



Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 14

MEETING DATE: September 18, 2024

SUBJECT: Quarterly Investment Performance Report—Alternative Assets

SUBMITTED FOR: ___ Consent **Deliberation** ___ and Action **Receive** X and File

RECOMMENDATION

Receive and file the performance report on alternative assets for the quarter ended June 30, 2024, for the Absolute Return portfolio, and the quarter ended March 31, 2024, for the Private Equity, Private Credit, and Real Assets portfolios, as presented by Cliffwater.

PURPOSE

This item complies with SCERS' investment policy statement reporting requirements and contributes to the effective management and oversight of investment activities.

SCERS ALTERNATIVE ASSETS PORTFOLIO RETURNS

This memorandum provides a summarized table of SCERS' Alternative Assets period returns, which complements Cliffwater's Quarterly Performance Review, and highlights notable manager performance, along with any recent alternative investments made by SCERS. The returns for the private market asset classes shown in the table below, and provided within Cliffwater's reports, are lagged by a quarter and reflect valuations as of March 31, 2024.

SCERS' alternative asset class returns, net of fees, are as follows:

SCERS ALTERNATIVE ASSETS PERFORMANCE SUMMARY
Quarter Reporting Periods Ending June 30, 2024

SCERS ASSET CLASS	Quarter*	1-Year*	3-Year*	5-Year*	Since Inception*	Since Inception Date*
SCERS Absolute Return	0.4%	7.4%	3.7%	5.3%	4.3%	Sep-04
HFRI FoF Conservative	0.9%	7.1%	3.6%	4.9%	3.9%	
HFRI FoF Composite + 1%	0.7%	9.5%	3.1%	5.8%	4.5%	
SCERS Private Equity	1.9%	6.9%	7.5%	17.1%	15.7%	Feb-08
Cambridge Private Equity/Venture Capital	1.2%	5.1%	7.6%	14.7%	13.6%	
SCERS Private Credit	2.0%	8.6%	7.8%	8.8%	8.6%	Oct-11
Credit Suisse Leveraged Loan + 2%	3.0%	14.4%	7.8%	7.3%	7.2%	
SCERS Real Assets	1.0%	5.5%	13.6%	9.3%	10.8%	Jan-13
(60%) Cambridge Private Infrastructure; (30%) Cambridge Private Energy; (10%) NCREIF Farmland	2.4%	7.9%	12.4%	8.6%	7.9%	
<p>*Note: Periods ending 3/31/24 for Private Equity, Private Credit, and Real Assets Periods ending 6/30/24 for Absolute Return All returns are net IRR except Absolute Return which is time-weighted</p>						

SCERS PORTFOLIO RESULTS

For the reporting quarter ended March 31, 2024:

- SCERS' Private Equity portfolio outperformed its benchmark, 1.9% versus 1.2%, with several buyout and venture capital strategies delivering outperformance as the public market has responded positively to a pending interest rate cut and positive economic news.
- SCERS' Private Credit portfolio underperformed against its benchmark return, 2.0% versus 3.0%, but on a relative basis, performed well compared to other asset classes. Loan spreads widened early in the year due to the uncertain economic sentiment resulting in valuation declines of existing loans.
- SCERS' Real Assets portfolio meaningfully underperformed against its benchmark, 1.0% versus 2.4% as energy prices weighed on energy investments across SCERS' infrastructure and energy strategies.

For the reporting quarter ended June 30, 2024, SCERS' Absolute Return portfolio underperformed the HFRI Fund of Funds Conservative Index return, +0.4% versus +0.9% due to the underperformance of the market neutral and macro-systematic strategies (-1.9%).

Below are notable top and bottom performing funds among SCERS' alternative assets managers for the quarterly reporting period:

-
- Top performing funds:
 - Absolute Return:
 - Marshall Wace Funds (Equity Long/Short): +2.1%
 - Grosvenor SC Absolute Return Fund (Fund-of-Funds): +2.0%
 - Elliott International (Event Driven): +2.0%
 - Private Equity portfolio:
 - OrbiMed Private Investments IX (Venture Capital): +17.5%
 - Accel-KKR Capital Partners V (Buyout): +17.2%
 - Shamrock Capital Growth Fund V (Buyout): +16.7%
 - Private Credit portfolio:
 - Athyrium Opportunities Fund II (Opportunistic Lending): +21.9%
 - Silver Point Specialty Credit Fund III (Direct Lending): +4.5%
 - OrbiMed Royalty & Credit Opportunities IV (Opportunistic Lending): +3.8%
 - Real Assets portfolio:
 - EnCap Energy Capital Fund IX (Energy and Power): +23.6%
 - EnCap Energy Capital Fund X, (Energy and Power): +8.1%
 - Quantum Energy Partners VII (Energy and Power): +3.7%
 - Bottom performing funds:
 - Absolute Return portfolio:
 - PSquared (Event Driven): -5.1%
 - Laurion Capital (Market Neutral): -4.1%
 - Graham Global Investment Fund II (Macro-Systematic): -1.1%
 - Private Equity portfolio:
 - RRJ Capital Master Fund II (Buyout): -11.6%
 - Atalaya Special Opportunities Fund VI (Distressed Debt): -9.3%
 - Cortec Group Fund VIII (Buyout): -9.0%
 - Private Credit portfolio:
 - Summit Partners Credit Fund II (Direct Lending): -1.9%

- Summit Partners Credit Fund III (Direct Lending): -1.6%
- MCP Private Capital Fund IV Feeder (Direct Lending): -0.7%

- Real Assets portfolio:
 - Pantheon SCERS SIRF MM (Infrastructure): -8.9%
 - ACM Fund II (Agriculture): -2.3%
 - ArcLight Energy Partners Fund VI (Energy and Power): -2.0%

NEW INVESTMENTS

During the quarter ended June 30, 2024, SCERS made the following new commitments:

- SKY Leasing Fund VI (Private Credit – Opportunistic Lending): \$40 million

ATTACHMENTS

- Board Order
- Cliffwater’s Quarterly Performance Review for Alternative Assets for the Quarter ended June 30, 2024.

Prepared by:

/s/

JR Pearce
Senior Investment Officer

Reviewed by:

/s/

Steve Davis
Chief Investment Officer

/s/

Eric Stern
Chief Executive Officer



Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement
September 18, 2024

AGENDA ITEM:

Quarterly Investment Performance Report—Alternative Assets

THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to receive and file the performance report on alternative assets for the quarter ended June 30, 2024, for the Absolute Return portfolio, and the quarter ended March 31, 2024, for the Private Equity, Private Credit, and Real Assets portfolios, as presented by Cliffwater.

I HEREBY CERTIFY that the above order was passed and adopted on September 18, 2024 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES:

(Present but not voting)

Board President

Eric Stern
Chief Executive Officer and
Board Secretary



INVESTMENT ADVISORY SERVICES

Los Angeles • New York

Sacramento County Employees' Retirement System Quarterly Performance Review

September 18, 2024

Absolute Return Portfolio Performance Summary – as of June 30, 2024

Diversifying Strategies

- The Diversifying Portfolio returned 0.39% in Q2 and 7.45% for the FYTD period ending June 30, 2024
 - Trailed the HFRI Conservative FoF Index benchmark by 51 bps in Q2 though outperformed by 37 bps for the fiscal year
 - Also above the T-bills + 2% long term objective by 80 bps (annualized) over the trailing 5-year period
- PSquared (-5.13%) and Laurion (-4.11%) were the biggest detractors to performance in Q2
 - Global macro strategies (Graham Tactical Trend and Tudor) also reported negative performance in Q2
- The Grosvenor portfolio (+12.05%), MW Global Opps (+11.76%), Elliott (+9.08%), and Davidson Kempner (+8.23%) provided the best performance over the fiscal year
 - Each of the Diversifying Portfolio funds produced positive returns over the fiscal year

Growth Oriented Strategies

- The portfolio was significantly downsized in Q1 '22 following the 2021 decision to eliminate the Growth Oriented Portfolio
 - The only investments in the portfolio are the remaining holdings of the Grosvenor Growth portfolio
 - Grosvenor Growth will continue to wind-down as that portfolio's liquidity allows
 - The portfolio market value totaled \$6.9 million at June 30, 2024
- The Growth Oriented Portfolio returned 1.42% in Q2 and 1.53% for the fiscal year

Portfolio risk and market sensitivity are at expectations for the Diversifying portfolio

- Diversifying Portfolio
 - Target standard deviation < 25% of global equities, with an equity beta < 0.2 and equity correlation < 0.5
 - Standard deviation of 3.27% compared to the ACWI standard deviation of 14.10% since December 2011 (23% ratio)
 - Portfolio equity beta of 0.11 with an equity correlation of 0.46
- The Growth Oriented portfolio has essentially been eliminated

Diversifying Absolute Return Portfolio Performance – as of June 30, 2024

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Jun	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Diversifying Portfolio													
Market Neutral													
Aristeia Partners, L.P.	53,700,255	6.3%	0.10%	0.57%	1.61%	5.11%	5.11%	4.11%	-	5.18%	3.88%	0.53	Jan-21
Laurion Capital, Ltd.	59,904,403	7.0%	-1.14%	-4.11%	-3.62%	0.81%	0.81%	-4.33%	7.73%	7.00%	9.50%	0.57	Mar-14
Market Neutral - HF Total	113,604,658	13.3%	-0.56%	-1.95%	-1.21%	2.14%	2.14%	1.87%	3.89%	5.01%	5.52%	0.58	Mar-14
Event Driven													
BlackRock Event Driven Equity Fund (BILPX)	56,726,144	6.6%	-0.10%	-0.50%	0.20%	5.47%	5.47%	1.64%	-	3.93%	5.04%	0.28	Mar-20
Davidson Kempner Institutional Partners LP	64,553,877	7.5%	0.52%	1.04%	4.30%	8.23%	8.23%	3.21%	5.85%	5.74%	4.37%	0.72	May-19
Elliott International Limited - Class A & B	87,602,200	10.2%	0.80%	2.01%	4.50%	9.08%	9.08%	8.25%	9.13%	8.05%	3.17%	1.92	Apr-12
PSquared US Feeder Fund LP	52,687,269	6.2%	-1.68%	-5.13%	-5.31%	0.30%	0.30%	1.18%	-	1.40%	5.50%	-0.22	Aug-20
Event Driven - HF Total	261,569,490	30.5%	0.03%	-0.28%	1.39%	6.22%	6.22%	3.98%	5.74%	6.61%	3.23%	1.47	Apr-12
Equity Long/Short													
Marshall Wace Funds LP - MW Global Opportunities (US) Fund	64,161,439	7.5%	2.23%	2.06%	8.12%	11.76%	11.76%	7.41%	7.18%	6.98%	7.61%	0.60	Jan-19
Junto Capital Partners LP	52,124,580	6.1%	0.43%	1.75%	-	-	-	-	-	4.25%	-	-	Feb-24
Equity Long/Short - HF Total	116,286,018	13.6%	1.41%	1.92%	8.07%	11.71%	11.71%	7.39%	7.17%	6.97%	7.58%	0.60	Apr-12
Macro-Discretionary													
Tudor BVI Global Fund LP	51,481,148	6.0%	-0.94%	-0.72%	-0.38%	2.97%	2.97%	-	-	1.97%	2.34%	-1.44	Jan-23
Macro-Discretionary - HF Total	51,481,148	6.0%	-0.94%	-0.72%	-0.38%	2.97%	2.97%	-7.28%	-7.28%	-1.21%	4.80%	-0.55	May-12
Macro-Systematic													
Graham Global Investment Fund II SPC Ltd. - Tactical Trend	51,050,846	6.0%	-2.28%	-1.07%	15.85%	2.60%	2.60%	9.65%	8.66%	5.22%	13.65%	0.27	Feb-17
Macro-Systematic - HF Total	51,050,846	6.0%	-2.28%	-1.07%	15.85%	2.60%	2.60%	9.65%	6.42%	4.39%	12.21%	0.22	Jan-17
Fund of Funds													
Grosvenor SC Absolute Return Fund LLC (Diversifying)	255,646,850	29.8%	0.72%	2.00%	7.94%	12.05%	12.05%	6.24%	6.17%	3.35%	3.54%	0.52	Dec-11
Fund of Funds - HF Total	255,646,850	29.8%	0.72%	2.00%	7.94%	12.05%	12.05%	6.23%	6.15%	3.25%	3.41%	0.51	Dec-11
Diversifying Portfolio Total	849,639,010	99.2%	0.14%	0.39%	4.33%	7.45%	7.45%	3.95%	4.96%	3.69%	3.27%	0.65	Dec-11
HFRI FOF: Conservative Index			0.23%	0.90%	3.53%	7.08%	7.08%	3.58%	4.93%	3.91%	3.22%	0.72	Dec-11
3 Month T-Bills+2%			0.56%	1.80%	3.60%	7.40%	7.40%	5.03%	4.16%	3.22%	0.48%	-	Dec-11

Growth Oriented Absolute Return Portfolio Performance – as of June 30, 2024

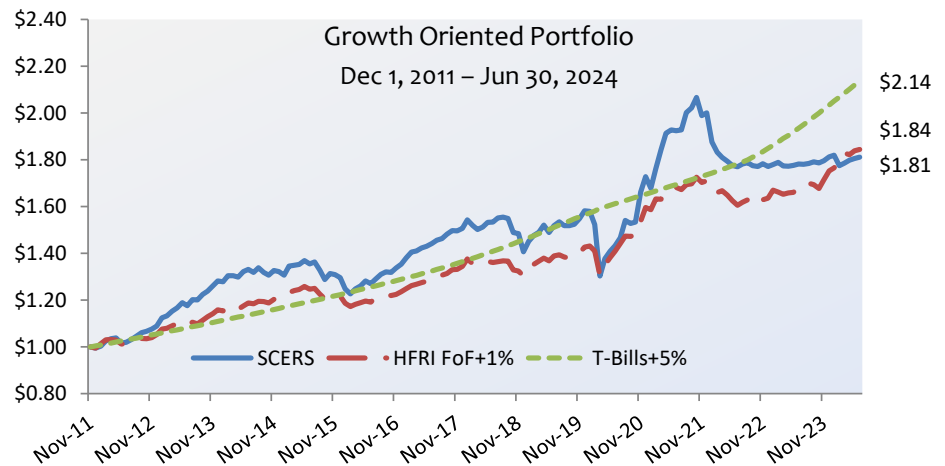
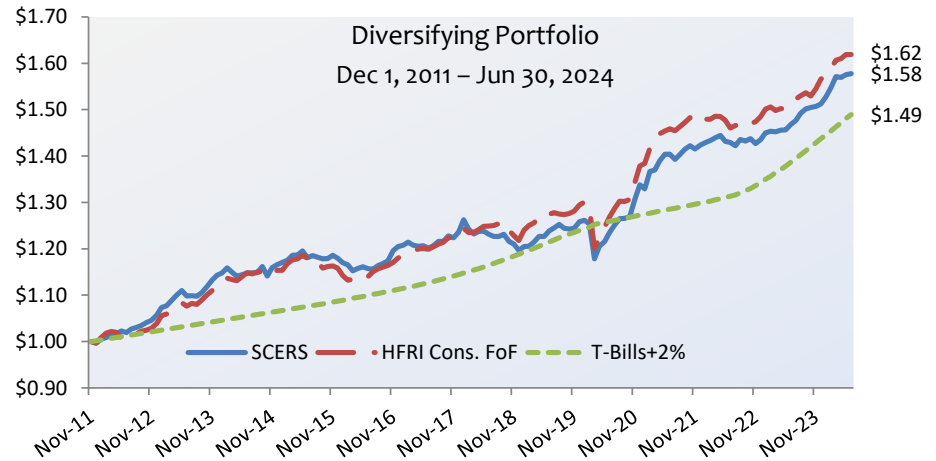
Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Jun	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Growth-Oriented Portfolio													
Fund of Funds													
Grosvenor SC Absolute Return Fund LLC (Growth)	6,874,700	0.8%	0.30%	1.42%	-0.11%	1.53%	1.53%	-1.69%	1.86%	4.16%	6.17%	0.44	Dec-11
Fund of Funds - HF Total	6,874,700	0.8%	0.30%	1.42%	-0.11%	1.53%	1.53%	-1.69%	1.86%	3.81%	6.55%	0.31	Sep-04
Growth-Oriented Portfolio Total	6,874,700	0.8%	0.30%	1.42%	-0.11%	1.53%	1.53%	-2.11%	3.52%	4.34%	7.61%	0.34	Sep-04
HFRI FoF Composite + 1%			0.13%	0.65%	5.06%	9.50%	9.50%	3.06%	5.79%	4.52%	5.24%	0.51	Sep-04
3 Month T-Bills+5%			0.79%	2.49%	5.03%	10.40%	10.40%	8.04%	7.16%	6.58%	0.52%	-	Sep-04
Market Indices													
SOFR 90 Day			0.43%	1.30%	2.63%	5.32%	5.32%	2.95%	2.08%	-	-	-	Sep-04
Bloomberg US Aggregate Bond Index			0.95%	0.07%	-0.71%	2.63%	2.63%	-3.02%	-0.23%	3.01%	4.16%	0.27	Sep-04
Bloomberg US High Yield Bond Index			0.94%	1.09%	2.58%	10.44%	10.44%	1.64%	3.92%	6.54%	9.15%	0.53	Sep-04
S&P 500 TR			3.59%	4.28%	15.29%	24.56%	24.56%	10.01%	15.05%	10.54%	15.02%	0.62	Sep-04
MSCI AC World Index Free - Net			2.23%	2.87%	11.30%	19.38%	19.38%	5.43%	10.76%	8.16%	15.75%	0.46	Sep-04
MSCI EAFE - Net			-1.61%	-0.42%	5.34%	11.54%	11.54%	2.89%	6.46%	5.83%	16.81%	0.31	Sep-04
MSCI EMF (Emerging Markets Free) - Net			3.94%	5.00%	7.49%	12.55%	12.55%	-5.07%	3.10%	7.21%	20.81%	0.35	Sep-04

Absolute Return Portfolios Cumulative Performance – March 2011 to June 2024

The Diversifying portfolio is above its T-bills + 2% long term objective though slightly trails the HFRI Fund of Funds Conservative Index over this period

The Growth Oriented portfolio continued to meet the T-bills + 5% long term objective and remained ahead of the Fund of Funds Index + 1% benchmark into the portfolio's wind-down

Showing cumulative performance (growth of \$1) for each portfolio since the initial restructuring of the Absolute Return portfolio in December 2011



Private Equity Portfolio – as of March 31, 2024

The Private Equity portfolio's net IRR since inception is 15.72%, versus the Cambridge Associates benchmark IRR of 13.57%

- The long-term Policy objective (Russell 3000 + 3%) has a 16.30% IRR over this period

The portfolio returned 1.9% in Q1 as public equity markets continued their strong rally from Q4 '23 (ACWI +8.2% in Q1)

- Although a majority of the funds showed gains during the quarter, some funds continued to see markdowns in their portfolios, particularly among some of the portfolio's Non-U.S. and Venture Capital funds
 - OrbiMed IX, AKKR V, Shamrock Growth V, and Khosla Ventures VII reported the largest gains in Q1
- Saw elevated distributions in Q1, as in Q4, following the general slowdown in private equity exits through much of 2023
 - \$70.8 million in distributions, led by Linden III & IV (\$28.3 million combined), Thoma Bravo XI and RCP XIII
 - Q1 distributions also reflect the \$7.0 million final payment from the secondary sale of the three HarbourVest funds

Despite a recent performance slowdown, longer-term performance remains quite strong across most of the funds

- Double-digit net IRRs for all vintage years prior to 2020, with all but one vintage year exceeding peer universes
- Summit Europe II (70.8%), AKKR IV (39.0%), Spectrum VII (37.2%), Summit VC IV (36.4%), Waterland V (35.0%), Spectrum VIII (31.1%), and AKKR Growth II (29.7%) are leading performance among SCERS' more mature funds

Changes during the quarter

- SCERS committed \$40 MM to Shamrock Growth Fund VI (media & entertainment focused buyout fund, re-up) in Q1
- \$40.8 million in new contributions, \$70.8 million in distributions
- Total portfolio gain increased by \$32.7 million while the total portfolio IRR declined by 0.17%

Private Equity Portfolio Performance Details – as of March 31, 2024

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Vintage Year 2006													
* HarbourVest Partners VIII - Buyout Fund L.P.	Fund of Funds	37,500	0	36,375	100%	64,697	0	64,697	28,322	10.71%	7.00%	1.78x	1.61x
* HarbourVest Partners VIII - Mezzanine and Distressed Debt Fund L.P.	Fund of Funds	5,000	0	4,800	100%	6,458	0	6,458	1,658	6.70%	7.00%	1.35x	1.61x
HarbourVest Partners VIII - Venture Fund L.P.	Fund of Funds	7,500	150	7,350	98%	14,043	2,002	16,045	8,695	11.24%	7.00%	2.18x	1.61x
Vintage Year 2006 Total		50,000	150	48,525	100%	85,198	2,002	87,200	38,675	10.52%	7.44%	1.80x	1.52x
Vintage Year 2008													
* Goldman Sachs Private Equity Partners X, L.P.	Fund of Funds	75,000	0	69,136	100%	110,473	5,413	115,886	46,750	10.49%	12.58%	1.68x	2.00x
* HarbourVest International Private Equity Partners VI-Partnership Fund L.P.	Fund of Funds	34,754	0	37,980	100%	62,101	0	62,101	24,121	9.17%	8.18%	1.64x	1.65x
Abbott Capital Private Equity Fund VI, L.P.	Fund of Funds	75,000	375	74,625	100%	121,253	23,108	144,360	69,735	12.63%	12.58%	1.93x	2.00x
Vintage Year 2008 Total		184,754	375	181,741	100%	293,827	28,520	322,348	140,606	11.13%	8.77%	1.77x	1.51x
Vintage Year 2011													
Waterland Private Equity Fund V C.V.	Buyout	17,269	2,788	16,278	84%	47,373	535	47,908	31,630	34.95%	8.72%	2.94x	1.53x
Khosla Ventures IV, L.P.	Venture Capital	10,000	190	9,810	98%	29,525	14,230	43,755	33,945	23.42%	14.84%	4.46x	2.43x
Vintage Year 2011 Total		27,269	2,978	26,088	89%	76,898	14,765	91,663	65,575	28.84%	11.95%	3.51x	1.82x
Vintage Year 2012													
Garrison Opportunity Fund III A LLC	Distressed Debt	20,000	0	20,000	100%	24,103	1,394	25,496	5,496	3.59%	15.29%	1.27x	1.67x
Summit Partners Venture Capital III-A, LP	Growth Equity	16,350	1,849	19,764	89%	38,234	3,435	41,669	21,905	17.38%	13.46%	2.11x	2.08x
New Enterprise Associates 14, L.P.	Venture Capital	25,000	500	24,500	98%	27,816	38,584	66,399	41,899	15.09%	14.90%	2.71x	2.26x
Vintage Year 2012 Total		61,350	2,349	64,264	96%	90,152	43,412	133,565	69,301	12.22%	11.87%	2.08x	1.81x
Vintage Year 2013													
* Accel-KKR Capital Partners IV, L.P.	Buyout	15,000	311	15,509	98%	55,448	0	55,448	39,939	38.96%	15.01%	3.58x	1.88x
H.I.G. Capital Partners V, L.P.	Buyout	14,000	209	14,033	99%	25,641	7,171	32,811	18,778	22.84%	15.01%	2.34x	1.88x
Marlin Equity IV, L.P.	Buyout	20,000	0	20,791	100%	19,054	8,392	27,446	6,655	6.29%	15.01%	1.32x	1.88x
RRJ Capital Master Fund II, L.P.	Buyout	35,000	3,750	36,080	89%	46,067	4,069	50,136	14,056	8.89%	11.79%	1.39x	1.75x

¹Benchmarks:

Private Equity Investments: Cambridge Associates median return for the respective strategies and vintage years

Vintage Year Comparison: Cambridge Associates Global Private Equity & Venture Capital median return for the respective vintage years

Private Equity Portfolio: Cambridge Associates Global Private Equity & Venture Capital pooled internal rate of return

Private Equity Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Atalaya Special Opportunities Fund V, L.P.	Distressed Debt	25,000	1,117	24,875	96%	31,413	408	31,821	6,946	7.66%	8.27%	1.28x	1.36x
H.I.G. Bayside Loan Opportunity Fund III (Europe-US\$), L.P.	Distressed Debt	30,000	5,400	24,600	82%	28,963	3,433	32,395	7,796	7.10%	5.25%	1.32x	1.24x
Wayzata Opportunities Fund III, L.P.	Distressed Debt	30,000	26,593	14,718	11%	11,860	3,844	15,704	986	1.36%	8.27%	1.07x	1.36x
Trinity Ventures XI, L.P.	Venture Capital	25,000	375	24,625	99%	7,189	41,522	48,712	24,087	9.40%	14.44%	1.98x	2.49x
Vintage Year 2013 Total		194,000	37,755	175,231	81%	225,635	68,838	294,473	119,242	11.88%	12.47%	1.68x	1.80x
Vintage Year 2014													
Blue Owl GP Stakes II US Investors LP	Buyout	35,000	6,247	38,107	82%	20,685	37,543	58,227	20,120	9.54%	17.92%	1.53x	2.01x
H.I.G. Europe Capital Partners II, L.P.	Buyout	15,110	3,291	15,054	78%	11,627	10,671	22,298	7,244	10.39%	13.71%	1.48x	1.73x
Marlin Heritage Fund	Buyout	10,000	1,438	11,286	86%	20,295	3,674	23,969	12,684	29.48%	17.92%	2.12x	2.01x
Thoma Bravo XI	Buyout	30,000	3,203	32,591	89%	86,770	25,882	112,653	80,061	26.55%	17.92%	3.46x	2.01x
TPG Opportunities Partners III	Distressed Debt	40,000	11,078	50,839	72%	55,441	6,068	61,509	10,670	8.24%	8.47%	1.21x	1.44x
Spectrum Equity Investors VII, L.P.	Growth Equity	25,000	1,625	23,388	94%	63,185	35,044	98,229	74,841	37.15%	20.25%	4.20x	2.37x
Khosla Ventures V	Venture Capital	20,000	700	19,300	97%	27,126	34,800	61,926	42,626	20.85%	16.19%	3.21x	2.42x
Vintage Year 2014 Total		175,110	27,583	190,565	84%	285,130	153,682	438,811	248,246	21.69%	14.57%	2.30x	1.99x
Vintage Year 2015													
* WPEF VI Overflow Fund C.V.	Buyout	6,476	6,466	10	0%	0	0	0	-10	0.00%	14.56%	0.00x	1.82x
RRJ Capital Master Fund III, LP	Buyout	40,000	2,538	40,923	94%	36,562	8,446	45,008	4,085	4.61%	14.56%	1.10x	1.82x
WPEF VI Feeder, L.P.	Buyout	25,903	15,071	25,343	42%	30,972	15,975	46,946	21,603	19.19%	14.56%	1.85x	1.82x
Accel-KKR Growth Capital Partners II	Growth Equity	15,000	188	16,590	99%	30,186	8,762	38,948	22,358	29.71%	19.01%	2.35x	2.27x
Summit Partners Venture Capital Fund IV-A, L.P.	Growth Equity	35,000	11,122	41,378	68%	38,912	61,238	100,150	58,772	36.39%	19.01%	2.42x	2.27x
New Enterprise Associates 15, L.P.	Venture Capital	35,000	1,925	33,079	95%	33,952	26,638	60,591	27,511	11.48%	14.36%	1.83x	2.07x
Vintage Year 2015 Total		157,379	37,310	157,324	76%	170,585	121,059	291,644	134,320	18.79%	14.37%	1.85x	1.94x
Vintage Year 2016													
Accel-KKR Capital Partners V, L.P.	Buyout	25,000	0	25,788	100%	24,342	34,023	58,365	32,577	29.00%	20.30%	2.26x	2.04x
Blue Owl GP Stakes III Pension Investors L P	Buyout	35,000	21,596	29,463	38%	28,970	34,851	63,822	34,358	23.61%	20.30%	2.17x	2.04x
Linden Capital Partners III	Buyout	35,000	1,915	40,085	95%	74,289	22,272	96,561	56,476	27.84%	20.30%	2.41x	2.04x

¹Benchmarks:

Private Equity Investments: Cambridge Associates median return for the respective strategies and vintage years

Vintage Year Comparison: Cambridge Associates Global Private Equity & Venture Capital median return for the respective vintage years

Private Equity Portfolio: Cambridge Associates Global Private Equity & Venture Capital pooled internal rate of return

Private Equity Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Marlin Heritage Europe, L.P.	Buyout	14,031	152	14,566	99%	19,456	18,203	37,659	23,093	25.83%	13.15%	2.59x	1.74x
Thoma Bravo Fund XII, L.P.	Buyout	30,000	7,381	40,884	75%	42,132	37,624	79,755	38,871	16.67%	20.30%	1.95x	2.04x
TSG7 A L.P.	Buyout	16,000	2,690	13,310	83%	13,878	16,889	30,767	17,457	17.95%	20.30%	2.31x	2.04x
TSG7 B L.P.	Buyout	4,000	16	4,158	100%	2,153	3,678	5,831	1,673	9.39%	20.30%	1.40x	2.04x
Atalaya Special Opportunities Fund VI, L.P.	Distressed Debt	25,000	2,454	28,940	90%	41,169	1,043	42,212	13,272	13.43%	8.76%	1.46x	1.36x
Trinity Ventures XII, L.P.	Venture Capital	30,000	4,275	25,725	86%	27,145	33,335	60,480	34,755	20.59%	16.78%	2.35x	2.07x
Vintage Year 2016 Total		214,031	40,479	222,920	81%	273,535	201,918	475,453	252,532	21.43%	14.77%	2.13x	1.84x
Vintage Year 2017													
Marlin Heritage II	Buyout	10,000	0	10,604	100%	4,426	10,092	14,518	3,914	8.33%	21.91%	1.37x	2.05x
Summit Partners Europe Growth Equity Fund II, SCSP	Growth Equity	32,379	10,523	38,263	68%	58,569	56,997	115,566	77,303	70.82%	10.96%	3.02x	1.49x
New Enterprise Associates 16, L.P.	Venture Capital	35,000	3,150	31,850	91%	8,390	39,682	48,072	16,222	9.50%	18.71%	1.51x	2.01x
Vintage Year 2017 Total		77,379	13,673	80,717	82%	71,384	106,772	178,156	97,439	28.33%	17.08%	2.21x	1.82x
Vintage Year 2018													
Linden Capital Partners IV LP	Buyout	44,330	3,876	45,250	91%	37,470	44,754	82,224	36,975	24.20%	19.05%	1.82x	1.67x
Marlin Equity V	Buyout	25,000	0	25,808	100%	12,442	31,976	44,417	18,610	20.04%	19.05%	1.72x	1.67x
TSG8 L.P.	Buyout	45,000	4,246	40,867	91%	1,492	35,500	36,992	-3,874	-3.98%	19.05%	0.91x	1.67x
Davidson Kempner Long-Term Distressed Opportunities Fund IV LP	Distressed Debt	35,000	2,400	33,198	93%	43,726	18,670	62,396	29,199	17.28%	11.10%	1.88x	1.41x
TSSP Opportunities Partners IV (A), L.P.	Distressed Debt	35,000	3,418	46,207	90%	30,205	26,727	56,932	10,725	11.12%	11.10%	1.23x	1.41x
RCP Fund XIII	Fund of Funds	50,000	3,598	48,902	93%	11,798	57,012	68,810	19,908	15.67%	16.59%	1.41x	1.66x
RCPDirect III	Fund of Funds	25,000	3,506	23,186	86%	14,049	27,423	41,472	18,286	19.90%	N/A	1.79x	N/A
Accel-KKR Growth Capital Partners III	Growth Equity	33,320	4,102	29,218	88%	5,394	33,017	38,411	9,193	10.00%	15.83%	1.31x	1.62x
Spectrum Equity VIII, L.P.	Growth Equity	25,000	2,500	22,500	90%	24,549	26,842	51,391	28,891	31.05%	15.83%	2.28x	1.62x
Khosla Ventures VI, L.P.	Venture Capital	35,000	1,750	33,250	95%	0	74,676	74,676	41,426	22.22%	15.90%	2.25x	1.77x
Vintage Year 2018 Total		352,650	29,397	348,385	92%	181,126	376,597	557,723	209,338	17.68%	15.16%	1.60x	1.58x
Vintage Year 2019													
Cortec Group Fund VII, L.P.	Buyout	30,000	3,681	33,774	88%	23,305	27,316	50,621	16,847	22.60%	16.50%	1.50x	1.50x

¹Benchmarks:

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Vintage Year Comparison: Cambridge Associates Global Private Equity & Venture Capital median return for the respective vintage years

Private Equity Portfolio: Cambridge Associates Global Private Equity & Venture Capital pooled internal rate of return

Private Equity Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Gridiron Capital Fund IV, L.P.	Buyout	30,000	1,456	31,487	95%	6,513	53,562	60,075	28,587	26.54%	16.50%	1.91x	1.50x
Thoma Bravo Fund XIII, LP	Buyout	45,000	3,743	54,899	92%	37,899	65,528	103,427	48,528	26.02%	16.50%	1.88x	1.50x
New Enterprise Associates 17, L.P.	Venture Capital	25,000	4,250	20,764	83%	2,462	21,974	24,436	3,672	6.15%	10.69%	1.18x	1.35x
Threshold Ventures III, L.P.	Venture Capital	20,000	2,580	17,420	87%	0	21,229	21,229	3,809	6.75%	10.69%	1.22x	1.35x
Vintage Year 2019 Total		150,000	15,710	158,344	90%	70,179	189,609	259,788	101,444	21.01%	13.09%	1.64x	1.40x
Vintage Year 2020													
Accel-KKR Capital Partners VI, LP	Buyout	30,000	3,047	26,953	90%	0	26,953	26,953	0	0.00%	15.79%	1.00x	1.41x
Wynnchurch Capital Partners V	Buyout	20,000	5,403	14,752	73%	703	18,131	18,834	4,082	12.90%	15.79%	1.28x	1.41x
Davidson Kempner Long-Term Distressed Opportunities Fund V LP	Distressed Debt	30,000	3,083	27,670	90%	1,667	32,308	33,976	6,306	7.94%	10.22%	1.23x	1.24x
Spectrum Equity IX-A, L.P.	Growth Equity	25,000	1,750	23,250	93%	0	21,273	21,273	-1,977	-4.35%	11.52%	0.91x	1.28x
Summit Partners Europe Growth Equity Fund III, SCSp	Growth Equity	21,586	4,640	18,545	79%	1,428	22,091	23,519	4,974	13.83%	3.70%	1.27x	1.10x
Summit Partners Venture Capital Fund V-A, L.P.	Growth Equity	20,000	7,904	12,984	60%	888	12,698	13,586	602	2.65%	11.52%	1.05x	1.28x
Shamrock Capital Content Fund II, L.P.	Opportunistic Credit	20,000	8,924	16,522	55%	5,440	13,926	19,366	2,844	9.27%	10.31%	1.17x	1.23x
Canvas Ventures 3, L.P.	Venture Capital	20,000	6,286	13,714	69%	0	13,324	13,324	-389	-1.39%	6.48%	0.97x	1.16x
OrbiMed Private Investments VIII, LP	Venture Capital	15,000	6,385	9,338	57%	1,463	10,735	12,198	2,861	12.28%	6.48%	1.31x	1.16x
Vintage Year 2020 Total		201,586	47,422	163,727	76%	11,590	171,439	183,029	19,302	5.75%	9.45%	1.12x	1.22x
Vintage Year 2021													
Linden Capital Partners V LP	Buyout	30,000	13,985	16,015	53%	0	18,245	18,245	2,230	N/M	N/M	1.14x	1.19x
Shamrock Capital Growth Fund V, L.P.	Buyout	20,000	6,927	13,183	65%	110	14,452	14,562	1,379	8.00%	9.90%	1.10x	1.19x
Strategic Value Special Situations Fund V, L.P.	Distressed Debt	30,000	12,000	18,023	60%	0	23,320	23,320	5,297	15.99%	11.50%	1.29x	1.19x
CRV Select Fund I, LP	Venture Capital	20,000	1,850	18,150	91%	0	18,161	18,161	11	0.02%	-1.84%	1.00x	0.97x
CRV XVIII, LP	Venture Capital	20,000	3,550	16,450	82%	0	16,574	16,574	124	0.30%	-1.84%	1.01x	0.97x
Khosla Ventures VII, L.P.	Venture Capital	20,000	5,440	14,560	73%	0	20,705	20,705	6,145	17.87%	-1.84%	1.42x	0.97x
Vintage Year 2021 Total		140,000	43,752	96,381	69%	110	111,458	111,568	15,187	7.79%	0.85%	1.16x	1.02x

¹Benchmarks:

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Vintage Year Comparison: Cambridge Associates Global Private Equity & Venture Capital median return for the respective vintage years

Private Equity Portfolio: Cambridge Associates Global Private Equity & Venture Capital pooled internal rate of return

Private Equity Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Vintage Year 2022													
Golden Capital Co-Investments, L.P.	Buyout	100,000	76,880	23,120	23%	0	26,569	26,569	3,449	N/M	N/M	1.15x	1.12x
Gridiron Capital Fund V, L.P.	Buyout	35,000	20,001	14,999	43%	0	15,886	15,886	886	N/M	N/M	1.06x	1.12x
Marlin Heritage III, L.P.	Buyout	30,000	22,680	7,320	24%	0	7,264	7,264	-56	N/M	N/M	0.99x	1.12x
Oaktree Power Opportunities Fund VI	Buyout	30,000	5,482	25,063	82%	445	28,179	28,624	3,562	N/M	N/M	1.14x	1.12x
Sixth Street Opportunities Partners V (A), L.P.	Distressed Debt	30,000	12,855	20,387	57%	3,246	17,917	21,163	776	N/M	N/M	1.04x	N/A
Accel-KKR Growth Capital Partners IV	Growth Equity	30,000	18,425	11,575	39%	0	11,112	11,112	-462	N/M	N/M	0.96x	0.98x
Shamrock Capital Content Fund III, L.P.	Opportunistic Credit	30,000	29,022	978	3%	0	6	6	-972	N/M	N/M	0.01x	1.11x
CRV Select Fund II, LP	Venture Capital	22,500	16,144	6,356	28%	0	5,647	5,647	-709	-7.28%	-4.50%	0.89x	0.94x
CRV XIX, LP	Venture Capital	22,500	14,738	7,763	35%	0	6,600	6,600	-1,162	N/M	N/M	0.85x	0.94x
OrbiMed Private Investments IX, LP	Venture Capital	25,000	19,625	5,375	22%	0	5,832	5,832	457	N/M	N/M	1.08x	0.94x
Threshold Ventures IV, L.P.	Venture Capital	25,000	19,850	5,150	21%	0	4,216	4,216	-934	N/M	N/M	0.82x	0.94x
Vintage Year 2022 Total		380,000	255,701	128,085	33%	3,691	129,230	132,921	4,836	4.39%	-2.58%	1.04x	0.97x
Vintage Year 2023													
Accel-KKR Capital Partners VII, LP	Buyout	35,000	35,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Cortec Group Fund VIII, L.P.	Buyout	40,000	35,704	5,988	11%	1,718	3,037	4,754	-1,234	N/M	N/M	0.79x	N/A
CVC Capital Partners IX	Buyout	32,379	32,379	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
TSG9 L.P.	Buyout	30,000	22,572	7,428	25%	0	6,587	6,587	-842	N/M	N/M	0.89x	N/A
Alchemy Special Opportunities Fund V	Distressed Debt	34,538	34,538	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Spectrum Equity X-A, L.P.	Growth Equity	25,000	22,250	2,750	11%	0	2,666	2,666	-84	N/M	N/M	0.97x	N/A
Khosla Ventures VIII	Venture Capital	30,000	25,500	4,500	15%	0	4,550	4,550	50	N/M	N/M	1.01x	N/A
Vintage Year 2023 Total		226,917	207,943	20,666	8%	1,718	16,840	18,558	-2,109	N/M	N/M	0.90x	0.92x
Vintage Year 2024													
Wynnchurch Capital Partners VI, L.P.	Buyout	38,000	38,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Shamrock Capital Growth Fund VI, L.P.	Growth Equity	40,000	40,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Vintage Year 2024 Total		78,000	78,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A

¹Benchmarks:

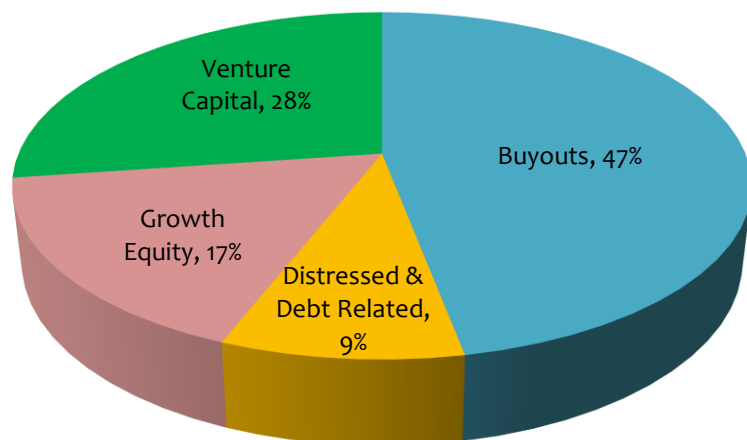
Private Equity Investments: Cambridge Associates median return for the respective strategies and vintage years

Vintage Year Comparison: Cambridge Associates Global Private Equity & Venture Capital median return for the respective vintage years

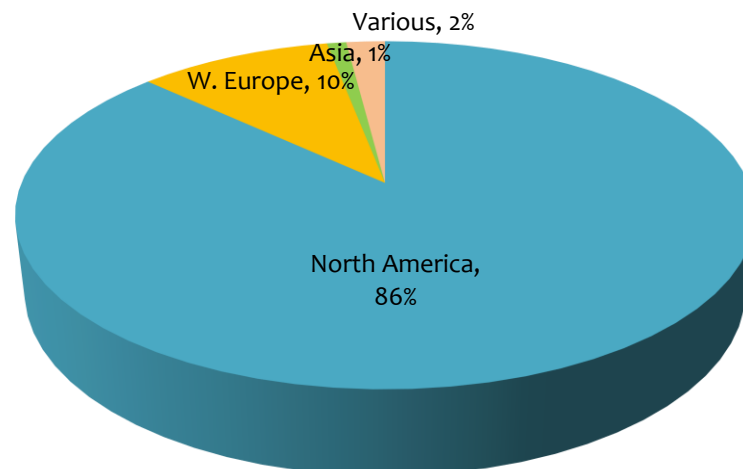
Private Equity Portfolio: Cambridge Associates Global Private Equity & Venture Capital pooled internal rate of return

Private Equity Portfolio Exposures as of March 31, 2024

Private Equity Portfolio Strategy Exposure*



Private Equity Portfolio Geographic Exposure*



	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI Bench.
Portfolio Strategy Totals											
Buyout	1,122,498	414,124	831,770	63%	732,236	723,928	1,456,164	624,394	20.07%		1.75x
Distressed Debt	364,538	114,937	309,456	68%	271,793	135,131	406,924	97,468	8.78%		1.31x
Fund of Funds	309,754	7,629	302,354	98%	404,872	114,957	519,829	217,475	11.37%		1.72x
Growth Equity	343,635	126,878	260,205	63%	261,346	295,176	556,522	296,317	29.36%		2.14x
Opportunistic Credit	50,000	37,946	17,500	24%	5,440	13,932	19,372	1,872	6.12%		1.11x
Venture Capital	480,000	139,063	341,678	71%	165,069	453,017	618,086	276,408	14.53%		1.81x
Portfolio Total :	2,670,425	840,577	2,062,963	69%	1,840,756	1,736,142	3,576,899	1,513,935	15.72%	13.57%	1.73x

* Exposures are based on the market values of investments as of 3/31/24.

Private Credit Portfolio – as of March 31, 2024

The Private Credit portfolio's net IRR since inception is 8.61%, versus the benchmark return of 7.17%

- The benchmark is the Credit Suisse Leveraged Loan Index + 2%

The Private Credit funds reported another solid quarterly gain, continuing their steady performance since the muted returns seen in the first half of 2022

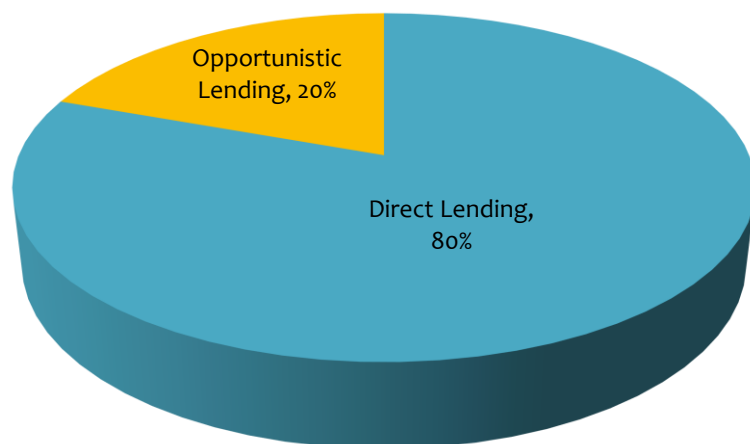
- The portfolio returned 2.0% in Q1 and 8.6% for the trailing 1-year period ending March 31, 2024
 - Most of the funds generated returns between 1% to 4% for the quarter
 - Athyrium II, Silver Point Specialty Credit III, and OrbiMed Royalty & Credit IV led performance in Q1
 - Performance in Q1 and the trailing 1-year period has been held back by markdowns in the older Summit Credit funds
 - These funds are being wound down as their existing loan portfolios mature
- Longer term performance remains steady despite modest sell-offs in Q1 2020 and during the first half of 2022
 - 7.8% net IRR for the 3-year period and 8.8% net IRR for the 5-year period

Changes during the quarter

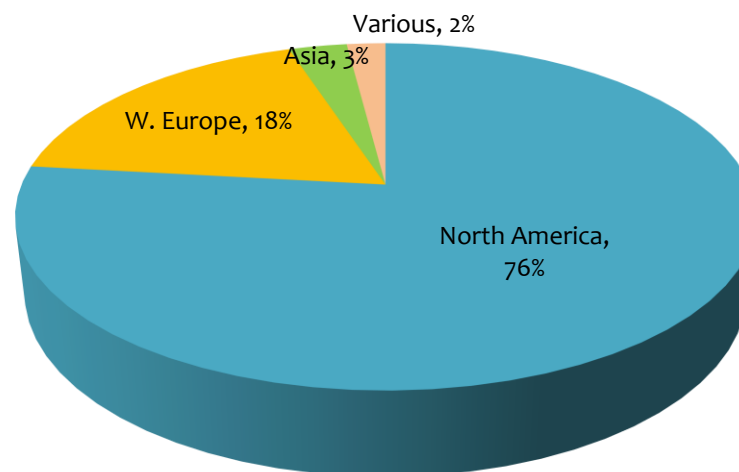
- SCERS made no new commitments to Private Credit funds in Q1
 - SCERS committed \$40 million to an Opportunistic Lending fund in Q2 2024
- \$22.1 million in new contributions, \$18.6 million in distributions
- Total portfolio gain increased by \$8.3 million while the total portfolio IRR declined by 0.02%

Private Credit Portfolio Exposures as of March 31, 2024

Private Credit Portfolio Strategy Exposure*



Private Credit Portfolio Geographic Exposure*



Portfolio Strategy Totals	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Direct Lending	649,106	183,918	513,869	72%	275,543	351,018	626,561	112,692	8.33%		1.22x	
Opportunistic Lending	192,000	71,738	163,171	63%	112,029	86,320	198,348	35,177	9.64%		1.22x	
Portfolio Total :	841,106	255,656	677,040	70%	387,572	437,337	824,909	147,869	8.61%	7.17%	1.22x	

* Exposures are based on the market values of investments as of 3/31/24.

Private Credit Portfolio Details – as of March 31, 2024

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Vintage Year 2011													
Summit Partners Credit Fund, LP	Direct Lending	20,000	0	20,697	100%	26,789	84	26,873	6,176	8.86%	N/A	1.30x	N/A
Vintage Year 2011 Total		20,000	0	20,697	100%	26,789	84	26,873	6,176	8.86%	11.95%	1.30x	1.82x
Vintage Year 2014													
Summit Partners Credit Fund II, L.P.	Direct Lending	35,000	879	49,221	97%	47,565	7,227	54,792	5,571	3.86%	4.55%	1.11x	N/A
Vintage Year 2014 Total		35,000	879	49,221	97%	47,565	7,227	54,792	5,571	3.86%	14.57%	1.11x	1.99x
Vintage Year 2015													
Athyrium Opportunities Fund II	Opportunistic Lending	32,000	1,943	43,772	94%	48,700	8,522	57,222	13,450	10.21%	9.54%	1.31x	1.54x
Vintage Year 2015 Total		32,000	1,943	43,772	94%	48,700	8,522	57,222	13,450	10.21%	14.37%	1.31x	1.94x
Vintage Year 2017													
Athyrium Opportunities Fund III	Opportunistic Lending	25,000	4,667	30,208	81%	24,494	7,371	31,865	1,657	2.19%	10.34%	1.05x	1.35x
Vintage Year 2017 Total		25,000	4,667	30,208	81%	24,494	7,371	31,865	1,657	2.19%	17.08%	1.05x	1.82x
Vintage Year 2018													
Benefit Street Partners Senior Secured Opportunities Fund L.P.	Direct Lending	50,000	20,989	50,953	58%	42,504	21,739	64,242	13,290	5.95%	5.09%	1.26x	N/A
Summit Partners Credit Fund III, L.P.	Direct Lending	50,000	2,016	59,660	96%	63,084	11,058	74,142	14,482	13.16%	5.09%	1.24x	N/A
TCP Direct Lending Fund VIII-S, LLC	Direct Lending	125,000	0	125,000	100%	43,944	117,237	161,181	36,181	8.04%	5.09%	1.29x	N/A
Vintage Year 2018 Total		225,000	23,004	235,612	90%	149,532	150,034	299,566	63,954	8.13%	15.16%	1.27x	1.58x
Vintage Year 2019													
BSP Levered US SOF II (Senior Secured Opportunities) Fund L.P.	Direct Lending	50,000	9,130	42,944	82%	11,054	42,014	53,068	10,124	11.47%	6.00%	1.24x	N/A
OrbiMed Royalty & Credit Opportunities II I, LP	Opportunistic Lending	35,000	20,163	30,093	42%	22,605	15,533	38,138	8,045	17.81%	12.37%	1.27x	1.35x
Vintage Year 2019 Total		85,000	29,292	73,037	66%	33,659	57,547	91,206	18,169	13.68%	13.09%	1.25x	1.40x
Vintage Year 2020													
MCP Private Capital Fund IV (Feeder) SC	Direct Lending	34,106	3,184	31,597	91%	3,064	35,579	38,643	7,046	12.49%	5.39%	1.22x	N/A

¹Benchmarks:

Private Credit Investments: Cambridge Associates median return for the respective debt strategies and vintage years

Private Credit Portfolio: Credit Suisse Leveraged Loan Index + 2%

Private Credit Portfolio Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI	TVPI Bench.
Silver Point Specialty Credit Fund II, L.P.	Opportunistic Lending	40,000	3,573	36,288	91%	12,006	34,077	46,083	9,795	11.68%	10.31%	1.27x	1.23x
Vintage Year 2020 Total		74,106	6,757	67,885	91%	15,070	69,656	84,726	16,841	12.00%	9.45%	1.25x	1.22x
Vintage Year 2021													
Ares Capital Europe V	Direct Lending	40,000	11,182	30,046	72%	6,291	30,955	37,246	7,200	11.86%	N/A	1.24x	N/A
IFM USIDF (Offshore) B Feeder	Direct Lending	75,000	35,000	53,957	53%	24,730	35,849	60,579	6,622	9.23%	6.10%	1.12x	N/A
Summit Partners Credit Fund IV, L.P.	Direct Lending	40,000	4,400	15,107	89%	2,473	15,927	18,400	3,293	13.42%	6.10%	1.22x	N/A
Shamrock Capital Debt Opportunities Fund I, L.P.	Opportunistic Lending	20,000	10,532	10,831	47%	1,363	10,317	11,681	850	7.71%	11.32%	1.08x	1.18x
Vintage Year 2021 Total		175,000	61,115	109,941	65%	34,857	93,049	127,906	17,965	10.69%	0.85%	1.16x	1.02x
Vintage Year 2022													
OrbiMed Royalty & Credit Opportunities I V, LP	Opportunistic Lending	40,000	30,861	11,979	23%	2,861	10,499	13,360	1,381	N/M	N/M	1.12x	1.11x
Vintage Year 2022 Total		40,000	30,861	11,979	23%	2,861	10,499	13,360	1,381	N/M	N/M	1.12x	0.97x
Vintage Year 2023													
Ares Senior Direct Lending Fund III	Direct Lending	50,000	50,000	0	0%	0	149	149	149	N/M	N/M	N/A	N/A
Brookfield Infrastructure Debt Fund III	Direct Lending	40,000	20,517	21,370	49%	3,440	19,143	22,584	1,214	N/M	N/M	1.06x	N/A
Silver Point Specialty Credit Fund III, L.P.	Direct Lending	40,000	26,621	13,317	33%	605	14,056	14,661	1,344	N/M	N/M	1.10x	N/A
Vintage Year 2023 Total		130,000	97,138	34,687	25%	4,046	33,349	37,394	2,707	N/M	N/M	1.08x	0.92x
Portfolio Total :		841,106	255,656	677,040	70%	387,572	437,337	824,909	147,869	8.61%	7.17%	1.22x	

¹Benchmarks:

Private Credit Investments: Cambridge Associates median return for the respective debt strategies and vintage years

Private Credit Portfolio: Credit Suisse Leveraged Loan Index + 2%

Real Assets Portfolio – as of March 31, 2024

The Real Assets portfolio's net IRR since inception is 10.75%, versus the blended benchmark return of 7.90%

- The Real Assets portfolio includes private Infrastructure, Energy and Power, and Agriculture, Timber and Other

The Real Assets portfolio is primarily Infrastructure and Energy and Power partnerships

- Since inception net IRRs of 10.1% for Infrastructure and 12.5% for Energy and Power
- Performance of the Energy and Power partnerships has been volatile, most recently being materially impacted by significant markdowns in Q1 2020
 - However, most of the Energy and Power (particularly upstream energy) partnerships have rebounded sharply since Q3 2020
- Infrastructure partnerships saw smaller declines in Q1 2020 and have maintained good performance since inception

The Real Assets portfolio generated a 1.0% net return in Q1

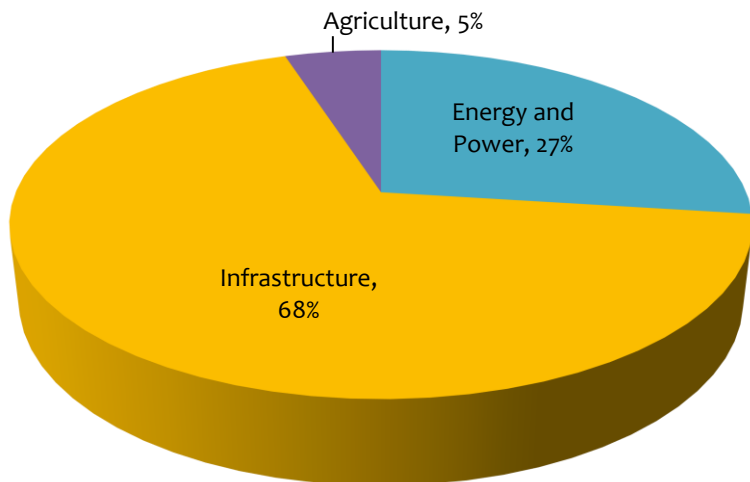
- The portfolio saw good contribution to returns from many Energy and Power and Infrastructure funds during Q1
 - EnCap IX & X, Quantum VII, Brookfield Infrastructure III & Super Core, ISQ Global Infrastructure II, and EQT Infrastructure IV provided the biggest gains in Q1
- The biggest detractor to the Q1 and 1-year performance was the Pantheon infrastructure secondaries portfolio

Changes during the quarter

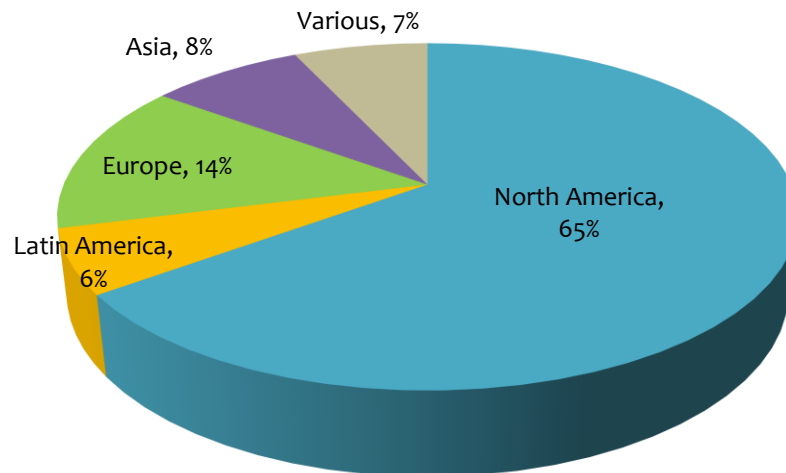
- SCERS made no new commitments to Real Assets funds in Q1
- \$24.7 million in new contributions, \$27.4 million in distributions
- Portfolio IRR declined by 0.28% while the total portfolio gain increased by \$11.0 million

Real Assets Portfolio Exposures as of March 31, 2024

Real Assets Portfolio Strategy Exposure*



Real Assets Portfolio Geographic Exposure*



Portfolio Strategy Totals	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI
Agriculture	65,000	9,257	63,721	86%	18,749	49,806	68,556	4,834	2.34%		1.08x
Energy and Power	527,500	114,223	474,945	78%	401,547	296,326	697,873	222,928	12.50%		1.47x
Infrastructure	943,225	255,474	731,578	73%	246,254	742,256	988,510	256,933	10.11%		1.35x
Real Asset Debt	100,000	84,789	36,169	15%	45,101	0	45,101	8,932	10.27%		1.25x
Portfolio Total :	1,635,725	463,742	1,306,413	72%	711,651	1,088,388	1,800,039	493,626	10.75%	7.90%	1.38x

* Exposures are based on the market values of investments as of 3/31/24.

Real Assets Portfolio Performance Details – as of March 31, 2024

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI
Vintage Year 2013												
EnCap Energy Capital Fund IX, L.P.	Energy and Power	33,000	1,284	37,997	96%	49,945	7,654	57,599	19,602	10.96%	4.05%	1.52x
Vintage Year 2013 Total		33,000	1,284	37,997	96%	49,945	7,654	57,599	19,602	10.96%		1.52x
Vintage Year 2014												
Carlyle Power Partners II, L.P.	Energy and Power	40,000	5,473	47,783	86%	31,538	38,199	69,737	21,954	9.49%	8.32%	1.46x
EnCap Flatrock Midstream III	Energy and Power	20,000	651	23,801	97%	22,683	10,724	33,407	9,606	9.99%	8.32%	1.40x
Global Energy & Power Infrastructure Fund II	Energy and Power	35,000	1,044	39,140	97%	38,851	8,681	47,533	8,393	10.14%	8.32%	1.21x
Quantum Energy Partners VI, LP	Energy and Power	35,000	7,455	33,709	79%	54,685	18,385	73,070	39,361	21.56%	8.32%	2.17x
Pantheon SCERS SIRF MM, LLC	Infrastructure	100,000	25,118	79,182	75%	87,000	33,952	120,952	41,770	9.89%	9.72%	1.53x
Wastewater Opportunity Fund	Infrastructure	25,000	522	26,423	98%	21,967	6,009	27,976	1,554	1.54%	9.72%	1.06x
Vintage Year 2014 Total		255,000	40,262	250,037	84%	256,724	115,950	372,675	122,638	10.95%		1.49x
Vintage Year 2015												
ArcLight Energy Partners Fund VI	Energy and Power	40,000	5,604	42,665	86%	36,691	12,254	48,945	6,280	3.18%	8.42%	1.15x
EnCap Energy Capital Fund X, L.P.	Energy and Power	40,000	1,579	41,659	96%	56,935	24,529	81,464	39,805	15.74%	8.42%	1.96x
* Atalaya Real Assets SMA	Real Asset Debt	100,000	84,789	36,169	15%	45,101	0	45,101	8,932	10.27%	N/A	1.25x
Vintage Year 2015 Total		180,000	91,971	120,493	49%	138,726	36,783	175,509	55,016	10.06%		1.46x
Vintage Year 2016												
ACM Fund II, LLC	Agriculture	25,000	130	29,016	99%	4,581	13,606	18,187	-10,829	-10.98%	6.16%	0.63x
Brookfield Infrastructure Fund III, L.P.	Infrastructure	40,000	4,142	42,256	90%	24,486	43,440	67,926	25,670	12.17%	10.73%	1.61x
IFM Global Infrastructure Fund	Infrastructure	125,053	0	125,053	100%	47,193	165,818	213,011	87,958	11.09%	10.73%	1.70x
Vintage Year 2016 Total		190,053	4,272	196,326	98%	76,260	222,864	299,124	102,798	9.29%		1.52x
Vintage Year 2017												
Quantum Energy Partners VII, LP	Energy and Power	40,000	4,450	42,018	89%	28,457	41,325	69,782	27,764	17.07%	14.55%	1.66x
Meridiam Infrastructure North America Fund III	Infrastructure	50,000	17,691	32,309	65%	1	42,839	42,840	10,531	13.71%	8.29%	1.33x
Vintage Year 2017 Total		90,000	22,141	74,327	75%	28,457	84,164	112,622	38,295	16.13%		1.52x

¹ Benchmarks:

Real Assets Portfolio: 60% Cambridge Infrastructure, 30% Cambridge Energy, 10% NCREIF Farmland

Energy Investments: Cambridge Associates median return for the respective vintage years.

Infrastructure Investments: Cambridge Associates median return for the respective vintage years.

Real Assets Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI
Paine Schwartz Food Chain Fund V, LP	Agriculture	40,000	9,127	34,705	77%	14,168	36,201	50,369	15,664	18.57%	6.00%	1.45x
EnCap Flatrock Midstream IV, L.P.	Energy and Power	22,500	4,339	18,837	81%	9,683	12,989	22,672	3,835	7.26%	13.87%	1.20x
Tailwater Energy Fund III, LP	Energy and Power	32,000	1,074	32,981	97%	16,372	22,200	38,572	5,591	3.94%	13.87%	1.17x
ISQ Global Infrastructure Fund II	Infrastructure	50,000	5,444	60,579	89%	27,198	58,416	85,614	25,035	12.90%	10.70%	1.41x
Vintage Year 2018 Total		144,500	19,985	147,102	86%	67,421	129,806	197,227	50,125	10.36%		1.34x
Vintage Year 2019												
Tailwater Energy Fund IV, LP	Energy and Power	35,000	10,378	30,296	70%	13,875	30,961	44,836	14,540	18.95%	18.38%	1.48x
Brookfield Infrastructure Fund IV	Infrastructure	40,000	3,055	39,810	92%	12,998	41,250	54,248	14,438	12.25%	10.27%	1.36x
EQT Infrastructure IV (No.2) USD SCSp	Infrastructure	35,000	4,417	35,459	87%	6,254	42,217	48,471	13,012	10.82%	10.27%	1.37x
Vintage Year 2019 Total		110,000	17,851	105,565	84%	33,128	114,427	147,555	41,990	13.32%		1.40x
Vintage Year 2020												
NGP Royalty Partners, L.P.	Energy and Power	40,000	940	39,012	98%	40,448	23,494	63,942	24,929	46.01%	12.21%	1.64x
Vintage Year 2020 Total		40,000	940	39,012	98%	40,448	23,494	63,942	24,929	46.01%		1.64x
Vintage Year 2021												
DigitalBridge Partners II, LP	Infrastructure	35,000	4,296	34,863	88%	4,264	35,677	39,941	5,078	7.36%	11.52%	1.15x
Harrison Street Social Infrastructure Fund, L.P.	Infrastructure	100,000	0	100,000	100%	5,916	110,469	116,385	16,385	7.38%	11.52%	1.16x
ISQ Global Infrastructure Fund III (UST), L.P.	Infrastructure	50,000	30,498	19,614	39%	119	22,575	22,694	3,080	13.10%	11.52%	1.16x
Meridiam Sustainable Infrastructure Europe IV	Infrastructure	43,172	31,876	11,541	26%	769	10,687	11,455	-86	-0.53%	11.52%	0.99x
Vintage Year 2021 Total		228,172	66,670	166,019	71%	11,067	179,409	190,476	24,457	7.39%		1.15x
Vintage Year 2022												
NGP Royalty Partners II	Energy and Power	75,000	29,953	45,047	60%	1,385	44,930	46,315	1,268	N/M	N/M	1.03x
Brookfield Super-Core Infrastructure Partners	Infrastructure	100,000	0	100,000	100%	5,133	108,236	113,369	13,369	N/M	N/M	1.13x
Ridgewood Water & Strategic Infrastructure Fund II	Infrastructure	50,000	28,413	24,488	43%	2,956	20,671	23,627	-861	N/M	N/M	0.96x
Vintage Year 2022 Total		225,000	58,366	169,534	74%	9,474	173,837	183,311	13,776	N/M		1.08x

¹ Benchmarks:

Real Assets Portfolio: 60% Cambridge Infrastructure, 30% Cambridge Energy, 10% NCREIF Farmland

Energy Investments: Cambridge Associates median return for the respective vintage years.

Infrastructure Investments: Cambridge Associates median return for the respective vintage years.

Real Assets Portfolio Performance Details – as of March 31, 2024 (continued)

Partnership Name	Strategy	(A) Commit. Amount	Unfund. Amount	(B) Cumulat. Cont.	% Drawn	(C) Cumulat. Dist.	(D) Fair Value	(C+D) Total Value	(C+D-B) Gain/Loss	Net IRR	IRR Bench.	TVPI
Vintage Year 2023												
Ara Fund III Feeder, LP	Energy and Power	40,000	40,000	0	0%	0	0	0	0	N/M	N/M	N/A
Meridiam Infrastructure North America Fund IV (Domestic), LP	Infrastructure	50,000	50,000	0	0%	0	0	0	0	N/M	N/M	N/A
Vintage Year 2023 Total		90,000	90,000	0	0%	0	0	0	0	N/M		N/A
Vintage Year 2024												
KKR Asia Pacific Infrastructure Fund II	Infrastructure	50,000	50,000	0	0%	0	0	0	0	N/M	N/M	N/A
Vintage Year 2024 Total		50,000	50,000	0	0%	0	0	0	0	N/M		N/A
Portfolio Total :		1,635,725	463,742	1,306,413	72%	711,651	1,088,388	1,800,039	493,626	10.75%	7.90%	1.38x

¹Benchmarks:

Real Assets Portfolio: 60% Cambridge Infrastructure, 30% Cambridge Energy, 10% NCREIF Farmland

Energy Investments: Cambridge Associates median return for the respective vintage years.

Infrastructure Investments: Cambridge Associates median return for the respective vintage years.

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