

What's going on in the marketplace?

The month of April saw positive global equity returns after two consecutive months of declines. Gains were fueled by an improved global economic environment and continued positive corporate earnings. The markets performance was, more than likely, tempered by fears surrounding trade tariffs and the potential for all out trade wars to erupt. Performance was also mitigated by tensions between the U.S. and Russia and Syria. In all, fundamentals continue to look fairly good; however, geopolitical issues continue to inject volatility into the markets. From a fixed income perspective, concerns regarding inflation and future Fed rate hikes pushed U.S. Treasury yields higher.

U.S. Equities

U.S. equity markets gained 0.4% (Russell 3000) on the month. This was driven by the large cap segment which matched the return of the broad market (S&P 500 +0.4%). Small caps outperformed all segments and returned 0.9% during the period; however, mid-cap performance offset these gains by falling 26 basis points. Value outperformed growth (R3000V 0.4%, R3000G 0.3%).

The KRS U.S. Equity portfolio outperformed the Russell 3000 Index by 18 bps during the month (0.6% vs 0.4%). The portfolio's relative performance was driven by stock selection with several of the strategies adding value over their respective indices. In addition, an equity rebalance occurred during the month which generated value over the index during trading. Further from an allocation perspective, the overall portfolio was slightly smaller in terms of market cap and tilted slightly towards value which were both tailwinds during the period. The FYTD return for the U.S. equity portfolio now stands at 12.6% versus the benchmark's 13.1% return.

Non-U.S. Equities

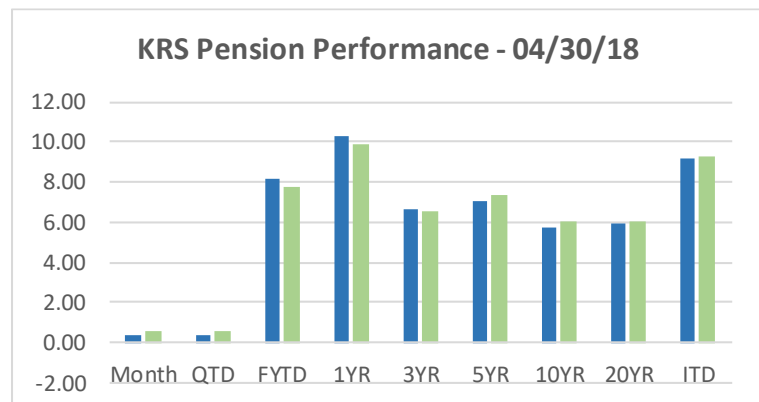
Non-U.S. equities provided strong positive performance during the period, having earned 1.5%. Developed markets provided strong returns approaching 1.9% (MSCI EAFE); however, emerging markets fell just over -0.5%. International markets echoed the same style bias of domestic markets; however, to a greater degree, with value outpacing growth by nearly 1.5%.

The KRS Non-U.S. Equity portfolio trailed its benchmark by 44 basis points during the period, gaining 1.1% versus the market return of 1.5%. Relative underperformance was driven primarily by stock selection, with three of the four active managers trailing the index on average by roughly 85 basis points. After ten months, the Non-U.S. equity portfolio has returned 14.1% versus the benchmark return of 12.4%.

Fixed Income

Different segments of the fixed income market were mixed in terms of performance during the period. The high yield and leverage loan markets gained 65 bps and 41 bps, respectively. While the U.S. aggregate and intermediate credit market segments fell 74 bps and 45 bps, respectively.

The KRS Fixed Income portfolio trailed its benchmark for the month by 23 bps (-0.2% vs -0.0%). Manager selection was mixed; however, having a large portion of the allocation in the intermediate credit space hampered relative performance as the segment was weaker during the period. For the fiscal year, the fixed income portfolio has returned 1.2% versus the benchmark return of 0.8%.



Alternative Assets

Three of the four sub-asset classes posted positive absolute returns for the month; however, two mandates trailed their respective benchmarks (Absolute Return: 0.0% vs 0.3%; Real Estate: -0.1% vs 0.0%). The Real Return, Private Equity, Absolute Return and Real Estate portfolios returned 0.5%, 0.2%, 0.0%, and -0.1%, respectively. This brought performance for the fiscal year for the Private Equity, Real Estate, Absolute Return, and Real Return portfolios to 11.9%, 8.7%, 5.0%, and 2.3%, respectively.

Cash

The cash portfolio performed inline during the month and returned 0.2%. The cash allocation finished the period at 3.2%. The portfolio has provided a 1.6% return so far during the fiscal year.

NOTES:

- Returns displayed are "net". For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager level returns are net of fees beginning with July 2011, and gross of fees for prior data.
- Individual plan allocation and performance (pg.3).
- Prior to January 1, 2014, the inception date for the Private Equity asset class was stated as 10/1/1990 for Pension Fund and 6/1/2001 for Insurance Fund. Prior to 07/01/02, the characteristics of the allocation, and the benchmark itself, were more closely aligned with Real Estate. As such, it is not appropriate to report this portion of the return stream within the Private Equity allocation, whose true inception date has been determined to be 07/01/02 based on funding the Systems' first private equity mandate. The portion of the original return streams that are no longer reported within the Private Equity allocation (Pension from 10/1/90 to 06/30/02; Insurance 06/01/01 to 06/30/02) are reported within the Fund Level performance figures.
- | | |
|---|---|
| Private Equity Composite (Pension)
Inception (07/01/02) to 06/30/11
60.00% S&P 1500 Composite Index
40.00% Barclays US Corporate High Yield Index
07/01/11 to 12/31/15
100.00% Russell 3000 Index + 4% (Qtr Lag)
01/01/16 to Present
100.00% Russell 3000 Index + 3% (Qtr Lag) | Private Equity Composite (Insurance)
Inception (07/01/02) to 06/30/11
80.00% S&P 1500 Composite Index
20.00% Barclays US Corporate High Yield Index
07/01/11 to 12/31/15
100.00% Russell 3000 Index + 4% (Qtr Lag)
01/01/16 to Present
100.00% Russell 3000 Index + 3% (Qtr Lag) |
|---|---|
- The Private Equity & Real Return Benchmarks, from one month returns up until five year returns, is equal to the performance of the associated KRS allocations. Given there is not appropriate benchmark to use for short term performance evaluation, this will allow greater focus on longer term returns, which is more appropriate given the long term nature of these investments.

<u>Pension Benchmark Composite 01/01/16 to 08/31/17</u> US Equity: Russell 3000 (25.6%) Non US Equity: MSCI AXCI Ex-US IMI (25.2%) Global Fixed Income: Barclays Universal Index (6.8%) Credit Fixed Income: Barclays US High Yield (7.2%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return: Allocation Specific (8.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.2%) <u>Pension Benchmark Composite 09/01/17 to Present</u> US Equity: Russell 3000 (23.6%) Non US Equity: MSCI AXCI Ex-US IMI (23.2%) Global Fixed Income: Barclays Universal Index (9.0%) Credit Fixed Income: Barclays US High Yield (9.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (8%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.2%)	<u>Insurance Benchmark Composite 01/01/16 to 08/31/17</u> US Equity: Russell 3000 (26.5%) Non US Equity: MSCI AXCI Ex-US IMI (26.5%) Global Fixed Income: Barclays Universal Index (6.0%) Credit Fixed Income: Barclays US High Yield (6.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return: Allocation Specific (8.0%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.0%) <u>Insurance Benchmark Composite 09/01/17 to Present</u> US Equity: Russell 3000 (24.5%) Non US Equity: MSCI AXCI Ex-US IMI (24.5%) Global Fixed Income: Barclays Universal Index (8.0%) Credit Fixed Income: Barclays US High Yield (8.0%) Real Estate: NCREIF ODCE (5.0%) Absolute Return: HFRI Diversified FOF (10.0%) Real Return<5yrs: Actual Performance Real Return>5yrs: CPI+3% (8%) Private Equity<5Yrs: Actual Performance Private Equity>5Yrs: Russell 3000 Index+3% (10.0%) Cash: Cit Grp 3-mos Treasury Bill (2.0%)
---	---

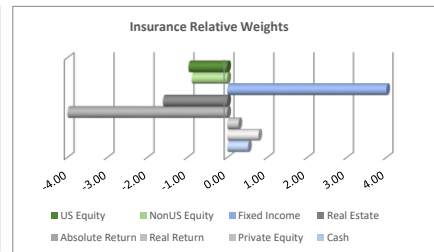
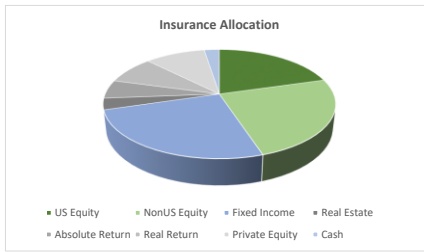
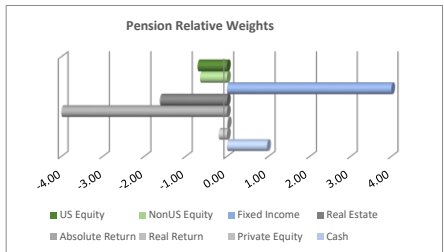
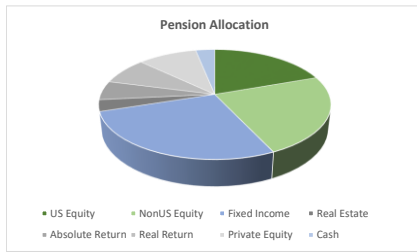
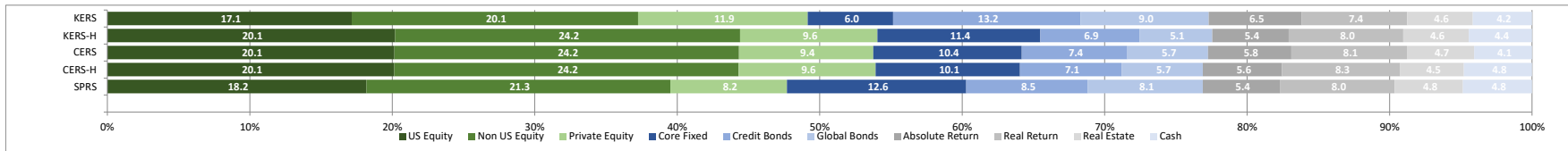
**Fund composite benchmark is a roll-up of individual plans, which may differ from one another.

KENTUCKY RETIREMENT SYSTEMS - PENSION FUND - NET RETURNS - 04/30/18

Structure	Benchmark	Inception	Market Value	% of Total	Month		QTD		Fiscal YTD		1 Year		3 Years		5 Years		10 Years		20 Years		ITD	
					KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark
TOTAL FUND	KY Ret. Blended Index	4/1/1984	12,331,023,817.19	100.00	0.37	0.53	0.37	0.53	8.12	7.73	10.25	9.92	6.66	6.50	7.10	7.32	5.72	6.03	5.94	6.04	9.17	9.29
US PUBLIC	KY Domestic Equity Blend	4/1/1984	2,415,629,492.03	19.59	0.56	0.38	0.56	0.38	10.50	10.90	12.55	13.05	9.63	10.20	12.13	12.75	8.90	9.24	6.86	6.91	11.31	11.34
EQUITY NON US	KY Ret.Int'l Eq. Blended Index	7/1/2000	2,879,408,403.52	23.35	1.09	1.53	1.09	1.53	14.12	12.42	17.89	16.53	6.76	5.57	6.65	5.97	3.36	2.92			3.46	3.81
PUBLIC EQUITY	Global Equity Blended Index	4/1/1984	5,295,037,895.55	42.94	0.84	0.95	0.84	0.95	12.37	11.67	15.29	14.78	7.90	7.36	9.00	8.79	6.08	5.74	5.79	5.52	10.65	10.49
FIXED INCOME	KY Ret. Fixed Blended Index	4/1/1984	3,337,112,187.65	27.06	-0.24	-0.01	-0.24	-0.01	1.19	0.78	1.83	1.63	3.80	4.50	3.32	3.60	4.91	4.75	5.54	5.54	7.53	7.34
REAL RETURN	PENSION REAL RETURN CUSTOM BM	7/1/2011	989,397,900.46	8.02	0.53	0.53	0.53	0.53	2.28	2.28	2.68	2.68	2.85	2.85	1.65	1.65					3.85	2.63
ABSOLUTE RETURN	HFRF Fund of Funds Diversified Index - 1 Month Ar	4/1/2010	686,625,804.71	5.57	0.03	0.30	0.03	0.30	4.97	4.92	4.94	4.90	1.83	1.73	3.91	3.36					4.17	3.10
REAL ESTATE	NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	7/1/1984	416,449,019.87	3.38	-0.07	0.00	-0.07	0.00	8.65	5.04	10.93	6.66	9.98	9.42	9.18	10.52	8.09	4.07	6.30	7.93	6.06	6.43
PRIVATE EQUITY	Russell 3000 + 3%(Qtr Lag)	7/1/2002	1,208,106,119.62	9.80	0.22	0.22	0.22	0.22	11.87	11.87	17.04	17.04	11.63	11.63	13.00	13.00	8.06	13.38			11.13	11.79
CASH ACCOUNT	Citigroup Treasury Bill-3 Month	1/1/1988	391,402,723.22	3.17	0.15	0.13	0.15	0.13	1.59	1.02	1.75	1.16	1.03	0.54	0.77	0.34	0.81	0.31	2.37	1.91	3.60	3.15

KENTUCKY RETIREMENT SYSTEMS - PENSION FUND - PLAN NET RETURNS - 04/30/18

Plan	Benchmark	Inception	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD									
KERS	KY Ret. KERS Plan Index		2,039,143,337.52	100.00	0.37	0.51	(1.80)	-2.01	7.19	6.93	9.29	8.99	5.98	6.22	6.68	6.98	5.52	5.87	5.84	5.96	9.11	9.24
KERS-H	KY Ret. KERS Haz Plan Index		648,098,761.78	100.00	0.38	0.53	(2.16)	-2.55	8.24	8.04	10.39	10.26	6.79	6.50	7.16	7.27	5.76	6.01	5.96	6.03	9.18	9.28
CERS	KY Ret. CERS Plan Index		7,037,126,084.09	100.00	0.37	0.53	(2.19)	-2.55	8.29	8.04	10.42	10.24	6.79	6.48	7.18	7.27	5.76	6.01	5.96	6.03	9.19	9.28
CERS-H	KY Ret. CERS Haz Plan Index		2,347,307,022.18	100.00	0.37	0.53	(2.17)	-2.55	8.28	8.04	10.42	10.25	6.82	6.48	7.19	7.27	5.77	6.01	5.97	6.03	9.19	9.28
SPRS	KY Ret. SPRS Plan Index		259,348,600.18	100.00	0.34	0.49	(2.01)	-2.22	7.31	7.29	9.30	9.33	5.73	6.07	6.53	6.99	5.44	5.87	5.80	5.96	9.09	9.24



KENTUCKY RETIREMENT SYSTEMS - INSURANCE FUND - NET RETURNS - 04/30/18

Structure	Benchmark	Inception	Market Value	% of Total	Month		QTD		Fiscal YTD		1 Year		3 Years		5 Years		10 Years		20 Years		ITD	
					KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark	KRS	Benchmark
TOTAL FUND	KY Ins. Blended Index	4/1/1987	5,113,777,244.89	100.00	0.37	0.52	0.37	0.52	8.42	8.12	10.51	10.30	6.92	6.79	7.03	7.59	4.90	5.43	5.29	5.55	7.49	7.86
US PUBLIC	KY Domestic Equity Blend	7/1/1992	1,049,819,073.31	20.53	0.54	0.38	0.54	0.38	10.46	10.90	12.53	13.05	9.98	10.20	12.31	12.75	8.77	9.06	6.64	6.36	9.66	9.53
EQUITY NON US	KRS Ins.Int'l Eq Blend	4/1/2000	1,248,350,386.80	24.41	1.09	1.53	1.09	1.53	14.00	12.42	17.78	16.53	6.68	5.57	6.51	5.97	2.96	2.57			3.45	2.95
PUBLIC EQUITY	Global Equity Blended Index	7/1/1992	2,298,169,460.11	44.94	0.84	0.96	0.84	0.96	12.27	11.68	15.20	14.80	8.11	7.42	9.14	8.81	5.82	5.52	5.60	5.20	8.83	8.61
FIXED INCOME	KRS Ins. Fixed Blended Index	7/1/1992	1,301,717,205.68	25.46	-0.26	-0.01	-0.26	-0.01	1.14	0.78	1.71	1.63	3.70	4.50	2.84	3.60	4.59	4.64	5.94	5.91	6.36	6.32
REAL RETURN	INSURANCE REAL RET CUSTOM BM	7/1/2011	423,174,002.99	8.28	0.38	0.38	0.38	0.38	2.18	2.18	2.54	2.54	2.68	2.68	1.42	1.42					3.55	2.70
ABSOLUTE RETURN	HFRF Fund of Funds Diversified Index - 1 Month Ar	4/1/2010	278,699,386.36	5.45	0.03	0.30	0.03	0.30	5.01	4.92	4.91	4.90	1.85	1.73	3.91	3.36					4.10	3.10
REAL ESTATE	NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	5/1/2009	173,371,397.53	3.39	-0.07	0.00	-0.07	0.00	8.60	5.04	10.99	6.66	9.94	9.42	9.23	10.52					9.12	5.86
PRIVATE EQUITY	Russell 3000 + 3% (Qtr Lag)	7/1/2002	510,229,506.78	9.98	0.23	0.23	0.23	0.23	13.40	13.40	17.83	17.83	14.19	14.19	15.09	15.09	10.24	12.69			10.07	11.20
CASH ACCOUNT	Citigroup Treasury Bill-3 Month	7/1/1992	128,679,166.87	2.52	0.14	0.13	0.14	0.13	1.26	1.02	1.42	1.16	0.74	0.54	0.53	0.34	0.50	0.31	2.09	1.91	2.65	2.51

KENTUCKY RETIREMENT SYSTEMS - INSURANCE FUND - PLAN NET RETURNS - 04/30/18

Plan	Benchmark	Inception	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD									
KERS INS	KY Ins. KERS Plan Index		831,978,792.05	100.00	0.39	0.55	(2.41)	-2.39	7.66	8.22	9.55	10.27	6.50	6.60	6.61	7.38	4.70	5.33	5.19	5.50	7.42	7.82
KERS-H INS	KY Ins. KERS Haz Plan Index		512,109,449.35	100.00	0.35	0.52	(2.19)	-2.43	8.29	8.19	10.34	10.32	6.82	6.63	7.01	7.41	4.89	5.35	5.29	5.51	7.49	7.83
CERS INS	KY Ins. CERS Plan Index		2,321,095,504.21	100.00	0.37	0.52	(2.04)	-2.43	8.54	8.20	10.66	10.37	6.97	6.67	7.10	7.44	4.94	5.36	5.31	5.51	7.50	7.83
CERS-H INS	KY Ins. CERS Haz Plan Index		1,259,861,552.74	100.00	0.37	0.52	(2.03)	-2.43	8.61	8.20	10.74	10.37	7.06	6.67	7.14	7.44	4.96	5.36	5.32	5.51	7.51	7.83
SPRS INS	KY Ins. SPRS Plan Index		188,731,948.33	100.00	0.37	0.52	(2.01)	-2.43	8.65	8.20	10.78	10.37	7.05	6.69	7.13	7.45	4.95	5.37	5.32	5.51	7.51	7.83

