What's going on in the marketplace?

During the month of January, growth assets performed well as the recovery in global risk appetite resumed. Global equity markets strengthened on the back of increased optimism that inflation may be moderating and signs that central banks are pivoting from draconian tightening. In response, the hopes of the global economy's ability to avoid a hard landing rose. NonUS markets also benefitted from a weakening US dollar that has been hovering around multi-decade highs. Fixed income markets also strengthened as yields fell and prices rose.

The KPPA Pension Trust portfolio gained 3.77% during the month of January, underperforming its blended benchmark return of 4.70%. The CERS Pension Composite produced a 4.06% return during the month. The CERS and CERS-H Pension portfolios returned 4.05% and 4.09% respectively, while their benchmark gained 4.96%. Both funds underperformed their respective benchmark with similar drivers of attribution. Selection was weaker in the fixed income portfolio, most notably in the specialty credit allocation, though core investments also struggled. Performance was weaker within the real estate portfolio in terms of selection. Offsetting a portion of the underperformance was the solid stock selection in the public equity allocation, combined with the underweight to the real return portfolio, which was one of the weaker performing asset classes during the month.

For the fiscal year, the KPPA Pension Trust portfolio gained 5.89%, outperforming the benchmark return 5.09%, while the CERS Pension Composite returned 6.41%. The CERS and CERS-H Pension portfolios returned 6.39% and 6.46%, against a benchmark return of 5.29%.

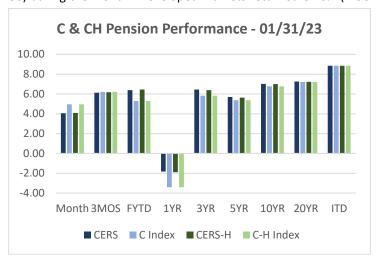
Global equity markets were strong to start the year, as evidenced by the MSCI ACWI Index returning 7.17% during the month of January. Non-US markets outpaced their domestic market counterparts (MSCI ACWI Ex-US: 7.98% versus R3000: 6.89%). This brought the fiscal year return for global equity markets to 9.61% (KPPA global equity portfolio: 11.54%).

US equity markets gained 6.89% during the month (Russell 3000), while the KPPA portfolio fared slightly better, returning 6.99%. All market segments were stronger (LC: 6.28%, MC: 9.23%, SC: 9.75%); with growth outpacing value (R3000G: 8.44% versus R3000V: 5.43%). For the fiscal year, the KPPA US Equity portfolio has gained 10.16% compared with its benchmark return of 9.45%. Relative outperformance has been driven by the portfolio's slight overweight down market cap and to value.

NonUS equity markets returned 7.98% (MSCI ACWI Ex-US) during the month. Developed markets returned 8.20% (MSCI

World Ex-US) during the period while emerging markets fell 7.90% (MSCI EM). The KPPA portfolio gained 8.37% during the month, outpacing its index by 39bps. Relative underperformance was driven by stock selection, specifically within the growth mandates. The fiscal year return now stands at 13.42% versus 11.32%.

The specialty credit portfolio underperformed its benchmark during the month, returning 1.30% versus 3.27%. The high yield market gained 3.81% as credit spreads tightened and rates fell. Leveraged loans gained 2.73% during the period but failed to keep pace given their lower rate exposure. For the fiscal year, the



portfolio has underperformed its benchmark, gaining 3.63% versus 7.26%. 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, especially with private market pricing playing catch-up, but continues to produce strong relative performance over longer periods.

The core fixed income portfolio gained 166bps compared to the Bloomberg Aggregate Index return of 3.08% as nominal bond yields were pulled lower by declining real yield and breakeven inflation. Relative underperformance was attributable to positioning within the allocation. While staff has begun to normalize the duration profile, the portfolios remain underweight overall duration given expectations for a further increase in rates and continued volatility. For the fiscal year, the portfolio has returned 1.11% compared to the benchmark return of 0.02%.

The private equity allocation was fairly flat during the month, gaining 9bps, and bringing the fiscal year return to -5.90%. Trailing public marks have significantly affected the overall performance of the portfolio, and the portfolio's 1-year return crossed into negative territory to -0.52% as of 01/31/23.

The real return portfolio gained 2.19% during the month, compared to its benchmark return of -0.06%. As with several of the previous months, performance was driven by the MLP portion of the portfolio (approximately 40% of the allocation); which gained 5.40%. Additionally, the investment in infrastructure debt performed well during the period. For the fiscal year, the portfolio has returned 10.06% versus 3.26% (benchmark).

The real estate portfolio fell -2.46% during the month of January. The 1-year return now stands at 10.33% versus the 20.96% return of its benchmark. This benchmark will fall to 6.5% next quarter as the negative impact of higher interest rates on 4Q 2022 valuations show up in the quarterly lagged returns. However, for calendar year 2022, all three of KPPA's open-end real estate funds (approximately 75% of the allocation) outperformed the benchmark by at least 250bps.

The cash portfolio returned 0.28% during the month compared with the 3-month T-bill's 0.37%. This brought the fiscal year return to 1.70%, in line with the benchmark.

		CERS & CERS	S-HAZ - PENS	ION FUND P	LAN NET RE	TURNS - 01/	/31/23				
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
CERS	8,387,166,336.02	4.05	6.13	6.39	-1.83	6.45	5.69	7.02	7.25	7.70	8.8
KY Ret. CKERS Plan IPS Index		4.96	6.21	5.29	-3.40	5.83	5.37	6.78	7.21	7.62	8.8
CERS- H	2,885,299,110.69	4.09	6.18	6.46	-1.89	6.38	5.63	7.00	7.23	7.69	8.8
KY Ret. CERS Haz P	lan IPS Index	4.96	6.21	5.29	-3.40	5.83	5.37	6.78	7.21	7.62	8.8
	KPPA PENS	ION FUND U	NIT - NET RET	URNS - 01/3	31/23 - PRO	XY PLAN ASS	ET PERFORM	NANCE			
Structure		Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY		7.57	7.57	11.54	-6.94	6.74	5.42	8.18	8.35	8.53	10.1
MSCI ACWI		7.17	7.17	9.61	-7.99	6.36	5.06	7.94	8.27	8.33	9.9
PRIVATE EQUITY		0.09	0.09	-5.90	-0.52	16.24	14.16	13.49	12.85		11.8
Russell 3000 + 3%	(Qtr Lag)	7.44	7.44	-12.43	-13.52	12.86	12.91	15.67	12.33		11.6
SPECIALTY CREDIT		1.30	1.30	3.63	1.74	4.82	5.18				5.5
50% BB US HY / 50°	% SP LSTA Leveraged Loan	3.27	3.27	7.26	-1.69	2.33	3.35				3.5
CORE FIXED INCOME		1.66	1.66	1.11	-3.41	0.27	2.12				2.4
Bloomberg Barcla	vs US Aggregate	3.08	3.08	0.02	-8.36	-2.35	0.86				1.6
CASH	75 10 1.08.08.0	0.28		1.70	1.90	0.82	1.42		1.64	2.70	3.3
Citigroup Treasury	v Bill-3 Month	0.37	0.37	1.70	1.87	0.79	1.30	0.78	1.23		2.8
REAL ESTATE	,	-2.46		1.34	10.33	13.15	12.38	10.97	8.37		6.8
-	Net 1 Otr in Arrears Index^	0.00	0.00	4.87	20.96	11.38		9.91	7.78		6.7
REAL RETURN	liter I da III / III e al S	2.19	2.19	10.06	9.93	7.64		3.91	7.70	7.05	4.79
US CPI +3%		-0.06	-0.06	3.26	8.75	7.25	5.25	3.95			3.9
7		0.00	0.00	5.20	0.75	7.25	5.25	0.55			0.5.
CERS	50	.8			8.0		20.0		9.9	1.1 6.9	3.2
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CERS-H	50	.6			7.8		20.1		10.7	1.4 6.4	3.1
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Plan	Market Value	Month	3 Months F	iscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	
CERS INS	3,198,628,587.32	4.07	6.18	6.49	-1.60	6.32	5.62	6.94	7.12	6.87	7.3	
KY Ins. CERS Plan IPS Inc	dex	4.96	6.21	5.29	-3.40	5.55	5.17	6.75	7.37	7.06	7.5	
CERS - H INS	1,579,862,490.19	3.96	5.99	6.24	-1.59	6.44	5.71	7.00	7.16	6.89	7.3	
KY Ins. CERS Haz Plan IP	'S Index	4.96	6.21	5.29	-3.40	5.55	5.17	6.75	7.37	7.06	7.5	
	KPPA INSURAN	ICE FUND U	NIT - NET RET	URNS - 01/	/31/23 - PRO	XY PLAN AS	ET PERFOR	MANCE				
Structure		Month	QTD F	iscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD	
UBLIC EQUITY		7.59	7.59	11.54	-6.90	6.76	5.40	8.23	8.26		8.5	
MSCI ACWI		7.17	7.17	9.61	-8.00	6.33	5.03	7.91	7.94		8.2	
RIVATE EQUITY		0.09	0.09	-2.46	5.58	16.45	14.18	14.65	12.18		10.9	
Russell 3000 + 3%(Qtr Lag)		7.44	7.44	-12.43	-13.52	12.86	12.91	15.67	12.10		11.2	
SPECIALTY CREDIT		1.31	1.31	3.79	2.15	4.81	5.12				5.3	
50% BB US HY / 50% SP LSTA Leveraged Loan		3.27	3.27	7.26	-1.69	2.33	3.35				3.5	
CORE FIXED INCOME		1.68	1.68	1.05	-3.62	0.03	1.96				2.1	
Bloomberg Barclays US Aggregate		3.08	3.08	0.02	-8.36	-2.35	0.86				1.6	
CASH		0.28	0.28	1.68	1.88	0.77	1.29	0.88	1.47		2.4	
Citigroup Treasury Bill-3 Month		0.37	0.37	1.70	1.87	0.79	1.30	0.78	1.23		2.3	
REAL ESTATE		-2.43	-2.43	1.29	10.22	13.03	12.35	10.86			10.2	
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^		0.00	0.00	4.87	20.96	11.38	9.26	9.91			7.0	
REAL RETURN		1.28	1.28	7.77	7.78	7.06	5.25	3.63			4.4	
US CPI +3%		-0.06	-0.06	3.26	8.06	7.15	5.31	4.01			4.0	
CERS INS	50	.6			8.2		19.9		11.0	1.3 6.5	2.5	
- CERS-H INS	49	.9			9.3		20.0		9.7	1.0 7.3	2.7	
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