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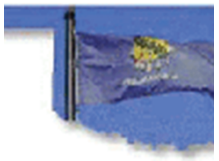

Oklahoma State Pension Commission

Investment Summary

Quarter Ending September 30, 2015

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Table of Contents

	Tab
Teachers	1
PERS	2
Firefighters	3
Police	4
Law	5
Judges	6
Wildlife	7

Market Environment Update and Outlook

Economic Environment

- **Third quarter GDP growth rate (first estimate) printed at a modest +1.5%.**
  - Retail sales (ended August) at +1.3% on a year-over-year growth rate basis. The same period last year YoY growth rate was 4.6%.
  - The inventory-to-sales ratio at August, 31 was flat at 1.4 and has remained relatively flat since early 2010.
  - Corporate profits (ended June) as a percent of GDP declined slightly vs first quarter GDP to 10.4% from 10.7% and remain elevated relative to historical levels.
  - The U.S. trade deficit widened in August.

- **The unemployment rate fell to 5.1% in Q3 from 5.3% in Q2 2014; U-6, a broader measure of unemployment, fell to 10.0% during the third quarter.**

- **The Case-Shiller Home Price Index (as of 9/30) increased slightly to 175.1 from second quarter levels (170.0) and is at levels higher than that of pre-financial crisis levels of 150.9.**

- **Rolling 12-month seasonally adjusted CPI decreased to -0.02% from +0.2% at the end of June; Capacity Utilization decreased slightly to 77.5% in September.**

- **Fed Funds rate remains at 0.25%, while the 10-year Treasury Yield finished Q3 at 2.2% down 20 basis points from Q2.**

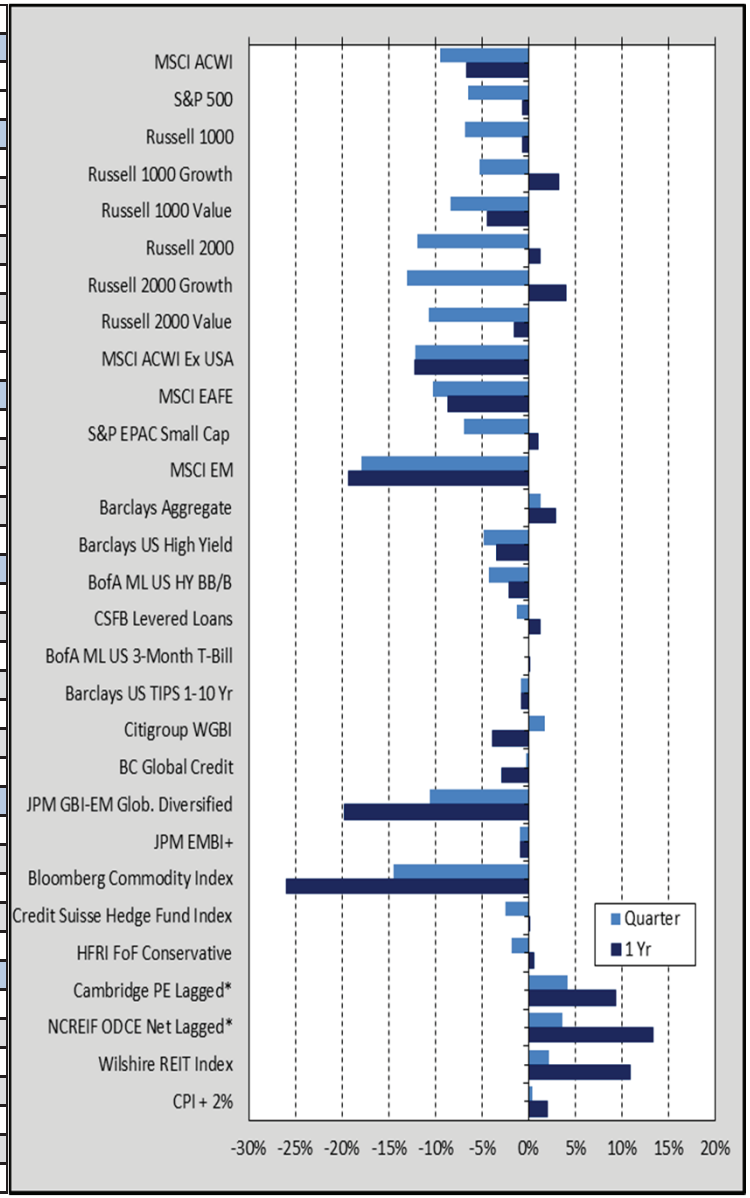
- **The Fed balance sheet remained flat in Q3 2015, while the European Central Bank balance sheet increased in the same period.**
  - ECB continues asset purchases of €60 billion per month.

- **S&P valuations decreased in September remaining above the 10-year and long-term averages**
  - Cyclically adjusted Shiller PE ratio (24.6x) is above the long-term average of 16.4x and above the 10-year average of 22.9x.

- **The U.S. Dollar continues its strength against a basket of major currencies as the Fed ends its quantitative easing program and the ECB continues easing.**
  - Currency volatility has seen a sustained uptick since Q1.

Market Environment – Q3 2015 Overview

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI	World	-9.4%	-6.7%	7.0%	6.8%	4.6%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Equity Benchmarks						
S&P 500	Large Core	-6.4%	-0.6%	12.4%	13.3%	6.8%
Russell 1000	Large Core	-6.8%	-0.6%	12.7%	13.4%	7.0%
Russell 1000 Growth	Large Growth	-5.3%	3.2%	13.6%	14.5%	8.1%
Russell 1000 Value	Large Value	-8.4%	-4.4%	11.6%	12.3%	5.7%
Russell 2000	Small Core	-11.9%	1.2%	11.0%	11.7%	6.5%
Russell 2000 Growth	Small Growth	-13.1%	4.0%	12.8%	13.3%	7.7%
Russell 2000 Value	Small Value	-10.7%	-1.6%	9.2%	10.2%	5.3%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	-12.2%	-12.2%	2.3%	1.8%	3.0%
MSCI EAFE	Int'l Developed	-10.2%	-8.7%	5.6%	4.0%	3.0%
S&P EPAC Small Cap	Small Cap Int'l	-6.9%	1.0%	10.7%	7.8%	5.8%
MSCI EM	Emerging Equity	-17.9%	-19.3%	-5.3%	-3.6%	4.3%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	1.2%	2.9%	1.7%	3.1%	4.6%
Barclays US High Yield	High Yield	-4.9%	-3.4%	3.5%	6.1%	7.3%
BofA ML US HY BB/B	High Yield	-4.3%	-2.1%	3.7%	6.0%	6.7%
CSFB Levered Loans	Bank Loans	-1.2%	1.2%	3.8%	4.8%	4.4%
BofA ML US 3-Month T-Bill	Cash	0.0%	0.0%	0.1%	0.1%	1.3%
Barclays US TIPS 1-10 Yr	Inflation	-0.9%	-0.8%	-1.4%	1.8%	3.6%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Global Fixed Income Benchmarks						
Citigroup WGBI	World Gov. Bonds	1.7%	-3.8%	-2.9%	-0.2%	3.4%
BC Global Credit	Global Bonds	-0.2%	-2.9%	0.6%	2.6%	4.3%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local)	-10.5%	-19.8%	-8.7%	-3.6%	4.5%
JPM EMBI+	Em. Mkt. Bonds	-0.9%	-0.9%	0.2%	4.2%	6.7%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
Alternative Benchmarks						
Bloomberg Commodity Index	Commodity	-14.5%	-26.0%	-16.0%	-8.9%	-5.7%
Credit Suisse Hedge Fund Index	Hedge Fund	-2.5%	0.1%	5.0%	4.5%	5.2%
HFRI FoF Conservative	Fund of Funds	-1.8%	0.6%	4.2%	2.8%	2.1%
Cambridge PE Lagged*	Private Equity	4.2%	9.3%	16.0%	15.7%	13.2%
NCREIF ODCE Net Lagged*	Real Estate	3.6%	13.4%	12.1%	13.3%	5.9%
Wilshire REIT Index	REIT	2.2%	10.9%	9.8%	12.4%	6.7%
CPI + 2%	Inflation/Real Assets	0.4%	2.0%	2.9%	3.7%	3.8%



* As of 6/30/2015

Positives

- **Divergence in monetary policies signaling different investment environments globally**
- **US Economy shows strength relative to other developed markets**
  - Low oil prices benefitting consumers
- **Global monetary stimulus flowing through to markets**
  - ECB €1.3 trillion in asset purchases in the Eurozone
  - Economic conditions in Europe and Japan responding to QE
  - China policy response remains stimulative with more tools available to deploy
- **Developed world inflation is low**
  - In US, CPI for all Urban Consumers on a seasonally adjusted basis was negative in Q3

Negatives

- **Volatility increased across global markets**
  - Financial and geo-political instability in the Mid-East, Eastern Europe, Greece
- **Slowing economic growth in China may have broad implications for many emerging economies**
  - China growth concerns sparked a rapid decline in commodities and emerging markets
- **Fed rate hike uncertainty contributed to volatility in domestic markets**
  - Fed signaled tightening to begin by year-end; market expecting a slow pace to rate increases
- **Valuations remain above 10 year and long term averages**
  - Developed Equity P/Es above median

Market Environment

Global Equity

- **U.S. equities posted sharp losses in the third quarter as global volatility ramped up.**
- **Small cap stocks underperformed large cap stocks during the quarter, with the Russell 2000 Index returning -11.9% and the Russell 1000 Index returning -6.8%.**
- **International equities underperformed U.S. markets during the quarter, returning -12.2%, as measured by the MSCI ACWI ex-U.S. Index.**
  - Developed markets returned -10.2% as measured by the MSCI EAFE Index. The Pacific Region led returns down posting a -13.1% with Singapore leading the group down -19.5%. Europe posted a loss of -8.7%.
  - Emerging markets returned -17.9% as measured by the MSCI Emerging Markets Index in U.S. dollar terms. Indonesia and China led to the downside returning -24.2% and -22.7% respectively.

Private Equity

- **New private equity commitments totaled $74.6 billion in Q3 2015.**
  - Represents a 25% decline from the $101.5 billion raised in Q2 2015, resulting from public equity market volatility and increased economic uncertainties
- **Buyout and growth equity funds raised $45.3 billion in Q3 2015.**
  - Annual pace is in line with the $180-190 billion that was raised in each of the past two years
- **Venture capital raised $10.0 billion ended Q3 2015.**
  - VC fundraising as a percent of total new PE funds is in line with historical post-dot com levels
- **Energy funds raised $7.8 billion representing 10% of capital raised in Q3 2015.**
  - Investors are opportunistically approaching the energy market dislocation.
- **Asian private equity commitments slowed to total 7% of total funds raised down from 11% in 2014.**
- **European commitments comprised 23% of all new PE commitments in Q3 2015.**
  - Fifteen pan-European buyout managers with closes on over $1 billion each raised over half of 2015 total

Fixed Income

- **The yield curve flattened significantly with long duration yields dropping 20-30 basis points.**
- **The spread between two and 10-year rates decreased to 142 basis points from 176 basis points ended June. Treasury Inflation-Protected Securities, or TIPS, returned -0.9% during the quarter, as measured by the Barclays US TIPS Index.**
- **The Barclays Long Duration Credit Index gained +0.5% as the long end of the curve ended the quarter 24 basis points lower.**
- **Long Treasuries gained +5.1% and investment-grade corporate debt gained +3.8%.**
- **The Barclays 1-3 year Government/ Credit Index returned 0.3% and US high yield bonds lost -4.9%.**
- **Emerging markets debt continued to slow in local and external currency.**
  - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, fell 90 basis points; local currency debt fell 10.5%, according to the JP Morgan GBI-EM Index.

Real Assets/Inflation-Linked Assets

- **Massive energy market dislocation.**
  - Oil prices trending lower.
  - Private equity and private debt opportunities attractive.
  - Potential for public stressed/distressed credit, equity and commodity plays.
- **OPEC and Saudi Arabia have indicated a willingness to allow lower oil prices to persist in efforts to cement market share and reduce marginal supply.**
- **Select infrastructure opportunities are attractive.**
  - Target opportunistic strategies in niche sub-sectors to take advantage of market dislocations.
- **NEPC continues to believe in the long-term demand drivers in agriculture.**
  - Long-term commodity prices driven by growing emerging market demand.
  - Softness in commodity prices may provide attractive entry point.
- **Timber opportunity set limited but warrants further review**
  - 45% increase in housing starts forecasted; timber prices highly correlated

Commodities

- **Commodities retracted significantly with the Bloomberg Commodity Index posting a -14.5%.**
  - Energy led the way losing -24% (WTI Oil), while industrial metals, precious metals and agriculture declined.

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.**

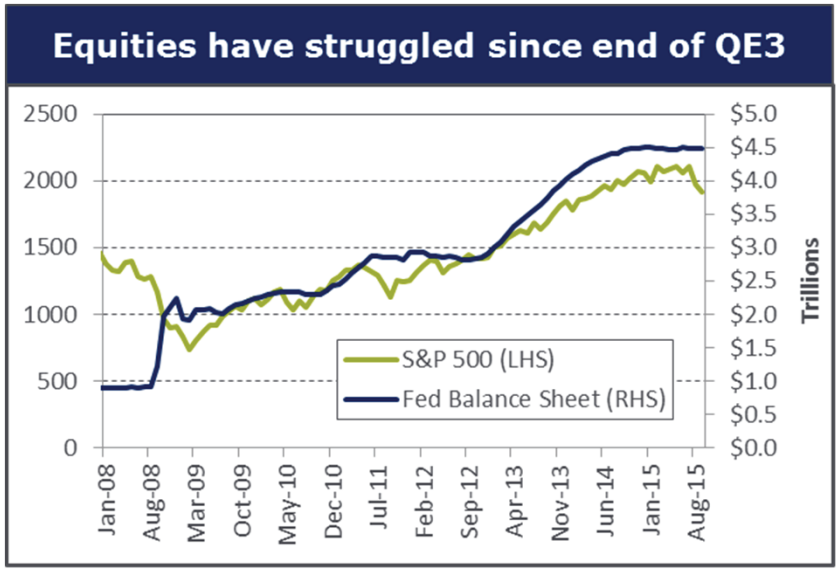
- **Within U.S. core real estate, strong fundamentals continue to be the story along with attractive income spreads relative to interest rates.**
  - Real estate fundamentals and debt terms are attractive, however valuations are high and the possibility of rising interest rates and the impact on cap rates causes concern.

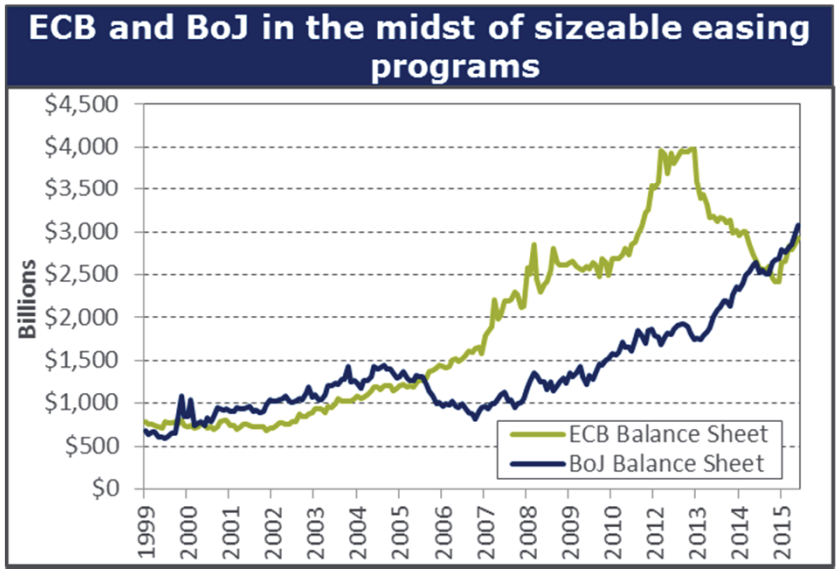
- **U.S. REITs posted modest gains with a +2.2% return.**
  - FFO multiples are high, at approximately 15x but are decreasing.
  - REITs are trading at a discount to NAV.

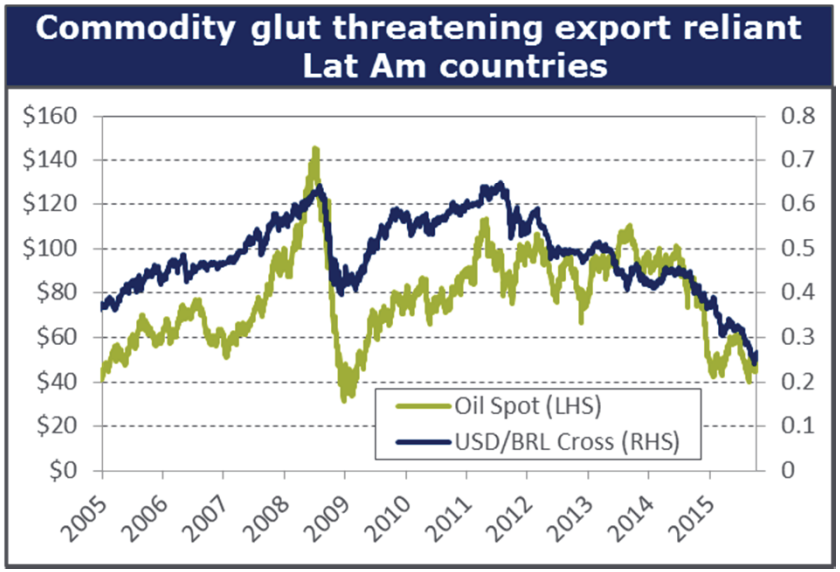
- **Overall, the non-core real estate investment environment in the U.S. is normalizing; however, select areas remain attractive.**

- **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.

Global Risks are Diverse and Unique

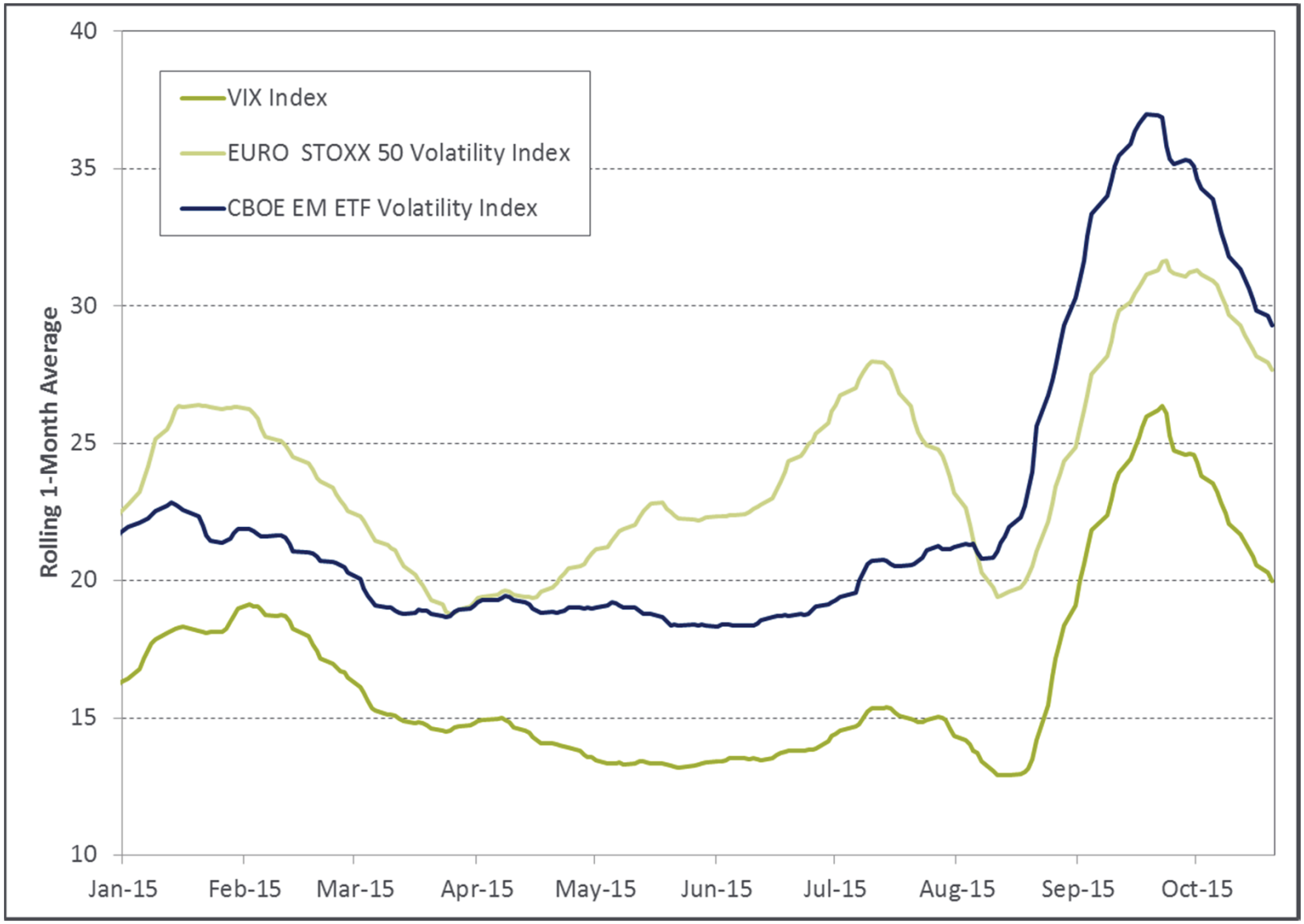






Sources: Standard & Poors, The Federal Reserve, ECB, BoJ, Bloomberg Energy, Bloomberg

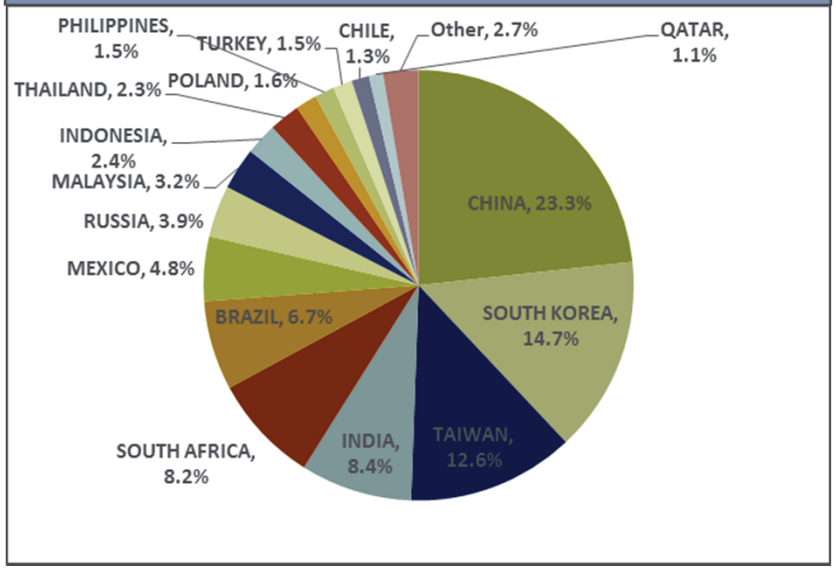
Increase in Global Volatility Finally Caught Up with Equities



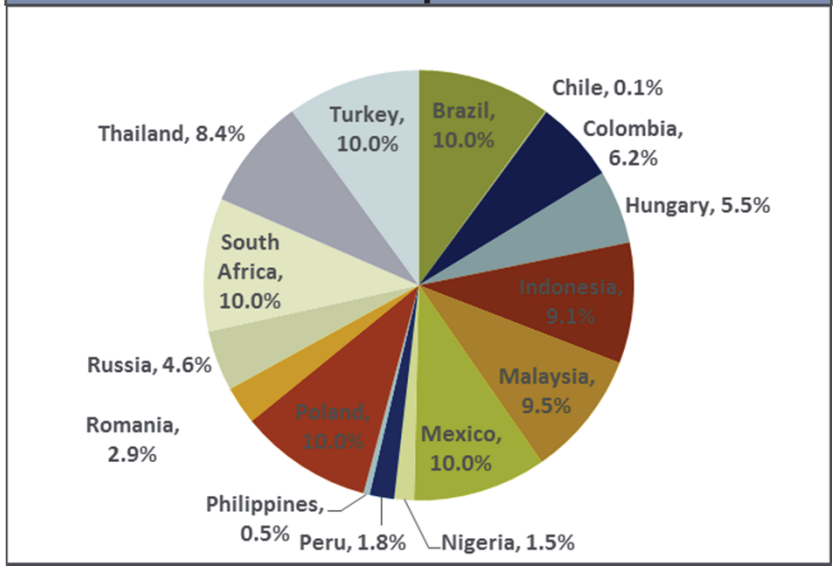
Source: Deutsche Borse, Goldman Sachs, CBOE, Bloomberg

Currency Risks are Not Only Unique by Country but also Vary Across Indices

MSCI EM Index Composition



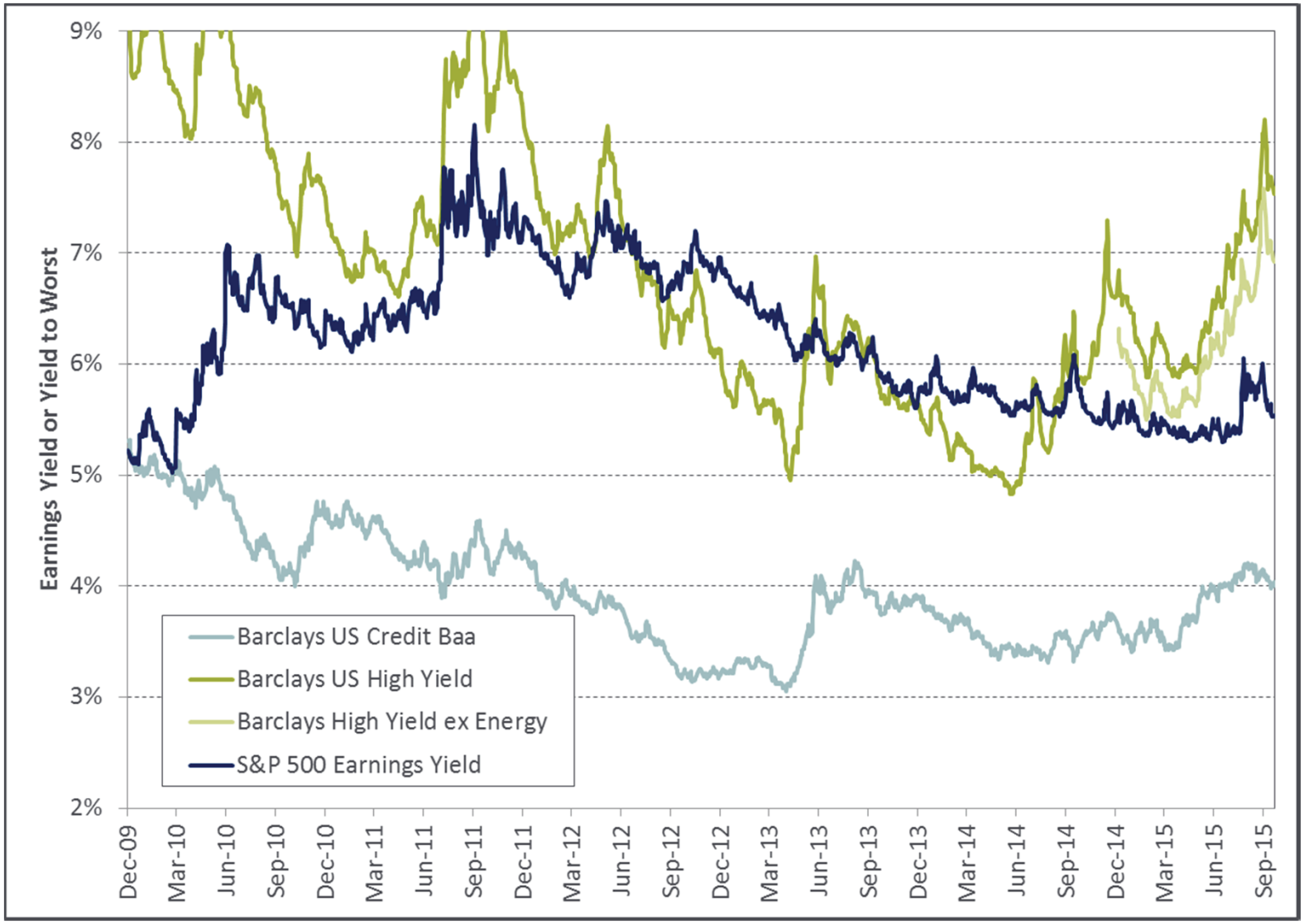
JPM GBI-EM Global Diversified Index Composition



- **MSCI EM Index dominated by Asia**
  - Lots of countries with sensitivity to Chinese growth and competitiveness
  - Despite possibility for further depreciation, most currencies appear cheap or reasonably valued

- **Debt indices more concentrated in Latin/South America with exposure to balance of payments challenged countries**
  - Currencies of major commodity exporters are sensitive to oil and other commodity price weakness – but also stand to benefit from a rebound
  - Structural issues in Turkey and Brazil pose significant challenges but with less contagion risk

High Yield Issues Now Yielding >7% in Otherwise Low Yield World



Source: Barclays, Standard & Poors, Bloomberg

Third Quarter 2015 Market Actions

- **Risk-return profile of US high yield is attractive relative to US equities**
  - High yield credit spreads now exceed long-term averages with yields near 2012 levels
  - Make use of dynamic credit strategies as disruptions in credit markets move rapidly
  - Dollar strength is a headwind for equity earnings growth and profit margin expansion
- **Recommend an overweight exposure to developed market equities**
  - Suggest investors opportunistically exploit potential volatility to add to the overweight
  - Long-term opportunity remains as earnings improve off cyclical lows in Europe/Japan
  - Offers a more favorable return outlook with superior valuations relative to US equities
- **Recommend at minimum a market weight exposure to EM equities**
  - Reasonable equity valuations, depressed currencies, and the attractiveness of long-term fundamentals represent a solid investment foundation
  - Volatility likely to continue as falling commodity prices, trade linkages to China, and external debt levels pose idiosyncratic country risks
  - Encourage the use of benchmark agnostic strategies with a bias towards small-cap and consumer focused strategies
- **Inflation expectations at historical lows but value opportunities can be found in inflation-sensitive assets**
  - Encourage patience as volatility and opportunities evolve in commodity markets
  - Private strategies are evolving but provide compelling return opportunities

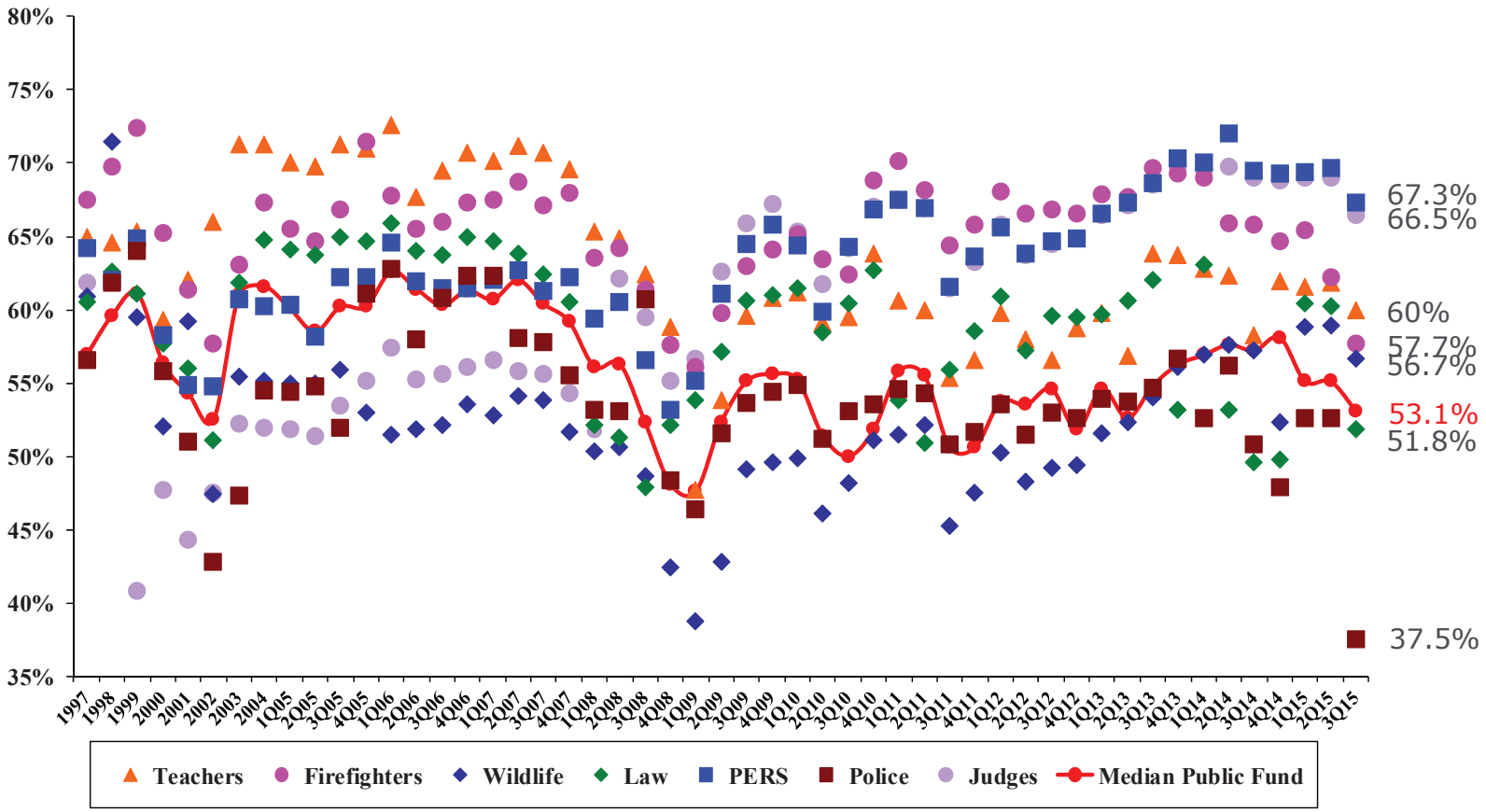
Asset Allocation Summary

Key Policy Items		Teachers^	PERS*	Firefighters	Police **	Law	Judges	Wildlife
TOTAL EQUITY	**Target**	60.0%	68.0%	57.0%	50.0%	55.0%	68.0%	50.0%
	Actual	59.9%	68.2%	60.0%	51.2%	58.0%	66.5%	56.7%
	Range	44-76	59.2-76.8	42-62	25-80	55-65	59.2-76.8	40-65
Large Cap	**Target**	22.5%	38.0%	29.4%	15.0%	20.0%	38.0%	50.0%
	Actual	19.2%	39.7%	33.0%	17.2%	28.2%	38.2%	40.3%
	Range	17.5-27.5	35-41	24.4-34.4	10-20	15-25	35-41	40-65
MidCap	**Target**	12.5%	-	-	-	-	-	0.0%
	Actual	14.8%						5.8%
	Range	7.5-17.5	-	-	-	-	-	0-10
Small Cap	**Target**	10.0%	6.0%	12.6%	5.0%	10.0%	6.0%	0.0%
	Actual	10.3%	6.3%	13.7%	6.8%	6.4%	6.3%	3.0%
	Range	9-11	3.2-8.8	7.6-17.6	0-15	5-15	3.2-8.8	0-10
International l Equity	**Target**	15.0%	24.0%	15.0%	15.0%	15.0%	24.0%	0.0%
	Actual	15.6%	22.2%	13.2%	13.5%	12.8%	22.0%	7.6%
	Range	10-20	21-27	10-20	5-25	5-15	21-27	0-15
Long/Short Equity	**Target**	-	-	-	15.0%	10.0%	-	-
	Actual			0.1%	13.7%	10.6%		
	Range	-	-	-	10-20	5-15	-	-
TOTAL FIXED INCOME	**Target**	25.0%	32.0%	20.0%	15.0%	30.0%	32.0%	40.0%
	Actual	22.0%	32.5%	17.8%	17.4%	28.7%	33.2%	38.7%
	Range	20-30	27.5-36.5	10-30	10-20	25-35	27.5-36.5	35-55
Dom. Fixed Income/High Yield	**Target**	25.0%	32.0%	13.0%	-	20.0%	32.0%	40.0%
	Actual	22.0%	32.5%	11.5%		19.9%	33.2%	38.7%
	Range	20-30	27.5-36.5	0-28	-	15-25	27.5-36.5	35-55
Int'l & Global Fixed Income	**Target**	-	-	7.0%	15.0%	10.0%	-	-
	Actual			6.3%	17.4%	8.8%		
	Range	-	-	2-12	10-20	5-15	-	-
TOTAL ALTERNATIVES	**Target**	15.0%	-	23.0%	35.0%	15.0%	-	10.0%
	Actual	17.7%		21.9%	30.4%	13.2%		2.3%
	Range	17.1-20.9	-	5-40	10-60	5-15	-	0-10
Low Volatility Hedge Funds	**Target**	-	-	5.0%	10.0%	-	-	-
	Actual			7.0%	8.6%			
	Range	-	-	0-10	5-15	-	-	-
Private Equity/MLP's	**Target**	10.0%	-	8.0%	10.0%	5.0%	-	-
	Actual	11.6%		2.8%	9.4%	2.7%		
	Range	5-15	-	0-15	5-15	0-5	-	-
Real Estate/Real Assets	**Target**	5.0%	-	10.0%	15.0%	10.0%	-	-
	Actual	6.1%		12.1%	12.4%	10.5%		
	Range	0-10	-	5-15	0-30	2-12	-	-
CASH	**Actual**	0.3%	0.3%	0.4%	1.0%	0.2%	0.3%	2.3%
Actuarial Assumed Rates		**8.0%**	**7.5%**	**7.5%**	**7.5%**	**7.5%**	**7.5%**	**7.0%**

Out of Range

^Master Limited Partnerships included in Private Equity allocation.
*The Russell 3000 index was broken down into Large Cap & Small Cap allocations for the PERS retirement plan
**Real Assets are included in Real Estate
Please note that allocations may not add to 100% due to rounding.

Equity Commitment



*Cash allocations not broken out for individual managers.

Performance Attribution

MANAGER IMPACT

	QTR	YTD	1 YR	3 YR	5 YR
TEACHERS	-1.10	-0.40	-2.00	0.80	0.80
PERS	-0.40	0.10	0.00	0.40	0.70
FIREFIGHTERS	0.40	1.50	1.70	0.80	0.10
POLICE	0.60	1.50	1.60	0.90	0.00
LAW	-1.10	-0.30	-0.70	0.50	0.20
JUDGES	0.00	0.10	0.10	0.20	0.30
WILDLIFE	0.20	0.50	0.60	0.70	0.20

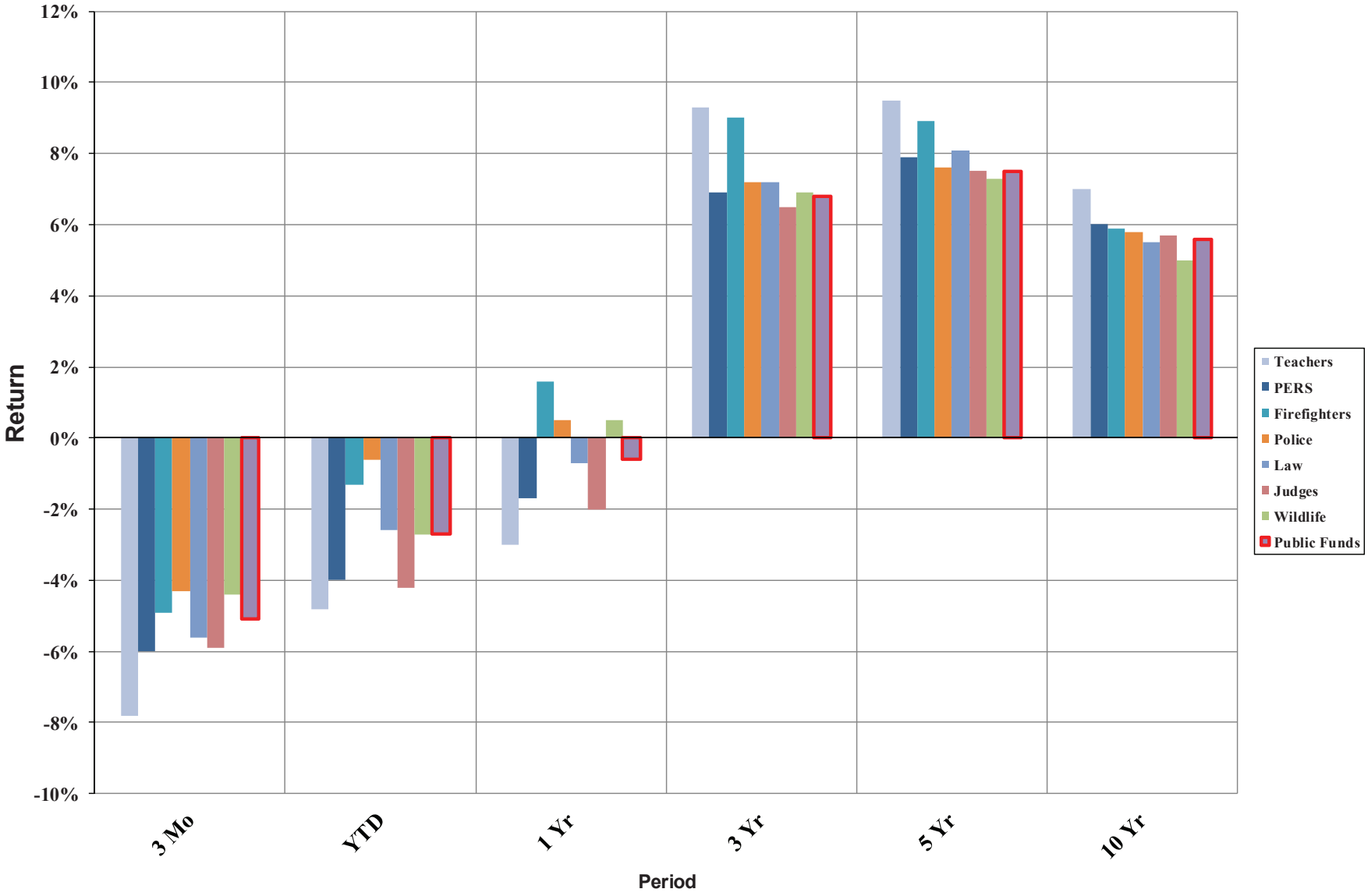
ALLOCATION IMPACT

	QTR	YTD	1 YR	3 YR	5 YR
TEACHERS	-0.30	0.60	2.10	1.60	0.50
PERS	0.20	0.00	0.20	0.20	-0.10
FIREFIGHTERS	-0.90	-0.50	-0.70	-0.50	-0.60
POLICE	1.10	2.10	3.00	0.80	0.00
LAW	-0.10	-0.40	-1.10	-1.00	-0.40
JUDGES	1.50	1.30	1.40	0.60	0.30
WILDLIFE	-1.40	-1.00	-1.10	-1.20	-1.20

POLICY IMPACT

	QTR	YTD	1 YR	3 YR	5 YR
TEACHERS	-1.30	-2.30	-2.50	0.10	0.70
PERS	-0.70	-1.40	-1.30	-0.50	-0.20
FIREFIGHTERS	0.70	0.40	1.20	1.90	1.90
POLICE	-0.90	-1.50	-3.50	-1.30	0.10
LAW	0.70	0.80	1.70	0.90	0.80
JUDGES	-2.30	-2.90	-2.90	-1.10	-0.60
WILDLIFE	1.90	0.50	1.60	0.60	0.80

Performance Return



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Oklahoma State Pension Commission	**26,710,210,323**	**100.0**	**-6.6**	**95**	**-3.9**	**84**	**-1.9**	**77**	**8.2**	**13**	**8.7**	**13**	**6.4**	**12**
S&P 500			*-6.4*	*93*	*-5.3*	*99*	*-0.6*	*52*	*12.4*	*1*	*13.3*	*1*	*6.8*	*4*
Barclays Aggregate			*1.2*	*1*	*1.1*	*1*	*2.9*	*1*	*1.7*	*99*	*3.1*	*99*	*4.6*	*93*
60% S&P 500 / 40% BC Agg			*-3.4*	*5*	*-2.6*	*50*	*1.0*	*11*	*8.1*	*15*	*9.3*	*5*	*6.2*	*15*
MSCI EAFE			*-10.2*	*99*	*-5.3*	*99*	*-8.7*	*99*	*5.6*	*81*	*4.0*	*99*	*3.0*	*99*
Teachers	13,170,597,939	49.3	-7.8	99	-4.8	97	-3.0	88	9.3	1	9.5	3	7.0	2
TEACHERS Allocation Index			*-6.7*	*95*	*-4.4*	*93*	*-1.0*	*60*	*8.5*	*11*	*8.7*	*13*	*6.3*	*14*
TEACHERS Policy Index			*-6.4*	*93*	*-5.0*	*99*	*-3.1*	*91*	*6.9*	*50*	*8.2*	*32*	*5.8*	*39*
PERS	8,052,670,282	30.1	-6.0	84	-4.0	86	-1.7	74	6.9	51	7.9	41	6.0	27
PERS Allocation Index			*-5.6*	*75*	*-4.1*	*88*	*-1.7*	*75*	*6.5*	*62*	*7.2*	*59*	*5.7*	*46*
PERS Policy Index			*-5.8*	*80*	*-4.1*	*87*	*-1.9*	*77*	*6.3*	*68*	*7.3*	*56*	*5.7*	*43*
Firefighters	2,133,536,853	8.0	-4.9	45	-1.3	13	1.6	5	9.0	4	8.9	10	5.9	32
FIREFIGHTERS Allocation Index			*-5.3*	*61*	*-2.8*	*54*	*-0.1*	*35*	*8.2*	*14*	*8.8*	*12*	*5.9*	*35*
FIREFIGHTERS Policy Index			*-4.4*	*26*	*-2.3*	*39*	*0.6*	*18*	*8.7*	*7*	*9.4*	*5*	*6.3*	*14*
Police	2,144,222,299	8.0	-4.3	24	-0.6	6	0.5	21	7.2	46	7.6	48	5.8	42
POLICE Allocation Index			*-4.9*	*43*	*-2.1*	*32*	*-1.1*	*62*	*6.3*	*70*	*7.6*	*46*	*5.5*	*54*
POLICE Policy Index			*-6.0*	*85*	*-4.2*	*90*	*-4.1*	*97*	*5.5*	*82*	*7.6*	*48*	*5.1*	*78*
Law	833,472,305	3.1	-5.6	73	-2.6	51	-0.7	54	7.2	47	8.1	37	5.5	59
LAW Allocation Index			*-4.5*	*31*	*-2.3*	*38*	*0.0*	*32*	*6.7*	*54*	*7.9*	*39*	*5.7*	*43*
LAW Policy Index			*-4.4*	*27*	*-1.9*	*24*	*1.1*	*9*	*7.7*	*29*	*8.3*	*28*	*6.0*	*27*
Judges	280,602,675	1.1	-5.9	82	-4.2	89	-2.0	78	6.5	61	7.5	53	5.7	44
JUDGES Allocation Index			*-5.9*	*82*	*-4.3*	*90*	*-2.1*	*79*	*6.3*	*67*	*7.2*	*59*	*5.4*	*63*
JUDGES Policy Index			*-7.4*	*99*	*-5.6*	*99*	*-3.5*	*94*	*5.7*	*78*	*6.9*	*64*	*5.2*	*75*
Wildlife	95,107,970	0.4	-4.4	29	-2.7	51	0.5	21	6.9	51	7.3	55	5.0	82
WILDLIFE Allocation Index			*-4.6*	*36*	*-3.2*	*69*	*-0.1*	*35*	*6.2*	*71*	*7.1*	*61*	*5.3*	*69*
WILDLIFE Policy Index			*-3.2*	*5*	*-2.2*	*33*	*1.0*	*10*	*7.4*	*42*	*8.3*	*30*	*6.1*	*24*
InvestorForce Public DB Gross Median			*-5.0*		*-2.6*		*-0.6*		*6.9*		*7.5*		*5.6*	

Returns are gross of manager fees.

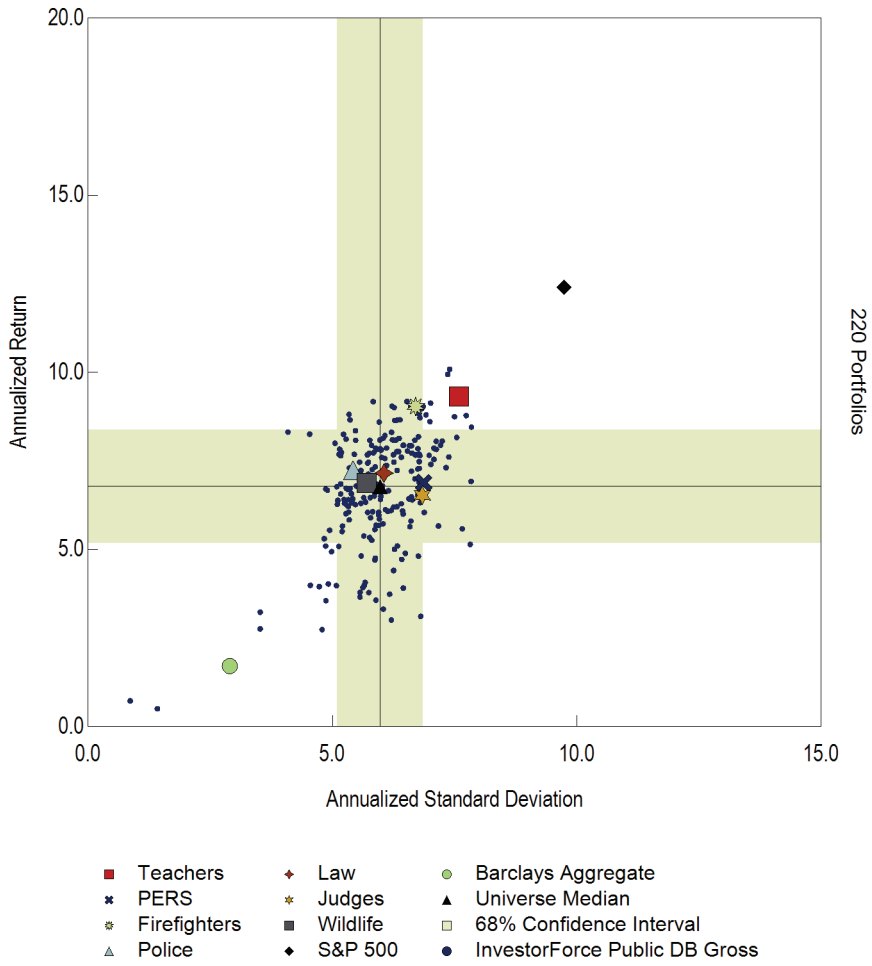
Total Fund Performance Detail

	Market Value ($)	% of Portfolio	2014 (%)	Rank	2013 (%)	Rank	2012 (%)	Rank	2011 (%)	Rank	2010 (%)	Rank
Oklahoma State Pension Commission	**26,710,210,323**	**100.0**	**7.5**	**12**	**20.4**	**7**	**13.7**	**19**	**1.1**	**43**	**13.8**	**31**
S&P 500			*13.7*	*1*	*32.4*	*1*	*16.0*	*1*	*2.1*	*20*	*15.1*	*9*
Barclays Aggregate			*6.0*	*45*	*-2.0*	*99*	*4.2*	*99*	*7.8*	*1*	*6.5*	*98*
60% S&P 500 / 40% BC Agg			*10.6*	*1*	*17.6*	*30*	*11.3*	*71*	*4.7*	*2*	*12.1*	*66*
MSCI EAFE			*-4.9*	*99*	*22.8*	*1*	*17.3*	*1*	*-12.1*	*99*	*7.8*	*97*
Teachers	13,170,597,939	49.3	8.1	4	24.0	1	14.7	4	0.9	51	15.9	4
TEACHERS Allocation Index			*8.2*	*4*	*21.2*	*3*	*12.4*	*49*	*0.9*	*51*	*14.0*	*26*
TEACHERS Policy Index			*6.7*	*28*	*18.7*	*20*	*12.9*	*38*	*1.7*	*29*	*14.5*	*18*
PERS	8,052,670,282	30.1	7.4	15	16.6	40	12.9	38	1.8	28	12.5	58
PERS Allocation Index			*7.0*	*21*	*15.9*	*48*	*12.2*	*53*	*0.1*	*70*	*12.3*	*61*
PERS Policy Index			*7.0*	*21*	*15.3*	*53*	*12.5*	*49*	*1.1*	*40*	*12.9*	*51*
Firefighters	2,133,536,853	8.0	6.9	24	21.1	3	12.6	46	-0.2	74	12.6	57
FIREFIGHTERS Allocation Index			*6.1*	*40*	*21.5*	*3*	*12.3*	*52*	*0.7*	*59*	*13.7*	*33*
FIREFIGHTERS Policy Index			*8.7*	*3*	*19.8*	*12*	*12.6*	*45*	*2.4*	*15*	*13.2*	*43*
Police	2,144,222,299	8.0	5.1	68	16.1	46	12.1	54	0.0	70	11.2	80
POLICE Allocation Index			*5.0*	*70*	*14.8*	*59*	*13.5*	*25*	*0.1*	*70*	*13.8*	*30*
POLICE Policy Index			*4.5*	*79*	*14.8*	*59*	*14.3*	*8*	*2.5*	*13*	*13.5*	*39*
Law	833,472,305	3.1	6.8	28	16.8	38	11.6	66	1.9	24	15.1	9
LAW Allocation Index			*7.1*	*20*	*14.6*	*62*	*12.1*	*55*	*2.2*	*17*	*13.1*	*45*
LAW Policy Index			*7.0*	*21*	*17.5*	*31*	*11.6*	*69*	*1.9*	*23*	*13.0*	*49*
Judges	280,602,675	1.1	7.0	22	16.0	47	12.9	39	0.9	52	13.2	45
JUDGES Allocation Index			*6.7*	*29*	*15.9*	*48*	*12.1*	*54*	*1.1*	*44*	*11.3*	*79*
JUDGES Policy Index			*7.0*	*21*	*15.3*	*53*	*12.5*	*47*	*1.1*	*40*	*12.9*	*51*
Wildlife	95,107,970	0.4	7.9	7	15.5	50	9.1	92	2.5	14	10.4	87
WILDLIFE Allocation Index			*7.7*	*10*	*14.4*	*64*	*9.8*	*83*	*2.7*	*11*	*10.8*	*82*
WILDLIFE Policy Index			*9.5*	*1*	*15.4*	*51*	*10.3*	*80*	*3.7*	*4*	*12.3*	*61*
InvestorForce Public DB Gross Median			*5.8*		*15.5*		*12.4*		*0.9*		*12.9*	

Returns are gross of manager fees.

Total Fund Risk/Return - 3 Years

3 Years Ending September 30, 2015



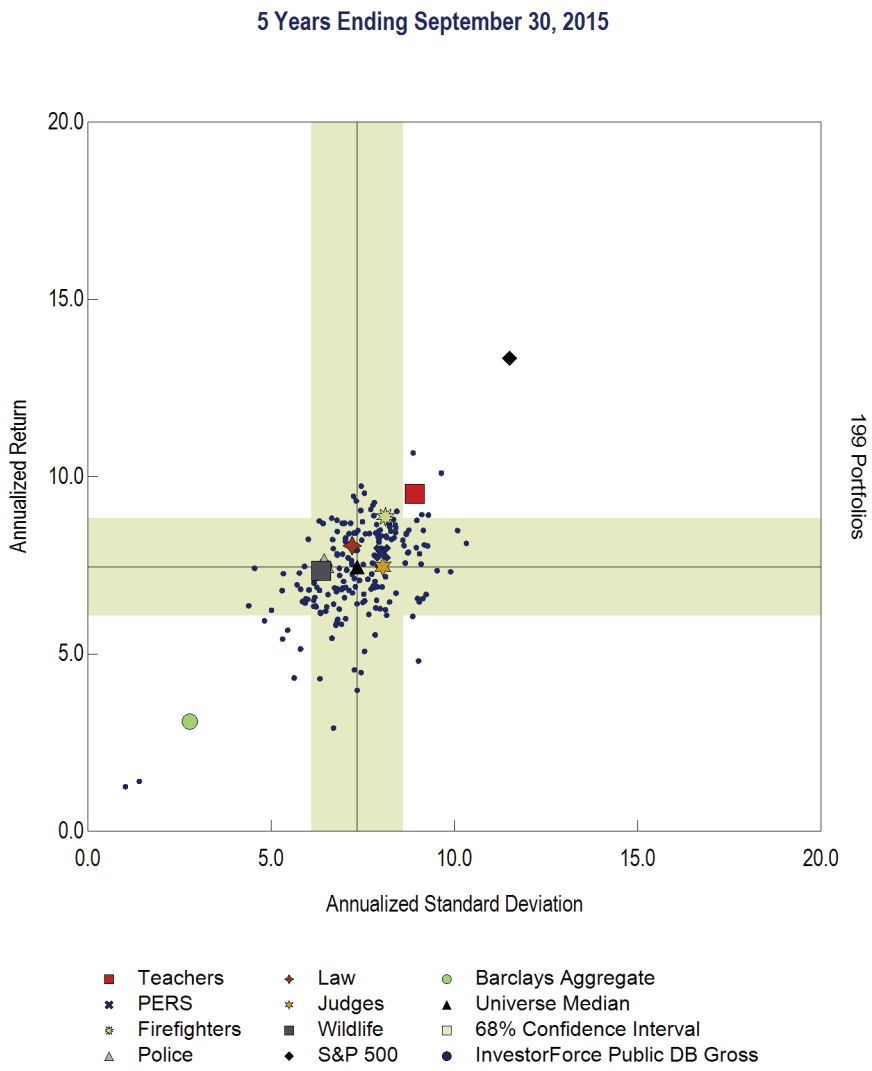
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Oklahoma State Pension Commission	8.25%	13	7.00%	92
Teachers	9.31%	1	7.59%	98
PERS	6.88%	49	6.87%	90
Firefighters	9.04%	4	6.70%	82
Police	7.23%	44	5.42%	25
Law	7.15%	46	6.06%	56
Judges	6.53%	58	6.84%	89
Wildlife	6.88%	49	5.70%	35

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
Oklahoma State Pension Commission	1.17	45	2.01	48
Teachers	1.22	36	2.06	44
PERS	1.00	72	1.62	73
Firefighters	1.34	15	2.55	9
Police	1.33	18	2.48	15
Law	1.18	45	2.01	48
Judges	0.95	79	1.59	76
Wildlife	1.20	39	2.07	44

Total Fund Risk/Return - 5 Years



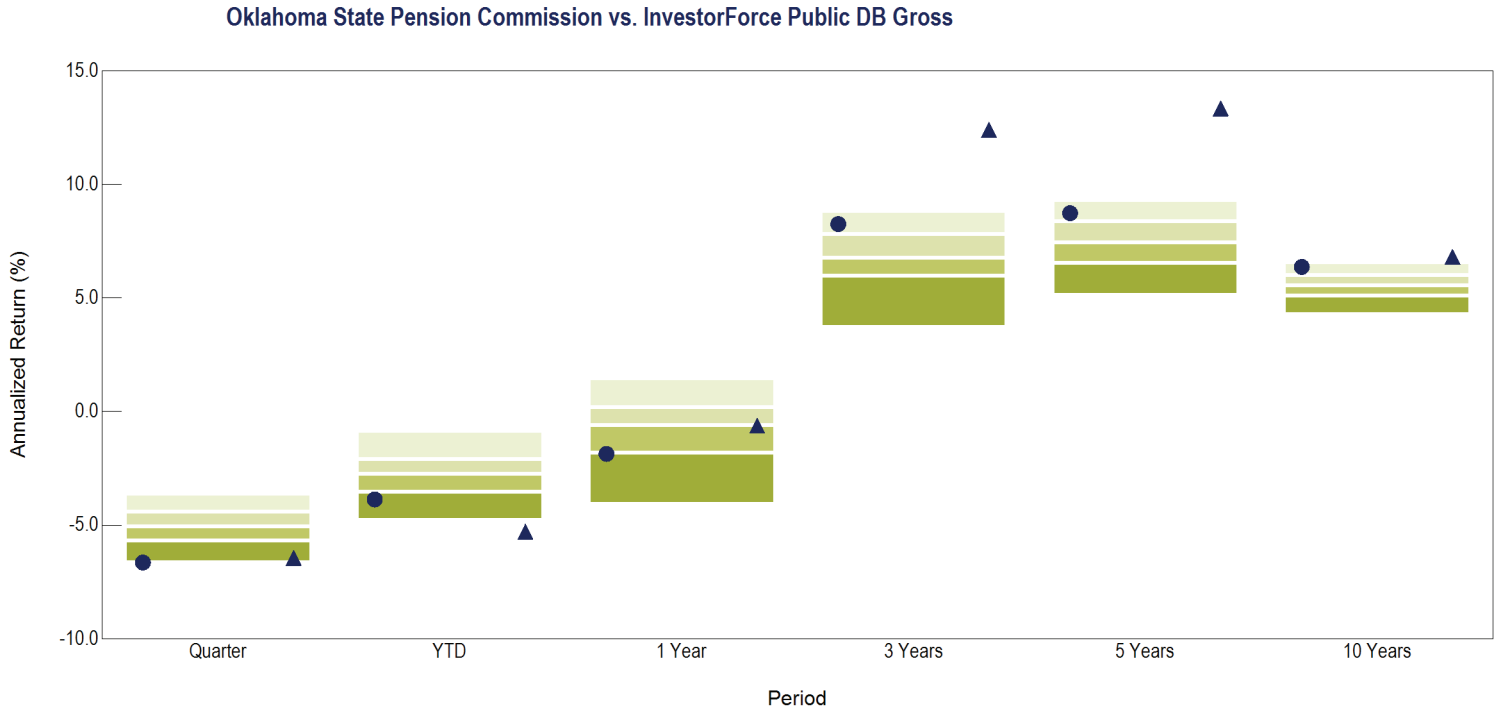
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Oklahoma State Pension Commission	8.73%	13	8.24%	79
Teachers	9.51%	3	8.92%	91
PERS	7.85%	41	8.02%	75
Firefighters	8.87%	10	8.11%	76
Police	7.57%	46	6.45%	21
Law	8.05%	36	7.21%	44
Judges	7.46%	51	8.04%	75
Wildlife	7.35%	53	6.36%	19

5 Years Ending September 30, 2015

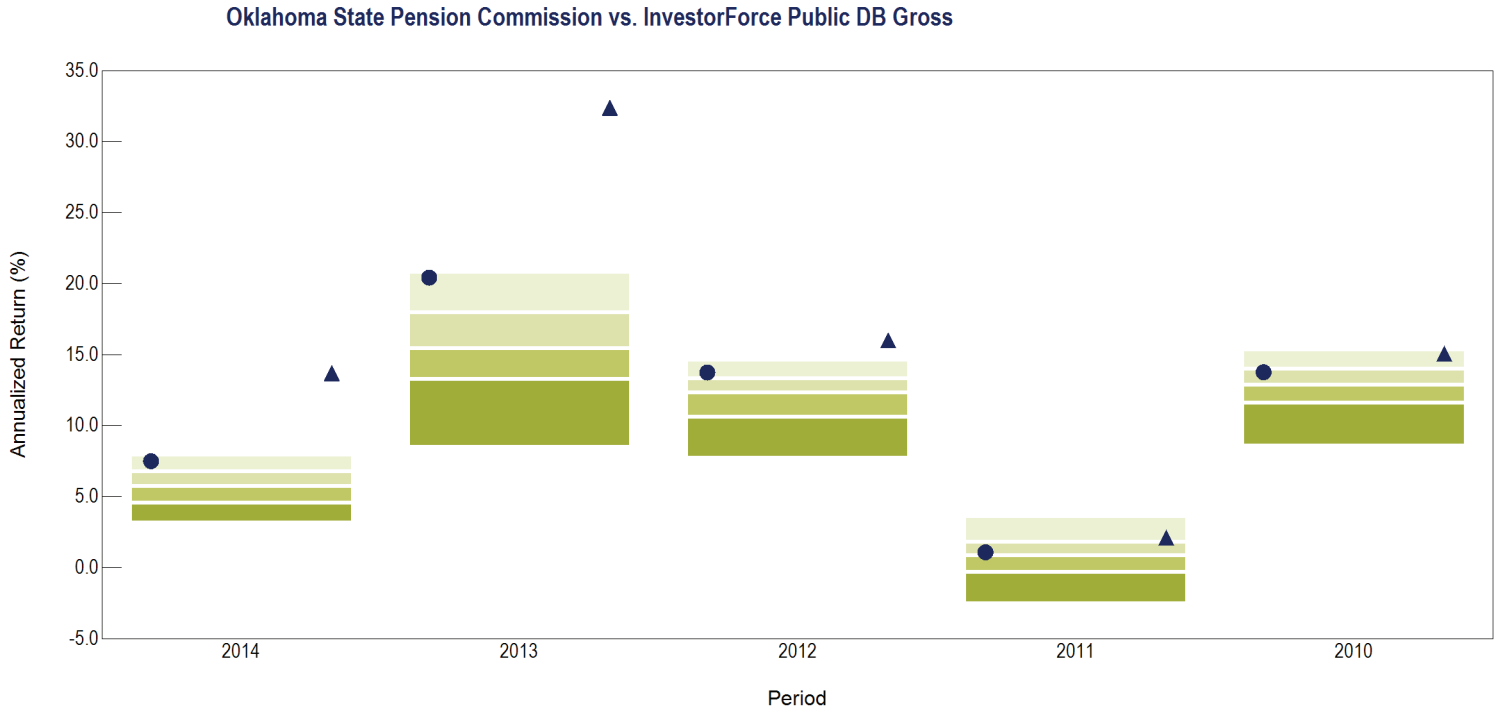
	Sharpe Ratio	Rank	Sortino Ratio	Rank
Oklahoma State Pension Commission	1.05	40	1.59	35
Teachers	1.06	38	1.59	35
PERS	0.97	61	1.51	46
Firefighters	1.09	32	1.61	34
Police	1.17	18	1.72	19
Law	1.11	28	1.62	31
Judges	0.92	73	1.45	58
Wildlife	1.15	22	1.74	18

Total Fund Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.6		-0.9		1.4		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1		4.3	
# of Portfolios	258		250		247		220		199		163	
● Oklahoma State Pension Commission	-6.6	(96)	-3.9	(84)	-1.9	(76)	8.2	(13)	8.7	(13)	6.4	(12)
▲ S&P 500	-6.4	(94)	-5.3	(98)	-0.6	(51)	12.4	(1)	13.3	(1)	6.8	(4)

Total Fund Return Summary vs. Peer Universe



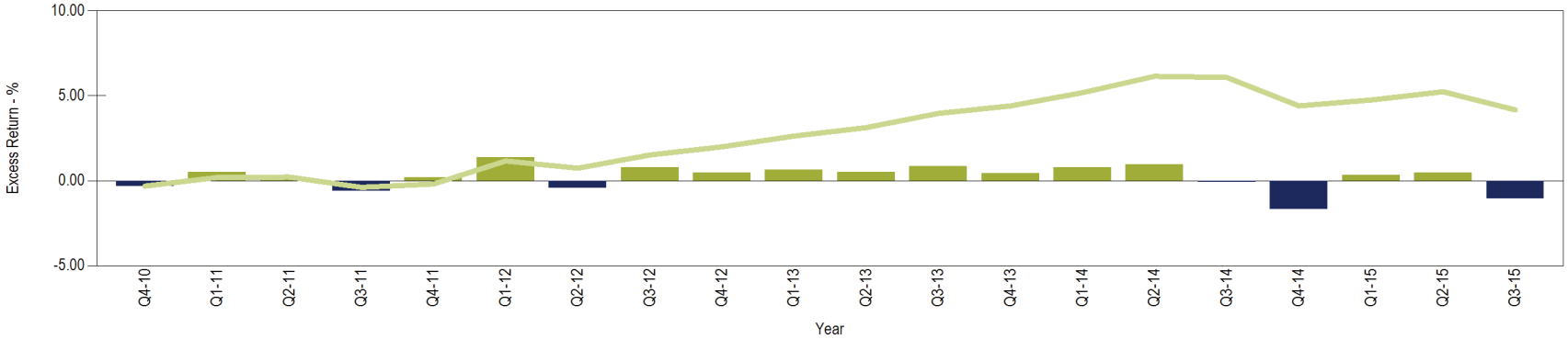
	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● Oklahoma State Pension Commission	7.5	(12)	20.4	(7)	13.7	(19)	1.1	(43)	13.8	(31)
▲ S&P 500	13.7	(1)	32.4	(1)	16.0	(1)	2.1	(20)	15.1	(9)

Oklahoma Teachers

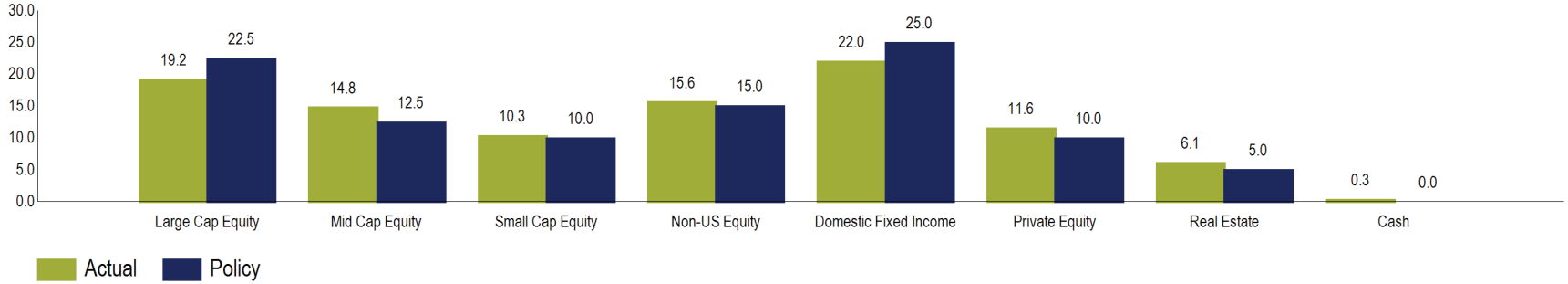
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK TEACHERS	**$13,170,597,939**	**-7.8%**	**99**	**-4.7%**	**95**	**-2.9%**	**88**	**9.3%**	**1**	**9.5%**	**3**	**7.0%**	**2**
TEACHERS Allocation Index		*-6.7%*	*96*	*-4.4%*	*93*	*-1.0%*	*59*	*8.5%*	*11*	*8.7%*	*13*	*6.3%*	*13*
TEACHERS Policy Index		*-6.4%*	*94*	*-5.0%*	*98*	*-3.1%*	*90*	*6.9%*	*48*	*8.2%*	*31*	*5.8%*	*39*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

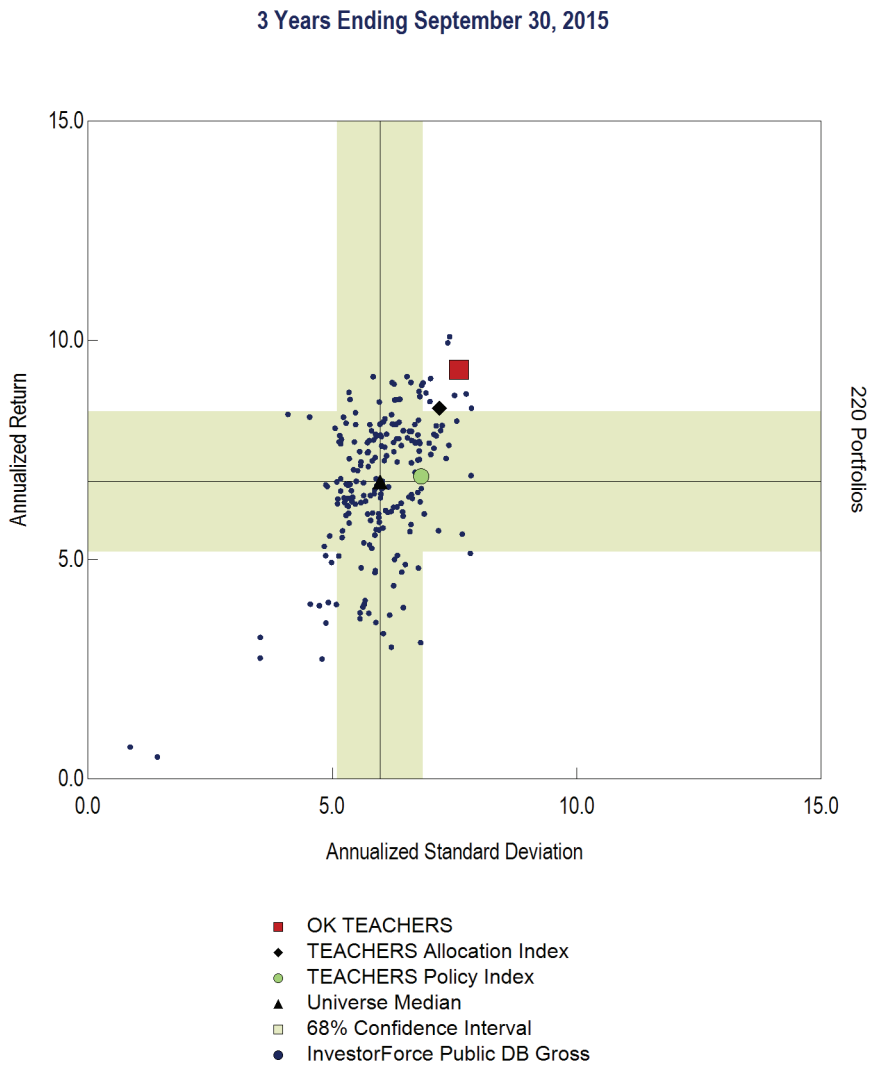
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



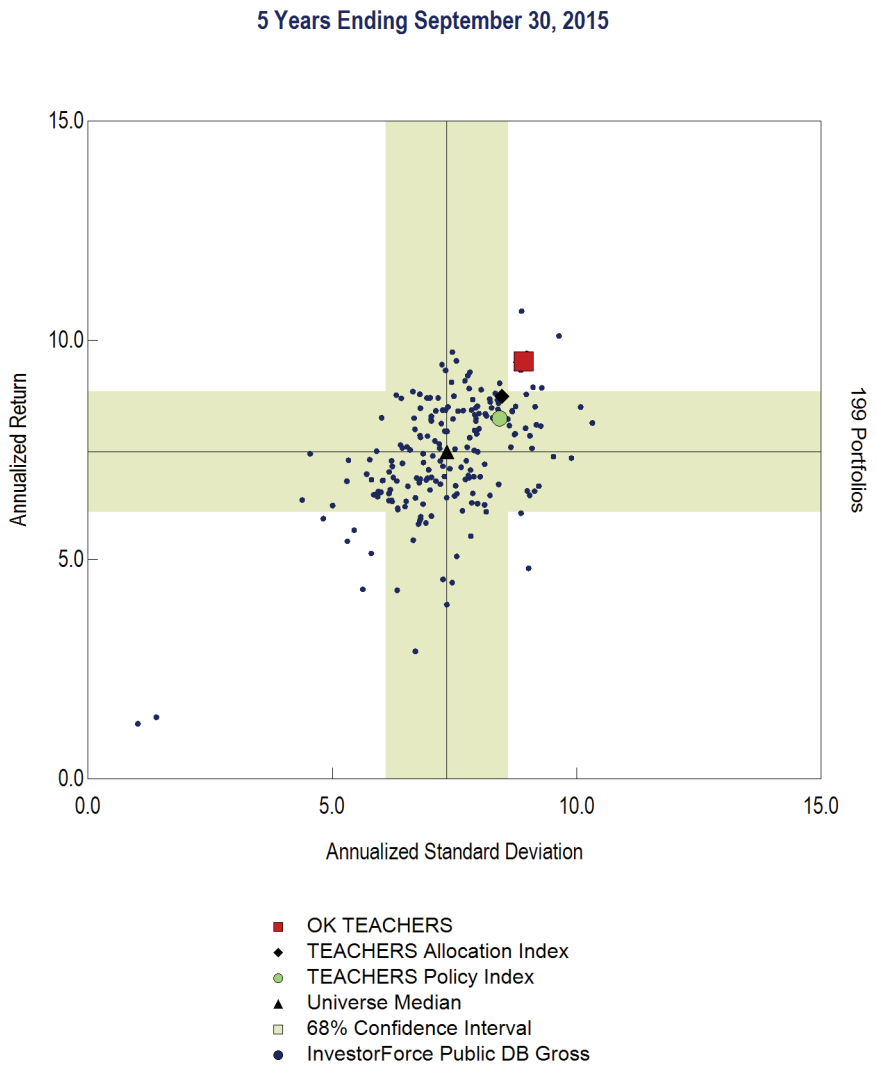
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK TEACHERS	9.33%	1	7.59%	98
TEACHERS Allocation Index	8.45%	11	7.19%	95
TEACHERS Policy Index	6.90%	48	6.82%	89

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK TEACHERS	1.22	35	2.07	44
TEACHERS Allocation Index	1.17	45	2.00	48
TEACHERS Policy Index	1.01	71	1.84	61

Total Fund Risk/Return - 5 Years



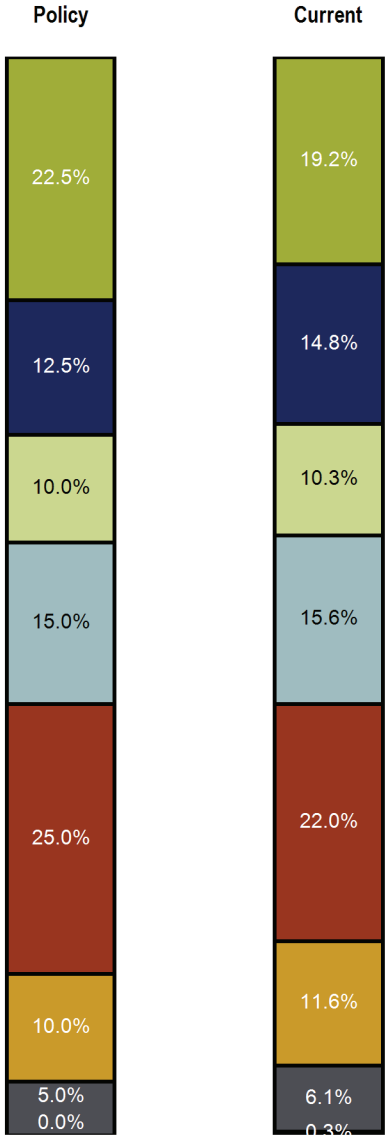
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK TEACHERS	9.53%	2	8.92%	1
TEACHERS Allocation Index	8.72%	4	8.47%	1
TEACHERS Policy Index	8.22%	5	8.42%	1

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK TEACHERS	1.06	38	1.60	35
TEACHERS Allocation Index	1.02	47	1.55	41
TEACHERS Policy Index	0.97	62	1.48	54

Total Fund Asset Allocation vs. Policy Targets

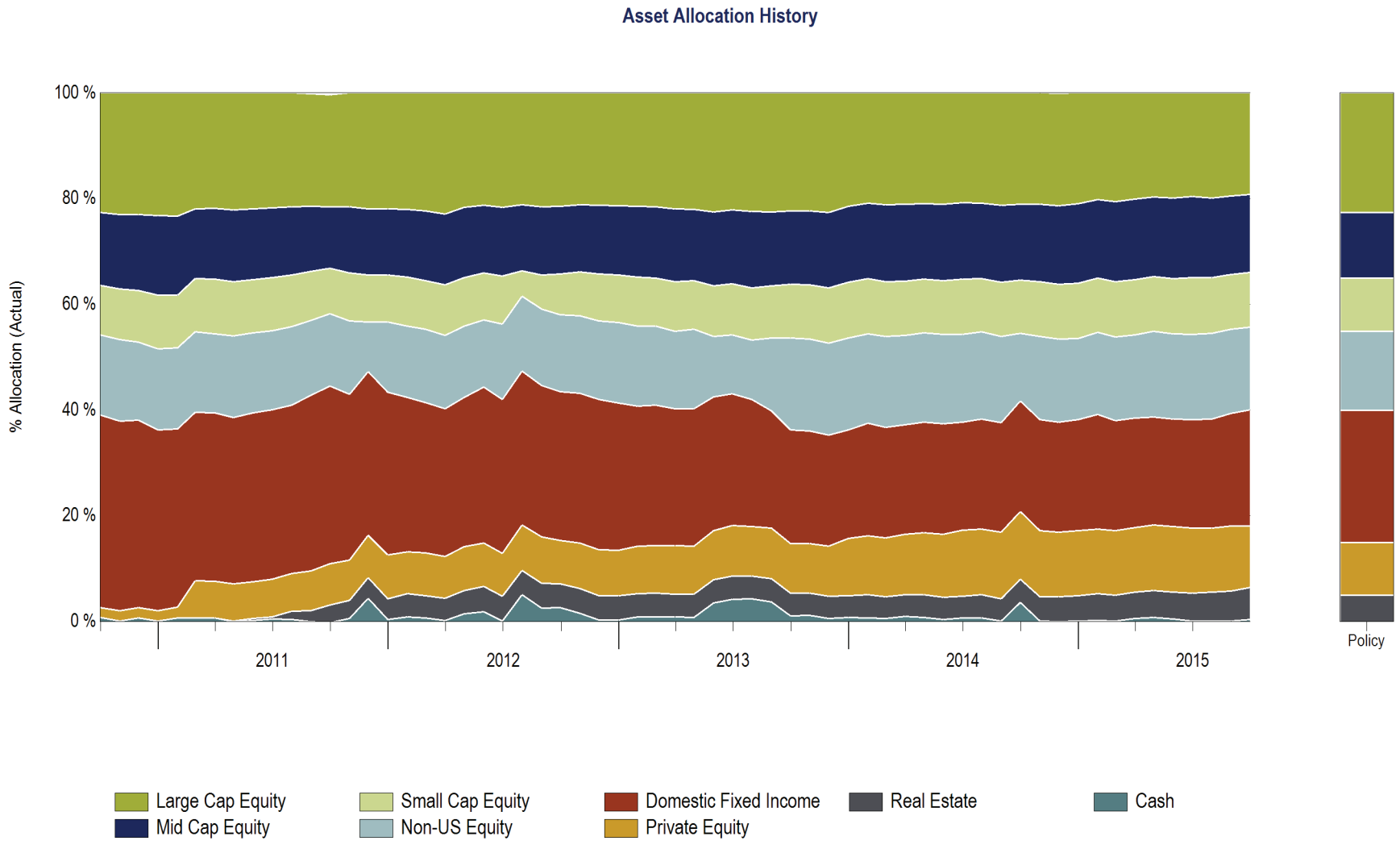


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$2,527,731,224	22.5%	19.2%	-3.3%	17.5% - 27.5%	**Yes**
Mid Cap Equity	$1,950,659,394	12.5%	14.8%	2.3%	7.5% - 17.5%	**Yes**
Small Cap Equity	$1,358,691,082	10.0%	10.3%	0.3%	9.0% - 11.0%	**Yes**
Non-US Equity	$2,058,758,937	15.0%	15.6%	0.6%	10.0% - 20.0%	**Yes**
Domestic Fixed Income	$2,904,054,286	25.0%	22.0%	-3.0%	20.0% - 30.0%	**Yes**
Private Equity	$1,523,033,133	10.0%	11.6%	1.6%	5.0% - 15.0%	**Yes**
Real Estate	$802,165,580	5.0%	6.1%	1.1%	0.0% - 10.0%	**Yes**
Cash	$45,504,303	0.0%	0.3%	0.3%	0.0% - 5.0%	**Yes**
Total	**$13,170,597,939**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Fund Asset Allocation History



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK TEACHERS	**13,170,597,939**	**100.0**	**-7.8**	**99**	**-4.7**	**95**	**-2.9**	**88**	**9.3**	**1**	**9.5**	**3**	**7.0**	**2**
TEACHERS Allocation Index			*-6.7*	*96*	*-4.4*	*93*	*-1.0*	*59*	*8.5*	*11*	*8.7*	*13*	*6.3*	*13*
Over/Under			-1.1		-0.3		-1.9		0.8		0.8		0.7	
TEACHERS Policy Index			*-6.4*	*94*	*-5.0*	*98*	*-3.1*	*90*	*6.9*	*48*	*8.2*	*31*	*5.8*	*39*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Total Equity Composite	**7,895,840,637**	**60.0**	**-9.2**	**61**	**-5.4**	**60**	**-2.1**	**43**	**11.9**	**18**	**11.0**	**21**	**6.6**	**43**
Russell 3000			*-7.2*	*34*	*-5.4*	*61*	*-0.5*	*32*	*12.5*	*13*	*13.3*	*6*	*6.9*	*33*
Over/Under			-2.0		0.0		-1.6		-0.6		-2.3		-0.3	
eA All Global Equity Gross Median			*-8.5*		*-4.6*		*-3.2*		*9.0*		*9.0*		*6.3*	
U.S. Equity Comp	**5,837,081,700**	**44.3**	**-9.2**	**63**	**-6.3**	**63**	**-1.0**	**63**	**13.7**	**38**	**13.0**	**57**	**7.1**	**67**
S&P 500			*-6.4*	*27*	*-5.3*	*52*	*-0.6*	*60*	*12.4*	*58*	*13.3*	*49*	*6.8*	*77*
Over/Under			-2.8		-1.0		-0.4		1.3		-0.3		0.3	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Advisory Research	444,383,370	3.4	-7.4	41	-6.5	62	-2.7	65	10.6	73	11.6	71	--	--
Russell 3000			*-7.2*	*37*	*-5.4*	*49*	*-0.5*	*46*	*12.5*	*51*	*13.3*	*46*	*6.9*	*69*
Over/Under			-0.2		-1.1		-2.2		-1.9		-1.7			
Epoch	471,716,392	3.6	-8.8	60	-7.1	66	-0.3	45	13.9	33	13.1	49	--	--
Russell 3000			*-7.2*	*37*	*-5.4*	*49*	*-0.5*	*46*	*12.5*	*51*	*13.3*	*46*	*6.9*	*69*
Over/Under			-1.6		-1.7		0.2		1.4		-0.2			
eA US All Cap Equity Gross Median			*-8.2*		*-5.6*		*-1.1*		*12.6*		*12.9*		*7.7*	
Sawgrass Large Growth	546,997,999	4.2	-4.2	12	-3.6	71	2.3	64	13.6	53	14.8	36	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			1.1		-2.1		-0.9		0.0		0.3			
eA US Large Cap Growth Equity Gross Median			*-6.0*		*-1.7*		*3.2*		*13.7*		*14.0*		*8.0*	
Hotchkis & Wiley Large Cap Value	556,707,096	4.2	-10.8	87	-9.5	76	-5.0	67	14.7	13	13.5	25	4.9	90
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			-2.4		-0.5		-0.6		3.1		1.2		-0.8	
eA US Large Cap Value Equity Gross Median			*-8.2*		*-7.5*		*-3.5*		*12.1*		*12.4*		*6.9*	
Aronson Mid Cap	531,559,412	4.0	-7.4	35	-5.0	61	-0.6	68	15.9	20	15.4	19	8.5	57
Russell MidCap			*-8.0*	*46*	*-5.8*	*69*	*-0.2*	*65*	*13.9*	*49*	*13.4*	*50*	*7.9*	*75*
Over/Under			0.6		0.8		-0.4		2.0		2.0		0.6	
eA US Mid Cap Equity Gross Median			*-8.2*		*-4.0*		*1.6*		*13.8*		*13.4*		*8.8*	
Frontier	505,985,271	3.8	-8.5	51	1.1	12	8.1	11	15.7	17	14.6	24	10.9	11
Russell MidCap Growth			*-8.0*	*43*	*-4.1*	*70*	*1.4*	*67*	*14.0*	*38*	*13.6*	*49*	*8.1*	*69*
Over/Under			-0.5		5.2		6.7		1.7		1.0		2.8	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Wellington	442,795,366	3.4	-11.8	90	-6.4	83	-0.1	78	14.7	26	11.1	86	7.6	83
Russell MidCap Growth			*-8.0*	*43*	*-4.1*	*70*	*1.4*	*67*	*14.0*	*38*	*13.6*	*49*	*8.1*	*69*
Over/Under			-3.8		-2.3		-1.5		0.7		-2.5		-0.5	
eA US Mid Cap Growth Equity Gross Median			*-8.5*		*-2.5*		*2.7*		*13.3*		*13.2*		*9.1*	
Hotchkis & Wiley Mid Cap	470,319,345	3.6	-11.0	83	-11.8	97	-7.5	91	15.0	28	15.5	17	8.4	49
Russell MidCap Value			*-8.0*	*43*	*-7.7*	*66*	*-2.1*	*63*	*13.7*	*55*	*13.2*	*46*	*7.4*	*81*
Over/Under			-3.0		-4.1		-5.4		1.3		2.3		1.0	
eA US Mid Cap Value Equity Gross Median			*-8.6*		*-6.3*		*-1.1*		*14.1*		*13.0*		*8.4*	
Shapiro Capital	579,348,974	4.4	-16.3	95	-15.5	94	-11.2	91	11.0	65	11.2	70	8.6	28
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			-5.6		-5.4		-9.6		1.8		1.0		3.3	
Cove Street Capital Small Cap Value	99,696,382	0.8	-10.3	60	-4.5	21	-3.8	74	--	--	--	--	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			0.4		5.6		-2.2							
Frontier Capital Management Small Cap Value	154,881,800	1.2	-7.1	11	-4.7	23	2.1	35	--	--	--	--	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			3.6		5.4		3.7							
Neumeier Poma Investment Counsel Small Cap Value	120,739,983	0.9	-9.2	39	0.3	2	6.8	4	--	--	--	--	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			1.5		10.4		8.4							
eA US Small Cap Value Equity Gross Median			*-9.8*		*-6.7*		*0.5*		*12.2*		*12.5*		*7.6*	
Geneva Capital Management Small Cap Growth	208,350,074	1.6	-3.4	1	7.9	1	15.2	3	--	--	--	--	--	--
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			9.7		13.4		11.2							
Wasatch Advisors Small Cap Growth	195,673,869	1.5	-8.1	14	1.3	13	11.6	9	--	--	--	--	--	--
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			5.0		6.8		7.6							
eA US Small Cap Growth Equity Gross Median			*-11.7*		*-3.8*		*4.1*		*13.4*		*14.3*		*8.7*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Domestic Passive Equity	**507,926,367**	**3.9**	**-7.0**	**--**	**-6.0**	**--**	**-0.9**	**--**	**13.3**	**--**	**--**	**--**	**--**	**--**
S&P 500			*-6.4*	*--*	*-5.3*	*--*	*-0.6*	*--*	*12.4*	*--*	*13.3*	*--*	*6.8*	*--*
Over/Under			-0.6		-0.7		-0.3		0.9					
Northern Trust S&P 500 Cap Wgt	241,959,751	1.8	-6.3	17	-4.8	22	-0.1	37	12.5	52	--	--	--	--
S&P 500			*-6.4*	*32*	*-5.3*	*46*	*-0.6*	*74*	*12.4*	*64*	*13.3*	*38*	*6.8*	*72*
Over/Under			0.1		0.5		0.5		0.1					
SSgA S&P Eq Weighted Index Fund	265,966,616	2.0	-7.6	61	-7.2	81	-1.5	84	14.1	3	--	--	--	--
S&P 500			*-6.4*	*32*	*-5.3*	*46*	*-0.6*	*74*	*12.4*	*64*	*13.3*	*38*	*6.8*	*72*
Over/Under			-1.2		-1.9		-0.9		1.7					
eA US Passive Equity Gross Median			*-7.2*		*-5.4*		*-0.5*		*12.5*		*13.3*		*7.0*	
International Equity Composite	**2,058,758,937**	**15.6**	**-9.4**	**35**	**-2.7**	**36**	**-5.8**	**45**	**6.4**	**43**	**5.0**	**52**	**4.3**	**69**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			2.8		5.9		6.4		4.1		3.2		1.3	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Causeway - Value	480,546,005	3.6	-12.0	83	-7.5	84	-10.3	75	4.8	79	5.0	56	4.3	49
MSCI EAFE			*-10.2*	*62*	*-5.3*	*65*	*-8.7*	*65*	*5.6*	*64*	*4.0*	*72*	*3.0*	*84*
Over/Under			-1.8		-2.2		-1.6		-0.8		1.0		1.3	
eA EAFE Value Equity Gross Median			*-9.8*		*-3.5*		*-7.5*		*6.6*		*5.4*		*4.2*	
Northern Trust Intl	779,928,935	5.9	-10.1	75	-4.9	45	-7.3	85	--	--	--	--	--	--
MSCI EAFE			*-10.2*	*75*	*-5.3*	*47*	*-8.7*	*88*	*5.6*	*97*	*4.0*	*99*	*3.0*	*99*
Over/Under			0.1		0.4		1.4							
eA US All Cap Equity Gross Median			*-8.2*		*-5.6*		*-1.1*		*12.6*		*12.9*		*7.7*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Small Cap Equity	**798,283,997**	**6.1**	**-6.9**	**37**	**3.0**	**43**	**-0.9**	**50**	**10.1**	**53**	**--**	**--**	**--**	**--**
MSCI ACWI ex USA			*-12.2*	*92*	*-8.6*	*97*	*-12.2*	*92*	*2.3*	*94*	*1.8*	*99*	*3.0*	*99*
Over/Under			5.3		11.6		11.3		7.8					
eA ACWI ex-US Small Cap Equity Gross Median			*-7.9*		*1.7*		*-1.1*		*10.3*		*8.6*		*7.6*	
Advisory Research Int'l Small Cap	198,711,047	1.5	-7.8	49	-2.4	82	-7.4	85	8.5	75	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*92*	*-8.6*	*97*	*-12.2*	*92*	*2.3*	*94*	*1.8*	*99*	*3.0*	*99*
Over/Under			4.4		6.2		4.8		6.2					
EPOCH Int'l Small Cap	194,397,051	1.5	-7.5	44	4.0	30	-1.9	53	8.5	76	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*92*	*-8.6*	*97*	*-12.2*	*92*	*2.3*	*94*	*1.8*	*99*	*3.0*	*99*
Over/Under			4.7		12.6		10.3		6.2					
Wasatch Int'l Small Cap	199,952,590	1.5	-6.8	36	6.2	24	5.4	20	10.9	43	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*92*	*-8.6*	*97*	*-12.2*	*92*	*2.3*	*94*	*1.8*	*99*	*3.0*	*99*
Over/Under			5.4		14.8		17.6		8.6					
Wellington Int'l Small Cap	205,223,309	1.6	-5.5	28	4.7	27	1.2	39	12.6	23	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*92*	*-8.6*	*97*	*-12.2*	*92*	*2.3*	*94*	*1.8*	*99*	*3.0*	*99*
Over/Under			6.7		13.3		13.4		10.3					
eA ACWI ex-US Small Cap Equity Gross Median			*-7.9*		*1.7*		*-1.1*		*10.3*		*8.6*		*7.6*	
Fixed Composite	**2,904,054,286**	**22.0**	**-1.2**	**85**	**-1.0**	**84**	**0.4**	**81**	**2.8**	**30**	**5.2**	**27**	**7.0**	**12**
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			-2.4		-2.1		-2.5		1.1		2.1		2.4	
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	
Loomis Sayles Core Plus	601,744,656	4.6	-2.4	95	-2.3	97	-1.9	96	1.9	86	4.7	34	7.1	5
Barclays Aggregate			*1.2*	*5*	*1.1*	*33*	*2.9*	*15*	*1.7*	*94*	*3.1*	*96*	*4.6*	*94*
Over/Under			-3.6		-3.4		-4.8		0.2		1.6		2.5	
Mackay Shields Core Plus	602,847,507	4.6	-0.8	84	-1.2	90	-0.6	91	2.1	73	4.6	40	5.9	36
Barclays Aggregate			*1.2*	*5*	*1.1*	*33*	*2.9*	*15*	*1.7*	*94*	*3.1*	*96*	*4.6*	*94*
Over/Under			-2.0		-2.3		-3.5		0.4		1.5		1.3	
Lord Abbett Core Plus	615,902,125	4.7	0.0	60	0.5	67	1.7	62	2.6	46	4.4	44	5.9	36
Barclays Aggregate			*1.2*	*5*	*1.1*	*33*	*2.9*	*15*	*1.7*	*94*	*3.1*	*96*	*4.6*	*94*
Over/Under			-1.2		-0.6		-1.2		0.9		1.3		1.3	
eA US Core Plus Fixed Inc Gross Median			*0.2*		*0.8*		*2.1*		*2.4*		*4.3*		*5.7*	

Total Fund Performance Detail

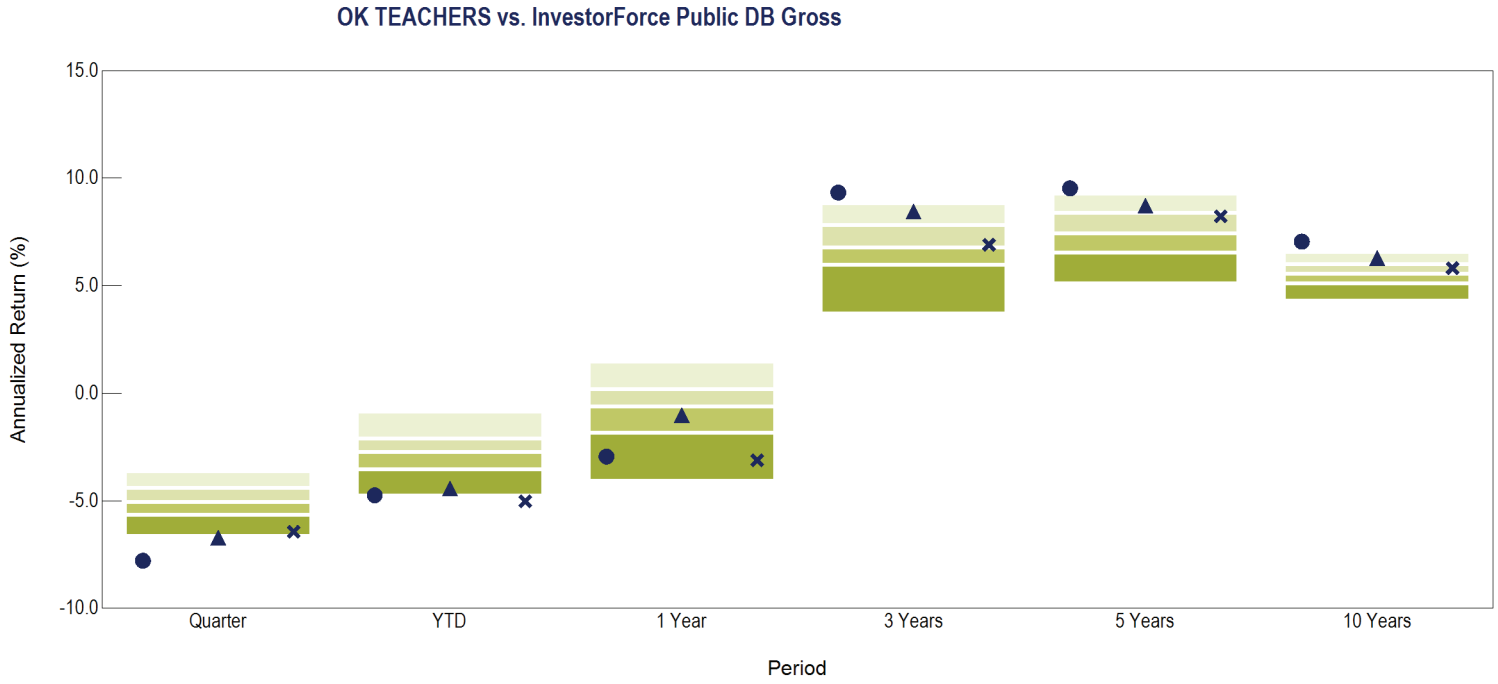
	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Hoisington Long Bonds	324,634,398	2.5	5.2	2	-0.8	12	10.2	2	3.0	21	7.4	11	7.7	37
Barclays Aggregate			*1.2*	*67*	*1.1*	*4*	*2.9*	*34*	*1.7*	*98*	*3.1*	*99*	*4.6*	*99*
Over/Under			4.0		-1.9		7.3		1.3		4.3		3.1	
eA US Long Duration Fixed Inc Gross Median			*1.7*		*-2.6*		*2.3*		*2.7*		*6.5*		*7.3*	
Loomis High Yield	247,165,339	1.9	-5.7	84	-3.2	85	-3.7	75	3.8	58	5.6	84	--	--
BofA Merrill Lynch US High Yield Master II TR			*-4.9*	*73*	*-2.5*	*77*	*-3.6*	*74*	*3.5*	*67*	*5.9*	*70*	*7.1*	*55*
Over/Under			-0.8		-0.7		-0.1		0.3		-0.3			
Lord Abbett High Yield	256,692,800	1.9	-3.7	45	-0.3	33	-1.4	42	5.7	10	7.8	8	--	--
BofA Merrill Lynch US High Yield Master II TR			*-4.9*	*73*	*-2.5*	*77*	*-3.6*	*74*	*3.5*	*67*	*5.9*	*70*	*7.1*	*55*
Over/Under			1.2		2.2		2.2		2.2		1.9			
Mackay High Yield	255,067,461	1.9	-3.2	31	0.5	19	-0.4	29	4.2	43	6.7	37	--	--
BofA Merrill Lynch US High Yield Master II TR			*-4.9*	*73*	*-2.5*	*77*	*-3.6*	*74*	*3.5*	*67*	*5.9*	*70*	*7.1*	*55*
Over/Under			1.7		3.0		3.2		0.7		0.8			
eA US High Yield Fixed Inc Gross Median			*-4.0*		*-0.9*		*-2.0*		*4.1*		*6.5*		*7.2*	
Total Private Equity	**743,715,117**	**5.6**	**0.6**	**--**	**9.3**	**--**	**12.9**	**--**	**19.2**	**--**	**--**	**--**	**--**	**--**
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			0.6		2.8		5.5		5.0					
Legacy LP - Aldus PE	49,105,424	0.4	0.0	--	0.6	--	1.9	--	11.2	--	8.4	--	--	--
Pimco Bravo	56,376,690	0.4	3.8	--	14.4	--	19.2	--	28.3	--	--	--	--	--
PIMCO Bravo 2	106,153,792	0.8	2.4	--	8.3	--	12.4	--	--	--	--	--	--	--
OK - OTRS/Franklin Park	532,079,211	4.0	0.0	--	9.9	--	13.5	--	11.5	--	--	--	--	--
Master Limited Partnerships	**779,318,016**	**5.9**	**-27.7**	**--**	**-28.5**	**--**	**-34.1**	**--**	**5.1**	**--**	**--**	**--**	**--**	**--**
Alerian MLP Index			*-22.1*	--	*-30.7*	--	*-39.2*	--	*-3.6*	--	*3.9*	--	*8.2*	--
Over/Under			-5.6		2.2		5.1		8.7					
Chickasaw Capital Management	282,099,788	2.1	-28.4	--	-28.3	--	-33.6	--	9.8	--	--	--	--	--
Alerian MLP Index			*-22.1*	--	*-30.7*	--	*-39.2*	--	*-3.6*	--	*3.9*	--	*8.2*	--
Over/Under			-6.3		2.4		5.6		13.4					
Swank Capital Cushing	266,542,328	2.0	-27.8	--	-28.7	--	-34.3	--	7.2	--	--	--	--	--
Alerian MLP Index			*-22.1*	--	*-30.7*	--	*-39.2*	--	*-3.6*	--	*3.9*	--	*8.2*	--
Over/Under			-5.7		2.0		4.9		10.8					
Fiduciary Asset Management/Advisory Research	230,675,900	1.8	-26.7	--	-28.5	--	-34.6	--	0.5	--	--	--	--	--
Alerian MLP Index			*-22.1*	--	*-30.7*	--	*-39.2*	--	*-3.6*	--	*3.9*	--	*8.2*	--
Over/Under			-4.6		2.2		4.6		4.1					

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Core Real Estate	**802,165,580**	**6.1**	**3.9**	**--**	**9.4**	**--**	**12.8**	**--**	**11.6**	**--**	**--**	**--**	**--**	**--**
NCREIF Property Index			3.1	--	10.1	--	13.5	--	11.9	--	12.5	--	8.0	--
Over/Under			0.8		-0.7		-0.7		-0.3					
L & B Real Estate	213,297,215	1.6	3.8	--	10.4	--	14.5	--	11.3	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			0.1		-0.9		-0.4		-2.1					
Heitman Real Estate	241,296,083	1.8	3.1	--	8.3	--	11.6	--	12.4	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-0.6		-3.0		-3.3		-1.0					
AEW Real Estate	239,901,108	1.8	5.1	--	10.5	--	13.4	--	11.4	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			1.4		-0.8		-1.5		-2.0					
L & B Gold Driller	26,742,860	0.2	0.0	--	-0.4	--	-2.0	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-3.7		-11.7		-16.9							
Greenoak Real Estate	16,427,624	0.1	0.0	--	0.4	--	--	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-3.7		-10.9									
Antheus Capital	21,500,000	0.2	0.0	--	0.0	--	--	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-3.7		-11.3									
Dune Real Estate	25,890,872	0.2	11.2	--	16.0	--	--	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			7.5		4.7									
Landmark Realty	2,357,992	0.0	-6.6	--	19.1	--	--	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-10.3		7.8									
American Realty	14,751,826	0.1	3.5	--	7.3	--	--	--	--	--	--	--	--	--
NCREIF ODCE			3.7	--	11.3	--	14.9	--	13.4	--	14.0	--	6.7	--
Over/Under			-0.2		-4.0									

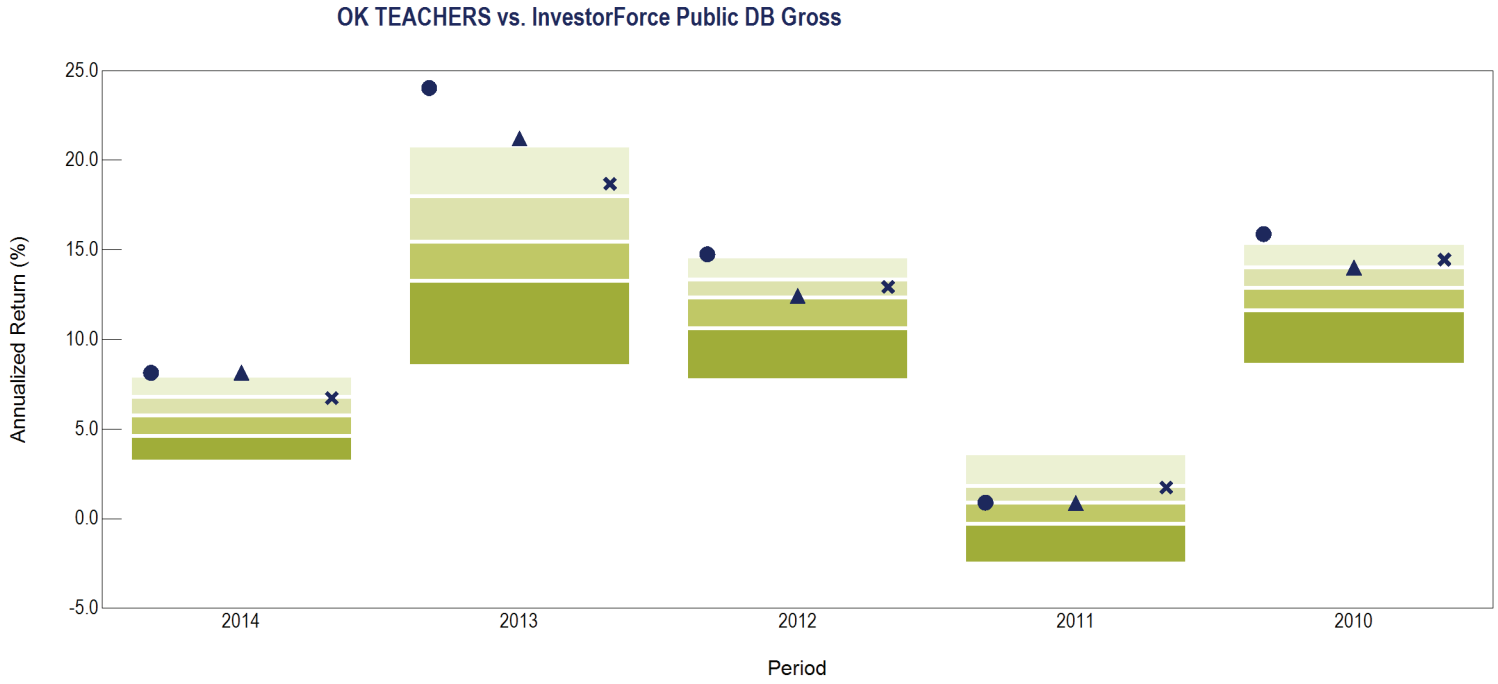
Performance numbers are shown gross of fees.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.6		-0.9		1.4		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1		4.3	
# of Portfolios	258		250		247		220		199		163	
● OK TEACHERS	-7.8	(99)	-4.7	(95)	-2.9	(88)	9.3	(1)	9.5	(3)	7.0	(2)
▲ TEACHERS Allocation Index	-6.7	(96)	-4.4	(93)	-1.0	(59)	8.5	(11)	8.7	(13)	6.3	(13)
× TEACHERS Policy Index	-6.4	(94)	-5.0	(98)	-3.1	(90)	6.9	(48)	8.2	(31)	5.8	(39)

Total Fund Return Summary vs. Peer Universe

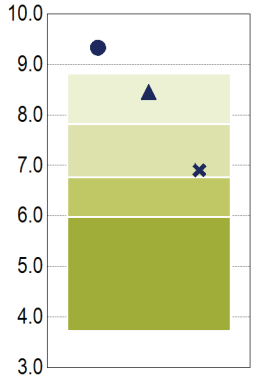


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK TEACHERS	8.1	(4)	24.0	(1)	14.8	(4)	0.9	(51)	15.9	(4)
▲ TEACHERS Allocation Index	8.2	(4)	21.2	(3)	12.4	(49)	0.9	(51)	14.0	(26)
× TEACHERS Policy Index	6.7	(28)	18.7	(20)	12.9	(38)	1.7	(29)	14.5	(18)

Total Fund Risk Statistics vs. Peer Universe

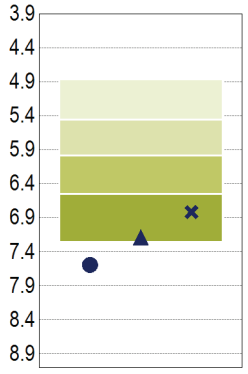
OK TEACHERS vs. InvestorForce Public DB Gross
3 Years

Anlzd Return



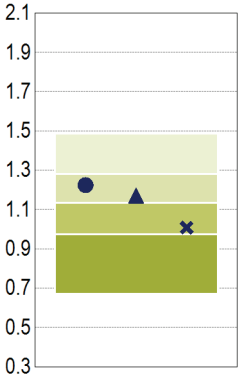
● OK TEACHERS	
Value	9.33
%tile	1
▲ TEACHERS Allocation Index	
Value	8.45
%tile	11
× TEACHERS Policy Index	
Value	6.90
%tile	48
Universe	
5th %tile	8.82
25th %tile	7.83
Median	6.78
75th %tile	5.99
95th %tile	3.73

Anlzd Standard Deviation



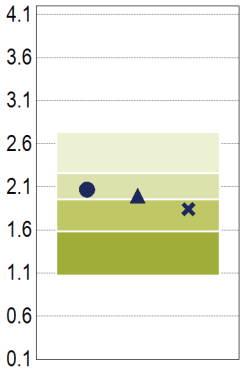
● OK TEACHERS	
Value	7.59
%tile	98
▲ TEACHERS Allocation Index	
Value	7.19
%tile	95
× TEACHERS Policy Index	
Value	6.82
%tile	89
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK TEACHERS	
Value	1.22
%tile	35
▲ TEACHERS Allocation Index	
Value	1.17
%tile	45
× TEACHERS Policy Index	
Value	1.01
%tile	71
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

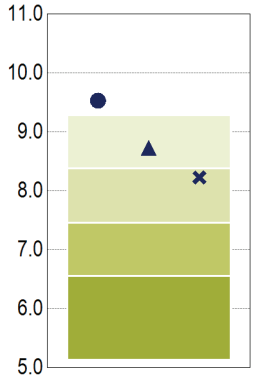


● OK TEACHERS	
Value	2.07
%tile	44
▲ TEACHERS Allocation Index	
Value	2.00
%tile	48
× TEACHERS Policy Index	
Value	1.84
%tile	61
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

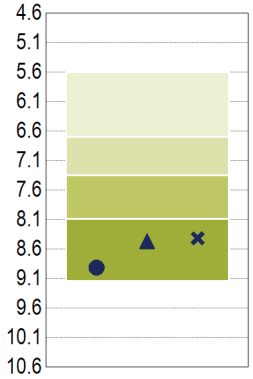
OK TEACHERS vs. InvestorForce Public DB Gross
5 Years

Anlzd Return



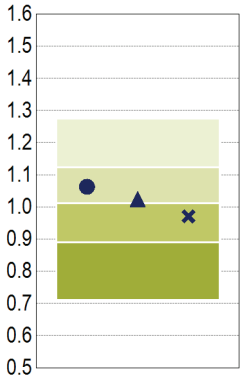
● OK TEACHERS	
Value	9.53
%tile	3
▲ TEACHERS Allocation Index	
Value	8.72
%tile	13
× TEACHERS Policy Index	
Value	8.22
%tile	31
Universe	
5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation



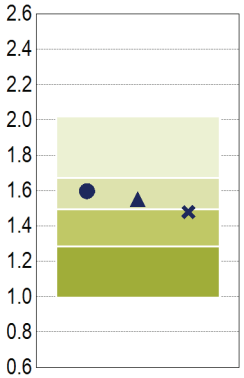
● OK TEACHERS	
Value	8.92
%tile	91
▲ TEACHERS Allocation Index	
Value	8.47
%tile	84
× TEACHERS Policy Index	
Value	8.42
%tile	84
Universe	
5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio



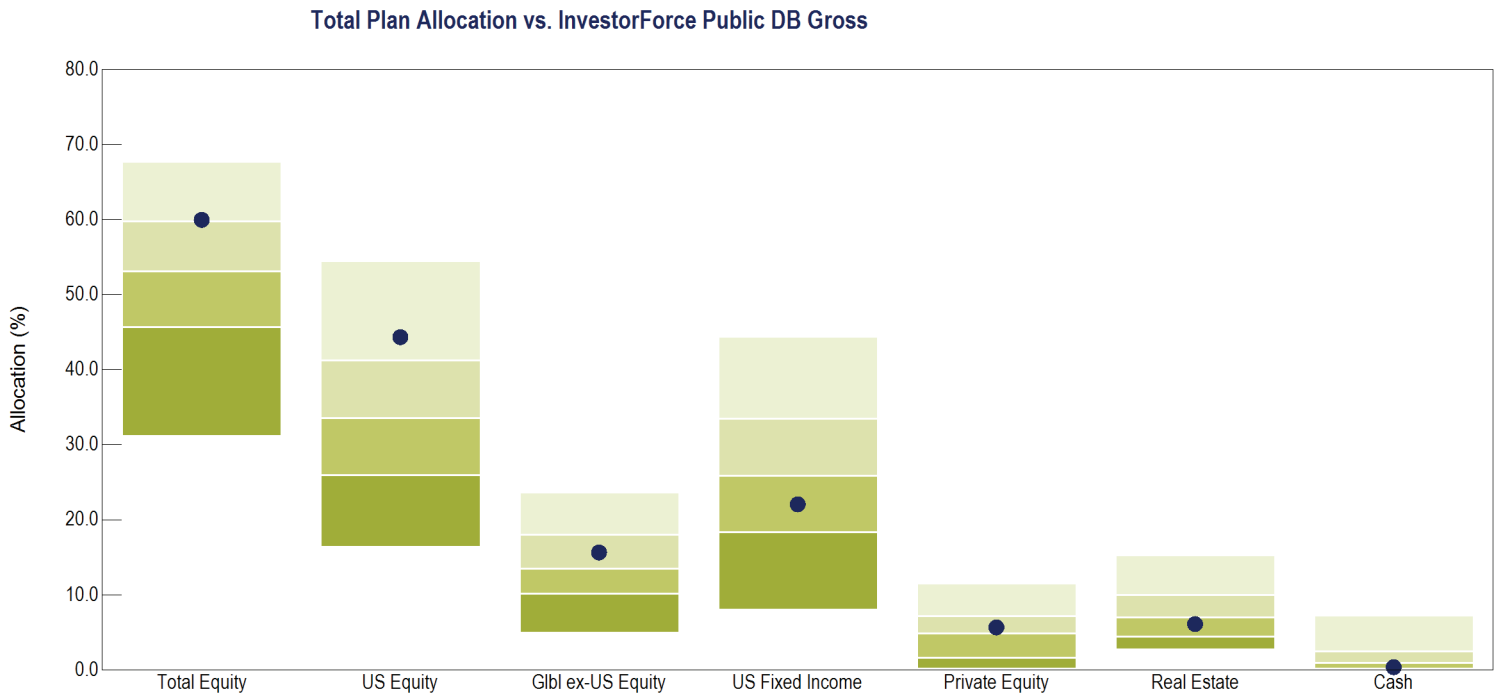
● OK TEACHERS	
Value	1.06
%tile	38
▲ TEACHERS Allocation Index	
Value	1.02
%tile	47
× TEACHERS Policy Index	
Value	0.97
%tile	62
Universe	
5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio



● OK TEACHERS	
Value	1.60
%tile	35
▲ TEACHERS Allocation Index	
Value	1.55
%tile	41
× TEACHERS Policy Index	
Value	1.48
%tile	54
Universe	
5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

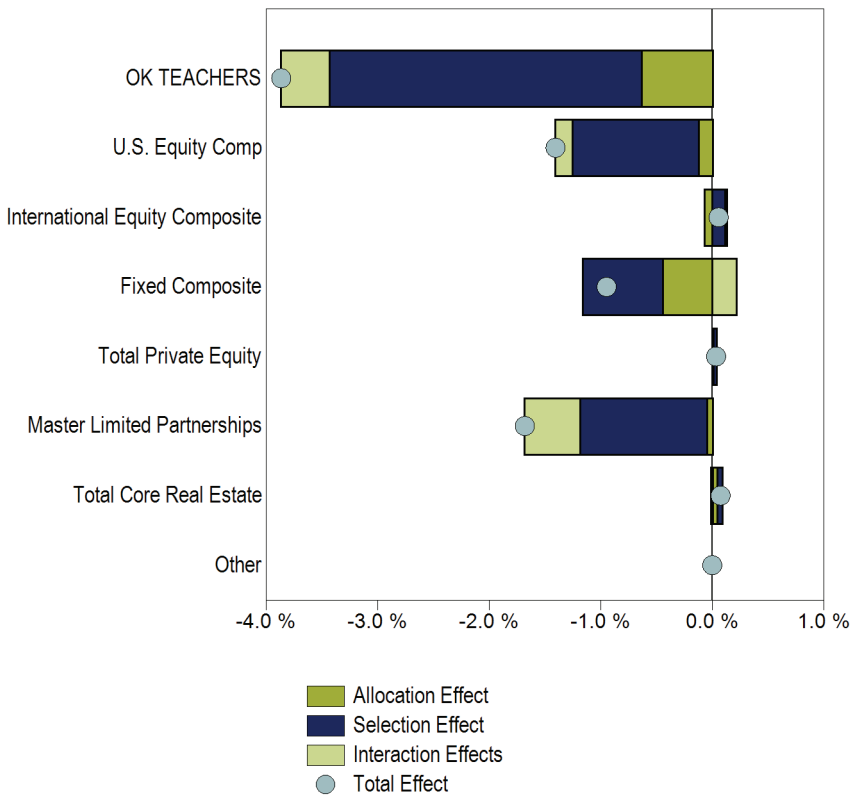
Total Fund Allocations vs. Peer Universe



	Allocation (Rank)													
5th Percentile	67.7		54.5		23.7		44.4		11.5		15.3		7.3	
25th Percentile	59.8		41.3		18.1		33.6		7.3		10.1		2.5	
Median	53.1		33.6		13.5		25.9		4.9		7.1		1.0	
75th Percentile	45.8		26.0		10.2		18.5		1.7		4.5		0.3	
95th Percentile	31.2		16.5		5.0		8.1		0.2		2.8		0.0	
# of Portfolios	248		226		218		187		63		157		216	
● **OK TEACHERS**	60.0	(25)	44.3	(16)	15.6	(37)	22.0	(67)	5.6	(45)	6.1	(58)	0.3	(71)

Total Fund Attribution Analysis

Attribution Effects Relative to TEACHERS Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
U.S. Equity Comp	-9.2%	-6.4%	-2.7%	-1.1%	-0.3%	-0.1%	-1.6%
International Equity Composite	-9.4%	-10.2%	0.9%	0.1%	-0.1%	0.0%	0.0%
Fixed Composite	-1.2%	1.2%	-2.5%	-0.7%	-0.1%	0.2%	-0.6%
Total Private Equity	0.6%	0.0%	0.6%	0.0%	0.0%	0.0%	0.0%
Master Limited Partnerships	-27.7%	-6.4%	-21.3%	-1.1%	-0.1%	-0.5%	-1.8%
Total Core Real Estate	3.9%	3.1%	0.8%	0.0%	0.0%	0.0%	0.1%
Other	0.0%	0.0%	0.0%	--	--	--	--
Total	**-7.8%**	**-3.9%**	**-3.9%**	**-2.8%**	**-0.6%**	**-0.4%**	**-3.9%**

*Other includes cash and transition accounts.

*Total returns shown are calculated as a weighted average of the returns of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

OK TEACHERS

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-7.8%	-4.8%	-3.7%
Wtd. Index Return *	-3.9%	-1.9%	0.4%
Excess Return	**-3.9%**	**-2.8%**	**-4.2%**
Selection Effect	-2.8%	-1.9%	-2.2%
Allocation Effect	-0.6%	-0.6%	-0.3%
Interaction Effect	-0.4%	-0.4%	-0.8%
Returns by Asset Class			
OK TEACHERS	-7.8%	-4.7%	-2.9%
Total Equity Composite	-9.2%	-5.4%	-2.1%
U.S. Equity Comp	-9.2%	-6.3%	-1.0%
Domestic Passive Equity	-7.0%	-6.0%	-0.9%
International Equity Composite	-9.4%	-2.7%	-5.8%
International Small Cap Equity	-6.9%	3.0%	-0.9%
Fixed Composite	-1.2%	-1.0%	0.4%
Total Private Equity	0.6%	9.3%	12.9%
Master Limited Partnerships	-27.7%	-28.5%	-34.1%
Total Core Real Estate	3.9%	9.4%	12.8%
Other	0.0%	51.9%	87.9%

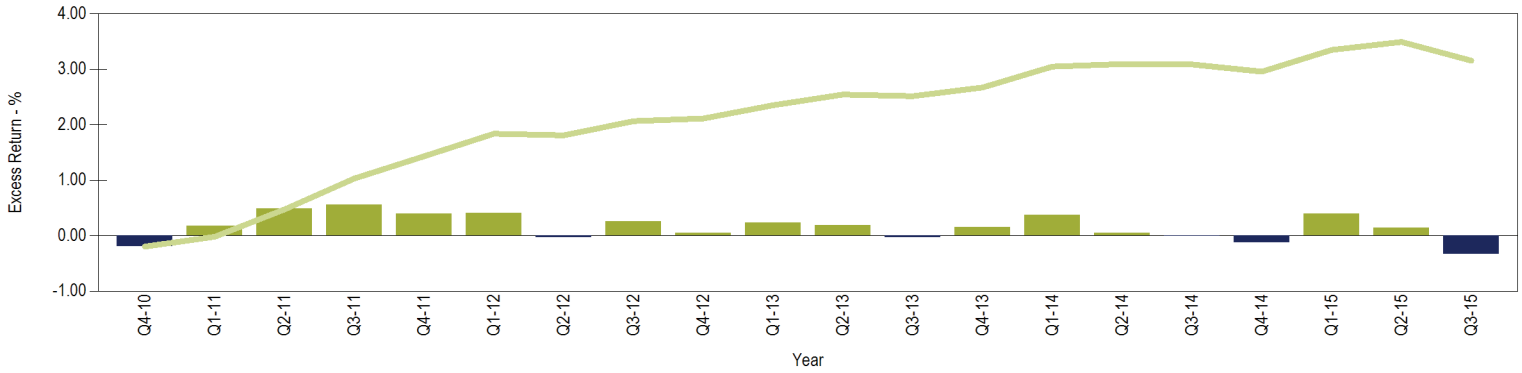
*Calculated from benchmark returns and weightings of each component.

Oklahoma PERS

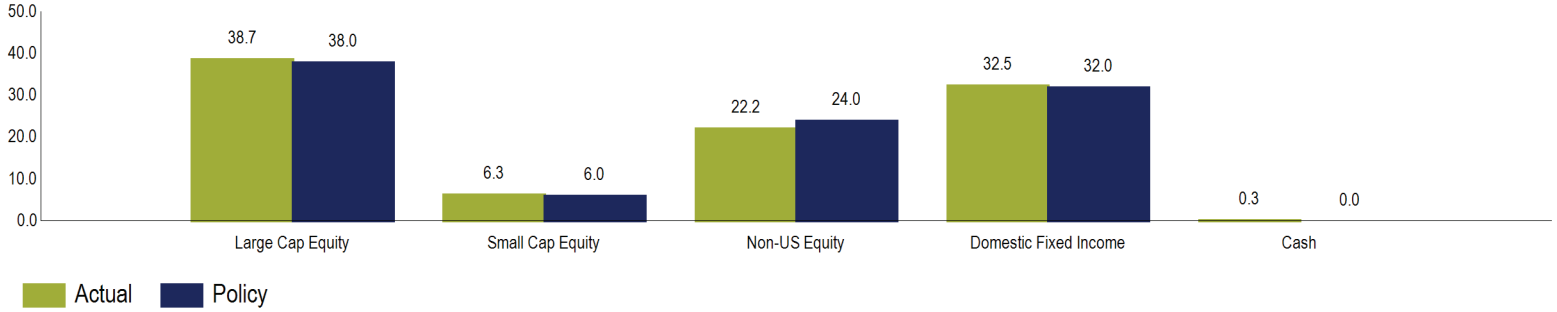
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK PERS	**$8,052,670,282**	**-6.0%**	**85**	**-4.0%**	**86**	**-1.7%**	**73**	**6.9%**	**49**	**7.8%**	**41**	**6.0%**	**27**
PERS Allocation Index		*-5.6%*	*75*	*-4.1%*	*89*	*-1.7%*	*74*	*6.5%*	*58*	*7.2%*	*57*	*5.7%*	*45*
PERS Policy Index		*-5.8%*	*81*	*-4.1%*	*88*	*-1.9%*	*76*	*6.3%*	*66*	*7.3%*	*53*	*5.7%*	*42*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

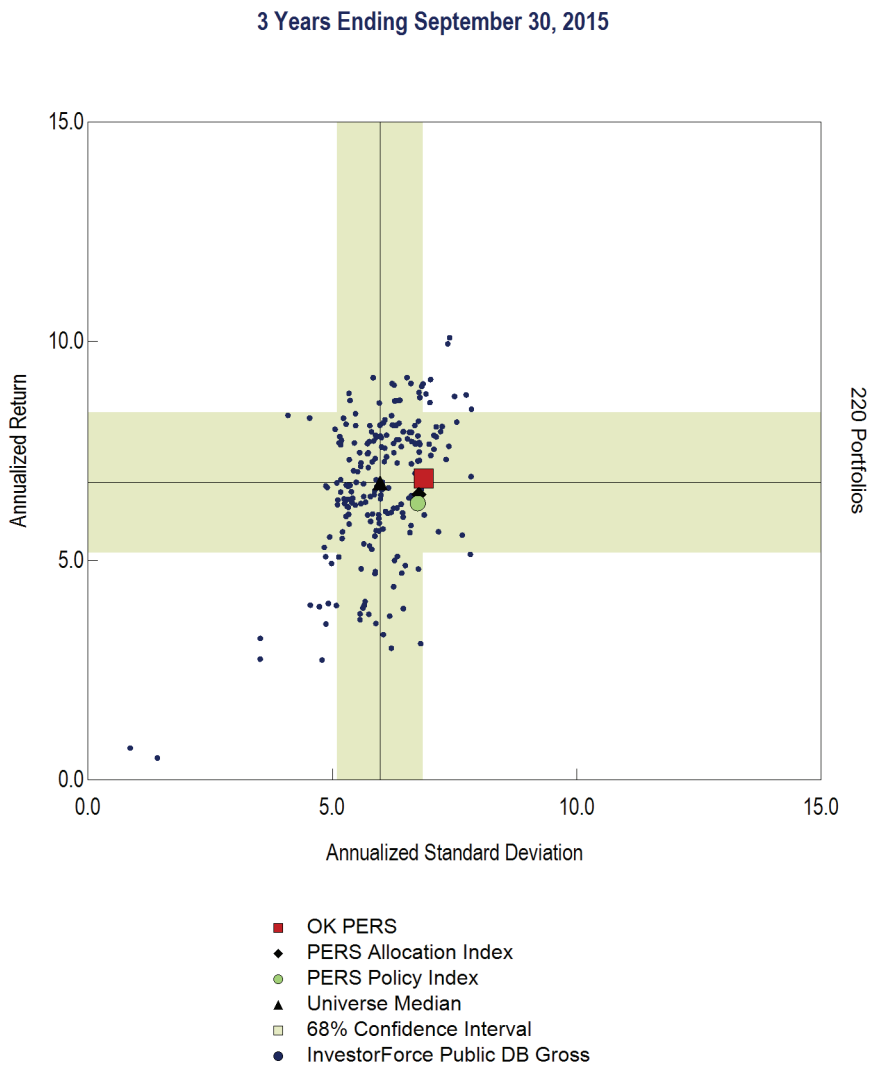
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



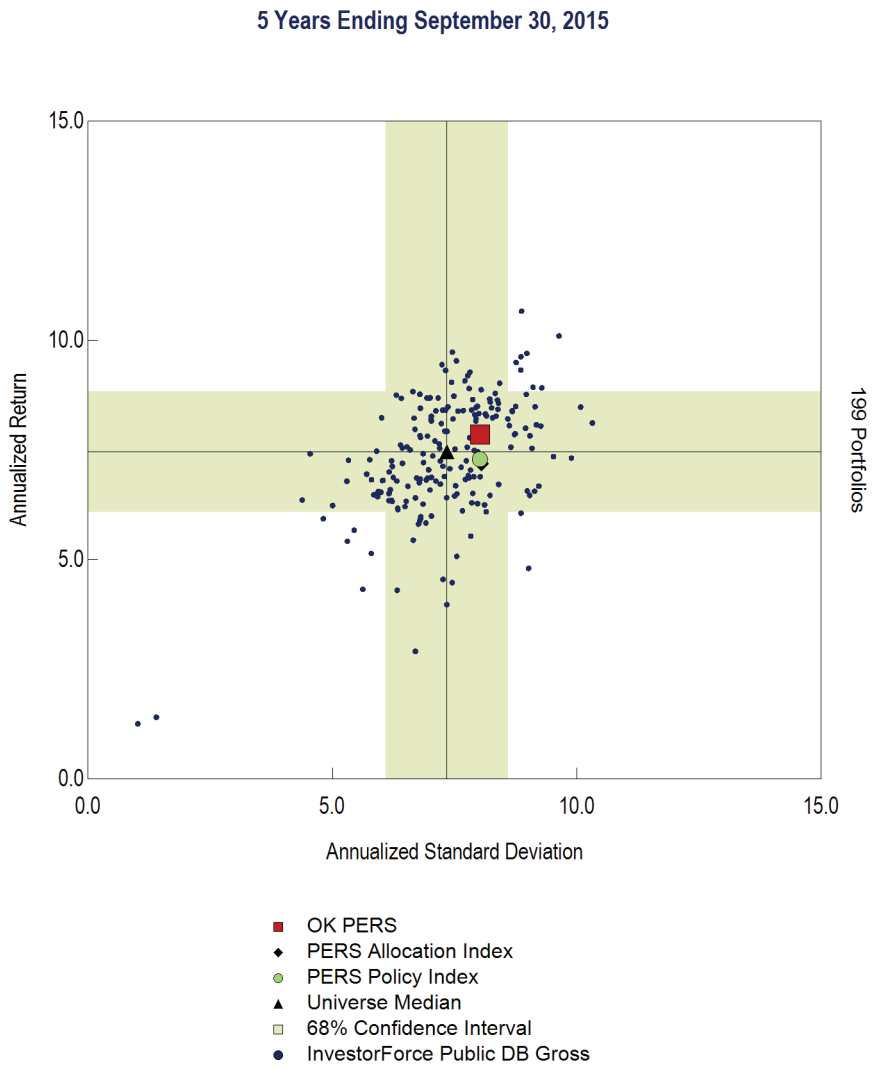
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK PERS	6.88%	49	6.87%	90
PERS Allocation Index	6.51%	58	6.77%	85
PERS Policy Index	6.31%	66	6.75%	82

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK PERS	1.00	72	1.62	73
PERS Allocation Index	0.96	79	1.63	73
PERS Policy Index	0.93	81	1.56	78

Total Fund Risk/Return - 5 Years



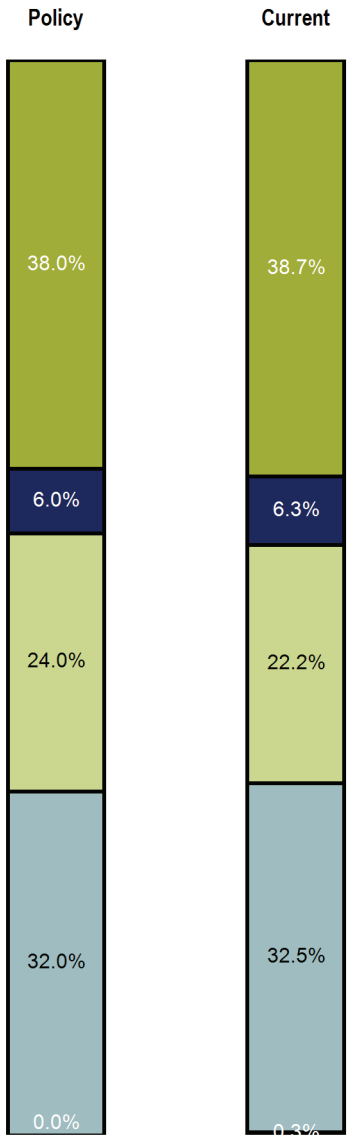
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK PERS	7.85%	41	8.02%	75
PERS Allocation Index	7.18%	57	8.05%	75
PERS Policy Index	7.29%	53	8.02%	75

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK PERS	0.97	61	1.51	46
PERS Allocation Index	0.89	76	1.37	67
PERS Policy Index	0.90	74	1.40	62

Total Fund Asset Allocation vs. Policy Targets

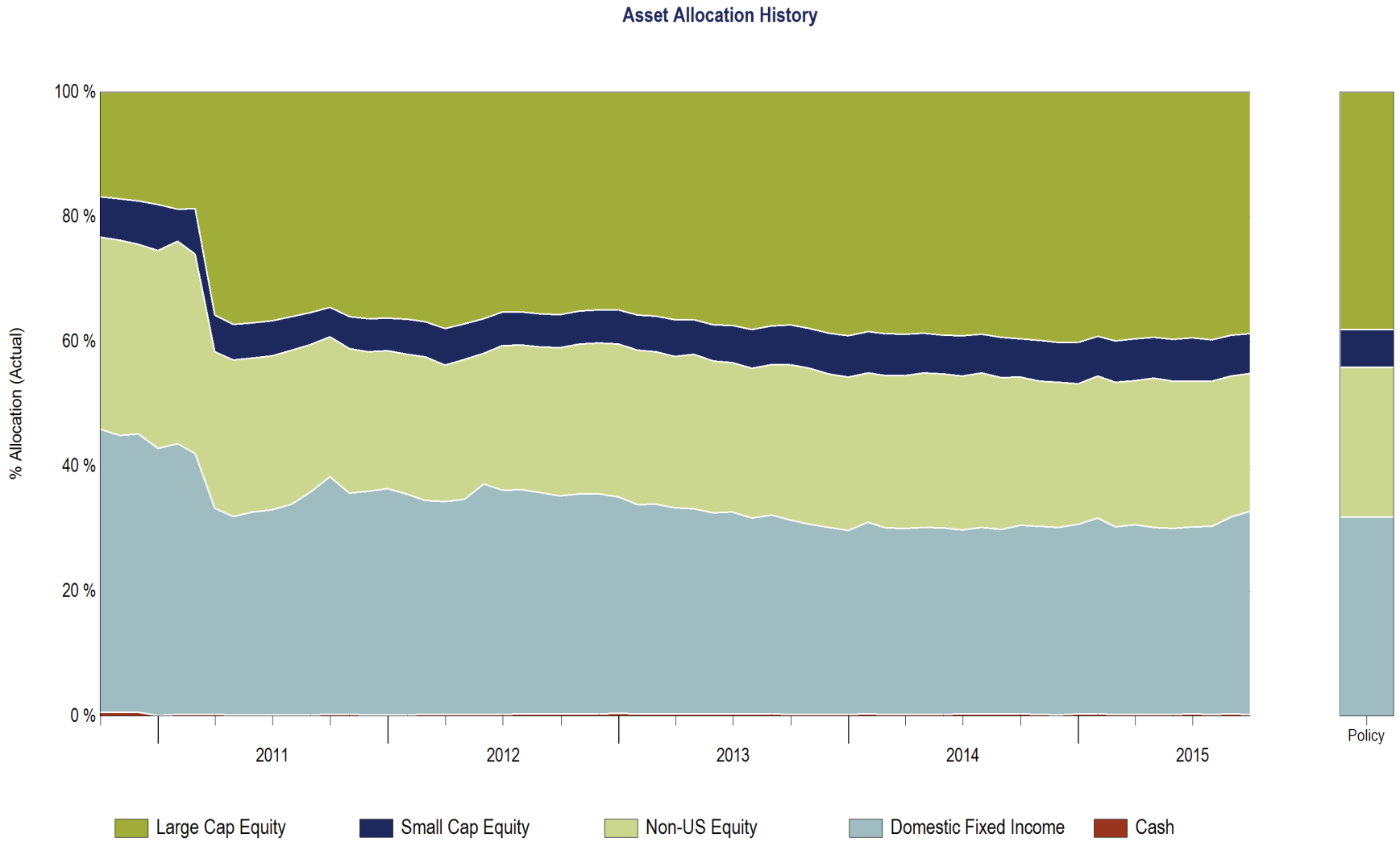


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$3,118,564,652	38.0%	38.7%	0.7%	35.0% - 41.0%	**Yes**
Small Cap Equity	$510,748,249	6.0%	6.3%	0.3%	3.2% - 8.8%	**Yes**
Non-US Equity	$1,784,266,093	24.0%	22.2%	-1.8%	21.0% - 27.0%	**Yes**
Domestic Fixed Income	$2,616,050,156	32.0%	32.5%	0.5%	27.5% - 36.5%	**Yes**
Cash	$23,041,132	0.0%	0.3%	0.3%	0.0% - 5.0%	**Yes**
Total	**$8,052,670,282**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Fund Asset Allocation History



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK PERS	**8,052,670,282**	**100.0**	**-6.0**	**85**	**-4.0**	**86**	**-1.7**	**73**	**6.9**	**49**	**7.8**	**41**	**6.0**	**27**
PERS Allocation Index			*-5.6*	*75*	*-4.1*	*89*	*-1.7*	*74*	*6.5*	*58*	*7.2*	*57*	*5.7*	*45*
Over/Under			-0.4		0.1		0.0		0.4		0.6		0.3	
PERS Policy Index			*-5.8*	*81*	*-4.1*	*88*	*-1.9*	*76*	*6.3*	*66*	*7.3*	*53*	*5.7*	*42*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Domestic Equity Composite	**3,629,312,901**	**45.1**	**-7.9**	**47**	**-5.6**	**56**	**-0.5**	**58**	**12.9**	**51**	**13.8**	**41**	**6.9**	**74**
Domestic Equity Benchmark			*-7.5*	*41*	*-5.5*	*56*	*-0.3*	*58*	*12.5*	*56*	*13.2*	*52*	*6.9*	*73*
Over/Under			-0.4		-0.1		-0.2		0.4		0.6		0.0	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Aronson Johnson & Ortiz	222,415,365	2.8	-7.9	44	-5.1	18	-1.6	26	13.5	27	14.1	17	6.7	60
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			0.5		3.9		2.8		1.9		1.8		1.0	
eA US Large Cap Value Equity Gross Median			*-8.2*		*-7.5*		*-3.5*		*12.1*		*12.4*		*6.9*	
Mellon	480,455,327	6.0	-7.6	68	-6.9	80	-1.8	69	13.1	44	14.6	22	7.0	69
Russell 1000			*-6.8*	*49*	*-5.2*	*55*	*-0.6*	*57*	*12.7*	*52*	*13.4*	*49*	*7.0*	*69*
Over/Under			-0.8		-1.7		-1.2		0.4		1.2		0.0	
State Street Enhanced Index	491,220,929	6.1	-5.8	28	-3.1	26	1.0	36	13.9	31	14.8	21	6.7	80
Russell 1000			*-6.8*	*49*	*-5.2*	*55*	*-0.6*	*57*	*12.7*	*52*	*13.4*	*49*	*7.0*	*69*
Over/Under			1.0		2.1		1.6		1.2		1.4		-0.3	
Blackrock Russell 1000	1,710,298,229	21.2	-6.9	50	-5.2	54	-0.6	57	12.7	52	--	--	--	--
Russell 1000			*-6.8*	*49*	*-5.2*	*55*	*-0.6*	*57*	*12.7*	*52*	*13.4*	*49*	*7.0*	*69*
Over/Under			-0.1		0.0		0.0		0.0					
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
Blackrock Russell 1000 Growth	214,174,802	2.7	-5.3	32	-1.5	49	3.2	51	13.6	51	--	--	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			0.0		0.0		0.0		0.0					
eA US Large Cap Growth Equity Gross Median			*-6.0*		*-1.7*		*3.2*		*13.7*		*14.0*		*8.0*	

Domestic Equity Benchmark is 86.4% Russell 1000 and 13.6% Russell 2000.

Total Fund Performance Detail

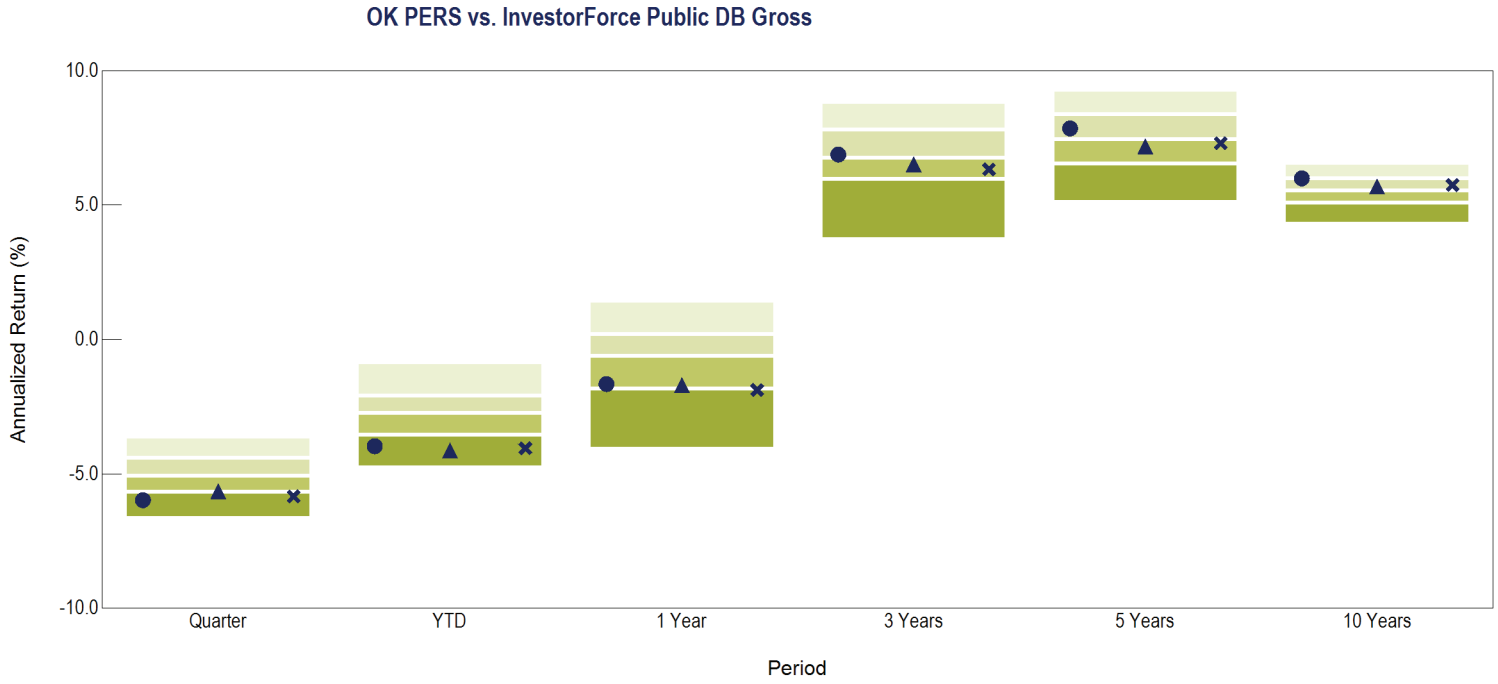
	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
UBS Global Asset Mgmt	183,249,768	2.3	-15.5	94	-6.7	73	2.7	60	13.4	49	16.1	24	8.1	60
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			-2.4		-1.2		-1.3		0.6		2.8		0.4	
eA US Small Cap Growth Equity Gross Median			*-11.7*		*-3.8*		*4.1*		*13.4*		*14.3*		*8.7*	
Barrow Hanley	177,686,774	2.2	-10.8	67	-7.9	61	1.1	42	14.1	27	13.2	39	10.5	6
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			-0.1		2.2		2.7		4.9		3.0		5.2	
DePrince Race & Zollo	149,811,707	1.9	-16.7	95	-14.4	91	-6.9	80	8.1	88	--	--	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			-6.0		-4.3		-5.3		-1.1					
eA US Small Cap Value Equity Gross Median			*-9.8*		*-6.7*		*0.5*		*12.2*		*12.5*		*7.6*	
Domestic Fixed Income Composite	**2,616,050,156**	**32.5**	**1.2**	**23**	**0.9**	**59**	**3.4**	**14**	**1.9**	**59**	**4.0**	**42**	**5.4**	**34**
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			0.0		-0.2		0.5		0.2		0.9		0.8	
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	
Blackrock	1,357,635,815	16.9	1.2	41	1.4	47	3.1	42	2.0	54	3.5	59	4.8	80
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.0		0.3		0.2		0.3		0.4		0.2	
Met West	764,720,048	9.5	0.7	85	1.0	71	2.7	64	2.5	20	4.3	11	6.4	2
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			-0.5		-0.1		-0.2		0.8		1.2		1.8	
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Hoisington	258,829,565	3.2	5.3	2	-0.5	8	11.2	1	3.4	12	7.5	10	7.9	29
Barclays Treasury Long Term			*5.1*	*3*	*0.2*	*6*	*8.8*	*2*	*2.8*	*42*	*6.2*	*67*	*7.0*	*75*
Over/Under			0.2		-0.7		2.4		0.6		1.3		0.9	
eA US Long Duration Fixed Inc Gross Median			*1.7*		*-2.6*		*2.3*		*2.7*		*6.5*		*7.3*	
Blackrock TIPS	234,864,728	2.9	-1.2	99	-0.7	99	-0.8	99	-1.8	99	2.6	69	--	--
Barclays US TIPS			*-1.1*	*99*	*-0.8*	*99*	*-0.8*	*99*	*-1.8*	*99*	*2.5*	*76*	*4.0*	*95*
Over/Under			-0.1		0.1		0.0		0.0		0.1			
eA US Interm Duration Fixed Inc Gross Median			*0.9*		*1.8*		*2.7*		*1.7*		*2.8*		*4.6*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	**1,784,266,093**	**22.2**	**-11.5**	**69**	**-7.3**	**80**	**-10.5**	**82**	**3.1**	**86**	**2.7**	**85**	**3.5**	**90**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			0.7		1.3		1.7		0.8		0.9		0.5	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Baille Gifford	246,807,083	3.1	-11.5	87	-5.2	73	-6.0	74	--	--	--	--	--	--
MSCI ACWI ex USA Growth			*-10.8*	*76*	*-6.0*	*88*	*-8.1*	*94*	*3.6*	*93*	*2.7*	*99*	*3.6*	*96*
Over/Under			-0.7		0.8		2.1							
eA ACWI ex-US All Cap Growth Eq Gross Median			*-9.7*		*-2.5*		*-4.0*		*6.1*		*5.7*		*5.7*	
Blackrock ACWI Ex US	806,508,155	10.0	-12.1	78	-8.4	89	-11.9	88	2.6	89	2.1	90	--	--
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			0.1		0.2		0.3		0.3		0.3			
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Blackrock ACWI Ex US Growth	253,878,816	3.2	-11.1	82	-6.5	91	-9.2	99	3.2	96	2.7	99	--	--
MSCI ACWI ex USA Growth			*-10.8*	*76*	*-6.0*	*88*	*-8.1*	*94*	*3.6*	*93*	*2.7*	*99*	*3.6*	*96*
Over/Under			-0.3		-0.5		-1.1		-0.4		0.0			
eA ACWI ex-US All Cap Growth Eq Gross Median			*-9.7*		*-2.5*		*-4.0*		*6.1*		*5.7*		*5.7*	
Mondrian	477,072,039	5.9	-10.6	56	-7.0	76	-10.9	84	3.8	79	3.7	74	4.1	76
MSCI ACWI ex USA Value			*-13.6*	*96*	*-11.3*	*98*	*-16.2*	*99*	*1.0*	*97*	*0.9*	*98*	*2.4*	*97*
Over/Under			3.0		4.3		5.3		2.8		2.8		1.7	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	

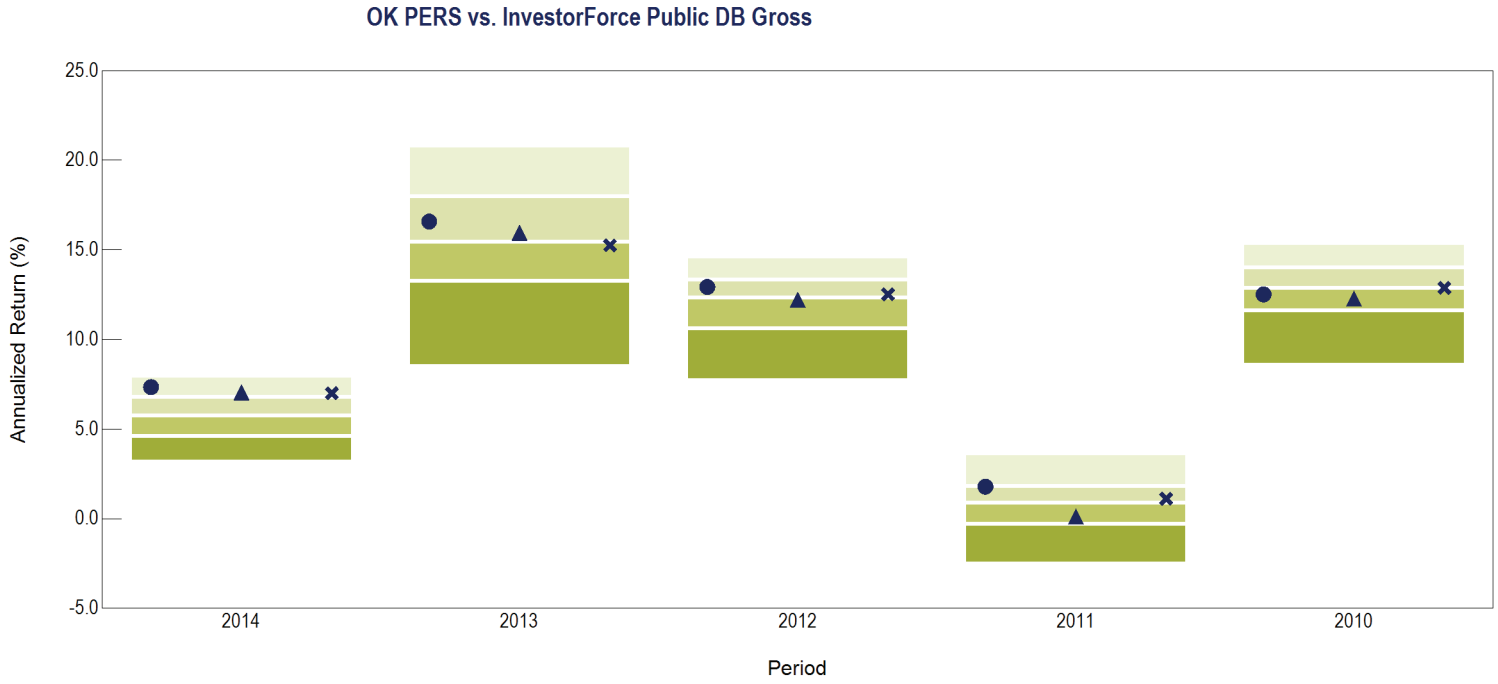
New Policy Index effective as of November 1, 2013 consist of 38% Large Cap Equity, 6% Small Cap Equity, 24% International Equity, and 32% Domestic Fixed Income.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.6		-0.9		1.4		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1		4.3	
# of Portfolios	258		250		247		220		199		163	
● OK PERS	-6.0	(85)	-4.0	(86)	-1.7	(73)	6.9	(49)	7.8	(41)	6.0	(27)
▲ PERS Allocation Index	-5.6	(75)	-4.1	(89)	-1.7	(74)	6.5	(58)	7.2	(57)	5.7	(45)
× PERS Policy Index	-5.8	(81)	-4.1	(88)	-1.9	(76)	6.3	(65)	7.3	(53)	5.7	(42)

Total Fund Return Summary vs. Peer Universe

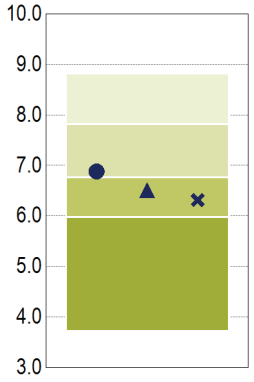


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK PERS	7.3	(16)	16.6	(40)	12.9	(38)	1.8	(28)	12.5	(58)
▲ PERS Allocation Index	7.0	(21)	15.9	(48)	12.2	(53)	0.1	(70)	12.3	(61)
× PERS Policy Index	7.0	(21)	15.3	(53)	12.5	(47)	1.1	(40)	12.9	(51)

Total Fund Risk Statistics vs. Peer Universe

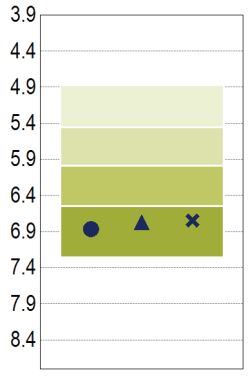
OK PERS vs. InvestorForce Public DB Gross
3 Years

Anlzd Return



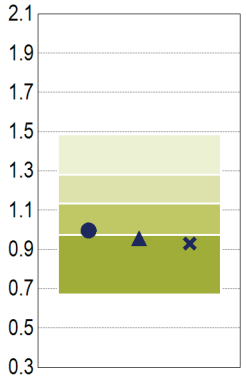
● OK PERS	
Value	6.88
%tile	49
▲ PERS Allocation Index	
Value	6.51
%tile	58
× PERS Policy Index	
Value	6.31
%tile	66
Universe	
5th %tile	8.82
25th %tile	7.83
Median	6.78
75th %tile	5.99
95th %tile	3.73

Anlzd Standard Deviation



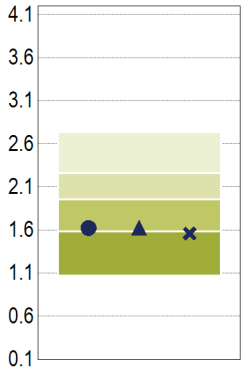
● OK PERS	
Value	6.87
%tile	90
▲ PERS Allocation Index	
Value	6.77
%tile	85
× PERS Policy Index	
Value	6.75
%tile	82
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK PERS	
Value	1.00
%tile	72
▲ PERS Allocation Index	
Value	0.96
%tile	79
× PERS Policy Index	
Value	0.93
%tile	81
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

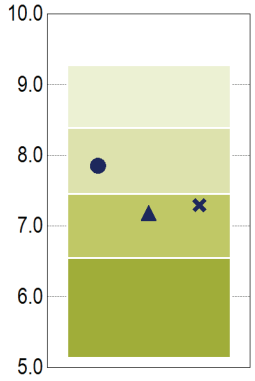


● OK PERS	
Value	1.62
%tile	73
▲ PERS Allocation Index	
Value	1.63
%tile	73
× PERS Policy Index	
Value	1.56
%tile	78
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

OK PERS vs. InvestorForce Public DB Gross
5 Years

Anlzd Return

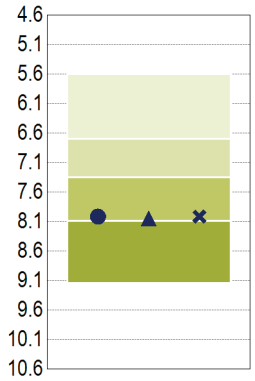


- OK PERS
  - Value 7.85
  - %tile 41
- PERS Allocation Index
  - Value 7.18
  - %tile 57
- PERS Policy Index
  - Value 7.29
  - %tile 53

Universe

5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation

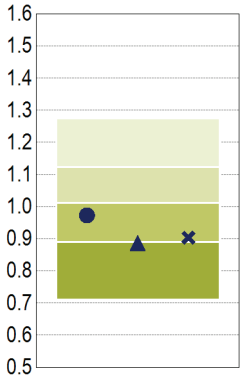


- OK PERS
  - Value 8.02
  - %tile 75
- PERS Allocation Index
  - Value 8.05
  - %tile 75
- PERS Policy Index
  - Value 8.02
  - %tile 75

Universe

5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio

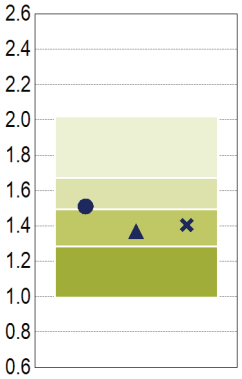


- OK PERS
  - Value 0.97
  - %tile 61
- PERS Allocation Index
  - Value 0.89
  - %tile 76
- PERS Policy Index
  - Value 0.90
  - %tile 74

Universe

5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio

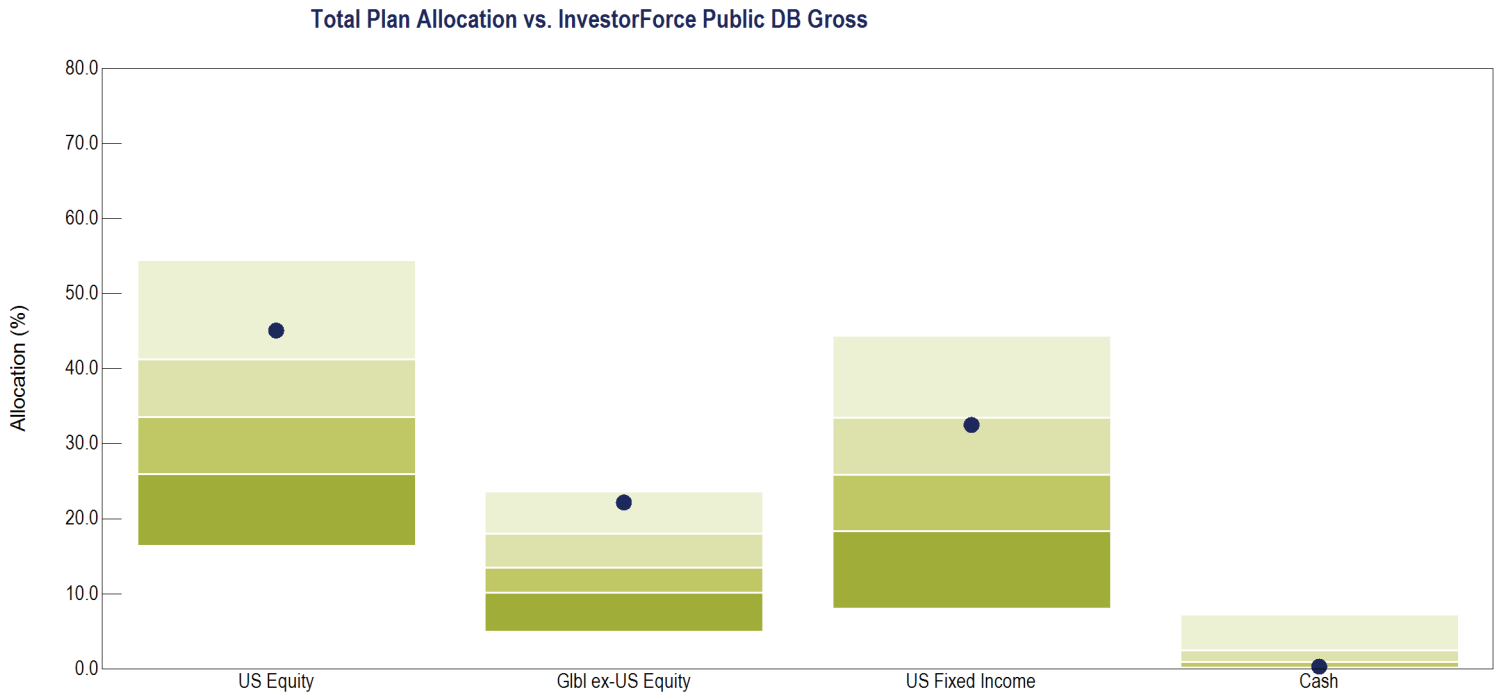


- OK PERS
  - Value 1.51
  - %tile 46
- PERS Allocation Index
  - Value 1.37
  - %tile 67
- PERS Policy Index
  - Value 1.40
  - %tile 62

Universe

5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

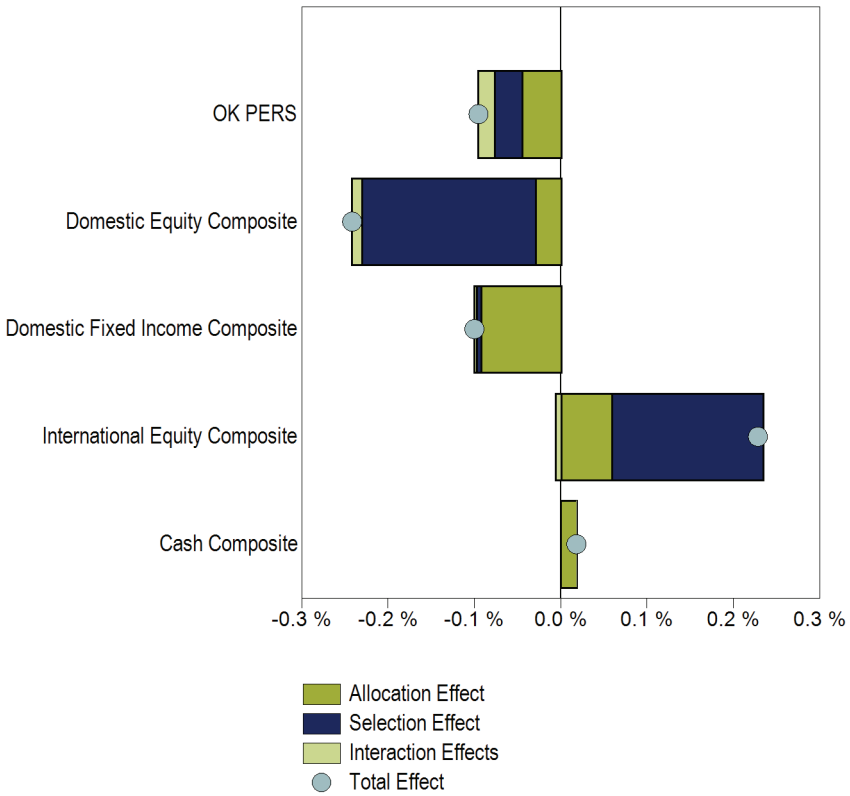
Total Fund Allocations vs. Peer Universe



	Allocation (Rank)							
5th Percentile	54.5		23.7		44.4		7.3	
25th Percentile	41.3		18.1		33.6		2.5	
Median	33.6		13.5		25.9		1.0	
75th Percentile	26.0		10.2		18.5		0.3	
95th Percentile	16.5		5.0		8.1		0.0	
# of Portfolios	226		218		187		216	
● OK PERS	45.1	(14)	22.2	(10)	32.5	(30)	0.3	(75)

Total Fund Attribution Analysis

Attribution Effects Relative to PERS Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	-7.9%	-7.5%	-0.4%	-0.2%	0.0%	0.0%	-0.2%
Domestic Fixed Income Composite	1.2%	1.2%	0.0%	0.0%	-0.1%	0.0%	-0.1%
International Equity Composite	-11.5%	-12.2%	0.7%	0.2%	0.1%	0.0%	0.2%
Cash Composite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**-6.0%**	**-5.9%**	**-0.1%**	**0.0%**	**0.0%**	**0.0%**	**-0.1%**

*Target return show is a weighted average of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-6.0%	-4.0%	-1.7%
Wtd. Index Return *	-5.9%	-4.0%	-2.1%
Excess Return	**-0.1%**	**0.1%**	**0.4%**
Selection Effect	0.0%	0.2%	0.5%
Allocation Effect	0.0%	-0.1%	-0.1%
Interaction Effect	0.0%	0.0%	0.0%
Asset Class Returns			
OK PERS	-6.0%	-4.0%	-1.7%
Domestic Equity Composite	-7.9%	-5.6%	-0.5%
Domestic Fixed Income Composite	1.2%	0.9%	3.4%
International Equity Composite	-11.5%	-7.3%	-10.5%
Cash Composite	0.0%	0.1%	0.1%
Z TERMINATED - R/E Composite			

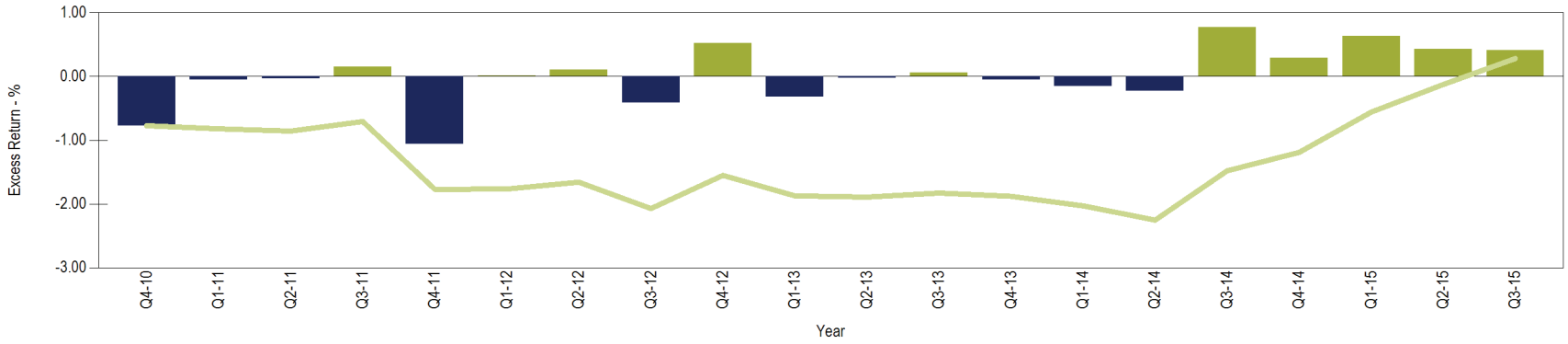
*Calculated from benchmark returns and weightings of each component.

Oklahoma Firefighters

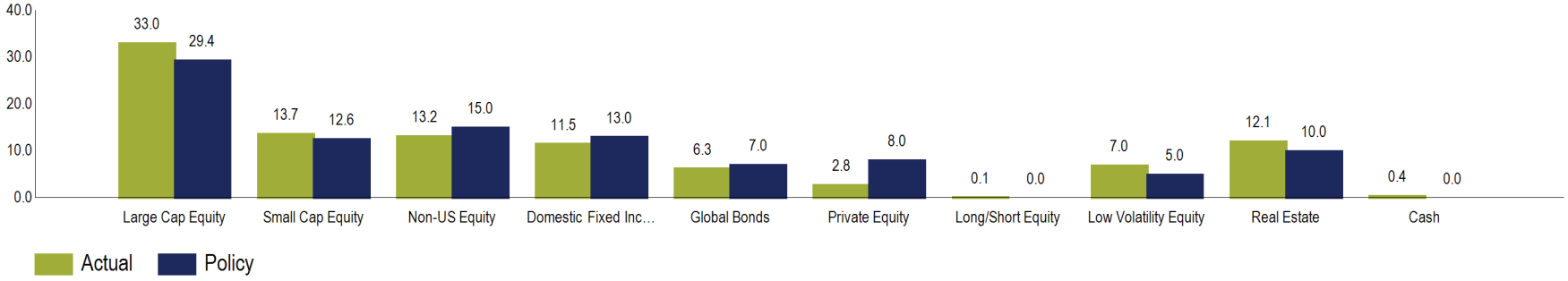
Total Plan Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK FIREFIGHTERS	**$2,133,536,853**	**-4.9%**	**45**	**-1.3%**	**13**	**1.7%**	**5**	**9.0%**	**3**	**8.9%**	**10**	**5.9%**	**31**
FIREFIGHTERS Allocation Index		*-5.3%*	*61*	*-2.8%*	*54*	*-0.1%*	*35*	*8.2%*	*14*	*8.8%*	*12*	*5.9%*	*35*
FIREFIGHTERS Policy Index		*-4.4%*	*26*	*-2.3%*	*39*	*0.6%*	*18*	*8.7%*	*7*	*9.4%*	*5*	*6.3%*	*14*
InvestorForce Public DB Gross Median		*-5.0%*		*-2.6%*		*-0.6%*		*6.9%*		*7.5%*		*5.6%*	

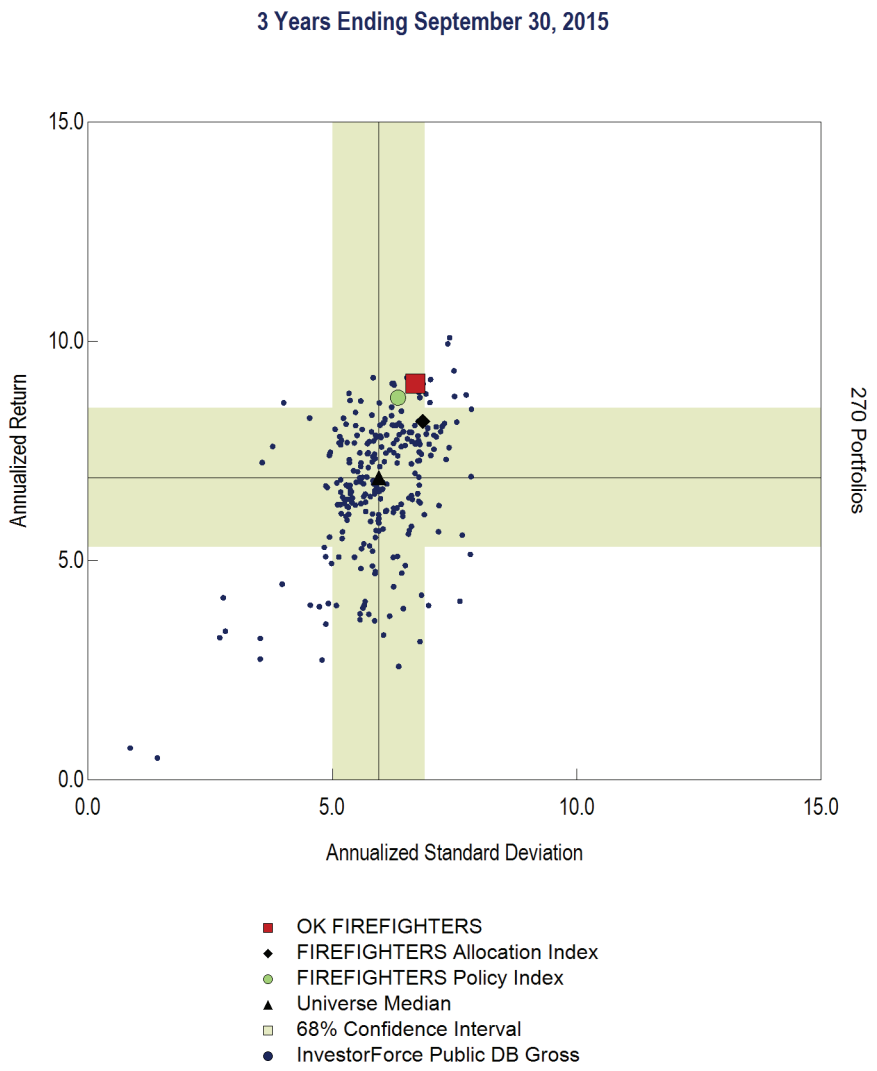
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Plan Risk/Return - 3 Years



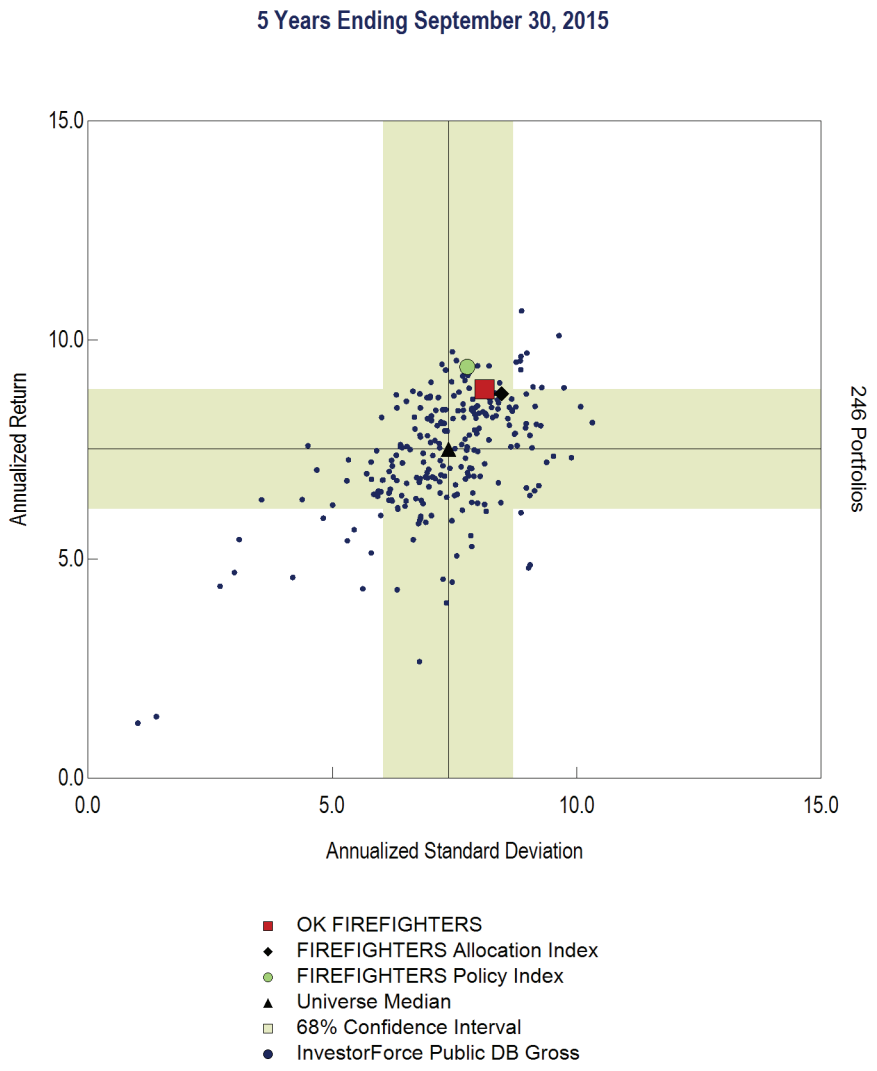
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK FIREFIGHTERS	9.04%	3	6.70%	81
FIREFIGHTERS Allocation Index	8.18%	14	6.85%	89
FIREFIGHTERS Policy Index	8.72%	7	6.34%	69

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK FIREFIGHTERS	1.34	17	2.55	11
FIREFIGHTERS Allocation Index	1.19	45	2.10	44
FIREFIGHTERS Policy Index	1.37	12	2.55	12

Total Plan Risk/Return - 5 Years



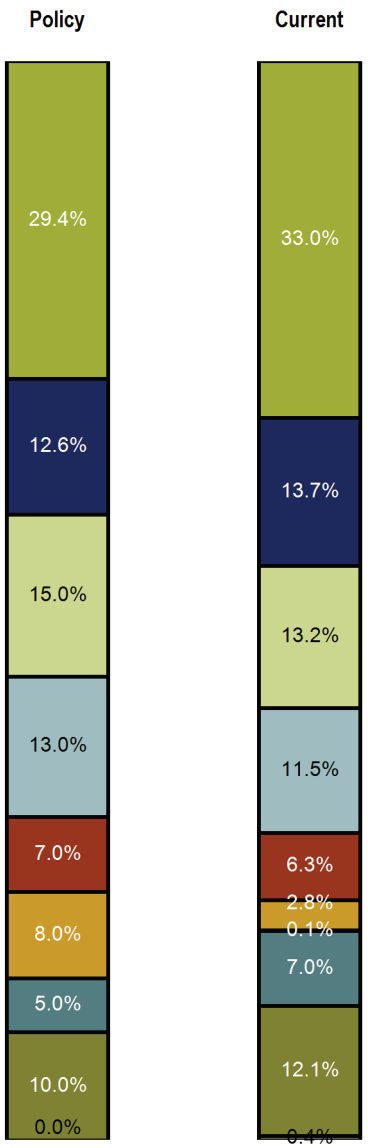
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK FIREFIGHTERS	8.88%	10	8.11%	76
FIREFIGHTERS Allocation Index	8.77%	12	8.46%	84
FIREFIGHTERS Policy Index	9.39%	5	7.76%	62

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK FIREFIGHTERS	1.09	33	1.61	35
FIREFIGHTERS Allocation Index	1.03	48	1.58	37
FIREFIGHTERS Policy Index	1.20	14	1.92	10

Total Plan Asset Allocation vs. Policy Targets

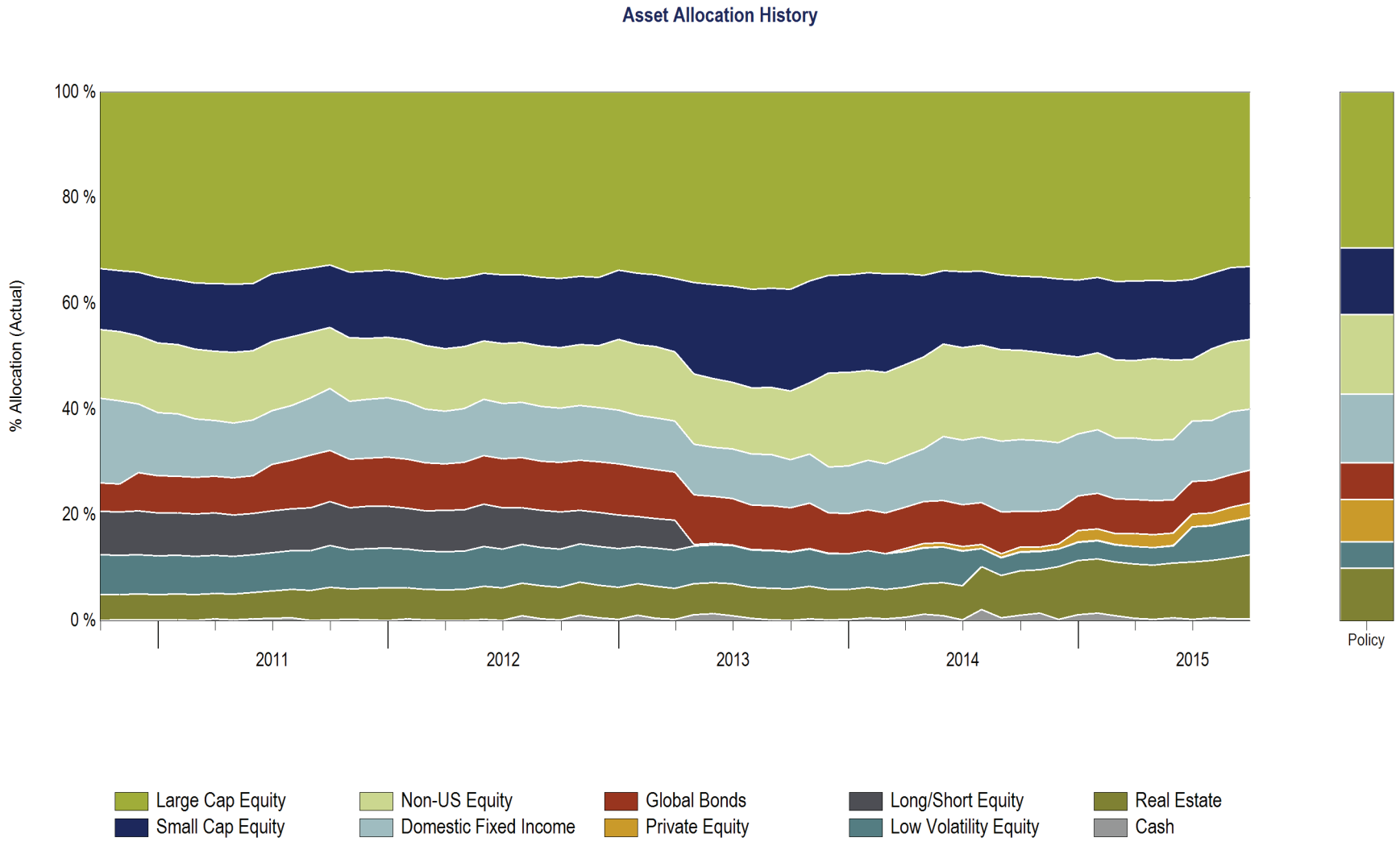


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$704,415,528	29.4%	33.0%	3.6%	24.4% - 34.4%	**Yes**
Small Cap Equity	$292,731,787	12.6%	13.7%	1.1%	7.6% - 17.6%	**Yes**
Non-US Equity	$281,995,611	15.0%	13.2%	-1.8%	10.0% - 20.0%	**Yes**
Domestic Fixed Income	$245,938,656	13.0%	11.5%	-1.5%	0.0% - 28.0%	**Yes**
Global Bonds	$133,557,183	7.0%	6.3%	-0.7%	2.0% - 12.0%	**Yes**
Private Equity	$59,691,559	8.0%	2.8%	-5.2%	0.0% - 13.0%	**Yes**
Long/Short Equity	$1,102,895	--	0.1%	0.1%	--	**No**
Low Volatility Equity	$148,802,507	5.0%	7.0%	2.0%	0.0% - 10.0%	**Yes**
Real Estate	$257,185,093	10.0%	12.1%	2.1%	5.0% - 15.0%	**Yes**
Cash	$8,116,034	0.0%	0.4%	0.4%	0.0% - 5.0%	**Yes**
Total	**$2,133,536,853**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Plan Asset Allocation History



Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK FIREFIGHTERS	**2,133,536,853**	**100.0**	**-4.9**	**45**	**-1.3**	**13**	**1.7**	**5**	**9.0**	**3**	**8.9**	**10**	**5.9**	**31**
FIREFIGHTERS Allocation Index			*-5.3*	*61*	*-2.8*	*54*	*-0.1*	*35*	*8.2*	*14*	*8.8*	*12*	*5.9*	*35*
Over/Under			0.4		1.5		1.8		0.8		0.1		0.0	
FIREFIGHTERS Policy Index			*-4.4*	*26*	*-2.3*	*39*	*0.6*	*18*	*8.7*	*7*	*9.4*	*5*	*6.3*	*14*
InvestorForce Public DB Gross Median			*-5.0*		*-2.6*		*-0.6*		*6.9*		*7.5*		*5.6*	
Domestic Equity Composite	**998,250,211**	**46.8**	**-8.1**	**49**	**-4.4**	**42**	**0.5**	**50**	**12.9**	**51**	**12.6**	**65**	**7.0**	**71**
Russell 3000			*-7.2*	*37*	*-5.4*	*55*	*-0.5*	*59*	*12.5*	*56*	*13.3*	*51*	*6.9*	*73*
Over/Under			-0.9		1.0		1.0		0.4		-0.7		0.1	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Large Cap Equity Composite	**704,415,528**	**33.0**	**-7.0**	**35**	**-4.5**	**43**	**-0.3**	**57**	**13.3**	**44**	**13.7**	**42**	**6.7**	**78**
Russell 1000			*-6.8*	*32*	*-5.2*	*51*	*-0.6*	*60*	*12.7*	*54*	*13.4*	*47*	*7.0*	*72*
Over/Under			-0.2		0.7		0.3		0.6		0.3		-0.3	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Aronson	79,249,443	3.7	-7.8	42	-5.1	19	-1.7	27	13.7	25	14.1	17	6.7	59
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			0.6		3.9		2.7		2.1		1.8		1.0	
Herndon Capital	68,993,282	3.2	-9.2	67	-8.5	65	-10.4	94	7.0	97	--	--	--	--
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			-0.8		0.5		-6.0		-4.6					
eA US Large Cap Value Equity Gross Median			*-8.2*		*-7.5*		*-3.5*		*12.1*		*12.4*		*6.9*	
SSgA Equity Index	130,282,819	6.1	-6.4	42	-5.2	55	-0.5	56	12.5	55	13.4	51	6.9	72
S&P 500			*-6.4*	*42*	*-5.3*	*56*	*-0.6*	*57*	*12.4*	*56*	*13.3*	*52*	*6.8*	*77*
Over/Under			0.0		0.1		0.1		0.1		0.1		0.1	
SSgA EQ Wtd S&P	129,629,854	6.1	-7.8	71	-6.9	80	-1.4	65	14.2	23	13.8	44	8.2	24
S&P 500			*-6.4*	*42*	*-5.3*	*56*	*-0.6*	*57*	*12.4*	*56*	*13.3*	*52*	*6.8*	*77*
Over/Under			-1.4		-1.6		-0.8		1.8		0.5		1.4	
Intech	130,707,959	6.1	-4.4	15	-2.7	22	3.4	16	13.9	30	14.5	26	7.6	44
S&P 500			*-6.4*	*42*	*-5.3*	*56*	*-0.6*	*57*	*12.4*	*56*	*13.3*	*52*	*6.8*	*77*
Over/Under			2.0		2.6		4.0		1.5		1.2		0.8	
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
Fred Alger Management	165,552,170	7.8	-7.8	80	-1.3	45	3.1	54	15.5	19	15.6	20	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			-2.5		0.2		-0.1		1.9		1.1			
eA US Large Cap Growth Equity Gross Median			*-6.0*		*-1.7*		*3.2*		*13.7*		*14.0*		*8.0*	

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Small Cap Equity Composite	**292,731,787**	**13.7**	**-10.5**	**52**	**-4.3**	**35**	**2.6**	**47**	**12.4**	**54**	**12.4**	**64**	**7.5**	**61**
Russell 2000			*-11.9*	*70*	*-7.7*	*71*	*1.2*	*57*	*11.0*	*71*	*11.7*	*73*	*6.5*	*80*
Over/Under			1.4		3.4		1.4		1.4		0.7		1.0	
eA US Small Cap Equity Gross Median			*-10.4*		*-5.7*		*2.3*		*12.6*		*13.3*		*7.9*	
Earnest Partner	58,668,676	2.7	-11.9	77	-7.8	60	-2.2	66	12.5	47	11.7	65	6.8	72
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			-1.2		2.3		-0.6		3.3		1.5		1.5	
River Road	58,975,633	2.8	-8.3	25	-3.1	11	2.9	29	10.0	75	10.7	75	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			2.4		7.0		4.5		0.8		0.5			
eA US Small Cap Value Equity Gross Median			*-9.8*		*-6.7*		*0.5*		*12.2*		*12.5*		*7.6*	
Lord Abbet	57,109,646	2.7	-15.4	91	-6.6	69	0.8	74	14.1	42	--	--	--	--
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			-2.3		-1.1		-3.2		1.3					
Delaware Small Growth	63,804,608	3.0	-6.5	5	1.7	11	11.3	11	13.5	49	--	--	--	--
Russell 2500 Growth			*-11.0*	*36*	*-3.8*	*51*	*3.4*	*54*	*13.8*	*45*	*13.9*	*54*	*8.4*	*56*
Over/Under			4.5		5.5		7.9		-0.3					
eA US Small Cap Growth Equity Gross Median			*-11.7*		*-3.8*		*4.1*		*13.4*		*14.3*		*8.7*	
SSgA Russell Small Cap	54,173,224	2.5	-10.5	51	-6.3	57	-0.3	69	--	--	--	--	--	--
Russell 2000			*-11.9*	*70*	*-7.7*	*71*	*1.2*	*57*	*11.0*	*71*	*11.7*	*73*	*6.5*	*80*
Over/Under			1.4		1.4		-1.5							
eA US Small Cap Equity Gross Median			*-10.4*		*-5.7*		*2.3*		*12.6*		*13.3*		*7.9*	
Long/Short Equity Composite	**1,102,895**	**0.1**												
Azul Holdco - Liquidating	1,102,895	0.1												

Azul Holdco was liquidated in June, 2010.

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	**231,995,611**	**10.9**	**-11.5**	**71**	**-6.4**	**71**	**-8.2**	**64**	**2.2**	**93**	**1.1**	**97**	**1.7**	**98**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			0.7		2.2		4.0		-0.1		-0.7		-1.3	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Chautauqua	81,098,140	3.8	-13.5	94	-7.1	76	-9.2	72	3.8	79	--	--	--	--
MSCI EAFE			*-10.2*	*46*	*-5.3*	*57*	*-8.7*	*68*	*5.6*	*54*	*4.0*	*70*	*3.0*	*95*
Over/Under			-3.3		-1.8		-0.5		-1.8					
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
WCM	89,731,342	4.2	-6.0	9	0.3	15	0.4	11	9.4	18	--	--	--	--
MSCI EAFE			*-10.2*	*46*	*-5.3*	*57*	*-8.7*	*68*	*5.6*	*54*	*4.0*	*70*	*3.0*	*95*
Over/Under			4.2		5.6		9.1		3.8					
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Emerging Markets Equity Composite	**61,072,546**	**2.9**	**-16.2**	**50**	**-15.5**	**69**	**-16.8**	**50**	**-2.9**	**54**	**--**	**--**	**--**	**--**
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			1.7		0.0		2.5		2.4					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
Wasatch	20,604,324	1.0	-11.9	7	-8.7	12	-10.6	10	-0.1	24	--	--	--	--
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			6.0		6.8		8.7		5.2					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
ClariVest Emerging Market Equity	40,468,222	1.9	-18.3	85	-18.6	94	-19.6	77	--	--	--	--	--	--
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			-0.4		-3.1		-0.3							
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
Thornburg - Liquidating	64,134	0.0												
Fixed Income Composite	**379,495,839**	**17.8**	**-0.5**	**79**	**-1.0**	**84**	**0.5**	**80**	**1.4**	**76**	**3.7**	**48**	**5.1**	**45**
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			-1.7		-2.1		-2.4		-0.3		0.6		0.5	
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Core Bonds Composite	**120,349,442**	**5.6**	**1.4**	**25**	**1.2**	**64**	**3.0**	**48**	**1.8**	**72**	**--**	**--**	**--**	**--**
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.2		0.1		0.1		0.1					
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
SSgA NL Fixed Income	42,681,433	2.0	1.2	37	1.2	64	2.9	59	1.7	80	3.1	81	--	--
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.0		0.1		0.0		0.0		0.0			
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Orleans Capital Management	25,391,212	1.2	0.6	90	0.8	82	2.0	89	--	--	--	--	--	--
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			-0.6		-0.3		-0.9							
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Garcia Hamilton Associates	52,276,797	2.5	1.9	2	1.3	49	3.7	10	--	--	--	--	--	--
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.7		0.2		0.8							
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Intermediate Bonds Composite	**42,647,382**	**2.0**	**1.1**	**29**	**1.7**	**54**	**3.0**	**27**	**1.7**	**52**	**--**	**--**	**--**	**--**
Barclays Int Govt/Credit			*0.9*	*46*	*1.8*	*52*	*2.7*	*50*	*1.4*	*77*	*2.4*	*86*	*4.2*	*89*
Over/Under			0.2		-0.1		0.3		0.3					
eA US Interm Duration Fixed Inc Gross Median			*0.9*		*1.8*		*2.7*		*1.7*		*2.8*		*4.6*	
SSgA Barclays Intermediate	42,647,382	2.0	1.1	29	1.7	54	3.0	27	1.7	52	2.7	61	4.4	73
Barclays Int Govt/Credit			*0.9*	*46*	*1.8*	*52*	*2.7*	*50*	*1.4*	*77*	*2.4*	*86*	*4.2*	*89*
Over/Under			0.2		-0.1		0.3		0.3		0.3		0.2	
eA US Interm Duration Fixed Inc Gross Median			*0.9*		*1.8*		*2.7*		*1.7*		*2.8*		*4.6*	
Garrison Middle Market Funding	38,966,635	1.8	2.0	1	5.7	1	9.9	1	--	--	--	--	--	--
Credit Suisse Leveraged Loans			*-1.2*	*89*	*1.6*	*13*	*1.2*	*74*	*3.8*	*5*	*4.8*	*27*	*4.4*	*95*
Over/Under			3.2		4.1		8.7							
eA US Core Plus Fixed Inc Gross Median			*0.2*		*0.8*		*2.1*		*2.4*		*4.3*		*5.7*	
Medley Opportunity Fund II	43,975,197	2.1	1.9	1	5.8	1	9.7	1	--	--	--	--	--	--
Credit Suisse Leveraged Loans			*-1.2*	*70*	*1.6*	*79*	*1.2*	*75*	*3.8*	*63*	*4.8*	*78*	*4.4*	*91*
Over/Under			3.1		4.2		8.5							
eA Float-Rate Bank Loan Gross Median			*-0.8*		*2.3*		*1.8*		*4.0*		*5.3*		*5.2*	

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Global Fixed Composite	**133,557,183**	**6.3**	**-4.1**	**83**	**-7.6**	**93**	**-7.5**	**87**	**-0.5**	**70**	**--**	**--**	**--**	**--**
Citi WGBI			*1.7*	*6*	*-2.4*	*63*	*-3.8*	*67*	*-2.9*	*92*	*-0.2*	*95*	*3.4*	*96*
Over/Under			-5.8		-5.2		-3.7		2.4					
eA All Global Fixed Inc Gross Median			*-0.9*		*-1.9*		*-2.7*		*1.7*		*3.0*		*4.8*	
Brandywine	133,557,183	6.3	-4.1	83	-7.6	93	-7.5	87	-0.5	70	3.6	43	--	--
Citi WGBI			*1.7*	*6*	*-2.4*	*63*	*-3.8*	*67*	*-2.9*	*92*	*-0.2*	*95*	*3.4*	*96*
Over/Under			-5.8		-5.2		-3.7		2.4		3.8			
eA All Global Fixed Inc Gross Median			*-0.9*		*-1.9*		*-2.7*		*1.7*		*3.0*		*4.8*	
Real Estate Composite	**257,185,093**	**12.1**	**3.0**	**--**	**11.1**	**--**	**15.8**	**--**	**12.4**	**--**	**--**	**--**	**--**	**--**
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-0.1		1.0		2.3		0.5					
JP Morgan RE	125,429,265	5.9	3.4	--	11.5	--	14.5	--	13.9	--	14.4	--	7.5	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			0.3		1.4		1.0		2.0		1.9		-0.5	
TA Associates	12,881,989	0.6	1.6	--	5.5	--	7.4	--	3.5	--	2.3	--	1.4	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-1.5		-4.6		-6.1		-8.4		-10.2		-6.6	
Portfolio Advisors RE III	10,555,654	0.5	2.5	--	15.6	--	21.6	--	14.1	--	10.2	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-0.6		5.5		8.1		2.2		-2.3			
Realty Associates IX Corp	8,694,872	0.4	4.6	--	11.2	--	14.8	--	13.2	--	10.3	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			1.5		1.1		1.3		1.3		-2.2			
Portfolio Advisors RE IV	6,255,776	0.3	1.0	--	11.6	--	17.1	--	17.6	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-2.1		1.5		3.6		5.7					
Angelo Gordon Net Lease Realty III LP	7,381,007	0.3	0.7	--	2.9	--	5.2	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-2.4		-7.2		-8.3							
Mesirow	8,602,566	0.4	1.1	--	4.1	--	-0.4	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-2.0		-6.0		-13.9							

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Dune Real Estate Fund III	10,833,618	0.5	0.0	--	10.0	--	11.2	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-3.1		-0.1		-2.3							
OK FF Portfolio Advisors	13,123,314	0.6	1.3	--	1.3	--	33.3	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-1.8		-8.8		19.8							
Landmark RE VII	1,684,280	0.1	-5.5	--	20.5	--	20.5	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-8.6		10.4		7.0							
JP Morgan Special Situation Property	48,320,599	2.3	5.2	--	16.5	--	--	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			2.1		6.4									
Hall Capital III	3,422,153	0.2	-10.5	--	-23.7	--	--	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-13.6		-33.8									
Hedge Fund Composite	**198,802,507**	**9.3**	**-0.4**	**--**	**-0.1**	**--**	**-1.0**	**--**	**4.2**	**--**	**4.0**	**--**	**--**	**--**
HFRI FOF: Conservative Index			*-1.8*	--	*0.3*	--	*0.6*	--	*4.2*	--	*2.8*	--	*2.1*	--
Over/Under			1.4		-0.4		-1.6		0.0		1.2			
Private Advisors	74,588,282	3.5	0.0	--	0.4	--	-0.6	--	4.4	--	4.1	--	--	--
HFRI Fund of Funds Composite Index			*-3.5*	--	*-0.9*	--	*0.0*	--	*4.2*	--	*2.7*	--	*2.4*	--
Over/Under			3.5		1.3		-0.6		0.2		1.4			
Permal	74,214,225	3.5	-1.0	--	--	--	--	--	--	--	--	--	--	--
HFRI Fund of Funds Composite Index			*-3.5*	--	*-0.9*	--	*0.0*	--	*4.2*	--	*2.7*	--	*2.4*	--
Over/Under			2.5											
Allianz Global Investors DMAP	50,000,000	2.3	--	--	--	--	--	--	--	--	--	--	--	--
Russell 2500 Growth			*-11.0*	--	*-3.8*	--	*3.4*	--	*13.8*	--	*13.9*	--	*8.4*	--
Over/Under														

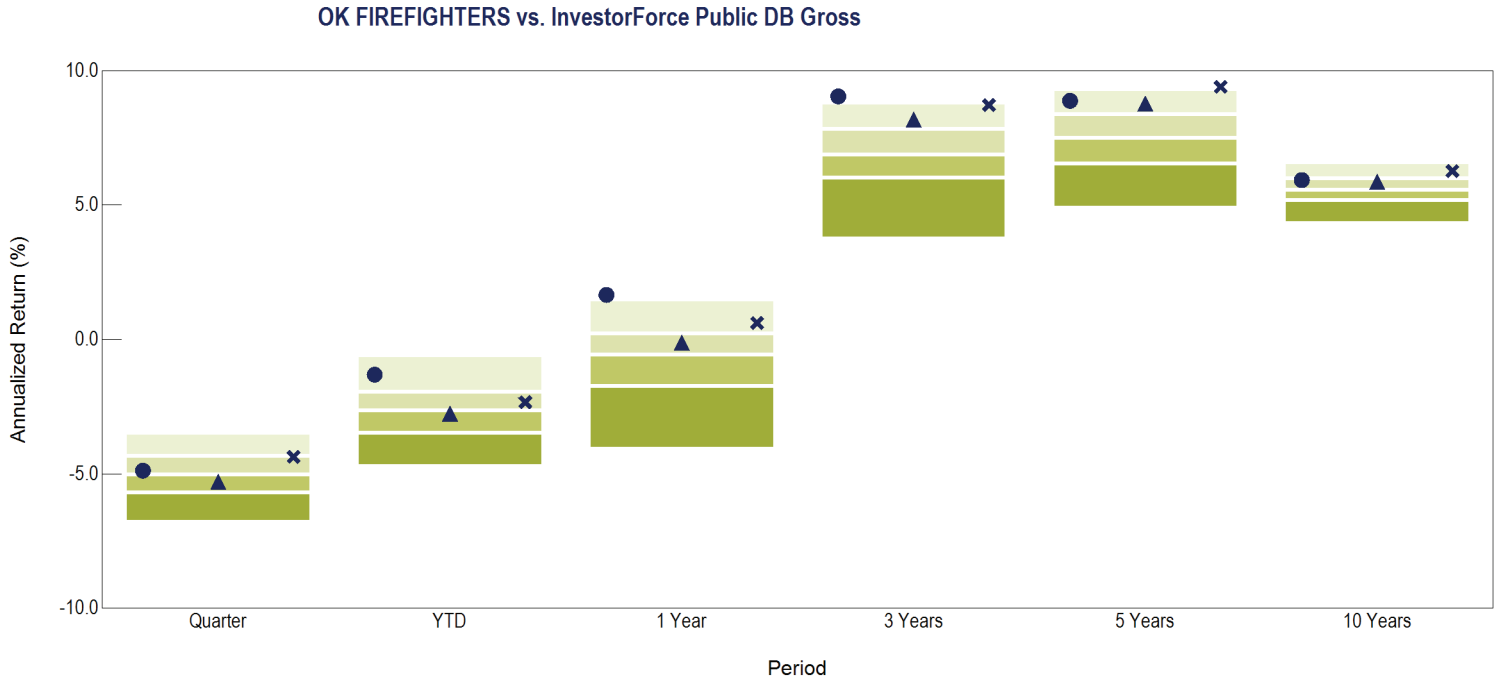
Permal was funded on 6/30/2015.
Allianz was funded on 7/31/2015.

Total Plan Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Private Equity Composite	**59,691,559**	**2.8**	**4.9**	**--**	**14.1**	**--**	**27.7**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			4.9		7.6		20.3							
Pomona Captial Fund VIII	19,715,875	0.9	10.5	--	12.3	--	19.9	--	--	--	--	--	--	--
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			10.5		5.8		12.5							
Ardian	17,899,341	0.8	5.7	--	14.7	--	34.5	--	--	--	--	--	--	--
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			5.7		8.2		27.1							
Dynamics Global Secondaries IV	22,076,342	1.0	0.0	--	12.7	--	--	--	--	--	--	--	--	--
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			0.0		6.2									

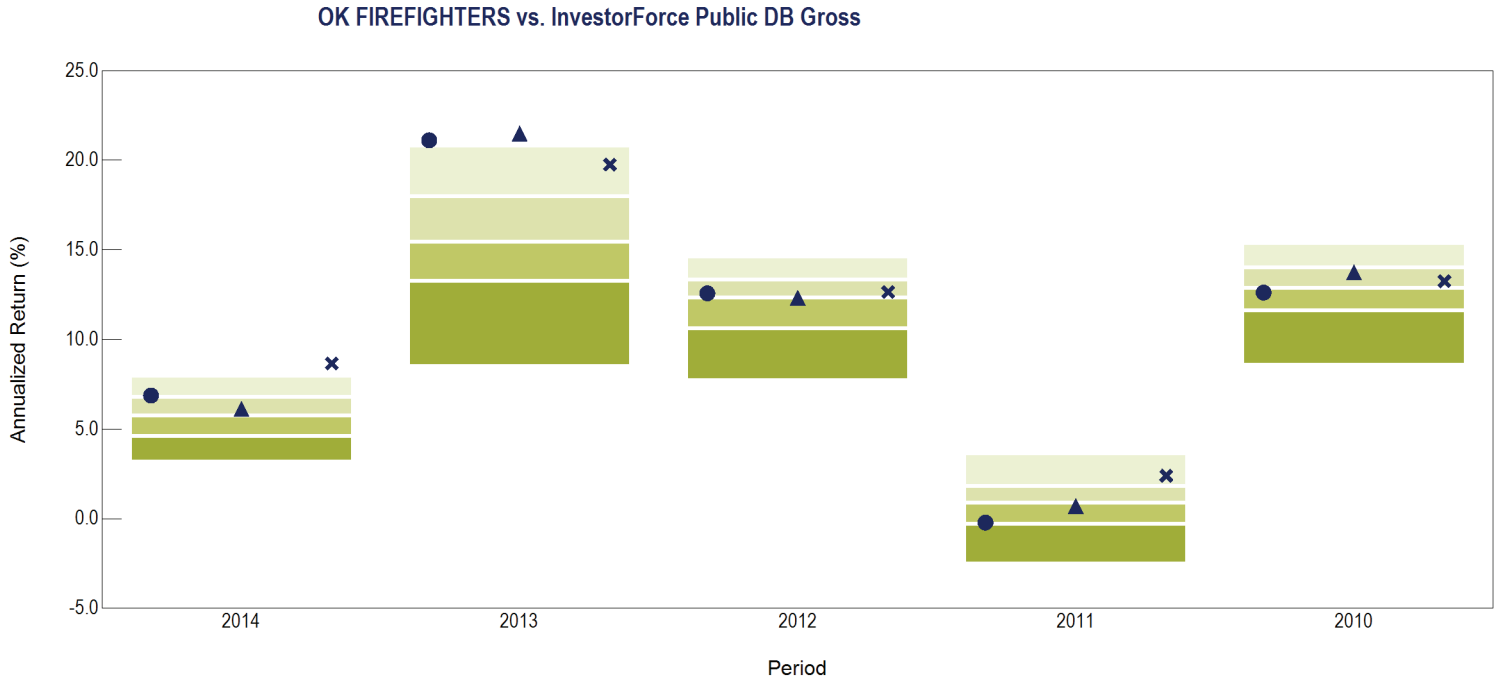
Performance Numbers are shown gross of fees.

Total Plan Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.5		-0.6		1.5		8.8		9.3		6.6	
25th Percentile	-4.3		-1.9		0.3		7.9		8.4		6.0	
Median	-5.0		-2.6		-0.6		6.9		7.5		5.6	
75th Percentile	-5.7		-3.5		-1.7		6.0		6.6		5.2	
95th Percentile	-6.8		-4.7		-4.1		3.8		4.9		4.3	
# of Portfolios	311		303		300		270		246		196	
● OK FIREFIGHTERS	-4.9	(45)	-1.3	(13)	1.7	(5)	9.0	(3)	8.9	(10)	5.9	(31)
▲ FIREFIGHTERS Allocation Index	-5.3	(61)	-2.8	(54)	-0.1	(35)	8.2	(14)	8.8	(12)	5.9	(35)
× FIREFIGHTERS Policy Index	-4.4	(26)	-2.3	(39)	0.6	(18)	8.7	(7)	9.4	(5)	6.3	(14)

Total Plan Return Summary vs. Peer Universe

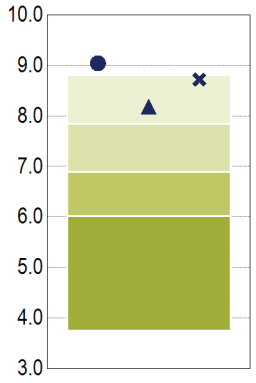


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK FIREFIGHTERS	6.9	(24)	21.1	(3)	12.6	(46)	-0.2	(74)	12.6	(57)
▲ FIREFIGHTERS Allocation Index	6.1	(40)	21.5	(3)	12.3	(52)	0.7	(59)	13.7	(33)
× FIREFIGHTERS Policy Index	8.7	(3)	19.8	(12)	12.6	(45)	2.4	(15)	13.2	(43)

Total Plan Risk Statistics vs. Peer Universe

OK FIREFIGHTERS vs. InvestorForce Public DB Gross
3 Years

Anlzd Return

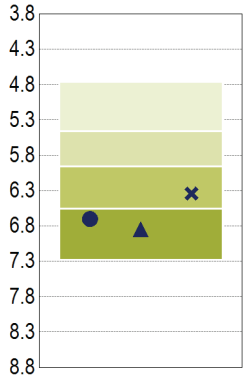


- OK FIREFIGHTERS
  - Value 9.04
  - %tile 3
- FIREFIGHTERS Allocation Index
  - Value 8.18
  - %tile 14
- FIREFIGHTERS Policy Index
  - Value 8.72
  - %tile 7

Universe

5th %tile	8.81
25th %tile	7.86
Median	6.90
75th %tile	6.02
95th %tile	3.76

Anlzd Standard Deviation

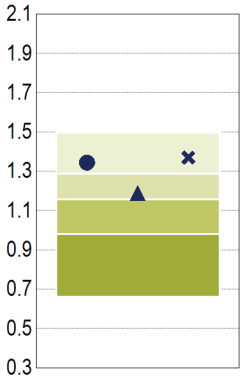


- OK FIREFIGHTERS
  - Value 6.70
  - %tile 81
- FIREFIGHTERS Allocation Index
  - Value 6.85
  - %tile 89
- FIREFIGHTERS Policy Index
  - Value 6.34
  - %tile 69

Universe

5th %tile	4.76
25th %tile	5.45
Median	5.95
75th %tile	6.55
95th %tile	7.27

Sharpe Ratio

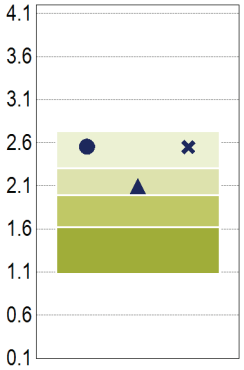


- OK FIREFIGHTERS
  - Value 1.34
  - %tile 17
- FIREFIGHTERS Allocation Index
  - Value 1.19
  - %tile 45
- FIREFIGHTERS Policy Index
  - Value 1.37
  - %tile 12

Universe

5th %tile	1.50
25th %tile	1.29
Median	1.16
75th %tile	0.98
95th %tile	0.66

Sortino Ratio



- OK FIREFIGHTERS
  - Value 2.55
  - %tile 11
- FIREFIGHTERS Allocation Index
  - Value 2.10
  - %tile 44
- FIREFIGHTERS Policy Index
  - Value 2.55
  - %tile 12

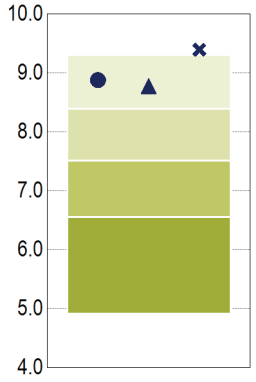
Universe

5th %tile	2.74
25th %tile	2.31
Median	2.00
75th %tile	1.63
95th %tile	1.08

Total Plan Risk Statistics vs. Peer Universe

OK FIREFIGHTERS vs. InvestorForce Public DB Gross
5 Years

Anlzd Return

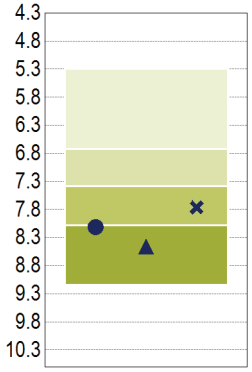


- ● OK FIREFIGHTERS
  - Value 8.88
  - %tile 10
- ▲ FIREFIGHTERS Allocation Index
  - Value 8.77
  - %tile 12
- × FIREFIGHTERS Policy Index
  - Value 9.39
  - %tile 5

Universe

5th %tile	9.31
25th %tile	8.40
Median	7.51
75th %tile	6.56
95th %tile	4.92

Anlzd Standard Deviation

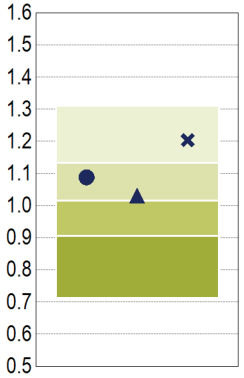


- ● OK FIREFIGHTERS
  - Value 8.11
  - %tile 76
- ▲ FIREFIGHTERS Allocation Index
  - Value 8.46
  - %tile 84
- × FIREFIGHTERS Policy Index
  - Value 7.76
  - %tile 62

Universe

5th %tile	5.30
25th %tile	6.71
Median	7.38
75th %tile	8.07
95th %tile	9.13

Sharpe Ratio

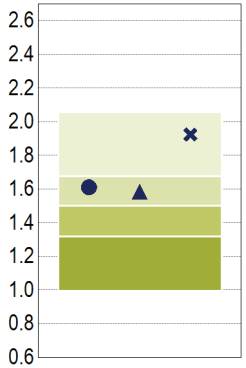


- ● OK FIREFIGHTERS
  - Value 1.09
  - %tile 33
- ▲ FIREFIGHTERS Allocation Index
  - Value 1.03
  - %tile 48
- × FIREFIGHTERS Policy Index
  - Value 1.20
  - %tile 14

Universe

5th %tile	1.31
25th %tile	1.13
Median	1.02
75th %tile	0.91
95th %tile	0.71

Sortino Ratio

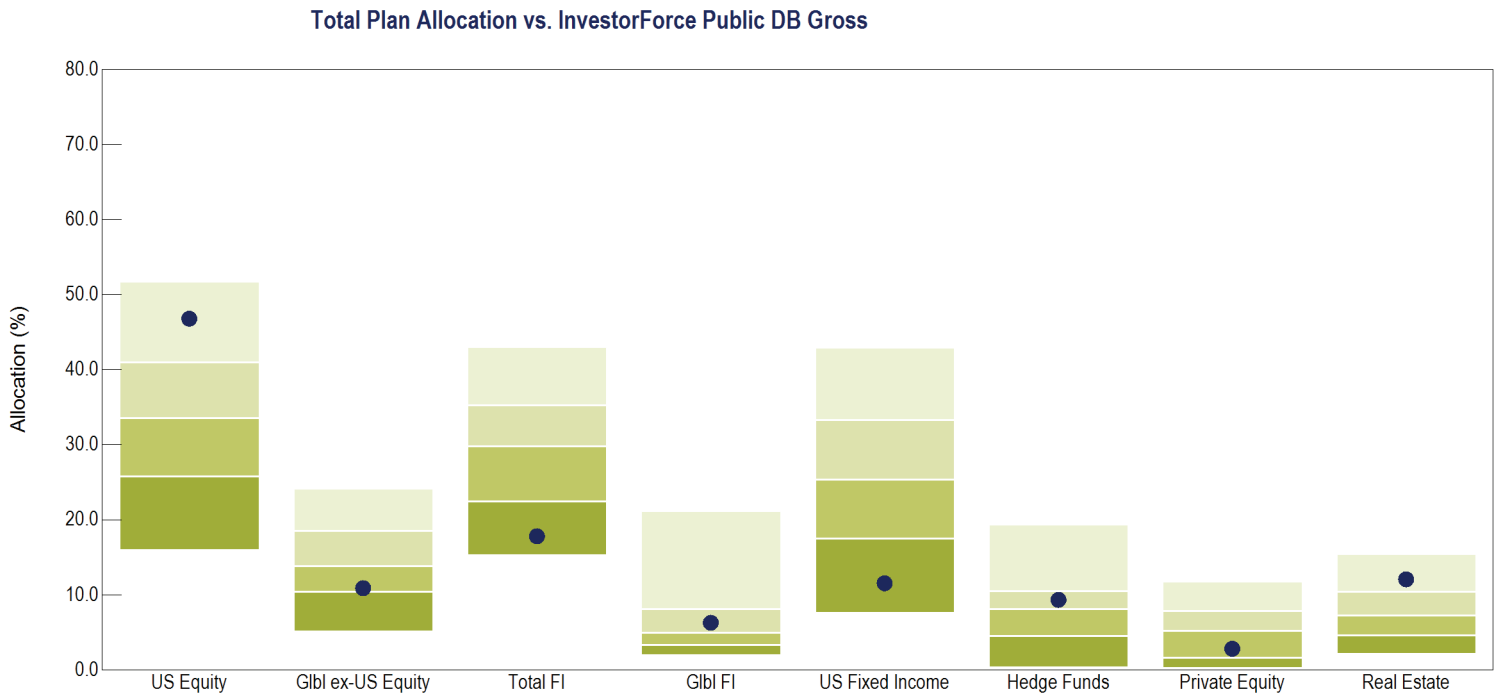


- ● OK FIREFIGHTERS
  - Value 1.61
  - %tile 35
- ▲ FIREFIGHTERS Allocation Index
  - Value 1.58
  - %tile 37
- × FIREFIGHTERS Policy Index
  - Value 1.92
  - %tile 10

Universe

5th %tile	2.06
25th %tile	1.68
Median	1.50
75th %tile	1.32
95th %tile	1.00

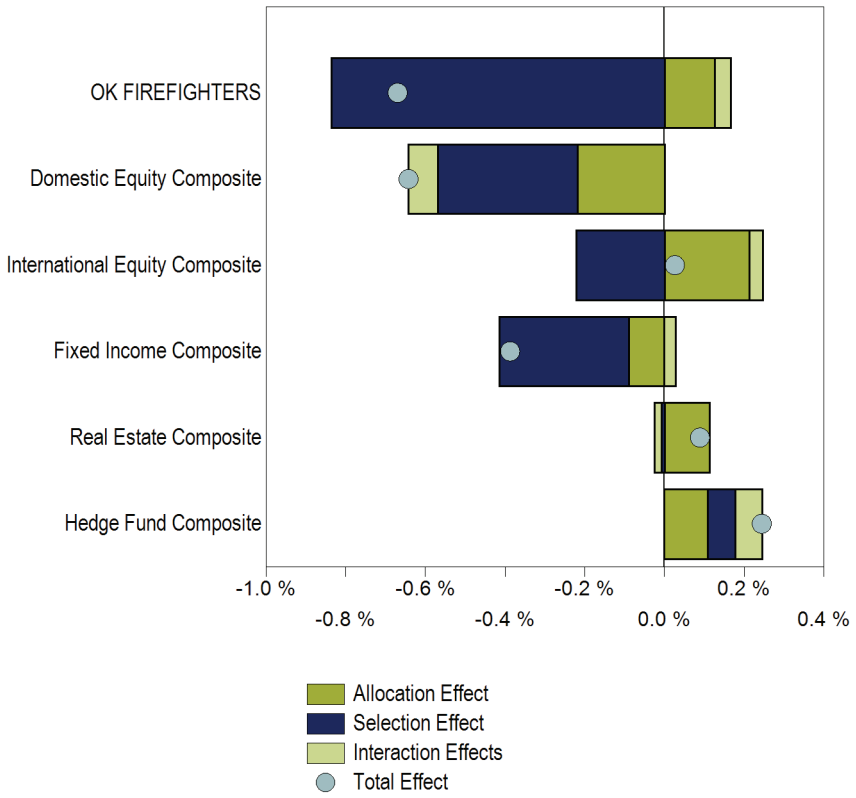
Total Plan Allocations vs. Peer Universe



	Allocation (Rank)															
5th Percentile	51.7		24.1		43.0		21.1		42.9		19.4		11.8		15.4	
25th Percentile	41.0		18.6		35.4		8.2		33.4		10.6		7.9		10.5	
Median	33.6		13.9		29.9		5.1		25.4		8.2		5.2		7.4	
75th Percentile	25.8		10.5		22.5		3.4		17.6		4.6		1.7		4.7	
95th Percentile	16.0		5.2		15.4		2.1		7.7		0.4		0.3		2.2	
# of Portfolios	271		264		298		43		225		83		81		192	
● **OK FIREFIGHTERS**	46.8	(10)	10.9	(73)	17.8	(90)	6.3	(39)	11.5	(92)	9.3	(36)	2.8	(66)	12.1	(13)

Total Plan Attribution Analysis

Attribution Effects Relative to FIREFIGHTERS Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	-8.1%	-7.2%	-0.8%	-0.4%	-0.2%	-0.1%	-0.6%
International Equity Composite	-11.5%	-10.2%	-1.3%	-0.2%	0.2%	0.0%	0.0%
Fixed Income Composite	-0.5%	1.2%	-1.7%	-0.3%	-0.1%	0.0%	-0.4%
Real Estate Composite	3.0%	3.1%	0.0%	0.0%	0.1%	0.0%	0.1%
Hedge Fund Composite	-0.4%	-1.8%	1.4%	0.1%	0.1%	0.1%	0.2%
Total	**-5.1%**	**-4.1%**	**-1.0%**	**-0.8%**	**0.1%**	**0.0%**	**-0.7%**

*Total returns shown are weighted averages of the returns of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

Total Plan Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-5.1%	-1.7%	1.2%
Wtd. Index Return *	-4.4%	-1.8%	0.8%
Excess Return	**-0.8%**	**0.2%**	**0.4%**
Selection Effect	-0.8%	0.2%	0.4%
Allocation Effect	0.0%	0.0%	0.0%
Interaction Effect	0.0%	0.0%	0.0%
Asset Class Returns			
OK FIREFIGHTERS	-4.9%	-1.3%	1.7%
Domestic Equity Composite	-8.1%	-4.4%	0.5%
Large Cap Equity Composite	-7.0%	-4.5%	-0.3%
Small Cap Equity Composite	-10.5%	-4.3%	2.6%
Long/Short Equity Composite	0.0%	0.0%	0.0%
International Equity Composite	-11.5%	-6.4%	-8.2%
Emerging Markets Equity Composite	-16.2%	-15.5%	-16.8%
Fixed Income Composite	-0.5%	-1.0%	0.5%
Domestic Fixed Income	1.5%	2.7%	5.0%
Core Bonds Composite	1.4%	1.2%	3.0%
Intermediate Bonds Composite	1.1%	1.7%	3.0%
Global Fixed Composite	-4.1%	-7.6%	-7.5%
Real Estate Composite	3.0%	11.1%	15.8%
Hedge Fund Composite	-0.4%	-0.1%	-1.0%
Private Equity Composite	4.9%	14.1%	27.7%

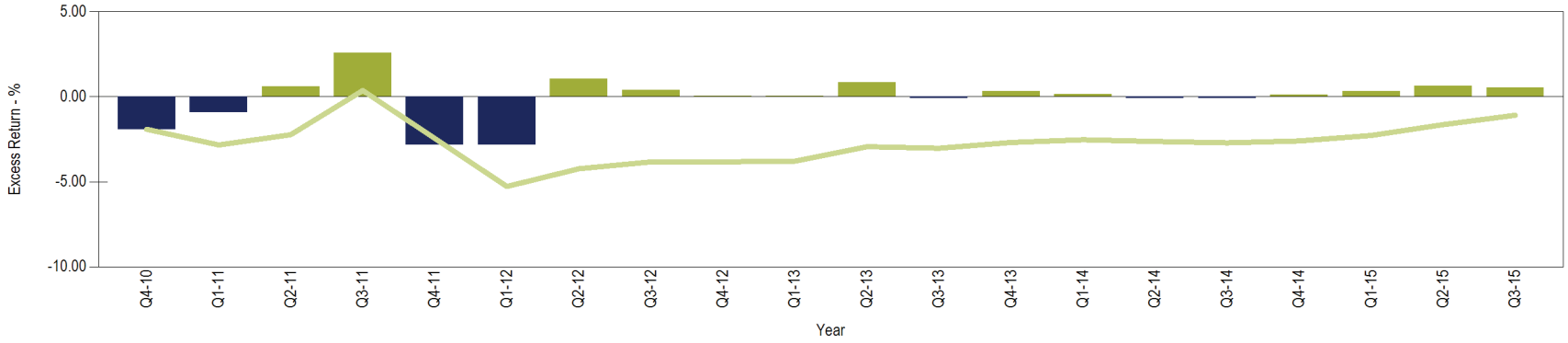
*Calculated from benchmark returns and weightings of each component.

Oklahoma Police

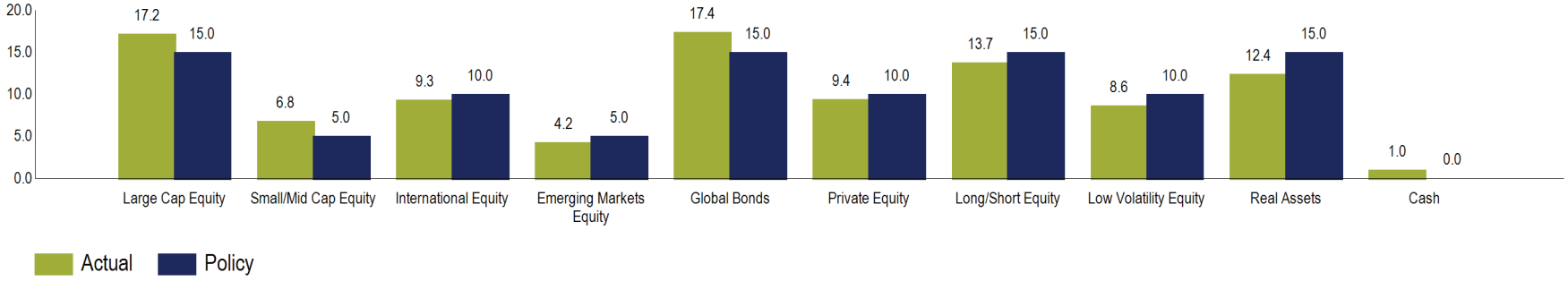
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK POLICE	**$2,144,222,299**	**-4.3%**	**23**	**-0.6%**	**4**	**0.5%**	**20**	**7.2%**	**44**	**7.6%**	**46**	**5.8%**	**42**
POLICE Allocation Index		*-4.9%*	*42*	*-2.1%*	*27*	*-1.1%*	*60*	*6.3%*	*69*	*7.6%*	*45*	*5.5%*	*54*
POLICE Policy Index		*-6.0%*	*85*	*-4.2%*	*90*	*-4.1%*	*97*	*5.5%*	*82*	*7.6%*	*46*	*5.1%*	*76*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

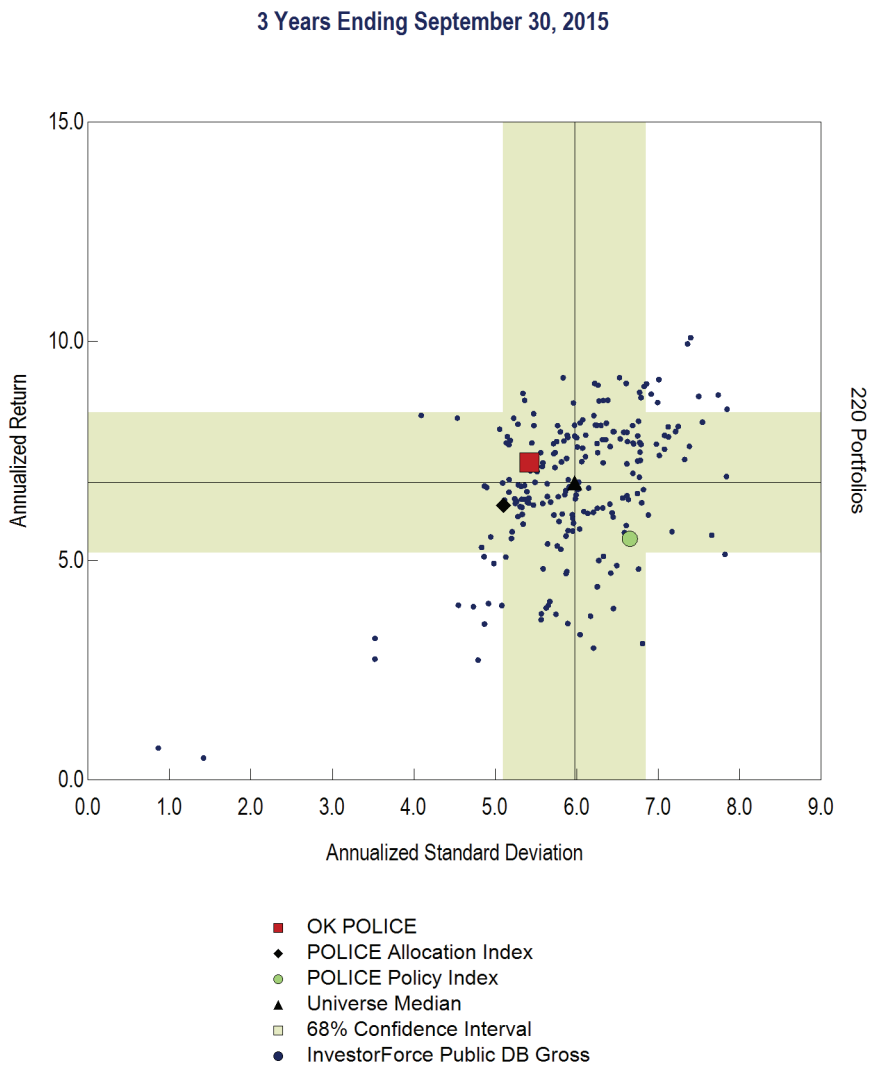
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



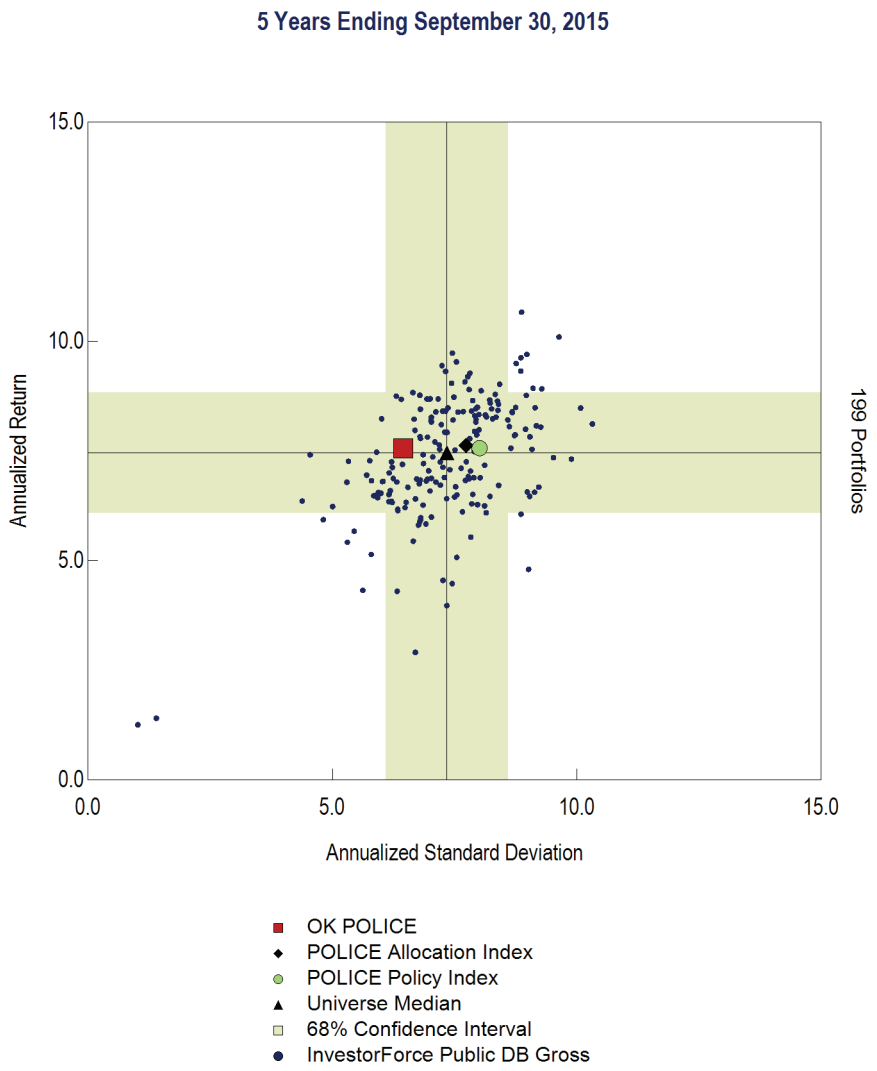
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK POLICE	7.24%	44	5.42%	25
POLICE Allocation Index	6.26%	69	5.10%	10
POLICE Policy Index	5.50%	82	6.65%	80

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK POLICE	1.33	18	2.48	15
POLICE Allocation Index	1.22	36	2.07	44
POLICE Policy Index	0.82	87	1.50	80

Total Fund Risk/Return - 5 Years



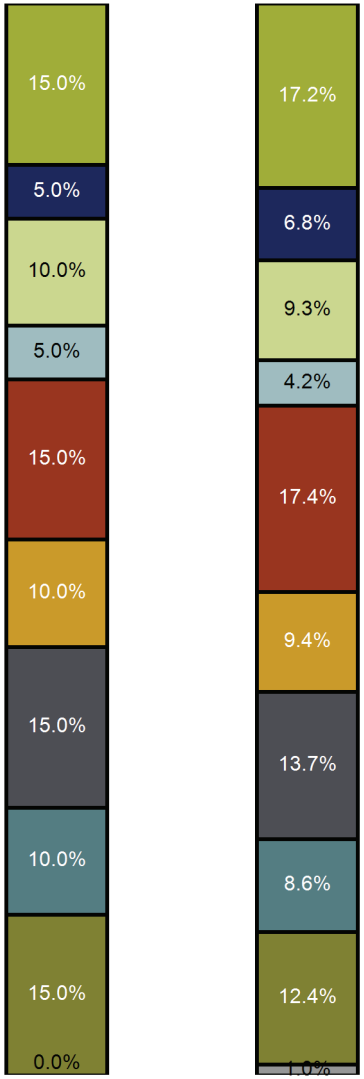
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK POLICE	7.57%	46	6.45%	21
POLICE Allocation Index	7.63%	45	7.74%	61
POLICE Policy Index	7.57%	46	8.01%	74

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK POLICE	1.17	18	1.72	19
POLICE Allocation Index	0.98	59	1.48	55
POLICE Policy Index	0.94	70	1.53	43

Total Fund Asset Allocation vs. Policy Targets

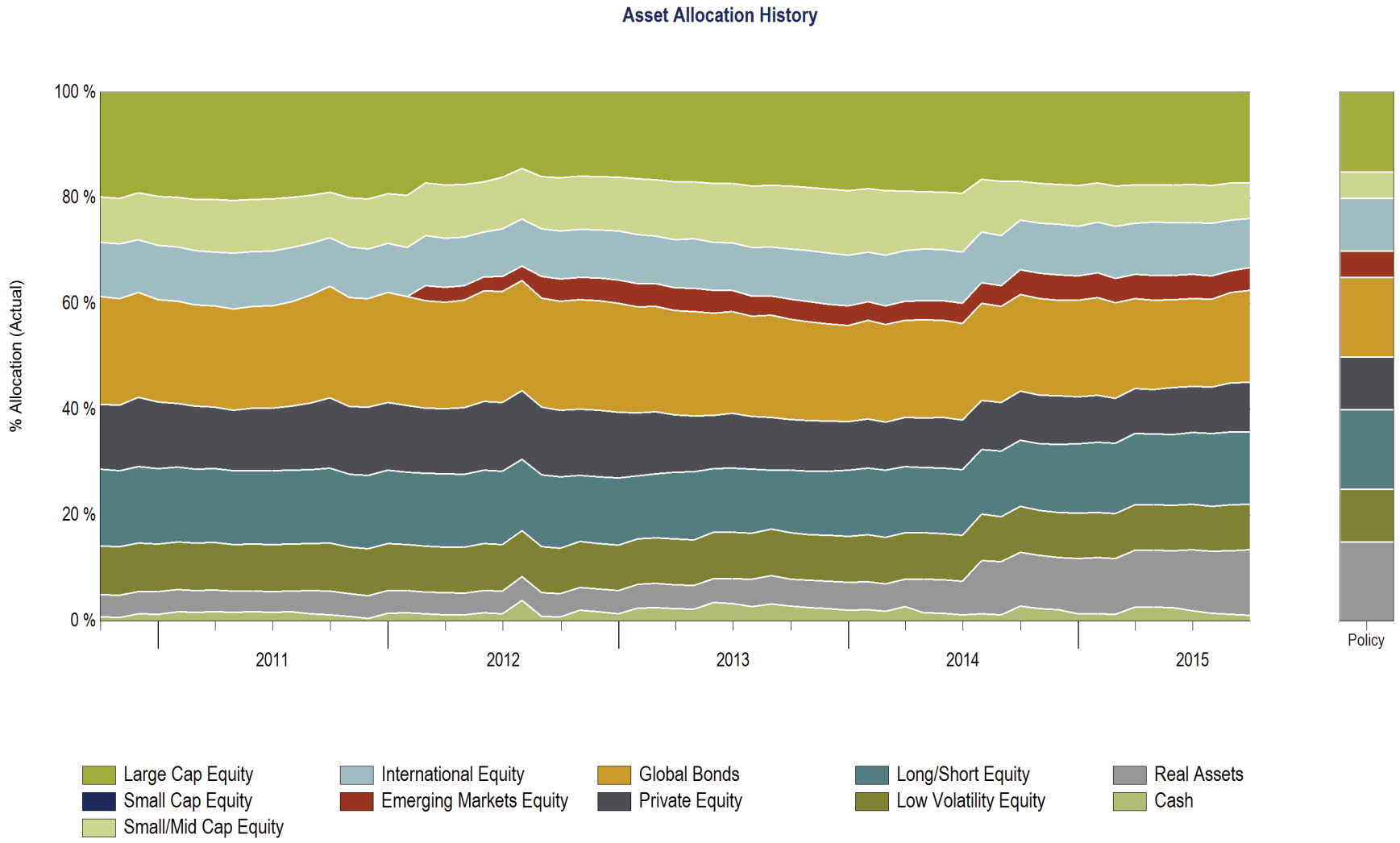


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$367,768,658	15.0%	17.2%	2.2%	10.0% - 20.0%	**Yes**
Small/Mid Cap Equity	$145,152,242	5.0%	6.8%	1.8%	0.0% - 15.0%	**Yes**
International Equity	$199,811,421	10.0%	9.3%	-0.7%	5.0% - 15.0%	**Yes**
Emerging Markets Equity	$90,785,046	5.0%	4.2%	-0.8%	0.0% - 10.0%	**Yes**
Global Bonds	$372,749,858	15.0%	17.4%	2.4%	10.0% - 20.0%	**Yes**
Private Equity	$200,990,745	10.0%	9.4%	-0.6%	5.0% - 15.0%	**Yes**
Long/Short Equity	$294,037,825	15.0%	13.7%	-1.3%	10.0% - 20.0%	**Yes**
Low Volatility Equity	$185,468,808	10.0%	8.6%	-1.4%	5.0% - 15.0%	**Yes**
Real Assets	$265,993,837	15.0%	12.4%	-2.6%	0.0% - 30.0%	**Yes**
Cash	$21,463,858	0.0%	1.0%	1.0%	0.0% - 5.0%	**Yes**
Total	**$2,144,222,299**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Fund Asset Allocation History



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK POLICE	**2,144,222,299**	**100.0**	**-4.3**	**23**	**-0.6**	**4**	**0.5**	**20**	**7.2**	**44**	**7.6**	**46**	**5.8**	**42**
POLICE Allocation Index			*-4.9*	*42*	*-2.1*	*27*	*-1.1*	*60*	*6.3*	*69*	*7.6*	*45*	*5.5*	*54*
Over/Under			0.6		1.5		1.6		0.9		0.0		0.3	
POLICE Policy Index			*-6.0*	*85*	*-4.2*	*90*	*-4.1*	*97*	*5.5*	*82*	*7.6*	*46*	*5.1*	*76*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Equity Composite	**803,517,368**	**37.5**	**-8.6**	**54**	**-5.3**	**59**	**-3.4**	**53**	**8.8**	**53**	**8.7**	**56**	**--**	**--**
Russell 3000			*-7.2*	*34*	*-5.4*	*61*	*-0.5*	*32*	*12.5*	*13*	*13.3*	*6*	*6.9*	*33*
Over/Under			-1.4		0.1		-2.9		-3.7		-4.6			
eA All Global Equity Gross Median			*-8.5*		*-4.6*		*-3.2*		*9.0*		*9.0*		*6.3*	
Domestic Equity Composite	**512,920,901**	**23.9**	**-7.9**	**46**	**-5.4**	**54**	**-0.5**	**59**	**12.0**	**64**	**13.0**	**56**	**6.7**	**80**
S&P 500			*-6.4*	*27*	*-5.3*	*52*	*-0.6*	*60*	*12.4*	*58*	*13.3*	*49*	*6.8*	*77*
Over/Under			-1.5		-0.1		0.1		-0.4		-0.3		-0.1	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Northern Trust Russell 1000 Index Fund	367,768,658	17.2	-6.8	49	-5.2	55	-0.6	57	12.7	52	13.4	49	7.0	67
Russell 1000			*-6.8*	*49*	*-5.2*	*55*	*-0.6*	*57*	*12.7*	*52*	*13.4*	*49*	*7.0*	*69*
Over/Under			0.0		0.0		0.0		0.0		0.0		0.0	
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
Boston Partners	84,181,354	3.9	-9.1	39	-4.5	29	0.4	44	12.3	52	13.4	29	8.2	44
Russell 2500 Value			*-9.6*	*47*	*-8.0*	*70*	*-2.4*	*61*	*11.0*	*67*	*11.5*	*68*	*6.3*	*87*
Over/Under			0.5		3.5		2.8		1.3		1.9		1.9	
eA US Small-Mid Cap Value Equity Gross Median			*-9.8*		*-6.3*		*-0.3*		*12.4*		*12.3*		*8.0*	
Cortina Small Cap Growth	60,970,889	2.8	-12.1	57	-8.1	84	-1.8	86	--	--	--	--	--	--
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			1.0		-2.6		-5.8							
eA US Small Cap Growth Equity Gross Median			*-11.7*		*-3.8*		*4.1*		*13.4*		*14.3*		*8.7*	

Northern Trust Russell 1000 Index fund was Mellon Capital Passive Index fund before 10/30/2014.

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	**290,596,468**	**13.6**	**-9.9**	**42**	**-5.2**	**57**	**-8.2**	**65**	**2.8**	**88**	**1.9**	**91**	**2.5**	**97**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			2.3		3.4		4.0		0.5		0.1		-0.5	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Mondrian Int'l Value	109,650,478	5.1	-10.2	27	-5.7	43	-9.9	48	5.9	31	4.7	33	3.9	54
MSCI ACWI ex USA			*-12.2*	*73*	*-8.6*	*85*	*-12.2*	*75*	*2.3*	*85*	*1.8*	*77*	*3.0*	*84*
Over/Under			2.0		2.9		2.3		3.6		2.9		0.9	
eA ACWI ex-US Value Equity Gross Median			*-11.2*		*-5.9*		*-10.3*		*4.7*		*4.0*		*4.2*	
Baring Focused Intl Equity	90,160,943	4.2	-8.2	25	0.1	16	-2.5	24	2.7	88	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			4.0		8.7		9.7		0.4					
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Vontobel Emerging Markets	61,437,631	2.9	-10.4	4	-9.7	16	-11.8	15	-1.2	35	--	--	--	--
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			7.5		5.8		7.5		4.1					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
Wasatch EM Small Cap	29,347,415	1.4	-12.7	20	-8.8	59	-10.6	47	-1.1	87	--	--	--	--
MSCI Emerging Markets Small Cap			*-16.7*	*91*	*-9.8*	*69*	*-15.2*	*86*	*-1.1*	*87*	*-2.4*	*98*	*6.7*	*99*
Over/Under			4.0		1.0		4.6		0.0					
eA Emg Mkts Small Cap Equity Gross Median			*-14.1*		*-7.1*		*-10.8*		*4.2*		*2.0*		*9.7*	
Fixed Income Composite	**372,749,858**	**17.4**	**-1.0**	**52**	**-0.7**	**35**	**-0.6**	**30**	**1.6**	**51**	**3.8**	**40**	**5.1**	**41**
Barclays Aggregate			*1.2*	*12*	*1.1*	*10*	*2.9*	*7*	*1.7*	*49*	*3.1*	*49*	*4.6*	*57*
Over/Under			-2.2		-1.8		-3.5		-0.1		0.7		0.5	
eA All Global Fixed Inc Gross Median			*-0.9*		*-1.9*		*-2.7*		*1.7*		*3.0*		*4.8*	
Oaktree	132,837,416	6.2	-4.2	94	-1.1	85	-1.6	92	4.1	12	5.8	21	7.7	6
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			-5.4		-2.2		-4.5		2.4		2.7		3.1	
Agincourt	152,493,871	7.1	1.2	24	1.3	43	3.0	24	2.1	51	3.6	50	5.0	46
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			0.0		0.2		0.1		0.4		0.5		0.4	
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	
Loomis Sayles	87,418,570	4.1	0.2	30	-3.4	78	-5.3	78	-2.4	88	0.9	83	--	--
Citi WGBI			*1.7*	*6*	*-2.4*	*63*	*-3.8*	*67*	*-2.9*	*92*	*-0.2*	*95*	*3.4*	*96*
Over/Under			-1.5		-1.0		-1.5		0.5		1.1			
eA All Global Fixed Inc Gross Median			*-0.9*		*-1.9*		*-2.7*		*1.7*		*3.0*		*4.8*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Long/Short	**294,037,825**	**13.7**	**-4.5**	**46**	**0.1**	**47**	**4.1**	**38**	**8.2**	**49**	**--**	**--**	**--**	**--**
HFRI FOF: Strategic Index			*-5.8*	*54*	*-2.1*	*56*	*-1.2*	*59*	*4.2*	*75*	*2.7*	*83*	*2.5*	*89*
Over/Under			1.3		2.2		5.3		4.0					
eV Alt Fundamental - Long/Short Equity Median			*-5.3*		*-0.6*		*1.3*		*8.1*		*6.6*		*6.3*	
Grosvenor	294,037,825	13.7	-4.5	46	0.1	47	4.1	38	8.3	49	6.3	55	4.3	75
HFRI FOF: Strategic Index			*-5.8*	*54*	*-2.1*	*56*	*-1.2*	*59*	*4.2*	*75*	*2.7*	*83*	*2.5*	*89*
Over/Under			1.3		2.2		5.3		4.1		3.6		1.8	
eV Alt Fundamental - Long/Short Equity Median			*-5.3*		*-0.6*		*1.3*		*8.1*		*6.6*		*6.3*	
Total Real Assets	**265,993,837**	**12.4**	**-1.3**	**--**	**3.4**	**--**	**1.6**	**--**	**7.6**	**--**	**--**	**--**	**--**	**--**
Total Core Real Estate	**127,161,087**	**5.9**	**3.4**	**--**	**11.2**	**--**	**14.2**	**--**	**13.9**	**--**	**--**	**--**	**--**	**--**
NCREIF ODCE			*3.7*	--	*11.3*	--	*14.9*	--	*13.4*	--	*14.0*	--	*6.7*	--
Over/Under			-0.3		-0.1		-0.7		0.5					
Columbus Square	4,042,733	0.2	6.5	--	13.9	--	18.0	--	17.5	--	19.2	--	15.5	--
NCREIF ODCE			*3.7*	--	*11.3*	--	*14.9*	--	*13.4*	--	*14.0*	--	*6.7*	--
Over/Under			2.8		2.6		3.1		4.1		5.2		8.8	
JP Morgan	92,196,758	4.3	3.4	--	11.5	--	14.5	--	13.9	--	14.4	--	--	--
NCREIF ODCE			*3.7*	--	*11.3*	--	*14.9*	--	*13.4*	--	*14.0*	--	*6.7*	--
Over/Under			-0.3		0.2		-0.4		0.5		0.4			
Blackstone Property Partners	30,921,595	1.4	2.6	--	5.9	--	--	--	--	--	--	--	--	--
NCREIF ODCE			*3.7*	--	*11.3*	--	*14.9*	--	*13.4*	--	*14.0*	--	*6.7*	--
Over/Under			-1.1		-5.4									
Private Real Estate	**58,707,260**	**2.7**	**4.2**	**--**	**14.9**	**--**	**17.5**	**--**	**13.6**	**--**	**--**	**--**	**--**	**--**
Siguler Guff Distressed RE	9,271,267	0.4	3.9	--	24.6	--	26.6	--	22.7	--	--	--	--	--
TA Associates Realty X	20,983,793	1.0	4.0	--	12.8	--	15.6	--	--	--	--	--	--	--
Cerberus Real Estate Fund III	21,671,634	1.0	5.6	--	17.8	--	20.7	--	--	--	--	--	--	--
Hall Capital Fund III	1,711,075	0.1	-11.2	--	-24.3	--	--	--	--	--	--	--	--	--
Siguler Guff Distressed RE II	5,069,491	0.2	1.0	--	-6.3	--	--	--	--	--	--	--	--	--
Mt Lucas Peak	29,673,431	1.4	-3.2	--	-2.2	--	4.8	--	9.0	--	1.7	--	6.6	--
Gresham Tap Fund	50,452,059	2.4	-14.9	--	-16.6	--	-27.6	--	--	--	--	--	--	--

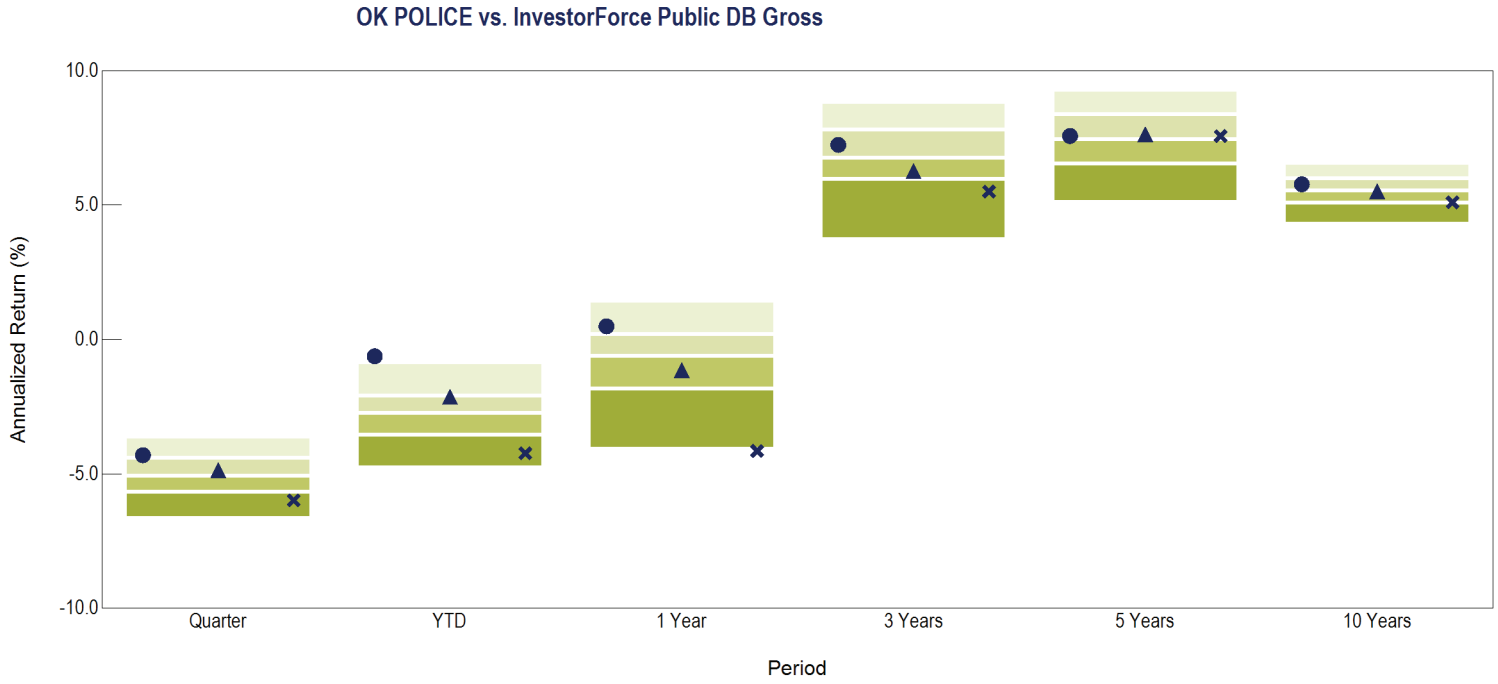
*The Private Real Estate returns are time weighted.

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Total Low Volatility Strategies	**185,468,808**	**8.6**	**-4.2**	**--**	**-1.3**	**--**	**-1.4**	**--**	**5.9**	**--**	**--**	**--**	**--**	**--**
HFRI FOF: Conservative Index			*-1.8*	--	*0.4*	--	*0.7*	--	*4.3*	--	*2.8*	--	*2.1*	--
Over/Under			-2.4		-1.7		-2.1		1.6					
PAAMCO	185,468,808	8.6	-4.2	53	-1.3	45	-1.4	53	5.9	25	4.5	35	4.5	38
HFRI FOF: Conservative Index			*-1.8*	*31*	*0.4*	*33*	*0.7*	*45*	*4.3*	*48*	*2.8*	*71*	*2.1*	*98*
Over/Under			-2.4		-1.7		-2.1		1.6		1.7		2.4	
eV Alt Fund of Funds - All Single Strategy Median			*-3.9*		*-2.5*		*-0.9*		*4.0*		*3.9*		*4.1*	
Private Equity	**200,990,745**	**9.4**	**4.0**	**--**	**15.8**	**--**	**15.8**	**--**	**13.1**	**--**	**13.5**	**--**	**--**	**--**
Cambridge Associates US All PE			*0.0*	--	*6.5*	--	*7.4*	--	*14.2*	--	*14.5*	--	*12.3*	--
Over/Under			4.0		9.3		8.4		-1.1		-1.0			

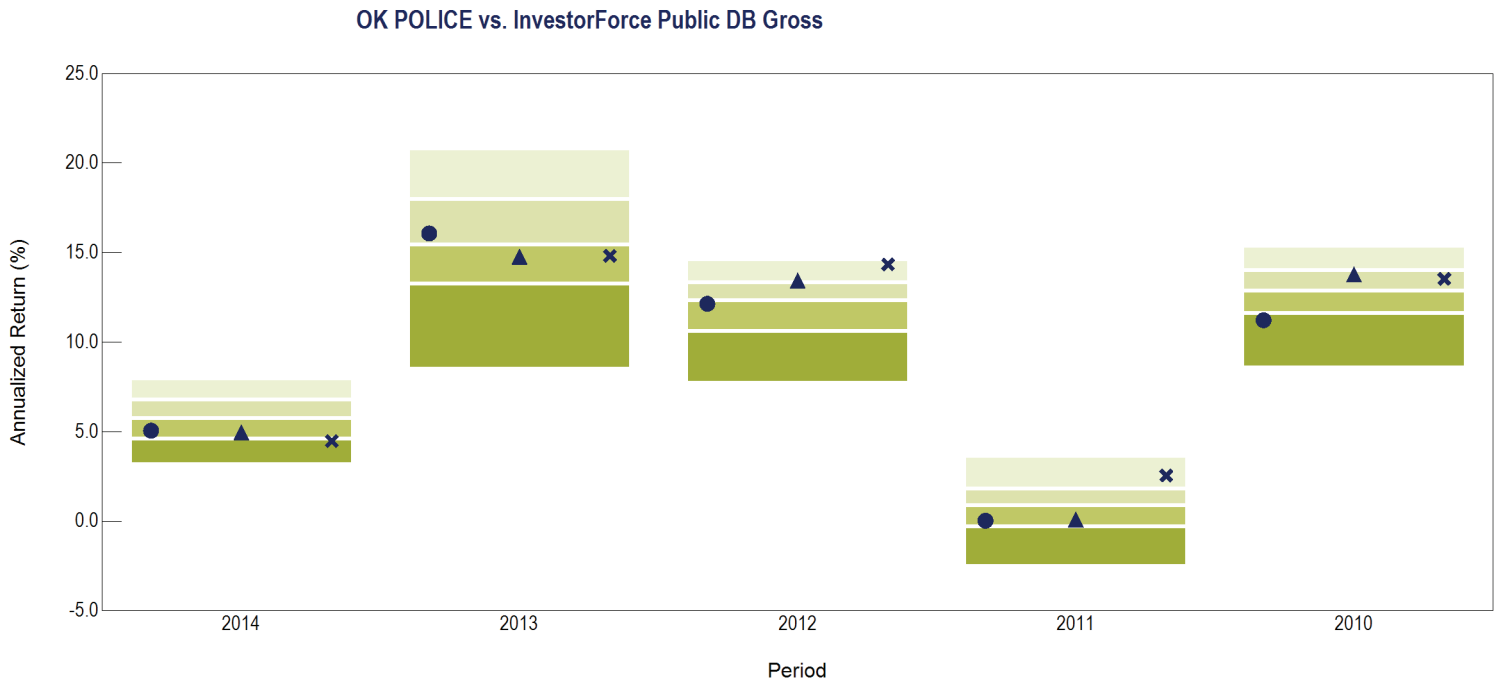
*Total fund includes $591,993 for illiquid securities in terminated account with Overseas CAP Partners.
*Returns are gross of manager fees.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.6		-0.9		1.4		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1		4.3	
# of Portfolios	258		250		247		220		199		163	
● OK POLICE	-4.3	(23)	-0.6	(4)	0.5	(20)	7.2	(44)	7.6	(46)	5.8	(42)
▲ POLICE Allocation Index	-4.9	(42)	-2.1	(27)	-1.1	(60)	6.3	(69)	7.6	(45)	5.5	(54)
× POLICE Policy Index	-6.0	(85)	-4.2	(90)	-4.1	(97)	5.5	(82)	7.6	(46)	5.1	(76)

Total Fund Return Summary vs. Peer Universe

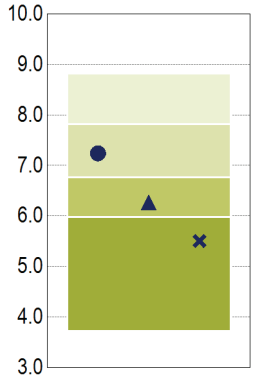


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK POLICE	5.1	(68)	16.1	(46)	12.1	(54)	0.0	(70)	11.2	(80)
▲ POLICE Allocation Index	5.0	(70)	14.8	(59)	13.5	(25)	0.1	(70)	13.8	(30)
× POLICE Policy Index	4.5	(79)	14.8	(59)	14.3	(8)	2.5	(13)	13.5	(39)

Total Fund Risk Statistics vs. Peer Universe

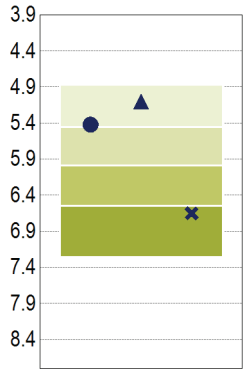
OK POLICE vs. InvestorForce Public DB Gross
3 Years

Anlzd Return



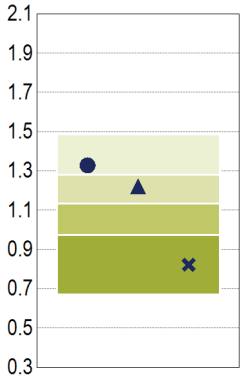
● OK POLICE	
Value	7.24
%tile	44
▲ POLICE Allocation Index	
Value	6.26
%tile	69
× POLICE Policy Index	
Value	5.50
%tile	82
Universe	
5th %tile	8.82
25th %tile	7.83
Median	6.78
75th %tile	5.99
95th %tile	3.73

Anlzd Standard Deviation



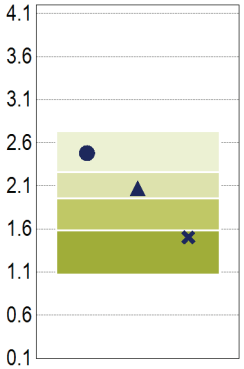
● OK POLICE	
Value	5.42
%tile	25
▲ POLICE Allocation Index	
Value	5.10
%tile	10
× POLICE Policy Index	
Value	6.65
%tile	80
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK POLICE	
Value	1.33
%tile	18
▲ POLICE Allocation Index	
Value	1.22
%tile	36
× POLICE Policy Index	
Value	0.82
%tile	87
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

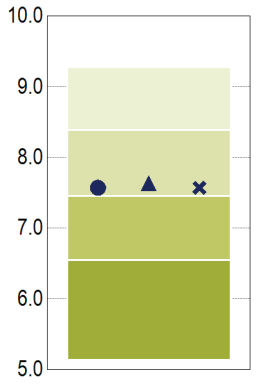


● OK POLICE	
Value	2.48
%tile	15
▲ POLICE Allocation Index	
Value	2.07
%tile	44
× POLICE Policy Index	
Value	1.50
%tile	80
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

OK POLICE vs. InvestorForce Public DB Gross
5 Years

Anlzd Return

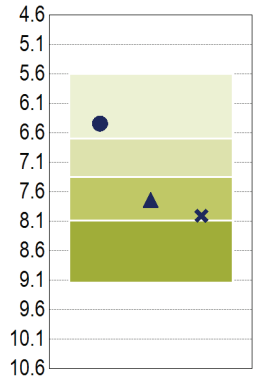


- ● OK POLICE
  - Value 7.57
  - %tile 46
- ▲ POLICE Allocation Index
  - Value 7.63
  - %tile 45
- × POLICE Policy Index
  - Value 7.57
  - %tile 46

Universe

5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation

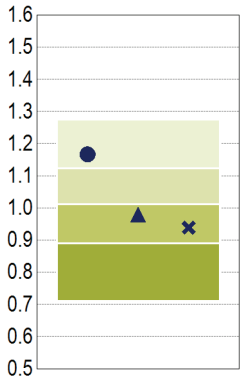


- ● OK POLICE
  - Value 6.45
  - %tile 21
- ▲ POLICE Allocation Index
  - Value 7.74
  - %tile 61
- × POLICE Policy Index
  - Value 8.01
  - %tile 74

Universe

5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio

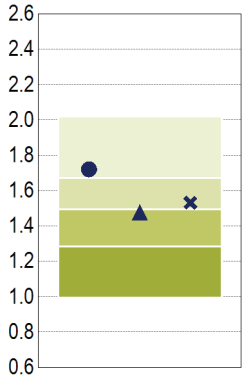


- ● OK POLICE
  - Value 1.17
  - %tile 18
- ▲ POLICE Allocation Index
  - Value 0.98
  - %tile 59
- × POLICE Policy Index
  - Value 0.94
  - %tile 70

Universe

5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio

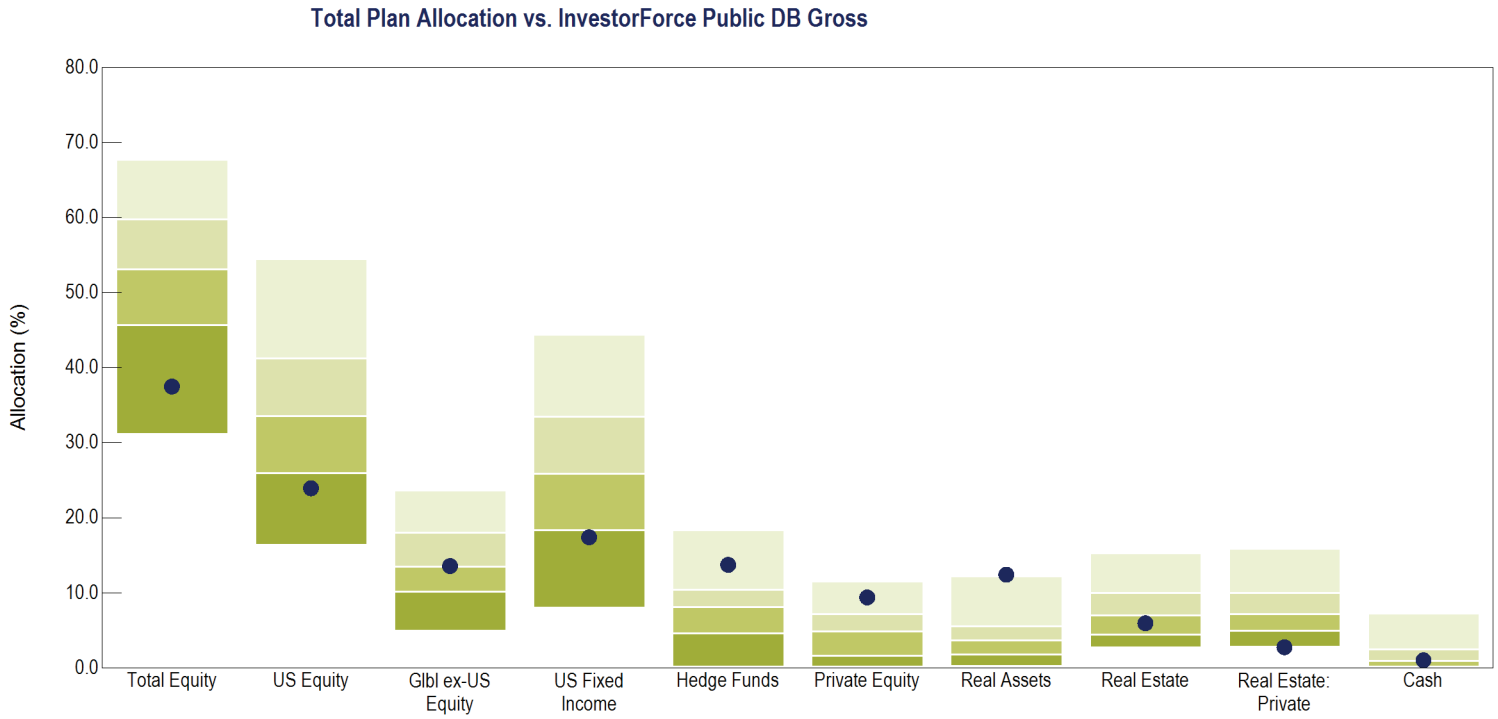


- ● OK POLICE
  - Value 1.72
  - %tile 19
- ▲ POLICE Allocation Index
  - Value 1.48
  - %tile 55
- × POLICE Policy Index
  - Value 1.53
  - %tile 43

Universe

5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

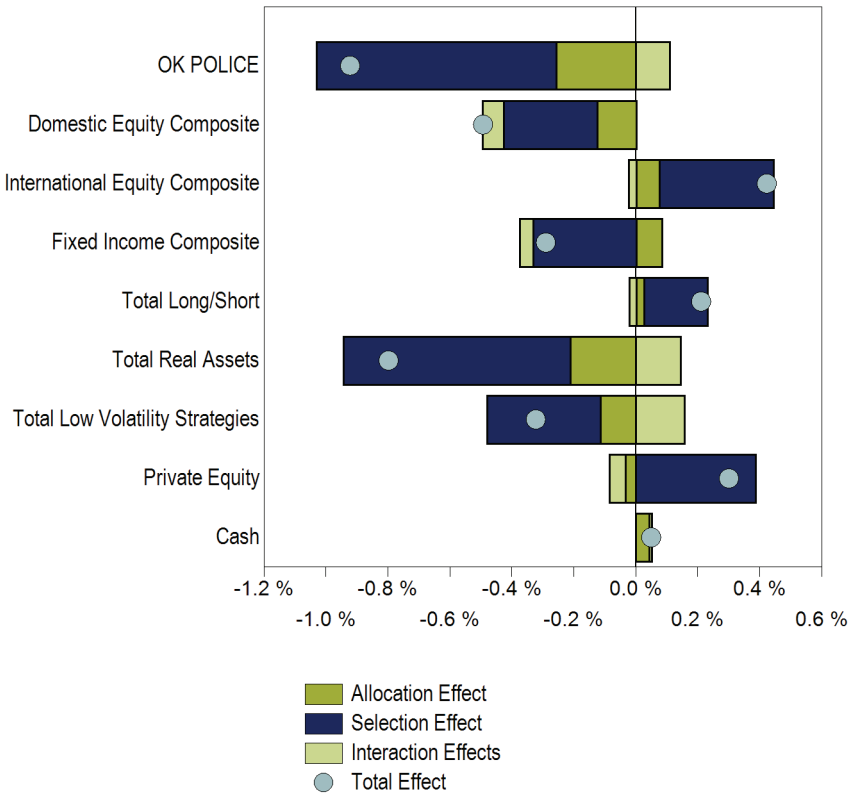
Total Fund Allocations vs. Peer Universe



	Total Equity		US Equity		Glbl ex-US Equity		US Fixed Income		Hedge Funds		Private Equity		Real Assets		Real Estate		Real Estate: Private		Cash		
Allocation (Rank)																					
5th Percentile	67.7		54.5		23.7		44.4		18.3		11.5		12.1		15.3		15.8		7.3		-
25th Percentile	59.8		41.3		18.1		33.6		10.4		7.3		5.6		10.1		10.1		2.5		-
Median	53.1		33.6		13.5		25.9		8.2		4.9		3.7		7.1		7.2		1.0		-
75th Percentile	45.8		26.0		10.2		18.5		4.7		1.7		1.9		4.5		5.0		0.3		-
95th Percentile	31.2		16.5		5.0		8.1		0.2		0.2		0.3		2.8		2.9		0.0		-
# of Portfolios	248		226		218		187		68		63		48		157		92		216		-
● **OK POLICE**	37.5	(89)	23.9	(81)	13.6	(50)	17.4	(77)	13.7	(13)	9.4	(11)	12.4	(3)	5.9	(60)	2.7	(96)	1.0	(50)	-

Total Fund Attribution Analysis

Attribution Effects Relative to POLICE Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	-7.9%	-6.4%	-1.4%	-0.3%	-0.1%	-0.1%	-0.5%
International Equity Composite	-9.9%	-12.2%	2.3%	0.4%	0.1%	0.0%	0.4%
Fixed Income Composite	-1.0%	1.2%	-2.3%	-0.3%	0.1%	0.0%	-0.3%
Total Long/Short	-4.5%	-5.8%	1.3%	0.2%	0.0%	0.0%	0.2%
Total Real Assets	-1.3%	3.7%	-5.0%	-0.7%	-0.2%	0.1%	-0.8%
Total Low Volatility Strategies	-4.2%	-1.8%	-2.4%	-0.4%	-0.1%	0.2%	-0.3%
Private Equity	4.0%	0.0%	4.0%	0.4%	0.0%	-0.1%	0.3%
Cash	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%
Total	**-4.3%**	**-3.6%**	**-0.7%**	**-0.8%**	**-0.3%**	**0.1%**	**-0.9%**

*Total returns shown are weighted averages of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-4.3%	-0.6%	0.5%
Wtd. Index Return *	-3.6%	-0.1%	1.3%
Excess Return	**-0.7%**	**-0.5%**	**-0.8%**
Selection Effect	-0.8%	0.0%	-0.5%
Allocation Effect	-0.3%	-0.7%	-0.5%
Interaction Effect	0.1%	0.2%	0.3%
Asset Class Returns			
OK POLICE	-4.3%	-0.6%	0.5%
Equity Composite	-8.6%	-5.3%	-3.4%
Domestic Equity Composite	-7.9%	-5.4%	-0.5%
International Equity Composite	-9.9%	-5.2%	-8.2%
Fixed Income Composite	-1.0%	-0.7%	-0.6%
Total Long/Short	-4.5%	0.1%	4.1%
Total Real Assets	-1.3%	3.4%	1.6%
Total Core Real Estate	3.4%	11.2%	14.2%
Private Real Estate	4.2%	14.9%	17.5%
Total Low Volatility Strategies	-4.2%	-1.3%	-1.4%
Private Equity	4.0%	15.8%	15.8%
Cash	0.4%	1.2%	1.4%

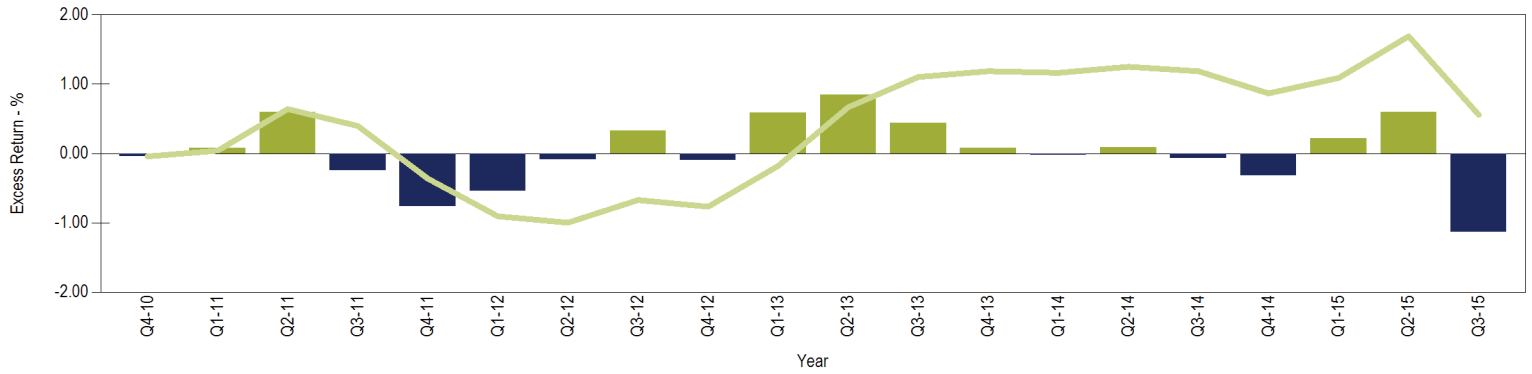
*Calculated from benchmark returns and weightings of each component.

Oklahoma Law

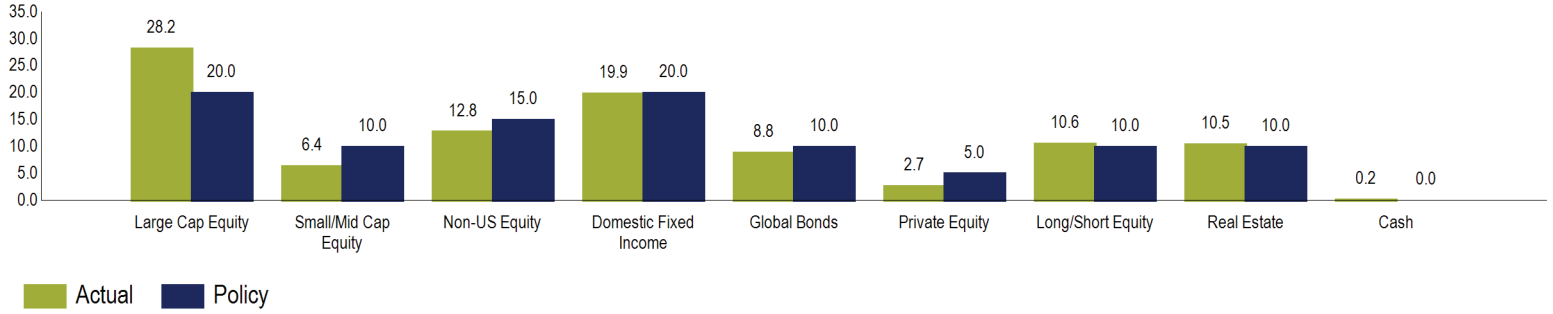
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK LAW	**$833,472,305**	**-5.6%**	**73**	**-2.6%**	**48**	**-0.7%**	**52**	**7.1%**	**46**	**8.1%**	**36**	**5.4%**	**58**
LAW Allocation Index		*-4.5%*	*29*	*-2.3%*	*33*	*0.0%*	*32*	*6.7%*	*51*	*7.9%*	*39*	*5.7%*	*42*
LAW Policy Index		*-4.4%*	*26*	*-1.9%*	*21*	*1.1%*	*9*	*7.7%*	*29*	*8.3%*	*27*	*6.0%*	*27*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

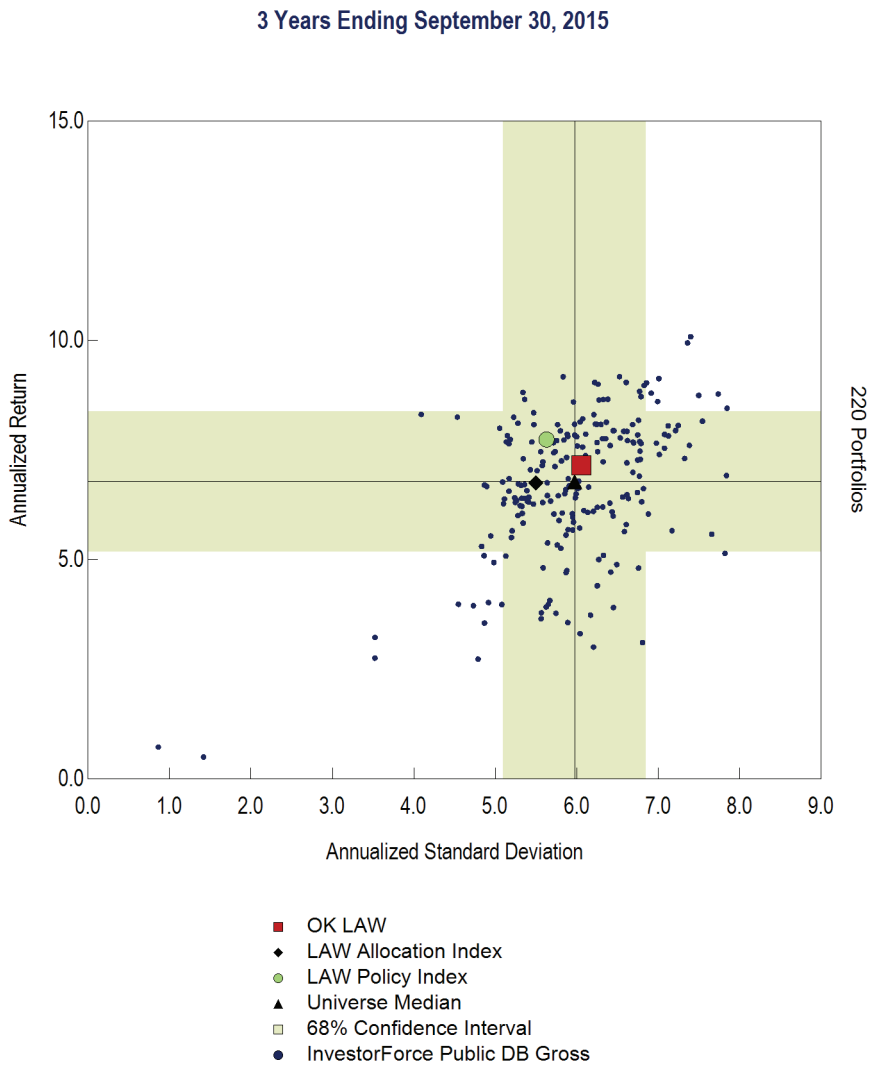
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



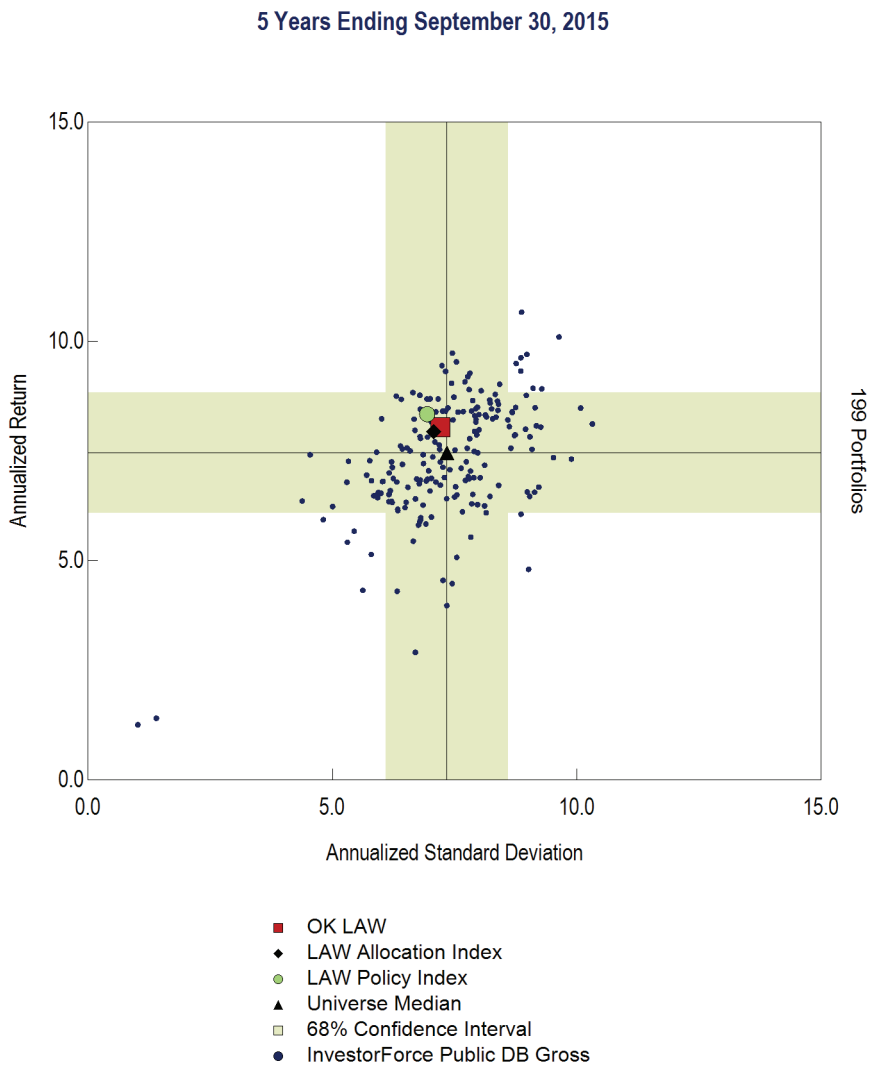
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK LAW	7.15%	46	6.06%	56
LAW Allocation Index	6.75%	51	5.50%	28
LAW Policy Index	7.74%	29	5.63%	32

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK LAW	1.17	45	2.01	48
LAW Allocation Index	1.22	36	2.13	41
LAW Policy Index	1.37	10	2.49	15

Total Fund Risk/Return - 5 Years



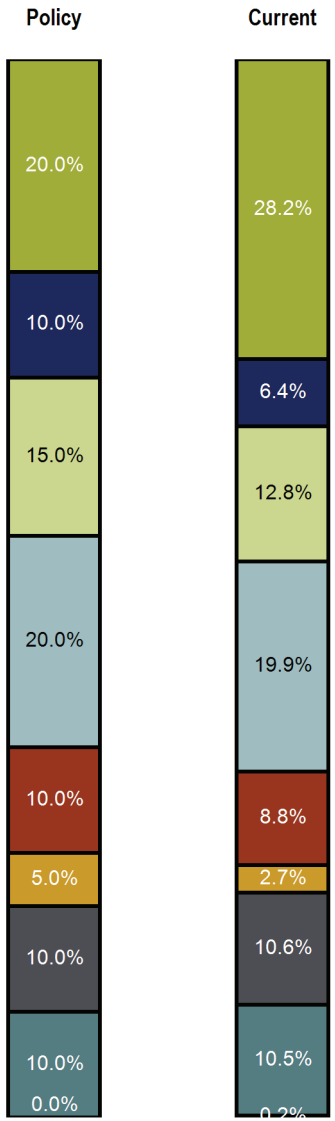
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK LAW	8.05%	36	7.21%	44
LAW Allocation Index	7.95%	39	7.07%	41
LAW Policy Index	8.34%	27	6.94%	35

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK LAW	1.11	28	1.62	32
LAW Allocation Index	1.12	27	1.73	19
LAW Policy Index	1.20	13	1.84	11

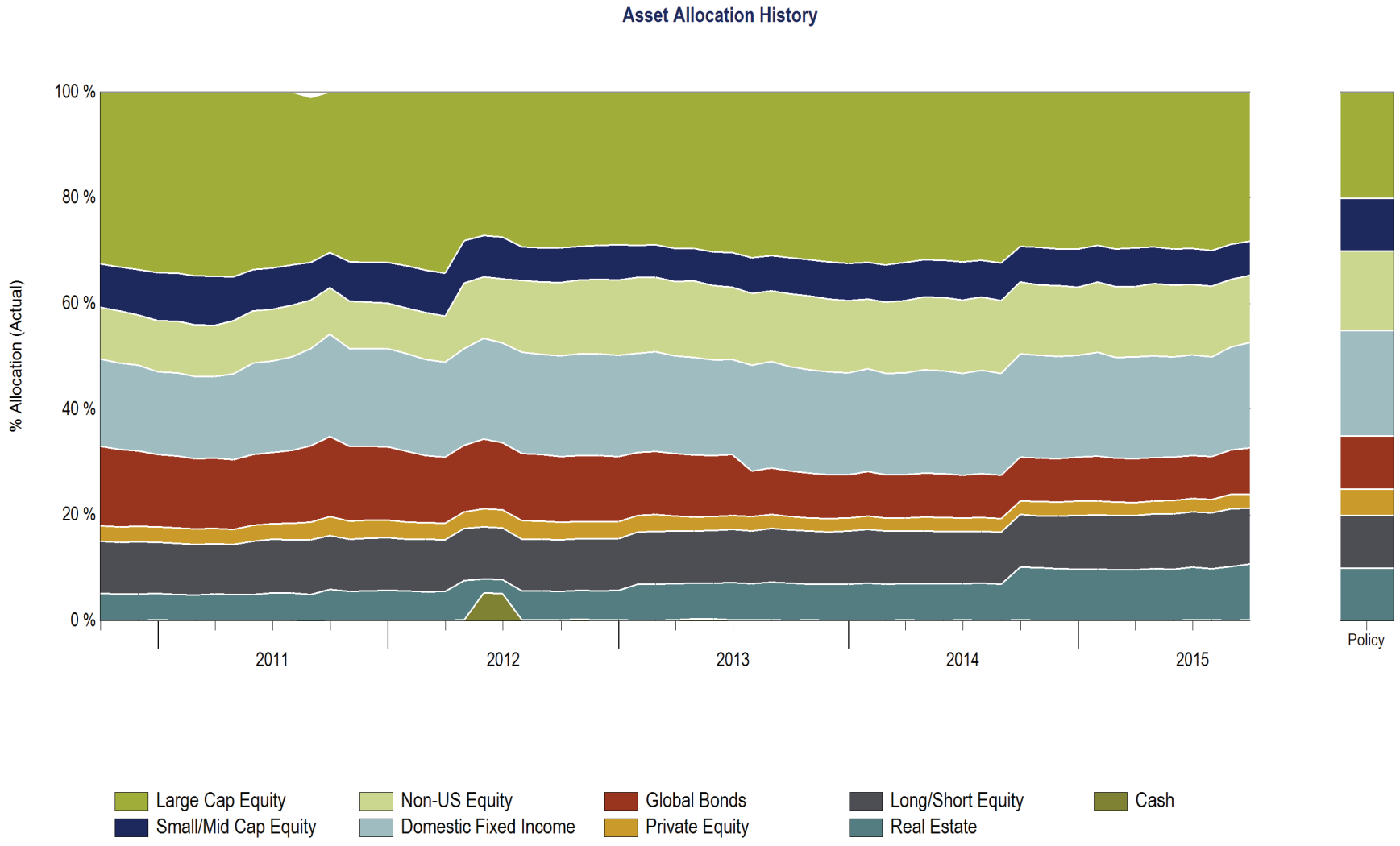
Total Fund Asset Allocation vs. Policy Targets



Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$235,364,483	20.0%	28.2%	8.2%	15.0% - 25.0%	No
Small/Mid Cap Equity	$53,362,087	10.0%	6.4%	-3.6%	5.0% - 15.0%	Yes
Non-US Equity	$106,327,391	15.0%	12.8%	-2.2%	5.0% - 15.0%	Yes
Domestic Fixed Income	$165,639,967	20.0%	19.9%	-0.1%	15.0% - 25.0%	Yes
Global Bonds	$73,579,784	10.0%	8.8%	-1.2%	5.0% - 15.0%	Yes
Private Equity	$22,122,397	5.0%	2.7%	-2.3%	0.0% - 5.0%	Yes
Long/Short Equity	$88,187,866	10.0%	10.6%	0.6%	5.0% - 15.0%	Yes
Real Estate	$87,286,552	10.0%	10.5%	0.5%	2.0% - 12.0%	Yes
Cash	$1,601,778	0.0%	0.2%	0.2%	0.0% - 5.0%	Yes
Total	**$833,472,305**	**100.0%**	**100.0%**			

Total Fund Asset Allocation History



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK LAW	**833,472,305**	**100.0**	**-5.6**	**73**	**-2.6**	**48**	**-0.7**	**52**	**7.1**	**46**	**8.1**	**36**	**5.4**	**58**
LAW Allocation Index			*-4.5*	*29*	*-2.3*	*33*	*0.0*	*32*	*6.7*	*51*	*7.9*	*39*	*5.7*	*42*
Over/Under			-1.1		-0.3		-0.7		0.4		0.2		-0.3	
LAW Policy Index			*-4.4*	*26*	*-1.9*	*21*	*1.1*	*9*	*7.7*	*29*	*8.3*	*27*	*6.0*	*27*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Domestic Equity Composite	**288,726,570**	**34.6**	**-9.2**	**63**	**-5.7**	**57**	**-0.4**	**58**	**12.9**	**50**	**13.5**	**46**	**6.3**	**86**
S&P 500			*-6.4*	*27*	*-5.3*	*52*	*-0.6*	*60*	*12.4*	*58*	*13.3*	*49*	*6.8*	*77*
Over/Under			-2.8		-0.4		0.2		0.5		0.2		-0.5	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
Hotchkis Wiley	70,281,804	8.4	-10.9	87	-9.5	76	-5.0	67	14.8	12	13.5	25	4.8	91
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			-2.5		-0.5		-0.6		3.2		1.2		-0.9	
eA US Large Cap Value Equity Gross Median			*-8.2*		*-7.5*		*-3.5*		*12.1*		*12.4*		*6.9*	
Kennedy Capital	53,362,087	6.4	-9.4	42	-7.1	54	0.6	48	12.4	49	12.6	47	8.9	24
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			1.3		3.0		2.2		3.2		2.4		3.6	
eA US Small Cap Value Equity Gross Median			*-9.8*		*-6.7*		*0.5*		*12.2*		*12.5*		*7.6*	
NTGI S&P	38,842,673	4.7	-6.4	42	-5.3	55	-0.6	57	12.4	58	13.3	54	--	--
S&P 500			*-6.4*	*42*	*-5.3*	*56*	*-0.6*	*57*	*12.4*	*56*	*13.3*	*52*	*6.8*	*77*
Over/Under			0.0		0.0		0.0		0.0		0.0			
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
Columbus Circle	49,997,814	6.0	-13.6	99	-6.8	93	-1.6	86	8.1	98	11.8	87	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			-8.3		-5.3		-4.8		-5.5		-2.7			
Waddell And Reed	76,242,192	9.1	-5.4	33	-0.2	30	4.4	34	15.5	18	15.1	31	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			-0.1		1.3		1.2		1.9		0.6			
eA US Large Cap Growth Equity Gross Median			*-6.0*		*-1.7*		*3.2*		*13.7*		*14.0*		*8.0*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
International Equity Composite	**106,327,391**	**12.8**	**-10.0**	**43**	**-5.7**	**63**	**-8.7**	**69**	**2.0**	**94**	**1.2**	**97**	**2.0**	**98**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			2.2		2.9		3.5		-0.3		-0.6		-1.0	
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Mondrian International Equity	38,101,761	4.6	-10.2	45	-5.8	64	-10.0	77	5.9	49	4.7	58	3.9	80
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			2.0		2.8		2.2		3.6		2.9		0.9	
Baring Focused International Equity	31,341,998	3.8	-8.2	25	0.1	16	-2.5	24	2.7	88	--	--	--	--
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			4.0		8.7		9.7		0.4					
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	
Emerging Market Equity Composite	**36,883,632**	**4.4**	**-11.3**	**6**	**-10.0**	**18**	**-12.3**	**15**	**-2.0**	**42**	**--**	**--**	**--**	**--**
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			6.6		5.5		7.0		3.3					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
Vontobel Global EM	26,820,374	3.2	-10.6	4	-10.2	19	-12.6	15	-2.1	45	--	--	--	--
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			7.3		5.3		6.7		3.2					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	
Wasatch Advisors	10,063,258	1.2	-12.9	10	-9.5	15	-11.5	14	-1.7	37	--	--	--	--
MSCI Emerging Markets			*-17.9*	*81*	*-15.5*	*69*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*83*	*4.3*	*80*
Over/Under			5.0		6.0		7.8		3.6					
eA Emg Mkts Equity Gross Median			*-16.3*		*-14.0*		*-16.8*		*-2.6*		*-1.8*		*6.1*	

Total Fund Performance Detail

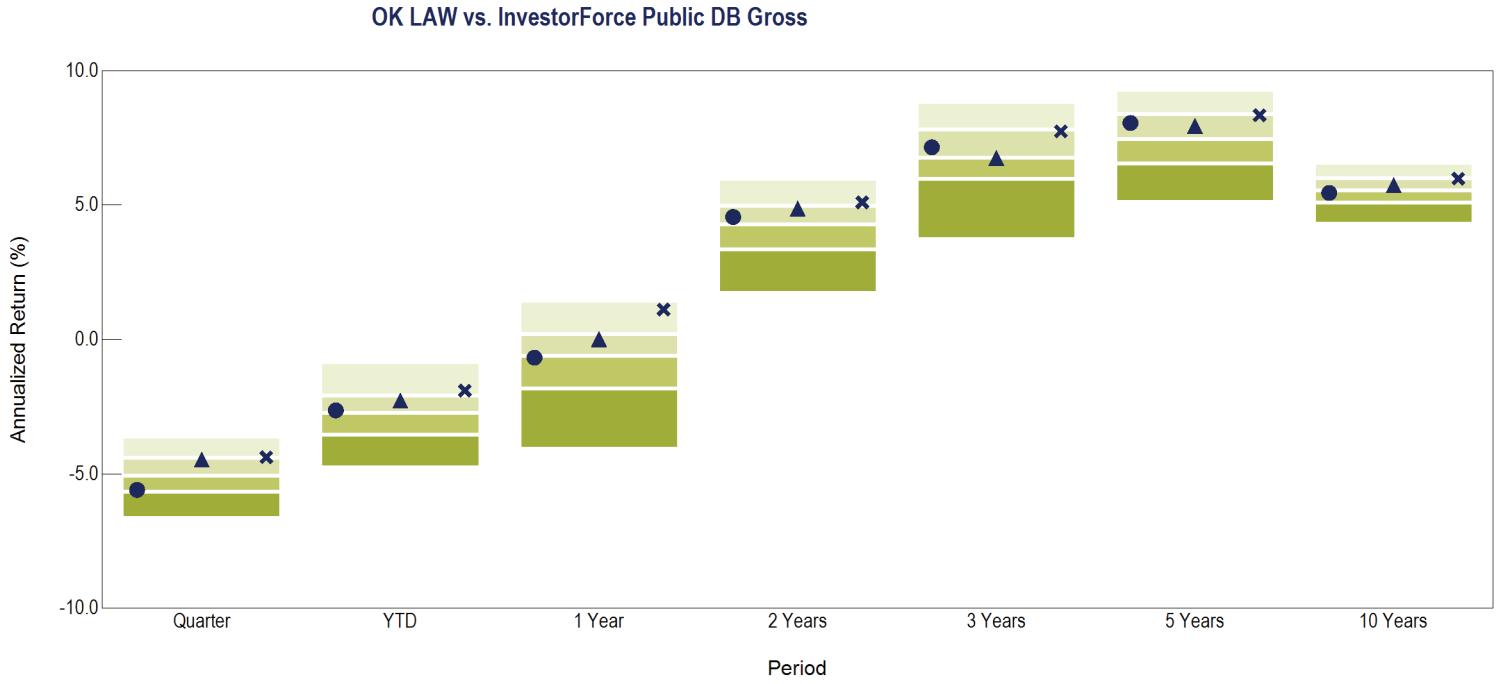
	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Fixed Income Composite	**239,219,751**	**28.7**	**-1.2**	**53**	**-1.0**	**37**	**-0.3**	**28**	**1.4**	**54**	**3.7**	**42**	**5.3**	**36**
Barclays Aggregate			*1.2*	*12*	*1.1*	*10*	*2.9*	*7*	*1.7*	*49*	*3.1*	*49*	*4.6*	*57*
Over/Under			-2.4		-2.1		-3.2		-0.3		0.6		0.7	
eA All Global Fixed Inc Gross Median			*-0.9*		*-1.9*		*-2.7*		*1.7*		*3.0*		*4.8*	
TCW	96,764,689	11.6	0.7	85	1.0	76	2.7	64	2.7	12	4.9	4	6.4	2
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			-0.5		-0.1		-0.2		1.0		1.8		1.8	
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
NTGI Bond	73,579,784	8.8	1.2	36	1.2	61	3.0	47	1.7	78	3.1	79	4.6	88
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.0		0.1		0.1		0.0		0.0		0.0	
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Franklin Templeton	68,875,278	8.3	-6.2	99	-5.7	99	-7.4	99	--	--	--	--	--	--
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			-7.4		-6.8		-10.3							
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Real Estate Composite	**87,286,552**	**10.5**	**-1.2**	**--**	**3.2**	**--**	**1.5**	**--**	**8.5**	**--**	**--**	**--**	**--**	**--**
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-4.3		-6.9		-12.0		-3.4					
Colcord Center	3,894,617	0.5	9.1	--	9.1	--	18.2	--	6.5	--	3.1	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			6.0		-1.0		4.7		-5.4		-9.4			
JPMCB Strategic Property Fund	52,617,008	6.3	3.4	--	11.2	--	14.2	--	13.8	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			0.3		1.1		0.7		1.9					
Trumbell UBS-SL	12,694,864	1.5	0.0	--	6.0	--	9.2	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-3.1		-4.1		-4.3							
Gresham TAP Fund	18,080,063	2.2	-14.8	--	-16.6	--	-27.7	--	--	--	--	--	--	--
NCREIF Property Index			*3.1*	--	*10.1*	--	*13.5*	--	*11.9*	--	*12.5*	--	*8.0*	--
Over/Under			-17.9		-26.7		-41.2							

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Private Equity Composite	**22,122,397**	**2.7**	**3.0**	**--**	**7.2**	**--**	**10.1**	**--**	**14.0**	**--**	**--**	**--**	**--**	**--**
Cambridge Associates US All PE 1 Qtr Lag			*3.8*	--	*7.4*	--	*8.9*	--	*15.9*	--	*15.6*	--	*13.2*	--
Over/Under			-0.8		-0.2		1.2		-1.9					
American Private Equity II, LP	3,423,774	0.4	3.5	--	1.9	--	2.9	--	8.8	--	10.0	--	--	--
American Private Equity LP	1,364,884	0.2	-0.6	--	-1.7	--	0.0	--	1.6	--	1.3	--	2.4	--
Knightsbridge VI, LP	5,656,735	0.7	6.5	--	11.1	--	10.4	--	17.7	--	16.4	--	8.1	--
Knightsbridge VII, LP	9,563,276	1.1	2.5	--	16.5	--	19.7	--	20.8	--	15.5	--	--	--
Apollo Private Equity- OK Law Enforcement Retire	2,113,728	0.3	-2.7	--	-29.2	--	7.2	--	--	--	--	--	--	--
Hedge Funds Composite	**88,187,866**	**10.6**	**-5.1**	**74**	**-0.6**	**43**	**2.9**	**19**	**7.7**	**14**	**--**	**--**	**--**	**--**
HFRI Equity Hedge (Total) Index			*-6.0*	*81*	*-2.4*	*71*	*-2.4*	*69*	*5.0*	*51*	*3.6*	*59*	*3.6*	*69*
Over/Under			0.9		1.8		5.3		2.7					
eV Alt Fund of Funds - Multi-Strategy Median			*-3.3*		*-1.1*		*-0.4*		*5.0*		*3.9*		*4.1*	
Grosvenor	88,187,866	10.6	-5.1	50	-0.6	50	2.9	43	7.7	53	5.5	62	--	--
HFRI Equity Hedge (Total) Index			*-6.0*	*56*	*-2.4*	*57*	*-2.4*	*64*	*5.0*	*71*	*3.6*	*78*	*3.6*	*82*
Over/Under			0.9		1.8		5.3		2.7		1.9			
eV Alt Fundamental - Long/Short Equity Median			*-5.3*		*-0.6*		*1.3*		*8.1*		*6.6*		*6.3*	

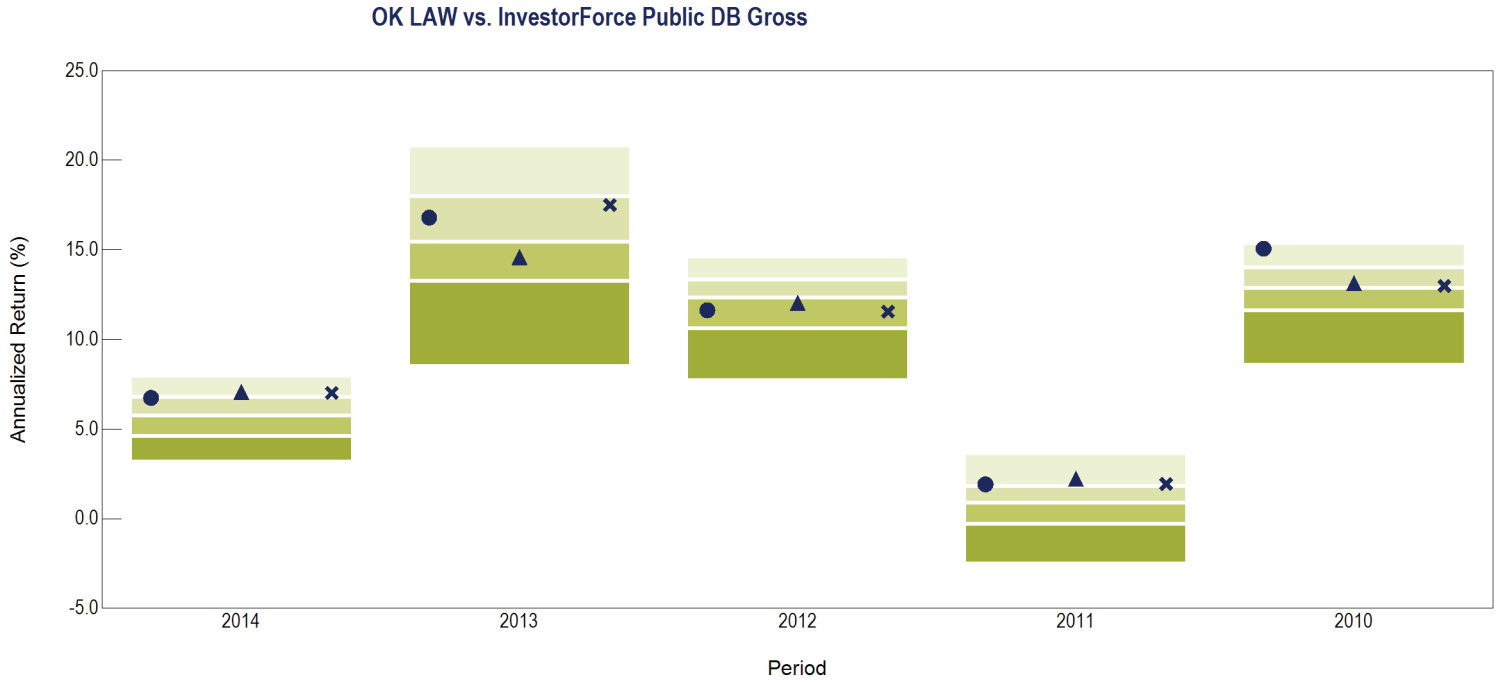
Performance numbers are shown gross of fees.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)													
5th Percentile	-3.6		-0.9		1.4		6.0		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		5.0		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		4.3		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		3.4		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		1.7		3.7		5.1		4.3	
# of Portfolios	258		250		247		229		220		199		163	
● OK LAW	-5.6	(73)	-2.6	(48)	-0.7	(52)	4.6	(43)	7.1	(46)	8.1	(36)	5.4	(58)
▲ LAW Allocation Index	-4.5	(29)	-2.3	(33)	0.0	(32)	4.9	(30)	6.7	(51)	7.9	(39)	5.7	(42)
× LAW Policy Index	-4.4	(26)	-1.9	(21)	1.1	(9)	5.1	(24)	7.7	(29)	8.3	(27)	6.0	(27)

Total Fund Return Summary vs. Peer Universe

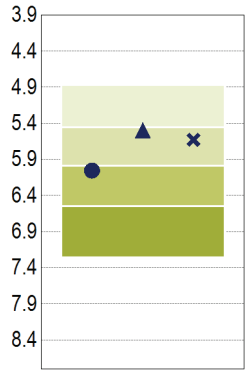


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK LAW	6.7	(28)	16.8	(38)	11.6	(66)	1.9	(24)	15.1	(9)
▲ LAW Allocation Index	7.1	(20)	14.6	(62)	12.1	(55)	2.2	(17)	13.1	(45)
× LAW Policy Index	7.0	(21)	17.5	(31)	11.6	(69)	1.9	(23)	13.0	(49)

Total Fund Risk Statistics vs. Peer Universe

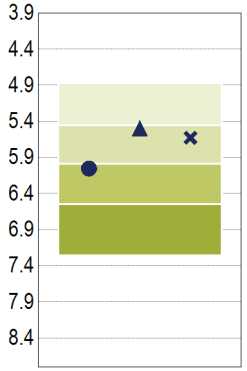
OK LAW vs. InvestorForce Public DB Gross
3 Years

Anlzd Standard Deviation



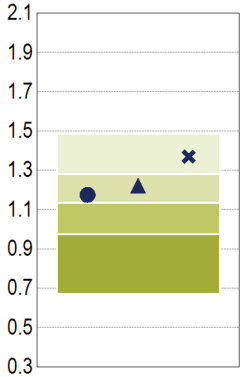
● OK LAW	
Value	6.06
%tile	56
▲ LAW Allocation Index	
Value	5.50
%tile	28
× LAW Policy Index	
Value	5.63
%tile	32
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Anlzd Standard Deviation



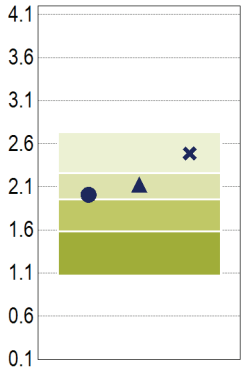
● OK LAW	
Value	6.06
%tile	56
▲ LAW Allocation Index	
Value	5.50
%tile	28
× LAW Policy Index	
Value	5.63
%tile	32
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK LAW	
Value	1.17
%tile	45
▲ LAW Allocation Index	
Value	1.22
%tile	36
× LAW Policy Index	
Value	1.37
%tile	10
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

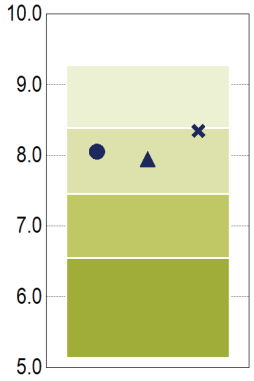


● OK LAW	
Value	2.01
%tile	48
▲ LAW Allocation Index	
Value	2.13
%tile	41
× LAW Policy Index	
Value	2.49
%tile	15
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

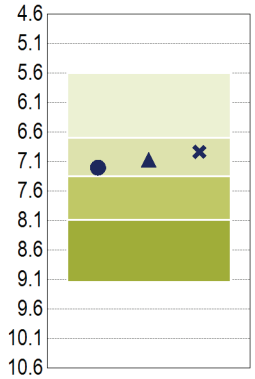
OK LAW vs. InvestorForce Public DB Gross
5 Years

Anlzd Return



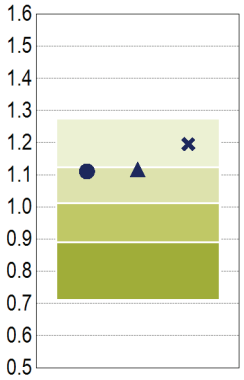
● OK LAW	
Value	8.05
%tile	36
▲ LAW Allocation Index	
Value	7.95
%tile	39
× LAW Policy Index	
Value	8.34
%tile	27
Universe	
5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation



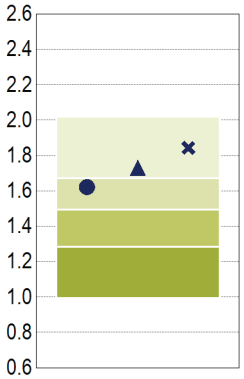
● OK LAW	
Value	7.21
%tile	44
▲ LAW Allocation Index	
Value	7.07
%tile	41
× LAW Policy Index	
Value	6.94
%tile	35
Universe	
5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio



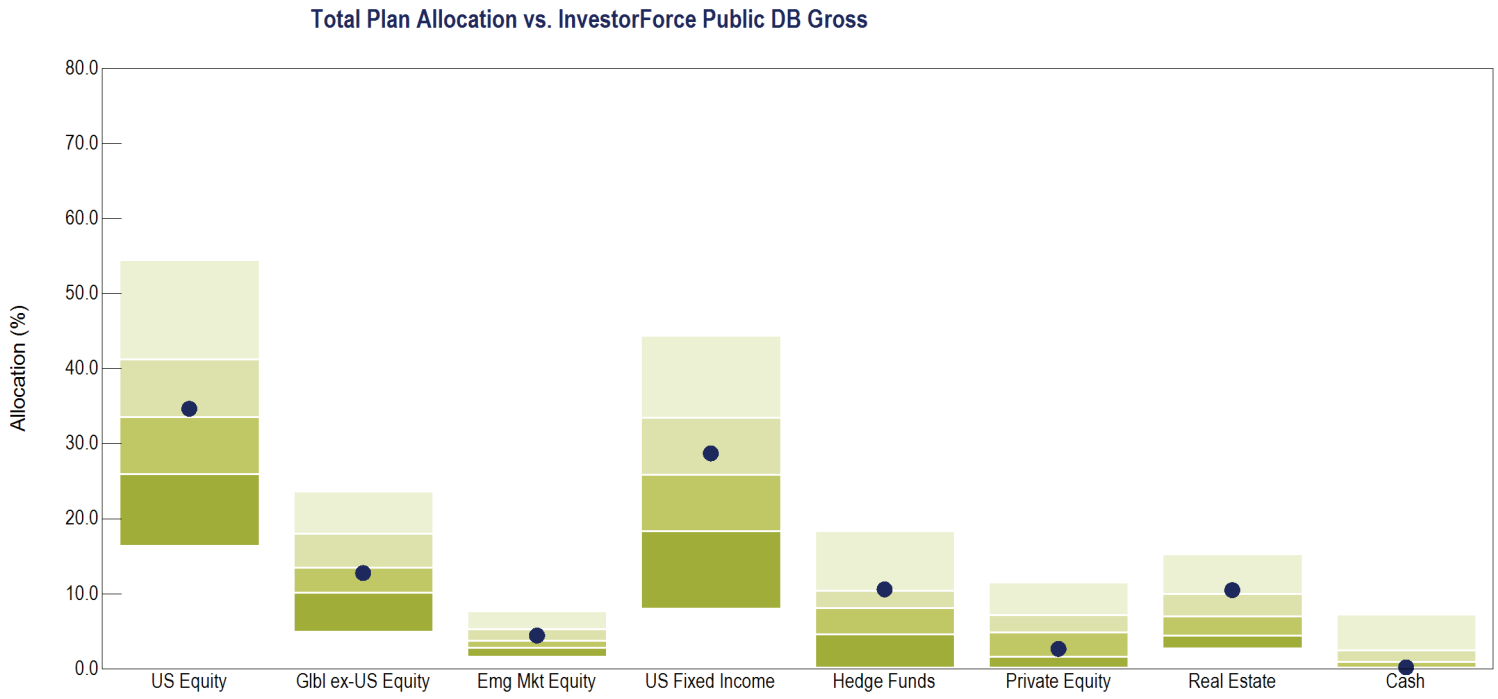
● OK LAW	
Value	1.11
%tile	28
▲ LAW Allocation Index	
Value	1.12
%tile	27
× LAW Policy Index	
Value	1.20
%tile	13
Universe	
5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio



● OK LAW	
Value	1.62
%tile	32
▲ LAW Allocation Index	
Value	1.73
%tile	19
× LAW Policy Index	
Value	1.84
%tile	11
Universe	
5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

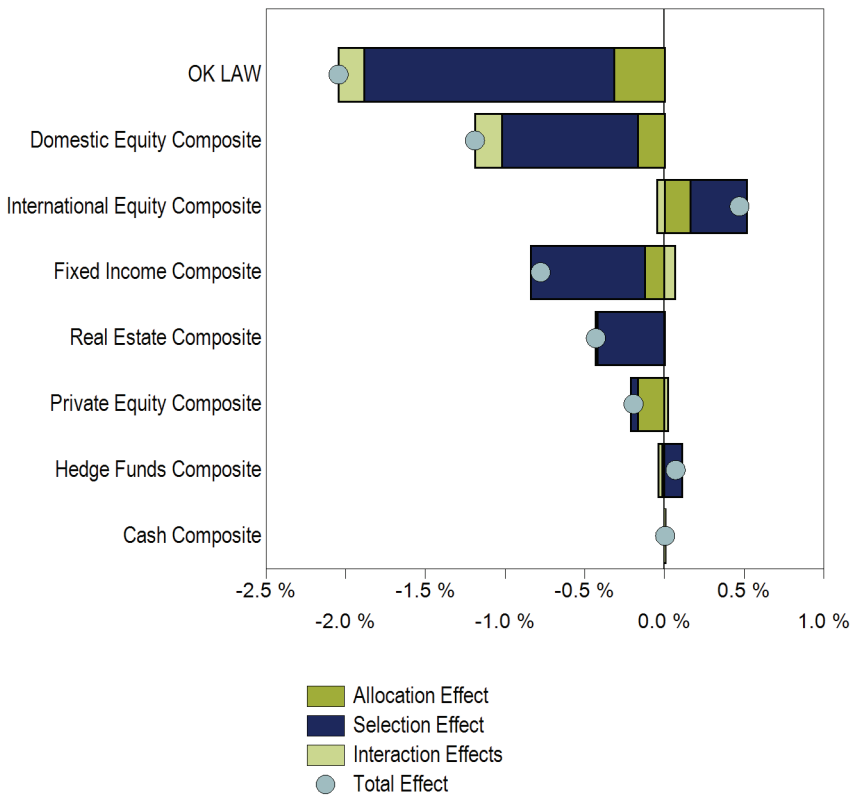
Total Fund Allocations vs. Peer Universe



	Allocation (Rank)															
5th Percentile	54.5		23.7		7.6		44.4		18.3		11.5		15.3		7.3	
25th Percentile	41.3		18.1		5.3		33.6		10.4		7.3		10.1		2.5	
Median	33.6		13.5		3.8		25.9		8.2		4.9		7.1		1.0	
75th Percentile	26.0		10.2		2.8		18.5		4.7		1.7		4.5		0.3	
95th Percentile	16.5		5.0		1.7		8.1		0.2		0.2		2.8		0.0	
# of Portfolios	226		218		90		187		68		63		157		216	
● **OK LAW**	34.6	(45)	12.8	(60)	4.4	(37)	28.7	(42)	10.6	(24)	2.7	(64)	10.5	(25)	0.2	(78)

Total Fund Attribution Analysis

Attribution Effects Relative to LAW Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	-9.2%	-6.4%	-2.7%	-0.8%	-0.2%	-0.2%	-1.2%
International Equity Composite	-10.0%	-12.2%	2.2%	0.4%	0.2%	0.0%	0.5%
Fixed Income Composite	-1.2%	1.2%	-2.5%	-0.7%	-0.1%	0.1%	-0.8%
Real Estate Composite	-1.2%	3.1%	-4.3%	-0.4%	0.0%	0.0%	-0.4%
Private Equity Composite	3.0%	3.8%	-0.8%	0.0%	-0.2%	0.0%	-0.2%
Hedge Funds Composite	-5.1%	-6.0%	0.9%	0.1%	0.0%	0.0%	0.1%
Cash Composite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**-5.6%**	**-3.6%**	**-2.0%**	**-1.6%**	**-0.3%**	**-0.2%**	**-2.0%**

*Total returns shown are a weighted average of the returns of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-5.6%	-2.6%	-0.7%
Wtd. Index Return *	-3.6%	-1.4%	0.4%
Excess Return	**-2.0%**	**-1.3%**	**-1.1%**
Selection Effect	-1.6%	-0.8%	-0.9%
Allocation Effect	-0.3%	-0.5%	-0.2%
Interaction Effect	-0.2%	0.0%	0.0%
Asset Class Returns			
OK LAW	-5.6%	-2.6%	-0.7%
Domestic Equity Composite	-9.2%	-5.7%	-0.4%
International Equity Composite	-10.0%	-5.7%	-8.7%
Emerging Market Equity Composite	-11.3%	-10.0%	-12.3%
Fixed Income Composite	-1.2%	-1.0%	-0.3%
Real Estate Composite	-1.2%	3.2%	1.5%
Private Equity Composite	3.0%	7.2%	10.1%
Hedge Funds Composite	-5.1%	-0.6%	2.9%
Cash Composite	0.0%	0.1%	0.1%

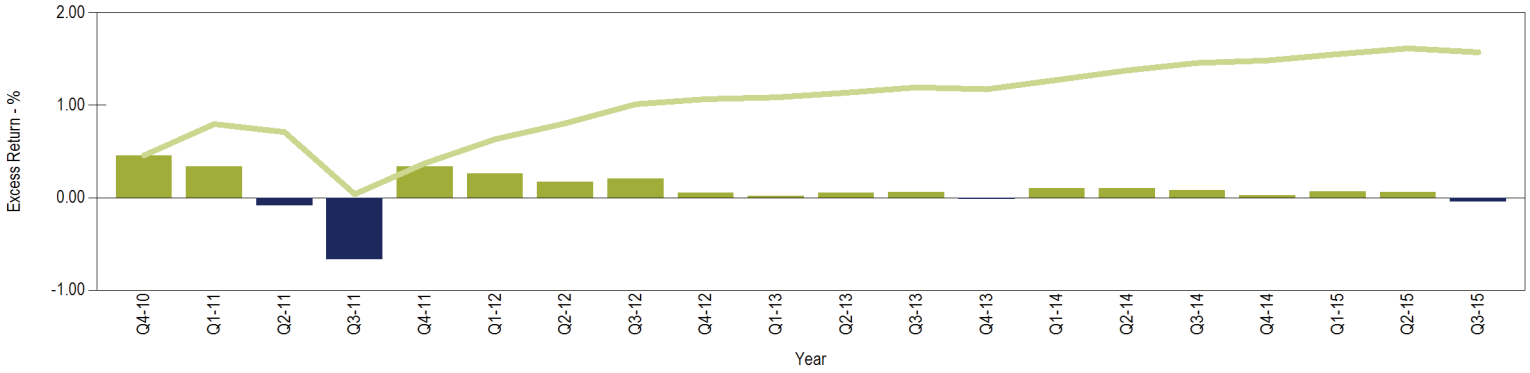
*Calculated from benchmark returns and weightings of each component.

Oklahoma Judge

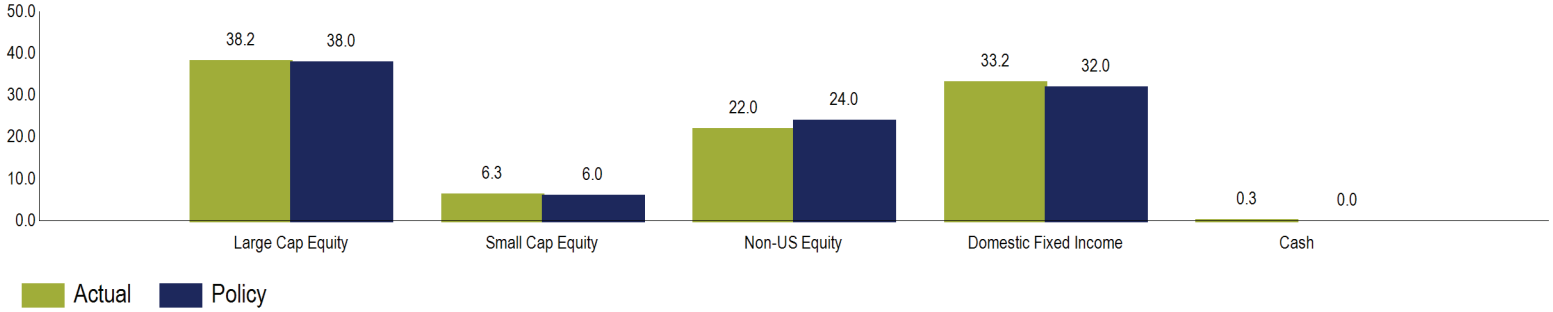
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK JUDGES	**$280,602,675**	**-5.9%**	**83**	**-4.2%**	**89**	**-2.0%**	**77**	**6.5%**	**58**	**7.5%**	**51**	**5.7%**	**43**
JUDGES Allocation Index		*-5.9%*	*83*	*-4.3%*	*90*	*-2.1%*	*78*	*6.3%*	*65*	*7.2%*	*57*	*5.4%*	*60*
JUDGES Policy Index		*-7.4%*	*99*	*-5.6%*	*99*	*-3.5%*	*93*	*5.7%*	*78*	*6.9%*	*61*	*5.2%*	*73*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

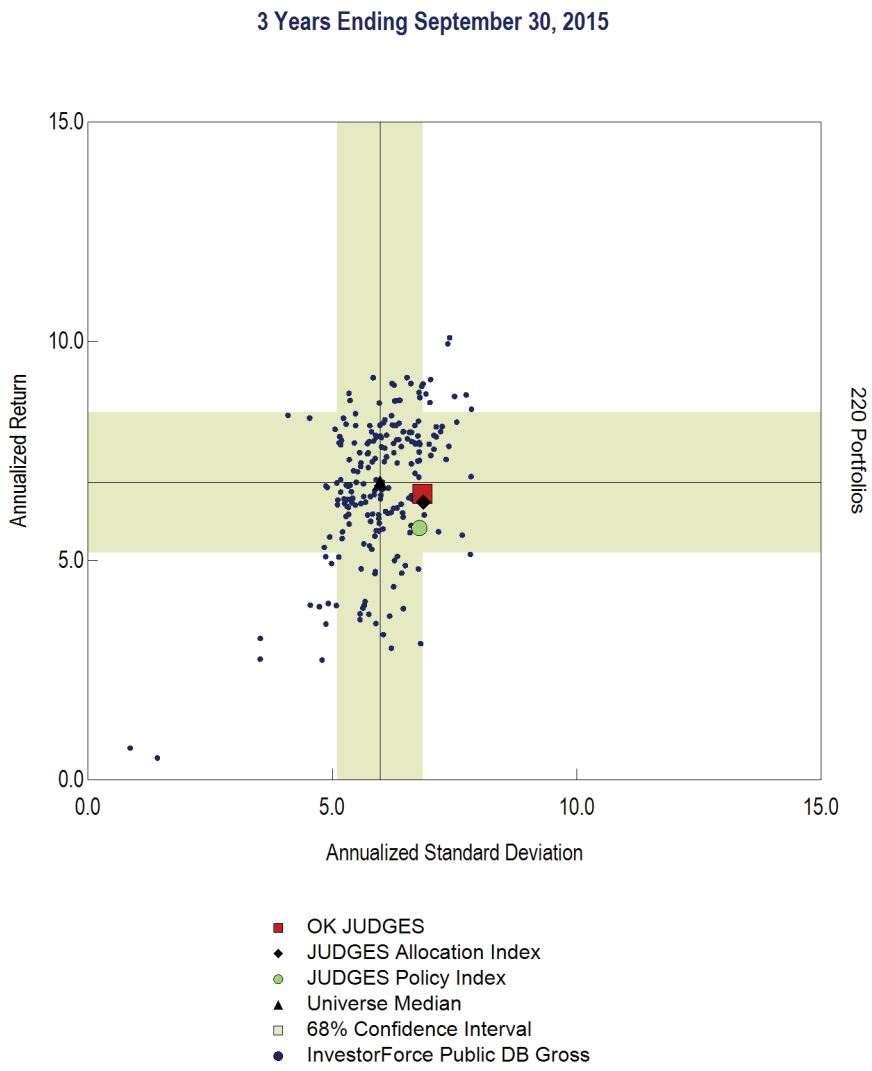
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



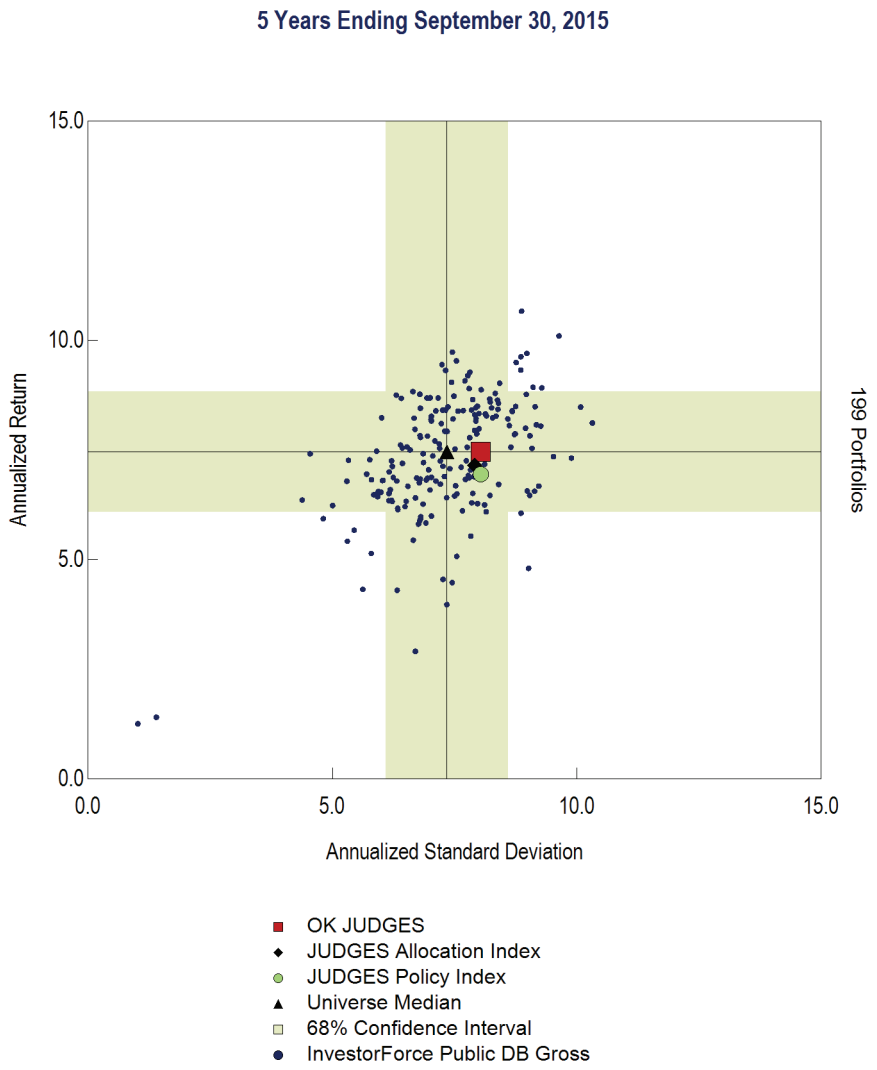
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK JUDGES	6.53%	58	6.84%	89
JUDGES Allocation Index	6.33%	65	6.86%	90
JUDGES Policy Index	5.75%	78	6.78%	86

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK JUDGES	0.95	79	1.59	76
JUDGES Allocation Index	0.92	82	1.55	78
JUDGES Policy Index	0.84	86	1.44	83

Total Fund Risk/Return - 5 Years



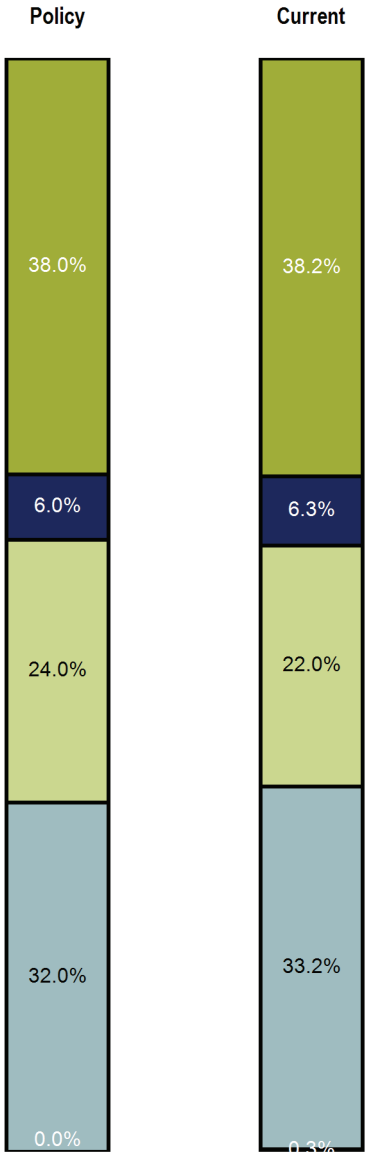
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK JUDGES	7.46%	51	8.04%	75
JUDGES Allocation Index	7.16%	57	7.91%	69
JUDGES Policy Index	6.95%	61	8.04%	75

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK JUDGES	0.92	73	1.45	58
JUDGES Allocation Index	0.90	74	1.42	60
JUDGES Policy Index	0.86	83	1.35	69

Total Fund Asset Allocation vs. Policy Targets

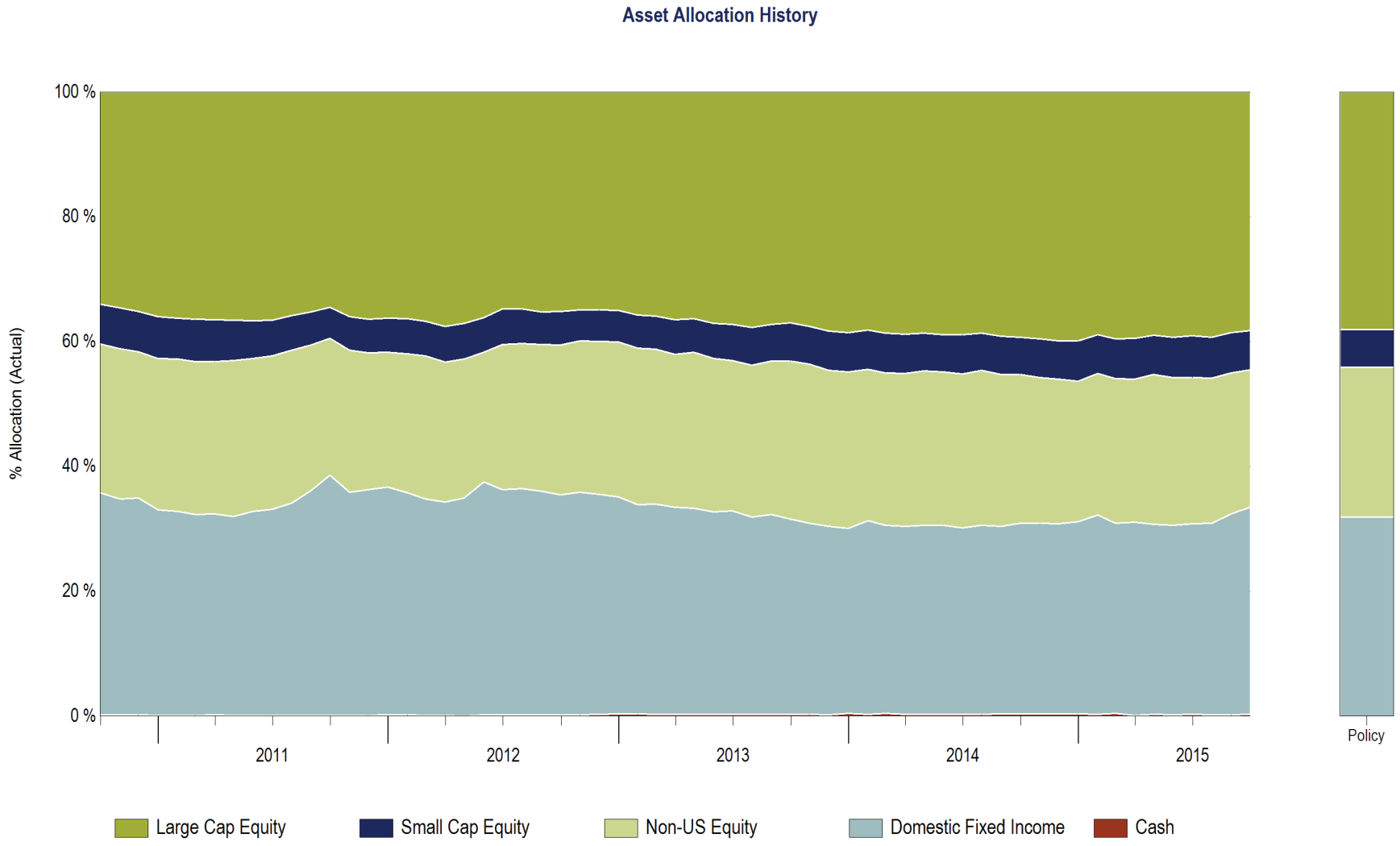


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$107,197,648	38.0%	38.2%	0.2%	35.0% - 41.0%	**Yes**
Small Cap Equity	$17,680,229	6.0%	6.3%	0.3%	3.2% - 8.8%	**Yes**
Non-US Equity	$61,846,581	24.0%	22.0%	-2.0%	21.0% - 27.0%	**Yes**
Domestic Fixed Income	$93,124,261	32.0%	33.2%	1.2%	27.5% - 36.5%	**Yes**
Cash	$753,956	0.0%	0.3%	0.3%	0.0% - 5.0%	**Yes**
Total	**$280,602,675**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Fund Asset Allocation History



Total Fund Performance Detail

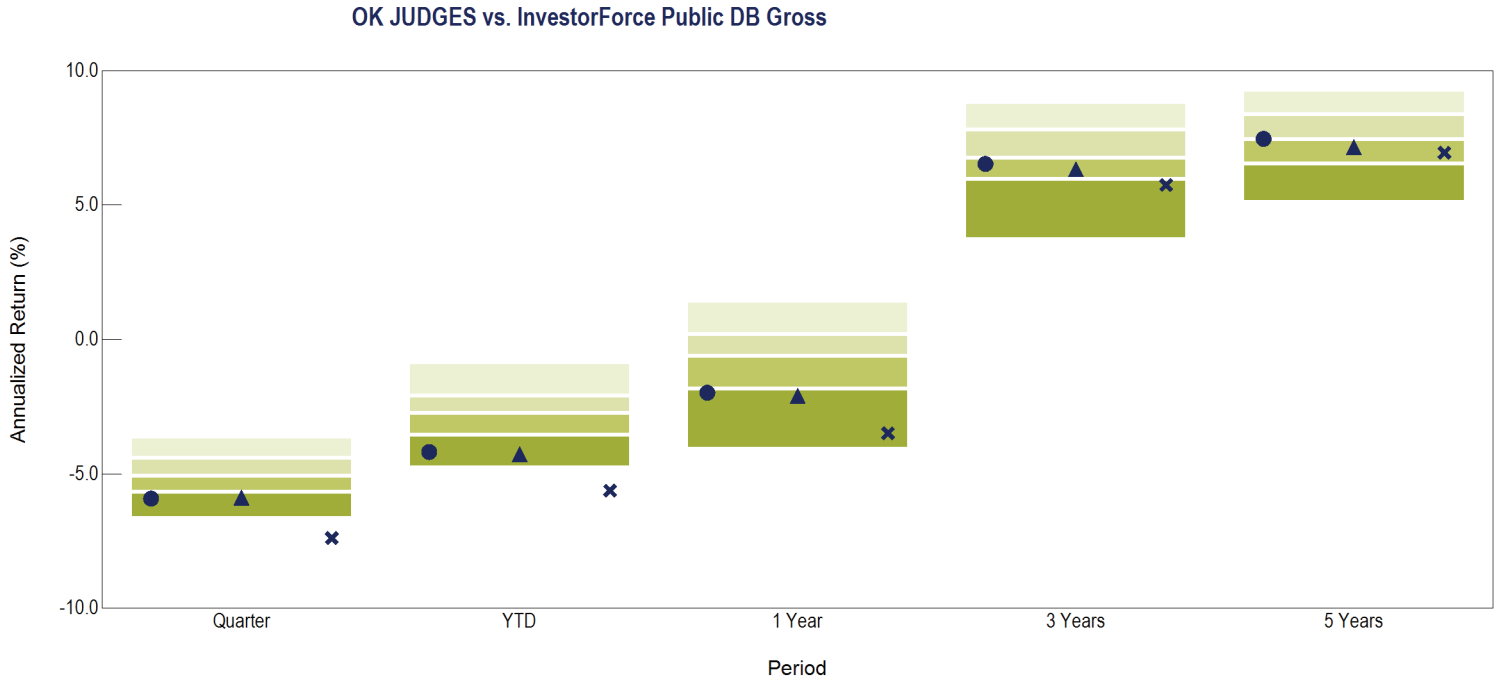
	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK JUDGES	**280,602,675**	**100.0**	**-5.9**	**83**	**-4.2**	**89**	**-2.0**	**77**	**6.5**	**58**	**7.5**	**51**	**5.7**	**43**
JUDGES Allocation Index			*-5.9*	*83*	*-4.3*	*90*	*-2.1*	*78*	*6.3*	*65*	*7.2*	*57*	*5.4*	*60*
Over/Under			0.0		0.1		0.1		0.2		0.3		0.3	
JUDGES Policy Index			*-7.4*	*99*	*-5.6*	*99*	*-3.5*	*93*	*5.7*	*78*	*6.9*	*61*	*5.2*	*73*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Domestic Equity Composite	**124,877,877**	**44.5**	**-7.6**	**42**	**-5.5**	**56**	**-0.3**	**57**	**12.5**	**57**	**13.2**	**52**	**7.0**	**71**
S&P 500			*-6.4*	*27*	*-5.3*	*52*	*-0.6*	*60*	*12.4*	*58*	*13.3*	*49*	*6.8*	*77*
Over/Under			-1.2		-0.2		0.3		0.1		-0.1		0.2	
eA All US Equity Gross Median			*-8.2*		*-5.2*		*0.5*		*12.9*		*13.3*		*7.7*	
BGI Russell 1000	107,197,648	38.2	-6.8	50	-5.2	54	-0.6	57	12.7	52	13.5	49	--	--
Russell 1000			*-6.8*	*49*	*-5.2*	*55*	*-0.6*	*57*	*12.7*	*52*	*13.4*	*49*	*7.0*	*69*
Over/Under			0.0		0.0		0.0		0.0		0.1			
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
BGI Russell 2000	17,680,229	6.3	-11.9	74	-7.6	76	1.5	61	11.3	70	11.9	70	--	--
Russell 2000			*-11.9*	*75*	*-7.7*	*77*	*1.2*	*63*	*11.0*	*72*	*11.7*	*73*	*6.5*	*79*
Over/Under			0.0		0.1		0.3		0.3		0.2			
eA US Small Cap Core Equity Gross Median			*-10.2*		*-5.4*		*2.8*		*12.9*		*13.5*		*7.8*	
International Equity Composite	**61,846,581**	**22.0**	**-12.1**	**78**	**-8.4**	**89**	**-11.9**	**88**	**2.6**	**89**	**2.1**	**90**	**2.7**	**96**
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			0.1		0.2		0.3		0.3		0.3		-0.3	
BGI ACWI Ex US	61,846,581	22.0	-12.1	78	-8.4	89	-11.9	88	2.6	89	2.1	90	--	--
MSCI ACWI ex USA			*-12.2*	*79*	*-8.6*	*90*	*-12.2*	*89*	*2.3*	*92*	*1.8*	*94*	*3.0*	*95*
Over/Under			0.1		0.2		0.3		0.3		0.3			
eA All ACWI ex-US Equity Gross Median			*-10.3*		*-4.6*		*-6.7*		*5.9*		*5.1*		*5.3*	

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Domestic Fixed Income Composite	**93,124,261**	**33.2**	**1.2**	**22**	**0.8**	**60**	**3.3**	**17**	**1.8**	**62**	**4.0**	**43**	**5.4**	**33**
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			0.0		-0.3		0.4		0.1		0.9		0.8	
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	
Blackrock	48,031,638	17.1	1.2	43	1.4	45	3.1	45	2.0	59	3.4	66	4.8	78
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			0.0		0.3		0.2		0.3		0.3		0.2	
Met West	26,758,356	9.5	0.8	82	1.0	74	2.7	70	2.4	28	4.3	12	6.2	3
Barclays Aggregate			*1.2*	*37*	*1.1*	*66*	*2.9*	*54*	*1.7*	*79*	*3.1*	*82*	*4.6*	*87*
Over/Under			-0.4		-0.1		-0.2		0.7		1.2		1.6	
eA US Core Fixed Inc Gross Median			*1.1*		*1.3*		*3.0*		*2.0*		*3.6*		*5.1*	
Hoisington	9,842,630	3.5	5.3	2	-0.9	12	9.9	2	2.9	30	7.3	16	7.8	34
Barclays Treasury Long Term			*5.1*	*3*	*0.2*	*6*	*8.8*	*2*	*2.8*	*42*	*6.2*	*67*	*7.0*	*75*
Over/Under			0.2		-1.1		1.1		0.1		1.1		0.8	
eA US Long Duration Fixed Inc Gross Median			*1.7*		*-2.6*		*2.3*		*2.7*		*6.5*		*7.3*	
Blackrock TIPS	8,491,637	3.0	-1.2	99	-0.7	99	-0.8	99	-1.8	99	2.6	69	--	--
Barclays US TIPS			*-1.1*	*99*	*-0.8*	*99*	*-0.8*	*99*	*-1.8*	*99*	*2.5*	*76*	*4.0*	*95*
Over/Under			-0.1		0.1		0.0		0.0		0.1			
eA US Interm Duration Fixed Inc Gross Median			*0.9*		*1.8*		*2.7*		*1.7*		*2.8*		*4.6*	

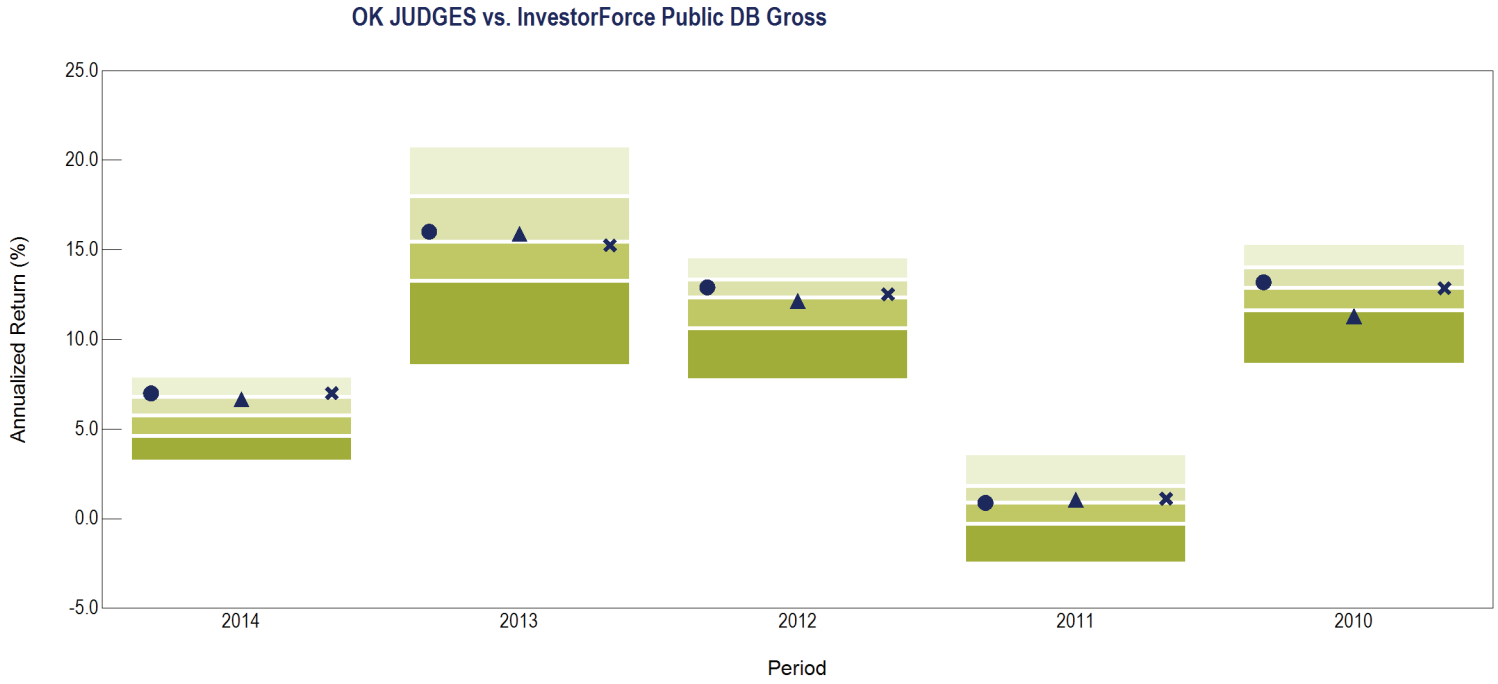
Performance numbers are shown gross of fees.
New Policy Index effective as of November 1, 2013 consist of 38% Large Cap Equity, 6% Small Cap Equity, 24% International Equity, 32% Domestic Fixed Income.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)									
5th Percentile	-3.6		-0.9		1.4		8.8		9.3	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4	
Median	-5.1		-2.7		-0.6		6.8		7.5	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1	
# of Portfolios	258		250		247		220		199	
● OK JUDGES	-5.9	(83)	-4.2	(89)	-2.0	(77)	6.5	(58)	7.5	(51)
▲ JUDGES Allocation Index	-5.9	(83)	-4.3	(90)	-2.1	(78)	6.3	(65)	7.2	(57)
× JUDGES Policy Index	-7.4	(99)	-5.6	(99)	-3.5	(93)	5.7	(78)	6.9	(61)

Total Fund Return Summary vs. Peer Universe

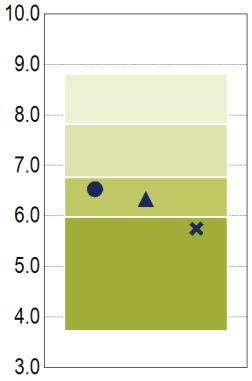


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK JUDGES	7.0	(22)	16.0	(47)	12.9	(39)	0.9	(52)	13.2	(45)
▲ JUDGES Allocation Index	6.7	(29)	15.9	(48)	12.1	(54)	1.1	(44)	11.3	(79)
× JUDGES Policy Index	7.0	(21)	15.3	(53)	12.5	(47)	1.1	(40)	12.9	(51)

Total Fund Risk Statistics vs. Peer Universe

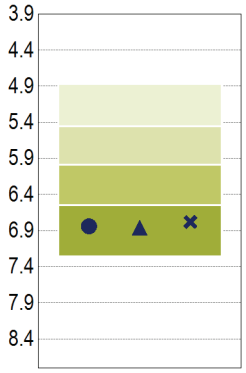
OK JUDGES vs. InvestorForce Public DB Gross
3 Years

Anlzd Return



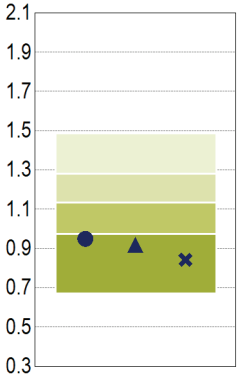
● OK JUDGES	
Value	6.53
%tile	58
▲ JUDGES Allocation Index	
Value	6.33
%tile	65
× JUDGES Policy Index	
Value	5.75
%tile	78
Universe	
5th %tile	8.82
25th %tile	7.83
Median	6.78
75th %tile	5.99
95th %tile	3.73

Anlzd Standard Deviation



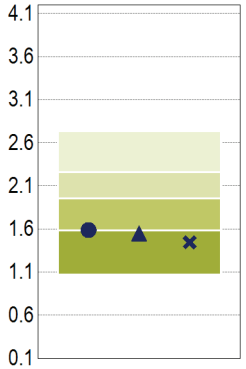
● OK JUDGES	
Value	6.84
%tile	89
▲ JUDGES Allocation Index	
Value	6.86
%tile	90
× JUDGES Policy Index	
Value	6.78
%tile	86
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK JUDGES	
Value	0.95
%tile	79
▲ JUDGES Allocation Index	
Value	0.92
%tile	82
× JUDGES Policy Index	
Value	0.84
%tile	86
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

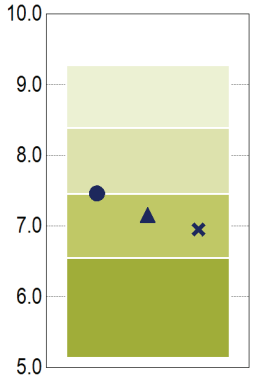


● OK JUDGES	
Value	1.59
%tile	76
▲ JUDGES Allocation Index	
Value	1.55
%tile	78
× JUDGES Policy Index	
Value	1.44
%tile	83
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

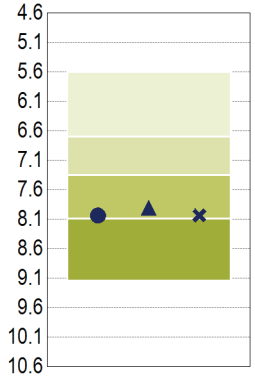
OK JUDGES vs. InvestorForce Public DB Gross
5 Years

Anlzd Return



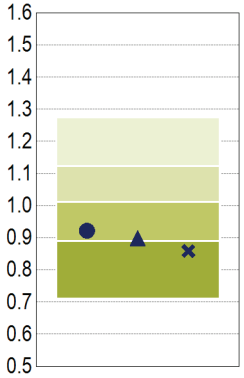
● OK JUDGES	
Value	7.46
%tile	51
▲ JUDGES Allocation Index	
Value	7.16
%tile	57
× JUDGES Policy Index	
Value	6.95
%tile	61
Universe	
5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation



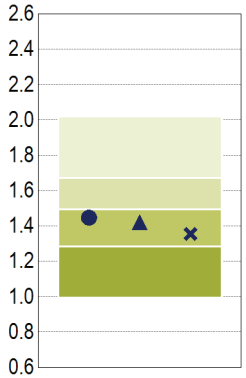
● OK JUDGES	
Value	8.04
%tile	75
▲ JUDGES Allocation Index	
Value	7.91
%tile	69
× JUDGES Policy Index	
Value	8.04
%tile	75
Universe	
5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio



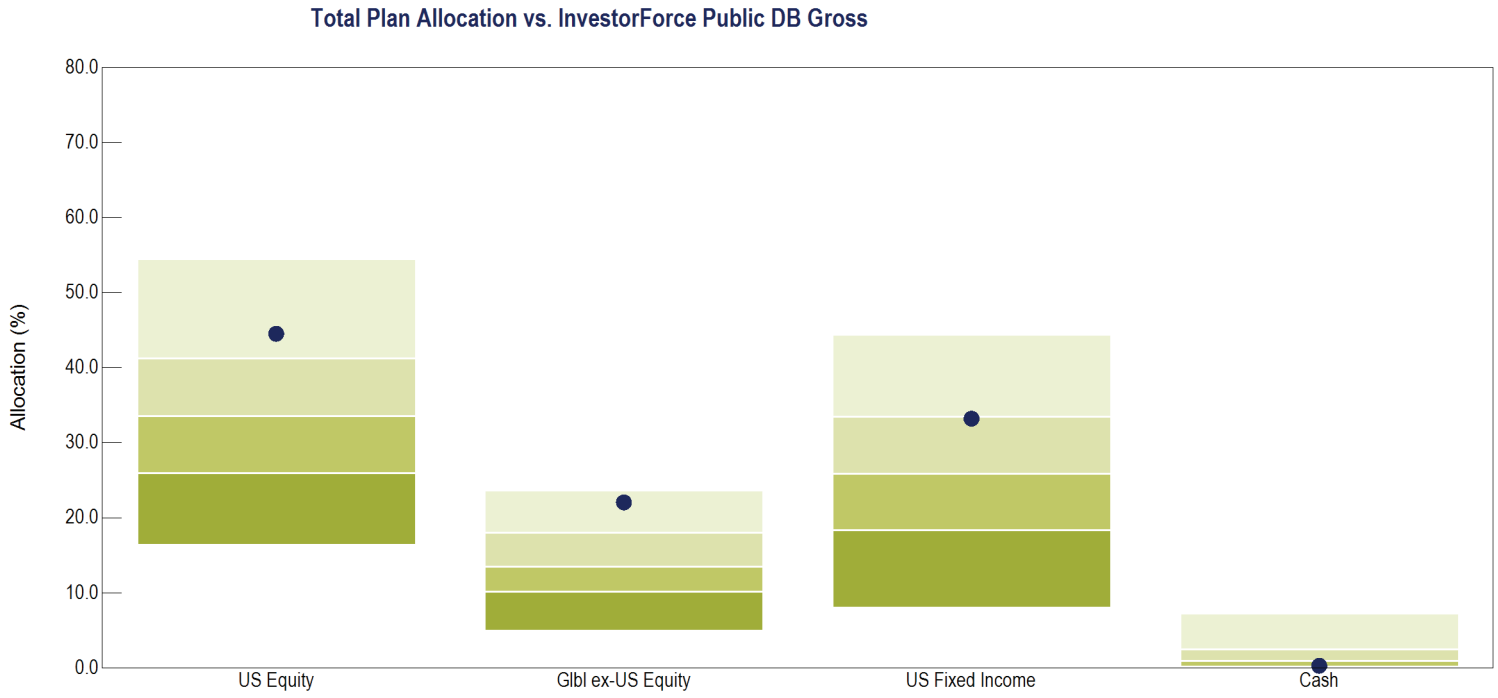
● OK JUDGES	
Value	0.92
%tile	73
▲ JUDGES Allocation Index	
Value	0.90
%tile	74
× JUDGES Policy Index	
Value	0.86
%tile	83
Universe	
5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio



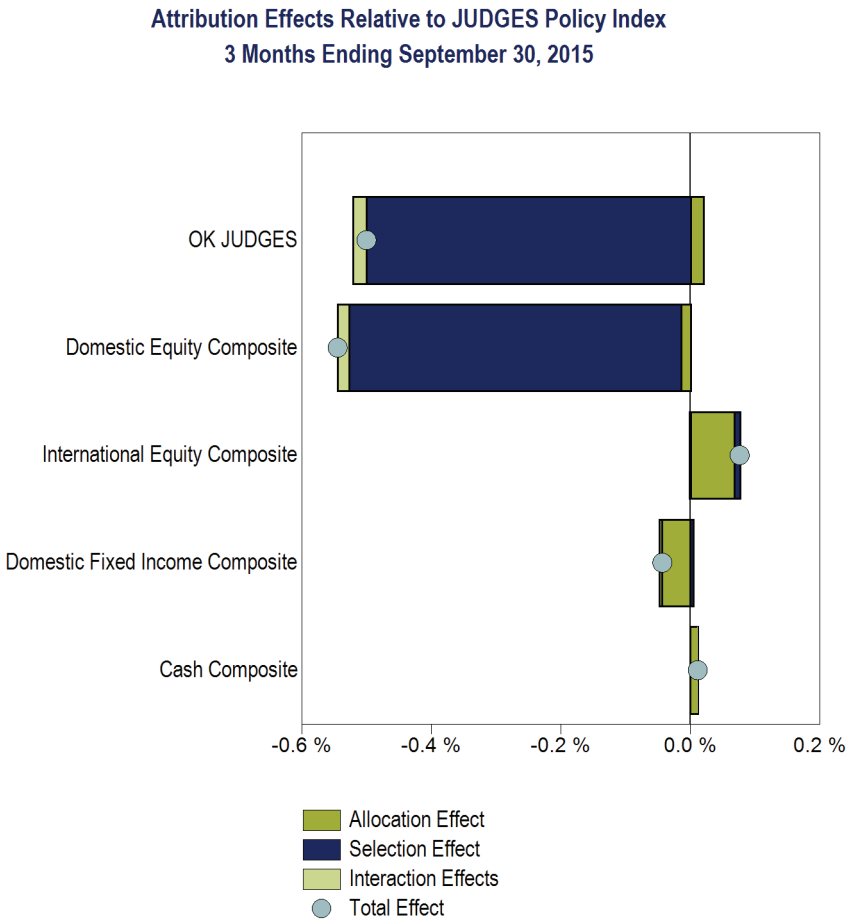
● OK JUDGES	
Value	1.45
%tile	58
▲ JUDGES Allocation Index	
Value	1.42
%tile	60
× JUDGES Policy Index	
Value	1.35
%tile	69
Universe	
5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

Total Fund Allocations vs. Peer Universe



	Allocation (Rank)							
5th Percentile	54.5		23.7		44.4		7.3	
25th Percentile	41.3		18.1		33.6		2.5	
Median	33.6		13.5		25.9		1.0	
75th Percentile	26.0		10.2		18.5		0.3	
95th Percentile	16.5		5.0		8.1		0.0	
# of Portfolios	226		218		187		216	
● **OK JUDGES**	44.5	(16)	22.0	(11)	33.2	(28)	0.3	(75)

Total Fund Attribution Analysis



Attribution Summary
3 Months Ending September 30, 2015

	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Composite	-7.6%	-6.4%	-1.1%	-0.5%	0.0%	0.0%	-0.5%
International Equity Composite	-12.1%	-12.2%	0.0%	0.0%	0.1%	0.0%	0.1%
Domestic Fixed Income Composite	1.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Cash Composite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**-5.9%**	**-5.4%**	**-0.5%**	**-0.5%**	**0.0%**	**0.0%**	**-0.5%**

*Target return is calculated as a weighted average of the composites shown and their respective benchmarks and may differ from returns shown throughout the report.

Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-5.9%	-4.2%	-2.0%
Wtd. Index Return *	-5.4%	-3.9%	-2.2%
Excess Return	**-0.5%**	**-0.2%**	**0.2%**
Selection Effect	-0.5%	-0.1%	0.3%
Allocation Effect	0.0%	-0.1%	0.0%
Interaction Effect	0.0%	0.0%	0.0%
Asset Class Returns			
OK JUDGES	-5.9%	-4.2%	-2.0%
Domestic Equity Composite	-7.6%	-5.5%	-0.3%
International Equity Composite	-12.1%	-8.4%	-11.9%
Domestic Fixed Income Composite	1.2%	0.8%	3.3%
Cash Composite	0.0%	0.1%	0.1%

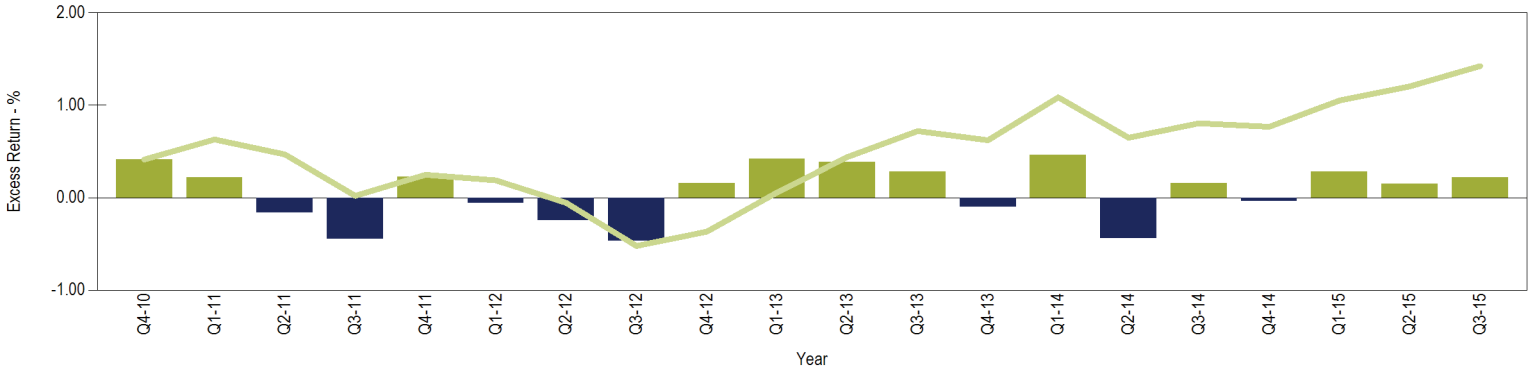
*Calculated from benchmark returns and weightings of each component.

Oklahoma Wildlife

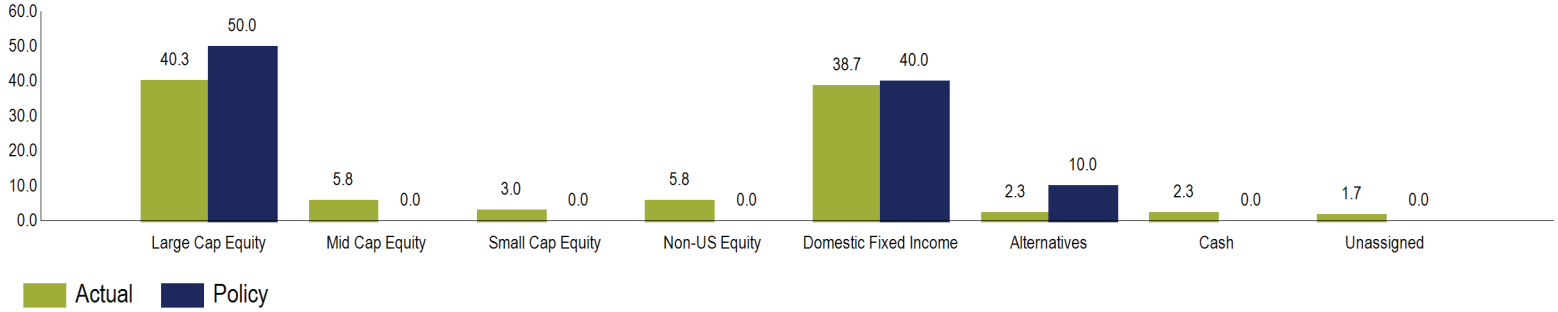
Total Fund Performance Summary

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
OK WILDLIFE	**$95,107,970**	**-4.4%**	**27**	**-2.6%**	**45**	**0.5%**	**19**	**6.9%**	**48**	**7.4%**	**52**	**5.0%**	**78**
WILDLIFE Allocation Index		*-4.6%*	*34*	*-3.2%*	*67*	*-0.1%*	*34*	*6.2%*	*70*	*7.1%*	*59*	*5.3%*	*66*
WILDLIFE Policy Index		*-3.2%*	*3*	*-2.2%*	*29*	*1.0%*	*10*	*7.4%*	*41*	*8.3%*	*29*	*6.1%*	*24*
InvestorForce Public DB Gross Median		*-5.1%*		*-2.7%*		*-0.6%*		*6.8%*		*7.5%*		*5.6%*	

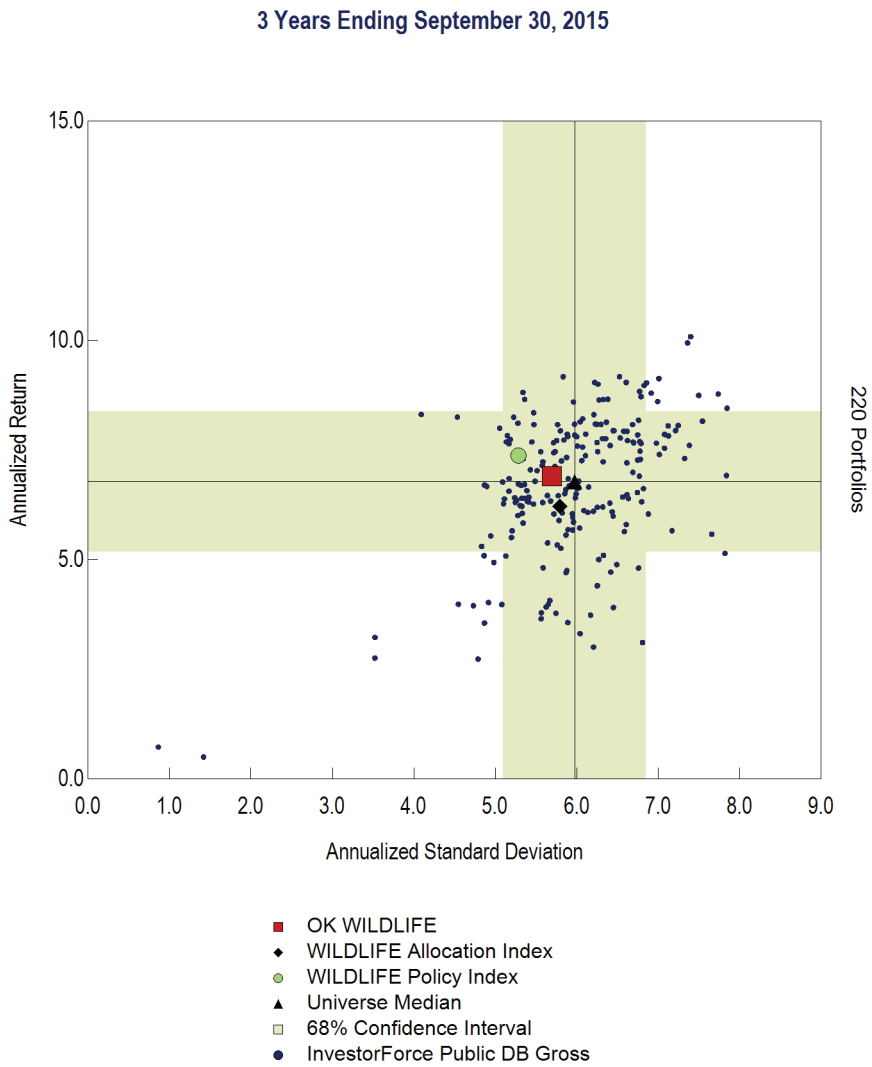
Quarterly and Cumulative Excess Performance



Actual vs Target Allocation (%)



Total Fund Risk/Return - 3 Years



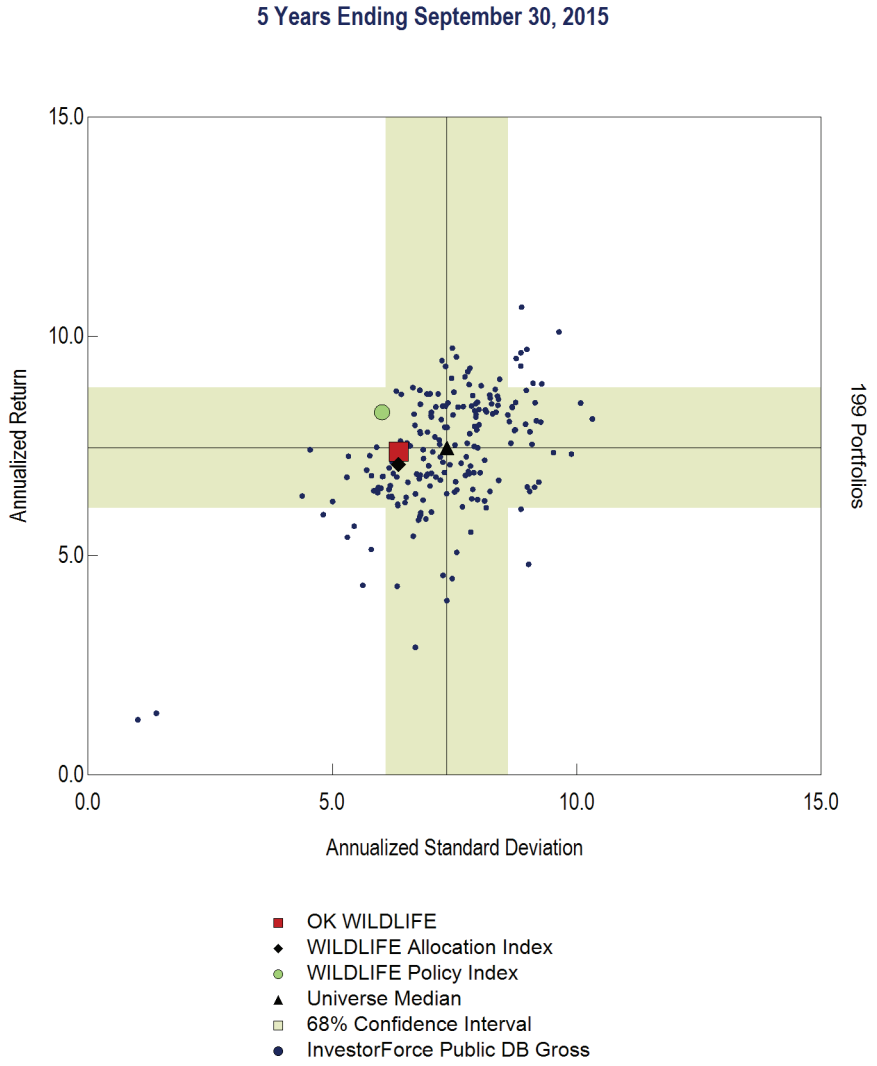
3 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK WILDLIFE	6.90%	48	5.69%	34
WILDLIFE Allocation Index	6.22%	70	5.79%	40
WILDLIFE Policy Index	7.38%	41	5.28%	17

3 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK WILDLIFE	1.21	38	2.07	44
WILDLIFE Allocation Index	1.07	66	1.83	62
WILDLIFE Policy Index	1.39	9	2.64	7

Total Fund Risk/Return - 5 Years



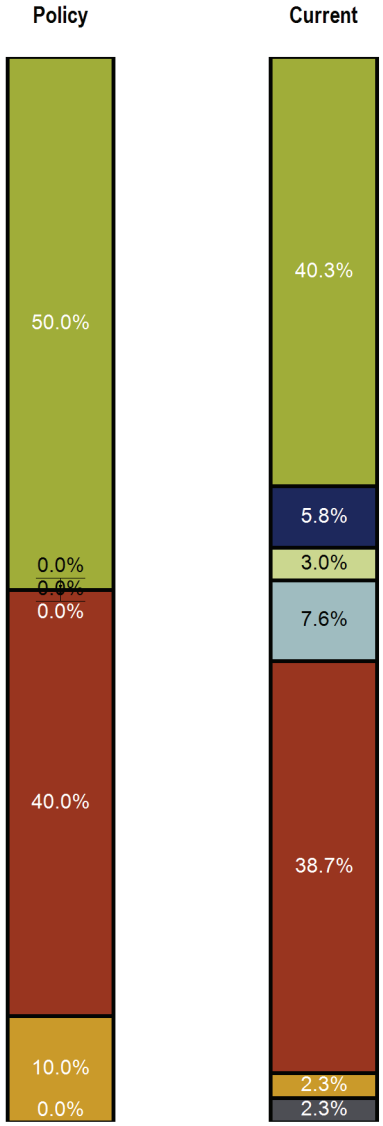
5 Years Ending September 30, 2015

	Anlzd Ret	Rank	Anlzd Std Dev	Rank
OK WILDLIFE	7.37%	52	6.36%	19
WILDLIFE Allocation Index	7.08%	59	6.35%	19
WILDLIFE Policy Index	8.27%	29	6.02%	11

5 Years Ending September 30, 2015

	Sharpe Ratio	Rank	Sortino Ratio	Rank
OK WILDLIFE	1.15	21	1.74	18
WILDLIFE Allocation Index	1.11	28	1.77	15
WILDLIFE Policy Index	1.37	2	2.27	1

Total Fund Asset Allocation vs. Policy Targets

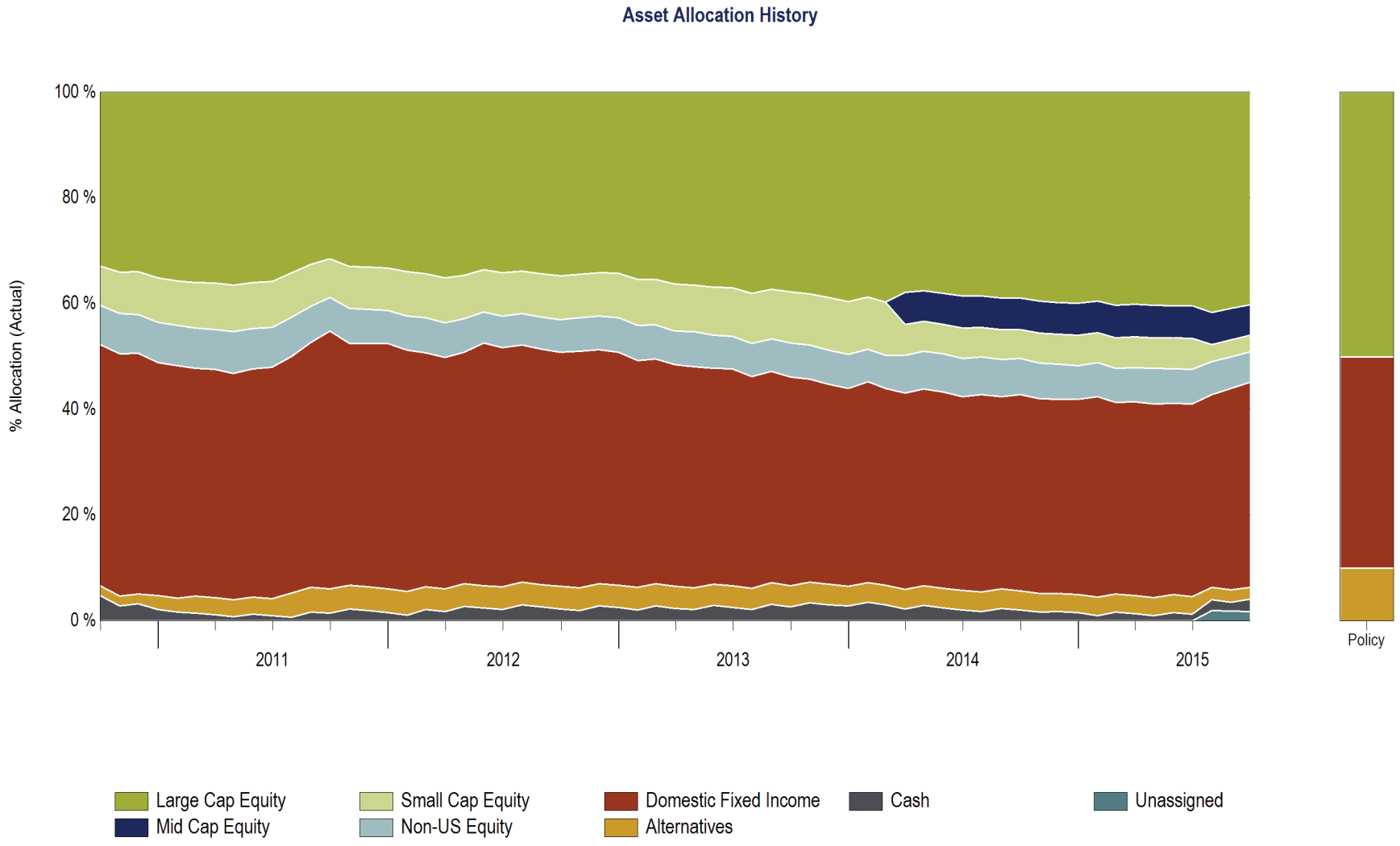


Asset Allocation vs. Target

	Current	Policy	Current	Difference*	Policy Range	Within Range
Large Cap Equity	$38,300,971	50.0%	40.3%	-9.7%	40.0% - 65.0%	**Yes**
Mid Cap Equity	$5,493,745	0.0%	5.8%	5.8%	0.0% - 10.0%	**Yes**
Small Cap Equity	$2,890,150	0.0%	3.0%	3.0%	0.0% - 10.0%	**Yes**
Non-US Equity	$7,207,904	0.0%	7.6%	7.6%	0.0% - 15.0%	**Yes**
Domestic Fixed Income	$36,825,662	40.0%	38.7%	-1.3%	35.0% - 55.0%	**Yes**
Alternatives	$2,201,753	10.0%	2.3%	-7.7%	0.0% - 10.0%	**Yes**
Cash	$2,187,785	0.0%	2.3%	2.3%	0.0% - 5.0%	**Yes**
Total	**$95,107,970**	**100.0%**	**100.0%**			

*Difference between Policy and Current Allocation

Total Fund Asset Allocation History



Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
OK WILDLIFE	**95,107,970**	**100.0**	**-4.4**	**27**	**-2.6**	**45**	**0.5**	**19**	**6.9**	**48**	**7.4**	**52**	**5.0**	**78**
WILDLIFE Allocation Index			*-4.6*	*34*	*-3.2*	*67*	*-0.1*	*34*	*6.2*	*70*	*7.1*	*59*	*5.3*	*66*
Over/Under			0.2		0.6		0.6		0.7		0.3		-0.3	
WILDLIFE Policy Index			*-3.2*	*3*	*-2.2*	*29*	*1.0*	*10*	*7.4*	*41*	*8.3*	*29*	*6.1*	*24*
InvestorForce Public DB Gross Median			*-5.1*		*-2.7*		*-0.6*		*6.8*		*7.5*		*5.6*	
Domestic Equity Comp	**46,684,866**	**49.1**	**-7.2**	**37**	**-4.4**	**42**	**1.3**	**45**	**13.5**	**40**	**13.4**	**49**	**--**	**--**
Core Equity	7,642,362	8.0	-6.7	48	-5.2	55	0.3	44	12.3	61	10.9	88	--	--
S&P 500			*-6.4*	*42*	*-5.3*	*56*	*-0.6*	*57*	*12.4*	*56*	*13.3*	*52*	*6.8*	*77*
Over/Under			-0.3		0.1		0.9		-0.1		-2.4			
eA US Large Cap Core Equity Gross Median			*-6.9*		*-4.9*		*-0.1*		*12.8*		*13.4*		*7.5*	
Growth Equity	9,126,762	9.6	-3.7	8	1.7	11	9.9	3	17.0	7	16.8	4	--	--
Russell 1000 Growth			*-5.3*	*32*	*-1.5*	*49*	*3.2*	*52*	*13.6*	*53*	*14.5*	*42*	*8.1*	*50*
Over/Under			1.6		3.2		6.7		3.4		2.3			
eA US Large Cap Growth Equity Gross Median			*-6.0*		*-1.7*		*3.2*		*13.7*		*14.0*		*8.0*	
Multi-Cap Value Strategy	3,172,170	3.3	-9.4	51	-8.2	52	-5.7	66	--	--	--	--	--	--
S&P 500 Value			*-8.3*	*36*	*-8.7*	*58*	*-4.3*	*60*	*11.2*	*51*	*11.9*	*46*	*5.4*	*83*
Over/Under			-1.1		0.5		-1.4							
eA US All Cap Value Equity Gross Median			*-9.3*		*-7.9*		*-3.4*		*11.3*		*11.8*		*7.4*	
Value Equity	7,268,073	7.6	-8.3	51	-5.5	23	-0.9	22	15.6	6	14.0	17	--	--
Russell 1000 Value			*-8.4*	*52*	*-9.0*	*70*	*-4.4*	*61*	*11.6*	*60*	*12.3*	*53*	*5.7*	*81*
Over/Under			0.1		3.5		3.5		4.0		1.7			
eA US Large Cap Value Equity Gross Median			*-8.2*		*-7.5*		*-3.5*		*12.1*		*12.4*		*6.9*	
BOK Small Cap	1,432,681	1.5	-11.6	67	-7.7	71	1.3	56	11.6	64	12.6	60	--	--
Russell 2000			*-11.9*	*70*	*-7.7*	*71*	*1.2*	*57*	*11.0*	*71*	*11.7*	*73*	*6.5*	*80*
Over/Under			0.3		0.0		0.1		0.6		0.9			
eA US Small Cap Equity Gross Median			*-10.4*		*-5.7*		*2.3*		*12.6*		*13.3*		*7.9*	
T Rowe Price New Horizons	724,789	0.8	-7.8	12	-0.6	27	6.3	34	--	--	--	--	--	--
Russell 2000 Growth			*-13.1*	*68*	*-5.5*	*60*	*4.0*	*51*	*12.8*	*55*	*13.3*	*67*	*7.7*	*69*
Over/Under			5.3		4.9		2.3							
eA US Small Cap Growth Equity Gross Median			*-11.7*		*-3.8*		*4.1*		*13.4*		*14.3*		*8.7*	
Small Cap Value	732,681	0.8	-11.7	75	-9.5	75	-3.5	72	--	--	--	--	--	--
Russell 2000 Value			*-10.7*	*67*	*-10.1*	*77*	*-1.6*	*64*	*9.2*	*83*	*10.2*	*83*	*5.3*	*92*
Over/Under			-1.0		0.6		-1.9							
eA US Small Cap Value Equity Gross Median			*-9.8*		*-6.7*		*0.5*		*12.2*		*12.5*		*7.6*	

Total Fund Performance Detail

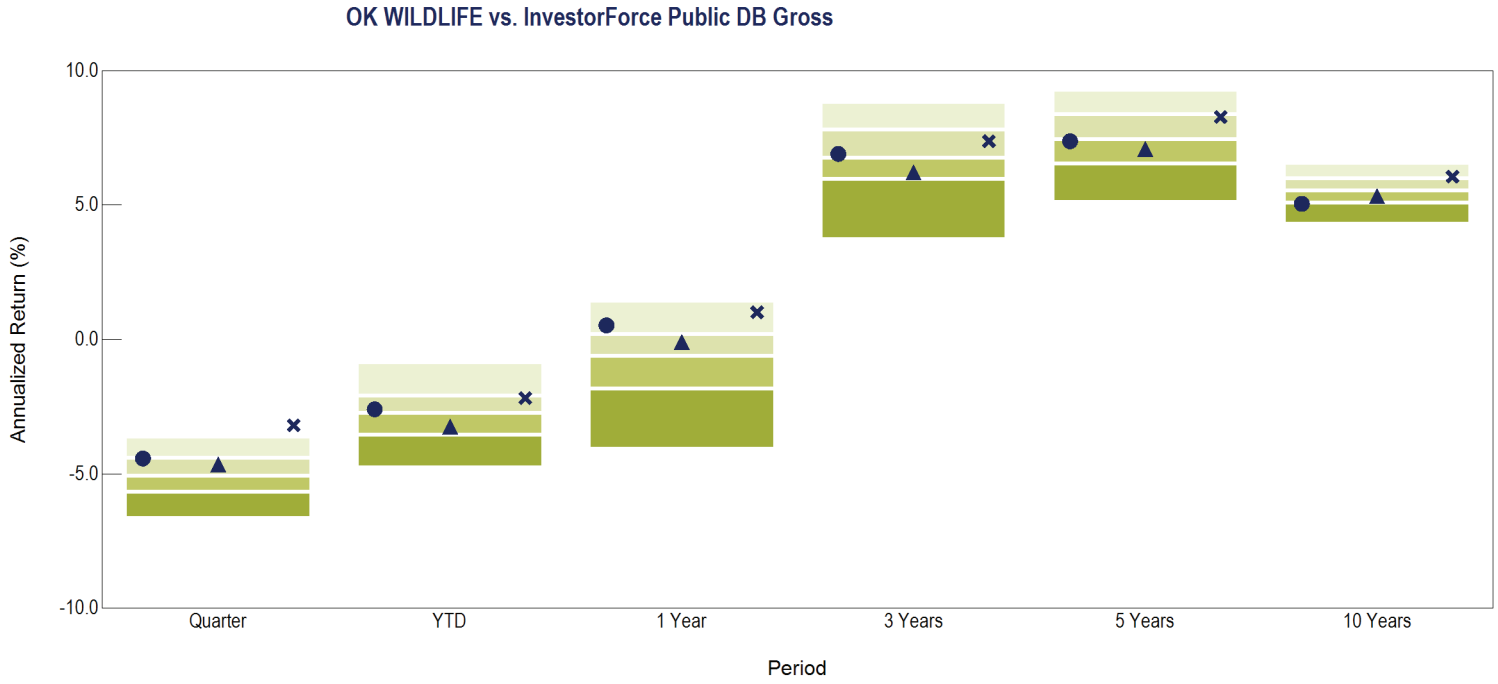
	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
John Hancock Disc Val	1,341,346	1.4	-5.5	13	-2.8	47	5.2	25	--	--	--	--	--	--
Russell 2500			-10.3	92	-6.0	84	0.4	70	12.4	88	12.7	80	7.4	88
Over/Under			4.8		3.2		4.8							
eA US Mid Cap Core Equity Gross Median			-7.8		-3.2		2.0		14.5		14.4		8.9	
Prudential Jennison Mid Cap Growth Z	1,313,055	1.4	--	--	--	--	--	--	--	--	--	--	--	--
Russell 2500 Growth			-11.0	--	-3.8	--	3.4	--	13.8	--	13.9	--	8.4	--
Over/Under														
Vanguard Institutional Index	7,149,830	7.5	--	--	--	--	--	--	--	--	--	--	--	--
S&P 500			-6.4	--	-5.3	--	-0.6	--	12.4	--	13.3	--	6.8	--
Over/Under														
Vanguard Mid Cap	2,646,455	2.8	--	--	--	--	--	--	--	--	--	--	--	--
Russell 2500			-10.3	--	-6.0	--	0.4	--	12.4	--	12.7	--	7.4	--
Over/Under														
Fidelity Leveraged Company Stk	192,888	0.2	--	--	--	--	--	--	--	--	--	--	--	--
Russell 2500			-10.3	--	-6.0	--	0.4	--	12.4	--	12.7	--	7.4	--
Over/Under														
T. Rowe Price Growth Stk	3,941,773	4.1	--	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 Growth			-5.9	--	-1.9	--	3.2	--	13.5	--	14.4	--	8.1	--
Over/Under														
Large Cap Growth Equity Composite	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
International Composite	**7,207,904**	**7.6**	**-12.9**	**88**	**-8.4**	**89**	**-12.1**	**88**	**3.2**	**85**	**2.1**	**90**	**--**	**--**
MSCI ACWI ex USA			-12.2	79	-8.6	90	-12.2	89	2.3	92	1.8	94	3.0	95
Over/Under			-0.7		0.2		0.1		0.9		0.3			
eA All ACWI ex-US Equity Gross Median			-10.3		-4.6		-6.7		5.9		5.1		5.3	
Dodge & Cox International STK	1,638,135	1.7	-15.4	99	-12.1	99	-16.2	99	--	--	--	--	--	--
MSCI ACWI ex USA			-12.2	66	-8.6	83	-12.2	88	2.3	94	1.8	99	3.0	99
Over/Under			-3.2		-3.5		-4.0							
eA ACWI ex-US Large Cap Core Eq Gross Median			-10.9		-6.0		-8.2		4.5		4.6		5.1	
MFS International New Discovery	1,776,777	1.9	-6.9	15	-1.7	36	-2.1	34	--	--	--	--	--	--
MSCI ACWI ex USA			-12.2	91	-8.6	99	-12.2	99	2.3	99	1.8	98	3.0	97
Over/Under			5.3		6.9		10.1							
eA ACWI ex-US Growth Equity Gross Median			-9.8		-3.1		-4.4		6.3		5.6		6.0	
Harbor International	1,654,470	1.7	--	--	--	--	--	--	--	--	--	--	--	--
MSCI ACWI ex USA			-12.2	--	-8.6	--	-12.2	--	2.3	--	1.8	--	3.0	--
Over/Under														

Total Fund Performance Detail

	Market Value ($)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
Emerging Int'l Composite	**2,138,522**	**2.2**	**-17.3**	**--**	**-17.6**	**--**	**-23.1**	**--**	**-7.2**	**--**	**--**	**--**	**--**	**--**
Oppenheimer Developing Markets	2,138,522	2.2	-17.2	69	-17.6	89	-23.2	93	--	--	--	--	--	--
MSCI Emerging Markets			*-17.9*	*80*	*-15.5*	*68*	*-19.3*	*73*	*-5.3*	*81*	*-3.6*	*82*	*4.3*	*78*
Over/Under			0.7		-2.1		-3.9							
eA Emg Mkt Equity Unhedged Gross Median			*-16.4*		*-14.2*		*-16.8*		*-2.7*		*-1.8*		*6.0*	
Fixed Income Composite	**36,825,662**	**38.7**	**1.3**	**21**	**1.4**	**39**	**2.7**	**34**	**1.5**	**75**	**3.0**	**64**	**--**	**--**
BOK Fixed	36,324,567	38.2	1.3	20	1.4	38	2.7	33	1.5	75	3.0	64	--	--
Barclays Aggregate			*1.2*	*23*	*1.1*	*50*	*2.9*	*26*	*1.7*	*66*	*3.1*	*62*	*4.6*	*60*
Over/Under			0.1		0.3		-0.2		-0.2		-0.1			
eA All US Fixed Inc Gross Median			*0.6*		*1.1*		*2.1*		*2.1*		*3.6*		*4.9*	
FHLMC	501,095	0.5	0.0	--	0.3	--	--	--	--	--	--	--	--	--
Alternative Investments Composite	**2,201,753**	**2.3**	**-7.7**	**--**	**-8.0**	**--**	**-9.8**	**--**	**-2.3**	**--**	**--**	**--**	**--**	**--**

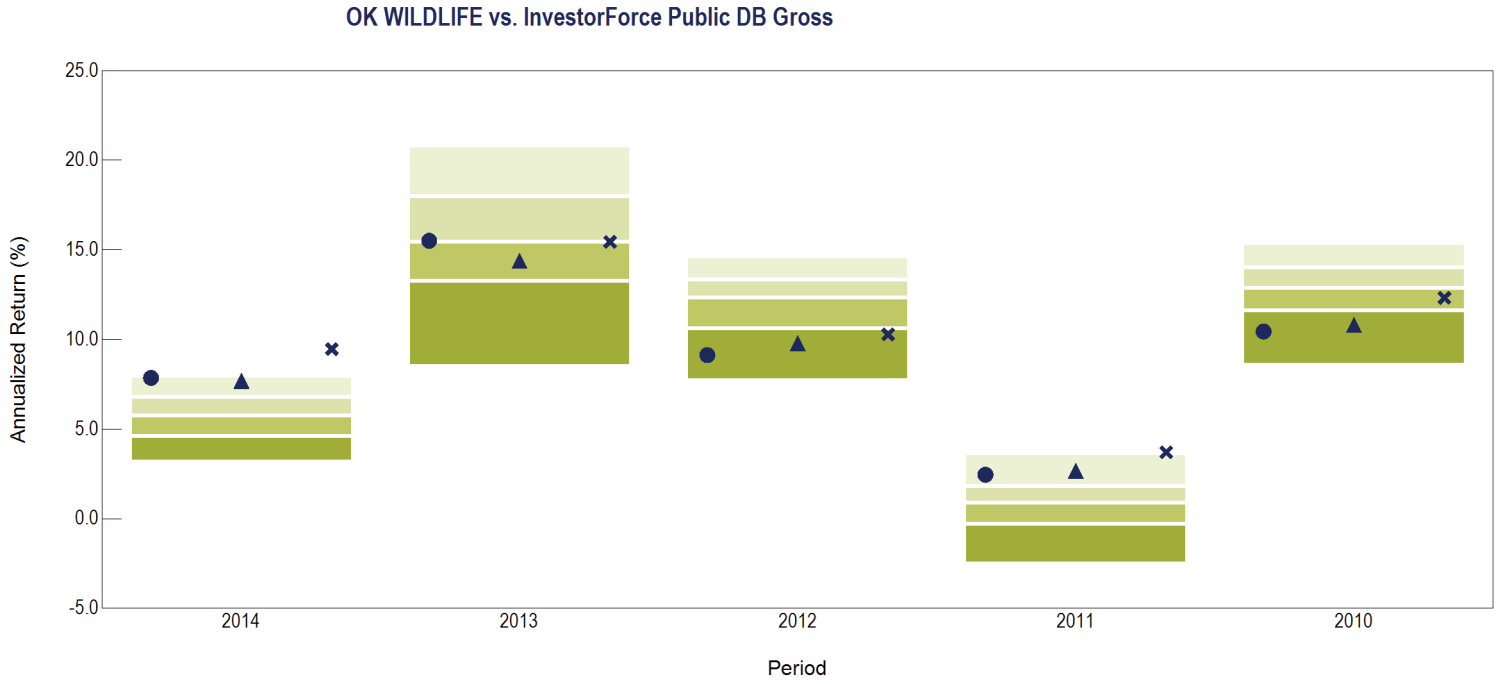
Performance numbers are shown gross of fees.

Total Fund Return Summary vs. Peer Universe



	Return (Rank)											
5th Percentile	-3.6		-0.9		1.4		8.8		9.3		6.6	
25th Percentile	-4.4		-2.1		0.2		7.8		8.4		6.0	
Median	-5.1		-2.7		-0.6		6.8		7.5		5.6	
75th Percentile	-5.6		-3.5		-1.8		6.0		6.6		5.1	
95th Percentile	-6.6		-4.8		-4.1		3.7		5.1		4.3	
# of Portfolios	258		250		247		220		199		163	
● OK WILDLIFE	-4.4	(27)	-2.6	(45)	0.5	(19)	6.9	(48)	7.4	(52)	5.0	(78)
▲ WILDLIFE Allocation Index	-4.6	(34)	-3.2	(67)	-0.1	(34)	6.2	(70)	7.1	(59)	5.3	(66)
× WILDLIFE Policy Index	-3.2	(3)	-2.2	(29)	1.0	(10)	7.4	(41)	8.3	(29)	6.1	(24)

Total Fund Return Summary vs. Peer Universe

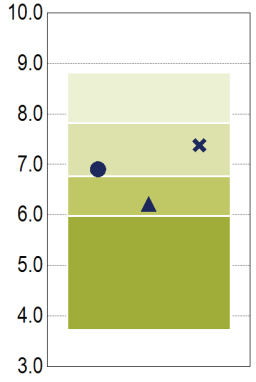


	Return (Rank)									
5th Percentile	8.0		20.8		14.6		3.6		15.4	
25th Percentile	6.8		18.0		13.4		1.9		14.0	
Median	5.8		15.5		12.4		0.9		12.9	
75th Percentile	4.6		13.3		10.7		-0.3		11.7	
95th Percentile	3.2		8.5		7.8		-2.5		8.6	
# of Portfolios	248		231		236		206		188	
● OK WILDLIFE	7.9	(7)	15.5	(50)	9.1	(91)	2.5	(14)	10.4	(87)
▲ WILDLIFE Allocation Index	7.7	(10)	14.4	(64)	9.8	(83)	2.7	(11)	10.8	(82)
× WILDLIFE Policy Index	9.5	(1)	15.4	(51)	10.3	(80)	3.7	(4)	12.3	(61)

Total Fund Risk Statistics vs. Peer Universe

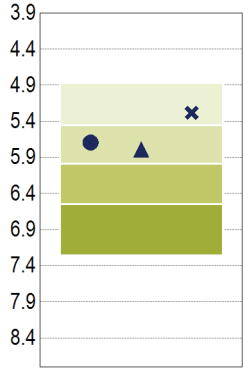
OK WILDLIFE vs. InvestorForce Public DB Gross
3 Years

Anlzd Return



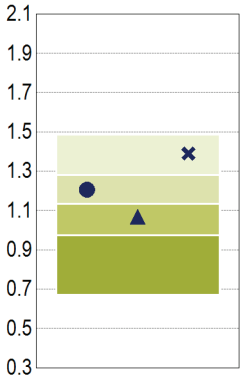
● OK WILDLIFE	
Value	6.90
%tile	48
▲ WILDLIFE Allocation Index	
Value	6.22
%tile	70
× WILDLIFE Policy Index	
Value	7.38
%tile	41
Universe	
5th %tile	8.82
25th %tile	7.83
Median	6.78
75th %tile	5.99
95th %tile	3.73

Anlzd Standard Deviation



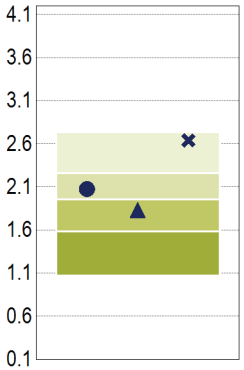
● OK WILDLIFE	
Value	5.69
%tile	34
▲ WILDLIFE Allocation Index	
Value	5.79
%tile	40
× WILDLIFE Policy Index	
Value	5.28
%tile	17
Universe	
5th %tile	4.87
25th %tile	5.44
Median	5.98
75th %tile	6.54
95th %tile	7.25

Sharpe Ratio



● OK WILDLIFE	
Value	1.21
%tile	38
▲ WILDLIFE Allocation Index	
Value	1.07
%tile	66
× WILDLIFE Policy Index	
Value	1.39
%tile	9
Universe	
5th %tile	1.49
25th %tile	1.28
Median	1.14
75th %tile	0.98
95th %tile	0.67

Sortino Ratio

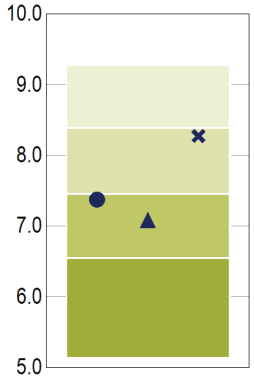


● OK WILDLIFE	
Value	2.07
%tile	44
▲ WILDLIFE Allocation Index	
Value	1.83
%tile	62
× WILDLIFE Policy Index	
Value	2.64
%tile	7
Universe	
5th %tile	2.74
25th %tile	2.26
Median	1.96
75th %tile	1.59
95th %tile	1.08

Total Fund Risk Statistics vs. Peer Universe

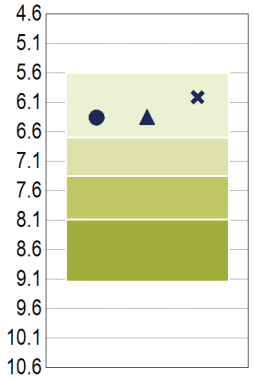
OK WILDLIFE vs. InvestorForce Public DB Gross
5 Years

Anlzd Return



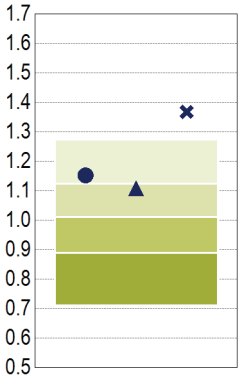
● OK WILDLIFE	
Value	7.37
%tile	52
▲ WILDLIFE Allocation Index	
Value	7.08
%tile	59
× WILDLIFE Policy Index	
Value	8.27
%tile	29
Universe	
5th %tile	9.28
25th %tile	8.39
Median	7.46
75th %tile	6.56
95th %tile	5.14

Anlzd Standard Deviation



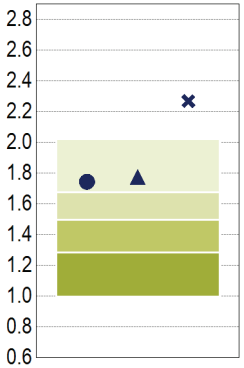
● OK WILDLIFE	
Value	6.36
%tile	19
▲ WILDLIFE Allocation Index	
Value	6.35
%tile	19
× WILDLIFE Policy Index	
Value	6.02
%tile	11
Universe	
5th %tile	5.61
25th %tile	6.69
Median	7.34
75th %tile	8.08
95th %tile	9.14

Sharpe Ratio



● OK WILDLIFE	
Value	1.15
%tile	21
▲ WILDLIFE Allocation Index	
Value	1.11
%tile	28
× WILDLIFE Policy Index	
Value	1.37
%tile	2
Universe	
5th %tile	1.27
25th %tile	1.13
Median	1.01
75th %tile	0.89
95th %tile	0.71

Sortino Ratio



● OK WILDLIFE	
Value	1.74
%tile	18
▲ WILDLIFE Allocation Index	
Value	1.77
%tile	15
× WILDLIFE Policy Index	
Value	2.27
%tile	1
Universe	
5th %tile	2.02
25th %tile	1.68
Median	1.50
75th %tile	1.29
95th %tile	1.00

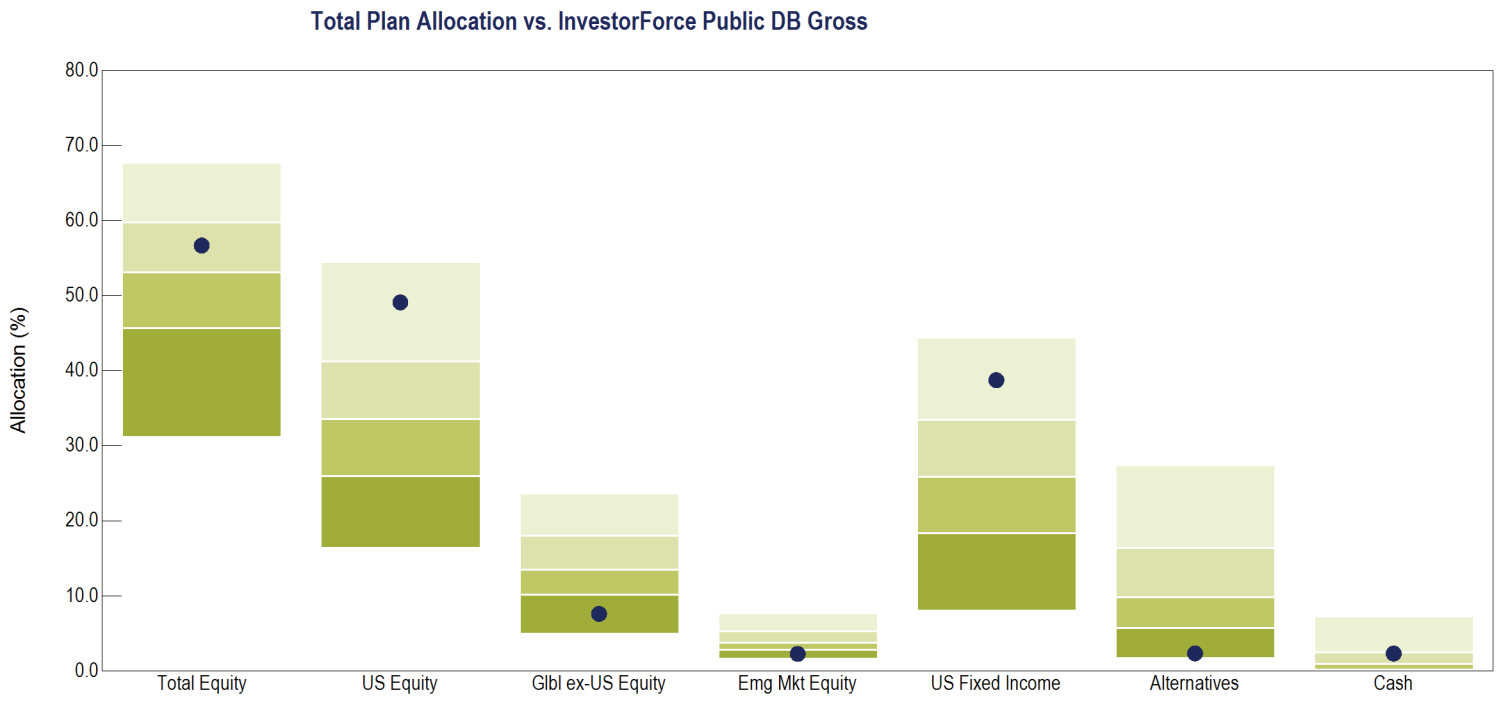
Total Fund Attribution Analysis

Performance Attribution

	Last 3 Mo.	YTD	1 Yr
Wtd. Actual Return	-4.4%	-2.6%	0.5%
Wtd. Index Return *	-3.2%	-2.2%	1.0%
Excess Return	**-1.2%**	**-0.4%**	**-0.5%**
Selection Effect	-2.2%	-1.2%	-3.7%
Allocation Effect	-0.2%	-0.4%	-0.2%
Interaction Effect	1.2%	1.2%	3.4%
Asset Class Returns			
OK WILDLIFE	-4.4%	-2.6%	0.5%
Total Equity	-8.0%	-5.0%	-0.4%
Domestic Equity Comp	-7.2%	-4.4%	1.3%
Large Cap Growth Equity Composite			
International Composite	-12.9%	-8.4%	-12.1%
Emerging Int'l Composite	-17.3%	-17.6%	-23.1%
Fixed Income Composite	1.3%	1.4%	2.7%
Alternative Investments Composite	-7.7%	-8.0%	-9.8%
Cash Composite	0.0%	0.0%	0.0%

*Calculated from benchmark returns and weightings of each component.

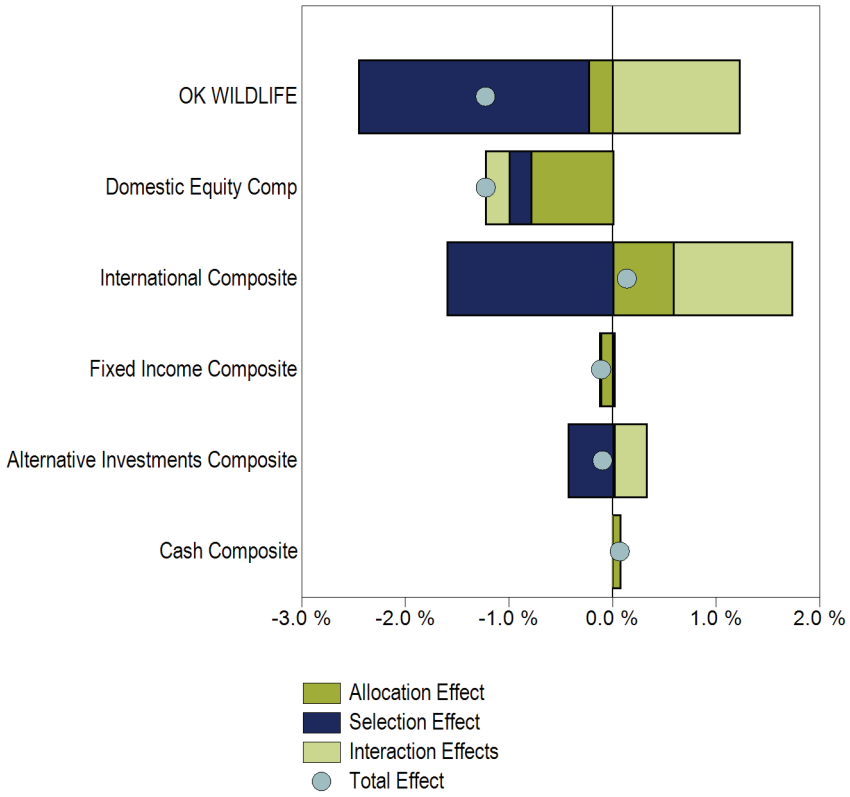
Total Fund Allocations vs. Peer Universe



	Allocation (Rank)													
5th Percentile	67.7		54.5		23.7		7.6		44.4		27.4		7.3	
25th Percentile	59.8		41.3		18.1		5.3		33.6		16.4		2.5	
Median	53.1		33.6		13.5		3.8		25.9		9.9		1.0	
75th Percentile	45.8		26.0		10.2		2.8		18.5		5.8		0.3	
95th Percentile	31.2		16.5		5.0		1.7		8.1		1.8		0.0	
# of Portfolios	248		226		218		90		187		126		216	
● **OK WILDLIFE**	56.7	(40)	49.1	(9)	7.6	(88)	2.2	(87)	38.7	(9)	2.3	(95)	2.3	(27)

Total Fund Attribution Analysis

Attribution Effects Relative to WILDLIFE Policy Index
3 Months Ending September 30, 2015



Attribution Summary
3 Months Ending September 30, 2015

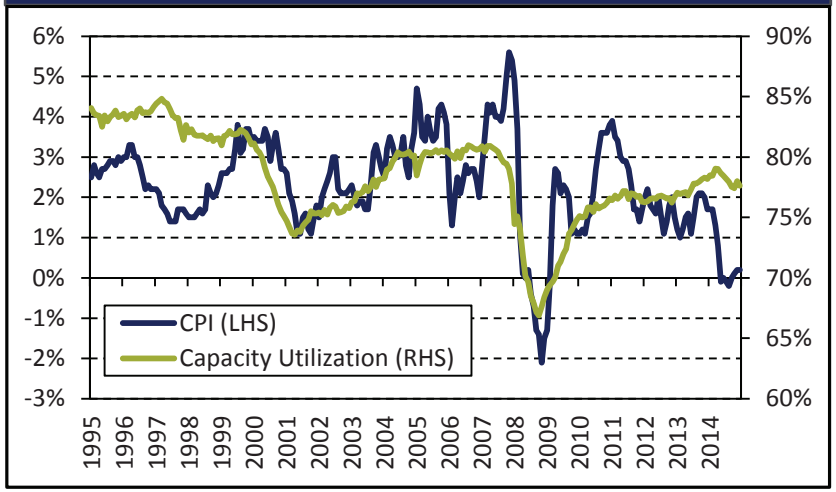
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Domestic Equity Comp	-7.2%	-6.4%	-0.8%	-0.2%	-1.6%	-0.2%	-2.0%
International Composite	-12.9%	-6.8%	-6.1%	-1.6%	1.1%	1.1%	0.6%
Fixed Income Composite	1.3%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%
Alternative Investments Composite	-7.7%	-3.5%	-4.2%	-0.4%	0.3%	0.3%	0.2%
Cash Composite	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Total	**-4.4%**	**-3.2%**	**-1.2%**	**-2.2%**	**-0.2%**	**1.2%**	**-1.2%**

*Target return shown is a weighted average of the composites shown and their benchmarks and may differ from returns shown throughout the report.

Appendix: Market Environment

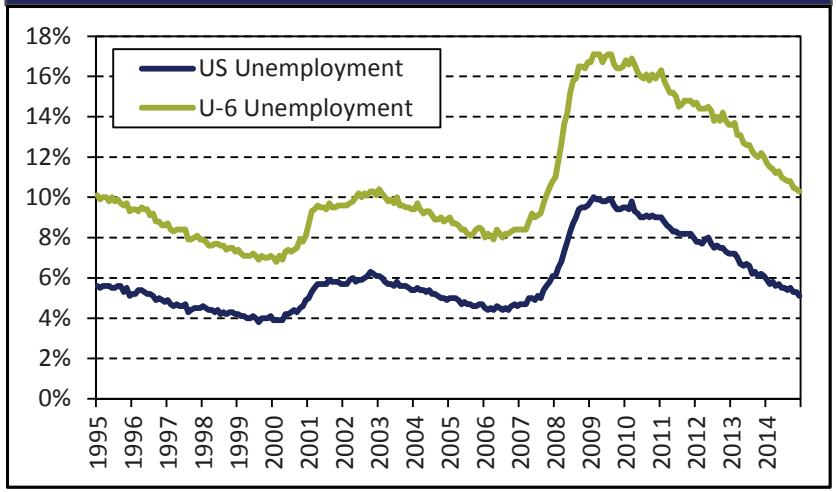
US Economic Indicators

Inflation has stayed low



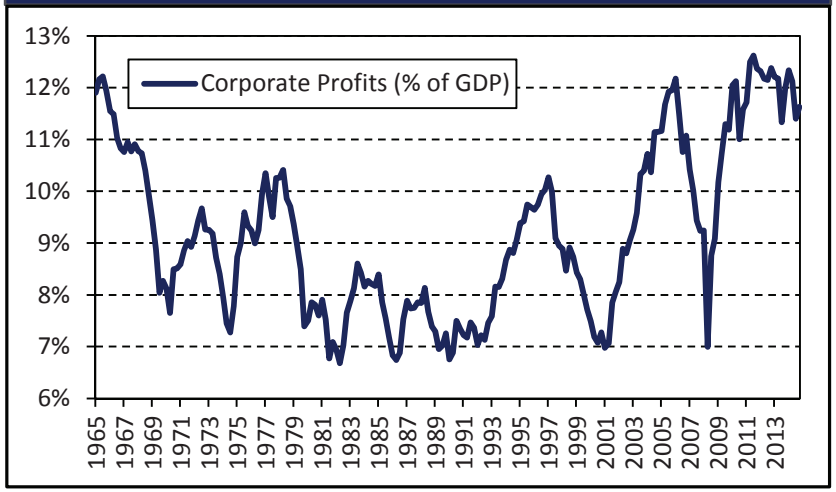
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

Unemployment steadily improving



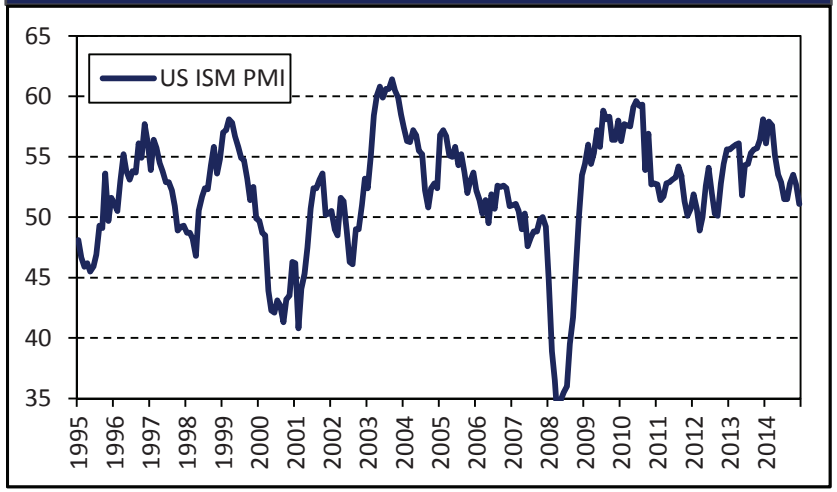
Source: Bloomberg, Bureau of Labor Statistics

Corporate profits at secular highs



Source: Bloomberg, Bureau of Economic Analysis

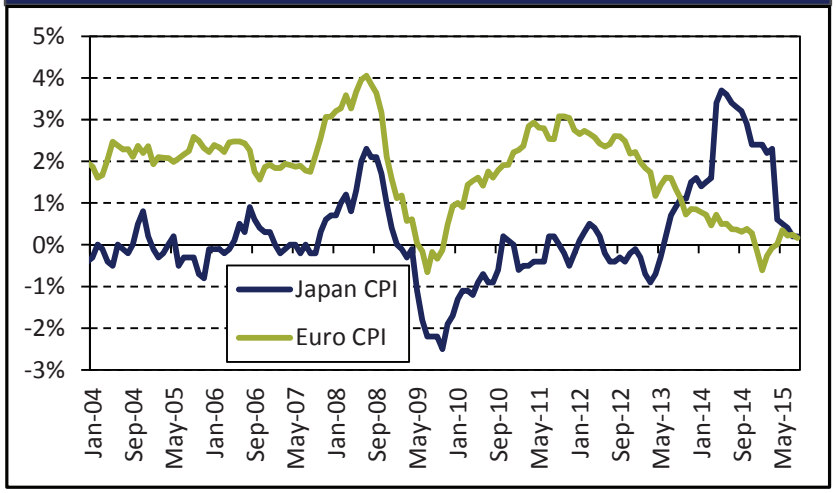
Manufacturing above average but trending lower



Source: Bloomberg, Institute for Supply Management

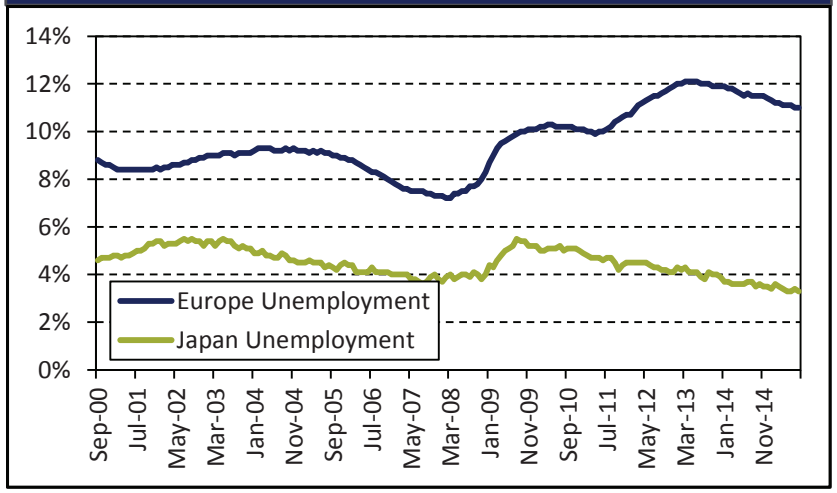
International Economic Indicators

Inflation remains muted



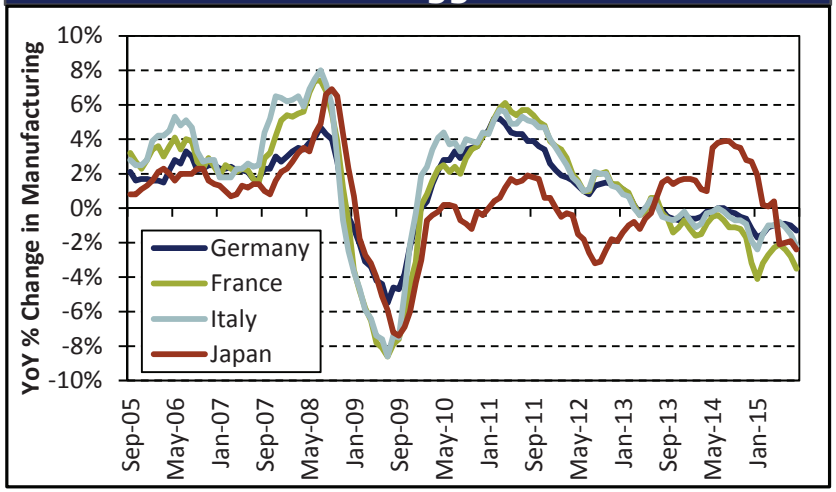
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Europe employment recovery lagging



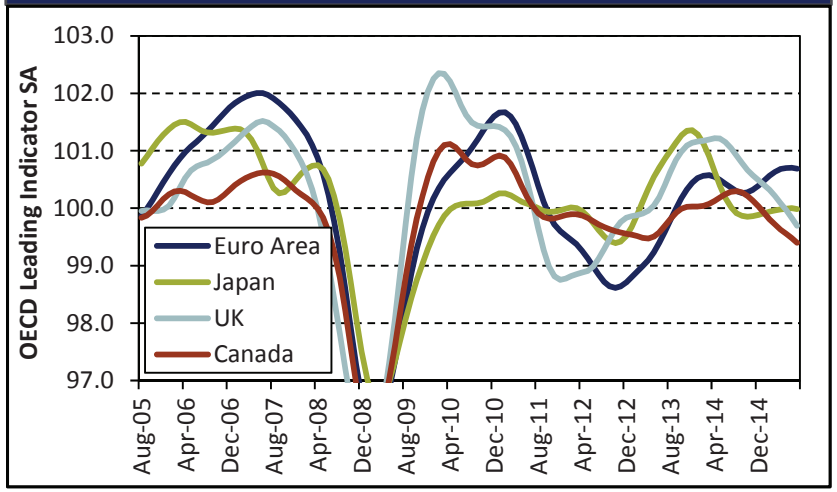
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

Manufacturing in developed economies has lagged



Source: Bloomberg, OECD, Eurostat

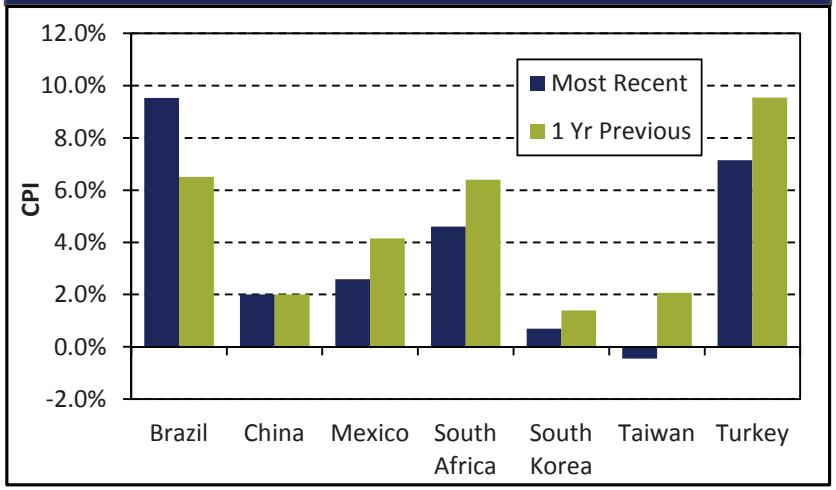
Leading indicators mostly neutral



Source: Bloomberg, OECD

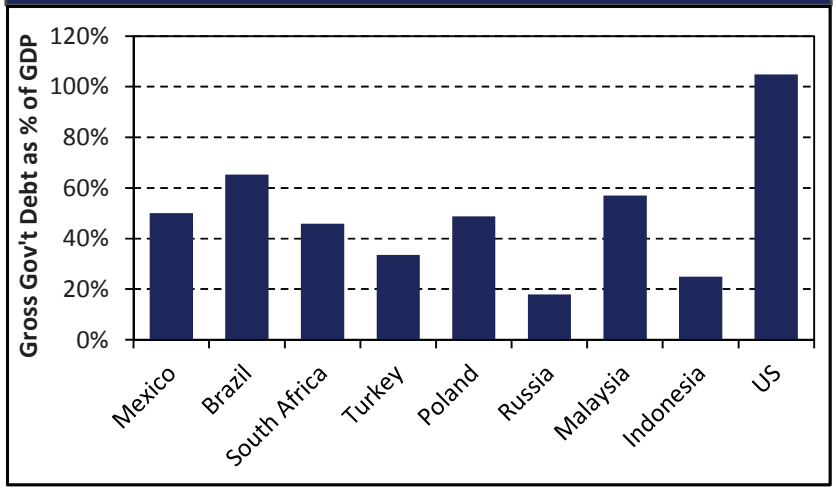
Emerging Market Economic Indicators

EM inflation is varied by country



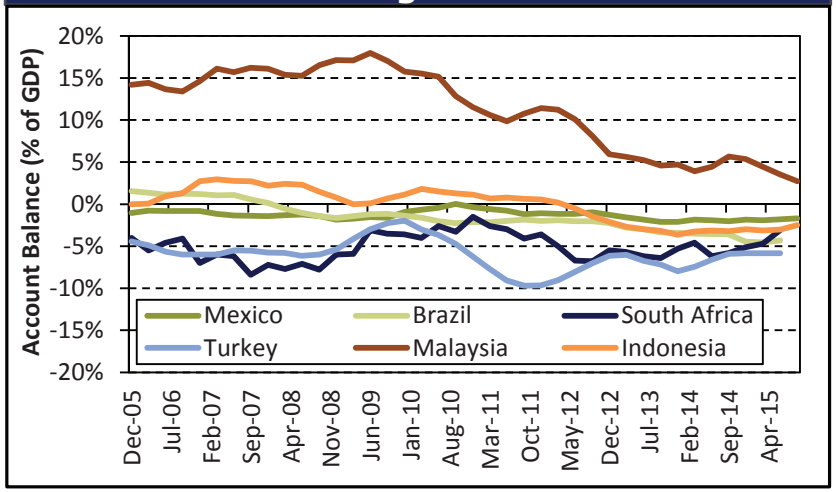
Source: Bloomberg

Relatively healthy Debt/GDP ratios



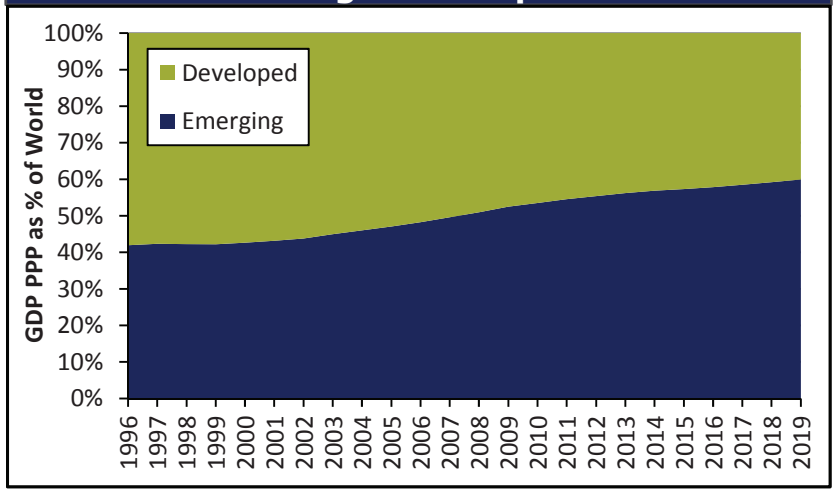
Source: Bloomberg, IMF

Some improvement in account balance challenged countries



Source: Bloomberg

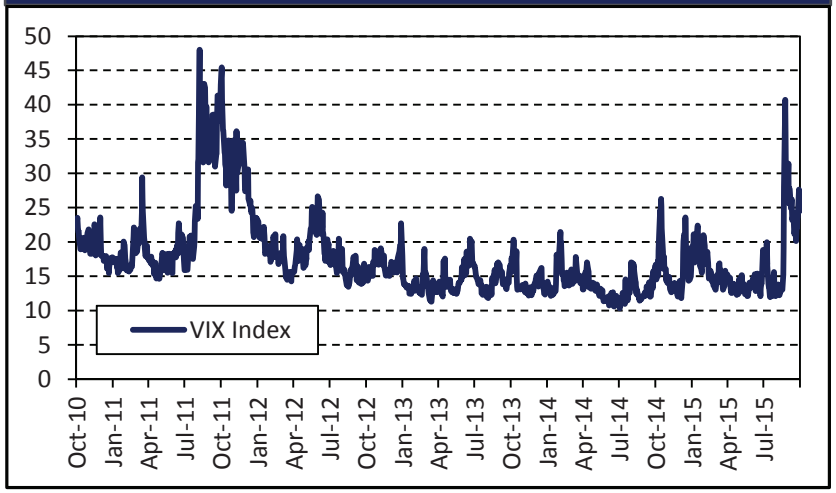
Emerging economies make up >50% of global output



Source: Bloomberg, IMF

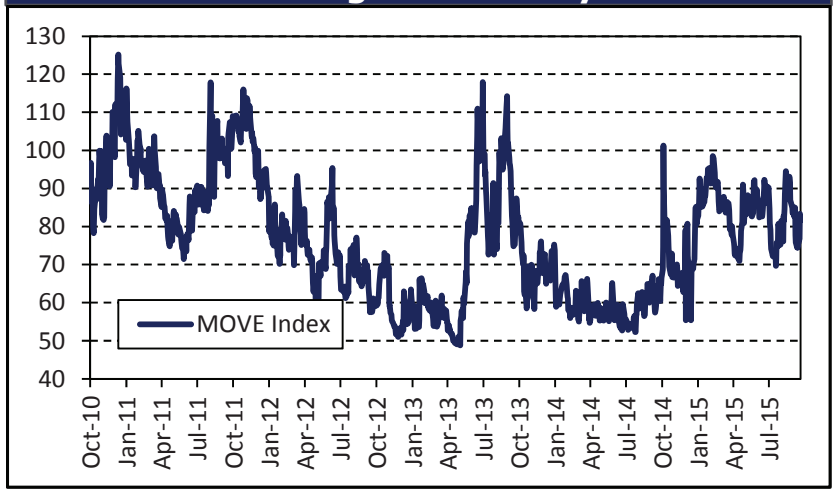
Volatility

Equity volatility has seen recent spike



Source: Bloomberg, CBOE

Treasury rates experiencing periods of higher volatility

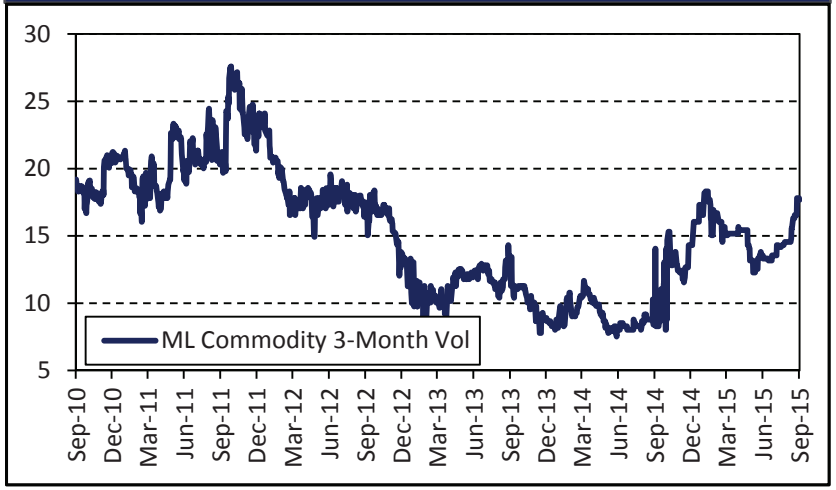


Source: Bloomberg, Merrill Lynch

Sustained uptick in currency volatilities

Source: Bloomberg, Deutsche Bank

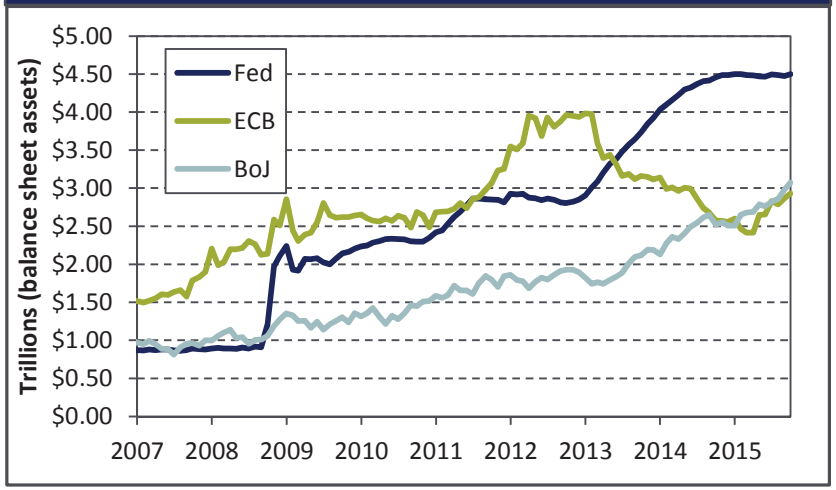
Commodity pricing volatility has increased



Source: Bloomberg, Merrill Lynch

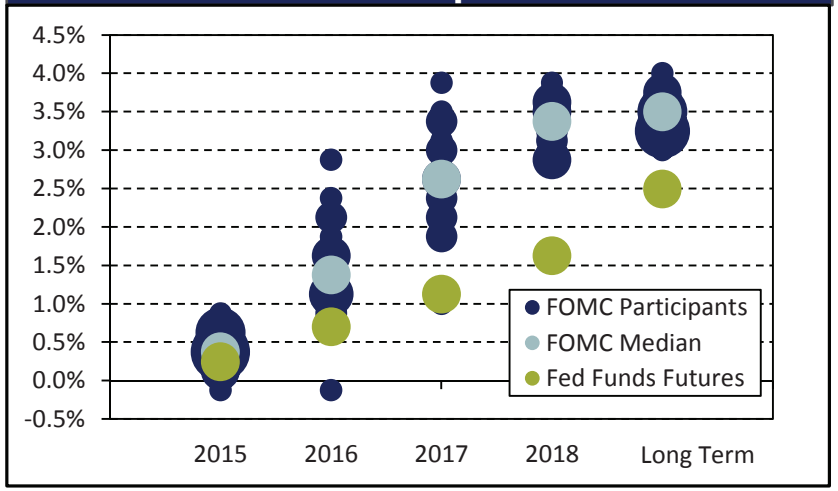
Central Banks

Major central bank policy divergence



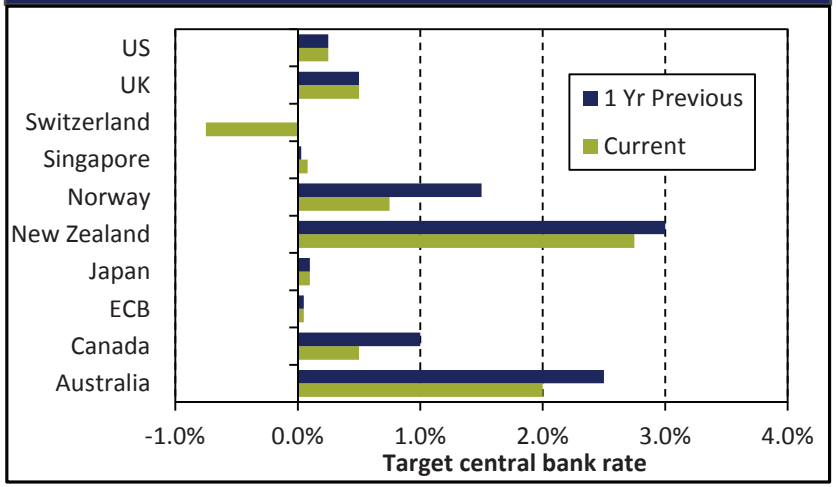
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC

Fed's ideal rate of policy firming above market expectations



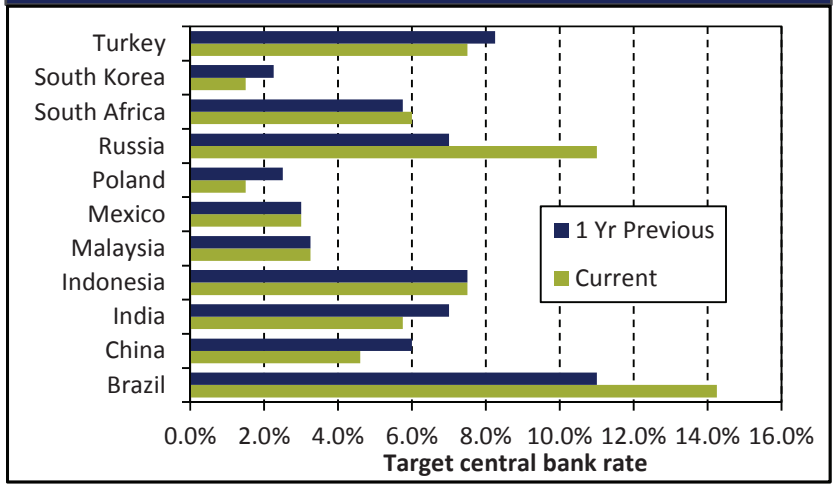
Source: Bloomberg, Federal Reserve, NEPC

Many developed central banks have maintained low interest rates



Source: Bloomberg

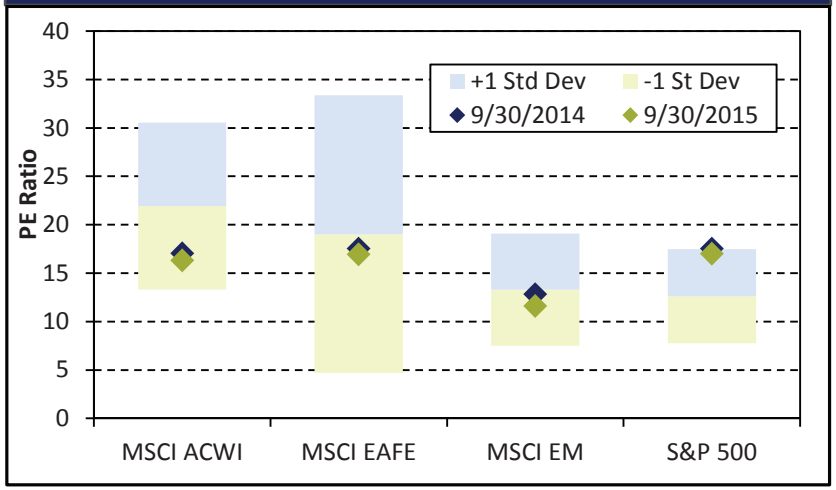
EM central bank policies have varied by circumstance



Source: Bloomberg

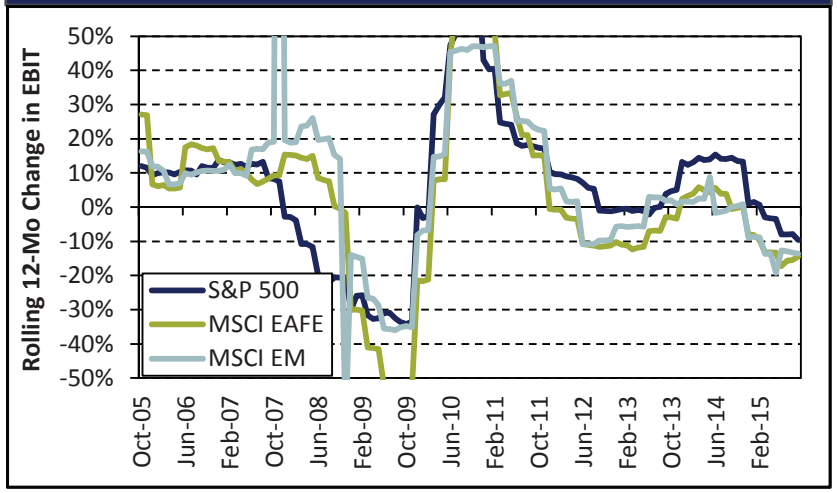
Global Equity

Global valuations are mixed



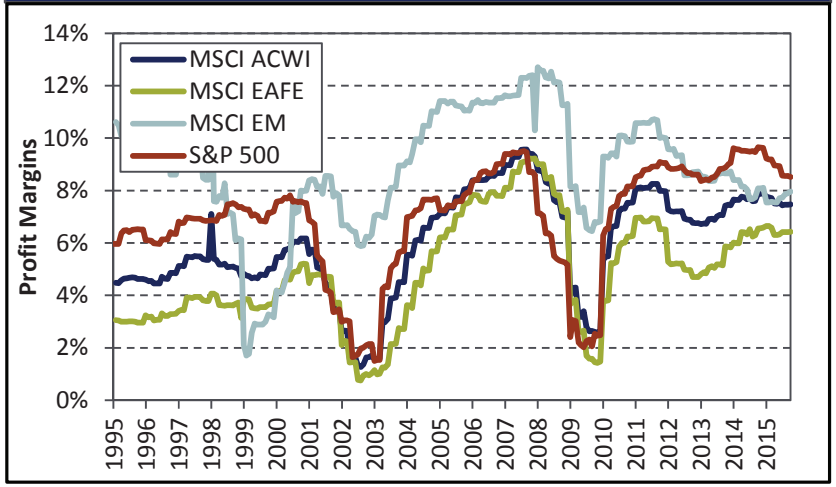
*Source: Bloomberg, Standard and Poors, MSCI *MSCI EAFE is ex UK Telecom*

Earnings growth trending lower



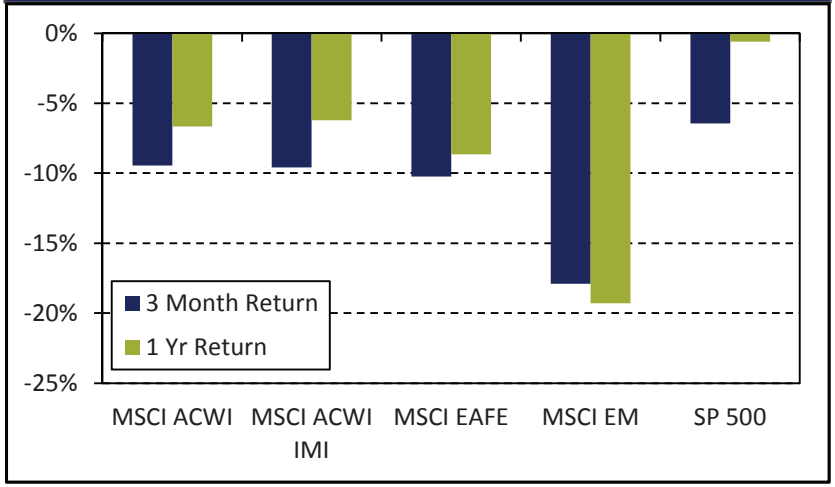
Source: Bloomberg, Standard and Poors, MSCI

Margins elevated, but largely a US story



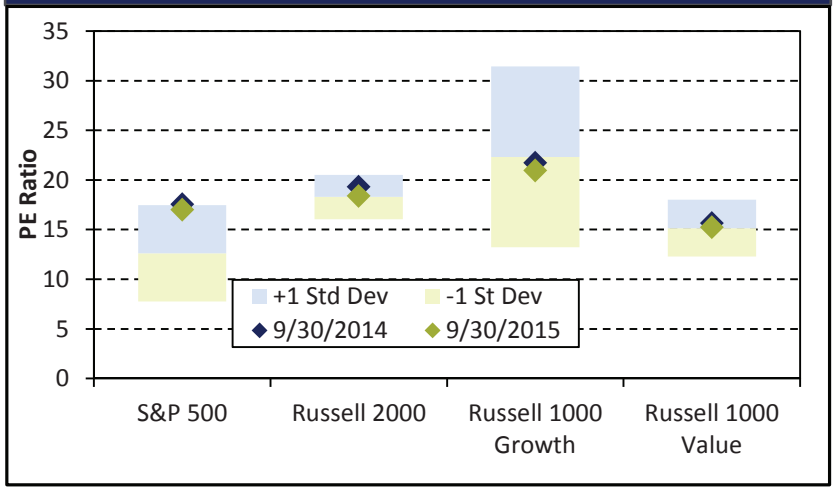
Source: Bloomberg, MSCI

Global equity returns mostly negative



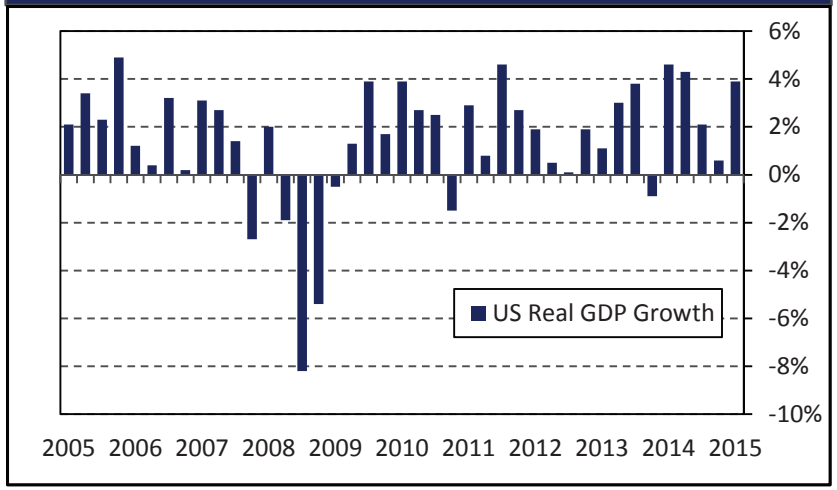
Source: Bloomberg, MSCI

Valuations near or above historical norms



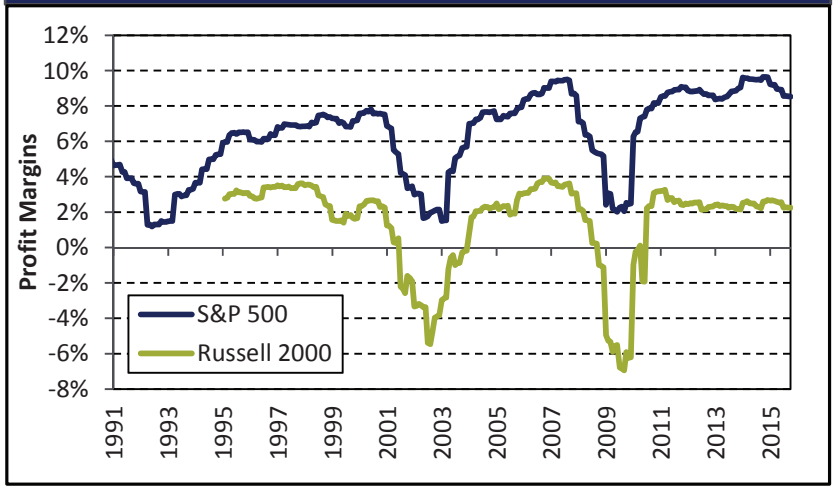
*Source: Bloomberg, Standard and Poors, Russell *Russell 2000 PE is index adjusted positive*

Growth recovery marked by inconsistency



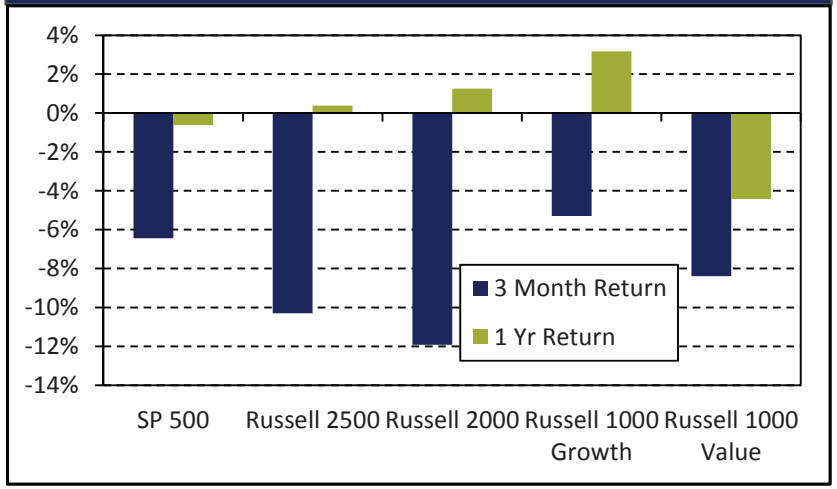
Source: Bloomberg, Bureau of Economic Analysis

Profit margins remain elevated



Source: Bloomberg, Standard and Poors, Russell

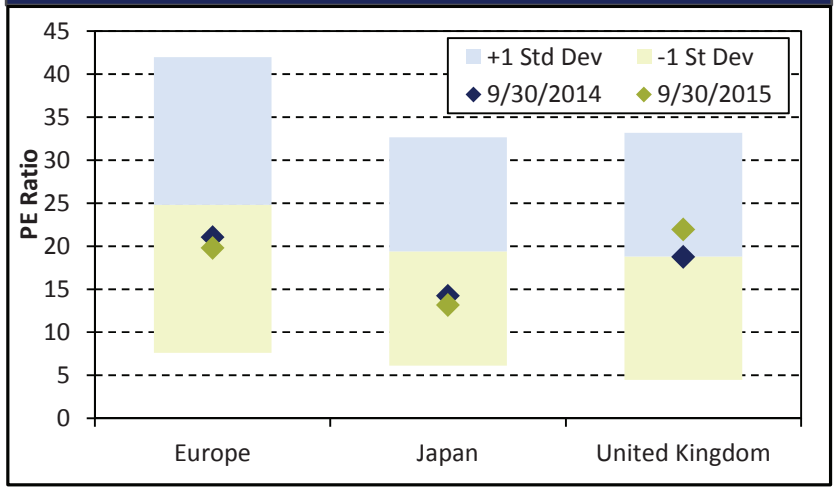
Trailing performance is negative in near term



Source: Bloomberg, Standard and Poors, Russell

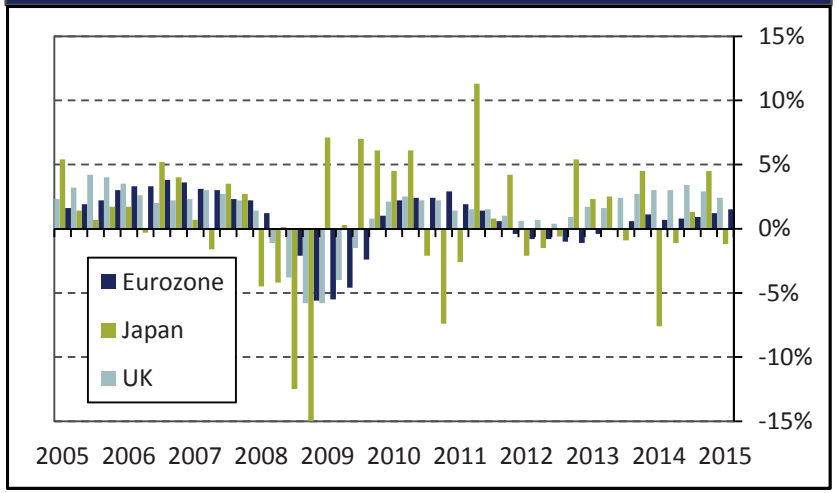
International Equity

PEs near historical medians



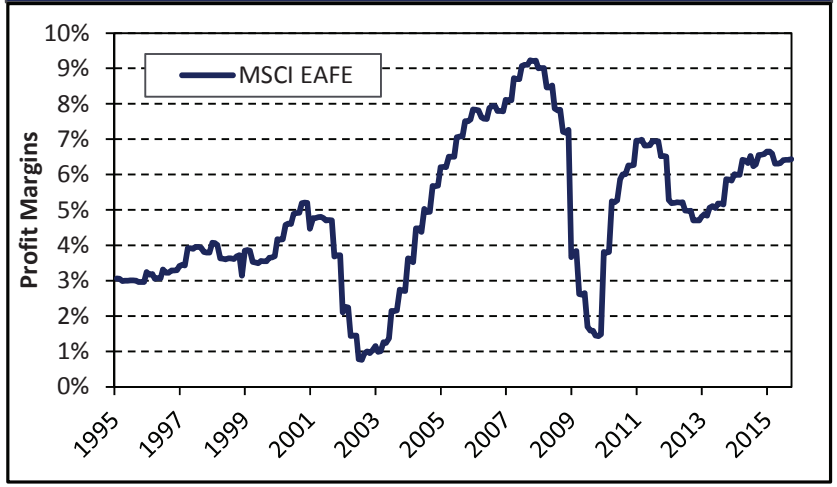
*Source: Bloomberg, MSCI, FTSE *UK represented by FTSE 100 Index*

Slow Global Growth



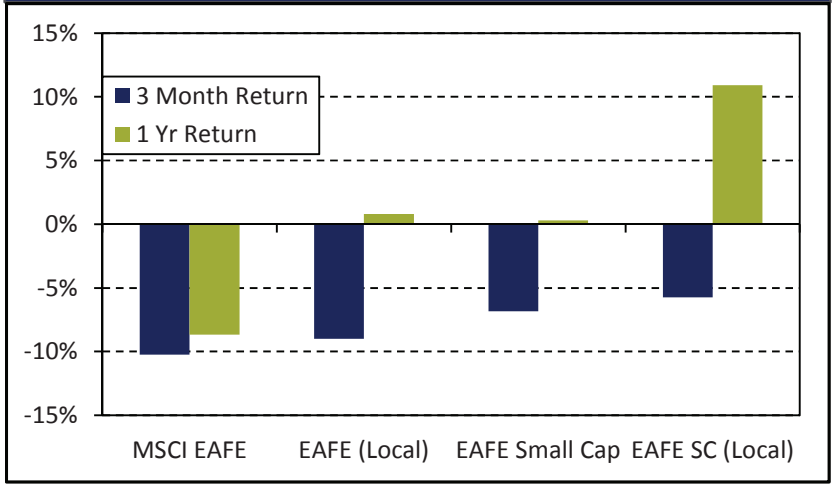
Source: Bloomberg

Margins elevated but not at extremes



Source: Bloomberg, MSCI

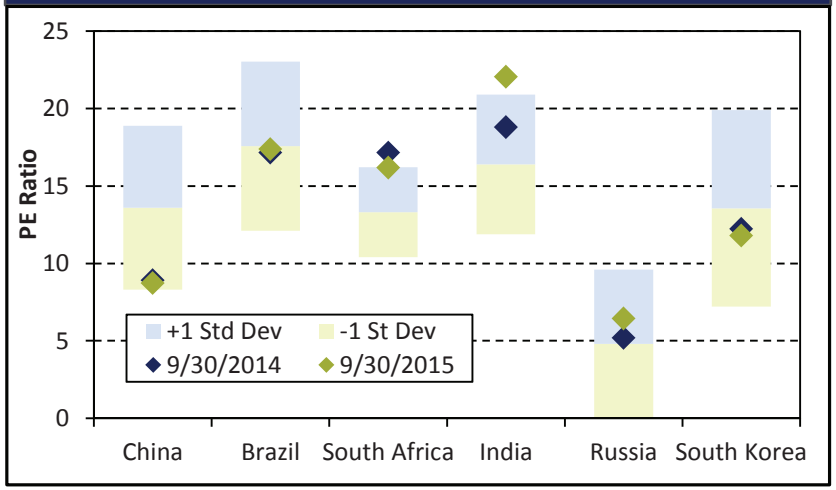
Returns pulled lower by dollar strength



Source: Bloomberg, MSCI

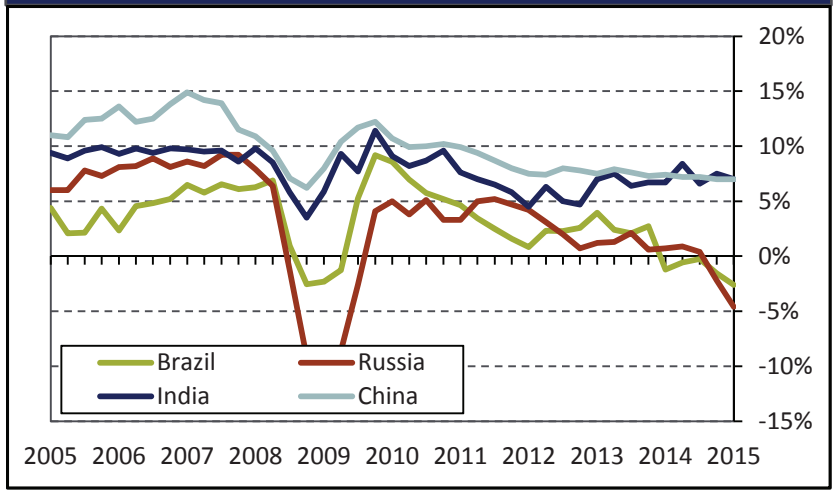
Emerging Markets Equity

Regional valuations show divergence



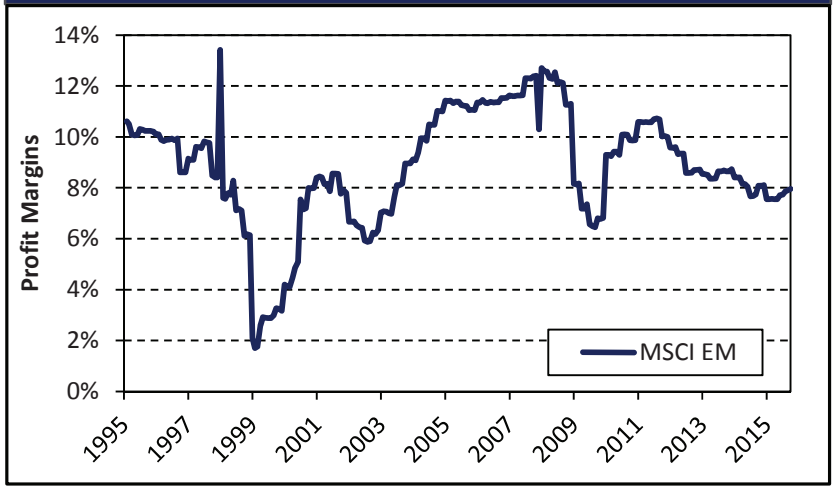
Source: Bloomberg, MSCI

Slowing growth in major economies



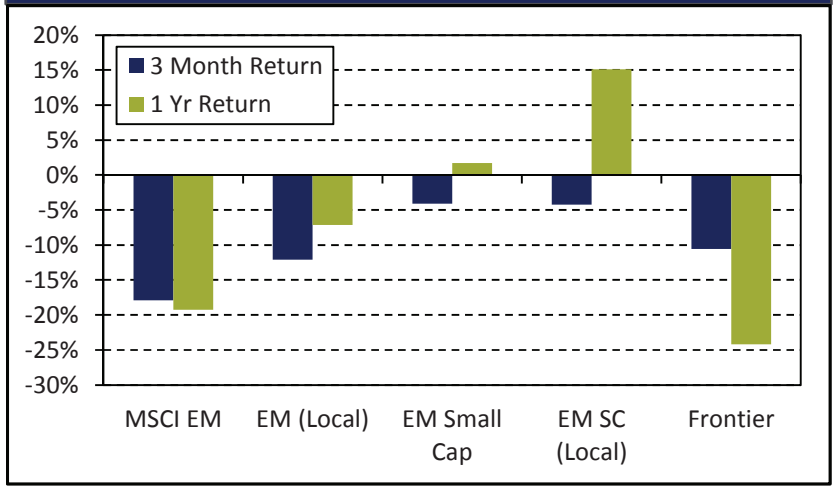
Source: Bloomberg

Profit margins in line with history



Source: Bloomberg, MSCI

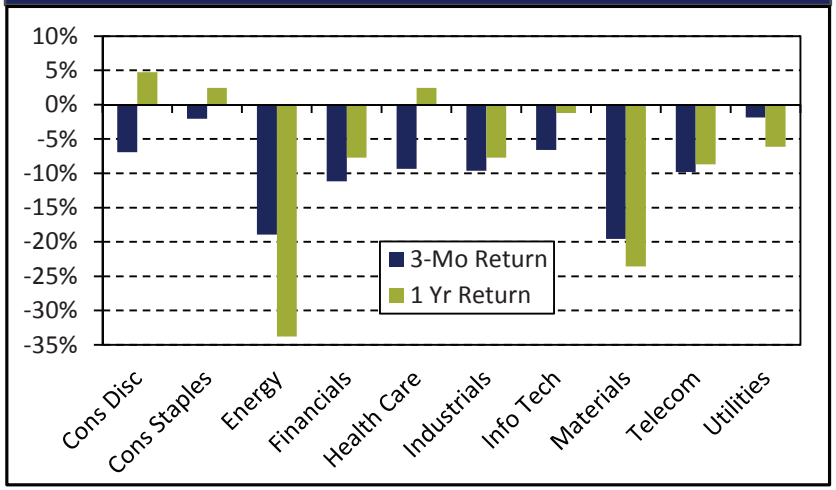
EM returns especially negative



Source: Bloomberg, MSCI

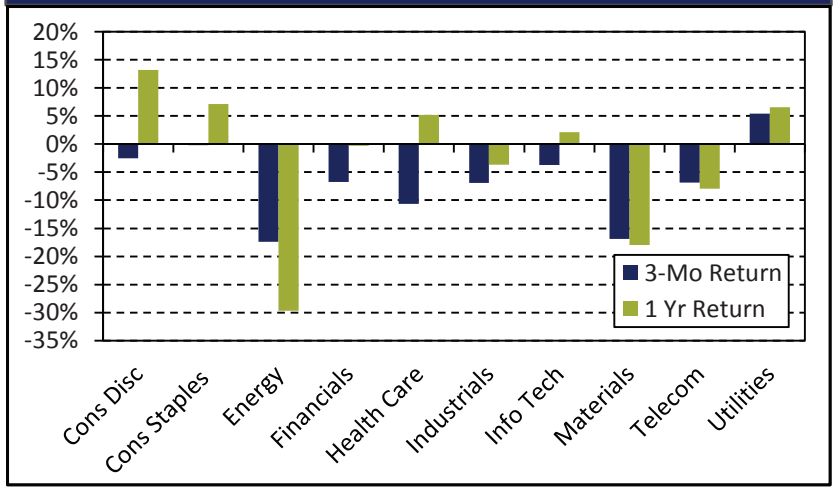
Global Equity by Sector

Energy returns sharply negative



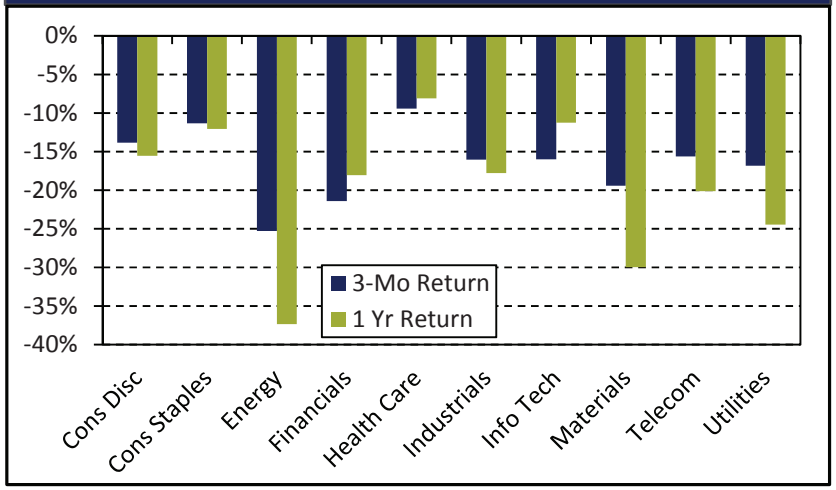
Source: Bloomberg, MSCI

Divergence among S&P 500 sectors



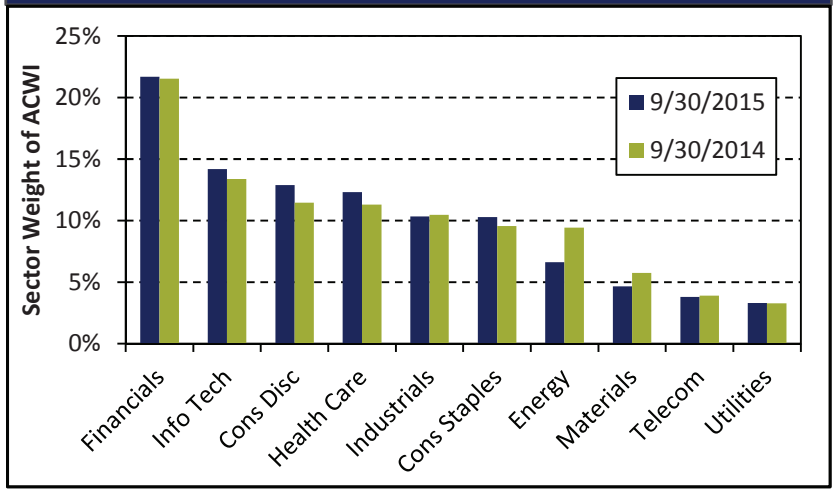
Source: Bloomberg, Standard and Poors

Energy sensitivity especially pronounced in EM



Source: Bloomberg, MSCI

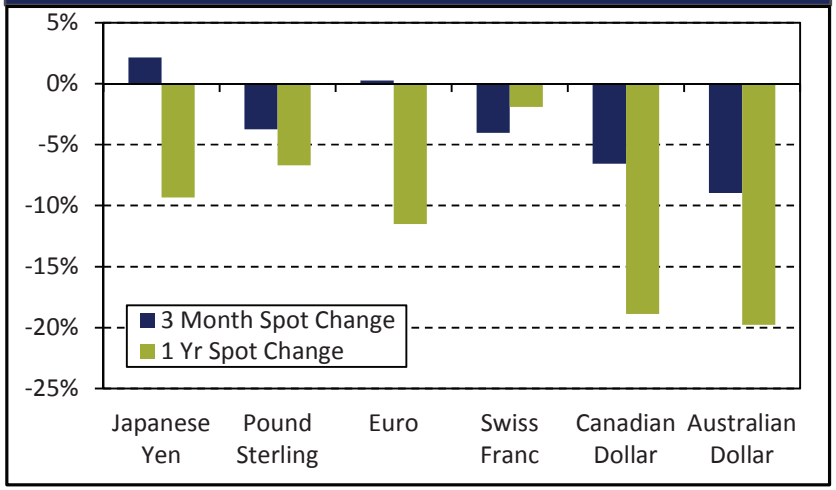
Global energy sector weight has fallen



Source: Bloomberg, MSCI

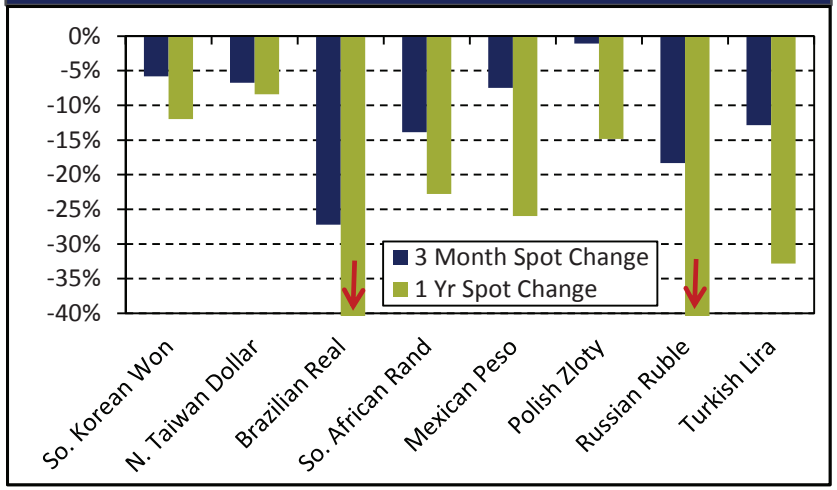
Currencies

Developed currencies mostly negative versus the dollar



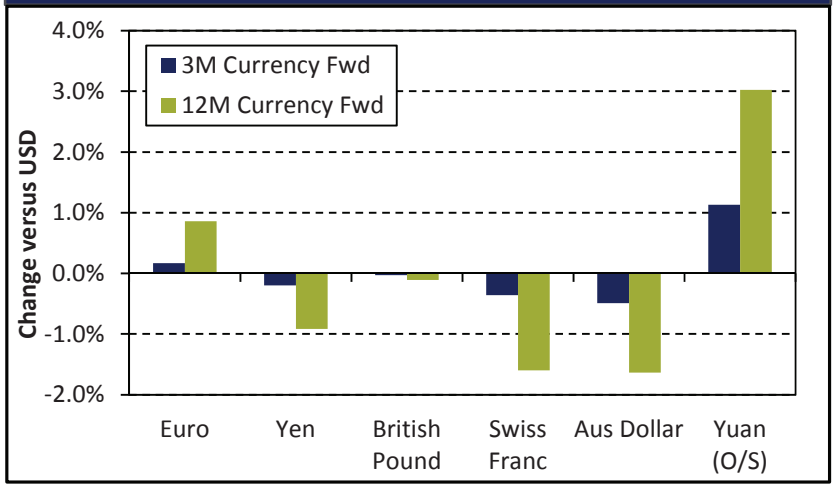
Source: Bloomberg

EM currencies have suffered in unique fashions



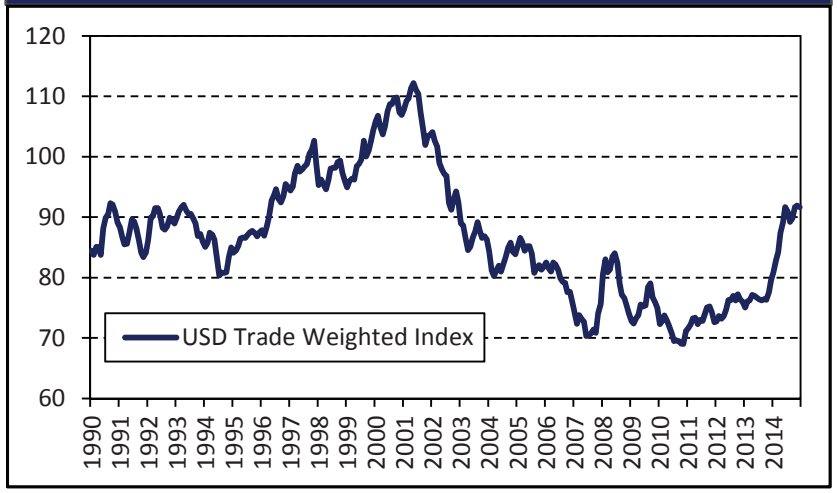
Source: Bloomberg

Yen and GBP expected to decline versus USD



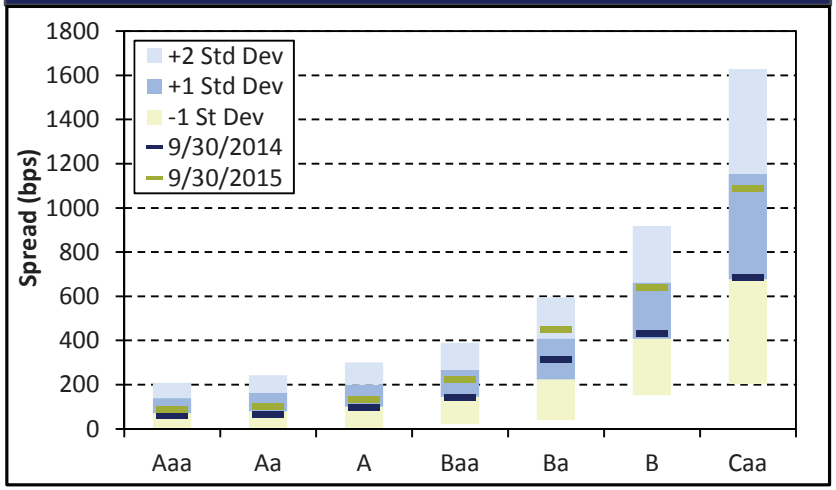
Source: Bloomberg

Recent dollar strength pronounced



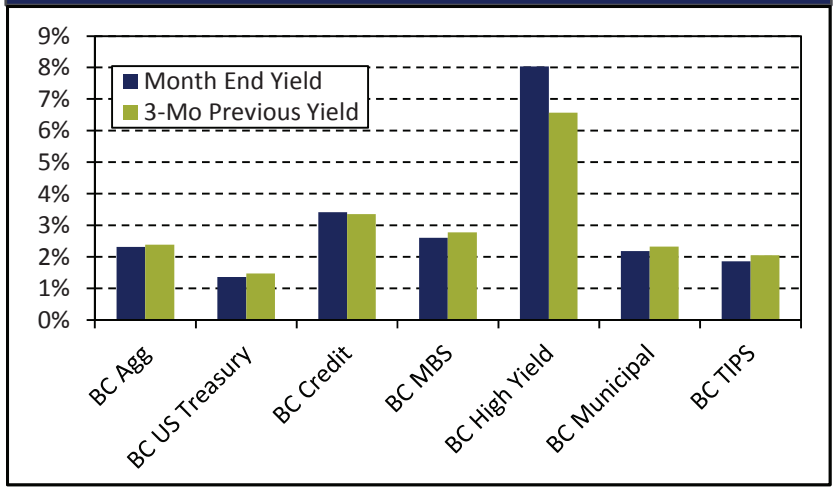
Source: Bloomberg, Federal Reserve

Spread levels drifting above historical medians



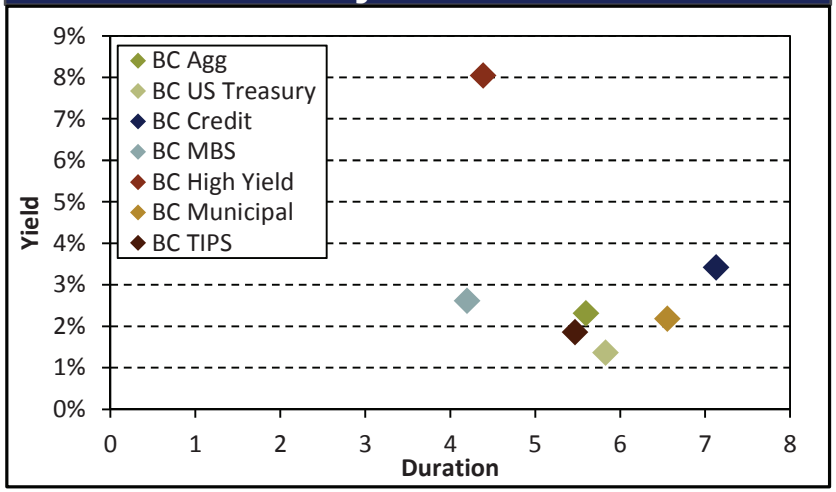
Source: Bloomberg, Barclays

High yield spreads have increased



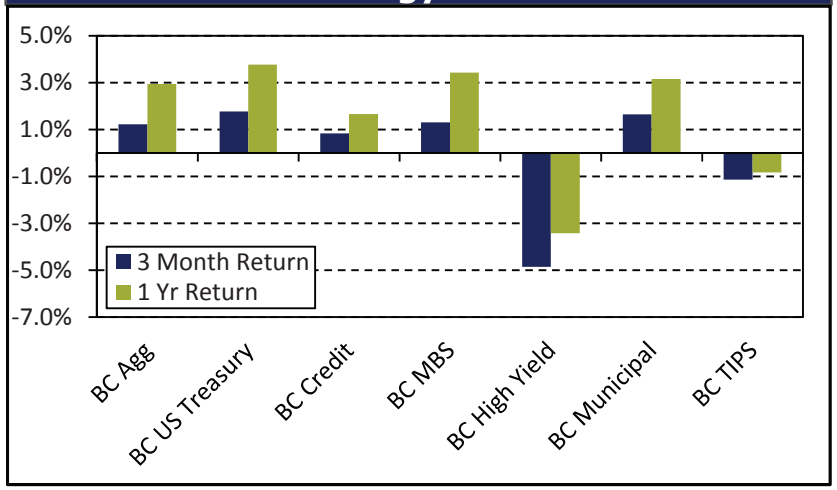
Source: Bloomberg, Barclays

Similar yield/duration tradeoff among major US indices



Source: Bloomberg, Barclays

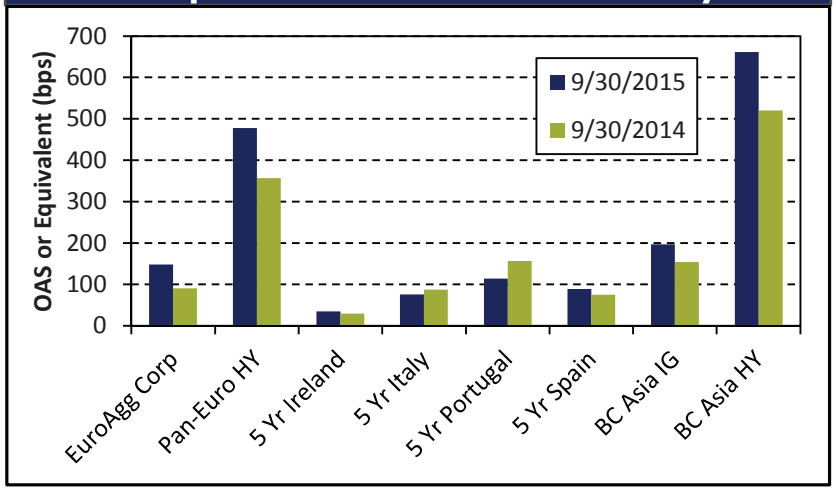
Negative high yield returns driven by energy distress



Source: Bloomberg, Barclays

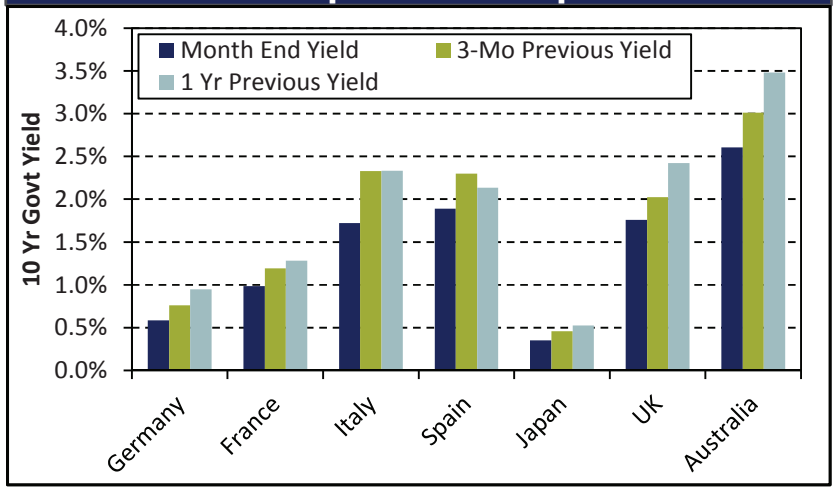
International Developed Fixed Income

European periphery yields at small premium relative to Germany



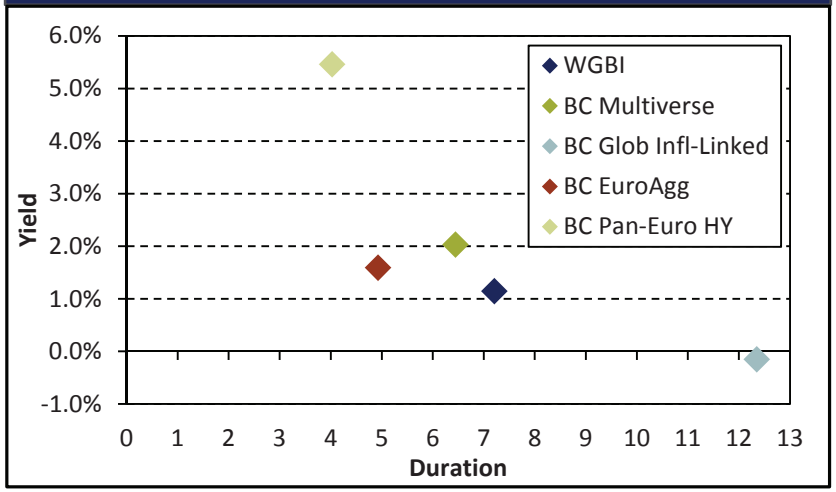
*Source: Barclays, Bloomberg, *European periphery spreads are over equivalent German Bund*

Global yields are at or near historic lows despite recent uptick



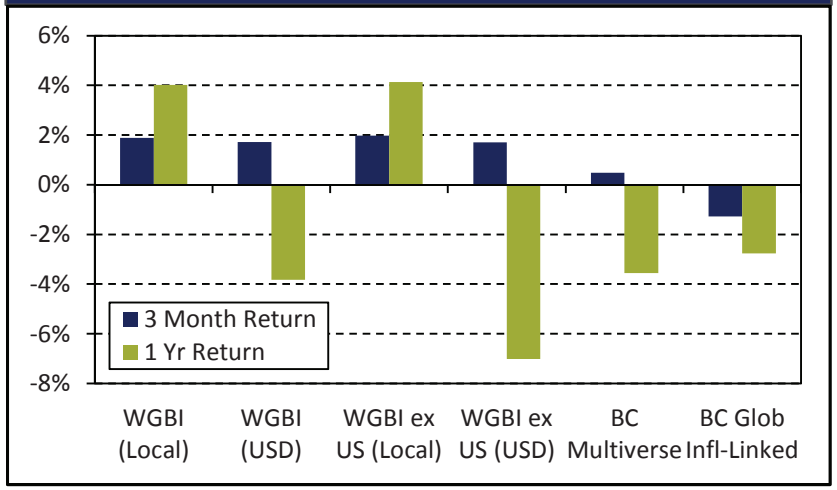
Source: Bloomberg

Low global yields relative to duration



Source: Bloomberg, Citigroup, Barclays

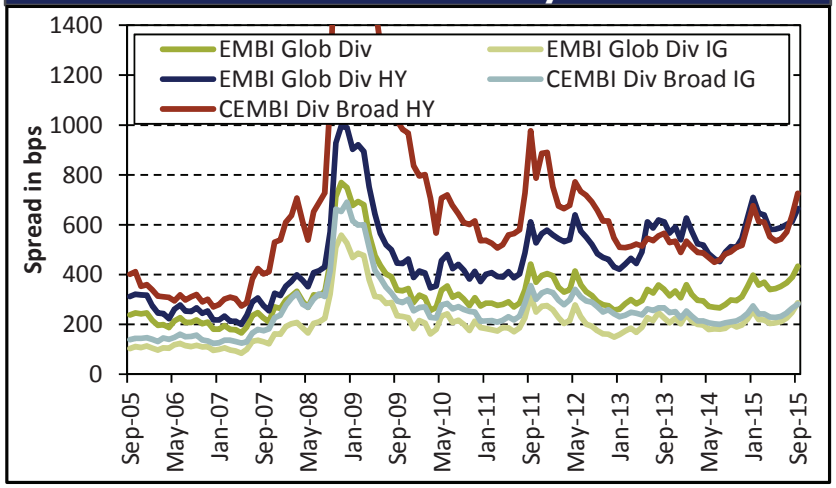
Global bonds negative over one year in USD terms



Source: Bloomberg, Citigroup, Barclays

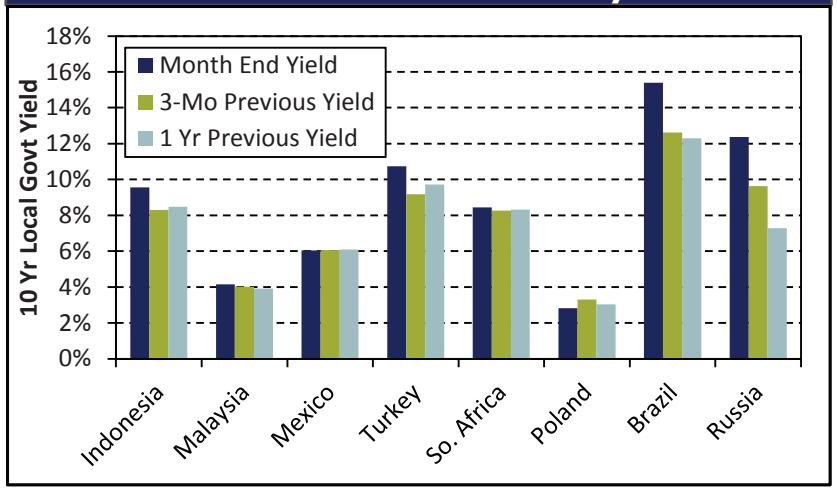
Emerging Markets Fixed Income

Spreads have widened slightly, still in line with history



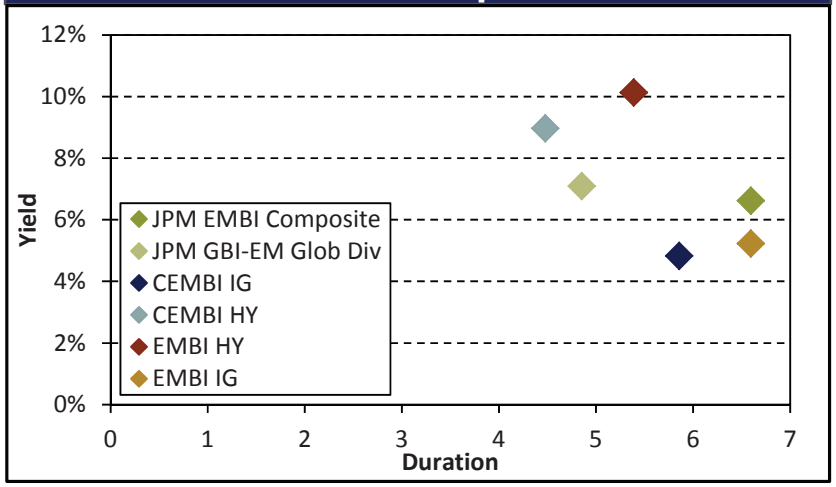
Source: Bloomberg, JP Morgan

Emerging market bond yield changes have varied directionally



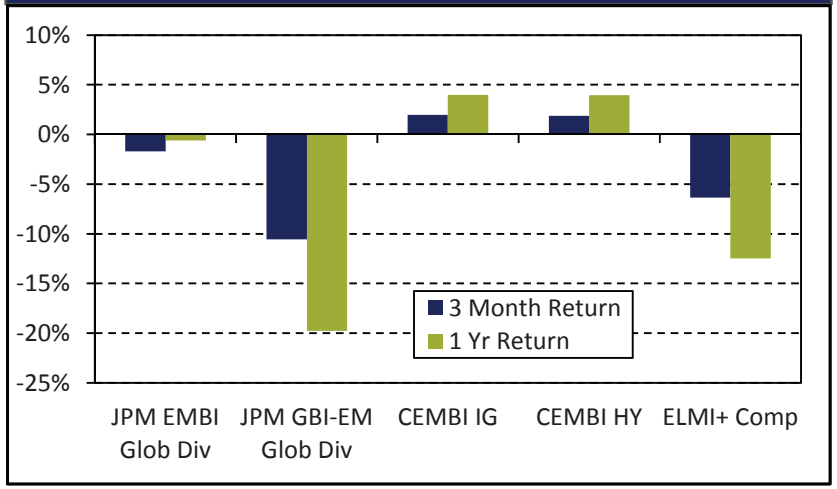
Source: Bloomberg

EM yields higher versus global counterparts



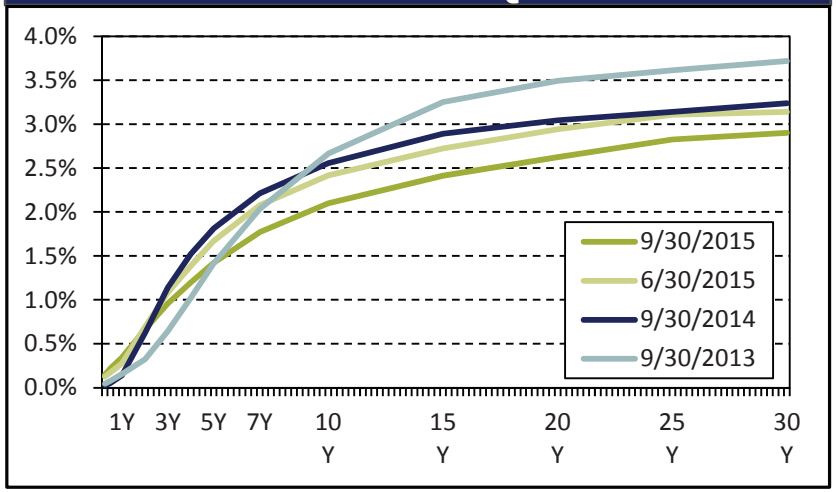
Source: Bloomberg, JP Morgan

Currency effect pronounced in EMD returns



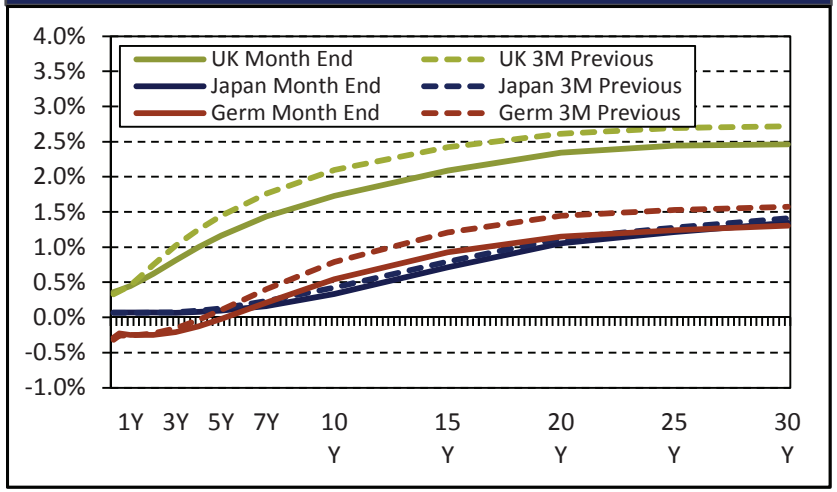
Source: Bloomberg, JP Morgan

Treasury yield curve moderately lower versus Q2



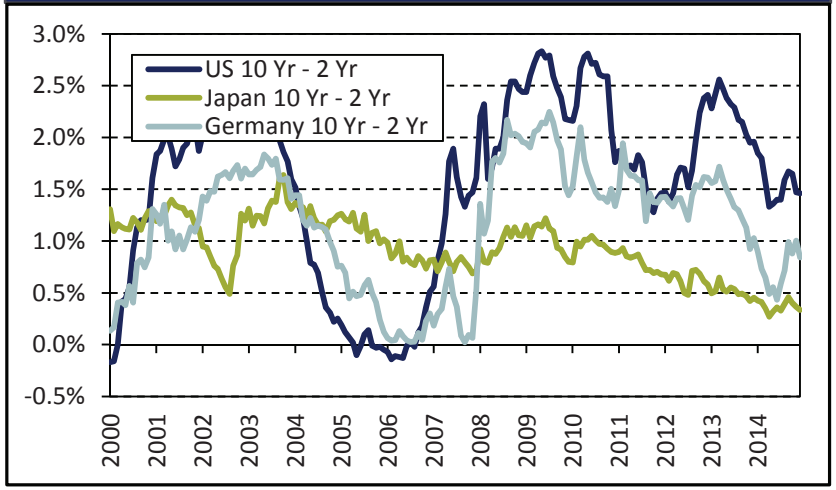
Source: Bloomberg

German and UK curves have shifted downwards



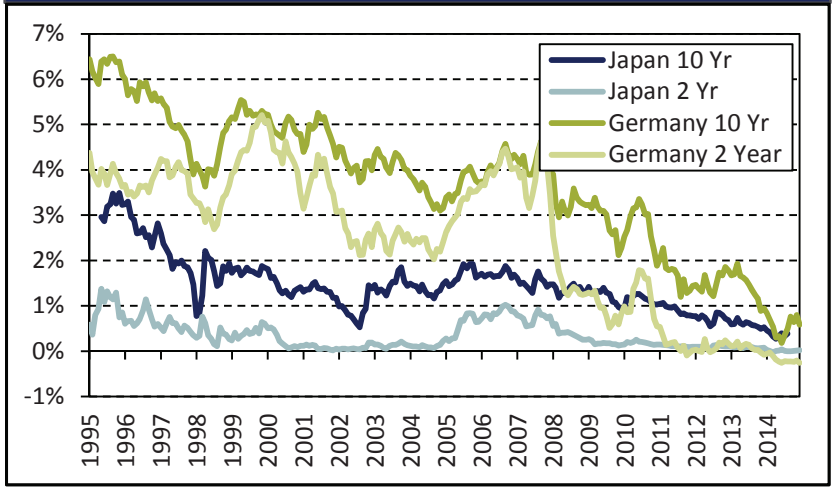
Source: Bloomberg

Global yield curves have flattened



Source: Bloomberg

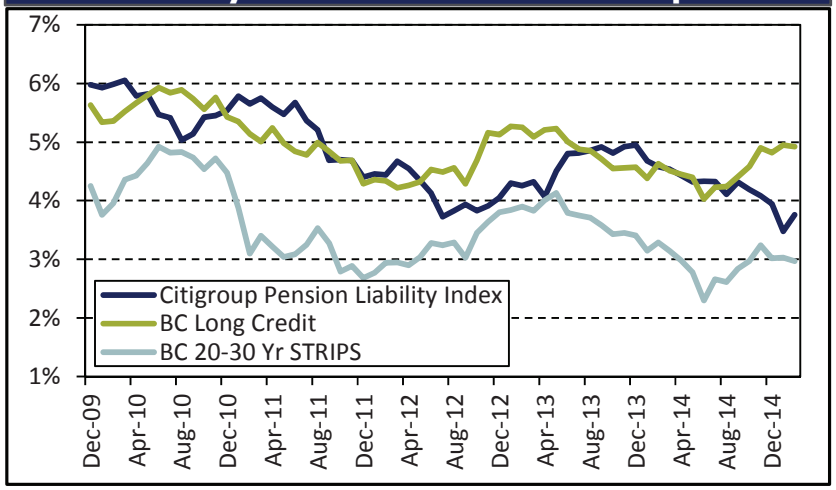
Global yields have trended lower over long term



Source: Bloomberg

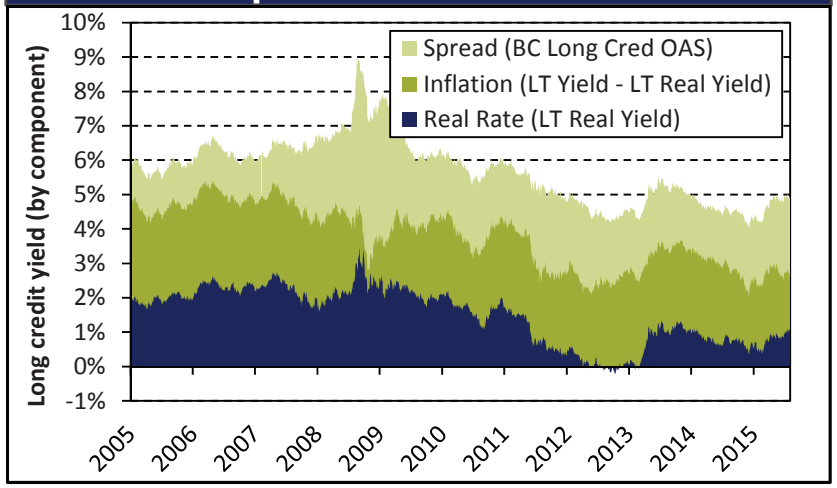
Long Rates and Liability

Long duration yields have fallen over last few years even with recent uptick



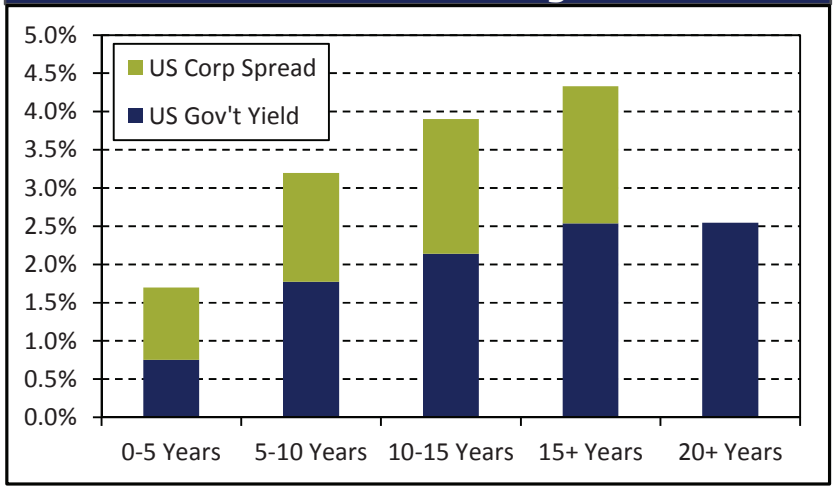
Source: Bloomberg, Citigroup, Barclays

Lower yields driven by low inflation expectations and real rates



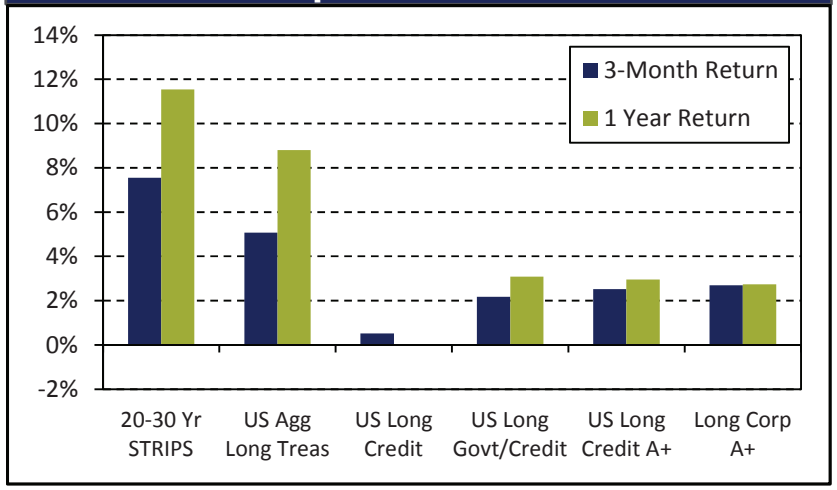
Source: Bloomberg, US Treasury, Barclays, NEPC

Yields are low but spreads slightly above historic averages



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

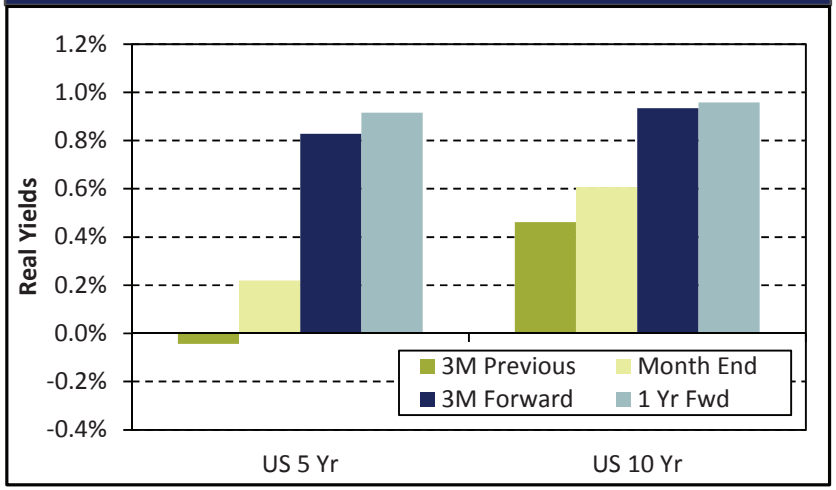
Recent compression in rates has lead to positive returns



Source: Bloomberg, Barclays

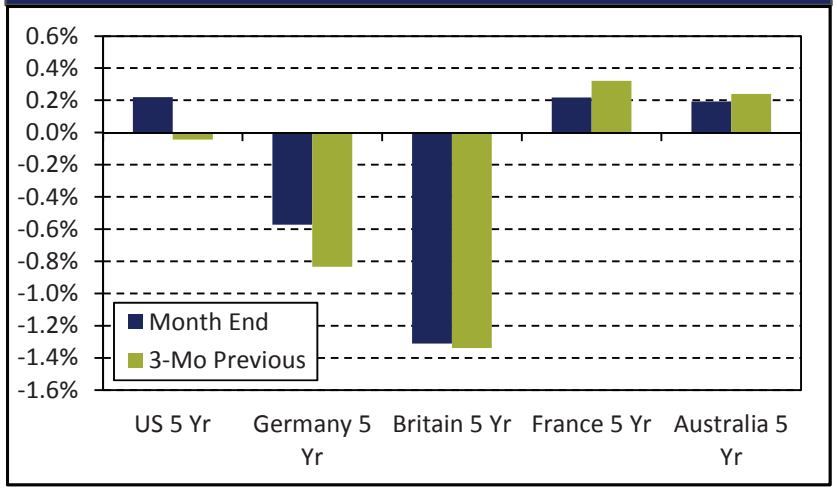
Inflation and Real Rates

US real yields have risen slightly



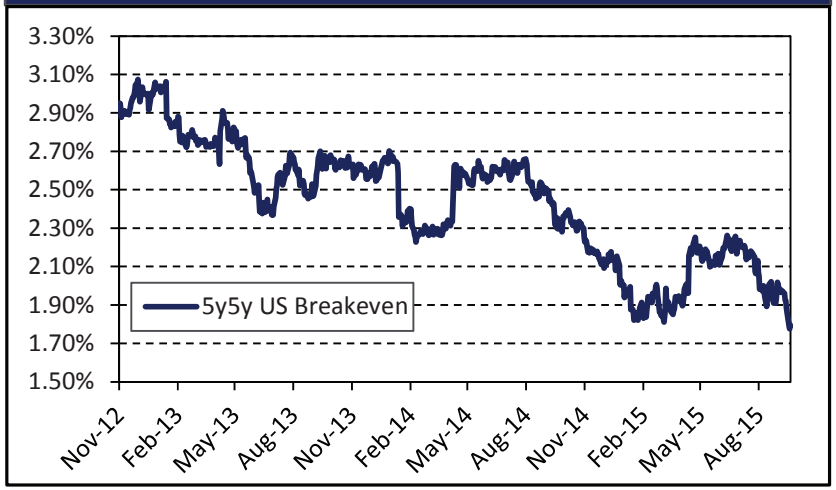
Source: Bloomberg

Global real yields are flat to negative



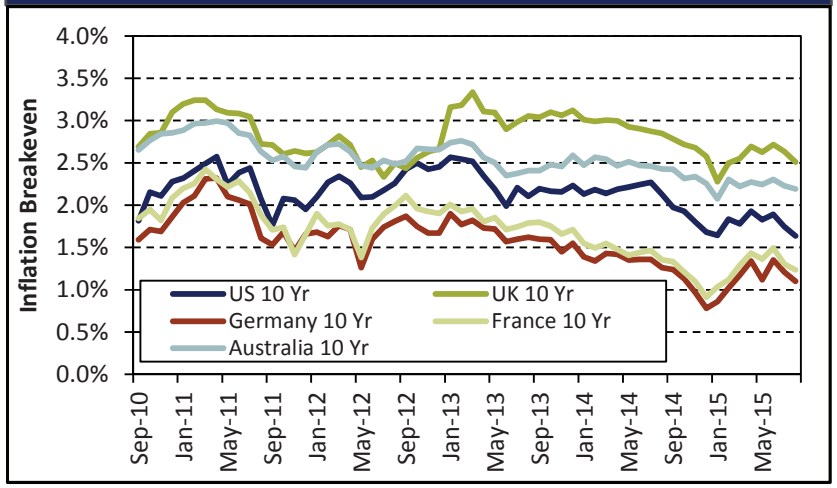
Source: Bloomberg

US inflation expectations on downward trend



Source: Bloomberg

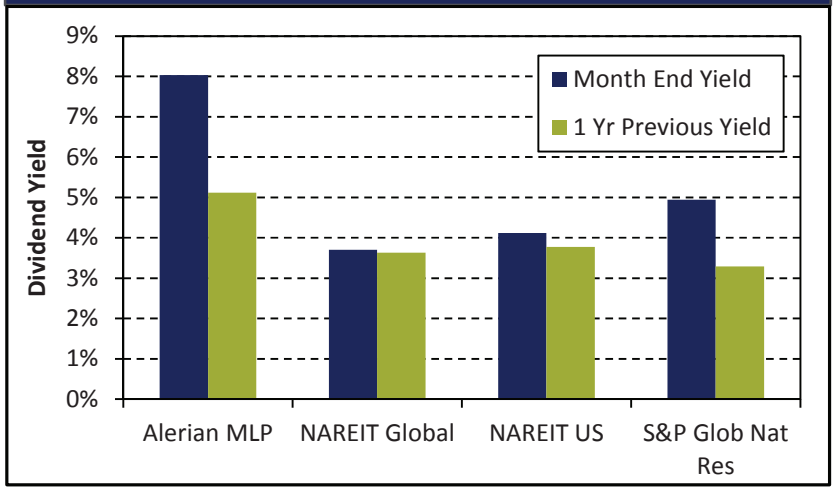
Global inflation expectations remain subdued



Source: Bloomberg

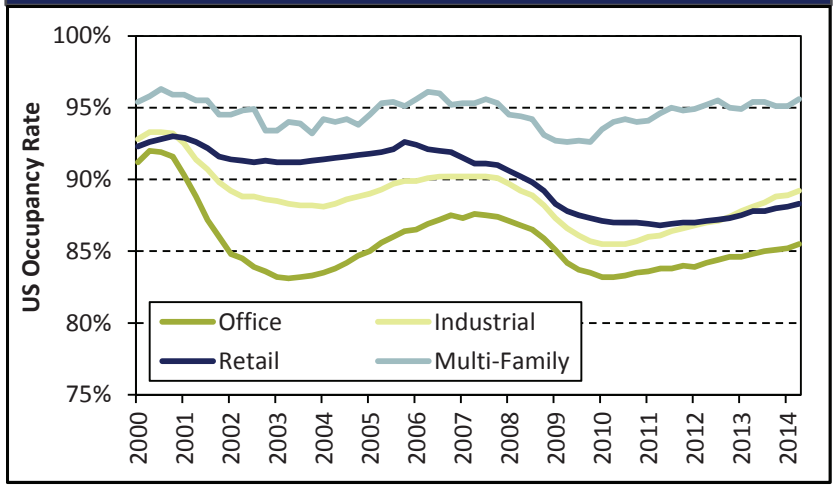
Inflation Sensitive Growth Assets

Yields slightly higher relative to last year



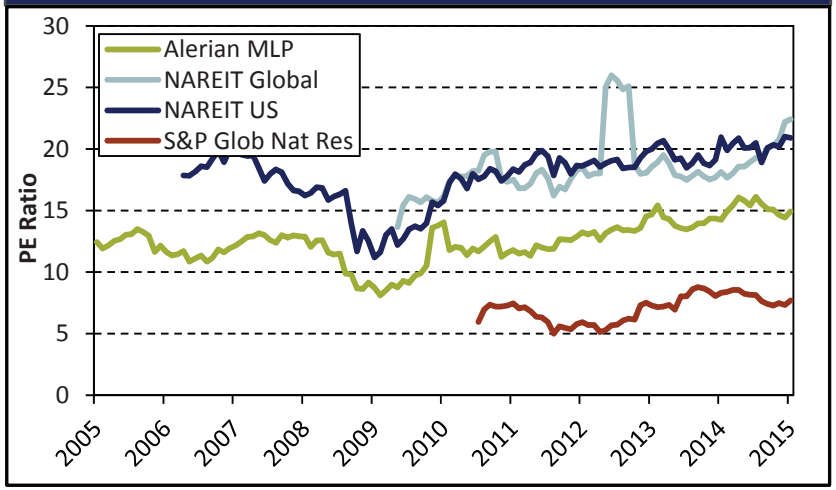
Source: Bloomberg, Alerian, Nareit, Standard and Poors

Gradual recovery in occupancy rates



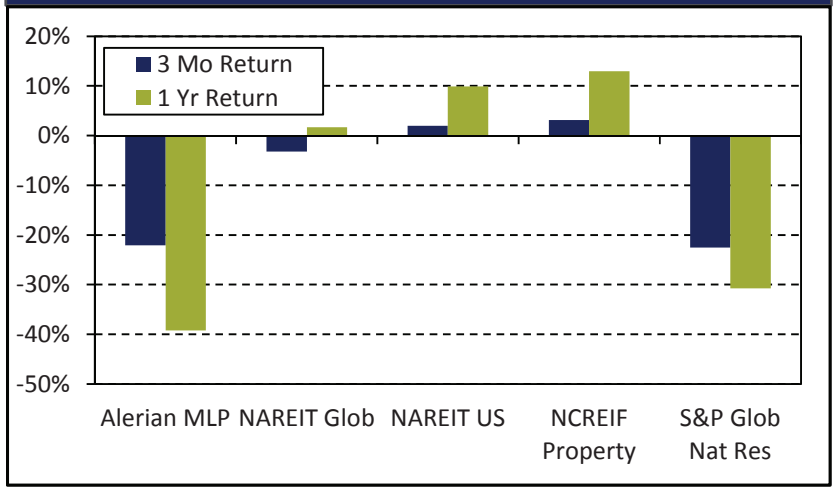
Source: Bloomberg, CB Richard Ellis

PE Ratios near or above averages



Source: Bloomberg, US Census Bureau

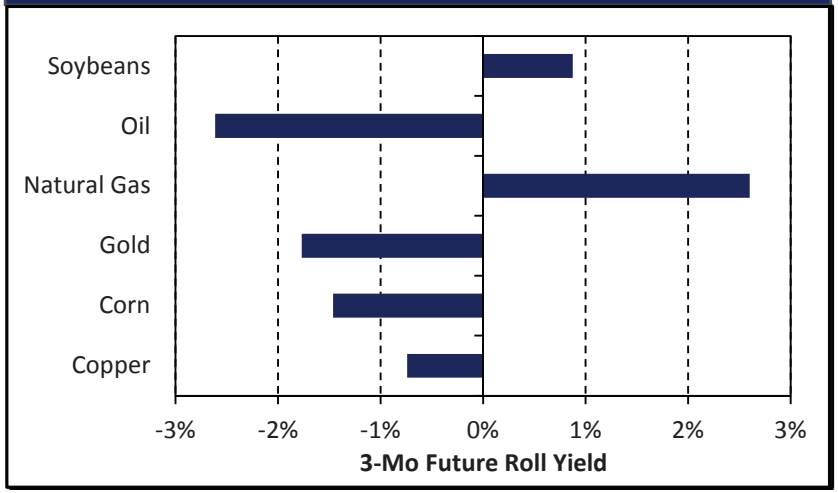
Recent REIT selloff has cut into long rally



Source: Bloomberg, Alerian, Nareit, Standard and Poors

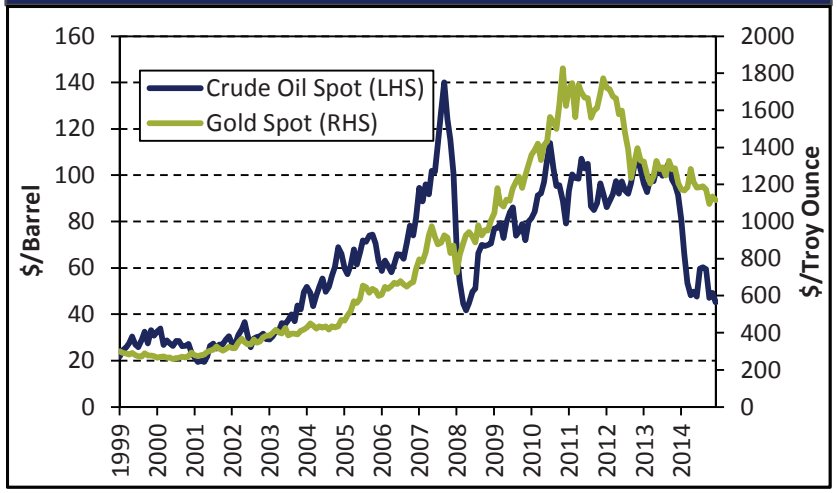
Commodities

Negative roll yields in major commodity futures



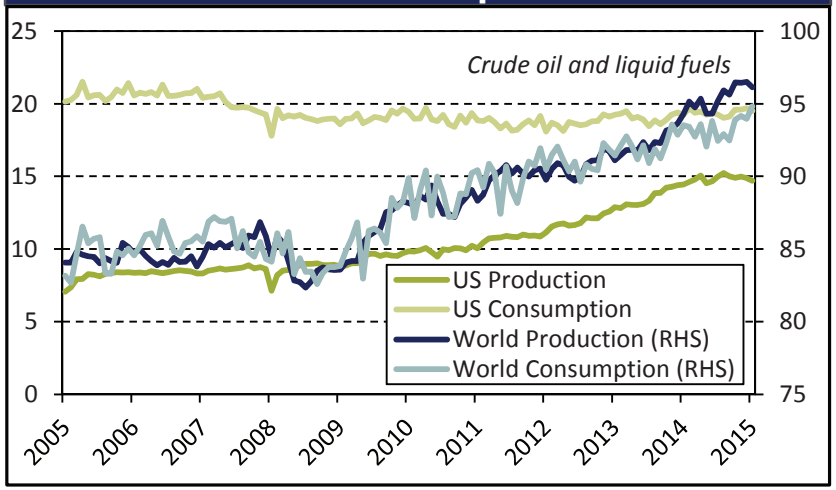
Source: Bloomberg

Precipitous fall in oil prices



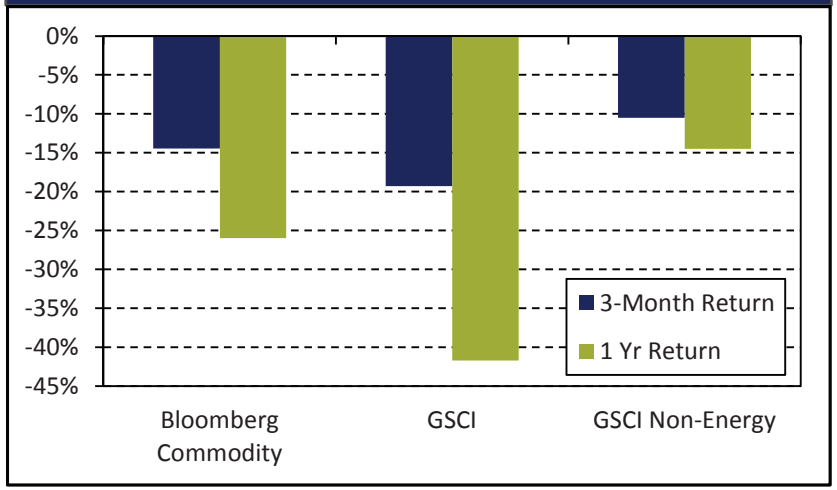
Source: Bloomberg

US fuel production closing gap with consumption



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

Commodity indices negative after oil-induced decline



Source: Bloomberg, Standard and Poors

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