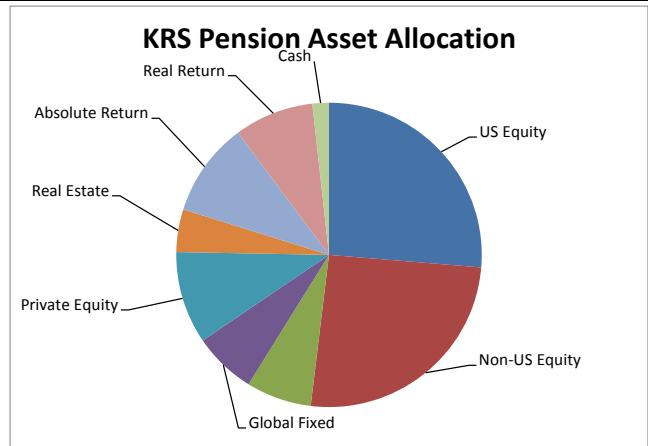


**What’s going on in the marketplace?**

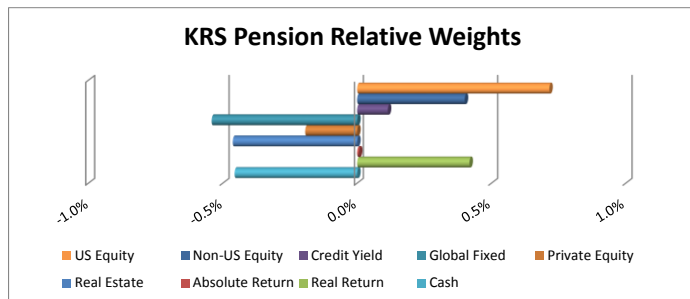
Markets quietly continued their “risk on” rally from July, with traditionally higher risk asset classes having stronger performance for the month. Developed U.S. equities saw improving returns moving down the cap spectrum, with the leader being small caps, which returned 1.77% in August (Russell 2000 Index). Mid-caps returned 0.50% (S&P 400 Midcap Index) while large caps were basically flat, returning 0.14% (S&P 500 Index).

Developed international equities were flat for the month, returning 0.08% (MSCI EAFE Index). Emerging markets was the highest performing asset class, returning 2.52% in August. In total, the MSCI ACWI Ex US Index (composed of roughly 80% developed international stocks and 20% emerging market stocks) returned 0.65%.



	Aug	1-Yr	3-Yr	5-Yr	10-Yr
Total Fund	0.37	6.04	6.14	6.82	5.07
Benchmark	0.48	6.34	6.28	7.09	5.44

The fixed income market had mixed results in August. The Barclays Aggregate Bond index returned -0.11% due to rising interest rates. High yield bonds are not as influenced by interest rates and were able to fare much better, returning 2.09% for the month.



best performer, returning 3.27% higher than its benchmark.

**What added value this month?**

**PENSION** – From a manager selection standpoint the pension portfolio was able to add relative value in two asset classes, with the Real Return portfolio leading the pack by adding 50 basis points of relative outperformance against a negative benchmark. The U.S. Equity portfolio also outperformed for the month, returning 3 basis points higher than its benchmark. Within the U.S. Equity portfolio the River Road’s Focused Absolute Value account was the

From an allocation standpoint the pension portfolio benefited from an overweight to Non U.S. Equity due to the relatively strong performance of the ACWI Ex US IMI Index. There were no other factors that added value to the pension portfolio from an allocation standpoint for the month. In total, the pension portfolio returned 0.37% in August, underperforming the benchmark return of 0.48%.

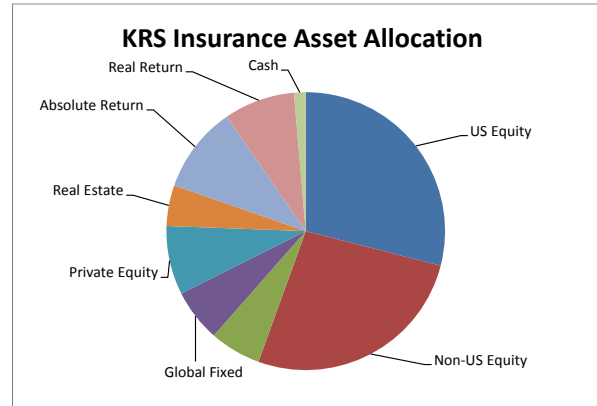
**INSURANCE** –The insurance portfolio roughly followed the same themes as the pension portfolio in August. The Real Return portfolio offered the greatest downside protection, returning 0.16% versus a benchmark return of -0.23%. The U.S. Equity portfolio also added value from a manager selection standpoint, outperforming the benchmark by 0.05% for the month of August.

From an allocation standpoint, the insurance portfolio benefited from an overweight to Fixed Income due to its relatively strong benchmark performance. There were no other allocation themes that added significant value to the insurance fund for the month. In total, the Insurance portfolio returned 0.35% in August compared to the benchmark return of 0.46%.

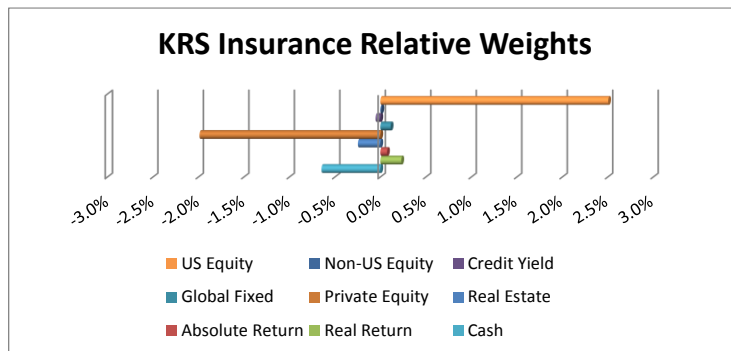
**What detracted this month?**

**PENSION** – From a manager selection standpoint the Absolute Return portfolio detracted the most value, underperforming its benchmark by 101 basis points in August. Fixed income underperformed by 24 basis points due to active managers struggling to keep with the strong high yield returns. Non U.S. Equity also struggled to keep up with its benchmark, underperforming by 9 basis points for the month of August.

From an allocation perspective, the pension portfolio suffered from the overweight to the U.S. Equity and Real Return portfolios due to the weak performance of their benchmarks when compared to the entire pension fund portfolio performance. The pension fund also suffered from an underweight to Fixed Income due to the relatively strong performance of the Fixed Income portfolio benchmark.



	Aug	1-Yr	3-Yr	5-Yr	10-Yr
Total Fund	0.35	6.74	6.04	6.58	4.34
Benchmark	0.46	6.81	6.57	7.20	4.88



**INSURANCE** – Like in the pension portfolio, the Absolute Return portfolio struggled to keep up with its strong benchmark performance, falling short by 108 basis points for the month. Fixed Income also failed to keep up with its benchmark, underperforming 32 basis points.

From an allocation perspective, the insurance portfolio suffered from an overweight to Real Return and Public Equity due to their relatively weak market performance. There were no other allocation themes that detracted from value in August.

and Public Equity due to their relatively weak market performance. There were no other allocation themes that detracted from value in August.

**NOTES:**

- Returns displayed are “net”. For the purposes of this report, total fund “net” 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.
- Individual plan allocation and performance (pg.6).
- 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) | Private Equity Composite (Insurance) |
| Inception (07/01/02) to 06/30/11   | Inception (07/01/02) to 06/30/11     |
| 60.00% S&P 1500 Composite Index    | 80.00% 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)**

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)**

- 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.

6) Pension Benchmark Composite 01/01/14 to 12/31/15  
US Equity: Russell 3000 (20.5%)  
Non US Equity: MSCI AXCI Ex-US (20.0%)  
Emerging Market: MSCI Emerging Markets (2.9%)  
Fixed Income: Barclays Universal Index (19.3%)  
Real Estate: NCREIF ODCE (4.5%)  
Absolute Return: HFRI Diversified FOF (10.0%)  
Real Return: Allocation Specific (10.0%)  
Private Equity<5Yrs: Actual Performance  
Private Equity>5Yrs: Russell 3000 Index+4% (10.0%)  
Cash: Cit Grp 3-mos Treasury Bill (2.8%)

Insurance Benchmark Composite 01/01/14 to 12/31/15  
US Equity: Russell 3000 (20.0%)  
Non US Equity: MSCI AXCI Ex-US (20.0%)  
Emerging Market: MSCI Emerging Markets (4.0%)  
Fixed Income: Barclays Universal Index (20.0%)  
Real Estate: NCREIF ODCE (5.0%)  
Absolute Return: HFRI Diversified FOF (10.0%)  
Real Return: Allocation Specific (10.0%)  
Private Equity<5Yrs: Actual Performance  
Private Equity>5Yrs: Russell 3000 Index+4% (10.0%)  
Cash: Cit Grp 3-mos Treasury Bill (1.0%)

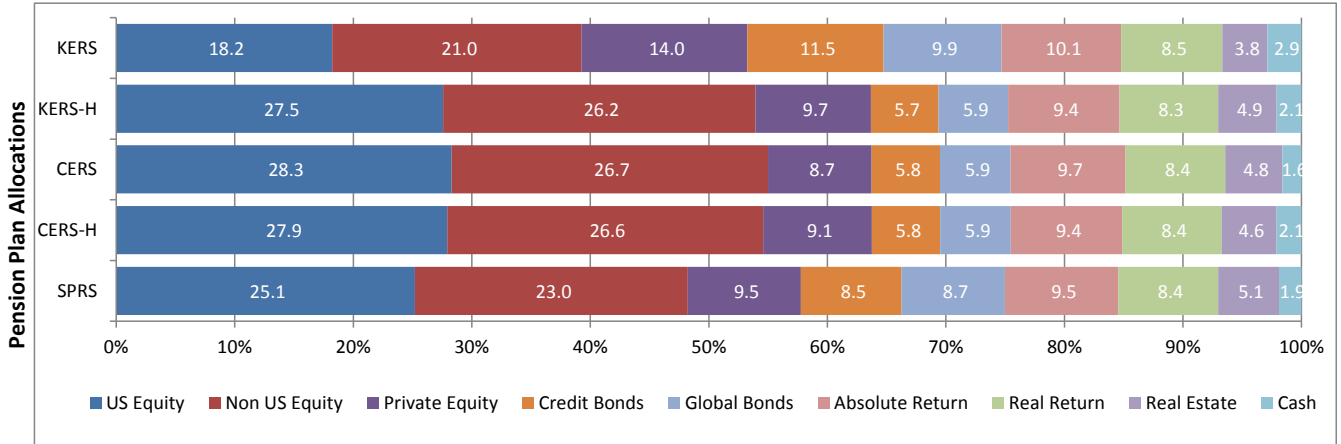
Pension Benchmark Composite 01/01/16 to Present  
US Equity: Russell 3000 (25.6%)  
Non US Equity: MSCI AXCI Ex-US IMI (25.2%)  
Global Fixed Income: Barclays Universal Index (6.8%)  
Credit Fixed Income: Barclays US High Yield (7.2%)  
Real Estate: NCREIF ODCE (5.0%)  
Absolute Return: HFRI Diversified 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%)

Insurance Benchmark Composite 01/01/16 to Present  
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%)

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

**KRS - PENSION**

	Market Value	Month	FYTD	1 YR	3 YR	5 YR	10 YR	ITD
<b>KERS</b>	<b>\$ 1,939,885,185.97</b>	<b>0.39</b>	<b>2.69</b>	<b>4.84</b>	<b>6.06</b>	<b>6.78</b>	<b>5.05</b>	<b>9.07</b>
KY Ret. KERS Plan Index		0.54	2.73	6.25	6.24	7.09	5.45	9.22
<b>KERS- H</b>	<b>\$ 545,214,529.24</b>	<b>0.36</b>	<b>2.87</b>	<b>6.23</b>	<b>6.19</b>	<b>6.84</b>	<b>5.07</b>	<b>9.08</b>
KY Ret. KERS Haz Plan Index		0.46	3.13	6.08	6.00	6.93	5.37	9.19
<b>CERS</b>	<b>\$ 6,251,435,872.74</b>	<b>0.36</b>	<b>3.15</b>	<b>6.31</b>	<b>6.16</b>	<b>6.83</b>	<b>5.07</b>	<b>9.08</b>
KY Ret. CERS Plan Index		0.47	3.18	6.13	5.99	6.93	5.37	9.19
<b>CERS- H</b>	<b>\$ 2,049,953,412.74</b>	<b>0.36</b>	<b>3.13</b>	<b>6.41</b>	<b>6.19</b>	<b>6.85</b>	<b>5.08</b>	<b>9.08</b>
KY Ret. CERS Haz Plan Index		0.47	3.16	6.11	5.99	6.93	5.37	9.19
<b>SPRS</b>	<b>\$ 215,921,016.27</b>	<b>0.39</b>	<b>2.63</b>	<b>4.83</b>	<b>5.61</b>	<b>6.52</b>	<b>4.91</b>	<b>9.03</b>
KY Ret. SPRS Plan Index		0.50	2.97	6.25	6.02	6.95	5.38	9.20



**KRS - INSURANCE**

	Market Value	Month	FYTD	1 YR	3 YR	5 YR	10 YR	ITD
<b>KERS INS</b>	<b>\$ 678,391,177.42</b>	<b>0.38</b>	<b>3.30</b>	<b>6.58</b>	<b>5.66</b>	<b>6.34</b>	<b>4.23</b>	<b>7.24</b>
KY Ins. KERS Plan Index		0.48	3.38	6.67	6.14	6.96	4.76	7.64
<b>KERS - H INS</b>	<b>\$ 448,320,340.07</b>	<b>0.35</b>	<b>3.12</b>	<b>6.63</b>	<b>6.04</b>	<b>6.59</b>	<b>4.35</b>	<b>7.28</b>
KY Ins. KERS Haz Plan Index		0.47	3.26	6.63	6.21	7.01	4.78	7.65
<b>CERS INS</b>	<b>\$ 1,956,081,246.22</b>	<b>0.35</b>	<b>3.07</b>	<b>6.75</b>	<b>6.11</b>	<b>6.63</b>	<b>4.37</b>	<b>7.28</b>
KY Ins. CERS Plan Index		0.46	3.17	6.62	6.25	7.03	4.79	7.65
<b>CERS - H INS</b>	<b>\$ 1,081,694,647.01</b>	<b>0.35</b>	<b>3.06</b>	<b>6.83</b>	<b>6.15</b>	<b>6.65</b>	<b>4.38</b>	<b>7.29</b>
KY Ins. CERS Haz Plan Index		0.46	3.17	6.61	6.26	7.04	4.79	7.65
<b>SPRS INS</b>	<b>\$ 164,301,035.92</b>	<b>0.35</b>	<b>3.05</b>	<b>6.71</b>	<b>6.11</b>	<b>6.62</b>	<b>4.37</b>	<b>7.28</b>
KY Ins. SPRS Plan Index		0.46	3.17	6.62	6.27	7.05	4.80	7.65

