

What’s going on in the marketplace?

The month of April was marked by sharply lower global equity markets fueled by concerns surrounding high inflation, tightening monetary policy and rising interest rates, and their potential to slow down the global economy. Supply chains continued to be challenged by the ongoing conflict in Ukraine and lockdowns in China in response to its zero-covid policy. Not only did rising rates hamper equity markets, but higher rates continued to create a tough environment for bond investors who experience negative returns as well.

The KPPA investment portfolio fell -3.6% during the month of April, providing 112bps of downside protection versus its benchmark (-4.7%). More specifically, the CERS and CERS-H portfolios fell slightly farther, returning -3.8% as the plans have a greater allocation to public equities (versus the aggregate KPPA portfolio), which were significantly weaker during the period. However, the plans outperformed their benchmark return of -4.9%. The 1.1% relative outperformance was in large part due to allocation positioning. The plans were underweight global equities (versus their specific benchmark) which underperformed during the period and were overweight specialty credit, core fixed income, and cash, asset classes that held up relatively well during a volatile period.

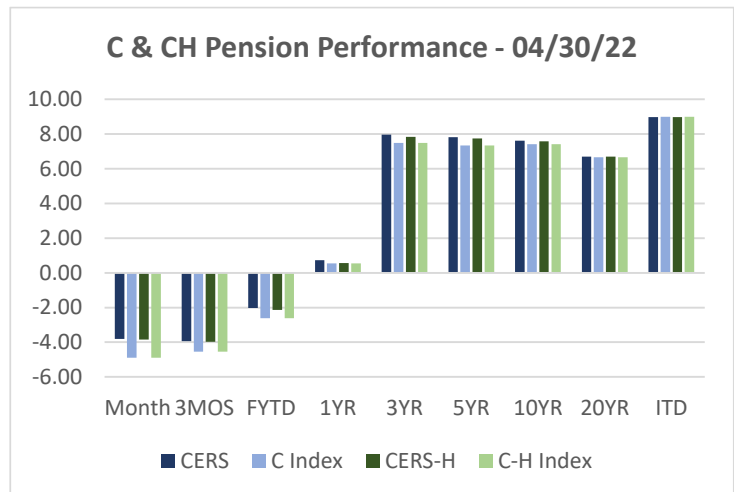
US equity markets fell -9.0% during the month (R3000), and the KPPA portfolio lost -8.7%, providing 30bps of downside protection. Midcaps outperformed large caps, while small caps brought up the rear (MC: -7.1%, LC: -8.7%, SC: -9.9%); value provided significant downside protection versus growth (R3000V: -5.8% vs R3000G: -12.1%). The KPPA portfolio’s relative outperformance was driven by a combination of both stock selection and allocation. Almost all of the individual strategies outpaced their respective indices, and the slight value and midcap tilts were beneficial as these areas held up better.

NonUS equity markets held up better than their domestic counterparts, falling -6.3% during the month (MSCI ACWI Ex-US). Emerging markets fell -5.6%, while developed countries lost -6.5% (MSCI World Ex-US). The KPPA portfolio trailed its index by -47bps due to significant weakness across the growth portion of the portfolio. This underperformance was partially offset by outperformance of the value oriented mandates and the net performance of the KPPA emerging market exposure.

The specialty credit portfolio outperformed, declining -39bps compared to its index return of -1.7%. The leveraged loan allocation held up well as evidenced by the S&P LSTA Leveraged Loan Index return of 0.2%; however, high yield investments struggled in the face of rising rates and widening spreads (Bloomberg US Corporate High Yield, -3.6%).

The core fixed income portfolio, produced negative absolute performance during the month; however, it performed well in relative terms, providing 260bps of downside protection versus the Bloomberg Aggregate Index (-1.2%vs-3.8%). The portfolio benefitted from its shorter duration profile and tactical allocation to front end investment grade credit, which outperformed during the market volatility.

The private equity allocation returned 20bps during the month, bringing the fiscal year return to 20.9%. It should be noted that the asset class is reported on a quarter lag, so much of this volatile year is not yet reflected in these performance figures.



The real return portfolio lost -44bps during the month, bringing the fiscal year return to 3.7%. Most of the individual mandates held up fairly well during the month; however, investments in the MLP space were challenged, falling -1.5% during the period, despite the Alerian MLP Index remaining fairly stable (-9bps).

Real estate has performed well for several quarters, and has been one of the best performing asset classes for the portfolio. The allocation returned 1.4% during the month, bringing the fiscal year performance to 21.8%, and has been driven by continued strength in industrial and multi-family properties.

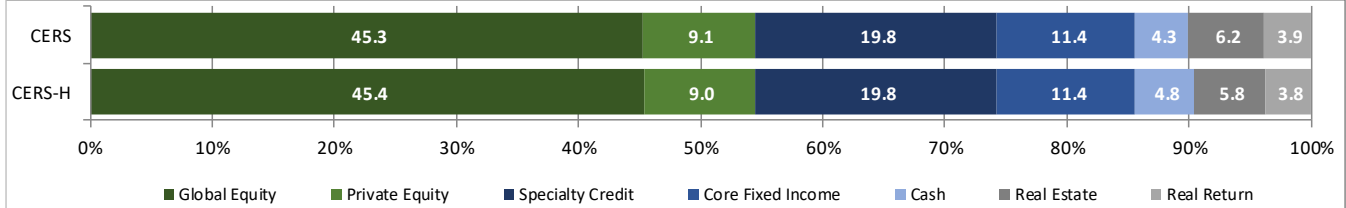
The cash portfolio performed in line with the 3-month T-bill for the month (0.03%). The overweight to cash helped bolster the total investment portfolio.

CERS & CERS-HAZ - PENSION FUND PLAN NET RETURNS - 04/30/22

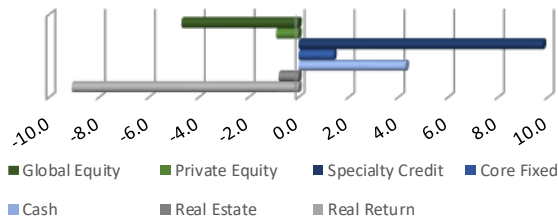
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS	8,296,378,491.06	-3.81	-3.94	-2.03	0.72	7.96	7.81	7.61	6.70	7.93	8.97
KY Ret. CKERS Plan Index		-4.89	-4.54	-2.62	0.54	7.49	7.34	7.41	6.66	7.84	9.00
CERS- H	2,823,467,920.76	-3.84	-3.98	-2.13	0.57	7.84	7.75	7.58	6.69	7.92	8.97
KY Ret. CERS Haz Plan Index		-4.89	-4.54	-2.62	0.54	7.49	7.34	7.41	6.66	7.84	9.00

KPPA PENSION FUND UNIT - NET RETURNS - 04/30/22 - PROXY PLAN ASSET PERFORMANCE

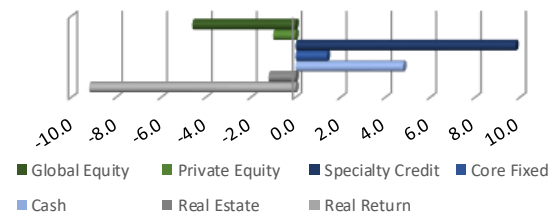
Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-7.89	-7.89	-10.35	-8.26	8.86	9.05	9.03	7.00	8.83	10.32
Global Equity Blended Index	-8.00	-8.00	-9.45	-7.04	8.77	9.01	8.95	7.01	8.63	10.18
PRIVATE EQUITY	0.20	0.20	20.91	36.07	21.14	18.12	15.11			12.56
Russell 3000 + 3%(Qtr Lag)	0.20	0.20	20.91	36.07	21.14	18.12	18.34			12.81
SPECIALTY CREDIT	-0.39	-0.39	2.65	4.80	5.81					5.91
Custom Benchmark	-1.67	-1.67	-2.45	-1.18	3.31					3.84
CORE FIXED INCOME	-1.19	-1.19	-4.60	-4.19	2.07	2.37				2.68
Bloomberg Barclays US Aggregate	-3.79	-3.79	-9.45	-8.51	0.38	1.20				1.94
CASH	0.03	0.03	0.10	0.11	0.85	1.30	0.89	1.62	2.72	3.32
Citigroup Treasury Bill-3 Month	0.03	0.03	0.08	0.08	0.71	1.09	0.61	1.20	2.33	2.90
REAL ESTATE	1.43	1.43	21.80	25.46	14.12	12.71	10.98	7.74	6.47	6.79
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	0.00	18.78	21.02	8.23	7.74	9.43	7.30	7.26	6.59
REAL RETURN	-0.44	-0.44	3.71	7.27	5.94	4.64	3.55			4.32
Pension Real Return Custom Benchmark	-0.44	-0.44	3.71	7.27	5.94	4.64	3.64			3.73



CERS PEN Relative Weights



CERS-HAZ PEN Relative Weights

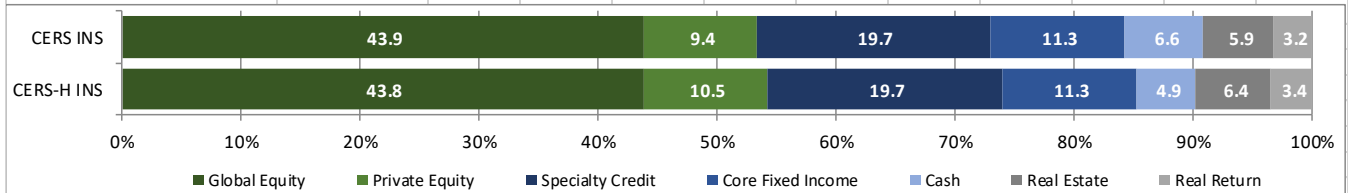


CERS INS & CERS HAZ INS - INSURANCE FUND - PLAN NET RETURNS - 04/30/22

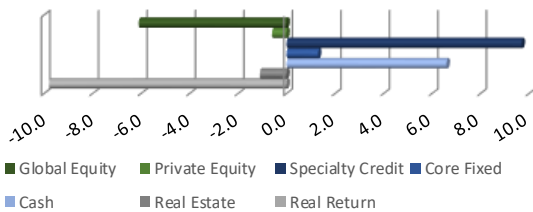
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS INS	3,117,723,100.90	-3.74	-3.84	-1.59	0.97	7.69	7.73	7.47	6.24	7.08	7.44
KY Ins. CERS Plan Index		-4.89	-4.54	-2.43	0.39	7.07	7.13	7.35	6.39	7.34	7.66
CERS - H INS	1,570,959,419.32	-3.70	-3.72	-1.24	1.40	7.84	7.85	7.55	6.28	7.10	7.47
KY Ins. CERS Haz Plan Index		-4.89	-4.54	-2.43	0.39	7.07	7.13	7.35	6.39	7.34	7.66

KPPA INSURANCE FUND UNIT - NET RETURNS - 04/30/22 - PROXY PLAN ASSET PERFORMANCE

Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-7.91	-7.91	-10.29	-8.20	8.86	9.01	9.07	7.01		8.65
Global Equity Blended Index	-8.00	-8.00	-9.49	-7.08	8.73	8.97	8.90	6.67		8.47
PRIVATE EQUITY	0.23	0.23	26.69	38.94	18.26	16.91	15.57			11.38
Russell 3000 + 3%(Qtr Lag)	0.23	0.23	26.69	38.94	18.26	16.91	18.34			12.34
SPECIALTY CREDIT	-0.30	-0.30	2.76	4.87	5.68					5.69
Custom Benchmark	-1.67	-1.67	-2.45	-1.18	3.31					3.84
CORE FIXED INCOME	-1.41	-1.41	-4.79	-4.37	1.84	2.25				2.37
Bloomberg Barclays US Aggregate	-3.79	-3.79	-9.45	-8.51	0.38	1.20				1.94
CASH	0.03	0.03	0.08	0.09	0.67	1.13	0.74	1.44		2.43
Citigroup Treasury Bill-3 Month	0.03	0.03	0.08	0.08	0.71	1.09	0.61	1.20		2.32
REAL ESTATE	1.69	1.69	21.55	25.34	14.15	12.76	10.82			10.36
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	0.00	18.78	21.02	8.23	7.74	9.43			6.52
REAL RETURN	-0.37	-0.37	2.79	5.64	6.01	4.63	3.40			4.14
Pension Real Return Custom Benchmark	-0.37	-0.37	2.79	5.64	6.01	4.63	3.70			3.79



CERS Insurance Relative Weights



CERS-HAZ Insurance Relative Weights

