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## Vermont Pension Investment Committee

### Fourth Fiscal Quarter 2017 Preliminary Investment Performance Analysis

September 26, 2017

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# NEPC Update



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# Highlights of Second Quarter Happenings at NEPC

June 30, 2017

## NEPC Insights

- 2017 First Quarter Market Thoughts (April 2017)
- The French Election – A Sigh of Relief (May 2017)
- An Insight into a Goals-Based Asset Allocation Framework (May 2017)
- The Essential Guide to Third-Party Valuations for Hedge Fund Investors (May 2017)
- Market Chatter: What's Next for Puerto Rico Bondholders? (June 2017)
- Are US Equities Falling out of Favor? (June 2017)

## Webinar Replays

- NEPC's 7th Annual Investment Manager Webinar (May 2017)

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

## Conference Recap

- NEPC hosted its 22<sup>nd</sup> Annual Investment Conference in Boston in May. This year's agenda focused on the uncertainty and challenges facing investors today. Over 200 NEPC clients attended the panel discussions, keynote presentations and breakout sessions. Thank you to everyone who took time out of their schedules to make this conference our biggest and, according to our attendees, our best one yet! Check out some pictures from the event here: <http://info.nepc.com/nepc-22nd-annual-investment-conference>



\*HFMA staff and volunteers determined that this business solution has met specific criteria developed under the HFMA Peer Review Process. HFMA does not endorse or guarantee the use of this business solution.

## Recent Updates

- Healthcare Financial Management Association (HFMA) has awarded NEPC's Healthcare practice with the "Peer Reviewed by HFMA ®" designation.\*



## NEPC Gives Back

- NEPC's Stacey Flier, CFA, Private Wealth Senior Consultant, hosted an educational day to discuss the importance of education and preparing for future careers to a group of 7th grade girls that attend St. Andrew Nativity School, a college-prep middle school in Portland, OR, that provides education for low-income, primarily minority, students of all religious backgrounds.
- NEPC participated in the J.P. Morgan Corporate Challenge Series, a world-wide series of 3.5-mile running events open to groups from organizations within the business and public sectors in Boston. The Corporate Challenge is set up to be the world's greenest road race, and this year the race made a donation to the Boston Children's Hospital Trust.

# Market Environment

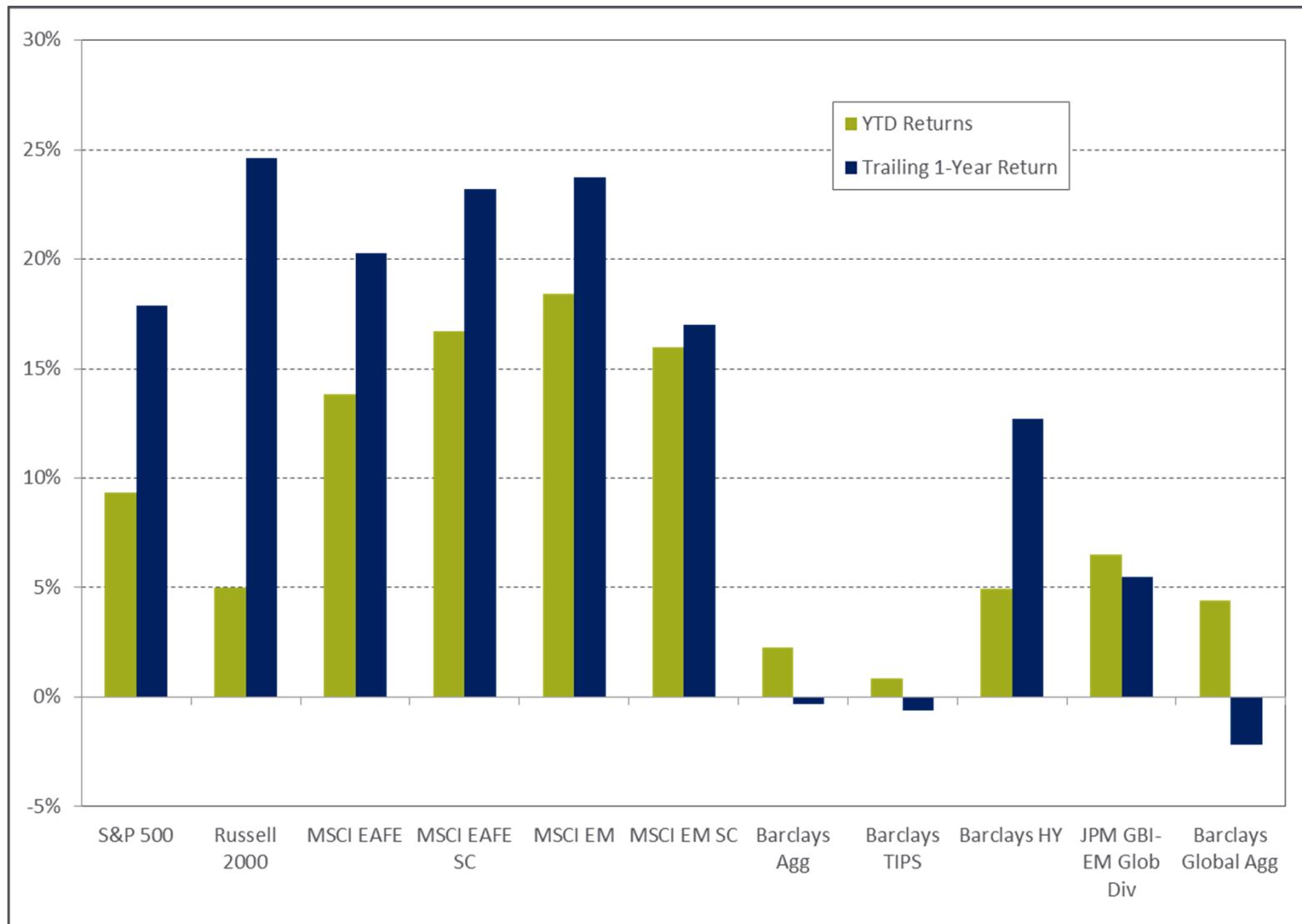


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- **The US economy is experiencing an extended economic growth cycle**
  - US consumers and a tightening labor market are driving the US economy
  - Growth recovery in Europe and the emerging markets reinforces US economic conditions
  - Stable economic growth is a positive backdrop but expected risk asset returns are subdued
- **Federal Reserve monetary policy remains on a gradual normalization path**
  - Despite the June increase, markets continue to price in a slow pace for Fed rate hikes
  - Market impact of the Fed's planned reduction of the \$4.5T balance sheet is untested
  - Chair Yellen's uncertain tenure may stoke market unease has her term expires in Feb. 2018
- **China is modestly tightening financial conditions to slow credit growth and manage an orderly transition to a consumer led economy**
  - Markets have responded positively to the PBOC's management of a more stable yuan
  - Capital outflow pressure persists and large scale currency devaluation remains a tail risk
  - Continued credit expansion and real estate development risk inflating asset price bubbles
- **Globalization backlash is disrupting the political and economic orthodoxy**
  - Outcomes of the French and UK elections have eased market fears but conditions driving anti-establishment political sentiment have not subsided
  - Capital market fundamentals may not be materially altered but risks stemming from globalization backlash likely lead to higher levels of currency volatility
  - Potential changes to US trade policy under the current administration remain uncertain

- **Trim US equity gains as US equity markets continue to rally**
  - Expanding valuations have driven recent gains and profit margins sit near all-time highs
- **Maintain overweight exposure to non-US developed market equities**
  - We believe a multi-year earnings recovery offers the potential for an elevated return
- **Emerging market equities remain attractive and offer robust total returns**
  - Fundamentals support an overweight relative to index weights (e.g. 15% to 20%)
- **Allocate to TIPS as inflation expectations are priced attractively**
  - Preserve US duration exposure with a bias to TIPS over core bonds
- **Reduce high yield bonds with credit spreads below long-term medians**
  - Credit markets continue to benefit from high demand in a low rate environment but current credit spread levels do not provide adequate compensation for the risks
- **For tactical investors, look to fund emerging local debt from risk assets**
  - Valuations for many emerging market currencies remain attractive despite the recent rally
- **Add macro hedge fund strategies for portfolio diversification benefits**
  - Systematic strategies tend to exhibit low correlation to equity markets

## Year to Date Performance: All Assets Have Moved Higher



Source: S&P, Russell, MSCI, Barclays, JPM, Bloomberg  
As of 06/30/2017



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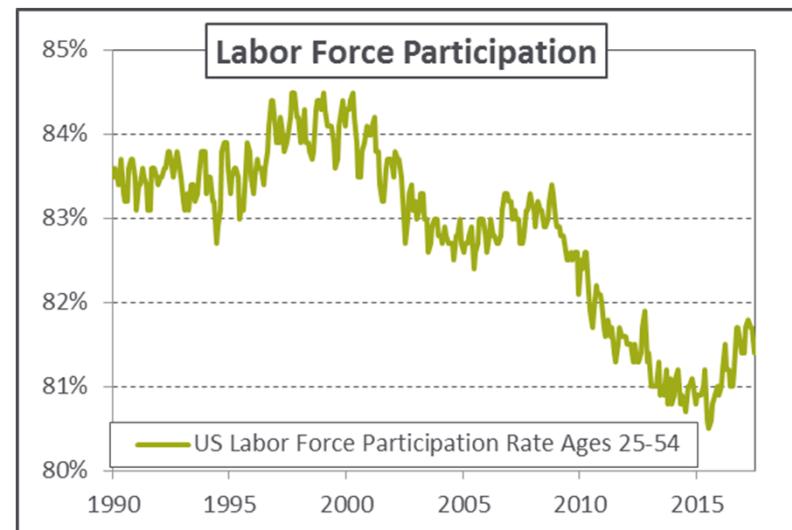
## Key Market Themes

### Extended US Economic Cycle

#### US recession concerns are muted

The US economy appears on a path of slow but steady growth as excess capacity is gradually absorbed by the economy

The labor market recovery has been strong but slack remains as many have yet to return to the workforce

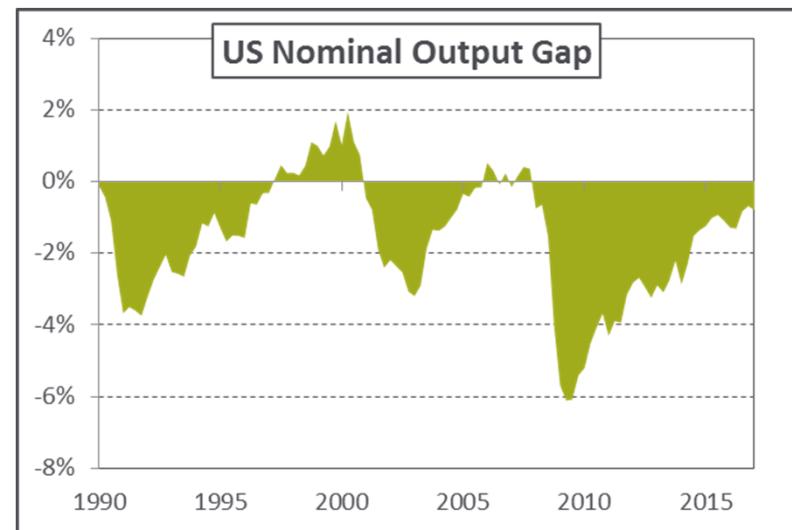


Source: FRED

#### US household balance sheets have room to expand and support further consumer spending gains

Improvement of economic conditions in Europe and emerging markets reinforce US economic gains as global growth factors synchronize

US corporate profitability is near all time highs and may be a challenge for companies to boost economic growth rate



Source: Congressional Budget Office, Bloomberg

## Federal Reserve Gradualism

### The Federal Reserve is expected to slowly increase interest rates

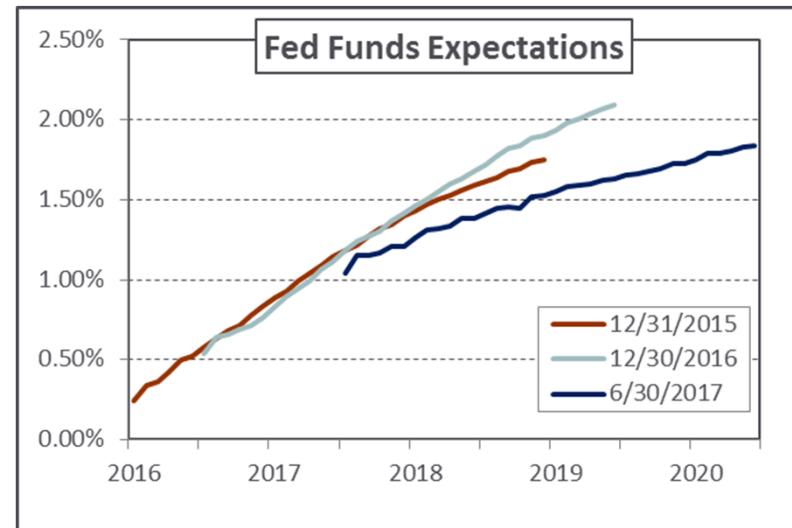
Expected path of Fed policy through 2019 matters more than timing of the next hike as the disconnect between market expectations and Fed signaling has grown

A relatively accommodative Fed is likely to continue, unless there is a dramatic acceleration in inflation

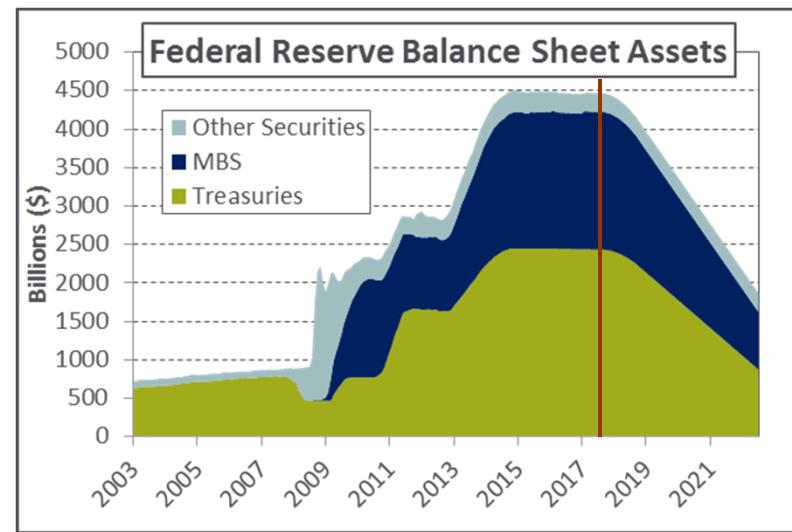
### Reduction of the Fed balance sheet will likely be a gradual process

The market impact is untested but the Fed has announced a specific schedule to not reinvest a portion of the balance sheet securities that mature

Politics could intersect with Fed policy as Fed Chair Janet Yellen's term is set to expire in February 2018



Source: Fed, Bloomberg



Source: Fed, Bloomberg, NEPC

Forecast based on the June Fed Minutes: MBS assumes \$4B per month for 3-month intervals over 12 months with a \$20B cap; Treasuries assume \$6B per month for 3-month intervals over 12 months with a \$30B cap; Other Securities are assumed to stay constant

## Despite Transparency, a Number of Outstanding Questions Remain...

### What does this mean for the future path of rate hikes?

*"The evolution of the economy will warrant gradual increases in the federal funds rate over time to achieve and maintain maximum employment and stable prices."*

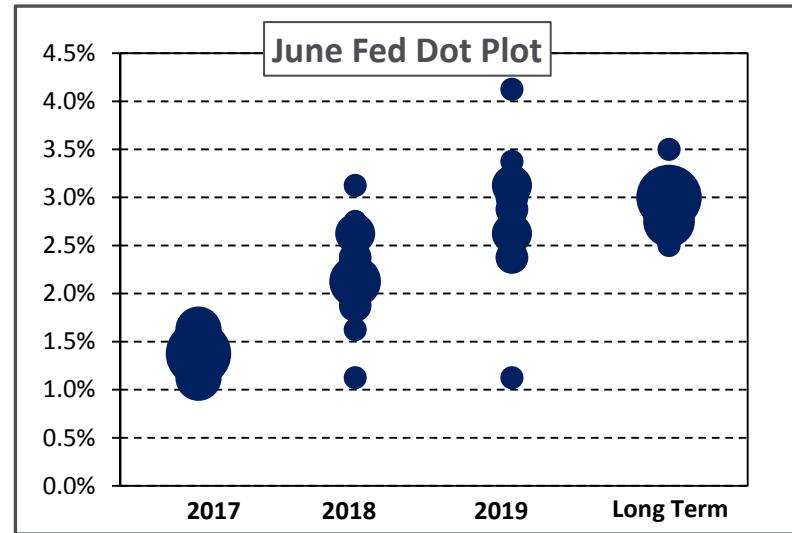
- Fed Chair Janet Yellen July 12<sup>th</sup>, 2017

### What implications does this have for other central banks?

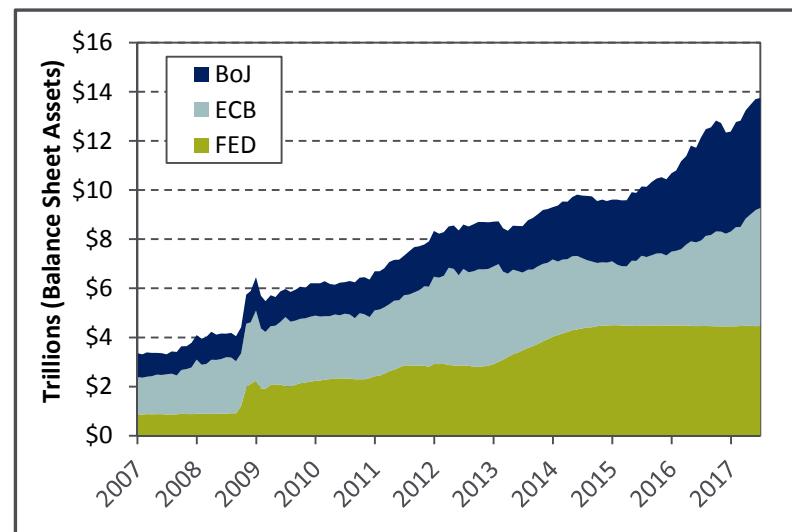
**ECB:** "A very substantial degree of monetary accommodation is still needed for underlying inflation pressures to gradually build..."

- ECB President Mario Draghi July 20<sup>th</sup>, 2017

**BoJ:** Though the monetary stimulus program remained unchanged in July, the 2% inflation target was postponed further – indicating ongoing stimulus measures will continue to be necessary



Source: Fed, NEPC



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

## The Fed's Challenge

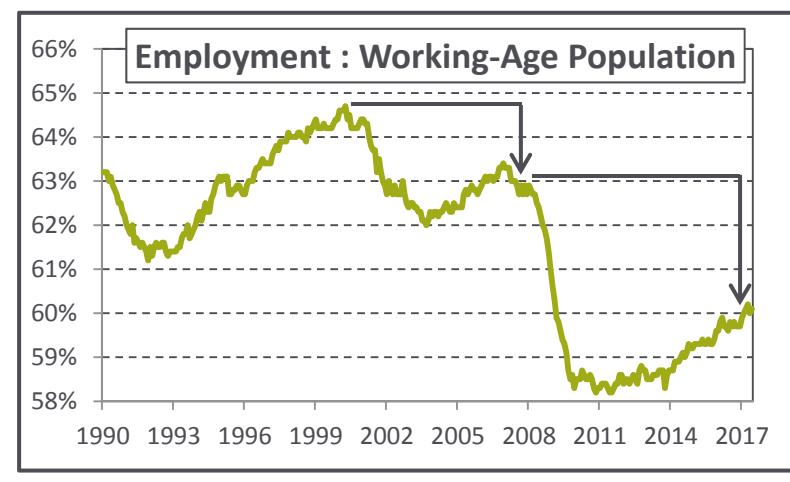
*"With further gradual adjustments in the stance of monetary policy, the economy will continue to expand at a moderate pace over the next couple of years, with the job market strengthening somewhat further and inflation rising to 2%"*

- Fed Chair Janet Yellen July 12<sup>th</sup>, 2017

- **The ongoing challenge for the Fed will be to balance continued strength in the labor market with lagging inflation**
  - Even with sustained improvements in unemployment, there has been significant difficulty reaching the 2% inflation target
- **Despite historically low unemployment, structural changes in demographics and the labor pool have introduced uncertainty regarding the remaining slack in the labor force**



Source: Bureau of Labor Statistics, Bloomberg



Source: Bureau of Labor Statistics  
Represents employed persons as a percentage of age 16+ population

## China Transitions

### China is the global growth engine but faces fundamental transitions

China's economic transition is pivoting from a production to a service and consumption based economy

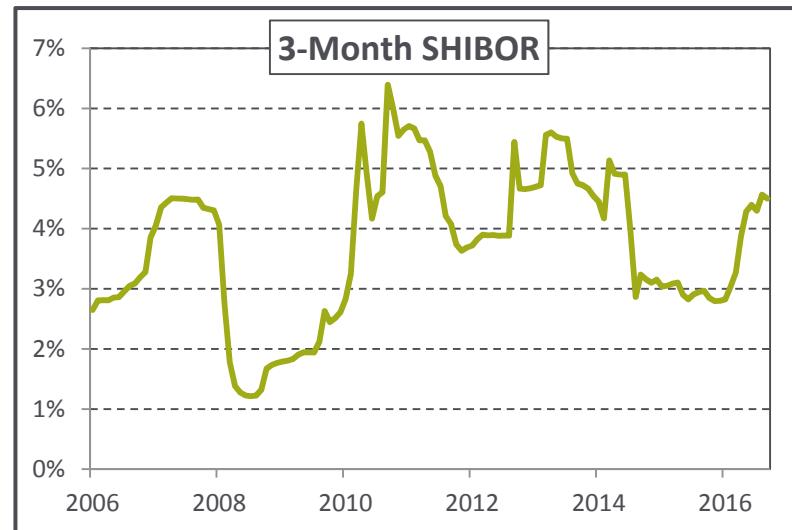
Fixed investment is required to sustain the production based economy and support labor force migration

Any disruption to these transitions will have global repercussions due to China's role in the global economy

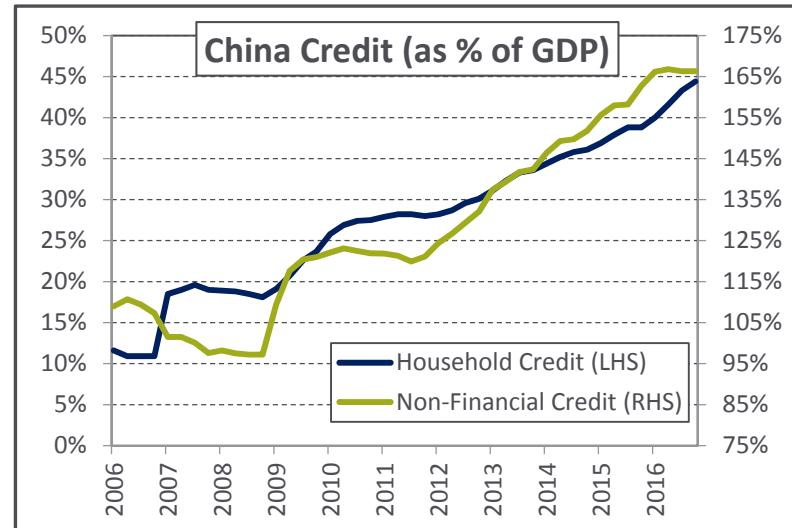
### China's government is negotiating a balance between deleveraging and near term economic growth

Unrestrained growth in credit and real estate markets pose a systematic risk

Concerns of capital outflows have forced greater intervention from the central bank to limit currency movements



Source: China Foreign Exchange Trade System, Bloomberg



Source: Bank for International Settlements

# **State Employees' Retirement System**

# Vermont State Employees

## Total Fund Performance Summary - Net

	Market Value	3 Mo Rank	YTD Rank	Fiscal YTD Rank	1 Yr Rank	3 Yrs Rank	5 Yrs Rank	7 Yrs Rank	10 Yrs Rank
<b>Employees Composite</b>	<b>\$1,740,006,749</b>	<b>2.6%</b>	<b>69</b>	<b>6.8%</b>	<b>67</b>	<b>10.6%</b>	<b>77</b>	<b>10.6%</b>	<b>77</b>
Policy Index	2.5%	77	6.3%	82	10.1%	84	10.1%	84	3.8%
Allocation Index	2.7%	60	6.8%	68	10.5%	78	10.5%	78	3.7%
InvestorForce Public DB Net Median	2.8%		7.3%		11.9%		11.9%		4.9%
									8.2%
									8.6%
									5.0%

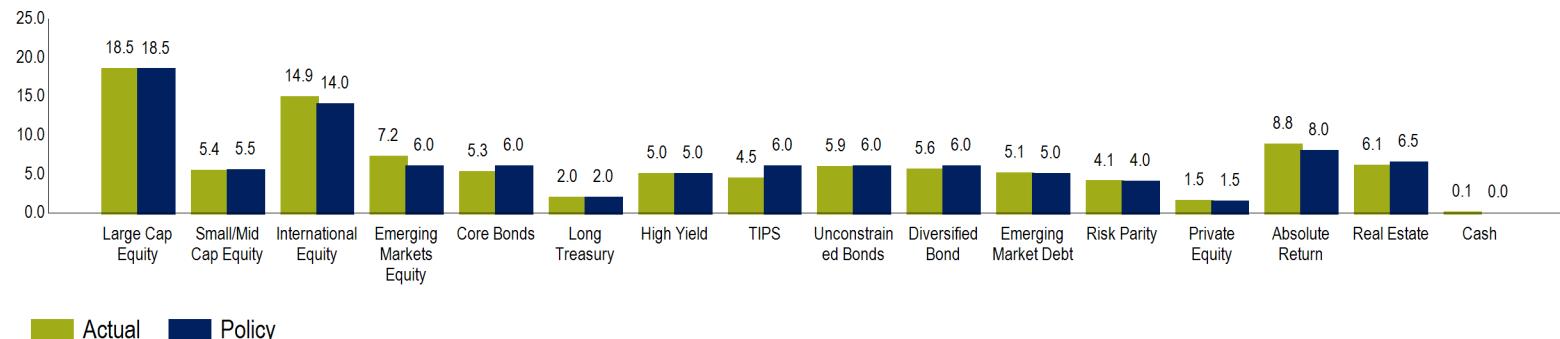
### 3 Years Ending June 30, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Employees Composite	3.67%	84	5.66%	27	0.61	78	1.05	64
Policy Index	3.78%	81	5.24%	10	0.68	65	1.18	47
Allocation Index	3.70%	83	5.47%	21	0.63	75	1.07	62

### 5 Years Ending June 30, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Employees Composite	6.60%	91	5.50%	31	1.17	83	2.04	70
Policy Index	6.48%	93	5.05%	13	1.25	74	2.24	49
Allocation Index	6.48%	93	5.16%	18	1.23	77	2.12	62

### Actual vs Target Allocation (%)



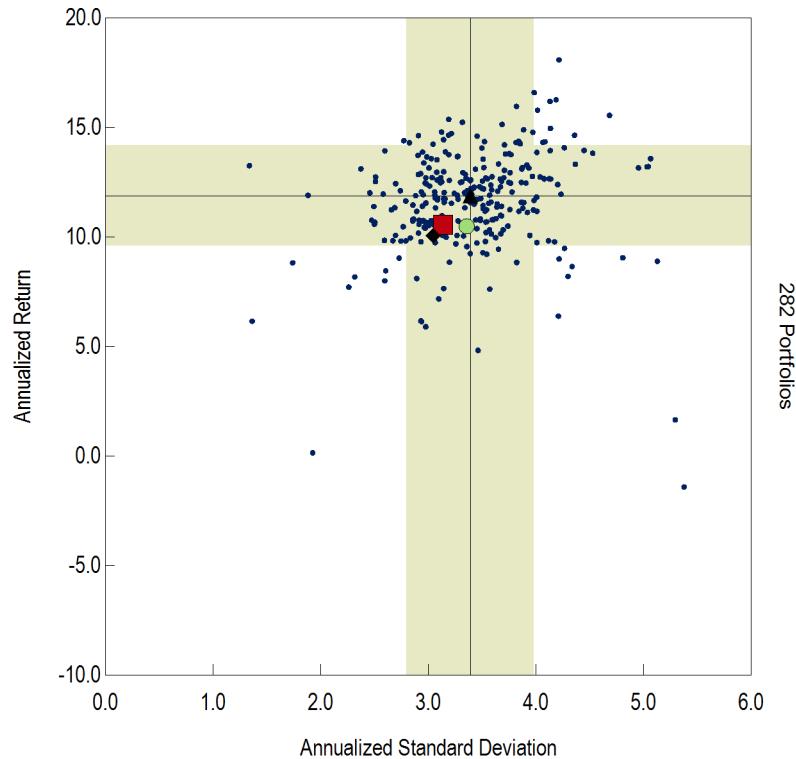
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June 30, 2017

# Vermont State Employees

## Total Fund Risk/Return - Net

1 Year Ending June 30, 2017



1 Year Ending June 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	10.56%	77	3.14%	35	3.20	63
Policy Index	10.07%	84	3.05%	27	3.13	66
S&P 500	17.90%	1	6.09%	99	2.85	80
Citi WGBI	-4.14%	99	6.58%	99	-0.71	99
MSCI ACWI	18.78%	1	5.34%	99	3.42	45
MSCI ACWI ex USA	20.45%	1	7.16%	99	2.78	84
InvestorForce Public DB Net Median	11.88%	--	3.39%	--	3.34	--



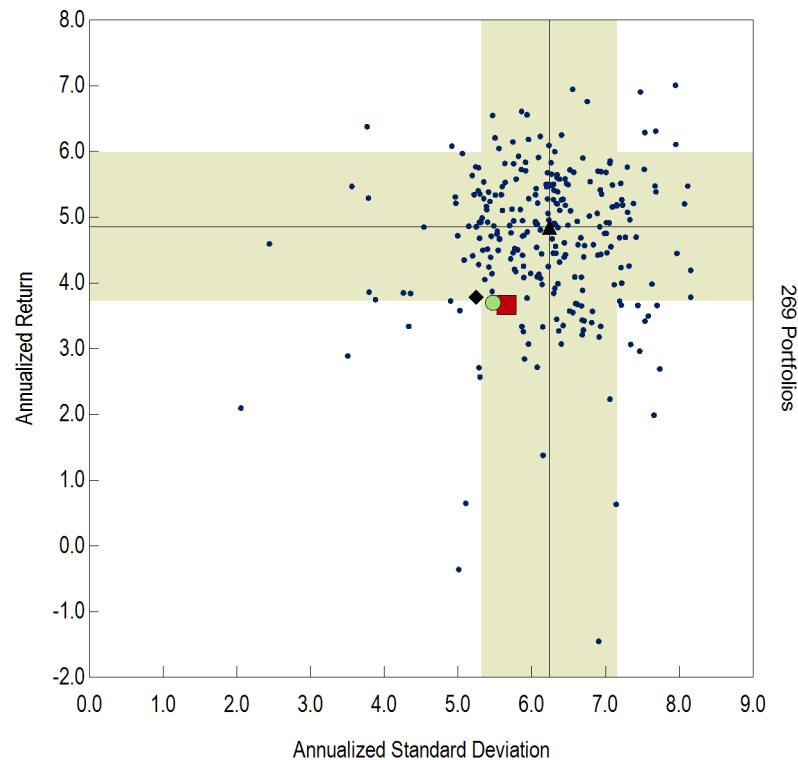
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June 30, 2017

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## Total Fund Risk/Return - Net

3 Years Ending June 30, 2017



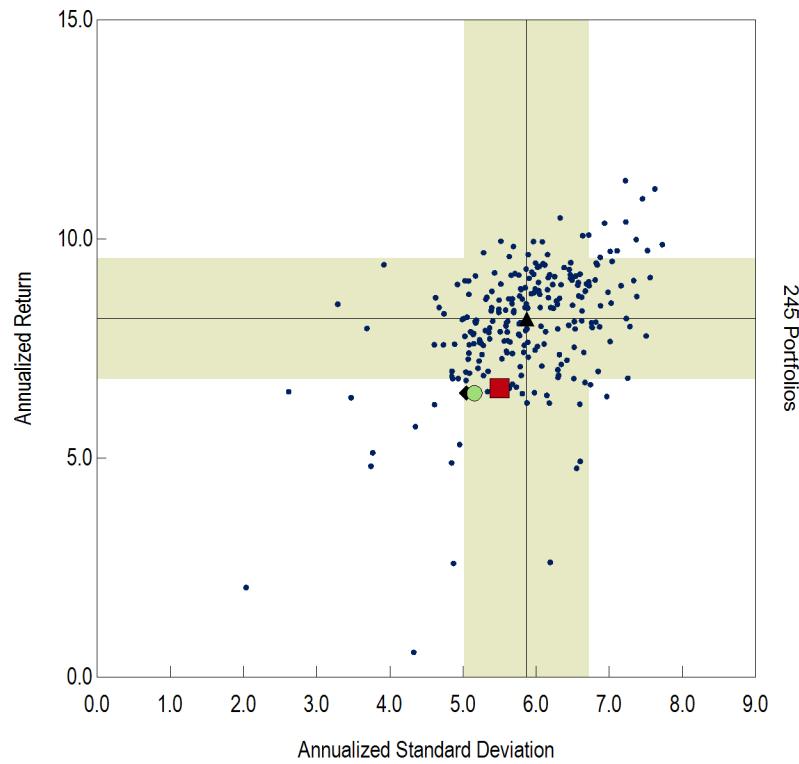
3 Years Ending June 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	3.67%	84	5.66%	27	0.61	78
Policy Index	3.78%	81	5.24%	10	0.68	65
S&P 500	9.61%	1	10.35%	99	0.91	18
Citi WGBI	-1.00%	99	5.98%	40	-0.21	99
MSCI ACWI	4.82%	51	10.78%	99	0.43	96
MSCI ACWI ex USA	0.80%	99	12.44%	99	0.05	99
InvestorForce Public DB Net Median	4.85%	--	6.24%	--	0.74	--

# Vermont State Employees

## Total Fund Risk/Return - Net

5 Years Ending June 30, 2017



5 Years Ending June 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	6.60%	91	5.50%	31	1.17	83
Policy Index	6.48%	93	5.05%	13	1.25	74
S&P 500	14.63%	1	9.56%	99	1.51	23
Citi WGBI	-0.20%	99	5.33%	25	-0.07	99
MSCI ACWI	10.54%	2	9.97%	99	1.04	93
MSCI ACWI ex USA	7.22%	80	11.56%	99	0.61	99
InvestorForce Public DB Net Median	8.19%	--	5.87%	--	1.37	--

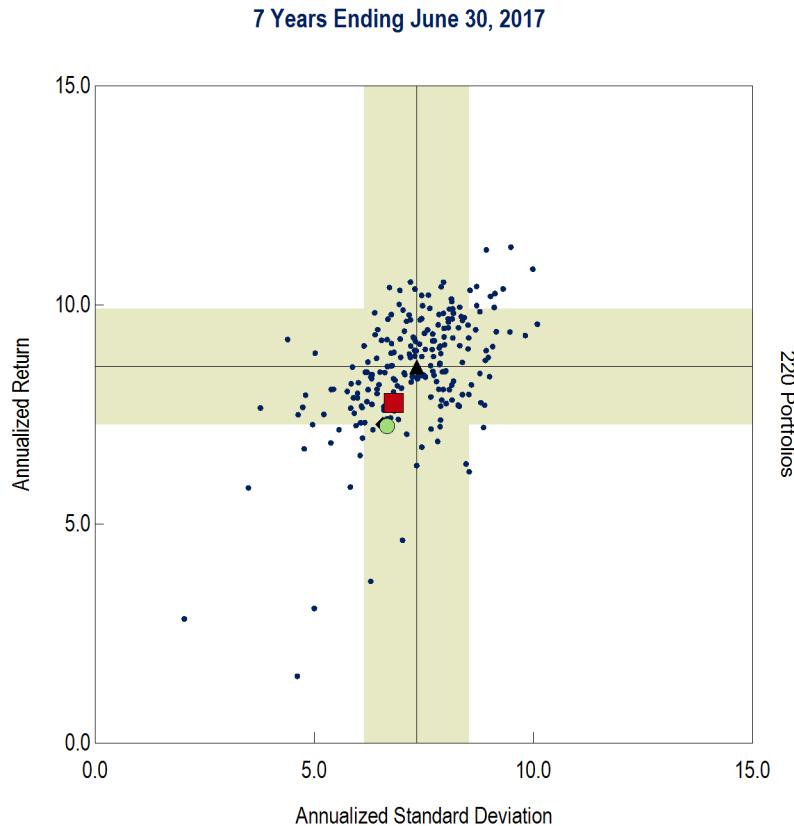


NEPC, LLC

June 30, 2017

# Vermont State Employees

## Total Fund Risk/Return - Net



	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	7.77%	77	6.81%	34	1.12	65
Policy Index	7.28%	90	6.56%	25	1.09	73
S&P 500	15.41%	1	11.69%	99	1.31	22
Citi WGBI	1.68%	99	5.67%	8	0.27	99
MSCI ACWI	10.48%	3	13.05%	99	0.79	98
MSCI ACWI ex USA	6.66%	96	14.97%	99	0.44	99
InvestorForce Public DB Net Median	8.59%	--	7.34%	--	1.17	--



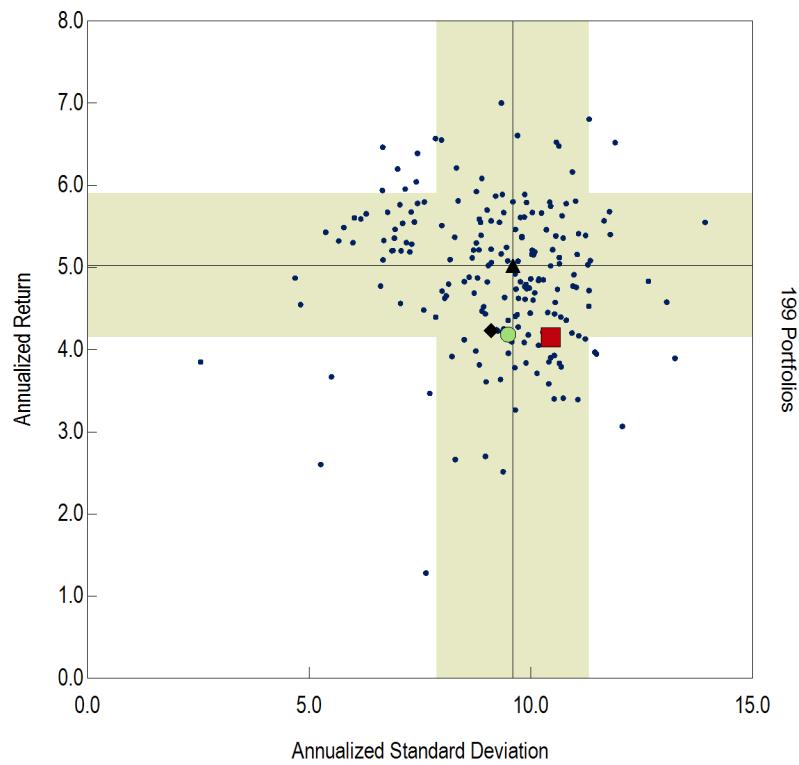
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June 30, 2017

# Vermont State Employees

## Total Fund Risk/Return - Net

10 Years Ending June 30, 2017



10 Years Ending June 30, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	4.15%	82	10.44%	77	0.36	86
Policy Index	4.23%	80	9.10%	41	0.42	70
S&P 500	7.18%	1	15.21%	99	0.44	59
Citi WGBI	3.49%	95	6.80%	9	0.45	57
MSCI ACWI	3.71%	93	16.95%	99	0.19	99
MSCI ACWI ex USA	1.13%	99	19.14%	99	0.04	99
InvestorForce Public DB Net Median	5.03%	--	9.59%	--	0.48	--



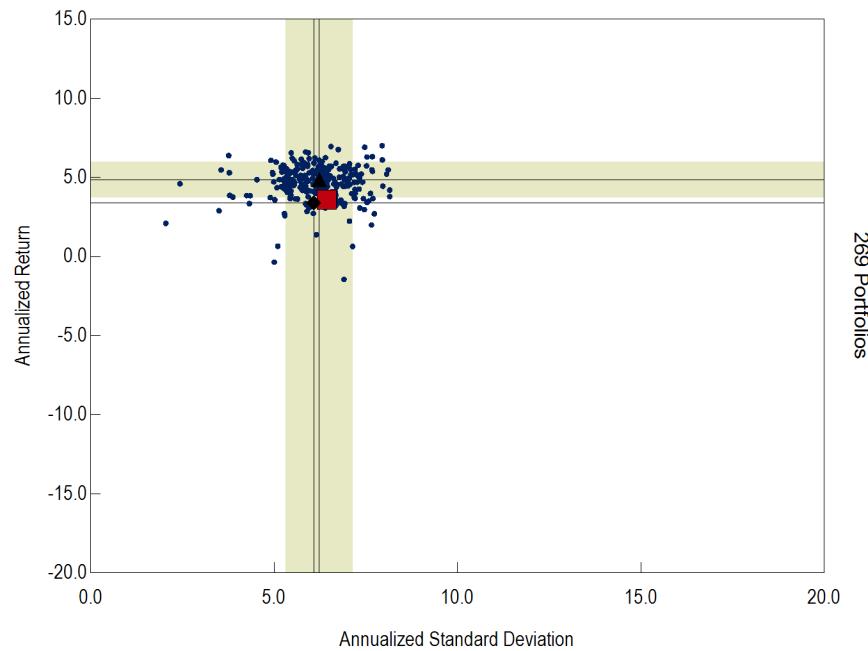
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June 30, 2017

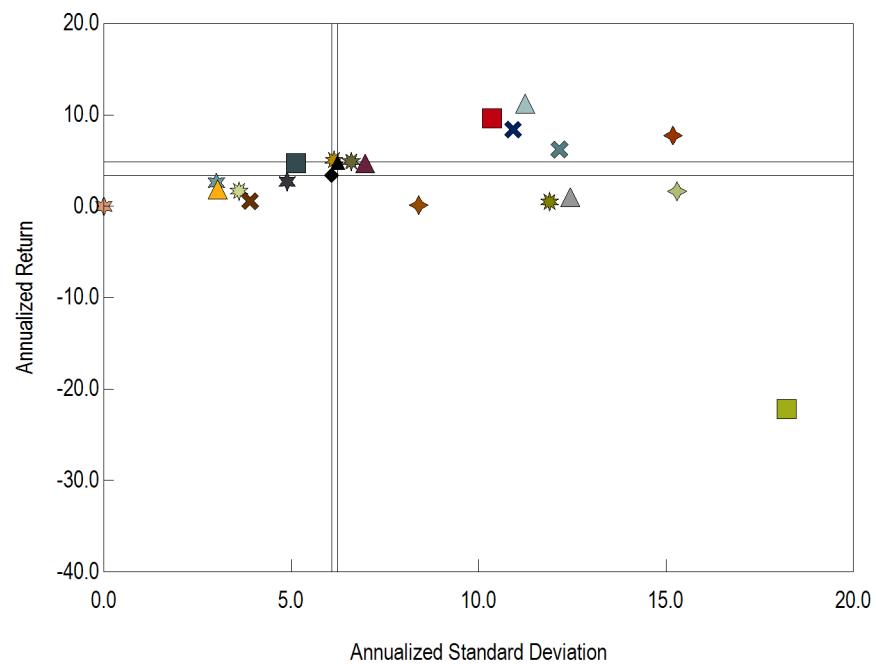
# Vermont State Employees

## Total Marketable Assets - Net

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2017

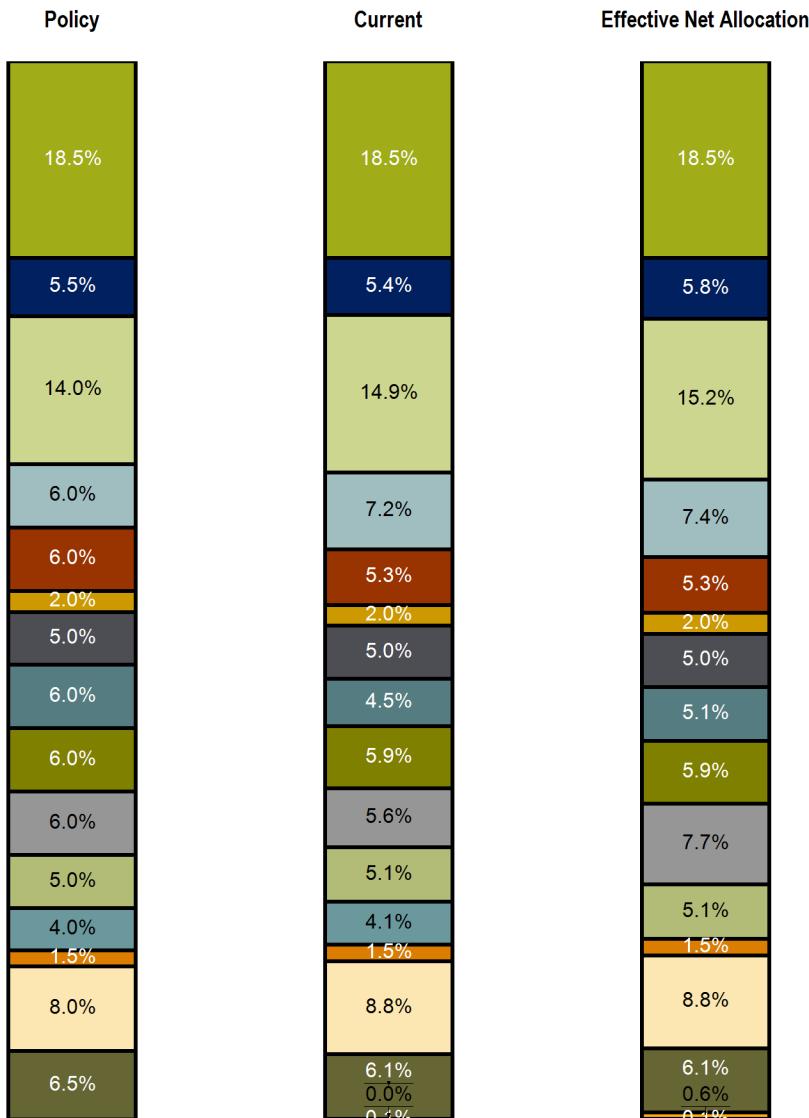


Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2017



# Vermont State Employees

## Total Fund Asset Allocation vs. Policy Targets



### Asset Allocation vs. Target

Policy	Current	Effective Net Allocation
Large Cap Equity	18.5%	18.5%
Small/Mid Cap Equity	5.5%	5.4%
International Equity	14.0%	14.9%
Emerging Markets Equity	6.0%	7.2%
Core Bonds	6.0%	5.3%
Long Treasury	2.0%	2.0%
High Yield	5.0%	5.0%
TIPS	6.0%	4.5%
Unconstrained Bonds	6.0%	5.9%
Diversified Bond	6.0%	5.6%
Emerging Market Debt	5.0%	5.1%
Risk Parity	4.0%	--
Private Equity	1.5%	1.5%
Absolute Return	8.0%	8.8%
Real Estate	6.0%	6.1%
Commodities	1.5%	0.6%
Cash	8.0%	0.1%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

Effective Net Allocation breaks out the exposure of AQR Global Risk Premium.  
 Absolute Return includes Grosvenor, Pinnacle Natural Resources, L.P., and Allianz Structured Alpha.



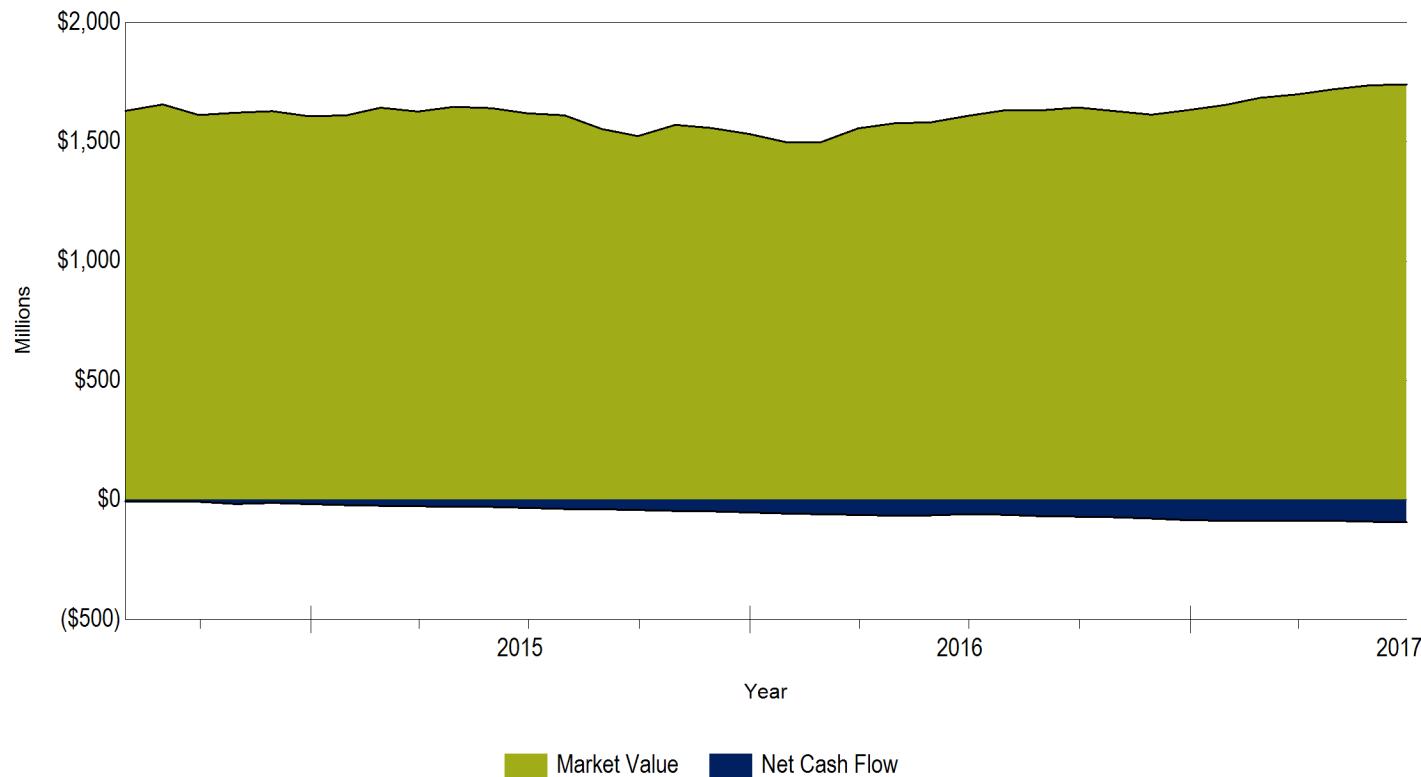
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June 30, 2017

# Vermont State Employees

## Total Fund Asset Growth Summary

3 Years Ending June 30, 2017



	Last Three Months	Year-To-Date	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$1,698,765,699	\$1,633,425,741	\$1,608,681,493	\$1,608,681,493	\$1,650,586,256
Contributions	\$190,241,079	\$199,826,821	\$236,036,458	\$236,036,458	\$844,574,099
Withdrawals	-\$196,547,595	-\$208,341,555	-\$270,070,901	-\$270,070,901	-\$938,319,544
Net Cash Flow	-\$6,306,517	-\$8,514,735	-\$34,034,443	-\$34,034,443	-\$93,745,445
Net Investment Change	\$47,547,567	\$115,095,744	\$165,359,700	\$165,359,700	\$183,165,938
Ending Market Value	\$1,740,006,749	\$1,740,006,749	\$1,740,006,749	\$1,740,006,749	\$1,740,006,749



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June 30, 2017

# Vermont State Employees

## Total Fund Asset Growth Summary by Manager

		Quarter Ending June 30, 2017				
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen	\$118,134,913	\$211,984	-\$211,984	\$0	\$7,774,354	\$125,909,267
Acadian	\$72,214,486	\$87,185	-\$87,185	\$0	\$7,802,051	\$80,016,537
Allianz Structured Alpha	\$31,088,191	\$0	-\$101,205	-\$101,205	\$528,640	\$31,515,625
AQR Global Risk Premium	\$136,246,511	\$141,836	-\$67,549,667	-\$67,407,831	\$2,084,971	\$70,923,651
BlackRock TIPS	\$64,665,711	\$13,493,133	-\$11,567	\$13,481,566	-\$244,593	\$77,902,684
Champlain	\$36,294,247	\$10,325,374	-\$73,487	\$10,251,887	\$2,119,222	\$48,665,355
GAM	\$165,474	\$0	\$0	\$0	\$1,556	\$167,030
GAM Unconstrained Bond	\$59,229,765	\$0	-\$78,291	-\$78,291	\$1,226,122	\$60,377,596
Grosvenor	\$80,299,835	\$0	\$0	\$0	\$349,573	\$80,649,409
Guggenheim	\$68,529,755	\$78,393	-\$78,393	\$0	\$1,215,882	\$69,745,638
Harbourvest Dover Street Fund IX	\$1,595,849	\$722,264	\$0	\$722,264	\$0	\$2,318,113
Harbourvest Dover VIII Fund	\$7,356,047	\$0	-\$291,641	-\$291,641	\$0	\$7,064,406
Harbourvest Partners IX Buyout Fund	\$6,285,450	\$0	-\$63,904	-\$63,904	\$0	\$6,221,546
Harbourvest Partners IX Credit Opportunities	\$906,469	\$0	-\$17,295	-\$17,295	\$0	\$889,174
Harbourvest Partners IX Venture Fund	\$4,683,578	\$0	-\$18,698	-\$18,698	\$0	\$4,664,881
Harbourvest Partners X Buyout Fund	\$2,021,150	\$480,767	-\$167,288	\$313,479	\$0	\$2,334,629
Harbourvest Partners X Venture Fund	\$900,920	\$247,252	\$0	\$247,252	\$0	\$1,148,172
HIPEP VII	\$1,913,486	\$218,786	\$0	\$218,786	\$0	\$2,132,272
KDP	\$17,111,101	\$27,648	-\$27,648	\$0	\$308,354	\$17,419,455
Mellon Dynamic Growth	\$32,947,759	\$0	-\$33,244,977	-\$33,244,977	\$347,093	\$49,875
Mondrian	\$69,656,139	\$65,578	-\$65,578	\$0	\$3,050,966	\$72,707,105
Morgan Stanley Prime Property	\$48,160,530	\$0	\$0	\$0	\$0	\$48,160,530
PIMCO Core Plus	\$95,187,475	\$69,874	-\$69,874	\$0	\$1,651,309	\$96,838,784
PIMCO Unconstrained	\$42,095,618	\$63,318	-\$63,318	\$0	\$455,333	\$42,550,951
Pinnacle Natural Resources, L.P.	\$21,798,620	\$20,241,790	\$0	\$20,241,790	-\$911,219	\$41,129,191

# Vermont State Employees

## Total Fund Asset Growth Summary by Manager

	Quarter Ending June 30, 2017					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
RREEF America REIT III	\$205,264	\$0	-\$879	-\$879	-\$5,053	\$199,332
Siguler Guff DREOF II	\$13,111,434	\$0	-\$367,106	-\$367,106	\$494,799	\$13,239,126
Siguler Guff DREOF II Co-Investment	\$3,866,124	\$0	\$0	\$0	\$88,180	\$3,954,304
SSgA ACWI Ex US	\$75,899,336	\$25,574,683	-\$13,129	\$25,561,554	\$5,029,906	\$106,490,797
SSgA Barclays Aggregate Index	\$49,681,232	\$42,980,599	-\$2,006,112	\$40,974,487	\$976,606	\$91,632,325
SSgA S&P 500 Cap-Wgt	\$214,453,323	\$28,993,606	-\$5,515,766	\$23,477,839	\$7,067,800	\$244,998,962
SSgA S&P 500 Equal-Wgt	\$75,123,307	\$7,797	-\$7,797	\$0	\$1,922,829	\$77,046,136
State Street Long U.S. Treasury Index	--	\$34,049,838	\$0	\$34,049,838	\$198,204	\$34,248,042
T. Rowe	\$3,085	\$0	\$0	\$0	\$0	\$3,085
Transwestern / Aslan III	\$102,653	\$0	\$0	\$0	\$0	\$102,653
UBS Trumbull	\$39,616,332	\$87,317	-\$87,317	\$0	\$466,360	\$40,082,692
Vermont Cash	\$772,429	\$2,731,628	-\$2,100,907	\$630,721	\$0	\$1,403,150
Wellington	\$36,986,312	\$9,337,263	-\$69,762	\$9,267,501	-\$613,052	\$45,640,761
Wellington Opportunistic EMD	\$87,293,616	\$0	\$0	\$0	\$2,169,892	\$89,463,508
Z Terminated - SSgA Russell 2000 Growth	\$8,074,767	\$1,730	-\$9,269,231	-\$9,267,501	\$1,192,734	\$0
Z Terminated - SSgA S&P 400	\$9,793,138	\$1,437	-\$10,253,323	-\$10,251,887	\$458,749	\$0
Z Terminated - Wellington DAS	\$43,526,865	\$0	-\$44,392,476	-\$44,392,476	\$865,610	\$0
Z Terminated- Schroder	\$20,767,402	\$0	-\$20,241,790	-\$20,241,790	-\$525,612	\$0
<b>Total</b>	<b>\$1,698,765,699</b>	<b>\$190,241,079</b>	<b>-\$196,547,595</b>	<b>-\$6,306,517</b>	<b>\$47,547,567</b>	<b>\$1,740,006,749</b>

## Vermont State Employees

### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Employees Composite</b>	<b>1,740,006,749</b>	<b>100.0</b>	<b>100.0</b>	<b>2.6</b>	<b>69</b>	<b>6.8</b>	<b>67</b>	<b>10.6</b>	<b>77</b>	<b>10.6</b>	<b>77</b>	<b>3.7</b>	<b>84</b>	<b>6.6</b>	<b>91</b>	<b>4.2</b>	<b>82</b>
Policy Index				2.5	77	6.3	82	10.1	84	10.1	84	3.8	81	6.5	93	4.2	80
Allocation Index				2.7	60	6.8	68	10.5	78	10.5	78	3.7	83	6.5	93	4.2	81
InvestorForce Public DB Net Median				2.8		7.3		11.9		11.9		4.9		8.2		5.0	
<b>Total Marketable Assets</b>	<b>1,454,033,665</b>	<b>83.6</b>	<b>--</b>	<b>3.1</b>	<b>29</b>	<b>8.0</b>	<b>20</b>	<b>11.6</b>	<b>57</b>	<b>11.6</b>	<b>57</b>	<b>3.6</b>	<b>87</b>	<b>6.5</b>	<b>93</b>	<b>--</b>	<b>--</b>
Total Marketable Assets Custom Index				2.9	44	7.1	55	10.6	74	10.6	74	3.4	90	6.6	91	--	--
InvestorForce Public DB Net Median				2.8		7.3		11.9		11.9		4.9		8.2		5.0	
<b>US Equity</b>	<b>416,354,300</b>	<b>23.9</b>	<b>24.0</b>	<b>2.6</b>	<b>53</b>	<b>7.8</b>	<b>49</b>	<b>17.8</b>	<b>60</b>	<b>17.8</b>	<b>60</b>	<b>9.1</b>	<b>27</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Russell 3000				3.0	46	8.9	39	18.5	55	18.5	55	9.1	27	14.6	34	7.3	46
eA All US Equity Net Median				2.8		7.6		19.1		19.1		7.6		13.8		7.1	
<b>Large Cap Comp</b>	<b>322,048,184</b>	<b>18.5</b>	<b>18.5</b>	<b>2.9</b>	<b>52</b>	<b>9.0</b>	<b>48</b>	<b>17.8</b>	<b>51</b>	<b>17.8</b>	<b>51</b>	<b>9.3</b>	<b>27</b>	<b>14.9</b>	<b>23</b>	<b>7.7</b>	<b>30</b>
S&P 500				3.1	48	9.3	45	17.9	50	17.9	50	9.6	22	14.6	28	7.2	45
eA US Large Cap Equity Net Median				3.0		8.7		17.8		17.8		7.8		13.7		7.0	
SSgA S&P 500 Cap-Wgt	244,998,962	14.1	14.0	3.1	48	9.3	45	17.9	49	17.9	49	9.6	22	14.6	28	--	--
S&P 500				3.1	48	9.3	45	17.9	50	17.9	50	9.6	22	14.6	28	7.2	45
SSgA S&P 500 Equal-Wgt	77,046,136	4.4	4.5	2.5	61	7.9	59	17.2	56	17.2	56	8.4	40	15.4	14	8.0	27
S&P 500 Equal Weighted				2.5	61	8.1	58	17.3	56	17.3	56	8.5	37	15.5	13	8.3	19
T. Rowe	3,085	0.0	0.0														
<b>Small/Mid Cap Comp</b>	<b>94,306,116</b>	<b>5.4</b>	<b>5.5</b>	<b>1.7</b>	<b>66</b>	<b>4.1</b>	<b>75</b>	<b>18.1</b>	<b>63</b>	<b>18.1</b>	<b>63</b>	<b>9.1</b>	<b>20</b>	<b>14.5</b>	<b>30</b>	<b>8.2</b>	<b>29</b>
Russell 2000				2.5	51	5.0	69	24.6	15	24.6	15	7.4	38	13.7	44	6.9	62
eA US Small-Mid Cap Equity Net Median				2.5		6.6		19.7		19.7		6.6		13.4		7.4	
Champlain	48,665,355	2.8	2.8	4.8	24	10.6	33	21.3	19	21.3	19	11.2	4	16.0	12	--	--
Russell 2500				2.1	57	6.0	71	19.8	29	19.8	29	6.9	55	14.0	48	7.4	53
eA US Mid Cap Equity Net Median				2.5		8.1		17.2		17.2		7.2		14.0		7.6	
Wellington	45,640,761	2.6	2.8	-1.0	90	-2.4	93	14.6	94	14.6	94	7.7	33	13.0	66	8.1	17
Russell 2000 Value				0.7	56	0.5	64	24.9	30	24.9	30	7.0	46	13.4	60	5.9	76
eA US Small Cap Value Equity Net Median				0.9		1.7		22.3		22.3		6.7		14.0		6.9	



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## Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Int'l Equity Comp</b>	<b>259,214,439</b>	<b>14.9</b>	<b>14.0</b>	<b>7.0</b>	<b>42</b>	<b>16.0</b>	<b>33</b>	<b>22.5</b>	<b>33</b>	<b>22.5</b>	<b>33</b>	<b>2.7</b>	<b>44</b>	<b>10.0</b>	<b>43</b>	<b>1.3</b>	<b>69</b>
MSCI EAFE				6.1	67	13.8	61	20.3	48	20.3	48	1.1	77	8.7	67	1.0	76
eA All EAFE Equity Net Median				6.6		14.6		20.1		20.1		2.3		9.6		2.3	
Acadian	80,016,537	4.6	4.0	10.7	4	21.8	4	31.0	3	31.0	3	6.2	12	13.1	14	1.7	61
Mondrian	72,707,105	4.2	4.0	4.3	95	12.0	85	16.0	79	16.0	79	0.5	86	8.4	72	1.6	63
MSCI EAFE				6.1	67	13.8	61	20.3	48	20.3	48	1.1	77	8.7	67	1.0	76
SSgA ACWI Ex US	106,490,797	6.1	6.0	5.9	78	14.3	75	20.7	45	20.7	45	1.0	72	7.4	81	--	--
MSCI ACWI ex USA				5.8	79	14.1	76	20.5	45	20.5	45	0.8	74	7.2	82	1.1	75
eA ACWI ex-US All Cap Equity Net Median				6.9		15.8		20.0		20.0		2.4		9.2		2.5	
<b>Emerging Market Comp</b>	<b>125,909,267</b>	<b>7.2</b>	<b>6.0</b>	<b>6.4</b>	<b>50</b>	<b>18.8</b>	<b>56</b>	<b>18.7</b>	<b>71</b>	<b>18.7</b>	<b>71</b>	<b>1.6</b>	<b>55</b>	<b>3.9</b>	<b>73</b>	--	--
Aberdeen	125,909,267	7.2	6.0	6.4	50	18.8	56	18.7	71	18.7	71	1.6	55	3.9	74	--	--
MSCI Emerging Markets				6.3	53	18.4	62	23.7	42	23.7	42	1.1	68	4.0	73	1.9	66
eA Emg Mkts Equity Net Median				6.4		19.3		22.9		22.9		1.7		5.2		2.5	
<b>US Fixed Income</b>	<b>490,715,475</b>	<b>28.2</b>	<b>31.0</b>	<b>1.3</b>	<b>54</b>	<b>3.1</b>	<b>36</b>	<b>3.5</b>	<b>27</b>	<b>3.5</b>	<b>27</b>	<b>3.4</b>	<b>30</b>	--	--	--	--
BBgBarc US Aggregate TR				1.4	50	2.3	56	-0.3	84	-0.3	84	2.5	52	2.2	61	4.5	52
eA All US Fixed Inc Net Median				1.4		2.5		0.9		0.9		2.5		2.8		4.5	
<b>Diversified Fixed</b>	<b>325,647,698</b>	<b>18.7</b>	<b>20.0</b>	<b>1.7</b>	<b>38</b>	<b>3.5</b>	<b>31</b>	<b>2.3</b>	<b>34</b>	<b>2.3</b>	<b>34</b>	<b>3.5</b>	<b>29</b>	<b>2.9</b>	<b>47</b>	<b>4.0</b>	<b>63</b>
BBgBarc US Aggregate TR				1.4	50	2.3	56	-0.3	84	-0.3	84	2.5	52	2.2	61	4.5	52
eA All US Fixed Inc Net Median				1.4		2.5		0.9		0.9		2.5		2.8		4.5	
PIMCO Core Plus	96,838,784	5.6	6.0	1.7	22	3.3	5	1.1	17	1.1	17	2.6	51	2.3	66	--	--
BBgBarc US Aggregate TR				1.4	64	2.3	65	-0.3	72	-0.3	72	2.5	59	2.2	72	4.5	76
SSgA Barclays Aggregate Index	91,632,325	5.3	6.0	1.4	68	2.2	71	-0.4	74	-0.4	74	--	--	--	--	--	--
BBgBarc US Aggregate TR				1.4	64	2.3	65	-0.3	72	-0.3	72	2.5	59	2.2	72	4.5	76
3-Month Libor Total Return USD				0.3	99	0.6	99	1.0	20	1.0	20	0.6	99	0.5	99	1.0	99
eA US Core Fixed Inc Net Median				1.5		2.4		0.2		0.2		2.6		2.5		4.7	
State Street Long U.S. Treasury Index	34,248,042	2.0		--	--	--	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Treasury Long TR				4.0	--	5.4	--	-7.2	--	-7.2	--	5.6	--	2.8	--	7.3	--



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### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Unconstrained Fixed Income</b>	<b>102,928,547</b>	<b>5.9</b>	<b>6.0</b>	<b>1.5</b>	<b>62</b>	<b>4.2</b>	<b>48</b>	<b>7.9</b>	<b>30</b>	<b>7.9</b>	<b>30</b>	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg				1.8	48	3.9	59	4.3	76	4.3	76	3.6	16	4.2	43	6.1	26
BBgBarc Global Aggregate TR eA Global Unconstrained Fixed Inc Net Median				2.6	21	4.4	43	-2.2	99	-2.2	99	-0.4	97	0.8	98	3.7	91
PIMCO Unconstrained	42,550,951	2.4	2.5	0.9	94	3.0	76	7.0	51	7.0	51	1.8	75	1.4	97	--	--
25% HY, 25% EMD, 50% BC Agg				1.8	48	3.9	59	4.3	76	4.3	76	3.6	16	4.2	43	6.1	26
3-Month Libor Total Return USD				0.3	95	0.6	99	1.0	98	1.0	98	0.6	90	0.5	99	1.0	99
GAM Unconstrained Bond	60,377,596	3.5	3.5	1.9	43	5.1	32	8.5	26	8.5	26	--	--	--	--	--	--
3-Month LIBOR + 3% eA Global Unconstrained Fixed Inc Net Median				1.1	90	2.1	93	4.1	80	4.1	80	3.6	15	3.5	64	4.0	89
<b>High Yield Comp</b>	<b>87,165,093</b>	<b>5.0</b>	<b>5.0</b>	<b>1.7</b>	<b>72</b>	<b>3.6</b>	<b>81</b>	<b>11.6</b>	<b>41</b>	<b>11.6</b>	<b>41</b>	<b>4.4</b>	<b>30</b>	<b>6.5</b>	<b>35</b>	<b>7.1</b>	<b>36</b>
BBgBarc US High Yield TR eA US High Yield Fixed Inc Net Median				2.2	35	4.9	24	12.7	27	12.7	27	4.5	28	6.9	25	7.7	14
KDP	17,419,455	1.0	1.0	1.6	73	3.4	83	7.9	87	7.9	87	2.7	84	4.6	93	--	--
BBgBarc US High Yield TR BofA Merrill Lynch US High Yield BB-B Rated				2.2	35	4.9	24	12.7	27	12.7	27	4.5	28	6.9	25	7.7	14
Guggenheim	69,745,638	4.0	4.0	1.7	72	3.7	78	12.6	29	12.6	29	4.7	21	--	--	--	--
BBgBarc US High Yield TR eA US High Yield Fixed Inc Net Median				2.2	35	4.9	24	12.7	27	12.7	27	4.5	28	6.9	25	7.7	14
				2.0		4.4		11.3		11.3		3.8		6.3		6.8	



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### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>TIPS</b>	<b>77,902,684</b>	<b>4.5</b>	<b>6.0</b>														
BlackRock TIPS	77,902,684	4.5	6.0	-0.4	--	0.8	--	-0.6	--	-0.6	--	0.6	--	0.2	--	--	--
BBgBarc US TIPS TR				-0.4	--	0.9	--	-0.6	--	-0.6	--	0.6	--	0.3	--	4.3	--
<b>Emerging Market Debt</b>	<b>89,463,508</b>	<b>5.1</b>	<b>5.0</b>														
Wellington Opportunistic EMD	89,463,508	5.1	5.0	2.5	48	6.8	62	9.0	27	9.0	27	5.1	9	5.9	14	--	--
JP Morgan EMBI Global TR				2.2	61	6.2	74	5.5	86	5.5	86	4.6	18	5.2	29	7.3	22
eA All Emg Mkts Fixed Inc Net Median				2.4		7.8		7.3		7.3		2.4		3.7		6.3	
<b>Risk Parity/GAA</b>	<b>70,973,526</b>	<b>4.1</b>	<b>4.0</b>	<b>1.1</b>	<b>84</b>	<b>5.4</b>	<b>58</b>	<b>5.0</b>	<b>77</b>	<b>5.0</b>	<b>77</b>	<b>0.5</b>	<b>76</b>	<b>4.4</b>	<b>58</b>	<b>3.9</b>	<b>66</b>
Mellon Dynamic Growth	49,875	0.0	0.0	1.2	47	4.1	38	3.4	82	3.4	82	4.7	18	6.5	30	2.9	51
Mellan Dynamic Growth Benchmark				3.7	9	8.0	12	9.3	35	9.3	35	2.8	43	6.2	33	3.6	34
<b>Risk Parity</b>	<b>70,923,651</b>	<b>4.1</b>	<b>4.0</b>	<b>1.2</b>	<b>82</b>	<b>5.8</b>	<b>53</b>	<b>5.6</b>	<b>72</b>	<b>5.6</b>	<b>72</b>	<b>0.1</b>	<b>83</b>	<b>4.2</b>	<b>62</b>	<b>--</b>	<b>--</b>
eA Global TAA Net Median				2.5		6.3		7.0		7.0		1.5		5.0		4.3	
AQR Global Risk Premium	70,923,651	4.1	4.0	1.2	82	5.8	53	5.6	72	5.6	72	0.1	83	4.2	62	--	--
60% MSCI World (Net) / 40% CITI WGBI				3.6	26	8.2	34	8.8	40	8.8	40	2.9	32	6.7	24	4.1	64
<b>Cash</b>	<b>1,403,150</b>	<b>0.1</b>	<b>0.0</b>														
Vermont Cash	1,403,150	0.1		0.0	--	0.0	--	0.0	--	0.0	--	0.0	--	0.0	--	0.7	--
91 Day T-Bills				0.2	--	0.4	--	0.5	--	0.5	--	0.2	--	0.2	--	0.4	--

Risk Parity Composite formerly shown as Risk Parity/GAA.

Mellon Dynamic Growth was included in Risk Parity/GAA composite prior to 04/01/2016.



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### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Total Real Estate</b>	<b>105,738,638</b>	<b>6.1</b>	<b>6.5</b>	<b>0.9</b>	--	<b>2.3</b>	--	<b>6.6</b>	--	<b>6.6</b>	--	<b>10.4</b>	--	<b>11.4</b>	--	--	--
NCREF Property Index				1.8	--	3.3	--	7.0	--	7.0	--	10.2	--	10.5	--	6.4	--
NCREF ODCE				1.7	--	3.5	--	7.9	--	7.9	--	11.3	--	11.8	--	5.2	--
UBS Trumbull	40,082,692	2.3		1.0	--	1.9	--	4.6	--	4.6	--	8.8	--	8.8	--	4.5	--
Siguler Guff DREOF II	13,239,126	0.8		3.9	--	4.2	--	12.5	--	12.5	--	10.7	--	--	--	--	--
Siguler Guff DREOF II Co-Investment	3,954,304	0.2		2.3	--	5.9	--	--	--	--	--	--	--	--	--	--	--
RREEF America REIT III	199,332	0.0		-2.9	--	-3.6	--	-16.1	--	-16.1	--	-1.9	--	7.0	--	-5.5	--
Morgan Stanley Prime Property	48,160,530	2.8		0.0	--	1.9	--	6.7	--	6.7	--	11.6	--	12.5	--	5.2	--
Transwestern / Aslan III	102,653	0.0		0.0	--	0.0	--	0.0	--	0.0	--	3.6	--	14.3	--	-21.9	--
<b>Absolute Return</b>	<b>153,461,254</b>	<b>8.8</b>	<b>8.0</b>	<b>-0.2</b>	<b>80</b>	<b>-0.2</b>	<b>91</b>	<b>4.1</b>	<b>76</b>	<b>4.1</b>	<b>76</b>	<b>0.0</b>	<b>80</b>	<b>4.5</b>	<b>64</b>	--	--
HFRI Fund of Funds Composite Index				0.7	62	3.1	54	6.4	57	6.4	57	1.5	59	3.9	70	0.9	91
eV Alt Fund of Funds - Multi-Strategy Median				1.0		3.2		7.2		7.2		2.0		5.2		2.9	
Grosvenor	80,649,409	4.6	3.0	0.4	70	2.2	65	7.5	49	7.5	49	1.7	54	5.6	42	--	--
Allianz Structured Alpha	31,515,625	1.8	2.0	1.4	41	2.3	65	5.0	67	5.0	67	8.0	6	6.4	31	--	--
91 Day T-Bills				0.2	73	0.4	88	0.5	91	0.5	91	0.2	78	0.2	98	0.4	94
eV Alt Fund of Funds - Multi-Strategy Median				1.0		3.2		7.2		7.2		2.0		5.2		2.9	
Pinnacle Natural Resources, L.P.	41,129,191	2.4	3.0	-3.0	--	-10.9	--	-9.4	--	-9.4	--	--	--	--	--	--	--
Bloomberg Commodity Index				-3.0	--	-5.3	--	-6.5	--	-6.5	--	-14.8	--	-9.2	--	-6.5	--
GAM	167,030	0.0	0.0														

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Allianz Structured Alpha. Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016.

Real Estate performance reported on a quarterly basis. NCREIF Property is available 25 days after quarter end.

Real Estate values are finalized as of 06/30/2017. Morgan Stanley will be liquidated, funding UBS and SSgA Long US Treasury Index.

## Vermont State Employees

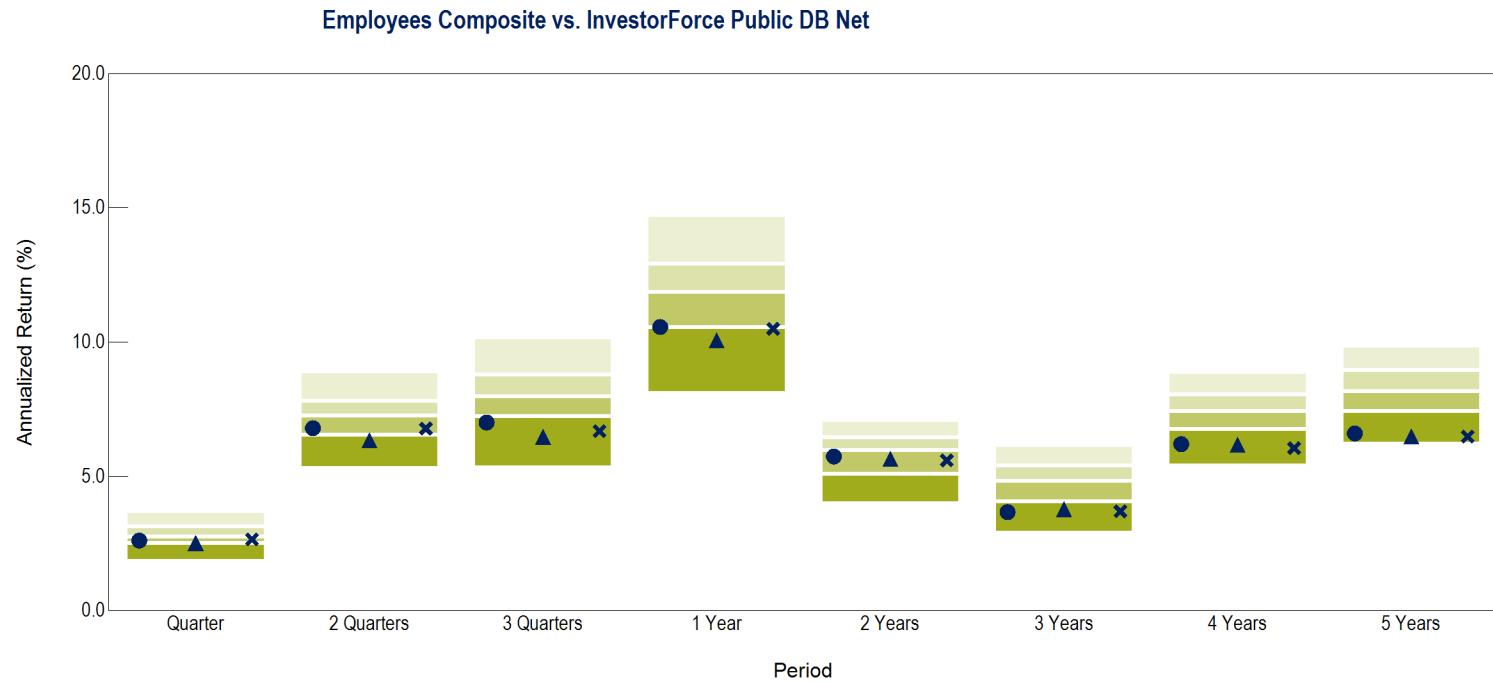
### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Private Equity</b>	<b>26,773,193</b>	<b>1.5</b>	<b>1.5</b>	<b>0.0</b>	--	<b>0.3</b>	--	<b>7.8</b>	--	<b>7.8</b>	--	<b>13.7</b>	--	--	--	--	--
Cambridge Associates US All PE				0.0	--	4.3	--	13.3	--	13.3	--	8.4	--	12.7	--	9.0	--
Harbourvest Partners IX Credit Opportunities	889,174	0.1															
Harbourvest Partners IX Venture Fund	4,664,881	0.3															
Harbourvest Partners IX Buyout Fund	6,221,546	0.4															
Harbourvest Partners X Venture Fund	1,148,172	0.1															
Harbourvest Partners X Buyout Fund	2,334,629	0.1															
Harbourvest Dover VIII Fund	7,064,406	0.4															
Harbourvest Dover Street Fund IX	2,318,113	0.1															
HIEP VII	2,132,272	0.1															

Harbourvest values based on final Capital Account Statements for Q1, and cash adjusted through Q2.

# Vermont State Employees

## Total Fund Return Summary vs. Peer Universe - Net

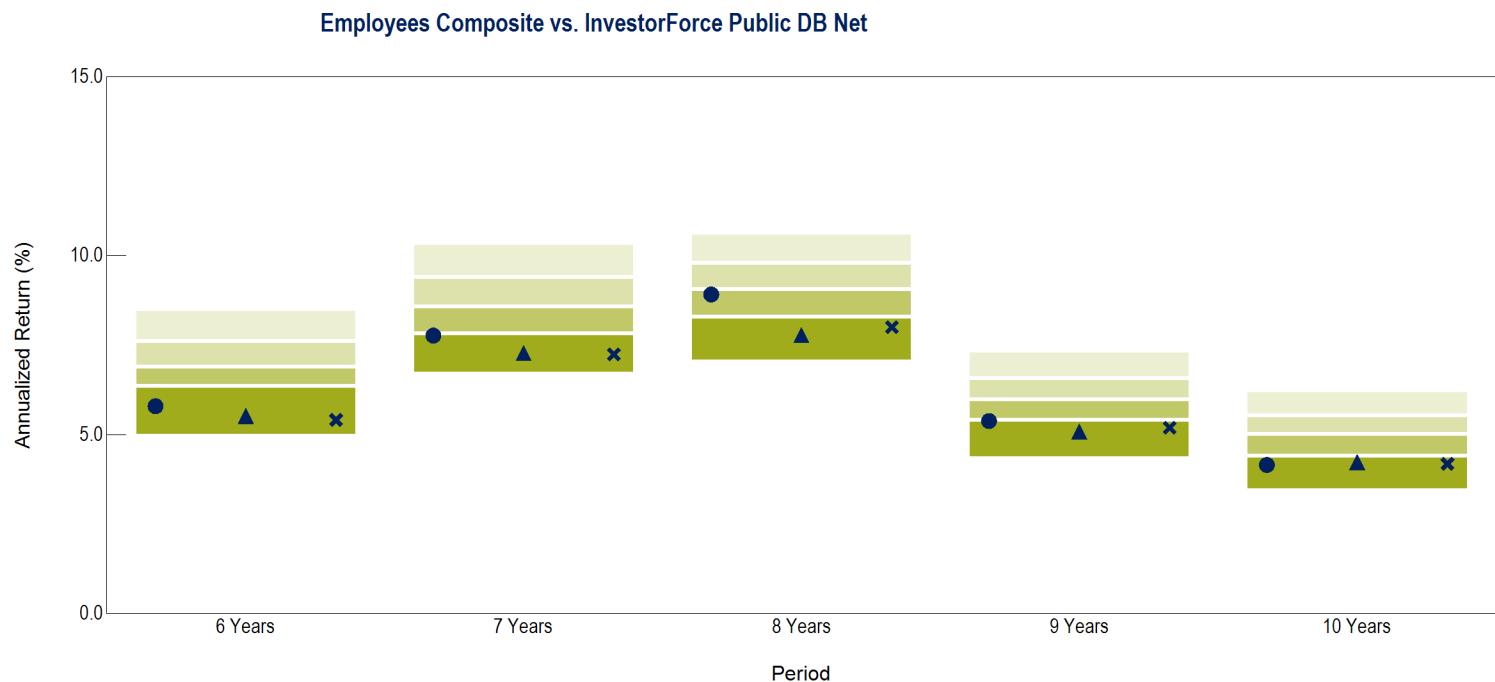


Return (Rank)										
5th Percentile	3.7	8.9	10.2	14.7	7.1	6.2	8.9	9.9		
25th Percentile	3.2	7.8	8.8	12.9	6.5	5.4	8.1	9.0		
Median	2.8	7.3	8.0	11.9	6.0	4.9	7.4	8.2		
75th Percentile	2.5	6.6	7.3	10.6	5.1	4.1	6.8	7.4		
95th Percentile	1.9	5.3	5.4	8.1	4.0	2.9	5.4	6.2		
# of Portfolios	283	283	282	282	278	269	255	245		
● Employees Composite	2.6	(69)	6.8	(67)	7.0	(82)	10.6	(77)	5.7	(58)
▲ Policy Index	2.5	(77)	6.3	(82)	6.5	(90)	10.1	(84)	5.7	(59)
✖ Allocation Index	2.7	(60)	6.8	(68)	6.7	(88)	10.5	(78)	5.6	(60)
							3.7	(84)	6.2	(88)
									6.6	(91)
									6.5	(93)
									6.5	(93)

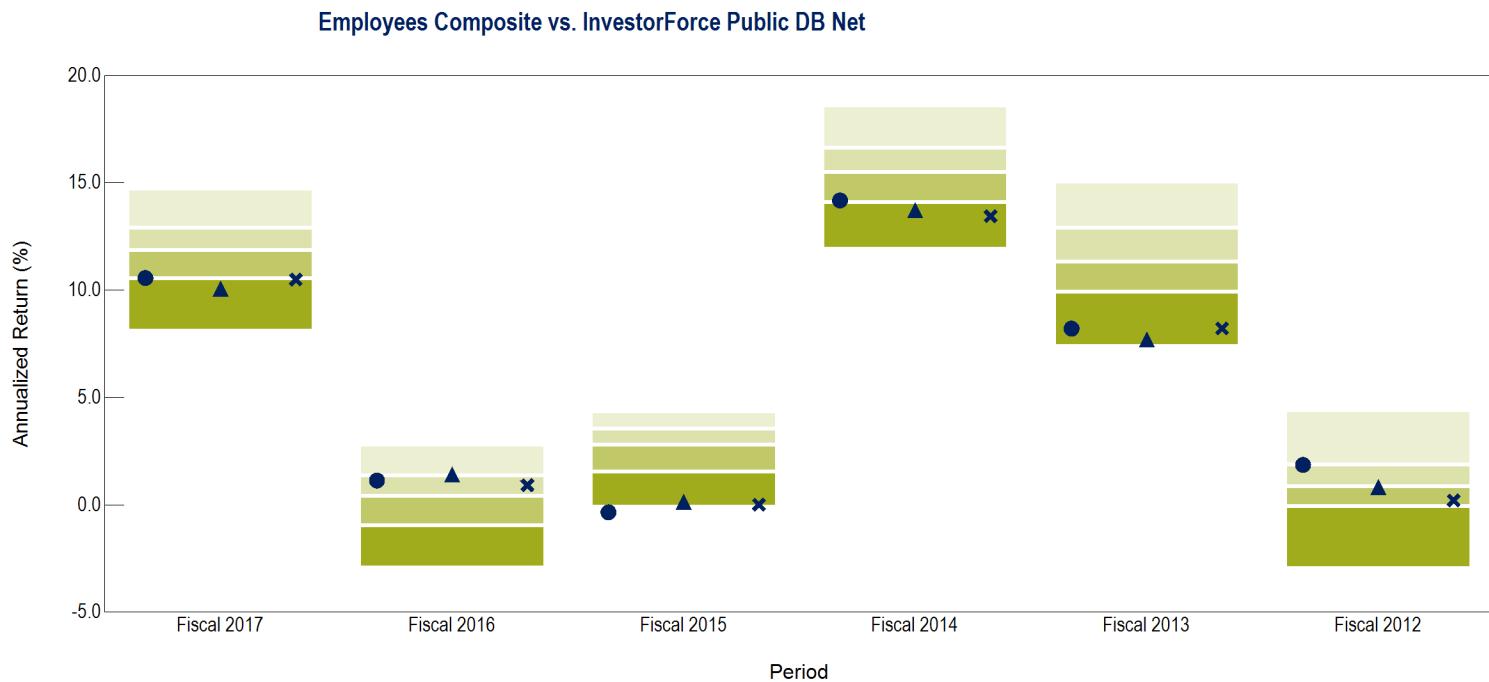


NEPC, LLC

June 30, 2017



Return (Rank)								
5th Percentile	8.5	10.3	10.6	7.3	6.2			
25th Percentile	7.6	9.4	9.8	6.6	5.5			
Median	6.9	8.6	9.1	6.0	5.0			
75th Percentile	6.4	7.8	8.3	5.4	4.4			
95th Percentile	5.0	6.7	7.0	4.4	3.5			
# of Portfolios	230	220	211	206	199			
● Employees Composite	5.8 (88)	7.8 (77)	8.9 (55)	5.4 (78)	4.2 (82)			
▲ Policy Index	5.5 (92)	7.3 (90)	7.8 (87)	5.1 (85)	4.2 (80)			
✖ Allocation Index	5.4 (92)	7.2 (91)	8.0 (85)	5.2 (84)	4.2 (81)			



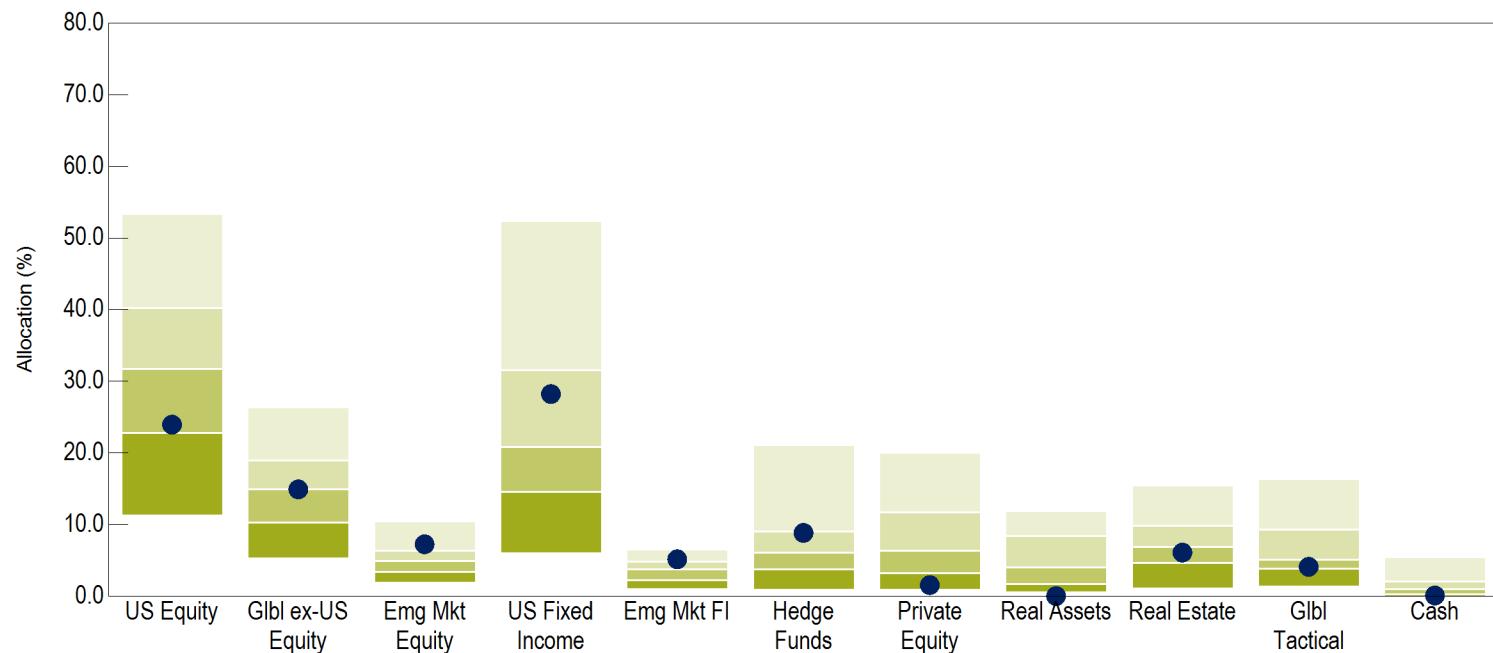
Return (Rank)								
5th Percentile	14.7	2.8	4.4	18.6	15.0	4.4		
25th Percentile	12.9	1.4	3.6	16.7	12.9	1.9		
Median	11.9	0.4	2.8	15.5	11.3	0.9		
75th Percentile	10.6	-0.9	1.6	14.1	9.9	0.0		
95th Percentile	8.1	-2.9	-0.1	11.9	7.4	-2.9		
# of Portfolios	282	258	231	173	192	147		
● Employees Composite	10.6	(77)	1.1	(32)	-0.3	(96)	14.2	(73)
▲ Policy Index	10.1	(84)	1.4	(25)	0.1	(94)	13.7	(84)
✖ Allocation Index	10.5	(78)	0.9	(36)	0.0	(95)	13.4	(89)

# Vermont State Employees

## Total Fund Allocation vs. Peer Universe - Net

Total Plan Allocation vs. InvestorForce Public DB Net

As of June 30, 2017



### Allocation (Rank)

5th Percentile	53.3	26.3	10.4	52.4	6.5	21.1	20.0	11.9	15.5	16.4	5.4	--
25th Percentile	40.3	19.1	6.4	31.6	4.9	9.1	11.8	8.5	9.9	9.4	2.1	--
Median	31.8	15.0	5.0	20.9	3.8	6.1	6.4	4.1	7.0	5.1	1.0	--
75th Percentile	22.9	10.4	3.5	14.7	2.3	3.8	3.3	1.8	4.8	3.9	0.3	--
95th Percentile	11.4	5.3	2.0	6.0	1.0	0.9	1.0	0.6	1.2	1.4	0.0	--
# of Portfolios	203	228	142	205	47	97	124	71	172	65	244	--
● Employees Composite	23.9 (72)	14.9 (51)	7.2 (19)	28.2 (34)	5.1 (20)	8.8 (27)	1.5 (88)	0.0 (99)	6.1 (55)	4.1 (74)	0.1 (90)	--



NEPC, LLC

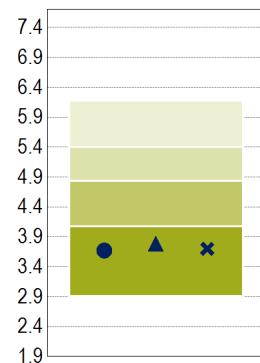
June 30, 2017

# Vermont State Employees

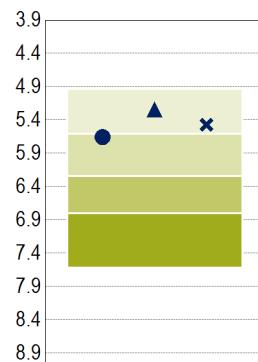
## Total Fund Risk Statistics vs. Peer Universe - Net

**Employees Composite vs. IFx Public DB Net  
3 Years**

Anlzd Return



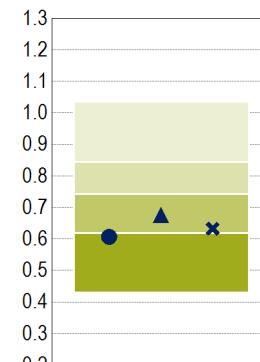
Anlzd Standard Deviation



Anlzd Alpha



Sharpe Ratio



● Employees Composite

Value 3.67  
Rank 84

▲ Policy Index

Value 3.78  
Rank 81

✖ Allocation Index

Value 3.70  
Rank 83

Universe

5th %tile 6.17  
25th %tile 5.42  
Median 4.85  
75th %tile 4.08  
95th %tile 2.92

● Employees Composite

Value 5.66  
Rank 27

▲ Policy Index

Value 5.24  
Rank 10

✖ Allocation Index

Value 5.47  
Rank 21

Universe

5th %tile 4.93  
25th %tile 5.60  
Median 6.24  
75th %tile 6.79  
95th %tile 7.61

● Employees Composite

Value -0.37  
Rank 57

▲ Policy Index

Value 0.00  
Rank 37

✖ Allocation Index

Value -0.24  
Rank 52

Universe

5th %tile 0.94  
25th %tile 0.36  
Median -0.22  
75th %tile -0.82  
95th %tile -1.79

● Employees Composite

Value 0.61  
Rank 78

▲ Policy Index

Value 0.68  
Rank 65

✖ Allocation Index

Value 0.63  
Rank 75

Universe

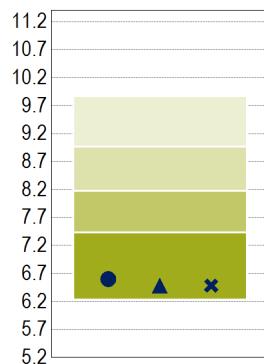
5th %tile 1.04  
25th %tile 0.85  
Median 0.74  
75th %tile 0.62  
95th %tile 0.43

# Vermont State Employees

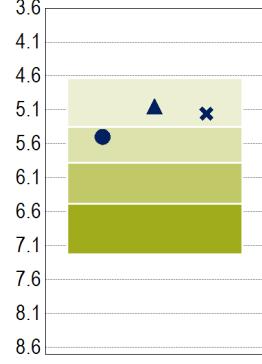
## Total Fund Risk Statistics vs. Peer Universe - Net

**Employees Composite vs. IFx Public DB Net  
5 Years**

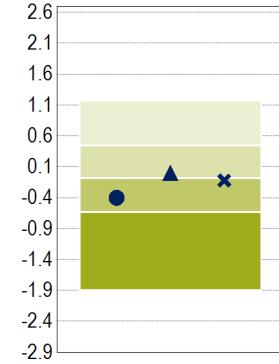
Anlzd Return



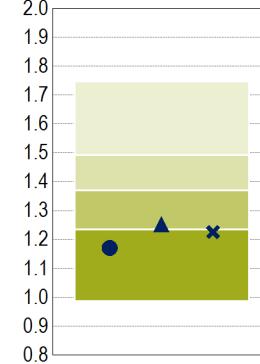
Anlzd Standard Deviation



Anlzd Alpha



Sharpe Ratio



● Employees Composite

Value	6.60
Rank	91
▲ Policy Index	
Value	6.48
Rank	93
✗ Allocation Index	
Value	6.48
Rank	93

● Employees Composite

Value	5.50
Rank	31
▲ Policy Index	
Value	5.05
Rank	13
✗ Allocation Index	
Value	5.16
Rank	18

● Employees Composite

Value	-0.40
Rank	67
▲ Policy Index	
Value	0.00
Rank	46
✗ Allocation Index	
Value	-0.12
Rank	55

● Employees Composite

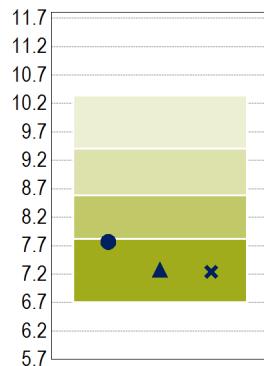
Value	1.17
Rank	83
▲ Policy Index	
Value	1.25
Rank	74
✗ Allocation Index	
Value	1.23
Rank	77

# Vermont State Employees

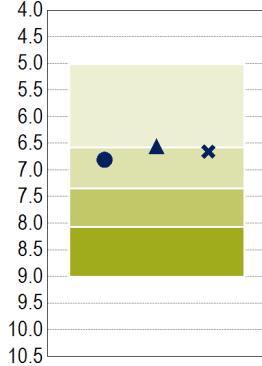
## Total Fund Risk Statistics vs. Peer Universe - Net

**Employees Composite vs. IFx Public DB Net  
7 Years**

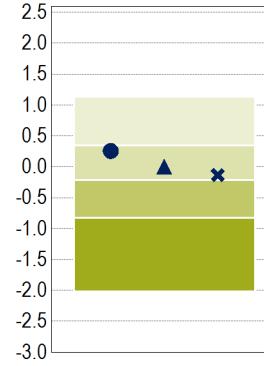
Anlzd Return



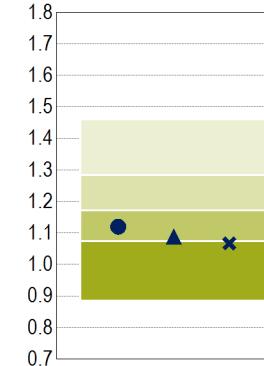
Anlzd Standard Deviation



Anlzd Alpha



Sharpe Ratio



● Employees Composite

Value	7.77
Rank	77
▲ Policy Index	
Value	7.28
Rank	90
✗ Allocation Index	
Value	7.24
Rank	91

● Employees Composite

Value	6.81
Rank	34
▲ Policy Index	
Value	6.56
Rank	25
✗ Allocation Index	
Value	6.66
Rank	28

● Employees Composite

Value	0.25
Rank	29
▲ Policy Index	
Value	0.00
Rank	39
✗ Allocation Index	
Value	-0.14
Rank	46

● Employees Composite

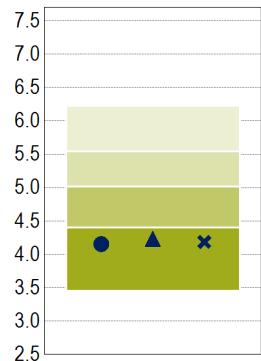
Value	1.12
Rank	65
▲ Policy Index	
Value	1.09
Rank	73
✗ Allocation Index	
Value	1.07
Rank	78

# Vermont State Employees

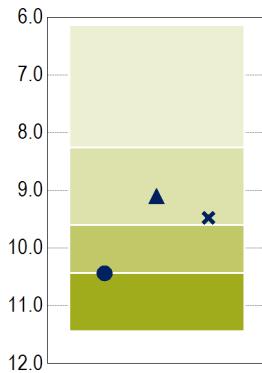
## Total Fund Risk Statistics vs. Peer Universe - Net

**Employees Composite vs. IFx Public DB Net  
10 Years**

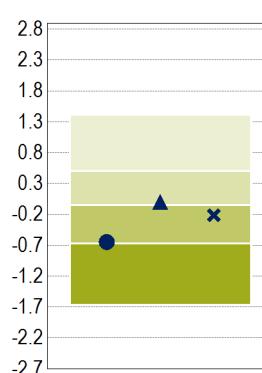
Anlzd Return



Anlzd Standard Deviation



Anlzd Alpha



Sharpe Ratio



- Employees Composite

Value	4.15
Rank	82
▲ Policy Index	
Value	4.23
Rank	80
✖ Allocation Index	
Value	4.18
Rank	81

- Employees Composite

Value	10.44
Rank	77
▲ Policy Index	
Value	9.10
Rank	41
✖ Allocation Index	
Value	9.48
Rank	49

- Employees Composite

Value	-0.65
Rank	73
▲ Policy Index	
Value	0.00
Rank	49
✖ Allocation Index	
Value	-0.21
Rank	61

- Employees Composite

Value	0.36
Rank	86
▲ Policy Index	
Value	0.42
Rank	70
✖ Allocation Index	
Value	0.39
Rank	77



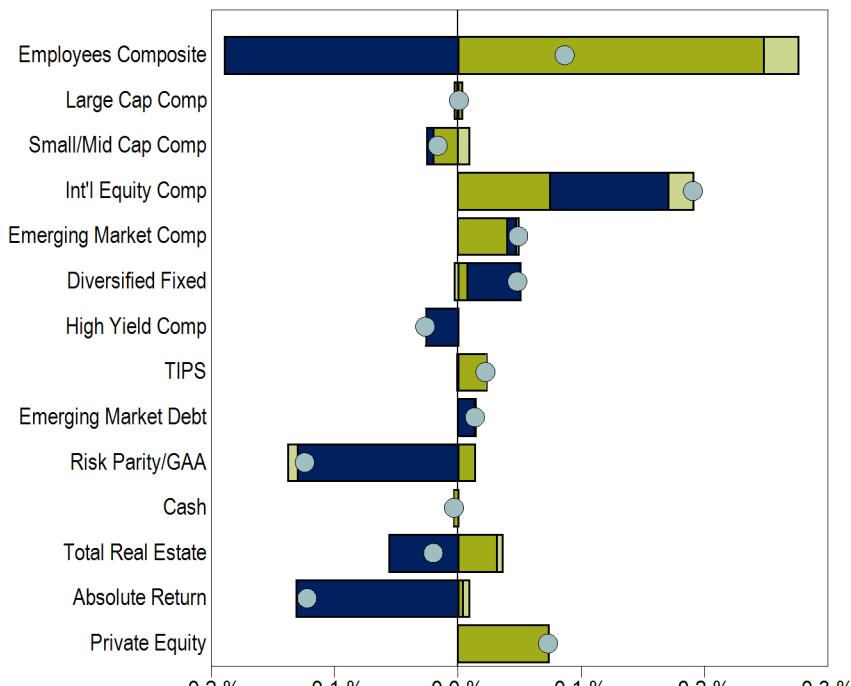
NEPC, LLC

June 30, 2017

# Vermont State Employees

## Total Fund Attribution Analysis - Net

**Attribution Effects Relative to Policy Index**  
3 Months Ending June 30, 2017



- Allocation Effect
- Selection Effect
- Interaction Effects
- Total Effect

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.

**Attribution Summary**  
3 Months Ending June 30, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	2.9%	3.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Small/Mid Cap Comp	1.7%	1.6%	0.1%	0.0%	0.0%	0.0%	0.0%
Int'l Equity Comp	7.0%	6.0%	0.9%	0.1%	0.1%	0.0%	0.2%
Emerging Market Comp	6.4%	6.3%	0.1%	0.0%	0.0%	0.0%	0.0%
Diversified Fixed	1.7%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%
High Yield Comp	1.7%	2.2%	-0.5%	0.0%	0.0%	0.0%	0.0%
TIPS	-0.4%	-0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt	2.5%	2.2%	0.3%	0.0%	0.0%	0.0%	0.0%
Risk Parity/GAA	1.1%	3.6%	-2.5%	-0.1%	0.0%	0.0%	-0.1%
Cash	0.0%	0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	0.9%	1.8%	-0.8%	-0.1%	0.0%	0.0%	0.0%
Absolute Return	-0.2%	1.3%	-1.5%	-0.1%	0.0%	0.0%	-0.1%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
<b>Total</b>	<b>2.7%</b>	<b>2.5%</b>	<b>0.1%</b>	<b>-0.2%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>0.1%</b>

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

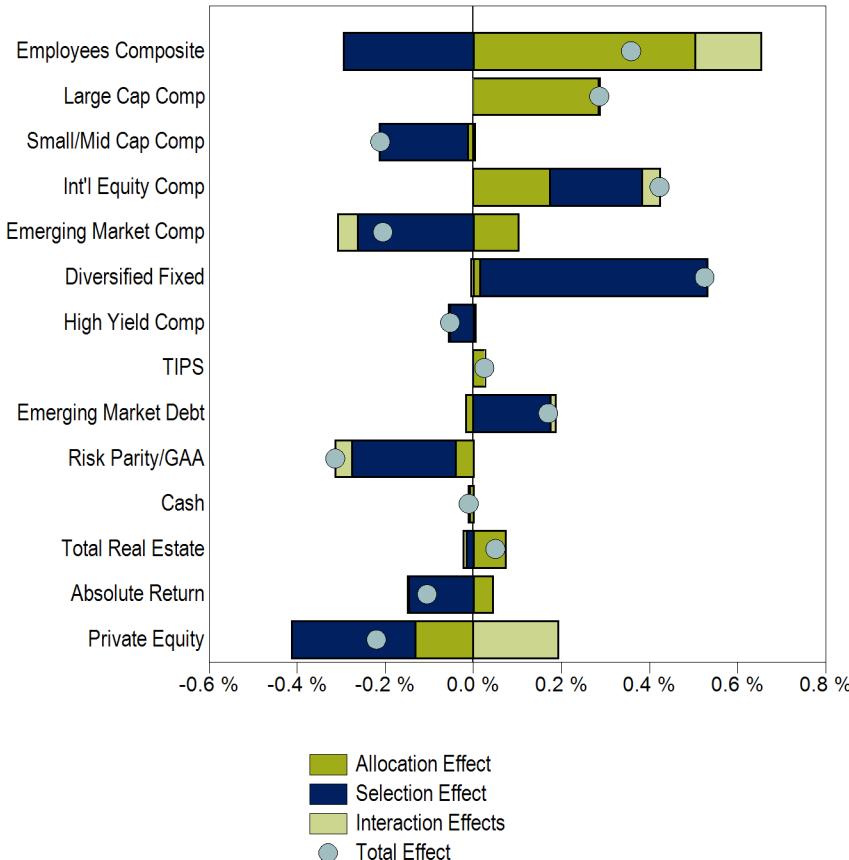
The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite.

May not add up due to rounding.

# Vermont State Employees

## Total Fund Attribution Analysis - Net

**Attribution Effects Relative to Policy Index**  
1 Year Ending June 30, 2017



**Attribution Summary**  
1 Year Ending June 30, 2017

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	17.8%	17.8%	0.0%	0.0%	0.3%	0.0%	0.3%
Small/Mid Cap Comp	18.1%	22.0%	-3.8%	-0.2%	0.0%	0.0%	-0.2%
Int'l Equity Comp	22.5%	20.3%	2.1%	0.2%	0.2%	0.0%	0.4%
Emerging Market Comp	18.7%	23.7%	-5.0%	-0.3%	0.1%	0.0%	-0.2%
Diversified Fixed	2.3%	-0.3%	2.6%	0.5%	0.0%	0.0%	0.5%
High Yield Comp	11.6%	12.7%	-1.1%	-0.1%	0.0%	0.0%	-0.1%
TIPS	-0.6%	-0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt	9.0%	5.5%	3.4%	0.2%	0.0%	0.0%	0.2%
Risk Parity/GAA	5.0%	8.8%	-3.8%	-0.2%	0.0%	0.0%	-0.3%
Cash	0.0%	0.5%	-0.5%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	6.6%	7.0%	-0.4%	0.0%	0.1%	0.0%	0.1%
Absolute Return	4.1%	5.7%	-1.6%	-0.1%	0.0%	0.0%	-0.1%
Private Equity	7.8%	13.3%	-5.5%	-0.3%	-0.1%	0.2%	-0.2%
<b>Total</b>	<b>10.8%</b>	<b>10.2%</b>	<b>0.7%</b>	<b>-0.3%</b>	<b>0.5%</b>	<b>0.1%</b>	<b>0.4%</b>

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report.

The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark.

The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite.

May not add up due to rounding.

Absolute Return's Wtd. index Return is calculated using a weighting of the respective benchmarks for each underlying strategy part of the composite.



NEPC, LLC

June 30, 2017

# Vermont State Employees

## Analytics Definitions

Asset Allocation Effect - Measures VPIC's ability to effectively allocate their portfolio's assets to various asset classes. The allocation effect determines whether the overweighting or underweighting of asset classes relative to a benchmark contributes positively or negatively to the overall portfolio return. Positive allocation occurs when the portfolio is overweighted in an asset class that outperforms the benchmark. Negative allocation occurs when the portfolio is overweighted in an asset class that underperforms the benchmark and underweighted in an asset class that outperforms the benchmark.

Selection Effect - Measures VPIC's ability to select managers within a given asset class relative to a benchmark. The over or underperformance of the portfolio is weighted by the benchmark weight, therefore, selection is not affected by VPIC's allocation to the asset class. The weight of the manager in the portfolio determines the size of the effect -- the larger the manager, the larger the effect is, positive or negative.

Interaction Effect - The interaction effect measures the combined impact of VPIC's manager selection and manager allocation decisions within an asset class. For example, if VPIC had superior manager selection and overweighted that particular asset class, the interaction effect is positive. If VPIC had superior manager selection, but underweighted that asset class, the interaction effect is negative. In this case, VPIC did not take advantage of the superior manager selection by allocating more assets to that asset class.



NEPC, LLC

June 30, 2017

## Vermont State Employees

### Risk Statistics - 3 Years Ending June 30, 2017 - Net

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Employees Composite	100.00%	3.67%	84	5.66%	27	-0.35%	56	0.61	78	1.05	64	0.88%	32
Policy Index	--	3.78%	81	5.24%	10	0.00%	36	0.68	65	1.18	47	0.00%	1
US Equity	23.93%	9.14%	27	10.83%	28	-0.06%	30	0.82	21	1.38	23	1.40%	2
Russell 3000	--	9.10%	27	10.63%	25	0.00%	29	0.83	19	1.37	24	0.00%	1
Large Cap Comp	18.51%	9.27%	27	10.45%	36	-0.42%	31	0.86	24	1.56	19	0.70%	1
S&P 500	--	9.61%	22	10.35%	34	0.00%	24	0.91	18	1.52	21	0.00%	1
Small/Mid Cap Comp	5.42%	9.09%	20	12.83%	46	3.06%	24	0.69	21	1.35	12	4.05%	2
Russell 2000	--	7.36%	38	15.38%	93	0.00%	61	0.46	57	0.77	53	0.00%	1
Int'l Equity Comp	14.90%	2.68%	44	11.78%	42	1.60%	45	0.21	44	0.37	43	2.06%	7
MSCI EAFE	--	1.15%	77	12.42%	76	0.00%	78	0.07	78	0.13	76	0.00%	1
Emerging Market Comp	7.24%	1.64%	55	15.29%	61	0.65%	55	0.09	56	0.18	49	5.16%	56
MSCI Emerging Markets	--	1.07%	68	16.06%	78	0.00%	67	0.05	67	0.10	66	0.00%	1
US Fixed Income	28.20%	3.42%	30	2.96%	61	1.27%	27	1.07	26	1.57	29	1.69%	36
BBgBarc US Aggregate TR	--	2.48%	52	2.90%	59	0.00%	76	0.77	61	1.07	66	0.00%	1
Diversified Fixed	18.72%	3.51%	29	3.00%	61	1.15%	28	1.09	24	1.37	40	1.22%	24
BBgBarc US Aggregate TR	--	2.48%	52	2.90%	59	0.00%	76	0.77	61	1.07	66	0.00%	1
Unconstrained Fixed Income	5.92%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	3.56%	16	3.68%	51	0.00%	48	0.90	28	1.50	28	0.00%	1
High Yield Comp	5.01%	4.36%	30	5.04%	43	0.69%	38	0.82	41	1.48	48	1.62%	37
BBgBarc US High Yield TR	--	4.48%	28	6.09%	83	0.00%	57	0.70	55	1.56	40	0.00%	1
TIPS	4.48%	0.59%	27	3.90%	70	-0.05%	22	0.09	23	0.16	21	0.18%	4
BBgBarc US TIPS TR	--	0.63%	23	3.83%	59	0.00%	18	0.10	18	0.18	18	0.00%	1
Emerging Market Debt	5.14%	5.05%	9	6.14%	28	0.44%	15	0.78	13	1.21	16	1.32%	9
JP Morgan EMBI Global TR	--	4.64%	18	6.04%	27	0.00%	25	0.73	21	1.07	22	0.00%	1
Total Real Estate	6.08%	10.40%	--	4.64%	--	0.15%	--	0.61	--	0.56	--	1.44%	--
NCREIF Property Index	--	10.16%	--	4.28%	--	0.00%	--	0.61	--	0.52	--	0.00%	--
Absolute Return	8.82%	0.02%	80	3.15%	21	-1.29%	76	-0.07	83	-0.09	83	1.66%	6
HFRI Fund of Funds Composite Index	--	1.53%	59	3.30%	27	0.00%	56	0.39	51	0.45	56	0.00%	1
Risk Parity/GAA	4.08%	0.49%	76	7.32%	62	-1.96%	80	0.03	77	0.06	77	4.42%	41
60% MSCI World (Net) / 40% CITI WGBI	--	2.86%	32	7.04%	55	0.00%	42	0.37	38	0.74	26	0.00%	1



NEPC, LLC

June 30, 2017

## Vermont State Employees

### Risk Statistics - 5 Years Ending June 30, 2017 - Net

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Employees Composite	100.00%	6.60%	91	5.50%	31	-0.39%	67	1.17	83	2.04	70	0.84%	26
Policy Index	--	6.48%	93	5.05%	13	0.00%	46	1.25	74	2.24	49	0.00%	1
US Equity	23.93%	--	--	--	--	--	--	--	--	--	--	--	--
Russell 3000	--	14.58%	34	9.80%	18	0.00%	29	1.47	12	2.53	17	0.00%	1
Large Cap Comp	18.51%	14.92%	23	9.67%	28	0.16%	21	1.53	10	2.87	8	0.74%	1
S&P 500	--	14.63%	28	9.56%	24	0.00%	26	1.51	11	2.61	18	0.00%	1
Small/Mid Cap Comp	5.42%	14.53%	30	11.96%	47	3.00%	43	1.20	31	2.44	12	3.47%	1
Russell 2000	--	13.70%	44	13.88%	87	0.00%	85	0.98	75	1.61	70	0.00%	1
Int'l Equity Comp	14.90%	10.04%	43	11.20%	38	1.87%	42	0.88	38	1.63	29	2.08%	7
MSCI EAFE	--	8.69%	67	11.74%	71	0.00%	79	0.73	72	1.28	67	0.00%	1
Emerging Market Comp	7.24%	3.95%	73	14.40%	70	0.20%	71	0.26	72	0.44	69	4.74%	51
MSCI Emerging Markets	--	3.96%	73	14.40%	70	0.00%	75	0.26	72	0.44	69	0.00%	1
US Fixed Income	28.20%	--	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	--	2.21%	61	2.86%	52	0.00%	83	0.72	77	0.98	74	0.00%	1
Diversified Fixed	18.72%	2.90%	47	3.17%	63	0.62%	53	0.86	62	1.10	64	1.13%	24
BBgBarc US Aggregate TR	--	2.21%	61	2.86%	52	0.00%	83	0.72	77	0.98	74	0.00%	1
Unconstrained Fixed Income	5.92%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	4.15%	43	3.78%	57	0.00%	72	1.06	50	1.51	53	0.00%	1
High Yield Comp	5.01%	6.48%	35	4.40%	30	0.84%	33	1.44	33	2.27	46	1.37%	36
BBgBarc US High Yield TR	--	6.89%	25	5.28%	76	0.00%	64	1.27	58	2.37	41	0.00%	1
TIPS	4.48%	0.20%	56	4.56%	73	-0.07%	55	0.01	56	0.01	55	0.16%	1
BBgBarc US TIPS TR	--	0.27%	37	4.52%	59	0.00%	40	0.02	40	0.03	40	0.00%	1
Emerging Market Debt	5.14%	5.90%	14	6.65%	28	0.91%	16	0.86	16	1.20	15	1.27%	7
JP Morgan EMBI Global TR	--	5.20%	29	6.81%	31	0.00%	30	0.74	26	1.04	30	0.00%	1
Total Real Estate	6.08%	11.43%	--	4.92%	--	0.98%	--	0.11	--	0.12	--	1.51%	--
NCREIF Property Index	--	10.49%	--	4.30%	--	0.00%	--	-0.09	--	-0.09	--	0.00%	--
Absolute Return	8.82%	4.51%	64	3.53%	33	0.79%	57	1.23	44	1.88	40	1.63%	7
HFRI Fund of Funds Composite Index	--	3.86%	70	3.25%	27	0.00%	67	1.14	49	1.51	53	0.00%	1
Risk Parity/GAA	4.08%	4.35%	58	7.22%	64	-1.75%	82	0.58	71	0.86	74	4.10%	44
60% MSCI World (Net) / 40% CITI WGBI	--	6.75%	24	6.63%	53	0.00%	47	0.99	17	2.07	5	0.00%	1



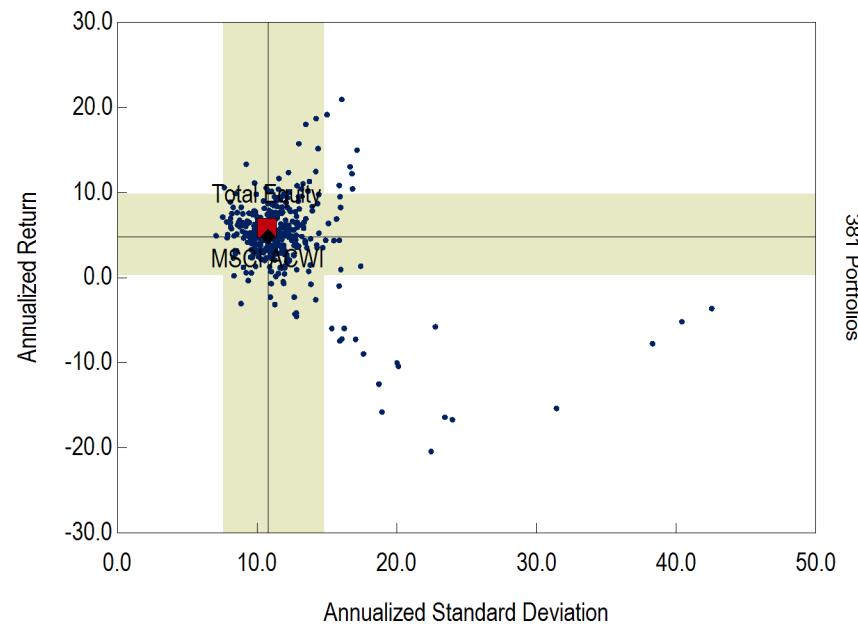
NEPC, LLC

June 30, 2017

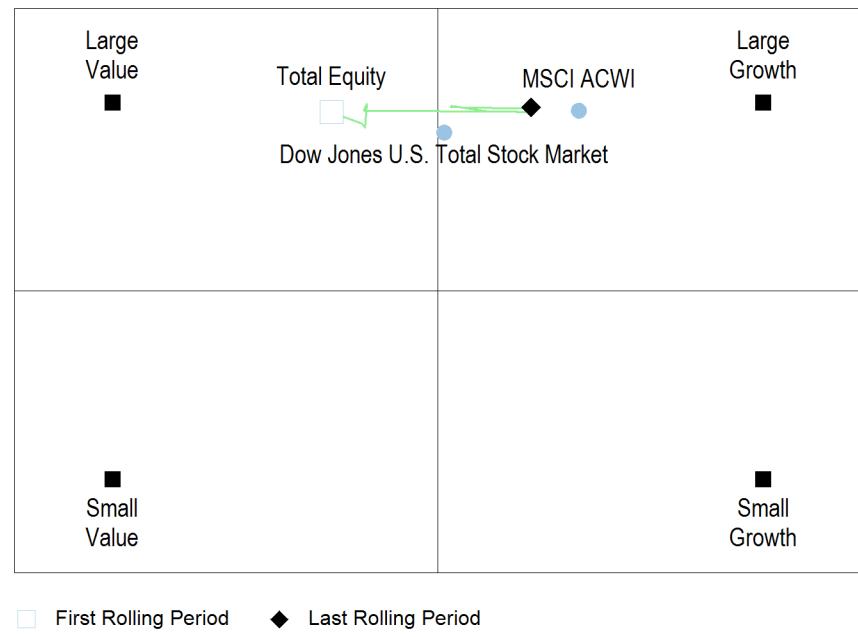
# **Manager Characteristics**

# Total Equity Composite

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2017



U.S. Effective Style Map  
3 Years Ending June 30, 2017

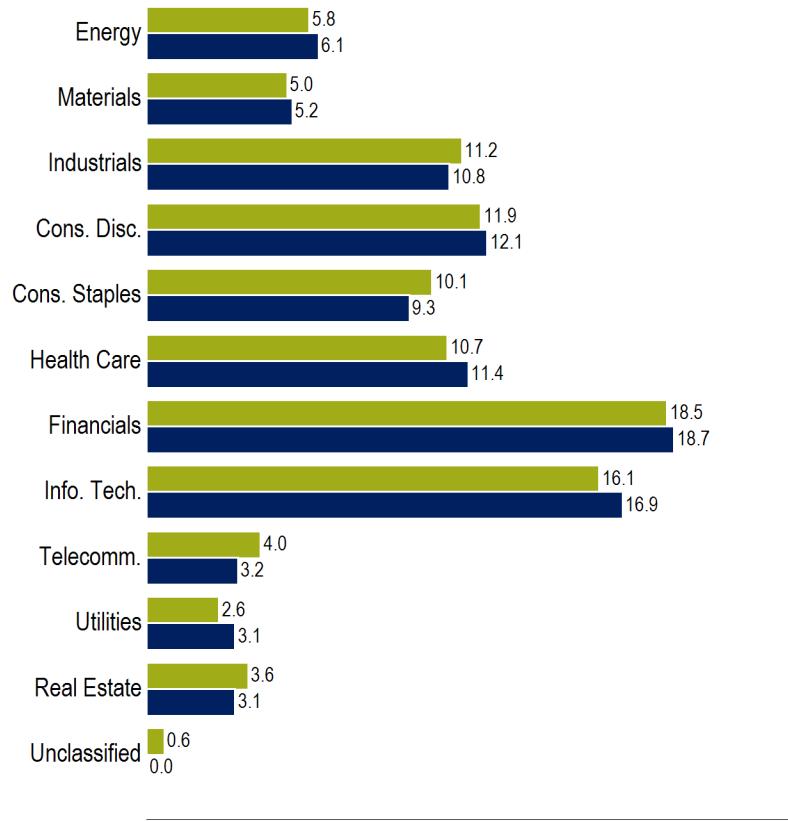


# Total Equity Composite

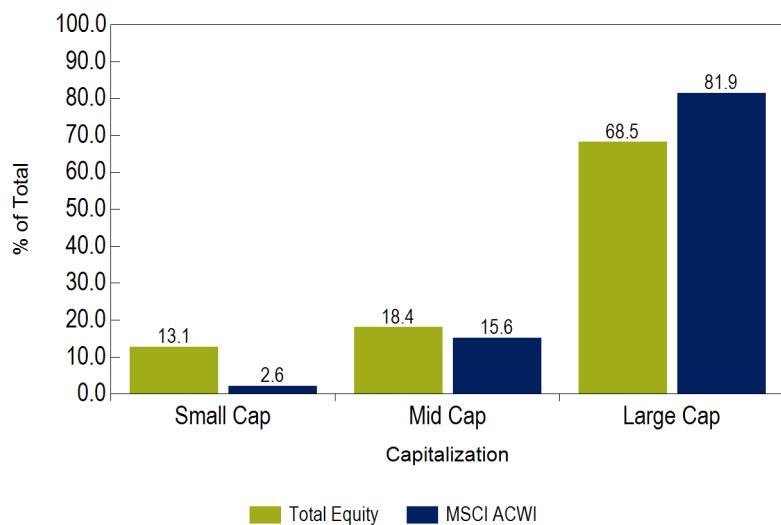
## Characteristics

	Portfolio	MSCI ACWI
Number of Holdings	2,903	2,501
Weighted Avg. Market Cap. (\$B)	71.69	104.74
Median Market Cap. (\$B)	8.36	9.35
Price To Earnings	23.50	23.01
Price To Book	4.02	3.49
Price To Sales	2.97	2.87
Return on Equity (%)	17.38	15.98
Yield (%)	2.21	2.40
Beta	0.98	1.00
R-Squared	0.98	1.00

## Sector Allocation (%) vs MSCI ACWI



## Market Capitalization As of June 30, 2017



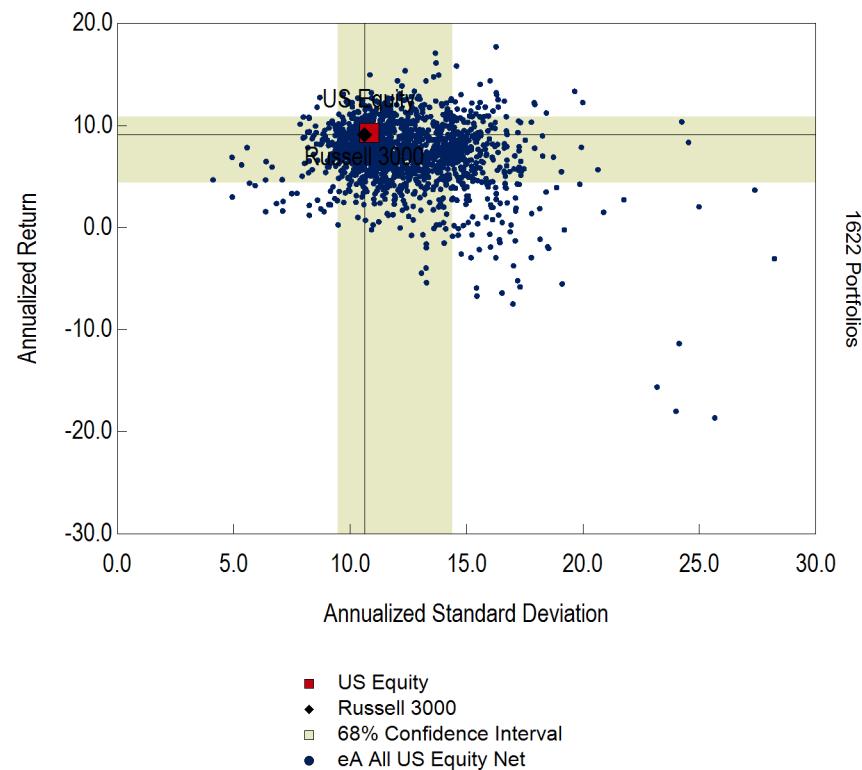
# Total Equity Composite

Top Ten Holdings		Top Positive Contributors			Top Negative Contributors		
		Relative Contribution %	Return %		Relative Contribution %	Return %	
ASTRA INTERNATIONAL	1.4%	SAMSUNG ELTN.PREF.	0.1%	13.5%	TENCENT HOLDINGS	-0.1%	25.0%
SAMSUNG ELECTRONICS	1.4%	ITC	0.1%	17.7%	ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.1%	30.7%
TELEKOMUNIKASI INDONESIA	1.1%	YUM CHINA ORD	0.1%	45.0%	NESTLE 'R'	-0.1%	16.9%
APPLE	1.1%	GPO FINANCE BANORTE	0.1%	15.5%	HSBC HDG. (ORD \$0.50)	-0.1%	14.9%
BANK CENTRAL ASIA	1.0%	AIA GROUP	0.1%	17.2%	BNC.BRADESCO PF.SPN.ADR 1:1	0.0%	-8.5%
SAMSUNG ELTN.PREF.	1.0%	TAIWAN SEMICON.MNFG.	0.1%	13.6%	MASSMART	0.0%	-20.7%
TAIWAN SEMICON.MNFG.	0.9%	QANTAS AIRWAYS	0.1%	47.8%	TRUWORTHS INTL.	0.0%	-15.5%
BANK RAKYAT INDONESIA	0.8%	GRUPO AEROPORTUARIO DEL SURESTE ADR 1:10	0.1%	23.5%	NOVO NORDISK 'B'	0.0%	24.2%
MICROSOFT	0.8%	FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.1%	11.9%	WW GRAINGER	0.0%	-21.9%
HOUSING DEVELOPMENT FIN.	0.7%	AYALA LAND	0.1%	19.6%	HON HAI PRECN.IND.	0.0%	28.2%

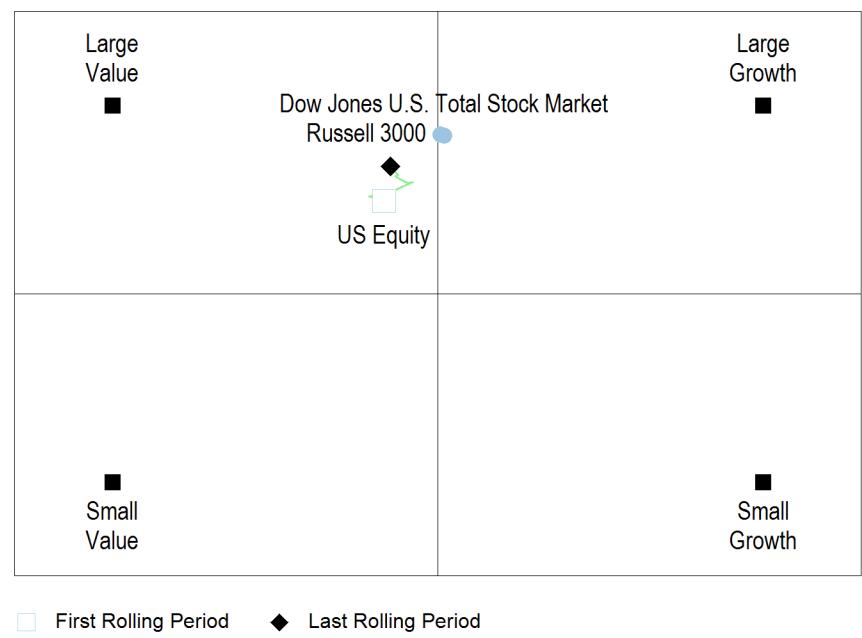
	Equity Sector Attribution					Returns		Sector Weights		
	Total Effects	Selection Effect	Attribution Effects		Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
			Allocation Effect	Effect						
Energy	0.0%	0.0%	0.0%	0.0%	0.0%	-4.8%	-4.7%	6.6%	6.7%	
Materials	0.1%	0.1%	0.0%	0.0%	0.0%	3.2%	2.1%	6.0%	5.3%	
Industrials	0.0%	0.0%	0.0%	0.0%	0.0%	5.5%	5.8%	11.3%	10.6%	
Consumer Discretionary	-0.2%	-0.1%	0.0%	0.0%	-0.1%	2.8%	4.2%	11.2%	12.1%	
Consumer Staples	-0.1%	0.0%	0.0%	0.0%	-0.1%	3.8%	4.5%	9.9%	9.5%	
Health Care	0.4%	0.4%	0.0%	0.0%	0.0%	10.3%	7.0%	11.2%	11.1%	
Financials	0.0%	0.1%	0.0%	0.0%	-0.1%	5.7%	5.2%	17.3%	18.5%	
Information Technology	-0.1%	-0.1%	0.0%	0.0%	0.0%	6.2%	6.7%	16.1%	16.4%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	0.0%	-1.1%	-0.1%	3.1%	3.4%	
Utilities	0.0%	0.0%	0.0%	0.0%	0.0%	3.7%	3.7%	2.8%	3.1%	
Real Estate	0.0%	0.0%	0.0%	0.0%	0.0%	4.0%	4.3%	4.2%	3.1%	
Cash	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	--	0.4%	0.0%	
Portfolio	0.1%	=	0.4%	+	0.0%	+ -0.3%	4.5%	4.4%	100.0%	100.0%

# Domestic Equity Composite

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2017



U.S. Effective Style Map  
3 Years Ending June 30, 2017

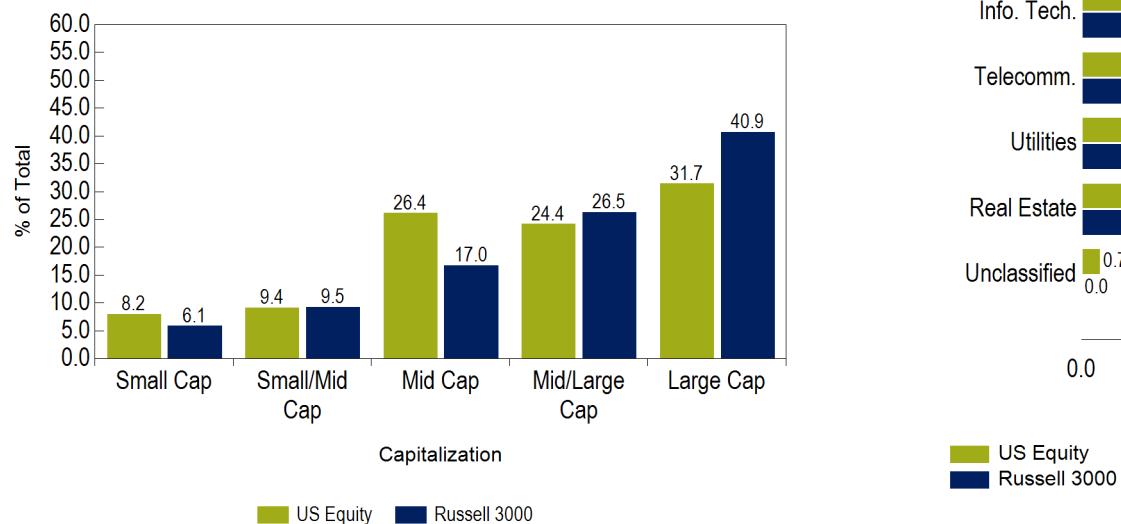


# Domestic Equity Composite

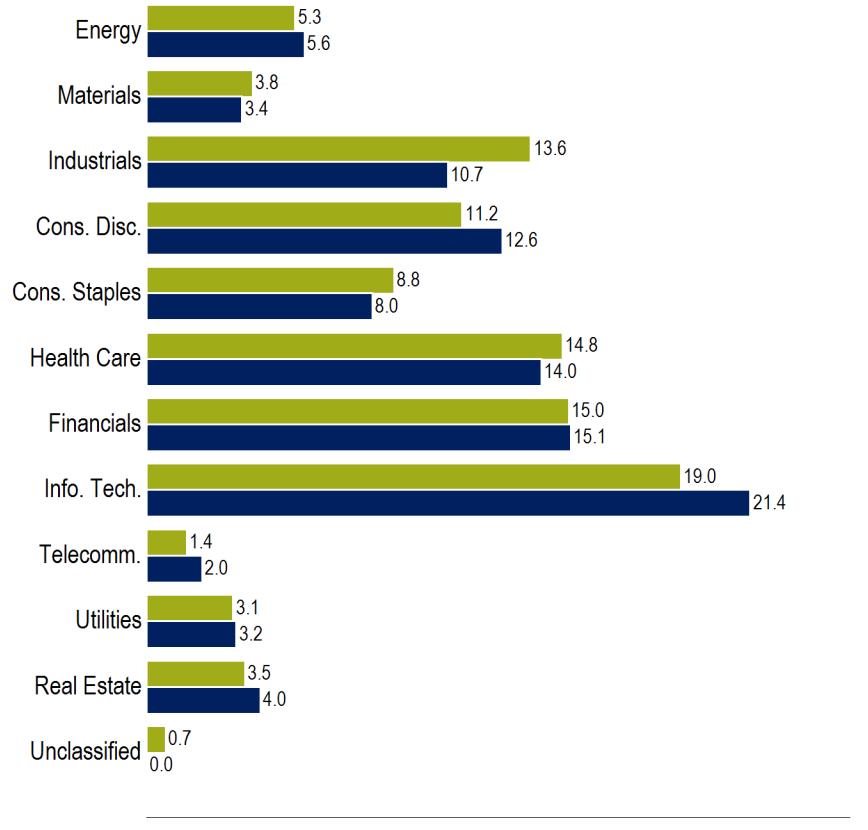
## Characteristics

	Portfolio	Russell 3000
Number of Holdings	630	3,000
Weighted Avg. Market Cap. (\$B)	101.87	128.51
Median Market Cap. (\$B)	11.69	1.56
Price To Earnings	26.37	24.73
Price To Book	4.84	4.17
Price To Sales	3.46	3.48
Return on Equity (%)	18.08	16.72
Yield (%)	1.82	1.87
Beta	1.01	1.00
R-Squared	0.98	1.00

Market Capitalization  
As of June 30, 2017



## Sector Allocation (%) vs Russell 3000



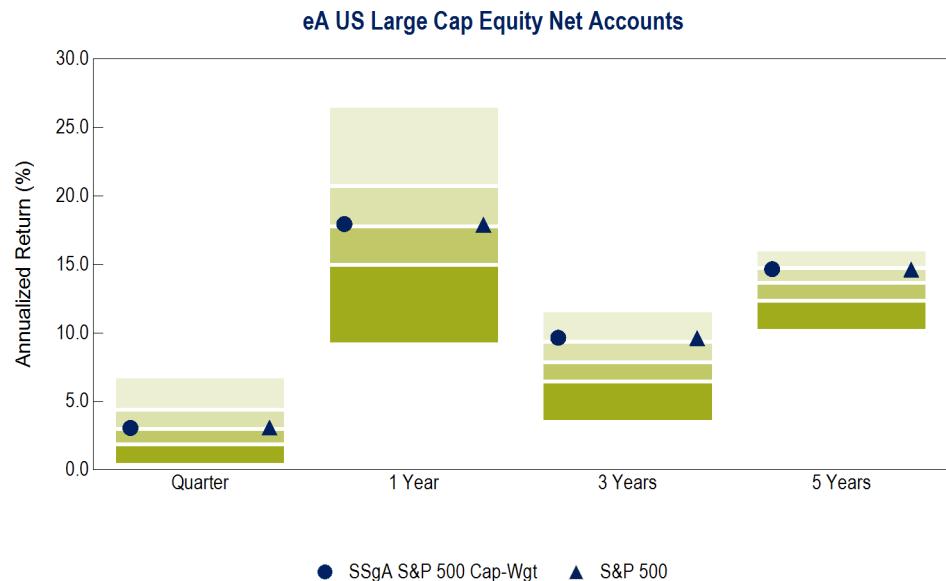
# Domestic Equity Composite

Top Ten Holdings		Top Positive Contributors			Top Negative Contributors		
		Relative Contribution %	Return %		Relative Contribution %	Return %	
APPLE	2.2%	SAMSUNG ELTN.PREF.	0.1%	13.5%	AMAZON.COM	-0.1%	9.2%
MICROSOFT	1.6%	TAIWAN SEMICON.MNFG.	0.1%	13.6%	MICROSOFT	-0.1%	5.2%
AMAZON.COM	1.1%	AIA GROUP	0.1%	17.2%	ORACLE	-0.1%	12.9%
JOHNSON & JOHNSON	1.1%	ITC	0.1%	17.7%	ALPHABET 'A'	-0.1%	9.7%
FACEBOOK CLASS A	1.1%	GPO FINANCE BANORTE	0.1%	15.5%	JOHNSON & JOHNSON	-0.1%	6.9%
EXXON MOBIL	1.0%	GENERAL ELECTRIC	0.1%	-8.6%	ALPHABET 'C'	-0.1%	9.5%
JP MORGAN CHASE & CO.	1.0%	YUM CHINA ORD	0.1%	45.0%	UNITEDHEALTH GROUP	-0.1%	13.5%
BERKSHIRE HATHAWAY 'B'	1.0%	AT&T	0.1%	-8.1%	CITIGROUP	-0.1%	12.1%
ALPHABET 'A'	0.8%	GRUPO AEROPORTUARIO DEL SURESTE ADR 1:10	0.1%	23.5%	MCDONALDS	-0.1%	18.9%
ALPHABET 'C'	0.8%	FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.0%	11.9%	FACEBOOK CLASS A	-0.1%	6.3%

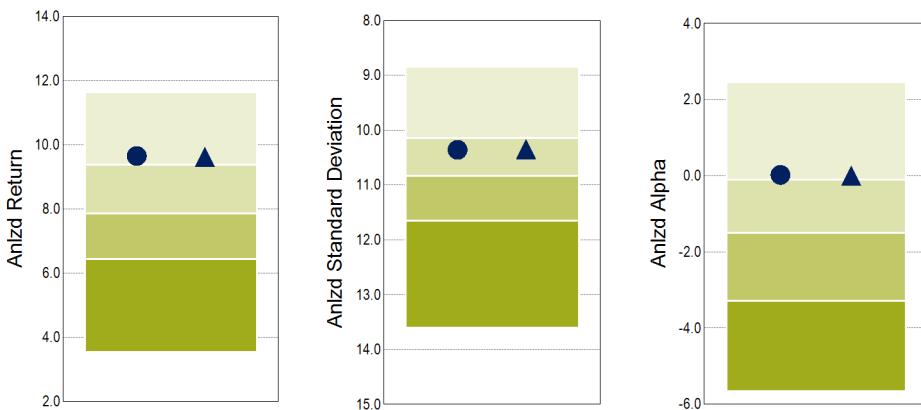
	Equity Sector Attribution						Sector Weights		
	Attribution Effects			Returns			Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.1%	0.1%	-0.1%	0.1%	-4.8%	-7.7%	6.6%	6.1%	
Materials	0.0%	0.0%	0.0%	0.1%	3.2%	2.6%	6.0%	3.4%	
Industrials	0.2%	0.0%	0.0%	0.1%	5.5%	4.2%	11.3%	10.7%	
Consumer Discretionary	0.0%	-0.1%	0.0%	0.1%	2.8%	3.0%	11.2%	12.7%	
Consumer Staples	0.2%	0.2%	0.0%	0.1%	3.8%	1.2%	9.9%	8.3%	
Health Care	0.2%	0.2%	-0.1%	0.1%	10.3%	7.4%	11.2%	13.4%	
Financials	0.3%	0.1%	0.0%	0.2%	5.7%	3.8%	17.3%	15.0%	
Information Technology	0.2%	0.4%	-0.1%	-0.1%	6.2%	4.3%	16.1%	21.2%	
Telecommunication Services	0.1%	0.1%	-0.1%	0.1%	-1.1%	-6.6%	3.1%	2.2%	
Utilities	0.0%	0.0%	0.0%	0.0%	3.7%	2.2%	2.8%	3.2%	
Real Estate	0.1%	0.1%	0.0%	0.0%	4.0%	2.3%	4.2%	4.0%	
Cash	0.0%	0.0%	0.0%	0.0%	0.2%	--	0.5%	0.0%	
Portfolio	1.5%	=	1.1% + -0.3%	+ 0.8%	4.5%	3.0%	100.0%	100.0%	

# SSgA S&P 500 Cap-Wgt

Using a replication process, we purchase each security for the Strategy in the same capitalization weight as it appears in the S&P 500 Index. Replication results in low turnover, accurate tracking, and low costs. SSgA's internal liquidity has allowed the firm to acquire many of the benchmark constituents for free. These free trading opportunities have allowed SSgA to gradually reduce security-level misweights while avoiding the open market. This process has resulted in portfolios that look and behave like the benchmark, and do so at a very low cost. SSgA's passive equity process objective is to remain fully invested in the equity market at all times. To accomplish this, it holds a small amount of unleveraged exchange-traded S&P 500® futures contracts to maintain full exposure. SSgA tends to hold approximately 1-3% of the strategy's value in suitable CFTC approved index futures contracts. This position in futures also allows the firm to accommodate cash flows into and out of the portfolio on a daily basis and to equitize dividend receivables to achieve closer tracking.



## 3 Year Risk Statistics



NEPC, LLC

# SSgA S&P 500 Cap-Wgt

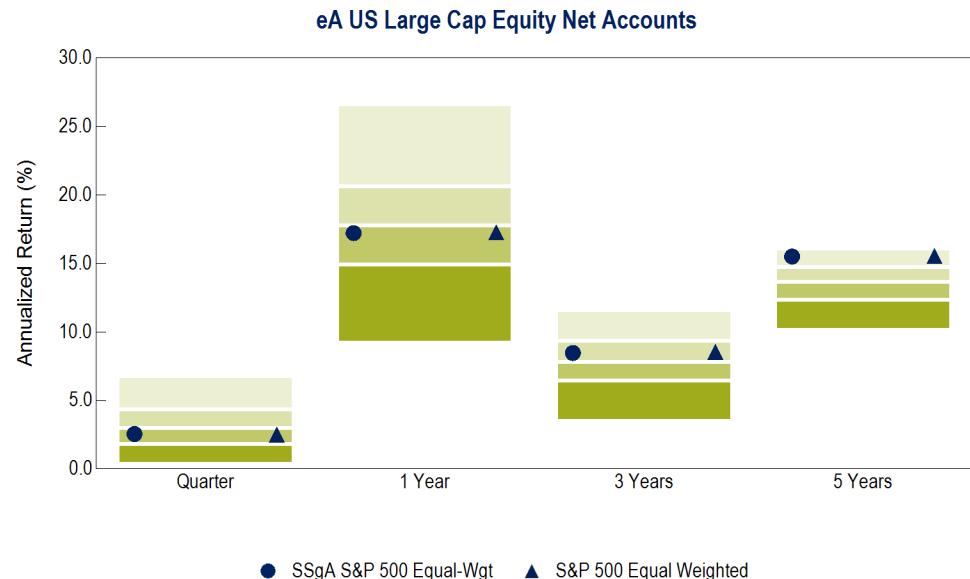
Characteristics				Top Positive Contributors			Top Negative Contributors		
	Portfolio	S&P 500		Relative Contribution %	Return %		Relative Contribution %	Return %	
Number of Holdings	505	505	CONSTELLATION BRANDS 'A'	0.0%	19.9%	O REILLY AUTOMOTIVE	0.0%	-18.9%	
Weighted Avg. Market Cap. (\$B)	154.9	154.7	CSX	0.0%	17.6%	EQUINIX	0.0%	7.7%	
Median Market Cap. (\$B)	20.6	20.6	INTUITIVE SURGICAL	0.0%	22.0%	H&R BLOCK (HRB)	0.0%	34.0%	
Price To Earnings	25.1	24.7	THERMO FISHER SCIENTIFIC (TMO)	0.0%	13.7%	ALEXANDRIA RLST.EQTIES.	0.0%	9.8%	
Price To Book	5.4	4.6	TRANSOCEAN	0.0%	-33.9%	REGENERON PHARMS. (REGN)	0.0%	26.7%	
Price To Sales	3.6	3.4	ABBVIE (ABBV)	0.0%	12.4%	AUTOZONE (AZO)	0.0%	-21.1%	
Return on Equity (%)	20.3	19.0	VISA 'A' (V)	0.0%	5.7%	EDWARDS LIFESCIENCES (EW)	0.0%	25.7%	
Yield (%)	2.0	2.0	SOUTHWESTERN ENERGY (SWN)	0.0%	-25.6%	DISCOVER FINANCIAL SVS.	0.0%	-8.6%	
Beta	1.0	1.0	ANADARKO PETROLEUM	0.0%	-26.8%	STATE STREET	0.0%	13.2%	
R-Squared	1.0	1.0	NVIDIA (NVDA)	0.0%	32.8%	INTERNATIONAL BUS.MCHS.	0.0%	-10.8%	

## SSgA S&P 500 Cap-Wgt Performance Attribution vs. S&P 500

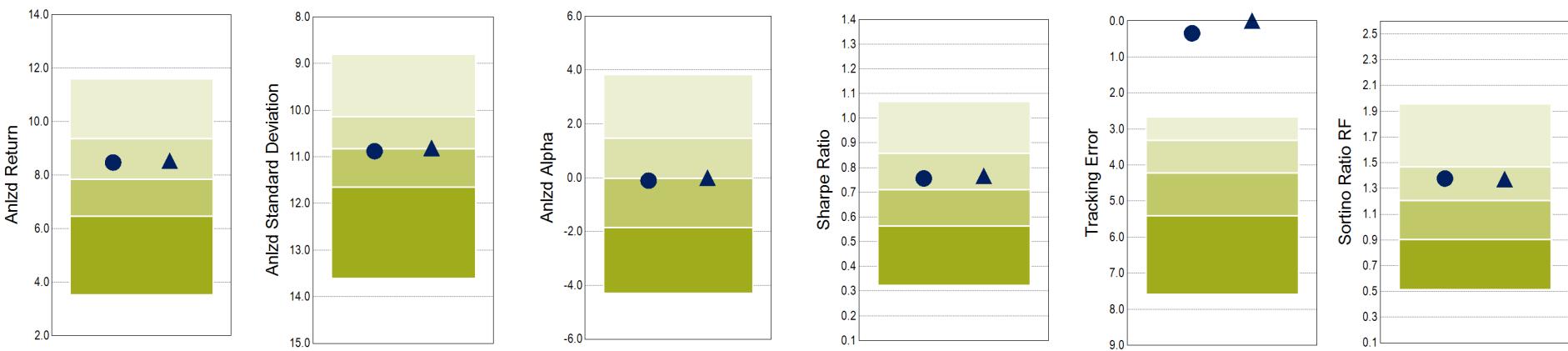
	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	-6.4%	-6.4%	6.6%	6.6%
Materials	0.0%	0.0%	0.0%	0.0%	2.9%	2.8%	2.9%	2.9%
Industrials	0.0%	0.0%	0.0%	0.0%	4.9%	4.9%	10.1%	10.0%
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	2.4%	2.4%	12.3%	12.3%
Consumer Staples	0.0%	0.0%	0.0%	0.0%	1.6%	1.6%	9.3%	9.2%
Health Care	0.0%	0.0%	0.0%	0.0%	7.1%	7.1%	13.9%	13.9%
Financials	0.0%	0.0%	0.0%	0.0%	4.3%	4.3%	14.4%	14.4%
Information Technology	0.0%	0.0%	0.0%	0.0%	4.1%	4.1%	22.1%	22.1%
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-7.1%	-7.1%	2.4%	2.4%
Utilities	0.0%	0.0%	0.0%	0.0%	2.2%	2.2%	3.2%	3.2%
Real Estate	0.0%	0.0%	0.0%	0.0%	2.8%	2.8%	2.9%	2.9%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
Portfolio	0.0%	=	0.0%	+ 0.0%	+ 0.0%	3.1%	3.1%	100.0%

# SSgA S&P 500 Equal-Wgt

The Strategy is managed using a "passive" or "indexing" investment approach, by which SSgA attempts to match, before expenses, the performance of the Index. SSgA will typically attempt to invest in the securities comprising the Index, in the same proportions as they are represented in the Index. In some cases, it may not be possible or practicable to purchase all of the securities comprising the Index, or to hold them in the same weightings as they represent in the Index. In those circumstances, SSgA may employ a sampling or optimization technique to construct the portfolio in question. From time to time securities are added to or removed from the Index. SSgA may sell securities that are represented in the Index, or purchase securities that are not yet represented in the Index, in anticipation of their removal from or addition to the Index. The Strategy may at times purchase or sell futures contracts on the Index, or options on those futures, or engage in other transactions involving the use of derivatives, in lieu of investment directly in the securities making up the Index or to enhance the Strategy's replication of the Index return. The Strategy's return may not match the return of the Index.



## 3 Year Risk Statistics



NEPC, LLC

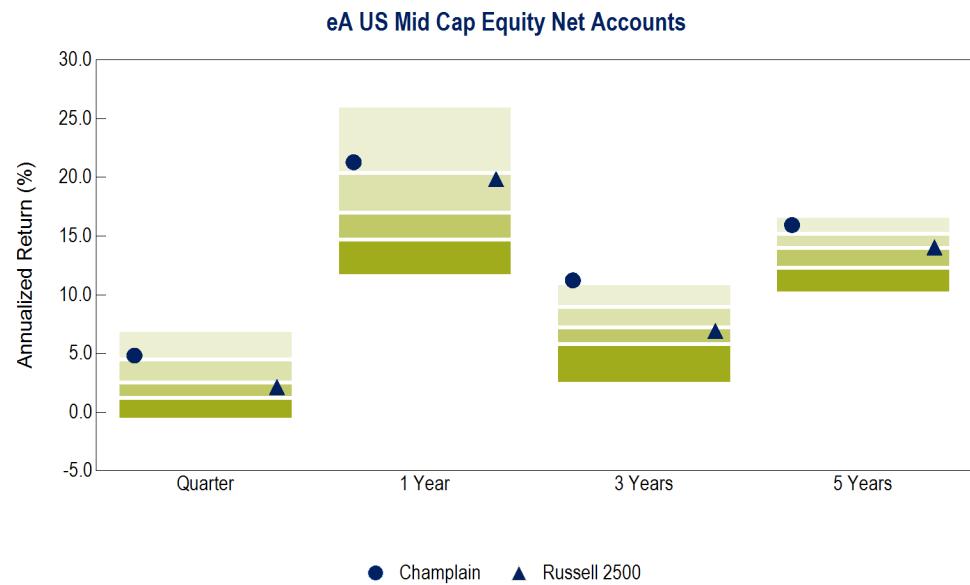
# SSgA S&P 500 Equal-Wgt

Characteristics				Top Positive Contributors			Top Negative Contributors		
	Portfolio	S&P 500		Relative Contribution %	Return %		Relative Contribution %	Return %	
Number of Holdings	497	505	GENERAL ELECTRIC (GE)	0.1%	-8.6%	AMAZON.COM (AMZN)	-0.1%	9.2%	
Weighted Avg. Market Cap. (\$B)	41.8	154.7	AT&T	0.1%	-8.1%	MICROSOFT (MSFT)	-0.1%	5.2%	
Median Market Cap. (\$B)	20.3	20.6	WHOLE FOODS MARKET (WFM)	0.1%	43.0%	ALPHABET 'A'	-0.1%	9.7%	
Price To Earnings	25.4	24.7	H&R BLOCK	0.1%	34.0%	ALPHABET 'C'	-0.1%	9.5%	
Price To Book	4.5	4.6	INTERNATIONAL BUS.MCHS.	0.1%	-10.8%	JOHNSON & JOHNSON (JNJ)	-0.1%	6.9%	
Price To Sales	3.1	3.4	VERIZON COMMUNICATIONS	0.1%	-7.3%	FACEBOOK CLASS A (FB)	-0.1%	6.3%	
Return on Equity (%)	18.3	19.0	CISCO SYSTEMS	0.0%	-6.6%	UNITEDHEALTH GROUP (UNH)	-0.1%	13.5%	
Yield (%)	1.9	2.0	WALT DISNEY (DIS)	0.0%	-6.3%	CITIGROUP	-0.1%	12.1%	
Beta	1.0	1.0	INTEL (INTC)	0.0%	-5.8%	JP MORGAN CHASE & CO. (JPM)	-0.1%	4.6%	
R-Squared	0.9	1.0	C R BARD	0.0%	27.3%	TRANSOCEAN	-0.1%	-33.9%	

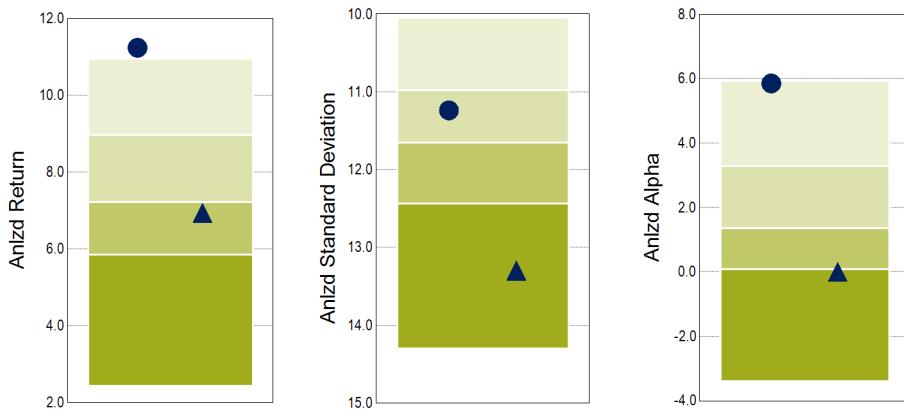
## SSgA S&P 500 Equal-Wgt Performance Attribution vs. S&P 500

	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.3%	-0.3%	0.0%	0.0%	-10.5%	-6.4%	6.8%	6.6%
Materials	0.0%	0.0%	0.1%	0.0%	2.3%	2.8%	5.2%	2.9%
Industrials	0.0%	-0.1%	0.2%	0.0%	3.9%	4.9%	13.5%	10.0%
Consumer Discretionary	-0.2%	-0.2%	0.1%	-0.1%	0.5%	2.4%	16.4%	12.3%
Consumer Staples	-0.1%	-0.1%	0.0%	0.0%	0.7%	1.6%	6.6%	9.2%
Health Care	0.1%	0.2%	-0.1%	0.0%	8.8%	7.1%	12.3%	13.9%
Financials	0.0%	0.1%	-0.1%	0.0%	5.1%	4.3%	13.0%	14.4%
Information Technology	-0.4%	-0.1%	-0.4%	0.1%	3.4%	4.1%	13.4%	22.1%
Telecommunication Services	0.2%	0.1%	0.1%	-0.1%	-2.0%	-7.1%	0.8%	2.4%
Utilities	0.0%	0.0%	0.1%	0.0%	1.8%	2.2%	5.7%	3.2%
Real Estate	0.0%	0.0%	0.1%	0.0%	1.9%	2.8%	6.2%	2.9%
Cash	0.0%	0.0%	0.0%	0.0%	0.2%	--	0.1%	0.0%
<b>Portfolio</b>	<b>-0.6%</b>	<b>=</b>	<b>-0.5%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>-0.2%</b>	<b>2.5%</b>
					<b>2.5%</b>	<b>3.1%</b>	<b>100.0%</b>	<b>100.0%</b>

Champlain employs a fundamental, bottom-up approach to investing in equity assets. They believe that superior companies purchased at attractive valuations have the highest probability to wealth creation. Champlain seeks strong businesses with credible and sincere management and aims to buy shares of their stock at discounts to fair or intrinsic value. Portfolio construction applies sector weight guidelines and position size rules to manage risk. The portfolio will have some exposure to at least seven out of the eight largest sectors of the S&P 400, with a maximum weighting on 25% in any one sector. Individual positions will not represent more than 2% of the respective companies' outstanding shares and are limited to no more than 5% of assets under management. The portfolio typically holds 50-75 securities with average position sizes of 2%. The strategy's minimum market cap is \$1.5 billion at purchase and a maximum market cap of \$15 billion. In general, no more than 10% of portfolio in stocks with a market cap below \$2B and no more than 5% of portfolio in companies with market cap above \$20B.



## 3 Year Risk Statistics



# Champlain

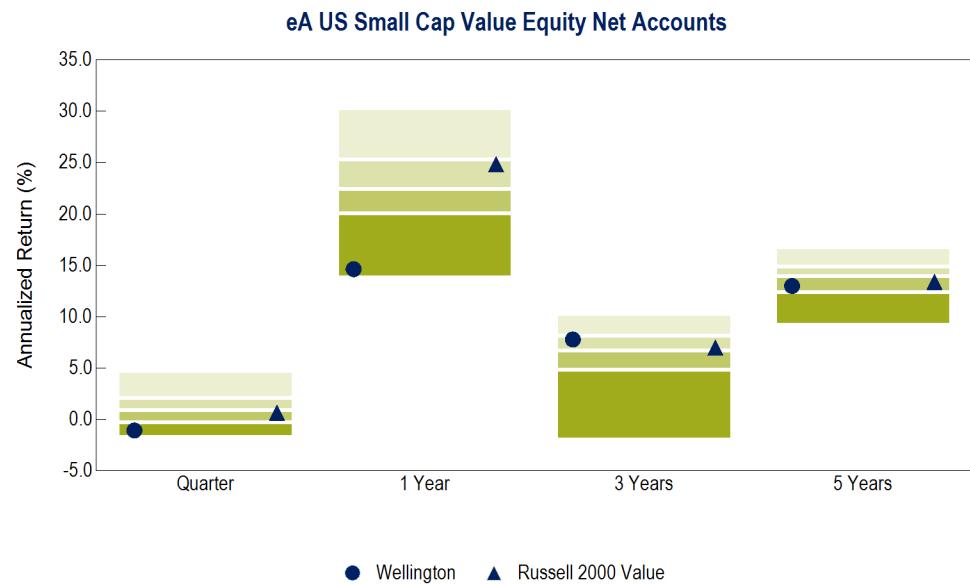
Characteristics	Top Positive Contributors			Top Negative Contributors				
	Portfolio	Russell 2500		Relative Contribution %	Return %	Relative Contribution %		
Number of Holdings	61	2,509	WHOLE FOODS MARKET	0.8%	43.0%	WW GRAINGER	-0.5%	-21.9%
Weighted Avg. Market Cap. (\$B)	9.8	4.4	ALIGN TECHNOLOGY	0.5%	30.9%	ADV.AUTO PARTS (AAP)	-0.4%	-21.3%
Median Market Cap. (\$B)	8.6	1.1	INTEGRA LFSC.HDG. (IART)	0.5%	29.4%	FLOWERS FOODS	-0.2%	-10.0%
Price To Earnings	34.4	24.5	C R BARD	0.5%	27.3%	SNYDERS LANCE	-0.2%	-13.7%
Price To Book	5.8	3.3	COOPER COS. (COO)	0.5%	19.8%	AKAMAI TECHS. (AKAM)	-0.2%	-16.6%
Price To Sales	3.9	3.1	STERIS (STE)	0.4%	17.7%	J M SMUCKER (SJM)	-0.2%	-9.2%
Return on Equity (%)	14.1	12.1	TABLEAU SOFTWARE CL.A	0.3%	23.7%	CORE LABORATORIES	-0.2%	-11.9%
Yield (%)	1.0	1.3	PALO ALTO NETWORKS	0.3%	18.8%	FASTENAL	-0.1%	-14.9%
Beta	0.8	1.0	NORTHERN TRUST	0.3%	12.8%	MOLSON COORS BREWING 'B' (TAP)	-0.1%	-9.4%
R-Squared	0.8	1.0	INDEX	0.3%	21.3%	SPLUNK	-0.1%	-8.7%

## Champlain Performance Attribution vs. Russell 2500

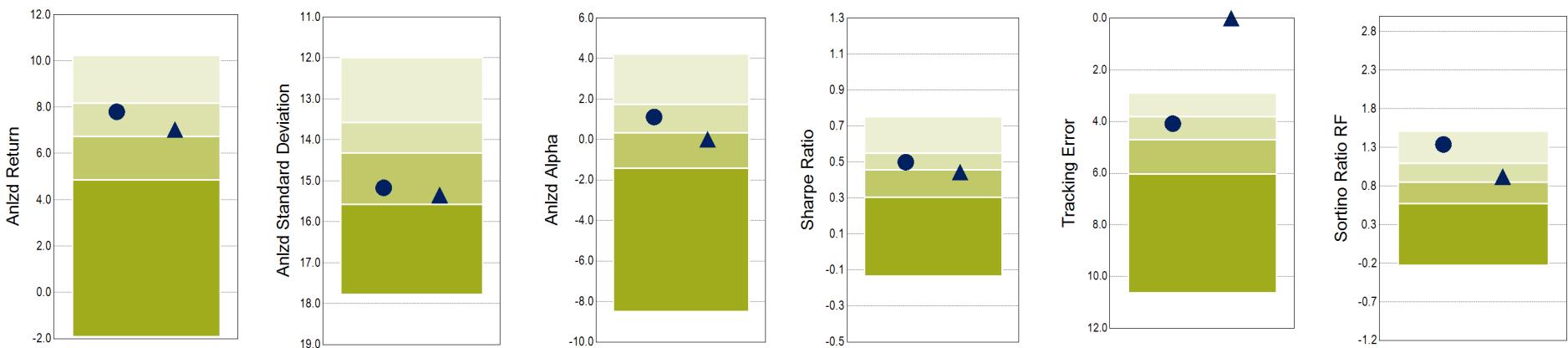
	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.6%	0.1%	0.5%	-0.1%	-17.3%	-20.1%	1.7%	4.4%
Materials	0.2%	0.5%	-0.1%	-0.3%	11.1%	2.3%	2.8%	6.0%
Industrials	-0.1%	-0.1%	0.0%	0.0%	0.7%	1.3%	17.2%	15.6%
Consumer Discretionary	-0.8%	-1.4%	-0.2%	0.8%	-8.9%	2.3%	5.6%	12.6%
Consumer Staples	0.0%	0.1%	-0.3%	0.3%	-0.7%	-3.0%	14.3%	3.1%
Health Care	2.6%	0.9%	0.9%	0.8%	17.4%	9.4%	21.3%	11.5%
Financials	0.0%	0.1%	-0.1%	0.0%	2.3%	1.8%	13.9%	17.4%
Information Technology	0.9%	0.5%	0.2%	0.1%	8.3%	5.1%	20.0%	15.3%
Telecommunication Services	0.0%	--	0.0%	--	--	3.1%	0.0%	0.6%
Utilities	-0.1%	--	-0.1%	--	--	1.8%	0.0%	3.8%
Real Estate	-0.1%	--	-0.1%	--	--	1.4%	0.0%	9.8%
Cash	0.0%	0.0%	0.0%	0.0%	0.2%	--	3.2%	0.0%
<b>Portfolio</b>	<b>3.2%</b>	=	<b>0.7%</b>	<b>+</b>	<b>0.9%</b>	<b>+ 1.6%</b>	<b>5.2%</b>	<b>2.1%</b>
							<b>100.0%</b>	<b>100.0%</b>

# Wellington

Wellington's investment objective is to seek long-term total returns in excess of the Russell 2000 Value Index by investing in conservatively-valued securities of high-quality, small cap companies. Wellington employ a bottom-up stock selection process that utilizes Wellington Management's proprietary, fundamental research to identify undervalued companies that have the potential for significant longer-term rewards. The investment universe consists of all stocks generally between US\$100 million and US\$2 billion in market capitalization. These stocks are reviewed for certain financial and valuation requirements that correspond with our investment process and philosophy. The Small Cap Value Team conducts their own proprietary research and leverages the broader research of the firm as appropriate. The Portfolio is expected to have a lower P/E ratio and other value-oriented characteristics relative to the overall small cap market, with a similar market capitalization. The return on equity is expected to be higher than the small cap value indexes, consistent with the high-quality focus.



## 3 Year Risk Statistics



# Wellington

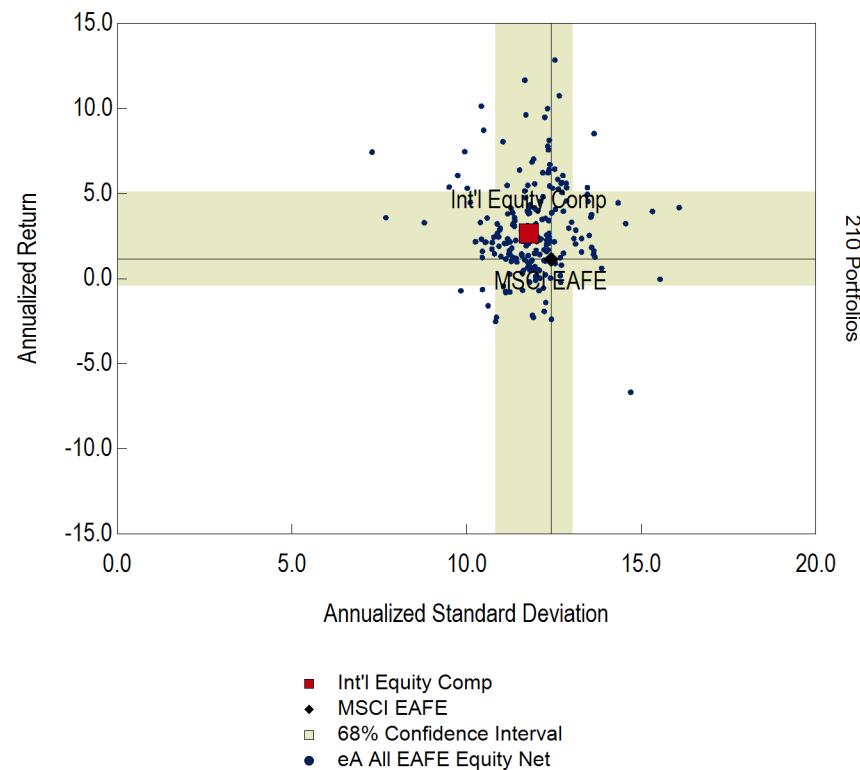
Characteristics				Top Positive Contributors			Top Negative Contributors		
	Portfolio	Russell 2000 Value		Relative Contribution %	Return %		Relative Contribution %	Return %	
Number of Holdings	74	1,399	WNS HDG.ADR 1:1 (WNS)	0.3%	20.1%	SMART & FINAL STORES	-0.4%	-24.8%	
Weighted Avg. Market Cap. (\$B)	1.7	1.8	PHIBRO ANIMAL HLTH.CLA (PAHC)	0.2%	32.2%	FRED'S 'A' (FRED)	-0.3%	-29.2%	
Median Market Cap. (\$B)	1.2	0.7	SUMMIT HOTEL PROPERTIES (INN)	0.2%	17.9%	MUELLER INDUSTRIES	-0.3%	-10.7%	
Price To Earnings	26.0	20.1	CHAS.RVR.LABS.INTL. (CRL)	0.2%	12.5%	CUBIC (CUB)	-0.3%	-12.3%	
Price To Book	2.3	1.7	ICU MEDICAL	0.2%	13.0%	FTI CONSULTING (FCN)	-0.3%	-15.1%	
Price To Sales	2.4	2.7	HANCOCK HOLDING (HBHC)	0.2%	8.1%	SEACOR HDG.	-0.2%	-16.7%	
Return on Equity (%)	8.5	7.4	FORWARD AIR	0.1%	12.3%	SP PLUS (SP)	-0.2%	-9.5%	
Yield (%)	1.6	1.7	BABCOCK & WILCOX ENTS. (BW)	0.1%	25.9%	RESOLUTE ENERGY (REN)	-0.2%	-26.3%	
Beta	1.0	1.0	PRIMORIS SERVICES (PRIM)	0.1%	7.6%	MATTHEWS INTL.'A' (MATW)	-0.2%	-9.2%	
R-Squared	0.9	1.0	GATX (GATX)	0.1%	6.1%	TESCO	-0.2%	-44.7%	

## Wellington Performance Attribution vs. Russell 2000 Value

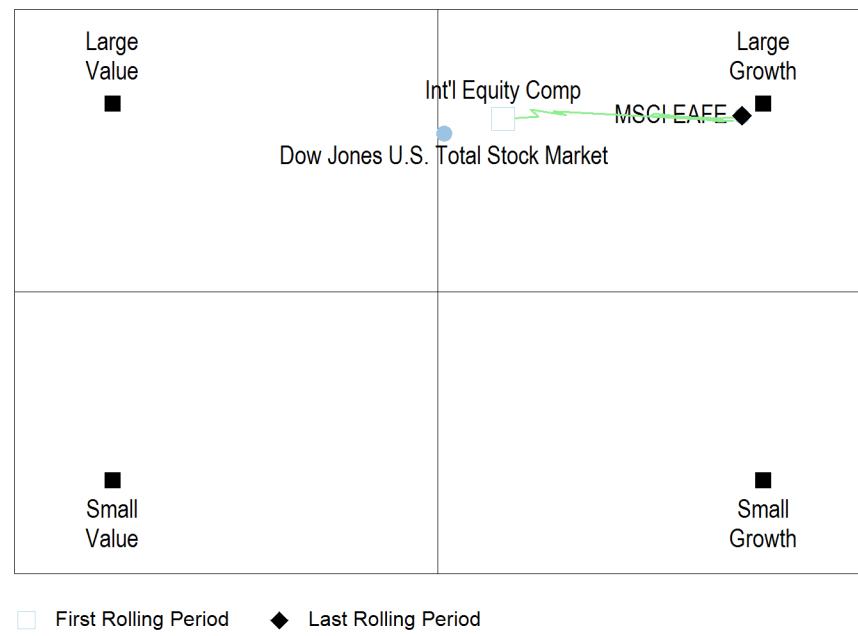
	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%	0.0%	0.0%	0.0%	-21.3%	-20.8%	5.1%	5.2%
Materials	0.2%	0.1%	0.0%	0.1%	1.1%	-1.6%	7.0%	4.9%
Industrials	-1.7%	-1.0%	0.7%	-1.4%	-3.7%	4.3%	30.5%	12.9%
Consumer Discretionary	-0.9%	-1.8%	-0.2%	1.0%	-14.2%	3.4%	4.2%	10.0%
Consumer Staples	-0.3%	-0.2%	0.0%	0.0%	-15.9%	-7.5%	3.0%	2.8%
Health Care	0.4%	0.1%	0.3%	0.1%	7.2%	6.0%	9.1%	4.8%
Financials	-0.2%	-0.2%	-0.1%	0.1%	0.8%	1.2%	21.1%	32.3%
Information Technology	0.2%	0.3%	0.0%	-0.1%	2.4%	-0.2%	6.6%	10.2%
Telecommunication Services	0.0%	--	0.0%	--	--	2.3%	0.0%	0.6%
Utilities	-0.1%	0.0%	-0.1%	0.0%	2.3%	2.5%	3.4%	6.5%
Real Estate	0.1%	0.2%	0.0%	-0.1%	2.8%	0.8%	6.1%	9.7%
Cash	0.0%	0.0%	0.0%	0.0%	0.2%	--	3.9%	0.0%
<b>Portfolio</b>	<b>-2.4%</b>	<b>=</b>	<b>-2.6%</b>	<b>+</b>	<b>0.5%</b>	<b>+</b>	<b>-0.4%</b>	<b>-2.0%</b>
							<b>0.4%</b>	<b>100.0%</b>
								<b>100.0%</b>

# Int'l Equity Composite

Annualized Return vs. Annualized Standard Deviation  
3 Years Ending June 30, 2017



U.S. Effective Style Map  
3 Years Ending June 30, 2017

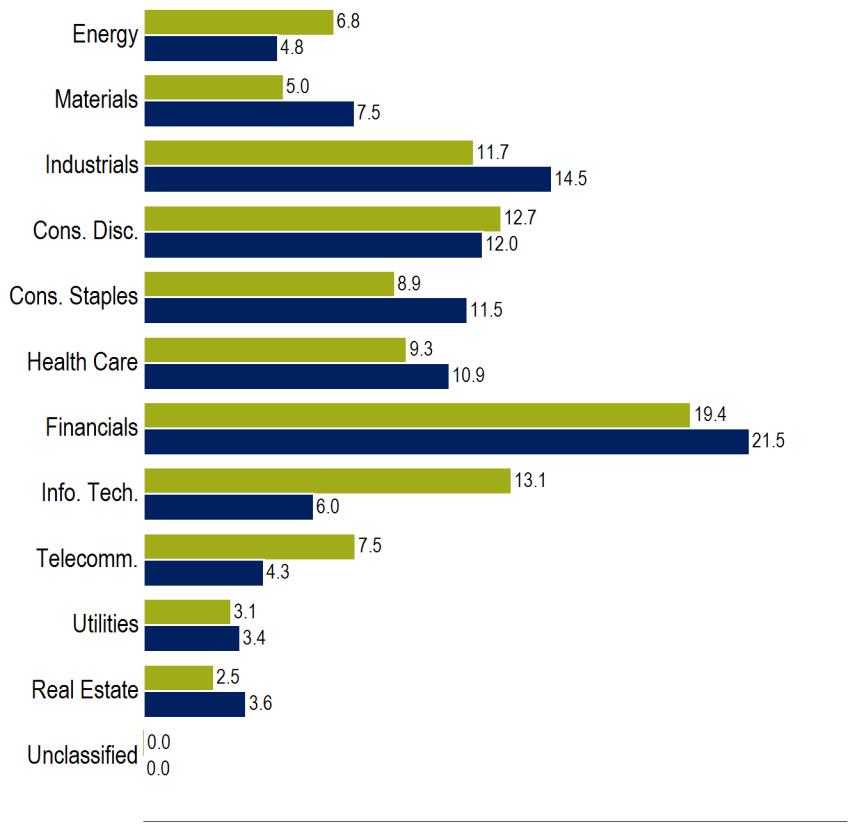


# Int'l Equity Composite

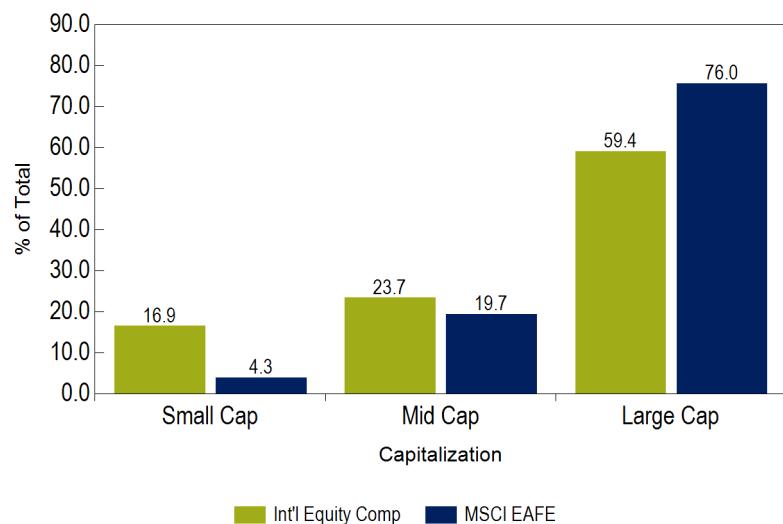
## Characteristics

	Portfolio	MSCI EAFE
Number of Holdings	2,257	927
Weighted Avg. Market Cap. (\$B)	42.99	55.81
Median Market Cap. (\$B)	6.70	10.24
Price To Earnings	19.99	21.00
Price To Book	2.84	2.51
Price To Sales	2.04	2.08
Return on Equity (%)	15.60	13.13
Yield (%)	2.65	3.03
Beta	0.94	1.00
R-Squared	0.97	1.00

## Sector Allocation (%) vs MSCI EAFE



## Market Capitalization As of June 30, 2017

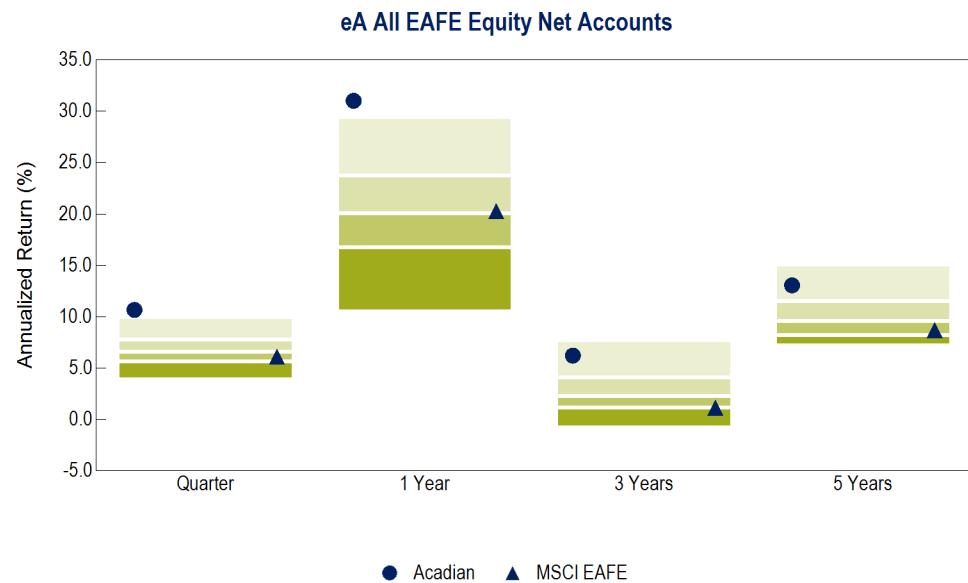


# Int'l Equity Composite

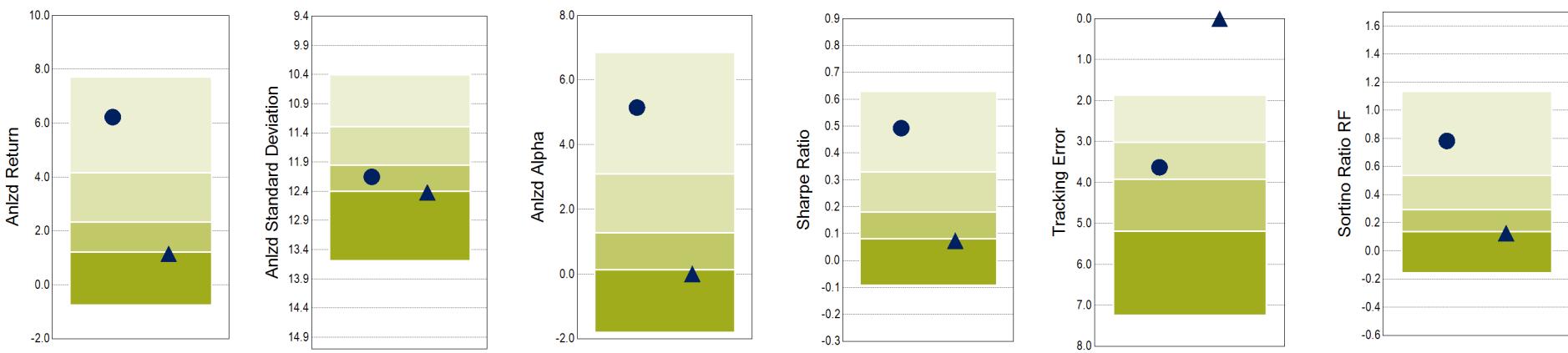
Top Ten Holdings		Top Positive Contributors			Top Negative Contributors		
		Relative Contribution %	Return %		Relative Contribution %	Return %	
SAMSUNG ELECTRONICS	4.1%	QANTAS AIRWAYS	0.3%	47.8%	HSBC HDG. (ORD \$0.50)	-0.2%	14.9%
TELEKOMUNIKASI INDONESIA	3.4%	DEUTSCHE LUFTHANSA	0.3%	44.9%	NESTLE 'R'	-0.2%	16.9%
ASTRA INTERNATIONAL	2.7%	IPSEN	0.2%	37.3%	NOVO NORDISK 'B'	-0.1%	24.2%
BANK CENTRAL ASIA	2.6%	ICON	0.2%	22.7%	AIA GROUP	-0.1%	17.2%
BANK RAKYAT INDONESIA	2.5%	ARISTOCRAT LEISURE	0.2%	27.1%	NINTENDO	-0.1%	44.6%
BANK MANDIRI	1.8%	LONZA GROUP	0.2%	25.1%	HONDA MOTOR	-0.1%	-8.6%
UNILEVER INDONESIA	1.1%	TELIASONERA	0.1%	12.3%	ING GROEP	-0.1%	16.8%
SANOFI	1.0%	ALLIANZ	0.1%	11.2%	VODAFONE GROUP	-0.1%	13.0%
HONDA MOTOR	0.9%	G4S	0.1%	13.5%	TESCO	-0.1%	-5.5%
TAKEDA PHARMACEUTICAL	0.9%	SAMSUNG ELECTRONICS	0.1%	12.8%	LVMH	-0.1%	14.5%

Equity Sector Attribution									
	Attribution Effects			Returns			Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.1%	-0.3%	0.3%	1.2%	-0.5%	9.4%	5.0%	
Materials	0.1%	0.1%	0.0%	0.0%	4.4%	3.3%	7.9%	8.0%	
Industrials	0.6%	0.5%	0.0%	0.1%	11.6%	7.2%	13.9%	14.3%	
Consumer Discretionary	-0.1%	0.0%	0.0%	0.0%	4.4%	4.8%	10.5%	12.2%	
Consumer Staples	-0.4%	-0.2%	-0.1%	-0.1%	5.8%	8.3%	7.3%	11.4%	
Health Care	0.8%	0.6%	0.0%	0.2%	12.6%	7.2%	12.9%	10.7%	
Financials	-0.5%	-0.3%	-0.1%	-0.1%	6.0%	7.4%	14.7%	21.2%	
Information Technology	0.6%	0.1%	0.2%	0.2%	11.4%	9.5%	11.4%	5.7%	
Telecommunication Services	-0.1%	-0.1%	0.0%	0.0%	2.6%	5.0%	5.7%	4.4%	
Utilities	0.0%	0.0%	0.0%	0.1%	7.6%	7.2%	3.7%	3.3%	
Real Estate	0.1%	0.2%	0.0%	-0.1%	10.8%	4.7%	2.5%	3.7%	
Cash	0.0%	--	--	--	--	--	0.0%	0.0%	
Portfolio	1.1%	=	0.9%	+	-0.2%	+	0.4%	7.5%	6.3%
							100.0%	100.0%	

Acadian believes that the larger the pool of potential investments, the greater the potential opportunity an active manager has to add value. They believe that stocks and markets have many attributes that are related to potential outperformance, and that a successful investment approach must be multi-faceted and highly adaptable. They believe that objectivity is crucial to investment success. Acadian's quantitative process and extensive database allows them to apply their valuation techniques to over 40,000 stocks worldwide. They do not limit the universe other than to employ screens based on invest-ability and availability of data. For example, they only evaluate stocks that have sufficient daily trading volume to be appropriate for institutional investment. Other than these practical considerations, they consider our investment universe to encompass all institutionally investable stocks in the world.



### 3 Year Risk Statistics



Characteristics				Top Positive Contributors			Top Negative Contributors		
	Portfolio	MSCI EAFE		Relative Contribution %	Return %		Relative Contribution %	Return %	
Number of Holdings	439	927		QANTAS AIRWAYS (A:QANX)	0.7%	47.8%	FORTESCUE METALS GP. (A:FMGX)	-0.1%	-15.8%
Weighted Avg. Market Cap. (\$B)	24.8	55.8		DEUTSCHE LUFTHANSA (D:LHA)	0.5%	44.9%	STMICROELECTRONICS (PAR) (F:SGS)	-0.1%	-6.1%
Median Market Cap. (\$B)	0.7	10.2		IPSEN (F:IPN)	0.4%	37.3%	BOLIDEN (W:BOL)	-0.1%	-7.0%
Price To Earnings	20.3	21.0		LONZA GROUP	0.3%	25.1%	UNILEVER CERTS.	-0.1%	11.5%
Price To Book	2.8	2.5		ARISTOCRAT LEISURE	0.3%	27.1%	CANADIAN IMP.BK.COM.	-0.1%	-4.5%
Price To Sales	1.5	2.1		ICON (ICLR)	0.3%	22.7%	MYCRONIC (W:MYCR)	0.0%	-9.4%
Return on Equity (%)	17.9	13.1		FUJITSU	0.3%	20.6%	BML (J:BMLL)	0.0%	-11.6%
Yield (%)	2.4	3.0		SAMSUNG ELECTRONICS (KO:SGL)	0.2%	12.8%	NORSK HYDRO	0.0%	-2.3%
Beta	0.9	1.0		KONAMI HOLDINGS	0.2%	31.0%	VOLVO 'B' (W:VOBF)	0.0%	17.9%
R-Squared	0.9	1.0		ACS ACTIV.CONSTR.Y SERV. (E:ACS)	0.2%	15.5%	GLAXOSMITHKLINE (UKIR:GSK)	0.0%	3.6%

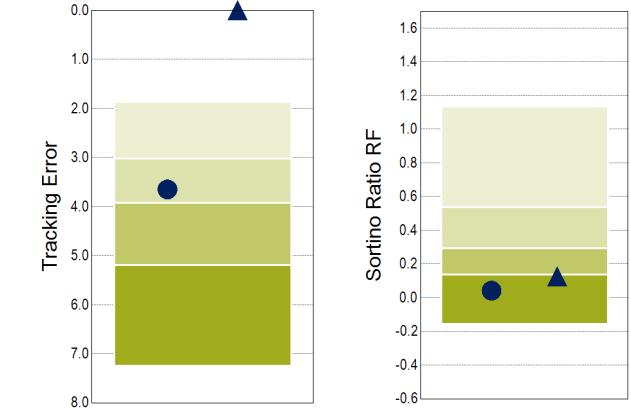
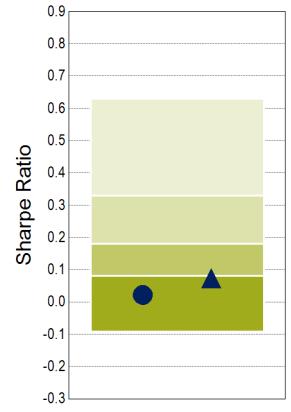
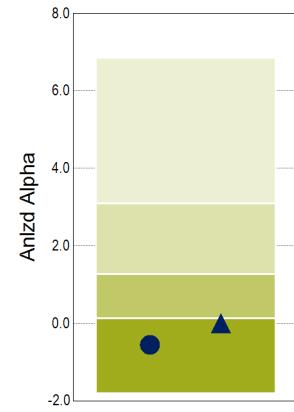
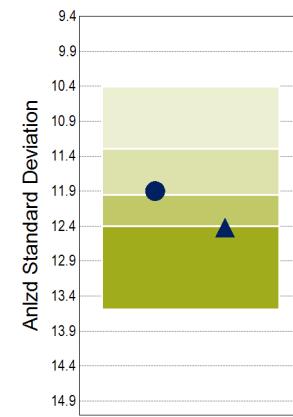
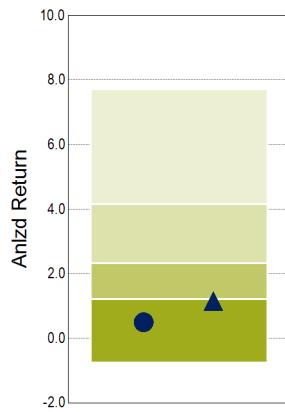
## Acadian Performance Attribution vs. MSCI EAFE

	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.4%	0.2%	-0.2%	0.4%	4.4%	-0.5%	9.4%	5.0%
Materials	0.2%	0.1%	0.0%	0.1%	4.1%	3.3%	12.4%	8.0%
Industrials	1.4%	1.0%	0.1%	0.3%	15.1%	7.2%	15.9%	14.3%
Consumer Discretionary	0.5%	0.6%	0.0%	-0.1%	10.1%	4.8%	10.8%	12.2%
Consumer Staples	-0.5%	0.4%	-0.3%	-0.6%	11.9%	8.3%	4.1%	11.4%
Health Care	1.5%	0.9%	0.1%	0.4%	16.7%	7.2%	13.5%	10.7%
Financials	-0.7%	-0.2%	-0.3%	-0.2%	6.0%	7.4%	13.7%	21.2%
Information Technology	1.3%	0.2%	0.6%	0.5%	12.5%	9.5%	14.6%	5.7%
Telecommunication Services	-0.2%	-0.1%	-0.1%	-0.1%	-0.9%	5.0%	1.4%	4.4%
Utilities	-0.3%	-0.3%	-0.1%	0.2%	-3.7%	7.2%	0.4%	3.3%
Real Estate	0.3%	0.3%	0.0%	0.0%	12.3%	4.7%	3.8%	3.7%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
<b>Portfolio</b>	<b>3.9%</b>	<b>=</b>	<b>3.2%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>1.0%</b>	<b>10.2%</b>
							<b>6.3%</b>	<b>100.0%</b>
								<b>100.0%</b>

Country Allocation				
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>				
Brazil*	0.2%	0.0%	-7.3%	-6.6%
Canada	5.2%	0.0%	0.1%	0.9%
Mexico*	0.5%	0.0%	9.4%	7.4%
United States	0.4%	0.0%	21.0%	3.1%
<b>Total-Americas</b>	<b>6.2%</b>	<b>0.0%</b>	<b>1.9%</b>	--
<b>Europe</b>				
Austria	1.7%	0.2%	13.9%	22.3%
Belgium	0.5%	1.2%	1.8%	4.9%
Denmark	1.4%	1.6%	17.9%	15.3%
Finland	3.0%	1.0%	11.1%	14.3%
France	7.3%	10.1%	11.2%	9.8%
Germany	8.4%	9.3%	15.5%	6.7%
Greece*	0.1%	0.0%	31.9%	34.2%
Ireland	1.5%	0.5%	22.7%	3.9%
Italy	3.3%	2.2%	8.9%	9.5%
Luxembourg	0.2%	0.0%	12.1%	6.3%
Netherlands	4.6%	3.4%	6.3%	8.1%
Norway	3.2%	0.6%	-1.3%	4.9%
Poland*	0.3%	0.0%	14.1%	14.1%
Portugal	0.4%	0.2%	12.7%	4.1%
Russia*	0.1%	0.0%	-16.0%	-9.9%
Spain	2.6%	3.3%	11.8%	8.3%
Sweden	5.2%	2.9%	5.8%	10.3%
Switzerland	4.7%	8.8%	14.4%	9.4%
United Kingdom	10.2%	17.9%	6.4%	4.7%
<b>Total-Europe</b>	<b>58.9%</b>	<b>63.1%</b>	<b>10.1%</b>	<b>7.8%</b>

Country Allocation				
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
Australia	5.2%	7.7%	0.8%	-1.8%
China*	0.0%	0.0%	-2.4%	2.7%
Hong Kong	0.5%	3.5%	0.7%	7.2%
Japan	19.7%	23.5%	3.3%	5.1%
Korea*	4.4%	0.0%	1.0%	1.0%
Malaysia*	0.1%	0.0%	-3.7%	3.9%
New Zealand	0.1%	0.2%	1.2%	8.1%
Philippines*	0.0%	0.0%	4.6%	5.7%
Singapore	1.2%	1.3%	0.1%	5.2%
Taiwan*	0.2%	0.0%	1.4%	2.1%
Thailand*	0.1%	0.0%	2.9%	0.1%
<b>Total-AsiaPacific</b>	<b>31.7%</b>	<b>36.2%</b>	<b>2.3%</b>	<b>3.9%</b>
<b>Other</b>				
Israel	0.5%	0.7%	3.6%	6.7%
South Africa*	2.0%	0.0%	4.1%	5.5%
Turkey*	0.0%	0.0%	7.4%	11.8%
<b>Total-Other</b>	<b>2.6%</b>	<b>0.7%</b>	<b>4.0%</b>	<b>6.7%</b>
<b>Totals</b>				
Developed	91.9%	100.0%	4.0%	6.3%
Emerging*	8.1%	0.0%	2.0%	--

The firm is an active value-oriented defensive manager. The firm's value driven investment philosophy is based on the belief that investments need to be evaluated in terms of their fundamental long-term value. The firm believes that the value of a company lies in its future income stream as dividends represent the most direct form of cash flow to a shareholder. The firm uses an inflation adjusted dividend discount model to derive the underlying value of a company. This methodology is applied consistently to individual securities across all markets and industries. The universe spans markets covered in the MSCI Indices and those developing markets with adequate investor protection and good repatriation procedures. The firm will then narrow the universe to a list of more than 1000 securities on the basis of value criteria, and then further reduce this to a shorter list of approximately 250 securities annually, for detailed fundamental analysis. The screens include basic value characteristics such as price to book, price to cash flow ratio, price to earnings ratio, and yield, as well as liquidity considerations. A focus list of approximately 80 securities is then created from that list of approximately 250 through fundamental research and deliberations of the Equity Strategy Committee. It is this list of securities on which more detailed fundamental analysis and financial modeling is carried out utilizing the dividend discount model, which is based on an evaluation of a company's future income stream, which is then discounted in real terms.



Characteristics	Top Positive Contributors				Top Negative Contributors			
	Portfolio	MSCI EAFE	Relative Contribution %		Return %	Relative Contribution %		Return %
Number of Holdings	56	927	TELIASONERA	0.3%	12.3%	HONDA MOTOR	-0.2%	-8.6%
Weighted Avg. Market Cap. (\$B)	63.2	55.8	ALLIANZ (D:ALV)	0.3%	11.2%	ENI	-0.2%	-6.1%
Median Market Cap. (\$B)	42.9	10.2	G4S	0.3%	13.5%	TESCO	-0.2%	-5.5%
Price To Earnings	19.5	21.0	ENEL	0.3%	13.4%	AHOLD KON.	-0.1%	-8.3%
Price To Book	1.9	2.5	KIRIN HOLDINGS (J:KB@N)	0.3%	9.0%	TELEFONICA (E:TEF)	-0.1%	-6.5%
Price To Sales	1.5	2.1	IBERDROLA	0.2%	10.3%	QBE INSURANCE GROUP (A:QBEX)	-0.1%	-7.9%
Return on Equity (%)	12.0	13.1	ABB LTD N (S:ABB)	0.2%	9.2%	AMEC FOSTER WHEELER (UKIR:AMFW)	-0.1%	-8.7%
Yield (%)	3.8	3.0	SANOFI	0.2%	9.0%	KINGFISHER (UKIR:KGF)	0.0%	-2.1%
Beta	0.9	1.0	TAIWAN SEMICON.MNFG. (TW:TSM)	0.2%	13.6%	DAIMLER	0.0%	-2.1%
R-Squared	0.9	1.0	TAKEDA PHARMACEUTICAL (J:TA@N)	0.2%	8.3%	TOKIO MARINE HOLDINGS (J:MIHO)	0.0%	-1.8%

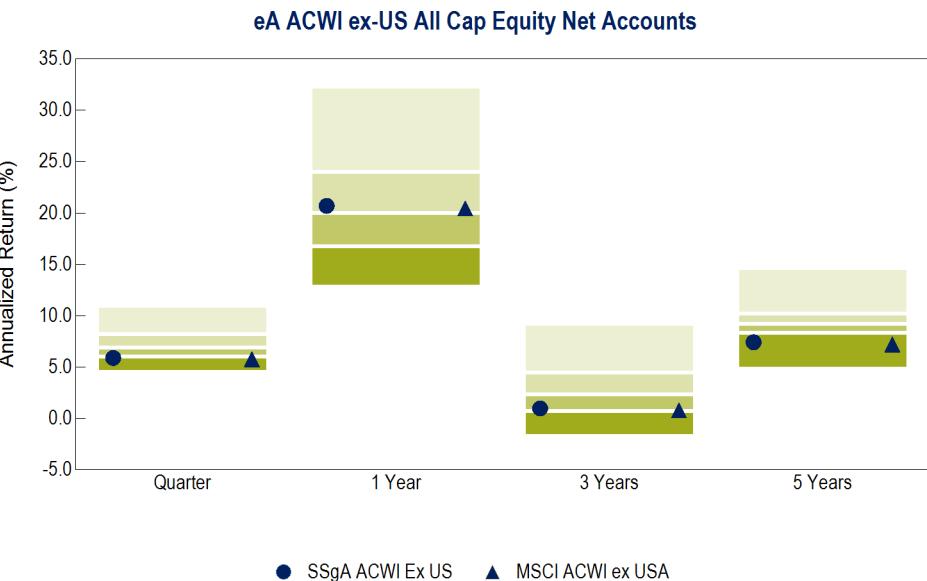
Mondrian Performance Attribution vs. MSCI EAFE								
	Attribution Effects				Returns		Sector Weights	
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.2%	-0.1%	-0.2%	0.1%	-2.2%	-0.5%	9.4%	5.0%
Materials	-0.1%	0.1%	0.0%	-0.2%	6.1%	3.3%	3.1%	8.0%
Industrials	-0.2%	-0.1%	-0.1%	0.0%	6.7%	7.2%	12.0%	14.3%
Consumer Discretionary	-0.8%	-0.8%	0.0%	0.0%	-1.9%	4.8%	10.3%	12.2%
Consumer Staples	-0.6%	-0.5%	0.0%	-0.1%	3.3%	8.3%	10.7%	11.4%
Health Care	0.2%	0.1%	0.1%	0.0%	8.0%	7.2%	12.3%	10.7%
Financials	-0.6%	-0.3%	-0.2%	-0.1%	6.0%	7.4%	15.9%	21.2%
Information Technology	0.2%	0.0%	0.2%	0.1%	9.3%	9.5%	8.1%	5.7%
Telecommunication Services	0.1%	-0.1%	0.1%	0.1%	3.1%	5.0%	10.4%	4.4%
Utilities	0.3%	0.0%	0.1%	0.3%	8.4%	7.2%	6.9%	3.3%
Real Estate	-0.1%	0.0%	-0.1%	0.0%	5.9%	4.7%	1.2%	3.7%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
<b>Portfolio</b>	<b>-1.7%</b>	<b>=</b>	<b>-1.7%</b>	<b>+</b>	<b>-0.2%</b>	<b>+</b>	<b>0.2%</b>	<b>4.6%</b>
							<b>6.3%</b>	<b>100.0%</b>
								<b>100.0%</b>

	Country Allocation			
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Europe</b>				
Denmark	1.1%	1.6%	3.4%	15.3%
France	7.3%	10.1%	8.5%	9.8%
Germany	9.7%	9.3%	6.4%	6.7%
Italy	5.1%	2.2%	2.6%	9.5%
Netherlands	2.1%	3.4%	-8.0%	8.1%
Spain	5.7%	3.3%	3.3%	8.3%
Sweden	4.1%	2.9%	10.4%	10.3%
Switzerland	12.3%	8.8%	10.0%	9.4%
United Kingdom	24.0%	17.9%	2.2%	4.7%
<b>Total-Europe</b>	<b>71.3%</b>	<b>63.1%</b>	<b>5.1%</b>	<b>7.8%</b>

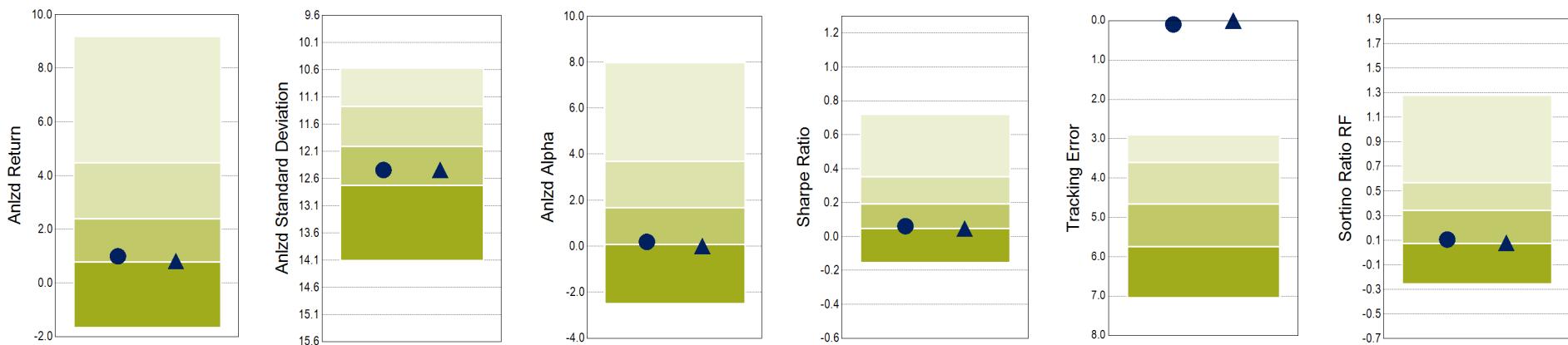
	Country Allocation			
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
Australia			1.5%	7.6%
Hong Kong			1.4%	3.5%
Japan			17.4%	23.5%
Singapore			6.6%	1.3%
Taiwan*			1.7%	0.0%
<b>Total-AsiaPacific</b>	<b></b>	<b></b>	<b>28.7%</b>	<b>36.2%</b>
<b>Totals</b>				
Developed			98.3%	100.0%
Emerging*			1.7%	0.0%
			13.6%	--

# SSgA ACWI Ex US

The MSCI ACWI ex US Index Strategy tends to hold each security that is held in the benchmark index, but the strategy will not be perfectly weighted in every index constituent on a daily basis. Holding securities in the perfect weights would require increased trading and therefore would incur costs. Thus, there will be securities in the fund that are either over- or under-weighted relative to the benchmark. The individual security mis-weights are very minimal, usually within 1 basis point. However, in aggregate, these small mis-weights can add up and result in tracking error if the mis-weighted securities' performance is volatile. SSgA seek to replicate the index by attempting to hold every security in the fund in its appropriate index weight. SSgA trade only when there is a change to the Index, when we have participant cash flows, or when we receive significant dividend income into the fund.



## 3 Year Risk Statistics



NEPC, LLC

June 30, 2017

# SSgA ACWI Ex US

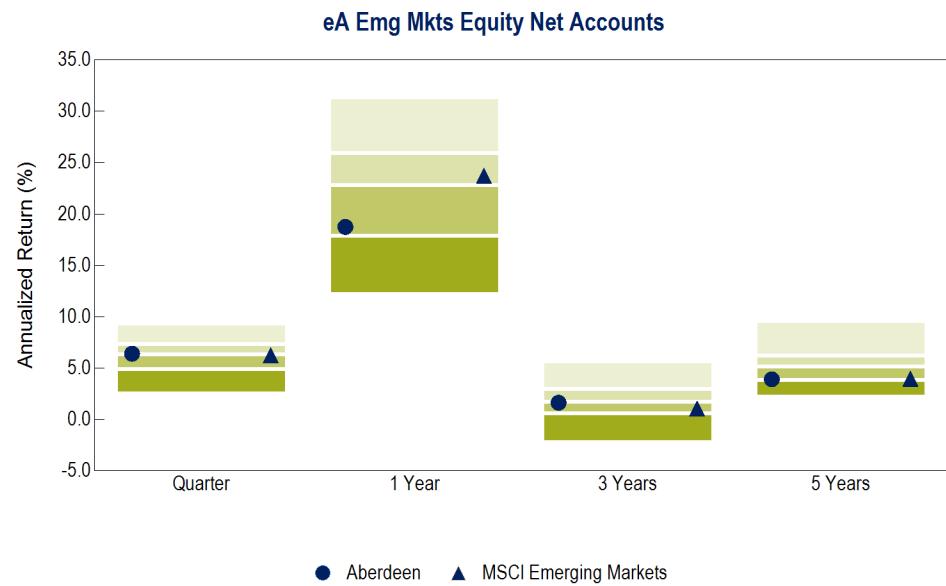
Characteristics				Top Positive Contributors			Top Negative Contributors		
	Portfolio	MSCI	ACWI ex USA		Relative Contribution %	Return %		Relative Contribution %	Return %
Number of Holdings	1,895	1,866		INTERCONEXION ELECTRICA (CB:ISA)	2.5%	8.9%	CORPORACION FINANCIERA COLOMBIANA (CB:VAL)	-1.4%	-8.8%
Weighted Avg. Market Cap. (\$B)	42.1	57.8		ALIBABA GROUP HLDG.SPN. ADR 1:1	0.1%	30.7%	INVERSIONES ARGOS	-0.9%	-2.6%
Median Market Cap. (\$B)	7.7	7.6		WESTPAC BANKING	0.0%	-9.9%	TENCENT HOLDINGS	-0.2%	25.0%
Price To Earnings	20.1	21.0		SIEMENS (IN:SIM)	0.0%	6.9%	NESTLE 'R'	-0.2%	16.9%
Price To Book	3.2	2.6		BHARAT FORGE	0.0%	5.3%	DAIWA HOUSE RESIDENTIAL	-0.2%	-8.5%
Price To Sales	2.7	2.2		NATIONAL AUS.BANK	0.0%	-8.0%	COLBUN MACHICURA	-0.1%	-1.6%
Return on Equity (%)	16.4	14.0		AUS.AND NZ.BANKING GP.	0.0%	-6.8%	HSBC HDG. (ORD \$0.50)	-0.1%	14.9%
Yield (%)	2.0	2.9		TOYOTA MOTOR	0.0%	-3.3%	SAMSUNG ELECTRONICS	-0.1%	12.8%
Beta	1.0	1.0		CAPITEC BANK	0.0%	12.7%	TAIWAN SEMICON.MNFG.	-0.1%	13.6%
R-Squared	1.0	1.0		CHENG SHIN RUB.INDS. (TW:CSI)	0.0%	2.9%	NOVARTIS 'R'	-0.1%	12.2%

## SSgA ACWI Ex US Performance Attribution vs. MSCI ACWI ex USA

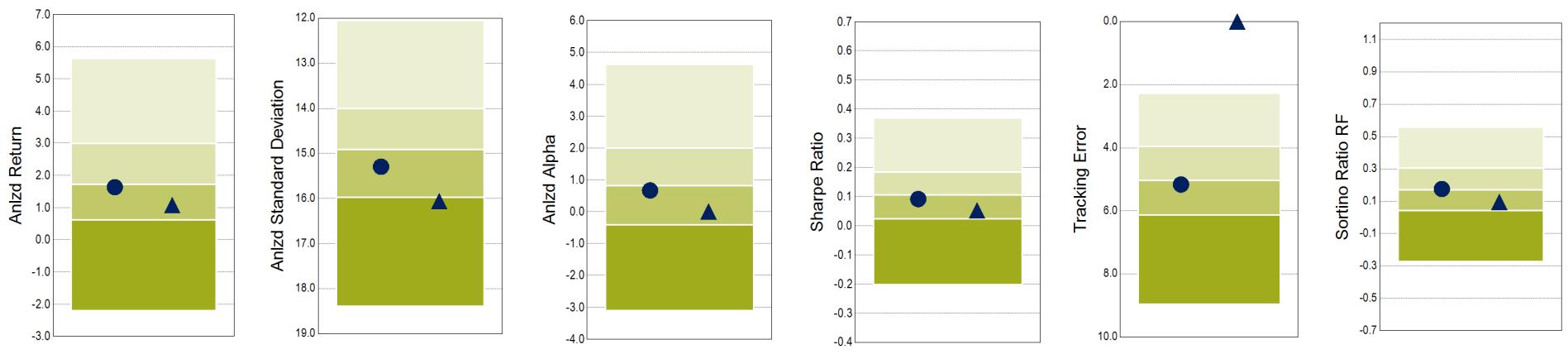
	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.2%	0.0%	0.3%	-0.1%	-4.3%	-2.6%	0.1%	6.8%
Materials	-1.1%	0.3%	-0.3%	-1.1%	-2.6%	1.7%	37.0%	8.0%
Industrials	-0.8%	0.3%	-0.5%	-0.6%	7.1%	7.0%	1.0%	11.9%
Consumer Discretionary	-0.5%	0.3%	-0.3%	-0.5%	5.8%	5.7%	2.5%	11.3%
Consumer Staples	-0.8%	-0.5%	-0.4%	0.2%	6.2%	7.6%	0.0%	9.9%
Health Care	-0.7%	-0.7%	-0.2%	0.2%	-4.6%	7.2%	1.6%	8.1%
Financials	-2.7%	-1.6%	-0.3%	-0.8%	-8.4%	5.9%	15.7%	23.3%
Information Technology	-1.0%	0.5%	-1.0%	-0.5%	18.0%	13.0%	1.7%	9.9%
Telecommunication Services	-0.2%	-1.2%	-0.1%	1.1%	-24.0%	4.2%	0.0%	4.5%
Utilities	2.2%	0.3%	0.8%	1.1%	6.1%	5.3%	38.0%	3.1%
Real Estate	-0.4%	-0.4%	0.0%	0.0%	-8.5%	5.9%	2.5%	3.2%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
<b>Portfolio</b>	<b>-5.7%</b>	<b>=</b>	<b>-2.7%</b>	<b>+</b>	<b>-1.9%</b>	<b>+</b>	<b>-1.1%</b>	<b>0.3%</b>
					<b>0.3%</b>	<b>6.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Country Allocation					Country Allocation				
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)		Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>					<b>AsiaPacific</b>				
Canada	0.1%	6.9%	-3.9%	0.9%	China*	1.8%	6.3%	19.0%	10.7%
Chile*	7.9%	0.3%	-1.6%	-1.5%	India*	4.6%	2.1%	-1.5%	3.0%
Colombia*	80.6%	0.1%	0.3%	2.0%	Japan	2.5%	16.4%	-8.5%	5.1%
Peru*	0.1%	0.1%	9.7%	7.4%	Malaysia*	0.0%	0.6%	12.5%	5.1%
United States	0.5%	0.0%	11.5%	3.1%	Taiwan*	1.5%	2.9%	2.2%	9.1%
<b>Total-Americas</b>	<b>89.1%</b>	<b>10.0%</b>	<b>0.2%</b>	<b>0.1%</b>	<b>Total-AsiaPacific</b>	<b>10.4%</b>	<b>41.9%</b>	<b>0.9%</b>	<b>5.8%</b>
<b>Europe</b>					<b>Other</b>				
Ireland	0.0%	0.3%	29.7%	3.9%	Israel	0.2%	0.5%	4.3%	6.6%
Netherlands	0.0%	2.4%	1.0%	8.1%	South Africa*	0.2%	1.6%	12.7%	3.6%
Poland*	0.0%	0.3%	6.2%	14.1%	<b>Total-Other</b>	<b>0.4%</b>	<b>2.7%</b>	<b>8.5%</b>	<b>4.4%</b>
Russia*	0.0%	0.9%	-24.0%	-9.9%	<b>Totals</b>				
<b>Total-Europe</b>	<b>0.1%</b>	<b>45.3%</b>	<b>-3.8%</b>	<b>7.5%</b>	Developed	3.3%	76.4%	-4.4%	5.8%
					Emerging*	96.7%	23.6%	0.4%	6.4%

Aberdeen believes, given the inefficiency of markets, that competitive long-term returns are achieved by identifying high quality stocks at attractive valuations and holding for the long term. It is their belief that sound fundamentals drive stock prices over time. They employ a fundamental bottom-up investment approach based upon a rigorous and disciplined proprietary research effort which originates with direct company due diligence visits. Portfolios are constructed to maximize their level of exposure to the most attractive companies filtered from the stock selection process. They run a representative or model' unconstrained portfolio that contains approximately 30 - 70 stocks at any given time. Once a stock has received unanimous approval by the team, the senior investment team members then decide which portfolio category it should enter (i.e. country, regional, Global Emerging Markets) and at what weighting. The Head of Global Emerging Markets then has responsibility to ensure that the decision is implemented.



### 3 Year Risk Statistics



# Aberdeen

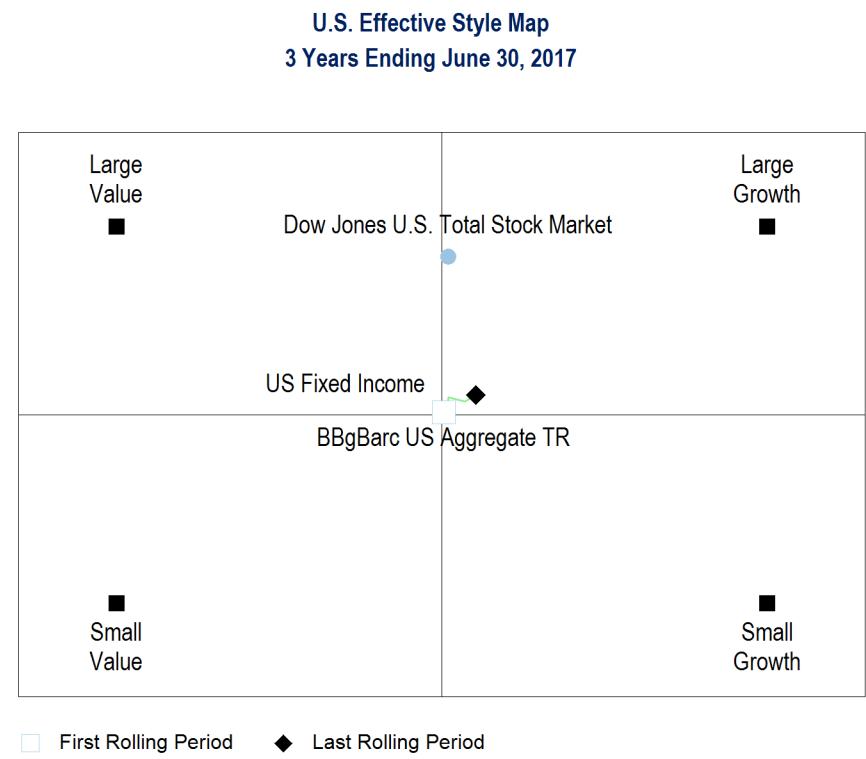
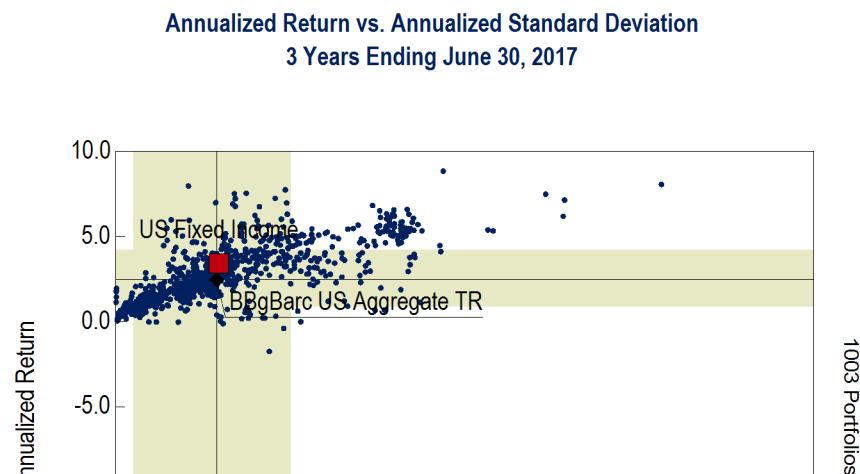
Characteristics			Top Positive Contributors			Top Negative Contributors		
	Portfolio	MSCI Emerging Markets		Relative Contribution %	Return %		Relative Contribution %	Return %
Number of Holdings	65	845	SAMSUNG ELTN.PREF.	0.6%	13.5%	BNC.BRADESCO PF.SPN.ADR 1:1	-0.2%	-8.5%
Weighted Avg. Market Cap. (\$B)	37.0	68.1	AIA GROUP	0.6%	17.2%	MASSMART	-0.2%	-20.7%
Median Market Cap. (\$B)	16.0	5.4	ITC (IN:IT)	0.5%	17.7%	TRUWORTHS INTL.	-0.2%	-15.5%
Price To Earnings	22.3	20.5	YUM CHINA ORD	0.4%	45.0%	LUKOIL OAO ADR. (LON)	-0.2%	-8.0%
Price To Book	3.6	2.8	GPO FINANCE BANORTE	0.4%	15.5%	MAGNIT (RS:MGN)	-0.1%	-5.1%
Price To Sales	3.1	2.2	GRUPO AEROPORTUARIO DEL SURESTE ADR 1:10 (ASR)	0.4%	23.5%	TENARIS ADS. 1:2 (TS)	-0.1%	-7.2%
Return on Equity (%)	19.0	16.8	FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.3%	11.9%	SIAM CEMENT FB	-0.1%	-4.1%
Yield (%)	2.5	2.4	AYALA LAND (PH:ALI)	0.3%	19.6%	NAVER (KO:NHN)	-0.1%	-4.2%
Beta	0.9	1.0	BIM BIRLESIK MAGAZALAR	0.3%	22.4%	MULTIPLAN EMPE. IMOBS.ON (BR:MUL)	-0.1%	-4.8%
R-Squared	0.9	1.0	HINDUSTAN UNILEVER	0.3%	20.0%	VALE PREFERRED ADR 1:1 (VALE.P)	-0.1%	-6.2%

## Aberdeen Performance Attribution vs. MSCI Emerging Markets

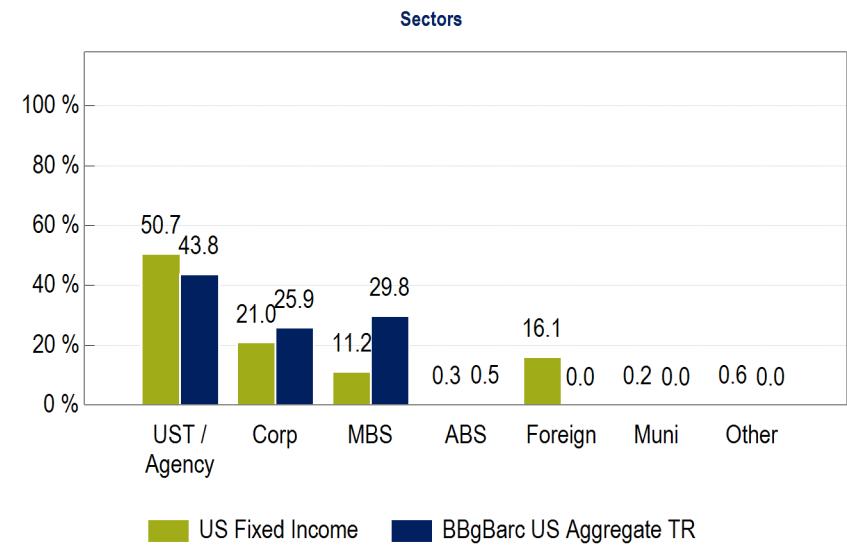
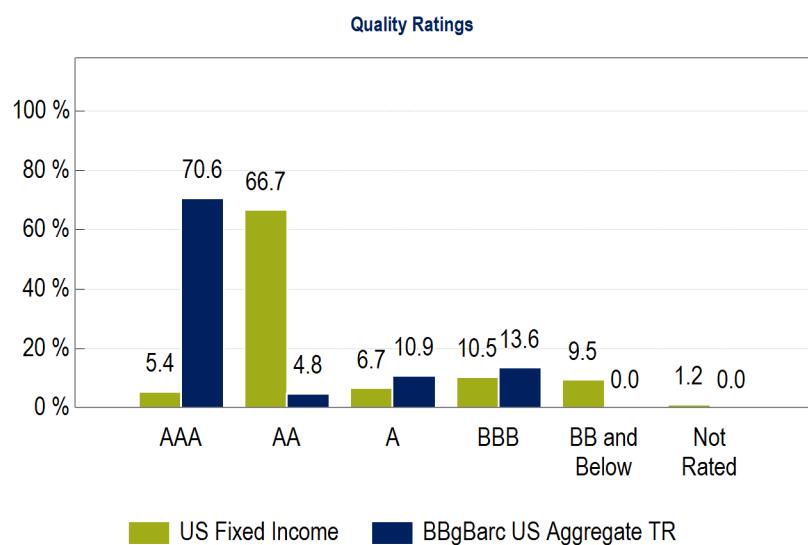
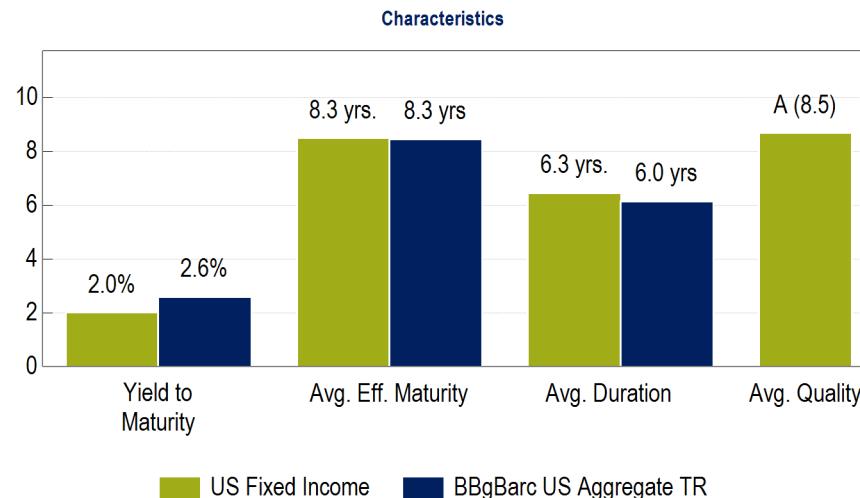
	Total Effects	Attribution Effects			Returns		Sector Weights	
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.2%	0.1%	0.0%	0.0%	-3.1%	-4.6%	5.8%	7.3%
Materials	0.3%	0.1%	0.0%	0.1%	2.4%	-0.4%	9.7%	7.4%
Industrials	0.2%	1.1%	-0.2%	-0.8%	23.5%	3.6%	1.6%	5.9%
Consumer Discretionary	-0.1%	0.0%	0.0%	-0.1%	7.7%	8.5%	10.3%	10.4%
Consumer Staples	1.0%	0.2%	0.5%	0.3%	7.8%	5.2%	17.2%	7.0%
Health Care	0.1%	0.1%	-0.1%	0.0%	16.4%	4.5%	1.1%	2.4%
Financials	1.4%	0.6%	0.2%	0.6%	8.6%	4.1%	28.4%	24.2%
Information Technology	-2.7%	-1.8%	-1.8%	0.8%	7.9%	15.6%	13.7%	24.4%
Telecommunication Services	-0.2%	-0.2%	0.0%	0.0%	-1.4%	2.1%	4.8%	5.7%
Utilities	0.0%	--	0.0%	--	--	-1.5%	0.0%	2.8%
Real Estate	0.0%	-0.2%	0.5%	-0.4%	3.7%	11.4%	7.3%	2.6%
Cash	0.0%	--	--	--	--	--	0.0%	0.0%
<b>Portfolio</b>	<b>0.1%</b>	<b>=</b>	<b>0.3%</b>	<b>+</b>	<b>-0.7%</b>	<b>+ 0.5%</b>	<b>6.5%</b>	<b>6.4%</b>
							<b>100.0%</b>	<b>100.0%</b>

Country Allocation					Country Allocation				
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)		Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>									
Brazil*	12.8%	7.7%	-2.5%	-6.6%	Hong Kong	11.3%	0.0%	5.2%	7.2%
Chile*	2.2%	1.2%	2.8%	-1.5%	India*	17.5%	8.7%	10.7%	3.0%
Mexico*	8.0%	3.7%	14.9%	7.4%	Indonesia*	4.8%	2.5%	8.2%	8.8%
United States	1.2%	0.0%	45.0%	3.1%	Korea*	8.2%	15.0%	8.1%	9.9%
<b>Total-Americas</b>	<b>24.2%</b>	<b>13.5%</b>	<b>6.1%</b>	<b>-1.6%</b>	Malaysia*	1.0%	2.4%	5.3%	5.1%
<b>Europe</b>									
Hungary*	1.1%	0.3%	16.4%	19.6%	Philippines*	3.7%	1.2%	9.9%	7.4%
Luxembourg	1.5%	0.0%	-7.2%	6.4%	Taiwan*	5.0%	12.2%	11.5%	9.1%
Poland*	1.2%	1.2%	8.2%	14.1%	Thailand*	5.2%	2.2%	0.1%	2.6%
Portugal	1.4%	0.0%	12.7%	4.1%	<b>Total-AsiaPacific</b>	<b>56.7%</b>	<b>71.0%</b>	<b>8.0%</b>	<b>8.8%</b>
Russia*	4.2%	3.8%	-6.5%	-9.9%	<b>Other</b>				
United Kingdom	1.7%	0.0%	2.8%	4.7%	South Africa*	3.7%	7.0%	-14.1%	3.6%
<b>Total-Europe</b>	<b>11.1%</b>	<b>5.8%</b>	<b>1.1%</b>	<b>-0.4%</b>	Turkey*	4.3%	1.0%	19.6%	20.0%
<b>Totals</b>									
Developed			17.1%	0.0%	<b>Total-Other</b>	<b>8.0%</b>	<b>9.7%</b>	<b>4.2%</b>	<b>3.9%</b>
Emerging*			82.9%	100.0%	Developed	17.1%	0.0%	7.3%	--
			Emerging*	100.0%	Emerging*	82.9%	100.0%	6.3%	6.4%

# Fixed Income Composite



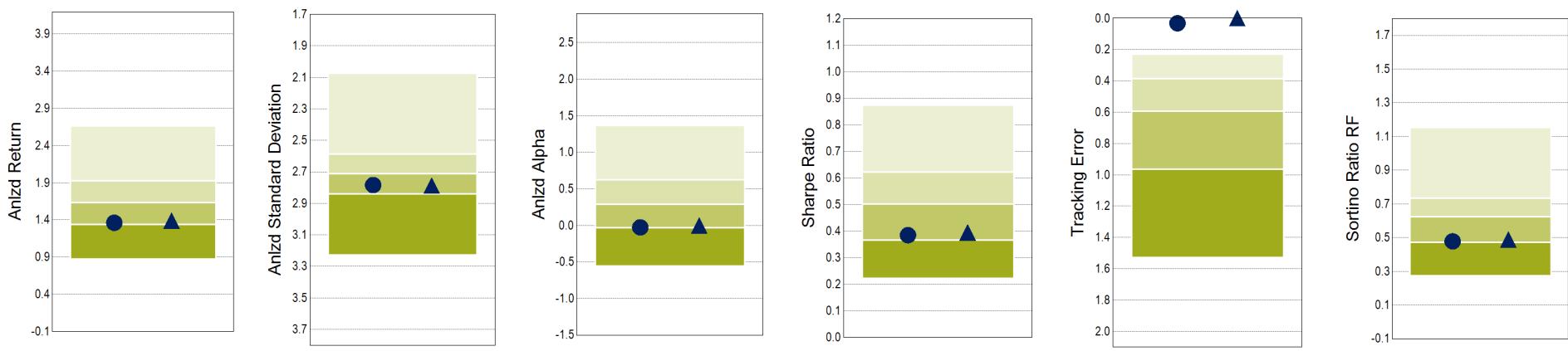
# Fixed Income Composite



## eA US Core Fixed Inc Net Accounts



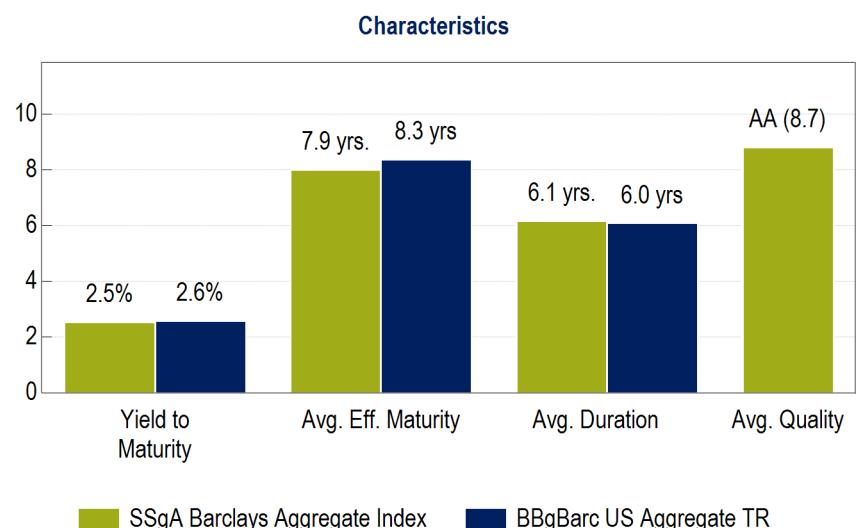
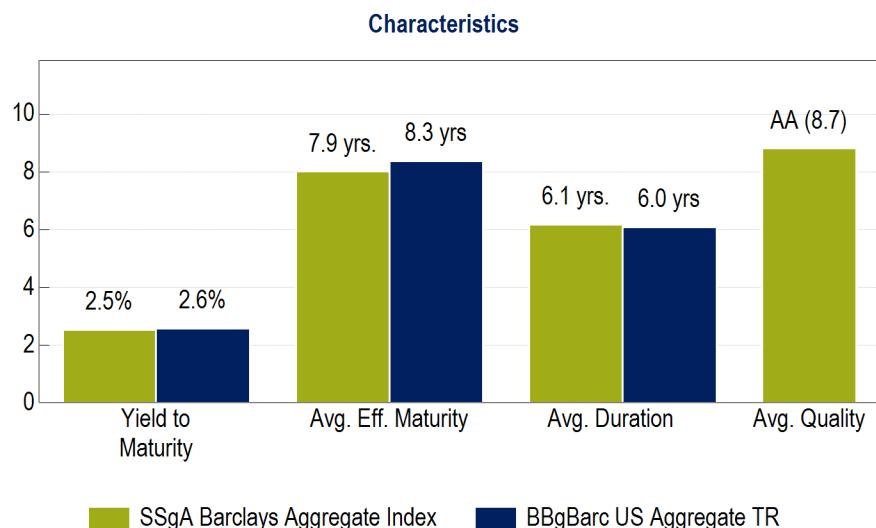
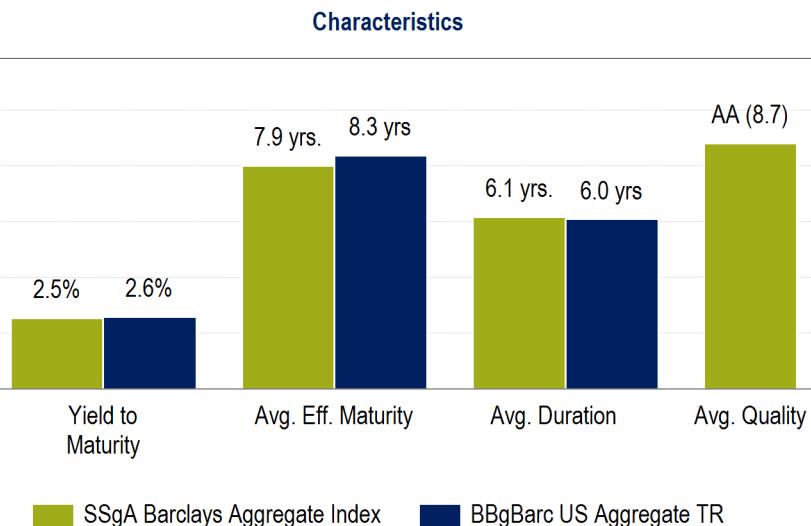
## Since Inception Risk Statistics



NEPC, LLC

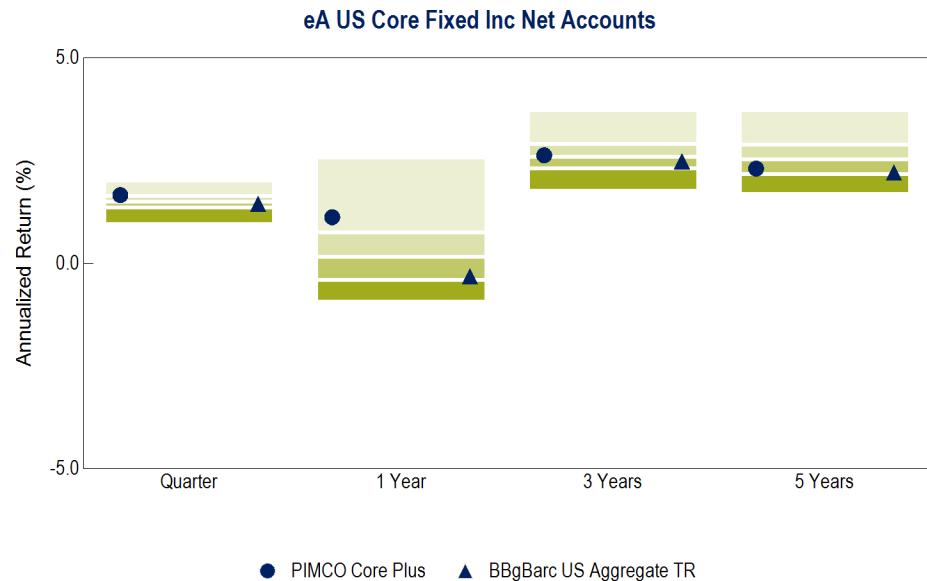
June 30, 2017

# SSgA Barclays Aggregate Index

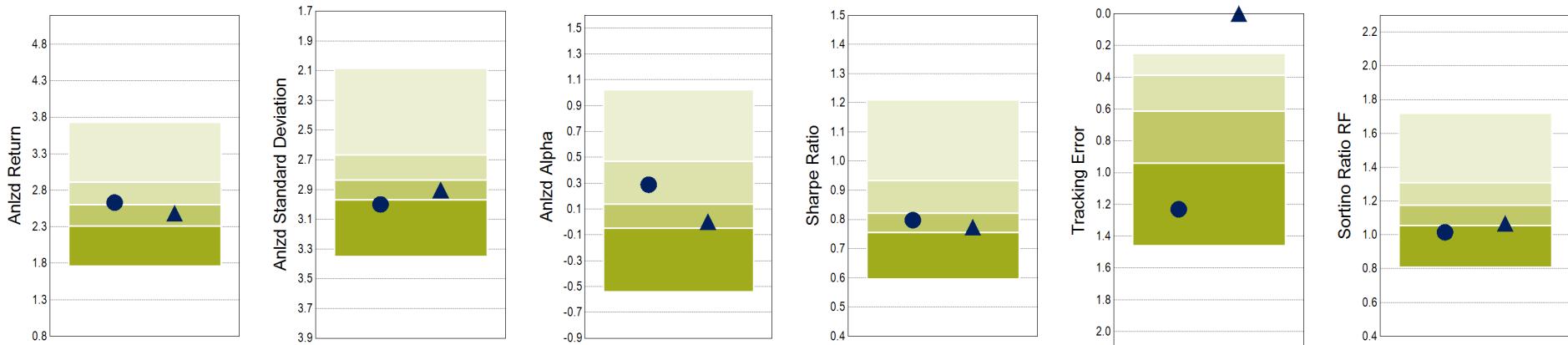


# PIMCO Core Plus

PIMCO's investment process expects to generate above-benchmark returns by building diversified, risk-averse portfolios based upon their long-term secular outlook. This is achieved by analyzing fundamental global trends in such areas as political factors, inflation, volatility, growth, and currency, amongst others. The three to five-year secular outlook is the core element of their decision-making process, and serves as a framework for portfolio implementation. In applying the secular outlook to the portfolio, such tools as duration position, yield curve posture and sector allocation are expressed to best represent the firm's view on the macro-economic environment. Bottom-up analysis of specific securities is also an important part of the firm's philosophy. Bonds are evaluated on a rich/cheap basis and fundamental research determines strong portfolio candidates.

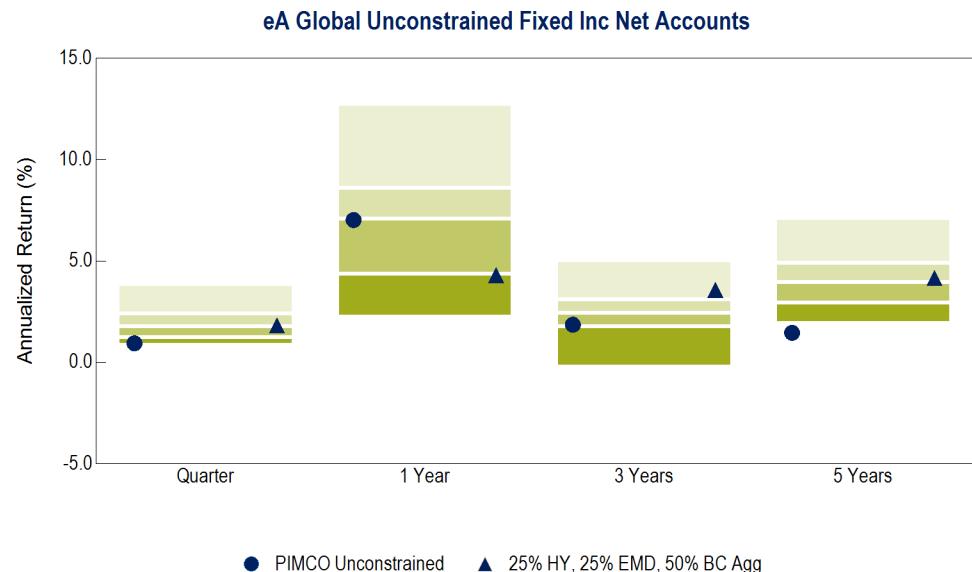


## 3 Year Risk Statistics

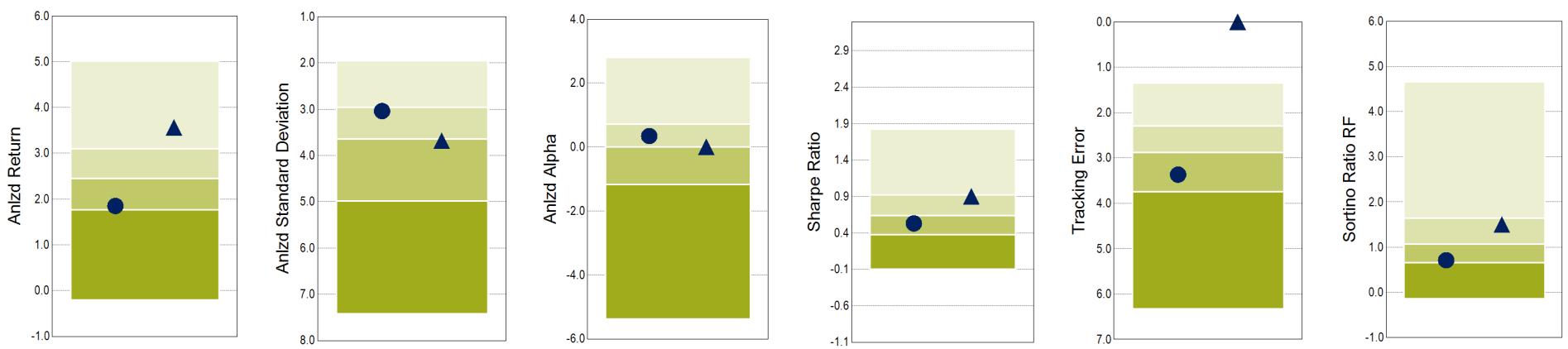


# PIMCO Unconstrained

The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that embodies PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy is designed to offer the traditional benefits of a core bond portfolio - seeks maximum long-term return consistent with capital preservation and prudent management- but with higher potential alpha and the potential to mitigate downside risk to a greater degree than what is reasonably possible from traditional active fixed income management approaches as the strategy allows for more manager discretion to adjust duration exposure, allocate across sectors and otherwise express the firm's active views. The strategy is governed by PIMCO's investment philosophy and unique, disciplined secular investment process, which focuses on long-term economic, social and political trends that may have lasting impacts on investment returns.

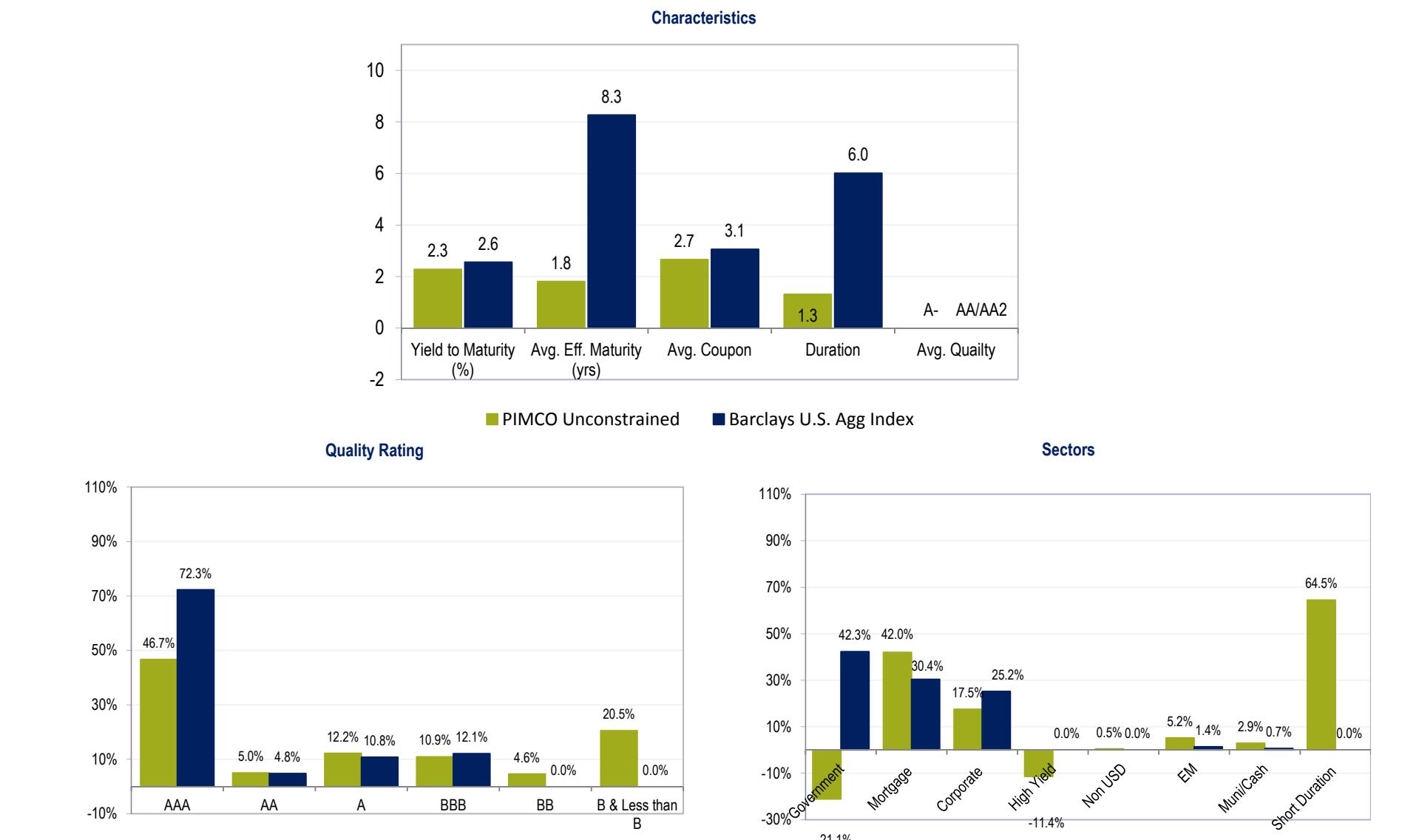


## 3 Year Risk Statistics



NEPC, LLC

# PIMCO Unconstrained



Source: PIMCO



NEPC, LLC

June 30, 2017

# GAM Unconstrained Bond - USD GIPS Composite

## Portfolio Sensitivity

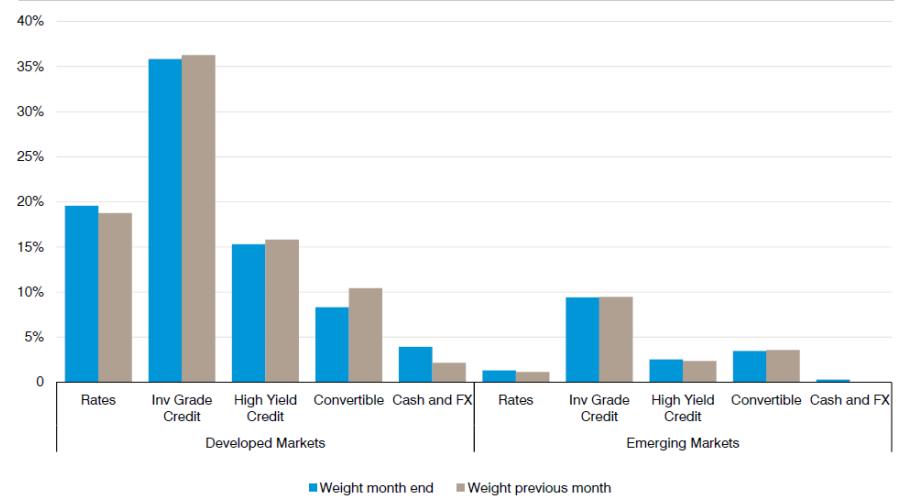
Investment strategy	Month end			
	Bond Weight (%)	Bonds Duration Contribution	Derivatives Duration Contribution	Total Duration Contribution
Developed Markets	86.0	3.23	-4.37	-1.14
Rates	16.9	1.34	-4.35	-3.01
Inv Grade Credit	43.1	1.26	-0.01	1.25
High Yield Credit	14.9	0.41	0.00	0.41
Convertible	11.2	0.21	-0.01	0.20
Cash and FX	0.0	0.00	0.00	0.00
Emerging Markets	1.2	0.04	0.75	0.79
Rates	0.8	0.03	0.75	0.78
Inv Grade Credit	0.0	0.00	0.00	0.00
High Yield Credit	0.0	0.00	0.00	0.00
Convertible	0.4	0.01	0.00	0.01
Cash and FX	0.0	0.00	0.00	0.00
<b>Total</b>	<b>87.2</b>	<b>3.26</b>	<b>-3.61</b>	<b>-0.35</b>

## Characteristics

	Month end
	GAM Unconstrained Bond Strategy*
Value at Risk % (97.5%, 22 days)	<b>0.94</b>
Coupon %	<b>2.66</b>
Yield to Maturity %	<b>2.22</b>
Current Yield %	<b>2.61</b>
Effective Duration	<b>-0.35</b>
Spread Duration	<b>1.59</b>
Equity Delta**	<b>3.08</b>
Currency Delta	<b>-6.75</b>
Credit Quality***	<b>A-</b>

Source: GAM

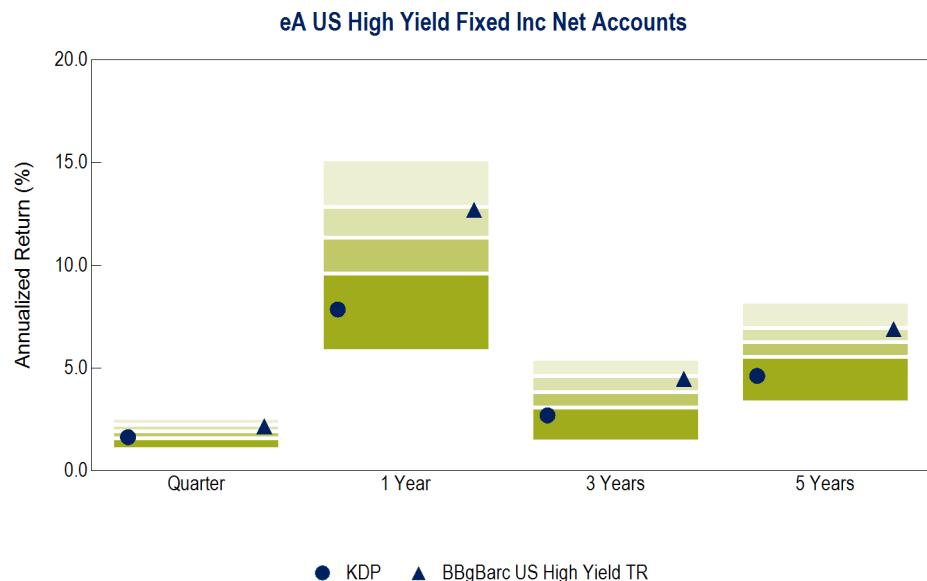
## Portfolio Overview



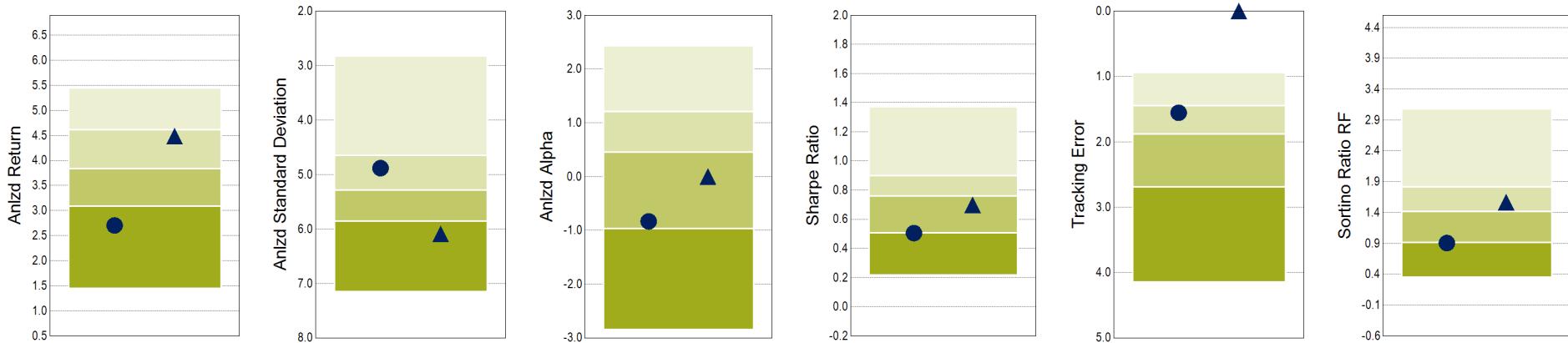
NEPC, LLC

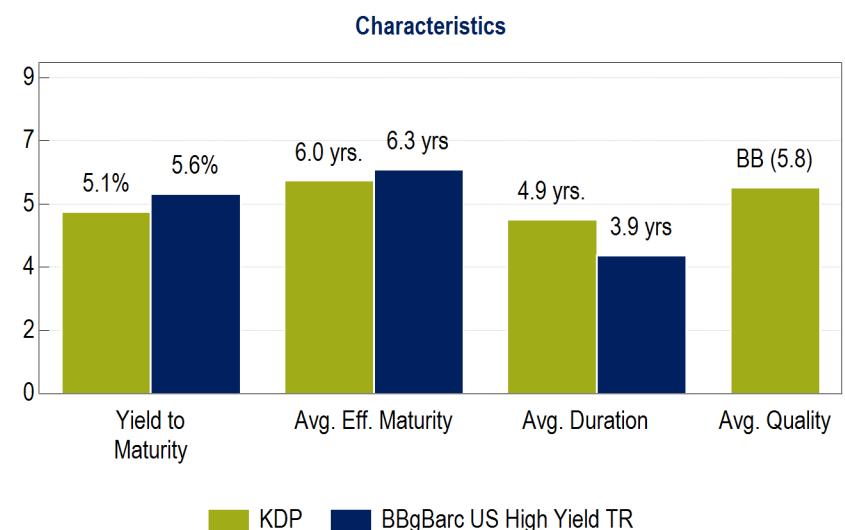
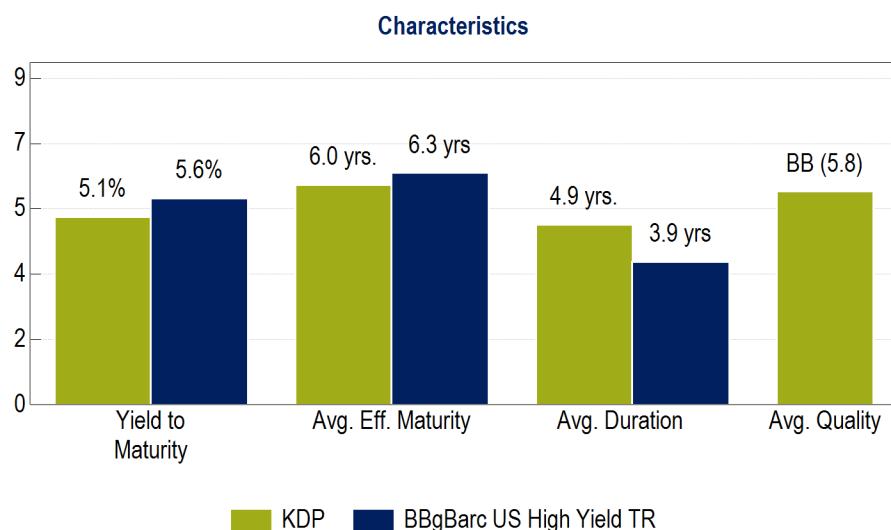
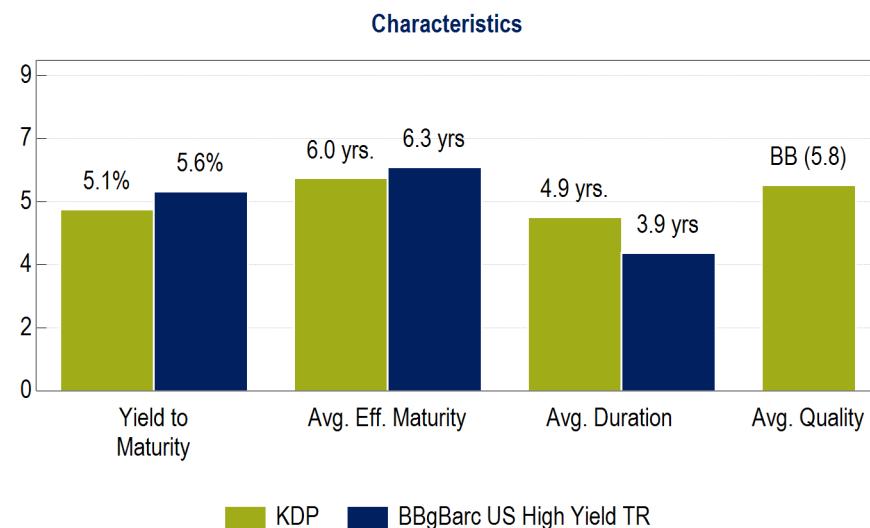
June 30, 2017

KDP believes that the key to delivering superior risk-adjusted returns lies in controlling credit risk. To do this the firm combines rigorous, bottom-up credit analysis with an active, top-down management approach that ensures a strong overall credit profile and broad portfolio diversification. KDP employs a value-oriented approach to investing that leverages our strong fundamental research capabilities, and seeks to take advantage of market inefficiencies and anomalies on an opportunistic basis in order to capture excess credit spread. KDP places a strong emphasis on issuer, industry and sector diversification, and tends to focus on larger companies, as they tend to be more resilient in times of difficulty and their securities tend to be more liquid. KDP uses a proprietary "Default Risk Ranking (DRR)" System to screen securities eligible for purchase in its portfolios. By assigning default risk probabilities to companies covered, the DRR system is used to identify securities that are overvalued or undervalued relative to the market. The firm minimizes portfolio volatility in part by investing in securities of companies that exhibit greater resilience in times of financial distress. KDP focuses on companies with good management, stable to improving earnings, good balance sheet liquidity and a strong competitive position in industries with favorable underlying fundamentals.

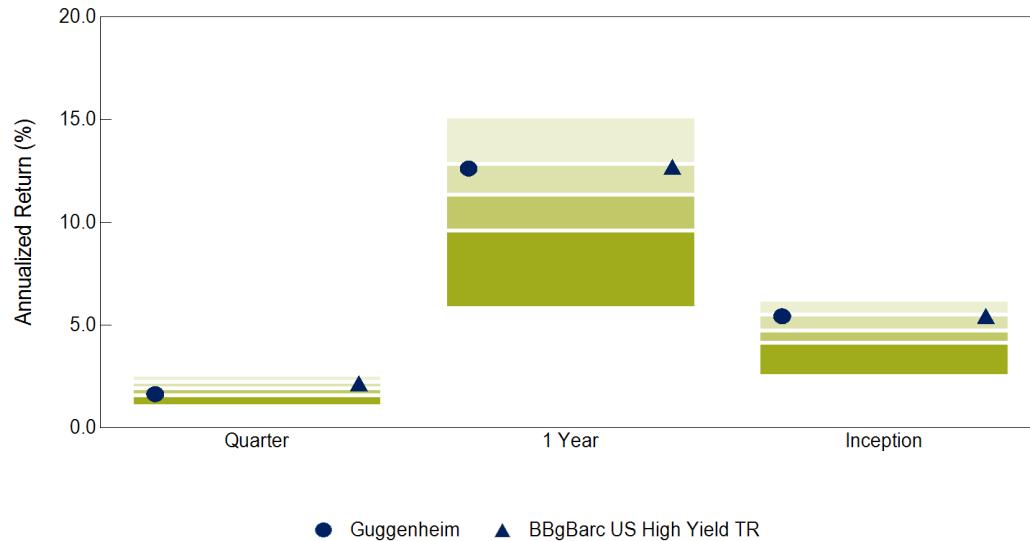


### 3 Year Risk Statistics



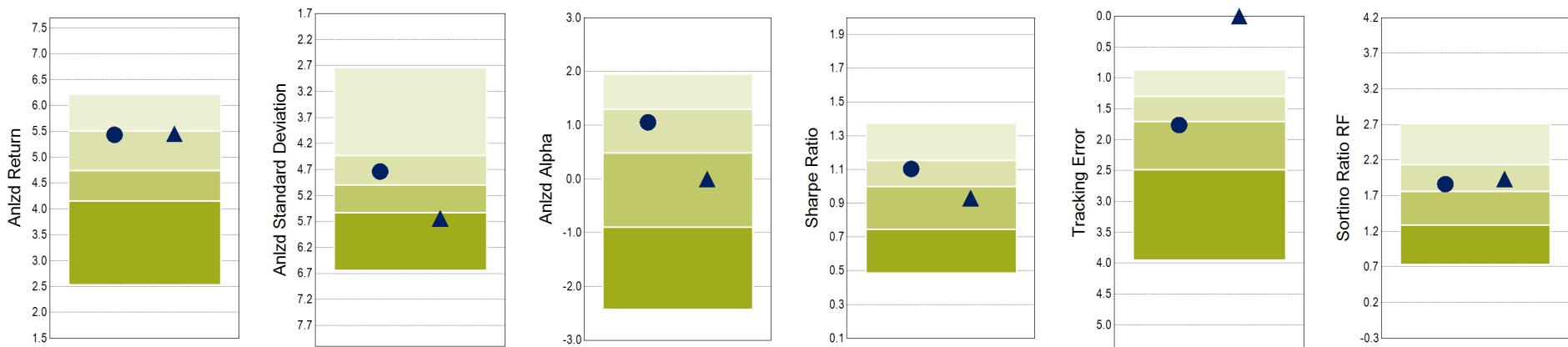


## eA US High Yield Fixed Inc Net Accounts



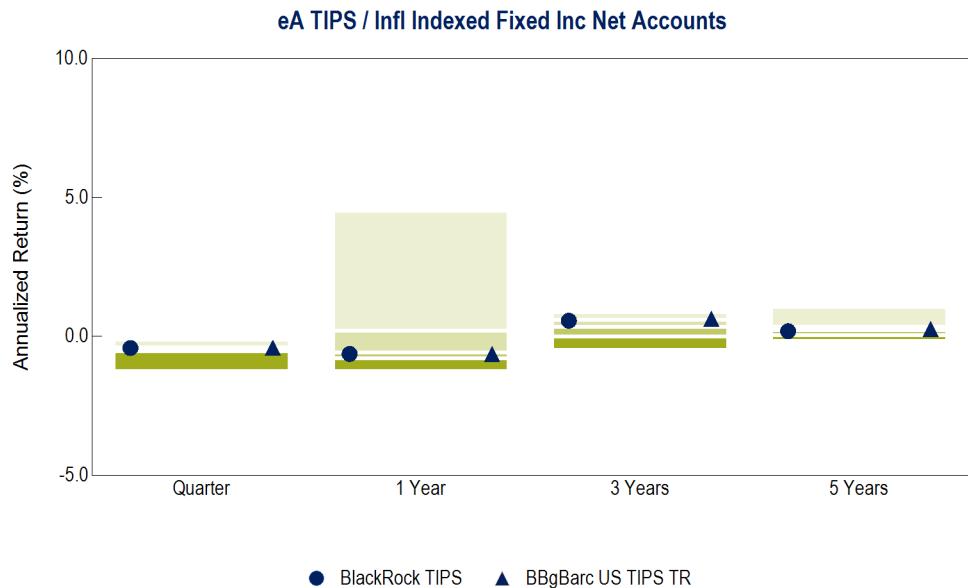
● Guggenheim    ▲ BBgBarc US High Yield TR

## Since Inception Risk Statistics

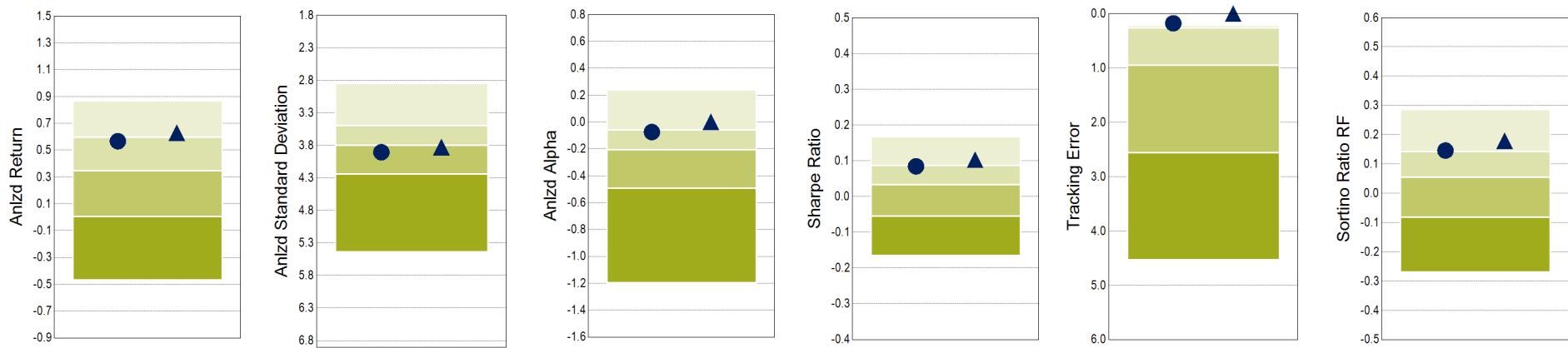


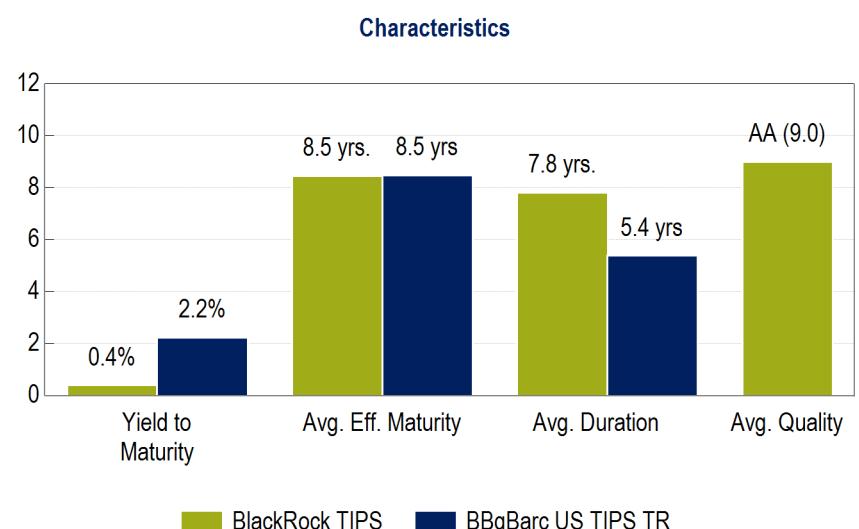
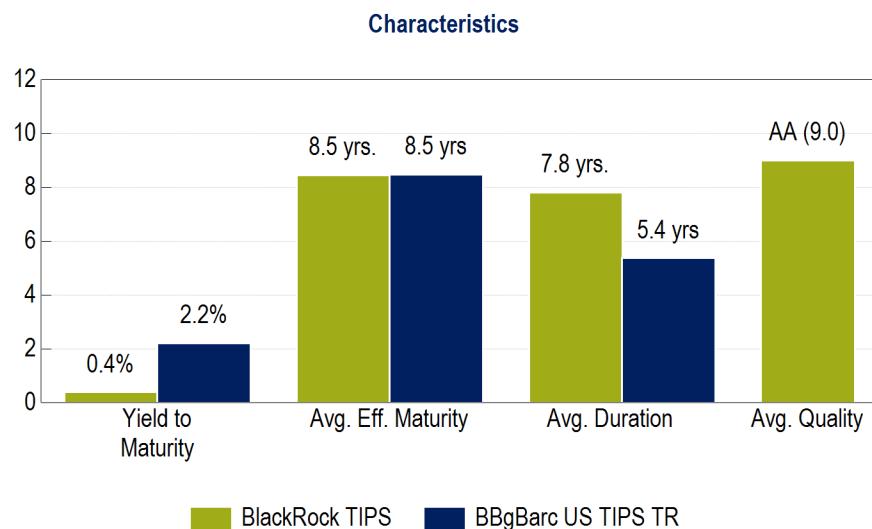
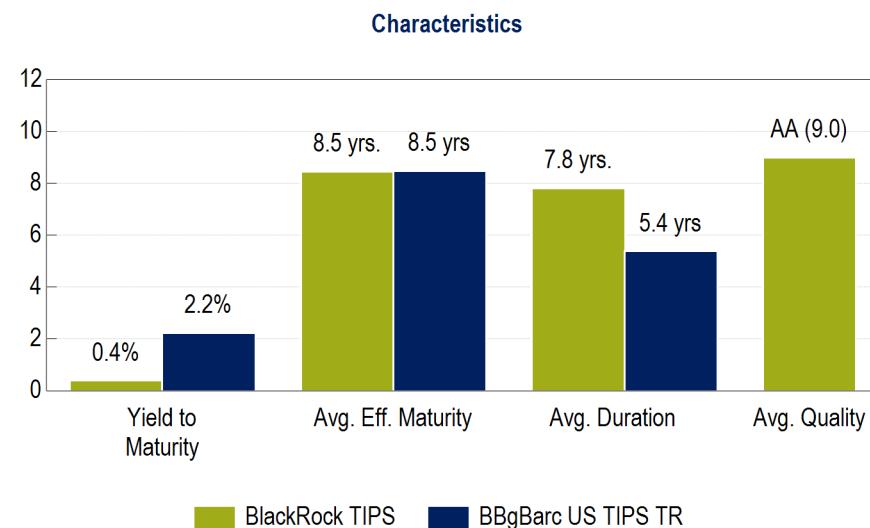
# BlackRock TIPS

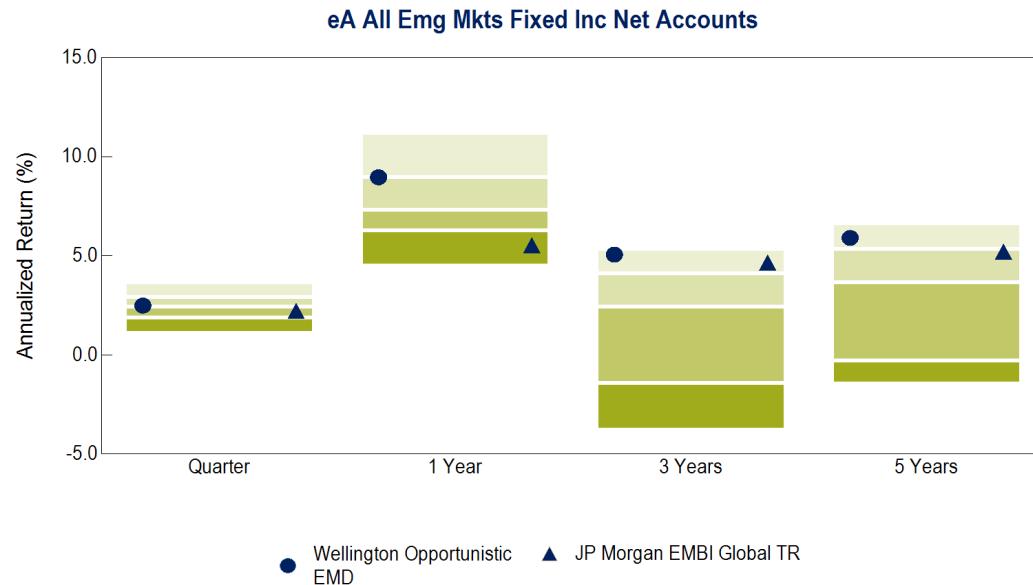
In the management of an inflation-linked bond portfolio, BlackRock will utilize multiple strategies to outperform the index. These include: duration and yield curve positioning, technical supply/demand anomalies related primarily to the ILB auction cycle, seasonal factors related to non-seasonally adjusted inflation-linked indices, break-even spread between ILBs and nominal securities, and, if applicable, sector and country allocation. The team compares nominal yields with real yields and factor in their views on inflation. If the yield spread is less than the inflation rate, then ILBs are considered to trade cheaply to nominal bonds and have greater relative value. The portfolio currently holds about 31 positions, out of 27-29 issues in the benchmark. Turnover is moderate, at around 100-150%.



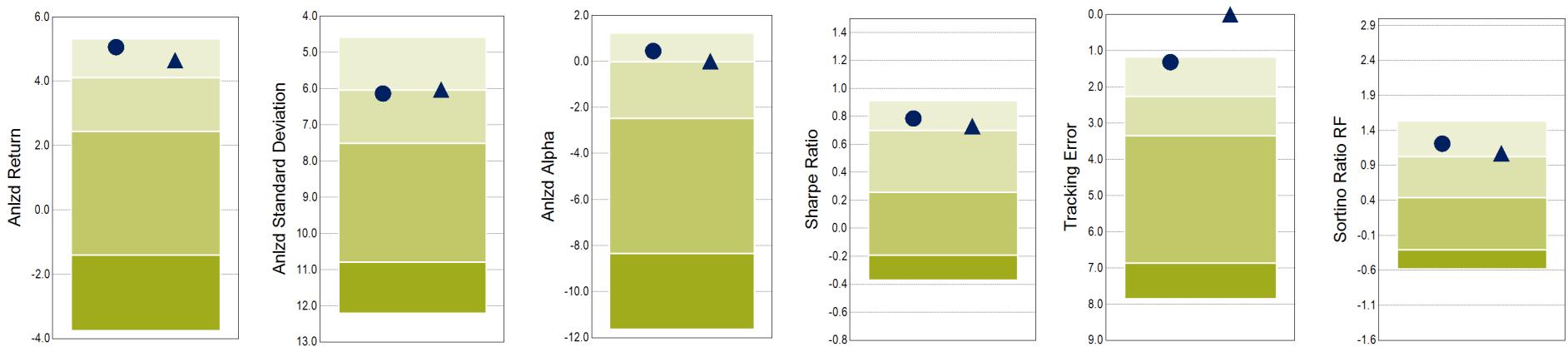
## 3 Year Risk Statistics



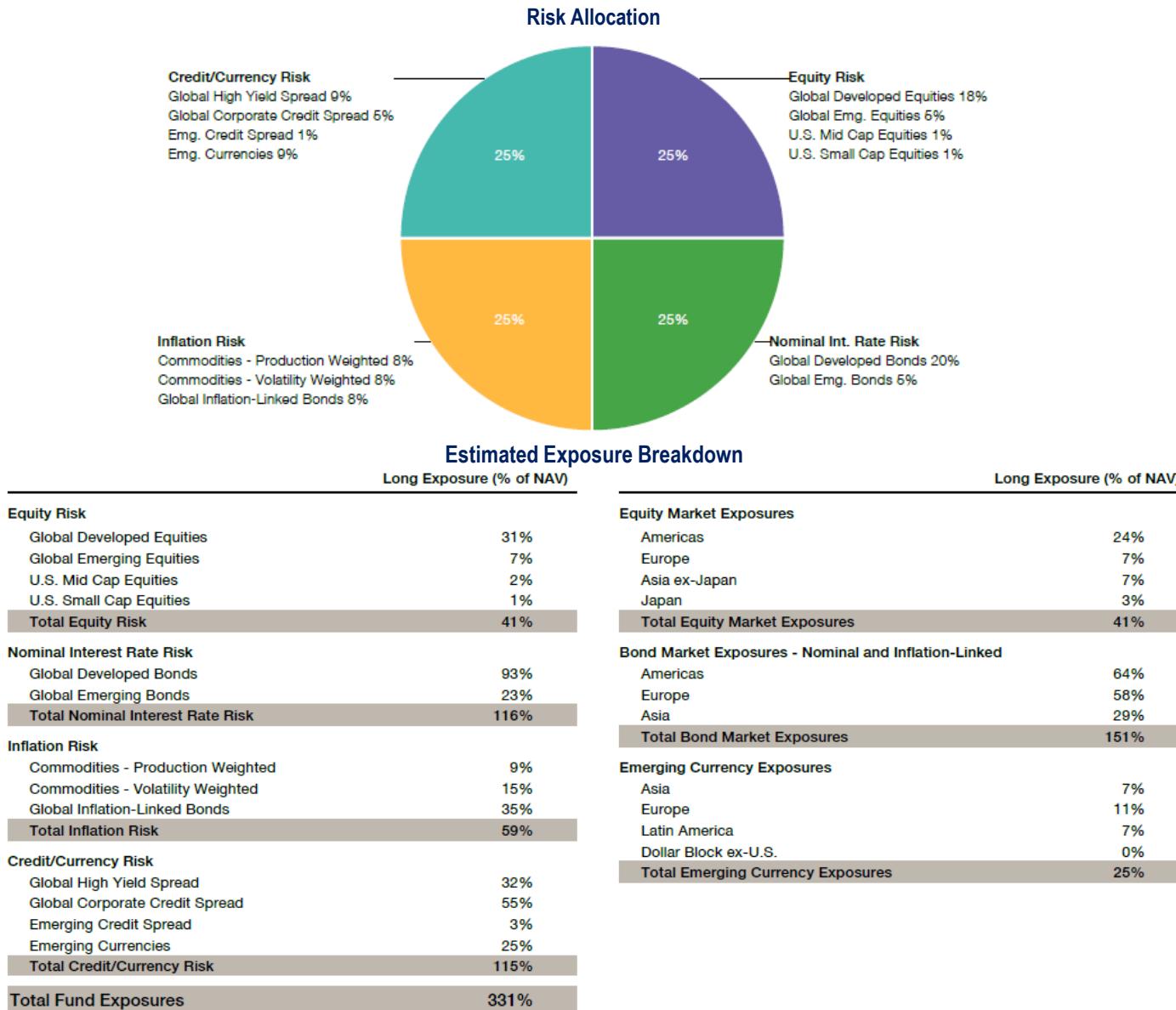




## 3 Year Risk Statistics



# AQR Global Risk Premium Fund



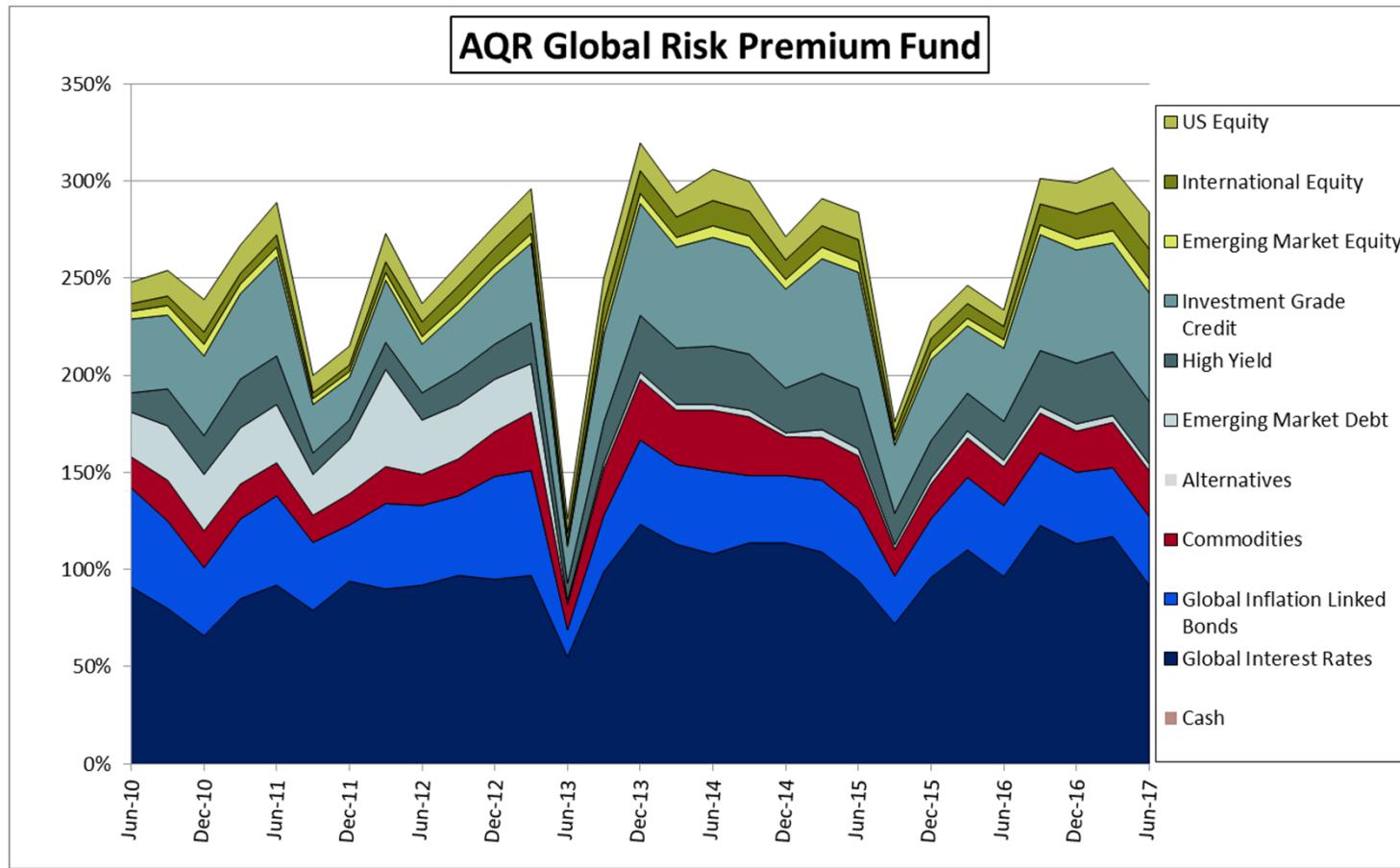
Source: AQR



NEPC, LLC

June 30, 2017

# AQR Global Risk Premium Fund



NEPC, LLC

June 30, 2017

# Mellon Dynamic Growth Fund

		Country	Current Month %		Country	Current Month %
Growth 69.9%	Developed ex-U.S. Equity 43.6%	Australia	5.6	Diversifying Strategies Currency 100.0% Developed ex-U.S. -14.8%	United States	114.8
		Canada	3.0		Australia	-3.0
		France	1.8		Canada	0.0
		Germany	6.8		Denmark	0.0
		Hong Kong	-1.9		Euro	10.0
		Italy	1.6		Japan	0.4
		Japan	10.6		New Zealand	-4.1
		Netherlands	3.3		Norway	0.3
		Spain	1.1		Sweden	2.4
		Switzerland	1.1		Switzerland	-7.3
		United Kingdom	9.1		United Kingdom	-13.9
		Other	1.4		Other	0.4
U.S. Equity 21.0%	United States	21.0				
	High Yield Bonds 5.3%	5.3				
Defensive 30.9%	Developed ex U.S. Bonds -15.2%		-15.2			
	U.S. Bonds 46.1%		46.1			
Real 10.7%	Commodity 5.7%		5.7			
	Inflation-Linked Bonds 5.0%		5.0			

1. Any collective investment funds presented are maintained by The Bank of New York Mellon. Employees of Mellon Capital manage the assets of any collective investment funds in their capacity as dual officers of The Bank of New York Mellon. Not all investors may be eligible to invest in the fund(s) shown above.

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Source: Mellon Capital Management



NEPC, LLC

June 30, 2017

# Mellon Dynamic Growth Fund

	Fund Return %	Growth					Defensive			Real		Diversifying Strategies
		Developed ex-U.S. Equity	U.S. Equity	EM Equity	High Yield Bonds	EM Debt	Government Bonds ex-U.S.	U.S. Bonds	IG Corporates	Commodity	Inflation - Linked Bonds	Currency
Month-to-Date	-1.09	-0.49	0.13	0.00	0.01	0.00	0.19	-0.32	0.00	-0.16	-0.05	-0.40
Quarter-to-Date	1.09	0.85	0.52	0.00	0.11	0.00	0.75	0.79	0.00	-0.31	0.09	-1.71
Year-to-Date	4.18	3.06	1.15	0.00	0.25	0.00	0.30	1.51	0.00	-0.32	0.16	-1.92
1 Year	3.83	6.71	1.47	0.00	0.74	0.00	-0.61	-2.93	0.00	-0.98	0.05	-0.61
3 Year	5.32	2.53	0.27	-0.37	0.36	-0.09	-0.40	1.34	0.00	-0.17	0.00	1.85
5 Year	7.13	3.37	2.39	-0.11	0.37	-0.04	-0.25	0.84	0.07	-0.06	0.14	0.40
7 Year	8.29	2.78	2.99	0.01	0.26	-0.03	0.27	0.71	0.13	0.07	0.33	0.77
10 Year	-	-	-	-	-	-	-	-	-	-	-	-
Since Inception <sup>2</sup>	6.76	2.00	2.35	-0.10	0.26	-0.03	0.40	0.68	0.14	0.00	0.33	0.73

Source: Mellon Capital Management



NEPC, LLC

June 30, 2017

# Appendix

## Index Performance Summary as of 06/30/2017

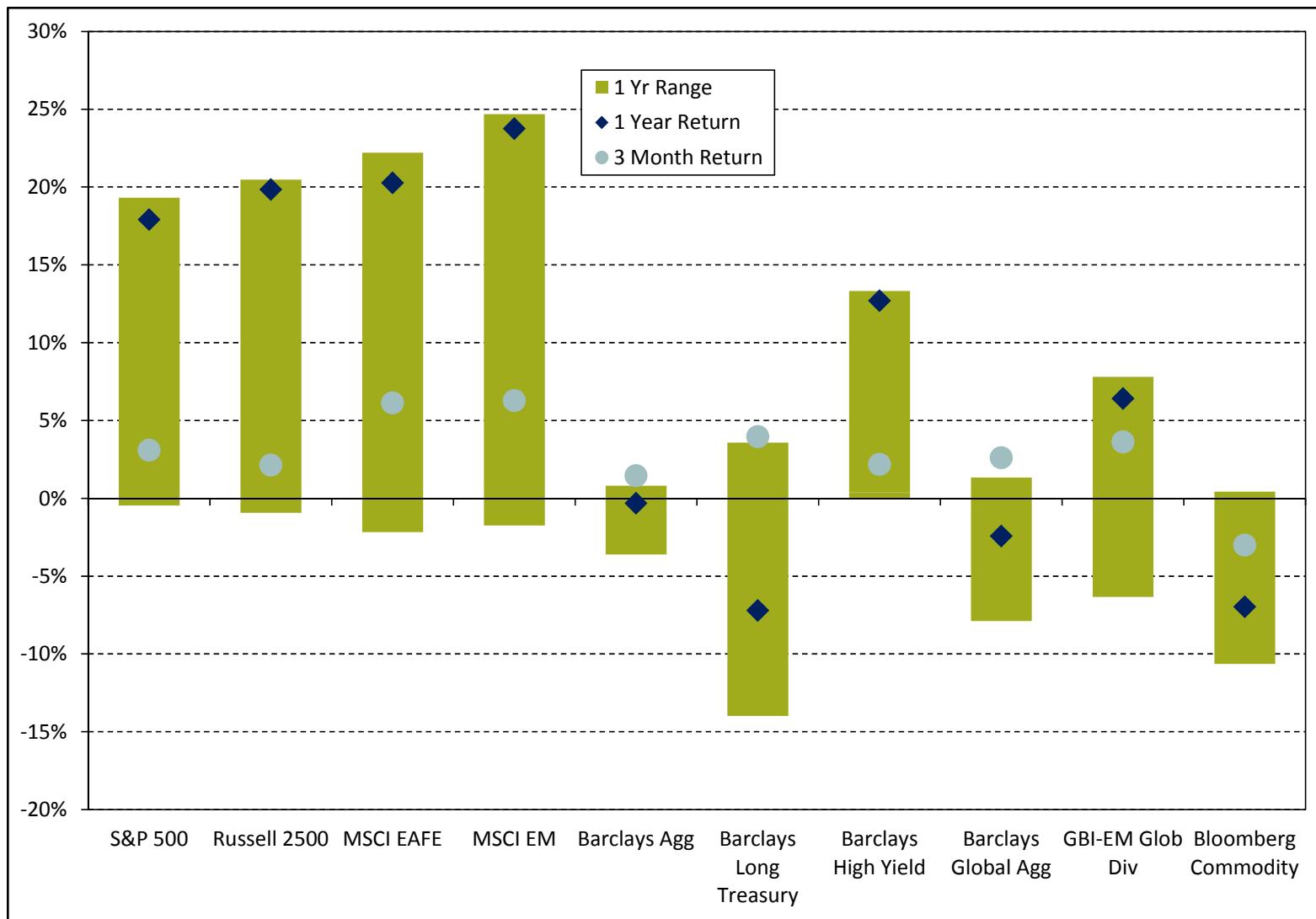
	2009	2010	2011	2012	2013	2014	2015	2016	Q1	April	May	June	Q2	YTD
<b>MSCI EM</b>	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	11.4%	2.2%	3.0%	1.0%	6.3%	18.4%
<b>MSCI EAFE</b>	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	7.2%	2.5%	3.7%	-0.2%	6.1%	13.8%
<b>MSCI ACWI</b>	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	6.9%	1.6%	2.2%	0.5%	4.3%	11.5%
<b>JPM GBI-EM Global Div</b>	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	6.5%	1.2%	2.0%	0.5%	3.6%	10.4%
<b>S&amp;P 500</b>	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	6.1%	1.0%	1.4%	0.6%	3.1%	9.3%
<b>Russell 1000</b>	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	6.0%	1.1%	1.3%	0.7%	3.1%	9.3%
<b>BC US STRIPS 20+ Yr</b>	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	1.8%	1.8%	3.1%	1.1%	6.1%	8.0%
<b>BC US Long Credit</b>	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	1.7%	1.6%	2.1%	1.0%	4.7%	6.4%
<b>JPM EMBI Glob Div</b>	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	3.9%	1.6%	0.9%	-0.1%	2.2%	6.2%
<b>BC US Govt/Cred Long</b>	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	6.7%	1.6%	1.6%	2.0%	0.8%	4.4%	6.0%
<b>Russell 2500</b>	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	3.8%	0.8%	-1.1%	2.5%	2.1%	6.0%
<b>Russell 2000</b>	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	2.5%	1.1%	-2.0%	3.5%	2.5%	5.0%
<b>BC US Corporate HY</b>	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	2.7%	1.2%	0.9%	0.1%	2.2%	4.9%
<b>BC Global Agg</b>	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.8%	1.1%	1.5%	-0.1%	2.6%	4.4%
<b>BC Municipal</b>	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	1.6%	0.7%	1.6%	-0.4%	2.0%	3.6%
<b>CS Hedge Fund</b>	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	2.1%	0.4%	0.8%	-	1.3%	3.4%
<b>FTSE NAREIT Eqy REITs</b>	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	1.2%	0.1%	-0.8%	2.2%	1.5%	2.7%
<b>BC US Agg Bond</b>	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.8%	0.8%	0.8%	-0.1%	1.4%	2.3%
<b>CS Leveraged Loan</b>	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	1.2%	0.4%	0.4%	-0.1%	0.8%	2.0%
<b>BC US Agg Interm</b>	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.0%	0.7%	0.6%	0.5%	-0.3%	0.9%	1.6%
<b>BC TIPS</b>	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	1.3%	0.6%	0.0%	-0.9%	-0.4%	0.9%
<b>BC US Govt/Cred 1-3 Yr</b>	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.3%	0.4%	0.2%	0.2%	0.0%	0.3%	0.7%
<b>Alerian MLP</b>	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	3.9%	-1.3%	-4.5%	-0.6%	-6.4%	-2.7%
<b>BBG Commodity</b>	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	-2.3%	-1.5%	-1.4%	-0.3%	-3.2%	-5.6%

Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse



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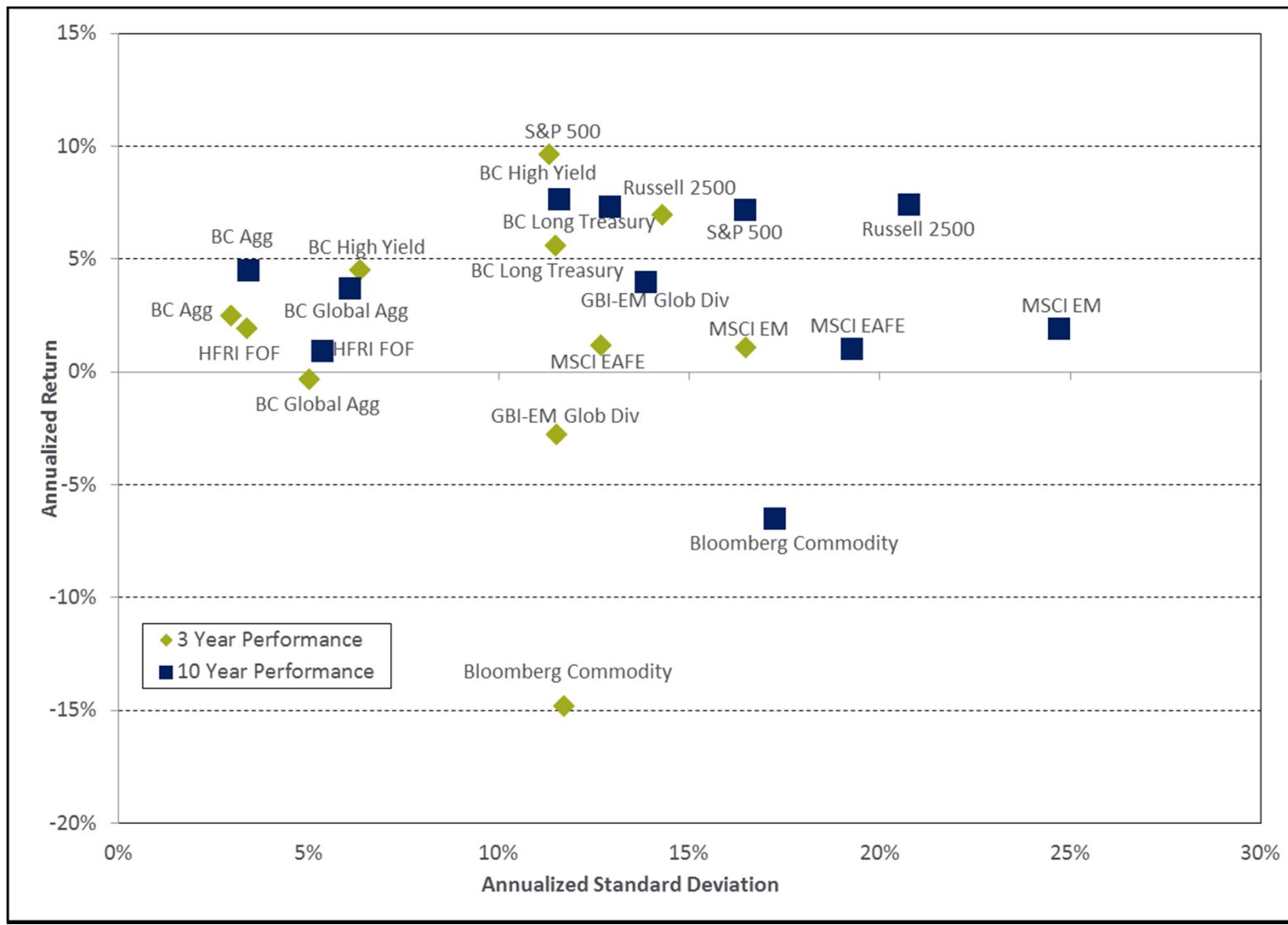
## Near Term Broad Market Performance Summary as of 06/30/2017



Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan

\*1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

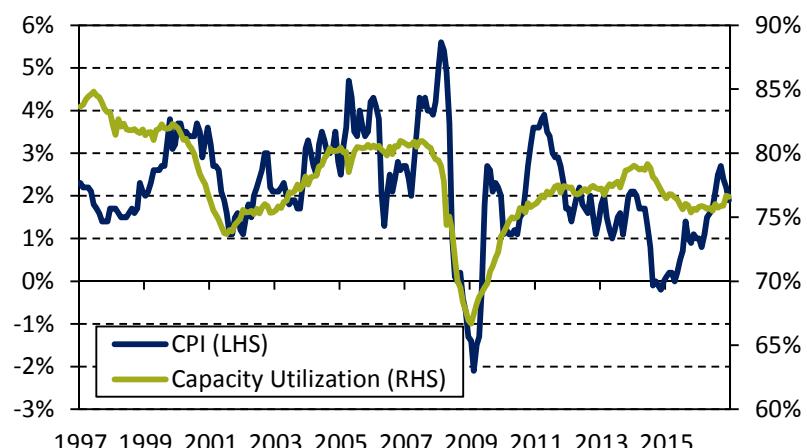
## Long Term Broad Market Performance Summary as of 06/30/2017



Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan

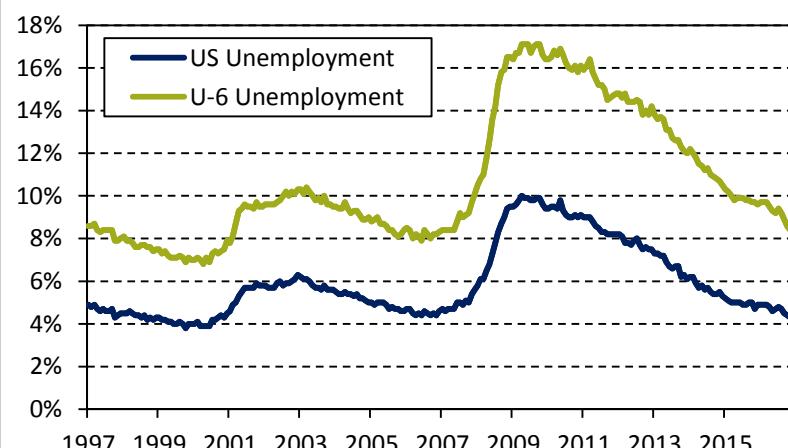
## US Economic Indicators

### Inflation continues to decline, while capacity utilization trends upward



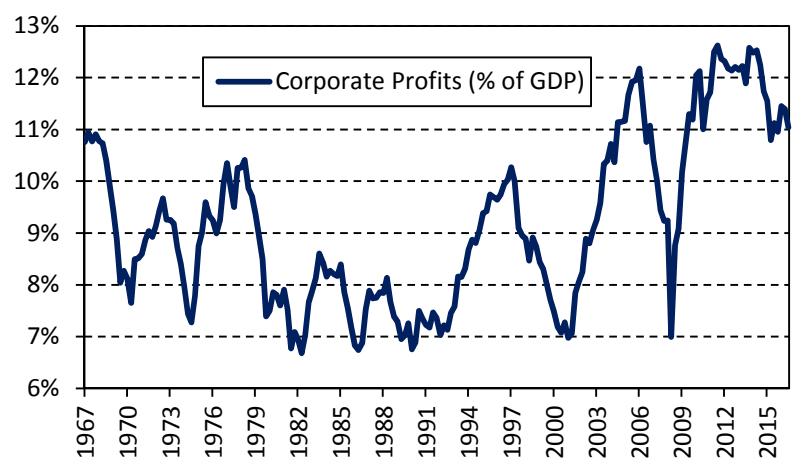
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

### Unemployment is still declining



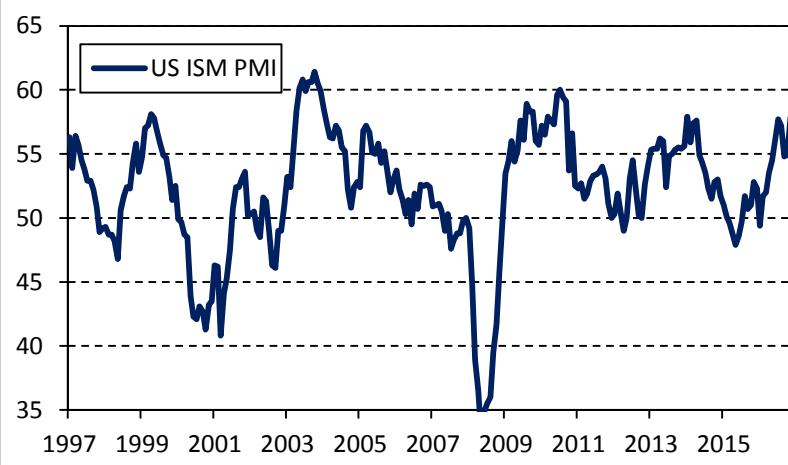
Source: Bloomberg, Bureau of Labor Statistics

### Corporate profits fall off recent highs



Source: Bloomberg, Bureau of Economic Analysis

### Manufacturing growth hit a multi-year high



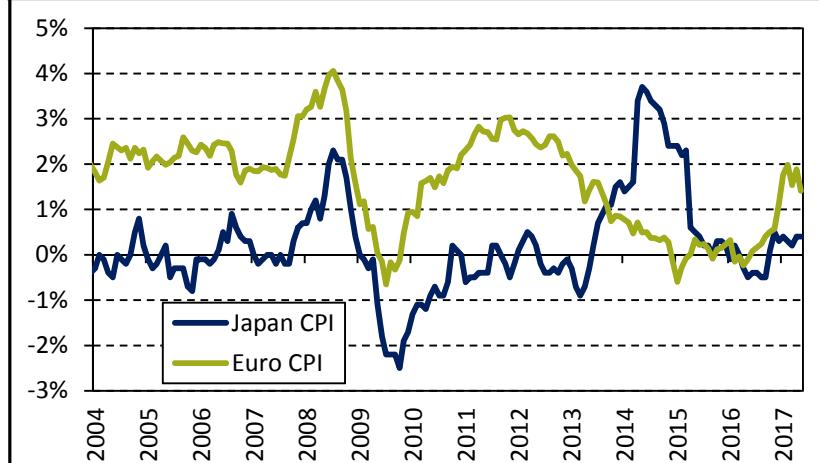
Source: Bloomberg, Institute for Supply Management



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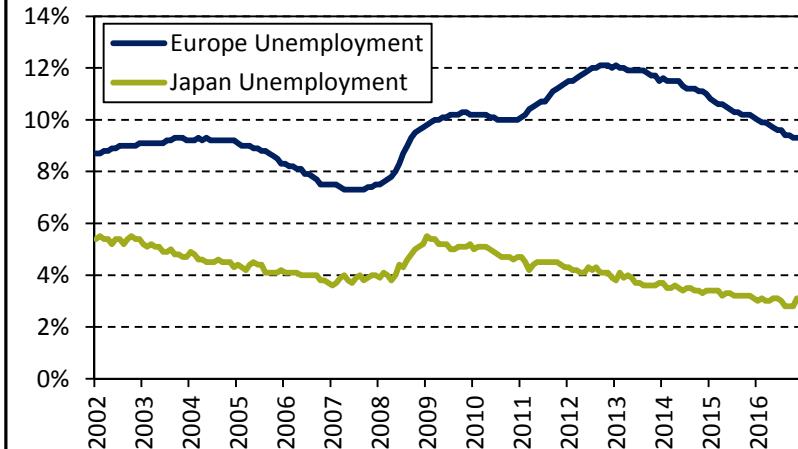
## International Economic Indicators

### Eurozone inflation fell to 1.4%, remaining below the 2% target



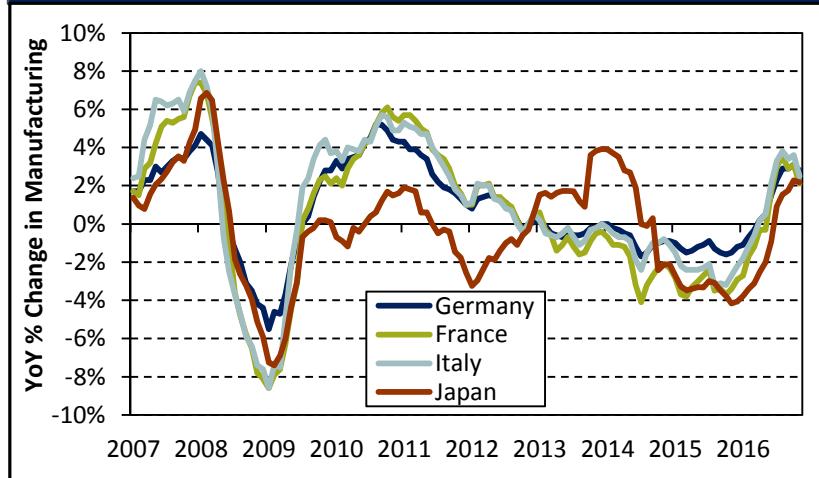
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

### Japan unemployment increased off previous month lows



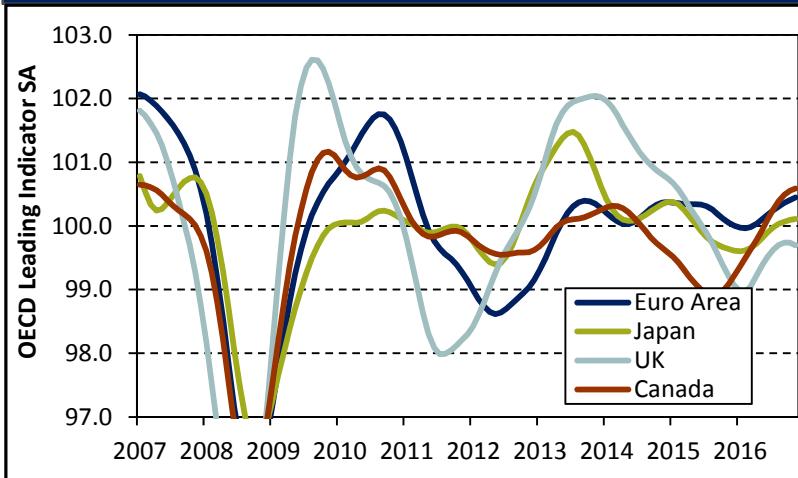
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

### Manufacturing has fallen, though still remains elevated



Source: Bloomberg, OECD, Eurostat

### UK leading indicators have begun to decline

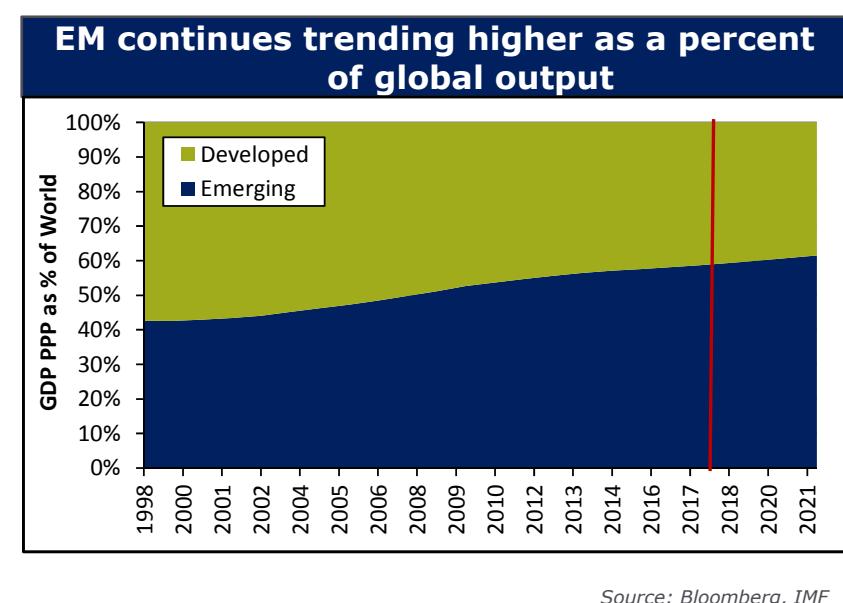
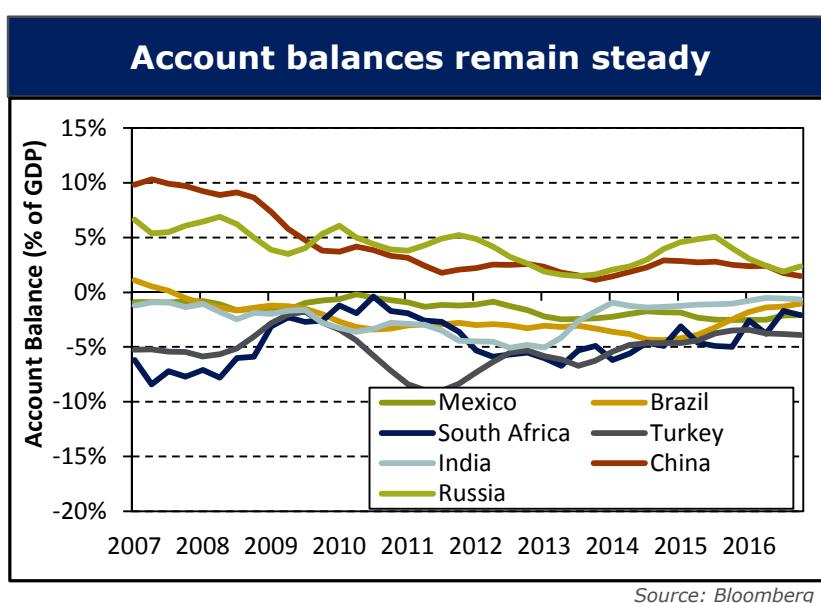
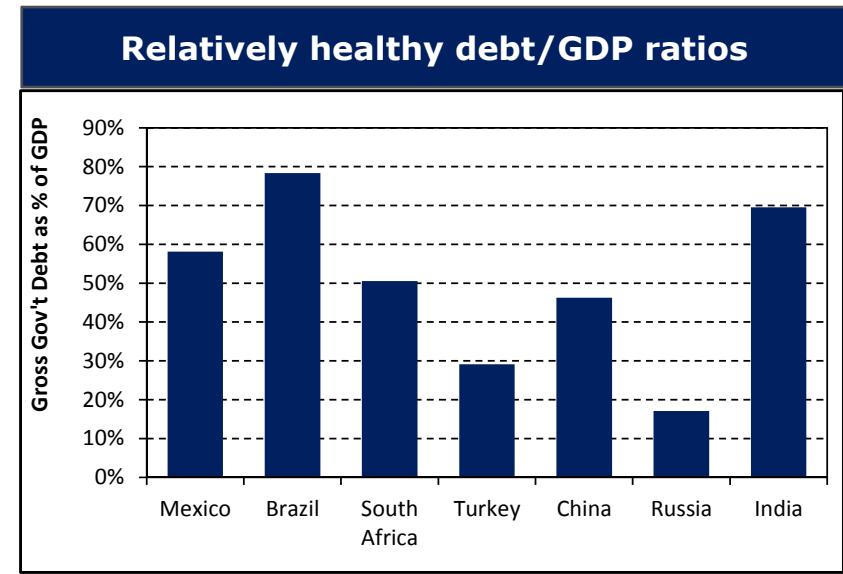
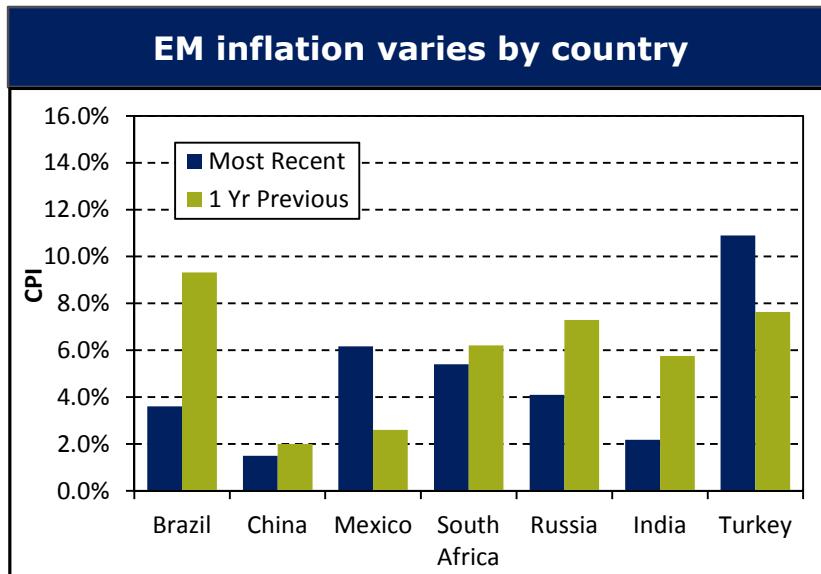


Source: Bloomberg, OECD



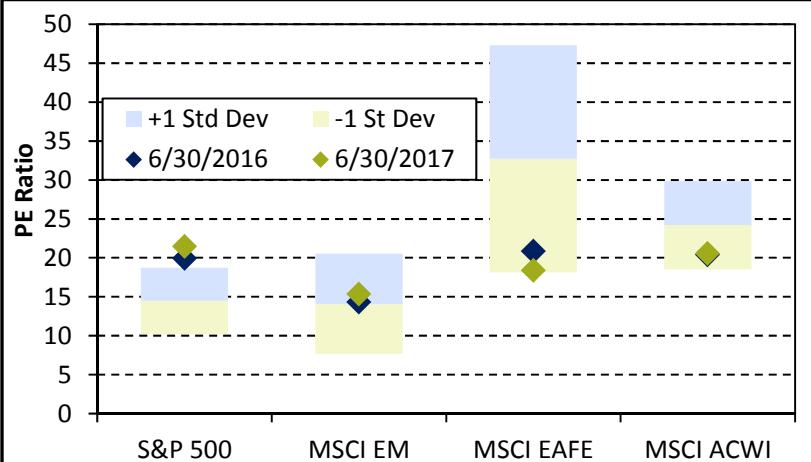
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## Emerging Market Economic Indicators



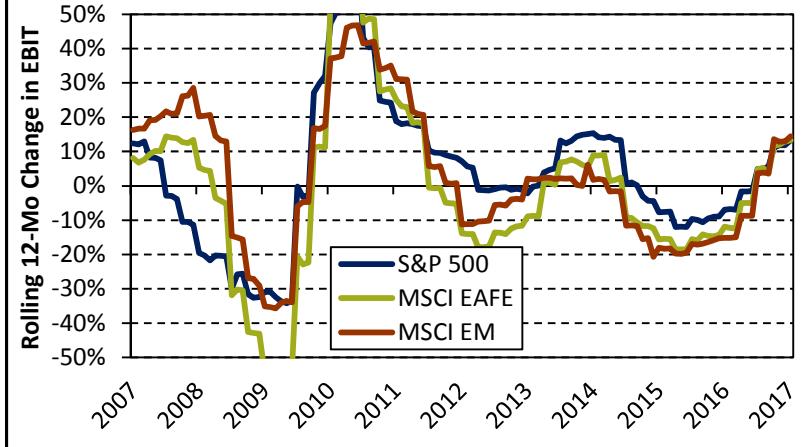
## Global Equity

### EAFE valuations remain lower than the previous year



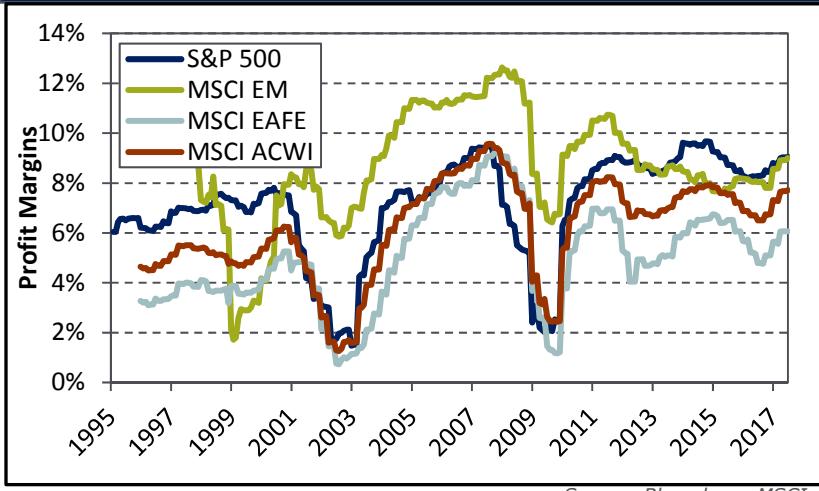
Source: Bloomberg, Standard and Poors, MSCI \*MSCI EAFE is ex UK Telecom  
 \*Standard deviation calculations on 20 years of data except S&P 500 (30 years)

### Rolling annual earnings growth continues trending upward off contraction



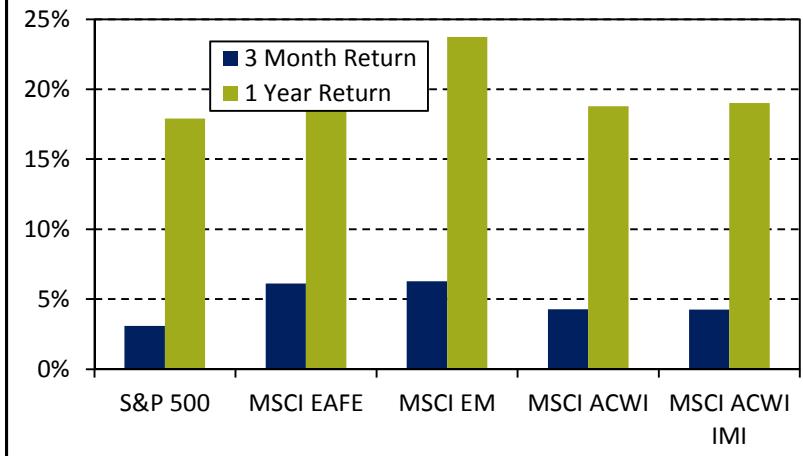
Source: Bloomberg, Standard and Poors, MSCI

### Profit margins continue to improve



Source: Bloomberg, MSCI

### Equities have experienced positive short-term performance

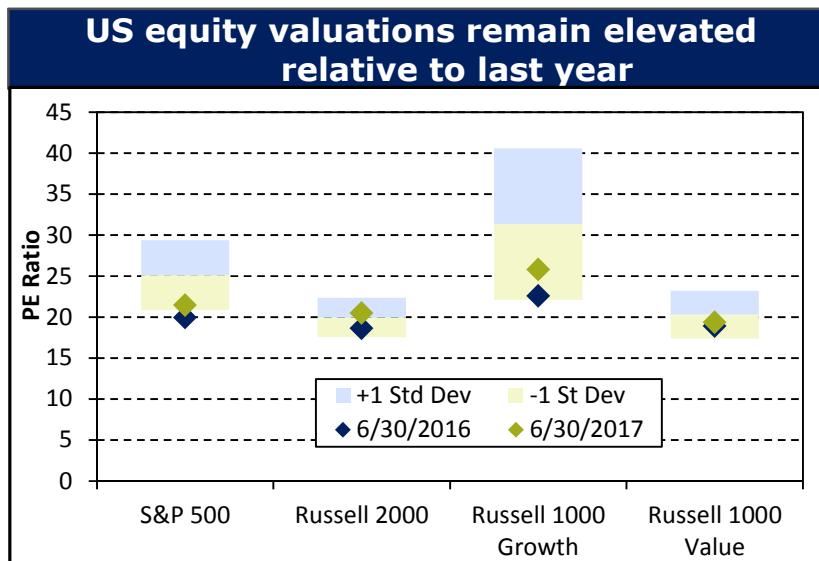


Source: Bloomberg, MSCI

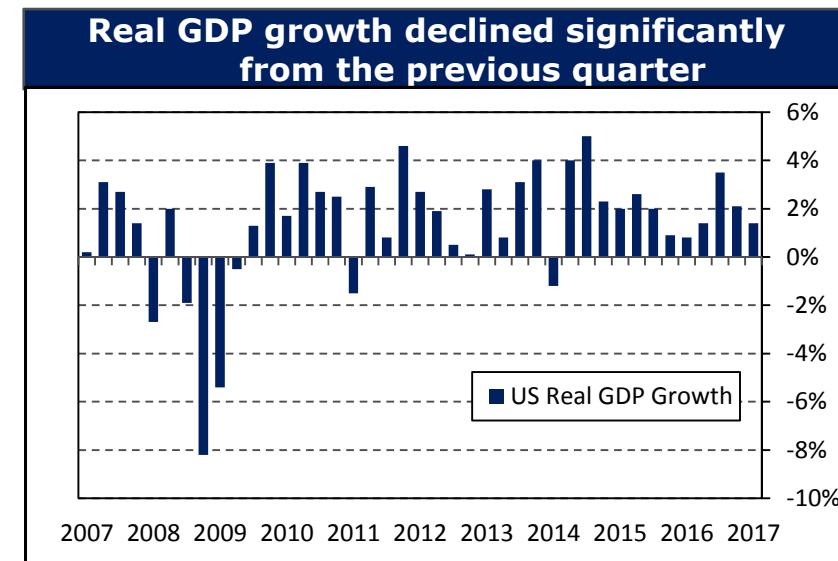


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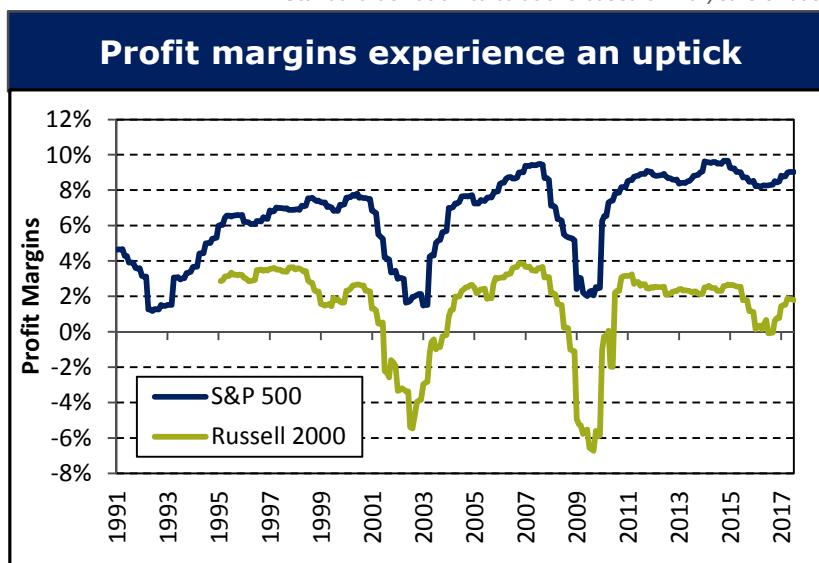
## US Equity



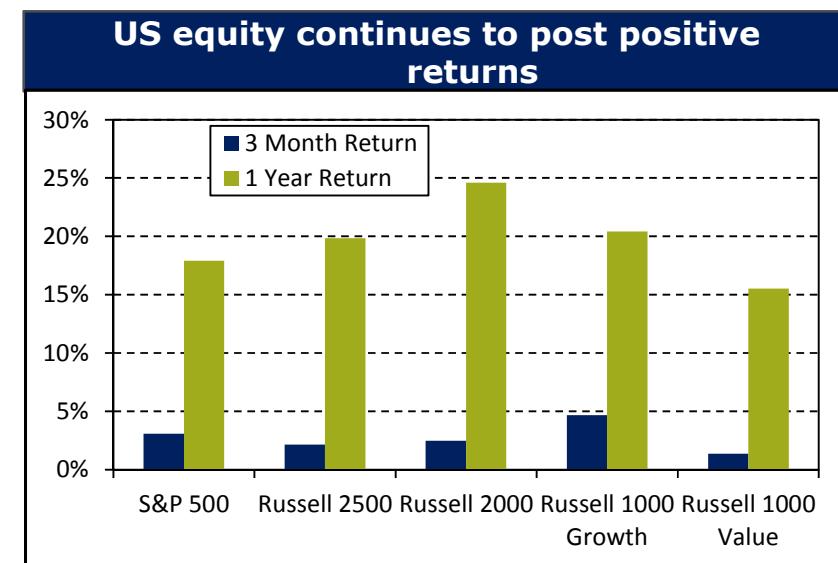
Source: Bloomberg, Standard and Poors, Russell \*Russell 2000 PE is index adjusted positive\*  
Standard deviation calculations based on 20 years of data



Source: Bloomberg, Bureau of Economic Analysis



Source: Bloomberg, Standard and Poors, Russell

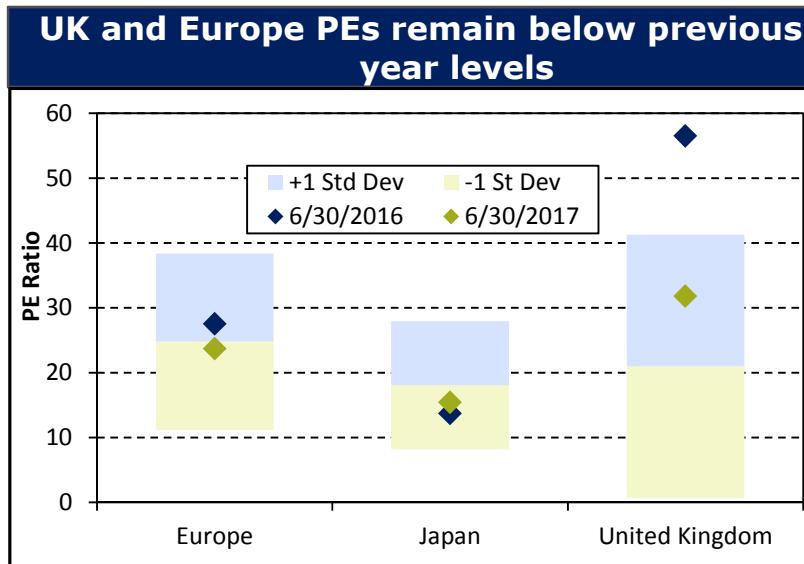


Source: Bloomberg, Standard and Poors, Russell

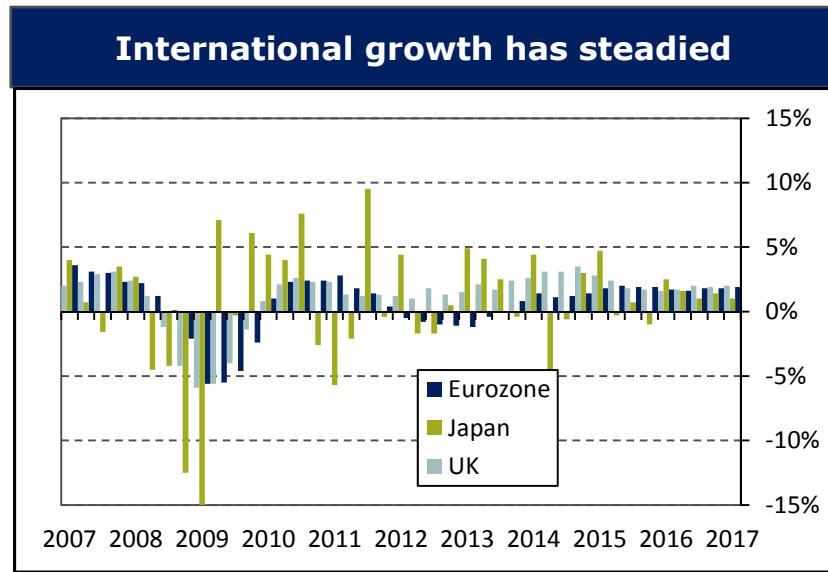


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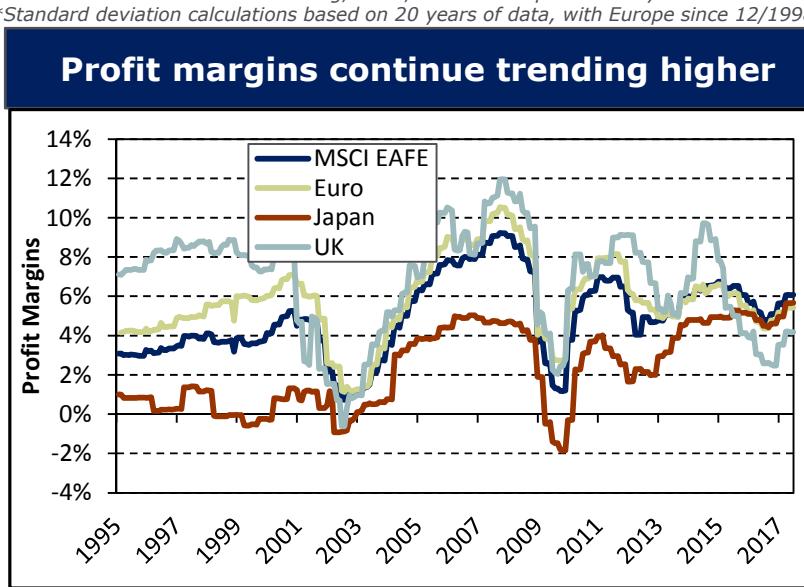
## International Equity



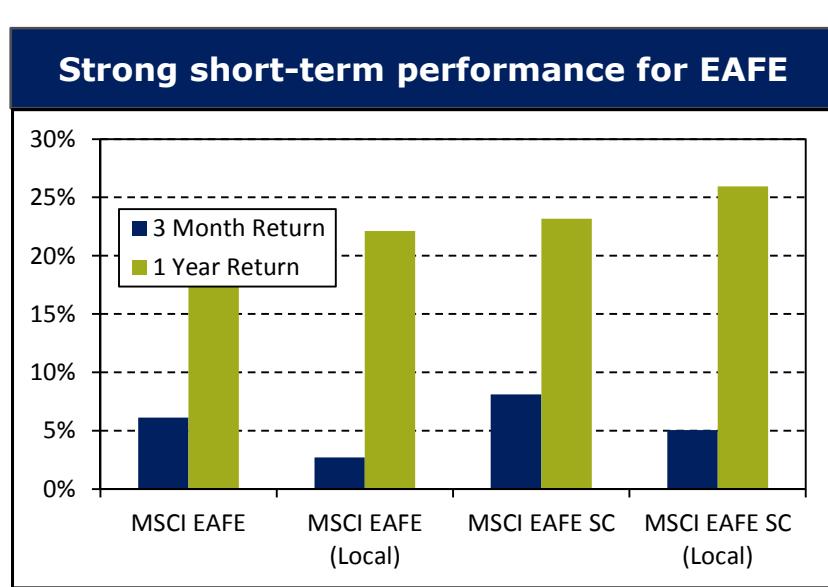
Source: Bloomberg, MSCI, FTSE \*UK represented by FTSE 100 Index  
 \*Standard deviation calculations based on 20 years of data, with Europe since 12/1998



Source: Bloomberg



Source: Bloomberg, MSCI



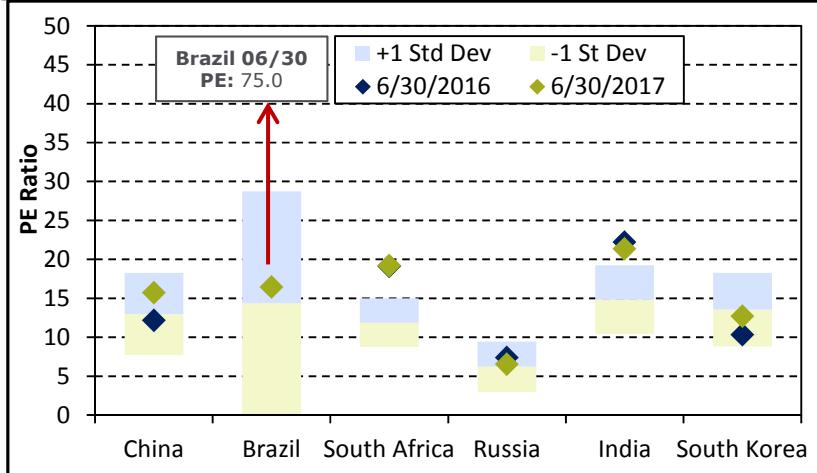
Source: Bloomberg, MSCI



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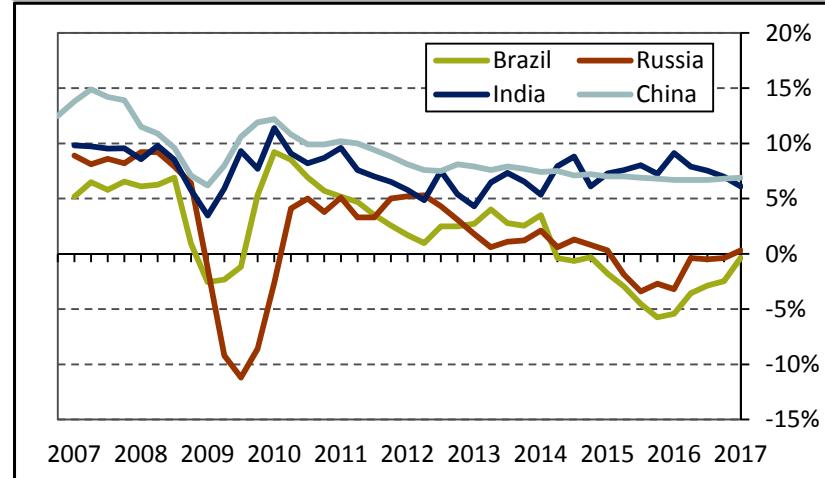
## Emerging Markets Equity

### India's valuation fell below the previous year, though still remains elevated

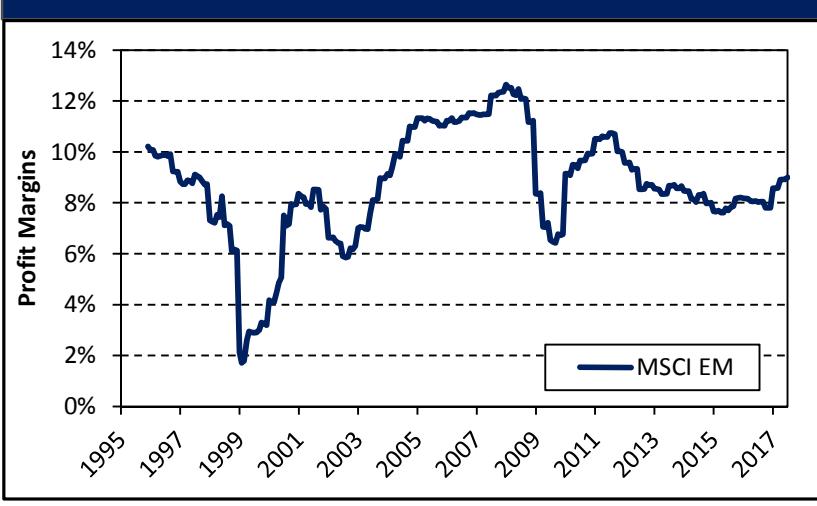


\*Standard deviation calculations based on 20 years of data, with Russia since 01/1998

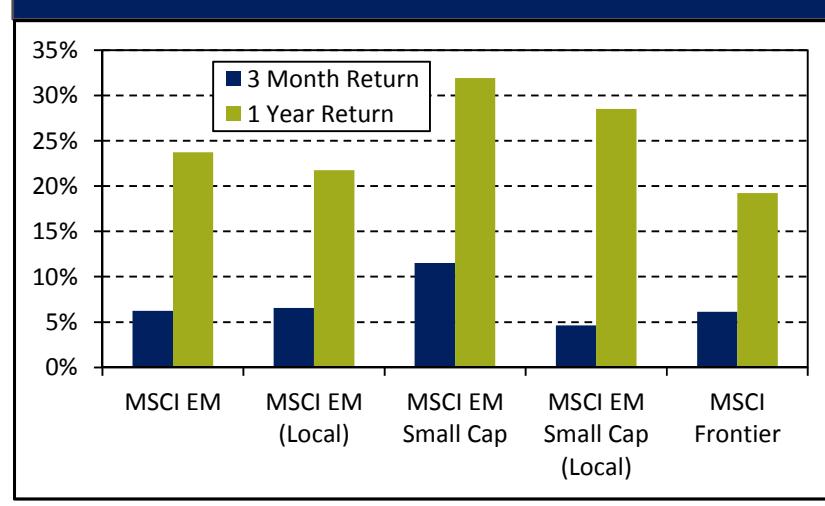
### Brazil continues to rebound off earnings contraction



### Profit margins continue trending upward

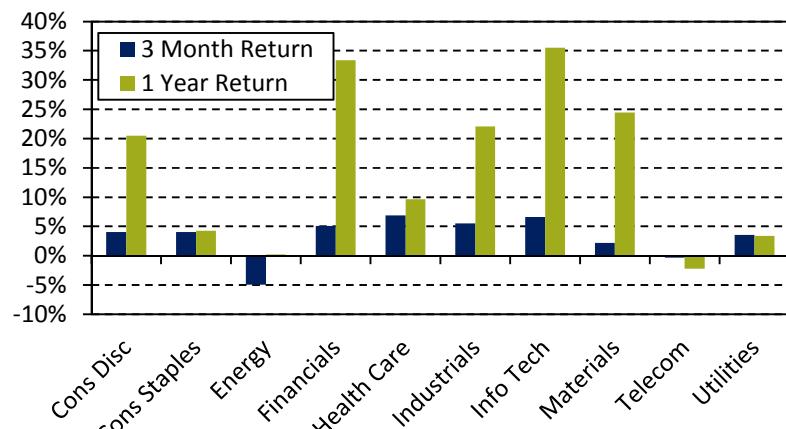


### EM posts strong short-term returns



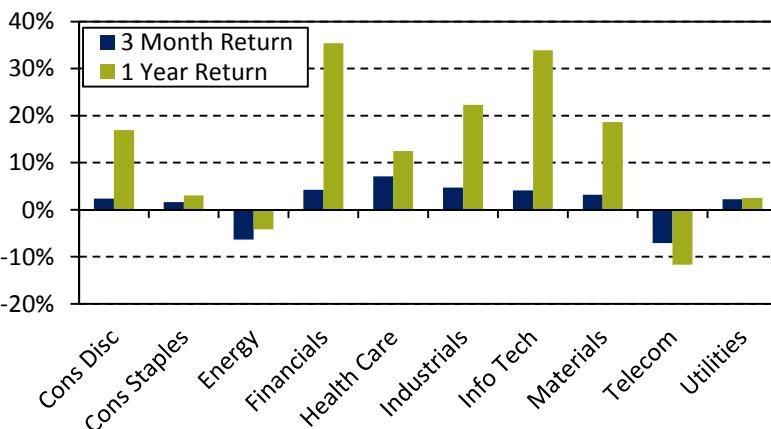
## Global Equity by Sector

**Ex-energy and telecom, MSCI ACWI has posted broad short-term returns**



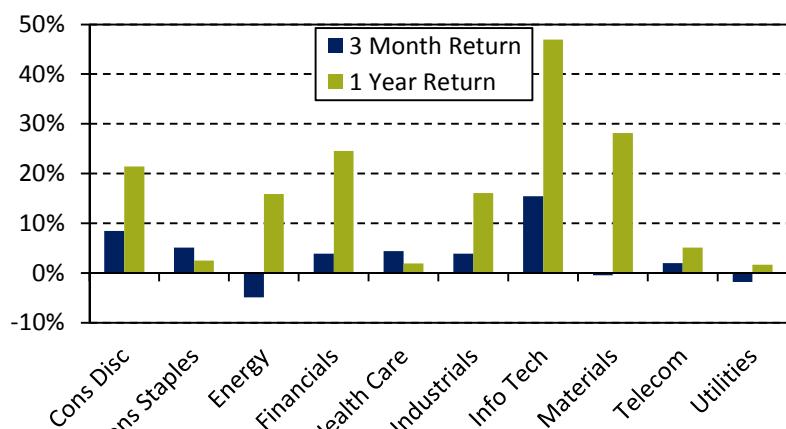
Source: Bloomberg, MSCI

**Energy and telecom sectors drag S&P 500 short-term returns**



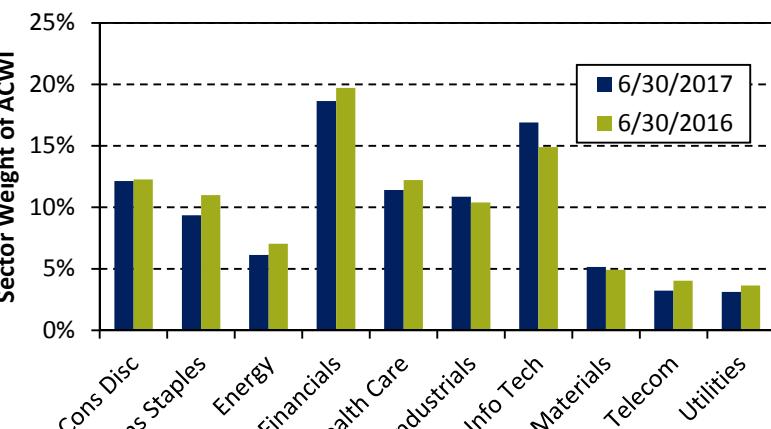
Source: Bloomberg, Standard and Poors

**MSCI EM short-term returns have been lead by Info Tech**



Source: Bloomberg, MSCI

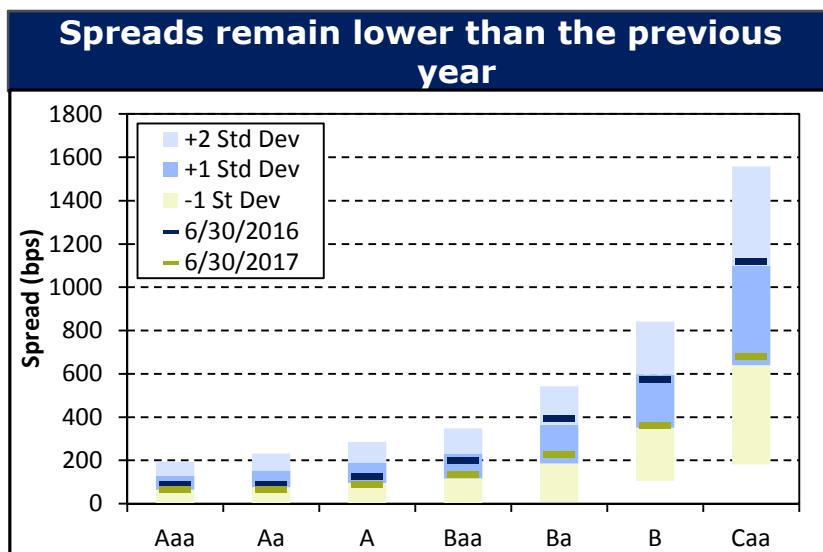
**Financials sector weight has decreased in favor of Info Tech and Industrials**



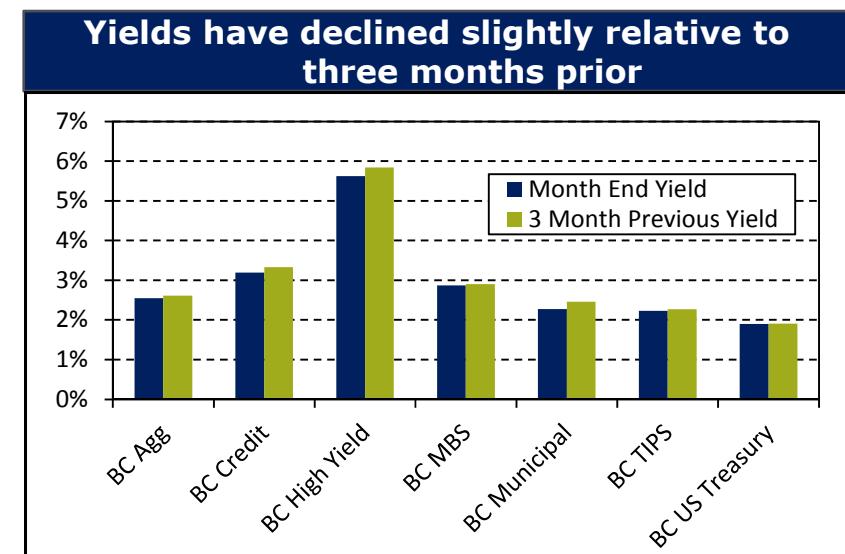
Source: Bloomberg, MSCI



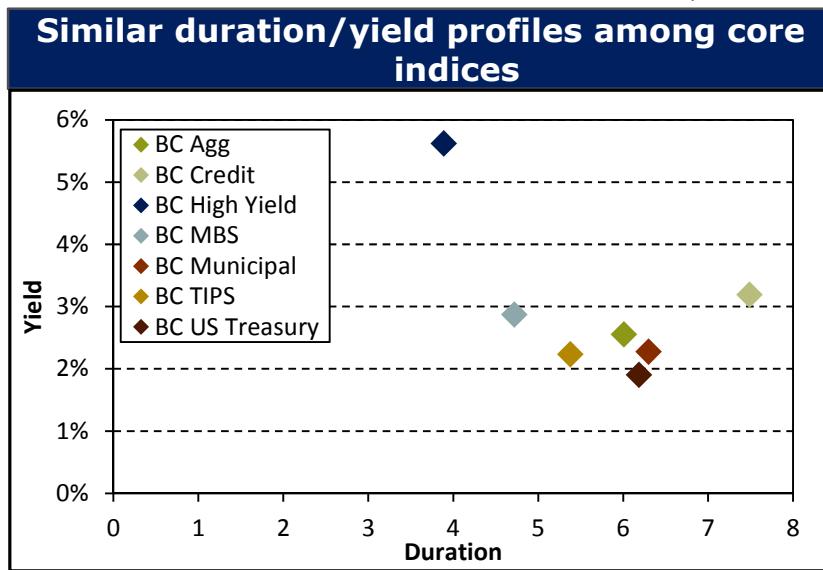
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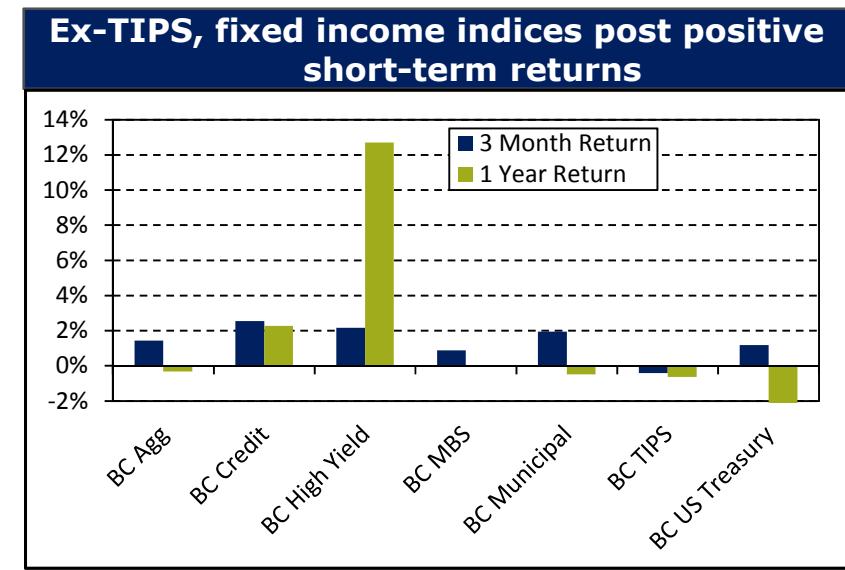
Source: Bloomberg, Barclays  
\*Standard deviation calculations based on 20 years of data



Source: Bloomberg, Barclays



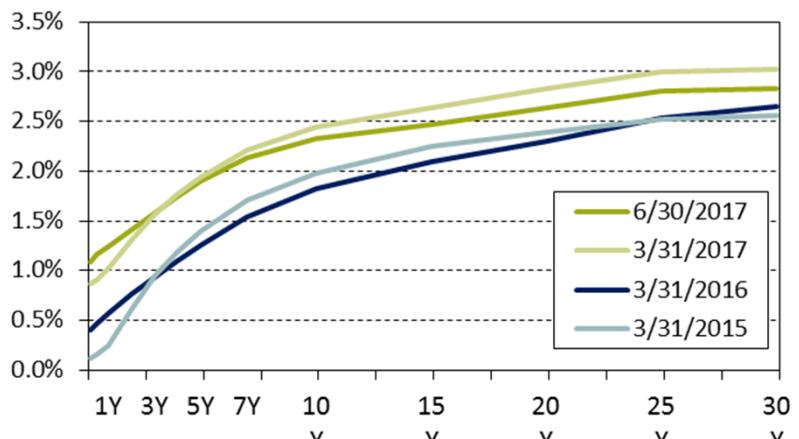
Source: Bloomberg, Barclays



Source: Bloomberg, Barclays

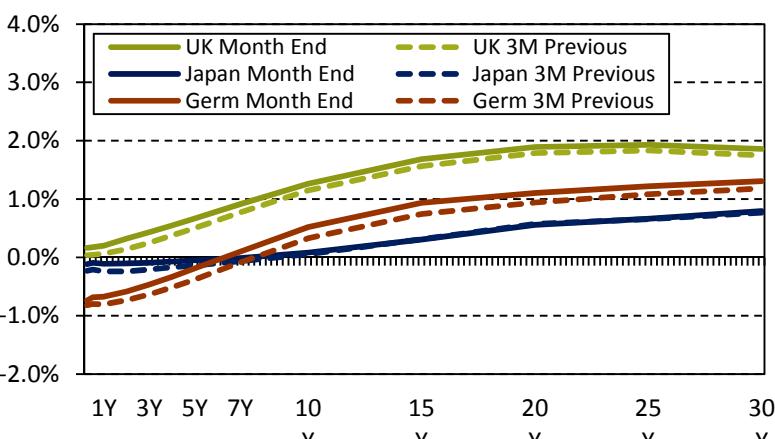
## Rates

### Short-term rate expectations increased with long-term rates declining slightly



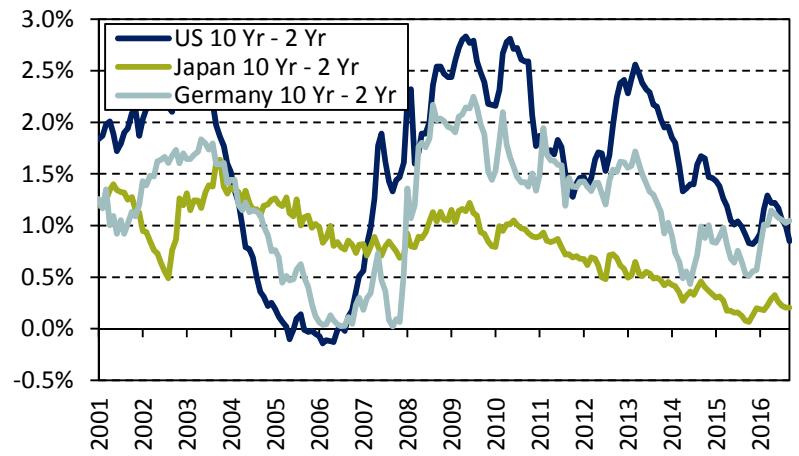
Source: Bloomberg

### Interest rate expectations have increased relative to prior months



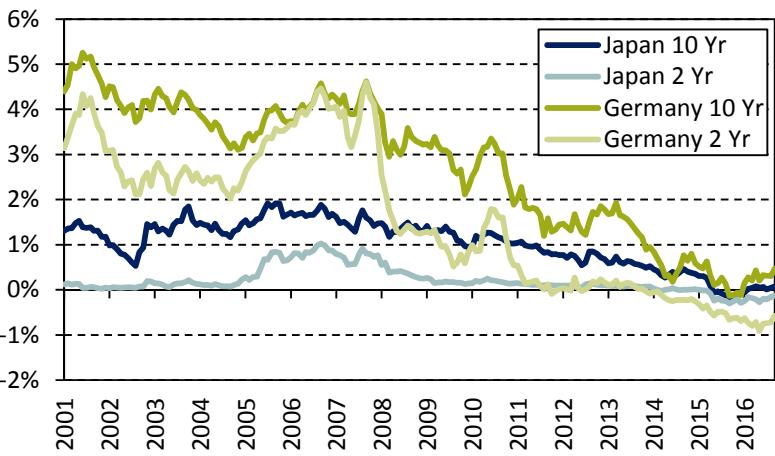
Source: Bloomberg

### 10-2 spreads continue tightening



Source: Bloomberg

### Sovereign bond yields increased, though remain in negative or neutral territory



Source: Bloomberg



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