

benchmarks. The fiscal year return now stands at 10.79% versus 7.56%.

The specialty credit portfolio outperformed its benchmark during the month, returning -0.13% versus -0.35%. The high yield market fell -1.29%, driven by the impact of rising rates which was partially offset by modestly tighter spreads. Leveraged loans were able to gain 0.58% during the period attributable to their lower rate sensitivity. For the fiscal year to date, the portfolio has underperformed its benchmark, gaining 3.50% versus 6.76%. 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 (though tilted positively), especially with private market pricing playing catch-up, but continues to produce strong relative performance over longer periods.

The core fixed income portfolio fell -87bps compared to the Bloomberg Aggregate Index return of -2.59% as signs that inflation continued to remain stubbornly high and economic data strengthened despite central bank efforts to date shifted market expectations toward even higher rates. Relative outperformance continues to be attributable to positioning within the allocation; the portfolios have remained underweight overall duration given the potential for higher rates and continued volatility. This underweight is slowing being reduced given the magnitude and pace of the tightening already realized and the elevated uncertainty of the outlook. Both shorter-term and intermediate credit market segments held up better. For the fiscal year, the portfolio has returned 0.24% compared to the benchmark return of -2.57%.

The private equity allocation fell -15bps during the month, bringing the fiscal year to date return to -6.04%. 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 -0.70% at the end of February.

The real return portfolio fell -39bps during the month, compared to its benchmark return of 1.03%. As with several of the previous months, performance was driven by the MLP portion of the portfolio (approximately 40% of the allocation); which lost -1.08%. For the fiscal year, the portfolio has returned 9.63% versus the benchmark return of 4.32%.

The real estate portfolio fell -0.25% during the month of February. The 1-year return now stands at 10.03% 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.

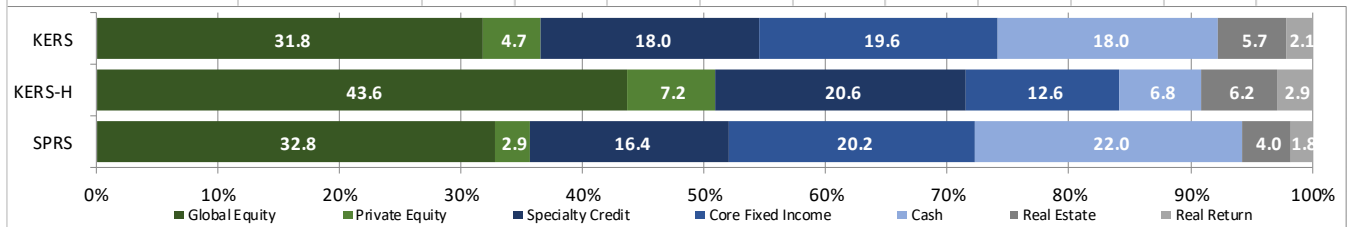
The cash portfolio returned 0.28% during the month compared with the 3-month T-bill's 0.35%. This brought the fiscal year return to 1.99%, slightly trailing the benchmark return of 2.06%. The relative underperformance of the cash portfolio is most attributable to lower rates offered by overnight repurchase agreements relative to the yields of the 3-month T-bill.

KERS, KERS-HAZ, & SPRS - PENSION FUND - PLAN NET RETURNS - 02/28/23

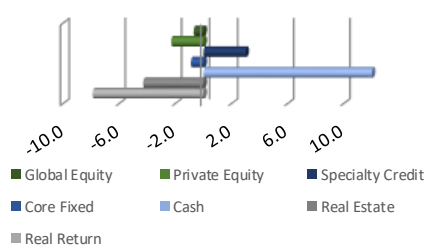
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS	3,309,329,386.75	-0.96	0.70	3.11	-2.57	6.29	5.43	6.35	6.93	7.46	8.67
KY Ret. KERS Plan IPS Index		-1.02	0.92	3.39	-2.22	5.76	5.08	6.30	7.01	7.44	8.72
KERS- H	855,850,886.56	-1.23	0.81	4.61	-2.09	7.02	5.75	6.75	7.13	7.60	8.77
KY Ret. KERS Haz Plan IPS Index		-0.92	1.00	4.13	-2.38	7.20	5.85	6.74	7.24	7.59	8.84
SPRS	567,240,010.86	-0.98	0.91	3.79	-1.44	6.42	5.50	6.32	6.91	7.45	8.66
KY Ret. SPRS Plan IPS Index		-1.02	0.92	3.39	-2.22	5.76	5.08	6.27	7.00	7.43	8.71

KPPA PENSION FUND UNIT - NET RETURNS - 02/28/23 - PROXY PLAN ASSET PERFORMANCE

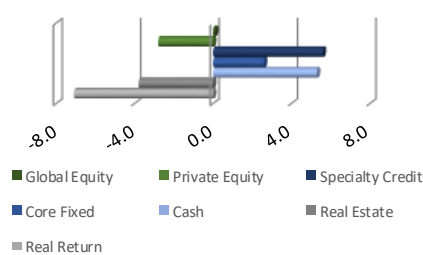
Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-2.37	5.02	8.90	-6.78	8.94	5.79	7.93	8.33	8.43	10.08
MSCI ACWI	-2.87	4.10	6.47	-8.61	8.35	5.34	7.62	8.23	8.19	9.88
PRIVATE EQUITY	-0.15	-0.05	-6.04	-0.70	16.09	14.16	13.38	12.72		11.77
Russell 3000 + 3%(Qtr Lag)	5.32	13.16	-7.77	-7.80	13.32	13.35	16.15	12.65		11.90
SPECIALTY CREDIT	-0.13	1.18	3.50	1.61	4.86	4.99				5.39
50% BB US HY / 50% SP LSTA Leveraged Loan	-0.35	2.87	6.76	-1.40	2.64	3.31				3.42
CORE FIXED INCOME	-0.87	0.78	0.24	-3.55	-0.33	2.09				2.37
Bloomberg Barclays US Aggregate	-2.59	0.41	-2.57	-9.72	-3.77	0.53				1.40
CASH	0.28	0.56	1.99	2.19	0.84	1.44	1.08	1.65	2.70	3.30
Citigroup Treasury Bill-3 Month	0.35	0.72	2.06	2.22	0.86	1.35	0.81	1.24	2.31	2.90
REAL ESTATE	-0.25	-2.71	1.08	10.03	13.09	12.34	10.79	8.50	6.69	6.81
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^	0.00	0.00	4.87	20.96	11.38	9.26	9.91	7.78	7.85	6.77
REAL RETURN	-0.39	1.79	9.63	9.23	8.71	5.87	3.85			4.72
US CPI +3%	1.03	0.97	4.32	9.61	8.83	5.94	4.01			4.03



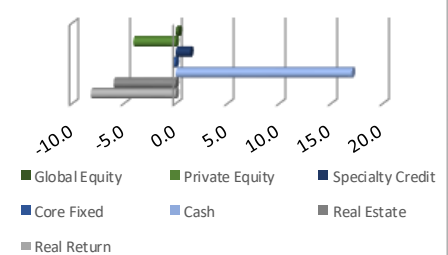
KERS PEN Relative Weights



KERS-HAZ PEN Relative Weights



SPRS PEN Relative Weights

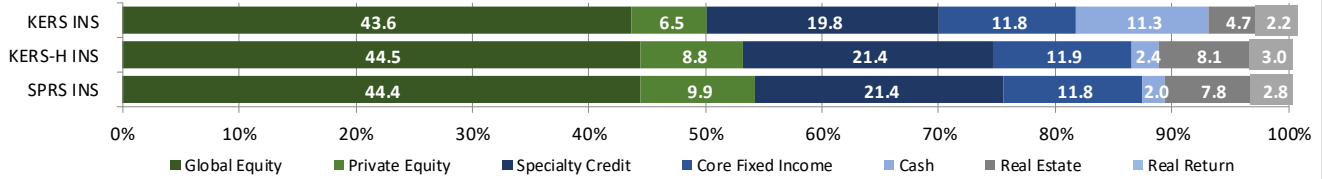


KERS INS, KERS-HAZ INS, SPRS INS - INSURANCE FUND - PLAN NET RETURNS - 02/28/23

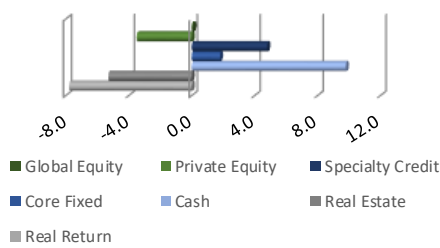
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS INS	1,373,008,231.67	-1.18	0.88	5.04	-1.43	7.15	5.56	6.41	6.92	6.63	7.20
KY Ins. KERS Plan IPS Index		-0.92	1.00	4.13	-2.30	6.98	5.75	6.73	7.45	7.02	7.52
KERS - H INS	594,275,342.68	-1.20	0.71	4.57	-1.37	7.23	5.87	6.74	7.08	6.75	7.29
KY Ins. KERS Haz Plan IPS Index		-0.92	1.00	4.13	-2.30	6.96	5.69	6.72	7.45	7.01	7.52
SPRS INS	236,190,502.08	-1.24	0.73	4.56	-1.47	7.45	6.11	6.90	7.16	6.80	7.34
KY Ins. SPRS Plan IPS Index		-0.92	1.00	4.13	-2.30	6.96	5.69	6.73	7.45	7.02	7.52

KPPA INSURANCE FUND UNIT - NET RETURNS - 02/28/23 - PROXY PLAN ASSET PERFORMANCE

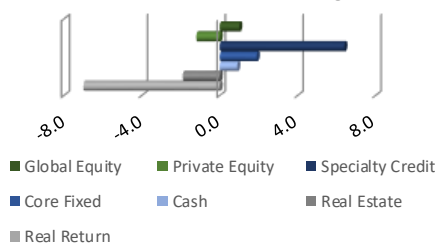
Structure	Month	QTD	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY	-2.38	5.03	8.88	-6.74	8.99	5.77	7.97	8.21		8.39
MSCI ACWI	-2.87	4.10	6.47	-8.62	8.32	5.30	7.59	7.89		8.14
PRIVATE EQUITY	-0.13	-0.04	-2.58	5.43	16.26	14.18	14.48	12.29		10.90
Russell 3000 + 3%(Qtr Lag)	5.32	13.16	-7.77	-7.80	13.32	13.35	16.15	12.45		11.45
SPECIALTY CREDIT	-0.09	1.22	3.69	2.04	4.85	4.93				5.26
50% BB US HY / 50% SP LSTA Leveraged Loan	-0.35	2.87	6.76	-1.40	2.64	3.31				3.42
CORE FIXED INCOME	-0.94	0.73	0.10	-3.90	-0.58	1.89				2.07
Bloomberg Barclays US Aggregate	-2.59	0.41	-2.57	-9.72	-3.77	0.53				1.40
CASH	0.28	0.56	1.96	2.16	0.82	1.33	0.90	1.48		2.44
Citigroup Treasury Bill-3 Month	0.35	0.72	2.06	2.22	0.86	1.35	0.81	1.24		2.33
REAL ESTATE	-0.25	-2.68	1.03	9.92	12.97	12.31	10.70			10.17
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index ^A	0.00	0.00	4.87	20.96	11.38	9.26	9.91			7.01
REAL RETURN	-0.32	0.96	7.43	7.55	7.99	5.60	3.58			4.43
US CPI +3%	1.03	0.97	4.32	9.28	8.56	5.94	4.06			4.07



KERS Insurance Relative Weights



KERS-HAZ Insurance Relative Weights



SPRS Insurance Relative Weights

