



INVESTMENT ADVISORY SERVICES

Los Angeles • New York

Sacramento County Employees' Retirement System Quarterly Performance Review

March 17, 2021



Executive Summary

Absolute Return Portfolio Performance Summary – as of December 31, 2020

Growth Oriented Strategies

- The Growth Oriented Portfolio returned 11.22% in Q4 and 10.79% for the 1-year period ending December 31, 2020
 - Outperformed the HFRI FoF Index + 1% benchmark by 337 bps in Q4 though trailing by 56 bps for the 1-year period
 - Outperformed the T-bills + 5% long term objective by 25 bps (annualized) over the 5-year period ending December 31, 2020
 - Outperformed the HFRI FoF Index + 1% benchmark by 99 bps (annualized) over the 5-year period
- All funds generated positive returns in Q4, led by Lakewood (+17.48%)
- Lakewood was the only fund to generate a negative return for the year (-8.69%); Third Point (+22.15%) led performance

Diversifying Strategies

- The Diversifying Portfolio returned 5.66% in Q4 and 5.26% for the 1-year period ending December 31, 2020
 - Outperformed the HFRI Conservative FoF Index benchmark by 56 bps in Q4 though trailing by 45 bps for the 1-year period
 - Underperforming the T-bills + 2% long term objective by 127 bps (annualized) over the trailing 5-year period
- All funds reported solidly positive returns in Q4, led by Laurion (+9.62%), MW Global Opps (+9.21%), and Graham (+8.40%)
- Large return dispersion among active funds over the 1-year period, ranging from +31.51 (Laurion) to -11.20% (Two Sigma)

Elevated volatility across asset classes during Q1 2020 pushed some portfolio characteristics above their targeted values

- Growth Oriented Portfolio
 - Target standard deviation < 50% of global equities, with an equity beta < 0.5 and equity correlation < 0.8
 - Standard deviation of 7.68% compared to the ACWI standard deviation of 13.51% since December 2011 (57% ratio)
 - Portfolio equity beta of 0.49 with an equity correlation of 0.87
- Diversifying Portfolio
 - Target standard deviation < 25% of global equities, with an equity beta < 0.1 and equity correlation < 0.1
 - Standard deviation of 3.20% compared to the ACWI standard deviation of 13.51% since December 2011 (24% ratio)
 - Portfolio equity beta of 0.11 with an equity correlation of 0.47

Growth Oriented Absolute Return Portfolio Performance – as of December 31, 2020

| Fund | Market Value | Actual % | Returns | | | | | | | | Std Dev | Sharpe Ratio | Incep Date |
|--|--------------------|--------------|--------------|---------------|---------------|---------------|---------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | | | Dec | QTD | YTD | FYTD | 1 Year | 3 Year | 5 Year | Incep | | | |
| Growth-Oriented Portfolio | | | | | | | | | | | | | |
| Event Driven | | | | | | | | | | | | | |
| Third Point Partners Qualified L.P. | 63,117,214 | 6.6% | 7.20% | 16.20% | 22.15% | 30.56% | 22.15% | 8.58% | 9.91% | 10.53% | 10.22% | 0.94 | May-12 |
| Event Driven - HF Total | 63,117,214 | 6.6% | 7.20% | 16.20% | 22.15% | 30.56% | 22.15% | 8.29% | 8.34% | 9.02% | 10.28% | 0.80 | May-12 |
| Equity Long/Short | | | | | | | | | | | | | |
| Lakewood Capital Partners, LP | 44,787,025 | 4.7% | 2.67% | 17.48% | -8.69% | 19.80% | -8.69% | -0.51% | 3.48% | 4.44% | 14.10% | 0.31 | Jul-13 |
| Equity Long/Short - HF Total | 44,787,025 | 4.7% | 2.67% | 17.48% | -8.69% | 19.80% | -8.69% | -0.51% | 3.48% | 4.44% | 14.10% | 0.31 | Jul-13 |
| Multi-Strategy | | | | | | | | | | | | | |
| Sculptor Domestic Partners II, L.P. | 62,750,248 | 6.6% | 1.93% | 5.89% | 18.66% | 12.14% | 18.66% | 10.29% | 9.26% | 8.55% | 6.56% | 1.14 | Jan-12 |
| Multi-Strategy - HF Total | 62,750,248 | 6.6% | 1.93% | 5.89% | 18.66% | 12.14% | 18.66% | 10.29% | 9.26% | 8.55% | 6.56% | 1.14 | Jan-12 |
| Fund of Funds | | | | | | | | | | | | | |
| Grosvenor SC Absolute Return Fund LLC (Growth) | 91,066,911 | 9.5% | 2.38% | 8.92% | 9.32% | 14.70% | 9.32% | 4.89% | 6.08% | 6.09% | 6.63% | 0.78 | Dec-11 |
| Fund of Funds - HF Total | 91,066,911 | 9.5% | 2.38% | 8.92% | 9.32% | 14.70% | 9.32% | 4.87% | 5.88% | 4.80% | 6.88% | 0.47 | Sep-04 |
| Growth-Oriented Portfolio Total | 261,721,398 | 27.4% | 3.44% | 11.22% | 10.79% | 18.41% | 10.79% | 5.55% | 6.45% | 5.19% | 7.50% | 0.49 | Sep-04 |
| HFRI FoF Composite + 1% | | | 3.21% | 7.85% | 11.35% | 12.65% | 11.35% | 5.71% | 5.46% | 4.56% | 5.44% | 0.54 | Sep-04 |
| 3 Month T-Bills+5% | | | 0.42% | 1.27% | 5.67% | 2.54% | 5.67% | 6.60% | 6.20% | 6.36% | 0.47% | - | Sep-04 |
| Market Indices | | | | | | | | | | | | | |
| Libor3Month | | | 0.02% | 0.06% | 0.60% | 0.12% | 0.60% | 1.75% | 1.46% | 1.67% | 0.48% | - | Sep-04 |
| Bloomberg Barclays US Aggregate Bond Index | | | 0.14% | 0.67% | 7.51% | 1.29% | 7.51% | 5.35% | 4.44% | 4.35% | 3.17% | 0.83 | Sep-04 |
| Bloomberg Barclays US High Yield Bond Index | | | 1.88% | 6.45% | 7.11% | 11.34% | 7.11% | 6.23% | 8.59% | 7.43% | 9.41% | 0.63 | Sep-04 |
| S&P 500 TR | | | 3.84% | 12.15% | 18.40% | 22.16% | 18.40% | 14.18% | 15.22% | 10.02% | 14.65% | 0.61 | Sep-04 |
| MSCI AC World Index Free - Net | | | 4.64% | 14.68% | 16.25% | 24.01% | 16.25% | 10.06% | 12.26% | 8.16% | 15.80% | 0.47 | Sep-04 |
| MSCI EAFE - Net | | | 4.65% | 16.05% | 7.82% | 21.61% | 7.82% | 4.28% | 7.45% | 6.01% | 17.04% | 0.33 | Sep-04 |
| MSCI EMF (Emerging Markets Free) - Net | | | 7.35% | 19.70% | 18.31% | 31.14% | 18.31% | 6.17% | 12.81% | 9.39% | 21.57% | 0.45 | Sep-04 |

Diversifying Absolute Return Portfolio Performance – as of December 31, 2020

| 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 | | | | | | | | | | | | | |
| Laurion Capital, Ltd. | 62,774,337 | 6.6% | 0.79% | 9.62% | 31.51% | 6.61% | 31.51% | 13.43% | 8.81% | 8.93% | 7.14% | 1.07 | Mar-14 |
| LMR Fund Limited | 43,212,854 | 4.5% | 2.43% | 5.77% | -5.85% | 11.42% | -5.85% | - | - | -3.41% | 25.36% | -0.03 | Nov-19 |
| KLS Diversified Fund LP | 37,143,836 | 3.9% | 1.80% | 4.34% | -7.68% | 8.47% | -7.68% | - | - | -3.64% | 14.10% | -0.29 | Jan-19 |
| Two Sigma Risk Premia Enhanced Fund, LP | 40,134,279 | 4.2% | 7.09% | 5.50% | -11.20% | 3.15% | -11.20% | - | - | -8.22% | 10.38% | -0.86 | Sep-19 |
| Market Neutral - HF Total | 183,265,306 | 19.2% | 2.71% | 6.70% | 2.35% | 7.29% | 2.35% | 4.11% | 3.35% | 4.90% | 6.10% | 0.63 | Mar-14 |
| Event Driven | | | | | | | | | | | | | |
| BlackRock Event Driven Equity Fund (BILPX) | 47,837,156 | 5.0% | 0.71% | 6.97% | - | 9.20% | - | - | - | 9.65% | 8.87% | - | Mar-20 |
| Davidson Kempner Institutional Partners LP | 50,172,367 | 5.2% | 1.98% | 4.98% | 9.94% | 9.58% | 9.94% | - | - | 7.81% | 6.76% | 0.95 | May-19 |
| Elliott International Limited - Class A & B | 65,044,741 | 6.8% | 2.80% | 3.31% | 12.68% | 6.43% | 12.68% | 7.07% | 8.39% | 7.72% | 3.32% | 1.95 | Apr-12 |
| PSquared US Feeder Fund LP | 45,914,296 | 4.8% | -0.21% | 2.10% | - | - | - | - | - | 2.03% | - | - | Aug-20 |
| Event Driven - HF Total | 208,968,561 | 21.8% | 1.93% | 4.88% | 11.58% | 8.27% | 11.58% | 6.56% | 8.09% | 7.54% | 3.53% | 1.79 | Apr-12 |
| Equity Long/Short | | | | | | | | | | | | | |
| Marshall Wace Funds LP - MW Global Opportunities (US) Fund | 50,573,610 | 5.3% | 2.17% | 9.21% | 18.66% | 14.14% | 18.66% | - | - | 12.44% | 5.99% | 1.73 | Jan-19 |
| Equity Long/Short - HF Total | 50,573,610 | 5.3% | 2.17% | 9.21% | 18.66% | 14.14% | 18.66% | 12.44% | 12.44% | 12.44% | 5.99% | 1.73 | Apr-12 |
| Macro-Systematic | | | | | | | | | | | | | |
| Graham Global Investment Fund II SPC Ltd. - Tactical Trend Segregated | 36,380,838 | 3.8% | 6.57% | 8.40% | 1.73% | 11.80% | 1.73% | 1.01% | - | 0.99% | 12.82% | 0.01 | Feb-17 |
| Macro-Systematic - HF Total | 36,380,838 | 3.8% | 6.57% | 6.70% | -6.76% | 5.71% | -6.76% | -1.60% | - | -0.42% | 9.64% | -0.16 | Jan-17 |
| Fund of Funds | | | | | | | | | | | | | |
| Grosvenor SC Absolute Return Fund LLC (Diversifying) | 213,434,912 | 22.3% | 2.81% | 5.66% | 10.08% | 9.56% | 10.08% | 4.36% | 2.20% | 2.61% | 3.76% | 0.45 | Dec-11 |
| Grosvenor SC Absolute Return Fund LLC Series B | 2,078,984 | 0.2% | 1.53% | 2.39% | 6.71% | 5.24% | 6.71% | 3.04% | 0.46% | 1.56% | 3.39% | 0.17 | Feb-13 |
| Fund of Funds - HF Total | 215,513,896 | 22.5% | 2.80% | 5.63% | 10.14% | 9.38% | 10.14% | 4.19% | 1.74% | 2.47% | 3.59% | 0.43 | Dec-11 |
| Diversifying Portfolio Total | 694,702,211 | 72.6% | 2.51% | 5.66% | 5.26% | 7.96% | 5.26% | 2.04% | 1.93% | 2.42% | 3.43% | 0.43 | Dec-11 |
| HFRI FOF: Conservative Index | | | 1.89% | 5.10% | 5.71% | 7.90% | 5.71% | 3.66% | 3.40% | 3.51% | 3.50% | 0.73 | Dec-11 |
| 3 Month T-Bills+2% | | | 0.18% | 0.53% | 2.67% | 1.07% | 2.67% | 3.60% | 3.20% | 2.69% | 0.25% | - | Dec-11 |

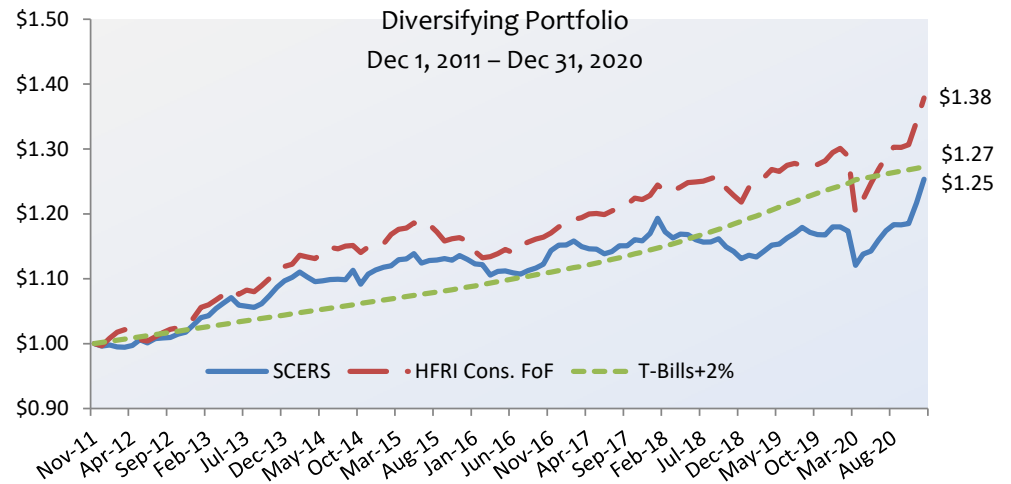
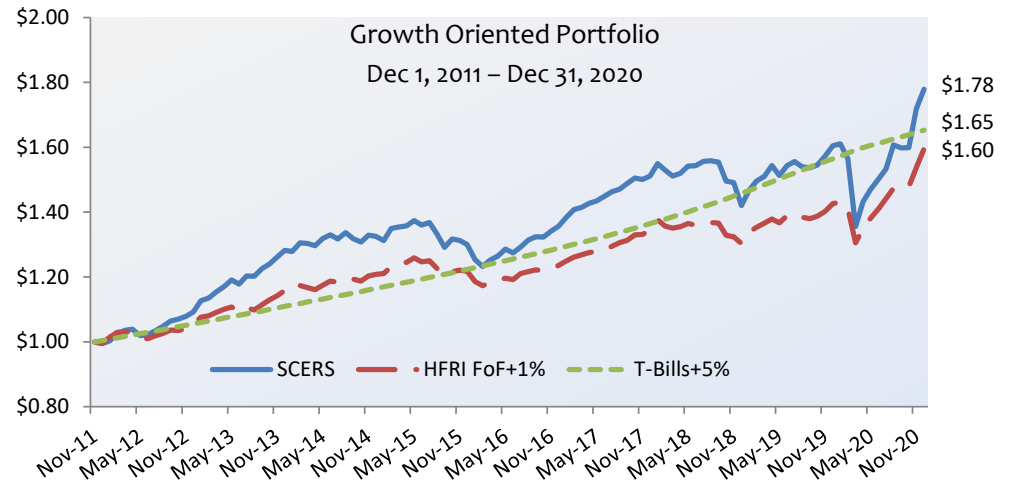
Absolute Return Portfolios Cumulative Performance – December 2011 to December 2020

Despite the sharp downturn in Q1, the Growth Oriented portfolio is again exceeding the T-bills + 5% long term objective; the portfolio remains ahead of the Fund of Funds Index + 1% benchmark

The Diversifying portfolio is nearing the T-bills + 2% long term objective though continues to trail the HFRI Fund of Funds Conservative Index over this period

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

- The prior exposure of the Absolute Return portfolio was only Equity Long/Short fund of funds investments



Private Equity Portfolio – as of September 30, 2020

The Private Equity portfolio's net IRR since inception is 15.86%, versus the Cambridge Associates benchmark IRR of 13.04%

- The long-term Policy objective (Russell 3000 + 3%) has a 15.59% IRR over this period

The private equity portfolio gained 12.3% in Q3 as financial markets continued to rally following the pandemic-driven Q1 sell-off

- Gains were once again broad-based and many funds generated returns of more than 20% for the quarter
 - Spectrum VII, DKL Distressed V, Waterland VI, Linden III, and Summit Europe Growth II reported the largest gains
- Distributions picked up with increased transaction activity, following a slowdown in Q2
 - \$51.4 million in distributions, led by Thoma Bravo XIII, Summit Europe Growth II, Thoma Bravo XI, and Linden IV

Longer-term performance remains quite strong across most of the private equity funds

- Double-digit net IRRs for all vintage years prior to 2018, with almost all vintage years exceeding peer universes
- Spectrum VII (51.3%), Summit VC IV (37.5%), Accel-KKR IV (35.7%), Waterland V (35.5%), and Marlin Heritage (35.1%) are leading performance among SCERS' more mature funds

The legacy fund of funds generally reported solid gains during the quarter

- Aggregate since inception net IRR increased from 11.10% to 11.36% during the quarter
 - The aggregate total value (TVPI) increased from 1.63x to 1.67x
- The legacy fund of funds comprise only 9.8% of the current fair value of the Private Equity portfolio

Changes during the quarter

- SCERS committed \$20 million to CRV XVIII and \$15 million to OrbiMed VIII (both venture capital) during Q3
 - SCERS committed \$40 million in total to two venture capital funds in Q4 2020
- \$35.5 million in new contributions, \$51.4 million in distributions
- Total portfolio gain increased by \$131.6 million while the total portfolio IRR increased by 1.23%

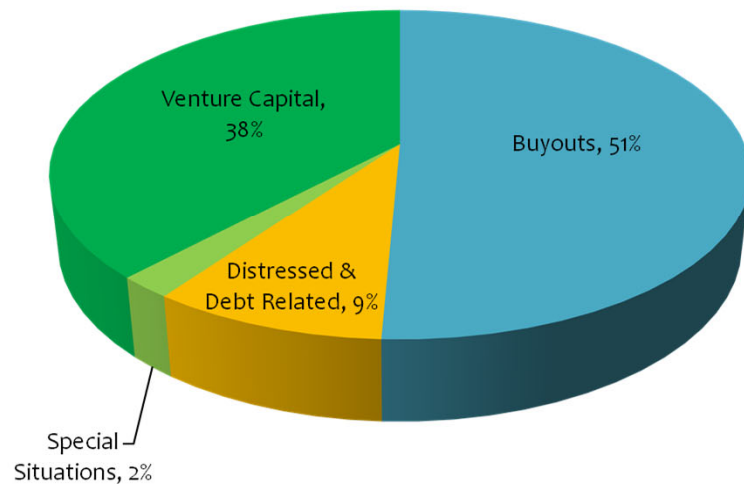
Private Equity Portfolio Characteristics as of September 30, 2020

The SCERS Private Equity portfolio is diversified by strategy and geography

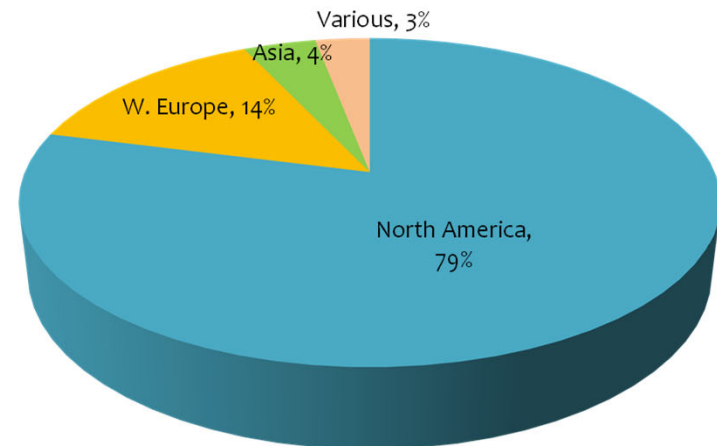
- Investments remain focused in North America, with meaningful exposure to Europe

Portfolio strategy and geographic allocations, based on fair market value of invested capital, shown below

Market Value Strategy Exposure*



Market Value Geographic Exposure*



* Exposures are based on the market values of investments as of 9/30/20.

Private Equity Portfolio Performance Details – as of September 30, 2020

| 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 2006 | | | | | | | | | | | | |
| HarbourVest Partners VIII - Buyout Fund L.P. | Fund of Funds | 37,500 | 1,125 | 36,375 | 97% | 54,226 | 9,664 | 63,890 | 27,515 | 10.78% | 7.34% | 1.76x |
| HarbourVest Partners VIII - Mezzanine and Distressed Debt Fund L.P. | Fund of Funds | 5,000 | 200 | 4,800 | 96% | 6,023 | 485 | 6,508 | 1,708 | 6.95% | 7.34% | 1.36x |
| HarbourVest Partners VIII - Venture Fund L.P. | Fund of Funds | 7,500 | 150 | 7,350 | 98% | 11,016 | 3,709 | 14,725 | 7,375 | 11.00% | 7.34% | 2.00x |
| Vintage Year 2006 Total | | 50,000 | 1,475 | 48,525 | 97% | 71,264 | 13,858 | 85,122 | 36,597 | 10.53% | 7.00% | 1.75x |
| Vintage Year 2008 | | | | | | | | | | | | |
| Abbott Capital Private Equity Fund VI, L.P. | Fund of Funds | 75,000 | 375 | 74,625 | 100% | 84,296 | 46,173 | 130,469 | 55,844 | 12.45% | 13.42% | 1.75x |
| Goldman Sachs Private Equity Partners X, L.P. | Fund of Funds | 75,000 | 13,234 | 68,958 | 82% | 93,427 | 21,547 | 114,974 | 46,016 | 11.00% | 13.42% | 1.67x |
| HarbourVest International Private Equity Partners VI-Partnership Fund L.P. | Fund of Funds | 37,765 | 1,888 | 37,980 | 95% | 31,237 | 34,700 | 65,937 | 27,957 | 11.92% | 5.12% | 1.74x |
| Vintage Year 2008 Total | | 187,765 | 15,497 | 181,563 | 92% | 208,960 | 102,420 | 311,380 | 129,817 | 11.75% | 9.16% | 1.71x |
| Vintage Year 2011 | | | | | | | | | | | | |
| Waterland Private Equity Fund V C.V. | Buyout | 18,765 | 3,407 | 15,934 | 82% | 30,070 | 13,406 | 43,475 | 27,542 | 35.48% | 10.56% | 2.73x |
| Khosla Ventures IV, L.P. | Venture Capital | 10,000 | 190 | 9,810 | 98% | 15,153 | 14,715 | 29,867 | 20,057 | 21.43% | 18.23% | 3.04x |
| Vintage Year 2011 Total | | 28,765 | 3,597 | 25,744 | 87% | 45,223 | 28,120 | 73,343 | 47,599 | 28.49% | 14.30% | 2.85x |
| Vintage Year 2012 | | | | | | | | | | | | |
| Garrison Opportunity Fund III A LLC | Distressed Debt | 20,000 | 0 | 20,000 | 100% | 8,043 | 11,047 | 19,090 | -910 | -0.85% | 13.85% | 0.95x |
| New Enterprise Associates 14, L.P. | Venture Capital | 25,000 | 1,125 | 23,875 | 96% | 23,784 | 30,025 | 53,808 | 29,933 | 16.38% | 15.80% | 2.25x |
| Summit Partners Venture Capital III-A, LP | Venture Capital | 16,350 | 1,504 | 19,692 | 91% | 21,135 | 19,517 | 40,652 | 20,960 | 18.05% | 15.80% | 2.06x |
| Vintage Year 2012 Total | | 61,350 | 2,629 | 63,567 | 96% | 52,962 | 60,588 | 113,550 | 49,983 | 12.01% | 14.41% | 1.79x |
| Vintage Year 2013 | | | | | | | | | | | | |
| Accel-KKR Capital Partners IV, L.P. | Buyout | 15,000 | 318 | 14,978 | 98% | 23,270 | 16,119 | 39,389 | 24,412 | 35.74% | 13.67% | 2.63x |
| H.I.G. Capital Partners V, L.P. | Buyout | 14,000 | 1,255 | 12,745 | 91% | 4,890 | 15,700 | 20,590 | 7,845 | 19.80% | 13.67% | 1.62x |
| Marlin Equity IV, L.P. | Buyout | 20,000 | 103 | 19,897 | 99% | 10,243 | 15,846 | 26,089 | 6,192 | 8.00% | 13.67% | 1.31x |
| RRJ Capital Master Fund II, L.P. | Buyout | 35,000 | 3,917 | 35,896 | 89% | 34,547 | 12,624 | 47,171 | 11,275 | 8.63% | 12.97% | 1.31x |
| H.I.G. Bayside Loan Opportunity Fund III (Europe-US\$), L.P. | Distressed Debt | 30,000 | 5,769 | 24,231 | 81% | 24,500 | 7,139 | 31,638 | 7,408 | 7.55% | 4.95% | 1.31x |
| Wayzata Opportunities Fund III, L.P. | Distressed Debt | 30,000 | 24,103 | 14,718 | 20% | 8,849 | 5,182 | 14,031 | -687 | -1.40% | 8.19% | 0.95x |

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, 2020 (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 |
|---|-----------------|--------------------------|-------------------|--------------------------|------------|--------------------------|----------------------|-------------------------|----------------------|---------------|---------------|--------------|
| Trinity Ventures XI, L.P. | Venture Capital | 25,000 | 1,500 | 23,500 | 94% | 4,835 | 35,450 | 40,286 | 16,786 | 11.84% | 14.22% | 1.71x |
| Vintage Year 2013 Total | | 169,000 | 36,966 | 145,965 | 78% | 111,135 | 108,060 | 219,195 | 73,230 | 11.84% | 13.08% | 1.50x |
| Vintage Year 2014 | | | | | | | | | | | | |
| Dyal Capital Partners II | Buyout | 35,000 | 8,628 | 29,610 | 75% | 5,517 | 20,833 | 26,350 | -3,260 | -4.50% | 16.58% | 0.89x |
| H.I.G. Europe Capital Partners II, L.P. | Buyout | 16,420 | 2,992 | 13,378 | 82% | 2,818 | 12,120 | 14,938 | 1,560 | 5.08% | 13.03% | 1.12x |
| Marlin Heritage Fund | Buyout | 10,000 | 2,293 | 10,430 | 77% | 15,749 | 8,347 | 24,096 | 13,666 | 35.05% | 16.58% | 2.31x |
| Thoma Bravo XI | Buyout | 30,000 | 3,203 | 32,531 | 89% | 54,325 | 50,698 | 105,022 | 72,491 | 31.54% | 16.58% | 3.23x |
| TPG Opportunities Partners III | Distressed Debt | 40,000 | 13,014 | 48,903 | 67% | 41,314 | 15,687 | 57,000 | 8,097 | 8.35% | 6.69% | 1.17x |
| Khosla Ventures V | Venture Capital | 20,000 | 700 | 19,300 | 97% | 1,013 | 25,994 | 27,007 | 7,707 | 9.53% | 17.51% | 1.40x |
| Spectrum Equity Investors VII, L.P. | Venture Capital | 25,000 | 1,625 | 23,375 | 94% | 29,634 | 75,017 | 104,651 | 81,276 | 51.33% | 17.51% | 4.48x |
| Vintage Year 2014 Total | | 176,420 | 32,455 | 177,527 | 82% | 150,370 | 208,694 | 359,065 | 181,538 | 25.40% | 17.93% | 2.02x |
| Vintage Year 2015 | | | | | | | | | | | | |
| * WPEF VI Overflow Fund C.V. | Buyout | 7,037 | 7,027 | 10 | 0% | 0 | 0 | 0 | -10 | 0.00% | 9.45% | 0.00x |
| RRJ Capital Master Fund III, LP | Buyout | 40,000 | 7,541 | 35,828 | 81% | 30,812 | 12,188 | 43,000 | 7,172 | 10.25% | 9.45% | 1.20x |
| WPEF VI Feeder, L.P. | Buyout | 28,148 | 10,067 | 20,309 | 64% | 6,092 | 32,687 | 38,779 | 18,470 | 27.10% | 9.45% | 1.91x |
| Accel-KKR Growth Capital Partners II | Mezzanine | 15,000 | 880 | 14,120 | 94% | 9,537 | 10,253 | 19,789 | 5,669 | 17.39% | 8.67% | 1.40x |
| New Enterprise Associates 15, L.P. | Venture Capital | 35,000 | 1,925 | 33,079 | 95% | 8,074 | 54,215 | 62,288 | 29,209 | 19.32% | 14.85% | 1.88x |
| Summit Partners Venture Capital Fund IV-A, L.P. | Venture Capital | 35,000 | 25,211 | 29,839 | 28% | 20,050 | 28,680 | 48,730 | 18,892 | 37.49% | 14.85% | 1.63x |
| Vintage Year 2015 Total | | 160,185 | 52,651 | 133,185 | 67% | 74,564 | 138,023 | 212,587 | 79,402 | 21.17% | 14.38% | 1.60x |
| Vintage Year 2016 | | | | | | | | | | | | |
| Accel-KKR Capital Partners V, L.P. | Buyout | 25,000 | 6,809 | 18,191 | 73% | 7,343 | 16,544 | 23,887 | 5,696 | 20.04% | 12.45% | 1.31x |
| Dyal III Pension Investors LP | Buyout | 35,000 | 22,040 | 21,125 | 37% | 12,017 | 20,948 | 32,964 | 11,839 | 20.54% | 12.45% | 1.56x |
| Linden Capital Partners III | Buyout | 35,000 | 8,057 | 33,943 | 77% | 25,982 | 52,299 | 78,281 | 44,338 | 33.18% | 12.45% | 2.31x |
| Marlin Heritage Europe, L.P. | Buyout | 15,247 | 1,936 | 12,978 | 87% | 0 | 19,297 | 19,297 | 6,319 | 25.41% | 10.07% | 1.49x |
| Thoma Bravo Fund XII, L.P. | Buyout | 30,000 | 1,323 | 37,254 | 96% | 8,578 | 46,507 | 55,085 | 17,831 | 17.39% | 12.45% | 1.48x |
| TSG7 A L.P. | Buyout | 16,000 | 3,792 | 12,208 | 76% | 202 | 16,817 | 17,018 | 4,811 | 12.58% | 12.45% | 1.39x |
| TSG7 B L.P. | Buyout | 4,000 | 512 | 3,662 | 87% | 806 | 3,027 | 3,833 | 171 | 3.22% | 12.45% | 1.05x |

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, 2020 (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 |
|--|-----------------|--------------------------|-------------------|--------------------------|------------|--------------------------|----------------------|-------------------------|----------------------|---------------|---------------|--------------|
| Atalaya Special Opportunities Fund VI, L.P. | Distressed Debt | 25,000 | 2,454 | 28,940 | 90% | 23,301 | 15,414 | 38,715 | 9,775 | 12.27% | 7.87% | 1.34x |
| Trinity Ventures XII, L.P. | Venture Capital | 30,000 | 5,625 | 24,375 | 81% | 0 | 44,277 | 44,277 | 19,902 | 25.79% | 16.58% | 1.82x |
| Vintage Year 2016 Total | | 215,247 | 52,548 | 192,676 | 76% | 78,229 | 235,128 | 313,357 | 120,682 | 21.95% | 14.77% | 1.63x |
| Vintage Year 2017 | | | | | | | | | | | | |
| Marlin Heritage II | Buyout | 10,000 | 1,873 | 8,127 | 81% | 0 | 9,207 | 9,207 | 1,081 | 8.00% | 17.67% | 1.13x |
| Summit Partners Europe Growth Equity Fund II, SCSP | Buyout | 35,185 | 22,220 | 28,698 | 37% | 23,120 | 21,578 | 44,698 | 16,000 | 80.12% | 13.52% | 1.56x |
| New Enterprise Associates 16, L.P. | Venture Capital | 35,000 | 8,313 | 26,688 | 76% | 1,062 | 34,052 | 35,114 | 8,426 | 17.09% | 17.08% | 1.32x |
| Vintage Year 2017 Total | | 80,185 | 32,406 | 63,512 | 60% | 24,181 | 64,837 | 89,019 | 25,507 | 30.16% | 16.72% | 1.40x |
| Vintage Year 2018 | | | | | | | | | | | | |
| Linden Capital Partners IV LP | Buyout | 44,330 | 24,946 | 21,940 | 44% | 4,246 | 18,926 | 23,172 | 1,232 | 8.04% | 6.97% | 1.06x |
| Marlin Equity V | Buyout | 25,000 | 14,419 | 10,727 | 42% | 521 | 14,249 | 14,770 | 4,043 | 21.77% | 6.97% | 1.38x |
| TSG8 L.P. | Buyout | 45,000 | 35,955 | 9,045 | 20% | 0 | 6,087 | 6,087 | -2,958 | N/M | N/M | 0.67x |
| Davidson Kempner Long-Term Distressed Opportunities Fund IV LP | Distressed Debt | 35,000 | 5,497 | 30,100 | 84% | 597 | 32,596 | 33,193 | 3,093 | 6.50% | N/A | 1.10x |
| TSSP Opportunities Partners IV (A), L.P. | Distressed Debt | 35,000 | 23,895 | 14,741 | 32% | 3,803 | 12,153 | 15,956 | 1,215 | N/M | N/M | 1.08x |
| RCP Fund XIII | Fund of Funds | 50,000 | 39,500 | 10,500 | 21% | 0 | 9,864 | 9,864 | -636 | N/M | N/M | 0.94x |
| RCPDirect III | Fund of Funds | 25,000 | 16,114 | 8,886 | 36% | 386 | 10,324 | 10,711 | 1,824 | N/M | N/M | 1.21x |
| Accel-KKR Growth Capital Partners III | Mezzanine | 33,320 | 24,827 | 8,493 | 25% | 0 | 8,338 | 8,338 | -155 | N/M | N/M | 0.98x |
| Khosla Ventures VI, L.P. | Venture Capital | 35,000 | 16,520 | 18,480 | 53% | 0 | 18,242 | 18,242 | -238 | -1.04% | 17.39% | 0.99x |
| Spectrum Equity VIII, L.P. | Venture Capital | 25,000 | 2,500 | 22,500 | 90% | 0 | 21,433 | 21,433 | -1,067 | -4.58% | 17.39% | 0.95x |
| Vintage Year 2018 Total | | 352,650 | 204,173 | 155,412 | 42% | 9,554 | 152,211 | 161,765 | 6,352 | 3.75% | 9.50% | 1.04x |
| Vintage Year 2019 | | | | | | | | | | | | |
| Cortec Group Fund VII, L.P. | Buyout | 30,000 | 22,004 | 10,848 | 27% | 2,856 | 9,254 | 12,109 | 1,261 | N/M | N/M | 1.12x |
| Gridiron Capital Fund IV, L.P. | Buyout | 30,000 | 22,279 | 7,721 | 26% | 0 | 8,773 | 8,773 | 1,053 | N/M | N/M | 1.14x |
| Thoma Bravo Fund XIII, LP | Buyout | 45,000 | 25,913 | 32,362 | 42% | 21,014 | 38,255 | 59,269 | 26,907 | N/M | N/M | 1.83x |
| New Enterprise Associates 17, L.P. | Venture Capital | 25,000 | 18,063 | 6,951 | 28% | 0 | 7,830 | 7,830 | 879 | N/M | N/M | 1.13x |
| Threshold Ventures III, L.P. | Venture Capital | 20,000 | 13,150 | 6,850 | 34% | 0 | 6,227 | 6,227 | -623 | N/M | N/M | 0.91x |
| Vintage Year 2019 Total | | 150,000 | 101,409 | 64,732 | 32% | 23,870 | 70,339 | 94,209 | 29,477 | N/M | N/M | 1.46x |

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, 2020 (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 2020 | | | | | | | | | | | | |
| Accel-KKR Capital Partners VI, LP | Buyout | 30,000 | 30,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| Summit Partners Europe Growth Equity Fund III, SCSp | Buyout | 23,457 | 23,457 | 0 | 0% | 0 | -87 | -87 | -87 | N/M | N/M | N/A |
| Wynnchurch Capital Partners V | Buyout | 20,000 | 19,478 | 522 | 3% | 0 | 240 | 240 | -283 | N/M | N/M | 0.46x |
| Davidson Kempner Long-Term Distressed Opportunities Fund V LP | Distressed Debt | 30,000 | 26,977 | 3,280 | 10% | 257 | 3,510 | 3,767 | 487 | N/M | N/M | 1.15x |
| Shamrock Capital Content Fund II, L.P. | Opportunistic Credit | 20,000 | 19,644 | 361 | 2% | 0 | 4 | 4 | -357 | N/M | N/M | 0.01x |
| CRV XVIII, LP | Venture Capital | 20,000 | 20,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| OrbiMed Private Investments VIII, LP | Venture Capital | 15,000 | 15,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| Spectrum Equity IX-A, L.P. | Venture Capital | 25,000 | 23,500 | 1,500 | 6% | 0 | 1,449 | 1,449 | -51 | N/M | N/M | 0.97x |
| Summit Partners Venture Capital Fund V-A, L.P. | Venture Capital | 20,000 | 20,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| Vintage Year 2020 Total | | 203,457 | 198,056 | 5,664 | 3% | 257 | 5,117 | 5,374 | -290 | N/M | N/M | 0.95x |
| Portfolio Total : | | 1,835,023 | 733,861 | 1,258,071 | 60% | 850,568 | 1,187,396 | 2,037,965 | 779,894 | 15.86% | 13.04% | 1.62x |
| Portfolio Strategy Totals | | | | | | | | | | | | |
| Buyout | | 767,588 | 337,764 | 510,896 | 56% | 325,018 | 512,486 | 837,505 | 326,609 | 22.79% | | 1.64x |
| Distressed Debt | | 245,000 | 101,710 | 184,913 | 58% | 110,663 | 102,726 | 213,389 | 28,477 | 5.61% | | 1.15x |
| Fund of Funds | | 312,765 | 72,585 | 249,474 | 77% | 280,611 | 136,467 | 417,077 | 167,603 | 11.36% | | 1.67x |
| Mezzanine | | 48,320 | 25,707 | 22,613 | 47% | 9,537 | 18,590 | 28,127 | 5,514 | 14.63% | | 1.24x |
| Opportunistic Credit | | 20,000 | 19,644 | 361 | 2% | 0 | 4 | 4 | -357 | N/M | | 0.01x |
| Venture Capital | | 441,350 | 176,451 | 289,814 | 60% | 124,740 | 417,122 | 541,862 | 252,048 | 21.41% | | 1.87x |
| Portfolio Total : | | 1,835,023 | 733,861 | 1,258,071 | 60% | 850,568 | 1,187,396 | 2,037,965 | 779,894 | 15.86% | 13.04% | 1.62x |
| Portfolio Geography Totals | | | | | | | | | | | | |
| US | | 1,548,000 | 643,641 | 1,032,830 | 58% | 667,373 | 1,021,745 | 1,689,117 | 656,287 | 15.88% | | 1.64x |
| Non-US | | 287,023 | 90,220 | 225,241 | 69% | 183,196 | 165,652 | 348,847 | 123,607 | 15.79% | | 1.55x |
| Portfolio Total | | 1,835,023 | 733,861 | 1,258,071 | 60% | 850,568 | 1,187,396 | 2,037,965 | 779,894 | 15.86% | 13.04% | 1.62x |

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 Credit Portfolio – as of September 30, 2020

The Private Credit portfolio's net IRR since inception is 7.70%, versus the benchmark return of 6.61%

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

The Private Credit funds reported another quarter of strong gains, following the downturn experienced in Q1

- The portfolio returned 5.3% in Q3 and 6.9% for the trailing 1-year period ending September 30, 2020
 - Most of the funds were up between 2% and 7% during Q3, with even larger gains from Silver Point SC II and OrbiMed Royalty III
- Longer term performance is also regaining lost ground following the sizeable sell-off in Q1
 - 7.0% net IRR for the 3-year period and 7.8% net IRR for the 5-year period
 - The portfolio is back to generating annualized returns of 7% - 8% over multi-year periods

Changes during the quarter

- SCERS committed \$40 million to Silver Point Specialty Credit II (Opportunistic Credit) during Q3
 - SCERS made no new commitments to Private Credit funds in Q4 2020
- \$6.5 million in new contributions, \$5.1 million in distributions
- Total portfolio gain increased by \$11.2 million while the total portfolio IRR increased by 1.23%

Private Credit Portfolio Details – as of September 30, 2020

| 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 2011 | | | | | | | | | | | | |
| Summit Partners Credit Fund, LP | Direct Lending | 20,000 | 2,125 | 20,697 | 89% | 26,198 | 511 | 26,709 | 6,013 | 8.82% | N/A | 1.29x |
| Vintage Year 2011 Total | | 20,000 | 2,125 | 20,697 | 89% | 26,198 | 511 | 26,709 | 6,013 | 8.82% | 14.30% | 1.29x |
| Vintage Year 2014 | | | | | | | | | | | | |
| Summit Partners Credit Fund II, L.P. | Direct Lending | 35,000 | 4,061 | 48,036 | 88% | 30,162 | 24,313 | 54,475 | 6,439 | 5.92% | 3.42% | 1.13x |
| Vintage Year 2014 Total | | 35,000 | 4,061 | 48,036 | 88% | 30,162 | 24,313 | 54,475 | 6,439 | 5.92% | 17.93% | 1.13x |
| Vintage Year 2015 | | | | | | | | | | | | |
| Athyrium Opportunities Fund II | Opportunistic Credit | 32,000 | 3,964 | 40,995 | 88% | 33,048 | 16,410 | 49,458 | 8,463 | 9.61% | 8.67% | 1.21x |
| Vintage Year 2015 Total | | 32,000 | 3,964 | 40,995 | 88% | 33,048 | 16,410 | 49,458 | 8,463 | 9.61% | 14.38% | 1.21x |
| Vintage Year 2017 | | | | | | | | | | | | |
| Athyrium Opportunities Fund III | Opportunistic Credit | 25,000 | 8,564 | 22,232 | 66% | 8,209 | 16,619 | 24,828 | 2,596 | 7.34% | 7.87% | 1.12x |
| Vintage Year 2017 Total | | 25,000 | 8,564 | 22,232 | 66% | 8,209 | 16,619 | 24,828 | 2,596 | 7.34% | 16.72% | 1.12x |
| Vintage Year 2018 | | | | | | | | | | | | |
| Benefit Street Partners Senior Secured Opportunities Fund L.P. | Direct Lending | 50,000 | 5,370 | 50,953 | 89% | 10,755 | 44,077 | 54,832 | 3,879 | 3.52% | 2.98% | 1.08x |
| Summit Partners Credit Fund III, L.P. | Direct Lending | 50,000 | 26,194 | 36,100 | 48% | 12,294 | 28,667 | 40,961 | 4,861 | N/M | N/M | 1.13x |
| TCP Direct Lending Fund VIII-S, LLC | Direct Lending | 100,000 | 28,567 | 71,433 | 71% | 10,899 | 69,160 | 80,059 | 8,625 | 7.21% | 2.98% | 1.12x |
| Vintage Year 2018 Total | | 200,000 | 60,131 | 158,486 | 70% | 33,947 | 141,904 | 175,852 | 17,366 | 6.50% | 9.50% | 1.11x |
| Vintage Year 2019 | | | | | | | | | | | | |
| BSP Levered US SOF II (Senior Secured Opportunities) Fund L.P. | Direct Lending | 50,000 | 46,926 | 3,063 | 6% | 0 | 3,812 | 3,812 | 749 | N/M | N/M | 1.24x |
| OrbiMed Royalty & Credit Opportunities III, LP | Opportunistic Credit | 35,000 | 29,668 | 6,993 | 15% | 1,668 | 7,256 | 8,924 | 1,931 | N/M | N/M | 1.28x |
| Vintage Year 2019 Total | | 85,000 | 76,594 | 10,056 | 10% | 1,668 | 11,069 | 12,737 | 2,680 | N/M | N/M | 1.27x |
| Vintage Year 2020 | | | | | | | | | | | | |
| IFM USIDF (Offshore) B Feeder | Direct Lending | 40,000 | 40,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| MCP Private Capital Fund IV (Feeder) SCSp | Direct Lending | 37,061 | 34,705 | 2,215 | 6% | 0 | 2,214 | 2,214 | -1 | N/M | N/M | 1.00x |
| Silver Point Specialty Credit Fund II, L.P. | Opportunistic Credit | 40,000 | 35,879 | 4,210 | 10% | 158 | 4,740 | 4,899 | 689 | N/M | N/M | 1.16x |

¹Benchmarks:

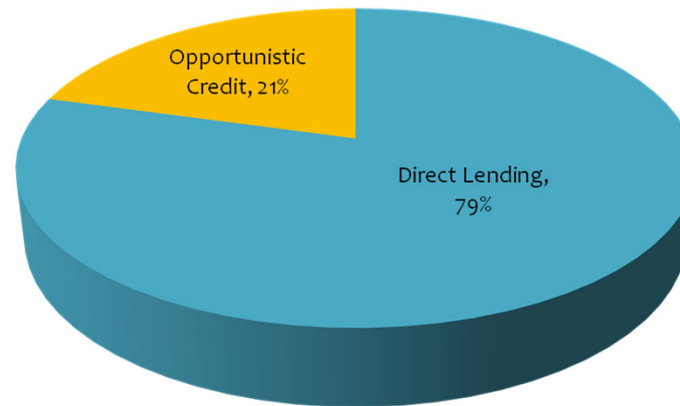
Private Credit Investments: Cambridge Associates median return for the respective debt strategies and vintage years

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

Private Credit Portfolio Details – as of September 30, 2020 (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 2020 Total | | 117,061 | 110,584 | 6,424 | 6% | 158 | 6,954 | 7,112 | 688 | N/M | N/M | 1.11x |
| Portfolio Total : | | 514,061 | 266,024 | 306,925 | 48% | 133,391 | 217,780 | 351,171 | 44,246 | 7.70% | 6.61% | 1.14x |
| Portfolio Strategy Totals | | | | | | | | | | | | |
| Direct Lending | | 382,061 | 187,949 | 232,496 | 51% | 90,308 | 172,754 | 263,062 | 30,566 | 6.89% | | 1.13x |
| Opportunistic Credit | | 132,000 | 78,075 | 74,429 | 41% | 43,084 | 45,026 | 88,109 | 13,680 | 10.41% | | 1.18x |
| Portfolio Total : | | 514,061 | 266,024 | 306,925 | 48% | 133,391 | 217,780 | 351,171 | 44,246 | 7.70% | 6.61% | 1.14x |

Market Value Strategy Exposure*



* Exposures are based on the market values of investments as of 9/30/20.

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, 2020

The Real Assets portfolio's net IRR since inception is 6.38%, versus the blended benchmark return of 5.17%

- The Real Assets portfolio includes private Infrastructure, Energy, and Agriculture, Timber and Other
- Real Assets is part of the broader Real Return asset category

The Real Assets portfolio is primarily Infrastructure and Energy partnerships

- Recent and longer-term performance of the Energy partnerships was materially impacted by significant Q1 markdowns; Infrastructure partnerships saw smaller declines in Q1 and have maintained good performance since inception
 - Since inception net IRRs of 9.2% for Infrastructure and 3.7% for Energy
- The Real Asset Debt separate account has also performed well with a 10.4% since inception net IRR
 - That separate account market value remains small at \$17.8 million, with no new investment activity

The Real Assets portfolio generated a 1.4% net return in Q3

- The portfolio's Energy funds dragged down performance during the quarter
 - This followed a Q2 rebound in the Energy funds' performance
- The Infrastructure funds generally reported solid gains during the quarter, led by Brookfield IV and ISQ II

Changes during the quarter

- SCERS committed \$40 million to NGP Royalty Partners (energy-related royalties) and \$50 million to Harrison Street Social Infrastructure Fund (infrastructure) during Q3
 - SCERS committed \$50 million to a global infrastructure fund (re-up) in Q4 2020
- \$13.9 million in new contributions, \$6.2 million in distributions
- Portfolio IRR decreased by 0.05% while the total portfolio gain increased by \$8.0 million

Real Assets Portfolio Performance Details – as of September 30, 2020

| 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 | 33,000 | 1,652 | 37,625 | 95% | 28,609 | 8,814 | 37,424 | -201 | -0.23% | 2.45% | 0.99x |
| Vintage Year 2013 Total | | 33,000 | 1,652 | 37,625 | 95% | 28,609 | 8,814 | 37,424 | -201 | -0.23% | | 0.99x |
| Vintage Year 2014 | | | | | | | | | | | | |
| Carlyle Power Partners II, L.P. | Energy | 40,000 | 13,873 | 34,083 | 65% | 8,328 | 28,576 | 36,904 | 2,821 | 3.35% | 5.13% | 1.08x |
| EnCap Flatrock Midstream III | Energy | 20,000 | 1,071 | 23,168 | 95% | 9,909 | 15,447 | 25,355 | 2,187 | 5.23% | 5.13% | 1.09x |
| Global Energy & Power Infrastructure Fund II | Energy | 35,000 | 1,737 | 37,018 | 95% | 28,145 | 23,131 | 51,277 | 14,259 | 23.21% | 5.13% | 1.39x |
| Quantum Energy Partners VI, LP | Energy | 35,000 | 8,690 | 32,150 | 75% | 18,840 | 30,088 | 48,929 | 16,778 | 20.79% | 5.13% | 1.52x |
| Pantheon SCERS SIRF MM, LLC | Infrastructure | 100,000 | 33,968 | 70,332 | 66% | 28,400 | 67,382 | 95,782 | 25,450 | 9.67% | 5.85% | 1.36x |
| Wastewater Opportunity Fund | Infrastructure | 25,000 | 0 | 25,007 | 100% | 1,998 | 19,379 | 21,377 | -3,630 | -7.80% | 5.85% | 0.85x |
| Vintage Year 2014 Total | | 255,000 | 59,339 | 221,758 | 77% | 95,620 | 184,003 | 279,624 | 57,865 | 10.07% | | 1.26x |
| Vintage Year 2015 | | | | | | | | | | | | |
| ArcLight Energy Partners Fund VI | Energy | 40,000 | 5,604 | 42,665 | 86% | 17,220 | 26,051 | 43,271 | 606 | 0.53% | 1.80% | 1.01x |
| EnCap Energy Capital Fund X, L.P. | Energy | 40,000 | 5,750 | 36,928 | 86% | 8,161 | 25,143 | 33,304 | -3,624 | -3.93% | 1.80% | 0.90x |
| Atalaya Real Assets SMA | Real Asset Debt | 100,000 | 84,789 | 36,169 | 15% | 26,888 | 17,812 | 44,700 | 8,532 | 10.42% | N/A | 1.24x |
| Vintage Year 2015 Total | | 180,000 | 96,143 | 115,762 | 47% | 52,269 | 69,006 | 121,275 | 5,513 | 1.93% | | 1.05x |
| Vintage Year 2016 | | | | | | | | | | | | |
| ACM Fund II, LLC | Agriculture | 25,000 | 4,282 | 24,864 | 83% | 4,581 | 16,711 | 21,292 | -3,572 | -7.98% | 5.53% | 0.86x |
| Brookfield Infrastructure Fund III, L.P. | Infrastructure | 40,000 | 8,450 | 32,946 | 79% | 9,188 | 31,524 | 40,712 | 7,767 | 9.78% | N/A | 1.24x |
| IFM Global Infrastructure Fund | Infrastructure | 125,053 | 0 | 125,053 | 100% | 34,893 | 127,361 | 162,254 | 37,201 | 11.59% | N/A | 1.30x |
| Vintage Year 2016 Total | | 190,053 | 12,732 | 182,863 | 93% | 48,663 | 175,596 | 224,259 | 41,396 | 9.31% | | 1.23x |
| Vintage Year 2017 | | | | | | | | | | | | |
| Quantum Energy Partners VII, LP | Energy | 40,000 | 18,194 | 24,409 | 55% | 2,661 | 18,581 | 21,242 | -3,167 | -7.79% | -4.39% | 0.87x |
| Meridiam Infrastructure North America Fund III | Infrastructure | 50,000 | 47,065 | 2,935 | 6% | 1 | 938 | 939 | -1,996 | -55.94% | N/A | 0.32x |
| Vintage Year 2017 Total | | 90,000 | 65,259 | 27,344 | 27% | 2,662 | 19,519 | 22,181 | -5,163 | -11.69% | | 0.81x |
| Vintage Year 2018 | | | | | | | | | | | | |
| Paine Schwartz Food Chain Fund V, LP | Agriculture | 40,000 | 35,531 | 4,469 | 11% | 0 | 3,643 | 3,643 | -826 | N/M | N/M | 0.82x |

¹Benchmarks:

Real Assets Portfolio: 45% Cambridge Infrastructure, 35% Cambridge Energy, 10% NCREIF Timberland, 10% NCREIF Farland
 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, 2020 (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 |
|--|----------------|--------------------------|-------------------|--------------------------|------------|--------------------------|----------------------|-------------------------|----------------------|--------------|---------------|--------------|
| EnCap Flatrock Midstream IV, L.P. | Energy | 22,500 | 14,650 | 8,435 | 35% | 588 | 8,552 | 9,139 | 705 | 4.70% | -0.01% | 1.08x |
| Tailwater Energy Fund III, LP | Energy | 32,000 | 7,204 | 26,850 | 77% | 1,662 | 21,844 | 23,506 | -3,345 | -7.64% | -0.01% | 0.88x |
| ISQ Global Infrastructure Fund II | Infrastructure | 50,000 | 20,018 | 33,679 | 60% | 3,697 | 35,059 | 38,756 | 5,077 | N/M | N/M | 1.15x |
| Vintage Year 2018 Total | | 144,500 | 77,403 | 73,434 | 46% | 5,947 | 69,098 | 75,045 | 1,611 | 1.63% | | 1.02x |
| Vintage Year 2019 | | | | | | | | | | | | |
| Tailwater Energy Fund IV, LP | Energy | 35,000 | 28,441 | 6,549 | 19% | 0 | 4,321 | 4,321 | -2,229 | N/M | N/M | 0.66x |
| Brookfield Infrastructure Fund IV | Infrastructure | 40,000 | 21,685 | 20,952 | 46% | 3,250 | 18,754 | 22,003 | 1,051 | N/M | N/M | 1.05x |
| EQT Infrastructure IV (No.2) USD SCSp | Infrastructure | 35,000 | 14,334 | 21,783 | 59% | 1,164 | 20,977 | 22,141 | 358 | N/M | N/M | 1.02x |
| Vintage Year 2019 Total | | 110,000 | 64,460 | 49,285 | 41% | 4,414 | 44,052 | 48,466 | -819 | N/M | | 0.98x |
| Vintage Year 2020 | | | | | | | | | | | | |
| NGP Royalty Partners, L.P. | Energy | 40,000 | 38,928 | 1,072 | 3% | 0 | 940 | 940 | -132 | N/M | N/M | 0.88x |
| Harrison Street Social Infrastructure Fund, L.P. | Infrastructure | 50,000 | 50,000 | 0 | 0% | 0 | 0 | 0 | 0 | N/M | N/M | N/A |
| Vintage Year 2020 Total | | 90,000 | 88,928 | 1,072 | 1% | 0 | 940 | 940 | -132 | N/M | | 0.88x |
| Portfolio Total : | | 1,092,553 | 465,916 | 709,142 | 57% | 238,184 | 571,028 | 809,212 | 100,070 | 6.38% | 5.17% | 1.14x |
| Portfolio Strategy Totals | | | | | | | | | | | | |
| Agriculture | | 65,000 | 39,813 | 29,334 | 39% | 4,581 | 20,354 | 24,936 | -4,398 | -9.43% | | 0.85x |
| Energy | | 412,500 | 145,795 | 310,952 | 65% | 124,123 | 211,488 | 335,611 | 24,659 | 3.73% | | 1.08x |
| Infrastructure | | 515,053 | 195,520 | 332,688 | 62% | 82,592 | 321,374 | 403,966 | 71,278 | 9.19% | | 1.21x |
| Real Asset Debt | | 100,000 | 84,789 | 36,169 | 15% | 26,888 | 17,812 | 44,700 | 8,532 | 10.42% | | 1.24x |
| Portfolio Total : | | 1,092,553 | 465,916 | 709,142 | 57% | 238,184 | 571,028 | 809,212 | 100,070 | 6.38% | 5.17% | 1.14x |
| Portfolio Geography Totals | | | | | | | | | | | | |
| US | | 802,500 | 401,429 | 474,729 | 50% | 185,991 | 337,353 | 523,345 | 48,616 | 4.46% | | 1.10x |
| Non-US | | 290,053 | 64,487 | 234,413 | 78% | 52,193 | 233,675 | 285,868 | 51,455 | 11.09% | | 1.22x |
| Portfolio Total | | 1,092,553 | 465,916 | 709,142 | 57% | 238,184 | 571,028 | 809,212 | 100,070 | 6.38% | 5.17% | 1.14x |

¹Benchmarks:

Real Assets Portfolio: 45% Cambridge Infrastructure, 35% Cambridge Energy, 10% NCREIF Timberland, 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 Characteristics as of September 30, 2020

The SCERS Real Assets portfolio is primarily Infrastructure and Energy

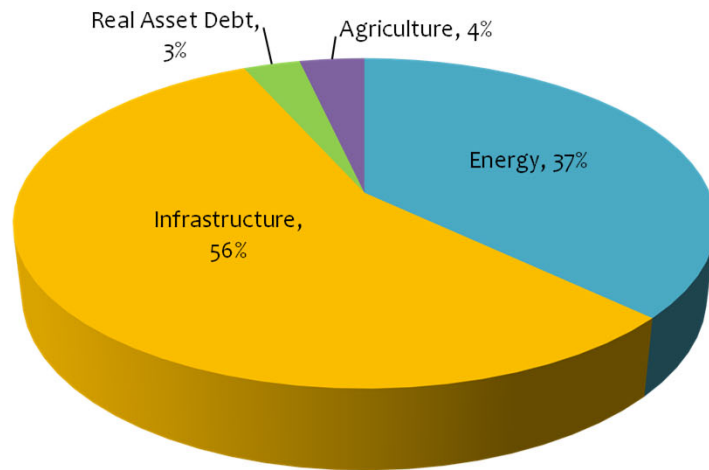
- Other strategies such as Agriculture represent much smaller allocations in the portfolio

The portfolio is focused on North America, though is diversified globally

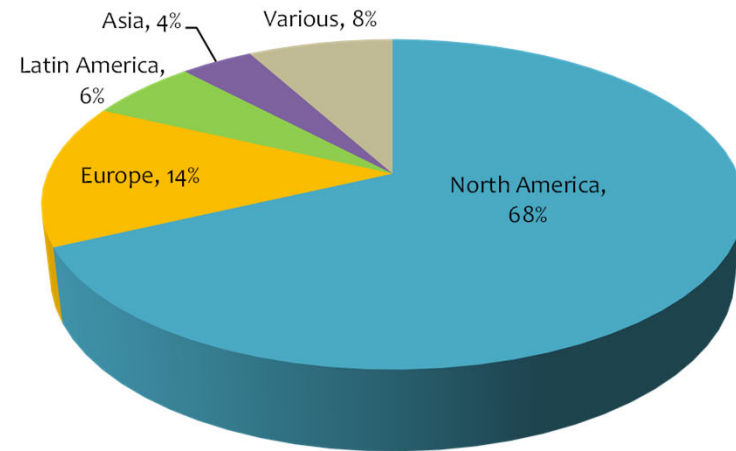
- The portfolio has exposure to Europe, Latin America, and Asia

Portfolio strategy and geographic allocations, based on fair market value of invested capital, shown below

Market Value Strategy Exposure*



Market Value Geographic Exposure*



* Exposures are based on the market values of investments as of 9/30/20.

Opportunities Portfolio – as of September 30, 2020

The Opportunities portfolio's net IRR since inception is 18.29%

- The long-term benchmark is SCERS' 7.00% total portfolio actuarial return objective
- Also tracking the portfolio's 3-year IRR versus an intermediate-term benchmark
 - 4.09% portfolio IRR v 6.63% IRR for the SCERS' total portfolio policy weighted benchmark over the last 3 years
- The portfolio only includes legacy distressed debt funds (fully liquidated) and one post-2009 distressed fund (Atalaya V)
 - The 3-year comparison, for example, reflects only the performance of Atalaya V

The legacy distressed funds performed very well, the current fund is performing at expectations

- SCERS' earlier vintage distressed debt funds are liquidated and have distributed significant capital back to SCERS
 - Stone Tower, MetWest TALF, and PIMCO have distributed \$129.3 million
- Atalaya SOF V, a vintage 2013 fund, has produced a 7.50% net IRR since inception

Changes during the quarter

- SCERS made no new commitments categorized as Opportunities funds during Q3 2020
- No new contributions, \$0.6 million in distributions
- Portfolio IRR remained unchanged, total portfolio gain increased \$0.2 million

As mentioned, the Opportunities portfolio only includes certain distressed debt funds

- SCERS has additional distressed debt investments within its Private Equity portfolio
- Categorizations were made at the time of each investment

Opportunities Portfolio Performance Details – as of September 30, 2020

| 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 2007 | | | | | | | | | | | | |
| * PIMCO Distressed Mortgage Fund, LP | Distressed Debt | 18,000 | 0 | 18,000 | 100% | 25,384 | 0 | 25,384 | 7,384 | 8.96% | 10.05% | 1.41x |
| Vintage Year 2007 Total | | 18,000 | 0 | 18,000 | 100% | 25,384 | 0 | 25,384 | 7,384 | 8.96% | | 1.41x |
| Vintage Year 2008 | | | | | | | | | | | | |
| * PIMCO Distressed Mortgage Fund II, L.P. | Distressed Debt | 12,000 | 0 | 12,000 | 100% | 35,277 | 0 | 35,277 | 23,277 | 34.39% | 12.19% | 2.94x |
| Vintage Year 2008 Total | | 12,000 | 0 | 12,000 | 100% | 35,277 | 0 | 35,277 | 23,277 | 34.39% | | 2.94x |
| Vintage Year 2009 | | | | | | | | | | | | |
| * MetWest Enhanced TALF Strategy Fund LP | Distressed Debt | 20,000 | 0 | 20,000 | 100% | 25,304 | 0 | 25,304 | 5,304 | 11.21% | 14.33% | 1.27x |
| * Stone Tower Structured Credit Recovery Fund LP | Distressed Debt | 25,000 | 0 | 25,248 | 100% | 43,383 | 0 | 43,383 | 18,135 | 25.30% | 14.33% | 1.72x |
| Vintage Year 2009 Total | | 45,000 | 0 | 45,248 | 100% | 68,687 | 0 | 68,687 | 23,439 | 19.71% | | 1.52x |
| Vintage Year 2013 | | | | | | | | | | | | |
| Atalaya Special Opportunities Fund V, L.P. | Distressed Debt | 25,000 | 1,117 | 24,875 | 96% | 25,237 | 5,817 | 31,054 | 6,179 | 7.50% | 8.19% | 1.25x |
| Vintage Year 2013 Total | | 25,000 | 1,117 | 24,875 | 96% | 25,237 | 5,817 | 31,054 | 6,179 | 7.50% | | 1.25x |
| Portfolio Total : | | 100,000 | 1,117 | 100,123 | 99% | 154,585 | 5,817 | 160,402 | 60,279 | 18.29% | 7.00% | 1.60x |

* Liquidated partnership

¹ Benchmarks:

Opportunities Investments: Cambridge Associates median return for the respective strategies and vintage years
Opportunities Portfolio: 7.00% actuarial return objective

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