



NEPC, LLC

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## **Vermont Pension Investment Committee**

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### **Third Fiscal Quarter 2017 Preliminary Investment Performance Analysis**

June 27, 2017

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# NEPC Update



# Highlights of First Quarter Happenings at NEPC

March 31, 2017

## NEPC Insights

- Will a Higher Fed Funds Rate Raise Long-Term Rates? (January 2017)
- 2016 4<sup>th</sup> Quarter Market Thoughts (January 2017)
- 2016 Q4 Endowment & Foundation Survey Results and Infographic (February 2017)
- The Times Are a Changin': NEPC's 2017 Annual Asset Allocation Letter (February 2017)
- NEPC's 2017 Healthcare Operating Fund Universe & Infographic (March 2017)
- The Fed's Masterful Move (March 2017)
- Fossil Fuel Divestment: Considerations for Institutional Portfolios (March 2017)
- Globalization Backlash – Europe's Political Roadmap (March 2017)
- Are Loose Personal Trading Policies at Hedge Funds A Red Flag? (March 2017)



MARK YOUR CALENDAR!



## Upcoming Events

NEPC's 22<sup>nd</sup> Annual Investment Conference will be held on May 9-10, 2017 at the InterContinental Hotel in Boston, MA.

This year's conference will focus on opportunities and threats in these uncertain political and economic times. In addition to the messages delivered by our exceptional keynote speakers, attendees will learn about asset allocation and investment ideas across the market spectrum. **Register today!**

<http://info.nepc.com/nepc-22nd-annual-investment-conference>

## Webinar Replays

- NEPC 2017 Market Outlook (January 2017)

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

## Recent Updates

- Expanded Private Wealth business with two new NEPC Partners and three senior hires
- Opened new Private Wealth office in Portland, OR
- Launched updated NEPC website
- Collaborated with RiskFirst's Pension Risk Analytics platform, Pfaroe, to improve effectiveness of asset-liability strategies and ongoing monitoring
- **Named a "Greenwich Quality Leader" by Greenwich Associates. See [Greenwich.com](http://Greenwich.com) for more information.**



## NEPC Gives Back

Basketball teams made up of Boston's working professionals, Year Up students and alumni including two NEPC teams, participated in the Annual Year Up Basketball Tournament fundraising event. Year Up, is a nonprofit connecting low-income young adults with companies looking for talent. The program is a one-year, intensive training program providing hands-on skills development, coursework eligible for college credit, corporate internships, and wraparound support.

# Market Environment



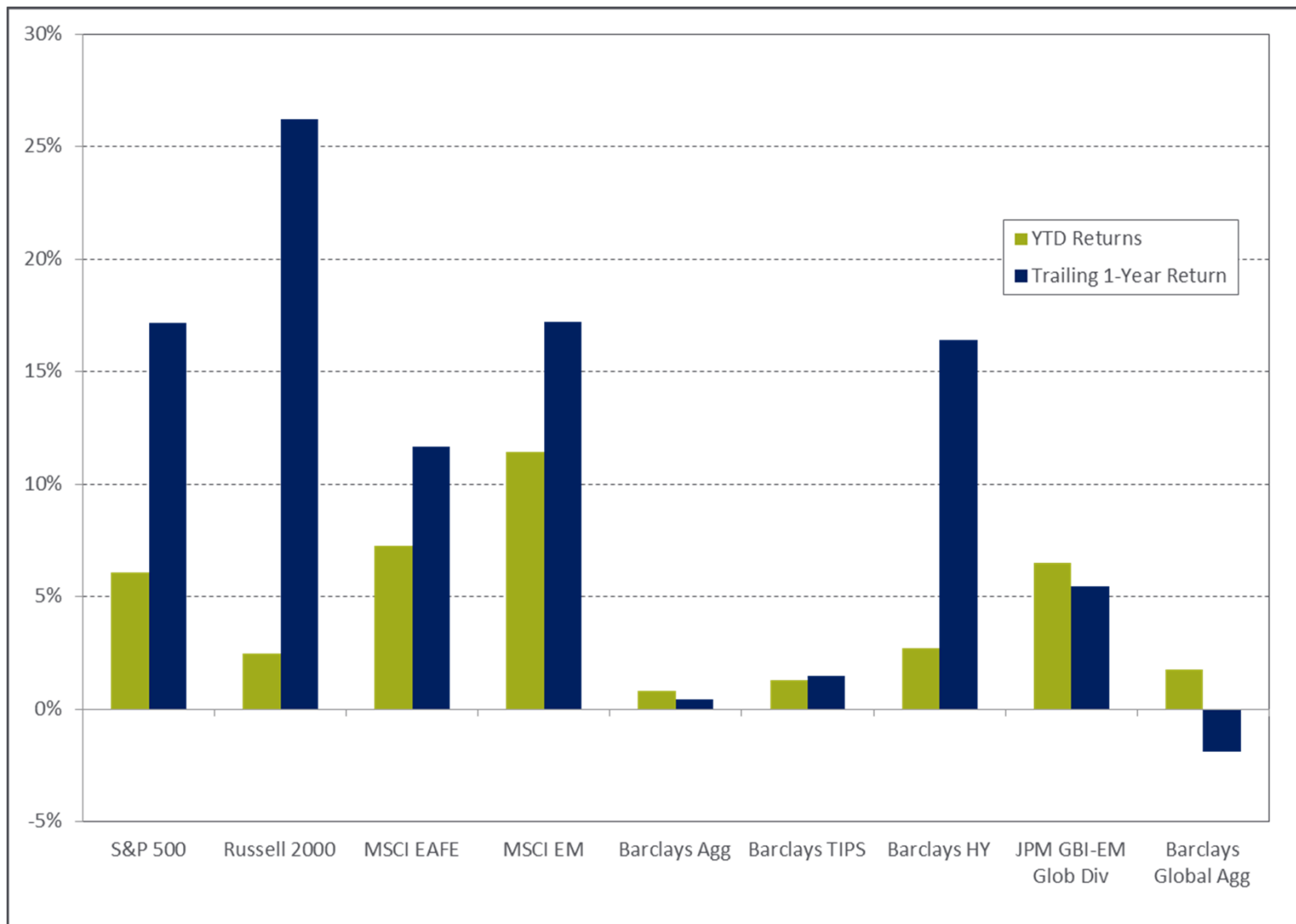


- **The US economy is experiencing an extended economic growth cycle**
  - Eight years removed from recession, US consumers continue to drive the US economy
  - Continued economic gains support positive but subdued risk asset returns
- **Federal Reserve monetary policy remains on a gradual normalization path**
  - Despite the March increase, the path for rate hikes appears subdued in 2017 and beyond
  - As the Fed looks to reduce its \$4.5 trillion balance sheet, clear messaging will be critical
  - Chair Yellen's uncertain tenure may stoke market unease as her term expires in Feb. 2018
- **Stimulative policies ease China's transition to a consumption led economy**
  - However, credit expansion and infrastructure spending risk inflating asset price bubbles
  - Central bank's yuan defense has been sizable but a rapid price fall remains a global tail-risk
- **Globalization backlash is disrupting the political and economic orthodoxy**
  - Anti-establishment political sentiment fuels a wider range of potential outcomes both at the polls (e.g. Europe) and in the actions of political leaders (e.g. US Trade Policy)
  - Capital market fundamentals are not materially altered but the associated risks of globalization backlash likely lead to larger price shifts among developed market currencies

## Current Opportunities

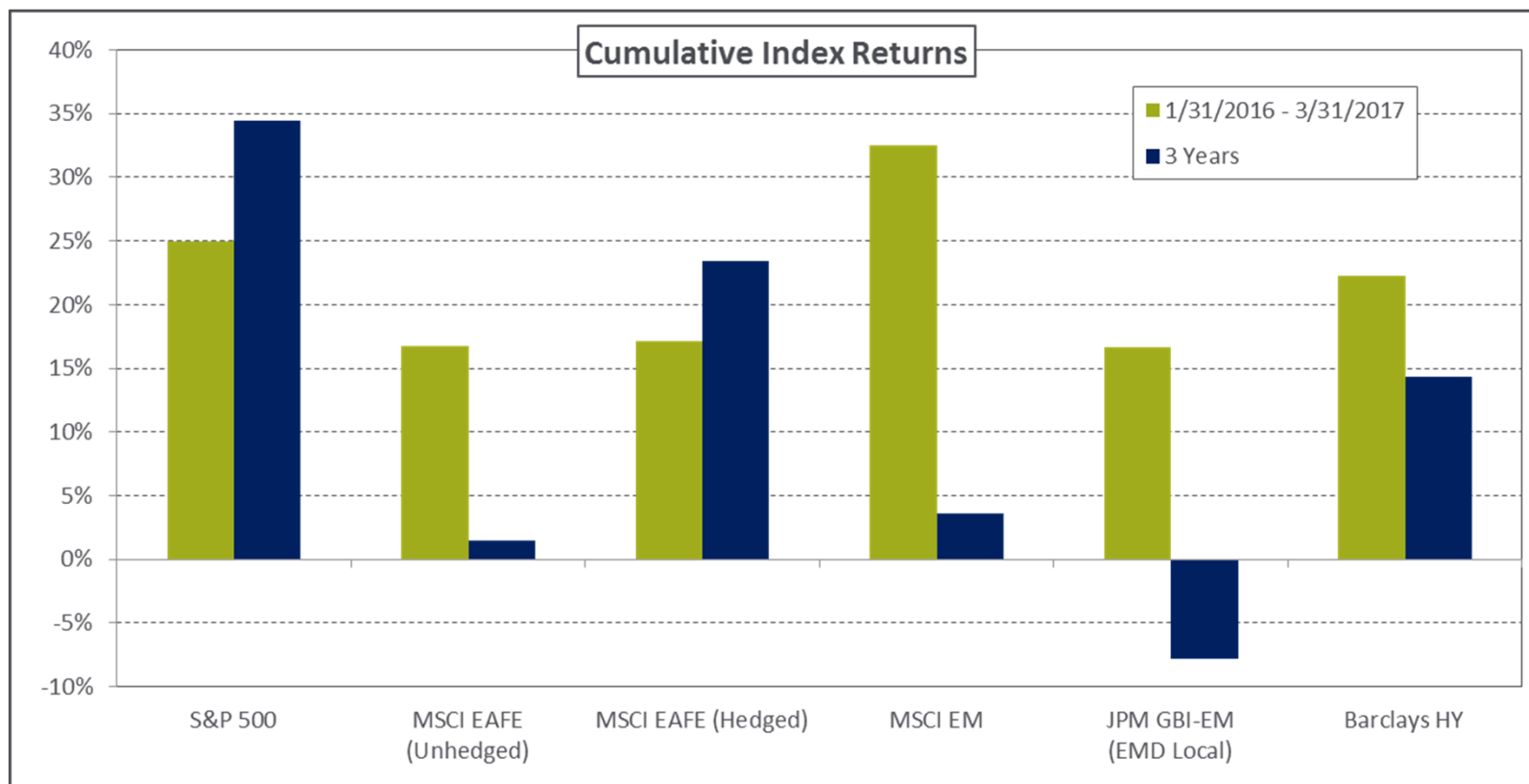
- **Trim US equity gains following a period of strong market returns**
  - Expanding valuations have driven recent gains with soft corporate earnings growth
- **Maintain overweight exposure to non-US developed market equities**
  - We believe markets offer an elevated return that compensates for Europe's political risk
- **Emerging market equities remain attractive and offer robust total returns**
  - Overweight small-cap and consumer focused strategies relative to broad mandates
- **Allocate to TIPS from core bonds as inflation expectations remain muted**
  - Duration exposure remains a critical asset allocation building block for a portfolio
- **Reduce high yield bond exposure for other credit strategies**
  - High yield credit spreads are less compelling but continue to benefit from high demand
- **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 03/31/2017

## Maintain a Disciplined Rebalance Approach



Source: S&P, MSCI, JPM, Barclays, Bloomberg  
As of 03/31/2017

- **US risk assets have outperformed expectations and we encourage investors to trim exposure to US equities and high yield**
- **We continue to recommend a strategic 50% currency hedge but US dollar gains over the last 3 years offer a rebalancing opportunity**

## Index Performance Summary as of 03/31/2017

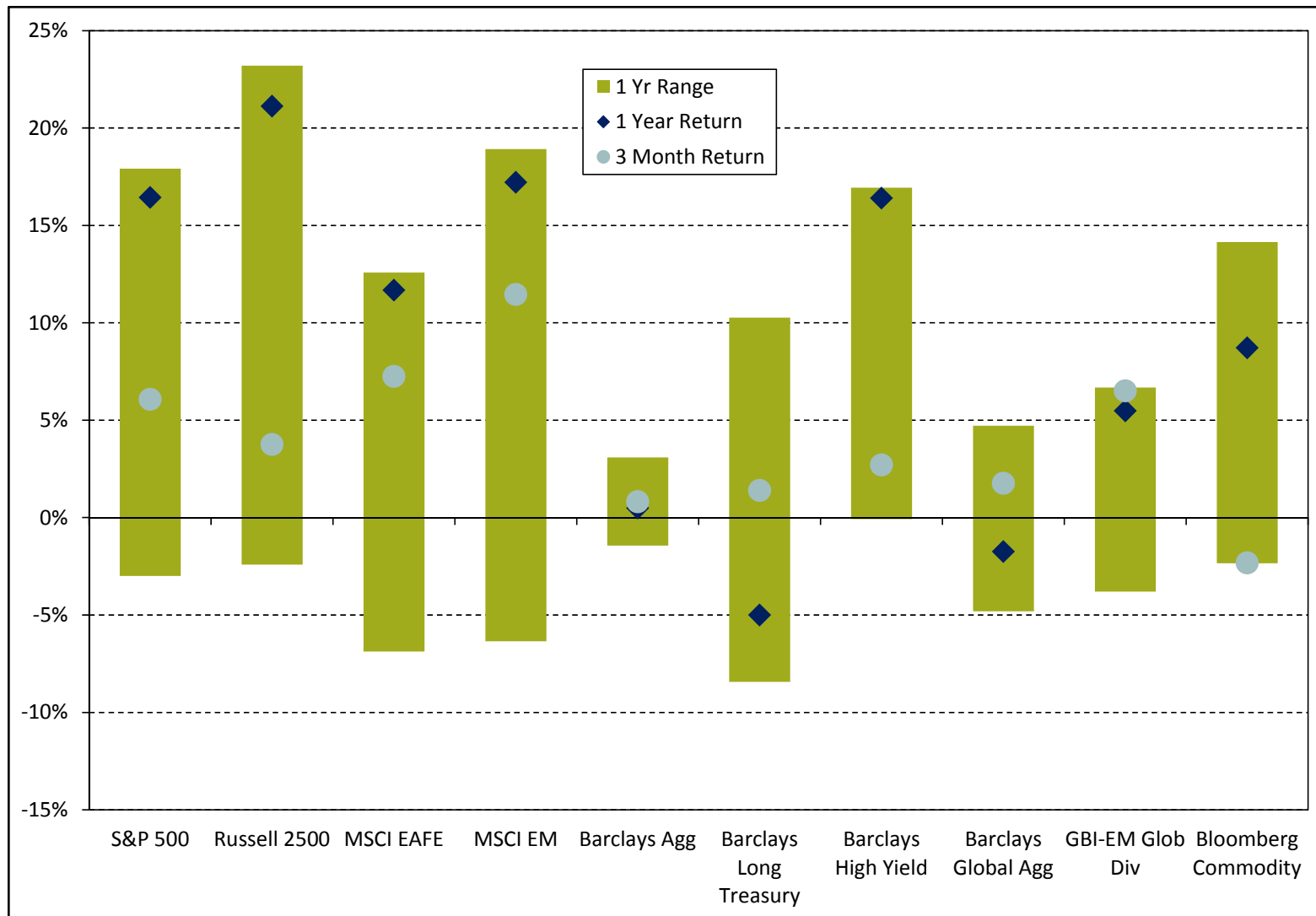
	2009	2010	2011	2012	2013	2014	2015	2016	Jan	Feb	Mar	YTD
<b>EM Equity</b>	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	5.5%	3.1%	2.5%	11.4%
<b>Int'l Developed Equity</b>	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	2.9%	1.4%	2.8%	7.2%
<b>EM Local Credit</b>	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	2.3%	1.8%	2.3%	6.5%
<b>US Large Cap</b>	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	1.9%	4.0%	0.1%	6.1%
<b>US Small/Mid Cap</b>	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	1.4%	2.4%	-0.1%	3.8%
<b>US High Yield</b>	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	1.5%	1.5%	-0.2%	2.7%
<b>Global Credit</b>	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.1%	0.5%	0.2%	1.8%
<b>US Long Treasuries</b>	-12.9%	9.4%	29.9%	3.6%	-12.7%	25.1%	-1.2%	1.3%	0.4%	1.6%	-0.6%	1.4%
<b>US Credit</b>	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.2%	0.7%	-0.1%	0.8%
<b>Commodities</b>	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	0.1%	0.2%	-2.7%	-2.3%

Source: Bloomberg, Barclays, S&P, Russell, MSCI, JP Morgan, Credit Suisse

S&P 500 = US Large Cap  
 Russell 2500 = US Small/Mid Cap  
 MSCI EAFE = International Developed Equity  
 MSCI EM = Emerging Market Equity  
 Barclays Agg = US Credit  
 Barclays Long Treasury = US Long Treasuries  
 Barclays High Yield = US HY  
 Barclays Global Agg = Global Credit  
 GBI-EM Global Diversified = EM Local Credit  
 Bloomberg Commodity = Commodities

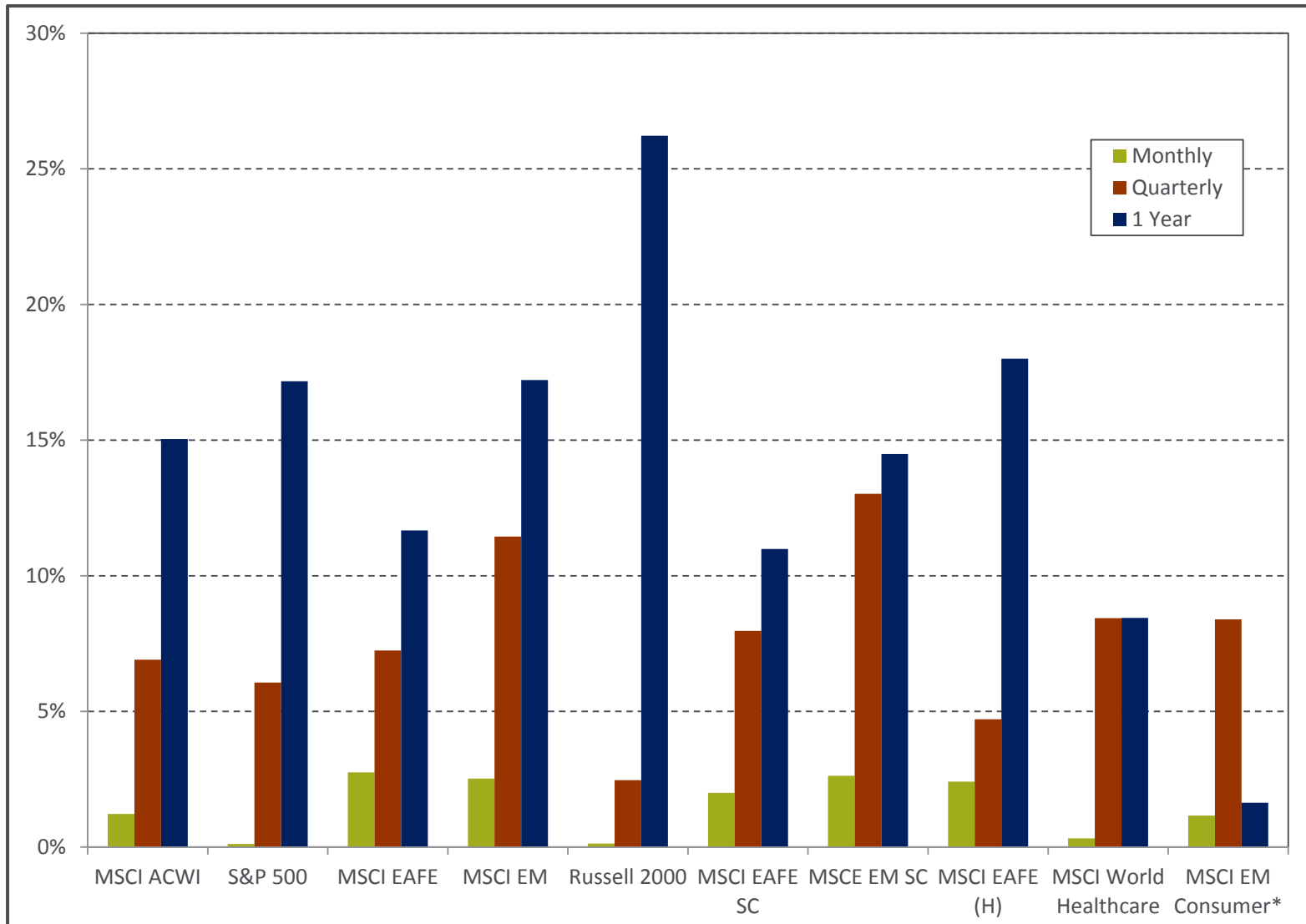


# Near Term Broad Market Performance Summary as of 03/31/2017



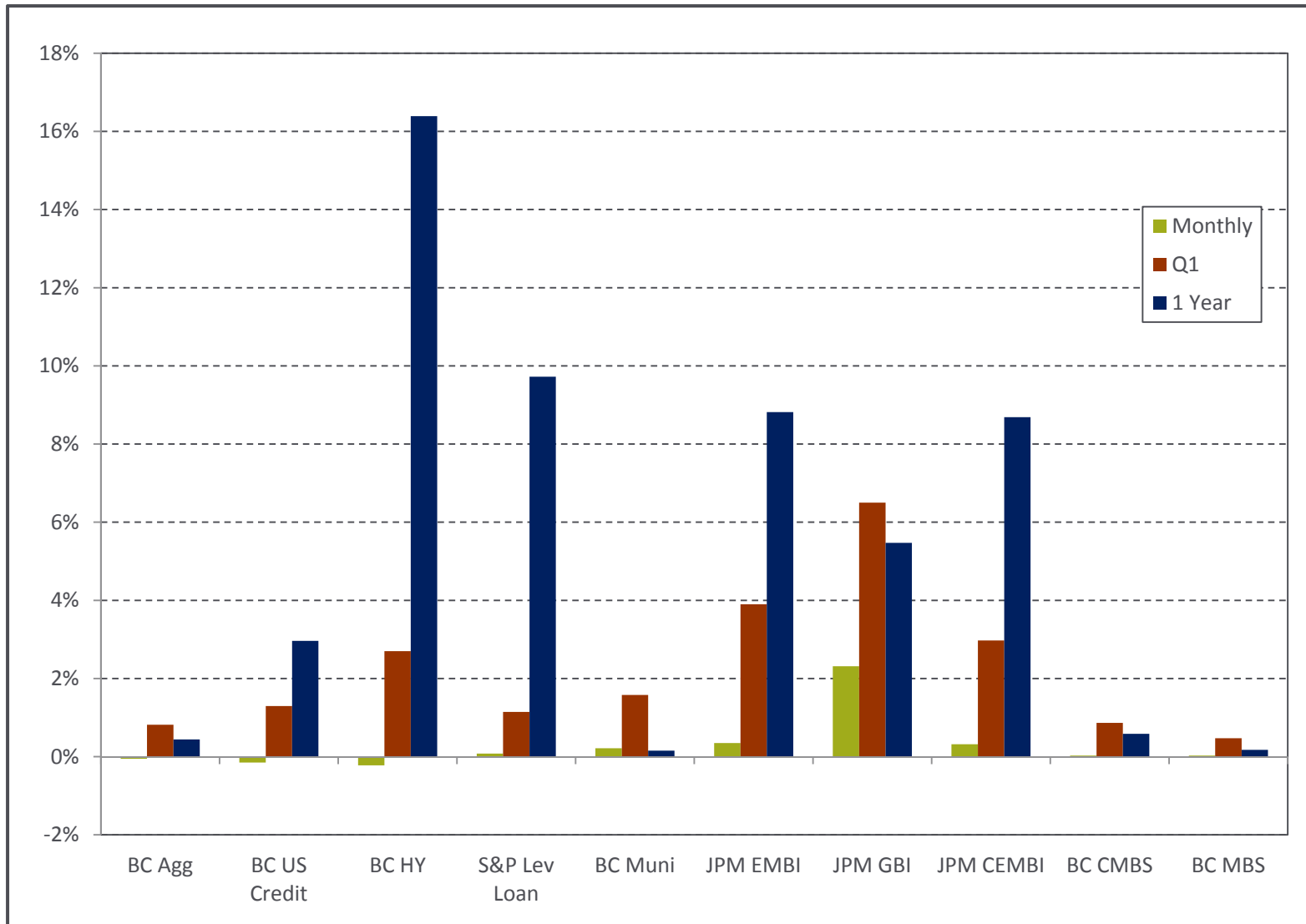
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan  
 \*1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

# Equity Index Returns as of 03/31/2017



Source: MSCI, S&P, Russell, NEPC, Bloomberg

# Fixed Income Index Returns as of 03/31/2017



Source: Barclays, S&P, JPM, Bloomberg



# State Teachers' Retirement System

# Vermont State Teachers

## Total Fund Performance Summary - Net

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	7 Yrs	Rank	10 Yrs	Rank
<b>Teachers Composite</b>	<b>\$1,712,062,285</b>	<b>4.1%</b>	<b>62</b>	<b>7.7%</b>	<b>77</b>	<b>11.0%</b>	<b>45</b>	<b>4.2%</b>	<b>82</b>	<b>5.8%</b>	<b>92</b>	<b>6.7%</b>	<b>82</b>	<b>4.0%</b>	<b>90</b>
<i>Policy Index</i>		3.5%	89	7.1%	86	9.7%	78	4.0%	86	5.6%	93	6.2%	94	4.1%	89
<i>Allocation Index</i>		4.0%	64	7.6%	79	10.2%	66	3.9%	88	5.5%	94	6.0%	95	4.0%	90
<i>InvestorForce Public DB Net Median</i>		4.2%		8.8%		10.8%		5.0%		7.2%		7.4%		5.1%	

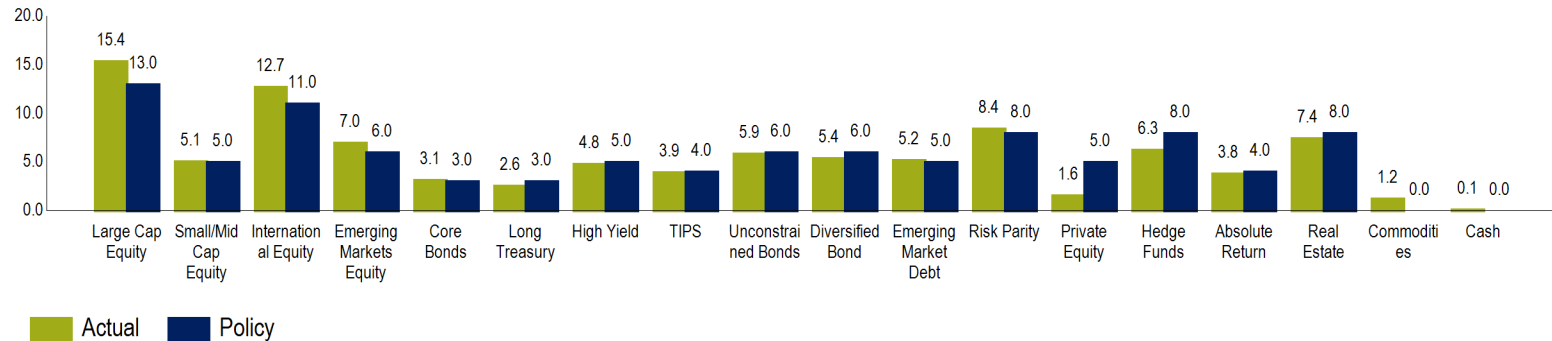
### 3 Years Ending March 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Teachers Composite	4.19%	82	5.58%	23	0.72	68	1.29	43
Policy Index	4.04%	86	5.28%	11	0.73	65	1.29	43
Allocation Index	3.90%	88	5.47%	19	0.68	74	1.15	63

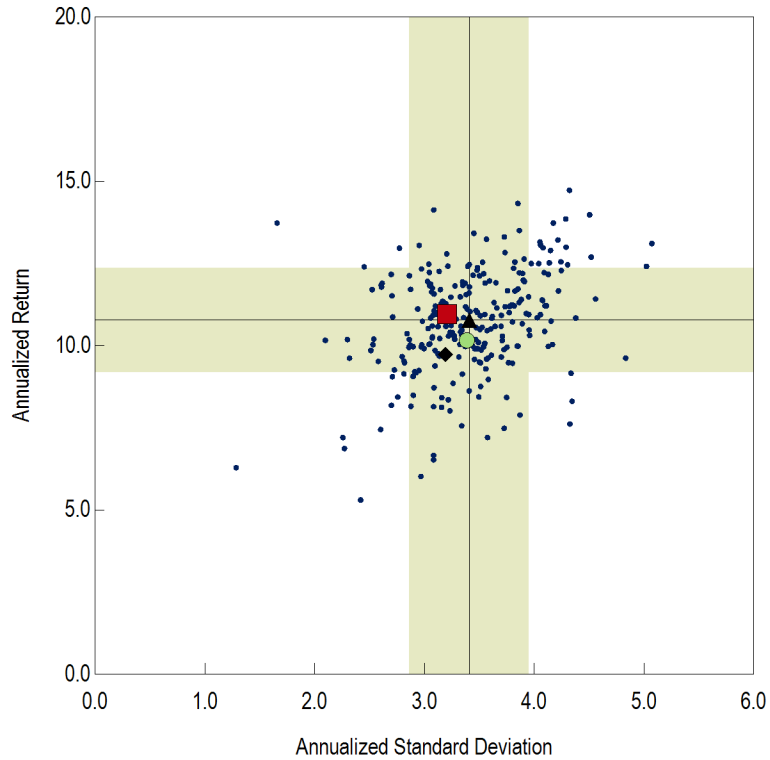
### 5 Years Ending March 31, 2017

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Teachers Composite	5.79%	92	5.78%	28	0.98	79	1.62	61
Policy Index	5.62%	93	5.51%	18	1.00	76	1.58	67
Allocation Index	5.47%	94	5.57%	20	0.96	83	1.46	78

### Actual vs Target Allocation (%)



1 Year Ending March 31, 2017



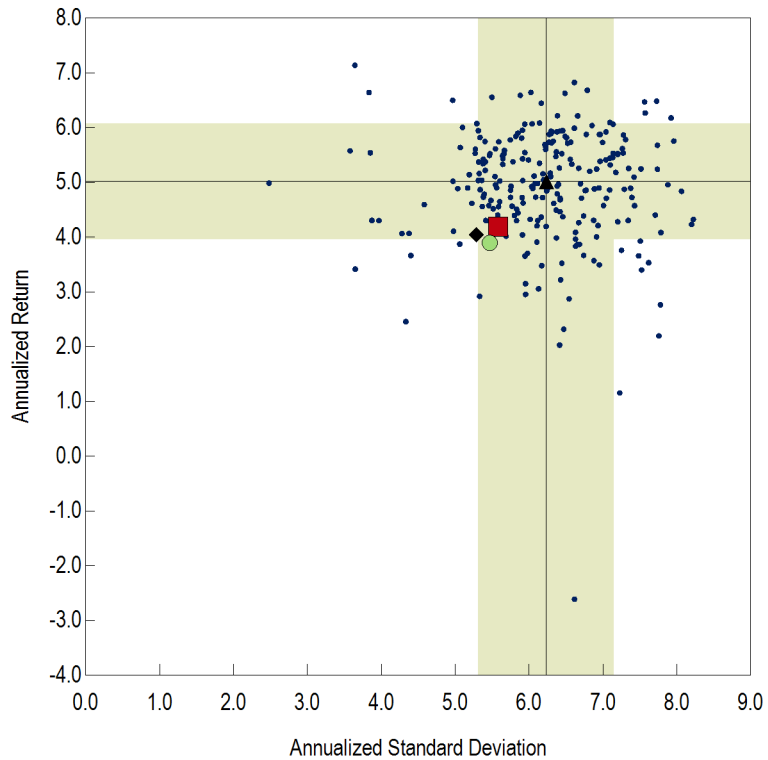
- Teachers Composite
- ◆ Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

1 Year Ending March 31, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Teachers Composite	10.96%	45	3.21%	36	3.30	31
Policy Index	9.73%	78	3.19%	35	2.93	59
S&P 500	17.17%	1	6.24%	99	2.69	78
Citi WGBI	-3.65%	99	7.60%	99	-0.53	99
MSCI ACWI	15.04%	1	5.69%	99	2.58	85
MSCI ACWI ex USA	13.13%	5	8.13%	99	1.57	99
InvestorForce Public DB Net Median	10.78%	--	3.41%	--	3.02	--

256 Portfolios

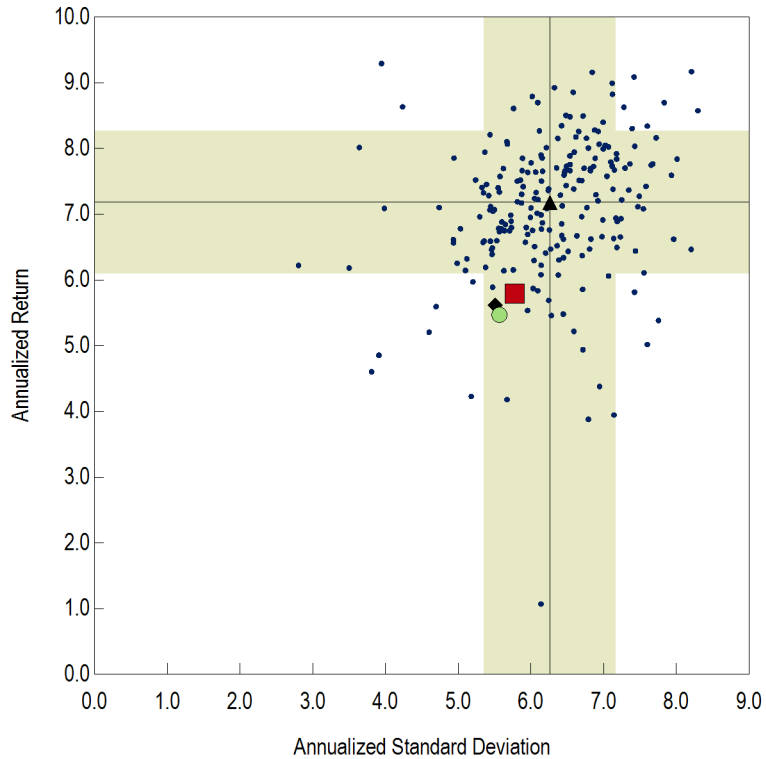
3 Years Ending March 31, 2017



3 Years Ending March 31, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Teachers Composite	4.19%	82	5.58%	23	0.72	68
Policy Index	4.04%	86	5.28%	11	0.73	65
S&P 500	10.37%	1	10.41%	99	0.98	11
Citi WGBI	-1.20%	99	5.90%	34	-0.23	99
MSCI ACWI	5.08%	48	10.79%	99	0.45	97
MSCI ACWI ex USA	0.56%	99	12.35%	99	0.03	99
InvestorForce Public DB Net Median	5.02%	--	6.23%	--	0.79	--

5 Years Ending March 31, 2017

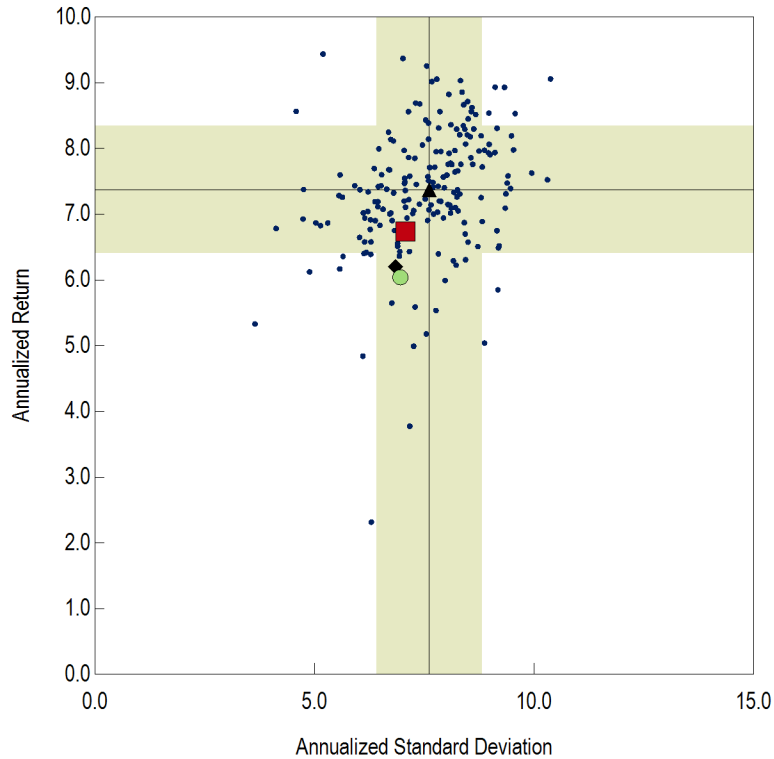


- Teachers Composite
- ◆ Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

5 Years Ending March 31, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Teachers Composite	5.79%	92	5.78%	28	0.98	79
Policy Index	5.62%	93	5.51%	18	1.00	76
S&P 500	13.30%	1	10.20%	99	1.29	15
Citi WGBI	-0.58%	99	5.29%	10	-0.13	99
MSCI ACWI	8.37%	9	11.06%	99	0.75	97
MSCI ACWI ex USA	4.36%	98	12.93%	99	0.33	99
InvestorForce Public DB Net Median	7.18%	--	6.26%	--	1.13	--

7 Years Ending March 31, 2017

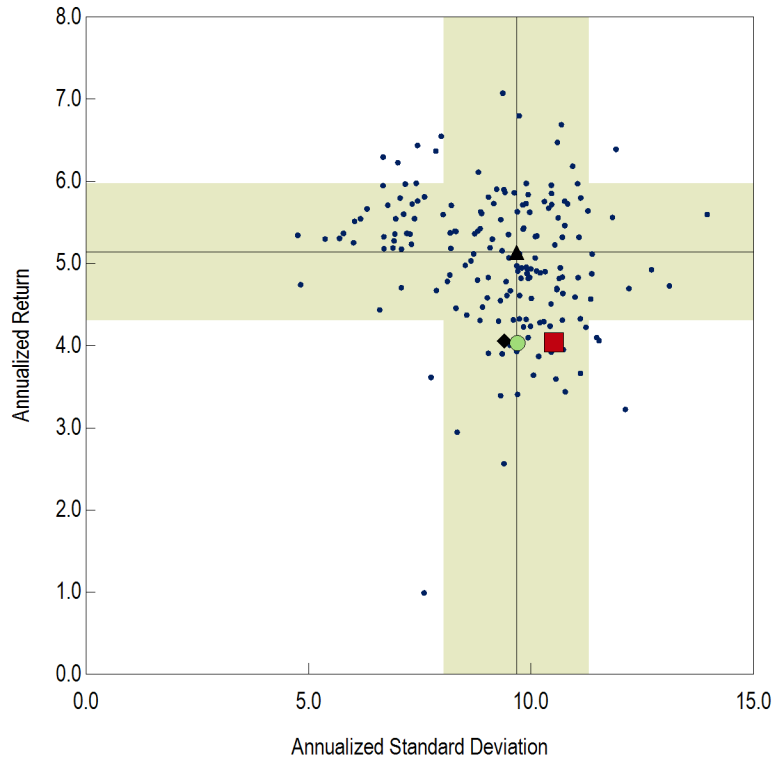


- Teachers Composite
- ◆ Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

7 Years Ending March 31, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Teachers Composite	6.73%	82	7.07%	35	0.94	61
Policy Index	6.20%	94	6.84%	28	0.89	73
S&P 500	12.94%	1	12.44%	99	1.03	35
Citi WGBI	1.31%	99	5.68%	8	0.21	99
MSCI ACWI	7.81%	31	13.69%	99	0.56	99
MSCI ACWI ex USA	3.82%	99	15.52%	99	0.24	99
InvestorForce Public DB Net Median	7.37%	--	7.61%	--	0.97	--

10 Years Ending March 31, 2017

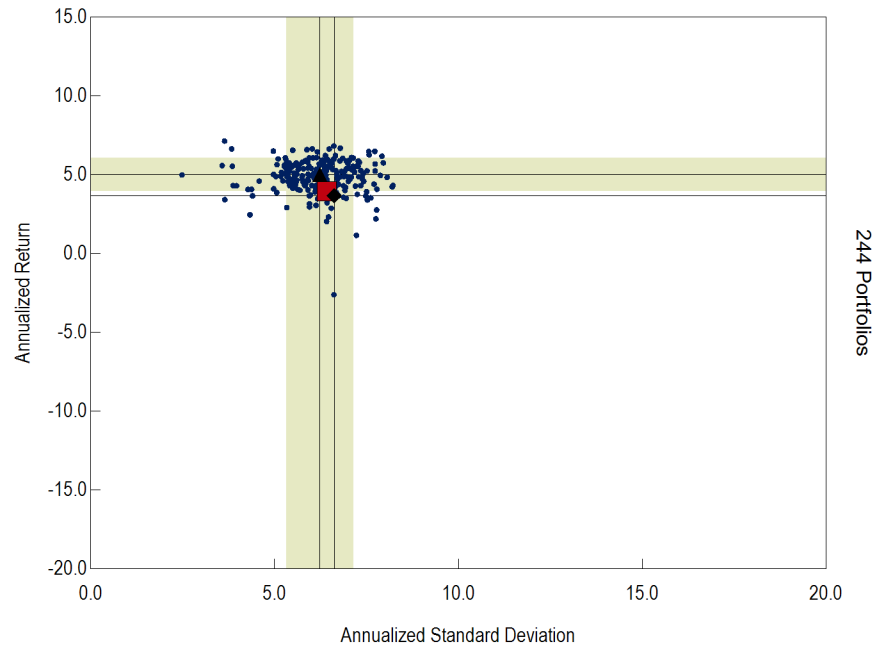


- Teachers Composite
- ◆ Policy Index
- Allocation Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

10 Years Ending March 31, 2017

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Teachers Composite	4.04%	90	10.52%	78	0.33	91
Policy Index	4.06%	89	9.39%	45	0.37	80
S&P 500	7.51%	1	15.30%	99	0.46	56
Citi WGBI	3.03%	99	6.82%	9	0.37	83
MSCI ACWI	4.00%	91	17.01%	99	0.20	99
MSCI ACWI ex USA	1.35%	99	19.17%	99	0.04	99
InvestorForce Public DB Net Median	5.14%	--	9.67%	--	0.48	--

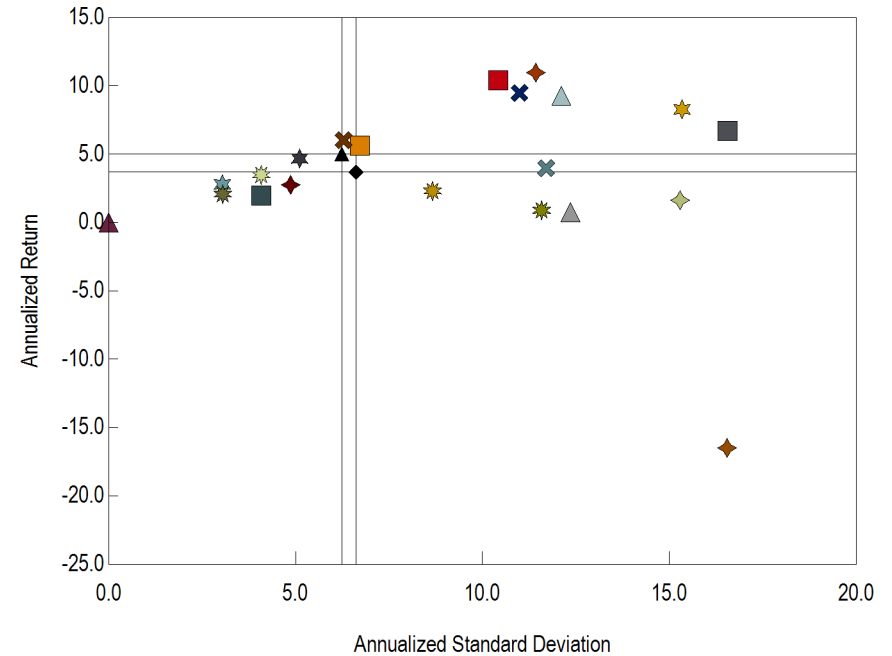
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2017



244 Portfolios

- Total Marketable Assets
- ◆ Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval
- InvestorForce Public DB Net

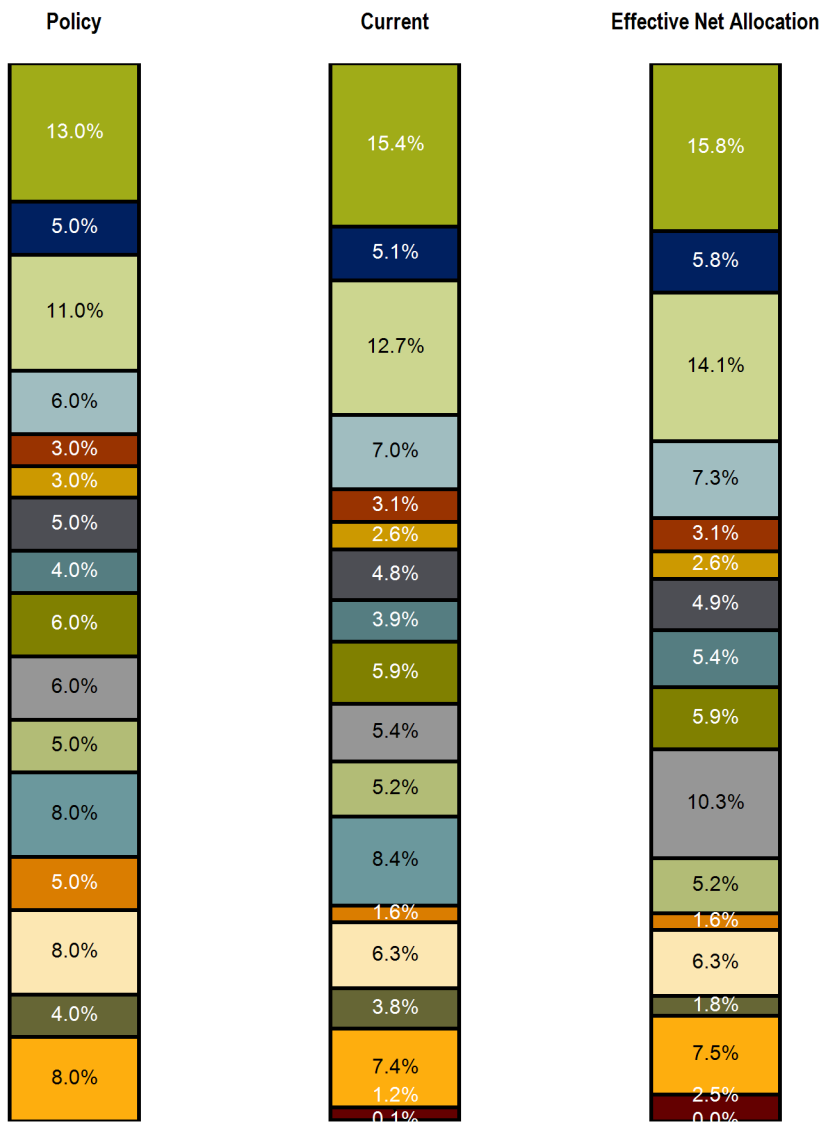
Annualized Return vs. Annualized Standard Deviation  
3 Years Ending March 31, 2017



- SSgA S&P 500 Cap-Wgt
- ◆ SSgA S&P 500 Equal-Wgt
- ▲ T. Rowe
- ▲ SSgA S&P 400
- ◆ Champlain
- ★ Wellington
- SSgA Russell 2000 Growth
- ★ Acadian
- ★ Mondrian
- ▲ SSgA ACWI Ex US
- ◆ Aberdeen
- ★ PIMCO Core Plus
- Wellington DAS
- ★ PIMCO Unconstrained
- ◆ KDP
- ★ Guggenheim
- BlackRock TIPS
- ★ Wellington Opportunistic EMD
- ★ AQR Global Risk Premium
- ▲ Vermont Cash
- ◆ Schroder
- ◆ Total Marketable Assets Custom Index
- ▲ Universe Median
- 68% Confidence Interval



# Total Fund Asset Allocation vs. Policy Targets



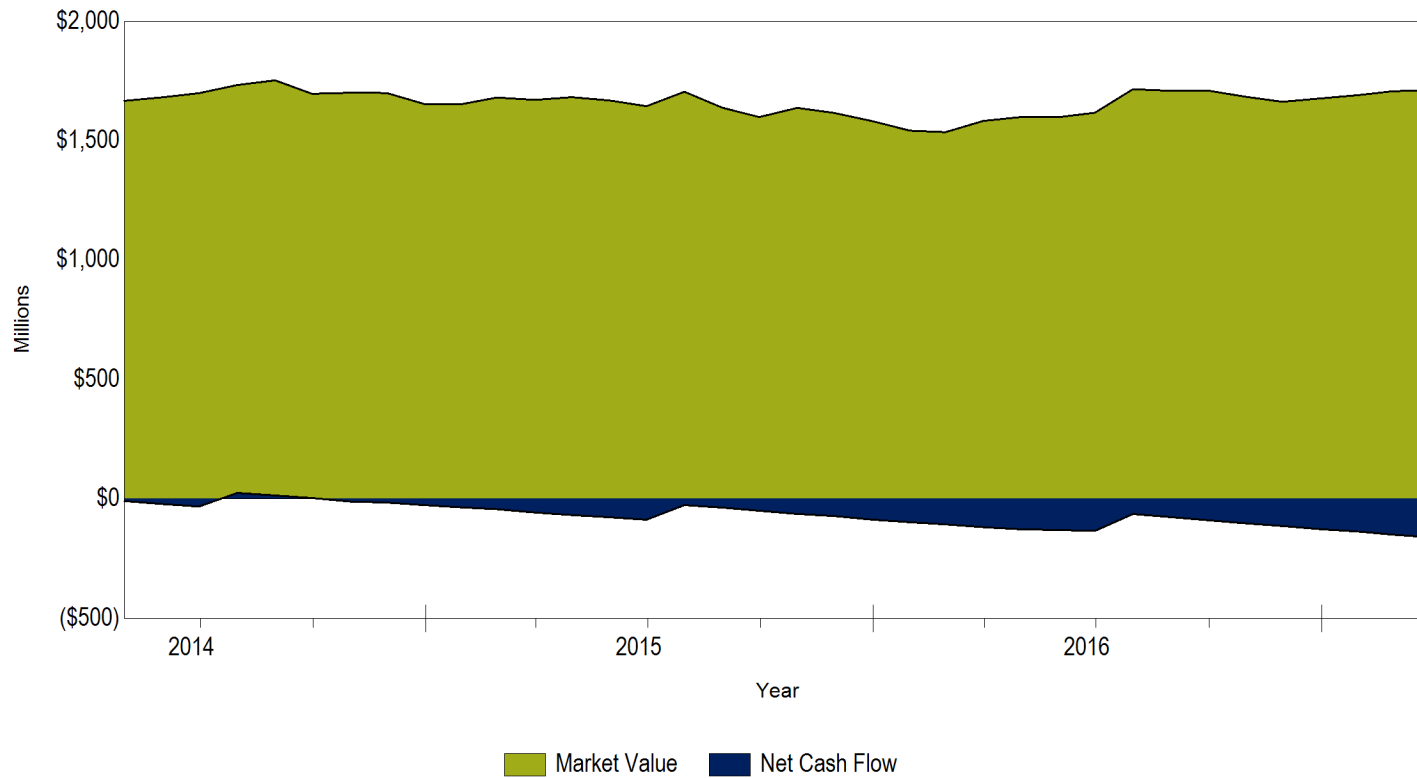
### Asset Allocation vs. Target

	Policy	Current	Effective Net Allocation
Large Cap Equity	13.0%	15.4%	15.8%
Small/Mid Cap Equity	5.0%	5.1%	5.8%
International Equity	11.0%	12.7%	14.1%
Emerging Markets Equity	6.0%	7.0%	7.3%
Core Bonds	3.0%	3.1%	3.1%
Long Treasury	3.0%	2.6%	2.6%
High Yield	5.0%	4.8%	4.9%
TIPS	4.0%	3.9%	5.4%
Unconstrained Bonds	6.0%	5.9%	5.9%
Diversified Bond	6.0%	5.4%	10.3%
Emerging Market Debt	5.0%	5.2%	5.2%
Risk Parity	8.0%	8.4%	--
Private Equity	5.0%	1.6%	1.6%
Hedge Funds	8.0%	6.3%	6.3%
Absolute Return	4.0%	3.8%	1.8%
Real Estate	8.0%	7.4%	7.5%
Commodities	--	1.2%	2.5%
Cash	--	0.1%	0.0%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

Effective Net Allocation breaks out the exposures of AQR Global Risk Premium and Mellon Dynamic Growth.  
 Hedge Funds include Grosvenor and Pinnacle Natural Resources, L.P.  
 Absolute Return includes Mellon Dynamic Growth and Allianz Structured Alpha.

**Total Fund Asset Growth Summary**

3 Years Ending March 31, 2017



	Last Three Months	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$1,677,575,084	\$1,617,794,214	\$1,583,437,546	\$1,665,001,956
Contributions	\$9,754,567	\$123,032,280	\$175,802,051	\$879,309,416
Withdrawals	-\$44,006,026	-\$150,125,550	-\$218,513,873	-\$1,040,558,125
Net Cash Flow	-\$34,251,459	-\$27,093,271	-\$42,711,822	-\$161,248,709
Net Investment Change	\$68,738,659	\$121,361,341	\$171,336,561	\$208,309,037
Ending Market Value	\$1,712,062,285	\$1,712,062,285	\$1,712,062,285	\$1,712,062,285

## Vermont State Teachers

### Total Fund Asset Growth Summary by Manager

	Quarter Ending March 31, 2017					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
Aberdeen	\$107,335,791	\$201,036	-\$201,036	\$0	\$12,755,813	\$120,091,604
Acadian	\$65,737,496	\$86,281	-\$86,281	\$0	\$6,702,564	\$72,440,061
Allianz Structured Alpha	\$31,050,283	\$0	-\$169,335	-\$169,335	\$452,507	\$31,333,455
AQR Global Risk Premium	\$137,654,462	\$132,722	-\$132,722	\$0	\$6,433,989	\$144,088,451
BlackRock TIPS	\$66,575,356	\$12,692	-\$12,692	\$0	\$856,989	\$67,432,345
Champlain	\$34,912,520	\$70,807	-\$70,807	\$0	\$2,001,722	\$36,914,242
GAM	\$175,078	\$0	\$0	\$0	-\$15	\$175,063
GAM Unconstrained Bond	\$57,680,479	\$0	-\$76,412	-\$76,412	\$1,851,381	\$59,455,449
Grosvenor	\$83,557,095	\$0	\$0	\$0	\$1,496,809	\$85,053,904
Guggenheim	\$68,033,671	\$83,986	-\$5,583,986	-\$5,500,000	\$1,452,614	\$63,986,285
Harbourvest Dover Street Fund IX	\$916,510	\$721,394	\$0	\$721,394	\$0	\$1,637,904
Harbourvest Dover VIII Fund	\$8,061,322	\$0	\$0	\$0	\$0	\$8,061,322
Harbourvest Partners IX Buyout Fund	\$6,891,368	\$0	\$0	\$0	\$0	\$6,891,368
Harbourvest Partners IX Credit Opportunities	\$997,704	\$0	\$0	\$0	\$0	\$997,704
Harbourvest Partners IX Venture Fund	\$4,920,053	\$0	\$0	\$0	\$0	\$4,920,053
Harbourvest Partners X Buyout Fund	\$1,923,678	\$0	\$0	\$0	\$0	\$1,923,678
Harbourvest Partners X Venture Fund	\$912,775	\$0	\$0	\$0	\$0	\$912,775
HIPEP VII	\$1,867,802	\$142,285	\$0	\$142,285	\$0	\$2,010,087
KDP	\$17,831,602	\$28,290	-\$28,290	\$0	\$336,655	\$18,168,257
Mellon Dynamic Growth	\$32,946,008	\$55,639	-\$55,639	\$0	\$1,007,499	\$33,953,507
Mondrian	\$67,983,561	\$66,514	-\$5,566,514	-\$5,500,000	\$5,119,000	\$67,602,561
Morgan Stanley Prime Property	\$59,124,819	\$0	-\$124,162	-\$124,162	\$1,262,277	\$60,262,935
PIMCO Core Plus	\$91,216,013	\$69,924	-\$69,924	\$0	\$1,497,101	\$92,713,114
PIMCO Unconstrained	\$40,533,379	\$62,399	-\$62,399	\$0	\$905,140	\$41,438,519
Pinnacle Natural Resources, L.P.	\$16,887,258	\$7,401,313	\$0	\$7,401,313	-\$2,175,004	\$22,113,567

Vermont State Teachers

Total Fund Asset Growth Summary by Manager

	Quarter Ending March 31, 2017					
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Net Investment Change	Ending Market Value
RREEF America REIT III	\$258,764	\$0	-\$807	-\$807	-\$1,112	\$256,846
Schroder	\$28,976,411	\$74,166	-\$7,475,478	-\$7,401,313	-\$539,599	\$21,035,499
Siguler Guff DREOF II	\$12,649,578	\$84,795	-\$8,126	\$76,668	\$481,244	\$13,207,491
Siguler Guff DREOF II Co-Investment	\$3,593,224	\$221,905	\$0	\$221,905	\$133,077	\$3,948,206
SSgA ACWI Ex US	\$71,908,168	\$12,006	-\$12,006	\$0	\$5,710,226	\$77,618,394
SSgA Barclays Aggregate Index	\$53,197,769	\$6,379	-\$6,379	\$0	\$435,387	\$53,633,156
SSgA Russell 2000 Growth	\$7,542,866	\$1,629	-\$1,629	\$0	\$411,760	\$7,954,626
SSgA S&P 400	\$9,492,040	\$1,673	-\$1,673	\$0	\$372,845	\$9,864,884
SSgA S&P 500 Cap-Wgt	\$191,921,634	\$16,033	-\$12,716,033	-\$12,700,000	\$11,420,516	\$190,642,150
SSgA S&P 500 Equal-Wgt	\$73,786,895	\$7,378	-\$5,307,378	-\$5,300,000	\$3,870,690	\$72,357,585
T. Rowe	\$2,468	\$0	\$0	\$0	\$0	\$2,468
Transwestern / Aslan III	\$128,447	\$0	\$0	\$0	\$0	\$128,447
UBS Trumbull	\$49,007,398	\$118,646	-\$118,646	\$0	\$564,241	\$49,571,639
Vermont Cash	\$2,696,299	\$0	-\$1,042,996	-\$1,042,996	\$0	\$1,653,303
Wellington	\$37,752,666	\$74,678	-\$5,074,678	-\$5,000,000	-\$445,974	\$32,306,692
Wellington DAS	\$43,364,279	\$0	\$0	\$0	\$791,463	\$44,155,742
Wellington Opportunistic EMD	\$85,570,095	\$0	\$0	\$0	\$3,576,852	\$89,146,947
<b>Total</b>	<b>\$1,677,575,084</b>	<b>\$9,754,567</b>	<b>-\$44,006,026</b>	<b>-\$34,251,459</b>	<b>\$68,738,659</b>	<b>\$1,712,062,285</b>

# Vermont State Teachers

## Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Teachers Composite</b>	<b>1,712,062,285</b>	<b>100.0</b>	<b>100.0</b>	<b>4.1</b>	<b>62</b>	<b>7.7</b>	<b>77</b>	<b>11.0</b>	<b>45</b>	<b>4.2</b>	<b>82</b>	<b>5.8</b>	<b>92</b>	<b>4.0</b>	<b>90</b>
<i>Policy Index</i>				3.5	89	7.1	86	9.7	78	4.0	86	5.6	93	4.1	89
<i>Allocation Index</i>				4.0	64	7.6	79	10.2	66	3.9	88	5.5	94	4.0	90
<i>InvestorForce Public DB Net Median</i>				4.2		8.8		10.8		5.0		7.2		5.1	
<b>Total Marketable Assets</b>	<b>1,384,702,333</b>	<b>80.9</b>	<b>--</b>	<b>4.8</b>	<b>18</b>	<b>8.3</b>	<b>60</b>	<b>11.9</b>	<b>25</b>	<b>4.0</b>	<b>87</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Total Marketable Assets Custom Index</i>				4.1	59	7.6	80	10.3	60	3.7	91	--	--	--	--
<i>InvestorForce Public DB Net Median</i>				4.2		8.8		10.8		5.0		7.2		5.1	
<b>US Equity</b>	<b>350,042,647</b>	<b>20.4</b>	<b>18.0</b>	<b>5.0</b>	<b>47</b>	<b>14.9</b>	<b>55</b>	<b>18.0</b>	<b>46</b>	<b>9.8</b>	<b>20</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Russell 3000</i>				5.7	38	15.0	53	18.1	45	9.8	21	13.2	29	7.5	48
<i>eA All US Equity Net Median</i>				4.8		15.3		17.4		7.9		12.1		7.5	
<b>Large Cap Comp</b>	<b>263,002,203</b>	<b>15.4</b>	<b>13.0</b>	<b>5.8</b>	<b>49</b>	<b>14.4</b>	<b>47</b>	<b>17.3</b>	<b>33</b>	<b>10.1</b>	<b>18</b>	<b>13.4</b>	<b>14</b>	<b>8.0</b>	<b>30</b>
<i>S&amp;P 500</i>				6.1	44	14.4	47	17.2	34	10.4	14	13.3	18	7.5	44
<i>eA US Large Cap Equity Net Median</i>				5.6		14.0		15.5		8.3		11.9		7.3	
<i>SSgA S&amp;P 500 Cap-Wgt</i>	190,642,150	11.1	10.0	6.1	44	14.4	46	17.2	33	10.4	14	13.3	18	--	--
<i>S&amp;P 500</i>				6.1	44	14.4	47	17.2	34	10.4	14	13.3	18	7.5	44
<i>SSgA S&amp;P 500 Equal-Wgt</i>	72,357,585	4.2	3.0	5.2	57	14.3	47	17.4	31	9.5	30	13.9	8	8.4	22
<i>S&amp;P 500 Equal Weighted</i>				5.4	54	14.4	46	17.4	31	9.6	28	14.0	7	8.7	17
<i>T. Rowe</i>	2,468	0.0	0.0												
<b>Small/Mid Cap Comp</b>	<b>87,040,444</b>	<b>5.1</b>	<b>5.0</b>	<b>2.5</b>	<b>77</b>	<b>16.5</b>	<b>48</b>	<b>20.6</b>	<b>31</b>	<b>9.6</b>	<b>14</b>	<b>13.5</b>	<b>21</b>	<b>8.6</b>	<b>29</b>
<i>Russell 2000</i>				2.5	79	21.6	19	26.2	8	7.2	39	12.4	37	7.1	68
<i>eA US Small-Mid Cap Equity Net Median</i>				4.2		15.9		18.7		6.6		11.6		7.9	
<i>SSgA S&amp;P 400</i>	9,864,884	0.6	0.5	3.9	72	16.2	30	20.8	20	9.3	21	13.3	26	--	--
<i>S&amp;P 400 MidCap</i>				3.9	71	16.3	29	20.9	17	9.4	20	13.3	26	9.0	26
<i>eA US Mid Cap Equity Net Median</i>				5.3		13.9		16.2		7.7		12.1		8.2	
<b>Champlain</b>	<b>36,914,242</b>	<b>2.2</b>	<b>2.0</b>	<b>5.5</b>	<b>48</b>	<b>15.7</b>	<b>34</b>	<b>22.7</b>	<b>7</b>	<b>11.0</b>	<b>7</b>	<b>14.0</b>	<b>17</b>	<b>--</b>	<b>--</b>
<i>Russell 2500</i>				3.8	76	17.3	23	21.5	14	7.4	55	12.6	36	7.7	60
<i>eA US Mid Cap Equity Net Median</i>				5.3		13.9		16.2		7.7		12.1		8.2	

# Vermont State Teachers

## Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Wellington	32,306,692	1.9	2.0	-1.4	87	15.9	88	16.7	91	8.3	37	12.7	48	8.6	18
<i>Russell 2000 Value</i>				-0.1	64	24.0	21	29.4	14	7.6	52	12.5	51	6.1	81
<i>eA US Small Cap Value Equity Net Median</i>				0.5		21.2		23.4		7.7		12.6		7.3	
SSgA Russell 2000 Growth	7,954,626	0.5	0.5	5.4	57	19.3	40	23.1	48	6.7	45	12.0	48	8.0	48
<i>Russell 2000 Growth</i>				5.3	58	19.2	40	23.0	49	6.7	44	12.1	46	8.1	46
<i>eA US Small Cap Growth Equity Net Median</i>				6.1		18.3		22.4		6.3		11.9		7.9	
<b>Int'l Equity Comp</b>	<b>217,661,016</b>	<b>12.7</b>	<b>11.0</b>	<b>8.5</b>	<b>25</b>	<b>14.5</b>	<b>32</b>	<b>14.6</b>	<b>18</b>	<b>1.9</b>	<b>41</b>	<b>7.0</b>	<b>43</b>	<b>1.5</b>	<b>65</b>
<i>MSCI EAFE</i>				7.2	59	13.3	43	11.7	44	0.5	74	5.8	70	1.1	76
<i>eA All EAFE Equity Net Median</i>				7.5		12.8		11.0		1.4		6.8		2.3	
Acadian	72,440,061	4.2	4.0	10.1	6	18.4	9	19.0	3	4.0	15	9.2	18	1.5	65
Mondrian	67,602,561	3.9	4.0	7.5	52	11.3	65	11.7	44	0.9	62	6.1	64	1.8	61
<i>MSCI EAFE</i>				7.2	59	13.3	43	11.7	44	0.5	74	5.8	70	1.1	76
SSgA ACWI Ex US	77,618,394	4.5	3.0	7.9	56	14.0	36	13.4	40	0.8	60	4.6	82	--	--
<i>MSCI ACWI ex USA</i>				7.9	63	13.9	37	13.1	43	0.6	63	4.4	82	1.4	72
<i>eA ACWI ex-US All Cap Equity Net Median</i>				8.5		12.0		11.5		1.4		6.2		2.6	
<b>Emerging Market Comp</b>	<b>120,091,604</b>	<b>7.0</b>	<b>6.0</b>	<b>11.7</b>	<b>62</b>	<b>11.6</b>	<b>74</b>	<b>16.2</b>	<b>59</b>	<b>1.6</b>	<b>60</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
Aberdeen	120,091,604	7.0	6.0	11.7	62	11.6	74	16.2	59	1.6	60	1.7	63	--	--
<i>MSCI Emerging Markets</i>				11.4	68	16.4	41	17.2	51	1.2	65	0.8	80	2.7	67
<i>eA Emg Mkts Equity Net Median</i>				12.2		15.2		17.2		2.1		2.1		3.4	
<b>US Fixed Income</b>	<b>440,982,866</b>	<b>25.8</b>	<b>27.0</b>	<b>1.8</b>	<b>22</b>	<b>2.2</b>	<b>25</b>	<b>4.9</b>	<b>27</b>	<b>3.8</b>	<b>26</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>BBgBarc US Aggregate TR</i>				0.8	65	-1.7	84	0.4	80	2.7	52	2.3	61	4.3	54
<i>eA All US Fixed Inc Net Median</i>				1.1		0.0		1.7		2.7		2.9		4.4	
<b>Diversified Fixed</b>	<b>291,395,980</b>	<b>17.0</b>	<b>18.0</b>	<b>1.8</b>	<b>20</b>	<b>0.6</b>	<b>37</b>	<b>2.9</b>	<b>38</b>	<b>3.7</b>	<b>27</b>	<b>3.3</b>	<b>44</b>	<b>3.8</b>	<b>66</b>
<i>BBgBarc US Aggregate TR</i>				0.8	65	-1.7	84	0.4	80	2.7	52	2.3	61	4.3	54
<i>eA All US Fixed Inc Net Median</i>				1.1		0.0		1.7		2.7		2.9		4.4	
PIMCO Core Plus	92,713,114	5.4	6.0	1.6	3	-0.5	21	1.8	26	2.8	50	2.5	60	--	--
<i>BBgBarc US Aggregate TR</i>				0.8	66	-1.7	74	0.4	74	2.7	60	2.3	73	4.3	77
Wellington DAS	44,155,742	2.6	3.0	1.8	2	-6.1	99	-2.8	99	5.6	1	5.1	2	--	--
<i>Wellington Custom Benchmark*</i>				1.4	3	-6.5	99	-2.8	99	4.5	3	3.4	15	5.6	7

\*Wellington Custom Benchmark is comprised of equal weighted zero coupon bonds targeting a 10 year duration. Instruments include swaps from 7/1/07 thru 12/18/08, swaps and US Treasury STRIPS from 12/19/08 thru 12/29/08, and US Treasury STRIPS since 12/30/08.

# Vermont State Teachers

## Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
SSgA Barclays Aggregate Index	53,633,156	3.1	3.0	0.8	68	-1.8	76	0.4	74	--	--	--	--	--	--
<i>BBgBarc US Aggregate TR</i>				0.8	66	-1.7	74	0.4	74	2.7	60	2.3	73	4.3	77
<i>3-Month Libor Total Return USD</i>				0.3	99	0.7	4	0.9	55	0.5	99	0.4	99	1.1	99
<i>eA US Core Fixed Inc Net Median</i>				0.9		-1.3		1.1		2.8		2.6		4.5	
<b>Unconstrained Fixed Income</b>	<b>100,893,968</b>	<b>5.9</b>	<b>6.0</b>	<b>2.7</b>	<b>40</b>	<b>6.3</b>	<b>29</b>	<b>8.3</b>	<b>32</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>25% HY, 25% EMD, 50% BC Agg</i>				2.1	61	2.4	73	6.4	58	4.0	11	4.2	35	5.8	20
<i>BBgBarc Global Aggregate TR</i>				1.8	70	-4.7	99	-1.9	99	-0.4	92	0.4	93	3.3	91
<i>eA Global Unconstrained Fixed Inc Net Median</i>				2.3		5.1		7.1		2.5		3.6		5.2	
PIMCO Unconstrained	41,438,519	2.4	2.5	2.1	61	6.0	33	7.8	35	2.1	66	1.5	91	--	--
<i>25% HY, 25% EMD, 50% BC Agg</i>				2.1	61	2.4	73	6.4	58	4.0	11	4.2	35	5.8	20
<i>3-Month Libor Total Return USD</i>				0.3	99	0.7	94	0.9	95	0.5	86	0.4	93	1.1	99
GAM Unconstrained Bond	59,455,449	3.5	3.5	3.1	30	6.4	27	8.7	31	--	--	--	--	--	--
<i>3-Month LIBOR + 3%</i>				1.0	93	3.0	69	3.9	76	3.5	20	3.4	54	4.1	76
<i>eA Global Unconstrained Fixed Inc Net Median</i>				2.3		5.1		7.1		2.5		3.6		5.2	
<b>High Yield Comp</b>	<b>82,154,542</b>	<b>4.8</b>	<b>5.0</b>	<b>2.0</b>	<b>73</b>	<b>9.8</b>	<b>38</b>	<b>15.3</b>	<b>35</b>	<b>4.3</b>	<b>32</b>	<b>6.4</b>	<b>33</b>	<b>7.0</b>	<b>36</b>
<i>BBgBarc US High Yield TR</i>				2.7	32	10.3	32	16.4	21	4.6	25	6.8	24	7.5	17
<i>eA US High Yield Fixed Inc Net Median</i>				2.3		9.1		13.8		3.8		6.1		6.7	
KDP	18,168,257	1.1	1.0	1.7	80	6.1	85	10.1	78	2.7	82	4.6	91	--	--
<i>BBgBarc US High Yield TR</i>				2.7	32	10.3	32	16.4	21	4.6	25	6.8	24	7.5	17
<i>BofA Merrill Lynch US High Yield BB-B Rated</i>				2.3	54	8.8	57	13.8	51	4.6	24	6.6	28	6.9	37
Guggenheim	63,986,285	3.7	4.0	2.1	70	10.8	21	16.7	20	4.7	23	--	--	--	--
<i>BBgBarc US High Yield TR</i>				2.7	32	10.3	32	16.4	21	4.6	25	6.8	24	7.5	17
<i>eA US High Yield Fixed Inc Net Median</i>				2.3		9.1		13.8		3.8		6.1		6.7	

# Vermont State Teachers

## Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>TIPS</b>	<b>67,432,345</b>	<b>3.9</b>	<b>4.0</b>												
BlackRock TIPS	67,432,345	3.9	4.0	1.3	--	-0.2	--	1.5	--	2.0	--	0.9	--	--	--
BBgBarc US TIPS TR				1.3	--	-0.2	--	1.5	--	2.0	--	1.0	--	4.2	--
<b>Emerging Market Debt</b>	<b>89,146,947</b>	<b>5.2</b>	<b>5.0</b>												
Wellington Opportunistic EMD	89,146,947	5.2	5.0	4.2	73	6.3	25	12.5	22	6.0	8	5.8	10	--	--
JP Morgan EMBI Global TR				3.9	80	3.2	81	8.8	54	5.7	13	5.2	20	6.9	29
eA All Emg Mkts Fixed Inc Net Median				5.2		4.8		9.2		3.6		3.7		6.1	
<b>Risk Parity/GAA</b>	<b>144,088,451</b>	<b>8.4</b>	<b>8.0</b>	<b>4.6</b>	<b>32</b>	<b>4.4</b>	<b>66</b>	<b>10.2</b>	<b>30</b>	<b>2.2</b>	<b>53</b>	<b>4.0</b>	<b>48</b>	<b>4.0</b>	<b>58</b>
<b>Risk Parity</b>	<b>144,088,451</b>	<b>8.4</b>	<b>8.0</b>	<b>4.6</b>	<b>32</b>	<b>4.4</b>	<b>66</b>	<b>10.4</b>	<b>29</b>	<b>2.3</b>	<b>51</b>	<b>3.9</b>	<b>51</b>	--	--
eA Global TAA Net Median				3.5		5.4		7.7		2.3		3.9		4.3	
AQR Global Risk Premium	144,088,451	8.4	8.0	4.6	32	4.4	66	10.4	29	2.3	51	3.9	51	--	--
60% MSCI World (Net) / 40% CITI WGBI				4.4	36	5.0	60	7.1	55	2.9	41	5.4	24	4.1	57
<b>Cash</b>	<b>1,653,303</b>	<b>0.1</b>	<b>0.0</b>												
Vermont Cash	1,653,303	0.1	0.0	0.0	--	0.0	--	0.0	--	0.0	--	0.0	--	0.8	--
91 Day T-Bills				0.1	--	0.3	--	0.4	--	0.2	--	0.1	--	0.5	--
<b>Commodities</b>	<b>21,035,499</b>	<b>1.2</b>	<b>3.0</b>												
Schroder	21,035,499	1.2	3.0	-2.8	--	-2.9	--	10.9	--	-16.5	--	-11.6	--	--	--
Bloomberg Commodity Index				-2.3	--	-3.6	--	8.7	--	-13.9	--	-9.5	--	-6.2	--
<b>Total Real Estate</b>	<b>127,375,563</b>	<b>7.4</b>	<b>8.0</b>	<b>1.8</b>	<b>--</b>	<b>5.7</b>	<b>--</b>	<b>8.0</b>	<b>--</b>	<b>11.4</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
NCREIF Property Index				1.6	--	5.1	--	7.3	--	10.6	--	10.7	--	6.7	--
NCREIF ODCE				1.8	--	6.1	--	8.3	--	11.8	--	12.0	--	5.6	--
Morgan Stanley Prime Property	60,262,935	3.5		1.9	--	6.7	--	9.3	--	12.5	--	13.0	--	5.8	--
UBS Trumbull	49,571,639	2.9		0.9	--	3.6	--	5.1	--	9.6	--	9.3	--	5.1	--
RREEF America REIT III	256,846	0.0		-0.7	--	-13.6	--	-13.0	--	2.1	--	8.7	--	-4.8	--
Transwestern / Aslan III	128,447	0.0		0.0	--	0.0	--	0.0	--	-2.0	--	9.4	--	-22.6	--
Siguler Guff DREOF II	13,207,491	0.8		3.8	--	10.3	--	14.4	--	--	--	--	--	--	--
Siguler Guff DREOF II Co-Investment	3,948,206	0.2		3.6	--	--	--	--	--	--	--	--	--	--	--

Risk Parity Composite formerly shown as Risk Parity/GAA.

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

Real Estate values are finalized as of 03/31/2017, except for the Siguler Guff funds, they are preliminary.



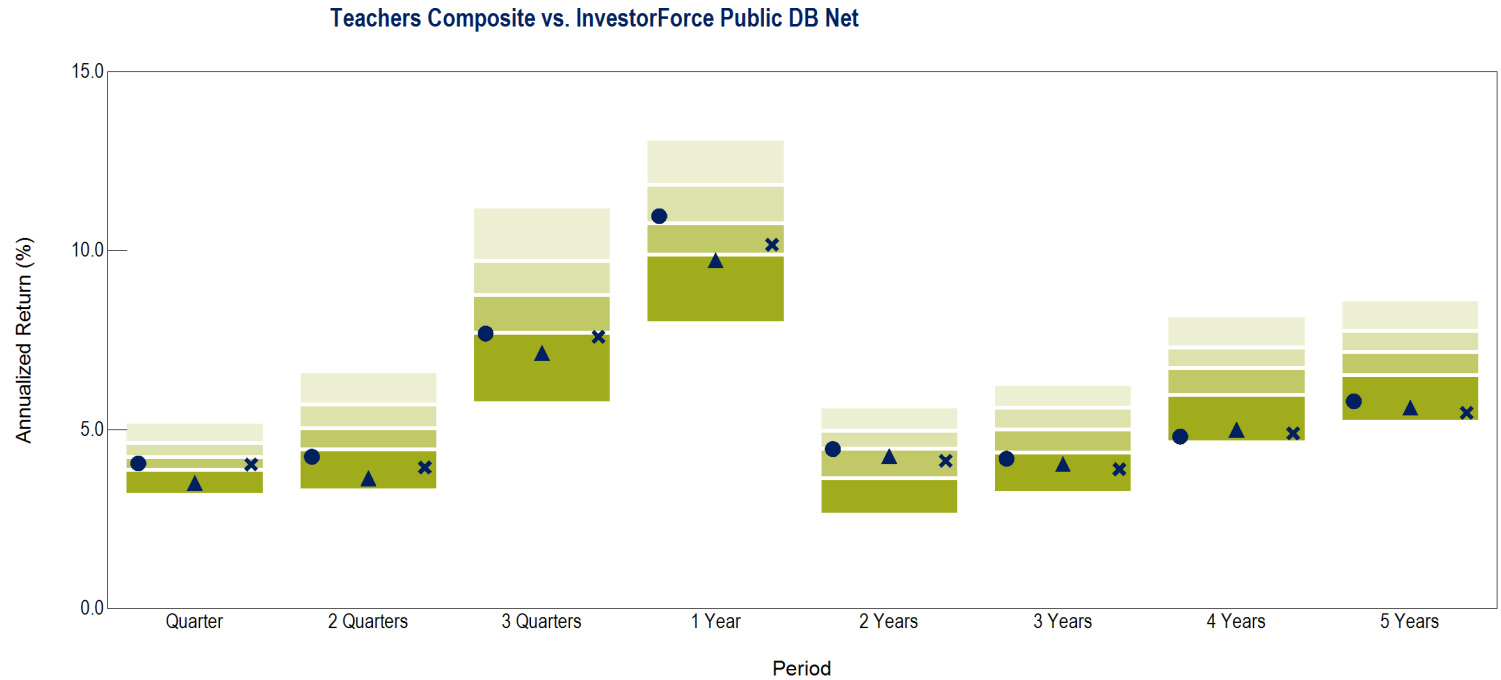
## Vermont State Teachers

### Total Fund Performance Detail - Net

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Absolute Return</b>	<b>172,629,496</b>	<b>10.1</b>	<b>9.0</b>	<b>0.6</b>	<b>90</b>	<b>3.9</b>	<b>78</b>	<b>5.5</b>	<b>66</b>	<b>0.6</b>	<b>75</b>	<b>4.3</b>	<b>52</b>	<b>--</b>	<b>--</b>
<i>HFRI Fund of Funds Composite Index</i>				2.4	47	5.6	57	6.2	59	1.8	51	3.2	75	1.2	87
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				2.3		6.0		6.9		1.8		4.4		2.9	
Grosvenor	85,053,904	5.0	5.0	1.8	63	7.0	39	8.6	33	2.0	48	5.3	34	--	--
Mellon Dynamic Growth	33,953,507	2.0	2.0	2.9	32	2.1	92	4.8	72	5.7	7	5.5	32	2.8	52
<i>Mellon Dynamic Growth Benchmark</i>				4.1	15	5.4	59	6.9	51	2.7	41	4.9	39	3.5	32
Allianz Structured Alpha	31,333,455	1.8	2.0	0.9	85	3.6	80	4.9	72	8.9	3	8.0	7	--	--
<i>91 Day T-Bills</i>				0.1	94	0.3	95	0.4	94	0.2	87	0.1	99	0.5	96
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				2.3		6.0		6.9		1.8		4.4		2.9	
Pinnacle Natural Resources, L.P.	22,113,567	1.3		-8.2	--	-6.6	--	--	--	--	--	--	--	--	--
<i>Bloomberg Commodity Index</i>				-2.3	--	-3.6	--	8.7	--	-13.9	--	-9.5	--	-6.2	--
GAM	175,063	0.0	0.0												
<b>Private Equity</b>	<b>27,354,892</b>	<b>1.6</b>	<b>5.0</b>	<b>0.0</b>	<b>--</b>	<b>7.4</b>	<b>--</b>	<b>12.6</b>	<b>--</b>	<b>16.3</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
<i>Cambridge Associates US All PE</i>				0.0	--	8.7	--	13.0	--	8.8	--	11.8	--	9.3	--
Harbourvest Partners IX Credit Opportunities	997,704	0.1													
Harbourvest Partners IX Venture Fund	4,920,053	0.3													
Harbourvest Partners IX Buyout Fund	6,891,368	0.4													
Harbourvest Partners X Venture Fund	912,775	0.1													
Harbourvest Partners X Buyout Fund	1,923,678	0.1													
Harbourvest Dover VIII Fund	8,061,322	0.5													
Harbourvest Dover Street Fund IX	1,637,904	0.1													
HIPEP VII	2,010,087	0.1													

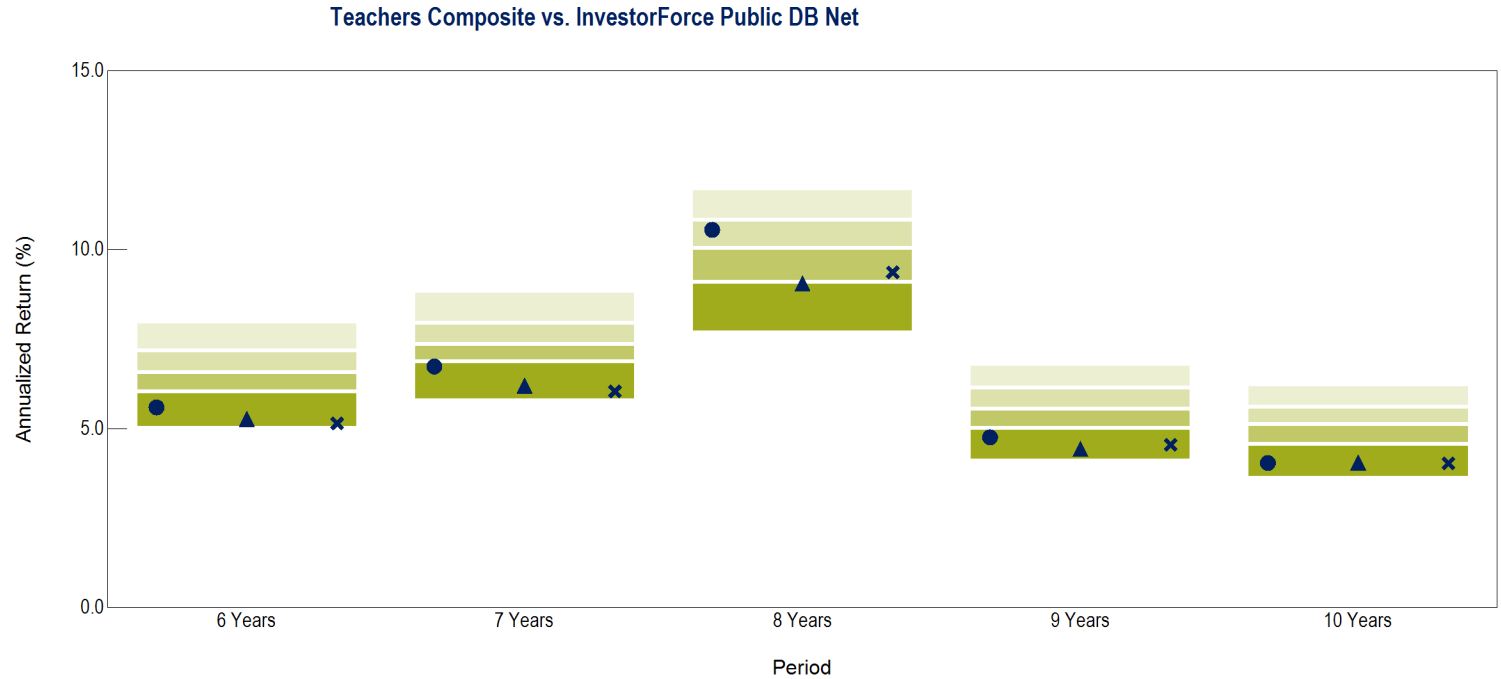
Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Mellon Dynamic Growth and Allianz Structured Alpha. Mellon Dynamic Growth was included in Risk Parity/GAA composite prior to 04/01/2016. Allianz Structured Alpha was included Diversified Fixed income composite prior to 04/01/2016. Mellon Dynamic Growth Benchmark: 60% MSCI All Country World Index IMI / 40% Citigroup GDP Weighted. Harbourvest values based on final Capital Account Statements for Q4, and cash adjusted through Q1.

Total Fund Return Summary vs. Peer Universe - Net



	Return (Rank)															
5th Percentile	5.2	6.6	11.2	13.1	5.6	6.3	8.2	8.6								
25th Percentile	4.6	5.7	9.7	11.8	5.0	5.6	7.3	7.8								
Median	4.2	5.0	8.8	10.8	4.5	5.0	6.7	7.2								
75th Percentile	3.9	4.5	7.7	9.9	3.7	4.4	6.0	6.5								
95th Percentile	3.2	3.3	5.7	8.0	2.6	3.2	4.7	5.2								
# of Portfolios	257	257	257	256	254	244	230	222								
● Teachers Composite	4.1 (62)	4.2 (83)	7.7 (77)	11.0 (45)	4.5 (51)	4.2 (82)	4.8 (94)	5.8 (92)								
▲ Policy Index	3.5 (89)	3.6 (93)	7.1 (86)	9.7 (78)	4.3 (60)	4.0 (86)	5.0 (92)	5.6 (93)								
× Allocation Index	4.0 (64)	3.9 (90)	7.6 (79)	10.2 (66)	4.1 (63)	3.9 (88)	4.9 (93)	5.5 (94)								

Total Fund Return Summary vs. Peer Universe - Net



	Return (Rank)									
5th Percentile	8.0		8.8		11.7		6.8		6.2	
25th Percentile	7.2		8.0		10.8		6.2		5.6	
Median	6.6		7.4		10.1		5.6		5.1	
75th Percentile	6.1		6.9		9.1		5.0		4.6	
95th Percentile	5.0		5.8		7.7		4.1		3.6	
# of Portfolios	205		196		186		183		178	
● Teachers Composite	5.6	(88)	6.7	(82)	10.6	(37)	4.8	(85)	4.0	(90)
▲ Policy Index	5.3	(93)	6.2	(94)	9.1	(77)	4.4	(90)	4.1	(89)
× Allocation Index	5.1	(94)	6.0	(95)	9.4	(71)	4.6	(88)	4.0	(90)

Total Fund Return Summary vs. Peer Universe - Net

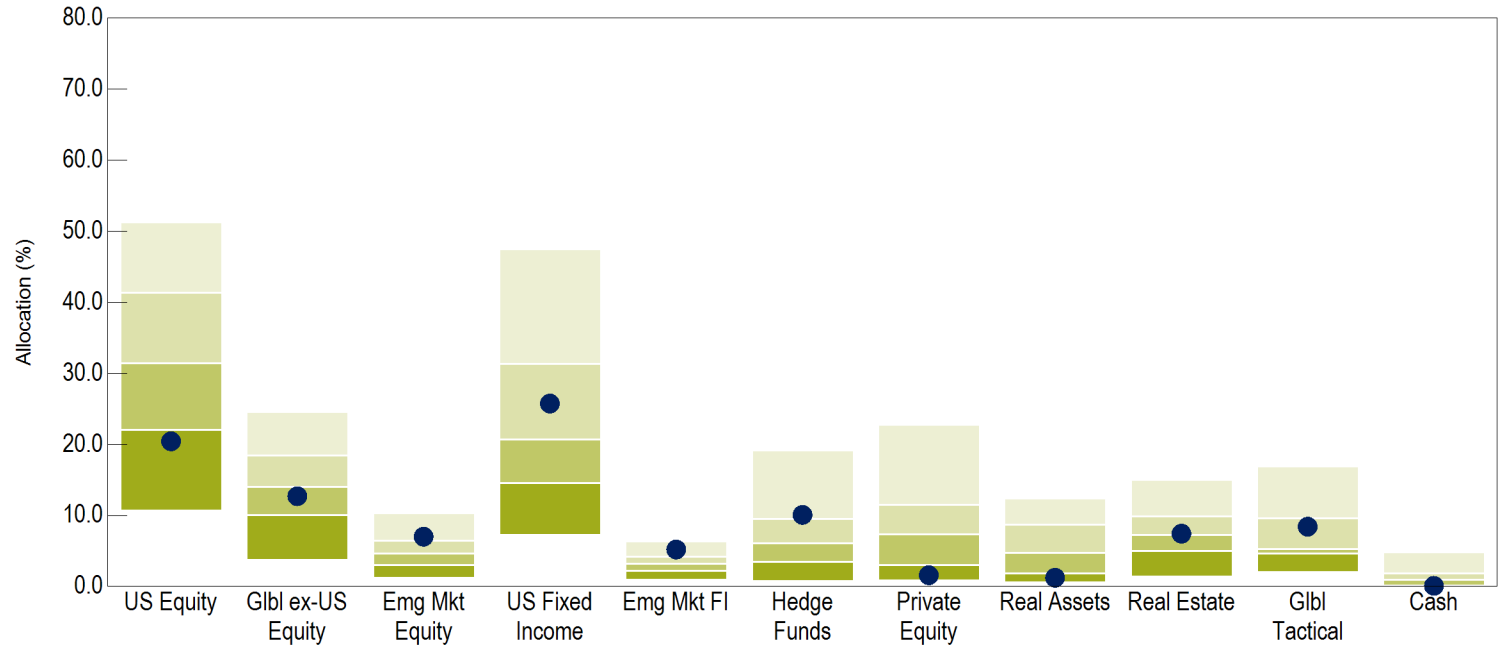
Teachers Composite vs. InvestorForce Public DB Net



	Return (Rank)											
5th Percentile	2.8		4.4		18.6		15.0		4.4	24.4		
25th Percentile	1.4		3.6		16.7		12.9		1.9	22.1		
Median	0.4		2.8		15.5		11.3		0.9	19.5		
75th Percentile	-0.9		1.6		14.1		9.9		0.0	15.9		
95th Percentile	-2.9		-0.1		11.9		7.4		-2.9	12.2		
# of Portfolios	258		231		173		192		147	137		
● Teachers Composite	1.4	(26)	-0.3	(96)	13.8	(83)	8.0	(94)	1.9	(26)	20.4	(39)
▲ Policy Index	1.4	(25)	0.1	(94)	13.7	(84)	7.7	(94)	0.9	(51)	18.5	(61)
× Allocation Index	0.9	(37)	0.0	(95)	13.1	(91)	8.0	(94)	0.6	(59)	18.4	(63)

Total Fund Allocation vs. Peer Universe - Net

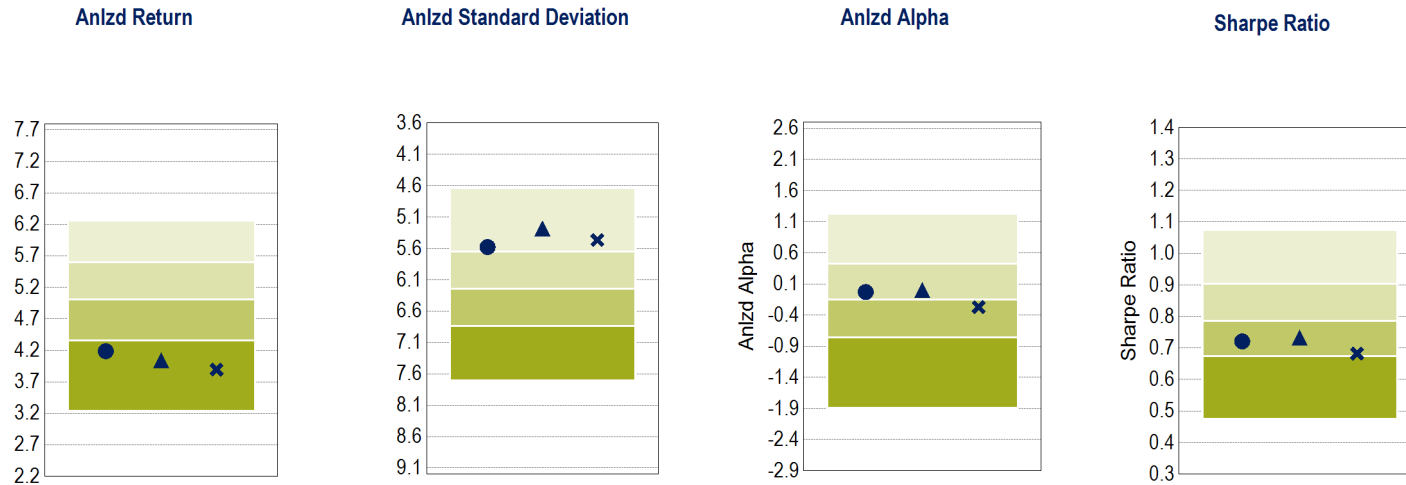
Total Plan Allocation vs. InvestorForce Public DB Net  
As of March 31, 2017



	Allocation (Rank)											
5th Percentile	51.3	24.6	10.3	47.5	6.4	19.1	22.7	12.4	15.0	16.9	4.9	--
25th Percentile	41.4	18.5	6.5	31.4	4.2	9.6	11.6	8.8	10.0	9.7	2.0	--
Median	31.5	14.1	4.7	20.8	3.3	6.2	7.5	4.8	7.4	5.4	1.0	--
75th Percentile	22.1	10.2	3.1	14.7	2.3	3.6	3.1	1.9	5.1	4.7	0.3	--
95th Percentile	10.7	3.8	1.3	7.3	1.0	0.8	0.9	0.6	1.5	2.1	0.0	--
# of Portfolios	184	205	119	187	41	88	116	66	153	68	225	--
● Teachers Composite	20.4 (81)	12.7 (62)	7.0 (23)	25.8 (38)	5.2 (16)	10.1 (22)	1.6 (86)	1.2 (87)	7.4 (48)	8.4 (34)	0.1 (87)	--

Total Fund Risk Statistics vs. Peer Universe - Net

Teachers Composite vs. IFx Public DB Net  
3 Years



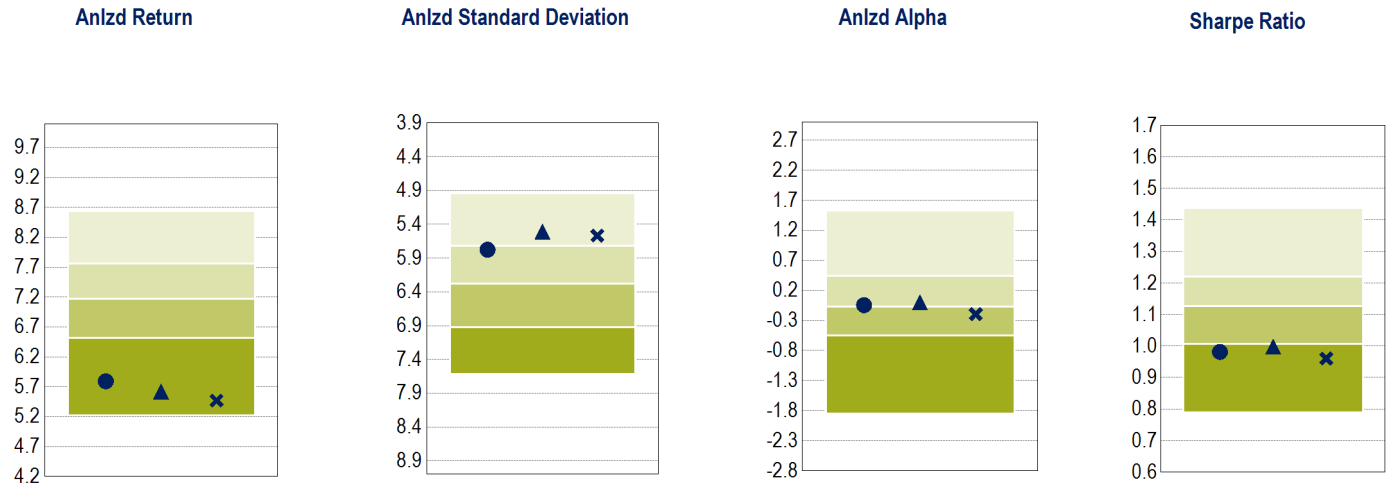
● Teachers Composite	
Value	4.19
Rank	82
▲ Policy Index	
Value	4.04
Rank	86
✘ Allocation Index	
Value	3.90
Rank	88
Universe	
5th %tile	6.26
25th %tile	5.61
Median	5.02
75th %tile	4.37
95th %tile	3.25

● Teachers Composite	
Value	5.58
Rank	23
▲ Policy Index	
Value	5.28
Rank	11
✘ Allocation Index	
Value	5.47
Rank	19
Universe	
5th %tile	4.64
25th %tile	5.64
Median	6.23
75th %tile	6.83
95th %tile	7.69

● Teachers Composite	
Value	-0.03
Rank	43
▲ Policy Index	
Value	0.00
Rank	42
✘ Allocation Index	
Value	-0.27
Rank	53
Universe	
5th %tile	1.23
25th %tile	0.44
Median	-0.14
75th %tile	-0.75
95th %tile	-1.89

● Teachers Composite	
Value	0.72
Rank	68
▲ Policy Index	
Value	0.73
Rank	65
✘ Allocation Index	
Value	0.68
Rank	74
Universe	
5th %tile	1.07
25th %tile	0.91
Median	0.79
75th %tile	0.68
95th %tile	0.48

Teachers Composite vs. I/Fx Public DB Net  
5 Years



● Teachers Composite

Value	5.79
Rank	92
▲ Policy Index	
Value	5.62
Rank	93
✘ Allocation Index	
Value	5.47
Rank	94

Universe	
5th %tile	8.63
25th %tile	7.77
Median	7.18
75th %tile	6.53
95th %tile	5.23

● Teachers Composite

Value	5.78
Rank	28
▲ Policy Index	
Value	5.51
Rank	18
✘ Allocation Index	
Value	5.57
Rank	20

Universe	
5th %tile	4.94
25th %tile	5.71
Median	6.26
75th %tile	6.92
95th %tile	7.60

● Teachers Composite

Value	-0.05
Rank	49
▲ Policy Index	
Value	0.00
Rank	46
✘ Allocation Index	
Value	-0.20
Rank	57

Universe	
5th %tile	1.53
25th %tile	0.45
Median	-0.06
75th %tile	-0.54
95th %tile	-1.84

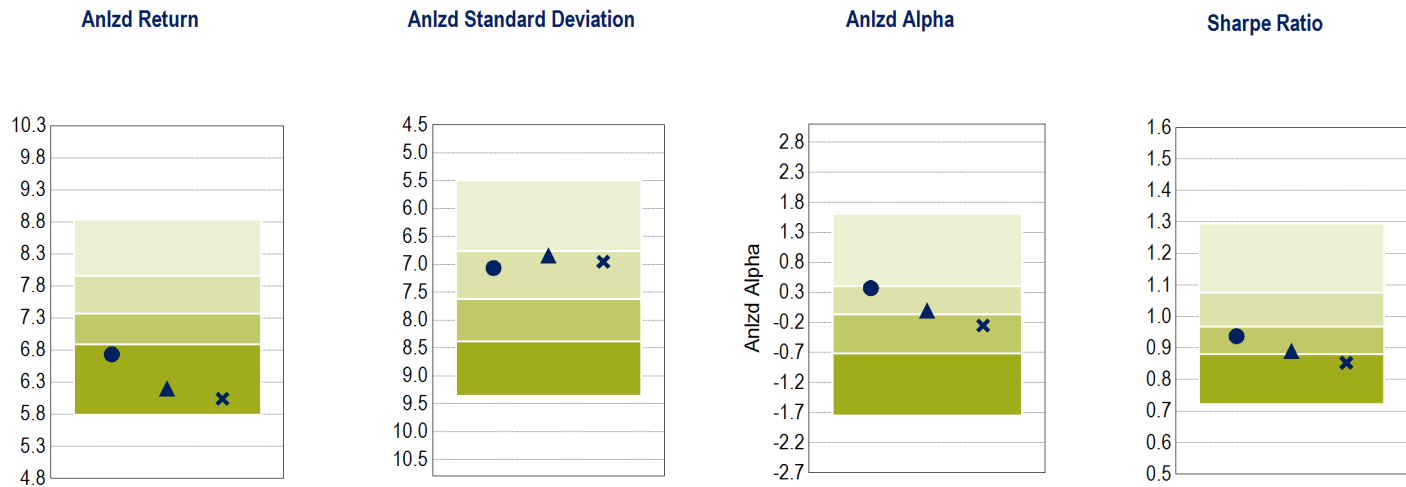
● Teachers Composite

Value	0.98
Rank	79
▲ Policy Index	
Value	1.00
Rank	76
✘ Allocation Index	
Value	0.96
Rank	83

Universe	
5th %tile	1.44
25th %tile	1.22
Median	1.13
75th %tile	1.01
95th %tile	0.79

Total Fund Risk Statistics vs. Peer Universe - Net

Teachers Composite vs. IFx Public DB Net  
7 Years



● Teachers Composite

Value	6.73
Rank	82
▲ Policy Index	
Value	6.20
Rank	94
✘ Allocation Index	
Value	6.04
Rank	95

Universe	
5th %tile	8.83
25th %tile	7.97
Median	7.37
75th %tile	6.90
95th %tile	5.80

● Teachers Composite

Value	7.07
Rank	35
▲ Policy Index	
Value	6.84
Rank	28
✘ Allocation Index	
Value	6.95
Rank	30

Universe	
5th %tile	5.49
25th %tile	6.75
Median	7.61
75th %tile	8.36
95th %tile	9.34

● Teachers Composite

Value	0.37
Rank	27
▲ Policy Index	
Value	0.00
Rank	47
✘ Allocation Index	
Value	-0.25
Rank	59

Universe	
5th %tile	1.60
25th %tile	0.41
Median	-0.06
75th %tile	-0.70
95th %tile	-1.74

● Teachers Composite

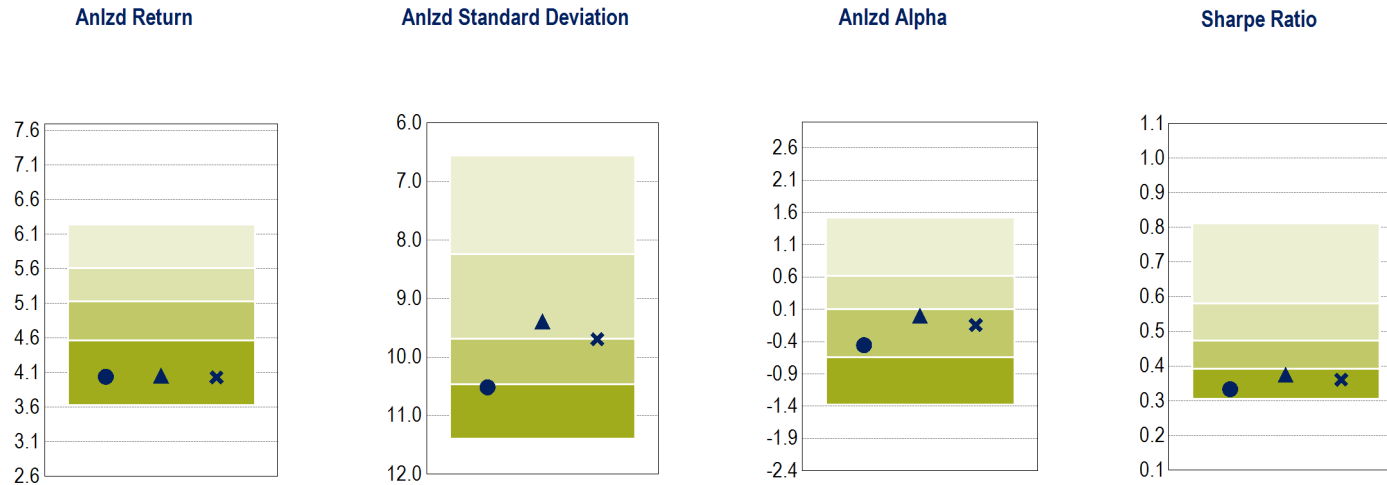
Value	0.94
Rank	61
▲ Policy Index	
Value	0.89
Rank	73
✘ Allocation Index	
Value	0.85
Rank	83

Universe	
5th %tile	1.30
25th %tile	1.08
Median	0.97
75th %tile	0.88
95th %tile	0.72



Total Fund Risk Statistics vs. Peer Universe - Net

Teachers Composite vs. IFX Public DB Net  
10 Years



● Teachers Composite

Value	4.04
Rank	90
▲ Policy Index	
Value	4.06
Rank	89
✘ Allocation Index	
Value	4.03
Rank	90

Universe	
5th %tile	6.24
25th %tile	5.62
Median	5.14
75th %tile	4.58
95th %tile	3.64

● Teachers Composite

Value	10.52
Rank	78
▲ Policy Index	
Value	9.39
Rank	45
✘ Allocation Index	
Value	9.69
Rank	52

Universe	
5th %tile	6.55
25th %tile	8.23
Median	9.67
75th %tile	10.45
95th %tile	11.38

● Teachers Composite

Value	-0.46
Rank	71
▲ Policy Index	
Value	0.00
Rank	54
✘ Allocation Index	
Value	-0.15
Rank	58

Universe	
5th %tile	1.52
25th %tile	0.63
Median	0.11
75th %tile	-0.64
95th %tile	-1.37

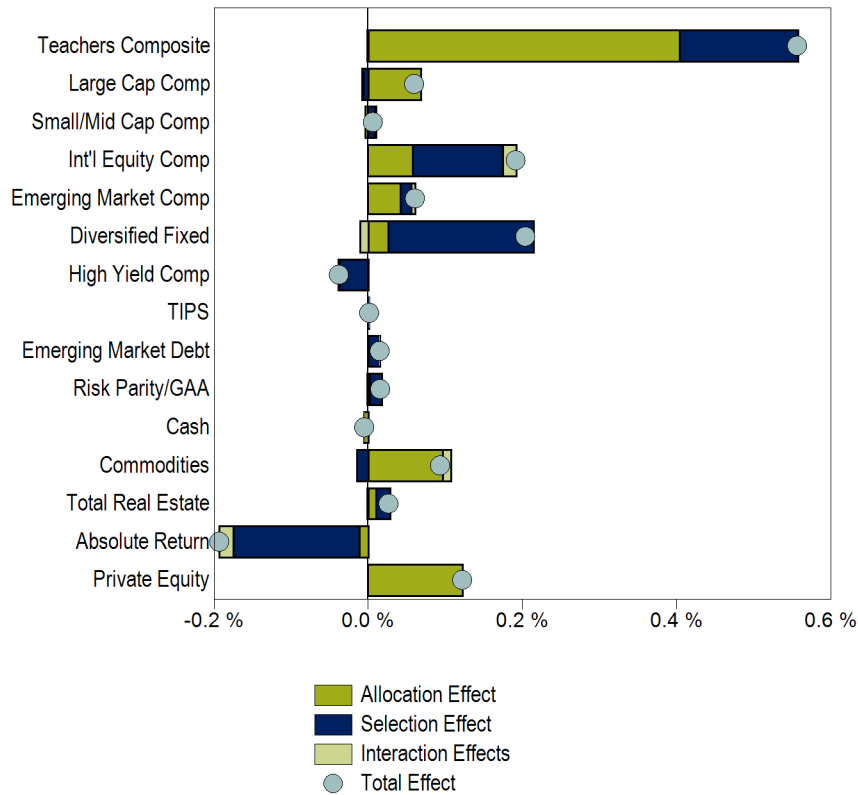
● Teachers Composite

Value	0.33
Rank	91
▲ Policy Index	
Value	0.37
Rank	80
✘ Allocation Index	
Value	0.36
Rank	85

Universe	
5th %tile	0.81
25th %tile	0.58
Median	0.48
75th %tile	0.39
95th %tile	0.31

**Total Fund Attribution Analysis - Net**

**Attribution Effects Relative to Policy Index  
3 Months Ending March 31, 2017**



**Attribution Summary  
3 Months Ending March 31, 2017**

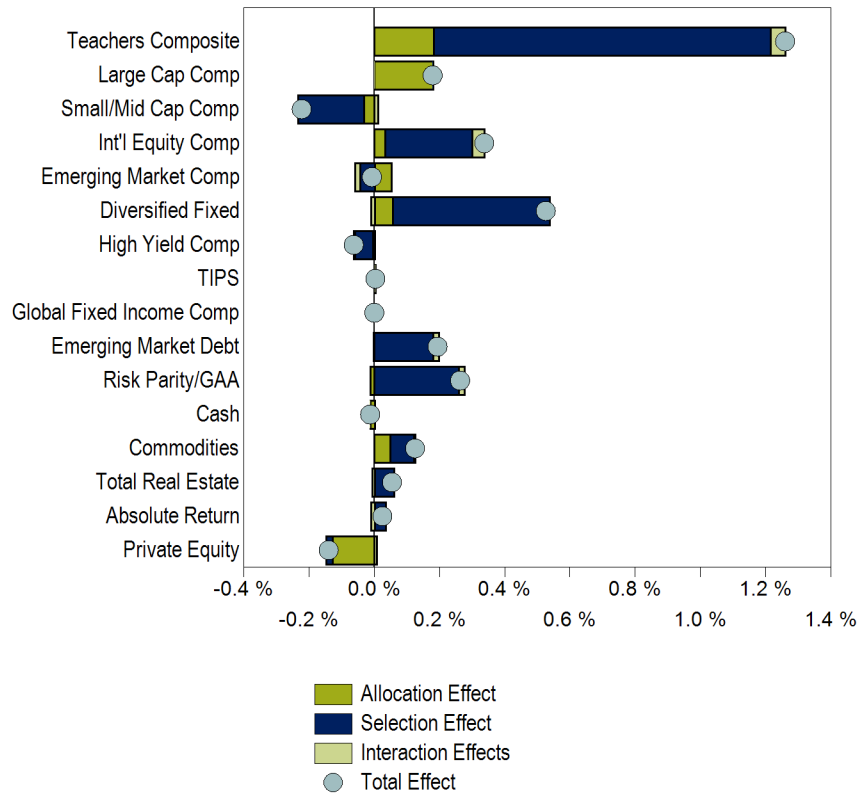
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	5.8%	5.9%	-0.1%	0.0%	0.1%	0.0%	0.1%
Small/Mid Cap Comp	2.5%	2.4%	0.2%	0.0%	0.0%	0.0%	0.0%
Int'l Equity Comp	8.5%	7.4%	1.1%	0.1%	0.1%	0.0%	0.2%
Emerging Market Comp	11.7%	11.4%	0.3%	0.0%	0.0%	0.0%	0.1%
Diversified Fixed	1.8%	0.8%	1.0%	0.2%	0.0%	0.0%	0.2%
High Yield Comp	2.0%	2.7%	-0.7%	0.0%	0.0%	0.0%	0.0%
TIPS	1.3%	1.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt	4.2%	3.9%	0.3%	0.0%	0.0%	0.0%	0.0%
Risk Parity/GAA	4.6%	4.4%	0.1%	0.0%	0.0%	0.0%	0.0%
Cash	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Commodities	-2.8%	-2.3%	-0.4%	0.0%	0.1%	0.0%	0.1%
Total Real Estate	1.8%	1.6%	0.2%	0.0%	0.0%	0.0%	0.0%
Absolute Return	0.6%	2.4%	-1.8%	-0.2%	0.0%	0.0%	-0.2%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
<b>Total</b>	<b>4.1%</b>	<b>3.5%</b>	<b>0.6%</b>	<b>0.2%</b>	<b>0.4%</b>	<b>0.0%</b>	<b>0.6%</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 policyindex 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 alongwith 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.

**Total Fund Attribution Analysis - Net**

**Attribution Effects Relative to Policy Index  
1 Year Ending March 31, 2017**



**Attribution Summary  
1 Year Ending March 31, 2017**

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	17.3%	17.3%	0.0%	0.0%	0.2%	0.0%	0.2%
Small/Mid Cap Comp	20.6%	24.8%	-4.2%	-0.2%	0.0%	0.0%	-0.2%
Int'l Equity Comp	14.6%	12.0%	2.6%	0.3%	0.0%	0.0%	0.3%
Emerging Market Comp	16.2%	17.2%	-1.0%	0.0%	0.1%	0.0%	0.0%
Diversified Fixed	2.9%	0.4%	2.5%	0.5%	0.1%	0.0%	0.5%
High Yield Comp	15.3%	16.4%	-1.1%	-0.1%	0.0%	0.0%	-0.1%
TIPS	1.5%	1.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Global Fixed Income Comp	--	--	--	--	0.0%	--	--
Emerging Market Debt	12.5%	8.8%	3.7%	0.2%	0.0%	0.0%	0.2%
Risk Parity/GAA	10.2%	7.1%	3.1%	0.3%	0.0%	0.0%	0.3%
Cash	0.0%	0.4%	-0.4%	0.0%	0.0%	0.0%	0.0%
Commodities	10.9%	8.7%	2.2%	0.1%	0.0%	0.0%	0.1%
Total Real Estate	8.0%	7.3%	0.7%	0.1%	0.0%	0.0%	0.1%
Absolute Return	5.5%	5.2%	0.3%	0.0%	0.0%	0.0%	0.0%
Private Equity	12.6%	13.0%	-0.4%	0.0%	-0.1%	0.0%	-0.1%
<b>Total</b>	<b>11.0%</b>	<b>9.7%</b>	<b>1.3%</b>	<b>1.0%</b>	<b>0.2%</b>	<b>0.0%</b>	<b>1.3%</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 policyindex 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 alongwith 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.

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.

## Vermont State Teachers

### Risk Statistics - 3 Years Ending December 31, 2016 - Net

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Teachers Composite	100.00%	4.19%	82	5.58%	23	-0.02%	42	0.72	68	1.29	43	0.85%	27
Policy Index	--	4.04%	86	5.28%	11	0.00%	41	0.73	65	1.29	43	0.00%	1
US Equity	20.45%	9.80%	20	10.95%	30	-0.07%	25	0.88	17	1.54	19	1.56%	2
Russell 3000	--	9.75%	21	10.71%	25	0.00%	24	0.90	15	1.48	23	0.00%	1
Large Cap Comp	15.36%	10.09%	18	10.52%	36	-0.36%	23	0.94	17	1.73	13	0.75%	1
S&P 500	--	10.37%	14	10.41%	33	0.00%	17	0.98	12	1.66	17	0.00%	1
Small/Mid Cap Comp	5.08%	9.62%	14	13.06%	46	3.71%	19	0.72	19	1.57	8	4.05%	3
Russell 2000	--	7.22%	39	15.68%	92	0.00%	63	0.45	56	0.78	54	0.00%	1
Int'l Equity Comp	12.71%	1.91%	41	11.54%	42	1.44%	41	0.15	40	0.27	38	2.06%	6
MSCI EAFE	--	0.50%	74	12.23%	77	0.00%	74	0.03	74	0.05	74	0.00%	1
Emerging Market Comp	7.01%	1.62%	60	15.28%	58	0.55%	60	0.10	60	0.18	54	5.31%	60
MSCI Emerging Markets	--	1.18%	65	16.11%	78	0.00%	65	0.06	65	0.12	65	0.00%	1
US Fixed Income	25.76%	3.76%	26	3.02%	61	1.41%	26	1.19	25	1.75	26	1.68%	36
BBgBarc US Aggregate TR	--	2.68%	52	2.94%	60	0.00%	76	0.86	58	1.17	66	0.00%	1
Diversified Fixed	17.02%	3.72%	27	3.08%	63	1.13%	29	1.16	27	1.49	40	1.22%	24
BBgBarc US Aggregate TR	--	2.68%	52	2.94%	60	0.00%	76	0.86	58	1.17	66	0.00%	1
Unconstrained Fixed Income	5.89%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	3.95%	11	3.73%	50	0.00%	37	1.02	22	1.73	22	0.00%	1
High Yield Comp	4.80%	4.27%	32	5.01%	39	0.58%	38	0.82	39	1.49	46	1.65%	41
BBgBarc US High Yield TR	--	4.56%	25	6.08%	82	0.00%	59	0.72	56	1.62	38	0.00%	1
TIPS	3.94%	1.97%	26	4.09%	68	-0.09%	22	0.44	29	0.78	21	0.18%	4
BBgBarc US TIPS TR	--	2.03%	22	4.01%	67	0.00%	17	0.46	19	0.83	18	0.00%	1
Emerging Market Debt	5.21%	6.01%	8	6.28%	29	0.36%	15	0.93	11	1.47	16	1.33%	9
JP Morgan EMBI Global TR	--	5.73%	13	6.23%	28	0.00%	19	0.89	16	1.34	19	0.00%	1
Total Real Estate	7.44%	11.45%	--	4.84%	--	0.17%	--	2.33	--	230.97	--	1.14%	--
NCREIF Property Index	--	10.58%	--	4.41%	--	0.00%	--	2.36	--	213.22	--	0.00%	--
Absolute Return	10.08%	0.63%	75	3.18%	23	-0.92%	66	0.15	68	0.17	71	1.41%	1
HFRI Fund of Funds Composite Index	--	1.80%	51	3.41%	31	0.00%	51	0.48	42	0.59	45	0.00%	1
Risk Parity/GAA	8.42%	2.22%	53	7.66%	64	-0.39%	56	0.27	60	0.45	55	4.63%	40
60% MSCI World (Net) / 40% CITI WGBI	--	2.94%	41	7.01%	50	0.00%	51	0.40	43	0.79	33	0.00%	1

## Vermont State Teachers

### Risk Statistics - 5 Years Ending March 31, 2017 - Net

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Teachers Composite	100.00%	5.79%	92	5.78%	28	-0.04%	49	0.98	79	1.62	61	0.82%	20
Policy Index	--	5.62%	93	5.51%	18	0.00%	45	1.00	76	1.58	67	0.00%	1
US Equity	20.45%	--	--	--	--	--	--	--	--	--	--	--	--
Russell 3000	--	13.18%	29	10.45%	19	0.00%	25	1.25	13	2.04	17	0.00%	1
Large Cap Comp	15.36%	13.44%	14	10.35%	30	-0.02%	20	1.29	12	2.21	10	0.77%	1
S&P 500	--	13.30%	18	10.20%	26	0.00%	20	1.29	11	2.12	15	0.00%	1
Small/Mid Cap Comp	5.08%	13.45%	21	12.42%	46	3.00%	29	1.07	24	2.04	14	3.50%	1
Russell 2000	--	12.35%	37	14.36%	86	0.00%	78	0.85	64	1.41	58	0.00%	1
Int'l Equity Comp	12.71%	6.97%	43	12.62%	50	1.46%	48	0.54	45	0.82	43	2.07%	6
MSCI EAFE	--	5.83%	70	13.21%	81	0.00%	79	0.43	75	0.65	72	0.00%	1
Emerging Market Comp	7.01%	--	--	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets	--	0.81%	80	15.33%	71	0.00%	81	0.04	81	0.07	79	0.00%	1
US Fixed Income	25.76%	--	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Aggregate TR	--	2.34%	61	2.88%	53	0.00%	83	0.77	77	1.05	74	0.00%	1
Diversified Fixed	17.02%	3.25%	44	3.29%	65	0.76%	49	0.95	57	1.25	59	1.18%	24
BBgBarc US Aggregate TR	--	2.34%	61	2.88%	53	0.00%	83	0.77	77	1.05	74	0.00%	1
Unconstrained Fixed Income	5.89%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	4.22%	35	3.83%	53	0.00%	67	1.07	40	1.58	40	0.00%	1
High Yield Comp	4.80%	6.41%	33	4.43%	30	0.90%	32	1.42	28	2.34	43	1.42%	39
BBgBarc US High Yield TR	--	6.82%	24	5.38%	75	0.00%	64	1.24	59	2.43	38	0.00%	1
TIPS	3.94%	--	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US TIPS TR	--	0.97%	36	4.64%	63	0.00%	35	0.18	26	0.24	31	0.00%	1
Emerging Market Debt	5.21%	--	--	--	--	--	--	--	--	--	--	--	--
JP Morgan EMBI Global TR	--	5.25%	20	7.10%	33	0.00%	24	0.72	23	1.07	23	0.00%	1
Total Real Estate	7.44%	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF Property Index	--	10.69%	--	4.35%	--	0.00%	--	2.43	--	264.69	--	0.00%	--
Absolute Return	10.08%	4.29%	52	3.53%	34	1.24%	45	1.18	38	1.72	40	1.49%	1
HFRI Fund of Funds Composite Index	--	3.22%	75	3.39%	31	0.00%	64	0.91	49	1.27	50	0.00%	1
Risk Parity/GAA	8.42%	4.02%	48	7.62%	60	-0.80%	73	0.51	67	0.76	64	4.27%	36
60% MSCI World (Net) / 40% CITI WGBI	--	5.44%	24	7.21%	52	0.00%	52	0.74	23	1.25	20	0.00%	1



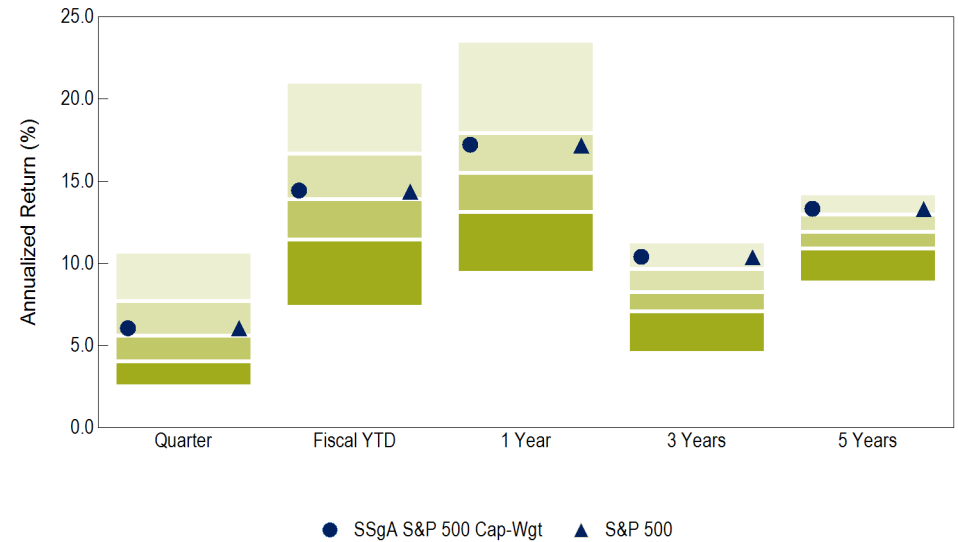
# Manager Characteristics



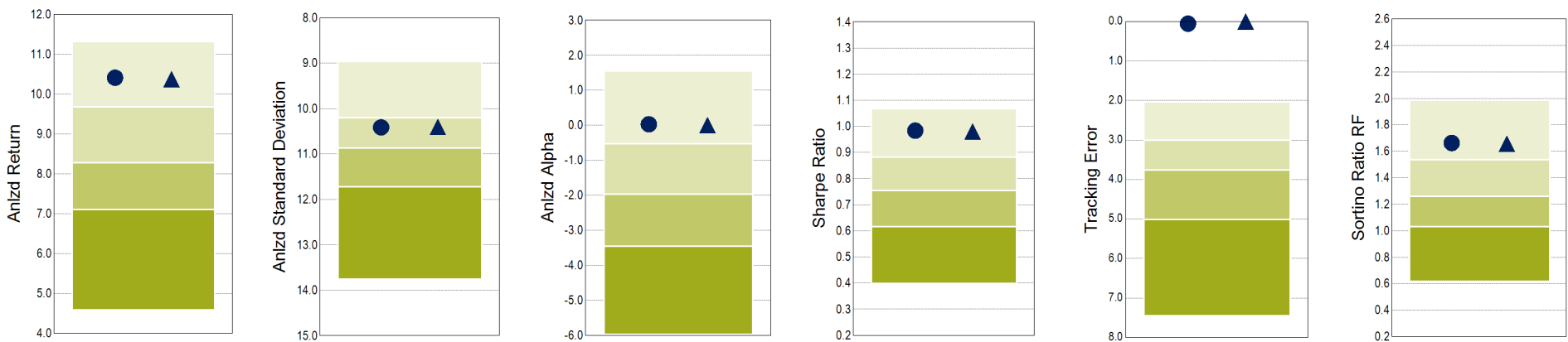
# SSgA S&P 500 Cap-Wgt

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.

eA US Large Cap Equity Net Accounts



## 3 Year Risk Statistics





# SSgA S&P 500 Cap-Wgt

## Top Positive Contributors

## Top Negative Contributors

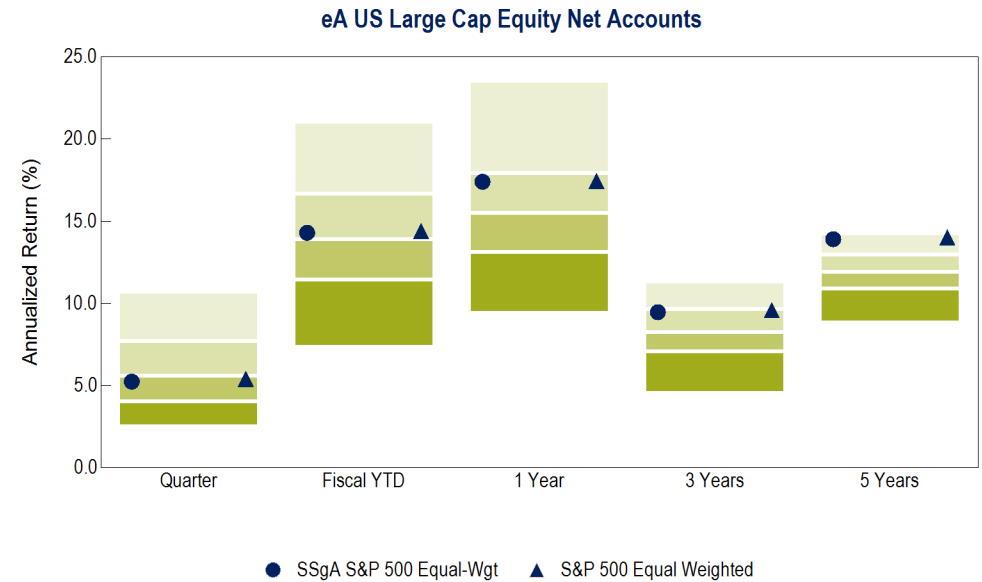
Characteristics			Top Positive Contributors		Top Negative Contributors			
	Portfolio	S&P 500	Relative Contribution %	Return %	Relative Contribution %	Return %		
Number of Holdings	507	505	APPLE	0.0%	24.6%	EXXON MOBIL	0.0%	-8.3%
Weighted Avg. Market Cap. (\$B)	151.7	151.4	VISA 'A' (V)	0.0%	14.1%	ACTIVISION BLIZZARD (ATVI)	0.0%	38.9%
Median Market Cap. (\$B)	19.9	19.9	AMAZON.COM	0.0%	18.2%	ALCOA (ARNC)	0.0%	42.4%
Price To Earnings	24.6	23.7	PRICELINE GROUP	0.0%	21.4%	TARGET (TGT)	0.0%	-22.9%
Price To Book	4.9	4.4	ORACLE	0.0%	16.5%	VIACOM 'B'	0.0%	33.4%
Price To Sales	3.6	3.3	CSX	0.0%	30.0%	WYNN RESORTS	0.0%	33.2%
Return on Equity (%)	21.0	18.8	TRANSOCEAN (RIG)	0.0%	-15.5%	SKYWORKS SOLUTIONS (SWKS)	0.0%	31.6%
Yield (%)	2.0	2.0	ADOBE SYSTEMS (ADBE)	0.0%	26.4%	DIGITAL REALTY TST.	0.0%	9.3%
Beta	1.0	1.0	FRONTIER COMMUNICATIONS (FTR)	0.0%	-34.1%	MEAD JOHNSON NUTRITION	0.0%	26.5%
R-Squared	1.0	1.0	CHESAPEAKE ENERGY (CHK)	0.0%	-15.4%	SIGNET JEWELERS	0.0%	-26.3%

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

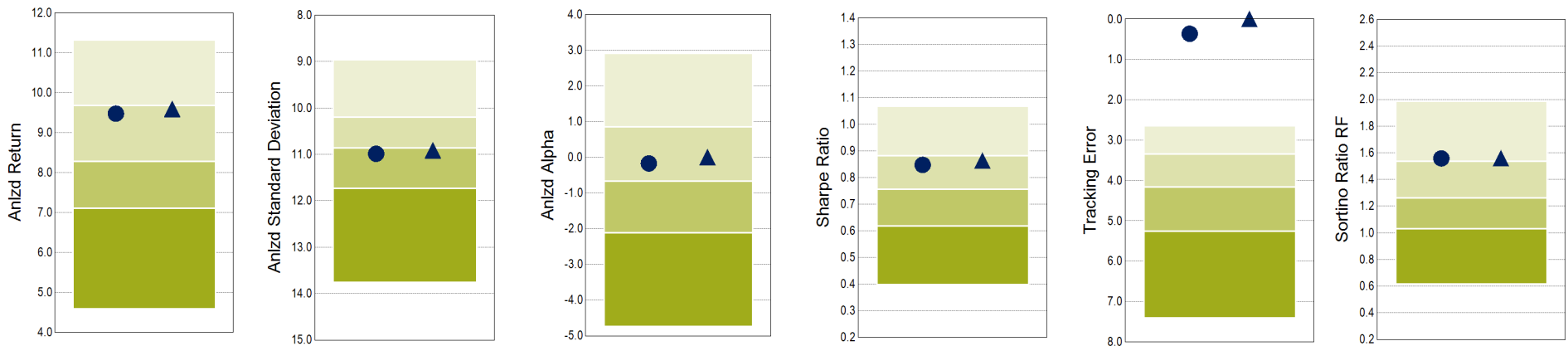
	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	-6.8%	-6.8%	7.4%	7.4%			
Materials	0.0%	0.0%	0.0%	0.0%	6.4%	6.4%	2.9%	2.9%			
Industrials	0.0%	0.0%	0.0%	0.0%	4.4%	4.4%	10.3%	10.3%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	8.5%	8.5%	12.1%	12.0%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	6.3%	6.3%	9.4%	9.4%			
Health Care	0.0%	0.0%	0.0%	0.0%	8.2%	8.2%	13.6%	13.6%			
Financials	0.0%	0.0%	0.0%	0.0%	2.5%	2.5%	14.9%	14.9%			
Information Technology	0.0%	0.0%	0.0%	0.0%	12.6%	12.6%	20.8%	20.8%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-4.0%	-4.0%	2.7%	2.7%			
Utilities	0.0%	0.0%	0.0%	0.0%	6.4%	6.4%	3.1%	3.2%			
Real Estate	0.0%	0.0%	0.0%	0.0%	3.6%	3.6%	2.8%	2.9%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>0.0%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>6.1%</b>	<b>6.1%</b>	<b>100.0%</b>	<b>100.0%</b>

# 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



# SSgA S&P 500 Equal-Wgt

## Top Positive Contributors

## Top Negative Contributors

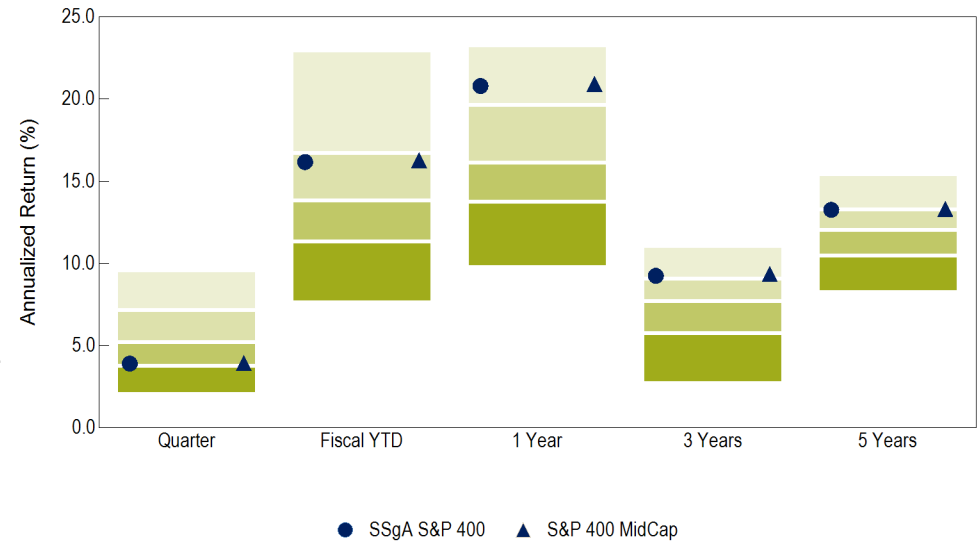
Characteristics			Relative		Relative			
	Portfolio	S&P 500	Contribution %	Return %	Contribution %	Return %		
Number of Holdings	502	505	EXXON MOBIL	0.1%	-8.3%	APPLE (AAPL)	-0.7%	24.6%
Weighted Avg. Market Cap. (\$B)	41.0	151.4	NRG ENERGY (NRG)	0.1%	52.8%	FACEBOOK CLASS A (FB)	-0.3%	23.5%
Median Market Cap. (\$B)	19.5	19.9	CHEVRON (CVX)	0.1%	-7.9%	AMAZON.COM	-0.2%	18.2%
Price To Earnings	25.0	23.7	VERIZON COMMUNICATIONS	0.1%	-7.7%	MICROSOFT (MSFT)	-0.2%	6.6%
Price To Book	4.3	4.4	GENERAL ELECTRIC	0.1%	-4.9%	JOHNSON & JOHNSON (JNJ)	-0.1%	8.8%
Price To Sales	3.1	3.3	ALCOA	0.1%	42.4%	ALPHABET 'C'	-0.1%	7.5%
Return on Equity (%)	19.2	18.8	WYNN RESORTS	0.1%	33.2%	VISA 'A'	-0.1%	14.1%
Yield (%)	1.9	2.0	VERTEX PHARMS. (VRTX)	0.1%	48.4%	ALPHABET 'A'	-0.1%	7.0%
Beta	1.0	1.0	QORVO	0.0%	30.0%	CISCO SYSTEMS (CSCO)	-0.1%	12.8%
R-Squared	0.9	1.0	PULTEGROUP	0.0%	28.6%	PROCTER & GAMBLE (PG)	-0.1%	7.7%

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

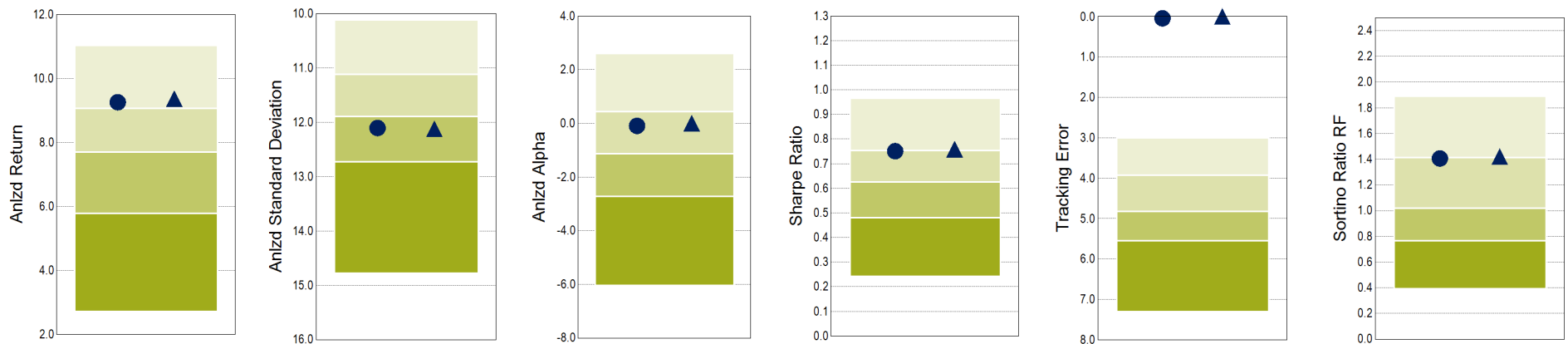
	Total Effects	Attribution Effects				Returns		Sector Weights			
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.0%	0.0%	0.0%	0.0%	-7.5%	-6.8%	6.7%	7.4%			
Materials	0.2%	0.0%	0.2%	0.0%	6.7%	6.4%	5.2%	2.9%			
Industrials	0.3%	0.1%	0.2%	0.0%	5.2%	4.4%	13.8%	10.3%			
Consumer Discretionary	-0.2%	-0.4%	0.4%	-0.1%	5.1%	8.5%	16.4%	12.0%			
Consumer Staples	-0.3%	-0.2%	-0.2%	0.1%	3.8%	6.3%	6.9%	9.4%			
Health Care	0.0%	0.1%	-0.1%	0.0%	9.3%	8.2%	11.9%	13.6%			
Financials	0.0%	0.1%	0.0%	0.0%	2.9%	2.5%	12.9%	14.9%			
Information Technology	-1.1%	-0.2%	-1.0%	0.1%	11.6%	12.6%	13.1%	20.8%			
Telecommunication Services	0.0%	-0.1%	0.1%	0.1%	-8.1%	-4.0%	1.0%	2.7%			
Utilities	0.2%	0.0%	0.2%	0.0%	7.5%	6.4%	5.8%	3.2%			
Real Estate	0.1%	0.0%	0.1%	0.0%	2.9%	3.6%	5.9%	2.9%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.5%	0.0%			
<b>Portfolio</b>	<b>-0.9%</b>	<b>=</b>	<b>-0.7%</b>	<b>+</b>	<b>-0.3%</b>	<b>+</b>	<b>0.1%</b>	<b>5.2%</b>	<b>6.1%</b>	<b>100.0%</b>	<b>100.0%</b>

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.

### eA US Mid Cap Equity Net Accounts



### 3 Year Risk Statistics



## Top Positive Contributors

## Top Negative Contributors

Characteristics	Portfolio	S&P 400 MidCap	Top Positive Contributors		Top Negative Contributors			
			Relative Contribution %	Return %	Relative Contribution %	Return %		
Number of Holdings	399	400	LOUISIANA PACIFIC (LPX)	0.0%	31.1%	DIEBOLD	0.0%	22.5%
Weighted Avg. Market Cap. (\$B)	5.3	5.3	DENBURY RES. (DNR)	0.0%	-29.9%	GLOBUS MEDICAL CL.A	0.0%	19.4%
Median Market Cap. (\$B)	3.8	3.8	NVR	0.0%	26.2%	RESTORATION HWRE.HLDG. (RH)	0.0%	50.7%
Price To Earnings	25.1	23.9	ENERGIZER HOLDINGS (ENR)	0.0%	25.6%	TIMKEN	0.0%	14.5%
Price To Book	4.0	3.4	KENNAMETAL	0.0%	26.2%	VISTA OUTDOOR (VSTO)	0.0%	-44.2%
Price To Sales	3.0	3.0	FOSSIL GROUP (FOSL)	0.0%	-32.5%	TCF FINANCIAL	0.0%	-12.7%
Return on Equity (%)	15.3	14.1	ALIGN TECHNOLOGY (ALGN)	0.0%	19.3%	KNOWLES	0.0%	13.4%
Yield (%)	1.6	1.5	LIVE NATION ENTM. (LYV)	0.0%	14.2%	NOW	0.0%	-17.1%
Beta	1.0	1.0	HELEN OF TROY (HELE)	0.0%	11.5%	KB HOME (KBH)	0.0%	25.9%
R-Squared	1.0	1.0	TERADYNE (TER)	0.0%	22.7%	TAUBMAN CENTERS (TCO)	0.0%	-9.8%

## SSgA S&P 400 Performance Attribution vs. S&P 400 MidCap

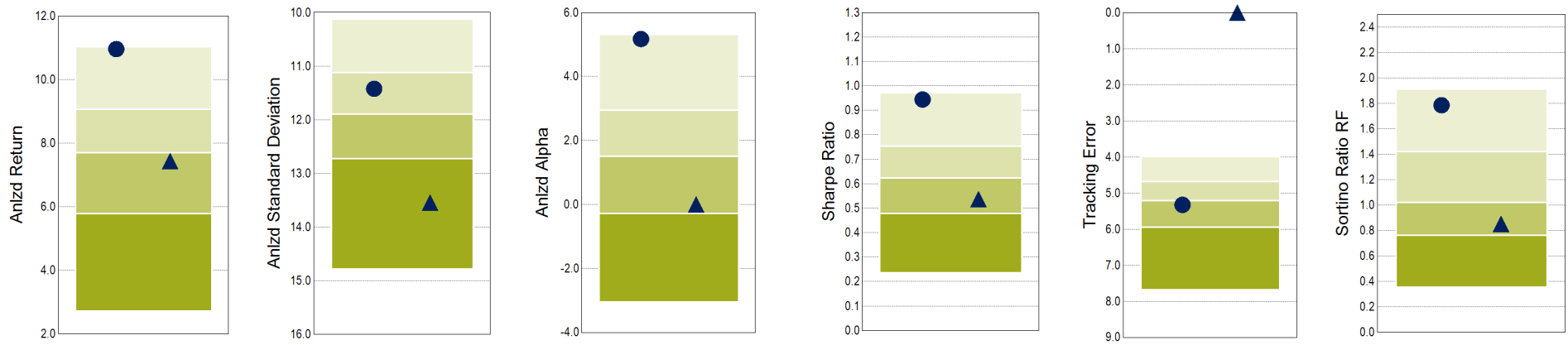
	Total Effects	Attribution Effects			Returns		Sector Weights		
		Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	-14.0%	-14.0%	4.0%	4.0%	
Materials	0.0%	0.0%	0.0%	0.0%	5.6%	5.6%	7.4%	7.4%	
Industrials	0.0%	0.0%	0.0%	0.0%	3.4%	3.4%	14.8%	14.8%	
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	4.8%	4.8%	11.4%	11.4%	
Consumer Staples	0.0%	0.0%	0.0%	0.0%	2.0%	1.9%	4.4%	4.4%	
Health Care	0.0%	0.0%	0.0%	0.0%	11.5%	11.4%	7.6%	7.6%	
Financials	0.0%	0.0%	0.0%	0.0%	2.4%	2.4%	16.9%	16.9%	
Information Technology	0.0%	0.0%	0.0%	0.0%	8.1%	8.1%	17.4%	17.4%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	-7.6%	-7.6%	0.2%	0.2%	
Utilities	0.0%	0.0%	0.0%	0.0%	5.7%	5.7%	5.4%	5.4%	
Real Estate	0.0%	0.0%	0.0%	0.0%	1.4%	1.4%	10.4%	10.4%	
Cash	0.0%	--	--	--	--	--	0.0%	0.0%	
<b>Portfolio</b>	<b>0.0%</b>	<b>=</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>4.1%</b>	<b>4.1%</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.

eA US Mid Cap Equity Net Accounts



### 3 Year Risk Statistics



## Top Positive Contributors

## Top Negative Contributors

Characteristics	Russell 2500	
	Portfolio	Russell 2500
Number of Holdings	61	2,440
Weighted Avg. Market Cap. (\$B)	9.5	4.6
Median Market Cap. (\$B)	8.0	1.1
Price To Earnings	32.1	24.4
Price To Book	4.9	3.2
Price To Sales	3.6	3.2
Return on Equity (%)	13.9	12.1
Yield (%)	1.0	1.4
Beta	0.8	1.0
R-Squared	0.9	1.0

	Relative Contribution %	Return %
RED HAT (RHT)	0.6%	24.1%
ROCKWELL AUTOMATION	0.5%	16.4%
MEAD JOHNSON NUTRITION	0.4%	26.5%
TREEHOUSE FOODS	0.4%	17.3%
WORKDAY CLASS A (WDAY)	0.3%	26.0%
COOPER COS.	0.3%	14.3%
SPLUNK	0.3%	21.8%
LABORATORY CORP.OF AM. HDG. (LH)	0.3%	11.8%
ALIGN TECHNOLOGY (ALGN)	0.3%	19.3%
WATERS (WAT)	0.2%	16.3%

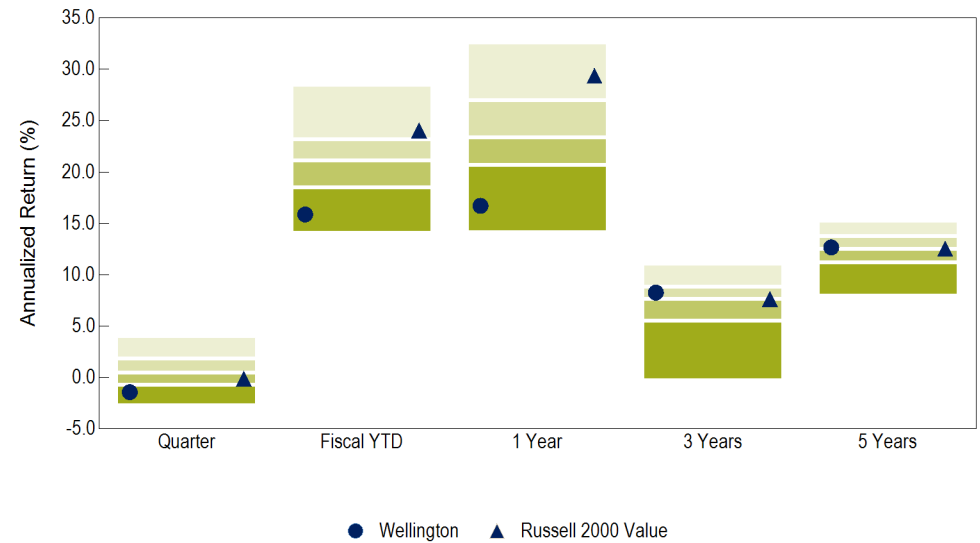
	Relative Contribution %	Return %
SALLY BEAUTY HOLDINGS (SBH)	-0.4%	-22.6%
ADV.AUTO PARTS (AAP)	-0.3%	-12.3%
PALO ALTO NETWORKS (PANW)	-0.2%	-9.9%
WEX	-0.2%	-7.3%
AKAMAI TECHS.	-0.1%	-10.5%
DENBURY RES.	-0.1%	-29.9%
WABTEC (WAB)	-0.1%	-5.9%
NORTHERN TRUST	-0.1%	-2.4%
WHOLE FOODS MARKET (WFM)	-0.1%	-2.9%
FLOWERS FOODS	-0.1%	-2.0%

## Champlain Performance Attribution vs. Russell 2500

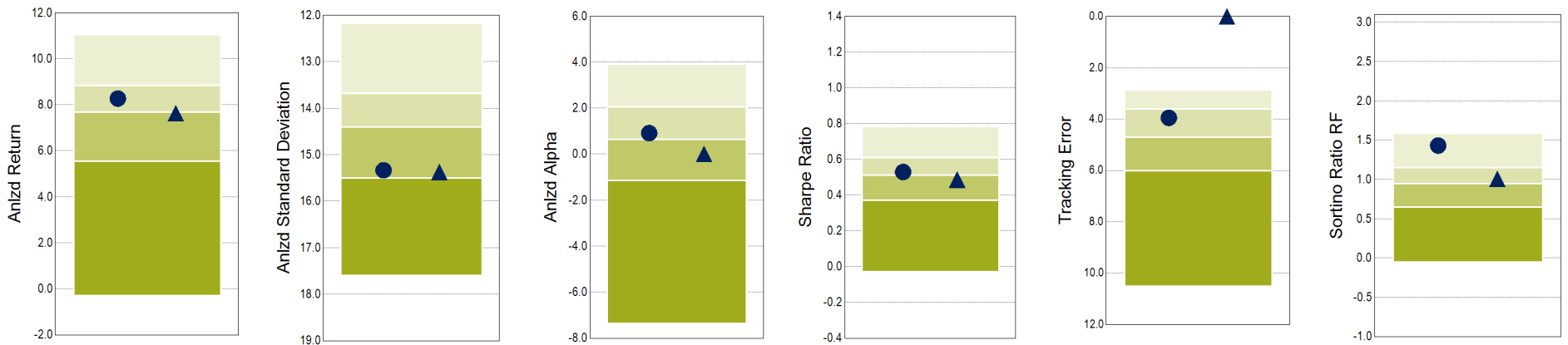
	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.2%	0.0%	0.3%	0.0%	-10.0%	-9.1%	2.0%	4.9%			
Materials	-0.3%	-0.1%	-0.3%	0.0%	5.3%	6.4%	1.8%	6.1%			
Industrials	0.7%	0.6%	0.0%	0.0%	7.4%	3.3%	17.0%	15.8%			
Consumer Discretionary	-1.3%	-2.0%	-0.2%	0.9%	-11.6%	4.2%	6.7%	12.5%			
Consumer Staples	0.9%	0.2%	-0.1%	0.7%	6.2%	-0.6%	14.5%	3.5%			
Health Care	0.9%	-0.1%	1.0%	-0.1%	10.5%	11.3%	19.5%	10.6%			
Financials	0.0%	0.0%	0.0%	0.0%	1.2%	1.0%	15.7%	17.8%			
Information Technology	1.1%	0.6%	0.4%	0.2%	11.6%	7.5%	19.3%	14.6%			
Telecommunication Services	0.1%	--	0.1%	--	--	-8.5%	0.0%	0.6%			
Utilities	-0.2%	--	-0.2%	--	--	6.0%	0.0%	3.7%			
Real Estate	-0.2%	--	-0.2%	--	--	1.6%	0.0%	9.8%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	3.5%	0.0%			
<b>Portfolio</b>	<b>2.0%</b>	<b>=</b>	<b>-0.7%</b>	<b>+</b>	<b>0.7%</b>	<b>+</b>	<b>1.9%</b>	<b>5.7%</b>	<b>3.8%</b>	<b>100.0%</b>	<b>100.0%</b>

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.

eA US Small Cap Value Equity Net Accounts



### 3 Year Risk Statistics





## Characteristics

	Portfolio	Russell 2000 Value
Number of Holdings	76	1,352
Weighted Avg. Market Cap. (\$B)	1.7	2.1
Median Market Cap. (\$B)	1.3	0.7
Price To Earnings	27.0	20.8
Price To Book	2.2	1.8
Price To Sales	2.3	2.7
Return on Equity (%)	8.0	7.3
Yield (%)	1.6	1.7
Beta	1.0	1.0
R-Squared	0.9	1.0

## Top Positive Contributors

	Relative Contribution %	Return %
ALSP.HLTHCR.SLTN.	0.3%	24.2%
COHERENT (COHR)	0.2%	49.7%
DIEBOLD	0.2%	22.5%
CHAS.RVR.LABS.INTL. (CRL)	0.2%	18.1%
TYMAN (UKIR:TYMN)	0.2%	18.1%
MULTI PACKAGING SOLUTIONS INTERNATIONAL ORD SHS (MPSX)	0.2%	25.9%
CUBIC	0.2%	10.4%
CORVEL	0.1%	18.9%
DORIAN LPG (LPG)	0.1%	28.3%
GREIF 'A' (GEF)	0.1%	8.2%

## Top Negative Contributors

	Relative Contribution %	Return %
FRED'S 'A'	-0.4%	-29.2%
ESSENDANT (ESND)	-0.4%	-26.8%
BABCOCK & WILCOX ENTS. (BW)	-0.3%	-43.7%
INTERNATIONAL BCSH. (IBOC)	-0.3%	-12.4%
CATO 'A'	-0.3%	-26.0%
MATTHEWS INTL.'A' (MATW)	-0.2%	-11.7%
TRIMAS	-0.2%	-11.7%
MISTRAS GROUP	-0.2%	-16.7%
BELDEN (BDC)	-0.2%	-7.4%
MUELLER INDUSTRIES (MLI)	-0.2%	-6.4%

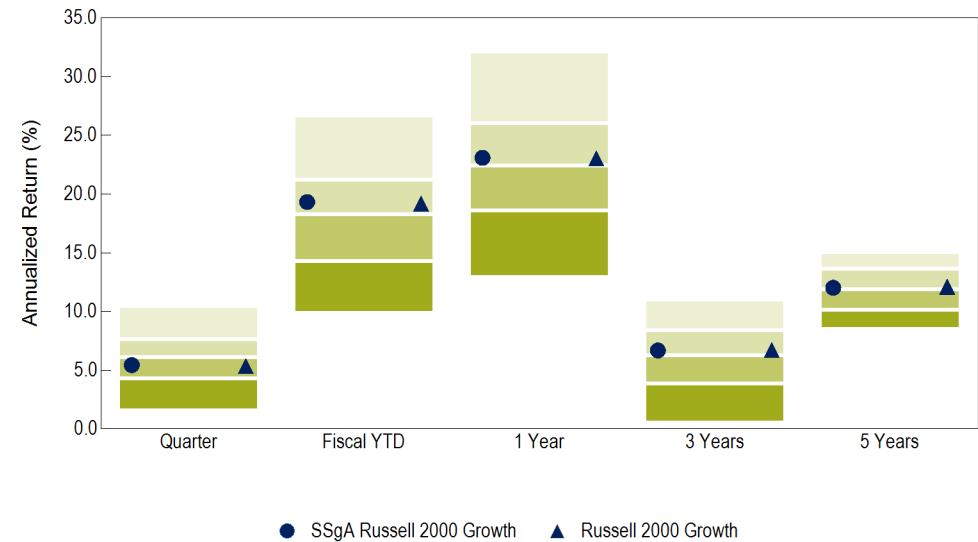
## Wellington Performance Attribution vs. Russell 2000 Value

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	0.5%	0.4%	0.1%	-0.1%	-2.5%	-9.7%	4.7%	6.0%			
Materials	0.3%	0.2%	0.0%	0.1%	6.4%	2.3%	6.1%	4.7%			
Industrials	-1.1%	-0.5%	0.1%	-0.7%	-3.3%	0.5%	32.2%	12.8%			
Consumer Discretionary	-0.8%	-1.9%	0.0%	1.0%	-19.7%	-0.7%	4.2%	9.7%			
Consumer Staples	-0.2%	-0.2%	0.0%	0.0%	-9.5%	-2.7%	2.6%	2.9%			
Health Care	0.3%	0.0%	0.3%	0.0%	8.7%	9.2%	7.4%	4.3%			
Financials	-0.3%	-0.9%	0.3%	0.4%	-5.1%	-2.2%	20.8%	33.3%			
Information Technology	-0.5%	-0.5%	-0.1%	0.0%	1.7%	6.5%	8.9%	9.7%			
Telecommunication Services	0.1%	--	0.1%	--	--	-9.2%	0.0%	0.7%			
Utilities	-0.1%	0.2%	-0.2%	-0.1%	8.5%	5.1%	2.9%	6.1%			
Real Estate	0.0%	0.0%	0.1%	0.0%	-1.7%	-1.2%	5.1%	9.8%			
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	5.0%	0.0%			
<b>Portfolio</b>	<b>-1.8%</b>	<b>=</b>	<b>-3.2%</b>	<b>+</b>	<b>0.8%</b>	<b>+</b>	<b>0.6%</b>	<b>-1.9%</b>	<b>-0.1%</b>	<b>100.0%</b>	<b>100.0%</b>

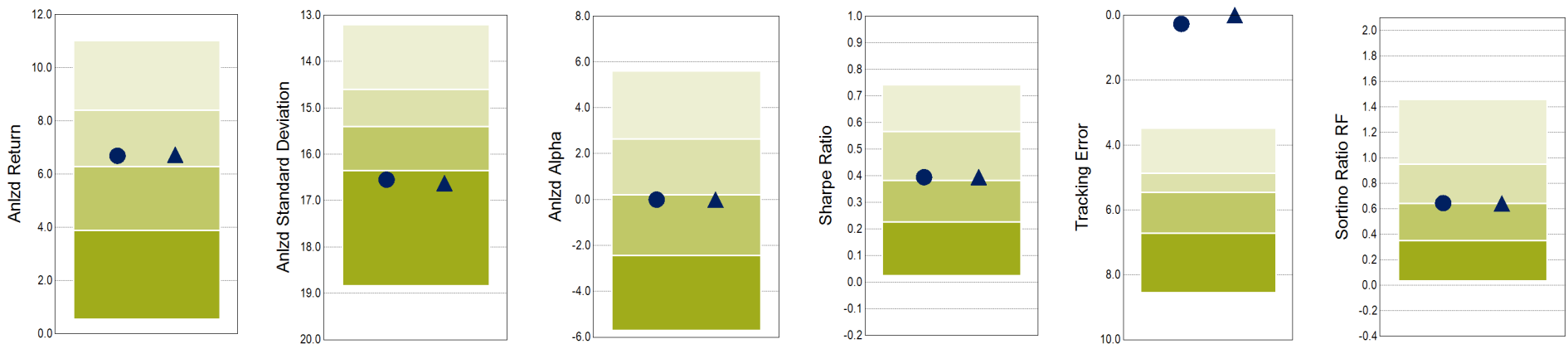
# SSgA Russell 2000 Growth

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.

eA US Small Cap Growth Equity Net Accounts



## 3 Year Risk Statistics



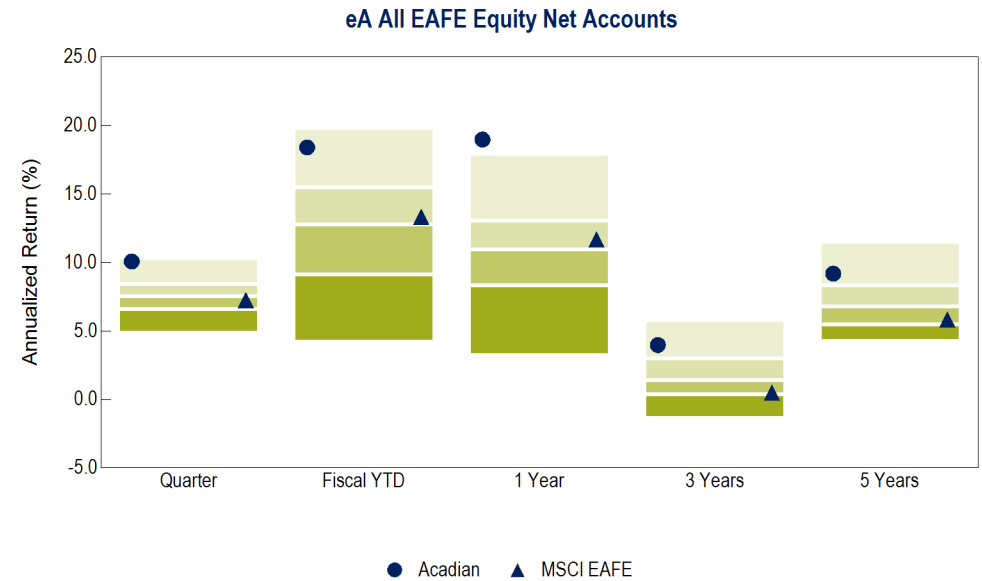
# SSgA Russell 2000 Growth

Characteristics			Top Positive Contributors			Top Negative Contributors		
	Portfolio	Russell 2000 Growth		Relative Contribution %	Return %		Relative Contribution %	Return %
Number of Holdings	1,130	1,157	DREW INDS.	0.0%	-7.0%	AVEXIS ORD SHS (AVXS)	0.0%	59.3%
Weighted Avg. Market Cap. (\$B)	2.4	2.4	SMITH & WESSON HLDG.	0.0%	-6.0%	INVITAE	0.0%	39.3%
Median Market Cap. (\$B)	0.9	0.9	CHAMBERS STREET PROPS.	0.0%	-3.1%	AMAG PHARMACEUTICALS	0.0%	-35.2%
Price To Earnings	29.9	29.9	SPECTRUM PHARMS. (SPPI)	0.0%	46.7%	LA JOLLA PHARM.	0.0%	70.3%
Price To Book	4.9	4.8	COHERENT (COHR)	0.0%	49.7%	NEKTAR THERAPEUTICS (NKTR)	0.0%	91.3%
Price To Sales	3.8	3.5	CHEMOURS (CC)	0.0%	74.4%	TG THERAPEUTICS (TGTX)	0.0%	150.5%
Return on Equity (%)	17.1	14.7	INVENTURE FOODS (SNAK)	0.0%	-55.1%	THE TRADE DESK ORD	0.0%	34.6%
Yield (%)	0.8	0.7	ADVANCED MICRO DEVC. (AMD)	0.0%	28.3%	HORIZON GLOBAL	0.0%	-42.2%
Beta	1.0	1.0	CENTURY ALUMINUM (CENX)	0.0%	48.2%	CYTOMX THERAPEUTICS (CTMX)	0.0%	57.1%
R-Squared	1.0	1.0	KITE PHARMA	0.0%	75.0%	EPIZYME (EPZM)	0.0%	41.7%

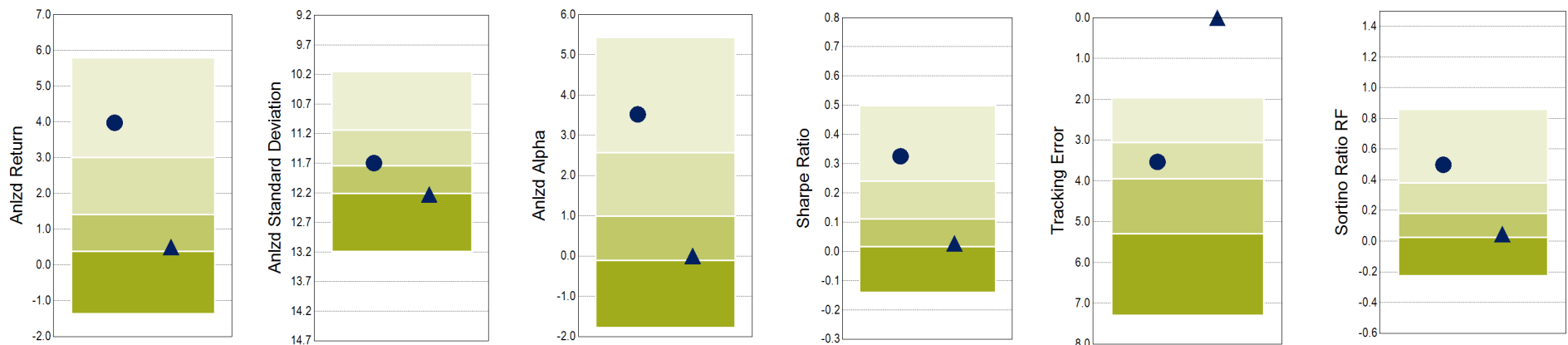
## SSgA Russell 2000 Growth Performance Attribution vs. Russell 2000 Growth

	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	0.0%	0.0%	0.0%	0.0%	-14.5%	-14.6%	1.4%	1.4%	
Materials	0.0%	0.0%	0.0%	0.0%	9.9%	9.8%	5.2%	5.2%	
Industrials	0.0%	0.0%	0.0%	0.0%	1.7%	1.7%	16.6%	16.6%	
Consumer Discretionary	0.1%	0.1%	0.0%	0.0%	2.6%	1.9%	14.7%	15.4%	
Consumer Staples	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	3.1%	3.2%	
Health Care	0.0%	0.0%	0.0%	0.0%	12.3%	12.2%	20.4%	20.4%	
Financials	0.0%	0.0%	0.0%	0.0%	3.2%	3.0%	5.8%	5.8%	
Information Technology	0.0%	0.0%	0.0%	0.0%	5.9%	5.9%	24.8%	24.7%	
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	0.8%	0.8%	0.8%	0.8%	
Utilities	0.0%	0.0%	0.0%	0.0%	1.7%	1.8%	0.9%	0.9%	
Real Estate	0.0%	0.0%	0.0%	0.0%	2.7%	2.7%	5.5%	5.5%	
Cash	0.0%	0.0%	0.0%	0.0%	0.1%	--	0.9%	0.0%	
<b>Portfolio</b>	<b>0.1%</b>	<b>=</b>	<b>0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>0.0%</b>	<b>5.3%</b>	<b>5.2%</b>
								<b>100.0%</b>	<b>100.0%</b>

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



## Top Positive Contributors

## Top Negative Contributors

Characteristics	MSCI EAFE		Relative Contribution %		Relative Return %			
	Portfolio	MSCI EAFE						
Number of Holdings	456	929	STMICROELECTRONICS (PAR)	0.6%	35.3%	NESTLE 'R' (S:NESN)	-0.1%	6.8%
Weighted Avg. Market Cap. (\$B)	25.1	53.0	SAMSUNG ELECTRONICS (KO:SGL)	0.4%	23.5%	DAITO TST.CONSTRUCTION	-0.1%	-7.2%
Median Market Cap. (\$B)	0.8	9.4	IPSEN	0.3%	38.4%	UNILEVER CERTS.	-0.1%	21.7%
Price To Earnings	20.6	21.2	PEUGEOT (F:PGT)	0.3%	23.5%	BP SPN.ADR 1:6 (BP)	-0.1%	-6.0%
Price To Book	2.7	2.4	QANTAS AIRWAYS	0.3%	25.4%	STATOIL	-0.1%	-6.0%
Price To Sales	1.5	2.0	HOCHTIEF	0.3%	17.7%	COMMONWEALTH BK.OF AUS. (A:CBAX)	-0.1%	12.4%
Return on Equity (%)	16.1	12.5	ARISTOCRAT LEISURE	0.3%	22.1%	ROYAL DUTCH SHELL A	-0.1%	-2.2%
Yield (%)	2.6	3.0	DEUTSCHE LUFTHANSA (D:LHA)	0.2%	24.2%	BERENDSEN (UKIR:BRNS)	-0.1%	-14.8%
Beta	0.9	1.0	MIXI	0.2%	33.7%	GLAXOSMITHKLINE (UKIR:GSK)	-0.1%	9.0%
R-Squared	0.9	1.0	KT ADR 2:1	0.2%	19.4%	BONAVISTA ENERGY	0.0%	-27.5%

## Acadian Performance Attribution vs. MSCI EAFE

	Attribution Effects				Returns		Sector Weights				
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark			
Energy	-0.1%	0.0%	-0.2%	0.1%	-1.6%	-1.7%	10.5%	5.4%			
Materials	0.8%	0.4%	0.2%	0.2%	12.6%	7.6%	11.1%	7.9%			
Industrials	0.9%	0.7%	0.1%	0.1%	14.0%	9.2%	15.7%	14.0%			
Consumer Discretionary	0.6%	0.8%	0.0%	-0.1%	11.5%	5.2%	11.0%	12.5%			
Consumer Staples	-0.6%	0.1%	-0.5%	-0.2%	9.5%	9.1%	4.2%	11.2%			
Health Care	0.6%	0.5%	0.1%	0.0%	12.4%	8.7%	12.3%	10.7%			
Financials	-0.6%	0.0%	-0.3%	-0.3%	6.7%	7.4%	14.8%	21.2%			
Information Technology	1.6%	0.2%	0.7%	0.7%	16.2%	11.7%	14.1%	5.5%			
Telecommunication Services	0.0%	0.6%	-0.1%	-0.5%	16.4%	5.1%	1.4%	4.5%			
Utilities	-0.1%	0.1%	-0.1%	-0.1%	9.8%	7.8%	1.2%	3.3%			
Real Estate	-0.1%	-0.1%	0.0%	0.0%	3.9%	6.1%	3.8%	3.7%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>3.1%</b>	<b>=</b>	<b>3.2%</b>	<b>+</b>	<b>-0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>10.4%</b>	<b>7.3%</b>	<b>100.0%</b>	<b>100.0%</b>

## Country Allocation

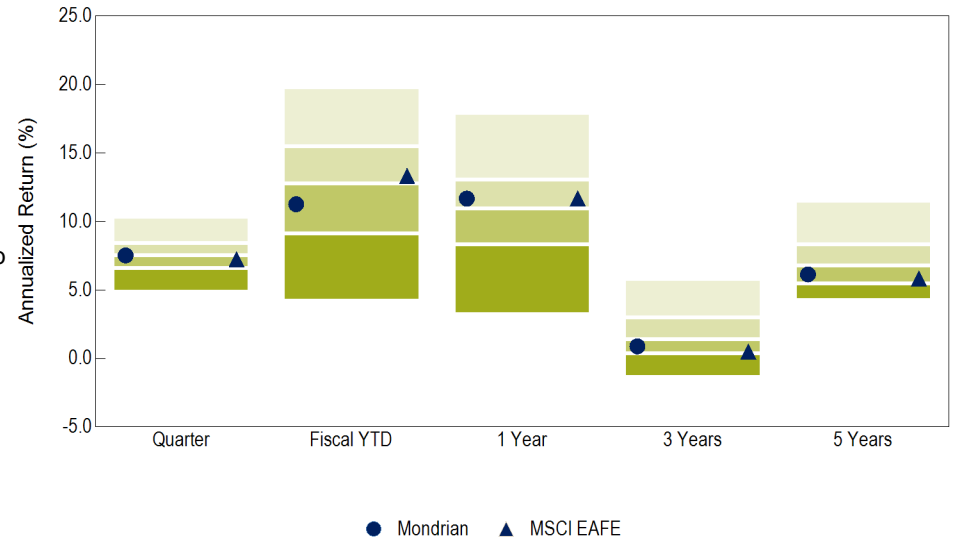
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>				
Brazil*	1.5%	0.0%	7.6%	10.4%
Canada	5.4%	0.0%	3.6%	2.5%
Mexico*	0.1%	0.0%	18.7%	16.0%
United States	0.3%	0.0%	-1.4%	6.1%
<b>Total-Americas</b>	<b>7.4%</b>	<b>0.0%</b>	<b>4.4%</b>	<b>--</b>
<b>Europe</b>				
Austria	1.7%	0.2%	18.3%	9.1%
Belgium	0.6%	1.2%	16.1%	5.1%
Denmark	2.0%	1.7%	19.0%	6.5%
Finland	3.1%	1.0%	1.0%	7.7%
France	7.0%	10.1%	22.8%	7.4%
Germany	8.9%	9.3%	15.5%	8.5%
Greece*	0.1%	0.0%	23.8%	-3.5%
Ireland	1.6%	0.5%	6.0%	3.9%
Italy	2.1%	2.1%	18.0%	6.2%
Luxembourg	0.2%	0.0%	8.2%	7.3%
Netherlands	4.6%	3.3%	1.4%	11.3%
Norway	3.0%	0.7%	3.0%	1.5%
Poland*	0.3%	0.0%	10.6%	17.7%
Portugal	0.4%	0.2%	15.4%	8.2%
Spain	2.2%	3.1%	9.4%	14.7%
Sweden	4.0%	2.8%	10.7%	10.0%
Switzerland	4.1%	8.7%	14.0%	8.8%
United Kingdom	13.3%	18.2%	3.6%	5.1%
<b>Total-Europe</b>	<b>59.2%</b>	<b>62.9%</b>	<b>10.5%</b>	<b>7.6%</b>

## Country Allocation

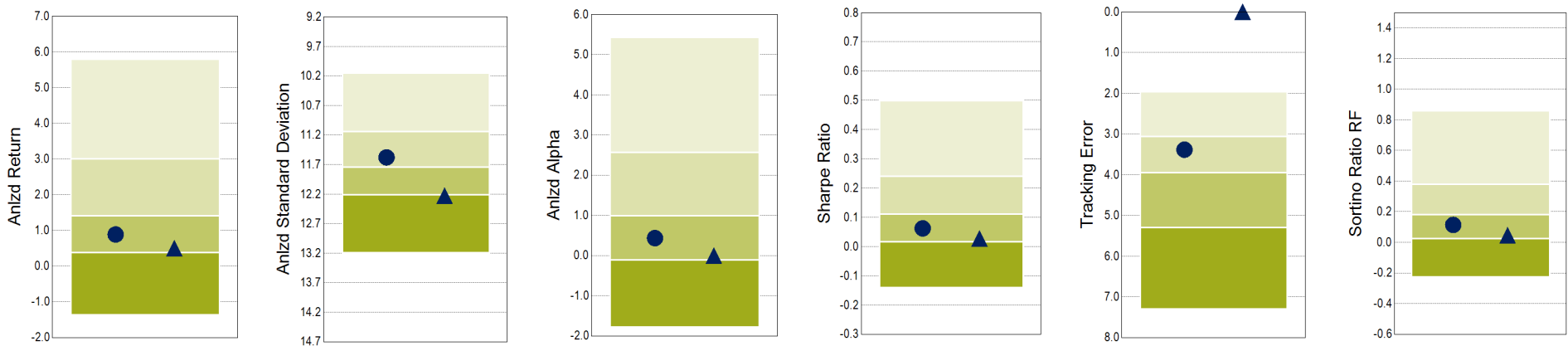
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
Australia	4.8%	7.5%	7.3%	11.0%
China*	0.1%	0.0%	7.3%	6.8%
Hong Kong	0.3%	3.2%	2.0%	13.2%
Japan	19.9%	24.3%	5.0%	4.5%
Korea*	3.9%	0.0%	9.1%	7.7%
Malaysia*	0.1%	0.0%	4.6%	3.1%
New Zealand	0.1%	0.2%	2.1%	2.4%
Singapore	1.2%	1.2%	10.1%	13.5%
Taiwan*	0.3%	0.0%	3.4%	5.0%
Thailand*	0.1%	0.0%	4.5%	3.7%
<b>Total-AsiaPacific</b>	<b>30.7%</b>	<b>36.4%</b>	<b>6.0%</b>	<b>6.9%</b>
<b>Other</b>				
Israel	1.0%	0.7%	3.0%	5.7%
South Africa*	1.7%	0.0%	-0.9%	2.8%
Turkey*	0.0%	0.0%	-10.7%	3.6%
<b>Total-Other</b>	<b>2.7%</b>	<b>0.7%</b>	<b>0.5%</b>	<b>5.7%</b>
<b>Totals</b>				
Developed	91.9%	100.0%	4.0%	7.3%
Emerging*	8.1%	0.0%	6.8%	--

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.

eA All EAFE Equity Net Accounts



### 3 Year Risk Statistics



## Top Positive Contributors

## Top Negative Contributors

Characteristics	MSCI EAFE		Relative Contribution %		Relative Return %			
	Portfolio	MSCI EAFE						
Number of Holdings	55	929	G4S	0.5%	31.0%	TESCO (UKIR:TSCO)	-0.2%	-9.2%
Weighted Avg. Market Cap. (\$B)	60.2	53.0	KIRIN HOLDINGS (J:KB@N)	0.4%	15.6%	PEARSON (UKIR:PSO)	-0.2%	-15.6%
Median Market Cap. (\$B)	41.1	9.4	TAKEDA PHARMACEUTICAL (J:TA@N)	0.4%	15.2%	KINGFISHER	-0.1%	-5.8%
Price To Earnings	23.6	21.2	TELEFONICA (E:TEF)	0.3%	20.5%	BP (UKIR:BP.)	-0.1%	-7.5%
Price To Book	2.1	2.4	SYNGENTA	0.3%	11.5%	ROYAL DUTCH SHELL B	-0.1%	-4.5%
Price To Sales	1.5	2.0	SAP	0.3%	12.9%	BMW	0.0%	-2.4%
Return on Equity (%)	10.5	12.5	ABB LTD N	0.3%	10.8%	SANTEN PHARM.	0.0%	18.9%
Yield (%)	3.7	3.0	ALLIANZ (D:ALV)	0.3%	12.5%	NESTLE 'R' (S:NESN)	0.0%	6.8%
Beta	0.9	1.0	SANOFI	0.3%	11.6%	SEKISUI CHEMICAL	0.0%	5.9%
R-Squared	0.9	1.0	UNITED OVERSEAS BANK	0.3%	12.1%	ROYAL DUTCH SHELL A (H:RDSA)	0.0%	-2.2%

## Mondrian Performance Attribution vs. MSCI EAFE

	Attribution Effects				Returns		Sector Weights		
	Total Effects	Selection Effect	Allocation Effect	Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark	
Energy	-0.1%	0.0%	-0.1%	0.0%	-2.4%	-1.7%	9.8%	5.4%	
Materials	-0.3%	0.4%	-0.2%	-0.4%	11.5%	7.6%	3.0%	7.9%	
Industrials	0.4%	0.8%	-0.1%	-0.3%	14.2%	9.2%	11.8%	14.0%	
Consumer Discretionary	-0.8%	-0.8%	-0.1%	0.1%	-1.8%	5.2%	10.0%	12.5%	
Consumer Staples	-0.3%	-0.3%	0.0%	0.0%	6.3%	9.1%	11.2%	11.2%	
Health Care	0.4%	0.2%	0.1%	0.1%	11.0%	8.7%	11.8%	10.7%	
Financials	-0.3%	0.1%	-0.2%	-0.2%	8.1%	7.4%	16.1%	21.2%	
Information Technology	0.4%	0.0%	0.3%	0.2%	12.4%	11.7%	8.4%	5.5%	
Telecommunication Services	0.6%	0.2%	0.1%	0.3%	7.8%	5.1%	10.5%	4.5%	
Utilities	0.4%	0.1%	0.2%	0.1%	9.7%	7.8%	6.4%	3.3%	
Real Estate	-0.1%	0.4%	-0.1%	-0.4%	17.6%	6.1%	1.0%	3.7%	
Cash	0.0%	--	--	--	--	--	0.0%	0.0%	
<b>Portfolio</b>	<b>0.2%</b>	<b>=</b>	<b>1.0%</b>	<b>+</b>	<b>-0.3%</b>	<b>+</b>	<b>-0.5%</b>	<b>7.6%</b>	<b>7.3%</b>
							<b>100.0%</b>	<b>100.0%</b>	



## Country Allocation

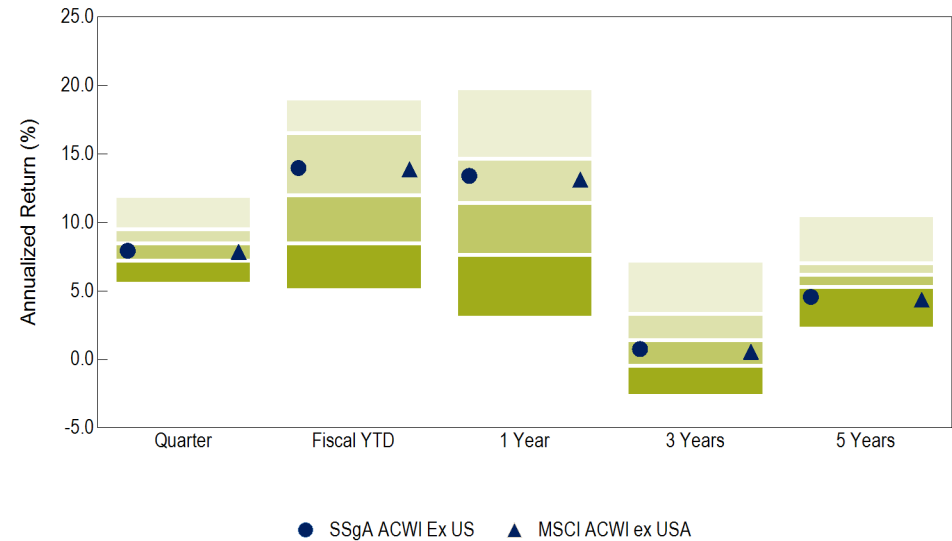
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Europe</b>				
Denmark	1.0%	1.7%	15.4%	6.5%
France	7.2%	10.1%	9.3%	7.4%
Germany	9.6%	9.3%	7.4%	8.5%
Italy	4.4%	2.1%	4.4%	6.2%
Netherlands	2.2%	3.3%	1.4%	11.3%
Spain	5.3%	3.1%	15.8%	14.7%
Sweden	4.1%	2.8%	7.9%	10.0%
Switzerland	12.5%	8.7%	7.9%	8.8%
United Kingdom	25.1%	18.2%	2.3%	5.1%
<b>Total-Europe</b>	<b>71.3%</b>	<b>62.9%</b>	<b>6.3%</b>	<b>7.6%</b>

## Country Allocation

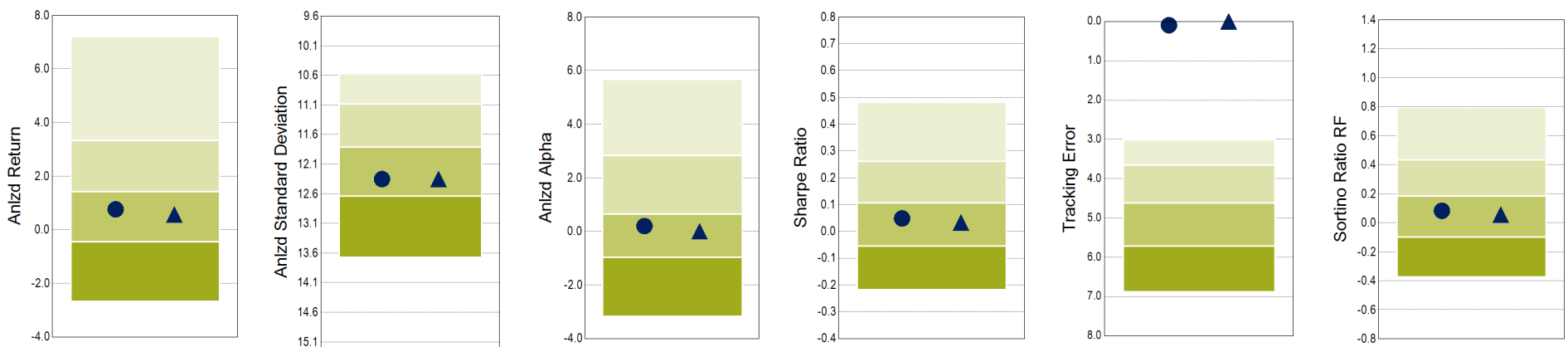
	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
Australia	1.5%	7.5%	12.2%	11.0%
Hong Kong	1.4%	3.2%	3.2%	13.2%
Japan	17.4%	24.3%	10.0%	4.5%
Singapore	6.7%	1.2%	13.8%	13.5%
Taiwan*	1.7%	0.0%	10.6%	11.8%
<b>Total-AsiaPacific</b>	<b>28.7%</b>	<b>36.4%</b>	<b>10.7%</b>	<b>6.9%</b>
<b>Totals</b>				
Developed	98.3%	100.0%	7.5%	7.3%
Emerging*	1.7%	0.0%	10.6%	--

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.

### eA ACWI ex-US All Cap Equity Net Accounts



### 3 Year Risk Statistics



# SSgA ACWI Ex US

Characteristics	MSCI		Top Positive Contributors		Top Negative Contributors			
	Portfolio	ACWI ex USA	Relative Contribution %	Return %	Relative Contribution %	Return %		
Number of Holdings	48	1,853	SIEMENS (D:SIE)	0.1%	14.9%	ROYAL DUTCH SHELL A (H:RDSA)	0.0%	-2.2%
Weighted Avg. Market Cap. (\$B)	7.0	53.1	SAP (D:SAP)	0.1%	12.9%	OAO GAZPROM SPN.ADR 1:2 (OGZPY)	0.0%	-11.7%
Median Market Cap. (\$B)	7.1	7.3	ALLIANZ (D:ALV)	0.1%	12.5%	VALEANT PHARMS. (NYS) INTL. (VRX)	0.0%	-24.0%
Price To Earnings	18.9	20.7	BAYER (D:BAYN)	0.1%	10.8%	BMW (D:BMW)	0.0%	-2.4%
Price To Book	1.7	2.5	HSBC HOLDINGS (K:HSBC)	0.0%	4.0%	LUKOIL OAO SPN.ADR 1:1 (LUKOY)	0.0%	-5.5%
Price To Sales	1.8	2.1	BASF (D:BAS)	0.0%	7.3%	POTASH CORPORATION (NYS) OF SASKATCHEWAN (POT)	0.0%	-4.5%
Return on Equity (%)	13.6	13.2	ADIDAS (D:ADS)	0.0%	20.6%	OAO TATNEFT ADR 1:6 (OAOFY)	0.0%	-10.1%
Yield (%)	2.1	2.9	INFINEON TECHNOLOGIES (D:IFX)	0.0%	19.0%	AGRIUM (NYS) (AGU)	0.0%	-4.1%
Beta	1.0	1.0	BARRICK GOLD (NYS) (ABX)	0.0%	19.0%	DAEWOO SECURITIES (KO:DOS)	0.0%	34.9%
R-Squared	1.0	1.0	BROOKFIELD ASSET MAN.'A' (NYS) (BAM)	0.0%	10.9%	KEYENCE (J:KEYE)	0.0%	16.6%

## 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	0.0%	0.0%	0.0%	0.0%	-0.5%	-0.8%	7.2%	7.2%			
Materials	0.0%	0.0%	0.0%	0.0%	8.4%	8.4%	8.0%	8.0%			
Industrials	0.0%	0.0%	0.0%	0.0%	9.6%	9.5%	11.6%	11.7%			
Consumer Discretionary	0.0%	0.0%	0.0%	0.0%	7.0%	6.9%	11.5%	11.5%			
Consumer Staples	0.0%	0.0%	0.0%	0.0%	8.6%	8.6%	9.8%	9.8%			
Health Care	0.0%	0.0%	0.0%	0.0%	8.4%	8.3%	8.1%	8.1%			
Financials	0.0%	0.0%	0.0%	0.0%	7.6%	7.6%	23.5%	23.4%			
Information Technology	0.0%	0.0%	0.0%	0.0%	14.6%	14.6%	9.4%	9.3%			
Telecommunication Services	0.0%	0.0%	0.0%	0.0%	5.9%	6.0%	4.6%	4.7%			
Utilities	0.0%	0.0%	0.0%	0.0%	8.3%	8.3%	3.2%	3.1%			
Real Estate	0.0%	0.0%	0.0%	0.0%	7.0%	6.8%	3.3%	3.3%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>0.1%</b>	<b>=</b>	<b>0.1%</b>	<b>+</b>	<b>0.0%</b>	<b>+</b>	<b>-0.1%</b>	<b>8.0%</b>	<b>7.9%</b>	<b>100.0%</b>	<b>100.0%</b>

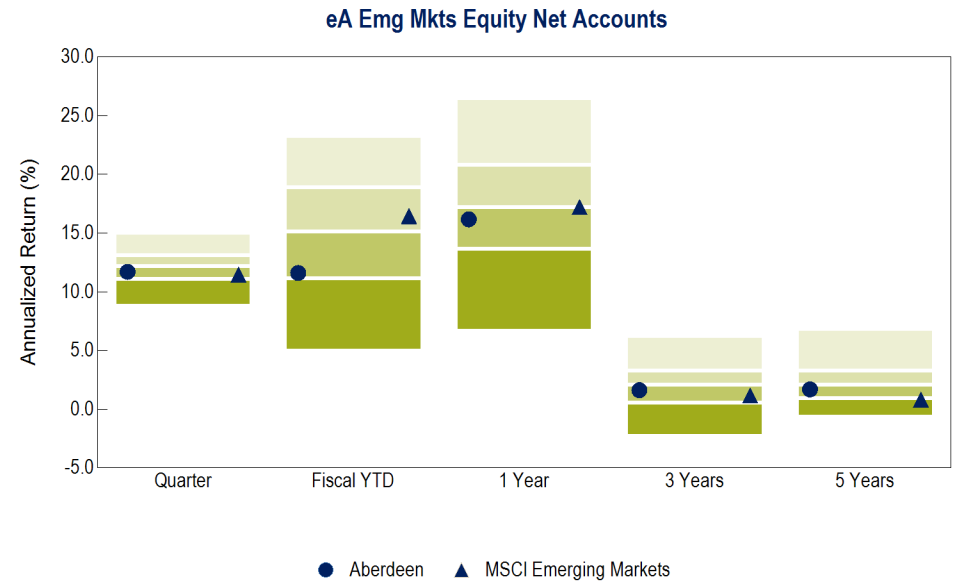
## Country Allocation

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>				
Brazil*	1.8%	1.7%	10.3%	10.3%
Canada	7.1%	7.1%	2.8%	2.7%
Chile*	0.3%	0.3%	16.1%	16.1%
Colombia*	0.1%	0.1%	5.7%	5.7%
Mexico*	0.8%	0.8%	16.1%	16.1%
Peru*	0.1%	0.1%	4.0%	5.5%
United States	0.4%	0.0%	15.7%	6.1%
<b>Total-Americas</b>	<b>10.5%</b>	<b>10.1%</b>	<b>6.0%</b>	<b>5.5%</b>
<b>Europe</b>				
Austria	0.1%	0.1%	9.1%	9.1%
Belgium	0.8%	0.8%	5.1%	5.1%
Czech Republic*	0.0%	0.0%	5.6%	5.6%
Denmark	1.2%	1.2%	6.5%	6.5%
Finland	0.7%	0.7%	7.7%	7.7%
France	7.0%	7.1%	7.3%	7.4%
Germany	6.5%	6.5%	8.6%	8.5%
Greece*	0.1%	0.1%	-3.5%	-3.4%
Hungary*	0.1%	0.1%	-0.1%	-0.1%
Ireland	0.2%	0.3%	4.5%	3.9%
Italy	1.4%	1.5%	6.6%	6.2%
Luxembourg	0.1%	0.0%	4.4%	7.9%
Netherlands	2.9%	2.3%	8.5%	11.3%
Norway	0.5%	0.5%	1.5%	1.5%
Poland*	0.3%	0.3%	17.7%	17.7%
Portugal	0.1%	0.1%	8.2%	8.2%
Russia*	1.0%	1.0%	-4.9%	-4.8%
Spain	2.2%	2.2%	14.7%	14.7%
Sweden	2.0%	2.0%	9.8%	10.0%
Switzerland	6.1%	6.1%	8.8%	8.8%
United Kingdom	11.4%	12.8%	5.8%	5.1%
<b>Total-Europe</b>	<b>44.7%</b>	<b>45.6%</b>	<b>7.4%</b>	<b>7.3%</b>

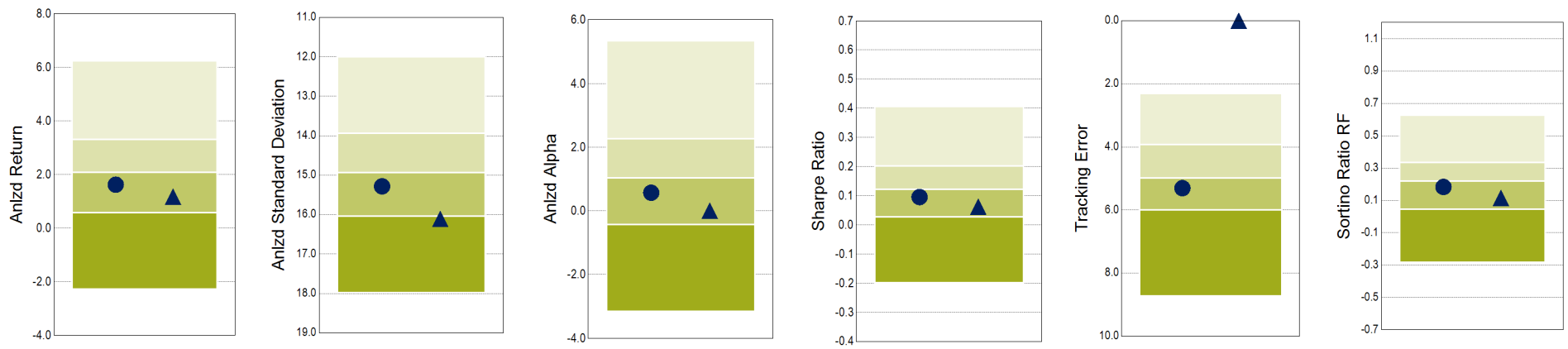
## Country Allocation

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
Australia	5.2%	5.2%	11.0%	11.0%
China*	3.7%	6.0%	13.2%	13.0%
Hong Kong	5.5%	2.3%	11.3%	13.2%
India*	1.9%	1.9%	17.1%	17.1%
Indonesia*	0.6%	0.6%	7.1%	7.1%
Japan	16.8%	17.1%	4.5%	4.5%
Korea*	3.3%	3.3%	16.7%	16.7%
Malaysia*	0.6%	0.6%	8.3%	8.3%
New Zealand	0.1%	0.1%	2.4%	2.3%
Philippines*	0.3%	0.3%	6.3%	6.3%
Singapore	0.9%	0.9%	14.8%	13.5%
Taiwan*	2.8%	2.7%	11.8%	11.8%
Thailand*	0.5%	0.5%	11.9%	8.7%
<b>Total-AsiaPacific</b>	<b>42.2%</b>	<b>41.5%</b>	<b>9.3%</b>	<b>9.4%</b>
<b>Other</b>				
Egypt*	0.0%	0.0%	1.0%	1.0%
Israel	0.4%	0.5%	-2.7%	5.7%
Qatar*	0.2%	0.2%	1.3%	1.3%
South Africa*	1.6%	1.6%	4.7%	4.6%
Turkey*	0.2%	0.2%	10.9%	10.9%
United Arab Emirates*	0.2%	0.2%	-0.4%	1.6%
<b>Total-Other</b>	<b>2.6%</b>	<b>2.8%</b>	<b>3.5%</b>	<b>4.8%</b>
<b>Totals</b>				
Developed	79.5%	77.3%	7.1%	6.9%
Emerging*	20.5%	22.7%	11.4%	11.4%

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



## Characteristics

	Portfolio	MSCI Emerging Markets
Number of Holdings	62	830
Weighted Avg. Market Cap. (\$B)	34.3	56.9
Median Market Cap. (\$B)	15.7	5.1
Price To Earnings	20.5	19.4
Price To Book	3.4	2.7
Price To Sales	2.9	2.2
Return on Equity (%)	19.0	15.8
Yield (%)	2.4	2.4
Beta	0.9	1.0
R-Squared	0.9	1.0

## Top Positive Contributors

	Relative Contribution %	Return %
SAMSUNG ELTN.PREF.	0.9%	20.8%
HOUSING DEVELOPMENT FIN. (IN:HDF)	0.7%	24.6%
ITC (IN:IT)	0.5%	21.2%
BNC.BRADESCO PF.SPN.ADR 1:1	0.5%	17.7%
ULTRATECH CEMENT (IN:URC)	0.4%	28.1%
FOM.ECO.MEXNO.SAB DE CV SPN.ADR 1:10	0.4%	16.2%
GPO FINANCE BANORTE	0.4%	16.6%
HANG LUNG GROUP (K:HLDV)	0.4%	22.5%
AIA GROUP	0.4%	11.7%
LOJAS RENNER ON	0.4%	23.3%

## Top Negative Contributors

	Relative Contribution %	Return %
MAGNIT	-0.2%	-8.8%
BRF BRASIL FOODS ON (BR:DG3)	-0.2%	-18.0%
LUKOIL OAO ADR. (LON)	-0.1%	-4.0%
TENARIS ADS. 1:2 (TS)	-0.1%	-4.4%
AMOREPACIFIC PF.	0.0%	-12.2%
BANK CENTRAL ASIA	0.0%	8.0%
PETROCHINA 'H' (K:PECH)	0.0%	-1.8%
AMOREPACIFIC GROUP (KO:PHM)	0.0%	-3.0%
BHP BILLITON (JSE) (R:BILJ)	0.0%	-0.9%
KOTAK MAHINDRA BANK	0.0%	26.7%

## 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	-0.3%	-0.1%	0.0%	-0.2%	0.2%	4.3%	7.8%	7.9%			
Materials	0.8%	0.6%	0.1%	0.1%	18.6%	12.0%	9.3%	7.4%			
Industrials	-0.5%	0.6%	-0.4%	-0.7%	20.4%	13.6%	1.5%	5.8%			
Consumer Discretionary	-0.2%	-0.1%	0.0%	-0.1%	10.4%	12.9%	10.7%	10.3%			
Consumer Staples	0.8%	0.1%	0.3%	0.4%	8.1%	7.6%	17.1%	7.2%			
Health Care	-0.1%	0.1%	0.0%	-0.1%	7.3%	5.5%	1.1%	2.5%			
Financials	1.4%	1.1%	0.2%	0.1%	13.9%	10.0%	27.4%	24.3%			
Information Technology	-2.1%	-1.2%	-1.3%	0.4%	14.6%	17.0%	12.9%	23.3%			
Telecommunication Services	-0.2%	-0.1%	0.0%	-0.1%	4.9%	7.7%	5.0%	5.9%			
Utilities	-0.3%	--	-0.2%	--	--	10.2%	0.0%	2.9%			
Real Estate	0.5%	0.0%	0.4%	0.1%	11.5%	10.5%	7.1%	2.6%			
Cash	0.0%	--	--	--	--	--	0.0%	0.0%			
<b>Portfolio</b>	<b>0.0%</b>	<b>=</b>	<b>1.0%</b>	<b>+</b>	<b>-0.8%</b>	<b>+</b>	<b>-0.2%</b>	<b>11.4%</b>	<b>11.4%</b>	<b>100.0%</b>	<b>100.0%</b>

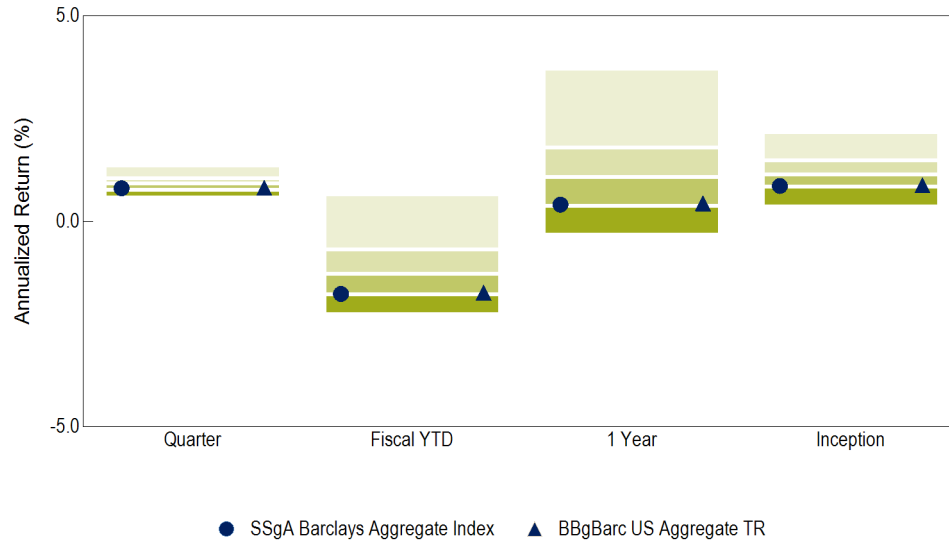
## Country Allocation

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>Americas</b>				
Brazil*	12.1%	7.7%	13.7%	10.3%
Chile*	2.0%	1.2%	11.4%	16.1%
Mexico*	7.5%	3.6%	16.6%	16.1%
United States	1.3%	0.0%	4.1%	6.1%
<b>Total-Americas</b>	<b>22.8%</b>	<b>13.3%</b>	<b>13.9%</b>	<b>12.1%</b>
<b>Europe</b>				
Hungary*	1.1%	0.3%	7.3%	-0.1%
Luxembourg	1.7%	0.0%	-4.4%	11.4%
Poland*	1.3%	1.1%	10.6%	17.7%
Portugal	1.3%	0.0%	15.4%	8.2%
Russia*	4.9%	4.5%	-6.5%	-4.8%
United Kingdom	1.8%	0.0%	8.5%	5.0%
<b>Total-Europe</b>	<b>12.1%</b>	<b>6.5%</b>	<b>1.5%</b>	<b>-0.2%</b>

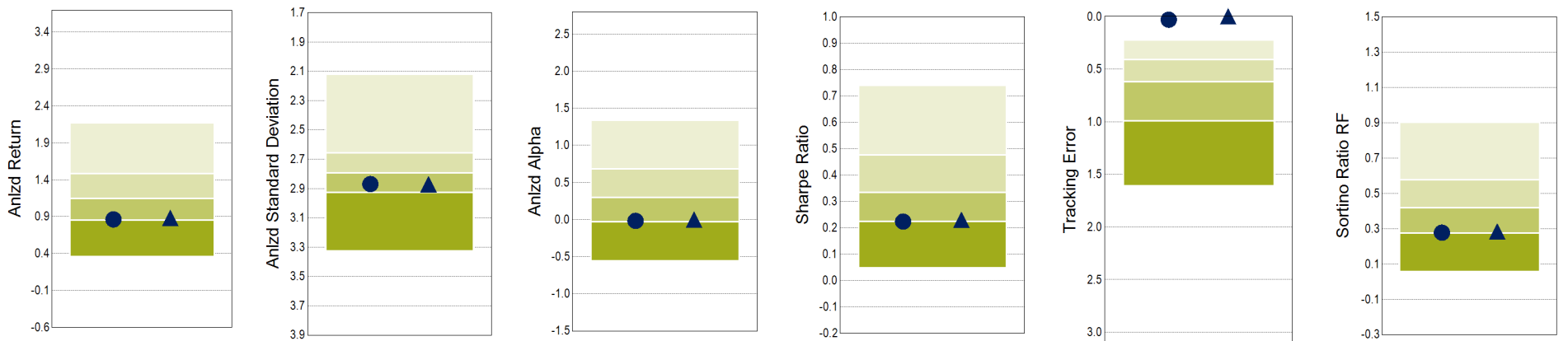
## Country Allocation

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
<b>AsiaPacific</b>				
China*	1.4%	26.4%	-1.8%	13.0%
Hong Kong	11.3%	0.0%	9.9%	13.4%
India*	16.8%	8.3%	18.7%	17.1%
Indonesia*	5.2%	2.6%	6.2%	7.1%
Korea*	7.3%	14.5%	16.8%	16.7%
Malaysia*	1.3%	2.5%	8.0%	8.3%
Philippines*	3.8%	1.2%	8.3%	6.3%
Taiwan*	4.9%	12.1%	11.2%	11.8%
Thailand*	5.0%	2.3%	9.2%	8.7%
<b>Total-AsiaPacific</b>	<b>57.0%</b>	<b>70.0%</b>	<b>12.7%</b>	<b>13.4%</b>
<b>Other</b>				
South Africa*	3.8%	7.2%	10.1%	4.6%
Turkey*	4.3%	1.0%	10.2%	10.9%
<b>Total-Other</b>	<b>8.1%</b>	<b>10.1%</b>	<b>10.1%</b>	<b>4.7%</b>
<b>Totals</b>				
Developed	17.3%	0.0%	8.3%	--
Emerging*	82.7%	100.0%	12.0%	11.4%

## eA US Core Fixed Inc Net Accounts

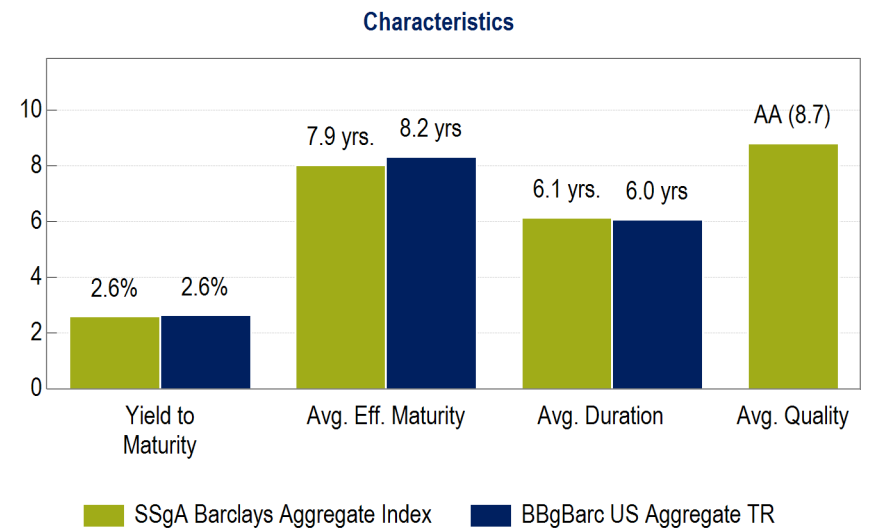
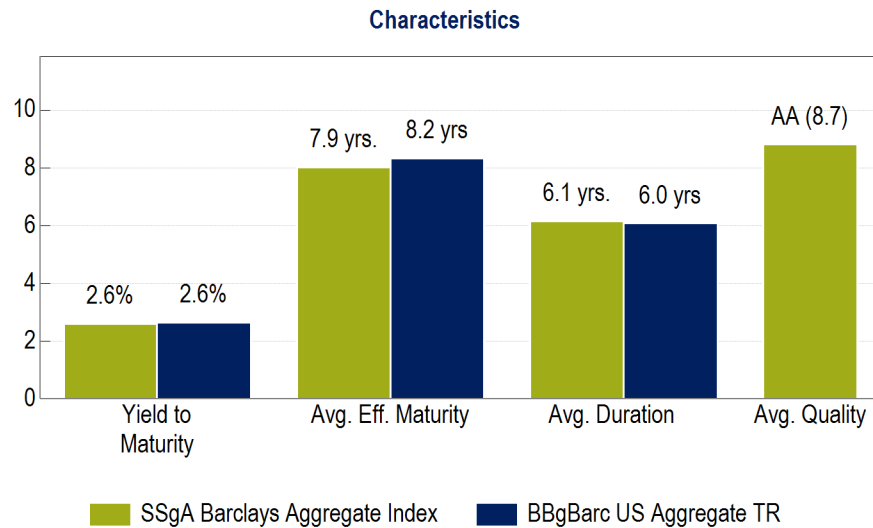
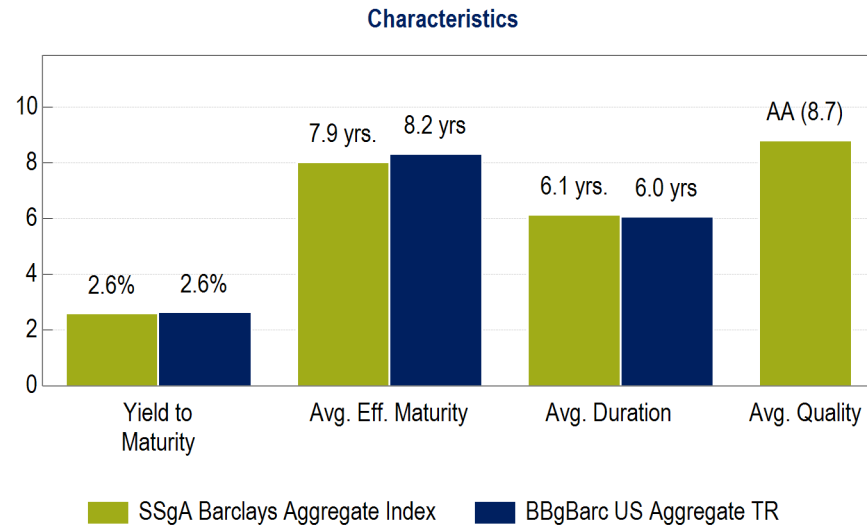


## Since Inception Risk Statistics

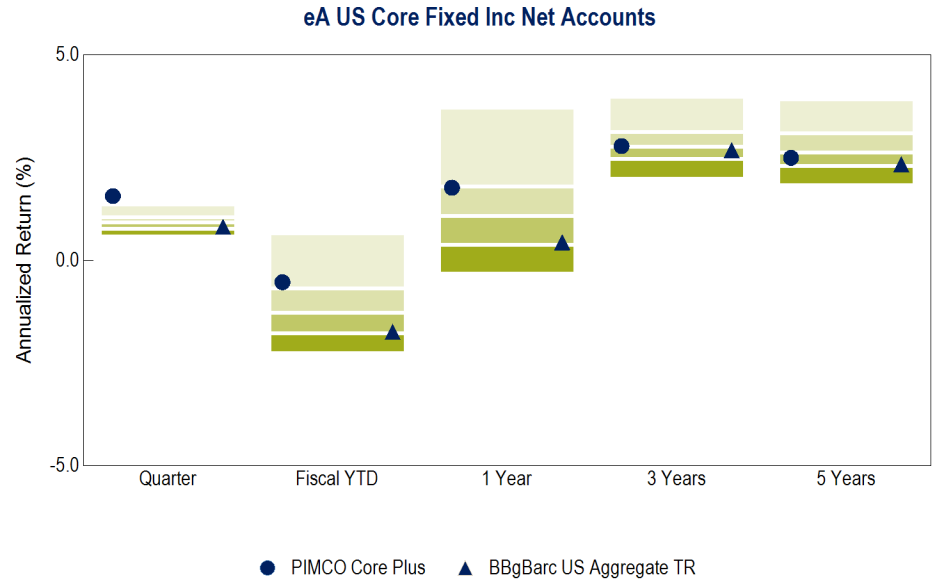




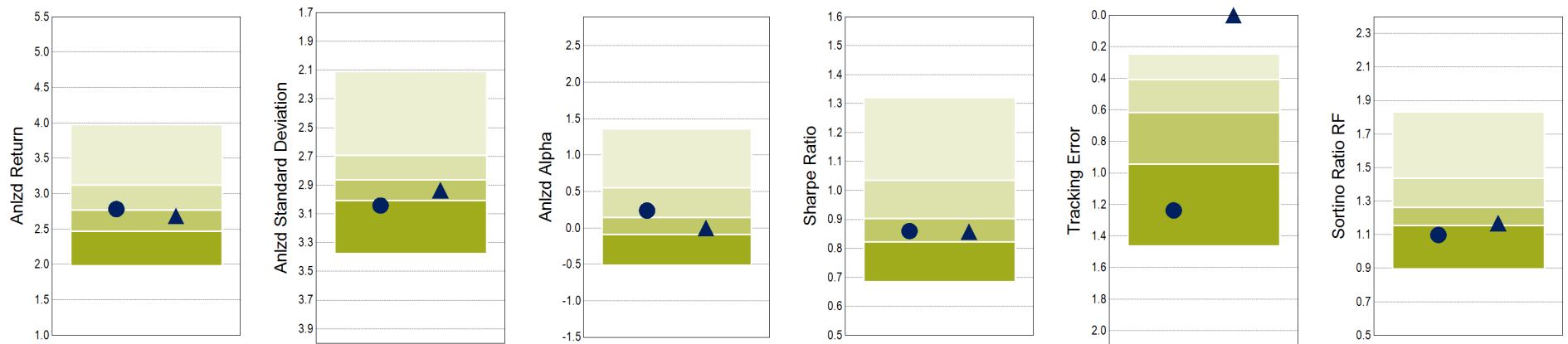
# SSgA Barclays Aggregate Index



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.



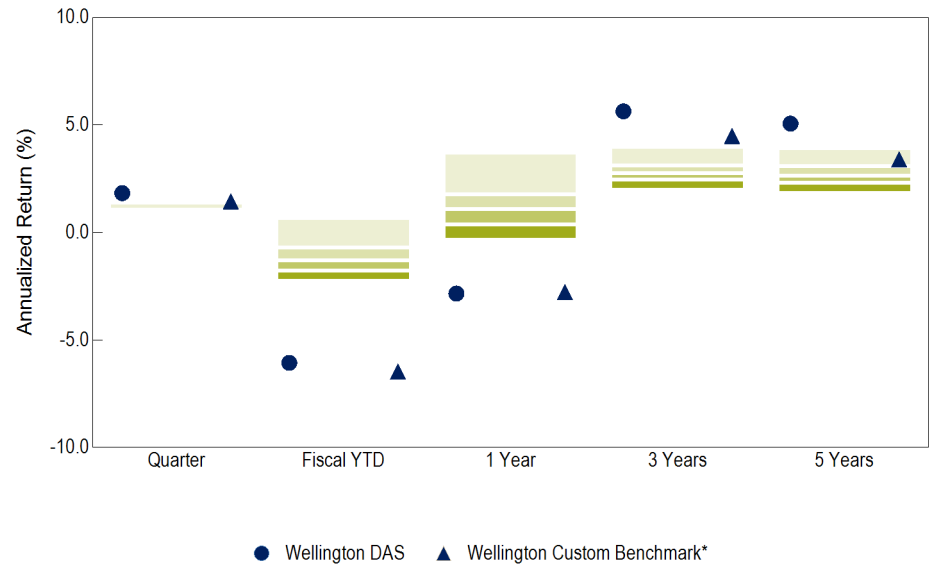
### 3 Year Risk Statistics



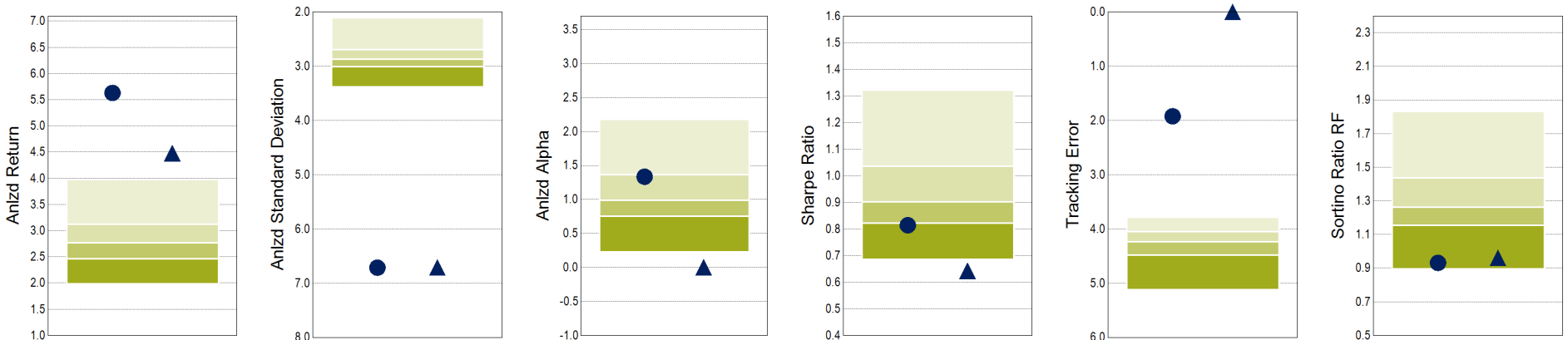
# Wellington DAS

The objective of the Diversified Alpha Strategies - Absolute Return (DAS) Portfolio is to provide positive absolute returns over cash or other market exposure (beta) over rolling 3-year periods with expected volatility of 3 to 6%. The DAS Portfolio aims to provide consistent returns by investing in diverse, market-neutral alpha sources that have low or negative correlations with each other. The mix of alpha sources is rebalanced periodically, and the target mix may change over time. The DAS Portfolio can be combined with desired market (beta) exposure through the use of derivative instruments. Drawing on a diversified basket of alpha sources from across a broad investment universe, rather than a single alpha source, should increase the efficiency of the return/risk ratio and increase the likelihood of achieving consistent returns. For this reason, the DAS Portfolio includes a variety of alpha sources: market neutral equity and fixed income strategies, overlay strategies (currency, fixed income, asset allocation), and long-only equity strategies from which they try to remove structural market risk through short equity index future or swap positions. The allocation to each alpha source is determined in a contribution to risk framework in the context of the expected aggregate DAS Portfolio characteristics. The target weights of the underlying alpha sources have been set using risk budgeting, with a goal of achieving a balanced contribution to risk across the alpha sources, rather than focusing only on the absolute or percent cash allocation.

eA US Core Fixed Inc Net Accounts

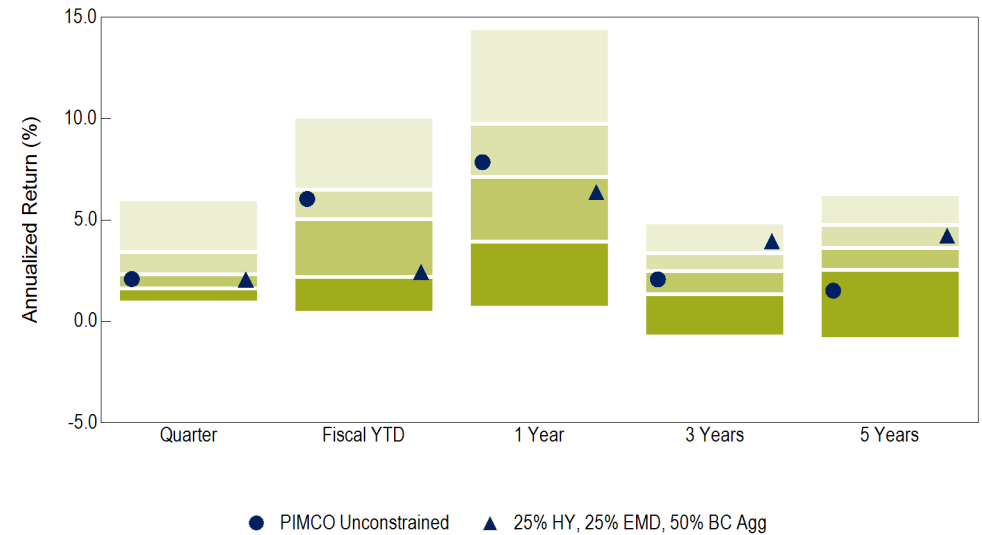


## 3 Year Risk Statistics

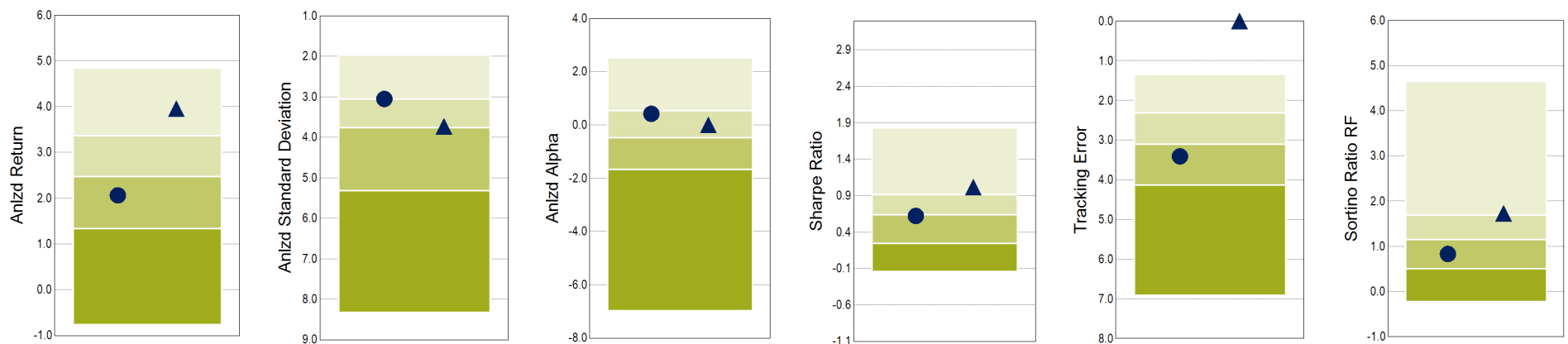


The PIMCO Unconstrained Bond Strategy is an absolute return-oriented, investment grade quality fixed income strategy that embodies PIMCO's secular thinking, global themes, and integrated investment process without the constraints of a benchmark or significant sector/instrument limitations. The strategy 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.

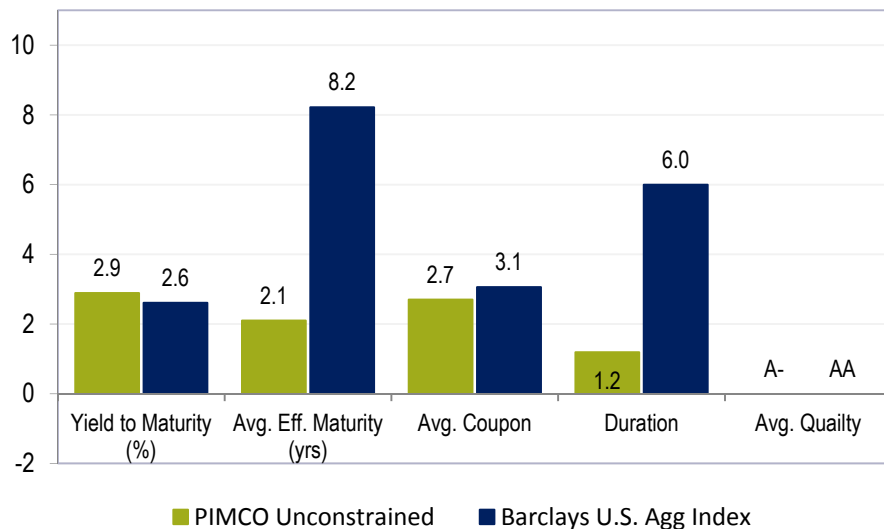
eA Global Unconstrained Fixed Inc Net Accounts



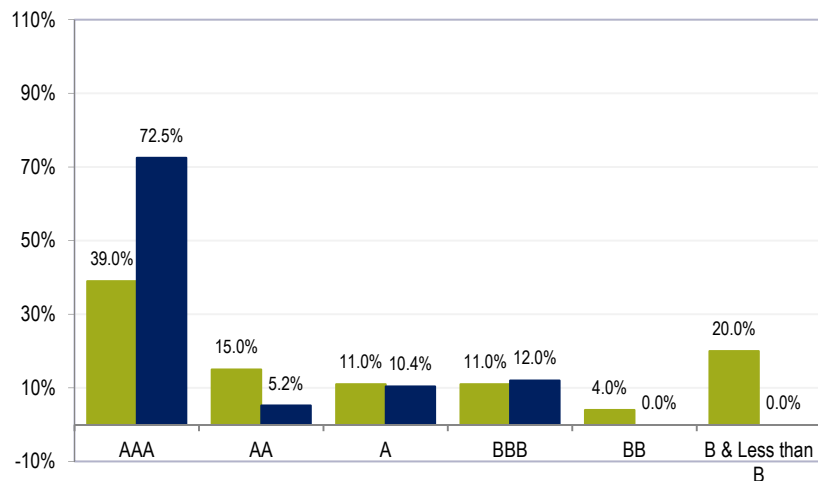
### 3 Year Risk Statistics



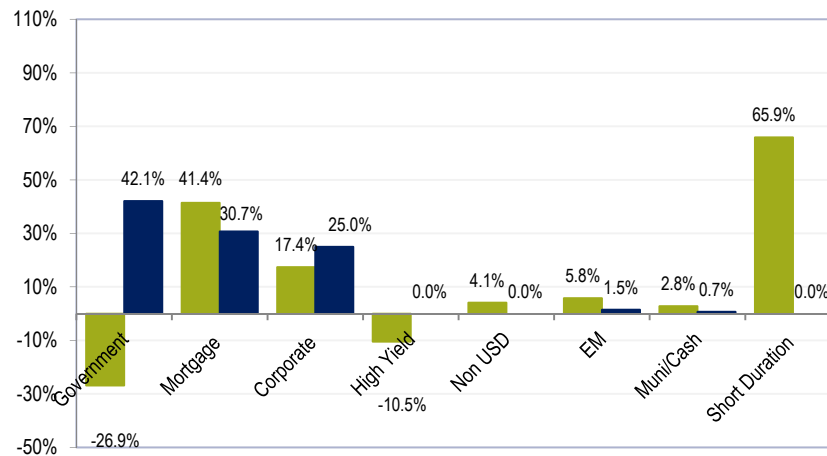
### Characteristics



### Quality Rating



### Sectors



Source: PIMCO



# GAM Unconstrained Bond - USD GIPS Composite

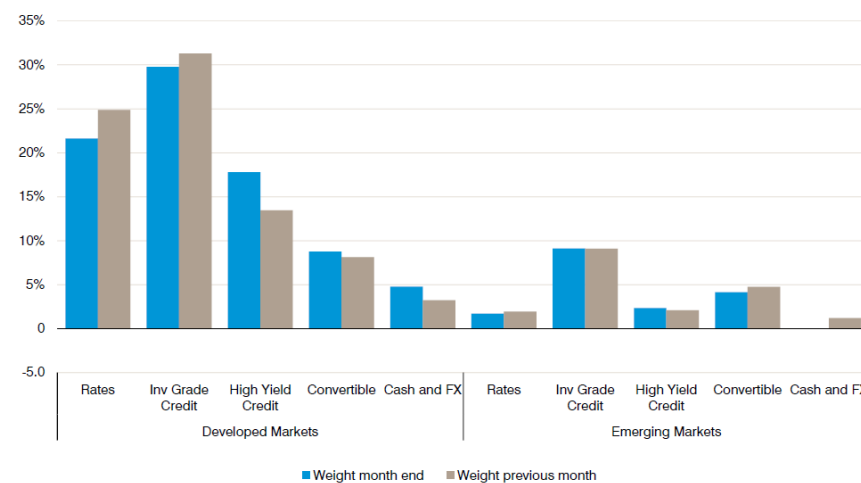
## Portfolio Sensitivity

Investment strategy	Month end			
	Bond Weight (%)	Bonds Duration Contribution	Derivatives Duration Contribution	Total Duration Contribution
Developed Markets	87.3	3.75	-2.99	0.76
Rates	19.4	1.86	-2.99	-1.13
Inv Grade Credit	36.4	1.40	0.00	1.40
High Yield Credit	19.3	0.28	0.00	0.27
Convertible	12.2	0.22	-0.01	0.21
Cash and FX	0.0	0.00	0.01	0.01
Emerging Markets	1.6	0.06	0.83	0.89
Rates	1.1	0.06	0.83	0.88
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>88.9</b>	<b>3.81</b>	<b>-2.16</b>	<b>1.65</b>

## Characteristics

	Month end
	GAM Unconstrained Bond Strategy*
Value at Risk % (97.5%, 22 days)	1.31
Coupon %	2.75
Yield to Maturity %	2.45
Curent Yield %	2.73
Years to Maturity	10.92
Effective Duration	1.65
Spread Duration	2.31
Equity Delta**	1.09
Currency Delta	-2.16
Credit Quality***	A-

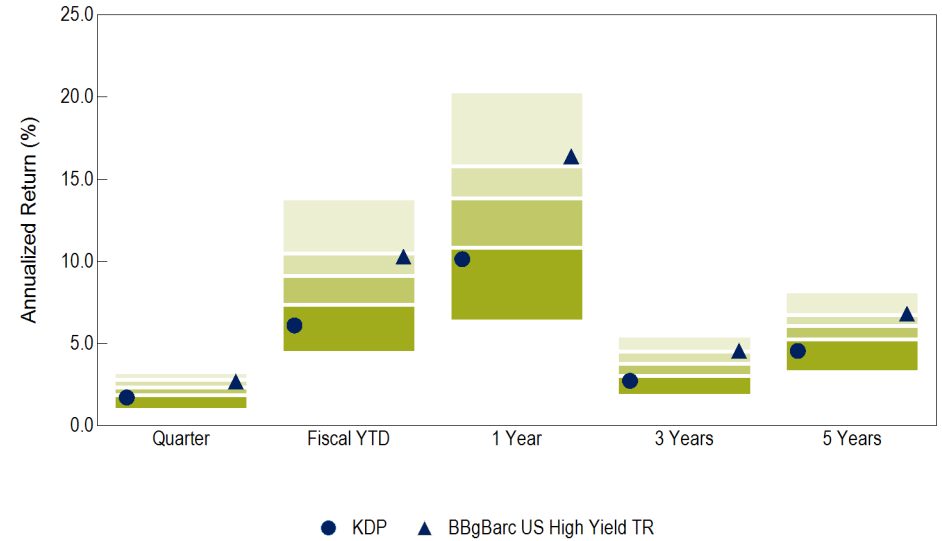
## Portfolio Overview



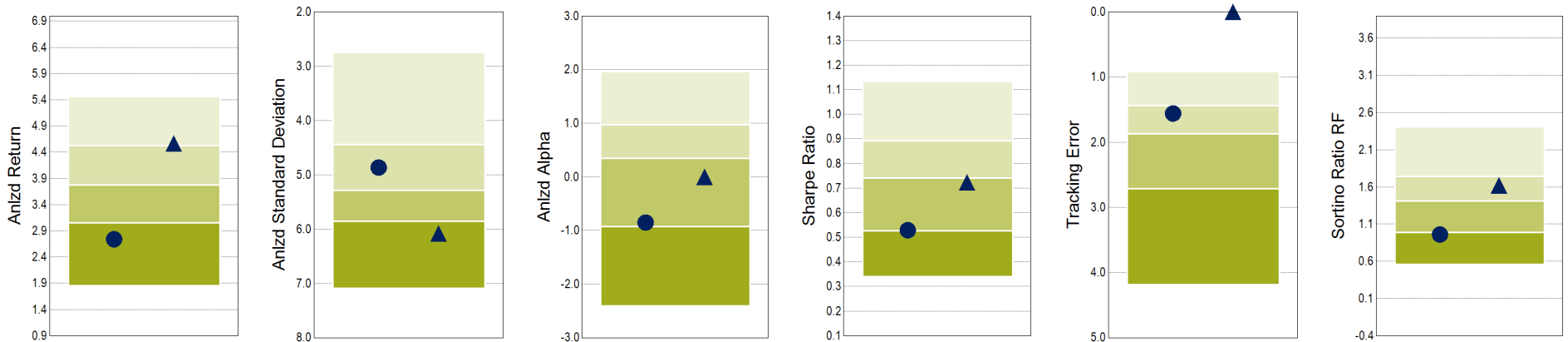
Source: GAM

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.

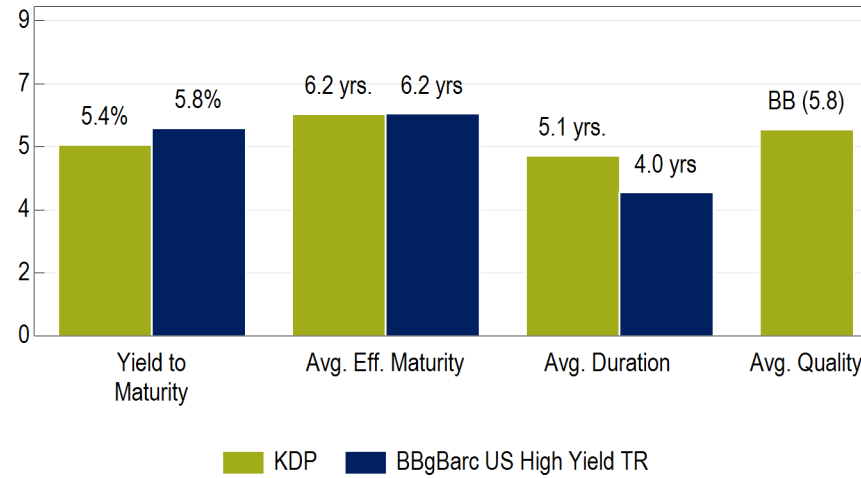
eA US High Yield Fixed Inc Net Accounts



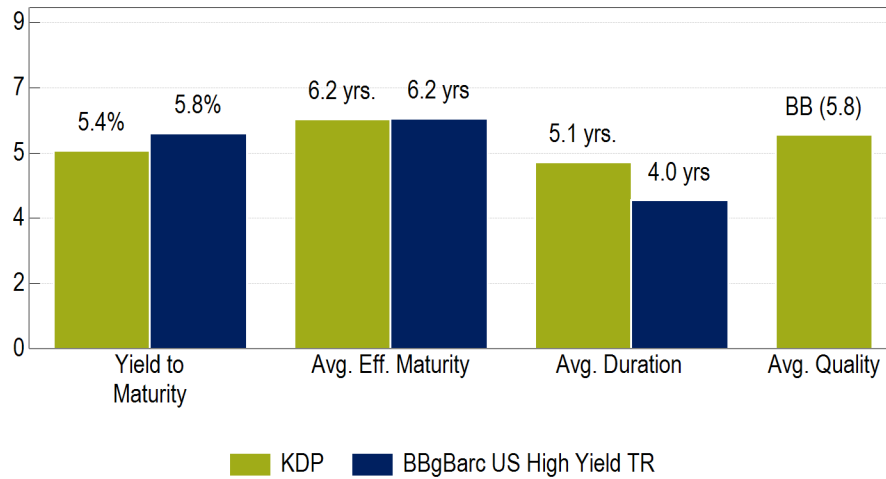
3 Year Risk Statistics



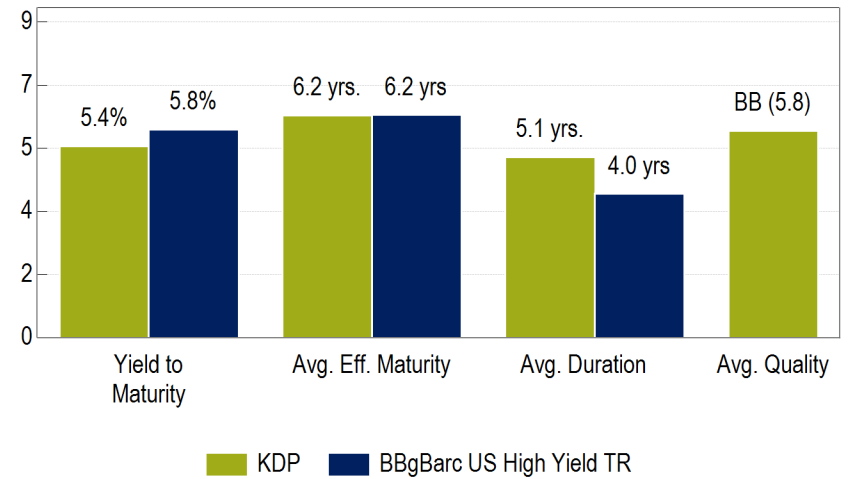
Characteristics



Characteristics

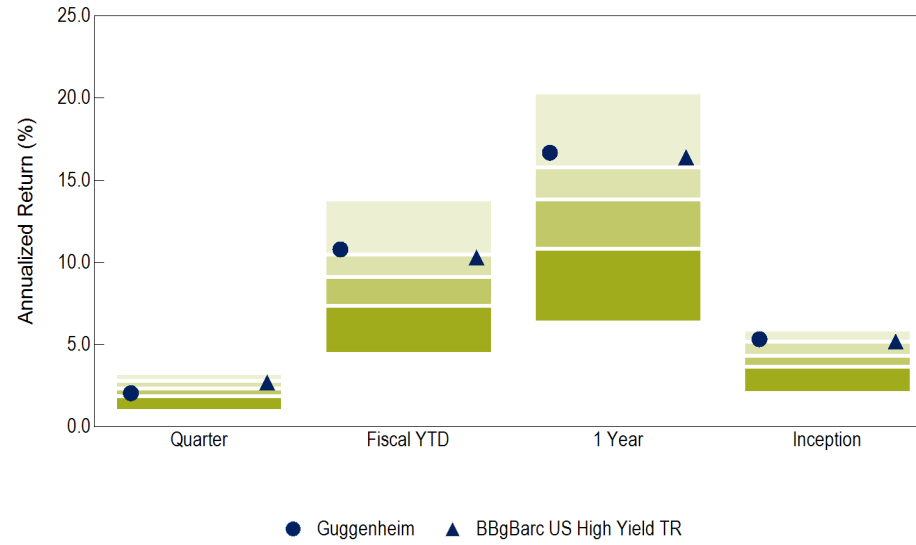


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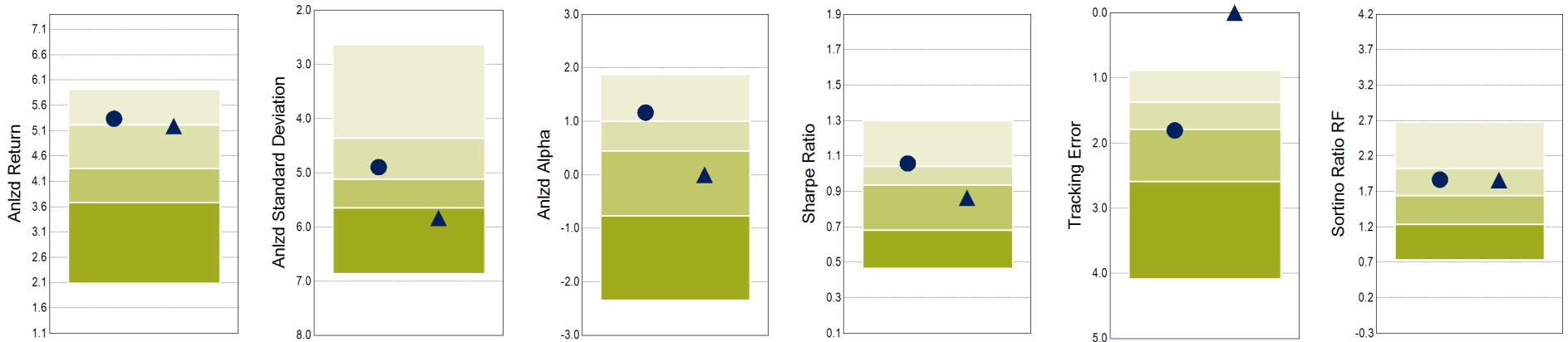




eA US High Yield Fixed Inc Net Accounts

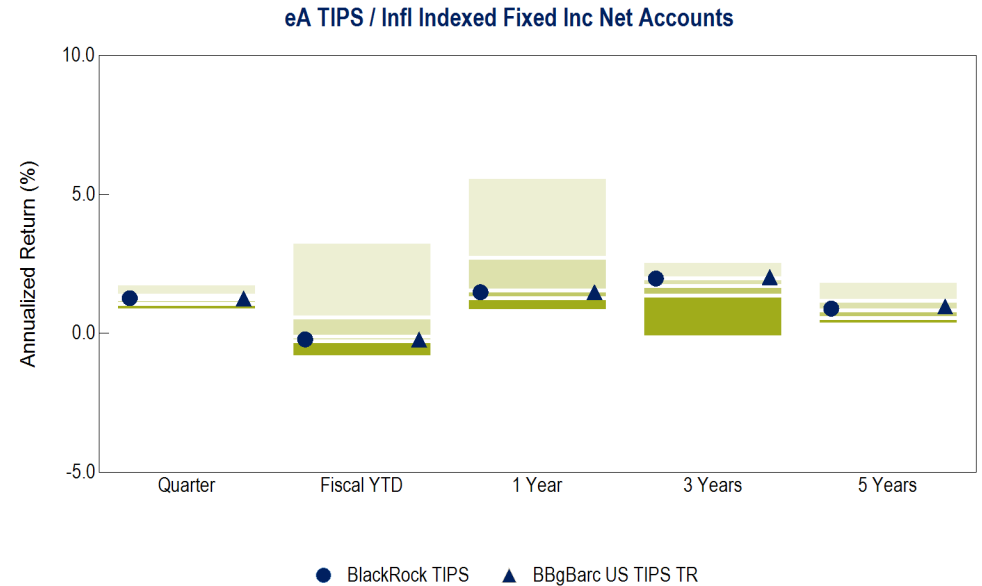


Since Inception Risk Statistics

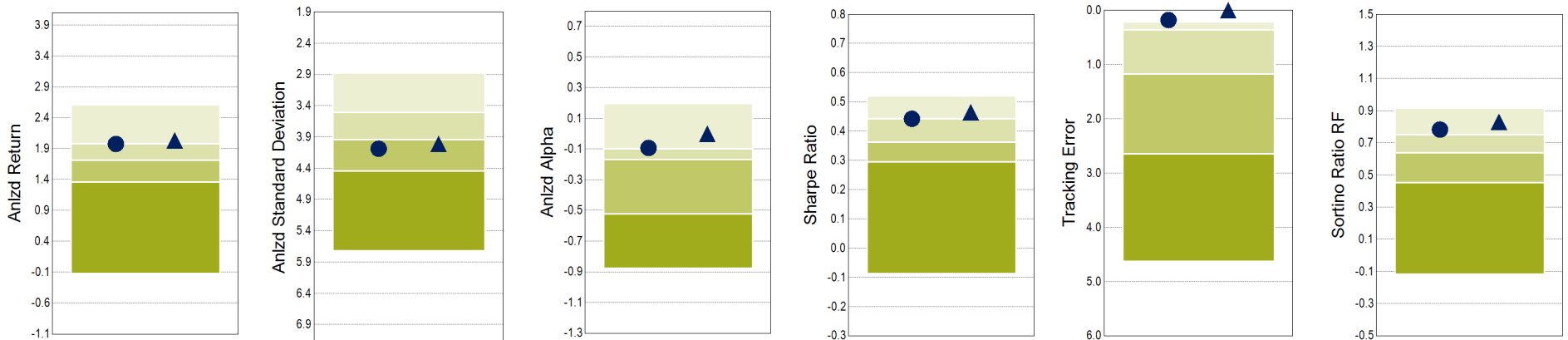


# BlackRock TIPS

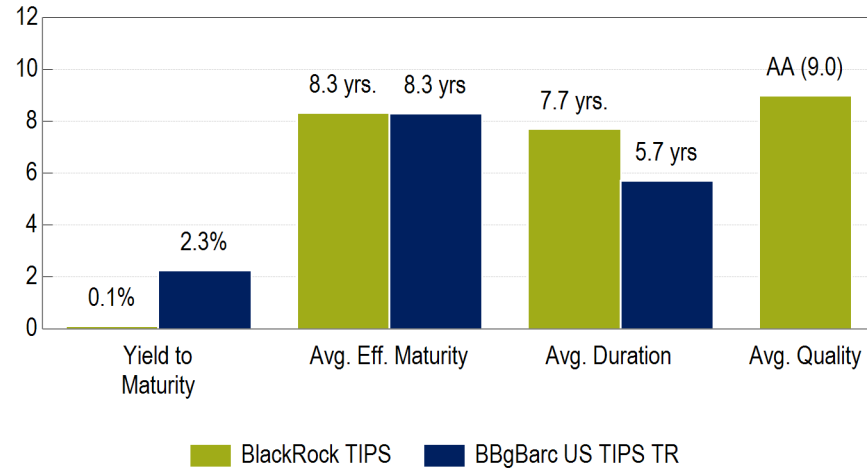
In the management of an inflation-linked bond portfolio, BlackRock will utilize multiple strategies to outperform the index. These include: duration and yield curve positioning, technical supply/demand anomalies related primarily to the ILB auction cycle, seasonal factors related to non-seasonally adjusted 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%.



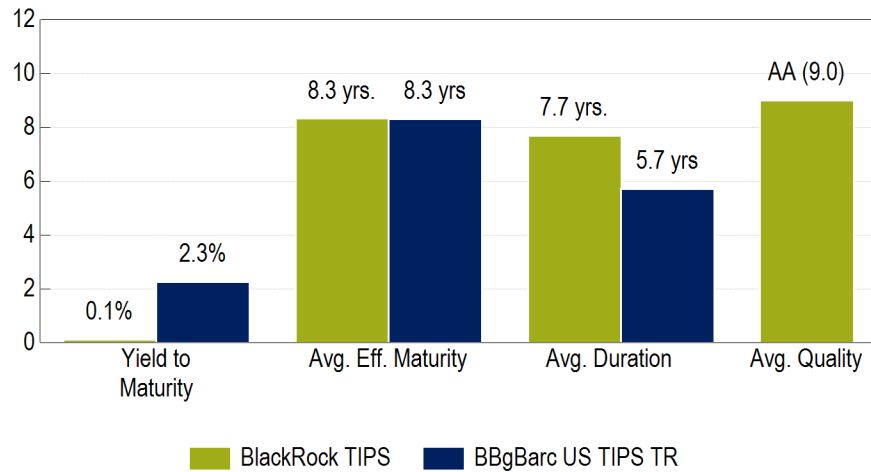
## 3 Year Risk Statistics



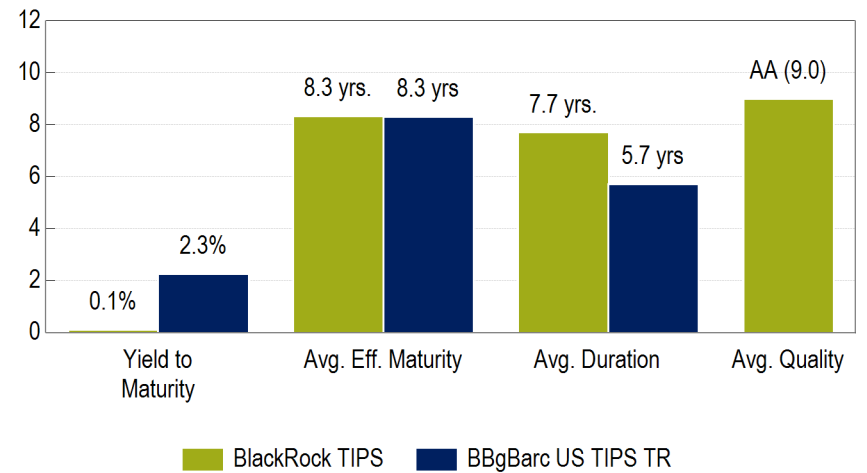
Characteristics

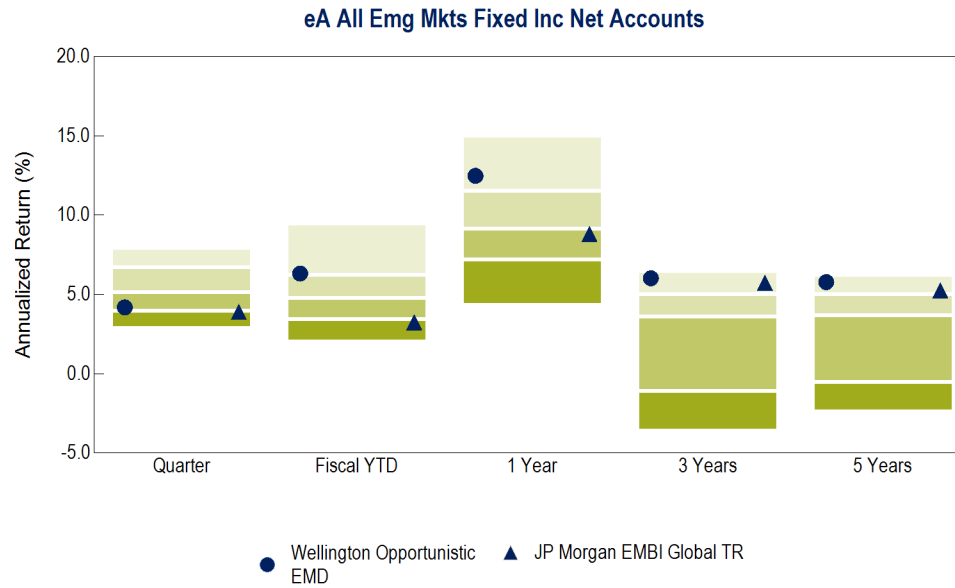


Characteristics

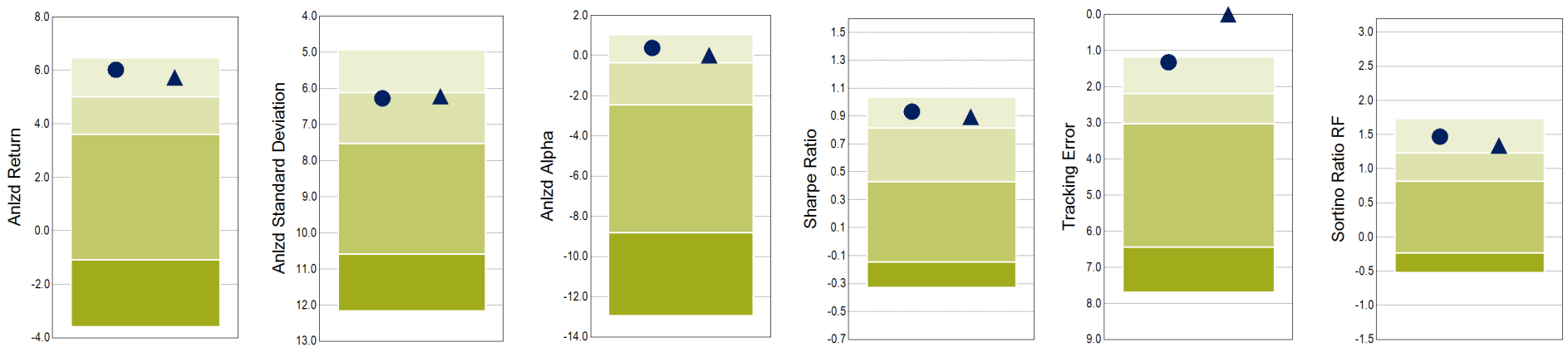


Characteristics

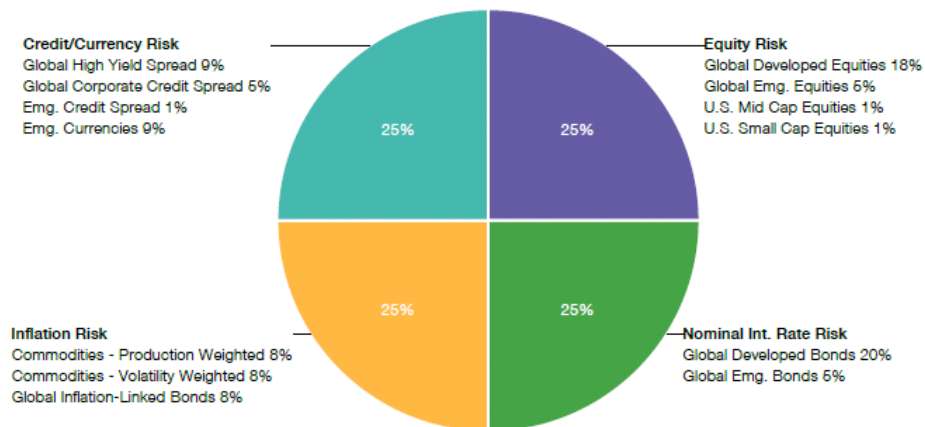




### 3 Year Risk Statistics



## Risk Allocation



## Estimated Exposure Breakdown

Long Exposure (% of NAV)		Long Exposure (% of NAV)	
<b>Equity Risk</b>		<b>Equity Market Exposures</b>	
Global Developed Equities	29%	Americas	23%
Global Emerging Equities	6%	Europe	7%
U.S. Mid Cap Equities	2%	Asia ex-Japan	6%
U.S. Small Cap Equities	1%	Japan	3%
<b>Total Equity Risk</b>	<b>38%</b>	<b>Total Equity Market Exposures</b>	<b>38%</b>
<b>Nominal Interest Rate Risk</b>		<b>Bond Market Exposures - Nominal and Inflation-Linked</b>	
Global Developed Bonds	96%	Americas	63%
Global Emerging Bonds	24%	Europe	63%
<b>Total Nominal Interest Rate Risk</b>	<b>119%</b>	Asia	29%
<b>Inflation Risk</b>		<b>Total Bond Market Exposures</b>	<b>155%</b>
Commodities - Production Weighted	9%	<b>Emerging Currency Exposures</b>	
Commodities - Volatility Weighted	15%	Asia	6%
Global Inflation-Linked Bonds	36%	Europe	9%
<b>Total Inflation Risk</b>	<b>59%</b>	Latin America	6%
<b>Credit/Currency Risk</b>		Dollar Block ex-U.S.	0%
Global High Yield Spread	32%	<b>Total Emerging Currency Exposures</b>	<b>21%</b>
Global Corporate Credit Spread	57%		
Emerging Credit Spread	4%		
Emerging Currencies	21%		
<b>Total Credit/Currency Risk</b>	<b>113%</b>		
<b>Total Fund Exposures</b>	<b>330%</b>		

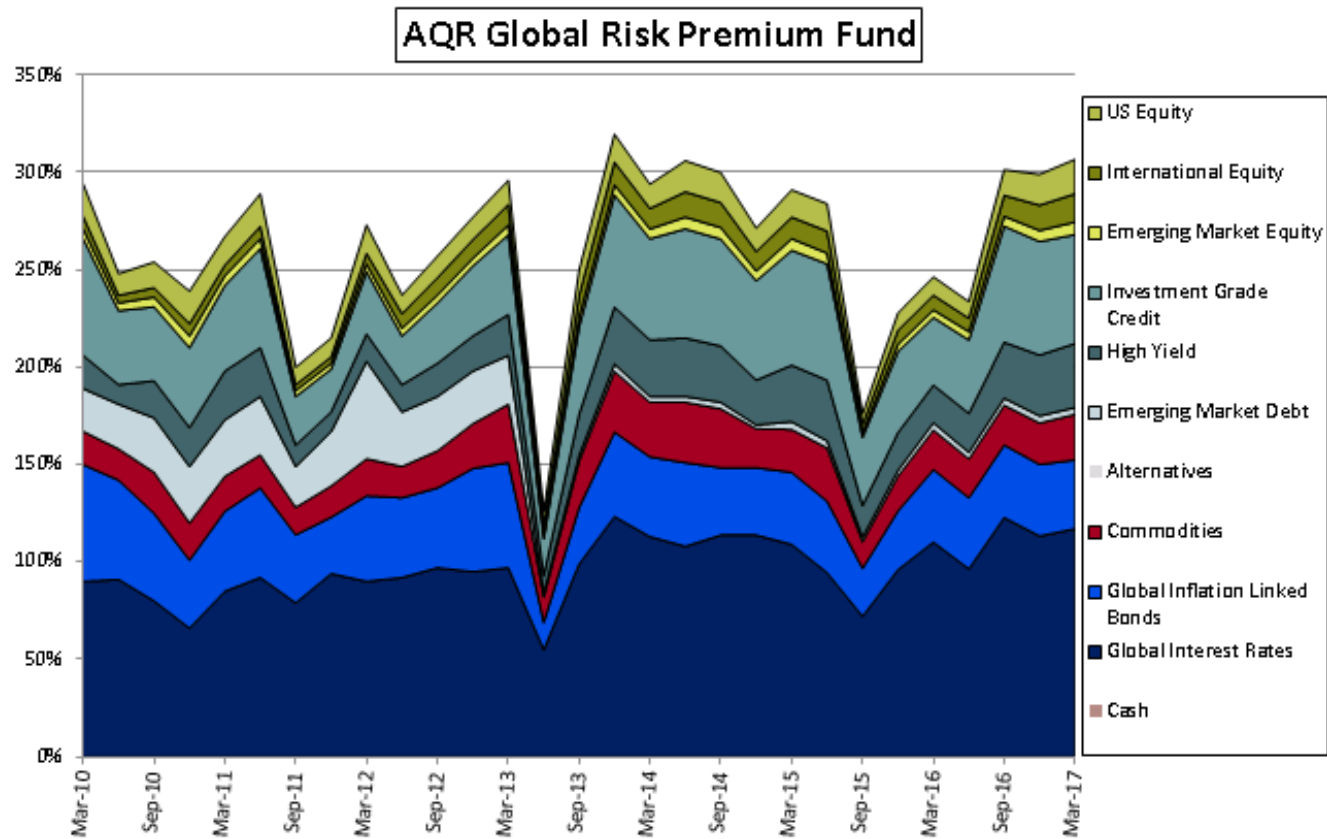
Source: AQR



NEPC, LLC

March 31, 2017

# AQR Global Risk Premium Fund

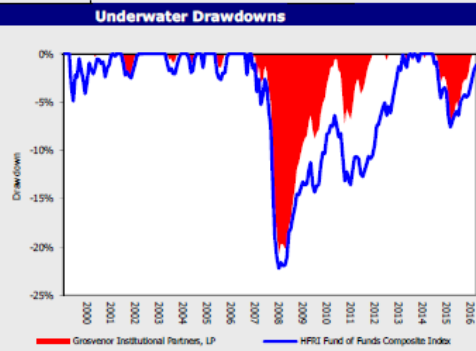
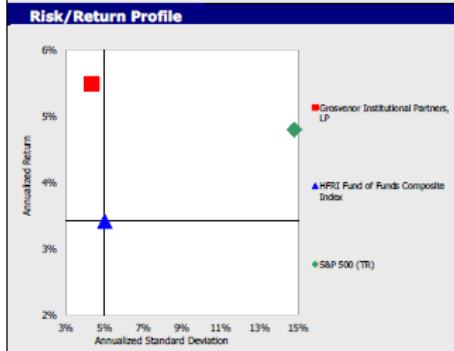
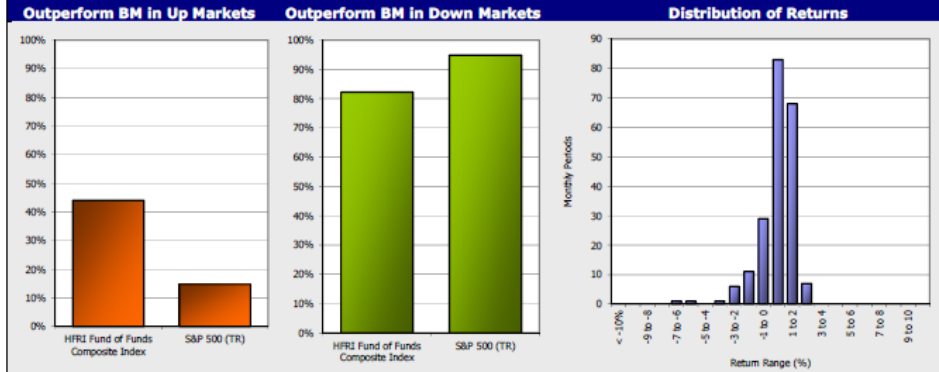


**Grosvenor Institutional Partners, LP**  
Grosvenor Capital Management, LP



Benchmark 1 (BM1): HFRI Fund of Funds Composite Index  
Benchmark 2 (BM2): S&P 500 (TR)

Monthly Performance (%) Net of Fees														Statistical Analysis			
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year	Returns	Fund	BM1	BM2
2017	0.9%	0.7%	0.1%										1.7%	Annualized Compound ROR	5.5%	3.4%	4.8%
2016	-3.0%	-1.5%	0.4%	1.1%	1.1%	-0.7%	1.1%	1.5%	0.4%	0.0%	0.7%	1.4%	2.4%	3 Yr Return	1.9%	1.8%	10.4%
2015	-0.4%	1.6%	0.5%	0.2%	0.9%	-0.5%	0.6%	-1.5%	-1.6%	0.6%	0.1%	-0.6%	-0.2%	5 Yr Return	5.2%	3.2%	13.3%
2014	0.0%	1.6%	-0.1%	-0.6%	0.8%	1.1%	-0.7%	0.8%	-0.2%	-0.3%	0.6%	0.3%	3.3%	Best Month	2.7%	5.2%	10.9%
2013	2.6%	0.6%	1.4%	0.8%	1.7%	-0.6%	1.7%	0.2%	1.7%	1.3%	1.6%	1.1%	15.2%	Worst Month	-6.9%	-6.5%	-16.8%
2012	1.6%	1.8%	0.9%	-0.1%	-1.4%	0.4%	0.8%	1.2%	0.8%	0.5%	0.7%	1.2%	8.6%	% Positive Months	76.3%	64.7%	62.3%
2011	0.9%	1.0%	0.0%	0.9%	-0.1%	-1.1%	-0.2%	-2.8%	-2.7%	1.7%	-0.7%	-0.6%	-3.7%	<b>Risk</b>			
2010	0.7%	0.3%	1.6%	0.9%	-1.8%	-0.9%	0.7%	0.3%	1.8%	1.2%	0.5%	1.5%	6.8%	Standard Deviation	4.3%	5.0%	14.8%
2009	1.2%	0.1%	-0.6%	0.1%	2.7%	0.9%	2.2%	1.8%	2.3%	0.7%	1.0%	1.1%	14.2%	3 Yr Standard Deviation	3.4%	3.4%	10.4%
2008	-2.4%	1.4%	-1.7%	0.2%	1.5%	-0.6%	-2.0%	-1.3%	-6.9%	-5.3%	-3.2%	-2.2%	-20.6%	5 Yr Standard Deviation	3.5%	3.4%	10.2%
														Sharpe Ratio (3.5%)	0.5	0.0	0.2
														Sortino Ratio (7.0%)	-0.4	-0.8	-0.2
														Downside Deviation (7.0%)	3.8%	4.4%	11.3%
														Max Drawdown	-20.7%	-22.2%	-50.9%
														Months In Maximum Drawdown	14	14	16
														Months To Recover	47	66	37
														<b>Comparison To Benchmark(s)</b>			
														Monthly Alpha		0.2%	0.4%
														Annualized Alpha		2.9%	4.7%
														Beta		0.7	0.2
														Correlation		0.9	0.5
														R-Squared		74.1%	26.6%
														<b>Annual Returns</b>			
														2017-(YTD)	1.7%	2.4%	6.1%
														2016	2.4%	0.5%	12.0%
														2015	-0.2%	-0.3%	1.4%
														2014	3.3%	3.4%	13.7%
														2013	15.2%	9.0%	32.4%
														2012	8.6%	4.8%	16.0%
														<b>Latest Returns</b>			
														Last Month	0.1%	0.4%	0.1%
														Last 3 Months	1.7%	2.4%	6.1%
														Last Year	8.6%	6.2%	17.2%
														2-Year	1.1%	0.1%	9.2%
														3-Year	1.9%	1.8%	10.4%
														4-Year	4.3%	2.8%	13.1%
														5-Year	5.2%	3.2%	13.3%
														<b>Drawdown Analysis</b>			
														1	-20.7%	-22.2%	-50.9%
														2	-7.2%	-7.6%	-44.7%
														3	-2.4%	-4.9%	-8.4%
														4	-2.1%	-2.7%	-6.8%
														5	-1.4%	-2.5%	-6.6%



	Fund	BM1	BM2
1	-20.7%	-22.2%	-50.9%
2	-7.2%	-7.6%	-44.7%
3	-2.4%	-4.9%	-8.4%
4	-2.1%	-2.7%	-6.8%
5	-1.4%	-2.5%	-6.6%

\*\*\*Past Performance is not indicative of future results. Ratios are calculated based on a risk-free rate of 3.6%. Actual ratios may vary depending on the actual risk-free rate and life of the fund\*\*\*

# Mellon Dynamic Growth Fund

		Country	Current Month %	
Growth 66.7%	Developed ex-U.S. Equity 39.5%	Australia	7.5	
		Canada	2.1	
		Euro	0.0	
		France	2.2	
		Germany	3.7	
		Hong Kong	-2.6	
		Italy	0.1	
		Japan	12.0	
		Netherlands	0.8	
		Spain	2.0	
		Switzerland	0.4	
		United Kingdom	10.0	
		Other	1.3	
		U.S. Equity 22.1%	United States	22.1
		High Yield Bonds 5.1%		5.1
Defensive 34.1%	Developed ex U.S. Bonds -15.0%		-15.0	
	U.S. Bonds 49.1%		49.1	
Real 10.9%	Commodity 6.0%		6.0	
	Inflation-Linked Bonds 4.9%		4.9	

		Country	Current Month %
Diversifying Strategies  Currency 100.0%	U.S. 114.6%  Developed ex-U.S. -14.6%	United States	114.6
		Australia	5.6
		Canada	-1.6
		Denmark	0.0
		Euro	-13.5
		Japan	1.2
		New Zealand	-2.6
		Norway	0.9
		Sweden	6.4
		Switzerland	2.4
		United Kingdom	-13.7
		Other	0.4

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.

Source: Mellon Capital Management



NEPC, LLC

March 31, 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	0.60	0.97	-0.04	0.00	-0.01	0.00	0.30	0.04	0.00	-0.16	0.01	-0.50
Quarter-to-Date	3.06	2.21	0.62	0.00	0.14	0.00	-0.46	0.72	0.00	-0.01	0.07	-0.23
Year-to-Date	3.06	2.21	0.62	0.00	0.14	0.00	-0.46	0.72	0.00	-0.01	0.07	-0.23
1 Year	5.61	5.16	1.18	0.00	1.10	0.00	-1.95	-2.18	0.00	-0.24	0.03	2.50
3 Year	6.45	2.94	0.50	-0.26	0.36	-0.03	-0.83	1.13	0.03	0.07	0.08	2.46
5 Year	6.26	2.90	2.11	-0.23	0.35	-0.04	-0.49	0.70	0.08	-0.03	0.13	0.78
7 Year	-	-	-	-	-	-	-	-	-	-	-	-
10 Year	-	-	-	-	-	-	-	-	-	-	-	-
Since Inception <sup>2</sup>	6.85	1.96	2.36	-0.10	0.25	-0.03	0.31	0.60	0.15	0.04	0.33	0.99

Source: Mellon Capital Management



NEPC, LLC

March 31, 2017

# Appendix

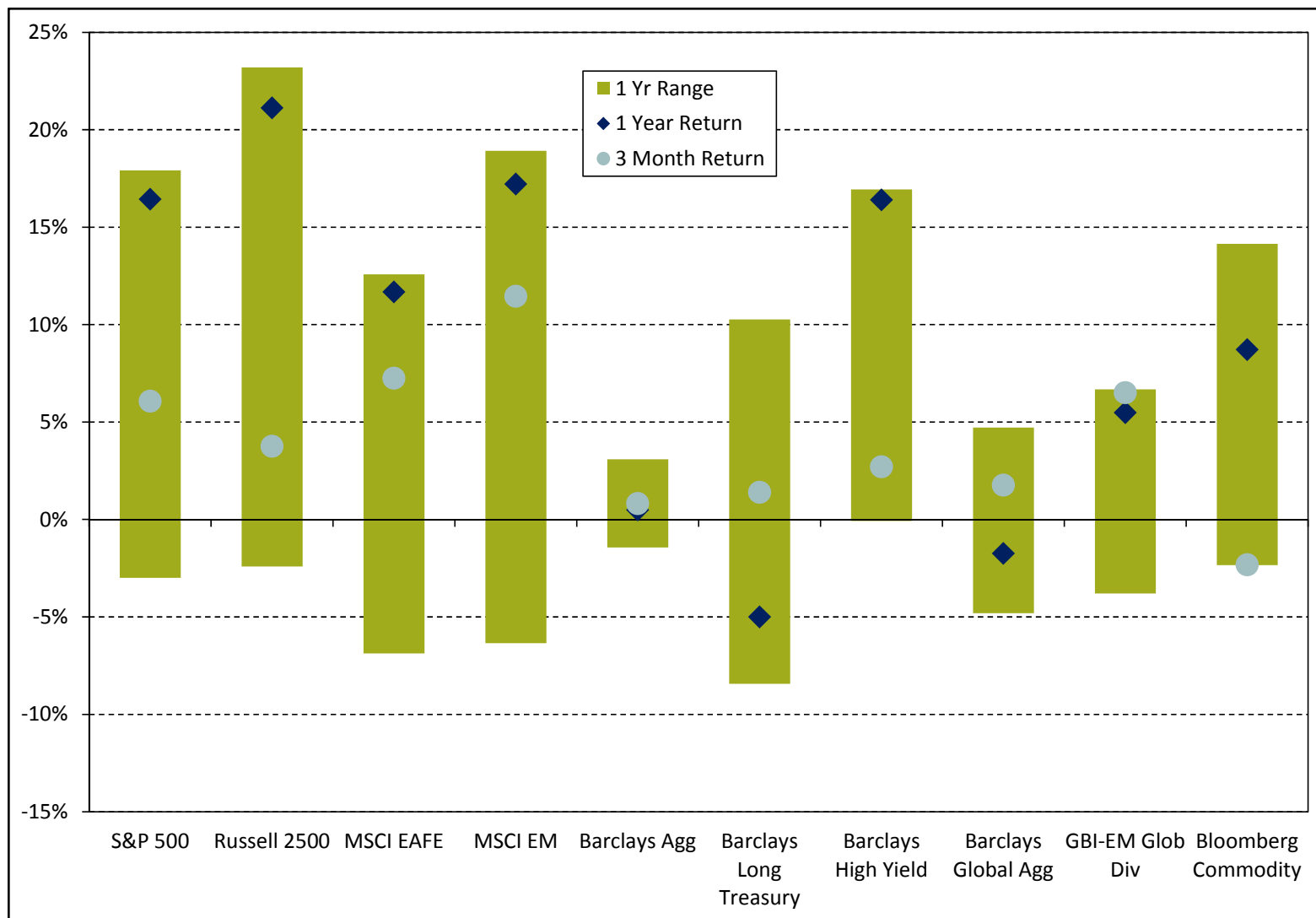


## Index Performance Summary as of 03/31/2017

	2009	2010	2011	2012	2013	2014	2015	2016	Jan	Feb	Mar	YTD
<b>MSCI EM</b>	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	11.2%	5.5%	3.1%	2.5%	11.4%
<b>MSCI EAFE</b>	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	1.0%	2.9%	1.4%	2.8%	7.2%
<b>MSCI ACWI</b>	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	7.9%	2.7%	2.8%	1.2%	6.9%
<b>JPM GBI-EM Global Div</b>	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	9.9%	2.3%	1.8%	2.3%	6.5%
<b>S&amp;P 500</b>	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	12.0%	1.9%	4.0%	0.1%	6.1%
<b>Russell 1000</b>	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	12.1%	2.0%	3.9%	0.1%	6.0%
<b>Alerian MLP</b>	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	18.3%	4.9%	0.4%	-1.3%	3.9%
<b>JPM EMBI Glob Div</b>	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	10.2%	1.4%	2.0%	0.4%	3.9%
<b>Russell 2500</b>	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	17.6%	1.4%	2.4%	-0.1%	3.8%
<b>Barclays US Corporate HY</b>	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	17.1%	1.5%	1.5%	-0.2%	2.7%
<b>Russell 2000</b>	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	21.3%	0.4%	1.9%	0.1%	2.5%
<b>BC US STRIPS 20+ Yr</b>	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	1.4%	0.5%	2.3%	-1.0%	1.8%
<b>BC Global Agg</b>	-6.5%	-5.3%	-5.3%	-4.1%	2.7%	-0.6%	3.3%	2.1%	1.1%	0.5%	0.2%	1.8%
<b>Credit Suisse Hedge Fund</b>	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	1.2%	0.7%	1.0%	-	1.7%
<b>BC US Long Credit</b>	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	10.2%	0.2%	2.0%	-0.6%	1.7%
<b>BC Municipal</b>	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	0.2%	0.7%	0.7%	0.2%	1.6%
<b>BC US Govt/Credit Long</b>	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	6.7%	0.3%	1.8%	-0.6%	1.6%
<b>BC TIPS</b>	11.4%	6.3%	13.6%	7.0%	-8.6%	3.6%	-1.4%	4.7%	0.8%	0.5%	-0.1%	1.3%
<b>CS Leveraged Loan</b>	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	9.9%	0.5%	0.6%	0.1%	1.2%
<b>FTSE NAREIT Equity REITs</b>	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	8.5%	0.1%	3.4%	-2.3%	1.2%
<b>BC US Agg Bond</b>	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	2.6%	0.2%	0.7%	-0.1%	0.8%
<b>BC US Agg Interm</b>	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.0%	0.2%	0.5%	0.0%	0.7%
<b>BC US Govt/Credit 1-3 Yr</b>	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.3%	0.2%	0.2%	0.1%	0.4%
<b>Bloomberg Commodity</b>	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	11.8%	0.1%	0.2%	-2.7%	-2.3%

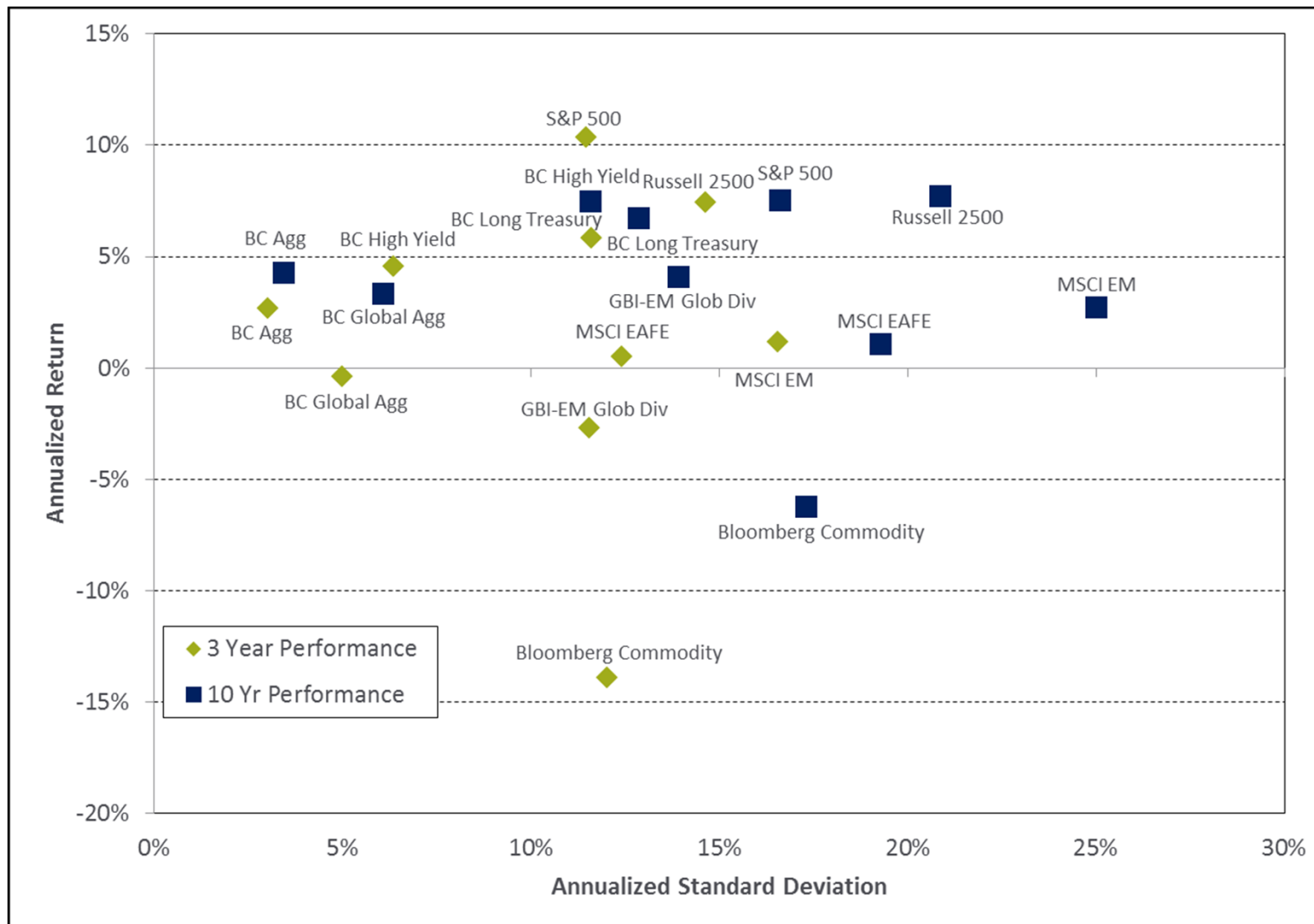
Source: Bloomberg, Barclays, Alerian, Nareit, MSCI, JP Morgan, Credit Suisse

# Near Term Broad Market Performance Summary as of 03/31/2017



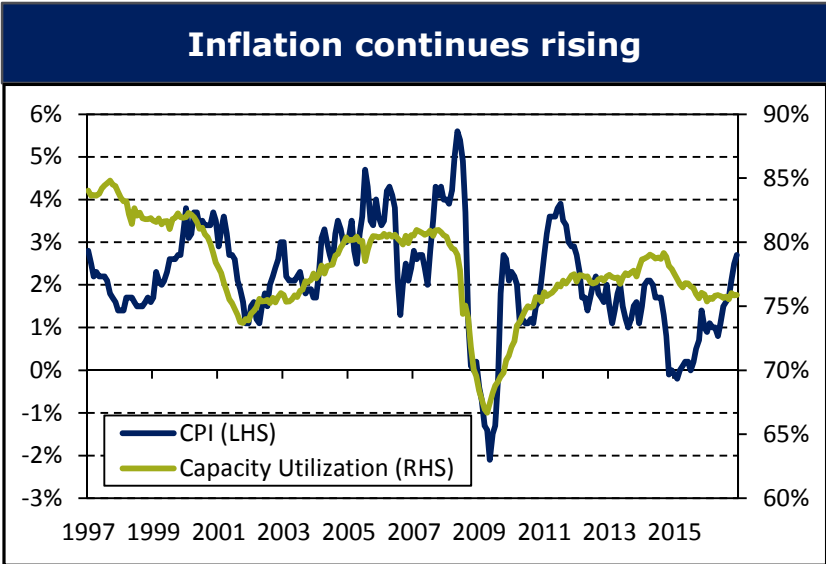
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan  
 \*1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

# Long Term Broad Market Performance Summary as of 03/31/2017

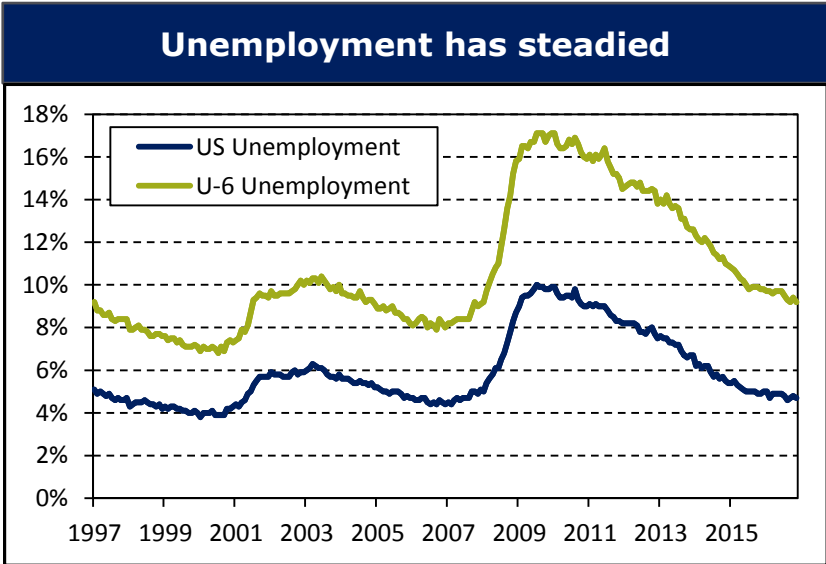


Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, JP Morgan

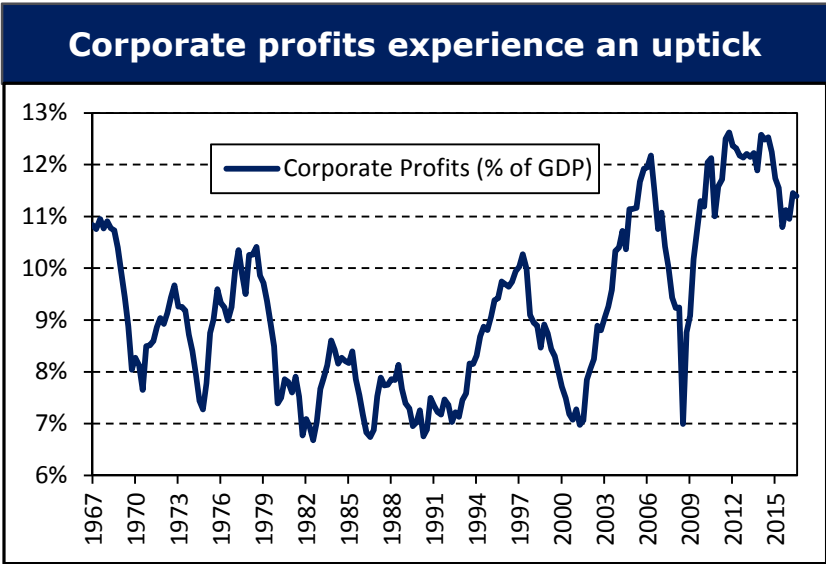
# US Economic Indicators



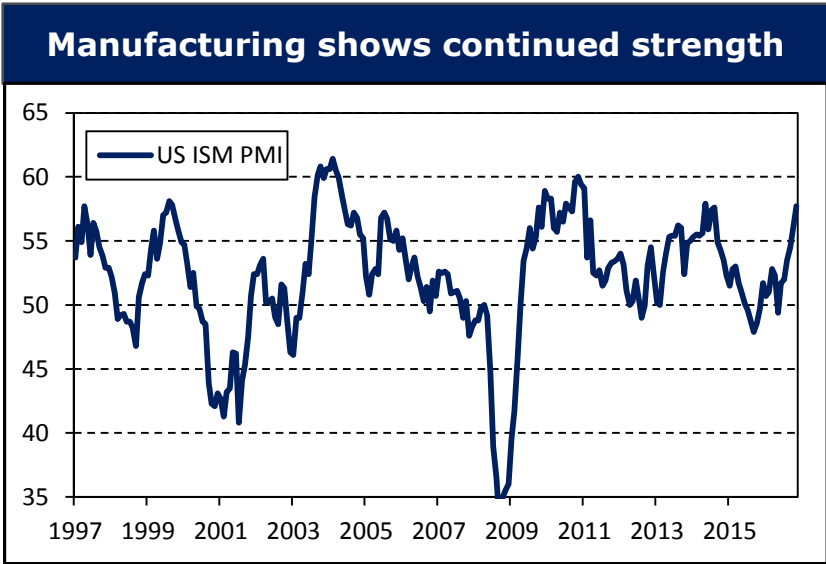
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics



Source: Bloomberg, Bureau of Labor Statistics



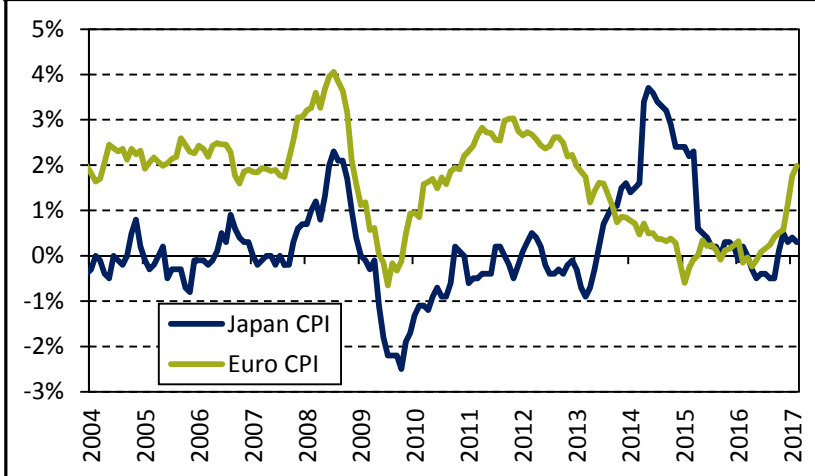
Source: Bloomberg, Bureau of Economic Analysis



Source: Bloomberg, Institute for Supply Management

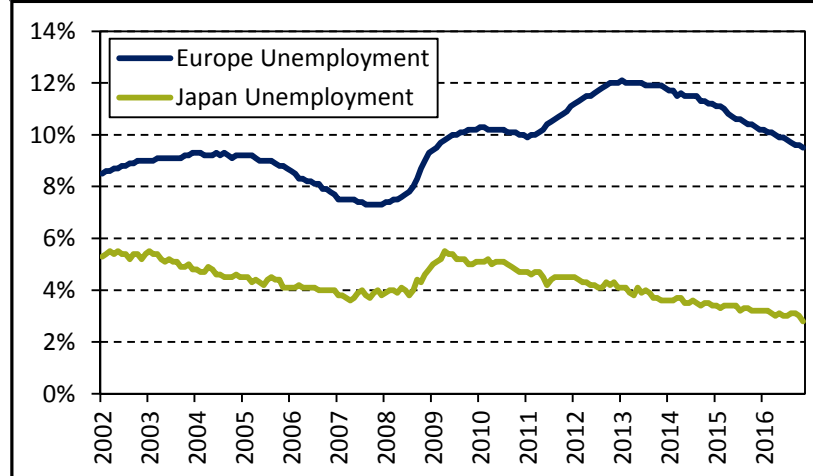
# International Economic Indicators

## Eurozone inflation continues to rise



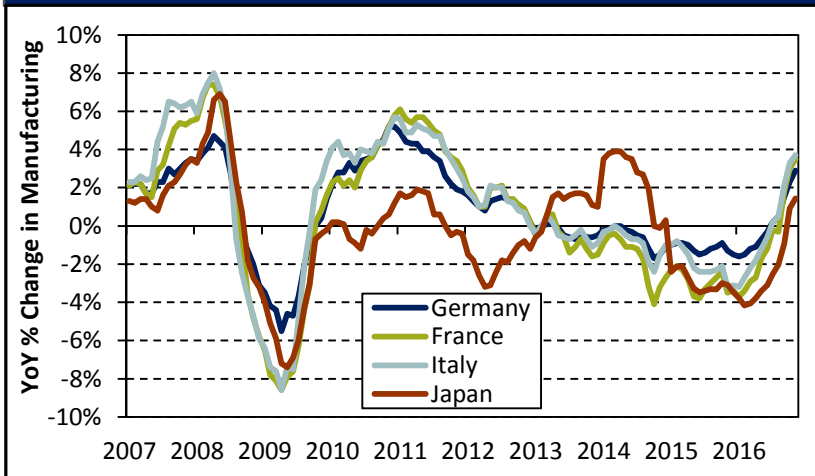
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

## Europe unemployment edges lower



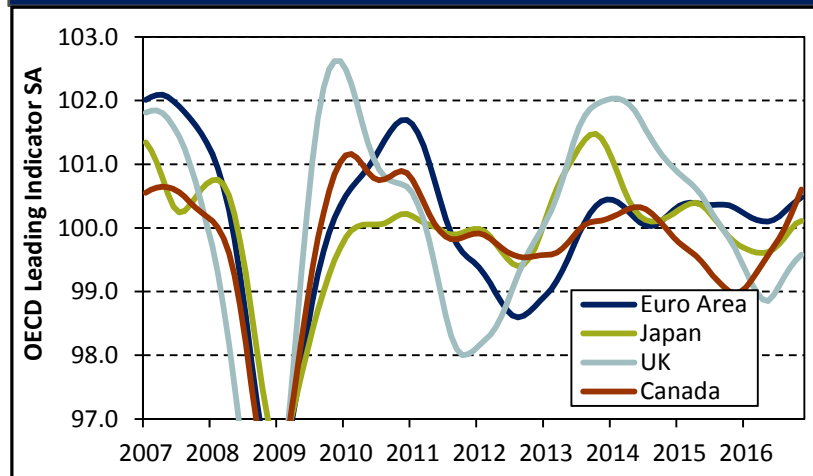
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

## Manufacturing shows continued strength



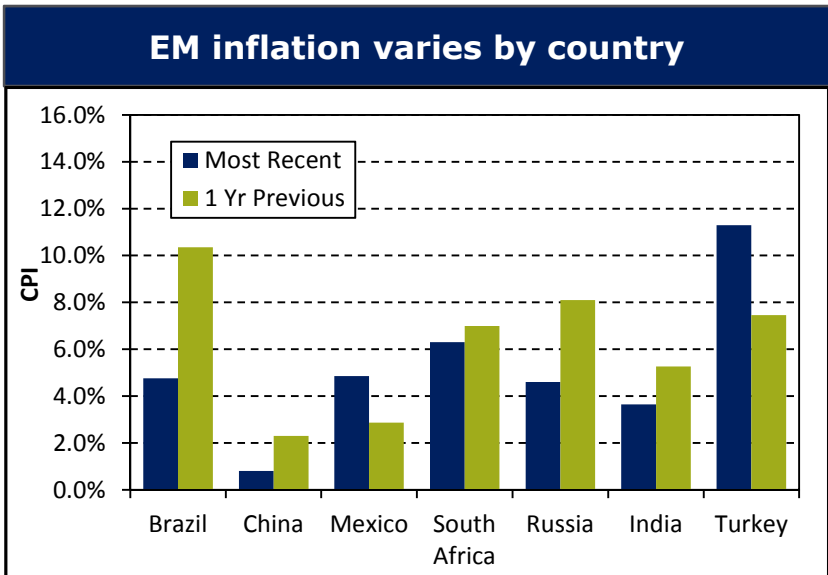
Source: Bloomberg, OECD, Eurostat

## Leading indicators are trending higher

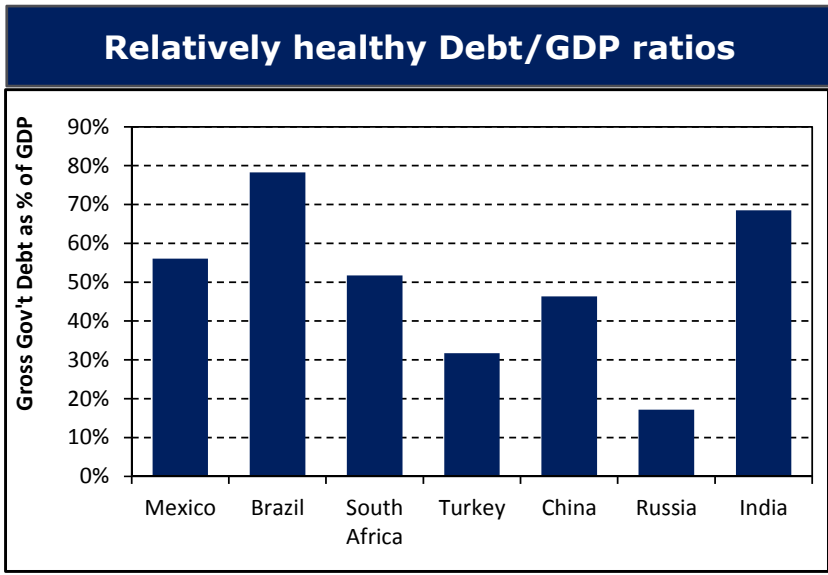


Source: Bloomberg, OECD

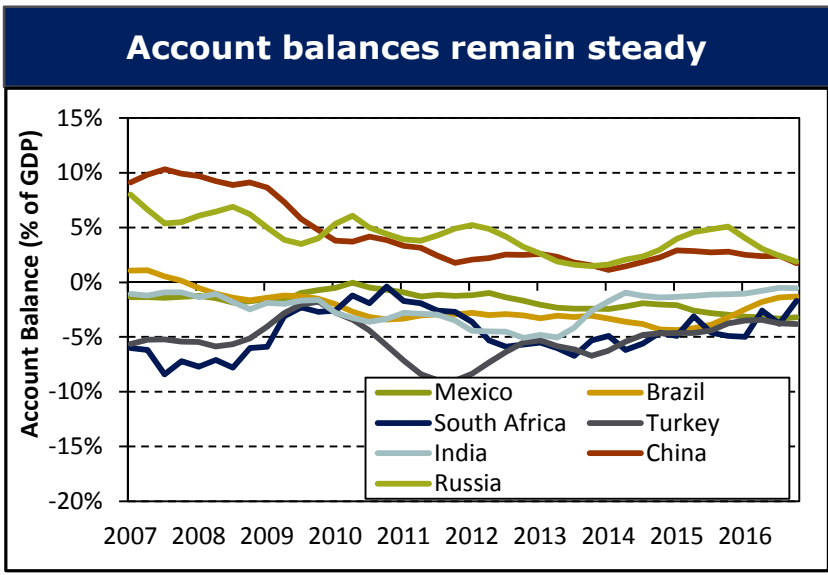
# Emerging Market Economic Indicators



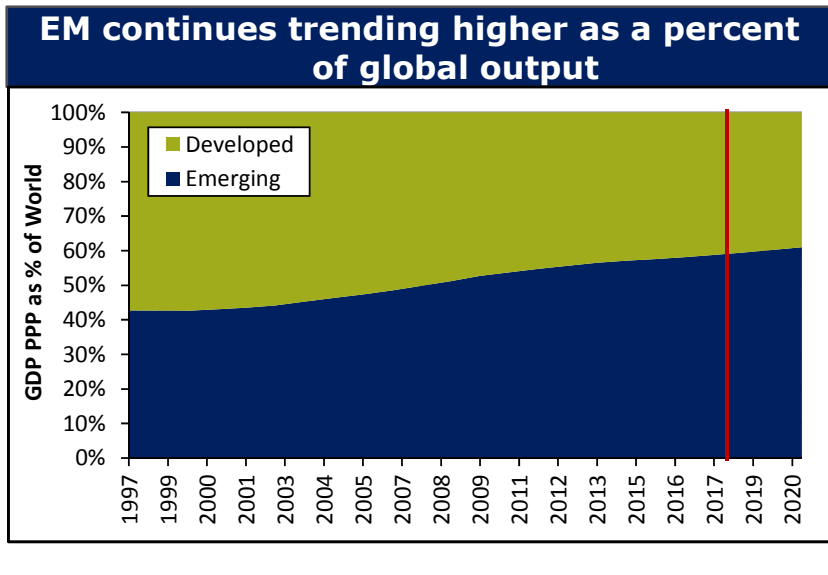
Source: Bloomberg



Source: Bloomberg, IMF



Source: Bloomberg

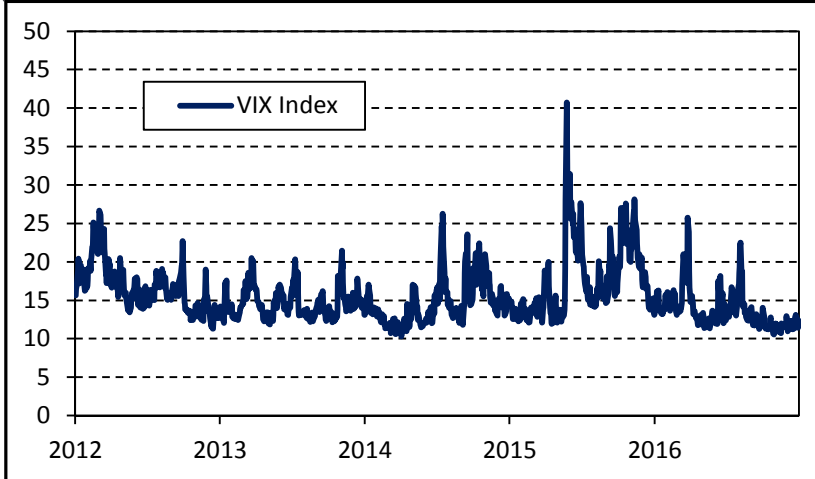


Source: Bloomberg, IMF



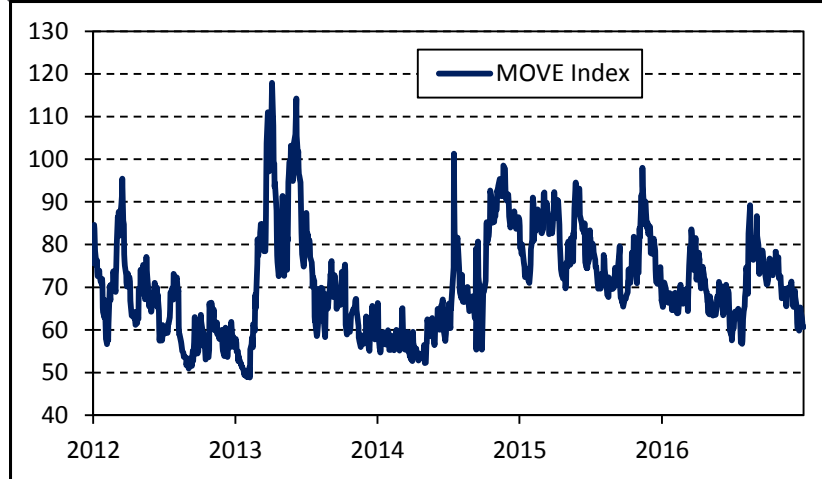
# Volatility

## Equity volatility remains low



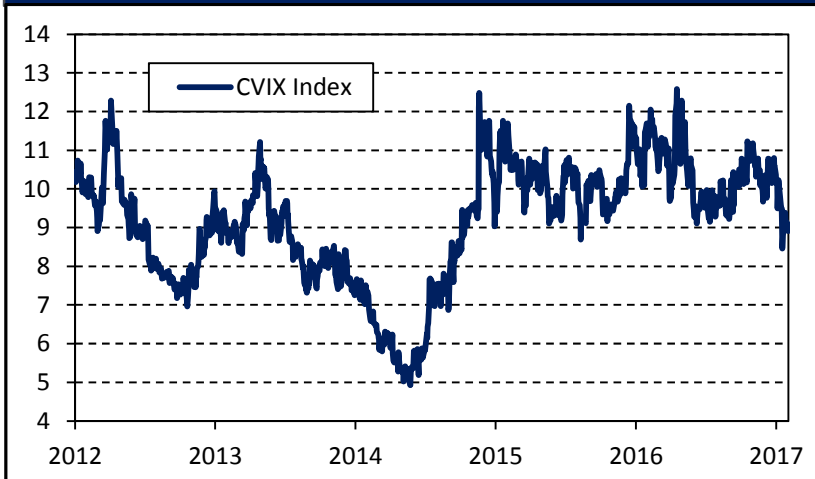
Source: Bloomberg, CBOE

## Treasury volatility has recently subsided



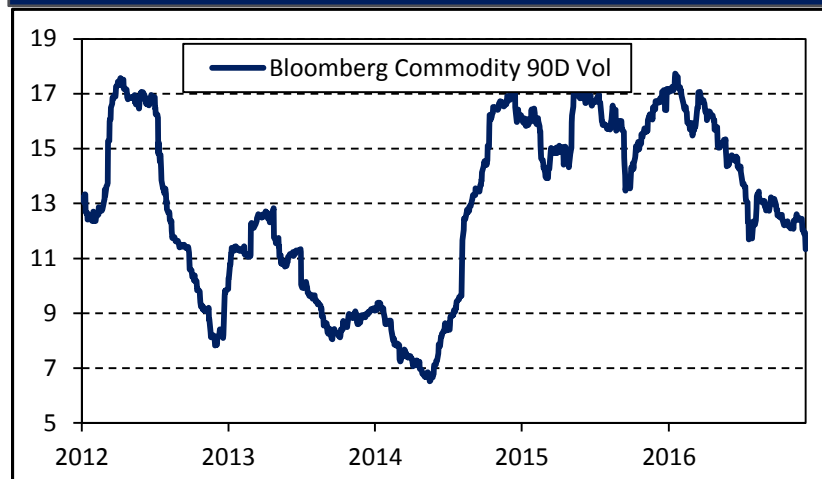
Source: Bloomberg, Merrill Lynch

## Currency volatility remains elevated



Source: Bloomberg, Deutsche Bank

## Commodity volatility continues to decline

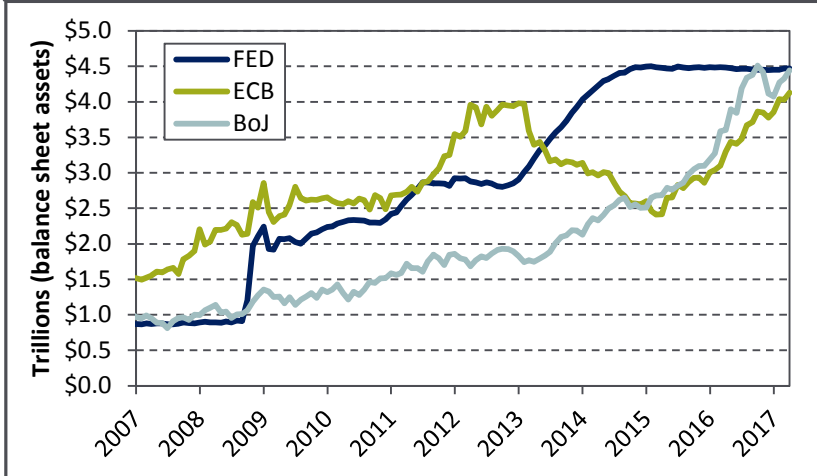


Source: Bloomberg, Merrill Lynch



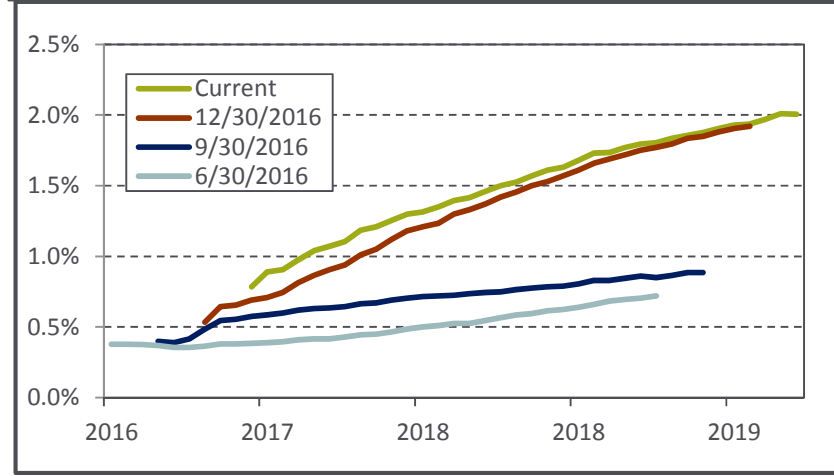
# Central Banks

## Currency movement continues impacting the value of the BoJ's balance sheet



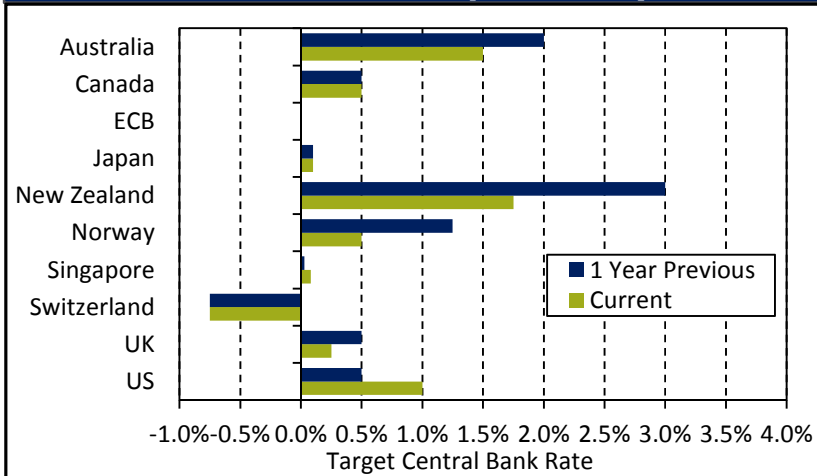
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC

## Post-election yield curve has increased slightly with the Fed rate hike



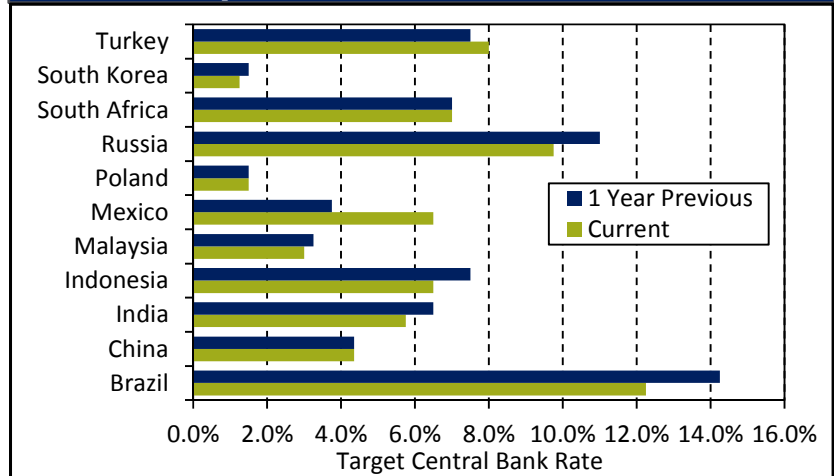
Source: Bloomberg, Federal Reserve

## Ex- US developed market interest rates are lower than the previous year



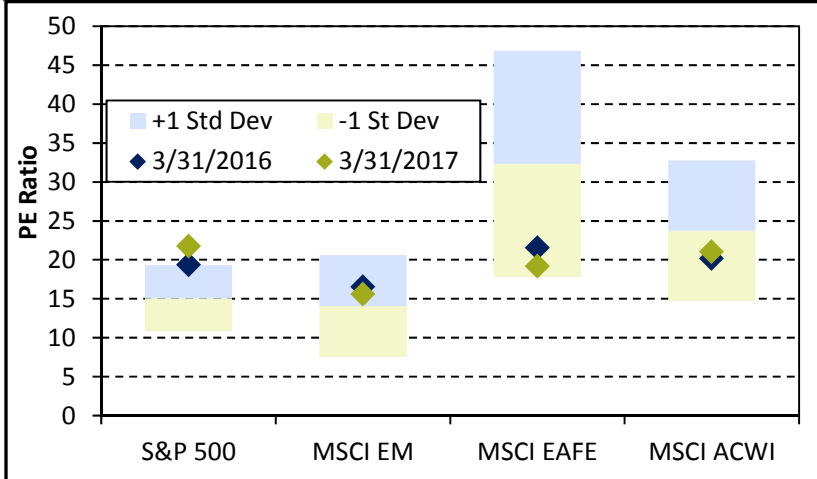
Source: Bloomberg

## EM central bank policies vary by country-specific economic conditions



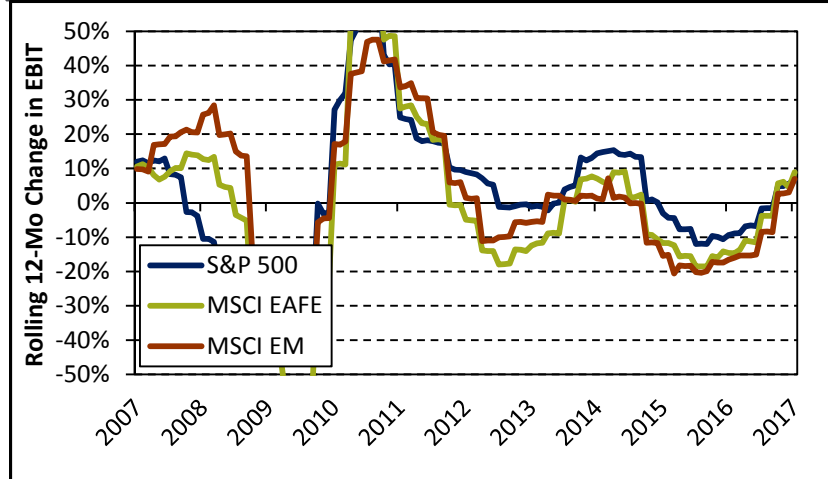
Source: Bloomberg

## EM and EAFE valuations remain lower than the previous year



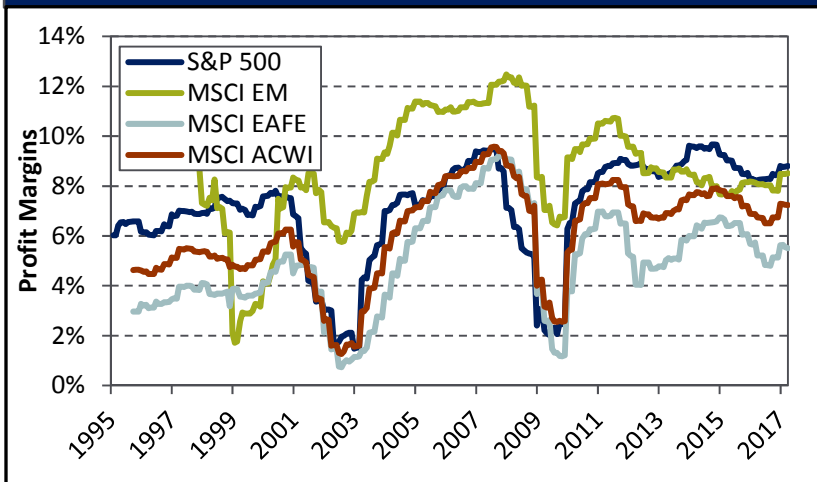
Source: Bloomberg, Standard and Poors, MSCI \*MSCI EAFE is ex UK Telecom  
\*Standard deviation calculations on 20 years of data except S&P 500 (30 years)

## Rolling annual earnings growth continues trending upward off contraction



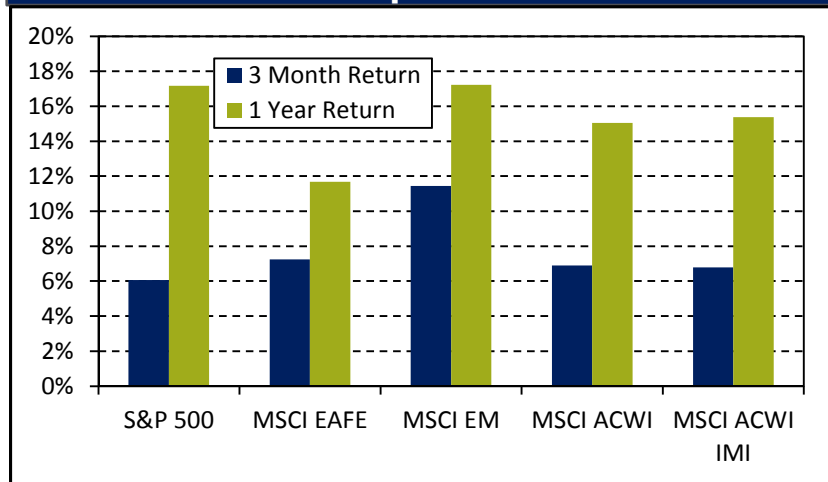
Source: Bloomberg, Standard and Poors, MSCI

## Profit margins continue to increase



Source: Bloomberg, MSCI

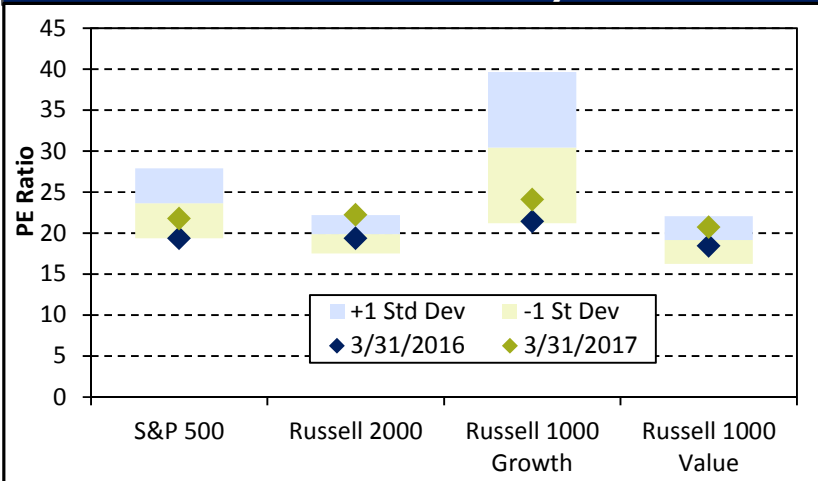
## Equities have experienced positive short-term performance



Source: Bloomberg, MSCI

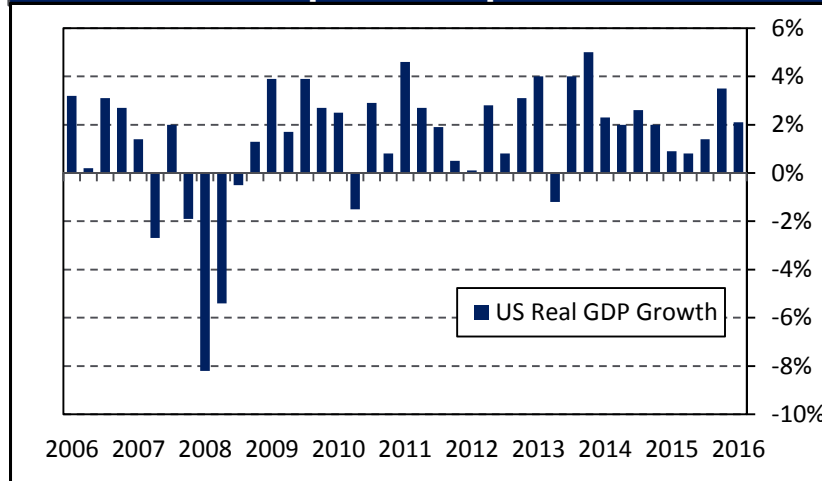
# US Equity

## US equity valuations remain elevated relative to last year



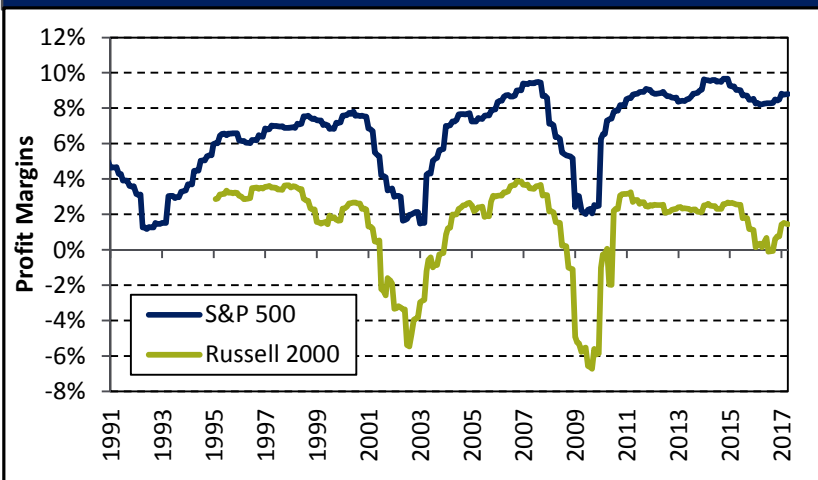
Source: Bloomberg, Standard and Poors, Russell \*Russell 2000 PE is index adjusted positive\* Standard deviation calculations based on 20 years of data

## Real GDP growth declined from the previous quarter



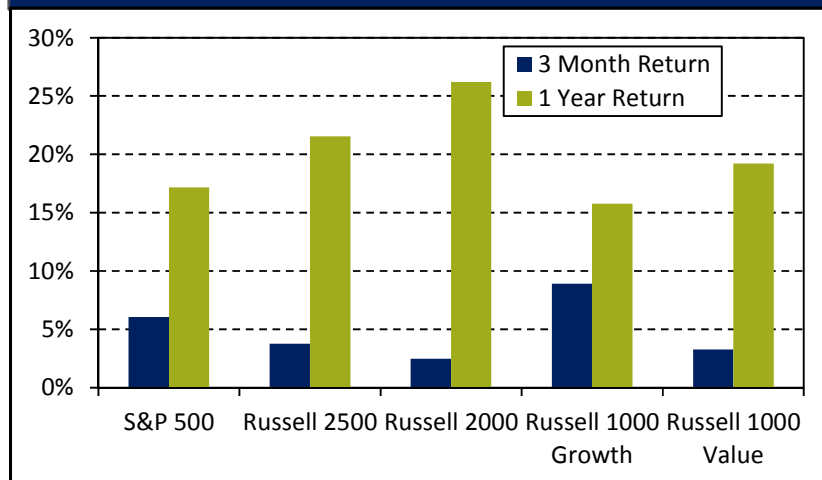
Source: Bloomberg, Bureau of Economic Analysis

## Profit margins experience a slight uptick



Source: Bloomberg, Standard and Poors, Russell

## US equity posts positive short-term returns

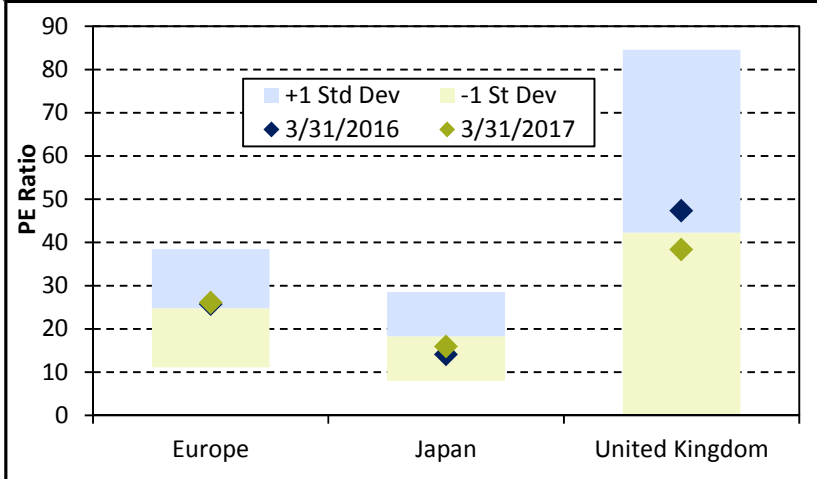


Source: Bloomberg, Standard and Poors, Russell



# International Equity

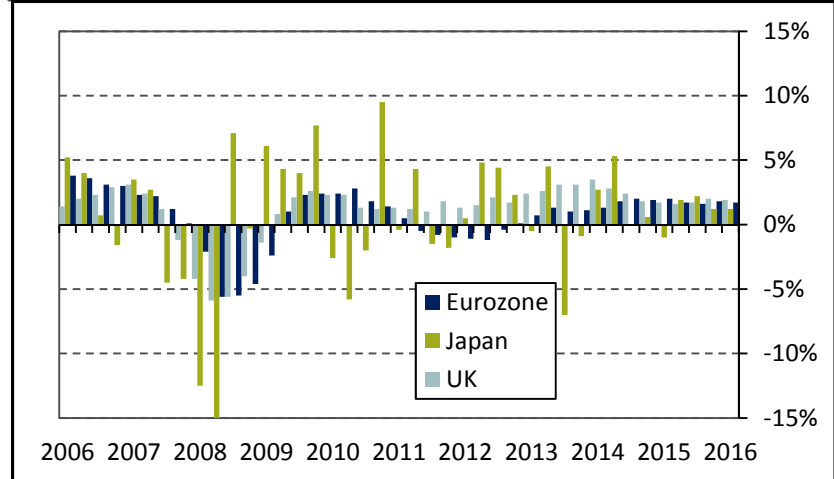
## UK valuation falls below previous year level



Source: Bloomberg, MSCI, FTSE \*UK represented by FTSE 100 Index

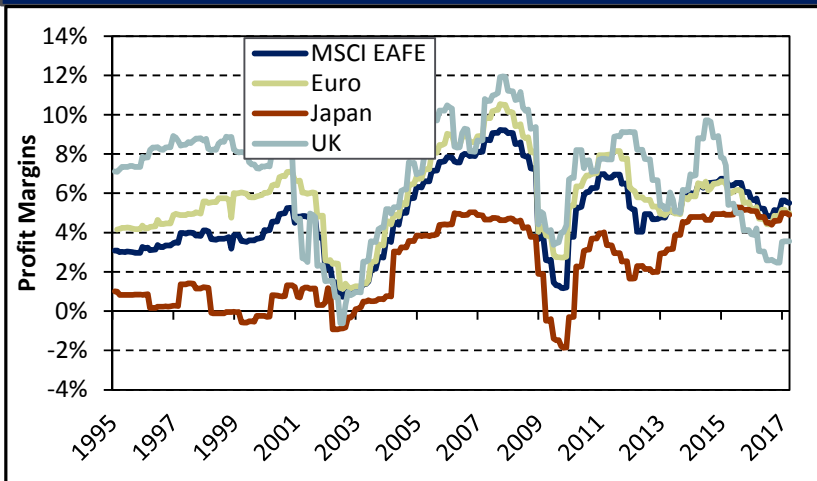
\*Standard deviation calculations based on 20 years of data, with Europe since 12/1998

## International growth has steadied



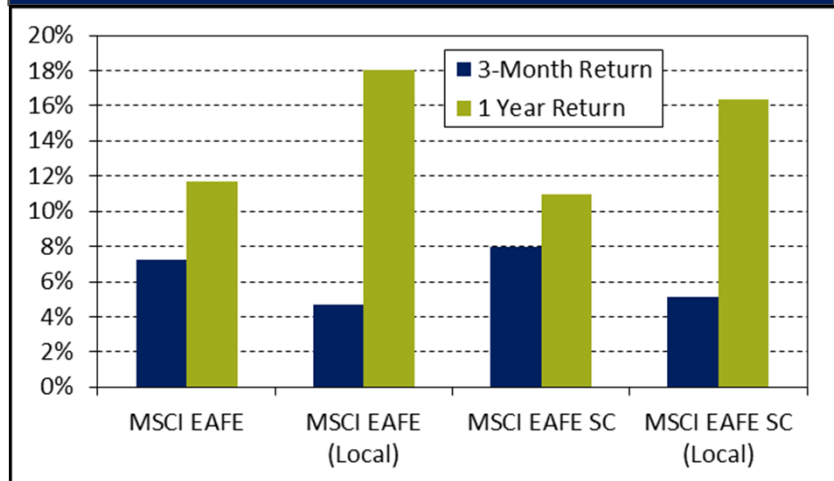
Source: Bloomberg

## Profit margins continue trending higher



Source: Bloomberg, MSCI

## Strong short-term performance for EAFE

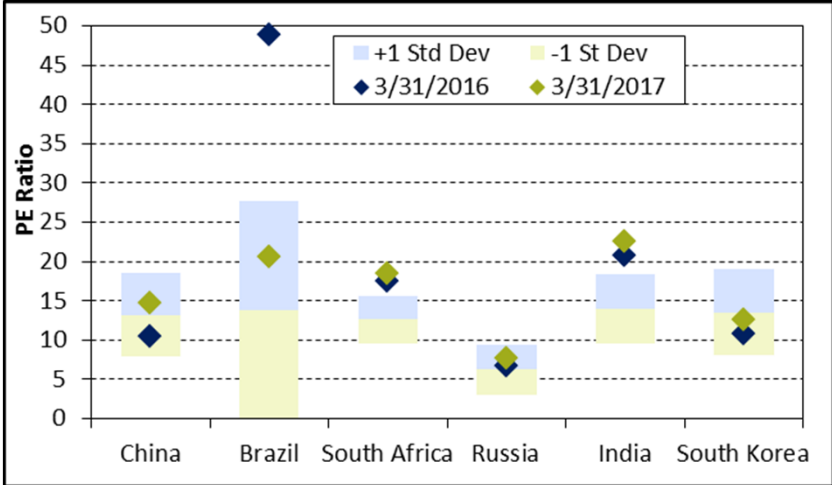


Source: Bloomberg, MSCI



# Emerging Markets Equity

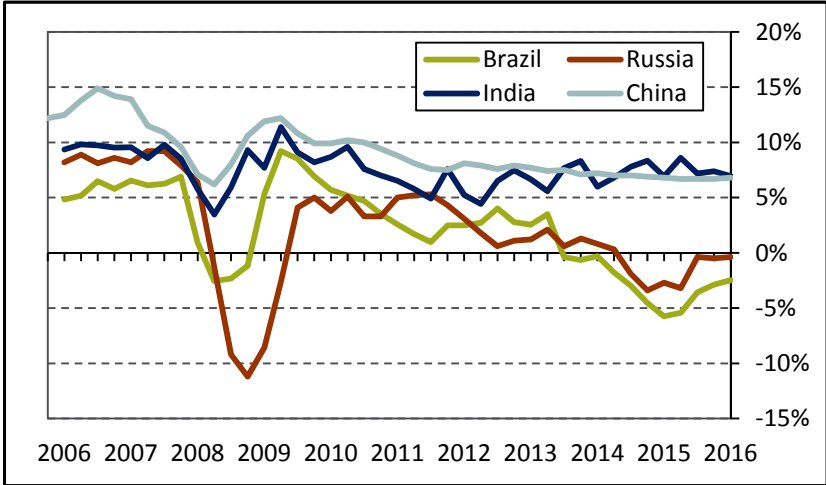
## Ex-Brazil, current year valuations remain higher than the previous year



Source: Bloomberg, MSCI

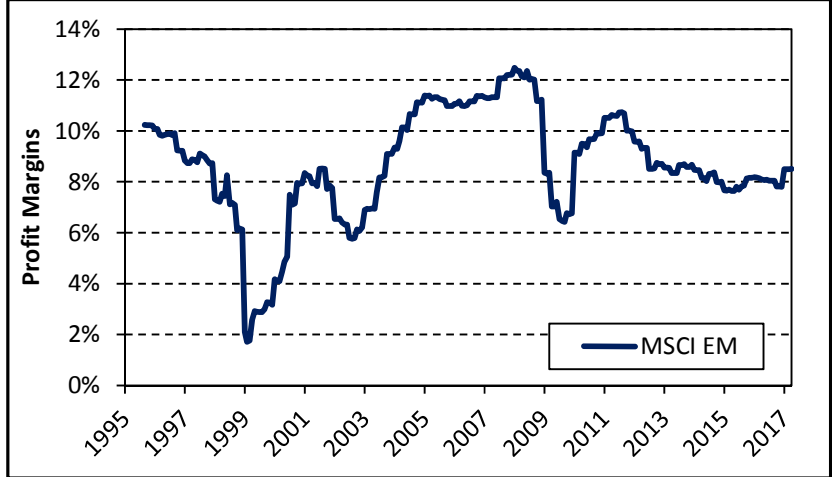
\*Standard deviation calculations based on 20 years of data, with Russia since 01/1998

## Brazil continues to rebound off earnings contraction



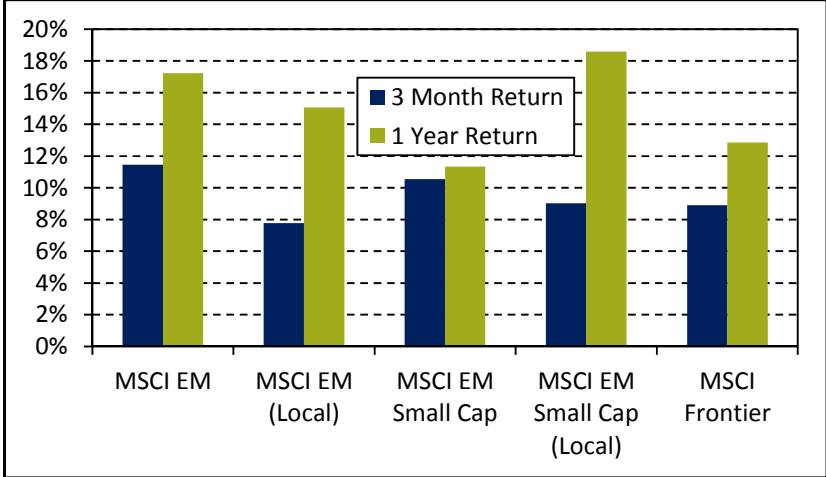
Source: Bloomberg

## Profit margins experience slight uptick



Source: Bloomberg, MSCI

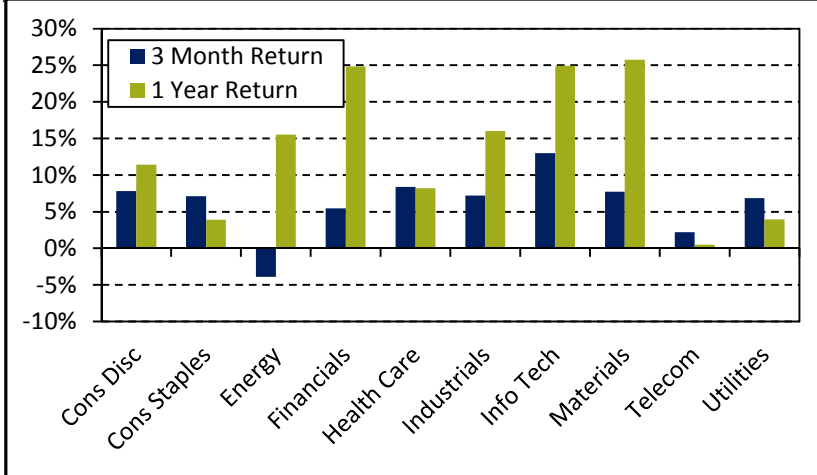
## EM posts strong short-term returns



Source: Bloomberg, MSCI

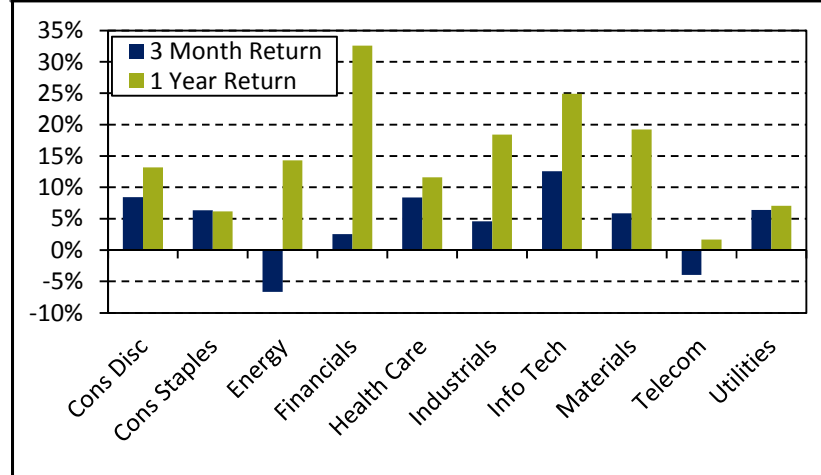
# Global Equity by Sector

## Ex-energy, MSCI ACWI has posted broad short-term returns



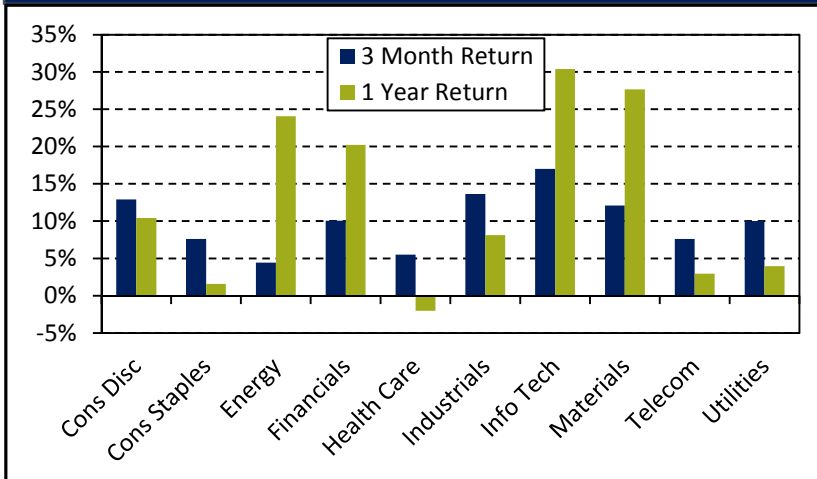
Source: Bloomberg, MSCI

## Energy and Telecom sectors drag S&P 500 short-term returns



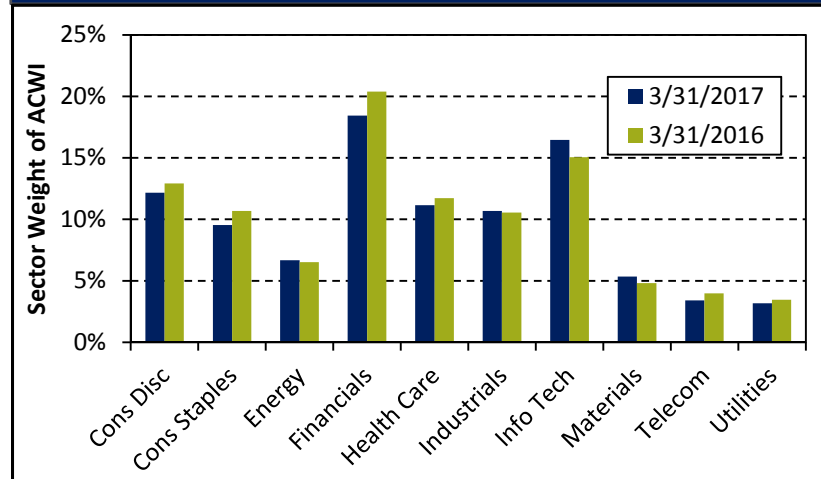
Source: Bloomberg, Standard and Poors

## MSCI EM posts positive short-term returns across all sectors



Source: Bloomberg, MSCI

## Financials sector weight has decreased in favor of Info Tech and Materials

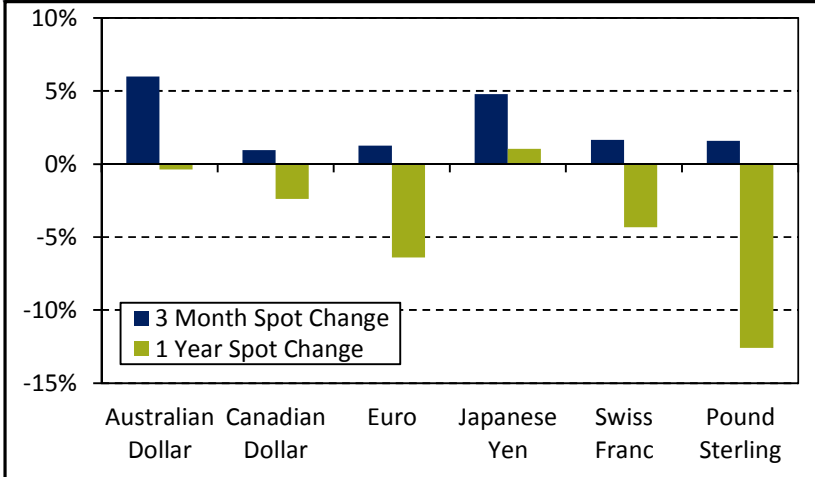


Source: Bloomberg, MSCI



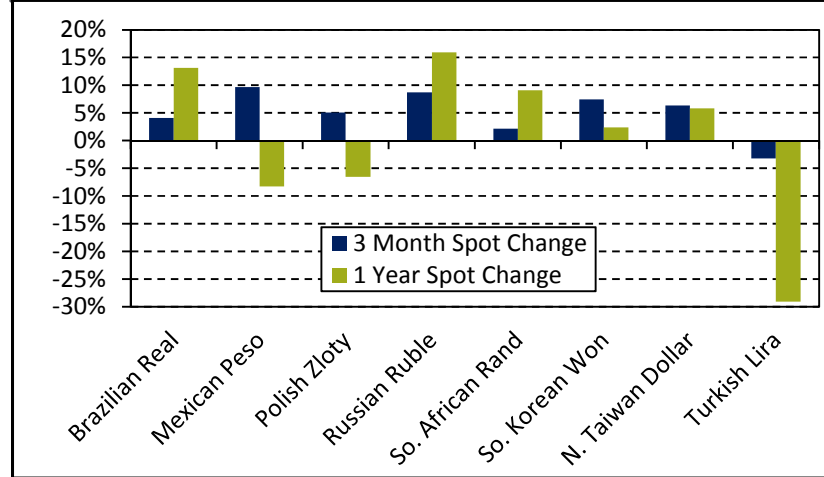
# Currencies

## International currencies have appreciated with the dollar decline



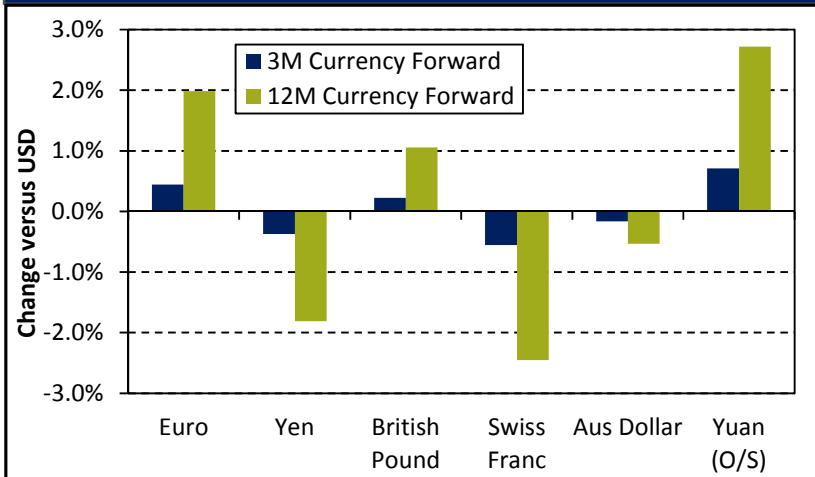
Source: Bloomberg

## The Lira has experienced sharp depreciation



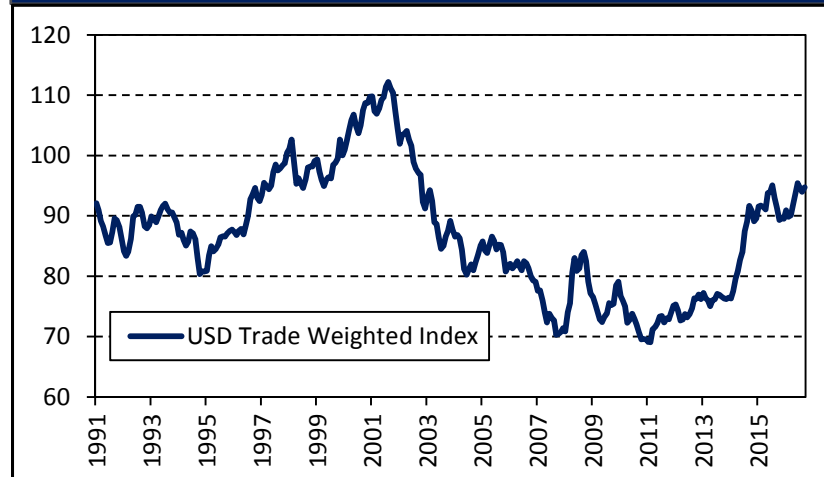
Source: Bloomberg

## USD expectations vary across developed markets



Source: Bloomberg

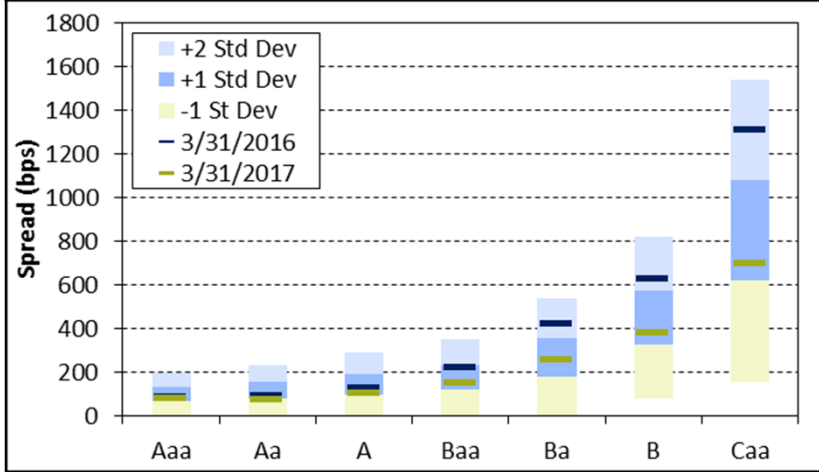
## The dollar has steadied in 2017



Source: Bloomberg, Federal Reserve

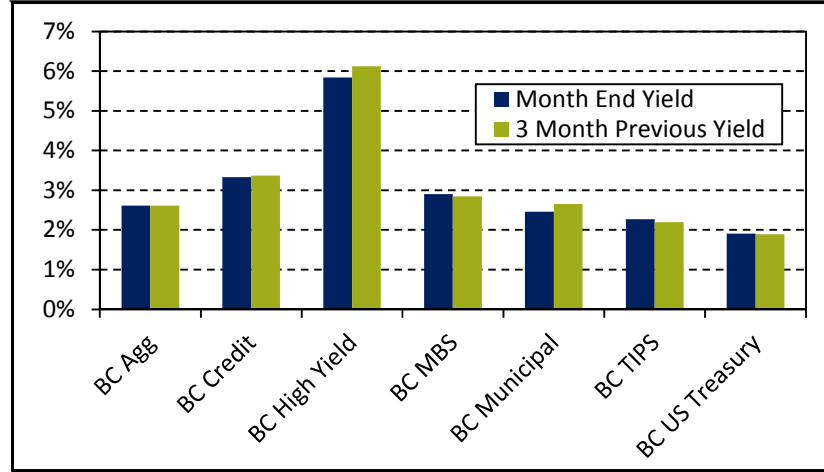


## Spreads remain lower than the previous year



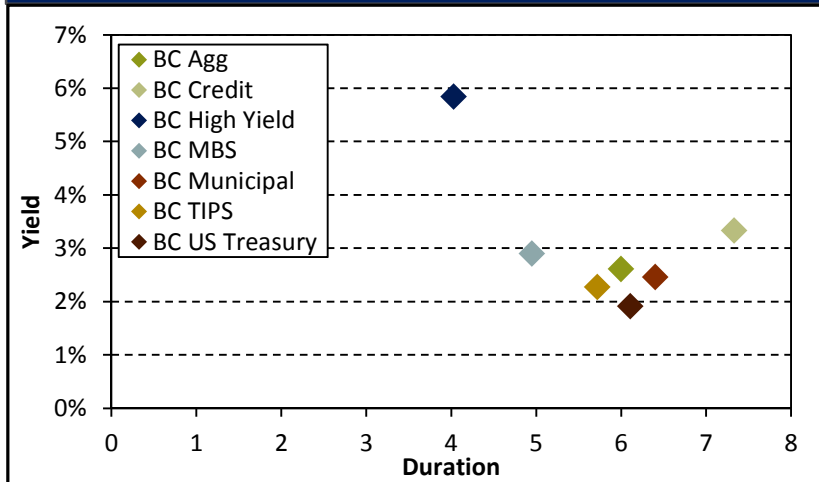
Source: Bloomberg, Barclays  
\*Standard deviation calculations based on 20 years of data

## Yields are similar to three months prior



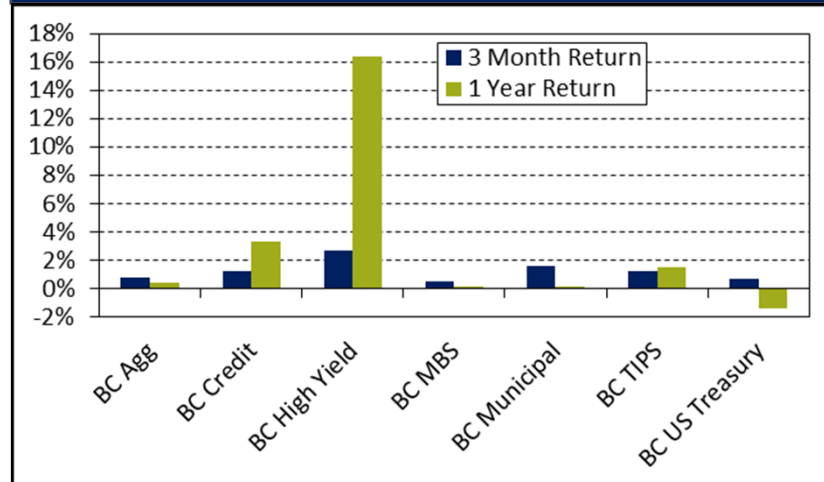
Source: Bloomberg, Barclays

## Similar duration/yield profiles among core indices



Source: Bloomberg, Barclays

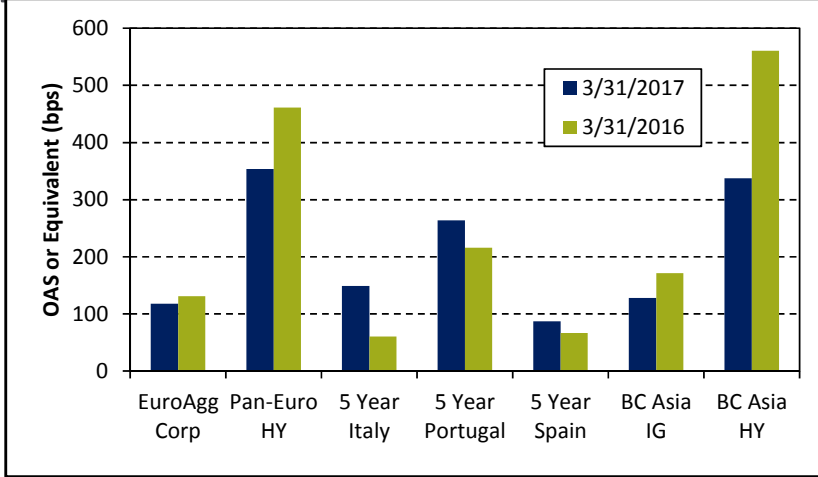
## High yield continues to outperform other fixed income indices



Source: Bloomberg, Barclays

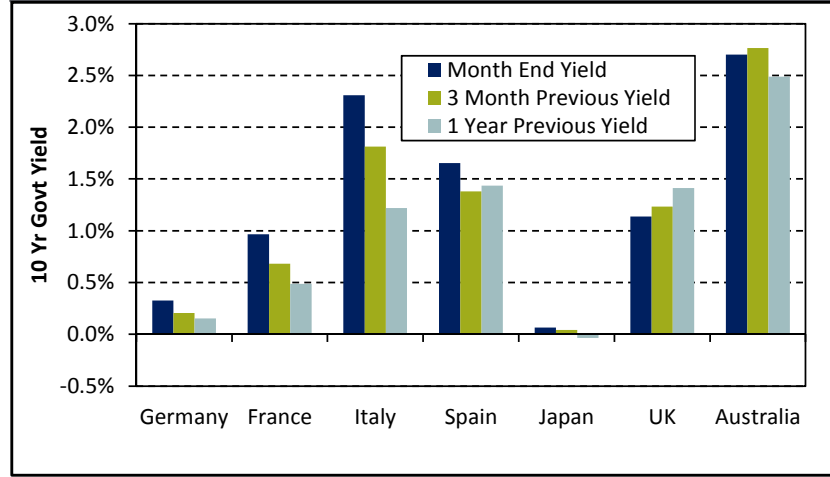
# International Developed Fixed Income

## European periphery yields vary relative to Germany



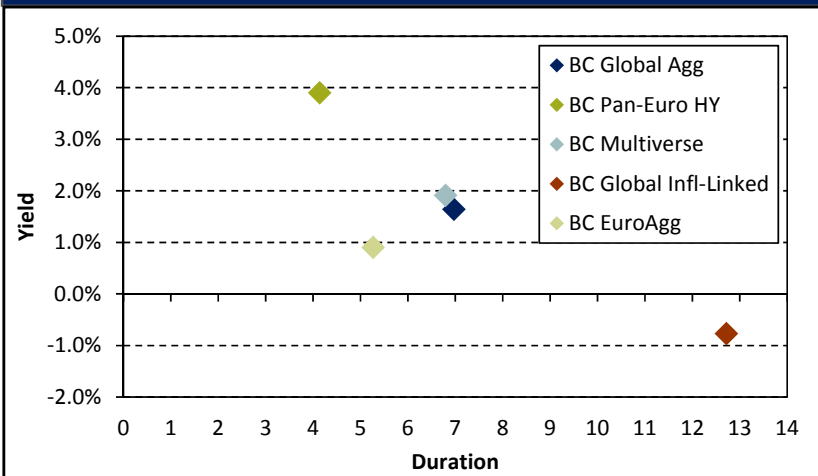
Source: Barclays, Bloomberg, \*European periphery spreads are over equivalent German Bund

## Ex the UK and Australia, international developed market yields have increased



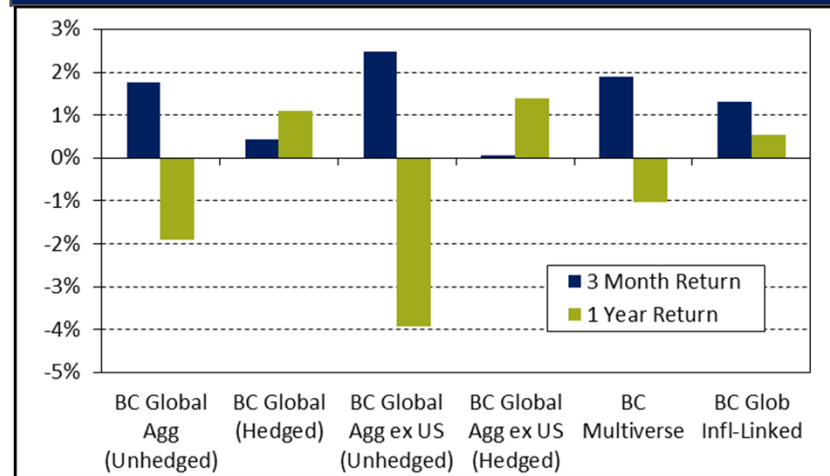
Source: Bloomberg

## Low yields persist in global bond universe



Source: Bloomberg, Citigroup, Barclays

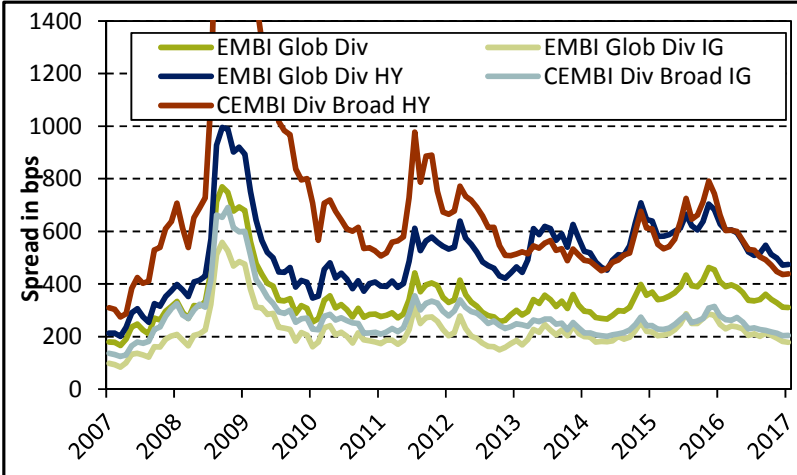
## Global bonds post relatively strong short-term returns



Source: Bloomberg, Citigroup, Barclays

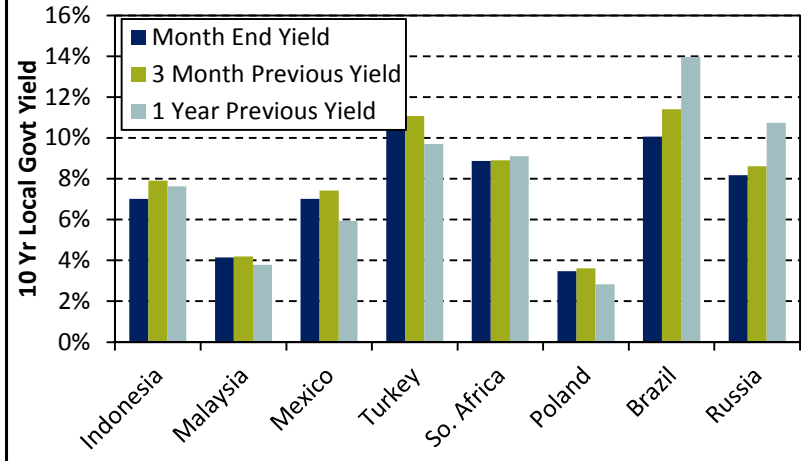
# Emerging Markets Fixed Income

## Spreads continue to decline



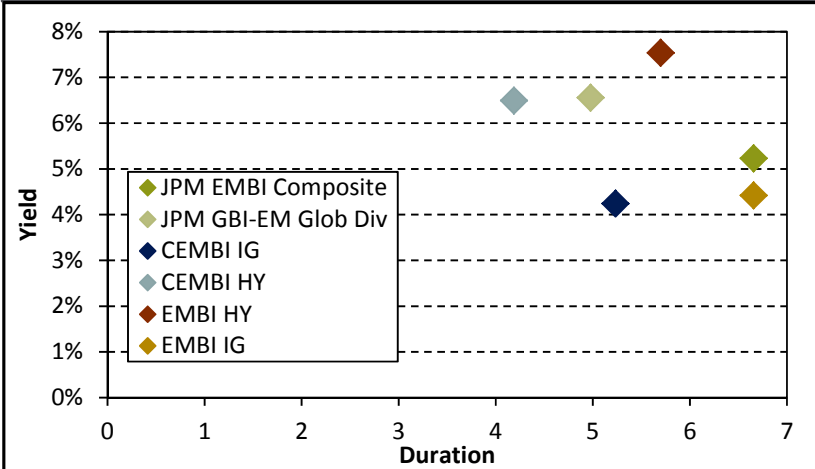
Source: Bloomberg, JP Morgan

## Ex Russia and Brazil, EM local bond yields remain largely unchanged for the year



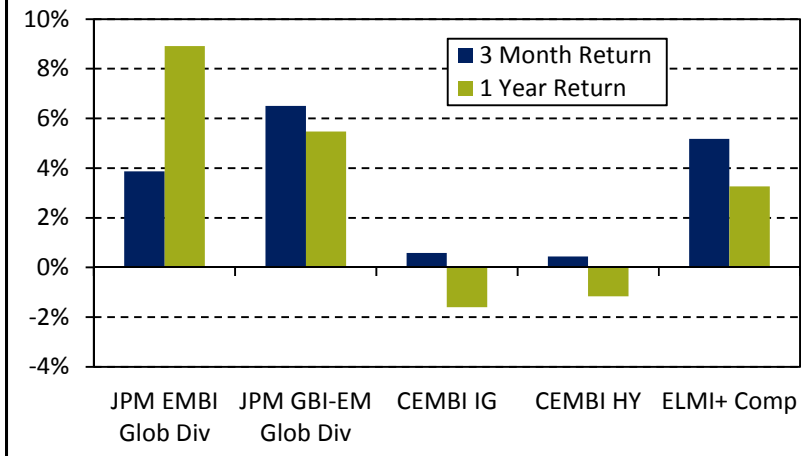
Source: Bloomberg

## EM yields remain attractive versus global counterparts



Source: Bloomberg, JP Morgan

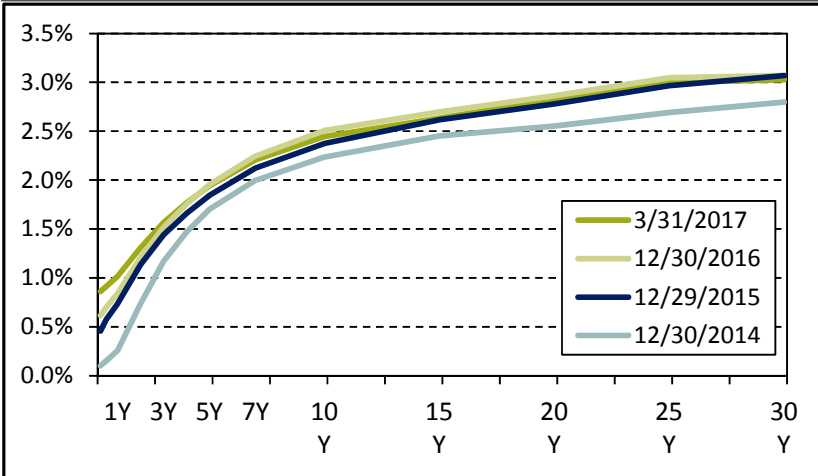
## EM debt posts strong positive short-term returns



Source: Bloomberg, JP Morgan

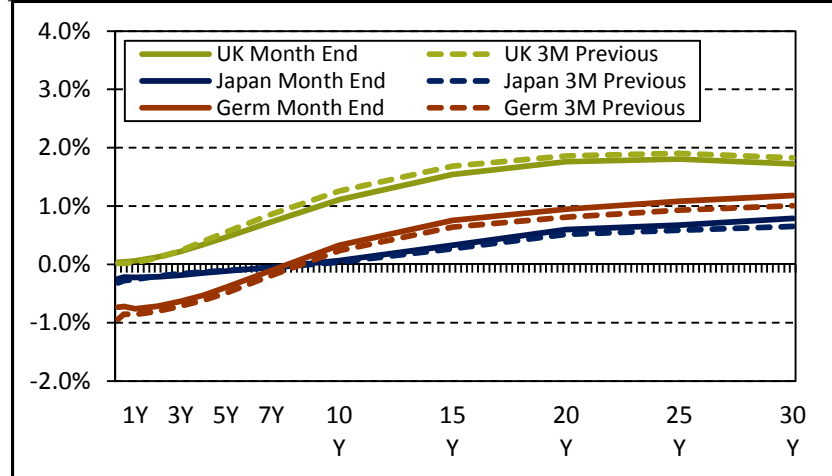


**Short-term rate expectations increased with long-term remaining largely unchanged**



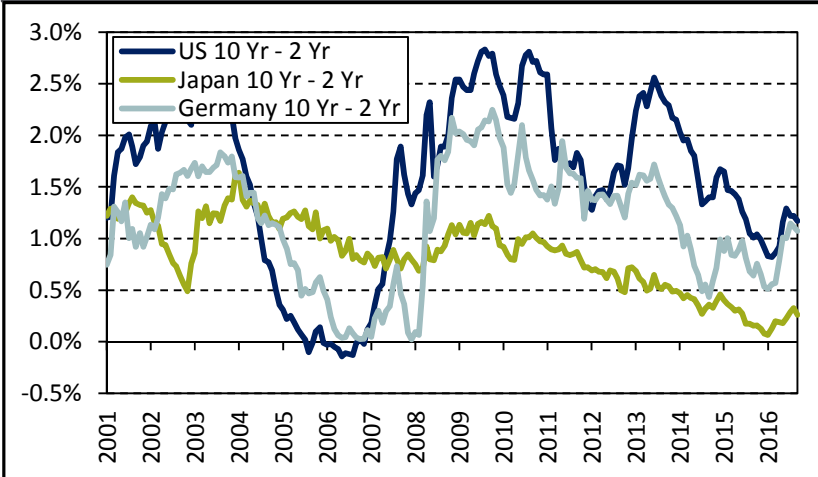
Source: Bloomberg

**Interest rate expectations remain similar to previous months**



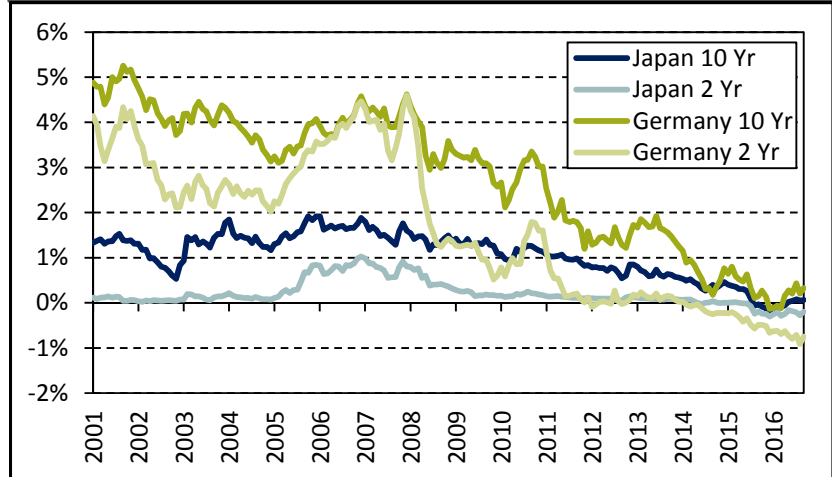
Source: Bloomberg

**10-2 spreads have tightened in the US and Germany**



Source: Bloomberg

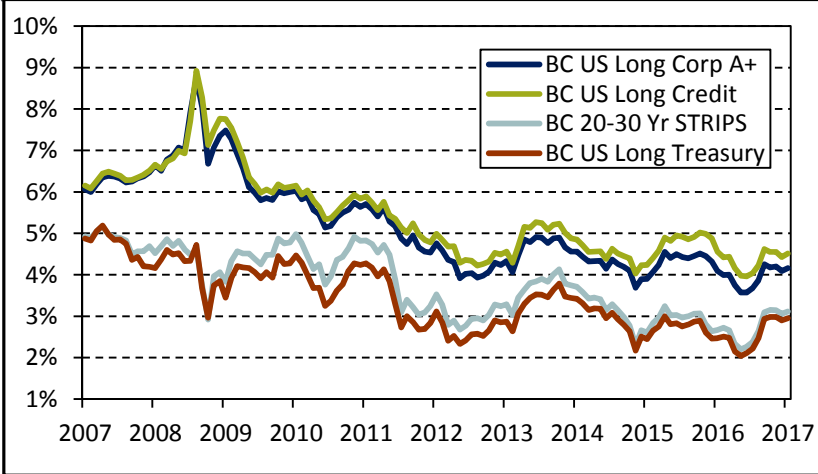
**Sovereign bond yields remain in negative or neutral territory**



Source: Bloomberg

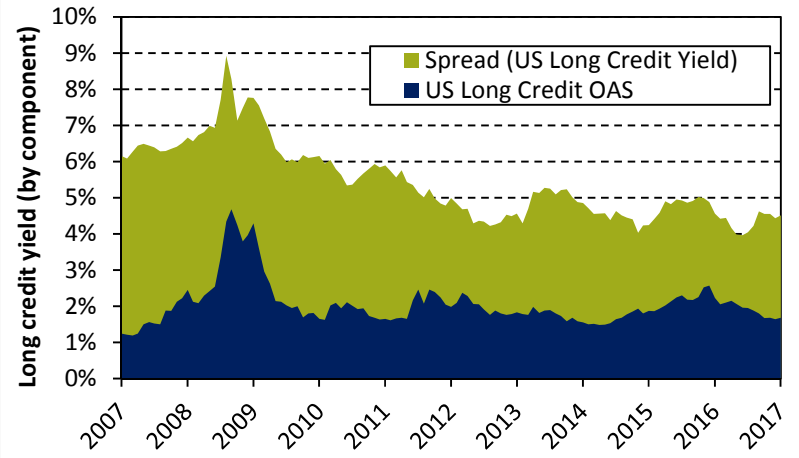
# Long Rates and Liability

## Long duration yields have steadied



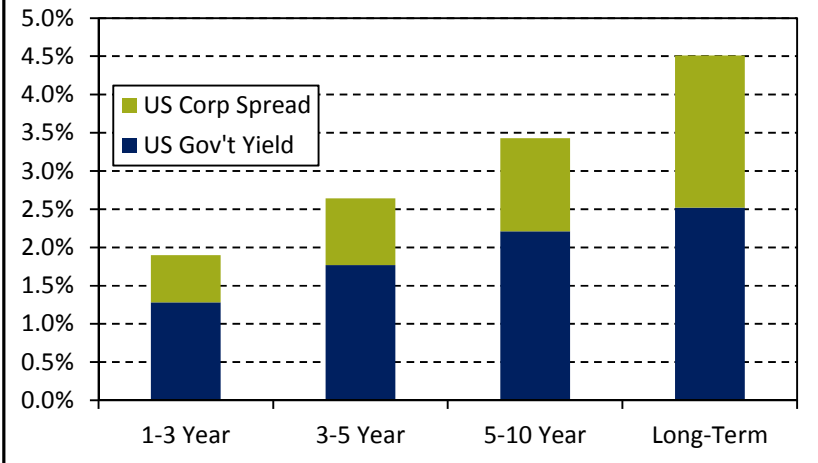
Source: Bloomberg, Citigroup, Barclays

## Long credit yield remains in line with previous years



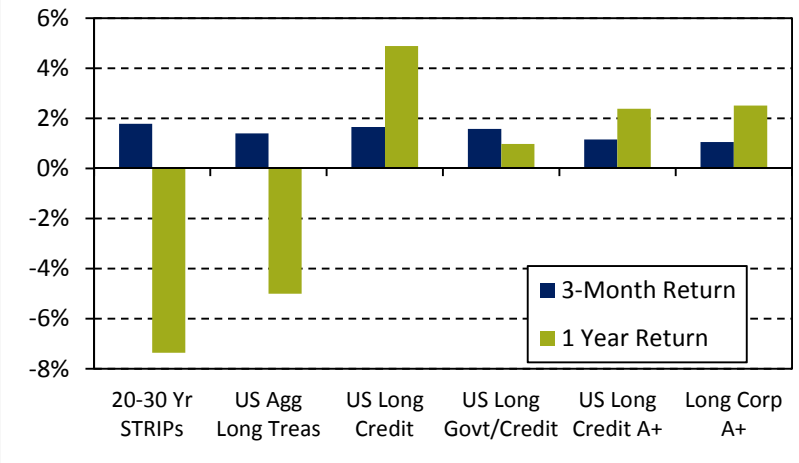
Source: Bloomberg, US Treasury, Barclays, NEPC

## Yield and spread components continue to offer modest returns



Source: Bloomberg, Barclays

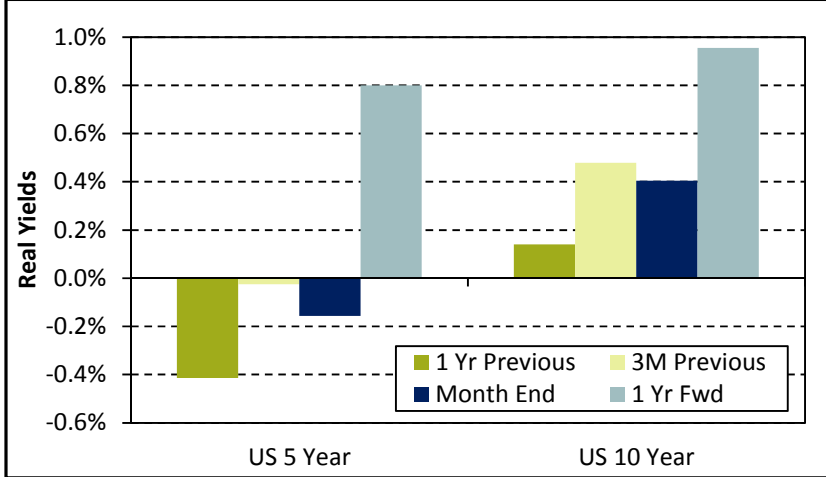
## Long duration fixed income posts short-term gains



Source: Bloomberg, Barclays

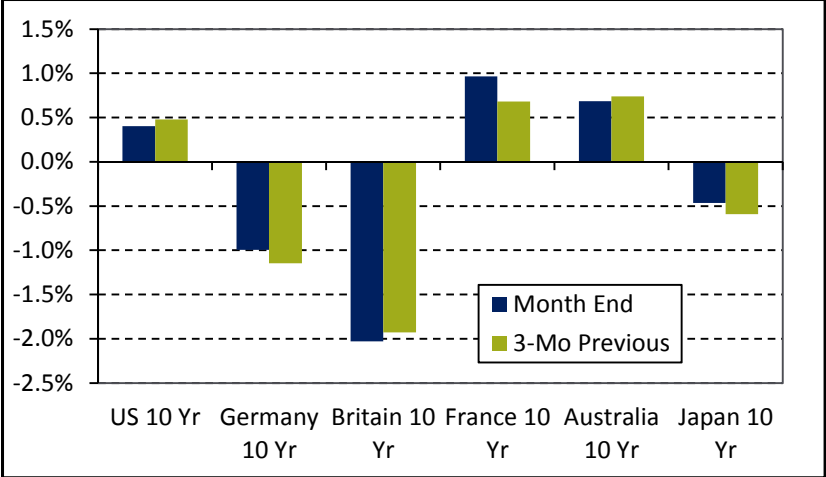
# Inflation and Real Rates

**US 5 and 10 year real yields decreased from three months prior**



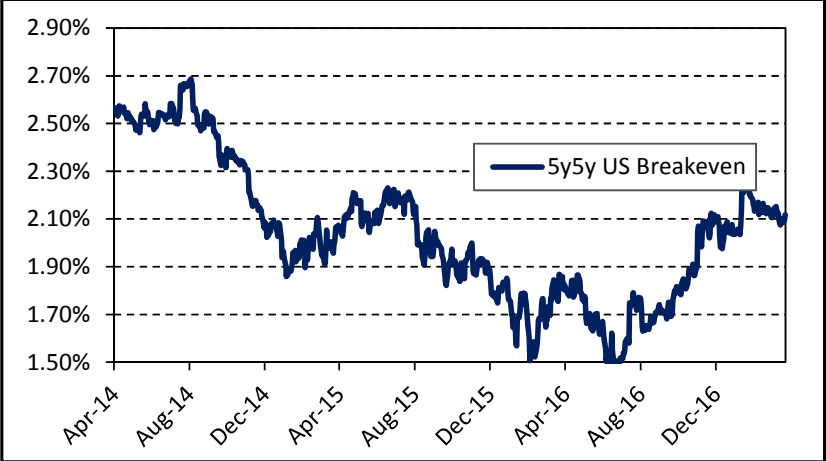
Source: Bloomberg

**France's yield has increased with election uncertainty**



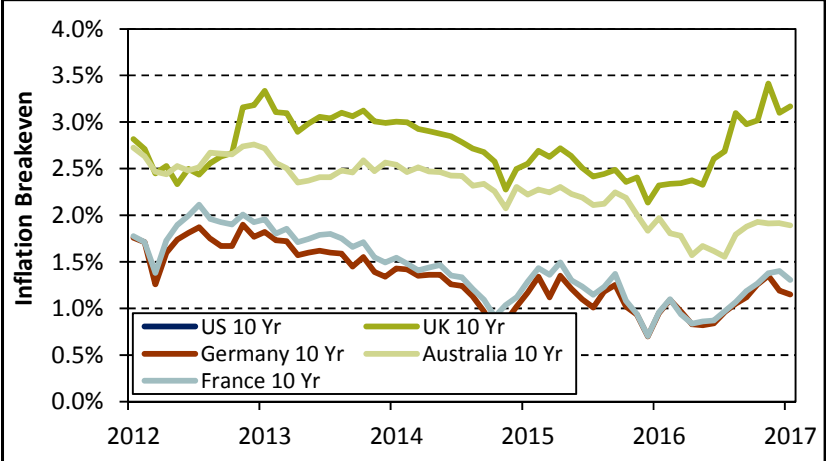
Source: Bloomberg

**US inflation expectations have decreased off of post US election highs**



Source: Bloomberg

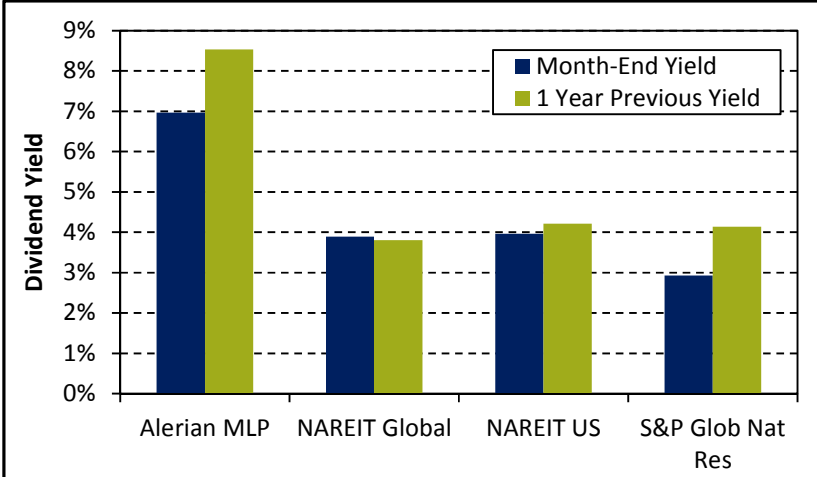
**Germany and France inflation expectations have begun to fall**



Source: Bloomberg

# Inflation-Sensitive Growth Assets

## MLP yields remain similar to the previous year



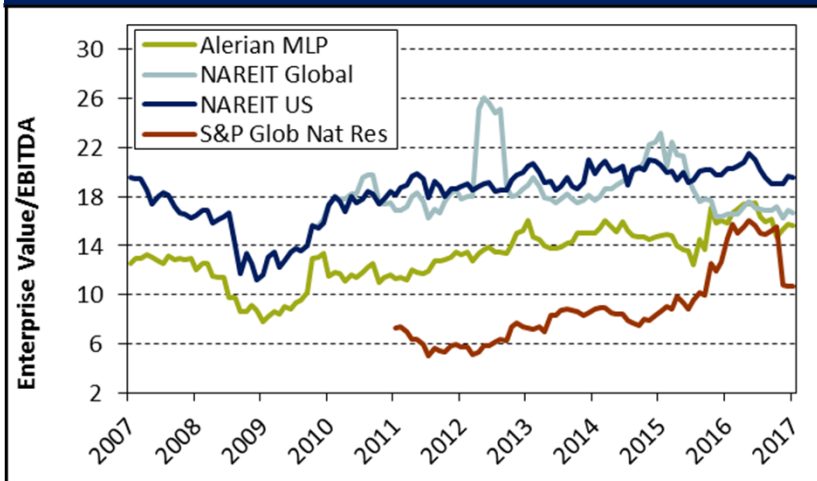
Source: Bloomberg, Alerian, Nareit, Standard and Poors

## Sustained recovery in commercial real estate occupancy rates



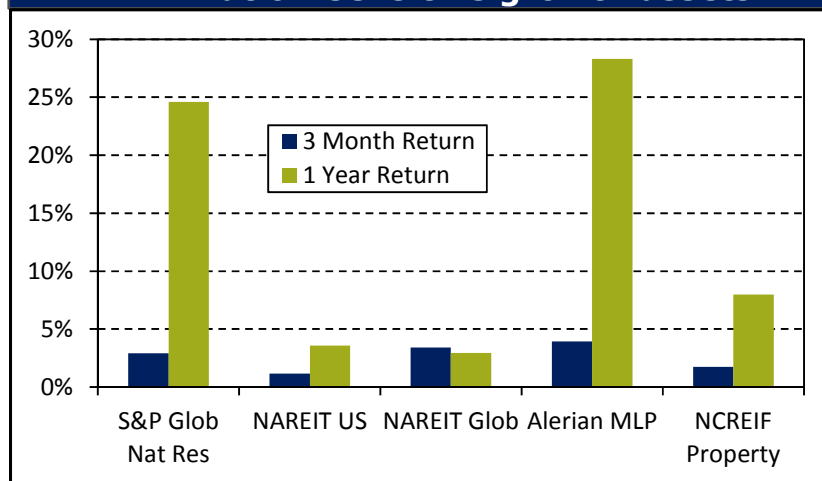
Source: NCREIF

## US REIT valuations have steadied



Source: Bloomberg, US Census Bureau

## Positive short-term performance for inflation-sensitive growth assets

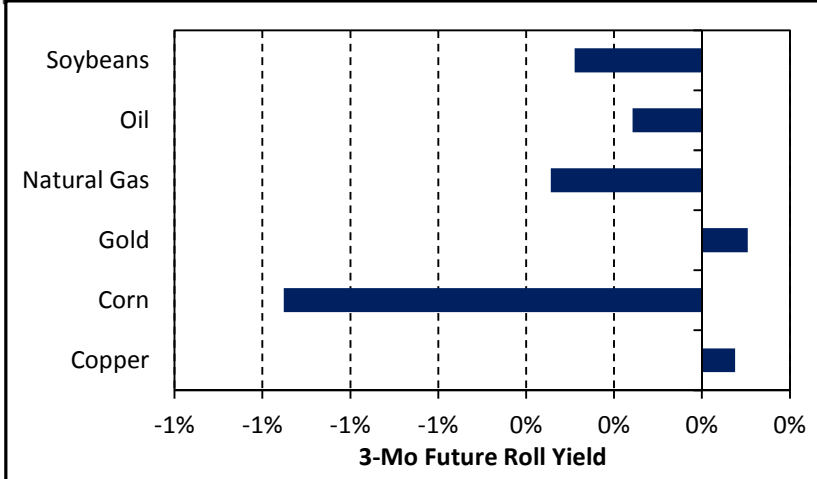


Source: Bloomberg, Alerian, Nareit, Standard and Poors



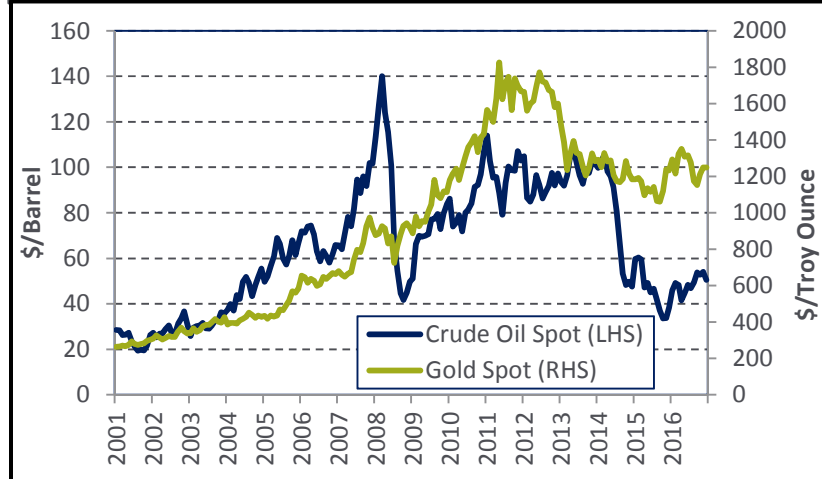
# Commodities

## Negative roll yields remain a hurdle for investing directly in oil and natural gas



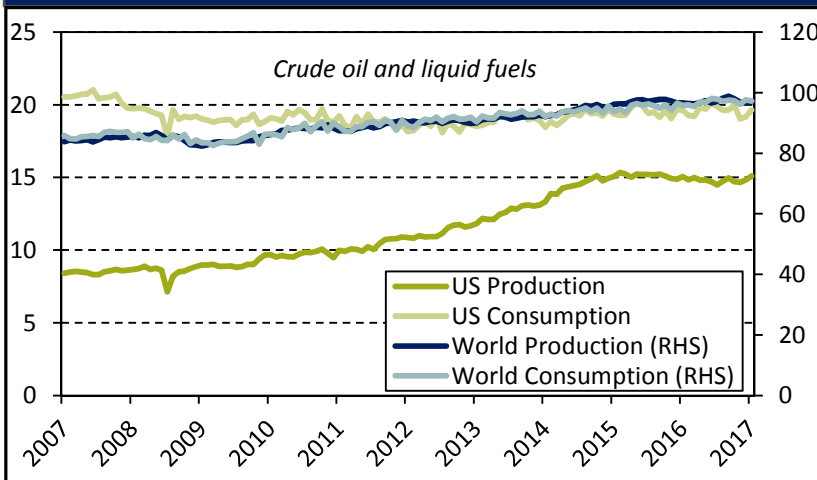
Source: Bloomberg

## Oil has slightly declined for the month



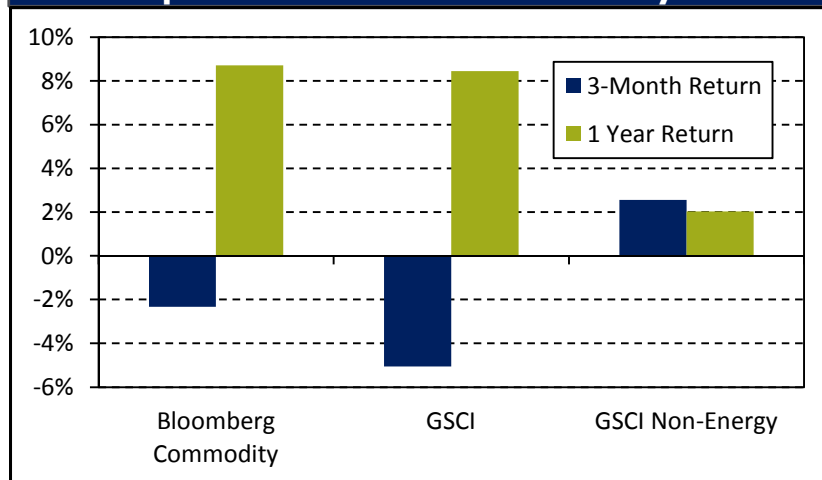
Source: Bloomberg

## Oil production and consumption has steadied



Source: Bloomberg, US Department of Energy \*Crude oil and liquid fuels

## Non-energy commodities have outperformed broad commodity indices



Source: Bloomberg, Standard and Poors





## Glossary of Investment Terminology

The calculation methodology for each measure of performance is outlined below.

Measurement	Description	Equation
<b>Policy Target</b>	Measures policy allocation decisions.	= TARGET ASSET WEIGHTS X INDEX RETURNS
<b>Allocation Index</b>	Measures actual allocation decisions. Deviations from the policy target can be derived. (Allocation Index – Policy Index)	= ACTUAL ASSET WEIGHTS X INDEX RETURNS
<b>Composite (Total Return)</b>	Measures actual performance and can derive active management decisions. (Composite – Allocation Index)	= ACTUAL ASSET WEIGHTS X ACTUAL RETURNS

The calculation methodology for each measure of attribution is outlined below.

Measurement	Description	Equation
<b>Allocation Effect</b>	Measure the effects of overweighting or underweighting managers and asset classes.	= (ACTUAL MANAGER WEIGHT – POLICY TARGET WEIGHT) X POLICY INDEX RETURN
<b>Selection Effect</b>	Measures the managers’ ability to add excess return relative to the policy index.	= (ACTUAL MANAGER RETURN – INDEX RETURN) X POLICY TARGET WEIGHT
<b>Interaction Effect</b>	Measures the cross correlation of both selection and allocation affects and is often referred to as an “error term”.	= (ACTUAL MANAGER RETURN X (ACTUAL MANAGER WEIGHT – POLICY TARGET WEIGHT)) – ((MANAGER WEIGHT – POLICY TARGET WEIGHT) X INDEX RETURN)

- **Past performance is no guarantee of future results.**
- **The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.**
- **Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.**
- **All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.**
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