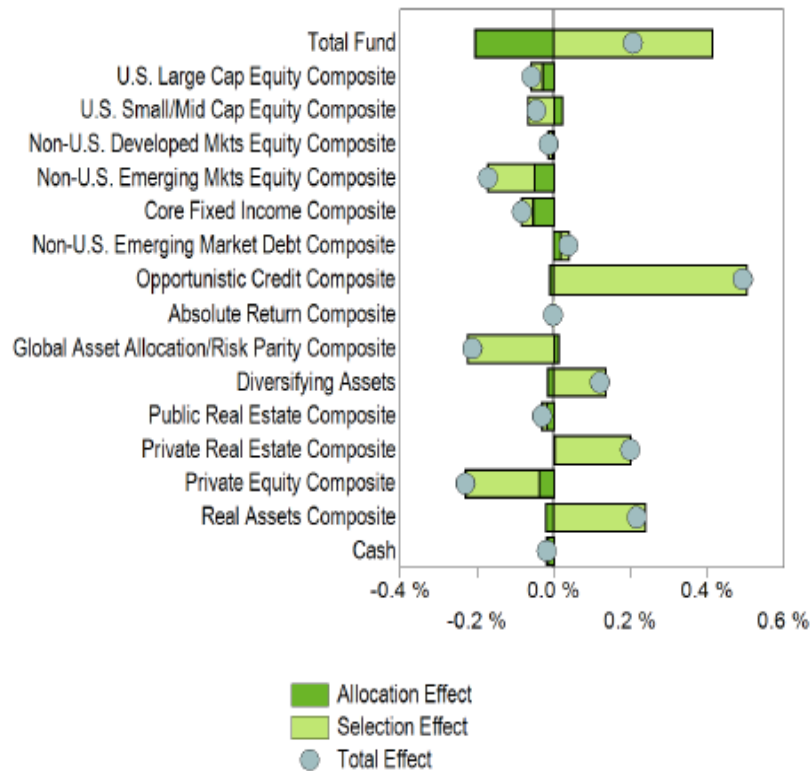
**Residual:** Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects  
YTD Ending June 30, 2018

**YTD Excess Return: +0.21%**



- Allocation Effect: -0.21%
  - Core Fixed Income overweight (-0.05%)
  - Non-U.S. Emerging Markets Equity overweight (-0.05%)
- Manager Selection Effect: +0.41%
  - Opportunistic Credit outperformed (+0.50%)
  - Real Assets outperformed (+0.24%)
  - Private Real Estate outperformed (+0.20%)
  - Diversifying Assets outperformed (+0.14%)
  - U.S. Small/Mid Cap Equity underperformed (-0.07%)
  - Non-U.S. Emerging Mkts Equity underperformed (-0.12%)
  - Private Equity underperformed (-0.19%)
- 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.  $(\text{Return Asset Class Index} - \text{Total Interim Policy Index Return}) \times (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Interim Policy Index})$ .

**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.  $[\text{Weight Asset Class Benchmark} \times (\text{Return Portfolio Asset Class} - \text{Return Asset Class in Interim Policy Index})]$  + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance.  $(\text{Return Asset Class Portfolio} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Policy Index})) - (\text{Return Asset Class Index} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Index}))$ .

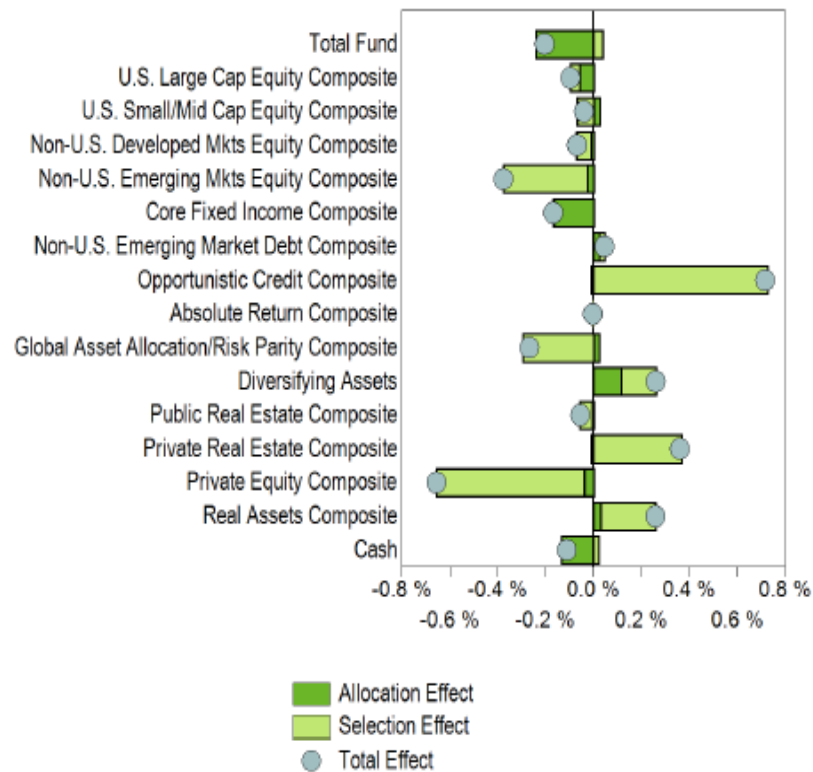
**Residual:** Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects  
1 Year Ending June 30, 2018

**1 Year Excess Return: -0.21%**



- Allocation Effect: -0.24%
  - Diversifying Assets underweight (+0.12%)
  - U.S. Large Cap Equity underweight (-0.06%)
  - Cash overweight (-0.13%)
  - Core Fixed Income overweight (-0.17%)
- Manager Selection Effect: +0.04%
  - Opportunistic Credit outperformed (+0.72%)
  - Private Real Estate outperformed (+0.37%)
  - Real Assets outperformed (+0.23%)
  - Diversifying Assets outperformed (+0.14%)
  - Non-U.S. Developed Mkts Equity underperformed (-0.06%)
  - U.S. Small/Mid Cap Equity underperformed (-0.07%)
  - Global Asset Allocation/Risk Parity underperformed (-0.29%)
  - Non-U.S. Emerging Mkts Equity underperformed (-0.35%)
  - Private Equity underperformed (-0.61%)
- 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.  $(\text{Return Asset Class Index} - \text{Total Interim Policy Index Return}) \times (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Interim Policy Index})$ .

**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.  $[\text{Weight Asset Class Benchmark} \times (\text{Return Portfolio Asset Class} - \text{Return Asset Class in Interim Policy Index})] + \text{Interaction Effect}$ : Measures the impact of over/under weighting decisions and over/under performance.  $(\text{Return Asset Class Portfolio} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Policy Index})) - (\text{Return Asset Class Index} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Index}))$ .

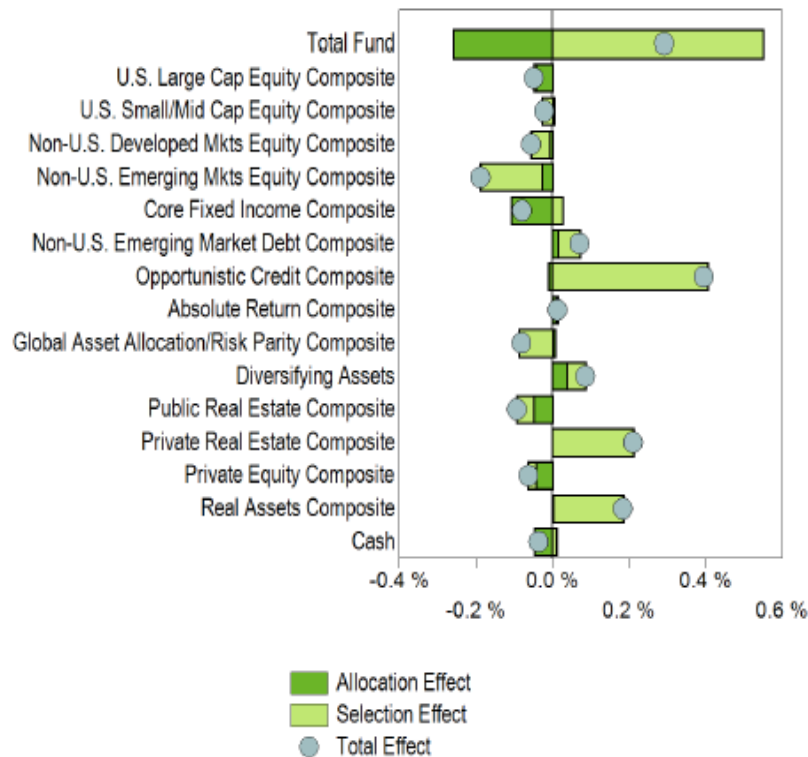
**Residual:** Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects  
3 Years Ending June 30, 2018

**3 Year Excess Return: +0.29%**



- Allocation Effect: -0.26%
  - Public Real Estate underweight (-0.05%)
  - Cash overweight (-0.05%)
  - Core Fixed Income overweight (-0.11%)
- Manager Selection Effect: +0.55%
  - Opportunistic Credit outperformed (+0.41%)
  - Private Real Estate outperformed (+0.21%)
  - Real Assets outperformed (+0.18%)
  - Non-U.S. Emerging Mkts Debt outperformed (+0.06%)
  - Diversifying Assets outperformed (+0.05%)
  - Non-U.S. Developed Mkts Equity underperformed (-0.05%)
  - Non U.S. Emerging Mkts Equity underperformed (-0.16%)
- Residual: 0.00%

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

**Allocation Effect:** Measures the impact of the decision to over/under weight asset classes relative to Interim SAAP benchmark weights.  $(\text{Return Asset Class Index} - \text{Total Interim Policy Index Return}) \times (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Interim Policy Index})$ .

**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.  $[\text{Weight Asset Class Benchmark} \times (\text{Return Portfolio Asset Class} - \text{Return Asset Class in Interim Policy Index})] + \text{Interaction Effect}$ . **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance.  $(\text{Return Asset Class Portfolio} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Policy Index})) - (\text{Return Asset Class Index} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Index}))$ .

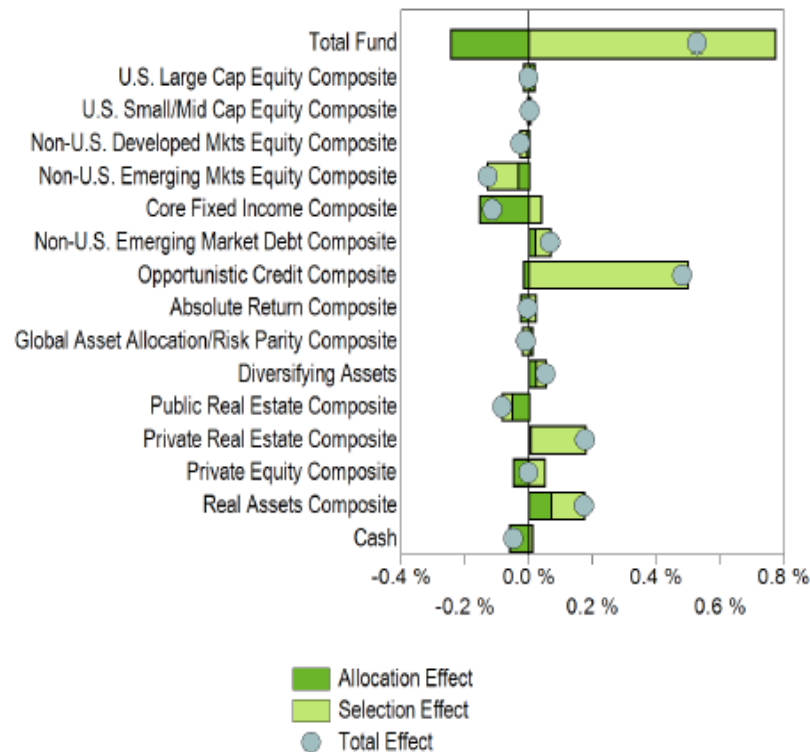
**Residual:** Contribution to excess return not captured in Allocation Effect and Manager Selection Effect.



# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects  
5 Years Ending June 30, 2018

**5 Year Excess Return: +0.53%**



- Allocation Effect: -0.25%
  - Real Assets underweight (+0.07%)
  - Public Real Estate underweight (-0.05%)
  - Private Equity underweight (-0.05%)
  - Cash overweight (-0.07%)
  - Core Fixed Income overweight (-0.15%)
- Manager Selection Effect: +0.77%
  - Opportunistic Credit outperformed (+0.50%)
  - Private Real Estate outperformed (+0.17%)
  - Real Assets outperformed (+0.10%)
  - Private Equity outperformed (+0.05%)
  - Non-U.S. Emerging Market Debt outperformed (+0.05%)
  - Non-U.S. Emerging Mkts Equity underperformed (-0.09%)
- 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.  $(\text{Return Asset Class Index} - \text{Total Interim Policy Index Return}) \times (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Interim Policy Index})$ .

**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.  $[\text{Weight Asset Class Benchmark} \times (\text{Return Portfolio Asset Class} - \text{Return Asset Class in Interim Policy Index})]$  + **Interaction Effect:** Measures the impact of over/under weighting decisions and over/under performance.  $(\text{Return Asset Class Portfolio} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Policy Index})) - (\text{Return Asset Class Index} (\text{Weight Asset Class Portfolio} - \text{Weight Asset Class Index}))$ .

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



## New Mexico Educational Retirement Board

# TOTAL FUND RISK STATISTICS

3 Years Ending June 30, 2018												
	% 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	16.6%	11.9%	15	10.1%	18	0.0%	22	0.2%	1	-0.2	--	1.0
S&P 500	--	11.9%	14	10.2%	27	0.0%	23	0.0%	1	--	--	1.0
U.S. Small/Mid Cap Equity Composite	3.2%	9.4%	93	12.1%	98	-0.4%	45	3.3%	89	-0.3	--	1.0
NMERB Small/Mid Cap Equity Blended Index	--	10.3%	80	12.3%	98	0.0%	23	0.0%	1	--	--	1.0
Non-U.S. Developed Mkts Equity Composite	4.9%	4.0%	52	11.7%	67	-0.8%	53	1.1%	1	-0.9	--	1.0
MSCI EAFE	--	4.9%	38	12.1%	72	0.0%	39	0.0%	1	--	--	1.0
Non-U.S. Emerging Mkts Equity Composite	8.9%	4.3%	53	13.9%	32	-0.6%	48	3.3%	42	-0.4	--	0.9
MSCI Emerging Markets	--	5.6%	21	16.0%	96	0.0%	32	0.0%	1	--	--	1.0
Core Fixed Income Composite	6.8%	2.0%	74	2.7%	55	0.3%	76	0.4%	5	0.7	36	1.0
BBgBarc US Aggregate TR	--	1.7%	95	2.6%	45	0.0%	99	0.0%	1	--	--	1.0
Non-U.S. Emerging Market Debt Composite	1.7%	5.1%	20	6.3%	34	3.8%	1	3.8%	84	0.9	1	0.7
Non-U.S. EMD Custom Benchmark	--	1.6%	64	9.0%	63	0.0%	53	0.0%	1	--	--	1.0

3 Years Ending June 30, 2018												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Opportunistic Credit Composite	18.7%	6.8%	--	2.1%	--	4.5%	--	2.6%	--	0.8	--	0.4
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index	--	4.7%	--	3.5%	--	0.0%	--	0.0%	--	--	--	1.0
Global Asset Allocation/Risk Parity Composite	10.1%	3.9%	--	5.4%	--	-1.0%	--	4.2%	--	-0.8	--	0.6
GAA/Risk Parity Custom Index	--	7.1%	--	6.2%	--	0.0%	--	0.0%	--	--	--	1.0

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 97.8% because Absolute Return Composite, Diversifying Assets and Cash Composite are not included.



## New Mexico Educational Retirement Board

# TOTAL FUND RISK STATISTICS

3 Years Ending June 30, 2018							
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank
Real Estate Composite	6.5%	10.6%	5	6.6%	99	6.7%	29
NCREIF Property Index	--	8.3%	87	3.5%	50	0.0%	97
Private Equity Composite	13.0%	12.4%	38	3.1%	6	13.6%	10
Cambridge Associates US All PE (1 Qtr Lag)	--	12.0%	51	6.2%	75	0.0%	95
Real Assets Composite	7.4%	9.3%	31	3.4%	24	2.6%	50
CPI + 4% (Seasonally Adjusted)	--	5.9%	45	0.6%	1	0.0%	99

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 97.8% because Absolute Return Composite, Diversifying Assets Composite, and Cash Composite are not included.





## New Mexico Educational Retirement Board

# TOTAL FUND RISK STATISTICS

5 Years Ending June 30, 2018												
	% 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	16.6%	13.3%	23	9.8%	6	0.0%	21	0.2%	1	-0.5	--	1.0
S&P 500	--	13.4%	21	9.8%	11	0.0%	20	0.0%	1	--	--	1.0
U.S. Small/Mid Cap Equity Composite	3.2%	12.3%	83	11.9%	98	0.6%	3	3.2%	92	0.0	25	1.0
NMERB Small/Mid Cap Equity Blended Index	--	12.3%	83	12.1%	98	0.0%	20	0.0%	1	--	--	1.0
Non-U.S. Developed Mkts Equity Composite	4.9%	6.0%	44	11.4%	65	-0.2%	44	1.1%	1	-0.4	--	1.0
MSCI EAFE	--	6.4%	37	11.6%	72	0.0%	37	0.0%	1	--	--	1.0
Non-U.S. Emerging Mkts Equity Composite	8.9%	4.2%	38	13.0%	33	-0.1%	32	3.2%	38	-0.2	--	0.9
MSCI Emerging Markets	--	5.0%	12	14.9%	95	0.0%	26	0.0%	1	--	--	1.0
Core Fixed Income Composite	6.8%	2.6%	71	2.8%	51	0.4%	75	0.4%	5	0.9	21	1.0
BBgBarc US Aggregate TR	--	2.3%	88	2.7%	43	0.0%	92	0.0%	1	--	--	1.0
Non-U.S. Emerging Market Debt Composite	1.7%	1.2%	43	6.4%	31	2.0%	7	4.0%	82	0.7	1	0.6
Non-U.S. EMD Custom Benchmark	--	-1.6%	66	9.4%	62	0.0%	42	0.0%	1	--	--	1.0

5 Years Ending June 30, 2018												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Opportunistic Credit Composite	18.7%	7.3%	--	2.0%	--	5.3%	--	2.5%	--	1.0	--	0.4
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index	--	4.8%	--	3.2%	--	0.0%	--	0.0%	--	--	--	1.0
Global Asset Allocation/Risk Parity Composite	10.1%	4.4%	--	5.5%	--	-0.1%	--	4.3%	--	-0.5	--	0.7
GAA/Risk Parity Custom Index	--	6.7%	--	6.2%	--	0.0%	--	0.0%	--	--	--	1.0

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 97.8% because Absolute Return Composite, Diversifying Assets and Cash Composite are not included.



## New Mexico Educational Retirement Board

# TOTAL FUND RISK STATISTICS

	5 Years Ending June 30, 2018							
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	
Real Estate Composite	6.5%	11.5%	10	7.0%	99	11.9%	11	
NCREIF Property Index	--	9.8%	88	4.1%	44	0.0%	96	
Private Equity Composite	13.0%	14.2%	44	3.8%	7	14.6%	20	
Cambridge Associates US All PE (1 Qtr Lag)	--	13.2%	50	6.5%	80	0.0%	96	
Real Assets Composite	7.4%	7.4%	17	3.8%	18	3.9%	45	
CPI + 4% (Seasonally Adjusted)	--	5.6%	54	0.7%	1	0.0%	95	

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 97.8% because Absolute Return Composite, Diversifying Assets, and Cash Composite are not included.



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - TOTAL FUND & U.S. EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Total Fund</b>	<b>12,902,525,115</b>	<b>100.0</b>	<b>1.5</b>	<b>14</b>	<b>1.9</b>	<b>15</b>	<b>8.3</b>	<b>37</b>	<b>7.6</b>	<b>11</b>	<b>8.1</b>	<b>35</b>	<b>6.8</b>	<b>21</b>	<b>9.1</b>	<b>Jul-83</b>
<i>Policy Index</i>			<u>0.9</u>	41	<u>1.6</u>	22	<u>8.5</u>	33	<u>7.3</u>	23	<u>7.6</u>	50	<u>6.0</u>	51	--	Jul-83
Over/Under			0.6		0.3		-0.2		0.3		0.5		0.8			
60% MSCI ACWI (Net) / 40% CITI WGBI			-1.0	99	-0.6	98	7.2	79	6.2	76	6.2	96	4.6	98	--	Jul-83
InvestorForce Public DB > \$1B Net Median			0.6		0.6		8.0		6.7		7.5		6.1		8.5	Jul-83
<b>U.S. Equity Composite</b>	<b>2,551,842,556</b>	<b>19.8</b>	<b>3.6</b>	<b>77</b>	<b>2.7</b>	<b>81</b>	<b>14.2</b>	<b>70</b>	<b>11.7</b>	<b>25</b>	<b>13.2</b>	<b>28</b>	<b>9.9</b>	<b>50</b>	<b>11.3</b>	<b>Jan-85</b>
<i>Russell 3000</i>			<u>3.9</u>	60	<u>3.2</u>	68	<u>14.8</u>	50	<u>11.6</u>	31	<u>13.3</u>	24	<u>10.2</u>	29	<u>11.2</u>	Jan-85
Over/Under			-0.3		-0.5		-0.6		0.1		-0.1		-0.3		0.1	
InvestorForce Public DB > \$1 Billion US Equity Net Median			4.0		3.5		14.8		11.2		13.0		9.9		11.3	Jan-85
<b>U.S. Large Cap Equity Composite</b>	<b>2,137,031,243</b>	<b>16.6</b>	<b>3.4</b>	<b>87</b>	<b>2.5</b>	<b>88</b>	<b>14.1</b>	<b>71</b>	<b>11.9</b>	<b>15</b>	<b>13.3</b>	<b>23</b>	<b>9.8</b>	<b>59</b>	<b>6.5</b>	<b>Aug-99</b>
<i>S&amp;P 500</i>			<u>3.4</u>	87	<u>2.6</u>	83	<u>14.4</u>	67	<u>11.9</u>	14	<u>13.4</u>	21	<u>10.2</u>	33	<u>5.9</u>	Aug-99
Over/Under			0.0		-0.1		-0.3		0.0		-0.1		-0.4		0.6	
InvestorForce Public DB > \$1 Billion US Equity Net Median			4.0		3.5		14.8		11.2		13.0		9.9		6.6	Aug-99
<i>S&amp;P 500 Index Fund</i>	2,137,031,243	16.6	3.4	23	2.5	32	14.1	34	11.9	14	13.3	25	9.9	39	5.3	Jan-00
<i>S&amp;P 500</i>			<u>3.4</u>	23	<u>2.6</u>	29	<u>14.4</u>	33	<u>11.9</u>	14	<u>13.4</u>	23	<u>10.2</u>	26	<u>5.4</u>	Jan-00
Over/Under			0.0		-0.1		-0.3		0.0		-0.1		-0.3		-0.1	
eV US Large Cap Core Equity Net Median			2.4		1.4		12.9		10.0		12.3		9.5		6.5	Jan-00
<b>U.S. Small/Mid Cap Equity Composite</b>	<b>414,811,313</b>	<b>3.2</b>	<b>4.5</b>	<b>17</b>	<b>3.6</b>	<b>44</b>	<b>14.5</b>	<b>65</b>	<b>9.4</b>	<b>93</b>	<b>12.3</b>	<b>83</b>	<b>10.0</b>	<b>42</b>	<b>7.7</b>	<b>Aug-99</b>
<i>NMERB Small/Mid Cap Equity Blended Index</i>			<u>5.7</u>	3	<u>5.5</u>	8	<u>16.2</u>	17	<u>10.3</u>	80	<u>12.3</u>	83	<u>10.6</u>	6	<u>8.6</u>	Aug-99
Over/Under			-1.2		-1.9		-1.7		-0.9		0.0		-0.6		-0.9	
InvestorForce Public DB > \$1 Billion US Equity Net Median			4.0		3.5		14.8		11.2		13.0		9.9		6.6	Aug-99
<i>S&amp;P 400 Mid-Cap</i>	414,711,084	3.2	4.5	20	3.6	37	--	--	--	--	--	--	--	--	7.7	Nov-17
<i>Russell 2500</i>			<u>5.7</u>	13	<u>5.5</u>	28	<u>16.2</u>	26	<u>10.3</u>	32	<u>12.3</u>	40	<u>10.7</u>	32	<u>9.3</u>	Nov-17
Over/Under			-1.2		-1.9		--	--	--	--	--	--	--	--	-1.6	
eV US Mid Cap Equity Net Median			2.5		1.9		12.7		9.2		11.8		10.1		6.1	Nov-17

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

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

3 - Total Fund market value includes \$62,636 from Legacy Assets.

4 - U.S. Small/Mid Cap Equity Composite includes \$2,302 from Pinnacle and \$97,927 from Lord Abbett.

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - NON-U.S. EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Non-U.S. Equity Composite</b>	<b>1,779,344,914</b>	<b>13.8</b>	<b>-6.0</b>	<b>98</b>	<b>-6.0</b>	<b>98</b>	<b>5.3</b>	<b>86</b>	<b>4.3</b>	<b>92</b>	<b>4.9</b>	<b>92</b>	<b>1.3</b>	<b>99</b>	<b>6.4</b>	<b>Jul-95</b>
MSCI ACWI ex USA			<u>-2.6</u>	49	<u>-3.8</u>	67	<u>7.3</u>	55	<u>5.1</u>	84	<u>6.0</u>	83	<u>2.5</u>	78	--	Jul-95
Over/Under			<b>-3.4</b>		<b>-2.2</b>		<b>-2.0</b>		<b>-0.8</b>		<b>-1.1</b>		<b>-1.2</b>			
InvestorForce Public DB > \$1 Billion Global ex-US Equity Net Median			-2.7		-3.6		7.6		6.0		6.7		3.3		6.1	Jul-95
<b>Non-U.S. Developed Mkts Equity Composite</b>	<b>627,444,967</b>	<b>4.9</b>	<b>-1.5</b>	<b>37</b>	<b>-2.9</b>	<b>50</b>	<b>5.7</b>	<b>60</b>	<b>4.0</b>	<b>52</b>	<b>6.0</b>	<b>44</b>	<b>1.7</b>	<b>99</b>	<b>6.2</b>	<b>Sep-95</b>
MSCI EAFE			<u>-1.2</u>	33	<u>-2.7</u>	47	<u>6.8</u>	42	<u>4.9</u>	38	<u>6.4</u>	37	<u>2.8</u>	74	<u>5.1</u>	Sep-95
Over/Under			<b>-0.3</b>		<b>-0.2</b>		<b>-1.1</b>		<b>-0.9</b>		<b>-0.4</b>		<b>-1.1</b>		1.1	
InvestorForce Public DB Dev Mkt ex-US Eq Net Median			-2.0		-3.0		6.5		4.0		5.6		3.5		6.6	Sep-95
Pyramis	301,219,473	2.3	-2.2	67	-3.4	63	4.0	88	2.6	95	5.4	90	2.2	90	7.4	Jun-03
MSCI EAFE			<u>-1.2</u>	45	<u>-2.7</u>	54	<u>6.8</u>	59	<u>4.9</u>	64	<u>6.4</u>	72	<u>2.8</u>	83	<u>7.4</u>	Jun-03
Over/Under			<b>-1.0</b>		<b>-0.7</b>		<b>-2.8</b>		<b>-2.3</b>		<b>-1.0</b>		<b>-0.6</b>		0.0	
eV All EAFE Equity Net Median			-1.5		-2.6		7.9		5.8		7.2		4.1		8.2	Jun-03
BlackRock MSCI EAFE	326,225,495	2.5	-0.8	34	-2.4	49	7.3	57	5.3	58	6.9	58	--	--	5.8	Aug-13
MSCI EAFE			<u>-1.2</u>	45	<u>-2.7</u>	54	<u>6.8</u>	59	<u>4.9</u>	64	<u>6.4</u>	72	<u>2.8</u>	83	<u>5.4</u>	Aug-13
Over/Under			0.4		0.3		0.5		0.4		0.5				0.4	
eV All EAFE Equity Net Median			-1.5		-2.6		7.9		5.8		7.2		4.1		6.2	Aug-13

1 - InvestorForce Public DB > \$1B 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.



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - EMERGING MARKET EQUITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Non-U.S. Emerging Mkts Equity Composite</b>	<b>1,151,899,946</b>	<b>8.9</b>	<b>-8.3</b>	<b>16</b>	<b>-7.6</b>	<b>39</b>	<b>5.0</b>	<b>39</b>	<b>4.3</b>	<b>53</b>	<b>4.2</b>	<b>38</b>	<b>0.7</b>	<b>84</b>	<b>6.7</b>	<b>Sep-00</b>
MSCI Emerging Markets			<u>-8.0</u>	11	<u>-6.7</u>	6	<u>8.2</u>	15	<u>5.6</u>	21	<u>5.0</u>	12	<u>2.3</u>	2	<u>7.9</u>	Sep-00
Over/Under			<b>-0.3</b>		<b>-0.9</b>		<b>-3.2</b>		<b>-1.3</b>		<b>-0.8</b>		<b>-1.6</b>		<b>-1.2</b>	
InvestorForce Public DB > \$1 Billion Emg Mkt Eq Net Median			-8.9		-8.2		3.1		4.3		4.1		1.6		6.9	Sep-00
<b>Robeco</b>	<b>305,259,167</b>	<b>2.4</b>	<b>-9.9</b>	<b>78</b>	<b>-9.4</b>	<b>87</b>	<b>5.2</b>	<b>67</b>	<b>5.9</b>	<b>44</b>	<b>5.3</b>	<b>48</b>	<b>--</b>	<b>--</b>	<b>8.9</b>	<b>Nov-08</b>
MSCI Emerging Markets			<u>-8.0</u>	42	<u>-6.7</u>	44	<u>8.2</u>	37	<u>5.6</u>	50	<u>5.0</u>	52	<u>2.3</u>	65	<u>9.3</u>	Nov-08
Over/Under			<b>-1.9</b>		<b>-2.7</b>		<b>-3.0</b>		<b>0.3</b>		<b>0.3</b>				<b>-0.4</b>	
eV Emg Mkts Equity Net Median			-8.5		-7.0		7.2		5.6		5.1		2.7		10.1	Nov-08
<b>Neuberger Berman Emerging Markets</b>	<b>326,975,977</b>	<b>2.5</b>	<b>-8.8</b>	<b>58</b>	<b>-7.7</b>	<b>64</b>	<b>9.1</b>	<b>31</b>	<b>8.1</b>	<b>18</b>	<b>7.0</b>	<b>20</b>	<b>--</b>	<b>--</b>	<b>5.9</b>	<b>Aug-13</b>
MSCI Emerging Markets			<u>-8.0</u>	42	<u>-6.7</u>	44	<u>8.2</u>	37	<u>5.6</u>	50	<u>5.0</u>	52	<u>2.3</u>	65	<u>4.9</u>	Aug-13
Over/Under			<b>-0.8</b>		<b>-1.0</b>		<b>0.9</b>		<b>2.5</b>		<b>2.0</b>				<b>1.0</b>	
eV Emg Mkts Equity Net Median			-8.5		-7.0		7.2		5.6		5.1		2.7		4.9	Aug-13
<b>Mondrian Emerging Markets Small Cap</b>	<b>255,610,846</b>	<b>2.0</b>	<b>-5.2</b>	<b>6</b>	<b>-5.7</b>	<b>52</b>	<b>1.6</b>	<b>81</b>	<b>-0.5</b>	<b>98</b>	<b>0.9</b>	<b>94</b>	<b>--</b>	<b>--</b>	<b>1.9</b>	<b>Aug-13</b>
MSCI Emerging Markets Small Cap			<u>-8.6</u>	52	<u>-8.5</u>	72	<u>5.6</u>	62	<u>2.5</u>	78	<u>4.3</u>	69	<u>4.4</u>	99	<u>4.3</u>	Aug-13
Over/Under			<b>3.4</b>		<b>2.8</b>		<b>-4.0</b>		<b>-3.0</b>		<b>-3.4</b>				<b>-2.4</b>	
eV Emg Mkts Small Cap Equity Net Median			-8.6		-5.6		7.0		5.3		6.2		6.7		6.1	Aug-13
<b>Parametric Emerging Markets Equity</b>	<b>264,053,956</b>	<b>2.0</b>	<b>-8.9</b>	<b>60</b>	<b>-7.1</b>	<b>54</b>	<b>4.1</b>	<b>73</b>	<b>4.1</b>	<b>74</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>3.3</b>	<b>Jun-15</b>
MSCI Emerging Markets			<u>-8.0</u>	42	<u>-6.7</u>	44	<u>8.2</u>	37	<u>5.6</u>	50	<u>5.0</u>	52	<u>2.3</u>	65	<u>4.5</u>	Jun-15
Over/Under			<b>-0.9</b>		<b>-0.4</b>		<b>-4.1</b>		<b>-1.5</b>						<b>-1.2</b>	
eV Emg Mkts Equity Net Median			-8.5		-7.0		7.2		5.6		5.1		2.7		4.5	Jun-15

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - TOTAL FI AND CORE FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Fixed Income Composite</b>	<b>3,507,713,284</b>	<b>27.2</b>	<b>0.8</b>	<b>1</b>	<b>1.6</b>	<b>5</b>	<b>4.5</b>	<b>4</b>	<b>5.4</b>	<b>4</b>	<b>5.6</b>	<b>5</b>	<b>7.1</b>	<b>1</b>	<b>3.0</b>	<b>Jan-85</b>
<i>BBgBarc US Aggregate TR</i>			<u>-0.2</u>	21	<u>-1.6</u>	74	<u>-0.4</u>	99	<u>1.7</u>	93	<u>2.3</u>	89	<u>3.7</u>	99	<u>6.8</u>	<i>Jan-85</i>
Over/Under			1.0		3.2		4.9		3.7		3.3		3.4		<b>-3.8</b>	
<i>InvestorForce Public DB &gt; \$1 Billion Fixed Income Net Median</i>			-0.6		-1.0		0.8		3.1		2.9		5.1		5.2	<i>Jan-85</i>
<b>Core Fixed Income Composite</b>	<b>878,916,881</b>	<b>6.8</b>	<b>-0.4</b>	<b>71</b>	<b>-2.0</b>	<b>99</b>	<b>-0.4</b>	<b>99</b>	<b>2.0</b>	<b>74</b>	<b>2.6</b>	<b>71</b>	<b>4.6</b>	<b>45</b>	<b>5.1</b>	<b>Dec-99</b>
<i>BBgBarc US Aggregate TR</i>			<u>-0.2</u>	50	<u>-1.6</u>	87	<u>-0.4</u>	92	<u>1.7</u>	95	<u>2.3</u>	88	<u>3.7</u>	95	<u>4.8</u>	<i>Dec-99</i>
Over/Under			<b>-0.2</b>		<b>-0.4</b>		0.0		0.3		0.3		0.9		0.3	
<i>InvestorForce Public DB &gt; \$1 Billion US Fixed Income Net Median</i>			-0.2		-1.3		0.3		2.6		2.9		4.6		5.4	<i>Dec-99</i>
<b>Core Fixed Income</b>	<b>878,916,881</b>	<b>6.8</b>	<b>-0.4</b>	<b>88</b>	<b>-2.0</b>	<b>84</b>	<b>-0.4</b>	<b>61</b>	<b>2.0</b>	<b>38</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>1.3</b>	<b>Apr-15</b>
<i>BBgBarc US Aggregate TR</i>			<u>-0.2</u>	42	<u>-1.6</u>	51	<u>-0.4</u>	57	<u>1.7</u>	63	<u>2.3</u>	63	<u>3.7</u>	79	<u>1.1</u>	<i>Apr-15</i>
Over/Under			<b>-0.2</b>		<b>-0.4</b>		0.0		0.3		0.3		0.2		0.2	
<i>eV US Core Fixed Inc Net Median</i>			-0.2		-1.6		-0.4		1.9		2.4		4.1		1.2	<i>Apr-15</i>

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - EMERGING MARKET DEBT

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Non-U.S. Emerging Market Debt Composite</b>	<b>214,461,076</b>	<b>1.7</b>	<b>-6.2</b>	<b>38</b>	<b>-4.8</b>	<b>35</b>	<b>-0.9</b>	<b>37</b>	<b>5.1</b>	<b>20</b>	<b>1.2</b>	<b>43</b>	<b>--</b>	<b>--</b>	<b>1.2</b>	<b>Sep-11</b>
<i>Non-U.S. EMD Custom Benchmark</i>			<u>-7.0</u>	45	<u>-5.8</u>	63	<u>-1.9</u>	62	<u>1.6</u>	64	<u>-1.6</u>	66	--	--	<u>-1.4</u>	Sep-11
Over/Under			0.8		1.0		1.0		3.5		2.8				2.6	
<i>InvestorForce All DB Emg Mkt Fix Inc Net Median</i>			-7.5		-5.3		-1.7		3.0		0.5		--	--	0.9	Sep-11
<b>EMSO</b>	<b>101,785,027</b>	<b>0.8</b>	<b>-3.8</b>	<b>28</b>	<b>-2.6</b>	<b>7</b>	<b>0.7</b>	<b>10</b>	<b>7.8</b>	<b>1</b>	<b>4.3</b>	<b>27</b>	<b>--</b>	<b>--</b>	<b>4.6</b>	<b>Sep-11</b>
<i>JP Morgan GBI - EM Global Diversified Index</i>			<u>-10.4</u>	81	<u>-6.4</u>	60	<u>-2.3</u>	59	<u>2.0</u>	80	<u>-1.4</u>	83	<u>2.6</u>	77	<u>-1.3</u>	Sep-11
Over/Under			6.6		3.8		3.0		5.8		5.7				5.9	
<i>eV All Emg Mkts Fixed Inc Net Median</i>			-6.2		-6.0		-2.0		3.6		3.1		5.7		3.2	Sep-11
<b>Prudential</b>	<b>112,657,790</b>	<b>0.9</b>	<b>-8.3</b>	<b>68</b>	<b>-6.7</b>	<b>67</b>	<b>-2.3</b>	<b>59</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.9</b>	<b>Feb-16</b>
<i>50% JPM EMBI Global Diversified/ 50% JPM GBI-EM Global Diversified</i>			<u>-7.0</u>	58	<u>-5.8</u>	47	<u>-1.9</u>	48	<u>3.4</u>	55	<u>1.9</u>	61	<u>4.7</u>	64	<u>6.7</u>	Feb-16
Over/Under			-1.3		-0.9		-0.4								1.2	
<i>eV All Emg Mkts Fixed Inc Net Median</i>			-6.2		-6.0		-2.0		3.6		3.1		5.7		6.9	Feb-16

1 - Non-U.S. Emerging Market Debt Composite market value includes \$18,259 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.



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Opportunistic Credit Composite</b>	<b>2,414,335,326</b>	<b>18.7</b>	<b>1.9</b>	<b>--</b>	<b>3.8</b>	<b>--</b>	<b>7.1</b>	<b>--</b>	<b>6.8</b>	<b>--</b>	<b>7.3</b>	<b>--</b>	<b>8.5</b>	<b>--</b>	<b>8.7</b>	<b>May-08</b>
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	6.0	May-08
Over/Under			1.2		2.8		3.8		2.1		2.5		2.3		2.7	
ICE BofAML BB-B US High Yield Constrained TR			0.7	--	-0.5	--	1.9	--	5.0	--	5.3	--	7.3	--	7.0	May-08
<b>Beachpoint Combined</b>	<b>595,919,722</b>	<b>4.6</b>	<b>1.5</b>	<b>--</b>	<b>2.5</b>	<b>--</b>	<b>6.6</b>	<b>--</b>	<b>6.0</b>	<b>--</b>	<b>6.2</b>	<b>--</b>	<b>7.5</b>	<b>--</b>	<b>6.9</b>	<b>Mar-04</b>
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	5.7	Mar-04
Over/Under			0.8		1.5		3.3		1.3		1.4		1.3		1.2	
Beachpoint Total Return	595,919,722	4.6	1.5	--	2.5	--	6.6	--	6.0	--	6.2	--	7.5	--	7.3	Jun-08
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	6.0	Jun-08
Over/Under			0.8		1.5		3.3		1.3		1.4		1.3		1.3	
<b>Pimco Disco Combined</b>	<b>147,002,059</b>	<b>1.1</b>	<b>1.6</b>	<b>--</b>	<b>4.1</b>	<b>--</b>	<b>10.0</b>	<b>--</b>	<b>10.2</b>	<b>--</b>	<b>9.4</b>	<b>--</b>	<b>12.1</b>	<b>--</b>	<b>12.1</b>	<b>Jul-08</b>
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	6.2	Jul-08
Over/Under			0.9		3.1		6.7		5.5		4.6		5.9		5.9	
Pimco Disco II	147,002,059	1.1	1.6	--	4.1	--	10.0	--	10.2	--	9.4	--	--	--	13.9	Oct-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	6.2	Oct-11
Over/Under			0.9		3.1		6.7		5.5		4.6		5.9		7.7	
<b>GoldenTree Combined</b>	<b>187,289,573</b>	<b>1.5</b>	<b>1.4</b>	<b>--</b>	<b>4.3</b>	<b>--</b>	<b>7.7</b>	<b>--</b>	<b>5.1</b>	<b>--</b>	<b>6.8</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>9.2</b>	<b>Oct-09</b>
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	6.6	Oct-09
Over/Under			0.7		3.3		4.4		0.4		2.0		--		2.6	
Goldentree II	187,289,573	1.5	1.4	--	4.3	--	7.7	--	5.1	--	6.8	--	--	--	8.8	Sep-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	5.9	Sep-11
Over/Under			0.7		3.3		4.4		0.4		2.0		--		2.9	
Medley Capital	89,646,498	0.7	-1.4	--	-5.4	--	-5.8	--	1.6	--	4.6	--	--	--	5.4	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	5.3	Aug-11
Over/Under			-2.1		-6.4		-9.1		-3.1		-0.2		--		0.1	

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





## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Waterfall - Eden	290,724,989	2.3	1.5	--	4.6	--	8.6	--	6.5	--	7.9	--	--	--	10.0	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>5.3</u>	Aug-11
BB-B Rated Constrained Index																
Over/Under			0.8		3.6		5.3		1.8		3.1				4.7	
Waterfall - Victoria	83,796,686	0.6	4.0	--	7.7	--	20.4	--	12.6	--	10.9	--	--	--	10.8	Aug-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>5.3</u>	Aug-11
BB-B Rated Constrained Index																
Over/Under			3.3		6.7		17.1		7.9		6.1				5.5	
Elegantree Fund	27,322,891	0.2	2.1	--	4.1	--	7.1	--	8.3	--	9.0	--	--	--	10.1	Mar-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>5.3</u>	Mar-12
BB-B Rated Constrained Index																
Over/Under			1.4		3.1		3.8		3.6		4.2				4.8	
Gramercy Distressed Opp II	106,228,805	0.8	-0.3	--	-2.8	--	-7.8	--	-1.2	--	4.7	--	--	--	3.2	Jul-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>5.3</u>	Jul-12
BB-B Rated Constrained Index																
Over/Under			-1.0		-3.8		-11.1		-5.9		-0.1				-2.1	
ICE Canyon	65,665,099	0.5	0.6	--	-3.3	--	2.0	--	5.2	--	1.6	--	--	--	2.8	Jun-12
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>5.5</u>	Jun-12
BB-B Rated Constrained Index																
Over/Under			-0.1		-4.3		-1.3		0.5		-3.2				-2.7	
Lone Star VIII	23,401,117	0.2	-6.2	--	-4.0	--	-4.2	--	-4.1	--	--	--	--	--	8.6	Oct-13
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>4.7</u>	Oct-13
BB-B Rated Constrained Index																
Over/Under			-6.9		-5.0		-7.5		-8.8						3.9	
Marathon European Credit Opportunity I	34,728,252	0.3	1.5	--	5.5	--	13.3	--	9.6	--	8.1	--	--	--	8.7	Oct-11
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>6.2</u>	Oct-11
BB-B Rated Constrained Index																
Over/Under			0.8		4.5		10.0		4.9		3.3				2.5	
Marathon European Credit Opportunity II	105,058,524	0.8	2.9	--	8.3	--	17.4	--	10.4	--	--	--	--	--	8.6	Mar-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>4.1</u>	Mar-14
BB-B Rated Constrained Index																
Over/Under			2.2		7.3		14.1		5.7						4.5	

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Lone Star IX	50,605,135	0.4	0.8	--	9.8	--	10.5	--	13.3	--	--	--	--	--	-17.8	Apr-15
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	4.4	Apr-15
Over/Under			0.1		8.8		7.2		8.6						-22.2	
Kildare European Partners I LP	31,051,548	0.2	5.4	--	10.4	--	19.8	--	17.0	--	--	--	--	--	11.8	May-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	4.1	May-14
Over/Under			4.7		9.4		16.5		12.3						7.7	
Black Forest	75,720,668	0.6	2.0	--	3.7	--	7.8	--	9.6	--	--	--	--	--	7.7	Aug-14
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	4.1	Aug-14
Over/Under			1.3		2.7		4.5		4.9						3.6	
Gramercy Distressed Opp III	85,762,425	0.7	0.0	--	-1.3	--	-1.8	--	--	--	--	--	--	--	-1.1	Jan-16
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	7.5	Jan-16
Over/Under			-0.7		-2.3		-5.1								-8.6	
GSO Capital Opp III	32,309,246	0.3	2.7	--	6.8	--	12.1	--	--	--	--	--	--	--	7.8	Oct-16
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			0.7	--	1.0	--	3.3	--	4.7	--	4.8	--	6.2	--	4.8	Oct-16
Over/Under			2.0		5.8		8.8								3.0	

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - OPPORTUNISTIC FI

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Cross Ocean ESS II	66,536,886	0.5	1.7	--	4.5	--	11.1	--	--	--	--	--	--	--	18.7	May-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>3.4</u>	May-17
Over/Under			1.0		3.5		7.8								15.3	
OWS CREDIT OPPORTUNITY FD	111,401,900	0.9	2.2	--	6.4	--	11.4	--	--	--	--	--	--	--	11.4	Jul-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>3.3</u>	Jul-17
Over/Under			1.5		5.4		8.1								8.1	
TAIGA SPECIAL OPP DAC LP	88,522,305	0.7	5.0	--	6.8	--	--	--	--	--	--	--	--	--	15.5	Aug-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>2.3</u>	Aug-17
Over/Under			4.3		5.8										13.2	
Sutherland Asset Management	69,449,048	0.5	10.0	--	12.8	--	2.4	--	--	--	--	--	--	--	2.4	Jul-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>3.3</u>	Jul-17
Over/Under			9.3		11.8		-0.9								-0.9	
OHA Strategic Credit II	5,688,425	0.0	3.4	--	25.2	--	--	--	--	--	--	--	--	--	20.8	Dec-17
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>1.3</u>	Dec-17
Over/Under			2.7		24.2										19.5	
Lone Star X	40,503,525	0.3	13.1	--	-44.7	--	--	--	--	--	--	--	--	--	-44.7	Jan-18
50% CS Leveraged Loan / 50% ICE BofA ML US HY BB-B Rated Constrained Index			<u>0.7</u>	--	<u>1.0</u>	--	<u>3.3</u>	--	<u>4.7</u>	--	<u>4.8</u>	--	<u>6.2</u>	--	<u>1.0</u>	Jan-18
Over/Under			12.4		-45.7										-45.7	

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Absolute Return Composite</b>	<b>493,617</b>	<b>0.0</b>														
<b>Global Asset Allocation/Risk Parity Composite</b>	<b>1,302,435,449</b>	<b>10.1</b>	<b>-0.2</b>	<b>--</b>	<b>-0.2</b>	<b>--</b>	<b>5.8</b>	<b>--</b>	<b>3.9</b>	<b>--</b>	<b>4.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>7.3</b>	<b>Oct-09</b>
<i>GAA/Risk Parity Custom Index</i>			<u>1.1</u>	--	<u>2.1</u>	--	<u>9.7</u>	--	<u>7.1</u>	--	<u>6.7</u>	--	<u>5.3</u>	--	<u>6.8</u>	Oct-09
Over/Under			-1.3		-2.3		-3.9		-3.2		-2.3				0.5	
<i>InvestorForce Public DB &gt; \$1 Billion Global Tactical Net Median</i>			--		--		--		--		--		--		--	Oct-09
<b>Global Asset Allocation Composite</b>	<b>629,940,242</b>	<b>4.9</b>	<b>-1.3</b>	<b>--</b>	<b>0.4</b>	<b>--</b>	<b>4.6</b>	<b>--</b>	<b>2.5</b>	<b>--</b>	<b>2.7</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>2.3</b>	<b>Nov-12</b>
<i>Credit Suisse Hedge Global Macro</i>			<u>1.3</u>	--	<u>1.9</u>	--	<u>5.7</u>	--	<u>1.6</u>	--	<u>2.2</u>	--	<u>3.4</u>	--	<u>2.6</u>	Nov-12
Over/Under			-2.6		-1.5		-1.1		0.9		0.5				-0.3	
<i>InvestorForce Public DB &gt; \$1 Billion Global Tactical Net Median</i>			--		--		--		--		--		--		--	Nov-12
<b>Bridgewater Pure Alpha</b>	<b>298,045,463</b>	<b>2.3</b>	<b>1.0</b>	<b>20</b>	<b>4.5</b>	<b>1</b>	<b>7.6</b>	<b>23</b>	<b>1.8</b>	<b>84</b>	<b>3.8</b>	<b>57</b>	<b>--</b>	<b>--</b>	<b>6.7</b>	<b>Oct-09</b>
<i>Credit Suisse Hedge Global Macro</i>			<u>1.3</u>	10	<u>1.9</u>	2	<u>5.7</u>	39	<u>1.6</u>	85	<u>2.2</u>	81	<u>3.4</u>	89	<u>4.4</u>	Oct-09
Over/Under			-0.3		2.6		1.9		0.2		1.6				2.3	
<i>eV Global TAA Net Median</i>			-0.4		-1.4		4.3		3.5		4.4		5.1		5.7	Oct-09
<b>PIMCO All Asset All Authority</b>	<b>331,894,779</b>	<b>2.6</b>	<b>-3.2</b>	<b>87</b>	<b>-3.1</b>	<b>85</b>	<b>2.1</b>	<b>79</b>	<b>3.1</b>	<b>53</b>	<b>1.4</b>	<b>90</b>	<b>--</b>	<b>--</b>	<b>1.4</b>	<b>Jul-13</b>
<i>Credit Suisse Hedge Global Macro</i>			<u>1.3</u>	10	<u>1.9</u>	2	<u>5.7</u>	39	<u>1.6</u>	85	<u>2.2</u>	81	<u>3.4</u>	89	<u>2.2</u>	Jul-13
Over/Under			-4.5		-5.0		-3.6		1.5		-0.8				-0.8	
<i>eV Global TAA Net Median</i>			-0.4		-1.4		4.3		3.5		4.4		5.1		4.4	Jul-13
<b>Risk Parity</b>	<b>672,495,207</b>	<b>5.2</b>	<b>0.8</b>	<b>--</b>	<b>-0.7</b>	<b>--</b>	<b>7.0</b>	<b>--</b>	<b>5.1</b>	<b>--</b>	<b>6.1</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.2</b>	<b>Nov-12</b>
<i>GAA/Risk Parity Custom Index</i>			<u>1.1</u>	--	<u>2.1</u>	--	<u>9.7</u>	--	<u>7.1</u>	--	<u>6.7</u>	--	<u>5.3</u>	--	<u>7.1</u>	Nov-12
Over/Under			-0.3		-2.8		-2.7		-2.0		-0.6				-2.9	
<i>InvestorForce Public DB &gt; \$1 Billion Global Tactical Net Median</i>			--		--		--		--		--		--		--	Nov-12
<b>Bridgewater All Weather</b>	<b>452,911,286</b>	<b>3.5</b>	<b>1.1</b>	<b>13</b>	<b>-0.2</b>	<b>20</b>	<b>7.6</b>	<b>23</b>	<b>4.4</b>	<b>35</b>	<b>5.2</b>	<b>44</b>	<b>--</b>	<b>--</b>	<b>7.9</b>	<b>Oct-09</b>
<i>60% MSCI World (Gross) / 40% CITI WGBI</i>			<u>-0.2</u>	42	<u>0.1</u>	16	<u>7.8</u>	22	<u>6.7</u>	9	<u>6.8</u>	14	<u>5.2</u>	38	<u>6.7</u>	Oct-09
Over/Under			1.3		-0.3		-0.2		-2.3		-1.6				1.2	
<i>eV Global TAA Net Median</i>			-0.4		-1.4		4.3		3.5		4.4		5.1		5.7	Oct-09
<b>PanAgora</b>	<b>219,583,921</b>	<b>1.7</b>	<b>0.0</b>	<b>36</b>	<b>-1.6</b>	<b>55</b>	<b>5.8</b>	<b>37</b>	<b>6.7</b>	<b>11</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>8.0</b>	<b>Dec-13</b>
<i>GAA/Risk Parity Custom Index</i>			<u>1.1</u>	13	<u>2.1</u>	2	<u>9.7</u>	7	<u>7.1</u>	7	<u>6.7</u>	18	<u>5.3</u>	35	<u>5.3</u>	Dec-13
Over/Under			-1.1		-3.7		-3.9		-0.4						2.7	
<i>eV Global TAA Net Median</i>			-0.4		-1.4		4.3		3.5		4.4		5.1		3.3	Dec-13

1 - Absolute Return Composite includes \$493,617 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 - 12/31/2017 - LIBOR +2% since 1/1/2018

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - GAA/RISK PARITY

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Diversifying Assets</b>	<b>119,705,544</b>	<b>0.9</b>	<b>19.1</b>	--	--	--	--	--	--	--	--	--	--	--	<b>21.3</b>	<b>Feb-18</b>
3-Month LIBOR + 2%			<u>1.1</u>	--	<u>2.1</u>	--	<u>3.8</u>	--	<u>3.1</u>	--	<u>2.8</u>	--	<u>2.7</u>	--	<u>1.7</u>	Feb-18
Over/Under			18.0												19.6	
EIG Energy Fund XVII	27,094,893	0.2	-0.8	--	--	--	--	--	--	--	--	--	--	--	-0.8	Apr-18
3-Month LIBOR + 2%			<u>1.1</u>	--	<u>2.1</u>	--	<u>3.8</u>	--	<u>3.1</u>	--	<u>2.8</u>	--	<u>2.7</u>	--	<u>1.1</u>	Apr-18
Over/Under			-1.9												-1.9	
The 1609 Fund LTD.	92,610,651	0.7	27.3	--	--	--	--	--	--	--	--	--	--	--	29.8	Feb-18
3-Month LIBOR + 2%			<u>1.1</u>	--	<u>2.1</u>	--	<u>3.8</u>	--	<u>3.1</u>	--	<u>2.8</u>	--	<u>2.7</u>	--	<u>1.7</u>	Feb-18
Over/Under			26.2												28.1	

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - REAL ESTATE

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Real Estate Composite</b>	<b>841,434,425</b>	<b>6.5</b>	<b>7.3</b>	<b>1</b>	<b>5.8</b>	<b>5</b>	<b>10.7</b>	<b>5</b>	<b>10.6</b>	<b>5</b>	<b>11.5</b>	<b>10</b>	<b>9.2</b>	<b>1</b>	<b>10.2</b>	<b>Dec-03</b>
<i>NCREIF Property Index</i>			<u>1.8</u>	62	<u>3.5</u>	76	<u>7.2</u>	92	<u>8.3</u>	87	<u>9.8</u>	88	<u>6.2</u>	20	<u>9.1</u>	<i>Dec-03</i>
Over/Under			5.5		2.3		3.5		2.3		1.7		3.0		1.1	
<i>Wilshire REIT</i>			9.7	1	1.5	99	3.9	99	7.8	99	8.4	99	7.8	11	9.2	<i>Dec-03</i>
<i>InvestorForce Public DB &gt; \$1 Billion Real Estate Net Median</i>			2.0		4.0		8.2		9.1		10.6		5.2		8.2	<i>Dec-03</i>
<b>Public Real Estate Composite</b>	<b>261,109,998</b>	<b>2.0</b>	<b>10.9</b>	<b>1</b>	<b>0.8</b>	<b>99</b>	<b>1.9</b>	<b>99</b>	<b>6.2</b>	<b>99</b>	<b>7.3</b>	<b>99</b>	<b>7.5</b>	<b>12</b>	<b>8.9</b>	<b>Dec-03</b>
<i>Wilshire REIT</i>			<u>9.7</u>	1	<u>1.5</u>	99	<u>3.9</u>	99	<u>7.8</u>	99	<u>8.4</u>	99	<u>7.8</u>	11	<u>9.2</u>	<i>Dec-03</i>
Over/Under			1.2		-0.7		-2.0		-1.6		-1.1		-0.3		-0.3	
<i>InvestorForce Public DB &gt; \$1 Billion Real Estate Net Median</i>			2.0		4.0		8.2		9.1		10.6		5.2		8.2	<i>Dec-03</i>
Brookfield	261,109,998	2.0	10.9	5	0.8	47	1.7	87	5.5	95	6.9	86	--	--	9.0	Jul-11
<i>MSCI US REIT</i>			<u>9.7</u>	19	<u>0.5</u>	54	<u>2.2</u>	85	<u>6.6</u>	80	<u>6.9</u>	87	<u>6.5</u>	98	<u>7.7</u>	<i>Jul-11</i>
Over/Under			1.2		0.3		-0.5		-1.1		0.0				1.3	
<i>eV US REIT Net Median</i>			8.3		0.7		3.9		7.6		8.6		8.5		9.0	<i>Jul-11</i>
<b>Private Real Estate Composite</b>	<b>580,324,426</b>	<b>4.5</b>	<b>5.7</b>	<b>3</b>	<b>8.3</b>	<b>3</b>	<b>15.9</b>	<b>3</b>	<b>13.3</b>	<b>1</b>	<b>14.8</b>	<b>1</b>	<b>8.8</b>	<b>1</b>	<b>8.5</b>	<b>Jan-08</b>
<i>NCREIF Property Index</i>			<u>1.8</u>	68	<u>3.5</u>	78	<u>7.2</u>	66	<u>8.3</u>	67	<u>9.8</u>	71	<u>6.2</u>	15	<u>6.1</u>	<i>Jan-08</i>
Over/Under			3.9		4.8		8.7		5.0		5.0		2.6		2.4	
<i>InvestorForce Public DB Real Estate Priv Net Median</i>			1.9		3.9		8.1		9.1		10.5		4.2		4.1	<i>Jan-08</i>
U.S. Private Real Estate	580,324,426	4.5	5.7	--	8.3	--	15.8	--	13.3	--	14.9	--	9.5	--	9.1	Jan-08
<i>NCREIF Property Index</i>			<u>1.8</u>	--	<u>3.5</u>	--	<u>7.2</u>	--	<u>8.3</u>	--	<u>9.8</u>	--	<u>6.2</u>	--	<u>6.1</u>	<i>Jan-08</i>
Over/Under			3.9		4.8		8.6		5.0		5.1		3.3		3.0	

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - PE & RA

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
<b>Private Equity Composite</b>	<b>1,674,418,975</b>	<b>13.0</b>	<b>3.8</b>	<b>42</b>	<b>6.5</b>	<b>63</b>	<b>11.1</b>	<b>80</b>	<b>12.4</b>	<b>38</b>	<b>14.2</b>	<b>44</b>	<b>10.4</b>	<b>27</b>	<b>6.9</b>	<b>Jun-06</b>
Cambridge Associates US All PE (1 Qtr Lag)			<u>2.7</u>	61	<u>7.9</u>	43	<u>16.2</u>	39	<u>12.0</u>	51	<u>13.2</u>	50	<u>10.3</u>	29	<u>12.2</u>	Jun-06
Over/Under			1.1		-1.4		-5.1		0.4		1.0		0.1		-5.3	
InvestorForce Public DB > \$1 Billion Private Equity Net Median			3.6		7.1		14.5		12.0		13.1		8.7		10.9	Jun-06
<b>Real Assets Composite</b>	<b>954,714,364</b>	<b>7.4</b>	<b>5.5</b>	<b>8</b>	<b>6.7</b>	<b>1</b>	<b>10.2</b>	<b>15</b>	<b>9.3</b>	<b>31</b>	<b>7.4</b>	<b>17</b>	<b>2.5</b>	<b>34</b>	<b>2.5</b>	<b>Jul-08</b>
CPI + 4% (Seasonally Adjusted)			<u>1.5</u>	72	<u>3.2</u>	40	<u>6.9</u>	56	<u>5.9</u>	45	<u>5.6</u>	54	<u>5.5</u>	1	<u>5.5</u>	Jul-08
Over/Under			4.0		3.5		3.3		3.4		1.8		-3.0		-3.0	
InvestorForce Public DB > \$1 Billion Real Assets/Commodities Net Median			1.8		2.3		7.3		4.4		6.2		2.4		2.4	Jul-08
<b>Infrastructure Composite</b>	<b>390,305,486</b>	<b>3.0</b>	<b>1.4</b>	<b>--</b>	<b>2.9</b>	<b>--</b>	<b>5.8</b>	<b>--</b>	<b>9.2</b>	<b>--</b>	<b>7.5</b>	<b>--</b>	<b>2.9</b>	<b>--</b>	<b>2.9</b>	<b>Jul-08</b>
Infrastructure	363,554,557	2.8	2.0	--	3.2	--	5.2	--	6.6	--	6.5	--	2.5	--	2.5	Jul-08
CPI + 4% (Seasonally Adjusted)			<u>1.5</u>	--	<u>3.2</u>	--	<u>6.9</u>	--	<u>5.9</u>	--	<u>5.6</u>	--	<u>5.5</u>	--	<u>5.5</u>	Jul-08
Over/Under			0.5		0.0		-1.7		0.7		0.9		-3.0		-3.0	
International Infrastructure	26,750,929	0.2	-6.1	--	-1.2	--	13.9	--	49.5	--	21.4	--	--	--	-1.9	Jan-13
CPI + 4% (Seasonally Adjusted)			<u>1.5</u>	--	<u>3.2</u>	--	<u>6.9</u>	--	<u>5.9</u>	--	<u>5.6</u>	--	<u>5.5</u>	--	<u>5.5</u>	Jan-13
Over/Under			-7.6		-4.4		7.0		43.6		15.8		--		-7.4	
<b>Natural Resources</b>	<b>564,408,879</b>	<b>4.4</b>	<b>8.6</b>	<b>--</b>	<b>9.5</b>	<b>--</b>	<b>13.4</b>	<b>--</b>	<b>9.2</b>	<b>--</b>	<b>7.3</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>4.0</b>	<b>Mar-09</b>
Harvest Fund	51,262,951	0.4	13.8	--	3.0	--	0.3	--	--	--	--	--	--	--	1.1	Aug-16
Alerian MLP Index			<u>11.8</u>	--	<u>-0.6</u>	--	<u>-4.6</u>	--	<u>-5.9</u>	--	<u>-4.1</u>	--	<u>6.5</u>	--	<u>-2.5</u>	Aug-16
Over/Under			2.0		3.6		4.9		--		--	--	--		3.6	
Energy	211,405,772	1.6	21.1	--	23.1	--	31.7	--	16.9	--	--	--	--	--	0.8	Jan-14
91 Day T-Bills			<u>0.5</u>	--	<u>0.8</u>	--	<u>1.4</u>	--	<u>0.7</u>	--	<u>0.4</u>	--	<u>0.3</u>	--	<u>0.5</u>	Jan-14
Over/Under			20.6		22.3		30.3		16.2		--		--		0.3	
Agriculture Composite	107,776,399	0.8	2.9	--	2.4	--	3.0	--	4.4	--	4.7	--	--	--	4.0	Aug-12
NCREIF Farmland			<u>1.1</u>	--	<u>2.5</u>	--	<u>6.5</u>	--	<u>7.6</u>	--	<u>10.2</u>	--	<u>11.7</u>	--	<u>12.0</u>	Aug-12
Over/Under			1.8		-0.1		-3.5		-3.2		-5.5		--		-8.0	
Timber Composite	97,560,315	0.8	-0.3	--	5.4	--	7.5	--	5.3	--	6.5	--	--	--	3.9	Mar-09
NCREIF Timberland Index			<u>0.5</u>	--	<u>1.4</u>	--	<u>3.6</u>	--	<u>3.5</u>	--	<u>6.0</u>	--	<u>4.0</u>	--	<u>3.9</u>	Mar-09
Over/Under			-0.8		4.0		3.9		1.8		0.5		--		0.0	

1 - Energy funded in January 2014. Composite includes Five Point Cap, Lime Rock, Enervest, BP Natural Gas, and Bluescape Energy.

2 - 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, which was funded in August 2014.

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



## New Mexico Educational Retirement Board

# PERFORMANCE DETAIL - CASH

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Mitigation Banking	49,626,537	0.4	-1.5	--	-1.5	--	10.8	--	11.1	--	11.6	--	--	--	1.0	Mar-11
CPI + 4% (Seasonally Adjusted)			<u>1.5</u>	--	<u>3.2</u>	--	<u>6.9</u>	--	<u>5.9</u>	--	<u>5.6</u>	--	<u>5.5</u>	--	<u>5.7</u>	Mar-11
Over/Under			-3.0		-4.7		3.9		5.2		6.0				-4.7	
Water Property Investor, L.P.	46,776,905	0.4	-2.3	--	0.7	--	0.2	--	-0.7	--	--	--	--	--	3.7	Jan-15
CPI + 4% (Seasonally Adjusted)			<u>1.5</u>	--	<u>3.2</u>	--	<u>6.9</u>	--	<u>5.9</u>	--	<u>5.6</u>	--	<u>5.5</u>	--	<u>5.8</u>	Jan-15
Over/Under			-3.8		-2.5		-6.7		-6.6						-2.1	
<b>Cash</b>	<b>170,359,351</b>	<b>1.3</b>														
Cash	166,608,782	1.3	0.5	--	0.9	--	2.3	--	1.3	--	0.9	--	0.9	--	1.1	Dec-99
91 Day T-Bills			<u>0.5</u>	--	<u>0.8</u>	--	<u>1.4</u>	--	<u>0.7</u>	--	<u>0.4</u>	--	<u>0.3</u>	--	<u>1.6</u>	Dec-99
Over/Under			0.0		0.1		0.9		0.6		0.5		0.6		-0.5	
NM ERB Cash	3,648,338	0.0	-0.1	--	0.0	--	0.0	--	0.0	--	0.7	--	0.5	--	1.0	Jun-00
91 Day T-Bills			<u>0.5</u>	--	<u>0.8</u>	--	<u>1.4</u>	--	<u>0.7</u>	--	<u>0.4</u>	--	<u>0.3</u>	--	<u>1.5</u>	Jun-00
Over/Under			-0.6		-0.8		-1.4		-0.7		0.3		0.2		-0.5	
Local Government Investment Pool (LGIP) at STO	102,230	0.0	0.4	--	0.7	--	1.0	--	0.5	--	--	--	--	--	0.5	Jul-15
91 Day T-Bills			<u>0.5</u>	--	<u>0.8</u>	--	<u>1.4</u>	--	<u>0.7</u>	--	<u>0.4</u>	--	<u>0.3</u>	--	<u>0.7</u>	Jul-15
Over/Under			-0.1		-0.1		-0.4		-0.2						-0.2	

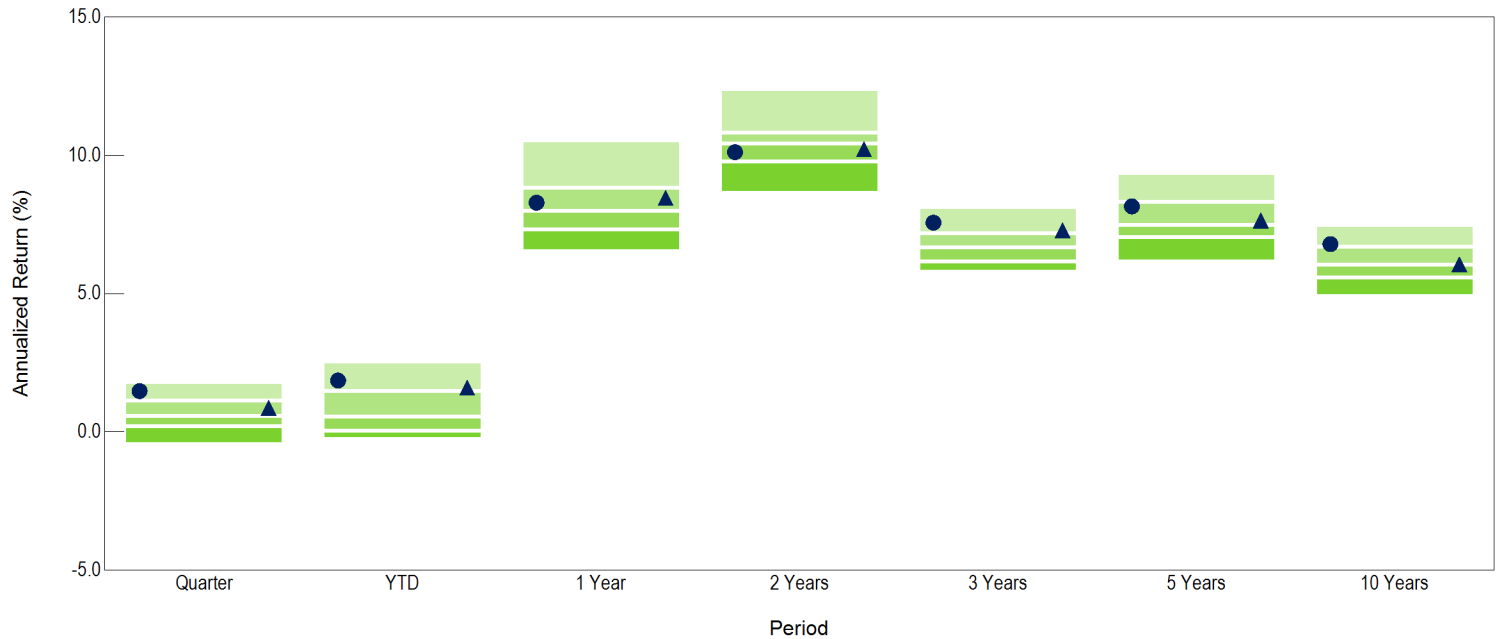
Note: Performance is shown net of fees. Fiscal year ends June 30.





# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

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



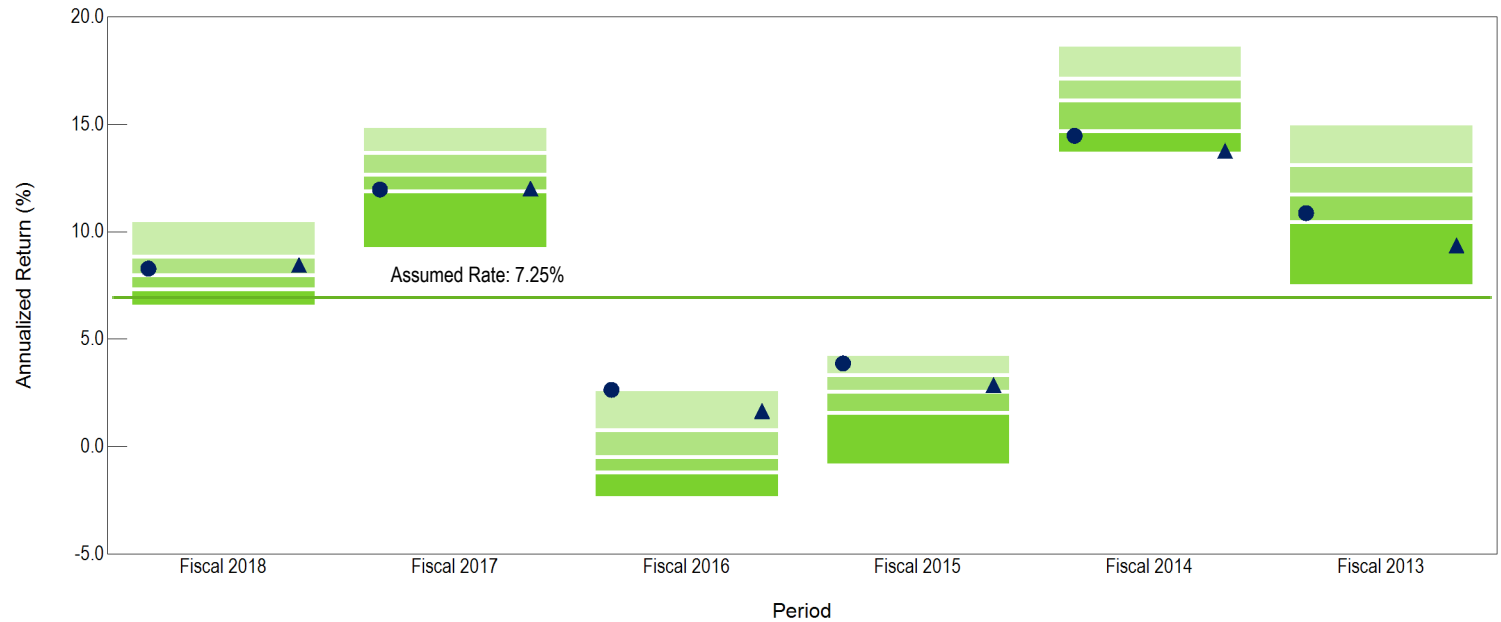
	Return (Rank)													
5th Percentile	1.8	2.5	10.5	12.4	8.1	9.3	7.5							
25th Percentile	1.1	1.5	8.8	10.8	7.2	8.3	6.7							
Median	0.6	0.6	8.0	10.4	6.7	7.5	6.1							
75th Percentile	0.2	0.1	7.3	9.8	6.2	7.0	5.6							
95th Percentile	-0.4	-0.2	6.5	8.6	5.8	6.2	4.9							
# of Portfolios	52	51	51	51	51	51	45							
● Total Fund	1.5	(14)	1.9	(15)	8.3	(37)	10.1	(69)	7.6	(11)	8.1	(35)	6.8	(21)
▲ Policy Index	0.9	(41)	1.6	(22)	8.5	(33)	10.2	(62)	7.3	(23)	7.6	(50)	6.0	(51)

Note: Ranks are based on net returns.



# TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

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



	Fiscal 2018		Fiscal 2017		Fiscal 2016		Fiscal 2015		Fiscal 2014		Fiscal 2013	
<b>Return (Rank)</b>												
5th Percentile	10.5		14.9		2.7		4.3		18.7		15.0	
25th Percentile	8.8		13.7		0.8		3.3		17.2		13.1	
Median	8.0		12.7		-0.5		2.6		16.1		11.8	
75th Percentile	7.3		11.9		-1.2		1.6		14.7		10.5	
95th Percentile	6.5		9.2		-2.4		-0.9		13.6		7.5	
# of Portfolios	51		65		55		53		43		56	
● Total Fund	8.3	(37)	12.0	(71)	2.6	(6)	3.9	(16)	14.5	(79)	10.9	(69)
▲ Policy Index	8.5	(33)	12.0	(68)	1.7	(9)	2.9	(47)	13.8	(91)	9.4	(86)

Note: Ranks are based on net returns.



## New Mexico Educational Retirement Board

# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Summary						
3 Months Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	3.4%	3.4%	0.0%	0.0%	0.0%	0.0%
U.S. Small/Mid Cap Equity Composite	4.5%	5.7%	-1.2%	0.0%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	-1.5%	-1.2%	-0.2%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	-8.3%	-8.0%	-0.4%	0.0%	0.0%	-0.1%
Core Fixed Income Composite	-0.4%	-0.2%	-0.2%	0.0%	0.0%	0.0%
Non-U.S. Emerging Market Debt Composite	-6.2%	-7.0%	0.8%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	1.9%	0.7%	1.2%	0.2%	0.0%	0.2%
Absolute Return Composite	0.1%	0.9%	-0.9%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	-0.2%	1.1%	-1.3%	-0.1%	0.0%	-0.1%
Diversifying Assets	19.1%	1.1%	18.1%	0.1%	0.0%	0.1%
Public Real Estate Composite	10.9%	9.7%	1.1%	0.0%	-0.1%	-0.1%
Private Real Estate Composite	5.7%	1.8%	3.9%	0.2%	0.0%	0.2%
Private Equity Composite	3.8%	2.7%	1.1%	0.1%	0.0%	0.1%
Real Assets Composite	5.5%	1.5%	3.9%	0.3%	0.0%	0.3%
Cash	0.4%	0.5%	0.0%	0.0%	0.0%	0.0%
<b>Total</b>	<b>1.5%</b>	<b>0.9%</b>	<b>0.6%</b>	<b>0.7%</b>	<b>-0.1%</b>	<b>0.6%</b>

Attribution Summary						
YTD Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	2.5%	2.6%	-0.2%	0.0%	0.0%	-0.1%
U.S. Small/Mid Cap Equity Composite	3.6%	5.5%	-1.8%	-0.1%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	-2.9%	-2.7%	-0.1%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	-7.6%	-6.7%	-0.9%	-0.1%	-0.1%	-0.2%
Core Fixed Income Composite	-2.0%	-1.6%	-0.4%	0.0%	-0.1%	-0.1%
Non-U.S. Emerging Market Debt Composite	-4.8%	-5.8%	1.0%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	3.8%	1.0%	2.8%	0.5%	0.0%	0.5%
Absolute Return Composite	-0.1%	1.8%	-1.9%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	-0.2%	2.1%	-2.2%	-0.2%	0.0%	-0.2%
Diversifying Assets	23.9%	2.1%	21.9%	0.1%	0.0%	0.1%
Public Real Estate Composite	0.8%	1.5%	-0.8%	0.0%	0.0%	0.0%
Private Real Estate Composite	8.3%	3.5%	4.8%	0.2%	0.0%	0.2%
Private Equity Composite	6.5%	7.9%	-1.4%	-0.2%	0.0%	-0.2%
Real Assets Composite	6.7%	3.2%	3.5%	0.2%	0.0%	0.2%
Cash	0.8%	0.8%	-0.1%	0.0%	0.0%	0.0%
<b>Total</b>	<b>1.8%</b>	<b>1.6%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>-0.2%</b>	<b>0.2%</b>



## New Mexico Educational Retirement Board

# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Summary						
1 Year Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	14.1%	14.4%	-0.2%	0.0%	-0.1%	-0.1%
U.S. Small/Mid Cap Equity Composite	14.5%	16.2%	-1.8%	-0.1%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	5.7%	6.8%	-1.2%	-0.1%	0.0%	-0.1%
Non-U.S. Emerging Mkts Equity Composite	5.0%	8.2%	-3.2%	-0.3%	0.0%	-0.4%
Core Fixed Income Composite	-0.4%	-0.4%	-0.1%	0.0%	-0.2%	-0.2%
Non-U.S. Emerging Market Debt Composite	-0.9%	-1.9%	1.0%	0.0%	0.0%	0.0%
Opportunistic Credit Composite	7.1%	3.3%	3.9%	0.7%	0.0%	0.7%
Absolute Return Composite	-0.3%	3.3%	-3.7%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	5.8%	8.7%	-2.9%	-0.3%	0.0%	-0.3%
Diversifying Assets	--	--	--	0.1%	0.1%	0.3%
Public Real Estate Composite	1.9%	3.9%	-2.0%	0.0%	0.0%	-0.1%
Private Real Estate Composite	15.9%	7.2%	8.7%	0.4%	0.0%	0.4%
Private Equity Composite	11.1%	16.2%	-5.1%	-0.6%	0.0%	-0.7%
Real Assets Composite	10.2%	6.9%	3.3%	0.2%	0.0%	0.3%
Cash	1.9%	1.4%	0.5%	0.0%	-0.1%	-0.1%
<b>Total</b>	<b>8.3%</b>	<b>8.5%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>-0.2%</b>	<b>-0.2%</b>

Attribution Summary						
3 Years Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	11.9%	11.9%	0.0%	0.0%	0.0%	0.0%
U.S. Small/Mid Cap Equity Composite	9.4%	10.3%	-0.9%	0.0%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	4.0%	4.9%	-1.0%	0.0%	0.0%	-0.1%
Non-U.S. Emerging Mkts Equity Composite	4.3%	5.6%	-1.3%	-0.2%	0.0%	-0.2%
Core Fixed Income Composite	2.0%	1.7%	0.3%	0.0%	-0.1%	-0.1%
Non-U.S. Emerging Market Debt Composite	5.1%	1.6%	3.5%	0.1%	0.0%	0.1%
Opportunistic Credit Composite	6.8%	4.7%	2.1%	0.4%	0.0%	0.4%
Absolute Return Composite	0.9%	2.7%	-1.8%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	3.9%	4.7%	-0.9%	-0.1%	0.0%	-0.1%
Diversifying Assets	--	--	--	0.0%	0.0%	0.1%
Public Real Estate Composite	6.2%	7.8%	-1.6%	0.0%	0.0%	-0.1%
Private Real Estate Composite	13.3%	8.3%	5.1%	0.2%	0.0%	0.2%
Private Equity Composite	12.4%	12.0%	0.3%	0.0%	0.0%	-0.1%
Real Assets Composite	9.3%	5.9%	3.4%	0.2%	0.0%	0.2%
Cash	1.0%	0.7%	0.3%	0.0%	0.0%	0.0%
<b>Total</b>	<b>7.6%</b>	<b>7.3%</b>	<b>0.3%</b>	<b>0.6%</b>	<b>-0.3%</b>	<b>0.3%</b>



## New Mexico Educational Retirement Board

# TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Summary						
5 Years Ending June 30, 2018						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
U.S. Large Cap Equity Composite	13.3%	13.4%	-0.1%	0.0%	0.0%	0.0%
U.S. Small/Mid Cap Equity Composite	12.3%	12.3%	0.0%	0.0%	0.0%	0.0%
Non-U.S. Developed Mkts Equity Composite	6.0%	6.4%	-0.4%	0.0%	0.0%	0.0%
Non-U.S. Emerging Mkts Equity Composite	4.2%	5.0%	-0.8%	-0.1%	0.0%	-0.1%
Core Fixed Income Composite	2.6%	2.3%	0.4%	0.0%	-0.2%	-0.1%
Non-U.S. Emerging Market Debt Composite	1.2%	-1.6%	2.7%	0.0%	0.0%	0.1%
Opportunistic Credit Composite	7.3%	4.8%	2.5%	0.5%	0.0%	0.5%
Absolute Return Composite	2.0%	2.4%	-0.4%	0.0%	0.0%	0.0%
Global Asset Allocation/Risk Parity Composite	4.4%	4.7%	-0.3%	0.0%	0.0%	0.0%
Diversifying Assets	--	--	--	0.0%	0.0%	0.1%
Public Real Estate Composite	7.3%	8.4%	-1.1%	0.0%	-0.1%	-0.1%
Private Real Estate Composite	14.8%	9.8%	5.0%	0.2%	0.0%	0.2%
Private Equity Composite	14.2%	13.2%	1.0%	0.0%	0.0%	0.0%
Real Assets Composite	7.4%	5.6%	1.8%	0.1%	0.1%	0.2%
Cash	0.8%	0.4%	0.4%	0.0%	-0.1%	-0.1%
<b>Total</b>	<b>8.1%</b>	<b>7.6%</b>	<b>0.5%</b>	<b>0.8%</b>	<b>-0.3%</b>	<b>0.5%</b>



# APPENDIX: MARKET ENVIRONMENT

NEPC, LLC

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# LONG-TERM PERFORMANCE SUMMARY



Source: Bloomberg, Standard and Poor's, Russell, MSCI, Barclays, JP Morgan



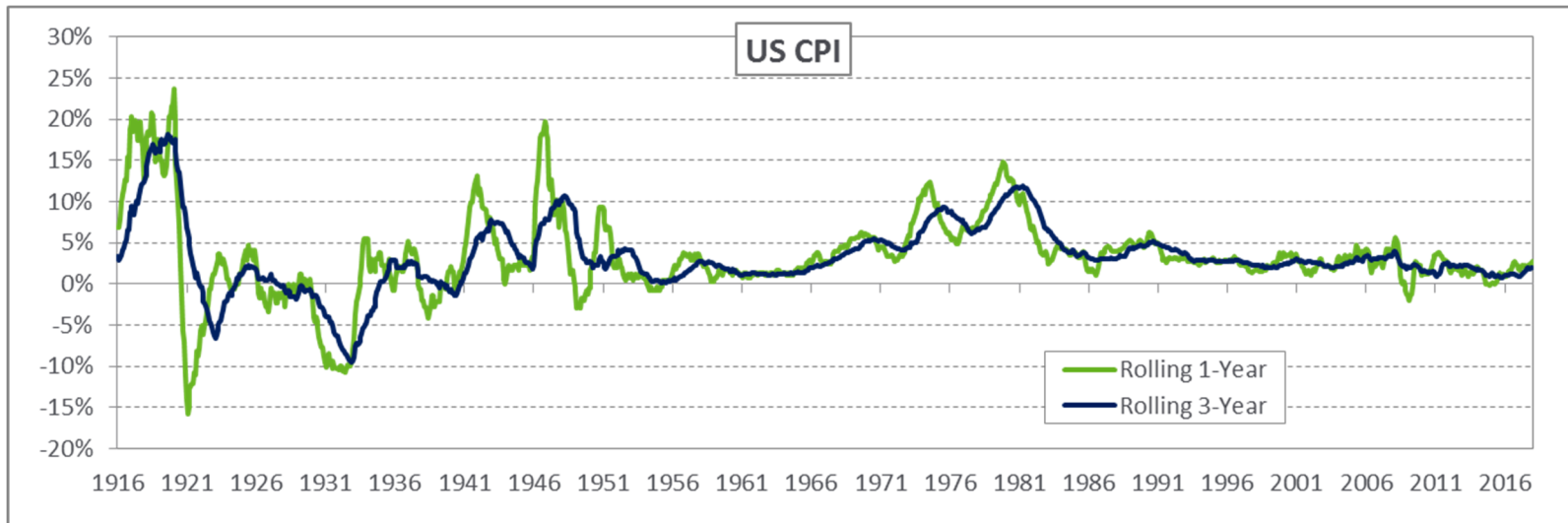
# MACRO

NEPC, LLC

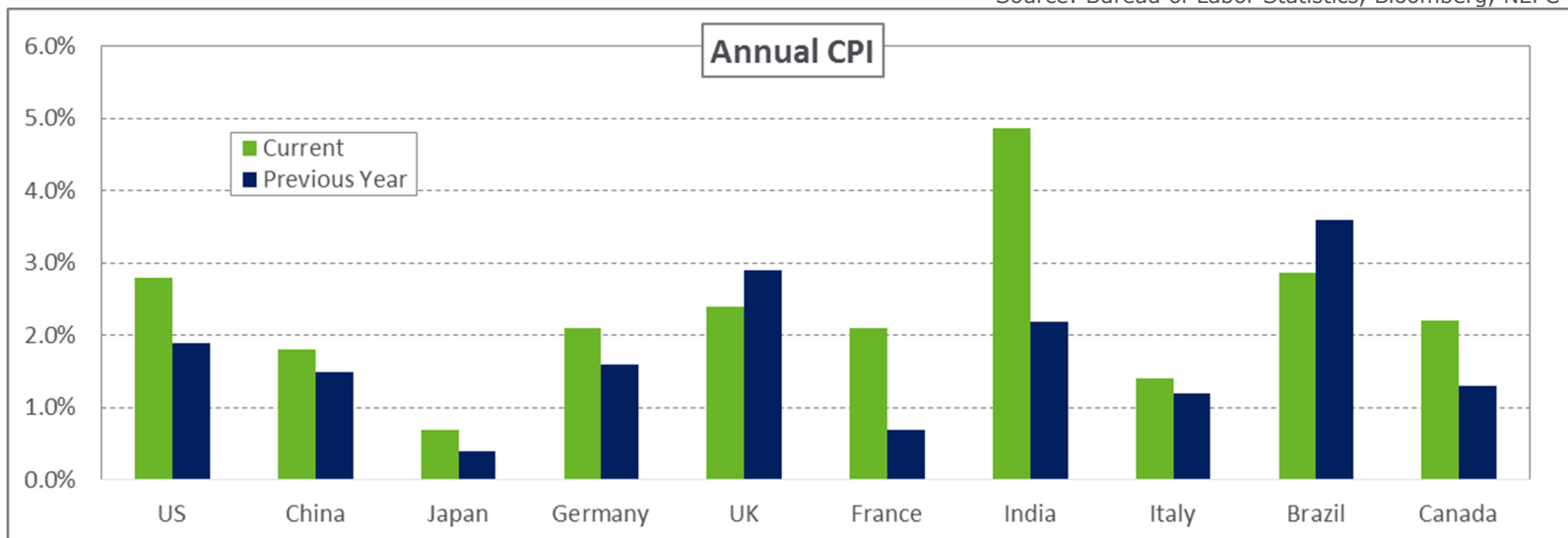
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# INFLATION



Source: Bureau of Labor Statistics, Bloomberg, NEPC



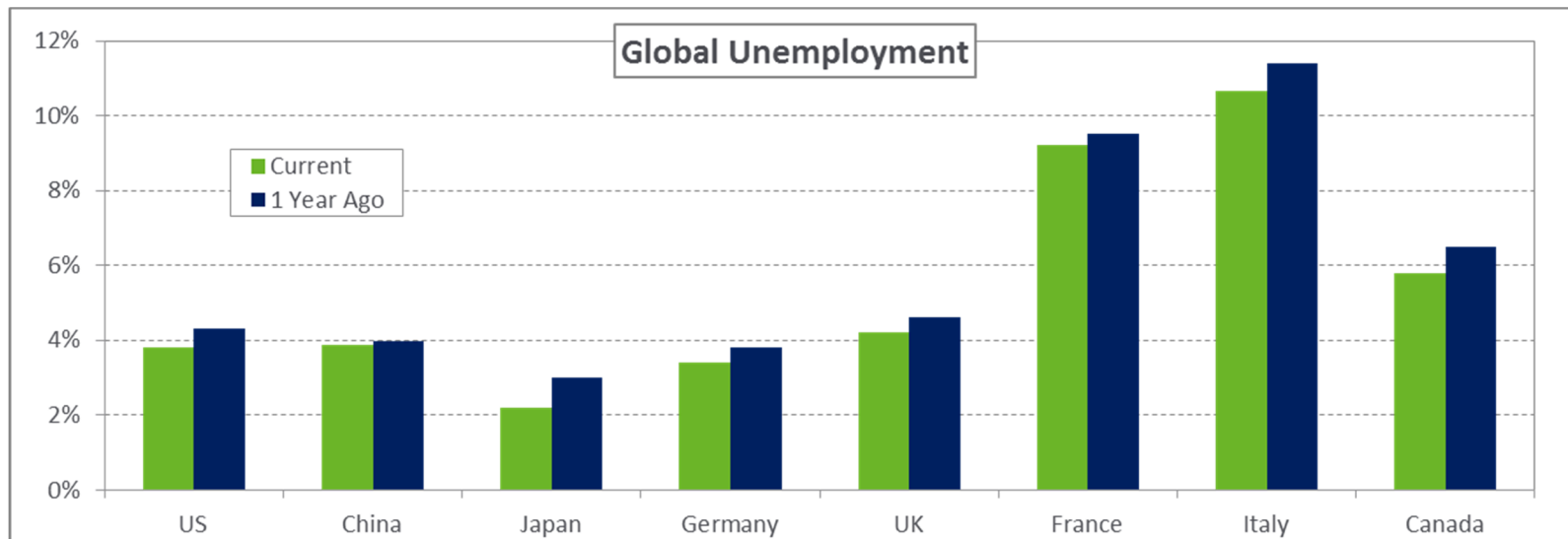
Source: Bureau of Labor Statistics, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, India Central Statistical Organization, ISTAT, IBGE, STCA, Bloomberg



# UNEMPLOYMENT



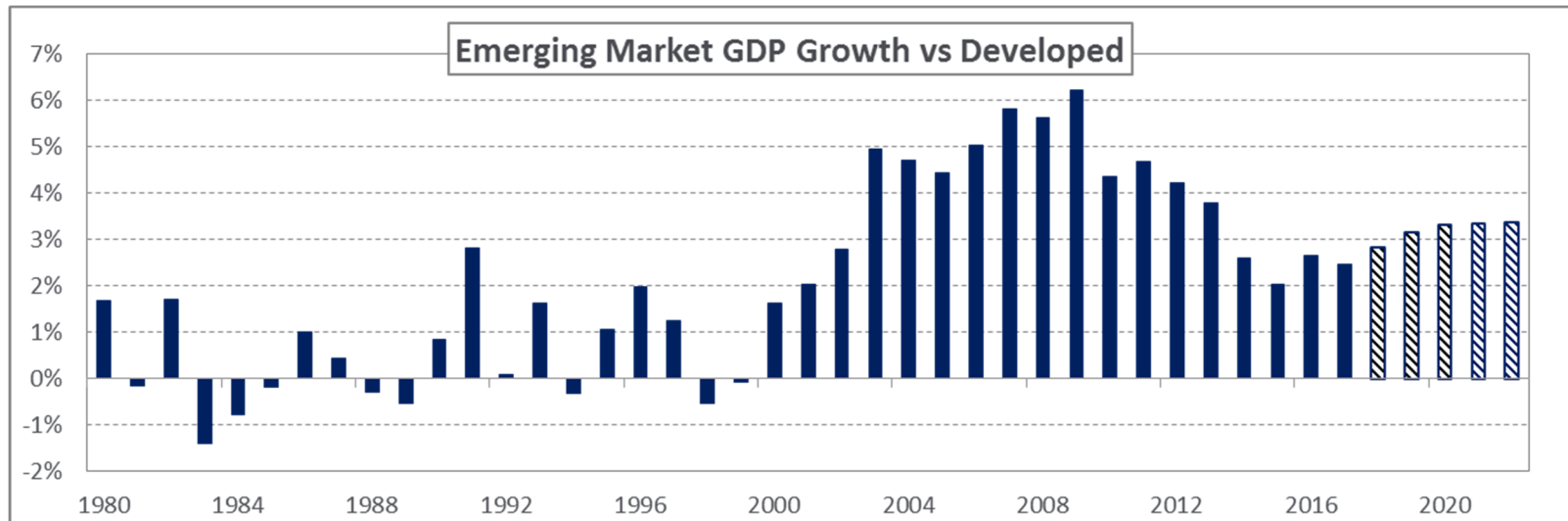
Source: Bureau of Labor Statistics, Bloomberg



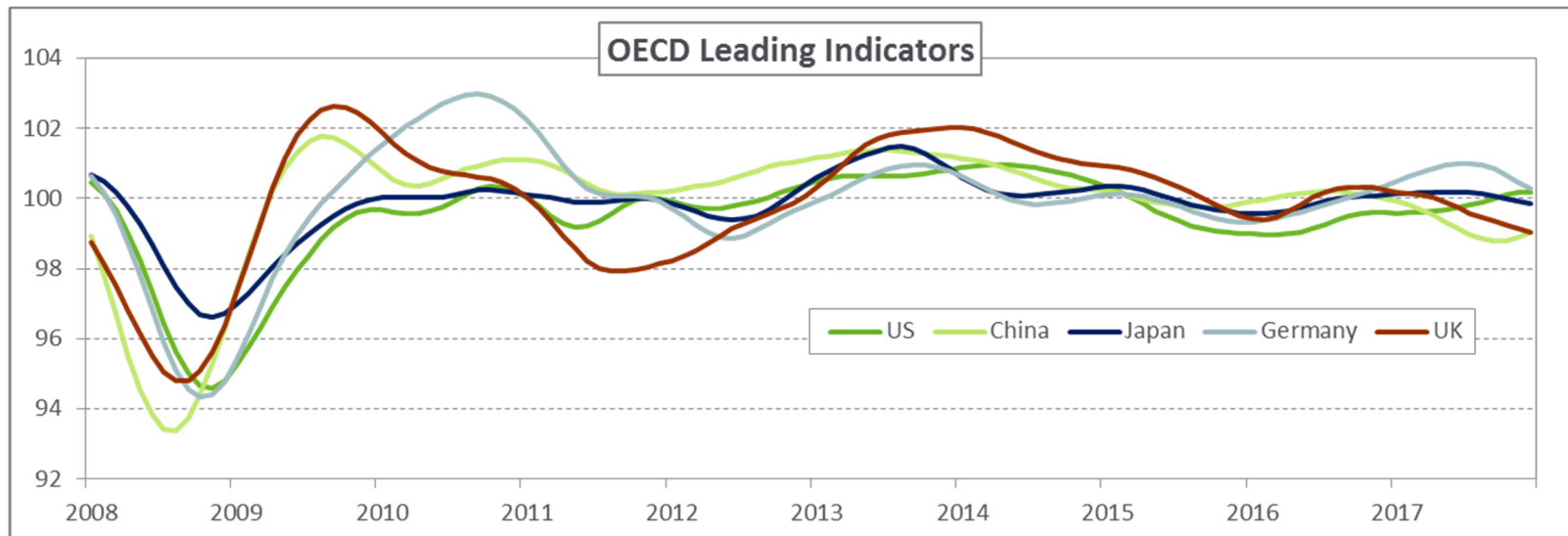
Source: Bureau of Labor Statistics, STA, National Bureau of Statistics of China, Ministry of Internal Affairs and Communications (Japan), German Federal Statistics Office, UK Office for National Statistics, National Statistics Office of France, ISTAT, IBGE, Bloomberg



# ECONOMIC INDICATORS



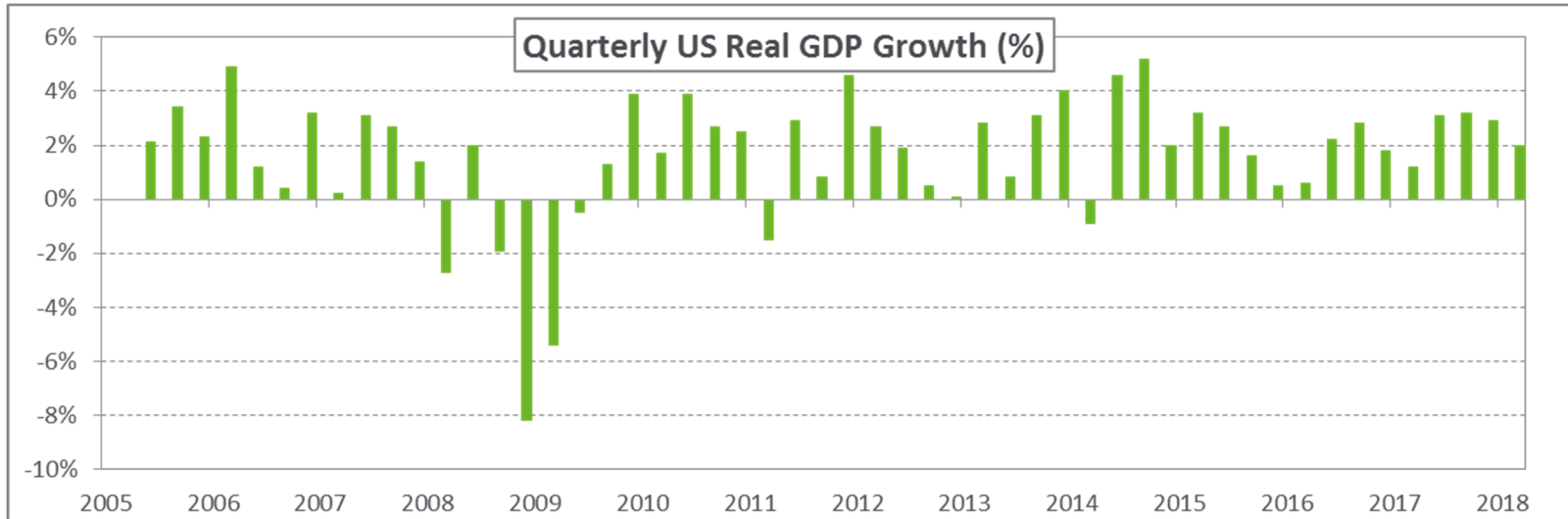
Source: IMF



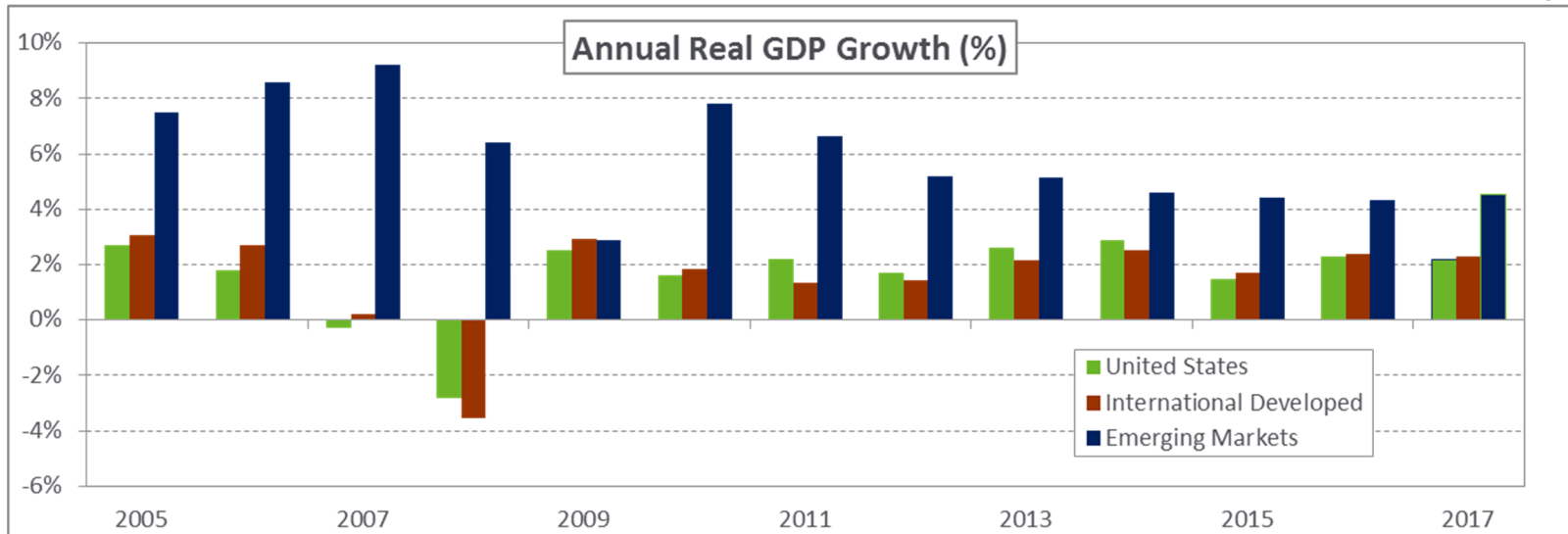
Source: OECD, Bloomberg



# GROSS DOMESTIC PRODUCT



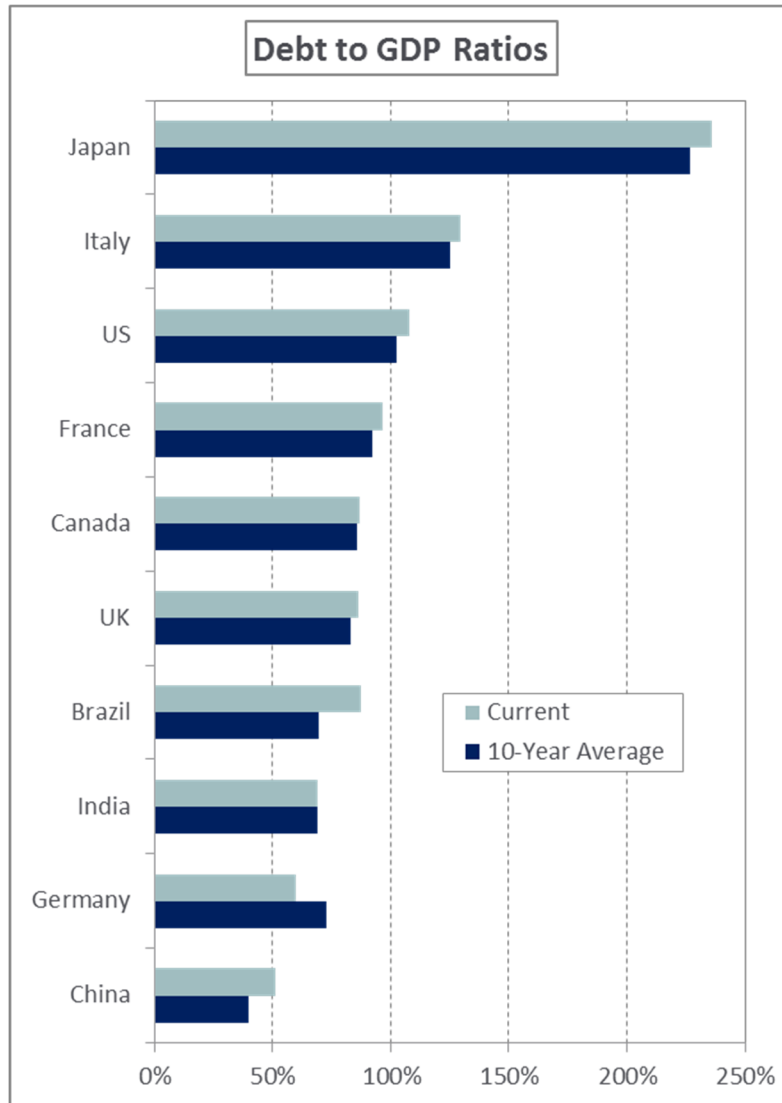
Source: Bloomberg



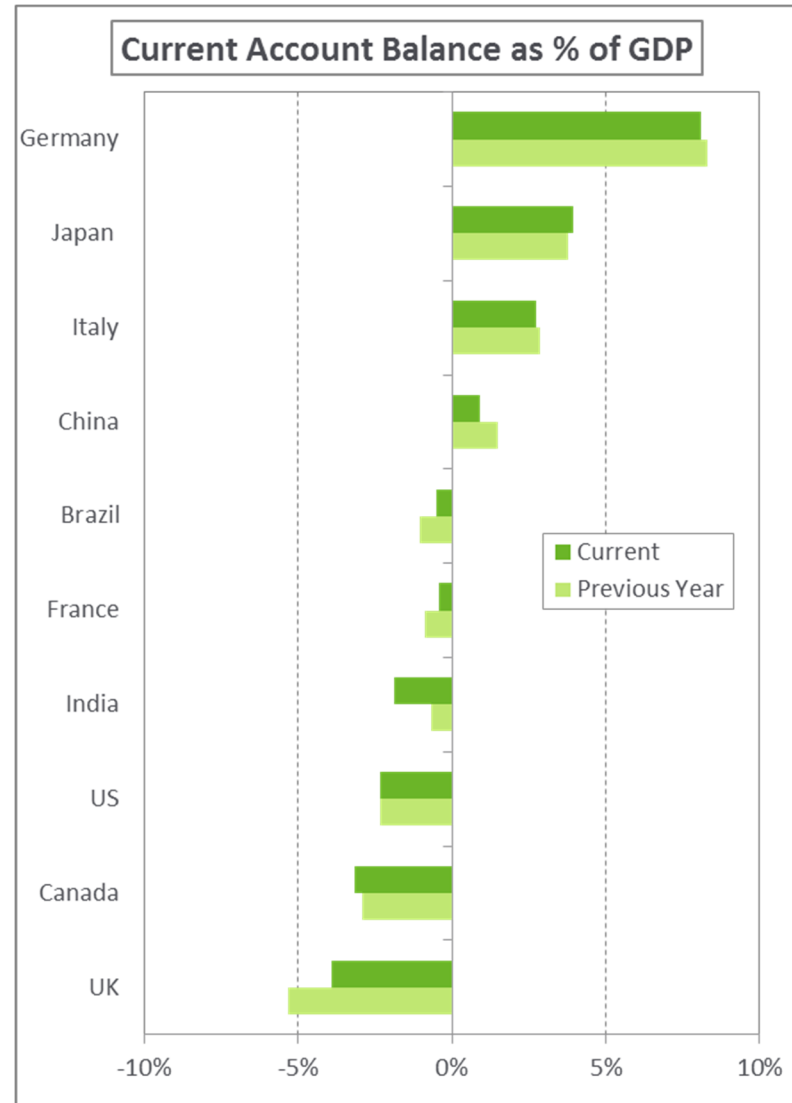
Source: Bloomberg



# GROSS DOMESTIC PRODUCT METRICS



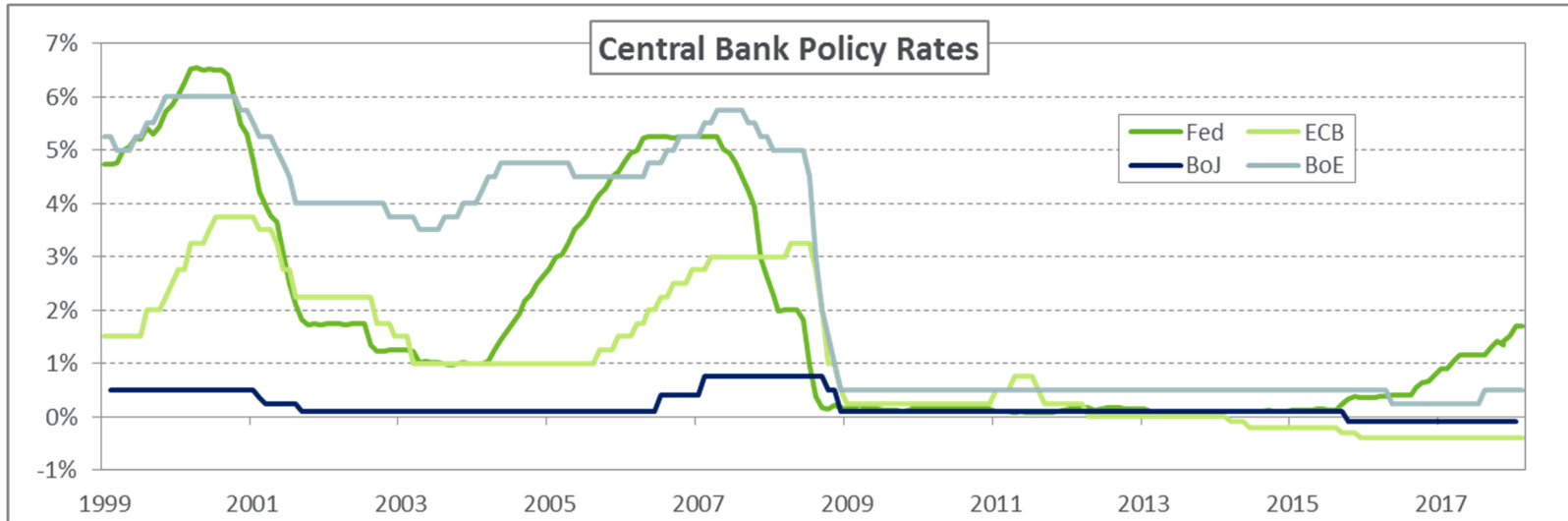
Source: IMF, Bloomberg



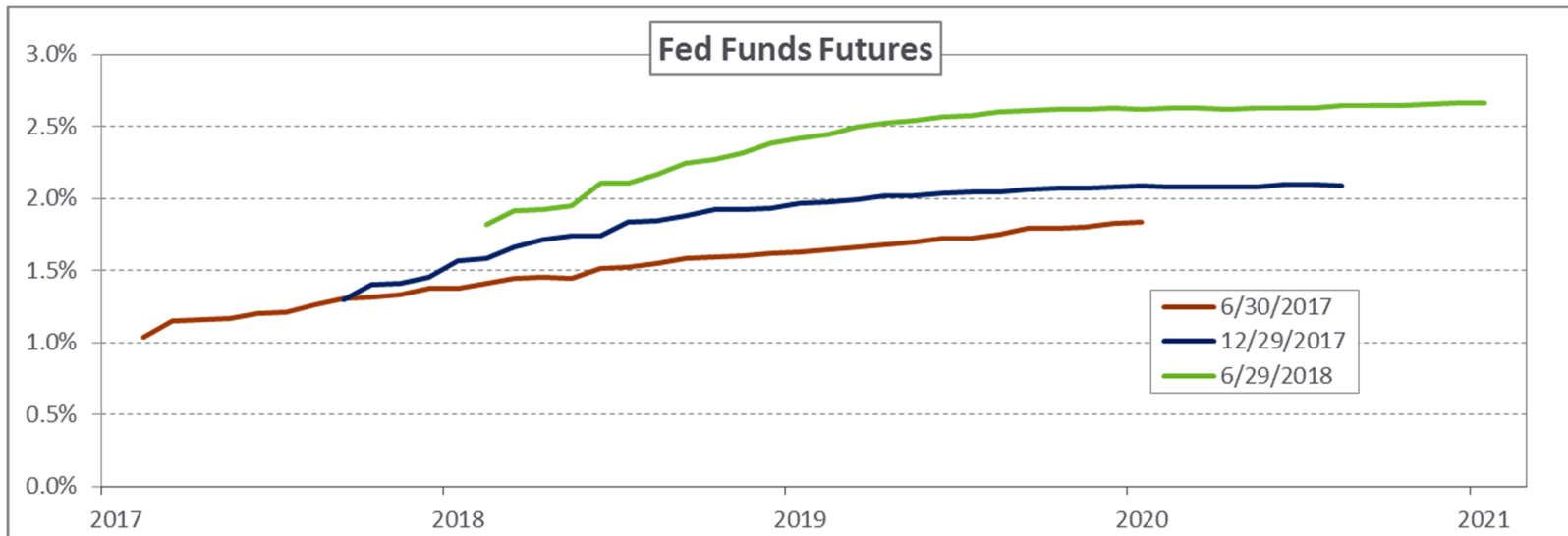
Source: Bloomberg



# CENTRAL BANK RATES



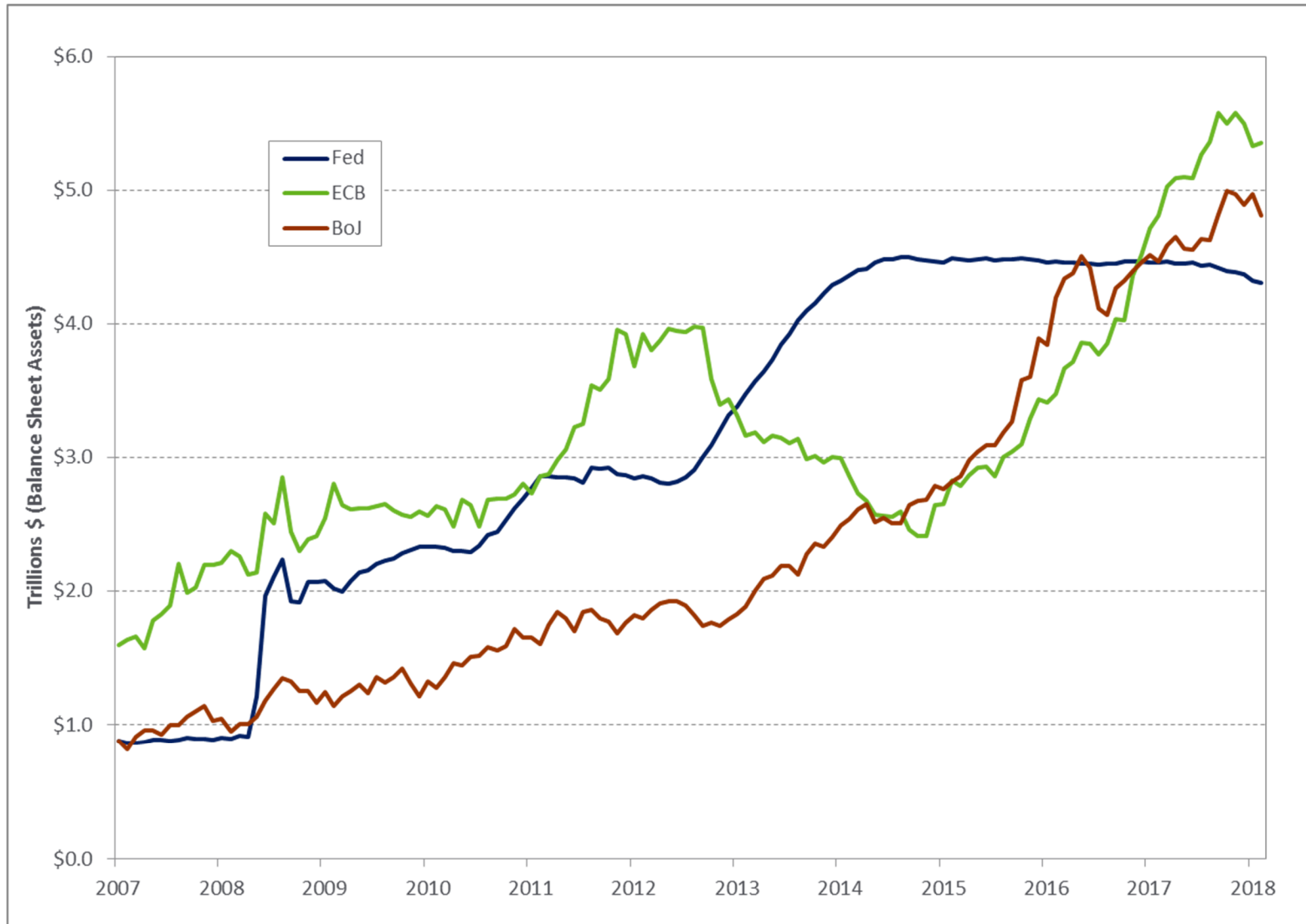
Source: Federal Reserve, ECB, Bank of Japan, Bank of England, Bloomberg



Source: Bloomberg



# CENTRAL BANK BALANCE SHEETS



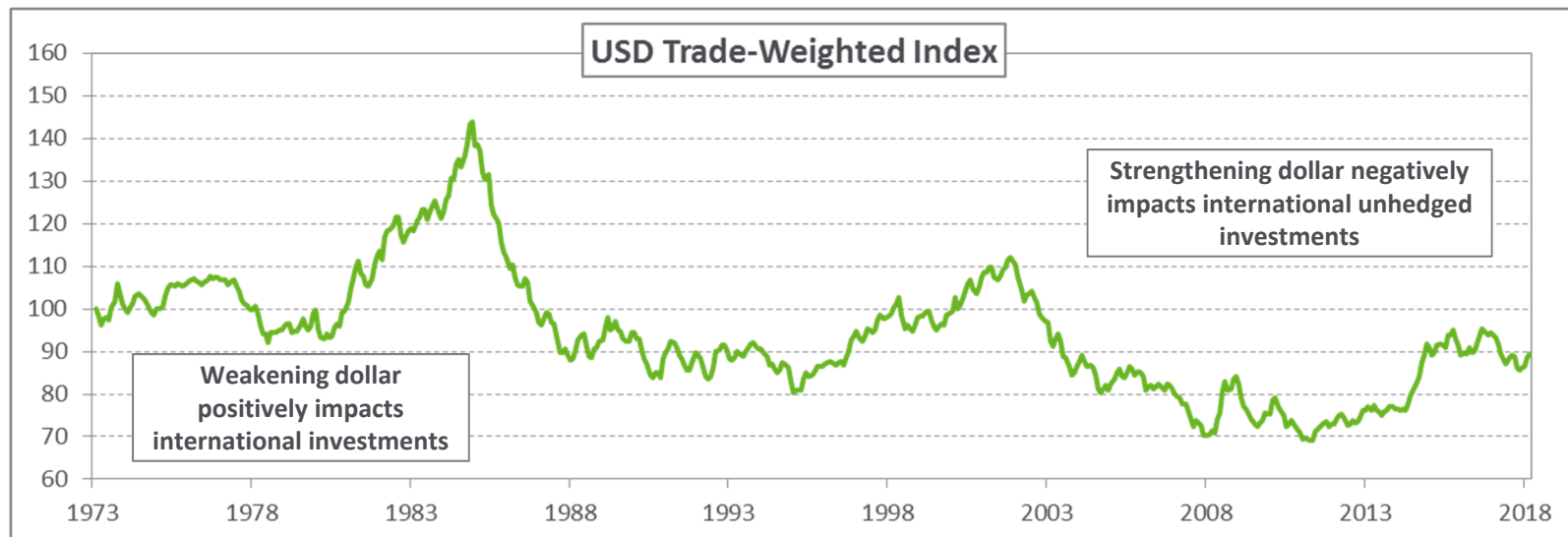
Source: Federal Reserve, Bank of Japan, ECB, Bloomberg, NEPC



# CURRENCIES

Currencies	% Change Relative to USD			
	Spot	1 Month	YTD	1 Year
Euro	1.17	-0.1%	-5.9%	2.2%
British Pound	1.32	-0.6%	-6.9%	1.4%
Japanese Yen	110.75	-1.7%	-1.4%	1.5%
Swiss Franc	0.99	-0.5%	-6.0%	-3.3%
Australian Dollar	0.74	-2.2%	-8.1%	-3.7%
Chinese Yuan	6.62	-3.2%	-5.0%	2.2%
Brazilian Real	3.88	-3.8%	-17.8%	-14.7%
Russian Ruble	62.76	-0.6%	-10.4%	-7.5%
Indian Rupee	68.46	-1.5%	-7.0%	-5.6%
Mexican Peso	19.92	-0.1%	-6.6%	-9.0%
South African Rand	13.73	-7.5%	-13.7%	-4.8%

Source: Bloomberg

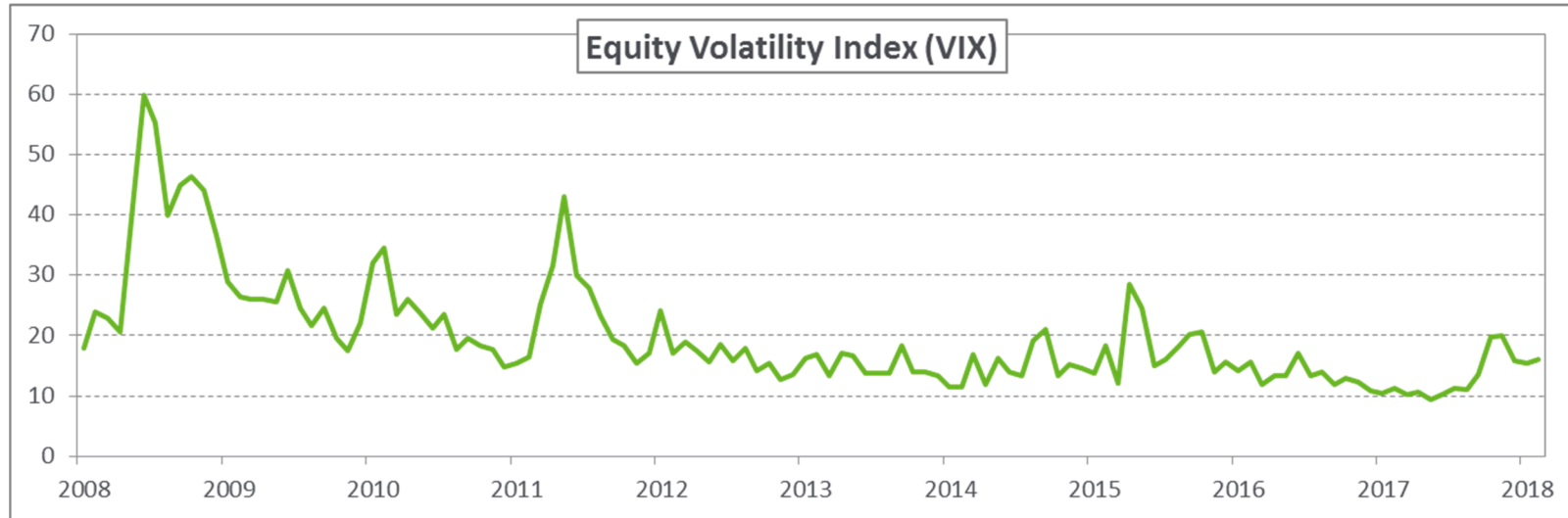


Source: Bloomberg

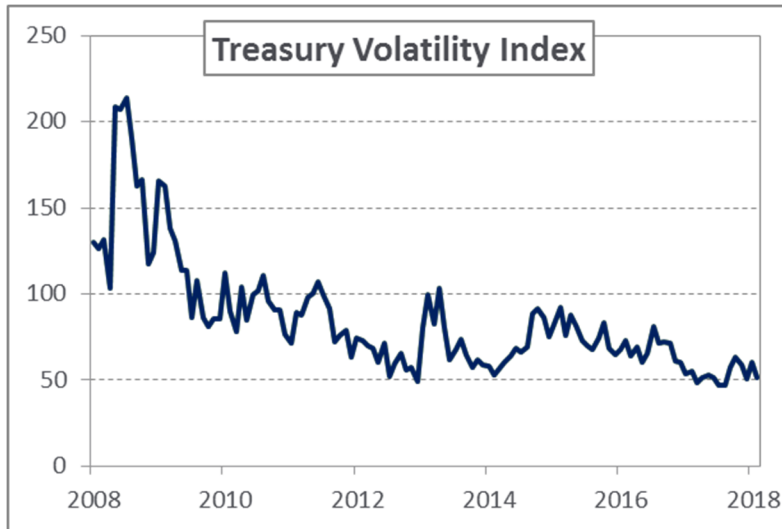




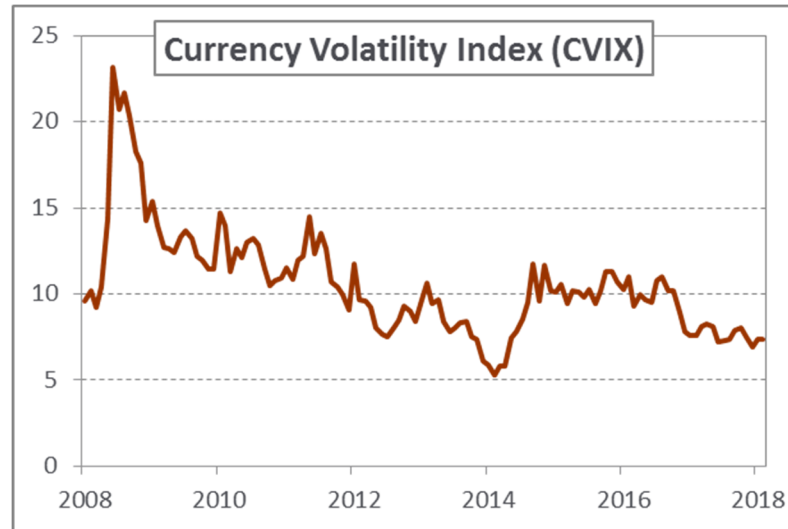
# VOLATILITY



Source: CBOE, Bloomberg



Source: Merrill Lynch, Bloomberg



Source: Deutsche Bank, Bloomberg

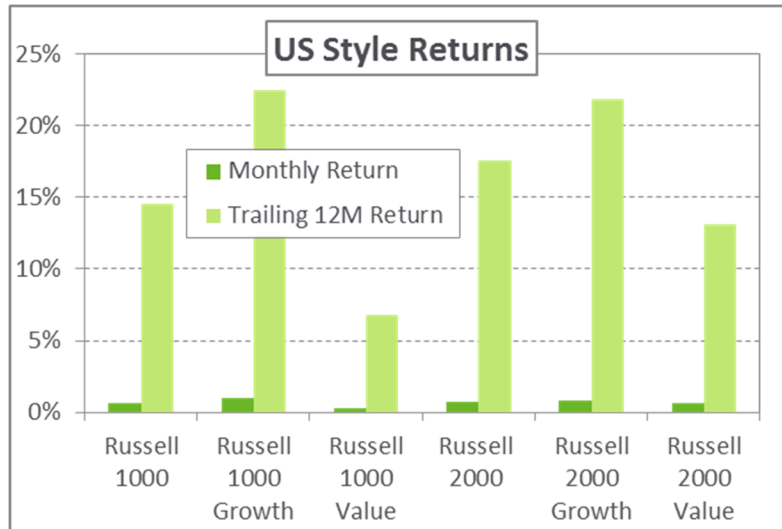


# EQUITY

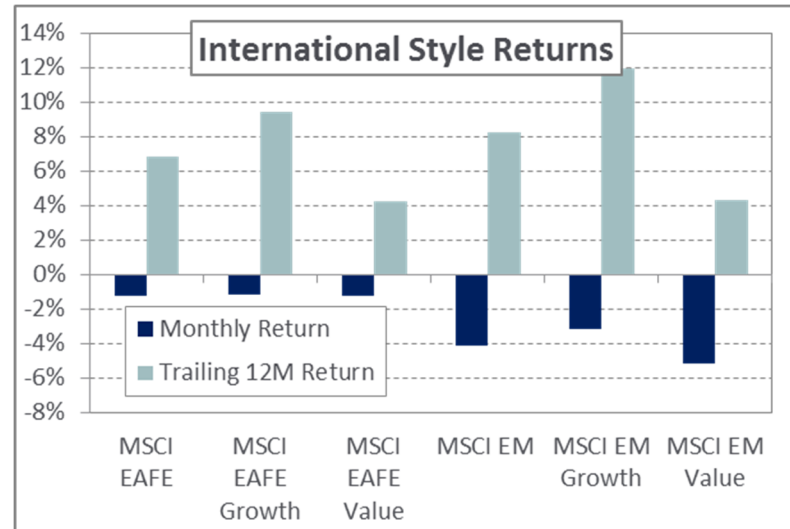
NEPC, LLC

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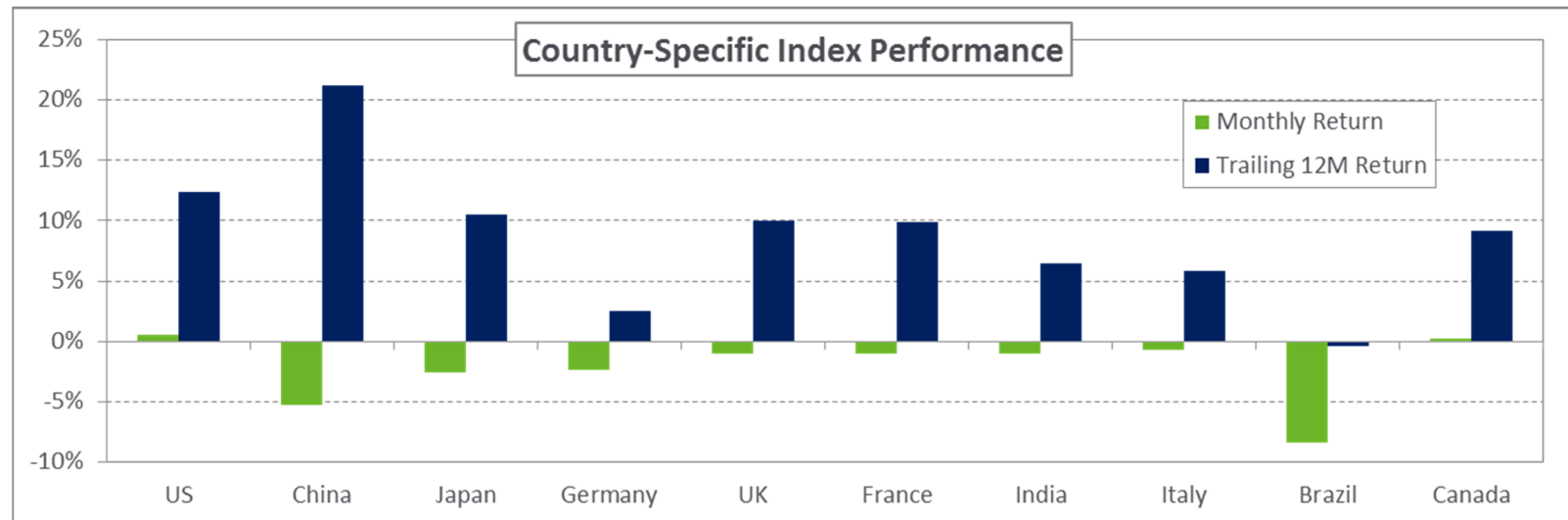
# EQUITY INDEX PERFORMANCE



Source: Russell, Bloomberg



Source: MSCI, Bloomberg



Source: MSCI, Bloomberg  
Represents returns in USD

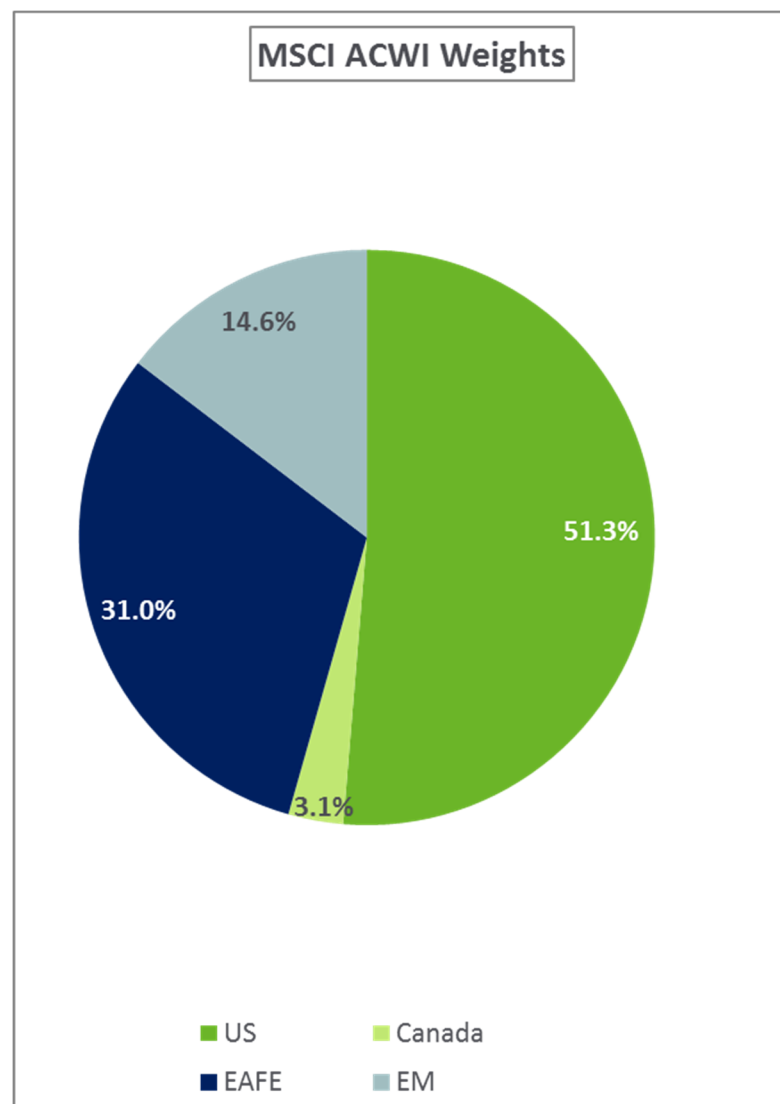


# INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
<b>S&amp;P 500</b>	<b>0.6%</b>	<b>3.4%</b>	<b>2.6%</b>	<b>100%</b>
Cons Disc	3.6%	8.1%	11.3%	13.0%
Cons Staples	4.4%	-1.8%	-9.0%	7.0%
Energy	0.7%	13.2%	6.3%	6.4%
Financials	-1.9%	-3.3%	-4.3%	13.4%
Health Care	1.6%	3.0%	1.6%	14.3%
Industrials	-3.3%	-3.3%	-5.0%	9.6%
Info Tech	-0.4%	7.0%	10.7%	25.8%
Materials	0.3%	2.4%	-3.4%	2.6%
Real Estate	4.3%	5.8%	0.3%	2.9%
Telecom	2.3%	-1.4%	-9.1%	2.0%
Utilities	2.7%	3.5%	-0.2%	3.0%

	MTD	QTD	YTD	Index Weight
<b>MSCI ACWI</b>	<b>-0.5%</b>	<b>0.7%</b>	<b>-0.2%</b>	<b>100%</b>
Cons Disc	0.8%	3.0%	4.0%	12.2%
Cons Staples	2.2%	-1.3%	-6.1%	8.0%
Energy	0.6%	10.2%	6.1%	6.8%
Financials	-2.4%	-5.6%	-6.6%	17.8%
Health Care	1.2%	2.5%	1.5%	10.9%
Industrials	-2.9%	-2.7%	-4.3%	10.8%
Info Tech	-1.1%	3.9%	7.2%	19.4%
Materials	-1.8%	0.4%	-3.3%	5.2%
Real Estate	0.4%	1.4%	-2.3%	3.0%
Telecom	0.1%	-4.2%	-9.4%	2.8%
Utilities	1.3%	1.3%	0.0%	3.0%

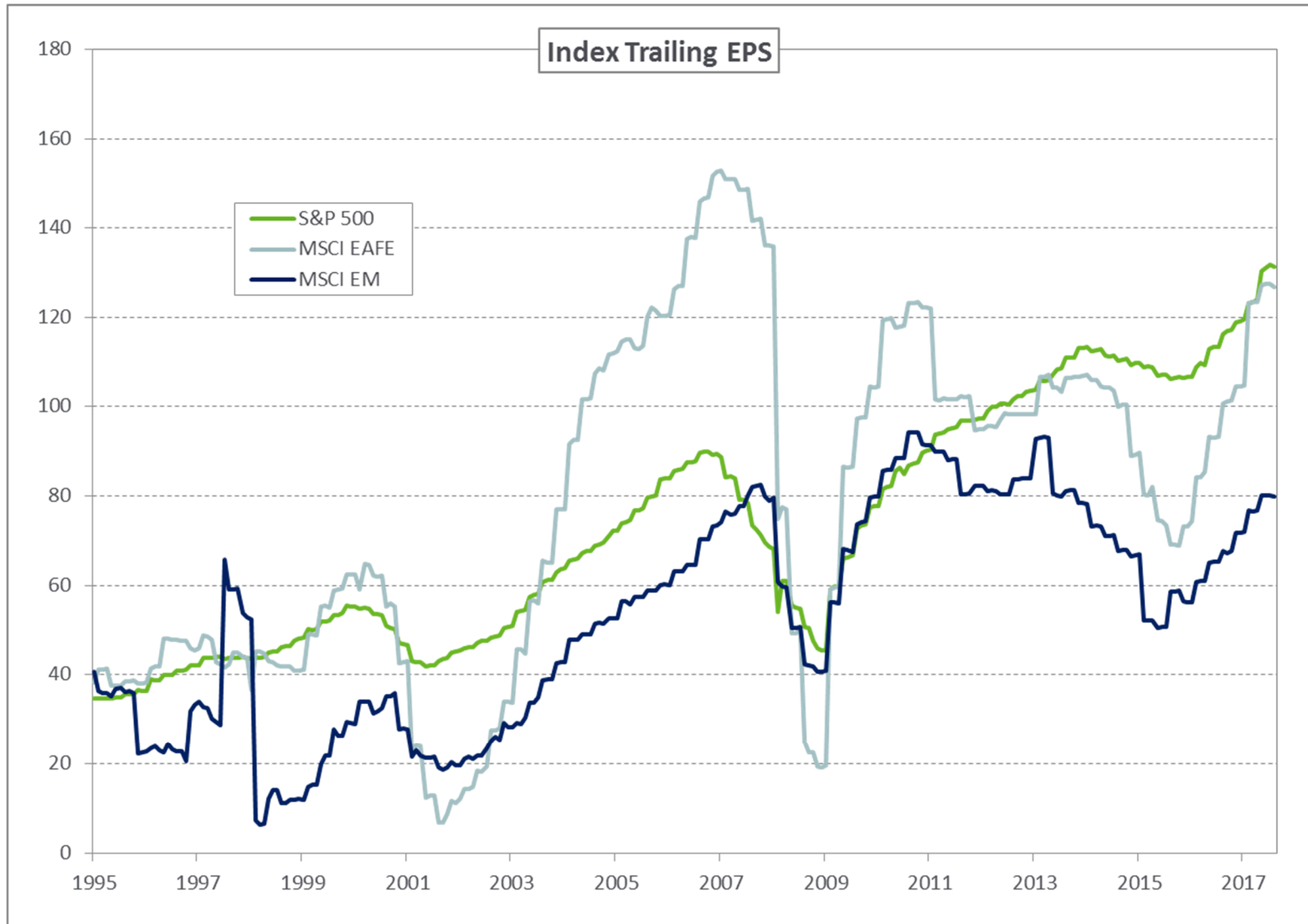
Source: S&P, MSCI, Bloomberg



Source: MSCI, Bloomberg



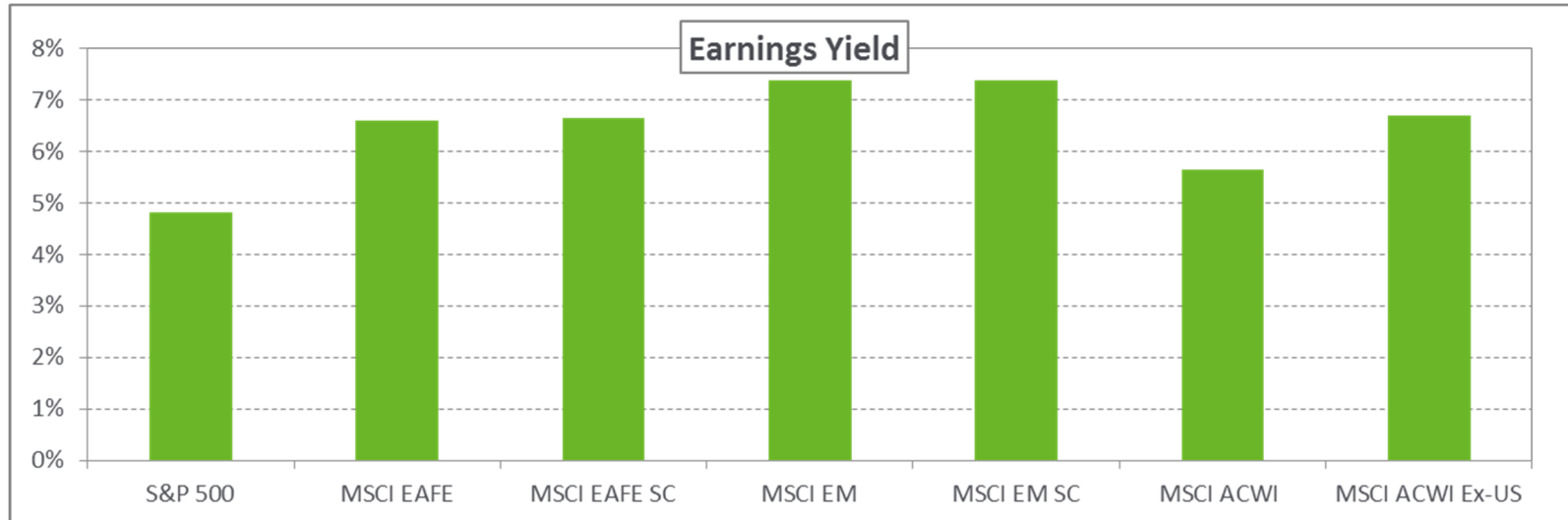
# EARNINGS



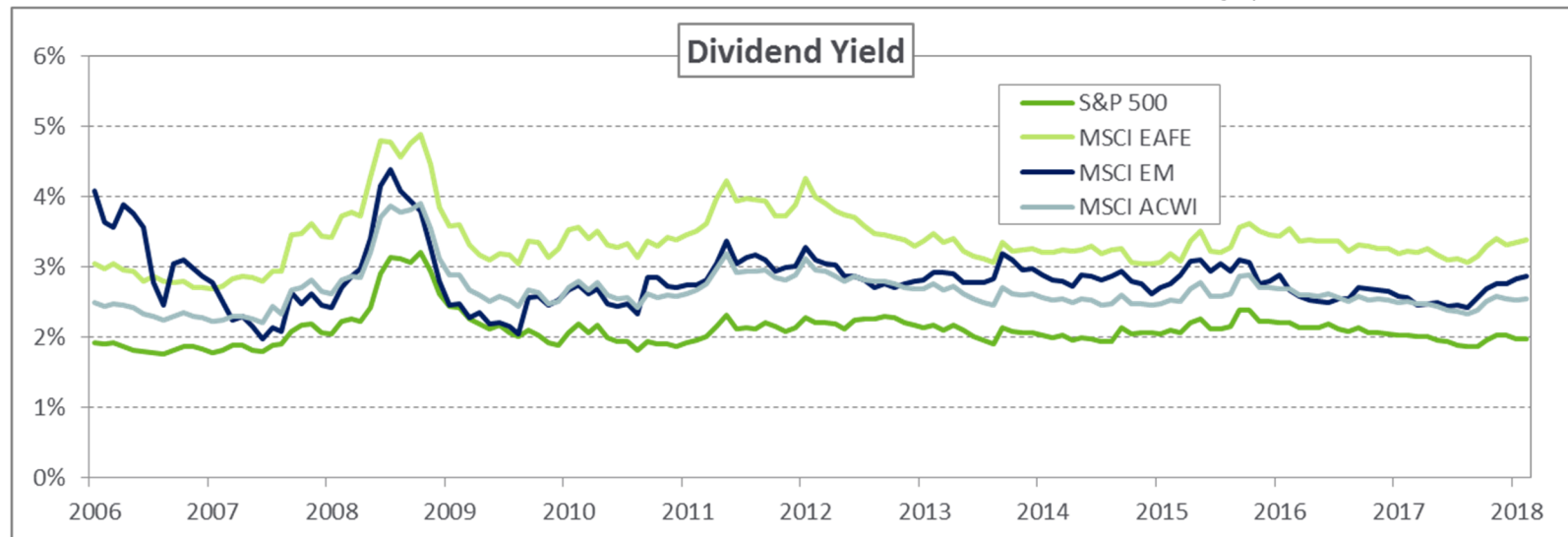
Source: S&P, MSCI, Bloomberg



# YIELDS



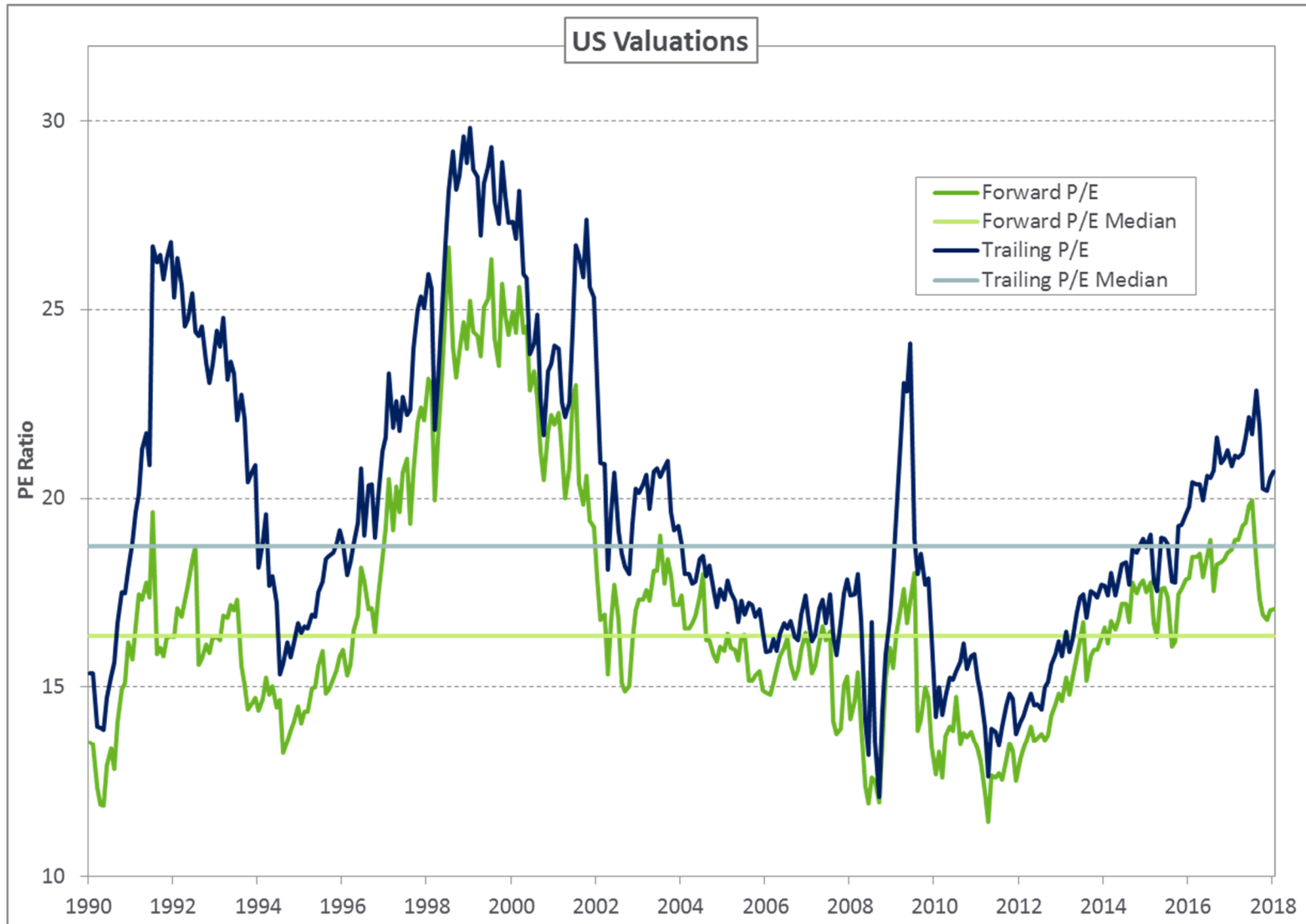
Source: S&P, MSCI, Bloomberg  
Earnings yield calculated as 1/PE Ratio



Source: S&P, MSCI, Bloomberg



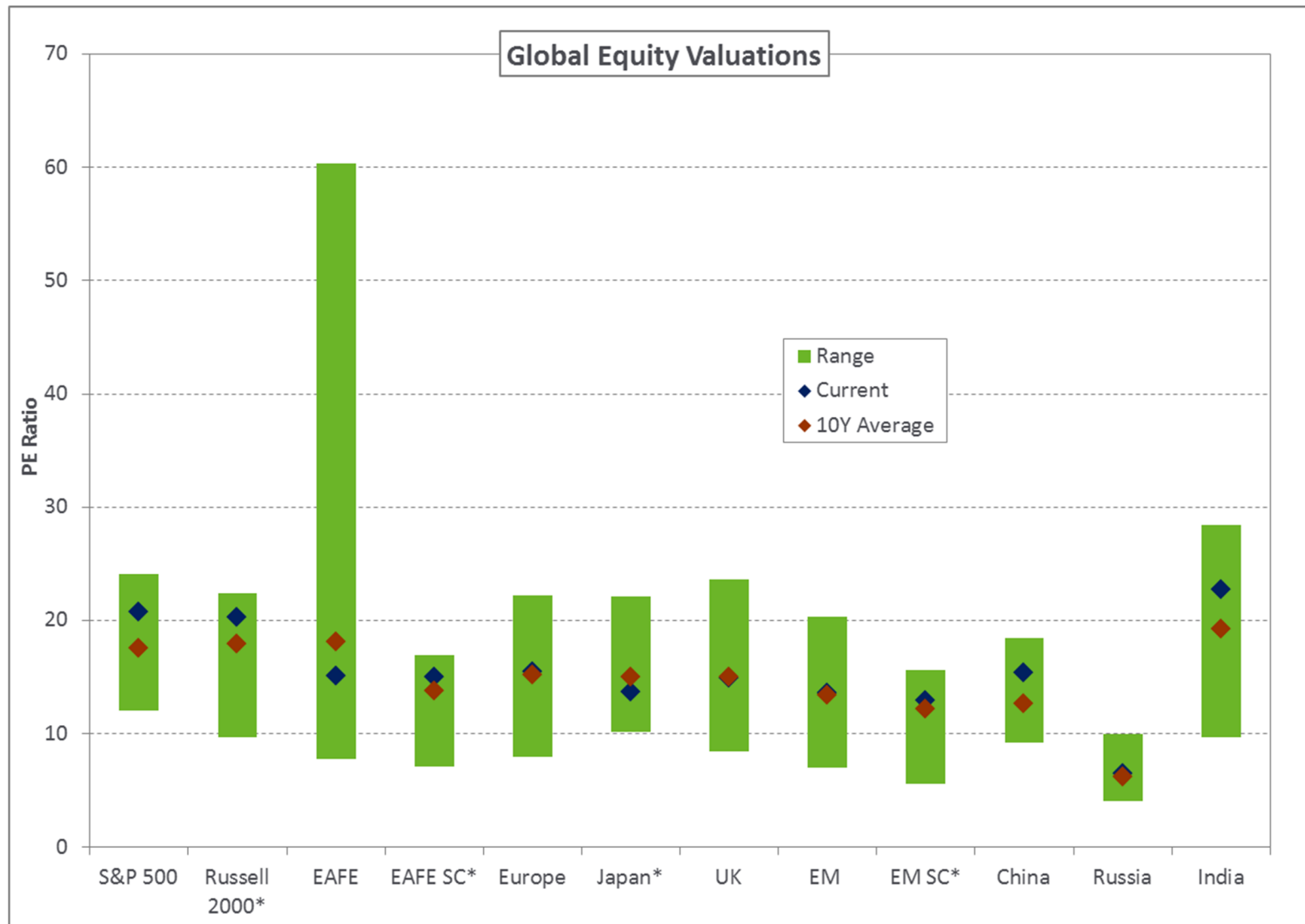
# US EQUITY VALUATIONS



Source: S&P, Bloomberg  
Medians calculated as of 01/31/1990



# GLOBAL EQUITY VALUATIONS



Source: S&P, Russell, MSCI, Bloomberg, NEPC  
 \*Denotes the use of index-adjusted positive PE ratio  
 Ranges calculated using trailing 10-year figures





# CREDIT

NEPC, LLC

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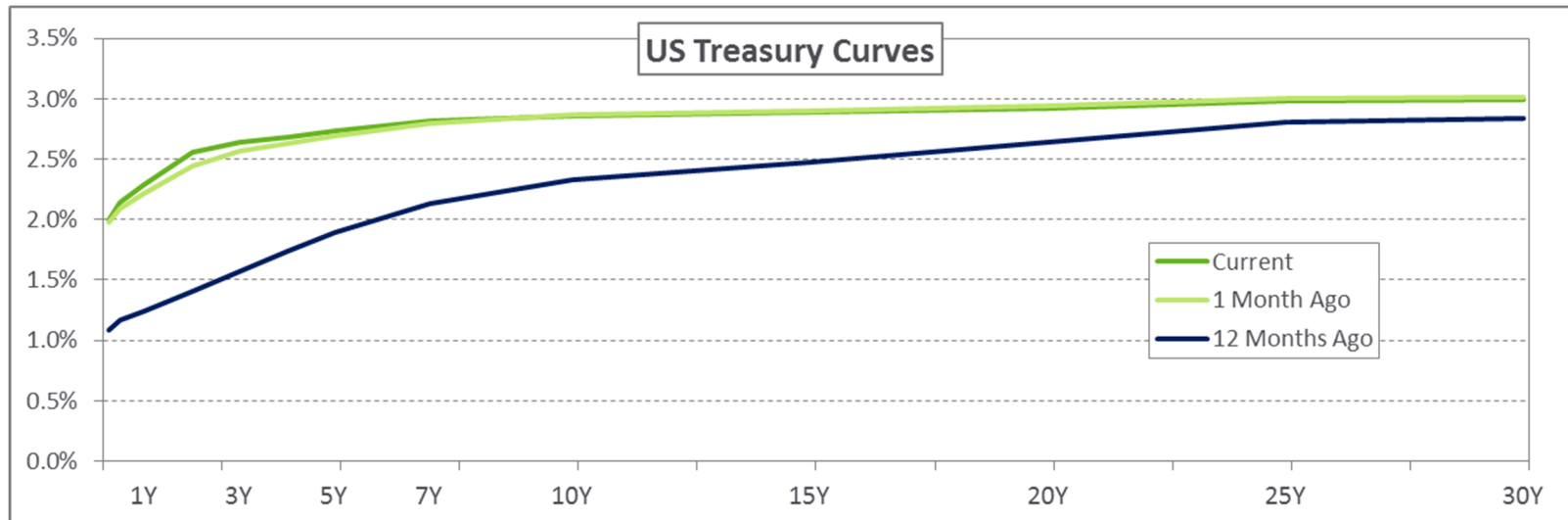
# FIXED INCOME CHARACTERISTICS

	Averages			Total Returns (%)		
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	3.3%	44	6.0	-0.1%	-0.2%	-0.4%
Barclays Treasury	2.7%	-	6.1	0.0%	0.1%	-0.6%
Barclays Agency	2.8%	14	3.8	0.0%	0.0%	-0.1%
Barclays MBS	3.4%	28	5.1	0.0%	0.2%	0.1%
Barclays ABS	3.0%	42	2.2	0.0%	0.4%	0.2%
Barclays CMBS	3.5%	70	5.3	-0.2%	-0.1%	-0.3%
Barclays Corp IG	4.0%	123	7.3	-0.6%	-1.0%	-0.8%
Barclays Muni	2.7%	-	6.0	0.1%	0.9%	1.6%
Barclays HY Muni	4.8%	-	7.7	0.5%	3.1%	7.1%
Barclays TIPS	3.0%	-	4.9	0.4%	0.8%	2.1%
Barclays HY	6.5%	363	3.9	0.4%	1.0%	2.6%
Barclays Global Agg	2.0%	47	7.1	-0.4%	-2.8%	1.4%
JPM EMBI Glob Div	6.6%	388.06	7.2	-1.2%	-3.5%	-1.6%
JPM CEMBI Broad	5.2%	298.32	4.6	-0.4%	-1.8%	-0.1%
JPM GBI - EM	6.6%	-	5.1	-2.9%	-10.4%	-2.3%

Source: Barclays, JPM, Bloomberg



# TREASURIES



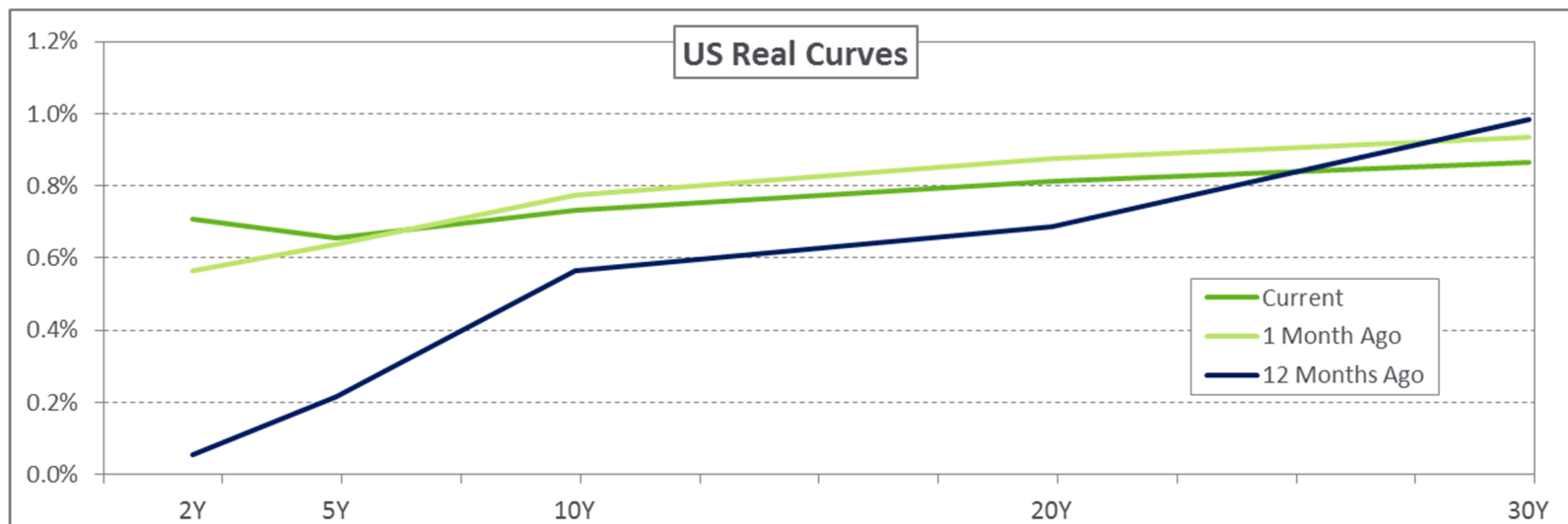
Source: Bloomberg

	Yield (%)			Total Return (%)	
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	2.00%	1.98%	1.08%	0.16%	1.29%
6M Treasury	2.14%	2.10%	1.16%	0.17%	1.35%
2Y Treasury	2.56%	2.44%	1.41%	-0.02%	-0.15%
5Y Treasury	2.74%	2.69%	1.90%	-0.05%	-1.51%
10Y Treasury	2.86%	2.87%	2.33%	0.00%	-2.64%
30Y Treasury	2.99%	3.02%	2.84%	0.30%	-0.17%

Source: Barclays, Bloomberg



# REAL YIELDS



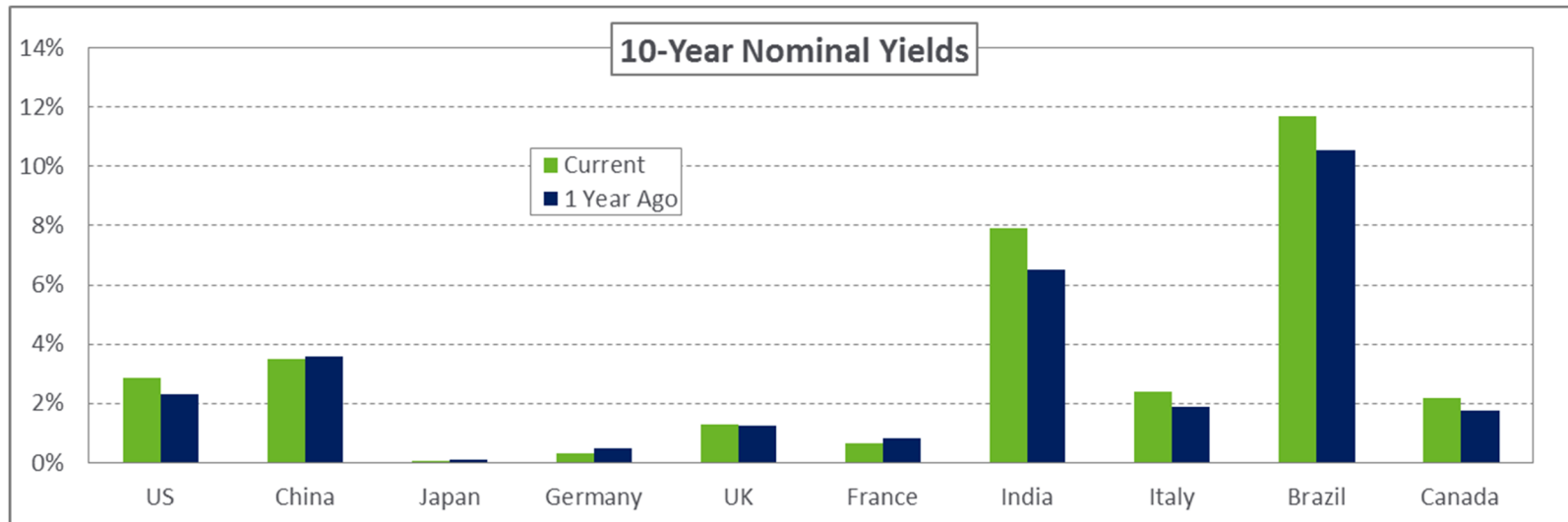
Source: Bloomberg

	Real Rates			Breakeven Rates	
	Current	1 Month Ago	12 Months Ago	Current	12 Months Ago
<b>2Y Treasury</b>	0.71%	0.57%	0.05%	1.80%	1.29%
<b>5Y Treasury</b>	0.65%	0.64%	0.22%	2.08%	1.66%
<b>10Y Treasury</b>	0.73%	0.78%	0.56%	2.13%	1.74%
<b>20Y Treasury</b>	0.81%	0.88%	0.69%	2.08%	1.70%
<b>30Y Treasury</b>	0.87%	0.94%	0.98%	2.12%	1.85%

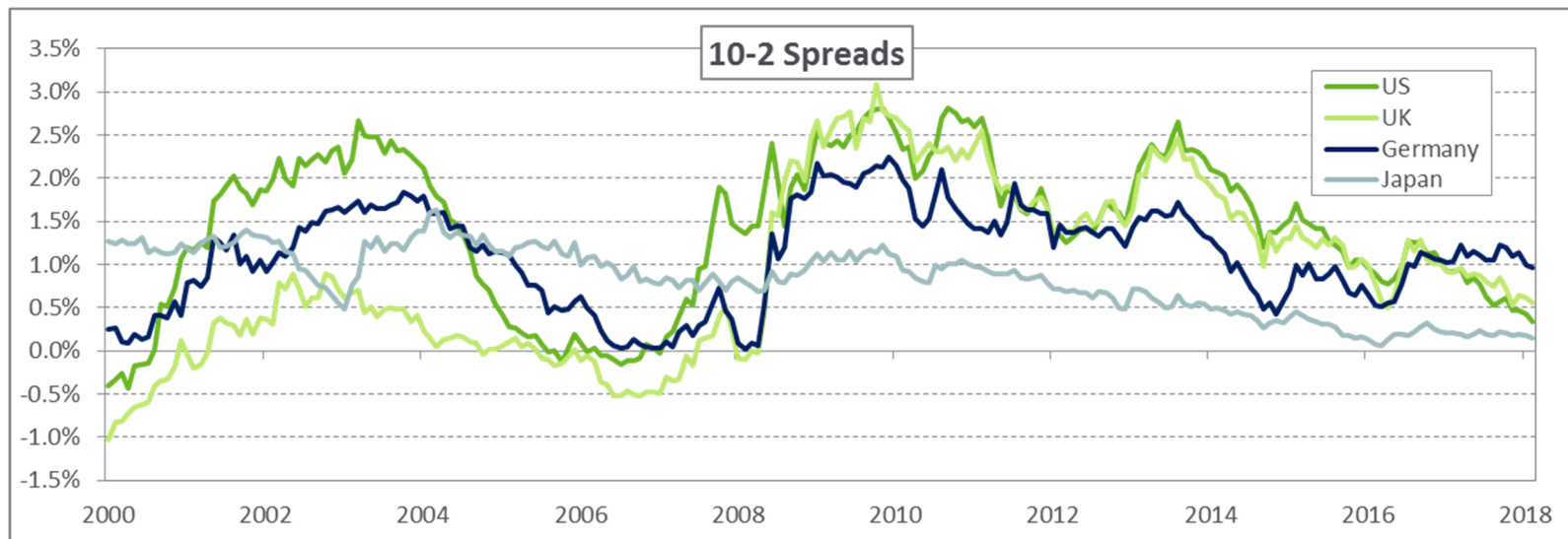
Source: Barclays, Bloomberg



# NOMINAL YIELDS



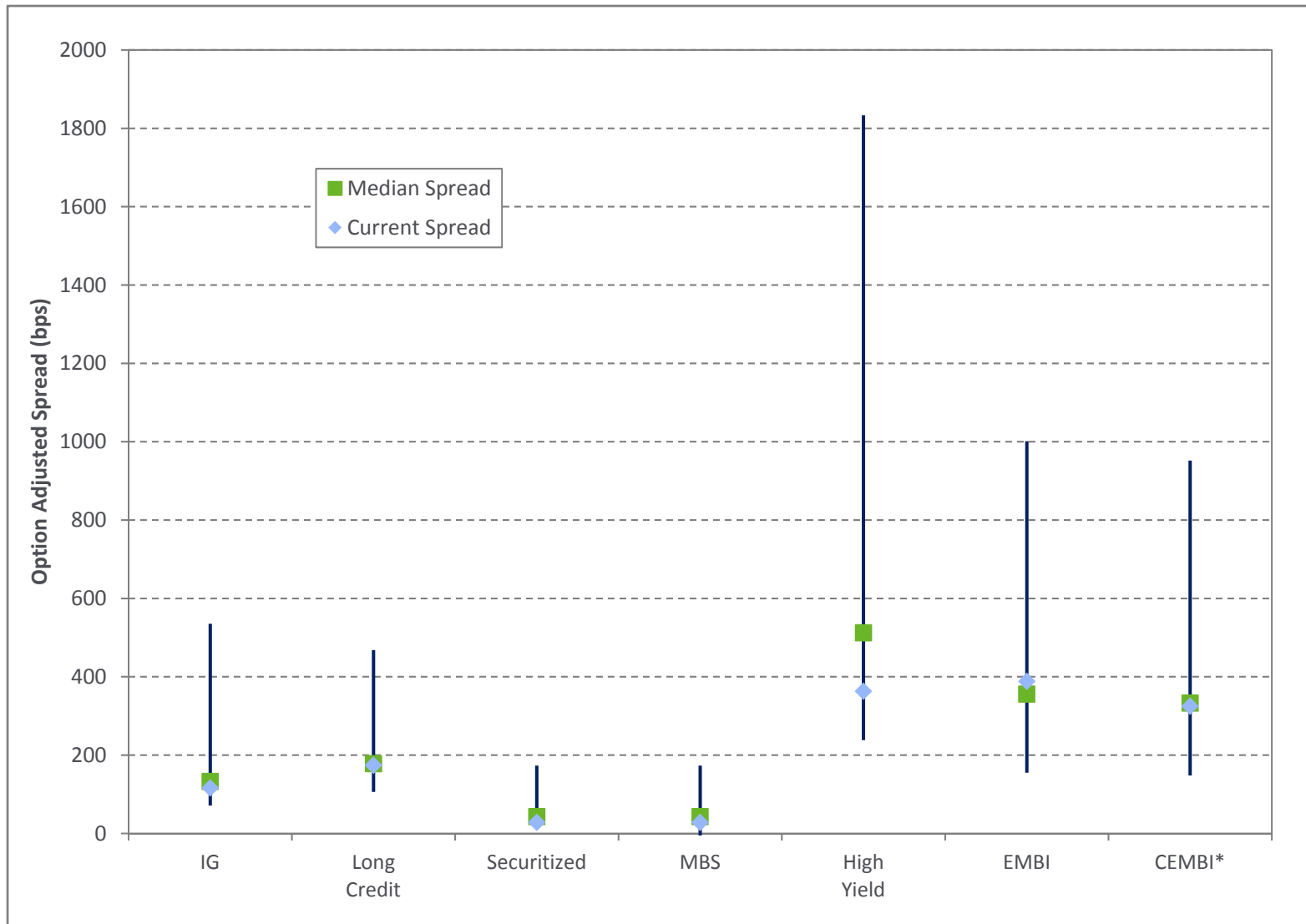
Source: Bloomberg



Source: Bloomberg



# CREDIT SPREADS



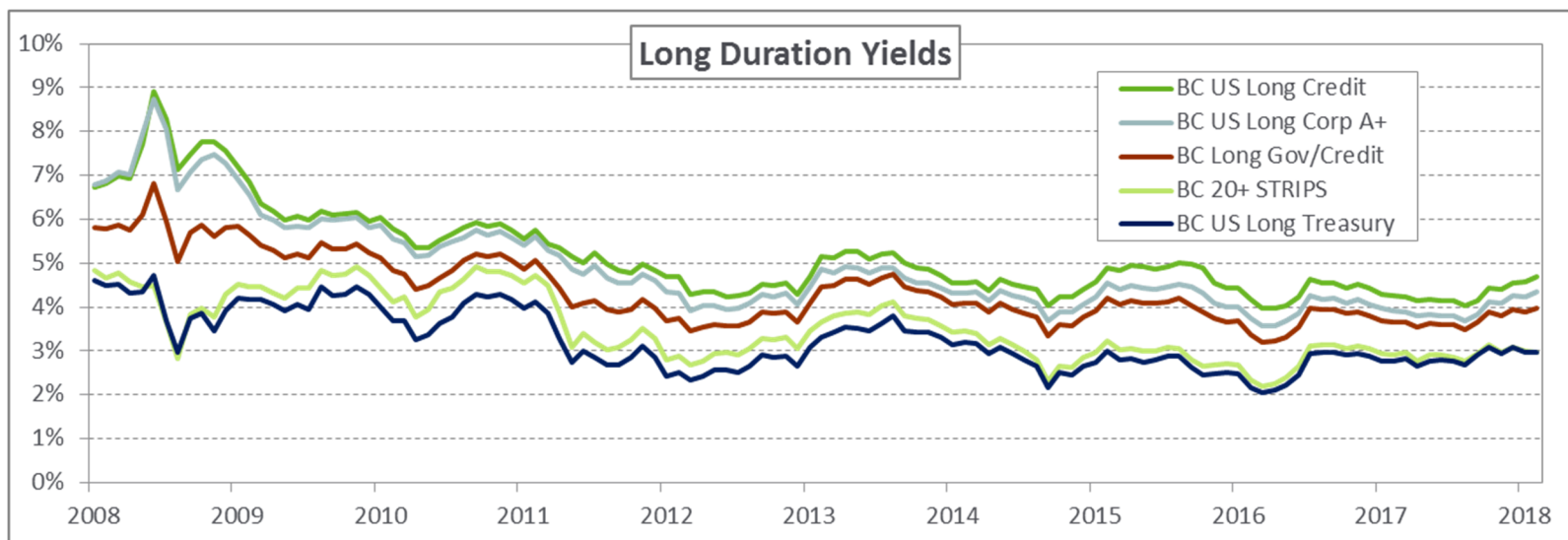
Source: Barclays, JPM, Bloomberg  
Data range: 01/31/2000 through month-end  
\*JPM CEMBI calculated since 12/31/2001



# LONG DURATION

Index	Month-End Yield	1 Month Prior Yield	1 Year Prior Yield	Duration
Barclays Long Treasury	3.0%	3.0%	2.8%	17.2
Barclays 20+ STRIPS	3.0%	3.0%	2.9%	25.4
Barclays Long Gov/Credit	4.0%	3.9%	3.7%	14.9
Barclays Long Credit	4.7%	4.6%	4.3%	13.4
Barclays Long Corp A+	4.3%	4.2%	3.9%	14.1

Source: Barclays, Bloomberg



Source: Barclays, Bloomberg



# REAL ASSETS

NEPC, LLC

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# REAL ASSETS INDEX PERFORMANCE

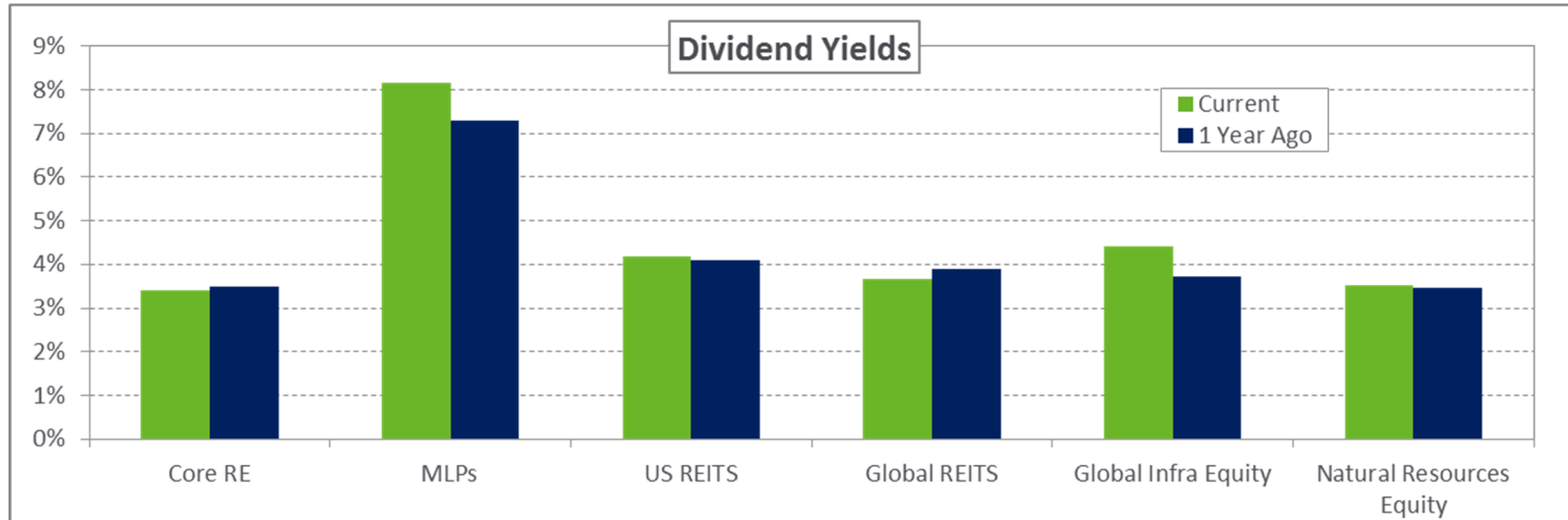
Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
<b>Bloomberg Commodity Index</b>	<b>-3.5%</b>	<b>0.4%</b>	<b>0.4%</b>	<b>7.3%</b>	<b>-4.5%</b>	<b>-6.4%</b>
<b>Bloomberg Sub Agriculture Index</b>	<b>-10.5%</b>	<b>-8.7%</b>	<b>-8.7%</b>	<b>-13.3%</b>	<b>-9.9%</b>	<b>-9.5%</b>
Coffee	-8.5%	-5.5%	-5.5%	-16.3%	-13.1%	-9.8%
Corn	-10.8%	-11.0%	-11.0%	-16.9%	-14.7%	-16.2%
Cotton	-7.9%	6.1%	6.1%	25.2%	8.0%	1.8%
Soybean	-15.4%	-18.4%	-18.4%	-13.6%	-9.0%	-5.1%
Soybean Oil	-6.7%	-9.7%	-9.7%	-15.1%	-9.1%	-12.0%
Sugar	-6.3%	-3.1%	-3.1%	-15.3%	-6.2%	-14.7%
Wheat	-7.5%	4.7%	4.7%	-20.1%	-18.6%	-14.8%
<b>Bloomberg Sub Energy</b>	<b>2.7%</b>	<b>10.7%</b>	<b>10.7%</b>	<b>34.8%</b>	<b>-9.0%</b>	<b>-13.0%</b>
Brent Crude	2.7%	16.7%	16.7%	69.6%	-1.5%	-10.8%
Heating Oil	0.3%	10.5%	10.5%	52.2%	-2.5%	-8.8%
Natural Gas	-0.7%	4.2%	4.2%	-17.8%	-23.3%	-21.3%
Unleaded Gas	0.2%	7.7%	7.7%	41.8%	-4.5%	-8.7%
WTI Crude Oil	8.8%	13.2%	13.2%	58.9%	-8.3%	-14.0%
<b>Bloomberg Sub Industrial Metals</b>	<b>-4.8%</b>	<b>1.0%</b>	<b>1.0%</b>	<b>15.2%</b>	<b>6.2%</b>	<b>0.9%</b>
Aluminum	-6.7%	8.7%	8.7%	11.8%	6.1%	-0.2%
Copper	-3.7%	-2.7%	-2.7%	7.5%	2.6%	-1.7%
Nickel	-2.1%	12.1%	12.1%	57.7%	6.2%	0.3%
Zinc	-7.3%	-12.1%	-12.1%	6.1%	12.1%	7.4%
<b>Bloomberg Sub Precious Metals</b>	<b>-3.3%</b>	<b>-4.5%</b>	<b>-4.5%</b>	<b>-0.8%</b>	<b>1.2%</b>	<b>-1.3%</b>
Gold	-3.7%	-5.5%	-5.5%	0.2%	1.5%	-0.1%
Silver	-1.9%	-0.9%	-0.9%	-3.6%	-0.1%	-4.9%
<b>Bloomberg Sub Livestock</b>	<b>2.7%</b>	<b>5.5%</b>	<b>5.5%</b>	<b>-9.4%</b>	<b>-4.5%</b>	<b>-2.7%</b>
Lean Hogs	2.5%	3.0%	3.0%	-11.4%	-3.5%	-8.6%
Live Cattle	2.8%	6.9%	6.9%	-8.7%	-5.3%	0.7%

Source: Bloomberg

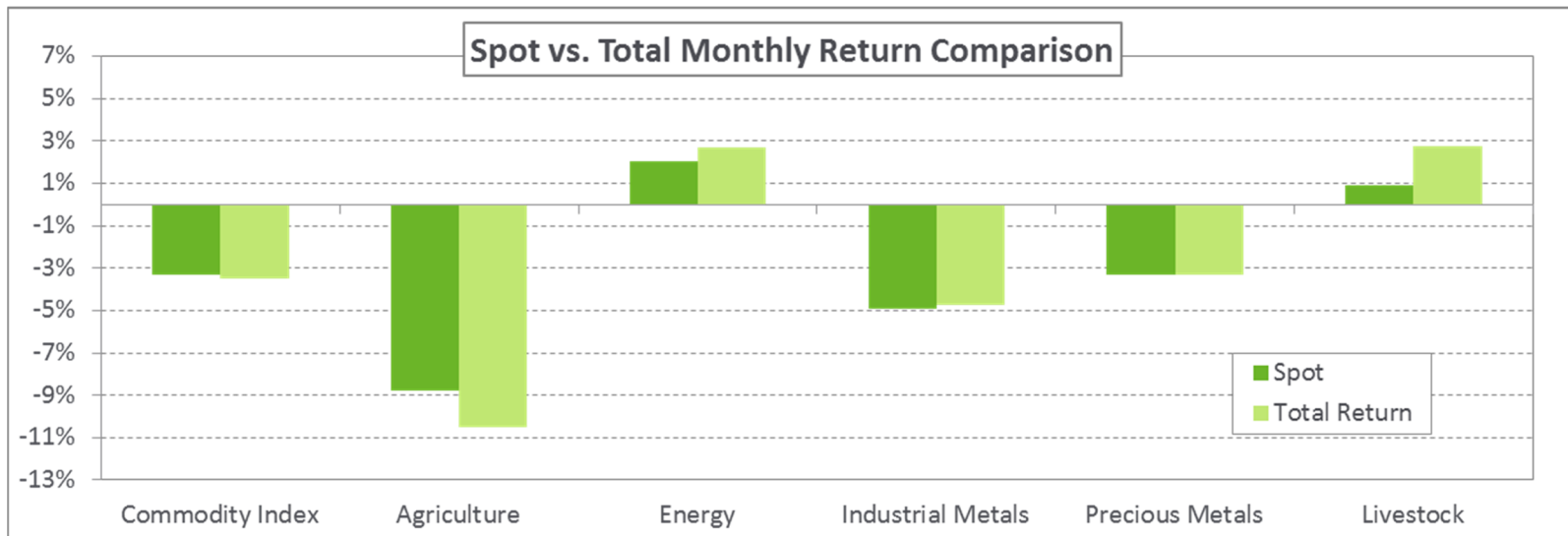
Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



# INCOME YIELD



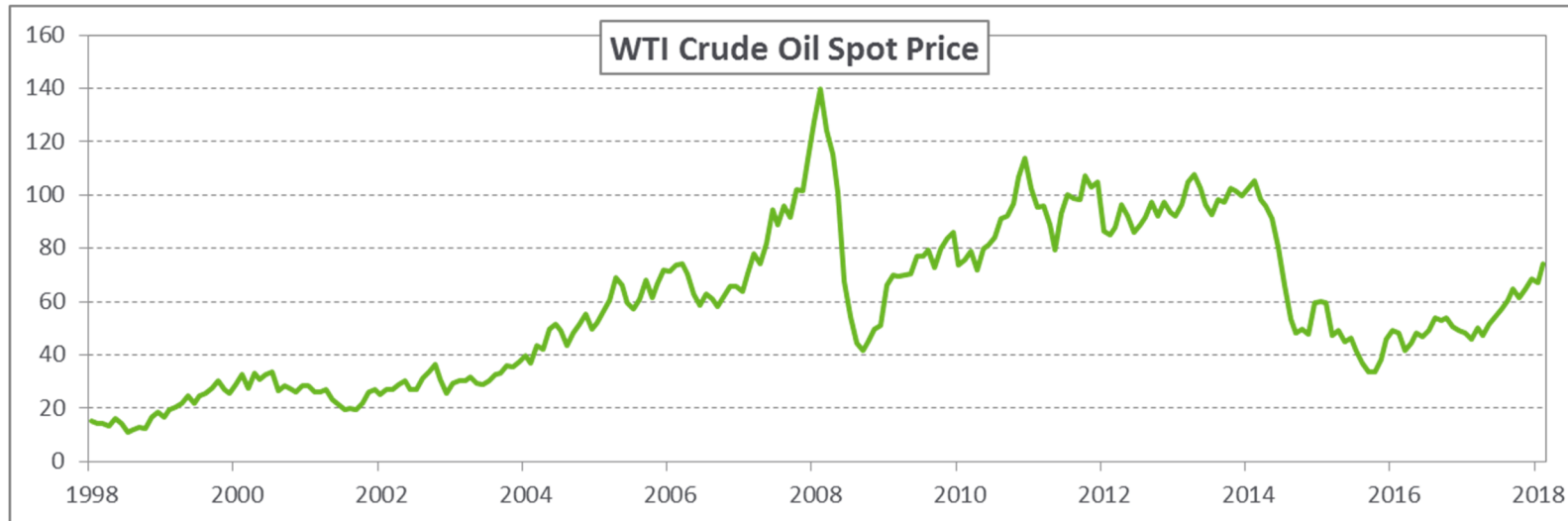
Source: Alerian, NAREIT, S&P, Bloomberg



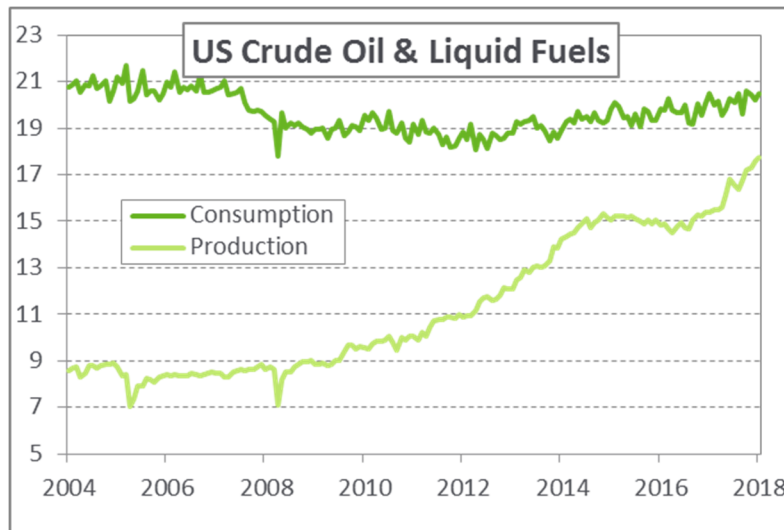
Source: Bloomberg, NEPC



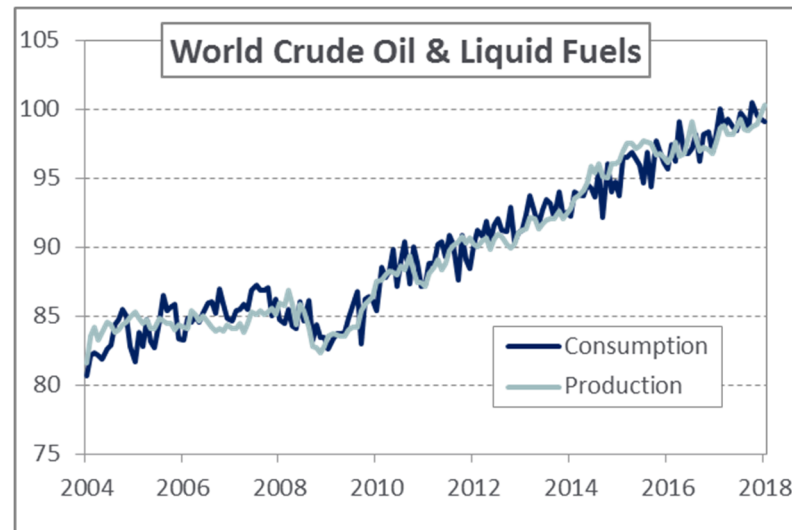
# OIL MARKETS



Source: New York Mercantile Exchange, Bloomberg



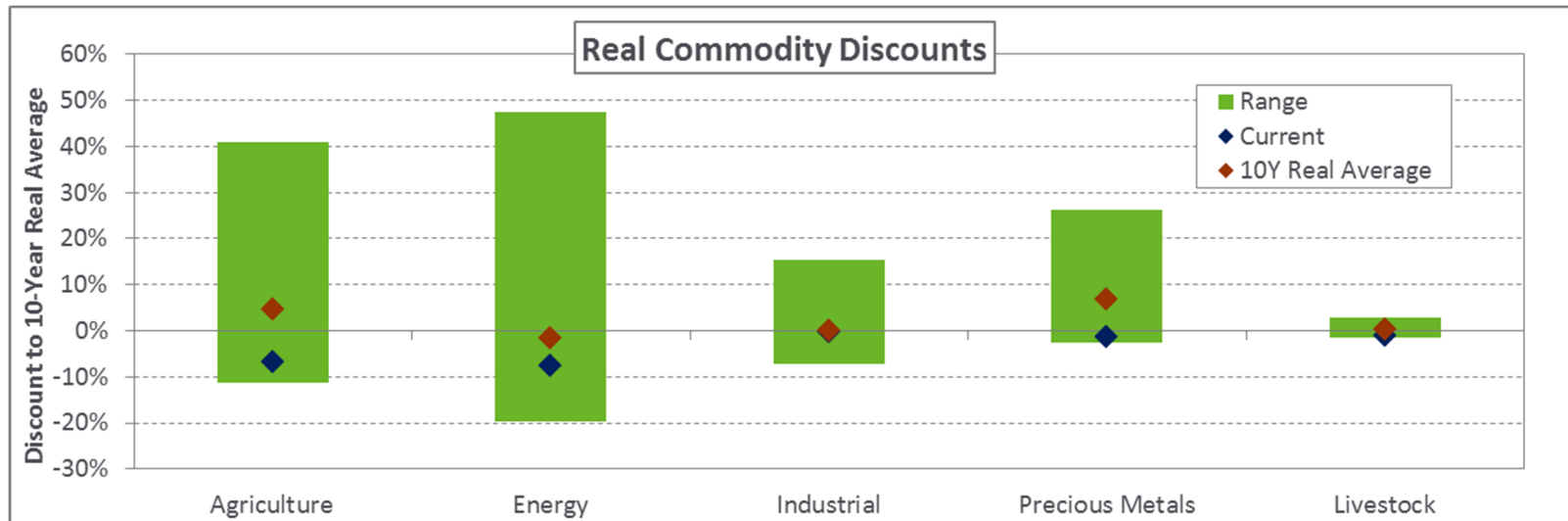
Source: US Department of Energy, Bloomberg



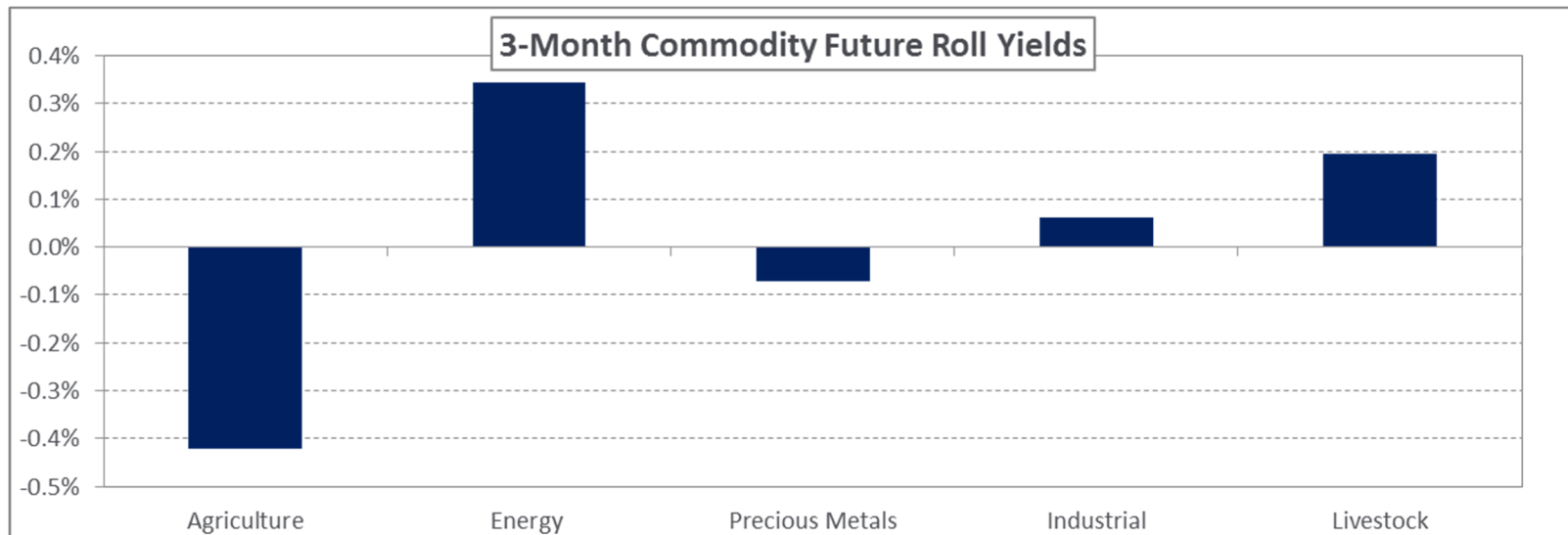
Source: OECD, Bloomberg



# VALUATIONS



Source: Bloomberg, NEPC



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.



# GLOSSARY OF INVESTMENT TERMINOLOGY

**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)*

**Standard Deviation** - The standard deviation is a statistical term that describes the distribution of results. It is a commonly used measure of volatility of returns of a portfolio, asset class, or security. The higher the standard deviation the more volatile the returns are.

*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) \*  $\sqrt{(\# \text{ of periods per year})}$  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.

*UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0*

*UpsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Period Benchmark Return is > = 0*



# GLOSSARY OF INVESTMENT TERMINOLOGY

**# Of Portfolios/Observations<sup>1</sup>** - The total number of data points that make up a specified universe

**Allocation Index<sup>3</sup>** - 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 Effect<sup>2</sup>** - 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 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)<sup>3</sup>** - 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)<sup>3</sup>** - Bonds which are similar to mortgage-backed securities but are collateralized by assets other than mortgages; commonly backed by credit card receivables, auto loans, or other types of consumer financing.

**Attribution<sup>3</sup>** - 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 Maturity<sup>4</sup>** - 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 Average<sup>1</sup>** - 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) Attribution<sup>1</sup>** - 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) Attribution<sup>1</sup>** - 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)<sup>4</sup>** - 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.

**Correlation<sup>1</sup>** - 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: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net





# GLOSSARY OF INVESTMENT TERMINOLOGY

**Coupon<sup>4</sup>** – 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 Effect<sup>1</sup>** – Is the effect that changes in currency exchange rates over time affect excess performance.

**Derivative Instrument<sup>2</sup>** – 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 Deviation<sup>1</sup>** – 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.*

**Duration<sup>3</sup>** – 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 Ratio<sup>1</sup>** – 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 Bond<sup>3</sup>** – 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 Hurdle<sup>5</sup>** – 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 Mark<sup>4</sup>** – 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 Rate<sup>4</sup>** – 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 Effects<sup>2</sup>** – 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.

**Median<sup>3</sup>** – The value (rate of return, market sensitivity, etc.) that exceeds one-half 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 Duration<sup>3</sup>** – The percentage change in the price of a fixed income security that results from a change in yield.

**Mortgage Backed Securities (MBS)<sup>3</sup>** – Bonds which are a general obligation of the issuing institution but are also collateralized by a pool of mortgages.

**Municipal Bond (Muni)<sup>4</sup>** – A debt security issued by a state, municipality or county to finance its capital expenditures.

**Net Investment Change<sup>1</sup>** – Is the change in an investment after accounting for all Net Cash Flows.

**Performance Fee<sup>4</sup>** – 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: <sup>1</sup>InvestorForce, <sup>2</sup>Interaction Effect Performance Attribution, <sup>3</sup>NEPC, LLC, <sup>4</sup>Investopedia, <sup>5</sup>Hedgeco.net*



# GLOSSARY OF INVESTMENT TERMINOLOGY

**Policy Index<sup>3</sup>** - 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)<sup>4</sup>** - 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)<sup>3</sup>** - The weighted equity P/E is based on current price and trailing 12 months earnings per share (EPS).

**Price to Sales (P/S)<sup>4</sup>** - 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)<sup>4</sup>** - 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) Effect<sup>2</sup>** - 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 rate<sup>5</sup>** - is a hurdle rate that once beaten allows a fund manager to charge a performance fee based on the entire annualized return.

**Tiered Fee<sup>1</sup>** - 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 Effects<sup>2</sup>** - 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 Return<sup>1</sup>** - 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.

**Universe<sup>3</sup>** - The list of all assets eligible for inclusion in a portfolio.

**Upside Deviation<sup>1</sup>** - Standard Deviation of Positive Returns

**Weighted Avg. Market Cap.<sup>4</sup>** - 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 (%)<sup>3</sup>** - The current yield of a security is the current indicated annual dividend rate divided by current price.

**Yield to Maturity<sup>3</sup>** - The discount rate that equates the present value of cash flows, both principal and interest, to market price.

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



### **Information Disclaimer**

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other 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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- 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.



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