

What’s going on in the marketplace?

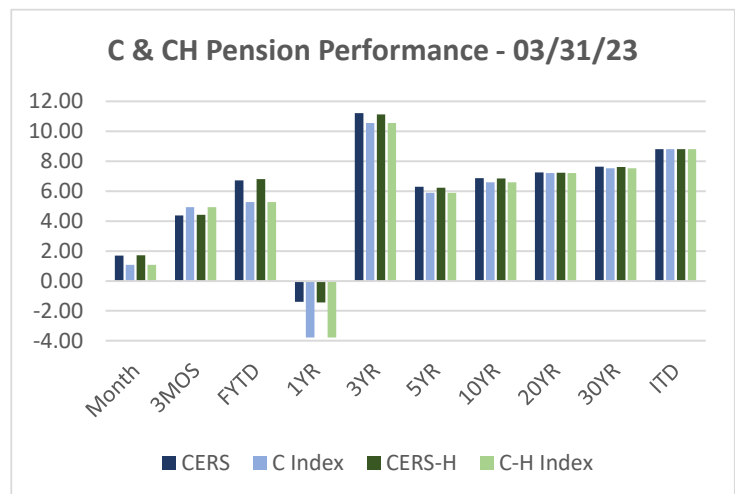
During the first quarter of 2023, global risks markets were able to shrug off a multitude of headwinds and produce positive performance. Markets were buoyed early in the quarter as optimism grew that the economy could avoid a recession and central banks would shortly shift to easing mode. This market optimism faded as concerns grew regarding the health of the banking sector following the sudden failure of two regional banks. Markets were able to rebound late in the quarter to finish on a positive note as fears of immediate contagion subsided, and optimism again took root. Despite this, most remain cautious on the market as earnings are likely to come under pressure as underlying growth seems to be slowing at a more meaningful pace. The market seems to be experiencing a broad underlying slowdown as company trends are beginning to decelerate. That said, it is a difficult starting point for comparison as we are coming off elevated numbers post pandemic, and high inflation and rates. Despite the long-predicted recession to come, as mentioned above, equity markets continue to be resilient as businesses have been performing against low expectations. Supply chains seem to be functioning and inflationary pressures are starting to abate. The financial industry experienced a couple of significant bank failures, as bond investments came under significant pressures during the quarter; however, they appear to be idiosyncratic, and contagion seems minimal. This is still likely to renew banks focus on capital/liquidity and may result in tightening credit availability. Mixed data has created some confusion in the marketplace. Equity markets seem to be doing well, while bond markets say we are headed for recession. Mixed growth trends are evidence of the contradiction as machine and semi-conductor sales are down, while retail and travel activity are up. There is a dichotomy in soft and hard data as well; PMI and business surveys say we are in recession, while auto and construction data say different. Slowing demand in North America is being offset by increasing demand in China (re-opening post covid).

The KPPA Pension Trust portfolio returned 1.61% during the month of March, outperforming its blended benchmark return of 0.99%. The CERS Pension Composite produced a 1.69% return during the month. The CERS and CERS-H Pension portfolios returned 1.69% and 1.71% respectively, while their benchmark gained 1.07%. Both funds outperformed their respective benchmark with similar drivers of attribution. Performance was stronger within the private equity portfolio in terms of selection. Also, the portfolios benefitted from strong selection in the high yield and real estate portfolios. Allocation positioning was modestly positive during the month. Partially offsetting relative performance was the weakness experienced in the public equity and core fixed income asset classes.

For the fiscal year, the KPPA Pension Trust portfolio gained 6.26%, outperforming the benchmark return of 5.00%, while the CERS Pension Composite returned 6.74%. The CERS and CERS-H Pension portfolios returned 6.72% and 6.80%, against a benchmark return of 5.27%.

Global equity markets were stronger during the month, as evidenced by the MSCI ACWI Index rising 3.08%. US markets outpaced their international market counterparts (R3000: 2.67% versus MSCI ACWI Ex-US: 2.13%). This brought the fiscal year return for global equity markets to 9.75% (KPPA global equity portfolio: 11.53%).

US equity markets gained 2.67% during the month (Russell 3000), while the KPPA portfolio underperformed, returning 2.31%. The market was driven by strength in the large cap segment (3.67%),



while midcaps and small caps were significantly weaker (-3.21% and -4.78%, respectively). Growth significantly outperformed value during the month, returning 6.25% versus -0.86%, as evidenced by the Russell 3000 style indices. For the fiscal year, the KPPA US Equity portfolio has gained 9.98% compared with its benchmark return of 9.75%. Relative outperformance has been driven by the portfolio's slight overweight down market cap to midcaps which have returned 12.17% for the fiscal year.

NonUS equity markets returned 2.13% (MSCI ACWI Ex-US) during the month. Developed markets returned 2.34% (MSCI World Ex-US) and emerging markets gained 3.03% (MSCI EM) during the period while period. The KPPA portfolio returned 2.56% during the month, outperforming its benchmark by 43bps. Relative outperformance was driven by stock selection, as the majority of individual active mandates bested their respective benchmarks. The fiscal year return now stands at 13.63% versus 9.85%.

The specialty credit portfolio outperformed its benchmark during the month, returning 1.61% versus 0.52%. The high yield market returned 1.07% during the period, as the leverage loan market remained relatively flat (-0.03%). For the fiscal year to date, the portfolio has underperformed its benchmark, gaining 5.16% versus 7.31%. The reported relative underperformance is largely driven by the issues associated with timing differences between the private market mandates and the public market benchmarks which tend to be exacerbated during periods of larger moves in the public markets. Individual strategy relative performance has been mixed fiscal year to date.

The core fixed income portfolio gained 1.15% compared to the Bloomberg Aggregate Index gaining 2.54% as Government bond yields overall decreased significantly in March as investors sought refuge of safer assets and forward rate hike expectations decreased in light of the banking sector turmoil. Relative underperformance was attributable to positioning within the allocation; the portfolios continue to remain underweight overall duration given the potential for higher rates and continued volatility. The fiscal year-to-date return now stands at 1.39% compared to the benchmark return of -0.09%.

The private equity allocation gained 160bps during the month, bringing the fiscal year to date return to -4.53%. Trailing public marks have significantly affected the overall performance of the portfolio, and the portfolio's 1-year return crossed into negative territory recently coming in at -2.92% at the end of March.

The real return portfolio gained 31bps during the month, compared to its benchmark return of 0.79%. As with several of the previous months, performance, both absolute and relative, was heavily influenced by the MLP portion of the portfolio (approximately 40% of the allocation); which lost -0.98%. For the fiscal year, the portfolio has returned 9.97% versus the benchmark return of 5.15%.

The real estate portfolio fell -1.57% during the month. The 1-year return now stands at 6.09% versus the 6.55% return of its benchmark, closing the relative gap that existed due to the benchmark finally adjusting to the impact of higher interest rates. The three open-end real estate funds in the portfolio (approximately 75% of the allocation) continue to outperform the benchmark.

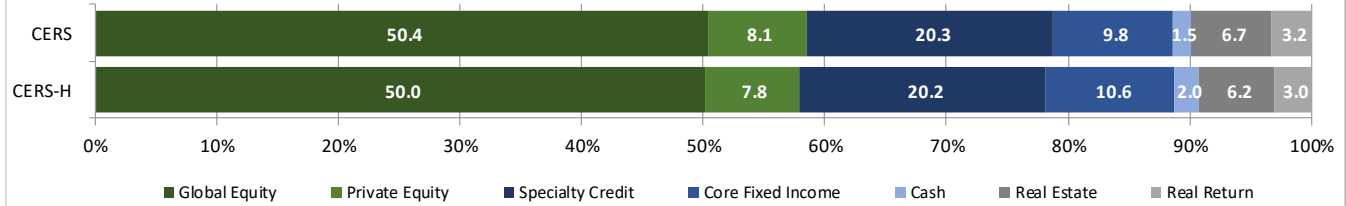
The cash portfolio returned 0.31% during the month compared with the 3-month T-bill's 0.40%. This brought the fiscal year return to 2.31%, trailing the benchmark return of 2.46%. The relative underperformance of the cash portfolio is most attributable to lower rates offered by overnight repurchase agreements relative to the yields of the 3-month T-bill.

CERS & CERS-HAZ - PENSION FUND PLAN NET RETURNS - 03/31/23

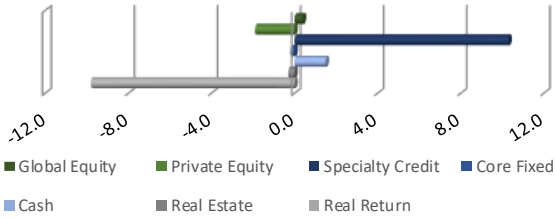
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS	8,435,338,447.03	1.69	4.38	6.72	-1.40	11.22	6.30	6.88	7.26	7.63	8.82
KY Ret. CKERS Plan IPS Index		1.07	4.94	5.27	-3.77	10.55	5.90	6.60	7.22	7.54	8.81
CERS- H	2,910,096,168.23	1.71	4.42	6.80	-1.43	11.13	6.24	6.86	7.24	7.62	8.81
KY Ret. CERS Haz Plan IPS Index		1.07	4.94	5.27	-3.77	10.55	5.90	6.60	7.22	7.54	8.81

KPPA PENSION FUND UNIT - NET RETURNS - 03/31/23 - PROXY PLAN ASSET PERFORMANCE

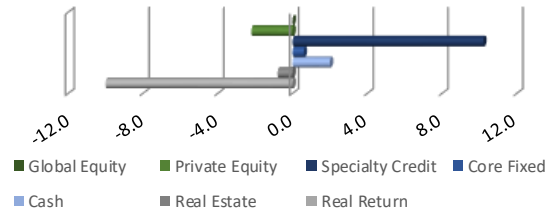
Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	2.41	7.55	11.53	-6.09	15.89	6.58	7.98	8.43	8.43	10.12
MSCI ACWI	3.08	7.31	9.75	-7.44	15.29	6.37	7.75	8.38	8.22	9.95
PRIVATE EQUITY	1.60	1.55	-4.53	-2.92	16.07	13.79	13.38	12.69		11.80
Russell 3000 + 3%(Qtr Lag)	-5.23	7.23	-12.59	-16.21	10.13	11.84	15.35	12.25		11.56
SPECIALTY CREDIT	1.61	2.80	5.16	3.27	7.48	5.29				5.61
50% BB US HY / 50% SP LSTA Leveraged Loan	0.52	3.41	7.31	-0.34	7.26	3.46				3.46
CORE FIXED INCOME	1.15	1.94	1.39	-0.74	1.43	2.26				2.47
Bloomberg Barclays US Aggregate	2.54	2.96	-0.09	-4.78	-2.77	0.91				1.64
CASH	0.31	0.88	2.31	2.49	0.92	1.47	1.11	1.66	2.70	3.30
Citigroup Treasury Bill-3 Month	0.40	1.12	2.46	2.61	0.95	1.40	0.85	1.26	2.31	2.90
REAL ESTATE	-1.57	-4.24	-0.51	6.09	11.87	11.38	10.31	8.38	6.69	6.75
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	-5.17	-5.17	-0.55	6.55	8.97	7.72	9.11	7.40	7.72	6.61
REAL RETURN	0.31	2.10	9.97	8.14	14.45	5.93	3.85			4.71
US CPI +3%	0.79	1.77	5.15	9.04	14.76	6.11	3.98			4.07



CERS PEN Relative Weights



CERS-HAZ PEN Relative Weights



CERS INS & CERS HAZ INS - INSURANCE FUND - PLAN NET RETURNS - 03/31/23

Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS INS	3,165,430,934.58	1.75	4.44	6.87	-1.14	10.97	6.21	6.81	7.18	6.78	7.33
KY Ins. CERS Plan IPS Index		1.07	4.94	5.27	-3.77	10.11	5.67	6.57	7.42	6.97	7.49
CERS - H INS	1,566,734,922.31	1.73	4.35	6.64	-1.20	10.98	6.30	6.87	7.21	6.80	7.35
KY Ins. CERS Haz Plan IPS Index		1.07	4.94	5.27	-3.77	10.11	5.67	6.57	7.42	6.97	7.49

KPPA INSURANCE FUND UNIT - NET RETURNS - 03/31/23 - PROXY PLAN ASSET PERFORMANCE

Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY		2.36	7.50	11.45	-6.11	15.91	6.56	8.02	8.32	8.45
MSCI ACWI		3.08	7.31	9.75	-7.44	15.26	6.34	7.73	8.05	8.23
PRIVATE EQUITY		2.11	2.07	-0.53	2.51	16.30	13.70	14.47	12.38	10.97
Russell 3000 + 3%(Qtr Lag)		-5.23	7.23	-12.59	-16.21	10.13	11.84	15.35	12.07	11.12
SPECIALTY CREDIT		1.51	2.74	5.26	3.54	7.39	5.19			5.45
50% BB US HY / 50% SP LSTA Leveraged Loan		0.52	3.41	7.31	-0.34	7.26	3.46			3.46
CORE FIXED INCOME		1.19	1.93	1.30	-1.06	1.27	2.09			2.18
Bloomberg Barclays US Aggregate		2.54	2.96	-0.09	-4.78	-2.77	0.91			1.64
CASH		0.32	0.89	2.29	2.48	0.91	1.36	0.93	1.49	2.44
Citigroup Treasury Bill-3 Month		0.40	1.12	2.46	2.61	0.95	1.40	0.85	1.26	2.33
REAL ESTATE		-1.71	-4.35	-0.70	5.92	11.69	11.33	10.31		9.97
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^		-5.17	-5.17	-0.55	6.55	8.97	7.72	9.11		6.56
REAL RETURN		0.56	1.52	8.03	7.06	13.04	5.69	3.61		4.45
US CPI +3%		0.79	1.77	5.15	9.04	13.73	6.08	4.04		4.11

