



Ventura County Employees' Retirement Association

Investment Summary Quarter Ending March 31, 2016

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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 **Market Environment Update and Outlook**



Economic Environment

- Fourth quarter GDP growth rate (third estimate) printed at a modest 1.4%.
 - Retail sales ended February at +3.1% on a year-over-year growth rate basis. In the same period last year the YoY growth rate was 1.2%.
 - The inventory-to-sales ratio ended February was flat at 1.4 and has remained relatively flat since early 2010.
 - Corporate profits (ended October) as a percent of GDP declined slightly to 9.3% from 9.9% and remain elevated relative to historical levels.
 - The U.S. trade deficit widened 2.6% in February due to increased imports.
- The unemployment rate remained unchanged at 5.0% in Q1; U-6, a broader measure of unemployment, fell to 9.8% during the first quarter.
- The Case-Shiller Home Price Index (ended January) increased slightly to 175.4 from 175.3 September and is at levels higher than that of pre-financial crisis levels of 150.9.
- Rolling 12-month seasonally adjusted CPI increased to 0.8% from 0.06% at the end of December; Capacity Utilization decreased to 74.8 in March from 75.4% in December.
- Fed Funds rate was unchanged at 0.50%. The 10-year Treasury Yield (constant maturity) finished Q1 at 1.9% down from 2.2% ended December.
- The Fed balance sheet decreased slightly during Q1 2016, while the European Central Bank balance sheet continues to increase.
 - ECB cut interest rates to -0.4% and expanded asset purchases from €60 billion to €80 billion per month.
- S&P valuations decreased in March remaining above the 10-year and long-term averages
 - Cyclically adjusted Shiller PE ratio (25.38x) is above the long-term average of 16.6x and above the 10-year average of 22.8x.
- Global currencies strengthened against the dollar amid commodity price stabilization and investor confidence.



Market Environment – Q1 2016 Overview

													_
	<u> </u>	Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>							
World Equity Benchmarks							MSCI ACWI						
MSCIACWI	World	0.2%	-4.3%	5.5%	5.2%	4.1%					-		
		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	S&P 500						
Domestic Equity Benchmarks							Russell 1000		-		- T		!
S&P 500	Large Core	1.3%	1.8%	11.8%	11.6%	7.0%	Russell 1000 Growth						
Russell 1000	Large Core	1.2%	0.5%	11.5%	11.4%	7.1%	Russell 1000 Value				-		
Russell 1000 Growth	Large Growth	0.7%	2.5%	13.6%	12.4%	8.3%							
Russell 1000 Value	Large Value	1.6%	-1.5%	9.4%	10.2%	5.7%	Russell 2000						
Russell 2000	Small Core	-1.5%	-9.8%	6.8%	7.2%	5.3%	Russell 2000 Growth						
Russell 2000 Growth	Small Growth	-4.7%	-11.8%	7.9%	7.7%	6.0%	Russell 2000 Value		_				
Russell 2000 Value	Small Value	1.7%	-7.7%	5.7%	6.7%	4.4%					-		
		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	MSCI ACWI Ex USA						
International Equity Benchmarks							MSCI EAFE						
MSCI ACWI Ex USA	World ex-US	-0.4%	-9.2%	0.3%	0.3%	1.9%	S&P EPAC Small Cap						
MSCI EAFE	Int'l Developed	-3.0%	-8.3%	2.2%	2.3%	1.8%	MSCI EM				-		
S&P EPAC Small Cap	Small Cap Int'l	-0.4%	2.8%	7.9%	5.9%	4.5%			_		_		
MSCIEM	Emerging Equity	5.7%	-12.0%	-4.5%	-4.1%	3.0%	Barclays Aggregate						
		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	Barclays US High Yield						į
Domestic Fixed Income Benchmarks							BofA ML US HY BB/B						
Barclays Aggregate	Core Bonds	3.0%	2.0%	2.5%	3.8%	4.9%					-		!
Barclays US High Yield	High Yield	3.4%	-3.7%	1.8%	4.9%	7.0%	CSFB Levered Loans						
BofA ML US HY BB/B	High Yield	3.1%	-2.4%	2.5%	5.2%	6.5%	BofA ML US 3-Month T-Bill				1		
CSFB Levered Loans	Bank Loans	1.3%	-1.1%	2.2%	3.5%	4.0%	Barclays US TIPS 1-10 Yr						
BofA ML US 3-Month T-Bill	Cash	0.1%	0.1%	0.1%	0.1%	1.1%	·				-		
Barclays US TIPS 1-10 Yr	Inflation	3.6%	1.8%	-0.7%	1.9%	4.0%	Citigroup WGBI				-		
		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	BC Global Credit						
Global Fixed Income Benchmarks							JPM GBI-EM Glob. Diversified						
Citigroup WGBI	World Gov. Bonds	7.1%	5.9%	0.5%	1.2%	4.2%	JPM EMBI+						
BC Global Credit	Global Bonds	4.6%	2.1%	1.6%	3.3%	4.8%					-	•	
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local)	11.0%	-1.6%	-6.7%	-2.0%	5.0%	Bloomberg Commodity Index						!
JPM EMBI+	Em. Mkt. Bonds	5.9%	5.9%	2.8%	6.1%	7.1%	Credit Suisse Hedge Fund Index					■ Quart	ter
		Qtr.	<u>1 Yr.</u>	<u>3 Yr.</u>	<u>5 Yr.</u>	<u>10 Yr.</u>	HFRI FoF Conservative					■1Yr	
Alternative Benchmarks											_		П
Bloomberg Commodity Index	Commodity	0.4%	-19.6%	-16.9%	-14.1%	-6.2%	Cambridge PE Lagged*					1	
Credit Suisse Hedge Fund Index	Hedge Fund	-2.2%	-5.2%	2.4%	2.7%	4.2%	NCREIF ODCE Net Lagged*						
HFRI FoF Conservative	Fund of Funds	-2.0%	-3.5%	2.1%	1.7%	1.4%	Wilshire REIT Index						
Cambridge PE Lagged*	Private Equity	0.4%	5.5%	12.5%	12.5%	11.4%	CPI + 2%						
NCREIF ODCE Net Lagged*	Real Estate	3.1%	14.0%	12.8%	12.6%	5.6%	CF1+ 2/0					- 1	1
Wilshire REIT Index	REIT	5.2%	4.8%	11.1%	12.1%	6.3%	-2	5% -20%	6 -15% -1	0% -5%	0% 59	% 10% 15	5%
CPI + 2%	Inflation/Real Assets	0.4%	2.9%	2.8%	3.3%	3.8%							
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^{*} As of 12/31/2015



15% 20%

Global Equity

- U.S. equities posted modest gains in the first quarter (+1.3%) rallying in March from a rocky beginning to 2016.
- Small cap stocks underperformed large cap stocks during the quarter, with the Russell 2000 Index returning -1.5% and the Russell 1000 Index returning 1.2%.
- International equities underperformed U.S. markets during the quarter, returning -0.4%, as measured by the MSCI ACWI ex-U.S. Index. Emerging markets returned 5.7% as measured by the MSCI Emerging Markets Index in U.S. dollar terms.
 - Developed international markets returned -3.0% as measured by the MSCI EAFE Index.

Private Equity

- Private equity fundraising totaled \$130.5 billion in Q1 2016.
- Buyout and Special Situations fundraising totaled \$48.1 billion in Q1 2016.
 - 55% of fundraising activity was in North America, 42% in Europe and 2.7% in Asia/Emerging Markets.
- Venture capital fundraising totaled \$9.2 billion.
 - VC fundraising as a percent of total new PE funds is in line with historical post-dot com levels at approximately 14%.
- Fund of fund and multi-manager co-investment fundraising totaled \$7.8 billion.
- Growth equity fundraising totaled \$3.4 billion.



Fixed Income

- The yield curve shifted down for maturities greater than 6 months. Intermediate yields decreased 44-49 basis points and long duration yields decreased 40 basis points.
- The spread between two and 10-year rates decreased to 105 basis points from 121 basis points ended March. Treasury Inflation-Protected Securities, or TIPS, returned +3.6% during the quarter, as measured by the Barclays US TIPS 1-10 Yr Index.
- The Barclays Long Duration Credit Index gained +6.82% as the long end of the curve ended the quarter 40 basis points lower.
- Long Treasuries gained +8.49% and investment-grade corporate debt gained 3.03%.
- The Barclays 1-3 year Government/ Credit Index returned +0.97% and US high yield bonds gained +3.4%.
- Emerging markets debt gained broadly and were especially pronounced in local currency as relative dollar weakness spurred strong gains.
 - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, gained 5.9%; local currency debt gained +11.0%, according to the JP Morgan GBI-EM Index.



Real Assets/Inflation-Linked Assets

- Massive energy market dislocation.
 - Seek inflation sensitive asset classes that offer positive yield
 - Oil prices stabilizing and remain low.
 - Private equity and private debt opportunities may be relatively attractive.
 - Potential for public stressed/distressed credit, equity and commodity plays.
- OPEC, Saudi Arabia and oil producing countries continue to show a willingness to allow lower oil
 prices to persist in efforts to cement market share and reduce marginal supply.
- Select infrastructure opportunities showing signs of being attractive.
 - Target opportunistic strategies in niche sub-sectors to take advantage of market dislocations.
 - Secular opportunities may exist within the shipping industry as traditional financing sources (both debt and equity) are less abundant
- Timber opportunities remain elusive.
 - Income yields (net) are low as assets are predominantly traded between like-minded institutions
 - Private strategies are illiquid and constrain quick entrance/exit (i.e. long-term lock-up)
 - Liquid strategies have limited pure timber exposure (and limited active-play options)



Commodities

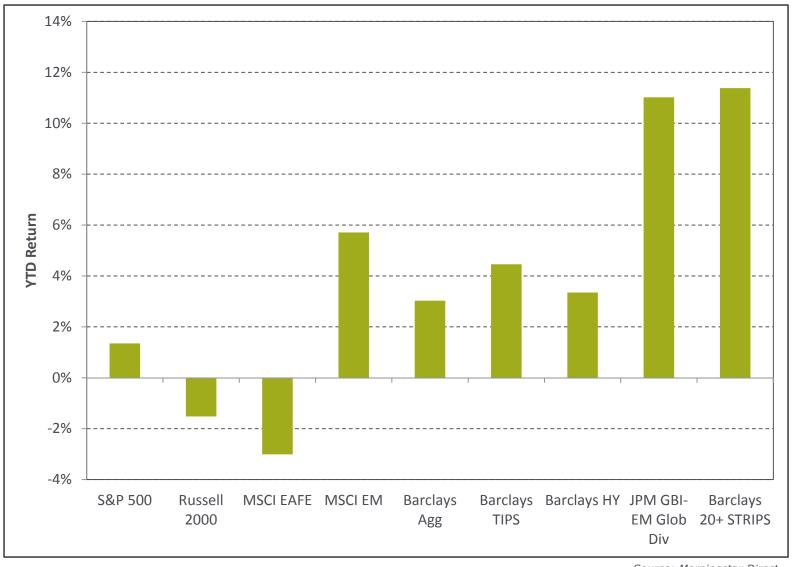
- Commodities ended quarter with a meager +0.51% as measured by the Bloomberg Commodity Index.
 - Volatility continued in oil markets as price discovery continues into 2016 with oil reaching multi-year lows in February preceding a rebound in March.
 - Precious metals were the best performing group appreciating nearly 9.5% on average.

Real Estate

- NEPC continues to be neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies.
- Within U.S. core real estate, strong fundamentals continue to be the story along with attractive income spreads relative to interest rates.
 - Real estate fundamentals and debt terms are attractive, however valuations are high and the possibility of rising interest rates and the impact on cap rates causes concern.
- Overall, the non-core real estate investment environment in the U.S. is normalizing; however, select areas remain attractive.
- Europe is viewed as the best place for a marginal dollar of non-core real estate investment.
 - Europe is emerging from multi-year recession, but recovery is slow and uneven with global markets experiencing large capital inflows.
 - Banks in EU are still overleveraged and have significant real estate exposure to jettison.



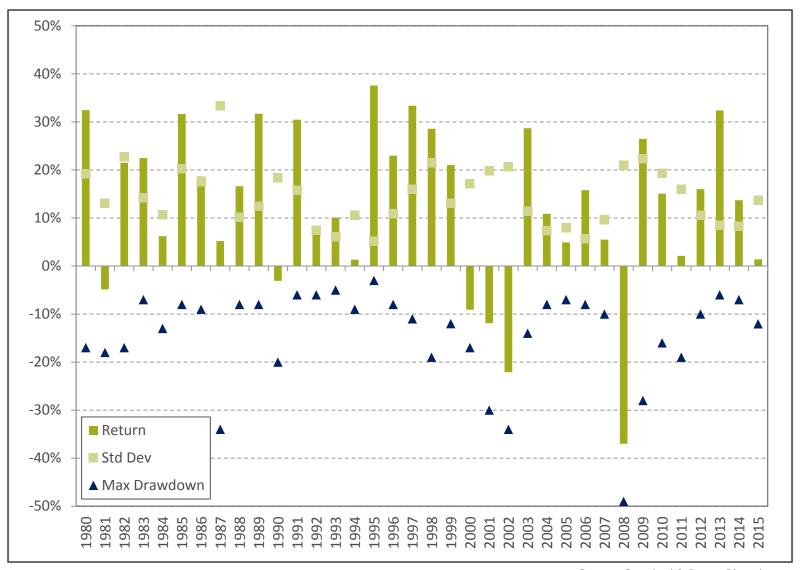
Year to Date Performance – Sharp Market Rally Masks Scale of Recent Sell-Off



Source: Morningstar Direct



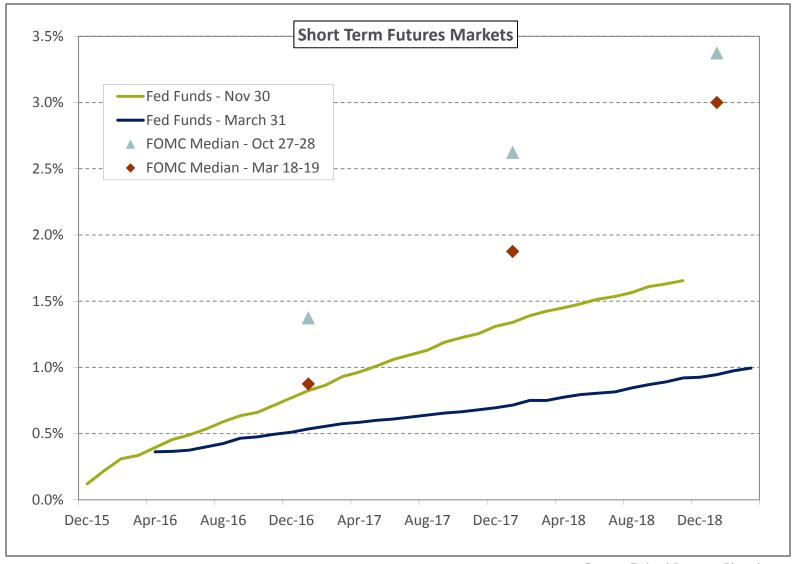
S&P 500 Intra-Year Drawdowns of Recent Magnitude Relatively Common



Source: Standard & Poors, Bloomberg



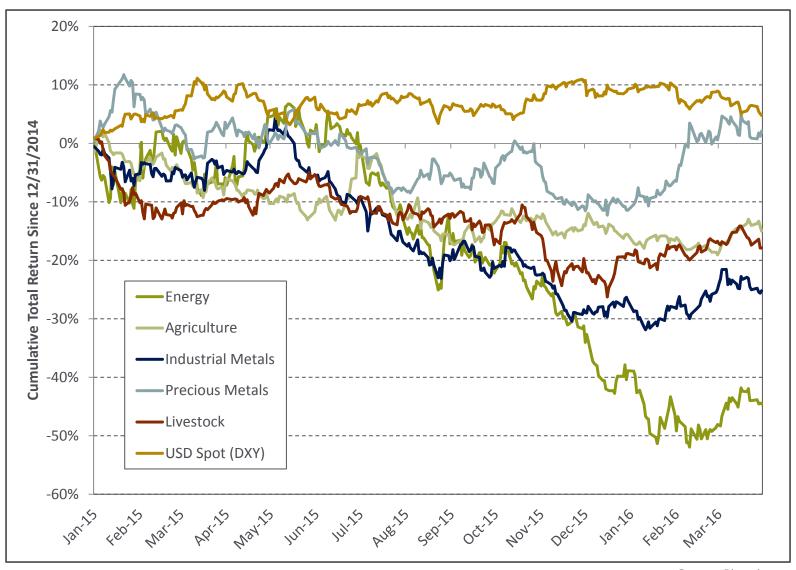
Fed Funds Curve and FOMC Appropriate Pace of Policy Firming Has Moderated







Stabilizing Commodity Returns are Positive for EM



Source: Bloomberg



General Actions for Clients

- Prospects of low US core bond returns warrant a more positive tilt to US equity, especially following sell-offs
 - Macro policy remains supportive but corporate earnings quality is deteriorating
 - Lower returns expected but pockets of opportunity can be found in US equity and credit
- Overweight non-US developed market equities
 - Central bank support and dollar strength provide a positive economic backdrop
 - Small-cap equities offer purest opportunity to benefit from local earnings recovery
 - EAFE equity markets offer the potential for strong returns relative to US equities
- Overweight emerging market small-cap and consumer focused strategies relative to broad equity mandates
 - Valuations and long-term fundamentals suggest a strategic overweight
 - China uncertainty, dollar pressure and idiosyncratic country risks temper excitement
- Seek tactical fixed income strategies but preserve duration exposure
 - US duration continues to have a role in a diversified and risk-aware portfolio
 - TIPS offer an attractive duration profile with inflation expectations at secular lows
 - Credit selection is critical as credit cycle matures and spreads contract in recent rally
- Private market opportunities are the preferred access point as energy market distress continues to evolve
 - Return opportunities of private strategies are compelling but suggest patience



NEPC Updates

March 31, 2016

Highlights of First Quarter Happenings at NEPC

NEPC Research

Recent White Papers

- 2016 First Quarter Market Thoughts
- Market Chatter: Is it really All About China? (January 2016)
- Market Chatter: Monetary Policy Divergence and Developed Currency (April 2016)

Upcoming Events

- 'Opportunities for Future Investments' is the theme for NEPC's 21st Annual Investment Conference – May 10-11, 2016 at the Hynes Convention Center in Boston, MA. Keynote Speakers are:
 - Michael Cembalest, Chairman of Market and Investment Strategy, J.P. Morgan Asset Management
 - > Dr. Dambisa Moyo, Global Economist and Author

Register at www.NEPC.com

NEPC Client Recognitions

We are excited to announce that three of NEPC's clients were nominated for the 2016 "Chief Investment Officer of the Year" Investor Intelligence Award. The winners will be announced at Institutional Investor's annual Roundtable for Public Funds, taking place April 27-29, 2016 in Los Angeles, CA. We wish them luck!

- · Arn Andrews, CIO, City of San Jose Department of Retirement Services
- Ryan Parham, CIO, Arizona Public Safety Personnel Retirement Systems
- · Girard Miller, CIO, Orange County Employees Retirement System



NEPC Client Recognitions (continued)

A number of NEPC clients were named on TrustedInsight's list of Top 30 Pension Fund Chief Investment Officers. According to the January 2016 issue, "these 30 chief investment officers manage more than \$1.3 trillion in assets for millions of retirees in the United States. These professionals are at the forefront of an industry that's slow to evolve, under constant scrutiny and vital to the wellbeing of many average Americans. Nonetheless, they operate at the top of their field to prudently protect the benefits of their constituency."

- Scott Evans, CIO, New York Employees Retirement System -\$78.5B AUM
- David Villa, CIO, State of Wisconsin Investment Board -\$102B AUM
- Gary Dokes, CIO, Arizona State Retirement System \$31B AUM
- Michael Trotsky, Executive Director, CIO, Massachusetts PRIM Board - \$62B AUM
- Robert Beale, CIO, Louisiana State Employees' Retirement System - \$5.2B AUM
- Richard Shafer, CIO, Ohio Public Employees' Retirement System - \$91.5B AUM
- James Perry, CIO, Dallas Police and Fire Pension System -\$3B AUM
- William Coaker, CIO, San Francisco Employees Retirement System - \$20.3B AUM
- Bob Jacksha, CIO, New Mexico Education Retirement Fund -\$11B AUM
- Girard Miller, CIO, Orange County Employees Retirement System - \$12.1B AUM
- Sam Masoudi, CFA, CAIA, CIO, Wyoming Retirement System
 \$7.8B AUM



Total Fund Performance

Note: All of the data shown on the following pages is as of March 31, 2016 and reflects the deduction of investment manager fees, unless otherwise noted.

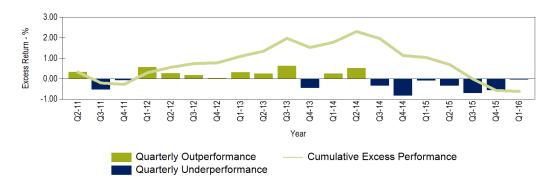
Total Fund Performance Summary (Net)

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Return	Since
Total Fund	\$4,309,978,136	1.4%	18	-1.4%	33	-1.5%	48	6.1%	31	6.8%	26	5.3%	39	7.8%	Apr-94
Policy Index		1.4%	15	-0.1%	9	0.2%	15	6.7%	10	6.9%	16	5.6%	28	7.9%	Apr-94
Allocation Index		0.9%	53	-1.6%	45	-1.5%	50	5.7%	47	6.2%	51	5.1%	55		Apr-94
60% MSCI World (Net) / 40% CITI WGBI		2.7%	1	0.9%	2	0.5%	11	4.4%	78	4.6%	96	4.6%	78	6.3%	Apr-94
InvestorForce Public DB > \$1B Net Median		0.9%		-1.8%		-1.5%		5.6%		6.3%		5.1%		7.4%	Apr-94

- -For the five-year period ending March 31, 2016, the Fund returned 6.8%, trailing the policy index by 0.1% and ranking in the 26th percentile of its peers. The Fund's volatility, as measured by standard deviation, ranked in the 71st percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 48th percentile. This means that the Fund has earned more return per unit of volatility taken than 52% of its peers.
- For the three-year period ending March 31, 2016, the Fund returned 6.1%, trailing the policy index by 0.6% and ranking in the 31st percentile of its peers. The Fund's volatility ranks in the bottom half of its peers over this period, with the Fund's Sharpe Ratio ranking in the 49th percentile.
- For the one-year period ending March 31, 2016, the Fund returned -1.5%, trailing the policy index by 1.7% and ranking in the 48th percentile of the InvestorForce Public Funds > \$1 Billion Universe (Net of Fees).
- For the one-year period ending March 31, 2016, the Fund experienced a net investment loss of \$44 million, which includes a net investment gain of \$63 million in the quarter. Assets decreased from \$4.37 billion one year ago to \$4.31 billion on March 31, 2016.

Policy Index as of January 2016: 28% Russell 3000, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% DJ U.S. Total Stock Market Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Quarterly and Cumulative Excess Performance



3 Years Ending March 31, 2016

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank	
Total Fund	6.1%	31	7.4%	64	0.8	49	1.6	36	
Policy Index	6.7%	10	7.3%	61	0.9	27	1.7	29	
InvestorForce Public DB > \$1B Net Median	5.6%		7.0%		0.8		1.5		

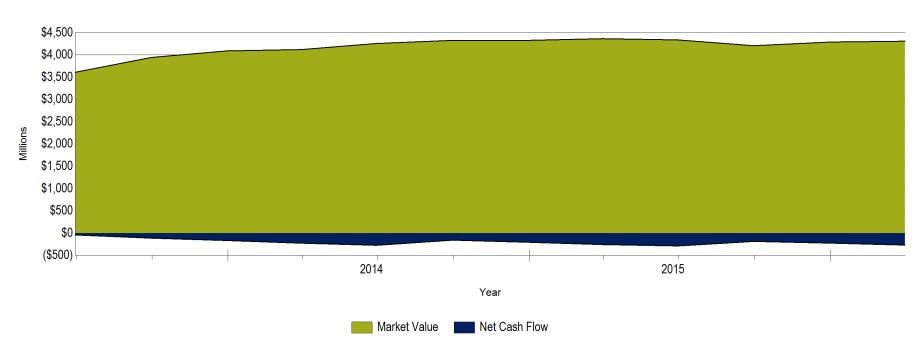
5 Years Ending March 31, 2016

	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	6.8%	26	8.4%	71	0.8	48	1.3	43
Policy Index	6.9%	16	8.4%	69	0.8	41	1.3	39
InvestorForce Public DB > \$1B Net Median	6.3%		7.7%		0.8		1.2	



Total Fund Asset Growth Summary

Market Value History 3 Years Ending March 31, 2016

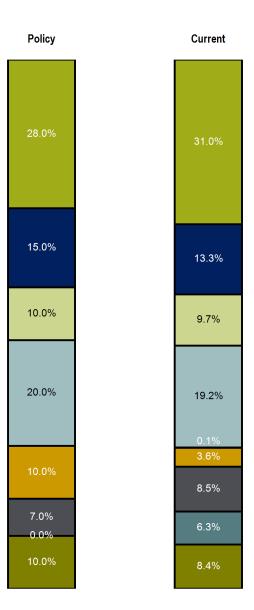


Summary of Cash Flows

Sources of Portfolio Growth	First Quarter	Fiscal Year-To-Date	One Year	Three Years
Beginning Market Value	\$4,290,811,595	\$4,338,136,581	\$4,365,835,058	\$3,648,861,350
Net Additions/Withdrawals	-\$43,916,187	\$19,254,076	-\$11,187,980	-\$268,005,932
Investment Earnings	\$63,082,728	-\$47,412,521	-\$44,668,942	\$929,122,718
Ending Market Value	\$4,309,978,136	\$4,309,978,136	\$4,309,978,136	\$4,309,978,136



Total Fund Asset Allocation vs. Policy Targets



, 10001, 11101		u. 901		
Current	Current	Policy Differ	ence *	Po

	Current	Current	Policy	Difference *	Policy Range	Range
U.S. Equity	\$1,337,134,180	31.0%	28.0%	3.0%	24.0% - 32.0%	Yes
Non-US Equity	\$572,363,460	13.3%	15.0%	-1.7%	12.0% - 18.0%	Yes
Global Equity	\$418,371,834	9.7%	10.0%	-0.3%	7.0% - 13.0%	Yes
U.S. Fixed Income	\$829,535,018	19.2%	20.0%	-0.8%	16.0% - 24.0%	Yes
Global Bonds	\$2,339,996	0.1%		0.1%		No
Private Equity	\$154,122,998	3.6%	10.0%	-6.4%	0.0% - 12.0%	Yes
Real Estate	\$365,489,464	8.5%	7.0%	1.5%	4.0% - 10.0%	Yes
Cash	\$269,942,617	6.3%	0.0%	6.3%	0.0% - 3.0%	No
Liquid Alternatives	\$360,678,570	8.4%	10.0%	-1.6%	5.0% - 15.0%	Yes
Total	\$4,309,978,136	100.0%	100.0%			

Asset Allocation vs. Target

Cash represents assest in Parametric Overlay

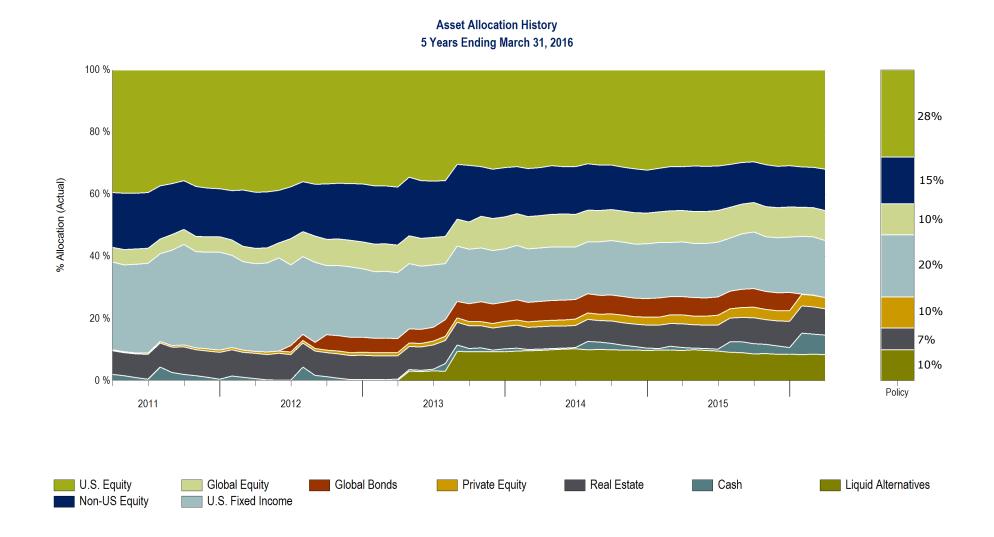
Global bonds consists of \$2,339,996 from the liquidating manager PIMCO Global Fixed Income

Policy Index as of January 2016:, 28% Russell 3000, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10%MSCI ACWI, 10% DJ U.S. Total Stock Market Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

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^{*}Difference between Policy and Current Allocation

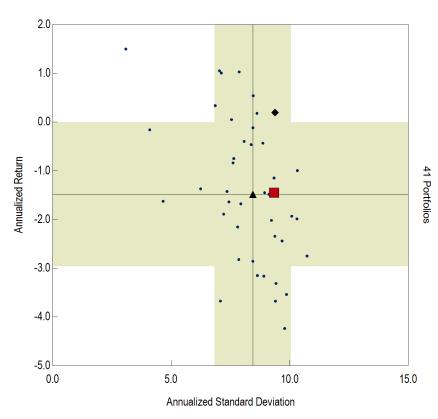
Total Fund Allocation History



Policy Index shown is most recently approved index



1 Years Ending March 31, 2016



- Total Fund
- Policy IndexUniverse Median
- 68% Confidence Interval
- InvestorForce Public DB > \$1B Net

1 Years Ending March 31, 2016

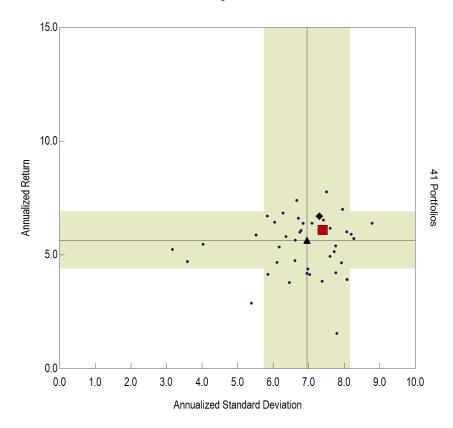
	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Fund	-1.5%	48	9.3%	75
Policy Index	0.2%	15	9.4%	79
InvestorForce Public DB > \$1B Net Median	-1.5%		8.4%	

1 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio	Rank
Total Fund	-0.2	43	-0.3	46
Policy Index	0.0	15	0.0	15
InvestorForce Public DB > \$1B Net Median	-0.2		-0.3	



3 Years Ending March 31, 2016



3 Years Ending March 31, 2016 Sharpe Ratio Rank Sortino Ratio Rank Total Fund 8.0 49 1.7 36 0.9 27 30 Policy Index 1.8 InvestorForce Public DB > \$1B Net Median 8.0 1.5

3 Years Ending March 31, 2016 Anlzd Ret

6.1%

6.7%

5.6%

Rank

31

11

Anlzd Std Dev

7.4%

7.3%

7.0%

Rank

64

61

Total Fund

Policy Index

Universe Median

68% Confidence Interval

• InvestorForce Public DB > \$1B Net

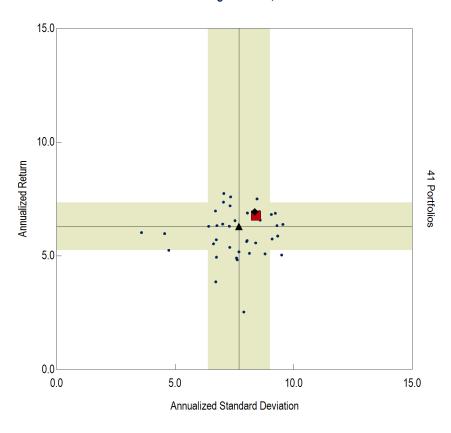


Total Fund

Policy Index

InvestorForce Public DB > \$1B Net Median

5 Years Ending March 31, 2016



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

5 Years Ending March 31, 2016

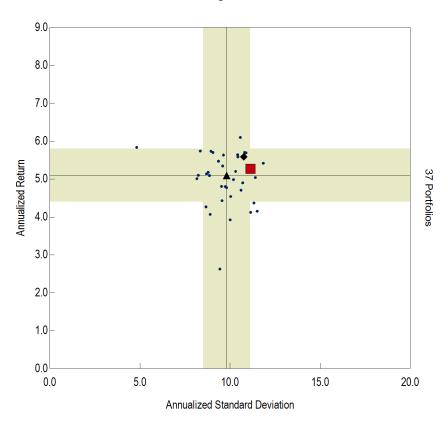
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	
Total Fund	6.8%	26	8.4%	71	
Policy Index	6.9%	16	8.4%	69	
InvestorForce Public DB > \$1B Net Median	6.3%		7.7%		

5 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio	Rank	
Total Fund	0.8	48	1.3	43	
Policy Index	0.8	41	1.3	40	
InvestorForce Public DB > \$1B Net Median	0.8		12		



10 Years Ending March 31, 2016



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

10 Years Ending March 31, 2016

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Fund	5.3%	39	11.1%	89
Policy Index	5.6%	28	10.8%	77
InvestorForce Public DB > \$1B Net Median	5.1%		9.8%	

10 Years Ending March 31, 2016

	Sharpe Ratio	Rank	Sortino Ratio	Rank	
Total Fund	0.4	65	0.6	59	
Policy Index	0.4	48	0.6	44	
InvestorForce Public DB > \$1B Net Median	0.4		0.6		



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

Anizd Return Anizd Standard Sharpe Ratio Sortino Ratio Deviation 2.0 4.0 0.4 0.7 0.3 5.0 1.0 0.5 0.2 0.3 6.0 0.0 0.1 0.1 0.0 7.0 -1.0 -0.1 -0.1 8.0 -0.3 -0.2 -2.0 -0.5 -0.3 9.0 -0.7 -0.4 -3.0 10.0 -0.9 -0.5 -4.0 11.0 -1.1 -0.6 Total Fund Total Fund Total Fund Total Fund Value -1.5 -0.3 Value 9.3 Value Value -0.2 %tile 48 %tile 46 %tile 75 %tile 43 ▲ Policy Index ▲ Policy Index ▲ Policy Index ▲ Policy Index 0.2 Value 0.0 Value Value 9.4 Value 0.0 %tile 15 %tile 15 %tile 79 %tile 15 Universe Universe Universe Universe 5th %tile 1.0 0.2 5th %tile 5th %tile 4.7 0.1 5th %tile 25th %tile -0.4 25th %tile -0.1 7.4 25th %tile 25th %tile -0.1 Median -1.5 -0.3 Median 8.4 Median Median -0.2 75th %tile -2.4 75th %tile -0.6 9.3 75th %tile 75th %tile -0.3 95th %tile -3.7 95th %tile -0.7 95th %tile 10.3 95th %tile -0.4

Total Fund vs. InvestorForce Public DB > \$1B Net 3 Years

Anizd Return Sharpe Ratio Sortino Ratio **Anizd Standard** Deviation 1.6 4.0 8.3 2.8 1.5 7.8 2.6 1.4 7.3 2.4 5.0 1.3 6.8 1.2 2.2 1.1 6.3 2.0 6.0 1.0 5.8 1.8 0.9 5.3 1.6 7.0 0.8 4.8 1.4 0.7 4.3 1.2 0.6 3.8 8.0 1.0 0.5 0.8 3.3 0.4 2.8 0.3 0.6 9.0 Total Fund Total Fund Total Fund Total Fund Value 6.1 Value 8.0 Value 1.7 Value 7.4 %tile 31 %tile 49 %tile 36 %tile 64 Policy Index ▲ Policy Index ▲ Policy Index Policy Index Value 6.7 Value 0.9 Value 1.8 Value 7.3 %tile 11 %tile 27 %tile 30 61 %tile Universe Universe Universe Universe 5th %tile 7.0 5th %tile 1.3 5th %tile 5th %tile 4.0 2.3 25th %tile 6.4 25th %tile 0.9 25th %tile 1.8 25th %tile 6.3 Median 5.6 Median 8.0 Median 1.5 7.0 Median 75th %tile 4.7 75th %tile 0.6 1.2 75th %tile 75th %tile 7.7 95th %tile 3.8 95th %tile 0.5 95th %tile 1.0 8.2 95th %tile



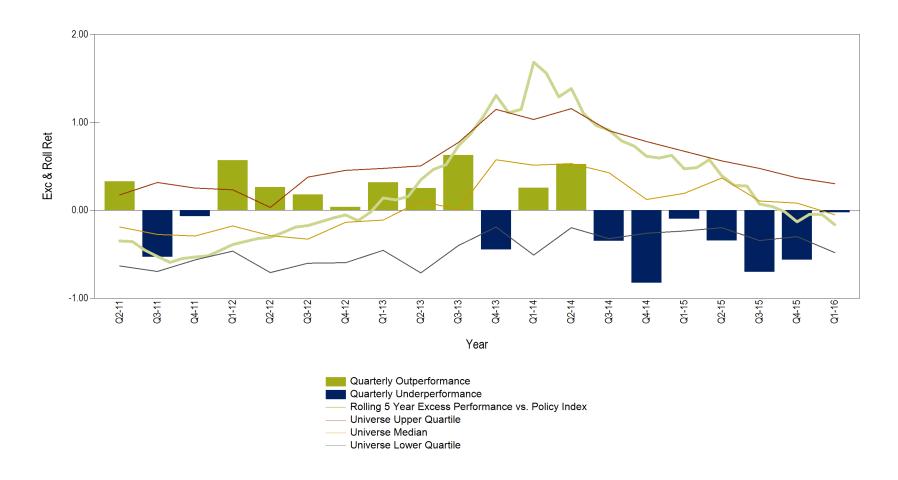
Total Fund vs. InvestorForce Public DB > \$1B Net 5 Years

Anizd Return Anizd Standard Sharpe Ratio Sortino Ratio Deviation 4.0 1.4 8.8 2.3 1.3 8.3 5.0 2.1 1.2 7.8 1.9 1.1 7.3 6.0 1.7 1.0 6.8 7.0 1.5 0.9 6.3 1.3 8.0 5.8 8.0 1.1 5.3 0.7 0.9 4.8 0.6 9.0 4.3 0.7 0.5 10.0 3.8 0.4 0.5 Total Fund Total Fund Total Fund Total Fund Value 8.4 Value 6.8 Value 8.0 Value 1.3 %tile 71 %tile 26 %tile 48 %tile 43 ▲ Policy Index ▲ Policy Index ▲ Policy Index Policy Index Value 8.4 Value 6.9 Value Value 1.3 8.0 69 %tile %tile 16 %tile 41 %tile 40 Universe Universe Universe Universe 4.7 5th %tile 7.5 5th %tile 5th %tile 1.1 5th %tile 1.8 7.0 25th %tile 25th %tile 6.8 25th %tile 0.9 25th %tile 1.4 7.7 Median Median 6.3 1.2 Median 8.0 Median 75th %tile 8.5 5.4 75th %tile 0.7 75th %tile 1.0 75th %tile 9.3 95th %tile 95th %tile 4.8 0.6 95th %tile 0.9 95th %tile

Total Fund vs. InvestorForce Public DB > \$1B Net 10 Years

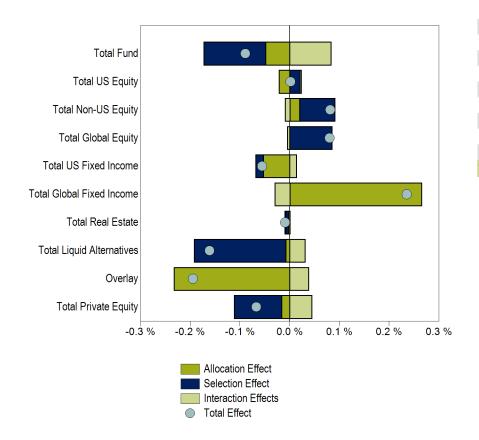
Anizd Return **Anizd Standard Sharpe Ratio** Sortino Ratio Deviation 7.2 8.0 1.1 7.0 7.7 1.0 0.7 6.5 8.2 0.9 8.7 6.0 0.6 8.0 9.2 5.5 0.5 9.7 0.7 5.0 10.2 0.6 0.4 10.7 4.5 0.5 11.2 0.3 4.0 0.4 11.7 0.2 3.5 12.2 0.3 12.7 0.2 0.1 Total Fund Total Fund Total Fund Total Fund Value 5.3 Value 0.4 Value 0.6 Value 11.1 %tile 39 %tile 59 %tile 89 %tile 65 ▲ Policy Index ▲ Policy Index Policy Index Policy Index Value 5.6 Value 0.6 Value 10.8 Value 0.4 %tile 28 48 %tile 44 77 %tile %tile Universe Universe Universe Universe 5th %tile 5.8 5th %tile 0.5 5th %tile 8.0 5th %tile 8.2 25th %tile 5.6 25th %tile 25th %tile 0.5 0.7 25th %tile 8.9 Median 5.1 0.6 0.4 Median Median 9.8 Median 75th %tile 4.7 0.4 75th %tile 0.5 75th %tile 10.7 75th %tile 95th %tile 95th %tile 0.4 95th %tile 0.3 95th %tile

Annualized Excess Performance



Total Fund Attribution Analysis

Attribution Effects
3 Months Ending March 31, 2016

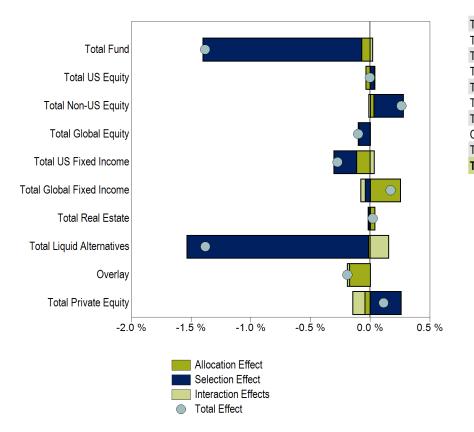


Attribution Summary 3 Months Ending March 31, 2016

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total US Equity	1.0%	0.9%	0.1%	0.0%	0.0%	0.0%	0.0%
Total Non-US Equity	0.1%	-0.4%	0.5%	0.1%	0.0%	0.0%	0.1%
Total Global Equity	1.1%	0.2%	0.8%	0.1%	0.0%	0.0%	0.1%
Total US Fixed Income	3.0%	3.0%	-0.1%	0.0%	-0.1%	0.0%	-0.1%
Total Global Fixed Income	2.6%	5.9%	-3.3%	0.0%	0.3%	0.0%	0.2%
Total Real Estate	1.9%	2.0%	-0.1%	0.0%	0.0%	0.0%	0.0%
Total Liquid Alternatives	-0.1%	1.7%	-1.7%	-0.2%	0.0%	0.0%	-0.2%
Overlay	7.3%	0.1%	7.3%	0.0%	-0.2%	0.0%	-0.2%
Total Private Equity	0.7%	1.7%	-1.0%	-0.1%	0.0%	0.0%	-0.1%
Total	1.3%	1.4%	-0.1%	-0.1%	0.0%	0.1%	-0.1%

Total Fund Attribution Analysis

Attribution Effects
Fiscal Year to Date

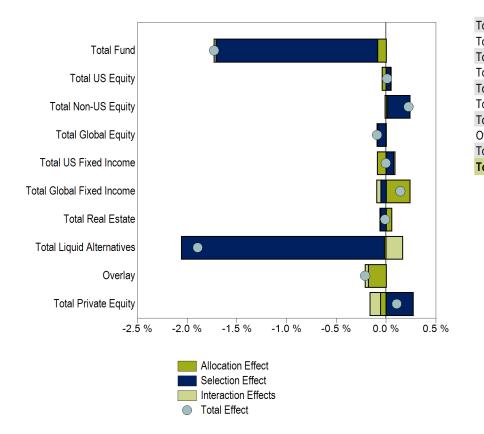


Attribution Summary Fiscal Year to Date

Wtd. , Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
-0.5%	-0.6%	0.1%	0.0%	0.0%	0.0%	0.0%
-7.9%	-9.7%	1.7%	0.2%	0.0%	0.0%	0.3%
-5.6%	-4.7%	-0.9%	-0.1%	0.0%	0.0%	-0.1%
2.6%	3.7%	-1.1%	-0.2%	-0.1%	0.0%	-0.3%
1.6%	5.8%	-4.2%	0.0%	0.3%	0.0%	0.2%
8.5%	8.7%	-0.2%	0.0%	0.0%	0.0%	0.0%
-12.5%	2.8%	-15.3%	-1.5%	0.0%	0.2%	-1.4%
9.6%	0.1%	9.5%	0.0%	-0.2%	0.0%	-0.2%
9.2%	1.7%	7.5%	0.3%	0.0%	-0.1%	0.1%
-1.5%	-0.1%	-1.4%	-1.3%	-0.1%	0.0%	-1.4%
	Return -0.5% -7.9% -5.6% 2.6% 1.6% 8.5% -12.5% 9.6% 9.2%	Return -0.5% -0.6% -7.9% -9.7% -5.6% -4.7% 2.6% 3.7% 1.6% 5.8% 8.5% 8.7% -12.5% 2.8% 9.6% 0.1% 9.2% 1.7%	Return Return Return -0.5% -0.6% 0.1% -7.9% -9.7% 1.7% -5.6% -4.7% -0.9% 2.6% 3.7% -1.1% 1.6% 5.8% -4.2% 8.5% 8.7% -0.2% -12.5% 2.8% -15.3% 9.6% 0.1% 9.5% 9.2% 1.7% 7.5%	Return Return Return Effect -0.5% -0.6% 0.1% 0.0% -7.9% -9.7% 1.7% 0.2% -5.6% -4.7% -0.9% -0.1% 2.6% 3.7% -1.1% -0.2% 1.6% 5.8% -4.2% 0.0% 8.5% 8.7% -0.2% 0.0% -12.5% 2.8% -15.3% -1.5% 9.6% 0.1% 9.5% 0.0% 9.2% 1.7% 7.5% 0.3%	Return Return Effect Effect -0.5% -0.6% 0.1% 0.0% 0.0% -7.9% -9.7% 1.7% 0.2% 0.0% -5.6% -4.7% -0.9% -0.1% 0.0% 2.6% 3.7% -1.1% -0.2% -0.1% 1.6% 5.8% -4.2% 0.0% 0.3% 8.5% 8.7% -0.2% 0.0% 0.0% -12.5% 2.8% -15.3% -1.5% 0.0% 9.6% 0.1% 9.5% 0.0% -0.2% 9.2% 1.7% 7.5% 0.3% 0.0%	Return Return Effect Effect Effects -0.5% -0.6% 0.1% 0.0% 0.0% 0.0% -7.9% -9.7% 1.7% 0.2% 0.0% 0.0% -5.6% -4.7% -0.9% -0.1% 0.0% 0.0% 2.6% 3.7% -1.1% -0.2% -0.1% 0.0% 1.6% 5.8% -4.2% 0.0% 0.3% 0.0% 8.5% 8.7% -0.2% 0.0% 0.0% 0.0% -12.5% 2.8% -15.3% -1.5% 0.0% 0.2% 9.6% 0.1% 9.5% 0.0% -0.2% 0.0% 9.2% 1.7% 7.5% 0.3% 0.0% -0.1%

Total Fund Attribution Analysis

Attribution Effects
1 Year Ending March 31, 2016



Attribution Summary 1 Year Ending March 31, 2016

			5	,			
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Total US Equity	-0.4%	-0.5%	0.2%	0.0%	0.0%	0.0%	0.0%
Total Non-US Equity	-7.6%	-9.2%	1.6%	0.2%	0.0%	0.0%	0.2%
Total Global Equity	-5.1%	-4.3%	-0.8%	-0.1%	0.0%	0.0%	-0.1%
Total US Fixed Income	2.3%	2.0%	0.3%	0.1%	-0.1%	0.0%	0.0%
Total Global Fixed Income	0.2%	4.6%	-4.4%	-0.1%	0.2%	0.0%	0.1%
Total Real Estate	11.7%	12.6%	-0.9%	-0.1%	0.1%	0.0%	0.0%
Total Liquid Alternatives	-15.3%	4.9%	-20.2%	-2.0%	0.0%	0.2%	-1.9%
Overlay	9.4%	0.1%	9.3%	0.0%	-0.2%	0.0%	-0.2%
Total Private Equity	10.5%	2.6%	8.0%	0.3%	-0.1%	-0.1%	0.1%
Total	-1.6%	0.2%	-1.8%	-1.6%	-0.1%	0.0%	-1.7%

Total Fund Risk Statistics

1 Year Ending March 31, 2016

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	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Tracking Error	Rank	Info Ratio	Rank	Anlzd AJ	Rank	Beta
Total Fund	100.0%	-1.5%	48	9.3%	75	-0.2	43	0.8%	12	-2.1	86	-1.7%	75	1.0
Policy Index		0.2%	15	9.4%	78	0.0	15	0.0%	1			0.0%	33	1.0
Total Equity	54.0%	-3.1%	42	15.2%	59	-0.2	42	1.3%	1	0.9	15	1.0%	41	1.0
MSCI ACWI		-4.3%	52	15.9%	70	-0.3	49	0.0%	1			0.0%	47	1.0
Total US Equity	31.0%	-0.4%	23	14.8%	51	0.0	23	0.1%	1	0.9	7	0.1%	23	1.0
Russell 3000		-0.5%	23	14.8%	49	0.0	23	0.0%	1			0.0%	23	1.0
Total Non-US Equity	13.3%	-7.6%	68	16.7%	85	-0.5	64	1.5%	1	1.1	39	1.0%	63	0.9
MSCI ACWI ex US		-9.2%	85	17.7%	96	-0.5	76	0.0%	1			0.0%	76	1.0
Total Global Equity	9.7%	-5.1%	62	15.9%	72	-0.3	61	1.5%	1	-0.5	74	-0.8%	61	1.0
MSCI ACWI		-4.3%	55	15.9%	72	-0.3	52	0.0%	1			0.0%	52	1.0
Total Fixed Income	19.3%	1.9%	34	3.0%	65	0.6	44	3.1%	79	-0.9	83	-0.3%	57	0.5
Barclays Global Aggregate		4.6%	1	4.6%	93	1.0	30	0.0%	1			0.0%	41	1.0
Total US Fixed Income	19.2%	2.3%	14	3.0%	68	0.7	48	2.5%	67	0.1	19	0.9%	16	0.7
Barclays Aggregate		2.0%	23	2.4%	60	8.0	47	0.0%	1			0.0%	52	1.0
Total Global Fixed Income	0.1%	0.2%	51	3.5%	17	0.0	51	3.1%	23	-1.4	89	-2.4%	43	0.6
Barclays Global Aggregate		4.6%	5	4.6%	38	1.0	7	0.0%	1			0.0%	10	1.0
Total Liquid Alternatives	8.4%	-15.3%		13.0%		-1.2		12.7%		-1.6		-34.0%		3.9
CPI + 4% (Unadjusted)	-	4.9%		0.9%		5.1		0.0%			-	0.0%		1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Total Real Estate	8.5%	11.7%	46	5.0%	56	2.3	54
NCREIF ODCE Net		12.6%	26	5.3%	58	2.4	54
Total Private Equity	3.6%	10.5%	37	7.6%	75	1.4	53
DJ U.S. Total Stock Market Index + 3%		2.6%	85	14.8%	97	0.2	86

Total U.S. Equity Benchmark: Russell 3000 Index, Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE

Composite rankings are used for Total Real Estate and Total Private Equity



Total Fund Risk Statistics

3 '	Yeare	Ending	March	31	2016
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	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Tracking Error	Rank	Info Ratio	Rank	Anlzd AJ	Rank	Beta
Total Fund	100.0%	6.1%	31	7.4%	64	0.8	49	0.8%	15	-0.8	88	-0.7%	70	1.0
Policy Index		6.7%	10	7.3%	61	0.9	27	0.0%	1			0.0%	42	1.0
Total Equity	54.0%	7.1%	77	11.6%	24	0.6	68	1.3%	1	1.3	13	1.8%	79	1.0
MSCI ACWI		5.5%	89	12.0%	33	0.5	83	0.0%	1			0.0%	91	1.0
Total US Equity	31.0%	11.3%	26	11.6%	23	1.0	20	0.3%	1	0.6	6	0.2%	27	1.0
Russell 3000		11.1%	29	11.6%	22	1.0	21	0.0%	1			0.0%	30	1.0
Total Non-US Equity	13.3%	0.8%	93	12.8%	44	0.1	93	1.2%	1	0.4	76	0.5%	93	0.9
MSCI ACWI ex US		0.3%	98	13.6%	84	0.0	98	0.0%	1			0.0%	98	1.0
Total Global Equity	9.7%	4.4%	79	12.2%	49	0.4	77	1.3%	1	-0.9	91	-1.2%	79	1.0
MSCI ACWI		5.5%	68	12.0%	45	0.5	67	0.0%	1			0.0%	71	1.0
Total Fixed Income	19.3%	1.5%	76	2.7%	36	0.5	67	2.8%	86	0.2	42	1.0%	13	0.5
Barclays Global Aggregate		0.9%	94	4.4%	93	0.2	95	0.0%	1			0.0%	61	1.0
Total US Fixed Income	19.2%	2.0%	55	2.6%	45	0.7	58	2.1%	46	-0.2	51	0.4%	36	0.6
Barclays Aggregate		2.5%	37	3.0%	56	0.8	50	0.0%	1			0.0%	65	1.0
Total Global Fixed Income	0.1%	0.0%	79	4.0%	25	0.0	79	2.1%	16	-0.4	84	-0.7%	75	0.8
Barclays Global Aggregate		0.9%	54	4.4%	35	0.2	51	0.0%	1			0.0%	57	1.0
Total Liquid Alternatives	8.4%													
CPI + 4% (Unadjusted)	=	4.8%		1.1%		4.4		0.0%	-	=	-	0.0%		1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Total Real Estate	8.5%	11.6%	66	4.7%	50	2.5	55
NCREIF ODCE Net		12.6%	42	5.1%	60	2.5	54
Total Private Equity	3.6%	15.4%	21	7.2%	76	2.1	47
DJ U.S. Total Stock Market Index + 3%	-	14.4%	31	11.6%	93	1.2	85

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE

Composite rankings are used for Total Real Estate and Total Private Equity



Total Fund Risk Statistics

5 Years Ending March 31, 2016

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	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Tracking Error	Rank	Info Ratio	Rank	Anlzd AJ	Rank	Beta
Total Fund	100.0%	6.8%	26	8.4%	71	0.8	48	0.8%	8	-0.2	63	-0.2%	52	1.0
Policy Index		6.9%	16	8.4%	69	0.8	41	0.0%	1			0.0%	35	1.0
Total Equity	54.0%	7.5%	76	12.9%	28	0.6	62	1.7%	1	1.4	6	2.6%	74	0.9
MSCI ACWI		5.2%	92	13.7%	41	0.4	89	0.0%	1			0.0%	92	1.0
Total US Equity	31.0%	11.2%	22	12.8%	24	0.9	18	0.3%	1	0.8	2	0.2%	24	1.0
Russell 3000		11.0%	25	12.7%	23	0.9	20	0.0%	1			0.0%	26	1.0
Total Non-US Equity	13.3%	1.2%	91	14.8%	38	0.1	91	1.3%	1	0.7	59	0.9%	91	0.9
MSCI ACWI ex US		0.3%	96	15.7%	73	0.0	96	0.0%	1			0.0%	96	1.0
Total Global Equity	9.7%	5.0%	74	12.9%	23	0.4	67	2.1%	4	-0.1	75	0.2%	70	0.9
MSCI ACWI		5.2%	72	13.7%	42	0.4	68	0.0%	1			0.0%	71	1.0
Total Fixed Income	19.3%	4.0%	42	2.8%	33	1.4	28	2.8%	72	0.8	11	3.0%	13	0.5
Barclays Global Aggregate	-	1.8%	99	4.4%	88	0.4	99	0.0%	1			0.0%	88	1.0
Total US Fixed Income	19.2%	4.3%	38	2.7%	46	1.6	29	2.2%	44	0.2	37	1.8%	25	0.7
Barclays Aggregate	-	3.8%	49	2.8%	50	1.3	50	0.0%	1			0.0%	82	1.0
Total Global Fixed Income	0.1%													
Barclays Global Aggregate	-	1.8%	72	4.4%	27	0.4	62	0.0%	1			0.0%	74	1.0
Total Liquid Alternatives	8.4%													
CPI + 4% (Unadjusted)		5.3%		1.1%		4.6		0.0%				0.0%		1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Total Real Estate	8.5%	11.2%	70	4.6%	31	2.4	44
NCREIF ODCE Net	-	12.2%	46	5.0%	38	2.5	33

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE

Composite rankings are used for Total Real Estate



March 31, 2016

Ventura County Employees' Retirement Association

Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD I (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Fund	4,309,978,136	100.0	100.0	1.4	18	-1.4	33	-1.5	48	6.1	31	6.8	26	5.3	39	7.8	Apr-94
Policy Index				<u>1.4</u>	15	<u>-0.1</u>	9	<u>0.2</u>	15	<u>6.7</u>	11	<u>6.9</u>	16	<u>5.6</u>	28	<u>7.9</u>	Apr-94
Over/Under				0.0		-1.3		-1.7		-0.6		-0.1		-0.3		-0.1	
Allocation Index				0.9	53	-1.6	45	-1.5	50	5.7	47	6.2	51	5.1	55		Apr-94
60% MSCI World (Net) / 40% CITI WGBI				2.7	1	0.9	2	0.5	11	4.4	78	4.6	96	4.6	78	6.3	Apr-94
InvestorForce Public DB > \$1B Net Median				0.9		-1.8		-1.5		5.6		6.3		5.1		7.4	Apr-94
Total Fund ex Parametric	4,040,035,519	93.7		1.9		-0.7	-	-0.8		6.3	-	6.9		5.3		7.8	Apr-94
Total Fund ex Private Equity	4,155,855,138	96.4		1.4	15	-1.7	48	-1.8	60	5.3	58					8.2	Jan-12
Policy Index				<u>1.4</u>	15	<u>-0.1</u>	9	<u>0.2</u>	15	<u>6.7</u>	11	<u>6.9</u>	16	<u>5.6</u>	28	<u>9.0</u>	Jan-12
Over/Under				0.0		-1.6		-2.0		-1.4						-0.8	
InvestorForce Public DB > \$1B Net Median				0.9		-1.8		-1.5		5.6		6.3		5.1		8.2	Jan-12
Total US Equity	1,337,134,180	31.0	28.0	1.0	39	-0.5	23	-0.4	23	11.3	26	11.2	22	6.6	51	8.7	Dec-93
Total U.S. Equity Benchmark				<u>0.9</u>	40	<u>-0.6</u>	23	<u>-0.5</u>	24	<u>11.0</u>	29	<u>11.0</u>	25	<u>7.0</u>	40	<u>9.0</u>	Dec-93
Over/Under				0.1		0.1		0.1		0.3		0.2		-0.4		-0.3	
eA All US Equity Net Median				0.1		-4.3		-4.2		9.5		9.4		6.6		9.8	Dec-93
BlackRock Equity Market Fund	1,148,940,523	26.7		1.0	40	-0.4	23	-0.2	23	11.2	27	11.0	24			6.7	Dec-07
Dow Jones U.S. Total Stock Market				<u>0.9</u>	40	<u>-0.6</u>	23	<u>-0.4</u>	23	<u>11.1</u>	29	<u>11.0</u>	25	<u>7.0</u>	39	<u>6.6</u>	Dec-07
Over/Under				0.1		0.2		0.2		0.1		0.0				0.1	
eA All US Equity Net Median				0.1		-4.3		-4.2		9.5		9.4		6.6		6.5	Dec-07
Western U.S. Index Plus	143,435,833	3.3		1.7	30	1.5	14	1.6	13	12.1	16	12.2	10			3.4	May-07
S&P 500				<u>1.3</u>	34	<u>1.5</u>	13	<u>1.8</u>	12	<u>11.8</u>	18	<u>11.6</u>	18	<u>7.0</u>	39	<u>5.7</u>	<i>May-</i> 07
Over/Under				0.4		0.0		-0.2		0.3		0.6				-2.3	
eA All US Equity Net Median				0.1		-4.3		-4.2		9.5		9.4		6.6		5.6	<i>May-07</i>
BlackRock Extended Equity Index	44,757,824	1.0		-0.8	66	-8.4	58	-8.9	64	8.1	46	8.6	40	6.8	47	11.0	Oct-02
Dow Jones U.S. Completion Total Stock Market				<u>-0.9</u>	67	<u>-8.7</u>	61	<u>-9.1</u>	65	<u>7.9</u>	47	<u>8.4</u>	43	<u>6.8</u>	48	<u>11.0</u>	Oct-02
Over/Under				0.1		0.3		0.2		0.2		0.2		0.0		0.0	
eA US Small-Mid Cap Equity Net Median				0.5		-7.4		-7.2		7.7		7.7		6.7		10.6	Oct-02

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance / Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result.

Policy Index: Currently, 28% Russell 3000 Index, 20% Barclays Aggregate, 15% MSCI ACWI ex U.S., 10% MSCI ACWI, 10% DJ U.S. Total Stock Market Index + 3%, 10% CPI+4% Index, and 7% NCREIF ODCE Real Estate Index.

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.



Ventura County Employees' Retirement Association

Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD I (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Non-US Equity	572,363,460	13.3	15.0	0.1	16	-7.9	59	-7.6	68	0.8	93	1.2	91	2.0	70	5.9	Mar-94
MSCI ACWI ex USA				<u>-0.4</u>	20	<u>-9.7</u>	76	<u>-9.2</u>	85	<u>0.3</u>	98	<u>0.3</u>	96	<u>1.9</u>	73	<u>4.7</u>	Mar-94
Over/Under				0.5		1.8		1.6		0.5		0.9		0.1		1.2	
eA All EAFE Equity Net Median				-2.2		-7.4		-5.9		3.6		3.6		2.9		6.2	Mar-94
BlackRock ACWI ex-U.S. Index	237,902,996	5.5		-0.2	35	-8.9	63	-8.0	66	0.9	84	0.8	85			0.6	Mar-07
MSCI ACWI ex USA				<u>-0.4</u>	36	<u>-9.7</u>	76	<u>-9.2</u>	77	<u>0.3</u>	88	<u>0.3</u>	89	<u>1.9</u>	74	<u>0.1</u>	Mar-07
Over/Under				0.2		8.0		1.2		0.6		0.5				0.5	
eA ACWI ex-US All Cap Equity Net Median				-1.5		-7.0		-5.8		3.3		3.3		2.9		1.7	Mar-07
Sprucegrove	165,287,365	3.8		0.4	29	-10.1	82	-10.6	86	-0.3	89	1.4	78	2.4	70	6.5	Mar-02
MSCI ACWI ex USA				<u>-0.4</u>	36	<u>-9.7</u>	76	<u>-9.2</u>	77	<u>0.3</u>	88	<u>0.3</u>	89	<u>1.9</u>	74	<u>5.8</u>	Mar-02
Over/Under				8.0		-0.4		-1.4		-0.6		1.1		0.5		0.7	
MSCI EAFE				-3.0	80	-8.8	61	-8.3	69	2.2	64	2.3	61	1.8	80	5.3	Mar-02
eA ACWI ex-US All Cap Equity Net Median				-1.5		-7.0		-5.8		3.3		3.3		2.9		6.8	Mar-02
Hexavest	76,709,883	1.8		0.0	19	-5.0	28	-5.0	49	2.2	82	2.6	70			2.9	Dec-10
MSCI EAFE				<u>-3.0</u>	67	<u>-8.8</u>	70	<u>-8.3</u>	79	<u>2.2</u>	82	<u>2.3</u>	73	<u>1.8</u>	67	<u>2.8</u>	Dec-10
Over/Under				3.0		3.8		3.3		0.0		0.3				0.1	
eA EAFE All Cap Equity Net Median				-2.0		-7.5		-5.4		3.8		3.4		2.3		4.0	Dec-10
Walter Scott	92,463,216	2.1		0.7	23	-3.6	25	-3.1	28	1.1	83	3.1	51			3.2	Dec-10
MSCI ACWI ex USA				<u>-0.4</u>	36	<u>-9.7</u>	76	<u>-9.2</u>	77	<u>0.3</u>	88	<u>0.3</u>	89	<u>1.9</u>	74	<u>0.9</u>	Dec-10
Over/Under				1.1		6.1		6.1		0.8		2.8				2.3	
eA ACWI ex-US All Cap Equity Net Median				-1.5		-7.0		-5.8		3.3		3.3		2.9		3.3	Dec-10

Prior to May 2002, the Non-U.S. Equity benchmark was MSCI EAFE



Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Global Equity	418,371,834	9.7	10.0	1.1	38	-5.6	59	-5.1	62	4.4	79	5.0	74	3.1	76	4.6	May-05
MSCI ACWI				<u>0.2</u>	47	<u>-4.7</u>	52	<u>-4.3</u>	55	<u>5.5</u>	68	<u>5.2</u>	72	<u>4.1</u>	65	<u>5.7</u>	May-05
Over/Under				0.9		-0.9		-0.8		-1.1		-0.2		-1.0		-1.1	
eA All Global Equity Net Median				-0.2		-4.5		-3.7		6.7		6.7		4.7		6.7	May-05
BlackRock MSCI ACWI Equity Index	218,952,483	5.1		0.4	45	-4.4	49	-3.9	52	5.9	62					9.3	Jul-12
MSCI ACWI				<u>0.2</u>	47	<u>-4.7</u>	52	<u>-4.3</u>	55	<u>5.5</u>	68	<u>5.2</u>	72	<u>4.1</u>	65	<u>8.9</u>	Jul-12
Over/Under				0.2		0.3		0.4		0.4						0.4	
eA All Global Equity Net Median				-0.2		-4.5		-3.7		6.7		6.7		4.7		10.0	Jul-12
GMO Global Equity	199,419,351	4.6		1.9	35	-6.9	71	-6.4	71	2.9	86	4.6	76	3.9	70	5.5	Apr-05
MSCI ACWI				<u>0.2</u>	47	<u>-4.7</u>	52	<u>-4.3</u>	55	<u>5.5</u>	68	<u>5.2</u>	72	<u>4.1</u>	65	<u>5.7</u>	Apr-05
Over/Under				1.7		-2.2		-2.1		-2.6		-0.6		-0.2		-0.2	
eA All Global Equity Net Median				-0.2		-4.5		-3.7		6.7		6.7		4.7		6.7	Apr-05



Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD I (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Private Equity	154,122,998	3.6	10.0	0.7	37	9.2	17	10.5	37	15.4	21	-	-		-	14.6	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>1.7</u>	17	<u>1.7</u>	64	<u>2.6</u>	85	14.4	31	<u>14.3</u>	12			<u>17.8</u>	Jan-12
Over/Under				-1.0		7.5		7.9		1.0						-3.2	
InvestorForce Public DB Private Eq Net Median			_	0.5		3.4		7.2		11.9		10.9		10.3		11.6	Jan-12
Adams Street Partners	95,734,628	2.2		1.3		7.1		8.2		14.7			-			13.5	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>1.7</u>		<u>1.7</u>		<u>2.6</u>		<u>14.4</u>		<u>14.3</u>				<u>17.8</u>	Jan-12
Over/Under				-0.4		5.4		5.6		0.3					_	-4.3	
Harbourvest	43,386,234	1.0		-0.3		13.3		18.6					-			20.1	Jul-13
DJ U.S. Total Stock Market Index + 3%				<u>1.7</u>		<u>1.7</u>		<u>2.6</u>		<u>14.4</u>		<u>14.3</u>				<u>14.3</u>	Jul-13
Over/Under				-2.0		11.6		16.0							_	5.8	
Pantheon Global Secondary Fund IV	15,002,135	0.3		0.1		11.6		4.2		9.5			-			9.0	Jan-12
DJ U.S. Total Stock Market Index + 3%				<u>1.7</u>		<u>1.7</u>		<u>2.6</u>		<u>14.4</u>		<u>14.3</u>				<u>17.8</u>	Jan-12
Over/Under				-1.6		9.9		1.6		-4.9						-8.8	

Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current quarter cash flows.



Private Equity Limited Partnership Performance

											_		Since Inception	
Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Interest Paid/(Rec'd)	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$29,665,000	\$12,835,000	70%	\$15,213	\$10,764,481	\$31,612,674	\$42,377,155	\$12,696,942	14.4%	0.36x	1.43x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$17,697,000	\$7,803,000	69%	\$1,589	\$5,557,179	\$15,005,080	\$20,562,259	\$2,863,670	6.6%	0.31x	1.16x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$6,111,500	\$2,388,500	72%	\$0	\$314,436	\$7,429,998	\$7,744,434	\$1,632,934	10.4%	0.05x	1.27x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$7,837,000	\$663,000	92%	\$6,697	\$3,933,030	\$8,369,072	\$12,302,102	\$4,458,405	14.3%	0.5x	1.57x
Total Adams Street 2010	2010	5/21/2010	\$85,000,000	\$61,310,500	\$23,689,500	72%	\$23,499	\$20,569,126	\$62,416,824	\$82,985,950	\$21,651,951	12.2%	0.34x	1.35x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$34,200,000	\$40,800,000	46%	\$10,728	\$2,698,535	\$33,317,817	\$36,016,352	\$1,805,624	4.1%	0.08x	1.05x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$47,756,250	\$19,743,750	71%	\$84,954	\$21,664,123	\$43,118,543	\$64,782,666	\$16,941,462	28.4%	0.45x	1.35x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	\$0	\$8,310,001	\$6,232,558	\$14,542,559	\$4,582,559	15.3%	0.83x	1.46x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$8,308,104	\$41,691,896	17%	-\$3,352	\$100,240	\$9,134,665	\$9,234,905	\$930,152	11.5%	0.01x	1.11x
Total VCERA Private Equity Program	_	5/21/2010	\$292,500,000	\$161,534,854	\$130,965,146	55%	\$115,829	\$53,342,025	\$154,220,407	\$207,562,432	\$45,911,748	14.1%	0.33x	1.28x

^{1.} Includes recycled/recallable distributions received to date.

Note: Private equity performance data is reported net of fees.

Distributions to Date shown for Pantheon Global Secondary Fund V includes management fee rebates paid to VCERA.

Performance shown is based on 9/30/2015 NAVs cash-adjusted for cash flows through 3/31/2016.



Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total US Fixed Income	829,535,018	19.2	20.0	3.0	28	2.6	43	2.3	14	2.0	55	4.3	38	5.9	23	6.1	Feb-94
Barclays Aggregate				<u>3.0</u>	26	<u>3.7</u>	21	<u>2.0</u>	23	<u>2.5</u>	37	<u>3.8</u>	49	<u>4.9</u>	48	<u>5.7</u>	Feb-94
Over/Under				0.0		-1.1		0.3		-0.5		0.5		1.0		0.4	
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		5.4	Feb-94
BlackRock U.S. Debt Fund	144,426,324	3.4		3.1	25	3.7	21	2.0	22	2.5	35	3.8	48	5.0	44	5.5	Nov-95
Barclays Aggregate				<u>3.0</u>	26	<u>3.7</u>	21	<u>2.0</u>	23	<u>2.5</u>	37	<u>3.8</u>	49	<u>4.9</u>	48	<u>5.5</u>	Nov-95
Over/Under				0.1		0.0		0.0		0.0		0.0		0.1		0.0	
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		5.3	Nov-95
Western	277,765,076	6.4		3.1	24	3.6	22	1.8	27	3.2	20	5.0	25	5.6	28	6.4	Dec-96
Barclays Aggregate				<u>3.0</u>	26	<u>3.7</u>	21	<u>2.0</u>	23	<u>2.5</u>	37	<u>3.8</u>	49	<u>4.9</u>	48	<u>5.5</u>	Dec-96
Over/Under				0.1		-0.1		-0.2		0.7		1.2		0.7		0.9	
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		5.4	Dec-96
Reams	293,147,976	6.8		3.3	19	2.4	47	4.4	3	0.7	86	3.9	48	6.1	20	5.7	Sep-01
Reams Custom Index				<u>0.1</u>	95	<u>0.3</u>	79	<u>0.4</u>	70	<u>0.3</u>	93	<u>2.3</u>	79	<u>4.2</u>	66	<u>4.3</u>	Sep-01
Over/Under				3.2		2.1		4.0		0.4		1.6		1.9		1.4	
Barclays Aggregate				3.0	26	3.7	21	2.0	23	2.5	37	3.8	49	4.9	48	4.8	Sep-01
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		4.8	Sep-01
Loomis Sayles Multi Strategy	72,294,856	1.7		2.6	39	-1.2	88	-1.8	90	1.9	59	5.1	24	6.6	13	6.4	Jul-05
Loomis Custom Index				<u>3.1</u>	23	<u>1.1</u>	65	<u>0.0</u>	77	<u>2.1</u>	49	<u>4.0</u>	42	<u>5.5</u>	32	<u>5.2</u>	Jul-05
Over/Under				-0.5		-2.3		-1.8		-0.2		1.1		1.1		1.2	
Barclays Govt/Credit				3.5	17	3.9	18	1.7	29	2.4	40	4.0	42	4.9	46	4.6	Jul-05
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		4.6	Jul-05
Loomis Strategic Alpha	41,900,786	1.0		0.4	91	-2.0	90	-2.3	91							1.2	Jul-13
Barclays Aggregate				<u>3.0</u>	26	<u>3.7</u>	21	<u>2.0</u>	23	<u>2.5</u>	37	<u>3.8</u>	49	<u>4.9</u>	48	<u>3.7</u>	Jul-13
Over/Under				-2.6		-5.7		-4.3								-2.5	
eA All US Fixed Inc Net Median				2.2		2.2		1.1		2.1		3.7		4.8		2.9	Jul-13

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate
Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index
As of January 2016, Loomis Strategic Alpha was moved from the Total Global Fixed Income composite to the Total US Fixed Income composite.



Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Real Estate	365,489,464	8.5	7.0	1.9	69	8.5	76	11.7	46	11.6	66	11.2	70	4.1	83	8.0	Mar-94
NCREIF ODCE Net				<u>2.0</u>	66	<u>8.7</u>	65	<u>12.6</u>	26	<u>12.6</u>	42	<u>12.2</u>	46	<u>5.4</u>	44	<u>8.2</u>	Mar-94
Over/Under				-0.1		-0.2		-0.9		-1.0		-1.0		-1.3		-0.2	
InvestorForce Public DB Real Estate Pub+Priv Net Median				2.2		9.3		10.9		12.4		12.2		5.3		7.1	Mar-94
Prudential Real Estate	127,195,743	3.0		2.0		10.0		13.4		13.2		12.8		5.1		6.0	Jun-04
NCREIF ODCE Net				<u>2.0</u>		<u>8.7</u>		<u>12.6</u>		<u>12.6</u>		<u>12.2</u>		<u>5.4</u>		<u>7.1</u>	Jun-04
Over/Under				0.0		1.3		8.0		0.6		0.6		-0.3		-1.1	
NCREIF ODCE				2.2		9.5		13.7		13.6		13.3		6.4		8.1	Jun-04
UBS Real Estate	237,153,034	5.5		1.8		8.0		10.9		10.7		10.3	-	5.7		7.7	Mar-03
NCREIF ODCE Net				<u>2.0</u>		<u>8.7</u>		<u>12.6</u>		<u>12.6</u>		<u>12.2</u>		<u>5.4</u>		<u>7.3</u>	Mar-03
Over/Under				-0.2		-0.7		-1.7		-1.9		-1.9		0.3		0.4	
NCREIF ODCE				2.2		9.5		13.7		13.6		13.3		6.4		8.3	Mar-03
RREEF	1,140,686	0.0		-4.8		-10.7		0.0		13.2		21.3	-			-5.4	Sep-07
NCREIF ODCE Net				<u>2.0</u>		<u>8.7</u>		<u>12.6</u>		<u>12.6</u>		<u>12.2</u>		<u>5.4</u>		<u>3.6</u>	Sep-07
Over/Under				-6.8		-19.4		-12.6		0.6		9.1				-9.0	
NCREIF ODCE				2.2		9.5		13.7		13.6		13.3		6.4		4.5	Sep-07

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index



Total Fund Performance Detail (Net)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%) Ra	ank	Fiscal YTD F (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Return (%)	Since
Total Liquid Alternatives	360,678,570	8.4	10.0	-0.1		-12.5		-15.3								1.8	Apr-13
CPI + 4% (Unadjusted)				<u>1.7</u>		<u>2.8</u>		<u>4.9</u>		<u>4.8</u>		<u>5.3</u>		<u>5.8</u>		<u>4.8</u>	Apr-13
Over/Under				-1.8		-15.3		-20.2								-3.0	
Bridgewater All Weather Fund	261,608,219	6.1		2.4		-5.1		-8.0								2.3	Aug-13
CPI + 5% (Unadjusted)				<u>1.9</u>		<u>3.5</u>		<u>5.9</u>								<u>5.7</u>	Aug-13
Over/Under				0.5		-8.6		-13.9								-3.4	
Tortoise Energy Infrastructure	99,070,351	2.3		-5.9		-27.5		-30.0								-3.9	Apr-13
Wells Fargo MLP Index				<u>-6.1</u>		<u>-32.2</u>		<u>-35.2</u>		<u>-10.1</u>		<u>-0.5</u>				<u>-10.7</u>	Apr-13
Over/Under				0.2		4.7		5.2								6.8	
Overlay	269,942,617	6.3	0.0														
Parametric	269,942,617	6.3															

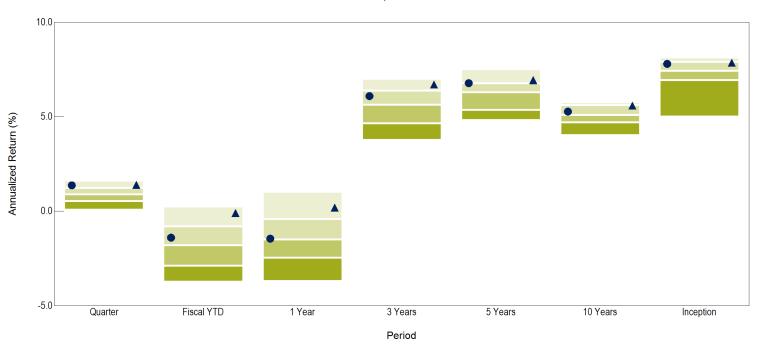
Overlay performance is not applicable on an individual account level

PIMCO Global Fixed Income is liquidating. The market value as of 3/31/2106 is \$2,339,996



Total Fund Return Summary vs. Peer Universe

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



	Return (Rank)													
5th Percentile	1.6		0.2		1.0		7.0		7.5		5.8		8.1	
25th Percentile	1.2		-0.8		-0.4		6.4		6.8		5.6		7.9	
Median	0.9		-1.8		-1.5		5.6		6.3		5.1		7.4	
75th Percentile	0.6		-2.9		-2.4		4.7		5.4		4.7		6.9	
95th Percentile	0.1		-3.7		-3.7		3.8		4.8		4.0		5.0	
# of Portfolios	41		41		41		41		41		37		22	
 Total Fund 	1.4	(18)	-1.4	(33)	-1.5	(48)	6.1	(31)	6.8	(26)	5.3	(39)	7.8	(29)
Policy Index	1.4	(15)	-0.1	(9)	0.2	(15)	6.7	(11)	6.9	(16)	5.6	(28)	7.9	(27)



Total Fund Return Summary vs. Peer Universe

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

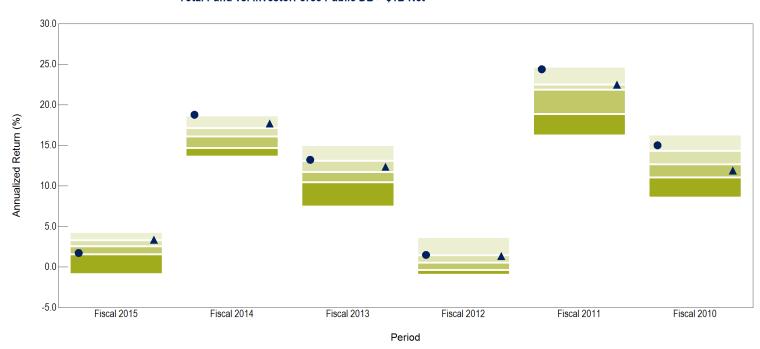


	Return (Rank)									
5th Percentile	2.4	7.6	19.5	14.3	4.2	15.1	27.5	-20.9	10.7	15.8
25th Percentile	0.8	6.1	16.0	13.4	1.5	13.8	21.7	-25.7	9.2	14.6
Median	-0.4	5.1	14.3	12.7	0.6	12.8	20.0	-26.9	8.5	14.0
75th Percentile	-1.3	4.4	11.0	11.8	-0.3	11.8	17.7	-28.3	7.1	12.5
95th Percentile	-3.2	2.6	8.5	9.0	-1.2	9.3	13.4	-30.5	5.9	10.9
# of Portfolios	57	55	48	44	42	41	40	39	39	38
Total Fund	-0.9 (61)	6.4 (1	19) 18.0 (10)	14.0 (15	0.3 (61)	15.1 (6) 24.2 (16)	-30.9 (98)	7.0 (77)	14.2 (41)
Policy Index	0.8 (25)	6.8 (1	17.2 (14)	12.9 (41	0.5 (55)	13.2 (4	4) 21.0 (33)	-27.1 (54)	8.5 (50)	14.0 (50)



Total Fund Return Summary vs. Peer Universe

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

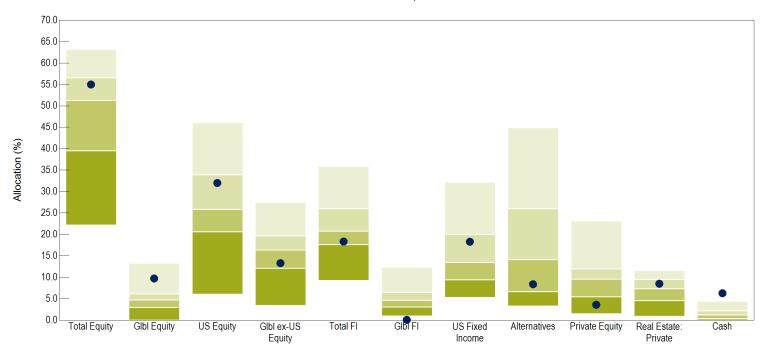


	Return (Rank)									
5th Percentile	4.3		18.7		15.0		3.7	24.7	16.	.3
25th Percentile	3.3		17.2		13.1		1.5	22.5	14.	.4
Median	2.6		16.1		11.8		0.5	21.9	12	.7
75th Percentile	1.6		14.7		10.5		-0.3	18.9	11.	.1
95th Percentile	-0.9		13.6		7.5		-0.9	16.3	8.	.6
# of Portfolios	53		43		56		41	42	4	1
 Total Fund 	1.7	(70)	18.8	(5)	13.2	(22)	1.5 (25	5) 24.4	(10) 15.	.0 (15)
Policy Index	3.4	(25)	17.7	(20)	12.4	(39)	1.4 (27	22.5	(30) 11.	9 (64)



Total Fund Allocations vs. Peer Universe

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



5th Percentile 25th Percentile Median 75th Percentile 95th Percentile # of Portfolios

Total Fund

Allocatio	n (Rank))																				
63.2		13.3		46.1		27.5		35.9		12.4		32.2		44.9		23.1		11.6		4.4		
56.6		6.2		34.0		19.7		26.0		6.6		20.1		26.1		12.0		9.5		2.2		
51.3		4.7		25.9		16.5		20.8		4.7		13.5		14.1		9.6		7.4		1.2		
39.6		3.1		20.7		12.2		17.7		3.1		9.5		6.7		5.5		4.6		0.4		
22.2		0.1		6.1		3.5		9.3		1.0		5.4		3.4		1.6		1.0		0.0		
38		16		36		36		39		21		34		37		34		29		36		
55.0	(39)	9.7	(12)	32.0	(31)	13.3	(70)	18.3	(69)	0.1	(99)	18.3	(31)	8.4	(68)	3.6	(82)	8.5	(33)	6.3	(3)	



Manager Due Diligence



Due Diligence Monitor

The items below summarize the recent quarter's performance and any changes or announcements from the Plan's managers/products. A "-" indicates there were no material announcements. A "Yes" indicates there was an announcement and a brief summary is provided on the following pages. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determine if any action should be taken (by NEPC and/or by our clients). Events are rated: No Action, Watch, Hold, Client Review or Terminate. NEPC's recommendation in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data) is refreshed quarterly.

Investment Options	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments	Last Onsite Conducted
BlackRock Equity Market Index	-	-	-	-		10/2013
Western U.S. Index Plus	-	-	-	-		6/2014
BlackRock Extended Equity Index	-	-	-	-		10/2013
BlackRock MSCI ACWI ex-U.S. Index	-	-	-	-		10/2013
Sprucegrove	-	No	Hold	No Action	3Q 2014 Departure	N/A
Hexavest	Top Quartile	-	-	-		1/2013
Walter Scott	Top Quartile	-	-	-		10/2012
BlackRock MSCI ACWI Index	-	-	-	-		10/2013
GMO	-	-	-	-		7/2014
Adams Street	N/A	-	-	-		11/2013
HarbourVest	N/A	-	-	-		3/2014
Pantheon	N/A	-	-	-		1/2015
BlackRock U.S. Debt Fund	Top Quartile	Yes	No Action	No Action	Jon Rubinstein Joining as a Co-CEO	10/2013
Western	Top Quartile	-	-	-		6/2014
Reams	Top Quartile	-	-	-		11/2013
Loomis Sayles Multi-Sector Full Discretion	-	-	-	-		11/2013



Due Diligence Monitor Continued

Investment Options	Performance (Recent Quarter)	Changes/ Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments	Last Onsite Conducted
Loomis Sayles Strategic Alpha	Bottom Decile	-	-	-		11/2013
Prudential	N/A	-	-	-		7/2014
RREEF	N/A	-	-	-		7/2013
UBS	N/A	-	-	-		8/2011
Bridgewater	N/A	Yes	No Action	No Action	Jon Rubinstein Joining as a Co-CEO	9/2012
Tortoise	N/A	-	-	-		8/2013
Parametric/Clifton	N/A	-	-	-	i ! !	7/2013

	NEPC Due Diligence Committee Recommendation Key
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot participate in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with an Investment Manager; manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



Due Diligence Commentary

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

Manager Changes/Announcements

Bridgewater

Jon Rubenstein is now Co-CEO alongside Eileen Murray. In addition, Greg Jensen, who holds the position of both Co-CEO and Co-CIO, will shift to focus exclusively on the investment side of the business. Mr. Jensen will remain Co-CIO along with Bob Prince and Ray Dalio.

NEPC recommends No Action at this time. We will continue to monitor the situation and provide updates as necessary.



Appendix: Market Environment



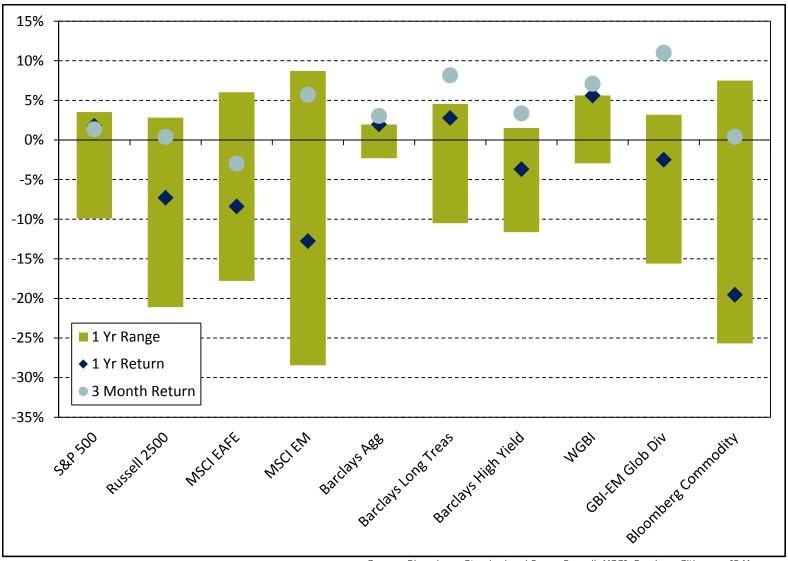
Index Performance Summary as of 3/31/2016

	2009	2010	2011	2012	2013	2014	2015	JAN	FEB	MAR	YTD
Barclays US Strips 20+ Yr	-36.0%	10.9%	58.5%	3.0%	-21.0%	46.4%	-3.7%	6.9%	4.6%	-0.3%	11.4%
JPM GBI-EM Global Diversified	22.0%	15.7%	-1.8%	16.8%	-9.0%	-5.7%	-14.9%	0.4%	1.4%	9.1%	11.0%
Barclays US Govt/Credit Long	1.9%	10.2%	22.5%	8.8%	-8.8%	19.3%	-3.3%	2.1%	2.2%	2.8%	7.3%
Citi WGBI	2.6%	5.2%	6.4%	1.7%	-4.0%	-0.5%	-3.6%	1.4%	2.9%	2.7%	7.1%
Barclays US Long Credit	16.8%	10.7%	17.1%	12.7%	-6.6%	16.4%	-4.6%	0.3%	1.7%	4.8%	6.8%
FTSE NAREIT Equity REITs	28.0%	28.0%	8.3%	18.1%	2.5%	30.1%	3.2%	-3.4%	-0.4%	10.1%	6.0%
MSCI EM	78.5%	18.9%	-18.4%	18.2%	-2.6%	-2.2%	-14.9%	-6.5%	-0.2%	13.2%	5.7%
JPM EMBI Global Diversified	29.8%	12.2%	7.4%	17.4%	-5.3%	7.4%	1.2%	-0.2%	1.9%	3.3%	5.0%
Barclays US Corporate HY	58.2%	15.1%	5.0%	15.8%	7.4%	2.5%	-4.5%	-1.6%	0.6%	4.4%	3.4%
Barclays US Agg Bond	5.9%	6.5%	7.8%	4.2%	-2.0%	6.0%	0.6%	1.4%	0.7%	0.9%	3.0%
Barclays US Agg Interm	6.5%	6.2%	6.0%	3.6%	-1.0%	4.1%	1.2%	1.3%	0.5%	0.6%	2.3%
Barclays Municipal	12.9%	2.4%	10.7%	6.8%	-2.6%	9.1%	3.3%	1.2%	0.2%	0.3%	1.7%
S&P 500	26.5%	15.1%	2.1%	16.0%	32.4%	13.7%	1.4%	-5.0%	-0.1%	6.8%	1.4%
Credit Suisse Leveraged Loan	44.9%	10.0%	1.8%	9.4%	6.2%	2.1%	-0.4%	-0.7%	-0.6%	2.6%	1.3%
Russell 1000	28.4%	16.1%	1.5%	16.4%	33.1%	13.2%	0.9%	-5.4%	0.0%	7.0%	1.2%
Barclays US Govt/Credit 1-3 Yr	3.8%	2.8%	1.6%	1.3%	0.6%	0.8%	0.7%	0.5%	0.1%	0.4%	1.0%
Bloomberg Commodity	18.9%	16.8%	-13.3%	-1.1%	-9.5%	-17.0%	-24.7%	-1.7%	-1.6%	3.8%	0.4%
Russell 2500	34.4%	26.7%	-2.5%	17.9%	36.8%	7.1%	-2.9%	-8.0%	0.7%	8.3%	0.4%
MSCI ACWI	34.6%	12.7%	-7.4%	16.1%	22.8%	4.2%	-2.4%	-6.0%	-0.7%	7.4%	0.2%
Russell 2000	27.2%	26.9%	-4.2%	16.4%	38.8%	4.9%	-4.4%	-8.8%	0.0%	8.0%	-1.5%
Credit Suisse Hedge Fund	18.6%	11.0%	-2.5%	7.7%	9.7%	4.1%	-0.7%	-1.4%	-1.1%	N/A	-2.5%
MSCI EAFE	31.8%	7.8%	-12.1%	17.3%	22.8%	-4.9%	-0.8%	-7.2%	-1.8%	6.5%	-3.0%
Alerian MLP	76.4%	35.9%	13.9%	4.8%	27.6%	4.8%	-32.6%	-11.1%	-0.5%	8.3%	-4.2%

Source: Morningstar Direct



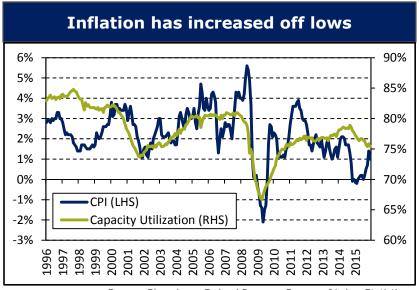
Broad Market Performance Summary as of 3/31/2016



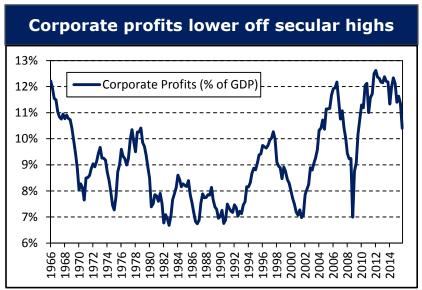
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, Citigroup, JP Morgan *1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago



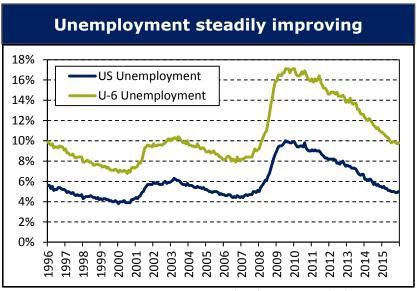
US Economic Indicators



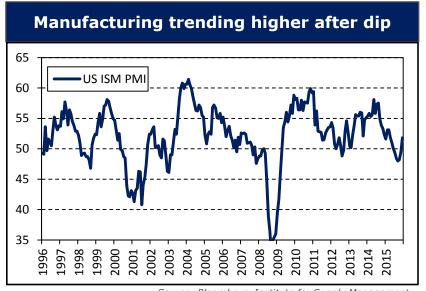
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics



Source: Bloomberg, Bureau of Economic Analysis



Source: Bloomberg, Bureau of Labor Statistics



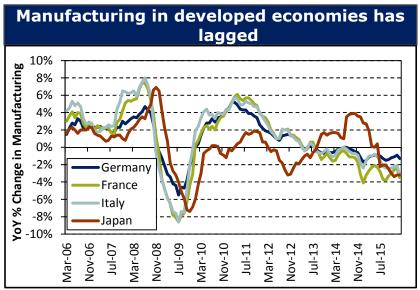
Source: Bloomberg, Institute for Supply Management



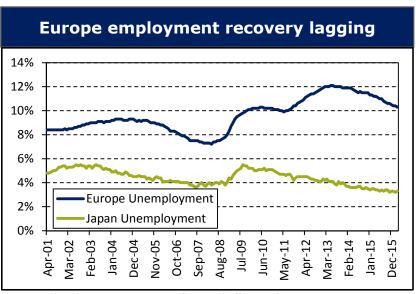
International Economic Indicators



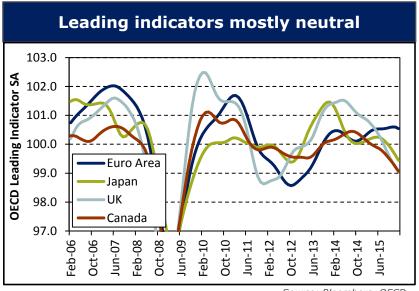
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat



Source: Bloomberg, OECD, Eurostat



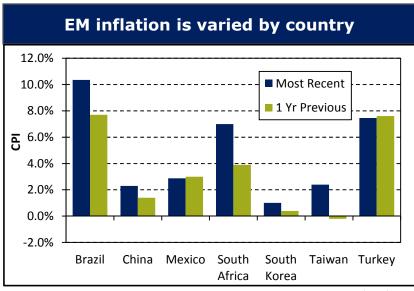
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat



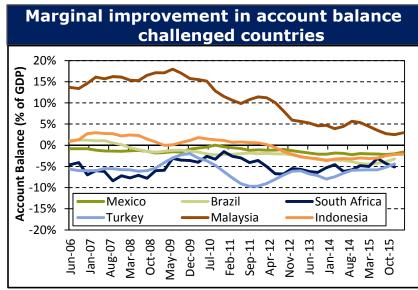
Source: Bloomberg, OECD



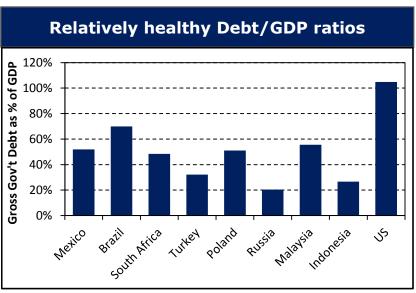
Emerging Market Economic Indicators



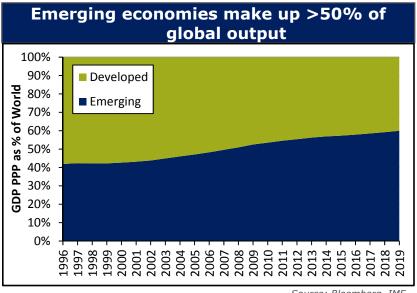
Source: Bloomberg



Source: Bloomberg



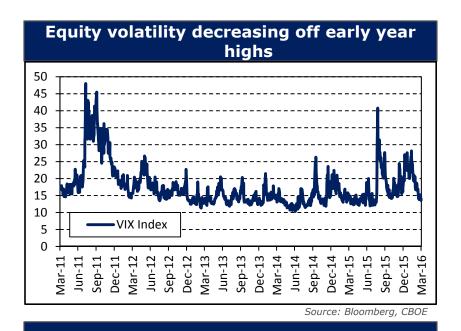
Source: Bloomberg, IMF

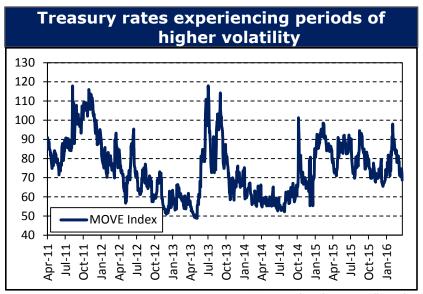


Source: Bloomberg, IMF



Volatility





Source: Bloomberg, Merrill Lynch



Sep-13

Dec-13 Mar-14

Jun-13

Jun-14 Sep-14 Dec-14

CVIX Index

Mar-12

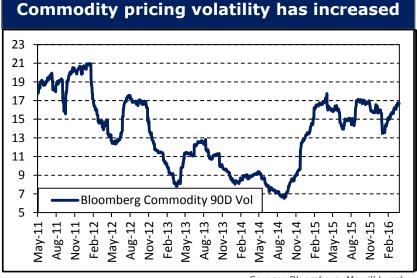
Jun-12

Dec-12 Mar-13

Sep-12

Source: Bloomberg, Deutsche Bank

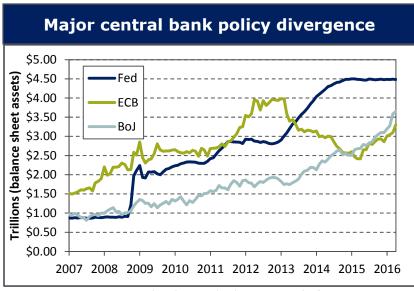
Mar-15 Jun-15 Sep-15



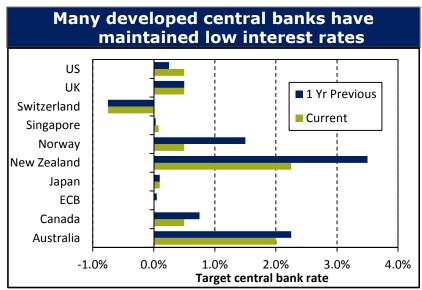
Source: Bloomberg, Merrill Lynch



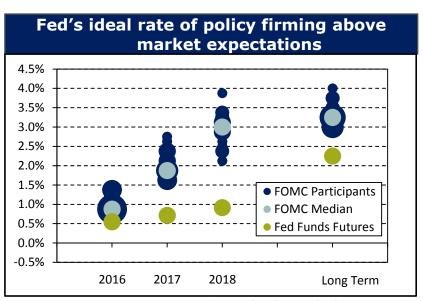
Central Banks



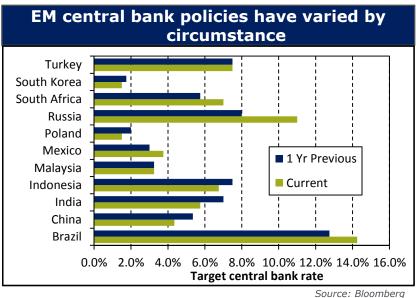
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC



Source: Bloomberg

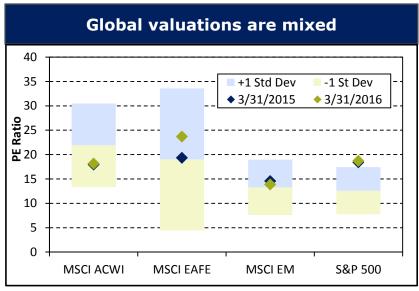


Source: Bloomberg, Federal Reserve, NEPC

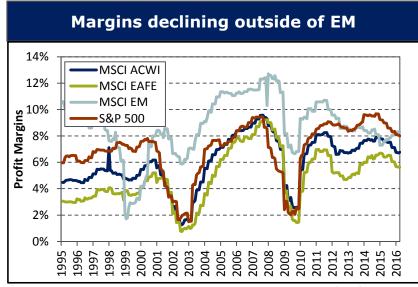




Global Equity



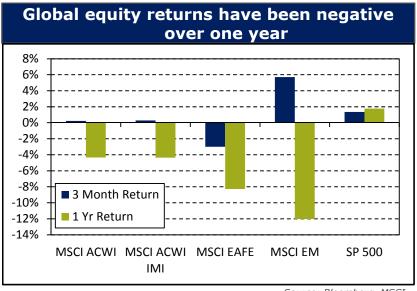
Source: Bloomberg, Standard and Poors, MSCI *MSCI EAFE is ex UK Telecom



Source: Bloomberg, MSCI



Source: Bloomberg, Standard and Poors, MSCI



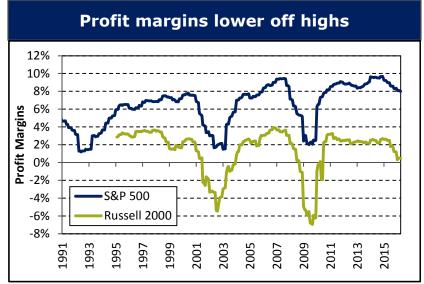
Source: Bloomberg, MSCI



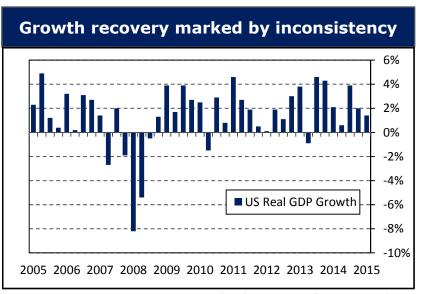
US Equity

Valuations near or above historical norms 35 30 25 **DE Batio** 20 15 10 +1 Std Dev -1 St Dev **♦** 3/31/2015 ♦ 3/31/2016 S&P 500 Russell 1000 Russell 2000 Russell 1000 Growth Value

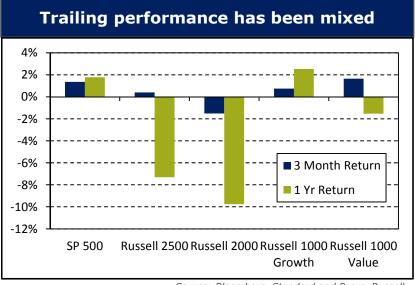
Source: Bloomberg, Standard and Poors, Russell *Russell 2000 PE is index adjusted positive



Source: Bloomberg, Standard and Poors, Russell



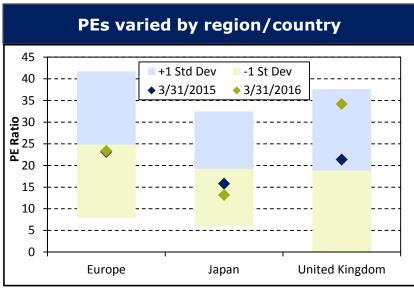
Source: Bloomberg, Bureau of Economic Analysis

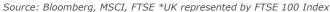


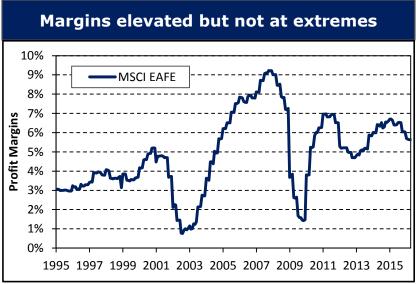
Source: Bloomberg, Standard and Poors, Russell



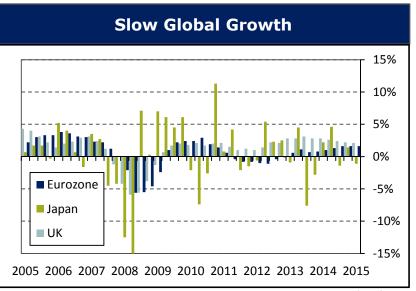
International Equity



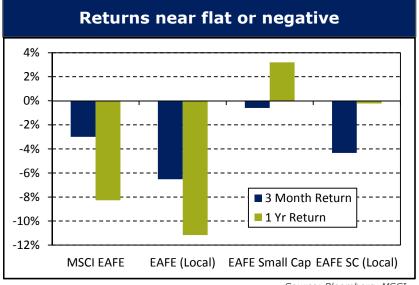




Source: Bloomberg, MSCI



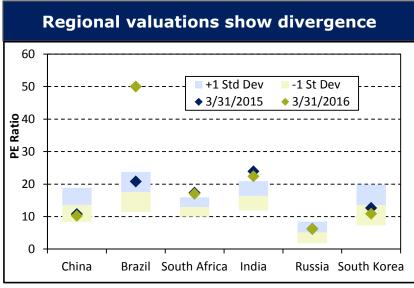


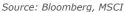


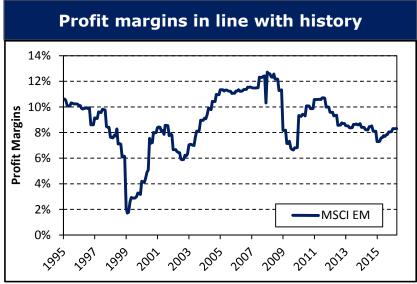
Source: Bloomberg, MSCI



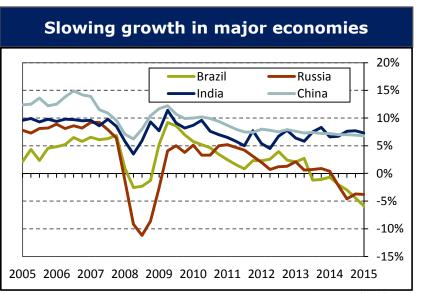
Emerging Markets Equity



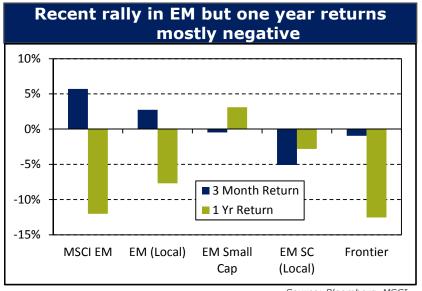




Source: Bloomberg, MSCI



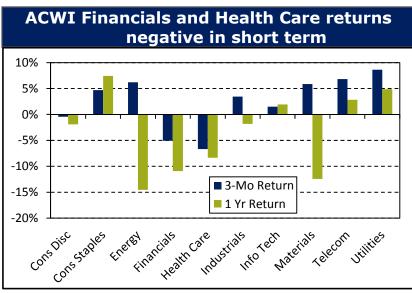
Source: Bloomberg



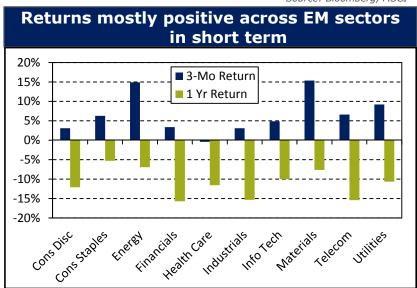
Source: Bloomberg, MSCI



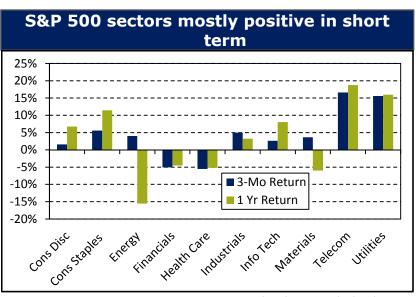
Global Equity by Sector



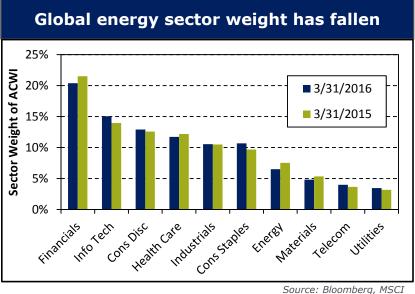
Source: Bloomberg, MSCI



Source: Bloomberg, MSCI

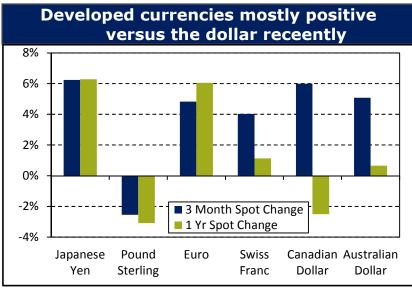


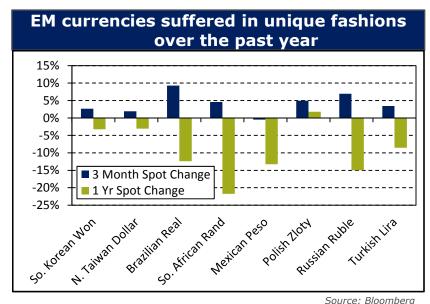
Source: Bloomberg, Standard and Poors



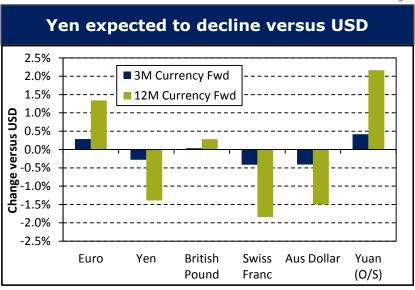


Currencies

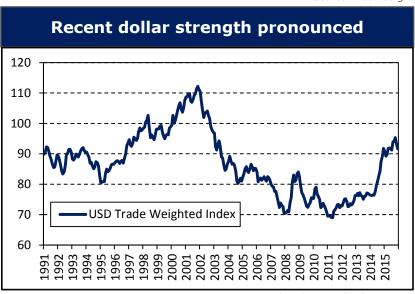




Source: Bloomberg



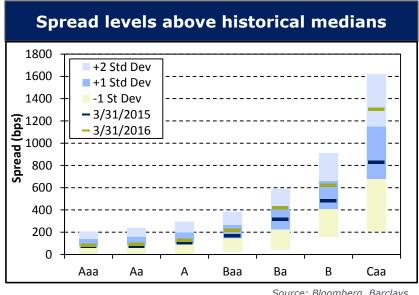




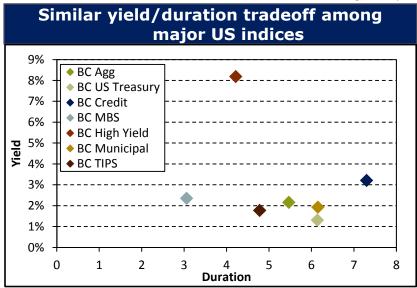
Source: Bloomberg, Federal Reserve



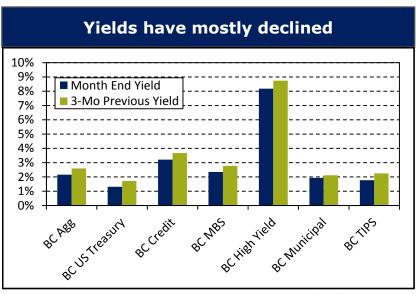
US Fixed Income



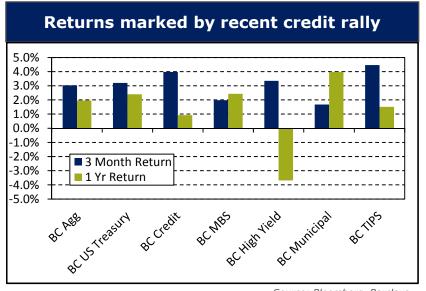
Source: Bloomberg, Barclays



Source: Bloomberg, Barclays



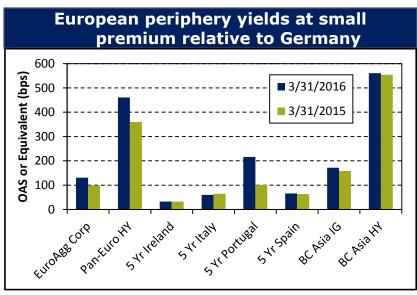
Source: Bloomberg, Barclays



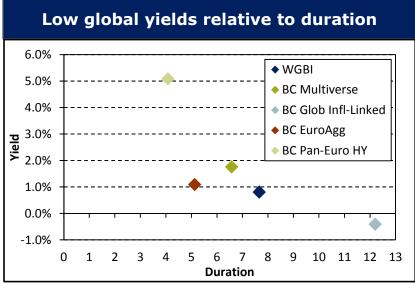
Source: Bloomberg, Barclays



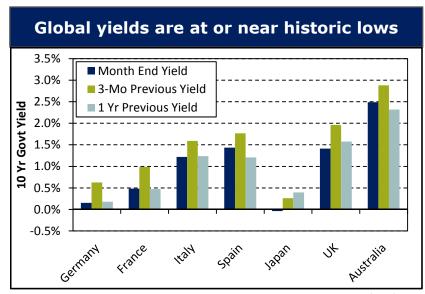
International Developed Fixed Income



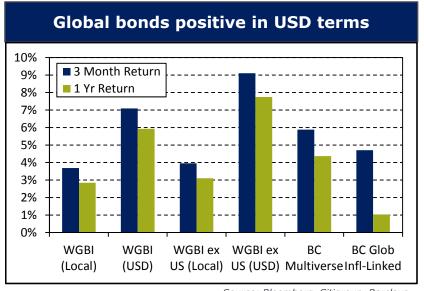
Source: Barclays, Bloomberg, *European periphery spreads are over equivalent German Bund



Source: Bloomberg, Citigroup, Barclays



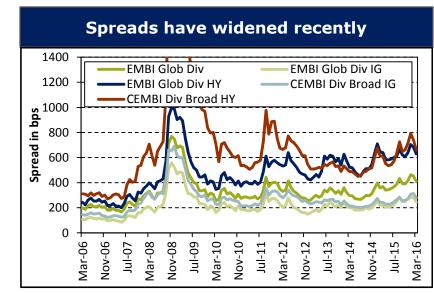
Source: Bloomberg



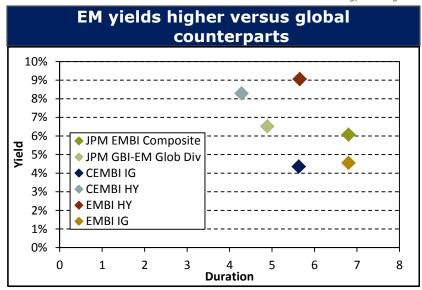
Source: Bloomberg, Citigroup, Barclays



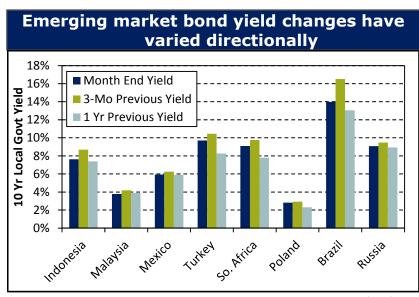
Emerging Markets Fixed Income



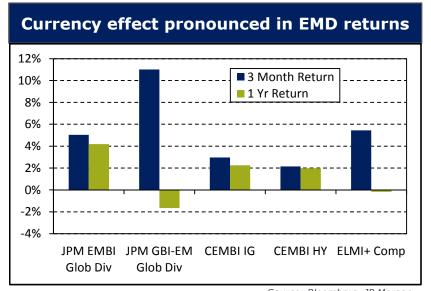
Source: Bloomberg, JP Morgan



Source: Bloomberg, JP Morgan

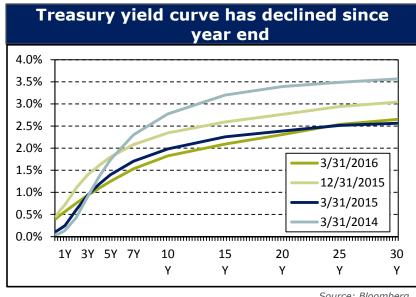


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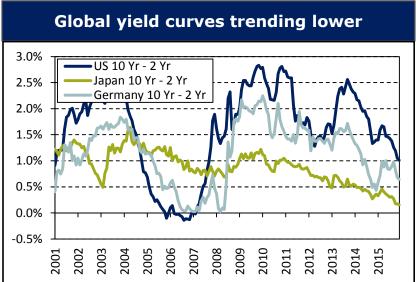


Source: Bloomberg, JP Morgan

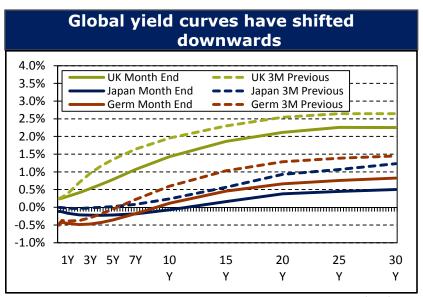




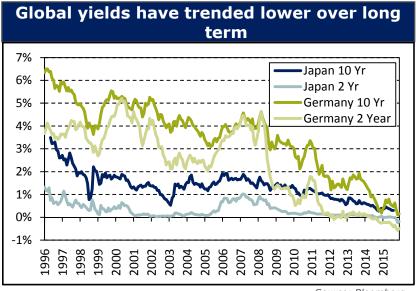




Source: Bloomberg



Source: Bloombera



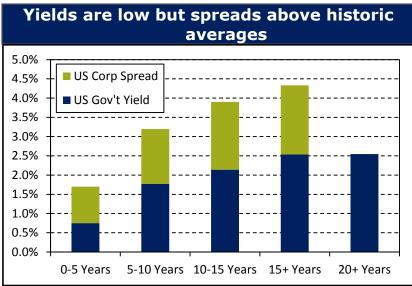
Source: Bloomberg



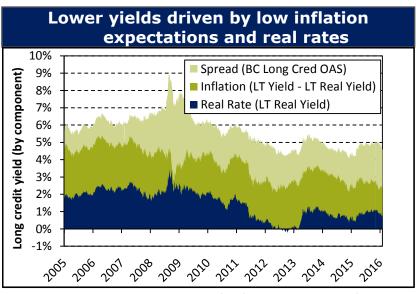
Long Rates and Liability

Long duration yields have fallen over last few years even with recent uptick 7% 6% 5% 4% 3% Citigroup Pension Liability Index 2% **BC Long Credit** BC 20-30 Yr STRIPS 1% May-14 Sep-11 May-12 Sep-12 Jan-13 May-13 Jan-14

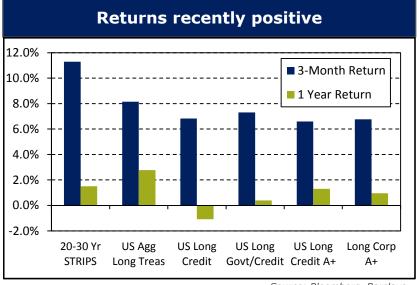
Source: Bloomberg, Citigroup, Barclays



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



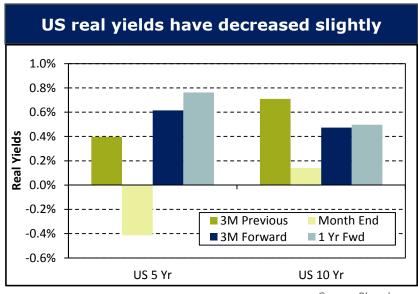
Source: Bloomberg, US Treasury, Barclays, NEPC



Source: Bloomberg, Barclays



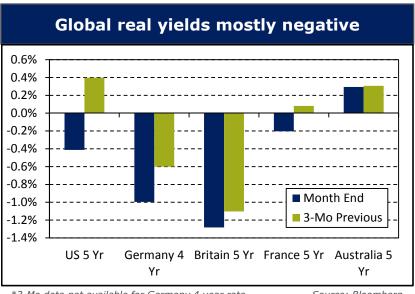
Inflation and Real Rates





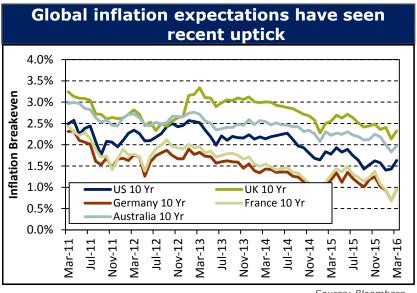


Source: Bloomberg



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

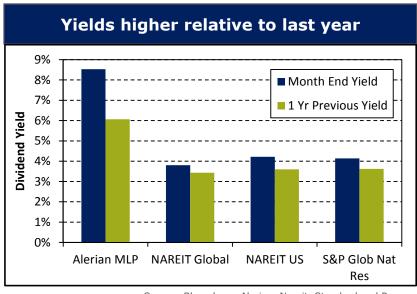
Source: Bloombera



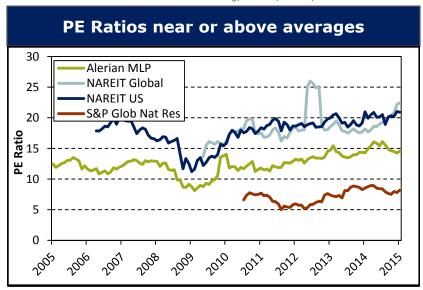
Source: Bloomberg



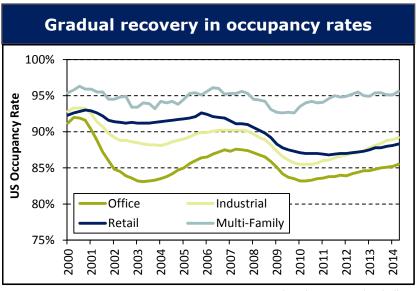
Inflation Sensitive Growth Assets



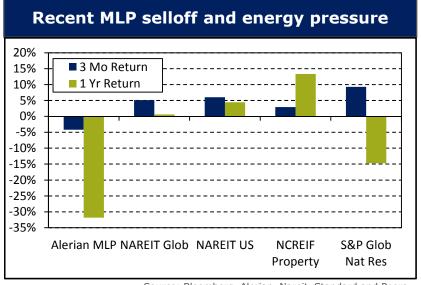
Source: Bloomberg, Alerian, Nareit, Standard and Poors



Source: Bloomberg, US Census Bureau



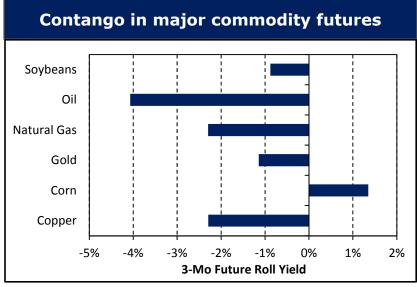
Source: Bloomberg, CB Richard Ellis



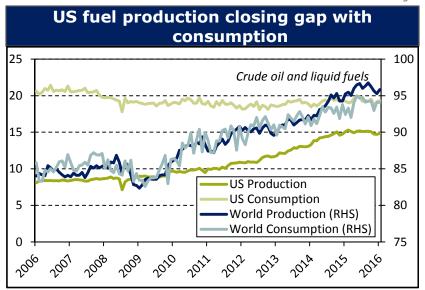
Source: Bloomberg, Alerian, Nareit, Standard and Poors



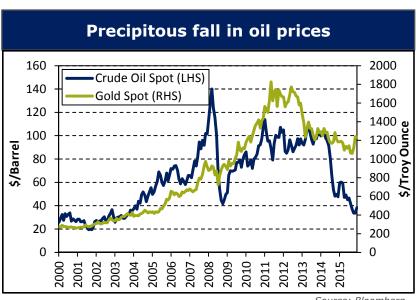
Commodities



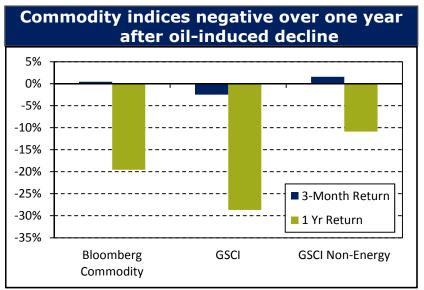
Source: Bloomberg



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



Source: Bloomberg



Source: Bloomberg, Standard and Poors



Sprucegrove

3 Years Ending March 31	, 2016
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	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	-0.3%	89	13.1%	73	2.5%	2	-0.2		-0.6%	89	1.0	0.0
MSCI ACWI ex USA	0.3%	88	13.6%	85	0.0%	1	-		0.0%	88	1.0	0.0

5 Years Ending March 31, 2016

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	1.4%	78	14.4%	19	2.9%	11	0.4	68	1.1%	77	0.9	0.1
MSCI ACWI ex USA	0.3%	89	15.7%	72	0.0%	1			0.0%	89	1.0	0.0

7 Years Ending March 31, 2016

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	9.9%	76	16.2%	21	3.7%	18	0.2	75	1.6%	68	0.9	0.6
MSCI ACWI ex USA	9.2%	81	17.6%	75	0.0%	1	-		0.0%	91	1.0	0.5

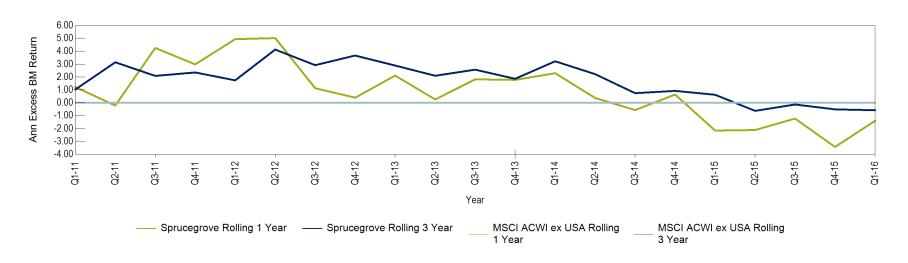
10 Years Ending March 31, 2016

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	2.4%	70	17.4%	20	4.3%	33	0.1	68	0.6%	68	0.9	0.1
MSCI ACWI ex USA	1.9%	74	19.2%	67	0.0%	1			0.0%	74	1.0	0.0



Sprucegrove

Rolling Annual Excess Benchmark Return

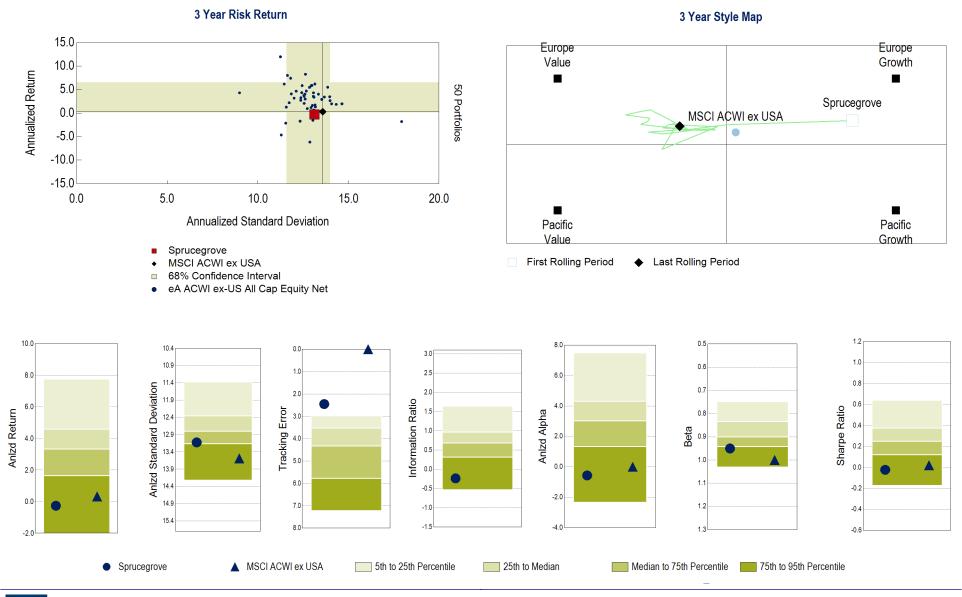


eA ACWI ex-US All Cap Equity Net Accounts



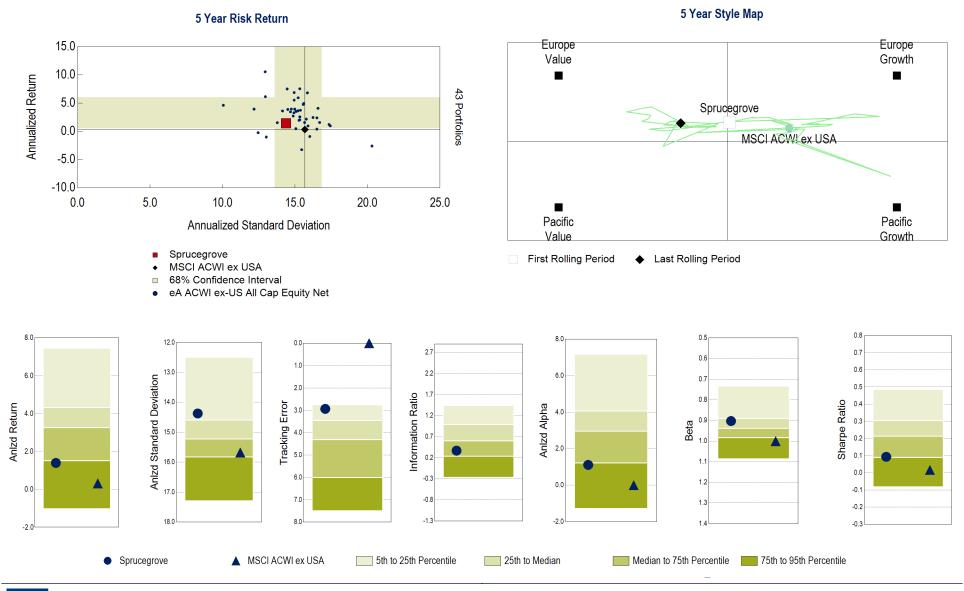


Spurcegrove

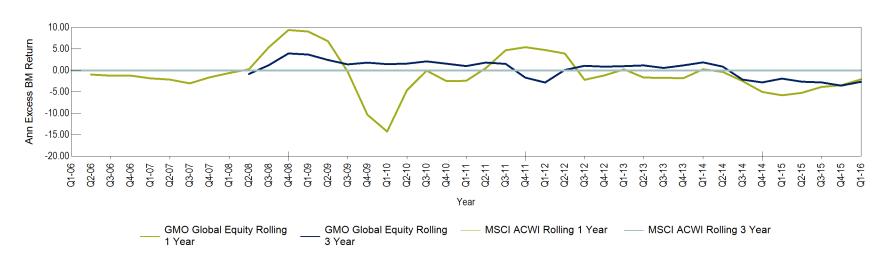




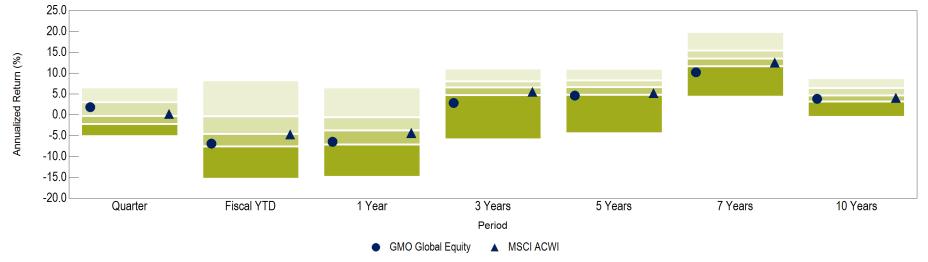
Spurcegrove



Rolling Annual Excess Benchmark Return



eA All Global Equity Net Accounts





3 Years Ending March 31

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	-0.3%	89	13.1%	73	2.5%	2	-0.2		-0.6%	89	1.0	0.0
MSCI ACWI ex USA	0.3%	88	13.6%	85	0.0%	1	-		0.0%	88	1.0	0.0

5 Years Ending March 31, 2016

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	1.4%	78	14.4%	19	2.9%	11	0.4	68	1.1%	77	0.9	0.1
MSCI ACWI ex USA	0.3%	89	15.7%	72	0.0%	1	-		0.0%	89	1.0	0.0

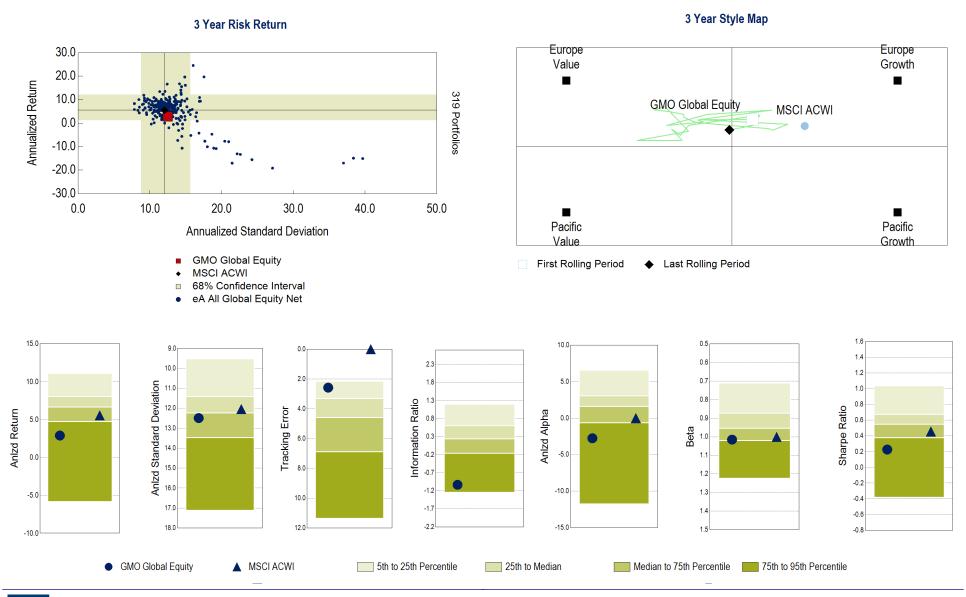
7 Years Ending March 31, 2016

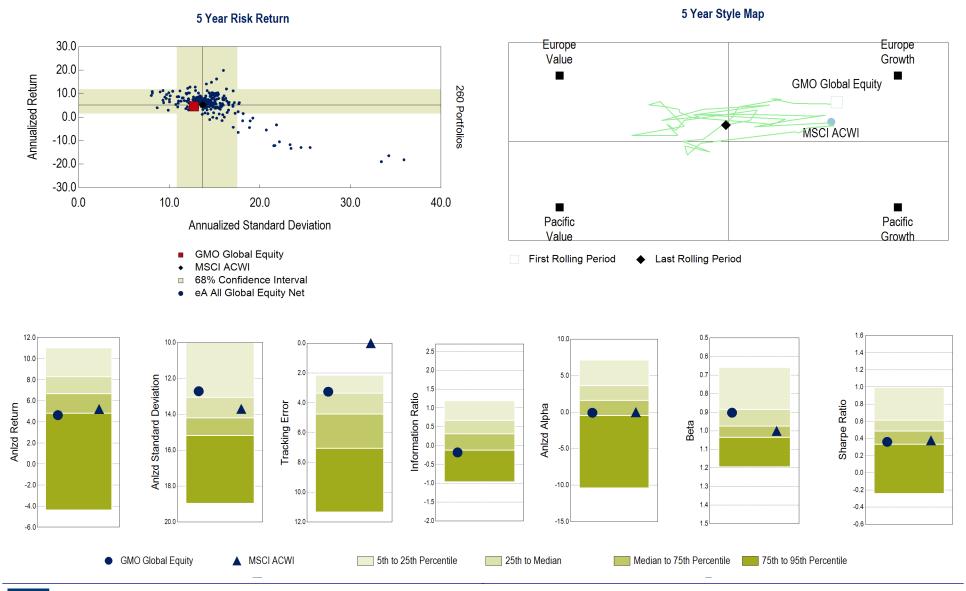
	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	9.9%	76	16.2%	21	3.7%	18	0.2	75	1.6%	68	0.9	0.6
MSCI ACWI ex USA	9.2%	81	17.6%	75	0.0%	1			0.0%	91	1.0	0.5

10 Years Ending March 31, 2016

	Anlzd Return	Rank	Anlzd Standard Deviation	Rank	Tracking Error	Rank	Information Ratio	Rank	Anlzd Alpha J	Rank	Beta	Sharpe Ratio
Sprucegrove	2.4%	70	17.4%	20	4.3%	33	0.1	68	0.6%	68	0.9	0.1
MSCI ACWI ex USA	1.9%	74	19.2%	67	0.0%	1			0.0%	74	1.0	0.0









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- Past performance is no guarantee of future results.
- The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.
- Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
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