



***California Public Employees' Retirement System
Performance Review – December 31, 2014***

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January 2015

December 2014 Asset Class Assumptions



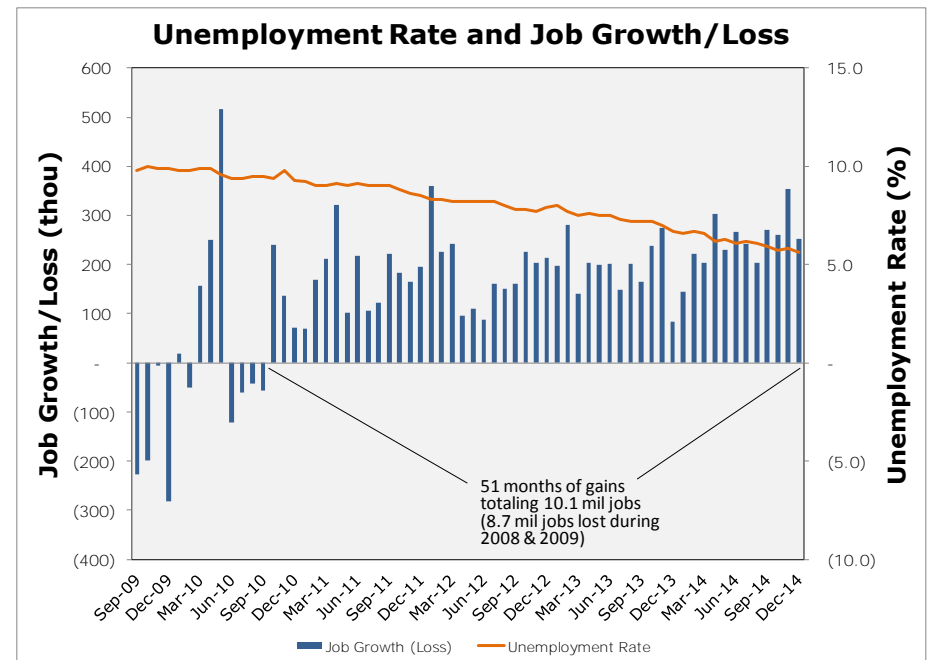
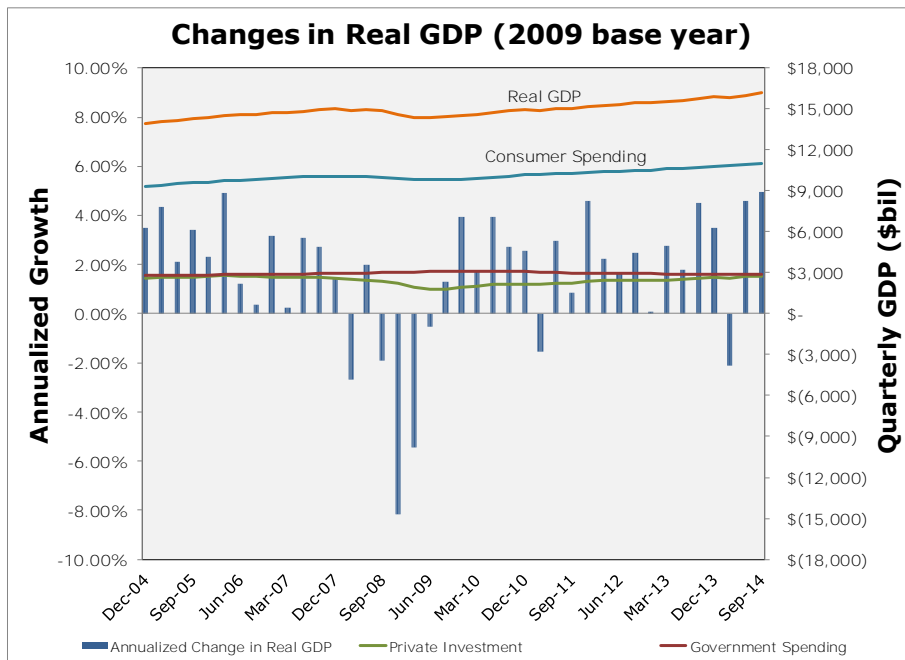
	Total Return (%)			Risk (%)
	Dec. 2013	Dec. 2014	Change	Dec. 2014
<u>Investment Categories:</u>				
U.S. Stocks	7.25	6.25	(1.00)	17.00
Dev ex-U.S. Stocks	7.25	6.25	(1.00)	18.00
Emerging Mkt Stocks	7.25	6.25	(1.00)	26.00
Global Stocks	7.45	6.45	(1.00)	17.15
Private Markets	10.40	8.80	(1.60)	27.50
Cash Equivalents	1.55	1.45	(0.10)	1.25
Core Bonds	4.10	3.35	(0.75)	5.00
LT Core Bonds	4.70	3.45	(1.25)	10.00
TIPS	4.00	2.90	(1.10)	6.00
High Yield Bonds	5.15	5.15	-	10.00
EMD Local Currency (h)	6.05	5.60	(0.45)	5.00
U.S. RE Securities	5.20	4.85	(0.35)	17.00
Private Real Estate	5.95	5.70	(0.25)	14.00
Commodities	4.25	3.70	(0.55)	15.00
MLPs	9.10	8.85	(0.25)	17.00
Real Asset Basket	6.55	6.15	(0.40)	8.35
Inflation:	2.25	1.70	(0.55)	1.75
<u>Returns minus Inflation:</u>				
U.S. Stocks	5.00	4.55	(0.45)	
U.S. Bonds	1.85	1.65	(0.20)	
Cash Equivalents	(0.70)	(0.25)	0.45	
<u>Stocks minus Bonds:</u>	3.15	2.90	(0.25)	
<u>Bonds minus Cash:</u>	2.55	1.90	(0.65)	

Economic Review



December 31, 2014	Key Economic Indicators			
CPI (all items) Seasonally adjusted	Monthly Change		Cumulative Change	
	Dec-14	-0.4	3-Month	-0.6
	Nov-14	-0.3	12-Month	0.7
	Oct-14	0.0	10-Yr Annual	2.1
Breakeven Inflation	10-Year	1.7		
Consumer Sentiment Unv. of Michigan Survey	Dec-14	93.6		
	Nov-14	88.8		
	1-Yr Ago	82.5	10-Yr Avg	77.1
Manufacturing Inst. for Supply Mgmt Purchasing Mngrs' Idx	Dec-14	55.5	Change in Manufacturing Sector	
	Nov-14	58.7	>50	Expansion
	1-Yr Avg	55.8	<50	Contraction

Note: Seasonally adjusted CPI data is utilized to better reflect short-term pricing activity.

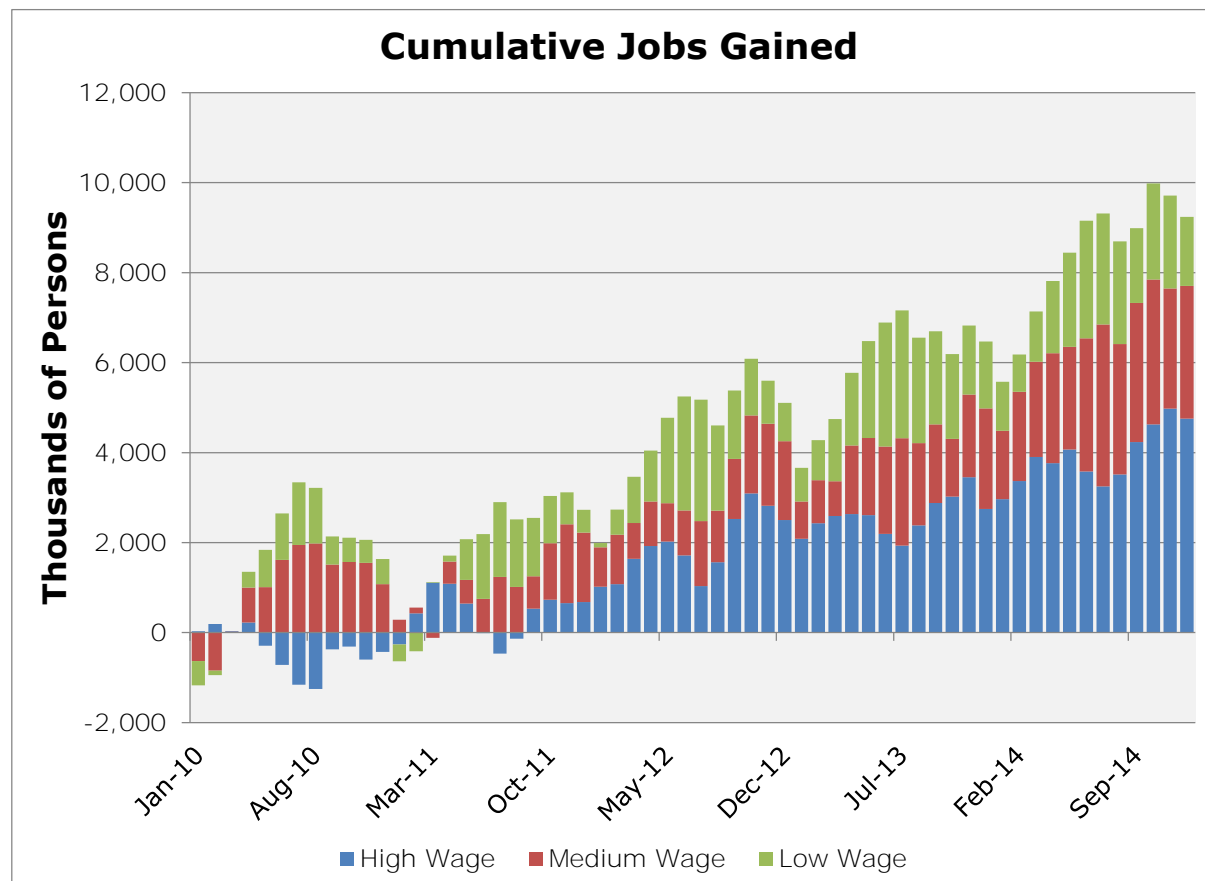


Data sources: Bureau of Economic Analysis, Bureau of Labor Statistics, Federal Reserve Bank of St. Louis, Barclays Capital



Jobs Gained by Occupation

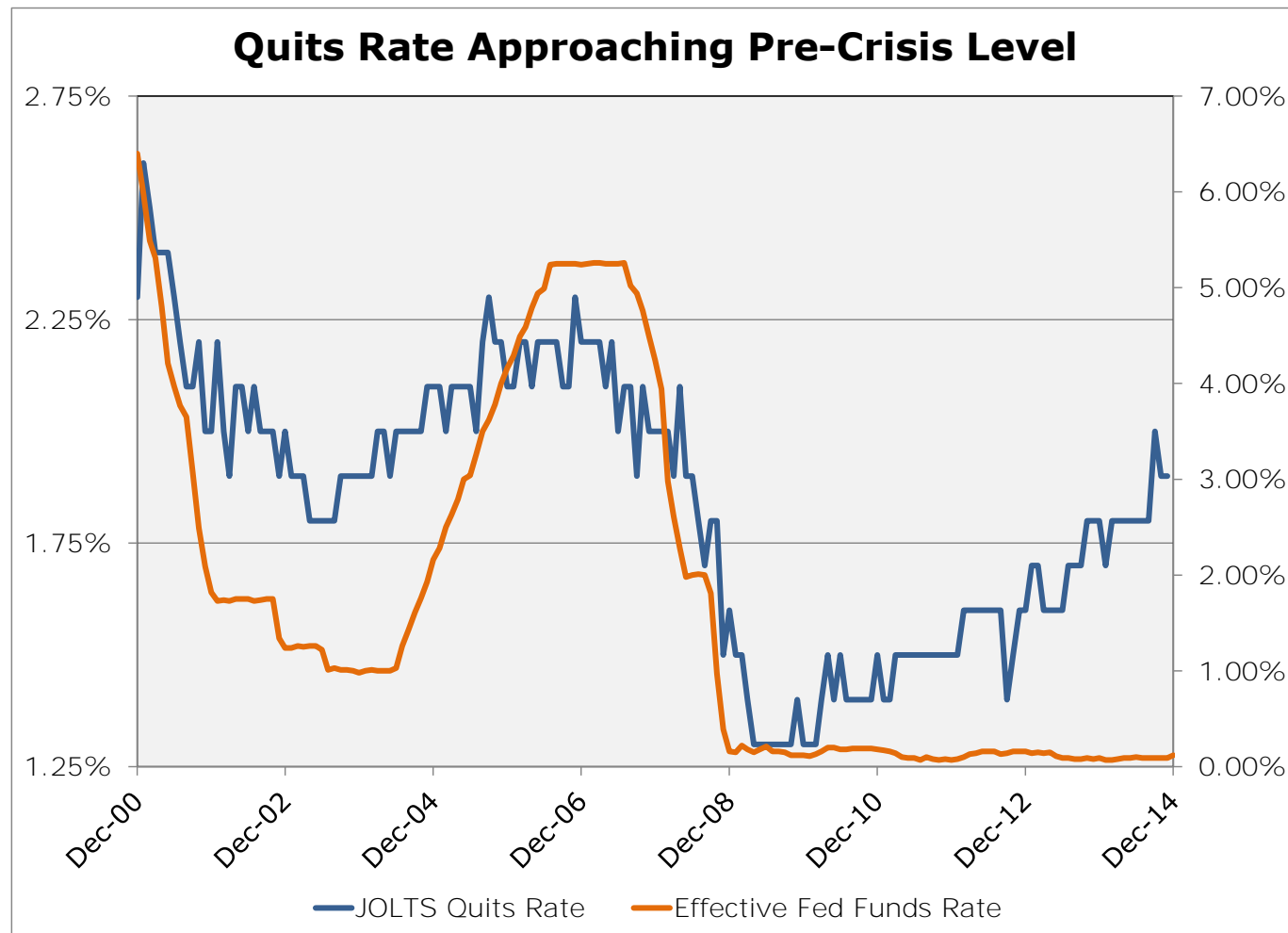
- Majority of gains were in high wage occupations (i.e. management, professional)
- Gains in medium wage occupations (i.e. sales, construction, maintenance) accelerated during 2014



Employment Signals Beyond U6



- JOLTS (Job Openings and Labor Turnover) Quits Rate is on the rise
- The rate is on Fed Chair Janet Yellen’s “dashboard” of market signals in order to help gauge labor demand

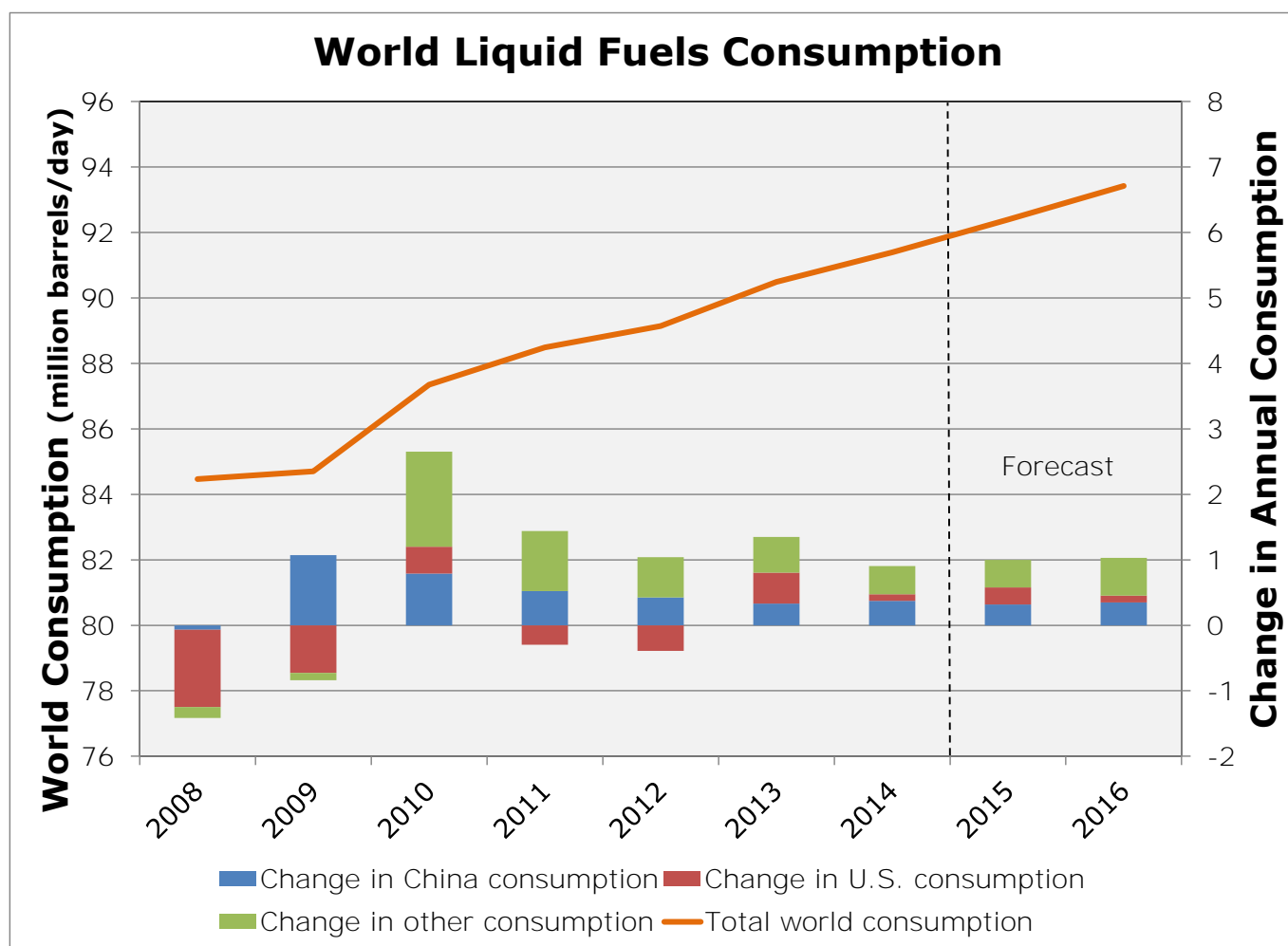


Source: Bureau of Labor Statistics, Federal Reserve

Global Oil Consumption



- Economic growth in China has settled near 7.5% for the past 3 years
- Consumption in the U.S. has gone down from 2008 to 2014 as consumption of natural gas has shown an increase in the double-digits

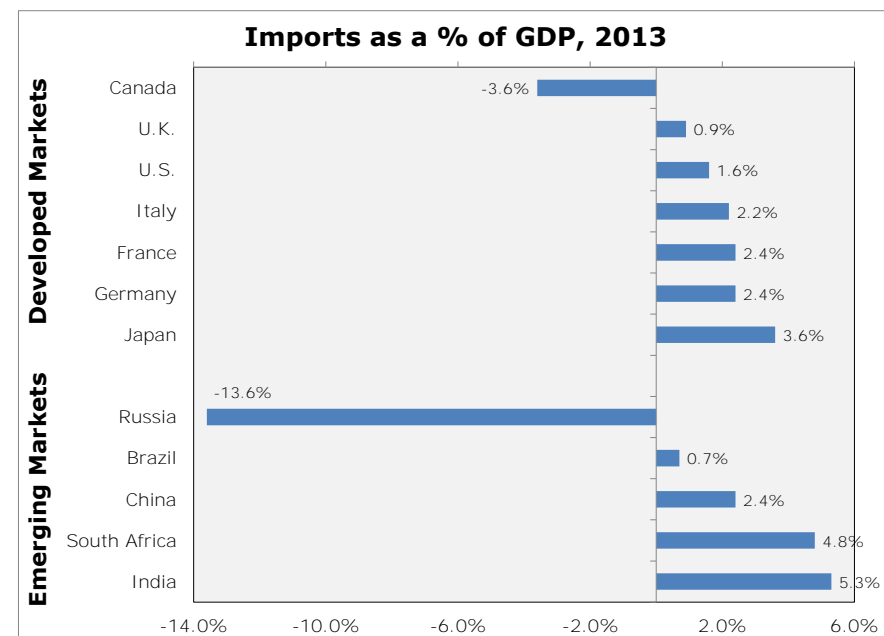
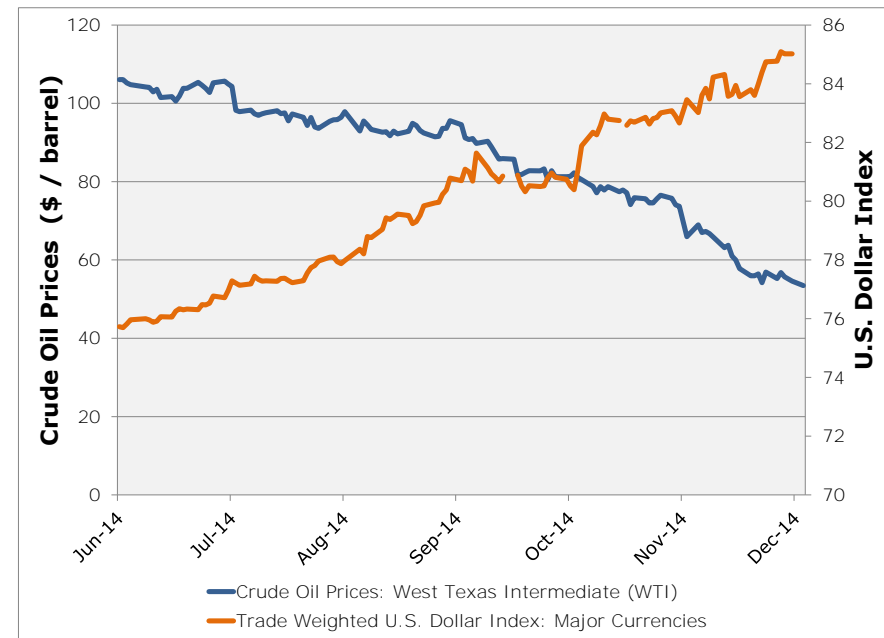


Source: U.S. Energy Information Administration

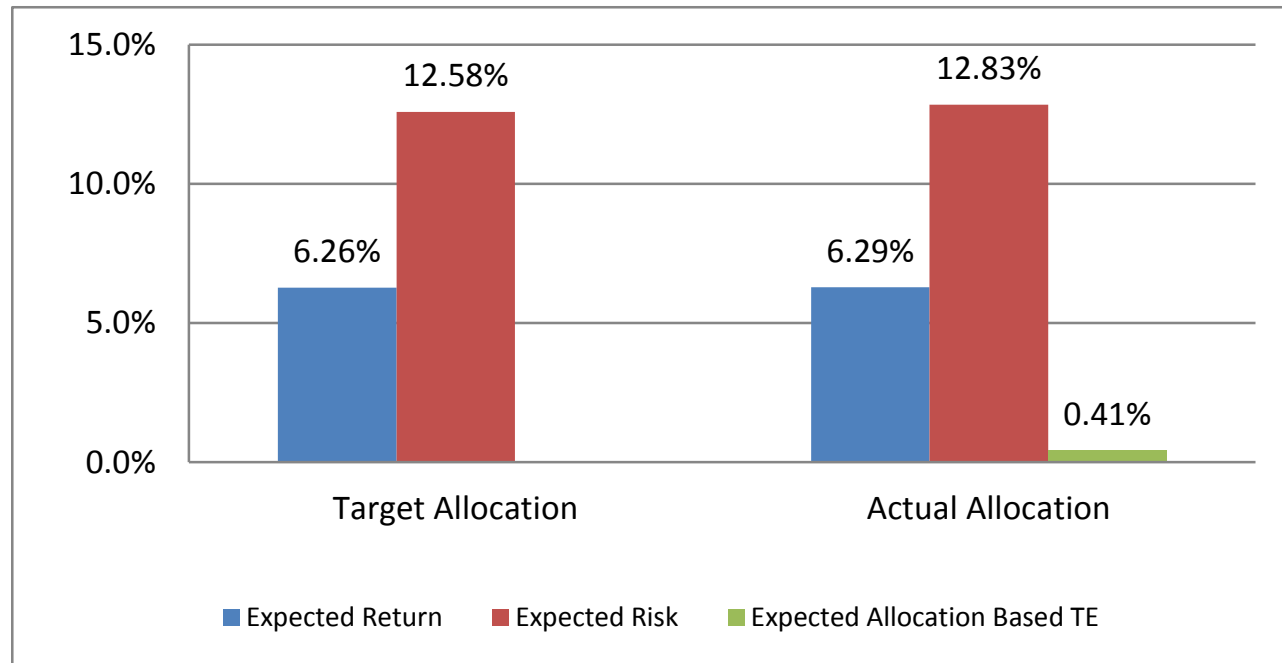


Oil Prices and Production

- Slowdown in the global economy and a shale boom in the U.S. has put downward pressure on oil prices
- Strong U.S. dollar will typically put negative pressure on commodity prices
- Consumers in markets that are net importers of oil are enjoying significantly lower gas prices
- Oil production has been increasing, which also pushes prices down, but is likely to slow with lower prices

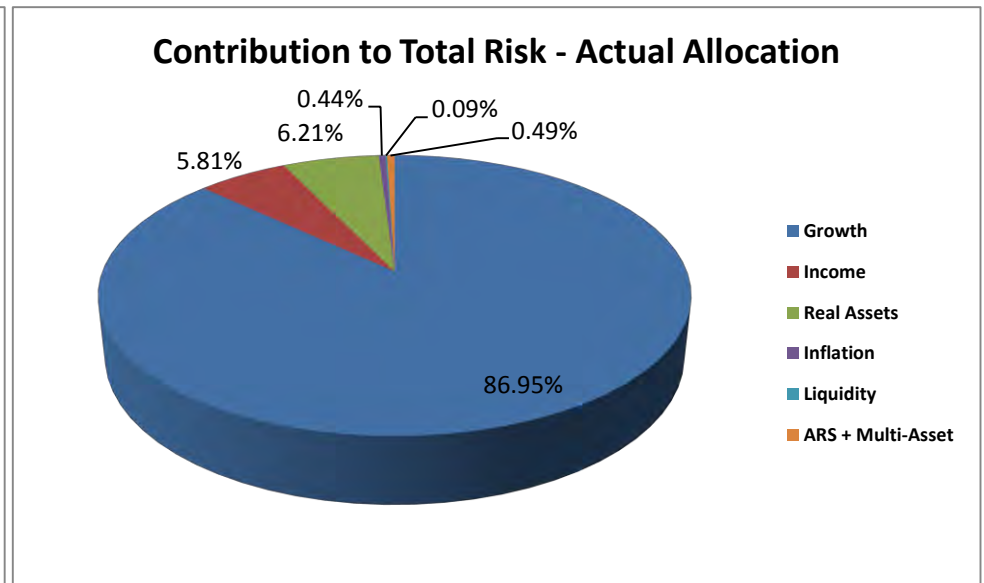
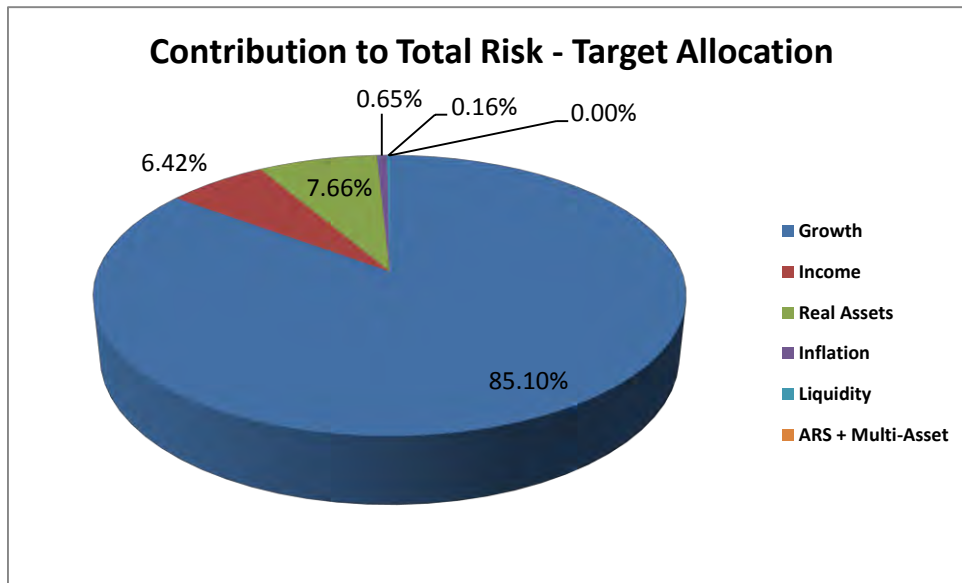
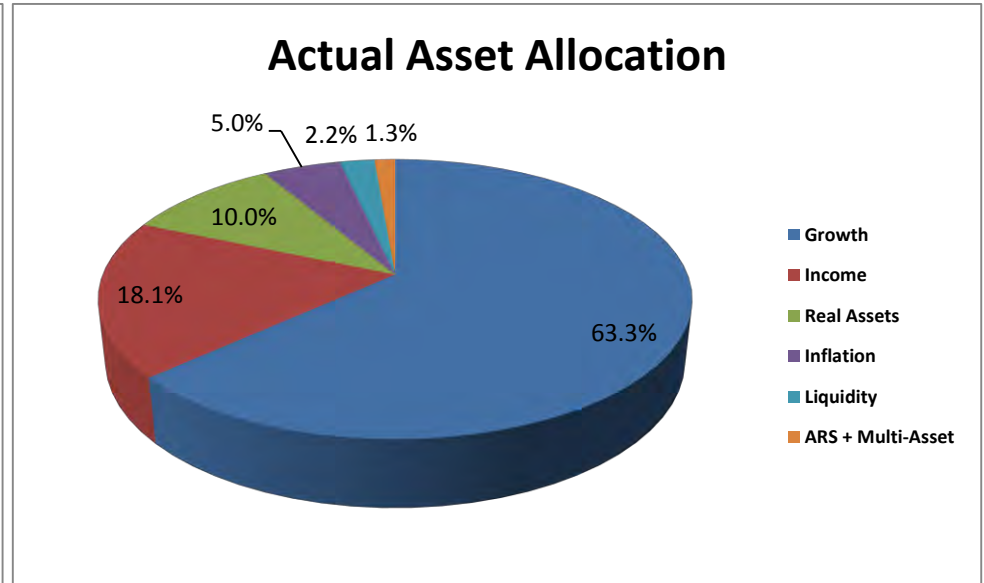
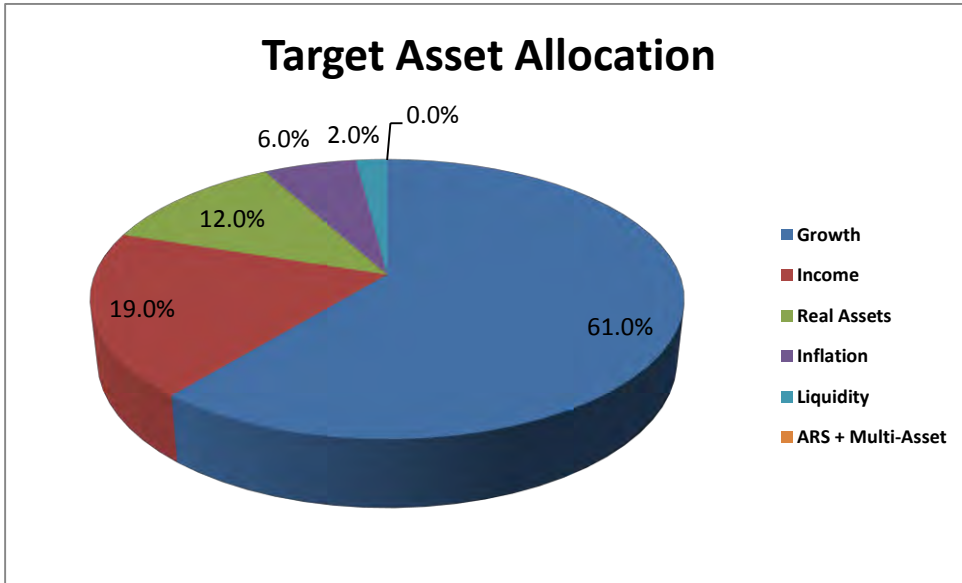


CalPERS Expected Return and Risk Estimates





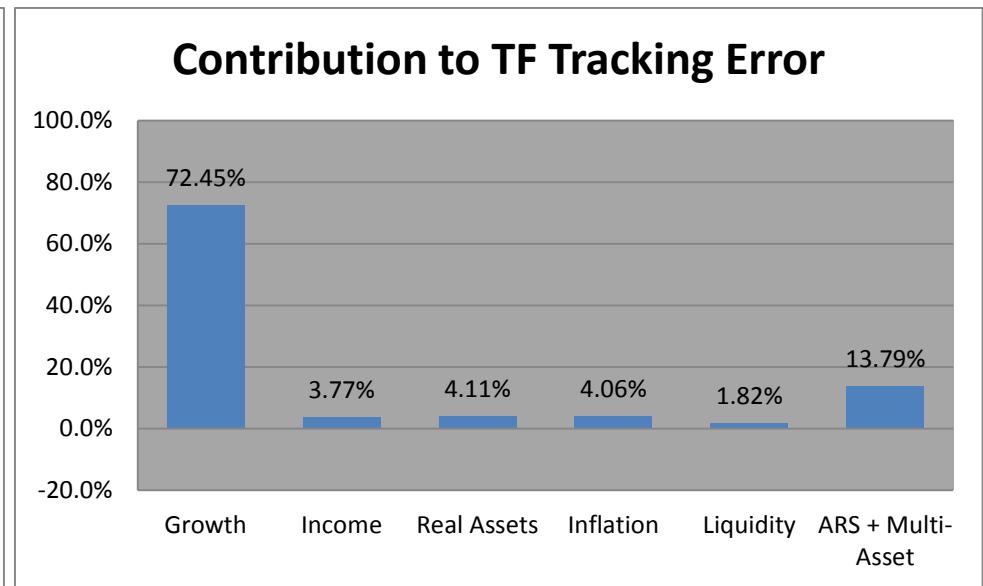
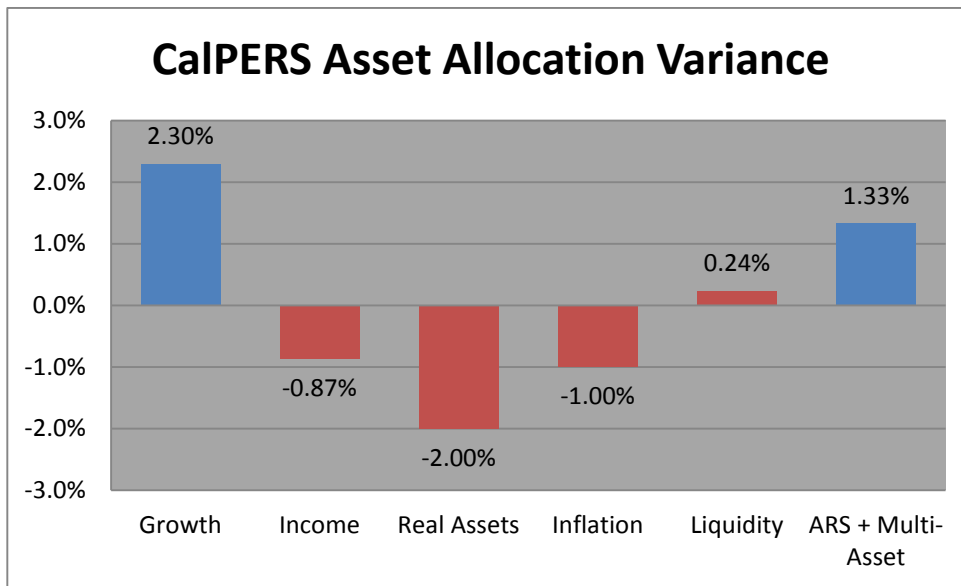
Asset and Risk Allocation



Forecasts using Wilshire's 2015 Asset Class Assumptions.



Drivers of Expected Excess Risk



- This excess risk forecast is based on asset allocation variance only.
- Other sources of risk (structural within asset classes, manager/program specific source of tracking error, covariance) are not considered here.



Total Fund – Performance

	Market Value	5-Year Ratios							
		Qtr	1-Year	3-Year	5-Year	10-Year	VaR	Sharpe	Info
TOTAL FUND	\$295.8 bil	0.7%	6.5%	11.9%	9.8%	6.2%	\$40.5 bil	1.3	0.1
<i>Total Fund Policy Benchmark</i>		0.6%	6.8%	12.0%	9.6%	7.1%		1.3	0.0
<i>Actuarial Rate</i>		1.8%	7.5%	7.5%	7.6%	7.7%			
GROWTH	187.3	0.8%	6.2%	15.3%	11.4%	7.0%	\$39.3 bil	1.0	0.0
<i>Growth Policy Benchmark</i>		0.5%	6.9%	17.0%	11.4%	7.9%		0.9	0.0
PUBLIC EQUITY	156.8	0.8%	4.6%	15.5%	10.3%	6.3%	\$32.0 bil	0.7	0.8
<i>Public Equity Policy Benchmark</i>		0.8%	4.6%	15.2%	9.9%	6.6%		0.7	0.0
PRIVATE EQUITY	30.5	0.9%	14.6%	15.3%	15.9%	12.9%	\$10.1 bil	3.1	-0.1
<i>Private Equity Policy Benchmark</i>		-1.0%	17.1%	23.1%	16.7%	15.2%		1.2	0.0
INCOME	53.6	2.5%	9.9%	4.3%	7.3%	6.5%	\$6.7 bil	1.6	0.9
<i>Income Policy Benchmark</i>		2.4%	9.6%	3.1%	6.3%	5.8%		1.3	0.0
REAL ASSETS	29.6	0.8%	13.0%	12.3%	8.4%	3.1%	\$4.1 bil	1.2	-0.4
<i>Real Assets Policy Benchmark</i>		2.7%	10.8%	10.8%	10.6%	8.9%		2.4	0.0
INFLATION	14.8	-6.4%	-5.1%	-1.7%	2.6%	-.%	\$1.0 bil	0.3	0.4
<i>Inflation Policy Benchmark</i>		-7.8%	-6.9%	-1.9%	1.5%	-.%		0.2	0.0
LIQUIDITY	6.6	0.4%	1.5%	0.4%	1.1%	2.2%	\$0.3 bil	0.7	-0.8
<i>Liquidity Policy Benchmark</i>		1.0%	2.5%	0.9%	1.4%	2.4%		0.8	0.0
ABSOLUTE RETURN STRATEGIES	2.8	1.7%	4.6%	5.6%	4.5%	4.4%		1.4	-0.3
<i>Absolute Return Strategies Policy Benchmark</i>		1.2%	5.2%	5.2%	5.4%	7.1%		30.8	0.0
MULTI-ASSET CLASS COMPOSITE	1.2	2.7%	9.7%	-.%	-.%	-.%		N/A	N/A
<i>Absolute 7.5%</i>		1.8%	7.5%	-.%	-.%	-.%		N/A	N/A
CURRENCY + ASSET ALLOCATION TRANSITION	0.0	-.%	-.%	-.%	-.%	-.%		N/A	N/A
TERMINATED AGENCY POOL	0.1	4.2%	13.3%	-.%	-.%	-.%		N/A	N/A
TOTAL FUND PLUS TAP	295.9	0.7%	6.5%	11.9%	9.8%	6.2%		N/A	N/A



Total Fund – Attribution (Quarter)

California Public Employees' Retirement System
Total Fund Attribution - Quarter
As of 12/31/2014

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	63.59	0.84	61.00	0.52	2.59	0.32	-0.01	0.01	0.20	0.20
Public Equity	53.11	0.83	51.00	0.80	2.11	0.03	0.00	0.00	0.02	0.02
Private Equity	10.48	0.87	10.00	-0.99	0.48	1.85	-0.01	0.01	0.18	0.18
Income	17.88	2.47	19.00	2.41	-1.12	0.06	-0.02	0.00	0.01	-0.01
Real Assets	10.10	0.84	12.00	2.69	-1.91	-1.85	-0.04	0.04	-0.23	-0.23
Inflation	5.28	-6.40	6.00	-7.77	-0.72	1.37	0.06	-0.01	0.09	0.14
Absolute Return	1.50	1.69	0.00	1.16	1.50	0.53	0.01	0.01	0.00	0.01
Liquidity	1.67	0.45	2.00	0.97	-0.33	-0.52	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	0.74	100.00	0.64		0.10	0.00	0.04	0.06	0.10
Trading/Hedging/Other		0.00		0.00		0.00				0.00
Total		0.75		0.64		0.10				0.10

Total Fund – Attribution (Calendar YTD)



**California Public Employees' Retirement System
Total Fund Attribution - Calendar Year-to-Date
As of 12/31/2014**

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	64.39	6.19	62.50	6.94	1.89	-0.74	-0.23	0.07	-0.34	-0.50
Public Equity	53.77	4.60	50.50	4.62	3.27	-0.02	-0.10	0.00	-0.01	-0.11
Private Equity	10.63	14.59	12.00	17.06	-1.37	-2.47	-0.13	0.06	-0.35	-0.41
Income	16.59	9.92	18.00	9.57	-1.41	0.35	-0.07	0.00	0.06	0.00
Real Assets	9.93	12.97	11.50	10.81	-1.57	2.17	-0.11	-0.01	0.21	0.09
Inflation	4.15	-5.14	5.00	-6.87	-0.85	1.73	0.12	-0.01	0.11	0.21
Absolute Return	1.90	4.57	0.00	5.19	1.90	-0.62	-0.05	-0.02	0.00	-0.07
Liquidity	3.04	1.48	3.00	2.52	0.04	-1.04	0.01	0.00	-0.03	-0.03
Monthly Linked Return	100.00	6.62	100.00	6.93		-0.30	-0.33	0.02	0.00	-0.30
Trading/Hedging/Other		-0.10		-0.09		-0.01				-0.01
Total		6.52		6.84		-0.32				-0.32

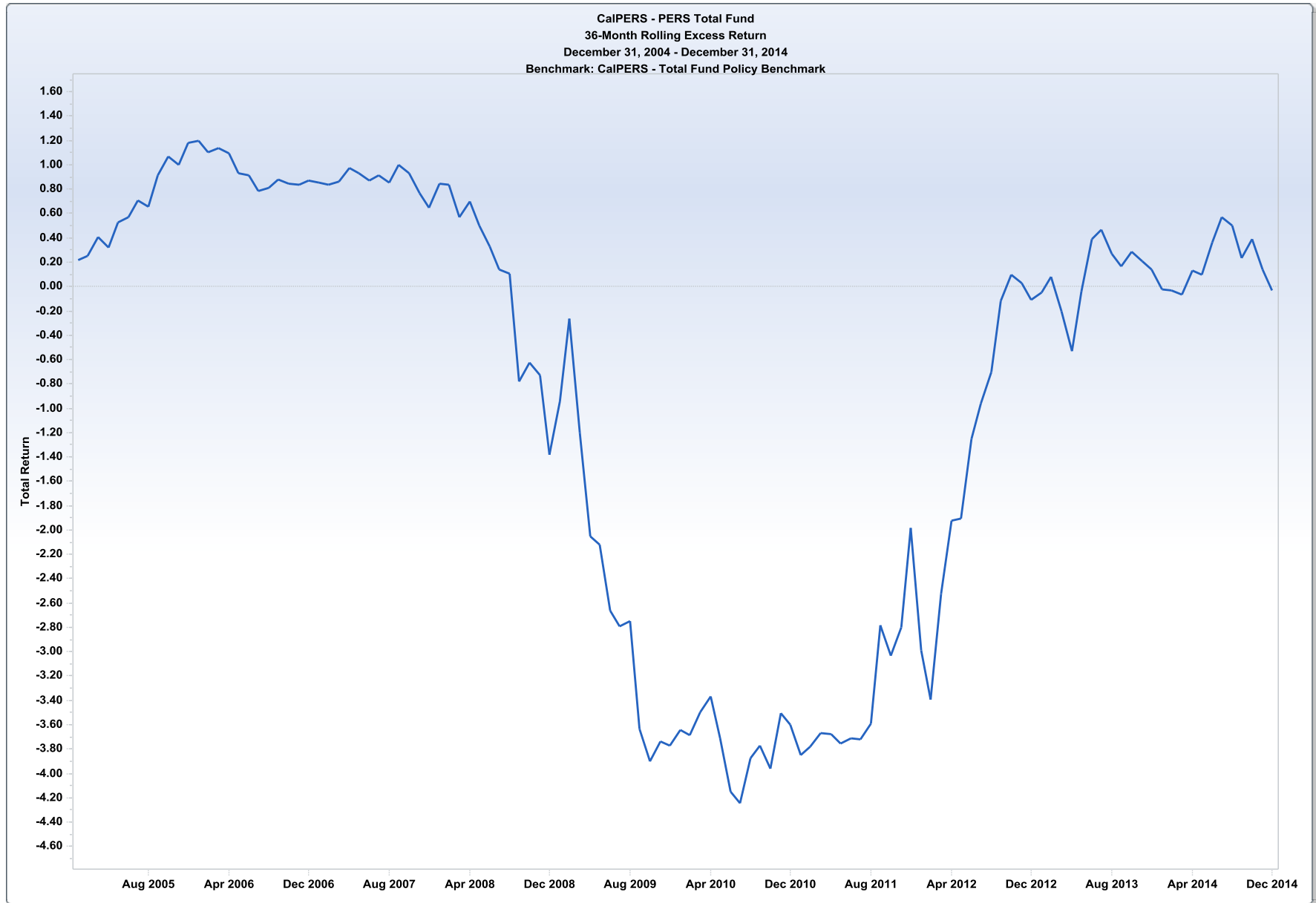


Total Fund – Attribution (Fiscal YTD)

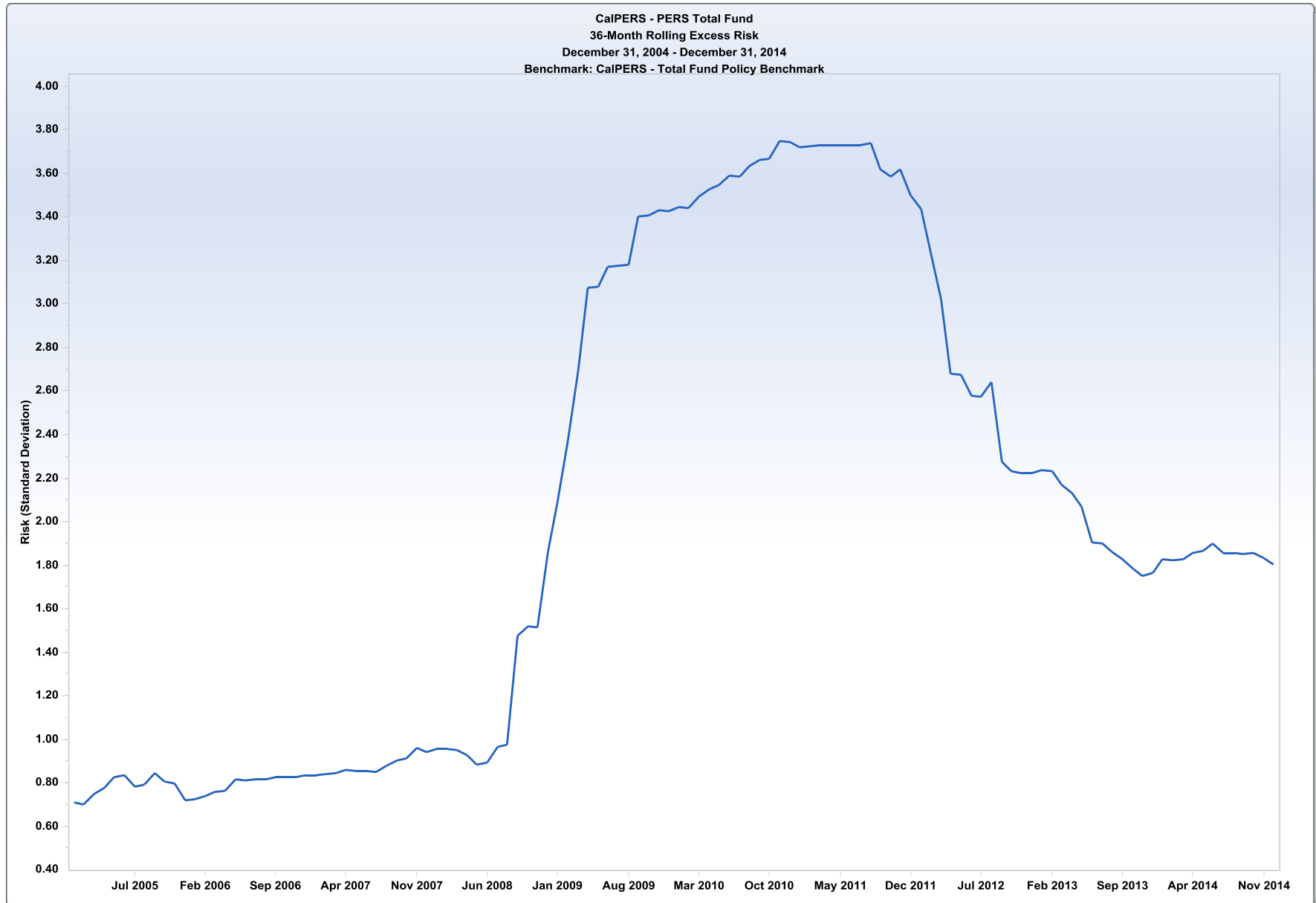
California Public Employees' Retirement System Total Fund Attribution - Fiscal Year-to-Date As of 12/31/2014

Asset Class	Actual (%)		Policy (%)		Difference (%)		Total Fund Return Contribution (%)			
	Weight	Return	Weight	Return	Weight	Return	Actual Allocation	Interaction	Active Management	Total
Growth	63.51	-0.95	61.00	-0.80	2.51	-0.15	-0.02	-0.01	-0.11	-0.13
Public Equity	53.06	-1.97	51.00	-1.88	2.06	-0.09	-0.04	0.00	-0.05	-0.09
Private Equity	10.46	4.34	10.00	4.82	0.46	-0.48	0.02	0.00	-0.06	-0.04
Income	17.85	2.39	19.00	2.02	-1.15	0.37	-0.02	0.00	0.07	0.04
Real Assets	10.04	2.26	12.00	5.23	-1.96	-2.97	-0.12	0.06	-0.35	-0.41
Inflation	4.97	-11.09	6.00	-12.57	-1.03	1.48	0.11	-0.01	0.10	0.19
Absolute Return	1.63	2.22	0.00	2.50	1.63	-0.28	0.05	-0.01	0.00	0.04
Liquidity	1.99	0.52	2.00	0.97	-0.01	-0.45	0.00	0.00	-0.01	-0.01
Monthly Linked Return	100.00	-0.51	100.00	-0.24		-0.27	-0.01	0.03	-0.30	-0.27
Trading/Hedging		-0.01		0.00		-0.01				-0.01
Total		-0.51		-0.24		-0.27				-0.27

Total Fund – Rolling Excess Returns



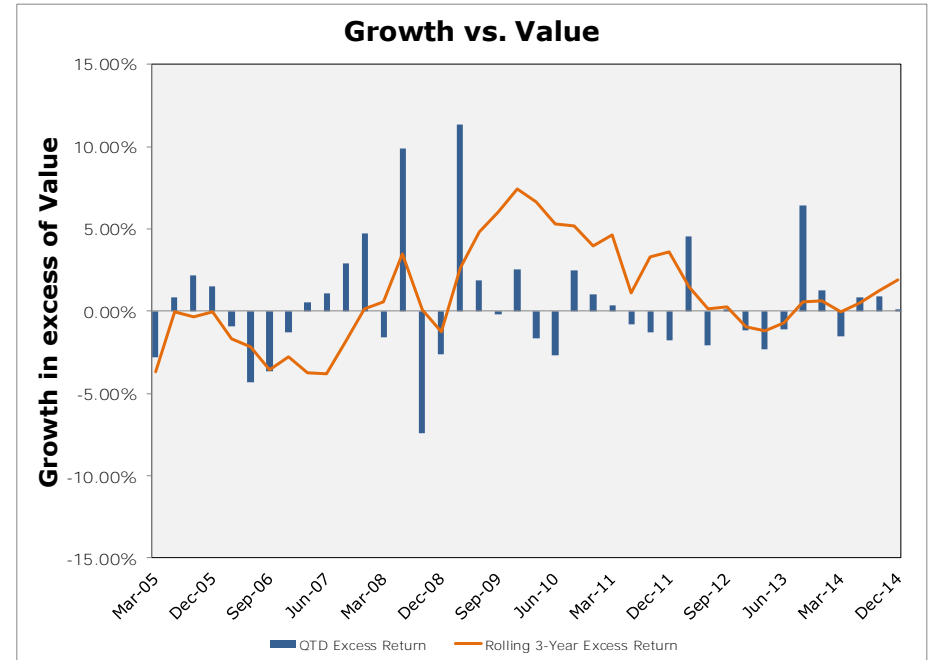
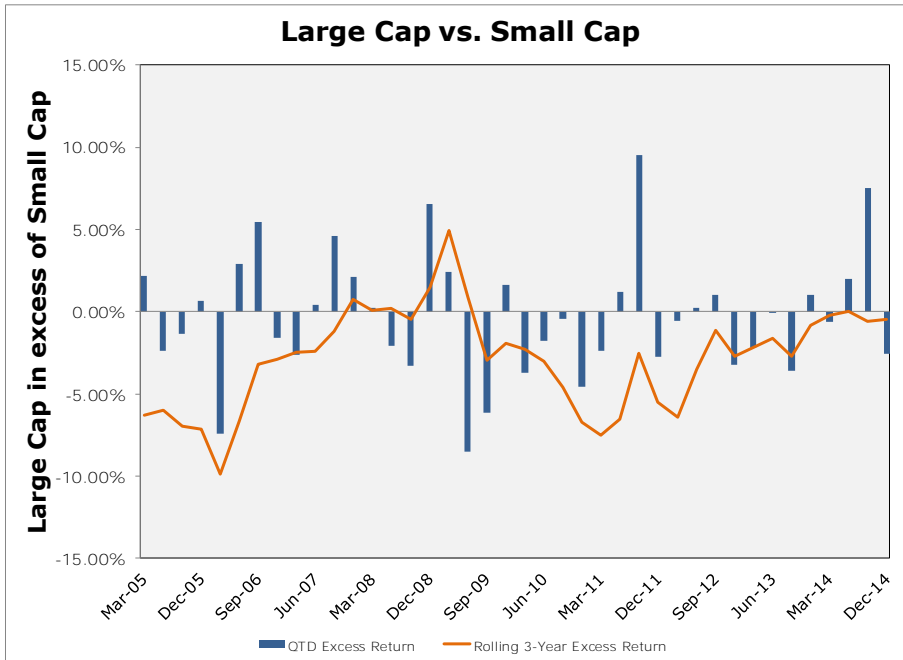
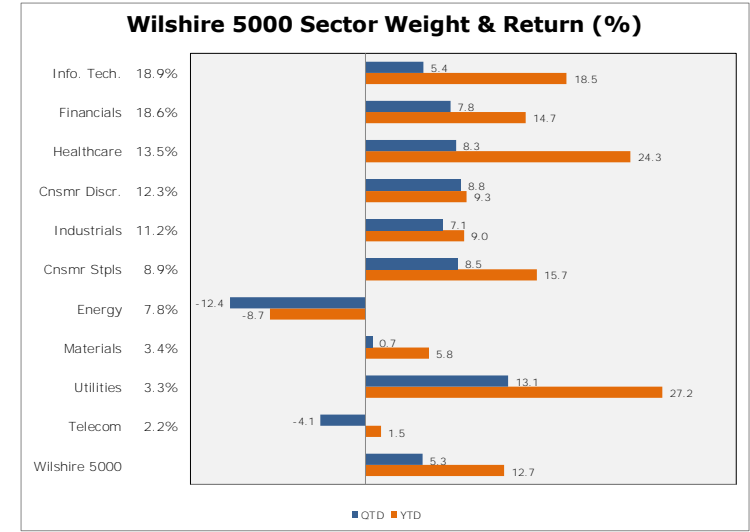
Total Fund – Rolling Tracking Error



U.S. Equity Market



December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Wilshire 5000	5.3	12.7	12.7	20.3	15.5	8.0
Wilshire U.S. Large Cap	5.0	13.4	13.4	20.2	15.4	7.9
Wilshire U.S. Small Cap	7.7	6.8	6.8	20.8	17.0	9.5
Wilshire U.S. Large Growth	5.2	14.0	14.0	21.6	15.5	8.6
Wilshire U.S. Large Value	4.8	13.0	13.0	19.0	15.3	7.1
Wilshire U.S. Small Growth	6.7	4.2	4.2	20.5	17.7	10.1
Wilshire U.S. Small Value	8.6	9.1	9.1	21.1	16.3	8.9
Wilshire REIT Index	15.1	31.8	31.8	16.4	17.3	8.3
MSCI USA Minimum Volatility Index	7.8	15.8	15.8	16.6	15.1	7.7
FTSE RAFI U.S. 1000 Index	4.8	12.6	12.6	21.4	16.5	9.1

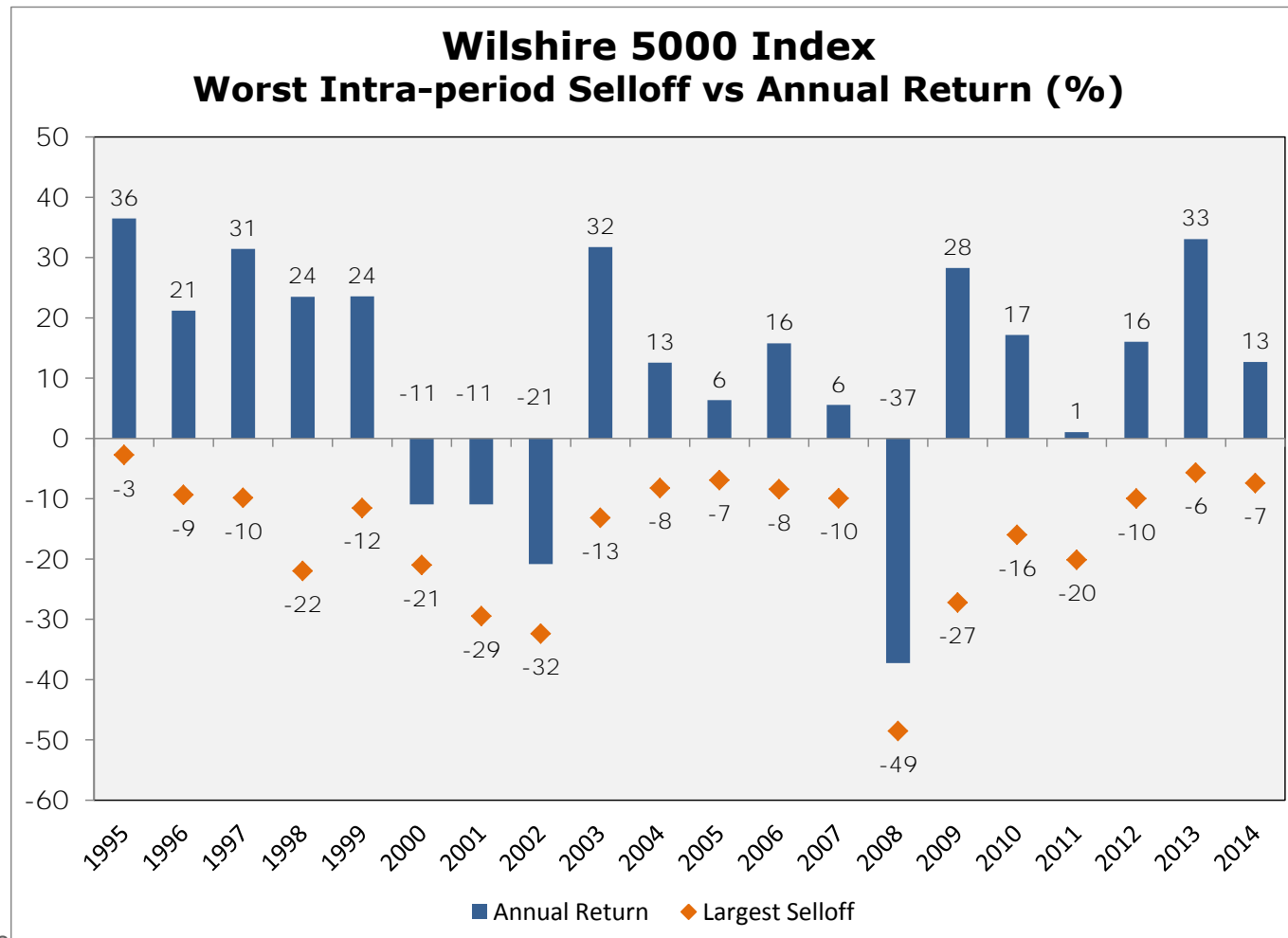


Data sources: Wilshire Compass, Wilshire Atlas

Annual Equity Returns



- U.S. Equity has now produced 6 straight years of positive returns since the credit crisis, including gains for the past 10 quarters
- Second straight year of a relatively mild sell-off

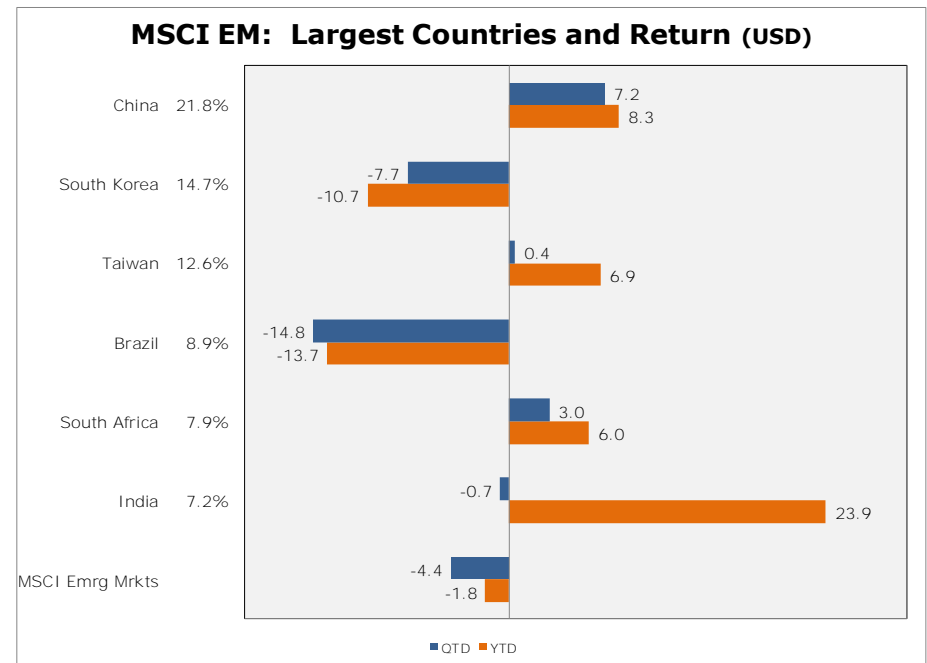
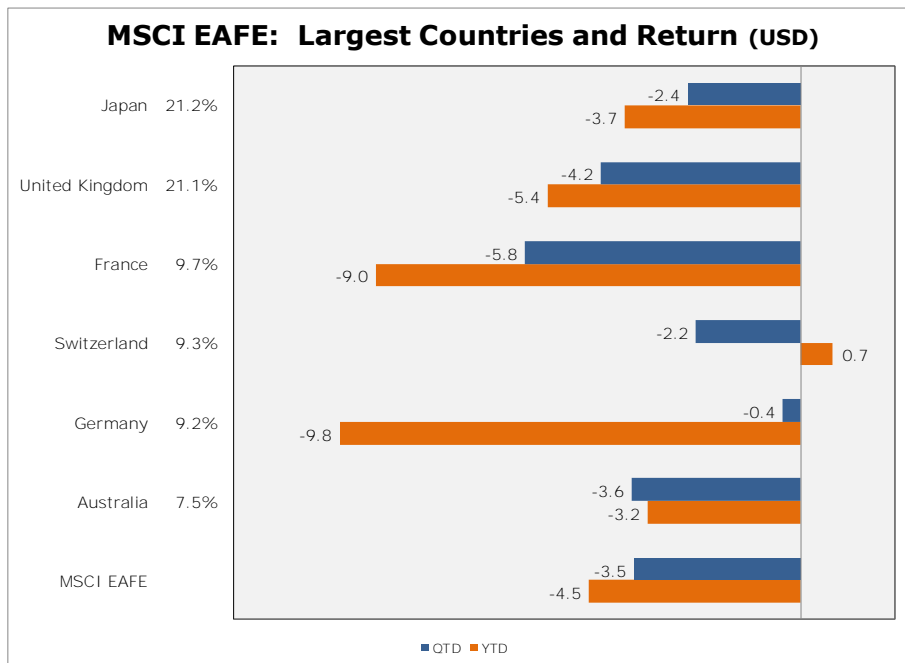


Source: Wilshire Atlas



Non-U.S. Equity Market

December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
MSCI ACWI ex-US (\$g)	-3.8	-3.4	-3.4	9.5	4.9	5.6
MSCI EAFE (\$g)	-3.5	-4.5	-4.5	11.6	5.8	4.9
MSCI Emerging Markets (\$g)	-4.4	-1.8	-1.8	4.4	2.1	8.8
MSCI Frontier Markets (\$g)	-12.4	7.2	7.2	13.9	8.4	5.9
MSCI ACWI ex-US Growth (\$g)	-2.3	-2.3	-2.3	9.8	5.5	5.8
MSCI ACWI ex-US Value (\$g)	-5.4	-4.6	-4.6	9.1	4.2	5.4
MSCI ACWI ex-US Small (\$g)	-3.9	-3.7	-3.7	11.2	7.2	7.3
MSCI EAFE Minimum Volatility Idx	0.1	5.0	5.0	11.3	8.5	7.3
FTSE RAFI Developed ex-US Index	-4.9	-4.8	-4.8	11.4	5.0	5.8
MSCI EAFE LC (g)	1.8	6.4	6.4	16.9	8.2	5.8
MSCI Emerging Markets LC (g)	0.1	5.6	5.6	8.7	5.2	10.3

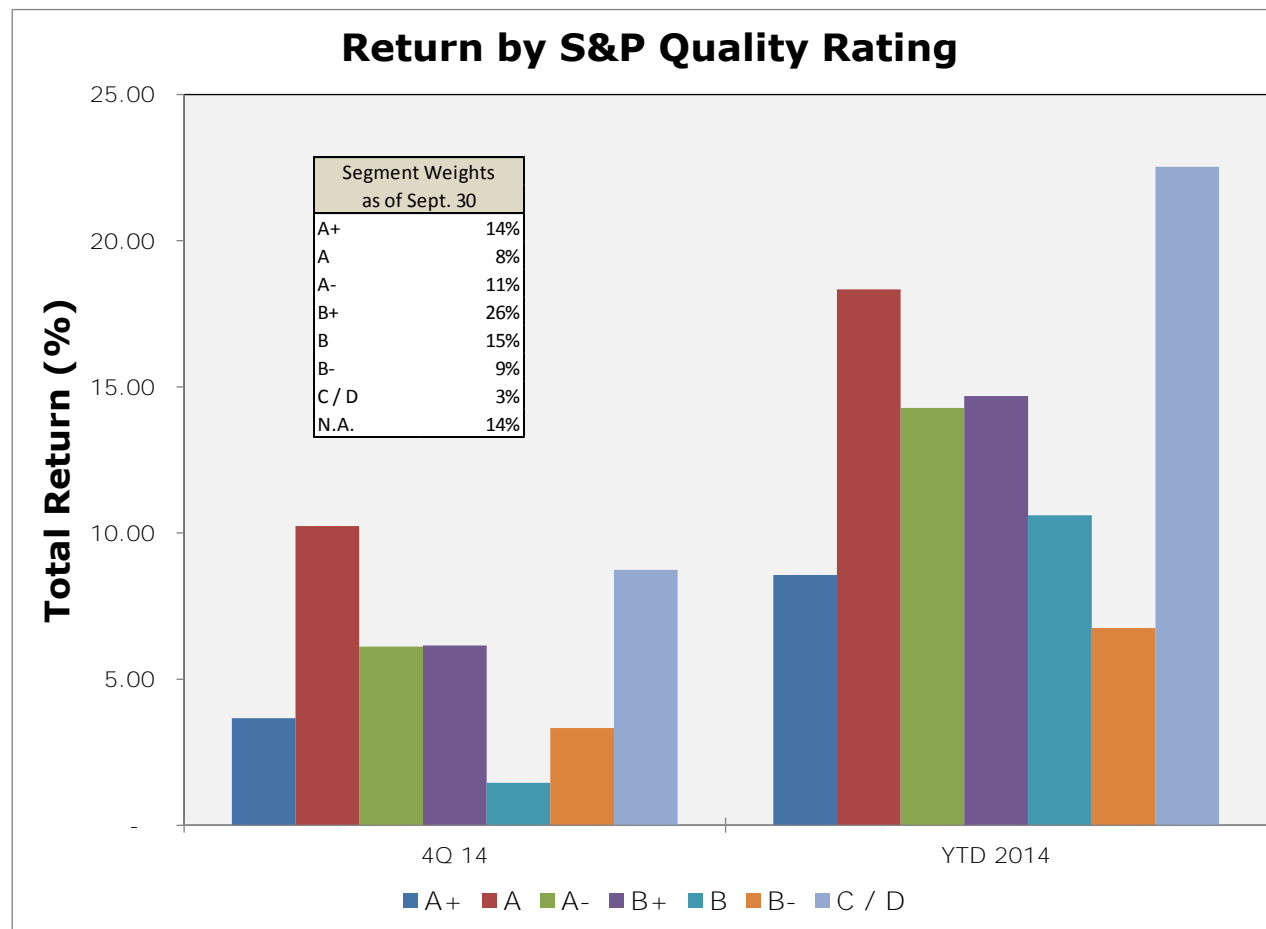


Data sources: Wilshire Compass, MSCI Barra



Returns by Quality Segment

Solid gains across the market during 2014 without a clear leader in terms of quality



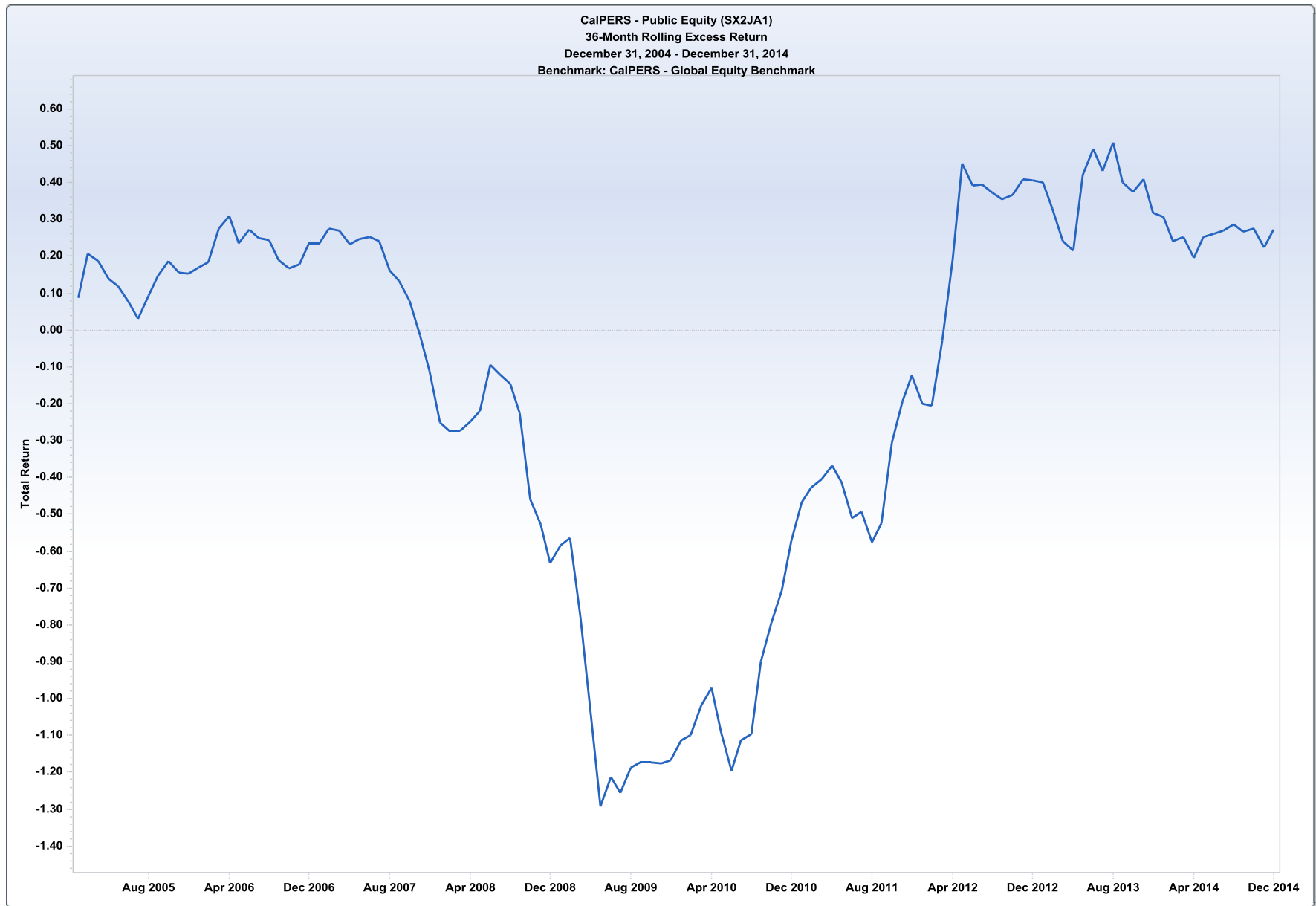
Data sources: Wilshire Atlas

Growth: Public Equity – Performance

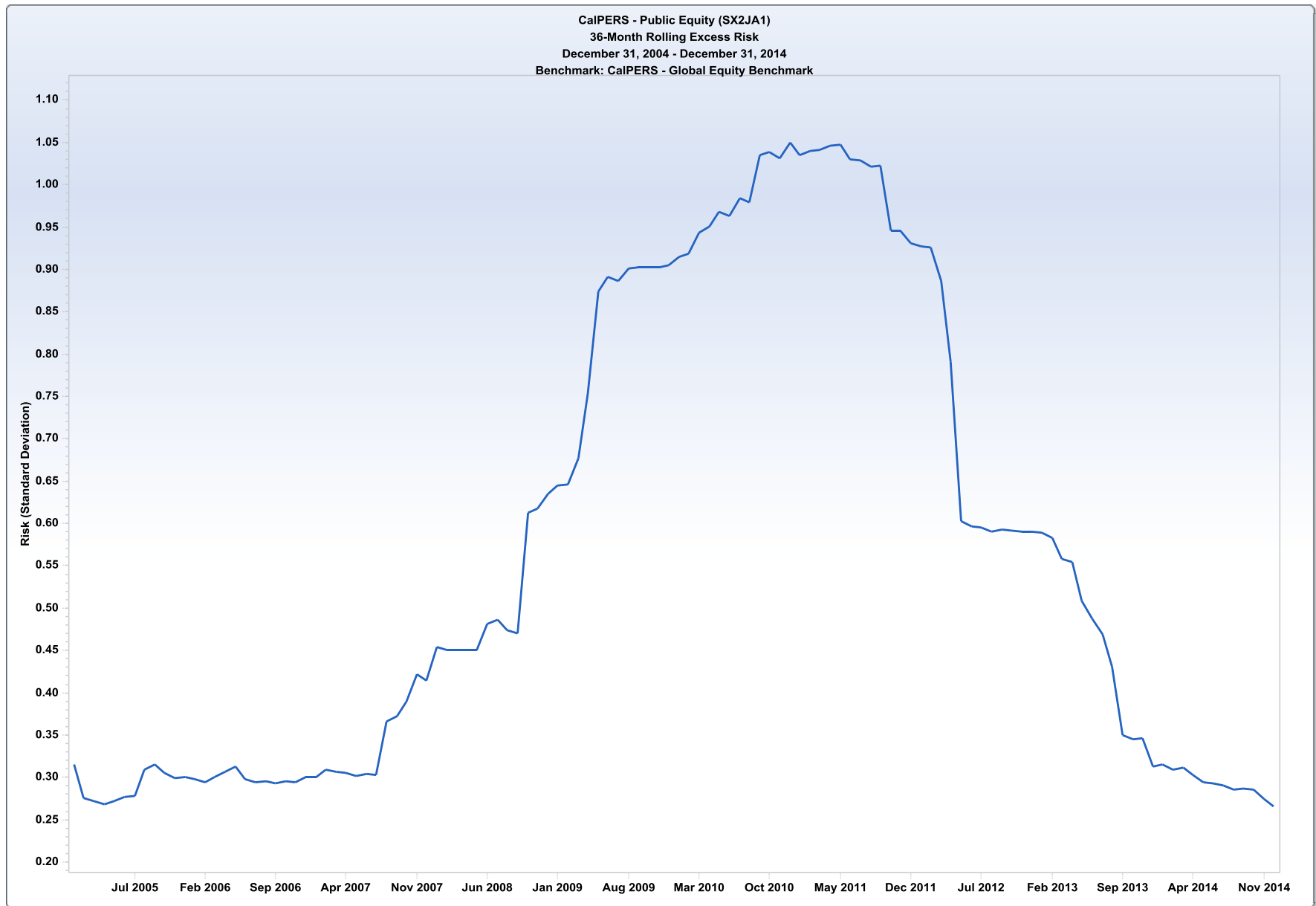


	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
PUBLIC EQUITY	156.8	0.8%	4.6%	15.5%	10.3%	6.3%	\$32.0 bil	0.7	0.8
<i>Public Equity Policy Benchmark</i>		0.8%	4.6%	15.2%	9.9%	6.6%		0.7	0.0
<i>Value Added</i>		0.0%	0.0%	0.3%	0.4%	-0.3%			
US Equity Composite	84.9	4.9%	12.2%	20.9%	15.8%	8.0%		1.1	0.5
<i>Custom US Equity Benchmark</i>		4.8%	12.3%	20.6%	15.5%	7.9%		1.1	0.0
<i>Value Added</i>		0.1%	-0.1%	0.3%	0.3%	0.1%			
Total Int'l Equity	71.9	-3.4%	-2.9%	10.3%	5.5%	5.6%		0.3	0.2
<i>Custom Int'l Equity Benchmark</i>		-3.3%	-2.8%	10.6%	5.3%	5.4%		0.3	0.0
<i>Value Added</i>		-0.1%	-0.1%	-0.3%	0.2%	0.2%			

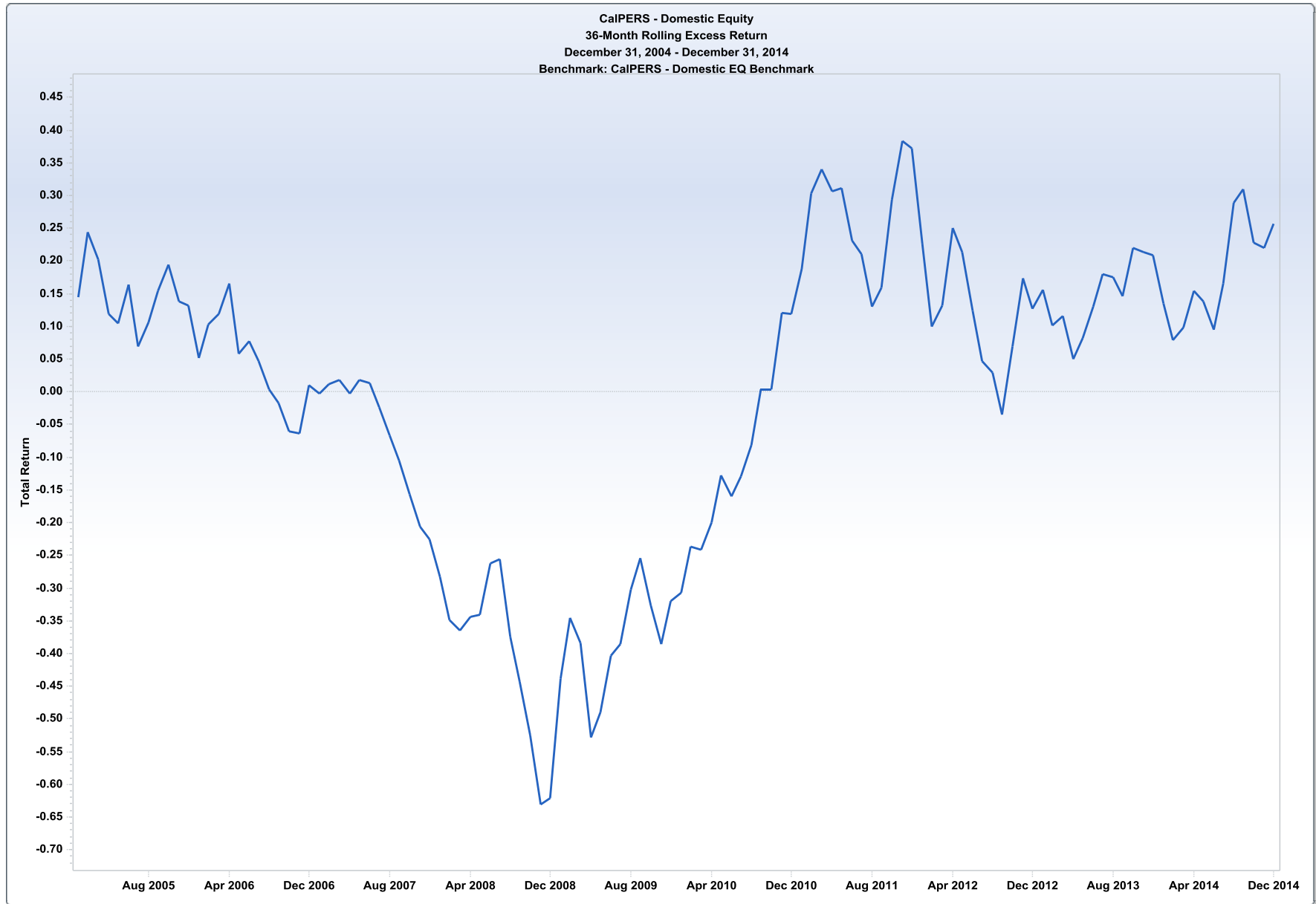
Growth: Public Equity – Rolling Excess Returns



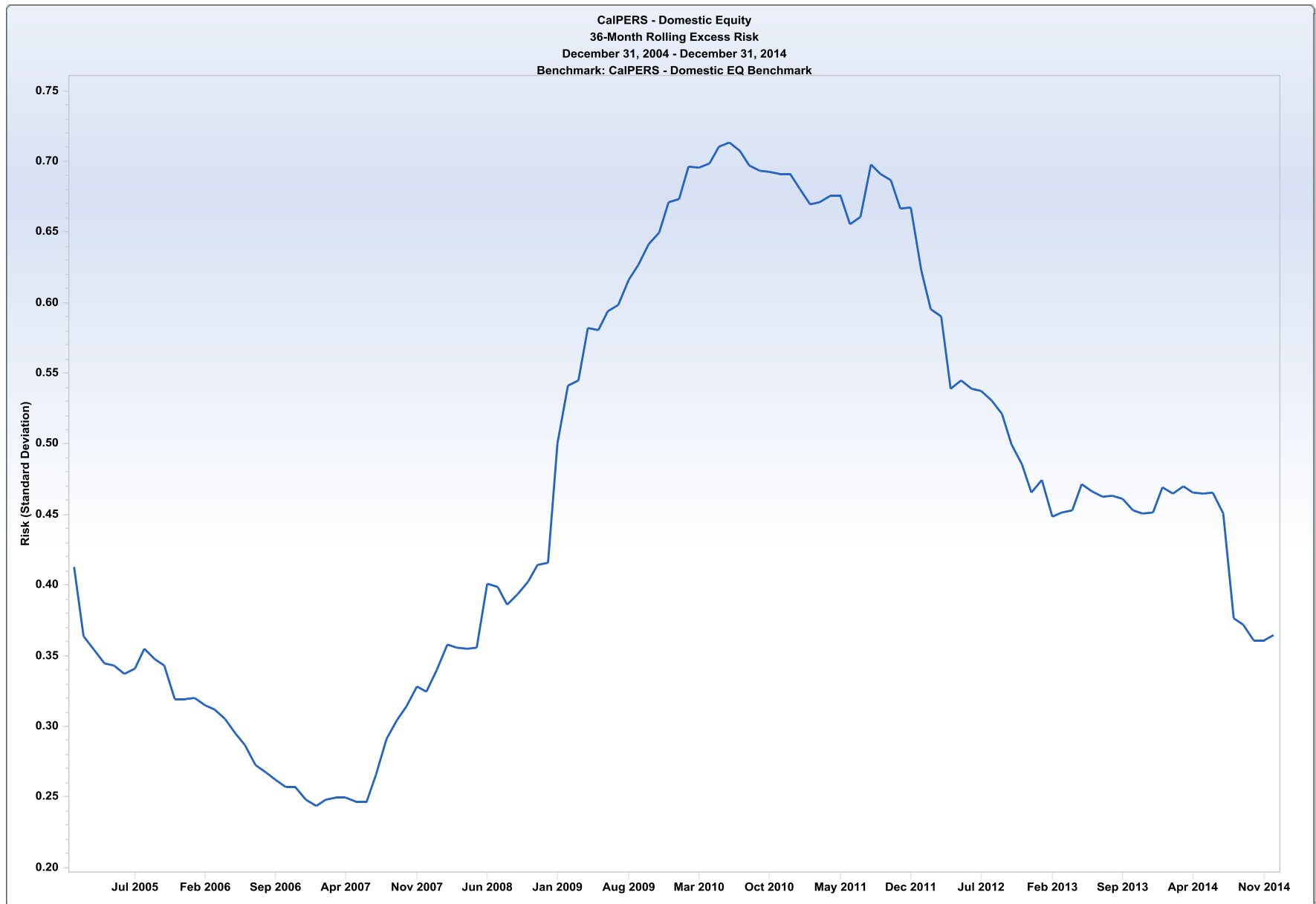
Growth: Public Equity – Rolling Tracking Error



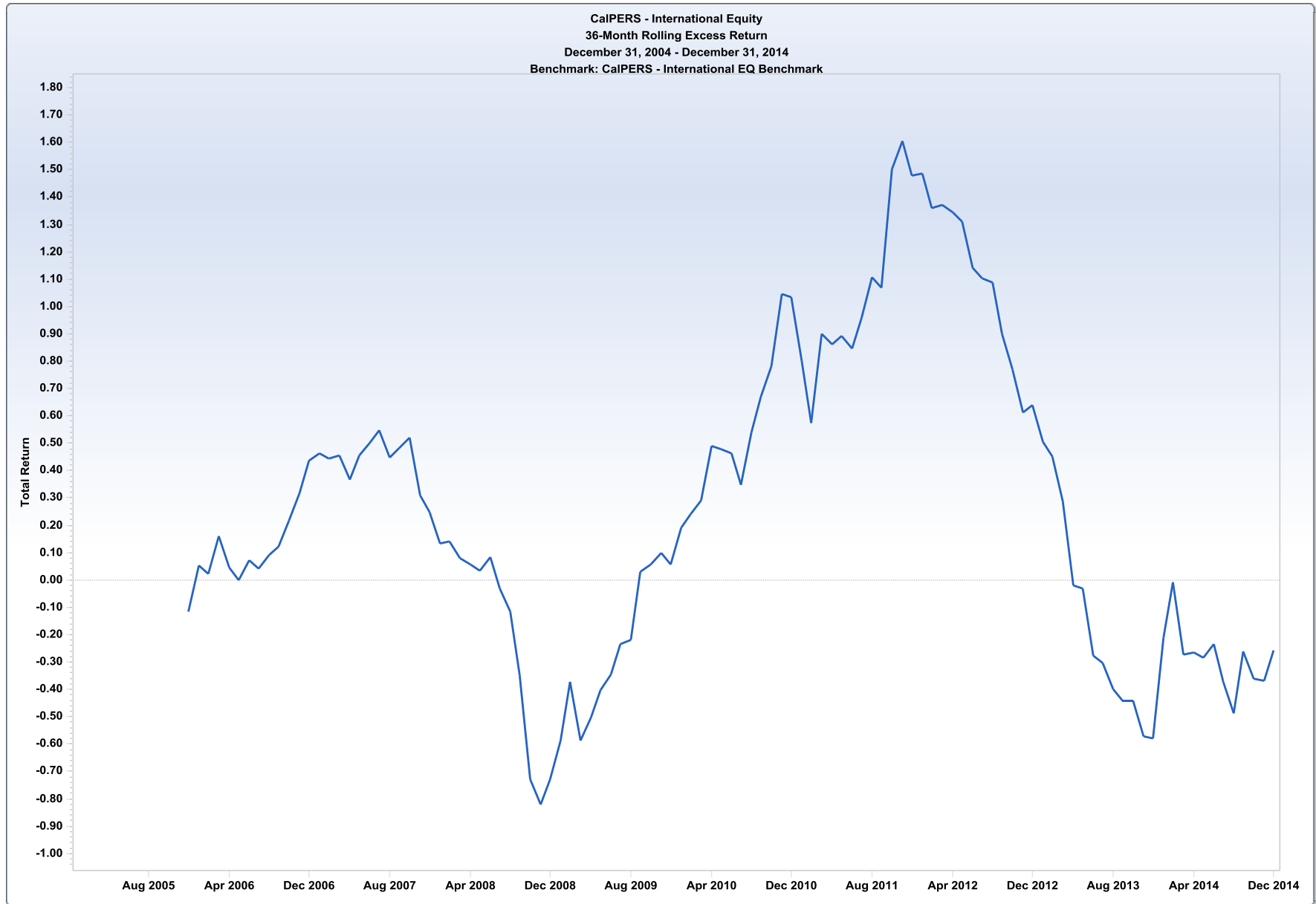
Growth: US Equity – Rolling Excess Returns



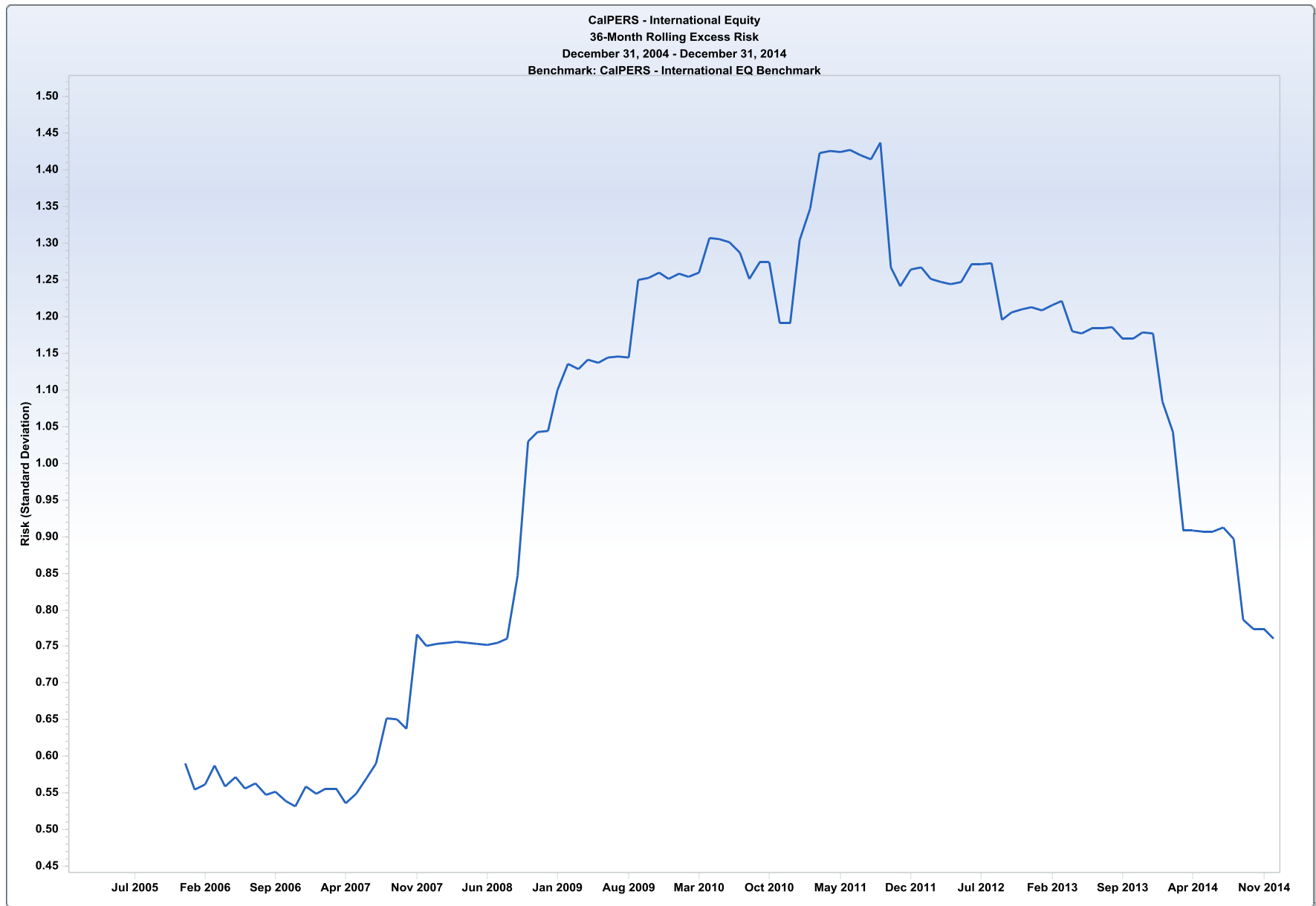
Growth: US Equity – Rolling Tracking Error



Growth: International Equity – Rolling Excess Returns



Growth: International Equity – Rolling Tracking Error



Growth: Corporate Governance/MDP/FoF

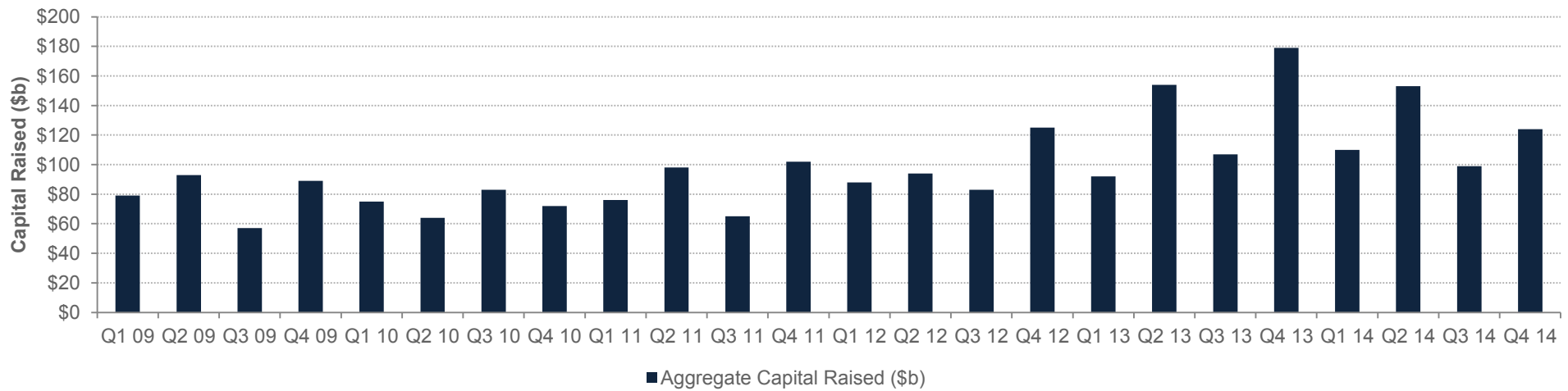


	<u>Market</u> <u>Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>Date</u>
Total Corporate Governance	2.8	1.0%	3.5%	15.5%	10.2%	4.8%	12/98
<i>Policy Benchmark</i>		4.3%	9.9%	17.7%	11.1%	6.1%	
<i>Value Added</i>		-3.3%	-6.4%	-2.2%	-0.9%	-1.3%	
Total MDP	2.1	1.1%	5.0%	16.4%	11.5%	6.4%	6/00
<i>Policy Benchmark</i>		1.5%	6.3%	16.7%	11.5%	7.3%	
<i>Value Added</i>		-0.4%	-1.3%	-0.3%	0.0%	-0.9%	
Total FoF	1.1	2.0%	1.4%	15.2%	12.0%	-.-%	3/08
<i>Policy Benchmark</i>		2.6%	4.8%	15.8%	11.9%	-.-%	
<i>Value Added</i>		-0.6%	-3.4%	-0.6%	0.1%	-.-%	

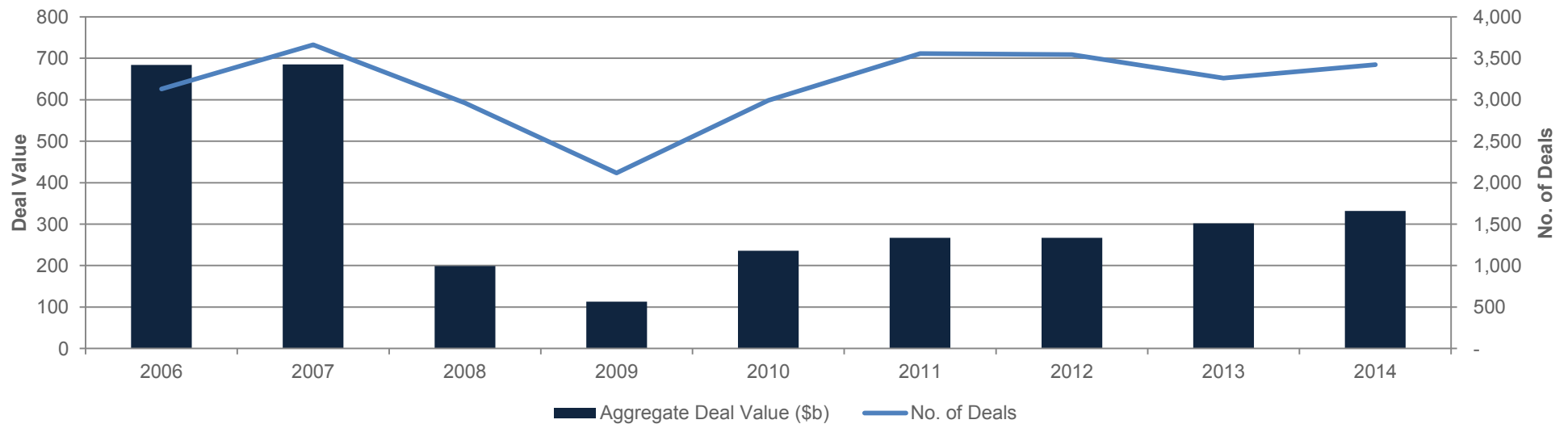
Private Equity – Fundraising & Investment Activity



Global Private Equity Fundraising (Q1 2009 – Q4 2014)



Global Private Equity-Backed Buyout Activity (2006 –2014)

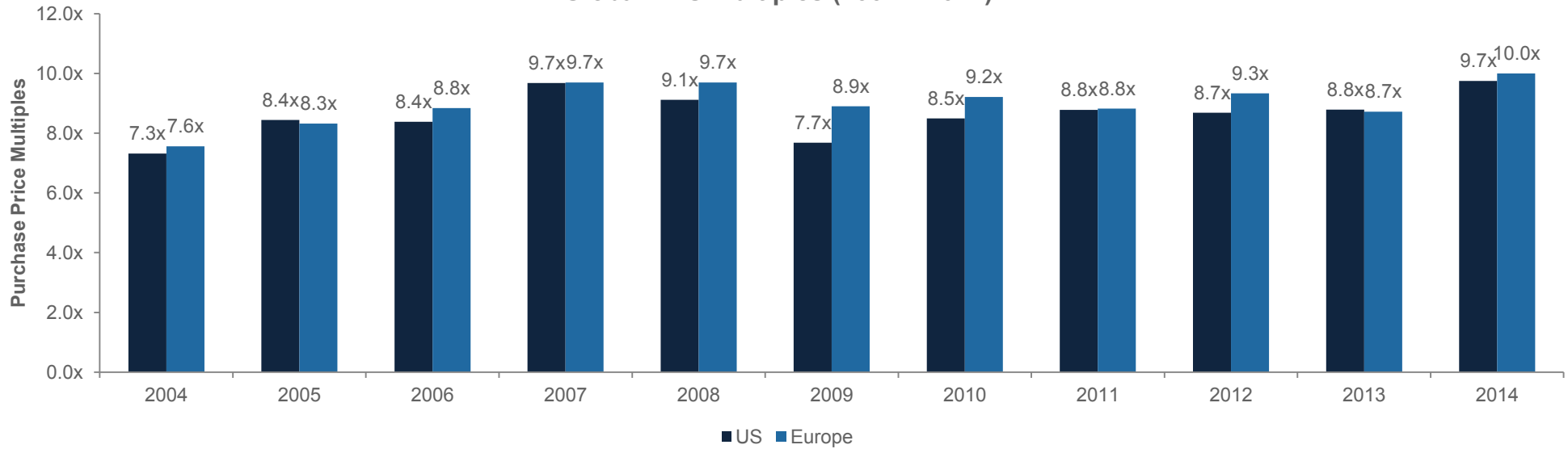


Sources: Preqin.

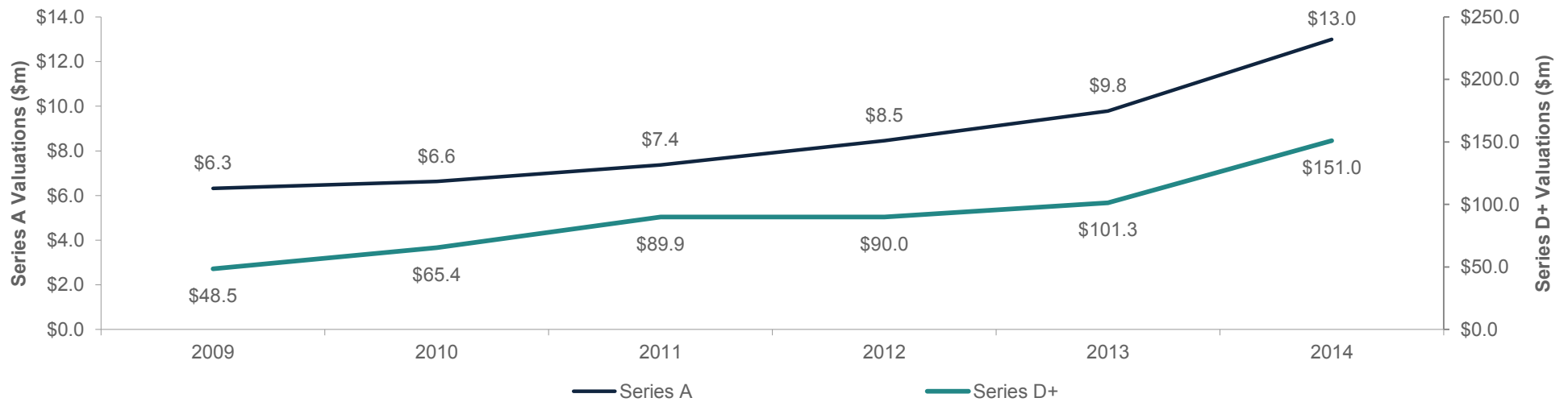
Private Equity – Pricing & Valuations



Global LBO Multiples (2004 – 2014)



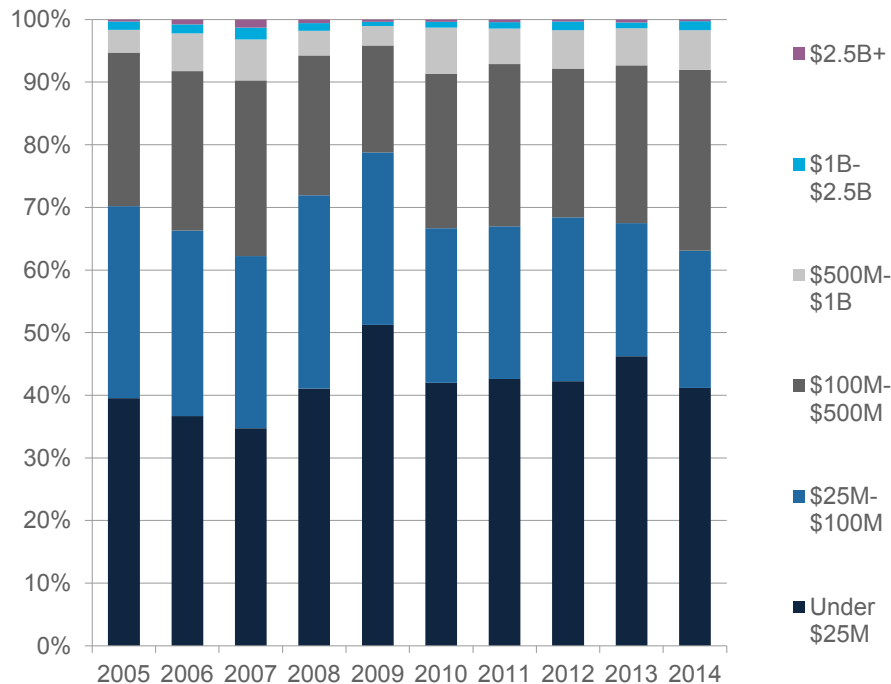
U.S. Venture Capital Median Pre-Money Valuations (2009 – 2014)



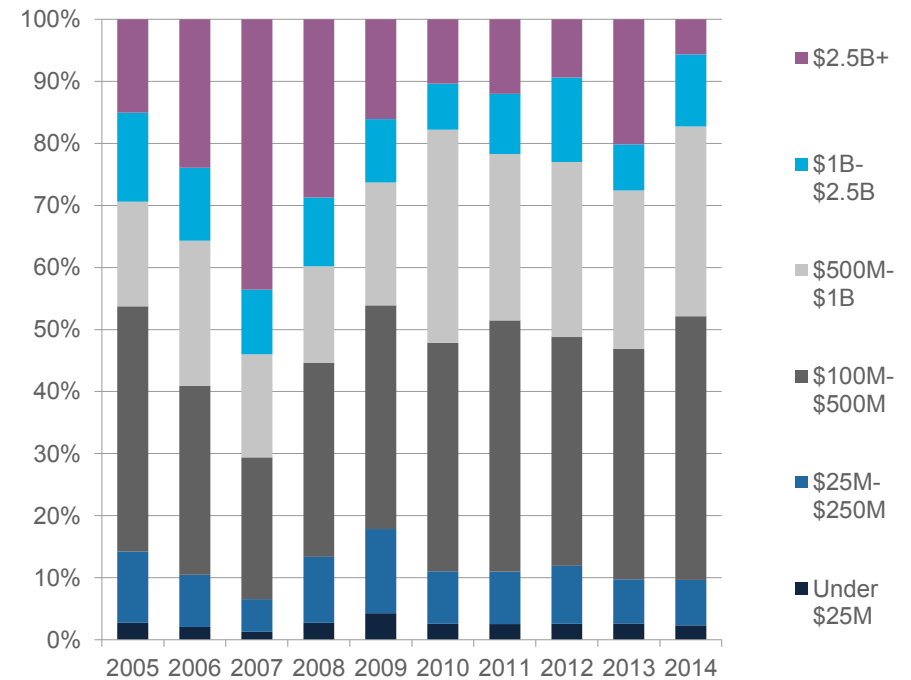
Private Equity – U.S. Investment Activity by Deal Size



Percentage of Deal Volume (count) by Deal Size



Percentage of Deal Volume (dollars) by Deal Size

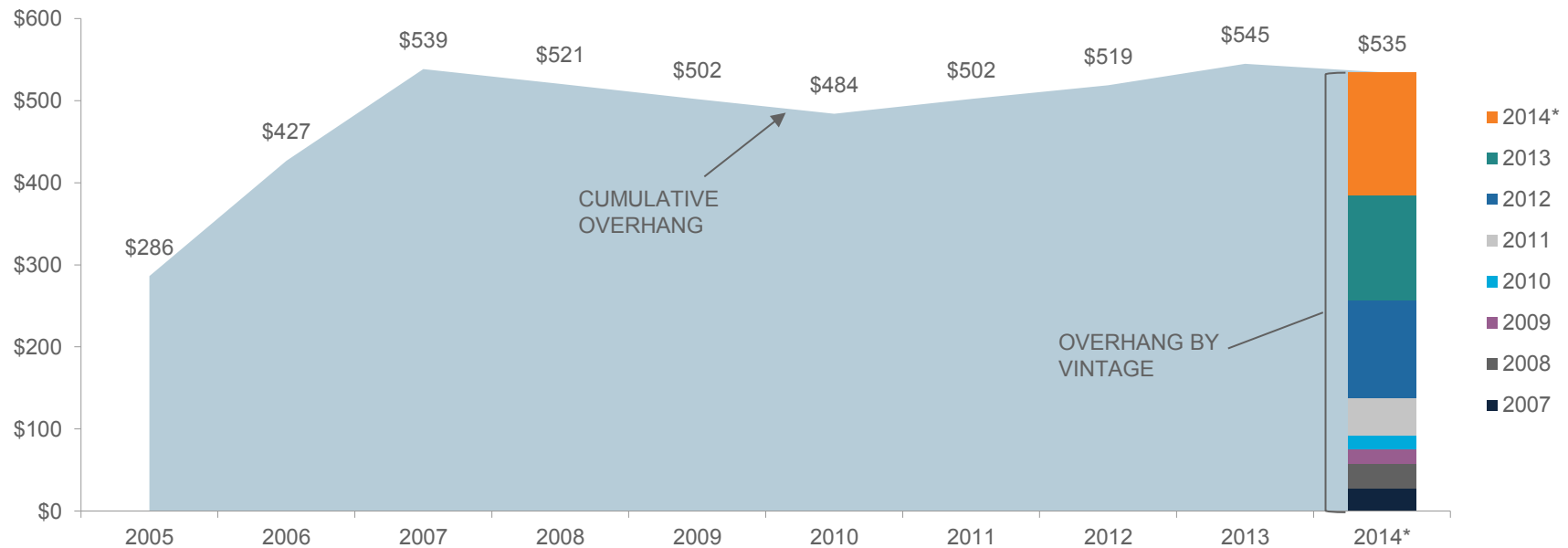


- Smaller deals continue to dominant deal activity by count
- Fewer large transactions (\$1b+) in 2014 relative to previous few years

Private Equity – U.S. Capital Overhang



Cumulative Vintage Year Overhang

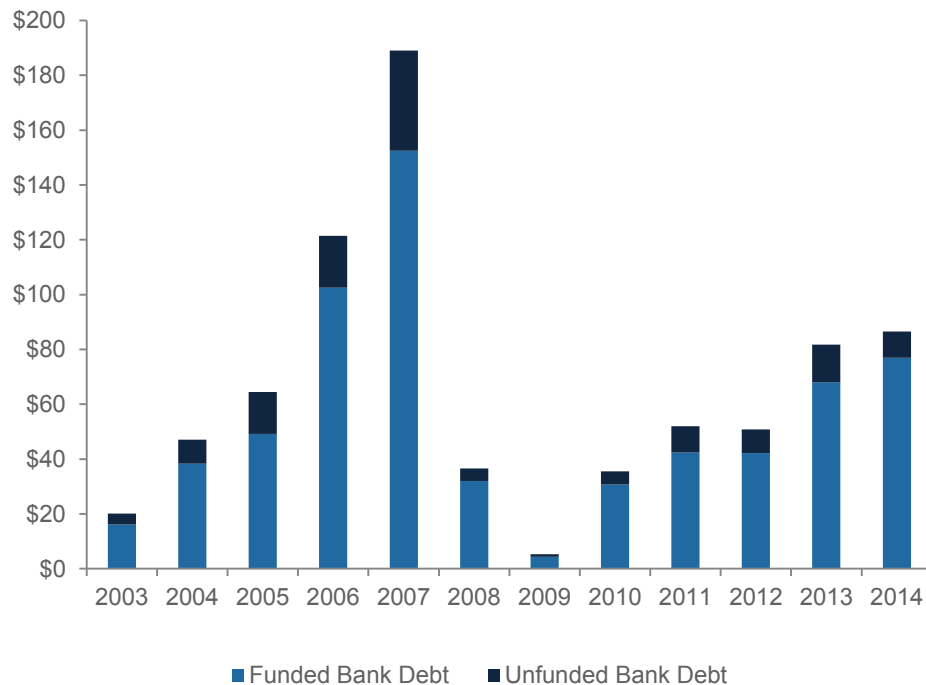


- Total private equity overhang significantly grew to an estimated \$539 billion during the run-up to the financial crisis
- While the overhang slightly decreased across 2007 through 2010, the overhang has steadily increased over the last few years to a near-peak level

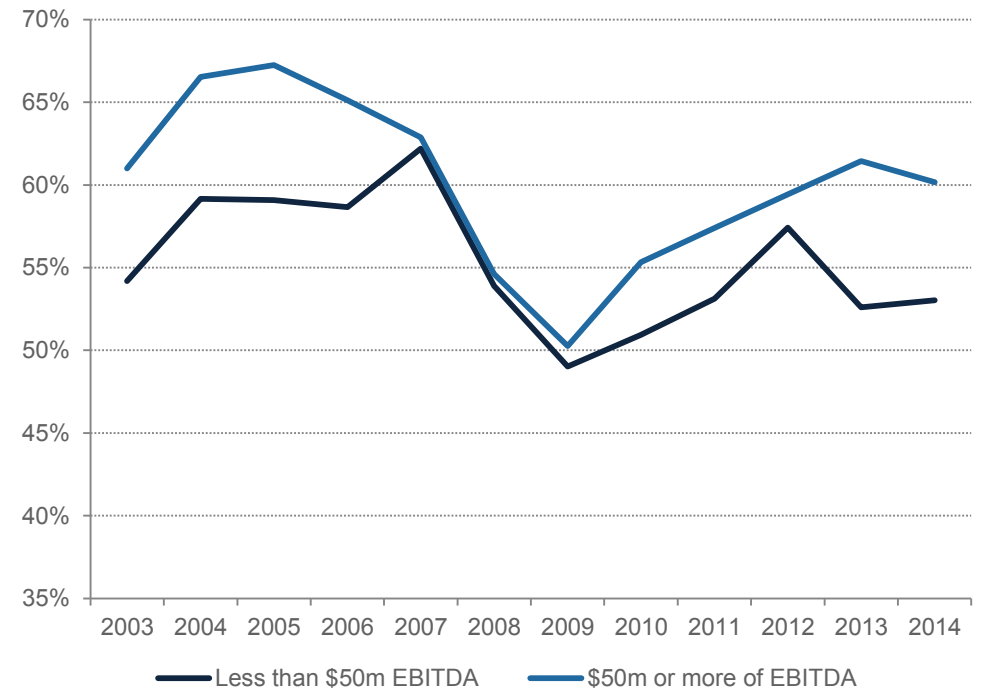
Private Equity – U.S. Debt Markets



Total U.S. Leveraged Buyout Loan Volume (\$b)



Percentage of Debt Used in Buyouts

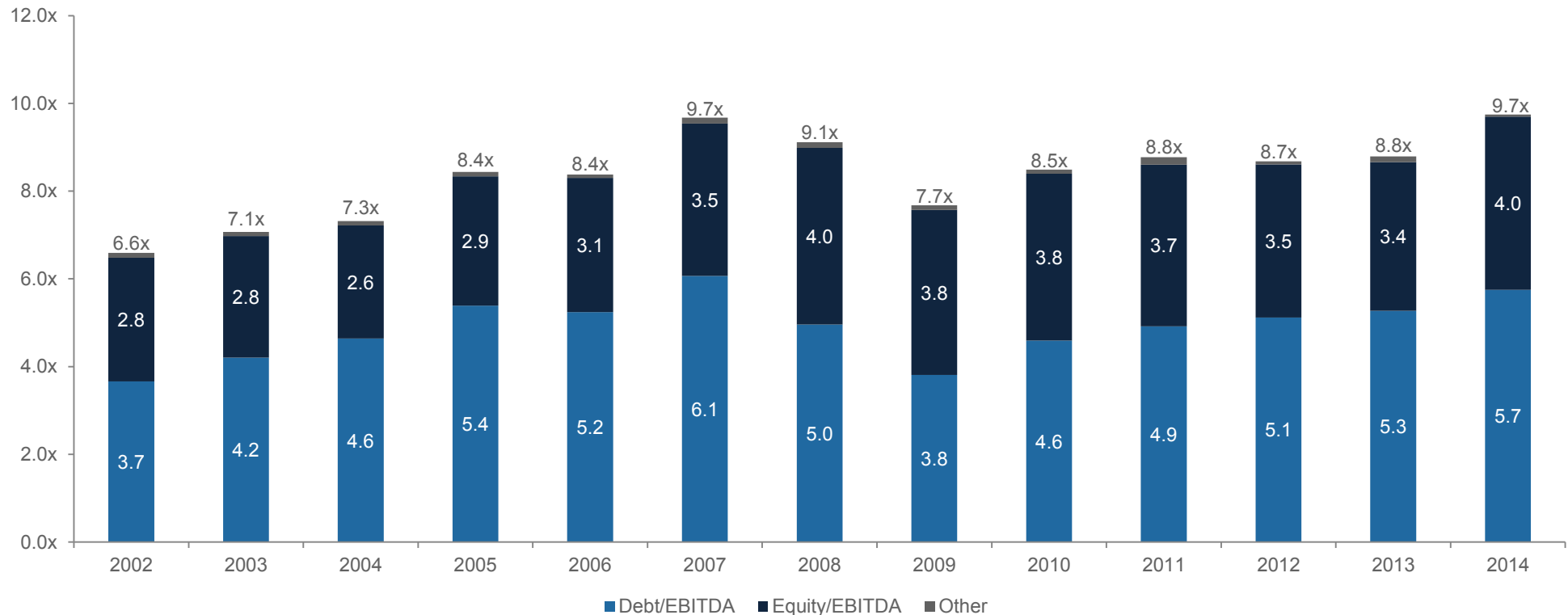


- The amount of capital available for leverage has gone down significantly since its peak volume in 2007, but continues to climb from the historically low levels in 2009
- Historically, middle-market transactions apply less leverage than large cap deals

Private Equity – U.S. LBO Purchase Price Multiples



Purchase Price Multiples of U.S. LBO Transactions



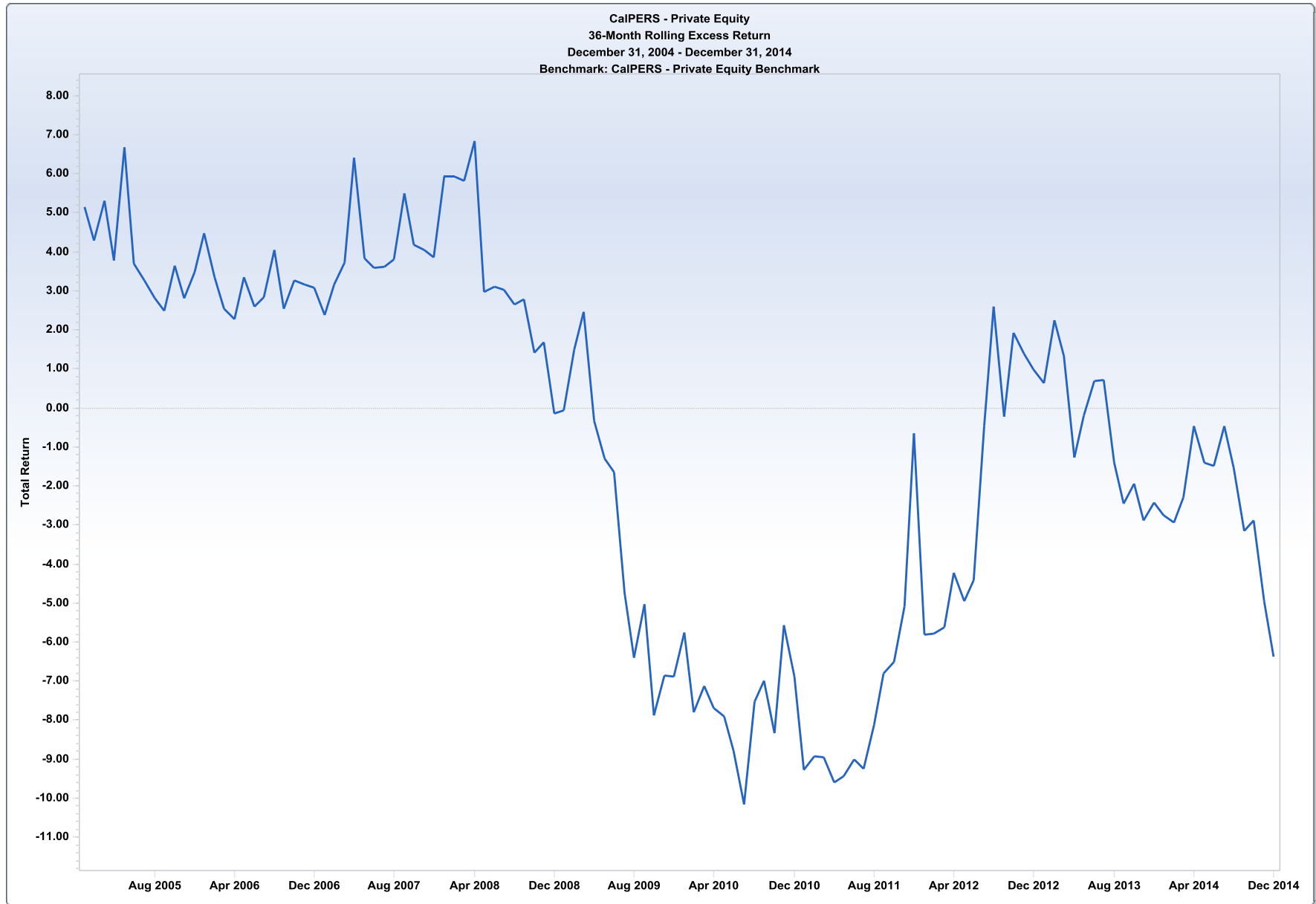
- As the debt markets have come back, purchase price multiples have increased from the low point in 2009
- Pricing in 2014 is equivalent to the peak level in 2007

Growth: Private Equity – Performance

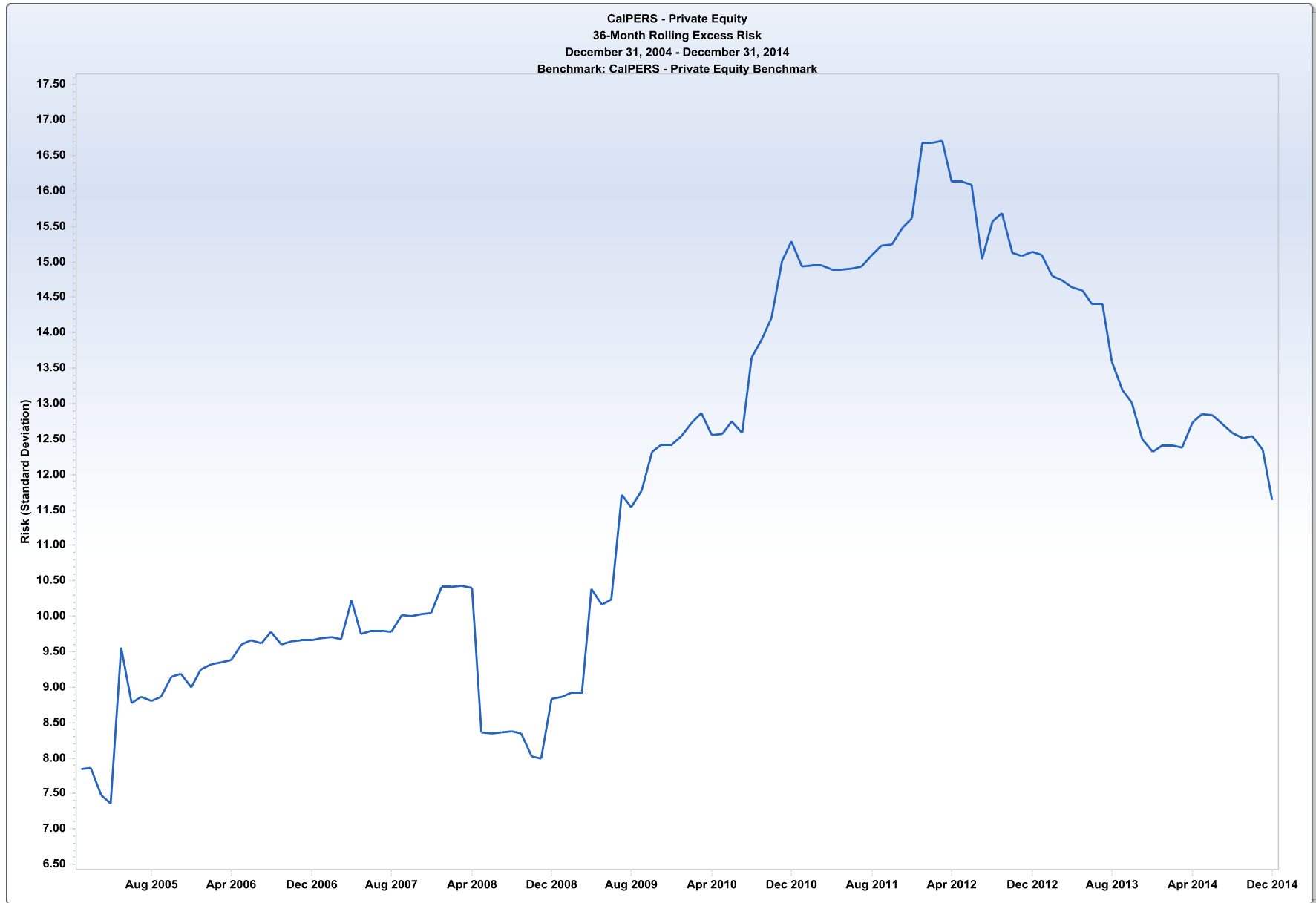


	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
PRIVATE EQUITY	30.5	0.9%	14.6%	15.3%	15.9%	12.9%	\$10.1 bil	3.1	-0.1
<i>PE Policy Benchmark</i>		-1.0%	17.1%	23.1%	16.7%	15.2%		1.2	0.0
<i>Value Added</i>		1.9%	-2.5%	-7.8%	-0.8%	-2.3%			
Private Equity Partnership Investments	30.5	0.9%	14.6%	15.4%	16.0%	13.1%			
Private Equity Distribution Stock	0.0	-0.3%	-21.5%	-24.4%	-11.3%	-2.4%			

Growth: Private Equity – Rolling Excess Returns



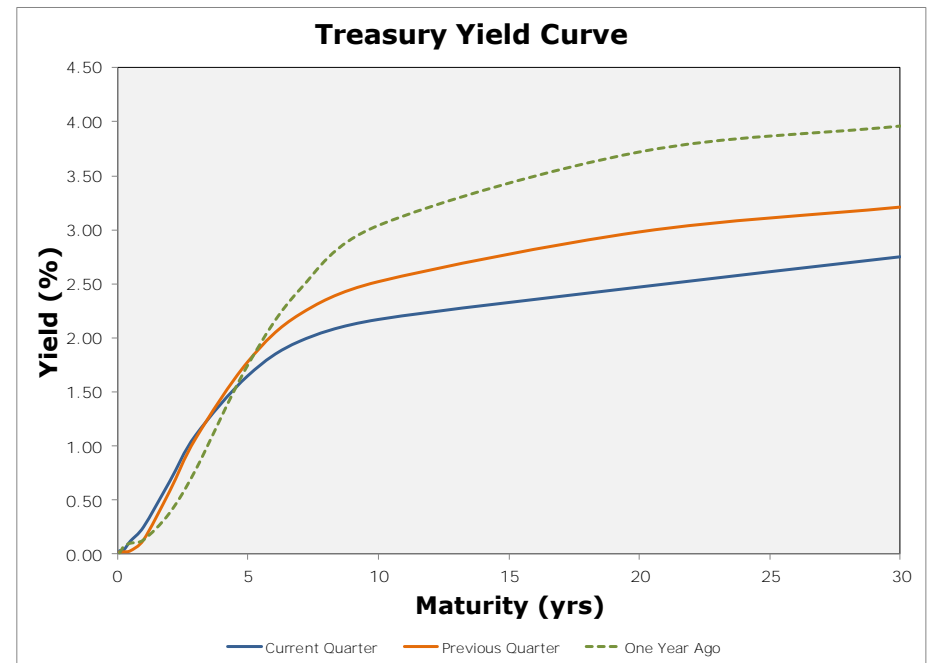
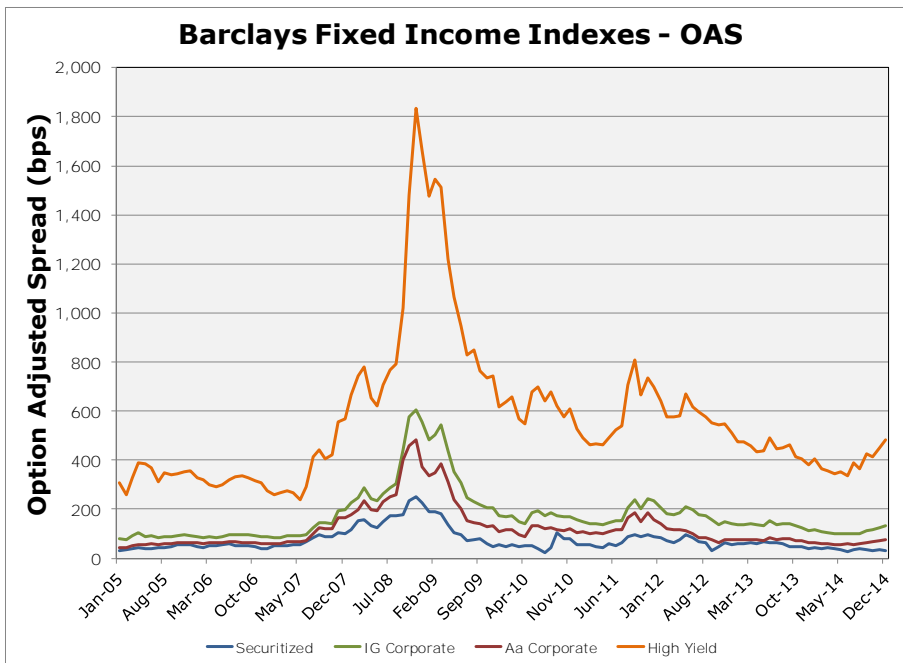
Growth: Private Equity – Rolling Tracking Error



U.S. Fixed Income Market



December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays Aggregate Bond Index	1.8	6.0	6.0	2.7	4.4	4.7
Barclays Treasury Index	1.9	5.0	5.0	1.4	3.9	4.4
Barclays Govt-Related Index	1.5	6.1	6.1	2.7	3.9	4.5
Barclays Securitized Index	1.7	5.9	5.9	2.5	4.0	4.7
Barclays Corporate IG Index	1.8	7.5	7.5	5.1	6.5	5.5
Barclays LT Govt/Credit Index	5.6	19.3	19.3	5.8	9.8	7.4
Barclays LT Treasury Index	8.6	25.1	25.1	4.2	10.0	7.5
Barclays LT Govt-Related Index	4.5	18.9	18.9	6.4	9.8	7.6
Barclays LT Corporate IG Index	4.0	15.7	15.7	7.1	9.6	7.0
Barclays U.S. TIPS Index	0.0	3.6	3.6	0.4	4.1	4.4
Barclays High Yield Index	-1.0	2.5	2.5	8.4	9.0	7.7
Treasury Bills	0.0	0.0	0.0	0.1	0.1	1.5

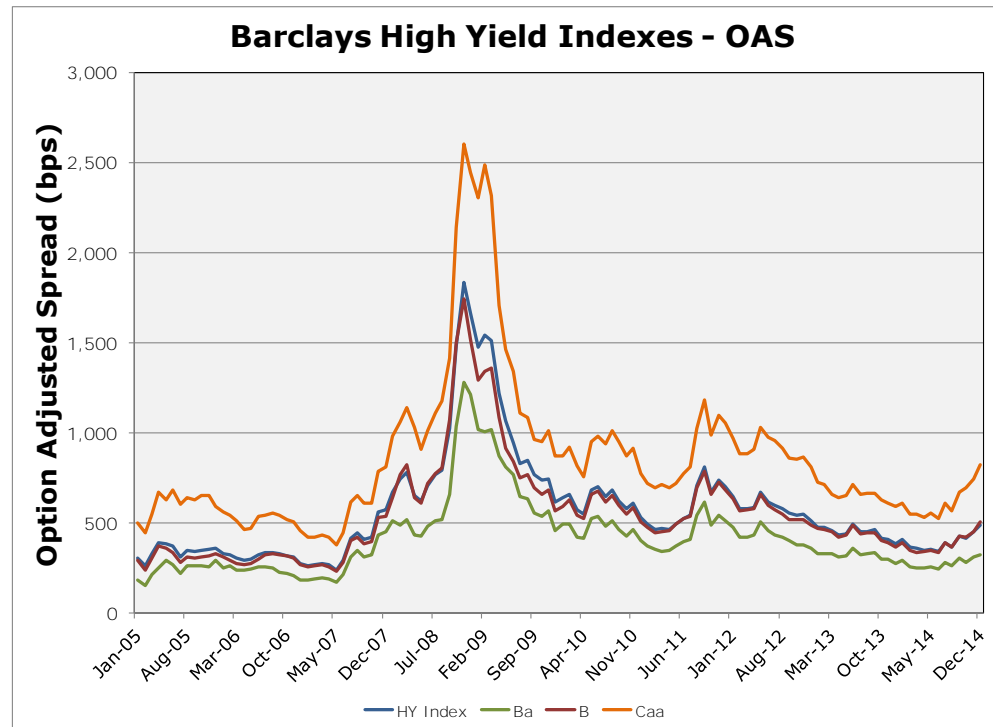


Data sources: Wilshire Compass, Barclays Capital, U.S. Treasury

High Yield Bond Market



December 31, 2014	Weight	Qtr	Ytd	1 Yr	3 Yr
Barclays High Yield Index	100%	-1.0	2.5	2.5	8.4
Quality Distribution					
Ba U.S. High Yield	43.1%	0.9	5.4	5.4	8.2
B U.S. High Yield	40.7%	-1.5	1.5	1.5	7.9
Caa U.S. High Yield	15.8%	-3.9	-1.1	-1.1	10.0
Ca to D U.S. High Yield	0.3%	-23.7	-38.9	-38.9	-5.9
Non-Rated U.S. High Yield	0.2%	-2.6	4.2	4.2	11.3



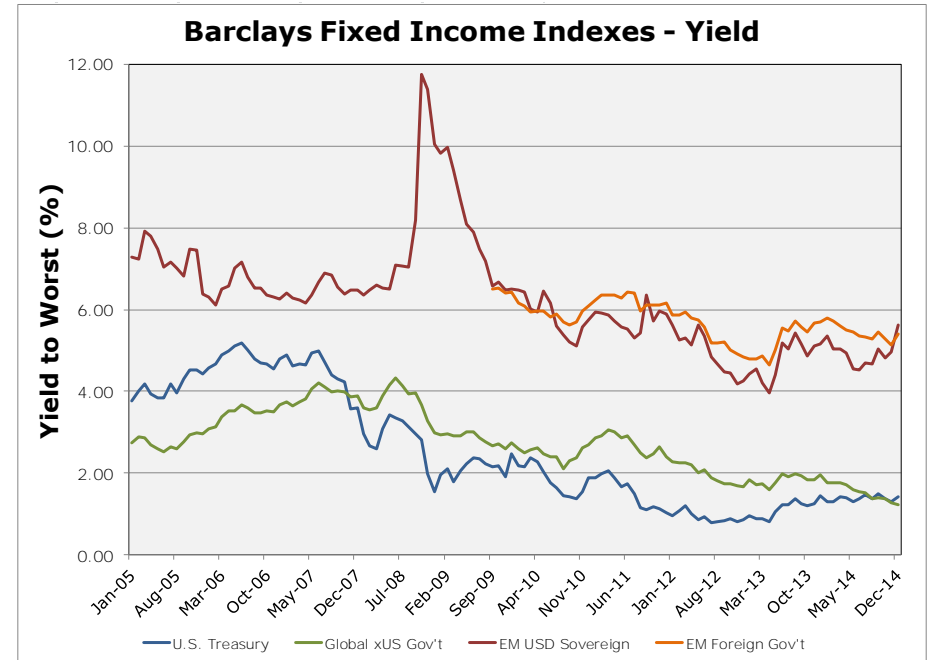
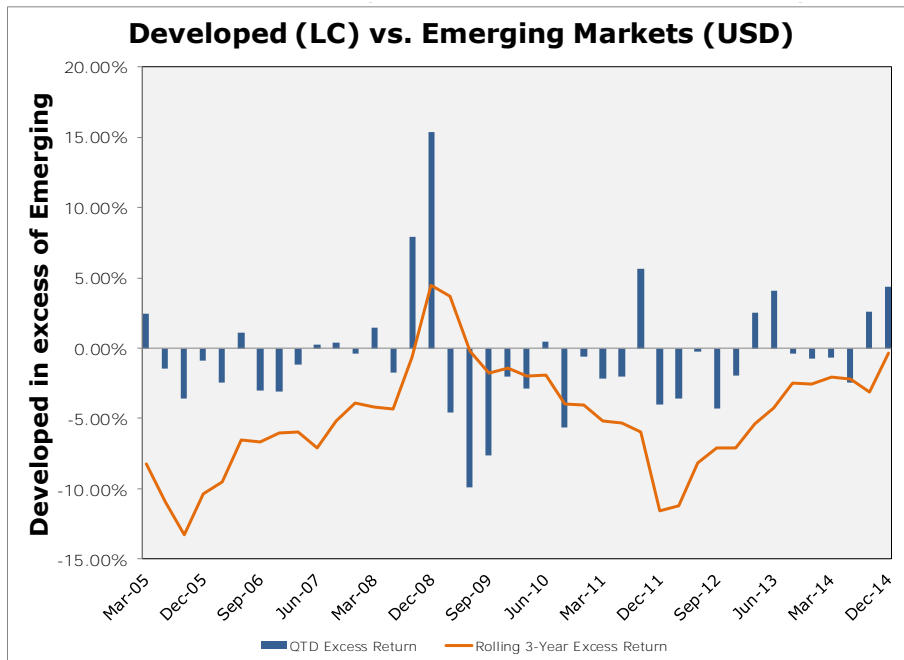
Data sources: Barclays Capital

Non-U.S. Fixed Income Market



December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
<i>Developed Markets</i>						
Barclays Global Aggregate xUS	-3.0	-3.1	-3.1	-0.8	1.4	2.8
Barclays Global Aggregate xUS *	2.6	8.8	8.8	5.4	4.7	4.7
Barclays Wrld Govt xUS IL Bond	0.4	3.8	3.8	3.3	4.1	4.2
Barclays Wrld Govt xUS IL Bond *	4.7	13.5	13.5	5.3	6.1	5.3
<i>Emerging Mkts (Hard Currency)</i>						
Barclays EM USD Aggregate	-1.7	4.8	4.8	5.8	7.4	7.7
<i>Emerging Mkts (Foreign Currency)</i>						
Barclays EM Local Currency Govt	-4.2	-1.9	-1.9	2.6	4.1	n.a.
Barclays EM Local Currency Govt *	1.2	4.5	4.5	3.0	3.9	n.a.
Euro vs. Dollar	-4.2	-12.2	-12.2	-2.3	-3.3	-1.2
Yen vs. Dollar	-8.5	-12.3	-12.3	-13.7	-4.9	-1.6
Pound vs. Dollar	-3.8	-5.9	-5.9	0.1	-0.7	-2.1

* Returns are reported in terms of local market investors, which removes currency effects.

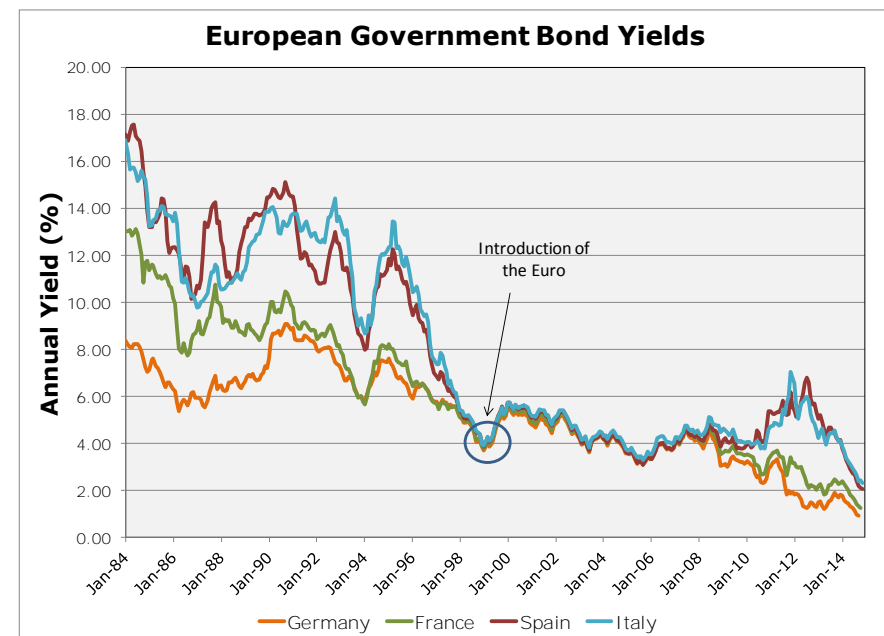
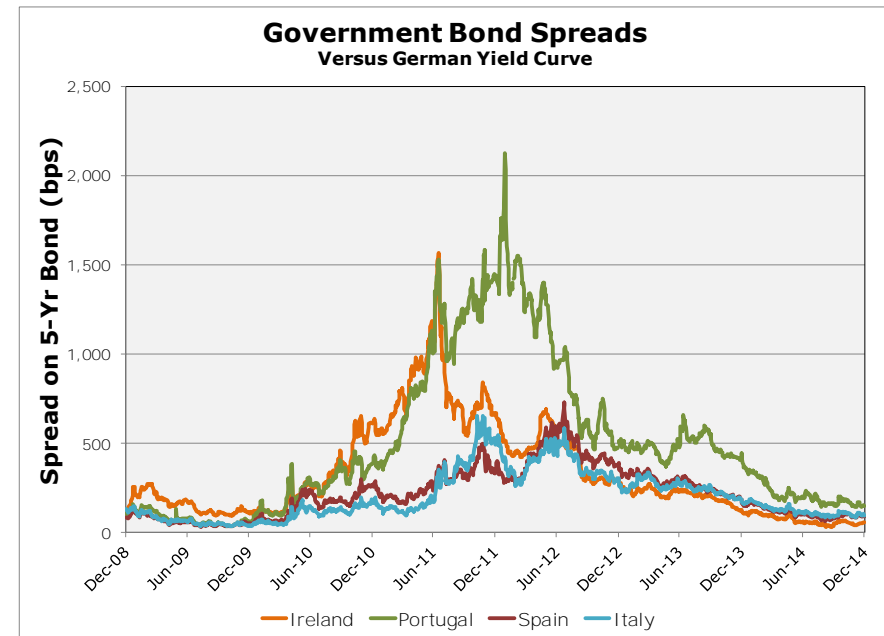


Data sources: Wilshire Compass, Barclays Capital



European Debt Issues

- Government yield spreads for some of the relatively troubled European economies continue to fall
- Yields on government bonds have moderated while the spreads among different countries are beginning to tighten

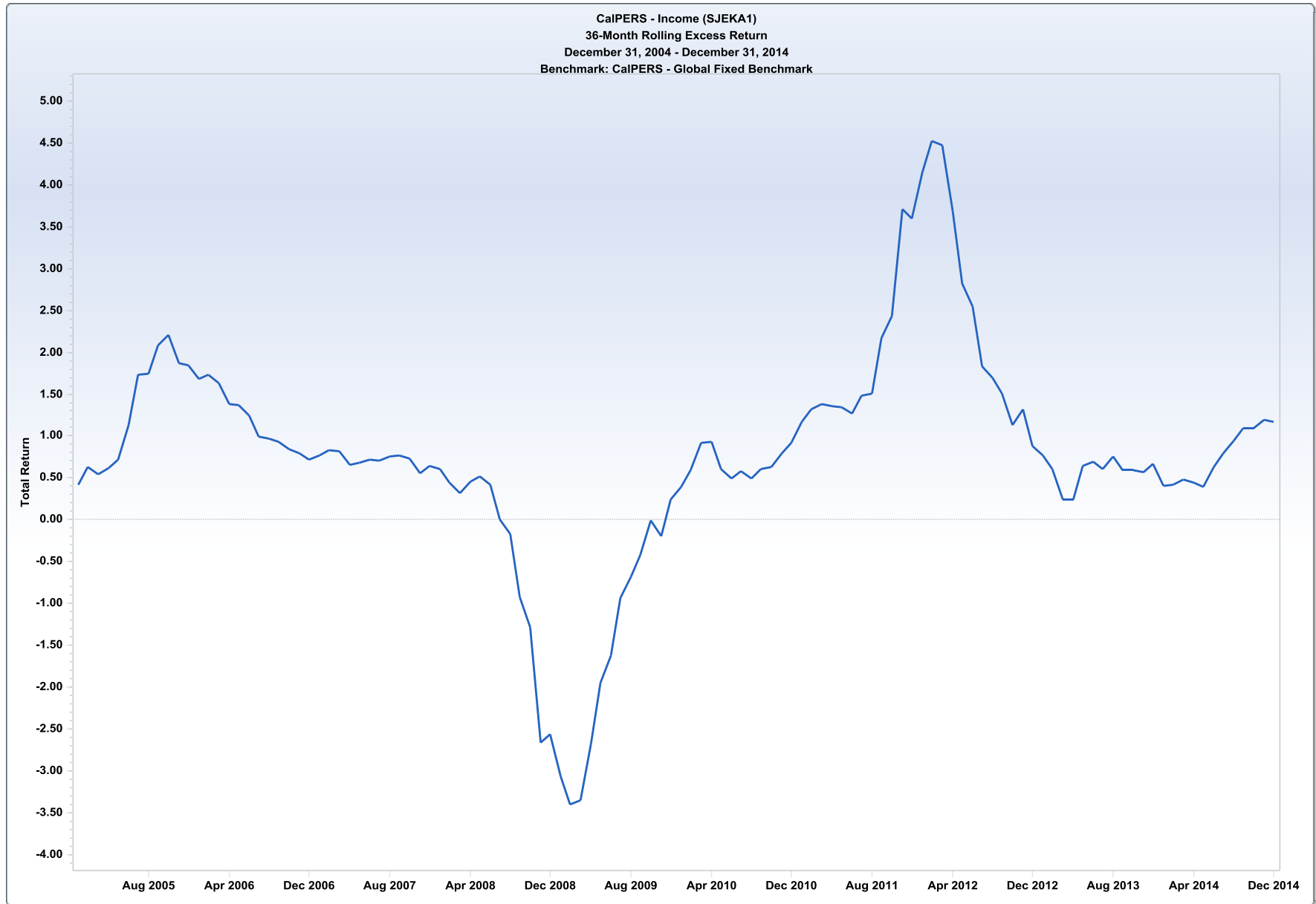




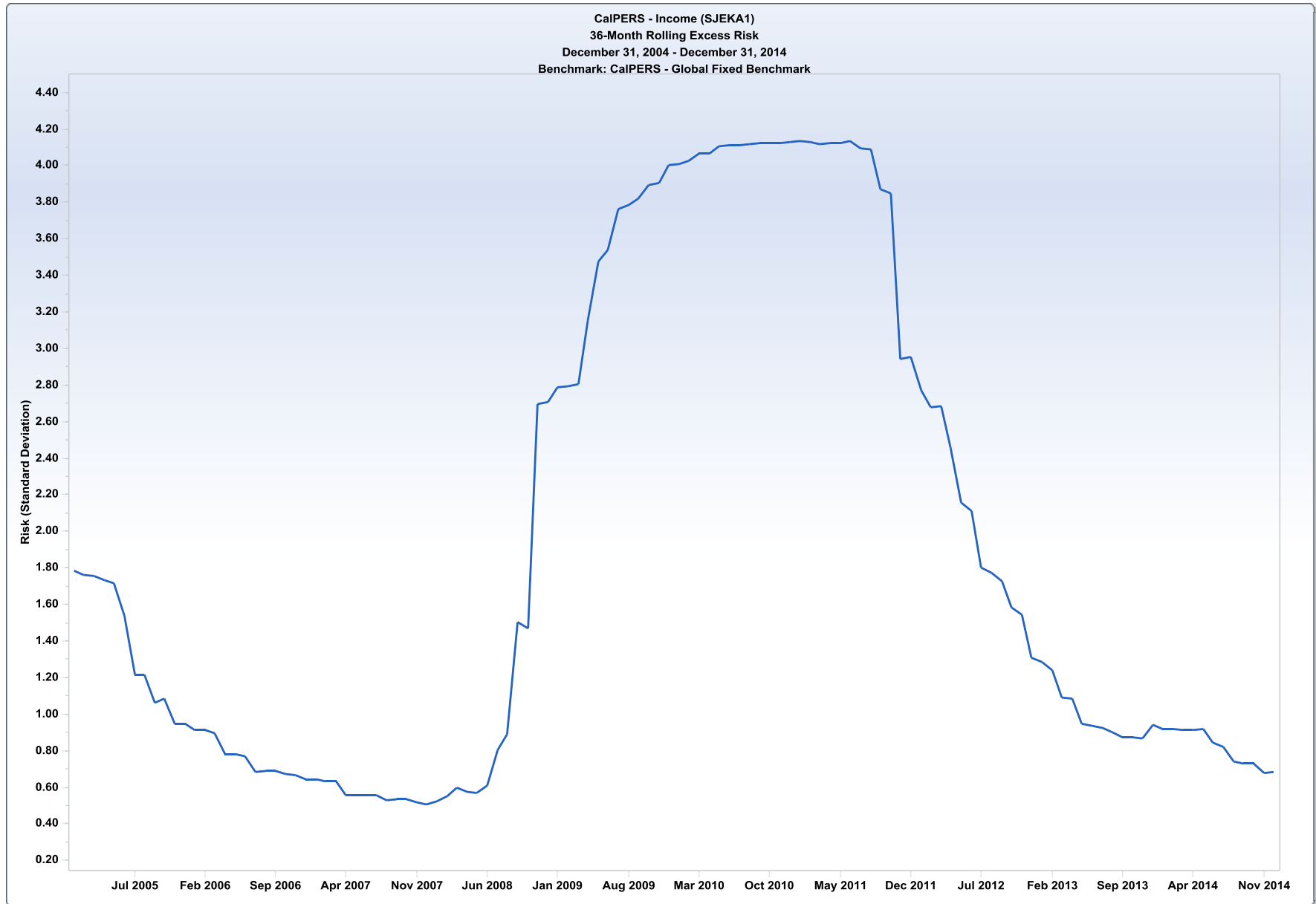
Income – Performance

	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
INCOME	53.6	2.5%	9.9%	4.3%	7.3%	6.5%	\$6.7 bil	1.6	0.9
<i>Income Policy Benchmark</i>		2.4%	9.6%	3.1%	6.3%	5.8%		1.3	0.0
<i>Value Added</i>		0.1%	0.3%	1.2%	1.0%	0.7%			
U.S. Income	48.7	3.2%	11.4%	5.0%	7.9%	6.9%		1.7	0.7
<i>U.S. Income Policy Benchmark</i>		3.3%	11.3%	3.8%	7.0%	6.1%		1.4	0.0
<i>Value Added</i>		-0.1%	0.1%	1.2%	0.9%	0.8%			
Non-U.S. Income	4.9	-4.0%	-3.0%	-1.9%	1.9%	3.3%		0.3	1.9
<i>Non-US Income Policy Benchmark</i>		-5.2%	-5.4%	-3.0%	0.4%	2.4%		0.0	0.0
<i>Value Added</i>		1.2%	2.4%	1.1%	1.5%	0.9%			

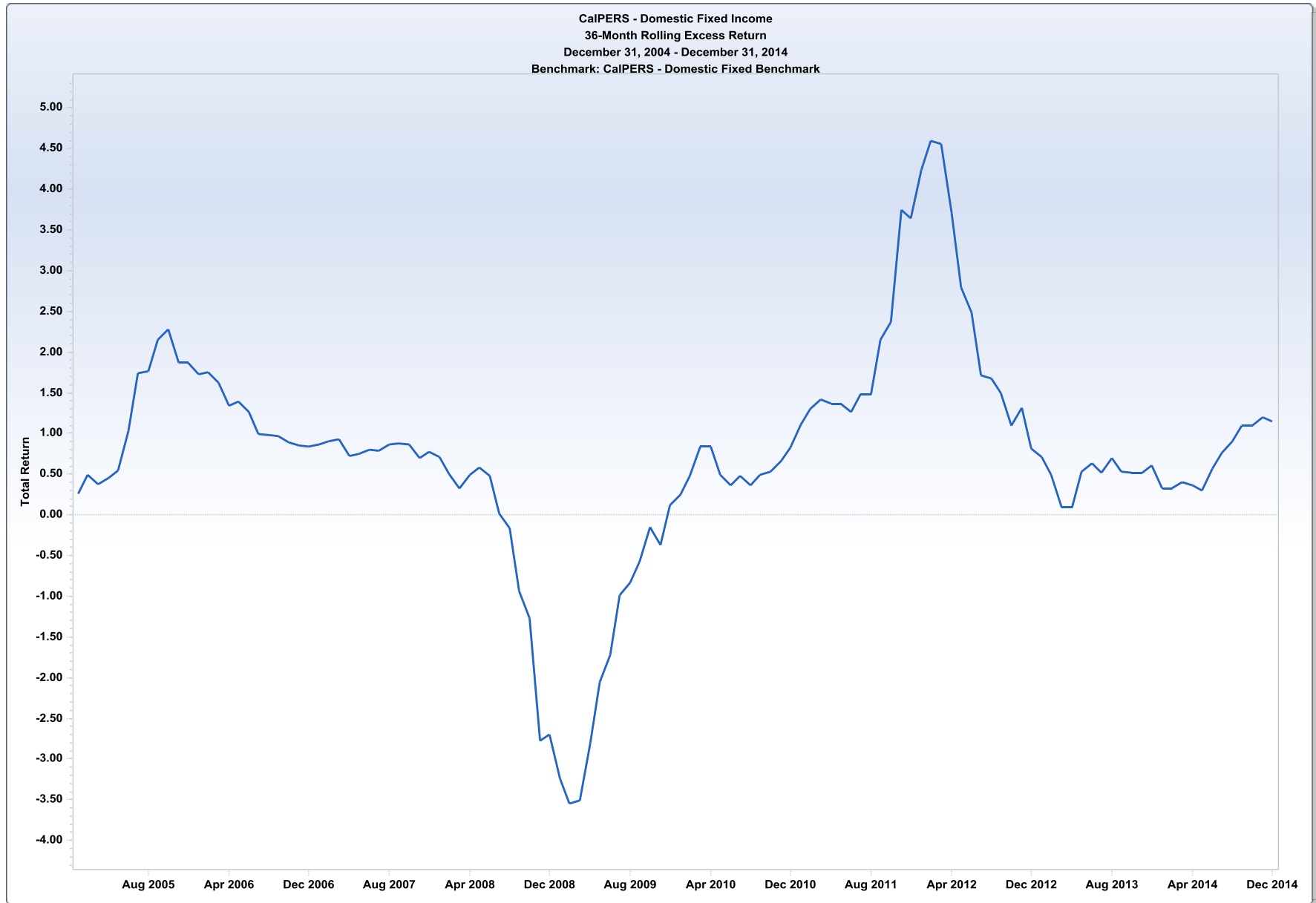
Income – Rolling Excess Returns



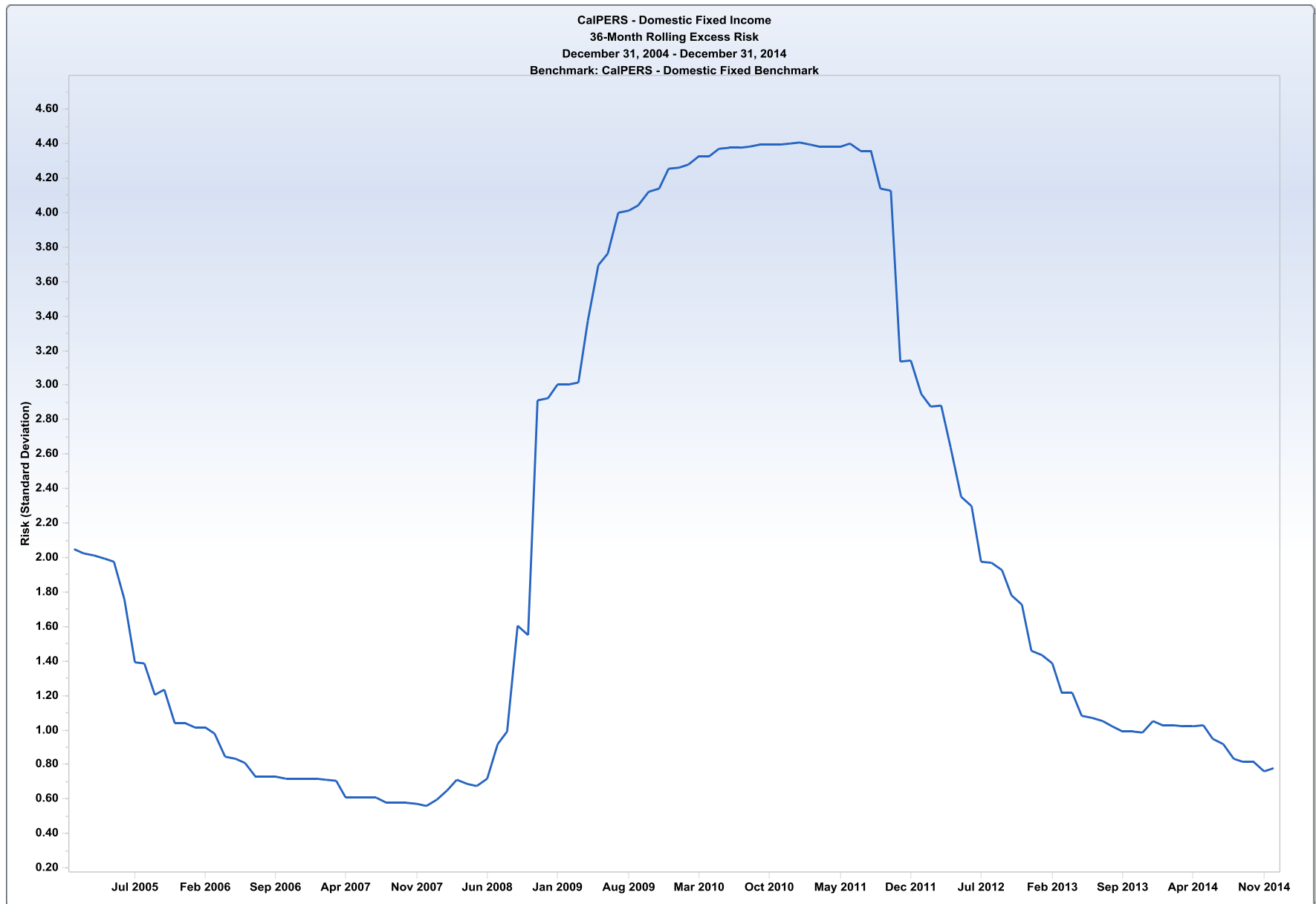
Income – Rolling Tracking Error



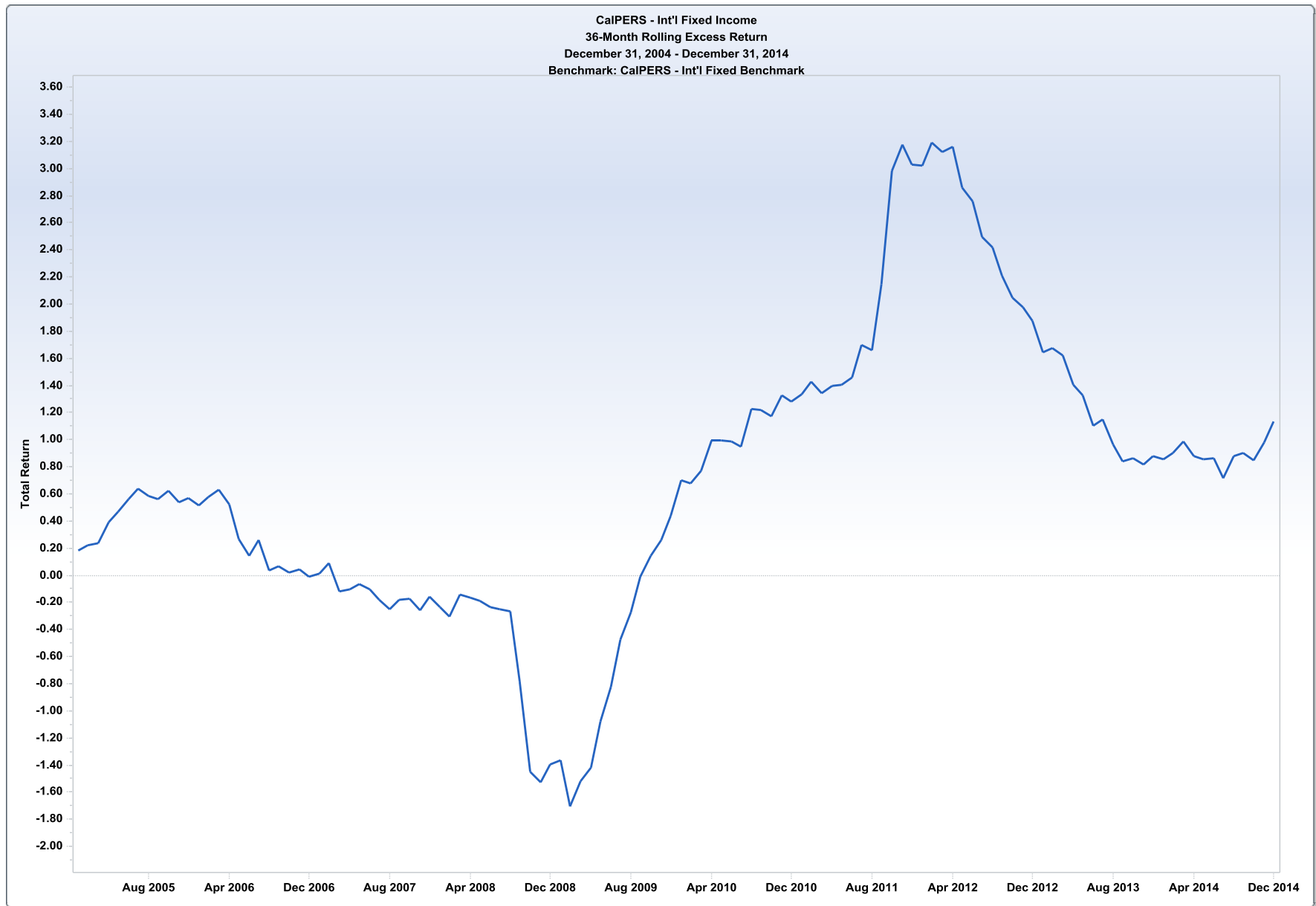
US Income – Rolling Excess Returns



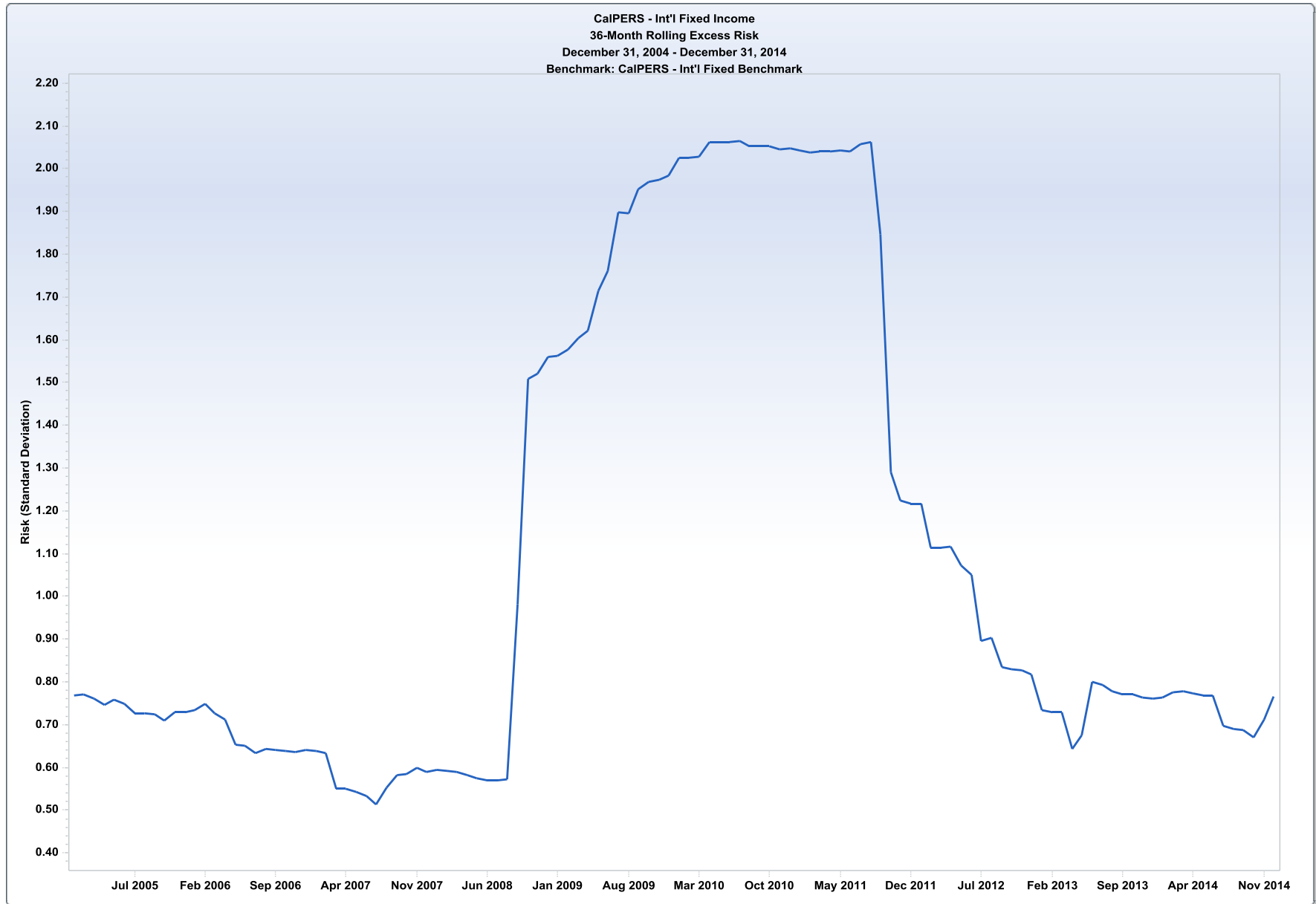
US Income – Rolling Tracking Error



International Income – Rolling Excess Returns



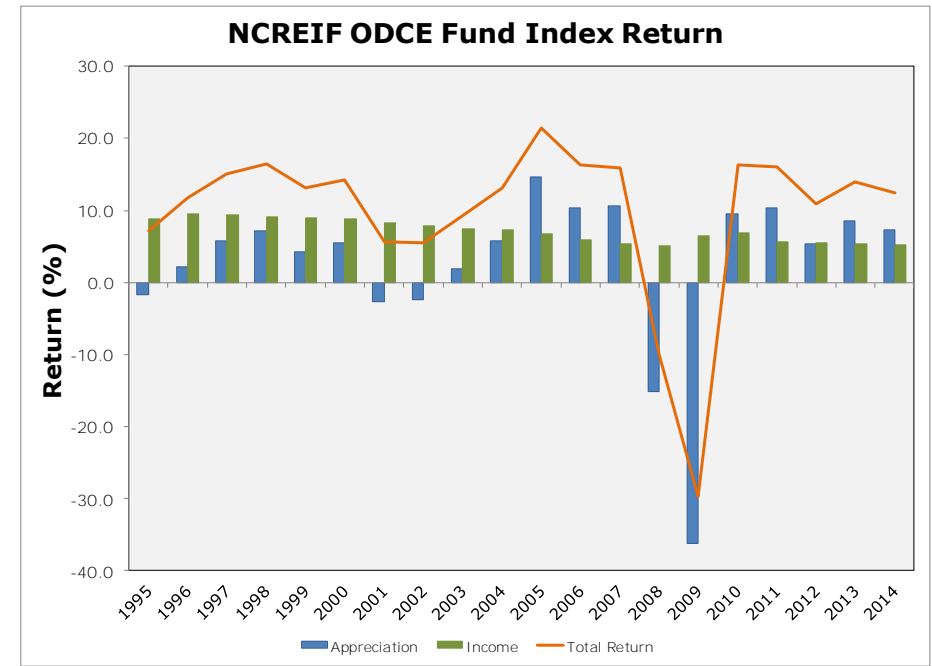
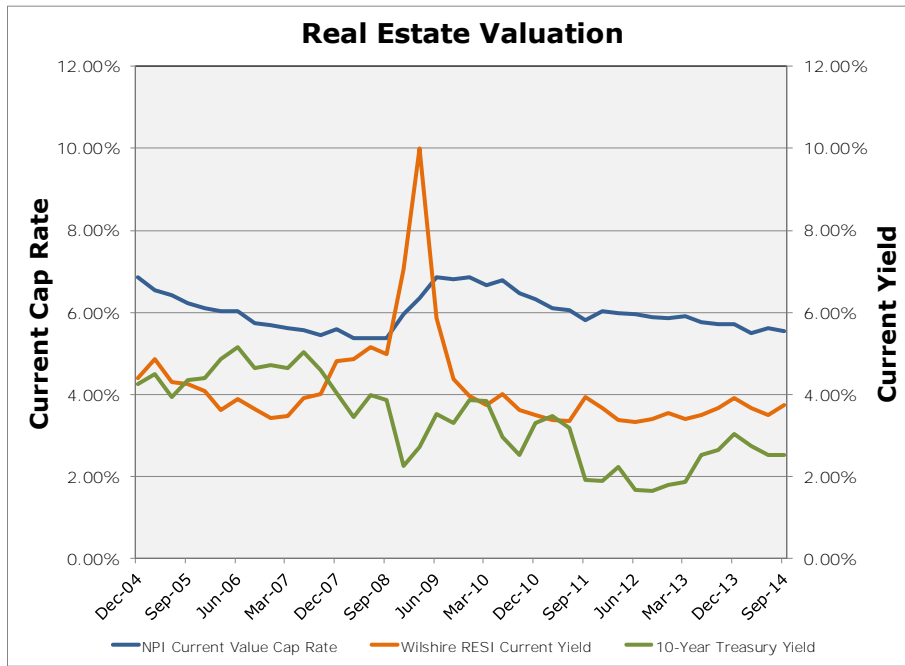
International Income – Rolling Tracking Error



Real Assets



December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays U.S. TIPS Index	0.0	3.6	3.6	0.4	4.1	4.4
Bloomberg Commodity Index	-12.1	-17.0	-17.0	-9.4	-5.5	-1.9
Wilshire Global REIT Index	11.2	24.6	24.6	16.3	15.2	7.6
NCREIF ODCE Fund Index	3.3	12.5	12.5	12.4	13.9	7.1
NCREIF Timberland Index	6.0	10.5	10.5	9.3	5.8	8.3
Alerian MLP Index (Oil & Gas)	-12.3	4.8	4.8	11.9	16.7	13.8



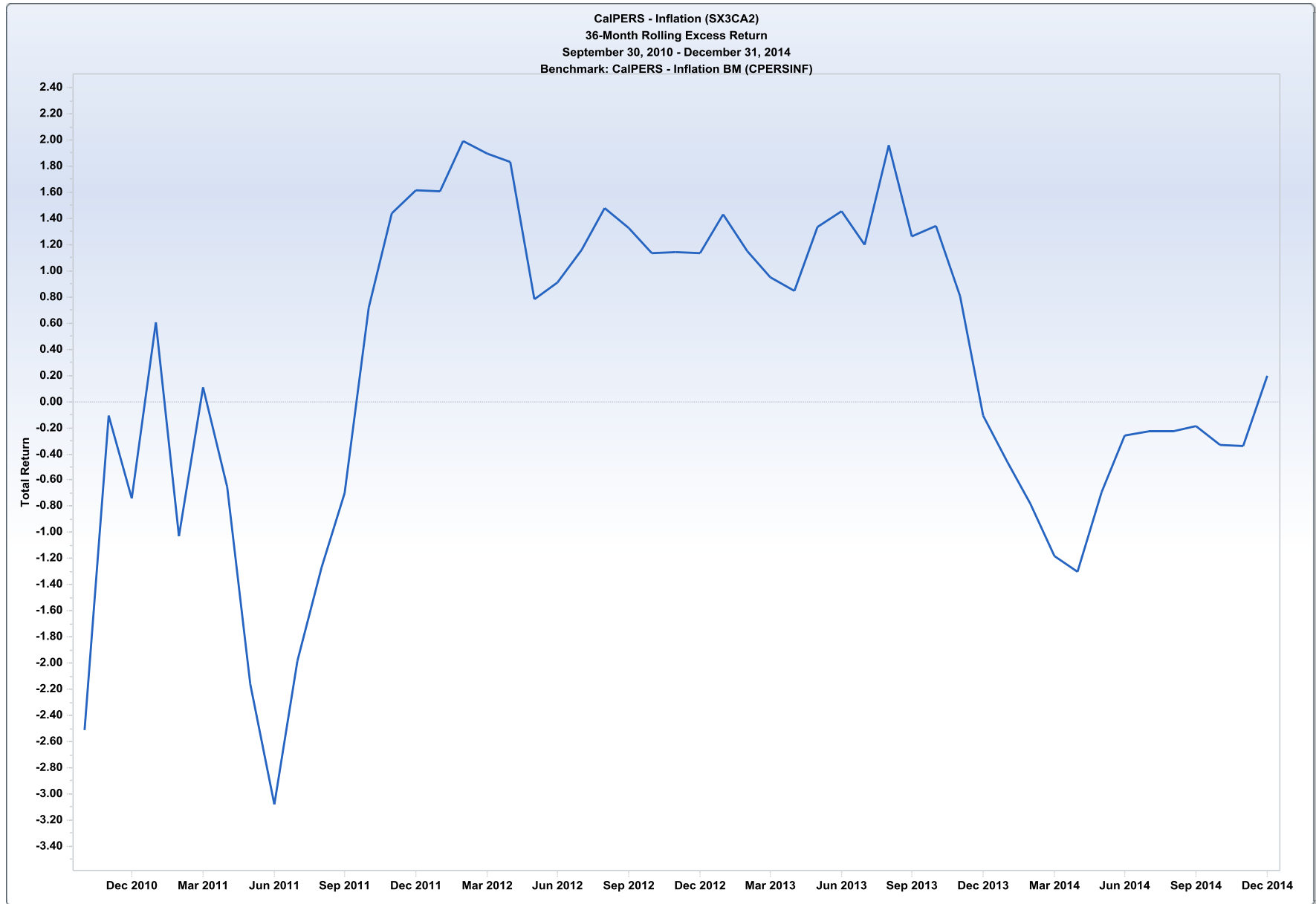
Data sources: Wilshire Compass, National Council of Real Estate Investment Fiduciaries



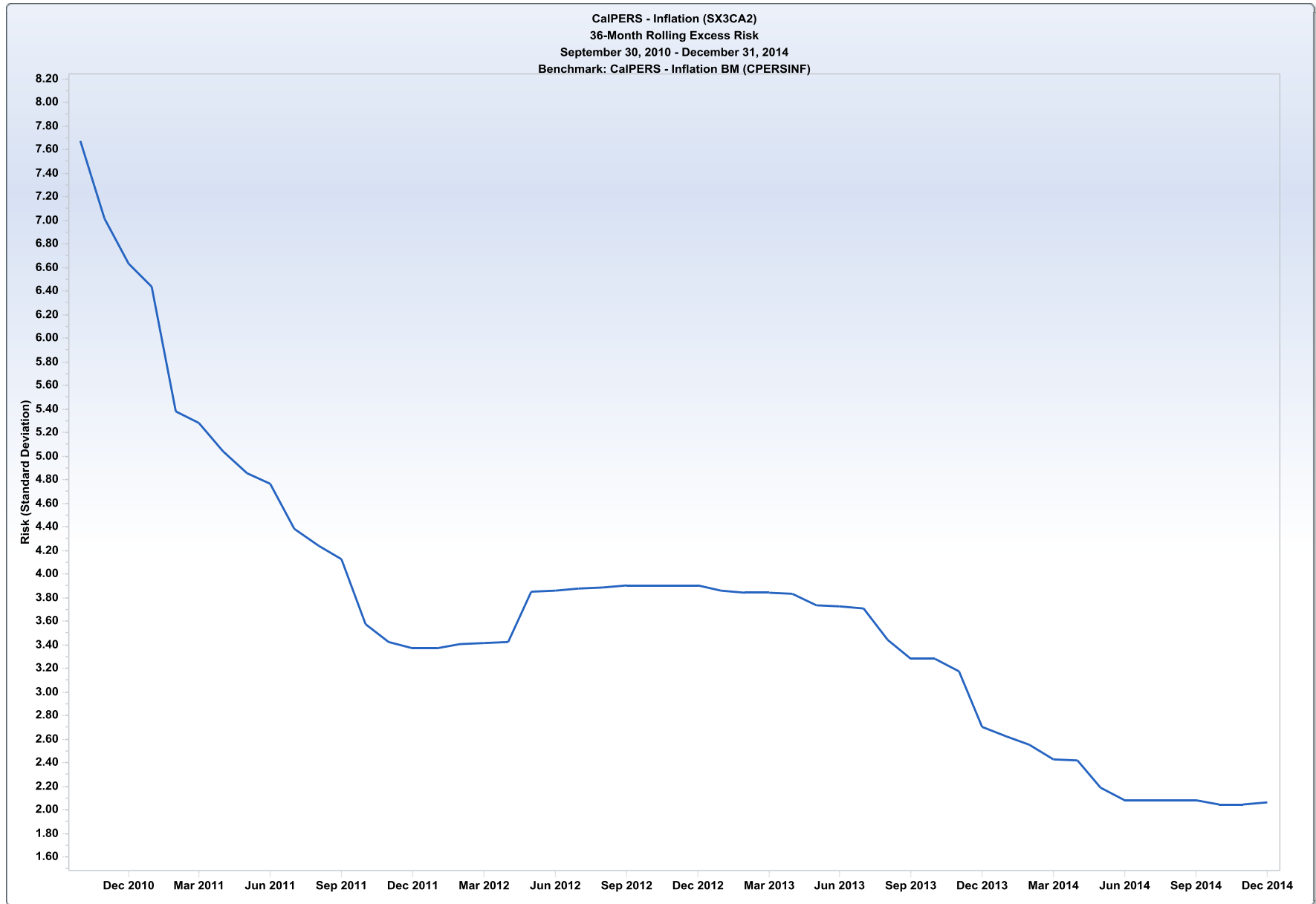
Inflation – Performance

	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
INFLATION	14.8	-6.4%	-5.1%	-1.7%	2.6%	-.-%	\$1.0 bil	0.3	0.4
<i>Inflation Policy Benchmark</i>		-7.8%	-6.9%	-1.9%	1.5%	-.-%		0.2	0.0
<i>Value Added</i>		1.4%	1.8%	0.2%	1.1%	-.-%			
Internal Commodities	1.9	-27.2%	-32.6%	-13.2%	-6.4%	-.-%			
<i>GSCI Total Return Index</i>		-27.7%	-33.1%	-12.9%	-6.5%	-.-%			
<i>Value Added</i>		0.5%	0.5%	-0.3%	0.1%	-.-%			
Core Inflation Linked Bonds	10.8	0.3%	4.7%	2.2%	4.8%	-.-%			
<i>Custom Benchmark</i>		-0.5%	3.4%	1.8%	4.3%	-.-%			
<i>Value Added</i>		0.8%	1.3%	0.4%	0.5%	-.-%			
Tactical Commodities	1.0	-27.4%	-32.8%	-.-%	-.-%	-.-%			
<i>GSCI Total Return Index</i>		-27.7%	-33.1%	-.-%	-.-%	-.-%			
<i>Value Added</i>		0.3%	0.3%	-.-%	-.-%	-.-%			
Tactical TIPS	1.2	0.0%	3.7%	-.-%	-.-%	-.-%			
<i>CalPERS TIPS</i>		0.0%	3.6%	-.-%	-.-%	-.-%			
<i>Value Added</i>		0.0%	0.1%	-.-%	-.-%	-.-%			

Inflation – Rolling Excess Returns



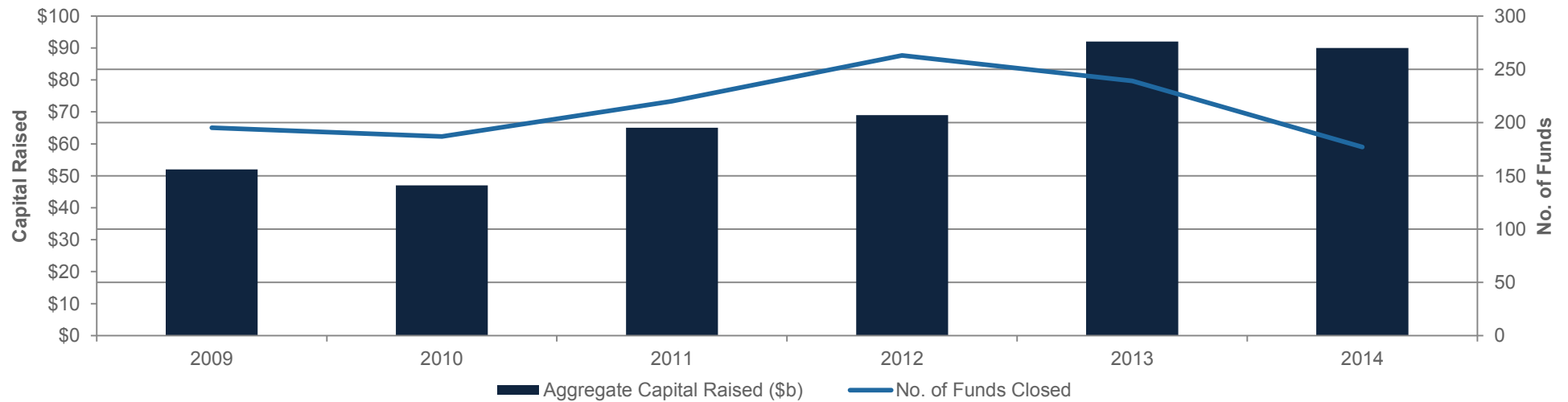
Inflation – Rolling Tracking Error



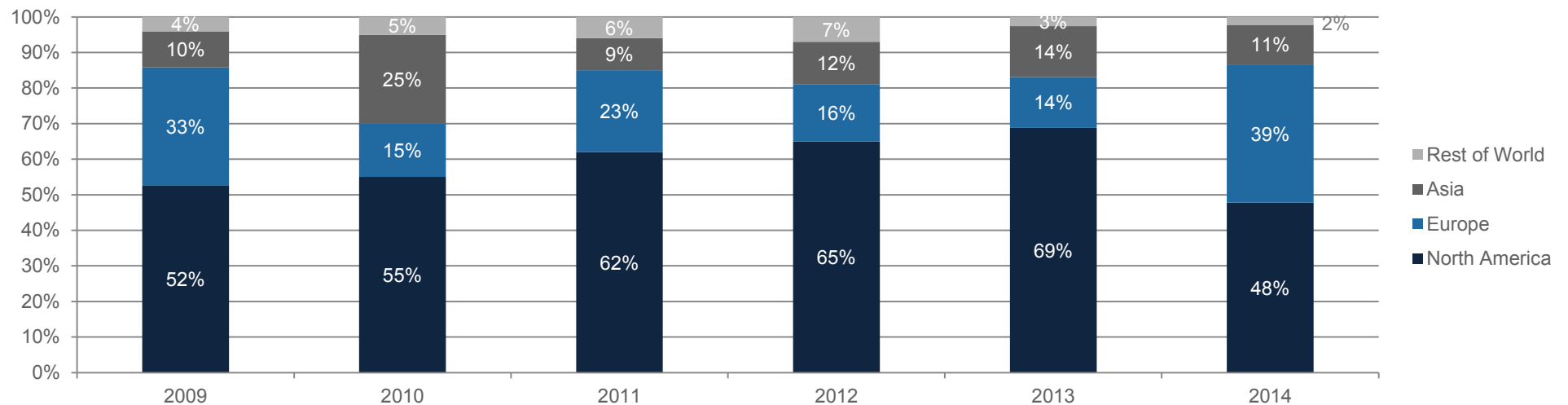
Private Real Estate – Fundraising Activity



Quarterly Closed-End Private Real Estate Fundraising (2009 – 2014)



Proportion of Aggregate Capital Raised by Closed-End Private Real Estate Funds by Fund Geographic Focus (2009 – 2014)

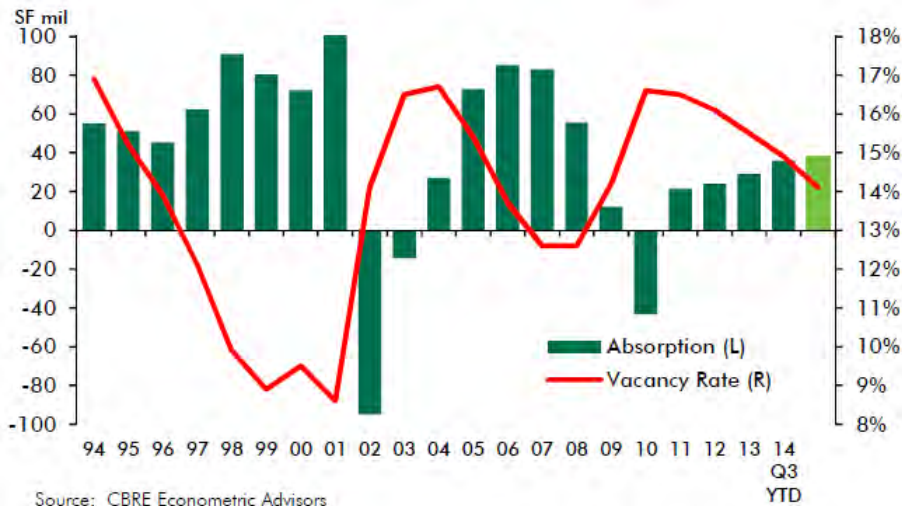


Source: Preqin.

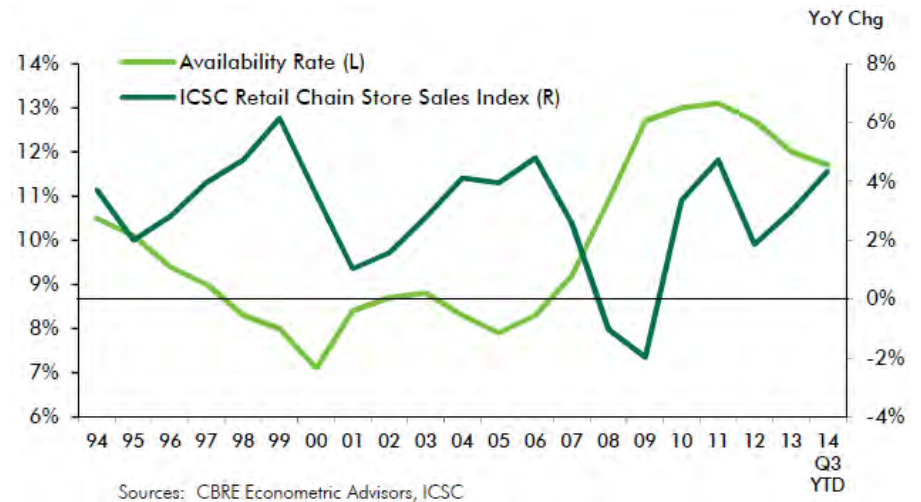


Commercial Property (as of 3Q 2014)

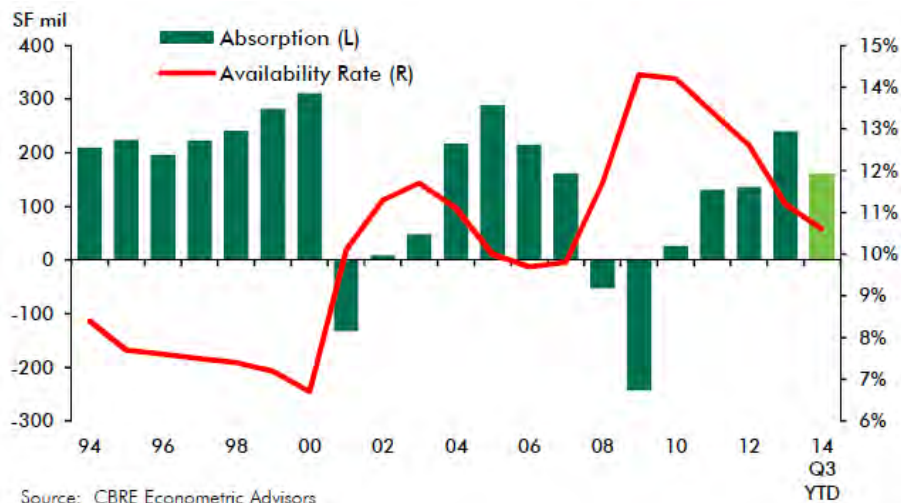
Office



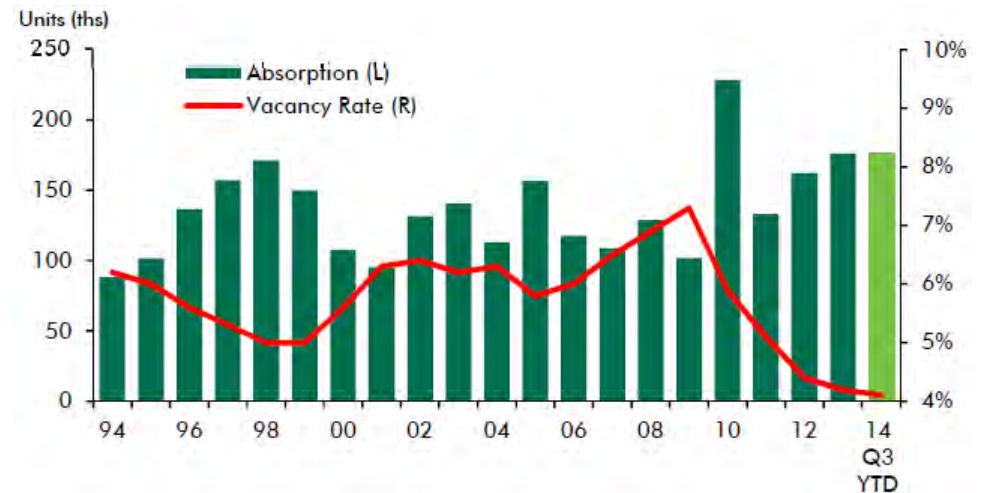
Retail



Industrial



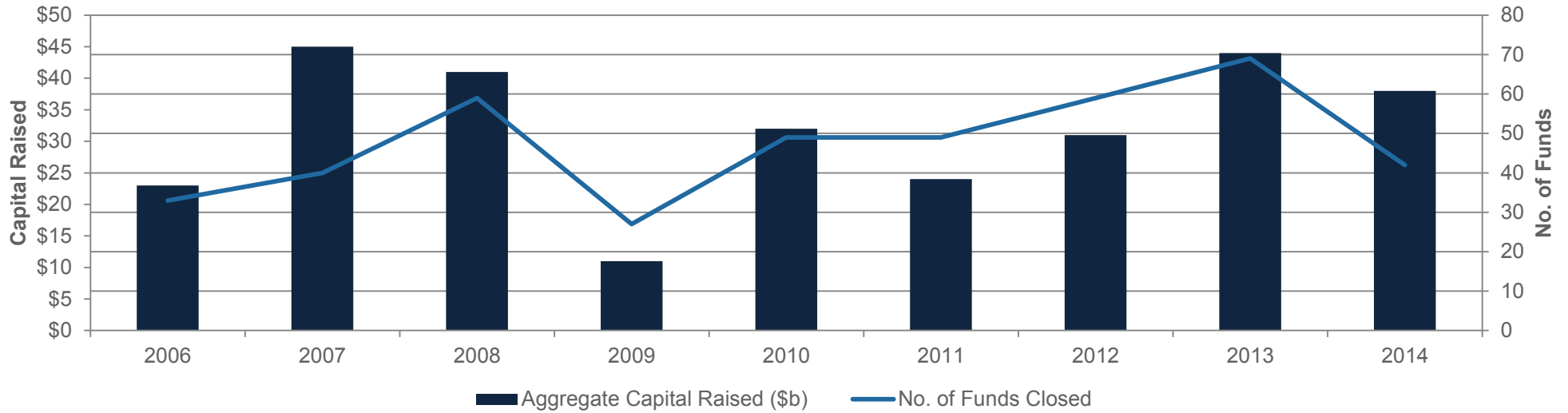
Apartment



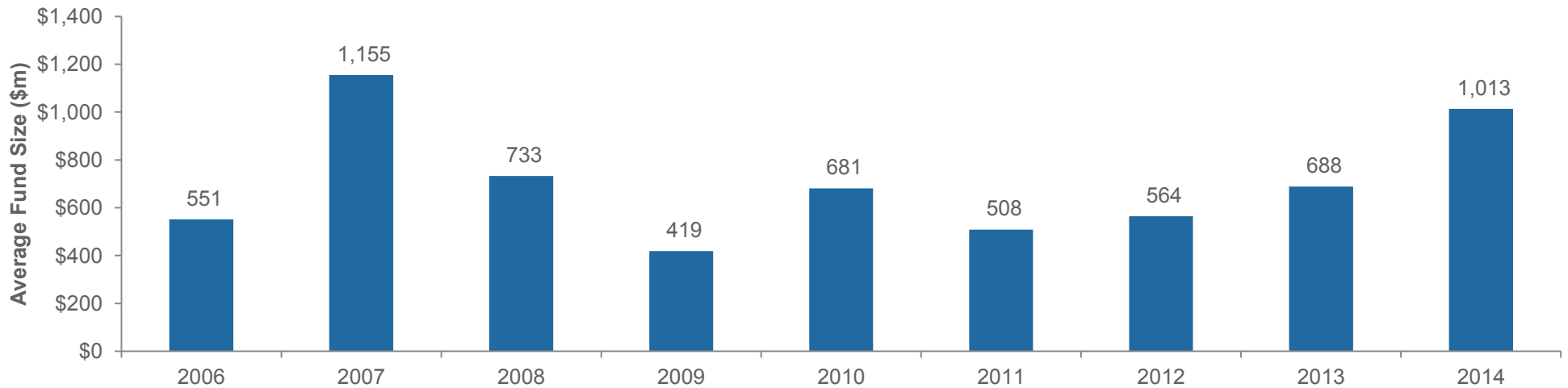
Unlisted Infrastructure – Fundraising Activity



Unlisted Infrastructure Fundraising (2006 – 2014)



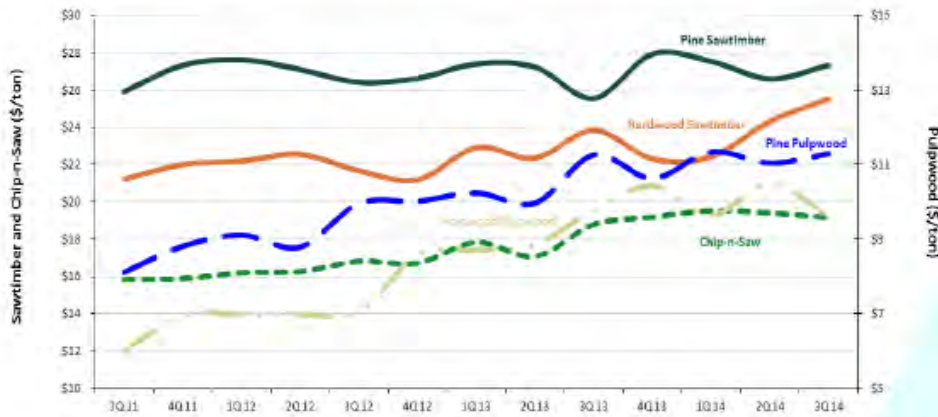
Average Unlisted Infrastructure Fund Size (2006 – 2014)





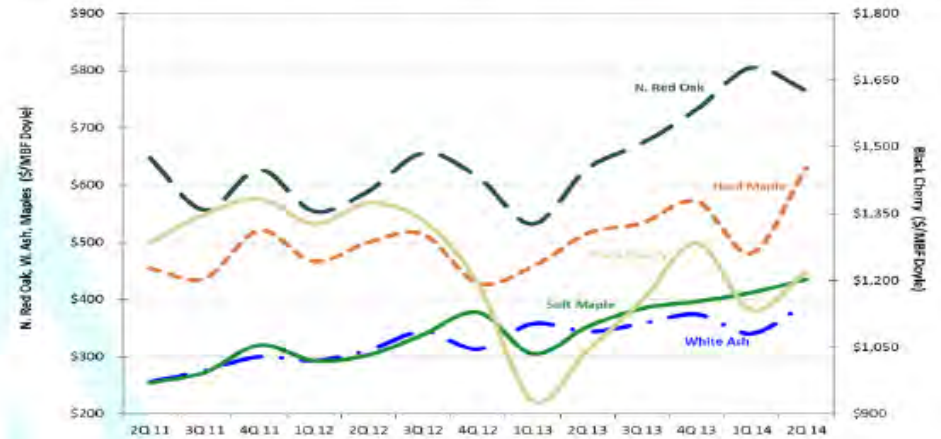
Timber (as of 3Q 2014)

Southeastern Timber Prices



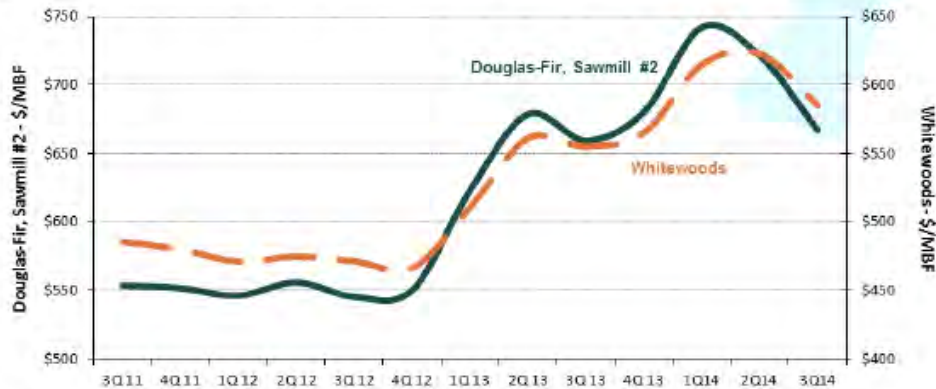
Source: Forest2Market®

Northeastern Hardwood Timber Prices



Source: Pennsylvania Woodlands Timber Market Report - Northwest Region

Pacific Northwest Timber Prices



Source: Log Lines®

Source: Forest Investment Associates

Pulp and Paper



Source: FOEX Indexes, Ltd., RISI Pulp & Paper Week



Real Assets – Performance

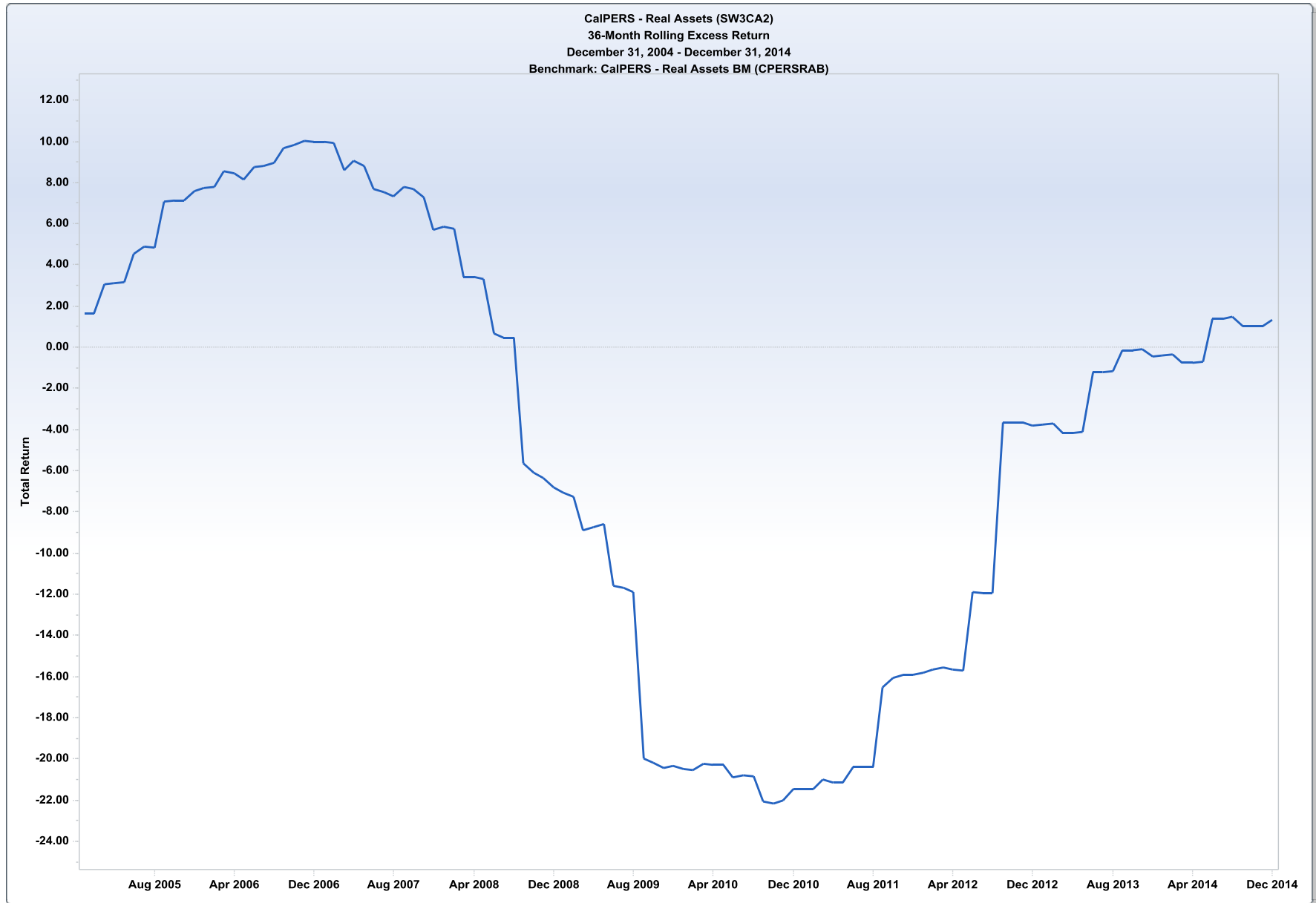
	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
REAL ASSETS	29.6	0.8%	13.0%	12.3%	8.4%	3.1%	\$4.1 bil	1.2	-0.4
<i>Real Assets Policy Benchmark</i>		2.7%	10.8%	10.8%	10.6%	8.9%		2.4	0.0
<i>Value Added</i>		-1.9%	2.2%	1.5%	-2.2%	-5.8%			
Real Estate	25.2	0.8%	13.1%	13.4%	9.1%	2.4%	\$4.1 bil	1.2	-0.4
<i>Real Estate Policy Benchmark</i>		3.0%	11.4%	11.7%	12.0%	9.6%		2.4	0.0
<i>Value Added</i>		-2.2%	1.7%	1.7%	-2.9%	-7.2%			
Forestland	2.2	-0.3%	3.7%	0.3%	-0.7%	-.-%			
<i>NCREIF Timberland Index</i>		1.5%	10.4%	7.4%	3.6%	-.-%			
<i>Value Added</i>		-1.8%	-6.7%	-7.1%	-4.3%	-.-%			
Infrastructure	2.1	2.2%	23.3%	13.6%	18.1%	-.-%			
<i>CPI + 400 BPS 1Qtr Lag</i>		0.9%	5.7%	5.7%	6.5%	-.-%			
<i>Value Added</i>		1.3%	17.6%	7.9%	11.6%	-.-%			



Real Estate – Performance

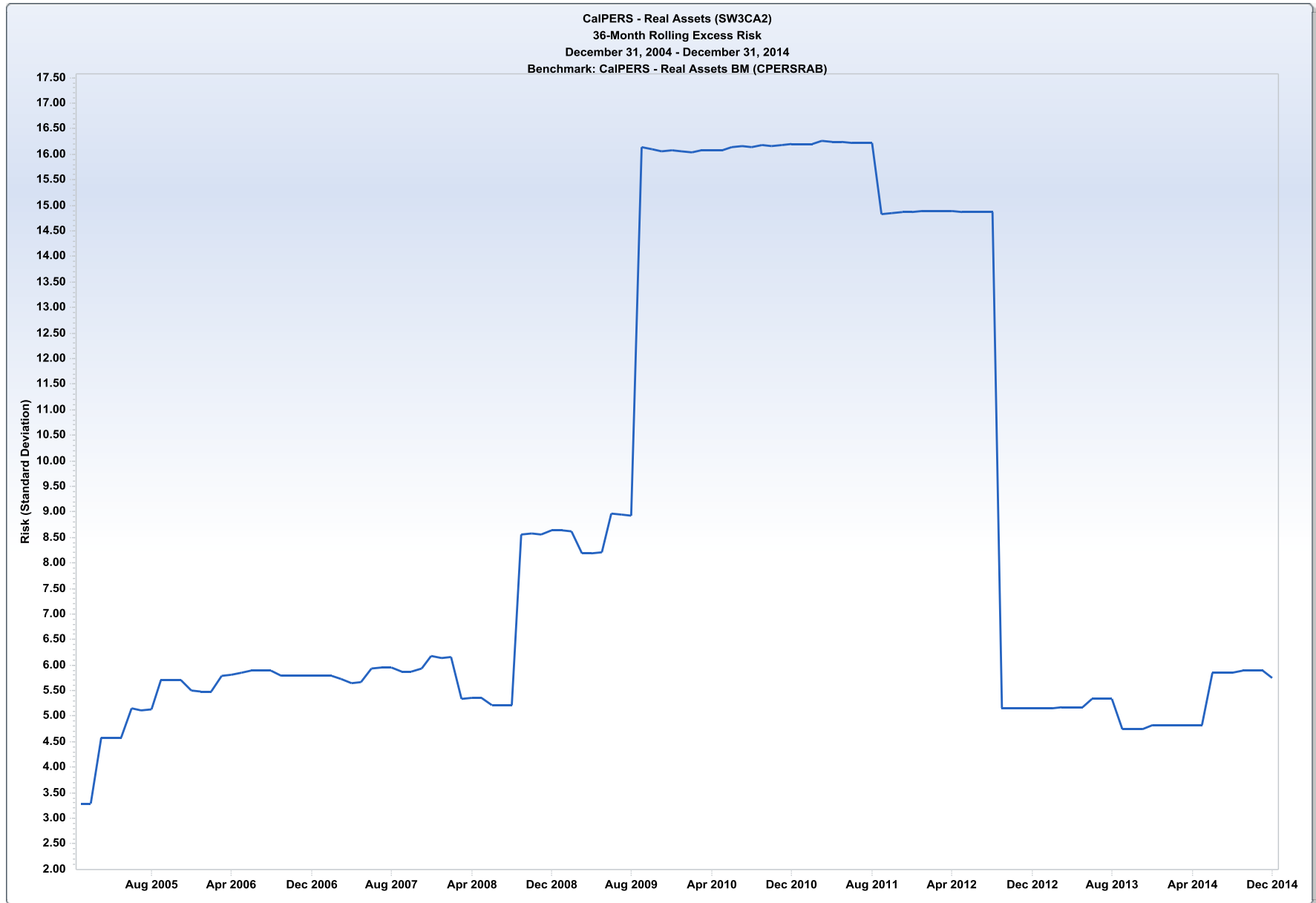
	Market Value	Qtr	1-Year	3-Year	5-Year	10-Year	VaR	5-year Sharpe Ratio	5-year Info Ratio
Real Estate	25.2	0.8%	13.1%	13.4%	9.1%	2.4%	\$4.1 bil	1.2	-0.4
<i>Real Estate Policy Benchmark</i>		3.0%	11.4%	11.7%	12.0%	9.6%		2.4	0.0
<i>Value Added</i>		-2.2%	1.7%	1.7%	-2.9%	-7.2%			
Strategic Real Estate	19.1	0.7%	12.5%	14.9%	13.5%	15.0%			
<i>Wt. NCREIF ODCE+FTSE EPRA NAREIT</i>		3.0%	11.4%	11.7%	12.0%	9.6%			
<i>Value Added</i>		-2.3%	1.1%	3.2%	1.5%	5.4%			
Legacy Real Estate ex Public	6.2	1.2%	15.0%	9.9%	4.9%	-1.8%			
<i>Wt. NCREIF ODCE+FTSE EPRA NAREIT</i>		3.0%	11.4%	11.7%	12.0%	9.6%			
<i>Value Added</i>		-1.8%	3.6%	-1.8%	-7.1%	-11.4%			

Real Assets – Rolling Excess Returns

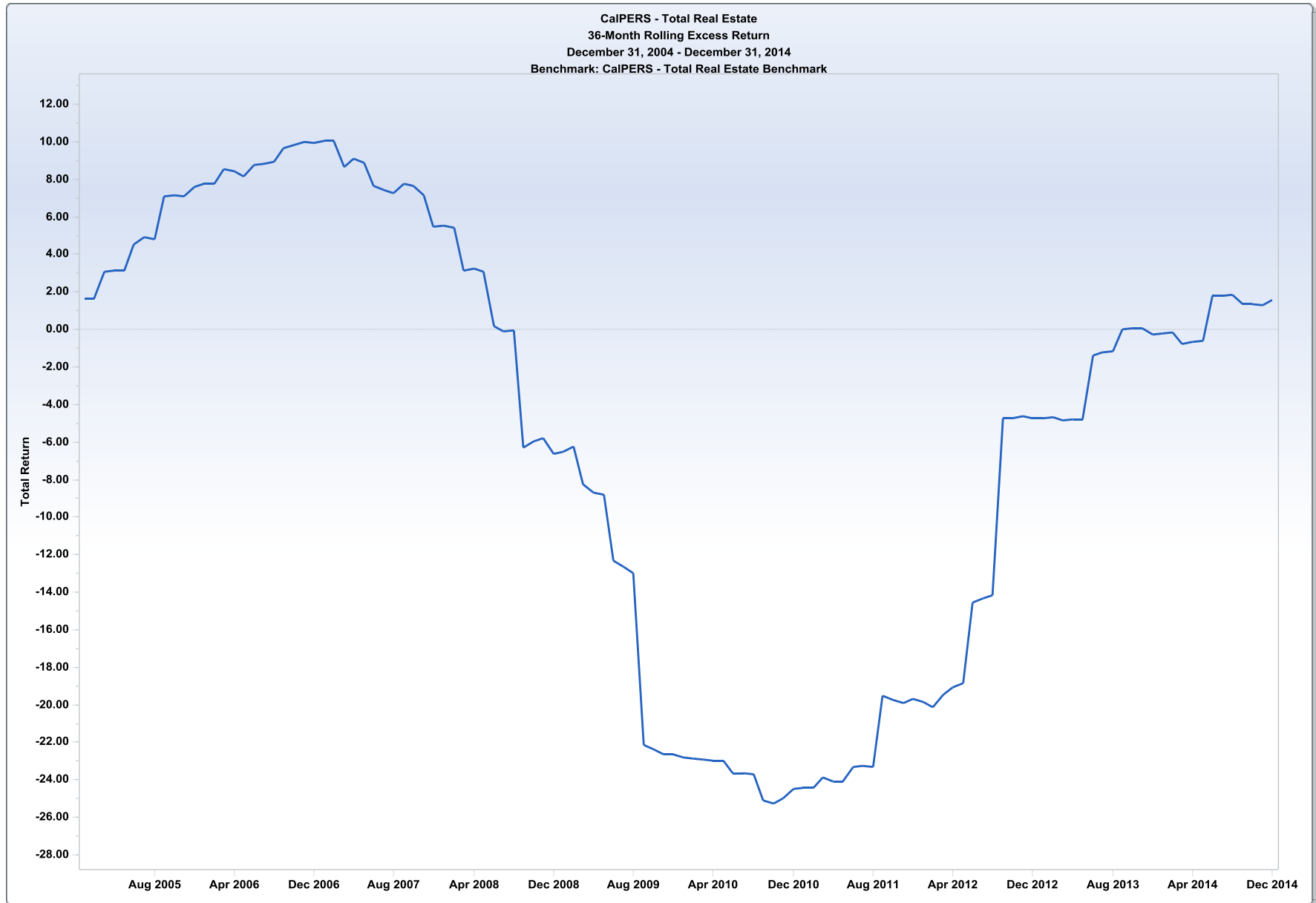




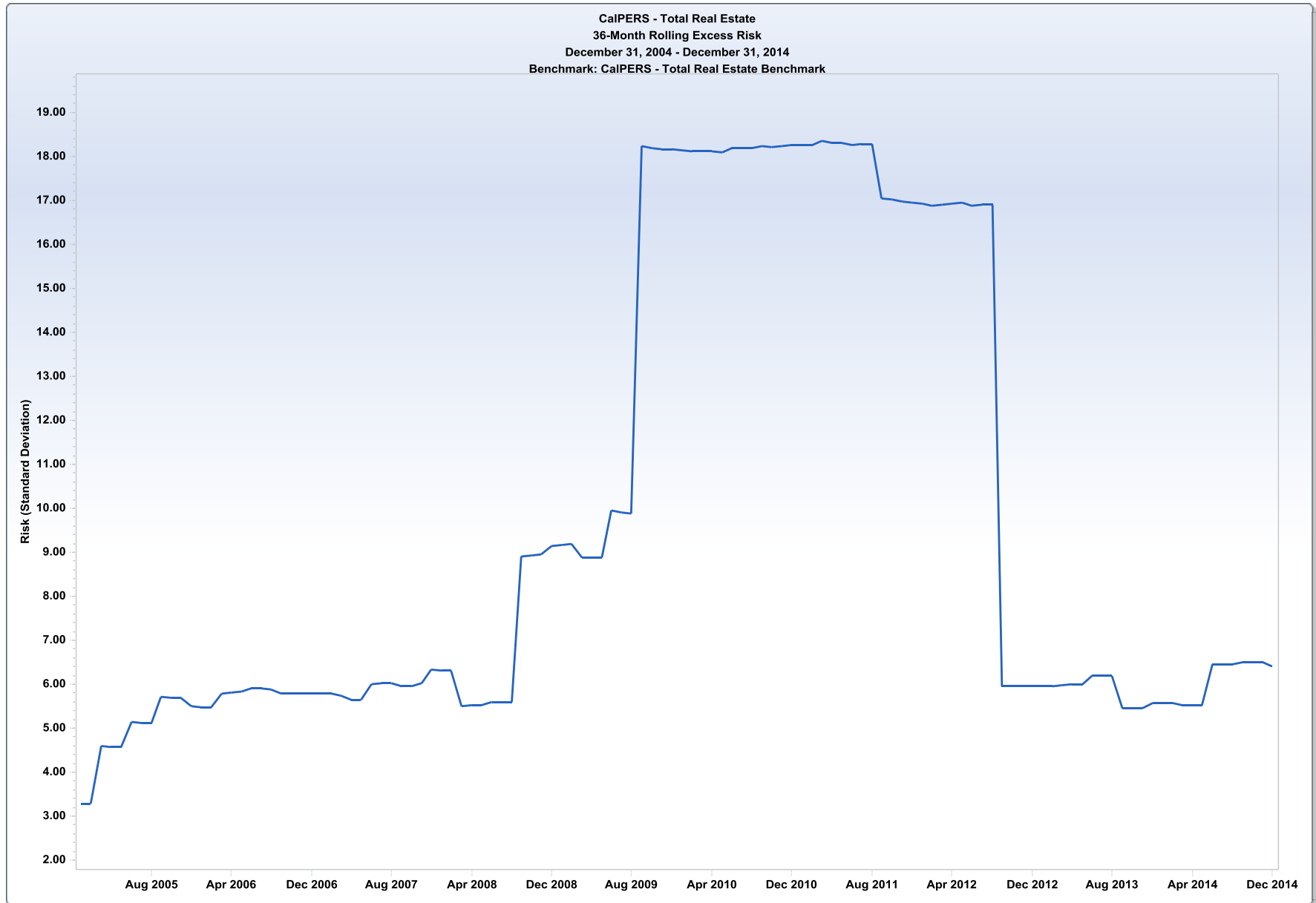
Real Assets – Rolling Tracking Error



Real Estate – Rolling Excess Returns



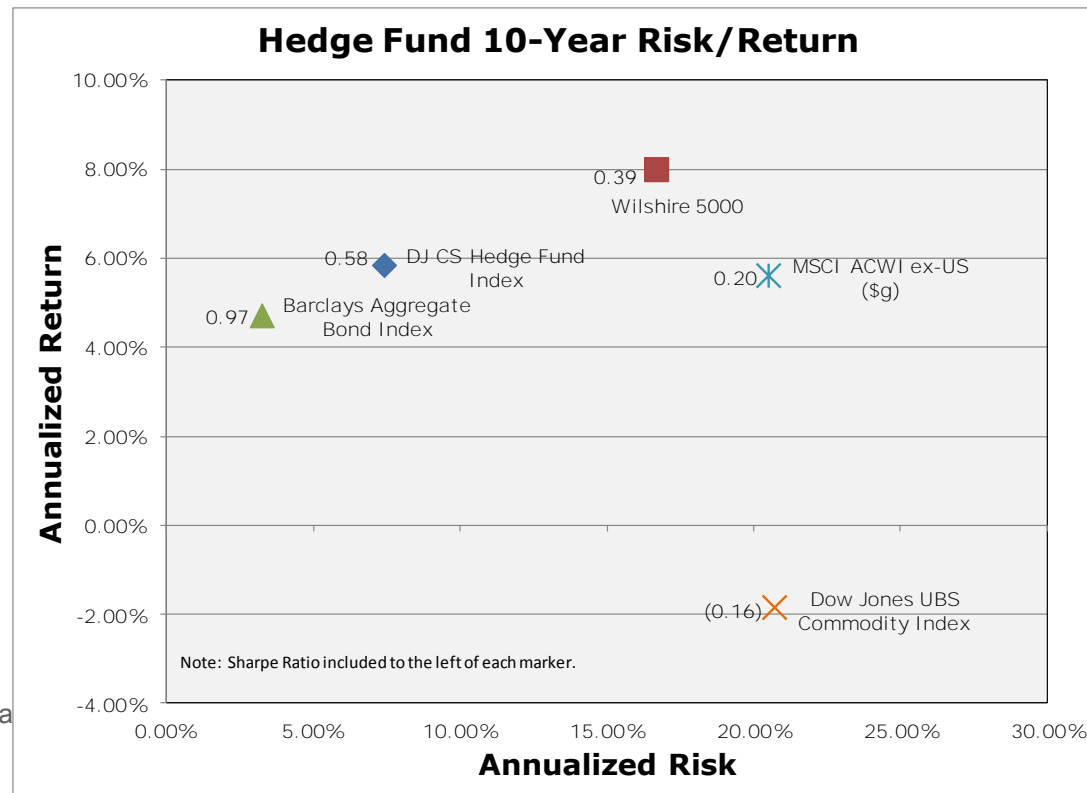
Real Estate – Rolling Tracking Error



Hedge Fund Performance



December 31, 2014	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
DJ CS Hedge Fund Index	0.7	4.1	4.1	7.2	5.9	5.8
Event Driven Index	-2.2	1.6	1.6	9.1	5.8	6.5
Global Macro Index	0.5	3.1	3.1	4.0	6.3	7.7
Long/Short Equity Index	2.3	5.5	5.5	10.4	6.4	6.4
Multi-Strategy Index	1.1	6.1	6.1	9.5	7.9	6.5
Wilshire 5000	5.3	12.7	12.7	20.3	15.5	8.0
MSCI ACWI ex-US (\$g)	-3.8	-3.4	-3.4	9.5	4.9	5.6
Barclays Aggregate Bond Index	1.8	6.0	6.0	2.7	4.4	4.7
Dow Jones UBS Commodity Index	-12.1	-17.0	-17.0	-9.4	-5.5	-1.9



Data sources: Wilshire Compa



ARS – Distribution of Performance

	<u>Market</u>						<u>5-Year</u>	<u>5-Year Up</u>	<u>5-Year</u>	<u>5-Year</u>
	<u>Value</u>	<u>Qtr</u>	<u>1-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>10-Year</u>	<u>Info</u>	<u>Capture</u>	<u>Sharpe</u>	<u>Sortino</u>
							<u>Ratio</u>	<u>Ratio</u>	<u>Ratio</u>	<u>Ratio</u>
Absolute Return Strategies	2.8	1.7%	4.6%	5.6%	4.5%	4.4%	-0.3	0.8	1.4	1.8
<i>ARS Policy Benchmark</i>		1.2%	5.2%	5.2%	5.4%	7.1%				
<i>Value Added</i>		0.5%	-0.6%	0.4%	-0.9%	-2.7%				
Total Direct Investments	2.4	2.1%	5.0%	5.8%	5.2%	5.0%				
Total Funds of Funds	0.3	-1.4%	1.5%	4.6%	2.3%					
HFRI Fund of Funds Index		0.8%	3.2%	5.6%	3.3%	3.0%				

ARS – Histogram of Monthly Returns

