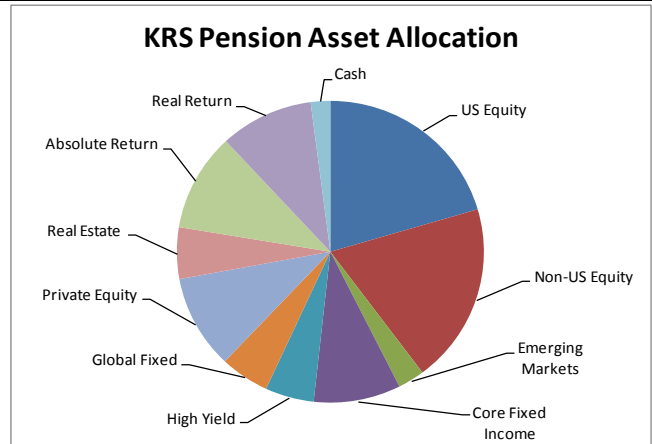


**What’s going on in the marketplace?**

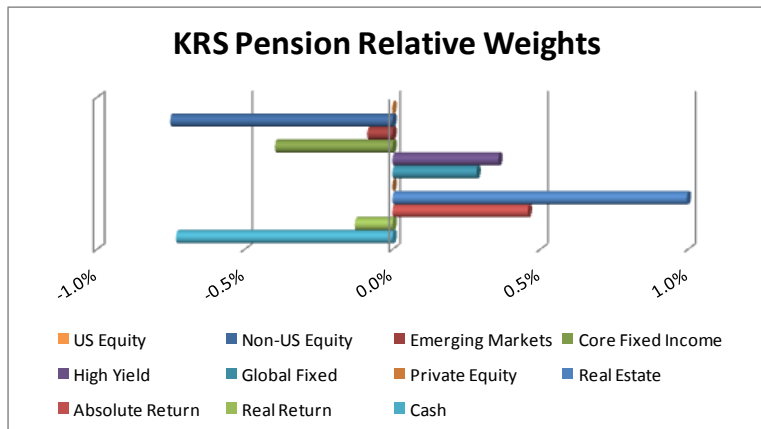
August was a difficult month for both the U.S. and international markets. Equities were steady for most of the month, dropping off near month end due to weak Chinese economic data and fears of slowed global economic growth. Losses were consistent amongst all major domestic and global indices. Large cap U.S. equities fell -6.03% in August (S&P 500 Index) while domestic small cap equities fell -6.28% (Russell 2000 Index). International markets fared even worse than those domestically. Developed international equities fell -7.35% (MSCI EAFE Index), while emerging market equities fell -9.01% (MSCI Emerging Market Index).

Fixed income also suffered losses in August. The Barclays U.S. Aggregate Bond Index was down -0.14% for the month. This decline was mostly attributed to poor performance of credit sectors within the market. Much like in the equity market, much of the poor performance in fixed income came at the end of the month as investors moved into perceived safe-haven assets. Despite the increased volatility and poor performance of most major asset classes, U.S. economic reports were encouraging. GDP was revised upward from 2.3% to a strong 3.7% (annualized); this was primarily due to increases in consumer spending growth.



	Aug	1-Yr	3-Yr	5-Yr	10-Yr
Total Fund	-3.29	-1.92	7.25	8.02	5.43
Benchmark	-3.36	-0.96	7.96	8.51	5.69

**What added value this month?**



**PENSION** – From a manager selection standpoint the pension portfolio was able to add value in the U.S. Equity, Non-U.S. Equity, and Real Estate portfolios. The Non U.S. Equity portfolio was able to offer 36 basis points of downside protection against the MSCI ACWI Ex Us Index. Within the Non U.S. Equity portfolio, Lazard outperformed the benchmark by 92 basis points, making it the highest performer in the portfolio. The U.S. Equity portfolio also offered some quality protection, providing 20 basis points of relative outperformance. The Real Estate portfolio protected against the downside as well, outperforming the benchmark by 3 basis points.

From an allocation standpoint, the portfolio benefited from an underweight to Non U.S. Equity and Emerging Markets due to the relatively weak performance of their respective benchmarks. The pension portfolio also benefited from an overweight to Real Estate and Absolute return due to the relatively strong performance of their benchmarks. In total, the pension portfolio returned -3.29% in August versus the benchmark return of -3.36%.

**INSURANCE** – From a manager selection standpoint the insurance portfolio was able to add value in the Non U.S. Equity, U.S. Equity, and Real Estate portfolios. The Non U.S. Equity portfolio was the best relative performer from a manager

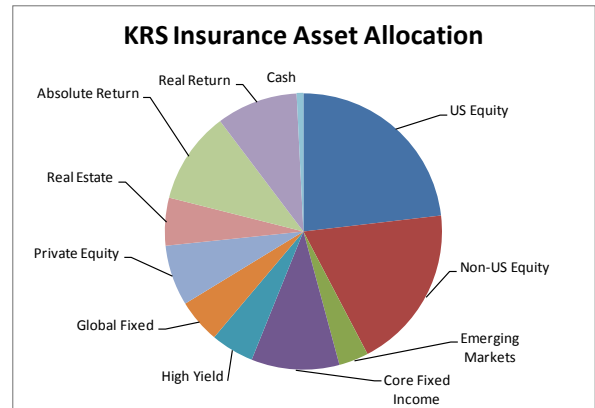
selection perspective, adding 35 basis points over its benchmark. The U.S. Equity and Real Estate portfolios also outperformed from a relative perspective by 13 and 4 basis points respectively.

From an allocation standpoint, the insurance portfolio benefited from an overweight to Real Estate and Absolute Return due to the relatively strong performance of their respective benchmarks. Like the pension fund, the Insurance portfolio benefited from an underweight to Non U.S. Equity and Emerging Markets. In total, the insurance portfolio earned -3.50% for the month of August compared to the benchmark return of -3.44%.

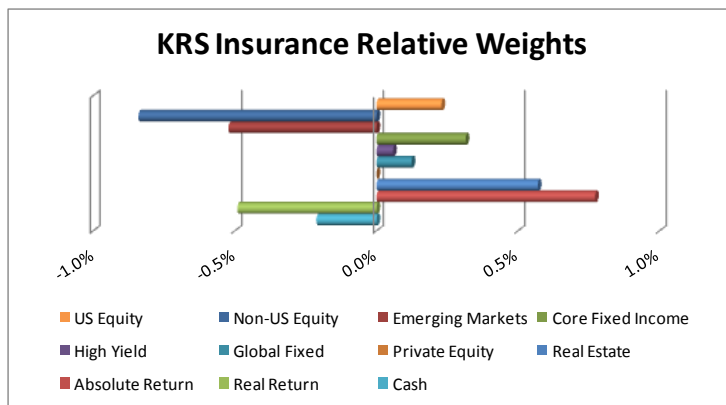
**What detracted this month?**

**PENSION** – From a manager selection standpoint the biggest detractor from performance came from the Real Return portfolio, which fell -2.83% for the month, lagging its benchmark by 104 basis points. Absolute Return, Emerging Markets, and Fixed Income also detracted value from a manager selection standpoint underperforming their respective benchmarks by 31, 20, and 15 basis points.

From an allocation perspective the pension portfolio suffered most from an underweight to the Fixed Income portfolio as indicated by the relatively strong performance of the Fixed Income portfolio benchmark.



	Aug	1-Yr	3-Yr	5-Yr	10-Yr
Total Fund	-3.50	-2.27	6.68	8.10	4.80
Benchmark	-3.44	-0.54	8.05	9.63	5.33



**INSURANCE** – From a manager selection standpoint the Real Return portfolio detracted the most value, underperforming the benchmark by 95 basis points. The Emerging Market, Fixed Income, and Absolute Return portfolios also detracted value, underperforming their benchmarks by 23, 11, and 27 basis points, respectively. All other portfolios had relative outperformance for the month.

From an Allocation Standpoint, the insurance portfolio suffered from an overweight to U.S. Equity as indicated by its relatively poor performing benchmark. The insurance portfolio suffered from an underweight to Fixed Income and Real Return, which had relatively strong performing benchmarks for the month.

**NOTES:**

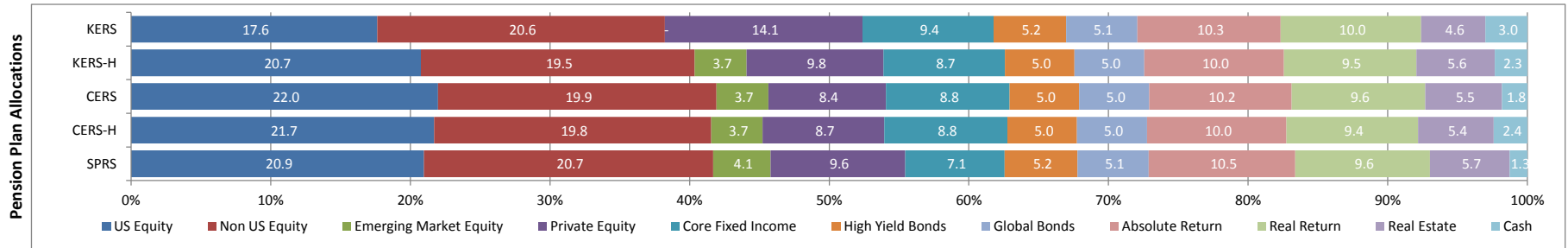
- Returns displayed are “net”. For the purposes of this report, total fund return information is net of fees and expenses, with audited data beginning in July 2011. At the manager level (detailed return sheets pgs.4-5), returns are net of fees beginning with July 2011, and gross of fees for prior data.

- 2) Individual plan allocation and performance (pg.6).
- 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.
- |  |   |
|--|---|
| <p>4) Private Equity Composite (Pension)<br/>         Inception (07/01/02) to 06/30/11<br/>         60.00% S&amp;P 1500 Composite Index<br/>         40.00% Barclays US Corporate High Yield Index<br/> <b>07/01/11 to Present</b><br/> <b>100.00% Russell 3000 Index + 4% (Qtr Lag)</b></p> | <p>Private Equity Composite (Insurance)<br/>         Inception (07/01/02) to 06/30/11<br/>         80.00% S&amp;P 1500 Composite Index<br/>         20.00% Barclays US Corporate High Yield Index<br/> <b>07/01/11 to Present</b><br/> <b>100.00% Russell 3000 Index + 4% (Qtr Lag)</b></p> |
|--|---|
- 5) The Private Equity Benchmark, from one month returns up until five year returns, is equal to the performance of the KRS Private Equity allocation. 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 private equity investments.





KENTUCKY RETIREMENT SYSTEMS - PENSION & INSURANCE - PLAN PERFORMANCE & ALLOCATION - 08/31/15



KRS - PENSION

	Month	FYTD	1 YR	3 YR	5 YR	10 YR	ITD
<b>KERS</b>	<b>-2.90</b>	<b>-2.72</b>	<b>-0.82</b>	<b>7.59</b>	<b>8.22</b>	<b>5.53</b>	<b>9.21</b>
KY Ret. KERS Plan Index	-2.80	-2.62	-0.43	8.07	8.58	5.72	9.34
<b>KERS- H</b>	<b>-3.29</b>	<b>-3.39</b>	<b>-2.11</b>	<b>7.21</b>	<b>8.00</b>	<b>5.42</b>	<b>9.17</b>
KY Ret. KERS Haz Plan Index	-3.30	-3.36	-1.76	7.80	8.42	5.64	9.31
<b>CERS</b>	<b>-3.40</b>	<b>-3.49</b>	<b>-2.21</b>	<b>7.16</b>	<b>7.96</b>	<b>5.41</b>	<b>9.17</b>
KY Ret. CERS Plan Index	-3.38	-3.42	-1.93	7.76	8.39	5.63	9.31
<b>CERS- H</b>	<b>-3.37</b>	<b>-3.46</b>	<b>-2.14</b>	<b>7.17</b>	<b>7.97</b>	<b>5.41</b>	<b>9.17</b>
KY Ret. CERS Haz Plan Index	-3.36	-3.41	-1.89	7.77	8.40	5.63	9.31
<b>SPRS</b>	<b>-3.43</b>	<b>-3.56</b>	<b>-2.29</b>	<b>7.15</b>	<b>7.95</b>	<b>5.40</b>	<b>9.17</b>
KY Ret. SPRS Plan Index	-3.31	-3.37	-1.80	7.77	8.40	5.63	9.31

KRS - INSURANCE

	Month	FYTD	1 YR	3 YR	5 YR	10 YR	ITD
<b>KERS INS</b>	<b>-3.59</b>	<b>-3.56</b>	<b>-2.76</b>	<b>6.34</b>	<b>7.90</b>	<b>4.70</b>	<b>7.26</b>
KY Ins. KERS Plan Index	-3.64	-3.62	-2.12	7.60	9.35	5.20	7.69
<b>KERS - H INS</b>	<b>-3.54</b>	<b>-3.53</b>	<b>-2.36</b>	<b>6.73</b>	<b>8.13</b>	<b>4.82</b>	<b>7.30</b>
KY Ins. KERS Haz Plan Index	-3.53	-3.53	-1.86	7.70	9.41	5.22	7.70
<b>CERS INS</b>	<b>-3.49</b>	<b>-3.49</b>	<b>-2.17</b>	<b>6.75</b>	<b>8.15</b>	<b>4.82</b>	<b>7.30</b>
KY Ins. CERS Plan Index	-3.45	-3.46	-1.66	7.77	9.46	5.24	7.70
<b>CERS - H INS</b>	<b>-3.45</b>	<b>-3.45</b>	<b>-2.12</b>	<b>6.76</b>	<b>8.15</b>	<b>4.83</b>	<b>7.30</b>
KY Ins. CERS Haz Plan Index	-3.44	-3.46	-1.65	7.77	9.46	5.25	7.70
<b>SPRS INS</b>	<b>-3.42</b>	<b>-3.42</b>	<b>-2.13</b>	<b>6.76</b>	<b>8.15</b>	<b>4.83</b>	<b>7.30</b>
KY Ins. SPRS Plan Index	-3.42	-3.44	-1.57	7.80	9.47	5.25	7.71

