

QUARTERLY PRIVATE EQUITY BOARD UPDATE

For the period ended December 31, 2022

Prepared at the Specific Request of:

Client:

Pennsylvania State Employees' Retirement System



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PERFORMANCE SUMMARY

StepStone Group LP (“StepStone”) was engaged by Pennsylvania State Employees’ Retirement System (“SERS”) to provide Private Equity services for prospective investment opportunities, as well as portfolio management.

StepStone monitors investments under the entity Pennsylvania State Employees’ Retirement System (“the Portfolio”).

The following table illustrates the Portfolio’s since inception investment performance as of December 31, 2022, as well as the quarter-over-quarter and year-over-year change.

The Portfolio is generating a since inception net IRR of 12.5% at December 31, 2022, down (2) basis points quarter-over-quarter.

As of December 31, 2022. In USD millions.

SERS PORTFOLIO PERFORMANCE SUMMARY					
	December 31, 2022	September 30, 2022	December 31, 2021	QUARTERLY Δ	ANNUAL Δ
Number of Active Managers	67	67	66	0	1
Number of Active Investments	196	196	189	0	7
Committed Capital	\$16,318.7	\$16,202.6	\$15,659.6	\$116.1	\$659.2
Unfunded Commitment	2,632.0	2,782.0	2,840.9	(150.0)	(209.0)
Total Exposure	9,152.4	9,103.4	9,958.2	49.0	(805.9)
Total Contributed	19,941.9	19,680.0	19,000.1	261.8	941.8
Total Distributed	26,229.6	26,077.1	25,172.2	152.5	1,057.4
Total Market Value	6,520.4	6,321.4	7,117.3	199.0	(596.9)
Since Inception G/L	12,808.2	12,718.5	13,289.4	89.7	(481.2)
Total Value	\$32,750.1	\$32,398.5	\$32,289.5	\$351.5	\$460.5
Net DPI	1.3x	1.3x	1.3x		
Net TVM	1.6x	1.6x	1.7x		
Net IRR	12.5%	12.5%	12.8%	(2 bps)	(28 bps)

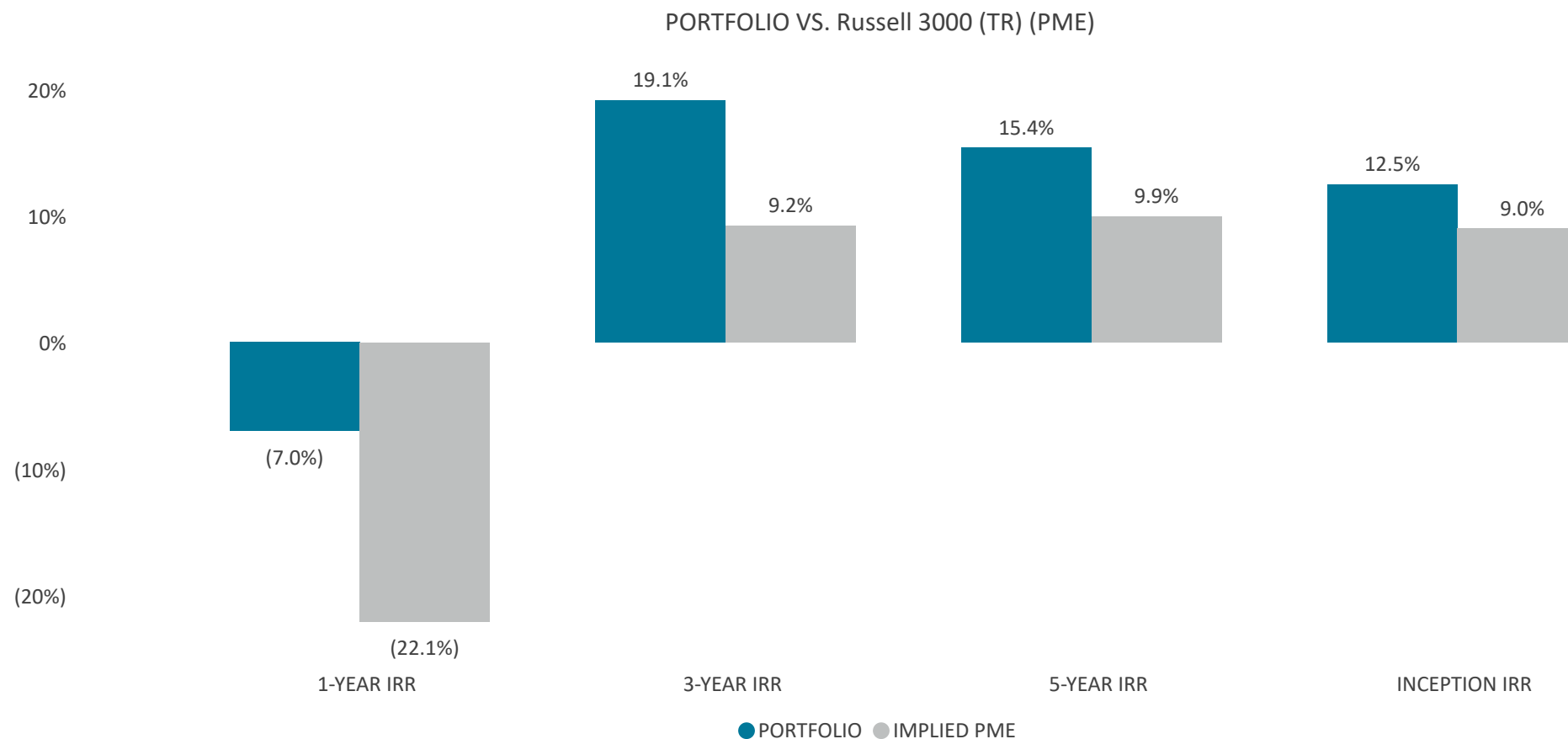
Past performance is not necessarily indicative of future results and there can be no assurance that the investment will achieve comparable results or avoid substantial losses.

IRR and TVM for certain vehicles may have been impacted by StepStone’s or the underlying GPs’ use of subscription-backed credit facilities by such vehicles.

Reinvested/recycled amounts increase contributed capital.

PERFORMANCE SUMMARY CONTINUED

The following table illustrates the Portfolio's point-to-point investment performance as of December 31, 2022, as well as the public market equivalent (PME) based on the Russell 3000 (TR) index.

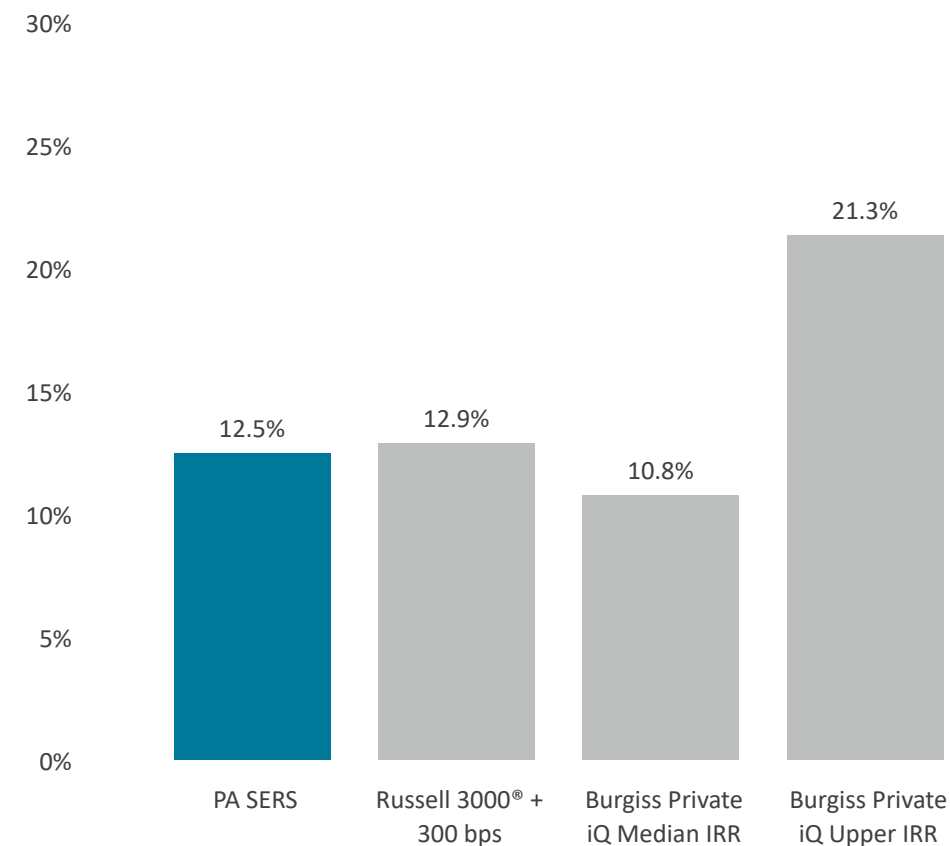


The referenced indices/benchmarks are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially affect the performance data presented.

PORTFOLIO PERFORMANCE VS. BENCHMARKS

The Portfolio's performance is measured against two benchmarks, the Russell 3000® and Burgiss Private iQ. The following graph illustrates Portfolio IRR performance versus benchmarks as of December 31, 2022.

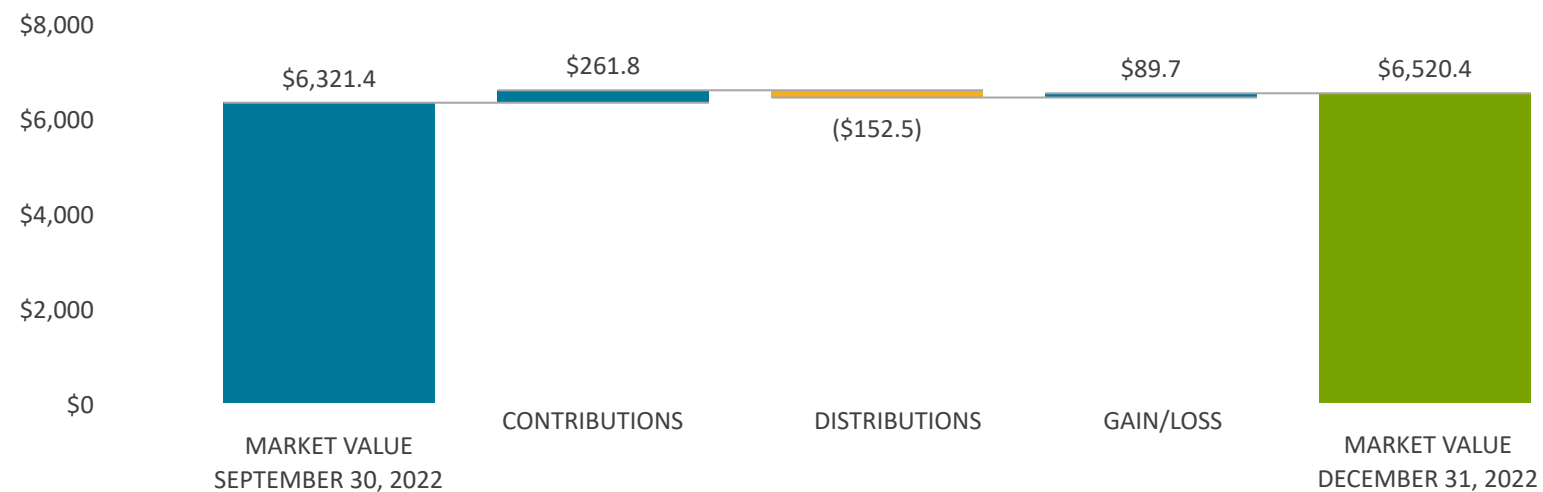
RETURNS	1 YEAR RETURN	3 YEAR RETURN	5 YEAR RETURN	10 YEAR RETURN
SERS Combined Portfolio (IRR)	(7.0%)	19.1%	15.4%	12.8%
Burgiss Private iQ Pooled PE Benchmark	(6.2%)	18.4%	16.4%	15.0%
Burgiss Private iQ All PE Top-Quartile	7.9%	26.2%	23.4%	22.6%
Russell 3000®	(19.2%)	7.1%	8.8%	12.1%
Russell 3000® + 300 bps	(16.2%)	10.1%	11.8%	15.1%
SERS Core Buyout (IRR)	(3.1%)	18.9%	16.1%	15.8%
Burgiss Private iQ Pooled Buyout Benchmark	(1.0%)	18.7%	16.0%	14.9%
Burgiss Private iQ Buyout Top-Quartile	15.7%	28.5%	25.0%	23.9%
SERS Core Growth Equity (IRR)	(22.8%)	30.3%	29.4%	22.3%
Burgiss Private iQ Pooled VC Benchmark	(18.3%)	24.1%	22.4%	19.5%
Burgiss Private iQ VC Top-Quartile	0.3%	28.8%	26.1%	23.8%
SERS Core Special Situations (IRR)	0.9%	17.4%	16.1%	12.7%
Burgiss Private iQ Pooled SS Benchmark	3.0%	8.5%	7.8%	8.5%
Burgiss Private iQ SS Top-Quartile	9.6%	13.3%	12.6%	12.8%
SERS Keystone Legacy Fund (IRR)	(17.0%)	5.7%	0.6%	6.6%
Burgiss Private iQ Pooled PE Benchmark	(6.2%)	18.4%	16.4%	15.0%
Burgiss Private iQ All PE Top-Quartile	7.9%	26.2%	23.4%	22.6%



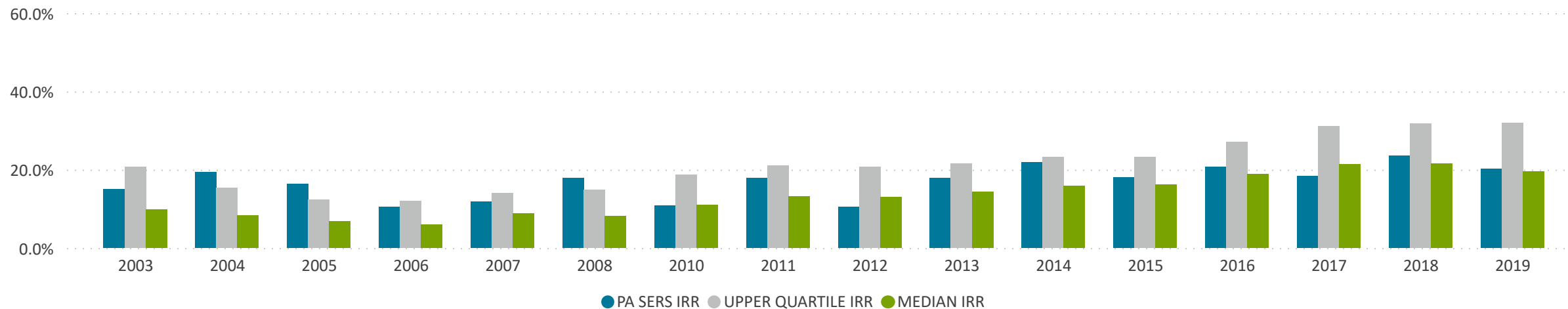
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QUARTERLY VALUATION MOVEMENT

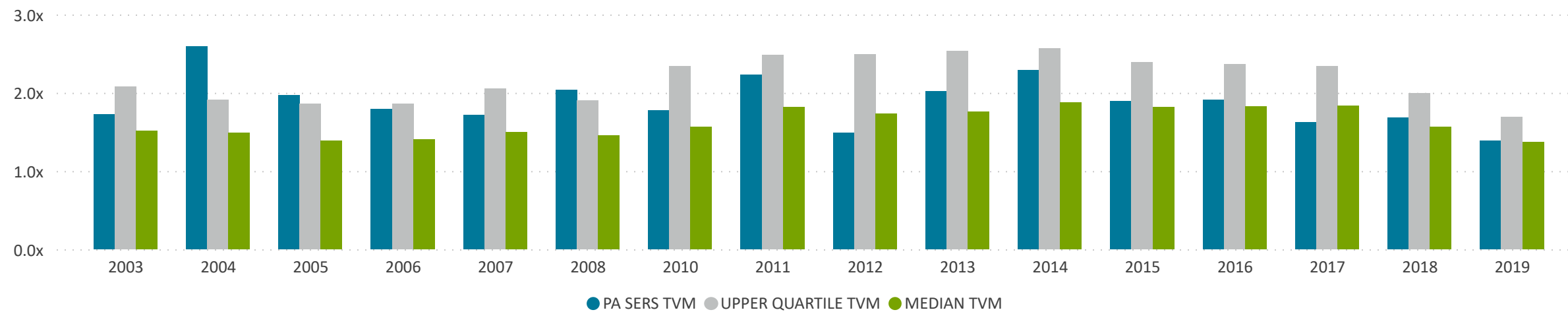
During the fourth quarter of 2022, the value of the Portfolio increased by \$89.7 million, or 1.4%.



IRR PERFORMANCE BY VINTAGE YEAR



TVM PERFORMANCE BY VINTAGE YEAR



FUND GEOGRAPHIC DIVERSIFICATION

As of December 31, 2022. In USD millions.

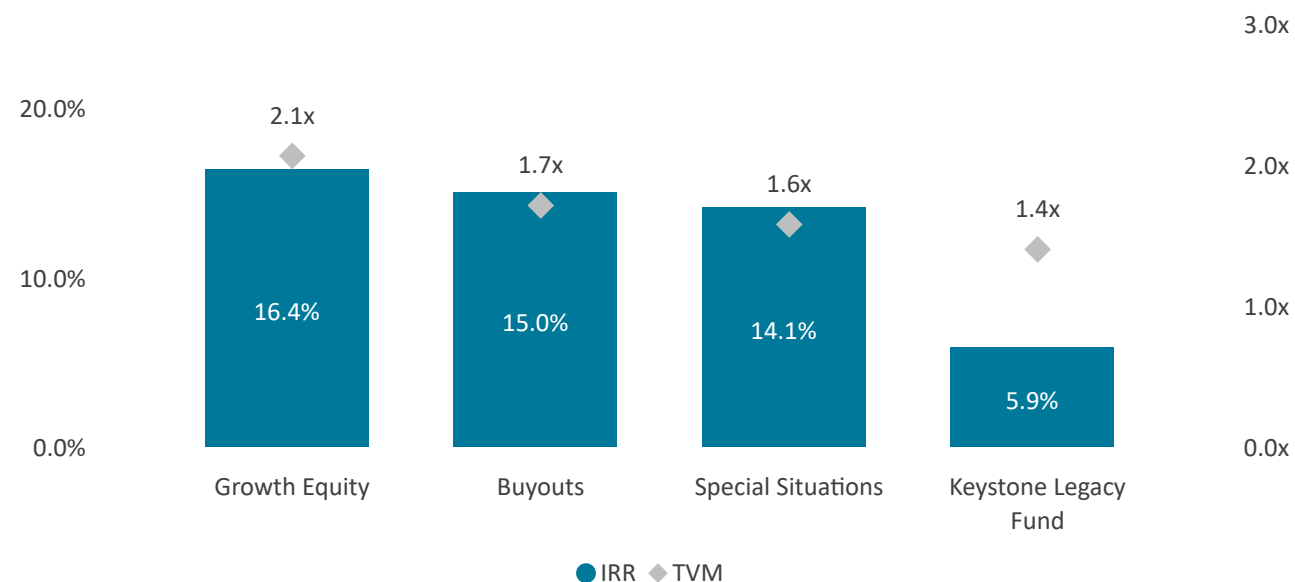
GEOGRAPHY	NAV	% OF TOTAL	UNFUNDED	% OF TOTAL	TOTAL EXPOSURE	% OF TOTAL
North America	\$4,189.5	64.3%	\$1,822.1	69.2%	\$6,011.6	65.7%
Global	\$688.4	10.6%	\$410.9	15.6%	\$1,099.4	12.0%
Europe	\$716.0	11.0%	\$260.6	9.9%	\$976.6	10.7%
Asia	\$559.6	8.6%	\$77.6	2.9%	\$637.2	7.0%
Keystone Legacy Fund	\$217.4	3.3%	\$47.8	1.8%	\$265.2	2.9%
Emerging Markets	\$149.5	2.3%	\$13.0	0.5%	\$162.5	1.8%
Total	\$6,520.4	100.0%	\$2,632.0	100.0%	\$9,152.4	100.0%

CORE PORTFOLIO PERIODIC RETURNS VS. RUSSELL 3000 INDEX

BENCHMARK	1 YEAR RETURN	3 YEAR RETURN	5 YEAR RETURN	10 YEAR RETURN	SINCE INCEPTION
SERS Core Portfolio (IRR)	(6.6%)	20.7%	18.6%	16.5%	15.3%
Russell 3000®	(19.2%)	7.1%	8.8%	12.1%	9.9%
Russell 3000® + 300 bps	(16.2%)	10.1%	11.8%	15.1%	12.9%
PA SERS Outperformance/(Underperformance)					
Russell 3000® Net	12.7%	13.6%	9.9%	4.4%	5.5%
Russell 3000® + 300 bps Net	9.7%	10.6%	6.9%	1.4%	2.5%

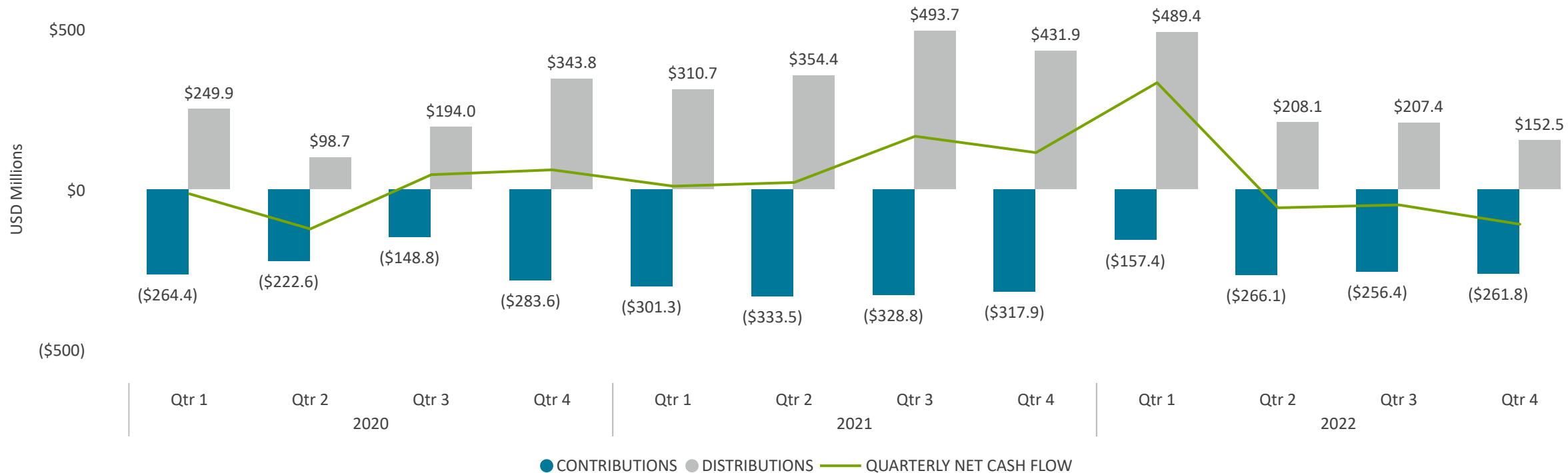
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PERFORMANCE BY SECTOR



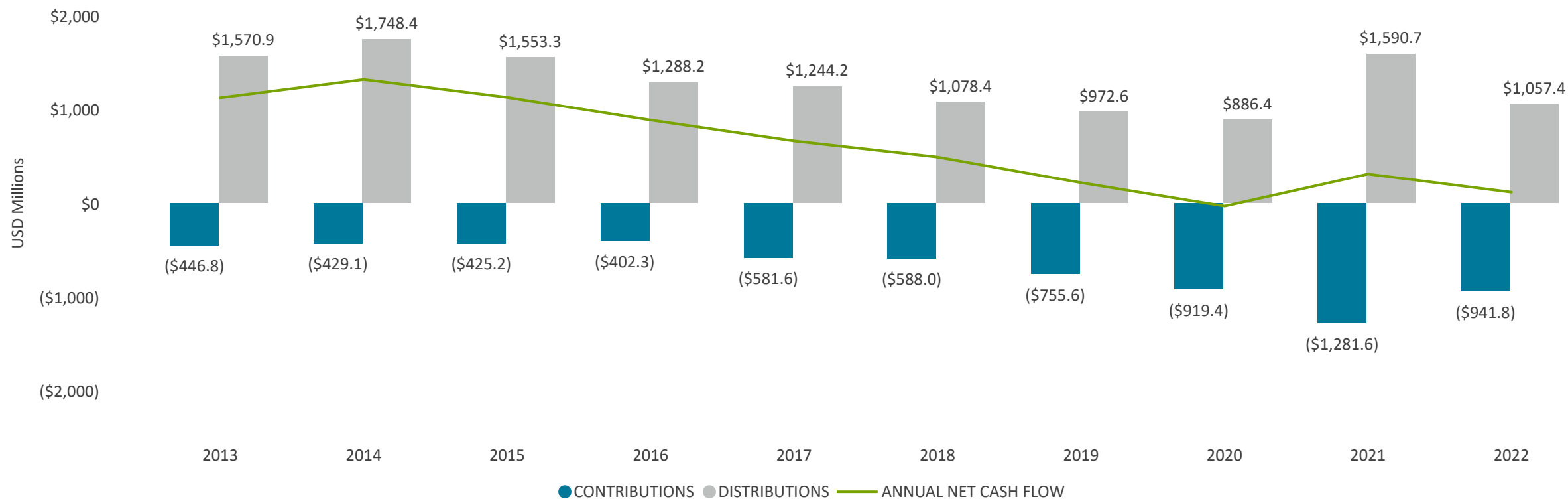
QUARTERLY CASH FLOW ACTIVITY

During the fourth quarter of 2022, the Portfolio contributed \$261.8 million and received \$152.5 million of distributions, for a net cash outflow of \$109.3 million.

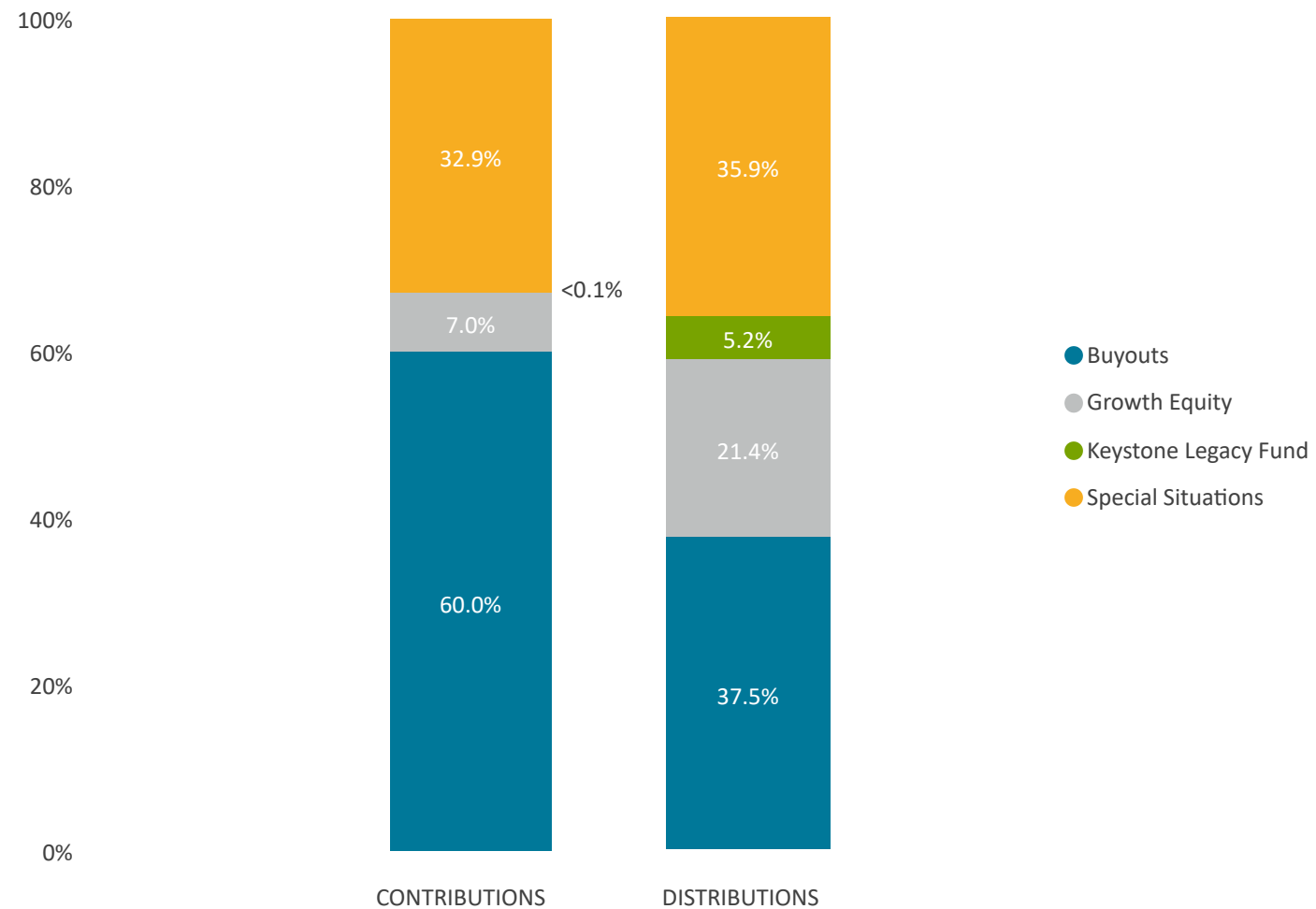


ANNUAL CASH FLOW ACTIVITY

During the twelve months ended December 31, 2022, the Portfolio contributed \$941.8 million and received \$1,057.4 million of distributions, for a net cash inflow of \$115.7 million.

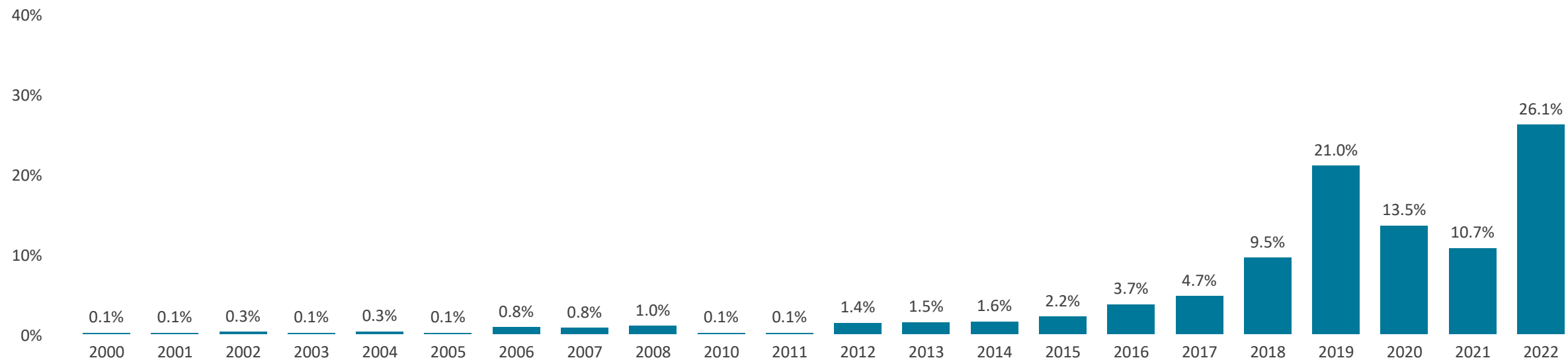


QUARTERLY CASH FLOW BY SECTOR



UNFUNDED % by VINTAGE YEAR

The following chart provides unfunded commitments by vintage year as a percentage of the Portfolio's total unfunded commitments.



SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
1997	Apollo Investment Fund IV	Buyouts	\$75,000,000	\$74,838,620	\$124,814,033	\$40,703	\$50,016,116	1.7x	8.5%	Second	Second
1997 Total			\$75,000,000	\$74,838,620	\$124,814,033	\$40,703	\$50,016,116	1.7x	8.5%	Second	Second
1998	HarbourVest IPEP III	Buyouts	40,000,000	39,400,000	61,092,165	68,687	21,760,852	1.6x	8.6%	Third	Second
1998 Total			\$40,000,000	\$39,400,000	\$61,092,165	\$68,687	\$21,760,852	1.6x	8.6%	Third	Second
1999	HarbourVest Partners VI	Growth Equity	200,000,000	196,586,055	251,227,115	376,542	55,017,602	1.3x	3.6%	First	First
1999	Lexington Capital Partners III	Special Situations	35,000,000	34,516,449	43,576,611						
1999	New Enterprise Associates IX	Growth Equity	20,000,000	19,600,000	8,739,870	396,637	(10,463,493)	0.5x	(6.1%)	Third	Third
1999 Total			\$255,000,000	\$250,702,504	\$303,543,596						
2000	Apollo Investment Fund V	Buyouts	50,000,000	44,972,146	122,673,016	426,039	78,126,909	2.7x	38.8%	First	First
2000	Audax Private Equity Fund	Buyouts	35,000,000	36,839,098	56,057,910	108,376	19,327,188	1.5x	13.1%	Second	Third
2000	Blackstone Communications Partners I	Buyouts	25,000,000	25,114,042	30,998,189	185,492	6,069,639	1.2x	6.2%	Fourth	Fourth
2000	New Enterprise Associates X	Growth Equity	35,000,000	35,028,000	39,412,034	2,095,304	6,479,338	1.2x	2.5%	Second	Second
2000	Permira European Fund II	Buyouts	45,672,612	45,672,612	91,560,959	296,850	46,185,198	2.0x	21.6%	First	First
2000	Providence Equity Partners IV	Buyouts	25,000,000	23,420,840	56,065,270						
2000 Total			\$215,672,612	\$211,046,738	\$396,767,378						
2001	Blackstone Capital IV	Buyouts	69,379,875	69,119,097	193,976,664	258,601	125,116,168	2.8x	36.2%	First	First
2001	Lexington Capital Partners V	Special Situations	75,000,000	74,623,418	125,170,164						
2001 Total			\$144,379,875	\$143,742,515	\$319,146,828						
2002	Berkshire Fund VI	Buyouts	20,000,000	18,819,615	55,273,814						
2002	GTCR VIII	Buyouts	75,000,000	69,393,599	120,471,948				22.3%	Second	
2002 Total			\$95,000,000	\$88,213,214	\$175,745,762						
2003	HarbourVest Partners VII	Growth Equity	75,000,000	73,687,500	117,260,978	1,198,941	44,772,419	1.6x	6.7%	First	First
2003	Kelso VII	Buyouts	40,000,000	41,169,937	65,821,118	73,096	24,724,277	1.6x	11.4%	Third	Third
2003	New Enterprise Associates 11	Growth Equity	25,000,000	25,000,000	63,385,828	1,988,367	40,374,195	2.6x	15.4%	First	First
2003	Permira European Fund III	Buyouts	127,062,518	127,340,454	218,052,206	446,418	91,158,171	1.7x	26.1%	Second	Third

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

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2003	TPG Partners IV	Buyouts	\$27,907,484	\$27,981,463	\$58,314,713						
2003 Total			\$294,970,002	\$295,179,353	\$522,834,842						
2004	ABRY Partners V	Buyouts	45,000,000	41,752,543	84,778,199						
2004	AXA Secondary Fund III	Special Situations	26,000,000	21,737,894	37,244,706	59,815	15,566,627	1.7x	44.0%	First	Second
2004	AXA Secondary Fund III-2	Special Situations	14,000,000	11,677,210	19,062,764	41,659	7,427,212	1.6x	40.5%	First	Second
2004	Providence Equity Partners V	Buyouts	45,000,000	42,692,347	52,204,745						
2004 Total			\$130,000,000	\$117,859,994	\$193,290,413	\$403,317	\$75,833,736	1.6x	12.6%	Second	Second
2005	Apollo Investment Fund VI	Buyouts	40,000,000	38,911,805	64,467,407	720,222	26,275,823	1.7x	8.6%	Second	Second
2005	Audax Private Equity Fund II	Buyouts	25,000,000	25,517,152	46,325,622	201,477	21,009,947	1.8x	14.1%	First	Second
2005	HIPEP V-Asia Pacific & Rest of World	Buyouts	30,000,000	28,245,316	38,861,957	439,581	11,056,222	1.4x	5.6%	Third	Third
2005	Lexington Capital Partners VI	Special Situations	50,000,000	53,066,325	73,712,907						
2005	Lightspeed Venture Partners VII	Growth Equity	18,000,000	18,000,000	53,968,729						
2005 Total			\$163,000,000	\$163,740,598	\$277,336,622	\$4,113,361	\$117,709,385	1.7x	9.6%	Second	Second
2006	ABRY Senior Equity II	Special Situations	30,000,000	28,388,642	45,127,413						
2006	Asia Alternatives Capital Partners	Buyouts	25,000,000	25,218,098	44,133,625	2,232,672	21,148,199	1.8x	10.9%	Second	Second
2006	AXA Secondary Fund IV	Special Situations	80,000,000	70,134,752	99,618,118	105,028	29,588,394	1.4x	8.5%	Second	Third
2006	Berkshire Fund VII	Buyouts	32,000,000	32,613,937	68,596,870						
2006	Blackstone Capital Partners V	Buyouts	150,000,000	150,111,788	250,429,596	499,037	100,816,844	1.7x	7.6%	Third	Second
2006	Centerbridge Capital Partners I	Special Situations	50,000,000	57,337,396	117,317,806	1,929,218	61,909,628	2.1x	19.2%	First	First
2006	Eureka II	Buyouts	20,000,000	21,906,935	23,150,416	5,747,375	6,990,856	1.3x	4.9%	Third	Fourth
2006	Francisco Partners II	Buyouts	30,000,000	29,383,916	48,613,520	185,638	19,415,242	1.7x	10.4%	Second	Second
2006	HarbourVest Partners VIII	Growth Equity	100,000,000	98,000,000	180,351,203	34,018,319	116,369,522	2.2x	11.3%	First	First
2006	Madison Dearborn Capital Partners V	Buyouts	63,817,077	71,571,265	116,191,907	2,306,273	46,926,915	1.7x	7.4%	Third	Second
2006	New Enterprise Associates 12	Growth Equity	35,000,000	35,631,130	48,025,951	2,740,396	15,135,217	1.4x	6.6%	Second	Second
2006	NewSpring Growth Capital II	Growth Equity	10,000,000	9,850,000	19,617,977						

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2006	Permira IV	Buyouts	\$136,401,782	\$138,422,695	\$208,443,061	\$29,506,398	\$99,526,764	1.7x	9.0%	Second	Second
2006	TPG Partners V	Buyouts	88,831,038	92,531,812	130,072,991	298,012	37,839,191	1.4x	4.8%	Third	Third
2006 Total			\$851,049,897	\$861,102,367	\$1,399,690,453	\$81,069,301	\$619,657,387	1.7x	9.2%	Second	Second
2007	ABRY Advanced Securities Fund	Special Situations	7,262,950	23,529,104	38,786,236						
2007	Advent Latin American Private Equity Fund IV	Buyouts	30,000,000	30,797,073	43,955,921	2,679,514	15,838,362	1.5x	9.0%	Third	Third
2007	Asia Alternatives Capital Partners II	Buyouts	29,949,500	29,091,302	64,131,666	11,924,363	46,964,727	2.6x	17.0%	First	First
2007	Audax Private Equity Fund III	Buyouts	37,000,000	42,498,691	82,716,671	782,672	41,000,653	2.0x	15.0%	Second	Second
2007	Battery Ventures VIII	Growth Equity	25,000,000	25,050,751	60,396,581						
2007	Dover Street VII	Special Situations	30,000,000	28,696,128	40,966,380	223,876	12,494,128	1.4x	9.1%	Third	Third
2007	JMI Equity Fund VI	Growth Equity	40,000,000	40,000,246	70,593,347	719,337	31,312,438	1.8x	11.5%	Second	Second
2007	Kelso VIII	Buyouts	150,000,000	146,686,760	208,554,873	6,758,298	68,626,411	1.5x	7.4%	Third	Third
2007	OCM Opportunities Fund VII	Special Situations	40,000,000	40,000,000	54,917,803						
2007	OCM Opportunities Fund VII b	Special Situations	40,000,000	36,000,000	62,330,206						
2007	Providence Equity Partners VI	Buyouts	49,976,748	54,530,937	77,959,686						
2007	TPG Asia V	Buyouts	22,500,000	21,964,311	29,149,272	2,265,242	9,450,203	1.4x	6.3%	Third	Third
2007	Weathergage Venture Capital	Growth Equity	25,000,000	22,875,000	46,144,239	11,711,506	34,980,745	2.5x	13.2%	Second	Second
2007 Total			\$526,689,198	\$541,720,303	\$880,602,880	\$45,918,471	\$384,801,049	1.7x	10.8%	Second	Second
2008	ABRY Partners VI	Buyouts	50,000,000	60,107,028	107,944,545						
2008	Advent International GPE VI-A	Buyouts	35,000,000	35,146,325	70,431,146	3,555,778	38,840,599	2.1x	16.5%	Second	First
2008	Battery Ventures VIII Side Car Fund	Growth Equity	6,768,000	6,803,790	18,828,496						
2008	Great Hill Equity Partners IV	Buyouts	25,000,000	25,125,662	60,470,403						
2008	H.I.G. Bayside Debt & LBO Fund II	Special Situations	30,000,000	31,448,253	49,922,160						
2008	Lightspeed Venture Partners VIII	Growth Equity	15,000,000	15,000,000	37,035,502						
2008	LLR Equity Partners III	Buyouts	30,000,000	29,108,722	65,280,571	959,924	37,131,773	2.3x	16.6%	Second	First
2008	Madison Dearborn Capital Partners VI	Buyouts	50,000,000	53,264,534	114,675,019	5,689,548	67,100,033	2.3x	23.2%	First	First

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As of December 31, 2022

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2008	TPG Partners VI	Buyouts	\$44,294,641	\$50,576,261	\$72,434,127	\$2,522,460	\$24,380,326	1.5x	9.5%	Second	Third
2008 Total			\$286,062,641	\$306,580,576	\$597,021,969	\$42,319,196	\$332,760,589	2.1x	18.4%	First	First
2010	Advent Latin American Private Equity Fund V	Buyouts	15,000,000	14,430,000	8,774,997	6,611,805	956,802	1.1x	1.0%	Fourth	Fourth
2010	Avenue Special Situations Fund VI	Special Situations	20,000,000	20,068,464	21,075,410						
2010	Oaktree Power Opportunities Fund III	Buyouts	25,000,000	19,267,532	29,128,397						
2010	OCM Opportunities Fund VIII	Special Situations	12,500,000	12,583,425	18,184,343						
2010	OCM Opportunities Fund VIIIb	Special Situations	12,500,000	12,500,000	14,817,134						
2010	Weathergage Venture Capital II	Growth Equity	25,000,000	23,250,000	57,291,466	30,034,027	64,075,493	3.8x	18.8%	Second	First
2010 Total			\$110,000,000	\$102,099,421	\$149,271,747	\$44,603,940	\$91,776,266	1.9x	11.0%	Second	Second
2011	ABRY Partners VII	Buyouts	30,000,000	38,355,700	51,558,373						
2011	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Buyouts	7,000,000	8,891,037	12,677,843	1,563,045	5,349,851	1.6x	10.7%	Third	Third
2011	Francisco Partners III	Buyouts	20,000,000	20,514,684	58,281,352	8,645,037	46,411,705	3.3x	23.5%	First	First
2011	H.I.G. Growth Buyouts & Equity Fund II	Buyouts	15,000,000	16,437,126	18,130,531						
2011	Insight Venture Partners VII	Growth Equity	20,000,000	22,129,992	53,377,064	15,718,114	46,965,186	3.1x	21.7%	Second	Second
2011	JMI Equity Fund VII	Growth Equity	10,000,000	9,780,000	23,216,560	1,318,000	14,754,560	2.5x	17.9%	Second	Second
2011	Meritech Capital Partners IV	Growth Equity	20,000,000	20,000,000	46,231,035						
2011 Total			\$122,000,000	\$136,108,538	\$263,472,759	\$50,979,956	\$178,344,176	2.3x	18.2%	Second	Second
2012	Advent International GPE VII-B	Buyouts	40,000,000	38,400,000	61,725,466	8,070,101	31,395,567	1.8x	13.6%	Third	Second
2012	Asia Alternatives Capital Partners III	Buyouts	50,000,000	55,509,180	72,171,048	30,022,882	46,684,750	1.8x	13.2%	Third	Second
2012	AXA Secondary Fund V B	Special Situations	75,000,000	61,682,742	97,816,150	206,785	36,340,193	1.6x	16.0%	Second	Third
2012	Carlyle Energy Mezzanine Opportunities Fund	Buyouts	50,000,000	65,670,223	40,417,028	144,842	(25,108,353)	0.6x			Fourth
2012	Penn Asia Investors	Buyouts	133,000,000	124,554,348	103,462,014	102,342,064	81,249,730	1.7x	14.0%	Third	Third
2012 Total			\$348,000,000	\$345,816,493	\$375,591,706	\$140,786,674	\$170,561,887	1.5x			Third
2013	Eureka Growth Capital III	Buyouts	20,000,000	17,210,666	40,332,770	4,770,099	27,892,203	2.6x	44.5%	First	First
2013	FSN Capital IV	Buyouts	38,026,457	38,520,666	82,280,821						

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2013	H.I.G. Bayside Loan Opp. Fund III	Special Situations	\$50,000,000	\$42,696,553	\$49,904,323						
2013	Incline Equity Partners III	Buyouts	15,000,000	16,006,245	41,866,592	153,886	26,014,232	2.6x	33.9%	First	First
2013	Insight Venture Partners VIII	Growth Equity	50,000,000	54,316,419	114,113,168	48,022,651	107,819,400	3.0x	21.1%	Second	Second
2013	LBC Credit Partners III	Special Situations	50,000,000	46,696,243	54,096,688				7.8%	Third	
2013	Oaktree Opportunities Fund IX	Special Situations	50,000,000	50,000,000	38,733,854						
2013	Platinum Equity Capital Partners III	Special Situations	50,000,000	47,126,944	89,261,319	10,243,647	52,378,022	2.1x	38.1%	First	Second
2013 Total			\$323,026,457	\$312,573,735	\$510,589,534	\$120,782,736	\$318,798,535	2.0x	17.9%	Second	Second
2014	Capvis Equity IV	Buyouts	43,132,946	46,342,729	33,984,236	28,008,330	15,649,838				
2014	GTCR Fund XI	Buyouts	25,000,000	24,249,240	47,807,055				33.7%	First	
2014	H.I.G. Europe Capital Partners II	Buyouts	24,436,963	22,568,576	17,832,358						
2014	Hahn & Company II	Buyouts	50,000,000	56,323,454	57,500,334						
2014	Horizon Impact Fund	Buyouts	50,000,000	42,649,604	61,866,043	24,737,913	43,954,352	2.0x	17.9%	Second	Second
2014	Horizon Strategic Fund - Carlyle Group	Buyouts	100,000,000	106,487,031	139,026,602	49,594,629	82,134,200	1.8x			Third
2014	KPS Special Situations Fund IV	Special Situations	25,000,000	23,883,420	24,559,197	23,074,149	23,749,926	2.0x	25.1%	First	Third
2014	LLR Equity Partners IV	Buyouts	50,000,000	45,485,764	94,788,431	19,607,693	68,910,360	2.5x	26.8%	First	First
2014	Meritech Capital Partners V	Growth Equity	23,000,000	22,540,000	149,761,168						
2014	Sentinel Capital Partners V	Buyouts	10,000,000	10,106,202	17,764,161	3,367,759	11,025,718	2.1x	20.9%	Second	Second
2014 Total			\$400,569,909	\$400,636,019	\$644,889,586	\$271,282,623	\$515,536,190	2.3x	21.9%	Second	Second
2015	ABRY Partners VIII	Buyouts	25,000,000	29,830,701	37,164,641						
2015	ADV Opportunities Fund I	Special Situations	50,000,000	61,740,304	34,910,378	43,412,053	16,582,127	1.3x	5.1%	Fourth	Fourth
2015	Advent Latin American Private Equity Fund VI	Buyouts	25,000,000	23,250,000	12,292,073	24,780,957	13,823,030	1.6x	13.7%	Third	Third
2015	Centerbridge Capital Partners III	Special Situations	30,000,000	39,554,787	37,531,996	29,164,282	27,141,491	1.7x	19.1%	Second	Third
2015	Clearlake Capital Partners IV	Special Situations	15,000,000	23,361,740	36,169,907	12,860,109	25,668,276	2.1x	30.8%	First	Second
2015	Francisco Partners IV	Buyouts	25,000,000	24,656,280	48,419,069	23,735,990	47,498,779	2.9x	27.9%	First	First
2015	H.I.G. Bayside Loan Opp. Fund IV	Special Situations	25,000,000	22,626,299	20,452,258						

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2015	H.I.G. Brazil and Latin America Partners	Buyouts	\$50,000,000	\$51,442,736	\$13,658,868						
2015	Insight Venture Partners IX	Growth Equity	50,000,000	52,784,788	54,495,120	136,163,092	137,873,425	3.6x	26.9%	Second	Second
2015	JMI Equity Fund VIII	Growth Equity	25,000,000	27,275,000	49,664,235	15,643,526	38,032,761	2.4x	28.7%	Second	Second
2015	Lightspeed India Partners I	Growth Equity	15,000,000	14,137,500	2,125,958						
2015	Primavera Capital Fund II	Buyouts	50,000,000	57,104,177	20,748,335	64,114,554	27,758,712	1.5x	8.7%	Fourth	Fourth
2015	Ridgemont Equity Partners II	Buyouts	50,000,000	51,743,836	52,610,915	51,120,618	51,987,697	2.0x	21.9%	Second	Second
2015	RRJ Capital Master Fund III	Special Situations	50,000,000	50,952,419	45,549,274	11,960,497	6,557,352	1.1x	6.3%	Fourth	Fourth
2015 Total			\$485,000,000	\$530,460,566	\$465,793,028	\$538,927,194	\$474,259,655	1.9x	17.9%	Second	Second
2016	Advent International GPE VIII-B	Buyouts	50,000,000	50,000,000	36,531,240	61,627,666	48,158,906	2.0x	18.6%	Third	Second
2016	ASF VII B	Special Situations	100,000,000	67,005,706	48,598,699	59,334,969	40,927,962	1.6x	16.4%	Third	Third
2016	ASF VII PA Co-Invest	Special Situations	50,000,000	32,122,766	26,946,108	27,675,758	22,499,100	1.7x	17.6%	Third	Third
2016	Audax Private Equity Fund V	Buyouts	50,000,000	44,939,958	66,745,788	28,771,122	50,576,953	2.1x	25.4%	Second	Second
2016	Blackstone Capital Partners VII	Buyouts	50,000,000	53,585,632	28,853,793	51,271,713	26,539,874	1.5x	13.2%	Fourth	Fourth
2016	Hellman & Friedman Capital Partners VIII	Buyouts	50,000,000	51,333,812	27,171,070	59,910,951	35,748,209	1.7x	14.2%	Fourth	Third
2016	Providence Strategic Growth II	Growth Equity	60,000,000	78,342,165	125,642,940	53,958,292	101,259,067	2.3x	38.8%	First	Second
2016	Sterling Group Partners IV	Buyouts	20,000,000	20,198,528	16,496,732	28,492,982	24,791,186	2.2x	23.1%	Second	Second
2016	Vista Equity Partners Fund VI	Buyouts	150,000,000	187,372,613	154,757,686						
2016 Total			\$580,000,000	\$584,901,179	\$531,744,055						
2017	Asia Alternatives Capital Partners V	Buyouts	50,000,000	47,699,042	7,838,088	52,584,260	12,723,306	1.3x	11.1%	Fourth	Fourth
2017	FSN Capital V	Buyouts	80,526,702	82,318,034	23,602,863						
2017	Horizon Impact Fund B	Buyouts	100,000,000	85,000,000	26,235,000	103,869,911	45,104,911	1.5x	15.2%	Fourth	Fourth
2017	Permira VI	Buyouts	56,456,336	51,942,740	29,478,960	66,247,120	43,783,340	1.8x	18.0%	Third	Second
2017	Sixth Street TAO 4.0 (B)	Special Situations	100,000,000	94,098,908	44,303,612	79,014,843	29,219,547	1.3x	10.6%	Fourth	Fourth
2017	Wind Point Partners VIII	Buyouts	100,000,000	99,538,026	105,528,718						
2017 Total			\$486,983,039	\$460,596,751	\$236,987,241	\$509,140,738	\$285,531,228	1.6x	18.4%	Third	Third

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2018	Clearlake Capital Partners V	Special Situations	\$55,000,000	\$77,715,883	\$98,162,693	\$68,280,397	\$88,727,207	2.1x	44.3%	First	First
2018	CVC Capital Partners VII	Buyouts	91,543,991	89,496,998	13,510,821	133,000,834	57,014,656	1.6x	22.7%	Third	Second
2018	GTCR Fund XII	Buyouts	32,500,000	32,302,193	19,642,335				27.9%	Second	
2018	Hahn & Company III	Buyouts	56,250,000	43,351,263	3,225,355						
2018	Hahn & Company III - Supplemental Fund	Buyouts	18,750,000	17,074,155	57,377						
2018	ICG Europe Fund VII	Special Situations	90,127,911	87,061,845	42,097,360	81,345,737	36,381,252	1.4x	17.3%	Third	Third
2018	Insight Venture Partners X	Growth Equity	100,000,000	102,723,487	43,430,287	198,022,332	138,729,132	2.4x	28.3%	Second	Second
2018	Keystone Legacy Fund	Keystone Legacy Fund	200,000,000	5,591,965,087	7,599,452,682	217,395,759	2,224,883,354	1.4x	5.9%	NM	NM
2018	LLR Equity Partners V	Buyouts	75,000,000	72,090,002	23,739,486	102,259,434	53,908,918	1.7x	21.3%	Third	Second
2018	NGP Keystone	Buyouts	25,000,000	10,150,000	-	NM	NM	NM	NM	NM	NM
2018	NGP XII	Buyouts	75,000,000	54,339,345	23,353,309	61,356,088	30,370,052	1.6x	16.4%	Fourth	Third
2018	Providence Strategic Growth III	Growth Equity	75,000,000	69,990,730	72,832,572	63,496,586	66,338,428	1.9x	30.0%	Second	Third
2018	Silver Lake Partners V	Buyouts	78,000,000	77,434,603	25,751,880	86,485,114	34,802,391	1.4x	14.1%	Fourth	Third
2018	Sixth Street Opportunities Partners IV	Special Situations	50,000,000	40,355,923	5,821,838	44,128,952	9,594,867	1.2x	11.0%	Fourth	Fourth
2018	TDR Capital IV	Buyouts	86,989,447	72,540,172	23,812,536	74,777,477	26,049,841	1.4x	18.4%	Third	Fourth
2018 Total			\$1,109,161,349	\$6,438,591,687	\$7,994,890,530	\$1,248,929,357	\$2,805,228,200	1.4x	6.5%	NM	NM
2019	Apollo Investment Fund IX	Buyouts	85,400,000	74,610,549	25,594,206	76,924,579	27,908,236	1.4x	23.0%	Second	Third
2019	Ares PA Opportunities Fund, L.P. - Distressed Debt	Special Situations	200,000,000	120,878,617	16,259,011	139,840,259	35,220,654	1.3x	19.4%	Third	Third
2019	ASF VIII B	Special Situations	100,000,000	50,289,039	10,208,441	66,329,213	26,248,615	1.5x	28.4%	Second	Second
2019	ASF VIII PA Co-Invest	Special Situations	50,000,000	24,081,846	2,445,110	NM	NM	NM	NM	NM	NM
2019	Audax Private Equity Fund VI	Buyouts	75,000,000	72,942,248	34,866,104	100,073,002	61,996,858	1.8x	56.8%	First	First
2019	Blackstone Capital Partners VIII	Buyouts	70,000,000	35,326,181	2,329,845	NM	NM	NM	NM	NM	NM
2019	Clearlake Opportunities Partners II	Special Situations	75,000,000	50,356,203	14,949,084	42,807,569	7,400,450	1.1x	11.4%	Third	Fourth
2019	Glendon Opportunities Fund II	Special Situations	150,000,000	120,000,000	-						
2019	Hellman & Friedman Capital Partners IX	Buyouts	90,000,000	89,835,398	3,017,970	NM	NM	NM	NM	NM	NM

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2019	ICG Europe Mid-Market Fund	Special Situations	\$73,380,097	\$38,689,381	\$821	NM	NM	NM	NM	NM	NM
2019	Insight Venture Partners XI	Growth Equity	75,000,000	72,975,000	133,132	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Fund V	Special Situations	75,000,000	42,261,702	3,465,339	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Mid-Cap Fund	Special Situations	25,000,000	13,668,206	2,004,079	17,813,767	6,149,640	1.4x	23.4%	Second	Second
2019	Permira VII	Buyouts	75,792,183	66,838,715	5,589,425	NM	NM	NM	NM	NM	NM
2019	Primavera Capital Fund III	Buyouts	75,000,000	79,188,930	9,600,983	96,042,690	26,454,744	1.3x	10.4%	Third	Third
2019	Providence Strategic Growth IV	Growth Equity	75,000,000	61,076,426	36,047,715	NM	NM	NM	NM	NM	NM
2019	Sixth Street TAO Contingent (D)	Special Situations	150,000,000	89,055,664	16,717,568	92,353,511	20,015,415	1.2x	15.1%	Third	Third
2019	TCV X	Growth Equity	75,000,000	56,289,972	6,878,500	97,719,787	48,308,316	1.9x	25.1%	Second	Second
2019	Thoma Bravo Fund XIII	Buyouts	75,000,000	91,498,386	45,140,596				30.9%	Second	
2019	TSG8	Buyouts	100,000,000	72,171,528	708,467	71,125,608	(337,453)	1.0x	(0.3%)	Fourth	Fourth
2019	Vista Equity Partners Fund VII	Buyouts	75,000,000	60,246,141	589,405						
2019	Wind Point Partners IX-A	Buyouts	75,000,000	66,585,851	1,513,144						
2019 Total			\$1,919,572,281	\$1,448,865,981	\$238,058,946	\$1,769,935,381	\$559,128,347	1.4x	20.2%	Second	Second
2020	Altaris Health Partners V	Buyouts	50,000,000	24,787,179	49,960	NM	NM	NM	NM	NM	NM
2020	Ares PA Opportunities Fund, L.P. - Diversified Credit	Special Situations	100,000,000	42,860,962	2,012,971	NM	NM	NM	NM	NM	NM
2020	Ares PA Opportunities Fund, L.P. - Special Situations	Special Situations	100,000,000	90,132,449	11,497,366	NM	NM	NM	NM	NM	NM
2020	Clearlake Capital Partners VI	Special Situations	60,000,000	60,712,437	5,025,825	NM	NM	NM	NM	NM	NM
2020	CVC Capital Partners VIII	Buyouts	53,868,033	31,206,537	-	NM	NM	NM	NM	NM	NM
2020	HarbourVest PA Co-investment Fund	Buyouts	200,000,000	153,325,000	5,973,000	NM	NM	NM	NM	NM	NM
2020	HPS Mezzanine Partners 2019	Special Situations	75,000,000	70,744,753	15,965,887	NM	NM	NM	NM	NM	NM
2020	LLR Equity Partners VI	Buyouts	50,000,000	32,716,712	-	NM	NM	NM	NM	NM	NM
2020	Neuberger Berman PA Co-Investment Fund	Buyouts	200,000,000	90,769,740	16,521,055	NM	NM	NM	NM	NM	NM
2020	Permira Susquehanna Opportunities - Buyout	Buyouts	40,000,000	18,557,655	99,900	NM	NM	NM	NM	NM	NM
2020	Thoma Bravo Discover Fund III	Buyouts	20,000,000	18,488,934	-	NM	NM	NM	NM	NM	NM

SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2020	Thoma Bravo Fund XIV	Buyouts	\$50,000,000	\$49,110,712	\$12	NM	NM	NM	NM	NM	NM
2020 Total			\$998,868,033	\$683,413,071	\$57,145,975	\$751,042,016	\$124,774,920	NM	NM	NM	NM
2021	Clearlake Capital Partners VII	Special Situations	100,000,000	41,028,943	2,434	NM	NM	NM	NM	NM	NM
2021	Clearlake Opportunities Partners III	Special Situations	75,000,000	8,283,377	35,959	NM	NM	NM	NM	NM	NM
2021	Hellman & Friedman X	Buyouts	100,000,000	54,509,574	-	NM	NM	NM	NM	NM	NM
2021	Insight Partners Fund XII	Growth Equity	50,000,000	33,039,234	13,043	NM	NM	NM	NM	NM	NM
2021	Providence Strategic Growth Europe	Growth Equity	71,523,204	55,054,878	9,131,958	NM	NM	NM	NM	NM	NM
2021	Providence Strategic Growth V	Growth Equity	50,000,000	21,216,137	1,334,107	NM	NM	NM	NM	NM	NM
2021	Sixth Street Opportunities Partners V	Special Situations	50,000,000	10,857,933	6,132	NM	NM	NM	NM	NM	NM
2021 Total			\$496,523,204	\$223,990,076	\$10,523,632	\$218,870,381	\$5,403,938	NM	NM	NM	NM
2022	ASF IX B	Special Situations	100,000,000	12,592	-	NM	NM	NM	NM	NM	NM
2022	Francisco Partners Agility III	Buyouts	30,000,000	-	-	NM	NM	NM	NM	NM	NM
2022	Francisco Partners VII	Buyouts	100,000,000	-	-	NM	NM	NM	NM	NM	NM
2022	Providence Strategic Growth Europe II, L.P.	Growth Equity	69,722,216	-	-	NM	NM	NM	NM	NM	NM
2022	Sentinel Capital Partners VII	Buyouts	100,000,000	-	-	NM	NM	NM	NM	NM	NM
2022	Sentinel Junior Capital II, L.P.	Special Situations	25,000,000	-	-	NM	NM	NM	NM	NM	NM
2022	Thoma Bravo Discover Fund IV, L.P.	Buyouts	50,000,000	7,723,926	-	NM	NM	NM	NM	NM	NM
2022	Thoma Bravo Fund XV, L.P.	Buyouts	100,000,000	53,669,622	21,669	NM	NM	NM	NM	NM	NM
2022	TSG 9	Buyouts	100,000,000	-	-	NM	NM	NM	NM	NM	NM
2022	Veritas Capital Partners VIII, L.P.	Buyouts	100,000,000	25,809,103	-	NM	NM	NM	NM	NM	NM
2022 Total			\$774,722,216	\$87,215,243	\$21,669	\$83,985,309	(\$3,208,265)	NM	NM	NM	NM
Total: Active Investments			\$11,231,250,713	\$14,849,395,543	\$16,730,867,350	\$6,520,412,000	\$8,401,883,807	1.6x	9.3%	Third	Second
Total: Liquidated Investments			\$5,087,455,548	\$5,092,457,387	\$9,498,776,312	\$0	\$4,406,318,925	1.9x	16.2%	First	Second
Total: Commonwealth of Pennsylvania State Employees' Retirement System			\$16,318,706,261	\$19,941,852,930	\$26,229,643,662	\$6,520,412,000	\$12,808,202,732	1.6x	12.5%	Second	Second

SCHEDULE OF INVESTMENTS BY SECTOR

As of December 31, 2022

SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	ABRY Partners V	2004	\$45,000,000	\$41,752,543	\$84,778,199						
Buyouts	ABRY Partners VI	2008	50,000,000	60,107,028	107,944,545						
Buyouts	ABRY Partners VII	2011	30,000,000	38,355,700	51,558,373						
Buyouts	ABRY Partners VIII	2015	25,000,000	29,830,701	37,164,641						
Buyouts	Advent International GPE VI-A	2008	35,000,000	35,146,325	70,431,146	3,555,778	38,840,599	2.1x	16.5%	Second	First
Buyouts	Advent International GPE VII-B	2012	40,000,000	38,400,000	61,725,466	8,070,101	31,395,567	1.8x	13.6%	Third	Second
Buyouts	Advent International GPE VIII-B	2016	50,000,000	50,000,000	36,531,240	61,627,666	48,158,906	2.0x	18.6%	Third	Second
Buyouts	Advent Latin American Private Equity Fund IV	2007	30,000,000	30,797,073	43,955,921	2,679,514	15,838,362	1.5x	9.0%	Third	Third
Buyouts	Advent Latin American Private Equity Fund V	2010	15,000,000	14,430,000	8,774,997	6,611,805	956,802	1.1x	1.0%	Fourth	Fourth
Buyouts	Advent Latin American Private Equity Fund VI	2015	25,000,000	23,250,000	12,292,073	24,780,957	13,823,030	1.6x	13.7%	Third	Third
Buyouts	Altaris Health Partners V	2020	50,000,000	24,787,179	49,960	NM	NM	NM	NM	NM	NM
Buyouts	Apollo Investment Fund IV	1997	75,000,000	74,838,620	124,814,033	40,703	50,016,116	1.7x	8.5%	Second	Second
Buyouts	Apollo Investment Fund IX	2019	85,400,000	74,610,549	25,594,206	76,924,579	27,908,236	1.4x	23.0%	Second	Third
Buyouts	Apollo Investment Fund V	2000	50,000,000	44,972,146	122,673,016	426,039	78,126,909	2.7x	38.8%	First	First
Buyouts	Apollo Investment Fund VI	2005	40,000,000	38,911,805	64,467,407	720,222	26,275,823	1.7x	8.6%	Second	Second
Buyouts	Asia Alternatives Capital Partners	2006	25,000,000	25,218,098	44,133,625	2,232,672	21,148,199	1.8x	10.9%	Second	Second
Buyouts	Asia Alternatives Capital Partners II	2007	29,949,500	29,091,302	64,131,666	11,924,363	46,964,727	2.6x	17.0%	First	First
Buyouts	Asia Alternatives Capital Partners III	2012	50,000,000	55,509,180	72,171,048	30,022,882	46,684,750	1.8x	13.2%	Third	Second
Buyouts	Asia Alternatives Capital Partners V	2017	50,000,000	47,699,042	7,838,088	52,584,260	12,723,306	1.3x	11.1%	Fourth	Fourth
Buyouts	Asia Alternatives Korea Buyout Investors (Hahn & Co)	2011	7,000,000	8,891,037	12,677,843	1,563,045	5,349,851	1.6x	10.7%	Third	Third
Buyouts	Audax Private Equity Fund	2000	35,000,000	36,839,098	56,057,910	108,376	19,327,188	1.5x	13.1%	Second	Third
Buyouts	Audax Private Equity Fund II	2005	25,000,000	25,517,152	46,325,622	201,477	21,009,947	1.8x	14.1%	First	Second
Buyouts	Audax Private Equity Fund III	2007	37,000,000	42,498,691	82,716,671	782,672	41,000,653	2.0x	15.0%	Second	Second
Buyouts	Audax Private Equity Fund V	2016	50,000,000	44,939,958	66,745,788	28,771,122	50,576,953	2.1x	25.4%	Second	Second
Buyouts	Audax Private Equity Fund VI	2019	75,000,000	72,942,248	34,866,104	100,073,002	61,996,858	1.8x	56.8%	First	First

SCHEDULE OF INVESTMENTS BY SECTOR

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	Berkshire Fund VI	2002	\$20,000,000	\$18,819,615	\$55,273,814						
Buyouts	Berkshire Fund VII	2006	32,000,000	32,613,937	68,596,870						
Buyouts	Blackstone Capital IV	2001	69,379,875	69,119,097	193,976,664	258,601	125,116,168	2.8x	36.2%	First	First
Buyouts	Blackstone Capital Partners V	2006	150,000,000	150,111,788	250,429,596	499,037	100,816,844	1.7x	7.6%	Third	Second
Buyouts	Blackstone Capital Partners VII	2016	50,000,000	53,585,632	28,853,793	51,271,713	26,539,874	1.5x	13.2%	Fourth	Fourth
Buyouts	Blackstone Capital Partners VIII	2019	70,000,000	35,326,181	2,329,845	NM	NM	NM	NM	NM	NM
Buyouts	Blackstone Communications Partners I	2000	25,000,000	25,114,042	30,998,189	185,492	6,069,639	1.2x	6.2%	Fourth	Fourth
Buyouts	Capvis Equity IV	2014	43,132,946	46,342,729	33,984,236	28,008,330	15,649,838				
Buyouts	Carlyle Energy Mezzanine Opportunities Fund	2012	50,000,000	65,670,223	40,417,028	144,842	(25,108,353)	0.6x			Fourth
Buyouts	CVC Capital Partners VII	2018	91,543,991	89,496,998	13,510,821	133,000,834	57,014,656	1.6x	22.7%	Third	Second
Buyouts	CVC Capital Partners VIII	2020	53,868,033	31,206,537	-	NM	NM	NM	NM	NM	NM
Buyouts	Eureka Growth Capital III	2013	20,000,000	17,210,666	40,332,770	4,770,099	27,892,203	2.6x	44.5%	First	First
Buyouts	Eureka II	2006	20,000,000	21,906,935	23,150,416	5,747,375	6,990,856	1.3x	4.9%	Third	Fourth
Buyouts	Francisco Partners Agility III	2022	30,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyouts	Francisco Partners II	2006	30,000,000	29,383,916	48,613,520	185,638	19,415,242	1.7x	10.4%	Second	Second
Buyouts	Francisco Partners III	2011	20,000,000	20,514,684	58,281,352	8,645,037	46,411,705	3.3x	23.5%	First	First
Buyouts	Francisco Partners IV	2015	25,000,000	24,656,280	48,419,069	23,735,990	47,498,779	2.9x	27.9%	First	First
Buyouts	Francisco Partners VII	2022	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyouts	FSN Capital IV	2013	38,026,457	38,520,666	82,280,821						
Buyouts	FSN Capital V	2017	80,526,702	82,318,034	23,602,863						
Buyouts	Great Hill Equity Partners IV	2008	25,000,000	25,125,662	60,470,403						
Buyouts	GTCR Fund XI	2014	25,000,000	24,249,240	47,807,055				33.7%	First	
Buyouts	GTCR Fund XII	2018	32,500,000	32,302,193	19,642,335				27.9%	Second	
Buyouts	GTCR VIII	2002	75,000,000	69,393,599	120,471,948				22.3%	Second	
Buyouts	H.I.G. Brazil and Latin America Partners	2015	50,000,000	51,442,736	13,658,868						

SCHEDULE OF INVESTMENTS BY SECTOR

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	H.I.G. Europe Capital Partners II	2014	\$24,436,963	\$22,568,576	\$17,832,358						
Buyouts	H.I.G. Growth Buyouts & Equity Fund II	2011	15,000,000	16,437,126	18,130,531						
Buyouts	Hahn & Company II	2014	50,000,000	56,323,454	57,500,334						
Buyouts	Hahn & Company III	2018	56,250,000	43,351,263	3,225,355						
Buyouts	Hahn & Company III - Supplemental Fund	2018	18,750,000	17,074,155	57,377						
Buyouts	HarbourVest IPEP III	1998	40,000,000	39,400,000	61,092,165	68,687	21,760,852	1.6x	8.6%	Third	Second
Buyouts	HarbourVest PA Co-investment Fund	2020	200,000,000	153,325,000	5,973,000	NM	NM	NM	NM	NM	NM
Buyouts	Hellman & Friedman Capital Partners IX	2019	90,000,000	89,835,398	3,017,970	NM	NM	NM	NM	NM	NM
Buyouts	Hellman & Friedman Capital Partners VIII	2016	50,000,000	51,333,812	27,171,070	59,910,951	35,748,209	1.7x	14.2%	Fourth	Third
Buyouts	Hellman & Friedman X	2021	100,000,000	54,509,574	-	NM	NM	NM	NM	NM	NM
Buyouts	HIPEP V-Asia Pacific & Rest of World	2005	30,000,000	28,245,316	38,861,957	439,581	11,056,222	1.4x	5.6%	Third	Third
Buyouts	Horizon Impact Fund	2014	50,000,000	42,649,604	61,866,043	24,737,913	43,954,352	2.0x	17.9%	Second	Second
Buyouts	Horizon Impact Fund B	2017	100,000,000	85,000,000	26,235,000	103,869,911	45,104,911	1.5x	15.2%	Fourth	Fourth
Buyouts	Horizon Strategic Fund - Carlyle Group	2014	100,000,000	106,487,031	139,026,602	49,594,629	82,134,200	1.8x			Third
Buyouts	Incline Equity Partners III	2013	15,000,000	16,006,245	41,866,592	153,886	26,014,232	2.6x	33.9%	First	First
Buyouts	Kelso VII	2003	40,000,000	41,169,937	65,821,118	73,096	24,724,277	1.6x	11.4%	Third	Third
Buyouts	Kelso VIII	2007	150,000,000	146,686,760	208,554,873	6,758,298	68,626,411	1.5x	7.4%	Third	Third
Buyouts	LLR Equity Partners III	2008	30,000,000	29,108,722	65,280,571	959,924	37,131,773	2.3x	16.6%	Second	First
Buyouts	LLR Equity Partners IV	2014	50,000,000	45,485,764	94,788,431	19,607,693	68,910,360	2.5x	26.8%	First	First
Buyouts	LLR Equity Partners V	2018	75,000,000	72,090,002	23,739,486	102,259,434	53,908,918	1.7x	21.3%	Third	Second
Buyouts	LLR Equity Partners VI	2020	50,000,000	32,716,712	-	NM	NM	NM	NM	NM	NM
Buyouts	Madison Dearborn Capital Partners V	2006	63,817,077	71,571,265	116,191,907	2,306,273	46,926,915	1.7x	7.4%	Third	Second
Buyouts	Madison Dearborn Capital Partners VI	2008	50,000,000	53,264,534	114,675,019	5,689,548	67,100,033	2.3x	23.2%	First	First
Buyouts	Neuberger Berman PA Co-Investment Fund	2020	200,000,000	90,769,740	16,521,055	NM	NM	NM	NM	NM	NM
Buyouts	NGP Keystone	2018	25,000,000	10,150,000	-	NM	NM	NM	NM	NM	NM

SCHEDULE OF INVESTMENTS BY SECTOR

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	NGP XII	2018	\$75,000,000	\$54,339,345	\$23,353,309	\$61,356,088	\$30,370,052	1.6x	16.4%	Fourth	Third
Buyouts	Oaktree Power Opportunities Fund III	2010	25,000,000	19,267,532	29,128,397						
Buyouts	Penn Asia Investors	2012	133,000,000	124,554,348	103,462,014	102,342,064	81,249,730	1.7x	14.0%	Third	Third
Buyouts	Permira European Fund II	2000	45,672,612	45,672,612	91,560,959	296,850	46,185,198	2.0x	21.6%	First	First
Buyouts	Permira European Fund III	2003	127,062,518	127,340,454	218,052,206	446,418	91,158,171	1.7x	26.1%	Second	Third
Buyouts	Permira IV	2006	136,401,782	138,422,695	208,443,061	29,506,398	99,526,764	1.7x	9.0%	Second	Second
Buyouts	Permira Susquehanna Opportunities - Buyout	2020	40,000,000	18,557,655	99,900	NM	NM	NM	NM	NM	NM
Buyouts	Permira VI	2017	56,456,336	51,942,740	29,478,960	66,247,120	43,783,340	1.8x	18.0%	Third	Second
Buyouts	Permira VII	2019	75,792,183	66,838,715	5,589,425	NM	NM	NM	NM	NM	NM
Buyouts	Primavera Capital Fund II	2015	50,000,000	57,104,177	20,748,335	64,114,554	27,758,712	1.5x	8.7%	Fourth	Fourth
Buyouts	Primavera Capital Fund III	2019	75,000,000	79,188,930	9,600,983	96,042,690	26,454,744	1.3x	10.4%	Third	Third
Buyouts	Providence Equity Partners IV	2000	25,000,000	23,420,840	56,065,270						
Buyouts	Providence Equity Partners V	2004	45,000,000	42,692,347	52,204,745						
Buyouts	Providence Equity Partners VI	2007	49,976,748	54,530,937	77,959,686						
Buyouts	Ridgemont Equity Partners II	2015	50,000,000	51,743,836	52,610,915	51,120,618	51,987,697	2.0x	21.9%	Second	Second
Buyouts	Sentinel Capital Partners V	2014	10,000,000	10,106,202	17,764,161	3,367,759	11,025,718	2.1x	20.9%	Second	Second
Buyouts	Sentinel Capital Partners VII	2022	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyouts	Silver Lake Partners V	2018	78,000,000	77,434,603	25,751,880	86,485,114	34,802,391	1.4x	14.1%	Fourth	Third
Buyouts	Sterling Group Partners IV	2016	20,000,000	20,198,528	16,496,732	28,492,982	24,791,186	2.2x	23.1%	Second	Second
Buyouts	TDR Capital IV	2018	86,989,447	72,540,172	23,812,536	74,777,477	26,049,841	1.4x	18.4%	Third	Fourth
Buyouts	Thoma Bravo Discover Fund III	2020	20,000,000	18,488,934	-	NM	NM	NM	NM	NM	NM
Buyouts	Thoma Bravo Discover Fund IV, L.P.	2022	50,000,000	7,723,926	-	NM	NM	NM	NM	NM	NM
Buyouts	Thoma Bravo Fund XIII	2019	75,000,000	91,498,386	45,140,596				30.9%	Second	
Buyouts	Thoma Bravo Fund XIV	2020	50,000,000	49,110,712	12	NM	NM	NM	NM	NM	NM
Buyouts	Thoma Bravo Fund XV, L.P.	2022	100,000,000	53,669,622	21,669	NM	NM	NM	NM	NM	NM

SCHEDULE OF INVESTMENTS BY SECTOR

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	TPG Asia V	2007	\$22,500,000	\$21,964,311	\$29,149,272	\$2,265,242	\$9,450,203	1.4x	6.3%	Third	Third
Buyouts	TPG Partners IV	2003	27,907,484	27,981,463	58,314,713						
Buyouts	TPG Partners V	2006	88,831,038	92,531,812	130,072,991	298,012	37,839,191	1.4x	4.8%	Third	Third
Buyouts	TPG Partners VI	2008	44,294,641	50,576,261	72,434,127	2,522,460	24,380,326	1.5x	9.5%	Second	Third
Buyouts	TSG 9	2022	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyouts	TSG8	2019	100,000,000	72,171,528	708,467	71,125,608	(337,453)	1.0x	(0.3%)	Fourth	Fourth
Buyouts	Veritas Capital Partners VIII, L.P.	2022	100,000,000	25,809,103	-	NM	NM	NM	NM	NM	NM
Buyouts	Vista Equity Partners Fund VI	2016	150,000,000	187,372,613	154,757,686						
Buyouts	Vista Equity Partners Fund VII	2019	75,000,000	60,246,141	589,405						
Buyouts	Wind Point Partners IX-A	2019	75,000,000	66,585,851	1,513,144						
Buyouts	Wind Point Partners VIII	2017	100,000,000	99,538,026	105,528,718						
Buyouts Total			\$6,411,466,335	\$5,540,492,211	\$5,513,364,951	\$3,620,401,394	\$3,593,274,134	1.6x	13.9%	Second	Second
Growth Equity	Battery Ventures VIII	2007	25,000,000	25,050,751	60,396,581						
Growth Equity	Battery Ventures VIII Side Car Fund	2008	6,768,000	6,803,790	18,828,496						
Growth Equity	HarbourVest Partners VI	1999	200,000,000	196,586,055	251,227,115	376,542	55,017,602	1.3x	3.6%	First	First
Growth Equity	HarbourVest Partners VII	2003	75,000,000	73,687,500	117,260,978	1,198,941	44,772,419	1.6x	6.7%	First	First
Growth Equity	HarbourVest Partners VIII	2006	100,000,000	98,000,000	180,351,203	34,018,319	116,369,522	2.2x	11.3%	First	First
Growth Equity	Insight Partners Fund XII	2021	50,000,000	33,039,234	13,043	NM	NM	NM	NM	NM	NM
Growth Equity	Insight Venture Partners IX	2015	50,000,000	52,784,788	54,495,120	136,163,092	137,873,425	3.6x	26.9%	Second	Second
Growth Equity	Insight Venture Partners VII	2011	20,000,000	22,129,992	53,377,064	15,718,114	46,965,186	3.1x	21.7%	Second	Second
Growth Equity	Insight Venture Partners VIII	2013	50,000,000	54,316,419	114,113,168	48,022,651	107,819,400	3.0x	21.1%	Second	Second
Growth Equity	Insight Venture Partners X	2018	100,000,000	102,723,487	43,430,287	198,022,332	138,729,132	2.4x	28.3%	Second	Second
Growth Equity	Insight Venture Partners XI	2019	75,000,000	72,975,000	133,132	NM	NM	NM	NM	NM	NM
Growth Equity	JMI Equity Fund VI	2007	40,000,000	40,000,246	70,593,347	719,337	31,312,438	1.8x	11.5%	Second	Second

SCHEDULE OF INVESTMENTS BY SECTOR

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Growth Equity	JMI Equity Fund VII	2011	\$10,000,000	\$9,780,000	\$23,216,560	\$1,318,000	\$14,754,560	2.5x	17.9%	Second	Second
Growth Equity	JMI Equity Fund VIII	2015	25,000,000	27,275,000	49,664,235	15,643,526	38,032,761	2.4x	28.7%	Second	Second
Growth Equity	Lightspeed India Partners I	2015	15,000,000	14,137,500	2,125,958						
Growth Equity	Lightspeed Venture Partners VII	2005	18,000,000	18,000,000	53,968,729						
Growth Equity	Lightspeed Venture Partners VIII	2008	15,000,000	15,000,000	37,035,502						
Growth Equity	Meritech Capital Partners IV	2011	20,000,000	20,000,000	46,231,035						
Growth Equity	Meritech Capital Partners V	2014	23,000,000	22,540,000	149,761,168						
Growth Equity	New Enterprise Associates 11	2003	25,000,000	25,000,000	63,385,828	1,988,367	40,374,195	2.6x	15.4%	First	First
Growth Equity	New Enterprise Associates 12	2006	35,000,000	35,631,130	48,025,951	2,740,396	15,135,217	1.4x	6.6%	Second	Second
Growth Equity	New Enterprise Associates IX	1999	20,000,000	19,600,000	8,739,870	396,637	(10,463,493)	0.5x	(6.1%)	Third	Third
Growth Equity	New Enterprise Associates X	2000	35,000,000	35,028,000	39,412,034	2,095,304	6,479,338	1.2x	2.5%	Second	Second
Growth Equity	NewSpring Growth Capital II	2006	10,000,000	9,850,000	19,617,977						
Growth Equity	Providence Strategic Growth Europe	2021	71,523,204	55,054,878	9,131,958	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth Europe II, L.P.	2022	69,722,216	-	-	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth II	2016	60,000,000	78,342,165	125,642,940	53,958,292	101,259,067	2.3x	38.8%	First	Second
Growth Equity	Providence Strategic Growth III	2018	75,000,000	69,990,730	72,832,572	63,496,586	66,338,428	1.9x	30.0%	Second	Third
Growth Equity	Providence Strategic Growth IV	2019	75,000,000	61,076,426	36,047,715	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth V	2021	50,000,000	21,216,137	1,334,107	NM	NM	NM	NM	NM	NM
Growth Equity	TCV X	2019	75,000,000	56,289,972	6,878,500	97,719,787	48,308,316	1.9x	25.1%	Second	Second
Growth Equity	Weathergag Venture Capital	2007	25,000,000	22,875,000	46,144,239	11,711,506	34,980,745	2.5x	13.2%	Second	Second
Growth Equity	Weathergag Venture Capital II	2010	25,000,000	23,250,000	57,291,466	30,034,027	64,075,493	3.8x	18.8%	Second	First
Growth Equity Total			\$1,569,013,420	\$1,418,034,199	\$1,860,707,878	\$1,100,307,411	\$1,542,981,090	2.1x	11.2%	Second	Second
Keystone Legacy Fund	Keystone Legacy Fund	2018	200,000,000	5,591,965,087	7,599,452,682	217,395,759	2,224,883,354	1.4x	5.9%	NM	NM
Keystone Legacy Fund Total			\$200,000,000	\$5,591,965,087	\$7,599,452,682	\$217,395,759	\$2,224,883,354	1.4x	5.9%	NM	NM
Special Situations	ABRY Advanced Securities Fund	2007	7,262,950	23,529,104	38,786,236						

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Special Situations	ABRY Senior Equity II	2006	\$30,000,000	\$28,388,642	\$45,127,413						
Special Situations	ADV Opportunities Fund I	2015	50,000,000	61,740,304	34,910,378	43,412,053	16,582,127	1.3x	5.1%	Fourth	Fourth
Special Situations	Ares PA Opportunities Fund, L.P. - Distressed Debt	2019	200,000,000	120,878,617	16,259,011	139,840,259	35,220,654	1.3x	19.4%	Third	Third
Special Situations	Ares PA Opportunities Fund, L.P. - Diversified Credit	2020	100,000,000	42,860,962	2,012,971	NM	NM	NM	NM	NM	NM
Special Situations	Ares PA Opportunities Fund, L.P. - Special Situations	2020	100,000,000	90,132,449	11,497,366	NM	NM	NM	NM	NM	NM
Special Situations	ASF IX B	2022	100,000,000	12,592	-	NM	NM	NM	NM	NM	NM
Special Situations	ASF VII B	2016	100,000,000	67,005,706	48,598,699	59,334,969	40,927,962	1.6x	16.4%	Third	Third
Special Situations	ASF VII PA Co-Invest	2016	50,000,000	32,122,766	26,946,108	27,675,758	22,499,100	1.7x	17.6%	Third	Third
Special Situations	ASF VIII B	2019	100,000,000	50,289,039	10,208,441	66,329,213	26,248,615	1.5x	28.4%	Second	Second
Special Situations	ASF VIII PA Co-Invest	2019	50,000,000	24,081,846	2,445,110	NM	NM	NM	NM	NM	NM
Special Situations	Avenue Special Situations Fund VI	2010	20,000,000	20,068,464	21,075,410						
Special Situations	AXA Secondary Fund III	2004	26,000,000	21,737,894	37,244,706	59,815	15,566,627	1.7x	44.0%	First	Second
Special Situations	AXA Secondary Fund III-2	2004	14,000,000	11,677,210	19,062,764	41,659	7,427,212	1.6x	40.5%	First	Second
Special Situations	AXA Secondary Fund IV	2006	80,000,000	70,134,752	99,618,118	105,028	29,588,394	1.4x	8.5%	Second	Third
Special Situations	AXA Secondary Fund V B	2012	75,000,000	61,682,742	97,816,150	206,785	36,340,193	1.6x	16.0%	Second	Third
Special Situations	Centerbridge Capital Partners I	2006	50,000,000	57,337,396	117,317,806	1,929,218	61,909,628	2.1x	19.2%	First	First
Special Situations	Centerbridge Capital Partners III	2015	30,000,000	39,554,787	37,531,996	29,164,282	27,141,491	1.7x	19.1%	Second	Third
Special Situations	Clearlake Capital Partners IV	2015	15,000,000	23,361,740	36,169,907	12,860,109	25,668,276	2.1x	30.8%	First	Second
Special Situations	Clearlake Capital Partners V	2018	55,000,000	77,715,883	98,162,693	68,280,397	88,727,207	2.1x	44.3%	First	First
Special Situations	Clearlake Capital Partners VI	2020	60,000,000	60,712,437	5,025,825	NM	NM	NM	NM	NM	NM
Special Situations	Clearlake Capital Partners VII	2021	100,000,000	41,028,943	2,434	NM	NM	NM	NM	NM	NM
Special Situations	Clearlake Opportunities Partners II	2019	75,000,000	50,356,203	14,949,084	42,807,569	7,400,450	1.1x	11.4%	Third	Fourth
Special Situations	Clearlake Opportunities Partners III	2021	75,000,000	8,283,377	35,959	NM	NM	NM	NM	NM	NM
Special Situations	Dover Street VII	2007	30,000,000	28,696,128	40,966,380	223,876	12,494,128	1.4x	9.1%	Third	Third
Special Situations	Glendon Opportunities Fund II	2019	150,000,000	120,000,000	-						

SCHEDULE OF INVESTMENTS BY SECTOR

As of December 31, 2022

SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Special Situations	H.I.G. Bayside Debt & LBO Fund II	2008	\$30,000,000	\$31,448,253	\$49,922,160						
Special Situations	H.I.G. Bayside Loan Opp. Fund III	2013	50,000,000	42,696,553	49,904,323						
Special Situations	H.I.G. Bayside Loan Opp. Fund IV	2015	25,000,000	22,626,299	20,452,258						
Special Situations	HPS Mezzanine Partners 2019	2020	75,000,000	70,744,753	15,965,887	NM	NM	NM	NM	NM	NM
Special Situations	ICG Europe Fund VII	2018	90,127,911	87,061,845	42,097,360	81,345,737	36,381,252	1.4x	17.3%	Third	Third
Special Situations	ICG Europe Mid-Market Fund	2019	73,380,097	38,689,381	821	NM	NM	NM	NM	NM	NM
Special Situations	KPS Special Situations Fund IV	2014	25,000,000	23,883,420	24,559,197	23,074,149	23,749,926	2.0x	25.1%	First	Third
Special Situations	KPS Special Situations Fund V	2019	75,000,000	42,261,702	3,465,339	NM	NM	NM	NM	NM	NM
Special Situations	KPS Special Situations Mid-Cap Fund	2019	25,000,000	13,668,206	2,004,079	17,813,767	6,149,640	1.4x	23.4%	Second	Second
Special Situations	LBC Credit Partners III	2013	50,000,000	46,696,243	54,096,688				7.8%	Third	
Special Situations	Lexington Capital Partners III	1999	35,000,000	34,516,449	43,576,611						
Special Situations	Lexington Capital Partners V	2001	75,000,000	74,623,418	125,170,164						
Special Situations	Lexington Capital Partners VI	2005	50,000,000	53,066,325	73,712,907						
Special Situations	Oaktree Opportunities Fund IX	2013	50,000,000	50,000,000	38,733,854						
Special Situations	OCM Opportunities Fund VII	2007	40,000,000	40,000,000	54,917,803						
Special Situations	OCM Opportunities Fund VII b	2007	40,000,000	36,000,000	62,330,206						
Special Situations	OCM Opportunities Fund VIII	2010	12,500,000	12,583,425	18,184,343						
Special Situations	OCM Opportunities Fund VIIIb	2010	12,500,000	12,500,000	14,817,134						
Special Situations	Platinum Equity Capital Partners III	2013	50,000,000	47,126,944	89,261,319	10,243,647	52,378,022	2.1x	38.1%	First	Second
Special Situations	RRJ Capital Master Fund III	2015	50,000,000	50,952,419	45,549,274	11,960,497	6,557,352	1.1x	6.3%	Fourth	Fourth
Special Situations	Sentinel Junior Capital II, L.P.	2022	25,000,000	-	-	NM	NM	NM	NM	NM	NM
Special Situations	Sixth Street Opportunities Partners IV	2018	50,000,000	40,355,923	5,821,838	44,128,952	9,594,867	1.2x	11.0%	Fourth	Fourth
Special Situations	Sixth Street Opportunities Partners V	2021	50,000,000	10,857,933	6,132	NM	NM	NM	NM	NM	NM
Special Situations	Sixth Street TAO 4.0 (B)	2017	100,000,000	94,098,908	44,303,612	79,014,843	29,219,547	1.3x	10.6%	Fourth	Fourth
Special Situations	Sixth Street TAO Contingent (D)	2019	150,000,000	89,055,664	16,717,568	92,353,511	20,015,415	1.2x	15.1%	Third	Third
Special Situations Total			\$3,050,770,958	\$2,298,904,046	\$1,757,341,839	\$1,582,307,436	\$1,040,745,228	1.5x	14.2%	First	First

SCHEDULE OF INVESTMENTS BY SECTOR

As of December 31, 2022

SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Total: Active Investments			\$11,231,250,713	\$14,849,395,543	\$16,730,867,350	\$6,520,412,000	\$8,401,883,807	1.6x	9.3%	Third	Second
Total: Liquidated Investments			\$5,087,455,548	\$5,092,457,387	\$9,498,776,312	\$0	\$4,406,318,925	1.9x	16.2%	First	Second
Total: Commonwealth of Pennsylvania State Employees' Retirement System			\$16,318,706,261	\$19,941,852,930	\$26,229,643,662	\$6,520,412,000	\$12,808,202,732	1.6x	12.5%	Second	Second

LEGACY PRIVATE CREDIT SCHEDULE OF INVESTMENTS

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2017	Audax Direct Lending Solutions Fund-A	Direct Lending	\$100,000,000	\$98,955,311	\$55,547,705	\$69,867,059	\$26,459,453	1.3x	15.9%	First	Second
2017 Total			\$100,000,000	\$98,955,311	\$55,547,705	\$69,867,059	\$26,459,453	1.3x	15.9%	First	Second
2018	Apollo Hybrid Value Fund	Diversified Credit	100,000,000	130,749,848	99,756,234	66,810,736	35,817,122	1.3x	16.2%	First	Second
2018	Brightwood Capital Fund IV	Direct Lending	100,000,000	100,000,000	36,851,306	91,440,405	28,291,711	1.3x	8.0%	Third	Second
2018 Total			\$200,000,000	\$230,749,848	\$136,607,540	\$158,251,141	\$64,108,833	1.3x	11.0%	Second	Second
2019	ICG North American Private Debt Fund II	Direct Lending	50,000,000	36,516,581	12,513,500	31,056,030	7,052,948	1.2x	12.8%	Second	Second
2019	Permira Credit Solutions IV Master (Feeder) SCSp	Direct Lending	75,000,000	55,120,793	12,164,260	54,307,623	11,351,090	1.2x	10.8%	Second	Second
2019 Total			\$125,000,000	\$91,637,374	\$24,677,760	\$85,363,653	\$18,404,039	1.2x	11.5%	Second	Second
2020	Ares PA Opportunities Fund, L.P. - Direct Lending	Direct Lending	100,000,000	71,013,632	184,560	NM	NM	NM	NM	NM	NM
2020	Permira Susquehanna Opportunities - Credit	Direct Lending	60,000,000	12,287,712	924,980	NM	NM	NM	NM	NM	NM
2020 Total			\$160,000,000	\$83,301,345	\$1,109,540			NM	NM	NM	NM
Total: Active Investments			\$585,000,000	\$504,643,878	\$217,942,545						

DIVERSE FUNDS SCHEDULE OF INVESTMENTS

As of December 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR
2006	Asia Alternatives Capital Partners	Buyouts	\$25,000,000	\$25,218,098	\$44,133,625	\$2,232,672	\$21,148,199	1.8x	10.9%
2007	Asia Alternatives Capital Partners II	Buyouts	29,949,500	29,091,302	64,131,666	11,924,363	46,964,727	2.6x	17.0%
2011	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Buyouts	7,000,000	8,891,037	12,677,843	1,563,045	5,349,851	1.6x	10.7%
2012	Asia Alternatives Capital Partners III	Buyouts	50,000,000	55,509,180	72,171,048	30,022,882	46,684,750	1.8x	13.2%
2012	Penn Asia Investors	Buyouts	133,000,000	124,554,348	103,462,014	102,342,064	81,249,730	1.7x	14.0%
2015	Clearlake Capital Partners IV	Special Situations	15,000,000	23,361,740	36,169,907	12,860,109	25,668,276	2.1x	30.8%
2016	Vista Equity Partners Fund VI	Buyouts	150,000,000	187,372,613	154,757,686				
2017	Asia Alternatives Capital Partners V	Buyouts	50,000,000	47,699,042	7,838,088	52,584,260	12,723,306	1.3x	11.1%
2018	Clearlake Capital Partners V	Special Situations	55,000,000	77,715,883	98,162,693	68,280,397	88,727,207	2.1x	44.3%
2019	Clearlake Opportunities Partners II	Special Situations	75,000,000	50,356,203	14,949,084	42,807,569	7,400,450	1.1x	11.4%
2019	Thoma Bravo Fund XIII	Buyouts	75,000,000	91,498,386	45,140,596				30.9%
2019	TSG8	Buyouts	100,000,000	72,171,528	708,467	71,125,608	(337,453)	1.0x	(0.3%)
2019	Vista Equity Partners Fund VII	Buyouts	75,000,000	60,246,141	589,405				
2020	Clearlake Capital Partners VI	Special Situations	60,000,000	60,712,437	5,025,825	NM	NM	NM	NM
2020	Thoma Bravo Discover Fund III	Buyouts	20,000,000	18,488,934	-	NM	NM	NM	NM
2020	Thoma Bravo Fund XIV	Buyouts	50,000,000	49,110,712	12	NM	NM	NM	NM
2021	Clearlake Capital Partners VII	Special Situations	100,000,000	41,028,943	2,434	NM	NM	NM	NM
2021	Clearlake Opportunities Partners III	Special Situations	75,000,000	8,283,377	35,959	NM	NM	NM	NM
2022	Thoma Bravo Discover Fund IV, L.P.	Buyouts	50,000,000	7,723,926	-	NM	NM	NM	NM
2022	Thoma Bravo Fund XV, L.P.	Buyouts	100,000,000	53,669,622	21,669	NM	NM	NM	NM
2022	TSG 9	Buyouts	100,000,000	-	-	NM	NM	NM	NM
2022	Veritas Capital Partners VIII, L.P.	Buyouts	100,000,000	25,809,103	-	NM	NM	NM	NM
Total: Private Equity Diverse Funds			\$1,494,949,500	\$1,118,512,555	\$659,978,020	\$1,080,486,571	\$621,952,036	1.6x	16.6%
2018	Brightwood Capital Fund IV	Direct Lending	\$100,000,000	\$100,000,000	\$36,851,306	\$91,440,405	\$28,291,711	1.3x	8.0%
Total: Legacy Private Credit Diverse Funds			\$100,000,000	\$100,000,000	\$36,851,306	\$91,440,405	\$28,291,711	1.3x	8.0%
Total: Diverse Funds			\$1,594,949,500	\$1,218,512,555	\$696,829,326	\$1,171,926,976	\$650,243,747	1.5x	16.1%

END NOTES

Performance Summary

Commitment reflects current commitment including FX fluctuations for non-USD funds.

Contributed Capital includes contributions for investments, management fees and expenses to underlying partnership investments.

Distributions include stock distributions.

Net DPI, or Distributed to Paid-In-Multiple, is calculated as Distributed Capital divided by Contributed Capital, inclusive of StepStone fees.

Net TVM, or Total Value Multiple, is calculated as Total Value, which is comprised of Market Value plus Distributed Capital, divided by Contributed Capital, inclusive of StepStone fees.

Net IRR is net of managers' fees, expenses, and carried interest, inclusive of StepStone fees.

Portfolio Performance vs Benchmarks

Benchmark is a dollar-weighted calculation of quarterly changes in the Russell 3000® Index. Russell Investment Group is the source and owner of the trademark, service marks and copyrights related to the Russell Indexes.

Russell® is a trademark of Russell Investment Group. Returns shown are time-weighted (TWR).

Benchmark is provided by Burgiss Private iQ and reflects Global Private Equity Funds (excluding Real Assets and Real Estate) Median IRR as of December 31, 2022, for funds with vintage years 1980 to 2022.

Returns shown are dollar-weighted (IRR).

Benchmark is provided by Burgiss Private iQ and reflects Global pooled returns for Buyout (including Natural Resources), Venture Capital, Special Situations (including Distressed and Mezzanine), and all Private Equity (excluding Real Assets and Real Estate), respectively, as of December 31, 2022, for funds with vintage years 1980 to 2022. Returns shown are dollar-weighted (IRR).

Benchmark is provided by Burgiss Private iQ and reflects Global Upper Quartile IRR for Buyout (including Natural Resources), Venture Capital, Special Situations (including Distressed and Mezzanine), and all Private Equity (excluding Real Assets and Real Estate), respectively, as of December 31, 2022, for funds with vintage years 1980 to 2022. Returns shown are dollar-weighted (IRR).

Unless otherwise indicated, all underlying investment attribution and performance information presented is net of fees and expenses charged by the underlying investment, but gross of StepStone vehicle/account fees and expenses. Where indicated, net return figures presented for StepStone vehicle/account performance include fees and expenses paid to StepStone.

Vintage Year Performance

IRR and TVM performance excludes Keystone Legacy Fund.

Core Portfolio vs Russell 3000 Index

Benchmark is a dollar-weighted calculation of quarterly changes in the Russell 3000® Index. Russell Investment Group is the source and owner of the trademark, service marks and copyrights related to the Russell Indexes.

Russell® is a trademark of Russell Investment Group. Buyout, Growth Equity, and Special Situations sectors represent PASERS core portfolio of investment returns within each sector.

Keystone Legacy Fund contains Buyout, Venture Capital, and Special Situation funds defined as non-core by PASERS.

Unless otherwise indicated, all underlying investment attribution and performance information presented is net of fees and expenses charged by the underlying investment, but gross of StepStone vehicle/account fees and expenses. Where indicated, net return figures presented for StepStone vehicle/account performance include fees and expenses paid to StepStone.

END NOTES CONTINUED

Schedule of Investments by Vintage Year, Sector, Legacy Private Credit, Diverse Funds

Commitment reflects current commitment including FX fluctuations for non-USD funds.

Contributions include management fees and expenses.

Gain/Loss represents since inception total value change of active investments unless otherwise noted.

NM - Not Meaningful

IRR and TVM for certain vehicles may have been impacted by StepStone's or the underlying GPs' use of subscription-backed credit facilities by such vehicles. Reinvested/recycled amounts increase contributed capital.

Fund quartile rankings provided by Burgiss Private iQ as of December 31, 2022 and represent sector-comparable funds aggregated by vintage year, asset class and geography in which SERS made investments.

Keystone Legacy Fund performance represents since inception returns for all non-core funds.

These figures have been prepared by StepStone on behalf of SERS and have not been provided by any General Partner.

Legacy Private Credit investments are not included in the Private Equity portfolio and are excluded from any performance figures shown throughout this report other than the Legacy Private Credit Schedule of Investments.

StepStone Diverse Manager Definition:

(i) 33%+ of the General Partner/Management company is owned by diverse individuals; and/or

(ii) 33%+ of carried interest for the Fund will be allocated to diverse individuals; and/or

(iii) 33% of key persons are diverse individuals

Diverse individuals include women and racial/ethnic minority employees, specifically in the US: Asian, Black, Hispanic/Latinx, Indigenous People, Middle Eastern/North African, and Two or More Races.

In addition, LGTBQIA+, disability, and US Military Veteran status will be considered.

StepStone has not completed due diligence on all Funds in SERS Private Equity portfolio and therefore the diverse manager list excludes these Funds.

Unless otherwise indicated, all underlying investment attribution and performance information presented is net of fees and expenses charged by the underlying investment, but gross of StepStone vehicle/account fees and expenses. Where indicated, net return figures presented for StepStone vehicle/account performance include fees and expenses paid to StepStone.

Past performance is not necessarily indicative of future results and there can be no assurance that the fund will achieve comparable results or avoid substantial losses.

Definitions on Pages 34-35 - Redacted