

2H | 2014

CALIFORNIA PUBLIC EMPLOYEES' RETIREMENT SYSTEM (CalPERS)  
PRIVATE EQUITY PROGRAM SEMI-ANNUAL 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 December 31, 2014 is above CalPERS' expected return for the asset class and well above the actuarial rate of return.**
- As has been noted in previous 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 20% 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 34% of net exposure**, which is defined as cost plus unfunded commitments.

### Industry Trends

- **2014 U.S. fundraising activity exceeded that of 2013 by roughly 20%, and commitments to European and Asian funds were modestly higher than in 2013.**
- Commitments to buyout funds continue to exceed 70% of total U.S. fundraising activity.
- **Risk metrics in the leveraged buyout market increased during 2014** as both purchase price multiples and debt multiples increased relative to 2013.
- U.S. purchase price multiples exceeded those in 2007 and debt multiples are only slightly below 2007 levels.
- Venture capital commitments and deal volume both increased in 2014.
- The fourth quarter saw a sharp increase in venture capital IPOs, as the year ended with 50% more IPOs than in 2013.
- **The outlook for distressed debt investment strategies continues to be mixed**, as default rates remain low but a turn in the cycle could materially increase the opportunity set.

## 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>14.6%</b> | <b>15.3%</b> | <b>15.9%</b> | <b>12.9%</b> |
| <i>PE Program Policy Benchmark<sup>2</sup></i>               | <i>17.1%</i> | <i>23.1%</i> | <i>16.7%</i> | <i>15.2%</i> |
| <i>State Street Private Equity Index (SSPEI)<sup>3</sup></i> | <i>14.4%</i> | <i>13.8%</i> | <i>13.8%</i> | <i>12.2%</i> |
| <b>Excess Return</b>   |              |              |              |              |
| <i>v. Policy Benchmark</i>                                   | (2.5%)       | (7.8%)       | (0.8%)       | (2.3%)       |
| <i>v. SSPEI</i>  | 0.2%         | 1.5%         | 2.1%         | 0.7%         |

Source: Wilshire Associates, State Street, PCA

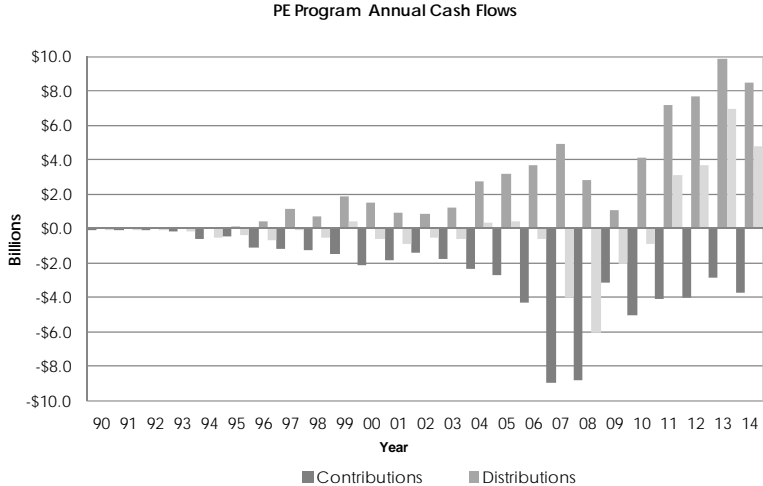
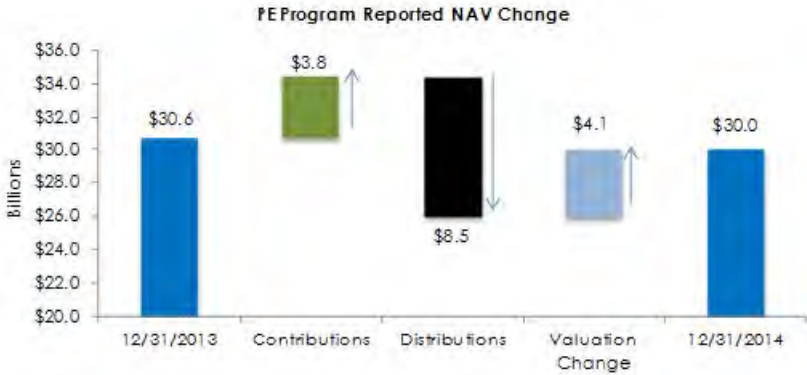
- o Despite posting a strong 14.6% return, the PE Program underperformed the Policy Benchmark by 2.5% over the latest year.
- o Strong absolute five-year returns for the PE Program and the Policy Benchmark exhibit the continued recovery from the economic crisis in late 2008/early 2009, while the PE Program underperformed the benchmark by 0.8%.
- 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 230 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

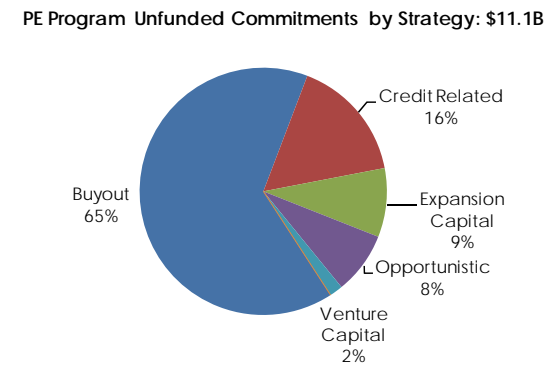
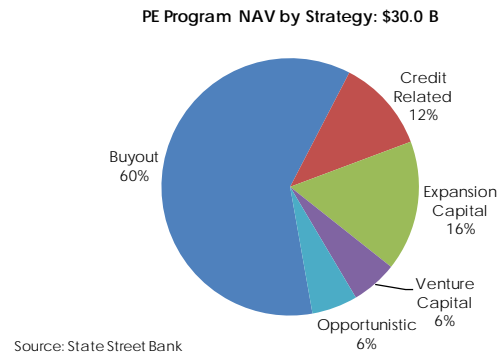
NET ASSET VALUE CHANGE AND CASH FLOWS



Source: PrivateEdge, PCA

- o PE Program net asset value (NAV) decreased by \$0.6 billion over the latest year due to strong net returns of capital from managers, totaling \$8.5 billion, which exceeded the program’s total contributions and valuation increases, which equaled \$7.9 billion.
- o Over the three-year period ending December 31, 2014, the PE Program has received \$26.1 billion in distributions while contributing \$10.7 billion, resulting in a positive net cash flow of \$15.4 billion.
- o Distributions from managers have been high due to an attractive exit market (attributable to a high priced IPO environment) and more friendly credit markets resulting in material utilization of the dividend recap. In addition, the PE Program’s sales on the secondary market in 2012, and proceeds received when direct investments in certain private equity management companies were wholly or partially realized in 2013, generated distributions and contributed to the positive net cash flows.

## PORTFOLIO STRATEGY COMPOSITION

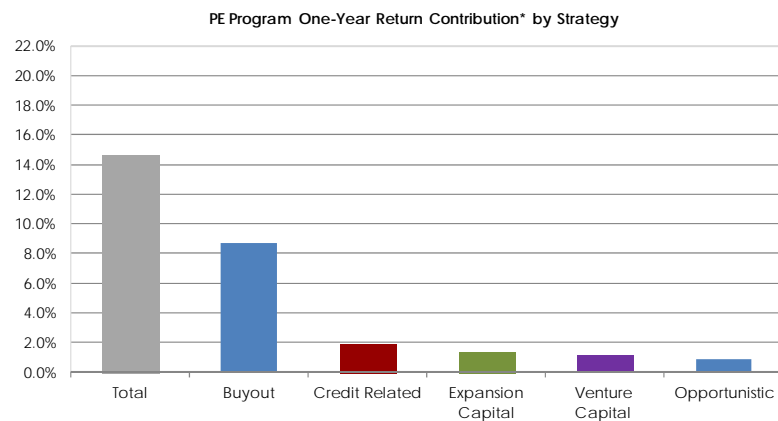


## Target Strategy Allocations

| Strategy         | Target | Range   | Actual |
|------------------|--------|---------|--------|
| Buyouts          | 60%    | 50%-70% | 60%    |
| Credit Related   | 15%    | 10%-25% | 12%    |
| Venture Capital  | 1%     | 0%-7%   | 6%     |
| Growth/Expansion | 15%    | 5%-20%  | 16%    |
| Opportunistic    | 10%    | 0%-15%  | 6%     |

- o All strategy allocations are within target ranges and all but Venture Capital are at or near the middle of 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.
- o Venture Capital, which comprises 6% of the Program's overall NAV, represents only 2% of unfunded commitments, demonstrating the Program's shift away from this strategy in recent years.
- o Conversely, Credit Related investments currently represent 12% of the Program's overall NAV but 16% of unfunded commitments, demonstrating an increased focus on new commitments to this strategy in recent years.

## PORTFOLIO STRATEGY PERFORMANCE



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

## Performance Summary: by strategy

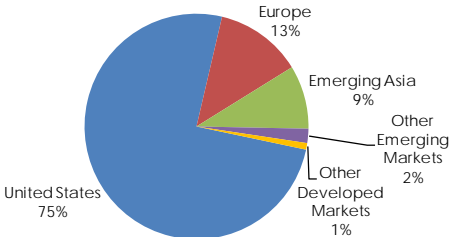
|                          | 1 Year       | 3 Year       | 5 Year       | 10 Year      |
|--------------------------|--------------|--------------|--------------|--------------|
| <b>PE Program</b>        | <b>14.6%</b> | <b>15.3%</b> | <b>15.9%</b> | <b>12.9%</b> |
| <i>Buyout</i>            | 14.4%        | 14.7%        | 15.8%        | 16.0%        |
| <i>Credit Related</i>    | 16.1%        | 23.0%        | 19.7%        | 15.2%        |
| <i>Expansion Capital</i> | 8.0%         | 11.9%        | 14.7%        | 8.7%         |
| <i>Venture Capital</i>   | 18.9%        | 9.8%         | 10.2%        | 6.7%         |
| <i>Opportunistic</i>     | 14.8%        | 8.4%         | 13.8%        | 5.9%         |

Sources: Wilshire, State Street Bank

- o All major strategies of the PE Program contributed positive results over the last twelve months, with the Buyout strategy being the largest contributor to overall performance. Venture Capital had the highest 1-year performance of the five strategies but represents a small proportion of the portfolio and therefore is a lesser contributor to the Program's overall performance.
- o Credit Related, despite being the third-largest strategy (by NAV) in the Program, the second largest contributor to results for the year followed by Expansion Capital, which, at 16% of the Program, is the second largest by NAV.
- o The Buyout strategy (with a 14.7% return) was a large factor in generating returns over the last three years due to its significant allocation in the PE Program.
- o The Buyout strategy has also demonstrated relative consistency in performance over the four time periods measured, while Venture Capital and Opportunistic have demonstrated more volatility.
- o The Buyout strategy has generated attractive results over the longer ten-year period, posting an average annual return of 16.0%.

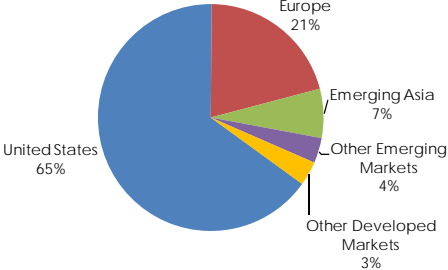
**PORTFOLIO GEOGRAPHIC COMPOSITION AND PERFORMANCE**

PE Program NAV by Geography: \$30.0 B



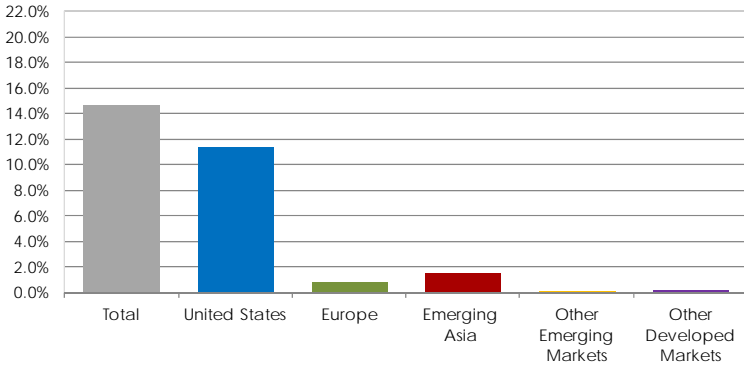
Source: State Street Bank, PCA

PE Program Unfunded Commitments by Geography: \$11.1 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      |
|--|--------------|--------------|--------------|--------------|
| <b>PE Program</b>                      | <b>14.6%</b> | <b>15.3%</b> | <b>15.9%</b> | <b>12.9%</b> |
| <i>United States</i>                   | <i>15.3%</i> | <i>16.7%</i> | <i>17.1%</i> | <i>12.9%</i> |
| <i>International- Developed World</i>  | <i>6.7%</i>  | <i>9.6%</i>  | <i>11.0%</i> | <i>13.5%</i> |
| <i>International- Emerging Markets</i> | <i>14.3%</i> | <i>11.3%</i> | <i>13.1%</i> | <i>13.3%</i> |

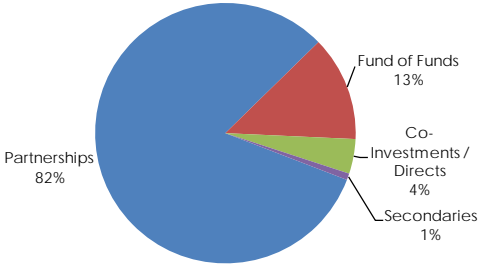
Sources: Wilshire, State Street Bank

- o Approximately 75% of the PE Program’s 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 and time periods.
- o Unfunded commitments in Europe have increased as a result of several large commitments made to European managers during the second half of 2014.



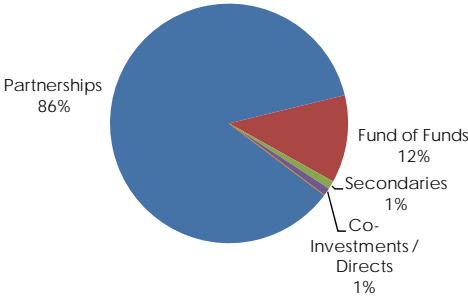
**PORTFOLIO STRUCTURE COMPOSITION AND PERFORMANCE**

PE Program NAV by Structure: \$30.0 B



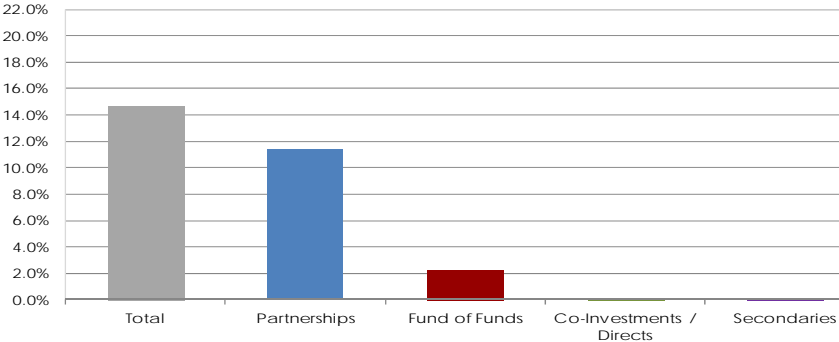
Source: State Street Bank

PE Program Unfunded Commitments by Structure: \$11.1 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

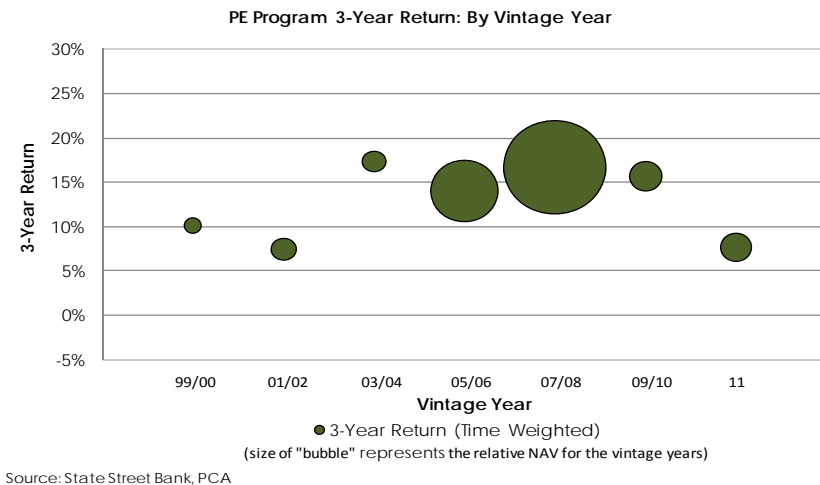
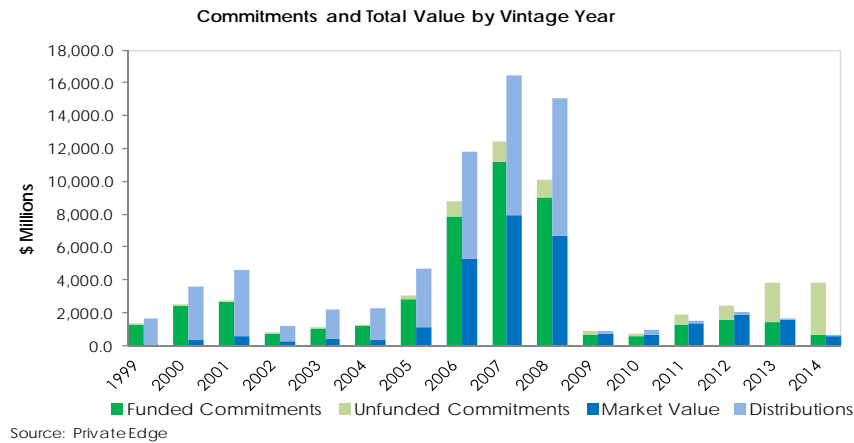
Performance Summary: by structure

|                               | 1 Year       | 3 Year       | 5 Year       | 10 Year      |
|-------------------------------|--------------|--------------|--------------|--------------|
| <b>PE Program</b>             | <b>14.6%</b> | <b>15.3%</b> | <b>15.9%</b> | <b>12.9%</b> |
| <i>Partnerships</i>           | 14.9%        | 16.2%        | 16.7%        | 13.3%        |
| <i>Fund of Funds</i>          | 17.6%        | 9.5%         | 10.6%        | 8.3%         |
| <i>Co-Investments/Directs</i> | (0.3%)       | 10.6%        | 18.3%        | 18.9%        |
| <i>Secondaries</i>            | 13.0%        | 8.1%         | 12.5%        | 11.5%        |

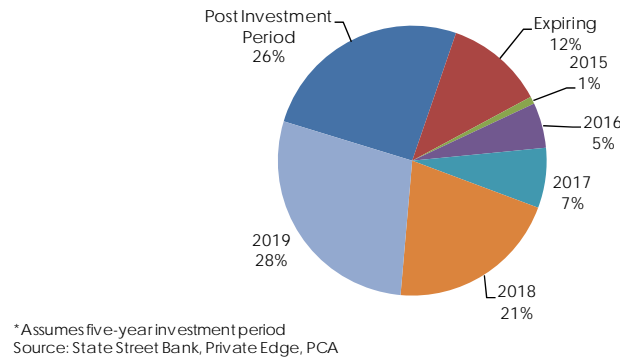
Sources: Wilshire, State Street Bank

- o Approximately 82% of the PE Program’s NAV is invested in Partnership structures, with Fund of Funds representing an additional 13%, followed by Co-Investments/Directs at 4% and secondaries at 1%.
- o Performance results are net positive across all structures over the latest year with the exception of Co-Investments/Directs, which posted a loss of (0.3%) in 2014.
- o Partnerships, representing the largest structure of the portfolio, had the most significant impact on performance results.
- o The Program’s bias toward Partnerships is also demonstrated in that 86% of unfunded commitments relate to Partnerships.
- o Co-investments, though representing 4% of the Program’s NAV, comprise only 1% of unfunded commitments, largely due to the fact that co-investments are frequently funded (or substantially funded) upon closing.

PORTFOLIO VINTAGE YEAR COMPOSITION AND PERFORMANCE



PE Program Unfunded Commitments by Maturity\*



- o The Program currently has \$59.5 billion in active commitments<sup>4</sup>, \$11.1 billion of unfunded commitments, and \$30.0 billion in NAV.
- o The majority of active commitments and market value are currently represented by the 2006 to 2008 vintage years at \$31.3 billion and \$20.0 billion, respectively, and are driving performance results.
- o Near-term expirations are smaller due to slower commitment activity post-crisis. An increase in recent commitment activity has increased the longer-dated expirations.

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

## ANNUAL COMMITMENT ACTIVITY AND MANAGER CONCENTRATION

PE Program Commitment Activity: fiscal year 2014/2015

| Partnership/Firm            | Commitment (\$M) | Sector        | Relationship |
|-----------------------------|------------------|---------------|--------------|
| Co-Investment(s)            | 104              | Co-Investment | Existing     |
| Bridgepoint V               | 469              | Buyout        | Existing     |
| Centerbridge III            | 150              | Credit        | New          |
| CVC Credit Separate Account | 250              | Credit        | Existing     |
| GCM California Mezzanine    | 80               | Credit        | Existing     |
| GCM Grosvenor DEM           | 200              | Buyout        | Existing     |
| Hellman & Friedman VIII     | 500              | Buyout        | Existing     |
| Sankaty Separate Account    | 500              | Credit        | New          |
| Siris Partners III          | 50               | Buyout        | Graduate     |
| WCAS XII                    | 350              | Buyout        | Existing     |

Source: CalPERS, PCA

Largest PE Program Relationships by Net Exposure

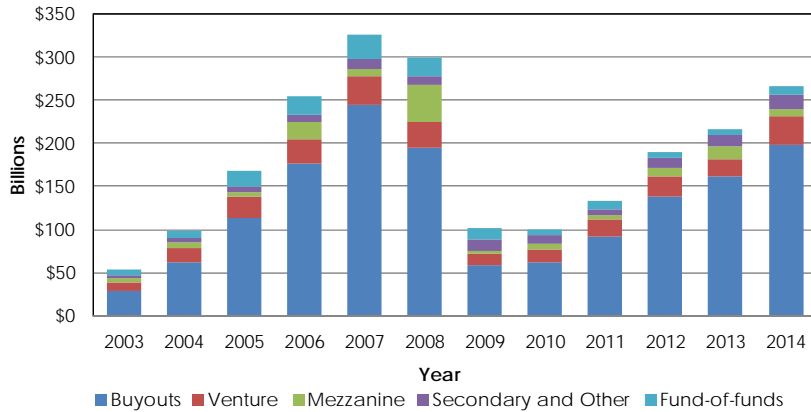
| Firm             | Investments | Net Exposure (\$M) | % of Program |
|------------------|-------------|--------------------|--------------|
| Carlyle Group    | 33          | \$3,727            | 9%           |
| Blackstone Group | 16          | \$3,574            | 9%           |
| TPG              | 17          | \$2,376            | 6%           |
| Apollo           | 12          | \$2,357            | 6%           |
| Grove Street     | 4           | \$1,795            | 4%           |

Source: State Street Bank, Private Edge, PCA

- o The PE Program authorized commitments totaling over \$2.5 billion across 10 opportunities during the first half of the 2014-2015 fiscal year.
- o PE Program's five largest relationships, based on net exposure (defined as cost of investments plus unfunded commitments) represent approximately 34% of the program's overall net exposure with capital allocated across over 70 investments (partnerships, funds of funds and direct investments) and targeting multiple strategies and geographies.

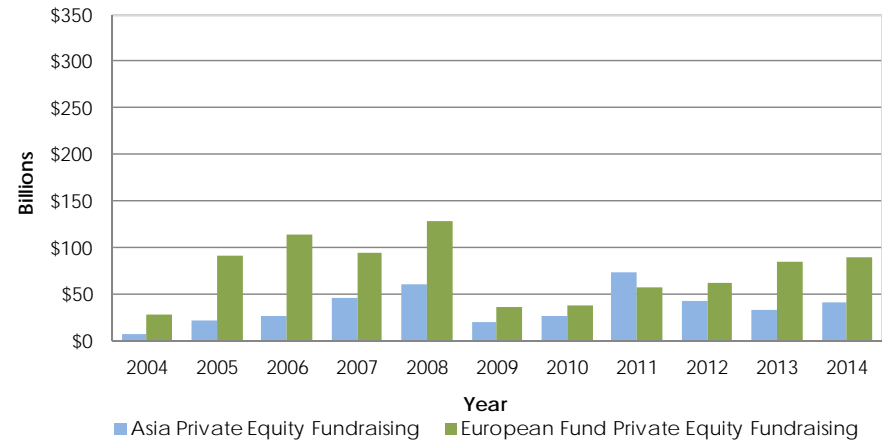
PRIVATE EQUITY MARKET OVERVIEW

Commitments to U.S. Private Equity Partnerships



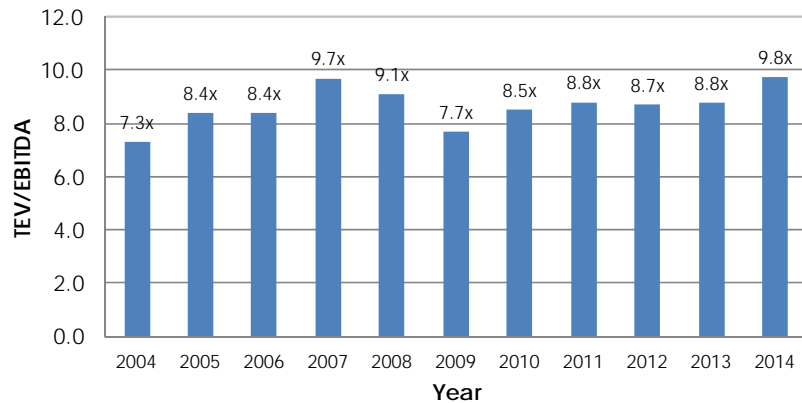
Source: *Private Equity Analyst* through December 2014

Commitments to Non-U.S. Private Equity



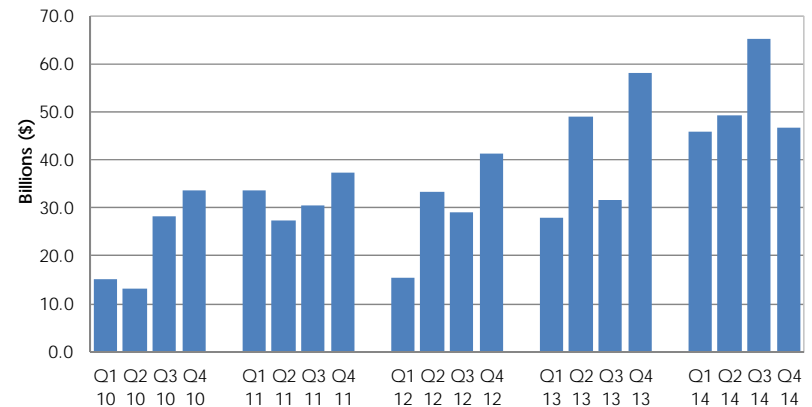
Source: Thomson Reuters, through December 2014

Average U.S. Purchase Price Multiples



Source: S&P Capital IQ

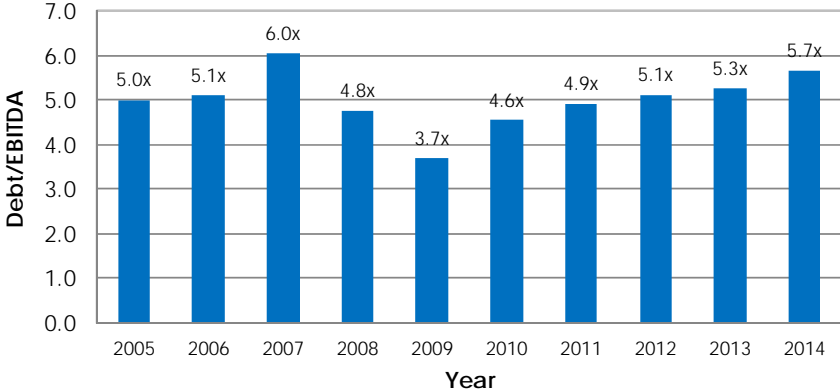
Announced and Disclosed U.S. Quarterly LBO Deal Value\*



\* Total deal size (both equity and debt).  
Source: Thomson Reuters Buyouts

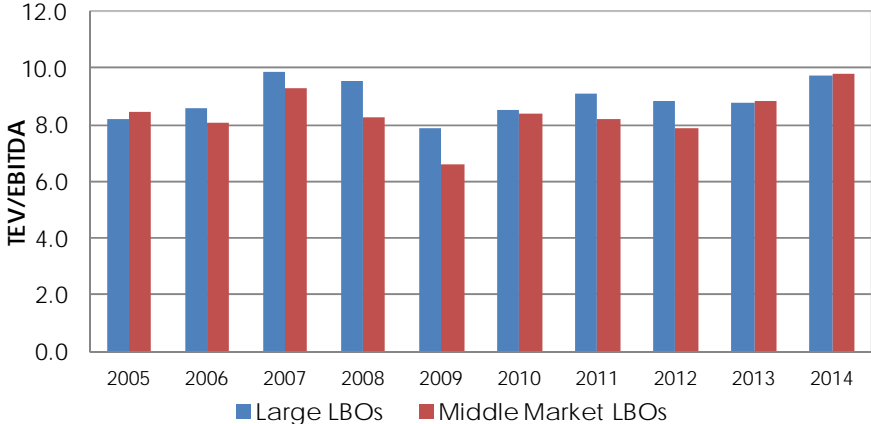
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Average U.S. Debt Multiples



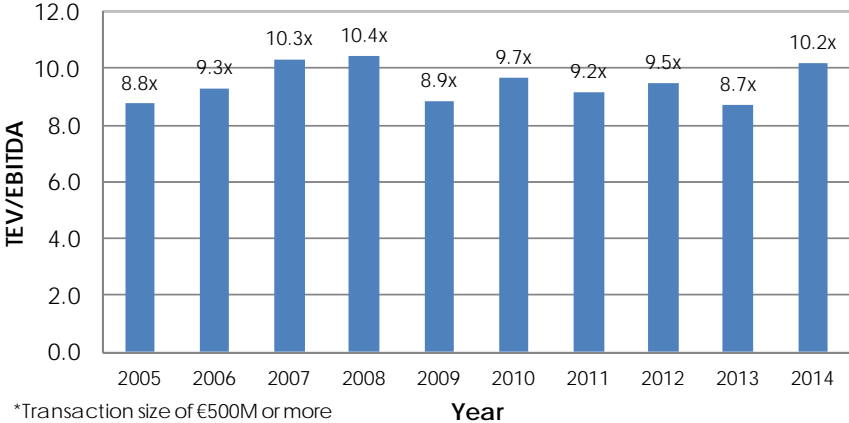
Source: S&P CapitalIQ

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



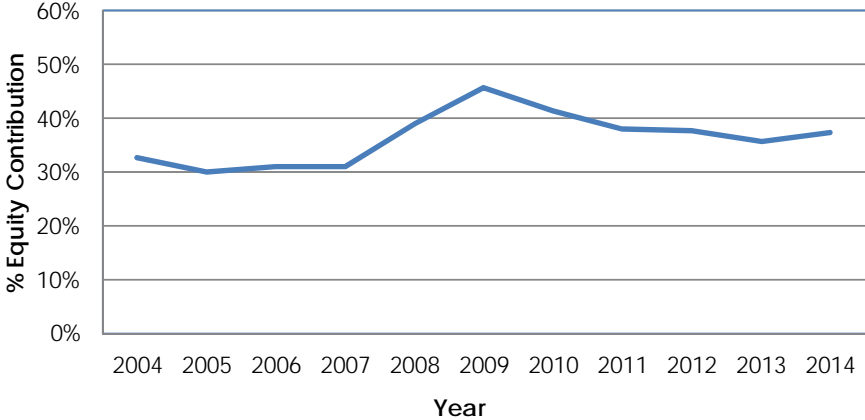
Source: S&P CapitalIQ

Average European Purchase Price Multiples



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

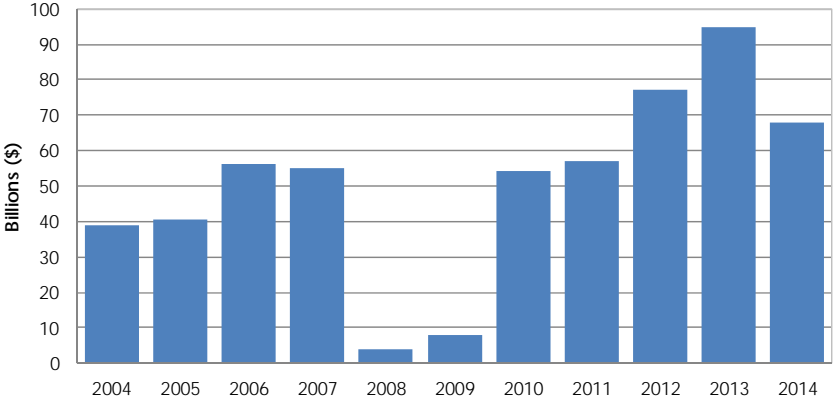
Equity Contribution



Source: S&P CapitalIQ

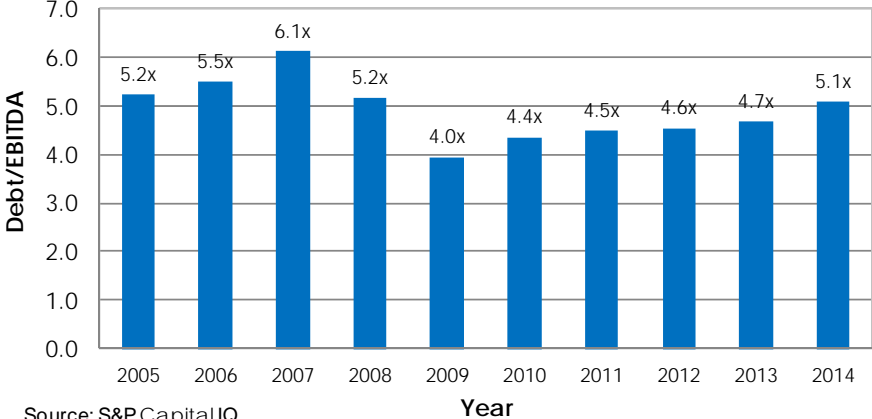
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Dividend/Stock Repurchase Loan Volume



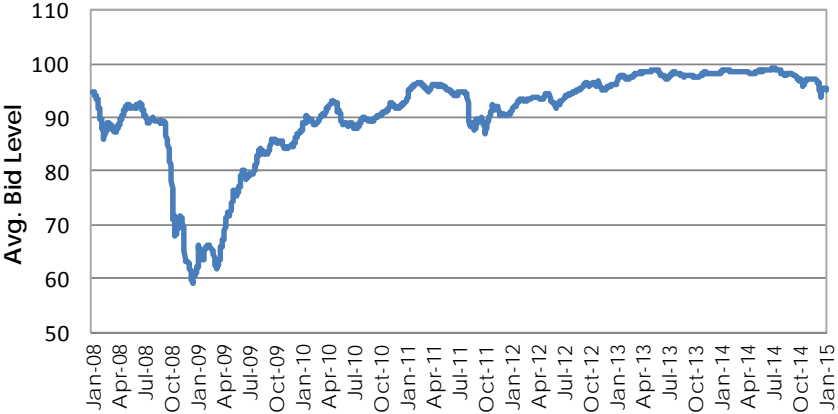
Source: S&P Capital IQLCD, Bank of America Merrill Lynch

Average European Debt Multiples



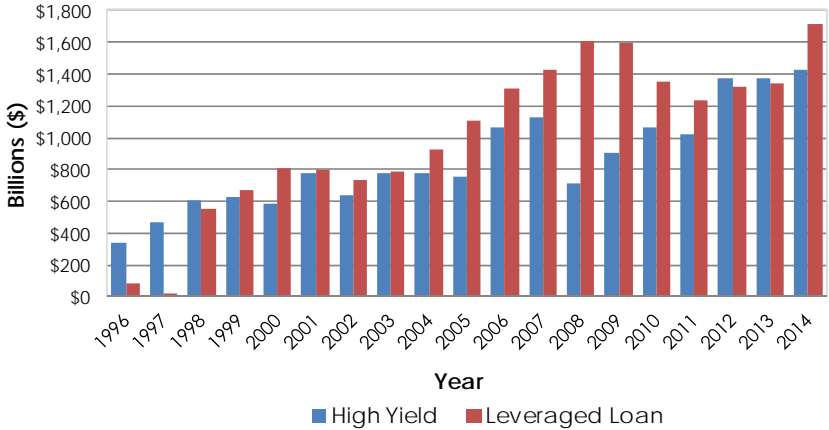
Source: S&P Capital IQ

Leveraged Loan Index



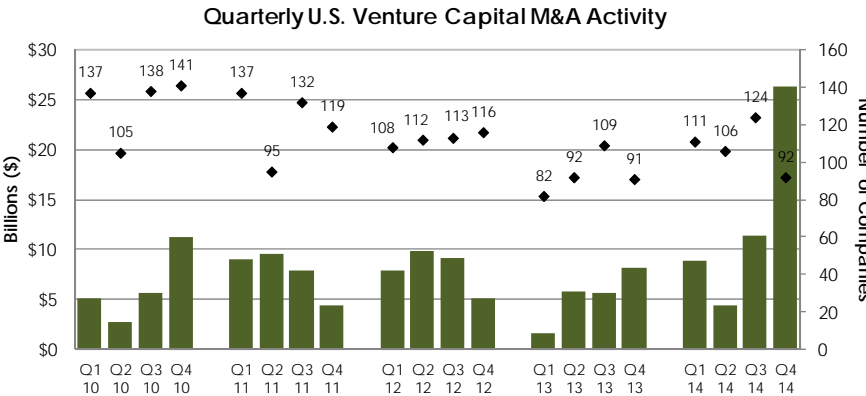
Source: Loan Syndications and Trading Association (LSTA)

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

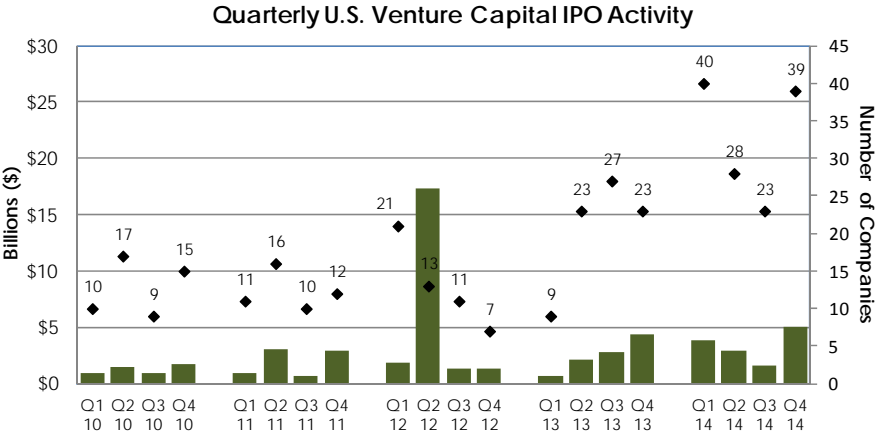


Source: Thomson Reuters, Credit Suisse Leveraged Finance Market Update

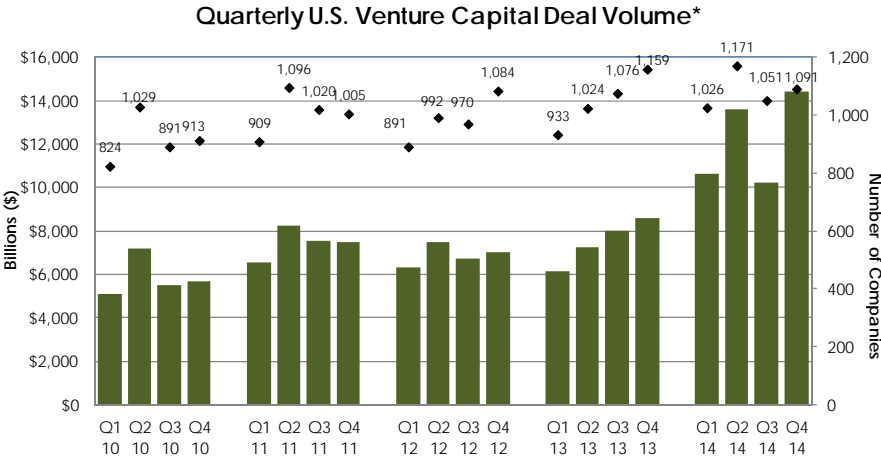
CalPERS Private Equity Performance Report – 2H 2014



Source: Thomson Reuters



Source: Thomson Reuters



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

## Appendix 1: PE Program Relationships by Net Exposure (Cost plus Unfunded Commitments)

| <u>Firm</u>                   | <u>Net Exposure (\$M)</u> | <u>% of Program</u> | <u>Firm (continued)</u>         | <u>Net Exposure (\$M)</u> | <u>% of Program</u> |
|-------------------------------|---------------------------|---------------------|---------------------------------|---------------------------|---------------------|
| Carlyle Group                 | 3,727                     | 9%                  | Stone Point Capital             | 250                       | 1%                  |
| Blackstone Group              | 3,574                     | 8%                  | Madison Dearborn Partners, Inc. | 242                       | 1%                  |
| TPG                           | 2,376                     | 6%                  | Lombard/Pacific Partners L.P.   | 234                       | 1%                  |
| Apollo Capital Management     | 2,357                     | 6%                  | Khosla Ventures                 | 225                       | 1%                  |
| Grove Street Advisors         | 1,796                     | 4%                  | Francisco Partners              | 214                       | 1%                  |
| CVC Capital Partners          | 1,780                     | 4%                  | Tailwind                        | 204                       | <1%                 |
| Kohlberg Kravis Roberts & Co. | 1,717                     | 4%                  | Arclight                        | 199                       | <1%                 |
| First Reserve                 | 1,146                     | 3%                  | SAIF Partners                   | 198                       | <1%                 |
| GCM Grosvenor                 | 1,113                     | 3%                  | Levine Leichtman Capital        | 193                       | <1%                 |
| Advent Partners               | 1,093                     | 3%                  | Health Evolution Partners       | 193                       | <1%                 |
| Hellman & Friedman            | 1,082                     | 3%                  | OCM                             | 182                       | <1%                 |
| Silver Lake Partners          | 1,033                     | 2%                  | Lion Capital                    | 178                       | <1%                 |
| Cerberus                      | 993                       | 2%                  | Wellspring Capital Partners     | 175                       | <1%                 |
| Bridgepoint Capital           | 912                       | 2%                  | The Resolute Fund               | 173                       | <1%                 |
| TowerBrook Capital Partners   | 775                       | 2%                  | Polish Enterprise               | 169                       | <1%                 |
| 57 Stars                      | 749                       | 2%                  | Palladium                       | 165                       | <1%                 |
| Yucaipa                       | 715                       | 2%                  | Clessidra Capital               | 155                       | <1%                 |
| Standard Life                 | 568                       | 1%                  | Thomas H. Lee Company           | 155                       | <1%                 |
| Permira                       | 546                       | 1%                  | Aisling Capital                 | 152                       | <1%                 |
| Sankaty Advisors              | 500                       | 1%                  | KPS                             | 150                       | <1%                 |
| Riverstone                    | 456                       | 1%                  | Centerbridge Partners           | 150                       | <1%                 |
| WL Ross & Co. LLC             | 448                       | 1%                  | Patria Investments              | 150                       | <1%                 |
| Capital Dynamics              | 440                       | 1%                  | Avenue Capital Partners         | 135                       | <1%                 |
| Hamilton Lane                 | 421                       | 1%                  | Huntsman Gay Capital            | 126                       | <1%                 |
| KMCP                          | 402                       | 1%                  | Lime Rock                       | 122                       | <1%                 |
| Ares                          | 385                       | 1%                  | Riverwood Capital Partners      | 122                       | <1%                 |
| New Mountain Capital, LLC     | 366                       | 1%                  | Coller Capital                  | 120                       | <1%                 |
| Green Equity Investors        | 353                       | 1%                  | Audax Group                     | 117                       | <1%                 |
| MHR                           | 340                       | 1%                  | VantagePoint Venture Partners   | 117                       | <1%                 |
| Jasper Ridge                  | 334                       | 1%                  | Affinity Equity Partners        | 113                       | <1%                 |
| Welsh Carson Anderson & Stowe | 331                       | 1%                  | W Capital Partners              | 107                       | <1%                 |
| Providence Equity Partners    | 302                       | 1%                  | Essex Woodlands Health Ventures | 106                       | <1%                 |
| Onex                          | 300                       | 1%                  | Magnum Capital                  | 96                        | <1%                 |
| AACP                          | 299                       | 1%                  | Triton Partners                 | 93                        | <1%                 |
| Oak Hill Capital Partners     | 271                       | 1%                  | Clarus Ventures                 | 91                        | <1%                 |
| Birch Hill Equity Partners    | 252                       | 1%                  | Kline Hawkes & Co.              | 89                        | <1%                 |
| Lindsay Goldberg LLC          | 250                       | 1%                  | Other                           | 1,506                     | 4%                  |



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