



The City of Grand Rapids – General Retirement System
Executive Summary of Investment Performance
March 31, 2015

Investment Performance	Tab 1
Capital Market Review	Tab 2
Appendix	

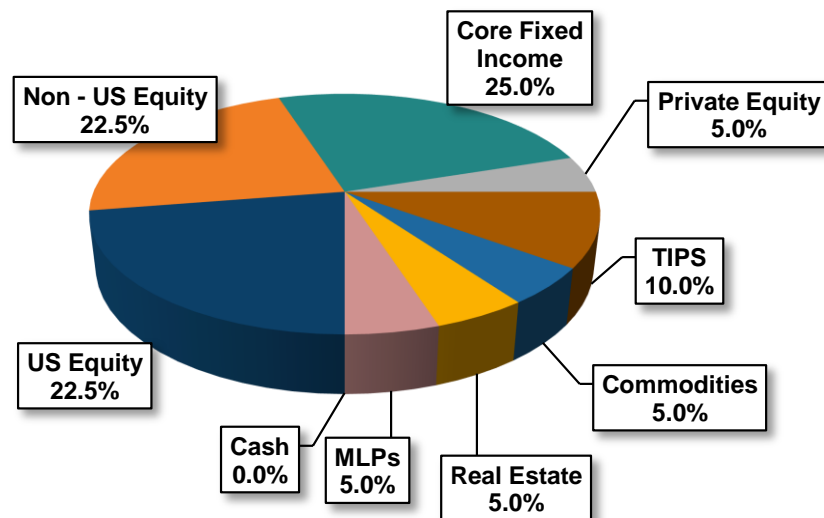
Total Fund

Policy Allocation vs Actual Allocation

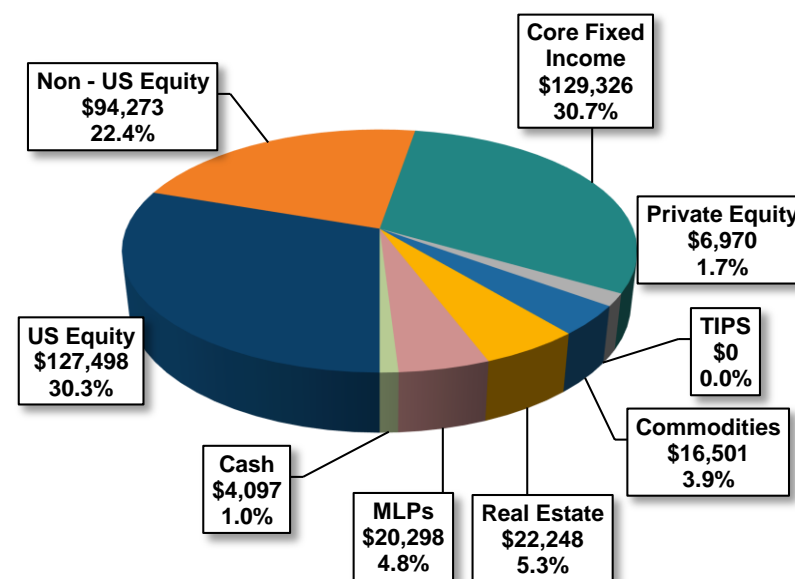
Total Fund Composite

As of March 31, 2015

Policy Allocation¹



Actual Allocation (in \$'000)



Total Assets: \$421,212,000

¹ Effective date: April 1, 2015

Policy Allocation vs Actual Allocation



Total Fund Composite

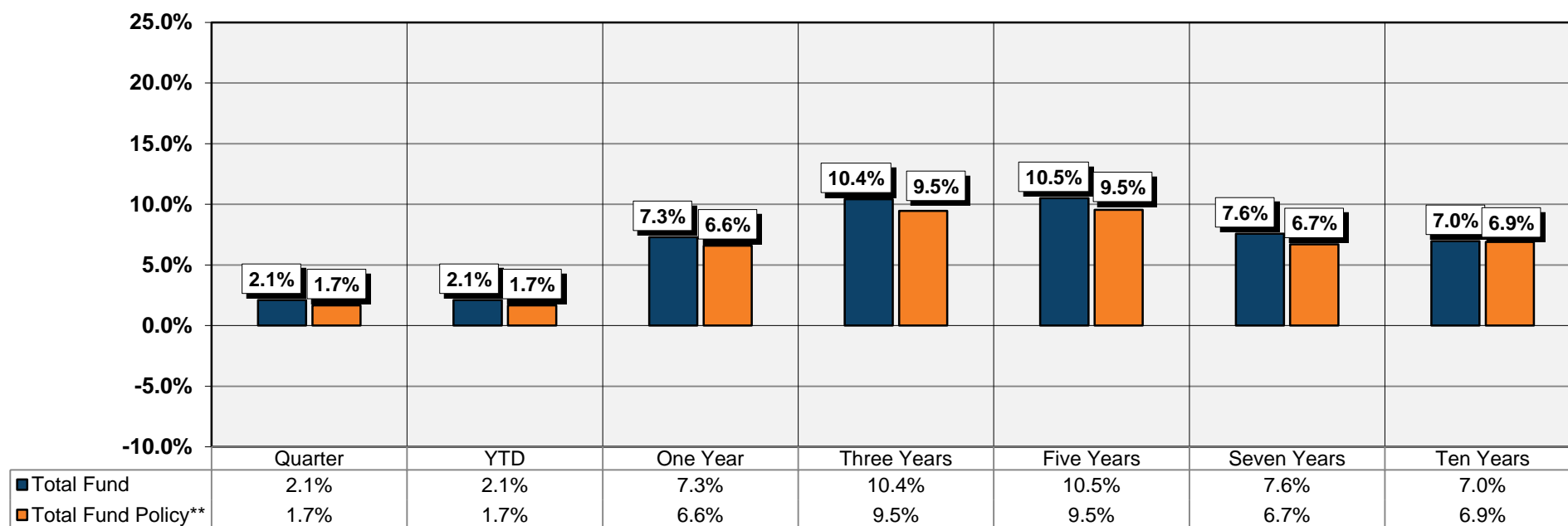
As of March 31, 2015

	Market Value (in \$'000)	Asset Allocation	
		Actual	Policy
US Equity	\$127,498	30.27%	22.50%
Non - US Equity	\$94,273	22.38%	22.50%
Core Fixed Income	\$129,326	30.70%	25.00%
Private Equity	\$6,970	1.65%	5.00%
TIPS	\$0	0.00%	10.00%
Commodities	\$16,501	3.92%	5.00%
Real Estate	\$22,248	5.28%	5.00%
MLPs	\$20,298	4.82%	5.00%
Cash	\$4,097	0.97%	0.00%
Total Fund Composite	\$421,212	100.00%	100.00%

Investment Performance

Total Fund Composite*

Periods Ended March 31, 2015



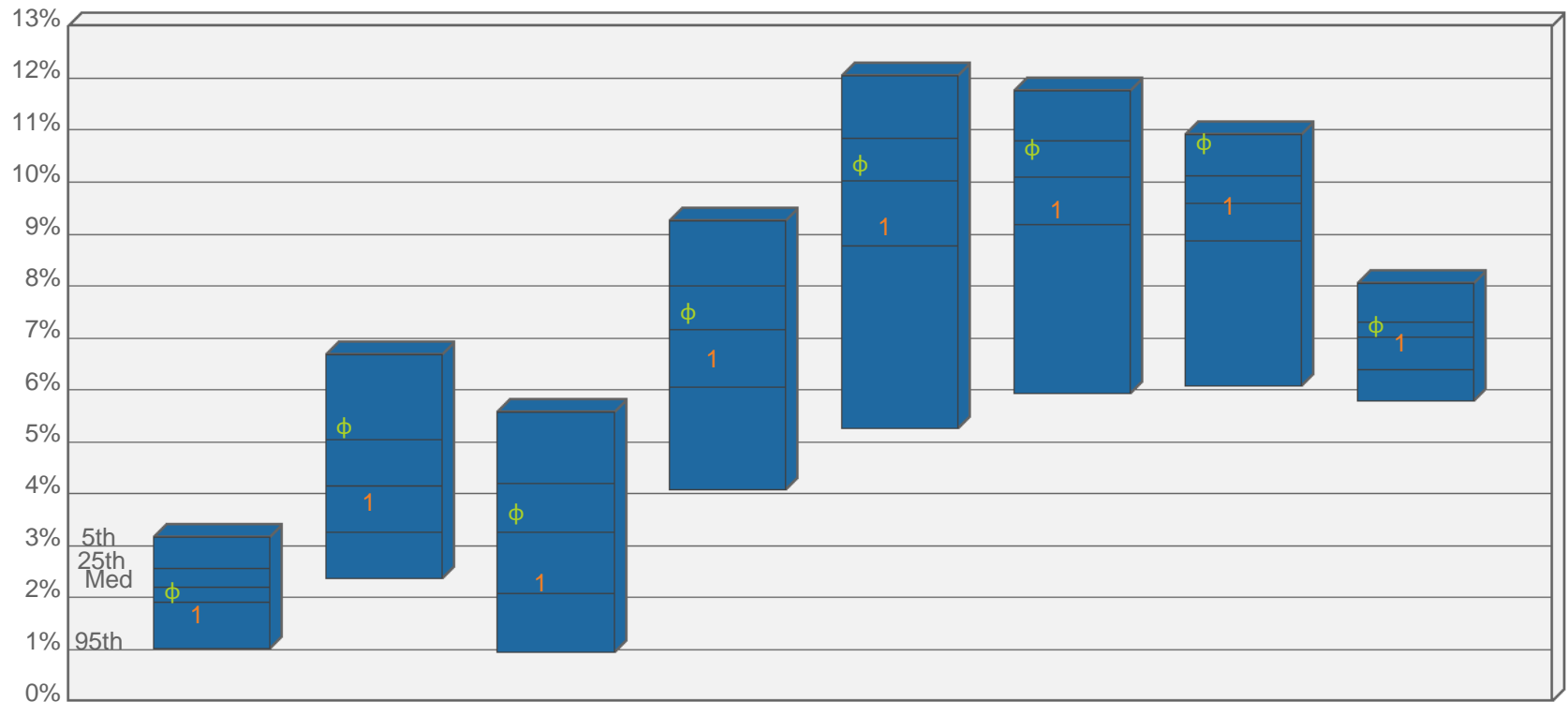
*Returns are net of fees

** Policy index = Wilshire 5000 (40%), MSCI ACWI ex U.S. (15%), Barclays Aggregate (30%), FTSE EPRA NAREIT Dev RE (5%), Wilshire 5000 +2.5% (5%), DJ UBS Commodity Index (5%)

Performance Comparison

Total Fund Composite

Periods Ended March 31, 2015



φ Total Fund
1 Policy Index

	1 Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	5 Years	10 Years
φ Total Fund	2.16 (56)	5.34 (20)	3.67 (42)	7.54 (38)	10.39 (40)	10.70 (30)	10.81 (8)	7.28 (28)
1 Policy Index	1.66 (85)	3.84 (56)	2.29 (72)	6.59 (62)	9.15 (69)	9.46 (69)	9.54 (50)	6.90 (53)
5th %tile	3.16	6.69	5.56	9.26	12.05	11.75	10.91	8.05
25th %tile	2.55	5.05	4.21	8.00	10.85	10.79	10.13	7.30
Median	2.19	4.16	3.25	7.15	10.03	10.10	9.59	7.02
75th %tile	1.92	3.26	2.08	6.05	8.78	9.18	8.88	6.38
95th %tile	1.02	2.36	0.95	4.08	5.26	5.93	6.08	5.78
Number of Funds	158	158	158	157	156	151	145	116

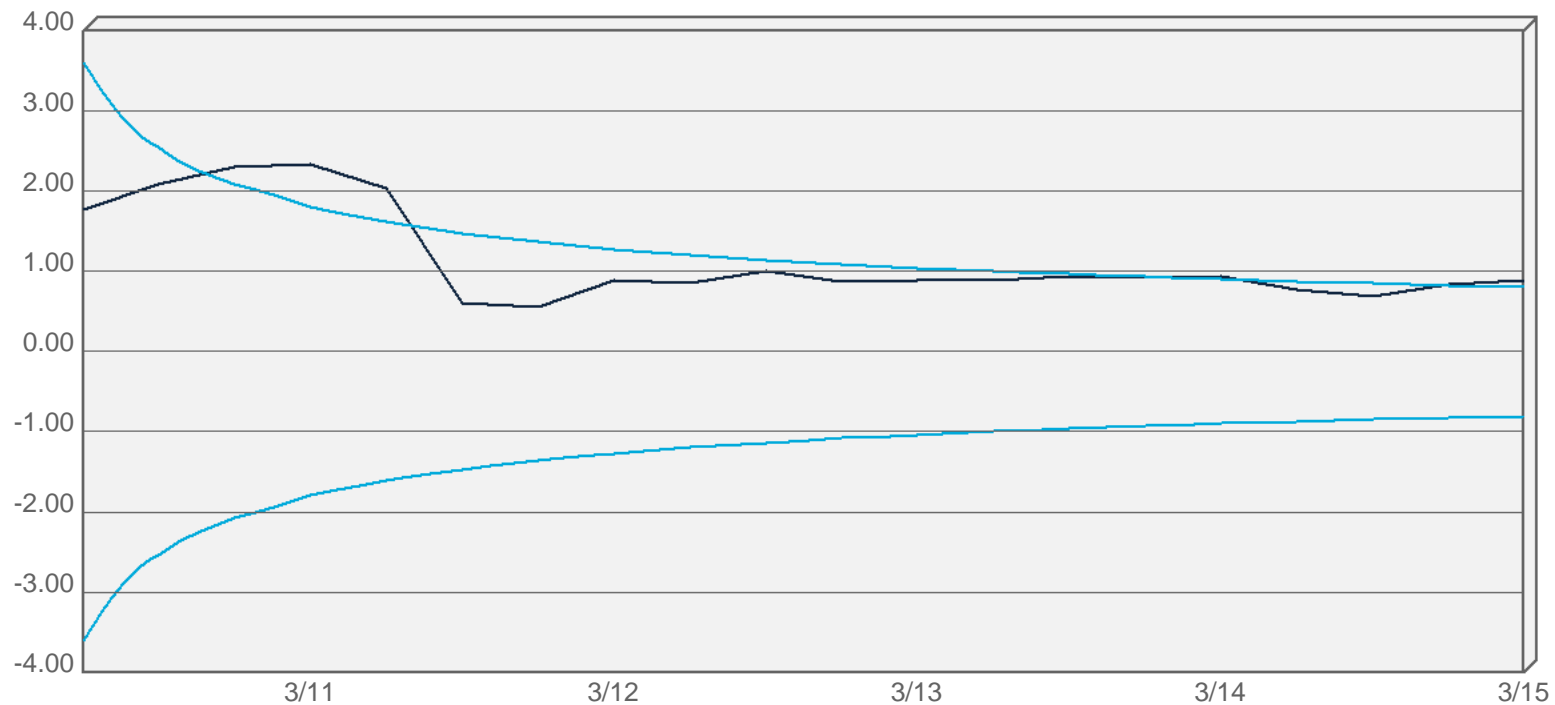
*TUCS Total Ret of Master Trusts - Public Universe - Gross of Fees

General Retirement System

Cumulative Skill Analysis

Total Fund Composite

Five Years Ending March 31, 2015



— Quarterly NOF Value Added vs. Policy Index

— 80% Confidence Band

Excess Return:	0.88	Information Ratio:	0.81
Excess Risk:	1.09	T-Stat:	1.80

Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
U.S. Equity Composite									
Net of Fee Return	1.98	1.98	12.36	16.80	15.31	10.18	8.86	9/30/87	8.38
Wilshire 5000	1.61	1.61	12.24	16.19	14.56	9.29	8.41	9/30/87	9.48
Value Added	0.37	0.37	0.12	0.62	0.75	0.89	0.45	9/30/87	-1.10
Core Fixed Composite									
Net of Fee Return	1.93	1.93	6.63	4.69	6.19	6.44	5.63	9/30/87	7.15
Barclays Aggregate	1.61	1.61	5.72	3.10	4.41	4.69	4.93	9/30/87	6.99
Value Added	0.32	0.32	0.91	1.58	1.77	1.75	0.71	9/30/87	0.16
Non-US Equity Composite									
Net of Fee Return	4.98	4.98	1.80	8.95	8.11	2.32	4.01	6/30/95	7.81
Policy Benchmark	3.49	3.49	-1.01	6.40	4.82	1.24	5.27	6/30/95	5.37
Value Added	1.49	1.49	2.81	2.55	3.29	1.08	-1.26	6/30/95	2.44
Real Estate Composite									
Net of Fee Return	3.77	3.77	14.88	11.18	10.44			6/30/09	14.65
FTSE EPRA/NAREIT Dev (N)	3.97	3.97	15.18	12.00	11.29			6/30/09	15.65
Value Added	-0.20	-0.20	-0.29	-0.82	-0.85			6/30/09	-1.00
Commodities Composite									
Net of Fee Return	-4.94	-4.94	-21.08					3/31/13	-14.48
DJ UBS Commodity Index	-5.94	-5.94	-27.04					3/31/13	-15.48
Value Added	1.00	1.00	5.96					3/31/13	1.00
MLPs Composite									
Net of Fee Return									
S&P MLP Index									

Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
Alternative Investments Composite									
Net of Fee Return	2.95	2.95	12.37	6.30				6/30/10	6.04
Wilshire 5000 +2.5%	2.23	2.23	14.74	18.69				6/30/10	20.80
Value Added	0.72	0.72	-2.37	-12.38				6/30/10	-14.76
Total Fund									
Net of Fee Return	2.10	2.10	7.29	10.42	10.51	7.57	6.97	9/30/87	8.02
Policy Index	1.66	1.66	6.59	9.46	9.54	6.70	6.90	9/30/87	8.67
Value Added	0.44	0.44	0.70	0.96	0.97	0.87	0.07	9/30/87	-0.66

Custom Benchmark Specification



Total Fund

March 31, 2015

	Quarter Start	Quarter End	Percent	Description
Policy Index	12/79	6/98	55.00	Wilshire 5000
			40.00	Barclays Aggregate
			5.00	MSCI EAFE Index (N)
	9/98	9/02	50.00	Wilshire 5000
			40.00	Barclays Aggregate
			10.00	MSCI EAFE Index (N)
	12/02	3/06	50.00	Wilshire 5000
			35.00	Barclays Aggregate
			15.00	MSCI EAFE Index (N)
	6/06	6/06	55.00	Wilshire 5000
			30.00	Barclays Aggregate
			15.00	MSCI EAFE Index (N)
	9/06	6/09	55.00	Wilshire 5000
			30.00	Barclays Aggregate
			15.00	MSCI ACWI X US (N)
	9/09	3/10	5.00	FTSE EPRA/NAREIT Dev (N)
			15.00	MSCI ACWI X US (N)
			30.00	Barclays Aggregate
			50.00	Wilshire 5000
	6/10	12/12	5.00	FTSE EPRA/NAREIT Dev (N)
			5.00	Wilshire 5000 + 2.5%
			30.00	Barclays Aggregate
			15.00	MSCI ACWI X US (N)
			45.00	Wilshire 5000
	3/13	3/15	5.00	FTSE EPRA/NAREIT Dev (N)
			5.00	Bloomberg Commodity Index
			5.00	Wilshire 5000 + 2.5%
			30.00	Barclays Aggregate
			15.00	MSCI ACWI X US (N)

Custom Benchmark Specification



Total Fund

March 31, 2015

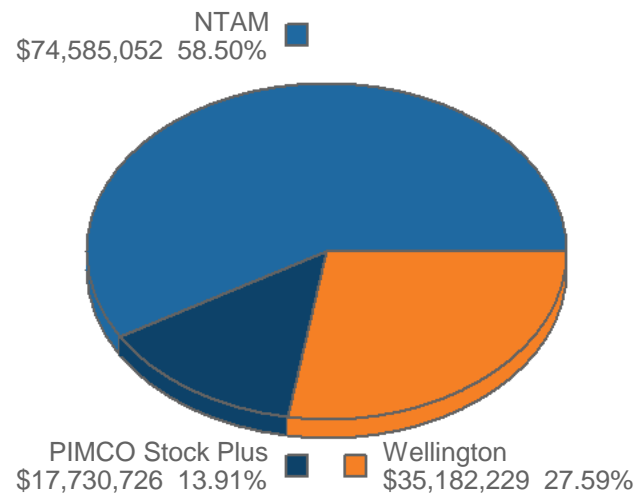
	Quarter Start	Quarter End	Percent	Description
Policy Index (cont.)			40.00	Wilshire 5000

U.S. Equity

Manager Allocation

U.S. Equity Composite

As of March 31, 2015



Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

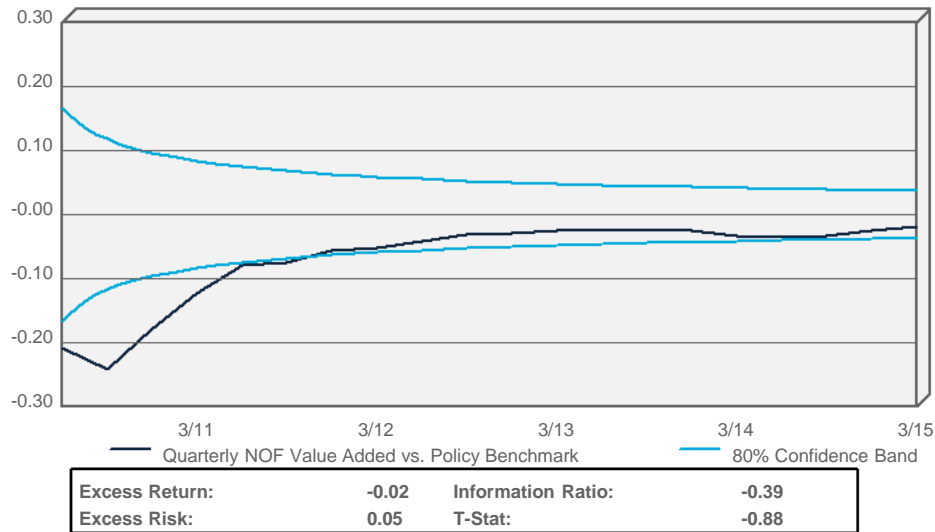
	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
NTAM									
Net of Fee Return	0.97	0.97	12.78	16.12	14.44	8.86	8.06	9/30/98	6.63
Policy Benchmark	0.95	0.95	12.74	16.12	14.46	8.95	8.11	9/30/98	6.63
Value Added	0.02	0.02	0.04	0.00	-0.02	-0.08	-0.05	9/30/98	-0.00
PIMCO Stock Plus									
Net of Fee Return	0.86	0.86	12.19	17.79	16.11	10.28	8.87	9/30/00	5.25
Standard & Poor's 500	0.95	0.95	12.74	16.12	14.46	8.95	8.01	9/30/00	4.56
Value Added	-0.09	-0.09	-0.55	1.67	1.65	1.34	0.85	9/30/00	0.70
Wellington									
Net of Fee Return	4.66	4.66	11.06	19.57	18.09	14.34	11.60	9/30/99	11.99
Russell 2000	4.32	4.32	8.21	16.27	14.56	10.47	8.82	9/30/99	8.60
Value Added	0.35	0.35	2.85	3.30	3.53	3.87	2.78	9/30/99	3.38
U.S. Equity Composite									
Net of Fee Return	1.98	1.98	12.36	16.80	15.31	10.18	8.86	9/30/87	8.38
Wilshire 5000	1.61	1.61	12.24	16.19	14.56	9.29	8.41	9/30/87	9.48
Value Added	0.37	0.37	0.12	0.62	0.75	0.89	0.45	9/30/87	-1.10

Investment Manager Analysis

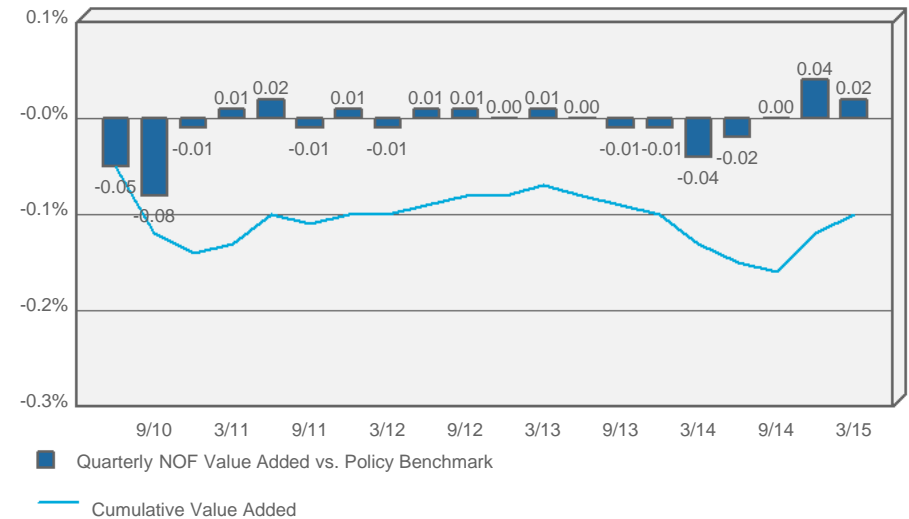
NTAM

March 31, 2015

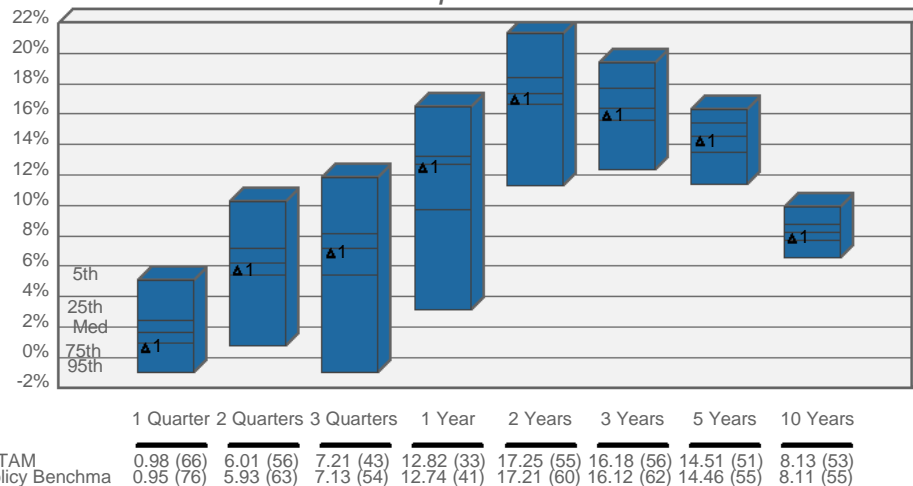
Cumulative Skill Analysis vs Benchmark



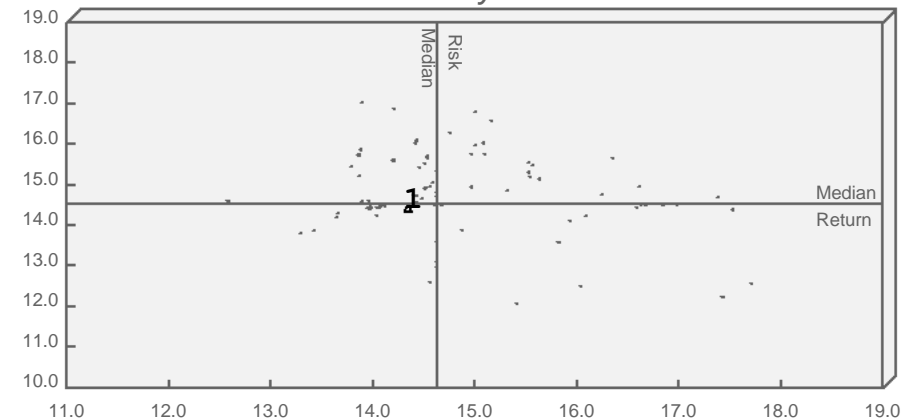
Value-Added Analysis vs Benchmark



Performance Comparison vs Peer Universe*



Five Year Risk/Return Analysis vs Peer Universe*



	1 Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	5 Years	10 Years
NTAM	0.98 (66)	6.01 (56)	7.21 (43)	12.82 (33)	17.25 (55)	16.18 (56)	14.51 (51)	8.13 (53)
Policy Benchmark	0.95 (76)	5.93 (63)	7.13 (54)	12.74 (41)	17.21 (60)	16.12 (62)	14.46 (55)	8.11 (55)
Median	1.61	6.23	7.16	12.67	17.35	16.35	14.51	8.23
Number of Funds	246	246	245	244	236	215	187	99

Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
NTAM	▲	14.51	51	14.45	60
Policy Benchmark	1	14.46	55	14.45	60
Median		14.51		14.63	

*TUCS Total Returns of Large Neutral Equity Portfolios Universe - Gross of Fees

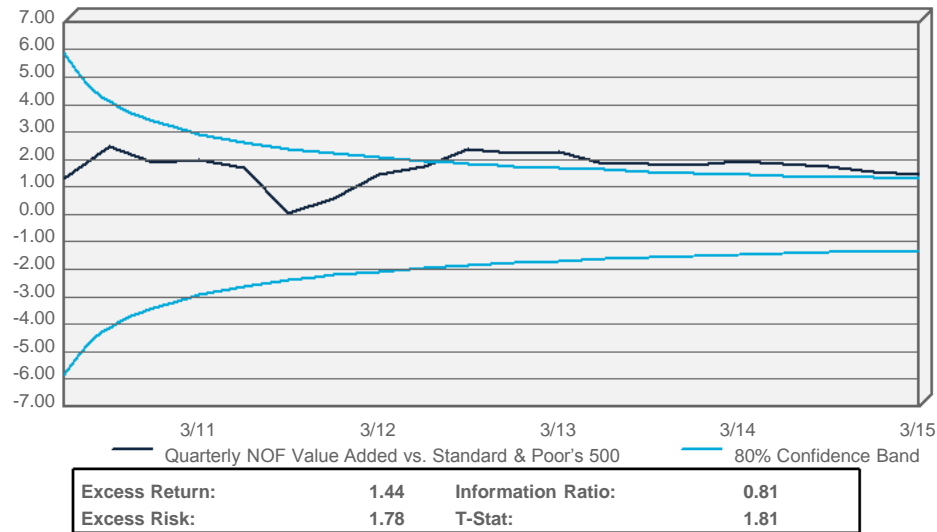
General Retirement System

Investment Manager Analysis

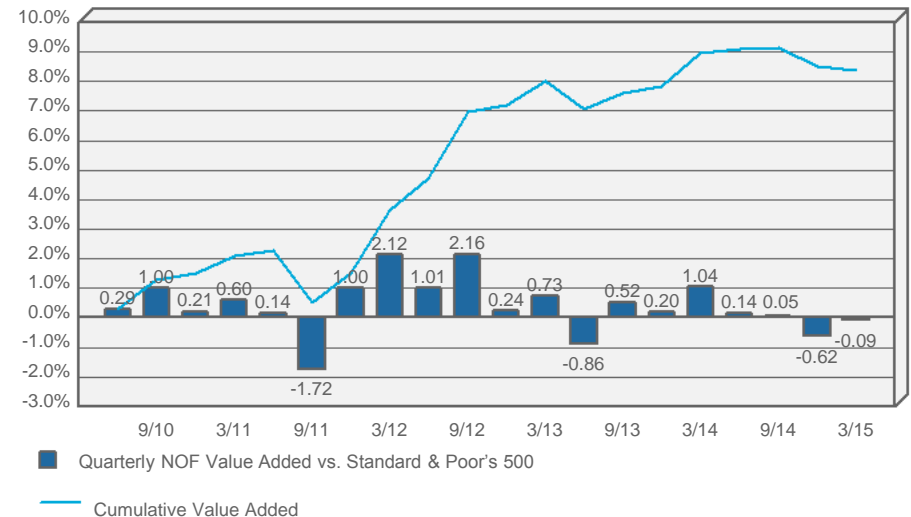
PIMCO Stock Plus

March 31, 2015

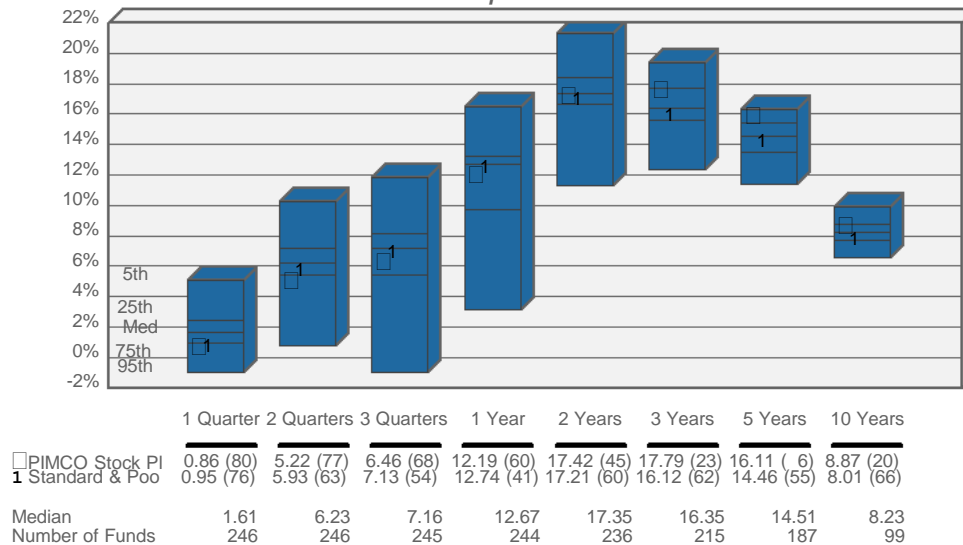
Cumulative Skill Analysis vs Benchmark



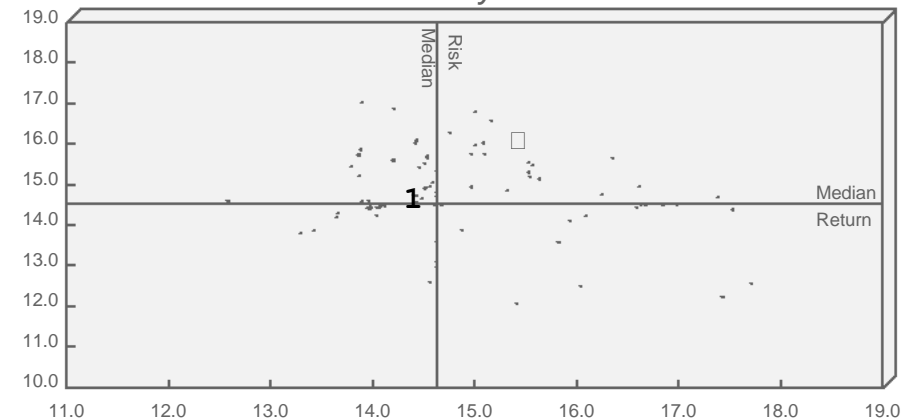
Value-Added Analysis vs Benchmark



Performance Comparison vs Peer Universe*



Five Year Risk/Return Analysis vs Peer Universe*



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
PIMCO Stock Plus	□	16.11	6	15.49	28
Standard & Poor's 500	1	14.46	55	14.45	60
Median		14.51		14.63	

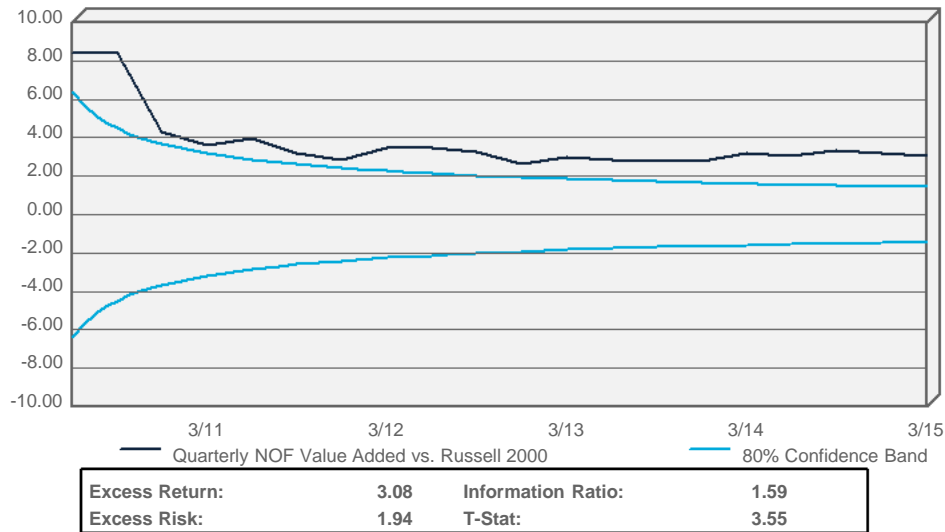
*TUCS Total Returns of Large Neutral Equity Portfolios Universe - Gross of Fees
General Retirement System

Investment Manager Analysis

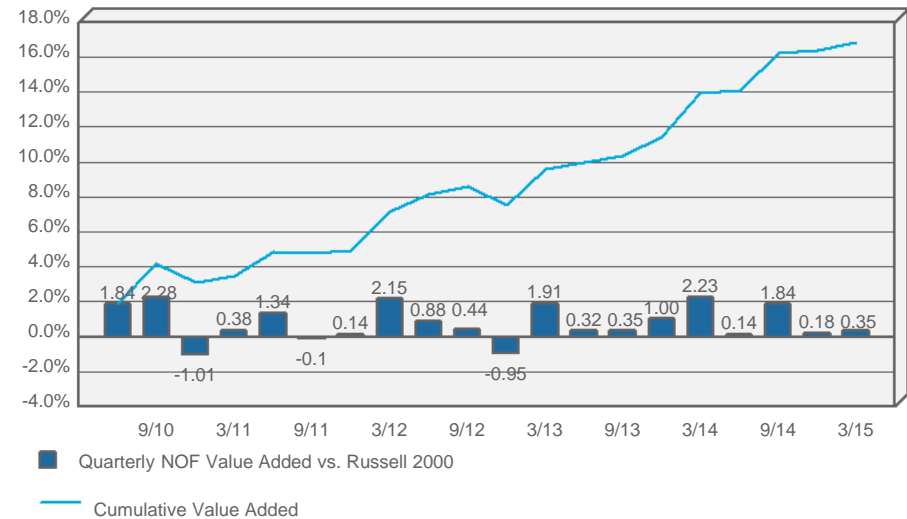
Wellington

March 31, 2015

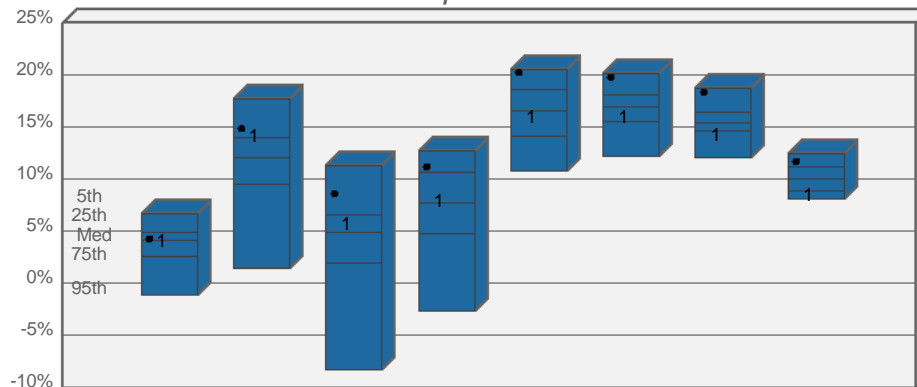
Cumulative Skill Analysis vs Benchmark



Value-Added Analysis vs Benchmark

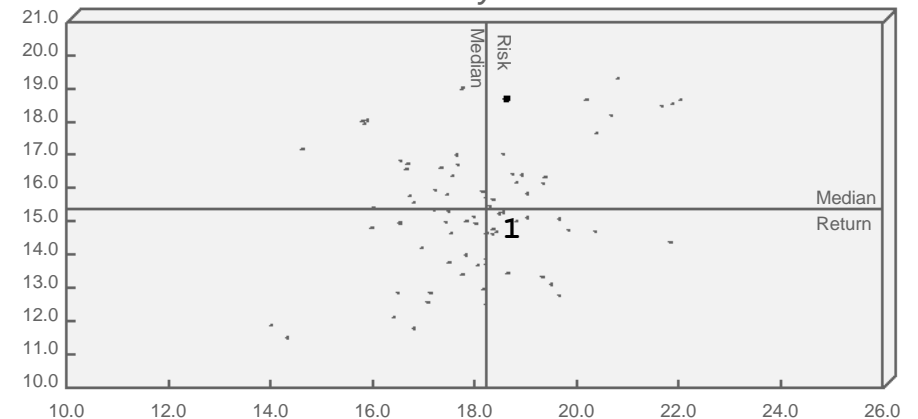


*Performance Comparison vs Peer Universe**



	1 Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	5 Years	10 Years
Wellington	4.81 (27)	15.36 (10)	9.16 (9)	11.74 (11)	20.71 (2)	20.29 (4)	18.80 (4)	12.22 (5)
Russell 2000	4.32 (38)	14.46 (15)	6.04 (35)	8.21 (46)	16.25 (54)	16.27 (66)	14.56 (75)	8.82 (77)
Median	4.08	12.12	4.95	7.78	16.51	16.98	15.38	10.08
Number of Funds	114	114	113	113	105	95	86	45

*Five Year Risk/Return Analysis vs Peer Universe**



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
Wellington	•	18.80	4	18.83	28
Russell 2000	1	14.56	75	18.83	28
Median		15.38		18.22	

*TUCS Total Returns of Small Neutral Equity Portfolios Universe - Gross of Fees

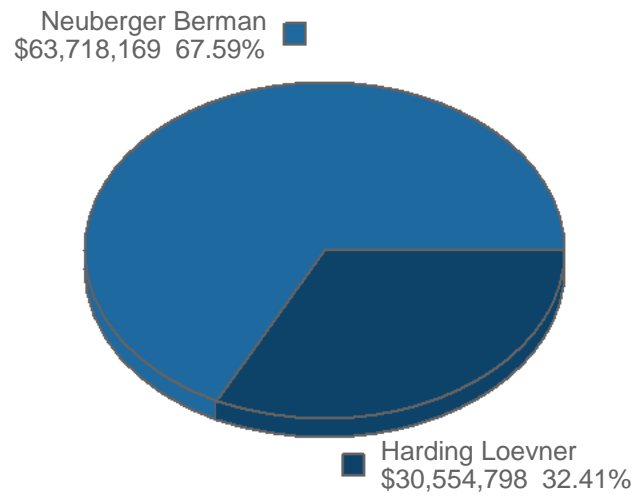
General Retirement System

Non – U.S. Equity

Manager Allocation

Non-US Equity Composite

As of March 31, 2015



Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
Neuberger Berman									
Net of Fee Return	5.55	5.55	2.35	9.15	8.23	2.40		6/30/06	3.03
MSCI ACWI X US (N)	3.49	3.49	-1.01	6.40	4.82	1.24		6/30/06	3.35
Value Added	2.05	2.05	3.36	2.74	3.41	1.16		6/30/06	-0.32
Harding Loevner									
Net of Fee Return									
MSCI ACWI X US (N)									
Int'l Equity Composite									
Net of Fee Return	4.98	4.98	1.80	8.95	8.11	2.32	4.01	6/30/95	7.81
Policy Benchmark	3.49	3.49	-1.01	6.40	4.82	1.24	5.27	6/30/95	5.37
Value Added	1.49	1.49	2.81	2.55	3.29	1.08	-1.26	6/30/95	2.44

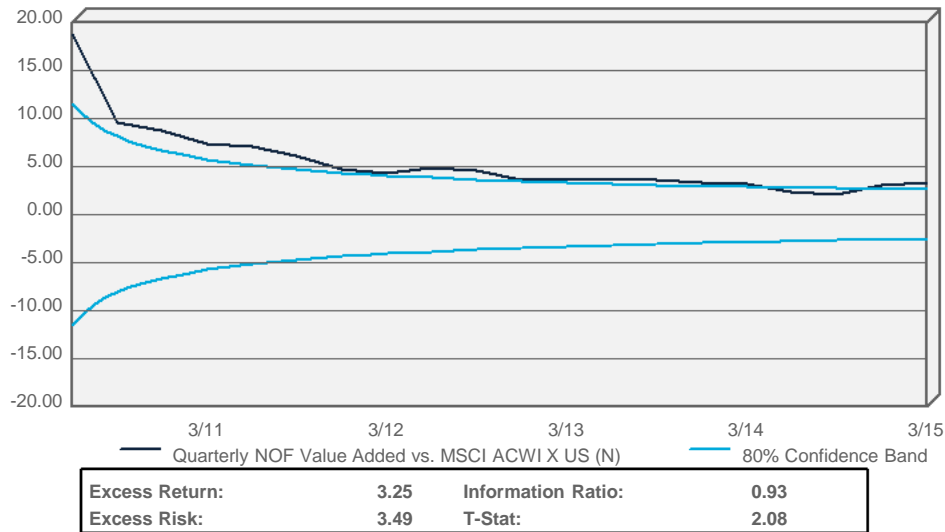
Investment Manager Analysis



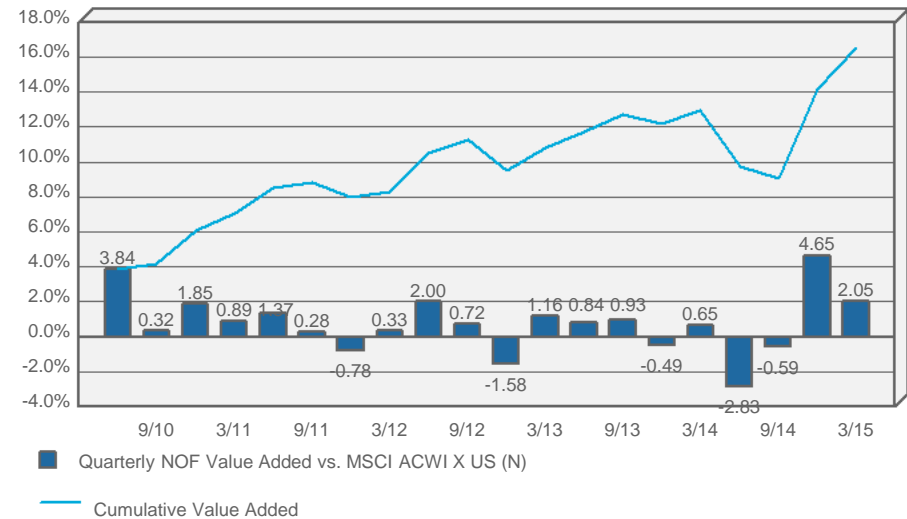
Neuberger Berman

March 31, 2015

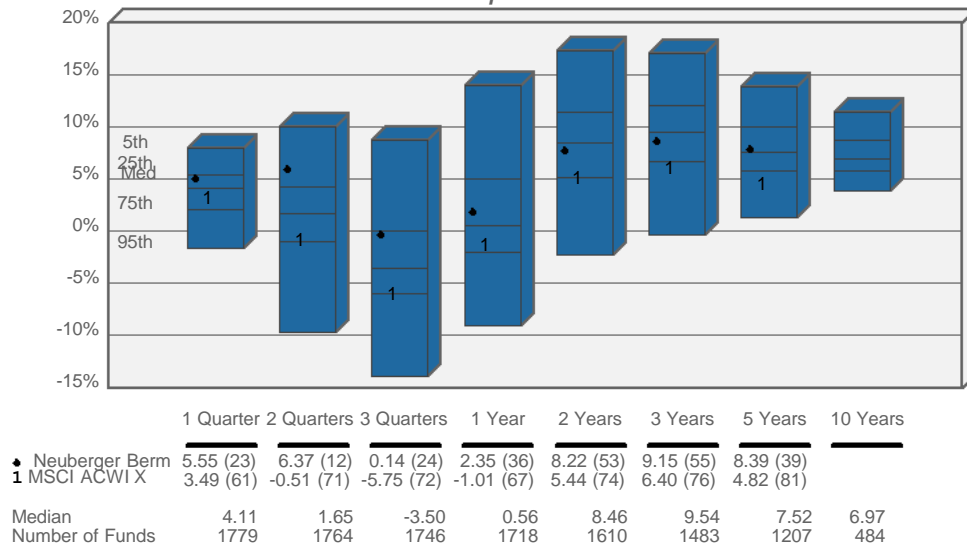
Cumulative Skill Analysis vs Benchmark



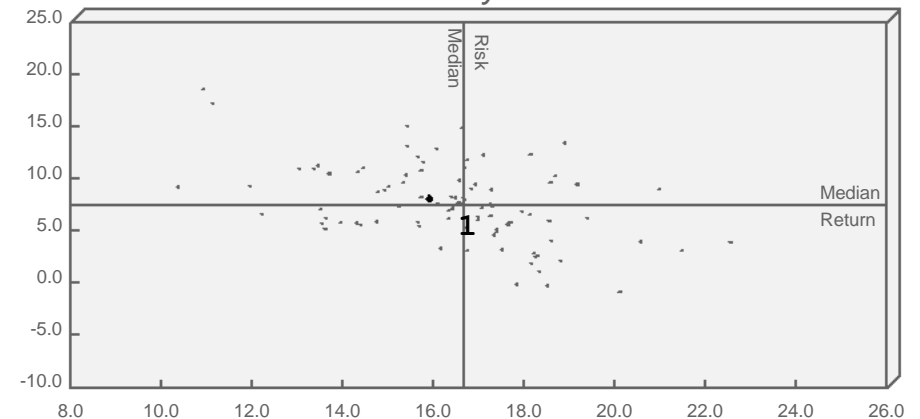
Value-Added Analysis vs Benchmark



Performance Comparison vs Peer Universe*



Five Year Risk/Return Analysis vs Peer Universe*



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
Neuberger Berman	◆	8.39	39	16.14	64
MSCI ACWI X US (N)	1	4.82	81	16.87	45
Median		7.52		16.66	

*TUCS Total Returns of International Equity Portfolios Universe - Gross of Fees

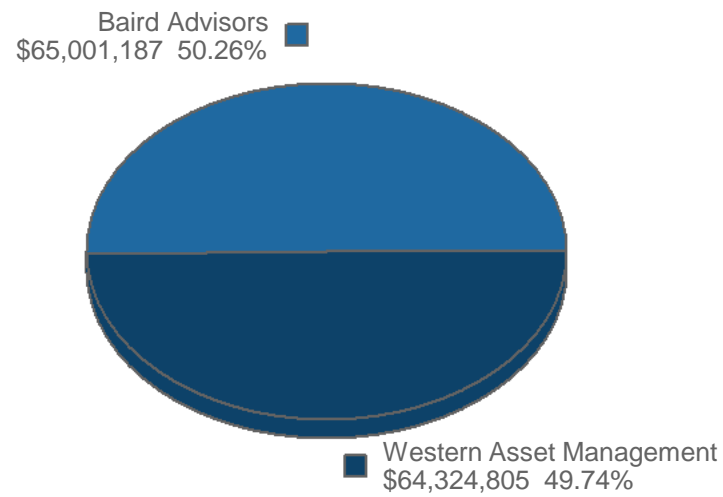
General Retirement System

Core Fixed Income

Manager Allocation

Core Fixed Composite

As of March 31, 2015



Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

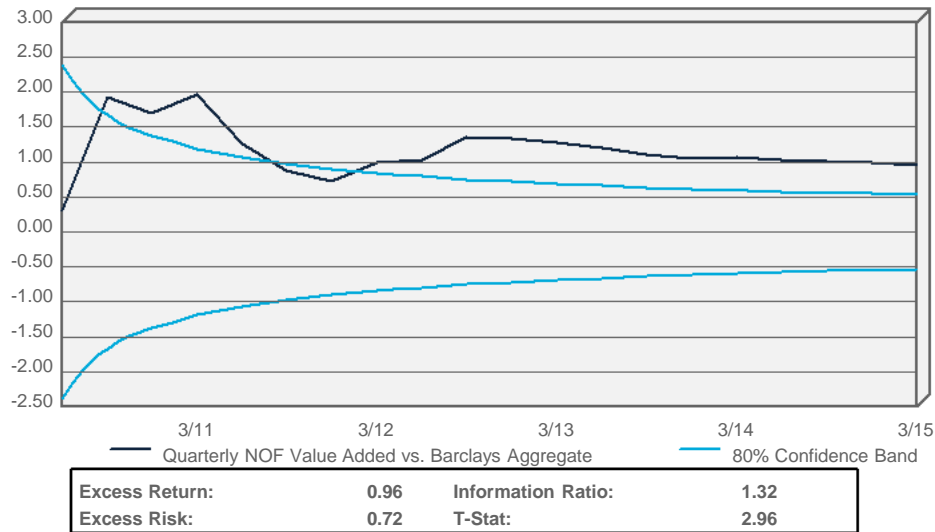
	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
Baird Advisors									
Net of Fee Return	1.71	1.71	6.30	4.07	5.41	5.38	5.22	3/31/03	4.96
Barclays Aggregate	1.61	1.61	5.72	3.10	4.41	4.69	4.93	3/31/03	4.65
Value Added	0.10	0.10	0.58	0.96	1.00	0.68	0.29	3/31/03	0.32
Western Asset Management									
Net of Fee Return	2.15	2.15	7.00	5.30	6.90	7.37	5.93	3/31/04	5.65
Barclays Aggregate	1.61	1.61	5.72	3.10	4.41	4.69	4.93	3/31/04	4.58
Value Added	0.54	0.54	1.28	2.19	2.49	2.68	1.00	3/31/04	1.08
Core Fixed Composite									
Net of Fee Return	1.93	1.93	6.63	4.69	6.19	6.44	5.63	9/30/87	7.15
Barclays Aggregate	1.61	1.61	5.72	3.10	4.41	4.69	4.93	9/30/87	6.99
Value Added	0.32	0.32	0.91	1.58	1.77	1.75	0.71	9/30/87	0.16

Investment Manager Analysis

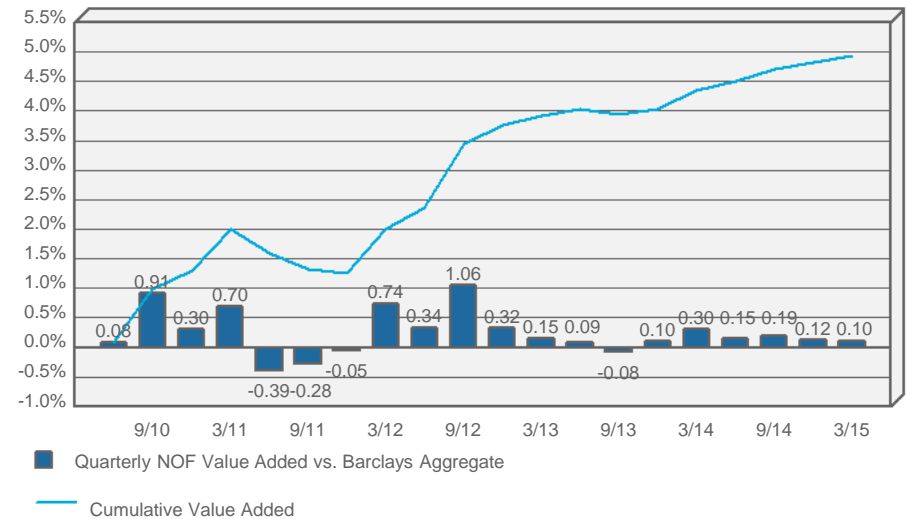
Baird Advisors

March 31, 2015

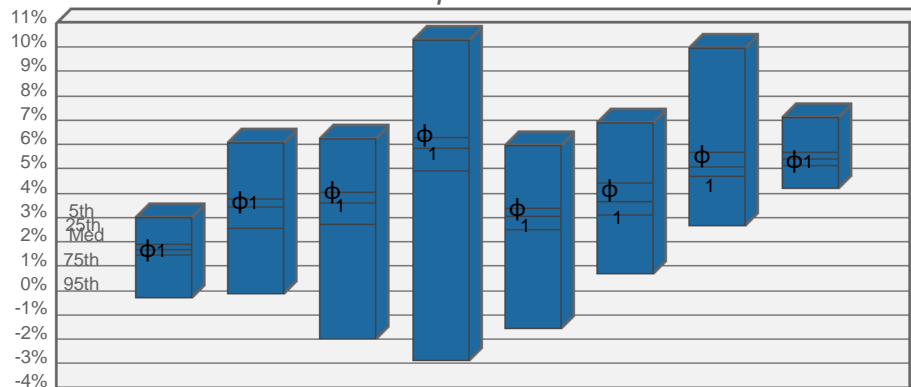
Cumulative Skill Analysis vs Benchmark



Value-Added Analysis vs Benchmark

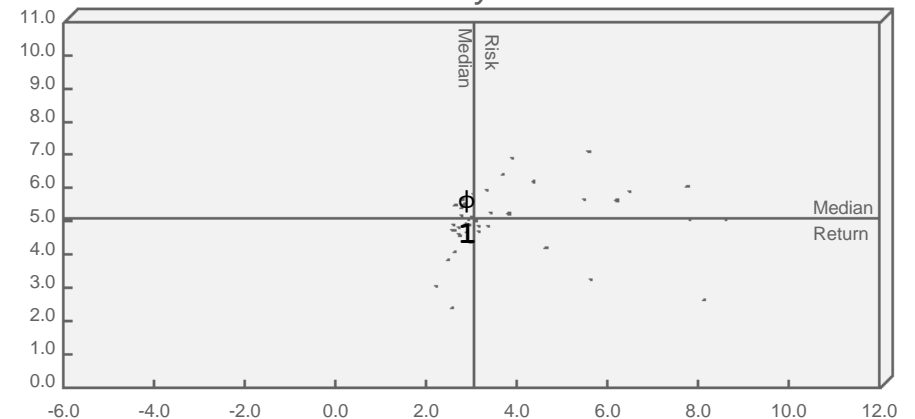


*Performance Comparison vs Peer Universe**



	1 Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	5 Years	10 Years
Φ Baird Advisors	1.76 (39)	3.76 (27)	4.18 (17)	6.52 (20)	3.47 (23)	4.28 (28)	5.64 (27)	5.42 (41)
I Barclays Aggre	1.61 (58)	3.43 (50)	3.60 (53)	5.72 (56)	2.77 (60)	3.10 (75)	4.41 (79)	4.93 (89)
Median	1.66	3.44	3.62	5.85	3.03	3.66	5.08	5.38
Number of Funds	70	67	66	65	60	58	46	24

*Five Year Risk/Return Analysis vs Peer Universe**



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
Baird Advisors	Φ	5.64	27	3.02	50
Barclays Aggregate	I	4.41	79	3.02	50
Median		5.08		3.04	

*TUCS Total Returns of Fixed Income Portfolios - Core Universe - Gross of Fees

General Retirement System

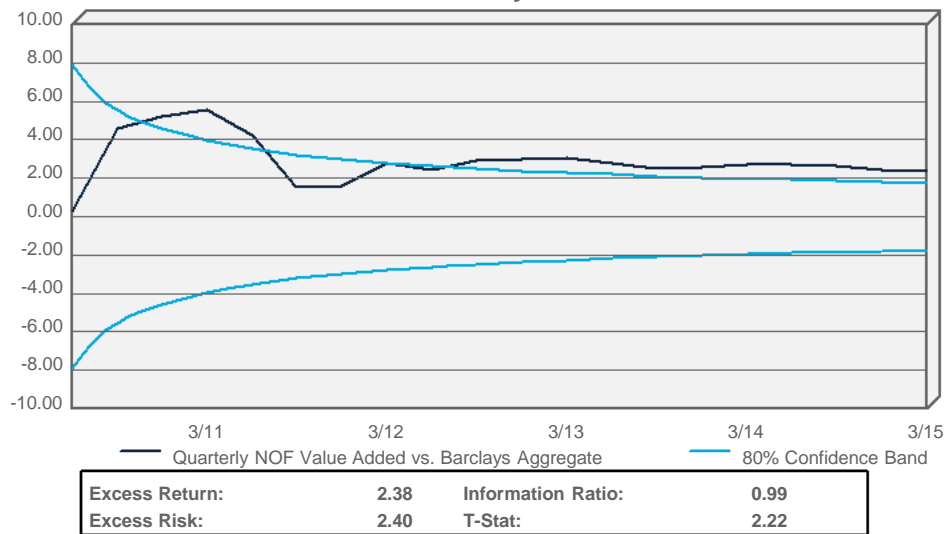
Investment Manager Analysis



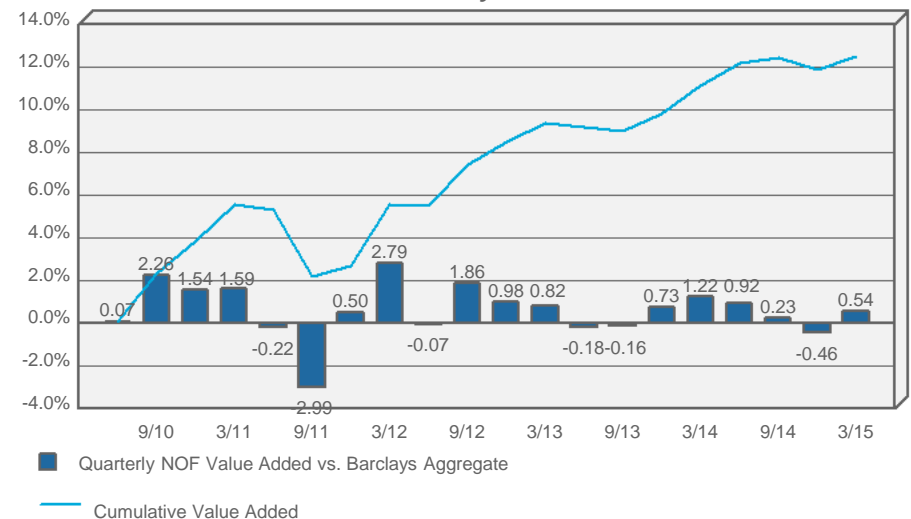
Western Asset Management

March 31, 2015

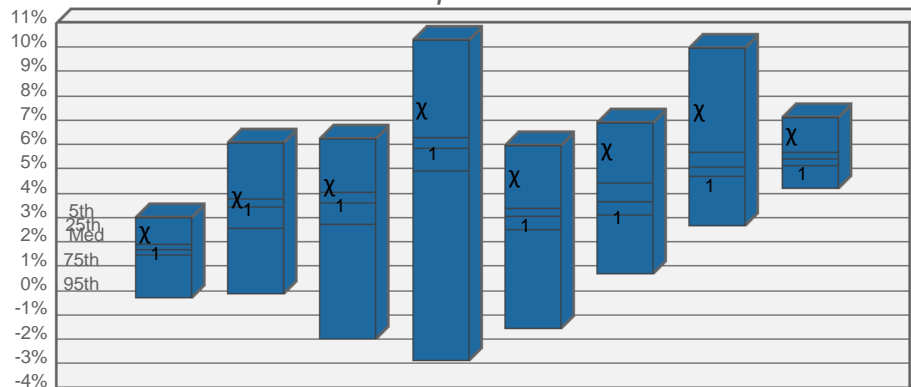
Cumulative Skill Analysis vs Benchmark



Value-Added Analysis vs Benchmark

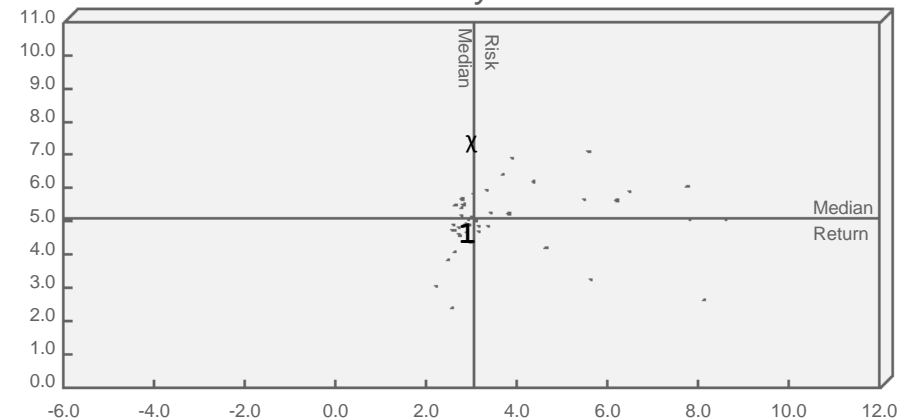


Performance Comparison vs Peer Universe*



	1 Quarter	2 Quarters	3 Quarters	1 Year	2 Years	3 Years	5 Years	10 Years
X Western Asset	2.22 (9)	3.65 (33)	4.12 (19)	7.29 (10)	4.50 (9)	5.60 (7)	7.21 (5)	6.23 (5)
1 Barclays Aggre	1.61 (58)	3.43 (50)	3.60 (53)	5.72 (56)	2.77 (60)	3.10 (75)	4.41 (79)	4.93 (89)
Median	1.66	3.44	3.62	5.85	3.03	3.66	5.08	5.38
Number of Funds	70	67	66	65	60	58	46	24

Five Year Risk/Return Analysis vs Peer Universe*



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
Western Asset Management	X	7.21	5	3.19	38
Barclays Aggregate	1	4.41	79	3.02	50
Median		5.08		3.04	

*TUCS Total Returns of Fixed Income Portfolios - Core Universe - Gross of Fees

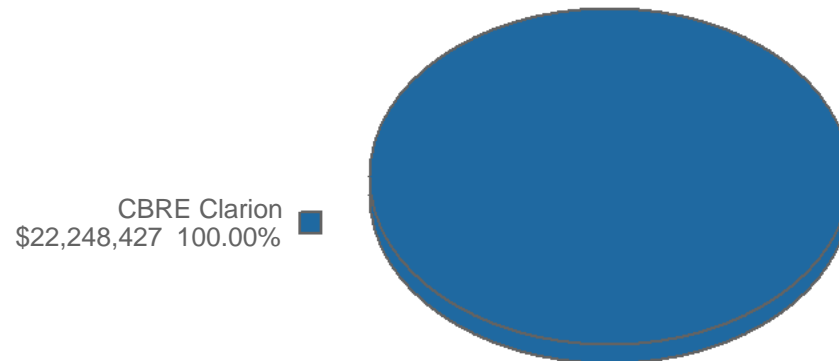
General Retirement System

Real Estate

Manager Allocation

Real Estate Composite

As of March 31, 2015



Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

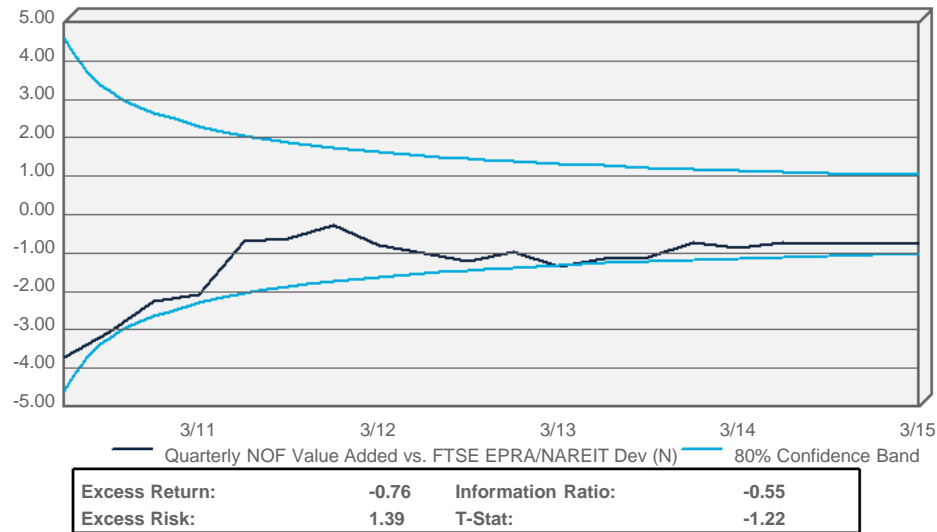
	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
CBRE Clarion									
Net of Fee Return	3.77	3.77	14.88	11.18	10.44			6/30/09	14.65
FTSE EPRA/NAREIT Dev (N)	3.97	3.97	15.18	12.00	11.29			6/30/09	15.65
Value Added	-0.20	-0.20	-0.29	-0.82	-0.85			6/30/09	-1.00
Real Estate Composite									
Net of Fee Return	3.77	3.77	14.88	11.18	10.44			6/30/09	14.65
FTSE EPRA/NAREIT Dev (N)	3.97	3.97	15.18	12.00	11.29			6/30/09	15.65
Value Added	-0.20	-0.20	-0.29	-0.82	-0.85			6/30/09	-1.00

Investment Manager Analysis

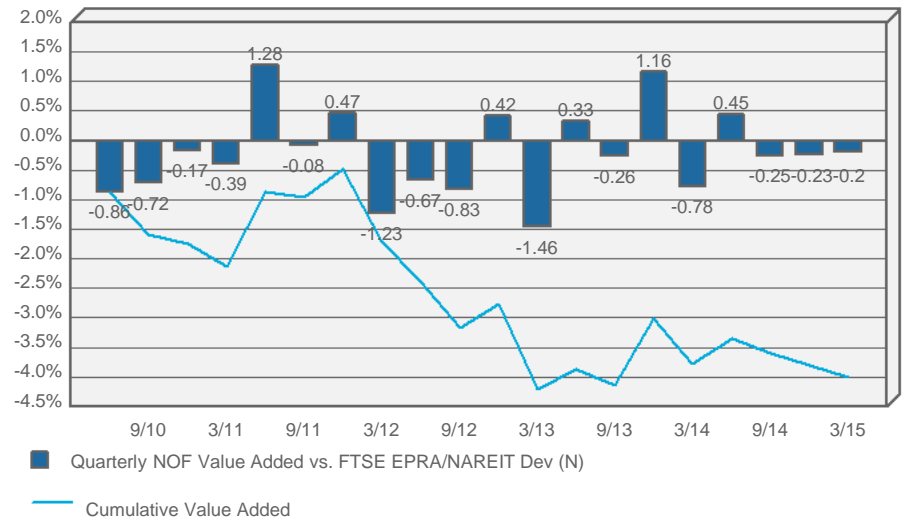
CBRE Clarion

March 31, 2015

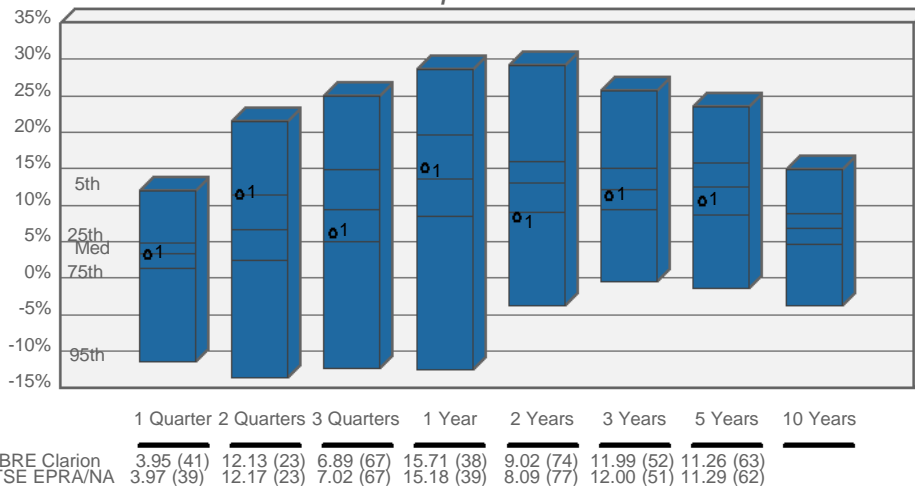
Cumulative Skill Analysis vs Benchmark



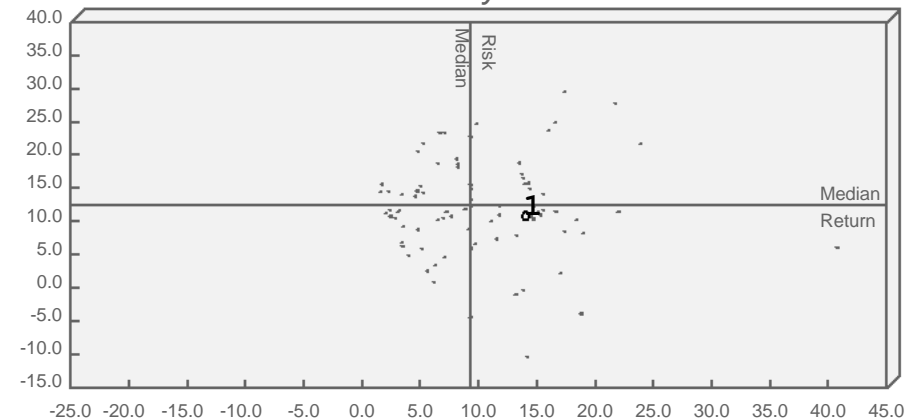
Value-Added Analysis vs Benchmark



*Performance Comparison vs Peer Universe**



*Five Year Risk/Return Analysis vs Peer Universe**



Description	Legend	Gross Fee Ret		Standard Deviation	
		Value	Rank	Value	Rank
CBRE Clarion	○	11.26	63	14.89	24
FTSE EPRA/NAREIT Dev (N)	■	11.29	62	15.10	22
Median		12.46		9.31	

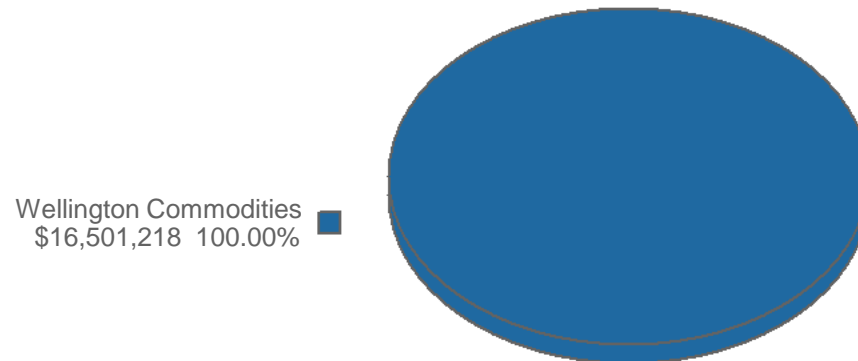
*TUCS Total Returns of Real Estate Portfolios Universe - Gross of Fees

Commodities

Manager Allocation

Commodities Composite

As of March 31, 2015



Performance Comparison



Trailing Returns

Periods Ended March 31, 2015

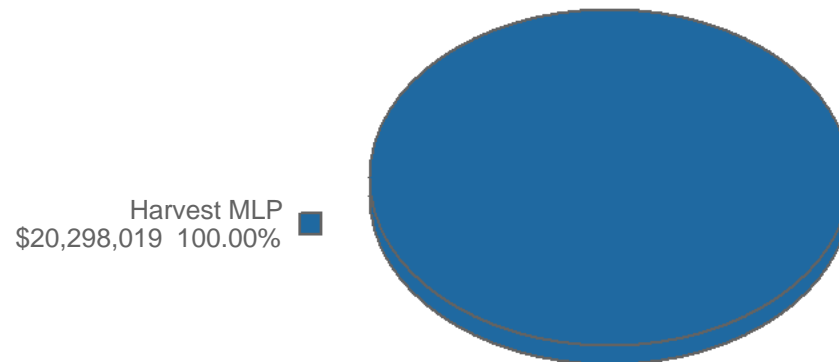
	1 Qtr	YTD	1 Year	3 Yrs	5 Yrs	7 Yrs	10 Yrs	Incept Date	Incept Ret
Wellington Commodities									
Net of Fee Return	-4.94	-4.94	-21.08					3/31/13	-14.48
DJ UBS Commodity Index	-5.94	-5.94	-27.04					3/31/13	-15.48
Value Added	1.00	1.00	5.96						1.00
Commodities Composite									
Net of Fee Return	-4.94	-4.94	-21.08					3/31/13	-14.48
DJ UBS Commodity Index	-5.94	-5.94	-27.04					3/31/13	-15.48
Value Added	1.00	1.00	5.96						1.00

MLPs

Manager Allocation

MLPs Composite

As of March 31, 2015



Private Equity

Investment Manager Performance



Private Partnerships

As of March 31, 2015

Partnership	Commitment Value	Inception Date	Capital Called Amount	%	Capital Distributed Amount	%	Fair Value	Total Value / Paid-In Capital ¹	Annualized IRR
Adams Street Direct 2010 Fund	\$500,000	April 27, 2010	\$458,736	92%	\$66,268	13%	\$571,622	1.39	13.58%
Adams Street Non-US Dev. 2010 Fund	\$1,500,000	April 27, 2010	\$713,066	48%	\$43,228	3%	\$767,715	1.14	5.69%
Adams Street Non-US EM 2010 Fund	\$500,000	January 3, 2011	\$297,000	59%	\$0	0%	\$331,135	1.11	6.44%
Adams Street US 2010 Fund	\$2,500,000	April 27, 2010	\$1,136,866	45%	\$104,933	4%	\$1,608,535	1.51	15.69%
Adams Street 2013 Global Fund	\$5,000,000	July 3, 2013	\$1,420,904	28%	\$0	0%	\$1,416,109	1.00	-0.37%
Flag Global Partners	\$5,000,000	January 17, 2012	\$2,400,000	48%	\$217,333	4%	\$2,275,095	1.04	2.57%
Alternative Investments Composite	\$15,000,000	April 27, 2010	\$6,426,572	43%	\$431,762	3%	\$6,970,211	1.15	8.32%

¹ TVPI = Fair Value + Capital Distributed / Capital Called

Capital Market Review

U.S. Equity

The U.S. stock market was up for the quarter by 1.6%. The market has not suffered a down quarter in nearly three years and is up a cumulative 60% since the credit crisis recovery point in early 2012. The Fed went to great lengths to express that, while a rise in rates is nearing, they are likely to be very cautious in the timing and pace of any increases. Several market factors support this stance such as good employment growth, low inflation and economic weakness in parts of Europe and China.

Large capitalization stocks underperformed smaller shares for the quarter while growth stocks led value. Sector performance was mixed during the quarter with Health Care and Consumer Discretionary the best performers. Utilities and Energy were the primary laggards, both hurt by lower oil prices.

There have been three major downward shifts in Treasury yields since the start of the last recession. Late 2008 brought the Citigroup bailout and quantitative easing. The bailout of Greece occurred in 2010 along with the possibility of more easing. Finally, 2011 included major political negotiations on raising the U.S. debt ceiling. After a steady rise, rates have again been falling. With the Fed set to raise the overnight rate, the big unknown at this point is whether longer term rates will move as well.

Non-U.S. Equity

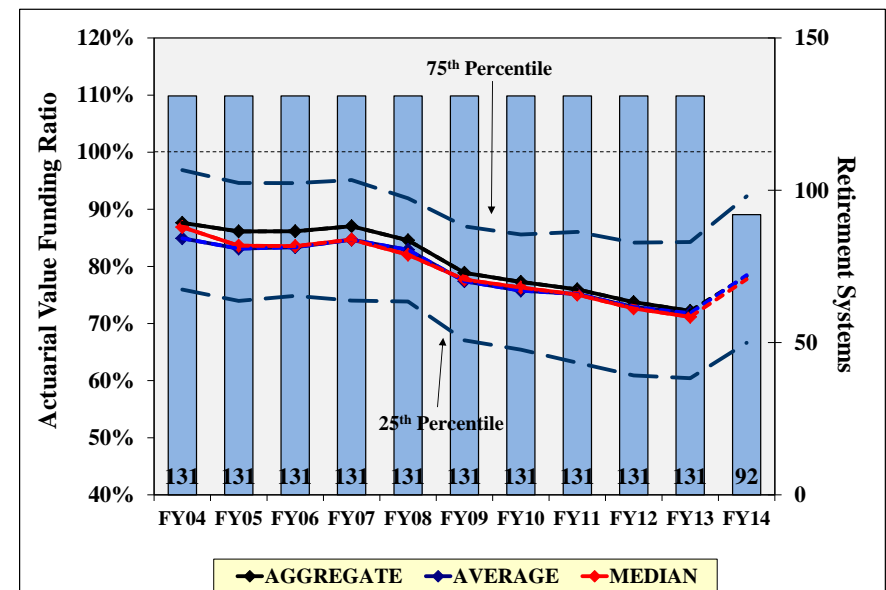
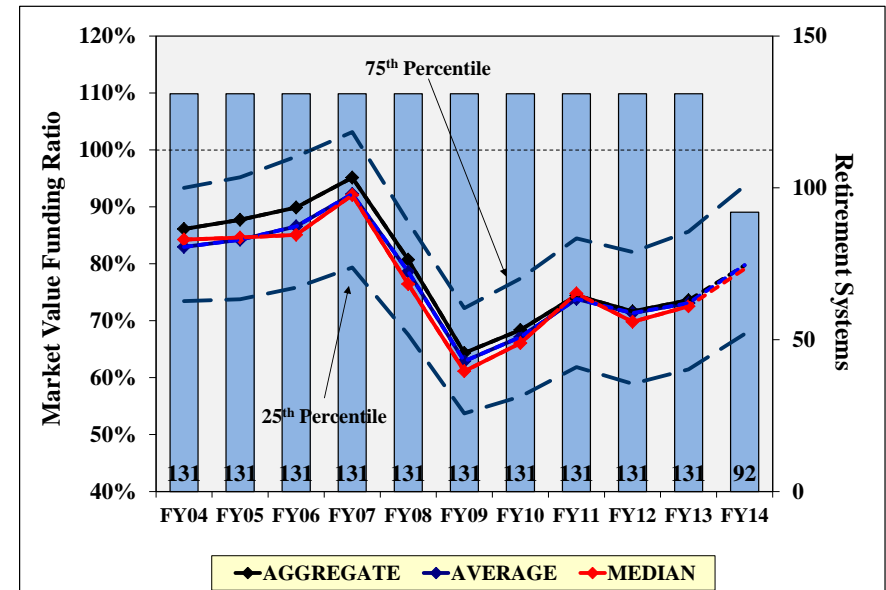
Global equity markets outside the U.S. started 2015 with strong gains, with European stocks leading the charge. Despite Greece's ongoing fiscal woes, the Eurozone began to show signs of economic recovery; recent moves by European central banks to relax monetary policy, including quantitative easing bond-buying programs, sent stock prices soaring. Pacific region stocks also rallied as their economies achieved more solid footing in the first quarter, aided by sharply lower energy prices. Although China and India enjoyed big gains, other emerging market economies experienced more muted performance, especially in the Americas.

Fixed Income

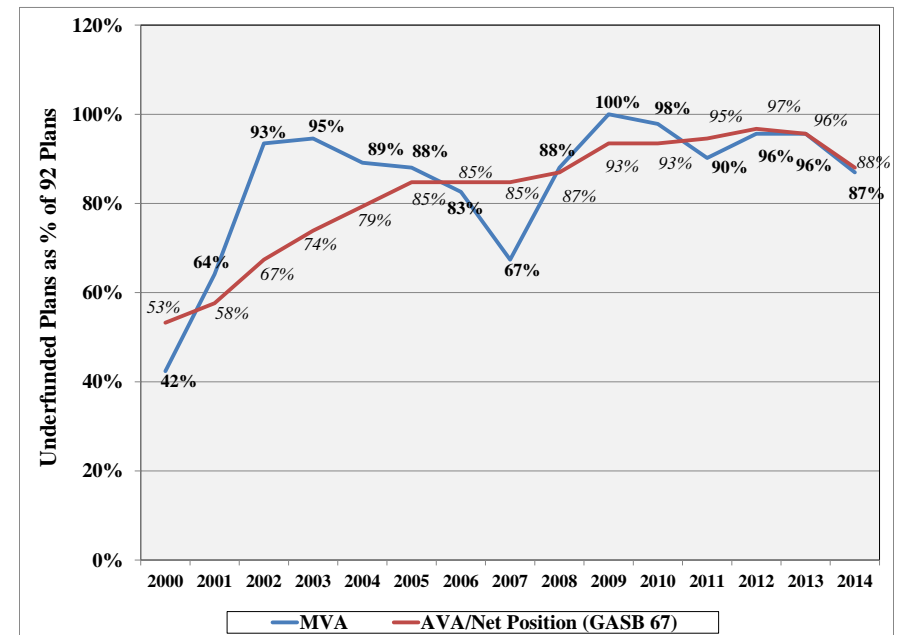
The U.S. Treasury yield curve flattened during the first quarter; yields on paper above one year maturity fell, especially in the short-intermediate band of the curve. Treasuries benefited from investor unease over a possible U.S. economic slowdown accompanied by remarkably low inflation. European bond markets held their own in local-currency terms, although the rally in U.S. Treasuries dampened their gains. Emerging market bonds also managed positive performance. The strong U.S. dollar, however, erased this quarter's global market gains for U.S.-based investors.

Wilshire 2015 State Funding Study

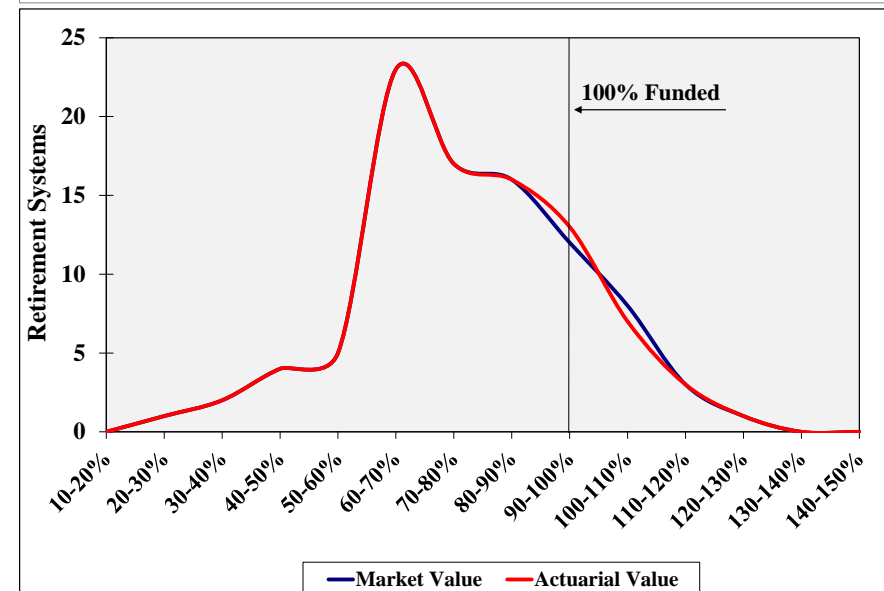
- 92 state retirement systems reported actuarial values on or after June 30, 2014
- Improvement in funding ratio fueled by rallying global stock markets in the 12 months ending June 30
- Funding ratios based on actuarial values were up for 2014
- Although pension liabilities grew, asset growth was far stronger



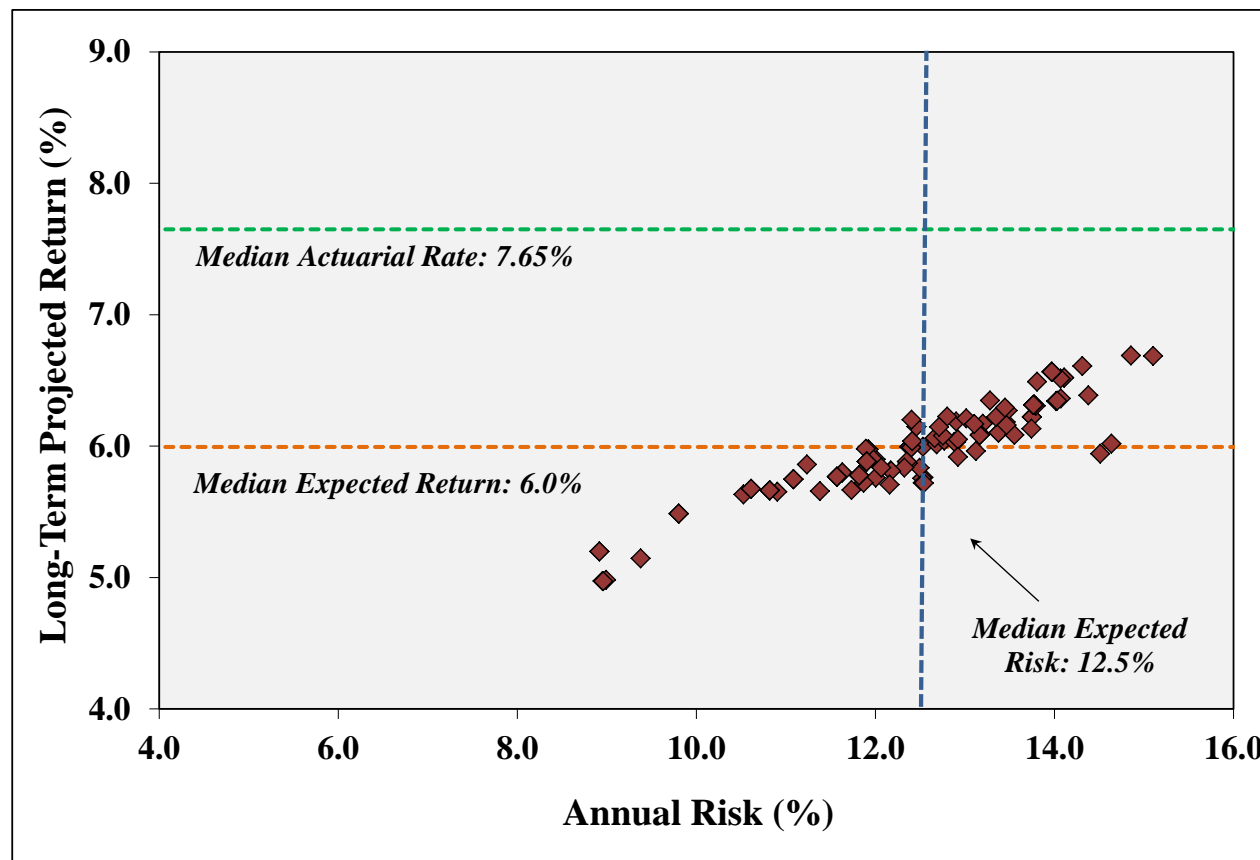
- Of the 92 plans with 2014 data, 87% of them were underfunded based on market values



- On a market value basis, a majority of the 92 plans are less than or equal to 80% funded

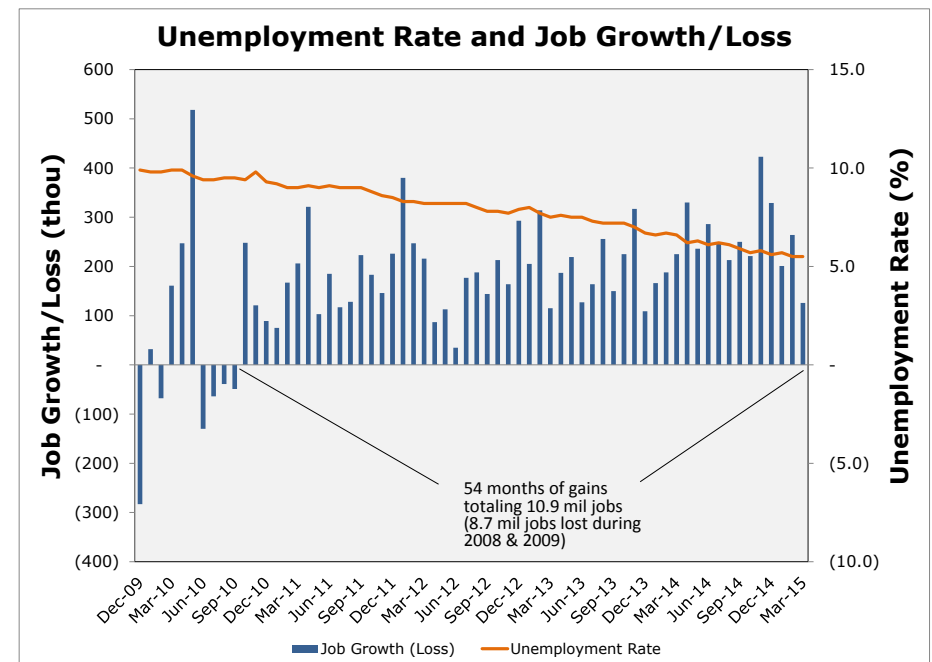
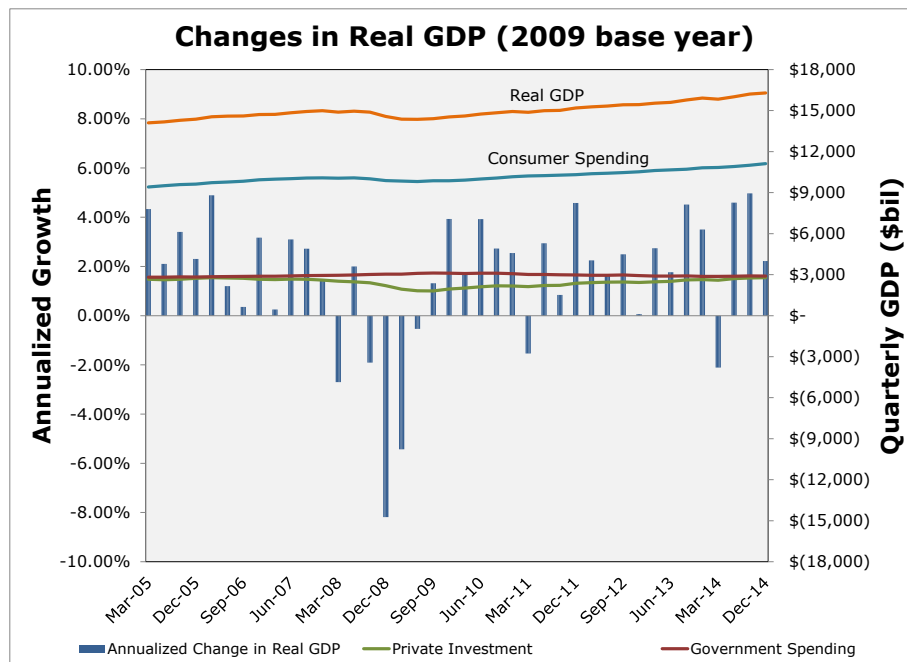


- Using Wilshire Consulting's asset class assumptions to calculate return forecasts for the 131 plans in our study, the median expected return is 6.0% per year
- None of the plans are projected to meet or exceed the median actuarial rate of 7.65%



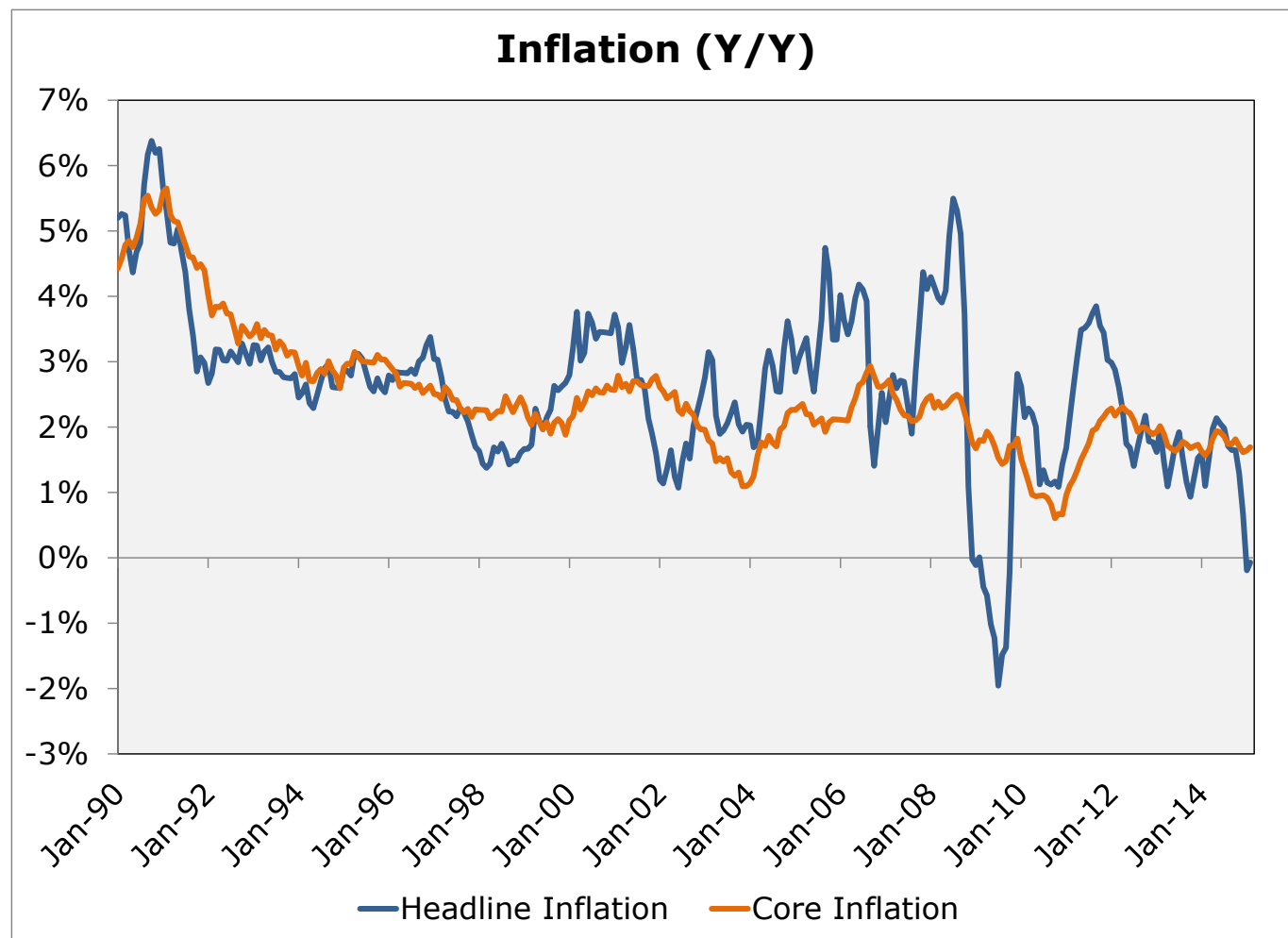
March 31, 2015		Key Economic Indicators			
CPI (all items) Seasonally adjusted	Monthly Change		Cumulative Change		
	Mar-15	0.2	3-Month	-0.2	
	Feb-15	0.2	12-Month	0.0	
	Jan-15	-0.7	10-Yr Annual	2.0	
Breakeven Inflation	10-Year	1.8			
Consumer Sentiment Unv. of Michigan Survey	Mar-15	93.0			
	Feb-15	95.4			
	1-Yr Ago	80.0	10-Yr Avg	77.1	
Manufacturing Inst. for Supply Mgmt Purchasing Mngrs' Idx	Mar-15	51.5	Change in Manufacturing Sector		
	Feb-15	52.9	>50	Expansion	
	1-Yr Avg	55.5	<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

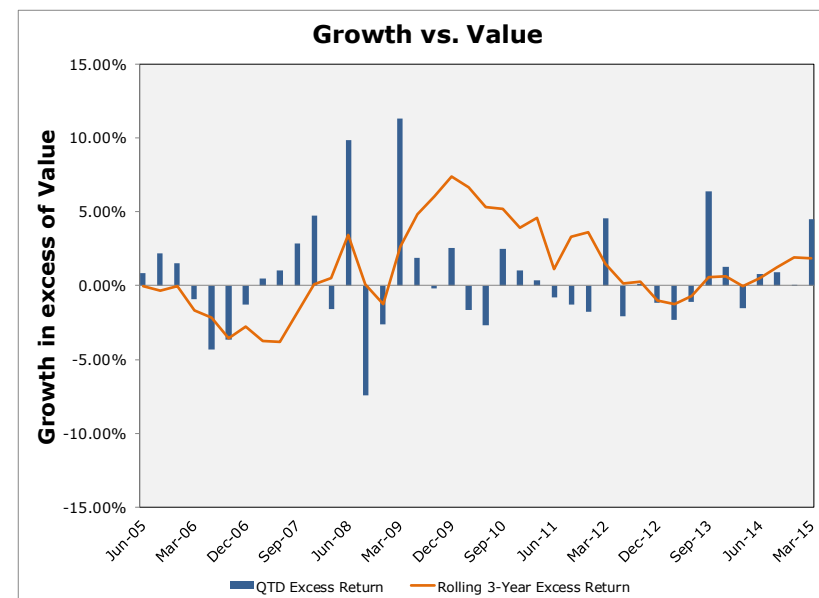
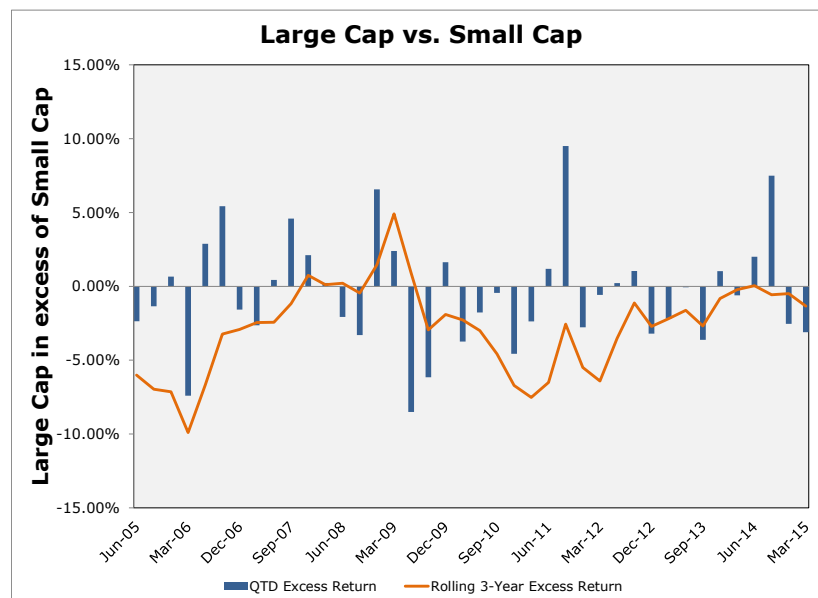
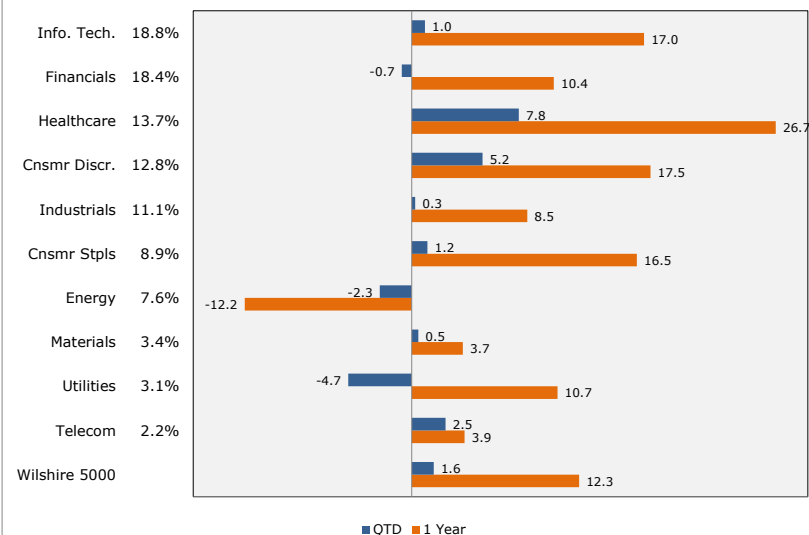
- Headline inflation down due to falling oil prices, Core inflation (ex food and energy) has moderated just under 2%
- Headline inflation does tend to eventually effect core prices



U.S. Equity Market

March 31, 2015	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Wilshire 5000	1.6	1.6	12.3	16.2	14.6	8.4
Wilshire U.S. Large Cap	1.3	1.3	12.7	16.0	14.4	8.2
Wilshire U.S. Small Cap	4.5	4.5	8.8	17.6	15.9	10.4
Wilshire U.S. Large Growth	3.8	3.8	17.1	17.3	15.3	9.4
Wilshire U.S. Large Value	-1.0	-1.0	9.0	15.0	13.7	7.0
Wilshire U.S. Small Growth	5.7	5.7	7.9	17.9	17.1	11.1
Wilshire U.S. Small Value	3.5	3.5	9.7	17.3	14.7	9.7
Wilshire REIT Index	4.7	4.7	25.2	14.2	16.1	9.6
MSCI USA Minimum Volatility Index	2.3	2.3	16.2	15.2	15.0	8.0
FTSE RAFI U.S. 1000 Index	0.3	0.3	10.2	17.3	14.6	9.3

Wilshire 5000 Sector Weight & Return (%)

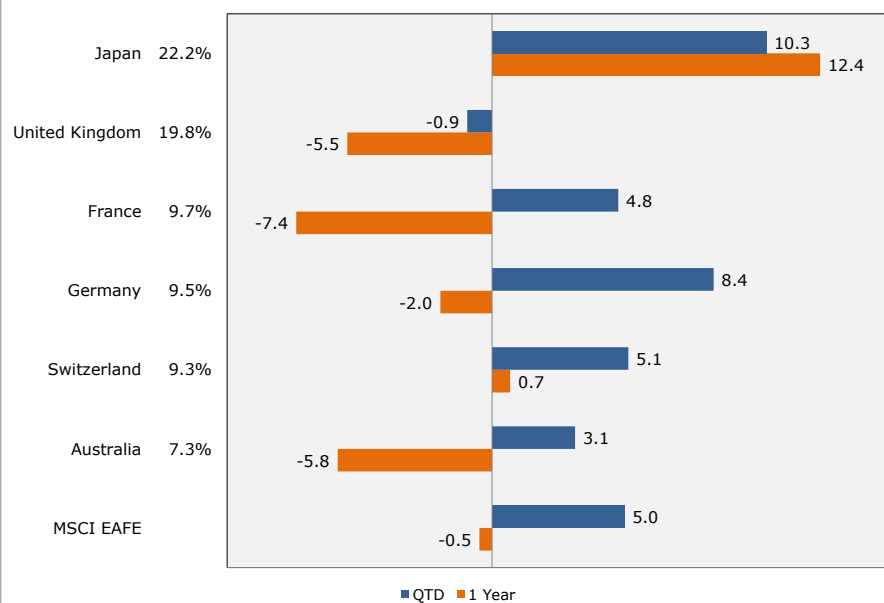


Data sources: Wilshire Compass, Wilshire Atlas

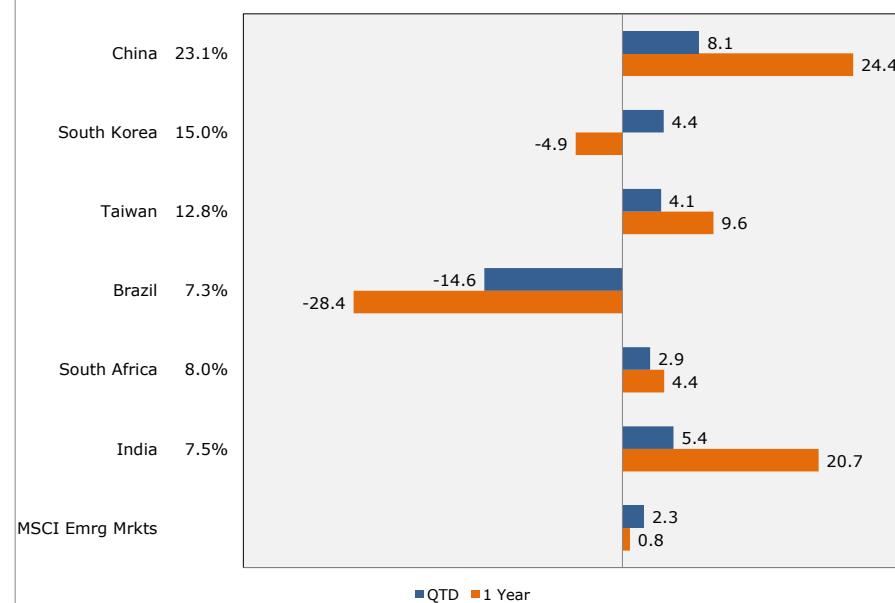
Non-U.S. Equity Market

March 31, 2015	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
MSCI ACWI ex-US (\$g)	3.6	3.6	-0.6	6.9	5.3	5.9
MSCI EAFE (\$g)	5.0	5.0	-0.5	9.5	6.6	5.4
MSCI Emerging Markets (\$g)	2.3	2.3	0.8	0.7	2.1	8.8
MSCI Frontier Markets (\$g)	-2.9	-2.9	-3.2	10.8	5.5	2.7
MSCI ACWI ex-US Growth (\$g)	4.9	4.9	2.1	7.5	6.1	6.3
MSCI ACWI ex-US Value (\$g)	2.2	2.2	-3.3	6.2	4.4	5.5
MSCI ACWI ex-US Small (\$g)	4.0	4.0	-3.3	7.8	6.9	7.3
MSCI EAFE Minimum Volatility Idx	6.4	6.4	9.0	11.5	9.7	8.0
FTSE RAFI Developed ex-US Index	3.5	3.5	-3.2	9.0	5.5	6.1
MSCI EAFE LC (g)	11.0	11.0	18.3	17.2	9.6	6.6
MSCI Emerging Markets LC (g)	4.9	4.9	11.3	6.8	5.9	10.5

MSCI EAFE: Largest Countries and Return (USD)

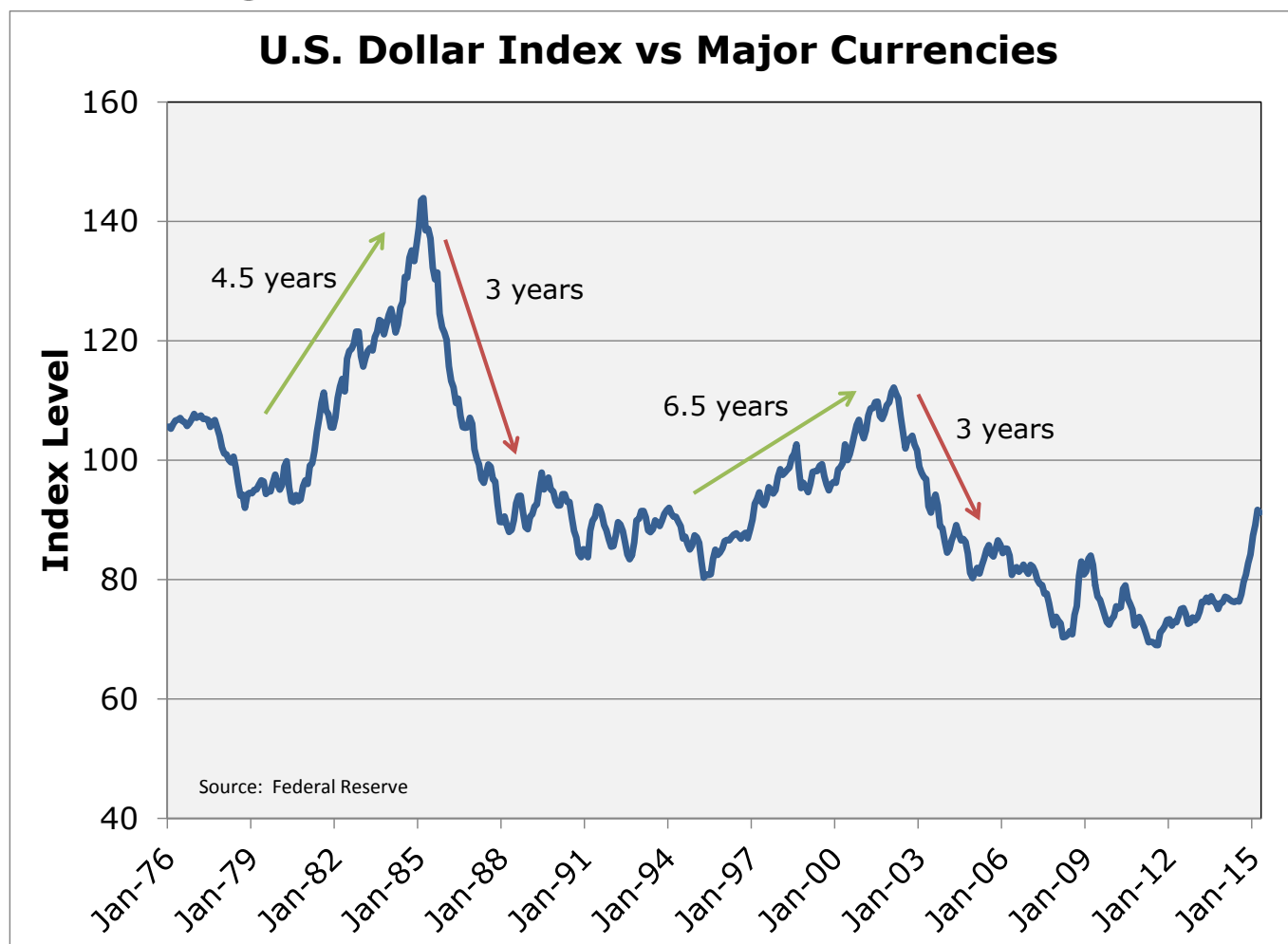


MSCI EM: Largest Countries and Return (USD)

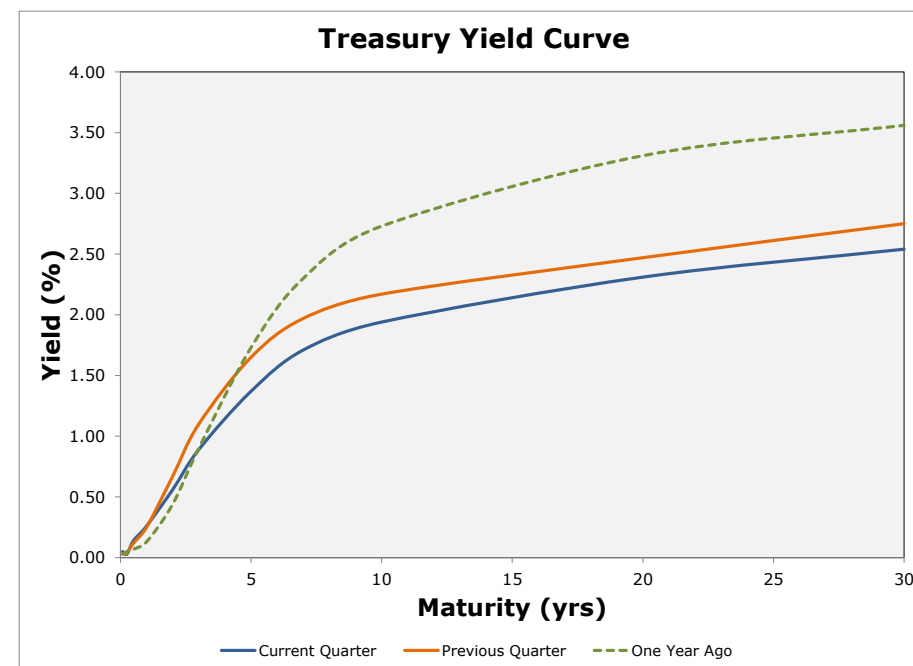
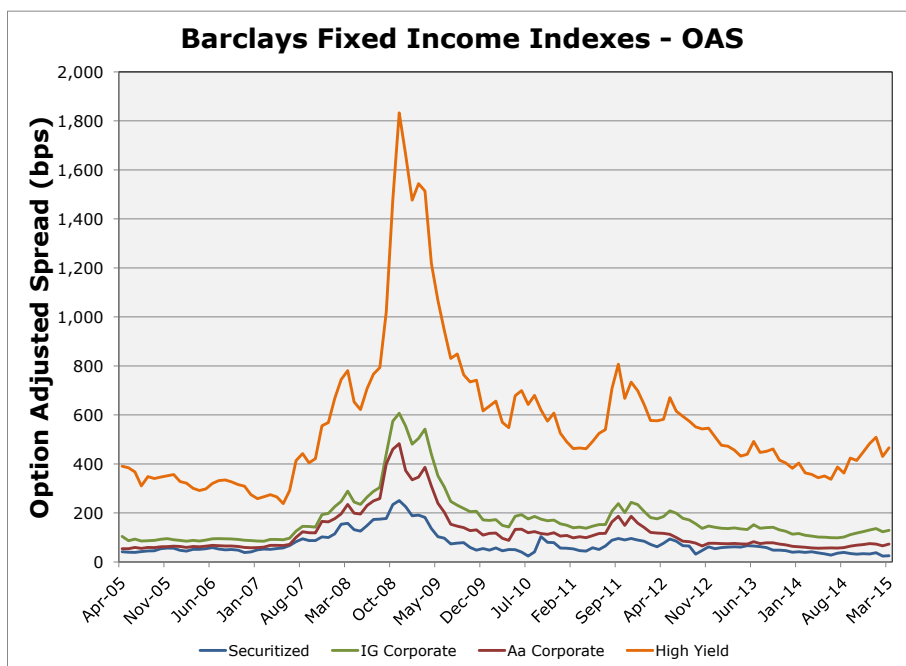


Data sources: Wilshire Compass

- Strengthening dollar has detracted from U.S. investors' foreign assets
- Two periods in the past 40 years where the dollar has gone on extended runs; the dollar is down, though, in total

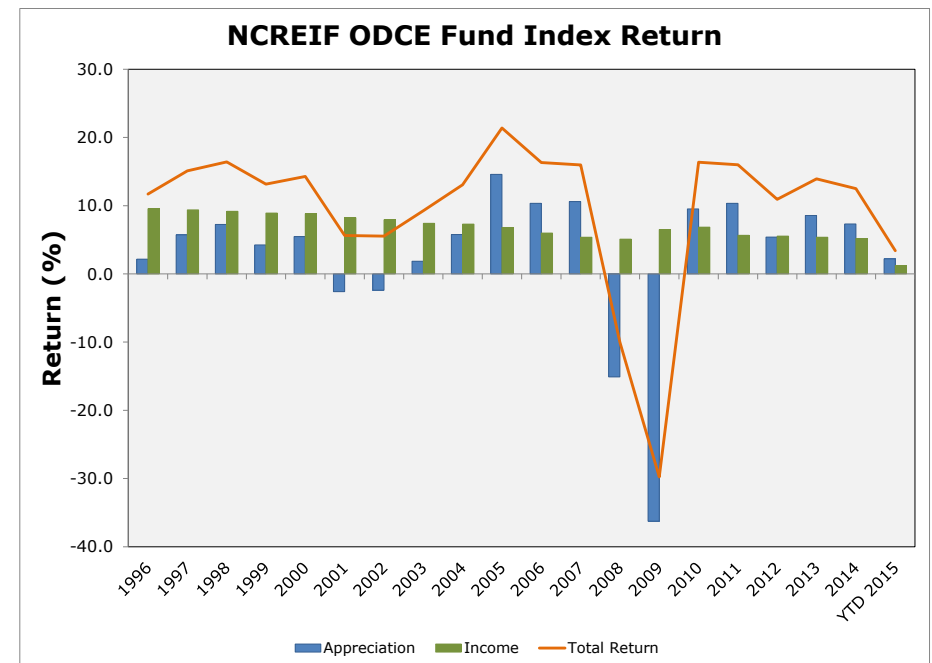
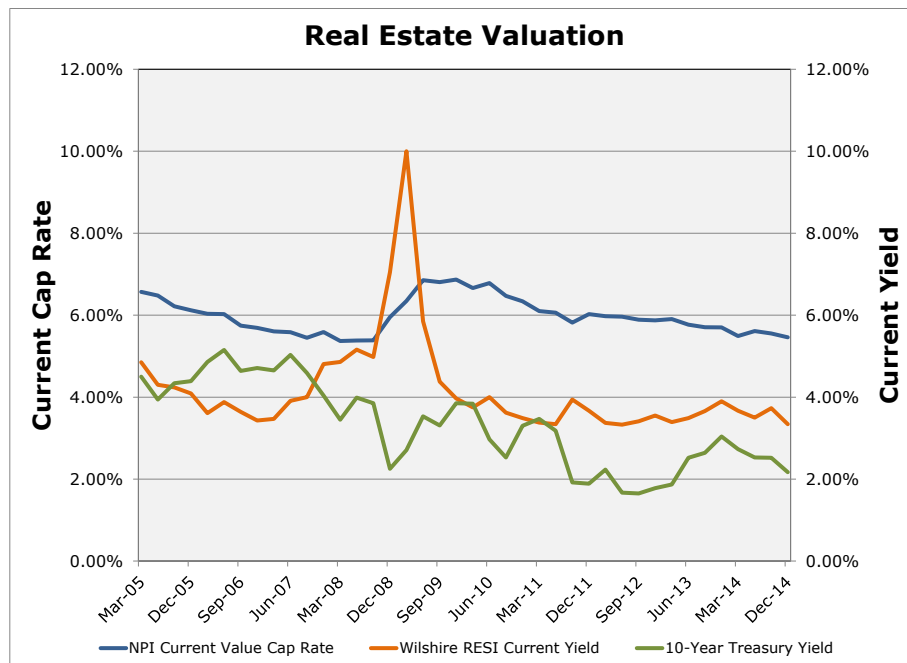


March 31, 2015	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays Aggregate Bond Index	1.6	1.6	5.7	3.1	4.4	4.9
Barclays Treasury Index	1.6	1.6	5.4	2.4	4.0	4.6
Barclays Govt-Related Index	1.4	1.4	5.5	2.9	3.9	4.7
Barclays Securitized Index	1.1	1.1	5.4	2.6	3.8	4.8
Barclays Corporate IG Index	2.3	2.3	6.8	5.2	6.5	5.9
Barclays LT Govt/Credit Index	3.4	3.4	15.7	7.7	10.2	7.7
Barclays LT Treasury Index	4.0	4.0	21.4	7.7	10.6	7.9
Barclays LT Govt-Related Index	2.3	2.3	14.1	6.7	9.7	7.8
Barclays LT Corporate IG Index	3.3	3.3	12.6	8.1	9.9	7.4
Barclays U.S. TIPS Index	1.4	1.4	3.1	0.6	4.3	4.6
Barclays High Yield Index	2.5	2.5	2.0	7.5	8.6	8.2
Treasury Bills	0.0	0.0	0.0	0.1	0.1	1.5



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

March 31, 2015	Qtr	Ytd	1 Yr	3 Yr	5 Yr	10 Yr
Barclays U.S. TIPS Index	1.4	1.4	3.1	0.6	4.3	4.6
Bloomberg Commodity Index	-5.9	-5.9	-27.0	-11.5	-5.7	-3.6
Wilshire Global REIT Index	4.1	4.1	20.4	13.6	15.0	8.7
NCREIF ODCE Fund Index	3.4	3.4	13.5	12.7	14.5	7.0
NCREIF Timberland Index	1.8	1.8	10.6	9.8	6.2	8.3
Alerian MLP Index (Oil & Gas)	-5.2	-5.2	-2.5	9.2	13.7	13.0



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

Asset Class Performance



Annual Asset Class Returns - Best to Worst

2010	2011	2012	2013	2014	YTD 2015
MLPs 35.9%	MLPs 13.9%	Emrg Mkts 18.6%	U.S. Equity 33.1%	REITs 31.8%	Developed 5.0%
REITs 28.6%	U.S. TIPS 13.6%	Developed 17.9%	MLPs 27.6%	U.S. Equity 12.7%	REITs 4.7%
Emrg Mkts 19.2%	REITs 9.2%	REITs 17.6%	Developed 23.3%	Core Bond 6.0%	High Yield 2.5%
U.S. Equity 17.2%	Core Bond 7.8%	U.S. Equity 16.1%	High Yield 7.4%	MLPs 4.8%	Emrg Mkts 2.3%
Commodities 16.8%	High Yield 5.0%	High Yield 15.8%	REITs 1.9%	U.S. TIPS 3.6%	U.S. Equity 1.6%
High Yield 15.1%	U.S. Equity 1.0%	U.S. TIPS 7.0%	T-Bills 0.1%	High Yield 2.5%	Core Bond 1.6%
Developed 8.2%	T-Bills 0.1%	MLPs 4.8%	Core Bond -2.0%	T-Bills 0.0%	U.S. TIPS 1.4%
Core Bond 6.5%	Developed -11.7%	Core Bond 4.2%	Emrg Mkts -2.3%	Emrg Mkts -1.8%	T-Bills 0.0%
U.S. TIPS 6.3%	Commodities -13.3%	T-Bills 0.1%	U.S. TIPS -8.6%	Developed -4.5%	MLPs -5.2%
T-Bills 0.1%	Emrg Mkts -18.2%	Commodities -1.0%	Commodities -9.5%	Commodities -17.0%	Commodities -5.9%

**Annualized
5-Year**

as of Mar '15
REITs 16.1%
U.S. Equity 14.6%
MLPs 13.7%
High Yield 8.6%
Developed 6.6%
Core Bond 4.4%
U.S. TIPS 4.3%
Emrg Mkts 2.1%
T-Bills 0.1%
Commodities -5.7%

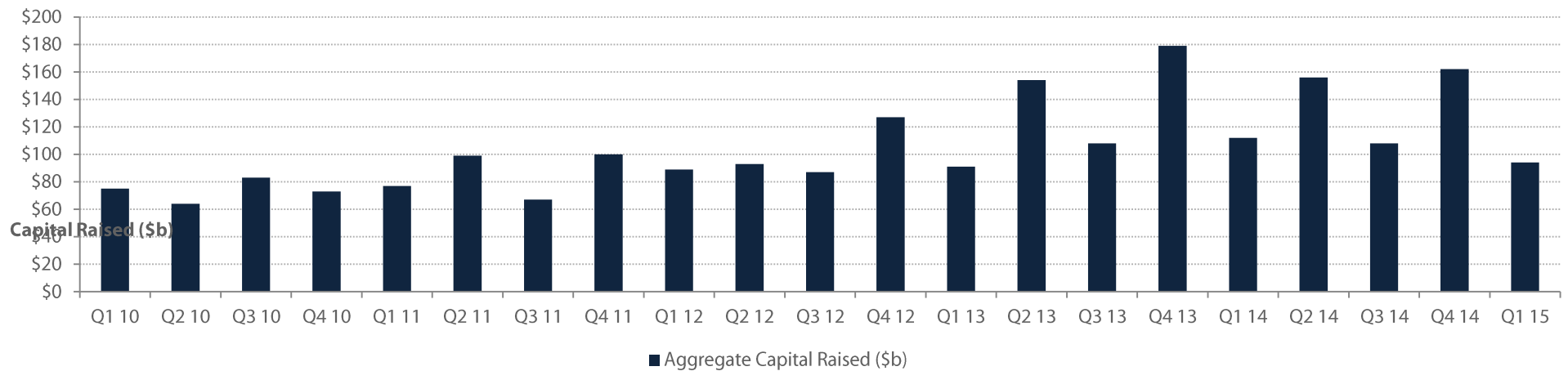
Data sources: Wilshire Compass

Note: Developed asset class is developed markets ex-U.S., ex-Canada.

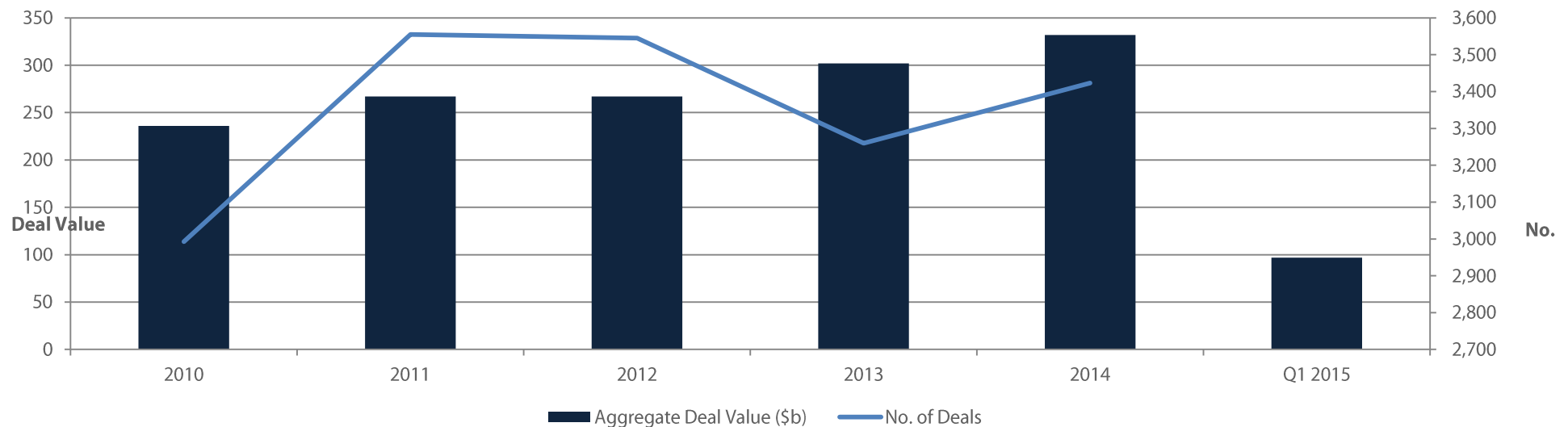
Private Markets Update

Private Equity – Fundraising & Investment Activity

Global Private Equity Fundraising (Q1 2010 – Q1 2015)



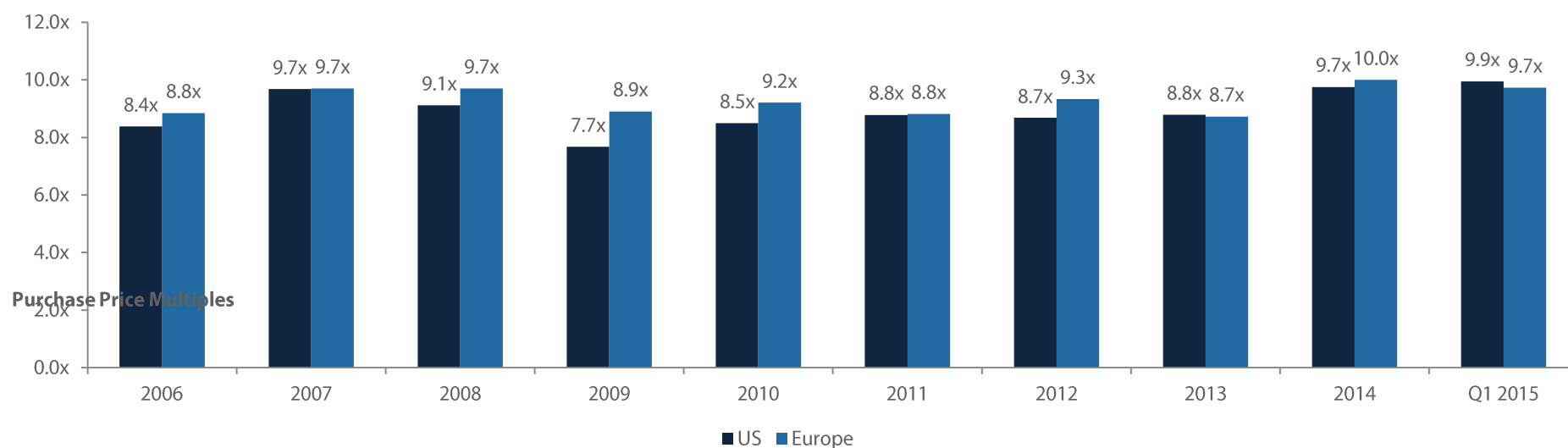
Global Private Equity–Backed Buyout Activity (2010 – Q1 2015)



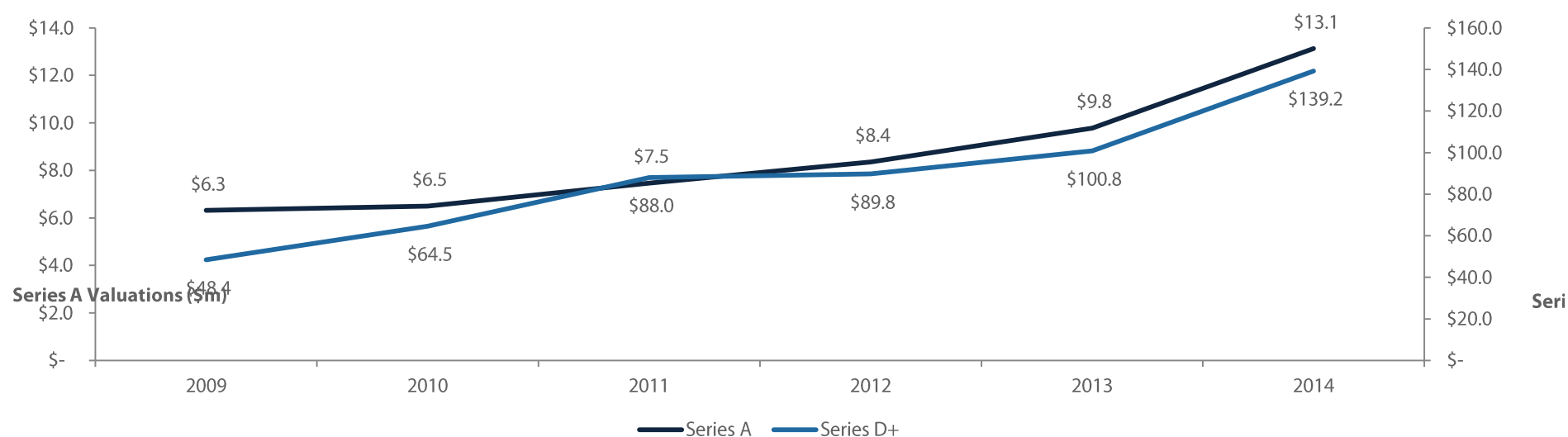
Private Equity – Pricing & Valuations



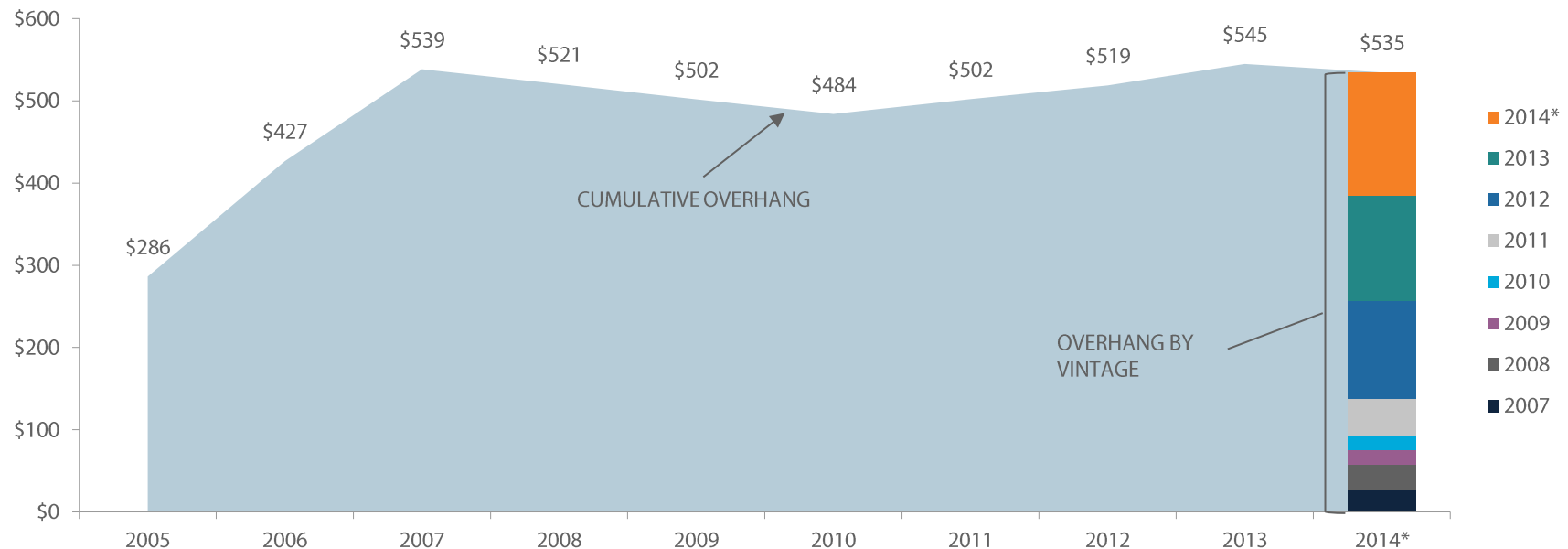
Global LBO Multiples (2006 – Q1 2015)



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



Cumulative Vintage Year Overhang

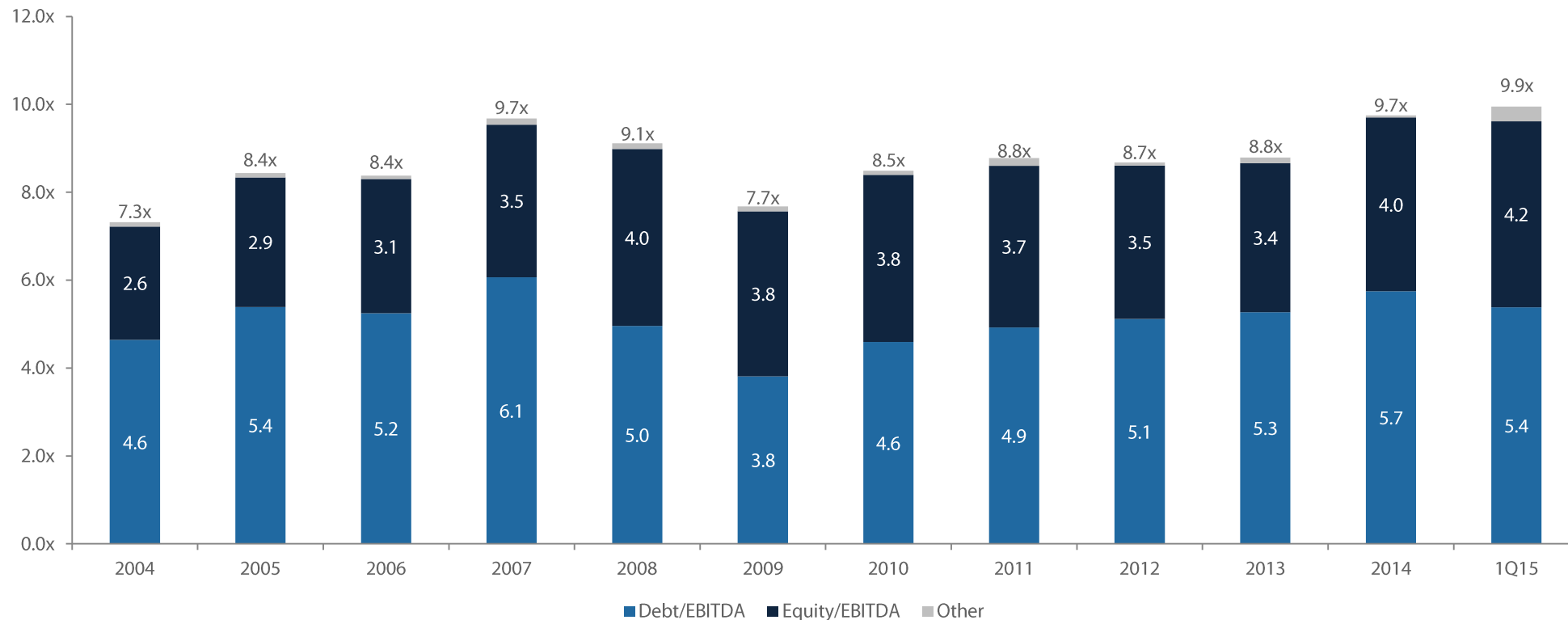


- Total private equity overhang significantly grew to an estimated \$539 billion during the run-up to the financial crisis
- While the overhang slightly decreased across 2007 through 2010, the overhang has steadily increased over the last few years to a near-peak level

Private Equity – U.S. LBO Purchase Price Multiples



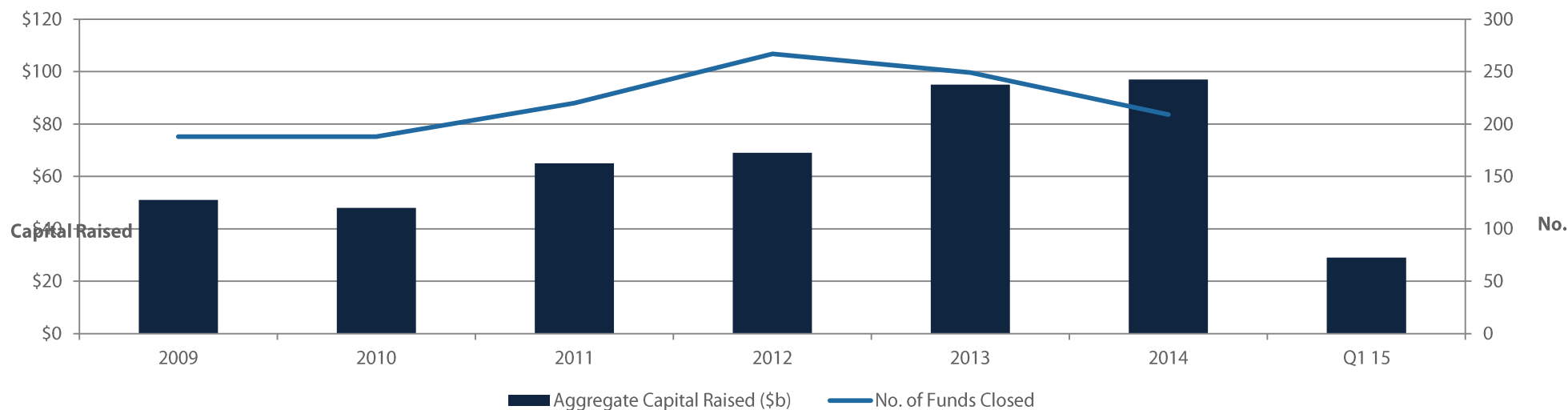
Purchase Price Multiples of U.S. LBO Transactions



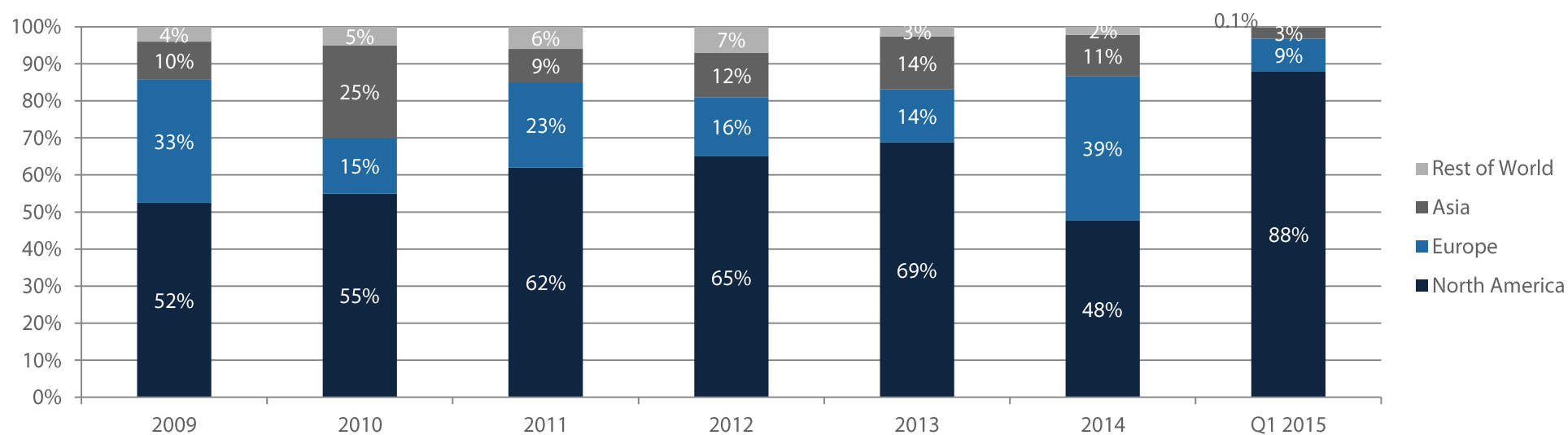
- As the debt markets have come back, purchase price multiples have increased from the low point in 2009
- Pricing in Q1 2015 is above the peak level in 2007

Private Real Estate – Fundraising Activity

Quarterly Closed-End Private Real Estate Fundraising (2009 – Q1 2015)



Proportion of Aggregate Capital Raised by Closed-End Private Real Estate Funds by Fund Geographic Focus (2009 – Q1 2015)

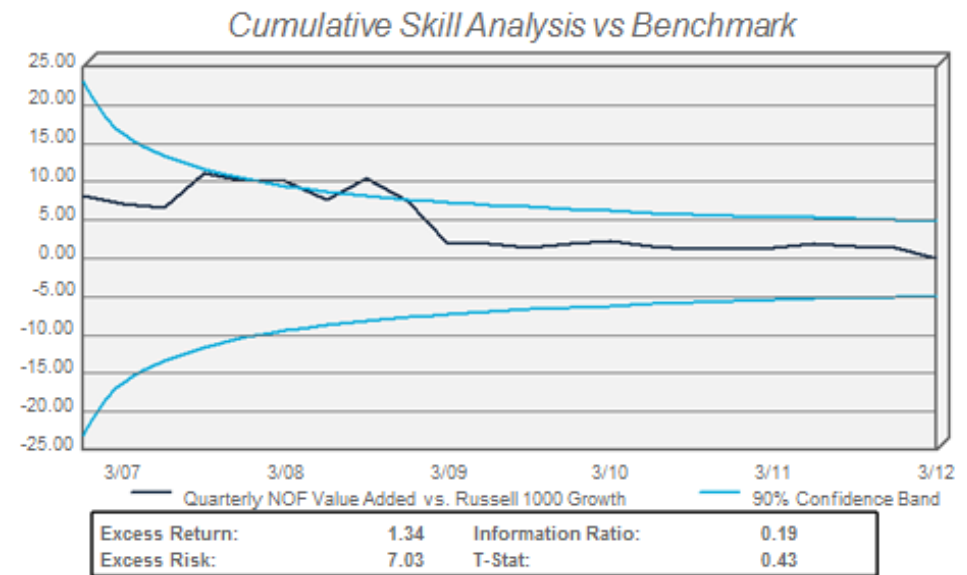


Source: Preqin.

Appendix

Cumulative Skill Graph

- Graphical representation of the statistical significance of excess returns over a specified benchmark for the cumulative time period being analyzed.
- Positive cumulative excess performance is shown when the dark blue line is above the “0.00” line measured on the left Y axis.
- The light blue lines that form a channel, or the shape of a trumpet horn, represent the boundaries of the statistical significance test.
- The width of the channel is calculated based on the amount of “Excess Risk” that the manager takes over the benchmark.



Value Added Graph

- Illustrates excess returns over the specified benchmark for individual periods, usually quarters, and for the cumulative time period being analyzed.
- A period in which there was positive excess performance the dark blue bar is above the line. Negative excess performance is below the line. The magnitude of the excess performance is measured on the left Y axis.
- The light blue line is the cumulative result of the quarterly performance and is measured on the right Y axis.

