

# QUARTERLY PRIVATE EQUITY BOARD UPDATE

For the period ended March 31, 2022

Report Prepared For:

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 March 31, 2022, as well as the quarter-over-quarter and year-over-year change.

The Portfolio is generating a since inception net IRR of 12.7% at March 31, 2022, down (6) basis points quarter-over-quarter.

As of March 31, 2022. In USD millions.

SERS PORTFOLIO PERFORMANCE SUMMARY					
	March 31, 2022	December 31, 2021	March 31, 2021	QUARTERLY Δ	ANNUAL Δ
Number of Managers	116	116	116	0	0
Number of Investments	336	333	328	3	8
Number of Active Investments	180	177	180	3	0
Committed Capital	\$14,664.6	\$14,466.3	\$14,082.9	\$198.3	\$581.7
Unfunded Commitment	2,249.6	2,169.8	2,541.6	79.8	(292.0)
Total Exposure	8,243.2	8,572.9	8,037.7	(329.8)	205.4
Total Contributed	18,559.8	18,422.3	17,621.9	137.5	937.9
Total Distributed	25,585.7	25,108.0	23,843.7	477.7	1,742.0
Total Market Value	5,993.6	6,403.1	5,496.1	(409.6)	497.4
Since Inception G/L	13,019.5	13,088.9	11,718.0	(69.4)	1,301.5
<b>Total Value</b>	<b>\$31,579.3</b>	<b>\$31,511.1</b>	<b>\$29,339.9</b>	<b>\$68.2</b>	<b>\$2,239.4</b>
Net DPI	1.4x	1.4x	1.4x		
Net TVM	1.7x	1.7x	1.7x		
<b>Net IRR</b>	<b>12.7%</b>	<b>12.7%</b>	<b>12.5%</b>	<b>(6 bps)</b>	<b>15 bps</b>

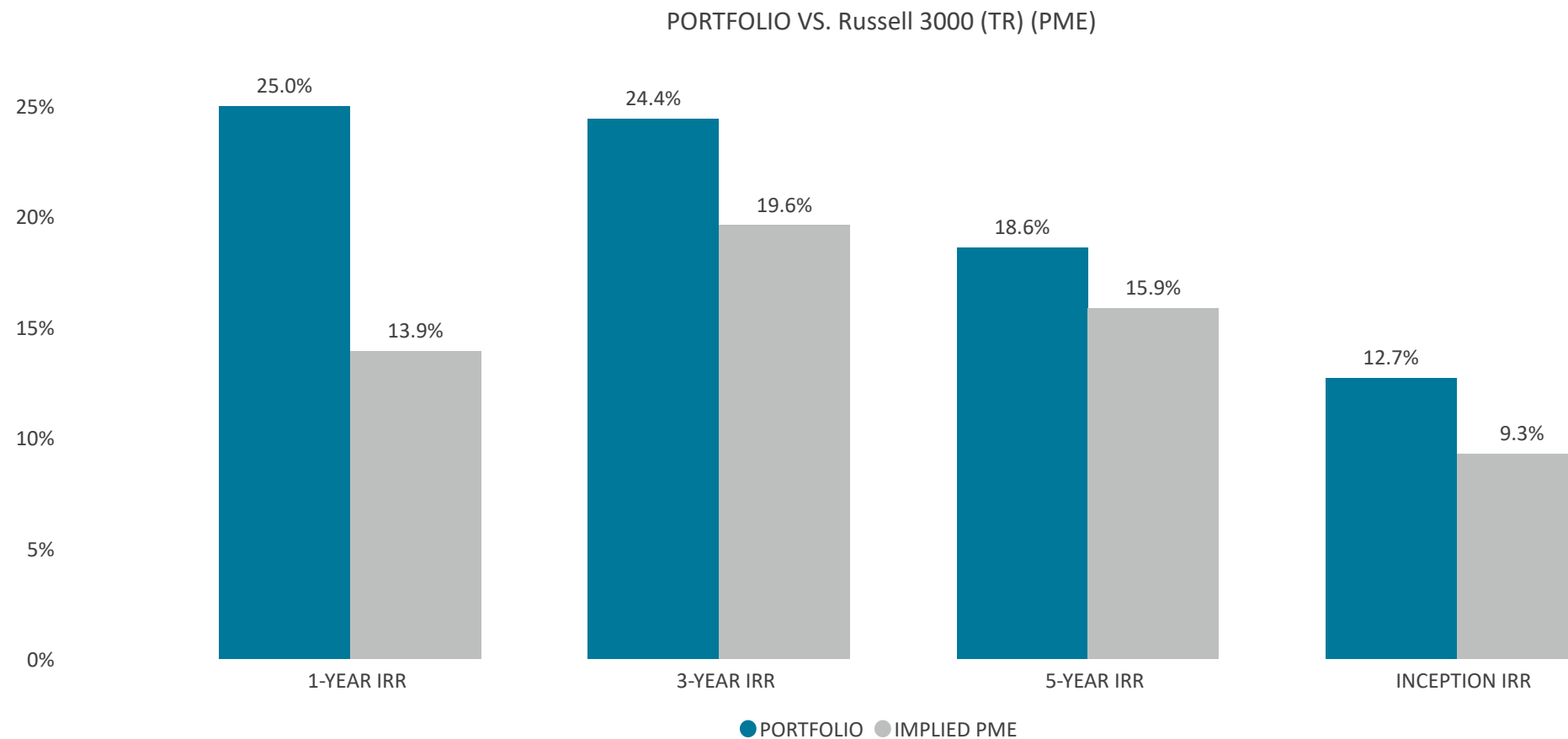
*Past performance is not necessarily indicative of future results and there can be no assurance that the investment will achieve comparable results or avoid substantial losses.*

*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 March 31, 2022, as well as the public market equivalent (PME) based on the Russell 3000 (TR) index.

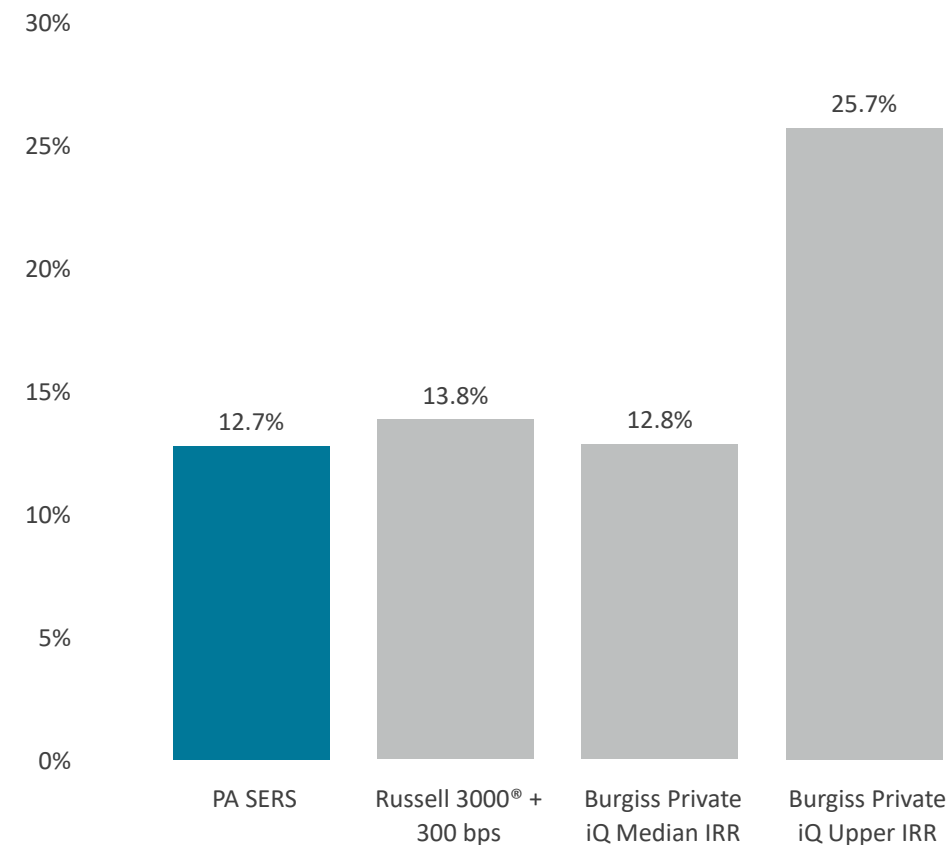


*The referenced indices/benchmarks are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may 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 March 31, 2022.

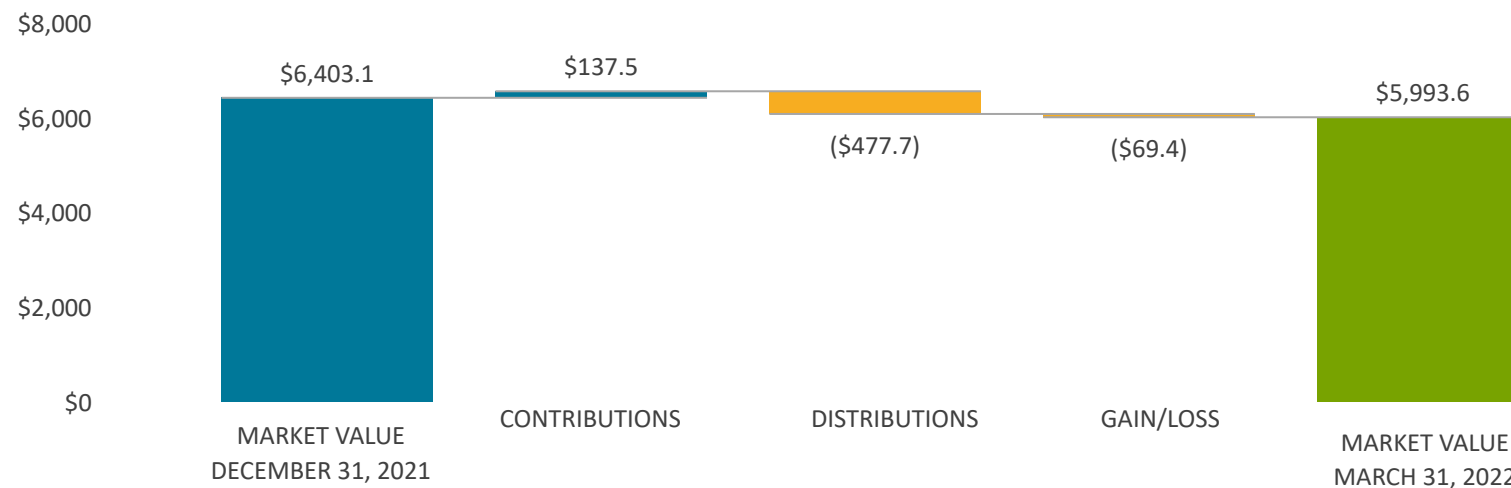
RETURNS	1 YEAR RETURN	3 YEAR RETURN	5 YEAR RETURN	10 YEAR RETURN
SERS Combined Portfolio (IRR)	25.0%	24.4%	18.6%	12.7%
Burgiss Private iQ Pooled PE Benchmark	22.6%	24.2%	20.6%	15.9%
Burgiss Private iQ All PE Top-Quartile	39.4%	34.3%	30.8%	27.1%
Russell 3000®	11.9%	18.2%	15.4%	14.3%
Russell 3000® + 300 bps	14.9%	21.2%	18.4%	17.3%
SERS Core Buyout (IRR)	24.0%	24.2%	20.3%	16.1%
Burgiss Private iQ Pooled Buyout Benchmark	25.8%	22.5%	19.4%	15.1%
Burgiss Private iQ Buyout Top-Quartile	41.0%	31.4%	29.1%	25.8%
SERS Core Growth Equity (IRR)	31.9%	42.1%	34.2%	21.5%
Burgiss Private iQ Pooled VC Benchmark	20.0%	34.8%	28.2%	20.9%
Burgiss Private iQ VC Top-Quartile	46.8%	42.8%	37.3%	32.9%
SERS Core Special Situations (IRR)	33.8%	23.9%	17.7%	12.8%
Burgiss Private iQ Pooled SS Benchmark	11.3%	9.7%	9.1%	9.3%
Burgiss Private iQ SS Top-Quartile	18.2%	15.8%	15.2%	14.6%
SERS Keystone Legacy Fund (IRR)	6.1%	4.3%	3.7%	6.3%
Burgiss Private iQ Pooled PE Benchmark	22.6%	24.2%	20.6%	15.9%
Burgiss Private iQ All PE Top-Quartile	39.4%	34.3%	30.8%	27.1%



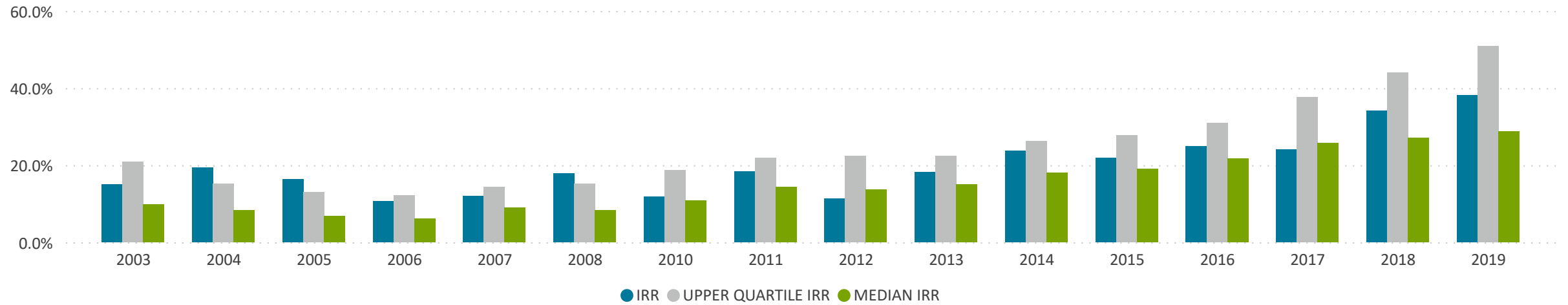
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## QUARTERLY VALUATION MOVEMENT

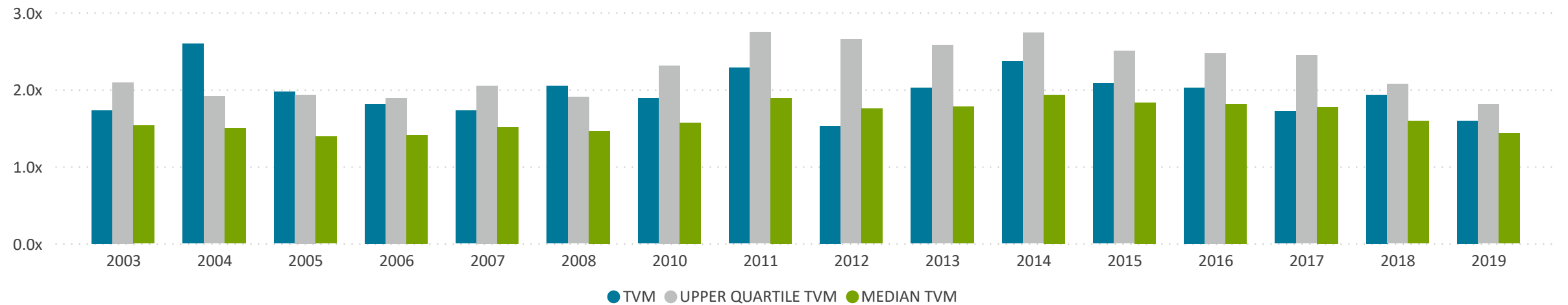
During the first quarter of 2022, the value of the Portfolio decreased by (\$69.4) million, or (1.1%).



### IRR PERFORMANCE BY VINTAGE YEAR



### TVM PERFORMANCE BY VINTAGE YEAR





## FUND GEOGRAPHIC DIVERSIFICATION

As of March 31, 2022. In USD millions.

GEOGRAPHY	NAV	% OF TOTAL	UNFUNDED	% OF TOTAL	TOTAL EXPOSURE	% OF TOTAL
North America	\$3,624.6	60.5%	\$1,405.9	62.5%	\$5,030.4	61.0%
Keystone Legacy Fund	\$282.0	4.7%	\$53.1	2.4%	\$335.0	4.1%
Global	\$664.0	11.1%	\$425.5	18.9%	\$1,089.5	13.2%
Europe	\$627.8	10.5%	\$242.5	10.8%	\$870.3	10.6%
Emerging Markets	\$193.3	3.2%	\$18.0	0.8%	\$211.2	2.6%
Asia	\$601.9	10.0%	\$104.7	4.7%	\$706.6	8.6%
<b>Total</b>	<b>\$5,993.6</b>	<b>100.0%</b>	<b>\$2,249.6</b>	<b>100.0%</b>	<b>\$8,243.2</b>	<b>100.0%</b>

## 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)	27.0%	28.2%	23.0%	16.8%	15.5%
Russell 3000®	11.9%	18.2%	15.4%	14.3%	10.8%
Russell 3000® + 300 bps	14.9%	21.2%	18.4%	17.3%	13.8%
<b>PA SERS Outperformance/(Underperformance)</b>					
Russell 3000® Net	15.1%	10.0%	7.6%	2.5%	4.7%
Russell 3000® + 300 bps Net	12.1%	7.0%	4.6%	(0.5%)	1.7%

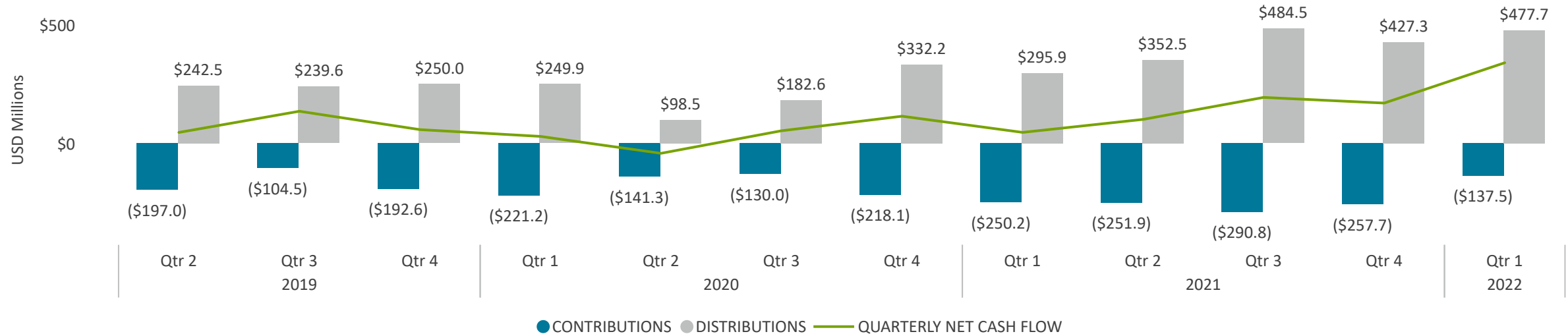
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## PERFORMANCE BY SECTOR



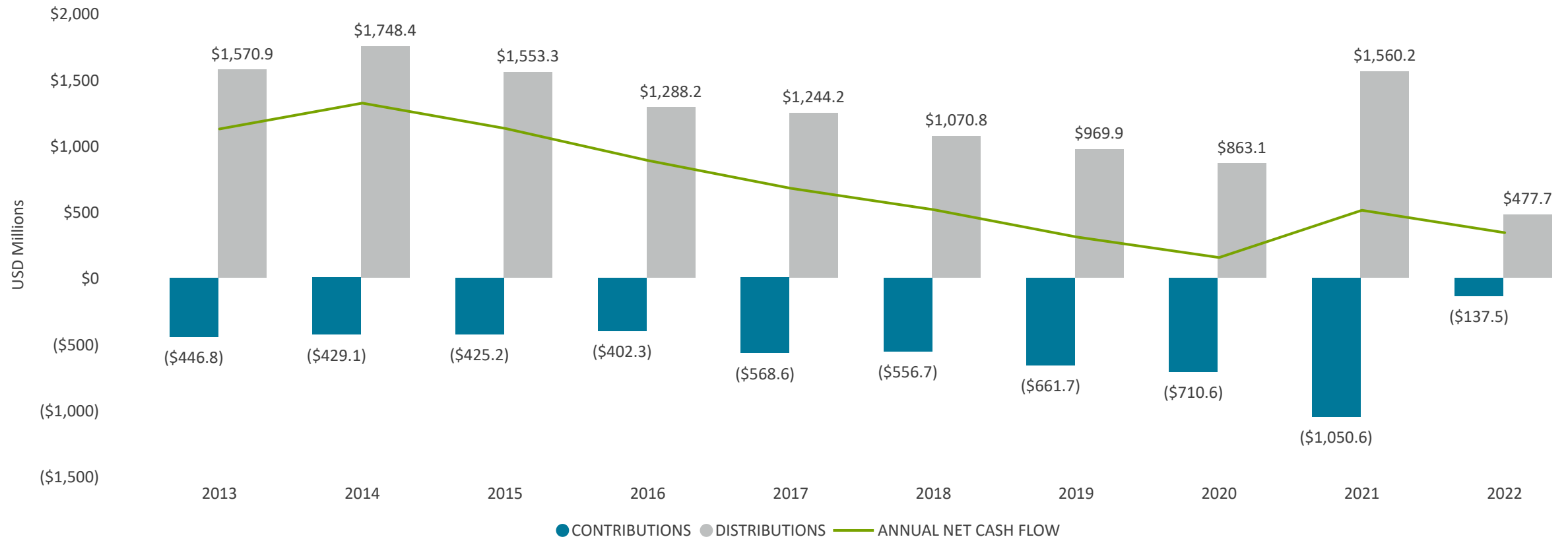
## QUARTERLY CASH FLOW ACTIVITY

During the first quarter of 2022, the Portfolio contributed \$137.5 million and received \$477.7 million of distributions, for a net cash inflow of \$340.2 million.

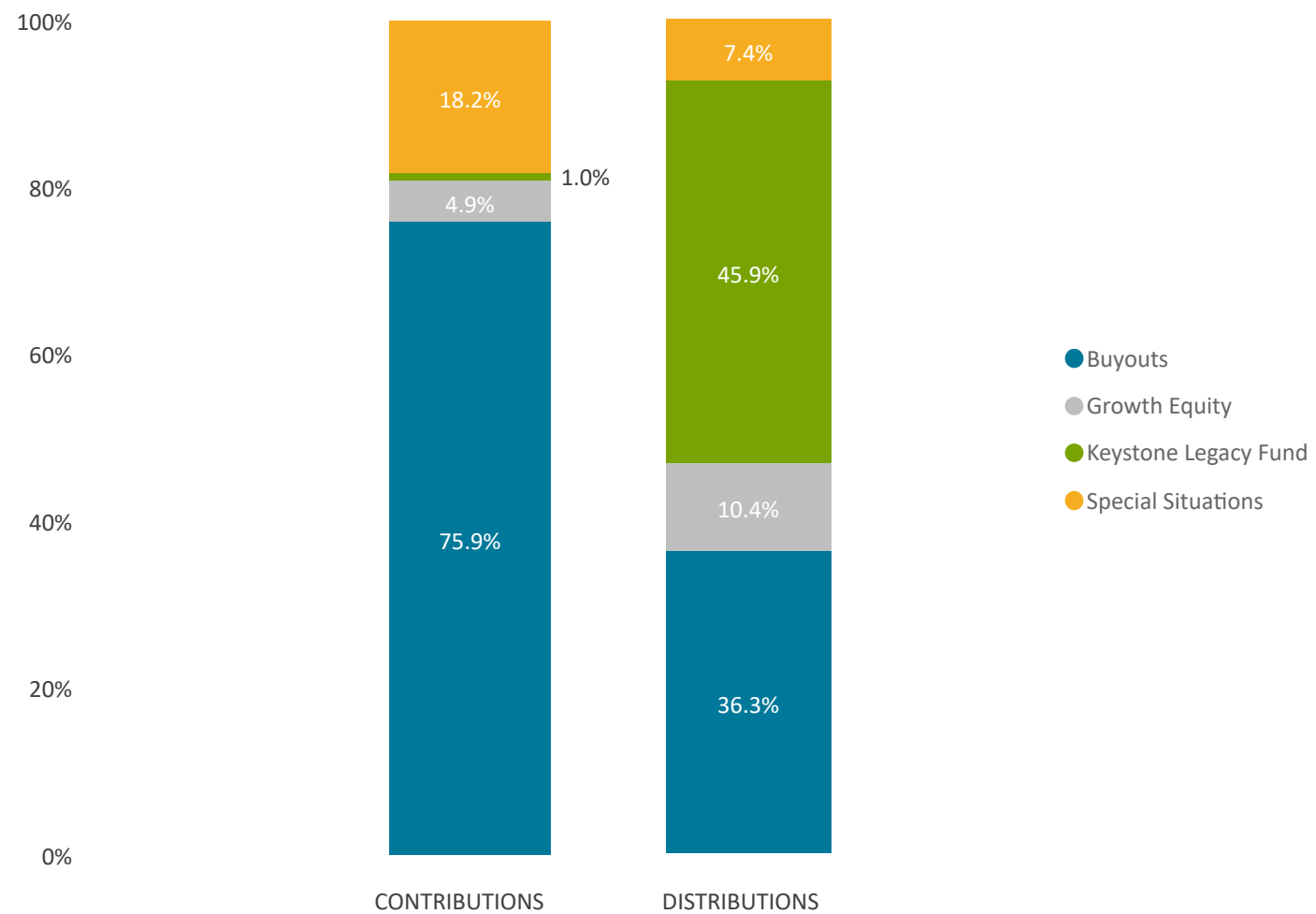


## ANNUAL CASH FLOW ACTIVITY

During the three months ended March 31, 2022, the Portfolio contributed \$137.5 million and received \$477.7 million of distributions, for a net cash inflow of \$340.2 million.

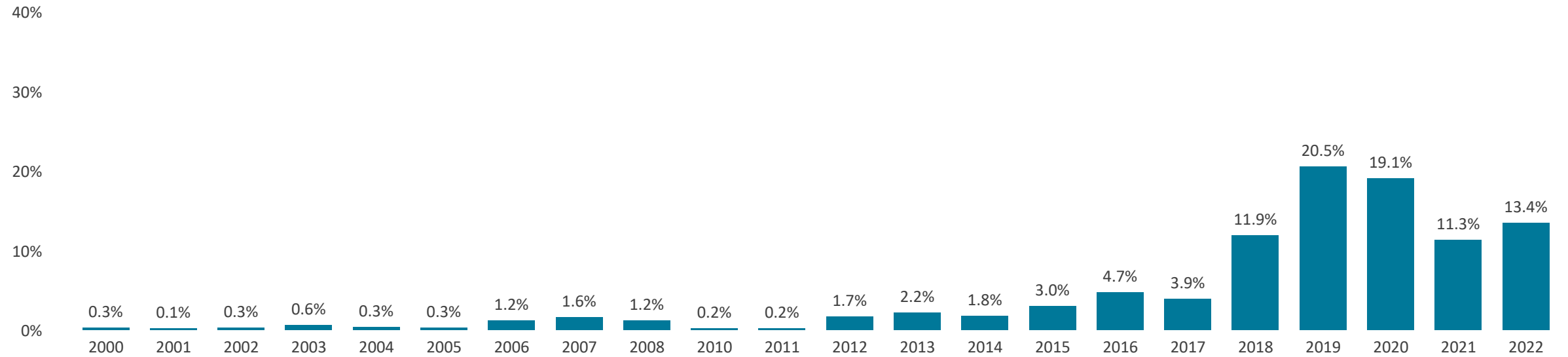


## CASH FLOW BY SECTOR



## 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 March 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	\$984	\$49,976,397	1.7x	8.5%	Second	Second
<b>1997 Total</b>			<b>\$75,000,000</b>	<b>\$74,838,620</b>	<b>\$124,814,033</b>	<b>\$984</b>	<b>\$49,976,397</b>	<b>1.7x</b>	<b>8.5%</b>	<b>Second</b>	<b>Second</b>
1998	HarbourVest IPEP III	Buyouts	40,000,000	39,400,000	61,092,165	74,921	21,767,086	1.6x	8.6%	Second	Second
<b>1998 Total</b>			<b>\$40,000,000</b>	<b>\$39,400,000</b>	<b>\$61,092,165</b>	<b>\$74,921</b>	<b>\$21,767,086</b>	<b>1.6x</b>	<b>8.6%</b>	<b>Second</b>	<b>Second</b>
1999	HarbourVest Partners VI	Growth Equity	200,000,000	196,586,055	251,227,115	555,802	55,196,862	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	377,696	(10,482,434)	0.5x	(6.1%)	Third	Third
<b>1999 Total</b>			<b>\$255,000,000</b>	<b>\$250,702,504</b>	<b>\$303,543,596</b>						
2000	Apollo Investment Fund V	Buyouts	50,000,000	44,972,146	122,673,016	421,926	78,122,796	2.7x	38.8%	First	First
2000	Audax Private Equity Fund	Buyouts	35,000,000	36,839,098	56,057,910	471,990	19,690,802	1.5x	13.1%	First	Second
2000	Blackstone Communications Partners I	Buyouts	25,000,000	25,114,042	30,998,189	191,439	6,075,586	1.2x	6.2%	Second	Second
2000	New Enterprise Associates X	Growth Equity	35,000,000	35,028,000	39,412,034	2,297,689	6,681,723	1.2x	2.6%	Second	Second
2000	Permira European Fund II	Buyouts	45,672,612	45,672,612	91,560,959	392,540	46,280,887	2.0x	21.6%	First	First
2000	Providence Equity Partners IV	Buyouts	25,000,000	23,420,840	56,065,270						
<b>2000 Total</b>			<b>\$215,672,612</b>	<b>\$211,046,738</b>	<b>\$396,767,378</b>						
2001	Blackstone Capital IV	Buyouts	69,379,875	69,119,097	193,120,867	1,100,472	125,102,242	2.8x	36.2%	First	First
2001	Lexington Capital Partners V	Special Situations	75,000,000	74,623,418	125,170,164						
<b>2001 Total</b>			<b>\$144,379,875</b>	<b>\$143,742,515</b>	<b>\$318,291,031</b>						
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%	First	
<b>2002 Total</b>			<b>\$95,000,000</b>	<b>\$88,213,214</b>	<b>\$175,745,762</b>						
2003	HarbourVest Partners VII	Growth Equity	75,000,000	73,687,500	117,075,996	1,938,931	45,327,427	1.6x	6.7%	First	First
2003	Kelso VII	Buyouts	40,000,000	41,169,937	65,821,118	65,209	24,716,390	1.6x	11.4%	Second	Second
2003	New Enterprise Associates 11	Growth Equity	25,000,000	25,000,000	63,385,828	3,270,845	41,656,673	2.7x	15.5%	First	First
2003	Permira European Fund III	Buyouts	127,062,518	127,340,454	218,052,206	540,167	91,251,919	1.7x	26.1%	Second	Second

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2003	TPG Partners IV	Buyouts	\$27,907,484	\$27,981,463	\$58,314,713						
<b>2003 Total</b>			<b>\$294,970,002</b>	<b>\$295,179,353</b>	<b>\$522,649,860</b>						
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						
2004	AXA Secondary Fund III-2	Special Situations	14,000,000	11,677,210	19,062,764						
2004	Providence Equity Partners V	Buyouts	45,000,000	42,692,347	52,204,745						
<b>2004 Total</b>			<b>\$130,000,000</b>	<b>\$117,859,994</b>	<b>\$193,290,413</b>	<b>\$450,227</b>	<b>\$75,880,646</b>	<b>1.6x</b>	<b>12.6%</b>	<b>Second</b>	<b>Second</b>
2005	Apollo Investment Fund VI	Buyouts	40,000,000	38,911,805	64,467,407	735,516	26,291,117	1.7x	8.6%	Second	Second
2005	Audax Private Equity Fund II	Buyouts	25,000,000	25,517,152	46,325,622	200,710	21,009,180	1.8x	14.1%	First	Second
2005	HIPEP V-Asia Pacific & Rest of World	Buyouts	30,000,000	28,245,316	38,492,130	1,324,733	11,571,547	1.4x	5.7%	Third	Second
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	52,907,319						
2005	Newbridge Asia IV	Buyouts	40,000,000	38,903,378	87,467,582						
<b>2005 Total</b>			<b>\$203,000,000</b>	<b>\$202,643,976</b>	<b>\$363,372,967</b>	<b>\$7,212,574</b>	<b>\$167,941,565</b>	<b>1.8x</b>	<b>11.2%</b>	<b>Second</b>	<b>Second</b>
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	43,740,125	2,686,712	21,208,739	1.8x	11.0%	Second	Second
2006	AXA Secondary Fund IV	Special Situations	80,000,000	70,134,752	99,618,118						
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	247,901,964	3,199,139	100,989,315	1.7x	7.6%	Second	Second
2006	Centerbridge Capital Partners I	Special Situations	50,000,000	57,337,396	117,317,806	2,209,378	62,189,788	2.1x	19.2%	First	First
2006	Eureka II	Buyouts	20,000,000	21,906,935	22,842,724	4,823,752	5,759,541	1.3x	4.4%	Third	Third
2006	Francisco Partners II	Buyouts	30,000,000	29,383,916	43,490,515	4,672,575	18,779,173	1.6x	10.3%	Second	Second
2006	HarbourVest Partners VIII	Growth Equity	100,000,000	98,000,000	172,989,043	48,910,997	123,900,040	2.3x	11.8%	First	First
2006	Hellman & Friedman Capital Partners VI	Buyouts	125,000,000	119,913,412	222,910,013	2,267,857	105,264,458	1.9x	12.9%	First	Second



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As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2006	Madison Dearborn Capital Partners V	Buyouts	\$63,817,077	\$71,571,265	\$116,017,833	\$1,682,408	\$46,128,976	1.6x	7.3%	Second	Second
2006	New Enterprise Associates 12	Growth Equity	35,000,000	35,631,130	48,025,951	3,504,809	15,899,630	1.4x	6.8%	Second	Second
2006	NewSpring Growth Capital II	Growth Equity	10,000,000	9,850,000	19,519,679						
2006	Permira IV	Buyouts	136,383,828	138,422,695	208,443,061	50,506,590	120,526,957	1.9x	9.9%	Second	Second
2006	TPG Partners V	Buyouts	88,831,038	92,531,812	130,072,991	313,176	37,854,355	1.4x	4.8%	Third	Third
<b>2006 Total</b>			<b>\$976,031,943</b>	<b>\$981,015,779</b>	<b>\$1,606,614,105</b>	<b>\$126,808,167</b>	<b>\$752,406,493</b>	<b>1.8x</b>	<b>9.8%</b>	<b>Second</b>	<b>Second</b>
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	2,731,310	15,890,158	1.5x	9.0%	Second	Second
2007	Asia Alternatives Capital Partners II	Buyouts	29,949,500	29,080,459	61,170,476	15,964,606	48,054,623	2.7x	17.4%	First	First
2007	Audax Private Equity Fund III	Buyouts	37,000,000	42,498,691	82,716,671	1,197,189	41,415,170	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	40,444,997	778,892	12,527,761	1.4x	9.1%	Third	Third
2007	JMI Equity Fund VI	Growth Equity	40,000,000	40,000,246	69,876,395	1,673,553	31,549,702	1.8x	11.5%	Second	Second
2007	Kelso VIII	Buyouts	150,000,000	146,686,760	208,554,873	7,790,154	69,658,267	1.5x	7.5%	Third	Third
2007	OCM Opportunities Fund VII	Special Situations	40,000,000	40,000,000	54,885,803						
2007	OCM Opportunities Fund VII b	Special Situations	40,000,000	36,000,000	62,318,740						
2007	Providence Equity Partners VI	Buyouts	49,976,748	54,530,937	75,215,312						
2007	TPG Asia V	Buyouts	22,500,000	21,964,311	27,840,308	3,572,570	9,448,567	1.4x	6.4%	Third	Third
2007	Weathergag Venture Capital	Growth Equity	25,000,000	22,875,000	44,247,579	15,969,907	37,342,486	2.6x	13.8%	Second	Second
<b>2007 Total</b>			<b>\$526,689,198</b>	<b>\$541,709,460</b>	<b>\$870,409,892</b>	<b>\$62,517,333</b>	<b>\$391,217,765</b>	<b>1.7x</b>	<b>10.9%</b>	<b>Second</b>	<b>Second</b>
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	3,877,151	39,161,972	2.1x	16.6%	First	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	48,942,708						

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2008	Lightspeed Venture Partners VIII	Growth Equity	\$15,000,000	\$15,000,000	\$36,819,713						
2008	LLR Equity Partners III	Buyouts	30,000,000	29,108,722	63,935,615	2,528,694	37,355,587	2.3x	16.6%	Second	First
2008	Madison Dearborn Capital Partners VI	Buyouts	50,000,000	53,258,583	112,050,064	7,898,850	66,690,331	2.3x	23.3%	First	First
2008	TPG Partners VI	Buyouts	44,294,641	50,576,261	72,308,182	2,754,940	24,486,861	1.5x	9.6%	Second	Second
<b>2008 Total</b>			<b>\$286,062,641</b>	<b>\$306,574,625</b>	<b>\$591,730,872</b>	<b>\$49,982,763</b>	<b>\$335,139,010</b>	<b>2.1x</b>	<b>18.6%</b>	<b>First</b>	<b>First</b>
2010	Advent Latin American Private Equity Fund V	Buyouts	15,000,000	14,430,000	8,325,000	9,202,362	3,097,362	1.2x	3.2%	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	29,013,528						
2010	OCM Opportunities Fund VIII	Special Situations	12,500,000	12,583,425	18,176,218						
2010	OCM Opportunities Fund VIIIb	Special Situations	12,500,000	12,500,000	13,885,884						
2010	Weathergag Venture Capital II	Growth Equity	25,000,000	23,250,000	54,829,514	45,041,933	76,621,447	4.3x	21.1%	Second	First
<b>2010 Total</b>			<b>\$110,000,000</b>	<b>\$102,099,421</b>	<b>\$145,305,554</b>	<b>\$62,146,251</b>	<b>\$105,352,384</b>	<b>2.0x</b>	<b>12.2%</b>	<b>Second</b>	<b>Second</b>
2011	ABRY Partners VII	Buyouts	30,000,000	38,298,283	50,892,045						
2011	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Buyouts	7,000,000	8,861,038	12,677,843	1,661,746	5,478,551	1.6x	11.0%	Third	Third
2011	Francisco Partners III	Buyouts	20,000,000	20,514,684	58,281,352	9,206,890	46,973,558	3.3x	23.8%	Second	First
2011	H.I.G. Growth Buyouts & Equity Fund II	Buyouts	15,000,000	16,437,126	14,005,734						
2011	Insight Venture Partners VII	Growth Equity	20,000,000	22,129,992	53,076,524	16,946,594	47,893,126	3.2x	22.3%	Second	Second
2011	JMI Equity Fund VII	Growth Equity	10,000,000	9,780,000	23,216,560	1,182,139	14,618,699	2.5x	17.9%	Third	Third
2011	Meritech Capital Partners IV	Growth Equity	20,000,000	19,700,000	44,043,149						
<b>2011 Total</b>			<b>\$122,000,000</b>	<b>\$135,721,122</b>	<b>\$256,193,208</b>	<b>\$66,404,148</b>	<b>\$186,876,234</b>	<b>2.4x</b>	<b>18.8%</b>	<b>Second</b>	<b>Second</b>
2012	Advent International GPE VII-B	Buyouts	40,000,000	37,600,000	61,725,466	9,169,173	33,294,639	1.9x	14.2%	Third	Second
2012	Asia Alternatives Capital Partners III	Buyouts	50,000,000	55,376,889	68,054,036	35,552,794	48,229,941	1.9x	14.0%	Third	Second
2012	AXA Secondary Fund V B	Special Situations	75,000,000	61,682,742	97,337,534						
2012	Carlyle Energy Mezzanine Opportunities Fund	Buyouts	50,000,000	65,517,654	34,066,380	6,303,746	(25,147,528)	0.6x	(15.4%)	Fourth	Fourth
2012	Penn Asia Investors	Buyouts	133,000,000	122,509,872	93,974,242	117,929,118	89,393,488	1.7x	16.2%	Second	Third

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
<b>2012 Total</b>			<b>\$348,000,000</b>	<b>\$342,687,157</b>	<b>\$355,157,658</b>						
2013	Eureka Growth Capital III	Buyouts	20,000,000	15,767,810	35,863,978	8,053,191	28,149,359	2.8x	45.3%	First	Second
2013	FSN Capital IV	Buyouts	37,971,770	38,520,666	73,684,675						
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	154,403	26,014,749	2.6x	33.9%	First	Second
2013	Insight Venture Partners VIII	Growth Equity	50,000,000	53,016,419	111,531,574	51,027,970	109,543,125	3.1x	21.8%	Second	Second
2013	LBC Credit Partners III	Special Situations	50,000,000	46,696,243	52,657,645				8.3%	Third	
2013	Oaktree Opportunities Fund IX	Special Situations	50,000,000	50,000,000	33,713,063						
2013	Platinum Equity Capital Partners III	Special Situations	50,000,000	47,112,591	88,903,502	12,215,461	54,006,372	2.1x	38.8%	First	Second
<b>2013 Total</b>			<b>\$322,971,770</b>	<b>\$309,816,526</b>	<b>\$488,125,352</b>	<b>\$136,975,617</b>	<b>\$315,284,442</b>	<b>2.0x</b>	<b>18.2%</b>	<b>Second</b>	<b>Second</b>
2014	Capvis Equity IV	Buyouts	43,028,959	46,342,729	33,984,236	27,766,824	15,408,331				
2014	GTCR Fund XI	Buyouts	25,000,000	24,135,037	47,142,609				40.1%	First	
2014	H.I.G. Europe Capital Partners II	Buyouts	24,497,493	22,568,576	17,730,497						
2014	Hahn & Company II	Buyouts	50,000,000	55,706,172	39,337,733						
2014	Horizon Impact Fund	Buyouts	50,000,000	44,629,802	54,360,139	31,726,326	41,456,663	1.9x	18.3%	Third	Third
2014	Horizon Strategic Fund - Carlyle Group	Buyouts	100,000,000	105,970,198	112,895,498	86,092,654	93,017,954	1.9x	15.2%	Third	Third
2014	KPS Special Situations Fund IV	Special Situations	25,000,000	23,523,004	24,290,154	19,088,896	19,856,046	1.8x	24.9%	Second	Third
2014	LLR Equity Partners IV	Buyouts	50,000,000	45,485,764	91,513,578	21,906,905	67,934,719	2.5x	27.3%	Second	Second
2014	Meritech Capital Partners V	Growth Equity	23,000,000	22,310,000	141,849,990						
2014	Sentinel Capital Partners V	Buyouts	10,000,000	10,188,099	14,355,388	6,942,108	11,109,397	2.1x	21.7%	Second	Third
<b>2014 Total</b>			<b>\$400,526,452</b>	<b>\$400,859,381</b>	<b>\$577,459,823</b>	<b>\$370,918,201</b>	<b>\$547,518,643</b>	<b>2.4x</b>	<b>23.8%</b>	<b>Second</b>	<b>Second</b>
2015	ABRY Partners VIII	Buyouts	25,000,000	29,677,791	35,538,197						
2015	ADV Opportunities Fund I	Special Situations	50,000,000	61,366,174	26,815,944	59,195,451	24,645,221	1.4x	7.8%	Fourth	Fourth
2015	Advent Latin American Private Equity Fund VI	Buyouts	25,000,000	22,875,000	9,875,000	34,517,771	21,517,771	1.9x	21.8%	Second	Second
2015	Centerbridge Capital Partners III	Special Situations	30,000,000	38,480,700	27,967,556	34,403,724	23,890,580	1.6x	19.5%	Second	Third

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2015	Clearlake Capital Partners IV	Special Situations	\$15,000,000	\$22,983,242	\$33,553,794	\$16,998,204	\$27,568,756	2.2x	33.7%	First	Second
2015	Francisco Partners IV	Buyouts	25,000,000	24,656,280	48,419,069	32,578,209	56,340,998	3.3x	31.8%	First	First
2015	H.I.G. Bayside Loan Opp. Fund IV	Special Situations	25,000,000	22,626,299	20,452,258						
2015	H.I.G. Brazil and Latin America Partners	Buyouts	50,000,000	41,178,074	10,585,377						
2015	Insight Venture Partners IX	Growth Equity	50,000,000	52,784,788	48,528,033	169,785,938	165,529,184	4.1x	32.9%	Second	First
2015	JMI Equity Fund VIII	Growth Equity	25,000,000	27,275,000	39,423,605	28,868,600	41,017,205	2.5x	31.5%	Second	Third
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	56,105,549	20,172,449	63,134,425	27,201,324	1.5x	9.7%	Fourth	Third
2015	Ridgmont Equity Partners II	Buyouts	50,000,000	50,971,205	50,960,707						
2015	RRJ Capital Master Fund III	Special Situations	50,000,000	48,836,505	44,417,375	11,068,625	6,649,495	1.1x	6.8%	Fourth	Fourth
<b>2015 Total</b>			<b>\$485,000,000</b>	<b>\$513,954,107</b>	<b>\$418,835,322</b>	<b>\$649,897,818</b>	<b>\$554,779,033</b>	<b>2.1x</b>	<b>21.9%</b>	<b>Second</b>	<b>Second</b>
2016	Advent International GPE VIII-B	Buyouts	50,000,000	50,000,000	36,531,240	64,905,265	51,436,505	2.0x	22.0%	Second	Second
2016	ASF VII B	Special Situations	100,000,000	62,871,929	41,331,254						
2016	ASF VII PA Co-Invest	Special Situations	50,000,000	30,026,958	24,051,896						
2016	Audax Private Equity Fund V	Buyouts	50,000,000	44,832,961	57,711,203	36,038,805	48,917,047	2.1x	26.5%	Second	Second
2016	Blackstone Capital Partners VII	Buyouts	50,000,000	52,631,273	24,306,364	61,736,280	33,411,371	1.6x	18.7%	Third	Third
2016	Hellman & Friedman Capital Partners VIII	Buyouts	50,000,000	51,060,710	26,777,195	79,238,232	54,954,717	2.1x	22.7%	Third	Second
2016	Providence Strategic Growth II	Growth Equity	60,000,000	77,434,748	125,545,075	65,739,458	113,849,785	2.5x	43.6%	First	Second
2016	Sterling Group Partners IV	Buyouts	20,000,000	19,840,007	15,979,809	28,598,813	24,738,615	2.2x	26.1%	Second	Second
2016	Vista Equity Partners Fund VI	Buyouts	150,000,000	186,648,128	126,687,002						
<b>2016 Total</b>			<b>\$580,000,000</b>	<b>\$575,346,713</b>	<b>\$478,921,038</b>	<b>\$685,463,279</b>	<b>\$589,037,604</b>	<b>2.0x</b>	<b>24.9%</b>	<b>Second</b>	<b>Second</b>
2017	Asia Alternatives Capital Partners V	Buyouts	50,000,000	43,717,148	5,347,237	50,396,362	12,026,451	1.3x	14.8%	Third	Fourth
2017	FSN Capital V	Buyouts	80,328,451	82,318,034	23,602,863						
2017	Horizon Impact Fund B	Buyouts	100,000,000	76,750,000	14,850,000	102,849,433	40,949,433	1.5x	17.7%	Third	Third
2017	Permira VI	Buyouts	56,660,418	51,150,582	28,972,718	74,226,955	52,049,091	2.0x	23.8%	Second	First

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2017	Wind Point Partners VIII	Buyouts	\$100,000,000	\$97,516,136	\$78,383,775						
<b>2017 Total</b>			<b>\$386,988,869</b>	<b>\$351,451,900</b>	<b>\$151,156,592</b>	<b>\$452,517,662</b>	<b>\$252,222,354</b>	<b>1.7x</b>	<b>24.1%</b>	<b>Third</b>	<b>Third</b>
2018	Clearlake Capital Partners V	Special Situations	55,000,000	68,732,746	82,496,439	83,951,595	97,715,288	2.4x	53.9%	First	First
2018	CVC Capital Partners VII	Buyouts	92,497,916	83,206,244	11,127,967	123,213,591	51,135,314	1.6x	28.9%	Second	Second
2018	GTCR Fund XII	Buyouts	32,500,000	32,302,193	19,642,335				36.2%	Second	
2018	Hahn & Company III	Buyouts	56,250,000	27,228,269	83,933						
2018	Hahn & Company III - Supplemental Fund	Buyouts	18,750,000	10,862,000	57,377						
2018	Insight Venture Partners X	Growth Equity	100,000,000	100,373,487	42,913,587	257,152,727	199,692,827	3.0x	45.2%	Second	First
2018	Keystone Legacy Fund	Keystone Legacy Fund	200,000,000	5,589,809,797	7,574,802,005	281,977,048	2,266,969,256	1.4x	6.0%	NM	NM
2018	LLR Equity Partners V	Buyouts	75,000,000	68,340,002	19,207,856	91,543,261	42,411,115	1.6x	22.4%	Third	Third
2018	NGP Keystone	Buyouts	25,000,000	10,150,000	-	NM	NM	NM	NM	NM	NM
2018	NGP XII	Buyouts	75,000,000	49,892,983	6,722,419	60,566,569	17,396,005	1.3x	12.9%	Fourth	Third
2018	Providence Strategic Growth III	Growth Equity	75,000,000	67,313,012	60,890,133	78,936,909	72,514,030	2.1x	37.1%	Third	Second
2018	Silver Lake Partners V	Buyouts	78,000,000	74,999,961	21,230,529	103,412,080	49,642,648	1.7x	24.0%	Third	Second
2018	TDR Capital IV	Buyouts	89,239,777	51,394,502	-	94,453,067	43,058,565	1.8x	41.9%	First	First
<b>2018 Total</b>			<b>\$972,237,693</b>	<b>\$6,234,605,196</b>	<b>\$7,839,174,581</b>	<b>\$1,263,454,114</b>	<b>\$2,868,023,498</b>	<b>1.5x</b>	<b>6.6%</b>	<b>NM</b>	<b>NM</b>
2019	Apollo Investment Fund IX	Buyouts	85,400,000	57,489,820	17,661,079	63,902,435	24,073,694	1.4x	30.6%	Third	Second
2019	ASF VIII B	Special Situations	100,000,000	41,812,014	6,622,414	NM	NM	NM	NM	NM	NM
2019	ASF VIII PA Co-Invest	Special Situations	50,000,000	9,885,240	-	NM	NM	NM	NM	NM	NM
2019	Audax Private Equity Fund VI	Buyouts	75,000,000	58,226,918	31,716,092	NM	NM	NM	NM	NM	NM
2019	Blackstone Capital Partners VIII	Buyouts	70,000,000	25,904,490	1,228,353	NM	NM	NM	NM	NM	NM
2019	Hellman & Friedman Capital Partners IX	Buyouts	90,000,000	84,683,326	3,017,970	NM	NM	NM	NM	NM	NM
2019	Insight Venture Partners XI	Growth Equity	75,000,000	71,250,000	133,132	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Fund V	Special Situations	75,000,000	30,894,415	1,556,740	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Mid-Cap Fund	Special Situations	25,000,000	9,945,346	1,334,931	NM	NM	NM	NM	NM	NM

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
2019	Permira VII	Buyouts	\$76,733,153	\$58,957,102	\$5,589,425	NM	NM	NM	NM	NM	NM
2019	Primavera Capital Fund III	Buyouts	75,000,000	78,241,480	9,345,614	NM	NM	NM	NM	NM	NM
2019	Providence Strategic Growth IV	Growth Equity	75,000,000	56,016,270	25,745,407	NM	NM	NM	NM	NM	NM
2019	TCV X	Growth Equity	75,000,000	56,289,972	-	144,341,540	88,051,568	2.6x	57.5%	Second	First
2019	Thoma Bravo Fund XIII	Buyouts	75,000,000	82,149,247	38,622,739				42.4%	Second	
2019	TSG8	Buyouts	100,000,000	51,080,109	292,630						
2019	Vista Equity Partners Fund VII	Buyouts	75,000,000	55,188,990	492,677						
2019	Wind Point Partners IX-A	Buyouts	75,000,000	49,175,159	1,434,440	NM	NM	NM	NM	NM	NM
<b>2019 Total</b>			<b>\$1,272,133,153</b>	<b>\$877,189,898</b>	<b>\$144,793,643</b>	<b>\$1,254,554,364</b>	<b>\$522,158,110</b>	<b>1.6x</b>	<b>38.2%</b>	<b>Second</b>	<b>Second</b>
2020	Altaris Health Partners V	Buyouts	50,000,000	12,112,813	-	NM	NM	NM	NM	NM	NM
2020	Ares PA Opportunities Fund, L.P. - Special Situations	Special Situations	100,000,000	53,789,411	10,623,117	NM	NM	NM	NM	NM	NM
2020	Clearlake Capital Partners VI	Special Situations	60,000,000	48,733,270	2,052,484	NM	NM	NM	NM	NM	NM
2020	CVC Capital Partners VIII	Buyouts	55,609,234	11,079,467	-	NM	NM	NM	NM	NM	NM
2020	HarbourVest PA Co-investment Fund	Buyouts	200,000,000	115,350,000	-	NM	NM	NM	NM	NM	NM
2020	LLR Equity Partners VI	Buyouts	50,000,000	20,810,462	-	NM	NM	NM	NM	NM	NM
2020	Neuberger Berman PA Co-Investment Fund	Buyouts	200,000,000	62,567,309	-	NM	NM	NM	NM	NM	NM
2020	Permira Susquehanna Opportunities - Buyout	Buyouts	40,000,000	18,557,655	-	NM	NM	NM	NM	NM	NM
2020	Thoma Bravo Discover Fund III	Buyouts	20,000,000	16,366,299	-	NM	NM	NM	NM	NM	NM
2020	Thoma Bravo Fund XIV	Buyouts	50,000,000	47,072,121	12	NM	NM	NM	NM	NM	NM
<b>2020 Total</b>			<b>\$825,609,234</b>	<b>\$406,438,807</b>	<b>\$12,675,613</b>	<b>\$485,852,236</b>	<b>\$92,089,042</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>
2021	Clearlake Capital Partners VII	Special Situations	100,000,000	-	-	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	22,539,234	13,043	NM	NM	NM	NM	NM	NM
2021	Providence Strategic Growth Europe	Growth Equity	73,162,569	39,066,018	4,290,092	NM	NM	NM	NM	NM	NM
2021	Providence Strategic Growth V	Growth Equity	50,000,000	6,939,227	-	NM	NM	NM	NM	NM	NM

## SCHEDULE OF INVESTMENTS BY VINTAGE YEAR

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
<b>2021 Total</b>			<b>\$373,162,569</b>	<b>\$123,054,053</b>	<b>\$4,303,135</b>	<b>\$131,280,134</b>	<b>\$12,529,215</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>
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	71,981,006	-	-	NM	NM	NM	NM	NM	NM
2022	TSG 9	Buyouts	100,000,000	-	-	NM	NM	NM	NM	NM	NM
<b>2022 Total</b>			<b>\$301,981,006</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>	<b>NM</b>
<b>Total: Active Investments</b>			<b>\$9,742,417,017</b>	<b>\$13,626,151,060</b>	<b>\$16,400,423,592</b>	<b>\$5,993,569,817</b>	<b>\$8,767,842,349</b>	<b>1.6x</b>	<b>9.7%</b>	<b>Third</b>	<b>Second</b>
<b>Total: Liquidated Investments</b>			<b>\$4,922,161,408</b>	<b>\$4,933,640,597</b>	<b>\$9,185,291,831</b>	<b>\$0</b>	<b>\$4,251,651,235</b>	<b>1.9x</b>	<b>16.2%</b>	<b>Second</b>	<b>Second</b>
<b>Total: Commonwealth of Pennsylvania State Employees' Retirement System</b>			<b>\$14,664,578,425</b>	<b>\$18,559,791,656</b>	<b>\$25,585,715,423</b>	<b>\$5,993,569,817</b>	<b>\$13,019,493,584</b>	<b>1.7x</b>	<b>12.7%</b>	<b>Third</b>	<b>Second</b>

## SCHEDULE OF INVESTMENTS BY SECTOR

As of March 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	38,298,283	50,892,045						
Buyouts	ABRY Partners VIII	2015	25,000,000	29,677,791	35,538,197						
Buyouts	Advent International GPE VI-A	2008	35,000,000	35,146,325	70,431,146	3,877,151	39,161,972	2.1x	16.6%	First	First
Buyouts	Advent International GPE VII-B	2012	40,000,000	37,600,000	61,725,466	9,169,173	33,294,639	1.9x	14.2%	Third	Second
Buyouts	Advent International GPE VIII-B	2016	50,000,000	50,000,000	36,531,240	64,905,265	51,436,505	2.0x	22.0%	Second	Second
Buyouts	Advent Latin American Private Equity Fund IV	2007	30,000,000	30,797,073	43,955,921	2,731,310	15,890,158	1.5x	9.0%	Second	Second
Buyouts	Advent Latin American Private Equity Fund V	2010	15,000,000	14,430,000	8,325,000	9,202,362	3,097,362	1.2x	3.2%	Fourth	Fourth
Buyouts	Advent Latin American Private Equity Fund VI	2015	25,000,000	22,875,000	9,875,000	34,517,771	21,517,771	1.9x	21.8%	Second	Second
Buyouts	Altaris Health Partners V	2020	50,000,000	12,112,813	-	NM	NM	NM	NM	NM	NM
Buyouts	Apollo Investment Fund IV	1997	75,000,000	74,838,620	124,814,033	984	49,976,397	1.7x	8.5%	Second	Second
Buyouts	Apollo Investment Fund IX	2019	85,400,000	57,489,820	17,661,079	63,902,435	24,073,694	1.4x	30.6%	Third	Second
Buyouts	Apollo Investment Fund V	2000	50,000,000	44,972,146	122,673,016	421,926	78,122,796	2.7x	38.8%	First	First
Buyouts	Apollo Investment Fund VI	2005	40,000,000	38,911,805	64,467,407	735,516	26,291,117	1.7x	8.6%	Second	Second
Buyouts	Asia Alternatives Capital Partners	2006	25,000,000	25,218,098	43,740,125	2,686,712	21,208,739	1.8x	11.0%	Second	Second
Buyouts	Asia Alternatives Capital Partners II	2007	29,949,500	29,080,459	61,170,476	15,964,606	48,054,623	2.7x	17.4%	First	First
Buyouts	Asia Alternatives Capital Partners III	2012	50,000,000	55,376,889	68,054,036	35,552,794	48,229,941	1.9x	14.0%	Third	Second
Buyouts	Asia Alternatives Capital Partners V	2017	50,000,000	43,717,148	5,347,237	50,396,362	12,026,451	1.3x	14.8%	Third	Fourth
Buyouts	Asia Alternatives Korea Buyout Investors (Hahn & Co)	2011	7,000,000	8,861,038	12,677,843	1,661,746	5,478,551	1.6x	11.0%	Third	Third
Buyouts	Audax Private Equity Fund	2000	35,000,000	36,839,098	56,057,910	471,990	19,690,802	1.5x	13.1%	First	Second
Buyouts	Audax Private Equity Fund II	2005	25,000,000	25,517,152	46,325,622	200,710	21,009,180	1.8x	14.1%	First	Second
Buyouts	Audax Private Equity Fund III	2007	37,000,000	42,498,691	82,716,671	1,197,189	41,415,170	2.0x	15.0%	Second	Second
Buyouts	Audax Private Equity Fund V	2016	50,000,000	44,832,961	57,711,203	36,038,805	48,917,047	2.1x	26.5%	Second	Second
Buyouts	Audax Private Equity Fund VI	2019	75,000,000	58,226,918	31,716,092	NM	NM	NM	NM	NM	NM
Buyouts	Berkshire Fund VI	2002	20,000,000	18,819,615	55,273,814						



## SCHEDULE OF INVESTMENTS BY SECTOR

As of March 31, 2022

SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
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	193,120,867	1,100,472	125,102,242	2.8x	36.2%	First	First
Buyouts	Blackstone Capital Partners V	2006	150,000,000	150,111,788	247,901,964	3,199,139	100,989,315	1.7x	7.6%	Second	Second
Buyouts	Blackstone Capital Partners VII	2016	50,000,000	52,631,273	24,306,364	61,736,280	33,411,371	1.6x	18.7%	Third	Third
Buyouts	Blackstone Capital Partners VIII	2019	70,000,000	25,904,490	1,228,353	NM	NM	NM	NM	NM	NM
Buyouts	Blackstone Communications Partners I	2000	25,000,000	25,114,042	30,998,189	191,439	6,075,586	1.2x	6.2%	Second	Second
Buyouts	Capvis Equity IV	2014	43,028,959	46,342,729	33,984,236	27,766,824	15,408,331				
Buyouts	Carlyle Energy Mezzanine Opportunities Fund	2012	50,000,000	65,517,654	34,066,380	6,303,746	(25,147,528)	0.6x	(15.4%)	Fourth	Fourth
Buyouts	CVC Capital Partners VII	2018	92,497,916	83,206,244	11,127,967	123,213,591	51,135,314	1.6x	28.9%	Second	Second
Buyouts	CVC Capital Partners VIII	2020	55,609,234	11,079,467	-	NM	NM	NM	NM	NM	NM
Buyouts	Eureka Growth Capital III	2013	20,000,000	15,767,810	35,863,978	8,053,191	28,149,359	2.8x	45.3%	First	Second
Buyouts	Eureka II	2006	20,000,000	21,906,935	22,842,724	4,823,752	5,759,541	1.3x	4.4%	Third	Third
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	43,490,515	4,672,575	18,779,173	1.6x	10.3%	Second	Second
Buyouts	Francisco Partners III	2011	20,000,000	20,514,684	58,281,352	9,206,890	46,973,558	3.3x	23.8%	Second	First
Buyouts	Francisco Partners IV	2015	25,000,000	24,656,280	48,419,069	32,578,209	56,340,998	3.3x	31.8%	First	First
Buyouts	Francisco Partners VII	2022	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyouts	FSN Capital IV	2013	37,971,770	38,520,666	73,684,675						
Buyouts	FSN Capital V	2017	80,328,451	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	24,135,037	47,142,609				40.1%	First	
Buyouts	GTCR Fund XII	2018	32,500,000	32,302,193	19,642,335				36.2%	Second	
Buyouts	GTCR VIII	2002	75,000,000	69,393,599	120,471,948				22.3%	First	
Buyouts	H.I.G. Brazil and Latin America Partners	2015	50,000,000	41,178,074	10,585,377						
Buyouts	H.I.G. Europe Capital Partners II	2014	24,497,493	22,568,576	17,730,497						
Buyouts	H.I.G. Growth Buyouts & Equity Fund II	2011	15,000,000	16,437,126	14,005,734						

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	Hahn & Company II	2014	\$50,000,000	\$55,706,172	\$39,337,733						
Buyouts	Hahn & Company III	2018	56,250,000	27,228,269	83,933						
Buyouts	Hahn & Company III - Supplemental Fund	2018	18,750,000	10,862,000	57,377						
Buyouts	HarbourVest IPEP III	1998	40,000,000	39,400,000	61,092,165	74,921	21,767,086	1.6x	8.6%	Second	Second
Buyouts	HarbourVest PA Co-investment Fund	2020	200,000,000	115,350,000	-	NM	NM	NM	NM	NM	NM
Buyouts	Hellman & Friedman Capital Partners IX	2019	90,000,000	84,683,326	3,017,970	NM	NM	NM	NM	NM	NM
Buyouts	Hellman & Friedman Capital Partners VI	2006	125,000,000	119,913,412	222,910,013	2,267,857	105,264,458	1.9x	12.9%	First	Second
Buyouts	Hellman & Friedman Capital Partners VIII	2016	50,000,000	51,060,710	26,777,195	79,238,232	54,954,717	2.1x	22.7%	Third	Second
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	38,492,130	1,324,733	11,571,547	1.4x	5.7%	Third	Second
Buyouts	Horizon Impact Fund	2014	50,000,000	44,629,802	54,360,139	31,726,326	41,456,663	1.9x	18.3%	Third	Third
Buyouts	Horizon Impact Fund B	2017	100,000,000	76,750,000	14,850,000	102,849,433	40,949,433	1.5x	17.7%	Third	Third
Buyouts	Horizon Strategic Fund - Carlyle Group	2014	100,000,000	105,970,198	112,895,498	86,092,654	93,017,954	1.9x	15.2%	Third	Third
Buyouts	Incline Equity Partners III	2013	15,000,000	16,006,245	41,866,592	154,403	26,014,749	2.6x	33.9%	First	Second
Buyouts	Kelso VII	2003	40,000,000	41,169,937	65,821,118	65,209	24,716,390	1.6x	11.4%	Second	Second
Buyouts	Kelso VIII	2007	150,000,000	146,686,760	208,554,873	7,790,154	69,658,267	1.5x	7.5%	Third	Third
Buyouts	LLR Equity Partners III	2008	30,000,000	29,108,722	63,935,615	2,528,694	37,355,587	2.3x	16.6%	Second	First
Buyouts	LLR Equity Partners IV	2014	50,000,000	45,485,764	91,513,578	21,906,905	67,934,719	2.5x	27.3%	Second	Second
Buyouts	LLR Equity Partners V	2018	75,000,000	68,340,002	19,207,856	91,543,261	42,411,115	1.6x	22.4%	Third	Third
Buyouts	LLR Equity Partners VI	2020	50,000,000	20,810,462	-	NM	NM	NM	NM	NM	NM
Buyouts	Madison Dearborn Capital Partners V	2006	63,817,077	71,571,265	116,017,833	1,682,408	46,128,976	1.6x	7.3%	Second	Second
Buyouts	Madison Dearborn Capital Partners VI	2008	50,000,000	53,258,583	112,050,064	7,898,850	66,690,331	2.3x	23.3%	First	First
Buyouts	Neuberger Berman PA Co-Investment Fund	2020	200,000,000	62,567,309	-	NM	NM	NM	NM	NM	NM
Buyouts	Newbridge Asia IV	2005	40,000,000	38,903,378	87,467,582						
Buyouts	NGP Keystone	2018	25,000,000	10,150,000	-	NM	NM	NM	NM	NM	NM
Buyouts	NGP XII	2018	75,000,000	49,892,983	6,722,419	60,566,569	17,396,005	1.3x	12.9%	Fourth	Third

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Buyouts	Oaktree Power Opportunities Fund III	2010	\$25,000,000	\$19,267,532	\$29,013,528						
Buyouts	Penn Asia Investors	2012	133,000,000	122,509,872	93,974,242	117,929,118	89,393,488	1.7x	16.2%	Second	Third
Buyouts	Permira European Fund II	2000	45,672,612	45,672,612	91,560,959	392,540	46,280,887	2.0x	21.6%	First	First
Buyouts	Permira European Fund III	2003	127,062,518	127,340,454	218,052,206	540,167	91,251,919	1.7x	26.1%	Second	Second
Buyouts	Permira IV	2006	136,383,828	138,422,695	208,443,061	50,506,590	120,526,957	1.9x	9.9%	Second	Second
Buyouts	Permira Susquehanna Opportunities - Buyout	2020	40,000,000	18,557,655	-	NM	NM	NM	NM	NM	NM
Buyouts	Permira VI	2017	56,660,418	51,150,582	28,972,718	74,226,955	52,049,091	2.0x	23.8%	Second	First
Buyouts	Permira VII	2019	76,733,153	58,957,102	5,589,425	NM	NM	NM	NM	NM	NM
Buyouts	Primavera Capital Fund II	2015	50,000,000	56,105,549	20,172,449	63,134,425	27,201,324	1.5x	9.7%	Fourth	Third
Buyouts	Primavera Capital Fund III	2019	75,000,000	78,241,480	9,345,614	NM	NM	NM	NM	NM	NM
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	75,215,312						
Buyouts	Ridgemont Equity Partners II	2015	50,000,000	50,971,205	50,960,707						
Buyouts	Sentinel Capital Partners V	2014	10,000,000	10,188,099	14,355,388	6,942,108	11,109,397	2.1x	21.7%	Second	Third
Buyouts	Silver Lake Partners V	2018	78,000,000	74,999,961	21,230,529	103,412,080	49,642,648	1.7x	24.0%	Third	Second
Buyouts	Sterling Group Partners IV	2016	20,000,000	19,840,007	15,979,809	28,598,813	24,738,615	2.2x	26.1%	Second	Second
Buyouts	TDR Capital IV	2018	89,239,777	51,394,502	-	94,453,067	43,058,565	1.8x	41.9%	First	First
Buyouts	Thoma Bravo Discover Fund III	2020	20,000,000	16,366,299	-	NM	NM	NM	NM	NM	NM
Buyouts	Thoma Bravo Fund XIII	2019	75,000,000	82,149,247	38,622,739				42.4%	Second	
Buyouts	Thoma Bravo Fund XIV	2020	50,000,000	47,072,121	12	NM	NM	NM	NM	NM	NM
Buyouts	TPG Asia V	2007	22,500,000	21,964,311	27,840,308	3,572,570	9,448,567	1.4x	6.4%	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	313,176	37,854,355	1.4x	4.8%	Third	Third
Buyouts	TPG Partners VI	2008	44,294,641	50,576,261	72,308,182	2,754,940	24,486,861	1.5x	9.6%	Second	Second
Buyouts	TSG 9	2022	100,000,000	-	-	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	TSG8	2019	\$100,000,000	\$51,080,109	\$292,630						
Buyouts	Vista Equity Partners Fund VI	2016	150,000,000	186,648,128	126,687,002						
Buyouts	Vista Equity Partners Fund VII	2019	75,000,000	55,188,990	492,677						
Buyouts	Wind Point Partners IX-A	2019	75,000,000	49,175,159	1,434,440	NM	NM	NM	NM	NM	NM
Buyouts	Wind Point Partners VIII	2017	100,000,000	97,516,136	78,383,775						
<b>Buyouts Total</b>			<b>6,232,242,492</b>	<b>\$5,294,620,283</b>	<b>\$5,514,585,705</b>	<b>\$3,663,878,350</b>	<b>\$3,883,843,772</b>	<b>1.7x</b>	<b>14.5%</b>	<b>Second</b>	<b>Second</b>
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	555,802	55,196,862	1.3x	3.6%	First	First
Growth Equity	HarbourVest Partners VII	2003	75,000,000	73,687,500	117,075,996	1,938,931	45,327,427	1.6x	6.7%	First	First
Growth Equity	HarbourVest Partners VIII	2006	100,000,000	98,000,000	172,989,043	48,910,997	123,900,040	2.3x	11.8%	First	First
Growth Equity	Insight Partners Fund XII	2021	50,000,000	22,539,234	13,043	NM	NM	NM	NM	NM	NM
Growth Equity	Insight Venture Partners IX	2015	50,000,000	52,784,788	48,528,033	169,785,938	165,529,184	4.1x	32.9%	Second	First
Growth Equity	Insight Venture Partners VII	2011	20,000,000	22,129,992	53,076,524	16,946,594	47,893,126	3.2x	22.3%	Second	Second
Growth Equity	Insight Venture Partners VIII	2013	50,000,000	53,016,419	111,531,574	51,027,970	109,543,125	3.1x	21.8%	Second	Second
Growth Equity	Insight Venture Partners X	2018	100,000,000	100,373,487	42,913,587	257,152,727	199,692,827	3.0x	45.2%	Second	First
Growth Equity	Insight Venture Partners XI	2019	75,000,000	71,250,000	133,132	NM	NM	NM	NM	NM	NM
Growth Equity	JMI Equity Fund VI	2007	40,000,000	40,000,246	69,876,395	1,673,553	31,549,702	1.8x	11.5%	Second	Second
Growth Equity	JMI Equity Fund VII	2011	10,000,000	9,780,000	23,216,560	1,182,139	14,618,699	2.5x	17.9%	Third	Third
Growth Equity	JMI Equity Fund VIII	2015	25,000,000	27,275,000	39,423,605	28,868,600	41,017,205	2.5x	31.5%	Second	Third
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	52,907,319						
Growth Equity	Lightspeed Venture Partners VIII	2008	15,000,000	15,000,000	36,819,713						
Growth Equity	Meritech Capital Partners IV	2011	20,000,000	19,700,000	44,043,149						
Growth Equity	Meritech Capital Partners V	2014	23,000,000	22,310,000	141,849,990						
Growth Equity	New Enterprise Associates 11	2003	25,000,000	25,000,000	63,385,828	3,270,845	41,656,673	2.7x	15.5%	First	First

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SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Growth Equity	New Enterprise Associates 12	2006	\$35,000,000	\$35,631,130	\$48,025,951	\$3,504,809	\$15,899,630	1.4x	6.8%	Second	Second
Growth Equity	New Enterprise Associates IX	1999	20,000,000	19,600,000	8,739,870	377,696	(10,482,434)	0.5x	(6.1%)	Third	Third
Growth Equity	New Enterprise Associates X	2000	35,000,000	35,028,000	39,412,034	2,297,689	6,681,723	1.2x	2.6%	Second	Second
Growth Equity	NewSpring Growth Capital II	2006	10,000,000	9,850,000	19,519,679						
Growth Equity	Providence Strategic Growth Europe	2021	73,162,569	39,066,018	4,290,092	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth Europe II, L.P.	2022	71,981,006	-	-	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth II	2016	60,000,000	77,434,748	125,545,075	65,739,458	113,849,785	2.5x	43.6%	First	Second
Growth Equity	Providence Strategic Growth III	2018	75,000,000	67,313,012	60,890,133	78,936,909	72,514,030	2.1x	37.1%	Third	Second
Growth Equity	Providence Strategic Growth IV	2019	75,000,000	56,016,270	25,745,407	NM	NM	NM	NM	NM	NM
Growth Equity	Providence Strategic Growth V	2021	50,000,000	6,939,227	-	NM	NM	NM	NM	NM	NM
Growth Equity	TCV X	2019	75,000,000	56,289,972	-	144,341,540	88,051,568	2.6x	57.5%	Second	First
Growth Equity	Weathergage Venture Capital	2007	25,000,000	22,875,000	44,247,579	15,969,907	37,342,486	2.6x	13.8%	Second	Second
Growth Equity	Weathergage Venture Capital II	2010	25,000,000	23,250,000	54,829,514	45,041,933	76,621,447	4.3x	21.1%	Second	First
<b>Growth Equity Total</b>			<b>1,572,911,575</b>	<b>\$1,362,718,139</b>	<b>\$1,781,606,975</b>	<b>\$1,372,141,733</b>	<b>\$1,791,030,569</b>	<b>2.3x</b>	<b>12.2%</b>	<b>Third</b>	<b>Second</b>
Keystone Legacy Fund	Keystone Legacy Fund	2018	200,000,000	5,589,809,797	7,574,802,005	281,977,048	2,266,969,256	1.4x	6.0%	NM	NM
<b>Keystone Legacy Fund Total</b>			<b>200,000,000</b>	<b>\$5,589,809,797</b>	<b>\$7,574,802,005</b>	<b>\$281,977,048</b>	<b>\$2,266,969,256</b>	<b>1.4x</b>	<b>6.0%</b>	<b>NM</b>	<b>NM</b>
Special Situations	ABRY Advanced Securities Fund	2007	7,262,950	23,529,104	38,786,236						
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	61,366,174	26,815,944	59,195,451	24,645,221	1.4x	7.8%	Fourth	Fourth
Special Situations	Ares PA Opportunities Fund, L.P. - Special Situations	2020	100,000,000	53,789,411	10,623,117	NM	NM	NM	NM	NM	NM
Special Situations	ASF VII B	2016	100,000,000	62,871,929	41,331,254						
Special Situations	ASF VII PA Co-Invest	2016	50,000,000	30,026,958	24,051,896						
Special Situations	ASF VIII B	2019	100,000,000	41,812,014	6,622,414	NM	NM	NM	NM	NM	NM
Special Situations	ASF VIII PA Co-Invest	2019	50,000,000	9,885,240	-	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						

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Special Situations	AXA Secondary Fund III-2	2004	\$14,000,000	\$11,677,210	\$19,062,764						
Special Situations	AXA Secondary Fund IV	2006	80,000,000	70,134,752	99,618,118						
Special Situations	AXA Secondary Fund V B	2012	75,000,000	61,682,742	97,337,534						
Special Situations	Centerbridge Capital Partners I	2006	50,000,000	57,337,396	117,317,806	2,209,378	62,189,788	2.1x	19.2%	First	First
Special Situations	Centerbridge Capital Partners III	2015	30,000,000	38,480,700	27,967,556	34,403,724	23,890,580	1.6x	19.5%	Second	Third
Special Situations	Clearlake Capital Partners IV	2015	15,000,000	22,983,242	33,553,794	16,998,204	27,568,756	2.2x	33.7%	First	Second
Special Situations	Clearlake Capital Partners V	2018	55,000,000	68,732,746	82,496,439	83,951,595	97,715,288	2.4x	53.9%	First	First
Special Situations	Clearlake Capital Partners VI	2020	60,000,000	48,733,270	2,052,484	NM	NM	NM	NM	NM	NM
Special Situations	Clearlake Capital Partners VII	2021	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Special Situations	Dover Street VII	2007	30,000,000	28,696,128	40,444,997	778,892	12,527,761	1.4x	9.1%	Third	Third
Special Situations	H.I.G. Bayside Debt & LBO Fund II	2008	30,000,000	31,448,253	48,942,708						
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	KPS Special Situations Fund IV	2014	25,000,000	23,523,004	24,290,154	19,088,896	19,856,046	1.8x	24.9%	Second	Third
Special Situations	KPS Special Situations Fund V	2019	75,000,000	30,894,415	1,556,740	NM	NM	NM	NM	NM	NM
Special Situations	KPS Special Situations Mid-Cap Fund	2019	25,000,000	9,945,346	1,334,931	NM	NM	NM	NM	NM	NM
Special Situations	LBC Credit Partners III	2013	50,000,000	46,696,243	52,657,645				8.3%	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	33,713,063						
Special Situations	OCM Opportunities Fund VII	2007	40,000,000	40,000,000	54,885,803						
Special Situations	OCM Opportunities Fund VII b	2007	40,000,000	36,000,000	62,318,740						
Special Situations	OCM Opportunities Fund VIII	2010	12,500,000	12,583,425	18,176,218						
Special Situations	OCM Opportunities Fund VIIIb	2010	12,500,000	12,500,000	13,885,884						
Special Situations	Platinum Equity Capital Partners III	2013	50,000,000	47,112,591	88,903,502	12,215,461	54,006,372	2.1x	38.8%	First	Second

## SCHEDULE OF INVESTMENTS BY SECTOR

As of March 31, 2022

SECTOR	FUND	VINTAGE	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR	IRR RANK	TVM RANK
Special Situations	RRJ Capital Master Fund III	2015	\$50,000,000	\$48,836,505	\$44,417,375	\$11,068,625	\$6,649,495	1.1x	6.8%	Fourth	Fourth
<b>Special Situations Total</b>			<b>\$1,737,262,950</b>	<b>\$1,379,002,841</b>	<b>\$1,529,428,907</b>	<b>\$675,572,686</b>	<b>\$825,998,752</b>	<b>1.6x</b>	<b>14.6%</b>	<b>First</b>	<b>First</b>
<b>Total: Active Investments</b>			<b>\$9,742,417,017</b>	<b>\$13,626,151,060</b>	<b>\$16,400,423,592</b>	<b>\$5,993,569,817</b>	<b>\$8,767,842,349</b>	<b>1.6x</b>	<b>9.7%</b>	<b>Third</b>	<b>Second</b>
<b>Total: Liquidated Investments</b>			<b>\$4,922,161,408</b>	<b>\$4,933,640,597</b>	<b>\$9,185,291,831</b>	<b>\$0</b>	<b>\$4,251,651,235</b>	<b>1.9x</b>	<b>16.2%</b>	<b>Second</b>	<b>Second</b>
<b>Total: Commonwealth of Pennsylvania State Employees' Retirement System</b>			<b>\$14,664,578,425</b>	<b>\$18,559,791,656</b>	<b>\$25,585,715,423</b>	<b>\$5,993,569,817</b>	<b>\$13,019,493,584</b>	<b>1.7x</b>	<b>12.7%</b>	<b>Third</b>	<b>Second</b>

## SCHEDULE OF INVESTMENTS BY DIVERSE INVESTMENTS

As of March 31, 2022

VINTAGE	FUND	SECTOR	COMMITMENT	CONTRIBUTIONS	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS	TVM	IRR
2015	Clearlake Capital Partners IV	Special Situations	\$15,000,000	\$22,983,242	\$33,553,794	\$16,998,204	\$1,590,014	2.2x	33.7%
2016	Vista Equity Partners Fund VI	Buyouts	150,000,000	186,648,128	126,687,002				
2018	Clearlake Capital Partners V	Special Situations	55,000,000	68,732,746	82,496,439	83,951,595	8,715,584	2.4x	53.9%
2019	Thoma Bravo Fund XIII	Buyouts	75,000,000	82,149,247	38,622,739				42.4%
2019	TSG8	Buyouts	100,000,000	51,080,109	292,630				
2019	Vista Equity Partners Fund VII	Buyouts	75,000,000	55,188,990	492,677				
2020	Clearlake Capital Partners VI	Special Situations	60,000,000	48,733,270	2,052,484	NM	NM	NM	NM
2020	Thoma Bravo Discover Fund III	Buyouts	20,000,000	16,366,299	-	NM	NM	NM	NM
2020	Thoma Bravo Fund XIV	Buyouts	50,000,000	47,072,121	12	NM	NM	NM	NM
2021	Clearlake Capital Partners VII	Special Situations	100,000,000	-	-	NM	NM	NM	NM
2022	TSG 9	Buyouts	100,000,000	-	-	NM	NM	NM	NM
<b>Total: Commonwealth of Pennsylvania State Employees' Retirement System</b>			<b>\$800,000,000</b>	<b>\$578,954,151</b>	<b>\$284,197,777</b>	<b>\$738,523,473</b>	<b>\$53,639,029</b>	<b>1.8x</b>	<b>28.4%</b>



## END NOTES

### Performance Summary

Commitment reflects current commitment include 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 March 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 March 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 March 31, 2022, for funds with vintage years 1980 to 2022. Returns shown are dollar-weighted (IRR).

### 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.

## END NOTES CONTINUED

### Schedule of Investments by Vintage Year, Sector, Diverse Managers

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

Contributions includes 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 March 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.

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.

**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 32-33 - Redacted**