

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

SCERS ALTERNATIVE ASSETS PERFORMANCE SUMMARY
Quarter Reporting Periods Ending December 31, 2023

SCERS ASSET CLASS	Quarter*	1-Year*	3-Year*	5-Year*	Since Inception *	Since Inception Date *
SCERS Absolute Return	0.7%	5.3%	4.3%	5.4%	4.2%	Sep-04
HFRI FoF Conservative	1.1%	4.6%	4.1%	5.0%	3.7%	
HFRI FoF Composite + 1%	3.7%	7.4%	3.3%	6.1%	4.4%	
SCERS Private Equity	-0.2%	2.1%	16.6%	17.7%	15.9%	Feb-08
Cambridge Private Equity/Venture Capital	-0.4%	4.1%	15.9%	14.7%	13.8%	
SCERS Private Credit	2.7%	10.6%	9.7%	8.8%	8.8%	Oct-11
Credit Suisse Leveraged Loan + 2%	3.9%	14.5%	7.9%	6.3%	6.9%	
SCERS Real Assets	1.0%	6.1%	16.1%	9.8%	11.2%	Jan-13
(60%) Cambridge Private Infrastructure; (30%) Cambridge Private Energy; (10%) NCREIF Farmland	2.0%	8.6%	15.2%	8.1%	7.9%	
<p>*Note: Periods ending 9/30/23 for Private Equity, Private Credit, and Real Assets Periods ending 12/31/23 for Absolute Return All returns are net IRR except Absolute Return which is time-weighted</p>						

SCERS PORTFOLIO RESULTS

For the reporting quarter ended September 30, 2023:

- SCERS' Private Equity portfolio outperformed on a relative basis against its benchmark, -0.2% versus -0.4%, with the underperformance due to valuation declines in the venture capital portfolio resulting from higher interest rates and negative sentiment on growth companies.
- SCERS' Private Credit portfolio underperformed against its benchmark return, 2.7% versus 3.9%, but on a relative basis, performed well compared to other asset classes. The increase in loan spreads due to the interest rate increase resulted in valuation declines but was offset by the high cash yield earned on the underlying loans.
- SCERS' Real Assets portfolio underperformed against its benchmark, 1.0% versus 2.0%. Some of SCERS' energy and power strategies continue to suffer from the volatility in oil and gas prices; however, the top four performing funds during the quarter were in energy and power.

For the quarter ended December 31, 2023, SCERS' Absolute Return portfolio underperformed the HFRI Fund of Funds Conservative Index return, +0.7% versus +1.1%. The underperformance was due primarily to the Market Neutral (+0.9%) and Macro-Systematic strategies (-14.7%).

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

- Top performing funds:
 - Absolute Return:
 - BlackRock Event Drive Equity Fund (event driven): +3.7%
 - Elliott International Limited (event driven): +2.4%
 - Davidson Kempner Institutional Partners (event driven): +2.1%
 - Private Equity portfolio:
 - Golden Capital Co-Investments (Buyout): +17.4%
 - WPEF VI Feeder (Buyout): +9.4%
 - Accel-KKR Growth Capital Partners II (Growth Equity): +8.9%
 - New Enterprise Associates 14 (Venture Capital): +8.3%
 - Linden Capital Partners IV (Buyout): +7.3%
 - Private Credit portfolio:
 - Athyrium Opportunities Fund II (Opportunistic Lending): +9.3%
 - OrbiMed Royalty & Credit Opportunities IV (Opportunistic Lending): +4.2%
 - Real Assets portfolio:
 - EnCap Energy Capital Fund IX (Energy and Power): +18.8%
 - NGP Royalty Partners (Energy and Power): +9.0%
 - EnCap Energy Capital Fund X, (Energy and Power): +7.8%
 - NGP Royalty Partners II (Energy and Power): +7.0%
- Bottom performing funds:
 - Absolute Return portfolio:
 - Graham Global Investment Fund II (Macro-Systematic): -14.7%
 - LMR Multi-Strategy Fund (Market Neutral): -1.0%
 - Marshall Wace Global Opportunities Fund (Equity Long/Short): +1.0%
 - Private Equity portfolio:
 - Trinity Ventures XII (Venture Capital): -12.3%

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- Khosla Ventures IV (Venture Capital): -11.0%
 - H.I.G. Bayside Loan Opportunity Fund III (Distressed Debt): -10.5%
 - TSG7 A (Buyout): -10.3%
 - TPG Opportunities Partners III (Distressed Debt): -9.2%

 - Private Credit portfolio:
 - Summit Partners Credit Fund II (Direct Lending): -2.1%
 - Summit Partners Credit Fund I (Direct Lending): - 1.4%
 - Summit Partners Credit Fund III (Direct Lending): -0.8%
 - Athyrium Opportunities Fund III (Opportunistic Lending): +0.1%

 - Real Assets portfolio:
 - BlackRock Global Energy & Power Infrastructure Fund II (Energy and Power): -14.1%
 - Pantheon SCERS SIRF MM, LLC (Infrastructure): -4.7%
 - ArcLight Energy Partners Fund VI (Energy and Power): -3.8%
 - Ridgewood Water & Strategic Infrastructure Fund II (Infrastructure): -3.0%
 - Wastewater Opportunity Fund (Infrastructure) -2.4%

NEW INVESTMENTS

During the quarter ended December 31, 2023, SCERS made the following new commitments:

- KKR Asia Pacific Infrastructure Fund II SCSp (Real Assets - Infrastructure): \$50 million
- Ares Senior Direct Lending Fund III (Private Credit – Direct Lending): \$50 million
- Wynnchurch Capital Partners VI (Private Equity - Buyout): \$40 million

ATTACHMENTS

- Board Order
- Cliffwater's Quarterly Performance Review for Alternative Assets for the Quarter ended December 31, 2023

Prepared by:

Reviewed by:

/s/

JR Pearce
Senior Investment Officer

/s/

Eric Stern
Chief Executive Officer

/s/

Steve Davis
Chief Investment Officer



Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement
March 20, 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 for the periods ended December 31, 2023 for the Absolute Return portfolio, and the periods ended September 30, 2023 for the Private Equity, Private Credit, and Real Assets portfolios, as presented by Cliffwater, LLC.

I HEREBY CERTIFY that the above order was passed and adopted on March 20, 2024 by the following vote of the Board of Retirement, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ALTERNATES:

(Present but not voting)

James Diepenbrock
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

March 20, 2024

Absolute Return Portfolio Performance Summary – as of December 31, 2023

Diversifying Strategies

- The Diversifying Portfolio returned 0.67% in Q4 and 5.33% for the CYTD period ending December 31, 2023
 - Trailed the HFRI Conservative FoF Index benchmark by 40 bps in Q4 but outperformed by 73 bps for the CYTD period
 - Also above the T-bills + 2% long term objective by 91 bps (annualized) over the trailing 5-year period
- BlackRock Event (+3.66%), Elliott (+2.42%), Laurion (+2.16%), and Davidson Kempner (+2.15%) led performance in Q4
 - Graham Tactical Trend (-14.68%) was by far the biggest detractor to performance during Q4
- MW Global Opps (+7.63%), Aristeia (+7.57%), and Elliott (7.54%) provided the best performance over the CYTD period
 - Graham Tactical Trend (-11.40%) was the biggest detractor and only Diversifying Portfolio fund with a negative CYTD return

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 \$7.9 million at December 31, 2023
- The Growth Oriented Portfolio returned 1.17% in Q4 and 2.32% for the CYTD period ending December 31, 2023

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 3.30% compared to the ACWI standard deviation of 14.26% 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 December 31, 2023

Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Dec	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
Diversifying Portfolio													
Market Neutral													
Aristeia Partners, L.P.	52,851,454	6.4%	0.72%	1.35%	7.57%	3.45%	7.57%	5.51%	-	5.51%	4.11%	0.67	Jan-21
Laurion Capital, Ltd.	62,168,063	7.5%	3.24%	2.16%	7.43%	4.62%	7.43%	5.12%	9.55%	7.77%	9.61%	0.66	Mar-14
LMR Multi-Strategy Fund	55,511,516	6.7%	-1.28%	-0.98%	2.95%	2.00%	2.95%	8.69%	-	5.17%	13.50%	0.29	Nov-19
Market Neutral - HF Total	170,531,034	20.6%	0.95%	0.87%	6.35%	3.39%	6.35%	6.51%	4.85%	5.40%	5.61%	0.67	Mar-14
Event Driven													
BlackRock Event Driven Equity Fund (BILPX)	56,613,067	6.8%	2.41%	3.66%	5.37%	5.26%	5.37%	2.46%	-	4.40%	5.30%	0.42	Mar-20
Davidson Kempner Institutional Partners LP	61,813,544	7.5%	1.28%	2.15%	5.90%	3.64%	5.90%	4.07%	-	5.39%	4.56%	0.69	May-19
Elliott International Limited - Class A & B	83,835,945	10.1%	1.00%	2.42%	7.54%	4.39%	7.54%	8.83%	9.10%	8.00%	3.21%	1.93	Apr-12
PSquared US Feeder Fund LP	55,640,516	6.7%	0.01%	1.11%	2.08%	5.92%	2.08%	3.00%	-	3.24%	5.43%	0.18	Aug-20
Event Driven - HF Total	257,903,071	31.1%	1.15%	2.34%	5.45%	4.73%	5.45%	4.91%	6.20%	6.77%	3.26%	1.56	Apr-12
Equity Long/Short													
Marshall Wace Funds LP - MW Global Opportunities (US) Fund	59,344,797	7.2%	-2.21%	1.03%	7.63%	3.37%	7.63%	1.97%	6.03%	6.03%	7.81%	0.51	Jan-19
Equity Long/Short - HF Total	59,344,797	7.2%	-2.21%	1.03%	7.63%	3.37%	7.63%	1.97%	6.03%	6.03%	7.81%	0.51	Apr-12
Macro-Discretionary													
Tudor BVI Global Fund LP	51,673,140	6.2%	0.52%	1.50%	3.35%	3.35%	3.35%	-	-	3.35%	2.59%	-0.76	Jan-23
Macro-Discretionary - HF Total	51,673,140	6.2%	0.52%	1.50%	3.35%	3.35%	3.35%	-8.53%	-4.40%	-1.23%	4.89%	-0.51	May-12
Macro-Systematic													
Graham Global Investment Fund II SPC Ltd. - Tactical Trend	44,067,234	5.3%	-6.73%	-14.68%	-11.40%	-11.43%	-11.40%	6.60%	7.74%	3.39%	13.64%	0.16	Feb-17
Macro-Systematic - HF Total	44,067,234	5.3%	-6.73%	-14.68%	-11.40%	-11.43%	-11.40%	6.60%	4.47%	2.53%	12.08%	0.09	Jan-17
Multi-Strategy													
Sculptor Domestic Partners II, L.P.	1,223,787	0.1%	0.00%	0.00%	4.81%	0.00%	4.81%	-0.89%	6.01%	6.12%	6.63%	0.72	Jan-12
Multi-Strategy - HF Total	1,223,787	0.1%	0.00%	0.00%	4.81%	0.00%	4.81%	-0.89%	1.94%	3.54%	6.42%	0.36	May-13
Fund of Funds													
Grosvenor SC Absolute Return Fund LLC (Diversifying)	236,865,788	28.6%	1.04%	1.85%	6.78%	3.82%	6.78%	3.49%	5.26%	2.84%	3.51%	0.42	Dec-11
Fund of Funds - HF Total	236,865,788	28.6%	1.04%	1.85%	6.78%	3.82%	6.78%	3.48%	5.32%	2.73%	3.37%	0.41	Dec-11
Diversifying Portfolio Total	821,608,851	99.1%	0.33%	0.67%	5.33%	2.99%	5.33%	4.16%	4.79%	3.48%	3.30%	0.63	Dec-11
HFRI FOF: Conservative Index			0.66%	1.07%	4.60%	2.57%	4.60%	4.05%	4.98%	3.71%	3.26%	0.70	Dec-11
3 Month T-Bills+2%			0.62%	1.85%	7.01%	3.67%	7.01%	4.15%	3.88%	3.05%	0.42%	-	Dec-11

Growth Oriented Absolute Return Portfolio Performance – as of December 31, 2023

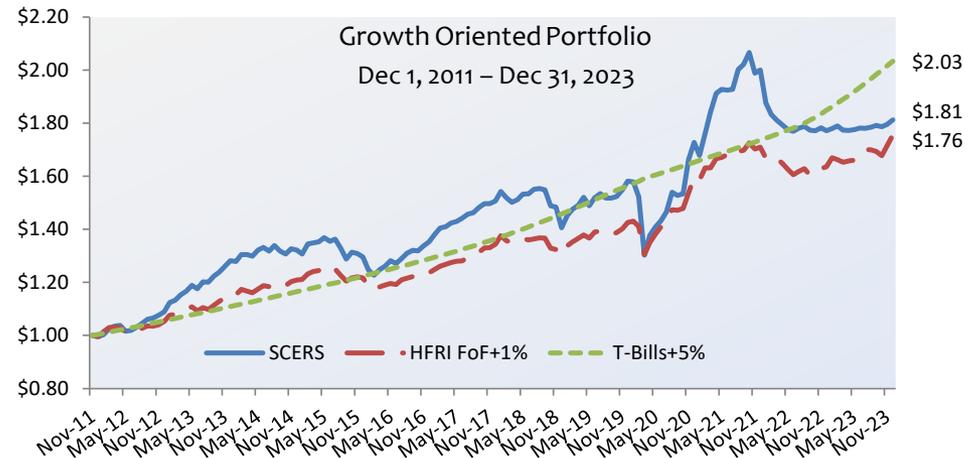
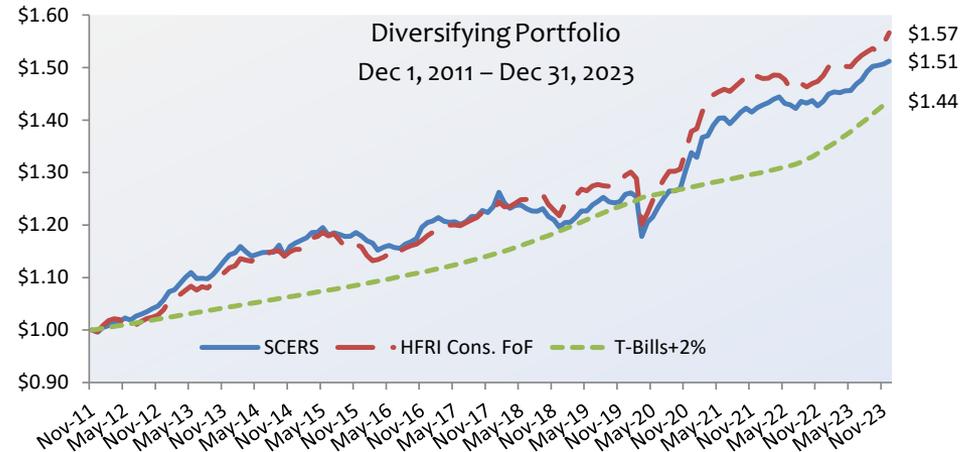
Fund	Market Value	Actual %	Returns								Std Dev	Sharpe Ratio	Incep Date
			Dec	QTD	YTD	FYTD	1 Year	3 Year	5 Year	Incep			
<u>Growth-Oriented Portfolio</u>													
Fund of Funds													
Grosvenor SC Absolute Return Fund LLC (Growth)	7,874,194	0.9%	0.94%	1.17%	2.32%	1.75%	2.32%	-0.74%	2.96%	4.36%	6.25%	0.49	Dec-11
Fund of Funds - HF Total	7,874,194	0.9%	0.94%	1.17%	2.32%	1.75%	2.32%	-0.74%	2.96%	3.93%	6.60%	0.34	Sep-04
Growth-Oriented Portfolio Total	7,874,194	0.9%	0.94%	1.17%	2.32%	1.75%	2.32%	1.53%	5.16%	4.46%	7.68%	0.37	Sep-04
HFRI FoF Composite + 1%			2.38%	3.70%	7.35%	4.49%	7.35%	3.26%	6.14%	4.38%	5.28%	0.49	Sep-04
3 Month T-Bills+5%			0.86%	2.56%	10.01%	5.11%	10.01%	7.16%	6.88%	6.48%	0.50%	-	Sep-04
Market Indices													
SOFR 90 Day			0.44%	1.32%	4.92%	2.62%	4.92%	2.07%	1.79%	-	-	-	Sep-04
Bloomberg US Aggregate Bond Index			3.83%	6.82%	5.53%	3.37%	5.53%	-3.31%	1.11%	3.12%	4.12%	0.33	Sep-04
Bloomberg US High Yield Bond Index			3.73%	7.16%	13.45%	7.66%	13.45%	1.98%	5.36%	6.57%	9.26%	0.54	Sep-04
S&P 500 TR			4.54%	11.69%	26.29%	8.04%	26.29%	10.00%	15.69%	10.02%	15.09%	0.59	Sep-04
MSCI AC World Index Free - Net			4.80%	11.03%	22.20%	7.26%	22.20%	5.75%	11.72%	7.78%	15.88%	0.44	Sep-04
MSCI EAFE - Net			5.31%	10.42%	18.24%	5.88%	18.24%	4.02%	8.16%	5.70%	16.97%	0.31	Sep-04
MSCI EMF (Emerging Markets Free) - Net			3.91%	7.87%	9.83%	4.71%	9.83%	-5.08%	3.69%	7.00%	21.00%	0.34	Sep-04

Absolute Return Portfolios Cumulative Performance – Dec. 2011 to Dec. 2023

The Diversifying portfolio is above its T-bills + 2% long term objective though 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 September 30, 2023

The Private Equity portfolio's net IRR since inception is 15.94%, versus the Cambridge Associates benchmark IRR of 13.77%

- The long-term Policy objective (Russell 3000 + 3%) has a 14.92% IRR over this period

The portfolio returned -0.2% in Q3 while public equity markets declined during the quarter (ACWI -3.4%)

- Although many of the funds showed strong gains during the quarter, performance was generally held back by the portfolio's Venture Capital and Growth Equity funds
 - Waterland V & VI, Ardian co-invest, Accel-KKR Growth II, NEA 14, and Linden IV reported the largest gains in Q3
- Distributions remained somewhat muted during Q3, in-line with the general slowdown in private equity exits seen in 2023
 - \$29.9 million in distributions, led by Davidson Kempner LT Distressed IV, Accel-KKR V, Marlin Heritage Europe, and TOP IV

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

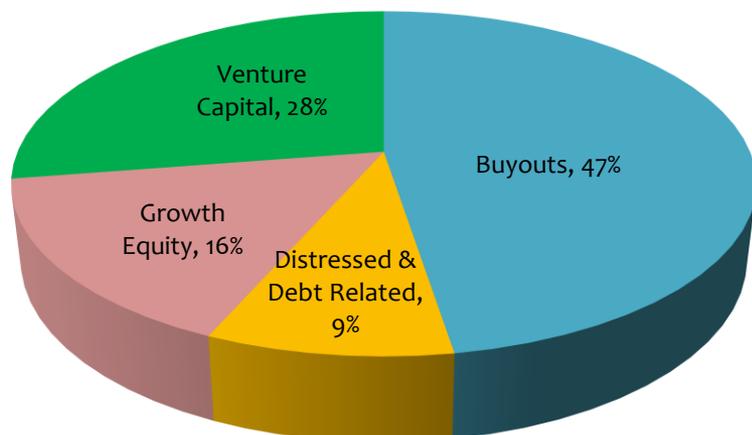
- Double-digit net IRRs for all vintage years prior to 2020, with all but one vintage year exceeding peer universes
- Summit Europe II (72.4%), AKKR IV (39.0%), Spectrum VII (37.7%), Summit VC IV (36.1%), Waterland V (35.1%), Spectrum VIII (30.9%), and Marlin Heritage (30.1%) are leading performance among SCERS' more mature funds

Changes during the quarter

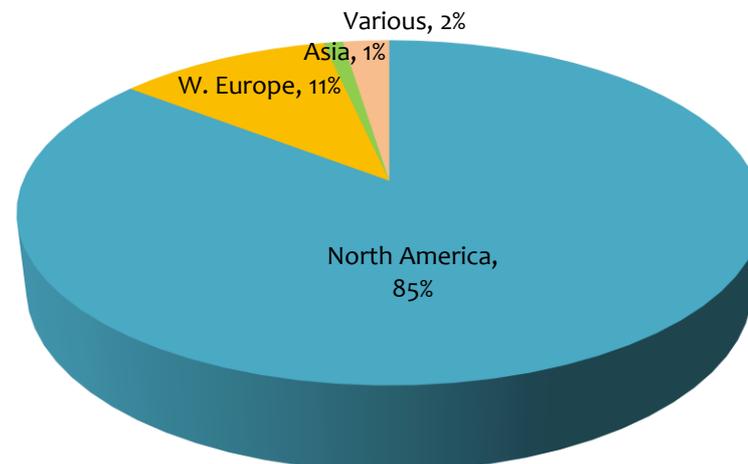
- SCERS committed €32 million to Alchemy Special Opps V (non-US distressed) during Q3
 - SCERS also committed \$38 million to a buyout fund (re-up) & slightly increased existing commitments to two funds in Q4 2023
- \$46.7 million in new contributions, \$29.9 million in distributions
- Total portfolio gain declined by \$3.5 million while the total portfolio IRR declined by 0.39%

Private Equity Portfolio Exposures as of September 30, 2023

Private Equity Portfolio Strategy Exposure*



Private Equity 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 Bench.
Buyout	1,067,228	410,938	771,159	61%	654,412	706,646	1,361,058	589,900	20.67%		1.76x
Distressed Debt	363,852	124,537	298,005	66%	262,173	126,710	388,883	90,878	8.70%		1.30x
Fund of Funds	309,044	11,817	298,167	96%	387,180	124,080	511,260	213,093	11.43%		1.71x
Growth Equity	302,533	93,071	252,069	69%	250,971	267,186	518,156	266,087	29.61%		2.06x
Opportunistic Credit	50,000	37,525	16,818	25%	4,337	13,766	18,104	1,286	5.41%		1.08x
Venture Capital	480,000	152,456	327,835	68%	156,521	436,425	592,947	265,112	15.22%		1.81x
Portfolio Total :	2,572,638	830,343	1,964,051	68%	1,715,594	1,674,814	3,390,407	1,426,356	15.94%	13.77%	1.73x

* Exposures are based on the market values of investments as of 9/30/23.

Private Equity Portfolio Performance Details – as of September 30, 2023

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%	64,035	662	64,697	28,322	10.71%	7.77%	1.78x	1.72x
* HarbourVest Partners VIII - Mezzanine and Distressed Debt Fund L.P.	Fund of Funds	5,000	0	4,800	100%	6,365	93	6,458	1,658	6.71%	7.77%	1.35x	1.72x
HarbourVest Partners VIII - Venture Fund L.P.	Fund of Funds	7,500	150	7,350	98%	13,649	2,177	15,826	8,476	11.19%	7.77%	2.15x	1.72x
Vintage Year 2006 Total		50,000	150	48,525	100%	84,048	2,933	86,981	38,456	10.51%	7.33%	1.79x	1.51x
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	10.51%	12.85%	1.68x	2.08x
* HarbourVest International Private Equity Partners VI-Partnership Fund L.P.	Fund of Funds	34,044	0	37,980	100%	55,859	6,113	61,972	23,992	9.20%	6.95%	1.63x	1.48x
Abbott Capital Private Equity Fund VI, L.P.	Fund of Funds	75,000	375	74,625	100%	118,644	25,304	143,948	69,323	12.72%	12.85%	1.93x	2.08x
Vintage Year 2008 Total		184,044	375	181,741	100%	284,976	36,830	321,806	140,064	11.18%	8.79%	1.77x	1.53x
Vintage Year 2011													
Waterland Private Equity Fund V C.V.	Buyout	16,916	2,772	16,235	84%	47,330	1,223	48,552	32,318	35.06%	9.01%	2.99x	1.53x
Khosla Ventures IV, L.P.	Venture Capital	10,000	190	9,810	98%	27,958	13,407	41,364	31,554	23.21%	15.54%	4.22x	2.52x
Vintage Year 2011 Total		26,916	2,962	26,045	89%	75,287	14,629	89,917	63,872	28.86%	11.94%	3.45x	1.84x
Vintage Year 2012													
Garrison Opportunity Fund III A LLC	Distressed Debt	20,000	0	20,000	100%	23,548	1,954	25,503	5,503	3.61%	15.39%	1.28x	1.67x
Summit Partners Venture Capital III-A, LP	Growth Equity	16,350	1,849	19,764	89%	38,234	3,608	41,842	22,078	17.52%	13.17%	2.12x	2.07x
New Enterprise Associates 14, L.P.	Venture Capital	25,000	500	24,500	98%	27,816	39,097	66,913	42,413	15.69%	15.42%	2.73x	2.31x
Vintage Year 2012 Total		61,350	2,349	64,264	96%	89,598	44,659	134,257	69,993	12.53%	12.47%	2.09x	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%	16.45%	3.58x	1.99x
H.I.G. Capital Partners V, L.P.	Buyout	14,000	209	13,964	99%	23,546	8,734	32,280	18,316	23.07%	16.45%	2.31x	1.99x
Marlin Equity IV, L.P.	Buyout	20,000	0	20,081	100%	17,841	9,913	27,755	7,674	7.23%	16.45%	1.38x	1.99x
RRJ Capital Master Fund II, L.P.	Buyout	35,000	3,758	36,072	89%	43,961	5,450	49,411	13,338	8.69%	12.18%	1.37x	1.74x

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 September 30, 2023 (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	440	31,853	6,978	7.69%	8.26%	1.28x	1.38x
H.I.G. Bayside Loan Opportunity Fund III (Europe-US\$), L.P.	Distressed Debt	30,000	5,400	24,600	82%	28,963	3,412	32,375	7,775	7.16%	4.77%	1.32x	1.27x
Wayzata Opportunities Fund III, L.P.	Distressed Debt	30,000	26,593	14,718	11%	11,686	3,176	14,862	144	0.22%	8.26%	1.01x	1.38x
Trinity Ventures XI, L.P.	Venture Capital	25,000	375	24,625	99%	7,189	41,876	49,066	24,441	10.05%	14.96%	1.99x	2.49x
Vintage Year 2013 Total		194,000	37,763	174,443	81%	220,047	73,001	293,049	118,606	12.07%	12.87%	1.68x	1.80x
Vintage Year 2014													
Blue Owl GP Stakes II US Investors LP	Buyout	35,000	8,906	35,449	75%	16,193	39,907	56,100	20,651	10.42%	18.46%	1.58x	2.08x
H.I.G. Europe Capital Partners II, L.P.	Buyout	14,802	3,224	15,054	78%	11,627	10,420	22,048	6,993	10.70%	14.11%	1.46x	1.72x
Marlin Heritage Fund	Buyout	10,000	1,847	10,876	82%	20,295	3,760	24,055	13,179	30.06%	18.46%	2.21x	2.08x
Thoma Bravo XI	Buyout	30,000	3,203	32,591	89%	75,257	33,803	109,060	76,468	26.55%	18.46%	3.35x	2.08x
TPG Opportunities Partners III	Distressed Debt	40,000	11,193	50,724	72%	55,169	6,391	61,560	10,836	8.47%	8.24%	1.21x	1.40x
Spectrum Equity Investors VII, L.P.	Growth Equity	25,000	1,625	23,388	94%	59,665	36,933	96,598	73,211	37.69%	20.31%	4.13x	2.20x
Khosla Ventures V	Venture Capital	20,000	700	19,300	97%	26,265	37,463	63,727	44,427	22.20%	17.65%	3.30x	2.48x
Vintage Year 2014 Total		174,802	30,699	187,382	82%	264,471	168,677	433,147	245,765	22.24%	15.30%	2.31x	1.99x
Vintage Year 2015													
* WPEF VI Overflow Fund C.V.	Buyout	6,344	6,334	10	0%	0	0	0	-10	0.00%	15.65%	0.00x	1.81x
RRJ Capital Master Fund III, LP	Buyout	40,000	2,648	40,813	93%	36,562	8,422	44,984	4,171	4.88%	15.65%	1.10x	1.81x
WPEF VI Feeder, L.P.	Buyout	25,374	14,764	25,343	42%	30,972	24,081	55,053	29,710	23.69%	15.65%	2.17x	1.81x
Accel-KKR Growth Capital Partners II	Growth Equity	15,000	188	16,384	99%	26,808	10,895	37,703	21,319	29.88%	19.14%	2.30x	2.22x
Summit Partners Venture Capital Fund IV-A, L.P.	Growth Equity	35,000	11,255	41,245	68%	38,912	51,293	90,205	48,960	36.07%	19.14%	2.19x	2.22x
New Enterprise Associates 15, L.P.	Venture Capital	35,000	1,925	33,079	95%	32,072	29,357	61,429	28,349	12.16%	15.33%	1.86x	2.13x
Vintage Year 2015 Total		156,718	37,114	156,874	76%	165,325	124,048	289,374	132,499	19.50%	15.33%	1.84x	1.95x
Vintage Year 2016													
Accel-KKR Capital Partners V, L.P.	Buyout	25,000	0	25,521	100%	24,342	27,972	52,314	26,793	27.97%	20.77%	2.05x	2.06x
Blue Owl GP Stakes III Pension Investors L P	Buyout	35,000	21,614	22,929	38%	21,932	31,688	53,619	30,691	23.55%	20.77%	2.34x	2.06x
Linden Capital Partners III	Buyout	35,000	2,157	39,843	94%	64,427	27,288	91,714	51,871	27.62%	20.77%	2.30x	2.06x

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 September 30, 2023 (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	13,744	233	14,481	98%	19,053	18,461	37,514	23,033	27.26%	13.30%	2.59x	1.71x
Thoma Bravo Fund XII, L.P.	Buyout	30,000	7,381	40,884	75%	42,132	33,517	75,648	34,764	16.27%	20.77%	1.85x	2.06x
TSG7 A L.P.	Buyout	16,000	2,823	13,177	82%	12,820	15,686	28,506	15,328	17.40%	20.77%	2.16x	2.06x
TSG7 B L.P.	Buyout	4,000	42	4,131	99%	1,716	3,922	5,638	1,507	9.42%	20.77%	1.36x	2.06x
Atalaya Special Opportunities Fund VI, L.P.	Distressed Debt	25,000	2,454	28,940	90%	40,798	1,426	42,224	13,284	13.48%	8.77%	1.46x	1.38x
Trinity Ventures XII, L.P.	Venture Capital	30,000	4,275	25,725	86%	27,145	43,437	70,581	44,856	25.16%	17.45%	2.74x	2.10x
Vintage Year 2016 Total		213,744	40,979	215,632	81%	254,363	203,397	457,760	242,128	21.90%	15.10%	2.12x	1.82x
Vintage Year 2017													
Marlin Heritage II	Buyout	10,000	0	10,496	100%	4,330	10,370	14,699	4,203	9.70%	21.96%	1.40x	1.96x
Summit Partners Europe Growth Equity Fund II, SCSP	Growth Equity	31,718	10,784	37,772	66%	58,569	47,343	105,912	68,140	72.43%	11.80%	2.80x	1.46x
New Enterprise Associates 16, L.P.	Venture Capital	35,000	3,150	31,850	91%	5,538	38,608	44,147	12,297	8.32%	21.27%	1.39x	2.08x
Vintage Year 2017 Total		76,718	13,934	80,118	82%	68,437	96,321	164,758	84,640	28.32%	18.48%	2.06x	1.82x
Vintage Year 2018													
Linden Capital Partners IV LP	Buyout	44,330	3,876	44,965	91%	19,028	52,836	71,864	26,899	21.89%	19.27%	1.60x	1.62x
Marlin Equity V	Buyout	25,000	0	25,782	100%	8,702	34,898	43,600	17,817	21.99%	19.27%	1.69x	1.62x
TSG8 L.P.	Buyout	45,000	5,620	39,494	88%	1,492	36,051	37,543	-1,951	-2.43%	19.27%	0.95x	1.62x
Davidson Kempner Long-Term Distressed Opportunities Fund IV LP	Distressed Debt	35,000	2,400	33,198	93%	43,432	18,165	61,597	28,400	17.58%	13.32%	1.86x	1.44x
TSSP Opportunities Partners IV (A), L.P.	Distressed Debt	35,000	4,857	44,683	86%	23,739	30,705	54,444	9,761	11.65%	13.32%	1.22x	1.44x
RCP Fund XIII	Fund of Funds	50,000	7,598	44,902	85%	7,413	53,396	60,809	15,907	15.75%	16.63%	1.35x	1.53x
RCPDirect III	Fund of Funds	25,000	3,694	22,998	85%	10,743	30,921	41,664	18,666	22.72%	N/A	1.81x	N/A
Accel-KKR Growth Capital Partners III	Growth Equity	33,320	4,102	29,218	88%	5,394	31,867	37,262	8,044	10.46%	16.81%	1.28x	1.65x
Spectrum Equity VIII, L.P.	Growth Equity	25,000	2,500	22,500	90%	22,500	25,104	47,604	25,104	30.89%	16.81%	2.12x	1.65x
Khosla Ventures VI, L.P.	Venture Capital	35,000	1,750	33,250	95%	0	59,219	59,219	25,969	17.87%	17.96%	1.78x	1.73x
Vintage Year 2018 Total		352,650	36,396	340,990	90%	142,444	373,162	515,606	174,616	17.41%	17.12%	1.51x	1.60x
Vintage Year 2019													
Cortec Group Fund VII, L.P.	Buyout	30,000	3,770	33,685	87%	23,305	26,272	49,576	15,891	24.73%	18.59%	1.47x	1.47x

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 September 30, 2023 (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	2,180	30,764	93%	4,044	54,622	58,666	27,903	31.58%	18.59%	1.91x	1.47x
Thoma Bravo Fund XIII, LP	Buyout	45,000	3,743	54,899	92%	27,084	74,544	101,629	46,730	28.55%	18.59%	1.85x	1.47x
New Enterprise Associates 17, L.P.	Venture Capital	25,000	5,125	19,889	80%	2,227	20,270	22,496	2,608	5.33%	12.25%	1.13x	1.38x
Threshold Ventures III, L.P.	Venture Capital	20,000	3,280	16,720	84%	0	21,975	21,975	5,255	10.87%	12.25%	1.31x	1.38x
Vintage Year 2019 Total		150,000	18,097	155,957	88%	56,660	197,683	254,343	98,387	23.87%	14.79%	1.63x	1.39x
Vintage Year 2020													
Accel-KKR Capital Partners VI, LP	Buyout	30,000	8,972	21,028	70%	0	21,028	21,028	0	0.00%	15.50%	1.00x	1.33x
Wynnchurch Capital Partners V	Buyout	20,000	6,039	14,116	70%	269	17,078	17,346	3,231	13.74%	15.50%	1.23x	1.33x
Davidson Kempner Long-Term Distressed Opportunities Fund V LP	Distressed Debt	30,000	3,083	27,670	90%	1,239	31,562	32,801	5,131	8.01%	10.33%	1.19x	1.21x
Spectrum Equity IX-A, L.P.	Growth Equity	25,000	2,688	22,313	89%	0	20,420	20,420	-1,893	-5.48%	11.49%	0.92x	1.20x
Summit Partners Europe Growth Equity Fund III, SCSp	Growth Equity	21,145	3,813	17,866	82%	0	19,345	19,345	1,479	5.98%	3.01%	1.08x	1.06x
Summit Partners Venture Capital Fund V-A, L.P.	Growth Equity	20,000	9,631	11,257	52%	888	10,516	11,404	147	0.86%	11.49%	1.01x	1.20x
Shamrock Capital Content Fund II, L.P.	Opportunistic Credit	20,000	8,164	16,179	59%	4,337	13,763	18,100	1,921	8.05%	10.45%	1.12x	1.19x
Canvas Ventures 3, L.P.	Venture Capital	20,000	7,186	12,814	64%	0	13,525	13,525	711	3.21%	7.43%	1.06x	1.16x
OrbiMed Private Investments VIII, LP	Venture Capital	15,000	6,648	8,625	56%	312	9,641	9,953	1,328	7.59%	7.43%	1.15x	1.16x
Vintage Year 2020 Total		201,145	56,224	151,866	72%	7,045	156,877	163,921	12,055	4.76%	9.89%	1.08x	1.20x
Vintage Year 2021													
Linden Capital Partners V LP	Buyout	30,000	13,985	16,015	53%	0	17,353	17,353	1,338	N/M	N/M	1.08x	1.13x
Shamrock Capital Growth Fund V, L.P.	Buyout	20,000	10,295	9,705	49%	20	8,938	8,958	-748	-6.74%	8.11%	0.92x	1.13x
Strategic Value Special Situations Fund V, L.P.	Distressed Debt	30,000	15,000	15,023	50%	0	18,149	18,149	3,126	13.39%	12.43%	1.21x	1.14x
CRV Select Fund I, LP	Venture Capital	20,000	2,050	17,950	90%	0	17,746	17,746	-204	-0.52%	-1.71%	0.99x	0.97x
CRV XVIII, LP	Venture Capital	20,000	3,850	16,150	81%	0	17,040	17,040	890	2.64%	-1.71%	1.06x	0.97x
Khosla Ventures VII, L.P.	Venture Capital	20,000	6,040	13,960	70%	0	16,703	16,703	2,743	11.17%	-1.71%	1.20x	0.97x
Vintage Year 2021 Total		140,000	51,220	88,803	63%	20	95,929	95,949	7,145	5.02%	0.81%	1.08x	1.01x

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 September 30, 2023 (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	85,610	14,390	14%	0	15,744	15,744	1,354	N/M	N/M	1.09x	1.04x
Gridiron Capital Fund V, L.P.	Buyout	30,000	25,653	4,347	14%	0	4,979	4,979	632	N/M	N/M	1.15x	1.04x
Marlin Heritage III, L.P.	Buyout	30,000	25,993	4,007	13%	0	3,454	3,454	-553	N/M	N/M	0.86x	1.04x
Oaktree Power Opportunities Fund VI	Buyout	30,000	16,073	14,346	46%	319	15,587	15,906	1,560	N/M	N/M	1.11x	1.04x
Sixth Street Opportunities Partners V (A), L.P.	Distressed Debt	30,000	18,607	13,575	38%	2,185	11,330	13,515	-59	N/M	N/M	1.00x	N/A
Accel-KKR Growth Capital Partners IV	Growth Equity	30,000	19,636	10,364	35%	0	9,862	9,862	-502	N/M	N/M	0.95x	0.96x
Spectrum Equity X-A, L.P.	Growth Equity	25,000	25,000	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Shamrock Capital Content Fund III, L.P.	Opportunistic Credit	30,000	29,361	639	2%	0	4	4	-635	N/M	N/M	0.01x	1.09x
CRV Select Fund II, LP	Venture Capital	22,500	16,706	5,794	26%	0	5,106	5,106	-688	N/M	N/M	0.88x	0.89x
CRV XIX, LP	Venture Capital	22,500	16,481	6,019	27%	0	5,159	5,159	-859	N/M	N/M	0.86x	0.89x
OrbiMed Private Investments IX, LP	Venture Capital	25,000	22,000	3,000	12%	0	2,918	2,918	-82	N/M	N/M	0.97x	0.89x
Threshold Ventures IV, L.P.	Venture Capital	25,000	20,225	4,775	19%	0	3,945	3,945	-830	N/M	N/M	0.83x	0.89x
Vintage Year 2022 Total		400,000	321,345	81,255	20%	2,504	78,088	80,592	-664	N/M	N/M	0.99x	0.93x
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	30,000	25,960	4,382	13%	367	3,459	3,826	-555	N/M	N/M	0.87x	N/A
CVC Capital Partners IX	Buyout	31,718	31,718	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
TSG9 L.P.	Buyout	30,000	24,226	5,774	19%	0	5,186	5,186	-588	N/M	N/M	0.90x	N/A
Alchemy Special Opportunities Fund V	Distressed Debt	33,832	33,832	0	0%	0	0	0	0	N/M	N/M	N/A	N/A
Khosla Ventures VIII	Venture Capital	30,000	30,000	0	0%	0	-65	-65	-65	N/M	N/M	N/A	N/A
Vintage Year 2023 Total		190,550	180,736	10,156	5%	367	8,581	8,948	-1,208	N/M	N/M	0.88x	0.86x
Portfolio Total :		2,572,638	830,343	1,964,051	68%	1,715,594	1,674,814	3,390,407	1,426,356	15.94%	13.77%	1.73x	

¹Benchmarks:

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

Private Credit Portfolio – as of September 30, 2023

The Private Credit portfolio's net IRR since inception is 8.75%, versus the benchmark return of 6.93%

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

The Private Credit funds reported another solid gain during the quarter, following muted performance in the first half of 2022

- The portfolio returned 2.7% in Q3 and 10.6% for the trailing 1-year period ending September 30, 2023
 - Most of the funds generated returns between 2% to 4% for the quarter
 - Athyrium II, OrbiMed Royalty IV, Benefit St. Senior Loan II, and Silver Point Specialty Credit III led performance in Q3
 - The only negative performance in Q3 came from a few of the Summit Credit funds
- Longer term performance remains steady despite modest sell-offs in Q1 2020 and during the first half of 2022
 - 9.7% net IRR for the 3-year period and 8.8% net IRR for the 5-year period

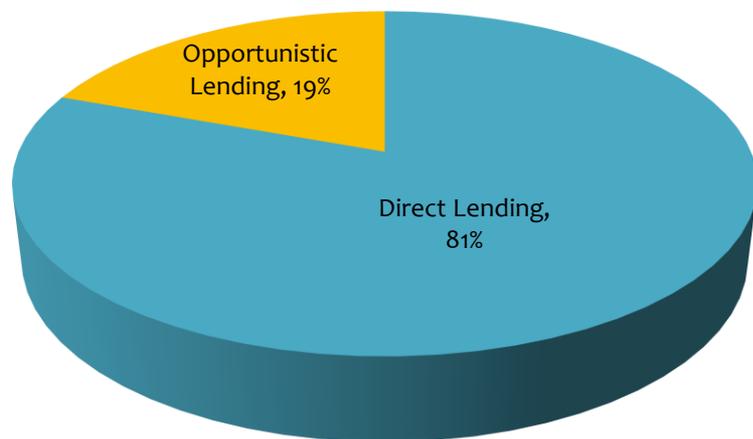
Changes during the quarter

- SCERS made no new commitments to Private Credit funds in Q3
 - SCERS committed \$50 million to a Direct Lending fund in Q4 2023
- \$11.5 million in new contributions, \$10.7 million in distributions
- Total portfolio gain increased by \$11.3 million while the total portfolio IRR increased by 0.14%*

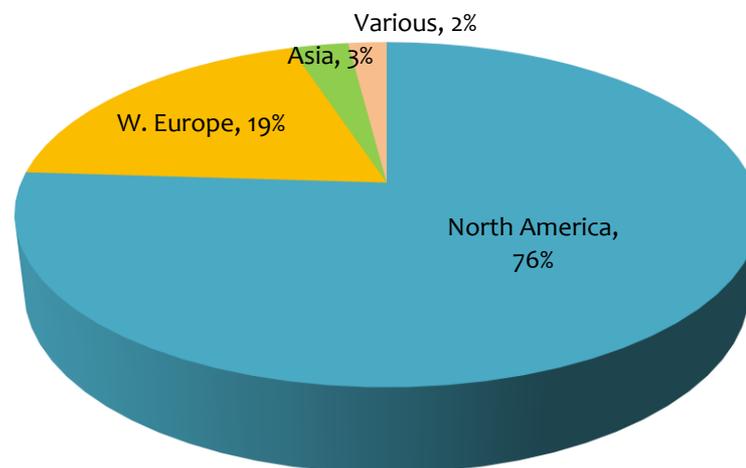
* Changes to portfolio gain and IRR reflect comparisons to the revised final June 30th results.

Private Credit Portfolio Exposures as of September 30, 2023

Private Credit Portfolio Strategy Exposure*



Private Credit 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	TVPI Bench.
Portfolio Strategy Totals												
Direct Lending	598,410	151,879	486,738	75%	242,399	347,868	590,267	103,529	8.64%		1.21x	
Opportunistic Lending	192,000	77,117	155,523	60%	102,982	81,884	184,866	29,343	9.18%		1.19x	
Portfolio Total :	790,410	228,996	642,262	71%	345,381	429,753	775,133	132,872	8.75%	6.93%	1.21x	

* Exposures are based on the market values of investments as of 9/30/23.

Private Credit Portfolio Details – as of September 30, 2023

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%	26,586	234	26,819	6,123	8.83%	N/A	1.30x	N/A
Vintage Year 2011 Total		20,000	0	20,697	100%	26,586	234	26,819	6,123	8.83%	11.94%	1.30x	1.84x
Vintage Year 2014													
Summit Partners Credit Fund II, L.P.	Direct Lending	35,000	1,029	49,221	97%	47,565	10,356	57,921	8,699	5.70%	4.23%	1.18x	N/A
Vintage Year 2014 Total		35,000	1,029	49,221	97%	47,565	10,356	57,921	8,699	5.70%	15.30%	1.18x	1.99x
Vintage Year 2015													
Athyrium Opportunities Fund II	Opportunistic Lending	32,000	1,997	43,667	94%	46,941	7,443	54,384	10,717	8.97%	9.44%	1.25x	1.51x
Vintage Year 2015 Total		32,000	1,997	43,667	94%	46,941	7,443	54,384	10,717	8.97%	15.33%	1.25x	1.95x
Vintage Year 2017													
Athyrium Opportunities Fund III	Opportunistic Lending	25,000	4,977	29,841	80%	23,586	7,930	31,516	1,675	2.32%	9.66%	1.06x	1.37x
Vintage Year 2017 Total		25,000	4,977	29,841	80%	23,586	7,930	31,516	1,675	2.32%	18.48%	1.06x	1.82x
Vintage Year 2018													
Benefit Street Partners Senior Secured Opportunities Fund L.P.	Direct Lending	50,000	17,940	50,953	64%	36,556	27,016	63,572	12,620	5.95%	4.59%	1.25x	N/A
Summit Partners Credit Fund III, L.P.	Direct Lending	50,000	902	59,660	98%	58,432	16,349	74,781	15,122	14.12%	4.59%	1.25x	N/A
TCP Direct Lending Fund VIII-S, LLC	Direct Lending	125,000	4,072	120,928	97%	36,345	117,731	154,076	33,148	8.37%	4.59%	1.27x	N/A
Vintage Year 2018 Total		225,000	22,914	231,541	90%	131,333	161,096	292,430	60,889	8.47%	17.12%	1.26x	1.60x
Vintage Year 2019													
BSP Levered US SOF II (Senior Secured Opportunities) Fund L.P.	Direct Lending	50,000	13,724	38,016	73%	8,247	38,186	46,433	8,417	12.05%	5.48%	1.22x	N/A
OrbiMed Royalty & Credit Opportunities II I, LP	Opportunistic Lending	35,000	20,163	30,093	42%	20,658	17,166	37,824	7,731	20.01%	12.84%	1.26x	1.31x
Vintage Year 2019 Total		85,000	33,887	68,109	60%	28,905	55,352	84,257	16,147	14.96%	14.79%	1.24x	1.39x
Vintage Year 2020													
MCP Private Capital Fund IV (Feeder) SC	Direct Lending	33,410	11,199	23,275	66%	2,121	26,461	28,582	5,307	12.34%	4.65%	1.23x	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 September 30, 2023 (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	6,086	33,775	85%	9,735	32,061	41,796	8,021	11.81%	10.45%	1.24x	1.19x
Vintage Year 2020 Total		73,410	17,285	57,050	76%	11,856	58,521	70,377	13,328	12.01%	9.89%	1.23x	1.20x
Vintage Year 2021													
Ares Capital Europe V	Direct Lending	40,000	9,954	30,046	75%	3,198	32,179	35,377	5,332	11.76%	N/A	1.18x	N/A
IFM USIDF (Offshore) B Feeder	Direct Lending	75,000	35,000	52,459	53%	19,990	37,829	57,820	5,361	9.84%	5.21%	1.10x	N/A
Summit Partners Credit Fund IV, L.P.	Direct Lending	40,000	4,400	15,107	89%	2,473	15,014	17,487	2,380	N/M	N/M	1.16x	N/A
Shamrock Capital Debt Opportunities Fund I, L.P.	Opportunistic Lending	20,000	10,441	10,169	48%	610	9,928	10,539	370	5.94%	9.85%	1.04x	1.12x
Vintage Year 2021 Total		175,000	59,796	107,781	66%	26,272	94,951	121,223	13,442	10.90%	0.81%	1.12x	1.01x
Vintage Year 2022													
OrbiMed Royalty & Credit Opportunities I V, LP	Opportunistic Lending	40,000	33,453	7,979	16%	1,453	7,355	8,808	830	N/M	N/M	1.10x	1.09x
Vintage Year 2022 Total		40,000	33,453	7,979	16%	1,453	7,355	8,808	830	N/M	N/M	1.10x	0.93x
Vintage Year 2023													
Brookfield Infrastructure Debt Fund III	Direct Lending	40,000	21,675	18,402	46%	884	18,165	19,050	647	N/M	N/M	1.04x	N/A
Silver Point Specialty Credit Fund III, L.P.	Direct Lending	40,000	31,984	7,975	20%	0	8,349	8,349	374	N/M	N/M	1.05x	N/A
Vintage Year 2023 Total		80,000	53,659	26,377	33%	884	26,514	27,399	1,021	N/M	N/M	1.04x	0.86x
Portfolio Total :		790,410	228,996	642,262	71%	345,381	429,753	775,133	132,872	8.75%	6.93%	1.21x	

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 September 30, 2023

The Real Assets portfolio's net IRR since inception is 11.21%, versus the blended benchmark return of 7.93%

- 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 10.6% for Infrastructure and 12.9% for Energy and Power
- Performance of the Energy and Power partnerships has been somewhat 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 Q3

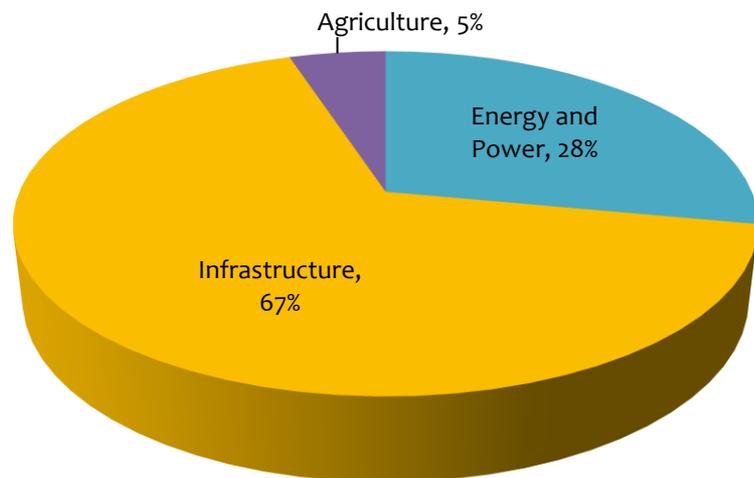
- The portfolio's Energy and Power funds generally led performance during the quarter
 - EnCap IX & X and NGP Royalty I & II provided the biggest gains in Q3
- The Infrastructure funds also generally contributed to positive performance in Q3, led by the Brookfield funds, ISQ II & III, Digital Bridge II, EQT IV, and Harrison St. Social Infrastructure
 - These funds returned 1% to 3% during the quarter

Changes during the quarter

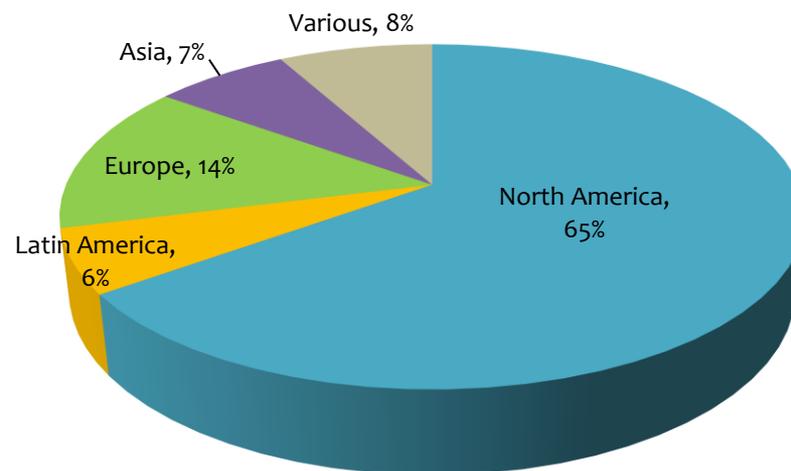
- SCERS made no new commitments to Real Assets funds in Q3
 - SCERS committed \$50 million to a non-US Infrastructure fund in Q4 2023
- \$22.5 million in new contributions, \$45.5 million in distributions
- Portfolio IRR declined by 0.33% while the total portfolio gain increased by \$10.8 million

Real Assets Portfolio Exposures as of September 30, 2023

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	10,012	62,966	85%	18,749	49,525	68,274	5,309	2.88%		1.08x
Energy and Power	527,500	141,750	445,986	73%	370,033	290,783	660,816	214,831	12.87%		1.48x
Infrastructure	892,343	228,109	702,048	74%	231,428	705,649	937,077	235,029	10.58%		1.33x
Real Asset Debt	100,000	84,789	36,169	15%	45,101	0	45,101	8,932	10.27%		1.25x
Portfolio Total :	1,584,843	464,660	1,247,168	71%	665,311	1,045,957	1,711,268	464,100	11.21%	7.93%	1.37x

* Exposures are based on the market values of investments as of 9/30/23.

Real Assets Portfolio Performance Details – as of September 30, 2023

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%	45,268	12,032	57,300	19,302	11.03%	3.36%	1.51x
Vintage Year 2013 Total		33,000	1,284	37,997	96%	45,268	12,032	57,300	19,302	11.03%		1.51x
Vintage Year 2014												
Carlyle Power Partners II, L.P.	Energy and Power	40,000	5,473	47,783	86%	29,540	40,812	70,352	22,569	10.32%	9.34%	1.47x
EnCap Flatrock Midstream III	Energy and Power	20,000	651	23,801	97%	21,188	11,971	33,159	9,358	10.21%	9.34%	1.39x
Global Energy & Power Infrastructure Fund II	Energy and Power	35,000	1,044	38,999	97%	38,476	9,624	48,100	9,101	11.12%	9.34%	1.23x
Quantum Energy Partners VI, LP	Energy and Power	35,000	7,746	33,415	78%	49,209	24,983	74,192	40,777	22.63%	9.34%	2.22x
Pantheon SCERS SIRF MM, LLC	Infrastructure	100,000	25,118	79,182	75%	87,000	38,304	125,304	46,122	10.88%	10.55%	1.58x
Wastewater Opportunity Fund	Infrastructure	25,000	522	26,423	98%	21,967	8,375	30,342	3,920	3.78%	10.55%	1.15x
Vintage Year 2014 Total		255,000	40,556	249,602	84%	247,379	134,069	381,448	131,846	11.95%		1.53x
Vintage Year 2015												
ArcLight Energy Partners Fund VI	Energy and Power	40,000	5,604	42,665	86%	35,932	13,600	49,531	6,866	3.54%	9.71%	1.16x
EnCap Energy Capital Fund X, L.P.	Energy and Power	40,000	1,774	41,463	96%	55,084	24,498	79,582	38,119	15.77%	9.71%	1.92x
* 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	92,167	120,297	49%	136,117	38,097	174,214	53,917	10.15%		1.45x
Vintage Year 2016												
ACM Fund II, LLC	Agriculture	25,000	481	28,665	98%	4,581	14,499	19,081	-9,585	-10.37%	6.16%	0.67x
Brookfield Infrastructure Fund III, L.P.	Infrastructure	40,000	4,473	41,793	89%	21,112	43,413	64,525	22,732	12.01%	12.01%	1.54x
IFM Global Infrastructure Fund	Infrastructure	125,053	0	125,053	100%	47,193	163,297	210,489	85,437	11.72%	12.01%	1.68x
Vintage Year 2016 Total		190,053	4,954	195,511	97%	72,887	221,209	294,096	98,584	9.73%		1.50x
Vintage Year 2017												
Quantum Energy Partners VII, LP	Energy and Power	40,000	4,874	40,303	88%	24,125	40,004	64,129	23,826	16.65%	15.46%	1.59x
Meridiam Infrastructure North America Fund III	Infrastructure	50,000	17,691	32,309	65%	1	38,056	38,057	5,748	10.31%	8.22%	1.18x
Vintage Year 2017 Total		90,000	22,565	72,612	75%	24,126	78,060	102,186	29,574	15.08%		1.41x

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 September 30, 2023 (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	9,531	34,300	76%	14,168	35,026	49,194	14,893	21.31%	5.99%	1.43x
EnCap Flatrock Midstream IV, L.P.	Energy and Power	22,500	4,746	18,431	79%	9,190	12,866	22,056	3,625	7.72%	16.87%	1.20x
Tailwater Energy Fund III, LP	Energy and Power	32,000	1,250	32,805	96%	16,013	21,006	37,019	4,215	3.26%	16.87%	1.13x
ISQ Global Infrastructure Fund II	Infrastructure	50,000	6,441	56,740	87%	23,929	54,338	78,267	21,528	12.88%	10.43%	1.38x
Vintage Year 2018 Total		144,500	21,968	142,276	85%	63,299	123,237	186,536	44,260	10.45%		1.31x
Vintage Year 2019												
Tailwater Energy Fund IV, LP	Energy and Power	35,000	13,155	27,519	62%	13,875	25,429	39,304	11,785	18.54%	17.23%	1.43x
Brookfield Infrastructure Fund IV	Infrastructure	40,000	3,512	39,354	91%	11,112	40,942	52,054	12,700	12.80%	8.11%	1.32x
EQT Infrastructure IV (No.2) USD SCSp	Infrastructure	35,000	5,223	34,623	85%	6,224	38,642	44,866	10,243	10.23%	8.11%	1.30x
Vintage Year 2019 Total		110,000	21,890	101,496	80%	31,211	105,013	136,224	34,728	13.19%		1.34x
Vintage Year 2020												
NGPRoyalty Partners, L.P.	Energy and Power	40,000	1,061	38,891	97%	31,845	31,752	63,597	24,706	53.17%	18.01%	1.64x
Vintage Year 2020 Total		40,000	1,061	38,891	97%	31,845	31,752	63,597	24,706	53.17%		1.64x
Vintage Year 2021												
DigitalBridge Partners II, LP	Infrastructure	35,000	3,804	35,136	89%	4,045	34,937	38,983	3,846	7.41%	10.36%	1.11x
Harrison Street Social Infrastructure Fund, L.P.	Infrastructure	100,000	0	100,000	100%	4,444	110,712	115,156	15,156	8.90%	10.36%	1.15x
ISQ Global Infrastructure Fund III (UST), L.P.	Infrastructure	50,000	35,870	14,124	28%	0	15,216	15,216	1,092	N/M	N/M	1.08x
Meridiam Sustainable Infrastructure Europe IV	Infrastructure	42,291	31,225	11,541	26%	546	9,738	10,285	-1,257	-12.21%	10.36%	0.89x
Vintage Year 2021 Total		227,291	70,899	160,802	69%	9,035	170,604	179,639	18,837	7.67%		1.12x
Vintage Year 2022												
NGPRoyalty Partners II	Energy and Power	75,000	53,087	21,913	29%	289	22,207	22,496	583	N/M	N/M	1.03x
Brookfield Super-Core Infrastructure Partners	Infrastructure	100,000	0	100,000	100%	3,855	105,002	108,856	8,856	N/M	N/M	1.09x
Ridgewood Water & Strategic Infrastructure Fund II	Infrastructure	50,000	44,230	5,770	12%	0	4,676	4,676	-1,094	N/M	N/M	0.81x
Vintage Year 2022 Total		225,000	97,317	127,683	57%	4,144	131,885	136,028	8,346	N/M		1.07x

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 September 30, 2023 (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
Portfolio Total :		1,584,843	464,660	1,247,168	71%	665,311	1,045,957	1,711,268	464,100	11.21%	7.93%	1.37x

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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