



NEPC, LLC

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Vermont Pension Investment Committee

Second Quarter State Employees' Investment Performance Analysis

October 25th, 2016

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NEPC Update



NEPC Updates

June 30, 2016

Highlights of Second Quarter Happenings at NEPC

NEPC Research

Recent White Papers

- "Thinking Ahead to Stay Ahead: Strategic Private Equity Investing in Healthcare" (April 2016)
- Market Chatter: "Implications of Brexit" (June 2016)
- Market Chatter: "Brexit... What Now?" (June 2016)
- "The Disease of Doubt" (July 2016)

Webinar

- "Brexit - A Vote for Volatility" (June 2016); Panel provides perspectives on the EU Referendum.



NEPC's 21st Annual Investment Conference

"Excellent breadth of materials, plenty of concurrent sessions, and the speakers were vibrant and humorous!" is just one of many positive reviews from attendees. The conference attracted more than 200 people to the Hynes Convention Center in Boston on May 10-11, 2016.

News from NEPC

We are excited to announce NEPC's active presence on five social media channels: Facebook, Google+, LinkedIn, Twitter and YouTube, and we will continue to post on the Endowments and Foundations Twitter. We will be using these online channels to share company news, information and articles throughout the industry. Those interested in keeping up with the latest news from NEPC can follow our accounts. Company news and industry insights will continue to be available on our website, which has been updated with a new optimized search feature.



Upcoming Events

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

MARK YOUR CALENDAR!

NEPC Client Recognitions

We are pleased to announce that three of NEPC's public fund clients won Institutional Investor (II) Awards.

- **Arn Andrews**, CIO of San Jose Police & Fire, won the award for Chief Investment Officer of the Year.
- **Sam Masoudi**, CIO of Wyoming Retirement System, won the award for Opportunistic Investment Strategies Award.
- **Bob Jacksha**, CIO of New Mexico Employees Retirement Board, won the award for Portfolio Construction.

We are also pleased to announce that two NEPC clients, **San Bernardino County Employees' Retirement System** and **Arizona Public Safety Personnel Retirement System**, were nominated for Institutional Investor magazine's 14th Annual Hedge Fund Industry Awards in the "Public Plan of the Year, Small" category.

Market Environment



- **US economic cycle and US central bank policy are at the forefront of major cyclical and secular forces informing our Assumptions and Actions**
 - These factors interact to create a supportive environment for risk assets in the near term but ultimately push long term capital market forecasts lower relative to history
- **The US economy is nearly 7 years removed from the previous recession but the health of US consumers can extend the expansion**
 - Prolonged US economic cycle has the potential to push the US dollar higher
- **Persistent US Dollar strength tightens global monetary conditions and materially weakens the US corporate earnings profile**
 - A strong dollar strains international borrowers with dollar based debt
 - Outsized credit growth in Asia, specifically China, at risk from a stronger US dollar
- **Influence of central bank policies in the developed world remain broadly supportive for risk assets but come with long term effects**
 - US policy is slowly diverging from Europe and Japan but gradual expected pace of hikes provides a positive backdrop for US equities and credit in the near term
 - Extraordinary central bank measures from Europe and Japan continue to expand and support a strong bias to equities in these markets

- **US economic expansion continues as Federal Reserve begins policy shift**
 - Economic conditions and health of US consumers remain supportive for growth
 - US Corporate earnings quality has weakened under pressure from profit margin declines
- **Central Banks continue to dictate the global investment outlook**
 - Subdued market expectation of Fed action over next 36 months; a surprise Fed rate increase poses risk to both US equities and interest rates
 - ECB and BoJ likely to maintain and expand accommodative monetary policies
 - Easing in China is broadly stimulative in the near term but currency policy is unpredictable
- **Rise of political populism fuels equity and currency market uncertainty**
 - Populist movements are destabilizing for the established political and economic order posing a risk for the cohesion of the European Union and global trade relationships
 - However, elevated risk offers an opportunity should market sentiment be overly pessimistic
- **Large currency adjustments across most emerging countries have provided a foundation to support improved capital market returns**
 - Continued political and economic reform is needed across EM to stimulate economic growth
 - Chinese Yuan (RMB) depreciation has been incremental relative to other EM FX adjustments and fears of further adjustment remain an over-hanging concern
- **Embrace illiquidity in opportunistic credit and private credit strategies**
 - Stressed credit liquidity magnifies the scale of price movements in traditional credit assets
 - Credit markets ability to absorb an exodus from crowded positions is challenged

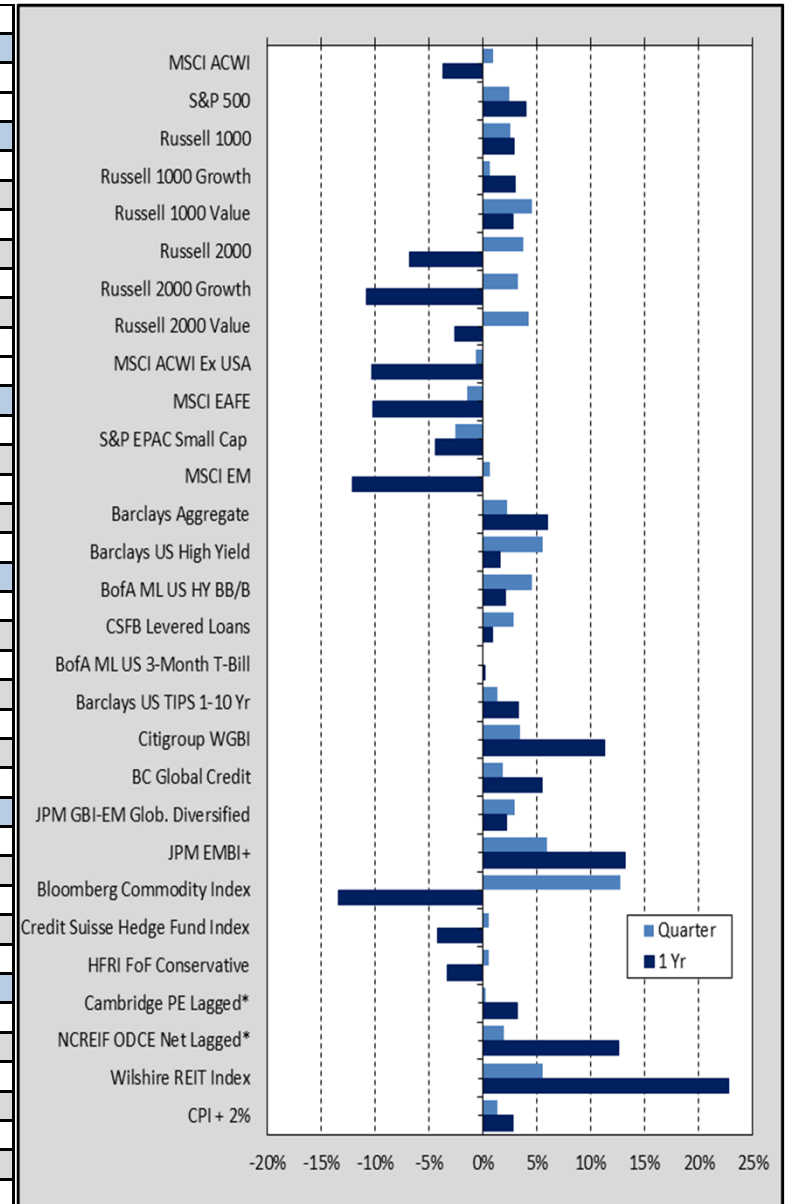
General Actions for Clients

- **Trim US equity exposure as US markets have rebounded significantly**
 - Remain disciplined and look for rebalancing opportunities should equity markets decline
 - Look to capture pockets of value in US high yield with credit spreads in-line with averages
- **Maintain overweight exposure to non-US developed market equities**
 - Central bank support and dollar strength provide a positive economic backdrop
 - A more dramatic expansion of political risk may soften our overweight view
 - Small-cap equity and global equity are preferred implementation approaches
 - These strategies offer the best opportunity to exploit valuation discrepancies among individual stocks that may result from elevated volatility levels
- **Recommend investors continue to hedge developed market currencies**
 - 50% hedge ratio remains an ideal neutral point for developed currency exposure
 - Current US dollar valuation hovers within a neutral band, opportunities to tactically adjust currency hedge ratios may arise should the US dollar significantly strengthen or weaken
- **Recent strength validates commitment to emerging market equities**
 - Valuations and long-term fundamentals suggest an overweight
 - China uncertainty, dollar pressure and idiosyncratic country risks temper excitement
 - Overweight small-cap and consumer focused strategies relative to broad mandates
- **Developed market duration exposure is generally unattractive**
 - Preserve US duration exposure with a bias towards TIPS over core bonds
 - Rebalance long treasuries, long credit, and risk parity following recent outsized gains
 - Look to eliminate WGBI focused global bond strategies with yields at historic lows



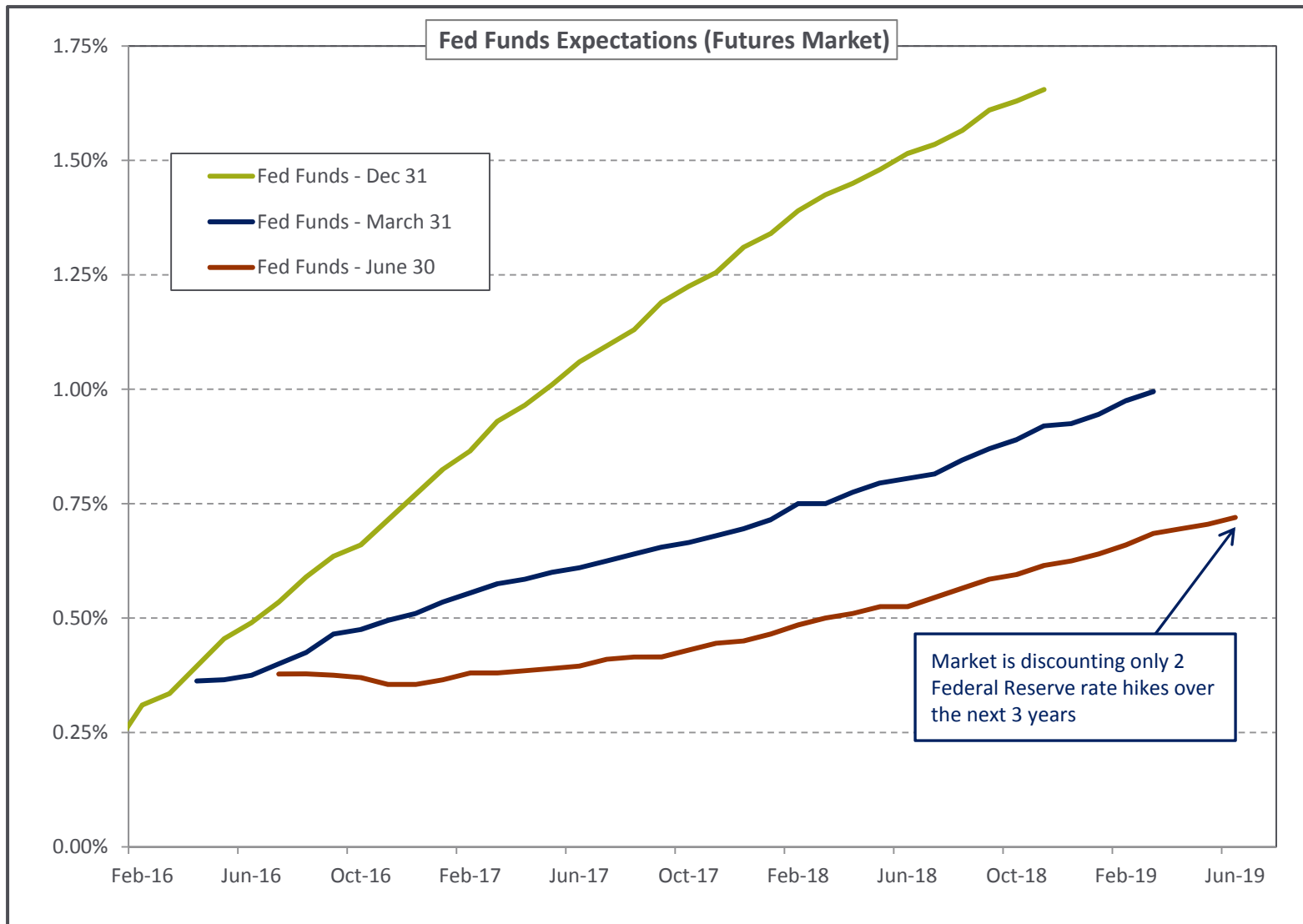
Market Environment – Q2 2016 Overview

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI	World	1.0%	-3.7%	6.0%	5.4%	4.3%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity Benchmarks						
S&P 500	Large Core	2.5%	4.0%	11.7%	12.1%	7.4%
Russell 1000	Large Core	2.5%	2.9%	11.5%	11.9%	7.5%
Russell 1000 Growth	Large Growth	0.6%	3.0%	13.1%	12.3%	8.8%
Russell 1000 Value	Large Value	4.6%	2.9%	9.9%	11.4%	6.1%
Russell 2000	Small Core	3.8%	-6.7%	7.1%	8.4%	6.2%
Russell 2000 Growth	Small Growth	3.2%	-10.8%	7.7%	8.5%	7.1%
Russell 2000 Value	Small Value	4.3%	-2.6%	6.4%	8.1%	5.2%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	-0.6%	-10.2%	1.2%	0.1%	1.9%
MSCI EAFE	Int'l Developed	-1.5%	-10.2%	2.1%	1.7%	1.6%
S&P EPAC Small Cap	Small Cap Int'l	-2.6%	-4.4%	7.6%	5.0%	4.3%
MSCI EM	Emerging Equity	0.7%	-12.1%	-1.6%	-3.8%	3.5%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	2.2%	6.0%	4.1%	3.8%	5.1%
Barclays US High Yield	High Yield	5.5%	1.6%	4.2%	5.8%	7.6%
BofA ML US HY BB/B	High Yield	4.6%	2.1%	4.6%	5.9%	7.0%
CSFB Levered Loans	Bank Loans	2.9%	0.9%	3.0%	4.0%	4.2%
BofA ML US 3-Month T-Bill	Cash	0.1%	0.2%	0.1%	0.1%	1.0%
Barclays US TIPS 1-10 Yr	Inflation	1.3%	3.3%	1.6%	1.6%	4.0%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Global Fixed Income Benchmarks						
Citigroup WGBI	World Gov. Bonds	3.4%	11.3%	2.6%	1.2%	4.2%
BC Global Credit	Global Bonds	1.9%	5.5%	3.2%	3.1%	4.7%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local)	3.0%	2.2%	-3.5%	-2.2%	5.7%
JPM EMBI+	Em. Mkt. Bonds	6.0%	13.2%	7.1%	6.4%	8.0%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Alternative Benchmarks						
Bloomberg Commodity Index	Commodity	12.7%	-13.4%	-10.6%	-10.8%	-5.6%
Credit Suisse Hedge Fund Index	Hedge Fund	0.6%	-4.2%	2.5%	2.9%	4.2%
HFRI FoF Conservative	Fund of Funds	0.5%	-3.3%	1.9%	1.9%	1.4%
Cambridge PE Lagged*	Private Equity	0.3%	3.2%	10.9%	11.4%	10.8%
NCREIF ODCE Net Lagged*	Real Estate	2.0%	12.6%	12.6%	12.2%	5.4%
Wilshire REIT Index	REIT	5.6%	22.8%	13.6%	12.5%	7.0%
CPI + 2%	Inflation/Real Assets	1.3%	2.8%	3.0%	3.3%	3.8%



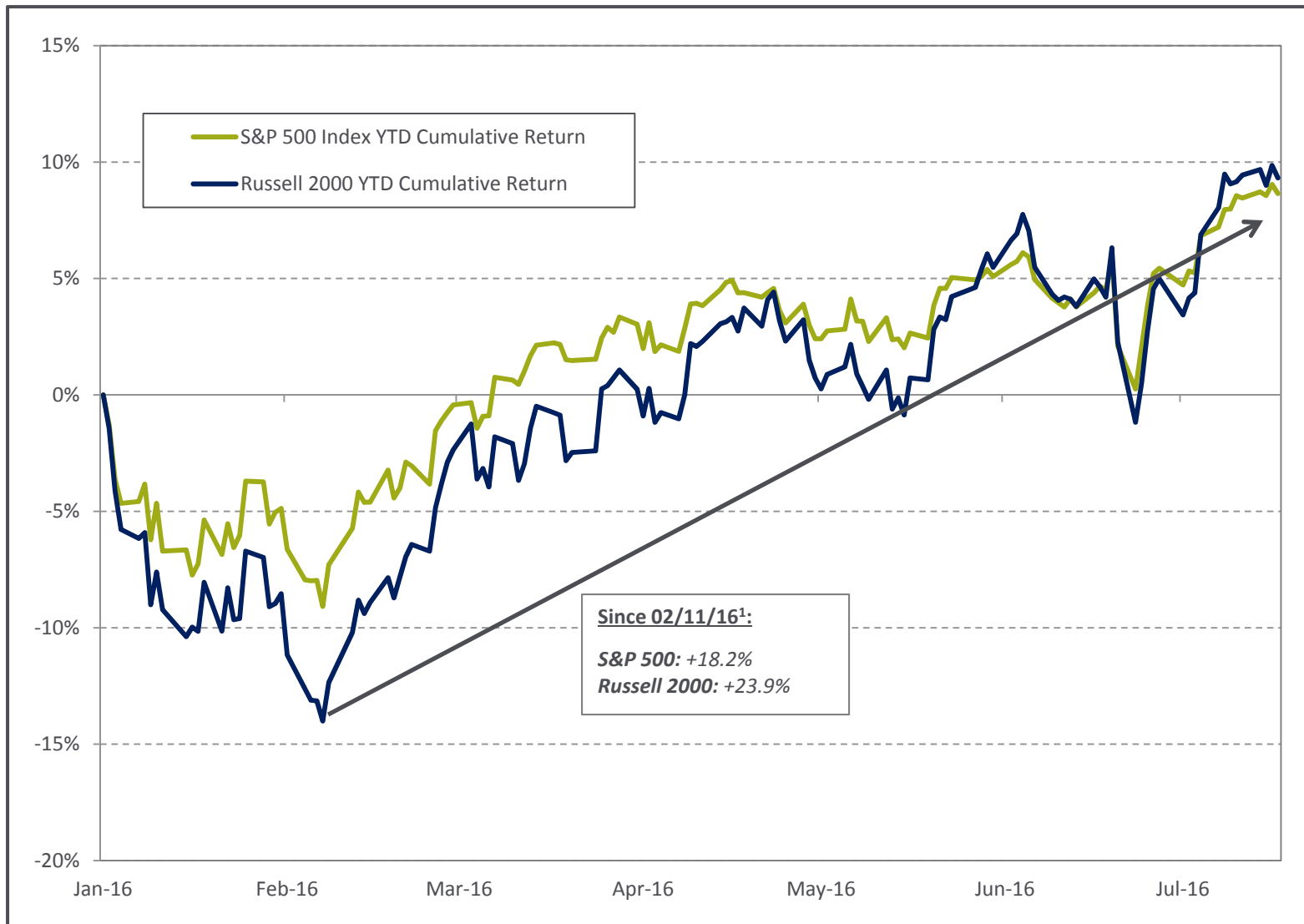
* As of 3/31/2016

An Uptick in Fed Funds Expectations of Current Lows is Likely to Fuel Dollar Strength



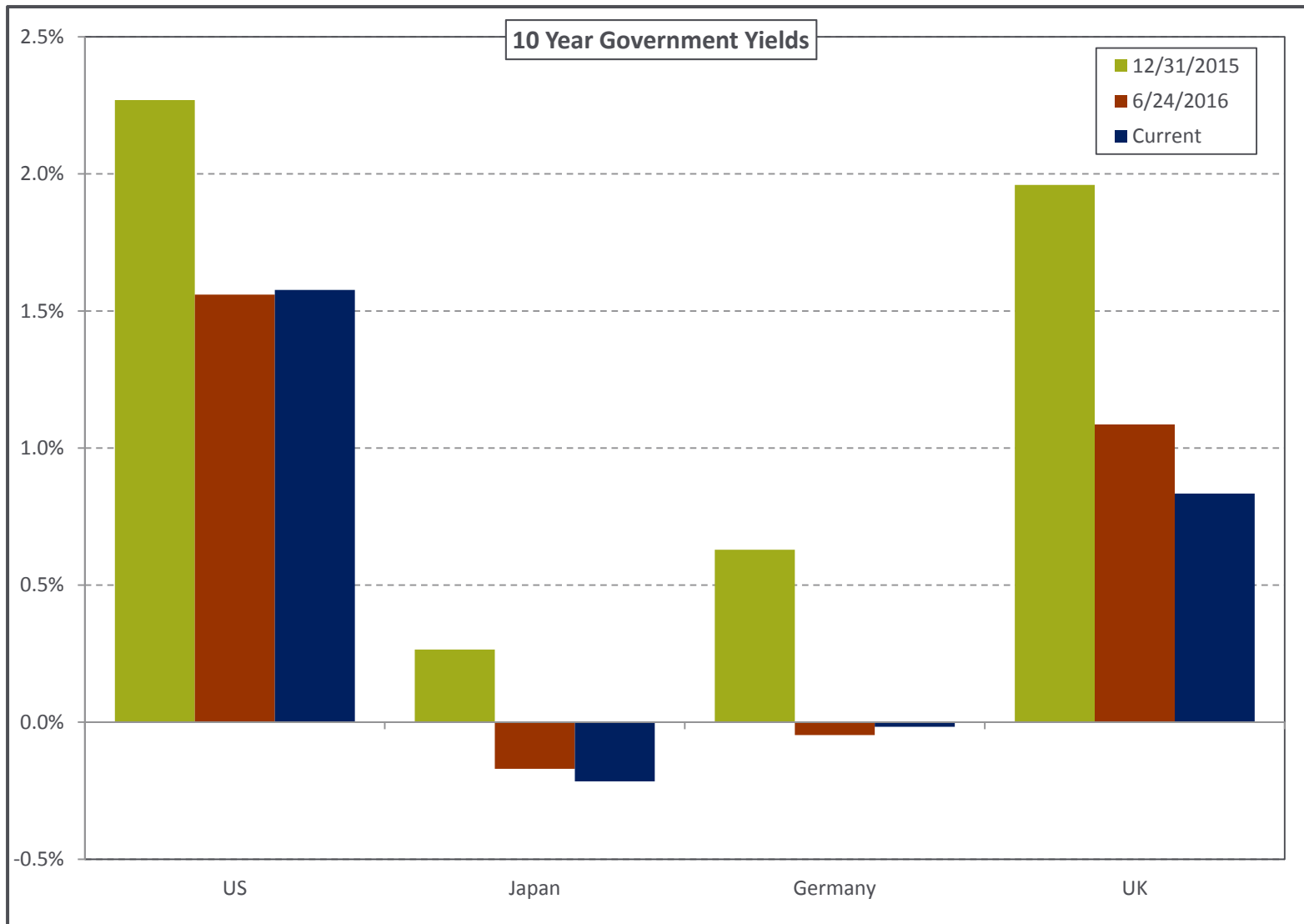
Source: Bloomberg

Significant US Equity Gains From February Lows – Remain Disciplined in Rebalancing



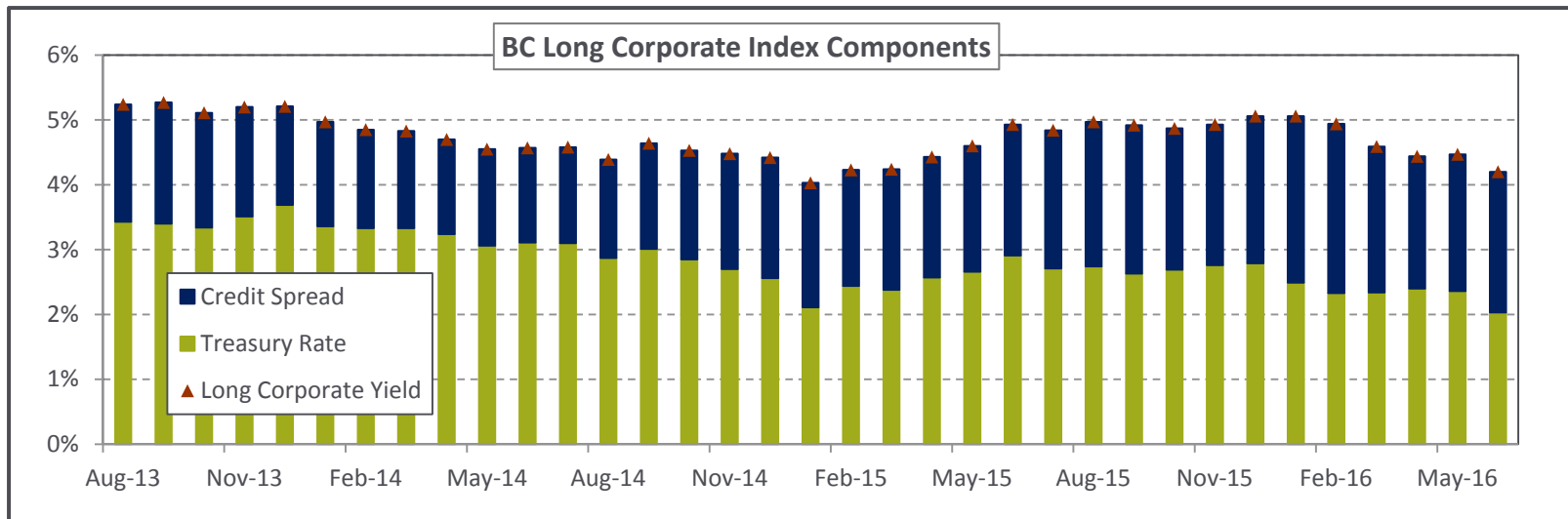
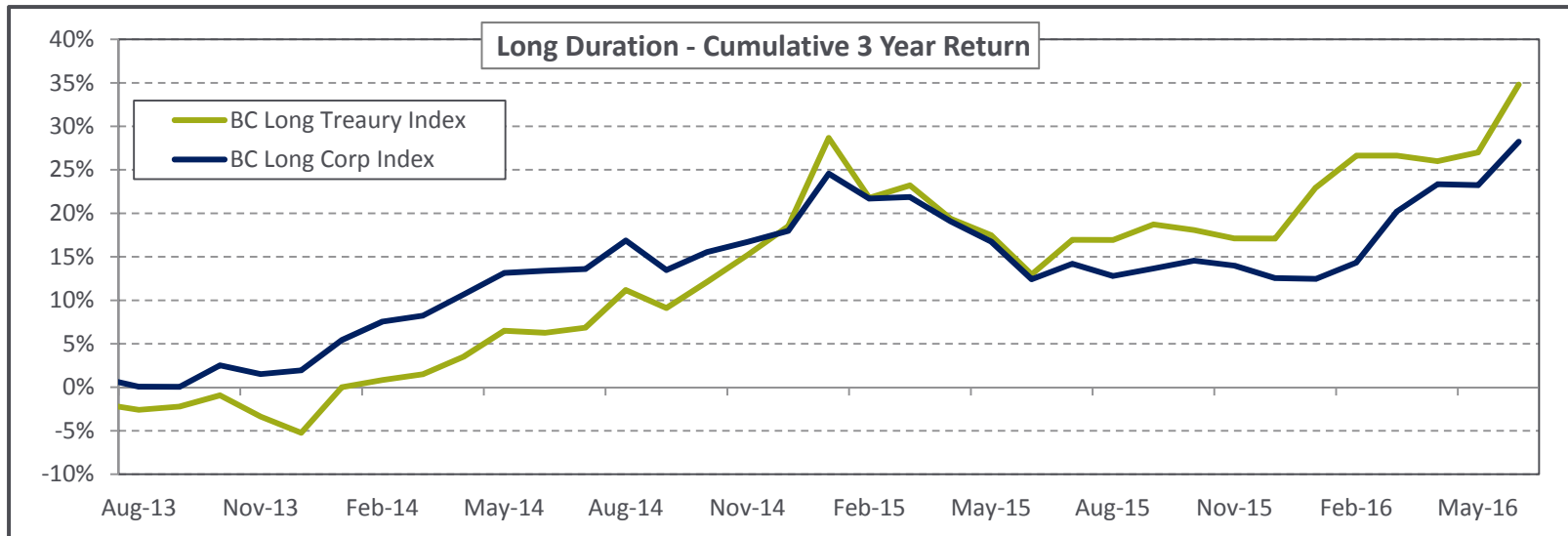
Source: Bloomberg
¹As of July 22, 2016

Global Bond Yields at Record Lows; Re-Evaluate WGBI Exposure



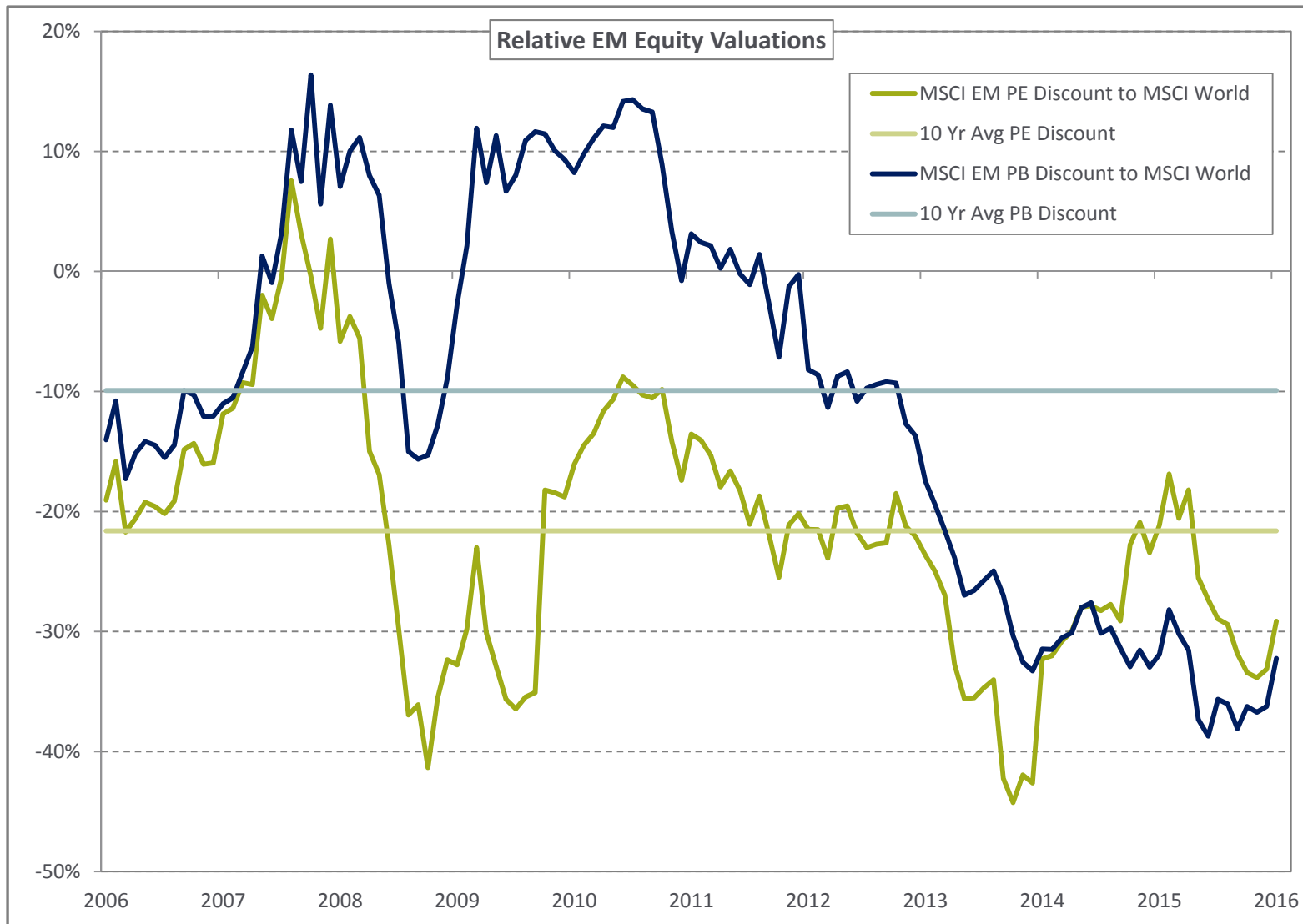
Source: Bloomberg
Results of Brexit vote announced on 06/24/2016

Treasury Exposure Provided Significant Gains – Opportunities for Profit Taking in Long Bonds



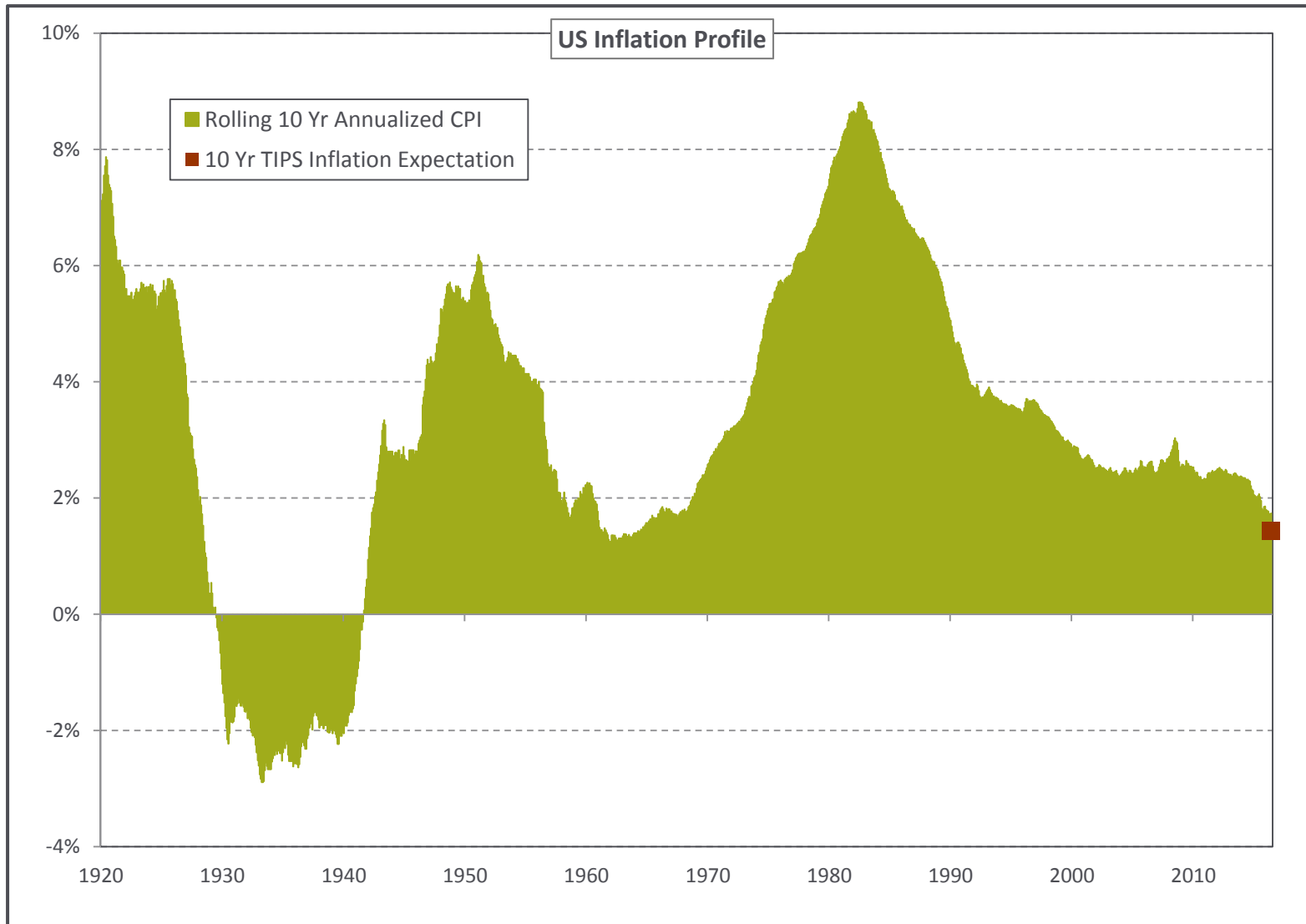
Source: Bloomberg

Emerging Markets Continue to Offer Reasonable Equity Valuations



Source: Bloomberg

US Inflation Expectations Near Historic Lows – Attractive Valuation for TIPS Relative to Core Bonds



Source: Bloomberg, BLS

Index Performance Summary as of 07/29/2016

	2009	2010	2011	2012	2013	2014	2015	Q1	Q2	July	YTD
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	9.6%	3.9%	26.7%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	7.0%	4.2%	18.1%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	6.5%	2.6%	17.2%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	6.7%	2.8%	17.1%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	19.7%	0.6%	15.3%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.7%	0.6%	14.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	5.0%	1.8%	12.3%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	5.5%	2.7%	12.0%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.7%	5.0%	11.8%
Citi WGBI	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	3.4%	0.5%	11.3%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	3.6%	5.2%	9.4%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	3.8%	6.0%	8.3%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	2.5%	3.8%	7.7%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	2.5%	3.7%	7.7%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	12.8%	-5.1%	7.5%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	2.2%	0.6%	6.0%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	2.9%	1.4%	5.7%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.0%	4.3%	5.6%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	2.6%	0.1%	4.4%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	1.4%	0.3%	4.1%
BC US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.0%	0.7%	0.0%	1.7%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	-1.5%	5.1%	0.4%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.6%	-0.1%	-1.6%

Source: Morningstar Direct



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Index Performance Summary as of 08/31/2016

	2009	2010	2011	2012	2013	2014	2015	Q1	Q2	July	Aug	YTD
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	9.6%	3.9%	-1.1%	25.3%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	6.7%	2.8%	0.6%	17.8%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	6.5%	2.6%	0.0%	17.2%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.7%	0.6%	0.0%	14.8%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.7%	5.0%	2.5%	14.5%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	5.5%	2.7%	2.1%	14.3%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	5.0%	1.8%	1.8%	14.3%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	19.7%	0.6%	-1.3%	13.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	7.0%	4.2%	-3.7%	13.8%
Citi WGBI	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	3.4%	0.5%	-0.9%	10.4%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	3.6%	5.2%	0.8%	10.3%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	3.8%	6.0%	1.8%	10.2%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	2.5%	3.8%	0.1%	7.8%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	2.5%	3.7%	0.1%	7.8%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	2.9%	1.4%	0.8%	6.5%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.0%	4.3%	0.3%	5.9%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	2.2%	0.6%	-0.1%	5.9%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	12.8%	-5.1%	-1.8%	5.6%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	2.6%	0.1%	0.1%	4.5%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	1.4%	0.3%	-0.1%	3.9%
BC US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.0%	0.7%	0.0%	-0.1%	1.6%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	-1.5%	5.1%	0.1%	0.5%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.6%	-0.1%	1.1%	-0.5%

Source: Morningstar Direct



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State Employees' Retirement System



Vermont State Employees

Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank
Employees Composite	\$1,600,319,433	3.0%	6	5.6%	1	1.0%	33	4.7%	87	4.8%	88
<i>Policy Index</i>		2.2%	24	4.5%	7	1.2%	30	4.9%	84	4.6%	91
<i>Allocation Index</i>		2.4%	16	4.5%	7	0.9%	37	4.6%	88	4.4%	93
<i>InvestorForce Public DB Net Median</i>		1.8%		3.0%		0.4%		6.0%		6.0%	

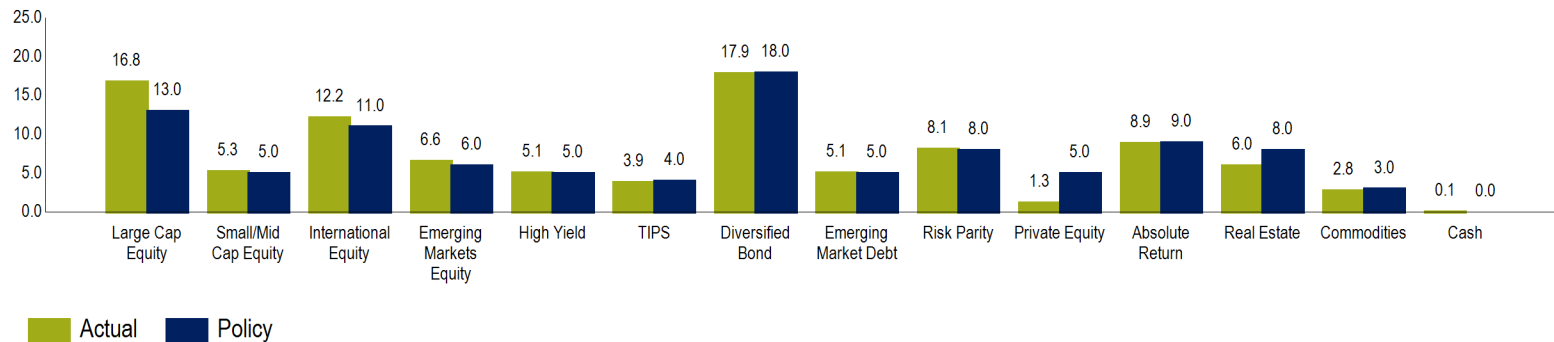
3 Years Ending June 30, 2016

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Employees Composite	4.74%	87	6.28%	29	0.74	74	1.47	60
Policy Index	4.85%	84	5.78%	12	0.83	65	1.63	41
Allocation Index	4.60%	88	5.93%	14	0.76	72	1.44	63

5 Years Ending June 30, 2016

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Employees Composite	4.84%	88	7.01%	33	0.68	74	1.10	65
Policy Index	4.59%	91	6.66%	21	0.68	74	1.05	71
Allocation Index	4.41%	93	6.74%	25	0.65	80	0.97	76

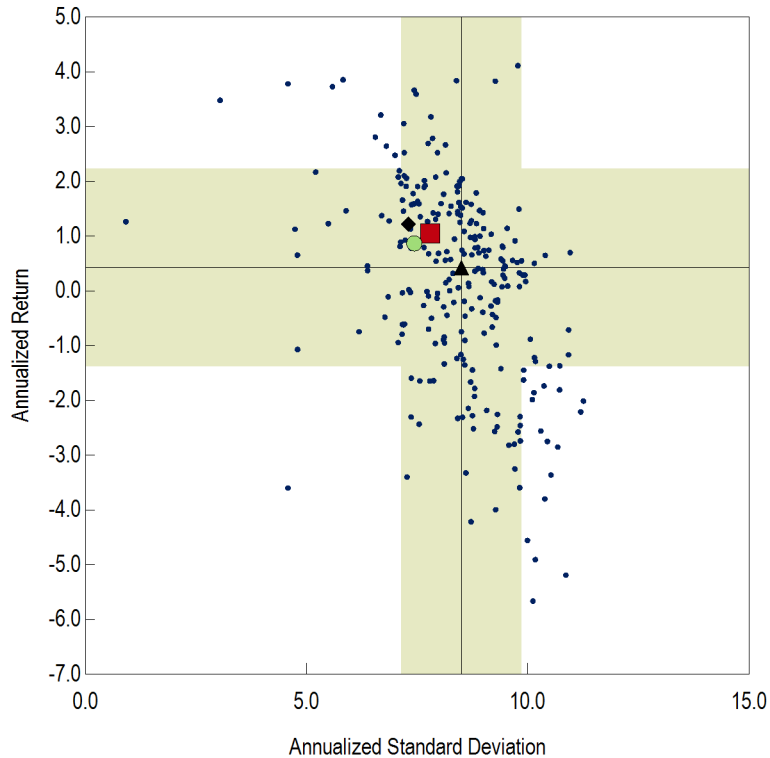
Actual vs Target Allocation (%)



Vermont State Employees

Total Fund Risk/Return

1 Year Ending June 30, 2016



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

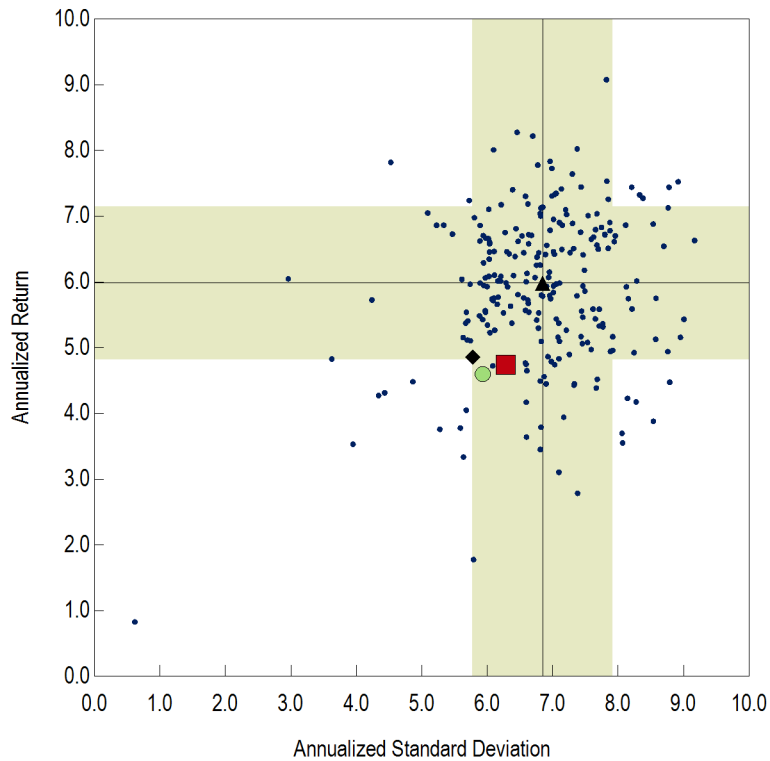
1 Year Ending June 30, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	1.05%	33	7.80%	29	0.11	32
Policy Index	1.22%	30	7.30%	17	0.15	27
S&P 500	3.99%	1	14.50%	99	0.26	10
Citi WGBI	11.26%	1	5.84%	4	1.90	1
MSCI ACWI	-3.73%	98	15.50%	99	-0.25	87
MSCI ACWI ex USA	-10.24%	99	16.89%	99	-0.62	99
InvestorForce Public DB Net Median	0.43%	--	8.50%	--	0.03	--

Vermont State Employees

Total Fund Risk/Return

3 Years Ending June 30, 2016



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

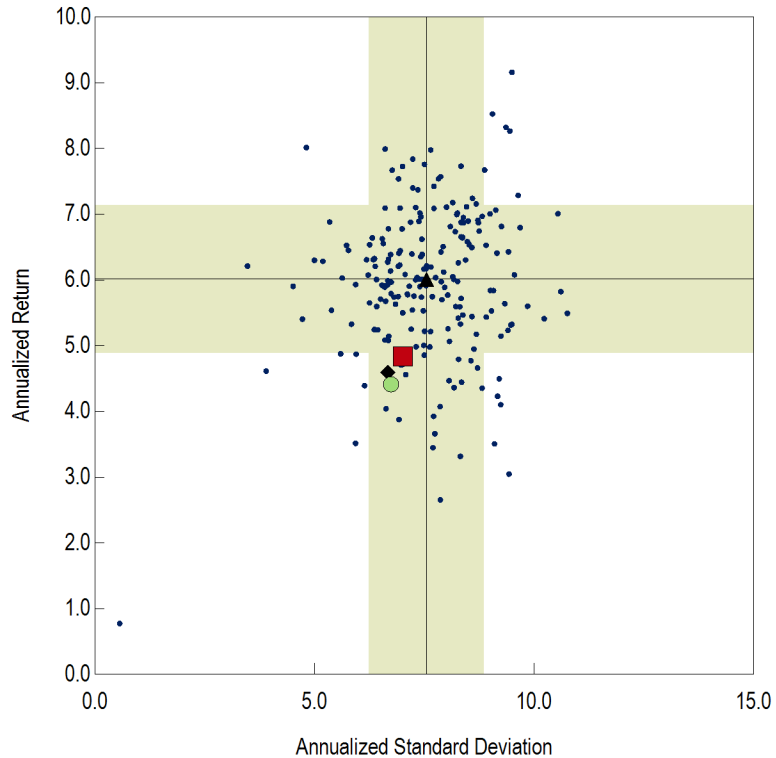
3 Years Ending June 30, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	4.74%	87	6.28%	29	0.74	74
Policy Index	4.85%	84	5.78%	12	0.83	65
S&P 500	11.66%	1	11.25%	99	1.03	19
Citi WGBI	2.65%	99	5.11%	4	0.50	97
MSCI ACWI	6.03%	48	11.82%	99	0.50	97
MSCI ACWI ex USA	1.16%	99	13.25%	99	0.08	99
InvestorForce Public DB Net Median	5.98%	--	6.85%	--	0.88	--

Vermont State Employees

Total Fund Risk/Return

5 Years Ending June 30, 2016



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

5 Years Ending June 30, 2016

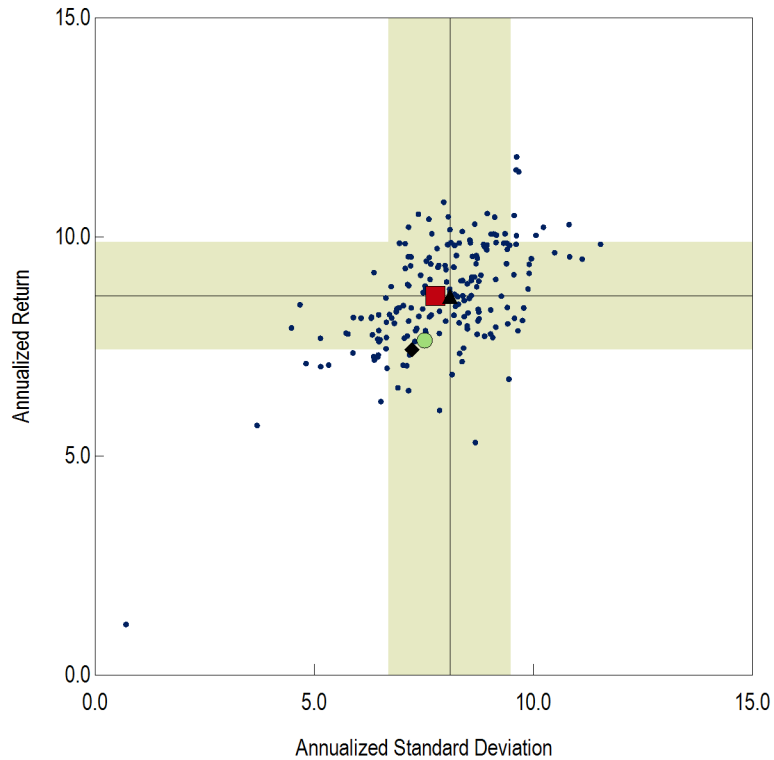
	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	4.84%	88	7.01%	33	0.68	74
Policy Index	4.59%	91	6.66%	21	0.68	74
S&P 500	12.10%	1	12.10%	99	0.99	14
Citi WGBI	1.18%	99	4.97%	3	0.22	99
MSCI ACWI	5.38%	76	13.54%	99	0.39	99
MSCI ACWI ex USA	0.10%	99	15.54%	99	0.00	99
InvestorForce Public DB Net Median	6.01%	--	7.55%	--	0.81	--

208 Portfolios

Vermont State Employees

Total Fund Risk/Return

7 Years Ending June 30, 2016



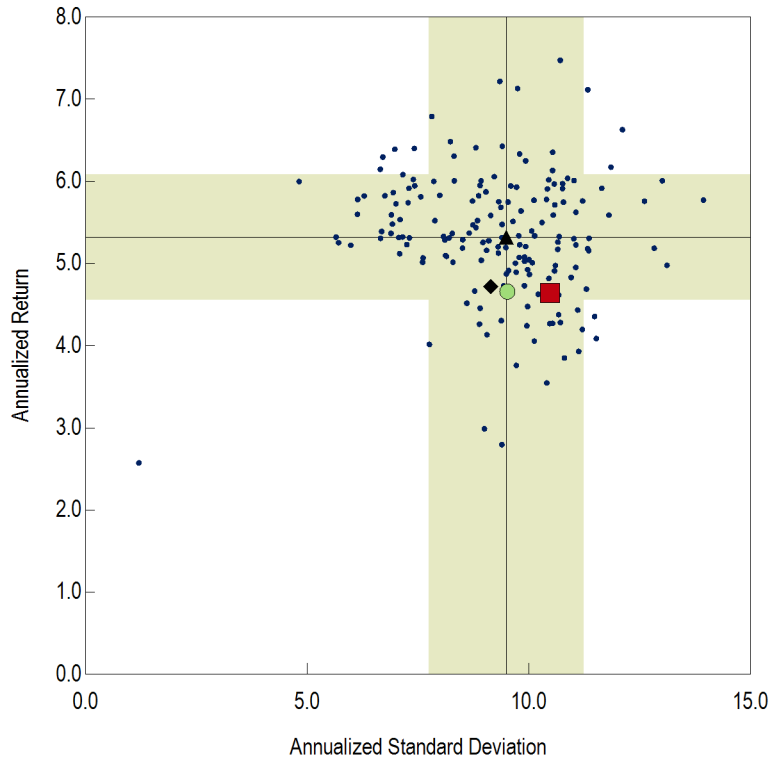
7 Years Ending June 30, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	8.66%	51	7.76%	43	1.11	46
Policy Index	7.43%	89	7.23%	30	1.02	69
S&P 500	14.92%	1	13.02%	99	1.14	40
Citi WGBI	2.73%	99	5.81%	5	0.46	99
MSCI ACWI	9.52%	27	14.38%	99	0.66	99
MSCI ACWI ex USA	5.35%	99	16.20%	99	0.33	99
InvestorForce Public DB Net Median	8.66%	--	8.09%	--	1.09	--

Vermont State Employees

Total Fund Risk/Return

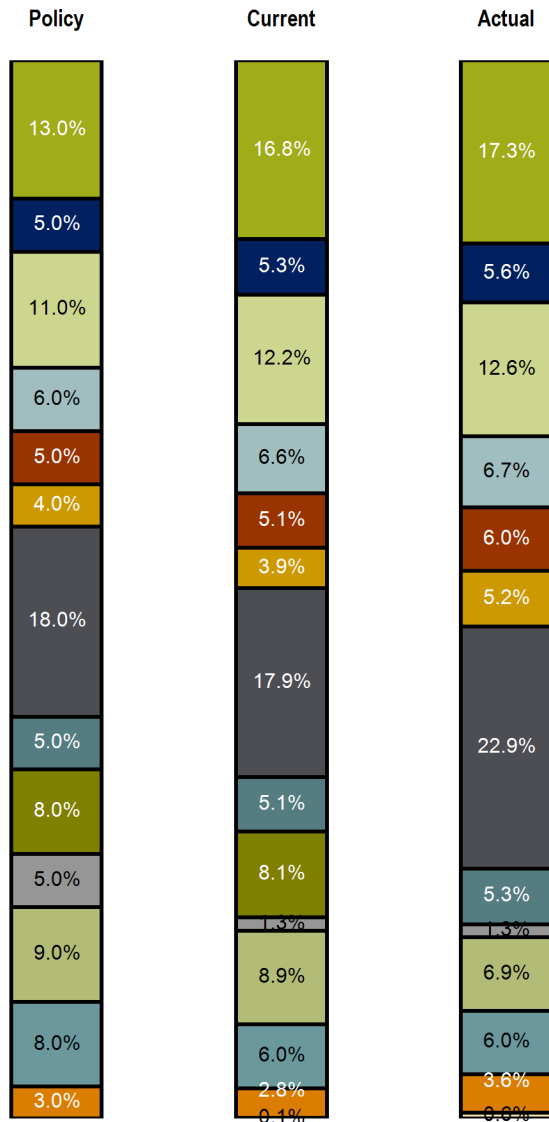
10 Years Ending June 30, 2016



10 Years Ending June 30, 2016

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank
Employees Composite	4.64%	85	10.47%	74	0.36	88
Policy Index	4.72%	83	9.13%	42	0.42	69
S&P 500	7.42%	1	15.24%	99	0.43	65
Citi WGBI	4.22%	94	6.65%	6	0.50	43
MSCI ACWI	4.26%	93	16.99%	99	0.20	99
MSCI ACWI ex USA	1.87%	99	19.15%	99	0.05	99
InvestorForce Public DB Net Median	5.32%	--	9.48%	--	0.47	--

Total Fund Asset Allocation vs. Policy Targets



	Asset Allocation vs. Target			
	Current	Interim Policy	Current	Difference*
Large Cap Equity	\$269,529,105	13.0%	16.8%	3.8%
Small/Mid Cap Equity	\$84,369,811	5.0%	5.3%	0.3%
International Equity	\$195,192,842	11.0%	12.2%	1.2%
Emerging Markets Equity	\$105,293,021	6.0%	6.6%	0.6%
High Yield	\$81,769,343	5.0%	5.1%	0.1%
TIPS	\$61,810,370	4.0%	3.9%	-0.1%
Diversified Bond	\$285,810,353	18.0%	17.9%	-0.1%
Emerging Market Debt	\$82,110,493	5.0%	5.1%	0.1%
Risk Parity	\$130,172,384	8.0%	8.1%	0.1%
Private Equity	\$20,053,435	5.0%	1.3%	-3.7%
Absolute Return	\$142,063,129	9.0%	8.9%	-0.1%
Real Estate	\$96,333,222	8.0%	6.0%	-2.0%
Commodities	\$44,902,008	3.0%	2.8%	-0.2%
Cash	\$909,918	--	0.1%	0.1%
Total	\$1,600,319,433	100.0%	100.0%	

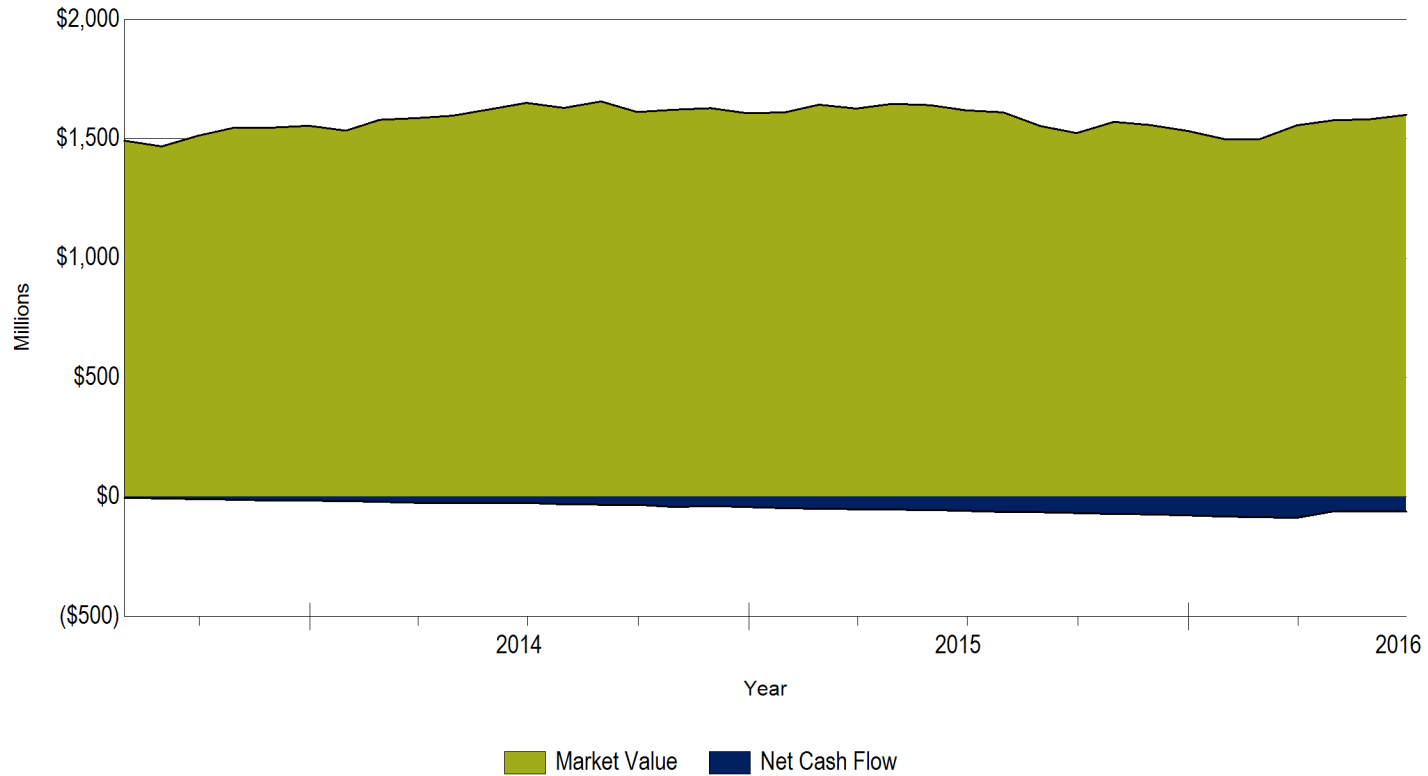
Difference between Interim Policy and Current Allocation

Actual Allocation breaks out Mellon Dynamic Growth and AQR Global Risk Premium

Vermont State Employees

Total Fund Asset Growth Summary

3 Years Ending June 30, 2016



	Last Three Months	Year-To-Date	One Year	Three Years
Beginning Market Value	\$1,526,284,653	\$1,533,232,267	\$1,619,392,908	\$1,463,668,721
Withdrawals	-\$42,458,251	-\$262,285,982	-\$330,117,065	-\$803,641,550
Contributions	\$68,986,938	\$278,438,828	\$327,532,901	\$742,356,967
Net Cash Flow	\$26,528,687	\$16,152,846	-\$2,584,165	-\$61,284,583
Net Investment Change	\$47,506,093	\$50,934,320	-\$16,489,310	\$197,935,295
Ending Market Value	\$1,600,319,433	\$1,600,319,433	\$1,600,319,433	\$1,600,319,433



Vermont State Employees

Total Fund Asset Growth Summary by Manager

	Quarter Ending June 30, 2016					Ending Market Value
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Net Investment Change	
Aberdeen	\$95,073,306	-\$161,437	\$6,161,437	\$6,000,000	\$4,219,716	\$105,293,021
Acadian	\$63,780,796	-\$79,320	\$79,320	\$0	\$389,022	\$64,169,818
Allianz Structured Alpha	\$49,616,587	-\$20,189,464	\$189,464	-\$20,000,000	\$386,623	\$30,003,210
AQR Global Risk Premium	\$122,896,556	-\$122,128	\$122,128	\$0	\$7,275,828	\$130,172,384
BlackRock TIPS	\$60,768,100	-\$10,325	\$10,325	\$0	\$1,042,270	\$61,810,370
Champlain	\$32,574,606	-\$65,460	\$65,460	\$0	\$2,027,973	\$34,602,579
GAM	\$242,616	-\$65,099	\$0	-\$65,099	\$11,244	\$188,761
GAM Unconstrained Bond	\$54,505,664	-\$58,338	\$58,338	\$0	\$1,149,631	\$55,655,295
Grosvenor	\$79,593,212	\$0	\$0	\$0	\$1,193,872	\$80,787,083
Guggenheim	\$61,874,961	-\$60,007	\$60,007	\$0	\$3,347,552	\$65,222,513
Harbourvest Dover VIII Fund	\$6,980,638	\$0	\$0	\$0	\$0	\$6,980,638
Harbourvest Partners IX Buyout Fund	\$5,237,778	\$0	\$251,165	\$251,165	\$0	\$5,488,943
Harbourvest Partners IX Credit Opportunities	\$815,794	\$0	\$25,120	\$25,120	\$0	\$840,914
Harbourvest Partners IX Venture Fund	\$4,206,068	\$0	\$0	\$0	\$0	\$4,206,068
Harbourvest Partners X Buyout Fund	\$403,109	\$0	\$480,767	\$480,767	\$0	\$883,876
Harbourvest Partners X Venture Fund	\$204,363	\$0	\$247,252	\$247,252	\$0	\$451,614
HIPEP VII	\$982,596	\$0	\$218,786	\$218,786	\$0	\$1,201,382
KDP	\$15,915,797	-\$25,464	\$25,464	\$0	\$631,033	\$16,546,830
Mellon Dynamic Growth	\$0	-\$53,248	\$30,284,802	\$30,231,554	\$852,521	\$31,084,075
Mondrian	\$64,156,512	-\$58,686	\$58,686	\$0	\$300,552	\$64,457,064
Morgan Stanley Prime Property	\$44,073,689	\$0	\$0	\$0	\$1,048,482	\$45,122,171
PIMCO Core Plus	\$90,902,107	-\$56,463	\$56,463	\$0	\$2,157,450	\$93,059,558
PIMCO Unconstrained	\$40,258,172	-\$59,299	\$59,299	\$0	\$430,561	\$40,688,733
RREEF America REIT III	\$1,736,582	-\$436,973	\$0	-\$436,973	\$9,273	\$1,308,882
Schroder	\$39,255,234	\$0	\$0	\$0	\$5,646,774	\$44,902,008

Vermont State Employees

Total Fund Asset Growth Summary by Manager

	Quarter Ending June 30, 2016					Ending Market Value
	Beginning Market Value	Withdrawals	Contributions	Net Cash Flow	Net Investment Change	
Siguler Guff	\$10,994,229	-\$8,521	\$829,623	\$821,102	\$30,147	\$11,845,478
SSgA ACWI Ex US	\$37,722,929	-\$6,375	\$29,006,375	\$29,000,000	-\$156,969	\$66,565,960
SSgA Barclays Aggregate Index	\$48,979,311	-\$5,800	\$5,800	\$0	\$1,089,212	\$50,068,523
SSgA Russell 2000 Growth	\$8,819,872	-\$1,300	\$1,300	\$0	\$281,251	\$9,101,123
SSgA S&P 400	\$8,578,670	-\$1,433	\$1,433	\$0	\$343,222	\$8,921,892
SSgA S&P 500 Cap-Wgt	\$197,821,165	-\$2,507,489	\$7,489	-\$2,500,000	\$4,657,857	\$199,979,022
SSgA S&P 500 Equal-Wgt	\$67,701,347	-\$5,624	\$5,624	\$0	\$1,845,600	\$69,546,946
T. Rowe	\$3,137	\$0	\$0	\$0	\$0	\$3,137
Transwestern / Aslan III	\$102,653	\$0	\$0	\$0	-\$1,689	\$100,964
UBS Trumbull	\$37,290,209	\$0	\$0	\$0	\$665,517	\$37,955,726
Vermont Cash	\$1,154,904	-\$834,190	\$589,203	-\$244,986	\$0	\$909,918
Wellington	\$34,415,754	-\$3,085,808	\$85,808	-\$3,000,000	\$328,463	\$31,744,217
Wellington DAS	\$48,798,138	-\$4,000,000	\$0	-\$4,000,000	\$1,540,108	\$46,338,245
Wellington Opportunistic EMD	\$87,847,494	-\$10,500,000	\$0	-\$10,500,000	\$4,762,999	\$82,110,493
Total	\$1,526,284,653	-\$42,458,251	\$68,986,938	\$26,528,687	\$47,506,093	\$1,600,319,433

Vermont State Employees

Total Fund Performance Detail

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Employees Composite	1,600,319,433	100.0	100.0	3.0	6	5.6	1	1.0	33	4.7	87	4.8	88	4.6	85
<i>Policy Index</i>				2.2	24	4.5	7	1.2	30	4.9	84	4.6	91	4.7	83
<i>Allocation Index</i>				2.4	16	4.5	7	0.9	37	4.6	88	4.4	93	4.7	84
<i>InvestorForce Public DB Net Median</i>				1.8		3.0		0.4		6.0		6.0		5.3	
US Equity	353,898,916	22.1	18.0	2.7	38	4.7	25	2.1	21	11.2	23	--	--	--	--
<i>Russell 3000</i>				2.6	40	3.6	33	2.1	20	11.1	24	11.6	21	7.4	44
<i>eA All US Equity Net Median</i>				2.1		1.7		-2.7		9.1		9.8		7.1	
Large Cap Comp	269,529,105	16.8	13.0	2.5	30	4.4	22	3.6	18	11.6	26	11.9	19	8.1	26
<i>S&P 500</i>				2.5	31	3.8	25	4.0	16	11.7	25	12.1	14	7.4	42
<i>eA US Large Cap Equity Net Median</i>				1.4		1.0		-1.1		10.1		10.4		7.0	
<i>SSgA S&P 500 Cap-Wgt</i>	199,979,022	12.5	10.0	2.4	31	3.8	26	4.0	16	11.7	25	12.1	14	--	--
<i>S&P 500</i>				2.5	31	3.8	25	4.0	16	11.7	25	12.1	14	7.4	42
<i>SSgA S&P 500 Equal-Wgt</i>	69,546,946	4.3	3.0	2.7	27	6.1	12	2.4	22	11.4	29	11.8	22	8.4	18
<i>S&P 500 Equal Weighted</i>				2.7	28	5.8	14	2.7	21	11.6	26	11.9	20	8.7	14
<i>T. Rowe</i>	3,137	0.0	0.0												
Small/Mid Cap Comp	84,369,811	5.3	5.0	3.4	27	5.7	19	-0.4	17	10.6	16	10.7	15	7.9	36
<i>Russell 2000</i>				3.8	20	2.2	50	-6.7	60	7.1	61	8.4	51	6.2	74
<i>eA US Small-Mid Cap Equity Net Median</i>				2.2		2.2		-5.6		7.8		8.4		7.3	
<i>SSgA S&P 400</i>	8,921,892	0.6	0.5	4.0	13	7.9	11	1.3	21	10.4	27	--	--	--	--
<i>S&P 400 MidCap</i>				4.0	13	7.9	10	1.3	20	10.5	24	10.5	26	8.6	29
<i>eA US Mid Cap Equity Net Median</i>				2.3		2.1		-3.4		9.2		9.3		7.8	
<i>Champlain</i>	34,602,579	2.2	2.0	6.0	3	8.7	8	3.8	10	12.3	7	11.5	16	--	--
<i>Russell 2500</i>				3.6	19	4.0	36	-3.7	53	8.6	64	9.5	48	7.3	68
<i>eA US Mid Cap Equity Net Median</i>				2.3		2.1		-3.4		9.2		9.3		7.8	
<i>Wellington</i>	31,744,217	2.0	2.0	0.6	76	4.2	51	-1.6	31	9.1	20	10.4	19	8.7	6
<i>Russell 2000 Value</i>				4.3	17	6.1	27	-2.6	38	6.4	72	8.1	69	5.2	86
<i>eA US Small Cap Value Equity Net Median</i>				2.2		4.3		-3.9		7.5		9.0		6.6	
<i>SSgA Russell 2000 Growth</i>	9,101,123	0.6	0.5	3.2	54	-1.7	61	-10.8	60	7.6	39	8.4	44	--	--
<i>Russell 2000 Growth</i>				3.2	53	-1.6	61	-10.8	60	7.7	36	8.5	42	7.1	42
<i>eA US Small Cap Growth Equity Net Median</i>				3.6		-0.7		-8.7		7.0		8.2		6.8	

Vermont State Employees

Total Fund Performance Detail

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Int'l Equity Comp	195,192,842	12.2	11.0	0.1	21	0.0	15	-6.3	30	4.0	35	2.6	54	2.0	67
MSCI EAFE				-1.5	44	-4.4	57	-10.2	62	2.1	68	1.7	73	1.6	76
eA All EAFE Equity Net Median				-1.8		-4.0		-8.8		3.0		2.7		2.5	
Acadian	64,169,818	4.0	4.0	0.5	16	-0.1	15	-2.7	14	5.7	20	3.6	37	1.7	71
Mondrian	64,457,064	4.0	4.0	0.4	19	0.9	10	-7.3	38	3.7	37	2.8	49	2.7	50
MSCI EAFE				-1.5	44	-4.4	57	-10.2	62	2.1	68	1.7	73	1.6	76
SSgA ACWI Ex US	66,565,960	4.2	3.0	-0.5	43	-0.8	40	-10.0	66	1.4	82	0.3	87	--	--
MSCI ACWI ex USA				-0.6	46	-1.0	43	-10.2	66	1.2	82	0.1	89	1.9	77
eA ACWI ex-US All Cap Equity Net Median				-1.1		-2.3		-7.5		3.5		2.7		2.8	
Emerging Market Comp	105,293,021	6.6	6.0	4.1	12	12.6	7	-3.7	7	-1.1	57	--	--	--	--
Aberdeen	105,293,021	6.6	6.0	4.1	12	12.6	7	-3.7	7	-1.1	57	-0.4	19	--	--
MSCI Emerging Markets				0.7	75	6.4	44	-12.1	72	-1.6	69	-3.8	77	3.5	72
eA Emg Mkts Equity Net Median				1.8		5.9		-9.7		-0.8		-2.3		4.5	
US Fixed Income	429,390,066	26.8	27.0	2.7	35	5.6	34	4.6	42	3.9	43	--	--	--	--
Barclays Aggregate				2.2	49	5.3	38	6.0	27	4.1	39	3.8	52	5.1	47
eA All US Fixed Inc Net Median				2.2		4.5		4.0		3.6		3.9		5.0	
Diversified Fixed	285,810,353	17.9	18.0	2.3	46	5.1	43	5.4	33	4.1	38	4.2	44	4.4	63
Barclays Aggregate				2.2	49	5.3	38	6.0	27	4.1	39	3.8	52	5.1	47
eA All US Fixed Inc Net Median				2.2		4.5		4.0		3.6		3.9		5.0	
PIMCO Core Plus	93,059,558	5.8	6.0	2.3	53	4.8	78	4.9	85	3.5	85	3.8	67	--	--
Barclays Aggregate				2.2	63	5.3	43	6.0	41	4.1	56	3.8	70	5.1	75
Wellington DAS	46,338,245	2.9	3.0	3.4	1	8.3	1	14.4	1	9.3	1	9.1	1	--	--
Wellington Custom Benchmark				3.9	1	10.3	1	12.6	1	7.4	1	7.5	2	7.0	2
SSgA Barclays Aggregate Index	50,068,523	3.1	3.0	2.2	63	5.3	44	6.0	41	--	--	--	--	--	--
Barclays Aggregate				2.2	63	5.3	43	6.0	41	4.1	56	3.8	70	5.1	75
3-Month Libor Total Return USD				0.2	99	0.3	99	0.5	99	0.3	99	0.4	99	1.4	99
eA US Core Fixed Inc Net Median				2.3		5.3		5.8		4.1		4.0		5.4	

Vermont State Employees

Total Fund Performance Detail

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Unconstrained Fixed Income	96,344,028	6.0	6.0	1.9	48	2.5	64	-0.5	71	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg				3.8	14	7.7	9	6.0	3	4.7	7	5.0	19	6.6	19
Barclays Global Aggregate				2.9	31	9.0	4	8.9	1	2.8	55	1.8	81	4.4	66
eA Global Unconstrained Fixed Inc Net Median				1.9		3.9		1.7		3.1		3.6		5.2	
PIMCO Unconstrained	40,688,733	2.5	2.5	1.9	50	1.6	73	-1.2	75	0.3	88	1.2	88	--	--
25% HY, 25% EMD, 50% BC Agg				3.8	14	7.7	9	6.0	3	4.7	7	5.0	19	6.6	19
3-Month Libor Total Return USD				0.2	90	0.3	85	0.5	56	0.3	86	0.4	97	1.4	99
GAM Unconstrained Bond	55,655,295	3.5	3.5	2.0	47	3.1	59	0.0	64	--	--	--	--	--	--
3-Month LIBOR + 3%				0.9	84	1.8	72	3.5	24	3.3	45	3.4	54	4.5	65
eA Global Unconstrained Fixed Inc Net Median				1.9		3.9		1.7		3.1		3.6		5.2	
High Yield Comp	81,769,343	5.1	5.0	5.0	29	7.1	46	0.4	60	3.8	56	5.6	39	6.9	43
Barclays High Yield				5.5	17	9.1	9	1.6	36	4.2	38	5.8	30	7.6	18
eA US High Yield Fixed Inc Net Median				4.3		6.9		0.8		3.9		5.4		6.8	
KDP	16,546,830	1.0	1.0	3.8	67	6.3	60	-0.1	64	3.0	77	4.6	78	--	--
Barclays High Yield				5.5	17	9.1	9	1.6	36	4.2	38	5.8	30	7.6	18
BofA Merrill Lynch US High Yield BB- B Rated				4.6	39	7.9	25	2.1	29	4.6	21	5.9	29	7.0	39
Guggenheim	65,222,513	4.1	4.0	5.3	19	7.2	39	0.5	58	--	--	--	--	--	--
Barclays High Yield				5.5	17	9.1	9	1.6	36	4.2	38	5.8	30	7.6	18
eA US High Yield Fixed Inc Net Median				4.3		6.9		0.8		3.9		5.4		6.8	
TIPS	61,810,370	3.9	4.0												
BlackRock TIPS	61,810,370	3.9	4.0	1.7	--	6.2	--	4.3	--	2.2	--	2.5	--	--	--
Barclays US TIPS				1.7	--	6.2	--	4.4	--	2.3	--	2.6	--	4.7	--

Vermont State Employees

Total Fund Performance Detail

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Emerging Market Debt	82,110,493	5.1	5.0												
Wellington Opportunistic EMD	82,110,493	5.1	5.0	5.8	19	10.6	59	8.8	14	5.7	10	6.1	7	--	--
<i>JP Morgan EMBI Global TR</i>				5.4	25	10.9	51	10.3	5	6.4	5	6.2	6	7.9	33
<i>eA All Emg Mkts Fixed Inc Net Median</i>				4.3		11.0		5.1		3.6		3.6		7.6	
Total Real Estate	96,333,222	6.0	8.0	1.9	--	3.9	--	9.4	--	12.5	--	--	--	--	--
<i>NCREIF Property Index</i>				2.0	--	4.3	--	10.6	--	11.6	--	11.5	--	7.4	--
<i>NCREIF ODCE</i>				2.1	--	4.4	--	11.8	--	13.0	--	12.7	--	6.2	--
Morgan Stanley Prime Property	45,122,171	2.8		2.4	--	4.3	--	11.5	--	13.9	--	14.1	--	6.6	--
UBS Trumbull	37,955,726	2.4		1.8	--	3.9	--	10.2	--	10.5	--	10.1	--	5.9	--
RREEF America REIT III	1,308,882	0.1		0.7	--	-4.1	--	-10.1	--	12.2	--	14.9	--	-2.3	--
Transwestern / Aslan III	100,964	0.0		-1.6	--	-1.6	--	0.4	--	6.3	--	10.6	--	-22.4	--
Siguler Guff	11,845,478	0.7		0.3	--	3.9	--	4.6	--	--	--	--	--	--	--
Absolute Return	142,063,129	8.9	9.0	1.5	24	-2.6	52	-4.9	37	2.0	40	3.2	38	--	--
<i>HFRI Fund of Funds Composite Index</i>				0.6	54	-2.6	51	-5.4	42	1.9	44	1.6	70	1.6	91
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				0.7		-2.6		-6.2		1.8		2.6		3.2	
Grosvenor	80,787,083	5.0	5.0	1.5	22	-2.6	51	-4.9	37	2.8	31	3.6	30	--	--
GAM	188,761	0.0	0.0												
Mellon Dynamic Growth	31,084,075	1.9	2.0	2.6	4	0.8	8	-1.6	15	6.3	7	5.4	10	4.2	28
<i>Mellon Dynamic Growth Benchmark</i>				1.4	25	4.3	1	0.8	4	4.3	17	4.3	17	4.1	29
Allianz Structured Alpha	30,003,210	1.9	2.0	0.6	54	6.3	1	9.3	1	8.7	3	6.9	4	--	--
<i>Citi 10 Year Treasury</i>				3.0	3	8.0	1	9.5	1	5.3	11	5.6	8	6.3	6
<i>eV Alt Fund of Funds - Multi-Strategy Median</i>				0.7		-2.6		-6.2		1.8		2.6		3.2	

Absolute Return composite formerly shown as Hedge Funds composite. As of 04/01/2016, Absolute Return includes Mellon Dynamic Growth and Allianz Structured Alpha. Risk Parity Composite formerly shown as GAA/Risk Parity. 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. Real Estate performance reported on a quarterly basis. NCREIF Property is available 25 days after quarter end. All Real Estate values are finalized as of 6/30/2016, except for Transwestern and Siguler Guff, which are preliminary.

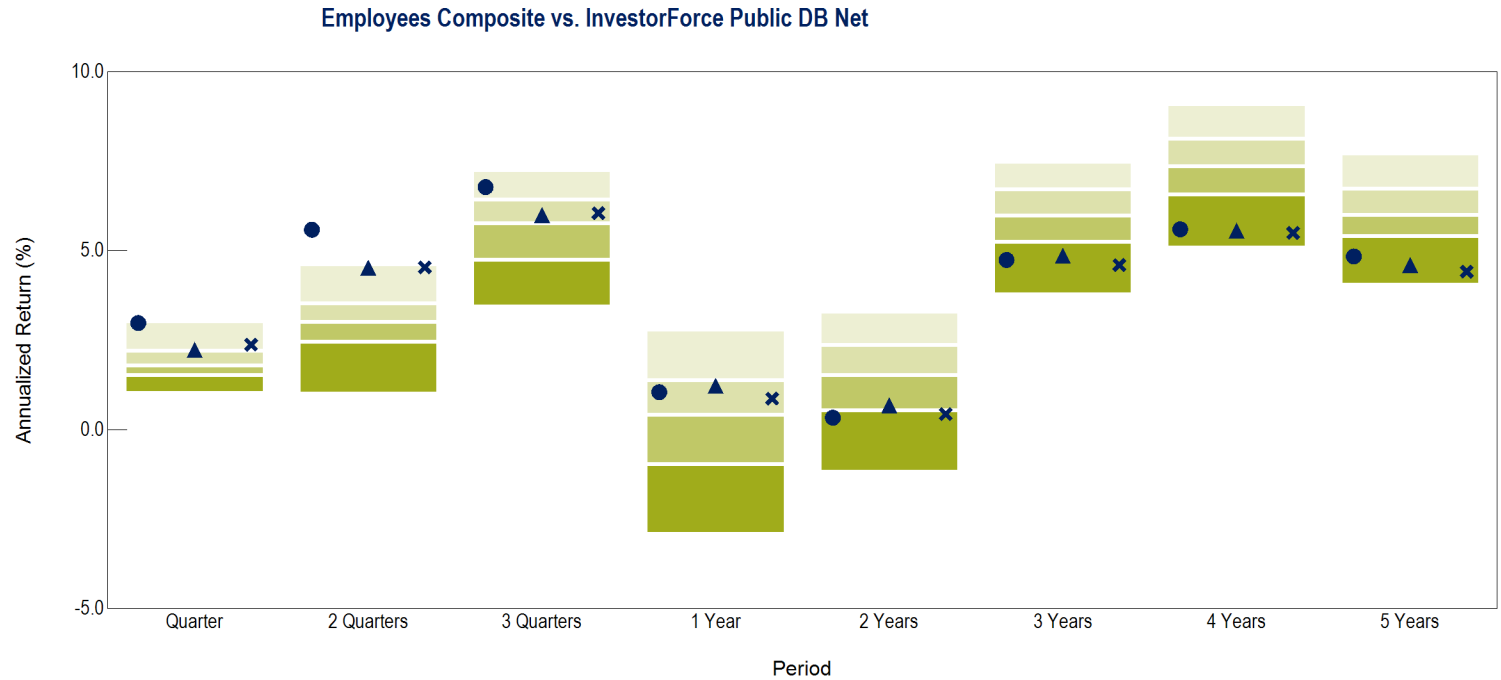
Vermont State Employees

Total Fund Performance Detail

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Risk Parity	130,172,384	8.1	8.0	5.8	2	8.9	3	-0.5	33	3.9	44	3.6	44	4.8	60
<i>eA Global TAA Net Median</i>				1.8		2.5		-1.2		3.5		3.4		5.0	
AQR Global Risk Premium	130,172,384	8.1	8.0	5.8	2	10.8	1	-0.7	40	4.0	43	4.1	29	--	--
<i>60% MSCI World (Net) / 40% CITI WGBI</i>				2.0	46	4.7	20	2.9	11	5.4	16	4.6	25	4.7	63
Commodities	44,902,008	2.8	3.0												
Schroder	44,902,008	2.8	3.0	14.4	--	16.2	--	-12.0	--	-13.7	--	-12.0	--	--	--
<i>Bloomberg Commodity Index</i>				12.8	--	13.3	--	-13.3	--	-10.6	--	-10.8	--	-5.6	--
Cash	909,918	0.1	0.0												
Vermont Cash	909,918	0.1		0.0	--	0.0	--	0.0	--	0.0	--	0.0	--	1.2	--
<i>91 Day T-Bills</i>				0.1	--	0.1	--	0.2	--	0.1	--	0.1	--	0.9	--
Private Equity	20,053,435	1.3	5.0	0.0	--	1.3	--	2.2	--	17.3	--	--	--	--	--
<i>Cambridge Associates US All PE</i>				0.0	--	0.2	--	-0.6	--	9.7	--	10.4	--	10.4	--
Harbourvest Partners IX Credit Opportunities	840,914	0.1													
Harbourvest Partners IX Venture Fund	4,206,068	0.3													
Harbourvest Partners IX Buyout Fund	5,488,943	0.3													
Harbourvest Partners X Venture Fund	451,614	0.0													
Harbourvest Partners X Buyout Fund	883,876	0.1													
Harbourvest Dover VIII Fund	6,980,638	0.4													
HIPEP VII	1,201,382	0.1													

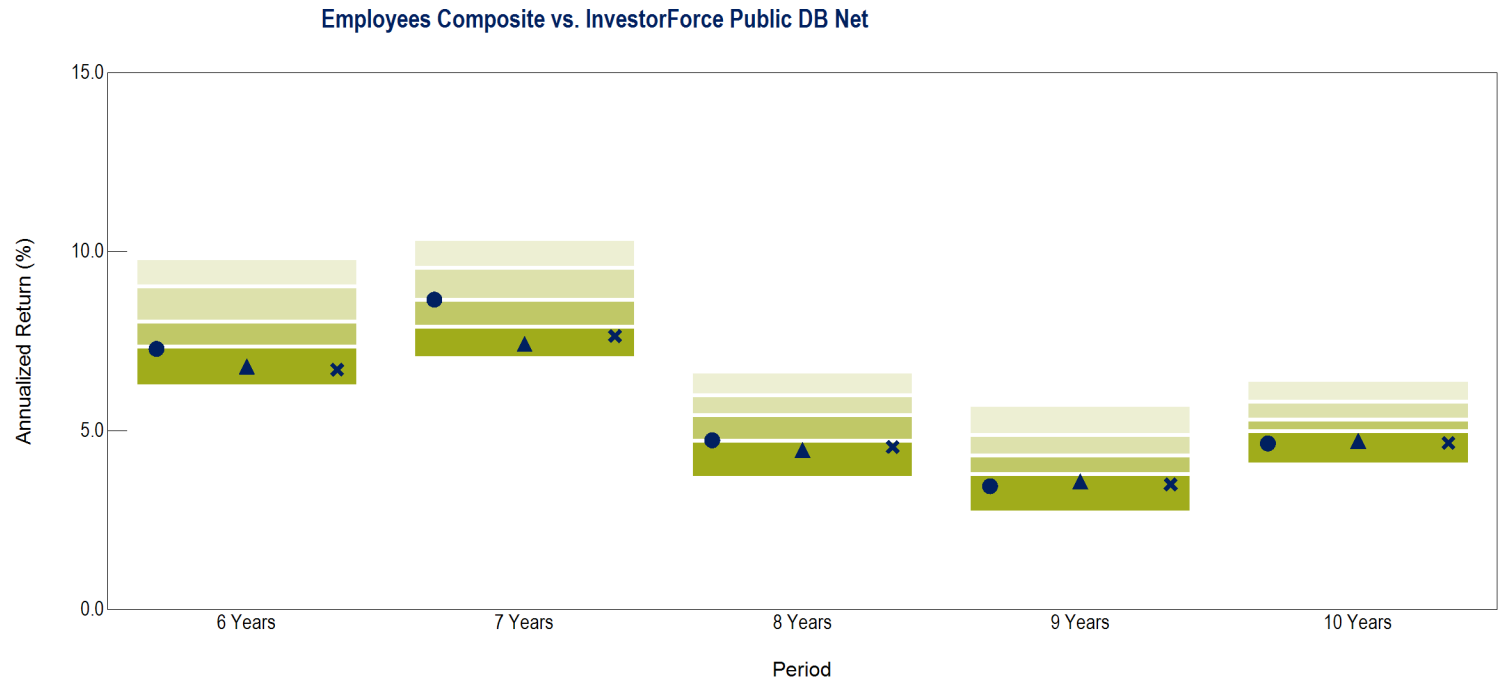
Harbourvest is based on final Capital Account Statements for Q1 2016, and cash adjusted through June for any Capital Calls or Distributions.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)							
	Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	4 Years	5 Years
5th Percentile	3.0	4.6	7.2	2.8	3.3	7.5	9.1	7.7
25th Percentile	2.2	3.5	6.4	1.4	2.4	6.7	8.1	6.7
Median	1.8	3.0	5.8	0.4	1.5	6.0	7.4	6.0
75th Percentile	1.5	2.5	4.8	-0.9	0.5	5.2	6.6	5.4
95th Percentile	1.0	1.0	3.4	-2.9	-1.2	3.8	5.1	4.1
# of Portfolios	260	259	258	258	251	235	222	208
● Employees Composite	3.0 (6)	5.6 (1)	6.8 (13)	1.0 (33)	0.3 (78)	4.7 (87)	5.6 (92)	4.8 (88)
▲ Policy Index	2.2 (24)	4.5 (7)	6.0 (46)	1.2 (30)	0.7 (72)	4.9 (84)	5.6 (92)	4.6 (91)
× Allocation Index	2.4 (16)	4.5 (7)	6.0 (43)	0.9 (37)	0.4 (76)	4.6 (88)	5.5 (93)	4.4 (93)

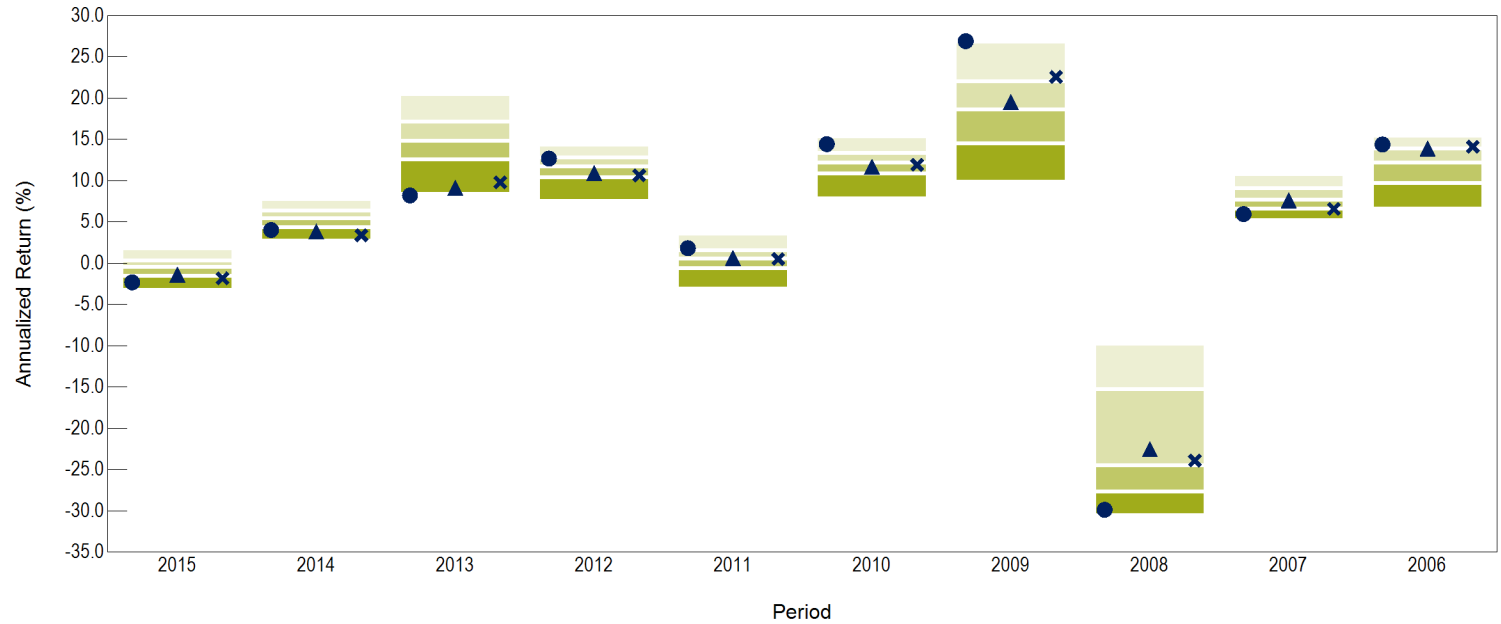
Total Fund Return Summary vs. Peer Universe



	Return (Rank)									
5th Percentile	9.8		10.3		6.6		5.7		6.4	
25th Percentile	9.0		9.6		6.0		4.9		5.8	
Median	8.1		8.7		5.4		4.3		5.3	
75th Percentile	7.4		7.9		4.7		3.8		5.0	
95th Percentile	6.3		7.0		3.7		2.7		4.1	
# of Portfolios	202		193		185		180		173	
● Employees Composite	7.3	(78)	8.7	(51)	4.7	(76)	3.4	(84)	4.6	(85)
▲ Policy Index	6.8	(91)	7.4	(89)	4.5	(85)	3.6	(80)	4.7	(83)
× Allocation Index	6.7	(92)	7.6	(86)	4.5	(82)	3.5	(82)	4.7	(84)

Total Fund Return Summary vs. Peer Universe

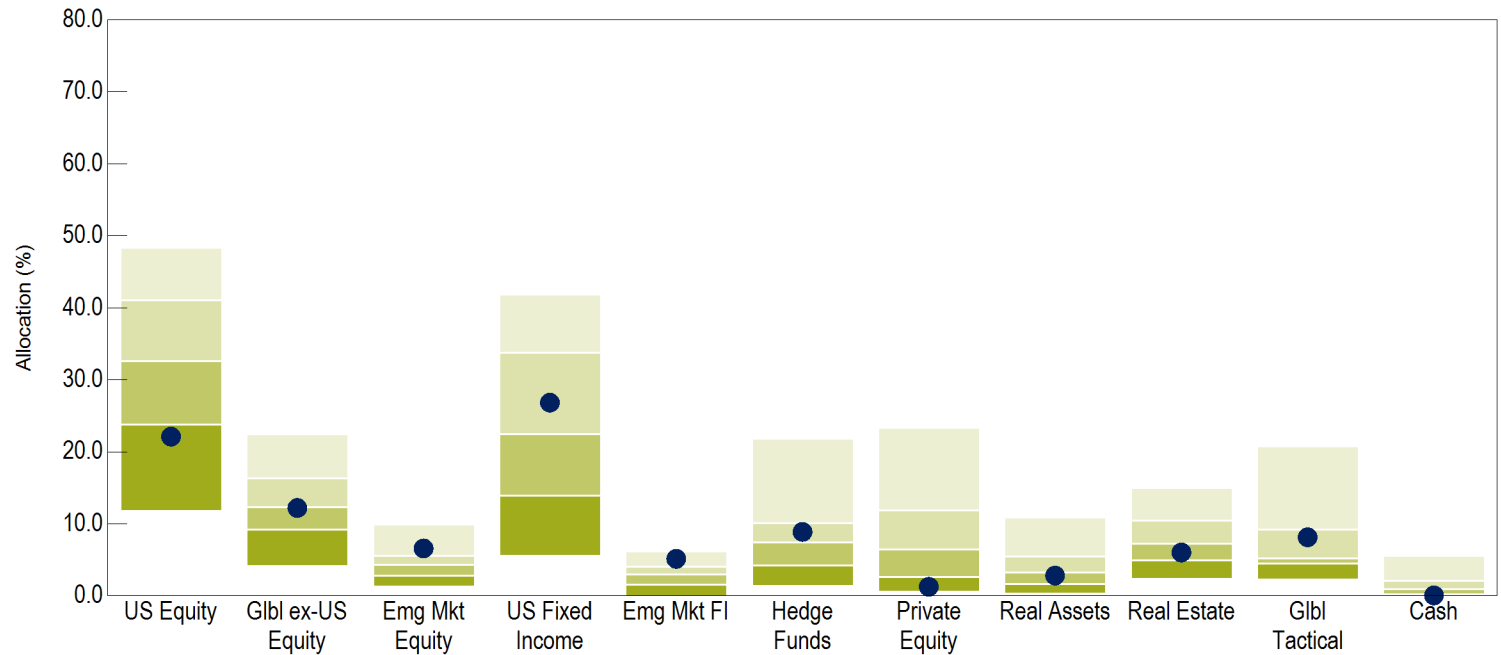
Employees Composite vs. InvestorForce Public DB Net



	Return (Rank)																			
5th Percentile	1.7	7.7	20.4	14.3	3.6	15.3	26.8	-9.8	10.7	15.4										
25th Percentile	0.4	6.4	17.2	12.9	1.6	13.4	22.0	-15.2	9.1	14.0										
Median	-0.4	5.5	14.9	11.8	0.6	12.2	18.6	-24.4	7.8	12.3										
75th Percentile	-1.5	4.4	12.7	10.4	-0.5	10.9	14.5	-27.6	6.7	9.8										
95th Percentile	-3.2	2.7	8.4	7.6	-3.1	7.9	9.9	-30.5	5.2	6.6										
# of Portfolios	262	210	191	159	137	131	128	125	122	115										
● Employees Composite	-2.3	(86)	4.0	(82)	8.2	(96)	12.7	(34)	1.8	(22)	14.4	(10)	26.9	(5)	-29.9	(91)	5.9	(87)	14.4	(16)
▲ Policy Index	-1.4	(74)	3.8	(84)	9.1	(93)	10.9	(67)	0.6	(50)	11.7	(63)	19.5	(47)	-22.5	(42)	7.6	(52)	13.9	(29)
× Allocation Index	-1.8	(81)	3.4	(91)	9.8	(91)	10.6	(72)	0.5	(56)	11.9	(57)	22.6	(24)	-23.9	(48)	6.6	(78)	14.1	(21)

Total Fund Allocation vs. Peer Universe

Total Plan Allocation vs. InvestorForce Public DB Net
As of June 30, 2016

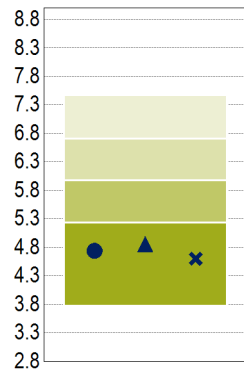


	Allocation (Rank)											
5th Percentile	48.4	22.5	9.9	41.9	6.2	21.8	23.3	10.9	15.0	20.8	5.6	--
25th Percentile	41.1	16.4	5.6	33.8	4.1	10.2	11.9	5.6	10.5	9.3	2.2	--
Median	32.6	12.4	4.4	22.5	3.0	7.5	6.6	3.3	7.4	5.3	1.1	--
75th Percentile	23.9	9.3	2.8	14.0	1.6	4.3	2.7	1.7	5.1	4.6	0.3	--
95th Percentile	11.8	4.3	1.4	5.6	0.0	1.4	0.6	0.3	2.4	2.4	0.0	--
# of Portfolios	207	202	114	166	41	82	112	56	149	64	218	--
● Employees Composite	22.1 (77)	12.2 (53)	6.6 (15)	26.8 (40)	5.1 (16)	8.9 (38)	1.3 (90)	2.8 (57)	6.0 (64)	8.1 (31)	0.1 (90)	--

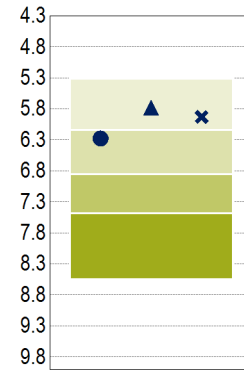
Hedge Funds represents the allocation to Absolute Return managers.
Gbl Tactical represents the allocation to Risk Parity.

Employees Composite vs. Ix Public DB Net
3 Years

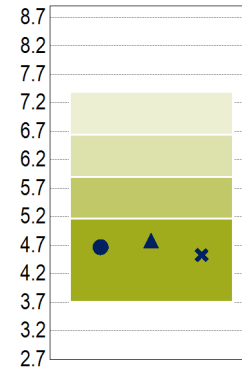
Anlzd Return



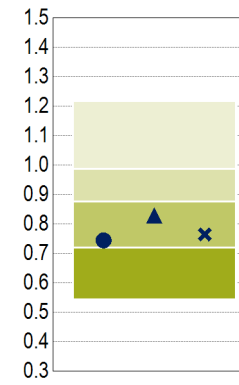
Anlzd Standard Deviation



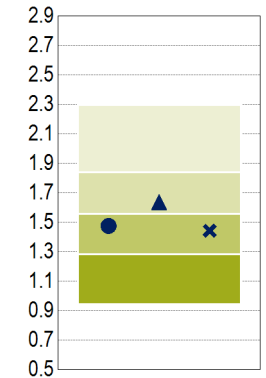
Ann Excess RF Return



Sharpe Ratio



Sortino Ratio RF



● Employees Composite

Value	4.74
%tile	87
▲ Policy Index	
Value	4.85
%tile	84
✘ Allocation Index	
Value	4.60
%tile	88

Universe	
5th %tile	7.47
25th %tile	6.72
Median	5.98
75th %tile	5.25
95th %tile	3.79

● Employees Composite

Value	6.28
%tile	29
▲ Policy Index	
Value	5.78
%tile	12
✘ Allocation Index	
Value	5.93
%tile	14

Universe	
5th %tile	5.32
25th %tile	6.13
Median	6.85
75th %tile	7.47
95th %tile	8.54

● Employees Composite

Value	4.67
%tile	87
▲ Policy Index	
Value	4.78
%tile	84
✘ Allocation Index	
Value	4.53
%tile	88

Universe	
5th %tile	7.40
25th %tile	6.65
Median	5.91
75th %tile	5.18
95th %tile	3.72

● Employees Composite

Value	0.74
%tile	74
▲ Policy Index	
Value	0.83
%tile	65
✘ Allocation Index	
Value	0.76
%tile	72

Universe	
5th %tile	1.22
25th %tile	0.99
Median	0.88
75th %tile	0.72
95th %tile	0.54

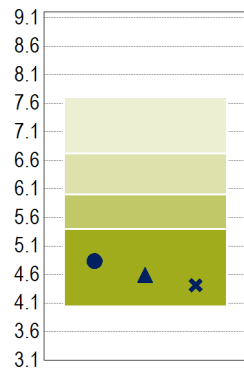
● Employees Composite

Value	1.47
%tile	60
▲ Policy Index	
Value	1.63
%tile	41
✘ Allocation Index	
Value	1.44
%tile	63

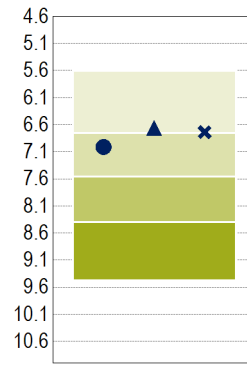
Universe	
5th %tile	2.30
25th %tile	1.84
Median	1.56
75th %tile	1.28
95th %tile	0.95

Employees Composite vs. IFx Public DB Net
5 Years

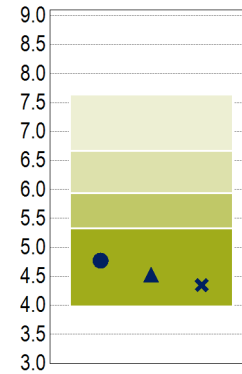
Anlzd Return



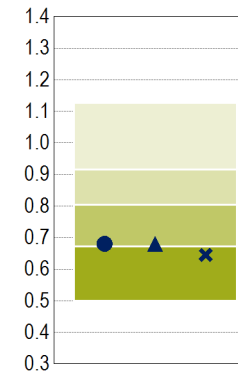
Anlzd Standard Deviation



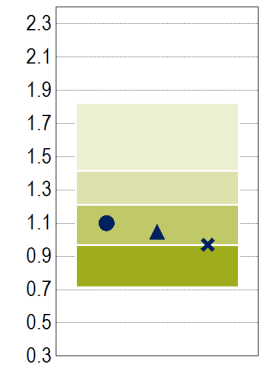
Ann Excess RF Return



Sharpe Ratio



Sortino Ratio RF



● Employees Composite	
Value	4.84
%tile	88
▲ Policy Index	
Value	4.59
%tile	91
✘ Allocation Index	
Value	4.41
%tile	93
Universe	
5th %tile	7.71
25th %tile	6.74
Median	6.01
75th %tile	5.41
95th %tile	4.05

● Employees Composite	
Value	7.01
%tile	33
▲ Policy Index	
Value	6.66
%tile	21
✘ Allocation Index	
Value	6.74
%tile	25
Universe	
5th %tile	5.61
25th %tile	6.74
Median	7.55
75th %tile	8.39
95th %tile	9.46

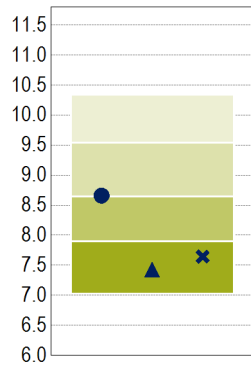
● Employees Composite	
Value	4.77
%tile	88
▲ Policy Index	
Value	4.53
%tile	91
✘ Allocation Index	
Value	4.35
%tile	93
Universe	
5th %tile	7.64
25th %tile	6.67
Median	5.95
75th %tile	5.34
95th %tile	3.99

● Employees Composite	
Value	0.68
%tile	74
▲ Policy Index	
Value	0.68
%tile	74
✘ Allocation Index	
Value	0.65
%tile	80
Universe	
5th %tile	1.13
25th %tile	0.92
Median	0.81
75th %tile	0.67
95th %tile	0.50

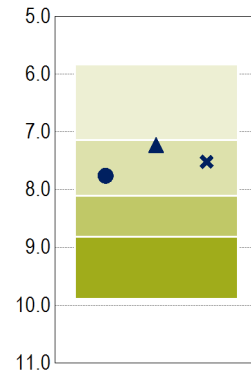
● Employees Composite	
Value	1.10
%tile	65
▲ Policy Index	
Value	1.05
%tile	71
✘ Allocation Index	
Value	0.97
%tile	76
Universe	
5th %tile	1.82
25th %tile	1.42
Median	1.22
75th %tile	0.97
95th %tile	0.72

Employees Composite vs. IFx Public DB Net
7 Years

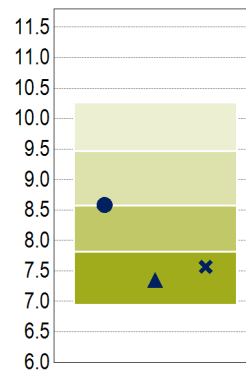
Anlzd Return



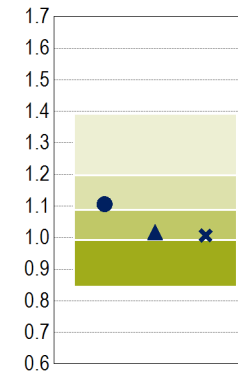
Anlzd Standard Deviation



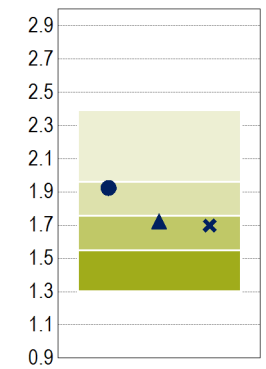
Ann Excess RF Return



Sharpe Ratio



Sortino Ratio RF



● Employees Composite	
Value	8.66
%tile	51
▲ Policy Index	
Value	7.43
%tile	89
✕ Allocation Index	
Value	7.64
%tile	86
Universe	
5th %tile	10.34
25th %tile	9.55
Median	8.66
75th %tile	7.91
95th %tile	7.03

● Employees Composite	
Value	7.76
%tile	43
▲ Policy Index	
Value	7.23
%tile	30
✕ Allocation Index	
Value	7.52
%tile	36
Universe	
5th %tile	5.84
25th %tile	7.13
Median	8.09
75th %tile	8.80
95th %tile	9.88

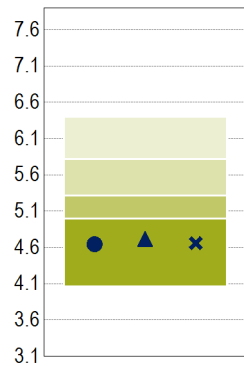
● Employees Composite	
Value	8.58
%tile	51
▲ Policy Index	
Value	7.35
%tile	89
✕ Allocation Index	
Value	7.57
%tile	86
Universe	
5th %tile	10.26
25th %tile	9.48
Median	8.58
75th %tile	7.83
95th %tile	6.95

● Employees Composite	
Value	1.11
%tile	46
▲ Policy Index	
Value	1.02
%tile	69
✕ Allocation Index	
Value	1.01
%tile	72
Universe	
5th %tile	1.39
25th %tile	1.20
Median	1.09
75th %tile	0.99
95th %tile	0.85

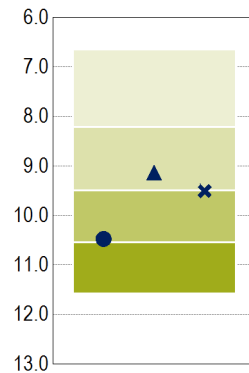
● Employees Composite	
Value	1.92
%tile	32
▲ Policy Index	
Value	1.72
%tile	57
✕ Allocation Index	
Value	1.70
%tile	60
Universe	
5th %tile	2.39
25th %tile	1.96
Median	1.76
75th %tile	1.55
95th %tile	1.30

Employees Composite vs. IFx Public DB Net
10 Years

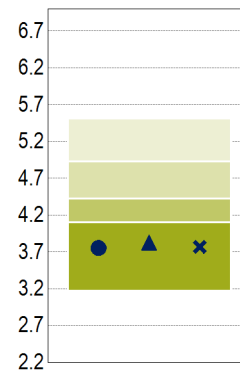
Anlzd Return



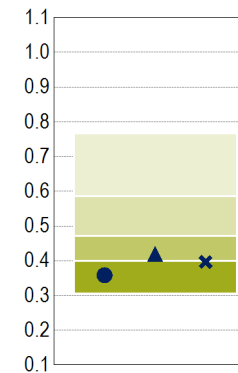
Anlzd Standard Deviation



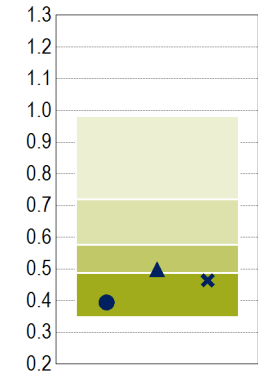
Ann Excess RF Return



Sharpe Ratio



Sortino Ratio RF



● Employees Composite	
Value	4.64
%tile	85
▲ Policy Index	
Value	4.72
%tile	83
✕ Allocation Index	
Value	4.66
%tile	84
Universe	
5th %tile	6.40
25th %tile	5.83
Median	5.32
75th %tile	5.00
95th %tile	4.07

● Employees Composite	
Value	10.47
%tile	74
▲ Policy Index	
Value	9.13
%tile	42
✕ Allocation Index	
Value	9.51
%tile	51
Universe	
5th %tile	6.64
25th %tile	8.19
Median	9.48
75th %tile	10.53
95th %tile	11.56

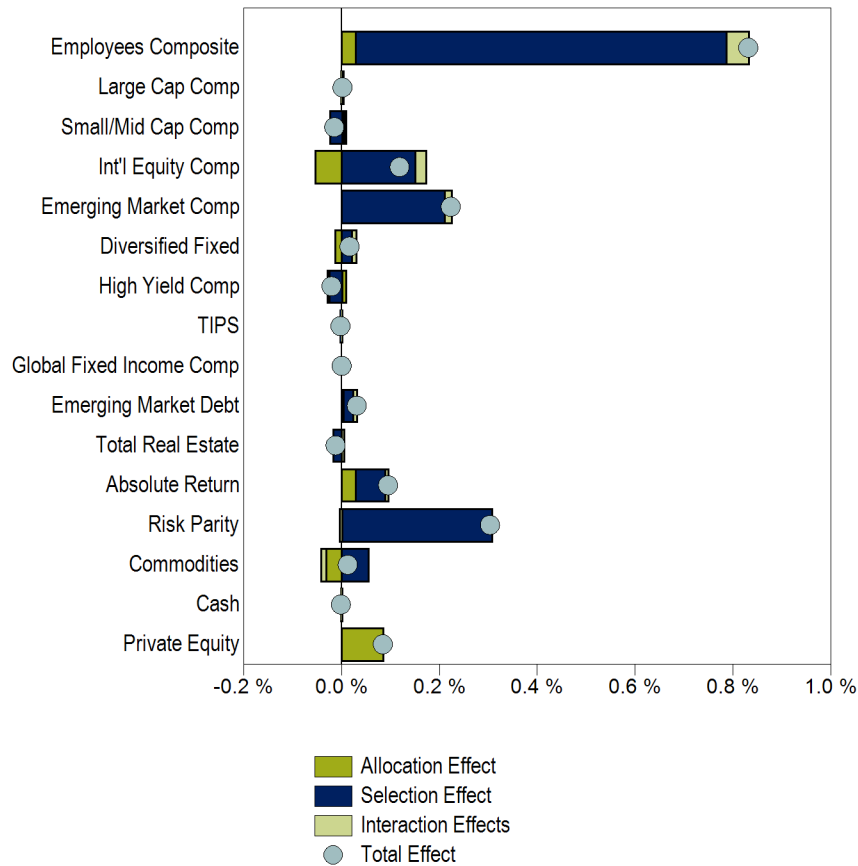
● Employees Composite	
Value	3.75
%tile	85
▲ Policy Index	
Value	3.83
%tile	83
✕ Allocation Index	
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%tile	84
Universe	
5th %tile	5.51
25th %tile	4.93
Median	4.43
75th %tile	4.11
95th %tile	3.18

● Employees Composite	
Value	0.36
%tile	88
▲ Policy Index	
Value	0.42
%tile	69
✕ Allocation Index	
Value	0.40
%tile	77
Universe	
5th %tile	0.77
25th %tile	0.59
Median	0.47
75th %tile	0.40
95th %tile	0.31

● Employees Composite	
Value	0.39
%tile	91
▲ Policy Index	
Value	0.50
%tile	72
✕ Allocation Index	
Value	0.46
%tile	81
Universe	
5th %tile	0.98
25th %tile	0.72
Median	0.58
75th %tile	0.49
95th %tile	0.35

Total Fund Attribution Analysis

Attribution Effects Relative to Policy Index
3 Months Ending June 30, 2016



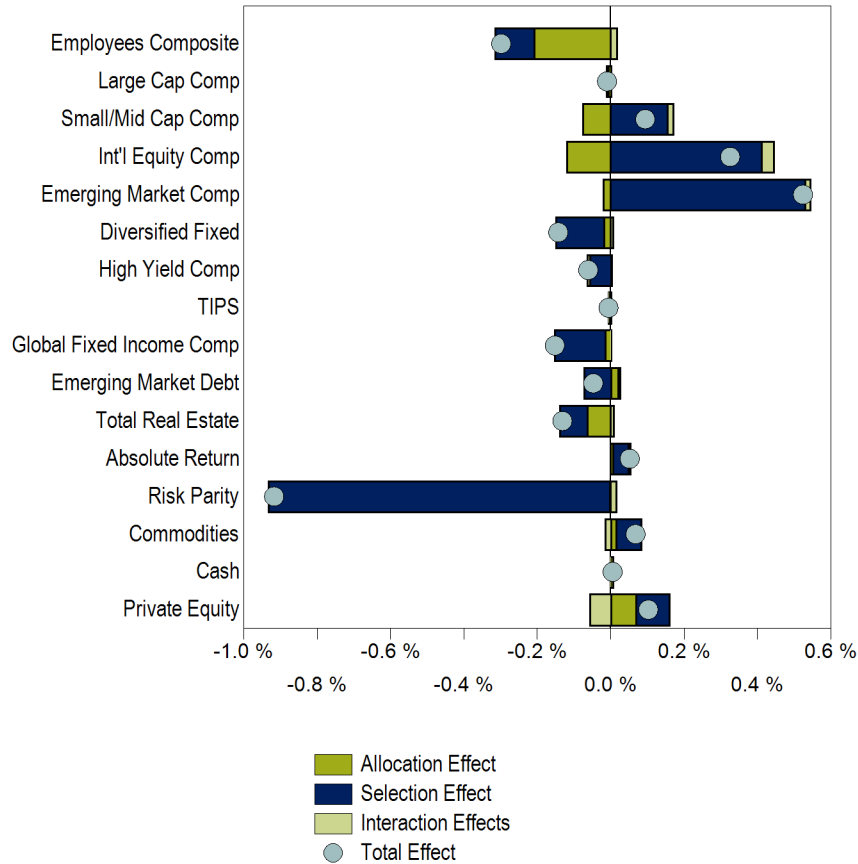
Attribution Summary
3 Months Ending June 30, 2016

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%
Small/Mid Cap Comp	3.4%	3.9%	-0.5%	0.0%	0.0%	0.0%	0.0%
Int'l Equity Comp	0.1%	-1.3%	1.4%	0.2%	-0.1%	0.0%	0.1%
Emerging Market Comp	4.1%	0.7%	3.4%	0.2%	0.0%	0.0%	0.2%
Diversified Fixed	2.3%	2.2%	0.1%	0.0%	0.0%	0.0%	0.0%
High Yield Comp	5.0%	5.5%	-0.5%	0.0%	0.0%	0.0%	0.0%
TIPS	1.7%	1.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Global Fixed Income Comp	--	--	--	--	0.0%	--	--
Emerging Market Debt	5.8%	5.4%	0.4%	0.0%	0.0%	0.0%	0.0%
Total Real Estate	1.9%	2.0%	-0.2%	0.0%	0.0%	0.0%	0.0%
Absolute Return	1.5%	0.8%	0.7%	0.1%	0.0%	0.0%	0.1%
Risk Parity	5.8%	2.0%	3.8%	0.3%	0.0%	0.0%	0.3%
Commodities	14.4%	12.8%	1.6%	0.1%	0.0%	0.0%	0.0%
Cash	0.0%	0.1%	-0.1%	0.0%	0.0%	0.0%	0.0%
Private Equity	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.1%
Total	3.0%	2.2%	0.8%	0.8%	0.0%	0.0%	0.8%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report. The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark. The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite. May not add up due to rounding.

Total Fund Attribution Analysis

Attribution Effects Relative to Policy Index
1 Year Ending June 30, 2016



Attribution Summary
1 Year Ending June 30, 2016

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Large Cap Comp	3.6%	3.7%	0.0%	0.0%	0.0%	0.0%	0.0%
Small/Mid Cap Comp	-0.4%	-3.5%	3.0%	0.2%	-0.1%	0.0%	0.1%
Int'l Equity Comp	-6.3%	-10.2%	3.8%	0.4%	-0.1%	0.0%	0.3%
Emerging Market Comp	-3.7%	-12.1%	8.4%	0.5%	0.0%	0.0%	0.5%
Diversified Fixed	5.4%	6.0%	-0.6%	-0.1%	0.0%	0.0%	-0.1%
High Yield Comp	0.4%	1.6%	-1.2%	-0.1%	0.0%	0.0%	-0.1%
TIPS	4.3%	4.4%	-0.1%	0.0%	0.0%	0.0%	0.0%
Global Fixed Income Comp	--	7.6%	--	-0.1%	0.0%	0.0%	-0.2%
Emerging Market Debt	8.8%	10.3%	-1.6%	-0.1%	0.0%	0.0%	0.0%
Total Real Estate	9.4%	10.6%	-1.2%	-0.1%	-0.1%	0.0%	-0.1%
Absolute Return	-4.9%	-5.2%	0.3%	0.0%	0.0%	0.0%	0.1%
Risk Parity	-0.5%	3.6%	-4.0%	-0.9%	0.0%	0.0%	-0.9%
Commodities	-12.0%	-13.3%	1.3%	0.1%	0.0%	0.0%	0.1%
Cash	0.0%	0.2%	-0.2%	0.0%	0.0%	0.0%	0.0%
Private Equity	2.2%	-0.6%	2.9%	0.1%	0.1%	-0.1%	0.1%
Total	0.9%	1.2%	-0.3%	-0.1%	-0.2%	0.0%	-0.3%

Note: Plan attribution calculations are returns based and the results shown reflect the composites shown. As a result, the total returns shown may vary from the calculated returns shown on the performance report. The target return shown for each composite is a custom index, based on aggregated policy indices. This policy index asset weights the underlying policy indices of each option in the plan and the respective benchmark. The allocation, selection, and interaction effects are calculated using the custom index described above along with the policy or target weight of each composite. May not add up due to rounding.

Vermont State Employees

Total Fund Risk Statistics - 3 Years Ending June 30, 2016

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Employees Composite	100.00%	4.74%	87	6.28%	29	-0.49%	59	0.74	74	1.47	60	0.93%	35
Policy Index	--	4.85%	84	5.78%	12	0.00%	37	0.83	65	1.63	41	0.00%	1
US Equity	22.11%	11.23%	23	11.75%	29	-0.07%	26	0.95	20	1.86	17	1.52%	2
Russell 3000	--	11.13%	24	11.47%	22	0.00%	25	0.96	18	1.77	22	0.00%	1
Large Cap Comp	16.84%	11.60%	26	11.34%	31	-0.12%	28	1.02	22	2.08	15	0.72%	1
S&P 500	--	11.66%	25	11.25%	29	0.00%	27	1.03	20	1.96	21	0.00%	1
Small/Mid Cap Comp	5.27%	10.57%	16	13.47%	51	4.41%	20	0.78	21	1.66	12	3.24%	1
Russell 2000	--	7.09%	61	15.22%	86	0.00%	76	0.46	72	0.79	70	0.00%	1
Int'l Equity Comp	12.20%	4.05%	35	12.69%	48	2.10%	35	0.31	35	0.62	33	2.33%	11
MSCI EAFE	--	2.06%	68	13.29%	79	0.00%	72	0.15	71	0.27	69	0.00%	1
Emerging Market Comp	6.58%	-1.11%	57	16.25%	72	0.34%	57	-0.07	57	-0.15	60	5.45%	61
MSCI Emerging Markets	--	-1.56%	69	16.51%	76	0.00%	64	-0.10	64	-0.18	66	0.00%	1
US Fixed Income	26.83%	3.91%	43	3.00%	67	-0.02%	76	1.28	68	2.76	66	1.55%	36
Barclays Aggregate	--	4.06%	39	2.66%	57	0.00%	75	1.50	49	3.94	36	0.00%	1
Diversified Fixed	17.86%	4.10%	38	2.94%	66	-0.01%	76	1.37	62	3.26	54	1.20%	26
Barclays Aggregate	--	4.06%	39	2.66%	57	0.00%	75	1.50	49	3.94	36	0.00%	1
Unconstrained Fixed Income	6.02%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	4.73%	7	3.58%	44	0.00%	29	1.30	18	2.99	13	0.00%	1
High Yield Comp	5.11%	3.78%	56	4.97%	31	0.39%	52	0.75	49	1.41	54	1.59%	45
Barclays High Yield	--	4.18%	38	6.00%	78	0.00%	59	0.69	56	1.62	46	0.00%	1
TIPS	3.86%	2.24%	28	4.32%	75	-0.10%	39	0.50	35	1.09	29	0.20%	5
Barclays US TIPS	--	2.31%	21	4.27%	73	0.00%	29	0.52	27	1.15	26	0.00%	1
Emerging Market Debt	5.13%	5.74%	10	6.39%	27	-0.61%	19	0.89	19	1.76	15	1.15%	5
JP Morgan EMBI Global TR	--	6.44%	5	6.37%	27	0.00%	13	1.00	8	1.92	11	0.00%	1
Total Real Estate	6.02%	12.55%	--	5.22%	--	0.79%	--	0.59	--	0.58	--	1.46%	--
NCREIF Property Index	--	11.60%	--	4.68%	--	0.00%	--	0.45	--	0.40	--	0.00%	--
Absolute Return	8.88%	2.04%	40	3.74%	29	0.19%	44	0.53	35	0.77	36	1.18%	1
HFRI Fund of Funds Composite Index	--	1.92%	44	3.67%	29	0.00%	48	0.50	37	0.73	40	0.00%	1
Risk Parity	8.13%	3.92%	44	7.73%	51	-0.69%	43	0.50	43	0.83	46	4.31%	46
60% MSCI World (Net) / 40% CITI WGBI	--	5.38%	16	7.60%	49	0.00%	31	0.70	20	1.61	6	0.00%	1

Vermont State Employees

Total Fund Risk Statistics - 5 Years Ending June 30, 2016

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	Tracking Error	Rank
Employees Composite	100.00%	4.84%	88	7.01%	33	0.03%	31	0.68	74	1.10	65	0.86%	13
Policy Index	--	4.59%	91	6.66%	21	0.00%	32	0.68	74	1.05	71	0.00%	1
US Equity	22.11%	--	--	--	--	--	--	--	--	--	--	--	--
Russell 3000	--	11.60%	21	12.56%	21	0.00%	22	0.92	15	1.48	19	0.00%	1
Large Cap Comp	16.84%	11.92%	19	12.60%	40	-0.64%	28	0.94	22	1.57	24	1.01%	1
S&P 500	--	12.10%	14	12.10%	27	0.00%	19	0.99	14	1.67	19	0.00%	1
Small/Mid Cap Comp	5.27%	10.68%	15	14.91%	44	3.25%	26	0.71	27	1.20	18	3.00%	1
Russell 2000	--	8.35%	51	16.58%	82	0.00%	71	0.50	60	0.78	60	0.00%	1
Int'l Equity Comp	12.20%	2.65%	54	14.38%	27	1.09%	53	0.18	51	0.27	48	2.29%	7
MSCI EAFE	--	1.68%	73	15.37%	69	0.00%	74	0.10	73	0.16	71	0.00%	1
Emerging Market Comp	6.58%	--	--	--	--	--	--	--	--	--	--	--	--
MSCI Emerging Markets	--	-3.78%	77	18.84%	65	0.00%	78	-0.20	80	-0.32	81	0.00%	1
US Fixed Income	26.83%	--	--	--	--	--	--	--	--	--	--	--	--
Barclays Aggregate	--	3.76%	52	2.77%	49	0.00%	82	1.34	50	2.23	43	0.00%	1
Diversified Fixed	17.86%	4.16%	44	3.19%	61	0.36%	64	1.28	57	2.01	59	1.53%	28
Barclays Aggregate	--	3.76%	52	2.77%	49	0.00%	82	1.34	50	2.23	43	0.00%	1
Unconstrained Fixed Income	6.02%	--	--	--	--	--	--	--	--	--	--	--	--
25% HY, 25% EMD, 50% BC Agg	--	4.96%	19	3.95%	31	0.00%	29	1.24	14	2.12	14	0.00%	1
High Yield Comp	5.11%	5.58%	39	5.57%	22	0.76%	36	0.99	30	1.68	41	1.52%	44
Barclays High Yield	--	5.84%	30	6.65%	72	0.00%	58	0.87	56	1.64	45	0.00%	1
TIPS	3.86%	--	--	--	--	--	--	--	--	--	--	--	--
Barclays US TIPS	--	2.63%	33	5.02%	72	0.00%	25	0.51	26	0.72	24	0.00%	1
Emerging Market Debt	5.13%	--	--	--	--	--	--	--	--	--	--	--	--
JP Morgan EMBI Global TR	--	6.25%	6	7.34%	18	0.00%	7	0.84	5	1.27	4	0.00%	1
Total Real Estate	6.02%	--	--	--	--	--	--	--	--	--	--	--	--
NCREIF Property Index	--	11.51%	--	4.61%	--	0.00%	--	0.39	--	0.30	--	0.00%	--
Absolute Return	8.88%	3.24%	38	4.25%	34	1.56%	37	0.75	31	1.05	31	1.29%	1
HFRI Fund of Funds Composite Index	--	1.63%	70	3.95%	30	0.00%	63	0.40	57	0.54	56	0.00%	1
Risk Parity	8.13%	3.60%	44	8.57%	56	-0.59%	68	0.41	70	0.61	68	4.09%	41
60% MSCI World (Net) / 40% CITI WGBI	--	4.64%	25	8.40%	54	0.00%	56	0.54	50	0.87	41	0.00%	1

Appendix

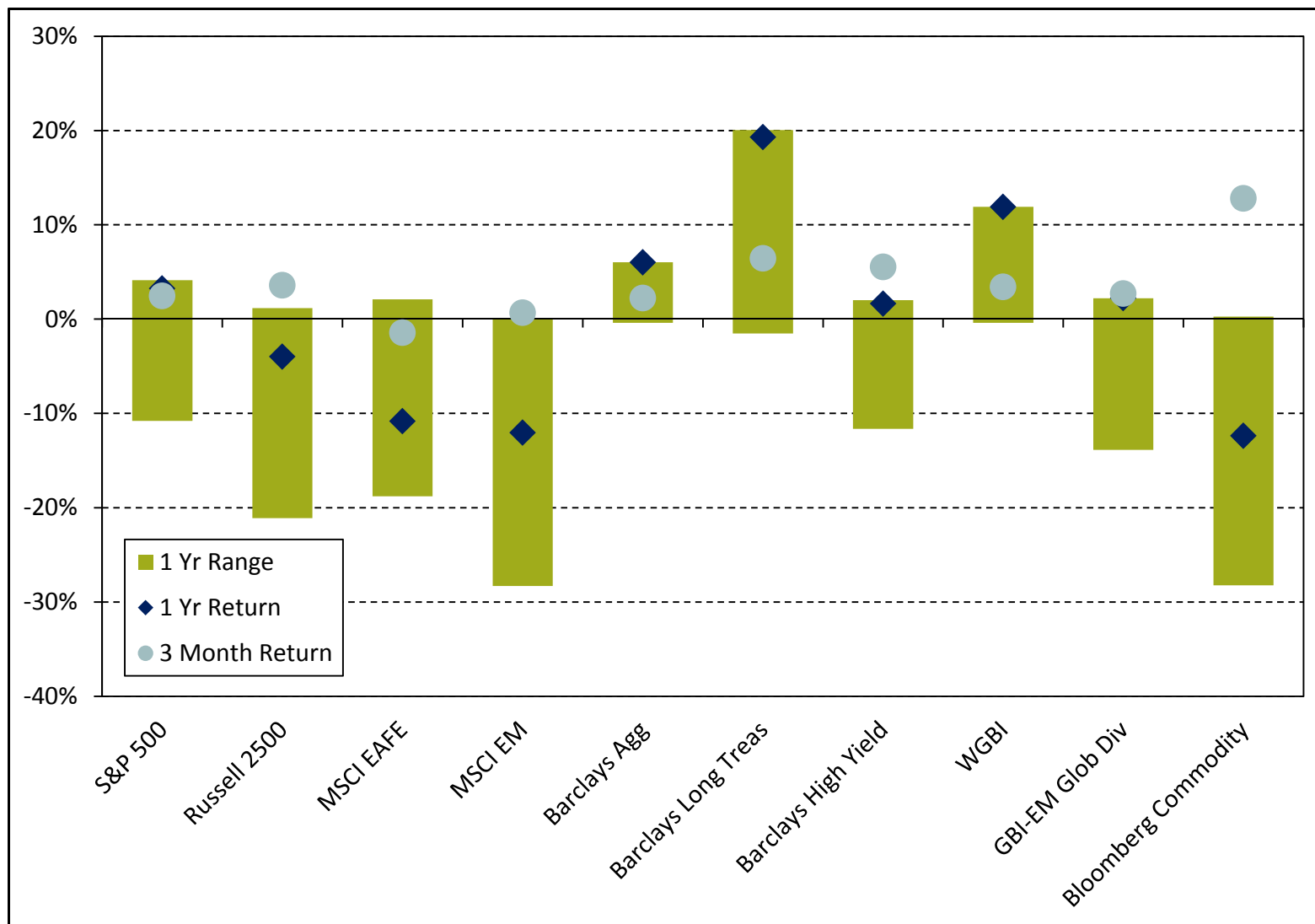


Index Performance Summary as of 6/30/2016

	2009	2010	2011	2012	2013	2014	2015	Q1	APRIL	MAY	JUNE	Q2	YTD
Barclays US STRIPS 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	11.4%	-0.9%	1.5%	9.0%	9.6%	22.0%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-4.2%	11.0%	2.5%	5.1%	19.7%	14.7%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	7.3%	1.2%	0.3%	4.9%	6.5%	14.3%
JPM GBI-EM Global Div	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	11.0%	2.6%	-5.4%	5.9%	2.7%	14.0%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	6.8%	2.4%	0.0%	4.2%	6.7%	13.9%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	6.0%	-2.4%	2.4%	7.0%	7.0%	13.4%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	0.4%	8.5%	-0.2%	4.1%	12.8%	13.3%
Citi WGBI USD	2.6%	5.2%	6.4%	1.6%	-4.0%	-0.5%	-3.6%	7.1%	1.3%	-1.5%	3.7%	3.4%	10.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.3%	17.4%	-5.3%	7.4%	1.2%	5.0%	1.8%	-0.2%	3.4%	5.0%	10.3%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	3.4%	3.9%	0.6%	0.9%	5.5%	9.1%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	5.7%	0.5%	-3.7%	4.0%	0.7%	6.4%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.5%	3.0%	0.4%	0.0%	1.8%	2.2%	5.3%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.7%	0.7%	0.3%	1.6%	2.6%	4.3%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	1.3%	1.9%	0.9%	0.0%	2.9%	4.2%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	0.4%	1.5%	2.1%	0.0%	3.6%	4.0%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	1.3%	0.4%	1.8%	0.3%	2.5%	3.8%
Barclays US Agg Interm	6.5%	6.1%	6.0%	3.6%	-1.0%	4.1%	1.2%	2.3%	0.2%	0.0%	1.2%	1.4%	3.8%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	1.2%	0.5%	1.8%	0.2%	2.5%	3.7%
Russell 2000	27.2%	26.9%	-4.2%	16.3%	38.8%	4.9%	-4.4%	-1.5%	1.6%	2.3%	-0.1%	3.8%	2.2%
BC US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	1.0%	0.1%	-0.1%	0.6%	0.7%	1.7%
MSCI ACWI	34.6%	12.7%	-7.3%	16.1%	22.8%	4.2%	-2.4%	0.2%	1.5%	0.1%	-0.6%	1.0%	1.2%
Credit Suisse Hedge Fund	18.6%	10.9%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-2.2%	0.3%	0.4%	N/A	N/A	-1.5%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-3.0%	2.9%	-0.9%	-3.4%	-1.5%	-4.4%

Source: Morningstar Direct

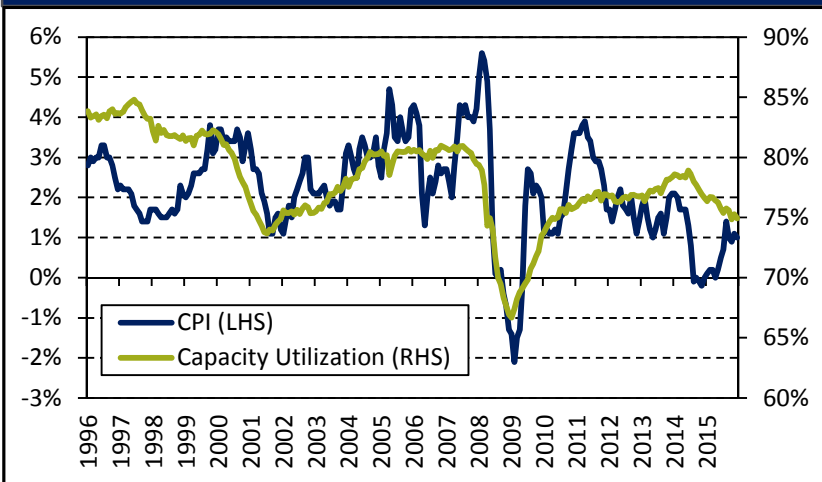
Near Term Broad Market Performance Summary as of 6/30/2016



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

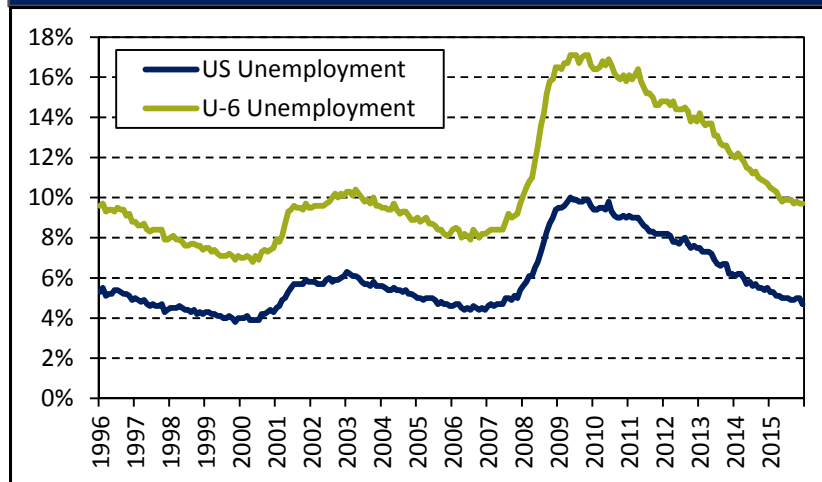
US Economic Indicators

Inflation has increased off lows



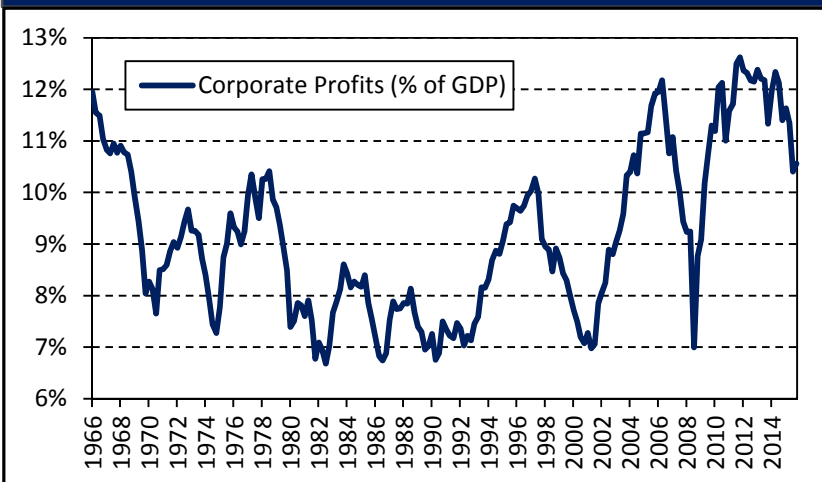
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

Unemployment steadily improving



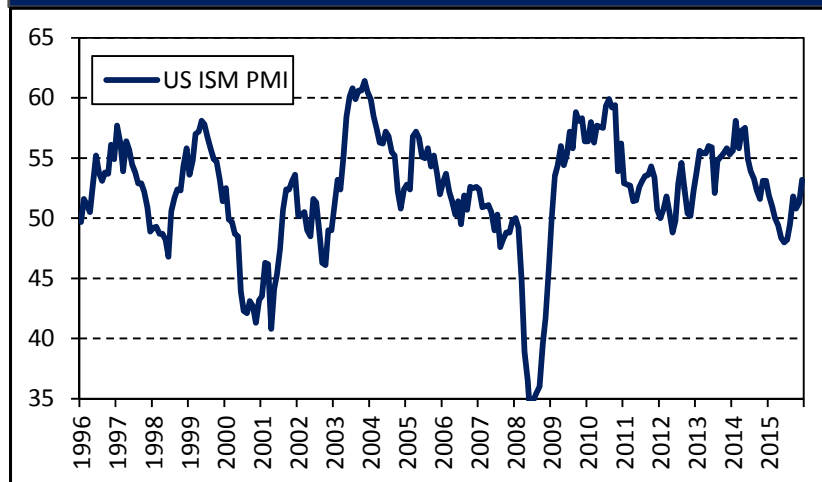
Source: Bloomberg, Bureau of Labor Statistics

Corporate profits lower off cyclical highs



Source: Bloomberg, Bureau of Economic Analysis

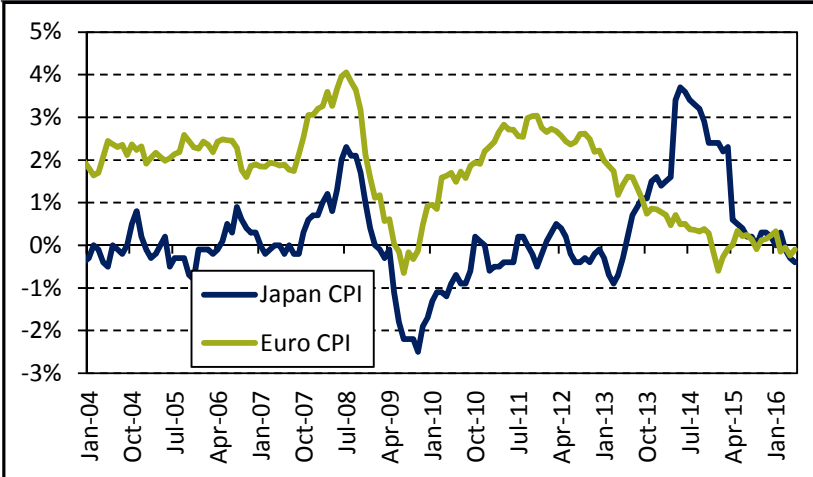
Manufacturing trending higher after dip



Source: Bloomberg, Institute for Supply Management

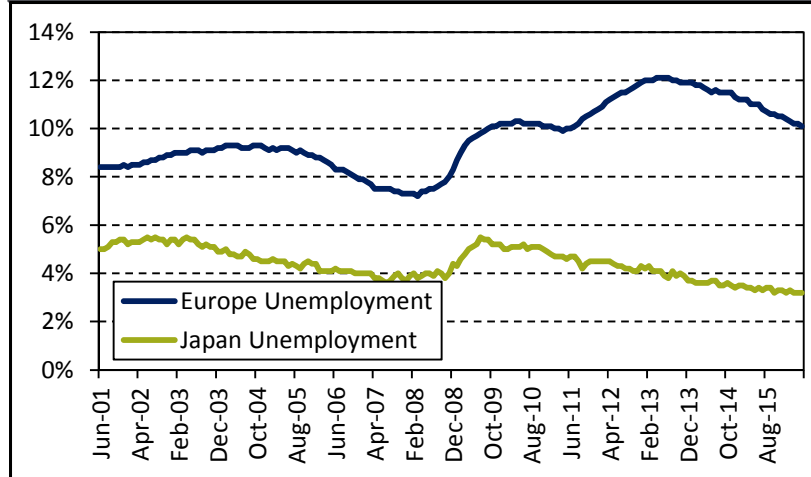
International Economic Indicators

Inflation remains muted



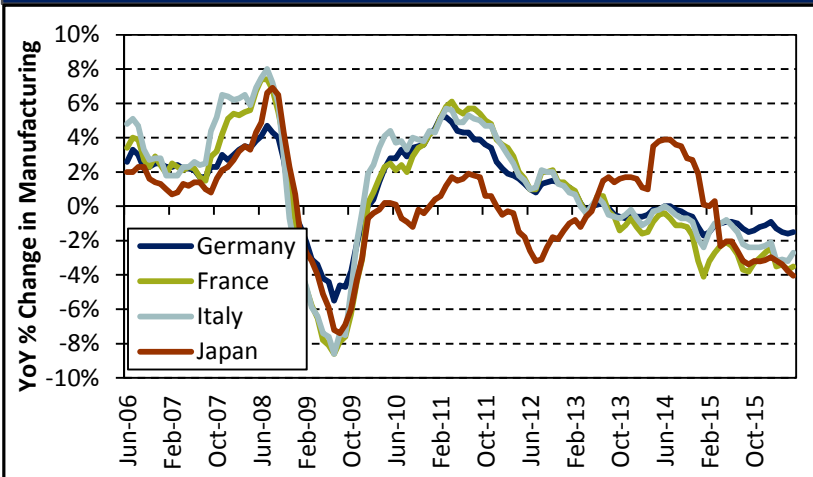
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Europe unemployment trending lower



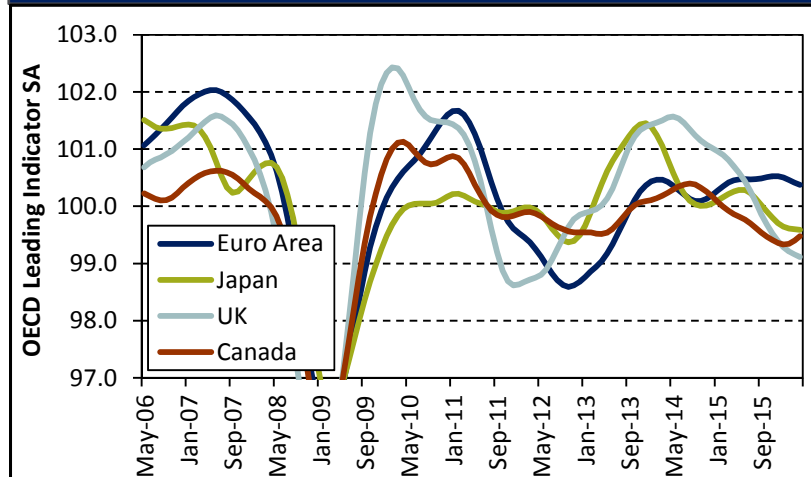
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Manufacturing continues to lag



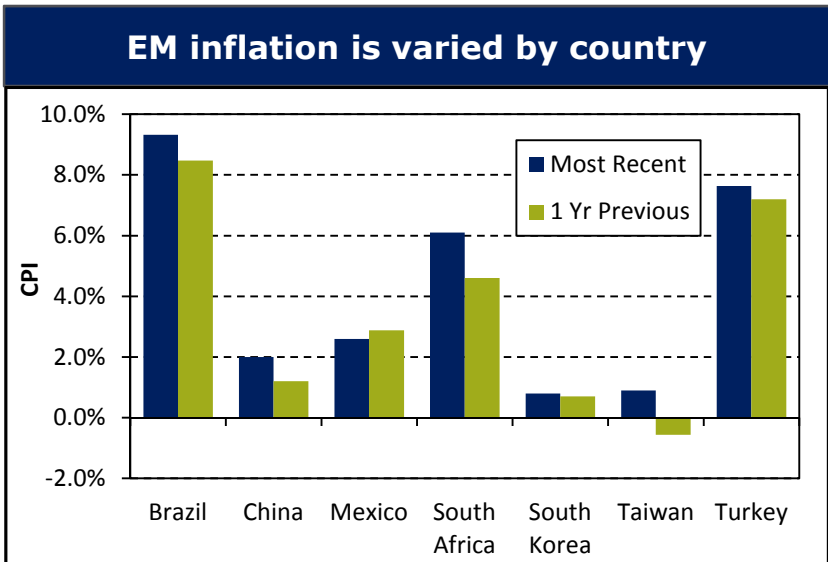
Source: Bloomberg, OECD, Eurostat

Leading indicators mostly neutral

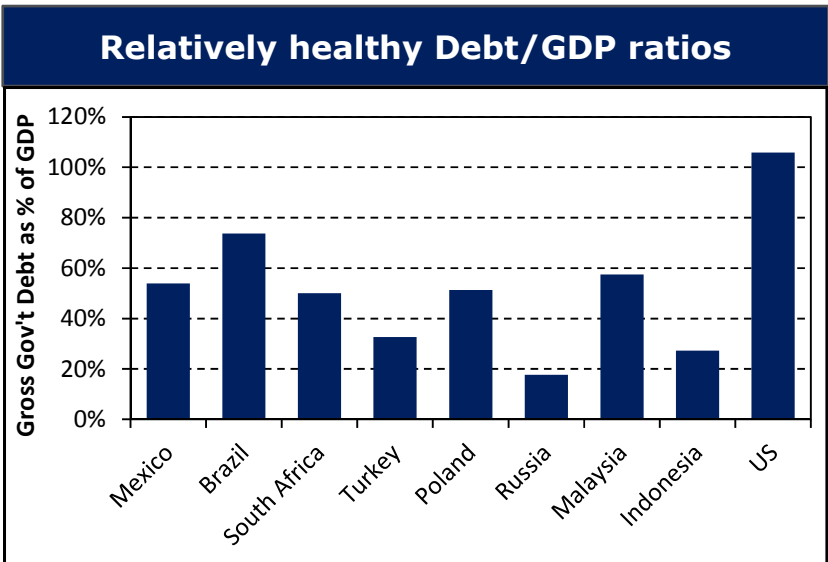


Source: Bloomberg, OECD

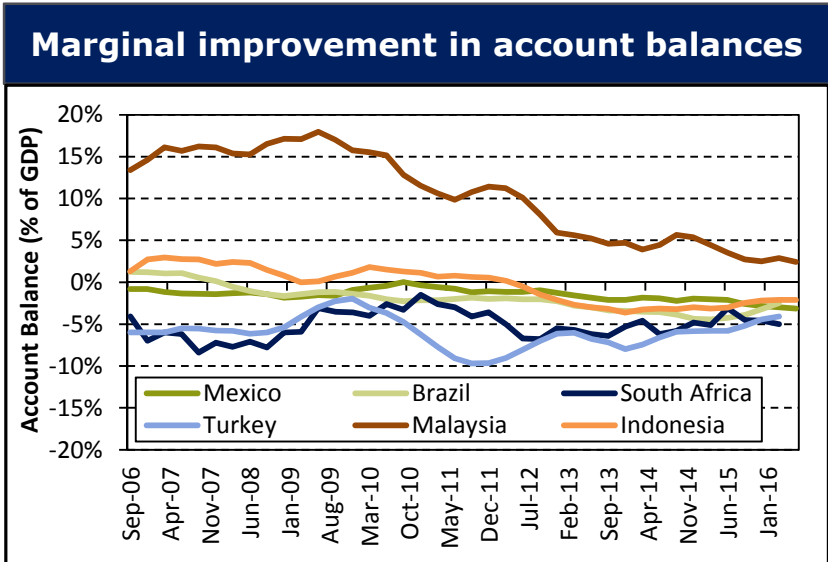
Emerging Market Economic Indicators



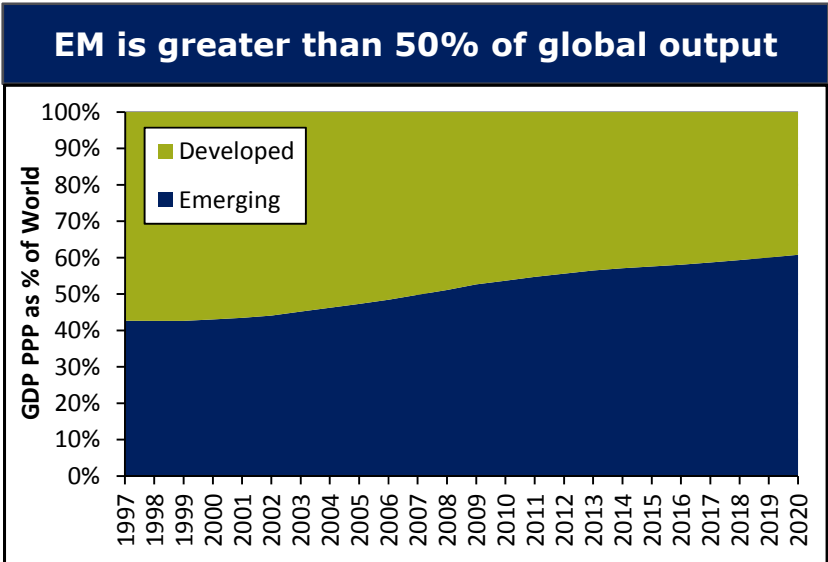
Source: Bloomberg



Source: Bloomberg, IMF



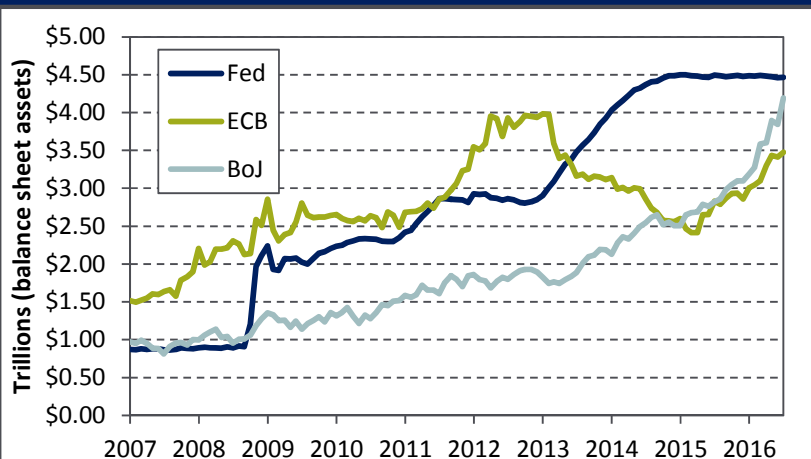
Source: Bloomberg



Source: Bloomberg, IMF

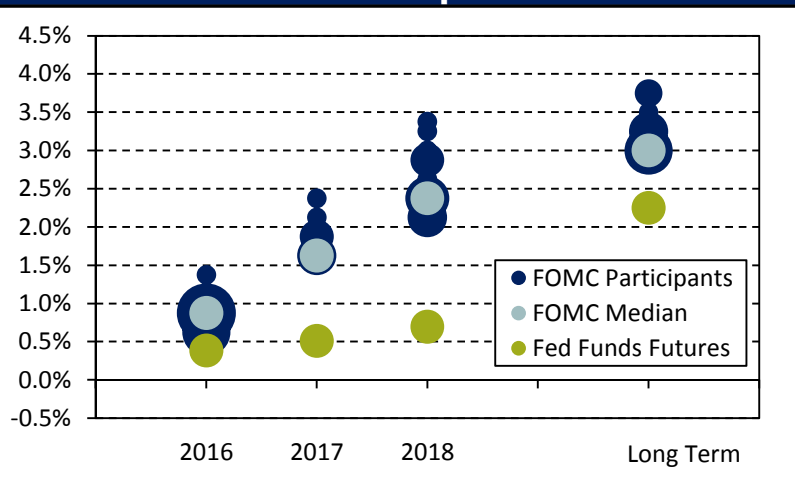
Central Banks

Major central bank policy divergence



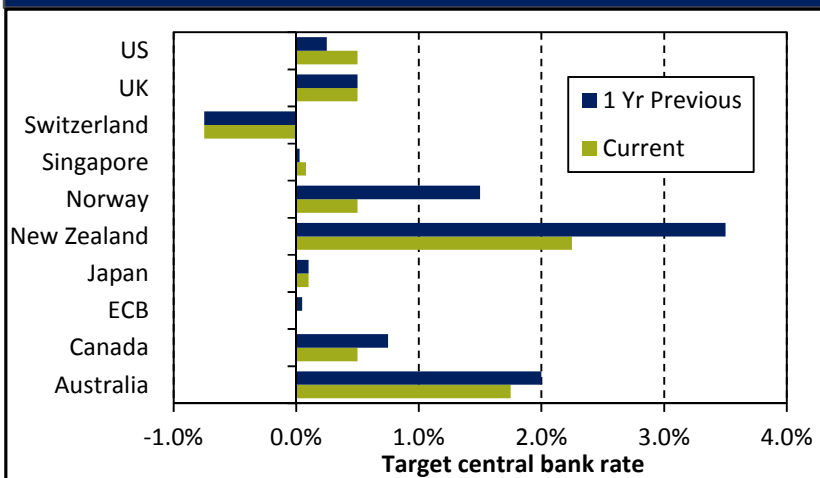
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC

Fed's projected policy rate firming above market expectations



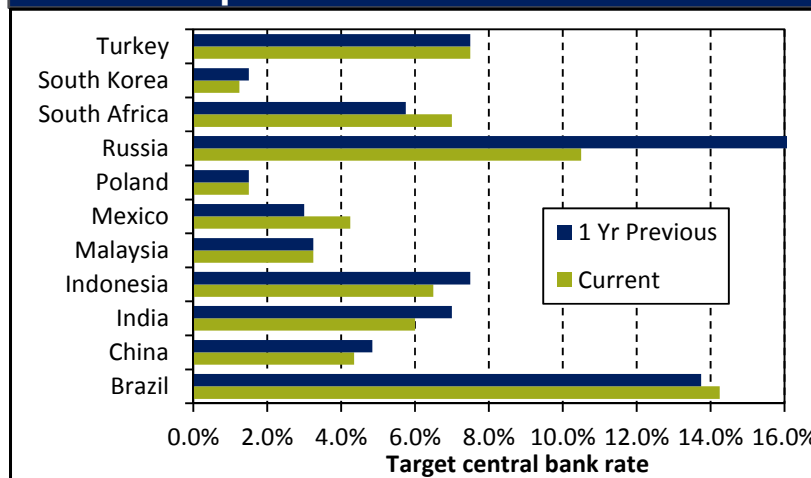
Source: Bloomberg, Federal Reserve, NEPC

Many developed central banks have maintained low interest rates



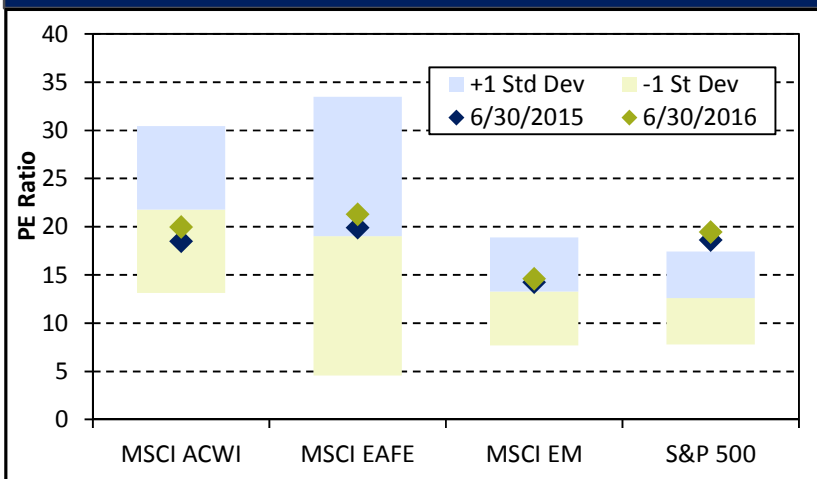
Source: Bloomberg

EM central bank policies vary by country-specific economic conditions



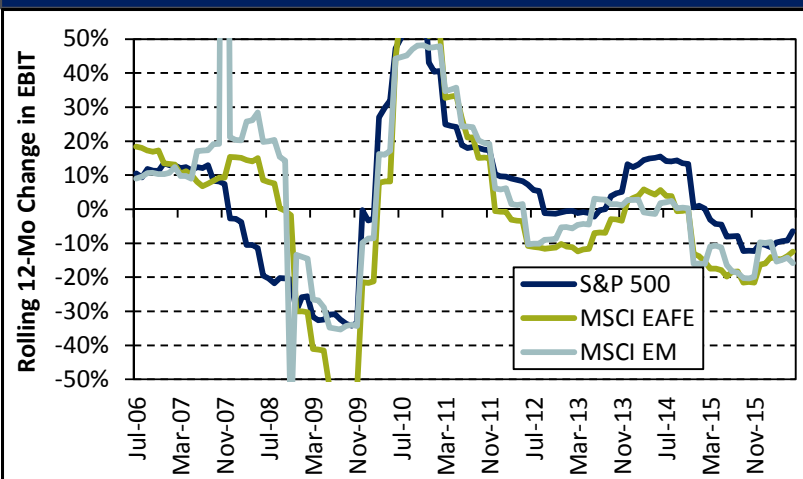
Source: Bloomberg

Global valuations are mixed



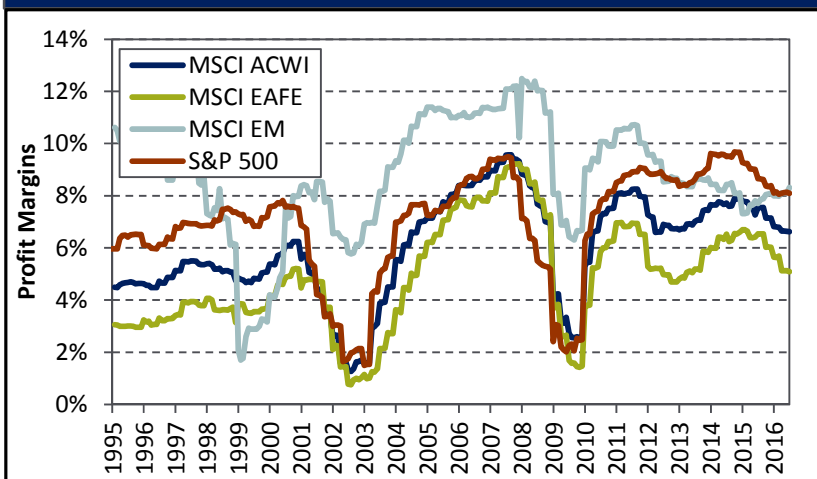
Source: Bloomberg, Standard and Poors, MSCI *MSCI EAFE is ex UK Telecom

Earnings growth has trended lower



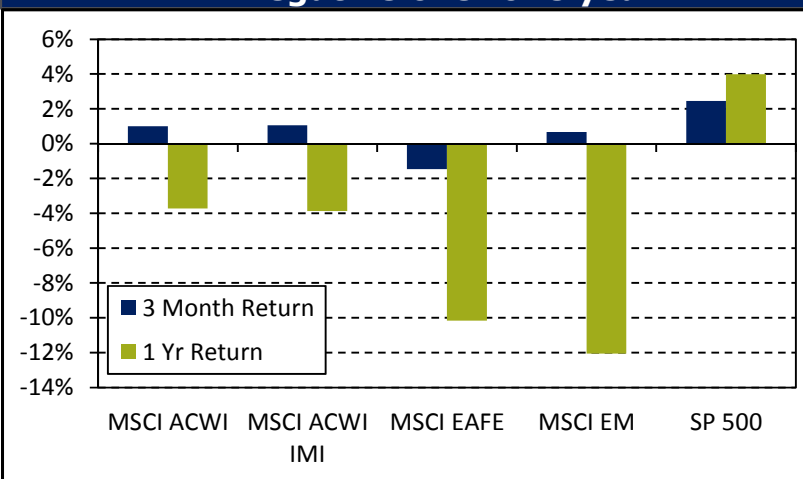
Source: Bloomberg, Standard and Poors, MSCI

Margins declining outside of EM



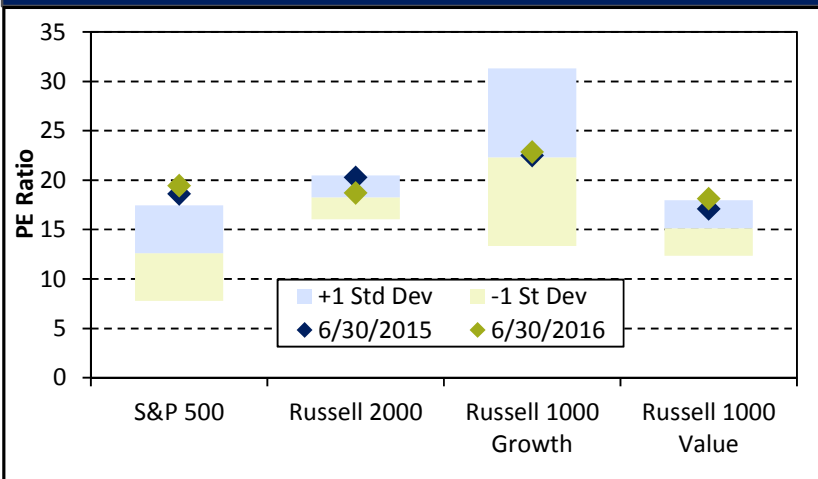
Source: Bloomberg, MSCI

Global equity returns have been mostly negative over one year



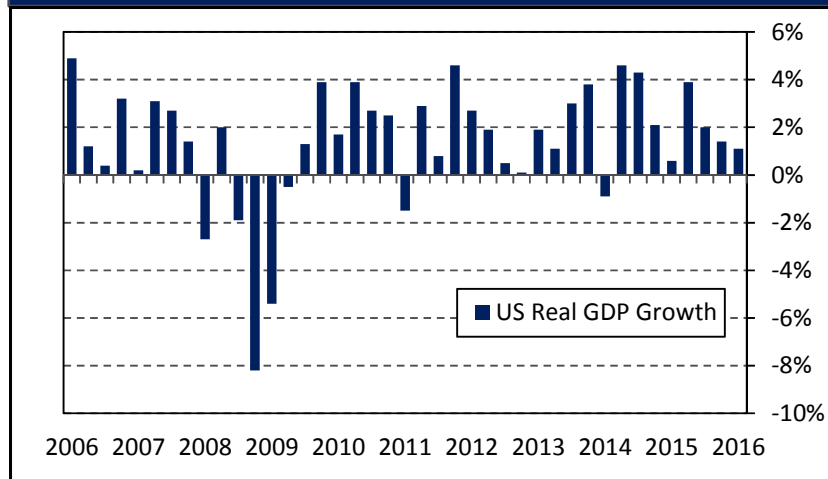
Source: Bloomberg, MSCI

Valuations near or above historical norms



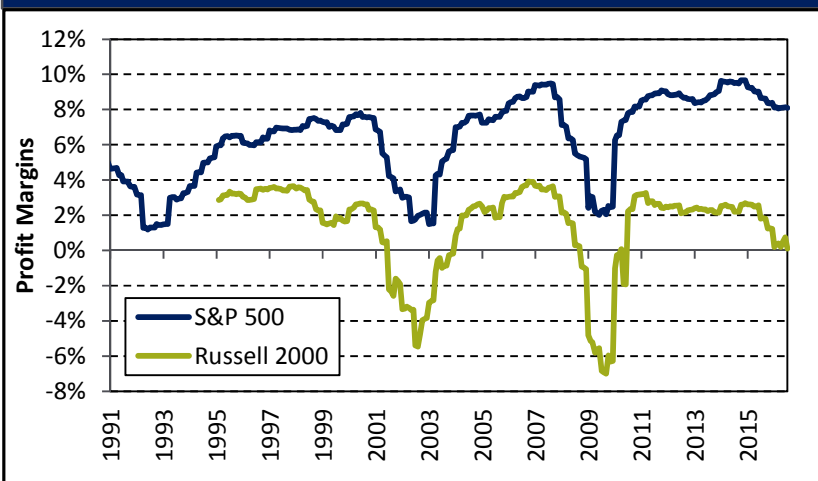
Source: Bloomberg, Standard and Poors, Russell *Russell 2000 PE is index adjusted positive

Growth recovery marked by inconsistency



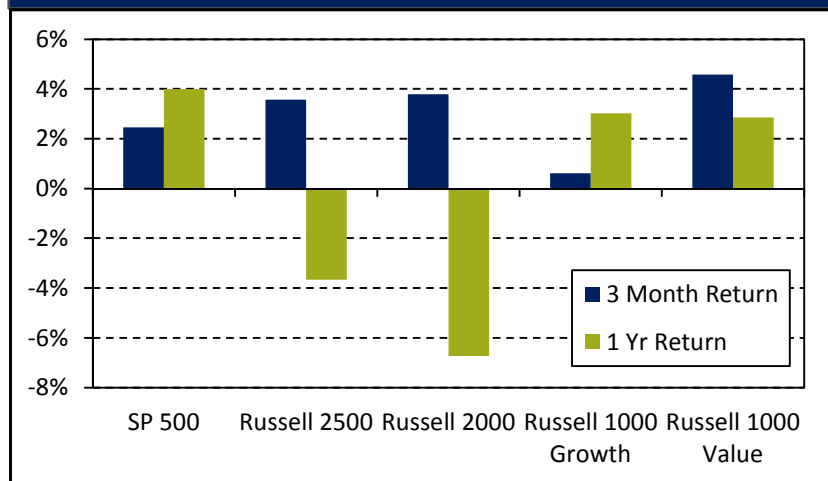
Source: Bloomberg, Bureau of Economic Analysis

Profit margins lower off highs



Source: Bloomberg, Standard and Poors, Russell

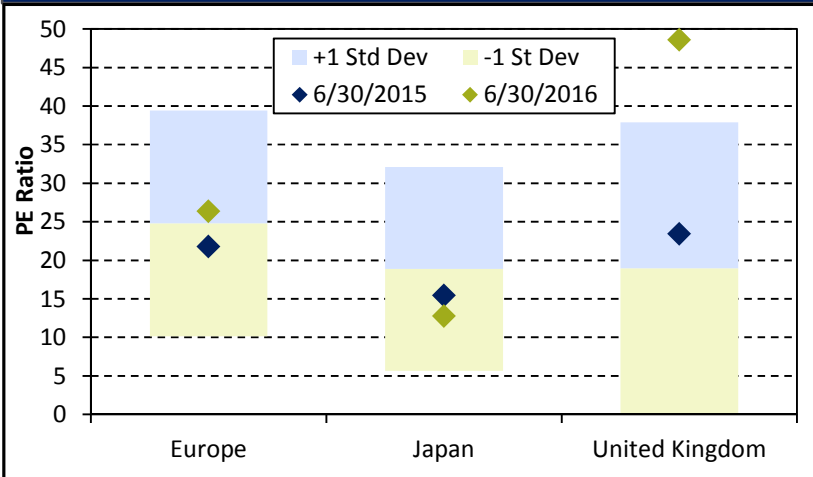
Trailing performance has been mixed



Source: Bloomberg, Standard and Poors, Russell

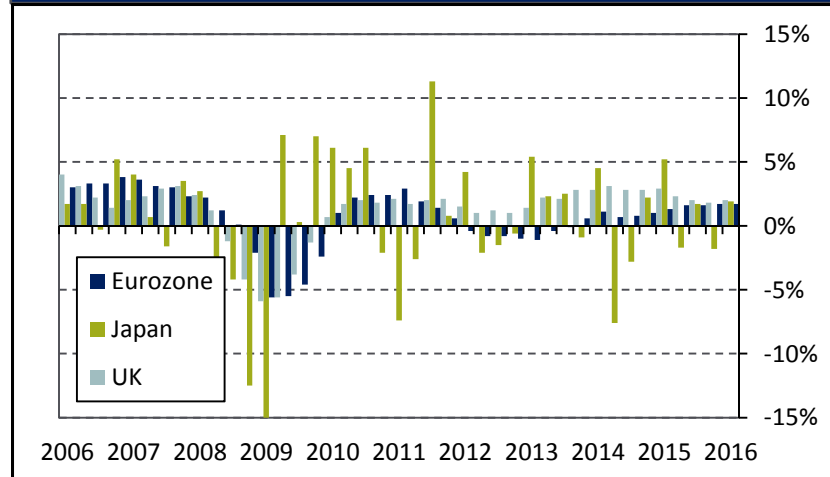
International Equity

PE levels varied by region/country



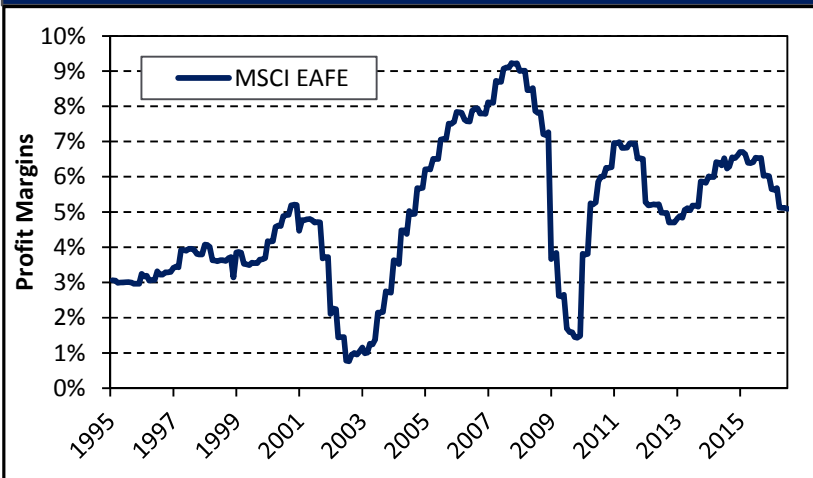
Source: Bloomberg, MSCI, FTSE *UK represented by FTSE 100 Index

Global growth remains subdued



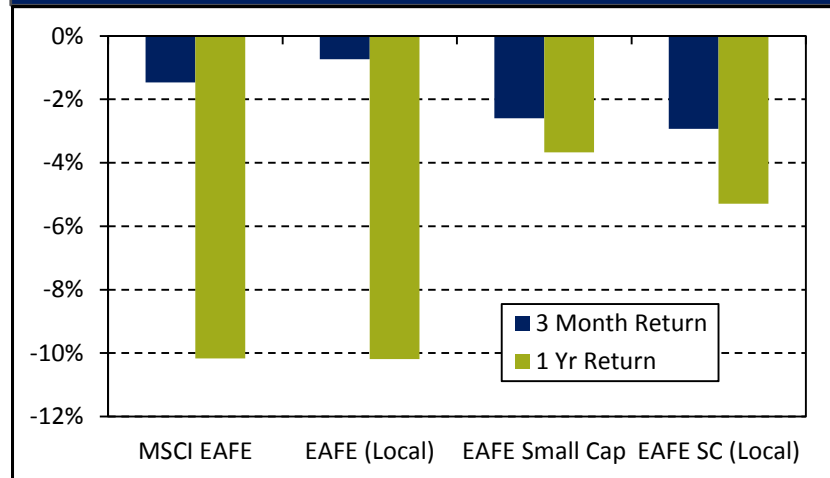
Source: Bloomberg

Margins recently declining



Source: Bloomberg, MSCI

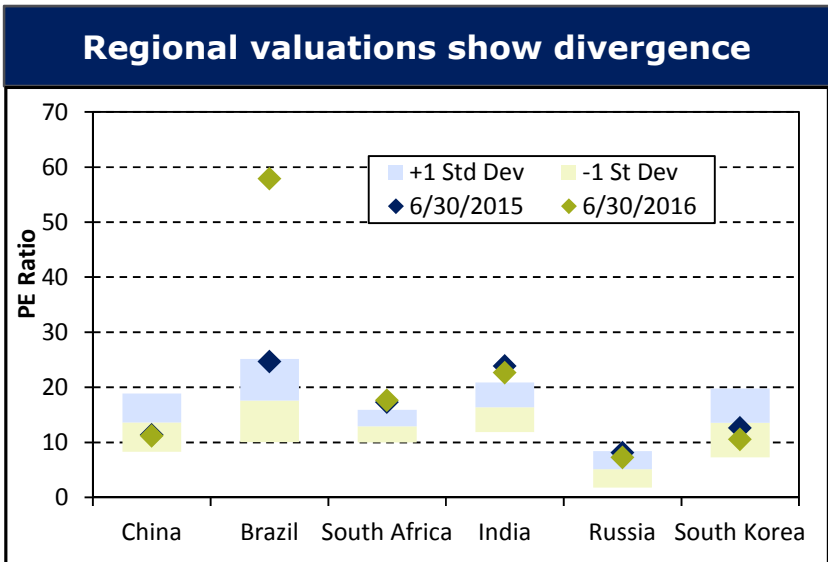
Returns broadly negative



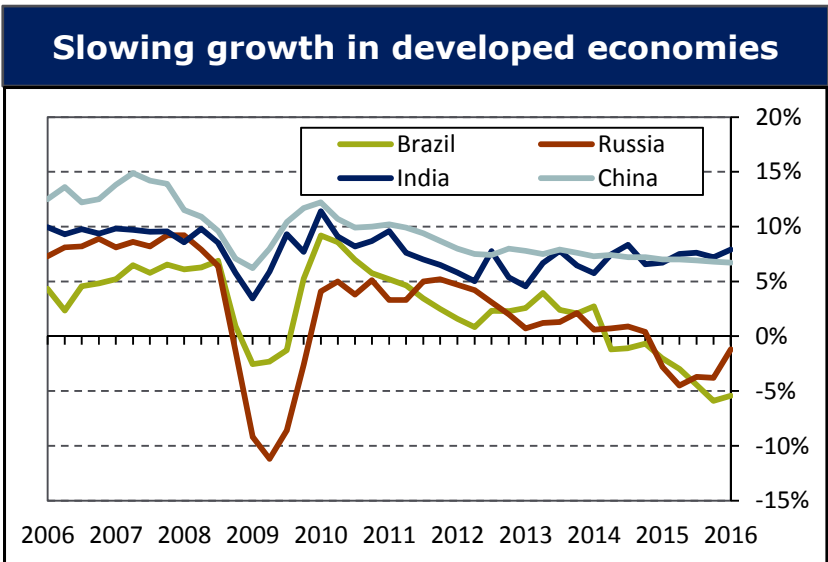
Source: Bloomberg, MSCI



Emerging Markets Equity



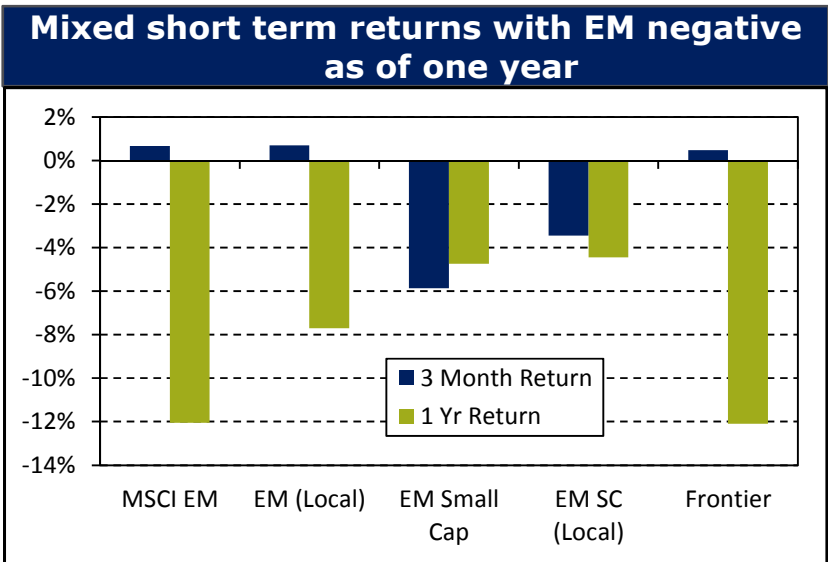
Source: Bloomberg, MSCI



Source: Bloomberg

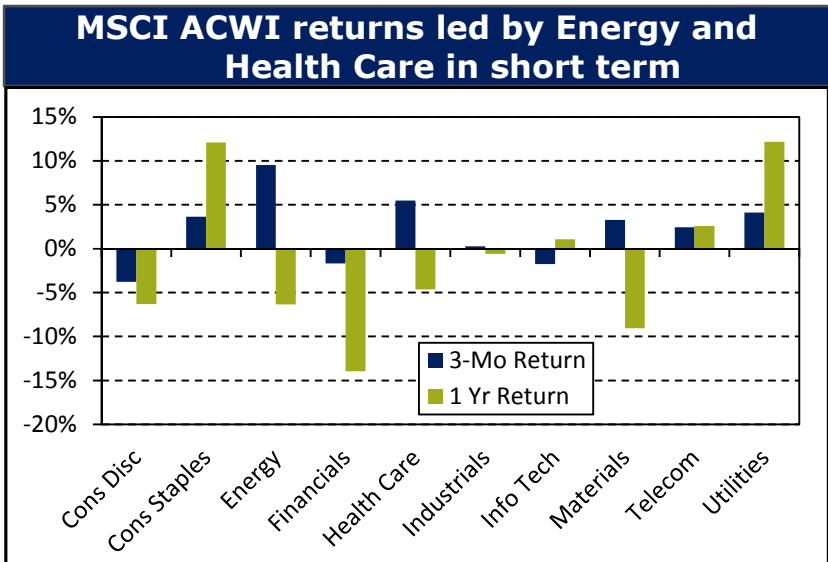


Source: Bloomberg, MSCI

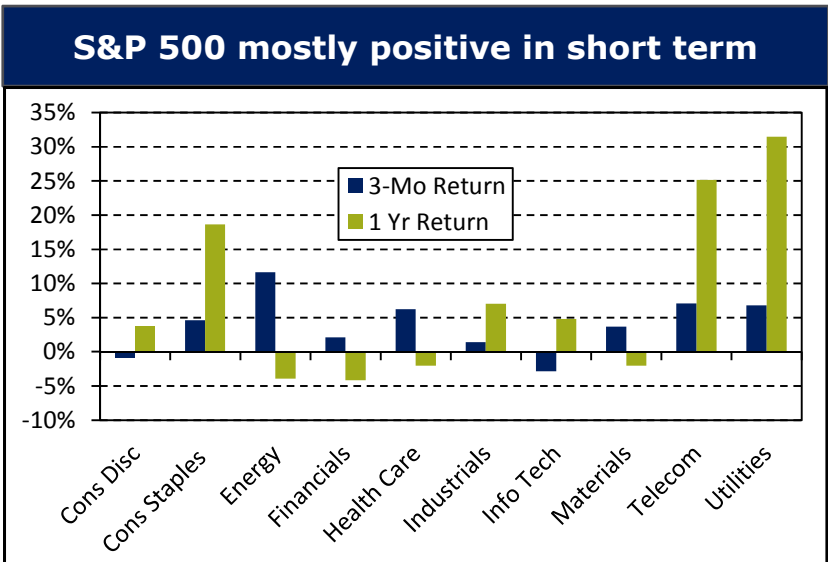


Source: Bloomberg, MSCI

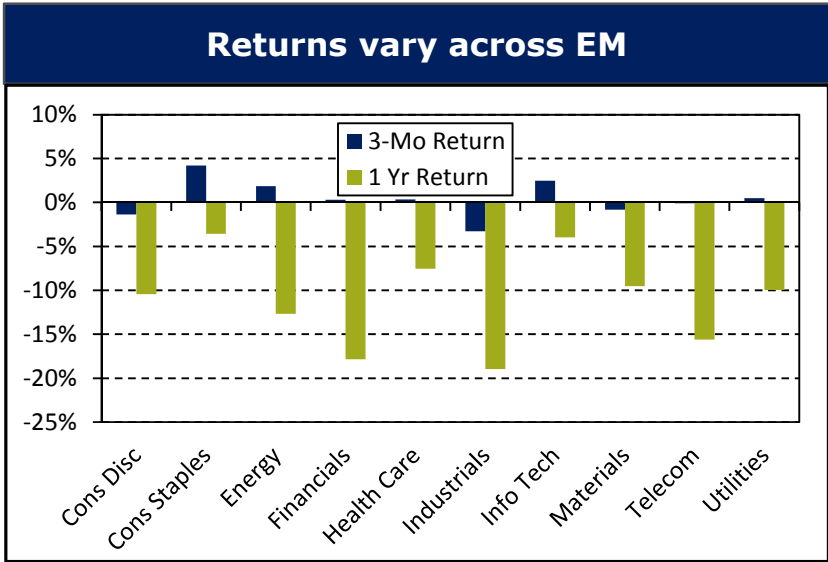
Global Equity by Sector



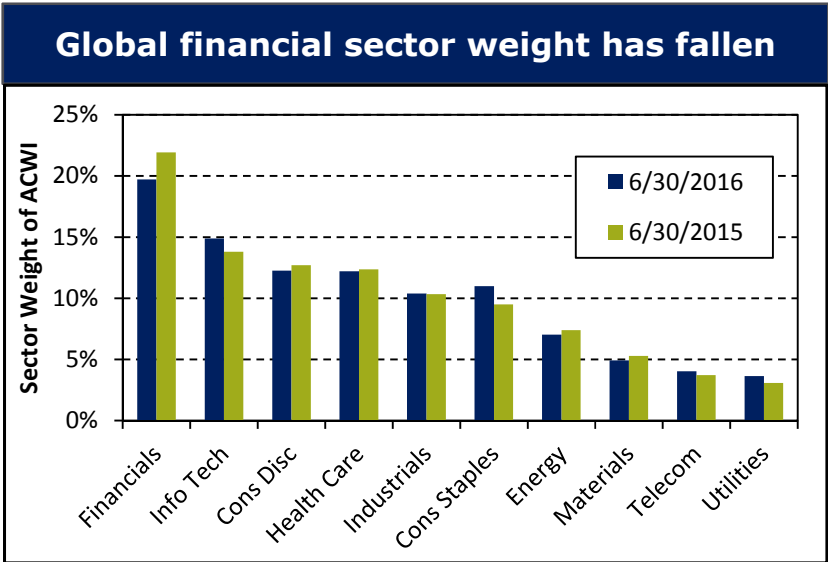
Source: Bloomberg, MSCI



Source: Bloomberg, Standard and Poors



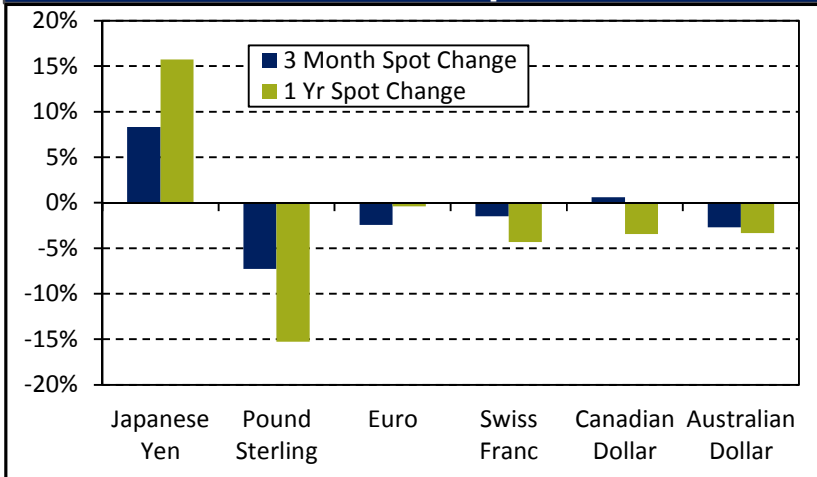
Source: Bloomberg, MSCI



Source: Bloomberg, MSCI

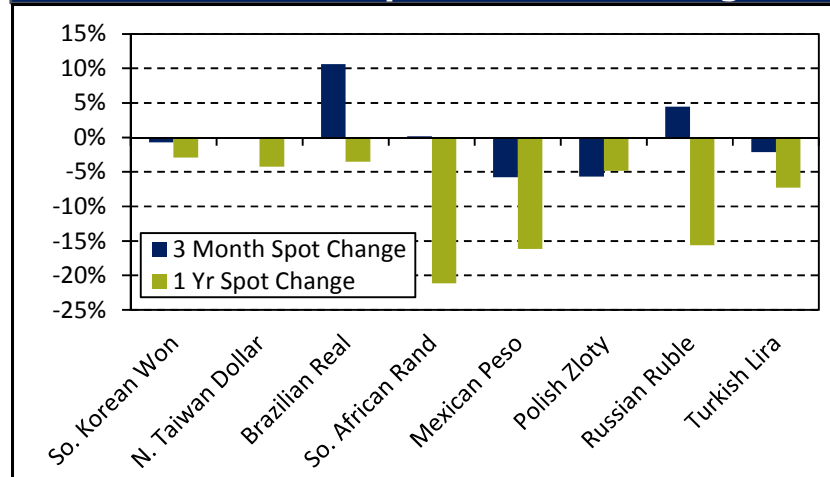
Currencies

Developed currencies declined versus the dollar with the exception of the Yen



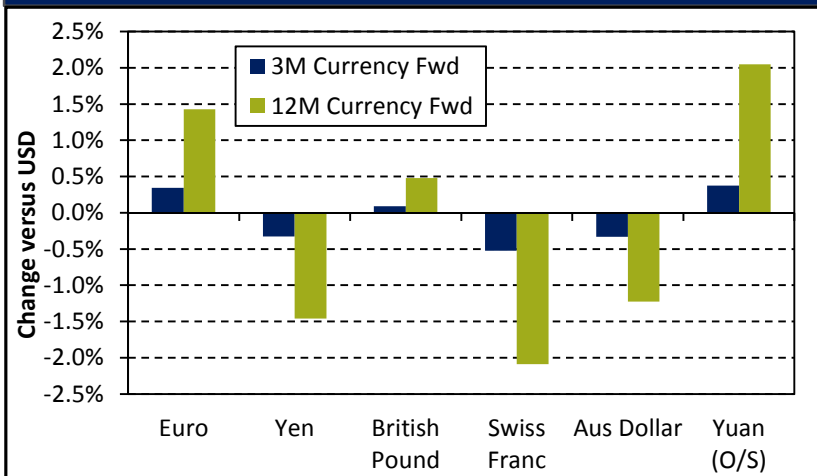
Source: Bloomberg

EM currencies declined over the year as the Real and Ruble posted short term gains



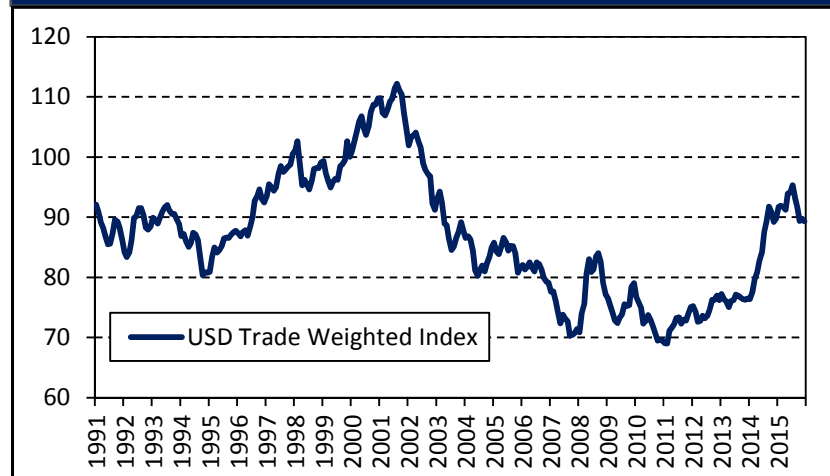
Source: Bloomberg

USD expectations vary across developed markets



Source: Bloomberg

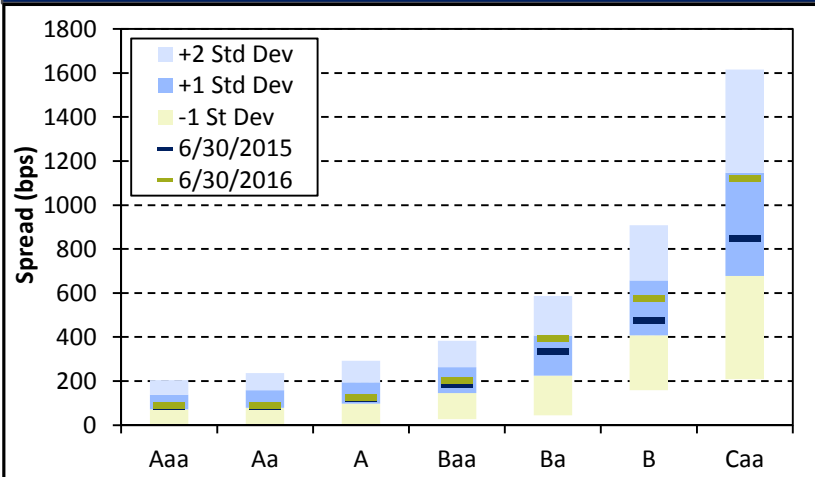
Dollar strength has retreated slightly



Source: Bloomberg, Federal Reserve

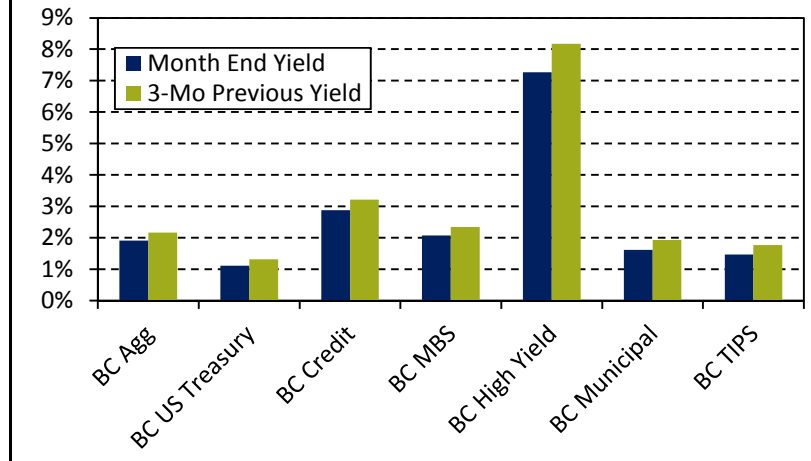


Spread levels above historical medians



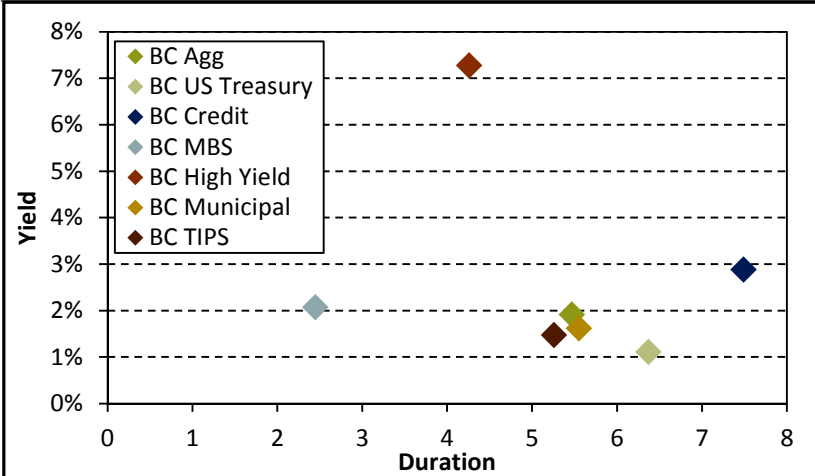
Source: Bloomberg, Barclays

Yields are declining month over month



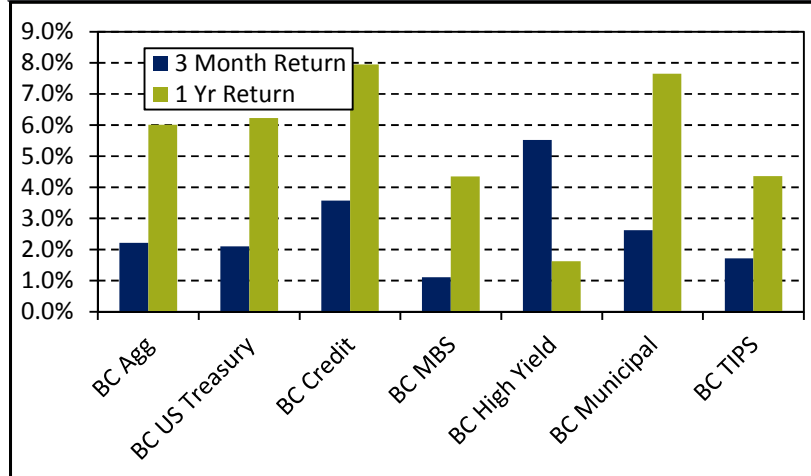
Source: Bloomberg, Barclays

Similar yield/duration tradeoff among major US indices



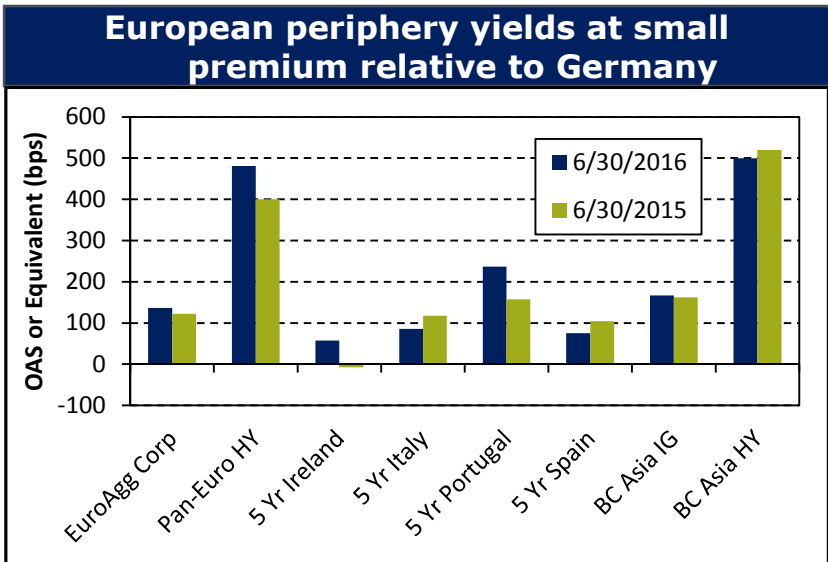
Source: Bloomberg, Barclays

Returns marked by recent credit and high yield rally

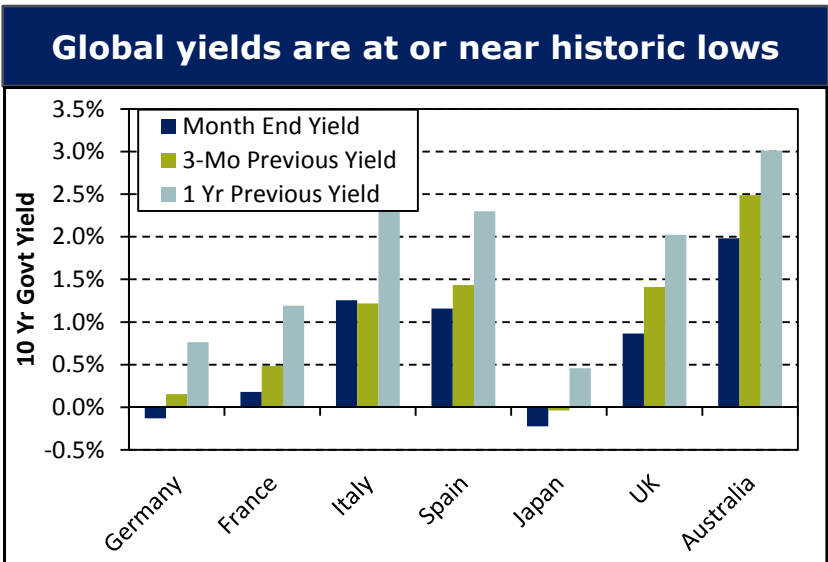


Source: Bloomberg, Barclays

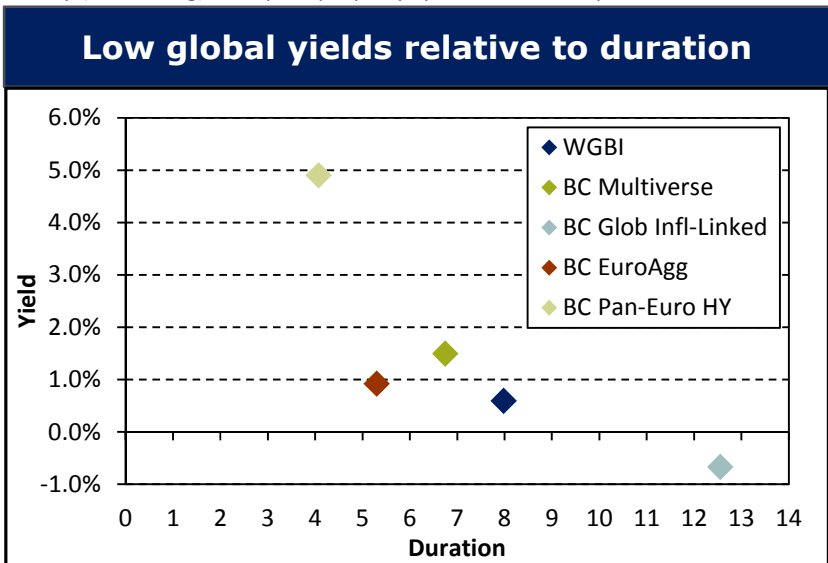
International Developed Fixed Income



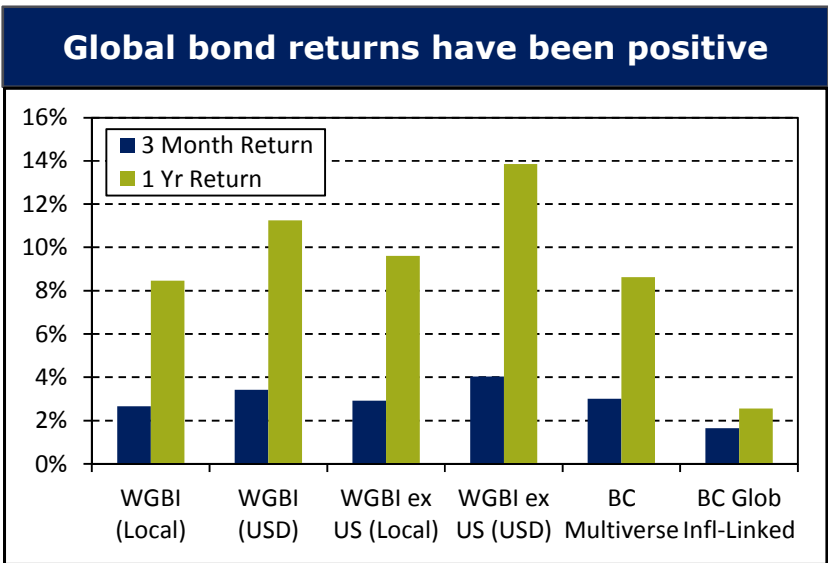
Source: Barclays, Bloomberg, *European periphery spreads are over equivalent German Bund



Source: Bloomberg

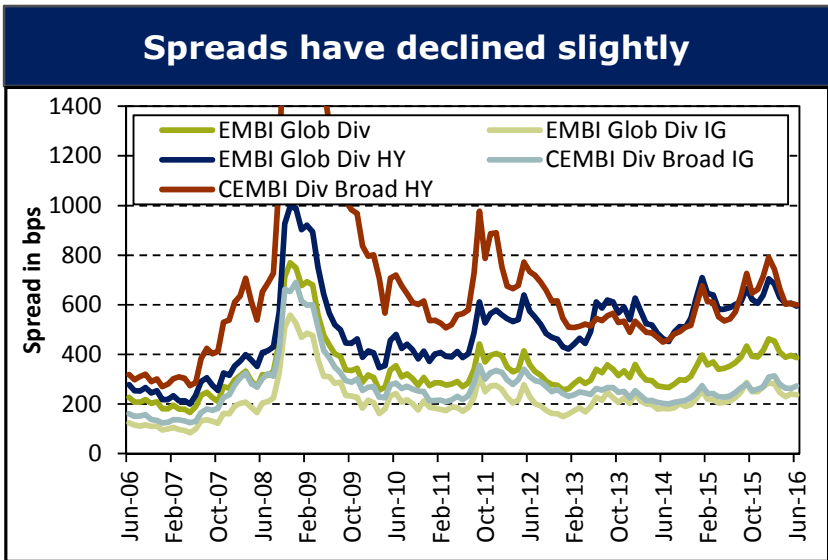


Source: Bloomberg, Citigroup, Barclays

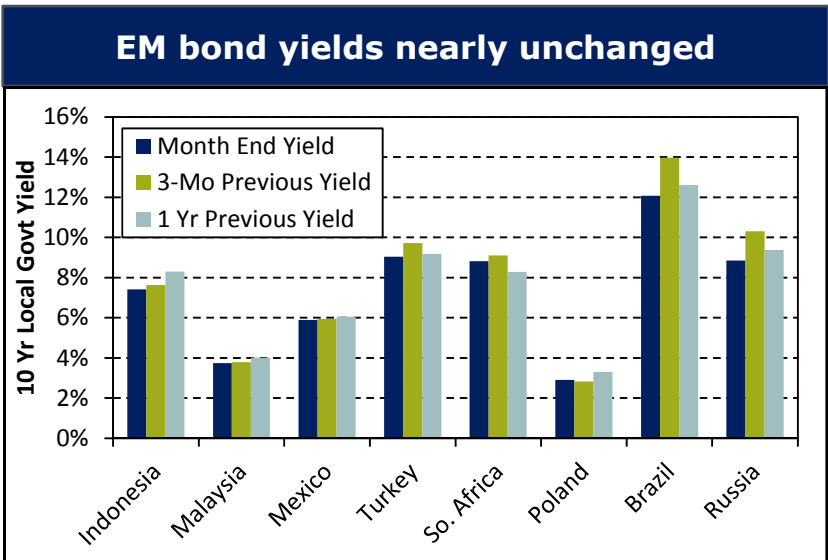


Source: Bloomberg, Citigroup, Barclays

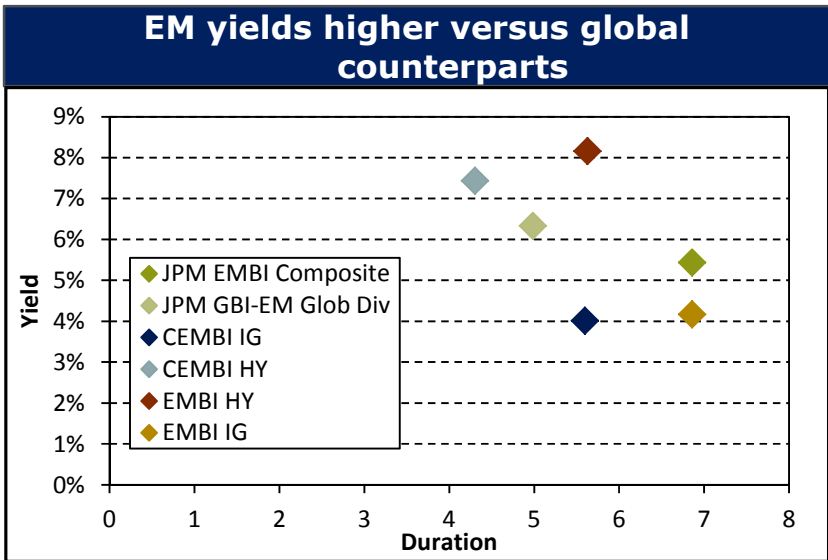
Emerging Markets Fixed Income



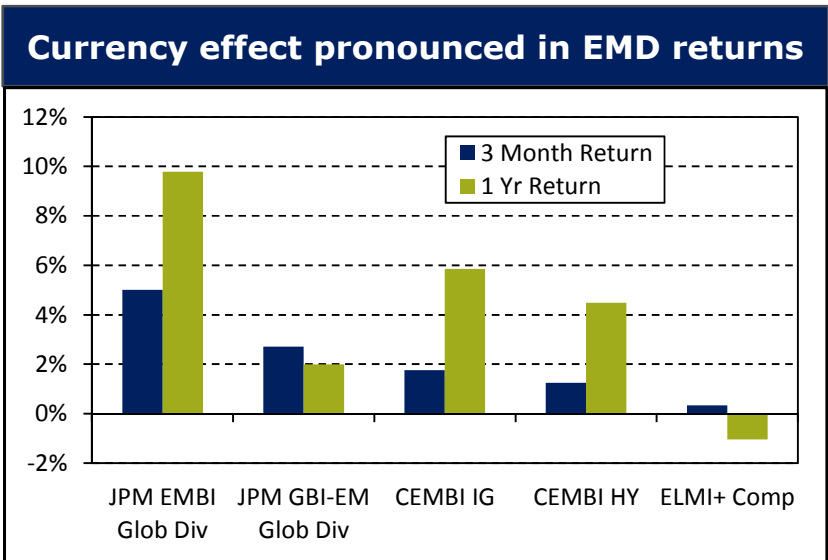
Source: Bloomberg, JP Morgan



Source: Bloomberg

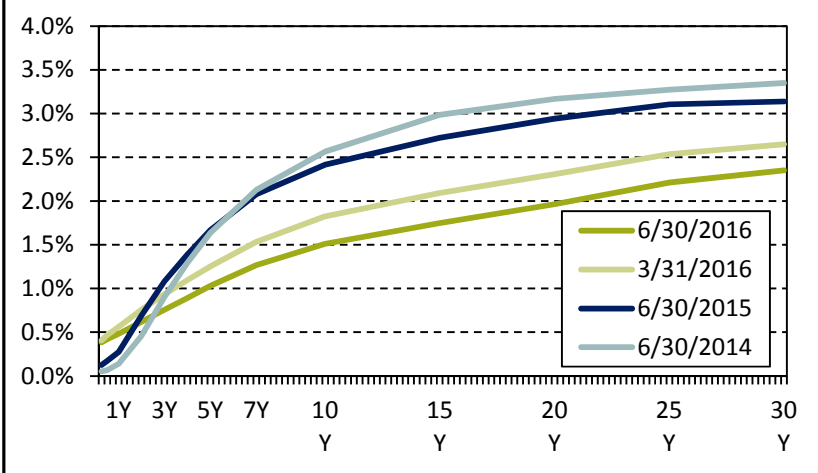


Source: Bloomberg, JP Morgan



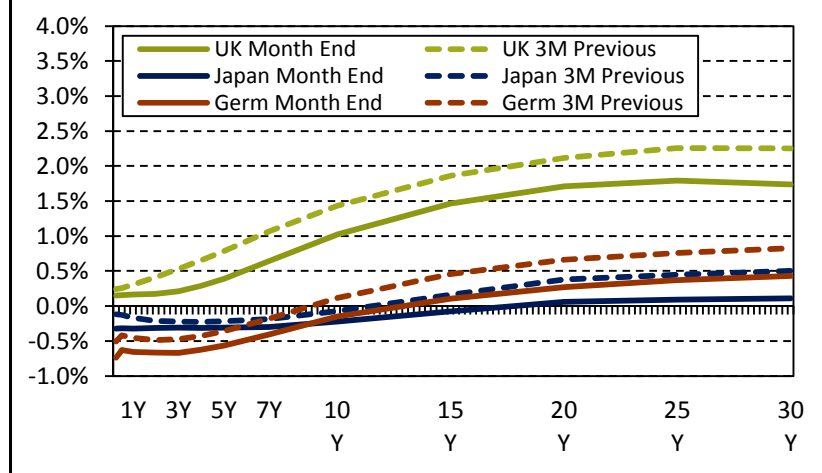
Source: Bloomberg, JP Morgan

Treasury yield curve declined with market uncertainty



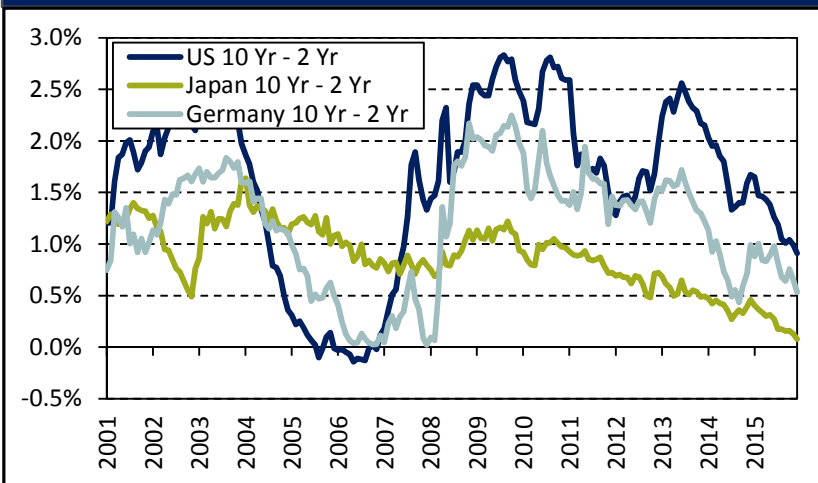
Source: Bloomberg

Lower yields across the board



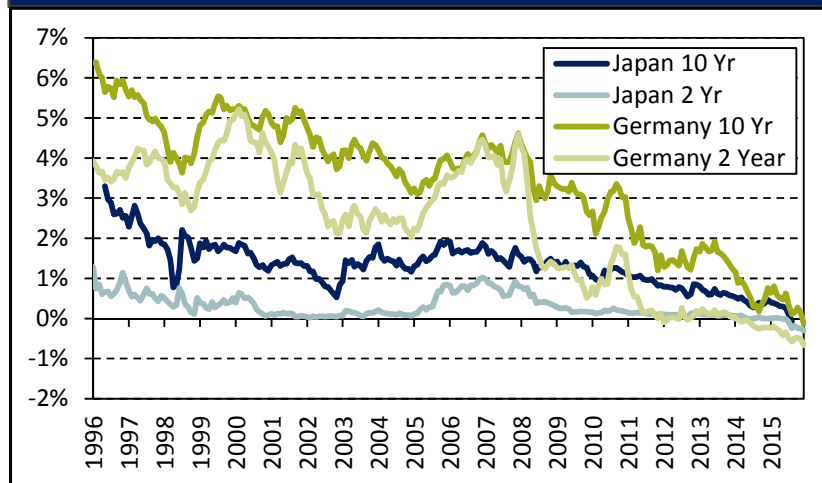
Source: Bloomberg

Global yields nearing lows



Source: Bloomberg

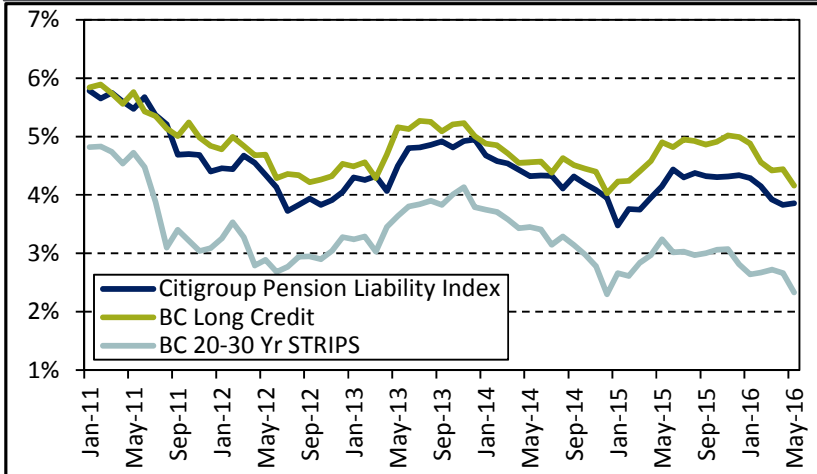
Global yields trending lower over long term



Source: Bloomberg

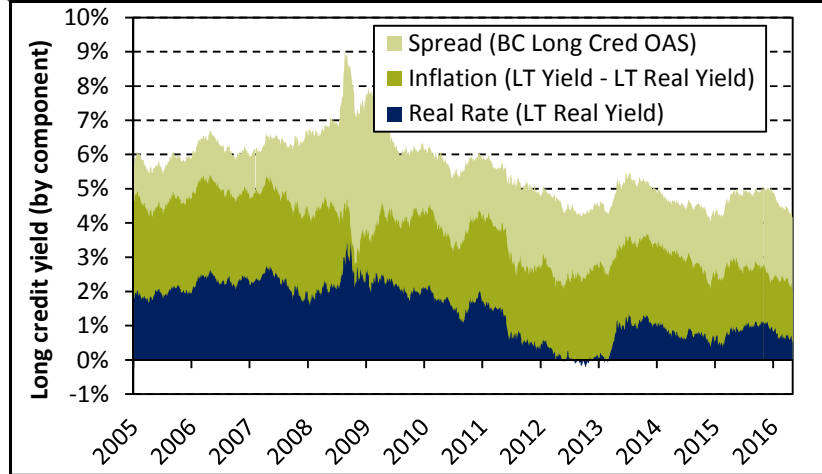
Long Rates and Liability

Long duration yields have fallen over last few years



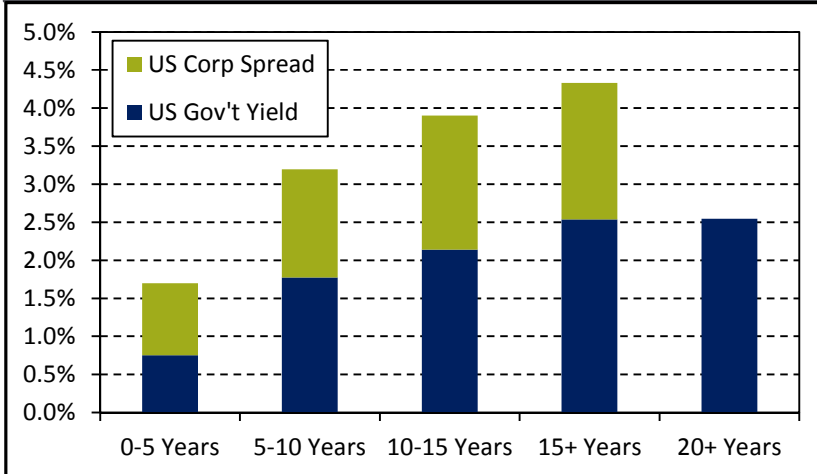
Source: Bloomberg, Citigroup, Barclays

Lower yields driven by low inflation expectations and real rates



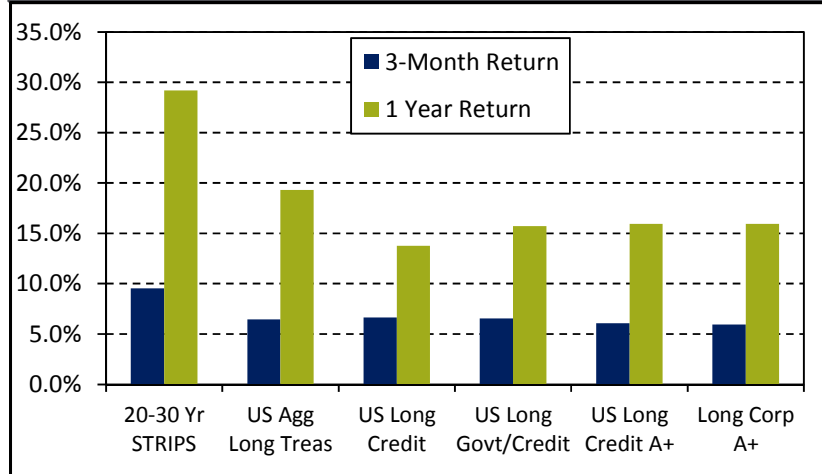
Source: Bloomberg, US Treasury, Barclays, NEPC

Yields are low but spreads above historic averages



Source: Bloomberg, BofA Merrill Lynch, Barclays *No index for 20+ year corporate

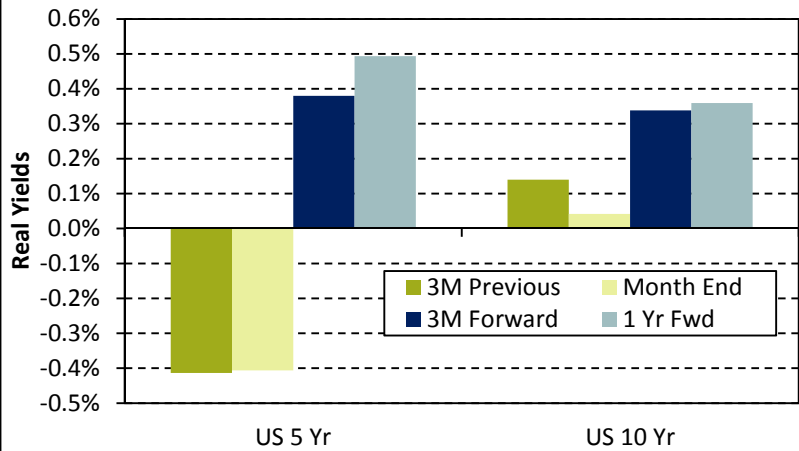
Positive returns as investors turn to safer assets



Source: Bloomberg, Barclays

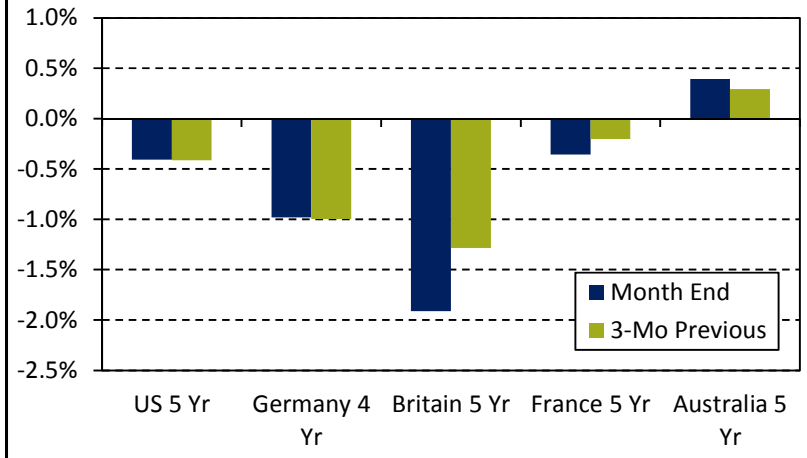
Inflation and Real Rates

US real yields have increased



Source: Bloomberg

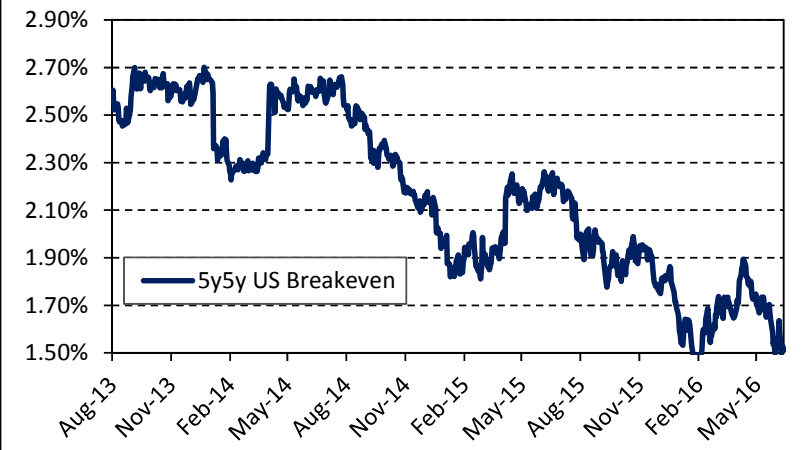
Global real yields mostly negative



*3-Mo data not available for Germany 4 year rate

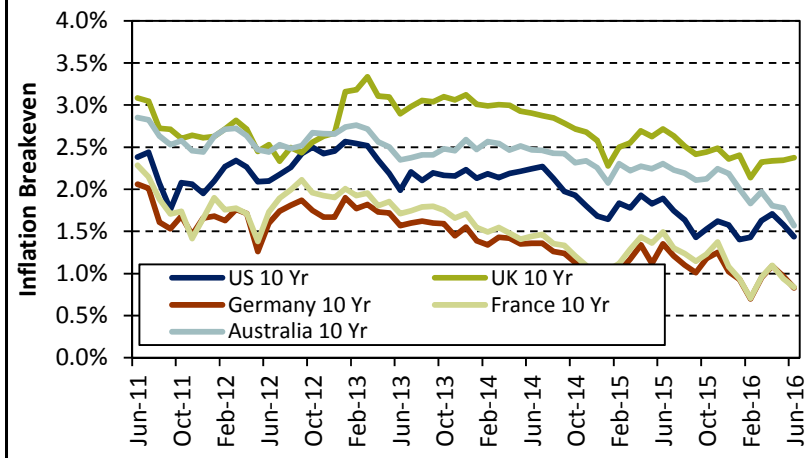
Source: Bloomberg

US inflation expectations remain low



Source: Bloomberg

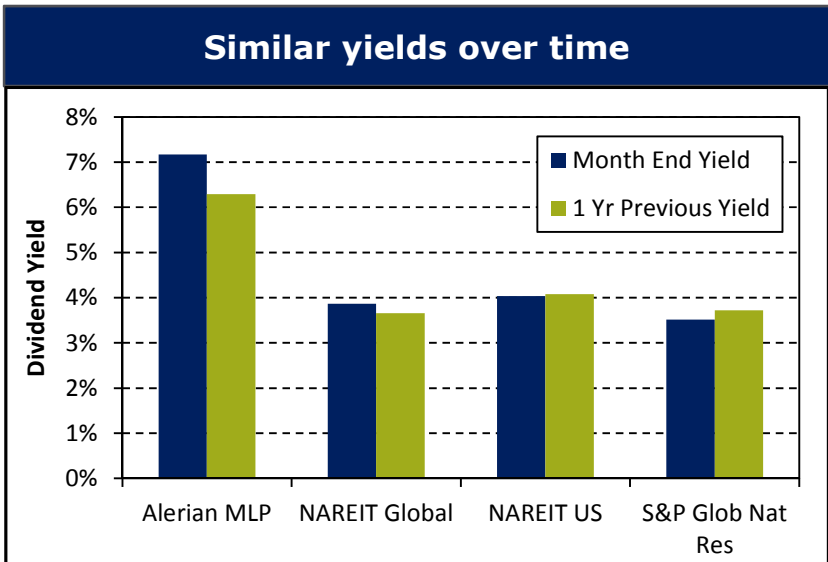
Global inflation expectations declining with the exception of the UK



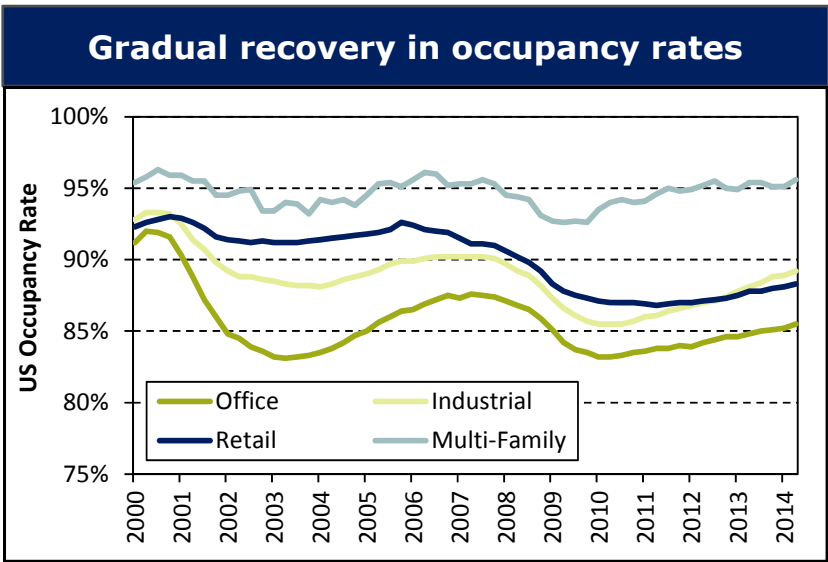
Source: Bloomberg



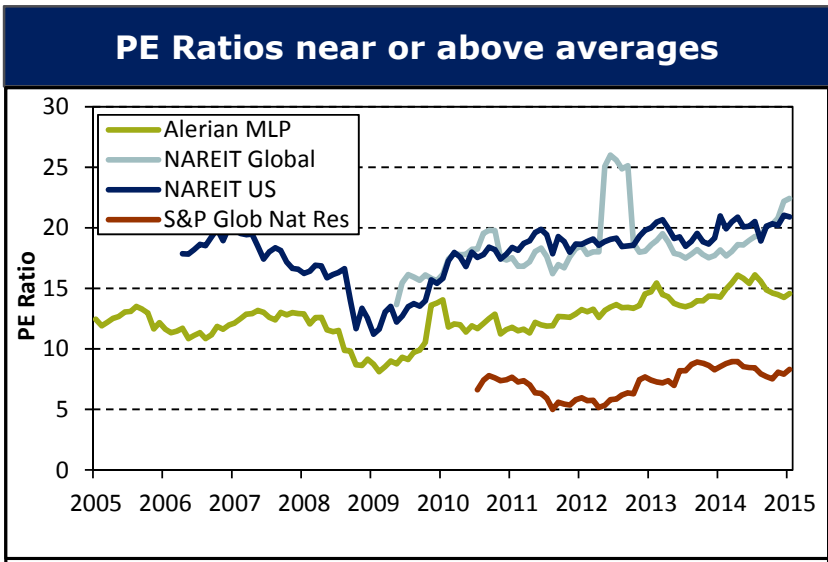
Inflation Sensitive Growth Assets



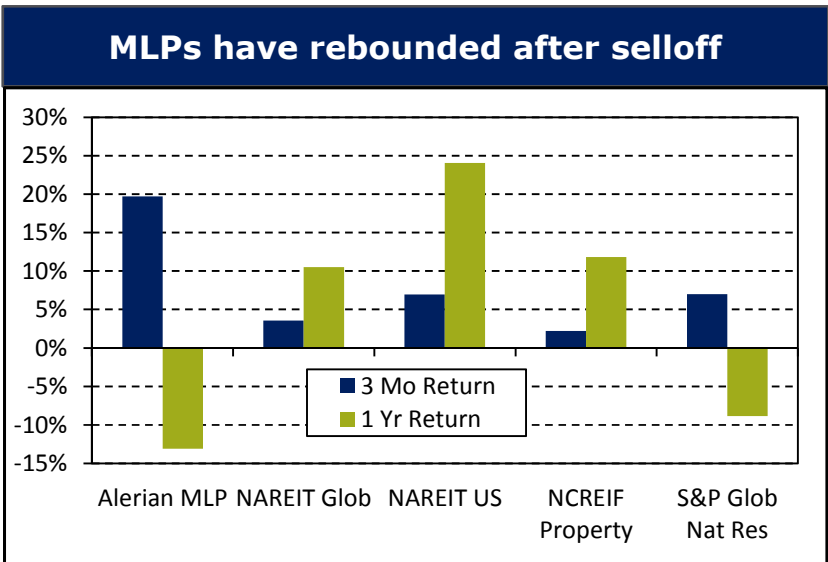
Source: Bloomberg, Alerian, Nareit, Standard and Poors



Source: Bloomberg, CB Richard Ellis



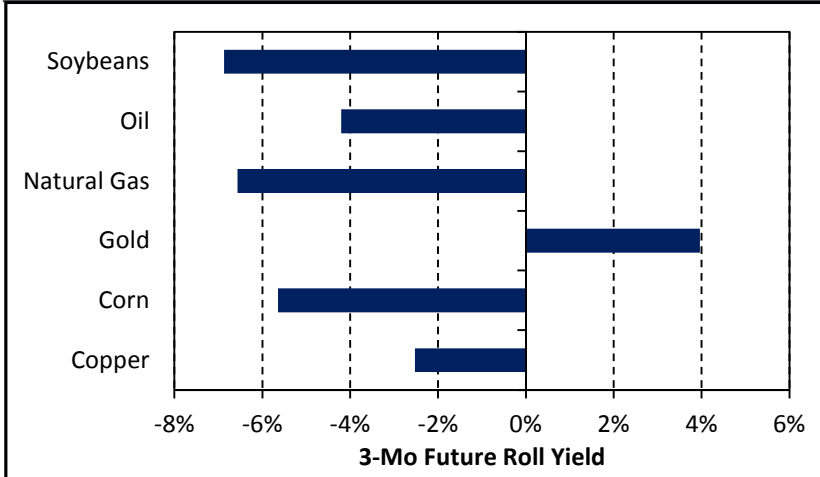
Source: Bloomberg, US Census Bureau



Source: Bloomberg, Alerian, Nareit, Standard and Poors

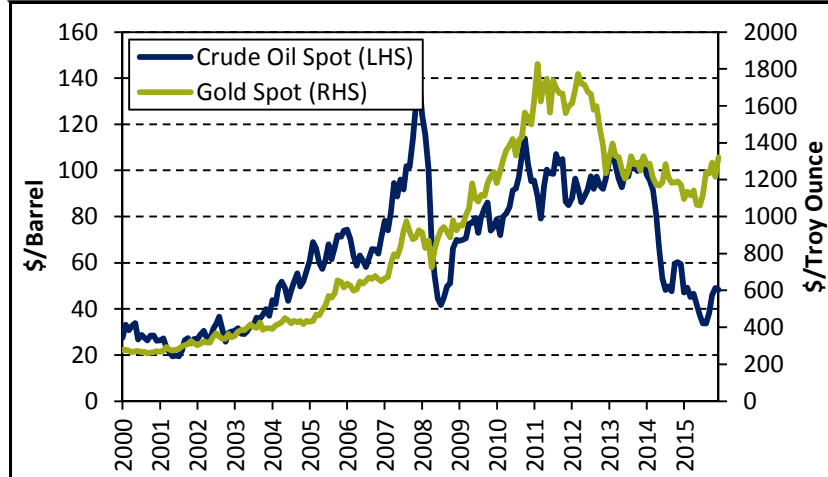
Commodities

Backwardation in major commodity futures with gold positive amid uncertainty



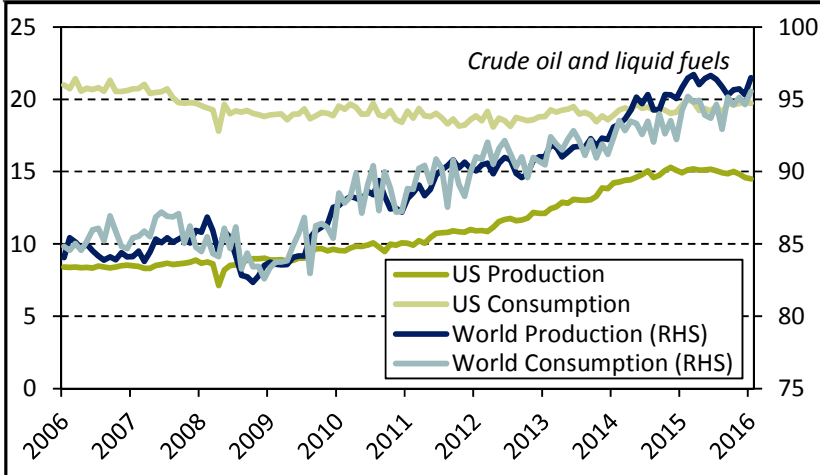
Source: Bloomberg

Oil prices slightly increasing



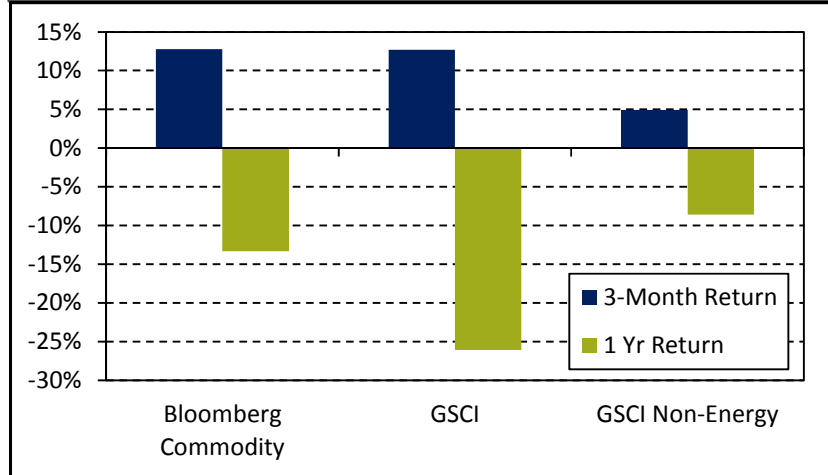
Source: Bloomberg

US fuel production closing gap with consumption



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

Commodity indices posting short term gains after last year's sell off



Source: Bloomberg, Standard and Poors



Glossary of Investment Terminology

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

Measurement	Description	Equation
Policy Target	Measures policy allocation decisions.	= TARGET ASSET WEIGHTS X INDEX RETURNS
Allocation Index	Measures actual allocation decisions. Deviations from the policy target can be derived. (Allocation Index – Policy Index)	= ACTUAL ASSET WEIGHTS X INDEX RETURNS
Composite (Total Return)	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
Allocation Effect	Measure the effects of overweighting or underweighting managers and asset classes.	= (ACTUAL MANAGER WEIGHT – POLICY TARGET WEIGHT) X POLICY INDEX RETURN
Selection Effect	Measures the managers’ ability to add excess return relative to the policy index.	= (ACTUAL MANAGER RETURN – INDEX RETURN) X POLICY TARGET WEIGHT
Interaction Effect	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)

Information Disclaimer and Reporting Methodology

Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

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