

1H 2014

## CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (CalPERS) PRIVATE EQUITY PROGRAM QUARTERLY PERFORMANCE REPORT



## INTRODUCTION

Private equity is a long-term asset class with performance results influenced by various factors. This report concentrates on several key exposures that contribute to performance results, including sector, geography, structure and vintage year. In addition, the broad industry trends highlighted herein may affect future performance results.

## EXECUTIVE SUMMARY

### Portfolio Highlights

- The PE Program underperformed the Policy Benchmark over the latest one, three, five, and ten-year periods. Despite trailing the Policy Benchmark over the latest ten-year period, **the PE Program's average annual return as of June 30, 2014 is above CalPERS' expected return for the asset class and well above the actuarial rate of return.**
- As has been noted in previous quarterly reports, including a public market index in the PE Program Policy Benchmark continues to result in questions about comparable performance results. Most private equity investors use this type of benchmark and the industry is attempting to develop an alternative that will be more readily understood and acceptable. **In the interim, generally expect private equity to underperform rising public equity markets and outperform falling ones.**
- **The PE Program has been net cash flow positive (i.e., distributions received exceeded capital contributions made) since 2011.**
- The **Buyout strategy continues to be the largest proportion of the PE Program** and was the largest contributor to performance over the latest three-year period due to valuation increases across the strategy.
- The **United States, representing the largest geographic exposure of the portfolio had the most significant impact on performance results over the latest three-year period.**
- **Partnerships, representing the largest type of investment vehicle in the portfolio, had the most significant impact on performance results over the past three years.**
- An analysis of the existing unfunded commitments shows that the **PE Program's general partners have significant "dry powder",** approximately a fourth of which is from the 2007-2008 vintage years.
- Although the PE Program is in its twenty-fourth year, the **preponderance of value and performance are attributable to commitments made in the last ten years.** More specifically, commitments made in the 2006-2008 vintage years currently represent the majority of aggregate value.
- **The PE Program's five largest general partner relationships represent approximately 36% of total exposure,** which is defined as market value plus unfunded commitments.

#### Industry Trends

- Fundraising activity globally increased modestly in the first half of 2014.
- Announced U.S. buyout deal volume exhibited an increase in Q2 2014 from the prior quarter and is on pace to exceed 2013 levels.
- Risk metrics in the leveraged buyout market increased during the second quarter of 2014 as both purchase price multiples and debt multiples increased.
- Venture capital investment activity continued to increase in the first half of 2014.
- Exit activity for venture capital investments continued to show strength in the first half of 2014.
- The outlook for distressed debt investment strategies continues to be mixed.

## OVERALL PRIVATE EQUITY PROGRAM PERFORMANCE

## Performance vs. Policy Benchmarks

	1 Year	3 Year	5 Year	10 Year
<b>CalPERS' PE Program<sup>1</sup></b>	<b>20.0%</b>	<b>12.8%</b>	<b>18.7%</b>	<b>13.3%</b>
<i>PE Program Policy Benchmark<sup>2</sup></i>	<i>23.3%</i>	<i>14.5%</i>	<i>23.2%</i>	<i>15.4%</i>
<i>State Street Private Equity Index (SSPEI)<sup>3</sup></i>	<i>18.6%</i>	<i>11.5%</i>	<i>15.7%</i>	<i>12.5%</i>
<b>Excess Return</b>				
<i>v. Policy Benchmark</i>	(3.3%)	(1.7%)	(4.5%)	(2.1%)
<i>v. SSPEI</i>	1.4%	1.3%	3.0%	0.8%

Source: Wilshire Associates, State Street, PCA

- o Despite posting a very strong 20.0% return (above long-term expectations for the asset class), the PE Program underperformed the Policy Benchmark by 3.3% over the latest year.
- o Strong absolute five-year returns for the PE Program and the Policy Benchmark exhibit the continued recovery from the economic crisis in late 2008/early 2009, while the PE Program underperformed by 4.5%.
- o The PE Program has posted a return above the expected return for the asset class and above the actuarial rate of return over the latest ten-year period, despite trailing the Policy Benchmark by 210 basis points.
- o The PE Program outperformed the State Street Private Equity Index (a peer based, industry benchmark) over all periods evaluated.

<sup>1</sup> The net asset value of CalPERS' PE Program portfolio is lagged one quarter with adjustments for current cash flows through the reporting period

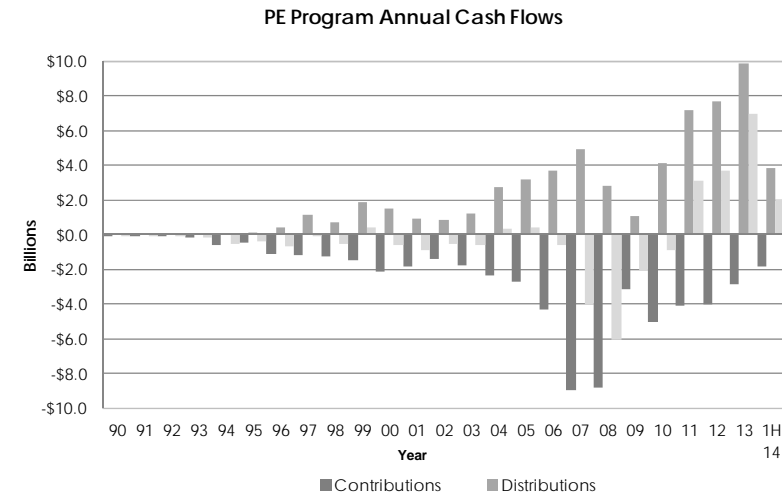
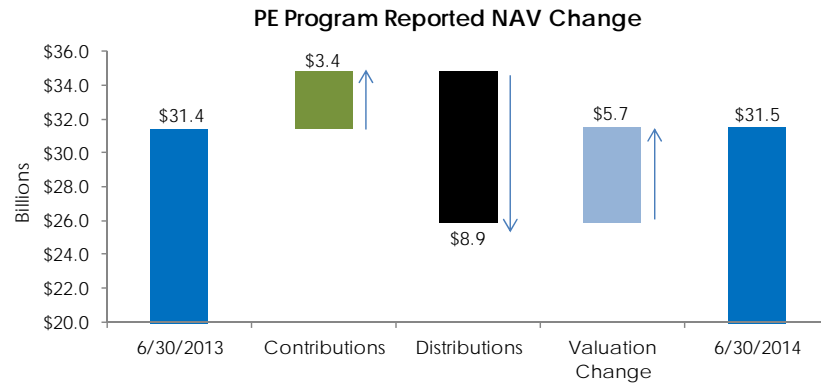
<sup>2</sup> Currently equals (67% FTSE US TMI + 33% FTSE AW x-US TMI) + 3% 1-quarter lagged from and since September 2011; the Wilshire 2500 ex-tob + 3% since July 2009; previous periods for the PE Program Policy Index are linked historically to the Custom Young Fund Index, the PE Program's prior benchmark. The Custom Young Fund Index was composed of private equity holdings where write downs lagged the public markets declines in the reporting period.

<sup>3</sup> Time-weighted return calculated by linking quarterly return, 1-quarter lagged

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## NET ASSET VALUE CHANGE AND CASH FLOWS



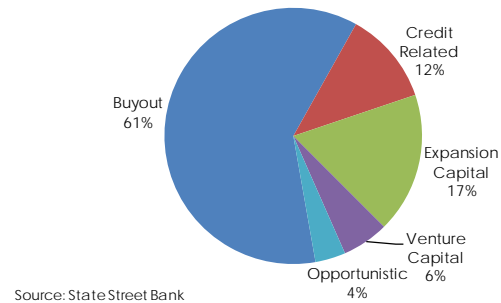
- PE Program value increased \$0.1 billion over the latest year despite strong net returns of capital from managers. This was due to a \$5.7 billion increase in valuation, an 18.2% increase from the 2013 net asset value. The Program's experience with manager valuations is that, on the whole, they have been consistently lower than the amount realized when the asset is sold.
- Over the last three years ending June 30, 2014, the PE Program has received \$24.1 billion in distributions while contributing \$11.3 billion, resulting in a positive net cash flow of \$12.8 billion.
- Distributions from managers have been high due to more friendly credit markets resulting in material utilization of the dividend recap, and greater use of the IPO market. In addition, the PE Program's sales of holdings on the secondary market in 2012 and proceeds received when investments in Apollo Global Management and The Carlyle Group were monetized in 2013, generated distributions and contributed to the positive net cash flows.

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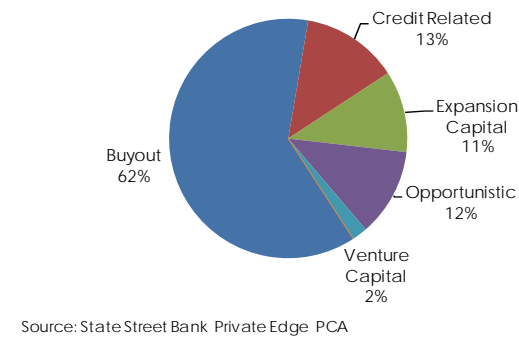


## PORTFOLIO STRATEGY COMPOSITION

PE Program NAV by Strategy: \$31.5 B



PE Program Unfunded Commitments by Strategy: \$10.9 B



Target Strategy Allocations

Strategy	Target	Range	Actual
Buyouts	60%	50%-70%	61%
Credit Related	15%	10%-25%	12%
Venture Capital	1%	0%-7%	6%
Growth/Expansion	15%	5%-20%	17%
Opportunistic	10%	0%-15%	4%

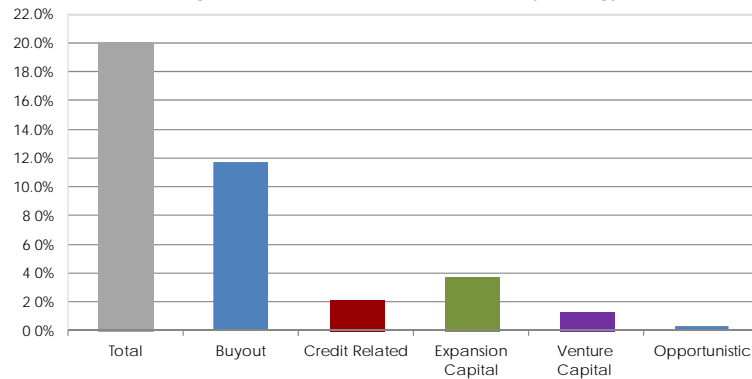
- o All Strategy allocations are within target ranges.
- o Buyout is the greatest proportion of the PE Program's unfunded commitments and will therefore continue to be its largest exposure prospectively.

## CalPERS Private Equity Performance Report – 1H 2014



## PORTFOLIO STRATEGY PERFORMANCE

PE Program One-Year Return Contribution\* by Strategy



\* Sector return weighted by proportion of NAV  
Source: State Street Bank PCA

Performance Summary: by strategy

	1 Year	3 Year	5 Year	10 Year
<b>PE Program</b>	<b>20.0%</b>	<b>12.8%</b>	<b>18.7%</b>	<b>13.3%</b>
<i>Buyout</i>	<i>19.5%</i>	<i>13.0%</i>	<i>17.6%</i>	<i>16.7%</i>
<i>Credit Related</i>	<i>18.5%</i>	<i>15.5%</i>	<i>29.0%</i>	<i>15.1%</i>
<i>Expansion Capital</i>	<i>21.5%</i>	<i>11.6%</i>	<i>16.8%</i>	<i>9.2%</i>
<i>Venture Capital</i>	<i>21.9%</i>	<i>9.8%</i>	<i>9.6%</i>	<i>6.4%</i>
<i>Opportunistic</i>	<i>7.5%</i>	<i>4.9%</i>	<i>12.8%</i>	<i>6.2%</i>

Source: State Street Bank

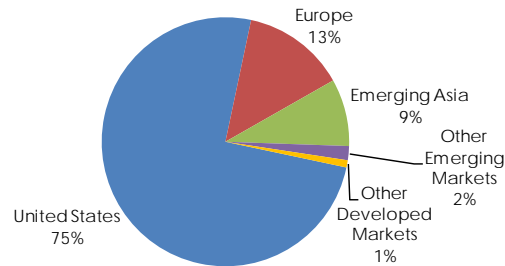
- All major strategies of the PE Program contributed positive results over the last twelve months.
- Expansion Capital, representing 17% of the Program, was the second largest contributor to results for the year followed by Credit Related, which is 12% of the Program.
- Buyout strategy (with a 13.0% return) was a large factor in generating returns over the last three years due to its significant allocation in the PE Program.
- Credit Related and Expansion Capital strategies were also large contributors, posting strong returns of 15.5% and 11.6%, respectively, over the same time period.
- Buyout strategy has generated attractive results over the longer ten-year period, posting an average annual return of 16.7%.

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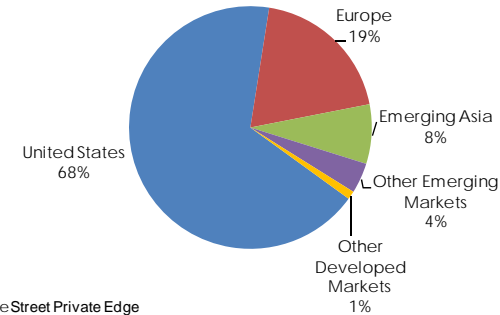
## PORTFOLIO GEOGRAPHIC COMPOSITION AND PERFORMANCE

PE Program NAV by Geography: \$31.5 B



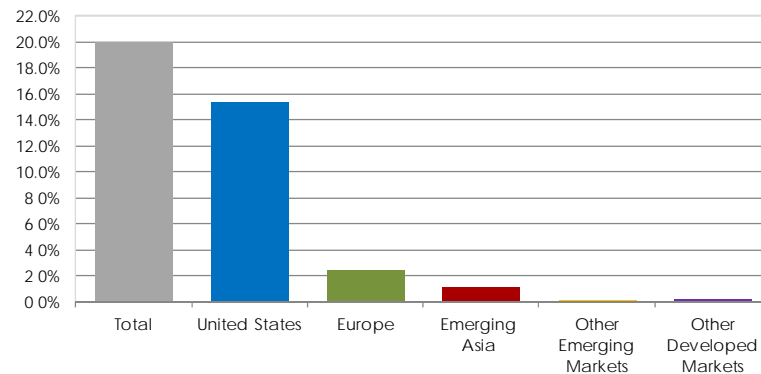
Source: State Street Bank PCA

PE Program Unfunded Commitments by Geography: \$10.9 B



Source: State Street Private Edge

PE Program One-Year Return Contribution\* by Geography



\* Geographic return weighted by proportion of NAV  
Source: State Street Bank PCA

Performance Summary: by geography

	1 Year	3 Year	5 Year	10 Year
PE Program	20.0%	12.8%	18.7%	13.3%
United States	20.6%	14.0%	19.9%	13.1%
International- Developed World	18.6%	9.9%	13.6%	15.0%
International- Emerging Markets	11.8%	7.7%	16.0%	13.5%

Source: State Street Bank

- o Approximately 75% of the PE Program's net asset value (NAV) is inside the United States (based on the location of the investment firm) with 14% invested in developed markets (primarily Europe at 13%) and 11% in emerging markets (primarily Asia at 9%).
- o Performance results were positive across all major geographic sectors.

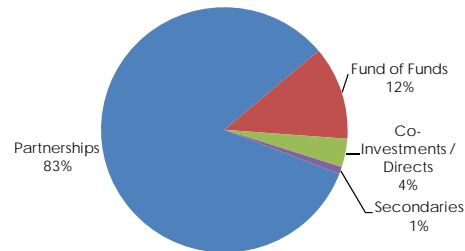


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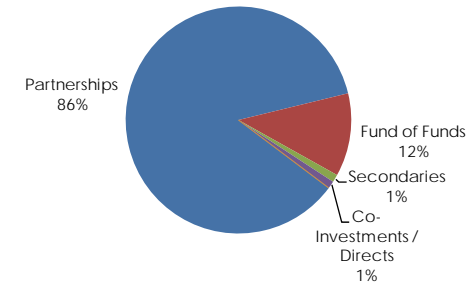
## PORTFOLIO STRUCTURE COMPOSITION AND PERFORMANCE

PE Program NAV by Structure: \$31.5 B



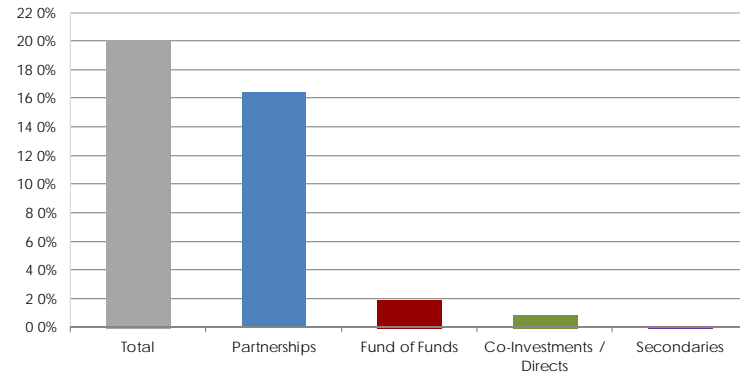
Source: State Street Bank

PE Program Unfunded Commitments by Structure: \$10.9 B



Source: State Street Bank, Private Edge, PCA

PE Program One-Year Return Contribution\* by Structure



\* Sector return weighted by proportion of NAV  
Source: State Street Bank PCA

Performance Summary: by Structure

	1 Year	3 Year	5 Year	10 Year
<b>PE Program</b>	<b>20.0%</b>	<b>12.8%</b>	<b>18.7%</b>	<b>13.3%</b>
<i>Partnerships</i>	<i>20.0%</i>	<i>13.5%</i>	<i>19.6%</i>	<i>13.6%</i>
<i>Fund of Funds</i>	<i>15.6%</i>	<i>9.0%</i>	<i>8.8%</i>	<i>7.8%</i>
<i>Co-Investment / Directs</i>	<i>23.1%</i>	<i>9.0%</i>	<i>23.6%</i>	<i>21.5%</i>
<i>Secondaries</i>	<i>11.0%</i>	<i>7.2%</i>	<i>11.2%</i>	<i>12.5%</i>

Source: State Street Bank

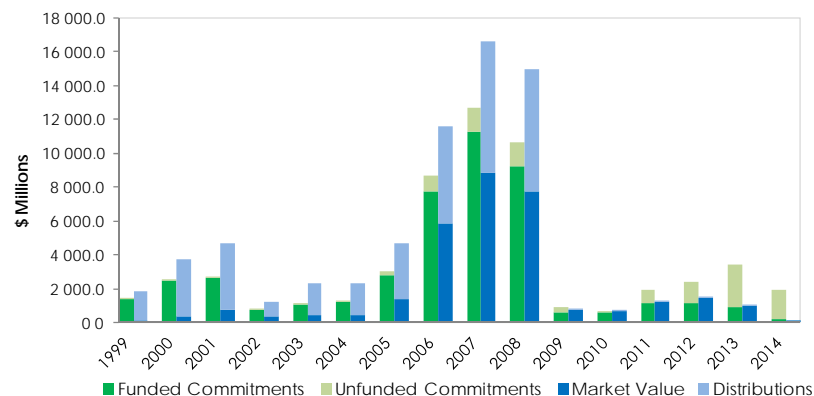
- Approximately 83% of the PE Program's NAV is invested in Partnership structures, with Fund of Funds representing an additional 12%, followed by Co-Investments / Directs at 4% and secondaries at 1%.
- Partnerships are expected to receive the vast majority of unfunded commitments at 86%.
- Performance results are net positive across all structures over the latest year.
- Partnerships, representing the largest structure of the portfolio, had the most significant impact on performance results.

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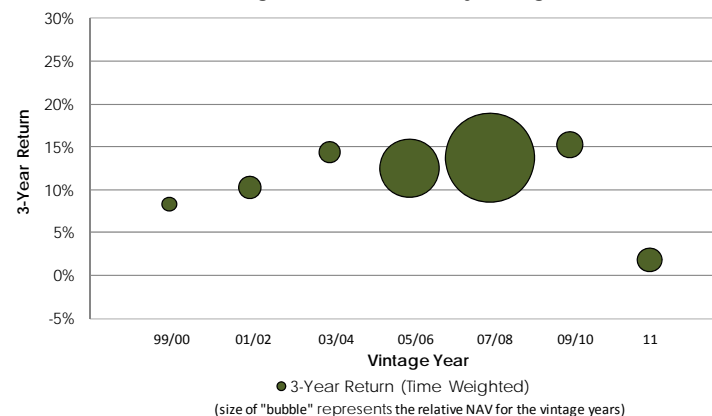


## PORTFOLIO VINTAGE YEAR COMPOSITION AND PERFORMANCE

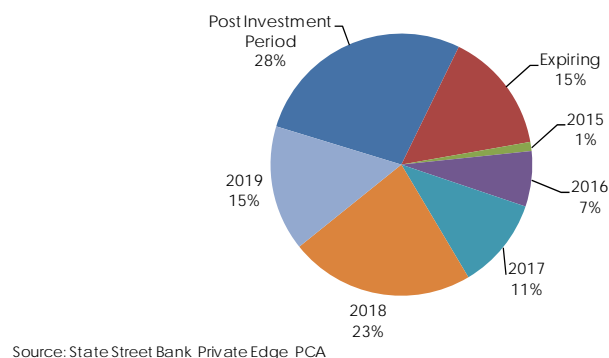
Commitments and Total Value by Vintage Year



PE Program 3-Year Return: By Vintage Year



PE Program Unfunded Commitments by Maturity



- The PE Program currently has \$57.5 billion in active commitments<sup>4</sup>, \$10.9 billion of unfunded commitments, and \$31.5 billion in market value.
- The majority of active commitments and market value are currently represented by the 2006 to 2008 vintage years at \$31.9 billion and \$22.4 billion, respectively and are driving performance results.
- The majority of unfunded commitments are expected to be deployed within the next several years.

<sup>4</sup> Active commitments only include commitments that have drawn capital as of the reporting date.

## CalPERS Private Equity Performance Report – 1H 2014



## ANNUAL COMMITMENT ACTIVITY AND MANAGER CONCENTRATION

## PE Program Commitment Activity: fiscal year 2013/2014

<u>Partnership/Firm</u>	<u>Commitment (\$M)</u>	<u>Sector</u>	<u>Relationship</u>
CVC Capital Partners VI	\$667	Buyout	Existing
Cerberus CP Partners	600	Opportunistic	Existing
Apollo VIII	500	Buyout	Existing
First Reserve XIII L.P.	400	Buyout	Existing
Five Co-Investments	361	Co-Investments	Existing
Permira V, L.P.	312	Buyout	Existing
Blackstone Tactical Opps	300	Opportunistic	Existing
Onex Partners IV, L.P.	300	Buyout	New
Trident VI, L.P.	250	Buyout	Graduate*
Lindsay Goldberg IV, L.P.	250	Buyout	Graduate*
CDH Fund V, L.P.	200	Buyout	Existing
Patria Fund V	175	Buyout	Graduate*
Tailwind II	150	Buyout	Existing

Source: CalPERS, PCA

\*former fund of fund relationship

## Largest PE Program Relationships by Net Committed Capital

<u>Firm</u>	<u>Investments</u>	<u>Total Exposure (\$M)</u>	<u>% of Program</u>
The Carlyle Group	32	\$3,772	9%
Blackstone Group	16	3,651	9%
Apollo Investment Management	14	2,585	6%
TPG Capital	17	2,525	6%
Grove Street Advisors	4	1,848	4%

Source: State Street Bank Private Edge PCA

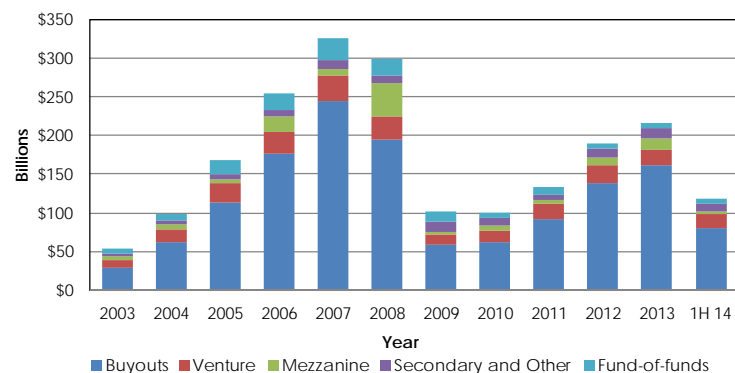
- o The PE Program committed approximately \$4.5 billion across 17 opportunities from July 1, 2013 through June 30, 2014.
- o PE Program's five largest relationships, based on total exposure (defined as cost plus unfunded commitments) represent approximately 34% of total exposure with capital allocated across over 80 investments (partnerships and direct investments) and targets multiple strategies and geographies.

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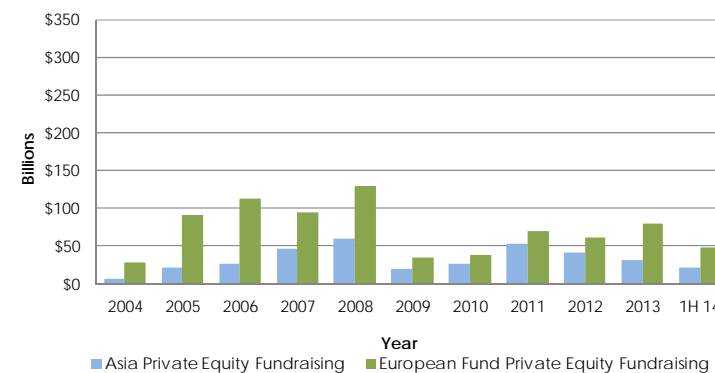


## PRIVATE EQUITY MARKET OVERVIEW

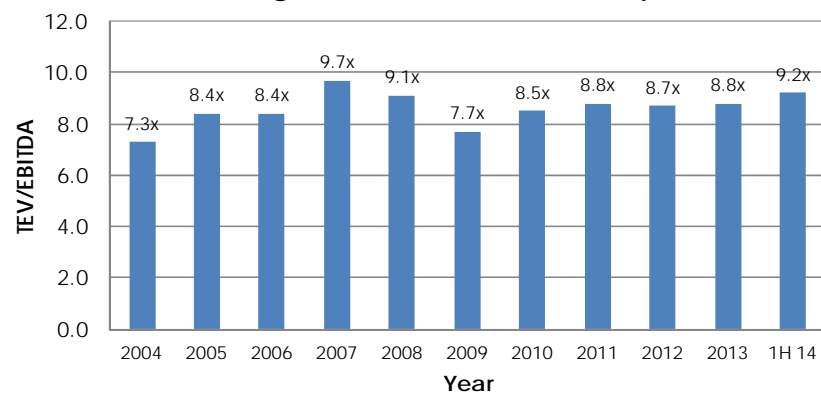
Commitments to U.S. Private Equity Partnerships



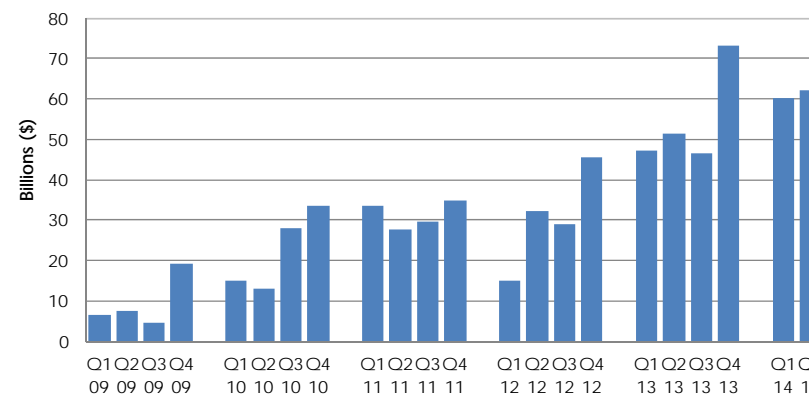
Commitments to Non-U.S. Private Equity



Average U.S. Purchase Price Multiples



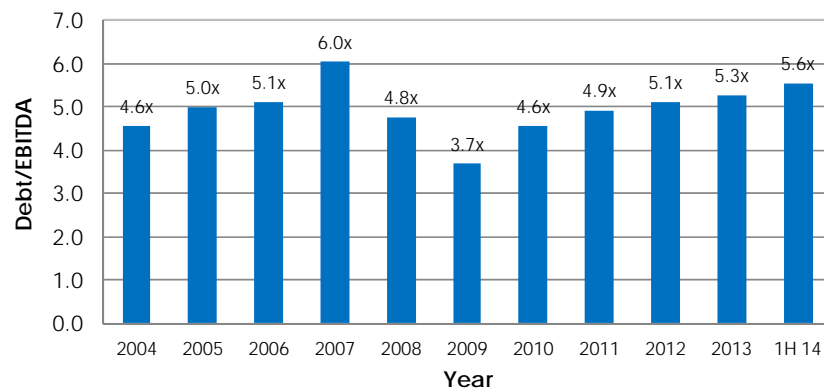
Announced and Disclosed U.S. Quarterly LBO Deal Value\*



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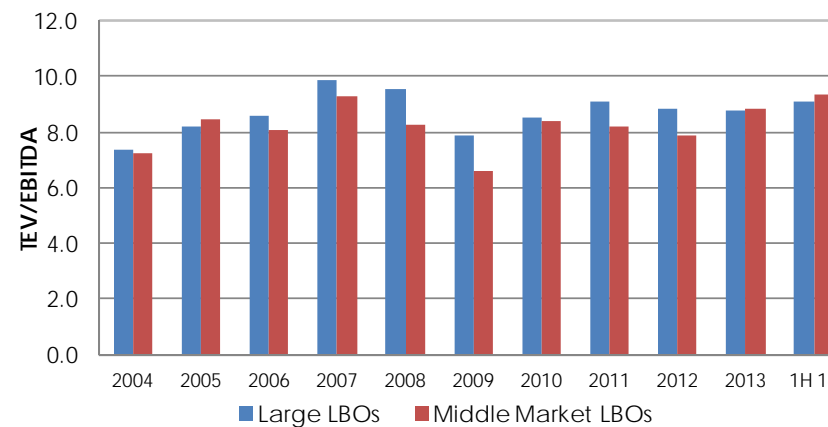


Average Debt Multiples



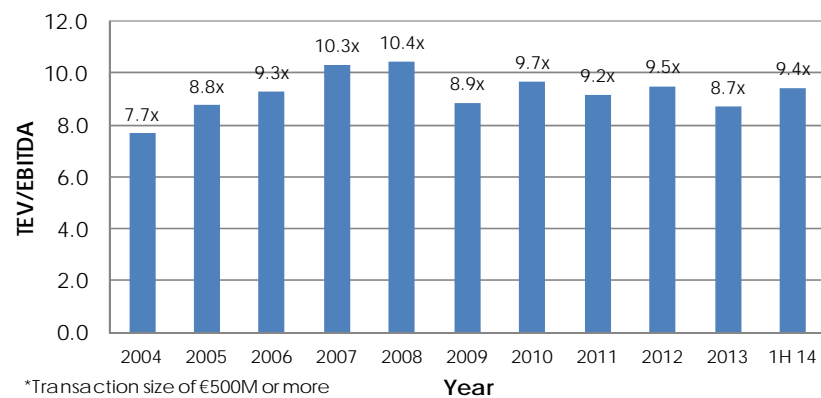
Source: S&amp;P Capital IQ

U.S. Purchase Price Multiples: Large vs Middle Market



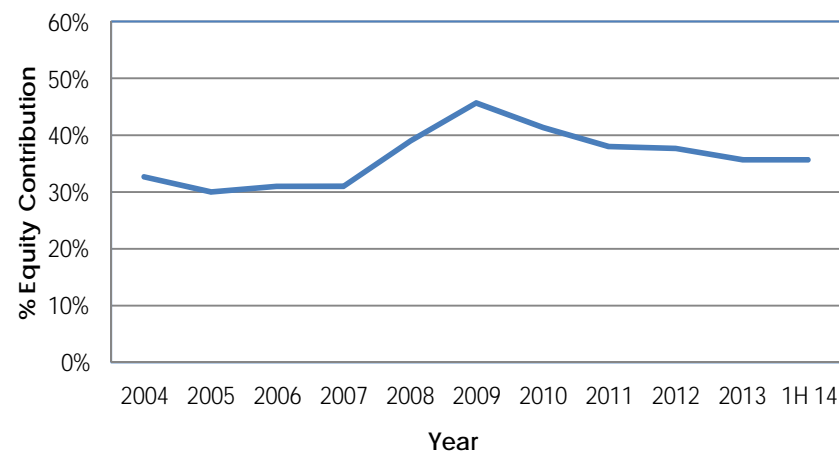
Source: S&amp;P Capital IQ

Average European Purchase Price Multiples



\*Transaction size of €500M or more  
Source: S&P Capital IQ

Equity Contribution

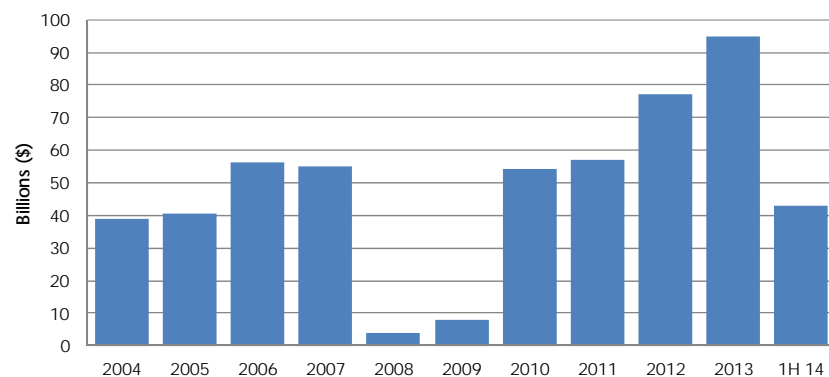


Source: S&amp;P Capital IQ

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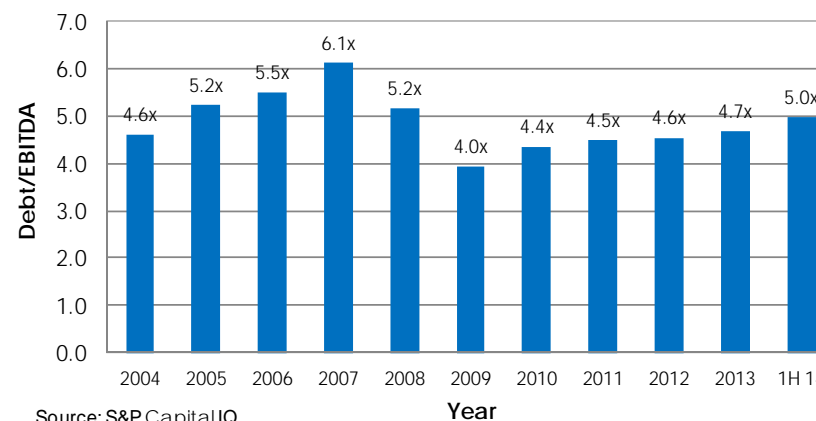
PCA

Dividend/Stock Repurchase Loan Volume



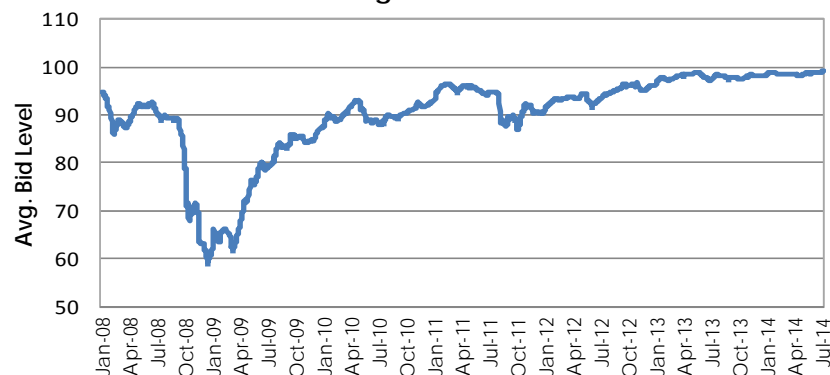
Source: S&amp;P Capital IQ LCD Bank of America Merrill Lynch

Average European Debt Multiples



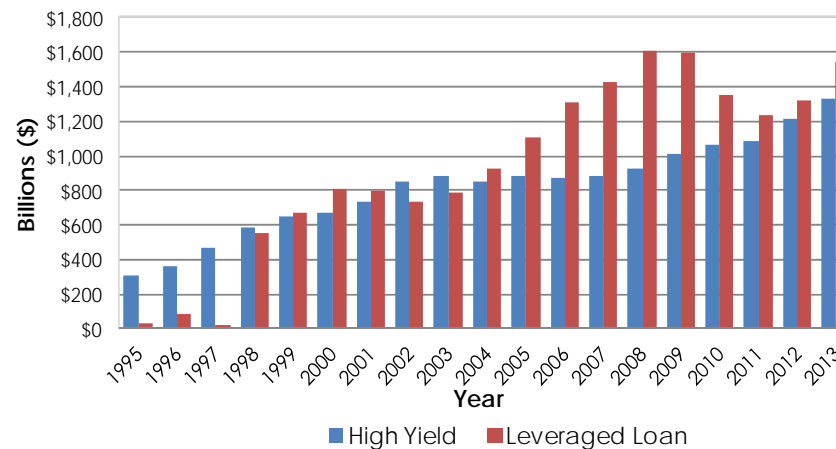
Source: S&amp;P Capital IQ

Leveraged Loan Index



Source: Loan Syndications and Trading Association (LSTA)

U.S. High-Yield and Leveraged Loan Market Size



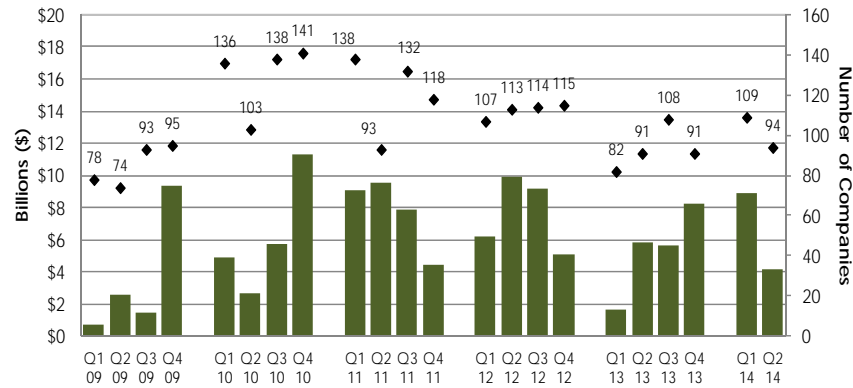
■ High Yield ■ Leveraged Loan

Source: Credit Suisse Leveraged Finance Market Update

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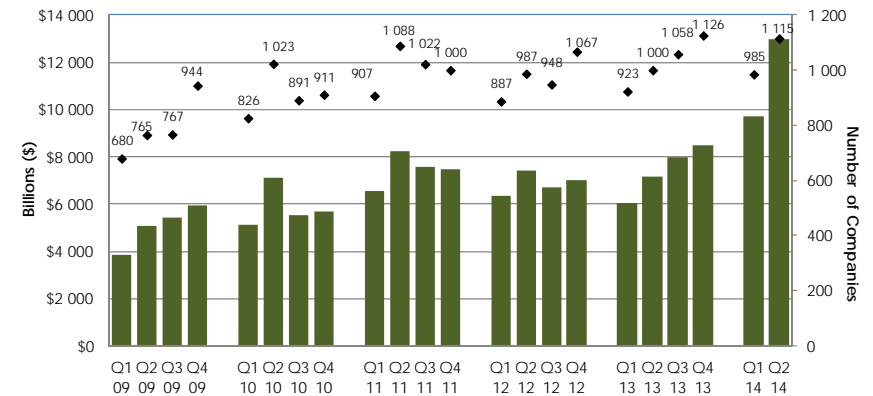


Quarterly U.S. Venture Capital M&amp;A Activity

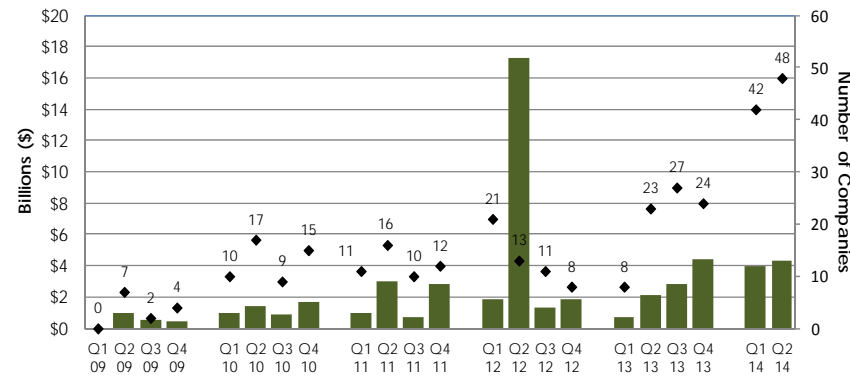


Source: Thomson Reuters

Quarterly U.S. Venture Capital Deal Volume\*

\* Only includes equity portion of deal value  
Source: Thomson Reuters

Quarterly U.S. Venture Capital IPO Activity



Source: Thomson Reuters

## CalPERS Private Equity Performance Report – 1H 2014



## Appendix 1: PE Program Relationships by Total Exposure (Market Value Plus Unfunded Commitments)

<u>Firm</u>	<u>Total Exposure (\$M)</u>	<u>% of Program</u>	<u>Firm (continued)</u>	<u>Total Exposure (\$M)</u>	<u>% of Program</u>
CARLYLE GROUP	3,820	9%	WELSH AND CARSON AND ANDERSON	274	1%
APOLLO MANAGEMENT	3,795	9%	THL EQUITY ADVISORS	273	1%
BLACKSTONE GROUP	3,499	8%	BIRCH HILL EQUITY PARTNERS	261	1%
TPG CAPITAL	2,491	6%	SAIF PARTNERS	260	1%
CVC CAPITAL PARTNERS	1,673	4%	ARCLIGHT	248	1%
KKR AND CO.	1,558	4%	PALLADIUM	244	1%
ADVENT INTERNATIONAL	1,341	3%	OAKTREE CAPITAL MANAGEMENT	243	1%
SILVER LAKE	1,158	3%	FRANCISCO PARTNERS	242	1%
CERBERUS	1,128	3%	THE RESOLUTE FUND	231	1%
CALIFORNIA EMERGING VENTURES	1,004	2%	RIVERWOOD CAPITAL LLC	203	<1%
57 STARS	925	2%	CDH INVESTMENTS	198	<1%
CFIG	913	2%	WAYZATA OPPORTUNITIES FUND	195	<1%
YUCAIPA	908	2%	KPS	195	<1%
OAK HILL CAPITAL PARTNERS	890	2%	AUDAX GROUP	165	<1%
HELLMAN AND FRIEDMAN CAPITAL PARTNERS	728	2%	INSIGHT CAPITAL	162	<1%
STANDARD LIFE	641	2%	POLISH ENTERPRISE	154	<1%
FIRST RESERVE	639	2%	AILING CAPITAL	152	<1%
HEALTH EVOLUTION PARTNERS	628	1%	LIME ROCK	150	<1%
PERMIRA	575	1%	CLESSIDRA CAPITAL	147	<1%
BRIDGEPOINT CAPITAL	536	1%	WELLSPRING CAPITAL MANAGEMENT	143	<1%
ARES MANAGEMENT LLC	522	1%	HUNTSMAN GAY CAPITAL	139	<1%
TOWERBROOK CAPITAL PARTNERS	509	1%	ESSEX WOODLANDS HEALTH VENTURES	139	<1%
NEW MOUNTAIN CAPITAL LLC	486	1%	LION CAPITAL	136	<1%
GREEN EQUITY INVESTORS	481	1%	LEVINE LEICHTMAN CAPITAL PARTNERS	135	<1%
RIVERSTONE LLC	460	1%	CLEARWATER CAPITAL	132	<1%
RIVERSTONE GLOBAL ENERGY	455	1%	GRANITE GLOBAL VENTURES	112	<1%
KMCP	446	1%	MAGNUM CAPITAL	110	<1%
ASIA ALTERNATIVE ASSETS	445	1%	CLARUS VENTURES	110	<1%
MHR	414	1%	TRITON PARTNERS	101	<1%
HAMILTON LANE	405	1%	AFFINITY EQUITY PARTNERS	101	<1%
KHOSLA VENTURES	382	1%	EM ALTERNATIVES	100	<1%
MADISON DEARBORN PARTNERS	336	1%	PAGASI	89	<1%
WLR RECOVERY	331	1%	BARING	86	<1%
PROVIDENCE EQUITY PARTNERS	327	1%	SAGEVIEW CAPITAL LLC	82	<1%
AVENUE CAPITAL PARTNERS	291	1%	W CAPITAL PARTNERS	81	<1%
CAPITAL DYNAMICS	280	1%	VANTAGEPOINT VENTURE PARTNERS	77	<1%
COLLER CAPITAL	279	1%	KLINE HAWKES CALIFORNIA	73	<1%
			OTHER	595	1%



## CalPERS Private Equity Performance Report – 1H 2014



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