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## San Bernardino County

Investment Summary  
Quarter Ending June 30, 2015

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# Market Environment Update and Outlook

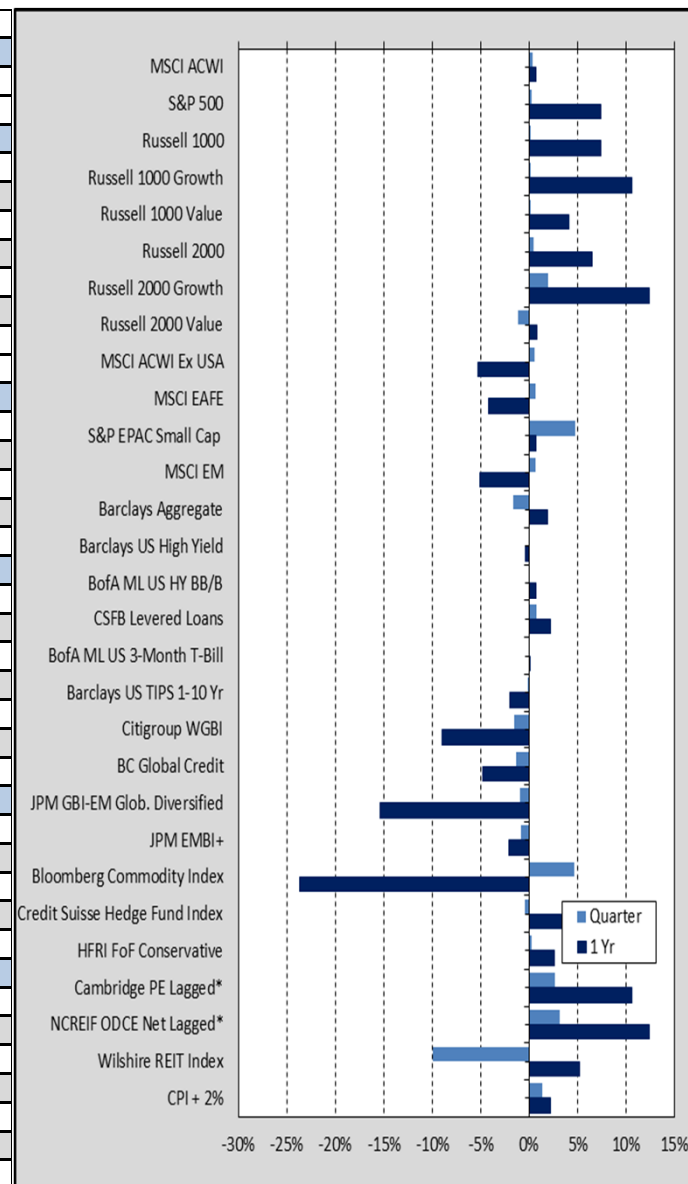


## Economic Environment

- **First quarter “third estimate” GDP growth goes negative to -0.2%.**
  - Retail sales (ended May) at +1.6% on a year-over-year growth rate basis.
  - The inventory-to-sales ratio at May 31 was flat at 1.4 and has remained relatively flat since early 2010.
  - Corporate profits as a percent of GDP increased in the first quarter to 10.7% from 10.4% in the fourth quarter and remain elevated relative to historical levels.
  - The U.S. trade deficit widened slightly during May.
- **The unemployment rate fell to 5.3% in Q2 from 5.5% in Q1 2014; U-6, a broader measure of unemployment, fell to 10.5% during the second quarter.**
- **The Case-Shiller Home Price Index (as of 4/30) increased slightly to 170.0 from first quarter levels (168.2) and is at levels higher than that of pre-financial crisis levels of 150.92.**
- **Rolling 12-month seasonally adjusted CPI increased to +0.2% from -0.02% at the end of March; Capacity Utilization increased slightly to 77.8% in June.**
- **Fed Funds rate remains at 0.25%, while the 10-year Treasury Yield finished Q2 at 2.4% up 50 basis points from Q1.**
- **The Fed balance sheet declined slightly in Q2 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 increased in June remaining above the 10-year and long-term averages**
  - Cyclically adjusted Shiller PE ratio (26.6x) is above the long-term average of 16.4x and above the 10-year average of 22.9x.
- **The U.S. Dollar continues to strengthen against a basket of major currencies as the Fed ends its quantitative easing program and the ECB ramps up easing.**
  - Currency volatility has seen a sustained uptick since Q1.

Market Environment – Q2 2015 Overview

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>World Equity Benchmarks</b>						
MSCI ACWI	World	0.3%	0.7%	13.0%	11.9%	6.4%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>Domestic Equity Benchmarks</b>						
S&P 500	Large Core	0.3%	7.4%	17.3%	17.3%	7.9%
Russell 1000	Large Core	0.1%	7.4%	17.7%	17.6%	8.1%
Russell 1000 Growth	Large Growth	0.1%	10.6%	18.0%	18.6%	9.1%
Russell 1000 Value	Large Value	0.1%	4.1%	17.3%	16.5%	7.0%
Russell 2000	Small Core	0.4%	6.5%	17.8%	17.1%	8.4%
Russell 2000 Growth	Small Growth	2.0%	12.3%	20.1%	19.3%	9.9%
Russell 2000 Value	Small Value	-1.2%	0.8%	15.5%	14.8%	6.9%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>International Equity Benchmarks</b>						
MSCI ACWI Ex USA	World ex-US	0.5%	-5.3%	9.4%	7.8%	5.5%
MSCI EAFE	Int'l Developed	0.6%	-4.2%	12.0%	9.5%	5.1%
S&P EPAC Small Cap	Small Cap Int'l	4.7%	0.7%	16.3%	12.9%	7.7%
MSCI EM	Emerging Equity	0.7%	-5.1%	3.7%	3.7%	8.1%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>Domestic Fixed Income Benchmarks</b>						
Barclays Aggregate	Core Bonds	-1.7%	1.9%	1.8%	3.3%	4.4%
Barclays US High Yield	High Yield	0.0%	-0.4%	6.8%	8.6%	7.9%
BofA ML US HY BB/B	High Yield	0.0%	0.7%	6.8%	8.4%	7.2%
CSFB Levered Loans	Bank Loans	0.8%	2.2%	5.3%	5.7%	4.8%
BofA ML US 3-Month T-Bill	Cash	0.0%	0.0%	0.1%	0.1%	1.4%
Barclays US TIPS 1-10 Yr	Inflation	-0.1%	-1.9%	-0.5%	2.4%	3.7%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>Global Fixed Income Benchmarks</b>						
Citigroup WGBI	World Gov. Bonds	-1.5%	-9.0%	-2.4%	1.0%	3.1%
BC Global Credit	Global Bonds	-1.3%	-4.8%	2.2%	4.3%	4.2%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local)	-1.0%	-15.4%	-3.8%	0.9%	5.9%
JPM EMBI+	Em. Mkt. Bonds	-0.9%	-2.1%	2.8%	6.2%	7.2%
		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
<b>Alternative Benchmarks</b>						
Bloomberg Commodity Index	Commodity	4.7%	-23.7%	-8.8%	-3.9%	-2.6%
Credit Suisse Hedge Fund Index	Hedge Fund	-0.5%	3.3%	7.1%	6.2%	5.9%
HFRI FoF Conservative	Fund of Funds	0.2%	2.6%	5.5%	3.6%	2.6%
Cambridge PE Lagged*	Private Equity	2.6%	10.5%	14.4%	15.1%	13.7%
NCREIF ODCE Net Lagged*	Real Estate	3.2%	12.4%	11.6%	13.4%	6.0%
Wilshire REIT Index	REIT	-9.9%	5.2%	9.0%	14.7%	6.9%
CPI + 2%	Inflation/Real Assets	1.4%	2.2%	3.3%	3.9%	4.1%



\* As of 3/31/2015

## **Positives**

- **Divergence in monetary policies signaling different investment environments globally**
- **US Economy shows strength relative to other developed markets**
- **ECB monetary easing continues with €60 billion in monthly asset purchases**
  - ECB commits €1.3 trillion in asset purchases in the Eurozone
  - Global risk assets responding positively
  - Negative short dated interest rates in Eurozone
- **Contagion risk from Greece's Euro exit is largely contained**
  - Greece represents only 1.7% of total Eurozone GDP
- **Developed world inflation is low**
  - In US, CPI for all Urban Consumers on a seasonally adjusted basis bounced back to positive territory after posting negative results in Q1

## **Negatives**

- **Geopolitical instability continues to drive volatility**
  - Instability in the Mid-East, Eastern Europe, Greece, China
- **Slowing economic growth in China may have broad implications for many emerging economies**
  - Commodity producers impacted
- **Fed rate hike uncertainty contributed to volatility in domestic markets**
  - Market expecting a slow pace to rate increases
- **Q1 GDP estimated at -0.2% growth rate**
  - Consumer spending decelerated, but still growing
- **US Equity valuations remain above 10 year and long term averages**

## Market Environment

### Global Equity

- **U.S. equities posted modest gains in the second quarter as global monetary accommodation ramped up.**
- **Small cap stocks outperformed large cap stocks during the quarter, with the Russell 2000 Index returning 0.4% and the Russell 1000 Index returning 0.1%.**
- **International equities outperformed U.S. markets during the quarter, returning 0.5%, as measured by the MSCI ACWI ex-U.S. Index.**
  - Developed markets returned 0.6% as measured by the MSCI EAFE Index. Relatively strong returns were posted by Hong Kong and Japan at +5.6% and +3.1% respectively.
  - Emerging markets returned +0.7% as measured by the MSCI Emerging Markets Index in U.S. dollar terms. Russia and China bolstered the quarter returning +7.6% and +6.0% respectively.

### Private Equity

- **New private equity commitments totaled \$101.5 billion in Q2 2015.**
  - Rapid fundraising pace continues for high demand managers.
- **Buyout and growth equity funds raised \$57 billion in Q2 2015.**
  - Very strong Q2 totals driven by one fund which raised \$17 billion.
- **Venture capital raised \$24.6 billion ended June.**
  - At 13% of total private equity raised, commitments are just below the 10-year historic relative average and are buoyed by strong IPO and M&A environment.
- **Energy funds raised \$30.1 billion representing 16% of capital raised in Q2.**
  - Investors are opportunistically approaching the energy market dislocation.
- **Asian private equity commitments slowed to total 6% of total funds raised down from 10% in 2014.**
- **European commitments comprised 17% of all new PE commitments in Q2 2015.**
  - 70% of European funds raised were based in the United Kingdom.



## Market Environment

### Fixed Income

- **The yield curve steepened amid global financial instability in the Eurozone and the Fed's rate hike signaling.**
- **The spread between two and 10-year rates increased to 176 basis points from 138 basis points ended March. Treasury Inflation-Protected Securities, or TIPS, returned -1.1% during the quarter, as measured by the Barclays US TIPS Index.**
- **The Barclays Long Duration Credit Index lost -7.3% as the long end of the curve ended the quarter 57 basis points higher.**
- **Long Treasuries fell -8.3% and investment-grade corporate debt lost 2.9%.**
  - Despite strong earnings and credit fundamentals, the overall performance of US high-grade corporate bonds was hindered by record new issuance, which contributed to 16 basis points of spread widening in the quarter. Issuance has totaled almost \$650 billion year-to-date (with a record issuance of \$155 billion in May). This issuance is over 20% higher than in the first half of 2014.
- **The Barclays 1-3 year Government/ Credit Index returned 0.1% and US high yield bonds were flat.**
- **Emerging markets debt continued to slow in local and external currency as yields increased globally.**
  - US dollar-denominated debt, as measured by the JP Morgan EMBI Index, fell 34 basis points; local currency debt fell 96 basis points, according to the JP Morgan GBI-EM Index.
  - Emerging market currencies—in particular, the Mexican peso, Thai baht and Turkish Lira—weakens against the US dollar.

**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



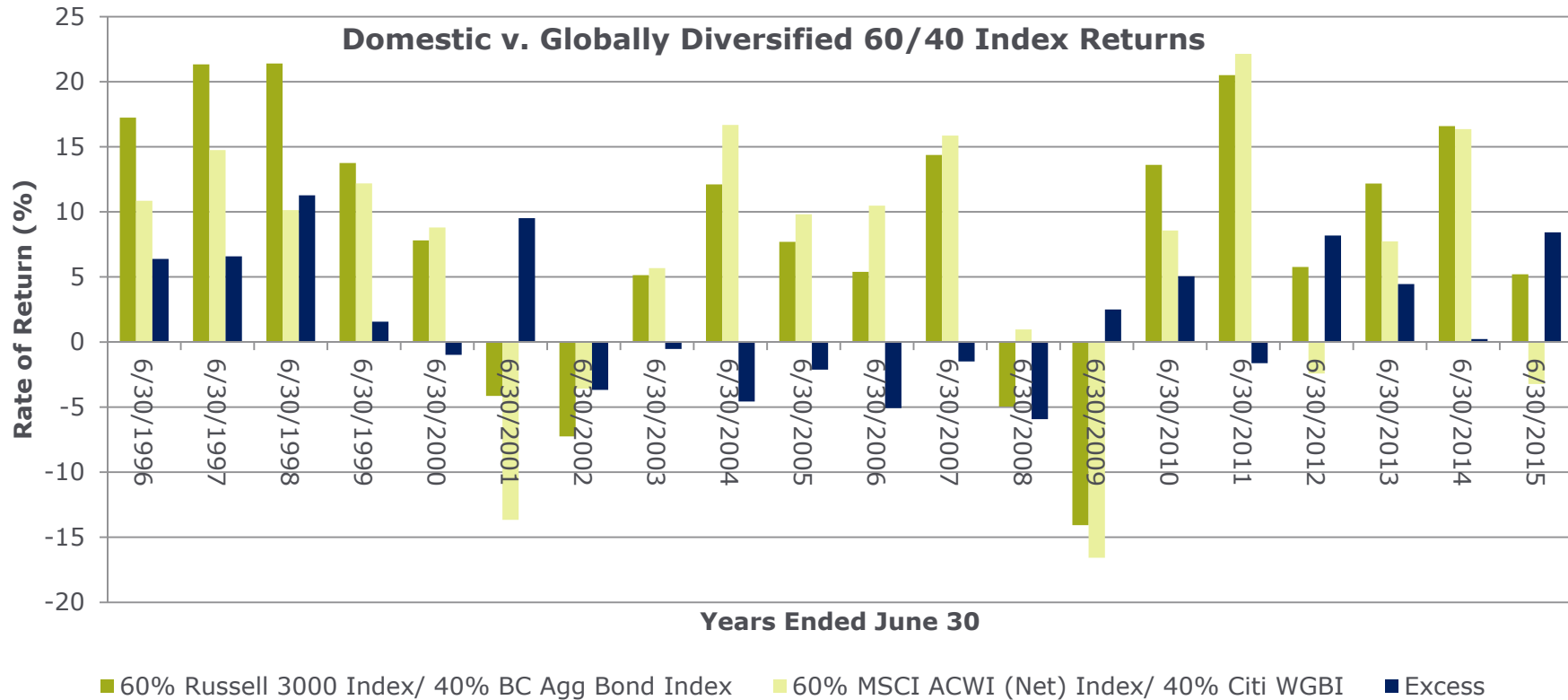
### Commodities

- **Commodities broke their three quarter losing streak with the Bloomberg Commodity Index posting a 4.7% gain.**
  - Energy and agriculture led the way, while industrial metals, precious metals and livestock declined.
  - The Bloomberg WTI Crude Oil Index gained 17.5% for the quarter amid continued declines in rig counts and announced project deferrals, expectations of demand rebounding and lower US output.

### Real Estate

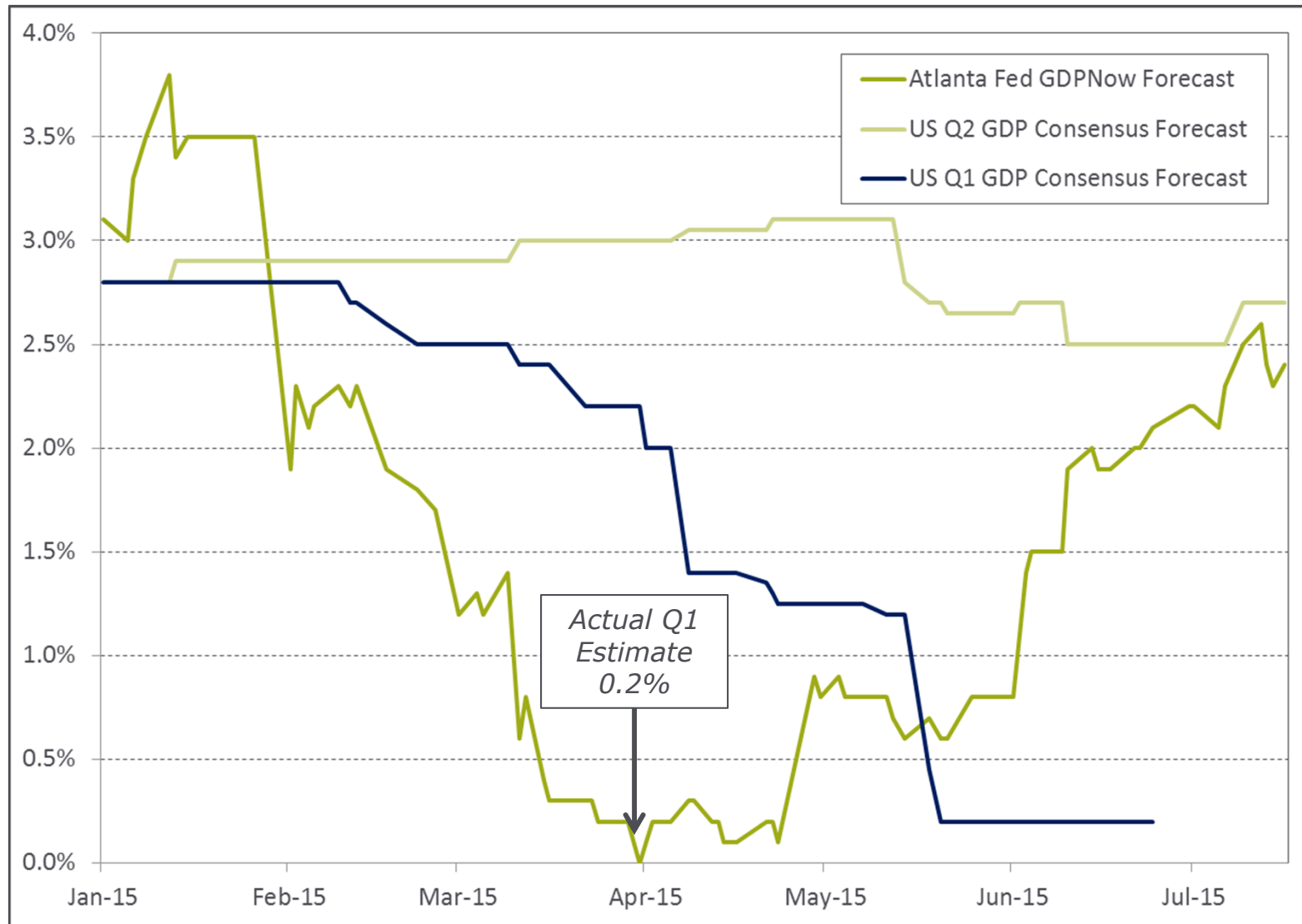
- **NEPC continues to be neutral on core real estate in the US and remains positive on non-core real estate, that is, value-add and opportunistic strategies.**
- **Within U.S. core real estate, strong fundamentals continue to be the story along with attractive income spreads relative to interest rates.**
  - 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 a very weak quarter with a -9.9% 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.

San Bernardino County Employees' Retirement Association  
**Domestic vs. Internationally Diversified Index Returns**



- In the past 20 years domestic focused portfolios have only experienced two periods of greater outperformance; 1998 and 2001

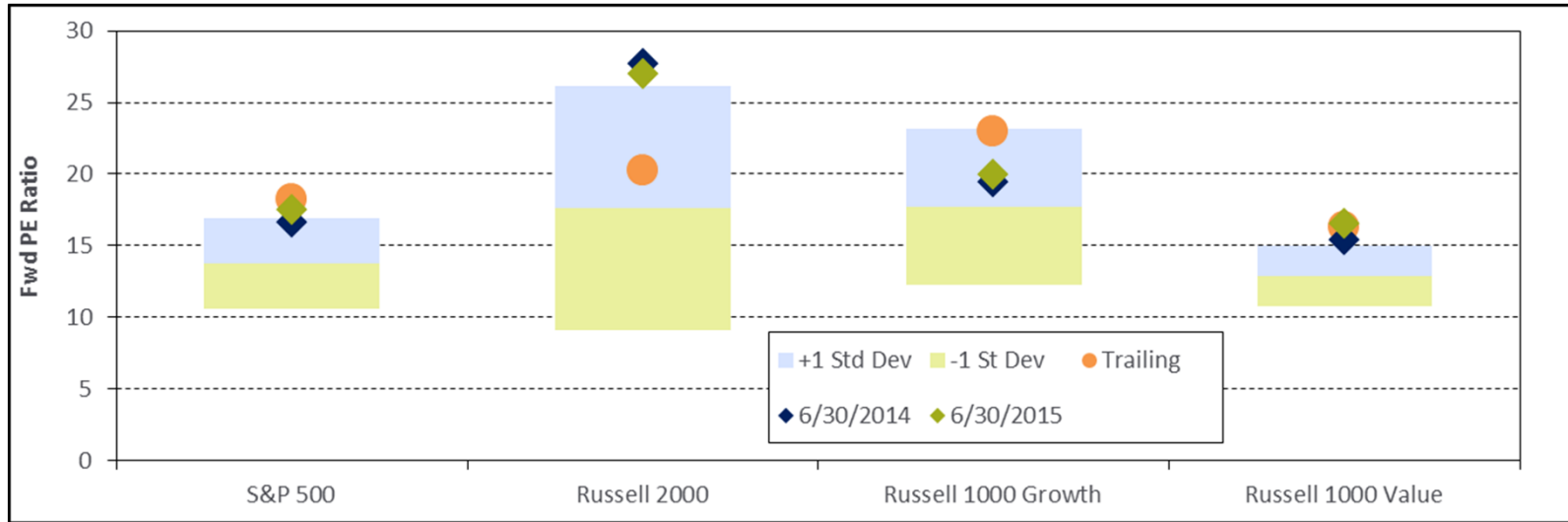
# US Economy Appears Poised to Rebound After Lackluster First Quarter



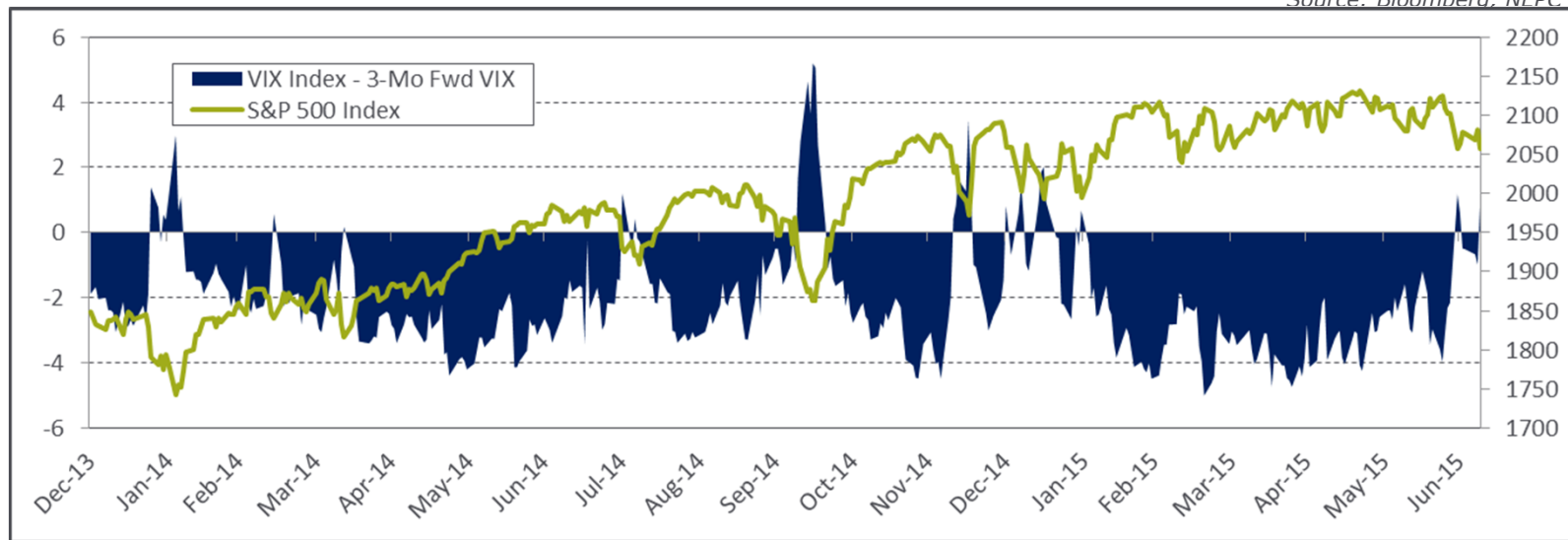
Source: Atlanta Fed, Bloomberg



San Bernardino County Employees' Retirement Association  
**Higher Valuations Supported by Expectations of Low Volatility**

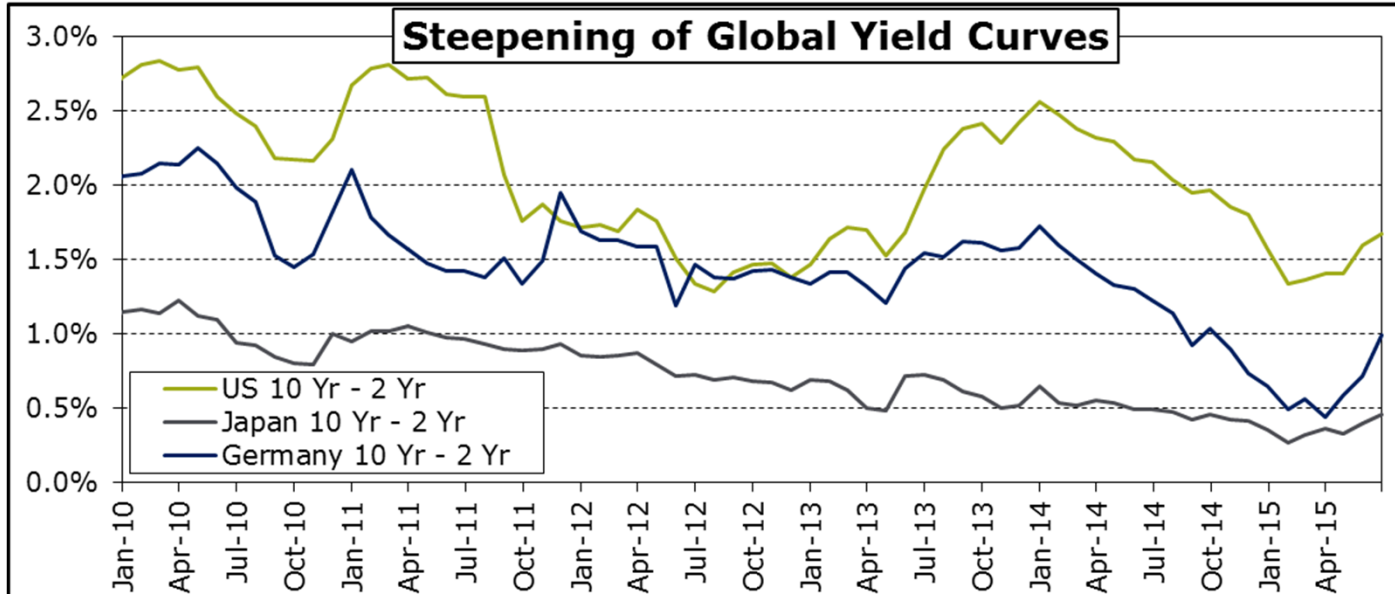
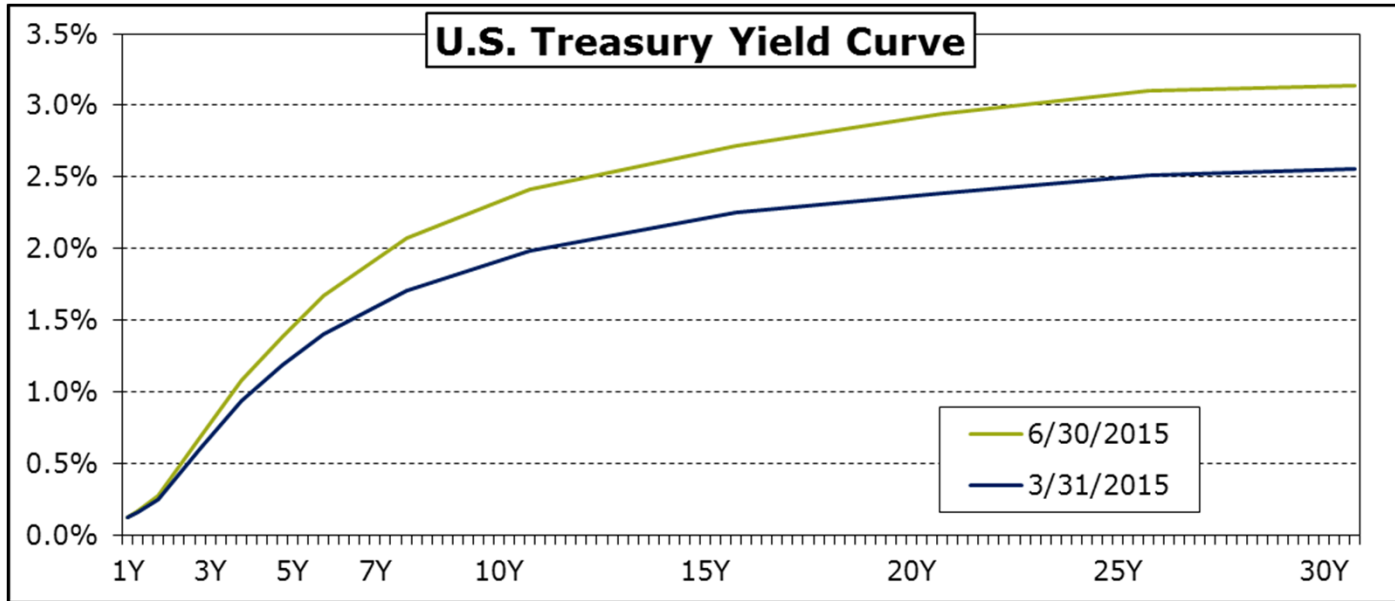


Source: Bloomberg, NEPC



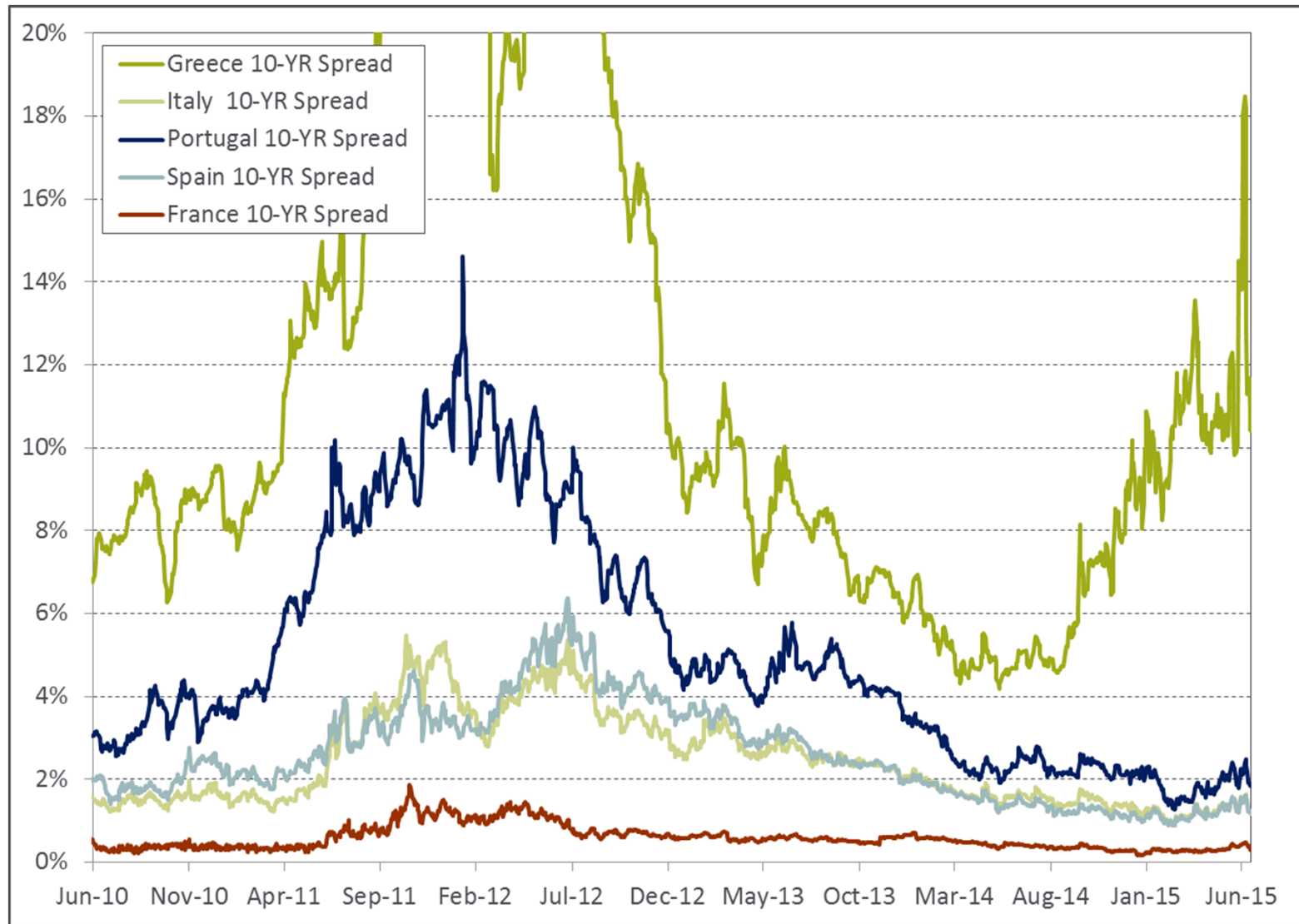
Source: Chicago Board Options Exchange, Bloomberg

Global Rates



Source: Bloomberg, as of 6/30/2015

Contagion Risks Appear Contained – Spread Over German Yields Relatively Unchanged



Source: Bloomberg, NEPC

- **US equities face headwinds but without major concerns**
  - Cautiously optimistic on US economy but Fed rate hike remains on the horizon
  - Dollar strength likely to slow earnings growth and valuations above average
- **Recommend an overweight exposure to developed market equities**
  - Suggest investors opportunistically exploit future volatility to add to the overweight
  - Long-term opportunity remains as earnings improve off cyclical lows in Europe/Japan
  - We continue to recommend a 50% hedge for developed market currency exposure
- **Recommend investors maintain a benchmark neutral weight in emerging market equities (7.7% of MSCI ACWI ended Q2)**
  - Long-term EM fundamentals remain attractive but risks and divergences across countries are significant
  - Encourage the use of benchmark agnostic investment strategies with a bias towards emerging market countries undertaking both economic and political reforms
- **Encourage investors to shift from benchmark-focused global bond strategies to US duration exposures**
  - Global interest rate volatility enhanced by QE programs and central bank activity
  - Consider a small allocation to long duration treasuries, long gov/credit, or long TIPS to fill US duration exposure
- **Be patient with evolving opportunities in commodity markets as volatility is high**
  - Limited distress so far but credit conditions likely to weaken

# NEPC Updates

June 30, 2015

## Highlights of Second Quarter Happenings at NEPC

### NEPC Research Recent White Papers

- 2015 2<sup>nd</sup> Quarter Market Thoughts
- *Rising Rates and Implications for Credit Investors* (April 2015) – Seth Bancroft, Senior Research Analyst, Traditional Research
- *Socially Responsible Investing in Action* (May 2015) – Sheila Healy Berube, CFA, Senior Consultant.
- *A Dynamic Approach to Pension Glide Paths* (May 2015) - Christopher A. Levell, ASA, CFA, CAIA, Partner, Client Strategy



### NEPC Client Recognitions

- NEPC is pleased to announce that two of our clients recently won *Institutional Investor Intelligence Awards*. Ruth Ryerson, Executive Director at Wyoming Retirement System, was a co-winner of the Executive Director of the Year award, along with Steve Yoakum from Public School and Education Employee Retirement Systems of Missouri. Dave Underwood, Deputy CIO and Portfolio Manager – Equities at Arizona State Retirement System, won the *Institutional Investor Intelligence Award: Innovator*.

### NEPC Recognitions

- We are pleased to announce that **NEPC has won two Alternative Investment Awards for 2015** from *Wealth & Finance International*, one for Sustained Excellence in Client Investment Management and the other for Macro Strategy Specialist of the Year – USA. Awards Coordinator Peter Rujveg commented, "The caliber of the 2015 nominees was simply outstanding and this ensured that the judging process was more than a little demanding. Put simply, our winners represent the very best of the best and with such a tremendous amount of competition, it is an honor to acknowledge them and wish them well for another award winning year ahead."

### News from NEPC

- **Doris Ewing honored by the NASP.** Please join us in congratulating retired NEPC Partner, Doris Ewing, who was honored as the first female African-American Partner of an Investment Consulting Firm at the NASP Women's Legends Tea on June 14 in Chicago. Congratulations Doris!

### Recent Events

- **NEPC Clients Invited to the White House.** A diverse group of NEPC clients were invited to the White House on June 16 for the Clean Energy Investment Summit. The goal of the event was to help address the fundraising gap for scalable investments in clean energy and catalyze more institutional investment. Attendees engaged with senior members of the Administration to discuss recent or potential clean energy investments.





# Total Fund Performance

**Total Fund Performance Summary (Gross)**

	Market Value	3 Mo	Rank	YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank
<b>Total Fund</b>	<b>\$8,215,333,413</b>	<b>2.2%</b>	<b>1</b>	<b>4.1%</b>	<b>1</b>	<b>4.6%</b>	<b>11</b>	<b>10.5%</b>	<b>51</b>	<b>10.8%</b>	<b>53</b>	<b>6.1%</b>	<b>82</b>
Policy Index		0.2%	56	1.1%	99	0.4%	95	7.5%	93	9.1%	85	6.3%	70
S&P 500		0.3%	43	1.2%	98	7.4%	1	17.3%	1	17.3%	1	7.9%	1
Barclays Aggregate		-1.7%	99	-0.1%	99	1.9%	75	1.8%	99	3.3%	99	4.4%	99
60% MSCI ACWI (Gross)/40% CITI WGBI		-0.3%	91	0.2%	99	-2.5%	99	7.7%	92	8.7%	90	5.7%	96
InvestorForce Public DB > \$1B Gross Median		0.2%		2.7%		2.8%		10.6%		11.0%		6.8%	

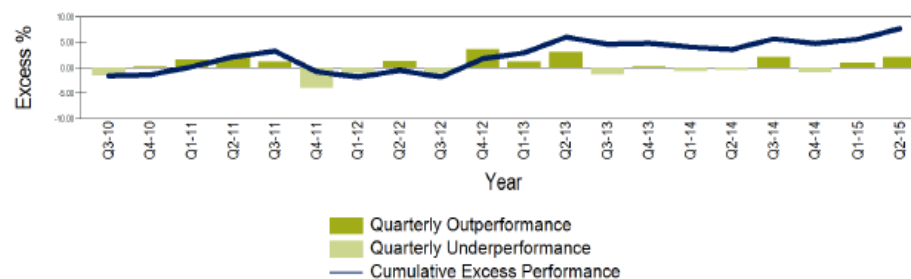
In the year ending June 30, 2015 the Fund returned 4.6% ranking in the 11th percentile of Pubic Funds > \$1Billion. The Fund's assets totaled \$8.2 billion, an increase of \$333.8 million from a year ago.

The Fund experienced a net investment gain of \$350.8 million in the year ended June 30, 2015 including a net investment gain of \$174.7 million in the second calendar quarter.

In the three -year period ending June 30, 2015 the Fund returned 10.5% and ranked in the 51st percentile among its peers and exceeded the assumed rate of 7.5%. The Sharpe Ratio over this period of 4.0 ranks in the 1st percentile, indicating that the Fund earned a much higher rate of return for each incremental unit of risk taken during the period versus its peers.

In the five-year period ending June 30, 2015 the Fund returned 10.8% per annum and ranked in the 53rd percentile among its peers and exceeded the assumed rate of 7.5%. On a risk adjusted basis the Fund's Sharpe and Sortino Ratios rank in the 1st and 6th percentile indicating both strong returns per unit of risk taken and strong returns per unit of downside risk experienced when compared to a universe of public fund peers >\$1B.

Quarterly and Cumulative Gross Performance vs. Policy



**Statistics Summary**

**3 Years Ending June 30, 2015**

	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	4.0	1	19.0	1
InvestorForce Public DB > \$1B Gross Median	2.0	--	4.0	--

**Statistics Summary**

**5 Years Ending June 30, 2015**

	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	2.4	1	2.7	6
InvestorForce Public DB > \$1B Gross Median	1.4	--	2.1	--

Note: Universe data is preliminary and includes 32 plans with \$218 billion in assets.

**Total Fund Performance Summary**

**Statistics Summary**

**1 Year Ending June 30, 2015**

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	4.6%	11	2.4%	2	1.9	1	7.5	1
InvestorForce Public DB > \$1B Gross Median	2.8%	--	5.2%	--	0.6	--	1.3	--

**Statistics Summary**

**3 Years Ending June 30, 2015**

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	10.5%	51	2.6%	2	4.0	1	19.0	1
InvestorForce Public DB > \$1B Gross Median	10.6%	--	5.6%	--	2.0	--	4.0	--

**Statistics Summary**

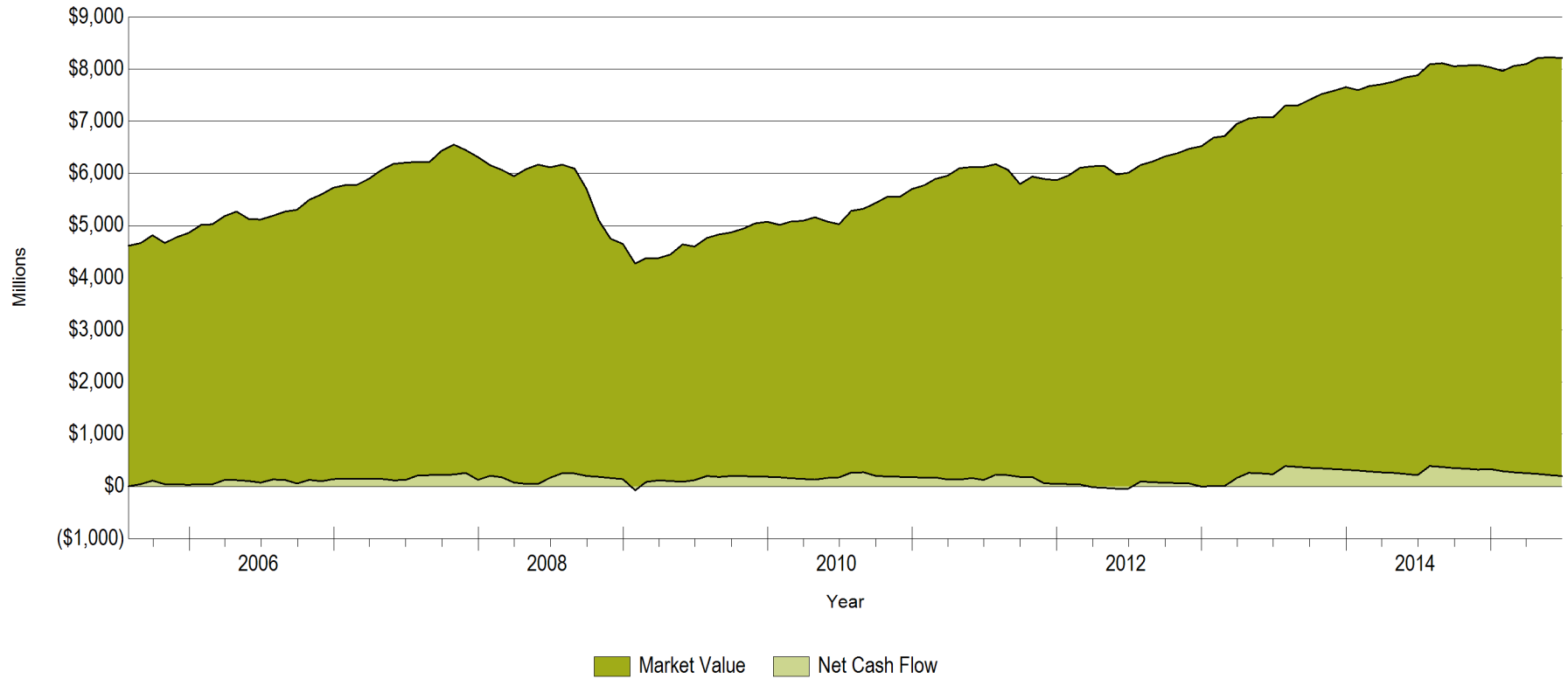
**5 Years Ending June 30, 2015**

	Anlzd Return	Anlzd Return Rank	Anlzd Standard Deviation	Anlzd Standard Deviation Rank	Sharpe Ratio	Sharpe Ratio Rank	Sortino Ratio	Sortino Ratio Rank
Total Fund	10.8%	53	4.5%	3	2.4	1	2.7	6
InvestorForce Public DB > \$1B Gross Median	11.0%	--	7.8%	--	1.4	--	2.1	--

Sortino Ratio requires at least two negative points in order to generate

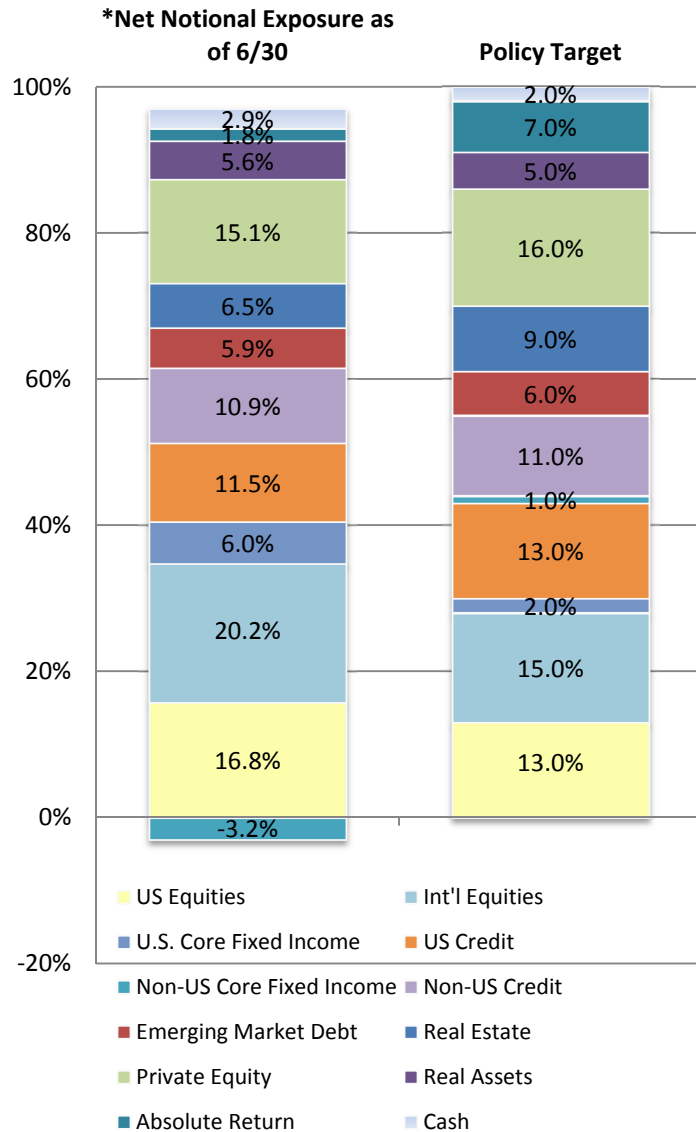
**Total Fund Asset Growth Summary**

10 Years Ending June 30, 2015



Sources of Portfolio Growth	Last Three Months	One Year	Five Years	Ten Years
Beginning Market Value	\$8,096,374,359	\$7,881,514,606	\$5,026,688,359	\$4,497,125,052
Net Additions/Withdrawals	-\$55,743,763	-\$16,942,359	\$26,727,296	\$197,673,229
Investment Earnings	\$174,702,817	\$350,761,166	\$3,161,917,758	\$3,520,535,132
<b>Ending Market Value</b>	<b>\$8,215,333,413</b>	<b>\$8,215,333,413</b>	<b>\$8,215,333,413</b>	<b>\$8,215,333,413</b>

# Total Fund Asset Allocation vs. Policy Targets



	*Net Notional Exposure	*Net Notional Exposure as of 6/30	Policy Target	*Difference	Policy Ranges	Within Range
<b>US Equities</b>	1,377,844	<b>16.8%</b>	<b>13.0%</b>	<b>3.8%</b>	<b>8%-18%</b>	<b>Yes</b>
<b>Int'l Equities</b>	1,661,433	<b>20.2%</b>	<b>15.0%</b>	<b>5.2%</b>	<b>10%-20%</b>	<b>No</b>
<b>U.S. Core Fixed Income</b>	494,902	<b>6.0%</b>	<b>2.0%</b>	<b>4.0%</b>	<b>-3%-7%</b>	<b>Yes</b>
<b>US Credit</b>	940,938	<b>11.5%</b>	<b>13.0%</b>	<b>-1.5%</b>	<b>8%-18%</b>	<b>Yes</b>
<b>Non-US Core Fixed Income</b>	(260,640)	<b>-3.2%</b>	<b>1.0%</b>	<b>-4.2%</b>	<b>-4%-6%</b>	<b>Yes</b>
<b>Non-US Credit</b>	899,262	<b>10.9%</b>	<b>11.0%</b>	<b>-0.1%</b>	<b>6%-16%</b>	<b>Yes</b>
<b>Emerging Market Debt</b>	481,531	<b>5.9%</b>	<b>6.0%</b>	<b>-0.1%</b>	<b>1%-11%</b>	<b>Yes</b>
<b>Real Estate</b>	530,496	<b>6.5%</b>	<b>9.0%</b>	<b>-2.5%</b>	<b>4%-14%</b>	<b>Yes</b>
<b>Private Equity</b>	1,238,941	<b>15.1%</b>	<b>16.0%</b>	<b>-0.9%</b>	<b>11%-21%</b>	<b>Yes</b>
<b>Real Assets</b>	459,002	<b>5.6%</b>	<b>5.0%</b>	<b>0.6%</b>	<b>0%-10%</b>	<b>Yes</b>
<b>Absolute Return</b>	149,958	<b>1.8%</b>	<b>7.0%</b>	<b>-5.2%</b>	<b>2%-12%</b>	<b>No</b>
<b>Cash</b>	241,666	<b>2.9%</b>	<b>2.0%</b>	<b>0.9%</b>	<b>0%-10%</b>	<b>Yes</b>
	<b>8,215,333</b>	<b>100.0%</b>	<b>100.0%</b>			

\*Net Notional Exposure is the combination of physical exposures as reported by State Street and the synthetic exposures reported by Russell.

San Bernardino County Employees' Retirement Association

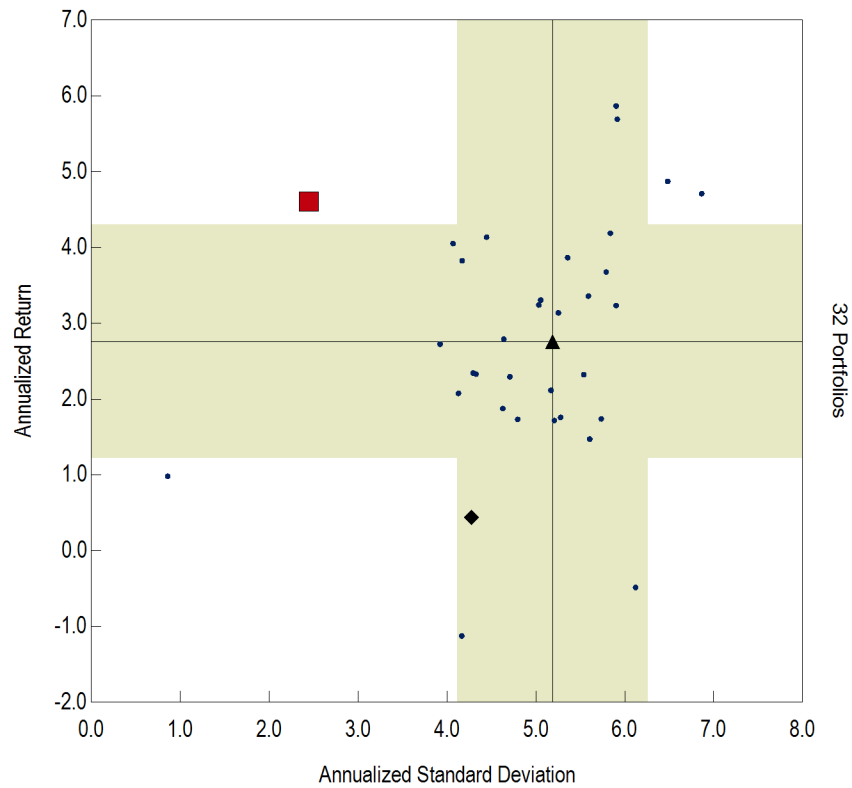
SBCERA Delta Adjusted Asset Summary

Asset Class	Physical Exposure		Delta Adjusted Synthetic Exposure		Net Position		Overlay Target		Policy Target	
<b>Total Market Value</b>	<b>8,320.1</b>	<b>100.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>8,320.1</b>	<b>100.0 %</b>	<b>8,320.1</b>	<b>100.0 %</b>	<b>8,320.1</b>	<b>100.00 %</b>
<b>Cash</b>	<b>1,679.9</b>	<b>20.2 %</b>	<b>-1,534.2</b>	<b>-18.4 %</b>	<b>145.7</b>	<b>1.8 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>0.0</b>	<b>0.00 %</b>
Cash	1,679.9	20.2 %	-1,534.2	-18.4 %	145.7	1.8 %	0.0	0.0 %	0.0	0.00 %
<b>Equity</b>	<b>1,371.5</b>	<b>16.5 %</b>	<b>1,657.3</b>	<b>19.9 %</b>	<b>3,028.7</b>	<b>36.4 %</b>	<b>3,173.8</b>	<b>38.1 %</b>	<b>3,161.7</b>	<b>38.00 %</b>
Emerging Markets	258.8	3.1 %	407.6	4.9 %	666.4	8.0 %	668.2	8.0 %	665.6	8.00 %
International Developed	217.7	2.6 %	780.4	9.4 %	998.1	12.0 %	1,002.3	12.0 %	998.4	12.00 %
US Large Cap	881.9	10.6 %	232.3	2.8 %	1,114.2	13.4 %	1,211.1	14.6 %	1,206.4	14.50 %
US Small Cap	13.0	0.2 %	237.0	2.8 %	250.0	3.0 %	292.3	3.5 %	291.2	3.50 %
<b>Fixed</b>	<b>2,440.2</b>	<b>29.3 %</b>	<b>-123.1</b>	<b>-1.5 %</b>	<b>2,317.1</b>	<b>27.8 %</b>	<b>2,317.7</b>	<b>27.9 %</b>	<b>2,308.8</b>	<b>27.75 %</b>
EM High Yield CDX	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.0 %	0.0	0.00 %
Global ex US Fixed	1,502.4	18.1 %	-419.8	-5.0 %	1,082.5	13.0 %	1,085.8	13.1 %	1,081.6	13.00 %
High Yield	937.8	11.3 %	0.0	0.0 %	937.8	11.3 %	793.5	9.5 %	790.4	9.50 %
US Fixed Income	0.0	0.0 %	296.7	3.6 %	296.7	3.6 %	438.5	5.3 %	436.8	5.25 %
<b>Other</b>	<b>2,828.6</b>	<b>34.0 %</b>	<b>0.0</b>	<b>0.0 %</b>	<b>2,828.6</b>	<b>34.0 %</b>	<b>2,828.6</b>	<b>34.0 %</b>	<b>2,849.6</b>	<b>34.25 %</b>
Alternatives	206.4	2.5 %	0.0	0.0 %	206.4	2.5 %	206.4	2.5 %	208.0	2.50 %
Commodities	126.8	1.5 %	0.0	0.0 %	126.8	1.5 %	126.8	1.5 %	124.8	1.50 %
Infrastructure	111.5	1.3 %	0.0	0.0 %	111.5	1.3 %	111.5	1.3 %	108.2	1.30 %
Private Equity	1,204.8	14.5 %	0.0	0.0 %	1,204.8	14.5 %	1,204.8	14.5 %	1,248.0	15.00 %
Real Estate	534.3	6.4 %	0.0	0.0 %	534.3	6.4 %	534.3	6.4 %	499.2	6.00 %
Tactical Cash	644.8	7.7 %	0.0	0.0 %	644.8	7.7 %	644.8	7.7 %	661.5	7.95 %

Source: Russell Investments

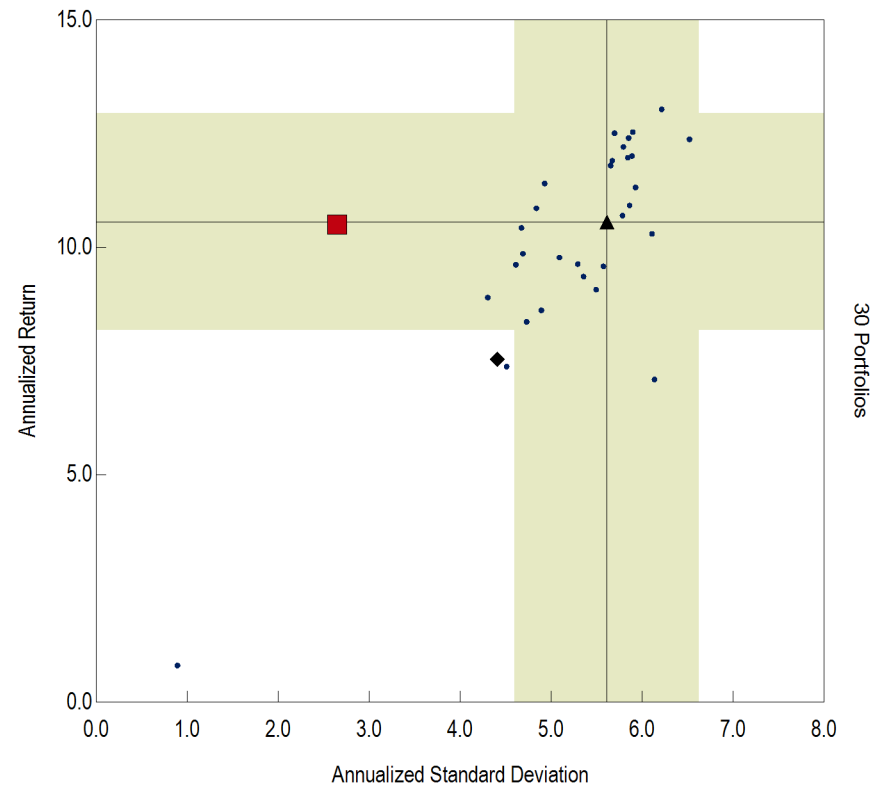
Total Fund Risk/Return

1 Year Ending June 30, 2015



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

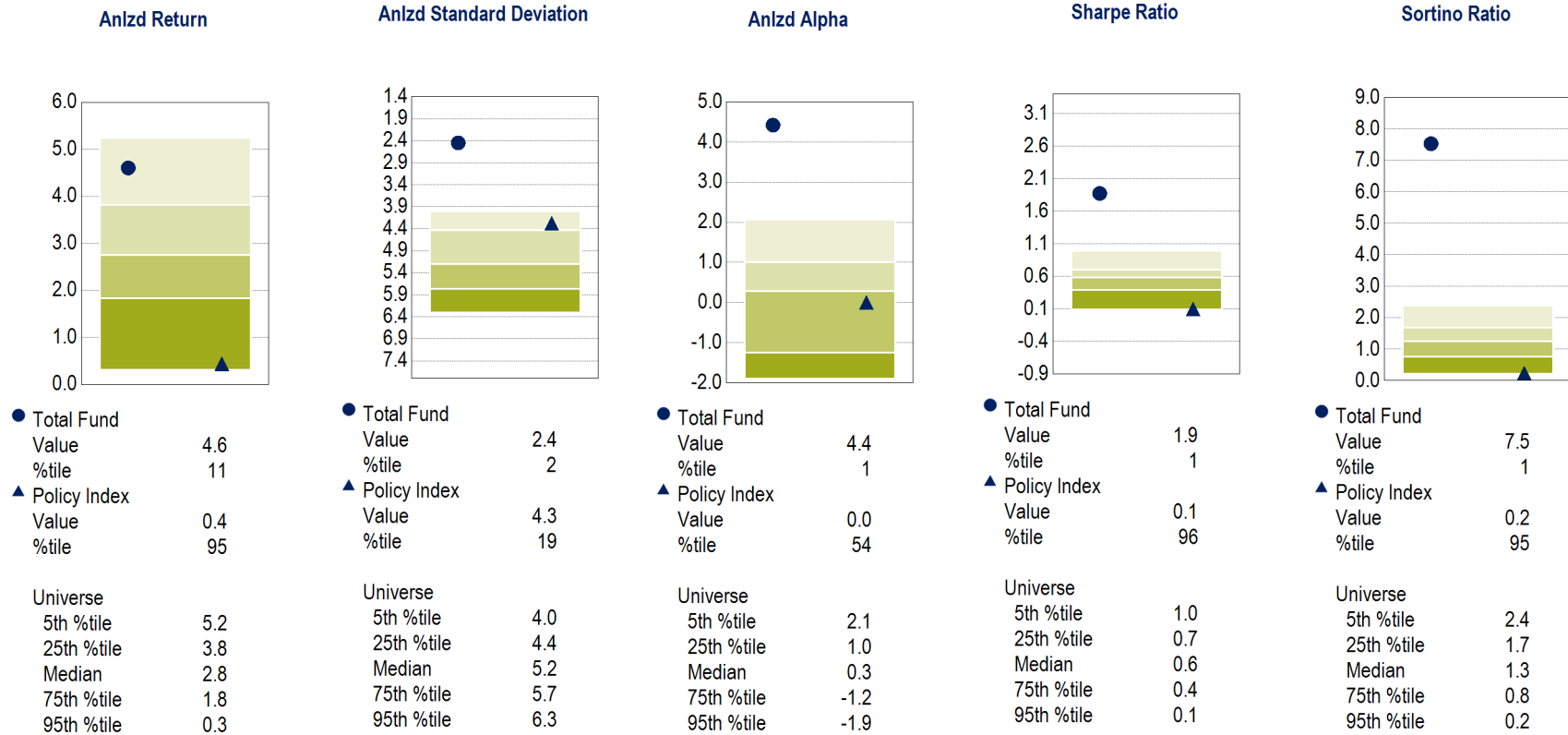
3 Years Ending June 30, 2015



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

Total Fund Risk Statistics vs. Peer Universe

Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)  
1 Year

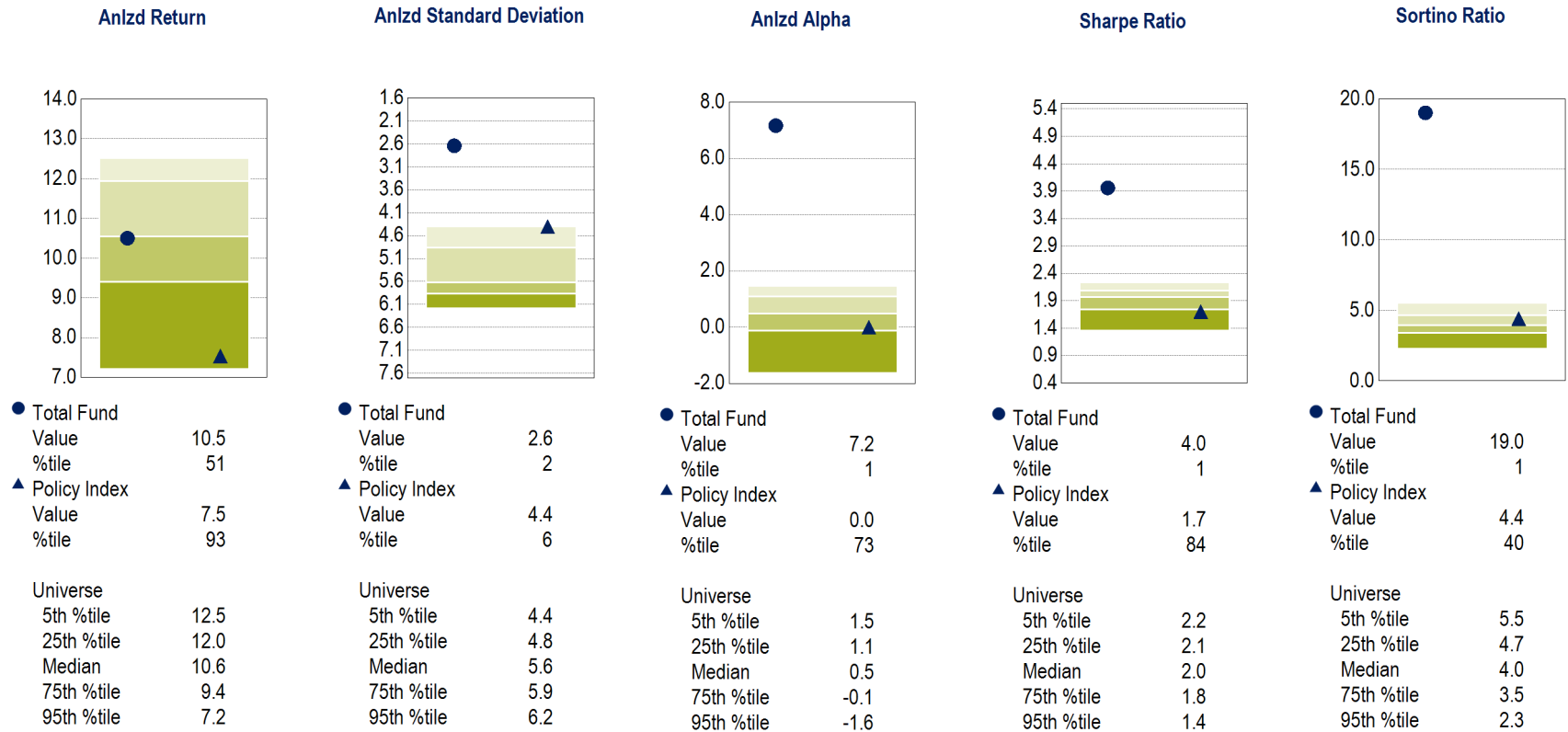


Due to the nature of the returns under a year the Sortino ratio cannot be calculated.



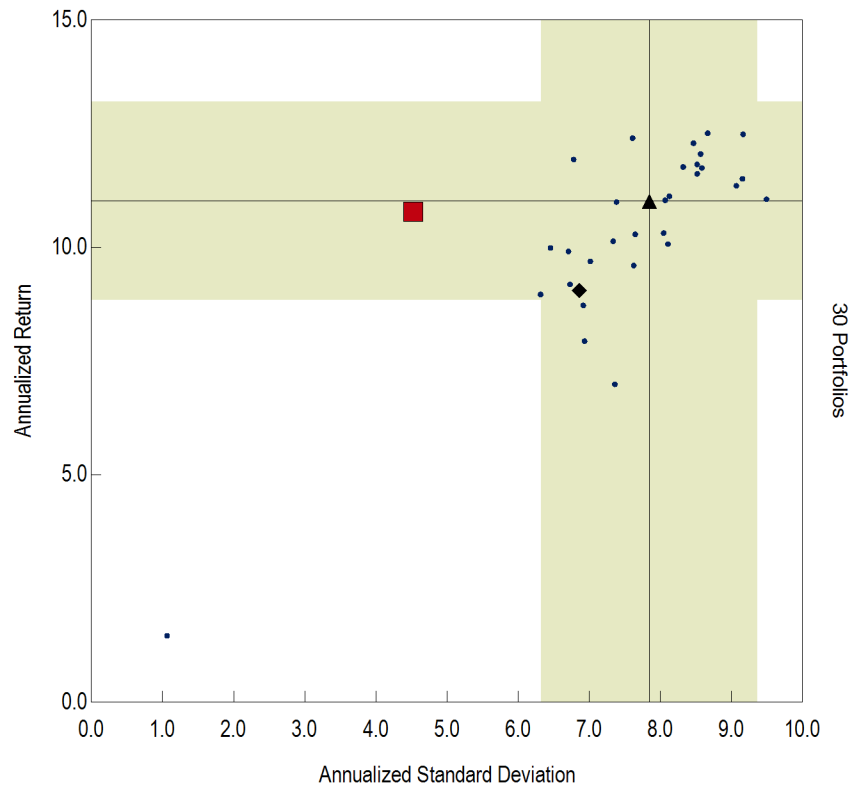
Total Fund Risk Statistics vs. Peer Universe

Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)  
3 Years



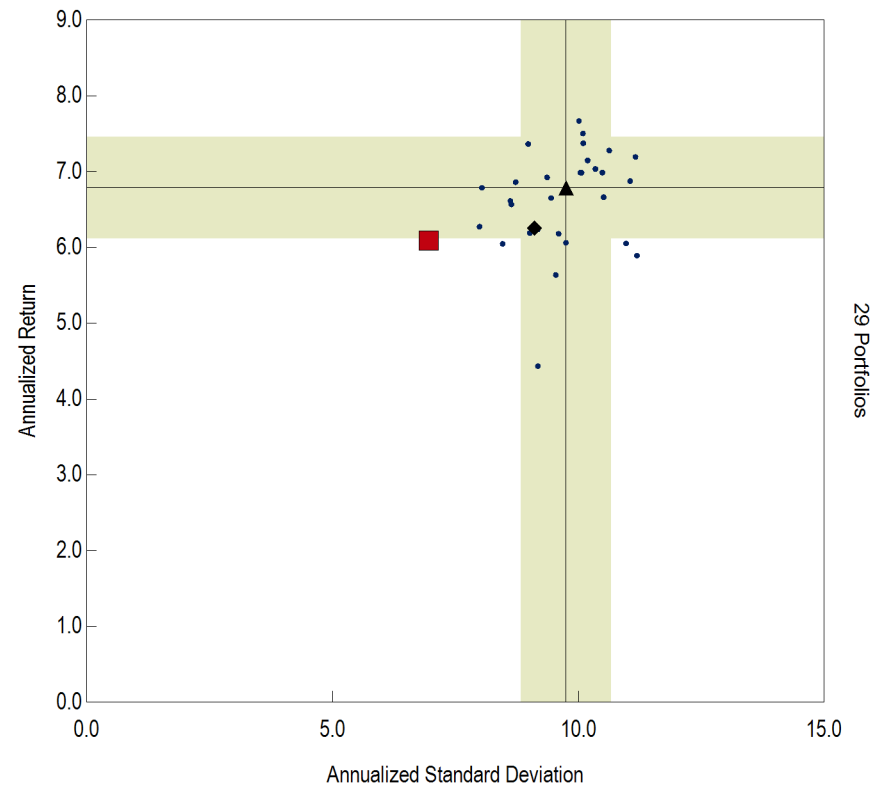
Total Fund Risk/Return

5 Years Ending June 30, 2015



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

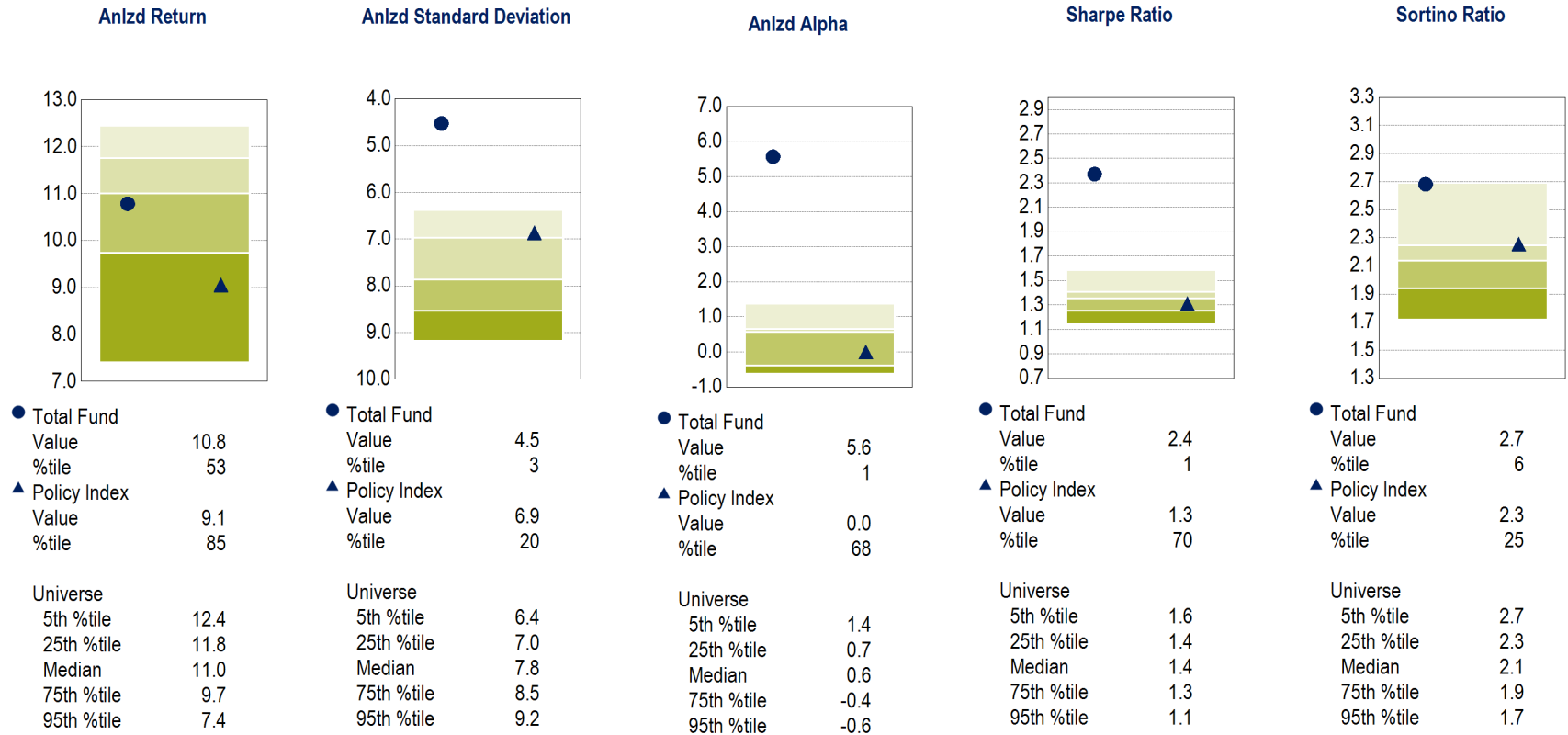
10 Years Ending June 30, 2015



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

Total Fund Risk Statistics vs. Peer Universe

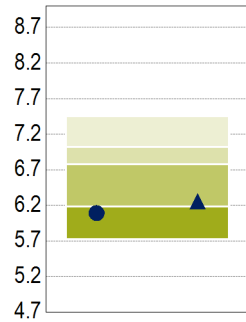
Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)  
5 Years



Total Fund Risk Statistics vs. Peer Universe

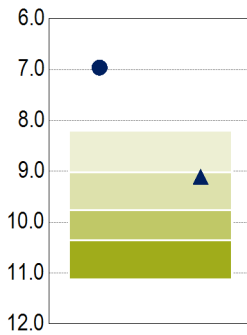
Total Fund vs. InvestorForce Public DB > \$1B Gross (USD)  
10 Years

Anlzd Return



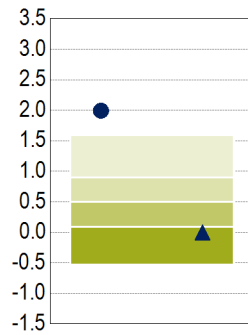
● Total Fund	
Value	6.1
%tile	82
▲ Policy Index	
Value	6.3
%tile	70
Universe	
5th %tile	7.5
25th %tile	7.0
Median	6.8
75th %tile	6.2
95th %tile	5.7

Anlzd Standard Deviation



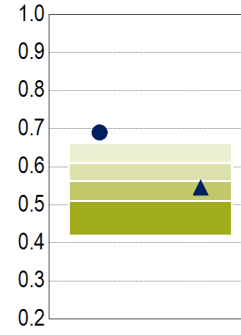
● Total Fund	
Value	7.0
%tile	1
▲ Policy Index	
Value	9.1
%tile	28
Universe	
5th %tile	8.2
25th %tile	9.0
Median	9.7
75th %tile	10.3
95th %tile	11.1

Anlzd Alpha



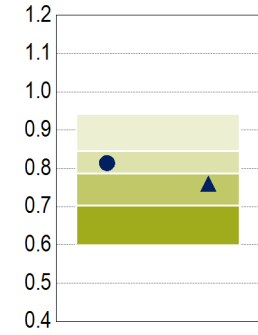
● Total Fund	
Value	2.0
%tile	4
▲ Policy Index	
Value	0.0
%tile	83
Universe	
5th %tile	1.6
25th %tile	0.9
Median	0.5
75th %tile	0.1
95th %tile	-0.5

Sharpe Ratio



● Total Fund	
Value	0.7
%tile	1
▲ Policy Index	
Value	0.5
%tile	61
Universe	
5th %tile	0.7
25th %tile	0.6
Median	0.6
75th %tile	0.5
95th %tile	0.4

Sortino Ratio



● Total Fund	
Value	0.8
%tile	34
▲ Policy Index	
Value	0.8
%tile	65
Universe	
5th %tile	0.9
25th %tile	0.8
Median	0.8
75th %tile	0.7
95th %tile	0.6

# San Bernardino County Employees' Retirement Association

## Total Fund Risk Statistics

3 Years Ending June 30, 2015

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sortino Ratio	Rank	Info Ratio	Rank
Domestic Equity	11.0%	3.0%	99	5.1%	1	1.0	99	-1.3	98
Russell 3000	--	17.7%	59	8.7%	16	5.4	15	--	--
International Developed	2.7%	31.4%	1	14.2%	99	8.6	1	1.6	8
MSCI EAFE	--	12.0%	74	10.5%	63	2.6	61	--	--
International Emerging	3.1%	2.6%	88	11.1%	18	0.3	86	-0.3	85
MSCI Emerging Markets	--	3.7%	73	12.5%	64	0.5	72	--	--
U.S. Credit Strategies	11.9%	9.8%	3	2.3%	1	11.3	1	1.1	3
50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index	--	6.0%	9	2.8%	3	3.2	4	--	--
Non-U.S. Credit Composite	12.6%	9.2%	3	3.6%	6	6.5	1	0.5	3
BofA ML Euro HY Constrained	--	4.8%	30	10.6%	95	0.9	78	--	--
Non-U.S. Core Composite	1.2%	1.8%	64	8.2%	91	0.4	70	0.4	75
Barclays Global Aggregate	--	-0.8%	85	4.0%	34	-0.3	86	--	--
Emerging Markets Debt Composite	5.9%	1.9%	56	5.8%	18	0.3	57	0.4	59
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	--	0.2%	64	8.0%	61	0.0	64	--	--
Alpha Pool Composite	19.4%	6.9%	13	1.7%	2	12.4	1	2.3	1
91 Day T-Bill + 3%	--	3.0%	52	0.0%	1	--	--	--	--

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Private Equity Composite	15.1%	14.4%	--	4.3%	--	3.3	--
Cambridge Associates Global All PE ( Qtr Lag)	--	13.0%	--	6.7%	--	1.9	--
Real Estate Composite	6.5%	9.8%	--	3.8%	--	2.5	--
NCREIF Property Index 1 Qtr Lag	--	11.5%	--	4.6%	--	2.5	--
Real Assets Composite	5.6%	5.1%	--	5.1%	--	1.0	--
Bloomberg Commodity Index	--	-8.7%	--	11.9%	--	-0.7	--

Percent of Total equals 95% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.

# San Bernardino County Employees' Retirement Association

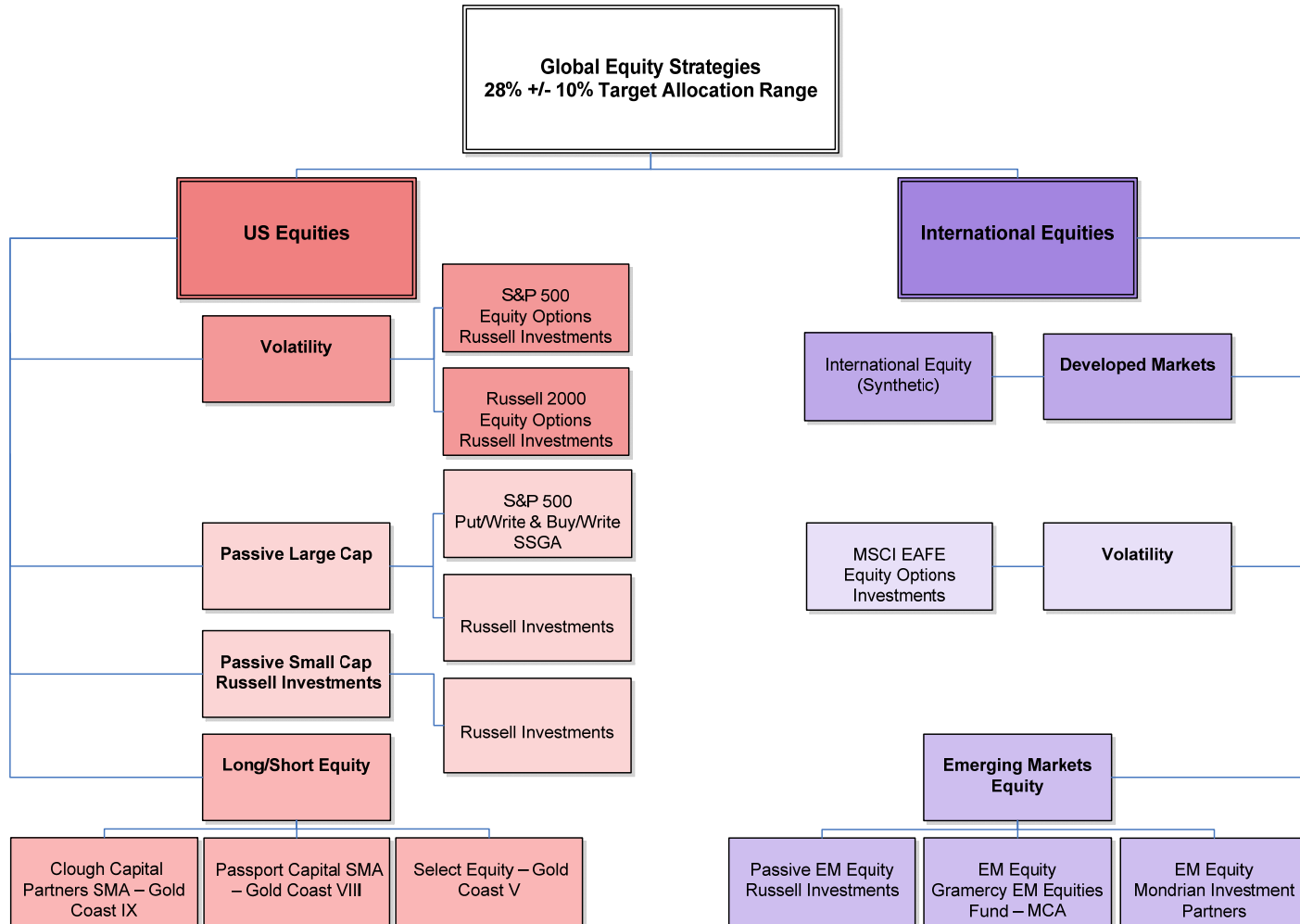
## Total Fund Risk Statistics

	% of Tot	Anlzd Ret	5 Years Ending June 30, 2015			Sortino Ratio	Rank	Info Ratio	Rank
			Rank	Anlzd Std Dev	Rank				
Domestic Equity	11.0%	5.5%	99	7.3%	1	1.0	99	-1.1	99
Russell 3000	--	17.5%	55	12.5%	25	2.4	28	--	--
International Developed	2.7%	19.3%	1	19.0%	99	1.5	10	0.9	28
MSCI EAFE	--	9.5%	83	15.7%	55	1.0	74	--	--
International Emerging	3.1%	3.4%	83	16.7%	22	0.3	77	-0.1	82
MSCI Emerging Markets	--	3.7%	77	18.1%	58	0.3	74	--	--
U.S. Credit Strategies	11.9%	9.7%	1	4.4%	24	1.9	22	0.5	1
50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index	--	7.0%	9	4.0%	15	2.2	4	--	--
Non-U.S. Credit Composite	12.6%	7.9%	1	7.6%	74	1.2	58	0.1	1
BofA ML Euro HY Constrained	--	7.1%	8	16.5%	99	0.7	96	--	--
Non-U.S. Core Composite	1.2%	3.6%	65	11.4%	93	0.4	92	0.2	80
Barclays Global Aggregate	--	2.1%	88	4.8%	30	0.6	83	--	--
Emerging Markets Debt Composite	5.9%	4.1%	63	8.2%	41	0.5	63	0.1	63
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified	--	3.9%	63	9.1%	60	0.6	62	--	--
Alpha Pool Composite	19.4%	8.6%	8	2.6%	6	4.6	1	2.1	1
91 Day T-Bill + 3%	--	3.1%	73	0.0%	1	--	--	--	--

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank
Private Equity Composite	15.1%	14.9%	--	5.5%	--	2.7	--
Cambridge Associates Global All PE ( Qtr Lag)	--	13.7%	--	8.3%	--	1.7	--
Real Estate Composite	6.5%	12.5%	--	5.6%	--	2.2	--
NCREIF Property Index 1 Qtr Lag	--	12.8%	--	5.1%	--	2.5	--
Real Assets Composite	5.6%	5.2%	--	4.4%	--	1.2	--
Bloomberg Commodity Index	--	-3.9%	--	15.5%	--	-0.3	--

Percent of Total equals 95% because Beta Overlay is not included as these statistics are not relevant for alternative asset classes.

## Global Equity Portfolio



San Bernardino County Employees' Retirement Association

Global Equity Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Total Equity</b>	<b>1,374,589,387</b>	<b>16.7</b>	<b>1.2</b>	<b>37</b>	<b>1.0</b>	<b>81</b>	<b>-1.4</b>	<b>79</b>	<b>7.1</b>	<b>95</b>	<b>7.3</b>	<b>93</b>	<b>--</b>	<b>--</b>
MSCI ACWI			<u>0.3</u>	63	<u>2.7</u>	66	<u>0.7</u>	67	<u>13.0</u>	70	<u>11.9</u>	75	<u>6.4</u>	84
Excess Return			0.9		-1.7		-2.1		-5.9		-4.6			
eA All Global Equity Gross Median			0.8		3.6		2.4		14.5		13.6		7.9	
<b>Domestic Equity</b>	<b>901,667,578</b>	<b>11.0</b>	<b>0.3</b>	<b>48</b>	<b>-0.2</b>	<b>87</b>	<b>-2.1</b>	<b>95</b>	<b>3.0</b>	<b>99</b>	<b>5.5</b>	<b>99</b>	<b>0.9</b>	<b>99</b>
Russell 3000			<u>0.1</u>	54	<u>1.9</u>	64	<u>7.3</u>	51	<u>17.7</u>	59	<u>17.5</u>	55	<u>8.2</u>	77
Excess Return			0.2		-2.1		-9.4		-14.7		-12.0		-7.3	
eA All US Equity Gross Median			0.3		3.2		7.3		18.3		17.8		9.1	
<b>Large Cap Equity</b>	<b>633,855,080</b>	<b>7.7</b>	<b>0.5</b>	<b>43</b>	<b>0.5</b>	<b>81</b>	<b>-1.6</b>	<b>95</b>	<b>2.9</b>	<b>99</b>	<b>6.2</b>	<b>99</b>	<b>1.4</b>	<b>99</b>
S&P 500			<u>0.3</u>	50	<u>1.2</u>	73	<u>7.4</u>	49	<u>17.3</u>	66	<u>17.3</u>	59	<u>7.9</u>	83
Excess Return			0.2		-0.7		-9.0		-14.4		-11.1		-6.5	
eA All US Equity Gross Median			0.3		3.2		7.3		18.3		17.8		9.1	
SsgA S&P500	581,416,274	7.1	2.4	12	4.7	35	5.9	64	9.4	98	10.1	99	3.9	99
S&P 500			<u>0.3</u>	50	<u>1.2</u>	73	<u>7.4</u>	49	<u>17.3</u>	66	<u>17.3</u>	59	<u>7.9</u>	83
Excess Return			2.1		3.5		-1.5		-7.9		-7.2		-4.0	
eA All US Equity Gross Median			0.3		3.2		7.3		18.3		17.8		9.1	
Russell US Large Cap Volatility	52,438,805	0.6	-28.5	99	-50.5	99	-64.4	99	-46.1	99	--	--	--	--
S&P 500			<u>0.3</u>	50	<u>1.2</u>	73	<u>7.4</u>	49	<u>17.3</u>	66	<u>17.3</u>	59	<u>7.9</u>	83
Excess Return			-28.8		-51.7		-71.8		-63.4					
eA All US Equity Gross Median			0.3		3.2		7.3		18.3		17.8		9.1	



San Bernardino County Employees' Retirement Association

Global Equity Strategies Performance Detail - Gross

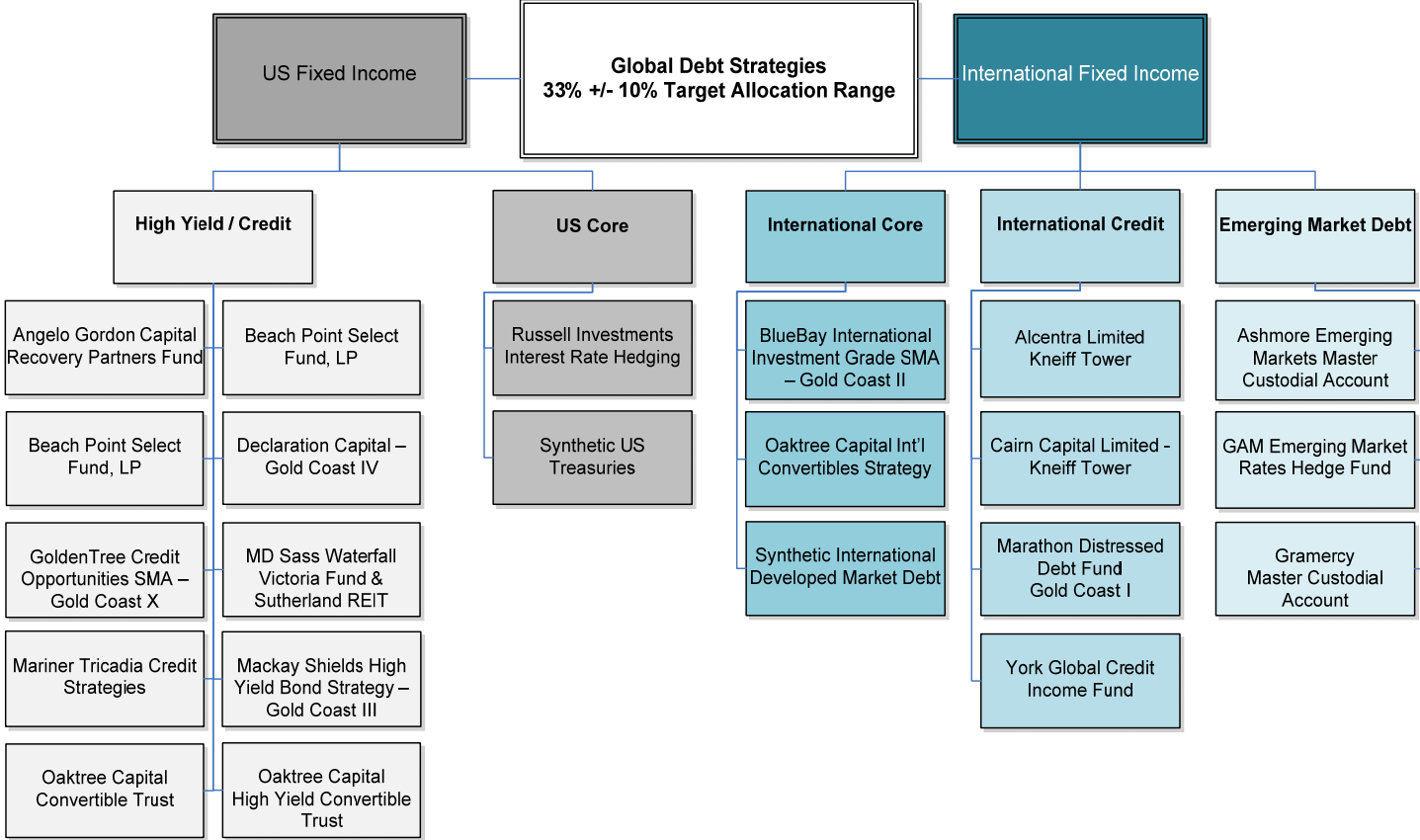
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Small Cap Equity</b>	<b>12,381,593</b>	<b>0.2</b>	<b>-37.1</b>	<b>99</b>	<b>-59.5</b>	<b>99</b>	<b>-39.2</b>	<b>99</b>	<b>-58.1</b>	<b>99</b>	--	--	--	--
<i>Russell 2000</i>			<u>0.4</u>	57	<u>4.8</u>	55	<u>6.5</u>	52	<u>17.8</u>	65	<u>17.1</u>	67	<u>8.4</u>	81
Excess Return			-37.5		-64.3		-45.7		-75.9					
<i>eA US Small Cap Equity Gross Median</i>			0.7		5.1		6.6		19.3		18.4		9.7	
<b>Russell US Small Cap Volatility</b>	<b>12,381,593</b>	<b>0.2</b>	<b>-37.1</b>	<b>99</b>	<b>-59.5</b>	<b>99</b>	<b>-39.2</b>	<b>99</b>	<b>-58.1</b>	<b>99</b>	--	--	--	--
<i>Russell 2000</i>			<u>0.4</u>	45	<u>4.8</u>	34	<u>6.5</u>	58	<u>17.8</u>	58	<u>17.1</u>	64	<u>8.4</u>	70
Excess Return			-37.5		-64.3		-45.7		-75.9					
<i>eA All US Equity Gross Median</i>			0.3		3.2		7.3		18.3		17.8		9.1	
<b>Long/Short Equity</b>	<b>255,430,906</b>	<b>3.1</b>	<b>2.8</b>	<b>9</b>	<b>5.6</b>	<b>27</b>	<b>0.1</b>	<b>92</b>	<b>9.4</b>	<b>98</b>	--	--	--	--
<i>Credit Suisse Long Shrt Eqt USD</i>			<u>1.7</u>	20	<u>3.5</u>	46	<u>6.0</u>	63	<u>10.8</u>	97	<u>7.8</u>	99	<u>6.7</u>	96
Excess Return			1.1		2.1		-5.9		-1.4					
<i>eA All US Equity Gross Median</i>			0.3		3.2		7.3		18.3		17.8		9.1	
Clough	89,182,433	1.1	1.3	27	5.4	29	6.1	63	10.4	97	--	--	--	--
Passport	93,577,389	1.1	6.6	1	8.5	11	0.7	90	7.4	99	--	--	--	--
Select Equity	72,671,085	0.9	0.1	54	2.3	60	-5.5	97	11.3	96	--	--	--	--
<i>Credit Suisse Long Shrt Eqt USD</i>			<u>1.7</u>	20	<u>3.5</u>	46	<u>6.0</u>	63	<u>10.8</u>	97	<u>7.8</u>	99	<u>6.7</u>	96
Excess Return			-1.6		-1.2		-11.5		0.5					
<i>eA All US Equity Gross Median</i>			0.3		3.2		7.3		18.3		17.8		9.1	

San Bernardino County Employees' Retirement Association

Global Equity Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>International Equity</b>	<b>472,921,809</b>	<b>5.8</b>	<b>2.9</b>	<b>28</b>	<b>3.2</b>	<b>92</b>	<b>-0.1</b>	<b>32</b>	<b>13.7</b>	<b>45</b>	<b>9.8</b>	<b>79</b>	<b>7.0</b>	<b>45</b>
MSCI EAFE			<u>0.6</u>	81	<u>5.5</u>	74	<u>-4.2</u>	79	<u>12.0</u>	74	<u>9.5</u>	83	<u>5.1</u>	94
Excess Return			2.3		-2.3		4.1		1.7		0.3		1.9	
eA All EAFE Equity Gross Median			1.8		6.9		-1.5		13.2		11.3		6.8	
<b>International Developed</b>	<b>220,221,016</b>	<b>2.7</b>	<b>7.2</b>	<b>2</b>	<b>8.6</b>	<b>29</b>	<b>8.1</b>	<b>3</b>	<b>31.4</b>	<b>1</b>	<b>19.3</b>	<b>1</b>	<b>9.3</b>	<b>11</b>
MSCI EAFE			<u>0.6</u>	81	<u>5.5</u>	74	<u>-4.2</u>	79	<u>12.0</u>	74	<u>9.5</u>	83	<u>5.1</u>	94
Excess Return			6.6		3.1		12.3		19.4		9.8		4.2	
eA All EAFE Equity Gross Median			1.8		6.9		-1.5		13.2		11.3		6.8	
Russell International Volatility	220,196,058	2.7	7.2	2	8.6	29	8.1	3	30.3	1	--	--	--	--
MSCI EAFE			<u>0.6</u>	81	<u>5.5</u>	74	<u>-4.2</u>	79	<u>12.0</u>	74	<u>9.5</u>	83	<u>5.1</u>	94
Excess Return			6.6		3.1		12.3		18.3					
eA All EAFE Equity Gross Median			1.8		6.9		-1.5		13.2		11.3		6.8	
<b>International Emerging</b>	<b>252,700,792</b>	<b>3.1</b>	<b>-0.7</b>	<b>83</b>	<b>-1.0</b>	<b>92</b>	<b>-6.4</b>	<b>72</b>	<b>2.6</b>	<b>88</b>	<b>3.4</b>	<b>83</b>	<b>8.4</b>	<b>73</b>
MSCI Emerging Markets			<u>0.7</u>	59	<u>2.9</u>	43	<u>-5.1</u>	59	<u>3.7</u>	73	<u>3.7</u>	77	<u>8.1</u>	78
Excess Return			-1.4		-3.9		-1.3		-1.1		-0.3		0.3	
eA Emg Mkts Equity Gross Median			1.0		2.6		-3.7		5.8		5.2		9.5	
Mondrian	186,373,523	2.3	-0.8	86	-0.8	91	-8.6	87	2.8	84	5.2	52	9.1	66
MSCI Emerging Markets			<u>0.7</u>	59	<u>2.9</u>	43	<u>-5.1</u>	59	<u>3.7</u>	73	<u>3.7</u>	77	<u>8.1</u>	78
Excess Return			-1.5		-3.7		-3.5		-0.9		1.5		1.0	
eA Emg Mkts Equity Gross Median			1.0		2.6		-3.7		5.8		5.2		9.5	
Gramercy Emerging Market Equity	66,228,101	0.8	0.1	73	-1.3	93	2.0	12	--	--	--	--	--	--
MSCI Emerging Markets			<u>0.7</u>	59	<u>2.9</u>	43	<u>-5.1</u>	59	<u>3.7</u>	73	<u>3.7</u>	77	<u>8.1</u>	78
Excess Return			-0.6		-4.2		7.1							
eA Emg Mkts Equity Gross Median			1.0		2.6		-3.7		5.8		5.2		9.5	

**Global Debt Strategies**



# San Bernardino County Employees' Retirement Association

## Global Debt Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Total Fixed</b>	<b>2,492,607,118</b>	<b>30.3</b>	<b>2.7</b>	<b>8</b>	<b>2.9</b>	<b>11</b>	<b>1.4</b>	<b>24</b>	<b>8.0</b>	<b>8</b>	<b>8.0</b>	<b>13</b>	<b>--</b>	<b>--</b>
<i>eA All Global Fixed Inc Gross Median</i>			-0.7		-0.1		-2.7		3.1		4.6		4.9	
<b>U.S. Credit Strategies</b>	<b>979,769,508</b>	<b>11.9</b>	<b>2.9</b>	<b>8</b>	<b>5.1</b>	<b>1</b>	<b>5.9</b>	<b>1</b>	<b>9.8</b>	<b>3</b>	<b>9.7</b>	<b>1</b>	<b>9.2</b>	<b>1</b>
<i>50% Credit Suisse Leveraged Loan Index / 50% BofA ML US HY BB-B Rated Constrained Index</i>			<u>0.4</u>	21	<u>2.8</u>	7	<u>1.4</u>	18	<u>6.0</u>	9	<u>7.0</u>	9	<u>6.0</u>	24
Excess Return			2.5		2.3		4.5		3.8		2.7		3.2	
<i>BofA Merrill Lynch US High Yield Master II TR</i>			0.0	27	2.5	8	-0.5	34	6.8	6	8.4	1	7.8	1
<i>eA Global Credit Fixed Income Gross Median</i>			-1.1		-0.8		-3.7		3.6		5.7		5.6	
AG Capital	7,204,387	0.1	-1.4	62	-1.4	54	-1.2	37	10.0	3	7.3	7	--	--
Golden Tree Asset Management	331,688,580	4.0	3.3	4	8.5	1	14.7	1	15.2	1	14.6	1	--	--
Beach Point Capital (Formerly Post)	123,005,797	1.5	4.7	1	4.8	1	5.5	1	12.5	1	10.0	1	--	--
Declaration / Meta Capital	86,571,404	1.1	0.8	20	2.4	8	5.4	1	7.6	4	--	--	--	--
Golden Tree Distressed Debt	32,158,965	0.4	8.1	1	13.9	1	29.6	1	22.5	1	14.5	1	--	--
Mackay / Gold Coast	115,645,991	1.4	1.0	19	2.4	8	1.2	20	9.2	3	8.6	1	8.8	1
Mariner Tricadia	79,440,501	1.0	1.0	19	2.9	7	3.7	1	8.2	3	7.3	7	--	--
MD Sass	29,062,136	0.4	-0.6	29	2.3	8	5.1	1	9.9	3	10.6	1	--	--
OCM Convertible	17,307,844	0.2	3.6	1	6.2	1	3.5	2	13.4	1	10.5	1	--	--
OCM High Income	15,195,080	0.2	2.4	10	3.7	2	2.5	12	8.5	3	7.0	9	--	--
Russell Interest Rate Hedging	34,614,476	0.4	15.5	1	4.5	1	-28.8	99	-19.0	99	-19.5	99	--	--
Stone Tower Credit	71,869,538	0.9	0.9	21	-0.4	55	-1.8	47	6.7	14	--	--	--	--
Waterfall Victoria	35,644,406	0.4	1.6	--	--	--	--	--	--	--	--	--	--	--

# San Bernardino County Employees' Retirement Association

## Global Debt Strategies Performance Detail - Gross

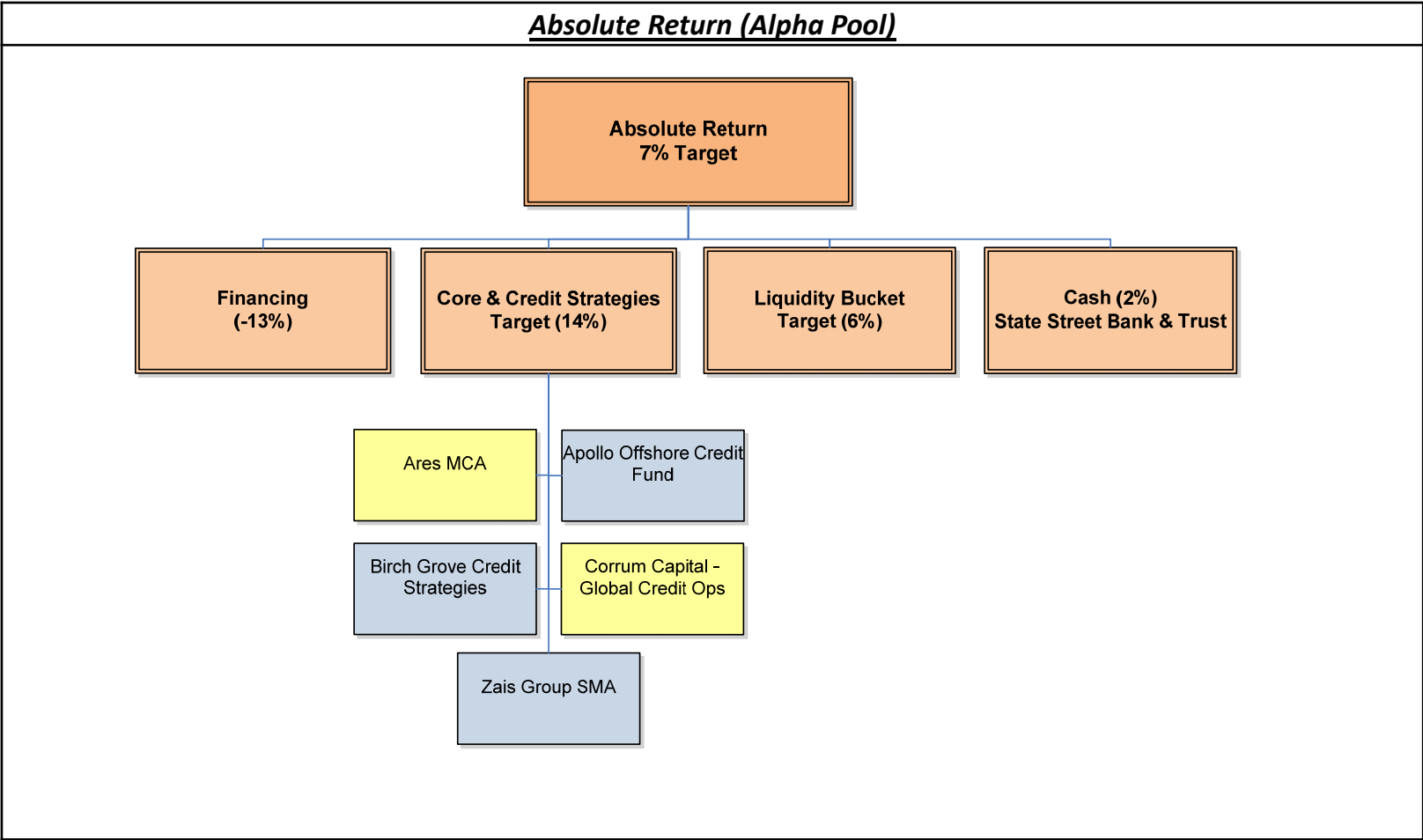
	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Non-U.S. Fixed Income Composite</b>	<b>1,512,837,610</b>	<b>18.4</b>	<b>2.6</b>	<b>8</b>	<b>1.5</b>	<b>25</b>	<b>-1.3</b>	<b>45</b>	<b>7.0</b>	<b>13</b>	<b>6.7</b>	<b>24</b>	<b>5.0</b>	<b>48</b>
Barclays Global Aggregate			-1.2	63	-3.1	76	-7.1	79	-0.8	85	2.1	88	3.5	90
Excess Return			3.8		4.6		5.8		7.8		4.6		1.5	
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
<b>Non-U.S. Credit Composite</b>	<b>1,031,306,677</b>	<b>12.6</b>	<b>3.0</b>	<b>7</b>	<b>1.3</b>	<b>11</b>	<b>-1.0</b>	<b>36</b>	<b>9.2</b>	<b>3</b>	<b>7.9</b>	<b>1</b>	<b>--</b>	<b>--</b>
BofA ML Euro HY Constrained			-0.3	28	-8.8	99	-19.4	99	4.8	30	7.1	8	7.0	1
Excess Return			3.3		10.1		18.4		4.4		0.8			
eA Global Credit Fixed Income Gross Median			-1.1		-0.8		-3.7		3.6		5.7		5.6	
Alcentra Core European Credit	262,332,757	3.2	7.2	1	5.5	1	4.9	1	17.7	1	--	--	--	--
Marathon/Gold Coast	199,866,908	2.4	1.8	15	3.6	2	5.9	1	11.8	2	4.8	79	--	--
Oaktree Capital	60,831,732	0.7	1.0	19	3.3	3	-6.7	84	5.7	10	5.8	50	--	--
York Global Credit	128,316,534	1.6	2.6	9	1.8	9	2.4	13	--	--	--	--	--	--
BofA ML Euro HY Constrained			-0.3	28	-8.8	99	-19.4	99	4.8	30	7.1	8	7.0	1
Excess Return			2.9		10.6		21.8							
eA Global Credit Fixed Income Gross Median			-1.1		-0.8		-3.7		3.6		5.7		5.6	
Cairn Composite	281,630,411	3.4	1.9	14	-0.9	51	-4.2	55	3.4	61	6.4	29	--	--
BofA ML Euro HY Constrained			-0.3	28	-8.8	99	-19.4	99	4.8	30	7.1	8	7.0	1
Excess Return			2.2		7.9		15.2		-1.4		-0.7			
eA Global Credit Fixed Income Gross Median			-1.1		-0.8		-3.7		3.6		5.7		5.6	
<b>Non-U.S. Core Composite</b>	<b>98,328,335</b>	<b>1.2</b>	<b>0.2</b>	<b>34</b>	<b>-8.3</b>	<b>99</b>	<b>-17.0</b>	<b>97</b>	<b>1.8</b>	<b>64</b>	<b>3.6</b>	<b>65</b>	<b>--</b>	<b>--</b>
Barclays Global Aggregate			-1.2	63	-3.1	76	-7.1	79	-0.8	85	2.1	88	3.5	90
Excess Return			1.4		-5.2		-9.9		2.6		1.5			
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Bluebay/Goldcoast	98,328,335	1.2	0.2	34	-8.3	99	-17.0	97	1.7	65	3.5	66	--	--
Barclays Global Aggregate			-1.2	63	-3.1	76	-7.1	79	-0.8	85	2.1	88	3.5	90
Excess Return			1.4		-5.2		-9.9		2.5		1.4			
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
<b>Emerging Markets Debt Composite</b>	<b>481,530,933</b>	<b>5.9</b>	<b>1.7</b>	<b>17</b>	<b>1.9</b>	<b>37</b>	<b>-2.1</b>	<b>36</b>	<b>1.9</b>	<b>56</b>	<b>4.1</b>	<b>63</b>	<b>4.9</b>	<b>99</b>
50% JPM EMBI Global Diversified/50% JPM GBI - EM Global Diversified			-0.6	73	-1.6	67	-7.7	61	0.2	64	3.9	63	6.7	87
Excess Return			2.3		3.5		5.6		1.7		0.2		-1.8	
eA All Emg Mkts Fixed Inc Gross Median			0.0		0.8		-4.3		3.0		5.9		8.2	

# San Bernardino County Employees' Retirement Association

## Global Debt Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Ashmore Emerging Markets Liquid Investments</b>	<b>171,296,762</b>	<b>2.1</b>	<b>3.8</b>	<b>4</b>	<b>5.4</b>	<b>2</b>	<b>-2.3</b>	<b>37</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
JP Morgan GBI - EM Global Diversified Index			-1.0	82	-4.9	85	-15.4	91	-3.8	93	0.9	89	5.9	94
Excess Return			4.8		10.3		13.1							
eA All Emg Mkts Fixed Inc Gross Median			0.0		0.8		-4.3		3.0		5.9		8.2	
Ashmore EM HY CRP DB FD I3	20,879,780	0.3	7.7	--	--	--	--	--	--	--	--	--	--	--
Ashmore Emerging HY Master	4,733,814	0.1	--	--	--	--	--	--	--	--	--	--	--	--
Ashmore Emerging HY Sep 2014	3,481,369	0.0	--	--	--	--	--	--	--	--	--	--	--	--
Ashmore Emerging Markets	22,886,415	0.3	--	--	--	--	--	--	--	--	--	--	--	--
<b>Ashmore Local Currency</b>	<b>56,700,748</b>	<b>0.7</b>	<b>-0.7</b>	<b>51</b>	<b>-4.6</b>	<b>91</b>	<b>-16.0</b>	<b>96</b>	<b>-5.2</b>	<b>99</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>
JP Morgan ELMI+			1.2	16	-1.2	61	-10.2	89	-2.1	93	0.0	99	3.5	93
Excess Return			-1.9		-3.4		-5.8		-3.1					
JP Morgan EMBI Global Index			-0.3	45	1.8	22	-1.6	47	3.4	45	6.5	25	7.3	14
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
GAM Emerging Markets Rates	41,377,000	0.5	0.3	42	0.7	52	-0.2	24	--	--	--	--	--	--
JP Morgan ELMI+			1.2	24	-1.2	64	-10.2	71	-2.1	76	0.0	99	3.5	99
Excess Return			-0.9		1.9		10.0							
JP Morgan EMBI Global Index			-0.3	61	1.8	38	-1.6	34	3.4	43	6.5	41	7.3	82
eA All Emg Mkts Fixed Inc Gross Median			0.0		0.8		-4.3		3.0		5.9		8.2	
Gramercy Funds Management LLC	164,635,223	2.0	1.3	23	3.0	19	7.7	1	--	--	--	--	--	--
JP Morgan ELMI+			1.2	24	-1.2	64	-10.2	71	-2.1	76	0.0	99	3.5	99
Excess Return			0.1		4.2		17.9							
JP Morgan EMBI Global Index			-0.3	61	1.8	38	-1.6	34	3.4	43	6.5	41	7.3	82
eA All Emg Mkts Fixed Inc Gross Median			0.0		0.8		-4.3		3.0		5.9		8.2	
Prudential Investment Management	47,521,200	0.6	-0.4	63	-3.6	74	-5.0	52	--	--	--	--	--	--
JP Morgan ELMI+			1.2	24	-1.2	64	-10.2	71	-2.1	76	0.0	99	3.5	99
Excess Return			-1.6		-2.4		5.2							
JP Morgan EMBI Global Index			-0.3	61	1.8	38	-1.6	34	3.4	43	6.5	41	7.3	82
eA All Emg Mkts Fixed Inc Gross Median			0.0		0.8		-4.3		3.0		5.9		8.2	

**Absolute Return (Alpha Pool)**



# San Bernardino County Employees' Retirement Association

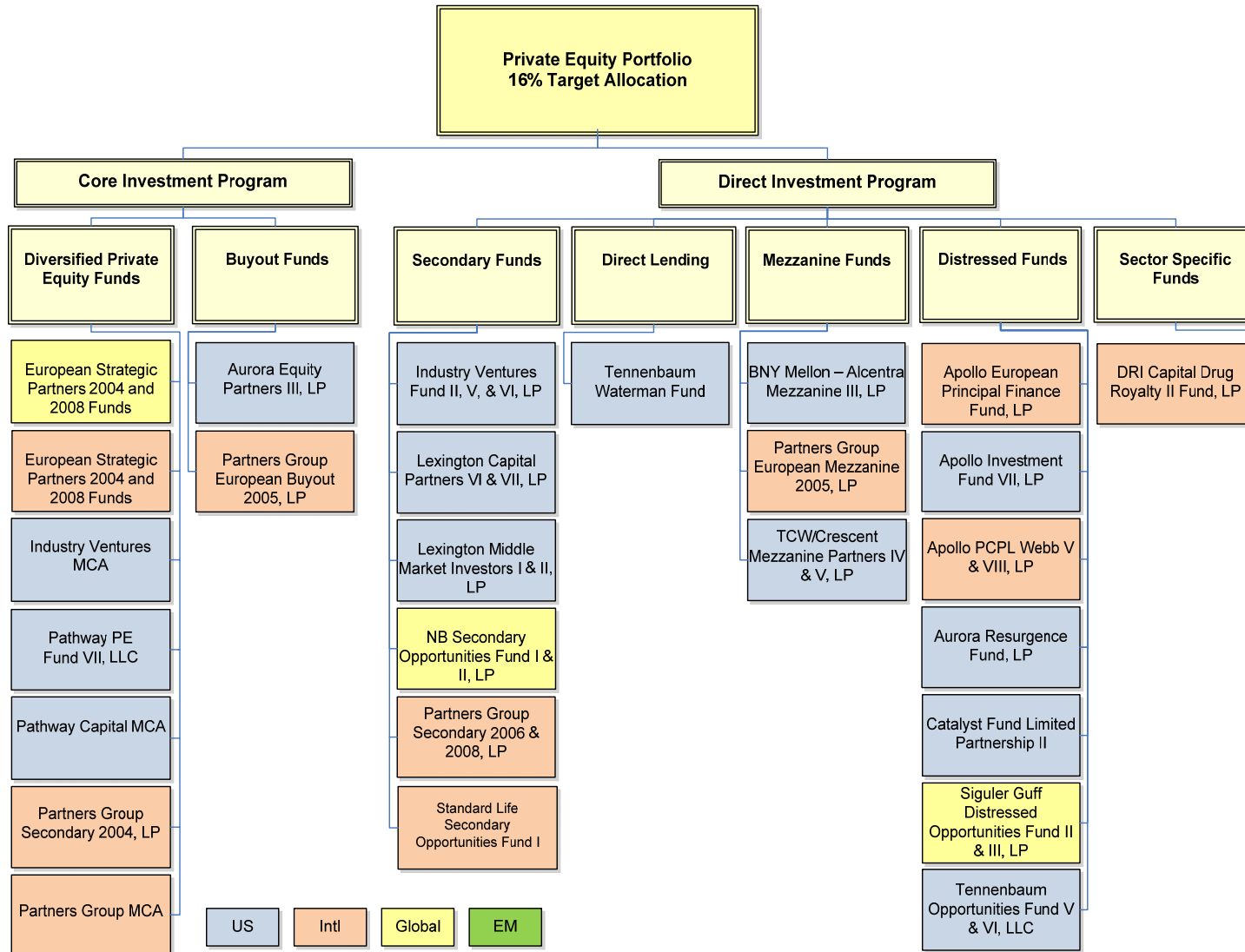
## Alpha Pool Strategies Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Alpha Pool Composite</b>	<b>1,596,065,756</b>	<b>19.4</b>	<b>1.3</b>	<b>15</b>	<b>2.2</b>	<b>19</b>	<b>2.3</b>	<b>16</b>	<b>6.9</b>	<b>13</b>	<b>8.6</b>	<b>8</b>	<b>--</b>	<b>--</b>
91 Day T-Bill + 3%			0.7	24	1.5	25	3.0	11	3.0	52	3.1	73	4.3	63
Excess Return			0.6		0.7		-0.7		3.9		5.5			
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Alpha Liquidity (Ssga)	154,694,017	1.9	0.1	36	0.1	47	0.2	32	0.3	75	0.3	99	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Apollo Global Management	25,400,060	0.3	--	--	--	--	--	--	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Ares Eco Alpha*	223,300,282	2.7	-40.2	99	-39.9	99	-42.4	99	-10.7	99	-0.5	99	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Ares Strategic Investment*	246,734,121	3.0	148.7	1	151.0	1	139.9	1	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Birch Grove Credit Strategies	100,313,256	1.2	2.1	10	3.9	6	7.1	1	--	--	--	--	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Sterling Stamos	154,439,261	1.9	1.8	10	1.2	30	4.0	3	5.0	26	3.3	69	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Stone Tower Off	373,247,431	4.5	2.3	9	3.9	6	6.4	1	8.9	4	10.4	1	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Zais	119,992,079	1.5	3.8	5	4.9	2	11.5	1	12.5	1	24.9	1	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	
Zais Group Invest Advisors	193,985,572	2.4	3.5	6	5.5	2	6.9	1	10.2	2	--	--	--	--
eA All Global Fixed Inc Gross Median			-0.7		-0.1		-2.7		3.1		4.6		4.9	

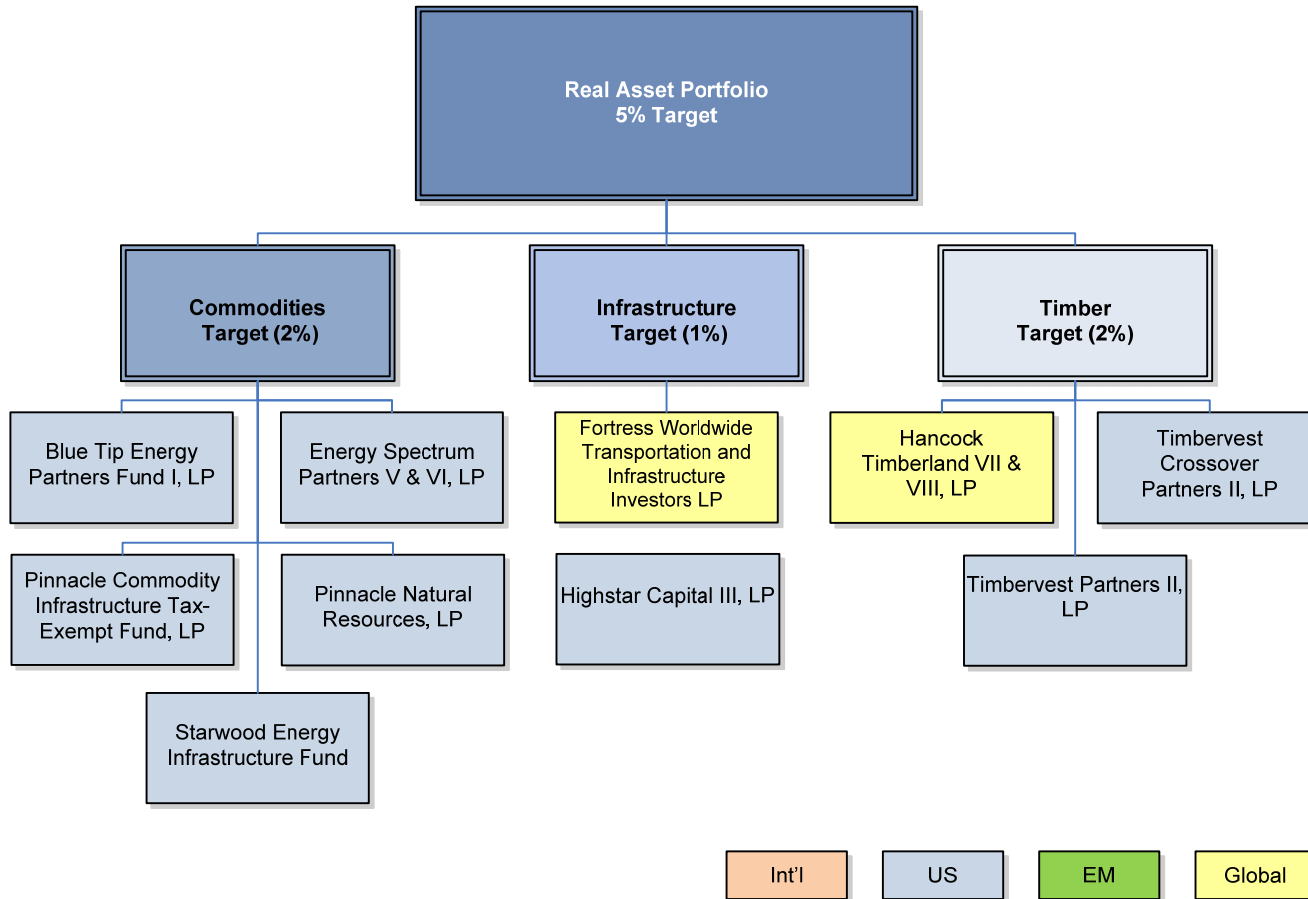
\*Pending custody accounting revision.



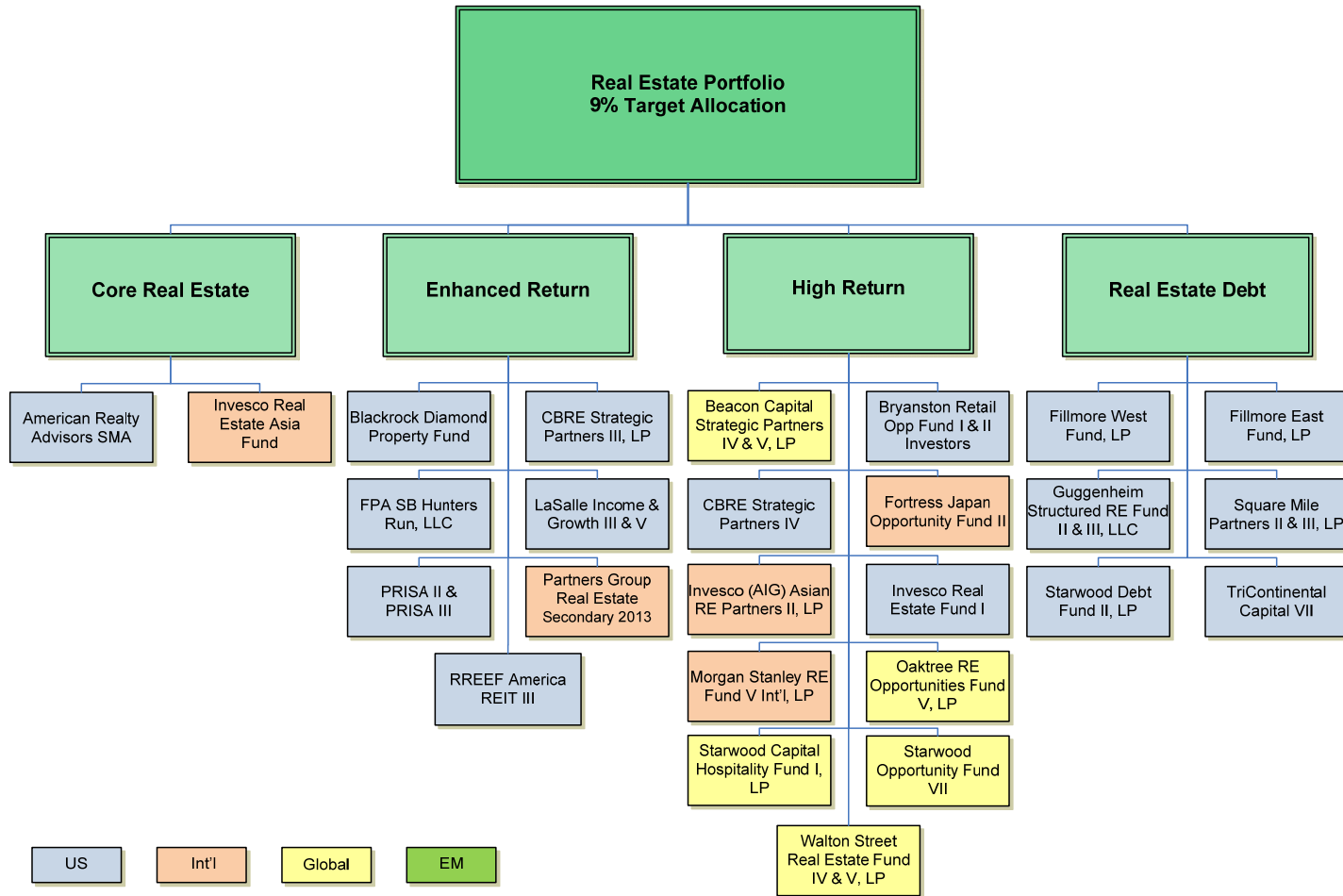
# Private Equity



## Real Asset Portfolio



# Real Estate



# San Bernardino County Employees' Retirement Association

## Alternatives Performance Detail - Gross

	Market Value (\$)	% of Portfolio	3 Mo (%)	Rank	YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank
<b>Private Equity Composite</b>	<b>1,238,513,322</b>	<b>15.1</b>	<b>6.1</b>	--	<b>5.9</b>	--	<b>11.2</b>	--	<b>14.4</b>	--	<b>14.9</b>	--	<b>8.7</b>	--
Cambridge Associates Global All PE ( Qtr Lag)			1.7	--	3.8	--	8.8	--	13.0	--	13.7	--	12.9	--
Excess Return			4.4		2.1		2.4		1.4		1.2		-4.2	
Russell 3000			0.1	--	1.9	--	7.3	--	17.7	--	17.5	--	8.2	--
Cambridge Associates US All PE 1 Qtr Lag			2.6	--	3.5	--	10.5	--	14.4	--	15.1	--	13.7	--
<b>Real Estate Composite</b>	<b>530,496,160</b>	<b>6.5</b>	<b>2.5</b>	--	<b>4.1</b>	--	<b>10.4</b>	--	<b>9.8</b>	--	<b>12.5</b>	--	<b>4.8</b>	--
NCREIF Property Index 1 Qtr Lag			3.6	--	6.7	--	12.7	--	11.5	--	12.8	--	8.4	--
Excess Return			-1.1		-2.6		-2.3		-1.7		-0.3		-3.6	
<b>Real Assets Composite</b>	<b>459,429,340</b>	<b>5.6</b>	<b>-1.8</b>	--	<b>3.3</b>	--	<b>4.5</b>	--	<b>5.1</b>	--	<b>5.2</b>	--	--	--
Bloomberg Commodity Index			4.9	--	-1.3	--	-23.5	--	-8.7	--	-3.9	--	-2.6	--
Excess Return			-6.7		4.6		28.0		13.8		9.1			
NCREIF Timberland 1 Qtr Lag			1.8	--	7.9	--	10.6	--	9.8	--	6.2	--	8.3	--
Timber	205,599,412	2.5	-0.3	--	5.8	--	3.9	--	9.1	--	5.3	--	--	--
NCREIF Timberland 1 Qtr Lag			1.8	--	7.9	--	10.6	--	9.8	--	6.2	--	8.3	--
Excess Return			-2.1		-2.1		-6.7		-0.7		-0.9			
<b>Infrastructure</b>	<b>111,527,042</b>	<b>1.4</b>	<b>1.6</b>	--	<b>7.7</b>	--	<b>19.1</b>	--	<b>0.4</b>	--	<b>6.8</b>	--	--	--
Russell 3000			0.1	--	1.9	--	7.3	--	17.7	--	17.5	--	8.2	--
Excess Return			1.5		5.8		11.8		-17.3		-10.7			
<b>Commodities</b>	<b>142,302,886</b>	<b>1.7</b>	<b>-6.4</b>	--	<b>-3.0</b>	--	<b>-1.6</b>	--	<b>1.7</b>	--	<b>4.1</b>	--	--	--
Bloomberg Commodity Index			4.9	--	-1.3	--	-23.5	--	-8.7	--	-3.9	--	-2.6	--
Excess Return			-11.3		-1.7		21.9		10.4		8.0			

## Appendix: Private Equity and Real Estate Performance



# San Bernardino County Employees' Retirement Association

## Private Equity Performance Ending March 31, 2015

Investment Name	Vintage Year	Commitment Amount	Contributed Capital	Distributions	Market Value	Net IRR	Investment Multiple
Apollo European Principal Finance Fund (Feeder), L	2009	\$ 53,501,728	\$ 46,162,052	\$ 57,203,022	\$ 9,980,830	11.52	1.46x
Apollo Investment Fund VII, L.P.	2008	\$ 10,000,000	\$ 7,873,192	\$ 12,546,228	\$ 4,321,653	26.14	2.15x
Apollo PCPL Webb V	2010	\$ 4,844,398	\$ 4,844,398	\$ 5,169,483	\$ 68,579	6.61	1.08x
Apollo PCPL Webb VIII	2010	\$ 4,734,303	\$ 4,734,303	\$ 11,945,626	\$ 39,204	46.13	2.53x
Aurora Equity Partners III, L.P.	2005	\$ 25,000,000	\$ 23,544,536	\$ 41,140,682	\$ 2,089,641	14.33	1.72x
Aurora Equity Partners IV, L.P.	2012	\$ 20,000,000	\$ 12,383,549	\$ 9,441	\$ 18,440,589	13.19	1.30x
Aurora Resurgence Fund, L.P.	2008	\$ 15,000,000	\$ 5,653,009	\$ 10,350,965	\$ -	17.6	1.82x
Baring Asia Private Equity Fund IV, L.P.	2012	\$ 8,000,000	\$ 2,785,847	\$ 435,400	\$ 2,651,410	12.25	1.11x
BNY Mellon - Alcentra Mezzanine III*	2007	\$ 25,000,000	\$ 23,254,658	\$ 26,583,881	\$ 85,416	11.81	1.14x
Catalyst Fund II, L.P.	2009	\$ 10,000,000	\$ 9,934,668	\$ 4,033,566	\$ 14,411,124	12.59	1.85x
Charlesbank Equity Fund VIII	2007	\$ 7,500,000	\$ 764,635	\$ -	\$ 806,103	5.43	1.05x
DRI II, L.P.	2010	\$ 20,000,000	\$ 19,917,669	\$ 17,371,977	\$ 6,314,232	13.77	1.20x
European Strategic Partners 2004	2004	\$ 239,864,499	\$ 218,044,995	\$ 172,352,087	\$ 87,875,381	3.32	1.19x
European Strategic Partners 2008	2010	\$ 31,000,923	\$ 21,176,868	\$ 3,587,780	\$ 18,689,327	1.78	1.04x
Industry Ventures Fund V	2008	\$ 10,000,000	\$ 9,500,000	\$ 13,966,628	\$ 14,032,543	35.71	2.95x
Industry Ventures Fund VI	2011	\$ 20,000,000	\$ 17,200,000	\$ 7,775,956	\$ 15,211,426	16.42	1.34x
Industry Ventures Partnership Holdings Fund II, L.P.	2012	\$ 25,000,000	\$ 16,750,000	\$ 1,906,090	\$ 32,826,427	44.82	2.07x
Industry Ventures Partnership Holdings Fund III-A, L.P.	2014	\$ 12,500,000	\$ 6,187,500	\$ 1,813,725	\$ 5,707,770	34.48	1.22x
Industry Ventures Partnership Holdings Fund III, L.P.	2013	\$ 25,000,000	\$ 7,750,000	\$ 412,574	\$ 8,731,723	29.91	1.18x
Industry Ventures Secondary VII, L.P.	2013	\$ 25,000,000	\$ 8,250,000	\$ 1,074,835	\$ 8,405,887	28.44	1.15x
Insight Venture Partners III Co-Invest	2014	\$ 4,000,000	\$ 3,144,000	\$ -	\$ 3,202,974	2.66	1.02x
Lexington Capital Partners VI-B	2006	\$ 25,000,000	\$ 24,634,637	\$ 23,013,818	\$ 10,987,046	7.08	1.38x
Lexington Capital Partners VII (Offshore)	2011	\$ 25,000,000	\$ 18,979,713	\$ 12,296,400	\$ 15,727,376	20.09	1.47x
Lexington Middle Market I	2005	\$ 25,000,000	\$ 24,771,942	\$ 25,699,752	\$ 11,336,364	11.34	1.50x
Lexington Middle Market II - Offshore	2008	\$ 10,000,000	\$ 8,734,249	\$ 5,347,669	\$ 6,650,433	13.61	1.37x
NB Secondary Opportunities I, LP	2005	\$ 20,000,000	\$ 18,500,843	\$ 18,874,350	\$ 5,946,156	7.46	1.34x
NB Secondary Opportunities II, LP	2008	\$ 20,000,000	\$ 16,721,949	\$ 16,422,252	\$ 9,705,402	17.07	1.56x
Partners Group Access 632, L.P.	2014	\$ 2,782,028	\$ 2,782,028	\$ -	\$ 2,399,145	-13.99	0.86x
Partners Group Access 648, L.P.	2014	\$ 4,410,387	\$ 4,028,602	\$ -	\$ 3,627,715	-10.47	0.90x
Partners Group Client Access 8 LP	2014	\$ 5,531,585	\$ 5,531,585	\$ -	\$ 6,272,233	11.54	1.13x
Partners Group Direct Investment 2012, L.P.	2013	\$ 17,903,542	\$ 10,696,931	\$ 258,604	\$ 10,165,732	-2.29	0.97x
Partners Group European Mandate, L.P.	2004	\$ 236,045,833	\$ 194,887,796	\$ 155,927,235	\$ 97,382,357	5.58	1.30x
Partners Group European Mezzanine 2005	2005	\$ 101,076,654	\$ 101,076,654	\$ 92,354,001	\$ 45,852,240	5.33	1.37x
Partners Group Princess Learning IC LTD	2014	\$ 4,980,000	\$ 3,175,572	\$ 1,550,144	\$ 1,285,820	-21.95	0.89x
Partners Group Secondary 2006 LP	2006	\$ 54,303,721	\$ 51,077,528	\$ 43,032,941	\$ 16,725,848	3.66	1.17x
Partners Group Secondary 2008, L.P.	2009	\$ 26,505,295	\$ 23,690,725	\$ 16,416,574	\$ 18,122,765	10.67	1.45x
Partners Group Starfrost Limited	2014	\$ 6,154,271	\$ 3,687,483	\$ -	\$ 3,121,115	-12.73	0.85x
Pathway Private Equity Fund VII, L.P.*	2004	\$ 904,500,000	\$ 703,756,793	\$ 508,792,860	\$ 576,346,203	9.29	1.46x
Siguler Guff DOF II	2006	\$ 30,000,000	\$ 30,000,000	\$ 38,627,086	\$ 4,484,810	9.19	1.44x
Siguler Guff DOF III	2008	\$ 10,000,000	\$ 9,650,000	\$ 9,576,936	\$ 5,248,331	11.55	1.54x
SL Capital SOF I LP	2014	\$ 25,000,000	\$ 8,892,703	\$ -	\$ 9,286,601	5.98	1.04x
TCW/Crescent Mezzanine IV, L.P.	2006	\$ 40,000,000	\$ 39,590,976	\$ 42,589,665	\$ 5,279,320	4.38	1.21x
TCW/Crescent Mezzanine V, L.P.	2008	\$ 20,000,000	\$ 19,688,757	\$ 19,180,140	\$ 6,564,543	10.02	1.31x
Tennenbaum Opportunities Fund V, L.P.	2007	\$ 10,000,000	\$ 10,000,000	\$ 7,453,912	\$ 5,256,870	4.45	1.27x
Tennenbaum Opportunities Fund VI, L.P.	2011	\$ 20,000,000	\$ 18,992,453	\$ 3,394,444	\$ 19,173,859	8.64	1.19x
Tennenbaum Waterman Fund, LP	2012	\$ 70,000,000	\$ 70,000,000	\$ 5,854,234	\$ 75,264,613	11.88	1.16x
The Resolute Fund III	2014	\$ 8,000,000	\$ 1,262,559	\$ -	\$ 1,280,212	1.78	1.01x
Thoma Bravo XI	2014	\$ 8,000,000	\$ 3,029,540	\$ -	\$ 3,004,742	-1.96	0.99x
<b>Total</b>		<b>\$ 2,326,139,166</b>	<b>\$ 1,897,697,897</b>	<b>\$ 1,436,342,962</b>	<b>\$ 1,230,390,090</b>	<b>7.97</b>	<b>1.37x</b>
Cambridge Associates Global ALL PE						<b>8.91</b>	
Cambridge Associates U.S. ALL PE						<b>9.54</b>	

Note: all metrics are calculated since inception

\* Denotes cash adjusted



# San Bernardino County Employees' Retirement Association

## Real Estate Performance Ending March 31, 2015

Investment Name	Vintage Year	Commitment Amount	Contributed Capital	Distributions	Market Value	Net IRR	Investment Multiple
American Realty Advisors	1996	\$ 128,009,773	\$ 128,009,773	\$ 92,063,126	\$ 173,572,496	7.34	2.08x
American Realty Value Add	2006	\$ 12,925,215	\$ 12,925,215	\$ 2,175,000	\$ 22,660,814	8.77	1.92x
Beacon Capital Strategic Partners IV, L.P.	2006	\$ 39,000,000	\$ 38,000,000	\$ 21,076,045	\$ 11,076,695	-3.02	0.85x
Beacon Capital Strategic Partners V, L.P.	2007	\$ 20,000,000	\$ 18,000,000	\$ 6,048,644	\$ 5,309,703	-8.3	0.63x
BlackRock Diamond Property Fund	2005	\$ 25,000,000	\$ 25,000,000	\$ 12,642,949	\$ 6,254,700	-5.01	0.76x
Bryanston Real Estate Opportunity Fund II, L.P.	2009	\$ 20,000,000	\$ 8,589,256	\$ 9,103,079	\$ 1,188,237	6.63	1.20x
Bryanston Retail Opportunity Fund, L.P.	2004	\$ 20,000,000	\$ 8,228,165	\$ 17,865,242	\$ 4,635,891	71.11	2.73x
CBRE Strategic Partners III	2003	\$ 10,000,000	\$ 10,000,000	\$ 12,698,783	\$ -	8.02	1.27x
CBRE Strategic Partners IV	2005	\$ 40,000,000	\$ 40,000,000	\$ 1,395,603	\$ 3,421,763	-24.61	0.12x
Fillmore East Fund	2006	\$ 25,000,000	\$ 31,403,818	\$ 20,262,179	\$ 371,990	-10.03	0.66x
Fillmore West Fund	2008	\$ 20,000,000	\$ 20,104,834	\$ 8,891,061	\$ 13,106,727	1.61	1.09x
Fortress Japan Opportunity Fund II	2012	\$ 21,739,130	\$ 14,402,795	\$ 2,135,533	\$ 18,757,696	22.23	1.47x
Invesco Asian Real Estate Partners II (USD), LP	2007	\$ 20,000,000	\$ 8,314,147	\$ 6,297,511	\$ 3,416,857	4.58	1.17x
Invesco High Yield Debt Fund I	2007	\$ 20,000,000	\$ 20,000,000	\$ 8,567,605	\$ -	-35.57	0.43x
Invesco Real Estate Asia Fund	2014	\$ 51,732,500	\$ 51,732,500	\$ -	\$ 50,023,911	-3.77	0.97x
INVESCO Real Estate Fund I	2005	\$ 10,000,000	\$ 9,248,390	\$ 8,293,250	\$ 1,635,586	1.41	1.07x
LaSalle Income & Growth Fund IV	2005	\$ 20,000,000	\$ 19,469,417	\$ 11,734,618	\$ 1,748,545	-5.53	0.69x
Morgan Stanley Real Estate Fund V International	2005	\$ 27,500,000	\$ 27,385,390	\$ 30,824,620	\$ 2,155,332	7.08	1.20x
Oaktree Real Estate Opportunities V	2012	\$ 25,000,000	\$ 25,000,000	\$ 13,625,000	\$ 23,305,151	15.72	1.47x
Partners Group RE Secondary 2013 (USD) A	2014	\$ 65,000,000	\$ 13,664,848	\$ -	\$ 15,334,192	12.8	1.11x
Prologis Japan Fund	2005	\$ 25,290,819	\$ 25,290,819	\$ 33,126,118	\$ -	4.81	1.31x
Prudential PRISA II	2004	\$ 83,343,833	\$ 83,343,833	\$ 15,000,000	\$ 82,610,426	4.37	1.17x
Prudential PRISA III	2003	\$ 40,000,000	\$ 35,703,965	\$ 10,000,000	\$ 25,853,050	0.12	1.00x
RREEF America REIT III	2004	\$ 20,000,000	\$ 20,539,309	\$ 20,052,533	\$ 3,485,034	2.96	1.15x
Square Mile Partners II	2007	\$ 20,000,000	\$ 19,831,232	\$ 4,356,164	\$ 1,402,763	-18.54	0.29x
Square Mile Partners III LP	2008	\$ 20,000,000	\$ 21,561,599	\$ 24,435,860	\$ 6,049,400	12.44	1.41x
Starwood Capital Hospitality Fund I-2	2006	\$ 30,000,000	\$ 30,000,000	\$ 18,084,672	\$ 13,954,277	1.03	1.07x
Starwood Debt Fund II, LP	2008	\$ 20,000,000	\$ 17,599,882	\$ 18,611,152	\$ 2,656,574	5.77	1.21x
Starwood Opportunity Fund VII - A	2006	\$ 25,000,000	\$ 25,000,000	\$ 8,486,257	\$ 12,309,026	-2.35	0.83x
Structured Real Estate III, LP (Guggenheim)	2008	\$ 20,000,000	\$ 20,000,000	\$ 15,664,664	\$ 599,611	-5.09	0.81x
Tri Continental Capital VII	2005	\$ 23,000,000	\$ 22,343,057	\$ 632,686	\$ 2,442,491	-22.38	0.14x
Tuckerman Multi-Family Development Fund III	2002	\$ 10,000,000	\$ 10,219,311	\$ 16,939,699	\$ -	26.67	1.66x
Walton Street Real Estate Fund IV, LP	2003	\$ 10,000,000	\$ 9,770,890	\$ 14,126,364	\$ 1,822,989	-6.82	1.63x
Walton Street Real Estate Fund V, LP	2006	\$ 40,000,000	\$ 40,000,000	\$ 13,729,990	\$ 17,244,379	-3.47	0.77x
<b>Total</b>		<b>\$ 1,007,541,270</b>	<b>\$ 910,682,445</b>	<b>\$ 498,946,007</b>	<b>\$ 528,406,306</b>	<b>2.15</b>	<b>1.13x</b>
<b>NCREIF Property Index</b>						<b>3.57</b>	

Note: all metrics are calculated since inception

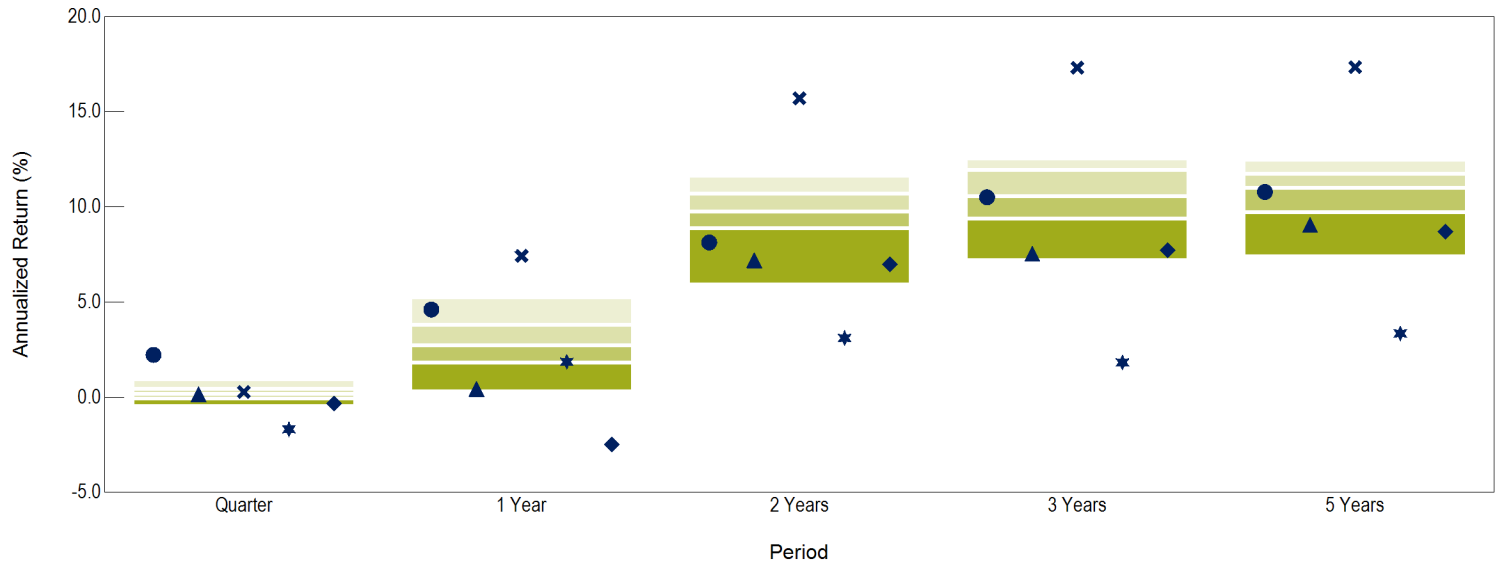
# Appendix: Market Environment





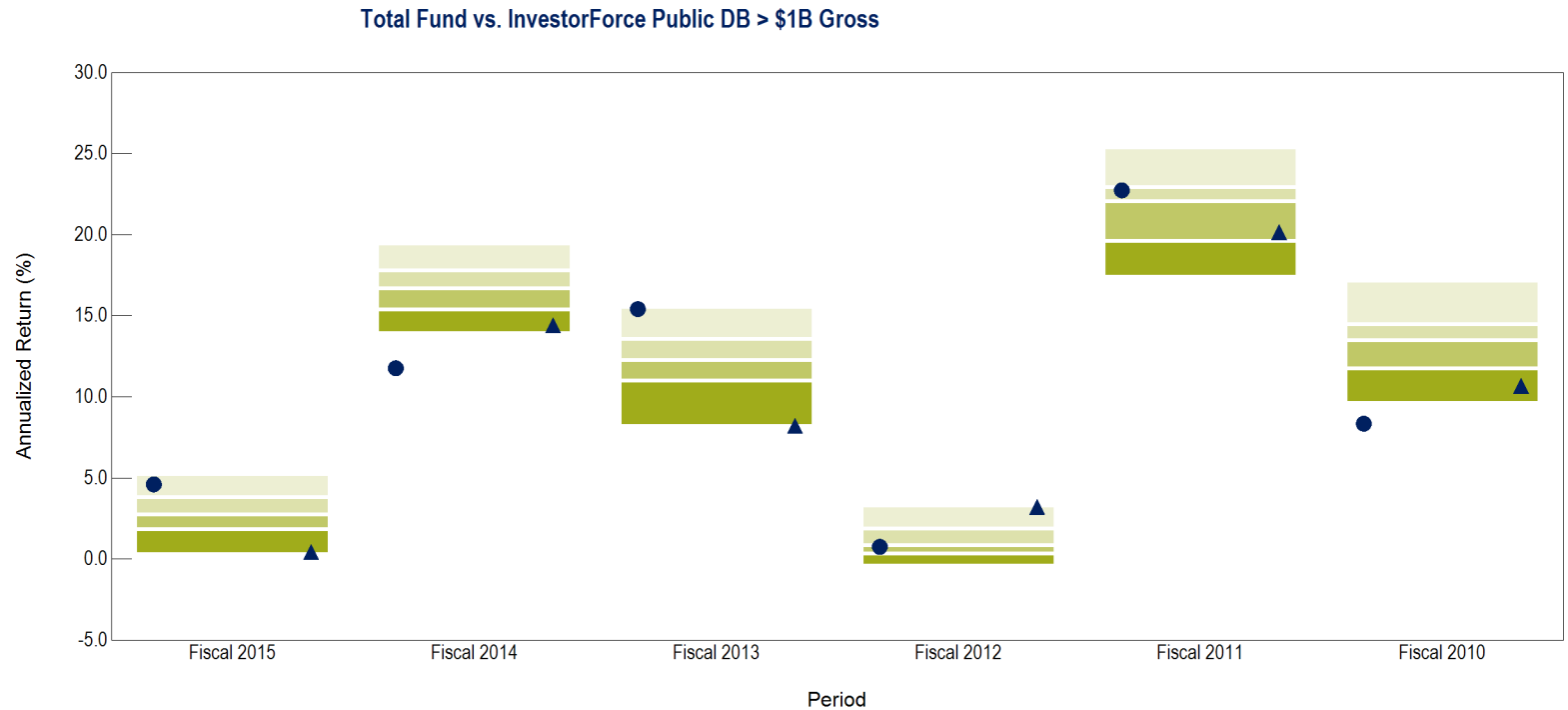
**Total Fund Return Summary vs. Peer Universe**

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



	Return (Rank)									
5th Percentile	0.9		5.2		11.6		12.5		12.4	
25th Percentile	0.4		3.8		10.7		12.0		11.8	
Median	0.2		2.8		9.8		10.6		11.0	
75th Percentile	0.0		1.8		8.9		9.4		9.7	
95th Percentile	-0.5		0.3		5.9		7.2		7.4	
# of Portfolios	32		32		30		30		30	
● Total Fund	2.2	(1)	4.6	(11)	8.1	(90)	10.5	(51)	10.8	(53)
▲ Policy Index	0.2	(56)	0.4	(95)	7.2	(92)	7.5	(93)	9.1	(85)
× S&P 500	0.3	(43)	7.4	(1)	15.7	(1)	17.3	(1)	17.3	(1)
* Barclays Aggregate	-1.7	(99)	1.9	(75)	3.1	(99)	1.8	(99)	3.3	(99)
◆ 60% MSCI World (Gross) / 40% CITI WGBI	-0.3	(91)	-2.5	(99)	7.0	(92)	7.7	(92)	8.7	(90)

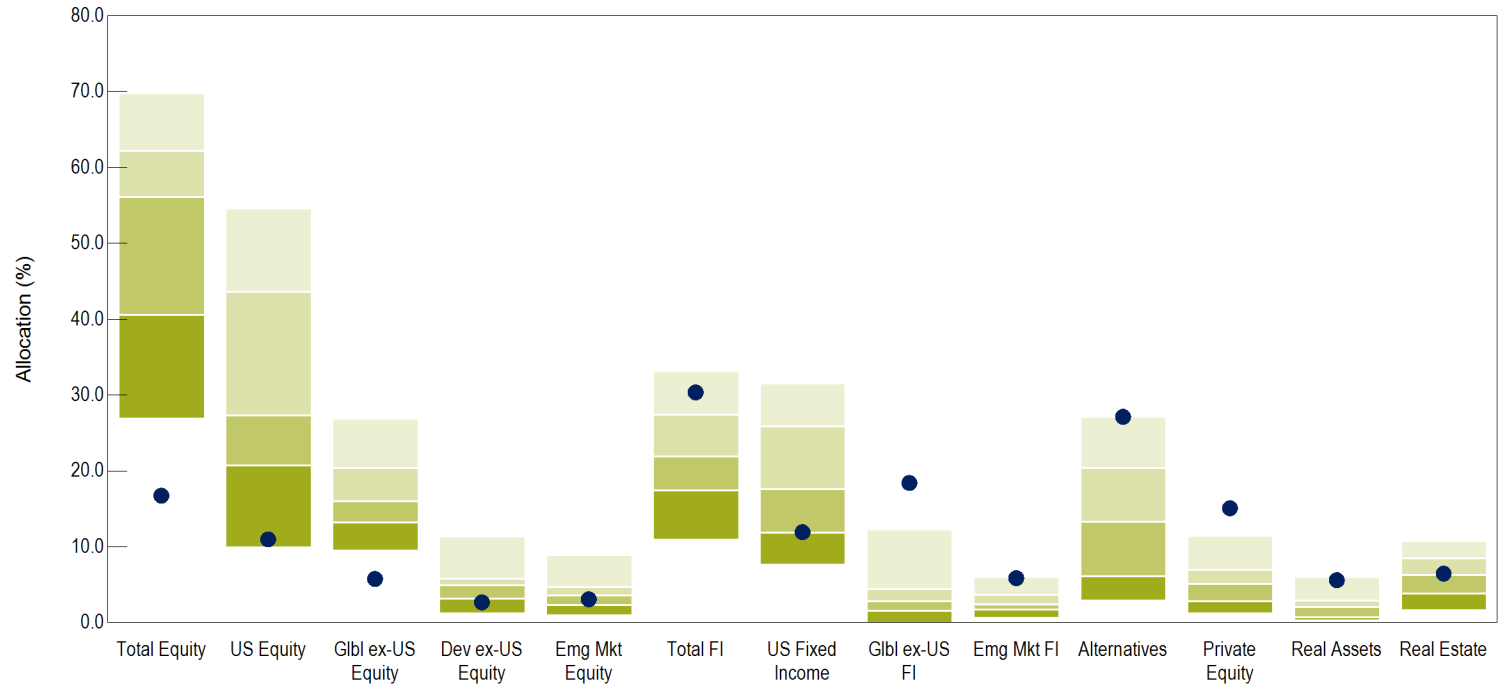
Fiscal Year Ending 6/30 Total Fund Return Summary vs. Peer Universe



	Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)		Return (Rank)	
5th Percentile	5.2	(11)	19.4	(99)	15.5	(7)	3.3	(58)	25.4	(32)
25th Percentile	3.8	(95)	17.8	(87)	13.6	(96)	1.9	(6)	22.9	(71)
Median	2.8		16.7		12.3		0.9		22.1	
75th Percentile	1.8		15.4		11.0		0.3		19.6	
95th Percentile	0.3		13.9		8.2		-0.4		17.4	
# of Portfolios	32		65		78		70		67	
● Total Fund	4.6	(11)	11.8	(99)	15.4	(7)	0.8	(58)	22.7	(32)
▲ Policy Index	0.4	(95)	14.4	(87)	8.2	(96)	3.2	(6)	20.2	(71)

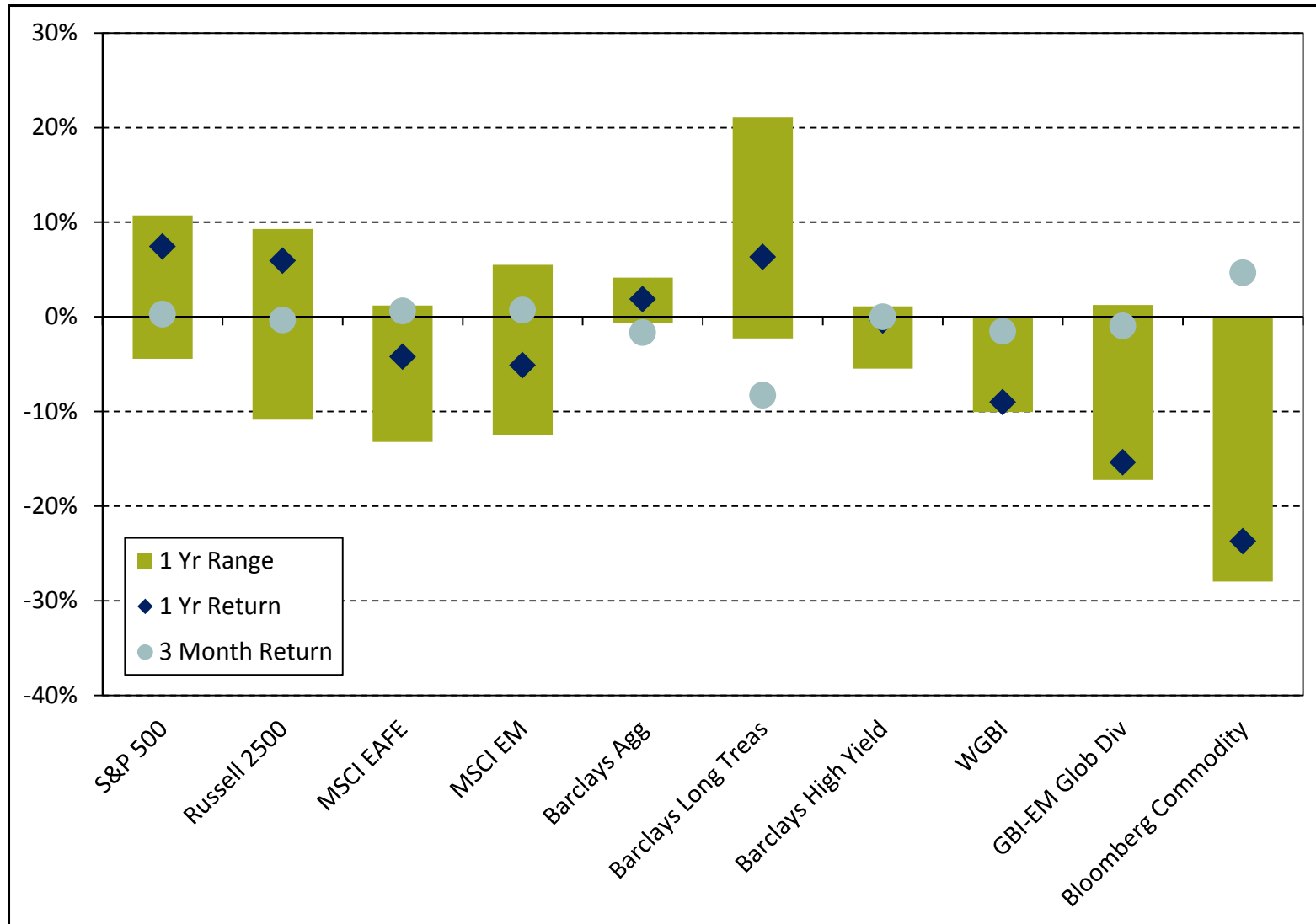
Total Fund Allocations vs. Peer Universe

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



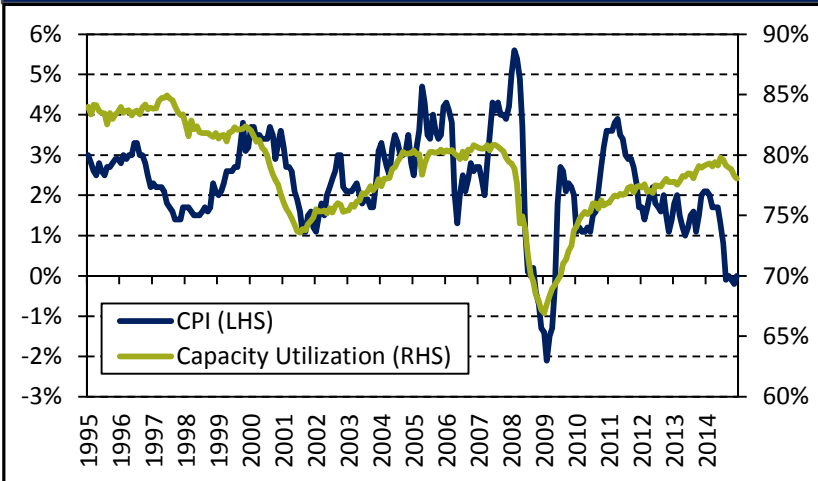
	Allocation (Rank)													
5th Percentile	69.7	54.6	26.9	11.3	8.9	33.2	31.6	12.3	6.0	27.1	11.4	6.0	10.8	--
25th Percentile	62.3	43.7	20.4	5.9	4.8	27.5	26.0	4.5	3.8	20.4	7.1	3.0	8.6	--
Median	56.2	27.4	16.1	5.1	3.7	22.0	17.7	3.0	2.5	13.3	5.2	2.1	6.4	--
75th Percentile	40.7	20.8	13.3	3.2	2.4	17.5	11.9	1.6	1.8	6.2	2.9	0.8	4.0	--
95th Percentile	27.0	10.0	9.6	1.3	1.1	11.0	7.8	0.0	0.7	3.0	1.3	0.4	1.7	--
# of Portfolios	29	29	29	6	17	29	27	14	11	22	21	9	23	--
● Total Fund	16.7 (99)	11.0 (95)	5.8 (98)	2.7 (80)	3.1 (61)	30.3 (14)	11.9 (75)	18.4 (2)	5.9 (6)	27.1 (6)	15.1 (1)	5.6 (14)	6.5 (50)	--

San Bernardino County Employees' Retirement Association  
**Broad Market Performance Summary as of 6/30/2015**



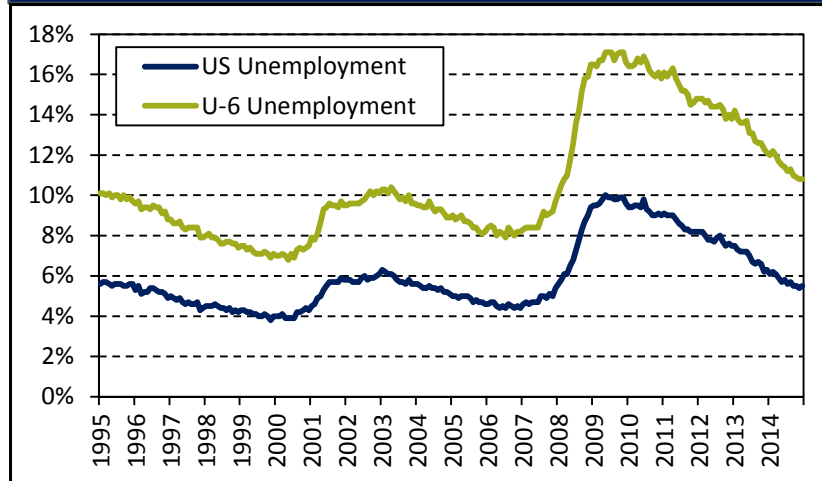
Source: Bloomberg, Standard and Poors, Russell, MSCI, Barclays, Citigroup, JP Morgan  
 \*1 Yr Range: Represents range of cumulative high/low daily index returns for an investment made one year ago

**Inflation has stayed low**



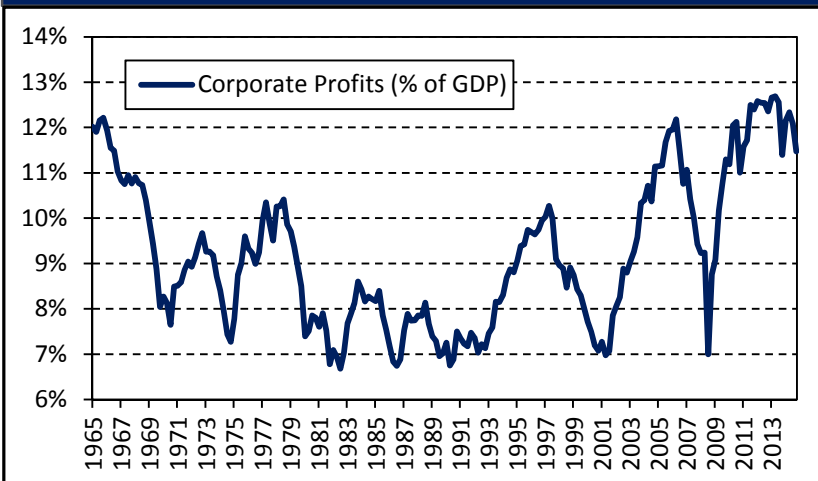
Source: Bloomberg, Federal Reserve, Bureau of Labor Statistics

**Unemployment steadily improving**



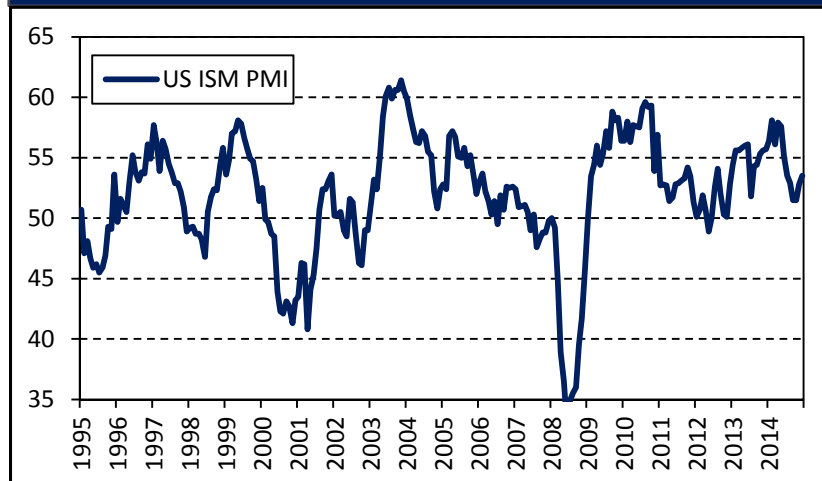
Source: Bloomberg, Bureau of Labor Statistics

**Corporate profits at secular highs**



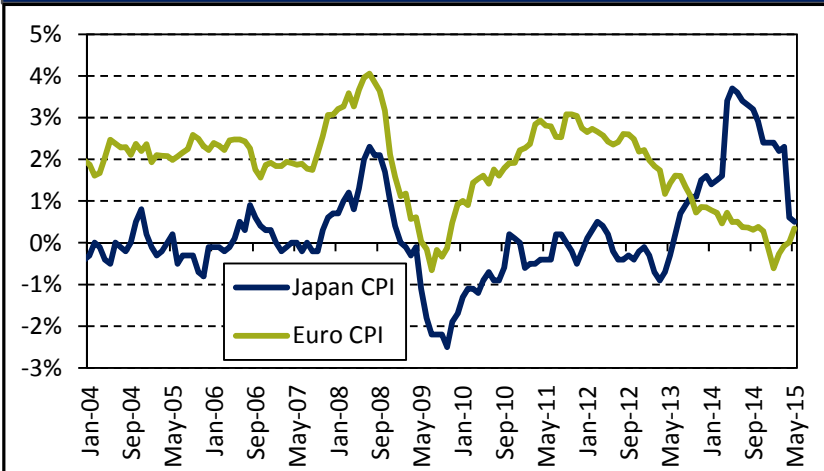
Source: Bloomberg, Bureau of Economic Analysis

**Manufacturing above average but trending lower**



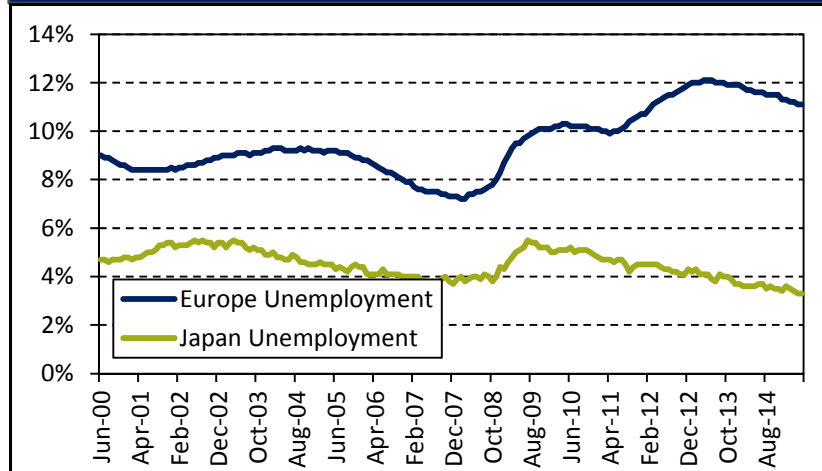
Source: Bloomberg, Institute for Supply Management

**Inflation outlook slowly improving**



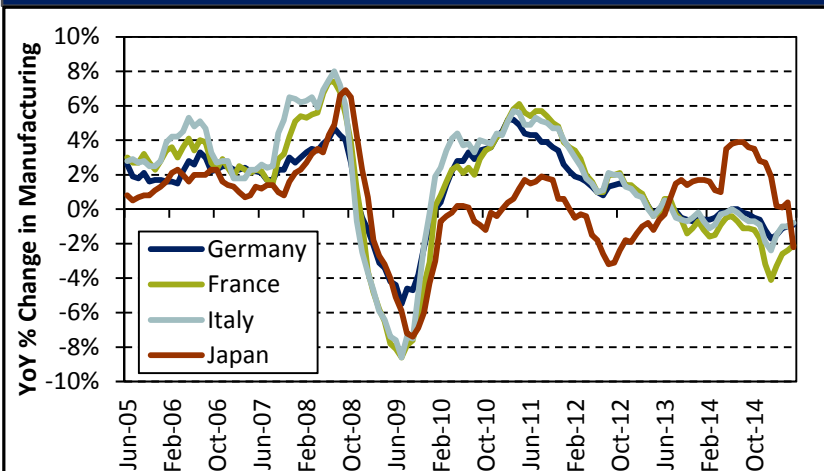
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

**Europe employment recovery lagging**



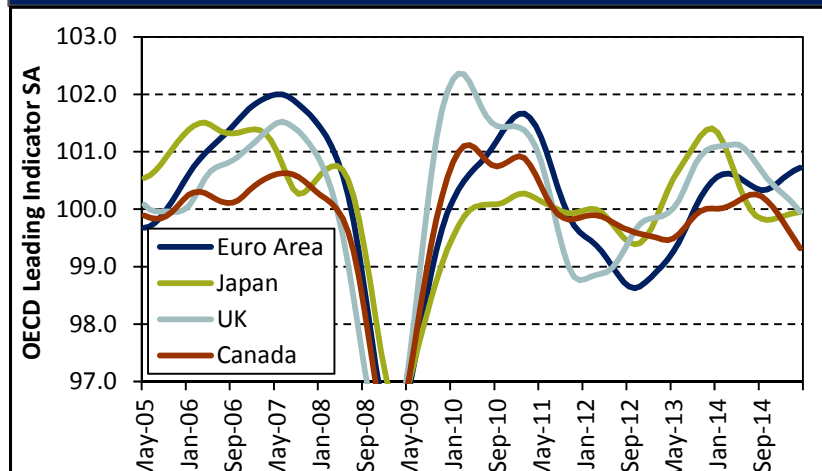
Source: Bloomberg, Japan Ministry of Internal Affairs and Communications, Eurostat

**Manufacturing in Japan has lagged**



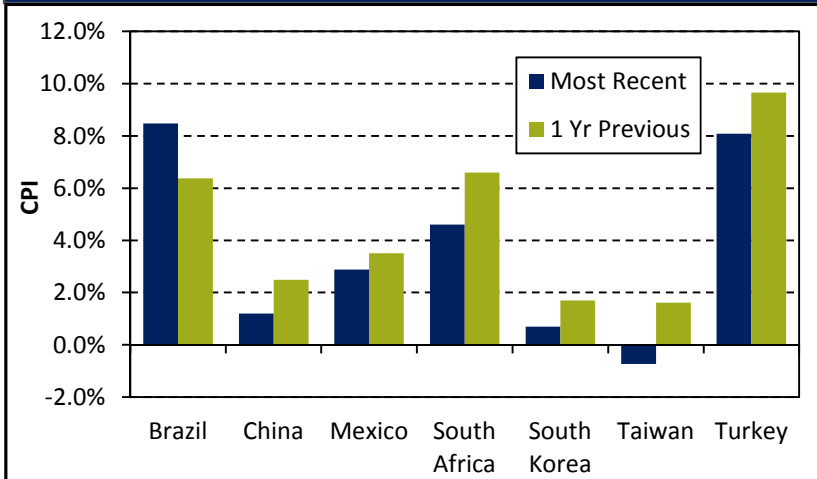
Source: Bloomberg, OECD, Eurostat

**Leading indicators neutral to positive**



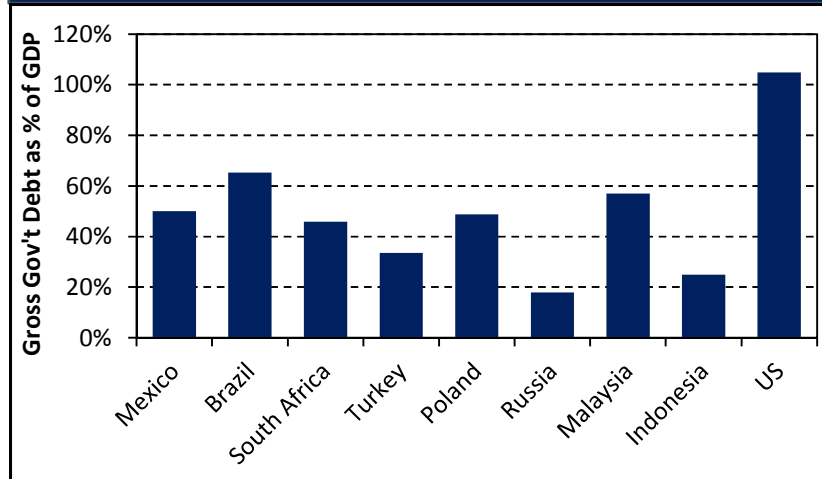
Source: Bloomberg, OECD

**EM inflation is varied by country**



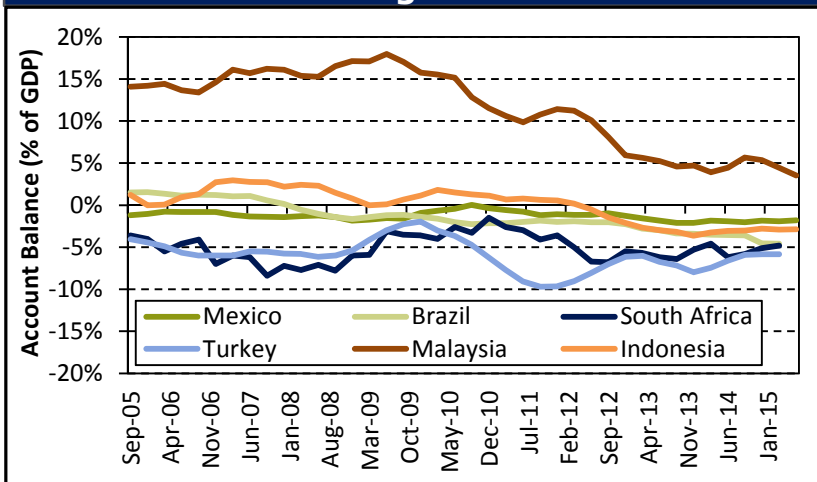
Source: Bloomberg

**Relatively healthy Debt/GDP ratios**



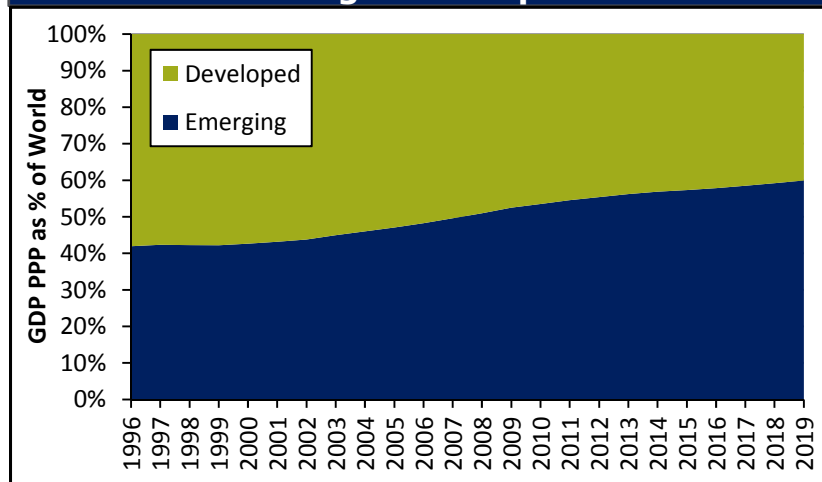
Source: Bloomberg, IMF

**Some improvement in account balance challenged countries**



Source: Bloomberg

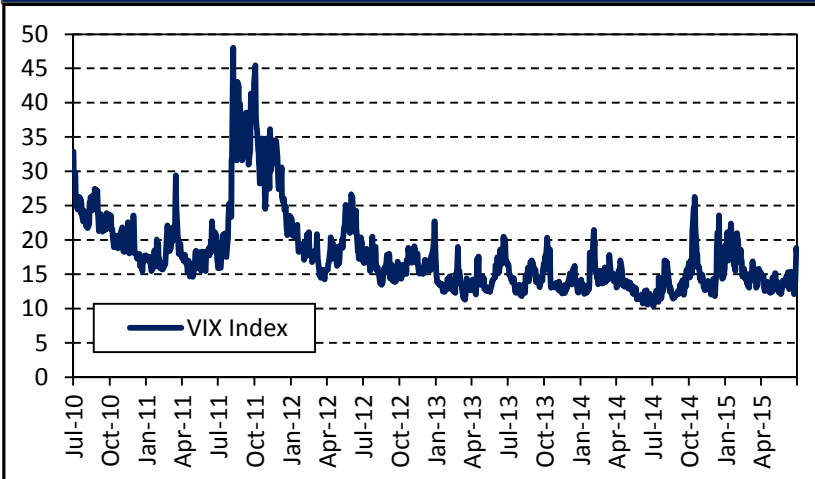
**Emerging economies make up >50% of global output**



Source: Bloomberg, IMF

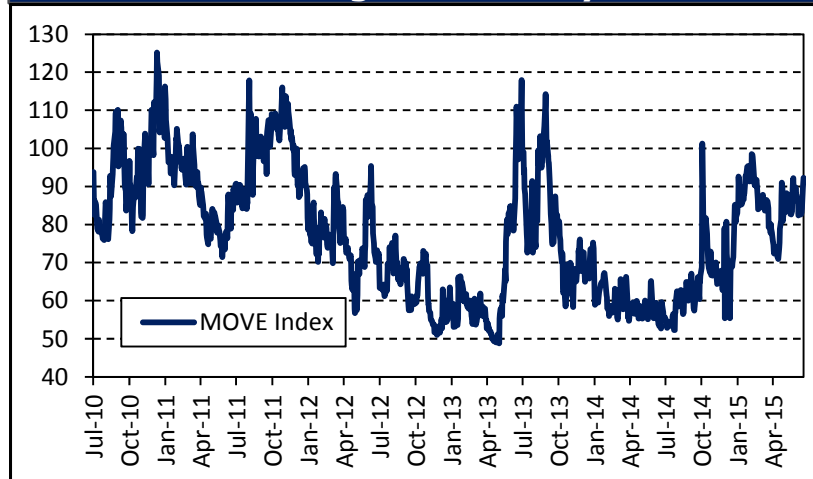
Volatility

**Equity volatility remains low**



Source: Bloomberg, CBOE

**Treasury rates experiencing periods of higher volatility**



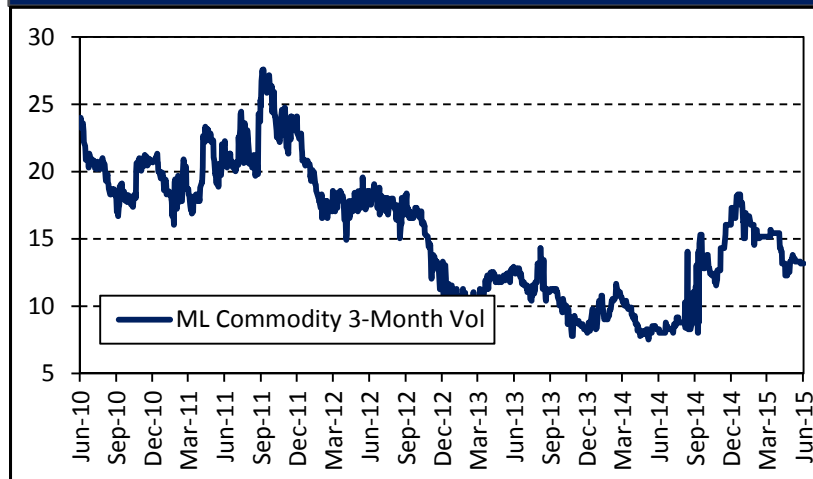
Source: Bloomberg, Merrill Lynch

**Sustained uptick in currency volatilities**



Source: Bloomberg, Deutsche Bank

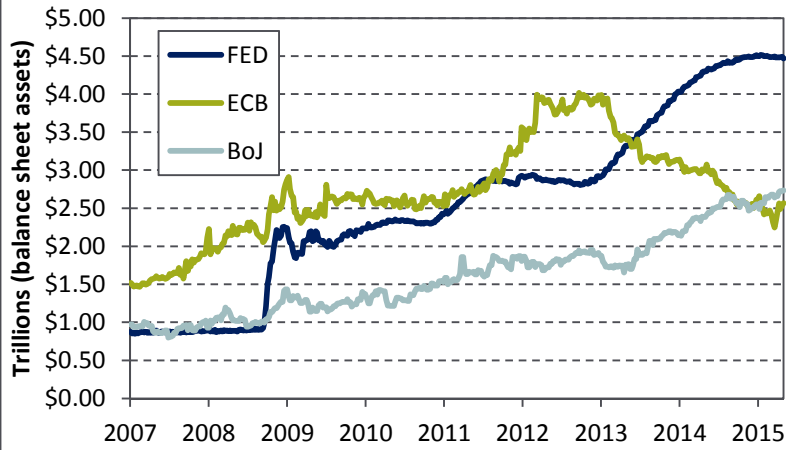
**Commodity pricing volatility has moderated**



Source: Bloomberg, Merrill Lynch

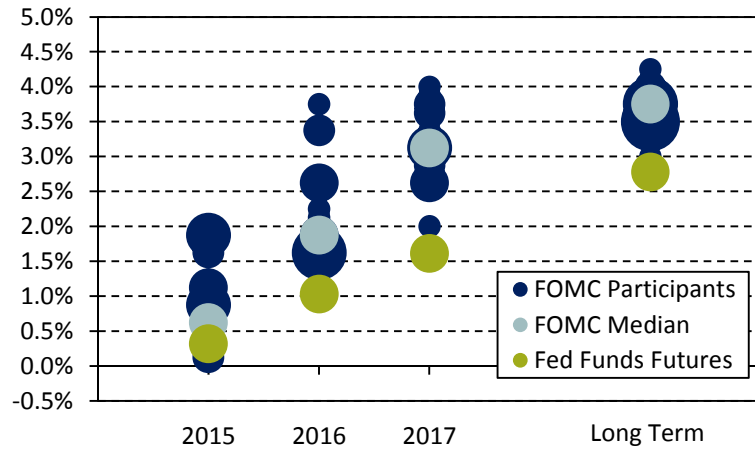


**Major central bank policy divergence**



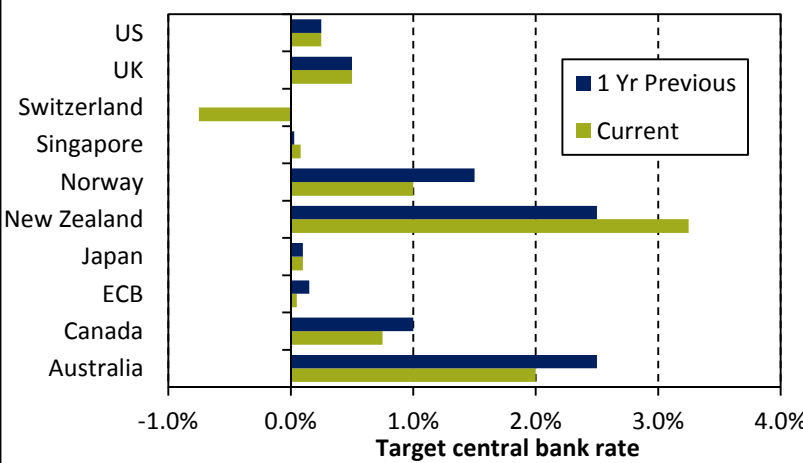
Source: Bloomberg, Federal Reserve, Bank of Japan, ECB, NEPC

**Fed's ideal rate of policy firming above market expectations**



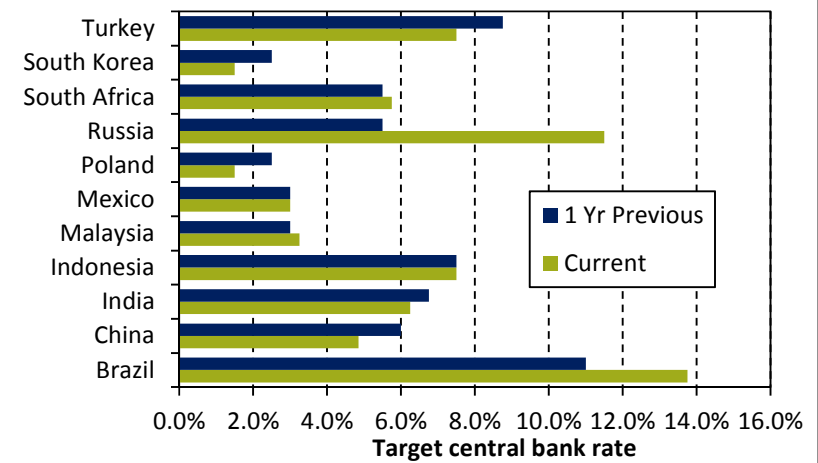
Source: Bloomberg, Federal Reserve, NEPC

**Many developed central banks have maintained low interest rates**



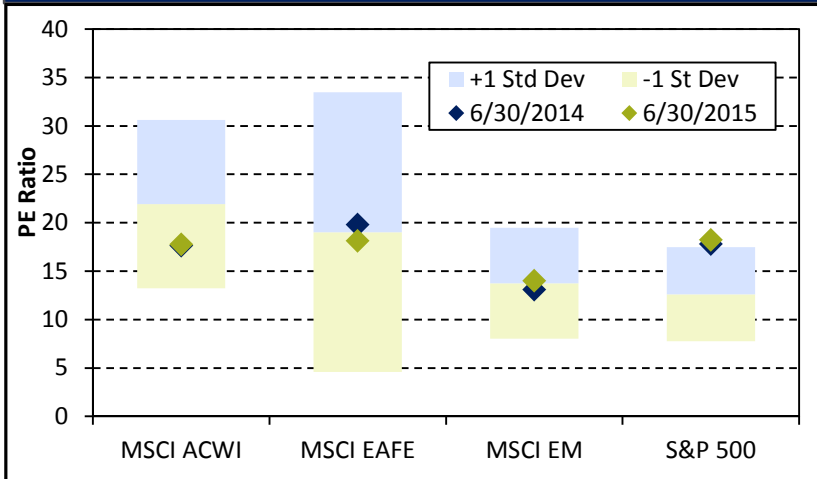
Source: Bloomberg

**EM central bank policies have varied by circumstance**



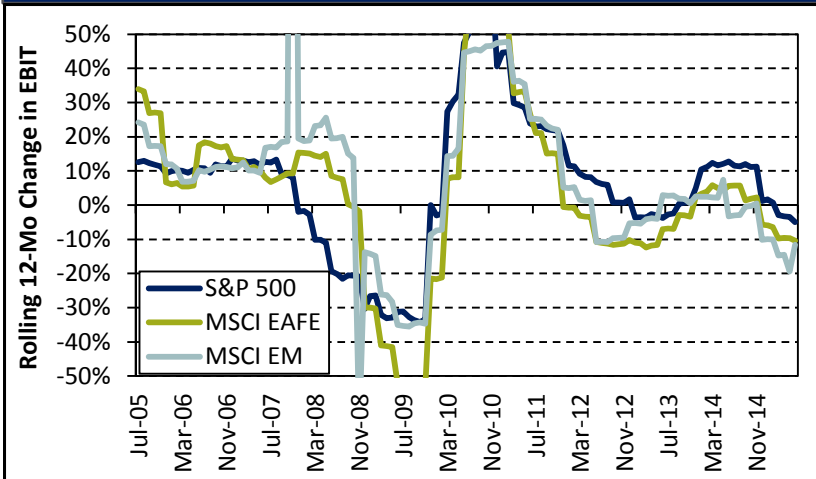
Source: Bloomberg

**Global valuations are mixed**



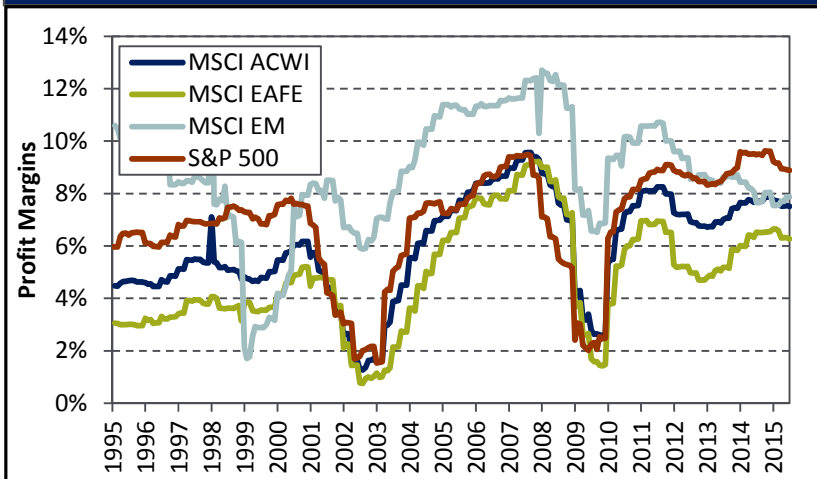
Source: Bloomberg, Standard and Poors, MSCI \*MSCI EAFE is ex UK Telecom

**Earnings growth trending lower**



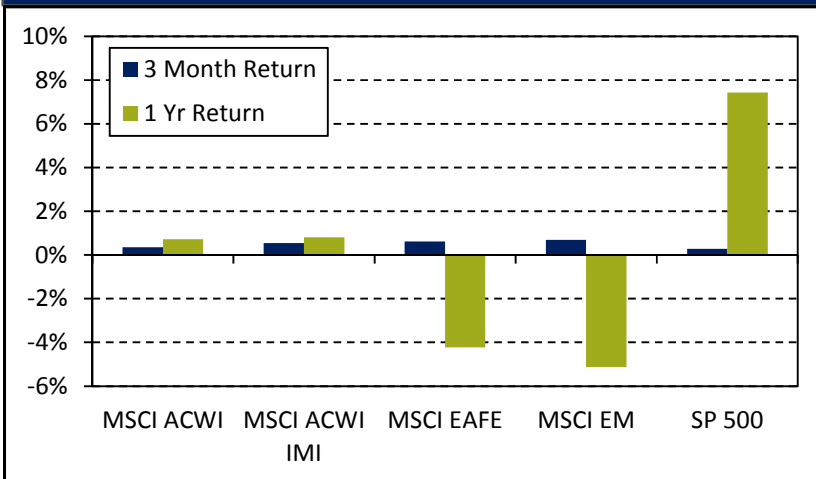
Source: Bloomberg, Standard and Poors, MSCI

**Margins elevated, but largely a US story**



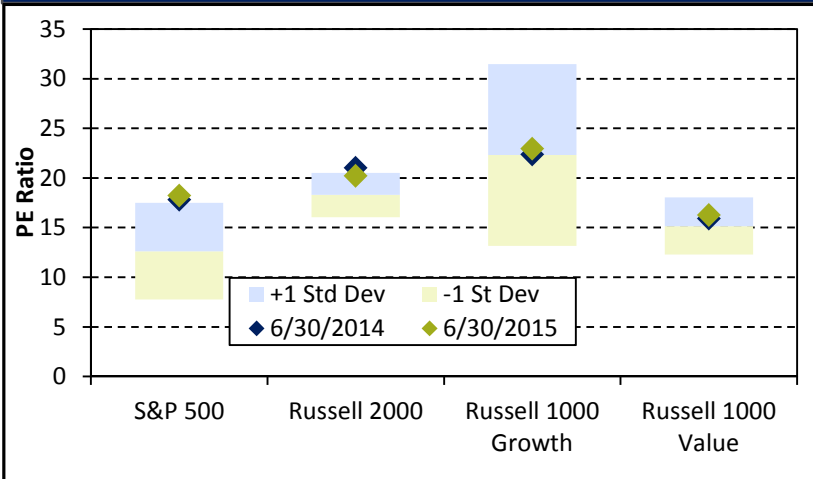
Source: Bloomberg, MSCI

**Significant global variance in returns**



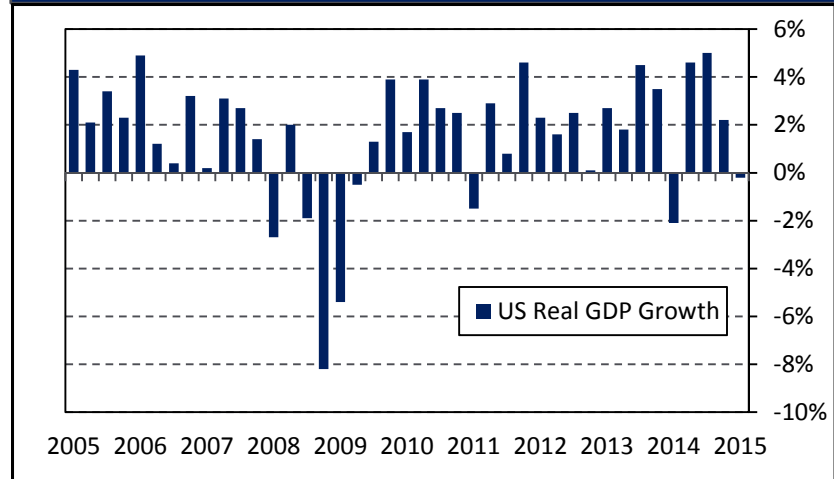
Source: Bloomberg, MSCI

**Valuations near or above historical norms**



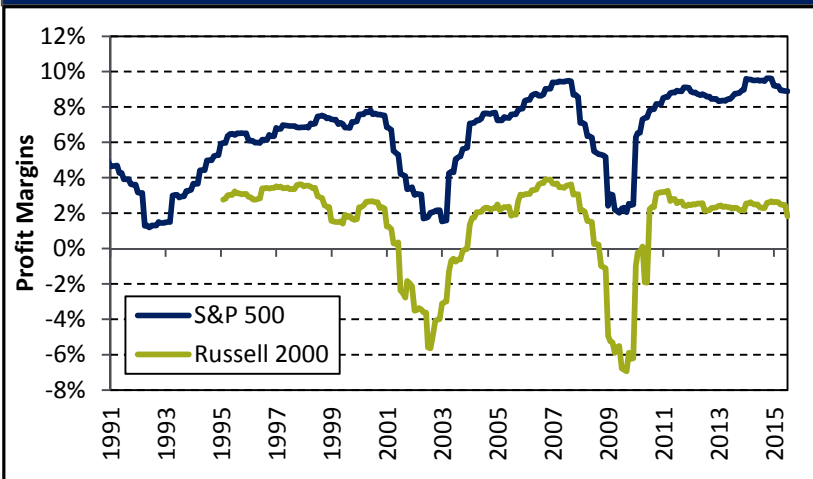
Source: Bloomberg, Standard and Poors, Russell \*Russell 2000 PE is index adjusted positive

**Growth recovery marked by inconsistency**



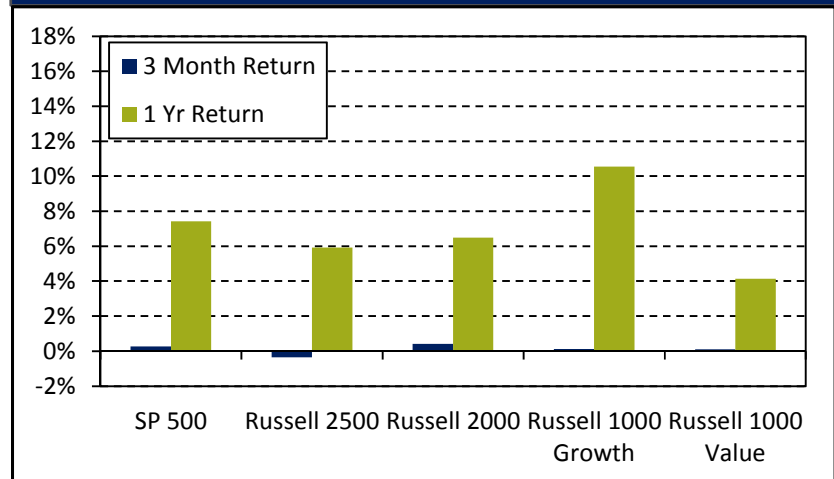
Source: Bloomberg, Bureau of Economic Analysis

**Profit margins remain elevated**



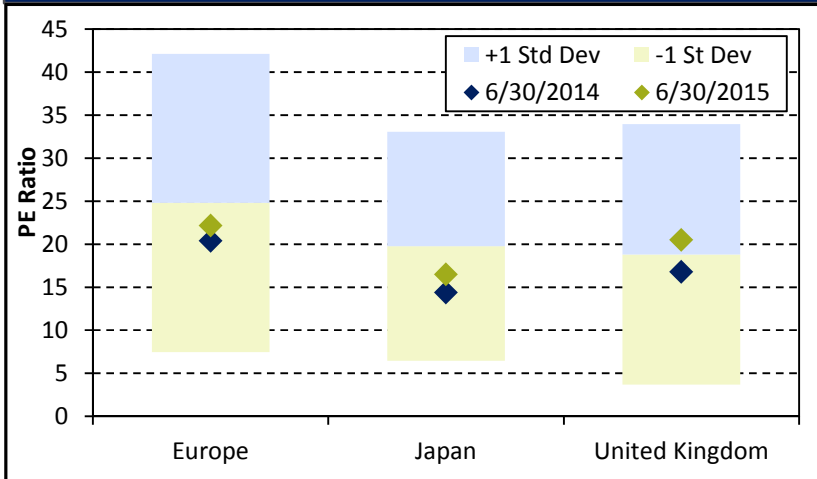
Source: Bloomberg, Standard and Poors, Russell

**Trailing performance is positive**



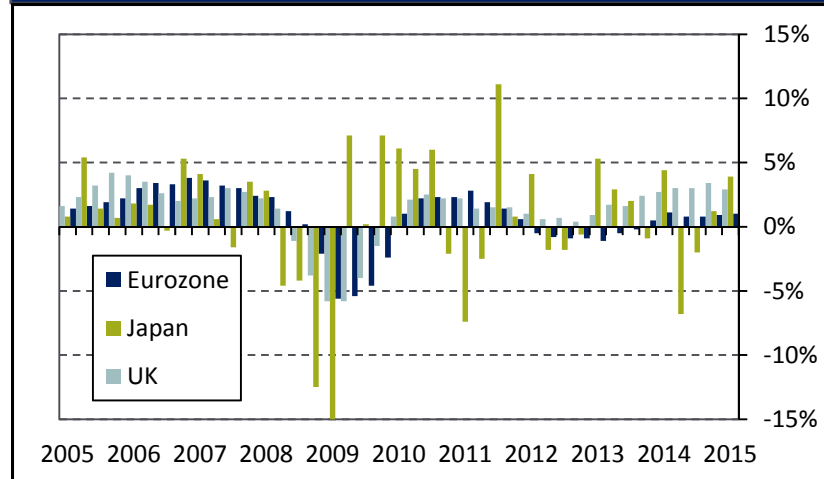
Source: Bloomberg, Standard and Poors, Russell

### PEs near historical medians



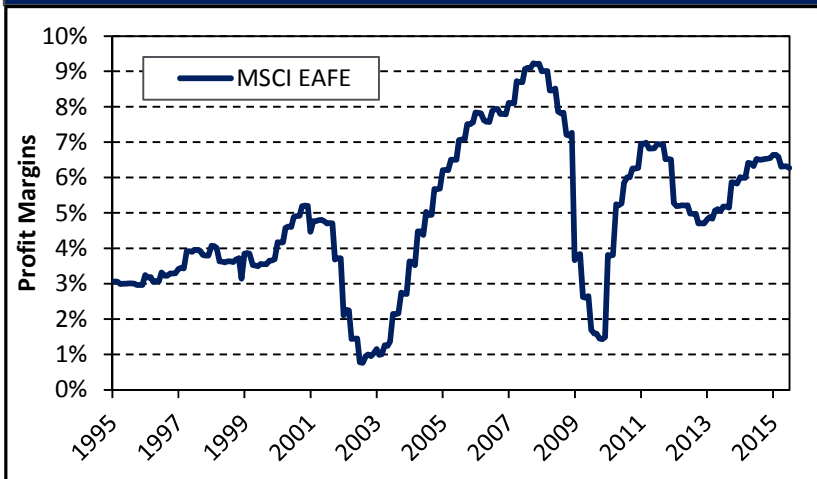
Source: Bloomberg, MSCI, FTSE \*UK represented by FTSE 100 Index

### Slow Global Growth



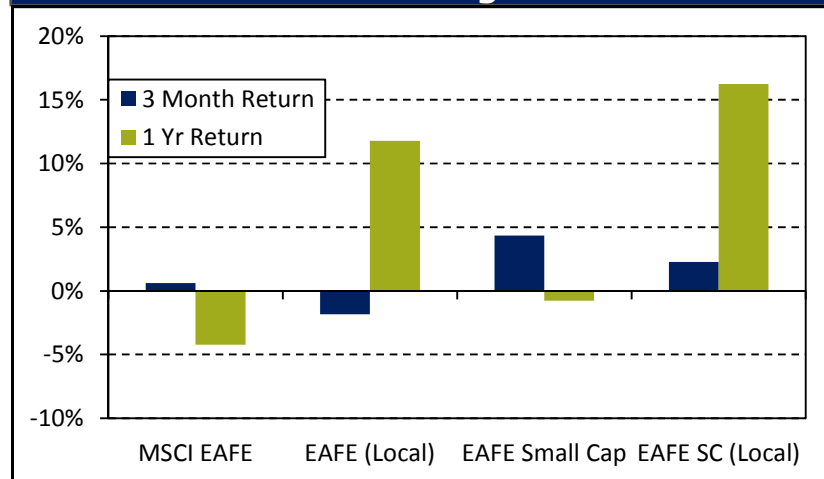
Source: Bloomberg

### Margins elevated but not at extremes



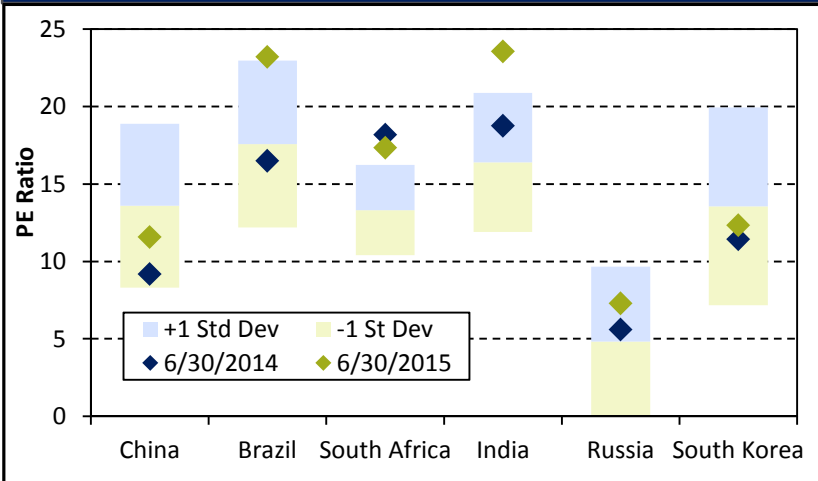
Source: Bloomberg, MSCI

### Positive performance muted by dollar strength



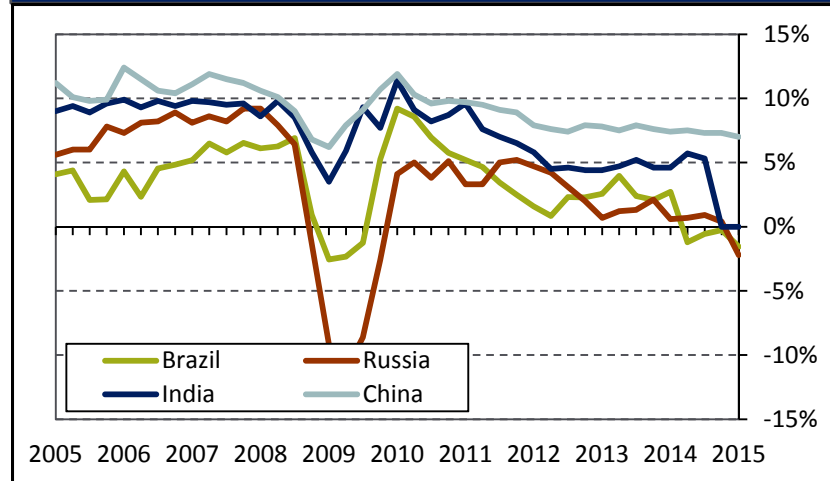
Source: Bloomberg, MSCI

**Regional valuations show divergence**



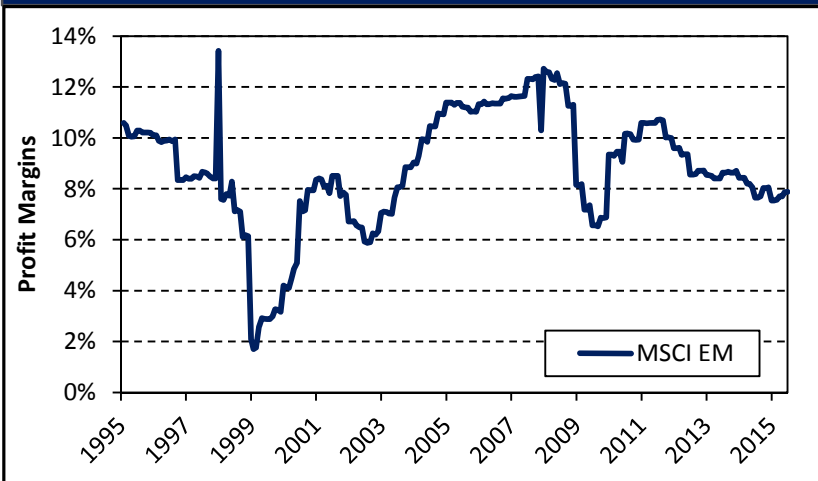
Source: Bloomberg, MSCI

**Slowing growth in major economies**



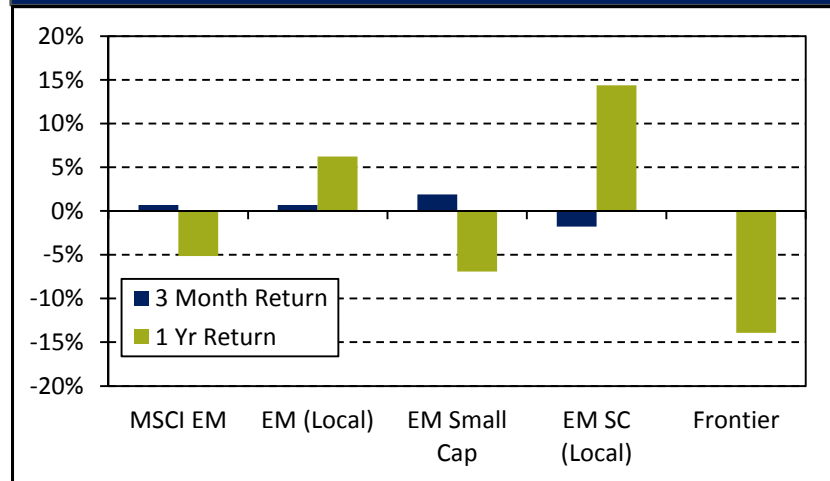
Source: Bloomberg

**Profit margins in line with history**



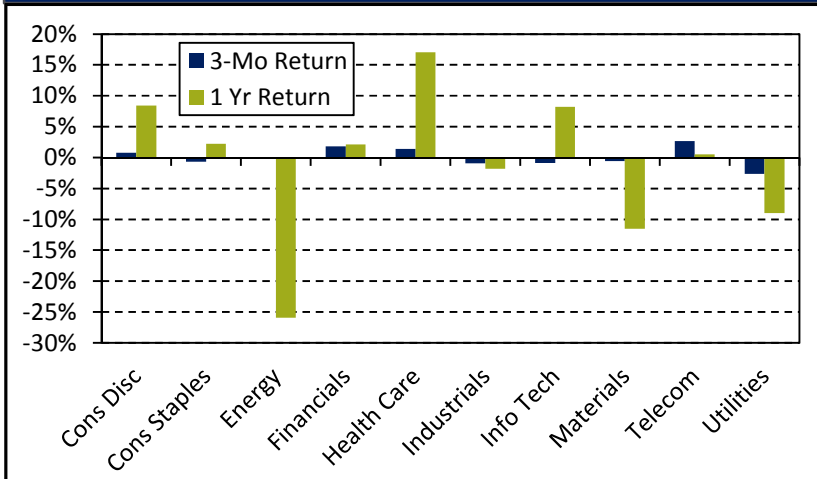
Source: Bloomberg, MSCI

**Dollar strength has detracted**



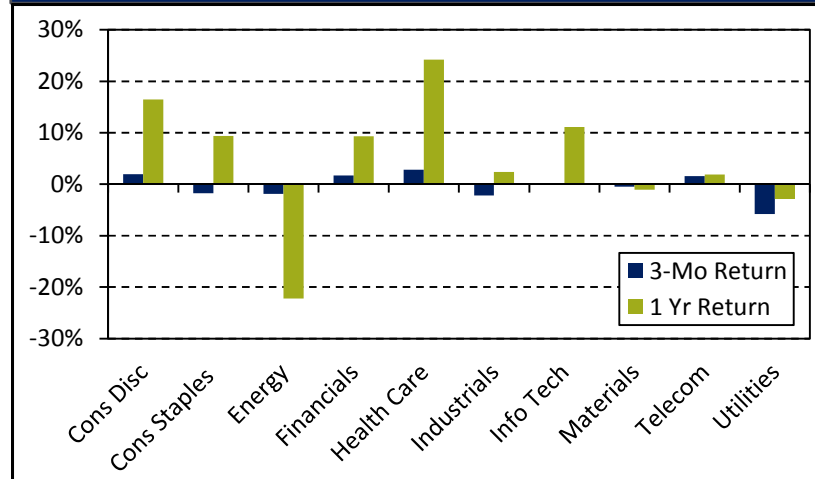
Source: Bloomberg, MSCI

**MSCI ACWI returns led by health care rally**



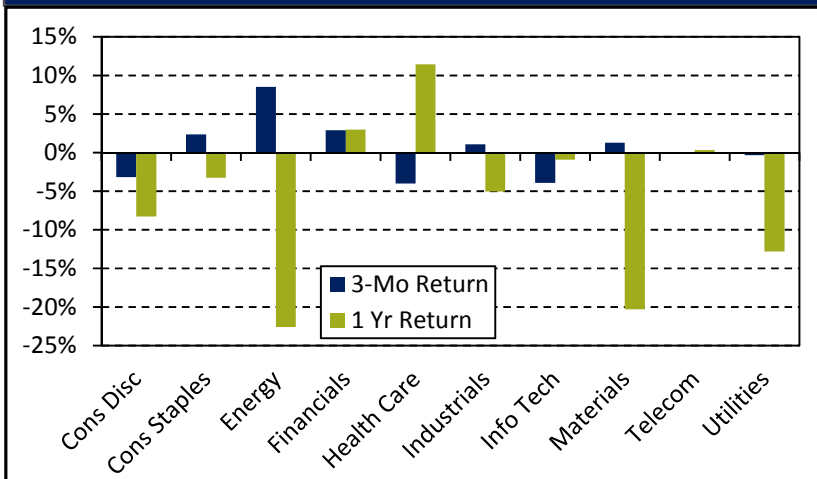
Source: Bloomberg, MSCI

**S&P 500 sector returns vary**



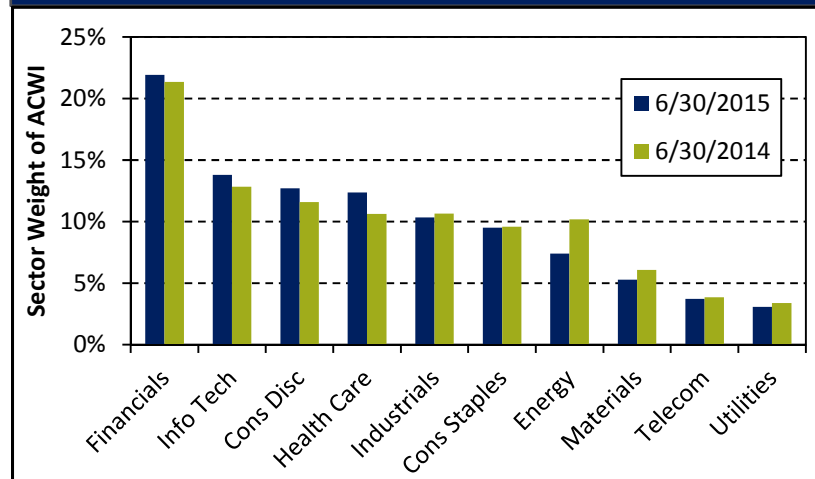
Source: Bloomberg, Standard and Poors

**Energy sensitivity especially pronounced in EM**

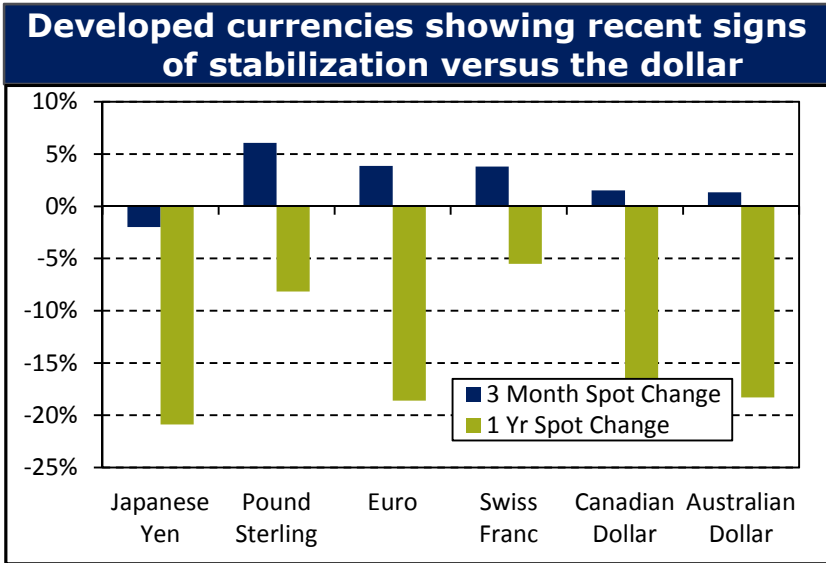


Source: Bloomberg, MSCI

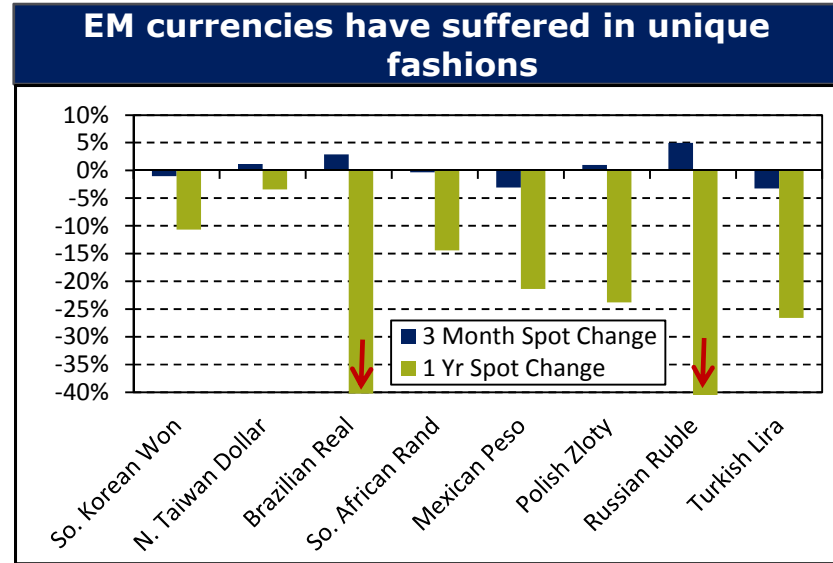
**Global energy sector weight has fallen**



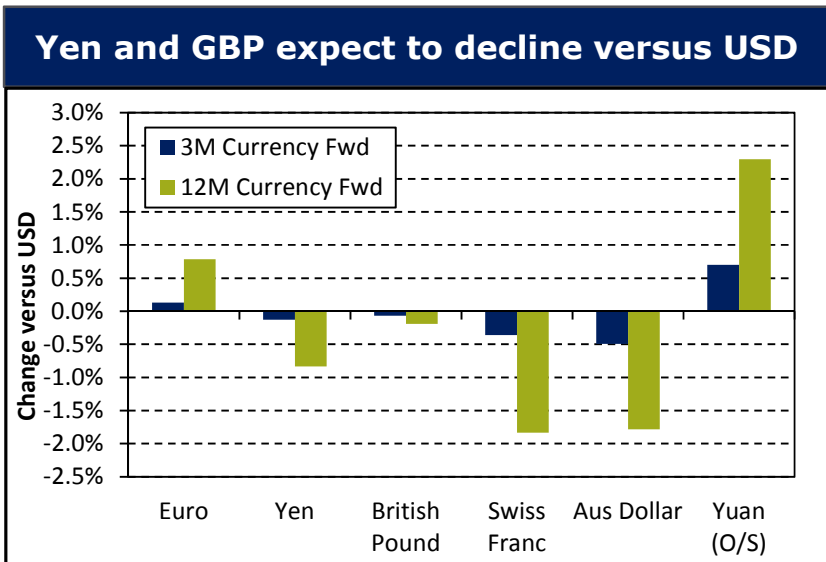
Source: Bloomberg, MSCI



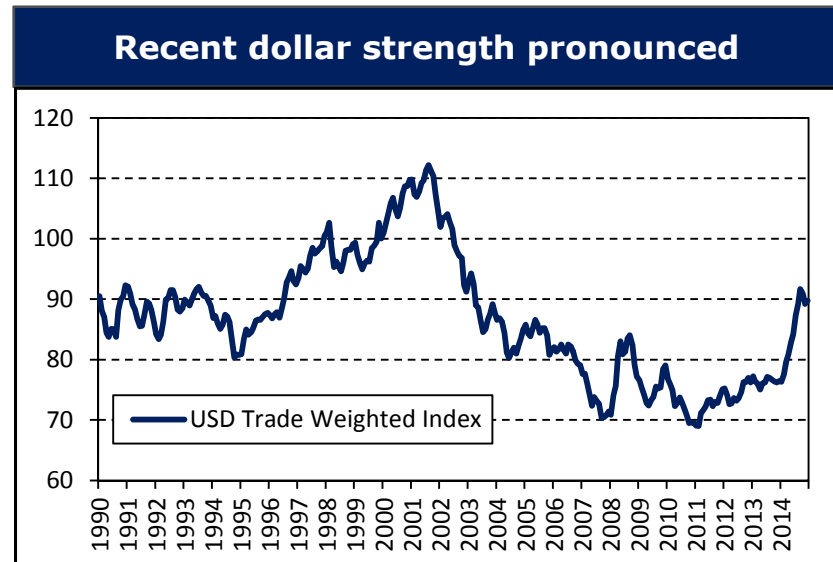
Source: Bloomberg



Source: Bloomberg

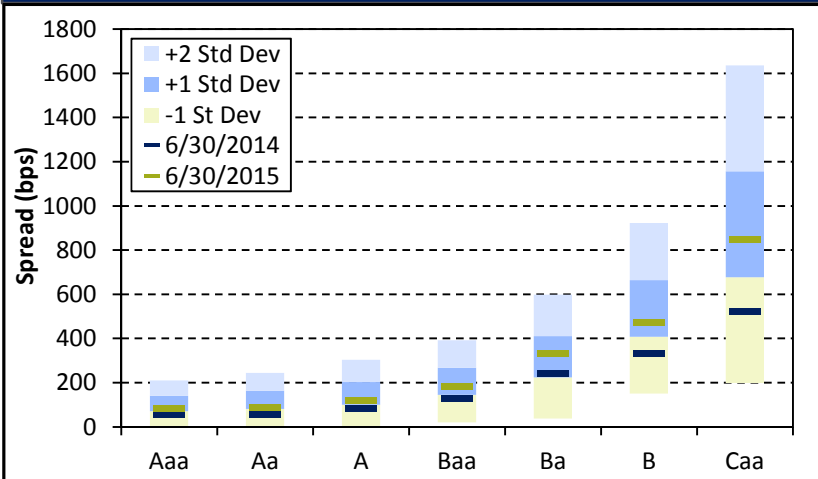


Source: Bloomberg



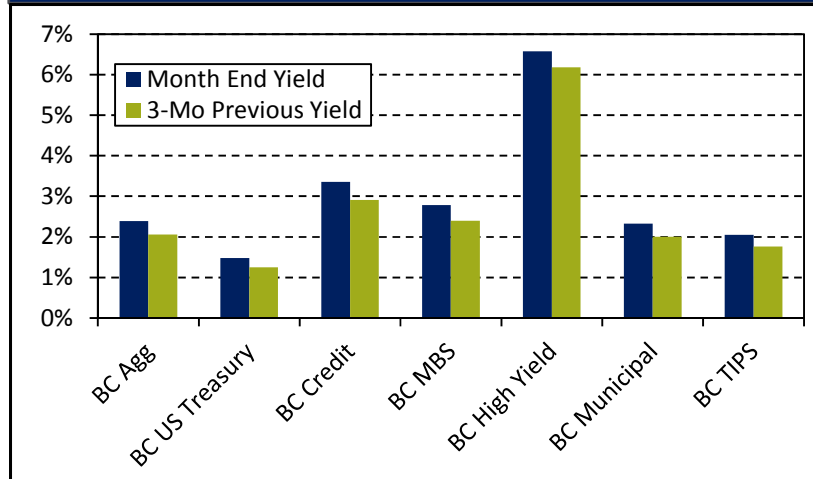
Source: Bloomberg, Federal Reserve

**Spreads levels in line with history**



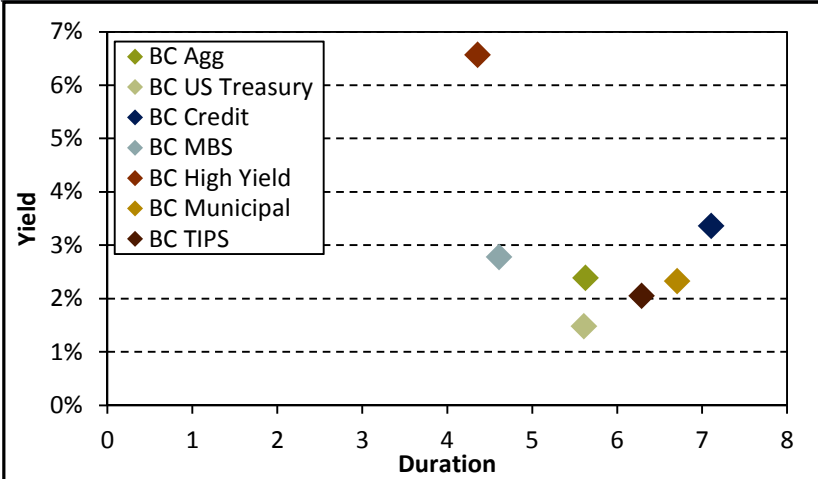
Source: Bloomberg, Barclays

**Yields have stayed mostly flat**



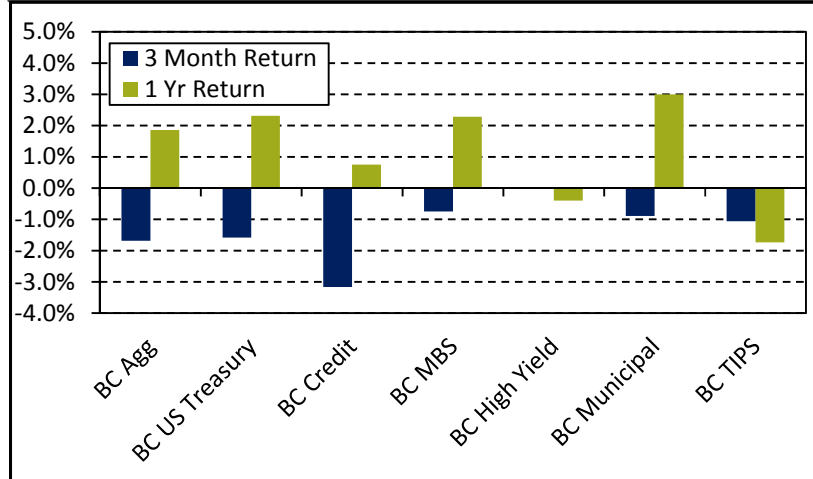
Source: Bloomberg, Barclays

**Similar yield/duration tradeoff among major US indices**



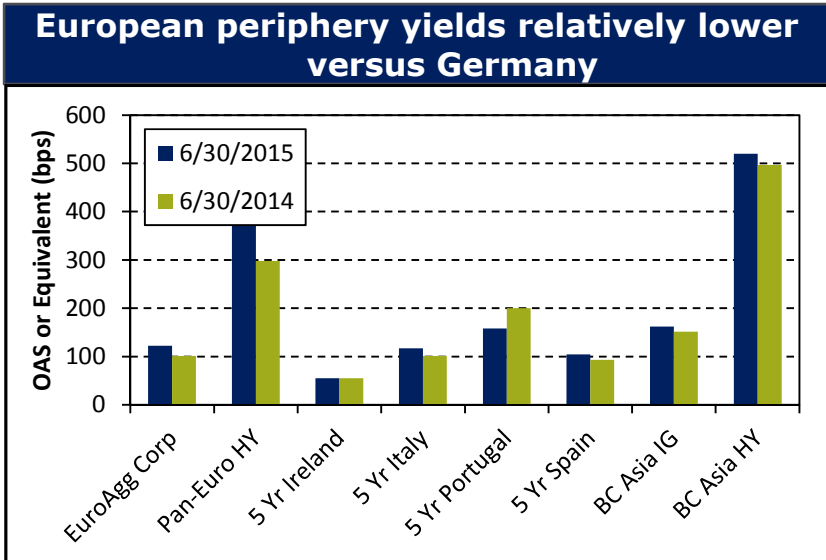
Source: Bloomberg, Barclays

**Recent performance muting trailing returns**

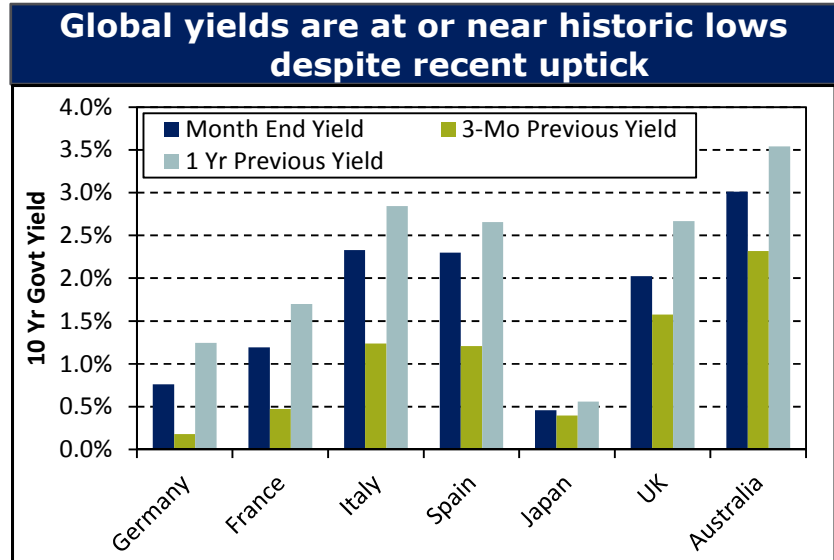


Source: Bloomberg, Barclays

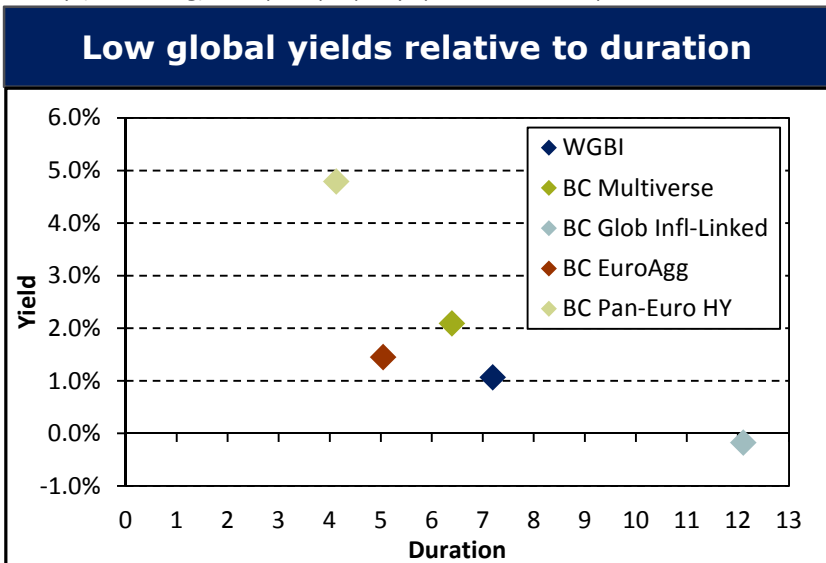




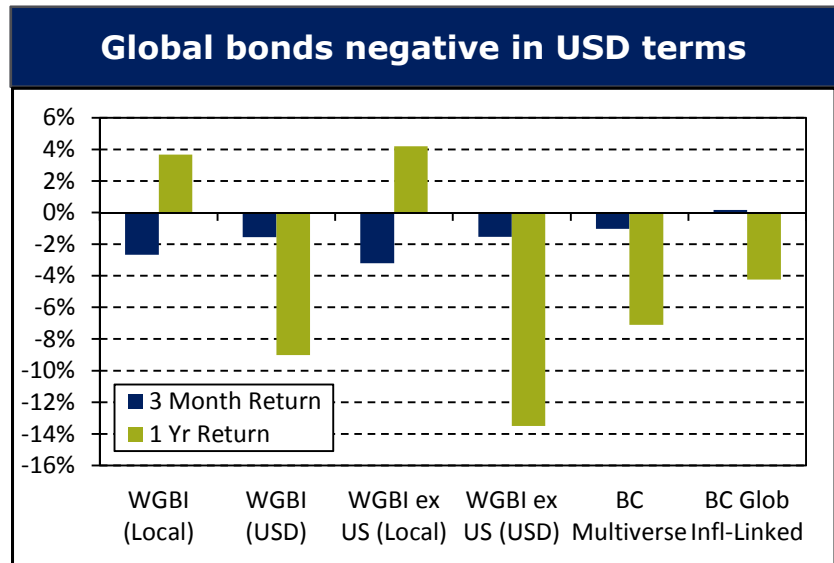
Source: Barclays, Bloomberg, \*European periphery spreads are over equivalent German Bund



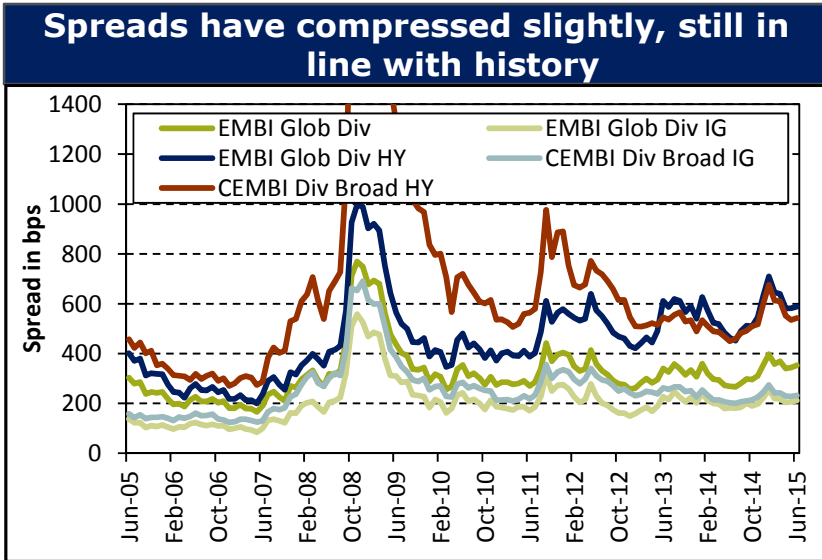
Source: Bloomberg



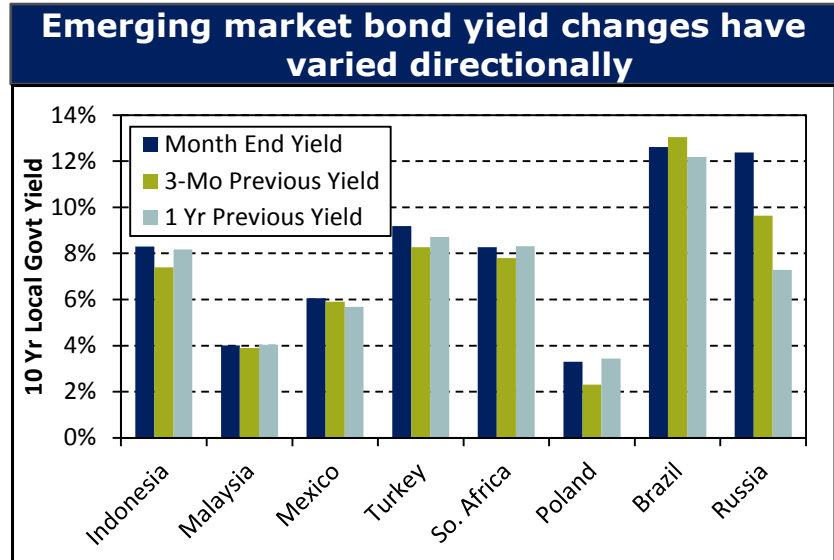
Source: Bloomberg, Citigroup, Barclays



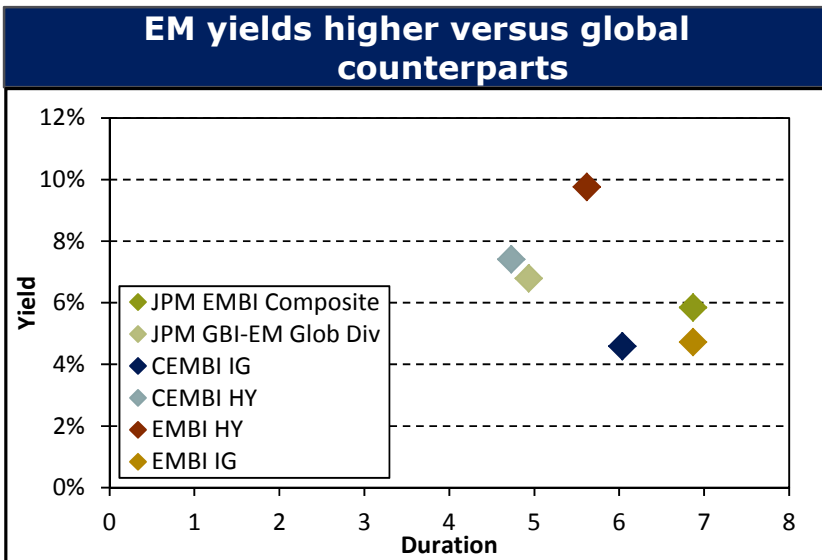
Source: Bloomberg, Citigroup, Barclays



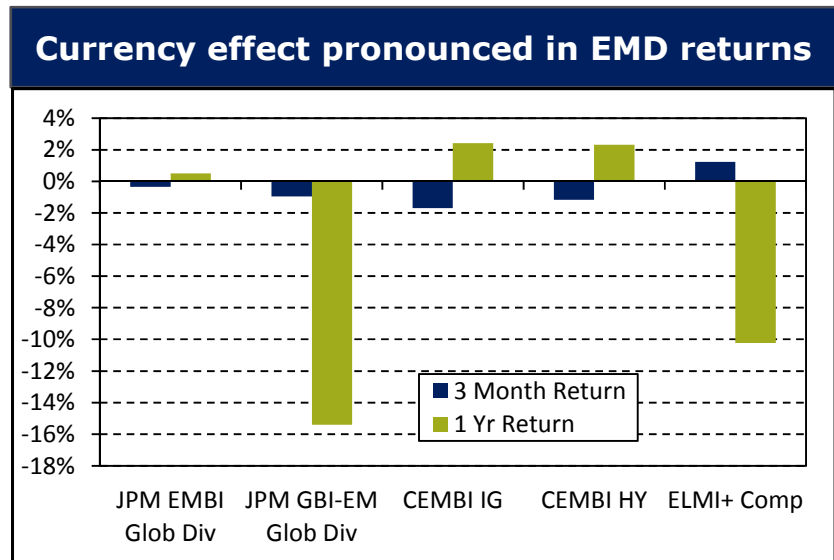
Source: Bloomberg, JP Morgan



Source: Bloomberg

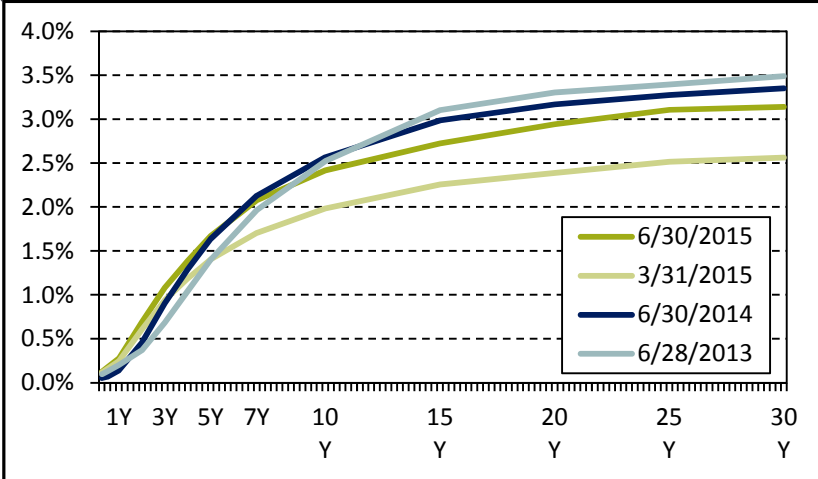


Source: Bloomberg, JP Morgan



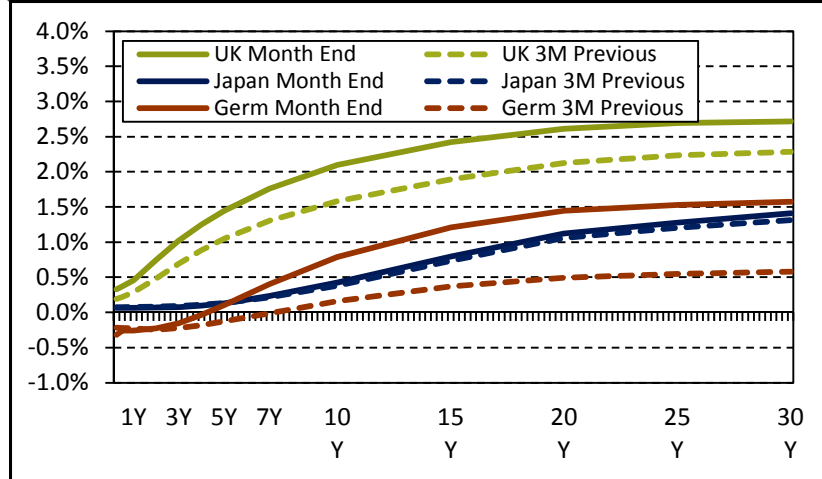
Source: Bloomberg, JP Morgan

**Treasury yield curve moderately higher during the year**



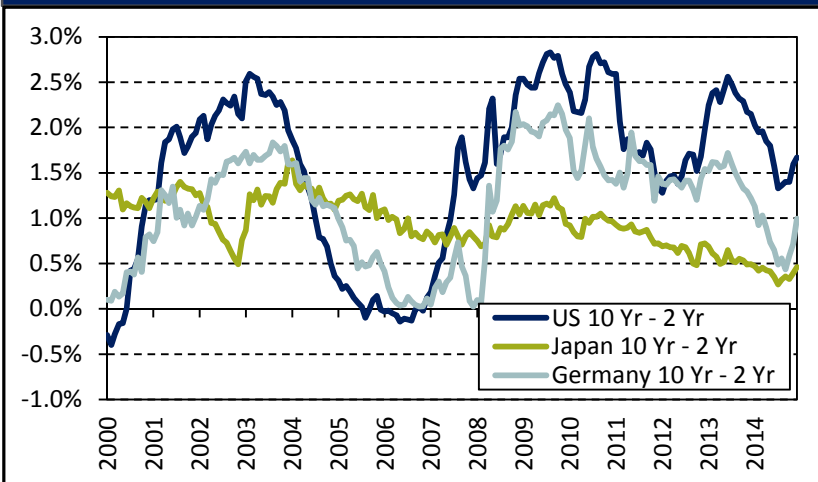
Source: Bloomberg

**German and UK curves have shifted upwards**



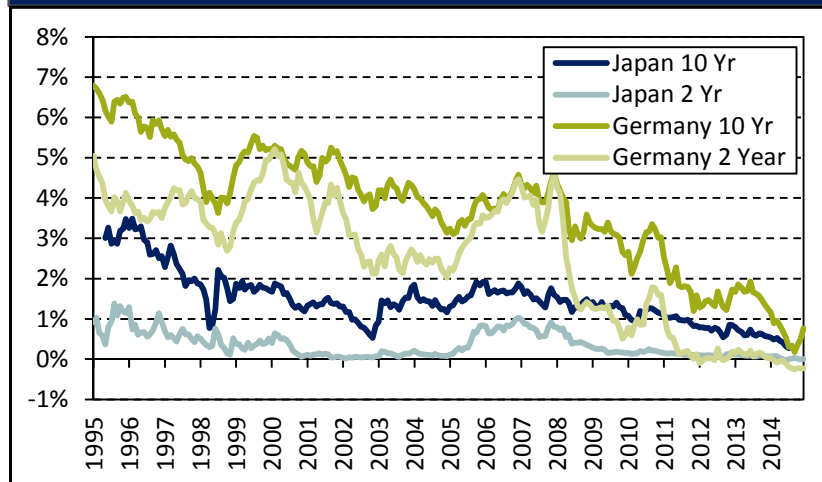
Source: Bloomberg

**Global yield curves have flattened**

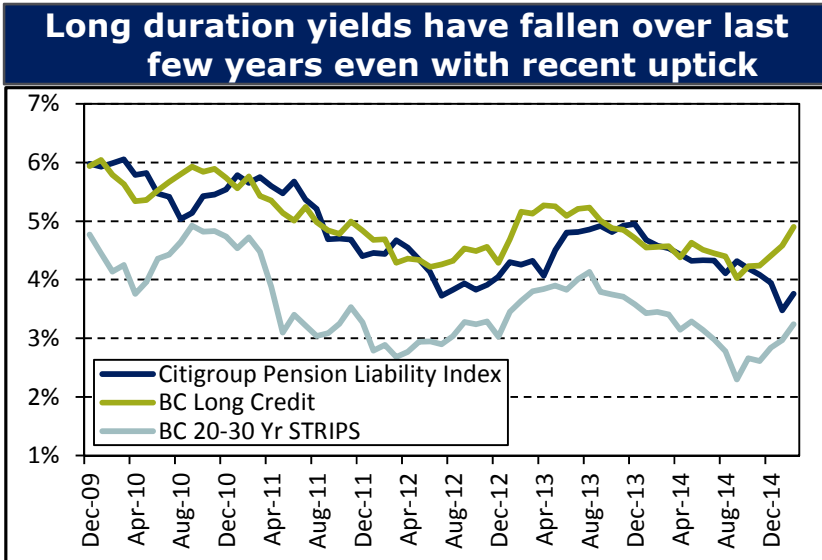


Source: Bloomberg

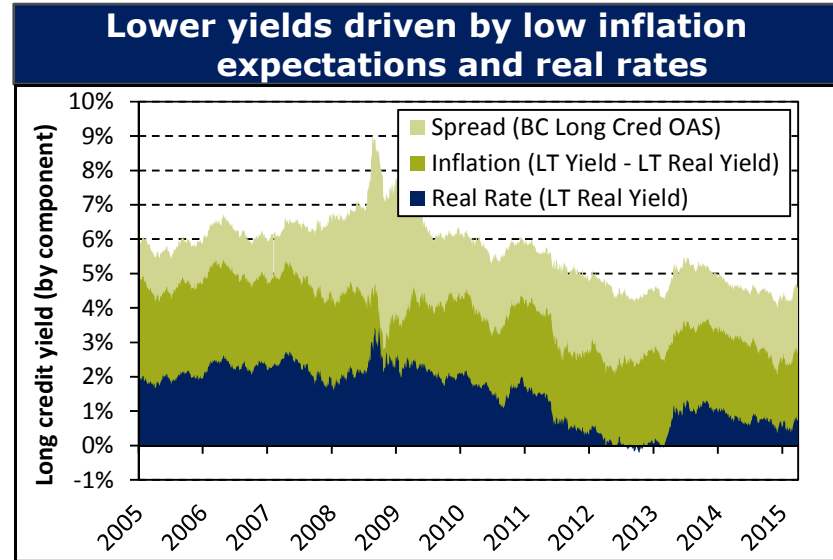
**Global yields have trended lower over long term**



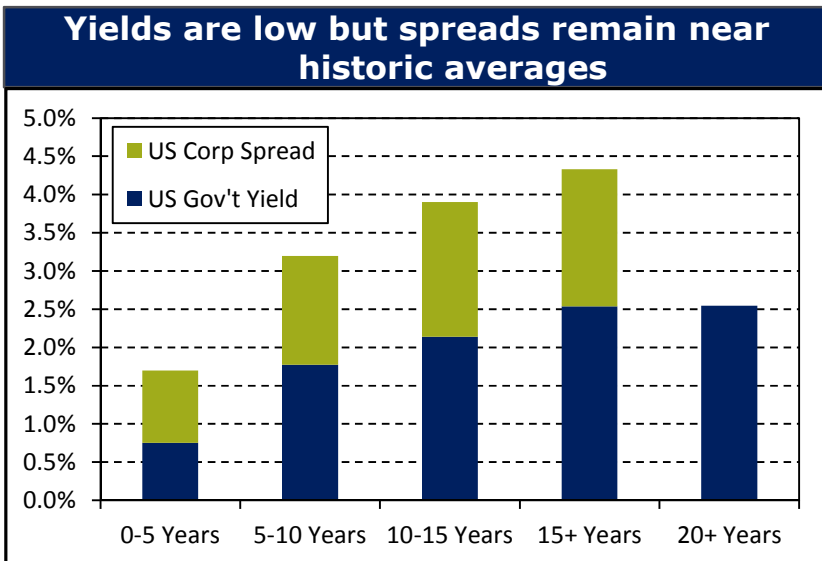
Source: Bloomberg



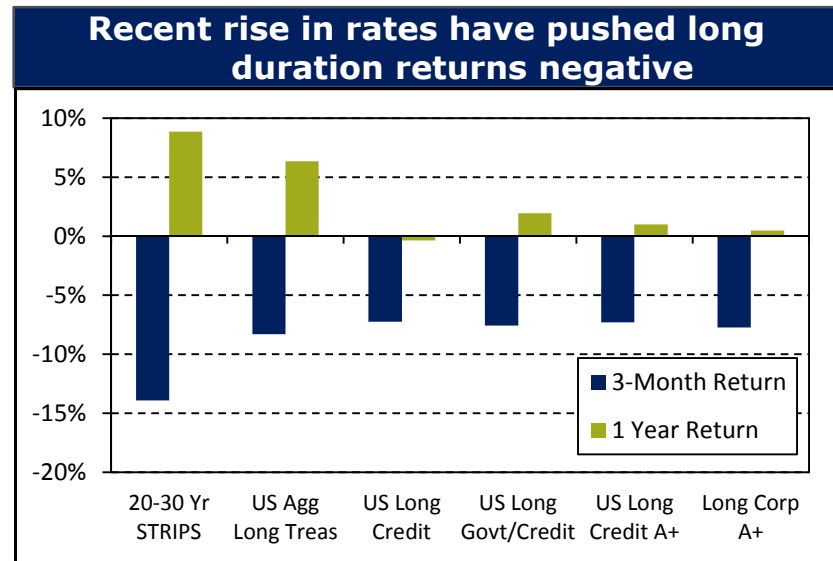
Source: Bloomberg, Citigroup, Barclays



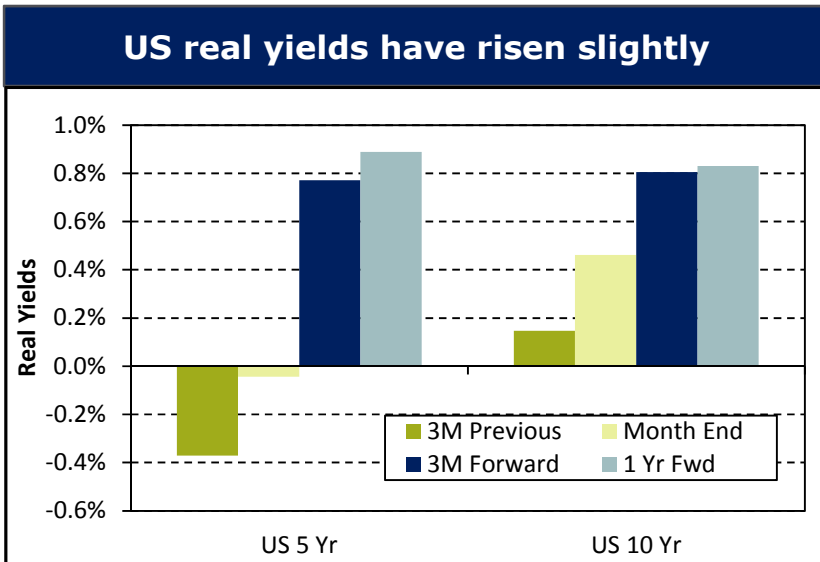
Source: Bloomberg, US Treasury, Barclays, NEPC



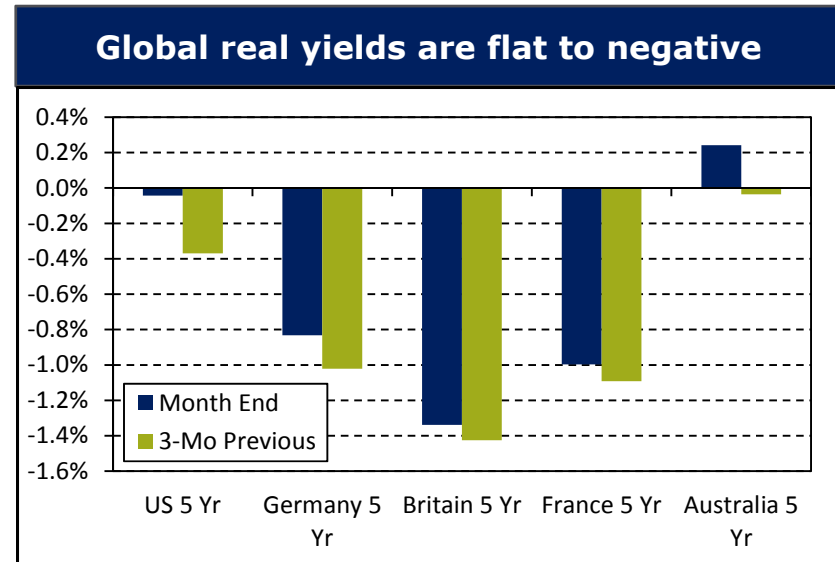
Source: Bloomberg, BofA Merrill Lynch, Barclays \*No index for 20+ year corporate



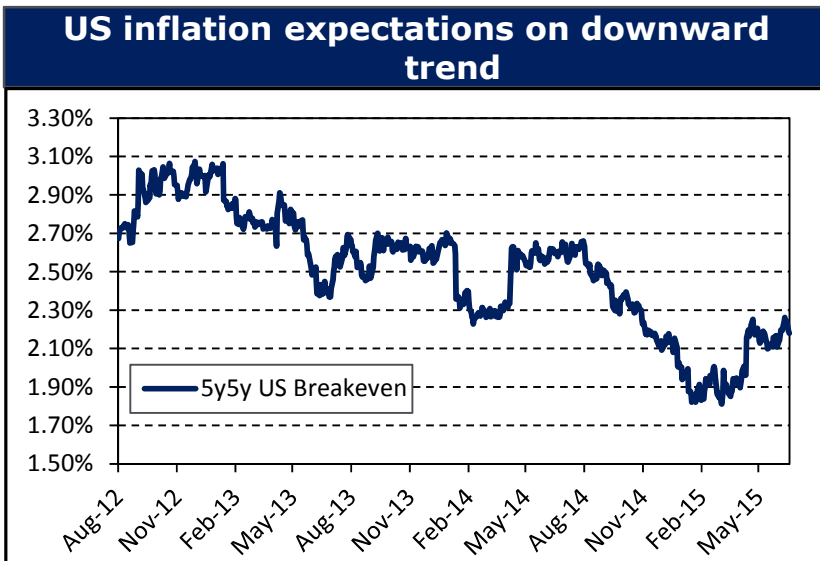
Source: Bloomberg, Barclays



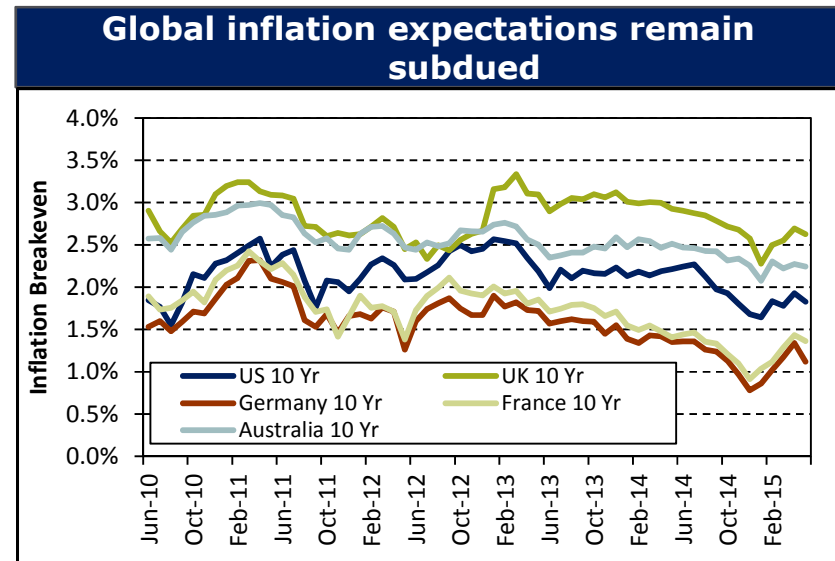
Source: Bloomberg



Source: Bloomberg

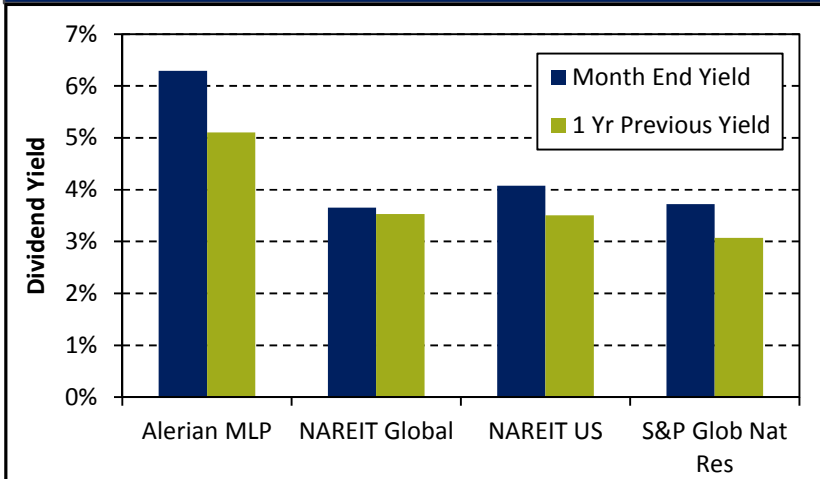


Source: Bloomberg



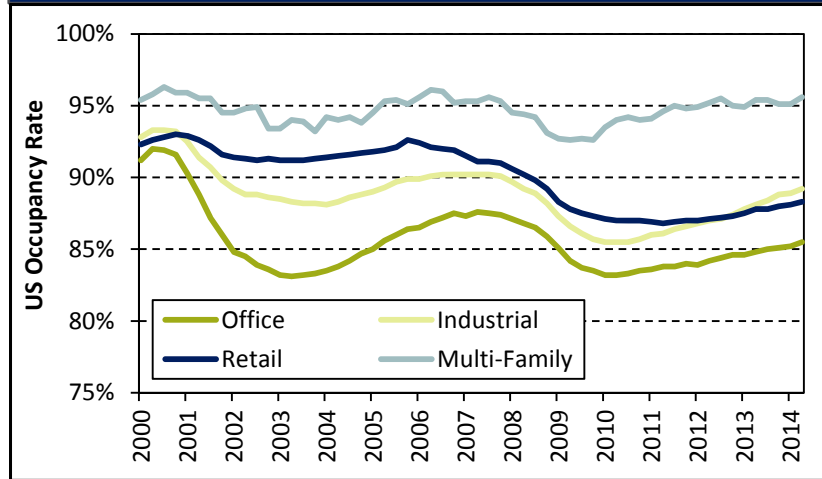
Source: Bloomberg

**Yields slightly higher relative to last year**



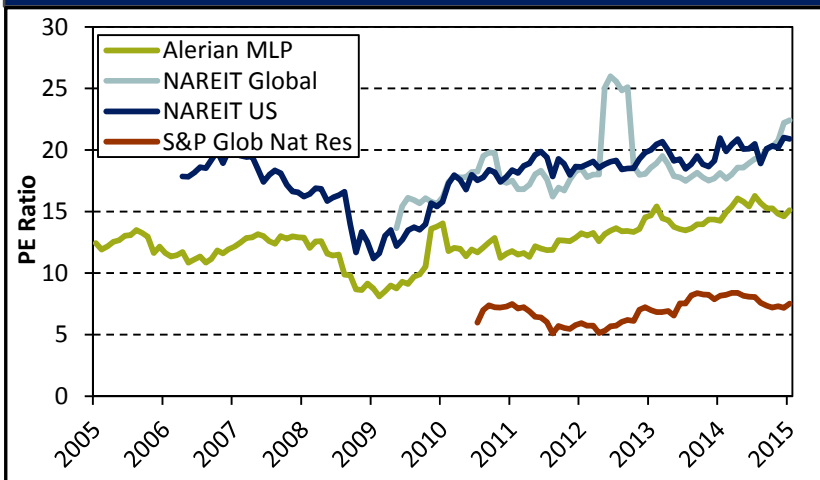
Source: Bloomberg, Alerian, Nareit, Standard and Poors

**Gradual recovery in occupancy rates**



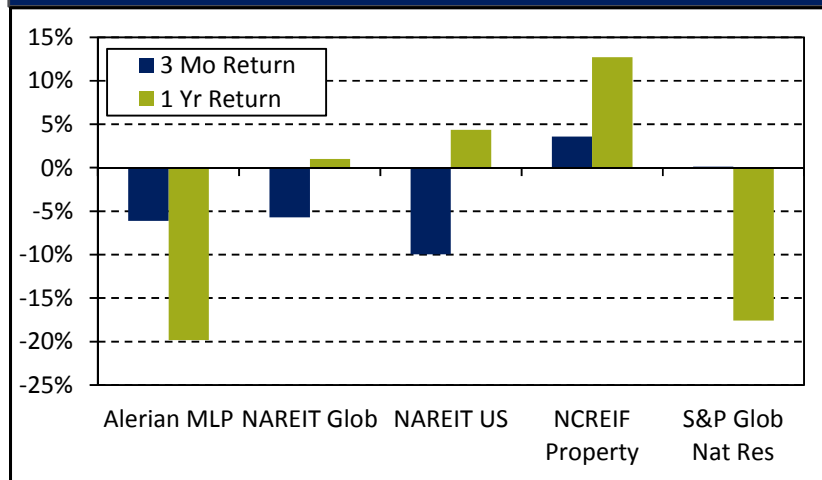
Source: Bloomberg, CB Richard Ellis

**PE Ratios near or above averages**

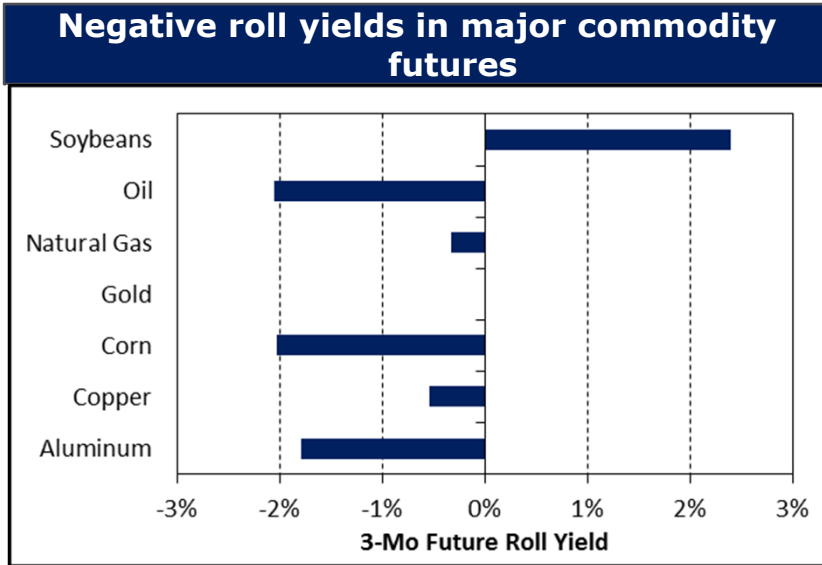


Source: Bloomberg, US Census Bureau

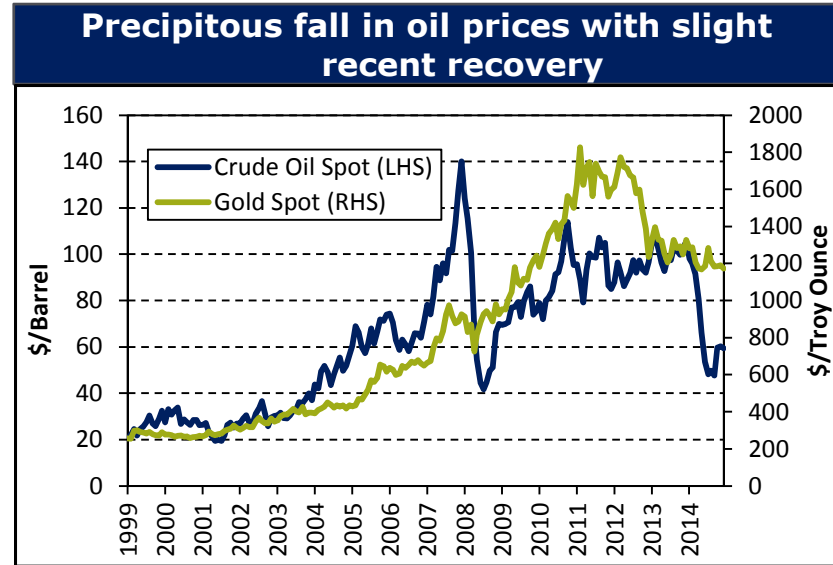
**Recent REIT selloff has cut into long rally**



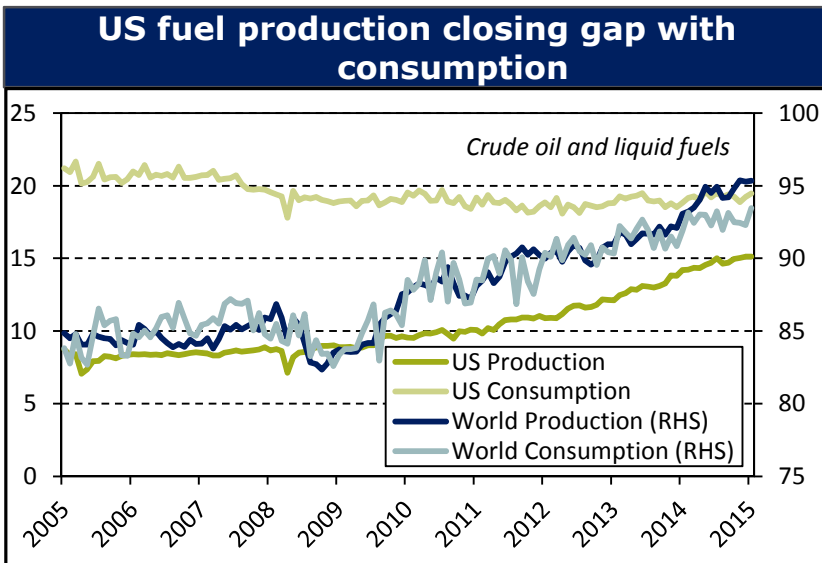
Source: Bloomberg, Alerian, Nareit, Standard and Poors



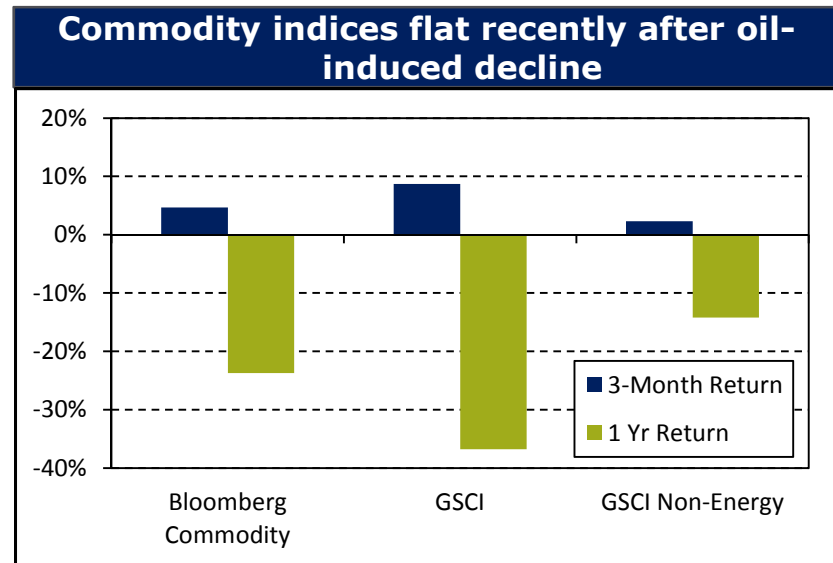
Source: Bloomberg



Source: Bloomberg



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



Source: Bloomberg, Standard and Poors