NEPC, LLC

YOU DEMAND MORE. So do we.SM

City of Hartford Municipal Employees' Retirement Fund

First Quarter 2015
Investment Performance Analysis - Board

Kristin Finney-Cooke, CAIA, Senior Consultant
Doug Moseley, Partner
Will Forde, CAIA, Senior Analyst

255 State Street, Boston, MA 02109 | TEL: 617.374.1300 | FAX: 617.374.1313 | www.nepc.com
BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | SAN FRANCISCO

Table of Contents

	Tab
NEPC Update	**1**
Market Environment	**2**
Executive Summary	**3**
Asset Allocation	**4**
Manager Pages	**5**
Appendix	**6**

NEPC Update

NEPC Updates

First Quarter 2015

Highlights of First Quarter Happenings at NEPC

NEPC Research

Recent White Papers Posted

- *Six Years Later: A Time for Moderation? NEPC's 2015 Asset Allocation (January 2015)* - NEPC's Asset Allocation Committee
- *A Primer on US Equity REITs and Their Role in an Institutional Investment Portfolio (April 2015)* - Sean Ruhmann, Director of Real Assets Research; Tim Bruce, Director of Traditional Research; Matt Ritter, Research Analyst, Real Assets Research; Larissa Davy, Research Associate, Traditional Research - The NEPC research paper provides an overview of US REITs and examines their place in institutional portfolios.

A PRIMER ON US EQUITY REITS AND THEIR ROLE IN AN INSTITUTIONAL INVESTMENT PORTFOLIO

Professional Staff Updates

- We are also pleased to announce that Aarish Patell has joined NEPC as a Research Consultant located in our Boston, MA office. Aarish will be focusing on private markets research.
- NEPC has also added two new Research Analysts to our hedge fund research team, Christian Pieri and Victoria Margosian.

NEPC Client Recognitions

- We are immensely gratified to consistently achieve your favorable client satisfaction ratings in relation to our peers. Last year, you ranked NEPC #1 among the 10 largest firms in the investment consulting business, as measured by the Greenwich Quality Index (GQI). We remain the only firm among the 10 largest investment consultancies with rankings in the top three in 10 of the last 11 years, according to Greenwich Associates' annual survey of over 1,000 large plan sponsors regarding their investment consulting relationships.[1]
- Orange County Employee Retirement System has won the Government Finance Officers Association's Award for Excellence in Government Finance, for its investment fee transparency and management initiatives.

Upcoming Events

- NEPC's 20th Annual Client Conference – May 19-20, 2015 in Boston at the Boston Convention & Exhibition Center (BCEC)
- Headline Speakers:
  - Liz Ann Sonders, Senior Vice President, Chair of the Investment Committee, Windhaven Investment Management, Inc.
  - Don Yaeger, Sports Journalist
  - Rick Rieder, Chief Investment Officer, Fundamental Fixed Income, BlackRock
- Register at www.nepc.com

[1]Source: Greenwich Associates, 2014 Evaluations by U.S. Institutional Investors. Greenwich Associates is an independent research firm. Its rankings do not represent an endorsement of NEPC. Past performance is no guarantee of future results.

Market Environment

Index Performance Summary as of 3/31/2015

	2008	2009	2010	2011	2012	2013	2014	JAN	FEB	MAR	YTD
Barclays US Strips 20+ Yr	59.5%	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	13.8%	-8.5%	1.4%	5.5%
Russell 2500	-36.8%	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.0%	6.0%	1.3%	5.2%
MSCI EAFE	-43.4%	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	0.5%	6.0%	-1.5%	4.9%
FTSE NAREIT REITs	-37.7%	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	6.7%	-3.5%	1.7%	4.8%
Russell 2000	-33.8%	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-3.2%	5.9%	1.7%	4.3%
Barclays US Govt/Cred Long	8.4%	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	6.4%	-3.4%	0.5%	3.4%
Barclays US Long Credit	-3.9%	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	5.2%	-2.2%	0.2%	3.1%
Barclays US Corp High Yield	-26.2%	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	0.7%	2.4%	-0.5%	2.5%
MSCI ACWI	-42.2%	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-1.6%	5.6%	-1.5%	2.3%
MSCI EM	-53.3%	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	0.6%	3.1%	-1.4%	2.2%
Credit Suisse Lev Loan	-28.8%	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	0.3%	1.4%	0.4%	2.1%
JPM EMBI Global Div	-12.0%	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	0.9%	0.9%	0.2%	2.0%
Credit Suisse Hedge Fund	-19.1%	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	0.8%	1.1%	1.1%	1.9%
Barclays US Agg Bond	5.2%	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	2.1%	-0.9%	0.5%	1.6%
Russell 1000	-37.6%	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	-2.7%	5.8%	-1.2%	1.6%
Barclays US Agg Interm	4.9%	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.4%	-0.5%	0.5%	1.3%
Barclays Municipal	-2.5%	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	1.8%	-1.0%	0.3%	1.0%
S&P 500	-37.0%	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	-3.0%	5.7%	-1.6%	1.0%
Barclays US Govt/Cred 1-3 Yr	5.0%	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.5%	-0.2%	0.2%	0.6%
Citi WGBI	10.9%	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-0.3%	-1.1%	-1.1%	-2.5%
JPM GBI EM Global Div	-5.2%	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	0.3%	-1.3%	-3.0%	-4.0%
Alerian MLP	-36.9%	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-3.1%	2.1%	-4.2%	-5.2%
Bloomberg Commodity	-35.6%	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-3.3%	2.6%	-5.1%	-5.9%

Source: Morningstar Direct

- **Protracted bull market, slow growth, and low interest rates persist**
- **Global monetary policies and capital markets continue to diverge**
- **The US economy shows strength relative to other developed markets**
- **Fed rate hikes are on the horizon but markets expect a slow pace**
- **Emerging Market fatigue tangible; low valuations cannot be ignored**

January 2015 – NEPC 2015 General Actions for Clients

- **Confirm alignment of portfolio positioning with long-term objectives**
- **Balance desire for increased return with recognition of downside risks**
- **Evaluate impact of expected US dollar strength on non-US allocations**
- **Remain committed to high conviction active manager exposures**
- **Seek niche private strategies to mitigate challenge of high valuations**

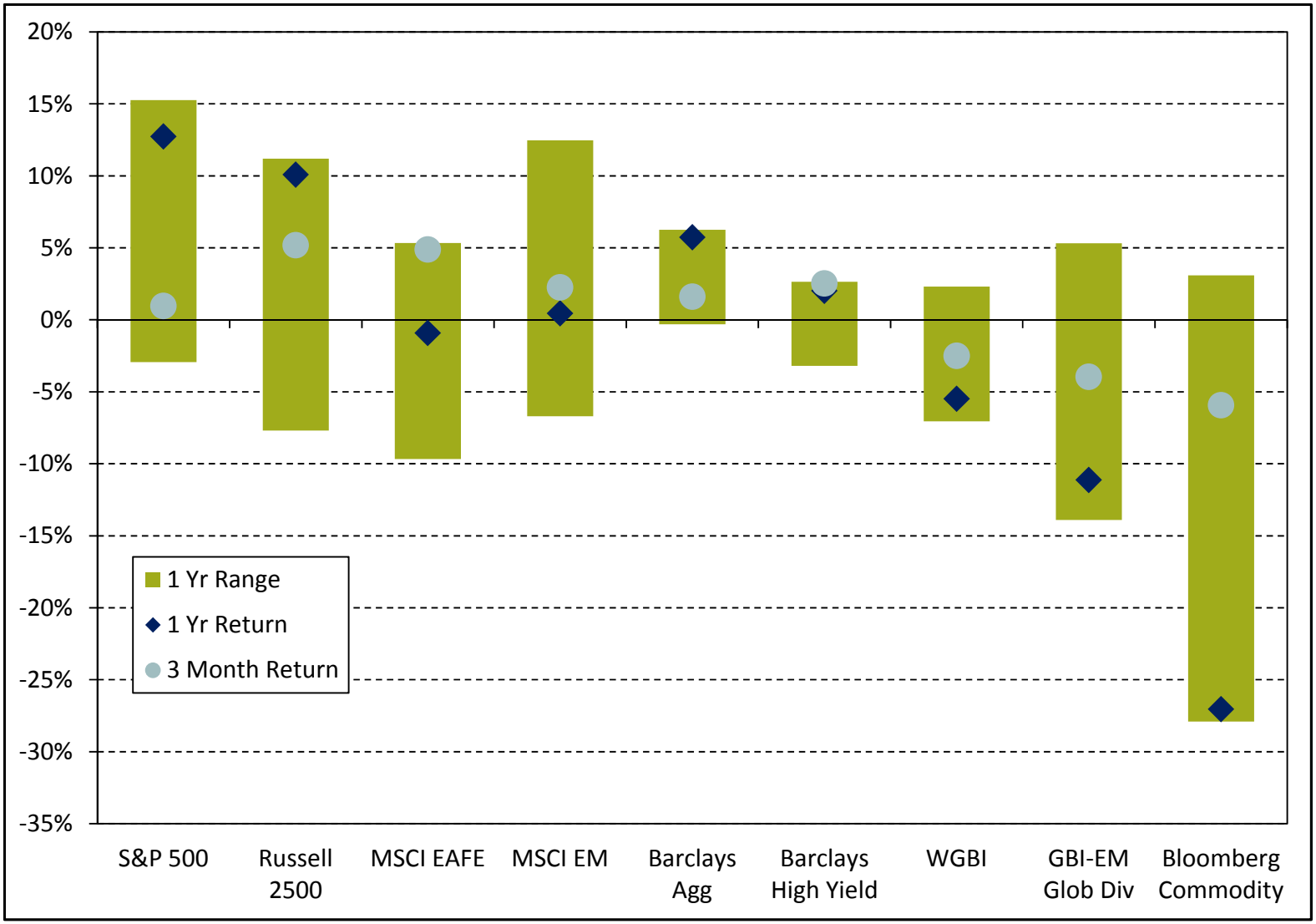
First Quarter 2015 Market Summary

- **Continued US economic stability but tepid equity results**
  - Market was modestly positive and able to absorb rate volatility
  - Stronger dollar perhaps hurting corporate earnings
- **Global stimulation flowing through to markets**
  - Europe and Japan responding to Quantitative Easing
  - Local equities (up), rates (lower), and currencies (weaker) all responding as expected
- **US rates experience volatility**
  - Dragged down by global rate gravity in January
  - Reflecting economic divergence due to stronger US conditions in February
  - Moderating once again in March
- **A fairly mild quarter for Emerging markets**
  - Equities stronger than US
  - Currencies experiencing further (mild) weakness
- **Oil prices appeared to bottom but remained volatile**
  - Bottoming is not synonymous with stability
  - Volatility likely to continue
  - Many projects have been halted
  - Limited distress so far but credit conditions likely to weaken at sustained lower prices

Questions to Ponder and Potential Actions…

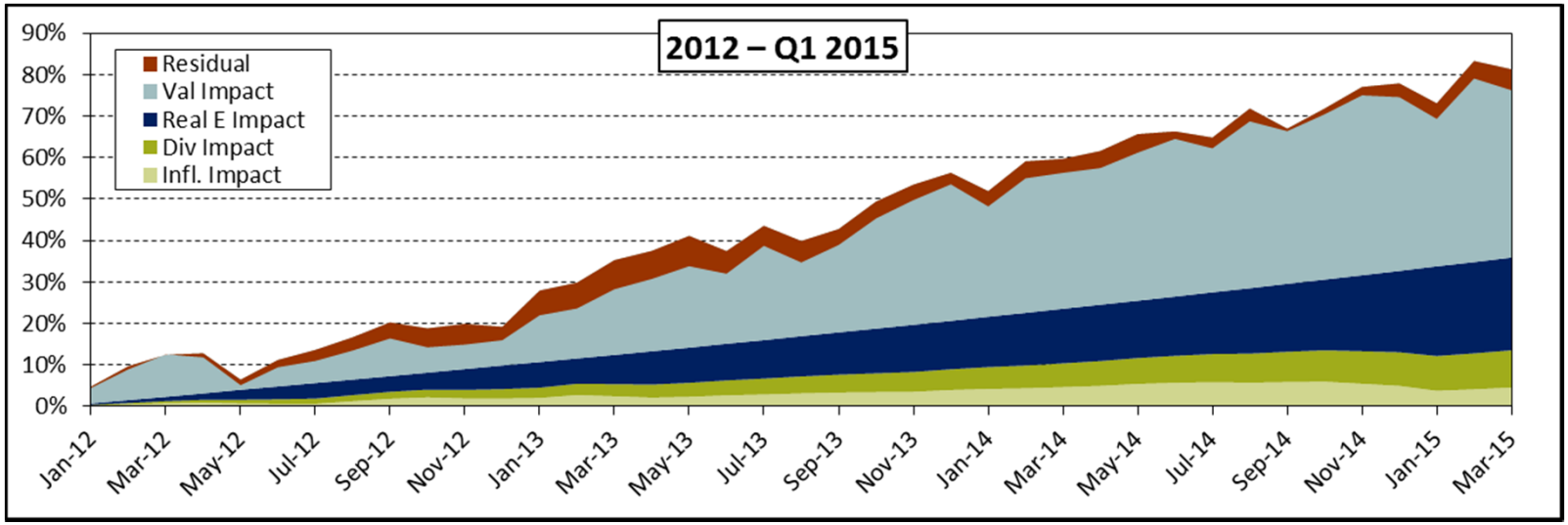
- **Future path of US equities**
  - When does equity market finally roll over?
  - Should we start to get more defensive?
    - Cash allocation? Defensive-oriented managers? Equity long-short?
- **QE in Europe and Japan**
  - Structural issues remain, how much of a pop can Euro/Japan equity markets provide?
  - How do we manage currency hedge timing now?
- **Early 2015 rate volatility**
  - A sign of things to come as market digests potential for rising Fed Funds?
  - Do fixed income allocations provide appropriate defensive characteristics?
    - Or should a barbell approach (cash/return-seeking plus long duration) be employed?
- **EM – quiet quarter**
  - Could further dollar strength lead to further currency weakness?
    - Consider a blended debt approach if not already in place
    - Consider active strategies that tilt towards energy importers (Asia) and away from energy exporters (Latin America/Russia)
- **Oil price volatility**
  - What's the path from here?
  - What's the opportunity?
    - Prepare dry powder to act on distressed opportunities

Broad Market Performance Summary as of 3/31/2015

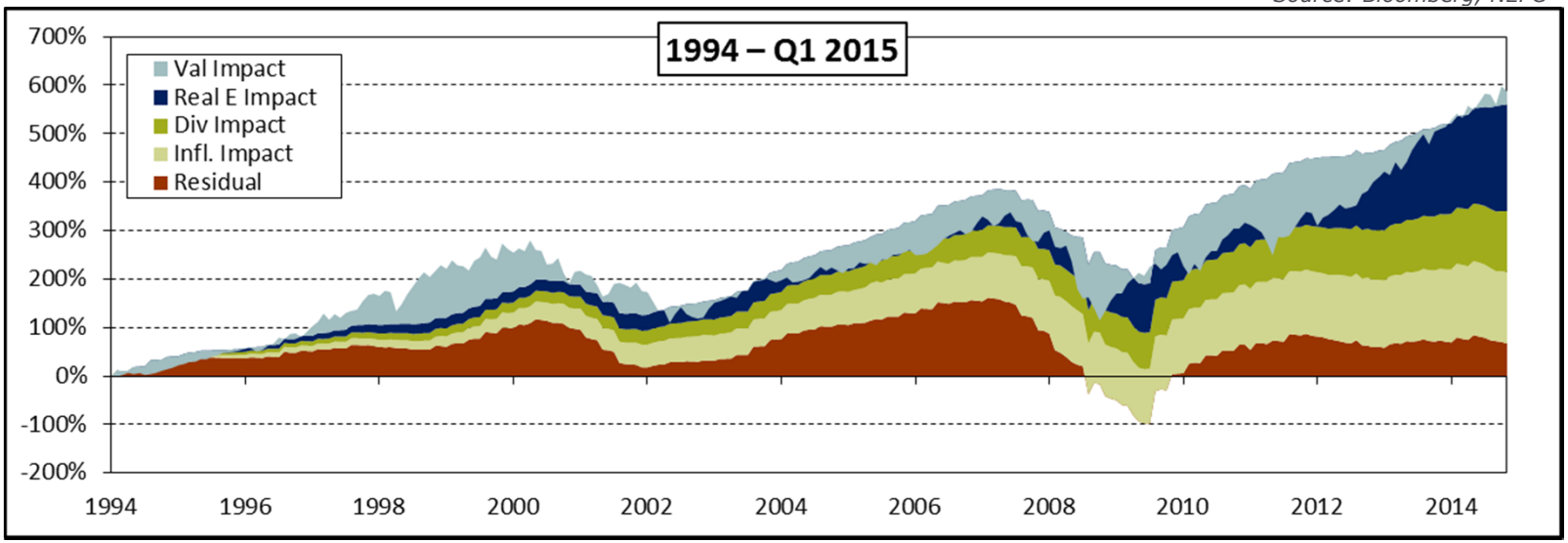


Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, Citigroup, JP Morgan
**1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago*

Building Blocks for US Equities

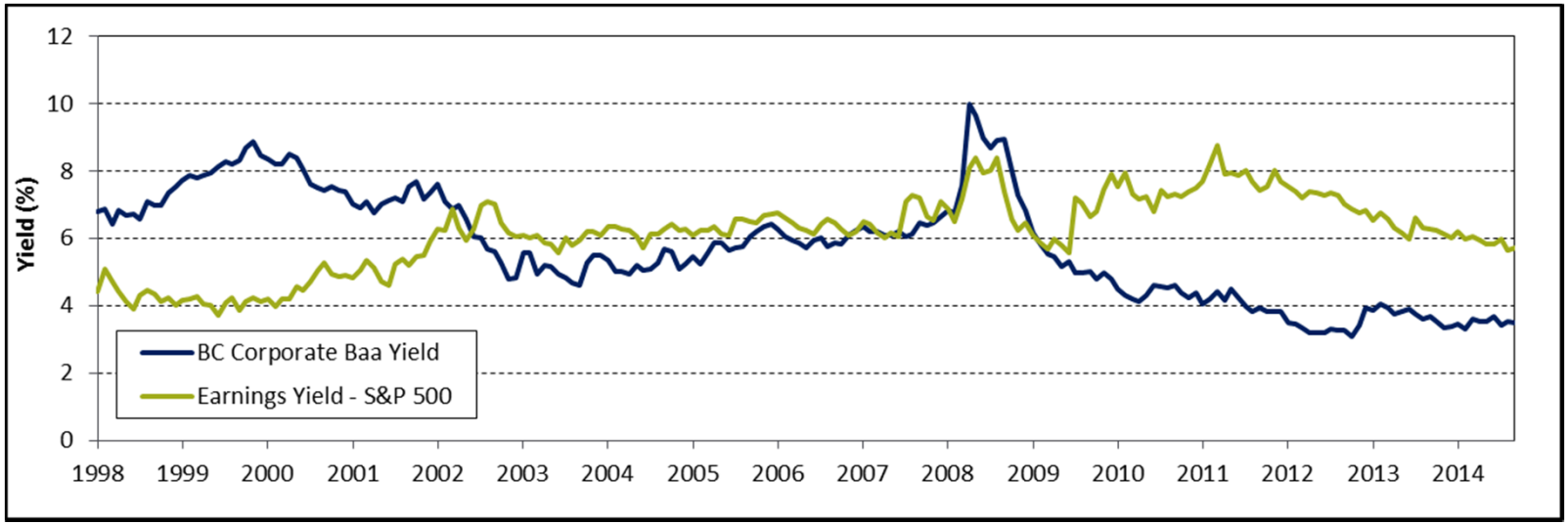


Source: Bloomberg, NEPC

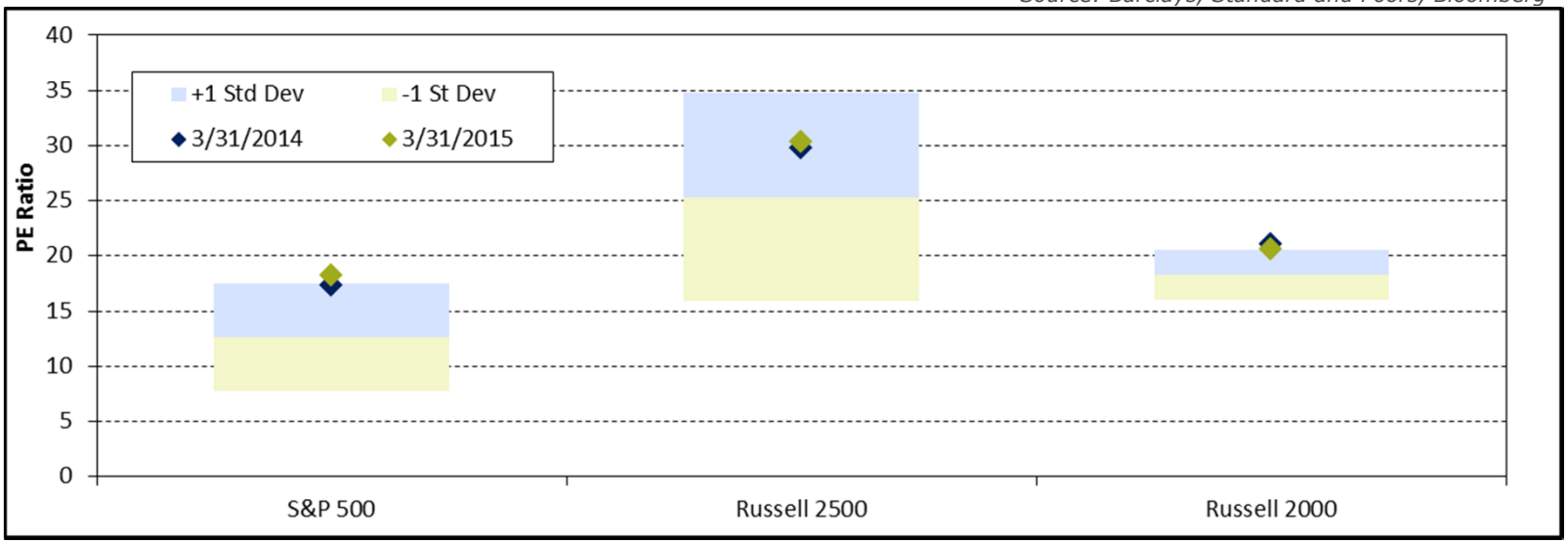


Source: Bloomberg, NEPC

US Equity… Relative Yield Attractiveness but High Valuations

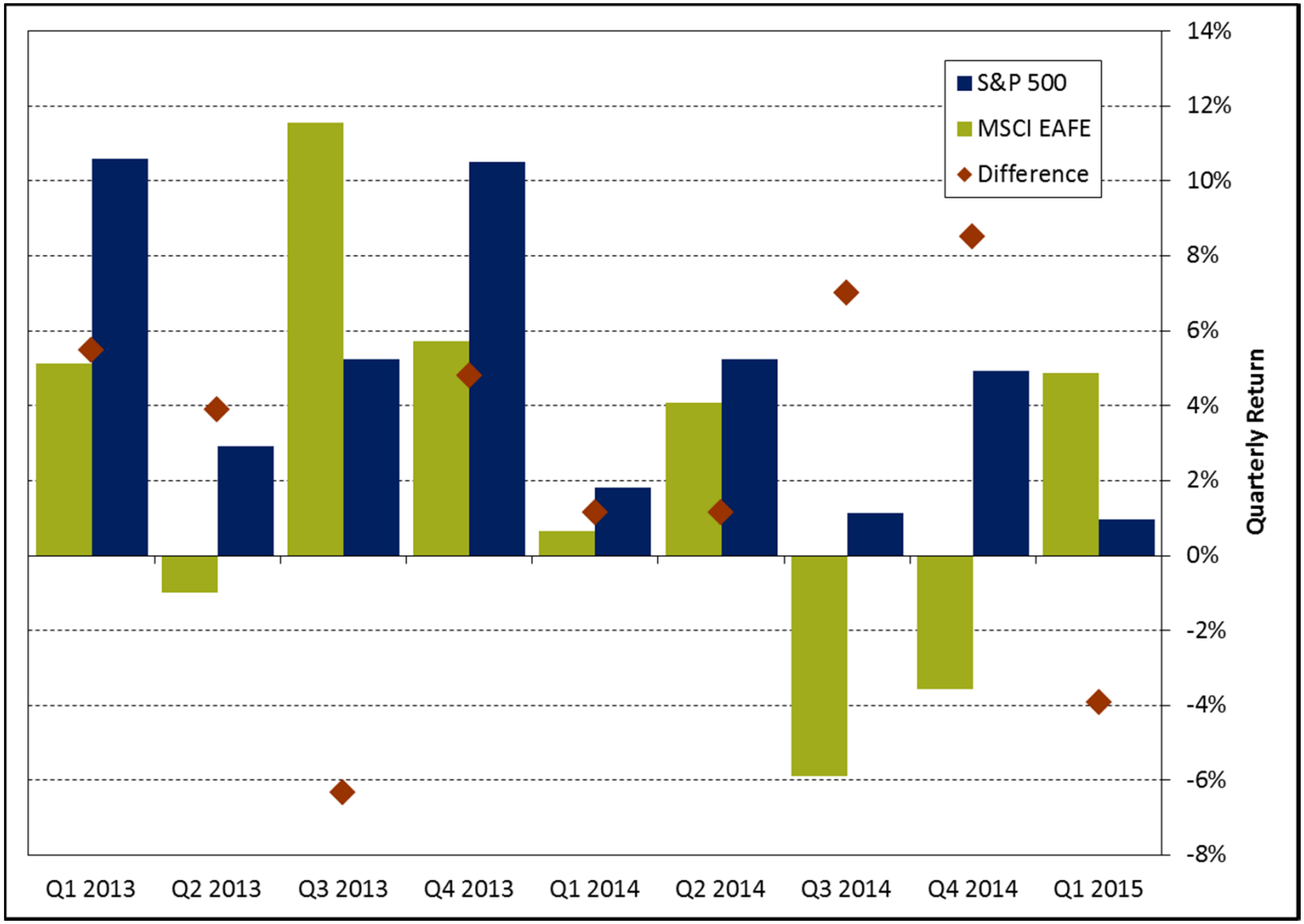


Source: Barclays, Standard and Poors, Bloomberg



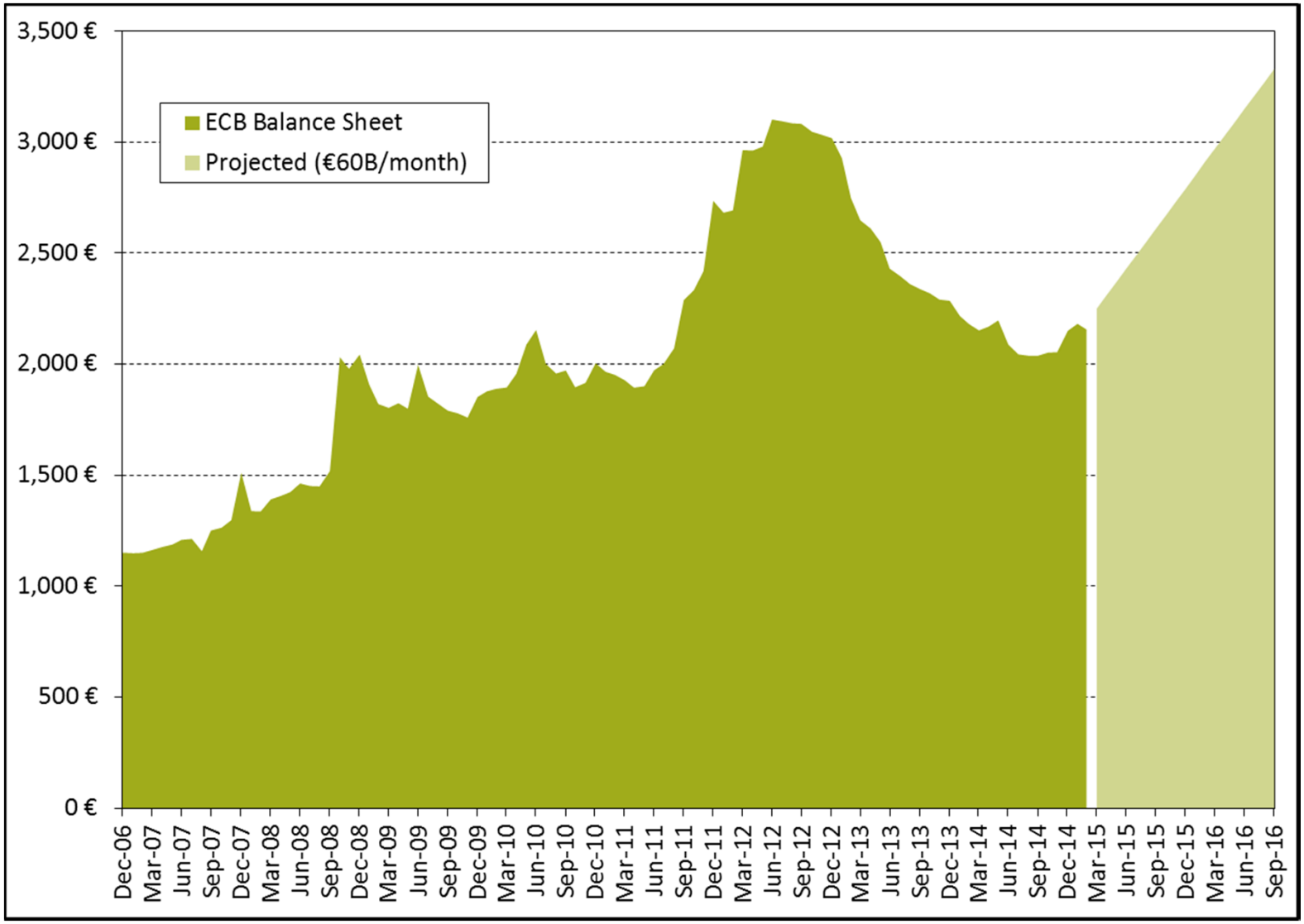
*Source: Bloomberg, Standard and Poors, Russell *Russell 2000 PE is index adjusted positive **Standard deviations shown from median values since data inception*

International Equity Outperformed Domestic in Q1, Reversing Recent Trend



Source: Bloomberg

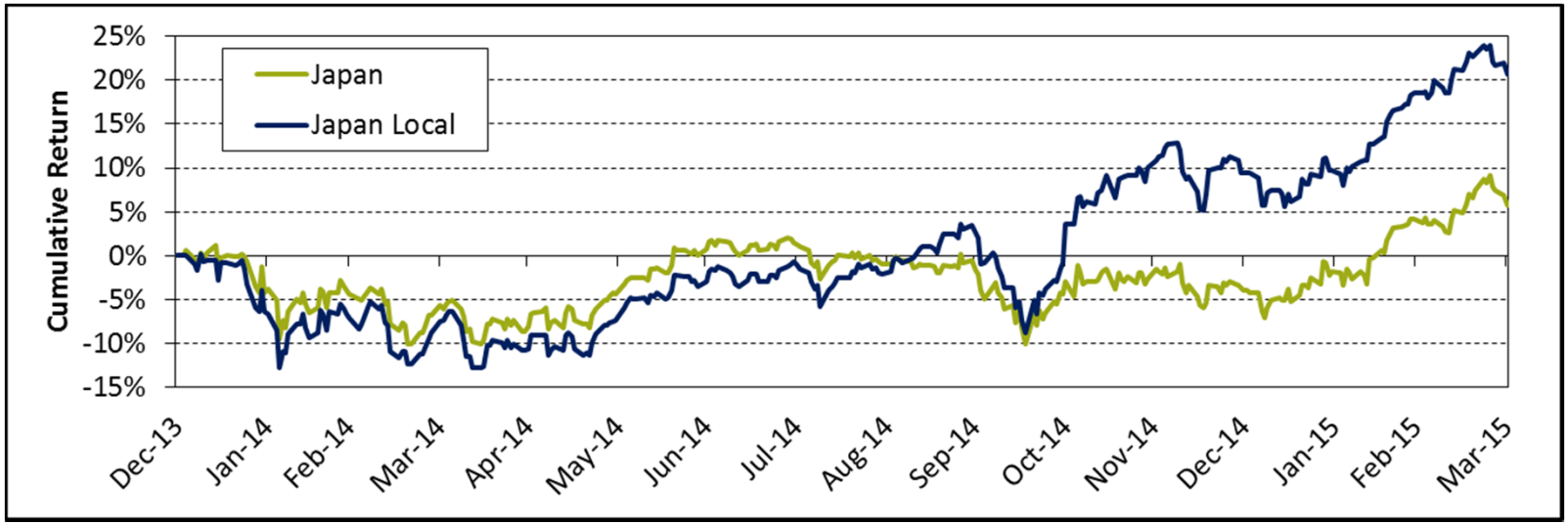
Launch of Quantitative Easing in Eurozone is a New Catalyst for International Equities



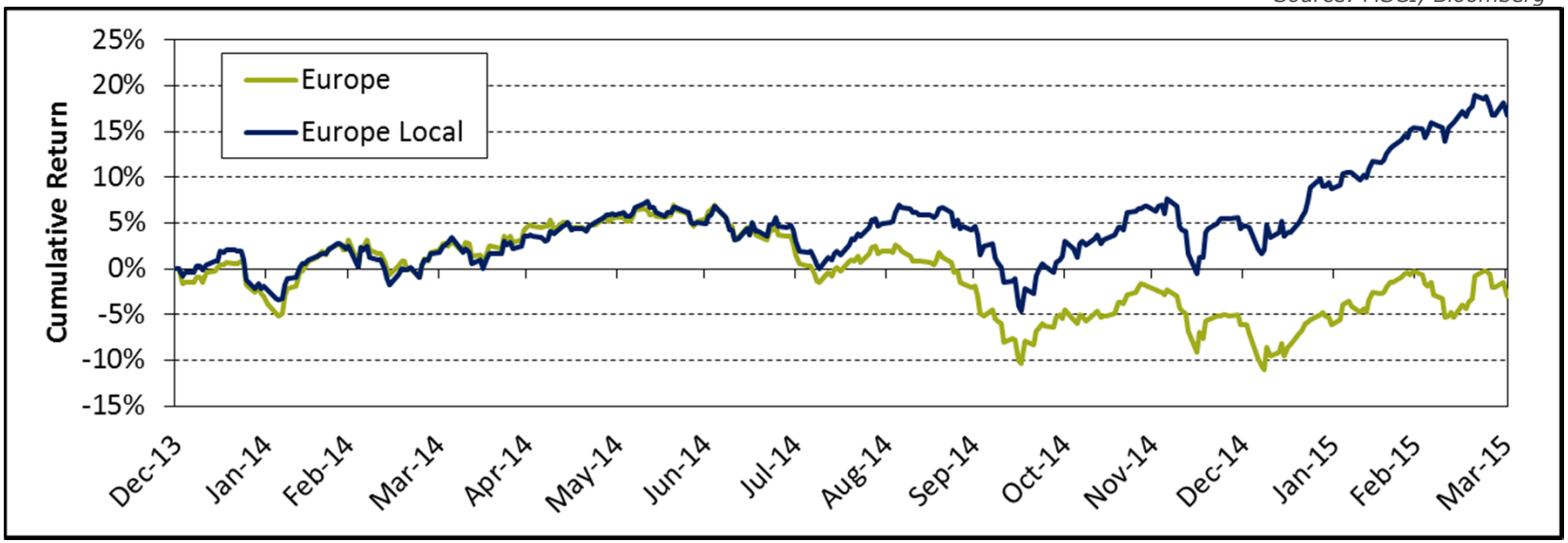
Unprecedented Support from Global QE Programs benefits International Equities

- **Favor international developed equities over the US and recommend a 50% strategic currency hedge for developed market currencies**
  - Encourage an equal weight exposure to international developed and US equities
  - If currency hedged, encourage larger international developed equity exposure relative to US equities
- **Catalysts are present to drive international equity markets above pre-financial crisis highs**
  - ECB's Q1 announcement of QE was nearly twice the size of markets expectations
  - ECB launched a €1.1T bond buying program, €60B a month through September 2016
  - Bank of Japan's unprecedented QE program remains open ended
- **Potential for increased earnings growth as underlying economic conditions improve in both the Eurozone and Japan**
  - Corporate earnings remain below pre-crisis highs, most acutely seen in Eurozone
  - Valuation measures are favorable relative to US equities with potential for markedly higher earnings growth
- **Increased exposure to international equities is not without concern**
  - Concerns of a Greece exit from the Eurozone remain a contagion risk
  - Lack of long-term political and economic reforms is greatest risk in Europe
  - QE pull back in Japan would be a serious shock to Yen and Japanese equity market
- **Secular belief in Emerging Markets continues, encourage an index market weight (approximately 11% -12% of total equity exposure)**

Significant Currency Drag Experienced in Performance of Developed Equity Markets

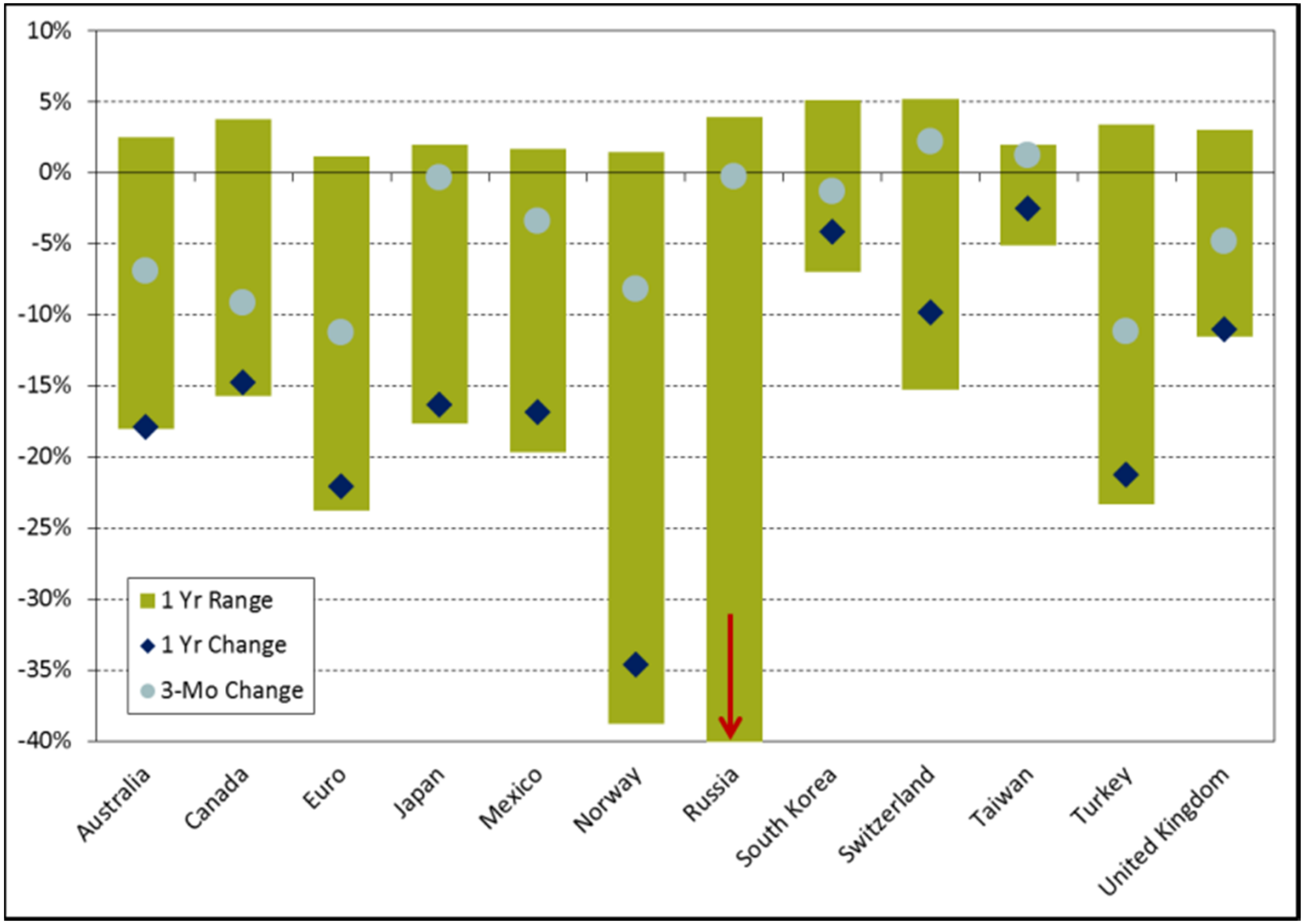


Source: MSCI, Bloomberg



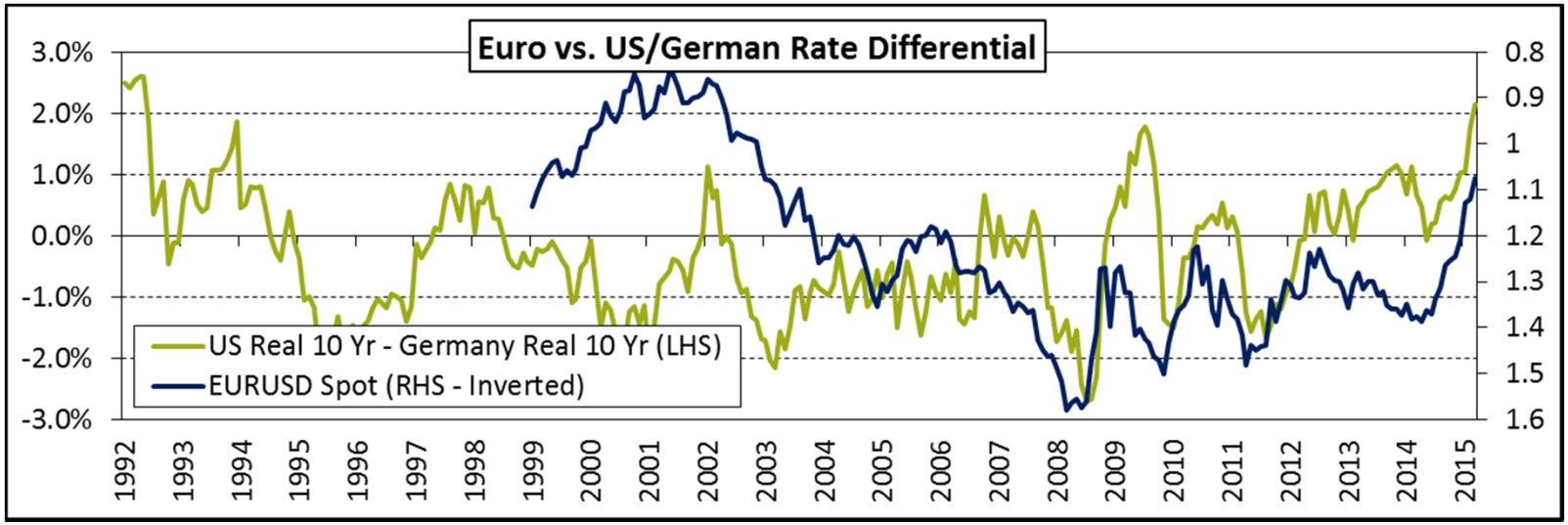
Source: MSCI, Bloomberg

Currencies Have Been Volatile (and mostly negative versus the US Dollar)

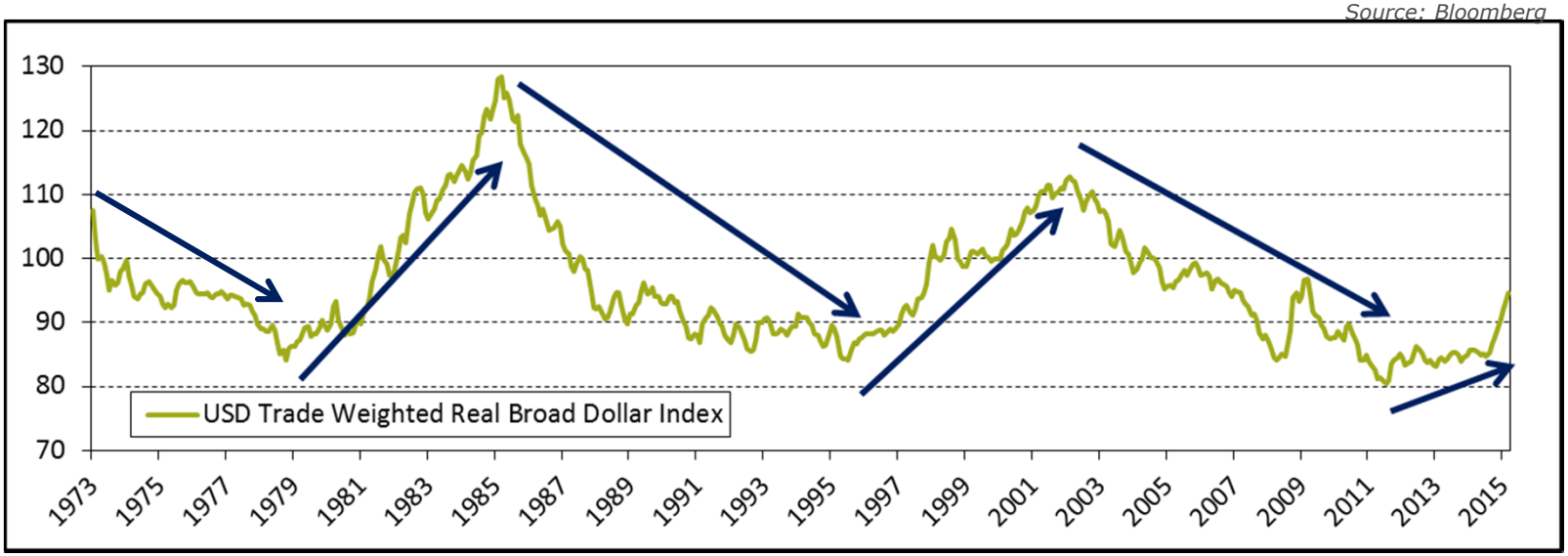


Source: Bloomberg

Currency Pressure Remains; Historic Movements Exhibit Persistence



Source: Bloomberg



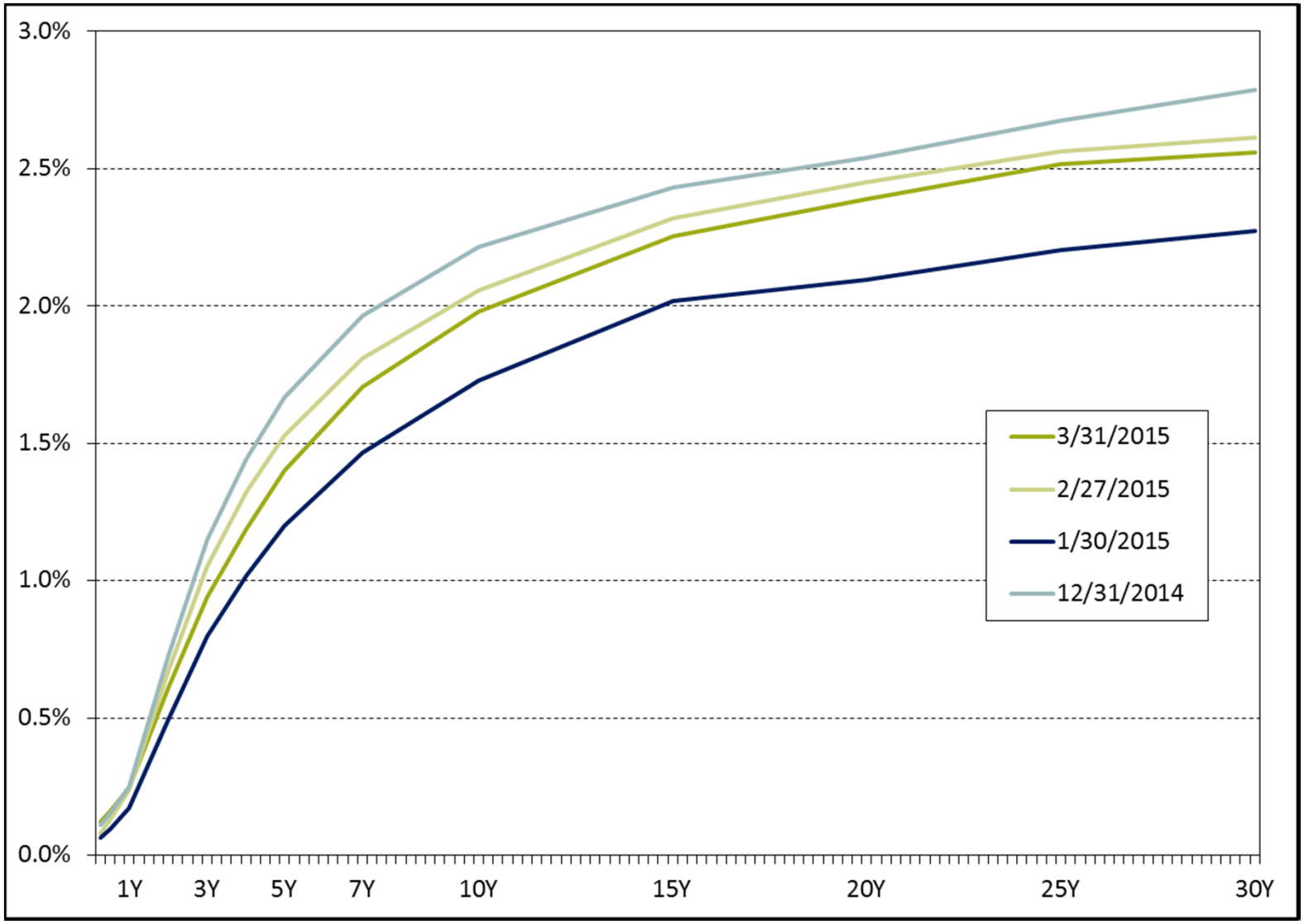
Source: Bloomberg

Negative or Near Negative Yields in Much of the Developed World

	Maturity (Years)									
	1	2	3	4	5	6	7	8	9	10
Switzerland	-0.89%	-0.86%	-0.80%	-0.60%	-0.40%	-0.30%	-0.24%	-0.20%	-0.13%	-0.07%
Germany	-0.24%	-0.26%	-0.22%	-0.17%	-0.10%	-0.08%	-0.03%	0.03%	0.10%	0.18%
Denmark	-0.70%	-0.48%	N/A	N/A	-0.26%	-0.01%	N/A	0.13%	N/A	0.26%
Finland	-0.22%	-0.22%	-0.13%	-0.07%	-0.02%	0.00%	0.03%	0.15%	0.18%	0.25%
Austria	-0.17%	-0.18%	-0.16%	-0.09%	-0.02%	0.01%	0.07%	0.17%	N/A	0.32%
Netherlands	N/A	-0.20%	-0.15%	-0.11%	-0.05%	0.04%	0.12%	0.20%	0.26%	0.34%
France	-0.17%	-0.17%	-0.12%	-0.03%	0.05%	0.09%	0.18%	0.28%	0.37%	0.47%
Sweden	-0.29%	-0.32%	N/A	-0.16%	0.03%	N/A	0.19%	0.31%	N/A	0.41%
Belgium	-0.18%	-0.17%	-0.11%	-0.03%	0.01%	0.08%	0.19%	0.27%	0.35%	0.44%
UK	0.37%	0.42%	0.79%	1.02%	1.19%	1.27%	1.42%	1.52%	1.60%	1.58%
Norway	N/A	0.83%	N/A	0.99%	N/A	1.21%	N/A	1.36%	1.39%	1.46%
Spain	0.01%	0.04%	0.19%	0.33%	0.53%	0.74%	0.85%	0.99%	1.14%	1.21%
Italy	0.01%	0.19%	0.26%	0.37%	0.54%	0.80%	0.93%	1.04%	1.18%	1.24%
Japan	0.03%	0.04%	0.06%	0.08%	0.14%	0.15%	0.17%	0.24%	0.31%	0.40%

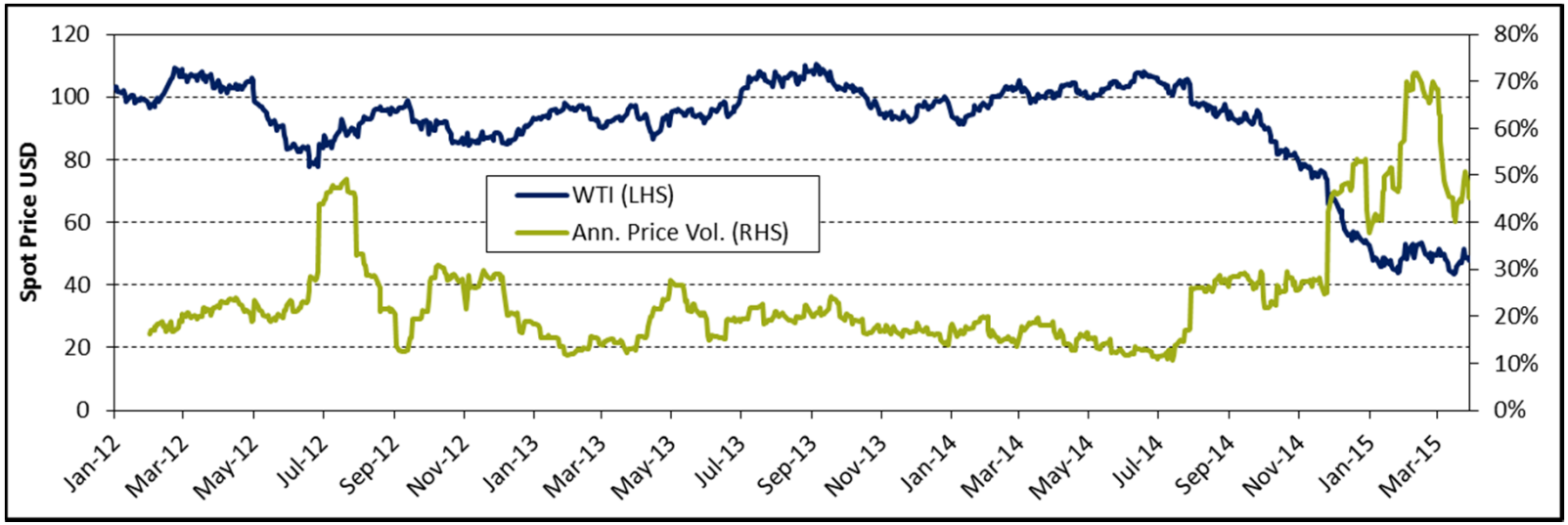
Source: Bloomberg

Treasury Curve Has Been in Flux, Seesawing in the First Quarter

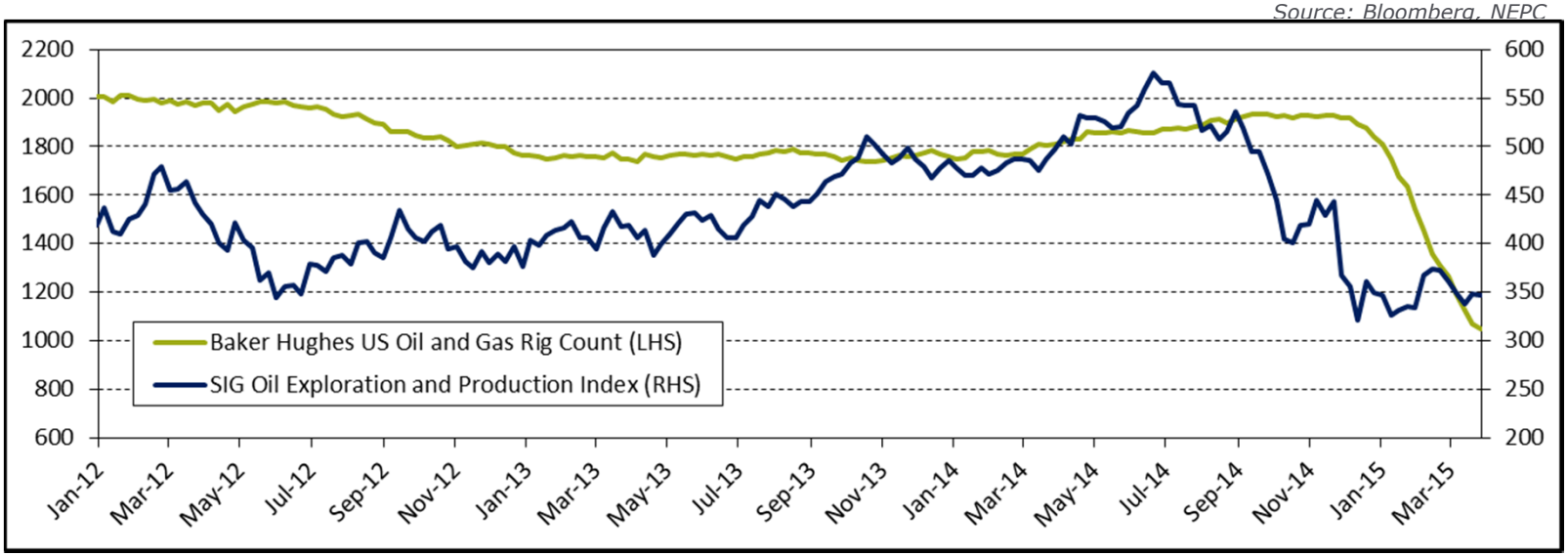


Source: Bloomberg

Energy Prices Appear to Find a Bottom… Project Plans Reflect Smaller Scale



Source: Bloomberg, NEPC



Source: Baker Hughes, Philadelphia Stock Exchange, Bloomberg

Executive Summary

Investment Summary

Portfolio Commentary

- **Goals & Objectives**
  - The portfolios investment objective is to achieve a rate of return consistent with that of the set asset allocation, while maintaining a long term investment horizon for the Fund.
  - As of March 31, 2015 the long term target allocation of the fund is 32% equities, 30.5% fixed income, 7% GAA, 29% alternatives, and 1.5% to cash.
- **Recent Decisions and Ongoing Activities**
  - NEPC will help conduct finalist interviews for the unconstrained fixed income mandate
  - NEPC will also be prepared to provide a fixed income and equity manager review in June
- **Total Fund Performance**
  - The Fund returned 1.7% for the Quarter, which ranked in the 89th percentile in the IF Public DB Fund Universe.
  - Active management was the main detractor from performance in the quarter as the fund's international equity managers unperformed the benchmark by 150 basis points, collectively.
- **Total Fund Asset Allocation**
  - Currently, the Fund is overweight to Domestic Equity, Emerging Market Equity, Core Fixed Income, Global Bonds, Emerging Market Debt, TIPS, Private Equity and cash. The fund is underweight to High Yield, Long Government/Credit, Private Debt, Hedge Funds, and Commodities relative to long term targets.

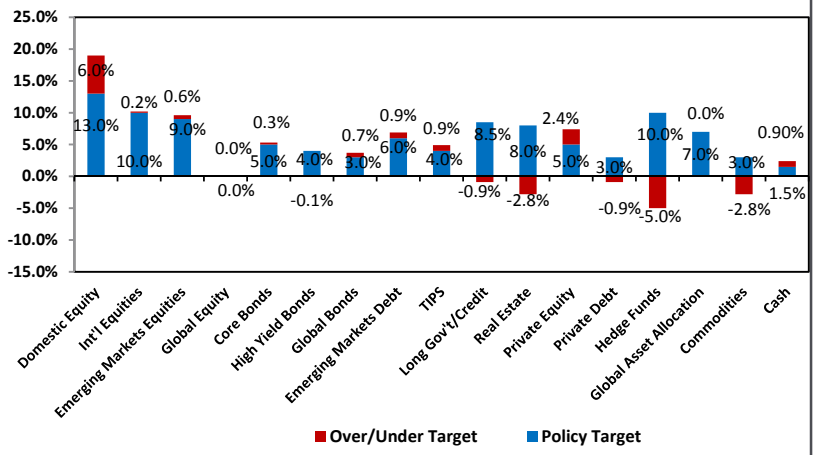
Total Return

	Last Quarter	Last Year	Last 3 Years	Last 5 Years
Total Composite	1.7	5.3	7.5	8.2
Rank	89	78	88	76
Median Public Funds	2.2	6.6	9.5	9.1
Policy Index	1.9	4.3	7.0	8.0

Periods longer than one year are annualized

*Rankings versus total Public Fund s1=best, 100=worst.

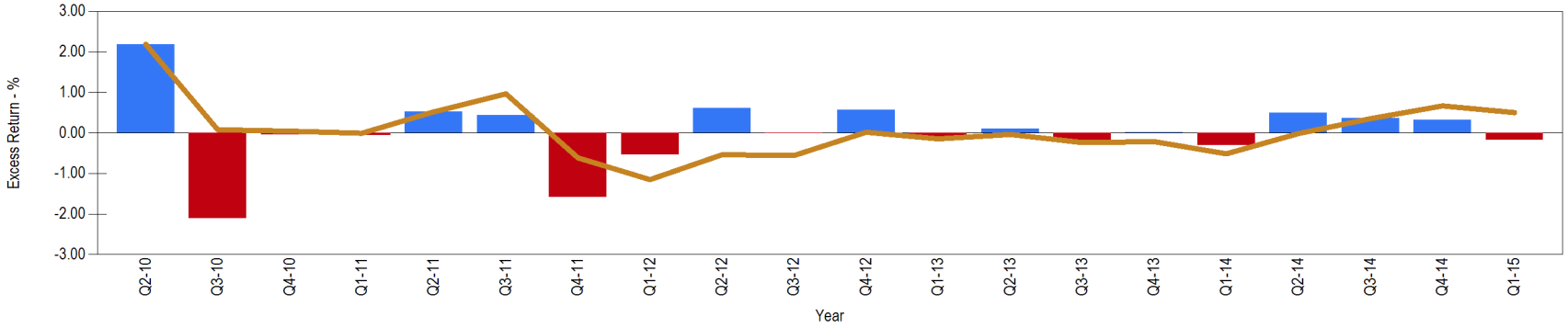
Current Allocation Total Composite vs. Long Term Policy Targets



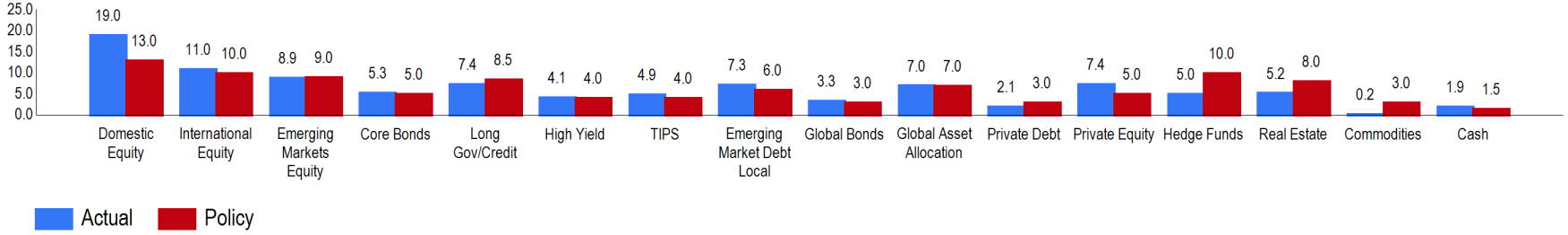
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Composite	**$1,029,411,767**	**1.7%**	**89**	**1.7%**	**89**	**5.3%**	**78**	**7.6%**	**88**	**8.2%**	**76**
Policy Index		*1.9%*	*81*	*1.9%*	*81*	*4.3%*	*90*	*7.0%*	*92*	*8.0%*	*83*
Allocation Index		*2.4%*	*33*	*2.4%*	*33*	*6.4%*	*55*	*8.5%*	*76*	*8.3%*	*73*
InvestorForce Public DB Gross Median		*2.2%*		*2.2%*		*6.6%*		*9.5%*		*9.1%*	

Quarterly and Cumulative Excess Performance

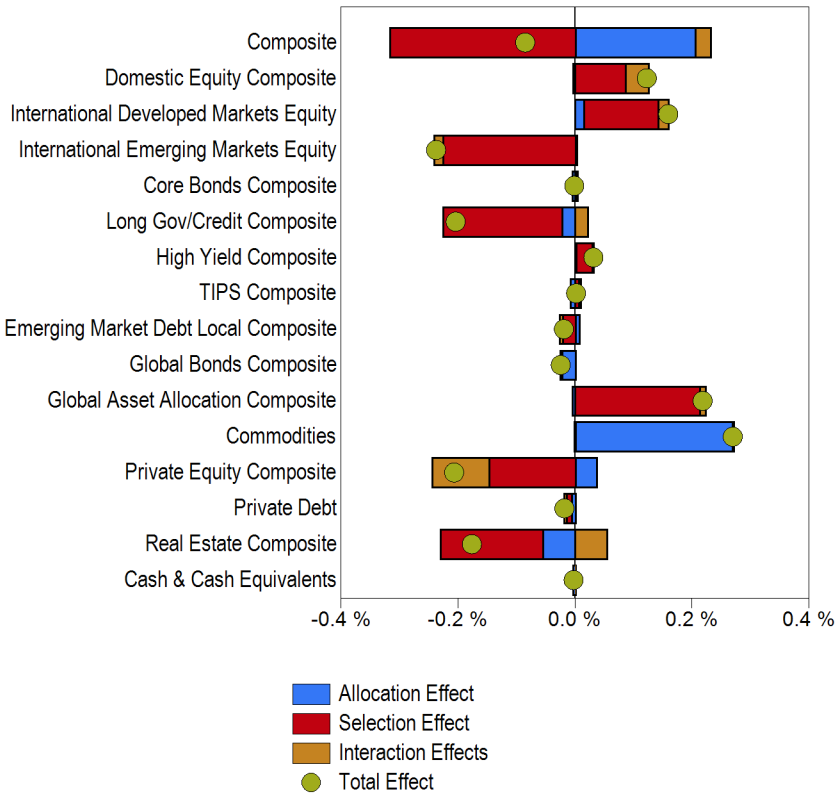


Actual vs Target Allocation (%)



Total Fund Attribution Analysis

Attribution Effects Relative to Policy Index
3 Months Ending March 31, 2015



Attribution Summary
3 Months Ending March 31, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	2.4%	1.8%	0.6%	0.1%	0.0%	0.0%	0.1%
International Developed Markets Equity	4.3%	2.9%	1.3%	0.1%	0.0%	0.0%	0.2%
International Emerging Markets Equity	-0.3%	2.2%	-2.5%	-0.2%	0.0%	0.0%	-0.2%
Core Bonds Composite	1.7%	1.6%	0.1%	0.0%	0.0%	0.0%	0.0%
Long Gov/Credit Composite	1.2%	3.4%	-2.2%	-0.2%	0.0%	0.0%	-0.2%
High Yield Composite	3.1%	2.4%	0.7%	0.0%	0.0%	0.0%	0.0%
TIPS Composite	1.6%	1.4%	0.2%	0.0%	0.0%	0.0%	0.0%
Emerging Market Debt Local Composite	1.7%	2.1%	-0.4%	0.0%	0.0%	0.0%	0.0%
Global Bonds Composite	-2.0%	-1.9%	-0.1%	0.0%	0.0%	0.0%	0.0%
Global Asset Allocation Composite	3.5%	0.4%	3.1%	0.2%	0.0%	0.0%	0.2%
Commodities	-8.2%	-8.2%	0.0%	0.0%	0.3%	0.0%	0.3%
Private Equity Composite	-0.3%	2.6%	-2.8%	-0.1%	0.0%	-0.1%	-0.2%
Private Debt	1.7%	2.1%	-0.3%	0.0%	0.0%	0.0%	0.0%
Real Estate Composite	1.4%	3.6%	-2.1%	-0.2%	-0.1%	0.1%	-0.2%
Cash & Cash Equivalents	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**1.7%**	**1.6%**	**0.1%**	**-0.3%**	**0.2%**	**0.0%**	**-0.1%**

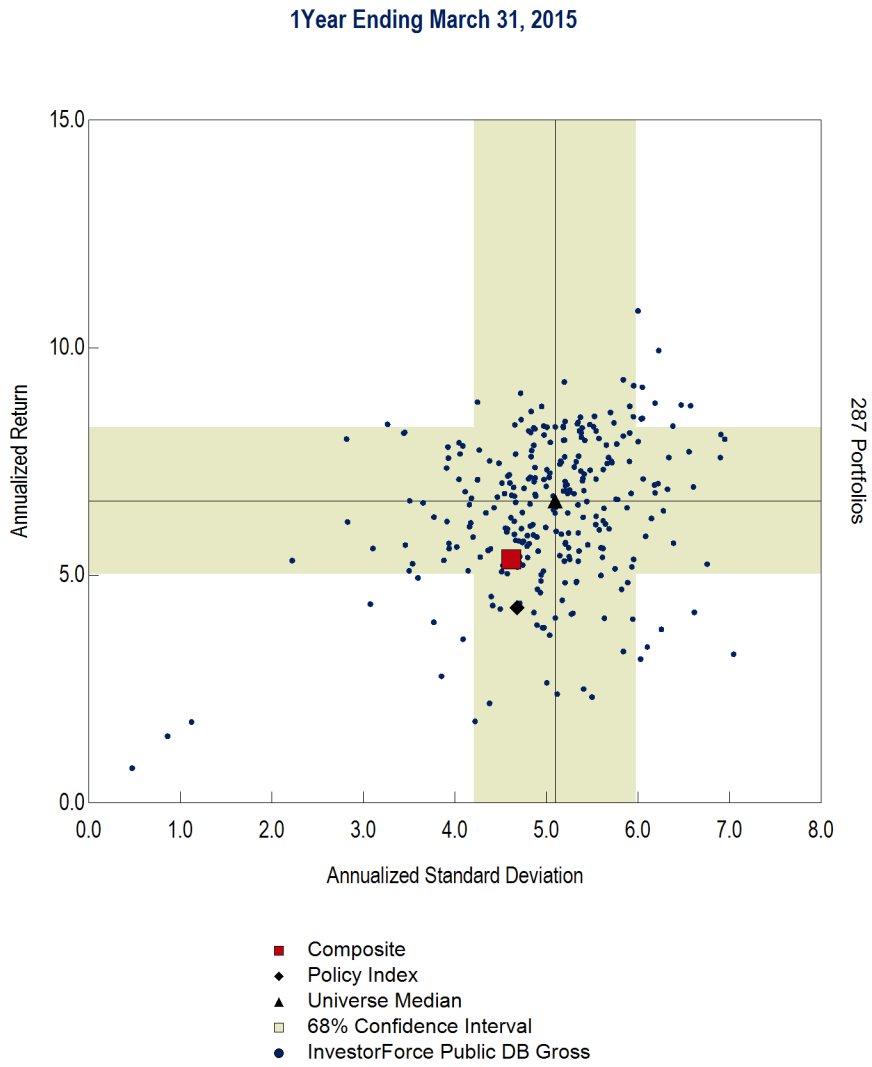
Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	1 Yr
Wtd. Actual Return	1.7%	5.4%
Wtd. Index Return *	1.6%	1.7%
Excess Return	**0.1%**	**3.7%**
Selection Effect	-0.3%	-0.4%
Allocation Effect	0.2%	1.5%
Interaction Effect	0.0%	0.2%
Asset Class Returns		
Composite	1.7%	5.3%
Total Equity Composite	2.3%	4.8%
Global Equity Composite	-5.8%	-11.0%
Domestic Equity Composite	2.4%	10.9%
International Equity Composite	2.2%	-0.4%
International Developed Markets Equity	4.3%	2.3%
International Emerging Markets Equity	-0.3%	-3.2%
Total Fixed Income Composite	1.4%	4.5%
Domestic Fixed Income Composite	1.8%	4.6%
Core Bonds Composite	1.7%	5.7%
Long Gov/Credit Composite	1.2%	5.6%
High Yield Composite	3.1%	3.0%
TIPS Composite	1.6%	3.3%
International Fixed Income Composite	0.5%	4.7%
Emerging Market Debt Local Composite	1.7%	8.6%
Global Bonds Composite	-2.0%	-3.2%
Global Asset Allocation Composite	3.5%	4.0%
Commodities	-8.2%	
Total Alternatives Composite	0.9%	11.2%
Private Equity Composite	-0.3%	17.1%
Private Debt	1.7%	5.6%
Real Estate Composite	1.4%	7.3%
Hedge Funds	1.9%	
Cash & Cash Equivalents	0.0%	0.3%
Passive Portfolios Composite	1.7%	4.6%

*Calculated from benchmark returns and weightings of each component.

Total Fund Risk/Return - 1 Years



1 Years Ending March 31, 2015

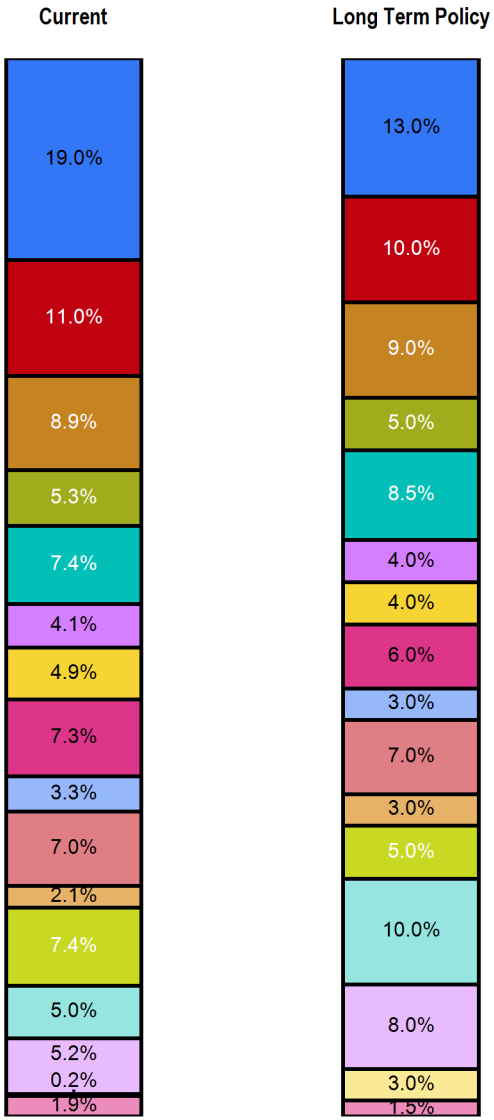
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Composite	5.34%	78	4.61%	24
Policy Index	4.29%	90	4.68%	28
Allocation Index	6.39%	55	5.16%	53

1 Years Ending March 31, 2015

	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Composite	1.15	68	2.66	48
Policy Index	0.91	88	1.38	94
Allocation Index	1.24	61	1.84	79

Asset Allocation

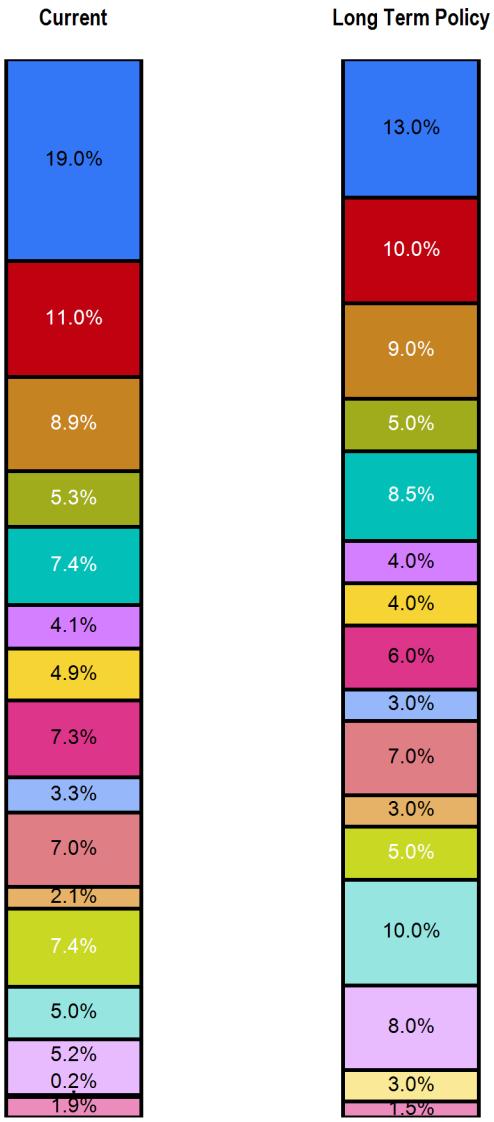
Total Fund Asset Allocation vs. Policy Targets



Asset Allocation vs. Target

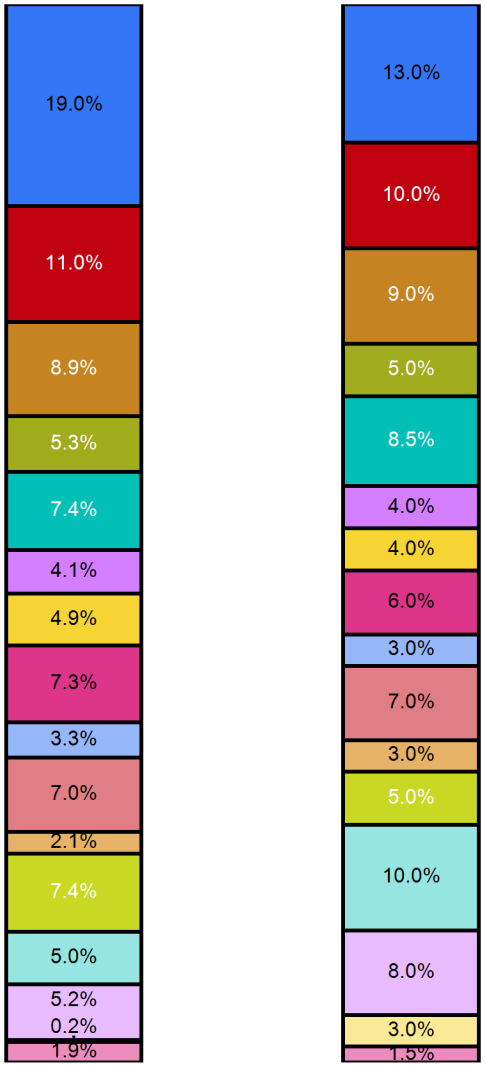
	Current	Current	Long Term Policy	Long Term Policy Range	Within Range
Domestic Equity	$195,527,522	19.0%	13.0%	10.0% - 16.0%	No
Atlanta Capital Large Growth	$58,863,447	5.7%			
Eagle Capital Large Value	$60,272,260	5.9%			
Southernsun SMID Value	$34,396,257	3.3%			
Voya	$23,960,260	2.3%			
SSgA Russell 3000 Index	$18,035,299	1.8%			
International Equity	$112,991,569	11.0%	10.0%	8.0% - 12.0%	Yes
SSgA Daily MSCI CAD Index	$647,435	0.1%			
Walter Scott Large Growth	$56,793,399	5.5%			
First Eagle All Cap Value	$48,715,449	4.7%			
SSgA EAFE Index	$6,835,287	0.7%			
Emerging Markets Equity	$91,665,072	8.9%	9.0%	7.0% - 11.0%	Yes
Parametric Emerging Markets	$49,603,661	4.8%			
Mondrian Emerging Markets	$35,091,039	3.4%			
SSgA Daily MSCI EM Index	$6,970,345	0.7%			
SSgA Emerging Markets	$26	0.0%			
Core Bonds	$54,245,421	5.3%	5.0%	3.5% - 6.5%	Yes
Hartford Investment Core Plus Fixed	$43,143,523	4.2%			
Columbia Core Plus Fixed	$732,830	0.1%			
SSgA Barclays Aggregate Index	$10,369,067	1.0%			
Long Gov/Credit	$75,871,658	7.4%	8.5%	6.5% - 10.5%	Yes
Aetna GICS	$436,252	0.0%			
PIMCO Long Duration Fixed	$69,526,811	6.8%			
SSgA Long US Gov't Credit	$5,908,595	0.6%			
High Yield	$42,692,724	4.1%	4.0%	3.5% - 5.5%	Yes
Shenkman Capital High Yield Fixed	$39,932,691	3.9%			
SSgA High Yield Bond	$2,760,033	0.3%			

Total Fund Asset Allocation vs. Policy Targets



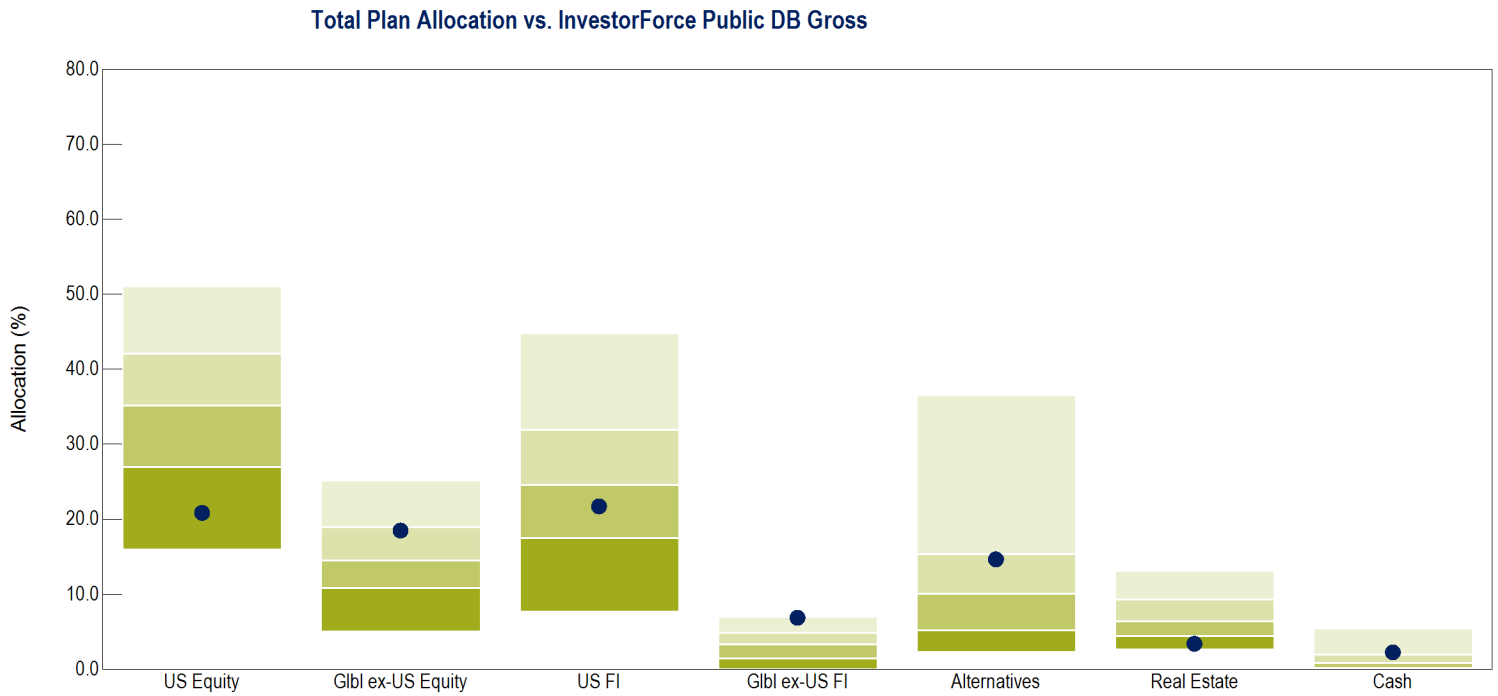
	Current	Current	Long Term Policy	Long Term Policy Range	Within Range
TIPS	$50,626,865	4.9%	4.0%	2.5% - 5.5%	**Yes**
Brown Bros-Harriman Global TIPS	$47,874,230	4.7%			
SSgA US TIPS Index	$2,752,635	0.3%			
Emerging Market Debt Local	$74,673,614	7.3%	6.0%	4.0% - 8.0%	**Yes**
Prudential Emerging Mkt Debt	$70,576,672	6.9%			
SSgA Passive EM Local Currency	$4,096,941	0.4%			
Global Bonds	$34,459,171	3.3%	3.0%	2.0% - 4.0%	**Yes**
Mondrian Global Fixed Income	$31,398,816	3.1%			
SSgA Passive World Gov't	$3,060,356	0.3%			
Global Asset Allocation	$72,119,719	7.0%	7.0%	5.0% - 9.0%	**Yes**
Blackrock Global Allocation	$36,820,848	3.6%			
Wellington Opportunistic	$35,298,871	3.4%			
Private Debt	$21,161,818	2.1%	3.0%	1.0% - 5.0%	**Yes**
Smith Whiley & Co Pelham III Fund	$1,710,501	0.2%			
Monroe Direct Lending Fund	$9,313,279	0.9%			
Brightwood	$2,883,424	0.3%			
Alcentra	$7,254,614	0.7%			
Private Equity	$76,077,180	7.4%	5.0%	3.0% - 8.0%	**Yes**
MERF - Ares Fund II	$1,241,085	0.1%			
Lexington Capital Partners	$1,144,638	0.1%			
Landmark Equity Partners XI	$1,111,802	0.1%			
Ares Corporate Opportunity Fund	$483,210	0.0%			
Parish Capital	$3,086,113	0.3%			
Landmark Equity Partners XIII	$3,998,097	0.4%			
Parish Capital II	$9,156,690	0.9%			
Fairview Ventures III	$10,208,130	1.0%			
Ares Corporate Opportunity Fund III	$6,906,100	0.7%			

Total Fund Asset Allocation vs. Policy Targets



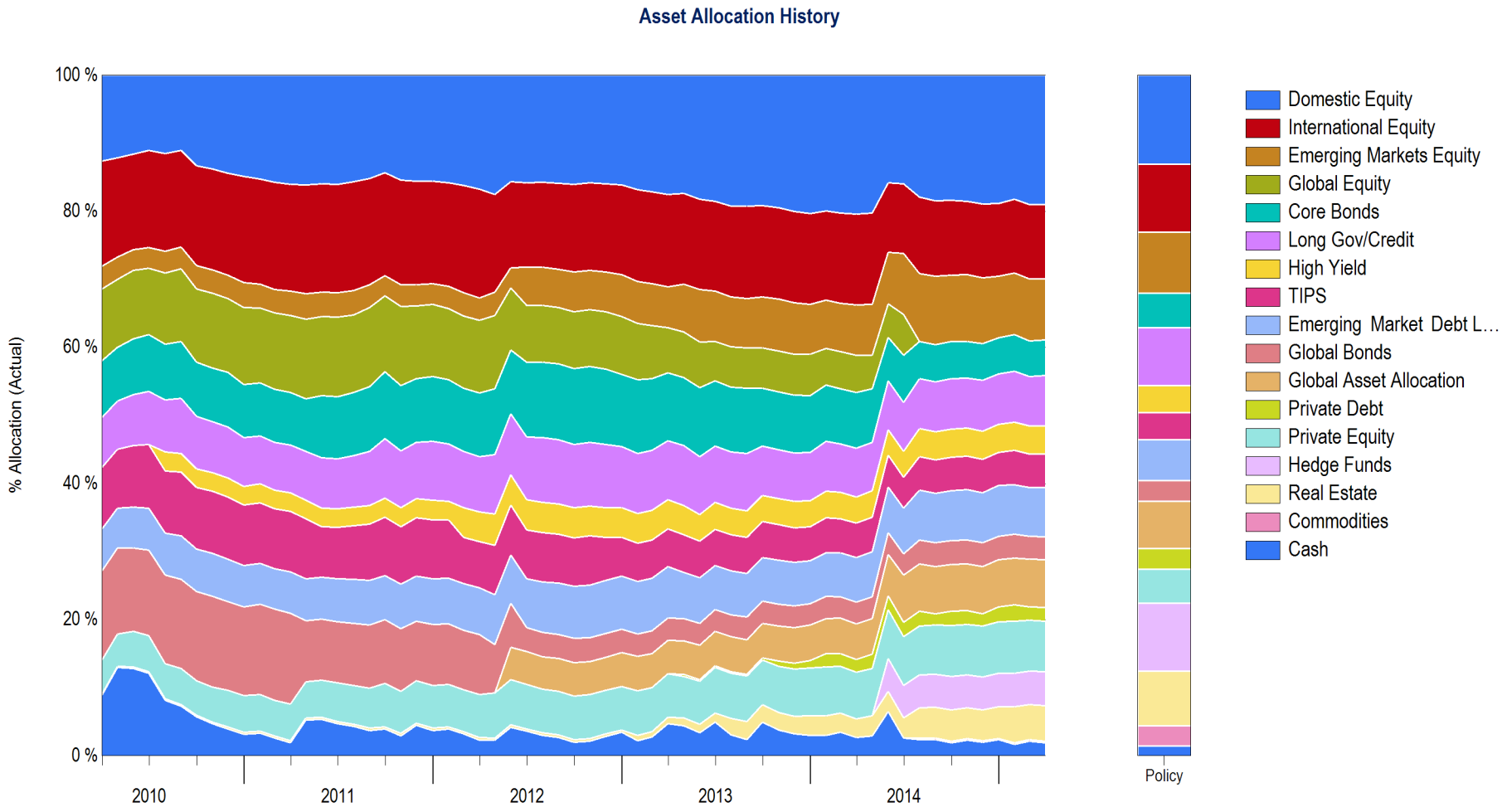
	Current	Current	Long Term Policy	Long Term Policy Range	Within Range
Landmark Equity Partners Fund XIV	$6,111,037	0.6%			
Lexington Capital Partners VII	$6,038,207	0.6%			
Vista Equity Partners IV	$10,164,490	1.0%			
Ares Corporate Opportunity Fund IV	$5,146,014	0.5%			
Pegasus Capital	$3,447,601	0.3%			
Landmark Equity XV	$1,662,433	0.2%			
Vista Equity Partners V	$1,947,345	0.2%			
Hedge Funds	$51,478,167	5.0%	10.0%	8.0% - 12.0%	No
Grosvenor	$51,478,167	5.0%			
Real Estate	$53,823,484	5.2%	8.0%	5.0% - 11.0%	**Yes**
Real Estate - Land	$190,000	0.0%			
New Boston Urban Strategy Amer Fund	$3,819,012	0.4%			
Heitman America Realty Fund	$14,782,357	1.4%			
TA Realty	$5,934,186	0.6%			
Tristan European Property	$3,665,316	0.4%			
Oaktree Real Estate Debt Fund	$827,417	0.1%			
SSgA US REIT Index	$5,550,680	0.5%			
Cornerstone	$19,054,515	1.9%			
Commodities	$1,980,577	0.2%	3.0%	2.0% - 4.0%	No
SSgA S&P GSCI NL QP CTF	$1,980,577	0.2%			
Cash	$20,017,207	1.9%	1.5%	0.0% - 3.0%	**Yes**
Cash	$2,941,789	0.3%			
Benefits Payment Fund	$17,072,397	1.7%			
COH Transition Account - BP Fund	$3,021	0.0%			
Total	**$1,029,411,767**	**100.0%**	**100.0%**		

Total Fund Allocations vs. Peer Universe

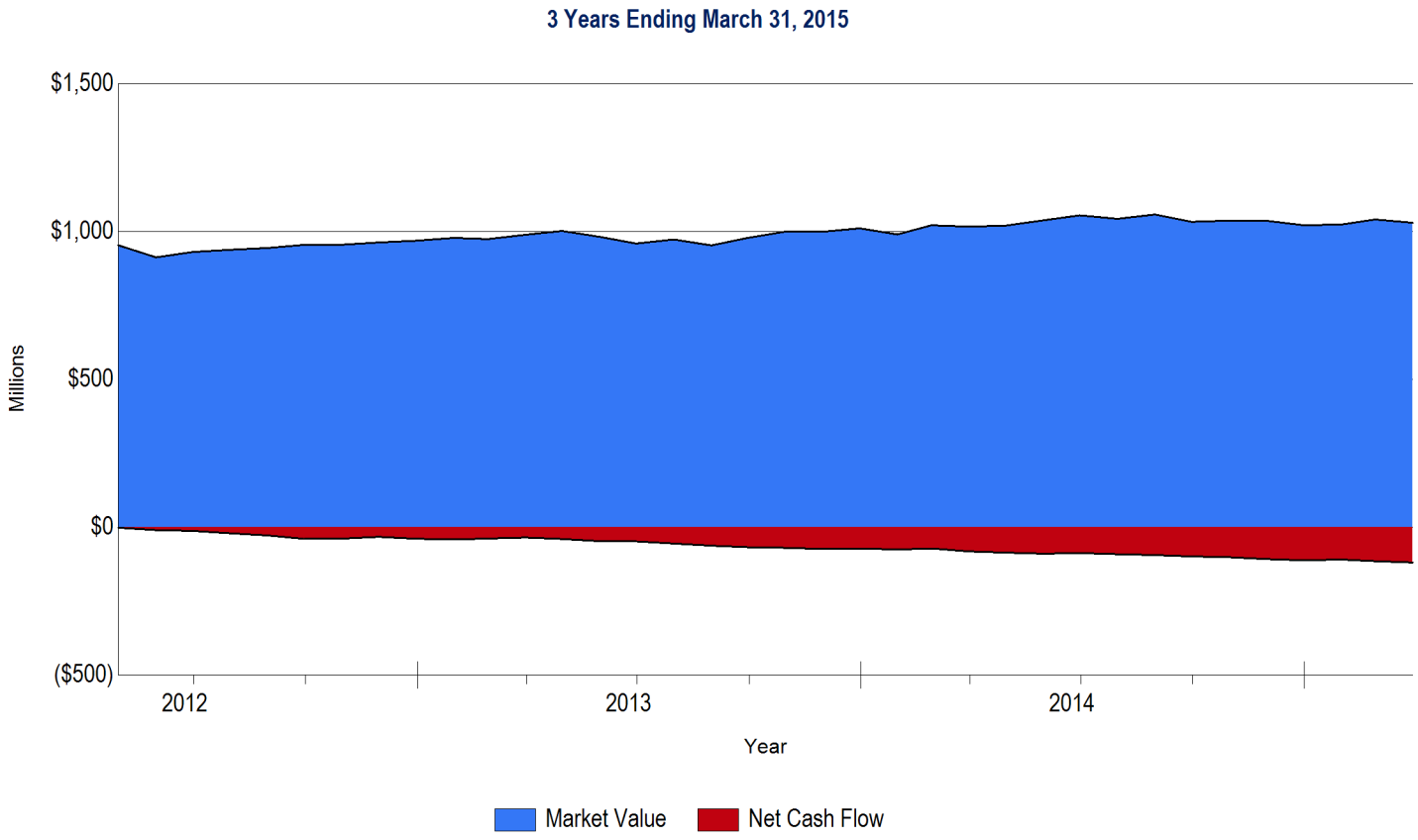


	Allocation (Rank)													
5th Percentile	51.0		25.2		44.8		7.0		36.6		13.1		5.4	
25th Percentile	42.2		19.0		32.0		5.0		15.4		9.4		2.0	
Median	35.3		14.6		24.6		3.4		10.1		6.4		0.9	
75th Percentile	27.0		10.9		17.6		1.5		5.2		4.5		0.2	
95th Percentile	16.0		5.1		7.7		0.1		2.4		2.7		0.0	
# of Portfolios	274		265		240		70		141		184		241	
● **Composite**	20.8	(90)	18.5	(29)	21.7	(62)	6.9	(6)	14.6	(30)	3.4	(88)	2.2	(22)

Total Fund Asset Allocation History



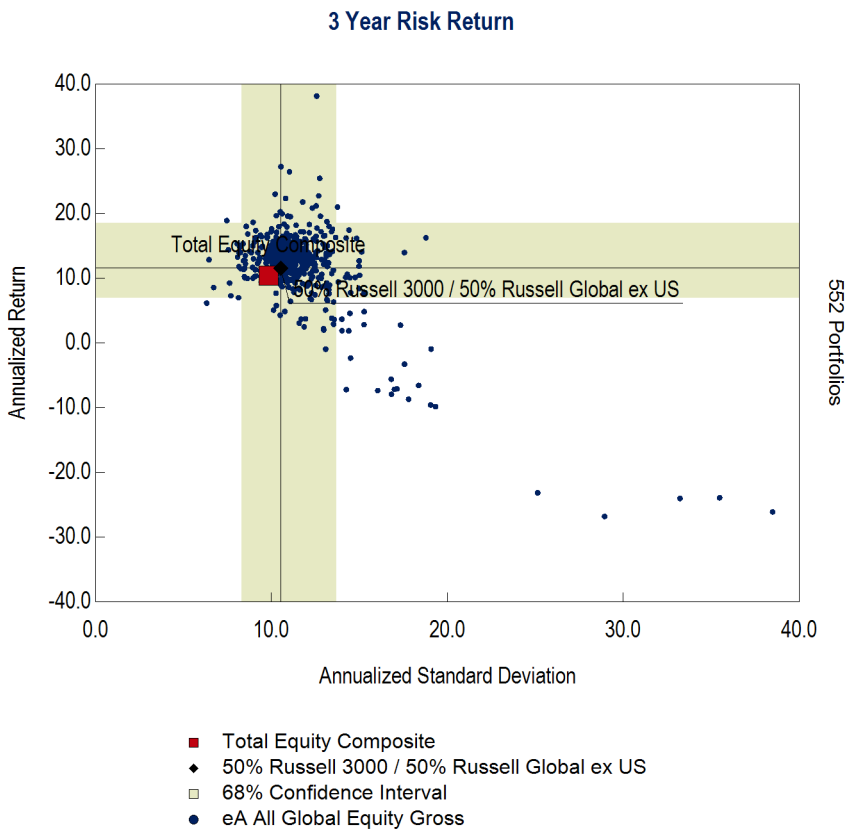
Total Fund Asset Growth Summary

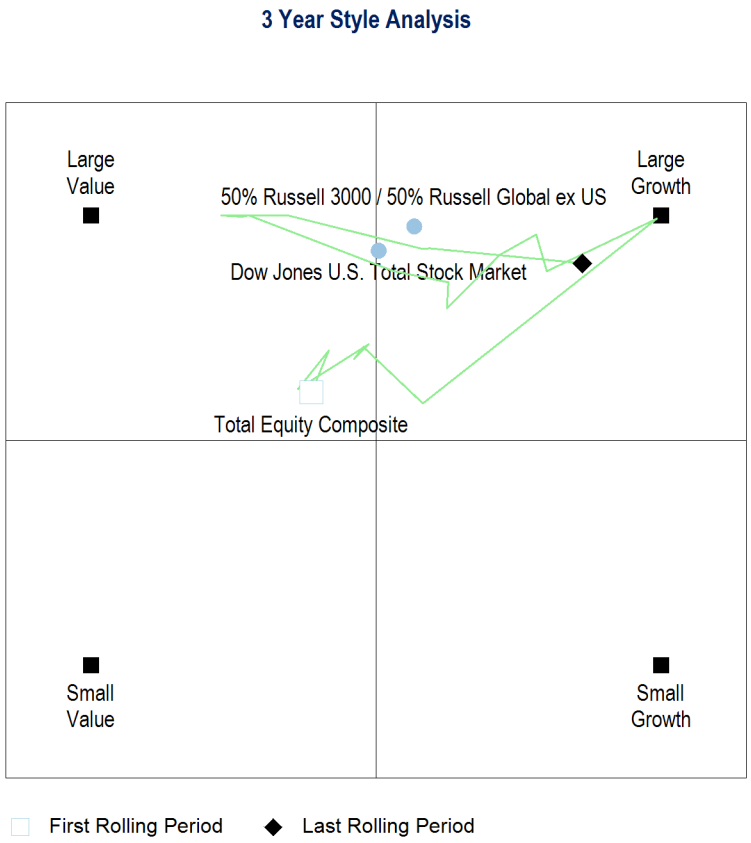


Sources of Portfolio Growth	Last Three Months	Year-To-Date	One Year	Three Years
Beginning Market Value	$1,019,310,892	$1,019,310,892	$1,016,111,838	$952,085,997
Net Additions/Withdrawals	-$6,286,360	-$6,286,360	-$33,554,988	-$124,472,532
Investment Earnings	$16,387,236	$16,387,236	$46,854,917	$201,798,303
Ending Market Value	$1,029,411,767	$1,029,411,767	$1,029,411,767	$1,029,411,767

Manager Pages

Total Equity Composite





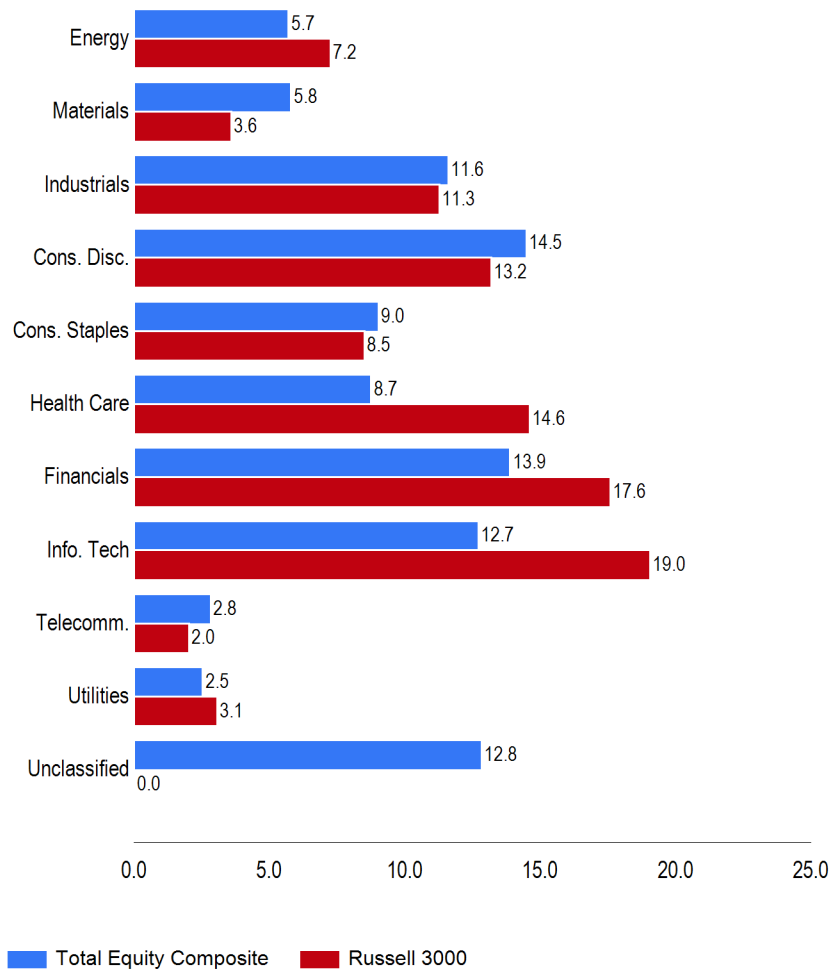
Style Analysis: Analytic is based on historical returns

Total Equity Composite

Characteristics

	Portfolio	Russell 3000
Number of Holdings	2,546	3,016
Weighted Avg. Market Cap. ($B)	55.1	103.5
Median Market Cap. ($B)	3.7	1.5
Price To Earnings	22.4	23.1
Price To Book	4.3	4.0
Price To Sales	3.1	3.0
Return on Equity (%)	19.1	17.6
Yield (%)	1.9	1.9
Beta	0.9	1.0
R-Squared	0.9	1.0

Equity Sector Allocation



Total Equity Composite

Top Ten Holdings

CASH - USD	5.6%
SSGA RUSSELL 3000 INDEX NON-LENDING	4.5%
DAILY MSCI EAFE INDX NL FUND ZV31NON	1.7%
ORACLE	1.3%
LIBERTY GLOBAL SR.C	1.2%
GOOGLE 'C'	1.1%
BERKSHIRE HATHAWAY 'B'	0.9%
COCA COLA	0.9%
UNITEDHEALTH GROUP	0.8%
ECOLAB	0.8%

Top Positive Contributors

	Relative Contribution %	Return %
FANUC	0.2%	31.6%
CENTENE	0.2%	36.1%
VALEANT PHARMS. (NYS) INTL.	0.1%	38.8%
UNITEDHEALTH GROUP	0.1%	17.4%
KEYENCE	0.1%	22.1%
NEWFIELD EXPLORATION	0.1%	29.4%
HANESBRANDS	0.1%	20.5%
TRINITY INDUSTRIES	0.1%	27.3%
NOVO NORDISK 'B'	0.1%	28.3%
WESTERN UNION	0.1%	17.1%

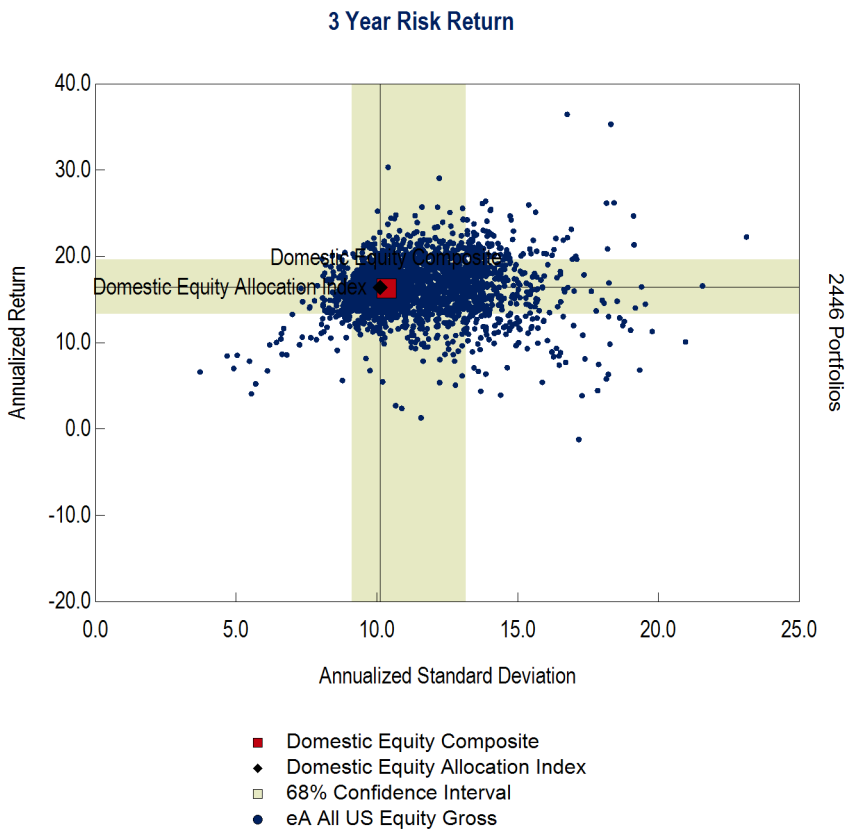
Top Negative Contributors

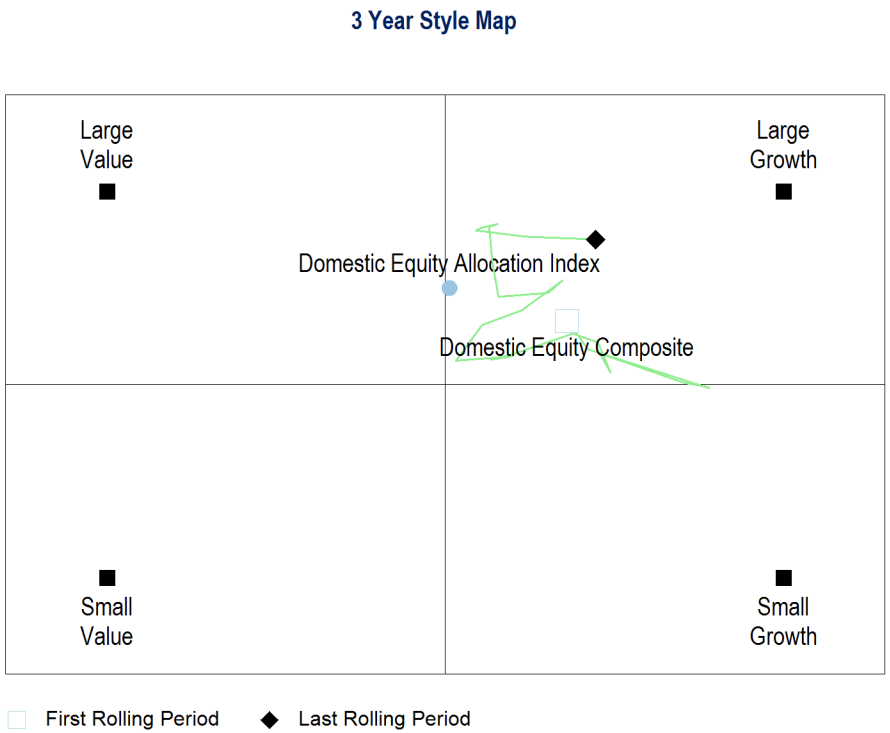
	Relative Contribution %	Return %
TIDEWATER	-0.1%	-40.4%
MICROSOFT	-0.1%	-11.9%
DARLING INGREDIENTS	-0.1%	-22.9%
TWENTY-FIRST CENTURY FOX CL.B	-0.1%	-10.5%
RALPH LAUREN CL.A	-0.1%	-28.7%
AMERICAN EXPRESS	-0.1%	-15.5%
ORACLE	-0.1%	-3.8%
VALE PREFERRED ADR 1:1	0.0%	-33.2%
CHINA SHENHUA EN.CO.'H'	0.0%	-13.7%
MORGAN STANLEY	0.0%	-7.7%

Equity Sector Attribution

	Attribution Effects								Returns		Sector Weights	
	Total Effects		Selection Effect		Allocation Effect		Interaction Effects		Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%		0.0%		0.0%		-0.2%		-4.3%	-2.2%	6.6%	7.6%
Materials	-0.1%		0.1%		0.0%		-0.1%		0.3%	1.1%	6.6%	3.6%
Industrials	0.3%		0.6%		0.0%		-0.2%		3.2%	0.4%	12.7%	11.5%
Cons. Disc.	-0.2%		0.1%		0.1%		-0.3%		3.2%	4.7%	15.3%	12.9%
Cons. Staples	0.0%		0.3%		0.0%		-0.2%		1.8%	1.2%	9.8%	8.6%
Health Care	0.0%		0.8%		-0.3%		-0.5%		11.2%	7.7%	8.4%	13.5%
Financials	0.1%		0.4%		0.1%		-0.4%		-0.2%	-0.7%	15.8%	18.1%
Info. Tech	0.3%		0.5%		0.0%		-0.2%		3.5%	1.6%	13.4%	19.0%
Telecomm.	0.0%		0.0%		0.0%		0.0%		1.9%	1.9%	3.1%	2.0%
Utilities	0.1%		0.1%		0.0%		-0.1%		-2.8%	-4.6%	2.7%	3.3%
Cash	-0.1%		0.0%		-0.1%		0.0%		0.0%	--	4.8%	0.0%
Portfolio	**0.5%**	**=**	**2.9%**	**+**	**-0.2%**	**+**	**-2.2%**		**2.2%**	**1.7%**	**99.2%**	**100.0%**

Domestic Equity Composite





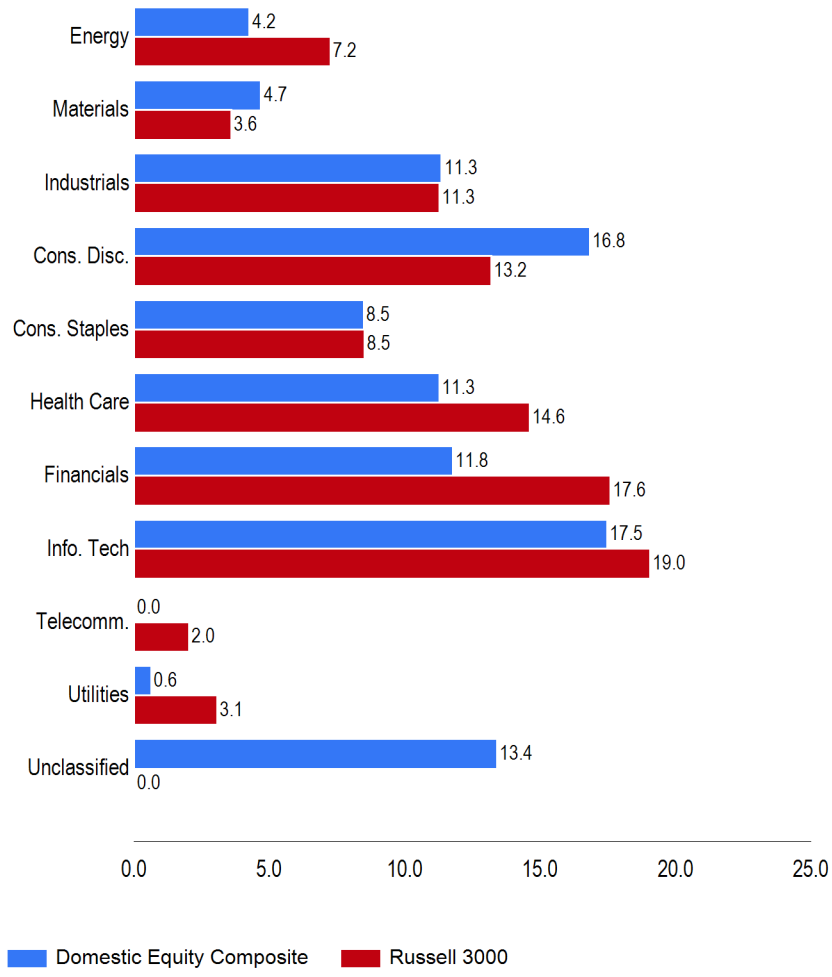
Style Analysis: Analytic is based on historical returns

Domestic Equity Composite

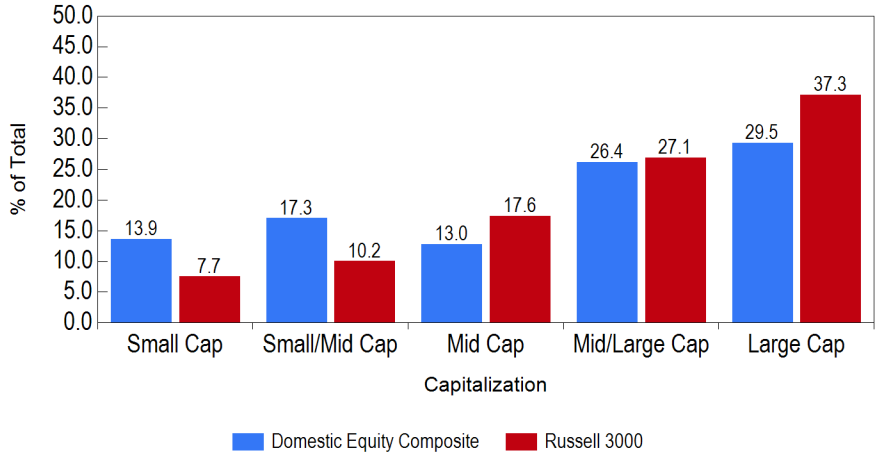
Characteristics

	Portfolio	Russell 3000
Number of Holdings	261	3,016
Weighted Avg. Market Cap. ($B)	75.6	103.5
Median Market Cap. ($B)	3.8	1.5
Price To Earnings	24.5	23.1
Price To Book	4.8	4.0
Price To Sales	3.3	3.0
Return on Equity (%)	20.1	17.6
Yield (%)	1.1	1.9
Beta	1.0	1.0
R-Squared	1.0	1.0

Equity Sector Allocation



Market Capitalization
As of March 31, 2015



Domestic Equity Composite

Top Ten Holdings

SSGA RUSSELL 3000 INDEX NON-LENDING	9.2%
CASH - USD	4.0%
ORACLE	2.6%
GOOGLE 'C'	2.2%
LIBERTY GLOBAL SR.C	2.2%
BERKSHIRE HATHAWAY 'B'	1.8%
COCA COLA	1.8%
UNITEDHEALTH GROUP	1.6%
ECOLAB	1.6%
AON CLASS A	1.6%

Top Positive Contributors

	Relative Contribution %	Return %
CENTENE	0.3%	36.1%
VALEANT PHARMS. (NYS) INTL.	0.2%	38.8%
NEWFIELD EXPLORATION	0.2%	29.4%
HANESBRANDS	0.2%	20.5%
TRINITY INDUSTRIES	0.2%	27.3%
UNITEDHEALTH GROUP	0.2%	17.4%
WESTERN UNION	0.2%	17.1%
BROADRIDGE FINL.SLTN.	0.1%	19.7%
CLEAN HARBORS	0.1%	18.2%
ECOLAB	0.1%	9.7%

Top Negative Contributors

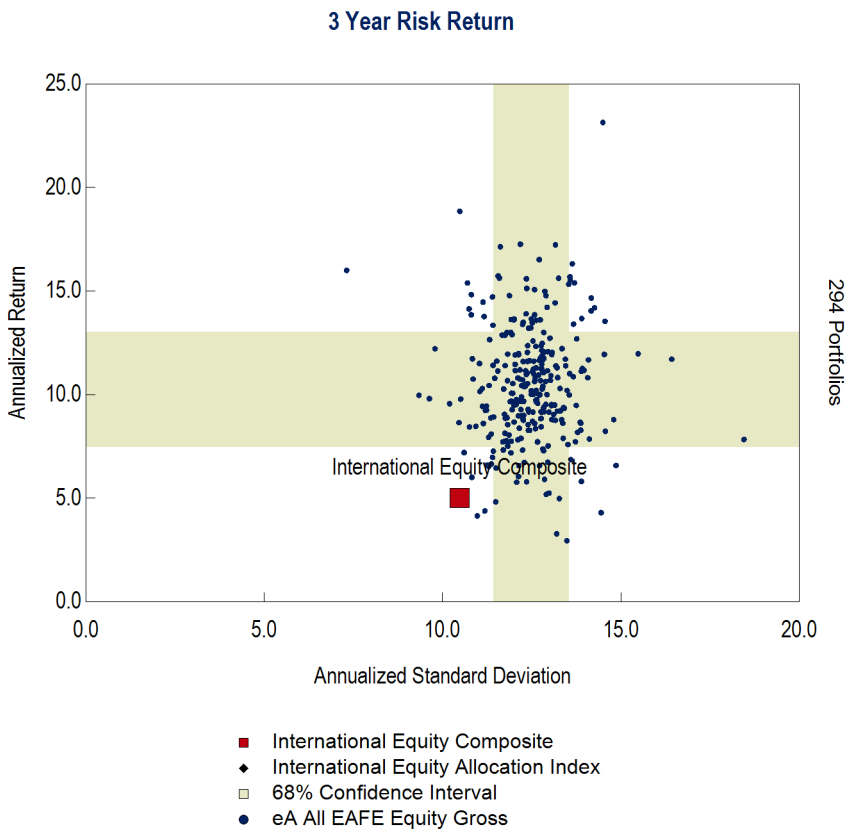
	Relative Contribution %	Return %
TIDEWATER	-0.3%	-40.4%
APPLE	-0.2%	13.2%
DARLING INGREDIENTS	-0.2%	-22.9%
TWENTY-FIRST CENTURY FOX CL.B	-0.1%	-10.5%
RALPH LAUREN CL.A	-0.1%	-28.7%
ORACLE	-0.1%	-3.8%
MORGAN STANLEY	-0.1%	-7.7%
ALIBABA GROUP HLDG.SPN. ADR 1:1	-0.1%	-19.9%
CARBO CERAMICS	-0.1%	-23.1%
AMERICAN EXPRESS	-0.1%	-15.5%

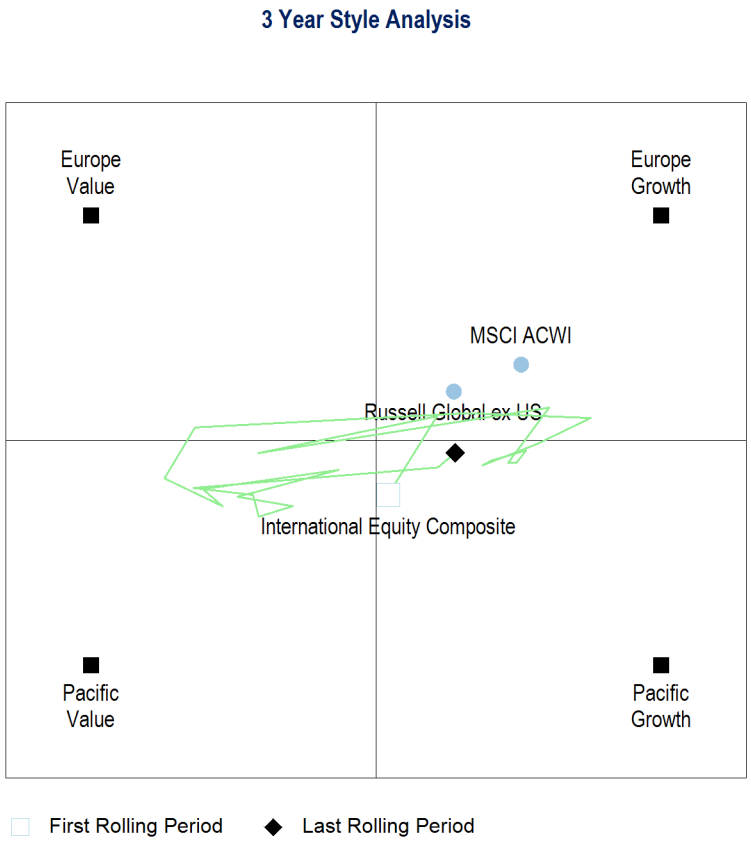
Equity Sector Attribution

	Attribution Effects						Returns		Sector Weights	
	Total Effects		Selection Effect		Allocation Effect		Interaction Effects	Portfolio	Benchmark	Portfolio	Benchmark
Energy	0.0%		-0.2%		0.1%		0.1%	-4.3%	-2.2%	4.9%	7.6%
Materials	0.1%		0.1%		0.0%		0.0%	2.5%	1.1%	5.5%	3.6%
Industrials	0.4%		0.4%		0.0%		0.0%	3.7%	0.4%	12.9%	11.5%
Cons. Disc.	-0.2%		-0.2%		0.2%		-0.1%	2.8%	4.7%	19.1%	12.9%
Cons. Staples	-0.1%		-0.1%		0.0%		0.0%	0.4%	1.2%	9.5%	8.6%
Health Care	0.4%		0.8%		-0.2%		-0.2%	13.4%	7.7%	10.8%	13.5%
Financials	-0.1%		-0.2%		0.1%		0.1%	-2.0%	-0.7%	13.8%	18.1%
Info. Tech	0.1%		0.1%		0.0%		0.0%	2.0%	1.6%	19.0%	19.0%
Telecomm.	0.0%		--		0.0%		--	--	1.9%	0.0%	2.0%
Utilities	0.1%		-0.2%		0.2%		0.2%	-10.3%	-4.6%	0.5%	3.3%
Cash	-0.1%		0.0%		-0.1%		0.0%	0.0%	--	4.0%	0.0%
Unclassified	0.0%		0.0%		0.0%		0.0%	6.7%	--	0.1%	0.0%
Portfolio	**0.7%**	**=**	**0.4%**	**+**	**0.3%**	**+**	**0.1%**	**2.5%**	**1.7%**	**100.0%**	**100.0%**

Attribution calculation is based on quarterly buy and hold methodology which does not take into account portfolio turnover and can differ from actual performance.

International Equity Composite





Style Analysis: Analytic is based on historical returns

International Equity Composite

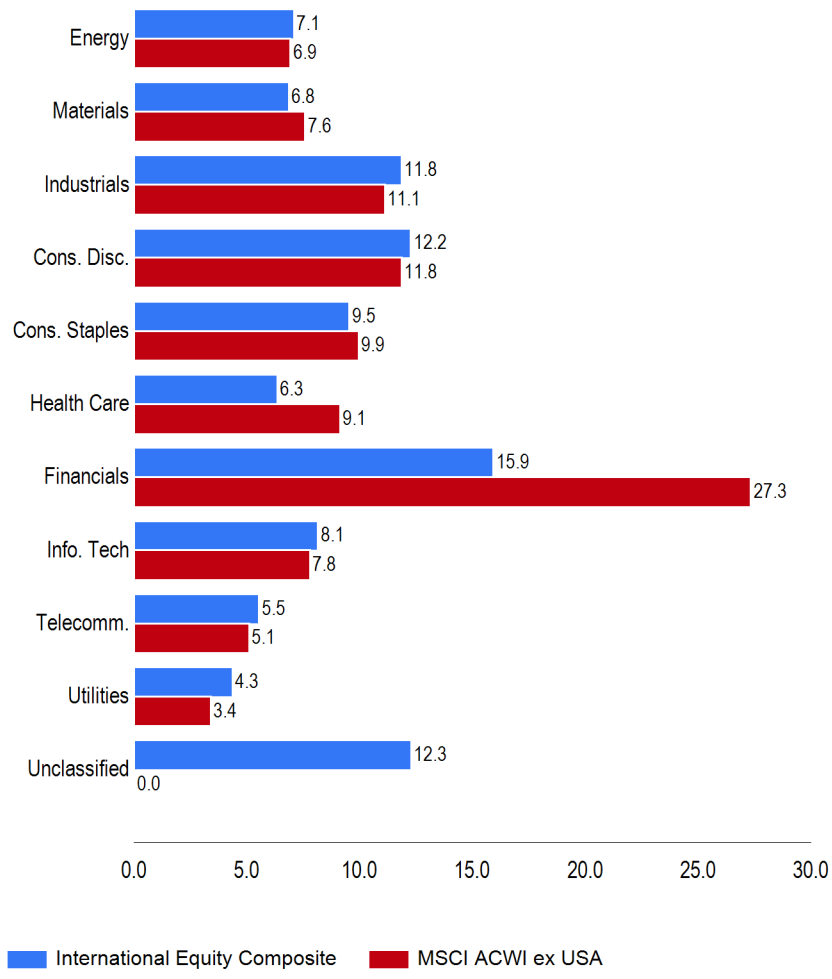
Characteristics

	Portfolio	MSCI ACWI ex USA
Number of Holdings	2,293	1,841
Weighted Avg. Market Cap. ($B)	35.9	53.3
Median Market Cap. ($B)	3.7	6.9
Price To Earnings	20.5	20.5
Price To Book	3.9	2.6
Price To Sales	3.0	2.1
Return on Equity (%)	18.2	15.3
Yield (%)	2.6	2.7
Beta	0.8	1.0
R-Squared	0.9	1.0

Regional Allocation

Region Weighting	International Equity Composite	MSCI ACWI ex USA
North America ex U.S.	1.56	6.80
United States	13.02	0.03
Europe Ex U.K.	15.55	32.50
United Kingdom	6.32	14.24
Pacific Basin Ex Japan	6.10	8.64
Japan	11.50	15.94
Emerging Markets	42.01	21.23
Other	3.95	0.61

Equity Sector Allocation



International Equity Composite

Top Ten Holdings

CASH - USD	7.0%
DAILY MSCI EAFE INDX NL FUND ZV31NON	3.4%
CHINA MOBILE	1.4%
FANUC	1.2%
SPDR GOLD SHARES	1.2%
KEYENCE	1.2%
DANONE	0.9%
TAIWAN SEMICON.MNFG.	0.9%
NESTLE 'R'	0.9%
NOVO NORDISK 'B'	0.7%

Top Positive Contributors

	Relative Contribution %	Return %
FANUC	0.2%	31.6%
KEYENCE	0.2%	22.1%
CHINA MOBILE	0.1%	11.8%
TOKIO MARINE HOLDINGS	0.1%	16.4%
ADIDAS	0.1%	14.1%
HOYA	0.1%	17.3%
SOMPO JAPAN NPNK.HDG.	0.1%	23.4%
SECOM	0.1%	16.4%
HSBC HDG. (ORD $0.50)	0.0%	-8.1%
HENGAN INTL.GP.	0.0%	14.9%

Top Negative Contributors

	Relative Contribution %	Return %
VALE PREFERRED ADR 1:1	-0.1%	-33.2%
CHINA SHENHUA EN.CO.'H'	-0.1%	-13.7%
TENCENT HOLDINGS	-0.1%	30.9%
NOVARTIS 'R'	-0.1%	9.4%
TURK TELEKOMUNIKASYON	-0.1%	-14.5%
CMPH.COCS. RODOVIARIAS ON	-0.1%	-12.0%
PERUSAHAAN GAS NEGARA	-0.1%	-24.2%
FIBRA UNO ADMINISTRACION REIT	-0.1%	-9.1%
DAIMLER	-0.1%	15.3%
ECOD.INFU.E LOG.ON	-0.1%	-29.9%

Equity Sector Attribution

	Attribution Effects								Returns		Sector Weights	
	Total Effects		Selection Effect		Allocation Effect		Interaction Effects		Portfolio	Benchmark	Portfolio	Benchmark
Energy	-0.1%		-0.2%		0.0%		0.2%		-4.3%	-4.1%	8.2%	7.5%
Materials	-0.2%		-0.4%		0.0%		0.2%		-1.3%	1.6%	7.5%	7.7%
Industrials	-0.3%		-0.4%		0.0%		0.0%		2.8%	4.7%	12.5%	11.0%
Cons. Disc.	-0.4%		-0.5%		0.0%		0.1%		3.8%	6.9%	11.9%	11.4%
Cons. Staples	-0.1%		-0.1%		0.0%		0.0%		3.0%	3.9%	10.1%	9.9%
Health Care	-0.2%		-0.2%		-0.2%		0.2%		7.8%	10.6%	6.3%	8.6%
Financials	0.5%		-1.0%		0.1%		1.4%		1.2%	2.2%	17.7%	27.6%
Info. Tech	-0.1%		-0.1%		0.0%		0.0%		6.8%	7.6%	8.3%	7.5%
Telecomm.	-0.1%		-0.2%		0.0%		0.1%		1.9%	1.9%	5.9%	5.2%
Utilities	0.0%		-0.1%		-0.1%		0.1%		-2.1%	-4.5%	4.6%	3.6%
Cash	-0.5%		0.0%		-0.5%		0.0%		0.0%	--	5.6%	0.0%
Unclassified	-0.1%		0.0%		-0.1%		0.0%		1.8%	--	1.5%	0.0%
Portfolio	**-1.6%**	**=**	**-3.1%**	**+**	**-0.7%**	**+**	**2.3%**		**2.0%**	**3.5%**	**100.0%**	**100.0%**

Attribution calculation is based on quarterly buy and hold methodology which does not take into account portfolio turnover and can differ from actual performance. MSCI ACWI ex USA used for attribution.

International Equity Composite

Country Allocation
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2015

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
Americas				
Argentina**	0.1%	0.0%	39.9%	3.5%
Brazil*	3.3%	1.9%	-16.4%	-14.6%
Canada	1.8%	7.5%	-6.9%	-5.9%
Chile*	1.4%	0.3%	1.5%	0.1%
Colombia*	0.6%	0.2%	-19.2%	-19.1%
Mexico*	3.0%	1.1%	-4.4%	-1.9%
Peru*	0.7%	0.1%	-11.7%	-6.0%
United States	2.4%	0.0%	1.4%	1.3%
Total-Americas	**13.3%**	**11.1%**	**-6.7%**	**-7.1%**
Europe				
Austria	0.1%	0.1%	12.1%	3.2%
Belgium	0.1%	0.9%	-0.7%	5.9%
Czech Republic*	0.3%	0.0%	-3.0%	-3.1%
Denmark	0.7%	1.1%	25.7%	16.7%
Finland	0.7%	0.6%	-0.2%	2.8%
France	5.7%	6.9%	4.7%	4.8%
Germany	2.0%	6.5%	7.5%	8.1%
Greece*	0.4%	0.1%	-9.7%	-29.3%
Hungary*	0.3%	0.0%	12.0%	14.0%
Ireland	0.0%	0.2%	--	3.9%
Italy	0.2%	1.6%	25.6%	6.8%
Luxembourg	0.0%	0.0%	0.0%	3.5%
Netherlands	0.4%	2.0%	1.3%	4.9%
Norway	0.1%	0.5%	10.9%	2.3%
Poland*	0.8%	0.3%	-1.5%	-3.0%
Portugal	0.0%	0.1%	--	7.3%
Russia*	1.4%	0.7%	13.1%	18.7%
Spain	0.6%	2.5%	11.9%	-0.7%
Sweden	0.9%	2.2%	1.3%	5.6%
Switzerland	4.1%	6.6%	2.7%	5.1%
United Kingdom	7.2%	14.9%	0.4%	-0.9%
Total-Europe	**26.1%**	**47.9%**	**4.1%**	**3.6%**

Country Allocation
Versus MSCI ACWI ex USA - Quarter Ending March 31, 2015

	Manager Allocation (USD)	Index Allocation (USD)	Manager Return (USD)	Index Return (USD)
AsiaPacific				
Australia	2.0%	5.3%	-1.7%	3.1%
Bangladesh**	0.2%	0.0%	-7.2%	3.5%
China*	6.9%	4.7%	4.7%	8.2%
Hong Kong	2.2%	2.2%	1.7%	6.0%
India*	3.5%	1.5%	5.9%	5.5%
Indonesia*	3.7%	0.6%	0.5%	2.5%
Japan	11.7%	15.0%	11.2%	10.2%
Korea*	5.0%	3.2%	4.6%	4.1%
Malaysia*	2.1%	0.8%	-3.1%	-1.5%
Pakistan**	0.2%	0.0%	-6.7%	3.5%
Philippines*	1.1%	0.3%	5.1%	10.2%
Singapore	1.7%	1.1%	-0.6%	-1.9%
Sri Lanka**	0.2%	0.0%	-9.9%	3.5%
Taiwan*	4.4%	2.7%	2.5%	3.9%
Thailand*	1.2%	0.5%	0.8%	2.4%
Total-AsiaPacific	**46.2%**	**38.1%**	**4.6%**	**6.7%**
Other				
Bahrain**	0.2%	0.0%	-7.6%	3.5%
Bulgaria**	0.0%	0.0%	-17.5%	3.5%
Croatia**	0.2%	0.0%	-10.2%	3.5%
Egypt*	0.4%	0.1%	-6.1%	1.5%
Estonia**	0.0%	0.0%	5.1%	3.5%
Israel	0.1%	0.4%	-2.1%	9.1%
Jordan**	0.2%	0.0%	-2.3%	3.5%
Kazakhstan**	0.3%	0.0%	-14.8%	3.5%
Kenya**	0.2%	0.0%	7.3%	3.5%
Kuwait**	0.4%	0.0%	-4.0%	3.5%
Lebanon**	0.1%	0.0%	1.0%	3.5%
Mauritius**	0.2%	0.0%	-15.7%	3.5%
Morocco**	0.2%	0.0%	-1.5%	3.5%
Nigeria**	0.2%	0.0%	-11.1%	3.5%
Oman**	0.2%	0.0%	-0.5%	3.5%

International Equity Composite

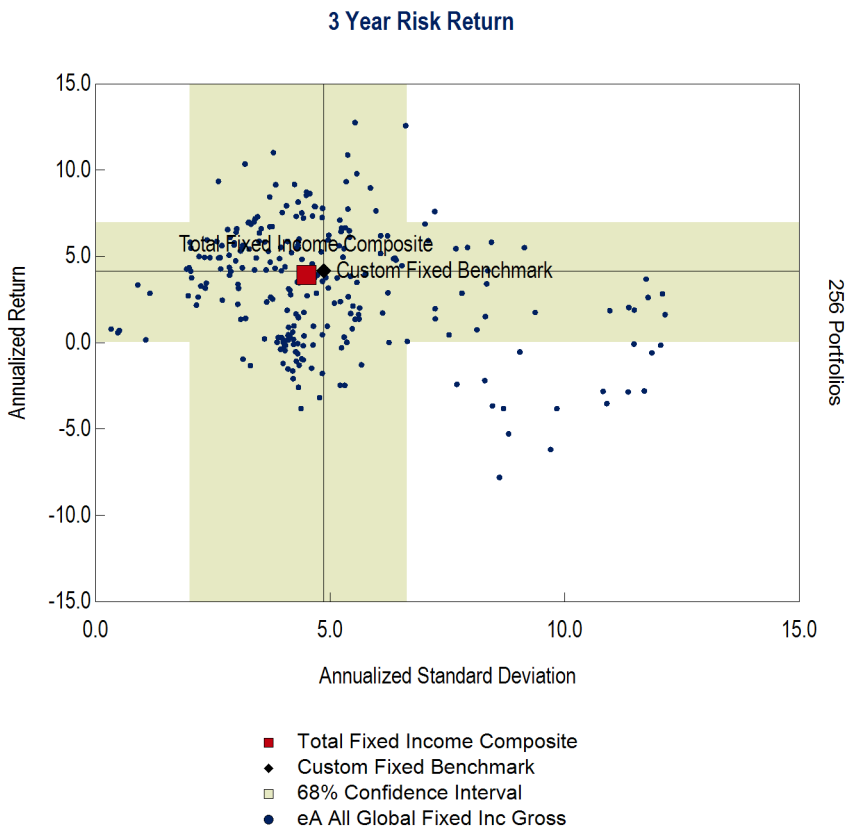
International Equity Performance Attribution

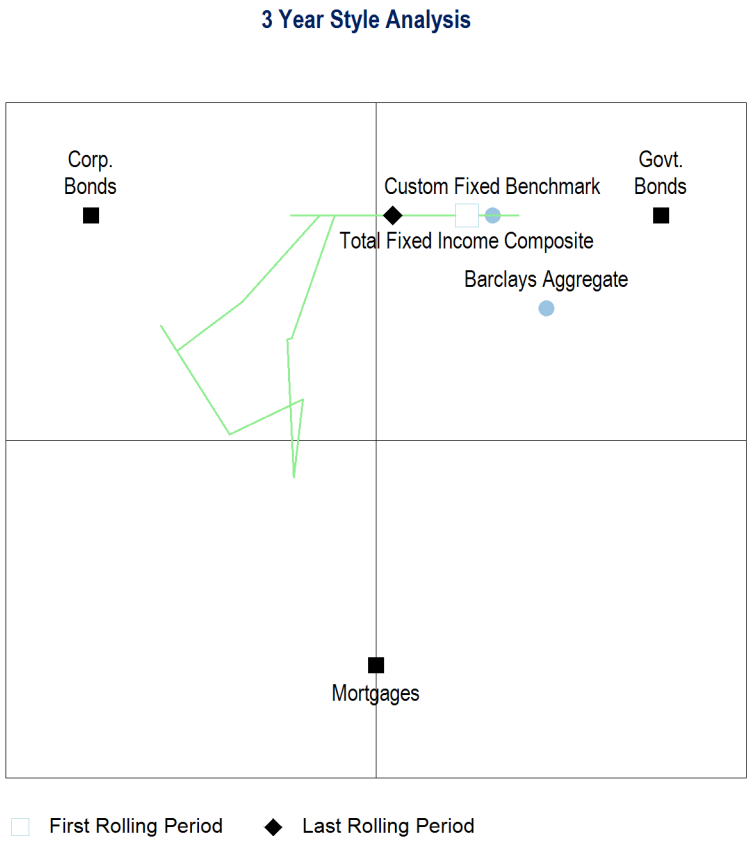
	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
Europe									
Austria	12.1%	3.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Belgium	-0.7%	5.9%	0.1%	0.9%	-0.1%	-0.1%	0.1%	0.1%	0.0%
Czech Republic*	-3.0%	-3.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Denmark	25.7%	16.7%	0.7%	1.1%	0.1%	-0.1%	0.0%	0.0%	0.0%
Finland	-0.2%	2.8%	0.7%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%
France	4.7%	4.8%	5.7%	6.9%	0.0%	-0.1%	0.2%	0.0%	0.0%
Germany	7.5%	8.1%	2.0%	6.5%	0.0%	-0.6%	0.6%	0.0%	0.0%
Greece*	-9.7%	-29.3%	0.4%	0.1%	0.0%	-0.1%	0.0%	0.1%	0.0%
Hungary*	12.0%	14.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Ireland	--	3.9%	0.0%	0.2%	--	0.0%	0.0%	--	0.0%
Italy	25.6%	6.8%	0.2%	1.6%	0.3%	-0.2%	0.2%	-0.3%	0.1%
Luxembourg	0.0%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Netherlands	1.3%	4.9%	0.4%	2.0%	-0.1%	-0.1%	0.2%	0.1%	0.1%
Norway	10.9%	2.3%	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Poland*	-1.5%	-3.0%	0.8%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Portugal	--	7.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Russia*	13.1%	18.7%	1.4%	0.7%	0.0%	0.1%	0.0%	0.0%	0.0%
Spain	11.9%	-0.7%	0.6%	2.5%	0.4%	-0.1%	0.2%	-0.3%	0.3%
Sweden	1.3%	5.6%	0.9%	2.2%	-0.1%	-0.1%	0.1%	0.1%	0.0%
Switzerland	2.7%	5.1%	4.1%	6.6%	-0.2%	0.2%	-0.1%	0.1%	0.0%
United Kingdom	0.4%	-0.9%	7.2%	14.9%	0.2%	0.4%	0.4%	-0.1%	0.9%
Americas									
Argentina**	39.9%	3.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Brazil*	-16.4%	-14.6%	3.3%	1.9%	-0.1%	-0.1%	-0.1%	-0.1%	-0.4%
Canada	-6.9%	-5.9%	1.8%	7.5%	-0.4%	0.4%	0.6%	0.3%	0.8%
Chile*	1.5%	0.1%	1.4%	0.3%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Colombia*	-19.2%	-19.1%	0.6%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Mexico*	-4.4%	-1.9%	3.0%	1.1%	0.0%	-0.2%	0.0%	-0.1%	-0.3%
Peru*	-11.7%	-6.0%	0.7%	0.1%	0.0%	-0.1%	0.0%	0.0%	-0.1%
United States	1.4%	1.3%	2.4%	0.0%	0.0%	-0.2%	0.0%	0.0%	-0.2%

International Equity Performance Attribution

	Returns and Weights				Attribution Effects				
	Manager Return	Index Return	Manager Weight	Index Weight	Selection Effect	Allocation Effect	Currency Effect	Interaction Effect	Total Effects
AsiaPacific									
Australia	-1.7%	3.1%	2.0%	5.3%	-0.3%	0.0%	0.3%	0.2%	0.1%
Bangladesh**	-7.2%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
China*	4.7%	8.2%	6.9%	4.7%	-0.2%	0.0%	0.0%	-0.1%	-0.3%
Hong Kong	1.7%	6.0%	2.2%	2.2%	-0.1%	0.0%	0.0%	0.0%	-0.1%
India*	5.9%	5.5%	3.5%	1.5%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Indonesia*	0.5%	2.5%	3.7%	0.6%	0.0%	0.0%	-0.2%	-0.1%	-0.3%
Japan	11.2%	10.2%	11.7%	15.0%	0.1%	0.0%	0.0%	0.0%	0.1%
Korea*	4.6%	4.1%	5.0%	3.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Malaysia*	-3.1%	-1.5%	2.1%	0.8%	0.0%	-0.1%	-0.1%	0.0%	-0.2%
New Zealand	--	-1.3%	0.0%	0.1%	--	0.0%	0.0%	--	0.0%
Pakistan**	-6.7%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Philippines*	5.1%	10.2%	1.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Singapore	-0.6%	-1.9%	1.7%	1.1%	0.0%	0.0%	0.0%	0.0%	0.0%
Sri Lanka**	-9.9%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Taiwan*	2.5%	3.9%	4.4%	2.7%	0.0%	-0.1%	0.0%	0.0%	-0.2%
Thailand*	0.8%	2.4%	1.2%	0.5%	0.0%	-0.1%	0.0%	0.0%	-0.1%
Other									
Bahrain**	-7.6%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Bulgaria**	-17.5%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Croatia**	-10.2%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Egypt*	-6.1%	1.5%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	-0.1%
Estonia**	5.1%	3.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Israel	-2.1%	9.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%
Jordan**	-2.3%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kazakhstan**	-14.8%	3.5%	0.3%	0.0%	0.0%	0.0%	0.0%	-0.1%	-0.1%
Kenya**	7.3%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kuwait**	-4.0%	3.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	-0.1%
Lebanon**	1.0%	3.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Mauritius**	-15.7%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Morocco**	-1.5%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nigeria**	-11.1%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Oman**	-0.5%	3.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Qatar*	-2.9%	-3.3%	0.7%	0.2%	0.0%	-0.1%	0.0%	0.0%	-0.1%

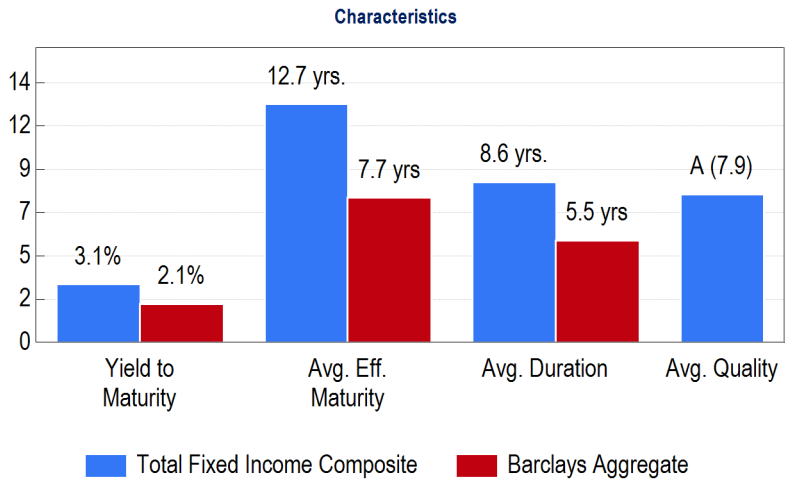
Total Fixed Income Composite

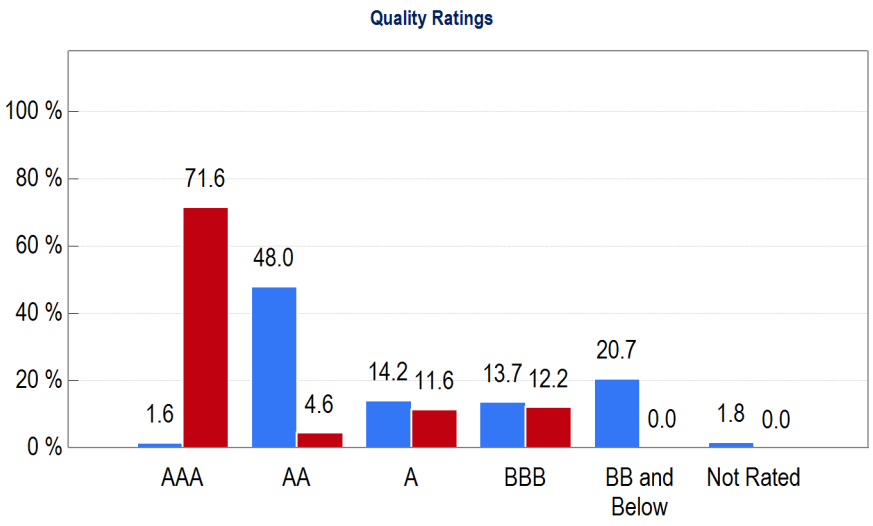


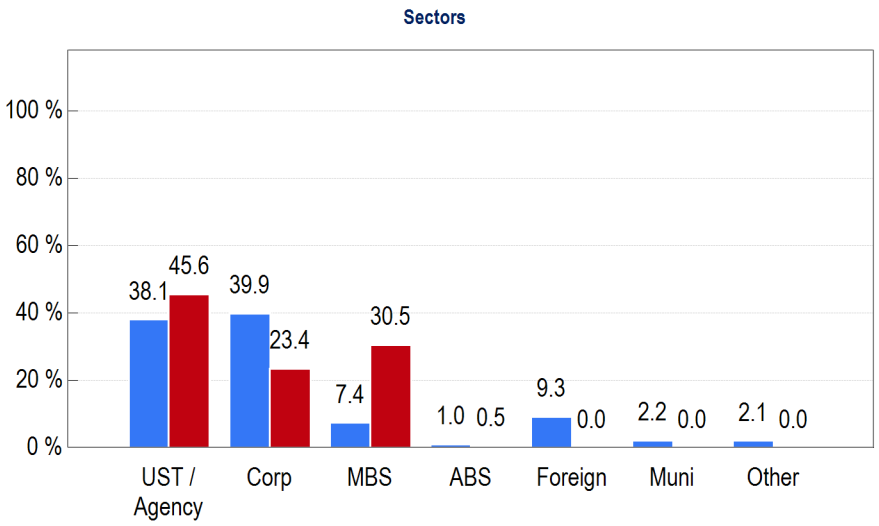


Style Analysis: Analytic is based on historical returns

Total Fixed Income Composite

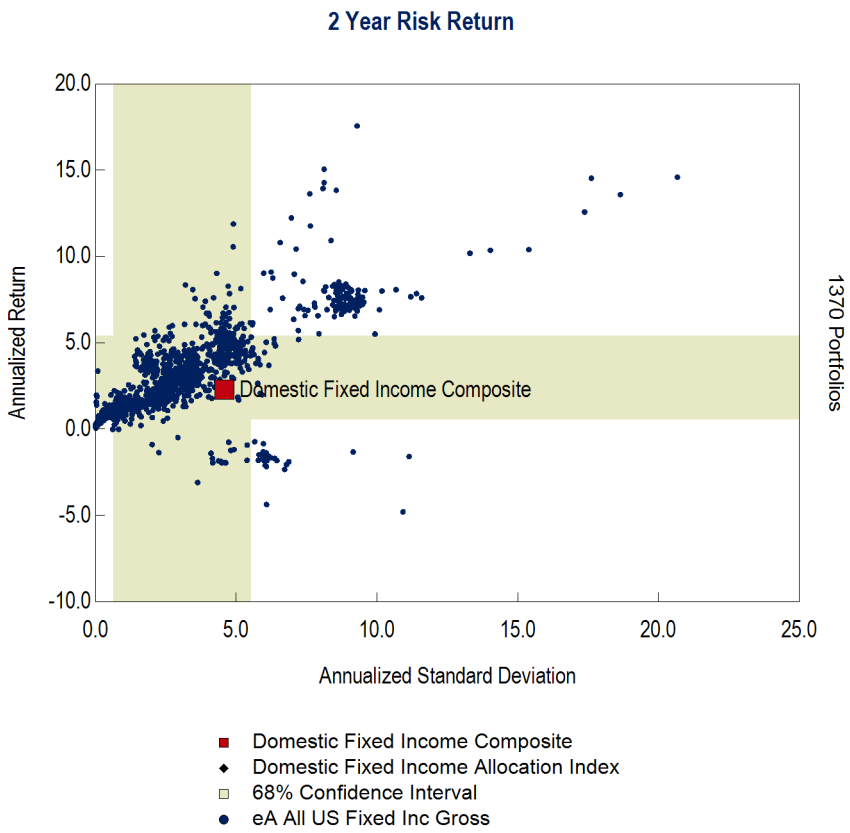


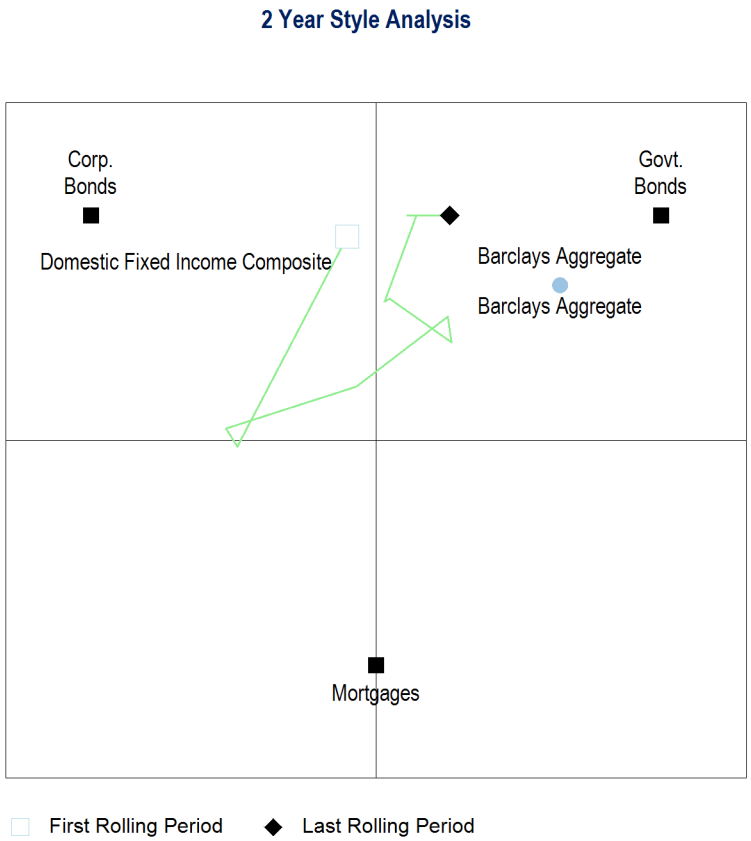




Characteristic, Quality, and Sector information not available for the Custom Fixed Income benchmark

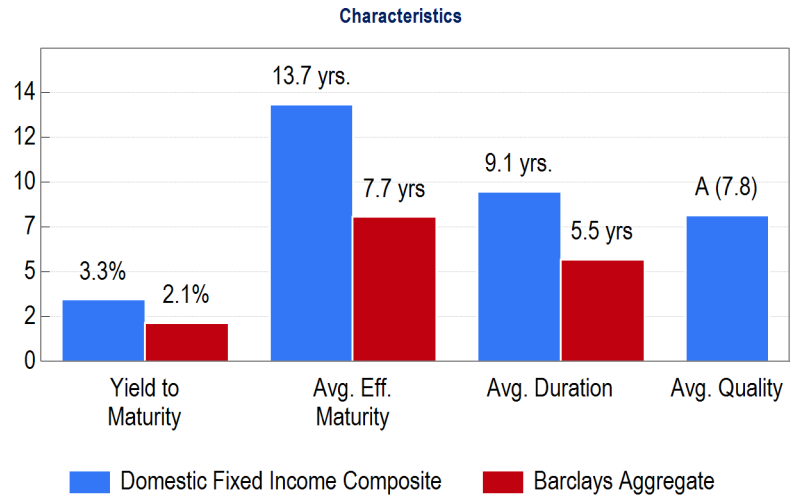
Domestic Fixed Income Composite

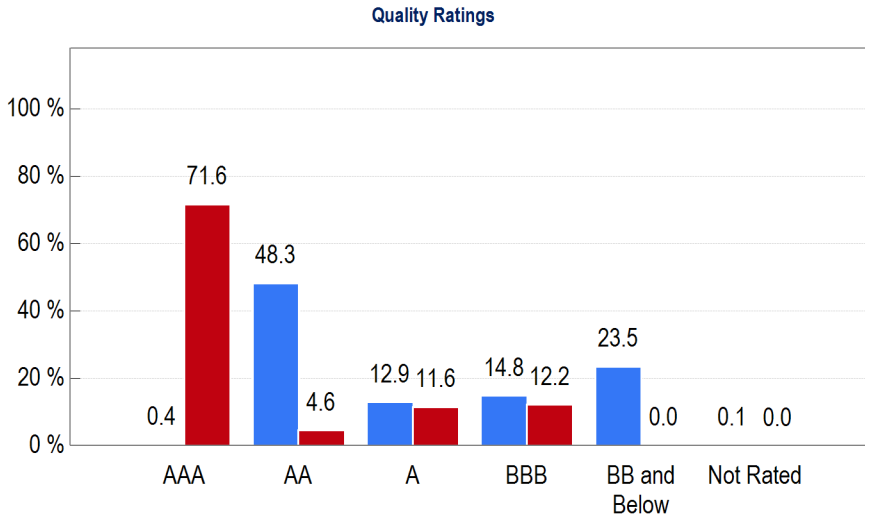


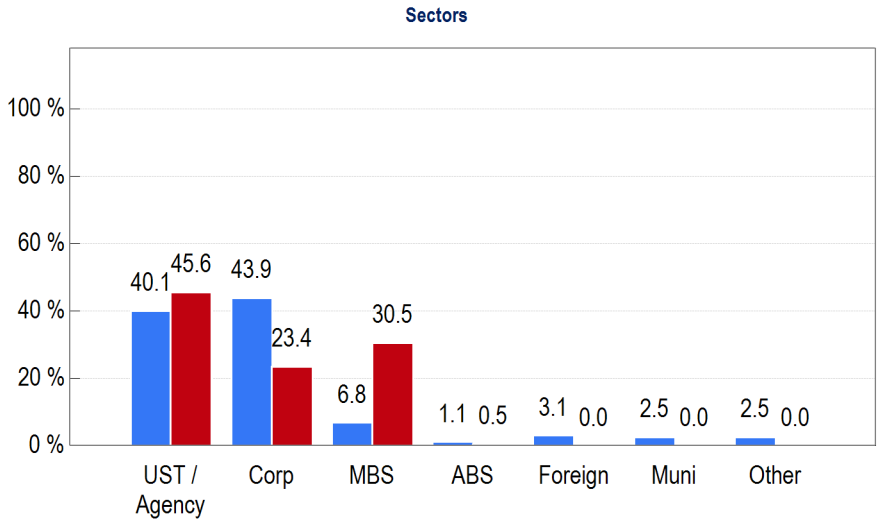


Style Analysis: Analytic is based on historical returns

Domestic Fixed Income Composite

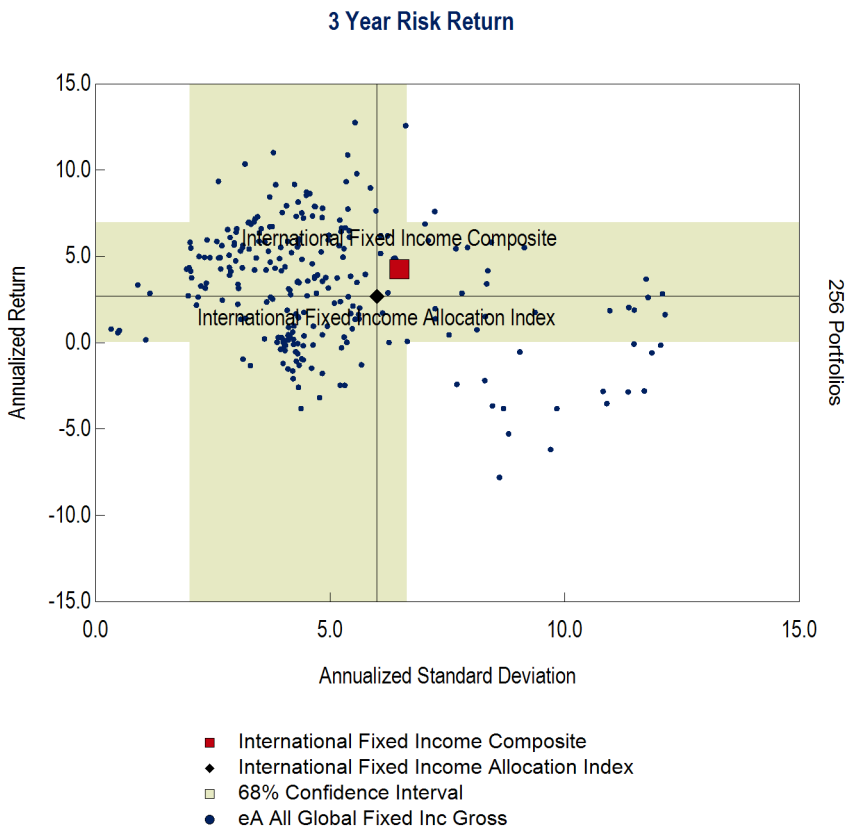


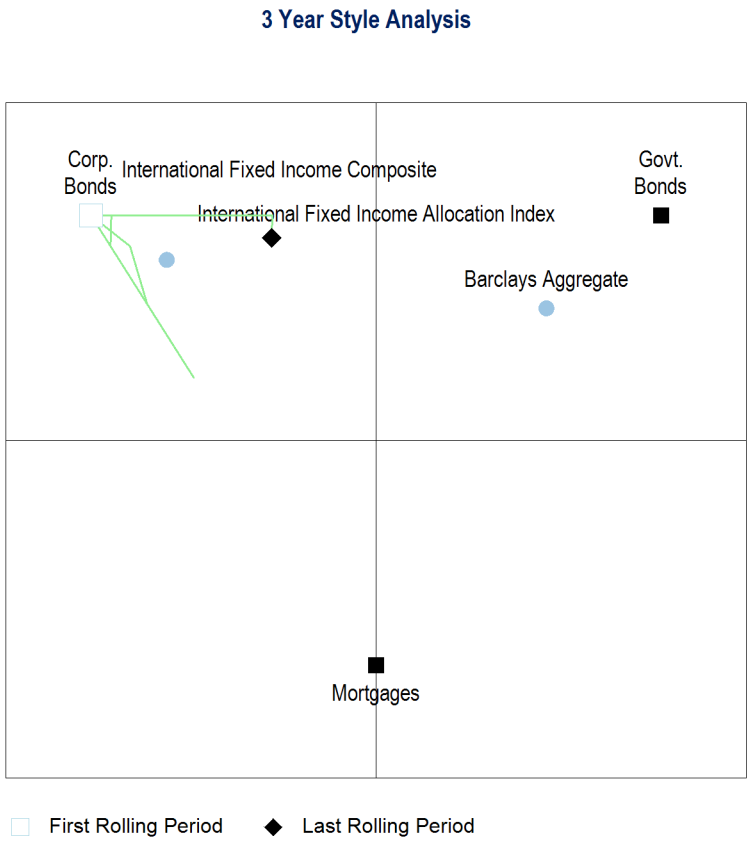




Characteristic, Quality, and Sector information not available for the Custom Domestic Fixed Income benchmark

International Fixed Income Composite

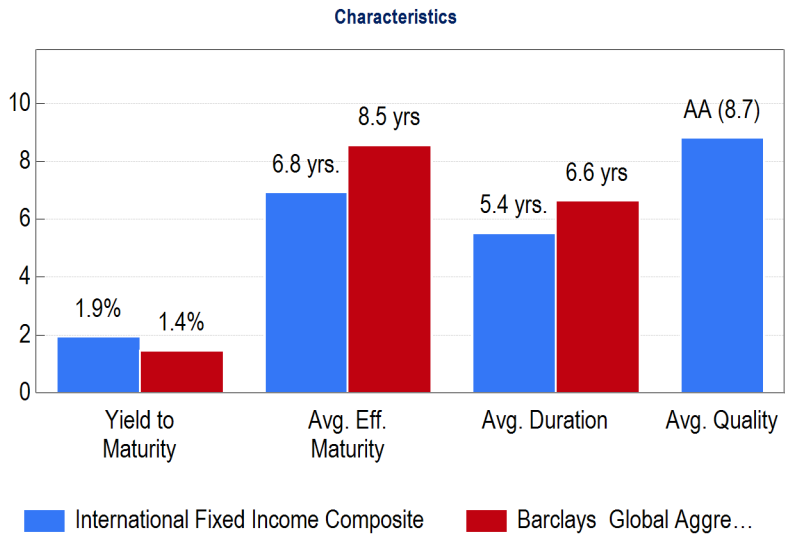


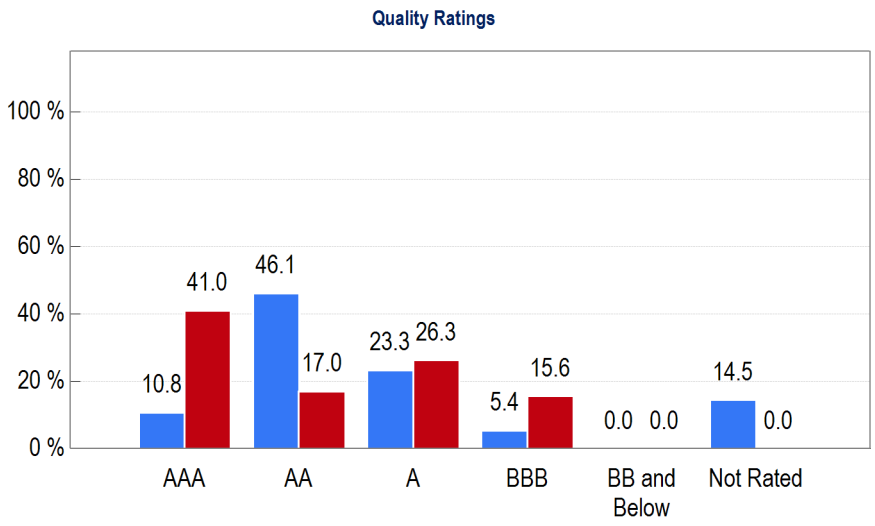


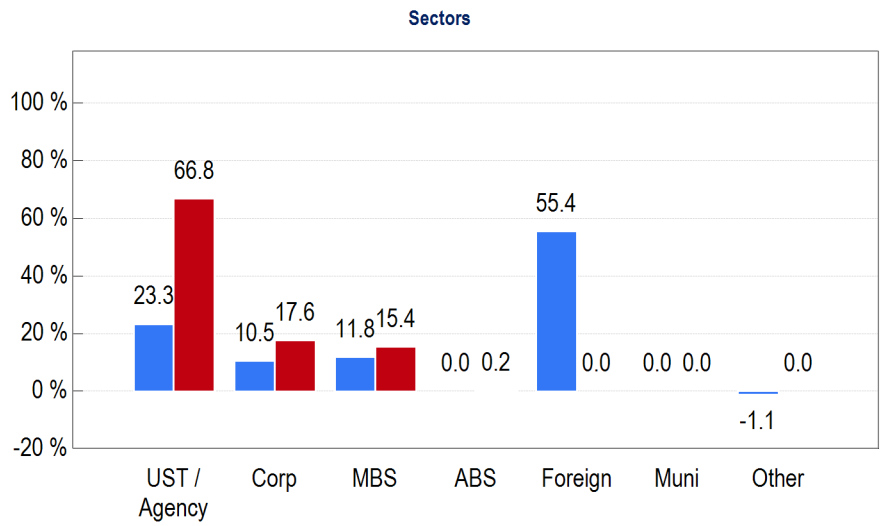
Style Map: Analytic is based on historical returns

Style Map: Analytic is based on historical returns

International Fixed Income Composite







Appendix

It is important to note the following characteristics of many non-traditional investment strategies including hedge funds and private equity:

1. Performance can be volatile and investors could lose all or a substantial portion of their investment
2. Leverage and other speculative practices may increase the risk of loss
3. Past performance may be revised due to the revaluation of investments
4. These investments can be illiquid, and investors may be subject to lock-ups or lengthy redemption terms
5. A secondary market may not be available for all funds, and any sales that occur may take place at a discount to value
6. These funds are not subject to the same regulatory requirements as registered investment vehicles
7. Managers are not required to provide periodic pricing or valuation information to investors
8. These funds may have complex tax structures and delays in distributing important tax information
9. These funds often charge high fees
10. Limited partnership agreements often give the manager authority to trade in securities, markets or currencies that are not within the manager's realm of expertise or contemplated investment strategy

Glossary of Terms

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

DownsideCapture = TotalReturn(FundReturns)/TotalReturns(BMReturn) when Benchmark <0

Data Source: InvestorForce

Disclaimer

- **NEPC uses, as a data source, the plan's custodian bank or service provider for asset balances, calculation of accruals, transfers, exchanges and contribution deferral information. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.**

- **This report is provided as a management aid for the client's internal use only. Fund performance contained in this report does not constitute a recommendation by NEPC.**

- **Information in this report on fund returns, market indices and security characteristics is received from sources external to NEPC. While efforts are made to ensure that this external data is accurate, NEPC cannot accept responsibility for errors that may occur.**

- **(c) Morningstar 2011. All Rights Reserved. For institutional use only. The information contained herein: (1) is proprietary to Morningstar and/or its content providers; (2) may not be copied or distributed; and (3) is not warranted to be accurate, complete or timely. Neither Morningstar nor its content providers are responsible for any damages or losses arising from any use of this information. Past financial performance is no guarantee of future results.**