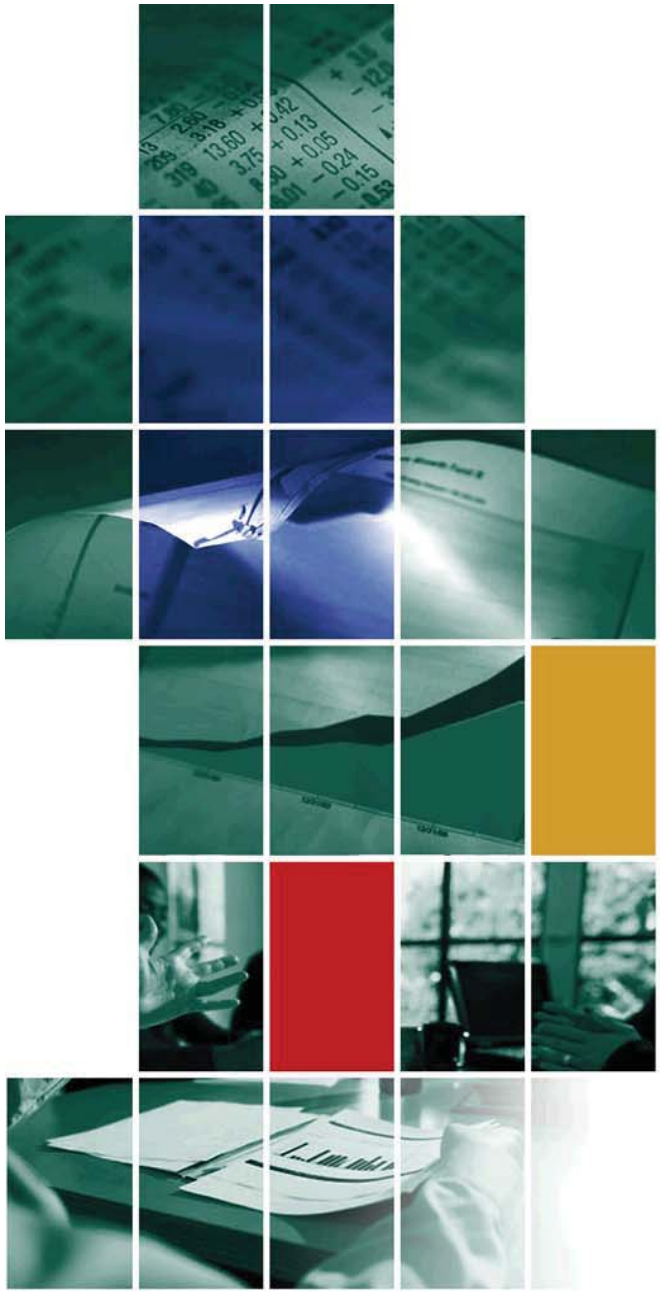

Kentucky Retirement Systems

Investment Performance Analysis

Quarter Ended

December 31, 2011

Prepared By

Janelle Stone

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Capital Markets Review
As of December 31, 2011

Fourth Quarter Economic Environment

Steadying domestic trends and fluctuating economic headwinds abroad were the overall themes in the fourth quarter. Domestically, the economy experienced improved numbers in manufacturing, retail sales, and consumer confidence. In December, the unemployment rate decreased to 8.5%, a 35 month low, thanks in part to a steady rate of private hiring and a decreasing labor force participation rate. The BEA's final third quarter data was revised downward from 2.0% to an annual growth rate of 1.8%. In an attempt to maintain historically low interest rates, the Federal Reserve reiterated its commitment to "Operation Twist," while also announcing a plan to publish a conditional future federal funds rate in an effort to boost transparency.

The European Central Bank, along with the Federal Reserve and four other major central banks, agreed to cut the cost of dollar loans to banks by 0.50% in an effort to improve the liquidity of European banks. Mario Draghi replaced Jean-Claude Trichet as president of the ECB in early November. Mr. Draghi spearheaded several key policy changes across the Eurozone in an attempt to restore stability to the monetary union. Eurozone leaders also pushed through an historic agreement for increased economic integration and tougher fiscal controls. Italian 10-year bond yield remained at elevated levels while Spanish yields retreated slightly from November highs, ending the year at 7.11% and 5.09% respectively. Commodities, represented by the DJ-UBS Commodity Index, finished slightly up for the quarter at 0.35% after a turbulent year. Gold's spot price decreased in the fourth quarter to $1,564 but increased 10.06% for the year.

Domestic Equities

- An improved U.S. economic outlook helped U.S. equities erase summer losses.
- Small-cap stocks outperformed their large-cap counterparts with small-cap value stocks, represented by the R 2000 Value, as the highest performer at 15.97% for the quarter.
- With the energy and industrials sectors leading the way, the S&P 500 (Cap Wtd) posted an 11.82% return for the quarter and a 2.11% return for the year.
- Market volatility, as measured by the CBOE Volatility Index, decreased to 23, and is down sharply from the third quarter reading of 43.
- Despite the positives, investors continued their retreat from U.S. equity mutual funds as $49B flowed out during the quarter, while taxable bond funds saw inflows of $34B.

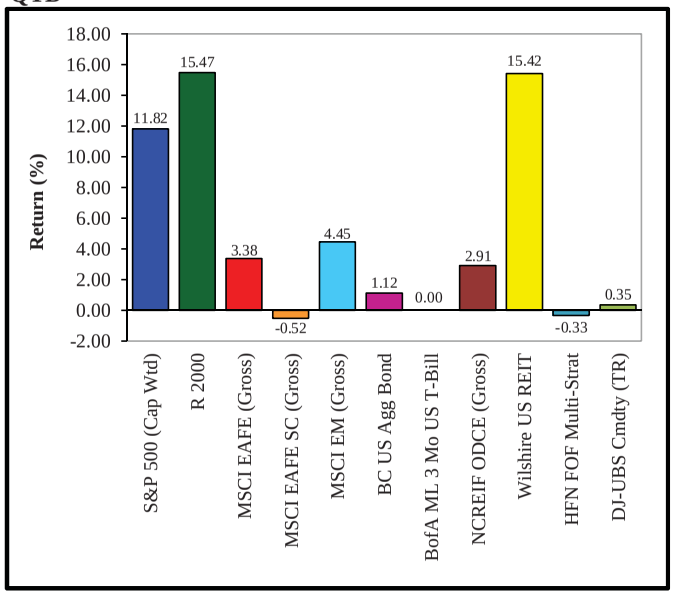
International Equities

- Although uncertainty over the future of the Eurozone remains, the MSCI EAFE gained 3.38% for the quarter.
- Continuing a trend seen throughout the year, small-cap stocks underperformed large-cap stocks as the MSCI EAFE Small Cap finished the quarter down -0.52%.
- The MSCI Emerging Markets index returned 4.45% for the quarter but still finished the year substantially down at -18.17%.

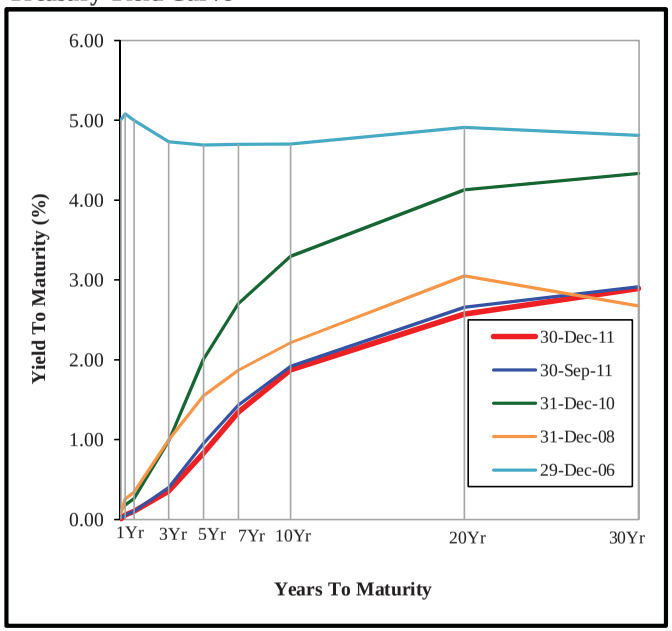
Fixed Income

- U.S. fixed income continued to be a safe haven for global investors, with the BC US Agg Bond Index returning 1.12% for the quarter and 7.84% for the year.
- U.S. Municipal Debt and U.S. TIPS were also strong performers for the year, with the BC US Muni Bond Index and the BC US Trsy: US TIPS Index returning 10.70% and 13.56%.

QTD



Treasury Yield Curve



Trailing-Period Performance

	Mth End Oct-2011	Mth End Nov-2011	MTD	QTD	CYTD	1 Year	2 Years	3 Years	5 Years	10 Years
S&P 500 (Cap Wtd)	10.93	-0.22	1.02	11.82	2.11	2.11	8.39	14.11	-0.25	2.92
R 2000	15.14	-0.36	0.66	15.47	-4.18	-4.18	10.25	15.63	0.15	5.62
MSCI EAFE (Gross)	9.65	-4.83	-0.94	3.38	-11.73	-11.73	-2.27	8.16	-4.26	5.12
MSCI EAFE SC (Gross)	7.20	-5.40	-1.90	-0.52	-15.66	-15.66	1.60	15.00	-3.80	9.42
MSCI EM (Gross)	13.26	-6.66	-1.20	4.45	-18.17	-18.17	-1.24	20.42	2.70	14.20
BC US Agg Bond	0.11	-0.09	1.10	1.12	7.84	7.84	7.19	6.77	6.50	5.78
BofA ML 3 Mo US T-Bill	0.00	0.00	0.00	0.00	0.10	0.10	0.11	0.14	1.48	1.95
NCREIF ODCE (Gross)	N/A	N/A	N/A	2.91	15.93	15.93	16.14	-1.78	-0.22	6.17
Wilshire US REIT	14.71	-3.93	4.74	15.42	9.24	9.24	18.53	21.79	-1.96	10.16
HFN FOF Multi-Strat	0.86	-0.73	-0.45	-0.33	-5.46	-5.46	-0.47	2.81	-1.02	3.22
DJ-UBS Cmdty (TR)	6.62	-2.22	-3.75	0.35	-13.32	-13.32	0.64	6.39	-2.07	6.63

Performance is annualized for periods greater than one year.
Treasury data courtesy of the U.S. Department of the Treasury.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems

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December 31, 2011

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RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Asset Allocation & Performance
As of December 31, 2011

	Allocation		Performance %
	Market Values ($)	%	FYTD
Total Fund	**10,500,229,283**	**100.00**	**-4.98**
Global Equity Composite	**4,333,973,579**	**41.28**	**-12.58**
Domestic Equity Composite	**2,090,507,193**	**19.91**	**-5.94**
River Road Asset Mgmt (SA)	36,437,675	0.35	0.46
Westwood Management (SA)	109,586,609	1.04	-8.23
Westfield Capital (SA)	115,322,170	1.10	-10.52
Internal S&P 500 Index (SA) (P)	918,348,490	8.75	-3.67
Equitization Assets Program	1,954,612	0.02	3.37
INVESCO Struct'd Core Equity (SA)	227,713,994	2.17	-4.68
Internal Mid Cap (SA)	494,485,858	4.71	-8.80
NT Structured Small Cap (SA)	186,604,430	1.78	-8.37
Kentucky Liquidation Account	8,737	0.00	N/A
Pension Liquidation	44,617	0.00	N/A
International Equity Composite	**1,859,555,116**	**17.71**	**-18.97**
BTC ACWI Ex-US Fund (CF)	245,006,505	2.33	-16.80
Artio Int'l Equity II (SA)	182,378,563	1.74	-20.64
The Boston Co Wrld Ex US Eq (SA)	651,755,529	6.21	-18.87
Pyramis Int'l Growth Fund (SA)	656,523,758	6.25	-16.18
NT Int'l Sm Cap Eq Index (SA)	148,635,425	1.42	-19.22
International Account (SA)	2,307,239	0.02	-20.41
KRS Transition Account	4	0.00	N/A
Currency Overlay	-27,051,907	-0.26	N/A
Emerging Mkts Equity Composite	**383,911,270**	**3.66**	**-14.53**
Aberdeen Emg Mkts Equity (CF)	247,262,601	2.35	-12.01
Wellington Emg Mkts Equity (CF)	136,648,669	1.30	-18.73

	Allocation		Performance %
	Market Values ($)	%	FYTD
Fixed Income Composite	**2,284,474,460**	**21.76**	**3.03**
NISA Core Agg Fixed Income (SA)	602,565,528	5.74	5.05
PIMCO Core Fixed Income (SA)	806,356,172	7.68	2.26
Columbia HY Fixed Income (SA)	165,845,615	1.58	N/A
Loomis Sayles HY Fixed Income (SA)	162,520,054	1.55	N/A
Manulife Asset Mgmt (SA)	109,657,266	1.04	N/A
Commerce Street Income Partners L.P.	47,634,164	0.45	-1.28
Waterfall (SA)	152,147,368	1.45	1.26
Shenkman Capital (SA)	117,653,517	1.12	0.48
Stone Harbor (SA)	120,094,778	1.14	1.35
Real Estate Composite	**177,728,197**	**1.69**	**2.47**
Internal Real Estate (SA)	9,545,579	0.09	0.00
Walton Street Real Estate Fund VI, L.P.	19,575,219	0.19	1.79
Prima Mortgage Invest Trust, LLC	43,644,322	0.42	3.95
Mesa West Real Estate Inc Fund II L.P.	22,300,314	0.21	5.36
H/2 Credit Partners (CF)	82,662,762	0.79	-0.39
Real Return Composite	**1,080,550,496**	**10.29**	**6.77**
Internal TIPS (SA)	441,972,702	4.21	7.02
Weaver Barksdale TIPS (SA)	383,223,351	3.65	7.59
PIMCO:All Asset;Inst (PAAIX)	201,364,985	1.92	N/A
Tenaska Power Fund II (CF)	13,892,623	0.13	5.69
Tortoise Capital (CF)	40,096,836	0.38	12.11
Absolute Return Composite	**1,071,833,881**	**10.21**	**-1.80**
Arrowhawk Durable Alpha Fund L.P.	69,748,800	0.66	-4.61
BAAM (SA)	343,862,365	3.27	N/A
PAAMCO (SA)	332,670,492	3.17	N/A
Prisma Capital Partners (SA)	325,552,224	3.10	N/A
Private Equity Composite	**1,241,746,814**	**11.83**	**3.33**
Cash Equivalent Composite	**309,921,856**	**2.95**	**0.11**
Cash Equivalents (SA)	309,921,856	2.95	0.11

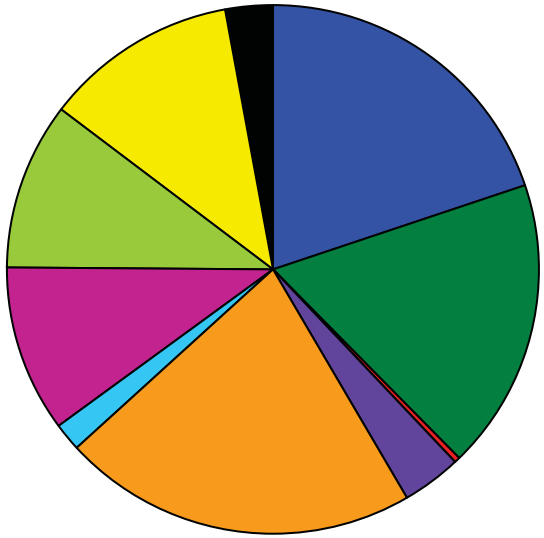
Performance shown is gross of fees. Fiscal year ends June 30th. Allocations shown may not sum up to 100% exactly due to rounding. Real Estate and Private Equity valuations are as of the most recent data available.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Total Fund
Asset Allocation Charts
As of December 31, 2011

Asset Allocation by Asset Class

December 31, 2011 : $10,500,229,283

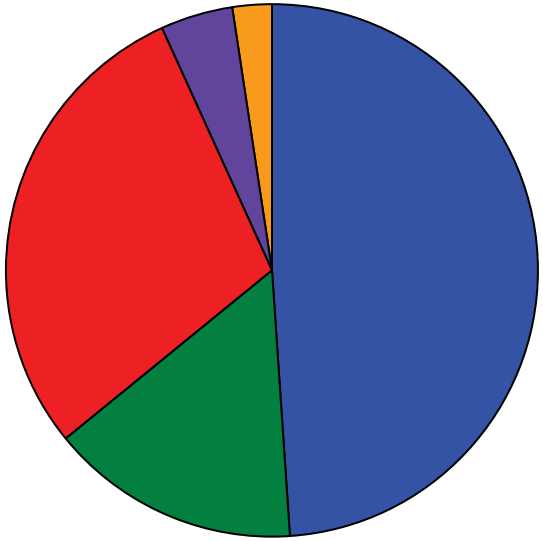


	Market Value ($)	Allocation (%)
Domestic Equity Composite	2,090,507,193	19.91
Intl Equity Ex C.O. Composite	1,886,607,023	17.97
Currency Overlay	-27,051,907	-0.26
Emerging Markets Equity Composite	383,911,270	3.66
Fixed Income Composite	2,284,474,460	21.76
Real Estate Composite	177,728,197	1.69
Real Return Composite	1,080,550,496	10.29
Absolute Return Composite	1,071,833,881	10.21
Private Equity Composite	1,241,746,814	11.83
Cash Equivalent Composite	309,921,856	2.95

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

Asset Allocation by Sub-Plan

December 31, 2011 : $10,500,229,283



	Market Value ($)	Allocation (%)
CERS	5,133,659,027	48.89
CERS Haz	1,602,744,117	15.26
KERS	3,055,626,463	29.10
KERS Haz	457,275,787	4.35
SPRS	250,923,890	2.39

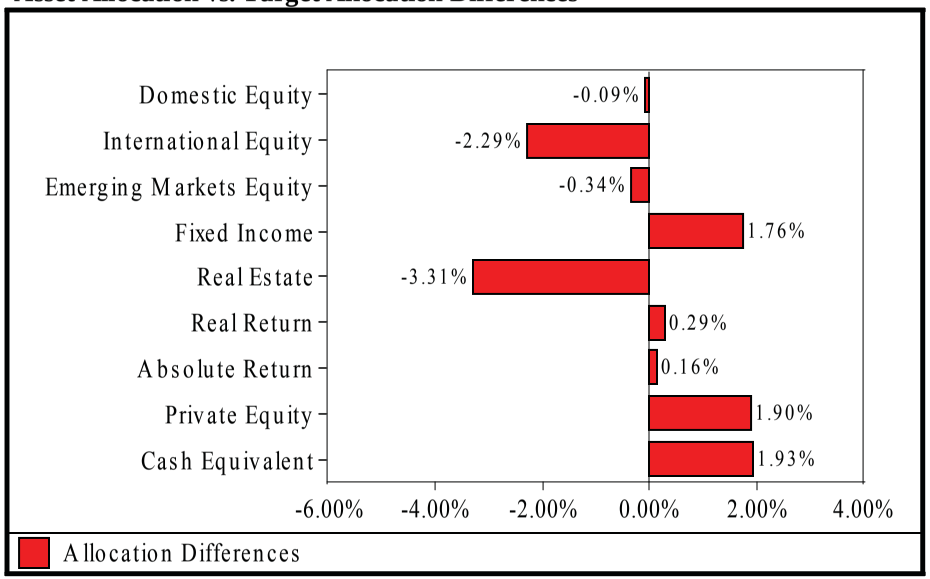
RVKuhns & ASSOCIATES, INC.

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 December 31, 2011

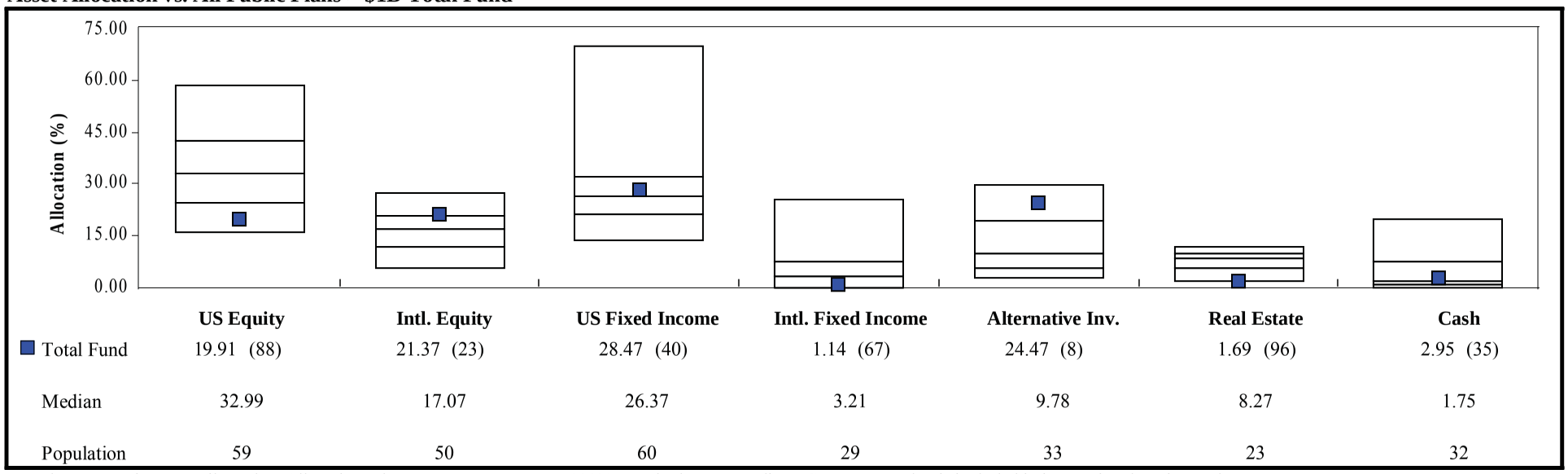
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity	2,090,507,193	19.91	20.00
International Equity	1,859,555,116	17.71	20.00
Emerging Markets Equity	383,911,270	3.66	4.00
Fixed Income	2,284,474,460	21.76	20.00
Real Estate	177,728,197	1.69	5.00
Real Return	1,080,550,496	10.29	10.00
Absolute Return	1,071,833,881	10.21	10.05
Private Equity	1,241,746,814	11.83	9.93
Cash Equivalent	309,921,856	2.95	1.02
Total Fund	10,500,229,283	100.00	100.00

Asset Allocation vs. Target Allocation Differences



Asset Allocation vs. All Public Plans > $1B-Total Fund

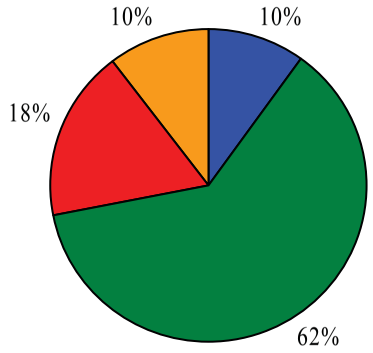


Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Currency overlay is included in international equity, and real return and opportunistic fixed income are included in U.S. fixed income when compared to other public plans.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Total Fund Thematic and Liquidity Analysis
As of December 31, 2011

Asset Allocation by Theme

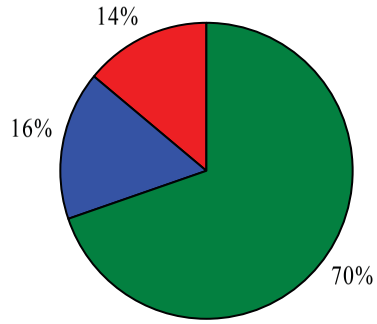


Alpha
Capital Preservation
Capital Appreciation
Inflation

Thematic Analysis - March 1, 1997 to December 31, 2011

Total Fund
Target Allocation Index (P)
Fixed Income Composite

Asset Allocation by Liquidity



Liquid
Less Liquid
Not Liquid

RVK Liquidity Rating (P) **68**

Correlation Matrix - 10 Years

	A	B	C	D
A	1.00			
B	0.52	1.00		
C	-0.18	-0.29	1.00	
D	0.59	0.77	0.00	1.00

A = HFN Mkt Neut Eq Index (Alpha)
B = MSCI ACW Index (Capital Appreciation)
C = BC US Gov't Bond Index (Capital Preservation)
D = 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.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Total Fund	**3.09**	**-4.98**	**-0.44**	**-0.44**	**10.38**	**1.75**	**12.90**	**19.66**	**-23.91**	**9.33**	**04/01/1984**
Target Allocation Index (P)	2.12	-5.62	-1.19	-1.19	10.98	2.07	12.41	23.06	-24.35	9.39	
Difference	0.97	0.64	0.75	0.75	-0.60	-0.32	0.49	-3.40	0.44	-0.06	
All Public Plans > $1B-Total Fund	5.23	-4.44	0.73	0.73	11.17	2.03	13.73	19.59	-26.60	9.65	
Percentile Rank	92	66	78	78	66	62	64	50	32	67	
Total Fund	**3.09**	**-4.98**	**-0.44**	**-0.44**	**10.38**	**1.75**	**12.90**	**19.66**	**-23.91**	**9.33**	**04/01/1984**
Actual Allocation Index (P)	3.34	-4.09	0.30	0.30	9.32	N/A	12.55	15.73	N/A	N/A	
Difference	-0.25	-0.89	-0.74	-0.74	1.06	N/A	0.35	3.93	N/A	N/A	
Global Equity Composite	**6.93**	**-12.58**	**-7.97**	**-7.97**	**11.62**	**-1.47**	**14.99**	**31.41**	**-37.10**	**10.51**	**04/01/1984**
Global Equity Custom Index (P)	7.60	-11.75	-6.97	-6.97	12.21	-1.77	15.56	31.40	-39.46	10.34	
Difference	-0.67	-0.83	-1.00	-1.00	-0.59	0.30	-0.57	0.01	2.36	0.17	
Fixed Income Composite	**1.17**	**3.03**	**7.04**	**7.04**	**8.21**	**5.86**	**7.61**	**10.01**	**-2.62**	**8.23**	**04/01/1984**
Fixed Income Custom Index (P)	1.45	4.36	8.12	8.12	7.37	6.68	6.49	7.51	3.09	8.15	
Difference	-0.28	-1.33	-1.08	-1.08	0.84	-0.82	1.12	2.50	-5.71	0.08	
Real Estate Composite	**0.66**	**2.47**	**13.33**	**13.33**	**6.80**	**4.14**	**14.80**	**-6.37**	**0.26**	**7.67**	**05/01/2009**
Real Estate Blended Index	2.97	6.59	15.26	15.26	-1.69	3.25	5.83	-22.11	5.27	1.34	
Difference	-2.30	-4.12	-1.93	-1.93	8.49	0.89	8.97	15.74	-5.01	6.33	
Real Return Composite	**2.29**	**6.77**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**6.77**	**07/01/2011**
Consumer Price Index + 3%	0.20	1.47	6.05	6.05	5.46	5.33	4.54	5.80	3.09	1.47	
Difference	2.09	5.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.30	
Absolute Return Composite	**-1.20**	**-1.80**	**3.82**	**3.82**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1.05**	**04/01/2010**
HFRI FOF Diversified Index (Lagged)	-2.36	-5.67	-2.46	-2.46	3.32	-0.16	4.07	8.67	-19.20	0.39	
Difference	1.16	3.87	6.28	6.28	N/A	N/A	N/A	N/A	N/A	0.66	
Private Equity Composite	**-0.79**	**3.33**	**11.03**	**11.03**	**6.60**	**1.45**	**16.76**	**-6.57**	**-13.41**	**10.82**	**10/01/1990**
Alternatives Custom Index (P)	-14.44	-13.62	-8.63	-8.63	13.96	0.75	16.16	39.44	-32.60	N/A	
Difference	13.65	16.95	19.66	19.66	-7.36	0.70	0.60	-46.01	19.19	N/A	
Cash Equivalent Composite	**0.05**	**0.11**	**0.31**	**0.31**	**0.80**	**2.18**	**0.89**	**1.19**	**2.83**	**4.75**	**01/01/1988**
Citi 3 Mo T-Bill Index	0.00	0.00	0.06	0.06	0.11	1.36	0.10	0.16	1.80	3.92	
Difference	0.05	0.11	0.25	0.25	0.69	0.82	0.79	1.03	1.03	0.83	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. See Addendum for Custom and Blended Index descriptions. International Equity Ex-C.O. Composite excludes Currency Overlay.

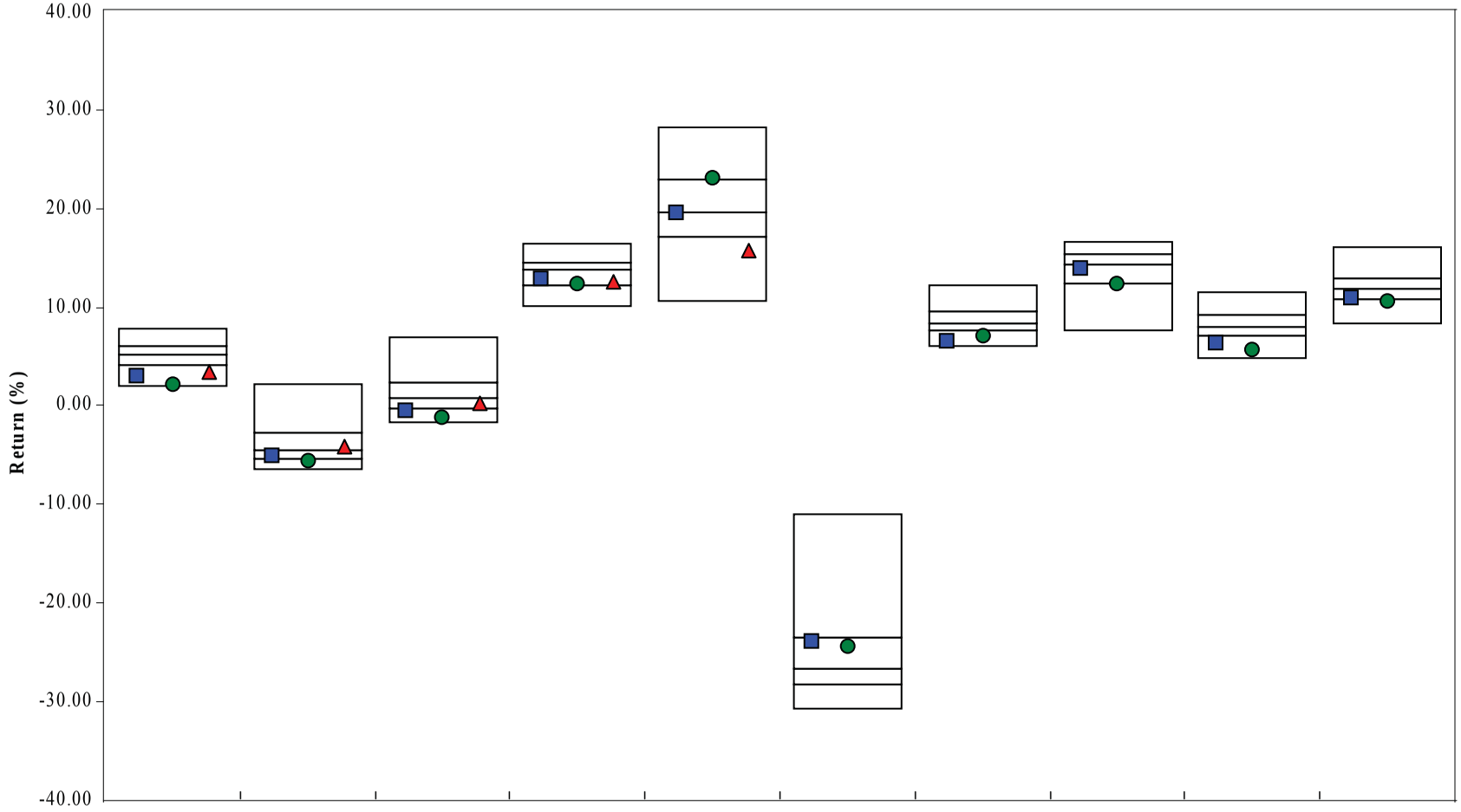
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Domestic Equity Composite	**12.17**	**-5.94**	**1.04**	**1.04**	**14.00**	**0.11**	**16.77**	**25.56**	**-34.87**	**1.53**	**07/01/2000**
Domestic Equity Custom Index (P)	12.12	-5.01	0.92	0.92	14.67	0.07	17.50	27.16	-36.36	1.65	
Difference	0.05	-0.93	0.12	0.12	-0.67	0.04	-0.73	-1.60	1.49	-0.12	
All Cap Equity Composite	**11.57**	**-8.16**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.16**	**07/01/2011**
R 3000 Index	12.12	-5.01	1.03	1.03	14.88	-0.01	16.93	28.34	-37.31	-5.01	
Difference	-0.55	-3.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.15	
Cap Weighted Equity Composite	**12.21**	**-5.64**	**1.41**	**1.41**	**14.44**	**0.34**	**17.71**	**25.56**	**-34.87**	**4.40**	**10/01/1999**
R 3000 Index	12.12	-5.01	1.03	1.03	14.88	-0.01	16.93	28.34	-37.31	2.45	
Difference	0.09	-0.63	0.38	0.38	-0.44	0.35	0.78	-2.78	2.44	1.95	
International Equity Composite	**1.84**	**-18.97**	**-17.01**	**-17.01**	**9.41**	**-3.18**	**12.88**	**39.79**	**-41.08**	**0.51**	**07/01/2000**
Non U.S. Equity Custom Index (P)	3.77	-16.75	-13.26	-13.26	10.97	-3.15	12.37	40.20	-44.13	1.29	
Difference	-1.93	-2.22	-3.75	-3.75	-1.56	-0.03	0.51	-0.41	3.05	-0.78	
International Equity Ex C.O. Composite	**3.04**	**-18.07**	**-15.33**	**-15.33**	**10.16**	**-2.78**	**12.68**	**40.12**	**-41.08**	**0.74**	**07/01/2000**
Non U.S. Equity Custom Index (P)	3.77	-16.75	-13.26	-13.26	10.97	-3.15	12.37	40.20	-44.13	1.29	
Difference	-0.73	-1.32	-2.07	-2.07	-0.81	0.37	0.31	-0.08	3.05	-0.55	
Emerging Markets Equity Composite	**4.67**	**-14.53**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-14.53**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	0.22	4.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.48	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. See Addendum for Custom and Blended Index descriptions. International Equity Ex-C.O. Composite excludes Currency Overlay.

Kentucky Retirement Systems - Pension Plan
All Public Plans > $1B-Total Fund
Plan Sponsor Peer Group Analysis
As of December 31, 2011



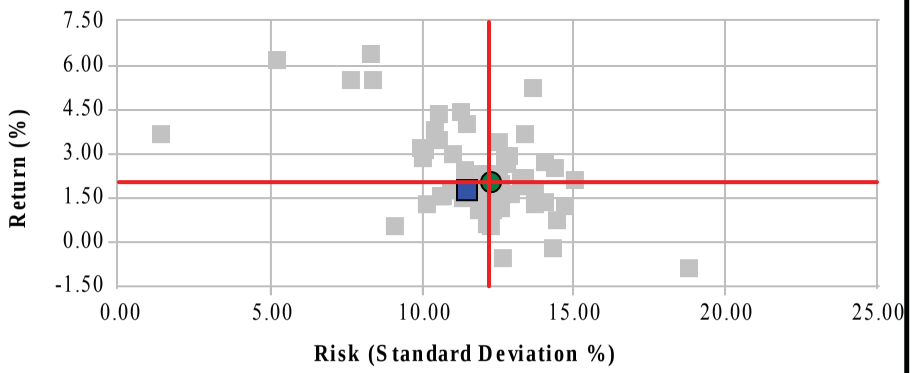
	QTD	FYTD	CYTD	2010	2009	2008	2007	2006	2005	2004
Total Fund	3.09 (92)	-4.98 (66)	-0.44 (78)	12.90 (64)	19.66 (50)	-23.91 (32)	6.58 (91)	13.98 (53)	6.41 (85)	10.92 (74)
Target Allocation Index (P)	2.12 (95)	-5.62 (85)	-1.19 (91)	12.41 (72)	23.06 (25)	-24.35 (36)	7.15 (83)	12.35 (76)	5.70 (89)	10.68 (78)
Actual Allocation Index (P)	3.34 (91)	-4.09 (40)	0.30 (61)	12.55 (71)	15.73 (82)	N/A	N/A	N/A	N/A	N/A
Median	5.23	-4.44	0.73	13.73	19.59	-26.60	8.34	14.28	7.92	11.93
Population	79	78	77	72	72	77	75	74	73	65

Performance shown is gross of fees. Parentheses contain percentile ranks.

RVKuhns & ASSOCIATES, INC.

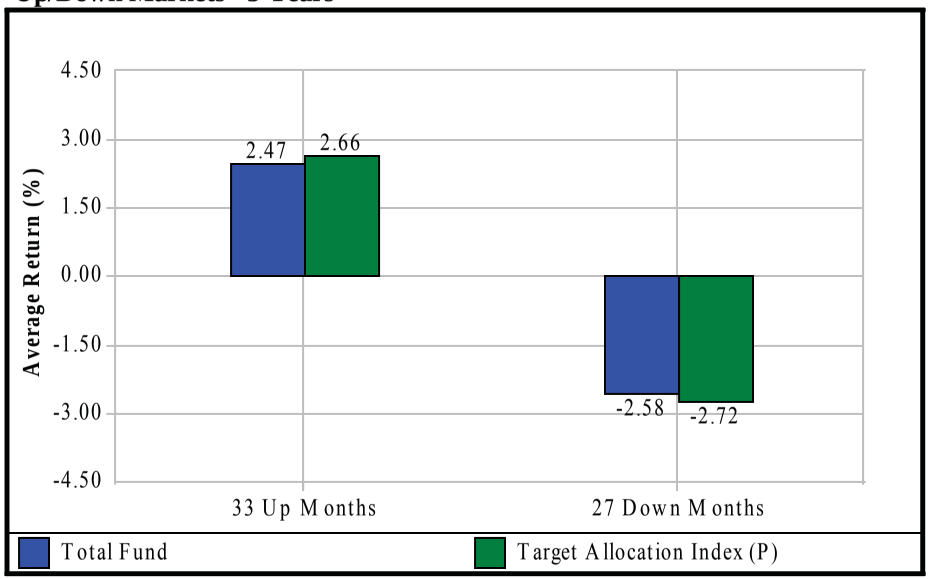
Kentucky Retirement Systems - Pension Plan
Total Fund vs. All Public Plans > $1B-Total Fund
As of December 31, 2011

Plan Sponsor Scattergram - 5 Years

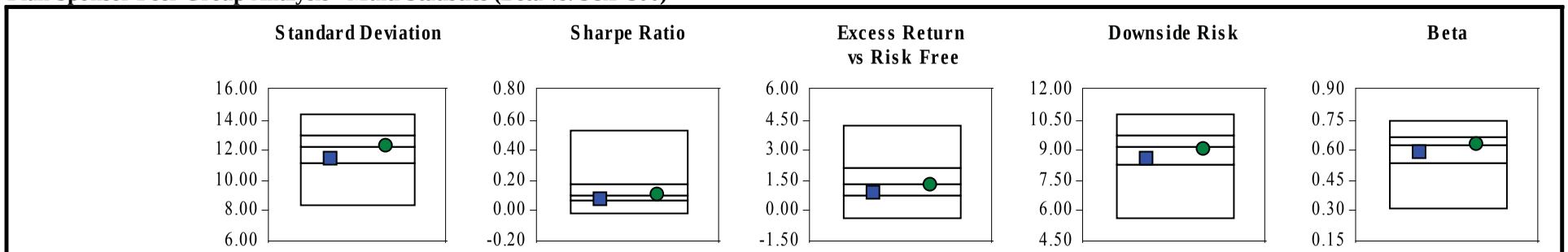


	Return	Standard Deviation
Total Fund	1.75	11.45
Target Allocation Index (P)	2.07	12.30
Median	2.03	12.18

Up/Down Markets - 5 Years



Plan Sponsor Peer Group Analysis - Multi Statistics (Beta vs. S&P 500)



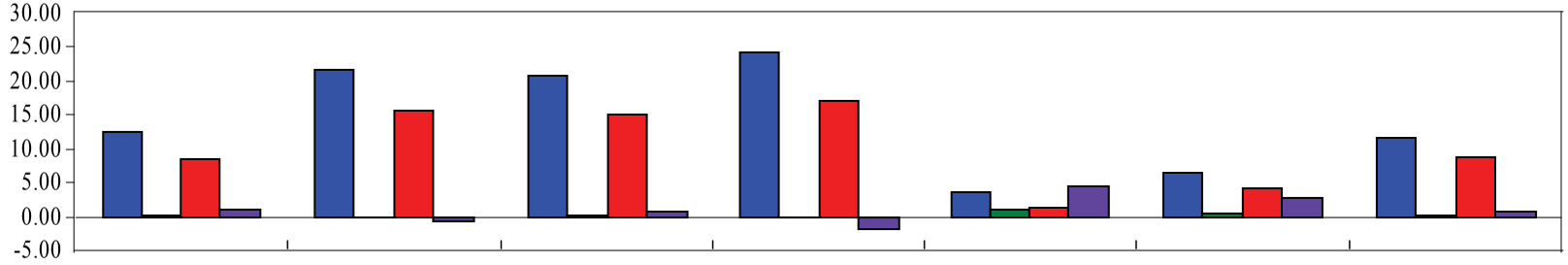
	5 Years	5 Years	5 Years	5 Years	5 Years
Total Fund	11.45 (66)	0.08 (63)	0.94 (63)	8.63 (63)	0.59 (66)
Target Allocation Index (P)	12.30 (48)	0.11 (50)	1.35 (50)	9.07 (55)	0.64 (43)
Median	12.18	0.11	1.34	9.18	0.62
Population	69	69	69	69	69

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

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Historical Stats & Correlation Analysis
As of December 31, 2011

Historical Statistics - 5 Years



	Total Fund	Global Equity Composite	Domestic Equity Composite	International Equity Composite	Fixed Income Composite	Real Estate Composite	Private Equity Composite
Standard Deviation	12.37	21.62	20.75	24.24	3.57	6.50	11.53
Sharpe Ratio	0.08	-0.03	0.04	-0.07	1.15	0.41	0.06
Downside Risk	8.60	15.63	14.99	17.17	1.45	4.24	8.83
Excess Return vs Risk Free	1.03	-0.58	0.86	-1.75	4.32	2.81	0.65

Correlation Matrix - 5 Years

	Total Fund	Global Equity Composite	Domestic Equity Composite	International Equity Composite	Fixed Income Composite	Real Estate Composite	Private Equity Composite
Total Fund	1.00						
Global Equity Composite	0.98	1.00					
Domestic Equity Composite	0.96	0.98	1.00				
International Equity Composite	0.96	0.97	0.91	1.00			
Fixed Income Composite	0.44	0.33	0.25	0.42	1.00		
Real Estate Composite	-0.07	-0.08	-0.03	-0.13	-0.16	1.00	
Private Equity Composite	0.40	0.26	0.33	0.17	0.39	0.11	1.00

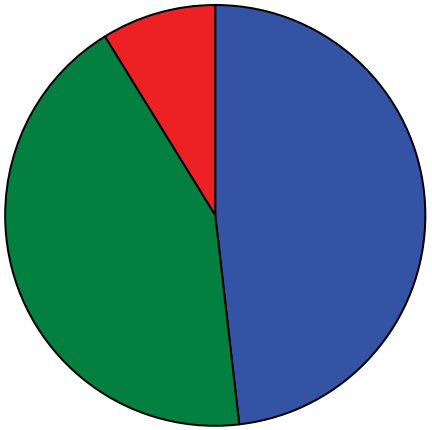
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Excluded composites do not have 5 years of performance history available.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Global Equity Composite
Asset Allocation Charts
As of December 31, 2011

Style Allocation

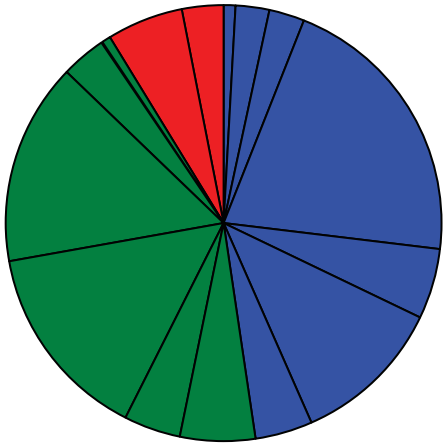
December 31, 2011 : $4,333,973,579



	Market Value ($)	Allocation (%)
Domestic Equity	2,090,507,193	48.24
International Equity	1,859,555,116	42.91
Emerging Markets Equity	383,911,270	8.86

Sub-Composite Detail

December 31, 2011 : $4,333,973,579



	Market Value ($)	Allocation (%)
River Road Asset Management (SA)	36,437,675	0.84
Westwood Management (SA)	109,586,609	2.53
Westfield Capital (SA)	115,322,170	2.66
Internal S&P 500 Index (SA) (P)	918,348,490	21.19
Equitization Assets Program	1,954,612	0.05
INVESCO Struct'd Core Equity (SA)	227,713,994	5.25
Internal Mid Cap (SA)	494,485,858	11.41
NT Structured Small Cap (SA)	186,604,430	4.31
Kentucky Liquidation Account	8,737	-
Pension Liquidation	44,617	-
BTC ACWI Ex-US Fund (CF)	245,006,505	5.65
Artio Int'l Equity II (SA) (P)	182,378,563	4.21
The Boston Co World Ex US Eq (SA) (P)	651,755,529	15.04
Pyramis Int'l Growth Fund (SA) (P)	656,523,758	15.15
NT Int'l Sm Cap Eq Index (SA)	148,635,425	3.43
International Account (SA)	2,307,239	0.05
KRS Transition Account	4	-
Currency Overlay	-27,051,907	-0.62
Aberdeen Emg Mkts Equity (CF)	247,262,601	5.71
Wellington Emg Mkts Equity (CF)	136,648,669	3.15

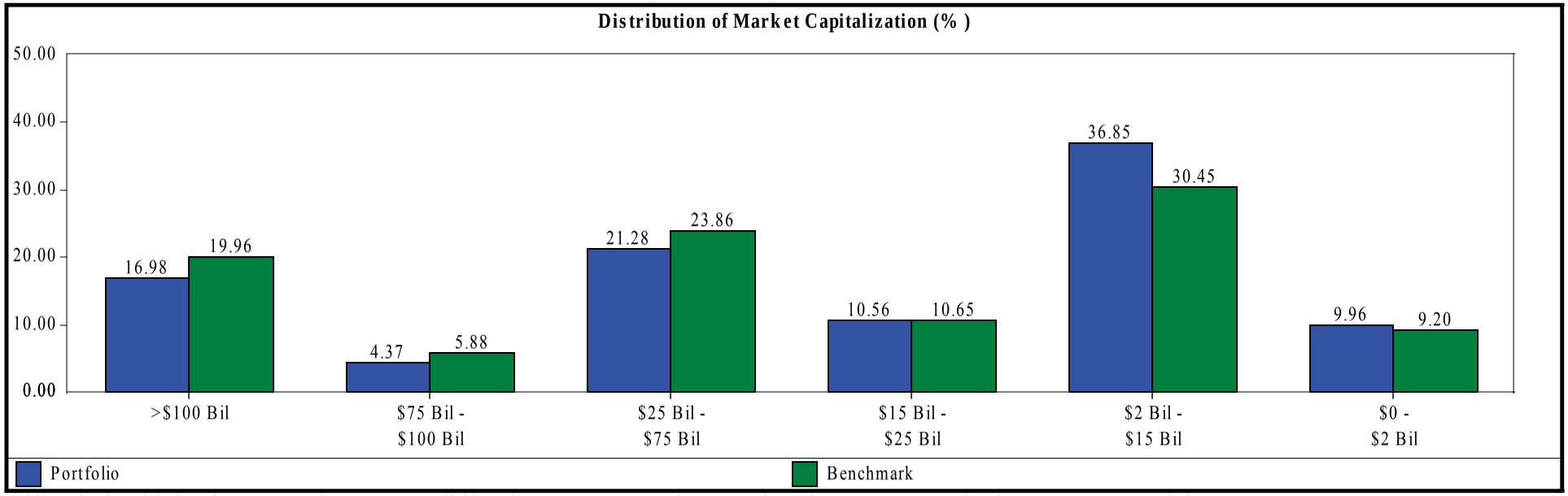
Allocations shown may not sum up to 100% exactly due to rounding.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Global Equity Composite vs. MSCI ACW IM Index (Gross)
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
EXXON MOBIL CORPORATION	1.17	1.39	-0.23	17.38
CHEVRONTEXACO CORPORATION	0.67	0.72	-0.05	15.82
MICROSOFT CORPORATION	0.66	0.66	-0.01	5.11
ROCHE HOLDING AG	0.65	0.40	0.25	4.76
GENERAL ELECTRIC COMPANY	0.62	0.64	-0.02	18.79
INT'L BUSINESS MACHS	0.61	0.74	-0.13	5.57
VODAFONE GROUP PLC	0.61	0.48	0.13	11.66
ROYAL DUTCH/SHELL GROUP	0.60	0.42	0.18	15.57
PFIZER INC.	0.60	0.57	0.03	23.62
CHINA MOBILE	0.56	0.25	0.32	-0.18
% of Portfolio	6.75	6.27		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	49,243	58,181
Median Mkt. Cap. ($M)	727	870
Price/Earnings ratio	12.39	12.14
Price/Book ratio	2.18	2.19
5 Yr. EPS Growth Rate (%)	7.62	8.07
Current Yield (%)	3.14	3.18
Beta (5 yrs, monthly periodicity)	0.92	1.00
Number of Stocks	10567	9050

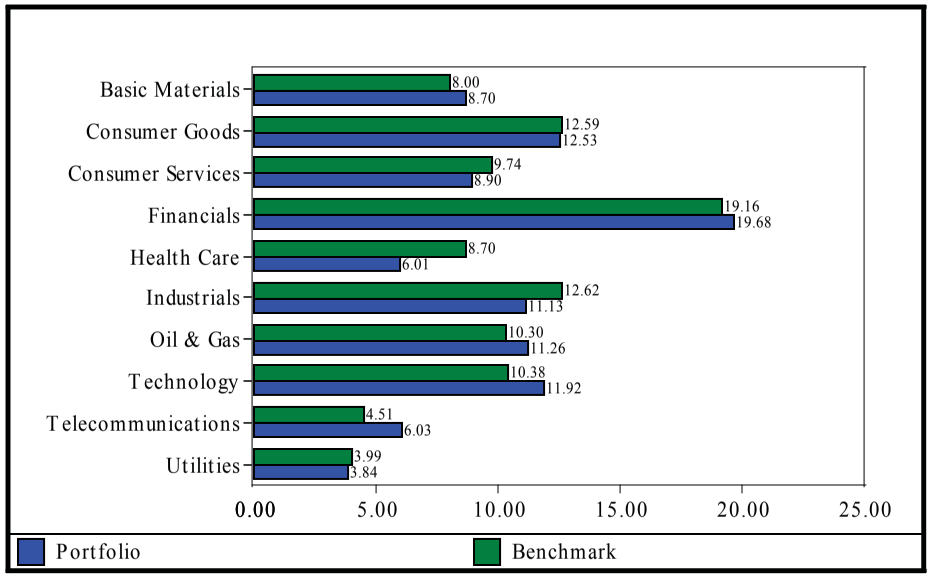


Holdings for the Global Equity Custom Index (P) are unavailable. The MSCI ACW IM Index (Gross) is used as a proxy. International Account (SA) currently has an 100% allocation to cash and is excluded from the Global Equity Composite holdings.

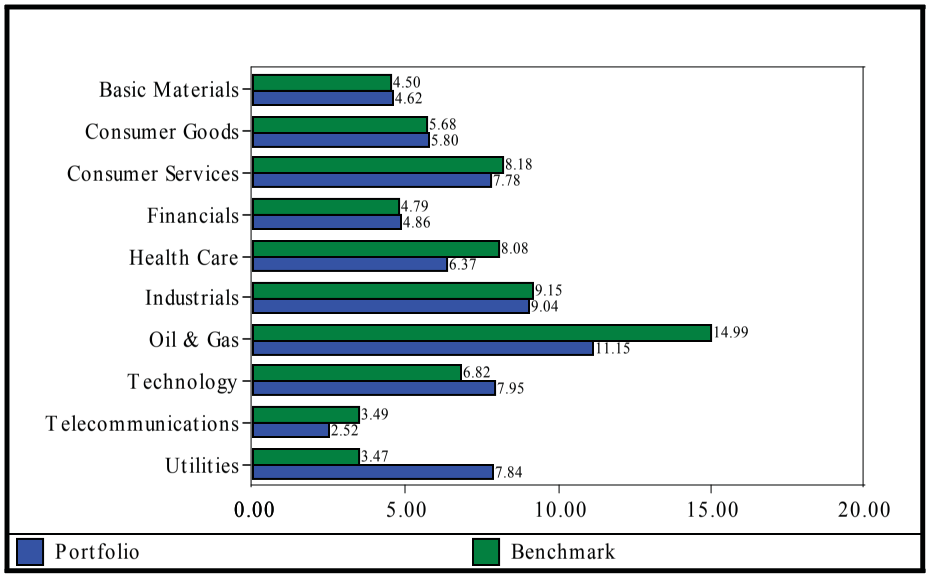
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Global Equity Composite vs. MSCI ACW IM Index (Gross)
Buy and Hold Sector/Region Attribution Graphs
As of December 31, 2011

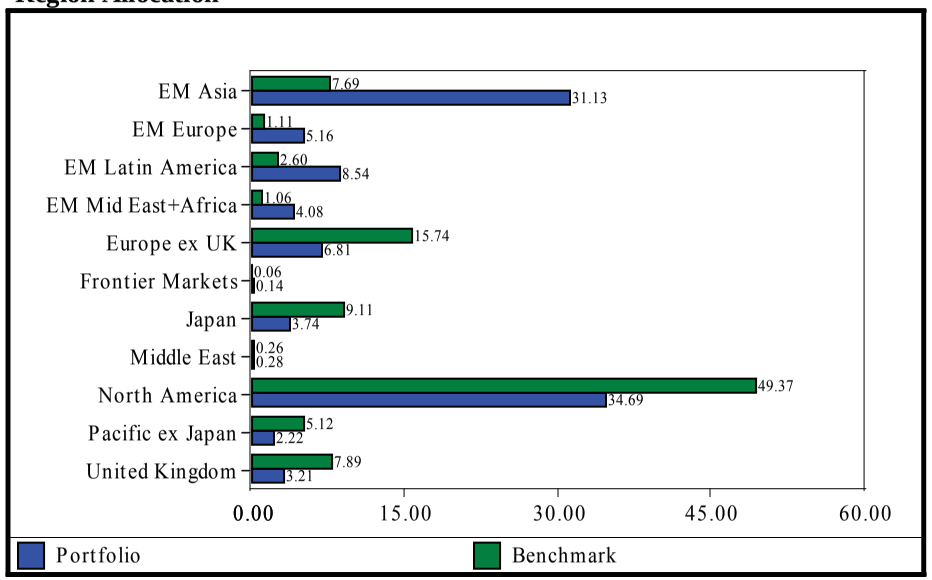
Sector Allocation



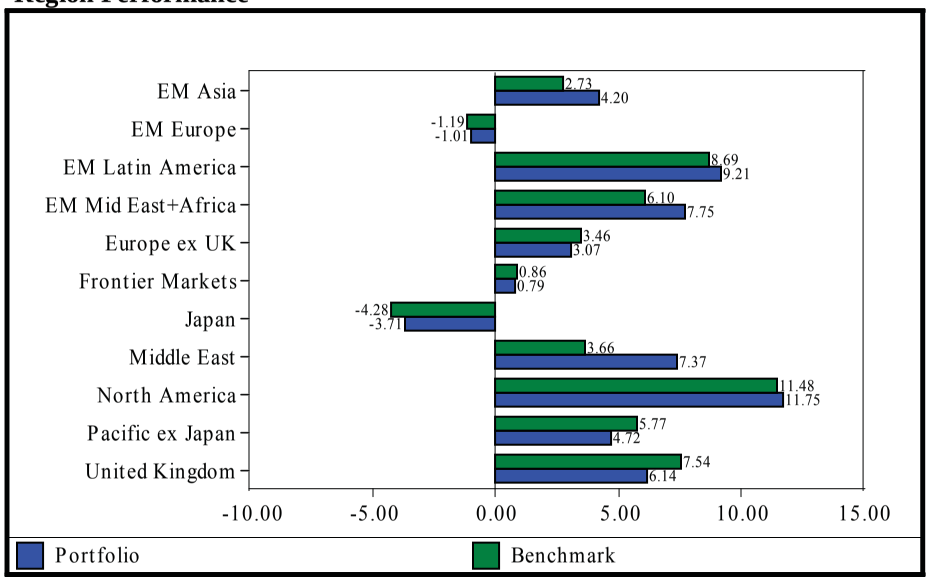
Sector Performance



Region Allocation



Region Performance



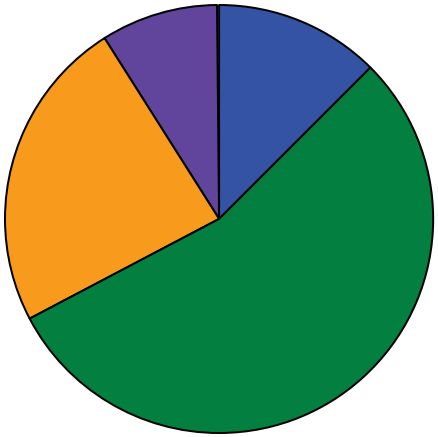
Holdings for the Global Equity Custom Index (P) are unavailable. The MSCI ACW IM Index (Gross) is used as a proxy. International Account (SA) currently has an 100% allocation to cash and is excluded from the Global Equity Composite holdings.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Domestic Equity Composite
Asset Allocation Charts
As of December 31, 2011

Style Allocation

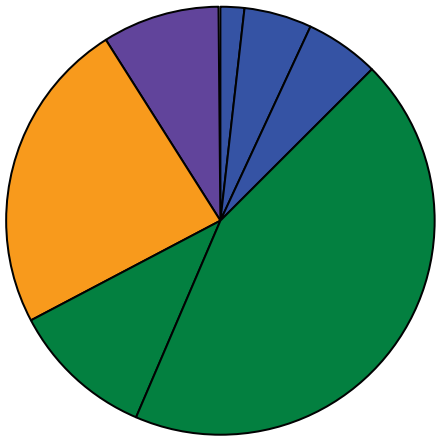
December 31, 2011 : $2,090,507,193



	Market Value ($)	Allocation (%)
All Cap Equity	261,346,455	12.50
Domestic Large Cap Equity	1,146,062,484	54.82
Domestic Mid Cap Equity	494,485,858	23.65
Domestic Small Cap Equity	186,604,430	8.93
Equitization Assets/Other	2,007,966	0.10

Sub-Composite Detail

December 31, 2011 : $2,090,507,193



	Market Value ($)	Allocation (%)
River Road Asset Management (SA)	36,437,675	1.74
Westwood Management (SA)	109,586,609	5.24
Westfield Capital (SA)	115,322,170	5.52
Internal S&P 500 Index (SA) (P)	918,348,490	43.93
INVESCO Struct'd Core Equity (SA)	227,713,994	10.89
Internal Mid Cap (SA)	494,485,858	23.65
NT Structured Small Cap (SA)	186,604,430	8.93
Equitization Assets Program	1,954,612	0.09
Kentucky Liquidation Account	8,737	-
Pension Liquidation	44,617	-

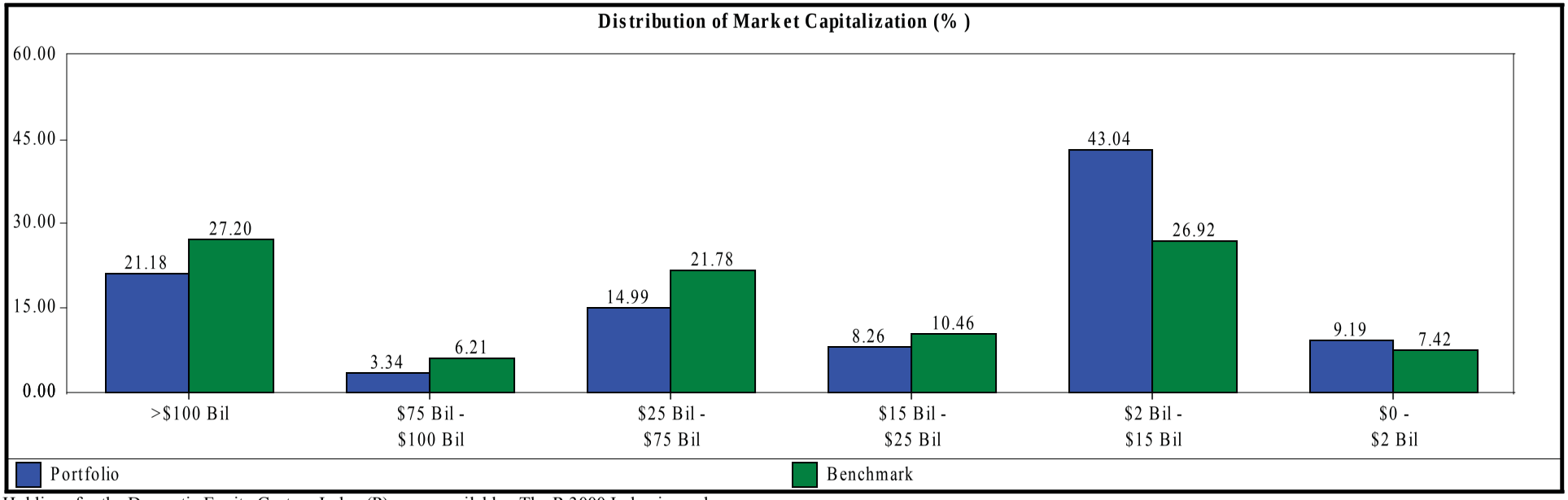
Allocations shown may not sum up to 100% exactly due to rounding.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Domestic Equity Composite vs. R 3000 Index
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
EXXON MOBIL CORPORATION	2.40	2.98	-0.58	17.38
CHEVRONTEXACO CORPORATION	1.37	1.53	-0.15	15.82
MICROSOFT CORPORATION	1.35	1.38	-0.03	5.11
GENERAL ELECTRIC COMPANY	1.29	1.36	-0.07	18.79
INT'L BUSINESS MACHS	1.25	1.59	-0.34	5.57
PFIZER INC.	1.23	1.22	0.01	23.62
JOHNSON & JOHNSON	1.11	1.28	-0.18	3.87
AT&T INC.	1.04	1.28	-0.24	7.59
COCA-COLA COMPANY (THE)	1.00	0.99	0.01	4.29
JPMORGAN CHASE & CO.	0.94	0.94	0.00	11.19
% of Portfolio	12.98	14.55		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	57,139	77,518
Median Mkt. Cap. ($M)	603	908
Price/Earnings ratio	14.00	13.98
Price/Book ratio	2.38	2.42
5 Yr. EPS Growth Rate (%)	8.63	9.73
Current Yield (%)	2.48	2.48
Beta (5 yrs, monthly periodicity)	0.98	1.00
Number of Stocks	3864	2946

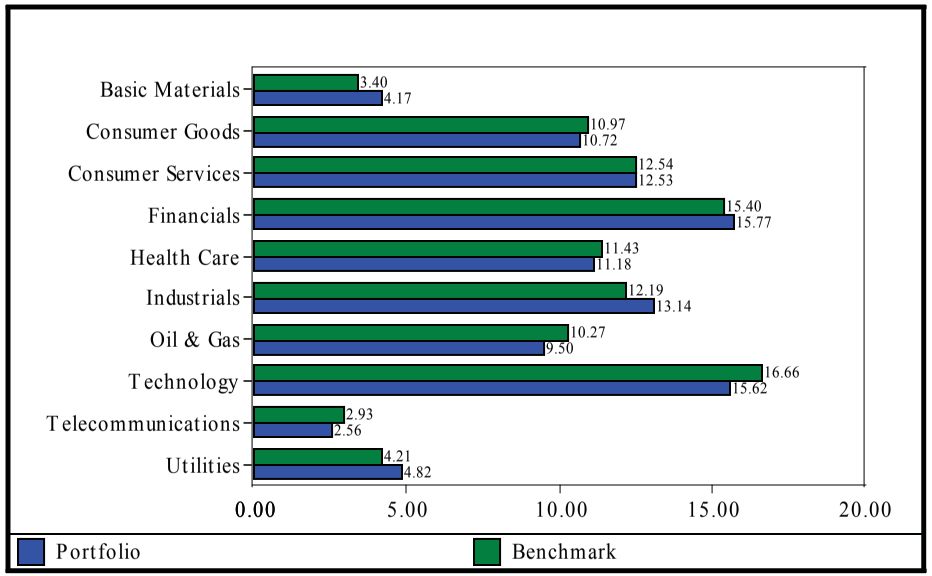


Holdings for the Domestic Equity Custom Index (P) are unavailable. The R 3000 Index is used as a proxy.

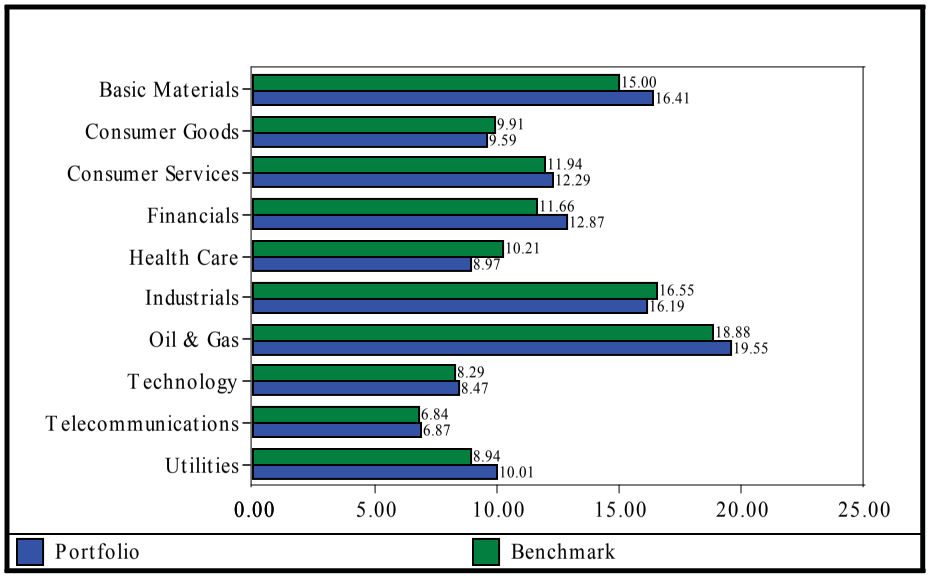
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Domestic Equity Composite vs. R 3000 Index
Buy and Hold Sector/Style Attribution Graphs
As of December 31, 2011

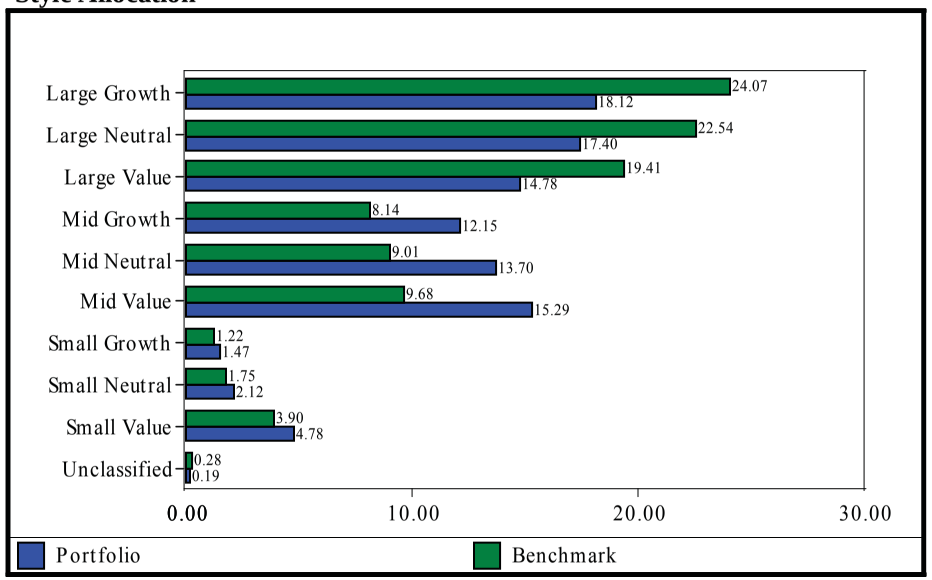
Sector Allocation



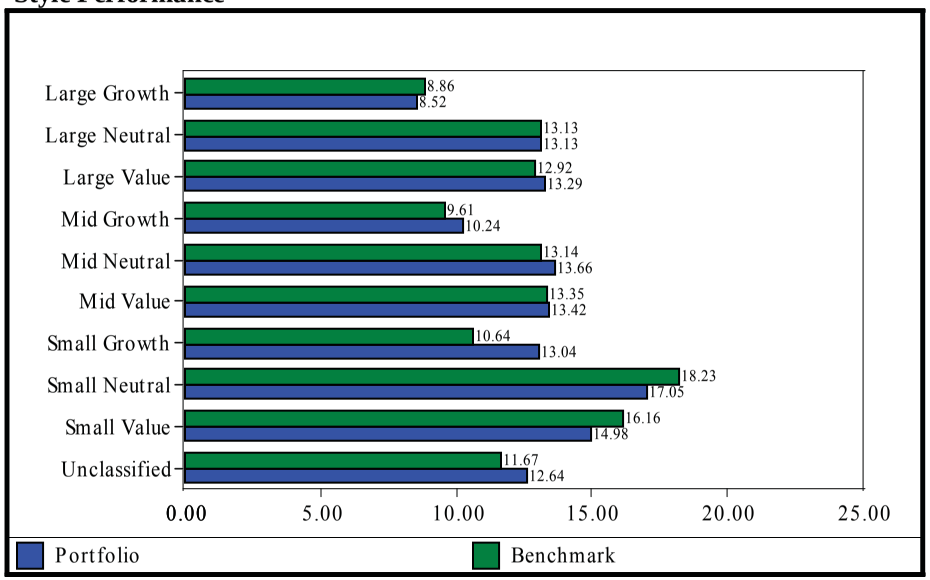
Sector Performance



Style Allocation



Style Performance



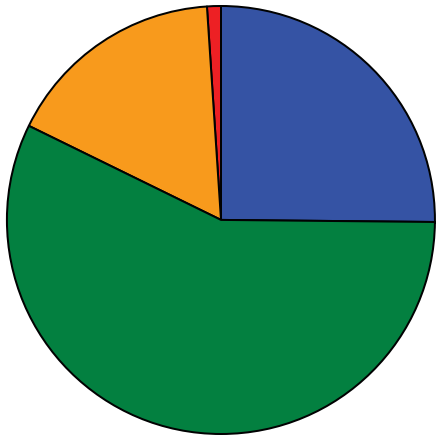
Holdings for the Domestic Equity Custom Index (P) are unavailable. The R 3000 Index is used as a proxy.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
International and Emerging Markets Equity Composites
Asset Allocation Charts
As of December 31, 2011

Style Allocation

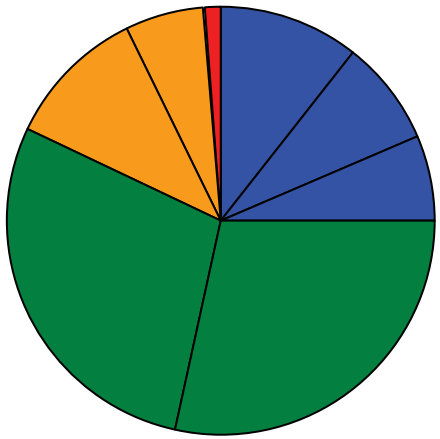
December 31, 2011 : $2,243,466,386



	Market Value ($)	Allocation (%)
International ACW Ex US Equity	576,020,493	25.68
Developed International Equity	1,308,279,287	58.32
Emerging Markets Equity	383,911,270	17.11
Currency Overlay/Other	-24,744,664	-1.10

Sub-Composite Detail

December 31, 2011 : $2,243,466,386



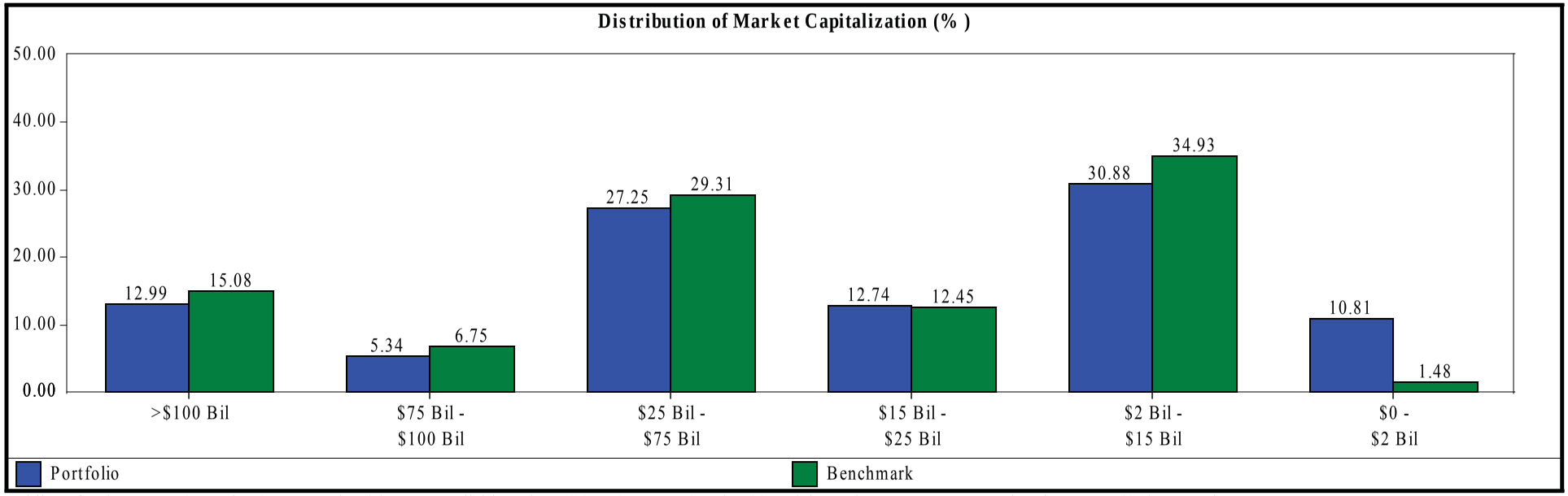
	Market Value ($)	Allocation (%)
BTC ACWI Ex-US Fund (CF)	245,006,505	10.92
Artio Int'l Equity II (SA) (P)	182,378,563	8.13
NT Int'l Sm Cap Eq Index (SA)	148,635,425	6.63
The Boston Co World Ex US Eq (SA) (P)	651,755,529	29.05
Pyramis Int'l Growth Fund (SA) (P)	656,523,758	29.26
Aberdeen Emg Mkts Equity (CF)	247,262,601	11.02
Wellington Emg Mkts Equity (CF)	136,648,669	6.09
International Account (SA)	2,307,239	0.10
KRS Transition Account	4	-
Currency Overlay	-27,051,907	-1.21

Allocations shown may not sum up to 100% exactly due to rounding. Allocations shown are not representative of the actual allocations due to the negative balance in the Currency Overlay program.

Kentucky Retirement Systems - Pension Plan
International and Emerging Markets Equity Composites vs. MSCI ACW Ex US Index (Gross)
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
ROCHE HOLDING AG	1.27	0.86	0.41	4.76
ROYAL DUTCH/SHELL GROUP	1.18	0.91	0.27	15.57
VODAFONE GROUP PLC	1.18	1.02	0.16	11.66
CHINA MOBILE	1.10	0.52	0.57	-0.18
NOVARTIS AG	1.04	0.97	0.08	2.33
TOTAL SA	1.02	0.78	0.24	16.66
SANOFI-AVENTIS	1.01	0.61	0.40	11.27
NESTLE S.A.	0.88	1.37	-0.49	4.34
TAIWAN SEMICONDUCTOR	0.78	0.45	0.33	8.95
TOYOTA MOTOR CORPORATION	0.72	0.66	0.06	-4.50
% of Portfolio	10.18	8.15		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	41,769	46,404
Median Mkt. Cap. ($M)	776	5,408
Price/Earnings ratio	11.17	10.92
Price/Book ratio	1.97	1.98
5 Yr. EPS Growth Rate (%)	6.66	7.04
Current Yield (%)	3.66	3.67
Beta (5 yrs, monthly periodicity)	0.91	1.00
Number of Stocks	6711	1845

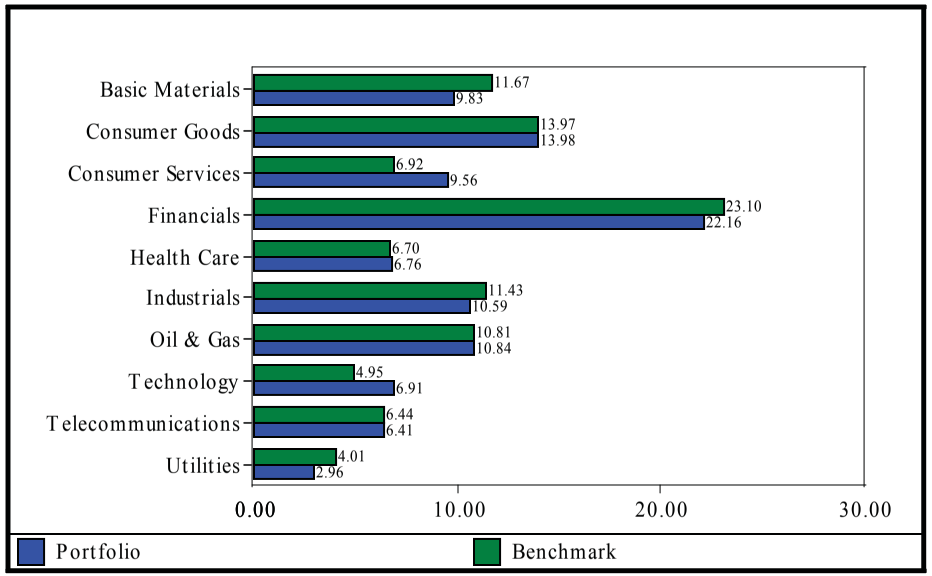


Holdings for the Non U.S. Equity Custom Index (P) are unavailable. The MSCI ACW Ex US Index (Gross) is used as a proxy. International Account (SA) currently has an 100% allocation to cash and is excluded from the International and Emerging Markets Equity Composites holdings.

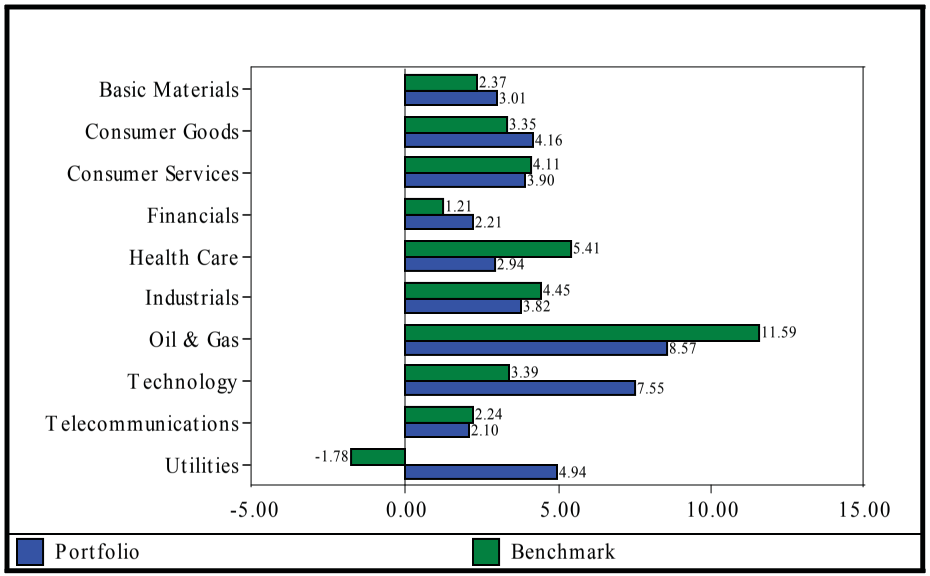
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
International and Emerging Markets Equity Composites vs. MSCI ACW Ex US Index (Gross)
Buy and Hold Sector/Region Attribution Graphs
As of December 31, 2011

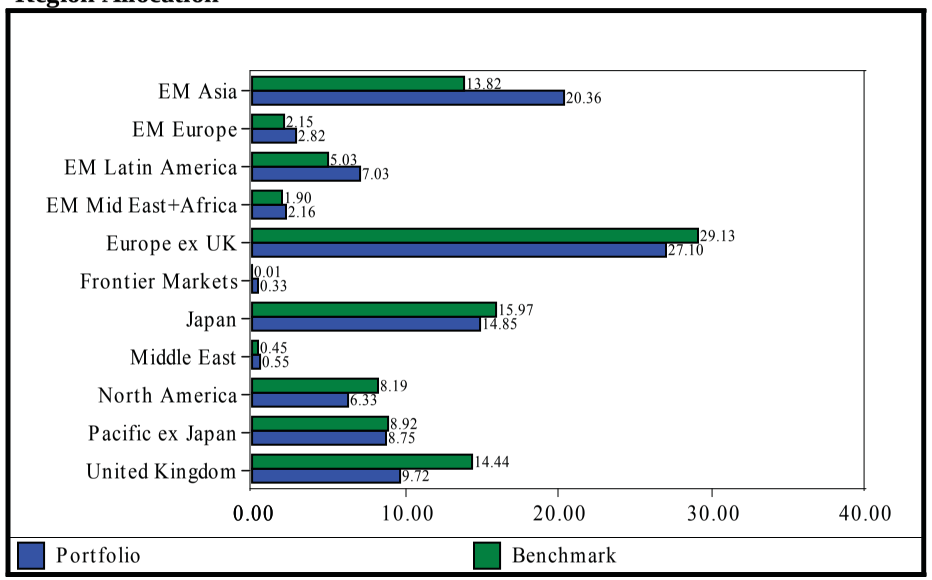
Sector Allocation



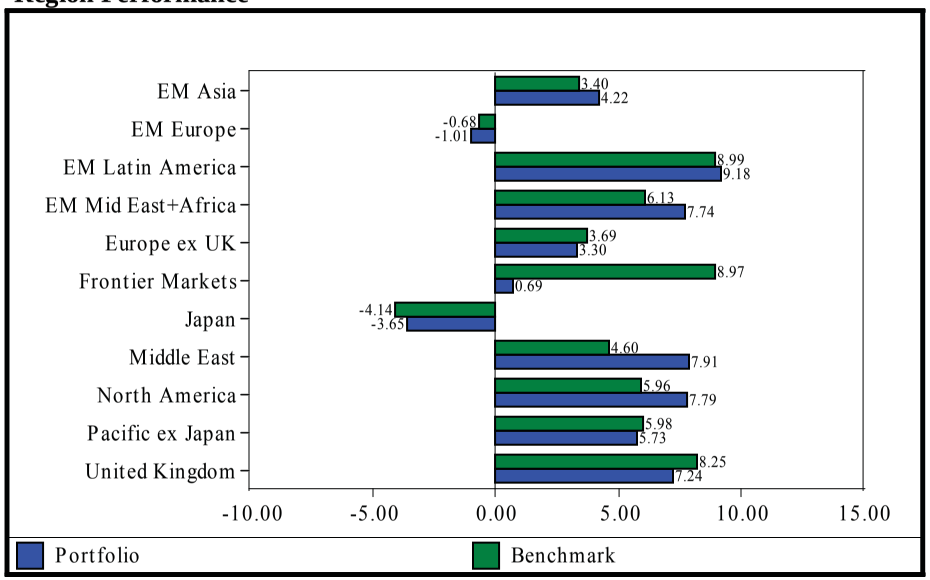
Sector Performance



Region Allocation



Region Performance

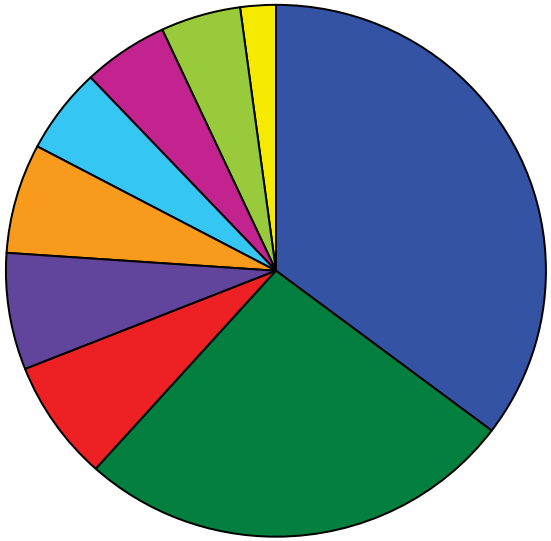


Holdings for the Non U.S. Equity Custom Index (P) are unavailable. The MSCI ACW Ex US Index (Gross) is used as a proxy. International Account (SA) currently has an 100% allocation to cash and is excluded from the International and Emerging Markets Equity Composites holdings.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Fixed Income Composite
Asset Allocation Chart
As of December 31, 2011

December 31, 2011 : $2,284,474,460



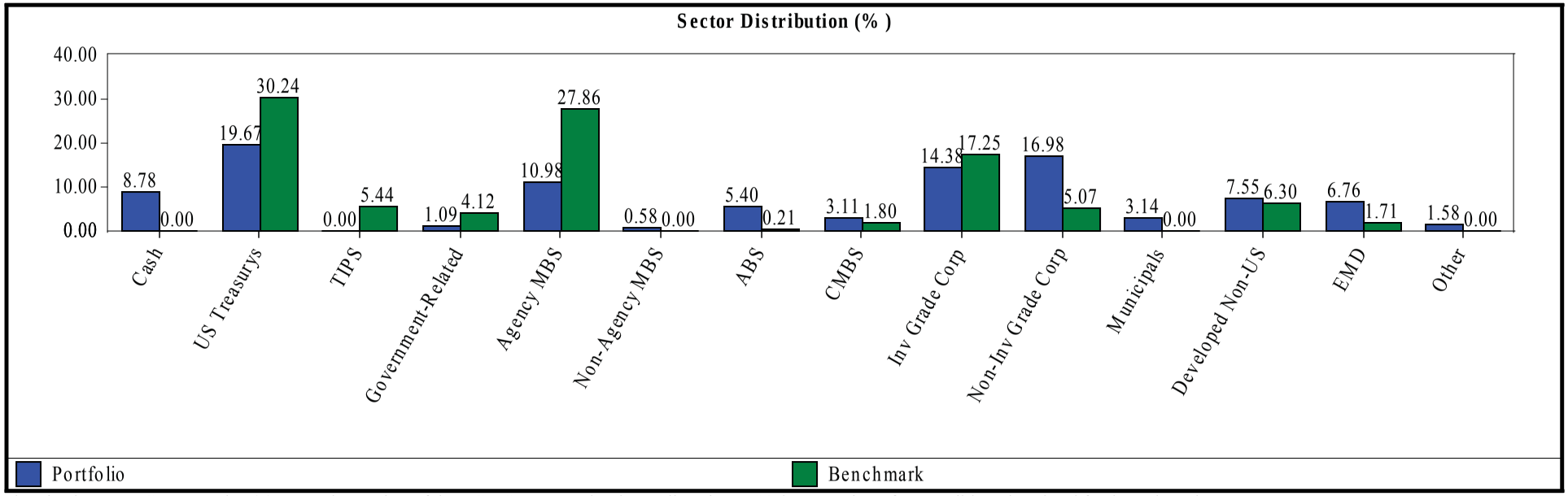
	Market Value ($)	Allocation (%)
PIMCO Core Fixed Income (SA)	806,356,172	35.30
NISA Core Agg Fixed Income (SA)	602,565,528	26.38
Columbia HY Fixed Income (SA)	165,845,615	7.26
Loomis Sayles HY Fixed Income (SA)	162,520,054	7.11
Waterfall (SA)	152,147,368	6.66
Stone Harbor (SA)	120,094,778	5.26
Shenkman Capital (SA)	117,653,517	5.15
Manulife Asset Mgmt (SA)	109,657,266	4.80
Commerce Street Income Partners L.P.	47,634,164	2.09

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

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Fixed Income Composite vs. BC US Unv Bond Index
Portfolio Characteristics
As of December 31, 2011

	Portfolio	Benchmark
Portfolio Characteristics		
Avg. Quality	A	-
Yield To Maturity	4.63%	2.77%
Coupon Rate	4.97%	4.36%
Current Yield	4.85%	-

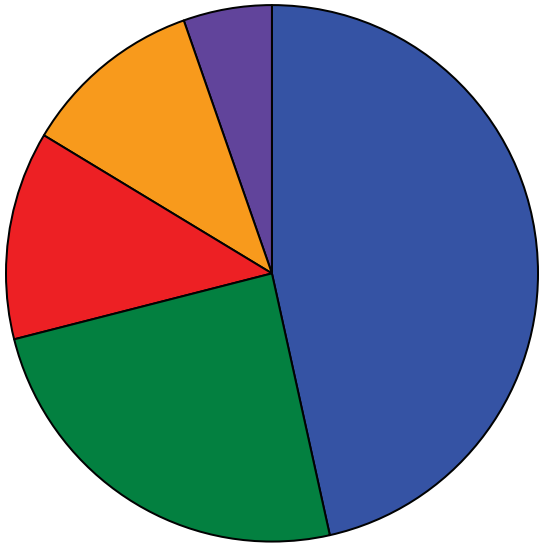


The Fixed Income Custom Index (P) currently consists of the BC US Unv Bond Index. Allocation to "Other" consists of convertibles, closed end funds, and Yankee bonds domiciled out of the Cayman Islands. Commerce Street Income Partners L.P. is not inlcuded in the Fixed Income Composite statistics due to its private equity style.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Real Estate Composite
Asset Allocation Chart
As of December 31, 2011

December 31, 2011 : $177,728,197



	Market Value ($)	Allocation (%)
H/2 Credit Partners (CF)	82,662,762	46.51
Prima Mortgage Invest Trust, LLC	43,644,322	24.56
Mesa West Real Estate Income Fund II L.P.	22,300,314	12.55
Walton Street Real Estate Fund VI, L.P.	19,575,219	11.01
Internal Real Estate (SA)	9,545,579	5.37

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

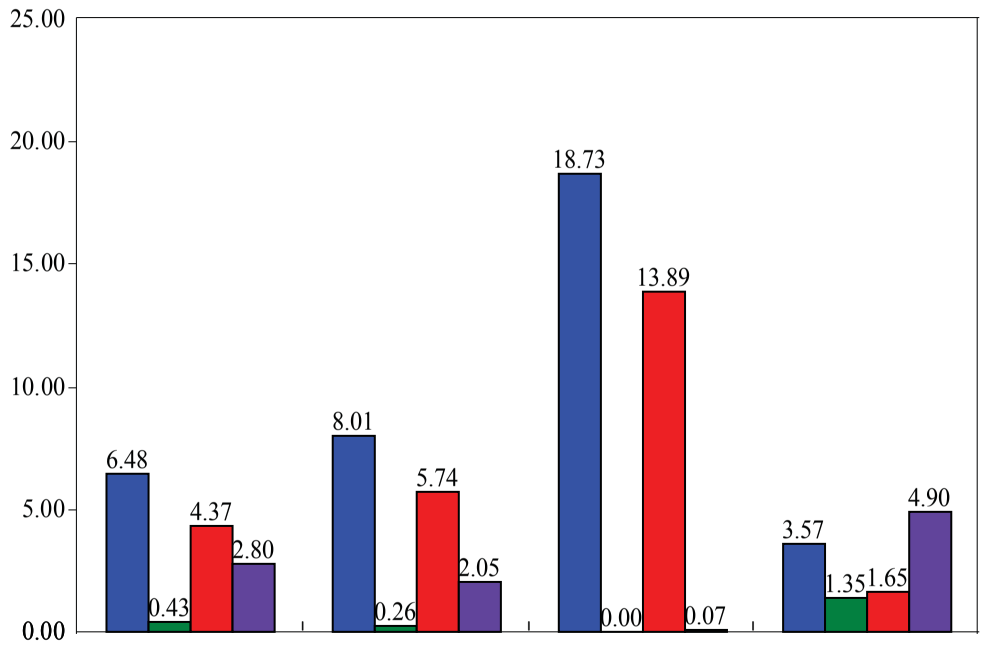
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Real Estate Composite
As of December 31, 2011

Comparative Performance

	QTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	2007	Since Inception	Inception Date
Real Estate Composite	**0.66**	**13.33**	**13.33**	**6.80**	**4.14**	**14.80**	**-6.37**	**0.26**	**0.27**	**5.27**	**07/01/1984**
Real Estate Blended Index	2.97	15.26	15.26	-1.69	3.25	5.83	-22.11	5.27	17.30	N/A	
Difference	-2.30	-1.93	-1.93	8.49	0.89	8.97	15.74	-5.01	-17.03	N/A	

Historical Statistics - 5 Years



	Real Estate Composite	Real Estate Blended Index	S&P 500 Index (Cap Wtd)	BC US Agg Bond Index
Standard Deviation	6.48	8.01	18.73	3.57
Sharpe Ratio	0.43	0.26	0.00	1.35
Downside Risk	4.37	5.74	13.89	1.65
Excess Return vs Risk Free	2.80	2.05	0.07	4.90

Historical Statistics - 5 Years

	Actual Correlation
Real Estate Blended Index	0.35
S&P 500 Index (Cap Wtd)	-0.10
R 2000 Index	-0.09
MSCI EAFE Index (Gross)	-0.18
MSCI Emg Mkts Index (Gross)	-0.13
BC US Agg Bond Index	-0.03
BC US Trsy: US TIPS Index	-0.07
Wilshire US REIT Index	-0.09
HFN FOF Multi-Strat Index (Net)	-0.13
DJ-UBS Cmdty Index (TR)	-0.02
BofA ML 3 Mo US T-Bill Index	-0.12
Consumer Price Index	0.07

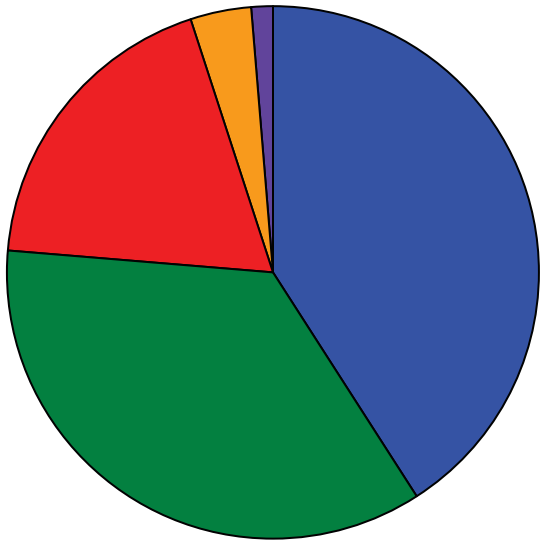
Performance shown is gross of fees. Calculation is based on monthly periodicity.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Asset Allocation Chart
As of December 31, 2011

Real Return Composite

December 31, 2011 : $1,080,550,496

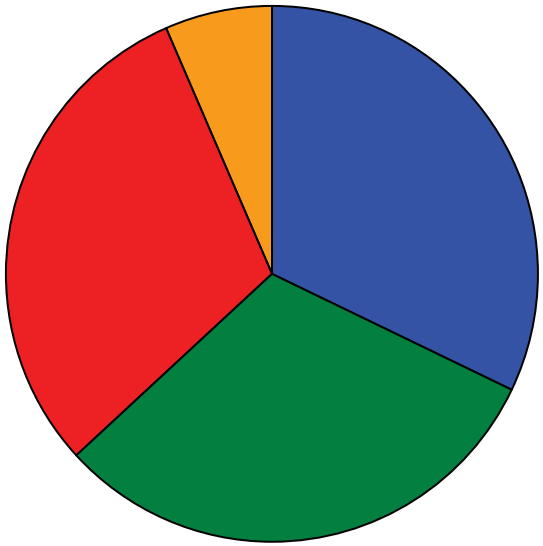


	Market Value ($)	Allocation (%)
Internal TIPS (SA) (P)	441,972,702	40.90
Weaver Barksdale TIPS (SA)	383,223,351	35.47
PIMCO:All Asset;Inst (PAAIX)	201,364,985	18.64
Tortoise Capital (CF)	40,096,836	3.71
Tenaska Power Fund II (CF)	13,892,623	1.29

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

Absolute Return Composite

December 31, 2011 : $1,071,833,881



	Market Value ($)	Allocation (%)
BAAM (SA)	343,862,365	32.08
PAAMCO (SA)	332,670,492	31.04
Prisma Capital Partners (SA)	325,552,224	30.37
Arrowhawk Durable Alpha Fund L.P.	69,748,800	6.51

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Asset Allocation & Performance
As of December 31, 2011

	Allocation		Performance %
	Market Values ($)	%	FYTD
Total Fund	**2,841,596,979**	**100.00**	**-6.36**
Global Equity Composite	**1,231,236,457**	**43.33**	**-12.73**
Domestic Equity Composite	**631,766,263**	**22.23**	**-6.01**
River Road Asset Mgmt (SA)	9,936,155	0.35	0.45
Westwood Management (SA)	29,887,774	1.05	-8.24
Westfield Capital (SA)	31,451,007	1.11	-10.52
Internal S&P 500 Index (SA) (I)	315,157,844	11.09	-3.55
Equitization Assets Program	453,663	0.02	30.30
Internal Mid Cap (SA)	168,216,641	5.92	-9.08
NT Structured Small Cap (SA)	76,663,137	2.70	-8.54
KRS Insurance Liquidation	42	0.00	N/A
International Equity Composite	**512,538,038**	**18.04**	**-19.14**
Artio Intl Equity II (SA)	46,948,745	1.65	-20.92
The Boston Co Wrld Ex US Eq (SA)	221,360,038	7.79	-18.87
Pyramis Int'l Growth Fund (SA)	242,116,152	8.52	-16.11
International Account (SA)	12,361,259	0.44	-19.49
KRS Insurance Transition	14,866	0.00	N/A
Currency Overlay	-10,263,023	-0.36	N/A
Emerging Mkts Equity Composite	**86,932,156**	**3.06**	**-14.51**
Aberdeen Emg Mkts Equity (CF)	56,118,865	1.97	-12.01
Wellington Emg Mkts Equity (CF)	30,813,292	1.08	-18.72

	Allocation		Performance %
	Market Values ($)	%	FYTD
Fixed Income Composite	**586,160,236**	**20.63**	**3.19**
NISA Core Fixed Income (SA)	190,551,013	6.71	5.30
PIMCO Core Fixed Income (SA)	202,381,386	7.12	2.00
Columbia HY Fixed Income (SA)	37,424,342	1.32	N/A
Loomis Sayles HY Fixed Income (SA)	36,658,571	1.29	N/A
Manulife Asset Mgmt (SA)	24,737,205	0.87	N/A
Commerce Street Partners LP	9,073,174	0.32	-1.28
Waterfall (SA)	32,662,192	1.15	5.82
Shenkman Capital (SA)	26,585,058	0.94	0.59
Stone Harbor (SA)	26,087,296	0.92	0.56
Real Estate Composite	**27,039,143**	**0.95**	**2.18**
Walton Street Real Estate Fund VI, L.P.	2,175,024	0.08	1.78
Prima Mortgage Invest Trust, LLC	4,849,369	0.17	3.94
Mesa West Real Estate Inc Fund II L.P.	2,477,813	0.09	5.36
H/2 Credit Partners (CF)	17,536,937	0.62	-0.39
Real Return Composite	**337,416,084**	**11.87**	**6.72**
Internal TIPS (SA)	281,279,638	9.90	7.26
PIMCO:All Asset;Inst (PAAIX)	50,135,689	1.76	N/A
Tenaska Power Fund II (CF)	1,543,625	0.05	5.69
Tortoise Capital (CF)	4,457,132	0.16	12.16
Absolute Return Composite	**268,876,518**	**9.46**	**-1.99**
Arrowhawk Durable Alpha Fund L.P.	29,572,619	1.04	-4.78
BAAM (SA)	82,116,384	2.89	N/A
PAAMCO (SA)	79,443,700	2.80	N/A
Prisma Capital Partners (SA)	77,743,815	2.74	N/A
Private Equity Composite	**185,024,398**	**6.51**	**1.97**
Cash Equivalent Composite	**205,844,143**	**7.24**	**0.08**
Cash Equivalents (SA)	205,826,593	7.24	0.08
KRS Clearing Account	17,551	0.00	-0.07

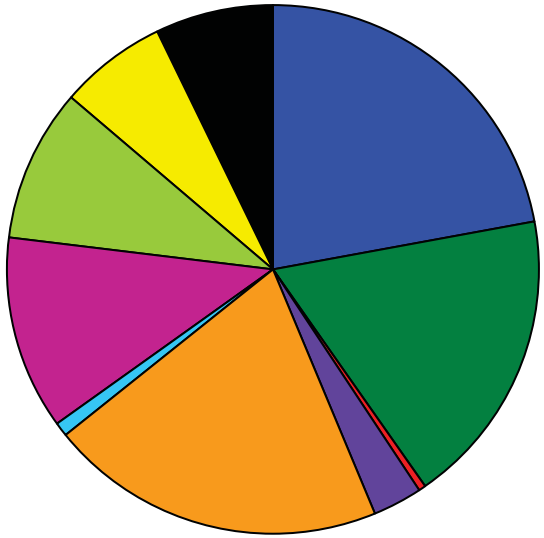
Performance shown is gross of fees. Fiscal year ends June 30th. Allocations shown may not sum up to 100% exactly due to rounding. KRS Clearing Account is excluded from the Cash Equivalent Composite performance calculation. Real Estate and Private Equity valuations are as of the most recent data available.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Total Fund
Asset Allocation Charts
As of December 31, 2011

Asset Allocation by Asset Class

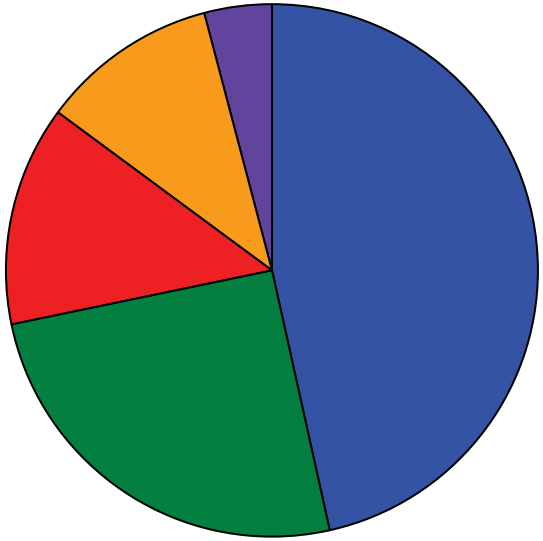
December 31, 2011 : $2,841,596,979



	Market Value ($)	Allocation (%)
Domestic Equity Composite	631,766,263	22.23
Intl Equity Ex C.O. Composite	522,801,061	18.40
Currency Overlay	-10,263,023	-0.36
Emerging Markets Equity Composite	86,932,156	3.06
Fixed Income Composite	586,160,236	20.63
Real Estate Composite	27,039,143	0.95
Real Return Composite	337,416,084	11.87
Absolute Return Composite	268,876,518	9.46
Private Equity Composite	185,024,398	6.51
Cash Equivalent Composite	205,844,143	7.24

Asset Allocation by Sub-Plan

December 31, 2011 : $2,841,579,428



	Market Value ($)	Allocation (%)
CERS	1,320,301,555	46.46
CERS Haz	718,745,089	25.29
KERS	381,594,193	13.43
KERS Haz	305,555,003	10.75
SPRS	115,383,587	4.06

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.

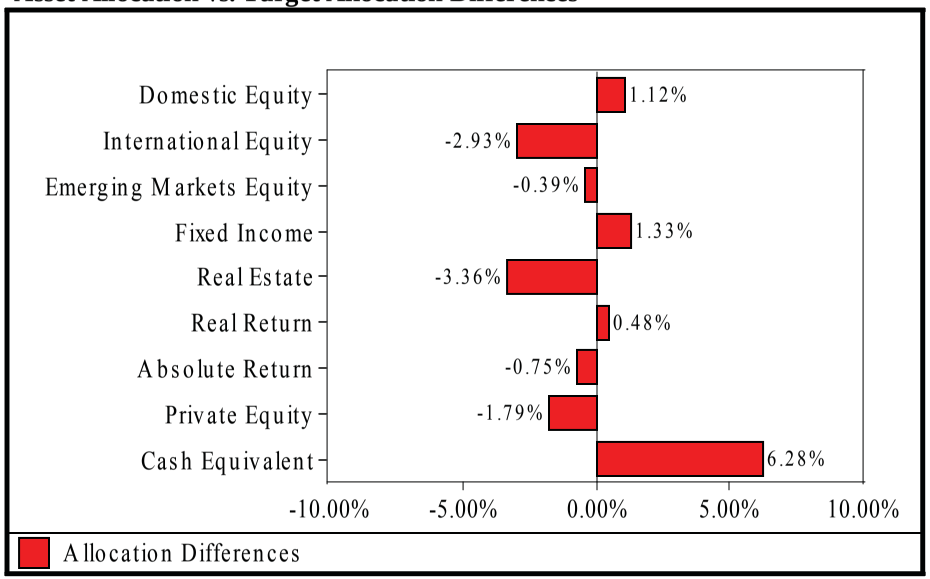
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Total Fund vs. All Public Plans > $1B-Total Fund
Asset Allocation vs. Target and Plan Sponsor Peer Group
As of December 31, 2011

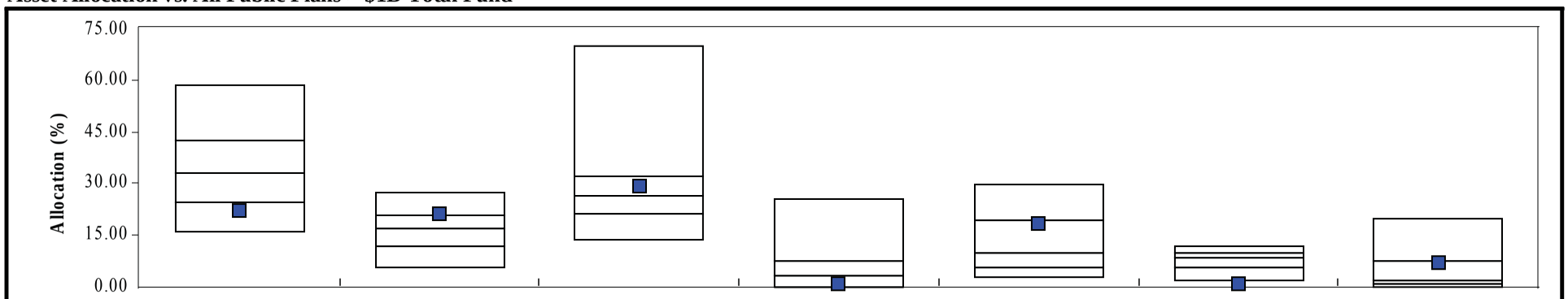
Asset Allocation vs. Target Allocation

	Market Value ($)	Allocation (%)	Target (%)
Domestic Equity	631,766,263	22.23	21.11
International Equity	512,538,038	18.04	20.97
Emerging Markets Equity	86,932,156	3.06	3.45
Fixed Income	586,160,236	20.63	19.30
Real Estate	27,039,143	0.95	4.31
Real Return	337,416,084	11.87	11.39
Absolute Return	268,876,518	9.46	10.21
Private Equity	185,024,398	6.51	8.30
Cash Equivalent	205,844,143	7.24	0.96
Total Fund	2,841,596,979	100.00	100.00

Asset Allocation vs. Target Allocation Differences



Asset Allocation vs. All Public Plans > $1B-Total Fund



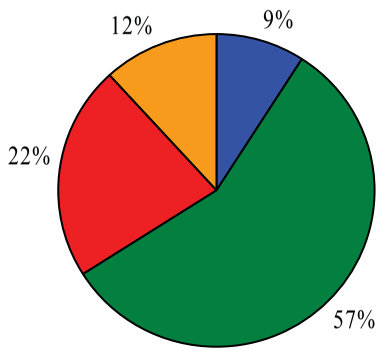
	US Equity	Intl. Equity	US Fixed Income	Intl. Fixed Income	Alternative Inv.	Real Estate	Cash
Total Fund	22.23 (81)	21.10 (24)	29.29 (37)	0.92 (68)	18.27 (28)	0.95 (99)	7.24 (27)
Median	32.99	17.07	26.37	3.21	9.78	8.27	1.75
Population	59	50	60	29	33	23	32

Parentheses contain percentile ranks. Allocations shown may not sum up to 100% exactly due to rounding. Currency overlay is included in international equity, and real return and opportunistic fixed income are included in U.S. fixed income when compared to other public plans.

RVKuhns & ASSOCIATES, INC.

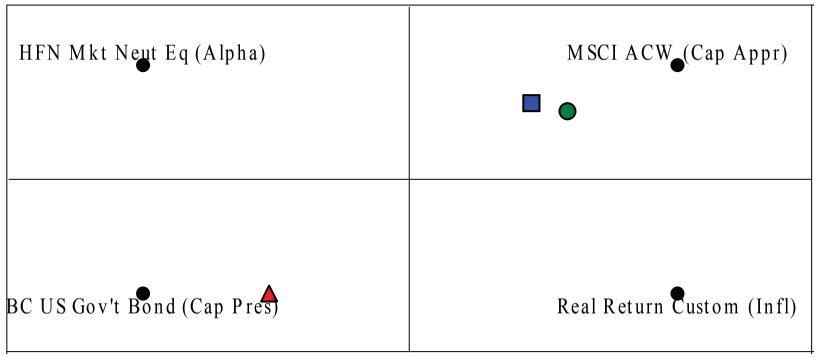
Kentucky Retirement Systems - Insurance Plan
Total Fund Thematic and Liquidity Analysis
As of December 31, 2011

Asset Allocation by Theme



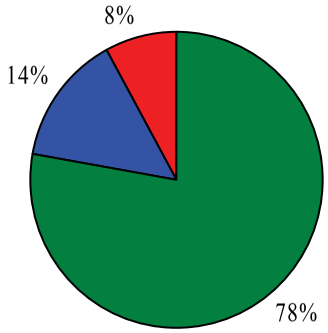
Alpha
Capital Preservation
Capital Appreciation
Inflation

Thematic Analysis - July 1, 2000 to December 31, 2011



Total Fund
Target Allocation Index (I)
Fixed Income Composite

Asset Allocation by Liquidity



Liquid
Less Liquid
Not Liquid

RVK Liquidity Rating (I) **72**

Correlation Matrix - 10 Years

	A	B	C	D
A	1.00			
B	0.52	1.00		
C	-0.18	-0.29	1.00	
D	0.59	0.77	0.00	1.00

A = HFN Mkt Neut Eq Index (Alpha)
B = MSCI ACW Index (Capital Appreciation)
C = BC US Gov't Bond Index (Capital Preservation)
D = 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.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Total Fund	**2.84**	**-6.36**	**-1.94**	**-1.94**	**11.76**	**0.29**	**13.26**	**25.68**	**-32.95**	**7.47**	**04/01/1987**
Target Allocation Index (I)	2.48	-5.57	-0.45	-0.45	13.15	0.54	13.24	28.49	-34.19	7.58	
Difference	0.36	-0.79	-1.49	-1.49	-1.39	-0.25	0.02	-2.81	1.24	-0.11	
All Public Plans > $1B-Total Fund	5.23	-4.44	0.73	0.73	11.17	2.03	13.73	19.59	-26.60	8.25	
Percentile Rank	92	94	97	97	42	97	58	11	99	100	
Total Fund	**2.84**	**-6.36**	**-1.94**	**-1.94**	**11.76**	**0.29**	**13.26**	**25.68**	**-32.95**	**7.47**	**04/01/1987**
Actual Allocation Index (I)	3.12	-4.66	-0.49	-0.49	10.73	N/A	11.80	22.04	N/A	N/A	
Difference	-0.28	-1.70	-1.45	-1.45	1.03	N/A	1.46	3.64	N/A	N/A	
Global Equity Composite	**6.58**	**-12.73**	**-8.56**	**-8.56**	**11.06**	**-1.71**	**14.09**	**31.30**	**-37.90**	**8.03**	**07/01/1992**
Global Equity Custom Index (I)	7.66	-11.61	-6.67	-6.67	11.84	-1.99	14.01	31.47	-39.88	7.81	
Difference	-1.08	-1.12	-1.89	-1.89	-0.78	0.28	0.08	-0.17	1.98	0.22	
Fixed Income Composite	**1.47**	**3.19**	**7.99**	**7.99**	**8.19**	**7.06**	**6.40**	**10.21**	**-0.50**	**7.38**	**07/01/2000**
Fixed Income Custom Index (I)	1.45	4.36	10.00	10.00	9.22	7.27	6.31	11.41	-2.35	7.36	
Difference	0.02	-1.17	-2.01	-2.01	-1.03	-0.21	0.09	-1.20	1.85	0.02	
Real Estate Composite	**0.59**	**2.18**	**14.85**	**14.85**	**N/A**	**N/A**	**18.36**	**N/A**	**N/A**	**8.48**	**05/01/2009**
Real Estate Blended Index	2.97	6.59	15.26	15.26	-1.69	3.25	5.83	-22.11	5.27	1.34	
Difference	-2.37	-4.41	-0.41	-0.41	N/A	N/A	12.53	N/A	N/A	7.14	
Real Return Composite	**2.32**	**6.72**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**6.72**	**07/01/2011**
Consumer Price Index + 3%	0.20	1.47	6.05	6.05	5.46	5.33	4.54	5.80	3.09	1.47	
Difference	2.12	5.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.25	
Absolute Return Composite	**-1.28**	**-1.99**	**3.81**	**3.81**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.73**	**04/01/2010**
HFRI FOF Diversified Index (Lagged)	-2.36	-5.67	-2.46	-2.46	3.32	-0.16	4.07	8.67	-19.20	0.39	
Difference	1.08	3.68	6.27	6.27	N/A	N/A	N/A	N/A	N/A	0.34	
Private Equity Composite	**-1.66**	**1.97**	**11.64**	**11.64**	**10.74**	**4.21**	**17.83**	**3.24**	**-18.26**	**6.48**	**06/01/2001**
Alternatives Custom Index (I)	-14.44	-13.62	-8.41	-8.41	12.41	-0.57	16.32	33.31	-34.68	2.63	
Difference	12.78	15.59	20.05	20.05	-1.67	4.78	1.51	-30.07	16.42	3.85	
Cash Equivalent Composite	**0.04**	**0.08**	**0.26**	**0.26**	**0.24**	**1.73**	**0.25**	**0.22**	**2.34**	**3.52**	**07/01/1992**
Citi 3 Mo T-Bill Index	0.00	0.00	0.06	0.06	0.11	1.36	0.10	0.16	1.80	3.25	
Difference	0.04	0.08	0.20	0.20	0.13	0.37	0.15	0.06	0.54	0.27	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. See Addendum for Custom and Blended Index descriptions. International Equity Ex-C.O. Composite excludes Currency Overlay and Cash Equivalent Composite excludes KRS Clearing Account.

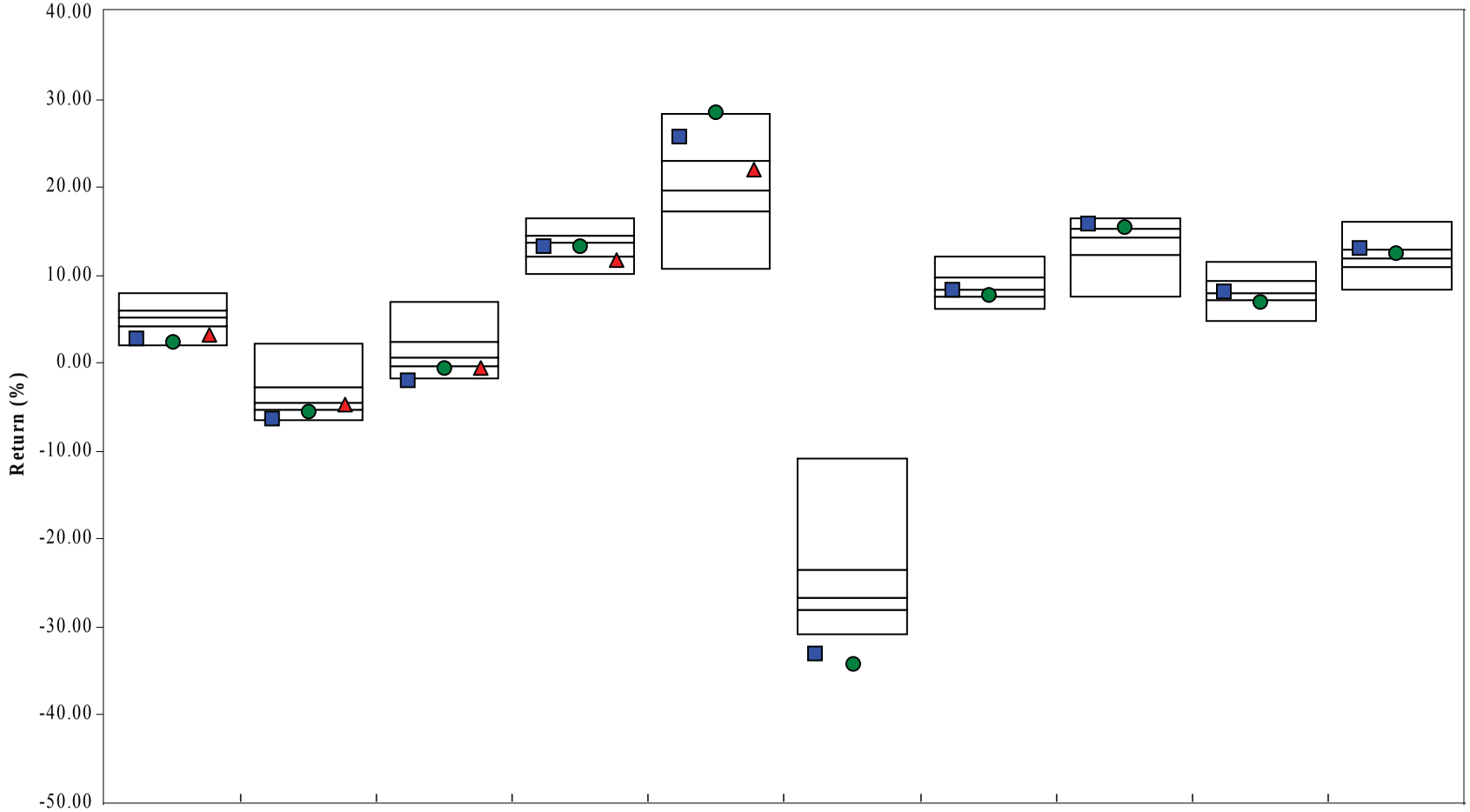
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Domestic Equity Composite	**12.32**	**-6.01**	**0.43**	**0.43**	**13.79**	**-0.06**	**16.32**	**26.14**	**-35.60**	**1.85**	**07/01/2000**
Domestic Equity Custom Index (I)	12.12	-5.01	0.97	0.97	14.35	-0.04	16.38	27.25	-36.72	1.21	
Difference	0.20	-1.00	-0.54	-0.54	-0.56	-0.02	-0.06	-1.11	1.12	0.64	
All Cap Composite	**11.56**	**-8.16**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.16**	**07/01/2011**
R 3000 Index	12.12	-5.01	1.03	1.03	14.88	-0.01	16.93	28.34	-37.31	-5.01	
Difference	-0.56	-3.15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.15	
Cap Weighted Composite	**12.38**	**-5.71**	**1.21**	**1.21**	**14.09**	**0.10**	**16.32**	**26.14**	**-35.60**	**1.91**	**07/01/2000**
R 3000 Index	12.12	-5.01	1.03	1.03	14.88	-0.01	16.93	28.34	-37.31	1.20	
Difference	0.26	-0.70	0.18	0.18	-0.79	0.11	-0.61	-2.20	1.71	0.71	
International Equity Composite	**0.84**	**-19.14**	**-17.36**	**-17.36**	**8.64**	**-3.09**	**11.39**	**39.31**	**-41.98**	**1.35**	**07/01/2000**
Non U.S. Equity Custom Index (I)	3.77	-16.75	-12.90	-12.90	9.71	-3.81	10.60	37.06	-44.13	0.72	
Difference	-2.93	-2.39	-4.46	-4.46	-1.07	0.72	0.79	2.25	2.15	0.63	
International Equity Ex C.O. Composite	**2.52**	**-17.87**	**-15.05**	**-15.05**	**9.64**	**-2.56**	**11.02**	**39.74**	**-41.98**	**1.00**	**04/01/2000**
Non U.S. Equity Custom Index (I)	3.77	-16.75	-12.90	-12.90	9.71	-3.81	10.60	37.06	-44.13	0.05	
Difference	-1.25	-1.12	-2.15	-2.15	-0.07	1.25	0.42	2.68	2.15	0.95	
Emerging Markets Equity Composite	**4.67**	**-14.51**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-14.51**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	0.22	4.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.50	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. See Addendum for Custom and Blended Index descriptions. International Equity Ex-C.O. Composite excludes Currency Overlay and Cash Equivalent Composite excludes KRS Clearing Account.

Kentucky Retirement Systems - Insurance Plan
All Public Plans > $1B-Total Fund
Plan Sponsor Peer Group Analysis
As of December 31, 2011



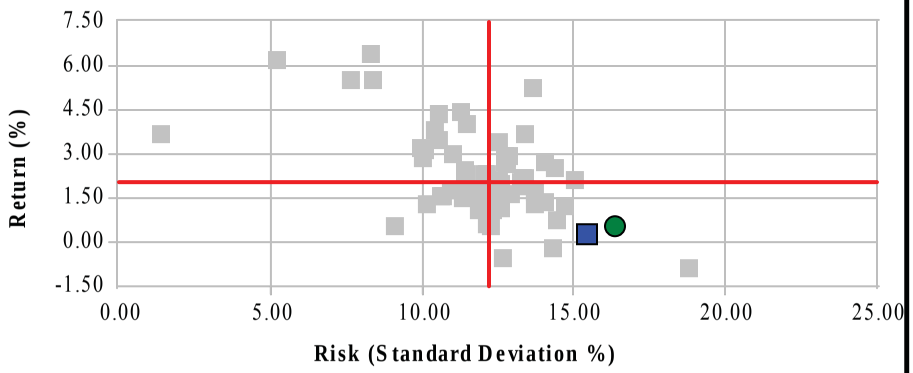
	QTD	FYTD	CYTD	2010	2009	2008	2007	2006	2005	2004
Total Fund	2.84 (92)	-6.36 (94)	-1.94 (97)	13.26 (58)	25.68 (11)	-32.95 (99)	8.39 (47)	15.80 (14)	8.11 (47)	13.18 (22)
Target Allocation Index (I)	2.48 (94)	-5.57 (84)	-0.45 (78)	13.24 (58)	28.49 (3)	-34.19 (100)	7.76 (69)	15.43 (21)	6.93 (78)	12.58 (37)
Actual Allocation Index (I)	3.12 (92)	-4.66 (58)	-0.49 (78)	11.80 (79)	22.04 (32)	N/A	N/A	N/A	N/A	N/A
Median	5.23	-4.44	0.73	13.73	19.59	-26.60	8.34	14.28	7.92	11.93
Population	79	78	77	72	72	77	75	74	73	65

Performance shown is gross of fees. Parentheses contain percentile ranks.

RVKuhns & ASSOCIATES, INC.

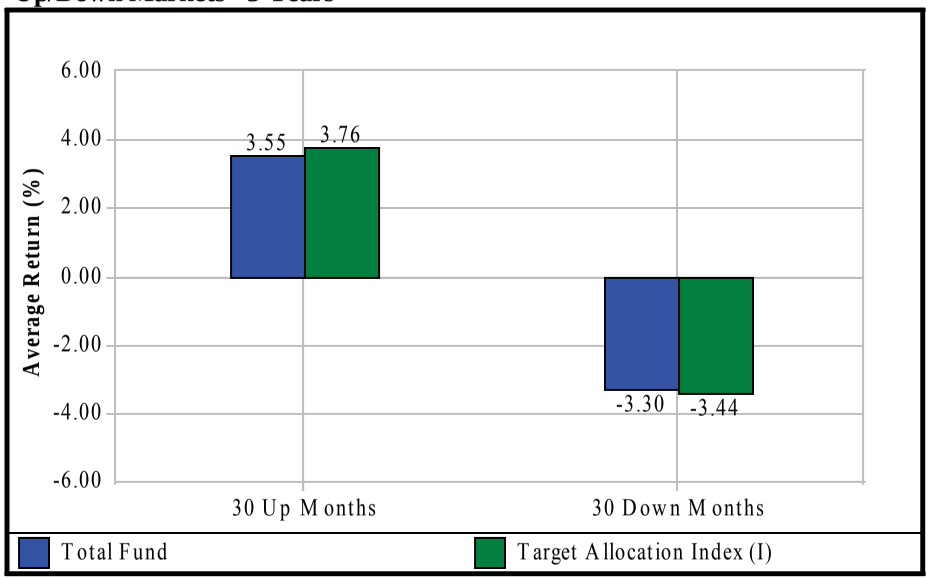
Kentucky Retirement Systems - Insurance Plan
Total Fund vs. All Public Plans > $1B-Total Fund
As of December 31, 2011

Plan Sponsor Scattergram - 5 Years

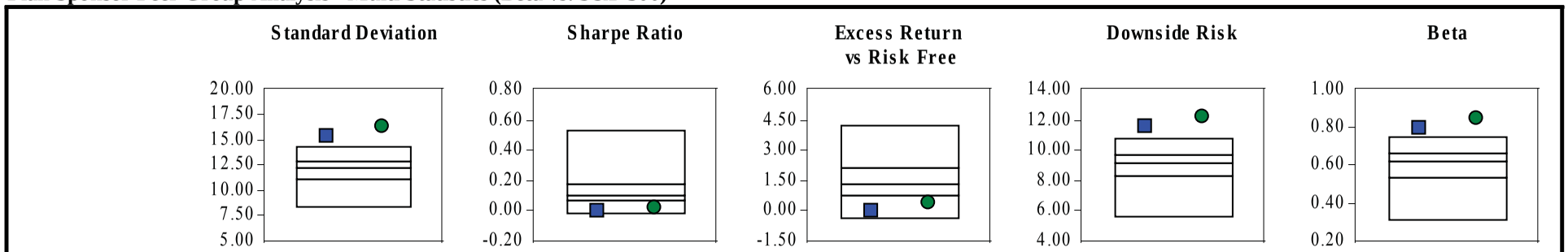


	Return	Standard Deviation
Total Fund	0.29	15.40
Target Allocation Index (I)	0.54	16.39
Median	2.03	12.18

Up/Down Markets - 5 Years



Plan Sponsor Peer Group Analysis - Multi Statistics (Beta vs. S&P 500)



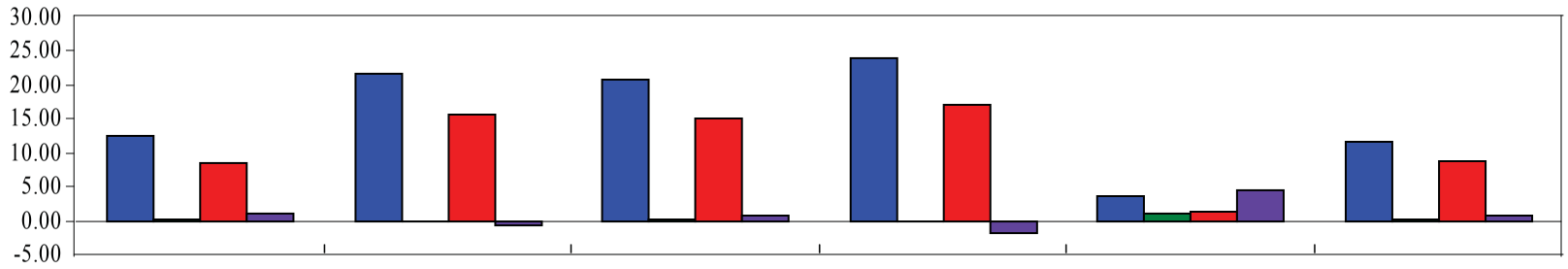
	5 Years	5 Years	5 Years	5 Years	5 Years
Total Fund	15.40 (2)	0.00 (91)	0.03 (91)	11.67 (2)	0.80 (2)
Target Allocation Index (I)	16.39 (1)	0.03 (90)	0.44 (85)	12.26 (1)	0.85 (1)
Median	12.18	0.11	1.34	9.18	0.62
Population	69	69	69	69	69

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

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Historical Stats & Correlation Analysis
As of December 31, 2011

Historical Statistics - 5 Years



	Total Fund	Global Equity Composite	Domestic Equity Composite	International Equity Composite	Fixed Income Composite	Private Equity Composite
Standard Deviation	12.37	21.62	20.75	23.88	3.57	11.53
Sharpe Ratio	0.08	-0.03	0.04	-0.07	1.15	0.06
Downside Risk	8.60	15.63	14.99	17.19	1.45	8.83
Excess Return vs Risk Free	1.03	-0.58	0.86	-1.72	4.32	0.65

Correlation Matrix - 5 Years

	Total Fund	Global Equity Composite	Domestic Equity Composite	International Equity Composite	Fixed Income Composite	Private Equity Composite
Total Fund	1.00					
Global Equity Composite	0.99	1.00				
Domestic Equity Composite	0.96	0.98	1.00			
International Equity Composite	0.96	0.97	0.91	1.00		
Fixed Income Composite	0.07	0.04	-0.02	0.11	1.00	
Private Equity Composite	0.69	0.59	0.61	0.54	0.10	1.00

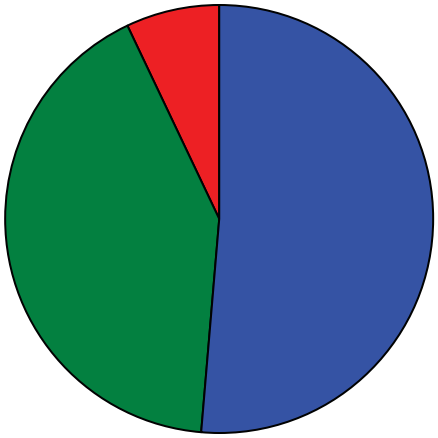
Performance shown is gross of fees. Calculation is based on quarterly periodicity. Excluded composites do not have 5 years of performance history available.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Global Equity Composite
Asset Allocation Charts
As of December 31, 2011

Style Allocation

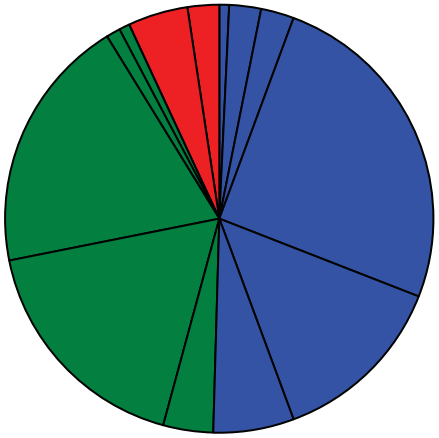
December 31, 2011 : $1,231,236,457



	Market Value ($)	Allocation (%)
Domestic Equity	631,766,263	51.31
International Equity	512,538,038	41.63
Emerging Markets Equity	86,932,156	7.06

Sub-Composite Detail

December 31, 2011 : $1,231,236,457



	Market Value ($)	Allocation (%)
River Road Asset Management (SA)	9,936,155	0.81
Westwood Management (SA)	29,887,774	2.43
Westfield Capital (SA)	31,451,007	2.55
Internal S&P 500 Index (SA) (I)	315,157,844	25.60
Equitization Assets Program	453,663	0.04
Internal Mid Cap (SA)	168,216,641	13.66
NT Structured Small Cap (SA)	76,663,137	6.23
KRS Insurance Liquidation	42	-
Artio Int'l Equity II (SA)	46,948,745	3.81
The Boston Co World Ex US Eq (SA) (I)	221,360,038	17.98
Pyramis Int'l Growth Fund (SA) (I)	242,116,152	19.66
International Account (SA)	12,361,259	1.00
KRS Insurance Transition	14,866	-
Currency Overlay	-10,263,023	-0.83
Aberdeen Emg Mkts Equity (CF)	56,118,865	4.56
Wellington Emg Mkts Equity (CF)	30,813,292	2.50

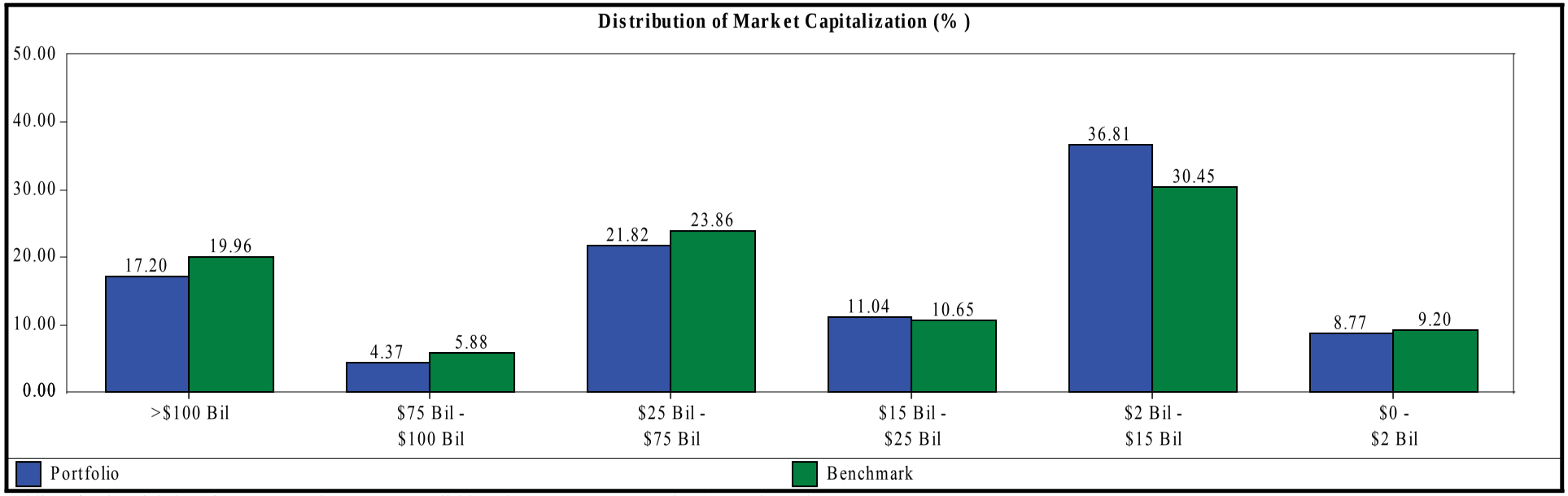
Allocations shown may not sum up to 100% exactly due to rounding.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Global Equity Composite vs. MSCI ACW IM Index (Gross)
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
EXXON MOBIL CORPORATION	1.02	1.39	-0.37	17.38
HSBC HOLDINGS PLC	0.82	0.46	0.36	-0.38
ROCHE HOLDING AG	0.76	0.40	0.35	4.76
VODAFONE GROUP PLC	0.68	0.48	0.20	11.66
ROYAL DUTCH/SHELL GROUP	0.66	0.42	0.24	15.57
SANOFI-AVENTIS	0.59	0.28	0.31	11.27
TOTAL SA	0.57	0.37	0.20	16.66
NOVARTIS AG	0.57	0.45	0.12	2.33
BP PLC	0.57	0.46	0.11	19.31
MICROSOFT CORPORATION	0.54	0.66	-0.12	5.11
% of Portfolio	6.78	5.37		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	48,941	58,181
Median Mkt. Cap. ($M)	1,558	870
Price/Earnings ratio	12.60	12.14
Price/Book ratio	2.18	2.19
5 Yr. EPS Growth Rate (%)	7.16	8.07
Current Yield (%)	3.18	3.18
Beta (5 yrs, monthly periodicity)	0.90	1.00
Number of Stocks	4926	9050

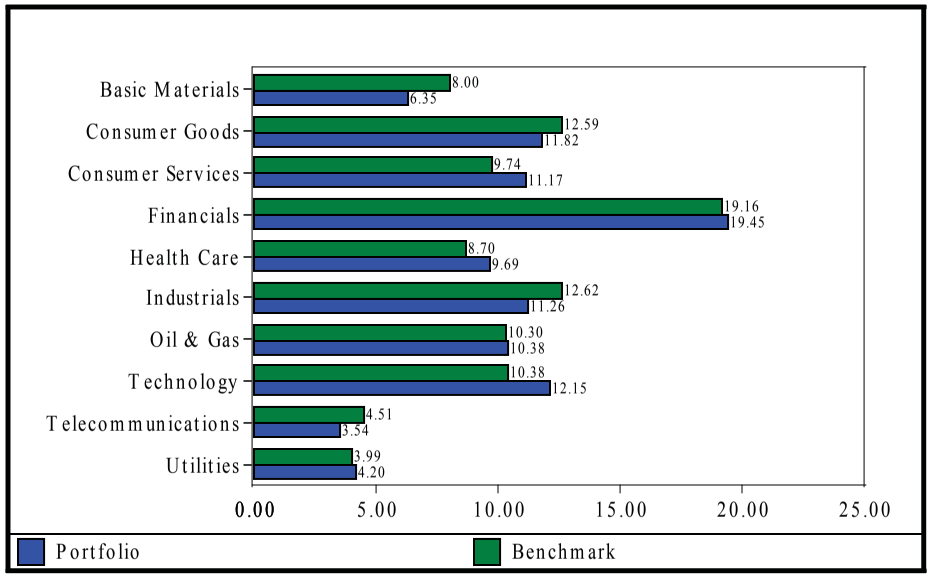


Holdings for the Global Equity Custom Index (I) are unavailable. The MSCI ACW IM Index (Gross) is used as a proxy.

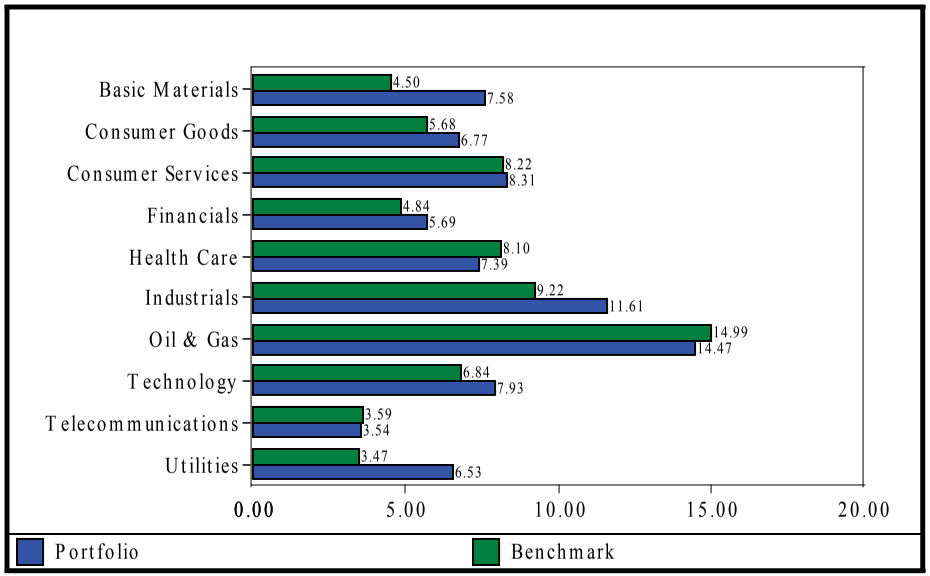
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Global Equity Composite vs. MSCI ACW IM Index (Gross)
Buy and Hold Sector/Region Attribution Graphs
As of December 31, 2011

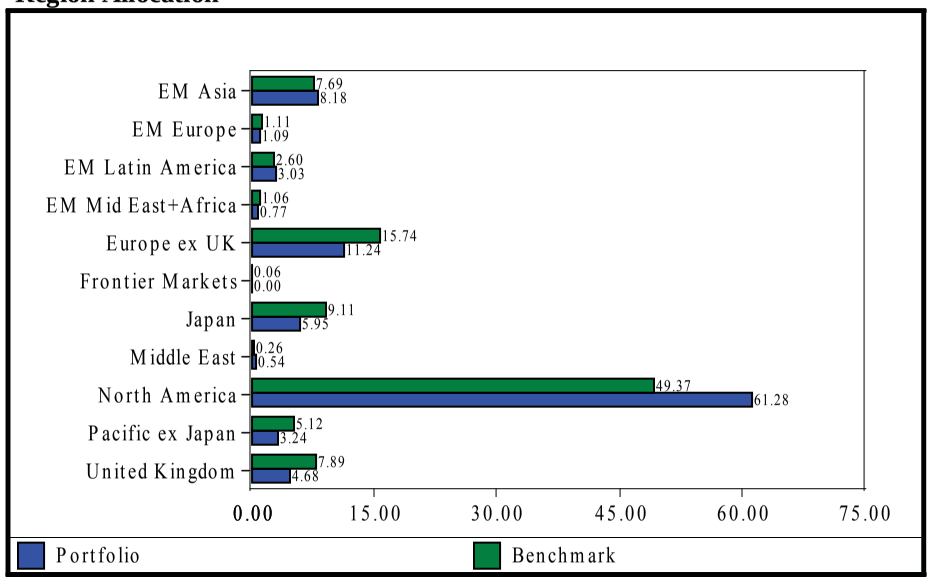
Sector Allocation



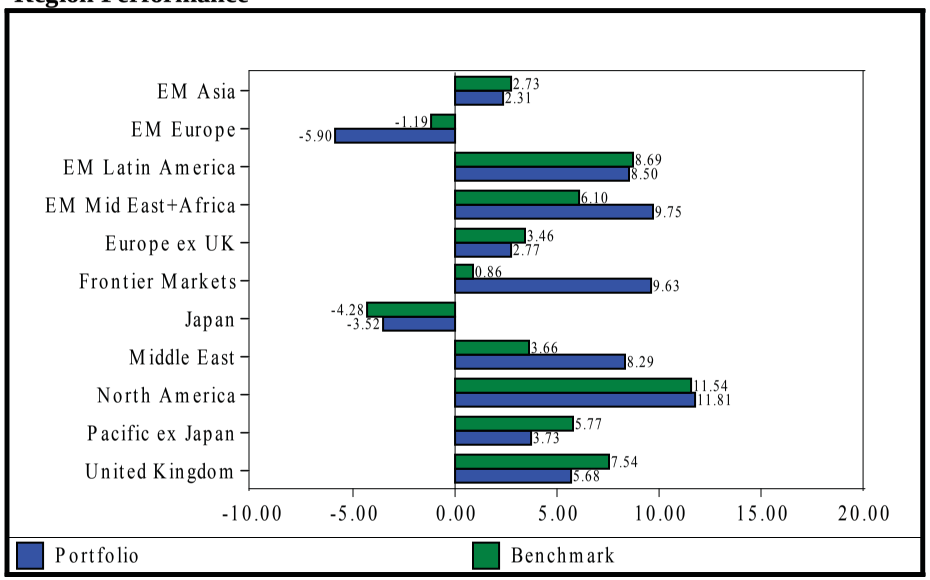
Sector Performance



Region Allocation



Region Performance



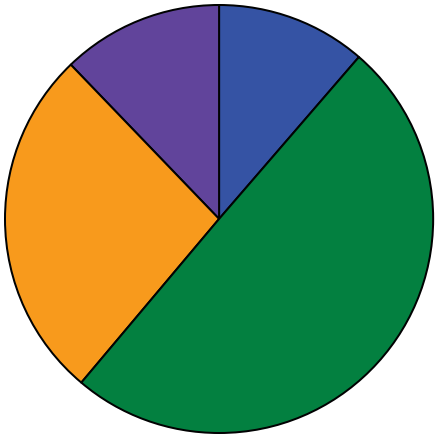
Holdings for the Global Equity Custom Index (I) are unavailable. The MSCI ACW IM Index (Gross) is used as a proxy.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Domestic Equity Composite
Asset Allocation Charts
As of December 31, 2011

Style Allocation

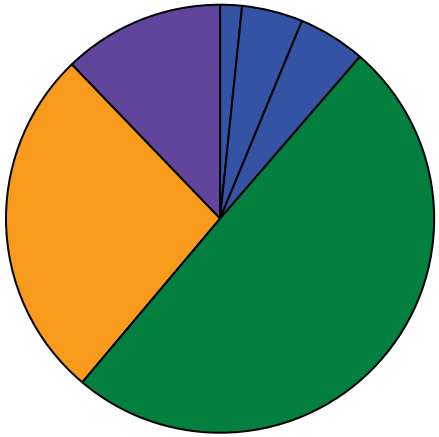
December 31, 2011 : $631,766,263



	Market Value ($)	Allocation (%)
Domestic All Cap Equity	71,274,935	11.28
Domestic Large Cap Equity	315,157,844	49.89
Domestic Mid Cap Equity	168,216,641	26.63
Domestic Small Cap Equity	76,663,137	12.13
Equitization Assets/Other	453,705	0.07

Sub-Composite Detail

December 31, 2011 : $631,766,263



	Market Value ($)	Allocation (%)
River Road Asset Management (SA)	9,936,155	1.57
Westwood Management (SA)	29,887,774	4.73
Westfield Capital (SA)	31,451,007	4.98
Internal S&P 500 Index (SA) (I)	315,157,844	49.89
Internal Mid Cap (SA)	168,216,641	26.63
NT Structured Small Cap (SA)	76,663,137	12.13
Equitization Assets Program	453,663	0.07
KRS Insurance Liquidation	42	-

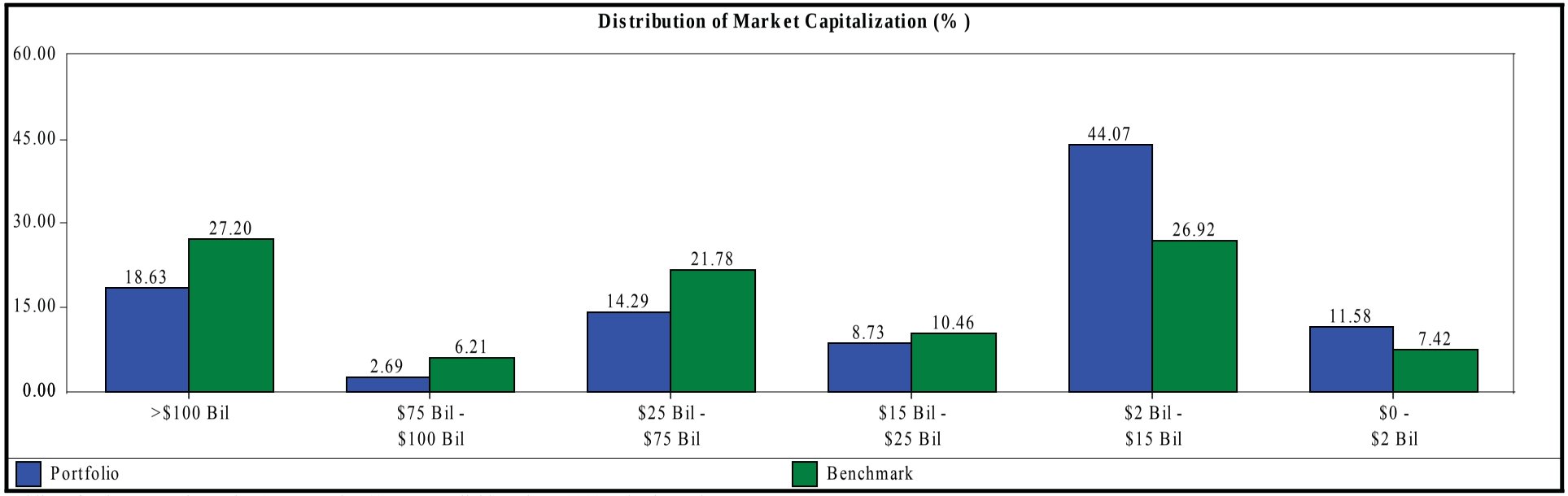
Allocations shown may not sum up to 100% exactly due to rounding.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Domestic Equity Composite vs. R 3000 Index
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
EXXON MOBIL CORPORATION	2.03	2.98	-0.95	17.38
MICROSOFT CORPORATION	1.07	1.38	-0.31	5.11
CHEVRONTEXACO CORPORATION	1.06	1.53	-0.46	15.82
INT'L BUSINESS MACHS	1.05	1.59	-0.54	5.57
JOHNSON & JOHNSON	1.04	1.28	-0.24	3.87
GENERAL ELECTRIC COMPANY	1.03	1.36	-0.33	18.79
GOOGLE INC.	0.98	1.16	-0.18	25.41
AT&T INC.	0.98	1.28	-0.30	7.59
PFIZER INC.	0.95	1.22	-0.27	23.62
PROCTER & GAMBLE CO (THE)	0.92	1.33	-0.41	6.45
% of Portfolio	11.11	15.11		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	50,443	77,518
Median Mkt. Cap. ($M)	644	908
Price/Earnings ratio	14.49	13.98
Price/Book ratio	2.39	2.42
5 Yr. EPS Growth Rate (%)	8.73	9.73
Current Yield (%)	2.49	2.48
Beta (5 yrs, monthly periodicity)	0.96	1.00
Number of Stocks	3491	2946

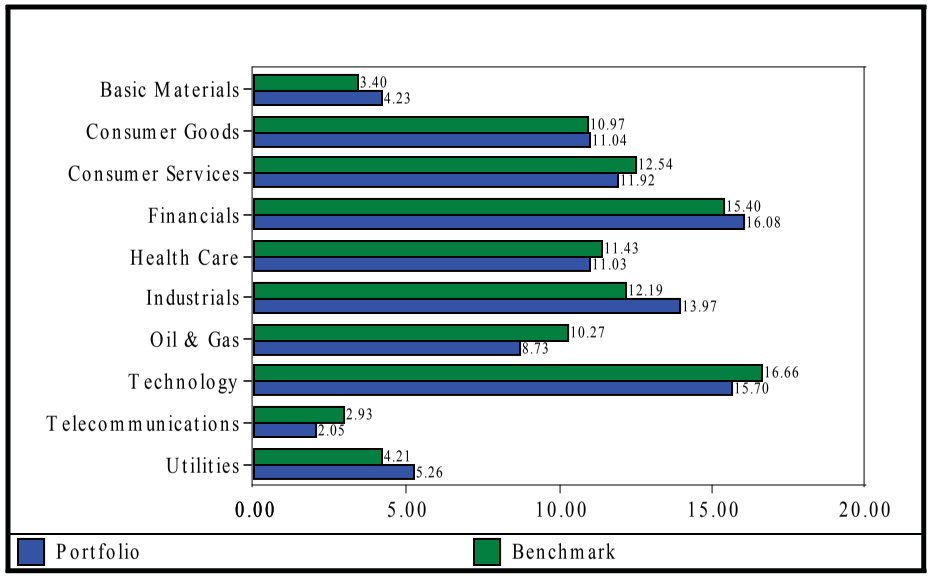


Holdings for the Domestic Equity Custom Index (I) are unavailable. The R 3000 Index is used as a proxy.

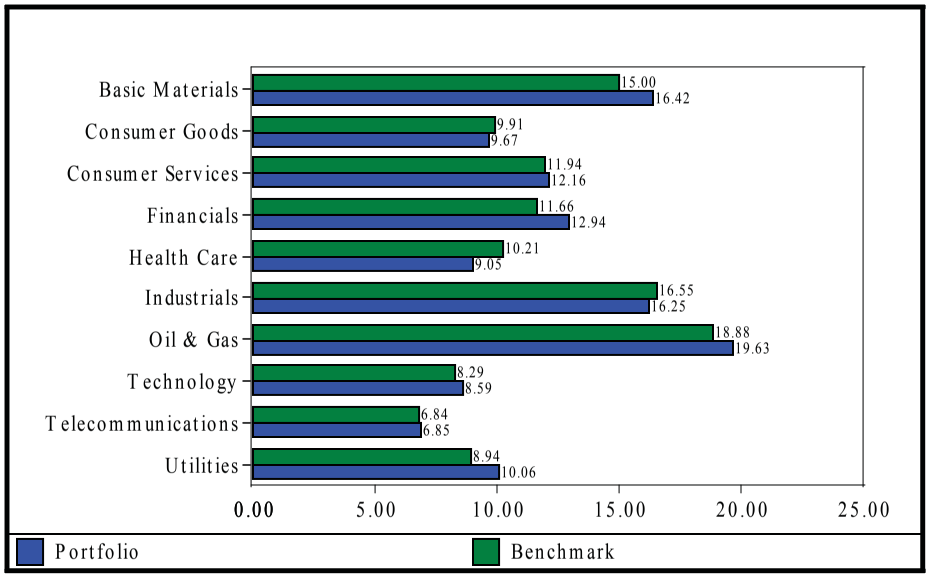
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Domestic Equity Composite vs. R 3000 Index
Buy and Hold Sector/Style Attribution Graphs
As of December 31, 2011

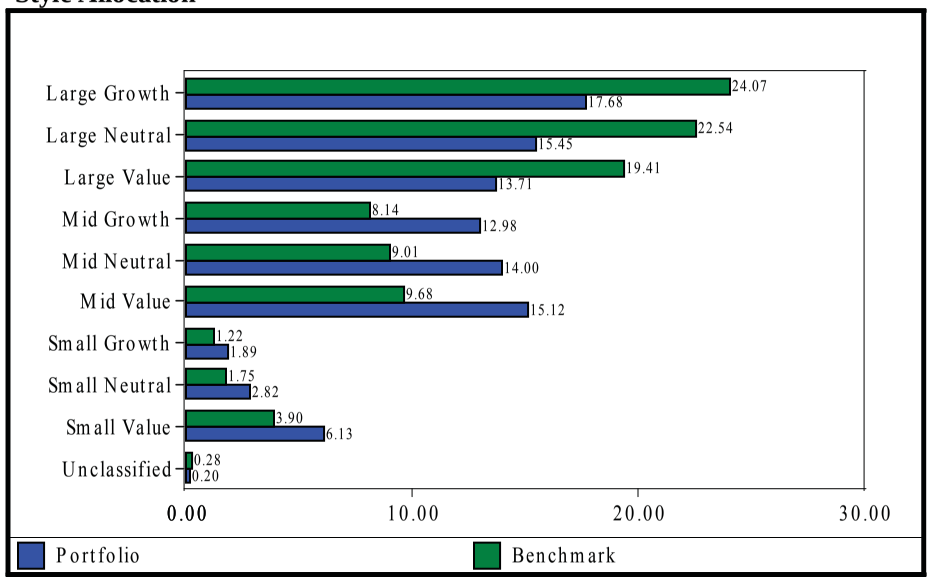
Sector Allocation



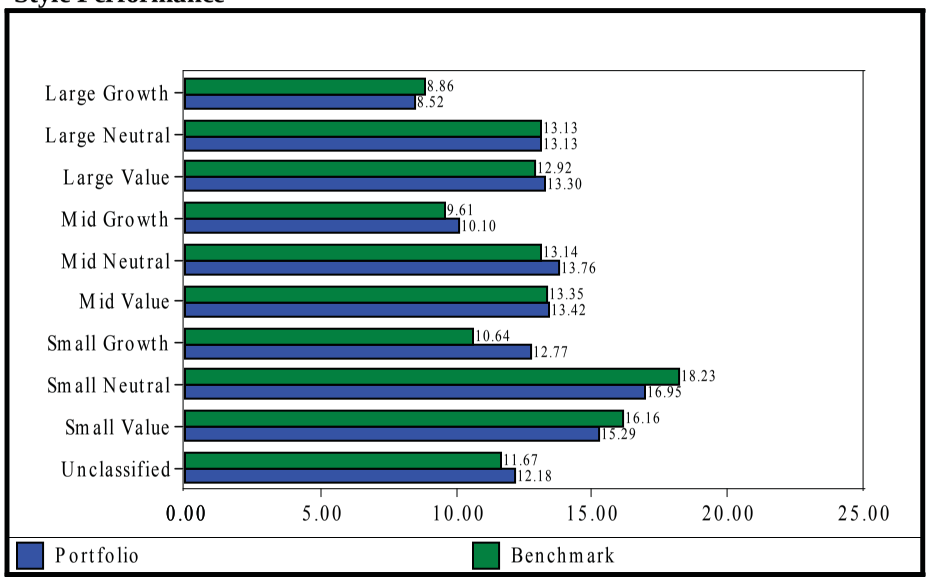
Sector Performance



Style Allocation



Style Performance



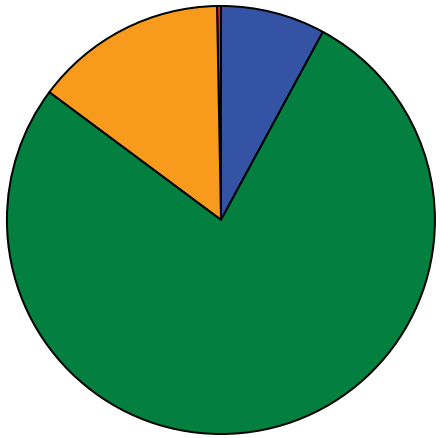
Holdings for the Domestic Equity Custom Index (I) are unavailable. The R 3000 Index is used as a proxy.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
International and Emerging Markets Equity Composites
Asset Allocation Charts
As of December 31, 2011

Style Allocation

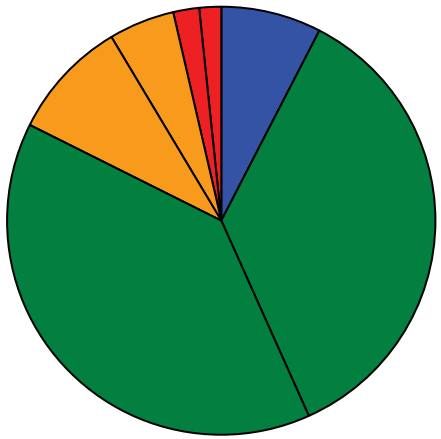
December 31, 2011 : $599,470,194



	Market Value ($)	Allocation (%)
International ACW Ex US Equity	46,948,745	7.83
Developed International Equity	463,476,190	77.31
Emerging Markets Equity	86,932,156	14.50
Currency Overlay/Other	2,113,102	0.35

Sub - Compsite Detail

December 31, 2011 : $599,470,194



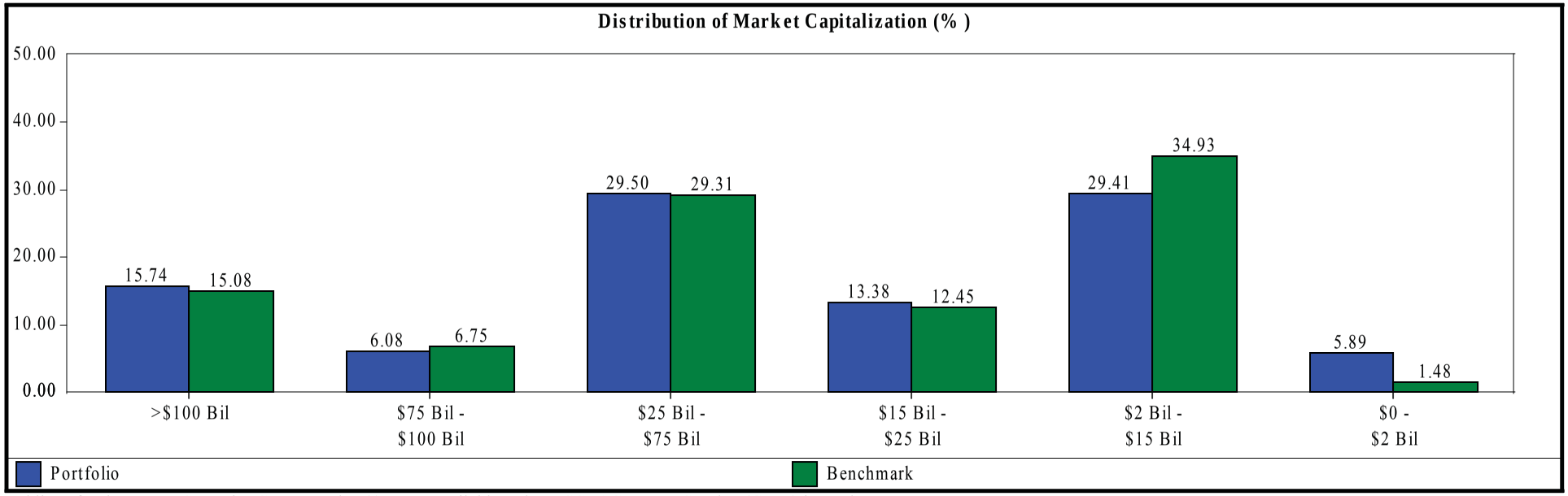
	Market Value ($)	Allocation (%)
Artio Int'l Equity II (SA)	46,948,745	7.83
The Boston Co World Ex US Eq (SA) (I)	221,360,038	36.93
Pyramis Int'l Growth Fund (SA) (I)	242,116,152	40.39
Aberdeen Emg Mkts Equity (CF)	56,118,865	9.36
Wellington Emg Mkts Equity (CF)	30,813,292	5.14
International Account (SA)	12,361,259	2.06
KRS Insurance Transition	14,866	-
Currency Overlay	-10,263,023	-1.71

Allocations shown may not sum up to 100% exactly due to rounding. Allocations shown are not representative of the actual allocations due to the negative balance in the Currency Overlay program.

Kentucky Retirement Systems - Insurance Plan
International and Emerging Markets Equity Composites vs. MSCI ACW Ex US Index (Gross)
Portfolio Characteristics
As of December 31, 2011

Top Ten Equity Holdings	Portfolio Weight (%)	Benchmark Weight (%)	Active Weight (%)	Quarterly Return (%)
HSBC HOLDINGS PLC	1.66	0.98	0.67	-0.38
ROCHE HOLDING AG	1.52	0.86	0.66	4.76
VODAFONE GROUP PLC	1.37	1.02	0.34	11.66
ROYAL DUTCH/SHELL GROUP	1.33	0.91	0.42	15.57
SANOFI-AVENTIS	1.19	0.61	0.59	11.27
NOVARTIS AG	1.14	0.97	0.18	2.33
TOTAL SA	1.14	0.78	0.35	16.66
BP PLC	1.14	0.98	0.16	19.31
CHINA MOBILE	0.99	0.52	0.46	-0.18
NESTLE S.A.	0.97	1.37	-0.40	4.34
% of Portfolio	12.45	9.00		

Portfolio Characteristics	Portfolio	Benchmark
Wtd. Avg. Mkt. Cap ($M)	47,418	46,404
Median Mkt. Cap. ($M)	5,403	5,408
Price/Earnings ratio	11.12	10.92
Price/Book ratio	1.95	1.98
5 Yr. EPS Growth Rate (%)	5.59	7.04
Current Yield (%)	3.75	3.67
Beta (5 yrs, monthly periodicity)	0.91	1.00
Number of Stocks	1439	1845

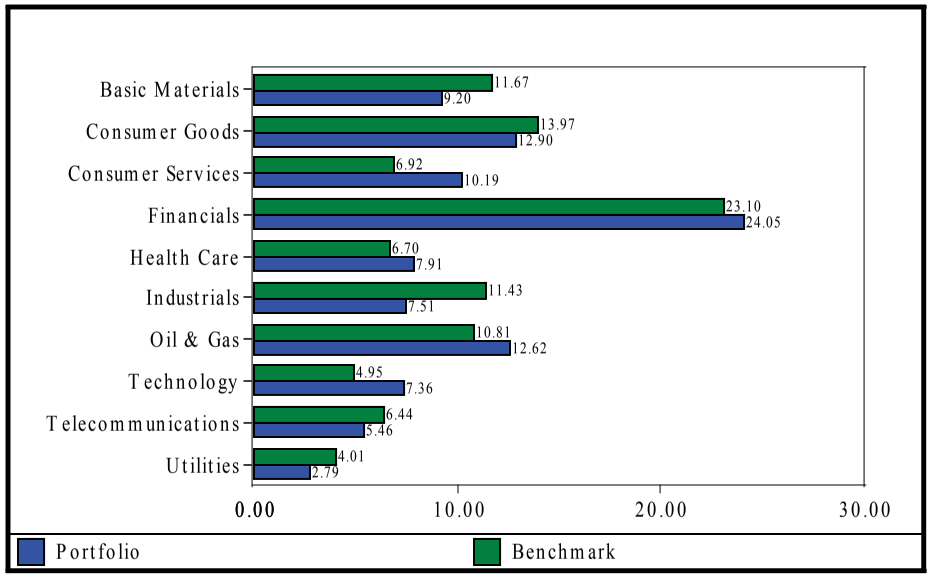


Holdings for the Non U.S. Equity Custom Index (I) are unavailable. The MSCI ACW Ex US Index (Gross) is used as a proxy.

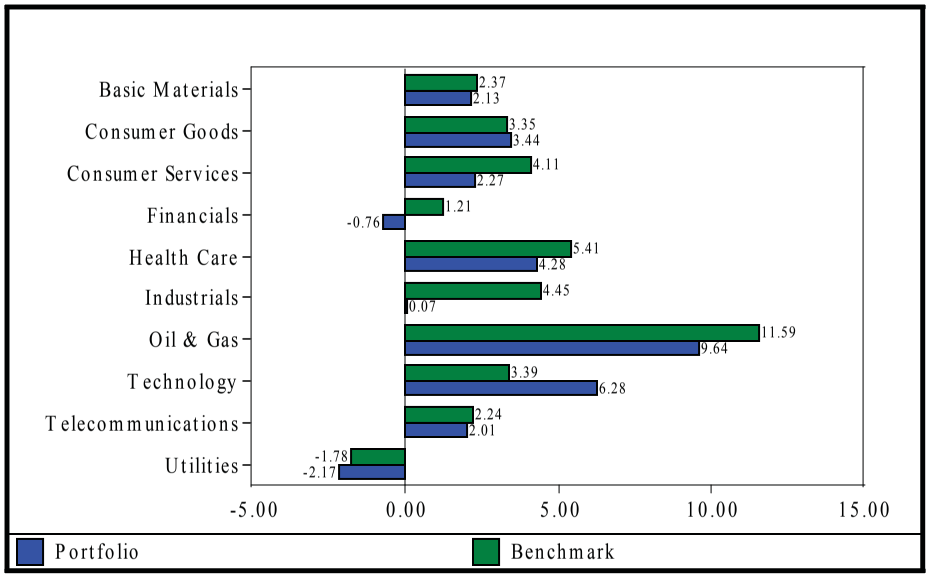
RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
International and Emerging Markets Equity Composites vs. MSCI ACW Ex US Index (Gross)
Buy and Hold Sector/Region Attribution Graphs
As of December 31, 2011

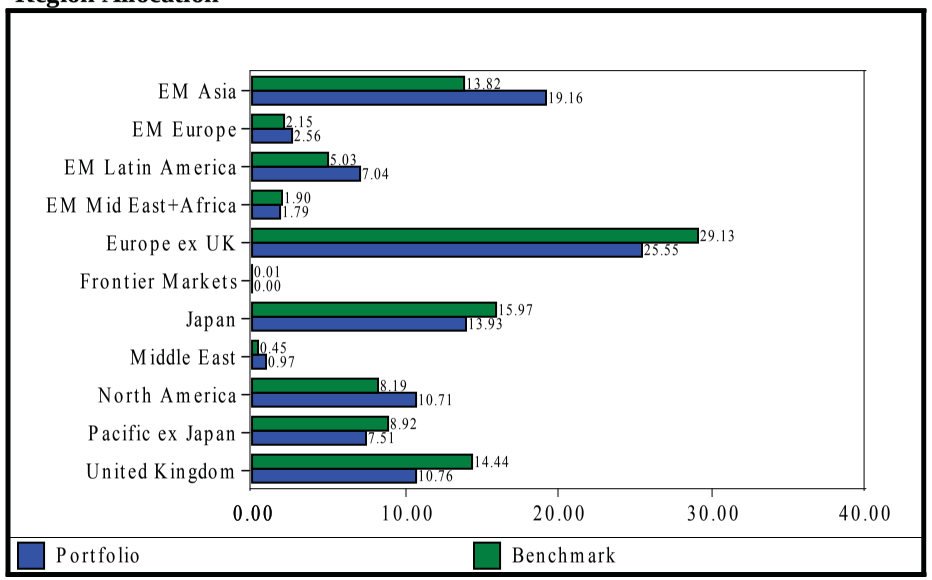
Sector Allocation



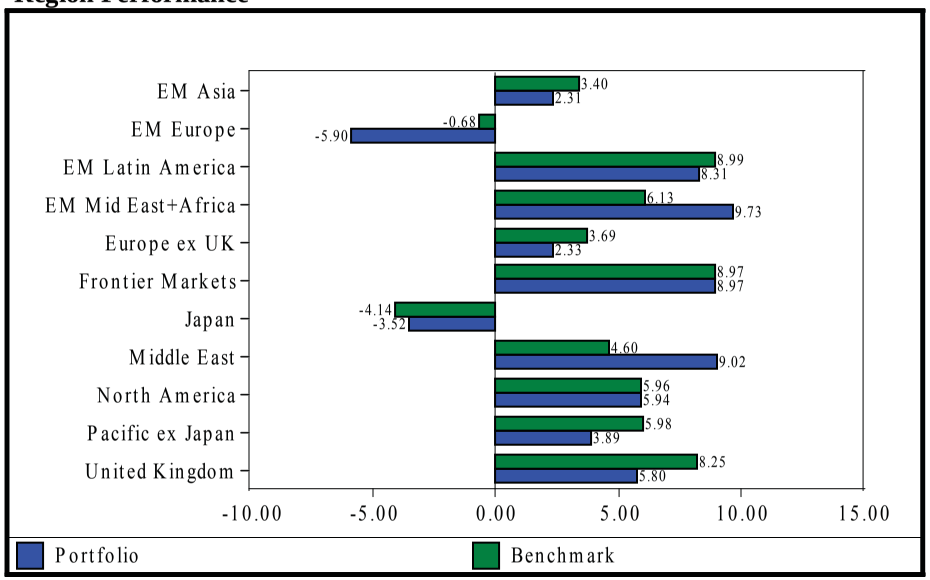
Sector Performance



Region Allocation



Region Performance

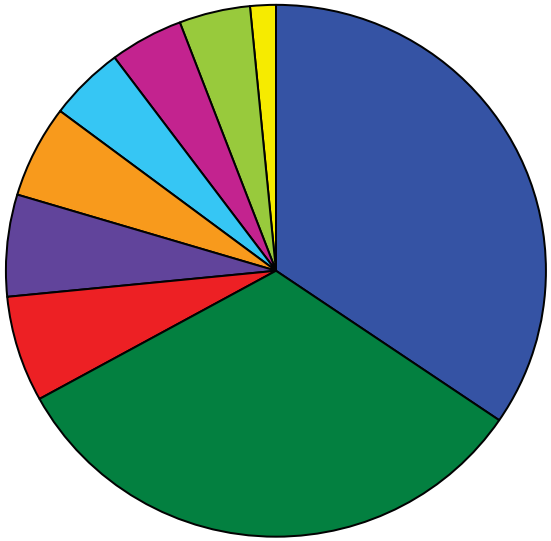


Holdings for the Non U.S. Equity Custom Index (I) are unavailable. The MSCI ACW Ex US Index (Gross) is used as a proxy.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Fixed Income Composite
Asset Allocation Chart
As of December 31, 2011

December 31, 2011 : $586,160,236



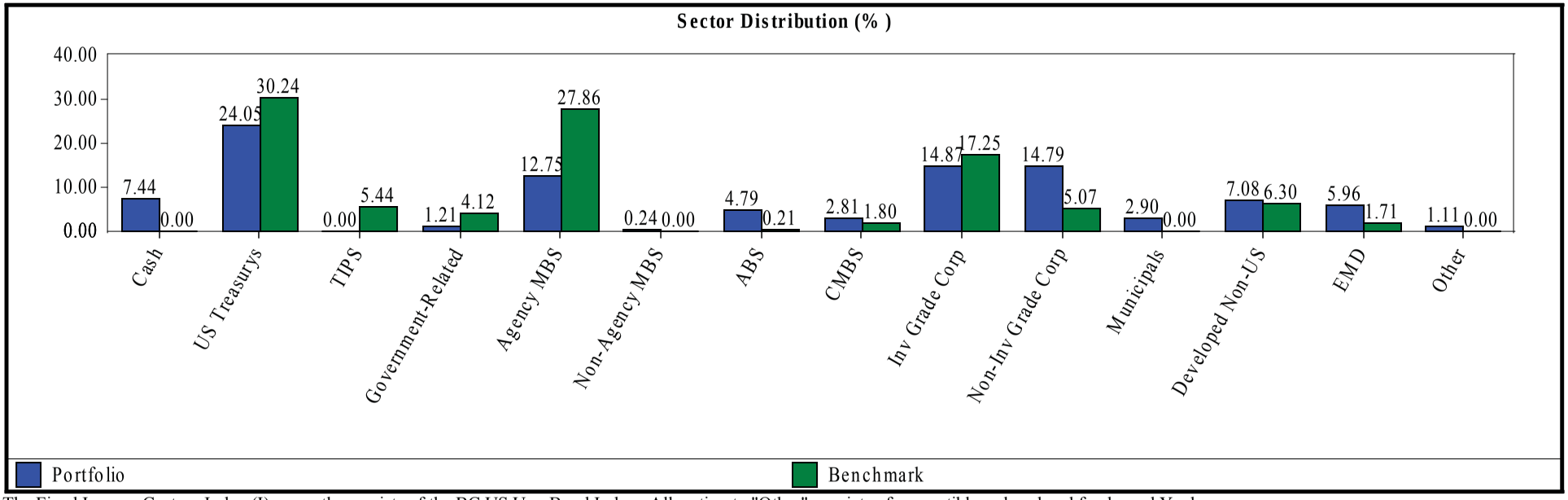
	Market Value ($)	Allocation (%)
PIMCO Core Fixed Income (SA)	202,381,386	34.53
NISA Core Fixed Income (SA)	190,551,013	32.51
Columbia HY Fixed Income (SA)	37,424,342	6.38
Loomis Sayles HY Fixed Income (SA)	36,658,571	6.25
Waterfall (SA)	32,662,192	5.57
Shenkman Capital (SA)	26,585,058	4.54
Stone Harbor (SA)	26,087,296	4.45
Manulife Asset Mgmt (SA)	24,737,205	4.22
Commerce Street Partners LP	9,073,174	1.55

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

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Fixed Income Composite vs. BC US Unv Bond Index
Portfolio Characteristics
As of December 31, 2011

	Portfolio	Benchmark
Portfolio Characteristics		
Avg. Quality	A	-
Yield To Maturity	4.23%	2.77%
Coupon Rate	4.89%	4.36%
Current Yield	4.75%	-

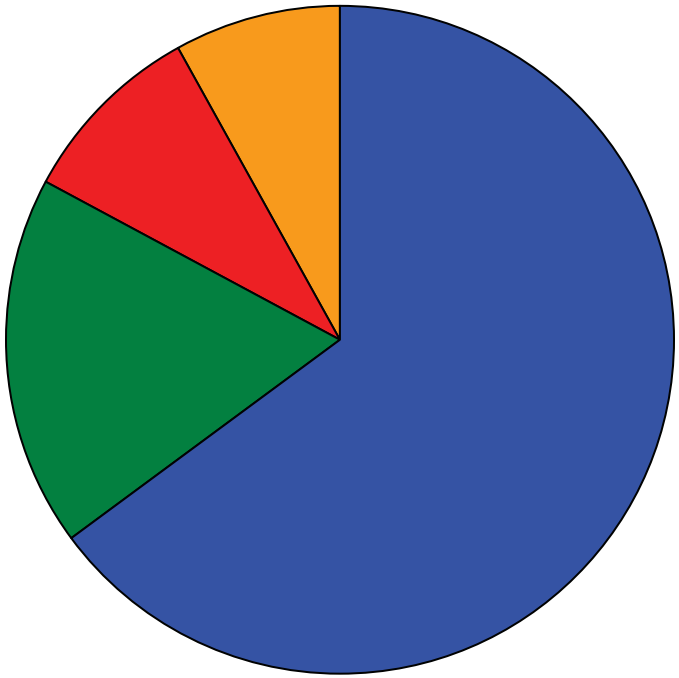


The Fixed Income Custom Index (I) currently consists of the BC US Unv Bond Index. Allocation to "Other" consists of convertibles, closed end funds, and Yankee bonds. Commerce Street Income Partners L.P. is not inlcuded in the Fixed Income Composite statistics due to its private equity style.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Real Estate Composite
Asset Allocation Chart
As of December 31, 2011

December 31, 2011 : $27,039,143



	Market Value ($)	Allocation (%)
H/2 Credit Partners (CF)	17,536,937	64.86
Prima Mortgage Invest Trust, LLC	4,849,369	17.93
Mesa West Real Estate Income Fund II L.P.	2,477,813	9.16
Walton Street Real Estate Fund VI, L.P.	2,175,024	8.04

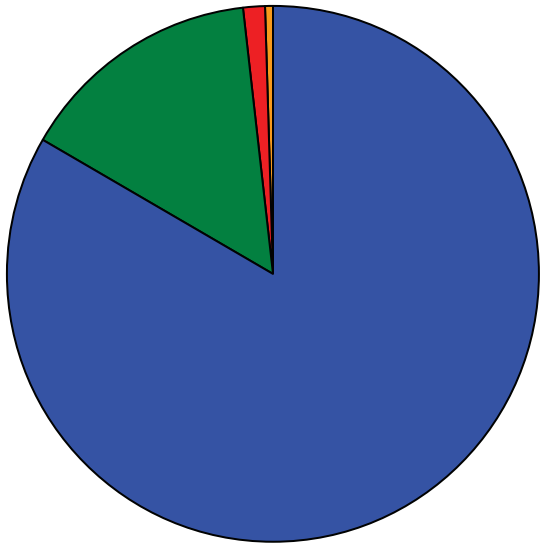
Allocations shown may not sum up to 100% exactly due to rounding.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Asset Allocation Chart
As of December 31, 2011

Real Return Composite

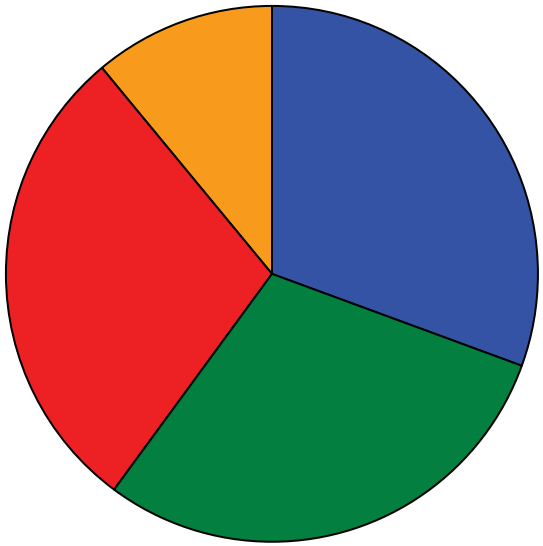
December 31, 2011 : $337,416,084



	Market Value ($)	Allocation (%)
Internal TIPS (SA) (I)	281,279,638	83.36
PIMCO:All Asset;Inst (PAAIX)	50,135,689	14.86
Tortoise Capital (CF)	4,457,132	1.32
Tenaska Power Fund II (CF)	1,543,625	0.46

Absolute Return Composite

December 31, 2011 : $268,876,518



	Market Value ($)	Allocation (%)
BAAM (SA)	82,116,384	30.54
PAAMCO (SA)	79,443,700	29.55
Prisma Capital Partners (SA)	77,743,815	28.91
Arrowhawk Durable Alpha Fund L.P.	29,572,619	11.00

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

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
River Road Asset Management (SA)	**11.72**	**0.46**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.46**	**07/01/2011**
R 3000 Value Index	13.33	-5.52	-0.10	-0.10	11.62	-2.58	16.23	19.76	-36.25	-5.52	
Difference	-1.61	5.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.98	
IM U.S. All Cap Value Equity (SA+CF)	12.30	-6.83	-1.02	-1.02	15.12	0.45	17.75	29.59	-35.17	-6.83	
Percentile Rank	68	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	
Westwood Management (SA)	**13.39**	**-8.23**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.23**	**07/01/2011**
R 3000 Value Index	13.33	-5.52	-0.10	-0.10	11.62	-2.58	16.23	19.76	-36.25	-5.52	
Difference	0.06	-2.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.71	
IM U.S. All Cap Value Equity (SA+CF)	12.30	-6.83	-1.02	-1.02	15.12	0.45	17.75	29.59	-35.17	-6.83	
Percentile Rank	30	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	69	
Westfield Capital (SA)	**9.84**	**-10.52**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-10.52**	**07/01/2011**
R 3000 Growth Index	10.94	-4.49	2.18	2.18	18.09	2.46	17.64	37.01	-38.44	-4.49	
Difference	-1.10	-6.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-6.03	
IM U.S. All Cap Growth Equity (SA+CF)	10.01	-8.13	-2.41	-2.41	17.49	3.45	21.03	34.74	-39.82	-8.13	
Percentile Rank	54	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	65	
Internal S&P 500 Index (SA)	**11.75**	**-3.67**	**3.20**	**3.20**	**14.51**	**0.37**	**15.97**	**25.44**	**-35.55**	**2.89**	**07/01/2001**
S&P Blended Index	11.82	-3.69	2.37	2.37	14.88	0.24	16.38	27.25	-36.72	2.78	
Difference	-0.07	0.02	0.83	0.83	-0.37	0.13	-0.41	-1.81	1.17	0.11	
IM U.S. Large Cap Core Equity (SA+CF)	11.80	-4.88	1.78	1.78	14.02	0.51	14.88	26.45	-36.17	3.37	
Percentile Rank	52	32	35	35	39	53	32	55	46	67	
Equitization Assets Program	**11.88**	**3.37**	**8.20**	**8.20**	**15.65**	**N/A**	**15.02**	**24.30**	**N/A**	**15.65**	**01/01/2009**
S&P 500 Index (Cap Wtd)	11.82	-3.69	2.11	2.11	14.11	-0.25	15.06	26.46	-37.00	14.11	
Difference	0.06	7.06	6.09	6.09	1.54	N/A	-0.04	-2.16	N/A	1.54	
INVESCO Struct'd Core Equity (SA)	**12.31**	**-4.68**	**2.85**	**2.85**	**11.55**	**-0.35**	**11.17**	**21.40**	**-32.76**	**3.80**	**08/01/2005**
S&P 500 Index (Cap Wtd)	11.82	-3.69	2.11	2.11	14.11	-0.25	15.06	26.46	-37.00	2.42	
Difference	0.49	-0.99	0.74	0.74	-2.56	-0.10	-3.89	-5.06	4.24	1.38	
IM U.S. Large Cap Core Equity (SA+CF)	11.80	-4.88	1.78	1.78	14.02	0.51	14.88	26.45	-36.17	3.23	
Percentile Rank	36	47	38	38	86	73	87	82	23	34	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. Performance for the NCREIF Property Index is available quarterly; interim month returns assume a 0.00% return.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Internal Mid Cap (SA)	**12.11**	**-8.80**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.80**	**07/01/2011**
R Mid Cap Index	12.31	-8.91	-1.55	-1.55	20.17	1.41	25.47	40.48	-41.46	-8.91	
Difference	-0.20	0.11	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.11	
IM U.S. Mid Cap Core Equity (SA+CF)	12.49	-9.65	-2.13	-2.13	18.71	2.86	24.51	36.31	-39.63	-9.65	
Percentile Rank	62	28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	28	
NT Structured Small Cap (SA)	**15.02**	**-8.37**	**-1.25**	**-1.25**	**18.63**	**1.32**	**29.64**	**30.39**	**-34.38**	**8.02**	**10/01/1999**
R 2000 Index	15.47	-9.77	-4.18	-4.18	15.63	0.15	26.86	27.18	-33.79	5.97	
Difference	-0.45	1.40	2.93	2.93	3.00	1.17	2.78	3.21	-0.59	2.05	
IM U.S. Small Cap Core Equity (SA+CF)	15.69	-9.34	-1.85	-1.85	18.43	1.59	28.24	29.60	-35.82	9.51	
Percentile Rank	63	42	47	47	48	52	36	45	38	77	
Domestic Equity Composite	**12.17**	**-5.94**	**1.04**	**1.04**	**14.00**	**0.11**	**16.77**	**25.56**	**-34.87**	**1.53**	**07/01/2000**
Domestic Equity Custom Index (P)	12.12	-5.01	0.92	0.92	14.67	0.07	17.50	27.16	-36.36	1.65	
Difference	0.05	-0.93	0.12	0.12	-0.67	0.04	-0.73	-1.60	1.49	-0.12	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. Performance for the NCREIF Property Index is available quarterly; interim month returns assume a 0.00% return.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
BTC ACWI Ex-US Fund (CF)	**3.74**	**-16.80**	**-13.43**	**-13.43**	**N/A**	**N/A**	**11.23**	**N/A**	**N/A**	**7.40**	**07/01/2009**
MSCI ACW Ex US Index (Net)	3.72	-16.87	-13.71	-13.71	10.70	-2.92	11.15	41.46	-45.52	7.24	
Difference	0.02	0.07	0.28	0.28	N/A	N/A	0.08	N/A	N/A	0.16	
IM International Core Equity (SA+CF)	4.16	-16.94	-12.11	-12.11	9.79	-3.14	11.50	33.54	-44.20	7.94	
Percentile Rank	60	49	65	65	N/A	N/A	53	N/A	N/A	60	
Artio Int'l Equity II (SA)	**2.57**	**-20.64**	**-19.01**	**-19.01**	**N/A**	**N/A**	**7.35**	**N/A**	**N/A**	**-1.05**	**08/01/2009**
MSCI ACW Ex US Index (Gross)	3.77	-16.75	-13.33	-13.33	11.20	-2.48	11.60	42.14	-45.24	3.83	
Difference	-1.20	-3.89	-5.68	-5.68	N/A	N/A	-4.25	N/A	N/A	-4.88	
IM International Equity (SA+CF)	3.77	-16.94	-13.25	-13.25	11.79	-1.93	15.02	38.61	-44.87	4.99	
Percentile Rank	71	84	85	85	N/A	N/A	84	N/A	N/A	95	
The Boston Co World Ex US Eq (SA)	**0.97**	**-18.87**	**-16.01**	**-16.01**	**5.75**	**-4.44**	**5.88**	**33.01**	**-36.54**	**1.95**	**05/01/2005**
The Boston Co Blended Index	3.57	-16.05	-11.78	-11.78	8.61	-4.02	9.43	32.71	-43.06	2.85	
Difference	-2.60	-2.82	-4.23	-4.23	-2.86	-0.42	-3.55	0.30	6.52	-0.90	
IM International Value Equity (SA+CF)	3.26	-15.99	-11.03	-11.03	9.90	-2.63	10.90	34.90	-41.06	4.00	
Percentile Rank	87	77	82	82	88	74	81	58	21	87	
Pyramis Int'l Growth Fund (SA)	**3.43**	**-16.18**	**-11.52**	**-11.52**	**9.36**	**-3.10**	**11.85**	**32.15**	**-43.05**	**5.30**	**08/01/2001**
Pyramis Blended Index	3.57	-16.05	-11.78	-11.78	8.61	-4.02	9.43	32.71	-43.06	4.39	
Difference	-0.14	-0.13	0.26	0.26	0.75	0.92	2.42	-0.56	0.01	0.91	
IM International Growth Equity (SA+CF)	3.95	-16.54	-12.53	-12.53	11.49	-2.05	14.54	37.53	-45.30	6.32	
Percentile Rank	58	49	45	45	68	64	65	69	37	65	
NT Int'l Sm Cap Eq Index (SA)	**0.47**	**-19.22**	**-18.79**	**-18.79**	**17.17**	**N/A**	**22.69**	**61.43**	**N/A**	**19.25**	**12/01/2008**
MSCI ACW Ex US Sm Cap Index (Net)	0.40	-19.71	-18.50	-18.50	18.46	-1.73	25.21	62.91	-50.23	20.84	
Difference	0.07	0.49	-0.29	-0.29	-1.29	N/A	-2.52	-1.48	N/A	-1.59	
IM International Small Cap Equity (SA+CF)	1.54	-17.24	-13.86	-13.86	16.24	-2.01	23.50	44.93	-46.76	18.26	
Percentile Rank	78	65	94	94	38	N/A	60	14	N/A	41	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. Performance for the NCREIF Property Index is available quarterly; interim month returns assume a 0.00% return.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
International Account (SA)	**7.78**	**-20.41**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-20.41**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	3.33	-1.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.40	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-19.39	
Percentile Rank	5	62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62	
International Equity Composite	**1.84**	**-18.97**	**-17.01**	**-17.01**	**9.41**	**-3.18**	**12.88**	**39.79**	**-41.08**	**0.51**	**07/01/2000**
Non U.S. Equity Custom Index (P)	3.77	-16.75	-13.26	-13.26	10.97	-3.15	12.37	40.20	-44.13	1.29	
Difference	-1.93	-2.22	-3.75	-3.75	-1.56	-0.03	0.51	-0.41	3.05	-0.78	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. Performance for the NCREIF Property Index is available quarterly; interim month returns assume a 0.00% return.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Aberdeen Emg Mkts Equity (CF)	**5.15**	**-12.01**	**-10.46**	**-10.46**	**28.00**	**N/A**	**29.06**	**81.47**	**N/A**	**7.30**	**04/01/2008**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-2.26	
Difference	0.70	7.00	7.71	7.71	7.58	N/A	9.86	2.45	N/A	9.56	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-2.68	
Percentile Rank	31	8	8	8	8	N/A	10	41	N/A	3	
Wellington Emg Mkts Equity (CF)	**3.81**	**-18.73**	**-21.63**	**-21.63**	**16.62**	**N/A**	**16.39**	**73.90**	**N/A**	**-2.89**	**04/01/2008**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-2.26	
Difference	-0.64	0.28	-3.46	-3.46	-3.80	N/A	-2.81	-5.12	N/A	-0.63	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-2.68	
Percentile Rank	59	43	70	70	88	N/A	83	71	N/A	58	
Emerging Markets Equity Composite	**4.67**	**-14.53**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-14.53**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	0.22	4.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.48	

Performance shown is gross of fees. All data reported for Kentucky Retirement Systems including manager performance and composite performance is provided by Northern Trust. Fiscal year ends June 30th. Performance for the NCREIF Property Index is available quarterly; interim month returns assume a 0.00% return.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
NISA Core Agg Fixed Income (SA)	**1.11**	**5.05**	**8.00**	**8.00**	**N/A**	**N/A**	**6.96**	**N/A**	**N/A**	**7.57**	**02/01/2009**
BC US Agg Bond Index	1.12	4.98	7.84	7.84	6.77	6.50	6.54	5.93	5.24	7.29	
Difference	-0.01	0.07	0.16	0.16	N/A	N/A	0.42	N/A	N/A	0.28	
IM U.S. Broad Market Core Fixed Income (SA+CF)	1.27	4.66	7.85	7.85	8.39	6.87	7.25	9.81	2.98	8.68	
Percentile Rank	77	26	38	38	N/A	N/A	63	N/A	N/A	81	
PIMCO Core Fixed Income (SA)	**0.82**	**2.26**	**4.90**	**4.90**	**N/A**	**N/A**	**7.06**	**N/A**	**N/A**	**5.03**	**11/01/2009**
BC US Agg Bond Index	1.12	4.98	7.84	7.84	6.77	6.50	6.54	5.93	5.24	6.48	
Difference	-0.30	-2.72	-2.94	-2.94	N/A	N/A	0.52	N/A	N/A	-1.45	
IM U.S. Broad Market Core Fixed Income (SA+CF)	1.27	4.66	7.85	7.85	8.39	6.87	7.25	9.81	2.98	6.95	
Percentile Rank	96	98	99	99	N/A	N/A	59	N/A	N/A	100	
Columbia HY Fixed Income (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.93**	**11/01/2011**
BC US Corp: Hi Yld Index	6.46	0.01	4.98	4.98	24.12	7.54	15.12	58.21	-26.16	0.44	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.49	
Loomis Sayles HY Fixed Income (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.99**	**11/01/2011**
BC US Corp: Hi Yld Index	6.46	0.01	4.98	4.98	24.12	7.54	15.12	58.21	-26.16	0.44	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.43	
Manulife Asset Mgmt (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.25**	**12/01/2011**
BC Multiverse Index	0.40	1.06	5.55	5.55	6.47	6.47	5.84	8.04	3.76	0.72	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.47	
Commerce Street Income Partners L.P.	**-3.96**	**-1.28**	**6.66**	**6.66**	**N/A**	**N/A**	**2.67**	**N/A**	**N/A**	**11.23**	**05/01/2009**
Opportunistic Fixed Income Custom Index	4.00	-0.09	3.24	3.24	N/A	N/A	10.12	N/A	N/A	14.25	
Difference	-7.96	-1.19	3.42	3.42	N/A	N/A	-7.45	N/A	N/A	-3.02	
Waterfall (SA)	**0.33**	**1.26**	**10.55**	**10.55**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**17.24**	**02/01/2010**
Opportunistic Fixed Income Custom Index	4.00	-0.09	3.24	3.24	N/A	N/A	10.12	N/A	N/A	6.35	
Difference	-3.67	1.35	7.31	7.31	N/A	N/A	N/A	N/A	N/A	10.89	
Shenkman Capital (SA)	**4.98**	**0.48**	**3.46**	**3.46**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**4.83**	**10/01/2010**
US High Yield/Bank Loan Blended Index	4.78	-0.69	3.04	3.04	21.82	5.92	12.41	56.08	-27.71	5.11	
Difference	0.20	1.17	0.42	0.42	N/A	N/A	N/A	N/A	N/A	-0.28	

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RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Stone Harbor (SA)	**5.53**	**1.35**	**7.12**	**7.12**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**6.94**	**12/01/2010**
JPM EMB Global Diversified Index	4.65	2.47	7.34	7.34	16.08	7.88	12.24	29.83	-12.01	6.32	
Difference	0.88	-1.12	-0.22	-0.22	N/A	N/A	N/A	N/A	N/A	0.62	
IM Emerging Markets Debt (SA+CF)	4.31	-1.94	2.59	2.59	17.15	8.45	14.58	31.23	-13.98	4.21	
Percentile Rank	19	32	24	24	N/A	N/A	N/A	N/A	N/A	23	
Fixed Income Composite	**1.17**	**3.03**	**7.04**	**7.04**	**8.21**	**5.86**	**7.61**	**10.01**	**-2.62**	**8.23**	**04/01/1984**
Fixed Income Custom Index (P)	1.45	4.36	8.12	8.12	7.37	6.68	6.49	7.51	3.09	8.15	
Difference	-0.28	-1.33	-1.08	-1.08	0.84	-0.82	1.12	2.50	-5.71	0.08	

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Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
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	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Internal Real Estate (SA)	**0.00**	**0.00**	**0.02**	**0.02**	**0.04**	**0.13**	**0.02**	**0.07**	**0.26**	**4.67**	**04/01/1999**
Walton Street Real Estate Fund VI, L.P.	**0.74**	**1.79**	**54.15**	**54.15**	**N/A**	**N/A**	**-11.15**	**N/A**	**N/A**	**-59.48**	**05/01/2009**
Prima Mortgage Invest Trust, LLC	**-0.18**	**3.95**	**7.93**	**7.93**	**N/A**	**N/A**	**22.63**	**N/A**	**N/A**	**14.25**	**05/01/2009**
Mesa West Real Estate Income Fund II L.P.	**3.42**	**5.36**	**11.12**	**11.12**	**N/A**	**N/A**	**-15.50**	**N/A**	**N/A**	**-3.10**	**01/01/2010**
H/2 Credit Partners (CF)	**0.29**	**-0.39**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.39**	**07/01/2011**
Real Estate Composite	**0.66**	**2.47**	**13.33**	**13.33**	**6.80**	**4.14**	**14.80**	**-6.37**	**0.26**	**7.67**	**05/01/2009**
Real Estate Blended Index	2.97	6.59	15.26	15.26	-1.69	3.25	5.83	-22.11	5.27	1.34	
Difference	-2.30	-4.12	-1.93	-1.93	8.49	0.89	8.97	15.74	-5.01	6.33	

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Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Internal TIPS (SA)	**2.41**	**7.02**	**13.09**	**13.09**	**9.84**	**7.92**	**6.46**	**10.08**	**-0.95**	**7.39**	**05/01/2002**
BC US Trsy: US TIPS Index	2.69	7.32	13.56	13.56	10.38	7.95	6.31	11.41	-2.35	7.38	
Difference	-0.28	-0.30	-0.47	-0.47	-0.54	-0.03	0.15	-1.33	1.40	0.01	
IM U.S. TIPS (SA+CF)	2.67	7.45	13.55	13.55	10.28	8.07	6.40	11.31	-1.49	7.48	
Percentile Rank	73	65	61	61	73	70	42	93	43	77	
Weaver Barksdale TIPS (SA)	**2.62**	**7.59**	**13.67**	**13.67**	**9.89**	**8.07**	**6.51**	**9.60**	**-0.25**	**7.40**	**07/01/2001**
BC US Trsy: US TIPS Index	2.69	7.32	13.56	13.56	10.38	7.95	6.31	11.41	-2.35	7.33	
Difference	-0.07	0.27	0.11	0.11	-0.49	0.12	0.20	-1.81	2.10	0.07	
IM U.S. TIPS (SA+CF)	2.67	7.45	13.55	13.55	10.28	8.07	6.40	11.31	-1.49	7.43	
Percentile Rank	62	40	43	43	71	51	41	97	23	74	
PIMCO:All Asset;Inst (PAAIX)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-3.27**	**12/01/2011**
BC US Trsy Infl Notes: 1-10 Yr Index	1.69	3.37	8.93	8.93	8.69	6.90	5.22	12.02	-2.43	-0.18	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.09	
Tenaska Power Fund II (CF)	**2.36**	**5.69**	**5.94**	**5.94**	**0.67**	**N/A**	**-0.92**	**-2.79**	**N/A**	**-1.03**	**10/01/2008**
Tortoise Capital (CF)	**17.56**	**12.11**	**18.68**	**18.68**	**N/A**	**N/A**	**34.95**	**N/A**	**N/A**	**31.06**	**05/01/2009**
Alerian MLP Index	16.33	8.24	13.88	13.88	39.75	14.18	35.85	76.41	-36.91	34.65	
Difference	1.23	3.87	4.80	4.80	N/A	N/A	-0.90	N/A	N/A	-3.59	
Real Return Composite	**2.29**	**6.77**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**6.77**	**07/01/2011**
Consumer Price Index + 3%	0.20	1.47	6.05	6.05	5.46	5.33	4.54	5.80	3.09	1.47	
Difference	2.09	5.30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.30	

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Kentucky Retirement Systems - Pension Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Arrowhawk Durable Alpha Fund L.P.	**-2.46**	**-4.61**	**0.85**	**0.85**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.61**	**04/01/2010**
BAAM (SA)	**0.23**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.23**	**09/01/2011**
PAAMCO (SA)	**-0.70**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.70**	**09/01/2011**
Prisma Capital Partners (SA)	**-2.82**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-2.82**	**09/01/2011**
Absolute Return Composite	**-1.20**	**-1.80**	**3.82**	**3.82**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**1.05**	**04/01/2010**
HFRI FOF Diversified Index (Lagged)	-2.36	-5.67	-2.46	-2.46	3.32	-0.16	4.07	8.67	-19.20	0.39	
Difference	1.16	3.87	6.28	6.28	N/A	N/A	N/A	N/A	N/A	0.66	
Cash Equivalents (SA)	**0.05**	**0.11**	**0.31**	**0.31**	**0.80**	**2.18**	**0.89**	**1.19**	**2.83**	**4.39**	**01/01/1988**
Citi 3 Mo T-Bill Index	0.00	0.00	0.06	0.06	0.11	1.36	0.10	0.16	1.80	3.92	
Difference	0.05	0.11	0.25	0.25	0.69	0.82	0.79	1.03	1.03	0.47	

See Addendum for Blended and Custom Index descriptions. Manager inception dates shown represent the first full month following initial funding.

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

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
River Road Asset Management (SA)	**11.72**	**0.45**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.45**	**07/01/2011**
R 3000 Value Index	13.33	-5.52	-0.10	-0.10	11.62	-2.58	16.23	19.76	-36.25	-5.52	
Difference	-1.61	5.97	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.97	
IM U.S. All Cap Value Equity (SA+CF)	12.30	-6.83	-1.02	-1.02	15.12	0.45	17.75	29.59	-35.17	-6.83	
Percentile Rank	68	12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12	
Westwood Management (SA)	**13.38**	**-8.24**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.24**	**07/01/2011**
R 3000 Value Index	13.33	-5.52	-0.10	-0.10	11.62	-2.58	16.23	19.76	-36.25	-5.52	
Difference	0.05	-2.72	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-2.72	
IM U.S. All Cap Value Equity (SA+CF)	12.30	-6.83	-1.02	-1.02	15.12	0.45	17.75	29.59	-35.17	-6.83	
Percentile Rank	30	69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	69	
Westfield Capital (SA)	**9.84**	**-10.52**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-10.52**	**07/01/2011**
R 3000 Growth Index	10.94	-4.49	2.18	2.18	18.09	2.46	17.64	37.01	-38.44	-4.49	
Difference	-1.10	-6.03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-6.03	
IM U.S. All Cap Growth Equity (SA+CF)	10.01	-8.13	-2.41	-2.41	17.49	3.45	21.03	34.74	-39.82	-8.13	
Percentile Rank	54	65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	65	
Internal S&P 500 Index (SA)	**11.78**	**-3.55**	**2.71**	**2.71**	**14.65**	**0.39**	**16.32**	**26.14**	**-35.60**	**2.95**	**07/01/2001**
S&P Blended Index	11.82	-3.69	2.37	2.37	14.88	0.24	16.38	27.25	-36.72	2.78	
Difference	-0.04	0.14	0.34	0.34	-0.23	0.15	-0.06	-1.11	1.12	0.17	
IM U.S. Large Cap Core Equity (SA+CF)	11.80	-4.88	1.78	1.78	14.02	0.51	14.88	26.45	-36.17	3.37	
Percentile Rank	51	31	39	39	37	53	30	52	46	65	
Equitization Assets Program	**11.03**	**30.30**	**37.64**	**37.64**	**25.55**	**N/A**	**14.98**	**25.04**	**N/A**	**25.55**	**01/01/2009**
S&P 500 Index (Cap Wtd)	11.82	-3.69	2.11	2.11	14.11	-0.25	15.06	26.46	-37.00	14.11	
Difference	-0.79	33.99	35.53	35.53	11.44	N/A	-0.08	-1.42	N/A	11.44	
Internal Mid Cap (SA)	**11.76**	**-9.08**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-9.08**	**07/01/2011**
R Mid Cap Index	12.31	-8.91	-1.55	-1.55	20.17	1.41	25.47	40.48	-41.46	-8.91	
Difference	-0.55	-0.17	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.17	
IM U.S. Mid Cap Core Equity (SA+CF)	12.49	-9.65	-2.13	-2.13	18.71	2.86	24.51	36.31	-39.63	-9.65	
Percentile Rank	72	30	N/A	N/A	N/A	N/A	N/A	N/A	N/A	30	

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RVKuhns & ASSOCIATES, INC.

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	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
NT Structured Small Cap (SA)	**14.57**	**-8.54**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-8.54**	**07/01/2011**
R 2000 Index	15.47	-9.77	-4.18	-4.18	15.63	0.15	26.86	27.18	-33.79	-9.77	
Difference	-0.90	1.23	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.23	
IM U.S. Small Cap Core Equity (SA+CF)	15.69	-9.34	-1.85	-1.85	18.43	1.59	28.24	29.60	-35.82	-9.34	
Percentile Rank	70	44	N/A	N/A	N/A	N/A	N/A	N/A	N/A	44	
Domestic Equity Composite	**12.32**	**-6.01**	**0.43**	**0.43**	**13.79**	**-0.06**	**16.32**	**26.14**	**-35.60**	**1.85**	**07/01/2000**
Domestic Equity Custom Index (I)	12.12	-5.01	0.97	0.97	14.35	-0.04	16.38	27.25	-36.72	1.21	
Difference	0.20	-1.00	-0.54	-0.54	-0.56	-0.02	-0.06	-1.11	1.12	0.64	
IM U.S. Equity (SA+CF)	12.30	-7.36	-0.54	-0.54	16.34	1.38	19.59	31.41	-36.98	4.67	
Percentile Rank	50	38	43	43	75	71	65	70	39	72	

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
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	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Artio Int'l Equity II (SA)	**2.62**	**-20.92**	**-18.95**	**-18.95**	**N/A**	**N/A**	**7.79**	**N/A**	**N/A**	**3.02**	**07/01/2009**
MSCI ACW Ex US Index (Gross)	3.77	-16.75	-13.33	-13.33	11.20	-2.48	11.60	42.14	-45.24	7.65	
Difference	-1.15	-4.17	-5.62	-5.62	N/A	N/A	-3.81	N/A	N/A	-4.63	
IM International Equity (SA+CF)	3.77	-16.94	-13.25	-13.25	11.79	-1.93	15.02	38.61	-44.87	8.57	
Percentile Rank	70	86	84	84	N/A	N/A	83	N/A	N/A	93	
The Boston Co World Ex US Eq (SA)	**0.95**	**-18.87**	**-16.00**	**-16.00**	**5.90**	**N/A**	**5.79**	**33.67**	**N/A**	**-6.38**	**06/01/2008**
The Boston Co Blended Index	3.57	-16.05	-11.78	-11.78	8.61	-4.02	9.43	32.71	-43.06	-7.74	
Difference	-2.62	-2.82	-4.22	-4.22	-2.71	N/A	-3.64	0.96	N/A	1.36	
IM International Value Equity (SA+CF)	3.26	-15.99	-11.03	-11.03	9.90	-2.63	10.90	34.90	-41.06	-5.65	
Percentile Rank	87	77	82	82	85	N/A	82	55	N/A	61	
Pyramis Int'l Growth Fund (SA)	**3.48**	**-16.11**	**-11.48**	**-11.48**	**9.40**	**-3.04**	**11.75**	**32.37**	**-43.03**	**5.31**	**08/01/2001**
Pyramis Blended Index	3.57	-16.05	-11.78	-11.78	8.61	-4.02	9.43	32.71	-43.06	4.39	
Difference	-0.09	-0.06	0.30	0.30	0.79	0.98	2.32	-0.34	0.03	0.92	
IM International Growth Equity (SA+CF)	3.95	-16.54	-12.53	-12.53	11.49	-2.05	14.54	37.53	-45.30	6.32	
Percentile Rank	58	49	45	45	68	63	66	68	37	65	
International Account (SA)	**8.98**	**-19.49**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-19.49**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	4.53	-0.48	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.48	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-19.39	
Percentile Rank	3	52	N/A	N/A	N/A	N/A	N/A	N/A	N/A	52	
International Equity Composite	**0.84**	**-19.14**	**-17.36**	**-17.36**	**8.64**	**-3.09**	**11.39**	**39.31**	**-41.98**	**1.35**	**07/01/2000**
Non U.S. Equity Custom Index (I)	3.77	-16.75	-12.90	-12.90	9.71	-3.81	10.60	37.06	-44.13	0.72	
Difference	-2.93	-2.39	-4.46	-4.46	-1.07	0.72	0.79	2.25	2.15	0.63	

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RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Aberdeen Emg Mkts Equity (CF)	**5.15**	**-12.01**	**-10.46**	**-10.46**	**28.00**	**N/A**	**29.06**	**81.47**	**N/A**	**7.30**	**04/01/2008**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-2.26	
Difference	0.70	7.00	7.71	7.71	7.58	N/A	9.86	2.45	N/A	9.56	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-2.68	
Percentile Rank	31	8	8	8	8	N/A	10	41	N/A	3	
Wellington Emg Mkts Equity (CF)	**3.81**	**-18.72**	**-21.61**	**-21.61**	**16.63**	**N/A**	**16.39**	**73.90**	**N/A**	**-2.89**	**04/01/2008**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-2.26	
Difference	-0.64	0.29	-3.44	-3.44	-3.79	N/A	-2.81	-5.12	N/A	-0.63	
IM Emerging Markets Equity (SA+CF)	4.20	-19.39	-18.96	-18.96	20.73	2.56	20.45	79.54	-54.49	-2.68	
Percentile Rank	59	43	70	70	88	N/A	83	71	N/A	58	
Emerging Markets Composite	**4.67**	**-14.51**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-14.51**	**07/01/2011**
MSCI Emg Mkts Index (Gross)	4.45	-19.01	-18.17	-18.17	20.42	2.70	19.20	79.02	-53.18	-19.01	
Difference	0.22	4.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	4.50	

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
NISA Core Fixed Income (SA)	**1.18**	**5.30**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**5.30**	**07/01/2011**
BC US Agg Bond Index	1.12	4.98	7.84	7.84	6.77	6.50	6.54	5.93	5.24	4.98	
Difference	0.06	0.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.32	
IM U.S. Broad Market Core Fixed Income (SA+CF)	1.27	4.66	7.85	7.85	8.39	6.87	7.25	9.81	2.98	4.66	
Percentile Rank	62	19	N/A	N/A	N/A	N/A	N/A	N/A	N/A	19	
PIMCO Core Fixed Income (SA)	**0.91**	**2.00**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**3.95**	**04/01/2011**
BC US Agg Bond Index	1.12	4.98	7.84	7.84	6.77	6.50	6.54	5.93	5.24	7.39	
Difference	-0.21	-2.98	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.44	
IM U.S. Broad Market Core Fixed Income (SA+CF)	1.27	4.66	7.85	7.85	8.39	6.87	7.25	9.81	2.98	7.03	
Percentile Rank	94	99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	99	
Columbia HY Fixed Income (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.93**	**11/01/2011**
BC US Corp: Hi Yld Index	6.46	0.01	4.98	4.98	24.12	7.54	15.12	58.21	-26.16	0.44	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.49	
Loomis Sayles HY Fixed Income (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-1.03**	**11/01/2011**
BC US Corp: Hi Yld Index	6.46	0.01	4.98	4.98	24.12	7.54	15.12	58.21	-26.16	0.44	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.47	
Manulife Asset Mgmt (SA)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.22**	**12/01/2011**
BC Multiverse Index	0.40	1.06	5.55	5.55	6.47	6.47	5.84	8.04	3.76	0.72	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-0.50	
Commerce Street Partners LP	**-3.96**	**-1.28**	**6.66**	**6.66**	**N/A**	**N/A**	**2.67**	**N/A**	**N/A**	**11.23**	**05/01/2009**
Opportunistic Fixed Income Custom Index	4.00	-0.09	3.24	3.24	N/A	N/A	10.12	N/A	N/A	14.25	
Difference	-7.96	-1.19	3.42	3.42	N/A	N/A	-7.45	N/A	N/A	-3.02	
Waterfall (SA)	**3.87**	**5.82**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**5.82**	**07/01/2011**
Opportunistic Fixed Income Custom Index	4.00	-0.09	3.24	3.24	N/A	N/A	10.12	N/A	N/A	-0.09	
Difference	-0.13	5.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.91	
Shenkman Capital (SA)	**5.51**	**0.59**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.59**	**07/01/2011**
US High Yield/Bank Loan Blended Index	4.78	-0.69	3.04	3.04	21.82	5.92	12.41	56.08	-27.71	-0.69	
Difference	0.73	1.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1.28	

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RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Stone Harbor (SA)	**5.05**	**0.56**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.56**	**07/01/2011**
JPM EMB Global Diversified Index	4.65	2.47	7.34	7.34	16.08	7.88	12.24	29.83	-12.01	2.47	
Difference	0.40	-1.91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-1.91	
IM Emerging Markets Debt (SA+CF)	4.31	-1.94	2.59	2.59	17.15	8.45	14.58	31.23	-13.98	-1.94	
Percentile Rank	33	39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	39	
Fixed Income Composite	**1.47**	**3.19**	**7.99**	**7.99**	**8.19**	**7.06**	**6.40**	**10.21**	**-0.50**	**7.38**	**07/01/2000**
Fixed Income Custom Index (I)	1.45	4.36	10.00	10.00	9.22	7.27	6.31	11.41	-2.35	7.36	
Difference	0.02	-1.17	-2.01	-2.01	-1.03	-0.21	0.09	-1.20	1.85	0.02	

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Walton Street Real Estate Fund VI, L.P.	**0.74**	**1.79**	**54.15**	**54.15**	**N/A**	**N/A**	**-11.15**	**N/A**	**N/A**	**-59.48**	**05/01/2009**
Prima Mortgage Invest Trust, LLC	**-0.18**	**3.94**	**7.92**	**7.92**	**N/A**	**N/A**	**22.87**	**N/A**	**N/A**	**14.33**	**05/01/2009**
Mesa West Real Estate Income Fund II L.P.	**3.42**	**5.36**	**11.12**	**11.12**	**N/A**	**N/A**	**-15.50**	**N/A**	**N/A**	**-3.10**	**01/01/2010**
H/2 Credit Partners (CF)	**0.29**	**-0.39**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.39**	**07/01/2011**
Real Estate Composite	**0.59**	**2.18**	**14.85**	**14.85**	**N/A**	**N/A**	**18.36**	**N/A**	**N/A**	**8.48**	**05/01/2009**
Real Estate Blended Index	2.97	6.59	15.26	15.26	-1.69	3.25	5.83	-22.11	5.27	1.34	
Difference	-2.37	-4.41	-0.41	-0.41	N/A	N/A	12.53	N/A	N/A	7.14	

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Internal TIPS (SA)	**2.72**	**7.26**	**13.30**	**13.30**	**9.95**	**7.97**	**6.40**	**10.25**	**-0.96**	**6.67**	**10/01/2003**
BC US Trsy: US TIPS Index	2.69	7.32	13.56	13.56	10.38	7.95	6.31	11.41	-2.35	6.40	
Difference	0.03	-0.06	-0.26	-0.26	-0.43	0.02	0.09	-1.16	1.39	0.27	
IM U.S. TIPS (SA+CF)	2.67	7.45	13.55	13.55	10.28	8.07	6.40	11.31	-1.49	6.55	
Percentile Rank	36	59	57	57	70	61	50	91	43	24	
PIMCO:All Asset;Inst (PAAIX)	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-3.27**	**12/01/2011**
BC US Trsy Infl Notes: 1-10 Yr Index	1.69	3.37	8.93	8.93	8.69	6.90	5.22	12.02	-2.43	-0.18	
Difference	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-3.09	
Tenaska Power Fund II (CF)	**2.36**	**5.69**	**5.94**	**5.94**	**0.67**	**N/A**	**-0.92**	**-2.79**	**N/A**	**-1.03**	**10/01/2008**
Tortoise Capital (CF)	**17.61**	**12.16**	**18.73**	**18.73**	**N/A**	**N/A**	**34.93**	**N/A**	**N/A**	**31.95**	**05/01/2009**
Alerian MLP Index	16.33	8.24	13.88	13.88	39.75	14.18	35.85	76.41	-36.91	34.65	
Difference	1.28	3.92	4.85	4.85	N/A	N/A	-0.92	N/A	N/A	-2.70	
Real Return Composite	**2.32**	**6.72**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**6.72**	**07/01/2011**
Consumer Price Index + 3%	0.20	1.47	6.05	6.05	5.46	5.33	4.54	5.80	3.09	1.47	
Difference	2.12	5.25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	5.25	

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Kentucky Retirement Systems - Insurance Plan
Manager Comparative Performance
As of December 31, 2011

	QTD	FYTD	CYTD	1 Year	3 Years	5 Years	2010	2009	2008	Since Inception	Inception Date
Arrowhawk Durable Alpha Fund L.P.	**-2.61**	**-4.78**	**0.85**	**0.85**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.92**	**04/01/2010**
BAAM (SA)	**0.23**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.23**	**09/01/2011**
PAAMCO (SA)	**-0.70**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-0.70**	**09/01/2011**
Prisma Capital Partners (SA)	**-2.82**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**-2.82**	**09/01/2011**
Absolute Return Composite	**-1.28**	**-1.99**	**3.81**	**3.81**	**N/A**	**N/A**	**N/A**	**N/A**	**N/A**	**0.73**	**04/01/2010**
HFRI FOF Diversified Index (Lagged)	-2.36	-5.67	-2.46	-2.46	3.32	-0.16	4.07	8.67	-19.20	0.39	
Difference	1.08	3.68	6.27	6.27	N/A	N/A	N/A	N/A	N/A	0.34	
Cash Equivalents (SA)	**0.04**	**0.08**	**0.26**	**0.26**	**0.24**	**1.73**	**0.25**	**0.22**	**2.34**	**3.35**	**07/01/1992**
Citi 3 Mo T-Bill Index	0.00	0.00	0.06	0.06	0.11	1.36	0.10	0.16	1.80	3.25	
Difference	0.04	0.08	0.20	0.20	0.13	0.37	0.15	0.06	0.54	0.10	
KRS Clearing Account	**-0.34**	**-0.07**	**-0.02**	**-0.02**	**0.05**	**3.95**	**0.02**	**0.15**	**15.32**	**2.97**	**03/01/2002**
Citi 3 Mo T-Bill Index	0.00	0.00	0.06	0.06	0.11	1.36	0.10	0.16	1.80	1.85	
Difference	-0.34	-0.07	-0.08	-0.08	-0.06	2.59	-0.08	-0.01	13.52	1.12	

See Addendum for Blended and Custom Index descriptions. Manager inception dates shown represent the first full month following initial funding.

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

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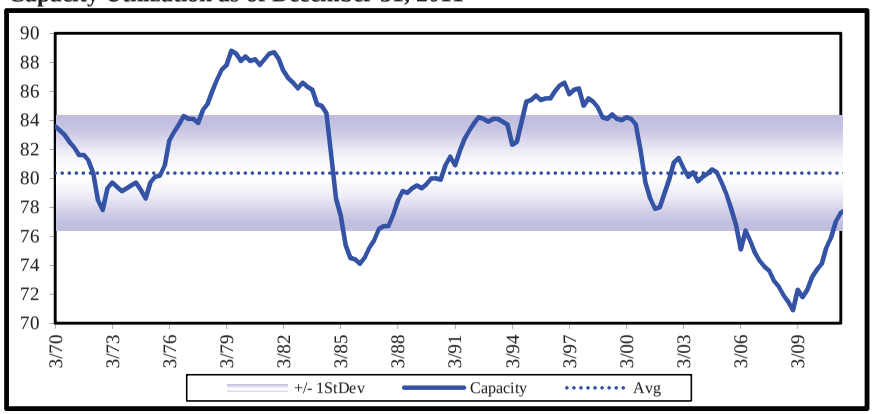
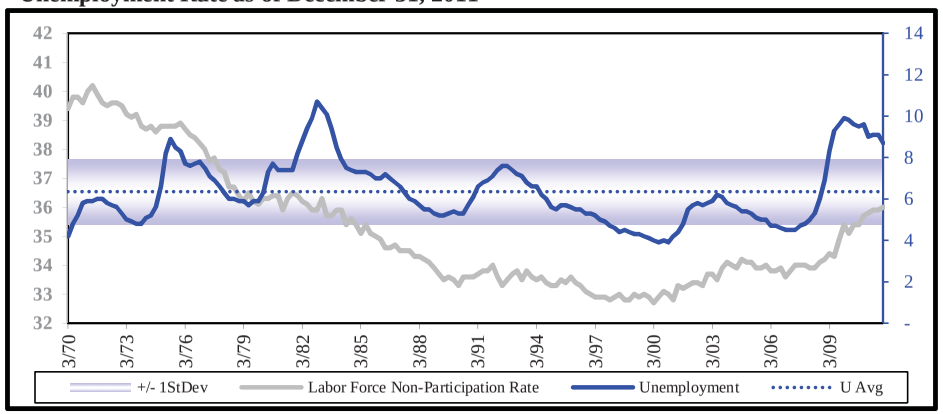
Economic Measures [1]
As of December 31, 2011

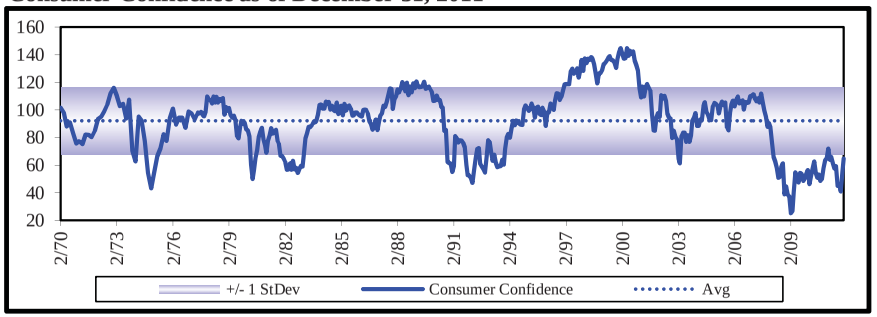
Capacity Utilization as of December 31, 2011



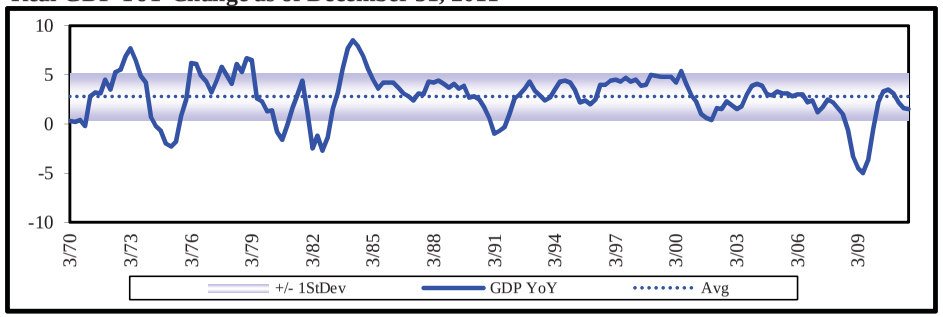
Unemployment Rate as of December 31, 2011



Consumer Confidence as of December 31, 2011

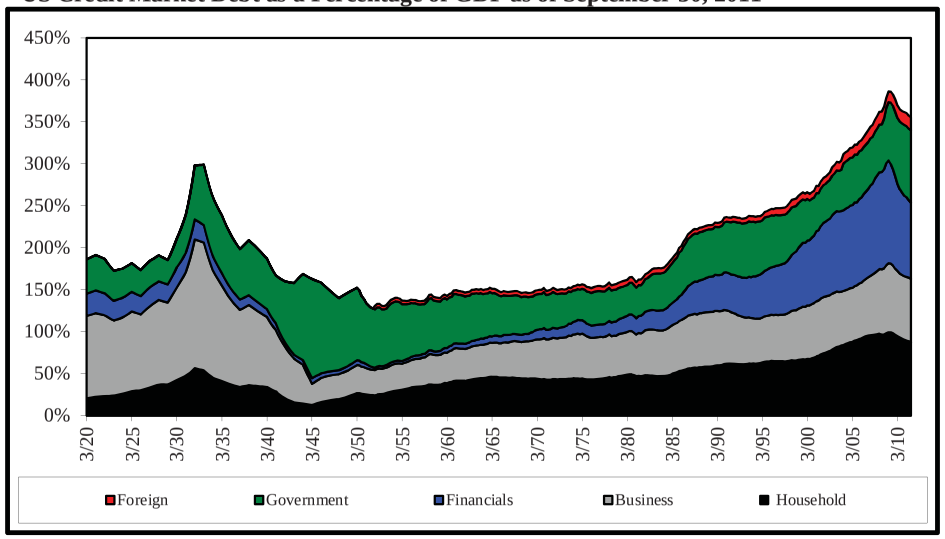


Real GDP YoY Change as of December 31, 2011



	12/31/2011		9/30/2011	20 Year	40 Year
Capacity Utilization	78.10	▲	77.70	79.40	80.30
Unemployment Rate	8.50%	▼	9.00%	6.00%	6.40%
Shiller 20 City YoY - Housing	N/A		-3.54%	3.19%	N/A
PMI - Manufacturing	53.10	▲	52.50	52.10	52.30
Baltic Dry Index - Shipping	1,738	▼	1,899	2,438	2,120
Real GDP YoY	1.60%	▲	1.50%	2.60%	2.80%
Consumer Confidence (Conf. Bd.)	64.80	▲	46.40	92.75	92.28
Breakeven Inflation - 10 Year	1.95	▲	1.76	N/A	N/A
CPI YoY (Headline)[4]	3.00%	▼	3.90%	2.50%	4.40%
CPI YoY (Core)[4]	2.20%	▲	2.00%	2.30%	4.30%
PPI YoY	4.80%	▼	6.90%	2.30%	4.00%
M2 YoY	9.60%	—	9.60%	5.60%	6.80%
Personal Savings	4.00%	▲	3.50%	4.20%	6.50%
Disposable Personal Income	0.40%	▲	0.10%	0.40%	0.60%
Prsnl Consumption Expenditures	2.40%	▼	2.90%	2.10%	3.90%
US Dollar Total Weighted Index	73.33	▲	72.81	88.12	95.89
WTI Crude Oil per Barrel	$99	▲	$79	$40	$36
Gold Spot per Oz[5]	$1,576	▼	$1,629	$286	$321

US Credit Market Debt as a Percentage of GDP as of September 30, 2011[2]



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

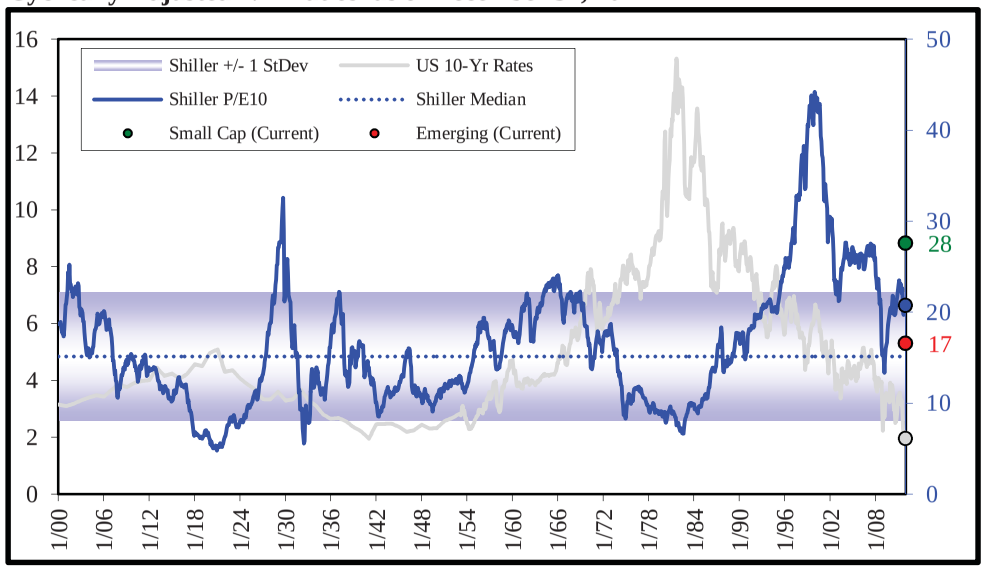
[2] Data prior to 1952 is from "The Statistical History of the United States, From Colonial Times to the Present", by Ben Wattenberg, Morgan Stanley Research.

[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.

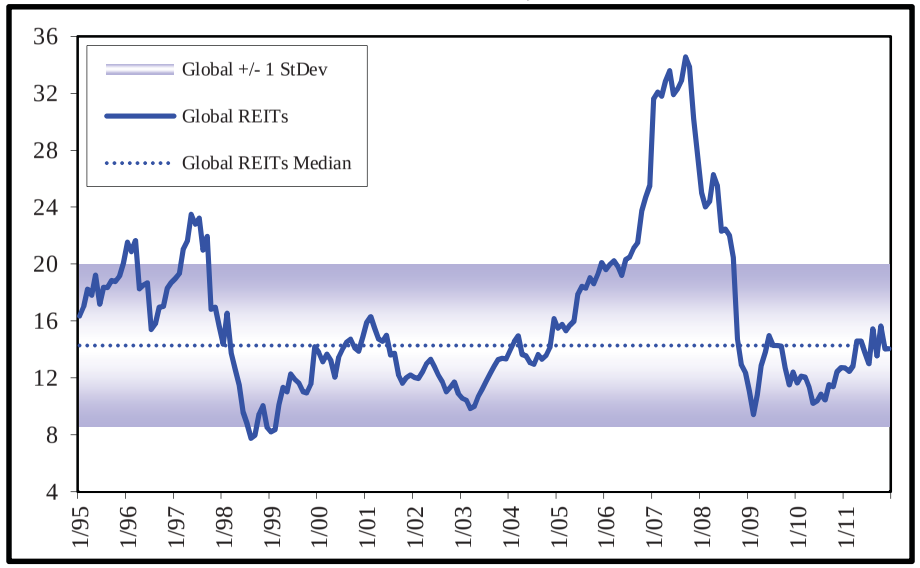
RVKuhns & ASSOCIATES, INC.

Valuation Metrics [1]
As of December 31, 2011

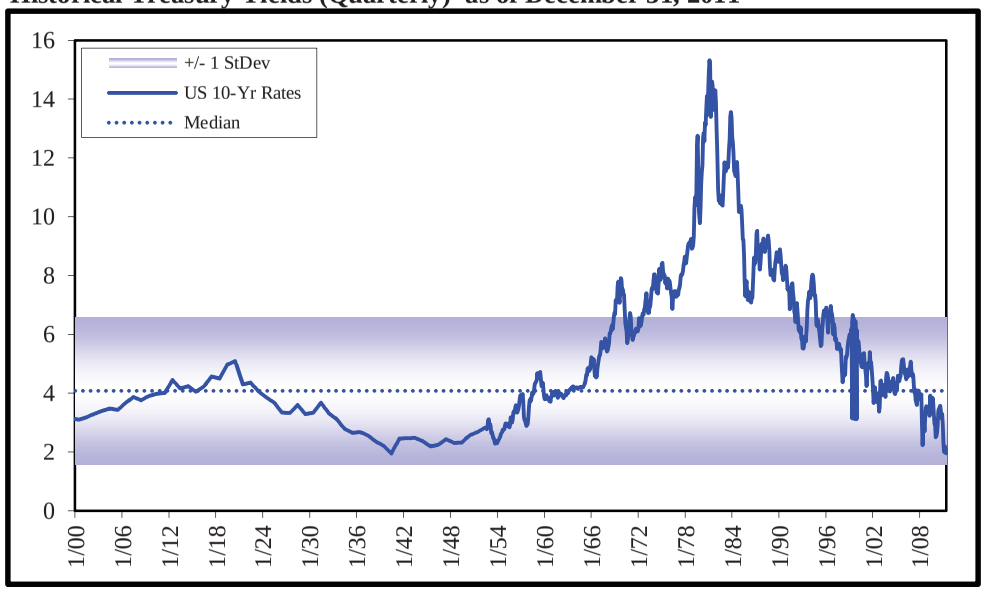
Cyclically Adjusted P/E Ratios[2] as of December 31, 2011



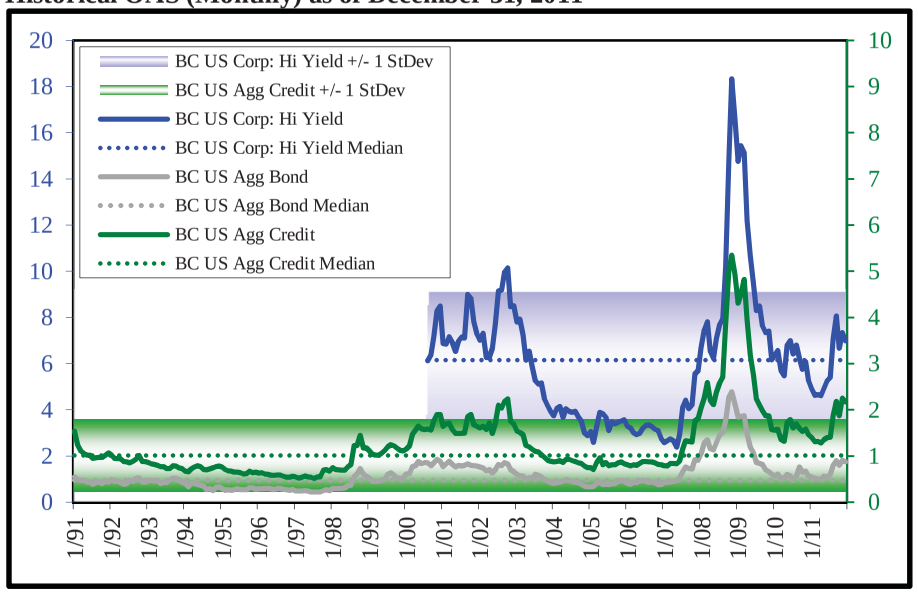
REITs Price to Cash Flows as of December 31, 2011



Historical Treasury Yields (Quarterly)[2] as of December 31, 2011



Historical OAS (Monthly) as of December 31, 2011



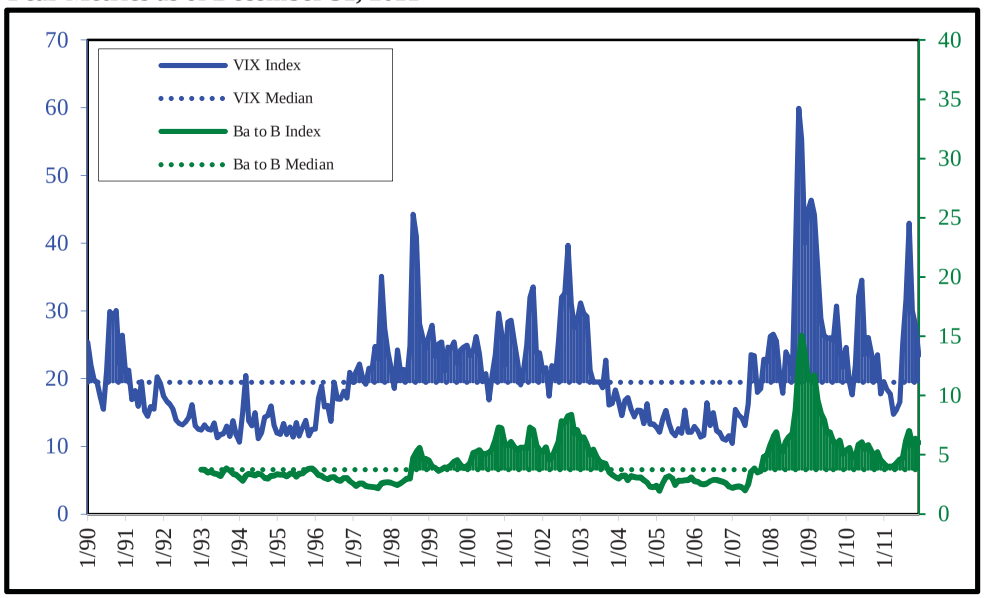
[1] All data courtesy of Bloomberg Professional Service.

[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.

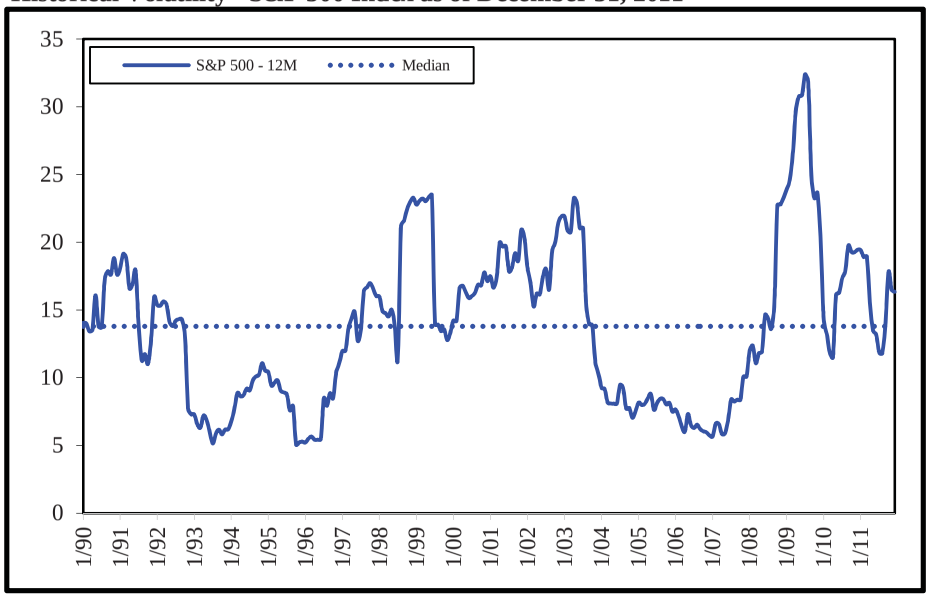
[3] US REITs is represented by the MSCI US REITs Index and Global REITs is represented by the MSCI World Real Estate Index.

Risk Metrics [1]
As of December 31, 2011

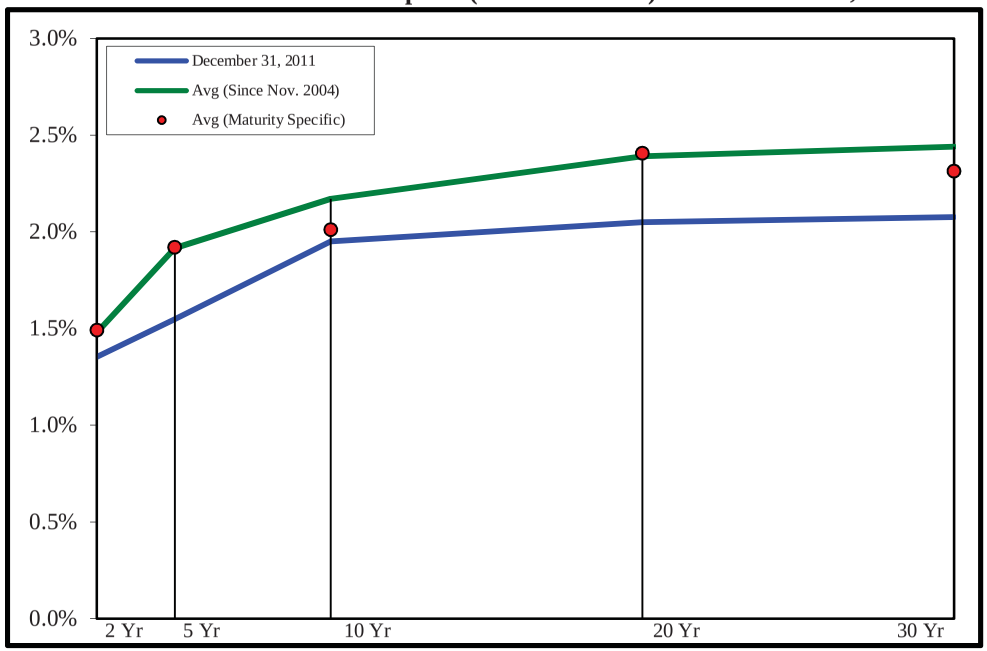
Fear Metrics as of December 31, 2011



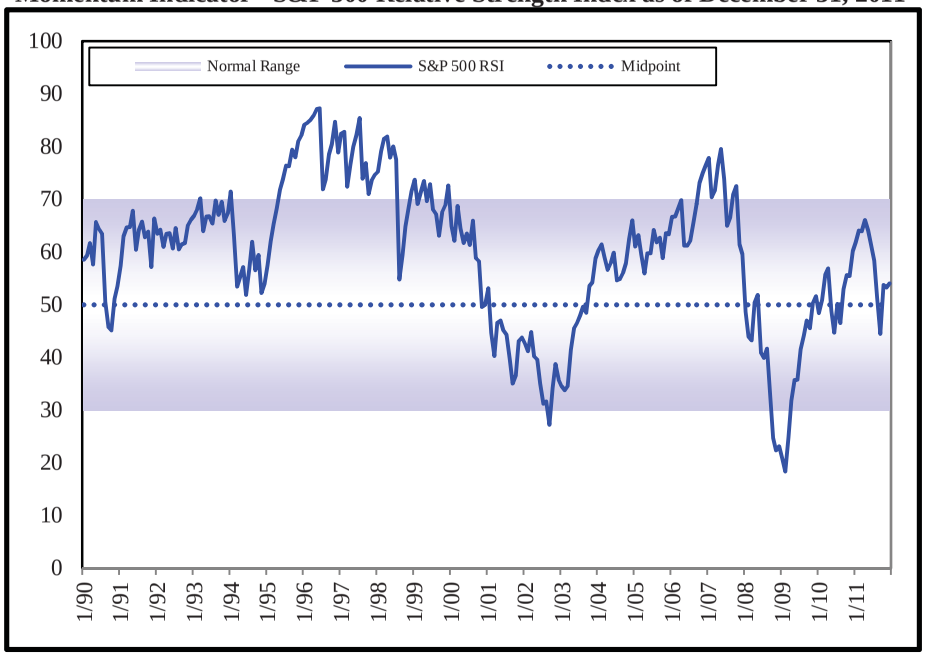
Historical Volatility - S&P 500 Index as of December 31, 2011



Breakeven Inflation - Common Inception (November 2004)[2] vs. December 31, 2011



Momentum Indicator - S&P 500 Relative Strength Index as of December 31, 2011



[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).

RVKuhns & ASSOCIATES, INC.

Annual Asset Class Performance
As of December 31, 2011

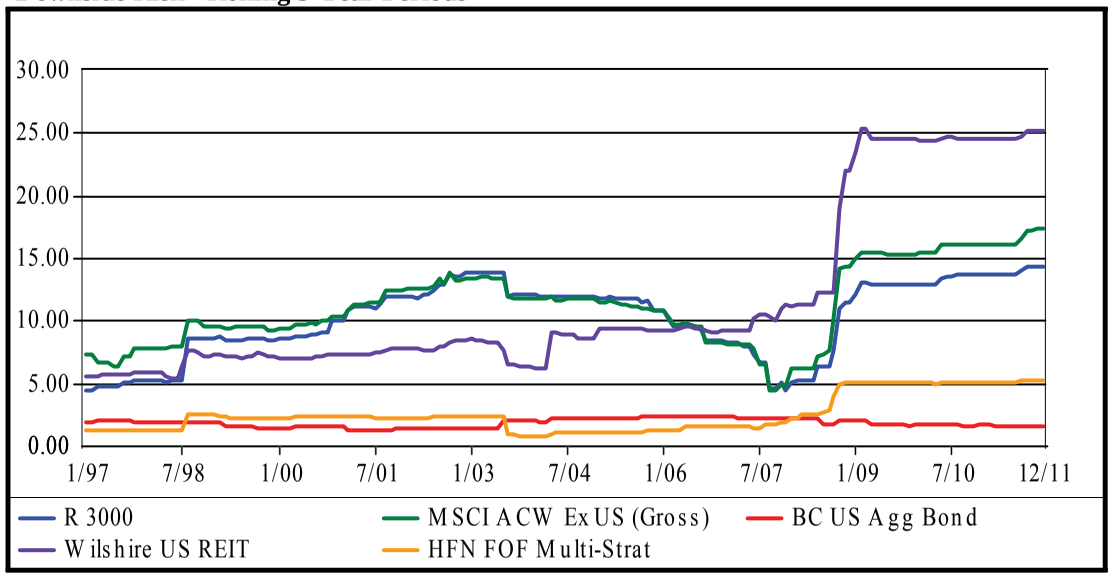
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Best	33.36%	28.58%	66.42%	31.84%	12.35%	25.91%	62.14%	33.16%	34.54%	35.97%	39.78%	8.44%	79.02%	28.60%	22.49%
	22.36%	20.34%	27.31%	31.04%	8.44%	16.56%	56.28%	31.27%	26.65%	32.59%	16.23%	5.24%	58.21%	26.86%	15.99%
	19.66%	16.42%	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%
	17.65%	11.77%	24.35%	14.28%	7.28%	10.25%	39.17%	20.70%	21.36%	19.67%	11.63%	-2.35%	32.46%	19.20%	9.24%
	15.11%	8.69%	21.26%	13.15%	6.61%	5.54%	36.18%	18.33%	14.02%	18.37%	11.63%	-10.01%	28.60%	16.84%	7.84%
	14.52%	5.23%	21.04%	12.40%	5.64%	3.58%	28.97%	13.06%	13.82%	16.32%	9.91%	-20.47%	27.18%	16.36%	4.98%
	12.76%	3.94%	20.19%	11.63%	5.28%	3.12%	28.68%	11.13%	6.75%	15.79%	6.97%	-26.16%	26.46%	15.12%	2.11%
	9.65%	3.75%	13.17%	6.18%	4.42%	1.78%	23.93%	10.88%	5.33%	11.85%	6.60%	-33.79%	18.91%	15.06%	0.10%
	5.33%	1.87%	4.85%	-3.02%	2.49%	-1.41%	11.93%	9.15%	4.91%	9.85%	5.49%	-35.65%	11.41%	10.16%	-4.18%
	2.05%	-2.55%	2.40%	-5.86%	-2.37%	-6.00%	9.28%	8.56%	4.55%	4.85%	5.00%	-37.00%	9.72%	8.21%	-5.46%
	-3.39%	-17.01%	2.39%	-7.22%	-11.89%	-7.44%	8.39%	8.46%	3.07%	4.33%	1.87%	-39.20%	5.93%	6.54%	-11.73%
	-11.60%	-25.33%	-0.82%	-9.10%	-12.11%	-15.66%	5.87%	6.79%	2.84%	2.71%	1.79%	-43.06%	1.92%	6.31%	-13.32%
	N/A	-27.03%	-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%
Worst	N/A	N/A	-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%

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 Emg Mkts	BC US Agg Bond - FI	BC US Corp: Hi Yield - FI	BC US Trsy: US TIPS - FI	BC US Gov't/Credit: Lng - FI	NCREIF ODCE (Gross) - Real Estate	Wilshire US REIT - REITs	HFN FOF Multi-Strat (Net) - ARS	DJ-UBS Cmdty (TR) - Commodities	BofA ML 3 Mo T-Bill - Cash Equiv

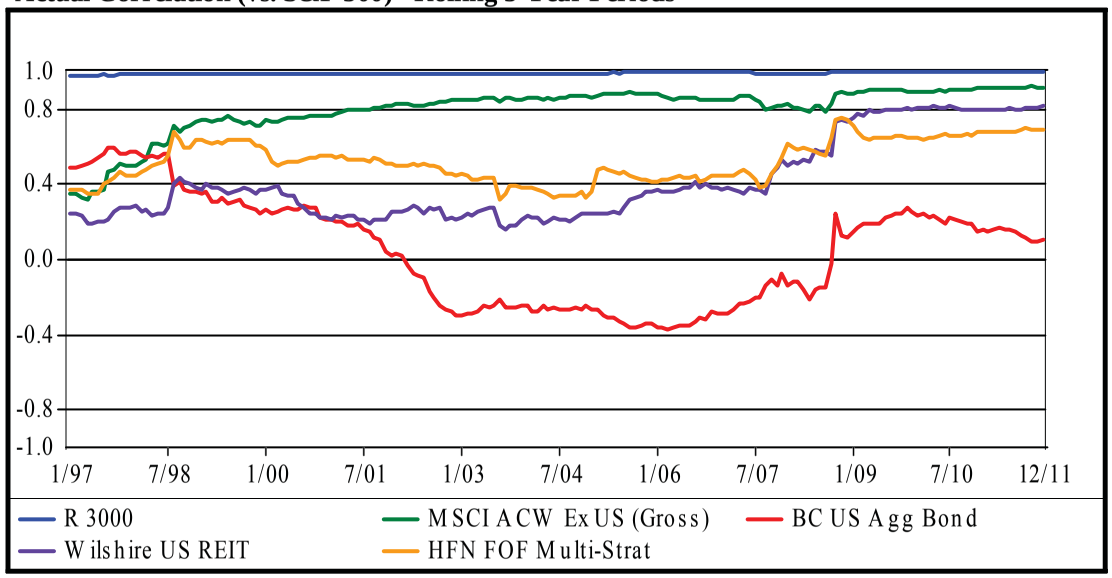
RVKuhns & ASSOCIATES, INC.

Risk Metrics
As of December 31, 2011

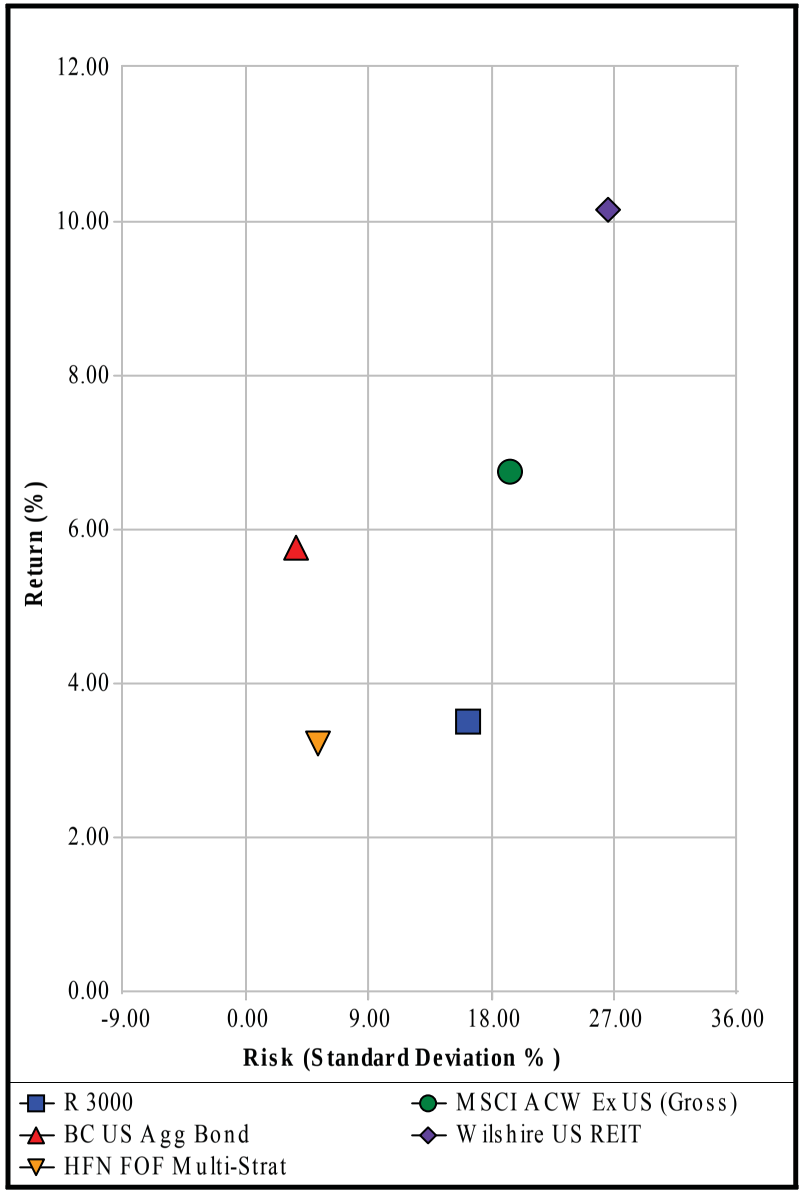
Downside Risk - Rolling 5-Year Periods



Actual Correlation (vs. S&P 500) - Rolling 5-Year Periods



Risk and Return - 10 Years

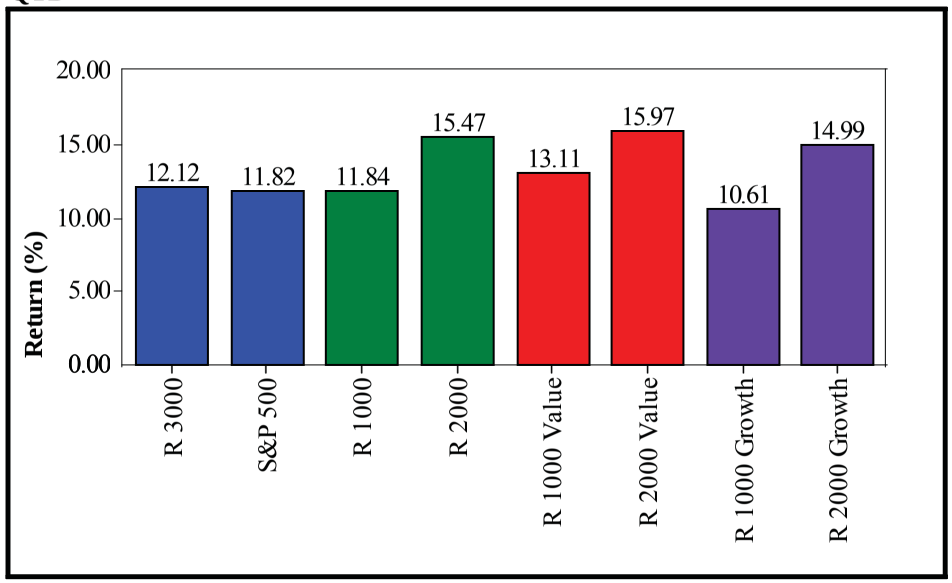


Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

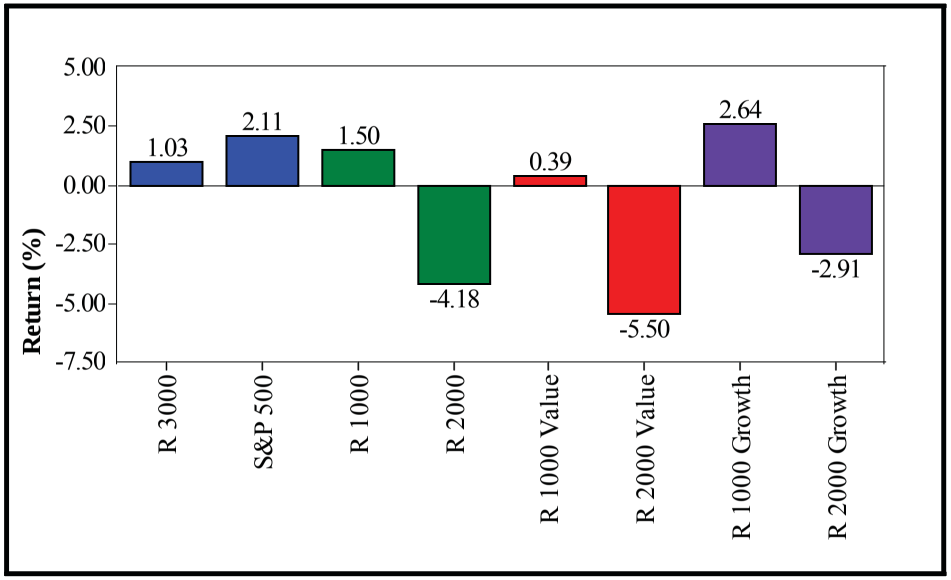
RVKuhns & ASSOCIATES, INC.

Domestic Equity Market Performance and Risk
As of December 31, 2011

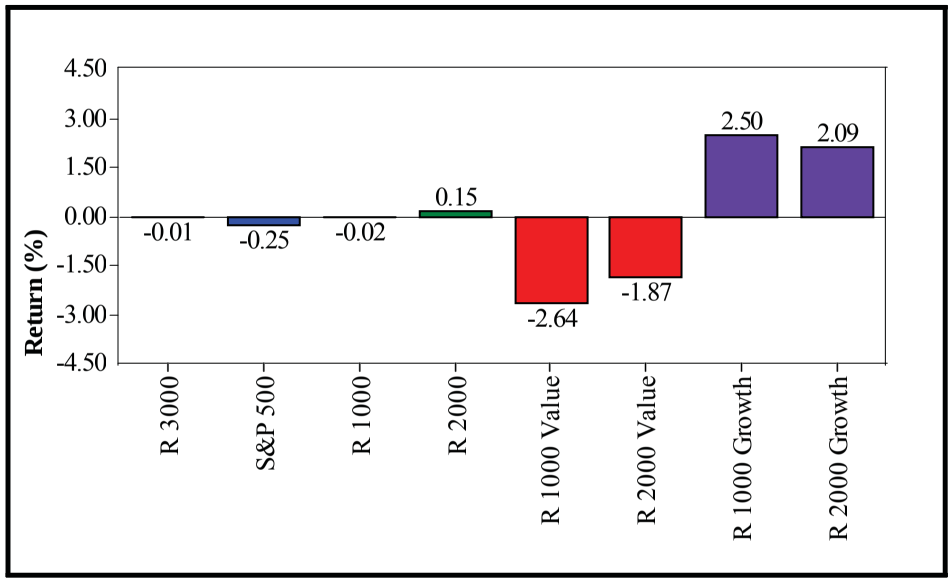
QTD



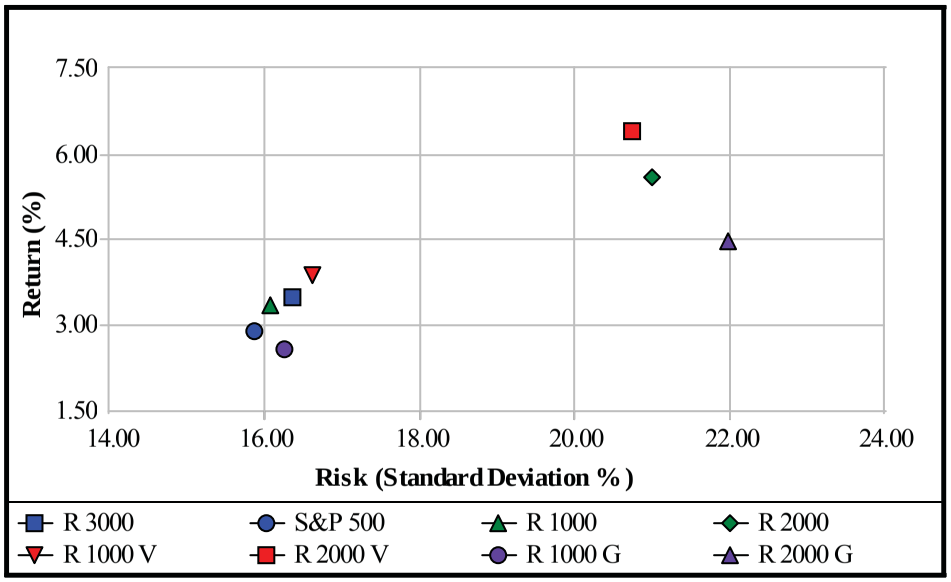
1 Year



5 Years



Risk and Return - 10 Years

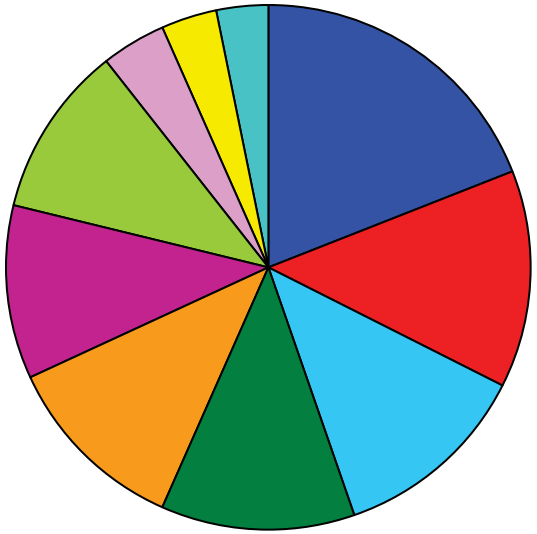


Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

RVKuhns & ASSOCIATES, INC.

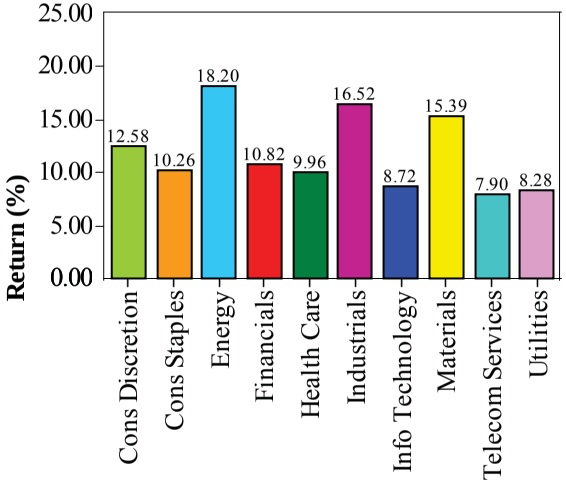
Domestic Equity Sector Weights and Returns
As of December 31, 2011

S&P 500 Sector Weights

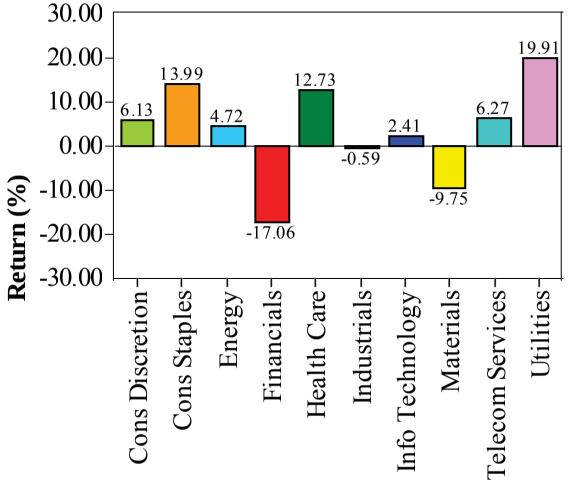


	Allocation (%)
Information Technology	19.02
Financials	13.43
Energy	12.27
Health Care	11.85
Consumer Staples	11.54
Industrials	10.69
Consumer Discretionary	10.67
Utilities	3.87
Materials	3.50
Telecommunication Services	3.17

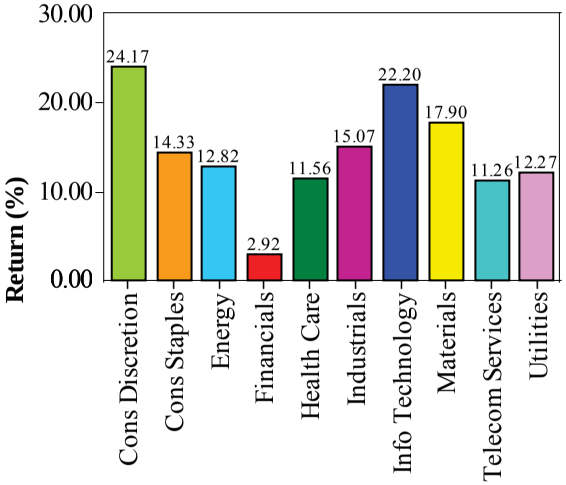
S&P 500 Sector Returns - QTD



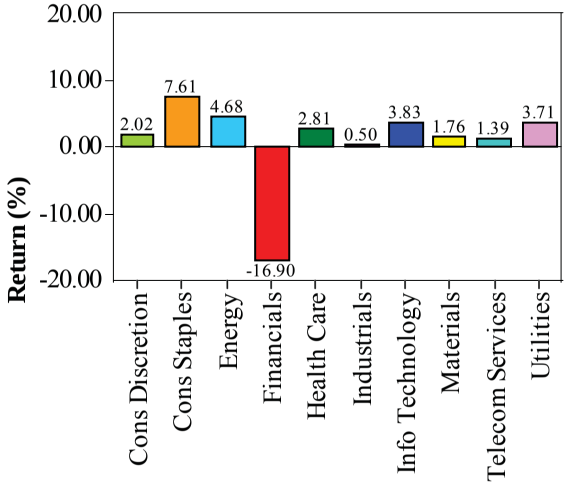
S&P 500 Sector Returns - 1 Year



S&P 500 Sector Returns - 3 Years



S&P 500 Sector Returns - 5 Years

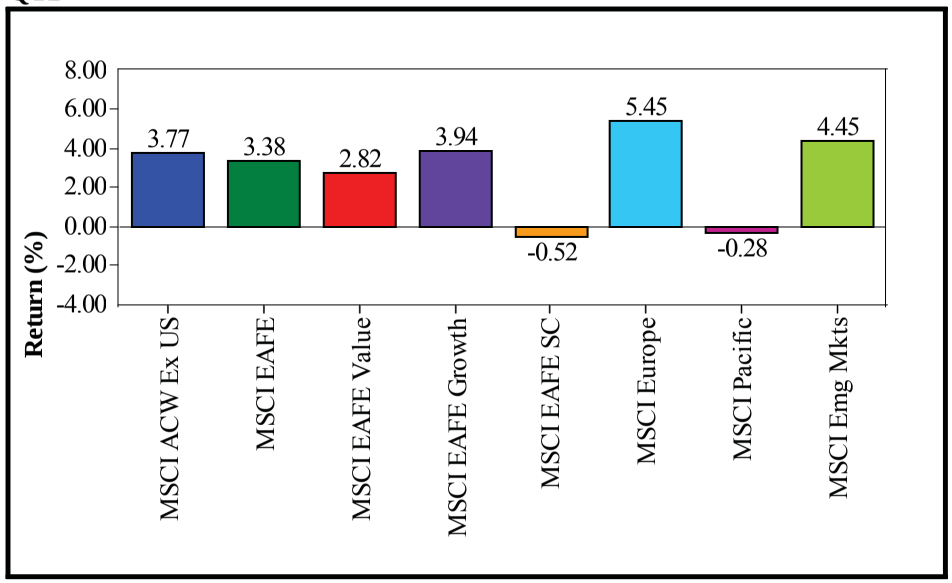


Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year.
Returns provided by MPI Stylus, allocations provided by Standard & Poor's.

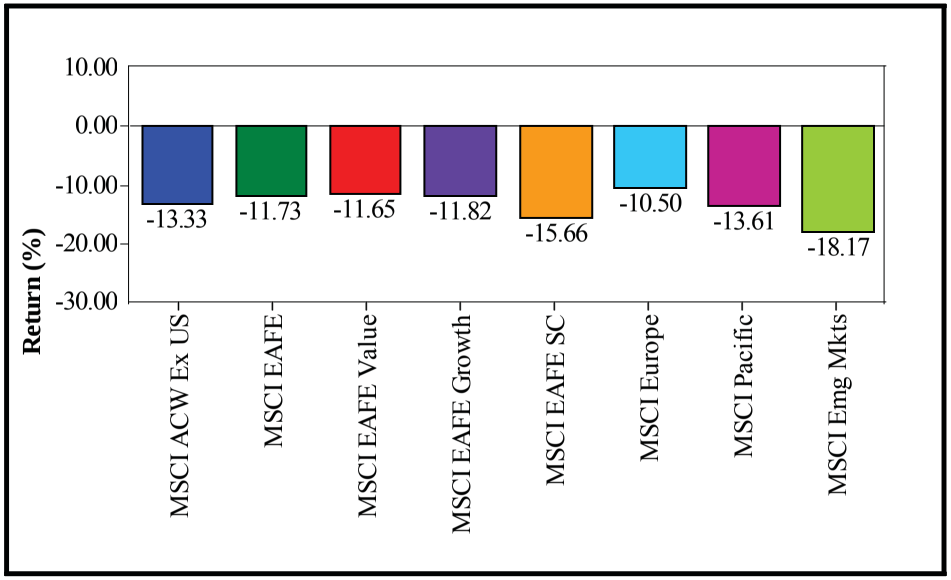
RVKuhns & ASSOCIATES, INC.

International Equity Market Performance and Risk
As of December 31, 2011

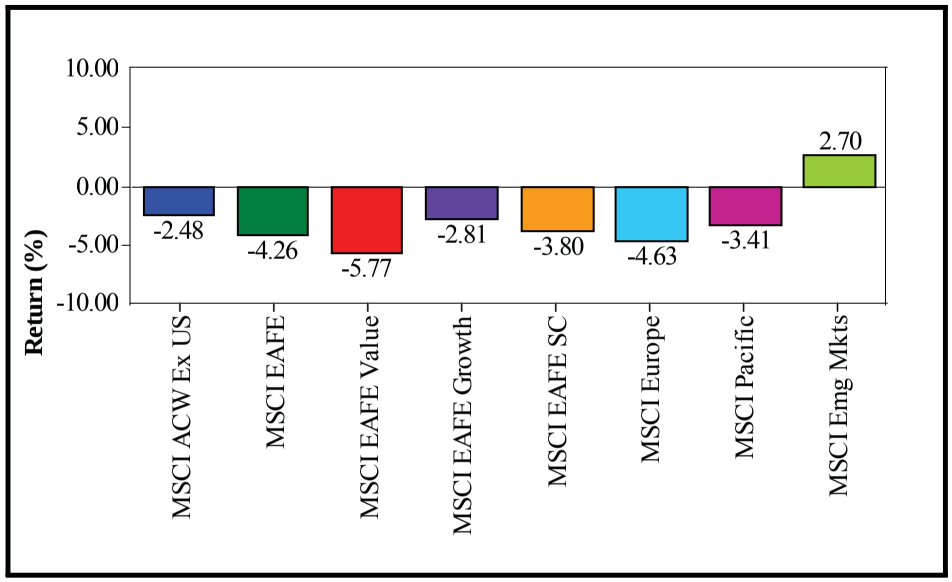
QTD



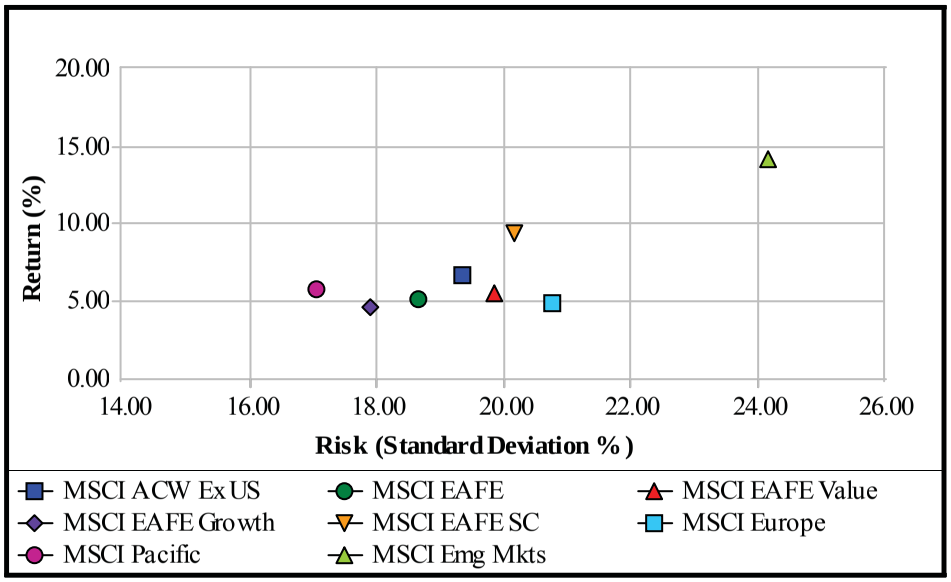
1 Year



5 Years



Risk and Return - 10 Years

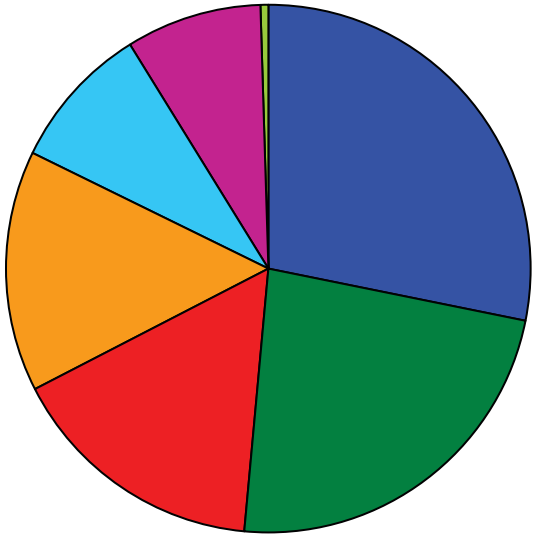


Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity. All returns are shown gross of foreign taxes on dividends.

RVKuhns & ASSOCIATES, INC.

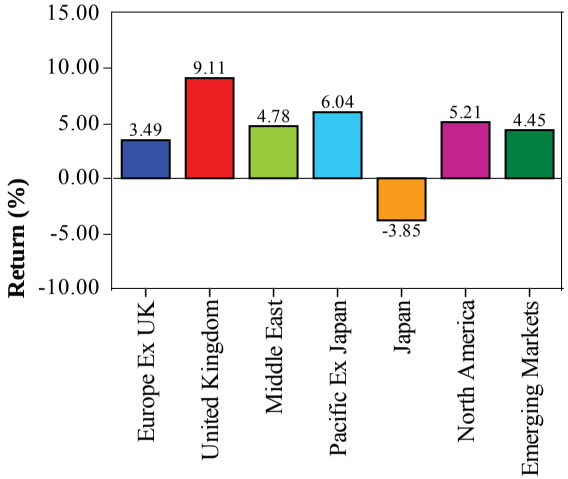
International Equity Region Weights and Returns
As of December 31, 2011

MSCI ACW Ex US Region Weights

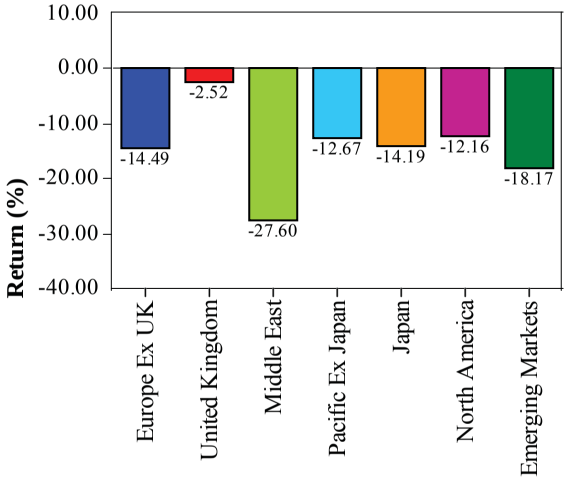


	Allocation (%)
Europe Ex UK	28.19
Emerging Markets	23.32
United Kingdom	15.91
Japan	14.75
Pacific ex Japan	9.00
North America	8.38
Middle East	0.44

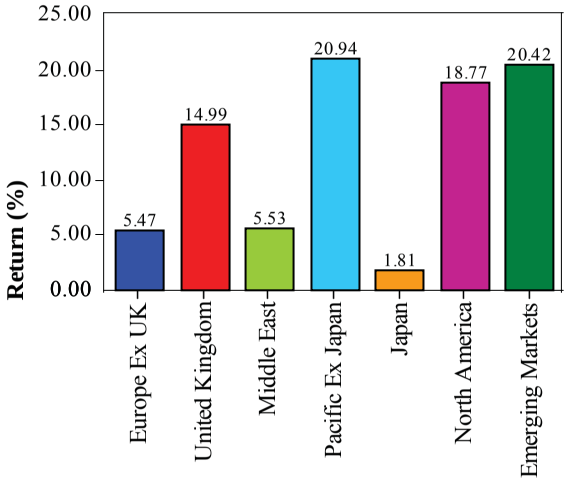
MSCI ACW Ex US Region Returns - QTD



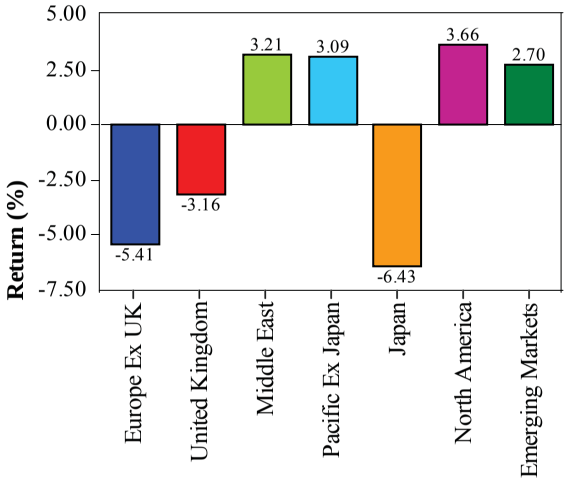
MSCI ACW Ex US Region Returns - 1 Year



MSCI ACW Ex US Region Returns - 3 Years



MSCI ACW Ex US Region Returns - 5 Years

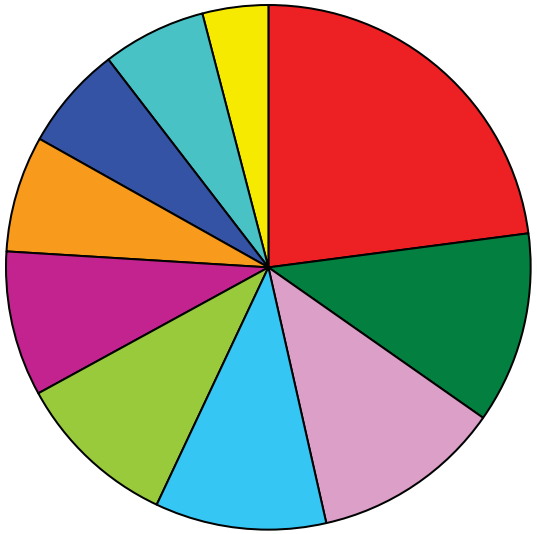


Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year.
Returns and allocations provided by MSCI Barra. All returns are shown gross of foreign taxes on dividends.

RVKuhns & ASSOCIATES, INC.

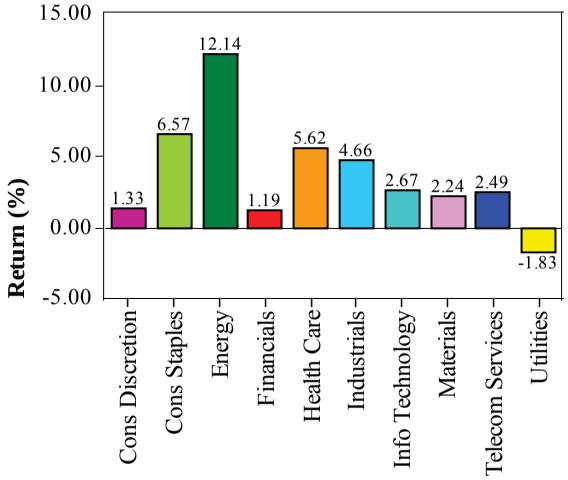
International Equity Sector Weights and Returns
As of December 31, 2011

MSCI ACW Ex US Sector Weights

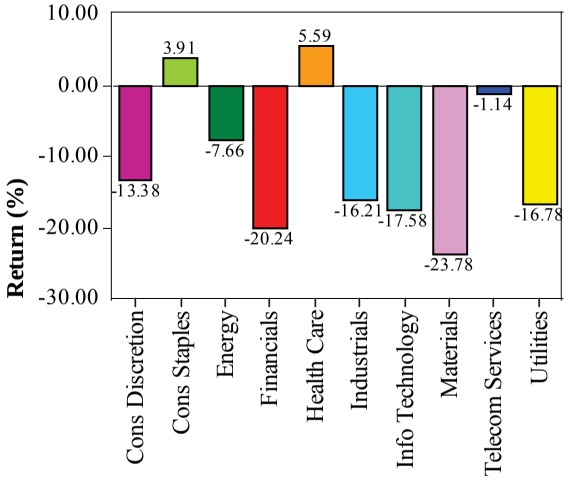


	Allocation (%)
Financials	22.90
Energy	11.85
Materials	11.70
Industrials	10.52
Consumer Staples	10.04
Consumer Discretionary	8.99
Health Care	7.15
Telecommunication Services	6.41
Information Technology	6.37
Utilities	4.08

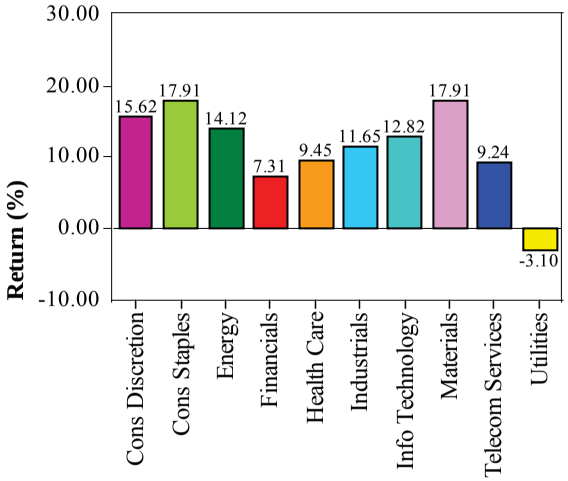
MSCI ACW Ex US Sector Returns - QTD



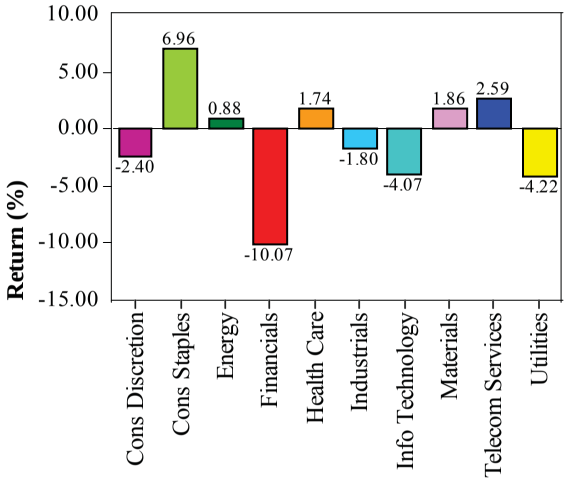
MSCI ACW Ex US Sector Returns - 1 Year



MSCI ACW Ex US Sector Returns - 3 Years



MSCI ACW Ex US Sector Returns - 5 Years



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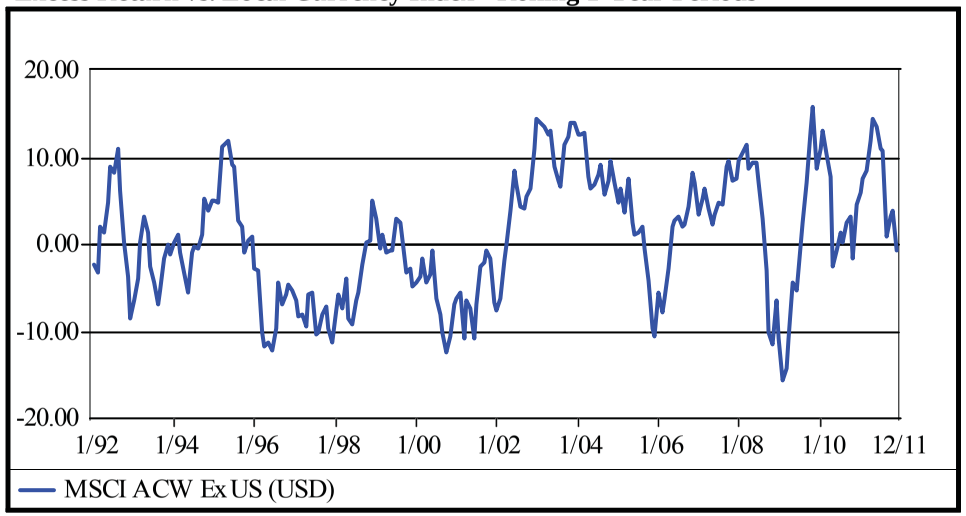
Returns and allocations provided by MSCI Barra. All returns are shown gross of foreign taxes on dividends.

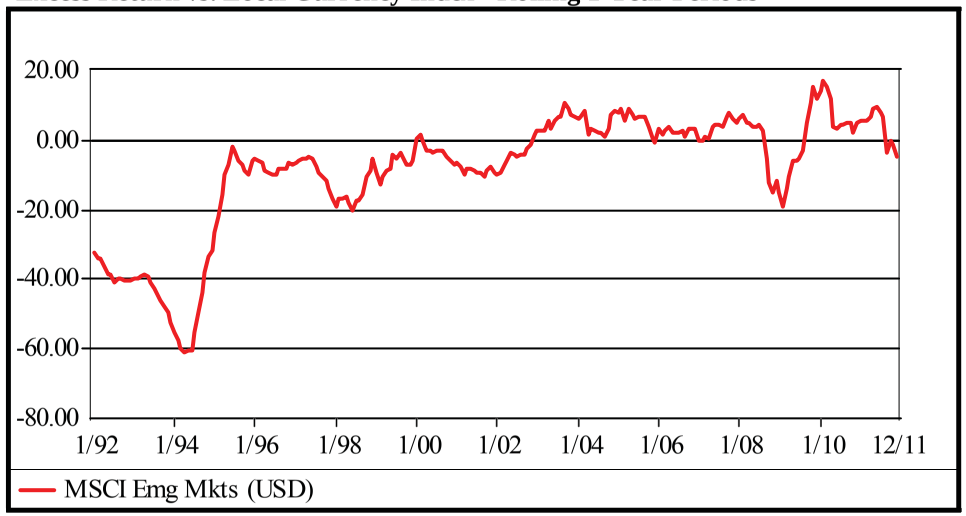
RVKuhns & ASSOCIATES, INC.

Effect of Currency on International Equity Performance
As of December 31, 2011

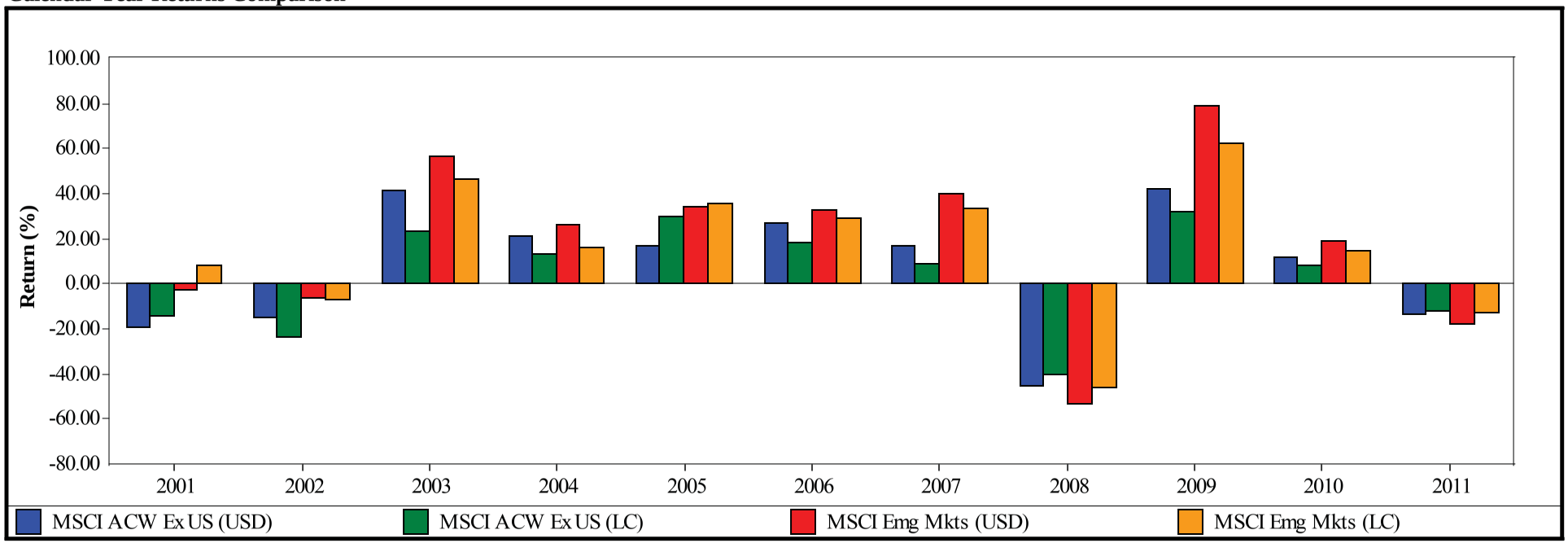
Excess Return vs. Local Currency Index - Rolling 1-Year Periods



Excess Return vs. Local Currency Index - Rolling 1-Year Periods



Calendar Year Returns Comparison

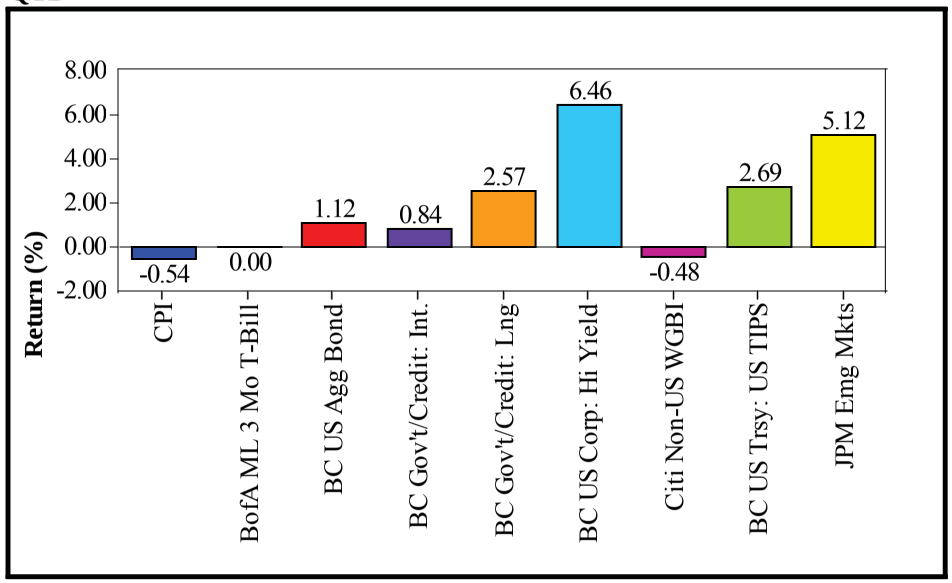


Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.
All returns are shown gross of foreign taxes on dividends.

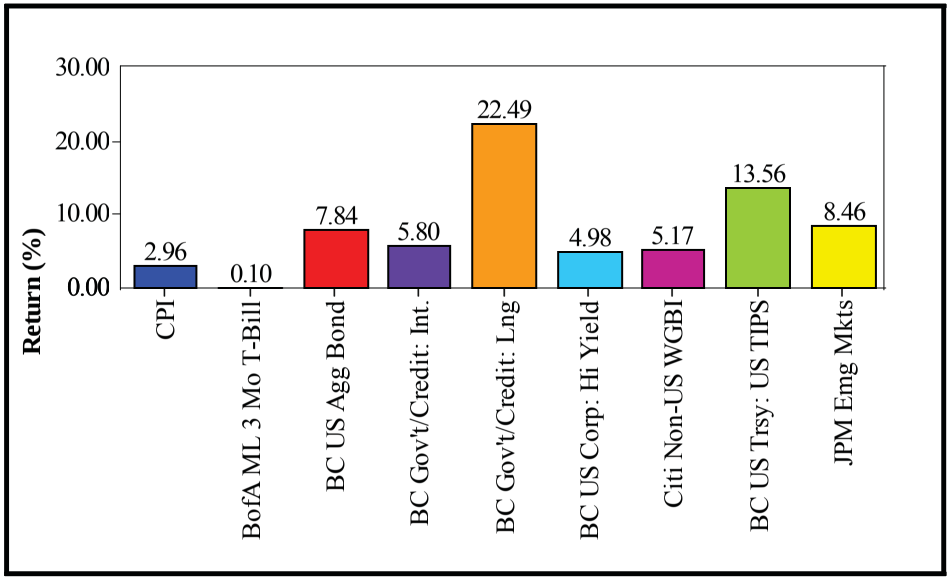
RVKuhns & ASSOCIATES, INC.

Fixed Income Market Performance and Risk
As of December 31, 2011

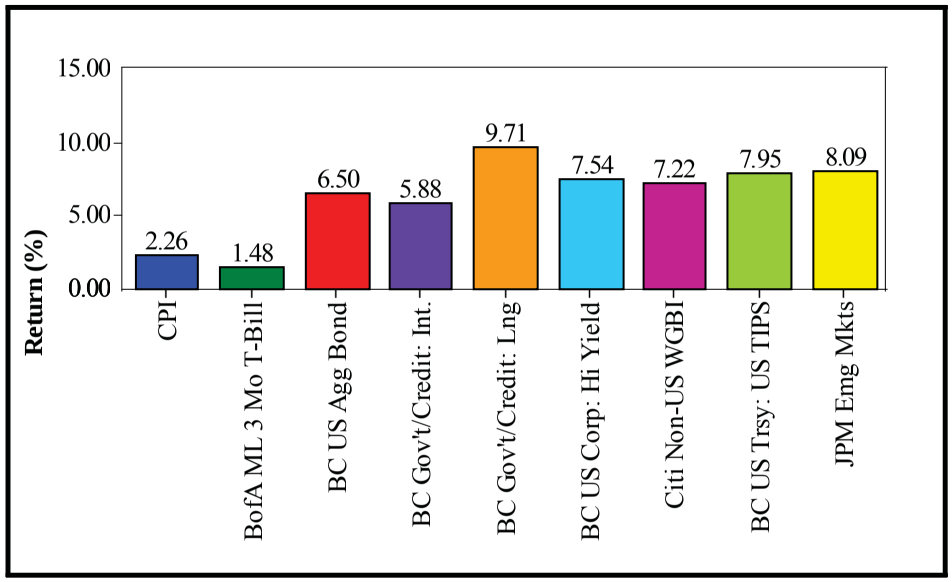
QTD



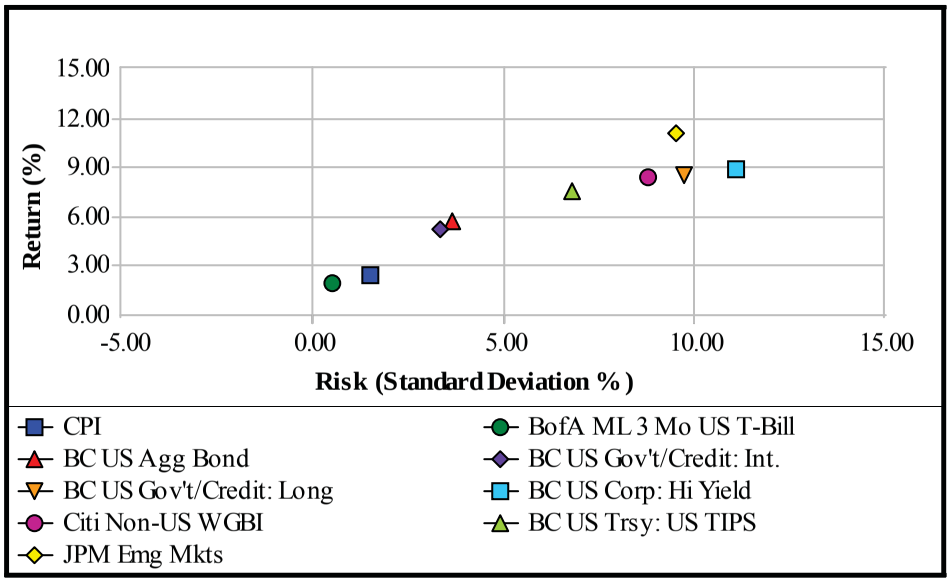
1 Year



5 Years



Risk and Return - 10 Years

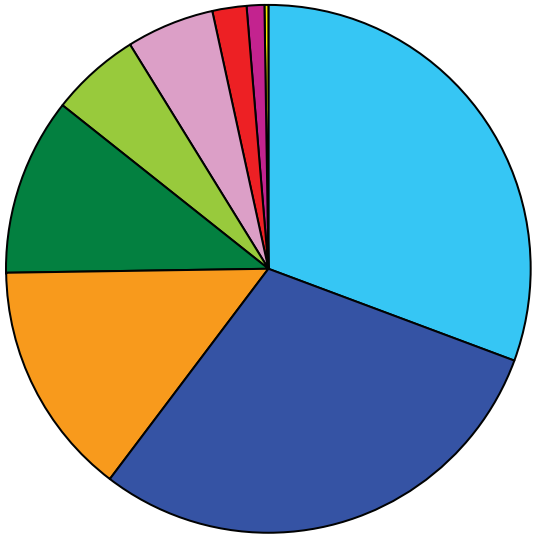


Performance is annualized for periods greater than one year. Calculation is based on monthly periodicity.

RVKuhns & ASSOCIATES, INC.

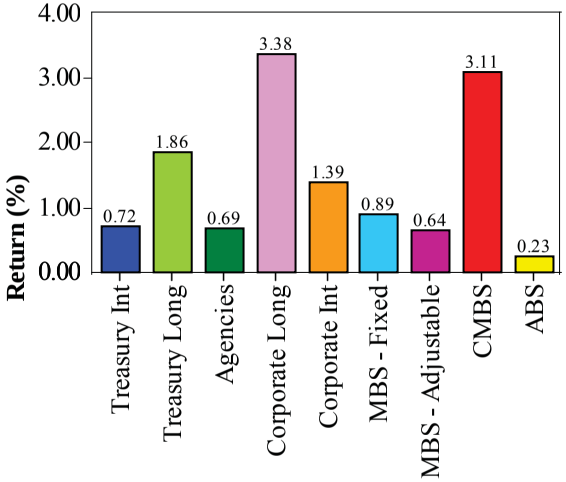
Domestic Fixed Income Sector Weights and Returns
As of December 31, 2011

BC US Agg Bond Sector Weights

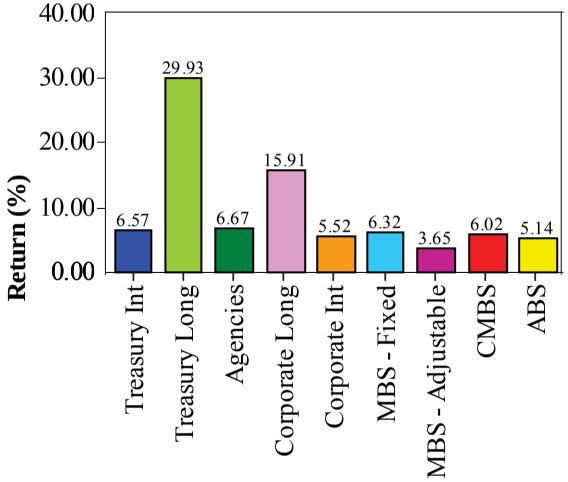


	Allocation (%)
MBS - Fixed Rate	30.69
Treasury Intermediate	29.63
Corporate Intermediate	14.49
Agencies	10.84
Treasury Long	5.52
Corporate Long	5.45
CMBS	2.04
MBS - Adjustable Rate	1.11
ABS	0.23

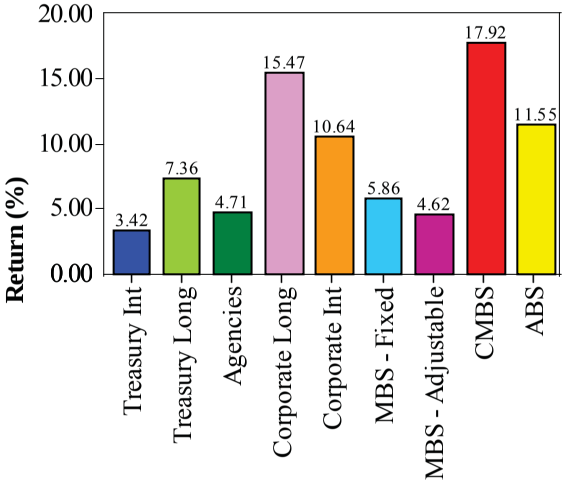
BC US Agg Bond Sector Returns - QTD



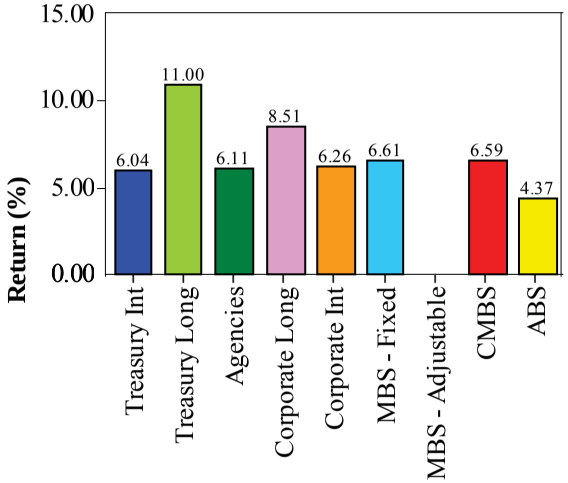
BC US Agg Bond Sector Returns - 1 Year



BC US Agg Bond Sector Returns - 3 Years



BC US Agg Bond Sector Returns - 5 Years

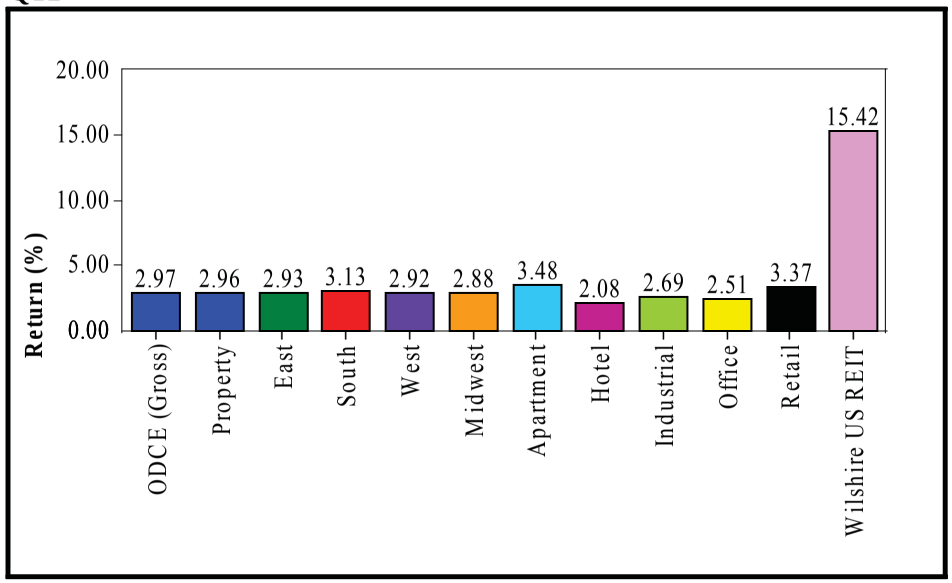


Allocations shown may not sum up to 100% exactly due to rounding. Performance is annualized for periods greater than one year.
Returns and allocations provided by Barclays Capital Indices.

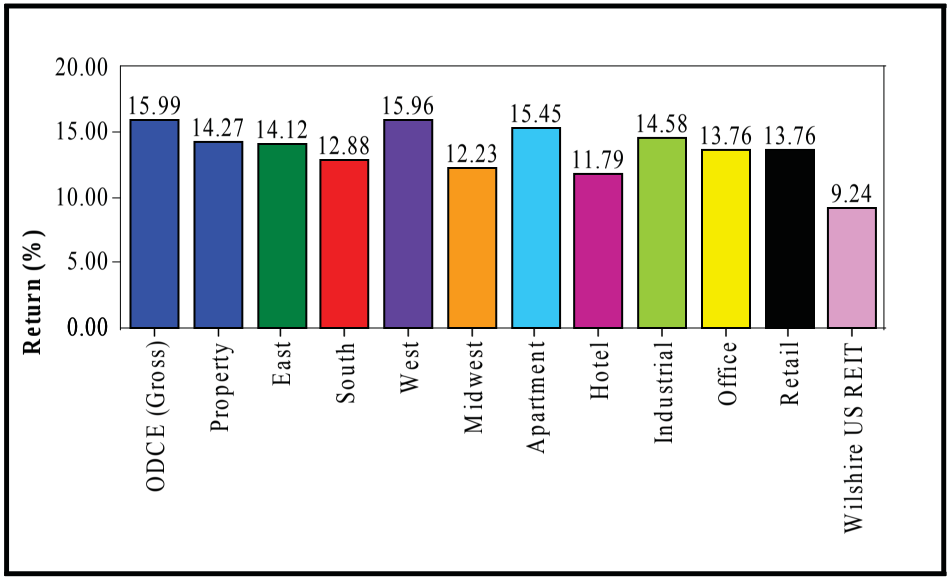
RVKuhns & ASSOCIATES, INC.

Real Estate Market Performance and Risk
As of December 31, 2011

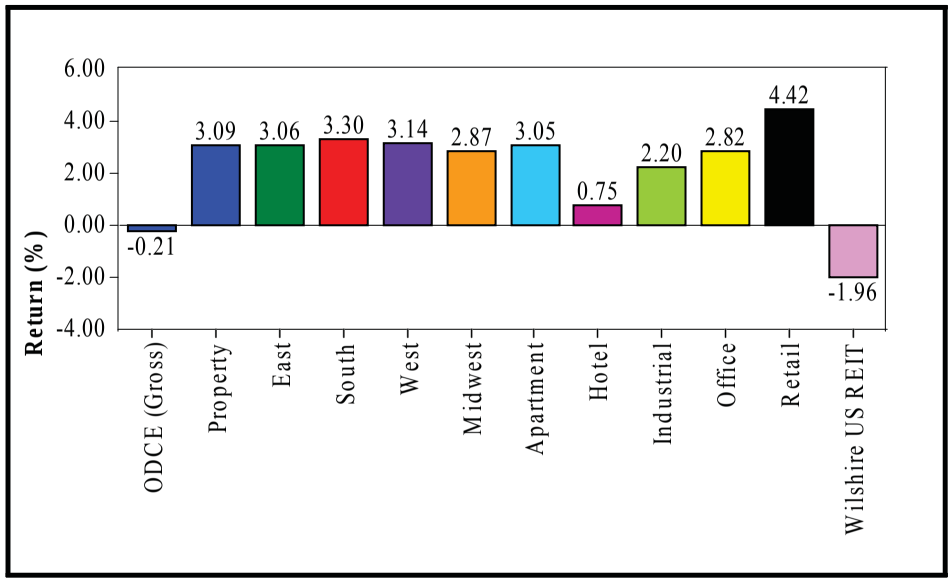
QTD



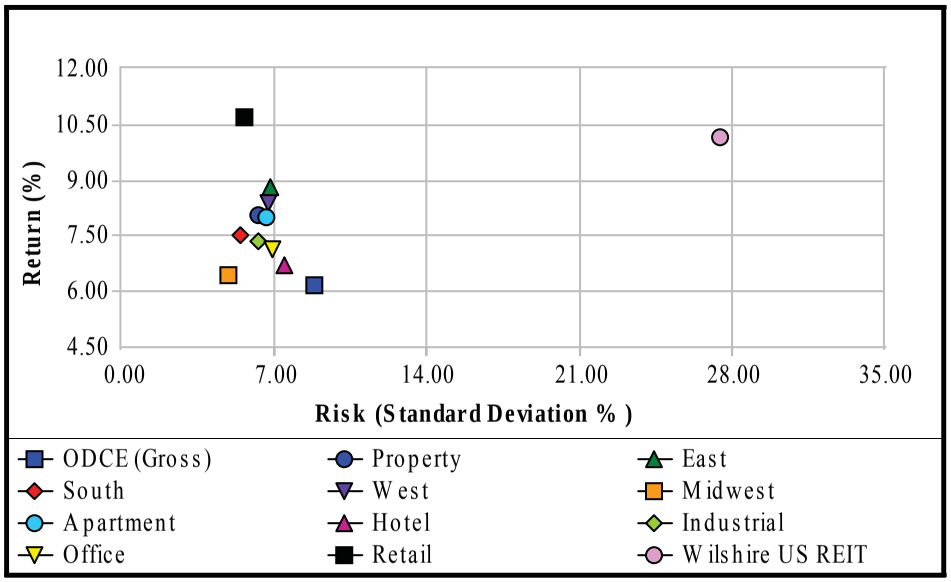
1 Year



5 Years



Risk and Return - 10 Years

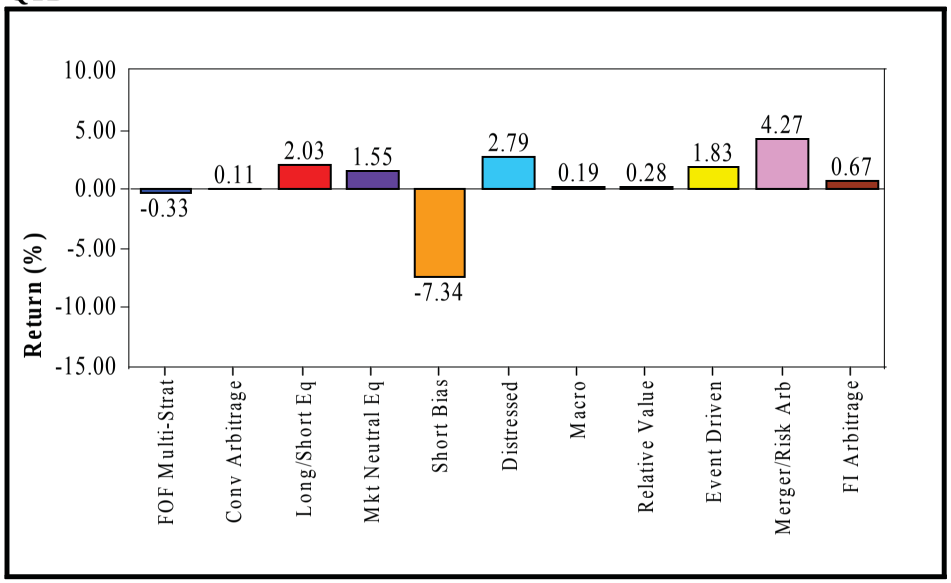


Performance is annualized for periods greater than one year. Calculation is based on quarterly periodicity.
All data shown represent NCREIF indices unless otherwise noted. Region and sector data represent the Property Index.

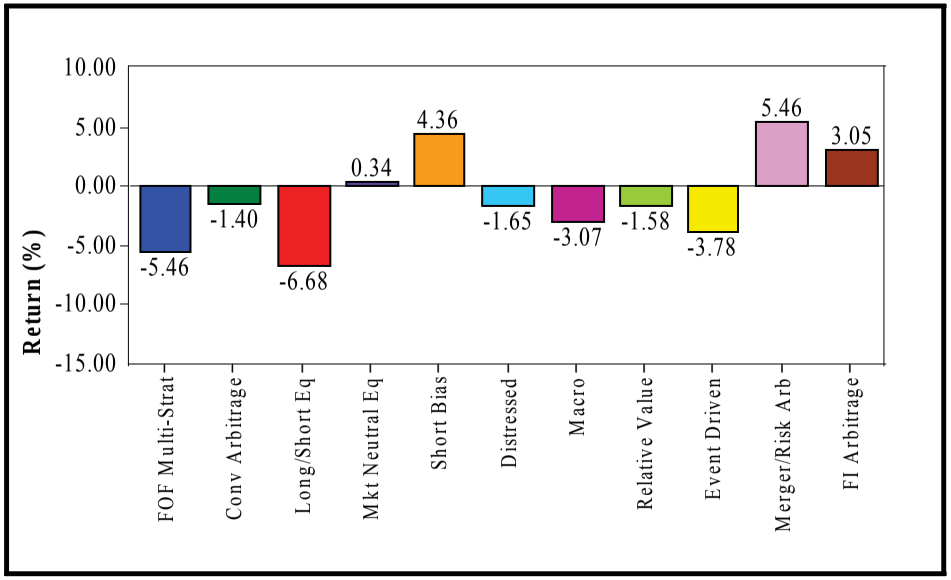
RVKuhns & ASSOCIATES, INC.

Hedge Fund Market Performance and Risk
As of December 31, 2011

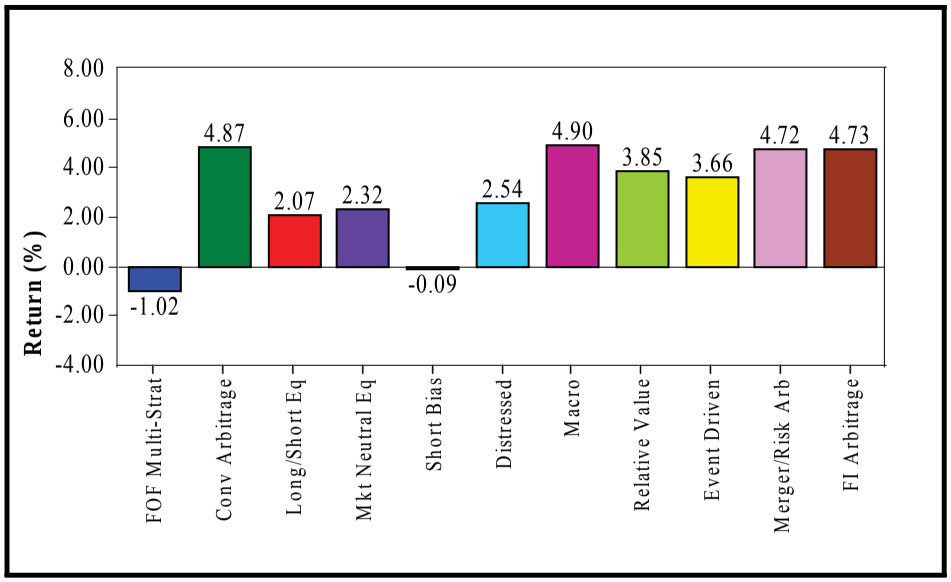
QTD



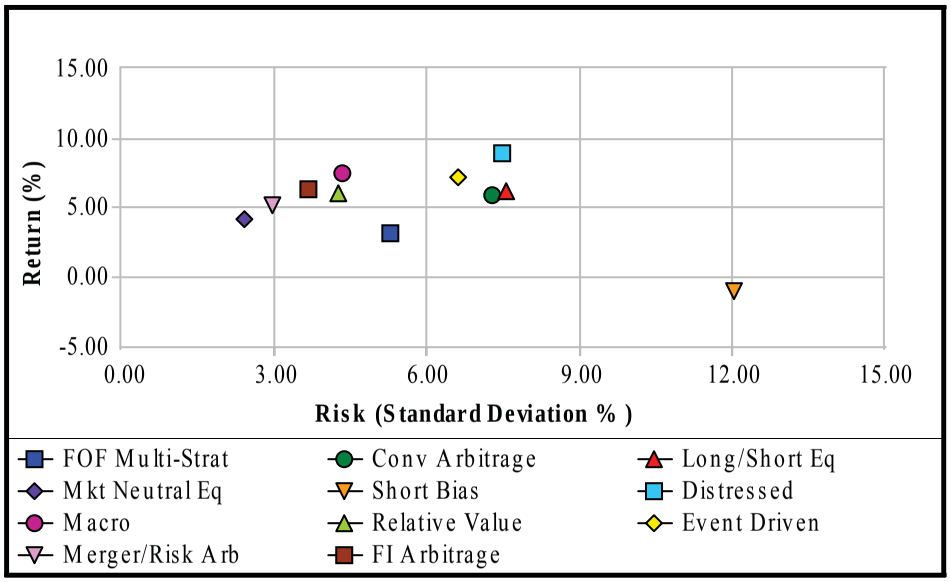
1 Year



5 Years



Risk and Return - 10 Years



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.

RVKuhns & ASSOCIATES, INC.

Kentucky Retirement Systems
Addendum
As of December 31, 2011

Performance Related Comments

- Performance shown is gross of fees.
- RVK endorses GIPS and calculates performance for composites and investment managers using different methodologies.
- 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.
- Manager inception dates shown represent the first full month following initial funding. Since Inception performance and inception dates may differ from Northern Trust.
- Effective September 1, 2011, Equitization Assets are included in the Total Fund and Domestic Equity Composites.

Asset Allocation Comments

- The Domestic 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 have been provided by Northern Trust.

Manager Transition Comments

- Waterfall (SA), Mesa West Real Estate Income Fund II L.P., and Arrowhawk Durable Alpha Fund L.P. were funded in Q1 2010.
- Shenkman Capital (SA) was funded in Q3 2010.
- Stone Harbor (SA) was funded in Q4 2010.
- PIMCO Core Fixed Income (SA) (Insurance Plan) was funded in Q1 2011.
- River Road Asset Management (SA), Westwood Management (SA), Westfield Capital (SA), Internal Mid Cap (SA), and International Account (SA) were funded in Q2 2011.
- BAAM (SA), PAAMCO (SA), and Prisma Capital Partners were funded in Q3 2011.
- Columbia HY Fixed Income (SA), Loomis Sayles HY Fixed Income (SA), Manulife Asset Mgmt (SA), and PIMCO:All Asset;Inst (PAAIX) were funded in Q4 2011.

Custom Benchmark Comments

- The Pension Plan and Insurance Plan Actual Allocation Indices are calculated using beginning of month investment weights applied to each corresponding primary benchmark return.
- R.V. Kuhns & Associates, Inc. began calculating the Pension Plan Target Allocation Index as of September 30, 2008 and it currently consists of 20.0% Russell 3000 Index, 20.0% MSCI ACW Ex US Index (Gross), 4.0% MSCI Emerging Markets Index (Gross), 20.0% BC US Universal Index, 5.0% NCREIF ODCE Index (Gross) (AWA), 10.0% Consumer Price Index + 3%, 10.05% HFRI FOF Diversified Index (Month Lag), 9.93% Russell 3000 Index + 4% (Quarter Lag), and 1.02% Citi 3 Mo T-Bill Index.
- R.V. Kuhns & Associates, Inc. began calculating the Insurance Plan Target Allocation Index as of September 30, 2008 and it currently consists of 21.11% Russell 3000 Index, 20.97% MSCI ACW Ex US Index (Gross), 3.45% MSCI Emerging Markets Index (Gross), 19.30% BC US Universal Index, 4.31% NCREIF ODCE Index (Gross) (AWA), 11.39% Consumer Price Index + 3%, 10.21% HFRI FOF Diversified Index (Month Lag), 8.30% Russell 3000 + 4% (Quarter Lag), 0.96% Citi 3 M T-Bill Index.
- The Global Equity Custom Index (P) is calculated monthly and currently consists of 45.45% Russell 3000 Index, 45.45% MSCI ACW Ex US Index (Gross), and 9.10% MSCI Emerging Markets Index (Gross).
- The Global Equity Custom Index (I) is calculated monthly and currently consists of 46.4% Russell 3000 Index, 46.1% MSCI ACW Ex US Index (Gross), and 7.5% MSCI Emerging Markets Index (Gross).
- The Domestic Equity Custom Index (P) is calculated monthly and currently consists of 100% Russell 3000 Index.
- The Domestic Equity Custom Index (I) is calculated monthly and currently consists of 100% Russell 3000 Index.

- The Non U.S. Equity Composite Index (P) is calculated monthly and currently consists of 100% MSCI ACW Ex US Index (Gross).
- The Non U.S. Equity Composite Index (I) is calculated monthly and currently consists of 100% MSCI ACW Ex US Index (Gross).
- The S&P Blended Index is calculated monthly and consists of 100% S&P 1500 Index through June 30, 2011, and 100% S&P 500 Index (Cap Wtd) thereafter.
- The Pyramis Blended Index is calculated monthly and consists of 100% MSCI EAFE Index (Gross) through June 30, 2009, and 100% MSCI World Ex US Index (Gross) thereafter.
- The Boston Co Blended Index is calculated monthly and consists of 100% MSCI EAFE Index (Gross) through June 30, 2009, and 100% MSCI World Ex US Index (Gross) thereafter.
- The Fixed Income Custom Index (P) is calculated monthly and currently consists of the BC US Unv Bond Index.
- The Fixed Income Custom Index (I) is calculated monthly and currently consists of the BC US Unv Bond Index.
- The PIMCO Blended Index consists of 100.0% BC US Agg Bond Index through September 30, 2011, and 60.0% BC US Agg Bond Index, 40.0% PIMCO Global Advantage Bond Index thereafter.
- The Opportunistic Blended Index is calculated monthly and consists of 40% BC ABS US Floating Rate Index and 60% BC US Corporate: High Yield Index.
- The US High Yield/Bank Loan Blended Index is calculated monthly and consists of 50% BC US Corp: High Yield Index and 50% BC US High Yield Loans Index.
- The Real Estate Blended Index is calculated monthly and consists of 100% NCREIF Property Index (Quarter Lag) through June 30, 2011 and 100% NCREIF ODCE Index (Gross) (AWA) thereafter.
- The Alternatives Custom Index (P) is calculated monthly and consists of 60% S&P 1500 Composite Index and 40% BC US Corp: High Yield Index through June 30, 2011 and Russell 3000 Index + 4% (Quarter Lag) thereafter.
- The Alternatives Custom Index (I) is calculated monthly and consists of 80% S&P 1500 Composite Index and 20% BC US Corp: High Yield Index through June 30, 2011 and Russell 3000 Index + 4% (Quarter Lag) thereafter.

Miscellaneous

- 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
  - *REITs*: Real Estate Real Return Strategy Fund
  - *Nominal Bonds*: Low Duration Fund, Short Term Fund, Investment Grade Corporate Bond Fund, Long Duration Total Return 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), Fundamental Advantage Total Return Strategy Fund, Global Advantage Strategy Fund, High Yield Fund, High Yield Spectrum Fund, Income Fund, Unconstrained Bond 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 Company Fundamental IndexPLUS TR Strategy Fund, Small Cap StocksPlus TR Fund, StocksPlus Fund, StocksPlus Total Return Fund, EqS Pathfinder Fund, EqS Emerging Markets Fund
  - *Other (Includes Cash)*: None

Glossary

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 quality ratings are reported using the investment managers' and the index providers' preferred rating agency. There are two primary rating agencies in the U.S. *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. S*tandard & 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:

S&P	Moody's	Explanation
Higher Credit Quality - Investment Grade		
AAA	Aaa	Prime/Highest credit quality
AA+	Aa1	High credit quality
AA	Aa2	
AA-	Aa3	
A+	A1	Upper-medium credit quality
A	A2	
A-	A3	
BBB+	Baa1	Lower-medium credit quality
BBB	Baa2	
BBB-	Baa3	
Lower Credit Quality - Below Investment Grade		
BB+	Ba1	Speculative/Low credit quality
BB	Ba2	
BB-	Ba3	
B+	B1	Highly speculative
B	B2	
B-	B3	
CCC+	Caa1	Substantial credit/default risk
CCC	Caa2	Extremely speculative
CCC-	Caa3	
CC	Ca	Vulnerable 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.

Glossary

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 quarterly performance relative to the benchmark. Buy and hold attribution may also understate emerging markets and small cap exposure due to limited pricing availability from Worldscope. Country, region, sector, and style allocations are as of the date one quarter prior to the reporting date, and the returns shown are for those segments throughout the quarter reported. Due to disclosure guidelines set by each investment manager, equity characteristics shown are as of the most recent date available. The following is the methodology for segment classification:

Sector - Attribution is calculated using the Industry Classification Benchmark (ICB), which is a detailed and comprehensive structure for sector and industry analysis. Stocks are classified by their primary sector, as defined by Worldscope 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 Worldscope 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 Worldscope. 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 subsequent 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 equipment versus the output that *could* be produced using the installed equipment.
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 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 Income - The difference between total personal income and personal income tax payments.
Personal Savings - Percentage of personal saving within the US as a percentage of disposable personal income.
Purchasing Managers Index - 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 monthly change in housing prices for 20 major metropolitan areas within the United States.

Glossary

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 dollar's value versus the EUR, GBP, CAD, SEK, CHF, and JPY.

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 quarters 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.

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 quarterly 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.

Glossary

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 provider's prior written approval. Index providers make no warranties and bear no liability with respect to the indices, any related data, their quality, 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. RVK 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 Plan's liabilities to changes in interest rates, as calculated by the Plan's 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 - RVK 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 quantitative data for over 1,273 plans which include corporate, endowment, foundation, public, and Taft Hartley plans, across 6 standard peer groups. Plan Sponsor Peer Groups are gross of fees.
Separate Account (SA) and Commingled Fund (CF) Peer Groups - RVK 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 quantitative data for over 1,009 investment management firms, 4,999 investment products, across 148 standard peer groups. Separate Account and Commingled Fund Peer Groups are gross of fees.
Mutual Fund (MF) Peer Groups - RVK utilizes the Lipper Mutual Fund Manager Peer Groups for peer comparison and rankings. The Lipper Manager Peer Group database includes performance and other quantitative data for over 636 investment management firms, 23,637 investment products, across 127 standard peer groups. Mutual Fund Peer Groups are net of fees.

Glossary

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 Value
100 - Lowest Statistical Value

Example: American Funds AMCP;R-4 (RAFEX) is ranked in the 4th percentile within the US Equity Large-Cap Growth Funds (MF) Peer Group for the Sharpe Ratio. Within the 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 - RVK 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 require 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. RVK defines a "large cash flow" as a net aggregate cash flow of ≥10% of the beginning-period portfolio market value or any cash flow that causes RVK 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.

RVK calculates performance beginning with the first full month following inception. Since inception performance may vary from manager reported performance due to RVK 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.

Region Attribution - Calculated using the Morgan Stanley Capital International (MSCI) region standards.

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-Squared 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.

Glossary

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

Asset Class	RVK Liquidity Rating
Liquid Investments	
T-Bills and Treasurys	100
Cash Equivalents	98
TIPS	95
US Large Cap Equity	95
Stable Value	91
Non-US Large Cap Equity	90
US Small Cap Equity	85
REITS	85
Non-US Small Cap Equity	85
Non-US Emerging Markets Equity	85
Core Fixed Income	85
Core Plus Fixed Income	80
Less Liquid Investments	
Fixed Income Plus Sector	50
Diversified Real Return	50
Absolute Return Strategies	35
Not Liquid Investments	
Core Real Estate	25
Core Plus Real Estate	15
Plus Only Real Estate	5
Private Equity Funds of Funds	5

Sector Attribution - Calculated using the Industry Classification Benchmark (ICB).

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.

Glossary

Time Period Abbreviations - QTD - Quarter-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. RVK categorizes the following asset classes as Alpha, Capital Appreciation, Capital Preservation, and Inflation:

Alpha	Capital Appreciation	Capital Preservation	Inflation
Absolute Return Strategies	Public Equity	Core Fixed Income	TIPS
Currency Overlay	Private Equity	CMBS Fixed Income	Core Real Estate
	Preferred Securities	Asset Backed Fixed Income	Real Return
	High Yield	Domestic Core Plus Fixed Income	Inflation Hedges
	Convertible Fixed Income	Mortgage Backed Fixed Income	REITS
	TALF Funds	International Developed Fixed Income	Commodities
	Distressed Debt	Cash Equivalents	
	Emerging Market Fixed Income	Stable Value	
	Value Added Real Estate		
	Opportunistic Real Estate		

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 fund's 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 the product's 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.

Glossary

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 product's 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.