

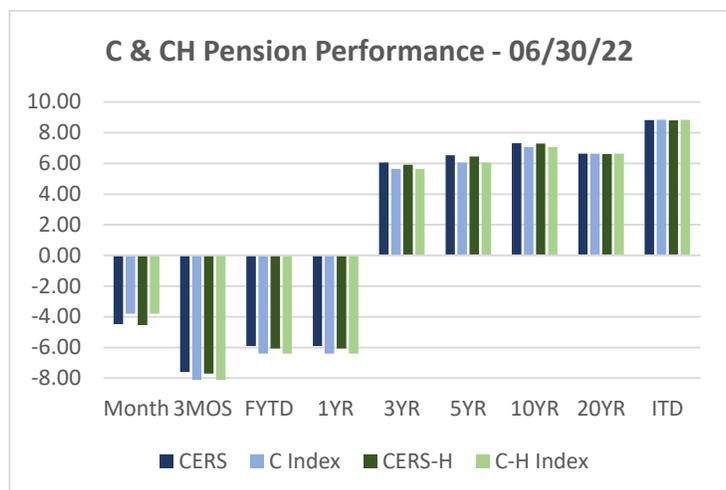
What's going on in the marketplace?

Global equity markets experienced severe declines during the month, as markets began to doubt the FED's ability to engineer a soft landing and fear of a recession began to ripple through the minds of investors. High inflation, rising interest rates, signs of economic slowdown and tightening central bank policies combined to fuel this concern. Global fixed income markets also were lower during the period in response to rising interest rates and widening spreads. The first half of the fiscal year witnessed several pockets of strength, particularly in the real estate and U.S. equity markets, and to a lesser degree the specialty credit and real return spaces. However, inflation continued to rise in response to loose monetary policy, supply chain issues, rising energy costs, and commodity strength. To combat inflation, central banks across the globe began to tighten financial conditions by raising rates. These actions called global growth into question and prompted downward pressure on valuation multiples producing elevated volatility across markets. These conditions were exacerbated by the breakout of conflict in Ukraine. Today markets remain incredibly volatile in the face of elevated inflation, early signs of potential softening in the labor market, teetering earnings, and the risks of further geopolitical issues.

The KPPA pension investment portfolio returned -4.3% during the month of June, underperforming its benchmark, which fell -3.5%. For the month the CERS Pension Composite returned -4.5%. More specifically, the CERS and CERS-H Pension portfolios returned -4.5% and -4.6%, respectively, while their benchmarks returned -3.8%. Both plans underperformed their respective benchmarks with similar drivers of attribution. Relative underperformance was a product of weaker performance in the Private Equity and Real Estate allocations of the portfolios versus the benchmark; this was partially offset by strong outperformance in the Specialty Credit allocation of the portfolios. Further, the underweight to Real Return hampered relative performance as this was one of the stronger performing asset classes during the month. This brought the KPPA pension fiscal year return to -5.7% versus benchmark return of -5.8%. For the fiscal year the CERS Pension Composite fell 5.9%. CERS and CERS-H Pension portfolios returned -5.9% and -6.1%, respectively, and outperformed their benchmarks' performance of -6.4%. For the fiscal year, the CERS and CERS-H plans' relative outperformance was primarily driven by strong security selection, most notably in the Specialty Credit, Private Equity, and Core Fixed Income portfolios. This relative outperformance was partially offset by allocation positioning that hampered performance. The average 6.8% underweight to Real Return cost the portfolio approximately 135bps of relative performance.

Global equity markets were significantly weaker during the month, with the MSCI ACWI falling -8.4%. US markets were slightly more resilient than their International market counterparts, providing 58bps of downside protection. For the fiscal year, global equity market were off 17.0%. Domestic markets held up significantly better with the Russell 3000 index down -13.9% versus the MSCI ACWI Ex-US index down -19.9%.

US equity markets declined 837bps during the month (Russell 3000), the KPPA portfolio fared just slightly better, dropping 831bps. Midcaps underperformed both large and small caps by +135bps; growth held up better than value (R300G: -7.8% vs R3000V: -8.8%). The KPPA portfolio's relative outperformance was driven by a combination of stock selection and allocation. A number of the individual strategies outpaced their respective indices, and the overweight to small cap proved beneficial during the period.



For the fiscal year, the KPPA portfolio outperformed the R3000, -13.6% versus -13.9%. Stock selection was solid with the only relative weakness coming from the all cap portion of the portfolio. The small and microcap strategies held up significantly better than their respective indices. The portfolio's value tilt was additive, as the style provided over 12% of downside protection over growth.

NonUS equity markets fell -9.0% (MSCI ACWI Ex-US) during the month. Emerging markets held up better than their developed international counterparts (MSCI EM: -6.7% vs MSCI World Ex-US: -9.4%). Small caps were noticeably weaker, losing -11.0%. The KPPA portfolio fell -9.0% during the month, losing 8bps to the benchmark. Individual mandate relative performance was mixed during the period; however, it skewed negative. The slight overweight to emerging markets was additive.

For the fiscal year, the portfolio trailed its benchmark by 194bps. During a risk off environment, the portfolio's growth managers and slight emerging market overweight hampered relative performance. The value portion of the portfolio performed well, and partially offset some of the weakness in other parts of the portfolio.

The specialty credit portfolio outperformed its benchmark during the month, providing 286bps of downside protection (-1.6% vs -4.5%). While the High Yield market was notably weaker during the month with the Bloomberg US Corporate High Yield returning -6.7%, the Leverage Loan market held up significantly better, as evidenced by the -2.2% return of S&P LSTA Leveraged Loan Index.

For the fiscal year, the specialty credit portfolio significantly outperformed its benchmark, providing a positive return of 1.2% versus a benchmark return of -7.9% with all but one of the mandates outperforming their respective benchmarks. With the first half of 2022 witnessing the worst first-half return in the history of the High Yield index, performance for the fiscal year was dragged down resulting in a -12.8% return for the index. Given their lower interest rate sensitivity and higher seniority, leveraged loans performed better with the index falling just -2.8% for the fiscal year.

The core fixed income portfolio provided 36bps of downside protection when compared to the Bloomberg Aggregate Index (-1.2% vs -1.6%). The portfolio's shorter duration profile and tactical allocation to front end investment grade credit aided relative performance during the period as rates rose and credit spreads widened.

For the fiscal year, the core portfolio produced 481 bps of outperformance with a -5.5% return versus the benchmark return of -10.3%. The short-term corporate and intermediate aggregate portions of the portfolio held up better than the traditional, more interest rate sensitive core aggregate index.

The private equity allocation reported a fiscal year return of 22.7%. However, it should be noted that this asset class is reported on a lag, so a portion of this year's volatility has yet to be reflected in the marks of some of the investments within the portfolio.

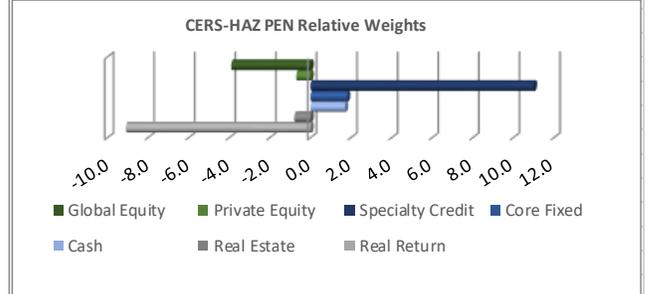
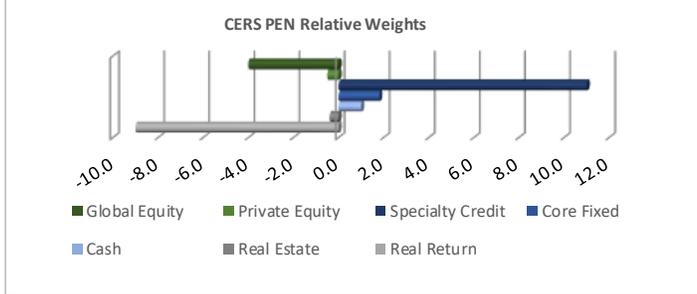
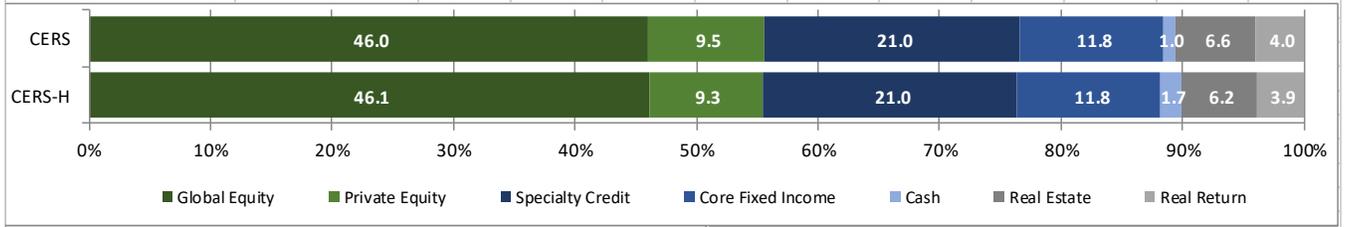
The real return portfolio lost 3.0% during the month, bringing the fiscal year return to 2.4% versus the long-term benchmark return of 8.0%. Most of the month's decline came from the MLP portion of the portfolio, which fell 14% during June; however, it still ended the fiscal year up 10%. Most strategies in the portfolio provided positive absolute performance for the fiscal year, but the relative weakness of the asset class was a product of benchmark construction (US CPI +3%) and the difficulty of measuring short-term performance.

Real estate has performed well for several quarters, and has been one of the best performing asset classes for the portfolio. The allocation returned 1.7% during the month, bringing the fiscal year performance to 28.1% (versus the benchmark return of 27.3%), and has been driven by continued strength in industrial, multi-family, and storage properties.

The cash portfolio performed in line with the 3-month T-bill for the month (0.08%). This brought the fiscal year performance to 0.3% versus 0.2%. The cash overweight was of benefit during a volatile month and fiscal year.

| CERS & CERS-HAZ - PENSION FUND PLAN NET RETURNS - 06/30/22 | | | | | | | | | | | |
|--|-------------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Plan | Market Value | Month | 3 Months | Fiscal YTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years | ITD |
| CERS | 7,948,696,375.08 | -4.49 | -7.61 | -5.90 | -5.90 | 6.06 | 6.53 | 7.32 | 6.64 | 7.78 | 8.82 |
| KY Ret. CKERS Plan Index | | -3.79 | -8.59 | -6.41 | -6.41 | 5.64 | 6.06 | 7.08 | 6.63 | 7.69 | 8.85 |
| CERS- H | 2,703,102,128.52 | -4.55 | -7.71 | -6.07 | -6.07 | 5.91 | 6.45 | 7.29 | 6.62 | 7.77 | 8.81 |
| KY Ret. CERS Haz Plan Index | | -3.79 | -8.59 | -6.41 | -6.41 | 5.64 | 6.06 | 7.08 | 6.63 | 7.69 | 8.85 |

| KPPA PENSION FUND UNIT - NET RETURNS - 06/30/22 - PROXY PLAN ASSET PERFORMANCE | | | | | | | | | | | |
|--|--|--------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|-------------|--------------|
| Structure | | Month | QTD | Fiscal YTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years | ITD |
| PUBLIC EQUITY | | -8.61 | -15.80 | -18.05 | -18.05 | 5.50 | 6.56 | 8.60 | 6.90 | 8.55 | 10.02 |
| Global Equity Blended Index | | -8.43 | -15.66 | -16.99 | -16.99 | 5.62 | 6.54 | 8.51 | 6.93 | 8.36 | 9.88 |
| PRIVATE EQUITY | | -1.29 | 1.69 | 22.70 | 22.70 | 20.44 | 17.41 | 14.77 | 12.53 | | 12.53 |
| Russell 3000 + 3%(Qtr Lag) | | 3.60 | -4.13 | 14.92 | 14.92 | 21.32 | 18.45 | 17.61 | 12.78 | | 12.78 |
| SPECIALTY CREDIT | | -1.59 | -1.80 | 1.20 | 1.20 | 4.78 | 5.41 | | | | 5.41 |
| Custom Benchmark | | -4.45 | -7.13 | -7.86 | -7.86 | 1.17 | 2.53 | | | | 2.53 |
| CORE FIXED INCOME | | -1.21 | -2.10 | -5.48 | -5.48 | 0.97 | 2.05 | | | | 2.52 |
| Bloomberg Barclays US Aggregate | | -1.57 | -4.69 | -10.29 | -10.29 | -0.93 | 0.88 | | | | 1.79 |
| CASH | | 0.08 | 0.18 | 0.25 | 0.25 | 0.75 | 1.30 | 0.90 | 1.61 | 2.71 | 3.31 |
| Citigroup Treasury Bill-3 Month | | 0.07 | 0.14 | 0.19 | 0.19 | 0.61 | 1.09 | 0.62 | 1.19 | 2.31 | 2.89 |
| REAL ESTATE | | 1.67 | 6.63 | 28.05 | 28.05 | 15.67 | 13.37 | 11.36 | 7.88 | 6.63 | 6.90 |
| NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^ | | 7.14 | 7.14 | 27.26 | 27.26 | 10.30 | 8.90 | 9.91 | 7.66 | 7.55 | 6.76 |
| REAL RETURN | | -2.96 | -1.66 | 2.44 | 2.44 | 4.85 | 4.30 | 3.38 | | | 4.14 |
| Pension Real Return Custom Benchmark | | 1.32 | 3.70 | 8.03 | 8.03 | 6.72 | 5.26 | 3.79 | | | 3.87 |



CERS INS & CERS HAZ INS - INSURANCE FUND - PLAN NET RETURNS - 06/30/22

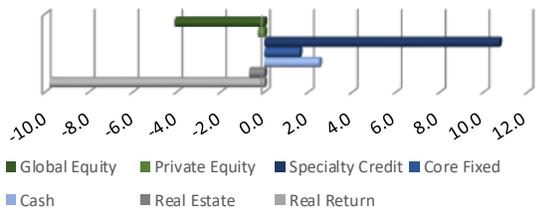
| Plan | Market Value | Month | 3 Months | Fiscal YTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years | ITD |
|-----------------------------|-------------------------|--------------|--------------|--------------|--------------|-------------|-------------|-------------|-------------|-------------|-------------|
| CERS INS | 3,004,344,252.93 | -4.29 | -7.49 | -5.43 | -5.43 | 5.80 | 6.46 | 7.21 | 6.27 | 6.87 | 7.29 |
| KY Ins. CERS Plan Index | | -3.79 | -8.59 | -6.22 | -6.22 | 5.23 | 5.86 | 7.04 | 6.49 | 7.13 | 7.50 |
| CERS - H INS | 1,508,530,985.74 | -4.22 | -7.35 | -4.99 | -4.99 | 5.99 | 6.61 | 7.30 | 6.32 | 6.90 | 7.31 |
| KY Ins. CERS Haz Plan Index | | -3.79 | -8.59 | -6.22 | -6.22 | 5.23 | 5.86 | 7.05 | 6.49 | 7.13 | 7.50 |

KPPA INSURANCE FUND UNIT - NET RETURNS - 06/30/22 - PROXY PLAN ASSET PERFORMANCE

| Structure | Month | QTD | Fiscal YTD | 1 Year | 3 Years | 5 Years | 10 Years | 20 Years | 30 Years | ITD |
|---|--------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|----------|--------------|
| PUBLIC EQUITY | -8.57 | -15.76 | -17.94 | -17.94 | 5.53 | 6.54 | 8.62 | 6.87 | | 8.28 |
| Global Equity Blended Index | -8.43 | -15.66 | -17.02 | -17.02 | 5.58 | 6.51 | 8.46 | 6.59 | | 8.11 |
| PRIVATE EQUITY | 1.17 | 3.06 | 30.26 | 30.26 | 18.10 | 16.67 | 15.41 | 11.43 | | 11.43 |
| Russell 3000 + 3%(Qtr Lag) | 3.60 | -4.13 | 14.92 | 14.92 | 21.32 | 18.45 | 17.61 | 12.31 | | 12.31 |
| SPECIALTY CREDIT | -1.41 | -1.63 | 1.39 | 1.39 | 4.68 | 5.21 | | | | 5.21 |
| Custom Benchmark | -4.45 | -7.13 | -7.86 | -7.86 | 1.17 | 2.53 | | | | 2.53 |
| CORE FIXED INCOME | -1.33 | -2.33 | -5.67 | -5.67 | 0.75 | 1.93 | | | | 2.22 |
| Bloomberg Barclays US Aggregate | -1.57 | -4.69 | -10.29 | -10.29 | -0.93 | 0.88 | | | | 1.79 |
| CASH | 0.09 | 0.18 | 0.24 | 0.24 | 0.59 | 1.13 | 0.75 | 1.44 | | 2.42 |
| Citigroup Treasury Bill-3 Month | 0.07 | 0.14 | 0.19 | 0.19 | 0.61 | 1.09 | 0.62 | 1.19 | | 2.31 |
| REAL ESTATE | 1.72 | 6.67 | 27.50 | 27.50 | 15.61 | 13.35 | 11.20 | | | 10.63 |
| NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^ | 7.14 | 7.14 | 27.26 | 27.26 | 10.30 | 8.90 | 9.91 | | | 6.99 |
| REAL RETURN | -1.96 | -0.90 | 2.24 | 2.24 | 5.16 | 4.44 | 3.27 | | | 4.03 |
| Pension Real Return Custom Benchmark | 1.32 | 3.70 | 6.98 | 6.98 | 6.76 | 5.28 | 3.85 | | | 3.93 |



CERS Insurance Relative Weights



CERS-HAZ Insurance Relative Weights

