



KRS Quarterly Performance Update

March 2025

Pension Portfolios Performance

	K	ERS, KERS-HA	Z, & SPRS - P	ENSION FUNI	D - PLAN NET	RETURNS - 0	3/31/25				
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS	4,710,172,722.82	-0.94	1.27	5.63	6.86	5.22	9.33	6.52	6.39	7.61	8.69
KY Ret. KERS Plan IPS Index		-1.34	0.95	5.09	7.11	5.03	9.16	6.36	6.35	7.61	8.74
KERS- H	1,077,150,104.21	-1.42	0.58	5.26	6.56	5.88	10.52	7.15	6.69	7.81	8.84
KY Ret. KERS Haz Plan IPS Ind	lex	-1.81	0.43	5.20	7.72	5.82	10.81	7.10	6.73	7.87	8.93
SPRS	696,688,948.33	-1.08	1.03	5.33	6.45	5.52	9.47	6.48	6.36	7.59	8.68
KY Ret. SPRS Plan IPS Index		-1.34	0.95	5.09	7.11	5.03	9.16	6.31	6.33	7.60	8.73
	KPPA PEN	SION FUND U	NIT - NET RE	TURNS - 03/3	1/25 - PROXY	PLAN ASSET	PERFORMAN	NCE			
Structure		Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY		-3.77	-1.30	3.67	5.08	6.34	14.79	8.44	7.46	8.76	10.27
MSCI ACWI		-3.88	-1.61	3.83	6.30	6.31	14.75	8.39	7.32	8.59	10.14
PRIVATE EQUITY		0.86	1.29	4.56	4.28	2.80	11.84	11.48	10.49		11.26
Russell 3000 + 3%(Qtr Lag)		-2.50	2.78	14.43	26.81	11.07	16.91	15.58	13.10		12.91
SPECIALTY CREDIT		0.69	2.02	7.52	10.45	8.18	8.77				6.90
50% BB US HY / 50% Morning	star LSTA Lev'd Ln	-0.67	0.74	5.70	7.29	6.14	8.17				5.00
CORE FIXED INCOME		0.02	2.72	4.83	5.15	2.98	2.81	2.60			2.88
Bloomberg US Aggregate		0.04	2.78	4.81	4.88	0.52	-0.40	1.46			1.92
CASH		0.37	1.08	3.65	5.04	4.18	2.55	2.03	2.01	2.74	3.40
FTSE Treasury Bill-3 Month		0.37	1.10	3.75	5.17	4.42	2.69	1.90	1.65	2.40	3.03
REAL ESTATE		0.85	1.61	2.44	1.32	-1.44	4.79	7.49	6.83	6.00	6.14
NCREIF NFI-ODCE Net 1 Qtri	n Arrears Index^	0.96	0.96	0.32	-2.27	-3.14	1.99	4.94	5.53	6.99	5.86
REAL RETURN		0.22	2.85	13.83	16.75	12.97	14.85	6.96			6.21
US CPI +3%		0.68	1.86	3.83	5.82	6.99	11.17	4.76			4.34

Insurance Portfolios Performance

	KERS INS	, KERS-HAZ II	NS, SPRS INS	- INSURANCE	FUND - PLAI	N NET RETUR	NS - 03/31/25	5			
Plan	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
KERS INS	1,733,154,616.84	-1.60	0.35	5.13	6.41	6.06	10.63	6.97	6.25	6.98	7.35
KY Ins. KERS Plan IPS Index		-1.81	0.43	5.20	7.72	5.82	10.69	7.07	6.51	7.39	7.69
KERS - H INS	686,848,777.99	-1.44	0.45	4.87	6.27	5.91	10.46	7.17	6.40	7.08	7.43
KY Ins. KERS Haz Plan IPS Index		-1.81	0.43	5.20	7.72	5.82	10.59	7.05	6.51	7.38	7.69
SPRS INS	275,500,587.74	-1.41	0.45	4.85	6.18	5.89	10.51	7.35	6.49	7.14	7.48
KY Ins. SPRS Plan IPS Index		-1.81	0.43	5.20	7.72	5.82	10.59	7.06	6.51	7.39	7.69
	KPPA INSUR	ANCE FUND	JNIT - NET R	ETURNS - 03/3	31/25 - PROX	Y PLAN ASSET	PERFORMA	NCE			
Structure		Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	30 Years	ITD
PUBLIC EQUITY		-3.75	-1.26	3.56	4.92	6.24	14.75	8.45	7.32		8.73
MSCI ACWI		-3.88	-1.61	3.83	6.30	6.31	14.73	8.38	7.15		8.57
PRIVATE EQUITY		-1.63	-1.53	0.95	1.53	4.20	11.66	12.04	10.47		10.43
Russell 3000 + 3%(Qtr Lag)		-2.50	2.78	14.43	26.81	11.07	16.91	15.58	12.80		12.50
SPECIALTY CREDIT		0.75	2.10	7.61	10.59	8.42	8.80				6.84
50% BB US HY / 50% Morningstar	LSTA Lev'd Ln	-0.67	0.74	5.70	7.29	6.14	8.17				5.00
CORE FIXED INCOME		0.02	2.71	4.78	5.08	2.79	2.66	2.50			2.62
Bloomberg US Aggregate		0.04	2.78	4.81	4.88	0.52	-0.40	1.46			1.92
CASH		0.37	1.08	3.65	5.04	4.18	2.54	1.89	1.85		2.60
FTSE Treasury Bill-3 Month		0.37	1.10	3.75	5.17	4.42	2.69	1.90	1.65		2.51
REAL ESTATE		0.88	1.59	2.44	1.05	-1.55	4.65	7.47			7.96
NCREIF NFI-ODCE Net 1 Qtr in Arr	ears Index^	0.96	0.96	0.32	-2.27	-3.14	1.99	4.94			4.66
REAL RETURN		0.29	2.43	13.16	15.51	11.75	13.49	6.54			5.81
US CPI +3%		0.68	1.86	3.83	5.82	6.99	10.57	4.79			4.38

Internal Portfolio Performance



Monthly Internally Managed Portfolio Perfomrance (Net of Fee) As of Date: 3/31/2025

Structure	Market Value	% of Total	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	10 Years	20 Years	ITD	Inception Date
PUBLIC EQUITY												
S&P 500 INDEX	3,290,869,680.68	16.43	-5.61	-4.24	3.87	8.30	9.15	18.64	12.63	10.46	9.03	2001-07-01
KY Ret. S&P/Russell Blend			-5.63	-4.27	3.80	8.25	9.06	18.59	12.50	10.39		
Internal US Mid Cap	225,295,717.32	1.12	-5.40	-6.03	0.94	-2.36	5.19	17.50	8.94		9.54	2014-08-01
S&P MidCap 400 Index			-5.47	-6.10	0.77	-2.70	4.42	16.91	8.43		9.07	
Scientific Beta	280,958,359.52	1.40	-2.90	1.14	8.60	7.63	6.62	15.87			10.63	2016-07-01
S&P 500 Index			-5.63	-4.27	3.80	8.25	9.06	18.59			13.87	
PRIVATE EQUITY												
INTERNAL PRIVATE EQ	87,113,463.18	0.43	-3.68	-2.54	4.55	7.23					11.67	2023-12-01
CORE FI												
INTERNAL CORE FI	1,045,106,551.94	5.22	-0.02	2.75	4.84	4.91					5.34	2023-09-01
Bloomberg US Aggregate Bond Index			0.04	2.78	4.81	4.88					5.19	
REAL ESTATE												
INTERNAL REAL ESTATE	48,609,713.50	0.24	-2.10	3.38	10.95	8.89					6.95	2023-12-01
NCREIF NFI-ODCE Net 1 Qtr in Arrears Index^			0.96	0.96	0.32	-2.27						
REAL RETURN												
INTERNAL REAL RETURN	223,841,713.07	1.12	0.88	5.26	13.05	13.33					13.61	2023-12-01
KRS CPI + 300 bpts			0.68	1.86	3.83	5.82					5.77	
INTERNALTIPS	145,599.44	0.00	0.37	1.08	3.65	5.02	4.40	2.93	2.43	3.47	4.25	2002-05-01
KR2 Internal US TIPS Blend			0.97	3.93	5.78	6.99	1.86	3.47	2.84	3.63		
CASH ACCOUNT	620,210,911.01	3.10	0.37	1.08	3.65	5.04	4.18	2.55	2.03	2.01	3.40	1988-01-01
FTSE Treasury Bill-3 Month			0.37	1.10	3.75	5.17	4.42	2.69	1.90	1.65	3.03	

Asset Class Gross Performance - Pension

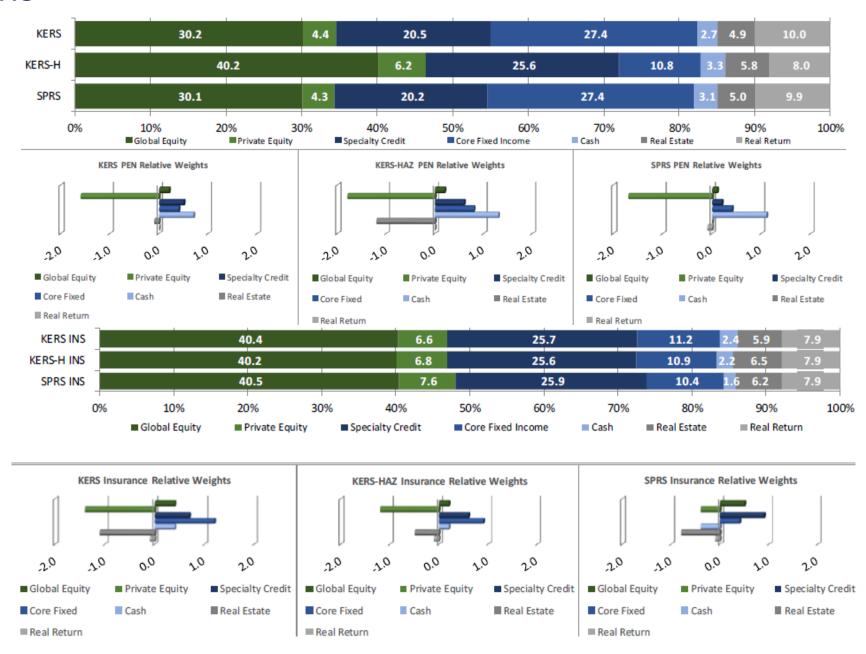


Kentucky Retirement Systems Pension Board Asset Class Performance

As of Date: 3/31/2025

Structure	Account Id	Market Value	Month	3 Months	Fiscal YTD	1 Year	3 Years	5 Years	ITD Inceptio
KERS	KR2F00010002								
TOTAL GROSS OF FEES	KR2F00010002	4,711,701,760.00	-0.87	1.40	6.00	7.36	5.67	9.85	8.85 4/1/1984
EQUITIES	KR2F00010002	1,493,284,395.90	-3.61	-1.10	3.94	5.50	6.52	15.00	38.10 7/1/2013
FIXED INCOME	KR2F00010002	2,232,892,227.87	0.23	2.44	6.24	7.73	5.59	5.82	88.49 7/1/2013
REAL ESTATE	KR2F00010002	228,656,001.52	0.75	2.01	3.87	2.96	0.65	6.19	46.58 7/1/2013
ALTERNATIVE INVESTMENTS	KR2F00010002	627,466,698.46	0.85	3.42	11.84	13.04	4.82	12.37	86.57 7/1/2013
OTHER	KR2F00010002	3,181,444.45	13.42	-1.44	0.84	-2.08	-5.84	-4.21	55.12 7/1/2013
CASH & TEMPORARY	KR2F00010002	126,220,991.80	0.37	1.08	3.65	5.04	4.18	2.55	13.56 7/1/2013
TOTAL NET OF FEES	KR2F00010002	4,710,172,722.82	-0.94	1.27	5.63	6.86	5.22	9.33	8.69 4/1/1984
ERS- H	KR2F00020002								
TOTAL GROSS OF FEES	KR2F00020002	1,077,558,232.06	-1.34	0.73	5.69	7.13	6.45	11.24	9.04 4/1/1984
EQUITIES	KR2F00020002	445,656,922.37	-3.66	-1.23	3.74	5.13	6.43	14.92	95.46 7/1/2013
FIXED INCOME	KR2F00020002	388,444,987.85	0.34	2.16	6.88	9.00	6.89	7.01	88.79 7/1/2013
REAL ESTATE	KR2F00020002	60,969,306.13	0.44	2.12	4.32	3.14	-0.09	5.38	45.31 7/1/2013
ALTERNATIVE INVESTMENTS	KR2F00020002	144,537,399.64	0.24	2.32	9.53	10.93	7.94	14.40	82.26 7/1/2013
OTHER	KR2F00020002	1,896,268.02	5.57	-1.11	3.42	2.22	0.71	1.39	28.37 7/1/2013
CASH & TEMPORARY	KR2F00020002	36,053,348.05	0.37	1.08	3.65	5.04	4.18	2.55	19.31 7/1/2013
TOTAL NET OF FEES	KR2F00020002	1,077,150,104.21	-1.42	0.58	5.26	6.56	5.88	10.52	8.84 4/1/1984
PRS .	KR2F00050002								
TOTAL GROSS OF FEES	KR2F00050002	696,929,141.82	-1.02	1.15	5.69	6.93	5.93	9.99	8.84 4/1/1984
EQUITIES	KR2F00050002	216,120,238.85	-3.66	-1.32	3.77	5.07	6.35	14.95	62.05 7/1/2013
FIXED INCOME	KR2F00050002	331,752,102.47	0.18	2.38	5.98	7.38	5.41	5.71	88.15 7/1/2013
REAL ESTATE	KR2F00050002	34,561,078.51	0.92	1.69	3.57	2.35	-0.13	5.39	74.80 7/1/2013
ALTERNATIVE INVESTMENTS	KR2F00050002	92,203,189.06	-0.03	2.35	10.45	12.19	7.76	13.75	89.82 7/1/2013
OTHER	KR2F00050002	571,547.91	11.71	-1.80	-0.73	-3.29	-1.41	-1.24	34.83 7/1/2013
CASH & TEMPORARY	KR2F00050002	21,720,985.02	0.37	1.08	3.65	5.04	4.18	2.55	17.11 7/1/2013
TOTAL NET OF FEES	KR2F00050002	696,688,948.33	-1.08	1.03	5.33	6.45	5.52	9.47	8.68 4/1/1984

Allocations

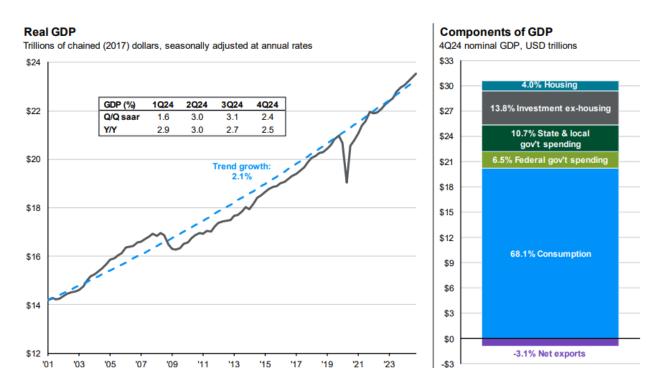


- The KRS Pension Composite produced a return of 1.13% for the quarter outperforming the blended benchmark return of 0.87%.
- The KRS Insurance Composite produced a return of 0.39% for the quarter versus the benchmark return of 0.43%.

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SPRS Pension 1.03%
Benchmark 0.95%
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KERSH Pension 0.58%
KERS Insurance 0.35%
KERSH Insurance 0.45%
SPRS Insurance 0.45%
Benchmark 0.43%

- Across portfolios, the largest contributor to outperformance was the strong outperformance in the Specialty Credit portfolio as managers produced positive excess performance across mandates. Relative outperformance in the Real Return, Public Equity and Real Estate portfolios were also positive contributors to overall performance.
- The overweight to Public Equity, the underweight to Private Equity and the underperformance of the Private Equity portfolio relative to its benchmark were all modest detractors from overall performance.



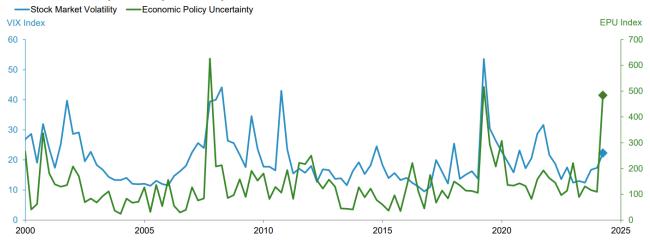
	S&P 500	International	Markets	Small Cap	U.S. Aggregate	Municipal	High Yield	Bank Loan	Commodities
S&P 500	1.00	0.86	0.68	0.86	0.39	0.42	0.80	0.60	0.38
International	0.83	1.00	0.79	0.76	0.43	0.47	0.80	0.60	0.44
Emerging Markets	0.62	0.75	1.00	0.60	0.39	0.44	0.70	0.56	0.49
Small Cap	0.84	0.76	0.58	1.00	0.29	0.34	0.76	0.63	0.36
U.S. Aggregate	0.62	0.69	0.63	0.52	1.00	0.84	0.50	0.15	-0.05
Municipal	0.59	0.67	0.62	0.52	0.86	1.00	0.56	0.29	0.03
High Yield	0.83	0.81	0.65	0.77	0.73	0.72	1.00	0.80	0.49
Bank Loan	0.61	0.58	0.55	0.61	0.36	0.33	0.71	1.00	0.49
Commodities	0.27	0.35	0.33	0.21	0.02	0.04	0.31	0.29	1.00

10 Years ended March 31, 2025

5 Years ended March 31, 2025

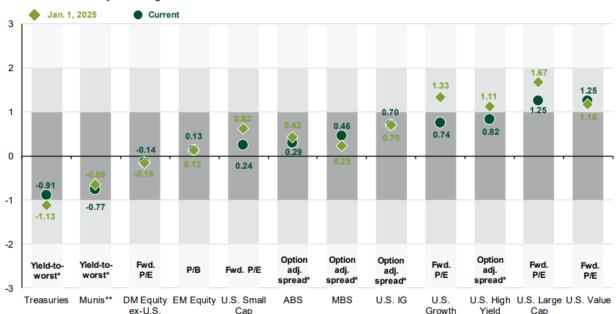
- Fiscal year to date, the KRS Pension Composite produced a return of 5.53% outperforming the blended benchmark by 42bps while the KRS Insurance Composite produced a return of 5.03% versus the blended benchmark return of 5.20%.
- Fiscal year to date, strong outperformance in the Real Return and Specialty Credit portfolios have been the most significant drivers of relative performance while underperformance in the Private Equity portfolio has been the largest detractor.
- Uncertainty about the direction of US policy weighed on financial markets during the first quarter, as investors digested news about a flurry of executive actions, including tariff hikes, deregulation announcements, cuts to government staffing and programs, and tighter immigration activities.
- The quarter was a roller coaster for markets as the post-election optimism in the US gave way concerns over concerns that policy uncertainty could tip the economy into a recession which saw the S7P 500 hitting a new record high in mid February only to tumble into a correction in just three weeks.
- The heightening concern around growth and inflation was in contrast to an otherwise solid showing by the US economy: headline consumer price inflation for February rose only modestly while employment data for March exceeded forecasts with the economy adding 228,000 jobs. Despite the robust economic data, forwardlooking expectations started to price increased uncertainty around tariffs, their rates, implementation, scope and their potential impact on the U.S. economy.

Stock Market Volatility and Policy Uncertainty



Asset class valuations

Z-scores based on 25-year average valuation measures



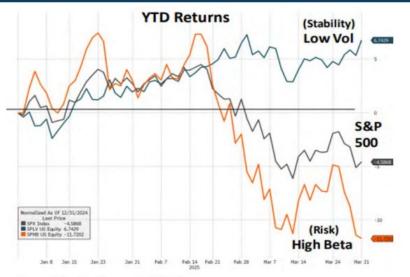
Public Equities

Global equity markets had a heterogeneous performance during the fourth quarter as US equity markets reacted positively to President Trump's election in November, driven mostly by a positive sentiment regarding optimism of a lower regulatory burden under his presidency while European equity investors were more bearish on the news due to growing concerns about the region's trade relationships with the US.

US Markets

- The first quarter of 2025 was a continuation of market cap leadership; however, style leadership experienced a sharp reversal
 - Large caps continued to outperform (SP500: -4.27% vs Midcap: -6.10% vs R2000: -9.48%)
 - Value significantly outperformed Growth by 11.64% (R3000V: 1.64% vs R3000G: -10.00%)
 - Quality and dividend yield outperformed
 - Low volatility outperformed high beta
 - Mag7 equities were punished compared to the rest of the market (valuations were stretched)
- The quarter began with strong momentum resulting in new highs which subsequently gave way to significant drop in response to tariffs and increasing fears of recession
 - All major indices fell as risk was re-priced
 - If tariff policy persists, concerns for more inflation and weaker growth

High Beta Hit Hardest Amid Tariff Shock & Risk-Off Move



Source: Piper Sandler, as of 4/1/2025

Magnificent 7 Leaders Become Laggards in Q1

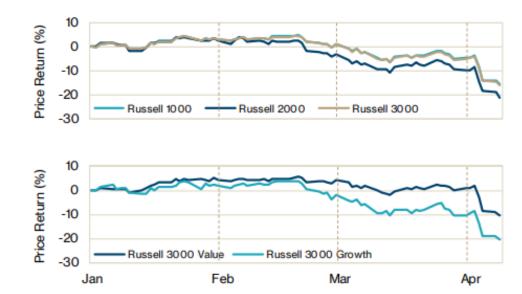


Source: FactSet as of 4/9/2025

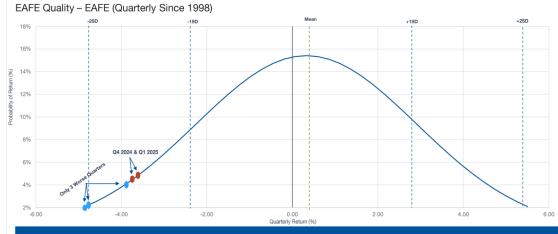
Public Equities

International Markets

- Increased during the quarter and significantly outperformed the US (greatest in 2 decades)
- Tariffs continue to loom over international markets (inflation concerns)
 - Lower quality (defined by ROE) has outperformed the last two quarters
 - European markets have re-rated
 - Opportunities in the defense sector have emerged in response to US NATO stance
 - German markets responded positively to stimulus package focusing on infrastructure and climate
 - o China outperformed as growth began to improve
- Last 2 quarters have been some of the toughest on record for quality (difficult for active management)
- Value and growth valuation discrepancies remain elevated and outside of historical norms



Quality's Improbable Underperformance – Last 2 Quarters



High Quality underperformance in the last two quarters some of most dramatic seen in the last 27 years

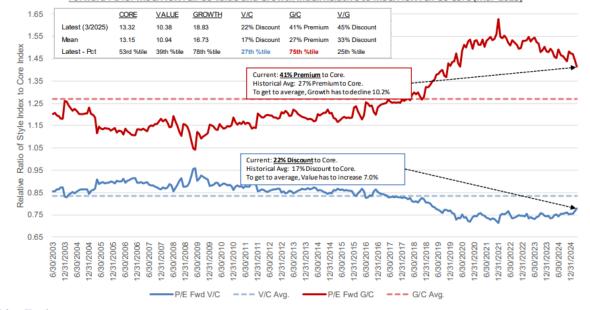
Three quarters were worse than the last two: Q2 2009, Q4 2016, and Q1 2021 Source: Lazard, FactSet, MSCI

Lazard Asset Management

Public Equities

- 1Q25: KPPA Global Equity -1.30% vs MSCI ACWI IMI -1.61%
 - NonUS Equity tilt drove relative outperformance as these markets outpaced the US by over 9.3%
 - US stock selection strength
- 1Q25: KPPA US Equity -4.57% vs Russell 3000 -4.72%
 - Value tilt contributed to relative outperformance, while market cap positioning detracted
 - Solid stock selection: 6 of 7 mandates outperformed
- 1Q25: KPPA NonUS Equity 4.39% vs MSCI ACWI Ex-US IMI 4.59%
 - Individual mandate relative performance was evenly split
 - Stock selection was the primary driver within the context of individual strategies

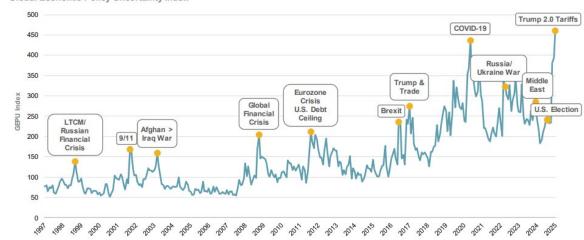
Forward PE for MSCI ACWI ex-US Value and Growth Index Relative to MSCI ACWI ex-US Core (Mar-2025



'alue Equity

Data as of 03/31/2025. Source: LSV, MSCI. This slide does not represent the composition of any LSV portfolio.

Global Economic Policy Uncertainty Index



Data from: 1/1/1997 to 1/31/2025. Data reported on a dela

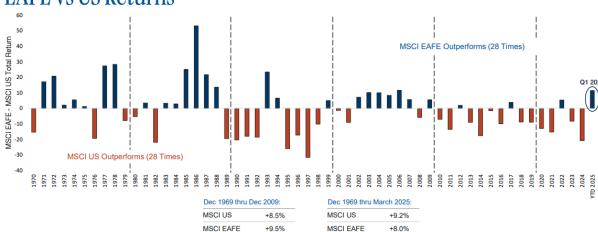
Each national EPU index reflects the relative frequency of own-country newspaper articles that contain a trio of terms pertaining to the economy (E), policy (P) and uncertainty (U). The GEPU index is a GDP-weighted average of national EPU indices for 21 countries: Australia, Brazil, Canada, Chile, China, Colombia, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States.

Source: FacEset, Economic Policy Uncertainty

Public Equities

- 12months: KPPA Global Equity 5.08% vs MSCI ACWI IMI 6.30%
 - Allocation driven headwinds
 - U/W US Equity
 - Within regions, investment exposure tilts versus benchmark
- 12months: KPPA US Equity 6.39% vs Russell 3000 7.22%
 - Relative underperformance driven by allocation
 - Value and smaller cap bias have been headwinds
 - R3000V 6.66% vs R3000G 7.18%
 - SP500 8.25% vs Russell Midcap -2.70% vs Russell 2000 -4.01%
 - Partially offset by solid stock selection (5 out of 7 outperformed)
- 12months: KPPA NonUS Equity 3.15% vs MSCI ACWI Ex-US IMI 5.50%
 - Individual strategy performance was mixed; split 50/50
 - Stock selection drove relative performance
 - Left tails were significantly larger than right
 - Value mandates held up better than growth





This quarter EAFE has outperformed US by largest quarterly magnitude in more than two decades

of 31 March 2025. Returns since 1969 are annualized.

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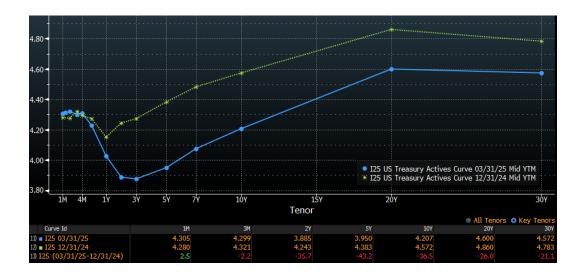
Certain information included herein is derived by Lazard in part from an MSCI index or indices (the "Index Data"). However, MSCI has not reviewed this product or report, and does not endorse or express any opinion regarding this product or report or any analysis or other information contained herein or the author or source of any such information or analysis. MSCI makes no express or implied warranties or representations and shall have no liability whatsoever with respect to any Index Data or data derived therefrom.

Source: MSCI, Lazard

Lazard Asset Management

Core Fixed Income

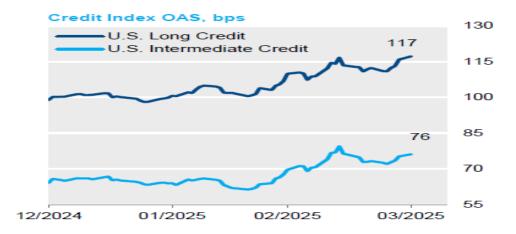
- As widely expected, the Federal Reserve at its January and March meetings kept the key borrowing rate unchanged in the range between 4.25% - 4.50% where it has been since December. In addition, the FOMC downgraded its collective outlook for economic growth and increased its inflation projection. Yields ultimately finished lower and the curve bull steepened.
- The 2YR and 5YR US Treasury yields fell 36 basis points and 43 basis points to close at 3.89% and 3.95%, respectively. The 10YR yield was 37 basis points lower to close at 4.21%. The 20YR and 30YR yields were lower 26 basis points and 21 basis points to finish the quarter at 4.60% and 4.57%, respectively.
- During the quarter, the 2-10YR curve remained the same finishing with a spread of 32 basis points.
- The strong correlation between bond returns and starting yields reflects the large contribution of coupon payments over time. As of 3/31/2025, yield-to-worst of the Bloomberg US Aggregate Bond Index was about 4.60%, providing a reasonable estimate of forward-looking annualized returns.



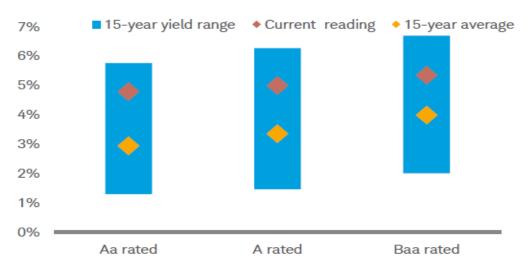


Core Fixed Income

- The Core Fixed Income Portfolio produced a return of 2.72% for the quarter and 4.83% fiscal year-to-date, slightly underperforming the benchmark by 6 basis points during the quarter but outperforming by 2 basis points fiscal year-to-date.
- For the quarter, the portfolio's relative underperformance was driven by the Corporate Credit allocation as the sector's excess return was -0.85%, as tariff uncertainty rattled markets during March.
- Credit spreads widened amidst the risk-off backdrop and in the face of heavy supply. The credit curve steepened as intermediate and long credit spreads widened 10 and 17 basis points, respectively.
- Average yields for Aa, A and Baa rates corporates are still well above their 15-year averages and at the high end of their 15-year ranges. Growth concerns could result in heightened volatility going forward.

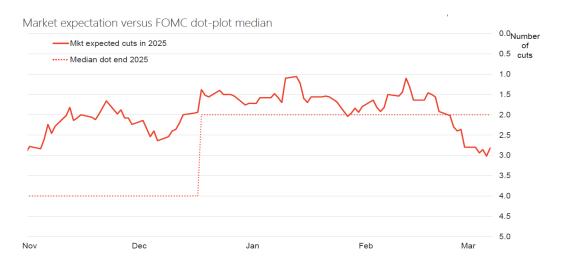


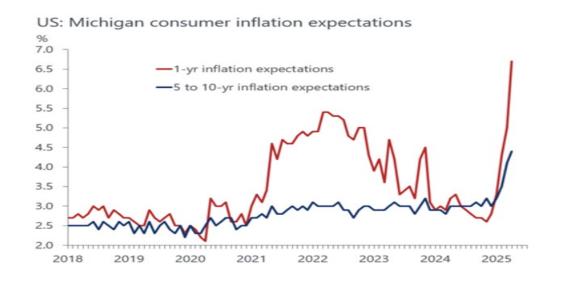
Investment grade corporate bond yields are still well above their 15-year averages



Liquidity

- The FOMC left policy unchanged during the quarter. The new forecast suggests heightened uncertainty this year, with growth expected to be weaker, but inflation momentarily higher.
- The median fed funds forecast did not change but some FOMC participants believe the rate will have to remain higher for longer.
- The Liquidity portfolio produced a return of 1.08% for the 3-month period ending March 31st, slightly underperforming the 3-Month Treasury Bill benchmark which returned 1.10%.
- For fiscal year-to-date, the Liquidity portfolio returned 3.65%, slightly underperforming the benchmark by 10 basis points.
- Near-term inflation expectations jumped to their highest level since 1981. The rise in long-term inflation expectations should catch the Federal Reserve's attention. However, the bond market doesn't believe tariffs will cause persistently higher inflation but consumers are less convinced.
- Chair Powell said the FOMC expects inflation from tariffs to be "transitory."





Specialty Credit Fixed Income

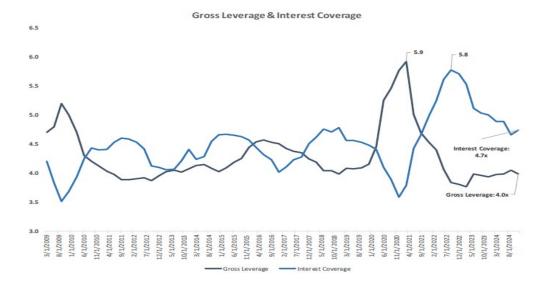
- The Specialty Credit portfolio produced a return of 2.02% for the quarter and 7.52% fiscal year-to-date, outperforming the custom benchmark which returned 0.74% and 5.70%, respectively.
- Over longer periods the portfolio has contributed outperformance, beating the benchmark by 204 and 60 basis points over three- and five-year periods, respectively.
- Softening macroeconomic data and forward earnings guidance along with increasing trade policy uncertainty resulted in modestly wider high yield valuations while total returns remained slightly positive.
- The risk-off tone resulted in decompression with lowerquality issues underperforming with B and CCC returning 0.74% and -0.43%, respectively.
- In a reversal of the multi-year trend, fallen angels outpaced rising stars by a 3:1 ratio. The first quarter of 2025 saw the largest fallen angel volume since second quarter 2020.
- The High Yield option adjusted spread (OAS) widened 60 basis points for the quarter to 347.

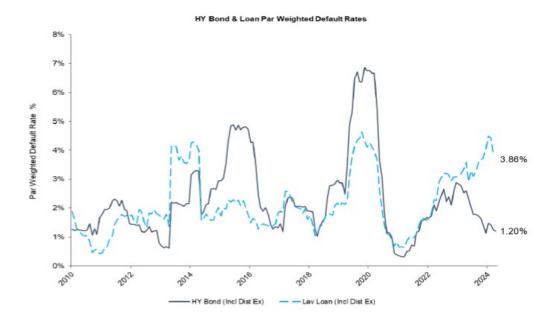




Specialty Credit Fixed Income

- Earnings reports from high yield issuers maintained the recent trend of generally meeting expectations and are yet to indicate broad, material fundamental improvement or deterioration.
- Modestly positive revenue and EBITDA growth continued while leverage and interest coverage metrics remained stable.
- The high yield bond default and distressed exchange activity remained moderate for the quarter. The LTM par-weighted default rate including distressed exchanges decreased to 1.20%.
- Default and distressed exchange activity remains concentrated in the leveraged loan market, where the par-weighted default rate including distressed exchange decreased to 3.86%.
- The 270 basis point spread between high yield bond and leveraged loan default activity remains near multi-decade highs
- The Morningstar LSTA US Leveraged Loan index declined -0.31% in March, the first monthly decline after 16 consecutive monthly gains. However, the index gained 0.48% for the quarter ending March 31, 2025 and produced a positive 4.86% for the fiscal year-to-date.



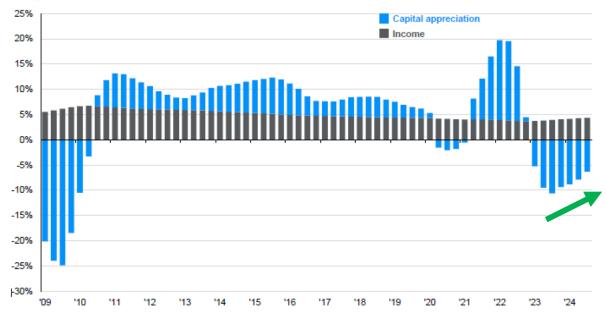


Real Estate (as of 12/31/24 - 1 quarter lag)

- Real Estate markets and sentiment have continued to rebound, with the Open End Diversified Core Equity (NFI-ODCE) index posting a second consecutive positive quarter after two years of declines.
- The Real Estate portfolio's value grew 1.61% during the quarter, outpacing the benchmark's 0.96% return.
- The portfolio's three open-end Core strategies (~2/3 total exposure) all produced positive returns during the fourth quarter. Although some valuation markdowns persist, they were more than offset by the funds' 3.5%+ annual income returns.
- During the second half of 2024, those same three open-end Core funds collectively raised over a billion dollars, largely cleared their redemption queues, and called capital from their contribution queues to start playing offense.
- This increased activity is also reflected in transaction volumes across all sectors, which has started to climb again from the trough reached in late 2023.

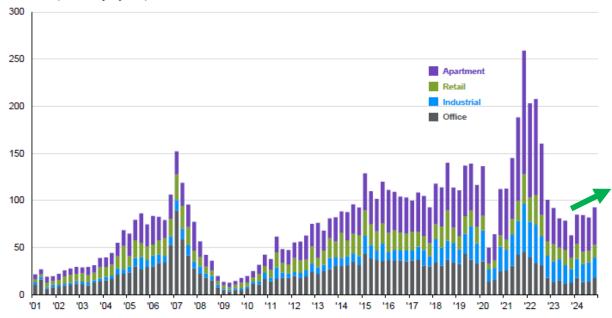
Global private real estate returns

Rolling 4-quarter returns from income and capital appreciation



U.S. real estate transaction volumes

USD billions, seasonally adjusted, 1Q01 - 4Q24



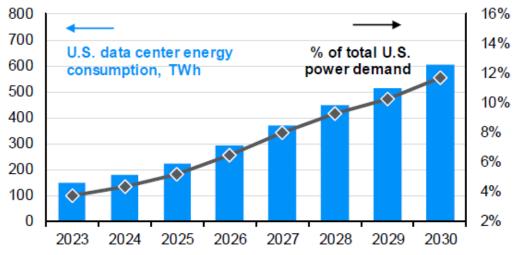
Source: JP Morgan

Real Return

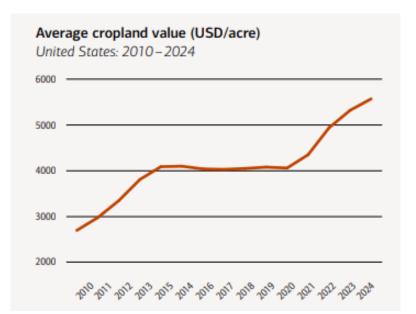
- The Real Return portfolio continued to perform well during the quarter, posting a return of 2.85% that was above its benchmark return of 1.86%.
- The portfolio's MLP exposure gained 6.8% during 1Q 2025 and has returned over 26% annualized over the past three years. Midstream energy companies have continued to grow free cash flow and volumes and are benefiting from the tailwind of data centers' voracious energy demand.
- The portfolio's farmland mandate was funded in 4Q 2024 and returned 3.1% during that quarter.
- The portfolio's inland marine manager returned 1.4% for 4Q 2024 and 8.2% for the full year. The remainder of KPPA's original 2023 commitment plus an incremental \$100 million are scheduled to be deployed at the end of 2Q 2025.
- Over half of the portfolio's railcar leasing allocation was called during 1Q 2025.

Data center expected growth in electricity demand

U.S. data center energy consumption, projections through 2030



Source: JP Morgan



Source: Bank of America, US Department of Agriculture

Private Equity (as of 12/31/24 - 1 quarter lag)

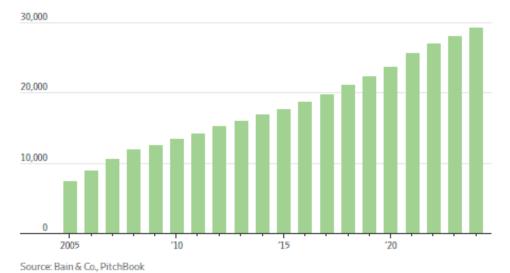
- The Private Equity portfolio produced a return of 1.3% for the quarter, trailing the benchmark's return of 2.8%.
- Performance relative to the benchmark (Russell 3000 + 3%, lagged one quarter) has continued to lag due to a robust equity market that gained ~25% during 2024.
- Transaction activity and exits have picked up in recent quarters but remain well below 2021 levels. Higher interest rates have unfavorably impacted buyout math, and the broader market uncertainty driven by tariffs has not helped.
- As a result, the number of portfolio companies that private equity firms are waiting to sell hit another record high in 2024 near 30,000.

	te equity exits by value oillions, 1Q14 – 4Q24	North America Europe	\$100 \$37	\$91 \$24
\$400		ROW	\$34	\$19
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	14 '15 '16 '17 '18 '19 '20 JP Morgan	'21 '22 '23	'24	

Avg. '15 - '24

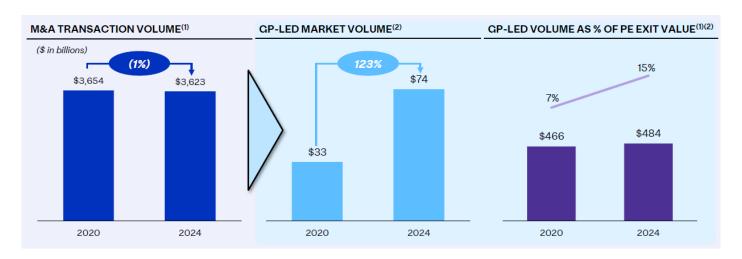
Private-equity glut

Firms are sitting on a record number of companies globally they're waiting to sell

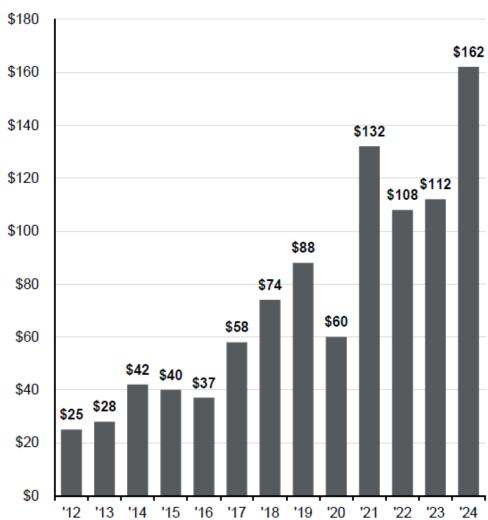


Private Equity

- This glut of unsold companies has helped the secondary market continue to grow. 2024 secondary transaction volume of \$162 billion was a record high and shattered the previous high of \$132 billion in 2021.
- Continuation vehicles (the most prevalent type of GP-led secondaries) have been gaining popularity since they offer LPs liquidity while allowing GPs to continue holding and growing their best assets.
- KPPA invested in two continuation vehicles during 4Q 2024 and received proceeds from three others during the first five months of 2025.



Secondary market volume USD billions



Source: PJT Park Hill Source: JP Morgan