

What’s going on in the marketplace?

The rise in global markets during the month of October was driven by an easing of investor concerns that centered primarily on trade and global economics. The upturn in global markets was also due to renewed U.S. and China trade talks and the continued accommodative policies of some central banks. Stocks rose higher on the back of generally positive economic and earnings results. Non-U.S. equity markets outpaced U.S. markets. Further, U.S. credit markets, though positive, underperformed their international counterparts.

U.S. Equities

U.S. markets gained approximately 2.0% during the month per the Russell 3000. All market cap segments produced positive returns led by small caps, which earned approximately 2.6%. Large caps returned roughly 2.2%, and mid-caps trailed, gaining just over 1.1%. Growth outpaced value by 1.3% (R3000G 2.8%, R3000V 1.5%).

During the month, the KRS U.S. Equity portfolio underperformed the Russell 3000 Index by 16 bps (2.0% vs 2.2%). Relative performance was driven by weakness in the internal factor based portfolio which tilts towards value and to the smaller portion of the large cap universe, two headwinds during the month. Allocation had little effect on relative performance as the overweight to both small and mid-caps offset one another as the best and worst performing market cap segments, respectively.

Non-U.S. Equities

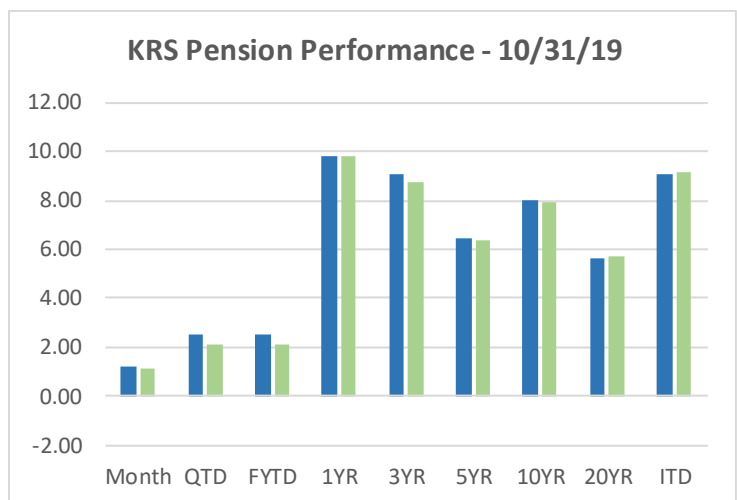
Non-U.S. equities markets performed well during the period gaining 3.6% per the MSCI ACWI-Ex US Index. Both developed and emerging markets performed well; however, emerging markets outperformed their developed counterparts, 4.2% compared to 3.3%.

The KRS Non-U.S. Equity portfolio gained 3.6% during the month, performing in line with the benchmark. Stock selection was mixed with two of the four active mandates outperforming their index. Allocation decisions had little effect on the period’s relative performance.

Fixed Income

The fixed income markets were mixed but mostly positive during the month. The intermediate credit, aggregate, and high yield markets returned 0.6%, 0.4%, and 0.3%, respectively. The leverage loan market dropped -0.5%.

The KRS Specialty Credit allocation was relatively flat versus a benchmark that fell -0.1%. Relative strategy was generally positive, with only one trailing its respective benchmark. The KRS Core Fixed income portfolio gained 35 bps versus the Bloomberg Barclays Aggregate return of 0.3%. Relative performance was bolstered by the intermediate credit mandate, which gained 60 bps.



Alternative Assets

The diversifying strategy group gained 0.5% during the month. Three of the four major portfolio segments provided positive returns. The Real Estate allocation led the way, earning nearly 1.8%. The Opportunistic and Absolute Return portfolios followed, returning 0.9% and 0.4%, respectively. The Real Return portion of the portfolio lost -12 bps during the period. The Private Equity portion of the portfolio provided a return of 13 bps on the month.

Cash

The cash portfolio performed inline during the month (0.2% vs 0.2%). The cash allocation finished the period above target (3.3%) in part due to the continued transitioning of assets to the newly approved asset allocations. The overweight had a slightly adverse effect on the fund's relative performance as most asset classes outperformed cash during the period.

NOTES:

- 1) 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.
- 2) Individual plan allocation and performance (pg.4).
- 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.
- 4)

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	20.00% Barclays US Corporate High Yield Index
07/01/11 to 12/31/15	07/01/11 to 12/31/15
100.00% Russell 3000 Index + 4% (Qtr Lag)	100.00% Russell 3000 Index + 4% (Qtr Lag)
01/01/16 to Present	01/01/16 to Present
100.00% Russell 3000 Index + 3% (Qtr Lag)	100.00% Russell 3000 Index + 3% (Qtr Lag)
- 5) 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>	<u>Insurance Benchmark Composite 01/01/16 to 08/31/17</u>
US Equity: Russell 3000 (25.6%)	US Equity: Russell 3000 (26.5%)
Non US Equity: MSCI AXCI Ex-US IMI (25.2%)	Non US Equity: MSCI AXCI Ex-US IMI (26.5%)
Global Fixed Income: Barclays Universal Index (6.8%)	Global Fixed Income: Barclays Universal Index (6.0%)
Credit Fixed Income: Barclays US High Yield (7.2%)	Credit Fixed Income: Barclays US High Yield (6.0%)
Real Estate: NCREIF ODCE (5.0%)	Real Estate: NCREIF ODCE (5.0%)
Absolute Return: HFRI Diversified FOF (10.0%)	Absolute Return: HFRI Diversified FOF (10.0%)
Real Return: Allocation Specific (8.0%)	Real Return: Allocation Specific (8.0%)
Private Equity<5Yrs: Actual Performance	Private Equity<5Yrs: Actual Performance
Private Equity>5Yrs: Russell 3000 Index+3% (10.0%)	Private Equity>5Yrs: Russell 3000 Index+3% (10.0%)
Cash: Cit Grp 3-mos Treasury Bill (2.2%)	Cash: Cit Grp 3-mos Treasury Bill (2.0%)
<u>Pension Benchmark Composite 09/01/17 to 05/31/18 - Transition Period w/Sliding Targets</u>	<u>Insurance Benchmark Composite 09/01/17 to 05/31/18 - Transition Period w/Sliding Targets</u>
US Equity: Russell 3000 (23.6%)	US Equity: Russell 3000 (24.5%)
Non US Equity: MSCI AXCI Ex-US IMI (23.2%)	Non US Equity: MSCI AXCI Ex-US IMI (24.5%)
Global Fixed Income: Barclays Universal Index (9.0%)	Global Fixed Income: Barclays Universal Index (8.0%)
Credit Fixed Income: Barclays US High Yield (9.0%)	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 (2.2%)
Pension Benchmark Composite 06/01/18 to Present
US Equity: Russell 3000 (17.0%)
Non US Equity: MSCI AXCI Ex-US IMI (21.0%)
Global Fixed Income: Barclays Universal Index (13.0%)
Credit Fixed Income: Barclays US High Yield (12.4%)
Real Estate: NCREIF ODCE (5.0%)
Absolute Return: HFRI Diversified FOF (10.0%)
Real Return<5yrs: Actual Performance
Real Return>5yrs: CPI+3% (10.0%)
Private Equity<5Yrs: Actual Performance
Private Equity>5Yrs: Russell 3000 Index+3% (9.4%)
Cash: Cit Grp 3-mos Treasury Bill (2.2%)

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

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%)
Insurance Benchmark Composite 06/01/18 to Present
US Equity: Russell 3000 (17.9%)
Non US Equity: MSCI AXCI Ex-US IMI (21.9%)
Global Fixed Income: Barclays Universal Index (13.0%)
Credit Fixed Income: Barclays US High Yield (11.0%)
Real Estate: NCREIF ODCE (5.0%)
Absolute Return: HFRI Diversified FOF (10.0%)
Real Return<5yrs: Actual Performance
Real Return>5yrs: CPI+3% (10.0%)
Private Equity<5Yrs: Actual Performance
Private Equity>5Yrs: Russell 3000 Index+3% (9.2%)
Cash: Cit Grp 3-mos Treasury Bill (2.0%)

