

Kentucky Retirement Systems

Investment Performance Analysis

Quarter Ended June 30, 2013

Capital Markets Review As of June 30, 2013

Second Quarter Economic Environment

The second quarter saw increased market volatility at home and abroad, though domestic markets still finished close to all-time highs. Domestically, the Bureau of Economic Analysis revised estimate of real GDP growth for the first quarter was 1.8% annualized, which was down from previous estimates, but an increase from the 0.4% fourth quarter growth rate. The Bureau of Labor Statistics reported modest second quarter job growth, while the unemployment rate remained at 7.6%. Fed Chairman Ben Bernanke, driven by improved economic indicators, unsettled markets in June by announcing the Fed may begin tapering its asset purchases earlier than expected. Markets initially responded negatively, as interest rates rose and stock prices dropped, before rebounding on assurance that the Fed would not take action in the short term. Also, despite the impact of the Sequestration this year, set to peak around June, consumer sentiment increased to 84.1% at quarter end, as measured by the University of Michigan survey – the highest level since 2007. June saw improvements in the manufacturing sector too, as the Institute for Supply Management index was reported at 50.9%, reversing a trend of three consecutive months of contraction.

Internationally, the Japanese market continues to be a bright spot in the global economy, recovering from concerns earlier in the quarter regarding Shinzo Abe's economic revitalization strategy. Emerging market equities experienced a strong decline over the quarter, due in part to a liquidity shortage in China. While interbank lending rates skyrocketed, the People's Bank of China initially declined to intervene for fear of rapid credit growth, before reluctantly stepping in to reintroduce stability. Additionally, China, the world's second largest economy, continued to experience slowing economic growth, posting a second quarter GDP growth rate of 7.5% annualized, down from 7.7% in the first quarter.

Domestic Equities

- Despite negative returns in June, equities managed to post positive returns for the quarter. The S&P 500 has returned 13.82% year to date, marking the strongest equity performance for this time period since 1998.
- Value trumped growth for the fifth consecutive quarter, with the Russell 3000 Value returning 3.14% versus 2.19% for the Russell 3000 Growth.
- Small cap stocks outperformed large cap, as the Russell 2000 returned 3.08% while the Russell 1000 returned 2.65%.
- Sector returns were mixed this quarter. Financials posted a 7.25% return on the quarter, and was the highest performing sector. Utilities returned -2.73%, and was the lowest performing sector.

International Equities

- •International equities were hit hard this quarter, producing negative returns across the board.
- •On a relative basis, developed markets far outpaced their emerging counterparts as the MSCI EAFE returned -0.73% versus -7.95% for the MSCI Emerging Markets.

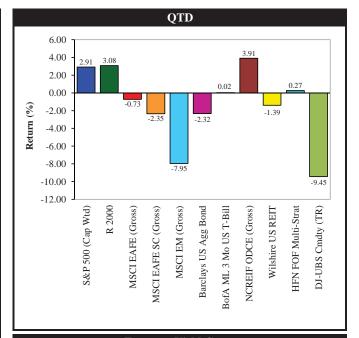
Fixed Income

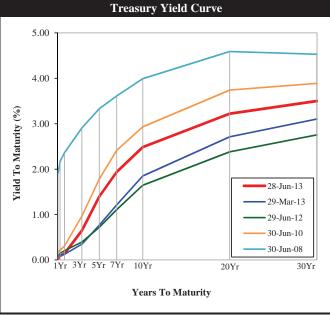
- The Barclays US Aggregate Bond Index suffered significant losses this quarter, hurt by the current rising interest rate environment.
- •Treasury long and corporate long were once again the lowest performing sectors for the quarter, posting returns of -5.58% and -5.74% respectively.
- The Barclays US TIPS Index returned -7.05% during the second quarter, signaling lower inflation expectations.

Trailing-Period Performance										
	Mth End Apr-2013	Mth End May-2013	MTD	QTD	CYTD	1 Year	2 Years	3 Years	5 Years	10 Years
S&P 500 (Cap Wtd)	1.93	2.34	-1.34	2.91	13.82	20.60	12.77	18.45	7.01	7.30
R 2000	-0.37	4.00	-0.51	3.08	15.86	24.20	10.28	18.67	8.77	9.53
MSCI EAFE (Gross)	5.33	-2.31	-3.53	-0.73	4.47	19.14	1.58	10.55	-0.16	8.16
MSCI EAFE SC (Gross)	3.66	-2.26	-3.62	-2.35	5.93	21.25	1.67	12.25	2.83	10.77
MSCI EM (Gross)	0.79	-2.52	-6.32	-7.95	-9.40	3.23	-6.69	3.72	-0.11	14.02
Barclays US Agg Bond	1.01	-1.78	-1.55	-2.32	-2.44	-0.69	3.31	3.51	5.19	4.52
BofA ML 3 Mo US T-Bill	0.01	0.01	0.01	0.02	0.04	0.11	0.08	0.11	0.29	1.72
NCREIF ODCE (Gross)	N/A	N/A	N/A	3.91	6.69	12.22	12.32	14.98	-0.14	6.95
Wilshire US REIT	6.56	-5.89	-1.66	-1.39	5.93	8.41	10.78	18.50	7.20	10.80
HFN FOF Multi-Strat	0.73	0.76	-1.21	0.27	3.65	7.37	1.64	2.96	-0.90	3.19
DJ-UBS Cmdty (TR)	-2.79	-2.24	-4.71	-9.45	-10.47	-8.01	-11.22	-0.25	-11.61	2.39

Performance is annualized for periods greater than one year.

Treasury data courtesy of the U.S. Department of the Treasury.







Kentucky Retirement Systems - Pension Plan Asset Allocation & Performance As of June 30, 2013

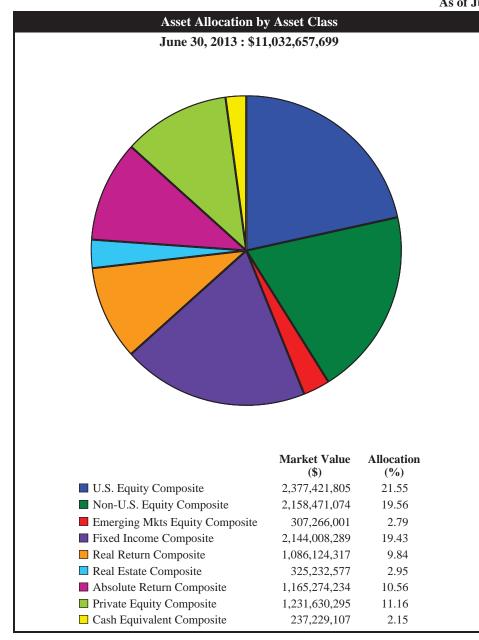
	Allocatio	n	Performance (%)
	Market Value (\$)	%	FYTD
Total Fund	11,032,657,699	100.00	11.03
Global Equity Composite	4,843,158,881	43.90	18.34
U.S. Equity Composite	2,377,421,805	21.55	21.59
River Road Asset Management (SA)	32,982,843	0.30	21.98
Westwood Management (SA)	102,835,910	0.93	28.96
Westfield Capital (SA)	111,553,071	1.01	26.82
Internal S&P 500 Index (SA)	1,264,152,892	11.46	20.40
INVESCO Struct'd Core Equity (SA)	216,490,026	1.96	23.82
Sasco Capital Inc. (SA)	44,510,917	0.40	17.88
Systematic Financial Management (SA)	187,932,008	1.70	23.88
Geneva Capital Management (SA)	213,648,523	1.94	14.78
NT Structured Small Cap (SA)	203,315,506	1.84	25.44
Pension Liquidation	111	0.00	N/A
Non-U.S. Equity Composite	2,158,471,074	19.56	16.70
The Boston Co. Non-US Value (SA)	663,707,428	6.02	19.12
BTC ACWI Ex US Fund (CF)	672,743,271	6.10	13.92
Pyramis Int'l Growth Fund (SA)	651,985,311	5.91	17.02
NT Int'l Sm Cap Eq Index (SA)	169,216,060	1.53	16.95
Artio Int'l Equity II (SA)	39,007	0.00	N/A
KRS Transition Account	779,997	0.01	N/A
Emerging Mkts Equity Composite	307,266,001	2.79	5.51
Aberdeen Emg Mkts Equity (CF)	112,526,006	1.02	6.47
Wellington Emg Mkts Equity (CF)	114,554,658	1.04	4.32
BTC Emg Mkts Equity (CF)	80,185,337	0.73	N/A
Fixed Income Composite	2,144,008,289	19.43	3.08
NISA Core Agg Fixed Income (SA)	545,392,618	4.94	-0.56
PIMCO Core Fixed Income (SA)	779,930,243	7.07	-0.58
Columbia HY Fixed Income (SA)	170,386,929	1.54	9.78
Loomis Sayles HY Fixed Income (SA)	173,998,295	1.58	13.15

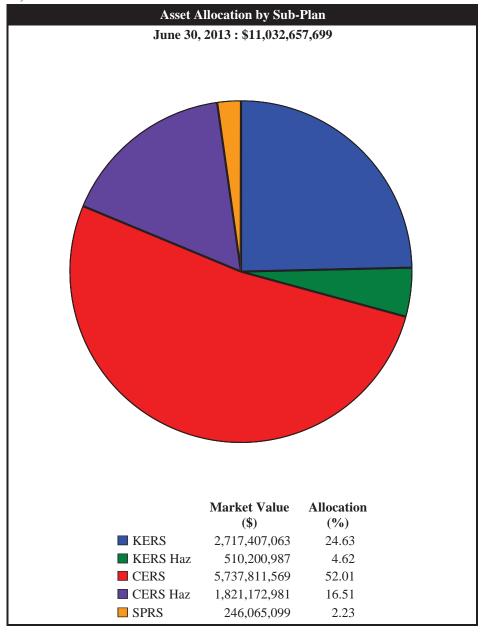
	Allocation	n	Performance (%)
	Market Value (\$)	%	FYTD
Fixed Income Composite (Cont.)			
Manulife Asset Mgmt (SA)	116,726,745	1.06	5.95
Waterfall (SA)	122,207,502	1.11	14.43
Shenkman Capital (SA)	119,529,633	1.08	7.49
Stone Harbor (SA)	115,836,322	1.05	0.74
Commerce Street Income Partners L.P.	3	0.00	N/A
Real Return Composite	1,086,124,317	9.84	-0.64
Internal TIPS (SA)	290,920,028	2.64	-4.68
Weaver Barksdale TIPS (SA)	370,510,894	3.36	-4.62
PIMCO:All Asset;Inst (PAAIX)	323,321,331	2.93	5.75
Tenaska Power Fund II (CF)	13,864,331	0.13	-8.51
Tortoise Capital (CF)	66,461,206	0.60	36.30
Amerra Ag Fund II (CF)	21,046,527	0.19	N/A
Real Estate Composite	325,232,577	2.95	12.03
Internal Real Estate (SA)	10,115,320	0.09	0.01
Walton Street Real Estate Fund VI, L.P.	29,777,128	0.27	11.47
Walton Street Real Estate Fund VII, L.P.	3,657,881	0.03	N/A
Prima Mortgage Invest Trust, LLC	44,972,880	0.41	8.07
Mesa West Real Estate Income Fund II L.P.	34,395,542	0.31	40.62
H/2 Credit Partners (CF)	97,202,923	0.88	11.26
Harrison Street Core (CF)	81,153,705	0.74	3.62
Greenfield Acquisition Partners VI, L.P.	23,957,198	0.22	N/A
Absolute Return Composite	1,165,274,234	10.56	12.30
BAAM (SA)	389,179,817	3.53	12.92
PAAMCO (SA)	389,881,622	3.53	13.05
Prisma Capital Partners (SA)	386,212,795	3.50	11.04
Private Equity Composite	1,231,630,295	11.16	11.12
Cash Equivalent Composite	237,229,107	2.15	0.32
Cash Equivalents (SA)	237,229,107	2.15	0.32

Performance shown is gross of fees, except where noted. Fiscal year ends June 30th. Allocations shown may not sum up to 100% exactly due to rounding. Real Estate and Private Equity valuations shown are as of the most recent date available.



Kentucky Retirement Systems - Pension Plan Total Fund Asset Allocation Charts As of June 30, 2013





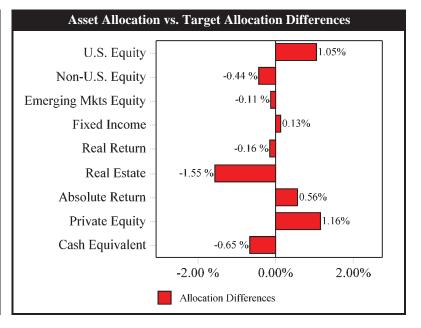
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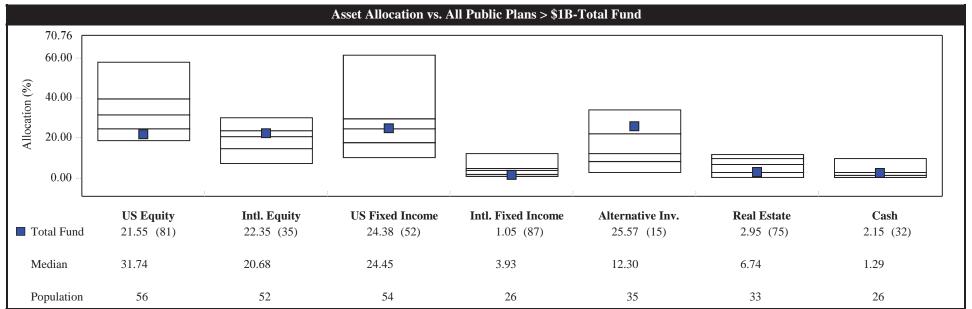


Kentucky Retirement Systems - Pension Plan Total Fund vs. All Public Plans > \$1B-Total Fund Asset Allocation vs. Target and Plan Sponsor Peer Group

As of June 30, 2013

Asset Allocation vs. Target Allocation									
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)				
Total Fund	11,032,657,699	100.00	-	-	100.00				
U.S. Equity Composite	2,377,421,805	21.55	15.50	25.50	20.50				
Non-U.S. Equity Composite	2,158,471,074	19.56	15.00	25.00	20.00				
Emerging Mkts Equity Composite	307,266,001	2.79	0.90	4.90	2.90				
Fixed Income Composite	2,144,008,289	19.43	16.80	21.80	19.30				
Real Return Composite	1,086,124,317	9.84	7.00	13.00	10.00				
Real Estate Composite	325,232,577	2.95	1.50	7.50	4.50				
Absolute Return Composite	1,165,274,234	10.56	7.00	13.00	10.00				
Private Equity Composite	1,231,630,295	11.16	5.00	15.00	10.00				
Cash Equivalent Composite	237,229,107	2.15	0.80	4.80	2.80				

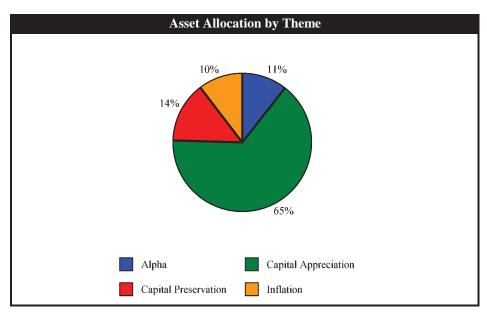


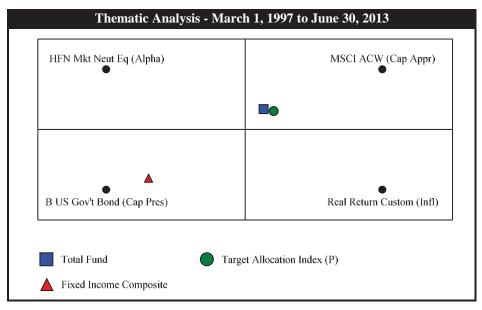


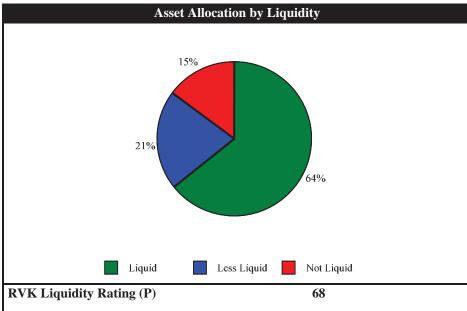
Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Dedicated TIPS are included in U.S. Fixed Income when compared to other public plans. Intl. Fixed Income does not reflect the underlying holdings within non-dedicated Intl. Fixed Income funds.



Kentucky Retirement Systems - Pension Plan Total Fund Thematic and Liquidity Analysis As of June 30, 2013







	Correlation Matrix - 10 Years							
	A	В	С	D				
A	1.00							
В	0.63	1.00						
С	-0.27	-0.24	1.00					
D	0.59	0.85	0.00	1.00				
A	=	HFN Mkt Neut Eq Index (Alpha)						
В	=	MSCI ACW Index (Capita	MSCI ACW Index (Capital Appreciation)					
С	=	Barclays US Gov't Bond I	ndex (Capital Preserva	ation)				
D	=	Real Return Custom Index	x (Inflation)					

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic, and custom index descriptions.



Kentucky Retirement Systems - Pension Plan Comparative Performance

As of June 30, 2013

	QTD	CYTD	FYTD	1	3	5	10	2012	2011	2010	Since	Inception
	Q1D	CTID	FIID	Year	Years	Years	Years	2012	2011	2010	Incep.	Date
Total Fund	-0.34	3.66	11.03	11.03	9.76	4.85	6.66	12.88	-0.44	12.90	9.42	04/01/1984
Target Allocation Index (P)	1.00	4.70	11.22	11.22	10.52	5.39	6.78	13.54	-1.19	12.41	9.54	
Difference	-1.34	-1.04	-0.19	-0.19	-0.76	-0.54	-0.12	-0.66	0.75	0.49	-0.12	
All Public Plans > \$1B-Total Fund Median	-0.01	4.93	12.38	12.38	11.63	5.25	7.45	13.49	0.75	13.23	9.76	
Total Fund Rank	64	73	70	70	87	66	83	61	79	58	60	
Global Equity Composite	0.02	6.77	18.34	18.34	12.25	4.10	7.27	17.11	-7.97	14.99	10.79	04/01/1984
Global Equity Blended Index (P)	-0.61	5.92	17.01	17.01	13.03	3.56	7.19	17.19	-6.97	15.56	10.60	
Difference	0.63	0.85	1.33	1.33	-0.78	0.54	0.08	-0.08	-1.00	-0.57	0.19	
U.S. Equity Composite	2.42	13.93	21.59	21.59	18.22	7.40	7.94	15.92	1.04	16.77	11.15	04/01/1984
R 3000 Index (P)*	2.69	14.06	21.47	21.47	18.60	7.45	8.01	16.42	0.92	17.50	11.06	
Difference	-0.27	-0.13	0.12	0.12	-0.38	-0.05	-0.07	-0.50	0.12	-0.73	0.09	
Non-U.S. Equity Composite	-1.28	2.36	16.70	16.70	6.39	0.46	7.75	16.43	-17.01	12.88	1.82	07/01/2000
MSCI ACW Ex US Index (Gross) (P)*	-2.90	0.27	14.14	14.14	8.67	0.12	8.20	17.39	-13.26	12.37	2.42	
Difference	1.62	2.09	2.56	2.56	-2.28	0.34	-0.45	-0.96	-3.75	0.51	-0.60	
Emerging Mkts Equity Composite	-8.08	-8.41	5.51	5.51	N/A	N/A	N/A	23.92	N/A	N/A	-1.51	07/01/2011
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	14.02	18.64	-18.17	19.20	-6.69	
Difference	-0.13	0.99	2.28	2.28	N/A	N/A	N/A	5.28	N/A	N/A	5.18	
Fixed Income Composite	-2.52	-1.88	3.08	3.08	5.76	5.63	4.92	10.24	7.04	7.61	8.09	04/01/1984
Barclays Universal Bond Index (P)*	-2.37	-2.29	0.24	0.24	4.16	5.19	4.77	5.53	8.12	6.49	7.83	
Difference	-0.15	0.41	2.84	2.84	1.60	0.44	0.15	4.71	-1.08	1.12	0.26	
Real Return Composite	-5.56	-4.84	-0.64	-0.64	N/A	N/A	N/A	9.55	N/A	N/A	5.50	07/01/2011
Consumer Price Index + 3%	1.06	3.21	4.81	4.81	5.39	4.35	5.50	4.79	6.05	4.54	4.76	
Difference	-6.62	-8.05	-5.45	-5.45	N/A	N/A	N/A	4.76	N/A	N/A	0.74	
Real Estate Composite	2.35	6.63	12.03	12.03	13.79	7.46	6.67	10.18	13.33	14.80	8.98	05/01/2009
NCREIF ODCE Index (Gross) (AWA)*	3.91	6.69	12.22	12.22	13.54	2.46	8.43	10.94	15.26	5.83	5.02	
Difference	-1.56	-0.06	-0.19	-0.19	0.25	5.00	-1.76	-0.76	-1.93	8.97	3.96	
Absolute Return Composite	3.23	7.53	12.30	12.30	6.34	N/A	N/A	7.06	3.82	N/A	5.02	04/01/2010
HFRI FOF Diversified Index (Lagged)	2.46	6.02	8.21	8.21	3.23	-0.29	3.74	3.13	-2.46	4.07	3.00	
Difference	0.77	1.51	4.09	4.09	3.11	N/A	N/A	3.93	6.28	N/A	2.02	

Performance shown is gross of fees, except where noted. All data reported for Kentucky Retirement Systems, including manager and composite performance, is provided by Nothern Trust. Fiscal year ends June 30th. An index marked with an asterisk (*) represents the current benchmark. See the Addendum for the complete historical composition of the custom index.



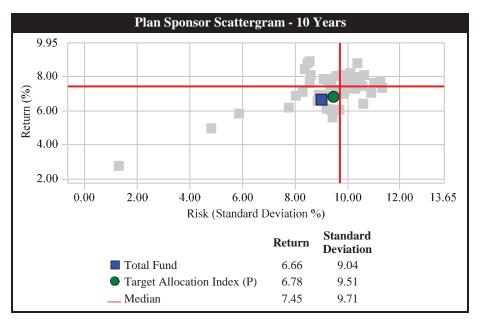
Kentucky Retirement Systems - Pension Plan Comparative Performance

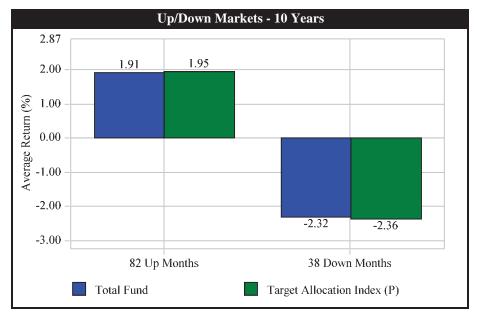
As of June 30, 2013

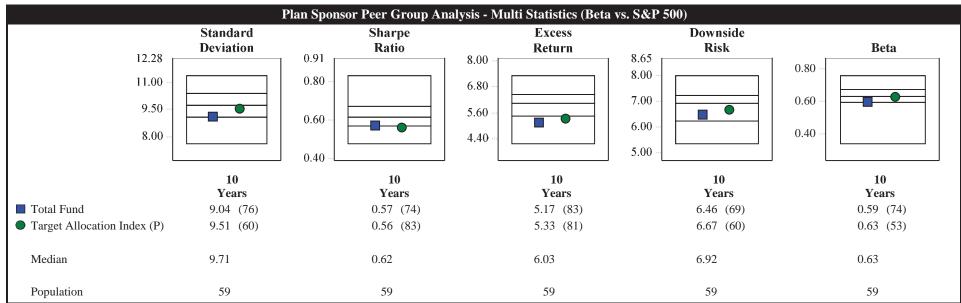
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2012	2011	2010	Since Incep.	Inception Date
Private Equity Composite	3.09	6.61	11.12	11.12	12.42	4.88	11.23	13.78	11.03	16.76	11.01	10/01/1990
R 3000 Index + 4% (Qtr Lag) (P)*	12.17	13.56	19.15	19.15	18.46	10.58	9.14	35.41	-8.63	16.16	N/A	
Difference	-9.08	-6.95	-8.03	-8.03	-6.04	-5.70	2.09	-21.63	19.66	0.60	N/A	
Cash Equivalent Composite	0.06	0.13	0.32	0.32	0.33	0.71	2.18	0.30	0.31	0.89	4.15	01/01/1988
Citi 3 Mo T-Bill Index	0.01	0.03	0.07	0.07	0.09	0.23	1.63	0.07	0.08	0.13	3.69	
Difference	0.05	0.10	0.25	0.25	0.24	0.48	0.55	0.23	0.23	0.76	0.46	



Kentucky Retirement Systems - Pension Plan Total Fund vs. All Public Plans > \$1B-Total Fund As of June 30, 2013



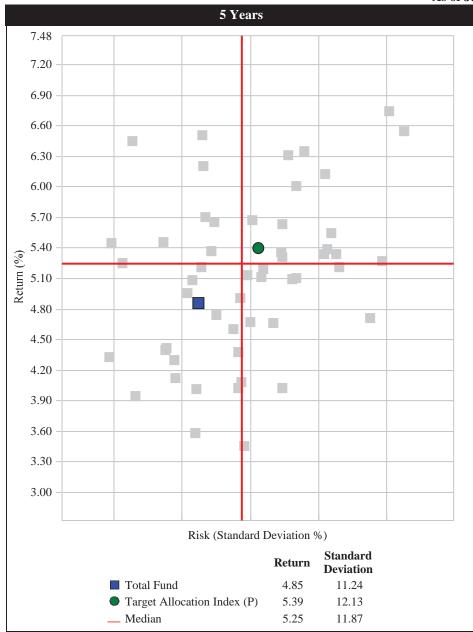


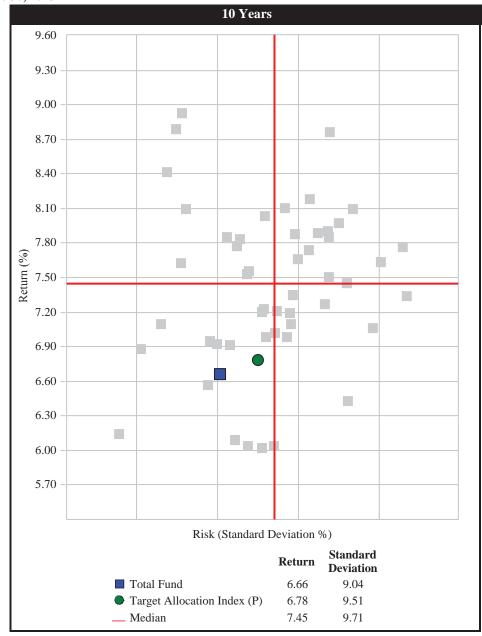


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Kentucky Retirement Systems - Pension Plan Total Fund vs. All Public Plans > \$1B-Total Fund Plan Sponsor Peer Group Scattergram As of June 30, 2013



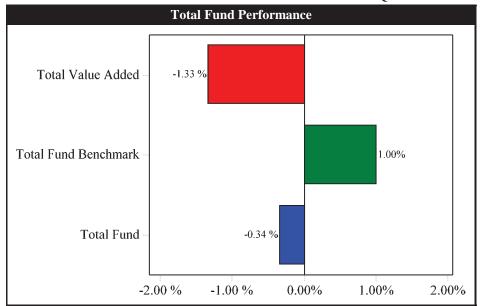


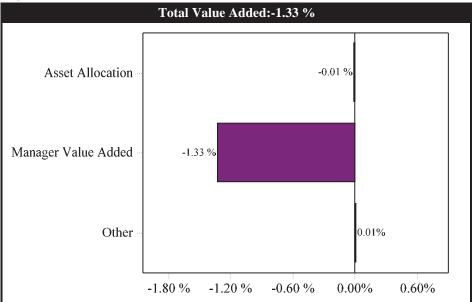
Performance shown is gross of fees. Calculation is based on monthly periodicity.

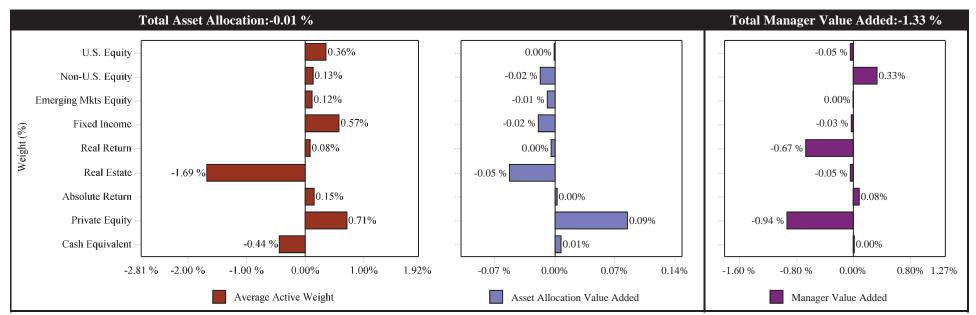


Kentucky Retirement Systems - Pension Plan Total Fund vs. Target Allocation Index (P) Total Fund Attribution

Quarter To Date Ending June 30, 2013





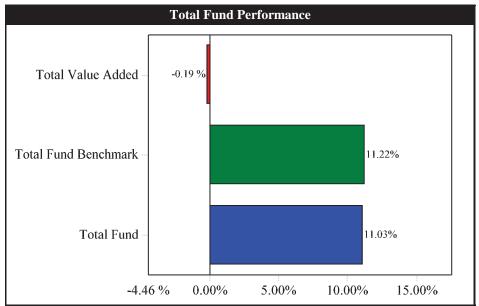


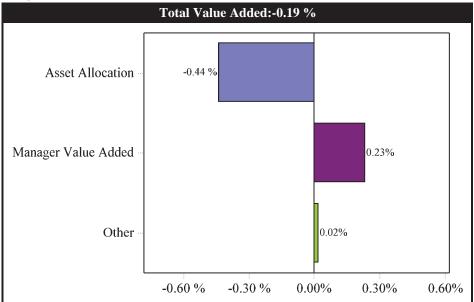
Performance shown is gross of fees, except where noted. Calculation is based on monthly periodicity. Allocation to "Other" is the contribution of other residual factors, including market timing and cash flows. Please see the Glossary for additional information regarding the Total Fund Attribution calculation.

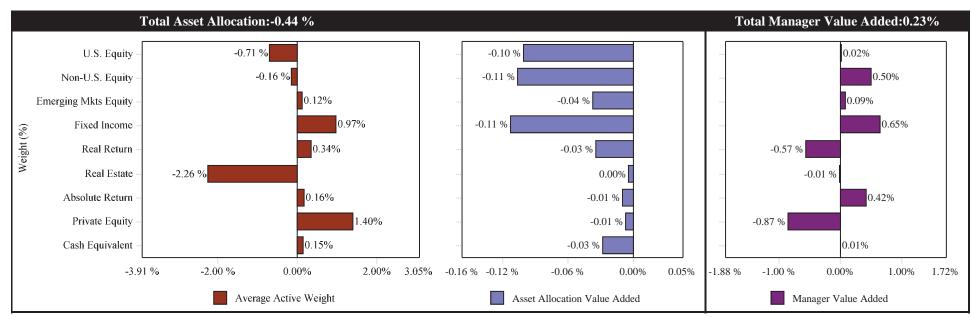


Kentucky Retirement Systems - Pension Plan Total Fund vs. Target Allocation Index (P) Total Fund Attribution

Fiscal Year To Date Ending June 30, 2013



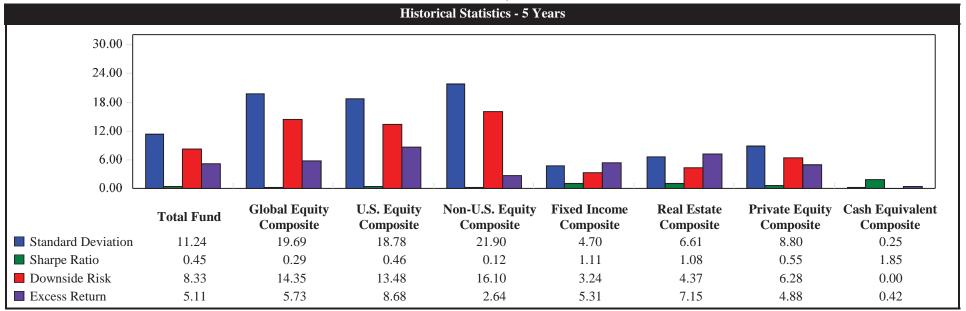




Performance shown is gross of fees, except where noted. Calculation is based on monthly periodicity. Allocation to "Other" is the contribution of other residual factors, including market timing and cash flows. Please see the Glossary for additional information regarding the Total Fund Attribution calculation.



Kentucky Retirement Systems - Pension Plan Historical Stats & Correlation Analysis As of June 30, 2013

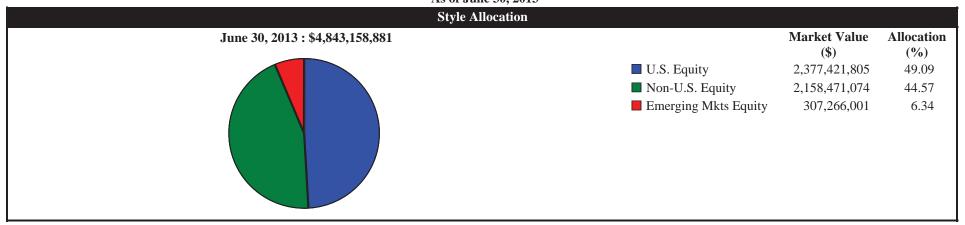


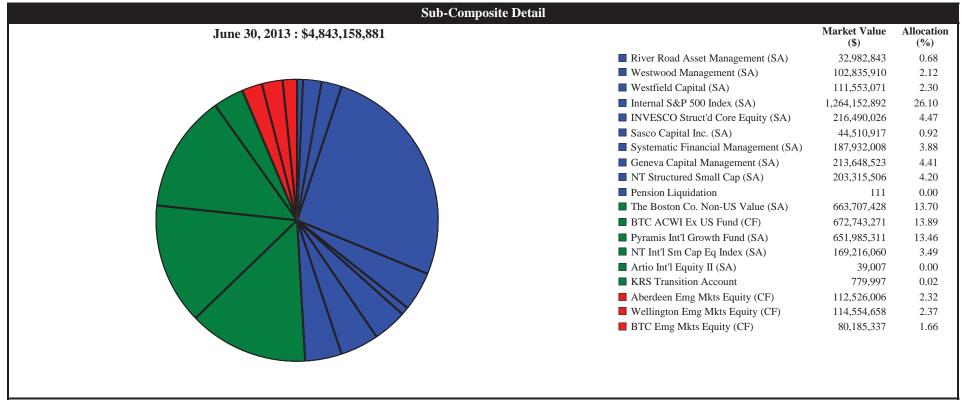
Correlation Matrix - 5 Years								
	Total Fund	Global Equity Composite	U.S. Equity Composite	Non-U.S. Equity Composite	Fixed Income Composite	Real Estate Composite	Private Equity Composite	Cash Equivalen Composite
Total Fund	1.00							
Global Equity Composite	0.98	1.00						
U.S. Equity Composite	0.96	0.98	1.00					
Non-U.S. Equity Composite	0.96	0.97	0.90	1.00				
Fixed Income Composite	0.61	0.51	0.43	0.56	1.00			
Real Estate Composite	-0.12	-0.14	-0.10	-0.17	-0.07	1.00		
Private Equity Composite	0.36	0.23	0.30	0.15	0.30	0.20	1.00	
Cash Equivalent Composite	0.02	0.01	0.04	-0.04	0.11	-0.23	-0.10	1.00

Performance shown is gross of fees, except where noted. Calculation is based on quarterly periodicity. Excluded composites do not have five years of performance history.



Kentucky Retirement Systems - Pension Plan Global Equity Composite Asset Allocation Charts As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding.



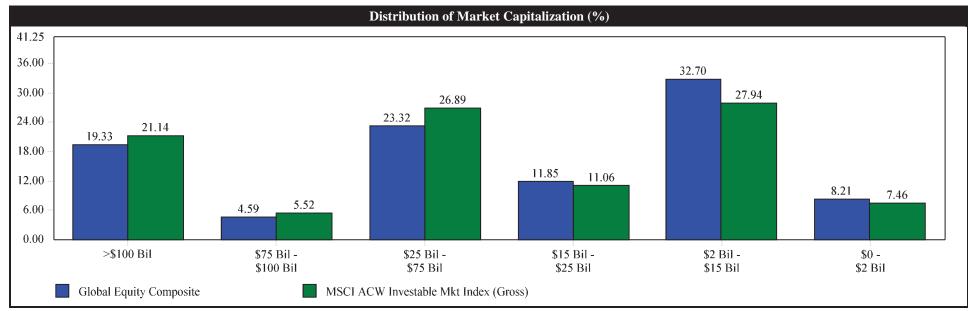
Global Equity Composite vs. MSCI ACW Investable Mkt Index (Gross)

Portfolio Characteristics

As of June 30, 2013

Top Ten Equity Holdings								
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)				
Exxon Mobil Corp	0.94	1.13	-0.19	0.96				
Apple Inc	0.86	1.04	-0.18	-9.82				
HSBC Holdings PLC	0.74	0.54	0.20	-2.24				
Toyota Motor Corp	0.69	0.47	0.22	16.84				
Novartis AG	0.61	0.46	0.15	-0.20				
Roche Holding AG	0.60	0.49	0.11	6.68				
General Electric Co	0.60	0.67	-0.07	1.12				
Chevron Corp	0.59	0.64	-0.05	0.41				
Johnson & Johnson	0.56	0.67	-0.11	6.11				
Google Inc	0.54	0.66	-0.12	10.85				
% of Portfolio	6.73	6.77						

Portfolio Characteristics							
	Portfolio	Benchmark					
Wtd. Avg. Mkt. Cap (\$M)	59,150	65,247					
Median Mkt. Cap (\$M)	898	1,189					
Price/Earnings Ratio	15.40	15.28					
Price/Book Ratio	2.23	2.29					
5 Yr. EPS Growth Rate (%)	3.39	3.64					
Current Yield (%)	2.42	2.59					
Beta (5 Years, Monthly)	0.93	1.00					
Number of Securities	9,777	8,446					



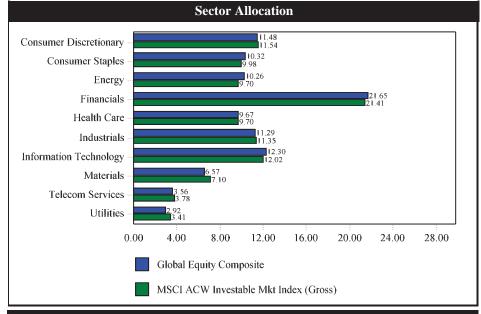
Holdings for the Global Equity Blended Index (P) are unavailable. The MSCI ACW Investable Mkt Index (Gross) is used as a proxy. Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown.

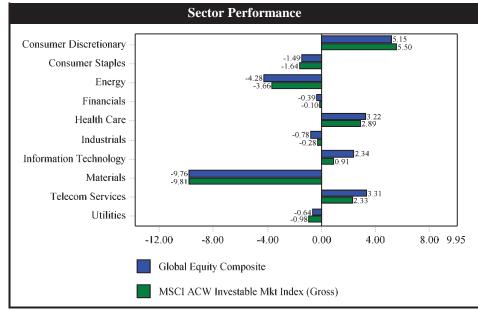


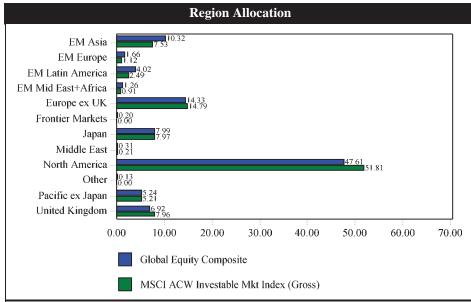
Global Equity Composite vs. MSCI ACW Investable Mkt Index (Gross)

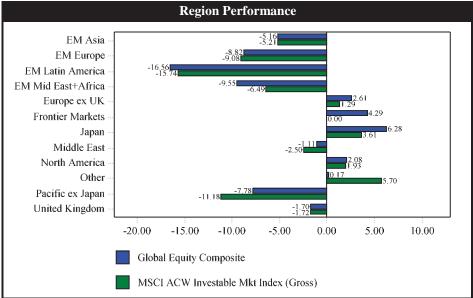
Buy and Hold Sector/Region Attribution Graphs

As of June 30,2013





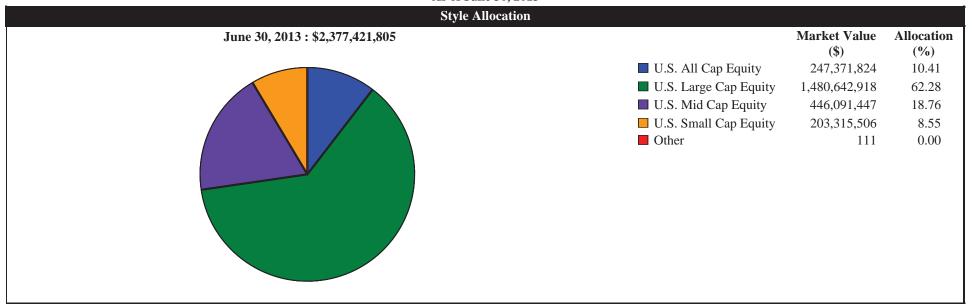


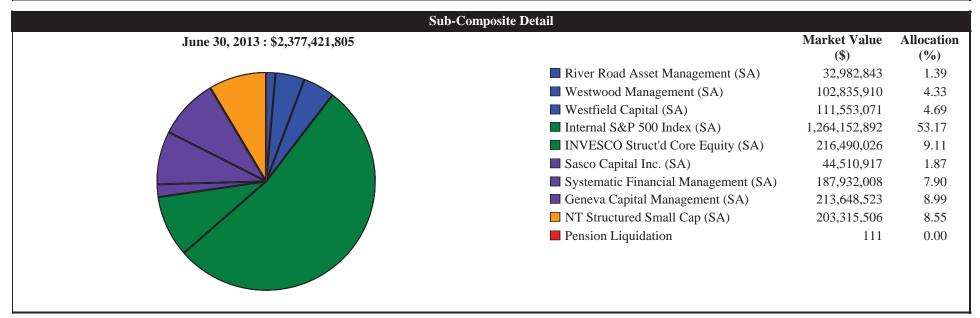


Holdings for the Global Equity Blended Index (P) are unavailable. The MSCI ACW Investable Mkt Index (Gross) is used as a proxy. Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown. Region allocation to "Other" consists of holdings domiciled in countries/regions that do not meet economic development, size, liquidity, or market accessibility criteria as defined by MSCI.



U.S. Equity Composite Asset Allocation Charts As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding.

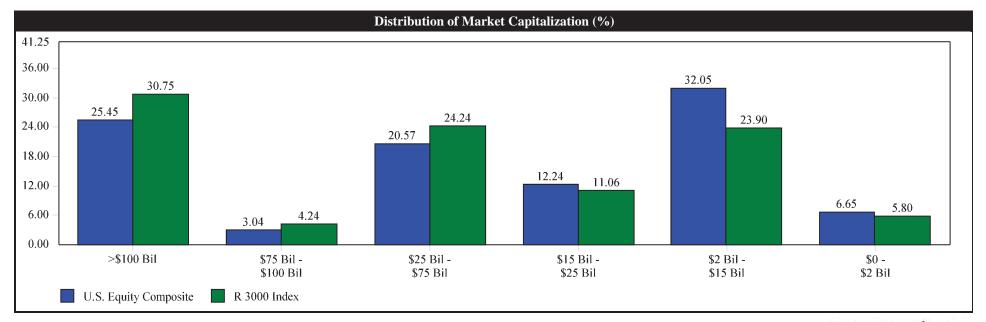


Kentucky Retirement Systems - Pension Plan U.S. Equity Composite vs. R 3000 Index Portfolio Characteristics

As of June 30, 2013

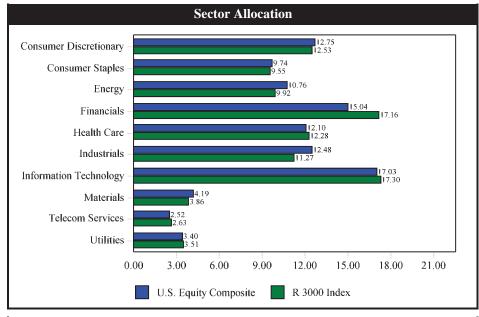
Top Ten Equity Holdings								
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)				
Exxon Mobil Corp	1.96	2.39	-0.43	0.96				
Apple Inc	1.80	2.10	-0.30	-9.82				
General Electric Co	1.25	1.39	-0.14	1.12				
Chevron Corp	1.24	1.32	-0.08	0.41				
Johnson & Johnson	1.18	1.33	-0.15	6.11				
Google Inc	1.12	1.29	-0.17	10.85				
JPMorgan Chase & Co	1.09	1.14	-0.05	11.94				
Microsoft Corp	1.07	1.47	-0.40	21.59				
Pfizer Inc	1.05	1.06	-0.01	-2.13				
Berkshire Hathaway Inc	0.94	1.13	-0.19	7.41				
% of Portfolio	12.70	14.62						

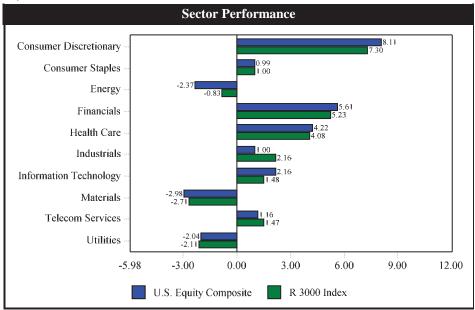
Portfolio Characteristics								
	Portfolio	Benchmark						
Wtd. Avg. Mkt. Cap (\$M)	73,528	87,083						
Median Mkt. Cap (\$M)	595	1,224						
Price/Earnings Ratio	16.81	16.90						
Price/Book Ratio	2.55	2.57						
5 Yr. EPS Growth Rate (%)	6.93	6.08						
Current Yield (%)	1.87	2.06						
Beta (5 Years, Monthly)	0.99	1.00						
Number of Securities	3,377	2,923						

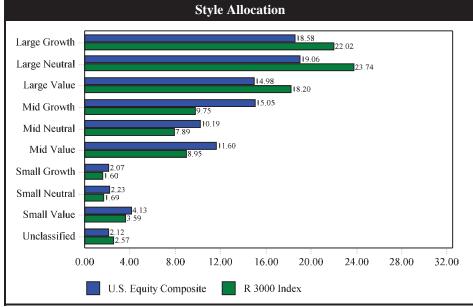


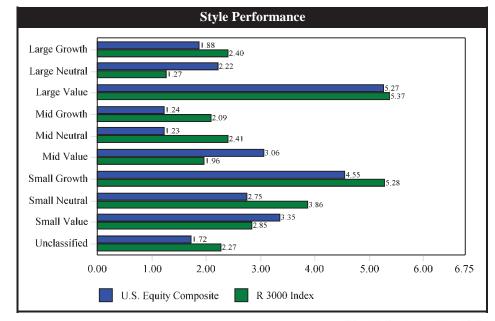


Kentucky Retirement Systems - Pension Plan U.S. Equity Composite vs. R 3000 Index Buy and Hold Sector/Style Attribution Graphs As of June 30,2013



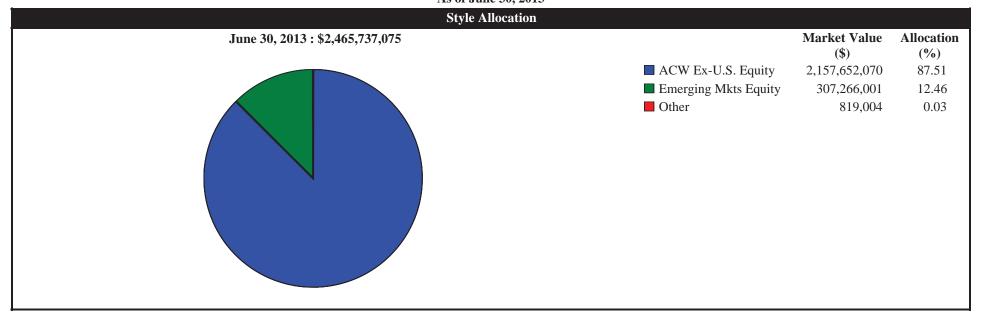


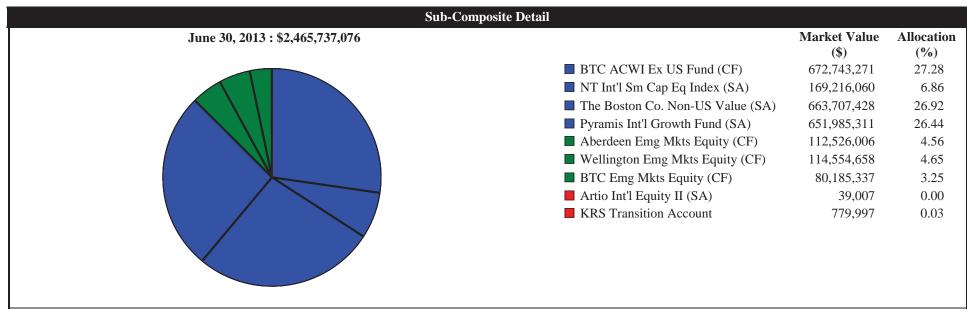






Kentucky Retirement Systems - Pension Plan Non-U.S. and Emerging Markets Equity Composite Asset Allocation Charts As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding. KRS Transition Account is currently comprised of currency and non-dollar denominated recoverable taxes.



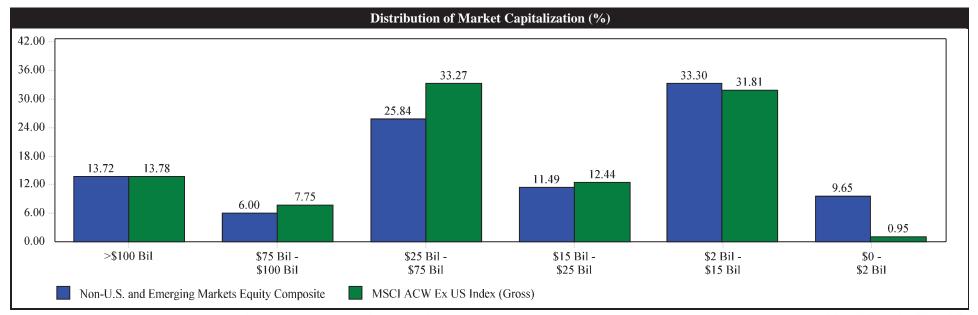
Non-U.S. and Emerging Markets Equity Composite vs. MSCI ACW Ex US Index (Gross)

Portfolio Characteristics

As of June 30, 2013

	Top Ten Equit	y Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
HSBC Holdings PLC	1.42	1.20	0.22	-2.24
Toyota Motor Corp	1.33	1.04	0.29	16.84
Novartis AG	1.16	1.02	0.14	-0.20
Roche Holding AG	1.16	1.09	0.07	6.68
Total SA	0.93	0.65	0.28	3.52
Sanofi	0.86	0.77	0.09	5.28
Mitsubishi UFJ Financial Group	0.82	0.49	0.33	3.97
Samsung Electronics Co Ltd	0.81	0.81	0.00	-14.86
BP PLC	0.77	0.83	-0.06	0.05
UBS AG	0.76	0.39	0.37	11.87
% of Portfolio	10.02	8.29		

Portfolio Characteristics									
	Portfolio	Benchmark							
Wtd. Avg. Mkt. Cap (\$M)	45,969	50,895							
Median Mkt. Cap (\$M)	1,051	6,371							
Price/Earnings Ratio	14.20	13.93							
Price/Book Ratio	1.95	2.01							
5 Yr. EPS Growth Rate (%)	-0.54	0.30							
Current Yield (%)	2.92	3.16							
Beta (5 Years, Monthly)	0.93	1.00							
Number of Securities	6,406	1,823							



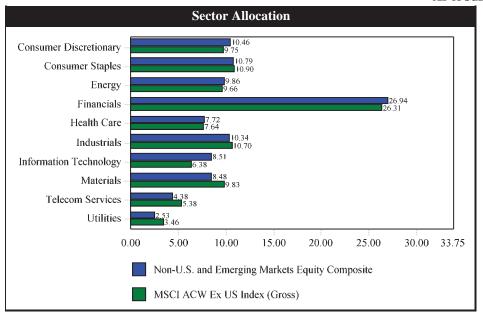
Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown.

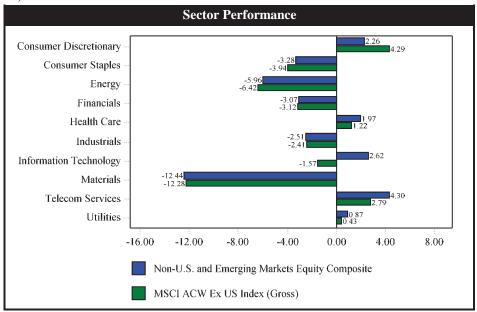


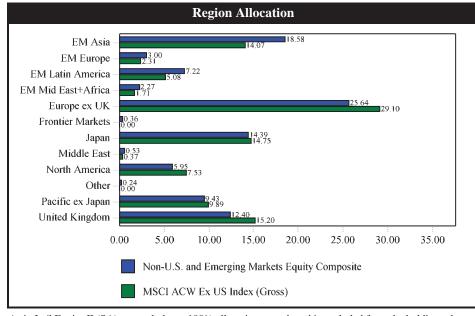
Non-U.S. and Emerging Markets Equity Composite vs. MSCI ACW Ex US Index (Gross)

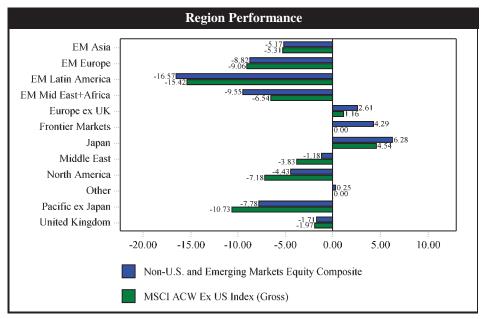
Buy and Hold Sector/Region Attribution Graphs

As of June 30,2013





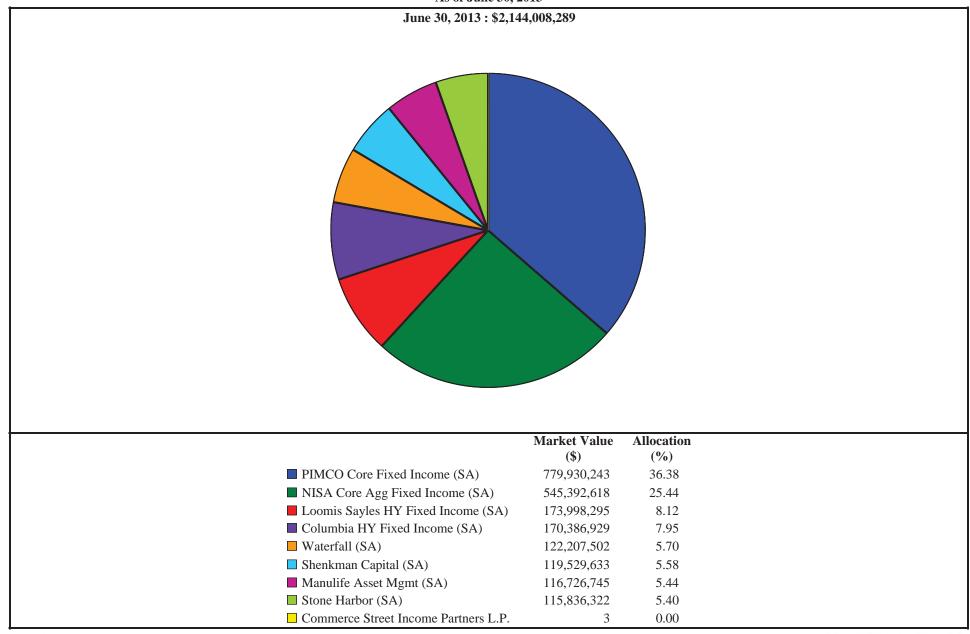




Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown. Regional allocation to "Other" consists of holdings domiciled in countries/regions that do not meet economic development, size, liquidity, or market accessibility criteria as defined by MSCI.



Kentucky Retirement Systems - Pension Plan Fixed Income Composite Asset Allocation by Manager As of June 30, 2013



Allocations shown may not sum up to 100% exactly due to rounding.

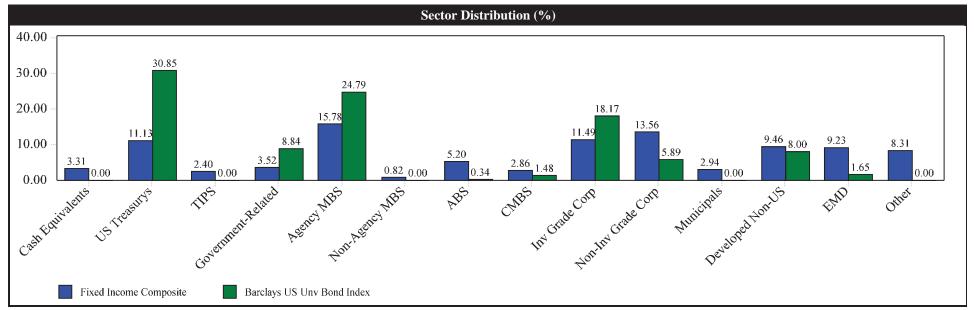


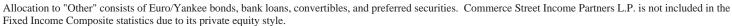
Fixed Income Composite vs. Barclays US Unv Bond Index

Portfolio Characteristics

As of June 30, 2013

Portfolio Characteristics									
	Portfolio	Benchmark							
Effective Duration	5.70	5.38							
Avg. Maturity	8.03	7.36							
Avg. Quality	Baa1	-							
Yield To Maturity (%)	4.64	2.81							
Coupon Rate (%)	4.07	3.79							
Current Yield (%)	3.99	-							

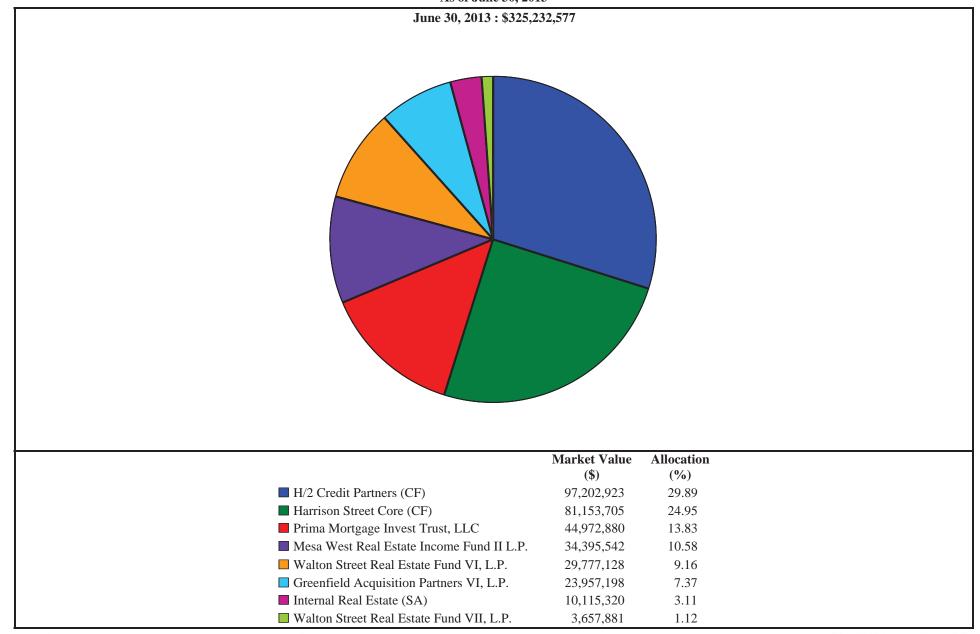






Kentucky Retirement Systems - Pension Plan Real Estate Composite

Asset Allocation by Manager As of June 30, 2013

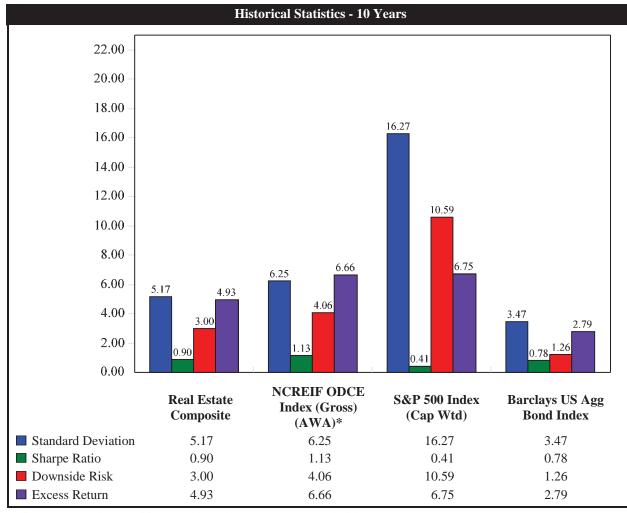


Allocations shown may not sum up to 100% exactly due to rounding.



Kentucky Retirement Systems - Pension Plan Real Estate Composite As of June 30, 2013

Comparative Performance												
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2012	2011	2010	Since Incep.	Inception Date
Real Estate Composite	2.35	6.63	12.03	12.03	13.79	7.46	6.67	10.18	13.33	14.80	8.98	05/01/2009
NCREIF ODCE Index (Gross) (AWA)*	3.91	6.69	12.22	12.22	13.54	2.46	8.43	10.94	15.26	5.83	5.02	
Difference	-1.56	-0.06	-0.19	-0.19	0.25	5.00	-1.76	-0.76	-1.93	8.97	3.96	



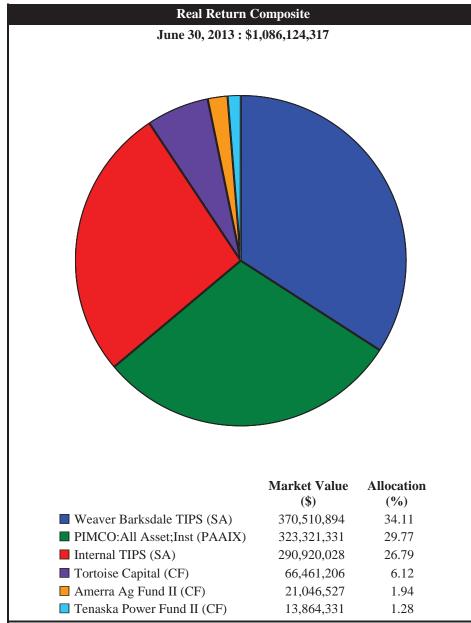
Actual Correlation - 10 Year	rs
	Actual
	Correlation
NCREIF ODCE Index (Gross) (AWA)*	0.32
S&P 500 Index (Cap Wtd)	-0.08
R 2000 Index	-0.07
MSCI EAFE Index (Gross)	-0.13
MSCI Emg Mkts Index (Gross)	-0.11
Barclays US Agg Bond Index	-0.06
Barclays US Trsy: US TIPS Index	-0.06
Wilshire US REIT Index	-0.06
HFN FOF Multi-Strat Index (Net)	-0.07
DJ-UBS Cmdty Index (TR)	-0.02
BofA ML 3 Mo US T-Bill Index	-0.12
Consumer Price Index	0.07

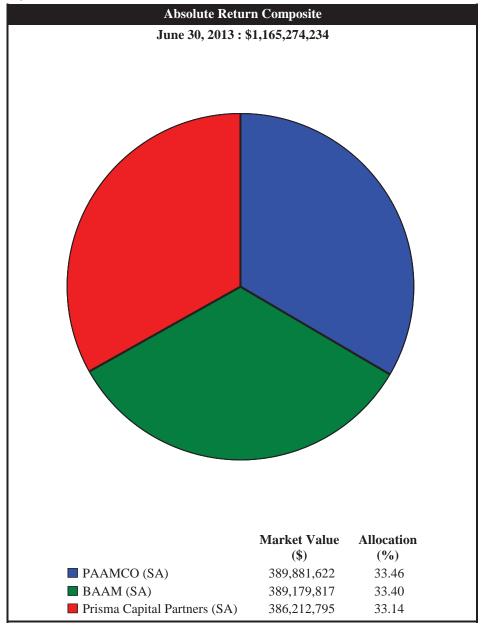
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



Kentucky Retirement Systems - Pension Plan Real Return Composite and Absolute Return Composite Asset Allocation by Manager

As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding.



Kentucky Retirement Systems - Insurance Plan Asset Allocation & Performance As of June 30, 2013

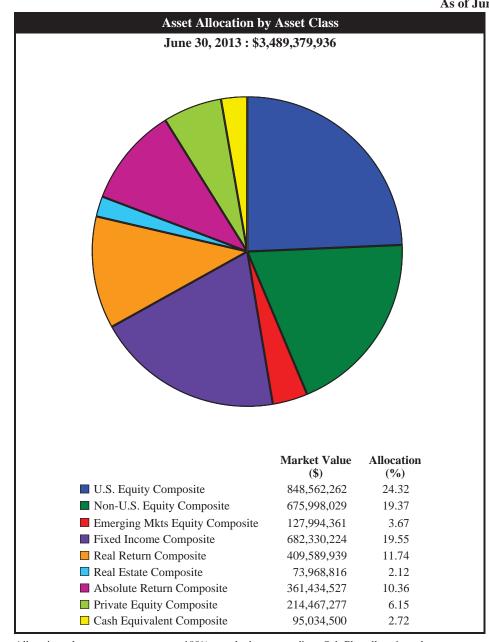
	Allocatio	n	Performance (%)
	Market Value (\$)	%	FYTD
Total Fund	3,489,379,936	100.00	10.31
Global Equity Composite	1,652,554,652	47.36	17.88
U.S. Equity Composite	848,562,262	24.32	21.47
River Road Asset Management (SA)	12,780,970	0.37	21.99
Westwood Management (SA)	39,779,252	1.14	28.87
Westfield Capital (SA)	43,316,511	1.24	26.80
Internal S&P 500 Index (SA)	511,836,732	14.67	20.54
Sasco Capital Inc. (SA)	14,998,926	0.43	17.86
Systematic Financial Management (SA)	63,334,835	1.82	23.87
Geneva Capital Management (SA)	72,002,045	2.06	14.77
NT Structured Small Cap (SA)	90,512,978	2.59	25.70
KRS Insurance Liquidation	13	0.00	N/A
Non-U.S. Equity Composite	675,998,029	19.37	16.25
The Boston Co. Non-US Value (SA)	212,589,296	6.09	18.82
BTC ACWI Ex US Fund (CF)	253,140,830	7.25	13.08
Pyramis Int'l Growth Fund (SA)	210,014,489	6.02	16.72
Artio Int'l Equity II (SA)	12,627	0.00	N/A
KRS Insurance Transition	240,787	0.01	N/A
Emerging Mkts Equity Composite	127,994,361	3.67	5.57
Aberdeen Emg Mkts Equity (CF)	47,196,460	1.35	6.48
Wellington Emg Mkts Equity (CF)	44,639,650	1.28	4.35
BTC Emg Mkts Equity (CF)	36,158,251	1.04	N/A
Fixed Income Composite	682,330,224	19.55	2.86
NISA Core Agg Fixed Income (SA)	188,066,614	5.39	-0.63
PIMCO Core Fixed Income (SA)	252,893,307	7.25	-0.06
Columbia HY Fixed Income (SA)	50,697,701	1.45	9.47
Loomis Sayles HY Fixed Income (SA)	51,914,465	1.49	12.15

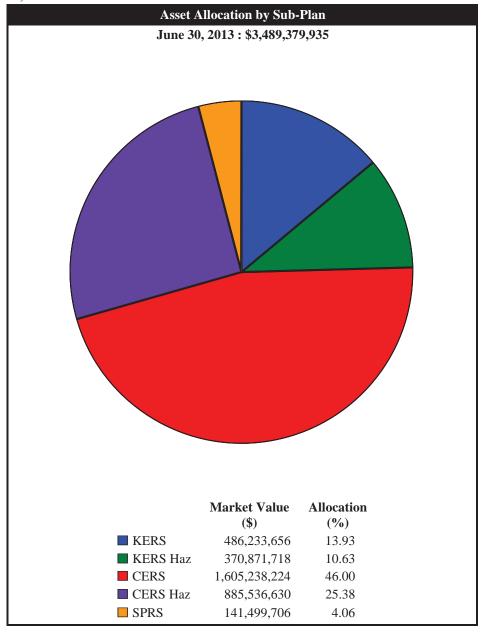
	Allocation	n	Performance (%
	Market Value (\$)	%	FYTD
Fixed Income Composite (Cont.)			
Manulife Asset Mgmt (SA)	33,017,003	0.95	5.74
Waterfall (SA)	40,294,390	1.15	18.57
Shenkman Capital (SA)	34,719,649	1.00	7.20
Stone Harbor (SA)	30,727,095	0.88	0.09
Commerce Street Income Partners L.P.	1	0.00	N/A
Real Return Composite	409,589,939	11.74	-1.64
Internal TIPS (SA)	279,461,932	8.01	-4.81
PIMCO:All Asset;Inst (PAAIX)	101,255,515	2.90	5.75
Tenaska Power Fund II (CF)	1,540,481	0.04	-8.51
Tortoise Capital (CF)	18,843,920	0.54	36.10
Amerra Ag Fund II (CF)	8,488,092	0.24	N/A
Real Estate Composite	73,968,816	2.12	10.44
Walton Street Real Estate Fund VI, L.P.	3,308,570	0.09	11.47
Walton Street Real Estate Fund VII, L.P.	1,607,760	0.05	N/A
Prima Mortgage Invest Trust, LLC	4,996,987	0.14	7.43
Mesa West Real Estate Income Fund II L.P.	3,821,729	0.11	40.62
H/2 Credit Partners (CF)	23,770,454	0.68	11.16
Harrison Street Core (CF)	25,933,335	0.74	3.16
Greenfield Acquisition Partners VI, L.P.	10,529,981	0.30	N/A
Absolute Return Composite	361,434,527	10.36	12.20
BAAM (SA)	120,314,192	3.45	12.87
PAAMCO (SA)	120,955,253	3.47	12.87
Prisma Capital Partners (SA)	120,165,082	3.44	11.01
Private Equity Composite	214,467,277	6.15	11.19
Cash Equivalent Composite	95,034,500	2.72	0.49
Cash Equivalents (SA)	95,034,500	2.72	0.49

Performance shown is gross of fees, except where noted. Fiscal year ends June 30th. Allocations shown may not sum up to 100% exactly due to rounding. Real Estate and Private Equity valuations shown are as of the most recent date available.



Kentucky Retirement Systems - Insurance Plan Total Fund Asset Allocation Charts As of June 30, 2013



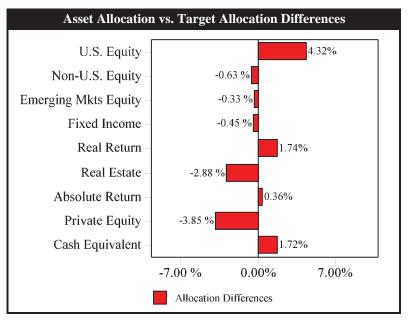


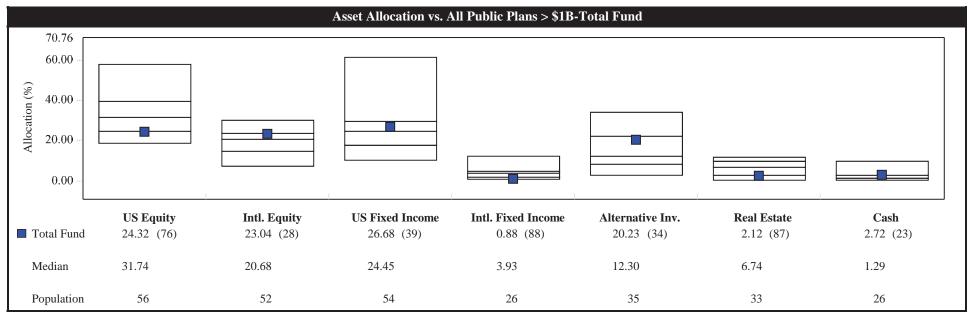
Allocations shown may not sum up to 100% exactly due to rounding. Sub-Plan allocations shown may not sum up to the Total Fund due to accounting differences between the performance and accounting departments of Northern Trust.



Kentucky Retirement Systems - Insurance Plan Total Fund vs. All Public Plans > \$1B-Total Fund Asset Allocation vs. Target and Plan Sponsor Peer Group

A	sset Allocation	vs. Target A	llocation		
	Asset Allocation (\$)	Asset Allocation (%)	Minimum Allocation (%)	Maximum Allocation (%)	Target Allocation (%)
Total Fund	3,489,379,936	100.00	-	-	100.00
U.S. Equity Composite	848,562,262	24.32	15.00	25.00	20.00
Non-U.S. Equity Composite	675,998,029	19.37	15.00	25.00	20.00
Emerging Mkts Equity Composite	127,994,361	3.67	2.00	6.00	4.00
Fixed Income Composite	682,330,224	19.55	17.50	22.50	20.00
Real Return Composite	409,589,939	11.74	7.00	13.00	10.00
Real Estate Composite	73,968,816	2.12	2.00	8.00	5.00
Absolute Return Composite	361,434,527	10.36	7.00	13.00	10.00
Private Equity Composite	214,467,277	6.15	5.00	15.00	10.00
Cash Equivalent Composite	95,034,500	2.72	0.00	3.00	1.00

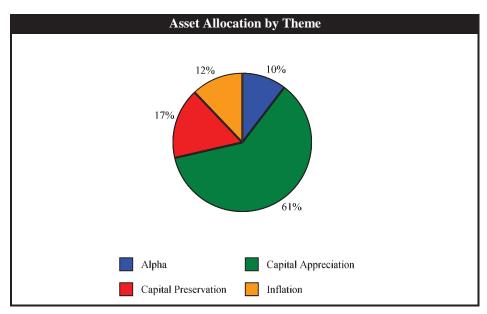


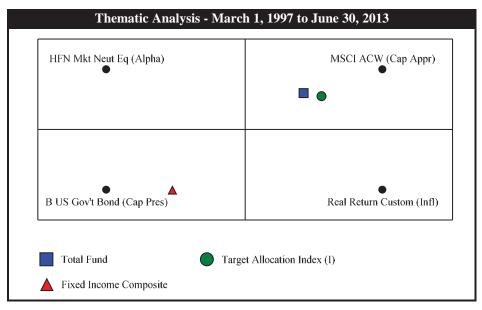


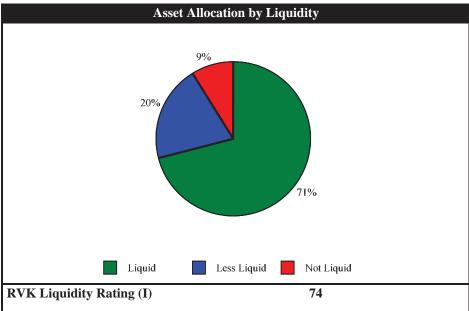
Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Dedicated TIPS are included in U.S. Fixed Income when compared to other public plans. Intl. Fixed Income does not reflect the underlying holdings within non-dedicated Intl. Fixed Income funds.



Kentucky Retirement Systems - Insurance Plan Total Fund Thematic and Liquidity Analysis As of June 30, 2013







		Correlation Mat	trix - 10 Years								
A	1.00										
В	0.63	1.00									
C	-0.27	-0.24	1.00								
D	0.59	0.85	0.00	1.00							
A	=	HFN Mkt Neut Eq Index (
В	B = MSCI ACW Index (Capital Appreciation)										
С	=	Barclays US Gov't Bond I	Barclays US Gov't Bond Index (Capital Preservation)								
D	=	Real Return Custom Index	Real Return Custom Index (Inflation)								

Asset Allocation by Theme is based on dedicated manager allocations; as such, thematic allocations are approximations. The RVK Liquidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class liquidity rating. Please see the Glossary for additional information regarding liquidity, thematic, and custom index descriptions.



Kentucky Retirement Systems - Insurance Plan Comparative Performance

As of June 30, 2013

OTD	CVTD	EVTD	1	3	5	10	2012	2011	2010	Since	Inception
UID	CYID	FYID	Year	Years	Years	Years	2012	2011	2010	Incep.	Date
-0.78	3.22	10.31	10.31	10.22	3.49	6.73	12.17	-1.94	13.26	7.63	04/01/1987
0.89	4.54	11.06	11.06	12.31	4.24	6.92	13.18	-0.45	13.25	7.82	
-1.67	-1.32	-0.75	-0.75	-2.09	-0.75	-0.19	-1.01	-1.49	0.01	-0.19	
-0.01	4.93	12.38	12.38	11.63	5.25	7.45		0.75	13.23	8.49	
84	78	80	80	83	94	82	78	98	50	100	
-0.11	6.72	17.88	17.88	11.65	3.52	7.03	16.81	-8.56	14.09	8.57	07/01/1992
-0.83	5.45	16.41	16.41	12.77	3.12	6.64	17.16	-6.67	14.01	8.32	
0.72	1.27	1.47	1.47	-1.12	0.40	0.39	-0.35	-1.89	0.08	0.25	
2.33	13.82	21.47	21.47	17.96	7.11	7.64	15.86	0.43	16.32	9.03	07/01/1992
2.69	14.06	21.47	21.47	18.42	7.17	7.66	16.42	0.97	16.38	N/A	
-0.36	-0.24	0.00	0.00	-0.46	-0.06	-0.02	-0.56	-0.54	-0.06	N/A	
-1.48	1.97	16.25	16.25	5.46	-0.30	8.09	16.09	-17.36	11.39	1.84	04/01/2000
-2.90	0.27	14.14	14.14	8.58	-0.56	7.85	17.39	-12.90	10.60	1.28	
1.42	1.70	2.11	2.11	-3.12	0.26	0.24	-1.30	-4.46	0.79	0.56	
-8.06	-8.36	5.57	5.57	N/A	N/A	N/A	23.97	N/A	N/A	-1.45	07/01/2011
-7.95	-9.40	3.23	3.23	3.72	-0.11	14.02	18.64	-18.17	19.20	-6.69	
-0.11	1.04	2.34	2.34	N/A	N/A	N/A	5.33	N/A	N/A	5.24	
-2.66	-2.02	2.86	2.86	5.86	5.25	5.67	10.01	7.99	6.40	6.98	07/01/1992
-2.37	-2.29	0.24	0.24	4.92	4.58	5.27	5.53	10.00	6.31	6.75	
-0.29	0.27	2.62	2.62	0.94	0.67	0.40	4.48	-2.01	0.09	0.23	
-5.95	-5.39	-1.64	-1.64	N/A	N/A	N/A	9.02	N/A	N/A	4.92	07/01/2011
1.06	3.21	4.81	4.81	5.39	4.35	5.50	4.79	6.05	4.54	4.76	
-7.01	-8.60	-6.45	-6.45	N/A	N/A	N/A	4.23	N/A	N/A	0.16	
2.63	5.44	10.44	10.44	14.74	N/A	N/A	10.23	14.85	18.36	9.22	05/01/2009
3.91	6.69	12.22	12.22	13.54	2.46	8.43	10.94	15.26	5.83	5.02	
-1.28	-1.25	-1.78	-1.78	1.20	N/A	N/A	-0.71	-0.41	12.53	4.20	
3.20	7.46	12.20	12.20	6.35	N/A	N/A	7.16	3.81	N/A	4.85	04/01/2010
2.46	6.02	8.21	8.21	3.23	-0.29	3.74	3.13	-2.46	4.07	3.00	
0.74	1.44	3.99	3.99	3.12	N/A	N/A	4.03	6.27	N/A	1.85	
	0.89 -1.67 -0.01 84 -0.11 -0.83 0.72 2.33 2.69 -0.36 -1.48 -2.90 1.42 -8.06 -7.95 -0.11 -2.66 -2.37 -0.29 -5.95 1.06 -7.01 2.63 3.91 -1.28 3.20 2.46	-0.78 3.22 0.89 4.54 -1.67 -1.32 -0.01 4.93 84 78 -0.11 6.72 -0.83 5.45 0.72 1.27 2.33 13.82 2.69 14.06 -0.36 -0.24 -1.48 1.97 -2.90 0.27 1.42 1.70 -8.06 -8.36 -7.95 -9.40 -0.11 1.04 -2.66 -2.02 -2.37 -2.29 -0.29 0.27 -5.95 -5.39 1.06 3.21 -7.01 -8.60 2.63 5.44 3.91 6.69 -1.28 -1.25 3.20 7.46 2.46 6.02	-0.78 3.22 10.31 0.89 4.54 11.06 -1.67 -1.32 -0.75 -0.01 4.93 12.38 84 78 80 -0.11 6.72 17.88 -0.83 5.45 16.41 0.72 1.27 1.47 2.33 13.82 21.47 2.69 14.06 21.47 -0.36 -0.24 0.00 -1.48 1.97 16.25 -2.90 0.27 14.14 1.42 1.70 2.11 -8.06 -8.36 5.57 -7.95 -9.40 3.23 -0.11 1.04 2.34 -2.66 -2.02 2.86 -2.37 -2.29 0.24 -0.29 0.27 2.62 -5.95 -5.39 -1.64 1.06 3.21 4.81 -7.01 -8.60 -6.45 2.63 5.44	QTD CYTD FYTD Year -0.78 3.22 10.31 10.31 0.89 4.54 11.06 11.06 -1.67 -1.32 -0.75 -0.75 -0.01 4.93 12.38 12.38 84 78 80 80 -0.11 6.72 17.88 17.88 -0.83 5.45 16.41 16.41 0.72 1.27 1.47 1.47 2.69 14.06 21.47 21.47 2.69 14.06 21.47 21.47 -0.36 -0.24 0.00 0.00 -1.48 1.97 16.25 16.25 -2.90 0.27 14.14 14.14 1.42 1.70 2.11 2.11 -8.06 -8.36 5.57 5.57 -7.95 -9.40 3.23 3.23 -0.11 1.04 2.34 2.34 -2.66 -2.02 2.86 2	QTD CYTD FYTD Year Years -0.78 3.22 10.31 10.31 10.22 0.89 4.54 11.06 11.06 12.31 -1.67 -1.32 -0.75 -0.75 -2.09 -0.01 4.93 12.38 12.38 11.63 84 78 80 80 83 -0.11 6.72 17.88 17.88 11.65 -0.83 5.45 16.41 16.41 12.77 0.72 1.27 1.47 1.47 1.12 2.33 13.82 21.47 21.47 17.96 2.69 14.06 21.47 21.47 18.42 -0.36 -0.24 0.00 0.00 -0.46 -1.48 1.97 16.25 16.25 5.46 -2.90 0.27 14.14 14.14 8.58 1.42 1.70 2.11 2.11 -3.12 -8.06 -8.36 5.57	Q1D CY1D FY1D Year Years Years -0.78 3.22 10.31 10.31 10.22 3.49 0.89 4.54 11.06 11.06 12.31 4.24 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.01 4.93 12.38 12.38 11.63 5.25 84 78 80 80 83 94 -0.11 6.72 17.88 17.88 11.65 3.52 -0.83 5.45 16.41 16.41 12.77 3.12 0.72 1.27 1.47 1.47 -1.12 0.40 2.33 13.82 21.47 21.47 17.96 7.11 2.69 14.06 21.47 21.47 18.42 7.17 -0.36 -0.24 0.00 0.00 -0.46 -0.06 -1.48 1.97 16.25 16.25 5.46 -0.30 -2.90 0.27 </td <td>Q1D CY1D FY1D Year Years Years Years -0.78 3.22 10.31 10.31 10.22 3.49 6.73 0.89 4.54 11.06 11.06 12.31 4.24 6.92 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -0.01 4.93 12.38 12.38 11.63 5.25 7.45 84 78 80 80 83 94 82 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 0.72 1.27 1.47 1.47 -1.12 0.40 0.39 2.33 13.82 21.47 21.47 17.96 7.11 7.64 2.69 14.06 21.47 21.47 18.42 7.17 7.66 -0.36 -0.24 0.00 0.00 -0.46<!--</td--><td>QTD CYTD FYTD Year Years Years Years Years 2012 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -0.01 4.93 12.38 11.63 5.25 7.45 13.49 84 78 80 80 83 94 82 78 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 0.72 1.27 1.47 1.47 -1.12 0.40 0.39 -0.35 2.33 13.82 21.47 21.47 17.96 7.11 7.64 15.86 2.69 14.06 21.</td><td>Q1D CY1D FY1D Year Years Years Years Years Years 2012 2011 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 -1.94 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -0.45 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -1.49 -0.01 4.93 12.38 12.38 11.63 5.25 7.45 13.49 0.75 84 78 80 80 83 94 82 78 98 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -8.56 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 -6.67 0.72 1.27 1.47 1.47 17.96 7.11 7.64 15.86 0.43 2</td><td> O. O. O. O. O. O. O. O.</td><td> OTB</td></td>	Q1D CY1D FY1D Year Years Years Years -0.78 3.22 10.31 10.31 10.22 3.49 6.73 0.89 4.54 11.06 11.06 12.31 4.24 6.92 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -0.01 4.93 12.38 12.38 11.63 5.25 7.45 84 78 80 80 83 94 82 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 0.72 1.27 1.47 1.47 -1.12 0.40 0.39 2.33 13.82 21.47 21.47 17.96 7.11 7.64 2.69 14.06 21.47 21.47 18.42 7.17 7.66 -0.36 -0.24 0.00 0.00 -0.46 </td <td>QTD CYTD FYTD Year Years Years Years Years 2012 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -0.01 4.93 12.38 11.63 5.25 7.45 13.49 84 78 80 80 83 94 82 78 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 0.72 1.27 1.47 1.47 -1.12 0.40 0.39 -0.35 2.33 13.82 21.47 21.47 17.96 7.11 7.64 15.86 2.69 14.06 21.</td> <td>Q1D CY1D FY1D Year Years Years Years Years Years 2012 2011 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 -1.94 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -0.45 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -1.49 -0.01 4.93 12.38 12.38 11.63 5.25 7.45 13.49 0.75 84 78 80 80 83 94 82 78 98 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -8.56 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 -6.67 0.72 1.27 1.47 1.47 17.96 7.11 7.64 15.86 0.43 2</td> <td> O. O. O. O. O. O. O. O.</td> <td> OTB</td>	QTD CYTD FYTD Year Years Years Years Years 2012 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -0.01 4.93 12.38 11.63 5.25 7.45 13.49 84 78 80 80 83 94 82 78 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 0.72 1.27 1.47 1.47 -1.12 0.40 0.39 -0.35 2.33 13.82 21.47 21.47 17.96 7.11 7.64 15.86 2.69 14.06 21.	Q1D CY1D FY1D Year Years Years Years Years Years 2012 2011 -0.78 3.22 10.31 10.31 10.22 3.49 6.73 12.17 -1.94 0.89 4.54 11.06 11.06 12.31 4.24 6.92 13.18 -0.45 -1.67 -1.32 -0.75 -0.75 -2.09 -0.75 -0.19 -1.01 -1.49 -0.01 4.93 12.38 12.38 11.63 5.25 7.45 13.49 0.75 84 78 80 80 83 94 82 78 98 -0.11 6.72 17.88 17.88 11.65 3.52 7.03 16.81 -8.56 -0.83 5.45 16.41 16.41 12.77 3.12 6.64 17.16 -6.67 0.72 1.27 1.47 1.47 17.96 7.11 7.64 15.86 0.43 2	O. O. O. O. O. O. O. O.	OTB

Performance shown is gross of fees, except where noted. All data reported for Kentucky Retirement Systems, including manager and composite performance, is provided by Nothern Trust. Fiscal year ends June 30th. An index marked with an asterisk (*) represents the current benchmark. See the Addendum for the complete historical composition of the custom index.



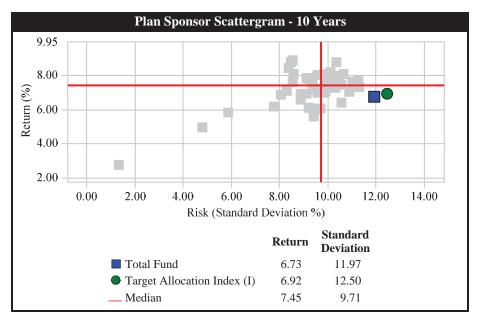
Kentucky Retirement Systems - Insurance Plan Comparative Performance

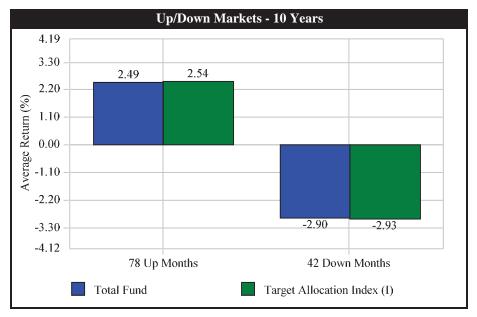
As of June 30, 2013

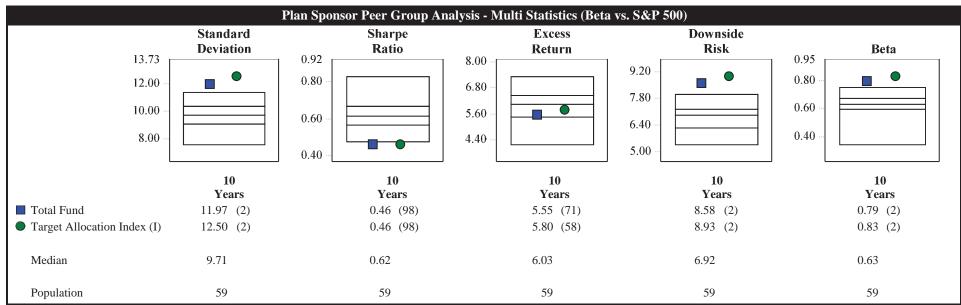
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2012	2011	2010	Since Incep.	Inception Date
Private Equity Composite	2.98	7.53	11.19	11.19	13.96	6.63	9.25	12.43	11.64	17.83	7.33	06/01/2001
R 3000 Index + 4% (Qtr Lag) (I)*	12.17	13.56	19.15	19.15	19.47	9.45	8.70	35.41	-8.41	16.32	6.01	
Difference	-9.19	-6.03	-7.96	-7.96	-5.51	-2.82	0.55	-22.98	20.05	1.51	1.32	
Cash Equivalent Composite	0.06	0.13	0.49	0.49	0.32	0.40	2.10	0.47	0.26	0.25	3.23	07/01/1992
Citi 3 Mo T-Bill Index	0.01	0.03	0.07	0.07	0.09	0.23	1.63	0.07	0.08	0.13	3.02	
Difference	0.05	0.10	0.42	0.42	0.23	0.17	0.47	0.40	0.18	0.12	0.21	



Kentucky Retirement Systems - Insurance Plan Total Fund vs. All Public Plans > \$1B-Total Fund As of June 30, 2013



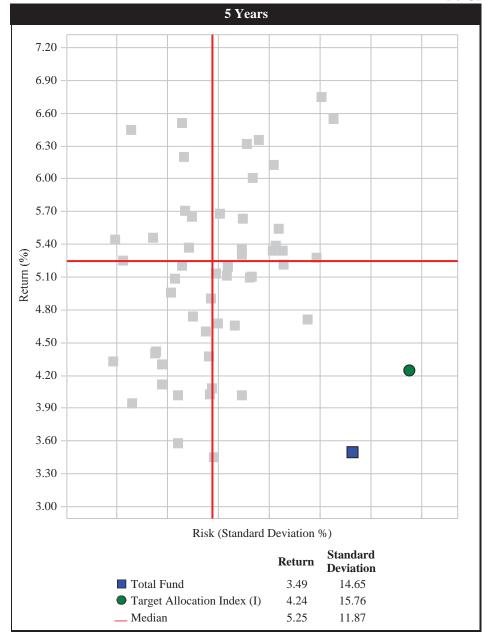


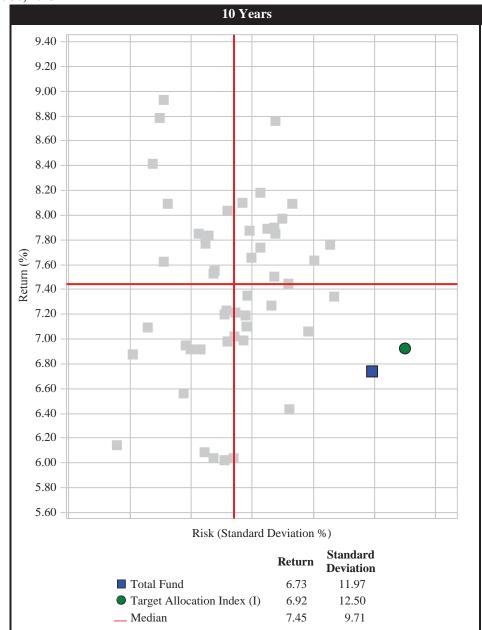


Performance shown is gross of fees. Calculation is based on monthly periodicity. Parentheses contain percentile ranks.



Kentucky Retirement Systems - Insurance Plan Total Fund vs. All Public Plans > \$1B-Total Fund Plan Sponsor Peer Group Scattergram As of June 30, 2013





Performance shown is gross of fees. Calculation is based on monthly periodicity.

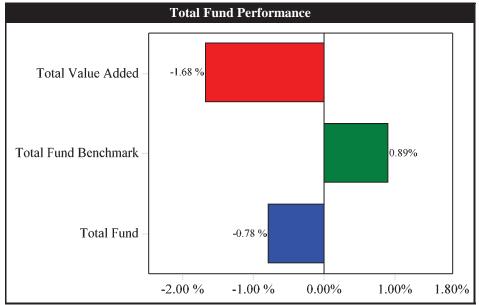


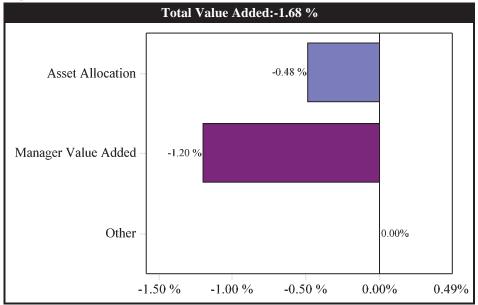
Kentucky Retirement Systems - Insurance Plan

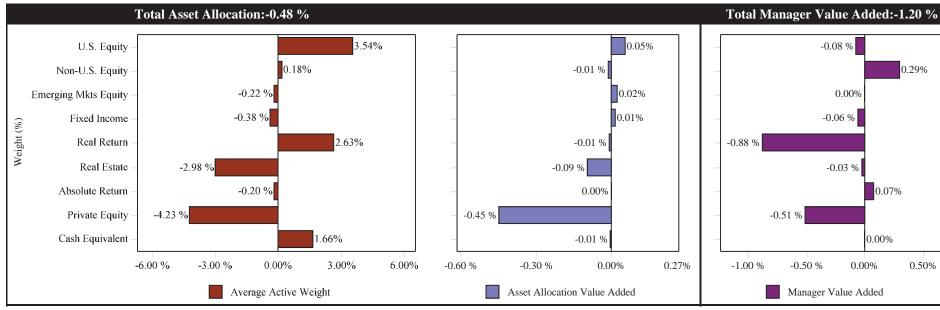
Total Fund vs. Target Allocation Index (I)

Total Fund Attribution

Quarter To Date Ending June 30, 2013







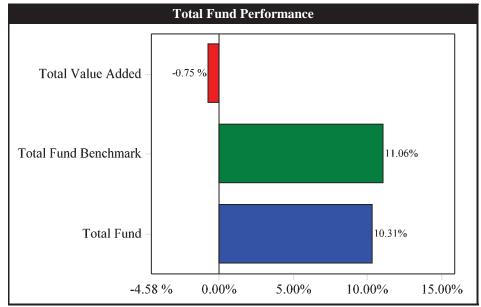
Performance shown is gross of fees, except where noted. Calculation is based on monthly periodicity. Allocation to "Other" is the contribution of other residual factors, including market timing and cash flows. Please see the Glossary for additional information regarding the Total Fund Attribution calculation.

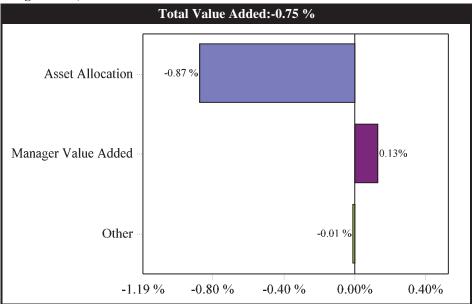


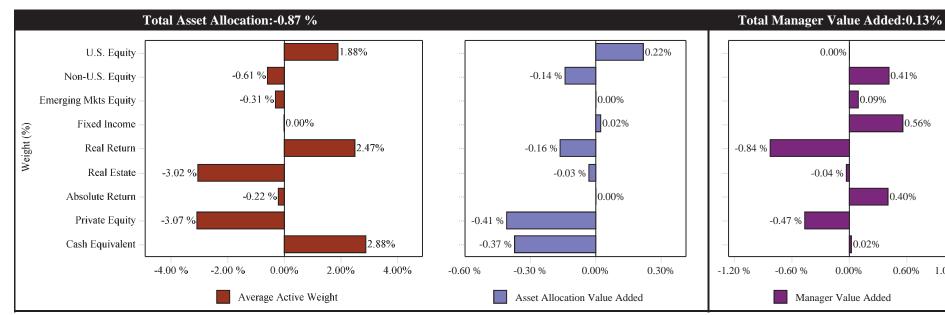
Total Fund vs. Target Allocation Index (I)

Total Fund Attribution

Fiscal Year To Date Ending June 30, 2013





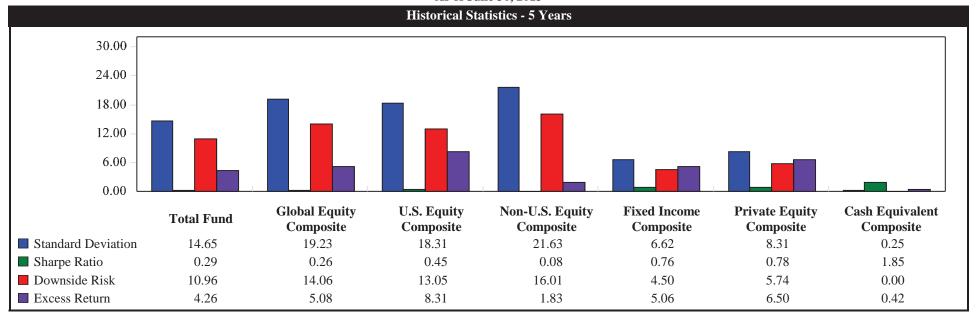


Performance shown is gross of fees, except where noted. Calculation is based on monthly periodicity. Allocation to "Other" is the contribution of other residual factors, including market timing and cash flows. Please see the Glossary for additional information regarding the Total Fund Attribution calculation.



1.03%

Kentucky Retirement Systems - Insurance Plan Historical Stats & Correlation Analysis As of June 30, 2013

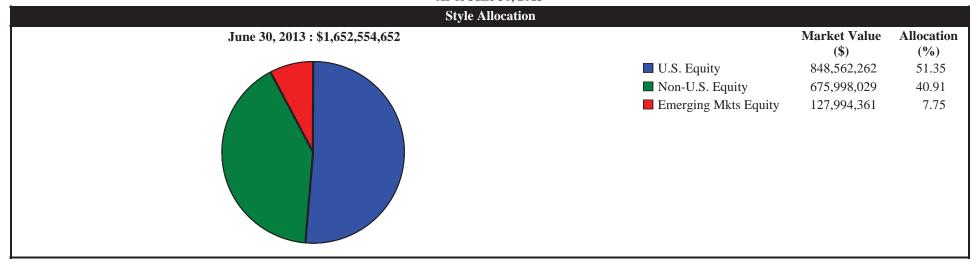


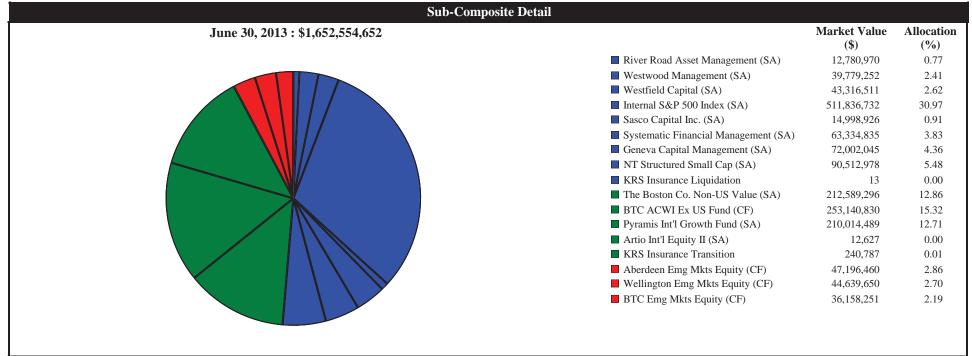
	Correlation Matrix - 5 Years										
	Total Fund	Global Equity Composite	U.S. Equity Composite	Non-U.S. Equity Composite	Fixed Income Composite	Private Equity Composite	Cash Equivalent Composite				
Total Fund	1.00										
Global Equity Composite	0.97	1.00									
U.S. Equity Composite	0.96	0.98	1.00								
Non-U.S. Equity Composite	0.95	0.97	0.91	1.00							
Fixed Income Composite	0.52	0.46	0.40	0.50	1.00						
Private Equity Composite	0.61	0.50	0.55	0.43	0.32	1.00					
Cash Equivalent Composite	0.04	0.01	0.02	-0.03	0.22	-0.12	1.00				

Performance shown is gross of fees, except where noted. Calculation is based on quarterly periodicity. Excluded composites do not have five years of performance history.



Kentucky Retirement Systems - Insurance Plan Global Equity Composite Asset Allocation Charts As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding.



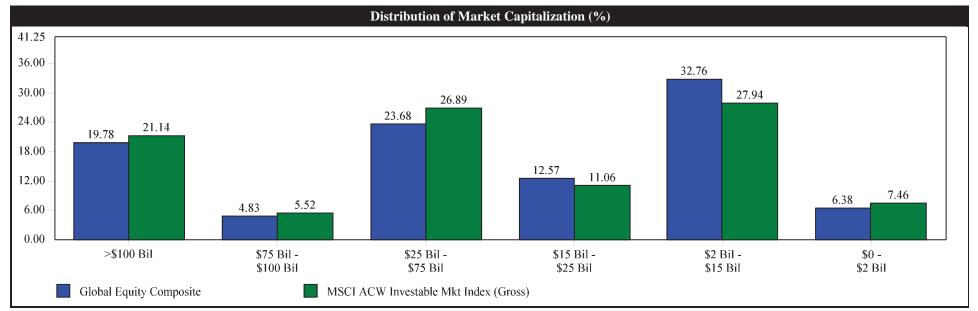
Global Equity Composite vs. MSCI ACW Investable Mkt Index (Gross)

Portfolio Characteristics

As of June 30, 2013

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	0.95	1.04	-0.09	-9.82
Exxon Mobil Corp	0.89	1.13	-0.24	0.96
Microsoft Corp	0.65	0.77	-0.12	21.59
Toyota Motor Corp	0.64	0.47	0.17	16.84
Google Inc	0.62	0.66	-0.04	10.85
Johnson & Johnson	0.59	0.67	-0.08	6.11
Roche Holding AG	0.56	0.49	0.07	6.68
Novartis AG	0.56	0.46	0.10	-0.20
HSBC Holdings PLC	0.54	0.54	0.00	-2.24
Taiwan Semiconductor Mfg	0.53	0.25	0.28	9.76
% of Portfolio	6.53	6.48		

	Portfolio Characteristics	
·	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	60,701	65,247
Median Mkt. Cap (\$M)	2,206	1,189
Price/Earnings Ratio	15.63	15.28
Price/Book Ratio	2.29	2.29
5 Yr. EPS Growth Rate (%)	3.76	3.64
Current Yield (%)	2.37	2.59
Beta (5 Years, Monthly)	0.91	1.00
Number of Securities	5,127	8,446



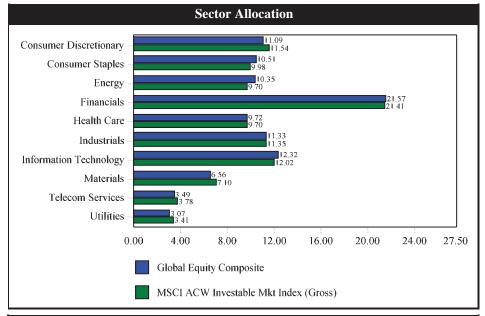
Holdings for the Global Equity Blended Index (I) are unavailable. The MSCI ACW Investable Mkt Index (Gross) is used as a proxy. Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown.

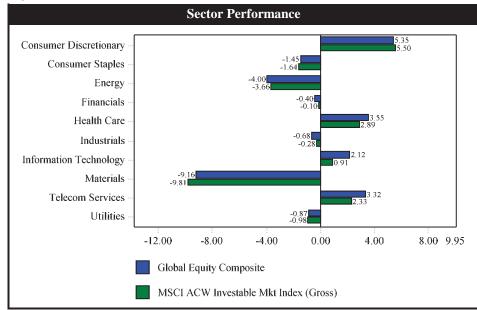


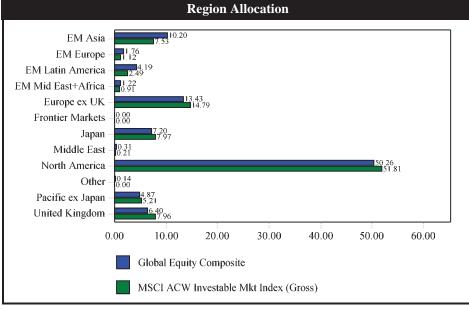
Global Equity Composite vs. MSCI ACW Investable Mkt Index (Gross)

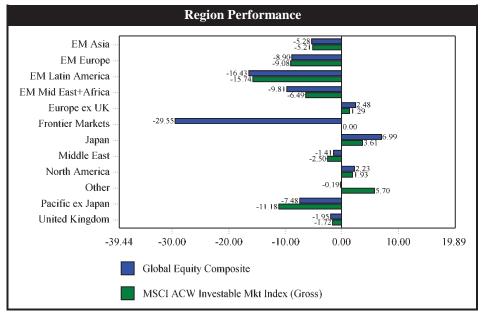
Buy and Hold Sector/Region Attribution Graphs

As of June 30,2013





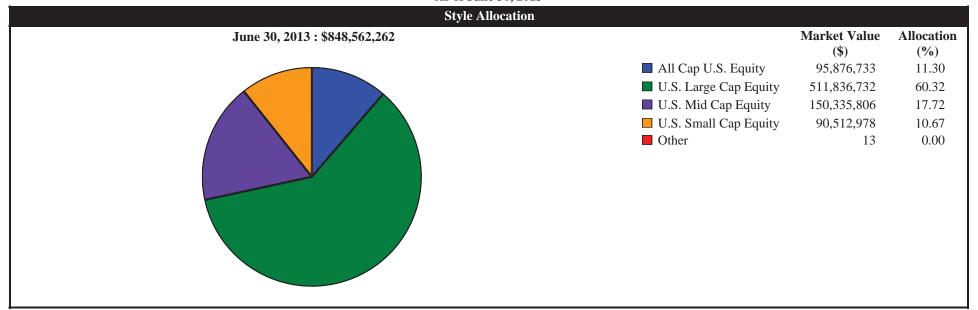


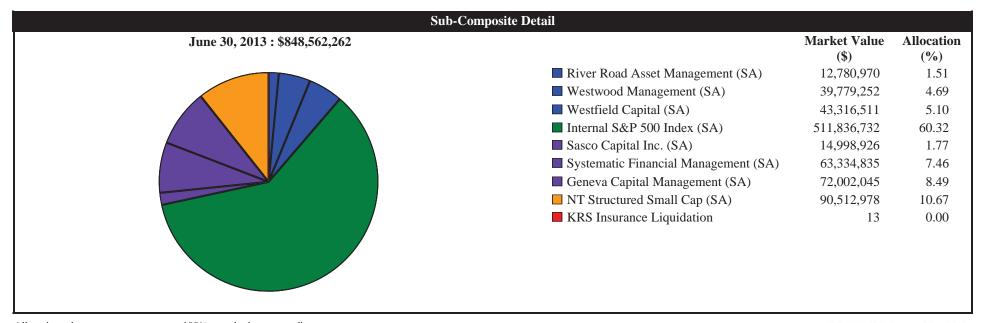


Holdings for the Global Equity Blended Index (I) are unavailable. The MSCI ACW Investable Mkt Index (Gross) is used as a proxy. Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown. Region allocation to "Other" consists of holdings domiciled in regions that do not meet economic development, size, liquidity, or market accessibility criteria as defined by MSCI.



U.S. Equity Composite Asset Allocation Charts As of June 30, 2013





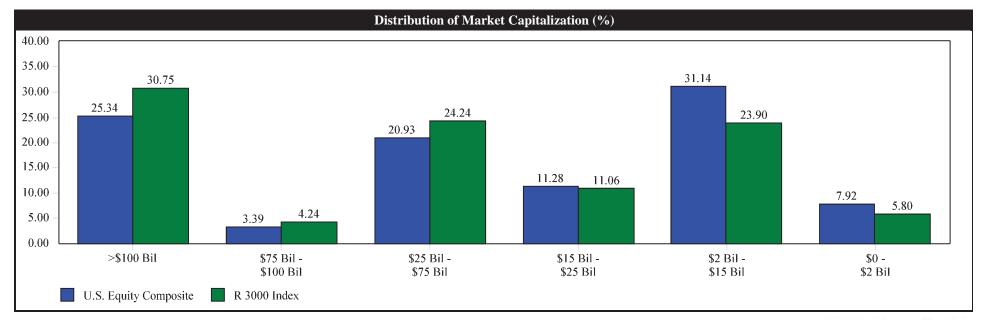
Allocations shown may not sum up to 100% exactly due to rounding.



Kentucky Retirement Systems - Insurance Plan U.S. Equity Composite vs. R 3000 Index Portfolio Characteristics

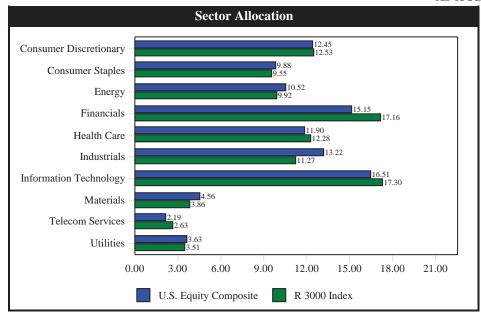
	Top Ten Equ	uity Holdings		
	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Apple Inc	1.83	2.10	-0.27	-9.82
Exxon Mobil Corp	1.72	2.39	-0.67	0.96
Microsoft Corp	1.26	1.47	-0.21	21.59
Google Inc	1.20	1.29	-0.09	10.85
Johnson & Johnson	1.15	1.33	-0.18	6.11
General Electric Co	1.03	1.39	-0.36	1.12
Wells Fargo & Co	1.01	1.14	-0.13	12.44
Chevron Corp	1.01	1.32	-0.31	0.41
JPMorgan Chase & Co	1.01	1.14	-0.13	11.94
Procter & Gamble Co (The)	0.92	1.19	-0.27	0.69
% of Portfolio	12.14	14.76		

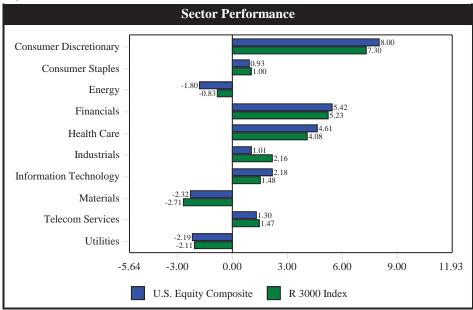
	Portfolio Characteristics	
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	72,952	87,083
Median Mkt. Cap (\$M)	646	1,224
Price/Earnings Ratio	17.25	16.90
Price/Book Ratio	2.58	2.57
5 Yr. EPS Growth Rate (%)	6.78	6.08
Current Yield (%)	1.88	2.06
Beta (5 Years, Monthly)	0.96	1.00
Number of Securities	3,046	2,923

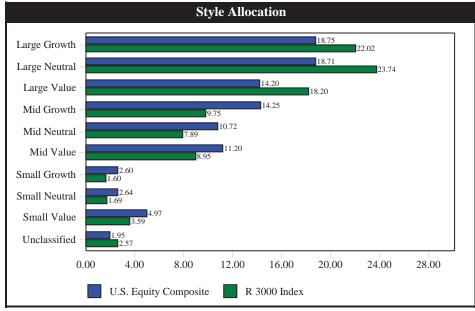


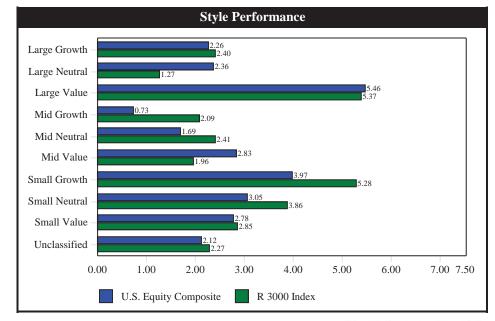


Kentucky Retirement Systems - Insurance Plan U.S. Equity Composite vs. R 3000 Index Buy and Hold Sector/Style Attribution Graphs As of June 30,2013



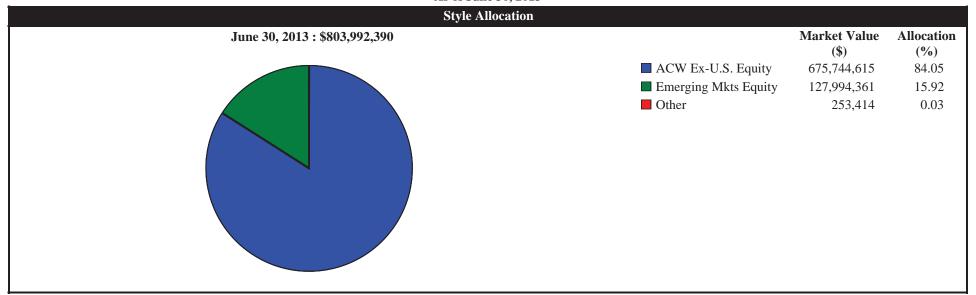


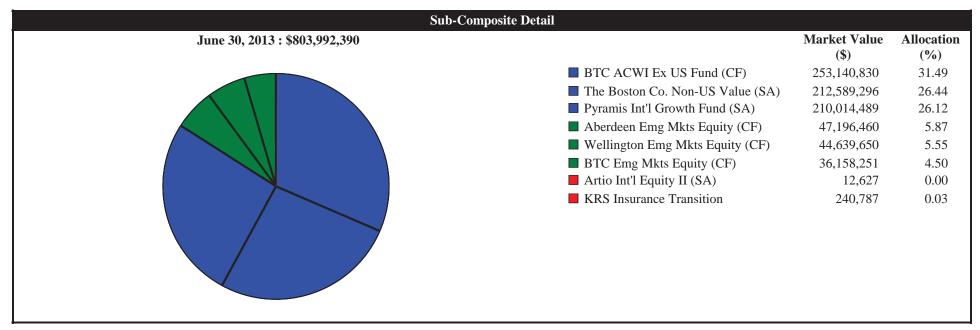






Kentucky Retirement Systems - Insurance Plan Non-U.S. and Emerging Markets Equity Composite Asset Allocation Charts As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding. KRS Insurance Transition is currently comprised of currency and non-dollar denominated recoverable taxes.



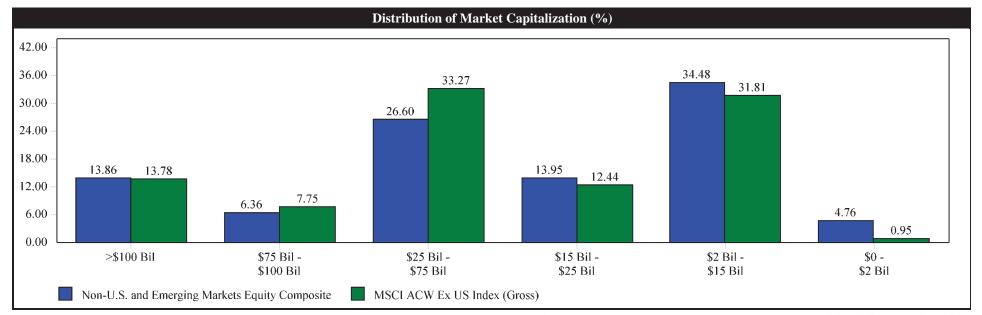
Non-U.S. and Emerging Markets Equity Composite vs. MSCI ACW Ex US Index (Gross)

Portfolio Characteristics

As of June 30, 2013

	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
Toyota Motor Corp	1.32	1.04	0.28	16.84
Roche Holding AG	1.16	1.09	0.07	6.68
Novartis AG	1.15	1.02	0.13	-0.20
HSBC Holdings PLC	1.11	1.20	-0.09	-2.24
Taiwan Semiconductor Mfg	1.10	0.57	0.53	9.76
Samsung Electronics Co Ltd	0.98	0.81	0.17	-14.86
China Mobile Ltd	0.94	0.39	0.55	0.80
Total SA	0.93	0.65	0.28	3.52
Sanofi	0.85	0.77	0.08	5.28
Mitsubishi UFJ Financial Group	0.82	0.49	0.33	3.97
% of Portfolio	10.36	8.03		

Po	ortfolio Characteristics	
	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap (\$M)	47,683	50,895
Median Mkt. Cap (\$M)	5,980	6,371
Price/Earnings Ratio	14.05	13.93
Price/Book Ratio	1.98	2.01
5 Yr. EPS Growth Rate (%)	-0.26	0.30
Current Yield (%)	2.89	3.16
Beta (5 Years, Monthly)	0.92	1.00
Number of Securities	2,084	1,823



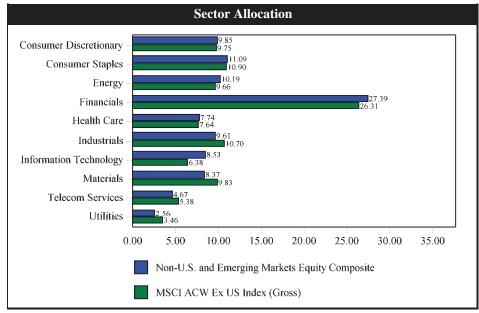
Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown. Beta calculation shown based on Developed Non-U.S. Composite returns.

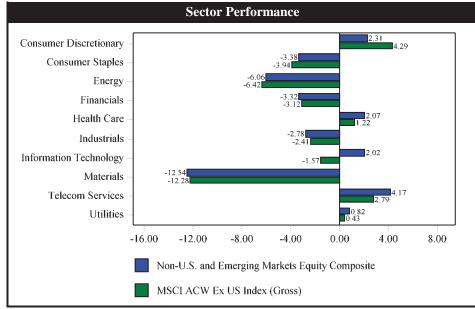


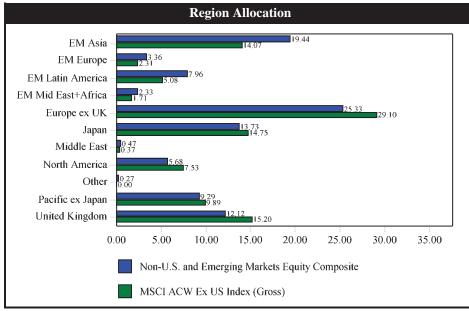
Non-U.S. and Emerging Markets Equity Composite vs. MSCI ACW Ex US Index (Gross)

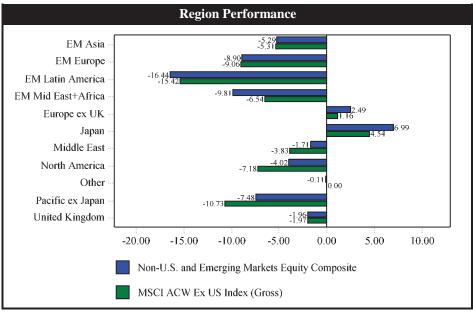
Buy and Hold Sector/Region Attribution Graphs

As of June 30,2013







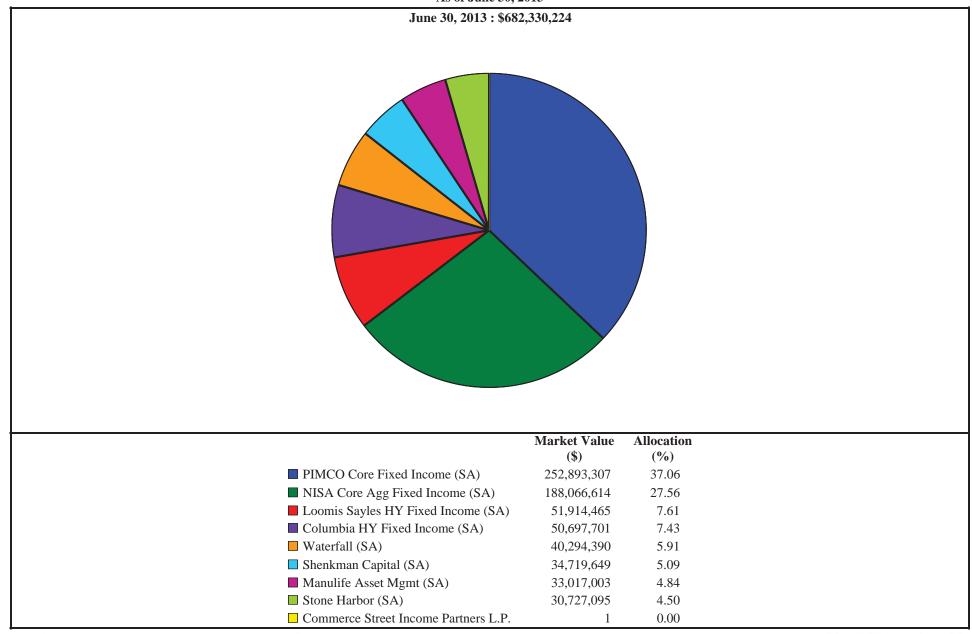


Artio Int'l Equity II (SA) currently has a 100% allocation to cash and is excluded from the holdings shown. Region allocation to "Other" consists of holdings domiciled in regions that do not meet economic development, size, liquidity, or market accessibility criteria as defined by MSCI.



${\bf Kentucky\ Retirement\ Systems\ -\ Insurance\ Plan}$

Fixed Income Composite
Asset Allocation by Manager
As of June 30, 2013



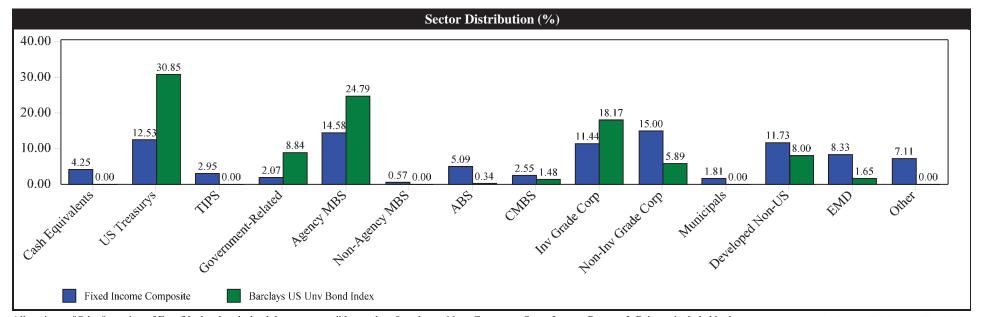
Allocations shown may not sum up to 100% exactly due to rounding.

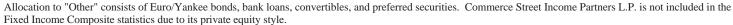


Fixed Income Composite vs. Barclays US Unv Bond Index

Portfolio Characteristics

	Portfolio Characteristics	
	Portfolio	Benchmark
Effective Duration	5.87	5.38
Avg. Maturity	7.89	7.36
Avg. Quality	Baa1	-
Yield To Maturity (%)	4.46	2.81
Coupon Rate (%)	3.92	3.79
Current Yield (%)	3.83	-

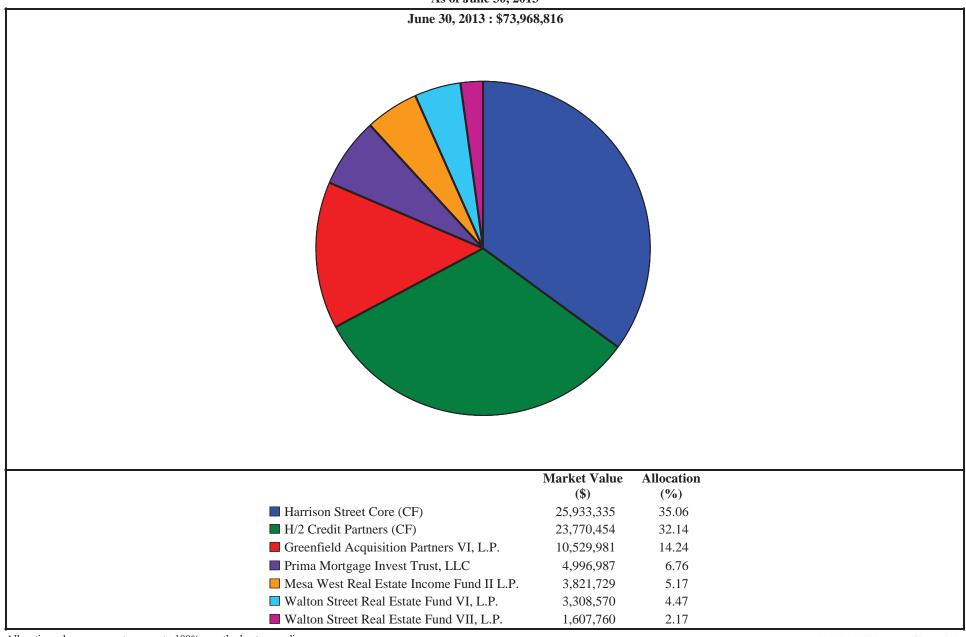






${\bf Kentucky\ Retirement\ Systems\ -\ Insurance\ Plan}$

Real Estate Composite Asset Allocation by Manager As of June 30, 2013

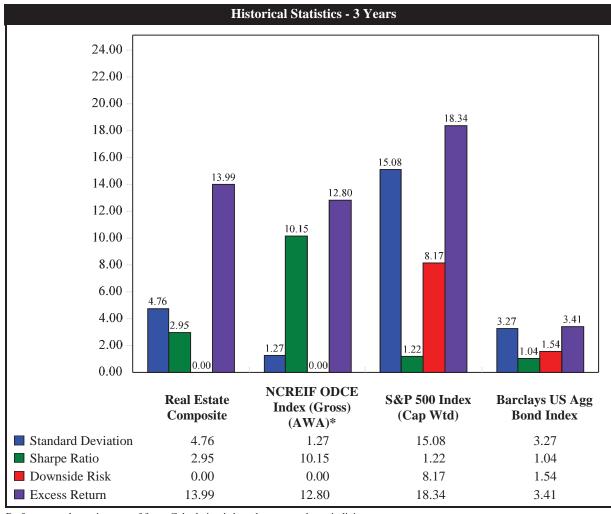


Allocations shown may not sum up to 100% exactly due to rounding.



Kentucky Retirement Systems - Insurance Plan Real Estate Composite As of June 30, 2013

Comparative Performance												
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	10 Years	2012	2011	2010	Since Incep.	Inception Date
Real Estate Composite	2.63	5.44	10.44	10.44	14.74	N/A	N/A	10.23	14.85	18.36	9.22	05/01/2009
NCREIF ODCE Index (Gross) (AWA)*	3.91	6.69	12.22	12.22	13.54	2.46	8.43	10.94	15.26	5.83	5.02	
Difference	-1.28	-1.25	-1.78	-1.78	1.20	N/A	N/A	-0.71	-0.41	12.53	4.20	



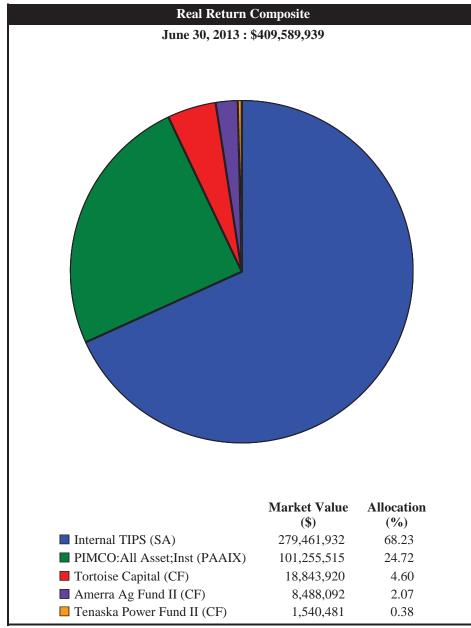
Actual Correlation - 3 Year	S
	Actual
	Correlation
NCREIF ODCE Index (Gross) (AWA)*	0.24
S&P 500 Index (Cap Wtd)	-0.27
R 2000 Index	-0.16
MSCI EAFE Index (Gross)	-0.31
MSCI Emg Mkts Index (Gross)	-0.04
Barclays US Agg Bond Index	0.00
Barclays US Trsy: US TIPS Index	-0.03
Wilshire US REIT Index	-0.31
HFN FOF Multi-Strat Index (Net)	-0.16
DJ-UBS Cmdty Index (TR)	-0.06
BofA ML 3 Mo US T-Bill Index	0.27
Consumer Price Index	0.30
Real Estate Composite	1.00

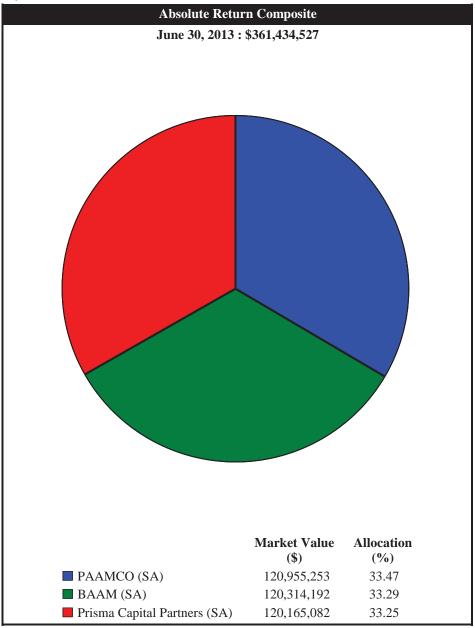
Performance shown is gross of fees. Calculation is based on quarterly periodicity.



Kentucky Retirement Systems - Insurance Plan Real Return Composite and Absolute Return Composite Asset Allocation by Manager

As of June 30, 2013





Allocations shown may not sum up to 100% exactly due to rounding.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
River Road Asset Management (SA)	3.15	17.60	21.98	21.98	N/A	N/A	10.28	N/A	N/A	14.14	07/01/2011
R 3000 Value Index	3.13	15.78	25.28	25.28	18.41	6.83	17.55	-0.10	16.23	13.40	07/01/2011
Difference	0.01	1.82	-3.30	-3.30	N/A	N/A	-7.27	-0.10 N/A	N/A	0.74	
IM U.S. All Cap Value Equity (SA+CF) Median	3.64	15.93	24.65	24.65	18.44	8.16	15.77	-1.02	17.56	12.18	
River Road Asset Management (SA) Rank	58	27	66	66	N/A	N/A	84	-1.02 N/A	N/A	16	
River Road Asset Management (SA) Rank	30	21	00	00	IN/A	IN/A	04	IN/A	IN/A	10	
Westwood Management (SA)	4.09	16.92	28.96	28.96	N/A	N/A	14.79	N/A	N/A	10.98	07/01/2011
R 3000 Value Index	3.14	15.78	25.28	25.28	18.41	6.83	17.55	-0.10	16.23	13.40	
Difference	0.95	1.14	3.68	3.68	N/A	N/A	-2.76	N/A	N/A	-2.42	
IM U.S. All Cap Value Equity (SA+CF) Median	3.64	15.93	24.65	24.65	18.44	8.16	15.77	-1.02	17.56	12.18	
Westwood Management (SA) Rank	37	30	20	20	N/A	N/A	58	N/A	N/A	64	
Westfield Capital (SA)	1.52	13.06	26.82	26.82	N/A	N/A	22.86	N/A	N/A	11.49	07/01/2011
R 3000 Growth Index	2.19	12.23	17.56	17.56	18.78	7.58	15.21	2.18	17.64	11.13	
Difference	-0.67	0.83	9.26	9.26	N/A	N/A	7.65	N/A	N/A	0.36	
IM U.S. All Cap Growth Equity (SA+CF) Median	2.22	12.12	18.86	18.86	18.18	7.43	16.29	-1.44	21.39	9.84	
Westfield Capital (SA) Rank	65	35	11	11	N/A	N/A	4	N/A	N/A	18	
U.S. All Cap Equity Composite	2.79	15.24	27.03	27.03	N/A	N/A	17.72	N/A	N/A	11.62	07/01/2011
R 3000 Index	2.69	14.06	21.47	21.47	18.63	7.25	16.42	1.03	16.93	12.31	
Difference	0.10	1.18	5.56	5.56	N/A	N/A	1.30	N/A	N/A	-0.69	
Internal S&P 500 Index (SA)	2.92	13.81	20.40	20.40	18.85	7.48	15.84	3.20	15.97	4.91	07/01/2001
S&P 500 Index (Cap Wtd)*	2.91	13.82	20.60	20.60	18.74	7.34	16.00	2.37	16.38	4.83	
Difference	0.01	-0.01	-0.20	-0.20	0.11	0.14	-0.16	0.83	-0.41	0.08	
IM U.S. Large Cap Index Equity (SA+CF) Median	2.84	13.88	20.66	20.66	18.54	7.16	16.23	1.56	15.56	4.44	
Internal S&P 500 Index (SA) Rank	35	64	75	75	9	20	81	8	42	27	
INVESCO Struct'd Core Equity (SA)	4.00	15.66	23.82	23.82	19.15	7.29	16.97	2.85	11.17	7.08	08/01/2005
S&P 500 Index (Cap Wtd)	2.91	13.82	20.60	20.60	18.45	7.01	16.00	2.11	15.06	5.60	
Difference	1.09	1.84	3.22	3.22	0.70	0.28	0.97	0.74	-3.89	1.48	
IM U.S. Large Cap Core Equity (SA+CF) Median	2.75	13.72	20.88	20.88	18.38	7.15	15.72	1.87	14.85	6.22	
INVESCO Struct'd Core Equity (SA) Rank	14	19	21	21	30	46	33	39	87	20	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager and composite performance is provided by Northern Trust. Fiscal year ends June 30th. An index marked with an asterisk (*) represents the current benchmark. See the Addendum for the complete historical composition of the custom index. Manager inception dates shown represent the first full month following initial funding.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Sasco Capital Inc. (SA)	-2.09	10.19	17.88	17.88	N/A	N/A	N/A	N/A	N/A	17.88	07/01/2012
R Mid Cap Value Index	1.65	16.10	27.65	27.65	19.53	8.87	18.51	-1.38	24.75	27.65	
Difference	-3.74	-5.91	-9.77	-9.77	N/A	N/A	N/A	N/A	N/A	-9.77	
IM U.S. Mid Cap Value Equity (SA+CF) Median	2.44	15.83	26.67	26.67	19.32	9.35	17.16	-1.06	22.22	26.67	
Sasco Capital Inc. (SA) Rank	100	100	99	99	N/A	N/A	N/A	N/A	N/A	99	
Systematic Financial Management (SA)	-0.01	13.60	23.88	23.88	N/A	N/A	N/A	N/A	N/A	23.88	07/01/2012
R Mid Cap Value Index	1.65	16.10	27.65	27.65	19.53	8.87	18.51	-1.38	24.75	27.65	
Difference	-1.66	-2.50	-3.77	-3.77	N/A	N/A	N/A	N/A	N/A	-3.77	
IM U.S. Mid Cap Value Equity (SA+CF) Median	2.44	15.83	26.67	26.67	19.32	9.35	17.16	-1.06	22.22	26.67	
Systematic Financial Management (SA) Rank	95	79	70	70	N/A	N/A	N/A	N/A	N/A	70	
Geneva Capital Management (SA)	0.25	11.26	14.78	14.78	N/A	N/A	N/A	N/A	N/A	14.78	07/01/2012
R Mid Cap Growth Index	2.87	14.70	22.88	22.88	19.53	7.61	15.81	-1.65	26.38	22.88	
Difference	-2.62	-3.44	-8.10	-8.10	N/A	N/A	N/A	N/A	N/A	-8.10	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	2.58	13.49	20.13	20.13	18.96	7.55	15.06	-1.78	26.68	20.13	
Geneva Capital Management (SA) Rank	93	82	86	86	N/A	N/A	N/A	N/A	N/A	86	
NT Structured Small Cap (SA)	2.95	15.72	25.44	25.44	20.61	10.60	18.71	-1.25	29.64	9.62	10/01/1999
R 2000 Index	3.08	15.86	24.20	24.20	18.67	8.77	16.34	-4.18	26.86	7.61	
Difference	-0.13	-0.14	1.24	1.24	1.94	1.83	2.37	2.93	2.78	2.01	
IM U.S. Small Cap Core Equity (SA+CF) Median	3.99	16.77	26.35	26.35	20.68	9.89	16.53	-1.48	28.30	10.96	
NT Structured Small Cap (SA) Rank	63	66	59	59	52	39	32	49	38	77	
U.S. Cap Weighted Equity Composite	2.38	13.77	20.89	20.89	18.22	7.57	15.65	1.41	17.71	6.01	10/01/1999
R 3000 Index	2.69	14.06	21.47	21.47	18.63	7.25	16.42	1.03	16.93	4.31	
Difference	-0.31	-0.29	-0.58	-0.58	-0.41	0.32	-0.77	0.38	0.78	1.70	
U.S. Equity Composite	2.42	13.93	21.59	21.59	18.22	7.40	15.92	1.04	16.77	11.15	04/01/1984
R 3000 Index (P)*	2.69	14.06	21.47	21.47	18.60	7.45	16.42	0.92	17.50	11.06	
Difference	-0.27	-0.13	0.12	0.12	-0.38	-0.05	-0.50	0.12	-0.73	0.09	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
The Boston Co. Non-US Value (SA)	0.67	4.05	19.12	19.12	6.49	0.47	14.85	-16.01	5.88	3.83	05/01/2005
MSCI ACW Ex US Index (Gross)*	-2.90	0.27	14.14	14.14	8.97	-0.81	17.39	-11.78	9.43	4.38	
Difference	3.57	3.78	4.98	4.98	-2.48	1.28	-2.54	-4.23	-3.55	-0.55	
IM International Value Equity (SA+CF) Median	-0.08	4.60	18.99	18.99	10.54	1.56	18.47	-11.03	11.47	5.99	
The Boston Co. Non-US Value (SA) Rank	35	56	50	50	93	68	81	84	82	92	
BTC ACWI Ex US Fund (CF)	-2.92	0.18	13.92	13.92	8.29	N/A	17.13	-13.43	11.23	8.83	07/01/2009
MSCI ACW Ex US Index (Net)	-3.11	-0.04	13.63	13.63	7.99	-0.80	16.83	-13.71	11.15	8.59	
Difference	0.19	0.22	0.29	0.29	0.30	N/A	0.30	0.28	0.08	0.24	
IM International Core Equity (SA+CF) Median	-0.27	5.11	20.65	20.65	11.92	0.84	19.56	-12.07	11.61	11.34	
BTC ACWI Ex US Fund (CF) Rank	98	97	98	98	97	N/A	78	67	54	94	
Pyramis Int'l Growth Fund (SA)	-0.85	2.76	17.02	17.02	10.60	-0.24	17.56	-11.52	11.85	6.29	08/01/2001
MSCI ACW Ex US Index (Gross)*	-2.90	0.27	14.14	14.14	8.97	-0.81	17.39	-11.78	9.43	5.26	
Difference	2.05	2.49	2.88	2.88	1.63	0.57	0.17	0.26	2.42	1.03	
IM International Growth Equity (SA+CF) Median	-0.63	5.23	18.97	18.97	12.00	1.51	19.98	-12.14	14.54	7.57	
Pyramis Int'l Growth Fund (SA) Rank	53	73	67	67	73	68	72	47	66	72	
NT Int'l Sm Cap Eq Index (SA)	-3.59	2.74	16.95	16.95	8.72	N/A	18.14	-18.79	22.69	17.43	12/01/2008
MSCI ACW Ex US Sm Cap Index (Net)	-4.42	1.83	15.94	15.94	9.16	2.65	18.52	-18.50	25.21	18.34	
Difference	0.83	0.91	1.01	1.01	-0.44	N/A	-0.38	-0.29	-2.52	-0.91	
IM International Small Cap Equity (SA+CF) Median	-0.72	7.78	23.64	23.64	15.07	3.87	23.13	-13.59	23.58	19.33	
NT Int'l Sm Cap Eq Index (SA) Rank	97	92	94	94	100	N/A	87	95	60	72	
Non-U.S. Equity Composite	-1.28	2.36	16.70	16.70	6.39	0.46	16.43	-17.01	12.88	1.82	07/01/2000
MSCI ACW Ex US Index (Gross) (P)*	-2.90	0.27	14.14	14.14	8.67	0.12	17.39	-13.26	12.37	2.42	
Difference	1.62	2.09	2.56	2.56	-2.28	0.34	-0.96	-3.75	0.51	-0.60	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Aberdeen Emg Mkts Equity (CF)	-7.93	-7.46	6.47	6.47	10.11	8.70	26.41	-10.46	29.06	8.35	04/01/2008
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-0.26	
Difference	0.02	1.94	3.24	3.24	6.39	8.81	7.77	7.71	9.86	8.61	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	0.13	
Aberdeen Emg Mkts Equity (CF) Rank	57	52	47	47	11	5	10	7	11	4	
Wellington Emg Mkts Equity (CF)	-8.19	-9.67	4.32	4.32	2.31	-1.07	19.49	-21.63	16.39	-0.64	04/01/2008
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-0.26	
Difference	-0.24	-0.27	1.09	1.09	-1.41	-0.96	0.85	-3.46	-2.81	-0.38	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	0.13	
Wellington Emg Mkts Equity (CF) Rank	65	73	67	67	76	67	61	72	85	62	
BTC Emg Mkts Equity (CF)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2013
MSCI Emg Mkts Index (Net)	-8.08	-9.57	2.87	2.87	3.38	-0.43	18.23	-18.42	18.88	N/A	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	N/A	
BTC Emg Mkts Equity (CF) Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Emerging Mkts Equity Composite	-8.08	-8.41	5.51	5.51	N/A	N/A	23.92	N/A	N/A	-1.51	07/01/2011
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-6.69	
Difference	-0.13	0.99	2.28	2.28	N/A	N/A	5.28	N/A	N/A	5.18	



As 01 June 30, 2013										
QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
-2.38	-2.45	-0.56	-0.56	3.66	N/A	4.47	8.00	6.96	5.39	02/01/2009
-2.32	-2.44	-0.69	-0.69	3.51	5.19	4.21	7.84	6.54	5.15	
-0.06	-0.01	0.13	0.13	0.15	N/A	0.26	0.16	0.42	0.24	
-2.43	-2.33	0.21	0.21	4.22	5.94	5.85	7.84	7.25	6.47	
42	63	83	83	86	N/A	86	37	64	84	
-3.82	-4.42	-0.58	-0.58	3.72	N/A	9.26	4.90	7.06	4.17	11/01/2009
-2.79	-3.43	-0.22	-0.22	3.66	5.28	6.07	7.51	6.54	4.37	
-1.03	-0.99	-0.36	-0.36	0.06	N/A	3.19	-2.61	0.52	-0.20	
-2.43	-2.33	0.21	0.21	4.22	5.94	5.85	7.84	7.25	5.01	
100	100	83	83	81	N/A	5	99	60	93	
-2.76	-3.09	2.00	2.00	4.89	5.19	8.11	5.03	8.04	4.86	
82	64	64	64	72	N/A	46	52	61	56	
-1.36	1.32	9.78	9.78	N/A	N/A	16.43	N/A	N/A	11.03	11/01/2011
-1.44	1.42	9.49	9.49	10.74	10.94	15.81	4.98	15.12	10.42	
0.08	-0.10	0.29	0.29	N/A	N/A	0.62	N/A	N/A	0.61	
-1.15	1.74	9.52	9.52	10.77	10.24	15.40	5.46	15.06	10.36	
68	62	47	47	N/A	N/A	29	N/A	N/A	34	
-2.63	0.72	13.15	13.15	N/A	N/A	24.26	N/A	N/A	13.73	11/01/2011
-1.44	1.42	9.49	9.49	10.74	10.94	15.81	4.98	15.12	10.42	
-1.19	-0.70	3.66	3.66	N/A	N/A	8.45	N/A	N/A	3.31	
-1.15	1.74	9.52	9.52	10.77	10.24	15.40	5.46	15.06	10.36	
99	89	9	9	N/A	N/A	2	N/A	N/A	8	
-2.27	-0.36	5.95	5.95	N/A	N/A	12.13	N/A	N/A	7.43	12/01/2011
-2.73	-4.63	-1.69	-1.69	3.83	3.91	4.84	5.55	5.84	0.44	
0.46	4.27	7.64	7.64	N/A	N/A	7.29	N/A	N/A	6.99	
3.06	6.40	14.43	14.43	15.26	N/A	14.05	10.55	N/A	15.70	02/01/2010
-0.73	1.36	6.49	6.49	6.90	7.61	9.89	3.24	10.12	6.83	
3.79	5.04	7.94	7.94	8.36	N/A	4.16	7.31	N/A	8.87	
	-2.38 -2.32 -0.06 -2.43 42 -3.82 -2.79 -1.03 -2.43 100 -2.76 82 -1.36 -1.44 0.08 -1.15 68 -2.63 -1.44 -1.19 -1.15 99 -2.27 -2.73 0.46 3.06 -0.73	-2.38	-2.38 -2.45 -0.56 -2.32 -2.44 -0.69 -0.06 -0.01 0.13 -2.43 -2.33 0.21 42 63 83 -3.82 -4.42 -0.58 -2.79 -3.43 -0.22 -1.03 -0.99 -0.36 -2.43 -2.33 0.21 100 100 83 -2.76 -3.09 2.00 82 64 64 -1.36 1.32 9.78 -1.44 1.42 9.49 0.08 -0.10 0.29 -1.15 1.74 9.52 68 62 47 -2.63 0.72 13.15 -1.44 1.42 9.49 -1.19 -0.70 3.66 -1.15 1.74 9.52 99 89 9 -2.27 -0.36 5.95 -2.73 -4.63 -1.69 <	QTD CYTD FYTD Year -2.38 -2.45 -0.56 -0.56 -2.32 -2.44 -0.69 -0.69 -0.06 -0.01 0.13 0.13 -2.43 -2.33 0.21 0.21 42 63 83 83 -3.82 -4.42 -0.58 -0.58 -2.79 -3.43 -0.22 -0.22 -1.03 -0.99 -0.36 -0.36 -2.43 -2.33 0.21 0.21 100 100 83 83 -2.76 -3.09 2.00 2.00 82 64 64 64 -1.36 1.32 9.78 9.78 -1.44 1.42 9.49 9.49 0.08 -0.10 0.29 0.29 -1.15 1.74 9.52 9.52 68 62 47 47 -2.63 0.72 13.15 13.15 <tr< td=""><td>QTD CYTD FYTD Year Years -2.38 -2.45 -0.56 -0.56 3.66 -2.32 -2.44 -0.69 -0.69 3.51 -0.06 -0.01 0.13 0.13 0.15 -2.43 -2.33 0.21 0.21 4.22 42 63 83 83 86 -3.82 -4.42 -0.58 -0.58 3.72 -2.79 -3.43 -0.22 -0.22 3.66 -1.03 -0.99 -0.36 -0.36 0.06 -2.43 -2.33 0.21 0.21 4.22 100 100 83 83 81 -2.76 -3.09 2.00 2.00 4.89 82 64 64 64 72 -1.36 1.32 9.78 9.78 N/A -1.44 1.42 9.49 9.49 10.74 0.08 -0.10 0.29 0.29 <</td><td>Q1D CY1D FY1D Year Years Years -2.38 -2.45 -0.56 -0.56 3.66 N/A -2.32 -2.44 -0.69 -0.69 3.51 5.19 -0.06 -0.01 0.13 0.13 0.15 N/A -2.43 -2.33 0.21 0.21 4.22 5.94 42 63 83 83 86 N/A -3.82 -4.42 -0.58 -0.58 3.72 N/A -2.79 -3.43 -0.22 -0.22 3.66 5.28 -1.03 -0.99 -0.36 -0.36 0.06 N/A -2.43 -2.33 0.21 0.21 4.22 5.94 100 100 83 83 81 N/A -2.76 -3.09 2.00 2.00 4.89 5.19 82 64 64 64 72 N/A -1.36 1.32 9.78 <td< td=""><td>Q1D CY1D FY1D Year Years Years 2012 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 42 63 83 83 86 N/A 86 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 100 100 83 83 81 N/A 5 -2.76 -3.09 2.00 2.00 4.89 5.19</td><td>QTD CYTD FYTD Year Years Years Years Years 2012 2011 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 42 63 83 83 86 N/A 86 37 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 100 <</td><td>Q1D CY1D FY1D Year Years Years Years 2012 2011 2010 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 42 63 83 83 86 N/A 86 37 64 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 6.54 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 0.52 -2.43 -2.33</td><td>Q1D CY1D FYID Year Years Years Years Years 2012 2011 2010 Incep. -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 5.39 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 5.15 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 0.24 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 6.47 42 63 83 83 86 N/A 86 37 64 84 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 4.17 -2.79 -3.43 -0.22 3.66 5.28 6.07 7.51 6.54 4.37 -1.03 -0.99 -0.36 0.06</td></td<></td></tr<>	QTD CYTD FYTD Year Years -2.38 -2.45 -0.56 -0.56 3.66 -2.32 -2.44 -0.69 -0.69 3.51 -0.06 -0.01 0.13 0.13 0.15 -2.43 -2.33 0.21 0.21 4.22 42 63 83 83 86 -3.82 -4.42 -0.58 -0.58 3.72 -2.79 -3.43 -0.22 -0.22 3.66 -1.03 -0.99 -0.36 -0.36 0.06 -2.43 -2.33 0.21 0.21 4.22 100 100 83 83 81 -2.76 -3.09 2.00 2.00 4.89 82 64 64 64 72 -1.36 1.32 9.78 9.78 N/A -1.44 1.42 9.49 9.49 10.74 0.08 -0.10 0.29 0.29 <	Q1D CY1D FY1D Year Years Years -2.38 -2.45 -0.56 -0.56 3.66 N/A -2.32 -2.44 -0.69 -0.69 3.51 5.19 -0.06 -0.01 0.13 0.13 0.15 N/A -2.43 -2.33 0.21 0.21 4.22 5.94 42 63 83 83 86 N/A -3.82 -4.42 -0.58 -0.58 3.72 N/A -2.79 -3.43 -0.22 -0.22 3.66 5.28 -1.03 -0.99 -0.36 -0.36 0.06 N/A -2.43 -2.33 0.21 0.21 4.22 5.94 100 100 83 83 81 N/A -2.76 -3.09 2.00 2.00 4.89 5.19 82 64 64 64 72 N/A -1.36 1.32 9.78 <td< td=""><td>Q1D CY1D FY1D Year Years Years 2012 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 42 63 83 83 86 N/A 86 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 100 100 83 83 81 N/A 5 -2.76 -3.09 2.00 2.00 4.89 5.19</td><td>QTD CYTD FYTD Year Years Years Years Years 2012 2011 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 42 63 83 83 86 N/A 86 37 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 100 <</td><td>Q1D CY1D FY1D Year Years Years Years 2012 2011 2010 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 42 63 83 83 86 N/A 86 37 64 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 6.54 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 0.52 -2.43 -2.33</td><td>Q1D CY1D FYID Year Years Years Years Years 2012 2011 2010 Incep. -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 5.39 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 5.15 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 0.24 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 6.47 42 63 83 83 86 N/A 86 37 64 84 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 4.17 -2.79 -3.43 -0.22 3.66 5.28 6.07 7.51 6.54 4.37 -1.03 -0.99 -0.36 0.06</td></td<>	Q1D CY1D FY1D Year Years Years 2012 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 42 63 83 83 86 N/A 86 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 100 100 83 83 81 N/A 5 -2.76 -3.09 2.00 2.00 4.89 5.19	QTD CYTD FYTD Year Years Years Years Years 2012 2011 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 42 63 83 83 86 N/A 86 37 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 100 <	Q1D CY1D FY1D Year Years Years Years 2012 2011 2010 -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 42 63 83 83 86 N/A 86 37 64 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 -2.79 -3.43 -0.22 -0.22 3.66 5.28 6.07 7.51 6.54 -1.03 -0.99 -0.36 -0.36 0.06 N/A 3.19 -2.61 0.52 -2.43 -2.33	Q1D CY1D FYID Year Years Years Years Years 2012 2011 2010 Incep. -2.38 -2.45 -0.56 -0.56 3.66 N/A 4.47 8.00 6.96 5.39 -2.32 -2.44 -0.69 -0.69 3.51 5.19 4.21 7.84 6.54 5.15 -0.06 -0.01 0.13 0.13 0.15 N/A 0.26 0.16 0.42 0.24 -2.43 -2.33 0.21 0.21 4.22 5.94 5.85 7.84 7.25 6.47 42 63 83 83 86 N/A 86 37 64 84 -3.82 -4.42 -0.58 -0.58 3.72 N/A 9.26 4.90 7.06 4.17 -2.79 -3.43 -0.22 3.66 5.28 6.07 7.51 6.54 4.37 -1.03 -0.99 -0.36 0.06

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager and composite performance is provided by Northern Trust. Fiscal year ends June 30th. An index marked with an asterisk (*) represents the current benchmark. See the Addendum for the complete historical composition of the custom index. Manager inception dates shown represent the first full month following initial funding.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Shenkman Capital (SA)	-0.32	1.59	7.49	7.49	N/A	N/A	10.65	3.46	N/A	6.61	10/01/2010
Shenkman Blended Index	-0.63	1.91	8.53	8.53	8.79	8.71	13.00	3.04	12.41	7.68	
Difference	0.31	-0.32	-1.04	-1.04	N/A	N/A	-2.35	0.42	N/A	-1.07	
Stone Harbor (SA)	-6.53	-8.06	0.74	0.74	N/A	N/A	17.53	7.12	N/A	5.99	12/01/2010
JPMorgan EMBI Global Dvf'd TR Index	-5.63	-7.77	1.12	1.12	7.33	8.38	17.44	7.35	12.24	5.83	
Difference	-0.90	-0.29	-0.38	-0.38	N/A	N/A	0.09	-0.23	N/A	0.16	
IM Emerging Markets Debt (SA+CF) Median	-6.31	-7.19	2.55	2.55	8.12	8.74	19.18	2.85	15.16	6.01	
Stone Harbor (SA) Rank	56	80	91	91	N/A	N/A	69	20	N/A	51	
Fixed Income Composite	-2.52	-1.88	3.08	3.08	5.76	5.63	10.24	7.04	7.61	8.09	04/01/1984
Fixed Income Custom Index (P)	-2.37	-2.29	0.24	0.24	4.16	5.19	5.53	8.12	6.49	7.83	
Difference	-0.15	0.41	2.84	2.84	1.60	0.44	4.71	-1.08	1.12	0.26	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Internal TIPS (SA)	-7.02	-7.44	-4.68	-4.68	4.57	4.36	7.15	13.09	6.46	6.29	05/01/2002
Barclays US Trsy: US TIPS Index	-7.05	-7.39	-4.78	-4.78	4.63	4.41	6.98	13.56	6.31	6.27	
Difference	0.03	-0.05	0.10	0.10	-0.06	-0.05	0.17	-0.47	0.15	0.02	
IM U.S. TIPS (SA+CF) Median	-7.04	-7.38	-4.49	-4.49	4.66	4.52	7.13	13.52	6.42	6.37	
Internal TIPS (SA) Rank	48	62	67	67	64	70	47	61	43	72	
Weaver Barksdale TIPS (SA)	-6.78	-7.30	-4.62	-4.62	4.73	4.56	6.96	13.67	6.51	6.37	07/01/2001
Barclays US Trsy: US TIPS Index	-7.05	-7.39	-4.78	-4.78	4.63	4.41	6.98	13.56	6.31	6.30	
Difference	0.27	0.09	0.16	0.16	0.10	0.15	-0.02	0.11	0.20	0.07	
IM U.S. TIPS (SA+CF) Median	-7.04	-7.38	-4.49	-4.49	4.66	4.52	7.13	13.52	6.42	6.39	
Weaver Barksdale TIPS (SA) Rank	34	45	62	62	40	39	64	42	41	70	
PIMCO:All Asset;Inst (PAAIX)	-4.19	-3.36	5.75	5.75	N/A	N/A	19.91	N/A	N/A	7.48	12/01/2011
Barclays US Trsy Infl Notes: 1-10 Yr Index	-5.52	-5.21	-3.14	-3.14	3.42	3.32	5.04	8.93	5.22	-0.39	
Difference	1.33	1.85	8.89	8.89	N/A	N/A	14.87	N/A	N/A	7.87	
Tenaska Power Fund II (CF)	-4.62	-5.00	-8.51	-8.51	1.24	N/A	2.33	5.94	-0.92	-1.30	10/01/2008
Tortoise Capital (CF)	3.97	25.58	36.30	36.30	24.69	N/A	8.24	18.68	34.95	27.28	08/01/2009
Alerian MLP Index	1.94	22.07	28.38	28.38	20.98	18.17	4.80	13.88	35.85	24.25	
Difference	2.03	3.51	7.92	7.92	3.71	N/A	3.44	4.80	-0.90	3.03	
Amerra Ag Fund II (CF)	1.59	-2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.67	12/01/2012
Real Return Composite	-5.56	-4.84	-0.64	-0.64	N/A	N/A	9.55	N/A	N/A	5.50	07/01/2011
Consumer Price Index + 3%	1.06	3.21	4.81	4.81	5.39	4.35	4.79	6.05	4.54	4.76	
Difference	-6.62	-8.05	-5.45	-5.45	N/A	N/A	4.76	N/A	N/A	0.74	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Internal Real Estate (SA)	0.00	0.00	0.01	0.01	0.01	0.04	0.00	0.02	0.02	4.17	04/01/1999
Walton Street Real Estate Fund VI, L.P.	3.01	8.64	11.47	11.47	34.30	N/A	7.95	54.15	-11.15	-41.72	05/01/2009
Walton Street Real Estate Fund VII, L.P.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2013
Prima Mortgage Invest Trust, LLC	2.02	3.31	8.07	8.07	10.32	N/A	8.03	7.93	22.63	11.81	05/01/2009
Mesa West Real Estate Income Fund II L.P.	4.02	26.08	40.62	40.62	17.15	N/A	20.16	11.12	-15.50	10.59	01/01/2010
H/2 Credit Partners (CF)	1.29	4.47	11.26	11.26	N/A	N/A	12.56	N/A	N/A	8.22	07/01/2011
Harrison Street Core (CF)	1.10	3.12	3.62	3.62	N/A	N/A	N/A	N/A	N/A	3.10	05/01/2012
Greenfield Acquisition Partners VI, L.P.	9.97	6.59	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.59	12/01/2012
Real Estate Composite	2.35	6.63	12.03	12.03	13.79	7.46	10.18	13.33	14.80	8.98	05/01/2009
NCREIF ODCE Index (Gross) (AWA)*	3.86	6.64	12.17	12.17	13.53	2.45	10.94	15.26	5.83	5.01	
Difference	-1.51	-0.01	-0.14	-0.14	0.26	5.01	-0.76	-1.93	8.97	3.97	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
BAAM (SA)	3.12	7.19	12.92	12.92	N/A	N/A	7.87	N/A	N/A	8.38	09/01/2011
PAAMCO (SA)	3.84	8.75	13.05	13.05	N/A	N/A	6.00	N/A	N/A	7.65	09/01/2011
Prisma Capital Partners (SA)	2.73	6.68	11.04	11.04	N/A	N/A	7.77	N/A	N/A	6.24	09/01/2011
Absolute Return Composite	3.23	7.53	12.30	12.30	6.34	N/A	7.06	3.82	N/A	5.02	04/01/2010
HFRI FOF Diversified Index (Lagged)	2.46	6.02	8.21	8.21	3.23	-0.29	3.13	-2.46	4.07	3.00	
Difference	0.77	1.51	4.09	4.09	3.11	N/A	3.93	6.28	N/A	2.02	
Cash Equivalents (SA)	0.06	0.13	0.32	0.32	0.33	0.71	0.30	0.31	0.89	4.15	01/01/1988
Citi 3 Mo T-Bill Index	0.01	0.03	0.07	0.07	0.09	0.23	0.07	0.08	0.13	3.69	
Difference	0.05	0.10	0.25	0.25	0.24	0.48	0.23	0.23	0.76	0.46	

Performance for absolute return managers and the HFRI FOF Diversified Index is lagged by one month.

Performance for the NCREIF ODCE Index (Gross) (AWA) is available quarterly; interim month returns assume a 0.00% return.



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
River Road Asset Management (SA)	3.16	17.59	21.99	21.99	N/A	N/A	10.34	N/A	N/A	14.16	07/01/2011
R 3000 Value Index	3.14	15.78	25.28	25.28	18.41	6.83	17.55	-0.10	16.23	13.40	
Difference	0.02	1.81	-3.29	-3.29	N/A	N/A	-7.21	N/A	N/A	0.76	
IM U.S. All Cap Value Equity (SA+CF) Median	3.64	15.93	24.65	24.65	18.44	8.16	15.77	-1.02	17.56	12.18	
River Road Asset Management (SA) Rank	58	27	66	66	N/A	N/A	84	N/A	N/A	15	
Westwood Management (SA)	4.05	16.87	28.87	28.87	N/A	N/A	14.72	N/A	N/A	10.92	07/01/2011
R 3000 Value Index	3.14	15.78	25.28	25.28	18.41	6.83	17.55	-0.10	16.23	13.40	
Difference	0.91	1.09	3.59	3.59	N/A	N/A	-2.83	N/A	N/A	-2.48	
IM U.S. All Cap Value Equity (SA+CF) Median	3.64	15.93	24.65	24.65	18.44	8.16	15.77	-1.02	17.56	12.18	
Westwood Management (SA) Rank	38	31	20	20	N/A	N/A	59	N/A	N/A	65	
Westfield Capital (SA)	1.52	13.04	26.80	26.80	N/A	N/A	22.88	N/A	N/A	11.49	07/01/2011
R 3000 Growth Index	2.19	12.23	17.56	17.56	18.78	7.58	15.21	2.18	17.64	11.13	
Difference	-0.67	0.81	9.24	9.24	N/A	N/A	7.67	N/A	N/A	0.36	
IM U.S. All Cap Growth Equity (SA+CF) Median	2.22	12.12	18.86	18.86	18.18	7.43	16.29	-1.44	21.39	9.84	
Westfield Capital (SA) Rank	65	35	11	11	N/A	N/A	3	N/A	N/A	18	
U.S. All Cap Equity Composite	2.77	15.20	26.98	26.98	N/A	N/A	17.71	N/A	N/A	11.60	07/01/2011
R 3000 Index	2.69	14.06	21.47	21.47	18.63	7.25	16.42	1.03	16.93	12.31	
Difference	0.08	1.14	5.51	5.51	N/A	N/A	1.29	N/A	N/A	-0.71	
Internal S&P 500 Index (SA)	2.88	13.77	20.54	20.54	18.86	7.60	15.95	2.71	16.32	4.97	07/01/2001
S&P 500 Index (Cap Wtd)*	2.91	13.82	20.60	20.60	18.74	7.34	16.00	2.37	16.38	4.83	
Difference	-0.03	-0.05	-0.06	-0.06	0.12	0.26	-0.05	0.34	-0.06	0.14	
IM U.S. Large Cap Index Equity (SA+CF) Median	2.84	13.88	20.66	20.66	18.54	7.16	16.23	1.56	15.56	4.44	
Internal S&P 500 Index (SA) Rank	47	69	70	70	9	12	76	12	31	26	
Sasco Capital Inc. (SA)	-2.08	10.19	17.86	17.86	N/A	N/A	N/A	N/A	N/A	17.86	07/01/2012
R Mid Cap Value Index	1.65	16.10	27.65	27.65	19.53	8.87	18.51	-1.38	24.75	27.65	
Difference	-3.73	-5.91	-9.79	-9.79	N/A	N/A	N/A	N/A	N/A	-9.79	
IM U.S. Mid Cap Value Equity (SA+CF) Median	2.44	15.83	26.67	26.67	19.32	9.35	17.16	-1.06	22.22	26.67	
Sasco Capital Inc. (SA) Rank	100	100	99	99	N/A	N/A	N/A	N/A	N/A	99	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Systematic Financial Management (SA)	-0.02	13.60	23.87	23.87	N/A	N/A	N/A	N/A	N/A	23.87	07/01/2012
R Mid Cap Value Index	1.65	16.10	27.65	27.65	19.53	8.87	18.51	-1.38	24.75	27.65	
Difference	-1.67	-2.50	-3.78	-3.78	N/A	N/A	N/A	N/A	N/A	-3.78	
IM U.S. Mid Cap Value Equity (SA+CF) Median	2.44	15.83	26.67	26.67	19.32	9.35	17.16	-1.06	22.22	26.67	
Systematic Financial Management (SA) Rank	95	79	70	70	N/A	N/A	N/A	N/A	N/A	70	
Geneva Capital Management (SA)	0.25	11.26	14.77	14.77	N/A	N/A	N/A	N/A	N/A	14.77	07/01/2012
R Mid Cap Growth Index	2.87	14.70	22.88	22.88	19.53	7.61	15.81	-1.65	26.38	22.88	
Difference	-2.62	-3.44	-8.11	-8.11	N/A	N/A	N/A	N/A	N/A	-8.11	
IM U.S. Mid Cap Growth Equity (SA+CF) Median	2.58	13.49	20.13	20.13	18.96	7.55	15.06	-1.78	26.68	20.13	
Geneva Capital Management (SA) Rank	93	82	86	86	N/A	N/A	N/A	N/A	N/A	86	
NT Structured Small Cap (SA)	3.02	15.81	25.70	25.70	N/A	N/A	18.50	N/A	N/A	12.03	07/01/2011
R 2000 Index	3.08	15.86	24.20	24.20	18.67	8.77	16.34	-4.18	26.86	10.28	
Difference	-0.06	-0.05	1.50	1.50	N/A	N/A	2.16	N/A	N/A	1.75	
IM U.S. Small Cap Core Equity (SA+CF) Median	3.99	16.77	26.35	26.35	20.68	9.89	16.53	-1.48	28.30	12.01	
NT Structured Small Cap (SA) Rank	60	64	55	55	N/A	N/A	34	N/A	N/A	49	
U.S. Cap Weighted Equity Composite	2.28	13.64	20.75	20.75	18.11	7.19	15.57	1.21	16.32	3.85	07/01/2000
R 3000 Index	2.69	14.06	21.47	21.47	18.63	7.25	16.42	1.03	16.93	3.29	
Difference	-0.41	-0.42	-0.72	-0.72	-0.52	-0.06	-0.85	0.18	-0.61	0.56	
U.S. Equity Composite	2.33	13.82	21.47	21.47	17.96	7.11	15.86	0.43	16.32	9.03	07/01/1992
R 3000 Index (I)*	2.69	14.06	21.47	21.47	18.42	7.17	16.42	0.97	16.38	N/A	
Difference	-0.36	-0.24	0.00	0.00	-0.46	-0.06	-0.56	-0.54	-0.06	N/A	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
The Boston Co. Non-US Value (SA)	0.57	3.79	18.82	18.82	6.41	0.55	14.90	-16.00	5.79	-1.17	06/01/2008
MSCI ACW Ex US Index (Gross)*	-2.90	0.27	14.14	14.14	8.97	-0.81	17.39	-11.78	9.43	-2.44	
Difference	3.47	3.52	4.68	4.68	-2.56	1.36	-2.49	-4.22	-3.64	1.27	
IM International Value Equity (SA+CF) Median	-0.08	4.60	18.99	18.99	10.54	1.56	18.47	-11.03	11.47	-0.40	
The Boston Co. Non-US Value (SA) Rank	37	58	51	51	93	68	81	84	82	66	
BTC ACWI Ex US Fund (CF)	-3.57	-0.53	13.08	13.08	N/A	N/A	N/A	N/A	N/A	18.11	06/01/2012
MSCI ACW Ex US Index (Net)	-3.11	-0.04	13.63	13.63	7.99	-0.80	16.83	-13.71	11.15	18.63	
Difference	-0.46	-0.49	-0.55	-0.55	N/A	N/A	N/A	N/A	N/A	-0.52	
IM International Core Equity (SA+CF) Median	-0.27	5.11	20.65	20.65	11.92	0.84	19.56	-12.07	11.61	24.46	
BTC ACWI Ex US Fund (CF) Rank	99	98	99	99	N/A	N/A	N/A	N/A	N/A	97	
Pyramis Int'l Growth Fund (SA)	-0.89	2.61	16.72	16.72	10.38	-0.31	17.12	-11.48	11.75	6.25	08/01/2001
MSCI ACW Ex US Index (Gross)*	-2.90	0.27	14.14	14.14	8.97	-0.81	17.39	-11.78	9.43	5.26	
Difference	2.01	2.34	2.58	2.58	1.41	0.50	-0.27	0.30	2.32	0.99	
IM International Growth Equity (SA+CF) Median	-0.63	5.23	18.97	18.97	12.00	1.51	19.98	-12.14	14.54	7.57	
Pyramis Int'l Growth Fund (SA) Rank	54	74	69	69	77	69	75	46	66	72	
Non-U.S. Equity Composite	-1.48	1.97	16.25	16.25	5.46	-0.30	16.09	-17.36	11.39	1.84	04/01/2000
MSCI ACW Ex US Index (Gross) (I)*	-2.90	0.27	14.14	14.14	8.58	-0.56	17.39	-12.90	10.60	1.28	
Difference	1.42	1.70	2.11	2.11	-3.12	0.26	-1.30	-4.46	0.79	0.56	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Aberdeen Emg Mkts Equity (CF)	-7.92	-7.45	6.48	6.48	10.11	8.71	26.41	-10.46	29.06	8.35	04/01/2008
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-0.26	
Difference	0.03	1.95	3.25	3.25	6.39	8.82	7.77	7.71	9.86	8.61	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	0.13	
Aberdeen Emg Mkts Equity (CF) Rank	56	52	47	47	11	5	10	7	11	4	
Wellington Emg Mkts Equity (CF)	-8.19	-9.64	4.35	4.35	2.33	-1.06	19.49	-21.61	16.39	-0.63	04/01/2008
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-0.26	
Difference	-0.24	-0.24	1.12	1.12	-1.39	-0.95	0.85	-3.44	-2.81	-0.37	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	0.13	
Wellington Emg Mkts Equity (CF) Rank	65	73	67	67	76	67	61	72	85	61	
BTC Emg Mkts Equity (CF)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2013
MSCI Emg Mkts Index (Net)	-8.08	-9.57	2.87	2.87	3.38	-0.43	18.23	-18.42	18.88	N/A	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
IM Emerging Markets Equity (SA+CF) Median	-7.60	-7.25	5.78	5.78	5.07	0.24	20.06	-18.46	21.47	N/A	
BTC Emg Mkts Equity (CF) Rank	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Emerging Mkts Equity Composite	-8.06	-8.36	5.57	5.57	N/A	N/A	23.97	N/A	N/A	-1.45	07/01/2011
MSCI Emg Mkts Index (Gross)	-7.95	-9.40	3.23	3.23	3.72	-0.11	18.64	-18.17	19.20	-6.69	
Difference	-0.11	1.04	2.34	2.34	N/A	N/A	5.33	N/A	N/A	5.24	



	OFF		EXTEN	1	3	5	2012	2011	2010	Since	Inception
	QTD	CYTD	FYTD	Year	Years	Years	2012	2011	2010	Incep.	Date
NISA Core Agg Fixed Income (SA)	-2.37	-2.44	-0.63	-0.63	N/A	N/A	4.34	N/A	N/A	3.53	07/01/2011
Barclays US Agg Bond Index	-2.32	-2.44	-0.69	-0.69	3.51	5.19	4.21	7.84	6.54	3.31	
Difference	-0.05	0.00	0.06	0.06	N/A	N/A	0.13	N/A	N/A	0.22	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-2.43	-2.33	0.21	0.21	4.22	5.94	5.85	7.84	7.25	3.97	
NISA Core Agg Fixed Income (SA) Rank	41	63	86	86	N/A	N/A	88	N/A	N/A	78	
PIMCO Core Fixed Income (SA)	-4.08	-4.35	-0.06	-0.06	N/A	N/A	9.91	N/A	N/A	4.02	04/01/2011
PIMCO Blended Index	-2.79	-3.43	-0.22	-0.22	3.66	5.28	6.07	7.51	6.54	4.19	
Difference	-1.29	-0.92	0.16	0.16	N/A	N/A	3.84	N/A	N/A	-0.17	
IM U.S. Broad Market Core Fixed Income (SA+CF) Median	-2.43	-2.33	0.21	0.21	4.22	5.94	5.85	7.84	7.25	4.52	
PIMCO Core Fixed Income (SA) Rank	100	100	64	64	N/A	N/A	4	N/A	N/A	84	
IM Global Fixed Income (SA+CF) Median	-2.76	-3.09	2.00	2.00	4.89	5.19	8.11	5.03	8.04	3.91	
PIMCO Core Fixed Income (SA) Rank	85	64	61	61	N/A	N/A	43	N/A	N/A	49	
Columbia HY Fixed Income (SA)	-1.47	1.05	9.47	9.47	N/A	N/A	16.38	N/A	N/A	10.83	11/01/2011
Barclays US Corp: Hi Yld Index	-1.44	1.42	9.49	9.49	10.74	10.94	15.81	4.98	15.12	10.42	
Difference	-0.03	-0.37	-0.02	-0.02	N/A	N/A	0.57	N/A	N/A	0.41	
IM U.S. High Yield Bonds (SA+CF) Median	-1.15	1.74	9.52	9.52	10.77	10.24	15.40	5.46	15.06	10.36	
Columbia HY Fixed Income (SA) Rank	77	72	53	53	N/A	N/A	29	N/A	N/A	37	
Loomis Sayles HY Fixed Income (SA)	-3.02	0.29	12.15	12.15	N/A	N/A	23.50	N/A	N/A	12.99	11/01/2011
Barclays US Corp: Hi Yld Index	-1.44	1.42	9.49	9.49	10.74	10.94	15.81	4.98	15.12	10.42	
Difference	-1.58	-1.13	2.66	2.66	N/A	N/A	7.69	N/A	N/A	2.57	
IM U.S. High Yield Bonds (SA+CF) Median	-1.15	1.74	9.52	9.52	10.77	10.24	15.40	5.46	15.06	10.36	
Loomis Sayles HY Fixed Income (SA) Rank	100	95	15	15	N/A	N/A	2	N/A	N/A	10	
Manulife Asset Mgmt (SA)	-2.07	-0.27	5.74	5.74	N/A	N/A	11.75	N/A	N/A	7.24	12/01/2011
Barclays Multiverse Index	-2.73	-4.63	-1.69	-1.69	3.83	3.91	4.84	5.55	5.84	0.44	
Difference	0.66	4.36	7.43	7.43	N/A	N/A	6.91	N/A	N/A	6.80	
Waterfall (SA)	3.32	7.30	18.57	18.57	N/A	N/A	17.92	N/A	N/A	15.71	07/01/2011
Opportunistic FI Blended Index	-0.73	1.36	6.49	6.49	6.90	7.61	9.89	3.24	10.12	5.49	
Difference	4.05	5.94	12.08	12.08	N/A	N/A	8.03	N/A	N/A	10.22	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Shenkman Capital (SA)	-0.39	1.63	7.20	7.20	N/A	N/A	10.81	N/A	N/A	6.43	07/01/2011
US High Yield/Bank Loan Blended Index	-0.63	1.91	8.53	8.53	8.79	8.71	13.00	3.04	12.41	6.94	
Difference	0.24	-0.28	-1.33	-1.33	N/A	N/A	-2.19	N/A	N/A	-0.51	
Stone Harbor (SA)	-6.58	-8.61	0.09	0.09	N/A	N/A	16.94	N/A	N/A	3.67	07/01/2011
JPMorgan EMBI Global Dvf'd TR Index	-5.63	-7.77	1.12	1.12	7.33	8.38	17.44	7.35	12.24	5.35	
Difference	-0.95	-0.84	-1.03	-1.03	N/A	N/A	-0.50	N/A	N/A	-1.68	
IM Emerging Markets Debt (SA+CF) Median	-6.31	-7.19	2.55	2.55	8.12	8.74	19.18	2.85	15.16	4.17	
Stone Harbor (SA) Rank	60	95	95	95	N/A	N/A	76	N/A	N/A	56	
Fixed Income Composite	-2.66	-2.02	2.86	2.86	5.86	5.25	10.01	7.99	6.40	6.98	07/01/1992
Barclays Universal Bond Index (I)*	-2.37	-2.29	0.24	0.24	4.92	4.58	5.53	10.00	6.31	6.75	
Difference	-0.29	0.27	2.62	2.62	0.94	0.67	4.48	-2.01	0.09	0.23	



	QTD	CYTD	FYTD	1 Year	3	5 Years	2012	2011	2010	Since Incep.	Inception
	—				Years						Date
Internal TIPS (SA)	-6.98	-7.43	-4.81	-4.81	4.58	4.39	7.01	13.30	6.40	5.51	10/01/2003
Barclays US Trsy: US TIPS Index	-7.05	-7.39	-4.78	-4.78	4.63	4.41	6.98	13.56	6.31	5.29	
Difference	0.07	-0.04	-0.03	-0.03	-0.05	-0.02	0.03	-0.26	0.09	0.22	
IM U.S. TIPS (SA+CF) Median	-7.04	-7.38	-4.49	-4.49	4.66	4.52	7.13	13.52	6.42	5.41	
Internal TIPS (SA) Rank	44	59	82	82	63	61	58	57	53	37	
PIMCO:All Asset;Inst (PAAIX)	-4.19	-3.36	5.75	5.75	N/A	N/A	19.91	N/A	N/A	7.48	12/01/2011
Barclays US Trsy Infl Notes: 1-10 Yr Index	-5.52	-5.21	-3.14	-3.14	3.42	3.32	5.04	8.93	5.22	-0.39	
Difference	1.33	1.85	8.89	8.89	N/A	N/A	14.87	N/A	N/A	7.87	
Tenaska Power Fund II (CF)	-4.62	-5.00	-8.51	-8.51	1.24	N/A	2.33	5.94	-0.92	-1.30	10/01/2008
Tortoise Capital (CF)	3.99	25.32	36.10	36.10	25.42	N/A	10.34	18.73	34.93	27.85	08/01/2009
Alerian MLP Index	1.94	22.07	28.38	28.38	20.98	18.17	4.80	13.88	35.85	24.25	
Difference	2.05	3.25	7.72	7.72	4.44	N/A	5.54	4.85	-0.92	3.60	
Amerra Ag Fund II (CF)	1.59	-2.67	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.67	12/01/2012
Real Return Composite	-5.95	-5.39	-1.64	-1.64	N/A	N/A	9.02	N/A	N/A	4.92	07/01/2011
Consumer Price Index + 3%	1.06	3.21	4.81	4.81	5.39	4.35	4.79	6.05	4.54	4.76	
Difference	-7.01	-8.60	-6.45	-6.45	N/A	N/A	4.23	N/A	N/A	0.16	



	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
Walton Street Real Estate Fund VI, L.P.	3.01	8.64	11.47	11.47	34.30	N/A	7.95	54.14	-11.15	-41.72	05/01/2009
Walton Street Real Estate Fund VII, L.P.	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	07/01/2013
Prima Mortgage Invest Trust, LLC	2.02	3.31	7.43	7.43	10.10	N/A	7.39	7.92	22.87	11.70	05/01/2009
Mesa West Real Estate Income Fund II L.P.	4.02	26.08	40.62	40.62	17.15	N/A	20.16	11.12	-15.50	10.59	01/01/2010
H/2 Credit Partners (CF)	1.29	4.46	11.16	11.16	N/A	N/A	12.45	N/A	N/A	8.17	07/01/2011
Harrison Street Core (CF)	0.97	2.67	3.16	3.16	N/A	N/A	N/A	N/A	N/A	2.71	05/01/2012
Greenfield Acquisition Partners VI, L.P.	10.03	6.58	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6.58	12/01/2012
Real Estate Composite	2.63	5.44	10.44	10.44	14.74	N/A	10.23	14.85	18.36	9.22	05/01/2009
NCREIF ODCE Index (Gross) (AWA)*	3.86	6.64	12.17	12.17	13.53	2.45	10.94	15.26	5.83	5.01	
Difference	-1.23	-1.20	-1.73	-1.73	1.21	N/A	-0.71	-0.41	12.53	4.21	



As of June 30, 2013

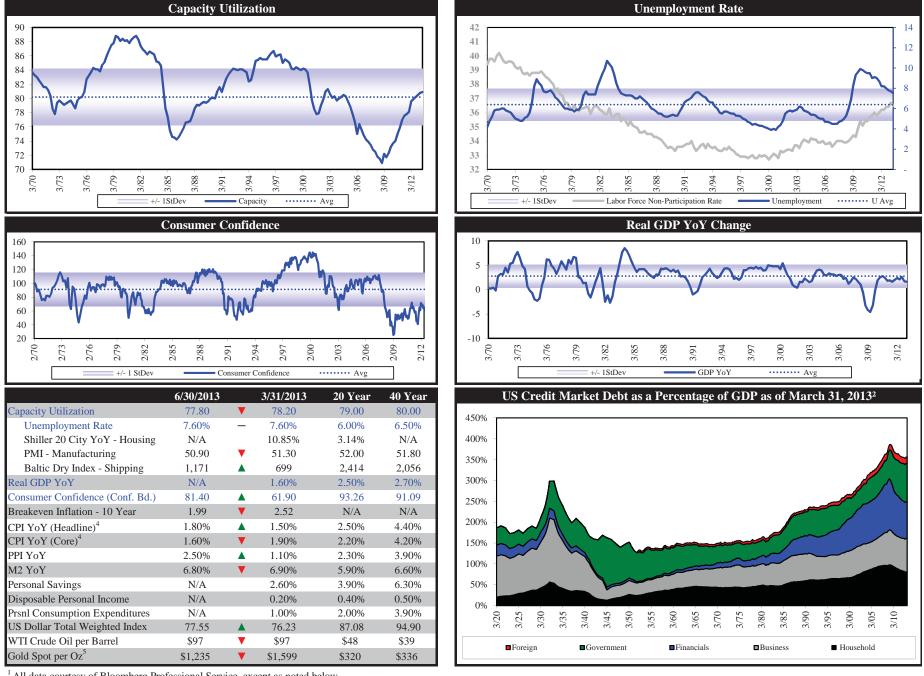
	QTD	CYTD	FYTD	1 Year	3 Years	5 Years	2012	2011	2010	Since Incep.	Inception Date
BAAM (SA)	3.08	7.15	12.87	12.87	N/A	N/A	8.05	N/A	N/A	8.45	09/01/2011
PAAMCO (SA)	3.81	8.58	12.87	12.87	N/A	N/A	6.22	N/A	N/A	7.68	09/01/2011
Prisma Capital Partners (SA)	2.71	6.65	11.01	11.01	N/A	N/A	7.97	N/A	N/A	6.33	09/01/2011
Absolute Return Composite	3.20	7.46	12.20	12.20	6.35	N/A	7.16	3.81	N/A	4.85	04/01/2010
HFRI FOF Diversified Index (Lagged)	2.46	6.02	8.21	8.21	3.23	-0.29	3.13	-2.46	4.07	3.00	
Difference	0.74	1.44	3.99	3.99	3.12	N/A	4.03	6.27	N/A	1.85	
Cash Equivalents (SA)	0.06	0.13	0.49	0.49	0.32	0.40	0.47	0.26	0.25	3.14	07/01/1992
Citi 3 Mo T-Bill Index	0.01	0.03	0.07	0.07	0.09	0.23	0.07	0.08	0.13	3.02	
Difference	0.05	0.10	0.42	0.42	0.23	0.17	0.40	0.18	0.12	0.12	

Performance for absolute return managers and the HFRI FOF Diversified Index is lagged by one month.

Performance for the NCREIF ODCE Index (Gross) (AWA) is available quarterly; interim month returns assume a 0.00% return.



Economic Measures 1 As of June 30, 2013



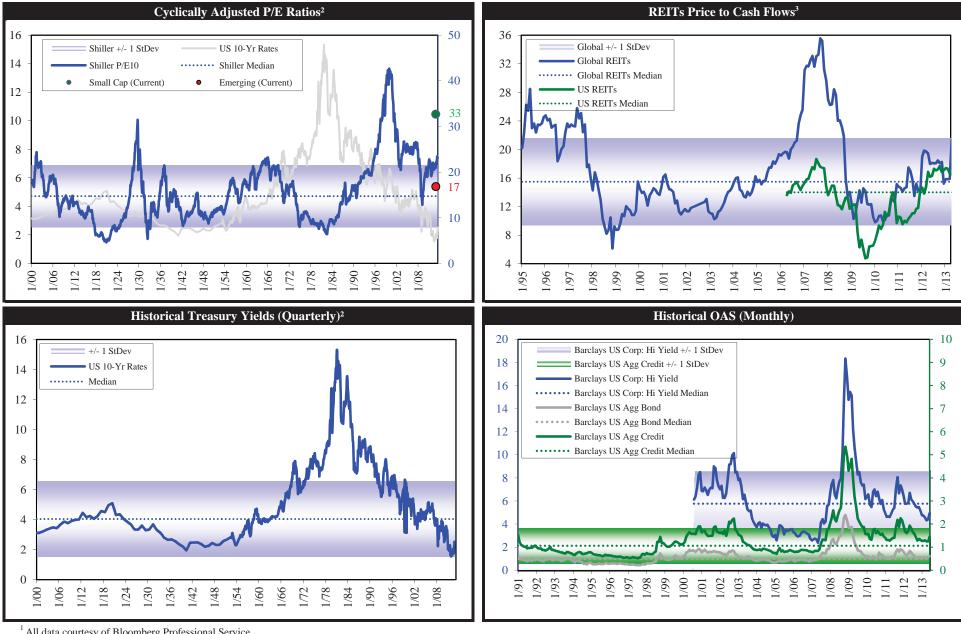
¹ All data courtesy of Bloomberg Professional Service, except as noted below.



² Data prior to 1952 is from "The Statistical History of the United States, From Colonial Times to the Present", by Ben Wattenberg, Morgan Stanley Research.

³ "N/A" is shown for data that is not yet available. ⁴ CPI figures are cyclically adjusted. ⁵ 20- and 40-year average Gold spot prices are adjusted for inflation.

Valuation Metrics ¹ As of June 30, 2013

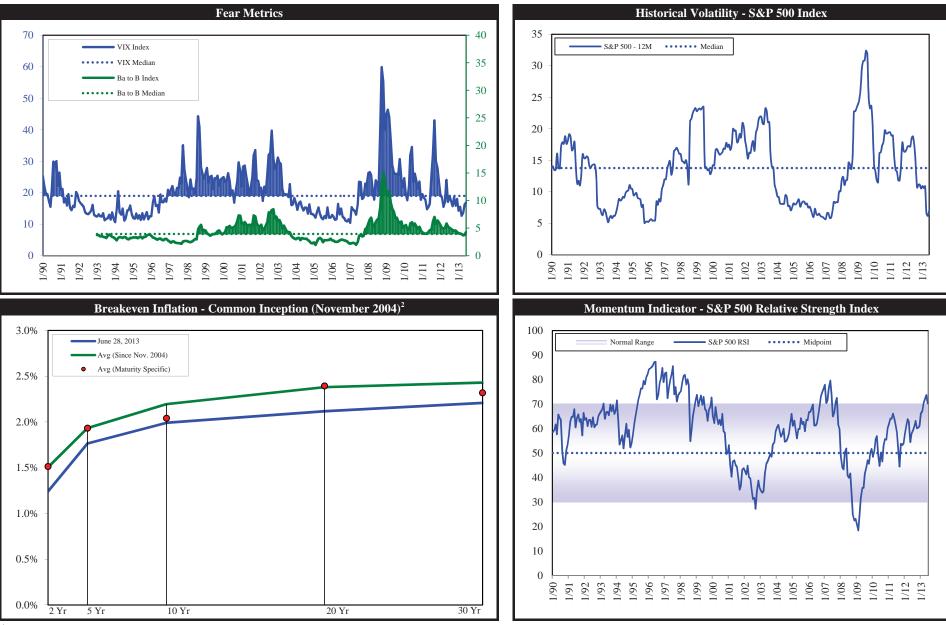


¹ All data courtesy of Bloomberg Professional Service.

² Source: Bloomberg and Robert J. Shiller, Irrational Exuberance, Second Edition. P/E for the S&P 500 Index is based on 10-year trailing real earnings. Small Cap is represented by the S&P 600 Small Cap Index, and Emerging is represented by the MSCI Emerging Markets Index. Due to limited history, only the current 10-year P/E is shown for Small Cap and Emerging.

³ US REITs is represented by the MSCI US REITs Index and Global REITs is represented by the MSCI World Real Estate Index.

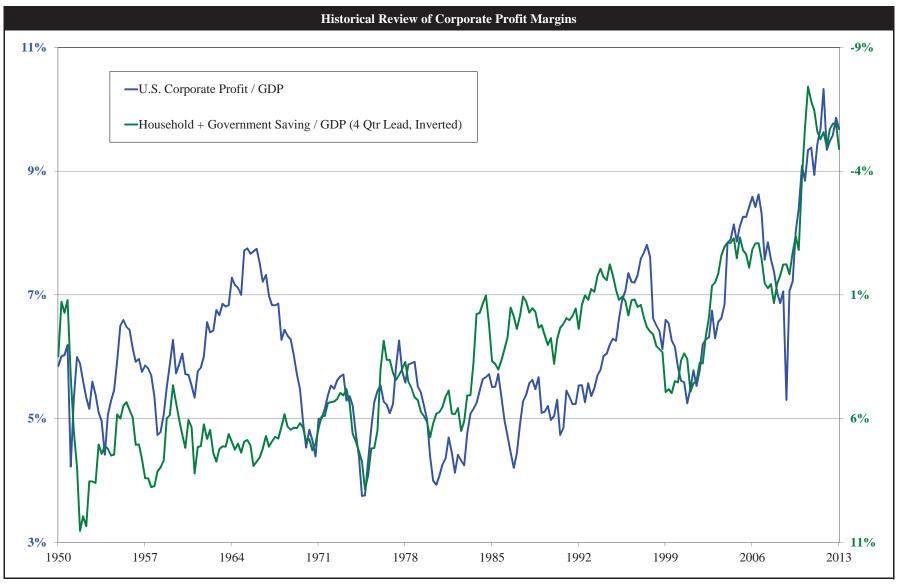
Risk Metrics ¹ As of June 30, 2013



¹ All data courtesy of Bloomberg Professional Service.



² Common inception of November 2004 is based on historical data availability. Specific inception dates are as follows: 2- and 20-year (2004), 5-year (2002), 10- and 30-year (1998).



Data courtesy of Federal Reserve Bank and Bureau of Economic Analysis.

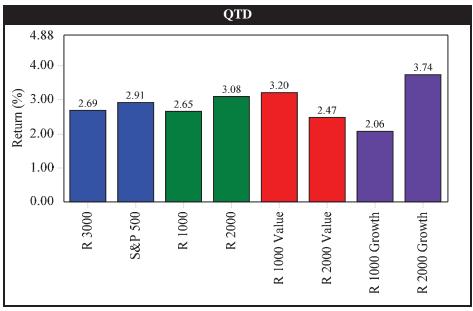
U.S. Corporate Profit is shown as of March 31, 2013, and is shown after tax, with an adjustment for inventory valuation and capital consumption.

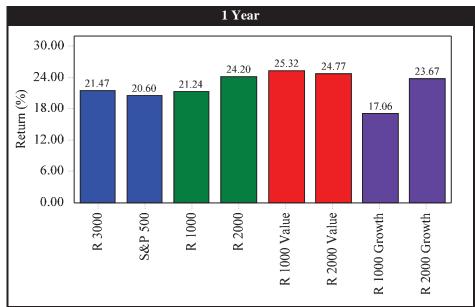


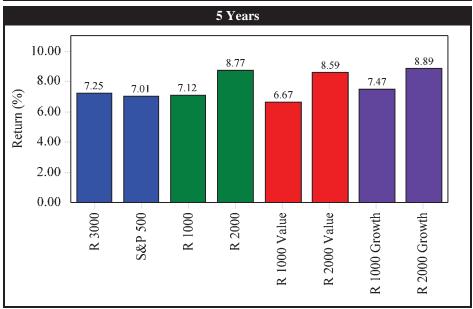
Annual Asset Class Performance As of June 30, 2013

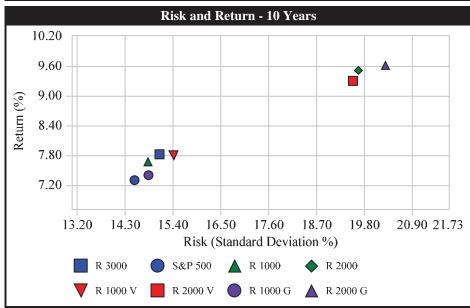
	1999	2000	2001	2002	2003	2004	2005	2006	200	07	2008	2009	2010	2011	2012	YTD
Best	66.42	31.84	12.35	25.91	62.14	33.16	34.54	35.97	39.	78	8.44	79.02	28.60	22.49	20.42	15.86
1	27.31	31.04	8.44	16.56	56.28	31.27	26.65	32.59	16.	23	5.24	58.21	26.86	15.99	18.64	13.82
	24.69	16.16	7.89	14.81	47.25	25.95	21.39	26.86	15.	97	2.06	47.32	22.40	13.56	17.90	6.64
	24.34	14.28	7.28	10.25	39.17	20.70	21.36	19.67	11.	63	-2.35	32.46	19.20	9.24	17.59	5.93
	21.26	13.15	6.61	5.54	36.18	18.33	14.02	18.37	11.	63	-10.01	28.60	16.83	7.84	16.34	5.93
	21.04	12.40	5.64	3.58	28.97	13.06	13.82	16.32	9.9	1	-20.47	27.18	16.36	4.98	16.00	4.47
	20.19	11.63	5.28	3.12	28.68	11.13	6.75	15.79	6.9	7	-26.16	26.46	15.12	2.11	15.81	3.65
	13.17	6.18	4.42	1.78	23.93	10.88	5.33	11.85	6.6	50	-33.79	18.91	15.06	0.10	10.94	1.42
	4.85	-3.02	2.49	-1.41	11.93	9.15	4.91	9.85	5.4	19	-35.65	11.41	10.16	-4.18	8.82	0.04
	2.40	-5.86	-2.37	-6.00	9.28	8.56	4.55	4.85	5.0	00	-37.00	9.72	8.21	-5.55	6.98	-2.44
	2.39	-7.22	-11.89	-7.44	8.39	8.46	3.07	4.33	1.8	37	-39.20	5.93	6.54	-11.73	4.80	-7.39
	-0.82	-9.10	-12.11	-15.66	5.87	6.79	2.84	2.71	1.7	9	-43.06	1.92	6.31	-13.32	4.21	-7.97
	-2.58	-13.96	-19.51	-20.48	4.10	4.34	2.74	2.07	-1.	57	-46.78	0.21	4.77	-15.66	0.11	-9.40
Worst	-7.65	-30.61	-21.21	-22.10	1.15	1.33	2.43	0.41	-17.	55	-53.18	-29.76	0.13	-18.17	-1.06	-10.47
'																
	S&P 500 - US Large Cap	R 2000 - US Small Cap	MSCI EAFE (Gross) - Int'l Dev.	MSCI EAFE SC (Gross) - Int'l SC	MSCI EM (Gross) - Int'l Em Mkts	Barcla	gg US C	orp: U	Barclays US Trsy: S TIPS - FI	Barcl US Gov/Cr Lng -	s redit: (NCREIF ODCE (Gross) - eal Estate			DJ-UBS Cmdty (TR) - Commod.	BofA ML 3 Mo T-Bill - Cash Equiv

Domestic Equity Market Performance and Risk As of June 30, 2013





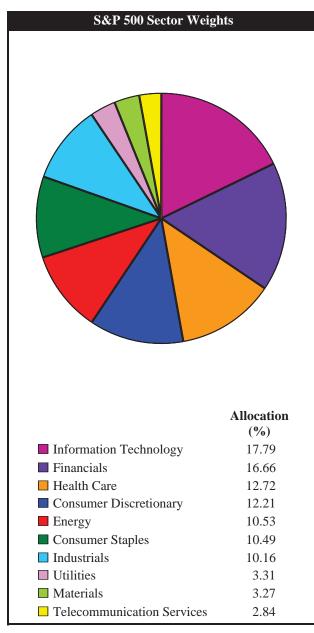


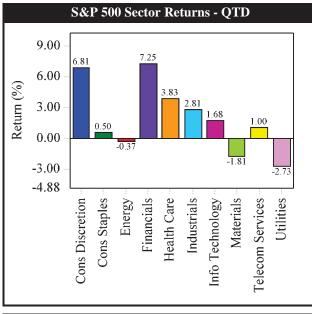


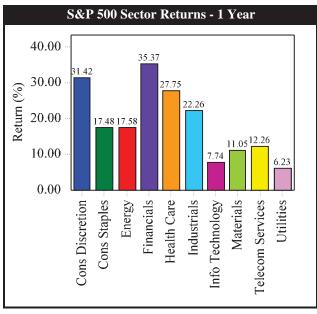
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

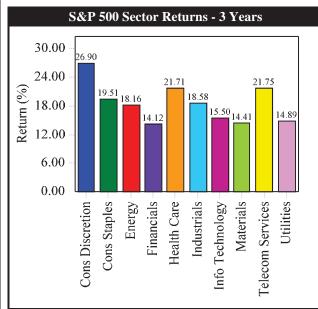


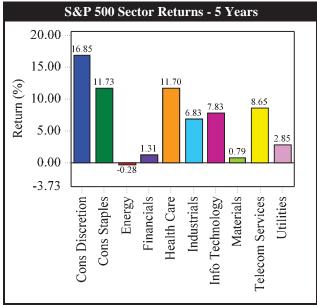
Domestic Equity Sector Weights and Returns As of June 30, 2013







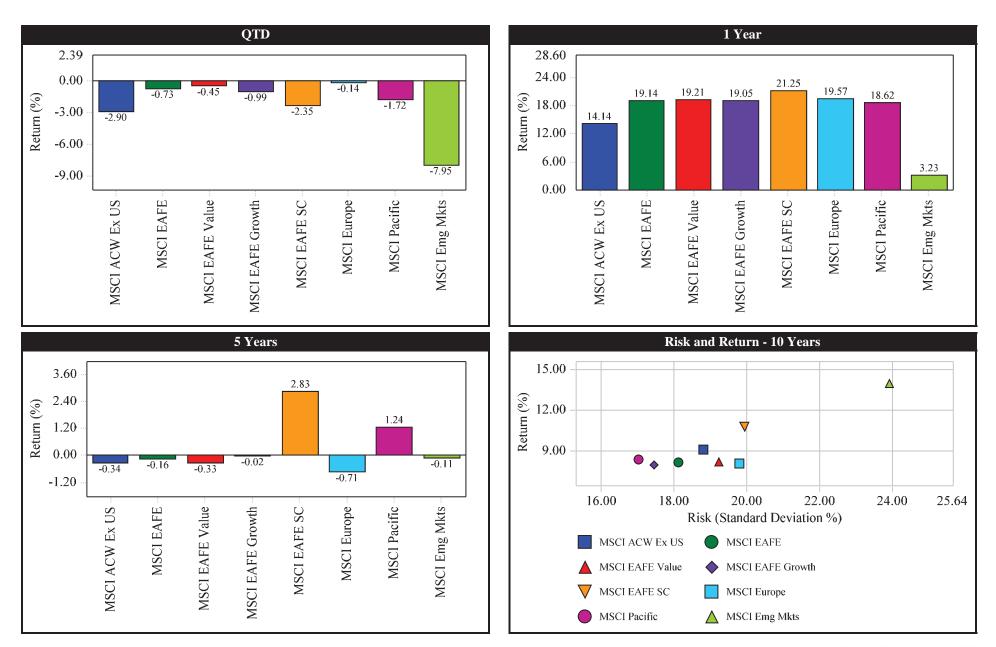








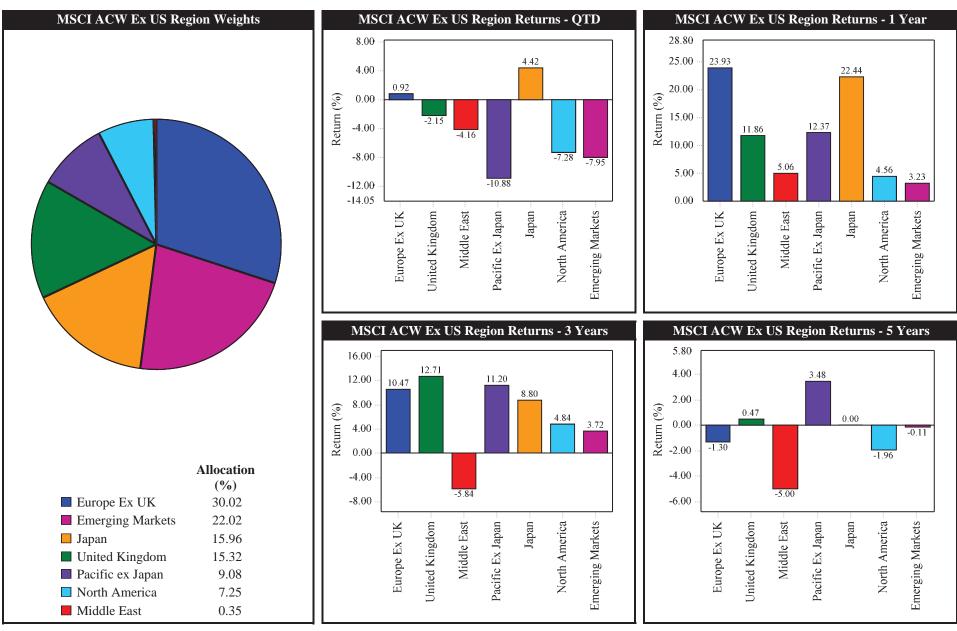
International Equity Market Performance and Risk As of June 30, 2013



Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All returns are shown gross of foreign taxes on dividends.



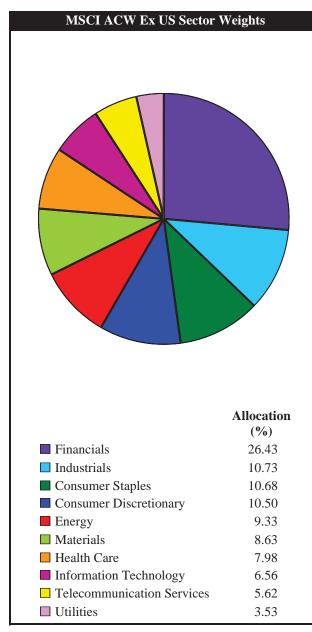
International Equity Region Weights and Returns As of June 30, 2013

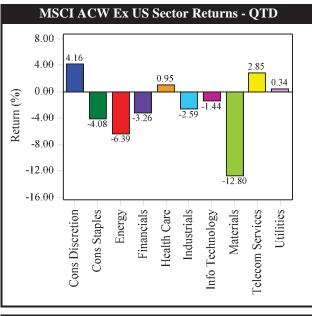


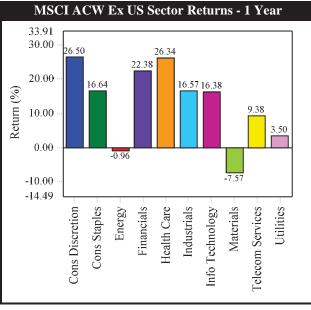
Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Allocations provided by MSCI Barra. All returns are shown gross of foreign taxes on dividends.

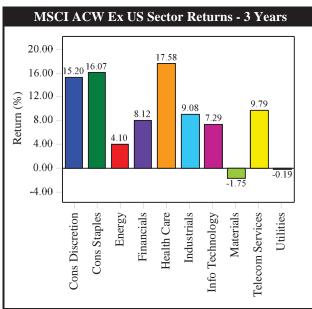


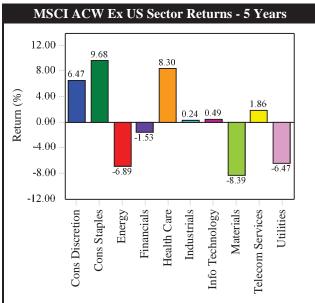
International Equity Sector Weights and Returns As of June 30, 2013







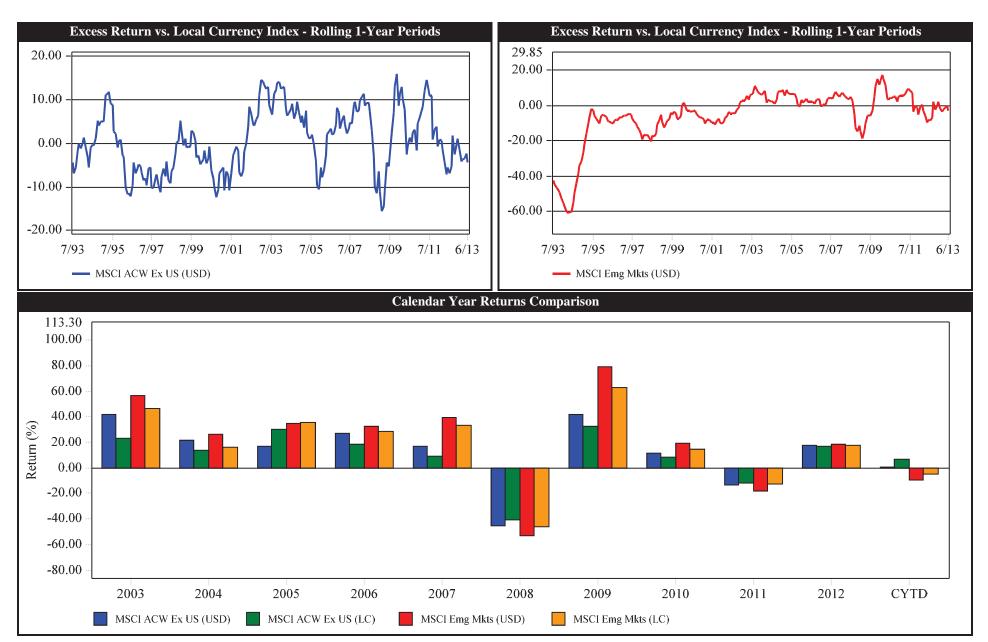




Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year. Allocations provided by MSCI Barra. All returns are shown gross of foreign taxes on dividends.



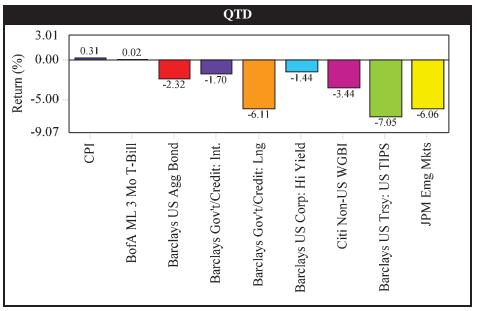
Effect of Currency on International Equity Performance As of June 30, 2013

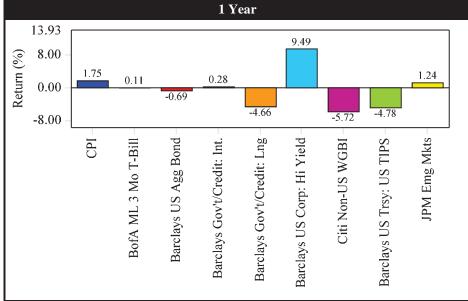


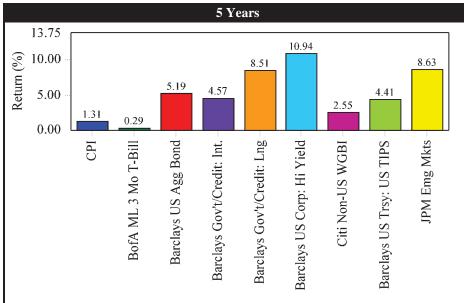
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All returns are shown gross of foreign taxes on dividends.

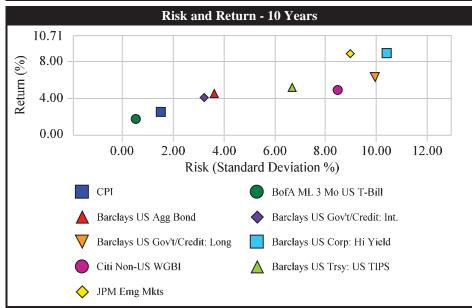


Fixed Income Market Performance and Risk As of June 30, 2013





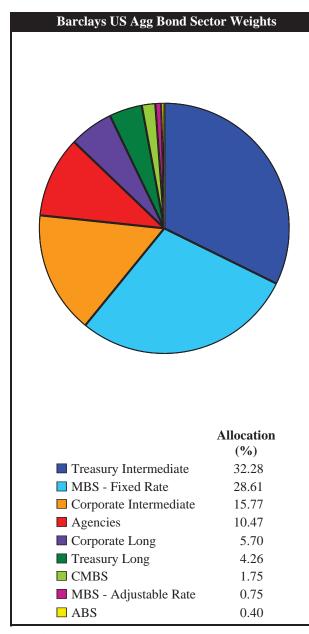


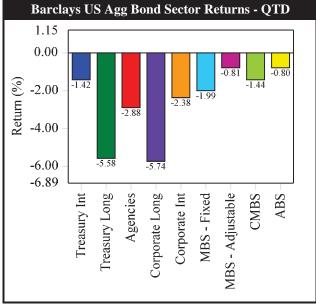


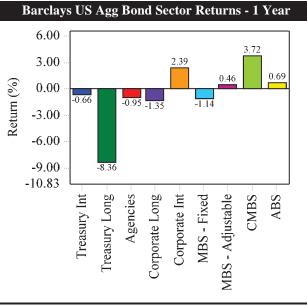
Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

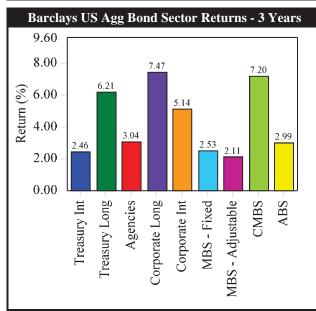


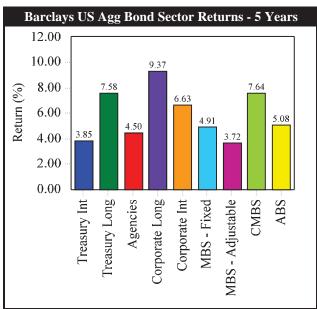
Domestic Fixed Income Sector Weights and Returns As of June 30, 2013

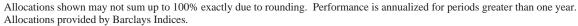






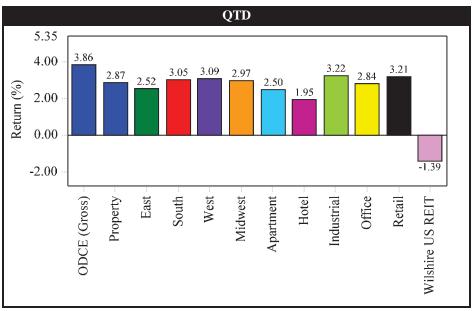


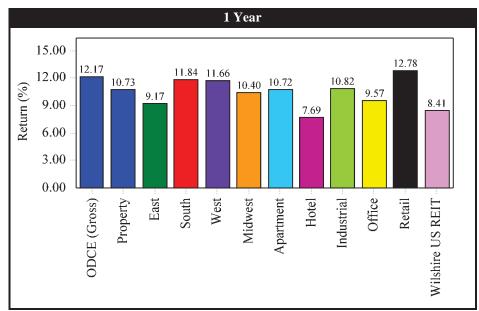


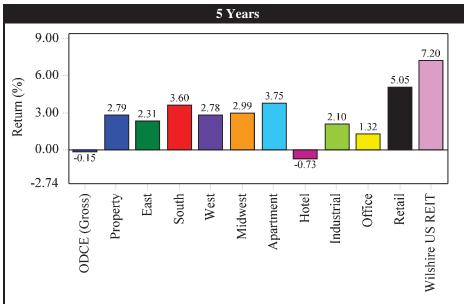


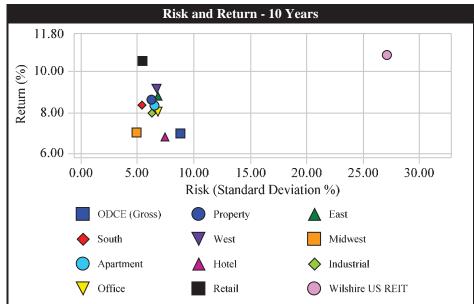


Real Estate Market Performance and Risk As of June 30, 2013





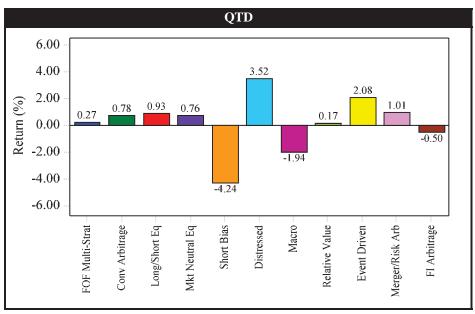


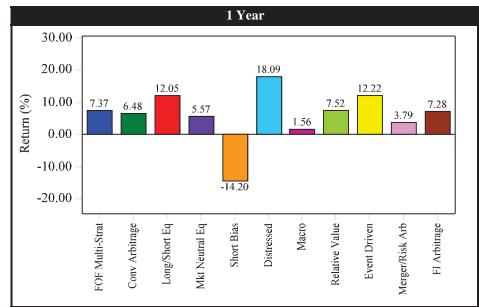


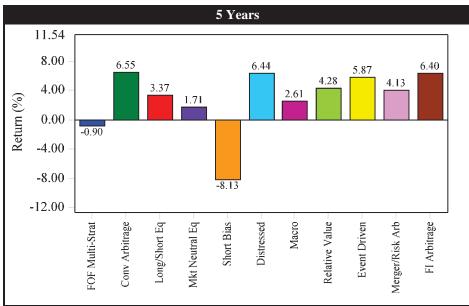
Performance is annualized for periods greater than one year. Calculation is based on quarterly periodicity. All data shown represent NCREIF indices unless otherwise noted. Region and sector data represent the Property Index.

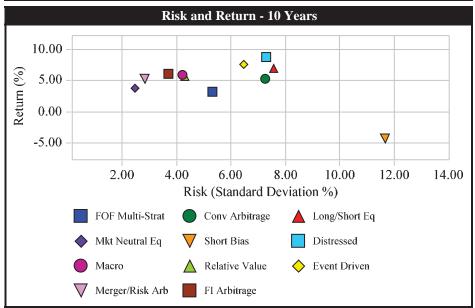


Hedge Fund Market Performance and Risk As of June 30, 2013









Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All data shown represent HFN indices, net of fees. Values are preliminary and subject to change.



Kentucky Retirement Systems Addendum As of June 30, 2013

Performance Related Comments

- Performance shown is gross of fees, except mutual funds, absolute return, and private equity, which are shown net of fees.
- Indices show N/A for Since Inception returns when the fund contains more history than the corresponding benchmark.
- All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Real Estate and Private Equity valuations are as of
 the most recent date available.

Asset Allocation Comments

- The U.S. Equity and Non-U.S. Equity Composites include Liquidation Accounts.
- The Private Equity Composite includes Internal Alternative Assets.
- The KERS, KERS Haz, CERS, CERS Haz and SPRS asset allocations are provided by Northern Trust.

Manager Transition Comments

- Currency Overlay was liquidated in O4 2012.
- International Account (SA) (Pension) and Arrowhawk Durable Alpha Fund L.P. were liquidated in December 2012.
- Equitization Assets Program (Pension) and Equitization Assets Program (Insurance) were fully liquidated in January 2013.
- Amerra Ag Fund II (CF) (Pension and Insurance) and Greenfield Acquisition Parters VI (CF) (Pension and Insurance) were funded in January 2013.
- Internal Mid Cap (SA) (Pension and Insurance) and International Account (Insurance) were fully liquidated in March 2013.
- BTC Emerging Markets (CF) (Pension and Insurance) and Walton Street Real Estate Fund VII, L.P. (Pension and Insurance) were funded in June 2013.

Holdings Comments

- KRS Transition Account (Pension and Insurance) is currently comprised of foreign currencies in the form of cash and recoverable taxes.
- Kentucky Liquidation Account (Pension) and KRS Insurance Liquidation (Insurance) are currently comprised of U.S. dollars, common stock, and warrants.
- The remaining assets of Commerce Street Income Partners, L.P. (Pension and Insurance) are residual.

Miscellaneous Comments

- The PIMCO All Asset Fund currently consists of the following underlying strategies which have been classified by RVK into eight broad categories:
 - Equity Nat. Resources: None
 - Commodities: Commodity Real Return Strategy Fund, CommoditiesPLUS Strategy Fund
 - Inflation Linked Bonds: Real Return Fund, Real Return Asset Fund
 - Floating Rate Bonds: Floating Income Fund, Senior Floating Rate Fund, Global Advantage Inflation-Linked Bond ETF
 - REITs: None
 - Nominal Bonds: Low Duration Fund, Short Term Fund, Investment Grade Corporate Bond Fund, Long Duration TR Fund, Long Term Credit Fund, Long Term US Government Fund,
 Total Return Fund, Convertible Fund, Emerging Markets Currency, Diversified Income Fund, Emerging Local Bond Fund, Emerging Markets Bond Fund, Foreign Bond Fund (Unhedged),
 Global Advantage Strategy Fund, High Yield Fund, High Yield Spectrum Fund, Income Fund, Credit Absolute Return Fund
 - Equity Non Real: EM Fundamental IndexPlus TR Fund, Fundamental IndexPlus TR, Int'l StocksPlus TR Fund (US Dollar Hedged), Int'l StocksPlus TR Fund (Unhedged), International Fundamental IndexPLUS TR Strategy Fund, Small Cap StocksPlus TR Fund, StocksPlus TR Fund, StocksPlus TR Fund, EqS Pathfinder Fund, EqS Emerging Markets Fund, EqS Dividend Fund, EqS Long/Short Fund, EqS Emerging Markets Corporate Fund
 - Other (Includes Cash): Net Cash Equivalents, Unconstrained Bond Fund, Fundamental Advantage TR Strategy Fund, Worldwide Fundamental Advantage TR Strategy Fund



Composite/Manager	<u>rk</u>	Since			
otal Fund Target Allocation Index (P)	R.V. Kuhns & Associates, Inc. began calculating the custom index as of September 1, 2008.				
	The custo	m index is calculated monthly and consists of:			
	6.00%	S&P 500 Index (Cap Wtd)			
	27.20%	S&P 1500 Composite Index			
	4.00%	R 2000 Index			
	18.00%	MSCI EAFE Index (Gross)			
	2.00%	MSCI Emerging Markets Index (Gross)			
	25.00%	Barclays US Aggregate Bond Index			
	10.00%	Barclays US Treasury: US TIPS Index			
	4.80%	Barclays US Corporate: High Yield Index			
	3.00%	Citigroup 3 Mo T-Bill Index	9/1/2008		
	6.00%	S&P 500 Index (Cap Wtd)			
	27.20%	S&P 1500 Composite Index			
	4.00%	R 2000 Index			
	12.00%	MSCI World Ex US Index (Gross)			
	4.00%	MSCI ACW Ex US Index (Gross)			
	2.00%	MSCI ACW Ex US Small Cap Index (Gross)			
	2.00%	MSCI Emerging Markets Index (Gross)			
	25.00%	Barclays US Aggregate Bond Index			
	10.00%	Barclays US Treasury: US TIPS Index			
	4.80%	Barclays US Corporate: High Yield Index			
	3.00%	Citigroup 3 Mo T-Bill Index	7/1/2009		
	20.00%	R 3000 Index			
	20.00%	MSCI ACW Ex US Index (Gross)			
	4.00%	MSCI Emerging Markets Index (Gross)			
	20.00%	Barclays US Unv Index			
	10.00%	Consumer Price Index + 3%			
	5.00%	NCREIF ODCE Index (Gross) (AWA)			
	10.05%	HFRI FOF Div Index (Lagged)			
	9.93%	R 3000 Index +4% (Qtr Lag)			
	1.02%	Citi 3 Mo T-Bill Index	7/1/2011		
	20.50%	R 3000 Index			
	20.00%	MSCI ACW Ex US Index (Gross)			
	2.90%	MSCI Emerging Markets Index (Gross)			
	19.30%	Barclays Universal Bond Index			
	10.00%	Consumer Price Index + 3%			
	4.50%	NCREIF ODCE Index (Gross) (AWA)			
	10.00%	HFRI FOF Div Index (Month Lag)			
	10.00%	R 3000 Index +4% (Qtr Lag)			
	2.80%	Citi 3 Mo T-Bill Index	1/1/2013		



Composite/Manager	Benchmark				
Total Fund Target Allocation Index (I)		m index is calculated monthly and consists of:	Since		
-	25.500	GOD FOOT 1 (G. W.)			
	27.50%	S&P 500 Index (Cap Wtd)			
	62.50%	Barclays US Gov't/Credit Bond index			
	10.00%	Citigroup 3 Mo T-Bill Index	Inception		
	50.00%	S&P 500 Index (Cap Wtd)			
	20.00%	S&P SmallCap 600 Index (Cap Wtd)			
	25.00%	Barclays US Gov't/Credit Bond index			
	5.00%	Citigroup 3 Mo T-Bill Index	8/1/1996		
	35.00%	S&P 500 Index (Cap Wtd)			
	20.00%	S&P SmallCap 600 Index (Cap Wtd)			
	25.00%	Barclays US Gov't/Credit Bond index			
	15.00%	BNY Mellon ADR Index			
	5.00%	Citigroup 3 Mo T-Bill Index	7/1/2000		
	60.00%	S&P 1500 Composite Index			
	15.00%	MSCI EAFE Index (Gross)			
	10.00%	Barclays US Treasury: US TIPS Index			
	5.00%	R 3000 Index + 4% (Qtr Lag) (I)*			
	5.00%	BNY Mellon ADR Index			
	5.00%	Citigroup 3 Mo T-Bill Index	7/1/2001		
	60.00%	S&P 1500 Composite Index			
	15.00%	MSCI EAFE Index (Gross)			
	10.00%	Barclays US Treasury: US TIPS Index			
	5.00%	R 3000 Index + 4% (Qtr Lag) (I)*			
	5.00%	S&P American Depositary Receipt Index			
	5.00%	Citigroup 3 Mo T-Bill Index	7/1/2002		
	3.00%	Citigloup 3 Wo 1-Dill Index	7/1/2002		
	60.00%	S&P 1500 Composite Index			
	16.00%	MSCI EAFE Index (Gross)			
	10.00%	Barclays US Treasury: US TIPS Index			
	5.00%	R 3000 Index + 4% (Qtr Lag) (I)*			
	4.00%	S&P American Depositary Receipt Index	7/1/2002		
	5.00%	Citigroup 3 Mo T-Bill Index	7/1/2003		
	60.00%	S&P 1500 Composite Index			
	20.00%	MSCI EAFE Index (Gross)			
	10.00%	Barclays US Treasury: US TIPS Index			
	5.00%	R 3000 Index + 4% (Qtr Lag) (I)*			
	5.00%	Citigroup 3 Mo T-Bill Index	4/1/2004		
	40.00%	S&P 1500 Composite Index			
	30.00%	MSCI EAFE Index (Gross)			
	12.00%	Barclays US Treasury: US TIPS Index			
	15.00%	R 3000 Index + 4% (Qtr Lag) (I)*			
	3.00%	Citigroup 3 Mo T-Bill Index	7/1/2007		



		115 01 0 0110 0 0 0 2 0 2 0	
Composite/Manager	Benchma	<u>rk</u>	Since
Total Fund Target Allocation Index (I) (Cont.)	40.00%	S&P 1500 Composite Index	
	27.00%	MSCI EAFE Index (Gross)	
	3.00%	MSCI Emerging Markets Index (Gross)	
	12.00%	Barclays US Treasury: US TIPS Index	
	15.00%	R 3000 Index + 4% (Qtr Lag) (I)*	
	3.00%	Citigroup 3 Mo T-Bill Index	5/1/2008
	40.00%	S&P 1500 Composite Index	
	24.00%	MSCI World Ex US Index (Gross)	
	3.00%	MSCI ACW Ex US Index (Gross)	
	3.00%	MSCI Emerging Markets Index (Gross)	
	12.00%	70% Barclays US Treasury: US TIPS Index/30% Barclays US Aggregate Bond Index	
	15.00%	R 3000 Index + 4% (Qtr Lag) (I)*	
	3.00%	Citigroup 3 Mo T-Bill Index	7/1/2009
	21.11%	R 3000 Index	
	20.97%	MSCI ACW Ex US Index (Gross)	
	3.45%	MSCI Emerging Markets Index (Gross)	
	19.30%	Barclays US Unv Index	
	11.39%	Consumer Price Index + 3%	
	4.31%	NCREIF ODCE Index (Gross) (AWA)	
	10.21%	HFRI FOF Div Index (Lagged)	
	8.30%	R 3000 Index +4% (Qtr Lag)	
	0.96%	Citi 3 Mo T-Bill Index	7/1/2011
	20.00%	R 3000 Index	
	20.00%	MSCI ACW Ex US Index (Gross)	
	4.00%	MSCI Emerging Markets Index (Gross)	
	20.00%	Barclays Universal Bond Index	
	10.00%	Consumer Price Index + 3%	
	5.00%	NCREIF ODCE Index (Gross) (AWA)	
	10.00%	HFRI FOF Div Index (Month Lag)	
	10.00%	R 3000 Index +4% (Qtr Lag)	
	1.00%	Citi 3 Mo T-Bill Index	1/1/2013



	AS 01 June 30, 2015				
Composite/Manager	Benchma	ark	Since Since		
Global Equity Composite (P)	R.V. Kuhns & Associates, Inc. began calculating the custom index as of July 1, 2011.				
1 7 1 1	Prior performance was provided by Northern Trust.				
	The custom index is calculated monthly and consists of:				
	The custom much is calculated monthly and consists of:				
	90.00%	S&P 500 Index (Cap Wtd)			
	10.00%	Russell 2000	Inception		
	85.00%	S&P 500 Index (Cap Wtd)			
	15.00%	Russell 2000	8/1/1996		
	62.00%	S&P 500 Index (Cap Wtd)			
	15.00%	Russell 2000			
	23.00%	BNY Melon ADR Index	7/1/2000		
	30.00%	S&P 500 Index (Cap Wtd)			
	31.00%	S&P 1500 Composite Index			
	12.00%	Russell 2000			
	18.00%	MSCI EAFE Index (Gross)	= /4 /2 0 0 d		
	9.00%	BNY Melon ADR Index	7/1/2001		
	30.00%	S&P 500 Index (Cap Wtd)			
	31.00%	S&P 1500 Composite Index			
	12.00%	Russell 2000			
	18.00%	MSCI EAFE Index (Gross)			
	9.00%	S&P ADR Index	7/1/2002		
	9.00%	S&F ADK IIIdex	7/1/2002		
	20.00%	S&P 500 Index (Cap Wtd)			
	31.00%	S&P 1500 Composite Index			
	9.00%	Russell 2000			
	6.00%	Russell 2500 Growth Index			
	20.00%	MSCI EAFE Index (Gross)			
	7.00%	S&P ADR Index			
			7/1/2002		
	7.00%	S&P 500 BARRA Growth Index	7/1/2003		
	12.00%	S&P 500 Index (Cap Wtd)			
	40.00%	S&P 1500 Composite Index			
	8.00%	Russell 2000 Index			
	24.00%	MSCI World Ex US Index (Gross)			
	8.00%	MSCI ACW Ex US Index (Gross)			
	4.00%	MSCI ACW Ex US Small Cap (Gross)			
	4.00%		7/1/2009		
	4.00%	MSCI Emerging Markets Index (Gross)	7/1/2009		
	45.45%	R 3000 Index			
	45.45%	MSCI ACW Ex US Index (Gross)			
	9.10%	MSCI Emerging Markets Index (Gross)	7/1/2011		
	47.20%	R 3000 Index			
	46.10%	MSCI ACW Ex US Index (Gross)			
			1/1/2012		
	6.70%	MSCI Emerging Markets Index (Gross)	1/1/2013		



As of June 30, 2013					
Composite/Manager Global Equity Composite (I)	Benchmark R.V. Kuhns & Associates, Inc. began calculating the custom index as of July 1, 2011. Prior performance was provided by Northern Trust.				
		m index is calculated monthly and consists of:			
	·				
	100.00%	S&P 500 Index (Cap Wtd)	Inception		
	70.00%	S&P 500 Index (Cap Wtd)	0/1/1006		
	30.00%	S&P 600 Index	8/1/1996		
	50.00%	S&P 500 Index (Cap Wtd)			
	20.00%	BNY Melon ADR Index			
	30.00%	S&P 600 Index	7/1/2000		
	75.00%	S&P 1500 Composite Index			
	5.00%	BNY Melon ADR Index			
	20.00%	MSCI EAFE Index (Gross)	7/1/2001		
	75.00%	S&P 1500 Composite Index			
	5.00%	S&P ADR Index			
	20.00%	MSCI EAFE Index (Gross)	7/1/2002		
	25.00%	MSCI EAFE Index (Gross)			
	75.00%	S&P 1500 Composite Index	4/1/2004		
	42.90%	MSCI EAFE Index (Gross)			
	57.10%	S&P 1500 Composite Index	7/1/2007		
	57.1070	See 1500 composite index	77 17 200 7		
	57.10%	S&P 1500 Composite Index			
	38.61%	MSCI EAFE Index (Gross)			
	4.29%	MSCI Emerging Markets	5/1/2008		
	57.10%	S&P 1500 Composite Index			
	4.29%	MSCI ACW Ex US Index (Gross)			
	4.29%	MSCI Emerging Markets Index (Gross)			
	34.32%	MSCI World Ex US Index (Gross)	7/1/2009		
	51.5270	Made World Ex Co Midex (Closs)	77172007		
	46.40%	R 3000 Index			
	46.10%	MSCI ACW Ex US Index (Gross)			
	7.50%	MSCI Emerging Markets Index (Gross)	7/1/2011		
	45.50%	R 3000 Index			
	45.50% 45.50%	MSCI ACW Ex US Index (Gross)			
	9.00%	MSCI Emerging Markets Index (Gross)	1/1/2013		
	2.00 /0	ALOCA Emiceging Manager Huta (C1000)	1/1/2010		



Composite/Manager	Ronchmo	Benchmark			
U.S. Equity Composite (P)		m index is calculated monthly and consists of:	Since		
c.b. Equity composite (1)	The edition	in much to taleulated monany and consists on			
	90.00%	S&P 500 Index (Cap Wtd)			
	10.00%	R 2000 Index	Inception		
			•		
	85.00%	S&P 500 Index (Cap Wtd)			
	15.00%	R 2000 Index	8/1/1996		
	80.52%	S&P 500 Index (Cap Wtd)			
	19.48%	R 2000 Index	7/1/2000		
	41.10%	S&P 500 Index (Cap Wtd)			
	42.46%	S&P 1500 Composite Index			
	16.44%	R 2000 Index	7/1/2001		
	26,000/	C 0 D 500 L. J (C W.J)			
	36.98% 42.47%	S&P 500 Index (Cap Wtd)			
	12.33%	S&P 1500 Composite Index R 2000 Index			
	8.22%	R 2500 Growth Index	7/1/2003		
	8.22%	R 2500 Growth fildex	//1/2003		
	27.50%	S&P 500 Index (Cap Wtd)			
	50.00%	S&P 1500 Composite Index			
	12.50%	R 2000 Index			
	10.00%	R 2500 Growth Index	11/1/2003		
	12.50%	S&P 500 Index (Cap Wtd)			
	65.00%	S&P 1500 Composite Index			
	12.50%	R 2000 Index			
	10.00%	R 2500 Growth Index	8/1/2005		
	16.50%	S&P 500 Index (Cap Wtd)			
	71.00%	S&P 1500 Composite Index			
	12.50%	R 2000 Index	3/1/2006		
	20.00%	S&P 500 Index (Cap Wtd)			
	66.67%	S&P 1500 Composite Index			
	13.33%	R 2000 Index	7/1/2007		
	13.33%	K 2000 flidex	//1/2007		
	100.00%	R 3000 Index	7/1/2011		
	2000070		77172011		
U.S. Equity Composite (I)	The custo	m index is calculated monthly and consists of:			
	100.00%	S&P 1500 Composite Index	Inception		
		1	F		
	100.00%	R 3000 Index	7/1/2011		



Composite/Manager	Benchmark				
Non-U.S. Equity Composite (P)		m index is calculated monthly and consists of:	<u>Since</u>		
	100.00%	BNY Mellon ADR Index	Inception		
	33.00%	BNY Mellon ADR Index			
	67.00%	MSCI EAFE Index (Gross)	8/1/2001		
	33.00%	S&P American Depositary Receipt Index			
	67.00%	MSCI EAFE Index (Gross)	7/1/2002		
	27.00%	S&P American Depositary Receipt Index	7/1/2002		
	73.00%	MSCI EAFE Index (Gross)	7/1/2003		
	100.00%	MSCI EAFE Index (Gross)	4/1/2004		
	90.00%	MSCI EAFE Index (Gross)			
	10.00%	MSCI Emerging Markets Index (Gross)	5/1/2008		
	80.00%	MSCI EAFE Index (Gross)			
	10.00% 10.00%	MSCI Emerging Markets Index (Gross) MSCI ACW Ex US Small Cap Index (Gross)	1/1/2009		
	60.00%	MSCI World Ex US Index (Gross)			
	20.00%	MSCI ACW Ex US Index (Gross)			
	10.00% 10.00%	MSCI Emerging Markets Index (Gross) MSCI ACW Ex US Small Cap Index (Gross)	7/1/2009		
		MSCI ACW Ex US Index (Gross)	7/1/2011		
			7/1/2011		
Non-U.S. Equity Composite (I)	The custo	om index is calculated monthly and consists of:			
	100.00%	BNY Mellon ADR Index	Inception		
	25.00%	BNY Mellon ADR Index	5 /4 / 5 00 4		
	75.00%	MSCI EAFE Index (Gross)	7/1/2001		
	25.00% 75.00%	S&P American Depositary Receipt Index MSCI EAFE Index (Gross)	7/1/2002		
			7/1/2002		
	20.00% 80.00%	S&P American Depositary Receipt Index MSCI EAFE Index (Gross)	7/1/2003		
	100.00%	MSCI EAFE Index (Gross)	4/1/2004		
	90.00% 10.00%	MSCI EAFE Index (Gross) MSCI Emerging Markets Index (Gross)	5/1/2008		
			2, 1, 2000		
	80.00% 10.00%	MSCI World Ex US Index (Gross) MSCI ACW Ex US Index (Gross)			
	10.00%	MSCI Emerging Markets Index (Gross)	7/1/2009		
	100.00%	MSCI ACW Ex US Index (Gross)	7/1/2011		
			RVK		

Composite/Manager	Benchmark	Since
Fixed Income Composite (P)	The custom index is calculated monthly and consists of:	
	80.00% Barclays US Govt/Credit Bond Index 20.00% BofA ML 1-3 Year US Treasury Index	Inception
		псериоп
	54.00% Barclays US Govt/Credit Bond Index 27.00% Barclays US Tsry: US TIPS Index	
	19.00% Barclays US Agg Bond Index	7/1/2001
	38.00% Barclays US Agg Bond Index	
	35.00% Barclays US Govt/Credit Bond Index 27.00% Barclays US Tsry: US TIPS Index	7/1/2003
		7/1/2003
	71.43% Barclays US Agg Bond Index 28.57% Barclays US Tsry: US TIPS Index	7/1/2007
	100.00% Barclays US Unv Bond Index	7/1/2011
		7/1/2011
Fixed Income Composite (I)	The custom index is calculated monthly and consists of:	
	100.00% Barclays US Govt/Credit Bond Index	Inception
	100.00% Barclays US Tsry: US TIPS Index	7/1/2001
	70.00% Barclays US Tsry: US TIPS Index	
	30.00% Barclays US Agg Bond Index	4/1/2011
	100.00% Barclays US Unv Bond Index	7/1/2011
Real Estate Composite (P)	The custom index is calculated monthly and consists of:	
& Real Estate Composite (I)	100.00% NCREIF Property Index (Qtr Lag)	Inception
	100.00% NCREIF ODCE Index (Gross) (AWA)	7/1/2011
Private Equity Composite (P)	The custom index is calculated monthly and consists of:	
	60.00% S&P 1500 Composite Index	
	40.00% Barclays US Corp: High Yield Index	Inception
	100.00% R 3000 Index + 4% (Qtr Lag)	7/1/2011
Private Equity Composite (I)	The custom index is calculated monthly and consists of:	
	80.00% S&P 1500 Composite Index	
	20.00% Barclays US Corp: High Yield Index	Inception
	100.00% R 3000 Index + 4% (Qtr Lag)	7/1/2011



Composite/Manager Internal S&P 500 Index (SA)	Benchmark The custom index is calculated monthly and consists of:				
	100.00% S&P 1500 Composite Index 100.00% S&P 500 Index (Cap Wtd)	Inception 7/1/2011			
The Boston Co. Non-U.S. Value (SA)	The custom index is calculated monthly and consists of:				
& Pyramis Int'l Growth Fund (SA)	100.00% MSCI EAFE Index (Gross)	Inception			
	100.00% MSCI World Ex US Index (Gross)	7/1/2009			
	100.00% MSCI ACW Ex US Index (Gross)	1/1/2012			
PIMCO Core Fixed Income (SA) PIMCO Blended Index	The blended index is calculated monthly and consists of:				
FINCO blended index	100.00% Barclays US Agg Bond Index	Inception			
	60.00% Barclays US Agg Bond Index 40.00% PIMCO Global Advantage Index	10/1/2011			
Commerce Street Income Partners L.P. & Waterfall (SA)	The blended index is calculated monthly and consists of:				
Opportunistic FI Blended Index	60.00% Barclays US Corp: High Yield Index 40.00% Barclays US ABS Floating Rate Index	Inception			
Shenkman Capital (SA) Shenkman Blended Index	The blended index is calculated monthly and consists of:				
Brendman Benacu Inaca	50.00% Barclays US Corp: High Yield Index 50.00% Barclays US High Yield Loans Index	Inception			



Alpha - A measure of the difference between a portfolio's actual returns and its expected performance, given its level of risk as measured by beta. It is a measure of the portfolio's historical performance not explained by movements of the market or a portfolio's non-systematic return.

Alpha Ratio - A measure of a portfolio's non-systematic return per unit of downside risk. It is measured by dividing the alpha of a portfolio by the downside risk. The non-systematic return is a measure of a portfolio's historical performance not explained by movements of the market.

Average Quality - Bond uality ratings are reported using the investment managers and the index providers preferred rating agency. Average Quality for managers unable to provide this statistic has been estimated using a credit quality distribution provided by the manager. There are two primary rating agencies in the US. Moody's assigns ratings on a system that employs up to four symbols (consisting of letters and numbers) such as, Aaa, Aa2, etc., with Aaa being the highest or safest rating. Standard & Poor's (S&P) employs a system that uses + and - along with letters such as AAA, AA+, etc.The two rating agencies systems are summarized below

<u>S&P</u>	Moody's	Explanation	<u>S&P</u>	Moody's	Explanation		
Higher Credi	t Quality – Inves	tment Grade	Lower Credit	Lower Credit Quality - Below Investment Grade			
AAA	Aaa	Prime/Highest credit uality	BB+	Ba1	Speculative/Low credit uality		
AA+	Aa1	High credit uality	BB	Ba2			
AA	Aa2		BB-	Ba3			
AA-	Aa3		B+	B1	Highly speculative		
A+	A1	Upper-medium credit uality	В	B2			
A	A2		B-	В3			
A-	A3		CCC+	Caa1	Substantial credit/default risk		
BBB+	Baa1	Lower-medium credit uality	CCC	Caa2	Extremely speculative		
BBB	Baa2	·	CCC-	Caa3	• •		
BBB-	Baa3		CC	Ca	ulnerable to default		
			C	Ca			
			D	C	In default		

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Buy and Hold Attribution - At the beginning of the time period under analysis, the manager and benchmark portfolios are broken down into segments (i.e., styles, sectors, countries, and regions) based on the desired type of attribution. The formula assumes zero turn-over to the manager and benchmark portfolios throughout the period and calculates the segment returns ("buy and hold returns") to arrive at performance attribution. Due to portfolio turnover, buy and hold attribution may not accurately represent uarterly performance relative to the benchmark. Country, region, sector, and style allocations are as of the date one uarter prior to the reporting date, and the returns shown are for those segments throughout the uarter reported. Due to disclosure guidelines set by each investment manager, e uity characteristics shown are as of the most recent date available. The following is the methodology for segment classification

Sector - Attribution is calculated using the Global Industry Classification Standard (GICS) which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector, as defined by S P Capital I data.

Country/Region - Attribution is calculated using the Morgan Stanley Capital International (MSCI) region standards. Stocks are classified by their domicile country/region, as defined by S P Capital I data.

Style - Stocks are classified into the following style boxes large/mid/small vs. growth/neutral/value. Stocks are classified along large/mid/small categories at the time of the Russell index rebalancing, using the index market cap boundaries as cutoff points. Stocks are classified along growth/neutral/value categories at the time of the Russell index rebalancing, using the price/book ratio as supplied by S P Capital I . Stocks in the Russell 3000 Index portfolio are sorted by price/book ratio names with the highest price/book ratio that make up 1/3 of the total market capitalization are assigned to the growth category, names that make up the subse uent 1/3 of the total market capitalization are assigned to the neutral category, while the balance of the names are assigned to the value category.

Portfolio Characteristics and Buy and Hold Attribution reports utilize product-specific data for all mutual funds and commingled funds.



Capital Markets Review -

Baltic Dry Index - Measures the demand for shipping capacity versus the supply of dry bulk carriers. As the supply of cargo ships is inelastic, the Baltic Dry Index provides an assessment of the price of moving major raw materials by sea.

Breakeven Inflation - Measures the expected inflation rate at each stated maturity by taking the difference between the real yield of the inflation-linked maturity curve and the yield of the closest nominal Treasury maturity.

Capacity Utilization - Measures the extent to which a country efficiently utilizes installed productive capacity. It measures the difference between the output that is produced using the installed e uipment versus the output that *could* be produced using the installed e uipment.

Consumer Confidence - Measures domestic consumer confidence as defined by the degree of optimism on the state of the economy that consumers express through saving and spending.

Consumer Price Index (CPI) - Measures the change in the price level of consumer goods and services.

Disposable Personal Income - The difference between total personal income and personal income tax payments.

Disposable Producer Price Index (PPI) - Measures the average change in selling prices received by US producers for their output.

M2 - Measures the amount of money in circulation and is often used as an indicator for forecasting inflation.

Option-Adjusted Spread - Measures the flat spread of an index or bond to the Treasury yield curve after removing the effect of any embedded options.

Personal Consumption Expenditures - Measures the average increase in prices for all domestic personal consumption.

Personal Savings - Percentage of personal saving within the US as a percentage of disposable personal income.

Purchasing Managers Index (PMI) - Measures economic activity by surveying purchasing managers on a monthly basis as to whether business conditions have improved, worsened, or stayed the same.

Relative Strength Index (RSI) - Measures the current and historical strength or weakness of a stock market based on the closing prices of the most recent 14-day period. RSI is classified as a momentum oscillator and measures the velocity and magnitude of directional price movements. RSI levels at or above 70 may indicate that a market is "overbought" while RSI levels below 30 may indicate that a market is "oversold."

Shiller 20 City YoY - Measures the yearly change in housing prices for 20 major metropolitan areas within the US.

US Credit Market Debt as a Percentage of GDP -

Business - Non-financial corporate business and non-corporate business.

Financials - Commercial banks, savings institutions and credit unions, government-sponsored enterprises, agency- and GSE-backed mortgage pools, ABS issuers, life insurance companies, REITs, and financial companies.

Foreign - US credit market instruments owed by non-US entities and debt issued by foreign companies in the US.

Government - Savings bonds, Treasury securities, budget agency securities, insurance reserves, and non-marketable securities held by retirement plans.

Household - Home mortgages, consumer credit, municipal securities, bank loans, and commercial mortgages.

US Dollar Total Weighted Index - Measures the value of the US Dollar relative to a basket of other world currencies. It is calculated as the weighted geometric mean of the dollars value versus the EUR, GBP, CAD, SE , CHF, and PY.

VIX - Measures the implied volatility of S P 500 Index options by looking at the market's expectation of the S P 500 Index volatility over the next 30 day period. Commonly referred to as the "fear index" or the "fear gauge."

Consistency - The percentage of uarters that a product achieved a rate of return higher than that of its benchmark. The higher the consistency figure, the more value a manager has contributed to the product s performance.

Convexity - A measure of the shape of the curve that describes the relationship between bond prices and bond yields.

Correlation - A statistical measure of the relationship between asset class returns. A value of 1.00 is a perfect correlation that is, the asset classes always move in the same direction. A value of -1.00 indicates a perfect negative correlation, in which the asset classes always move in opposite directions of each other. A value of 0 indicates there is no relationship between the direction of returns of the two asset classes. Correlation calculations only consider the direction of changes relative to two variables and not the magnitude of those changes.

Coupon Rate - The percentage rate of interest paid on a bond or fixed income security it is typically paid twice per year.



Current Yield - The annual income of a security divided by the security s current price.

Down Market Capture - Down market by definition is negative benchmark return and down market capture represents the ratio in % terms of the average portfolios return over the benchmark during the down market period. The lower the value of the down market capture the better the product s performance.

Downside Risk - A measure similar to standard deviation, but focuses only on the negative movements of the return series. It is calculated by taking the standard deviation of the negative uarterly set of returns. The higher the factor, the riskier the product.

Earnings Per Share - It is backward looking, calculated using the one year current EPS divided by the one year EPS five years ago.

Effective Duration - The weighted average duration of all the bonds in a given portfolio, weighted by their dollar values.

Excess Return vs. Market - Average of the monthly arithmetic difference between the manager's return and the benchmark return over a specified time period, shown on an annualized basis.

Excess Return vs. Risk Free - Average of the monthly arithmetic difference between the manager's return and the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise) over a specified time period, shown on an annualized basis.

Excess Risk - A measure of the standard deviation of a portfolio's performance relative to the risk free return.

Expense Ratios - Morningstar is the source for mutual fund expense ratios.

Gain/Loss - The net increase or decrease in the market value of a portfolio excluding its Net Cash Flow for a given period.

Indices - All indices and related information are considered intellectual property and are licensed by each index provider. The indices may not be copied, used or distributed without the index providers prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their uality, accuracy, suitability and/or completeness.

Information Ratio - Measured by dividing the active rate of return by the tracking error. The higher the information ratio, the more value-added contribution by the manager.

Liability Driven Investing (LDI) - A method to optimally structure asset investments relative to liabilities. The change in liabilities is estimated by the Ryan Labs Generic PPA Index of appropriate duration for that Plan. This benchmark is based on generic data and is therefore an approximation. R is not an actuarial firm, and does not have actuarial expertise.

Estimated Funded Status - The estimated ratio of a Plan's assets relative to its future liabilities. This is calculated by dividing the Plan's asset market value by the estimated present value of its liabilities. The higher the estimated funded status, the better the Plan's ability to cover its projected benefit obligations. An estimated funded status of 100% indicates a Plan that is fully funded. Estimated PV of Liabilities - An estimate of a Plan's future liabilities in present value terms. The beginning of the period liability is provided by the Plan's actuary. The period-end present value liability estimate provided in this report is derived by applying the estimated percentage change generated using the Ryan Labs Generic PPA Index with duration similar to that reported on the most recent actuarial valuation report.

Duration of Liabilities - The sensitivity of the value of a Plans liabilities to changes in interest rates, as calculated by the Plans actuary.

Duration of Assets - The dollar-weighted average duration of all the individual Plan assets.

Estimated Plan Hedge Ratio - The estimate of how well a Plan's investment portfolio is hedged against changes in interest rates - a primary driver of funded status movements. This is calculated by dividing the dollar-weighted values of both the Plan asset duration by the liability duration and multiplying by the estimated funded status. An estimated plan hedge ratio of zero indicates that the Plan's liabilities have not been hedged, whereas a value of one indicates fully hedged.

Modified Duration - The approximate percentage change in a bond s price for a 100 basis point change in yield.

Net Cash Flow - The sum, in dollars, of a portfolio's contributions and withdrawals. This includes all management fees and expenses only when performance shown is gross of fees.



Peer Groups -

Plan Sponsor Peer Groups - R utilizes the Mellon Analytical Solutions Trust Universe along with the Investment Metrics Plan Sponsor Universe. The combined Mellon Analytical Solutions Trust Universe and Investment Metrics Plan Sponsor Universe is used for comparison of total fund composite results and utilizes actual client returns compiled from consultant and custodial data. The Plan Sponsor Peer Group database includes performance and other uantitative data for over 2,100 plans which include corporate, endowment, foundation, public, and Taft Hartley plans. Plan Sponsor Peer Groups are gross of fees.

Institutional Peer Groups (Separate Account and Commingled Fund) - R utilizes the Investment Metrics Separate Account and Commingled Fund Manager Peer Groups for peer comparison and rankings. The Separate Account and Commingled Fund Peer Group database includes performance and other uantitative data for over 1,000 investment management firms, 6,400 investment products, across 100 standard peer groups. Separate Account and Commingled Fund Peer Groups are gross of fees.

Mutual Fund (MF) Peer Groups - R utilizes the Lipper Mutual Fund Manager Peer Groups for peer comparison and rankings. The Lipper Manager Peer Group database includes performance and other uantitative data for over 700 investment management firms and 24,500 investment products, across more than 140 standard peer groups. Mutual Fund Peer Groups are net of fees.

Percentile Rankings - Percentile rank compares an individual fund s performance with those of other funds within a defined peer group of managers possessing a similar investment style. Percentile rank identifies the percentage of a fund s peer group that has a higher return (or other comparative measurement) than the fund being ranked. Conversely, 100 minus the individual fund s ranking will identify the percentage of funds within the peer group that have a lower return than the fund being ranked.

1 - Highest Statistical alue 100 - Lowest Statistical alue

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the IM US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the IM US Equity Large-Cap Growth Funds peer group, 4% of the other funds performed better than American Funds AMCP;R-4 (RAFEX), while 96% of the funds performed worse.

Performance Methodology - R endorses the Global Investment Performance Standards (GIPS) and calculates performance for investment managers and composites using different methodologies. Investment manager performance is calculated by revaluing the portfolio on the date of all large external cash flows while composite performance is calculated using the Modified Dietz calculation methodology. According to the CFA Institute, "Only investment management firms that actually manage assets can claim compliance with the Standards. Plan Sponsors and consultants cannot make a claim of compliance unless they actually manage assets for which they are making a claim of compliance. They can claim to endorse the Standards and/or re uire that their investment managers comply with the Standards."

Investment Managers - Performance is calculated for interim periods between all large external cash flows for a given month and geometrically linked to calculate period returns. An external cash flow is defined as cash, securities, or assets that enter or exit a portfolio. R defines a "large cash flow" as a net aggregate cash flow of $\geq 10\%$ of the beginning-period portfolio market value or any cash flow that causes R calculated performance to deviate from manager/custodian reported performance in excess of 5 basis points for a given month.

Composites - The Modified Dietz methodology is utilized to calculate asset class, sub-asset class, and total fund composite performance. The Modified Dietz method calculates a time-weighted

total rate of return that considers the timing of external cash flows however, it does not utilize interim period performance to mitigate the impact of significant cash in- and outflows to the composite.

R calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to R using the first full month of returns as the inception date. Performance for both managers and composites is annualized for periods greater than one year.

Portfolio Characteristics - Due to disclosure guidelines set by each investment manager, portfolio characteristics shown are as of the most recent date available.

Private Equity Quartile Ranks – Private E uity uartile ranks are generated using vintage year peer group data provided by Thomson Reuters, and are based on each fund s annualized, since inception internal rate of return (IRR). Three Private E uity peer groups are available via Thomson Reuters Buyout, enture, and All Private E uity. Ranks are available uarterly, at a one-uarter lag.

Return - Compounded rate of return for the period.

%Return - The time-weighted rate of return of a portfolio for a given period.



R-Squared - The percentage of a portfolio's performance explained by the behavior of the appropriate benchmark. High R-S uared means a higher correlation of the portfolio's performance to the appropriate benchmark.

Risk Free Benchmark - BofA ML 3 Mo US T-Bill Index unless specified otherwise.

RVK Liquidity Rating - A ualitative method for determining the relative amount of li uidity in a portfolio. The characteristics considered when determining relative li uidity include trading volume, gates for redemption, leverage, nature of transactions, and pricing mechanisms. The R Li uidity Rating is calculated using beginning of month investment weights applied to each corresponding asset class li uidity rating.

Asset Class	RVK Liquidity Rating	Asset Class	RVK Liquidity Rating
Liquid Investments		Less Liquid Investments	
T-Bills and Treasurys	100	Fixed Income Plus Sector	50
Cash E uivalents	98	Diversified Real Return	50
TIPS	95	Global Tactical Asset Allocation	50
US Large Cap E uity	95	Stable alue (Plan Sponsor Directed)	50
Stable alue (Participant Directed)	91	Absolute Return Strategies	35
Non-US Large Cap E uity	90	Not Liquid Investments	
US Small Cap E uity	85	Core Real Estate	25
REITS	85	Core Plus Real Estate	15
Non-US Small Cap E uity	85	Plus Only Real Estate	5
Emerging Markets E uity	85	Private E uity Funds of Funds	5
Core Fixed Income	85		
Core Plus Fixed Income	80		

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return. The result is the absolute rate of return per unit of risk. The higher the value, the better the product s historical risk-adjusted performance.

Simple Alpha - The difference between the manager's return and the benchmark's return.

Spread Duration - A measure of the price sensitivity of a bond to a 100 basis-point movement of the bond s spread relative to Treasurys.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period.

Time Period Abbreviations - QTD - uarter-to-Date. CYTD - Calendar Year-to-Date. FYTD - Fiscal Year-to-Date. YOY - Year Over Year.



Thematic Classification - Represents dedicated manager allocations as such, thematic allocations are approximations. R categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation

<u>Alpha</u>

Absolute Return Strategies Currency Overlay

Capital Appreciation Public E uity Private E uity Preferred Securities High Yield Convertible Fixed Income

TALF Funds
Distressed Debt
Emerging Market Fixed Income
alue Added Real Estate
Opportunistic Real Estate

Capital Preservation Core Fixed Income

CMBS Fixed Income Asset Backed Fixed Income Domestic Core Plus Fixed Income Mortgage Backed Fixed Income International Developed Fixed Income

Cash E uivalents
Stable alue

Inflation
TIPS
Core Real Estate
Real Return

Inflation Hedges REITS Commodities

Total Fund Attribution - A method for identifying the sources of a total fund s over- or underperformance relative to its benchmark. The calculation identifies the contributions of positive or negative total fund excess return caused by allocation differences relative to the total fund s custom benchmark, and performance differences of the investment managers relative to the benchmark components that represent them.

Total Fund Performance -

Total Fund - The percentage return of the total fund for the specified time period.

Total Fund Benchmark - The percentage return of the total fund benchmark for the specified time period calculated using the target asset allocation and the corresponding benchmark returns. **Total Value Added -** The percentage of over- or underperformance of the total fund as compared to the total fund benchmark.

Total Value Added -

Asset Allocation - Shows how the variance of the total funds actual allocation from its target allocation added to or subtracted from fund performance.

Manager Value Added - The portion of the total value added attributable to the outperformance or underperformance of the fund s investment managers, relative to the individual benchmarks that represent them in the total fund benchmark.

Market Timing/Other - The contribution of other residual factors, including estimation error and transaction timing.

Total Fund Beta - Total Fund Beta is calculated using the S P 500 as the benchmark. It represents a measure of the sensitivity of the total fund to movements in the S P 500 and is a measure of the Total Fund's non-diversifiable or systematic risk.

Tracking Error - A measure of the standard deviation of a portfolio's performance relative to the performance of an appropriate market benchmark.

Treynor Ratio - Similar to Sharpe ratio, but focuses on beta rather than excess risk (standard deviation). Treynor ratio represents the excess rate of return over the risk-free rate (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise) divided by the beta. The result is the absolute rate of return per unit of risk. The higher the value, the better historical risk-adjusted performance.

Unit Value - The dollar value of a portfolio, assuming an initial nominal investment of \$100, growing at the compounded rate of %Return for a given period.

Up Market Capture - Up market by definition is positive benchmark return and up market capture represents the ratio in % terms of the average portfolios return over the benchmark during the up market period. The higher the value of the up market capture the better the products performance.

Yield to Maturity - The rate of return achieved on a bond or other fixed income security assuming the security is bought and held to maturity and that the coupon interest paid over the life of the bond will be reinvested at the same rate of return.

Yield to Worst - The bond yield calculated by using the worst possible yield taking into consideration all call, put, and optional sink dates.

