



Semi-Annual Board Update

For the period ending June 30, 2020

Report Prepared For:



Table of Contents

I.	Overview	1
	Portfolio Performance Assessment	1
	Portfolio Performance vs. Benchmarks	2
II.	Market Overview	3
	Executive Summary	3
	Capital Markets Overview	5
	Public Equity Markets	5
	Debt Markets	7
	Private Equity Market Overview	8
	Dry Powder	8
	Private Equity Performance	8
	Fundraising	9
	Investment Activity	10
	Exit Environment	11
III.	SERS Portfolio Review	12
	Summary	12
	New Investment Commitments	12
	Subsequent Investment Commitments	12
	Performance	13
	Quarterly Performance	13
	Diversification	15
	Core Portfolio Periodic Returns vs. Russell 3000® Index	15
	Performance by Strategy	15
	Portfolio Cash Flow Analysis	16
	Subsequent Cash Flow Activity	19
IV.	End Notes	20
V.	Exhibits	21
	Exhibit A – Investments by Vintage Year	22
	Exhibit B – Investments by Sector	31
VI.	Definitions	40

Disclaimer on this Page - Redacted

I. Overview

StepStone Group LP (“StepStone”) was engaged by Pennsylvania State Employees’ Retirement System (“SERS”) to provide Private Equity Advisory services for prospective investment opportunities as well as portfolio monitoring and reporting. StepStone monitors new and existing private equity investments for SERS at both the fund level and underlying portfolio company level to provide detailed performance and exposure analysis. The following report represents SERS’ portfolio of Private Investments (the “Portfolio”).

Since inception through June 30, 2020, SERS has committed \$13.6 billion to 322 partnerships, of which 180 are active. This quarterly monitoring report covers the performance of the Portfolio as of June 30, 2020, as well as significant activity that occurred during the third quarter of 2020. Natural Resource partnerships are included in Buyout as of July 1, 2016. SERS consolidated 163 Fund investments under Keystone Legacy Fund as of July 1, 2018.

Portfolio Performance Assessment

As of June 30, 2020, the Portfolio managed by SERS consisted of the following (all amounts herein \$ millions unless otherwise noted):

SERS PORTFOLIO PERFORMANCE OVERVIEW					
<i>\$ in millions</i>	JUNE 30, 2020	MARCH 31, 2020	JUNE 30, 2019	QUARTERLY Δ	ANNUAL Δ
Number of Managers	115	115	113	-	2
Number of Investments	322	320	313	2	9
Number of Active Managers	63	63	62	-	1
Number of Active Investments	180	178	171	2	9
Committed Capital ¹	\$13,620.0	\$13,375.8	\$12,926.7	\$244.3	\$693.3
Contributed Capital ²	17,023.5	16,882.2	16,363.9	141.3	659.6
Distributed Capital ³	23,033.1	22,934.6	22,195.1	98.5	838.0
Market Value	4,038.4	3,610.8	3,985.1	427.7	53.3
Total Value	27,071.5	26,545.4	26,180.2	526.1	891.3
Unfunded Commitment	2,611.2	2,484.7	2,535.8	126.5	75.5
Total Exposure ⁴	6,649.7	6,095.5	6,520.9	554.2	128.8
Total Gain/(Loss)	\$10,048.0	\$9,663.2	\$9,816.3	\$384.8	\$231.7
DPI ⁵	1.35x	1.36x	1.36x	(0.01x)	(0.00x)
TVM ⁶	1.59x	1.57x	1.60x	0.02x	(0.01x)
IRR ⁷	12.16%	12.06%	12.23%	+9 bps	(8) bps

Note: Portfolio excludes T.Rowe Price Stock Distribution Account. **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.

Portfolio Performance vs. Benchmarks

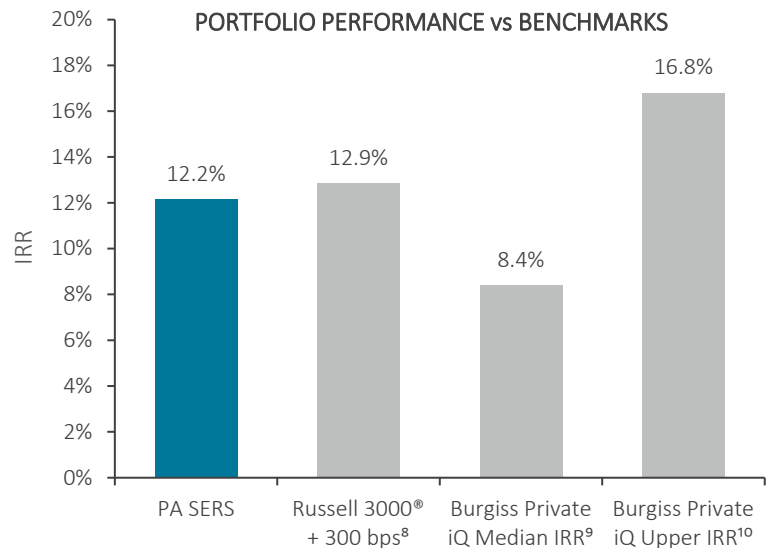
The Portfolio's performance is measured against two benchmarks, the Russell 3000® and Burgiss Private iQ.

The following graph illustrates Portfolio IRR performance versus benchmarks as of June 30, 2020.

StepStone believes the Russell 3000® Index plus 300 bps from inception appropriately reflects the opportunity cost of investing in Buyout, Venture Capital, and Special Situations investments versus publicly traded common stocks and therefore is an appropriate benchmark for SERS.

SERS' returns include Buyout, Venture Capital, and Special Situations investments from vintage years 1980 to 2020.

SERS' Core Buyout, Venture Capital, and Special Situations investments have a since inception IRR of 14.9%, 16.2%, and 13.9% respectively.



	1 YEAR RETURN	3 YEAR RETURN	5 YEAR RETURN	10 YEAR RETURN
SERS Combined Portfolio (IRR)	6.0%	9.5%	7.8%	12.1%
Burgiss Private iQ Pooled PE Benchmark ¹¹	4.5%	11.2%	10.4%	13.0%
Burgiss Private iQ All PE Top-Quartile ¹²	11.7%	17.2%	15.8%	18.1%
Russell 3000® ⁸	6.5%	10.0%	10.0%	13.7%
Russell 3000® + 300 bps ⁸	9.5%	13.0%	13.0%	16.7%
SERS Core Buyout (IRR)	9.5%	11.7%	11.0%	15.0%
Burgiss Private iQ Pooled Buyout Benchmark ¹¹	0.9%	9.4%	10.5%	13.0%
Burgiss Private iQ Buyout Top-Quartile ¹²	8.5%	16.6%	17.3%	19.0%
SERS Core Venture Capital (IRR)	18.8%	24.4%	15.8%	21.0%
Burgiss Private iQ Pooled VC Benchmark ¹¹	14.7%	19.0%	12.8%	16.1%
Burgiss Private iQ VC Top-Quartile ¹²	18.5%	22.3%	17.4%	20.1%
SERS Core Special Situations (IRR)	8.1%	10.1%	7.5%	11.5%
Burgiss Private iQ Pooled SS Benchmark ¹¹	(2.4%)	4.1%	5.1%	8.4%
Burgiss Private iQ SS Top-Quartile ¹²	7.0%	11.0%	10.7%	12.0%
SERS Keystone Legacy Fund (IRR)	(14.7%)	(2.3%)	1.1%	8.3%
Burgiss Private iQ Pooled PE Benchmark ¹¹	4.5%	11.2%	10.4%	13.0%
Burgiss Private iQ All PE Top-Quartile ¹²	11.7%	17.2%	15.8%	18.1%

Note: Burgiss Private iQ data is continuously updated and is therefore subject to change. The referenced indices are shown for general market comparisons and are not meant to represent any specific 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.

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.

II. Market Overview

Executive Summary

The COVID-19 outbreak sent global equity markets into a severe and abrupt decline in Q1, highlighted by the S&P 500's fastest 30% decline in its history; however, global equity markets reversed course quickly in Q2, with the S&P 500 experiencing the largest 50-day advance in its history. While the equity markets have seen a V-shape recovery, the gains were mainly in U.S. large-cap tech stocks and the valuation dispersion between growth and value companies continues to widen. Record levels of fiscal stimulus, low interest rates, and ongoing inflation have created a favorable environment for equities to outperform cash and bonds. Additionally, while oil prices initially declined in the beginning of Q2, pricing sharply rebounded to approximately \$40/barrel by quarter-end. Investors flocked to gold, which rallied 13%, as the expansion of central banks' balance sheets and fiscal deficits provided the potential for future inflation.

Global economic activity and consumer sentiment also rebounded since the end of March. The CARES Act in the U.S. was able to keep many businesses afloat and individuals employed. U.S. weekly unemployment claims significantly declined as the quarter progressed and economic indicators such as retail sales and new housing starts pointed to a recovery in consumer confidence. China's economy grew 3.5% in the second quarter on strong manufacturing activity and an increased demand for Chinese exports. In Europe, there are countries that were already struggling prior to the pandemic and as a result, may take longer to recover than other parts of the world. However, PMI manufacturing and services data has been encouraging as the index significantly increased during each month of the quarter. While the worst of the recession appears to have passed for global economies, industries such as travel, leisure, restaurants, and hotels remain well below pre-pandemic levels.

All global equities rose in Q2 2020, led by the S&P 500 Total Return Index, which gained 20.5%, as government stimulus and positive news on the virus lifted the index to near all-time highs. The MSCI Emerging Markets Index recorded its strongest quarterly return in over a decade, returning 17.3%, as the weakening U.S. dollar sparked demand in emerging market assets. Meanwhile, the MSCI Europe Index rose 14.3%, due to parts of the eurozone being able to ease lockdown restrictions as they contained the spread of the virus.

In the private markets, capital activity generally slowed in Q2. U.S. leveraged buyout ("LBO") debt volume decreased 31.4% quarter-over-quarter and 8.2% year-over-year to \$15.6 billion, which is 25.0% lower than the 10-year quarterly average of \$20.8 billion. According to data from S&P, purchase price multiples for U.S. LBOs were 9.2x EBITDA in the second quarter, down from 11.2x EBITDA in the prior quarter, and below the 10-year average of 9.7x EBITDA. While a decline in purchase price multiples seems appropriate, the sample size comprised of only 10 deals. Average debt multiples of large corporate U.S. LBO loans decreased to 4.9x from 5.3x over the quarter, which is below the 10-year average of 5.5x. Equity contributions for U.S. LBOs decreased slightly to 46.1%, but above the 10-year average of 41.7%¹³.

Given travel restrictions and various national lockdowns, global private equity fundraising declined 34.6% quarter-over-quarter to \$146.2 billion, representing a decline of 15.8% compared to the second quarter of 2019. Larger, more established and well-known GPs have fared better than emerging managers or first-time funds which are having a harder time meeting and building LPs relationships. U.S.-focused funds represented 72.9% of total dollar amount raised during the quarter, above the 10-year average of 60.4%. Funds raised in Europe, Asia, and the rest of world made up 12.3%, 10.6% and 4.3%, respectively, of global fundraising for the quarter. Dollars invested by private equity funds rose 2.7% quarter-over-quarter but was down 12.1% year-over-year, however the average investment per company increased 12.2% quarter-over-quarter to \$20.8 million. Companies operating in the Information Technology sector continue to account for a significant portion of the invested capital, with over 33.8% of the capital deployed in the second quarter.

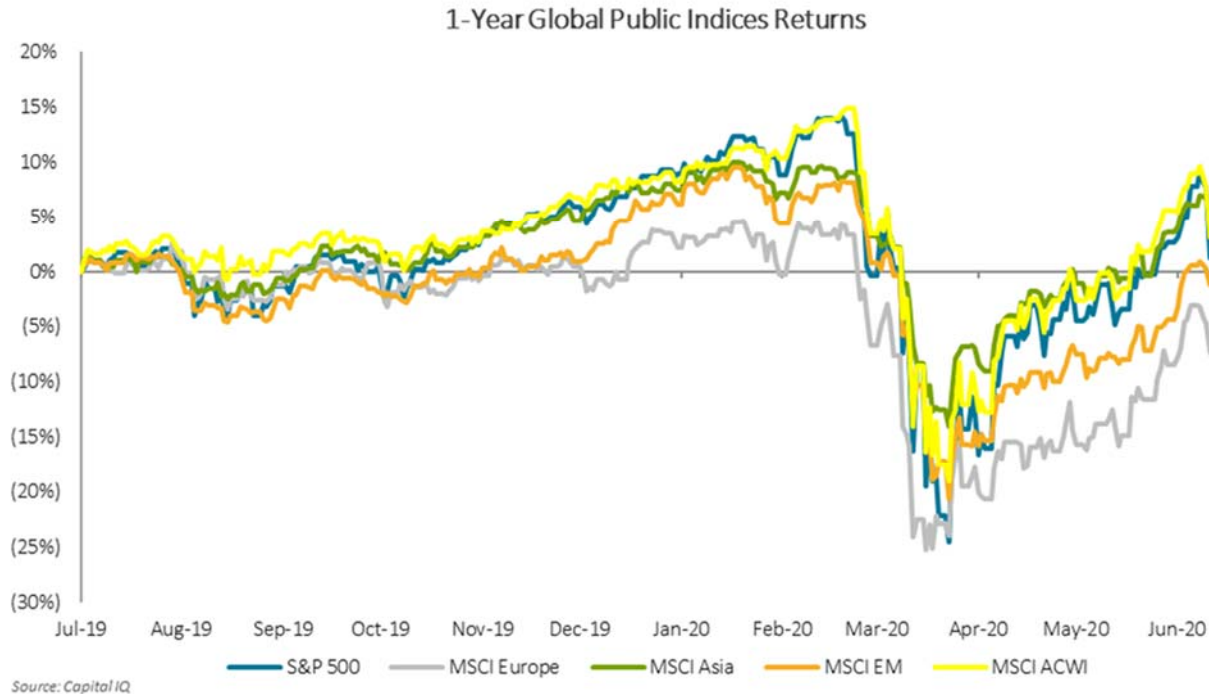
Private equity-backed IPO transaction volume increased in the second quarter by 95.1% compared to the prior quarter but decreased by 51.2% compared to the second quarter of 2019, with \$10.4 billion raised in 25 IPOs. The largest IPOs of the second quarter were completed by Dun & Bradstreet Holdings Inc. (NYSE: DNB), which raised \$2.0 billion, and Zoominfo Technologies Inc. (NASDAQ: ZI), which raised \$934.5 million. Together these deals represented 50.4% of the total value for all IPOs during the quarter. M&A activity decreased 39.3% quarter-over-quarter to \$143.1 billion and was down 35.6% compared to the second quarter of 2019. The largest M&A deals of the quarter were the \$83.6 billion purchase of Sprint Corporation by T-Mobile US, Inc. and the \$6.0 billion purchase of Iqsa Services Limited by The Blackstone Group, Inc. (NYSE: BX). Together these deals represented 62.7% of the total value for all deals during the quarter¹⁴.

Special purpose acquisition companies (“SPACs”) have continued to gain in popularity with private equity firms as an investment vehicle. A SPAC is a company with no commercial operations and is formed strictly to raise capital through an IPO for the purpose of acquiring an existing company. In 2020 alone, more than 88 SPACs have been formed in the U.S. and have raised a total of \$40.0 billion¹⁵. Some notable SPACs that went public through a reverse merger in 2020 were DraftKings (NASDAQ: DKNG) and Virgin Galactic (NYSE: SPCE).

Capital Markets Overview

Public Equity Markets

After the sharp decline in global equity markets in the first quarter from global fears of the impact of COVID-19, global markets rebounded quickly in Q2. As economies reopened, market sentiment improved and the Chicago Board Option Exchange’s Volatility Index (“VIX”) dropped to levels last seen in late 2018. The S&P 500 roared back to near all-time highs, led by a strong recovery in large-cap tech and growth stocks. While public markets have risen quicker than expected, global economies still have a long road ahead of them to get back to pre-pandemic levels.



The following table shows the returns of four major MSCI indices, as well as the S&P 500 and the S&P 500 Total Return Index, over various time horizons through June 30, 2020. Returns for time periods greater than one year are annualized. All indices rose sharply in the quarter, led by the S&P 500 Total Return of 20.5%.

Regional Indices

	3 Mo	1 Yr	3 Yr	5 Yr	10 Yr
MSCI Asia	14.1%	0.1%	1.1%	1.8%	3.8%
MSCI Europe	14.3%	(8.8%)	(2.7%)	(1.3%)	2.7%
MSCI EM	17.3%	(5.7%)	(0.5%)	0.5%	0.8%
MSCI ACWI	18.7%	0.3%	4.1%	4.4%	6.9%
S&P 500	20.0%	5.4%	8.6%	8.5%	11.6%
S&P 500 Total Return*	20.5%	7.5%	10.7%	10.7%	14.0%

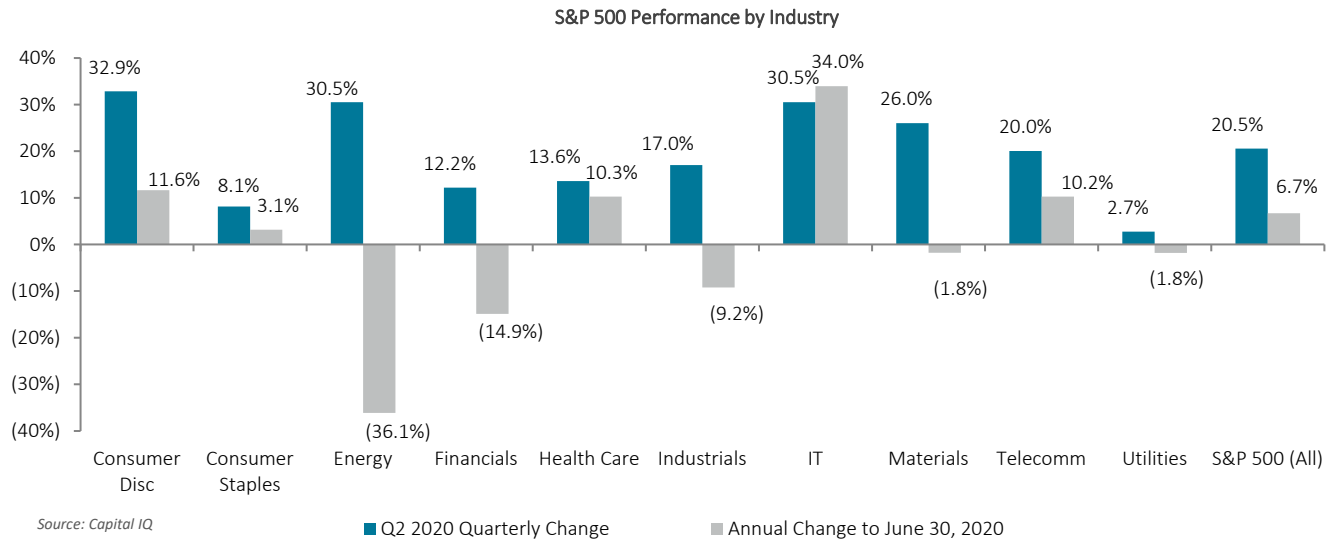
For the period ended June 30, 2020

*Includes reinvestment of dividends.

Source: Capital IQ

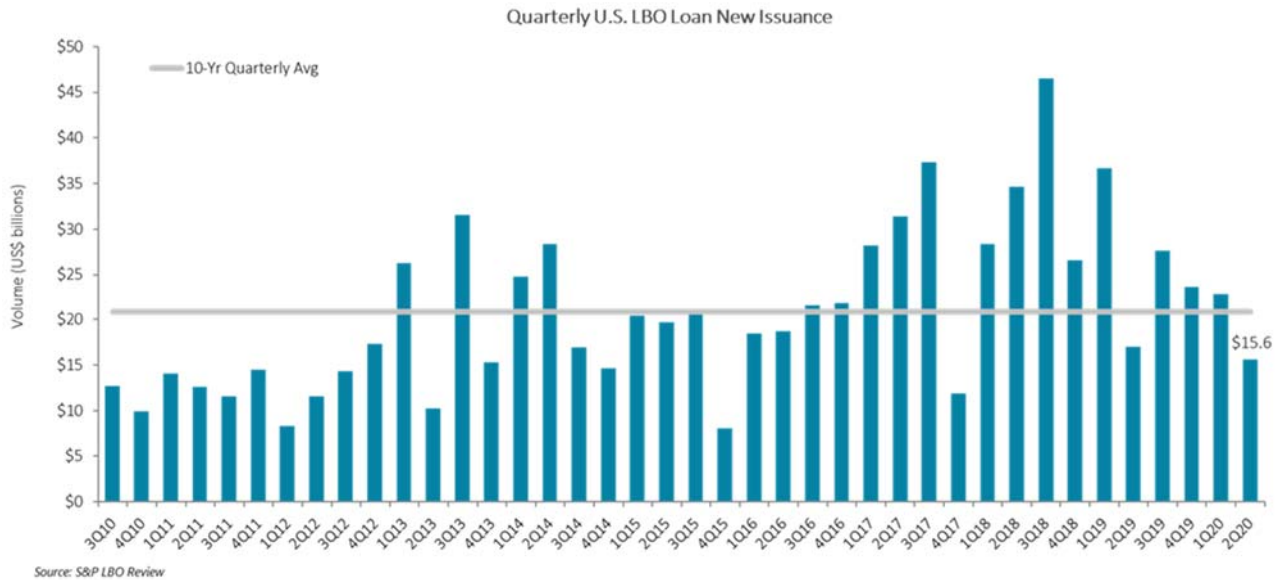
The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially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

The following table shows the quarterly and annual returns of the S&P 500 Total Return and each GIC sector for the period ending June 30, 2020. All ten GIC sectors were up during the second quarter, led by Consumer Discretionary, Energy and Information Technology, rising 32.9%, 30.5% and 30.5%, respectively. Non-cyclical sectors Consumer Staples and Utilities rose the least, rising 8.1% and 2.7%, respectively, for the quarter.

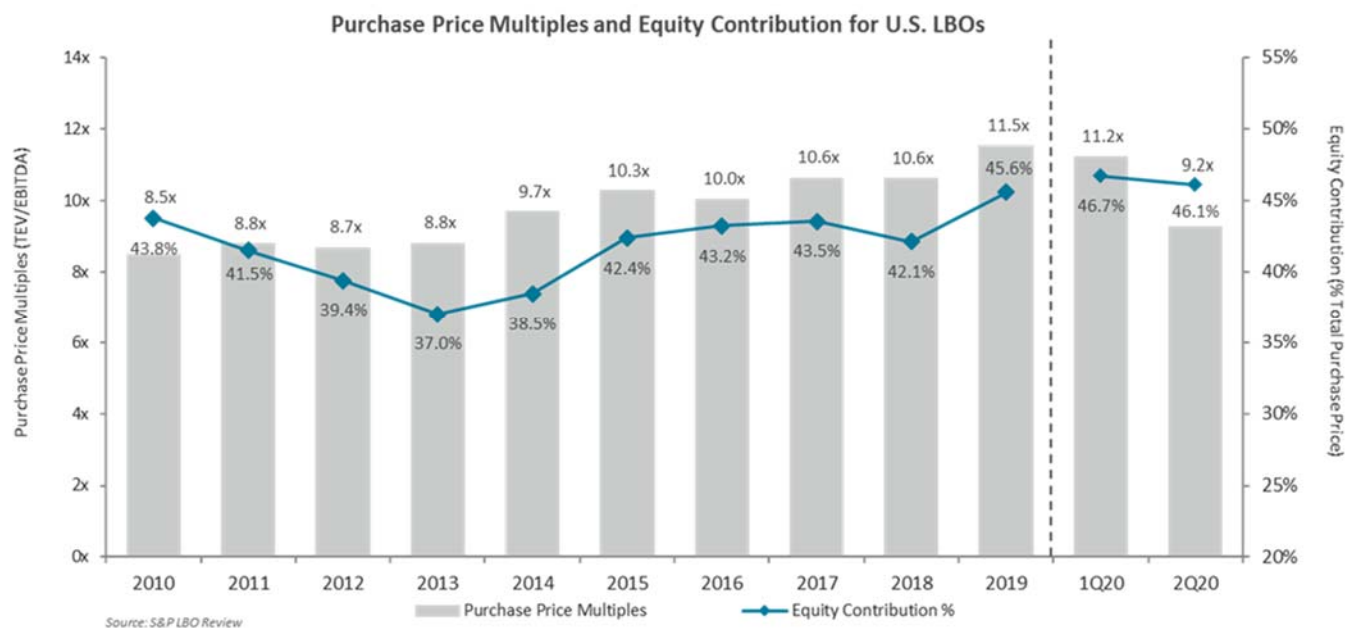


Debt Markets

During the second quarter of 2020, U.S. LBO new loan issuance totaled \$15.6 billion, representing a decrease of 31.4% from the prior quarter, a decrease of 8.2% from the second quarter of 2019 and a 25% decrease from the 10-year quarterly average of \$20.8 billion. The following chart shows the quarterly volume of U.S. LBO new loan issuance for the past ten years.



The weighted average purchase price multiple for U.S. LBO deals decreased significantly to 9.2x total enterprise value (“TEV”) to EBITDA in the second quarter from 11.2x EBITDA in the prior quarter and from an average of 11.5x during 2019, and below the 10-year average of 9.7x. The average debt multiple of large corporate U.S. LBO loans decreased during the quarter to 4.9x EBITDA, while equity contributions for U.S. LBOs increased from 45.6% to 46.7%. The following chart compares purchase price multiples and equity contribution percentages for U.S. LBO deals.



Private Equity Market Overview

Dry Powder

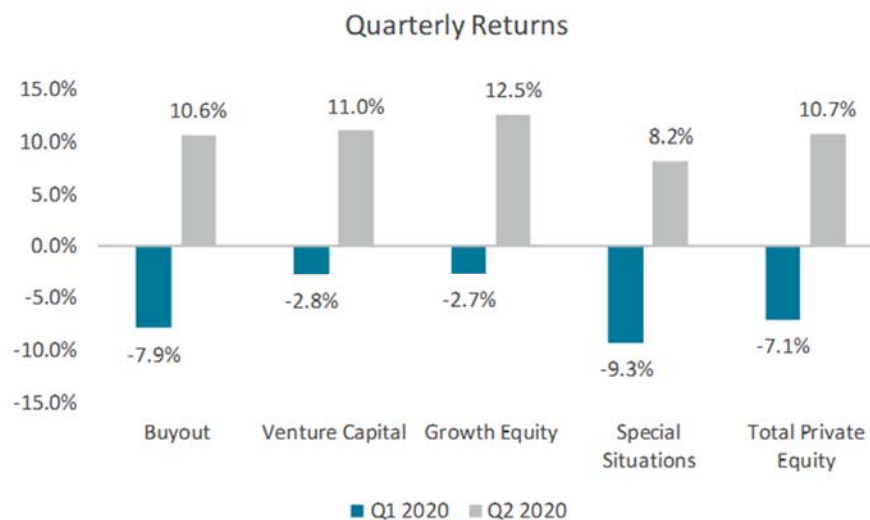
General partners are sitting on more than \$2.9 trillion of dry powder, including more than \$2.1 trillion in private equity funds—enabling them to provide support for sound investments in need of capital during this massive stop in economic activity. Direct Lending funds have flexibility to renegotiate and support borrowers as they are less restricted by regulations faced by traditional lenders and institutional banks. Patient capital creates flexibility for more investments to survive the downturn. However, many funds won't have the capital to support their investments; GPs will need to get creative.



Source: Preqin, as of October 2019; Preqin data is continuously updated, and historical values are subject to change

Private Equity Performance

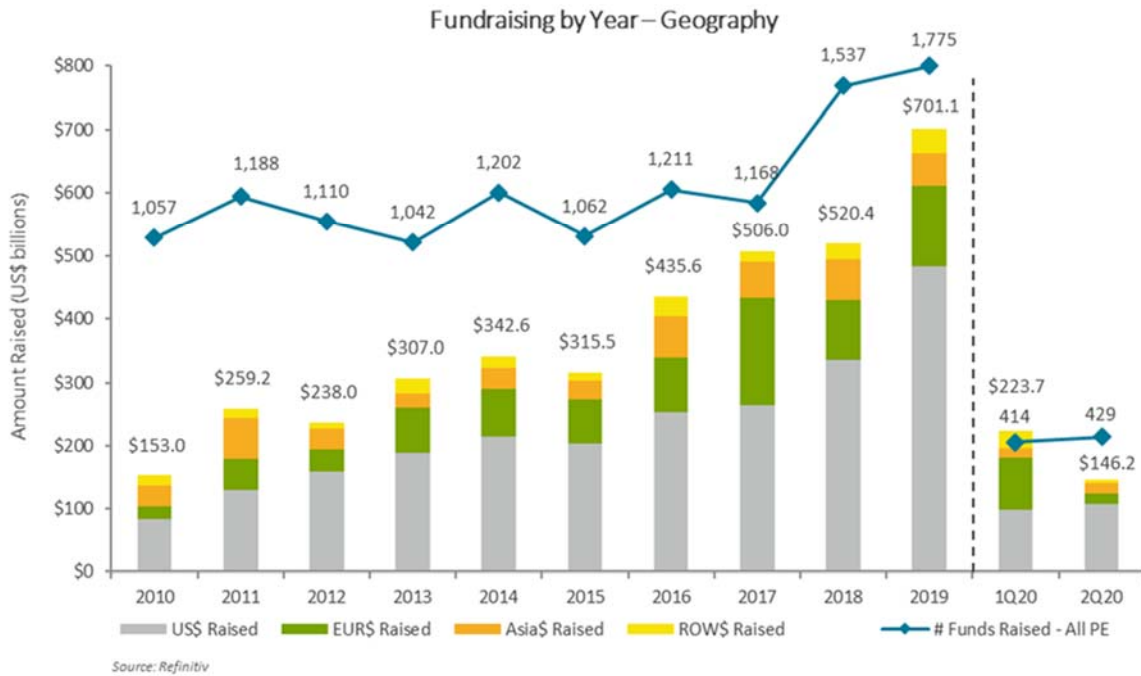
Similar to the public markets, private equity returns for Q2 2020 have rebounded from Q1 2020 as shown in the chart below, with all sectors showing positive returns based on data received thus far in Q2.



Source: StepStone Portfolio Analytics & Reporting ("SPAR"). SPAR data are updated continuously; values are subject to change. Based on Q2 NAVs reported as of 10/1/2020.

Fundraising

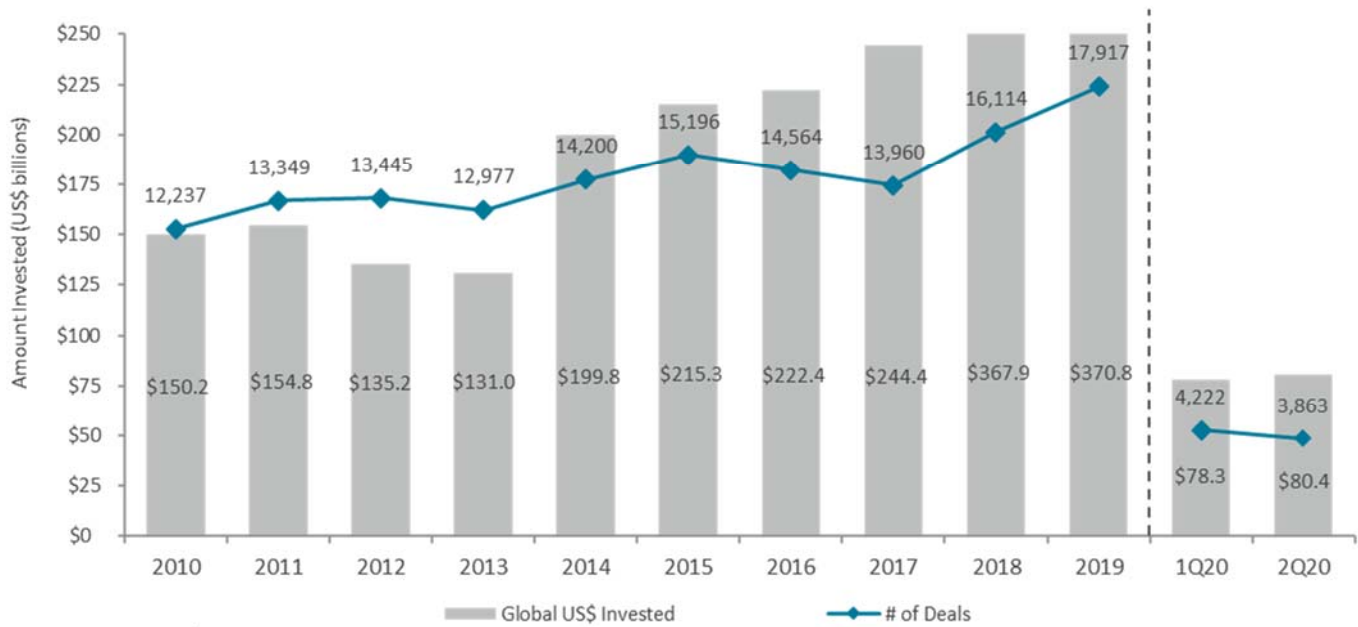
Global private equity fundraising totaled \$146.2 billion in the second quarter, representing a decline of 34.6%, quarter-over-quarter, and a 15.8% decline from the second quarter of 2019. Geographically, the U.S. represented 72.9% of total funds raised in the quarter, above its 10-year average of 60.4%. Funds raised in Europe, Asia, and the rest of world made up 12.3%, 10.6% and 4.3% of global fundraising for the quarter, respectively. By strategy, Buyout funds raised \$100.6 billion or 68.8% of the total amount raised for the quarter, a decrease of 39.6% from the prior quarter and a decrease of 20.6% compared to the prior year period. Venture Capital funds raised \$29.9 billion in the second quarter, an increase of 15.0% quarter-over-quarter and an increase of 22.6% compared to the second quarter of 2019. The charts below depict annual private equity fundraising activity by geography and strategy.



Investment Activity

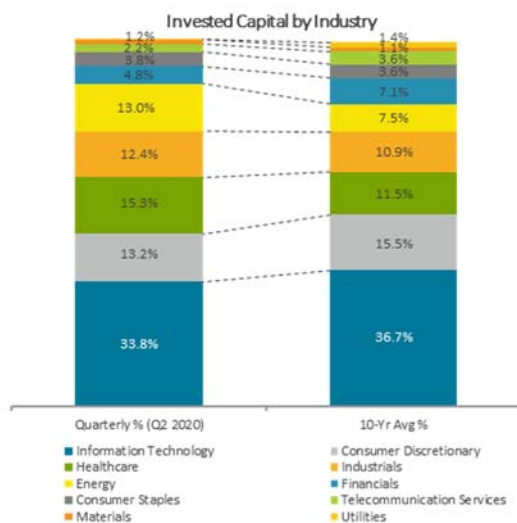
Private equity funds invested \$80.4 billion globally during the second quarter, representing a quarter-over-quarter increase of 2.7% and a decrease of 12.1% from the second quarter of 2019. The average investment size during the quarter was \$20.8 million, an increase of 12.2% compared to the average investment size of \$18.6 million in the first quarter of 2020.

Investment Activity - All Private Equity

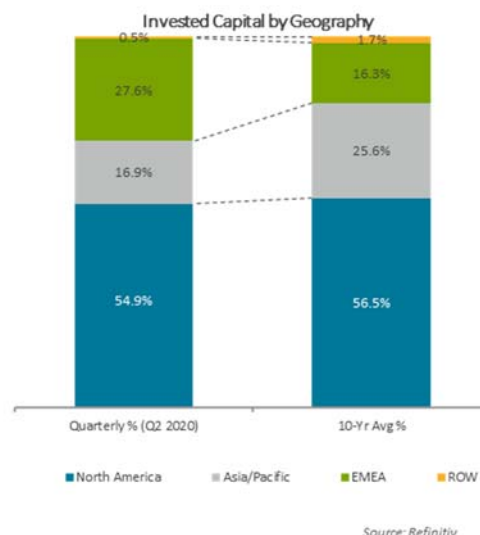


Source: Refinitiv

The graphs below depict the percentage of invested capital by industry and geography for the second quarter of 2020 and over the last ten years. Companies operating in the Information Technology sector continue to account for a significant portion of the invested capital, with over 33.8% of the capital deployed in the second quarter. Geographically, investment activity in EMEA was above its 10-year average, comprising 27.6% of total capital invested in the second quarter while investments in the Asia/Pacific region represented 16.9% of total capital invested during the quarter, significantly less than its 10-year average of 25.6%.



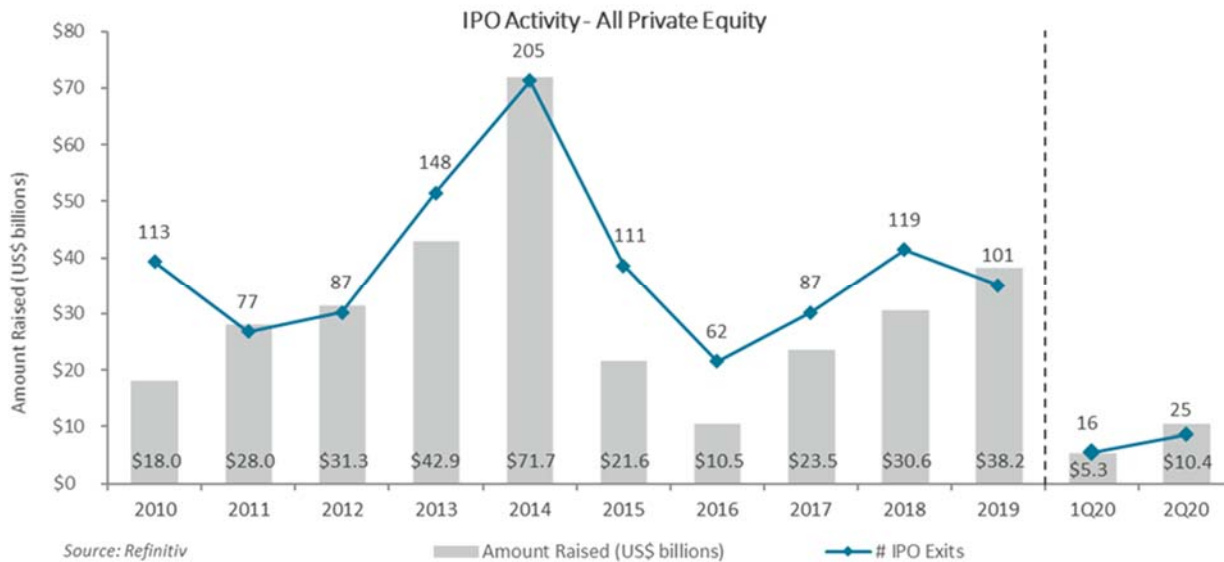
Source: Refinitiv



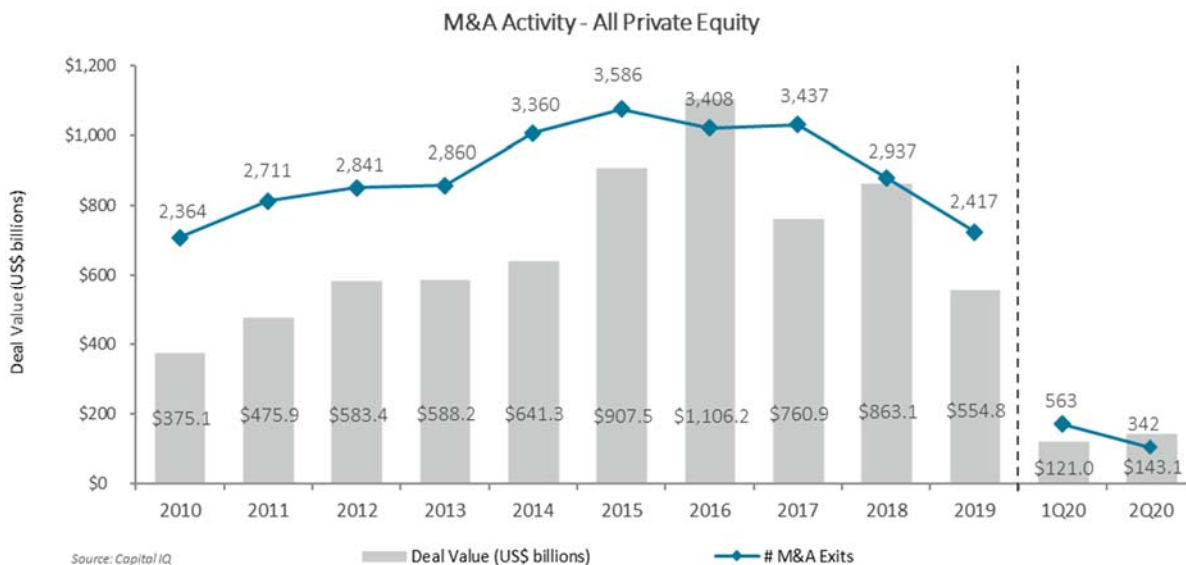
Source: Refinitiv

Exit Environment

In the second quarter, the number of private equity-backed IPOs increased by 56.3% compared to the prior quarter and decreased by 40.5% compared to the second quarter of 2019, with \$10.4 billion raised in 25 IPOs. The IPOs were comprised of 19 venture capital-backed offerings that raised a total of \$4.8 billion, and six offerings from buyouts that raised \$5.6 billion. The largest IPOs of the second quarter were completed by Dun & Bradstreet Holdings Inc. (NYSE: DNB), which raised \$2.0 billion, and ZoomInfo Technologies Inc. (NASDAQ: ZI), which raised \$934.5 million. Together these deals represented 50.4% of the total value for all IPOs during the quarter. The graph below shows the amount raised and the number of IPOs on the NYSE and NASDAQ.



The number of private equity-backed Mergers and Acquisitions (“M&A”) decreased 39.3% during the quarter and was down 35.6% compared to the second quarter of 2019. In the second quarter, there were 342 private equity backed M&A deals totaling \$143.1 billion. The largest M&A deals of the quarter were the \$83.6 billion purchase of Sprint Corporation by T-Mobile US, Inc. (NASDAQ: TMUS) and the \$6.0 billion purchase of Iqsa Services Limited by The Blackstone Group Inc. (NYSE: BX). Together these deals represented 62.7% of the total value for all deals during the quarter. The graph below shows the deal value and the number of M&A deals.



III. SERS Portfolio Review

Summary

During the second quarter of 2020, SERS made total contributions of \$141.3 million (including \$10.7 million in fees) and received \$98.5 million in distributions, for a net cash outflow of \$42.9 million during the period. With \$4.0 billion in market value and \$2.6 billion in unfunded commitments as of June 30, 2020, SERS' total exposure to private equity is approximately \$6.6 billion.

New Investment Commitments

The Portfolio made two new commitments for the period, April 1, 2020 through June 30, 2020.

New Investment Commitments Q2 2020

Fund	Closing Date	Sector	Geographic Focus	Commitments (\$)
Permira Susquehanna Opportunities - Buyout	4/20/2020	Buyout	Europe	\$40.0
HarbourVest PA Co-investment Fund	5/1/2020	Buyout	North America	\$200.0
Total				\$240.0

Subsequent Investment Commitments

The Portfolio made two new commitments for the period, July 1, 2020 through September 30, 2020.

New Investment Commitments Q3 2020

Fund	Closing Date	Sector	Geographic Focus	Commitments (\$)
Neuberger Berman PA Co-Investment Fund	7/26/2020	Buyout	North America	\$200.0
LLR Equity Partners VI	8/7/2020	Buyout	North America	\$50.0
Total				\$250.0

Performance

Quarterly Performance

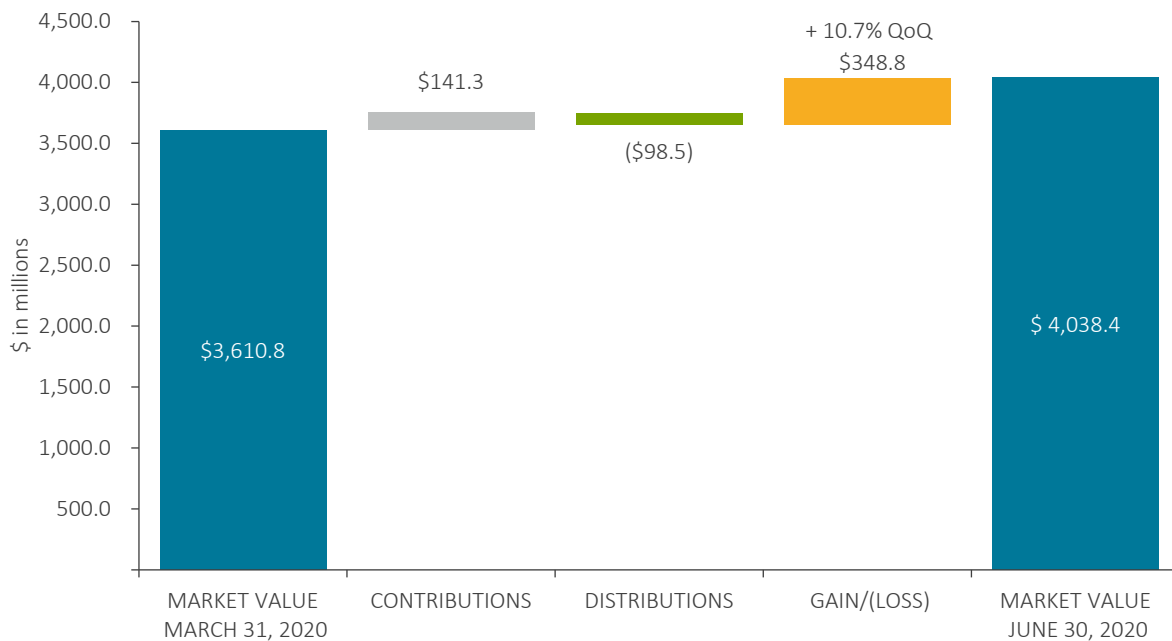
The following table details the quarterly change in value by contributions, distributions, and unrealized gains and losses which occurred during the past eight quarters, net of any partnership fees and expenses.

\$ in millions	2018		2019				2020	
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Beginning Market Value	\$3,902.5	\$3,989.5	\$3,791.1	\$3,919.6	\$3,985.1	\$3,906.1	\$3,990.6	\$3,610.8
Contributed Capital	143.0	186.4	168.1	195.5	105.0	193.1	221.7	141.3
Distributed Capital	(187.7)	(283.5)	(237.8)	(242.5)	(239.3)	(249.9)	(249.9)	(98.5)
Appreciation/(Depreciation)¹⁶	\$131.8	(\$101.3)	\$198.3	\$112.5	\$55.3	\$141.4	(\$351.6)	\$384.8
Ending Market Value	3,989.5	3,791.1	3,919.6	3,985.1	3,906.1	3,990.6	3,610.8	4,038.4
Unfunded Commitment	2,354.8	2,403.3	2,401.3	2,535.8	2,513.4	2,653.3	2,484.7	2,611.2
Total Exposure	\$6,344.3	\$6,194.4	\$6,320.9	\$6,520.9	\$6,419.5	\$6,643.9	\$6,095.5	\$6,649.7
Since Inception IRR	12.3%	12.2%	12.2%	12.2%	12.2%	12.2%	12.1%	12.2%

Valuation Movement

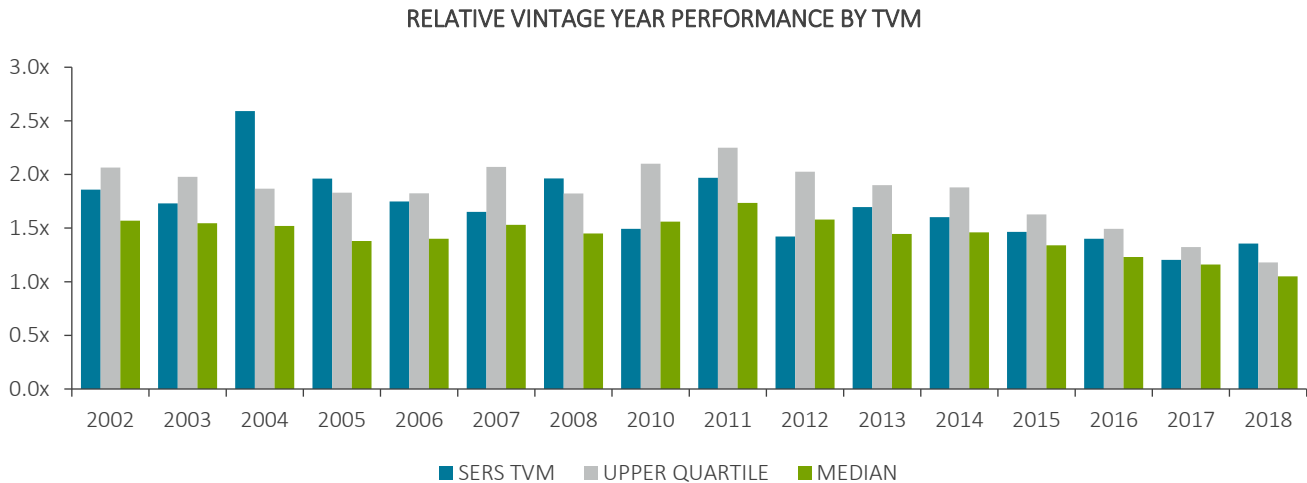
The valuation of the Portfolio increased by approximately \$384.8 million, or 10.7% (on a net, after-fees basis) during the second quarter, primarily driven by Buyout-focused partnership investments.

Quarterly Change in Portfolio Value



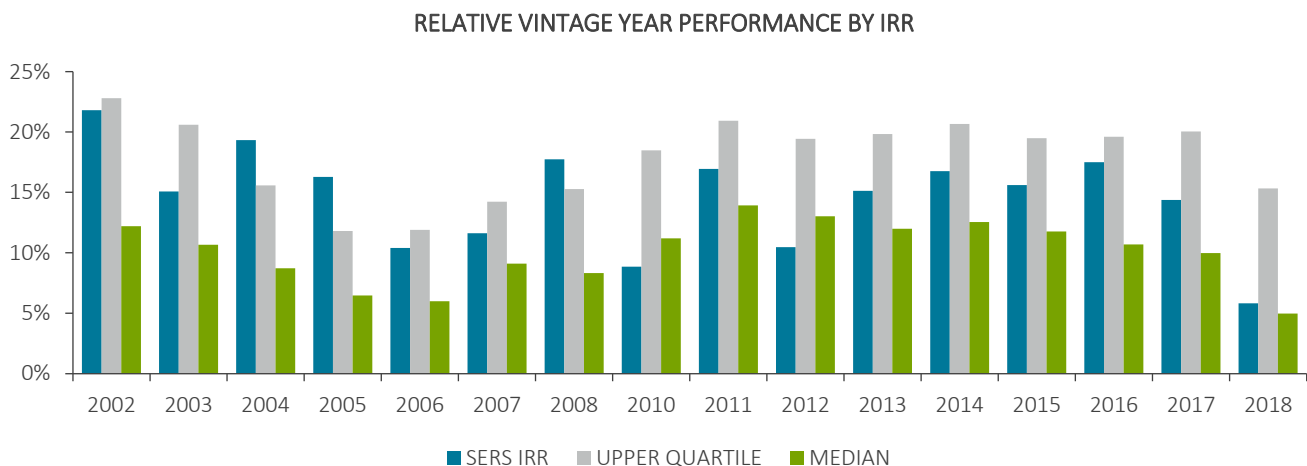
Vintage Year Performance by TVM

The following graph illustrates Portfolio investment performance by vintage year as of June 30, 2020 relative to the upper quartile and median Global Private Equity TVM benchmarks as provided by Burgiss Private iQ. Performance of funds that are less than two years old is not meaningful. In aggregate, 14 out of 16 vintage years shown have outperformed the median and four have outperformed the upper quartile.



Vintage Year Performance by IRR

The following graph illustrates Portfolio investment performance by vintage year as of June 30, 2020 relative to the upper quartile and median Global Private Equity IRR benchmarks as provided by Burgiss Private iQ. In aggregate, 14 out of 16 vintage years shown have outperformed the median and three have outperformed the upper quartile.



Note: Vintage years prior to 2001 have a market value of \$13.3 million, representing 0.3% of the Portfolio's total market value as of June 30, 2020. **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.

Diversification

Fund Geographic Focus

(\$ in millions)

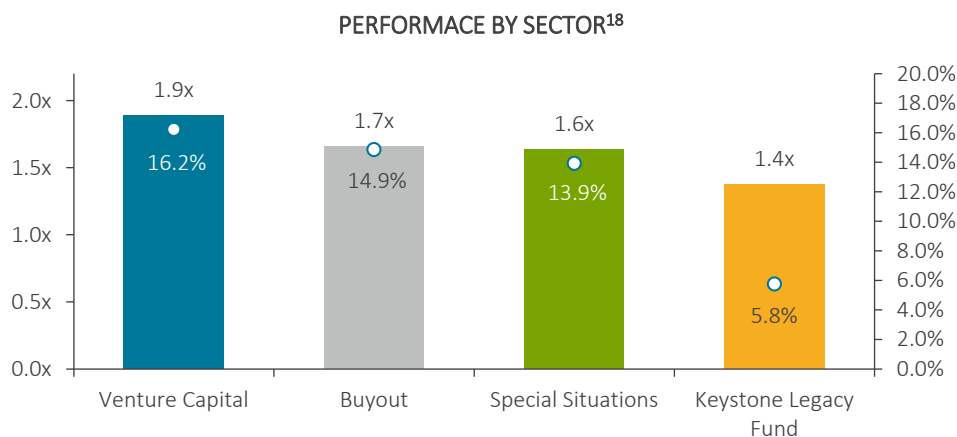
	MARKET VALUE		UNFUNDED		TOTAL EXPOSURE	
	\$	% OF TOTAL	\$	% OF TOTAL	\$	% OF TOTAL
North America	2,218.8	54.9%	1,491.0	57.1%	3,709.8	55.8%
Global	388.2	9.6%	497.5	19.1%	885.7	13.3%
Keystone Legacy Fund	602.5	14.9%	140.4	5.4%	742.9	11.2%
Asia	463.4	11.5%	198.6	7.6%	662.0	10.0%
Europe	274.7	6.8%	254.2	9.7%	529.0	8.0%
Emerging Markets	90.8	2.2%	29.5	1.1%	120.3	1.8%
Total	\$4,038.4	100.0%	\$2,611.2	100.0%	\$6,649.7	100.0%

Core Portfolio Periodic Returns vs. Russell 3000® Index¹⁷

	1 YEAR RETURN	3 YEAR RETURN	5 YEAR RETURN	10 YEAR RETURN	SINCE INCEPTION
SERS Core Portfolio (IRR)	11.3%	14.1%	11.4%	15.5%	15.2%
Russell 3000®	6.5%	10.0%	10.0%	13.7%	9.9%
Russell 3000® + 300 bps	9.5%	13.0%	13.0%	16.7%	12.9%
PA SERS Outperformance/(Underperformance)					
Russell 3000®	4.8%	4.1%	1.3%	1.7%	5.3%
Russell 3000® + 300 bps	1.8%	1.1%	(1.7%)	(1.3%)	2.3%

Performance by Strategy

Venture Capital is the best performing sector generating an IRR of 16.2% and a TVM of 1.9x as of June 30, 2020.



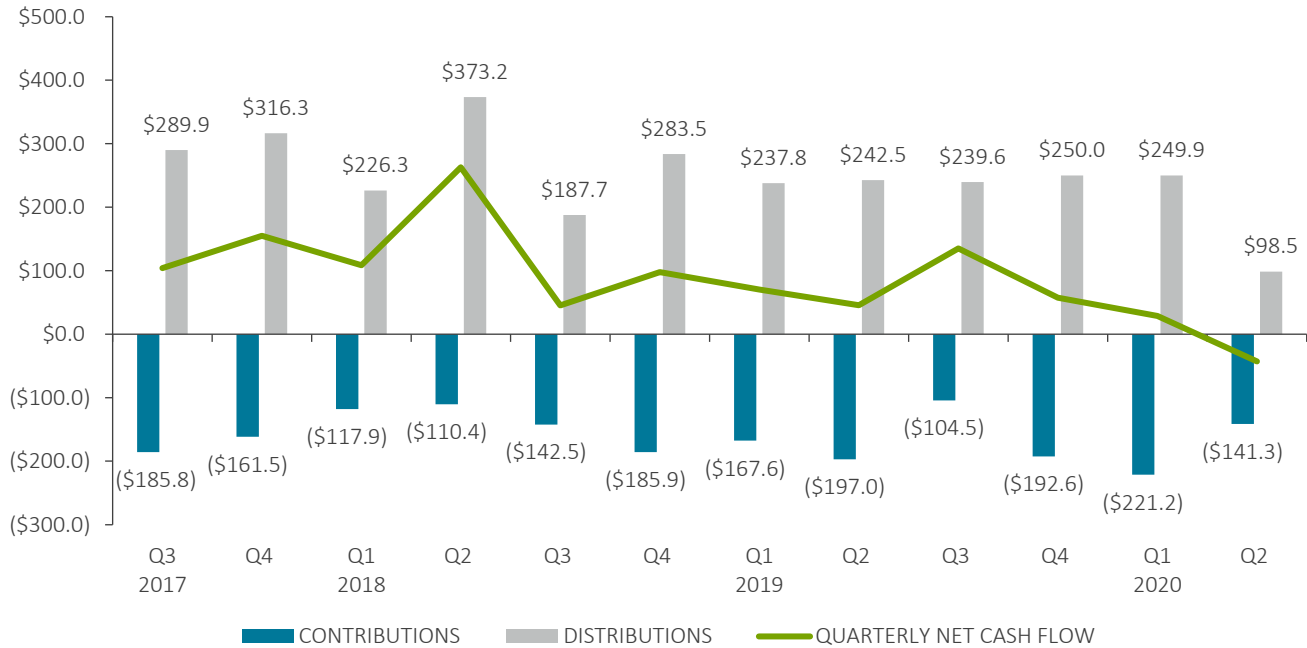
The referenced indices are shown for general market comparisons and are not meant to represent any particular fund. An investor cannot directly invest in an index. Moreover, indices do not reflect commissions or fees that may be charged to an investment product based on the index, which may materially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

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.

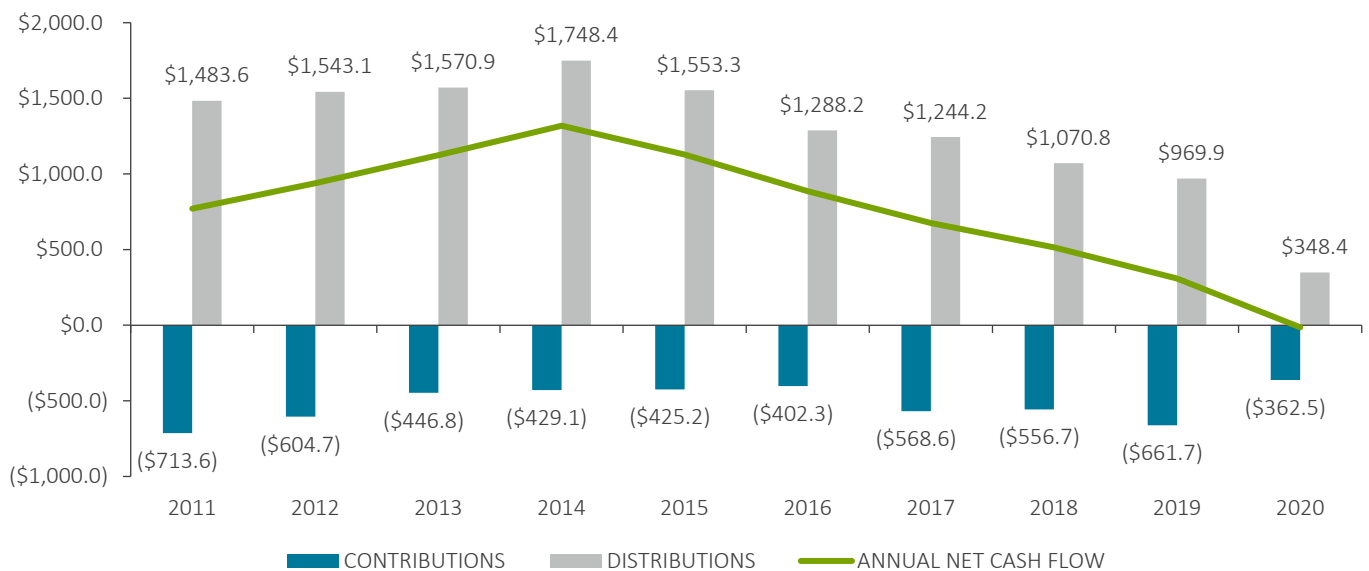
Portfolio Cash Flow Analysis

During the second quarter of 2020, the Portfolio made \$141.3 million of contributions and received \$98.5 million of distributions, for a net cash outflow of \$42.9 million. The graphs below illustrate recent cash flow activity by quarter and year.

Quarterly Cash Flow Activity

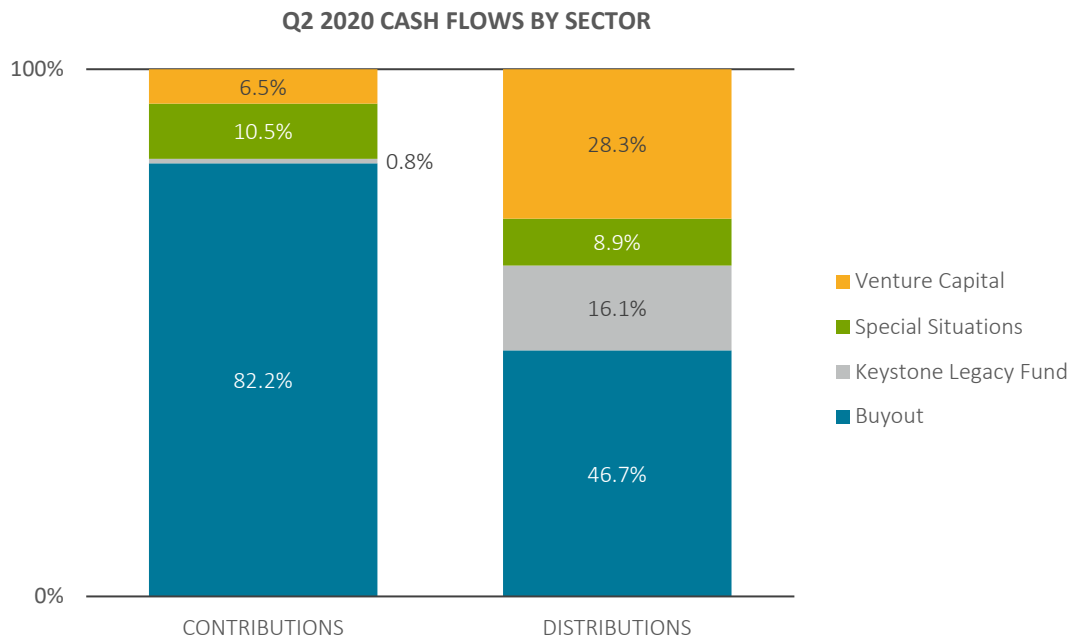


Annual Cash Flow Activity



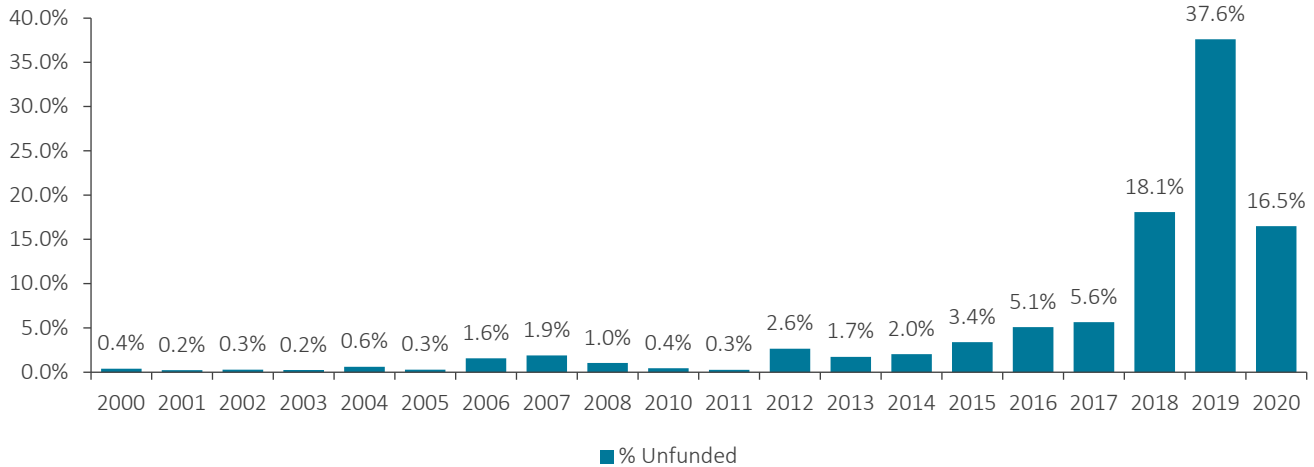
Cash Flow by Sector

Buyout funds were the most active in terms of cash flow activity during the second quarter of 2020, with Buyout funds drawing down \$116.1 million, or 82.2% of total contributions during the quarter, and distributing \$45.9 million, or 46.7% of total distributions during the quarter.



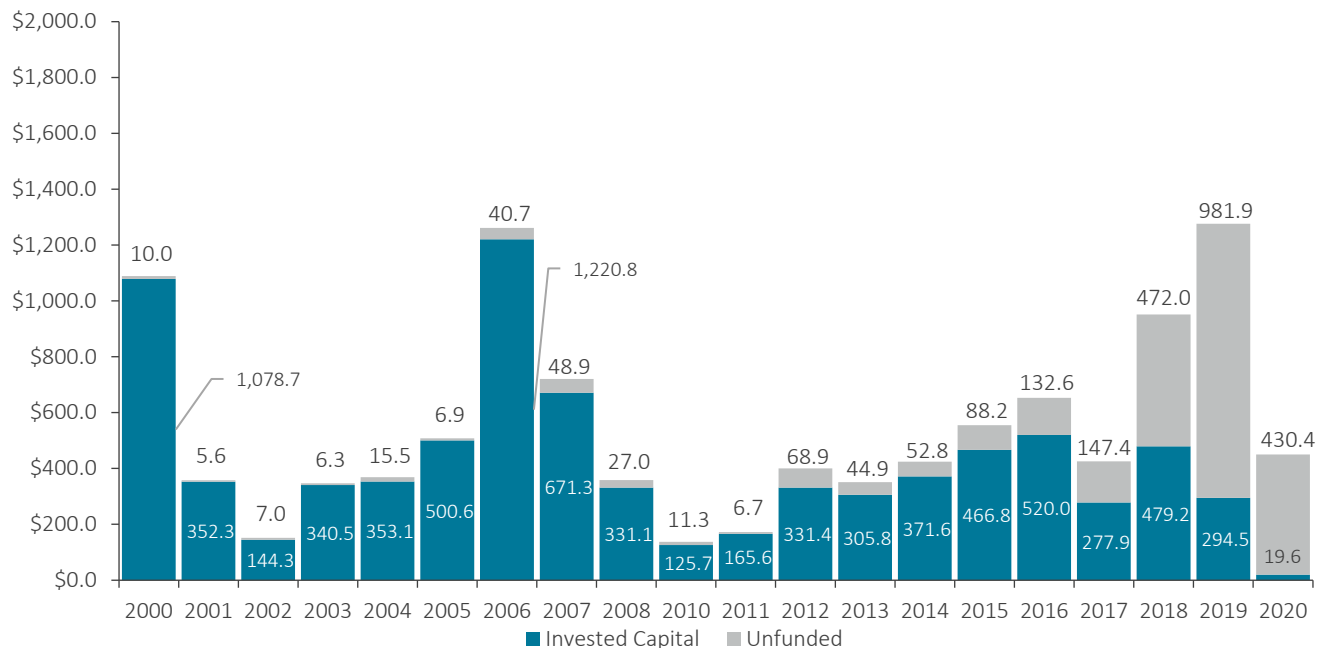
Unfunded % by Vintage Year

The following chart provides unfunded commitments by vintage year as a percentage of the Portfolio's total unfunded commitments. Vintage years 2015 through 2020 make up 86.3% of the Portfolio's unfunded commitments.



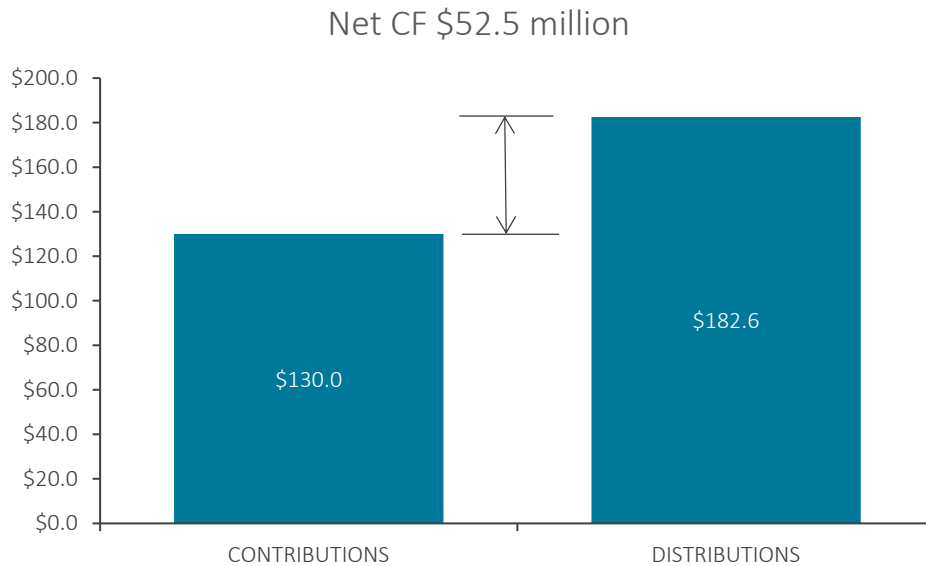
Invested Capital to Unfunded by Vintage Year

The following chart provides invested capital and unfunded capital commitments by vintage year.



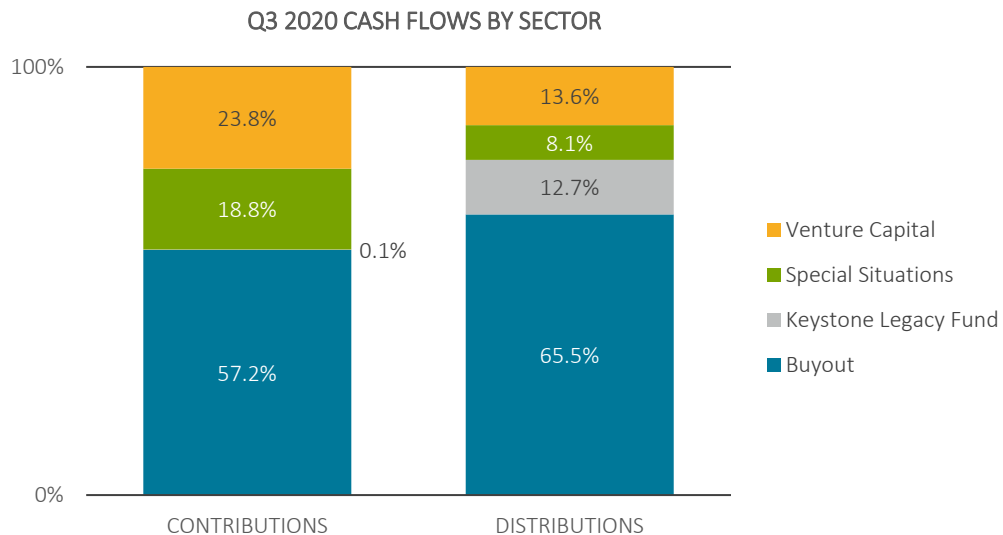
Subsequent Cash Flow Activity

Subsequent to quarter-end through September 30, 2020, the Portfolio made \$130.0 million of contributions and received \$182.6 million of distributions, for a net cash inflow of \$52.5 million, an increase of 222.5% from the previous quarter total.



Subsequent Cash Flow by Sector

The largest concentration of net cash flows during Q3 2020 was from Buyout, which resulted in a net cash inflow of \$45.2 million.



IV. End Notes

¹ Commitment reflects current commitment including FX fluctuations for non-USD funds.

² Contributed Capital includes contributions for investments, management fees and expenses to underlying partnership investments.

³ Includes stock distributions.

⁴ Total Exposure represents the sum of Market Value and Unfunded Commitment.

⁵ DPI, or Distributed to Paid-In Multiple, is a performance metric that measures distributions received relative to capital invested. DPI is calculated as Distributed Capital divided by Contributed Capital.

⁶ TVM, or Total Value Multiple, is a performance metric that measures total value created by the Portfolio relative to capital invested, without consideration for time. TVM is calculated as Total Value, which is comprised of Market Value plus Distributed Capital, divided by Contributed Capital. TVM net of StepStone's fees is 1.59x.

⁷ IRR, or Internal Rate of Return, is a performance metric that is calculated based on the Portfolio's daily cash flows and market value as of quarter-end. IRR is net of manager's fees, expenses and carried interest. IRR net of StepStone's fees is 12.16% as of June 30, 2020.

⁸ 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).

⁹ Benchmark is provided by Burgiss Private IQ and reflects Global Private Equity Funds (excluding Real Assets and Real Estate) Median IRR as of June 30, 2020, for funds with vintage years 1980 to 2020. Returns shown are dollar-weighted (IRR).

¹⁰ Benchmark is provided by Burgiss Private IQ and reflects Global Private Equity Funds (excluding Real Assets and Real Estate) Upper Quartile IRR as of June 30, 2020, for funds with vintage years 1980 to 2020. Returns shown are dollar-weighted (IRR).

¹¹ 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 June 30, 2020, for funds with vintage years 1980 to 2020. Returns shown are dollar-weighted (IRR).

¹² 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 June 30, 2020, for funds with vintage years 1980 to 2020. Returns shown are dollar-weighted (IRR).

¹³ S&P U.S. LBO Review, Q2 2020.

¹⁴ Capital IQ Transaction Screening Report as of August 31, 2020.

¹⁵ Data provided from SPACInsider.

¹⁶ Appreciation/ (Depreciation) represents realized and unrealized gains/(losses) during the quarter, which is comprised of the difference between Ending Market Value and Beginning Market Value plus Contributed Capital minus Distributed Capital.

¹⁷ 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.

¹⁸ Buyout, Venture Capital, 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.

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. 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.

V. Exhibits

Exhibit A – Investments by Vintage Year

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
1997	Apollo Investment Fund IV	Buyout	\$75,000,000	\$74,838,620	\$124,814,033	\$80,294	\$50,055,707	1.7x	8.5%	Second	Second
1997 Total			\$75,000,000	\$74,838,620	\$124,814,033	\$80,294	\$50,055,707	1.7x	8.5%	Second	Second
1998	HarbourVest IPEP III	Buyout	40,000,000	39,400,000	61,092,165	75,186	21,767,351	1.6x	8.6%	Second	Second
1998 Total			\$40,000,000	\$39,400,000	\$61,092,165	\$75,186	\$21,767,351	1.6x	8.6%	Second	Second
1999	HarbourVest Partners VI	Venture Capital	200,000,000	196,586,055	251,156,017	986,161	55,556,123	1.3x	3.6%	Second	Second
1999	Lexington Capital Partners III	Special Situations	35,000,000	34,516,449	43,363,378						
1999	New Enterprise Associates IX	Venture Capital	20,000,000	19,600,000	8,228,227	1,035,641	-10,336,132	0.5x	-6.0%	Third	Fourth
1999	TPG Partners III	Buyout	64,375,746	64,119,169	165,990,273						
1999 Total			\$319,375,746	\$314,821,673	\$468,737,895						
2000	ABRY Partners IV	Buyout	27,242,773	25,497,290	74,633,973						
2000	Apollo Investment Fund V	Buyout	50,000,000	44,972,146	122,673,016	430,414	78,131,284	2.7x	38.8%	First	First
2000	Audax Private Equity Fund	Buyout	35,000,000	36,839,098	56,057,910	125,324	19,344,136	1.5x	13.1%	First	Second
2000	Blackstone Communications Partners I	Buyout	25,000,000	25,114,042	30,998,189	147,136	6,031,283	1.2x	6.2%	Second	Second
2000	Madison Dearborn Capital Partners IV	Buyout	90,000,000	90,365,390	169,072,775	2,085,125	80,792,509	1.9x	14.1%	First	First
2000	New Enterprise Associates X	Venture Capital	35,000,000	35,028,000	33,995,586	5,268,504	4,236,090	1.1x	1.9%	Third	Third
2000	Permira European Fund II	Buyout	45,672,612	45,672,612	91,560,959	290,705	46,179,052	2.0x	21.6%	First	First
2000	Providence Equity Partners IV	Buyout	25,000,000	23,420,840	56,065,270						
2000 Total			\$332,915,385	\$326,909,418	\$635,057,678						
2001	ABRY Mezzanine Partners	Special Situations	30,000,000	26,731,187	49,707,116						
2001	Blackstone Capital IV	Buyout	69,379,875	69,119,097	192,546,094	1,675,528	125,102,525	2.8x	36.2%	First	First
2001	Lexington Capital Partners V	Special Situations	75,000,000	74,623,418	125,170,164						
2001 Total			\$174,379,875	\$170,473,702	\$367,423,374						
2002	Berkshire Fund VI	Buyout	20,000,000	18,819,615	54,873,734						
2002	GTCR VIII	Buyout	75,000,000	69,393,599	120,471,948				22.3%	Second	
2002 Total			\$95,000,000	\$88,213,214	\$175,345,682						
2003	HarbourVest Partners VII	Venture Capital	75,000,000	73,687,500	108,698,287	11,806,613	46,817,400	1.6x	6.9%	Third	Second
2003	Kelso VII	Buyout	40,000,000	41,169,937	65,821,118	63,646	24,714,827	1.6x	11.4%	Second	Second

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2003	New Enterprise Associates 11	Venture Capital	25,000,000	25,000,000	63,385,828	2,848,768	41,234,596	2.6x	15.5%	Second	First
2003	Permira European Fund III	Buyout	127,062,518	127,340,454	218,052,206	318,806	91,030,558	1.7x	26.1%	First	Second
2003	TPG Partners IV	Buyout	27,907,484	27,981,463	58,018,004						
2003 Total			\$294,970,002	\$295,179,353	\$513,975,442						
2004	ABRY Partners V	Buyout	45,000,000	41,752,543	83,389,341						
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	LLR Equity Partners II	Buyout	25,000,000	25,000,000	45,084,480	137,058	20,221,538	1.8x	12.2%	Second	Second
2004	Oaktree Capital Management	Special Situations	40,000,000	40,582,060	327,057,310						
2004	OCM Opportunities Fund V	Special Situations	40,000,000	40,003,507	65,911,274						
2004	Providence Equity Partners V	Buyout	45,000,000	42,692,171	51,743,883						
2004 Total			\$235,000,000	\$223,445,385	\$629,493,757						
2005	Apollo Investment Fund VI	Buyout	40,000,000	38,911,805	64,467,407	760,974	26,316,575	1.7x	8.7%	Second	Second
2005	Audax Private Equity Fund II	Buyout	25,000,000	25,517,152	46,325,622	231,524	21,039,994	1.8x	14.1%	First	Second
2005	HIPEP V-Asia Pacific & Rest of World	Buyout	30,000,000	28,245,316	35,732,646	4,324,064	11,811,394	1.4x	5.9%	Third	Second
2005	Lexington Capital Partners VI	Special Situations	50,000,000	53,066,325	70,566,984						
2005	Lightspeed Venture Partners VII	Venture Capital	18,000,000	18,000,000	49,449,448						
2005	Newbridge Asia IV	Buyout	40,000,000	38,903,378	85,845,344						
2005	OCM Opportunities Fund VI	Special Situations	40,000,000	40,000,000	63,171,009						
2005	OCM/GFI Power Opportunities Fund II	Buyout	13,431,284	13,470,852	41,644,215						
2005 Total			\$256,431,284	\$256,114,829	\$457,202,676						
2006	ABRY Senior Equity II	Special Situations	30,000,000	28,282,103	44,960,375						
2006	Asia Alternatives Capital Partners	Buyout	25,000,000	25,197,065	42,216,540	2,806,118	19,825,593	1.8x	10.8%	Second	Second
2006	AXA Secondary Fund IV	Special Situations	80,000,000	70,134,752	99,186,788						
2006	Berkshire Fund VII	Buyout	32,000,000	32,613,861	68,126,503						
2006	Blackstone Capital Partners V	Buyout	150,000,000	150,111,788	242,154,335	6,746,693	98,789,240	1.7x	7.6%	Second	Second
2006	Centerbridge Capital Partners I	Special Situations	50,000,000	57,399,008	114,404,865	4,401,060	61,406,917	2.1x	19.2%	First	First

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2006	Eureka II	Buyout	20,000,000	21,906,935	22,163,990	4,741,306	4,998,361	1.2x	4.2%	Third	Third
2006	Francisco Partners II	Buyout	30,000,000	29,383,916	41,240,515	5,459,691	17,316,289	1.6x	10.1%	Second	Second
2006	HarbourVest Partners VIII	Venture Capital	100,000,000	98,000,000	145,199,679	47,097,269	94,296,948	2.0x	10.7%	Second	First
2006	Hellman & Friedman Capital Partners VI	Buyout	125,000,000	119,913,412	218,914,920	5,663,474	104,664,982	1.9x	12.9%	First	First
2006	Madison Dearborn Capital Partners V	Buyout	75,000,000	71,556,584	113,632,910	967,550	43,043,876	1.6x	7.1%	Second	Second
2006	New Enterprise Associates 12	Venture Capital	35,000,000	35,631,130	46,722,311	3,684,056	14,775,237	1.4x	6.7%	Second	Second
2006	NewSpring Growth Capital II	Venture Capital	10,000,000	9,850,000	14,203,466						
2006	OCM Principal Opportunities Fund IV	Special Situations	20,000,000	20,400,000	34,058,279						
2006	Permira IV	Buyout	136,375,536	138,372,478	205,123,986	17,647,826	84,399,335	1.6x	8.5%	Second	Second
2006	TA X	Buyout	70,000,000	69,732,009	91,152,009						
2006	TPG Partners V	Buyout	88,831,038	92,531,812	128,288,961	2,233,190	37,990,339	1.4x	4.8%	Third	Second
2006 Total			\$1,077,206,574	\$1,071,016,854	\$1,671,750,431						
2007	ABRY Advanced Securities Fund	Special Situations	7,262,950	23,508,684	38,682,209						
2007	Advent Latin American Private Equity Fund IV	Buyout	30,000,000	30,797,073	41,165,921	5,506,763	15,875,611	1.5x	9.2%	Second	Third
2007	Asia Alternatives Capital Partners II	Buyout	29,949,500	28,998,110	50,994,011	23,878,451	45,874,352	2.6x	18.0%	First	First
2007	Audax Private Equity Fund III	Buyout	37,000,000	42,498,691	81,672,112	1,457,475	40,630,897	2.0x	15.0%	First	Second
2007	Battery Ventures VIII	Venture Capital	25,000,000	25,050,751	55,636,614						
2007	Dover Street VII	Special Situations	30,000,000	28,696,128	38,958,754	2,085,812	12,348,438	1.4x	9.1%	Second	Third
2007	Insight Venture Partners VI	Venture Capital	30,000,000	32,244,177	81,709,725	201,691	49,667,240	2.5x	19.2%	First	First
2007	JMI Equity Fund VI	Venture Capital	40,000,000	40,000,246	69,017,467						
2007	Kelso VIII	Buyout	150,000,000	146,309,243	169,699,185	23,733,039	47,122,981	1.3x	5.9%	Third	Third
2007	OCM Opportunities Fund VII	Special Situations	40,000,000	40,000,000	54,806,896						
2007	OCM Opportunities Fund VII b	Special Situations	40,000,000	36,000,000	62,262,693						
2007	Providence Equity Partners VI	Buyout	50,000,000	54,663,181	59,224,369						
2007	TPG Asia V	Buyout	22,500,000	21,964,311	26,635,553	4,133,689	8,804,931	1.4x	6.3%	Third	Third
2007	Weathergag Venture Capital	Venture Capital	25,000,000	22,875,000	34,251,174	15,097,343	26,473,517	2.2x	12.3%	Second	First
2007 Total			\$556,712,450	\$573,605,594	\$864,716,682						

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2008	ABRY Partners VI	Buyout	50,000,000	59,994,861	107,608,270						
2008	Advent International GPE VI-A	Buyout	35,000,000	35,146,325	68,452,177	4,908,401	38,214,253	2.1x	16.6%	First	First
2008	Battery Ventures VIII Side Car Fund	Venture Capital	6,768,000	6,803,790	17,449,466						
2008	Great Hill Equity Partners IV	Buyout	25,000,000	25,125,662	59,603,949						
2008	H.I.G. Bayside Debt & LBO Fund II	Special Situations	30,000,000	30,998,253	46,874,314						
2008	Lightspeed Venture Partners VIII	Venture Capital	15,000,000	14,850,000	31,101,784						
2008	LLR Equity Partners III	Buyout	30,000,000	29,108,722	51,222,009	5,656,025	27,769,311	2.0x	15.0%	Second	First
2008	Madison Dearborn Capital Partners VI	Buyout	50,000,000	53,137,097	85,996,243	29,033,296	61,892,442	2.2x	23.5%	First	First
2008	TPG Partners VI	Buyout	44,294,641	50,155,750	66,018,872	8,332,761	24,195,883	1.5x	9.7%	Second	Second
2008 Total			\$286,062,641	\$305,320,461	\$534,327,085						
2010	Advent Latin American Private Equity Fund V	Buyout	15,000,000	14,430,000	8,325,000	6,330,656	225,656	1.0x	0.3%	Fourth	Fourth
2010	Avenue Special Situations Fund VI	Special Situations	20,000,000	20,068,464	20,720,289						
2010	Oaktree Power Opportunities Fund III	Buyout	25,000,000	19,123,945	23,437,650						
2010	OCM Opportunities Fund VIII	Special Situations	12,500,000	12,583,425	17,717,075						
2010	OCM Opportunities Fund VIIIb	Special Situations	12,500,000	12,500,000	12,750,127						
2010	Weathergag Venture Capital II	Venture Capital	25,000,000	23,250,000	19,980,495	38,705,052	35,435,547	2.5x	15.7%	Second	First
2010 Total			\$110,000,000	\$101,955,834	\$102,930,637						
2011	ABRY Partners VII	Buyout	30,000,000	37,911,447	48,786,607						
2011	Asia Alternatives Korea Buyout Investors (Hahn & Co)	Buyout	7,000,000	8,715,513	9,137,898	4,869,732	5,292,117	1.6x	11.3%	Third	Third
2011	Berkshire Fund VIII	Buyout	30,000,000	32,062,612	29,954,225						
2011	Francisco Partners III	Buyout	20,000,000	20,514,684	33,151,148	15,979,070	28,615,534	2.4x	20.4%	Second	First
2011	H.I.G. Growth Buyouts & Equity Fund II	Buyout	15,000,000	15,898,204	9,008,823						
2011	Insight Venture Partners VII	Venture Capital	20,000,000	21,319,992	43,195,215	19,391,523	41,266,747	2.9x	22.2%	First	First
2011	JMI Equity Fund VII	Venture Capital	10,000,000	9,780,000	12,614,296						
2011	Meritech Capital Partners IV	Venture Capital	20,000,000	19,400,000	31,674,671						
2011 Total			\$152,000,000	\$165,602,451	\$217,522,884						
2012	Advent International GPE VII-B	Buyout	40,000,000	37,600,000	38,901,080	28,891,358	30,192,438	1.8x	14.8%	Second	Second

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2012	Asia Alternatives Capital Partners III	Buyout	50,000,000	54,192,776	45,958,605	42,390,954	34,156,783	1.6x	12.9%	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	Buyout	50,000,000	65,140,434	31,410,748	5,121,868	-28,607,818	0.6x	(24.7%)	Fourth	Fourth
2012	NewSpring Growth Capital III	Venture Capital	25,000,000	23,643,105	17,097,833						
2012	Penn Asia Investors	Buyout	133,000,000	89,143,279	45,323,531	97,852,928	54,033,180	1.6x	15.1%	Second	Second
2012 Total			\$373,000,000	\$331,402,336	\$276,029,331						
2013	Eureka Growth Capital III	Buyout	20,000,000	15,190,667	13,697,042	13,097,397	11,603,772	1.8x	39.3%	First	Second
2013	FSN Capital IV	Buyout	37,900,657	37,755,593	53,506,224						
2013	H.I.G. Bayside Loan Opp. Fund III	Special Situations	50,000,000	40,418,122	40,802,856						
2013	Incline Equity Partners III	Buyout	15,000,000	15,705,405	29,124,308	8,390,734	21,809,637	2.4x	32.9%	First	First
2013	Insight Venture Partners VIII	Venture Capital	50,000,000	52,250,000	72,558,657	60,956,469	81,265,126	2.6x	20.5%	First	First
2013	LBC Credit Partners III	Special Situations	50,000,000	46,696,253	46,683,842				6.9%	Third	
2013	Oaktree Opportunities Fund IX	Special Situations	50,000,000	50,000,000	23,947,715						
2013	Platinum Equity Capital Partners III	Special Situations	50,000,000	47,749,134	67,247,880	22,637,940	42,136,686	1.9x	38.1%	First	Second
2013 Total			\$322,900,657	\$305,765,174	\$347,568,525						
2014	Capvis Equity IV	Buyout	42,879,920	44,923,075	33,984,236	15,687,069	4,748,230				
2014	GTCR Fund XI	Buyout	25,000,000	22,712,831	21,334,738				26.3%	First	
2014	H.I.G. Europe Capital Partners II	Buyout	24,288,664	18,561,566	4,172,985						
2014	Hahn & Company II	Buyout	50,000,000	53,972,151	14,174,068						
2014	Horizon Impact Fund	Buyout	50,000,000	44,629,802	20,795,776	47,231,461	23,397,435	1.5x	15.7%	Second	Second
2014	Horizon Strategic Fund - Carlyle Group	Buyout	100,000,000	86,601,204	42,848,347	87,148,312	43,395,455	1.5x	10.9%	Third	Second
2014	KPS Special Situations Fund IV	Special Situations	25,000,000	23,342,222	7,222,716	20,055,286	3,935,780	1.2x	12.0%	Third	Fourth
2014	LLR Equity Partners IV	Buyout	50,000,000	45,485,764	56,867,849	36,872,367	48,254,452	2.1x	25.5%	First	First
2014	Meritech Capital Partners V	Venture Capital	23,000,000	21,332,500	20,431,240						
2014	Sentinel Capital Partners V	Buyout	10,000,000	10,043,414	5,637,708	9,999,644	5,593,938	1.6x	16.6%	Second	Second
2014 Total			\$400,168,584	\$371,604,529	\$227,469,663						
2015	ABRY Partners VIII	Buyout	25,000,000	29,191,750	19,994,127						

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2015	ADV Opportunities Fund I	Special Situations	50,000,000	56,390,677	8,703,460	52,958,254	5,271,037	1.1x	2.8%	Fourth	Fourth
2015	Advent Latin American Private Equity Fund VI	Buyout	25,000,000	19,300,000	5,000,000	17,708,876	3,408,876	1.2x	8.1%	Third	Third
2015	Centerbridge Capital Partners III	Special Situations	30,000,000	26,189,002	10,518,588	28,631,357	12,960,943	1.5x	18.7%	Second	Second
2015	Clearlake Capital Partners IV	Special Situations	15,000,000	21,809,094	15,701,359	17,907,258	11,799,522	1.5x	26.1%	First	Second
2015	Francisco Partners IV	Buyout	25,000,000	24,656,280	21,406,842	35,220,941	31,971,503	2.3x	29.2%	First	First
2015	H.I.G. Bayside Loan Opp. Fund IV	Special Situations	25,000,000	22,626,299	13,011,761						
2015	H.I.G. Brazil and Latin America Partners	Buyout	50,000,000	29,942,431	9,139						
2015	Insight Venture Partners IX	Venture Capital	50,000,000	51,172,788	12,273,960	106,539,988	67,641,160	2.3x	26.6%	First	First
2015	JMI Equity Fund VIII	Venture Capital	25,000,000	26,900,000	16,068,006						
2015	Lightspeed India Partners I	Venture Capital	15,000,000	13,590,000	1,576,000						
2015	Primavera Capital Fund II	Buyout	50,000,000	54,475,309	7,516,140						
2015	Ridgemont Equity Partners II	Buyout	50,000,000	48,547,530	21,510,770						
2015	RRJ Capital Master Fund III	Special Situations	50,000,000	42,005,160	37,341,464	13,823,101	9,159,405	1.2x	10.8%	Third	Third
2015 Total			\$485,000,000	\$466,796,319	\$190,631,616						
2016	Advent International GPE VIII-B	Buyout	50,000,000	46,850,000	-	62,963,750	16,113,750	1.3x	14.1%	Second	Second
2016	ASF VII B	Special Situations	100,000,000	56,694,086	10,737,362						
2016	ASF VII PA Co-Invest	Special Situations	50,000,000	25,136,737	3,193,613						
2016	Audax Private Equity Fund V	Buyout	50,000,000	44,032,670	15,657,020	42,235,881	13,860,230	1.3x	15.1%	Second	Second
2016	Blackstone Capital Partners VII	Buyout	50,000,000	46,720,625	4,527,675	48,847,469	6,654,519	1.1x	9.2%	Third	Third
2016	Hellman & Friedman Capital Partners VIII	Buyout	50,000,000	50,536,959	4,936,396	60,318,204	14,717,641	1.3x	13.3%	Second	Second
2016	Providence Strategic Growth II	Venture Capital	60,000,000	67,447,363	44,766,872						
2016	Sterling Group Partners IV	Buyout	20,000,000	15,565,495	904,208	18,247,966	3,586,679	1.2x	9.4%	Third	Second
2016	Vista Equity Partners Fund VI	Buyout	150,000,000	166,987,216	36,993,858						
2016 Total			\$580,000,000	\$519,971,151	\$121,717,004						
2017	Asia Alternatives Capital Partners V	Buyout	50,000,000	21,016,566	584,065	NM	NM	NM	NM	NM	NM
2017	FSN Capital V	Buyout	78,572,345	58,499,399	9,958,963						
2017	Horizon Impact Fund B	Buyout	100,000,000	55,750,000	990,000	58,656,971	3,896,971	1.1x	4.9%	Third	Third

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2017	Permira VI	Buyout	56,740,276	51,150,582	7,745,206	57,271,581	13,866,205	1.3x	14.4%	Second	Second
2017	Wind Point Partners VIII	Buyout	100,000,000	91,487,319	48,554,180	NM	NM	NM	NM	NM	NM
2017 Total			\$385,312,621	\$277,903,865	\$67,832,414						
2018	Clearlake Capital Partners V	Special Situations	55,000,000	50,650,059	15,464,574	NM	NM	NM	NM	NM	NM
2018	CVC Capital Partners VII	Buyout	91,865,099	45,718,040	563,383	NM	NM	NM	NM	NM	NM
2018	GTCR Fund XII	Buyout	32,500,000	14,966,250	634,852	NM	NM	NM	NM	NM	NM
2018	Hahn & Company III	Buyout	56,250,000	9,704,001	83,933	NM	NM	NM	NM	NM	NM
2018	Hahn & Company III - Supplemental Fund	Buyout	18,750,000	5,944,175	57,377	NM	NM	NM	NM	NM	NM
2018	Insight Venture Partners X	Venture Capital	100,000,000	93,800,000	34,245	NM	NM	NM	NM	NM	NM
2018	Keystone Legacy Fund	Keystone Legacy Fund	200,000,000	5,583,372,904	7,059,023,241	602,543,591	2,078,193,928	1.4x	5.7%	NM	NM
2018	LLR Equity Partners V	Buyout	75,000,000	54,929,167	6,825,485	NM	NM	NM	NM	NM	NM
2018	NGP Keystone	Buyout	25,000,000	-	-	NM	NM	NM	NM	NM	NM
2018	NGP XII	Buyout	75,000,000	38,979,286	113,471	NM	NM	NM	NM	NM	NM
2018	Providence Strategic Growth III	Venture Capital	75,000,000	54,430,567	13,014,791	NM	NM	NM	NM	NM	NM
2018	Silver Lake Partners V	Buyout	78,000,000	52,709,282	573,513	NM	NM	NM	NM	NM	NM
2018	TDR Capital IV	Buyout	88,886,049	34,834,570	-	NM	NM	NM	NM	NM	NM
2018 Total			\$971,251,148	\$6,040,038,301	\$7,096,388,865						
2019	Apollo Investment Fund IX	Buyout	85,400,000	23,032,685	2,157,713	NM	NM	NM	NM	NM	NM
2019	ASF VIII B	Special Situations	100,000,000	18,070,147	42,362	NM	NM	NM	NM	NM	NM
2019	ASF VIII PA Co-Invest	Special Situations	50,000,000	5,000	-	NM	NM	NM	NM	NM	NM
2019	Audax Private Equity Fund VI	Buyout	75,000,000	13,558,417	1,536,573	NM	NM	NM	NM	NM	NM
2019	Blackstone Capital Partners VIII	Buyout	70,000,000	-	-	NM	NM	NM	NM	NM	NM
2019	Hellman & Friedman Capital Partners IX	Buyout	90,000,000	20,006,514	-	NM	NM	NM	NM	NM	NM
2019	Insight Venture Partners XI	Venture Capital	75,000,000	11,250,000	-	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Fund V	Special Situations	75,000,000	-	-	NM	NM	NM	NM	NM	NM
2019	KPS Special Situations Mid-Cap Fund	Special Situations	25,000,000	4,432,972	-	NM	NM	NM	NM	NM	NM
2019	Permira VII	Buyout	74,961,398	13,239,036	-	NM	NM	NM	NM	NM	NM

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Vintage Year

As of June 30, 2020

VINTAGE	FUND	SECTOR	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
2019	Primavera Capital Fund III	Buyout	75,000,000	53,947,292	291,169	NM	NM	NM	NM	NM	NM
2019	Providence Strategic Growth IV	Venture Capital	75,000,000	7,479,093	2,293,574	NM	NM	NM	NM	NM	NM
2019	TCV X	Venture Capital	75,000,000	28,455,000	-	NM	NM	NM	NM	NM	NM
2019	Thoma Bravo Fund XIII	Buyout	75,000,000	54,255,533	303	NM	NM	NM	NM	NM	NM
2019	TSG8	Buyout	100,000,000	14,737,363	-	NM	NM	NM	NM	NM	NM
2019	Vista Equity Partners Fund VII	Buyout	75,000,000	18,931,440	166,237	NM	NM	NM	NM	NM	NM
2019	Wind Point Partners IX-A	Buyout	75,000,000	13,102,227	-	NM	NM	NM	NM	NM	NM
2019 Total			\$1,270,361,398	\$294,502,719	\$6,487,931	NM	NM	NM	NM	NM	NM
2020	Altaris Health Partners V	Buyout	50,000,000	-	-	NM	NM	NM	NM	NM	NM
2020	Ares PA Opportunities Fund, L.P. - Special Situations	Special Situations	100,000,000	-	-	NM	NM	NM	NM	NM	NM
2020	Clearlake Capital Partners VI	Special Situations	60,000,000	5,852,651	2,118	NM	NM	NM	NM	NM	NM
2020	HarbourVest PA Co-investment Fund	Buyout	200,000,000	13,775,000	-	NM	NM	NM	NM	NM	NM
2020	Permira Susquehanna Opportunities - Buyout	Buyout	40,000,000	-	-	NM	NM	NM	NM	NM	NM
2020 Total			\$450,000,000	\$19,627,651	\$2,118	NM	NM	NM	NM	NM	NM
Total: Active Investments			\$9,243,048,364	\$12,634,509,434	\$15,158,517,887	\$4,038,447,438	\$6,562,455,890	1.5x	9.0%	Second	Second
Total: Liquidated Investments			\$4,376,975,751	\$4,389,036,960	\$7,874,560,871	-	\$3,485,523,910	1.8x	16.1%	First	Second
Total: Commonwealth of Pennsylvania State Employees' Retirement System			\$13,620,024,115	\$17,023,546,394	\$23,033,078,757	\$4,038,447,438	\$10,047,979,801	1.6x	12.2%	Second	Second

1. Commitment reflects current commitment including fx fluctuations for non-usd funds.

2. Contributions includes management fees and expenses.

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

4. IRR and TVM performance for investments held less than two years in 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.

5. Fund quartile rankings provided by Burgiss Private iQ as of June 30, 2020, and represents sector-comparable funds aggregated by vintage year, asset class and geography, with special situation funds benchmarked to All Private Equity. Total Buyout, Venture Capital and Special Situations are benchmarked by sector-comparable funds, which includes vintages in which SERS made commitments. Vintage year benchmarks compares Burgiss Private iQ vintage year by Global All Private Equity Benchmarks.

NM - Not Meaningful

Note: Keystone Legacy Fund performance represents since inception returns for all non-core funds combined and contributions and distributions reflect since inception cash flows for the non-core portfolio.

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

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.

Exhibit B – Investments by Sector

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Buyout	ABRY Partners IV	2000	\$27,242,773	\$25,497,290	\$74,633,973						
Buyout	ABRY Partners V	2004	45,000,000	41,752,543	83,389,341						
Buyout	ABRY Partners VI	2008	50,000,000	59,994,861	107,608,270						
Buyout	ABRY Partners VII	2011	30,000,000	37,911,447	48,786,607						
Buyout	ABRY Partners VIII	2015	25,000,000	29,191,750	19,994,127						
Buyout	Advent International GPE VI-A	2008	35,000,000	35,146,325	68,452,177	4,908,401	38,214,253	2.1x	16.6%	First	First
Buyout	Advent International GPE VII-B	2012	40,000,000	37,600,000	38,901,080	28,891,358	30,192,438	1.8x	14.8%	Second	Second
Buyout	Advent International GPE VIII-B	2016	50,000,000	46,850,000	-	62,963,750	16,113,750	1.3x	14.1%	Second	Second
Buyout	Advent Latin American Private Equity Fund IV	2007	30,000,000	30,797,073	41,165,921	5,506,763	15,875,611	1.5x	9.2%	Second	Third
Buyout	Advent Latin American Private Equity Fund V	2010	15,000,000	14,430,000	8,325,000	6,330,656	225,656	1.0x	0.3%	Fourth	Fourth
Buyout	Advent Latin American Private Equity Fund VI	2015	25,000,000	19,300,000	5,000,000	17,708,876	3,408,876	1.2x	8.1%	Third	Third
Buyout	Altaris Health Partners V	2020	50,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyout	Apollo Investment Fund IV	1997	75,000,000	74,838,620	124,814,033	80,294	50,055,707	1.7x	8.5%	Second	Second
Buyout	Apollo Investment Fund IX	2019	85,400,000	23,032,685	2,157,713	NM	NM	NM	NM	NM	NM
Buyout	Apollo Investment Fund V	2000	50,000,000	44,972,146	122,673,016	430,414	78,131,284	2.7x	38.8%	First	First
Buyout	Apollo Investment Fund VI	2005	40,000,000	38,911,805	64,467,407	760,974	26,316,575	1.7x	8.7%	Second	Second
Buyout	Asia Alternatives Capital Partners	2006	25,000,000	25,197,065	42,216,540	2,806,118	19,825,593	1.8x	10.8%	Second	Second
Buyout	Asia Alternatives Capital Partners II	2007	29,949,500	28,998,110	50,994,011	23,878,451	45,874,352	2.6x	18.0%	First	First
Buyout	Asia Alternatives Capital Partners III	2012	50,000,000	54,192,776	45,958,605	42,390,954	34,156,783	1.6x	12.9%	Third	Second
Buyout	Asia Alternatives Capital Partners V	2017	50,000,000	21,016,566	584,065	NM	NM	NM	NM	NM	NM
Buyout	Asia Alternatives Korea Buyout Investors (Hahn & Co)	2011	7,000,000	8,715,513	9,137,898	4,869,732	5,292,117	1.6x	11.3%	Third	Third
Buyout	Audax Private Equity Fund	2000	35,000,000	36,839,098	56,057,910	125,324	19,344,136	1.5x	13.1%	First	Second
Buyout	Audax Private Equity Fund II	2005	25,000,000	25,517,152	46,325,622	231,524	21,039,994	1.8x	14.1%	First	Second
Buyout	Audax Private Equity Fund III	2007	37,000,000	42,498,691	81,672,112	1,457,475	40,630,897	2.0x	15.0%	First	Second
Buyout	Audax Private Equity Fund V	2016	50,000,000	44,032,670	15,657,020	42,235,881	13,860,230	1.3x	15.1%	Second	Second

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Buyout	Audax Private Equity Fund VI	2019	75,000,000	13,558,417	1,536,573	NM	NM	NM	NM	NM	NM
Buyout	Berkshire Fund VI	2002	20,000,000	18,819,615	54,873,734						
Buyout	Berkshire Fund VII	2006	32,000,000	32,613,861	68,126,503						
Buyout	Berkshire Fund VIII	2011	30,000,000	32,062,612	29,954,225						
Buyout	Blackstone Capital IV	2001	69,379,875	69,119,097	192,546,094	1,675,528	125,102,525	2.8x	36.2%	First	First
Buyout	Blackstone Capital Partners V	2006	150,000,000	150,111,788	242,154,335	6,746,693	98,789,240	1.7x	7.6%	Second	Second
Buyout	Blackstone Capital Partners VII	2016	50,000,000	46,720,625	4,527,675	48,847,469	6,654,519	1.1x	9.2%	Third	Third
Buyout	Blackstone Capital Partners VIII	2019	70,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyout	Blackstone Communications Partners I	2000	25,000,000	25,114,042	30,998,189	147,136	6,031,283	1.2x	6.2%	Second	Second
Buyout	Capvis Equity IV	2014	42,879,920	44,923,075	33,984,236	15,687,069	4,748,230				
Buyout	Carlyle Energy Mezzanine Opportunities Fund	2012	50,000,000	65,140,434	31,410,748	5,121,868	(28,607,818)	0.6x	(24.7%)	Fourth	Fourth
Buyout	CVC Capital Partners VII	2018	91,865,099	45,718,040	563,383	NM	NM	NM	NM	NM	NM
Buyout	Eureka Growth Capital III	2013	20,000,000	15,190,667	13,697,042	13,097,397	11,603,772	1.8x	39.3%	First	Second
Buyout	Eureka II	2006	20,000,000	21,906,935	22,163,990	4,741,306	4,998,361	1.2x	4.2%	Third	Third
Buyout	Francisco Partners II	2006	30,000,000	29,383,916	41,240,515	5,459,691	17,316,289	1.6x	10.1%	Second	Second
Buyout	Francisco Partners III	2011	20,000,000	20,514,684	33,151,148	15,979,070	28,615,534	2.4x	20.4%	Second	First
Buyout	Francisco Partners IV	2015	25,000,000	24,656,280	21,406,842	35,220,941	31,971,503	2.3x	29.2%	First	First
Buyout	FSN Capital IV	2013	37,900,657	37,755,593	53,506,224						
Buyout	FSN Capital V	2017	78,572,345	58,499,399	9,958,963						
Buyout	Great Hill Equity Partners IV	2008	25,000,000	25,125,662	59,603,949						
Buyout	GTCR Fund XI	2014	25,000,000	22,712,831	21,334,738				26.3%	First	
Buyout	GTCR Fund XII	2018	32,500,000	14,966,250	634,852	NM	NM	NM	NM	NM	NM
Buyout	GTCR VIII	2002	75,000,000	69,393,599	120,471,948				22.3%	Second	
Buyout	H.I.G. Brazil and Latin America Partners	2015	50,000,000	29,942,431	9,139						
Buyout	H.I.G. Europe Capital Partners II	2014	24,288,664	18,561,566	4,172,985						
Buyout	H.I.G. Growth Buyouts & Equity Fund II	2011	15,000,000	15,898,204	9,008,823						

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Buyout	Hahn & Company II	2014	50,000,000	53,972,151	14,174,068						
Buyout	Hahn & Company III	2018	56,250,000	9,704,001	83,933	NM	NM	NM	NM	NM	NM
Buyout	Hahn & Company III - Supplemental Fund	2018	18,750,000	5,944,175	57,377	NM	NM	NM	NM	NM	NM
Buyout	HarbourVest IPEP III	1998	40,000,000	39,400,000	61,092,165	75,186	21,767,351	1.6x	8.6%	Second	Second
Buyout	HarbourVest PA Co-investment Fund	2020	200,000,000	13,775,000	-	NM	NM	NM	NM	NM	NM
Buyout	Hellman & Friedman Capital Partners IX	2019	90,000,000	20,006,514	-	NM	NM	NM	NM	NM	NM
Buyout	Hellman & Friedman Capital Partners VI	2006	125,000,000	119,913,412	218,914,920	5,663,474	104,664,982	1.9x	12.9%	First	First
Buyout	Hellman & Friedman Capital Partners VIII	2016	50,000,000	50,536,959	4,936,396	60,318,204	14,717,641	1.3x	13.3%	Second	Second
Buyout	HIPEP V-Asia Pacific & Rest of World	2005	30,000,000	28,245,316	35,732,646	4,324,064	11,811,394	1.4x	5.9%	Third	Second
Buyout	Horizon Impact Fund	2014	50,000,000	44,629,802	20,795,776	47,231,461	23,397,435	1.5x	15.7%	Second	Second
Buyout	Horizon Impact Fund B	2017	100,000,000	55,750,000	990,000	58,656,971	3,896,971	1.1x	4.9%	Third	Third
Buyout	Horizon Strategic Fund - Carlyle Group	2014	100,000,000	86,601,204	42,848,347	87,148,312	43,395,455	1.5x	10.9%	Third	Second
Buyout	Incline Equity Partners III	2013	15,000,000	15,705,405	29,124,308	8,390,734	21,809,637	2.4x	32.9%	First	First
Buyout	Kelso VII	2003	40,000,000	41,169,937	65,821,118	63,646	24,714,827	1.6x	11.4%	Second	Second
Buyout	Kelso VIII	2007	150,000,000	146,309,243	169,699,185	23,733,039	47,122,981	1.3x	5.9%	Third	Third
Buyout	LLR Equity Partners II	2004	25,000,000	25,000,000	45,084,480	137,058	20,221,538	1.8x	12.2%	Second	Second
Buyout	LLR Equity Partners III	2008	30,000,000	29,108,722	51,222,009	5,656,025	27,769,311	2.0x	15.0%	Second	First
Buyout	LLR Equity Partners IV	2014	50,000,000	45,485,764	56,867,849	36,872,367	48,254,452	2.1x	25.5%	First	First
Buyout	LLR Equity Partners V	2018	75,000,000	54,929,167	6,825,485	NM	NM	NM	NM	NM	NM
Buyout	Madison Dearborn Capital Partners IV	2000	90,000,000	90,365,390	169,072,775	2,085,125	80,792,509	1.9x	14.1%	First	First
Buyout	Madison Dearborn Capital Partners V	2006	75,000,000	71,556,584	113,632,910	967,550	43,043,876	1.6x	7.1%	Second	Second
Buyout	Madison Dearborn Capital Partners VI	2008	50,000,000	53,137,097	85,996,243	29,033,296	61,892,442	2.2x	23.5%	First	First
Buyout	Newbridge Asia IV	2005	40,000,000	38,903,378	85,845,344						
Buyout	NGP Keystone	2018	25,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyout	NGP XII	2018	75,000,000	38,979,286	113,471	NM	NM	NM	NM	NM	NM
Buyout	Oaktree Power Opportunities Fund III	2010	25,000,000	19,123,945	23,437,650						

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Buyout	OCM/GFI Power Opportunities Fund II	2005	13,431,284	13,470,852	41,644,215						
Buyout	Penn Asia Investors	2012	133,000,000	89,143,279	45,323,531	97,852,928	54,033,180	1.6x	15.1%	Second	Second
Buyout	Permira European Fund II	2000	45,672,612	45,672,612	91,560,959	290,705	46,179,052	2.0x	21.6%	First	First
Buyout	Permira European Fund III	2003	127,062,518	127,340,454	218,052,206	318,806	91,030,558	1.7x	26.1%	First	Second
Buyout	Permira IV	2006	136,375,536	138,372,478	205,123,986	17,647,826	84,399,335	1.6x	8.5%	Second	Second
Buyout	Permira Susquehanna Opportunities - Buyout	2020	40,000,000	-	-	NM	NM	NM	NM	NM	NM
Buyout	Permira VI	2017	56,740,276	51,150,582	7,745,206	57,271,581	13,866,205	1.3x	14.4%	Second	Second
Buyout	Permira VII	2019	74,961,398	13,239,036	-	NM	NM	NM	NM	NM	NM
Buyout	Primavera Capital Fund II	2015	50,000,000	54,475,309	7,516,140						
Buyout	Primavera Capital Fund III	2019	75,000,000	53,947,292	291,169	NM	NM	NM	NM	NM	NM
Buyout	Providence Equity Partners IV	2000	25,000,000	23,420,840	56,065,270						
Buyout	Providence Equity Partners V	2004	45,000,000	42,692,171	51,743,883						
Buyout	Providence Equity Partners VI	2007	50,000,000	54,663,181	59,224,369						
Buyout	Ridgemont Equity Partners II	2015	50,000,000	48,547,530	21,510,770						
Buyout	Sentinel Capital Partners V	2014	10,000,000	10,043,414	5,637,708	9,999,644	5,593,938	1.6x	16.6%	Second	Second
Buyout	Silver Lake Partners V	2018	78,000,000	52,709,282	573,513	NM	NM	NM	NM	NM	NM
Buyout	Sterling Group Partners IV	2016	20,000,000	15,565,495	904,208	18,247,966	3,586,679	1.2x	9.4%	Third	Second
Buyout	TA X	2006	70,000,000	69,732,009	91,152,009						
Buyout	TDR Capital IV	2018	88,886,049	34,834,570	-	NM	NM	NM	NM	NM	NM
Buyout	Thoma Bravo Fund XIII	2019	75,000,000	54,255,533	303	NM	NM	NM	NM	NM	NM
Buyout	TPG Asia V	2007	22,500,000	21,964,311	26,635,553	4,133,689	8,804,931	1.4x	6.3%	Third	Third
Buyout	TPG Partners III	1999	64,375,746	64,119,169	165,990,273						
Buyout	TPG Partners IV	2003	27,907,484	27,981,463	58,018,004						
Buyout	TPG Partners V	2006	88,831,038	92,531,812	128,288,961	2,233,190	37,990,339	1.4x	4.8%	Third	Second
Buyout	TPG Partners VI	2008	44,294,641	50,155,750	66,018,872	8,332,761	24,195,883	1.5x	9.7%	Second	Second
Buyout	TSG8	2019	100,000,000	14,737,363	-	NM	NM	NM	NM	NM	NM

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Buyout	Vista Equity Partners Fund VI	2016	150,000,000	166,987,216	36,993,858						
Buyout	Vista Equity Partners Fund VII	2019	75,000,000	18,931,440	166,237	NM	NM	NM	NM	NM	NM
Buyout	Wind Point Partners IX-A	2019	75,000,000	13,102,227	-	NM	NM	NM	NM	NM	NM
Buyout	Wind Point Partners VIII	2017	100,000,000	91,487,319	48,554,180	NM	NM	NM	NM	NM	NM
Buyout Total			\$5,853,017,414	\$4,549,170,248	\$4,997,113,139	\$2,234,266,853	\$2,682,209,743	1.6x	13.8%	Second	Second
Keystone Legacy Fund	Keystone Legacy Fund	2018	200,000,000	5,583,372,904	7,059,023,241	602,543,591	2,078,193,928	1.4x	5.7%	NM	NM
Keystone Legacy Fund Total			\$200,000,000	\$5,583,372,904	\$7,059,023,241	\$602,543,591	\$2,078,193,928	1.4x	5.7%	NM	NM
Special Situations	ABRY Advanced Securities Fund	2007	7,262,950	23,508,684	38,682,209						
Special Situations	ABRY Mezzanine Partners	2001	30,000,000	26,731,187	49,707,116						
Special Situations	ABRY Senior Equity II	2006	30,000,000	28,282,103	44,960,375						
Special Situations	ADV Opportunities Fund I	2015	50,000,000	56,390,677	8,703,460	52,958,254	5,271,037	1.1x	2.8%	Fourth	Fourth
Special Situations	Ares PA Opportunities Fund, L.P. - Special Situations	2020	100,000,000	-	-	NM	NM	NM	NM	NM	NM
Special Situations	ASF VII B	2016	100,000,000	56,694,086	10,737,362						
Special Situations	ASF VII PA Co-Invest	2016	50,000,000	25,136,737	3,193,613						
Special Situations	ASF VIII B	2019	100,000,000	18,070,147	42,362	NM	NM	NM	NM	NM	NM
Special Situations	ASF VIII PA Co-Invest	2019	50,000,000	5,000	-	NM	NM	NM	NM	NM	NM
Special Situations	Avenue Special Situations Fund VI	2010	20,000,000	20,068,464	20,720,289						
Special Situations	AXA Secondary Fund III	2004	26,000,000	21,737,894	37,244,706						
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	99,186,788						
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	57,399,008	114,404,865	4,401,060	61,406,917	2.1x	19.2%	First	First
Special Situations	Centerbridge Capital Partners III	2015	30,000,000	26,189,002	10,518,588	28,631,357	12,960,943	1.5x	18.7%	Second	Second
Special Situations	Clearlake Capital Partners IV	2015	15,000,000	21,809,094	15,701,359	17,907,258	11,799,522	1.5x	26.1%	First	Second
Special Situations	Clearlake Capital Partners V	2018	55,000,000	50,650,059	15,464,574	NM	NM	NM	NM	NM	NM
Special Situations	Clearlake Capital Partners VI	2020	60,000,000	5,852,651	2,118	NM	NM	NM	NM	NM	NM

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Special Situations	Dover Street VII	2007	30,000,000	28,696,128	38,958,754	2,085,812	12,348,438	1.4x	9.1%	Second	Third
Special Situations	H.I.G. Bayside Debt & LBO Fund II	2008	30,000,000	30,998,253	46,874,314						
Special Situations	H.I.G. Bayside Loan Opp. Fund III	2013	50,000,000	40,418,122	40,802,856						
Special Situations	H.I.G. Bayside Loan Opp. Fund IV	2015	25,000,000	22,626,299	13,011,761						
Special Situations	KPS Special Situations Fund IV	2014	25,000,000	23,342,222	7,222,716	20,055,286	3,935,780	1.2x	12.0%	Third	Fourth
Special Situations	KPS Special Situations Fund V	2019	75,000,000	-	-	NM	NM	NM	NM	NM	NM
Special Situations	KPS Special Situations Mid-Cap Fund	2019	25,000,000	4,432,972	-	NM	NM	NM	NM	NM	NM
Special Situations	LBC Credit Partners III	2013	50,000,000	46,696,253	46,683,842				6.9%	Third	
Special Situations	Lexington Capital Partners III	1999	35,000,000	34,516,449	43,363,378						
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	70,566,984						
Special Situations	Oaktree Capital Management	2004	40,000,000	40,582,060	327,057,310						
Special Situations	Oaktree Opportunities Fund IX	2013	50,000,000	50,000,000	23,947,715						
Special Situations	OCM Opportunities Fund V	2004	40,000,000	40,003,507	65,911,274						
Special Situations	OCM Opportunities Fund VI	2005	40,000,000	40,000,000	63,171,009						
Special Situations	OCM Opportunities Fund VII	2007	40,000,000	40,000,000	54,806,896						
Special Situations	OCM Opportunities Fund VII b	2007	40,000,000	36,000,000	62,262,693						
Special Situations	OCM Opportunities Fund VIII	2010	12,500,000	12,583,425	17,717,075						
Special Situations	OCM Opportunities Fund VIIIb	2010	12,500,000	12,500,000	12,750,127						
Special Situations	OCM Principal Opportunities Fund IV	2006	20,000,000	20,400,000	34,058,279						
Special Situations	Platinum Equity Capital Partners III	2013	50,000,000	47,749,134	67,247,880	22,637,940	42,136,686	1.9x	38.1%	First	Second
Special Situations	RRJ Capital Master Fund III	2015	50,000,000	42,005,160	37,341,464	13,823,101	9,159,405	1.2x	10.8%	Third	Third
Special Situations Total			\$1,807,262,950	\$1,323,259,226	\$1,784,596,572	\$421,256,963	\$882,594,309	1.7x	15.0%	First	First
Venture Capital	Battery Ventures VIII	2007	25,000,000	25,050,751	55,636,614						
Venture Capital	Battery Ventures VIII Side Car Fund	2008	6,768,000	6,803,790	17,449,466						
Venture Capital	HarbourVest Partners VI	1999	200,000,000	196,586,055	251,156,017	986,161	55,556,123	1.3x	3.6%	Second	Second

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Venture Capital	HarbourVest Partners VII	2003	75,000,000	73,687,500	108,698,287	11,806,613	46,817,400	1.6x	6.9%	Third	Second
Venture Capital	HarbourVest Partners VIII	2006	100,000,000	98,000,000	145,199,679	47,097,269	94,296,948	2.0x	10.7%	Second	First
Venture Capital	Insight Venture Partners IX	2015	50,000,000	51,172,788	12,273,960	106,539,988	67,641,160	2.3x	26.6%	First	First
Venture Capital	Insight Venture Partners VI	2007	30,000,000	32,244,177	81,709,725	201,691	49,667,240	2.5x	19.2%	First	First
Venture Capital	Insight Venture Partners VII	2011	20,000,000	21,319,992	43,195,215	19,391,523	41,266,747	2.9x	22.2%	First	First
Venture Capital	Insight Venture Partners VIII	2013	50,000,000	52,250,000	72,558,657	60,956,469	81,265,126	2.6x	20.5%	First	First
Venture Capital	Insight Venture Partners X	2018	100,000,000	93,800,000	34,245	NM	NM	NM	NM	NM	NM
Venture Capital	Insight Venture Partners XI	2019	75,000,000	11,250,000	-	NM	NM	NM	NM	NM	NM
Venture Capital	JMI Equity Fund VI	2007	40,000,000	40,000,246	69,017,467						
Venture Capital	JMI Equity Fund VII	2011	10,000,000	9,780,000	12,614,296						
Venture Capital	JMI Equity Fund VIII	2015	25,000,000	26,900,000	16,068,006						
Venture Capital	Lightspeed India Partners I	2015	15,000,000	13,590,000	1,576,000						
Venture Capital	Lightspeed Venture Partners VII	2005	18,000,000	18,000,000	49,449,448						
Venture Capital	Lightspeed Venture Partners VIII	2008	15,000,000	14,850,000	31,101,784						
Venture Capital	Meritech Capital Partners IV	2011	20,000,000	19,400,000	31,674,671						
Venture Capital	Meritech Capital Partners V	2014	23,000,000	21,332,500	20,431,240						
Venture Capital	New Enterprise Associates 11	2003	25,000,000	25,000,000	63,385,828	2,848,768	41,234,596	2.6x	15.5%	Second	First
Venture Capital	New Enterprise Associates 12	2006	35,000,000	35,631,130	46,722,311	3,684,056	14,775,237	1.4x	6.7%	Second	Second
Venture Capital	New Enterprise Associates IX	1999	20,000,000	19,600,000	8,228,227	1,035,641	(10,336,132)	0.5x	(6.0%)	Third	Fourth
Venture Capital	New Enterprise Associates X	2000	35,000,000	35,028,000	33,995,586	5,268,504	4,236,090	1.1x	1.9%	Third	Third
Venture Capital	NewSpring Growth Capital II	2006	10,000,000	9,850,000	14,203,466						
Venture Capital	NewSpring Growth Capital III	2012	25,000,000	23,643,105	17,097,833						
Venture Capital	Providence Strategic Growth II	2016	60,000,000	67,447,363	44,766,872						
Venture Capital	Providence Strategic Growth III	2018	75,000,000	54,430,567	13,014,791	NM	NM	NM	NM	NM	NM
Venture Capital	Providence Strategic Growth IV	2019	75,000,000	7,479,093	2,293,574	NM	NM	NM	NM	NM	NM
Venture Capital	TCV X	2019	75,000,000	28,455,000	-	NM	NM	NM	NM	NM	NM

Commonwealth of Pennsylvania State Employees' Retirement System

Schedule of Active Investments by Sector

As of June 30, 2020

SECTOR	FUND	VINTAGE	COMMITMENT ¹	CONTRIBUTIONS ²	DISTRIBUTIONS	MARKET VALUE	GAIN/LOSS ³	TVM ⁴	IRR ⁴	IRR RANK ⁵	TVM RANK ⁵
Venture Capital	Weathergag Venture Capital	2007	25,000,000	22,875,000	34,251,174	15,097,343	26,473,517	2.2x	12.3%	Second	First
Venture Capital	Weathergag Venture Capital II	2010	25,000,000	23,250,000	19,980,495	38,705,052	35,435,547	2.5x	15.7%	Second	First
Venture Capital Total			\$1,382,768,000	\$1,178,707,056	\$1,317,784,934	\$780,380,031	\$919,457,910	1.8x	9.7%	Second	First
Total: Active Investments			\$9,243,048,364	\$12,634,509,434	\$15,158,517,887	\$4,038,447,438	\$6,562,455,890	1.5x	9.0%	Second	Second
Total: Liquidated Investments			\$4,376,975,751	\$4,389,036,960	\$7,874,560,871	-	\$3,485,523,910	1.8x	16.1%	First	Second
Total: Commonwealth of Pennsylvania State Employees' Retirement System			\$13,620,024,115	\$17,023,546,394	\$23,033,078,757	\$4,038,447,438	\$10,047,979,801	1.6x	12.2%	Second	Second

1. Commitment reflects current commitment including fx fluctuations for non-usd funds.

2. Contributions includes management fees and expenses.

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

4. IRR and TVM performance for investments held less than two years in 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.

5. Fund quartile rankings provided by Burgiss Private iQ as of June 30, 2020, and represents sector-comparable funds aggregated by vintage year, asset class and geography, with special situation funds benchmarked to All Private Equity. Total Buyout, Venture Capital and Special Situations are benchmarked by sector-comparable funds, which includes vintages in which SERS made commitments. Vintage year benchmarks compares Burgiss Private iQ vintage year by Global All Private Equity Benchmarks.

NM - Not Meaningful

Note: Keystone Legacy Fund performance represents since inception returns for all non-core funds combined and contributions and distributions reflect since inception cash flows for the non-core portfolio.

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

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 40 -45 - Redacted