Private Equity
Annual Program Review
As of Quarter Ending December 31, 2024

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Private Equity
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Contents

Program Overview

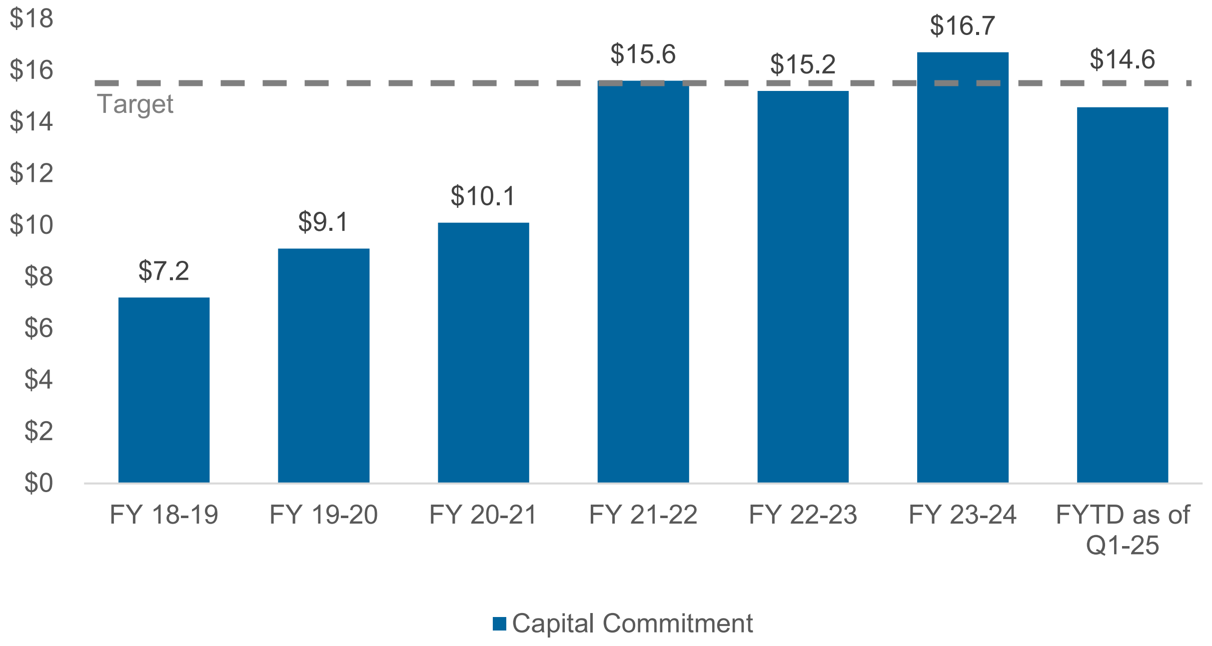
Role	• Enhance equity returns through an active, value-added approach • Drive returns through appreciation, sometimes with leverage; negligible cash yield • Harvest the illiquidity premium
Key Metrics	• Net asset value (NAV) at $92.1bn as of December 31, 2024 • Buyout at $63.3bn (68.7%), Growth at $21.9bn (23.7%), Opportunistic at $3.9bn (4.3%), Venture at $2.2bn (2.3%), and Credit at $0.9bn (1.0%) • U.S. portfolio at $62.9bn (67.3%), Europe at $20.9bn (22.4%), Emerging Markets at $6.0bn (6.4%), and Developed Asia at $1.2bn (1.3%) • Approximately 133 managers and 394 funds[1]
Investment Beliefs	• A long investment horizon is a responsibility and an advantage *(IB 2)* • Long-term value creation requires effective management of three forms of capital: financial, physical and human *(IB 4)* • Take risk only where we have a strong belief we will be rewarded for it *(IB 7)* • Costs matter and need to be effectively managed *(IB 8)* • Strong processes and teamwork and deep resources are needed to achieve CalPERS goals and objectives *(IB 10)*

[1] Funds, Fund-of-Funds, and Customized Investment Accounts / Separately Managed Accounts. The manager count includes legacy relationships (i.e., managers with which CalPERS has not recommitted)

Program Overview

Commitments by Fiscal Year

As of March 31, 2025
$ in bn



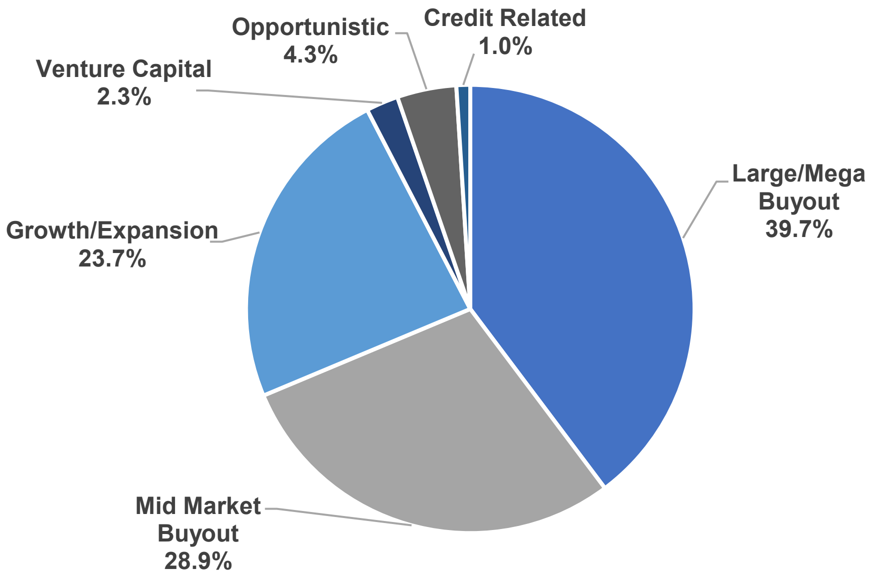
- Commitments have been consistent with the target of $15.5bn +/-15% per year for the last four fiscal years
- Maintaining a minimum level of commitments is important to avoiding another "lost decade"[1]
- Under its current strategy, CalPERS PE expressed its investment view that the 2023-24 vintages were promising by continuing commitments at the level of the 2021 step-function increase, which occurred under the prior strategy
- CalPERS PE's allocation decision also mitigated the proportion it committed in 2021, which is widely regarded as a challenged vintage and a headwind in the portfolio
  - Commitments to the 2021 vintage (calendar year, not fiscal) totaled $19.5bn
- After over three fiscal years of falling short, CalPERS PE achieved its goal of at least 40% co-invest in FY 2022-23, FY 2023-24, and FYTD 2024-25 because of a new co-invest strategy launched in the middle of FY 2022-23 (Dec. 2022)

Source: PEARS (Active Only) as of December 31, 2024. FYTD 2024-25 is net secondary sales to address fund commitment imbalances in Large/Mega Buyout in vintage years 2019-21. The secondary proceeds were invested in secondary purchases and co-investment.
[1] Ref. Board meetings on September 19, 2022, and June 20, 2023

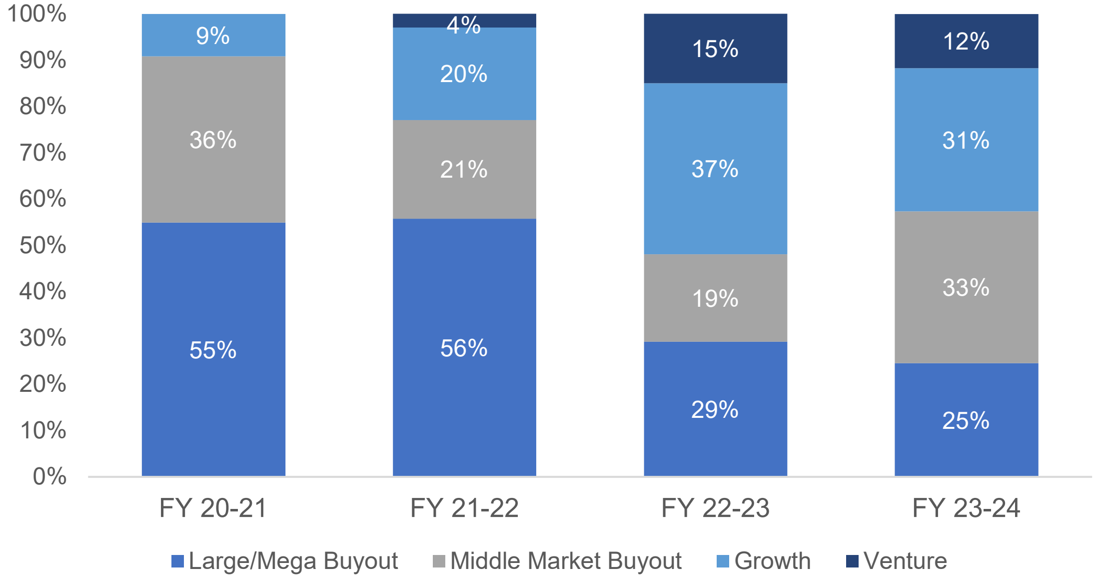
Portfolio Positioning

NAV by Strategy Segments

As of December 31, 2024



Fund Commitments by FY and Strategy Segments[1]



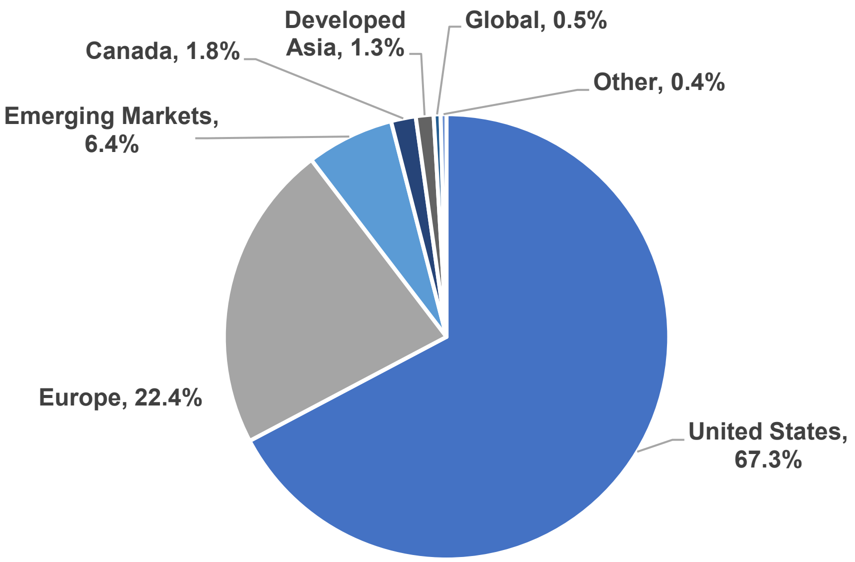
- Large Buyout dominated fund commitments until the middle of FY 2022-23, when CalPERS began enhancing the portfolio with strategy diversification
- In Nov. 2022, CalPERS began executing a new PE strategy that immediately achieved run-rate diversification across the strategy segments of PE
  - Buyout commitments went from 91% in FY 2020-21 to 58% in FY 2023-24
  - Within Buyout, Large/Mega commitments went from a majority (73%) in FY 2021-22 to a minority (43%) in FY 2023-24
  - CalPERS merged the Growth & Innovation platform into PE to address PE's longtime underinvestment in Growth and Venture
  - Growth and Venture went from 9% of commitments in FY 2020-21 to 43% in FY 2023-24
  - After over a decade hiatus, CalPERS re-entered Venture; despite Venture's J-curve dynamics, CalPERS is scaling Venture well with a 14.7% 1-year TWR

Source: PEARS (Active Only) as of December 31, 2024 - unlagged. NAV stands for Net Asset Value, and TWR stands for time-weighted return
[1] Buyout, Growth, and Venture Only. Excludes secondaries and co-investment

Program Overview

NAV By Geography

As of December 31, 2024



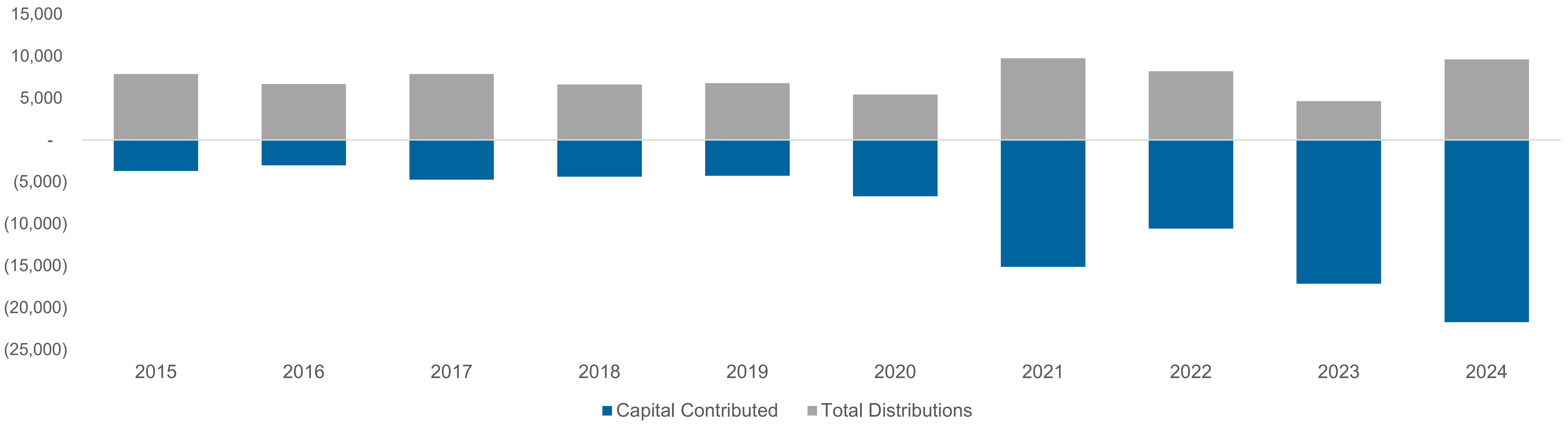
- Program intention is to remain US-centric
- PE will opportunistically internationalize at the margins
- US accounted for 74% of NAV at 3/31/23, and the US-portion of the PE portfolio has decreased to 67% as of 12/31/24

Source: PEARS (Active Only) as of December 31, 2024 - unlagged

Program Overview

Capital Contributions and Distributions

As of December 31, 2024
$ in mm



- CalPERS PE has been cash flow negative as it scales to meet higher asset allocation targets and executes the current PE strategy
    - In 2021, CalPERS approved increasing the PE target from 8% to 13%
    - In 2024, CalPERS approved an increase from 13% to 17%, avoiding repeating its past mistakes of procyclicality
    - Emphasis on secondaries and co-invest has accelerated (1) NAV scaling and (2) the impact of decisions by CalPERS PE on returns

Source: PEARS as of December 31, 2023

Positioning for the Market Environment

Themes Since Nov. 2022:

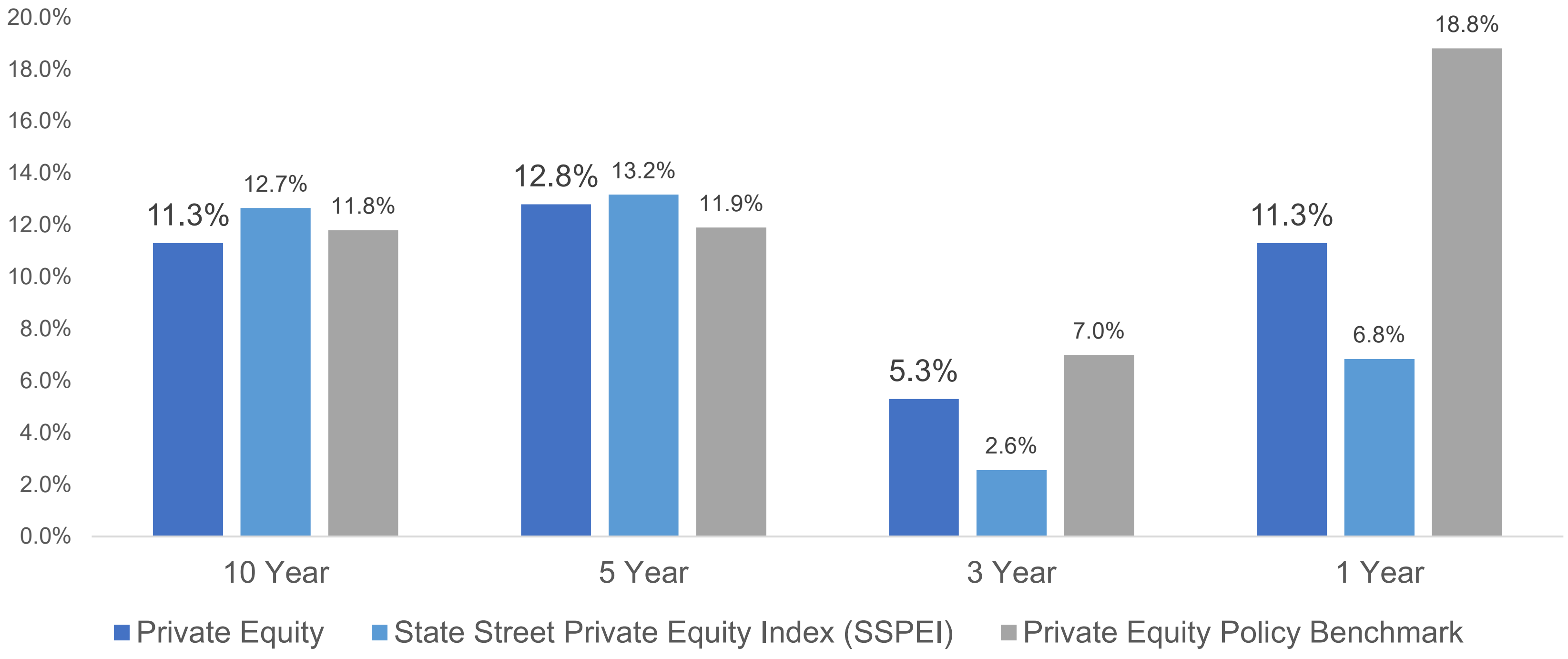
- Commit consistently by vintage year to avoid another lost decade for CalPERS PE from under-allocation and procyclicality
- Invest in diverse and emerging managers to improve returns
- Engage with investment partners to prioritize sustainable investment frameworks, such as Climate and Labor Principles
- Diversify the portfolio with Venture and Growth strategies to reduce Buyout exposure proportionally
- Recompose the Buyout portfolio from Mega/Large to Middle Market
- Make manager selection the centerpiece of the investment process
- Pursue structural alpha opportunities:
    - Reduce costs by increasing co-investment without management fees or carry to enhance net returns
    - Employ secondaries as a buyer and seller to optimize the portfolio
    - Establish separately managed accounts for bespoke opportunities with general partners
    - Avoid the deployment delay after limited partner decision-making that characterizes traditional Private Equity fund investing
    - Reduce the ratio of unfunded to NAV to enhance liquidity and positioning to be opportunistic
- Maintain a US-centric portfolio while opportunistically investing internationally
- Emphasize professional development, team communication, and internal promotions to enhance the 40-person PE Program’s capabilities and culture

Current Considerations:

- Inflation and interest rates have stabilized at higher levels than persisted for over a decade
- Distributions have been well below historical levels

Portfolio Performance | Public Equity & Universe TWR Benchmarks

Time-weighted Rate of Return (TWR) as of March 31, 2025



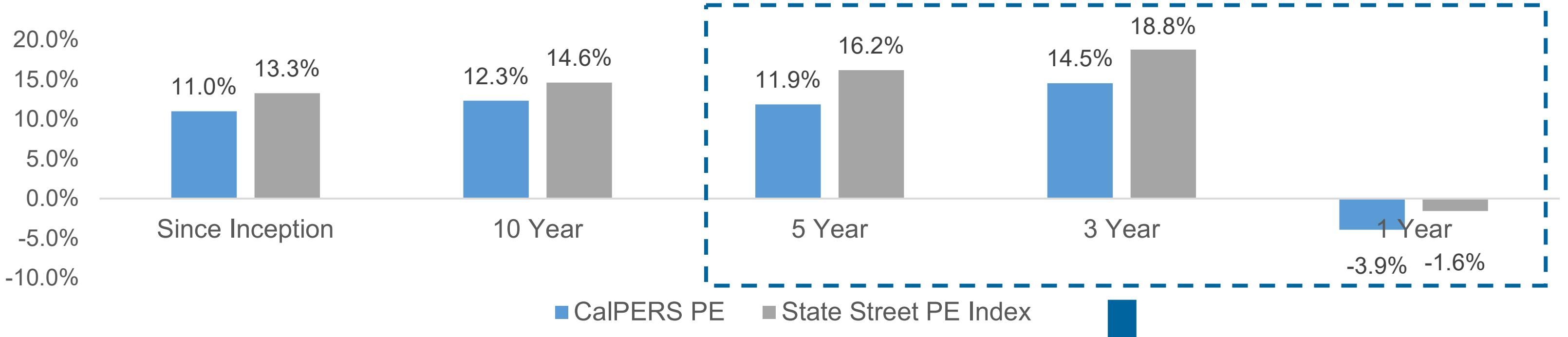
- CalPERS PE is outperforming the time-weighted version of the SSPEI in the 1- and 3-year periods
- The CalPERS Private Equity portfolio is outperforming the Policy Benchmark (Public Equity with an illiquidity premium) for the 5-year period
- A surge in the 1-year policy benchmark has not yet been reflected in PE valuations, which lag public markets; public-private comparisons should be made over longer time periods
- CalPERS PE's improved performance versus PE indexes and peers, resulting from the current strategy implementation, is likely a leading indicator that CalPERS PE returns will improve relative to the policy benchmark over the next several years. The next two performance slides cover PE index and peer benchmarking

Source: State Street as of March 31, 2025. The CalPERS PE policy benchmark: Custom FTSE All World, All Cap Equity + 150 bps with a quarter lag
Notes: The 10-year benchmark number is a composite of linked benchmarks. SSPEI returns are calculated using ModDietz methodology as a proxy for TWR

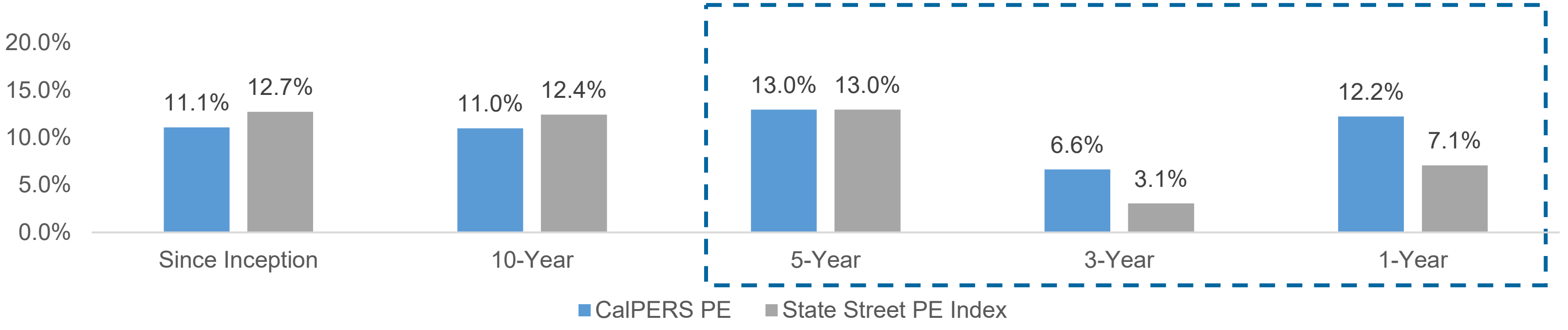
Portfolio Performance | Universe Money-weighted Benchmark

Internal Rate of Return (IRR) Differences Between CalPERS PE and State Street PE Index (SSPEI)

Prior to the Implementation of the Current Strategy: As of September 30, 2022



Impact after Two Full Years of the Current Strategy: As of December 31, 2024



- As of 9/30/22, all time horizons exhibited underperformance, resulting from:
  - Inconsistent and procyclical allocation
  - Favoring Large over Middle Buyout
  - Under-allocation to Growth and Venture
  - Below-average manager selection
  - Missing longstanding co-invest goals
  - Co-invest deals underperforming funds
- Made possible by CalPERS leadership and launched in Q4 2022, the current PE strategy has erased in two years the -430 bps deficit to the 5-year SSPEI return (9/30/22 vs 12/31/24)
- Driven by the 2023 and 2024 vintages, CalPERS outperformed the SSPEI in the 1- and 3-year periods as of 12/31/24
- 1- and 3-year performance drivers:
  - Maintaining consistent commitments
  - Reducing traditional PE's deployment lag
  - Diversifying away from Large Buyout
  - Improving manager selection
  - Achieving co-invest goal
  - Enhancing co-invest deal selection
  - Engaging the secondary market
  - Using high-conviction investment themes

Source: PEARS and Staff Analysis as of 12/31/24; State Street Private Equity Index as of 12/31/24

CalPERS

Portfolio Performance | Peer Time-weighted Benchmarks

Time-weighted Return Versus Two Peer Groups

30 Largest US Public PE Programs

As of date	1-year returns	3-year returns
12/31/22	Rank: 17th of 30 Quartile: 3rd	Rank: 30th of 30 Quartile: 4th
12/31/24	**Rank: 1st of 30** Quartile: 1st	**Rank: 2nd of 30** Quartile: 1st

California Public Peers

As of date	1-year returns	3-year returns
12/31/22	Rank: 7th of 12 Quartile: 3rd	Rank: 12th of 12 Quartile: 4th
12/31/24	**Rank: 1st of 12** Quartile: 1st	**Rank: 1st of 12** Quartile: 1st

30 Largest US Public PE Programs by NAV

	PE Program	NAV ($bn)	1-yr Return
1	CalPERS	89.0	11.9%
2	CalSTRS	53.9	8.9%
3	Washington State Investment Board	49.5	9.6%
4	Texas Teachers	32.6	7.2%
5	Oregon Public Employees	25.2	4.1%
6	State of Michigan Retirement Systems	23.8	8.0%
7	Virginia Retirement System	19.0	6.3%
8	Florida State Board of Administration	18.6	8.1%
9	Massachusetts Pension Reserves	18.2	7.8%
10	Minnesota State Board	16.7	9.5%
11	Ohio Public Employees	15.4	9.3%
12	Maryland Retirement and Pension System	14.9	7.0%
13	New York State Teachers	14.3	6.4%
14	Texas County & District Retirement System	13.3	6.1%
15	Los Angeles County Employees (LACERA)	13.2	2.9%
16	University of California Pension	12.5	10.2%
17	Pennsylvania Public Schools Employees	11.5	5.2%
18	Alaska Permanent PE	10.8	6.7%
19	Missouri Public Schools	10.2	5.8%
20	San Francisco Employees (SFERS)	10.0	3.6%
21	New York City Employees (NYCERS)	9.6	6.4%
22	New York City Teachers	9.3	5.8%
23	United Nations Pension	8.1	5.3%
24	Iowa Public Employees	7.9	6.5%
25	New Jersey Division of Pensions	7.7	3.8%
26	Connecticut Employees	6.9	8.1%
27	Pennsylvania State Employees (PSERS)	6.7	6.3%
28	South Carolina	6.1	7.7%
29	North Carolina Retirement Systems (NCRS)	6.1	3.2%
30	New York City Police	6.0	6.2%

CalPERS PE Performance

- Best-performing program for calendar year 2024 (from 17th out of 30 in 2022)
- 1st decile for the 3-year return (from 30th out of 30 in 2022)

CalPERS PE Scale*

- ~1.7x larger than the second-largest PE program ($89bn vs $54bn)
- ~15x larger than the 30th-largest PE program ($89bn vs $6bn)

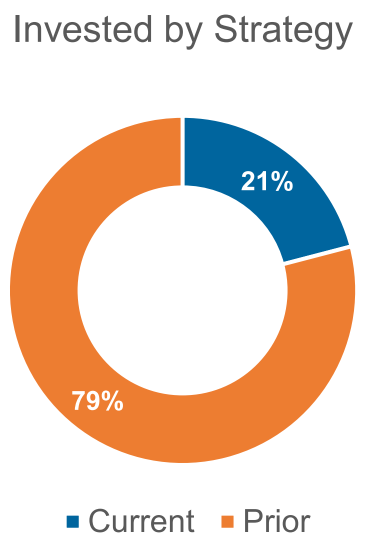
** Size is widely regarded as a headwind to returns*

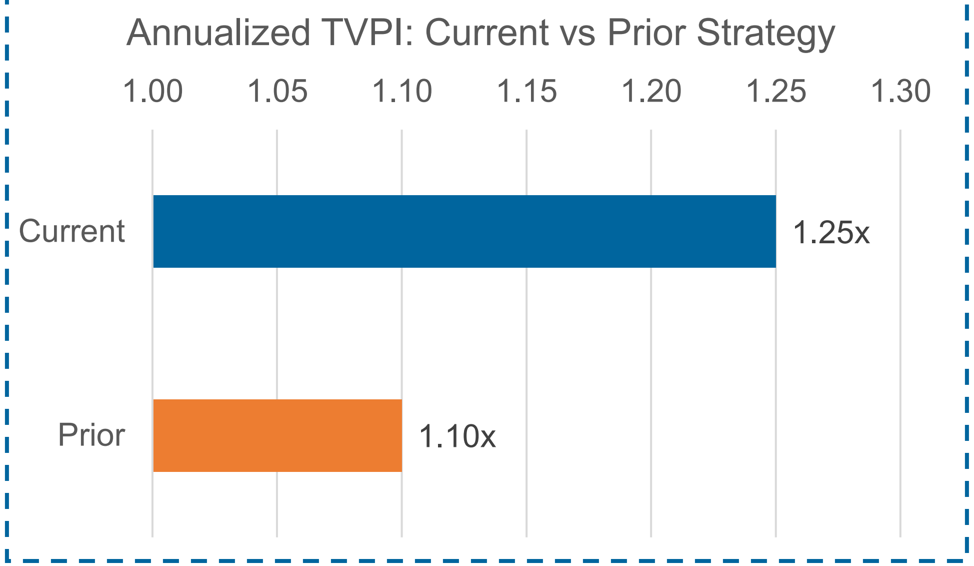
Source: Peer datasets based on 12/31/24 time-weighted returns (TWR) and Net Asset Value (NAV) publicly reported by each institution and collected by Nasdaq eVestment as of 5/4/25
Note: Of the Top 30 in PE NAV size as of 12/31/24, three did not report PE results for 12/31/22 (Iowa Public Employees, New York City Police, and Virginia Retirement System). To address this, the Top 30 PE programs that reported as of 12/31/22 were used as substitutes, adding Alaska Retirement, Illinois Municipal Retirement Fund, and Nevada Public Employees to the peer set.
California peer set constituents have at least $1bn in PE NAV with the same institutions reporting as of 12/31/22 and 12/31/24: CalPERS, CalSTRS, LACERA, University of California Pension, SFERS, University of California Endowment, San Bernardino County, Sacramento County, Ventura County, Contra Costa County, San Diego City, and Alameda County (in order of NAV)

Portfolio Performance | Current versus Prior Strategy

Breakout of Total CalPERS PE Portfolio between the Current and Prior Strategies

Strategy	Cost ($bn)	TVPI (Non-annualized)	Weighted Avg. Hold (Years)
Current Strategy (~2023-24)	$29	1.24x	0.97
Prior Strategy (~Pre-2023)	$109	1.78x	6.01





- The prior two performance slides show the current strategy's impact on the total PE portfolio (i.e., the blend of the current and prior strategies). This slide distills returns between the two strategies
- Launched in Nov. 2022, the current strategy is driving the improved performance in the total PE portfolio, the supermajority of which are assets invested under the prior strategy
  - Current strategy's annualized TVPI is meaningfully above that of the prior strategy (1.25 vs 1.10, respectively)
- The current strategy accounts for about one-fifth of the capital CalPERS PE has deployed on a cost basis. If the current strategy continues to outperform, the total PE portfolio should experience continued improvement in returns as the proportion of invested under the current strategy increases
- ~25% of the current strategy portfolio is marked at cost since the investments are recent, a headwind to returns
- TVPI is gross of fees and expenses, so it does not consider the more cost-effective implementation of the current strategy

Source: PEARS and Staff Analysis as of 12/31/24
Note: Figures are gross of fees and expenses at the company level and include active and exited holdings. TVPI stands for total value to paid-in ratio. Annualized TVPI is calculated using simple annualization

Key Initiatives | Cost-effective Implementation

Assumptions	
Committed	$1,000,000,000
Gross multiple	2.5x
Management fee	1.25%
Carry	20%
Fund life	10

Savings versus fund economics	
Management fee	$125,000,000
Carry	$275,000,000
Total savings from direct/co-investment	$400,000,000

- Co-investment provides significant cost savings and helps limited partners capture more of Private Equity's returns
- Each $1bn in co-invest is expected to save about $400mm in management fees and carry over the life of PE investments under realistic assumptions
- Based on CalPERS annual deployment budget of $15.5bn and a co-invest ratio of 40%, fee savings would be approximately $2.5bn over a 10-year period for each year of commitments
  - Approximately $25bn of reduced costs for 10 years of commitments

Source: CalPERS Staff Analysis

Key Initiatives | Integration of Governance and Sustainability

Highlights of CalPERS PE's Efforts over the Last Year to Enhance Returns through Building a More Sustainable Portfolio:

- Labor Principles
  - Coordinated with Sustainable Investments to adopt the Labor Principles and a stakeholder engagement process
  - Working with PE investment partners to obtain their attestations to operate in broad alignment with the Labor Principles
  - Scaling back or ending commitments to PE funds that have not been aligning with CalPERS values on human capital

- Diversity
  - Shifting focus to smaller funds in Buyout, expanding Growth, and adding Venture to increase and diversify the opportunity set
  - In FY 2023-24, committed over $6bn to diverse managers in the non-intermediated portfolio (i.e., not including TPG Next & GCM Elevate)
  - Co-hosted the second edition of the Catalyst: California's Emerging and Diverse Investment Manager Forum in May 2025

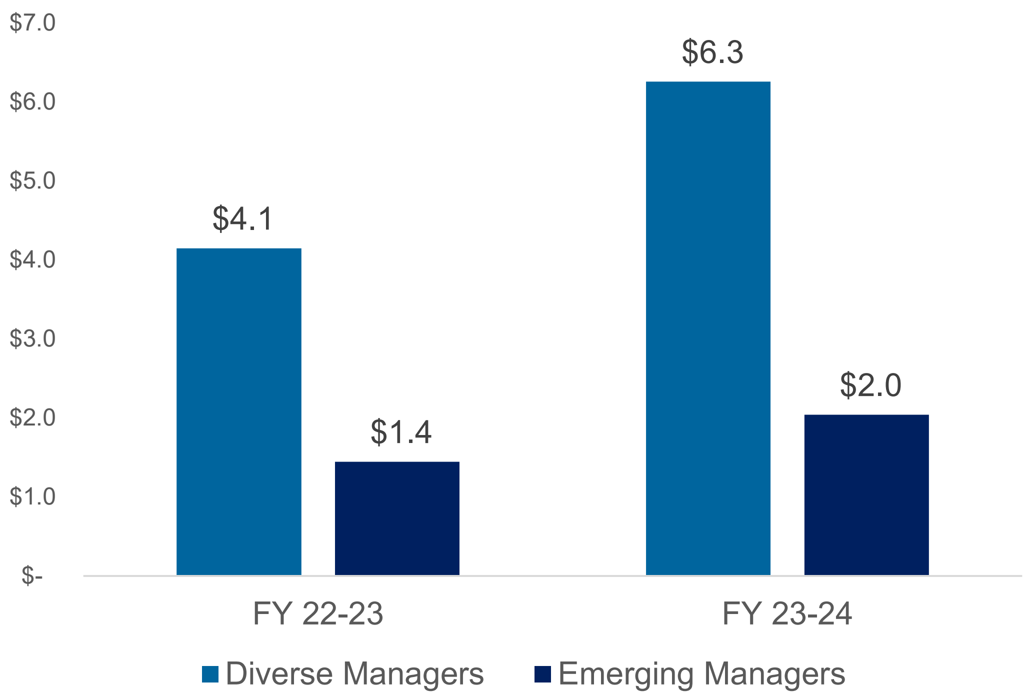
- Diligence
  - Incorporated Governance and Sustainability questions into the CalPERS Due Diligence Questionnaire
  - Coordinating with Sustainable Investments as it further integrates Governance and Sustainability into Private Markets diligence
  - Encouraging expanded industry participation in the ESG Data Convergence Initiative (EDCI), which CalPERS co-founded

- Climate
  - Working with Sustainable Investments to develop an actionable pipeline contributing to the $100bn 2030 goal
  - Made primary commitments to several specialized Climate funds and continuing to source fund investment opportunities
  - Funded about $1.4bn of PE co-investments supporting Climate solutions and continuing to source co-invest opportunities

Key Initiatives | Integration of Governance and Sustainability

Emerging and Diverse Managers

In billions ($)



- Since the last PE Annual Program Review, CalPERS co-hosted with CalSTRS the second edition of the Catalyst: California's Emerging and Diverse Investment Manager Forum, bringing together institutional investors and other global allocators to engage with diverse entrepreneurs and entrepreneurial general partners to forge a new path in leadership and growth
- Under its current strategy, CalPERS PE is pursuing alpha through better manager selection. As part of that effort, PE has increased its commitments to emerging and diverse managers in its non-intermediated portfolio (i.e., CalPERS PE's direct portfolio, which excludes TPG Next and GCM Elevate, both of which select managers on behalf of CalPERS under the oversight of Sustainable Investments). PE's emerging and diverse manager commitments are reported to the California legislature in compliance with California law
- The $1bn partnership with external emerging manager advisors TPG Next and GCM Grosvenor is designed to invest over multiple years, is focused on Private Market investments, and is overseen by Sustainable Investments

Source: As reported in "Assembly Bill 890: Diversity in the Management of Investments," dated March 1, 2025 (https://www.calpers.ca.gov/documents/assembly-bill-890-year-three-report-fy-2023-24/download?inline) and in Wilshire's Consultant Trust Level Review, dated August 31, 2023 (https://www.calpers.ca.gov/documents/202309-invest-item05c-03-a/download)

Key Initiatives | Integration of Governance and Sustainability

ESG Data Convergence Initiative (EDCI)

- EDCI is a global partnership of private markets stakeholders committed to streamlining the industry's historically fragmented approach to collecting and reporting ESG data. The mission is to create a critical mass of meaningful, performance-based, and comparable private company sustainability data

- CalPERS Private Equity co-founded EDCI in 2021 and serves on the steering committee

- EDCI launched with 7 GPs and 9 LPs/IMs representing about $4 trillion in assets under management (AUM) and now has over 350 GPs and 150 LPs/IMs representing about $38 trillion of AUM

- As part of its current strategy launched in Q4 2022, CalPERS PE has worked to increase engagement with EDCI, as well as the participation of its active Buyout managers in EDCI
  - The number of GPs participating went from 20 to 42, increasing the engagement rate from 49% to 68%
  - The proportion of NAV with EDCI-participating GPs went from 50% to 75%
  - EDCI participation increased even as the current PE strategy added new managers to the portfolio outside Large Buyout. Many of these Middle Market managers had not been participating in EDCI before partnering with CalPERS

Source: CalPERS Staff Analysis and www.esgdc.org