LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Investment Committee Agenda

REGULAR MEETING	Chair: Sung Won Sohn
TUESDAY, NOVEMBER 12, 2019	Committee Members: Elizabeth Lee Nilza R. Serrano
TIME: 10:30 A.M. OR IMMEDIATELY FOLLOWING THE REGULAR BOARD MEETING	Manager-Secretary: Lita Payne Executive Assistant: Ani Ghoukassian
MEETING LOCATION: LACERS Ken Spiker Boardroom 202 West First Street, Suite 500 Los Angeles, CA 90012-4401	Legal Counselor: City Attorney's Office Public Pensions General Counsel Division
Live Committee Meetings can be heard at: (213) 621-CITY (Metro), (818) 904-9450 (Valley), (310) 471-CITY (Westside), and (310) 547-CITY (San Pedro Area).	Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, five or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at (213) 473-7169.

I. PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

II. APPROVAL OF MINUTES FOR THE SPECIAL MEETING OF OCTOBER 8, 2019 AND POSSIBLE COMMITTEE ACTION

III. CHIEF INVESTMENT OFFICER VERBAL REPORT

IV. CONTINUED DISCUSSION OF THE PRIVATE EQUITY PROGRAM 2020 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION

V. OTHER BUSINESS

VI. NEXT MEETING: The next Regular Meeting of the Investment Committee is scheduled for Tuesday, December 10, 2019, in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

VII. ADJOURNMENT

LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

Board of Administration Agenda

SPECIAL MEETING

TUESDAY, NOVEMBER 12, 2019

TIME: 10:30 A.M. OR IMMEDIATELY FOLLOWING THE REGULAR BOARD MEETING

MEETING LOCATION:

LACERS Ken Spiker Boardroom
202 West First Street, Suite 500
Los Angeles, CA 90012-4401

Live Committee Meetings can be heard at: (213) 621-CITY (Metro), (818) 904-9450 (Valley), (310) 471-CITY (Westside), and (310) 547-CITY (San Pedro Area).

President:	Cynthia M. Ruiz
Vice President:	Michael R. Wilkinson
Commissioners:	Annie Chao Elizabeth Lee Sandra Lee Nilza R. Serrano Sung Won Sohn
Manager-Secretary:	Lita Payne
Executive Assistant:	Ani Ghoukassian
Legal Counsel:	City Attorney's Office Public Pensions General Counsel Division

Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, or other auxiliary aids and/or services may be provided upon request. To ensure availability, you are advised to make your request at least 72 hours prior to the meeting you wish to attend. Due to difficulties in securing Sign Language Interpreters, five or more business days' notice is strongly recommended. For additional information, please contact: Board of Administration Office at (213) 473-7169.

I. PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION

II. APPROVAL OF MINUTES FOR THE SPECIAL MEETING OF OCTOBER 8, 2019 AND POSSIBLE COMMITTEE ACTION

III. CHIEF INVESTMENT OFFICER VERBAL REPORT

IV. CONTINUED DISCUSSION OF THE PRIVATE EQUITY PROGRAM 2020 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION

V. OTHER BUSINESS

VI. NEXT MEETING: The next Regular Meeting of the Investment Committee is scheduled for Tuesday, December 10, 2019, in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

VII. ADJOURNMENT

MINUTES OF THE SPECIAL MEETING
BOARD OF ADMINISTRATION
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

LACERS Ken Spiker Boardroom
202 West First Street, Suite 500
Los Angeles, California

October 8, 2019

12:51 p.m.

Agenda of: Nov. 12, 2019

Item No: II

PRESENT:	Chair:	Sung Won Sohn
	Committee Members:	Elizabeth Lee Nilza R. Serrano
	Commissioner:	Cynthia M. Ruiz
	Manager-Secretary:	Neil M. Guglielmo
	Executive Assistant:	Ani Ghoukassian
	Legal Counselor:	Anya Freedman

The Items in the Minutes are numbered to correspond with the Agenda.

Commissioner Ruiz was present, this is considered a Special Meeting of the Board of Administration. Any votes will be taken by Investment Committee members only.

I

PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION – Chair Sohn asked if any persons wished to speak on matters within the Committee's jurisdiction, to which there was no response and no public comment cards received.

II

APPROVAL OF MINUTES FOR THE INVESTMENT COMMITTEE MEETING OF SEPTEMBER 10, 2019 AND POSSIBLE COMMITTEE ACTION – A Motion to approve the minutes of September 10, 2019 was moved by Committee Member Serrano, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano and Chair Sohn –3; Nays, None.

Commissioner Ruiz left the Special Meeting at 12:53 p.m.

III

CHIEF INVESTMENT OFFICER VERBAL REPORT – Rod June, Chief Investment Officer, presented the Committee with the 12-month forward calendar for Investment Committee Agenda items. He stated four investment manager interviews will take place in early 2020. He stated future Investment

Committee items: Trying to find dates in November to hold Investment Committee interviews for small cap equities search and Investment Committee education.

Chair Sohn recessed the Special Meeting at 12:56 p.m. to convene in Closed Session

IV

CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54956.81 TO CONSIDER THE PURCHASE OF PARTNERSHIP INTERESTS IN TWO (2) PARTICULAR, SPECIFIC, REAL ESTATE INVESTMENTS, AND POSSIBLE COMMITTEE ACTION

Committee Member Serrano left the Special Meeting at 1:30 p.m.

Chair Sohn reconvened the Special Meeting at 1:53 p.m.

Committee Member Serrano returned to the Special Meeting at 1:54 p.m.

V

PRIVATE EQUITY PROGRAM 2020 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION – David Fann, President, Heidi Poon and Jeff Goldberger, Vice Presidents with TorreyCove presented this item to the Committee. Committee Member Serrano moved approval, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano, and Chair Sohn -3; Nays, None.

Committee Member Elizabeth Lee left the Special Meeting at 2:03 p.m.

VI

BROKERAGE ACTIVITY REPORT FOR PERIOD JULY 1, 2018 TO JUNE 30, 2019 – Barbara Sandoval, Investment Officer II, presented this item to the Committee. The Committee received and filed the report.

VII

OTHER BUSINESS – There was no other business.

VIII

NEXT MEETING – The next Regular Meeting of the Investment Committee is scheduled for Tuesday, November 12, 2019, in the LACERS Ken Spiker Boardroom, 202 West First Street, Suite 500, Los Angeles, CA 90012-4401.

IX

ADJOURNMENT – There being no further business before the Committee, Chair Sohn adjourned the Meeting at 2:36 p.m.

Sung Won Sohn
Chair

Neil M. Guglielmo
Manager-Secretary

LACERS
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM

REPORT TO INVESTMENT COMMITTEE
From: Lita Payne, Executive Officer Lita Payne

MEETING: NOVEMBER 12, 2019
ITEM: IV

SUBJECT: **CONTINUED DISCUSSION OF THE PRIVATE EQUITY PROGRAM 2020 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Committee recommend to the Board the adoption of the Private Equity Program 2020 Strategic Plan.

Discussion

On October 8, 2019, the Committee considered the attached report regarding the Private Equity Program 2020 Strategic Plan. David Fann, Jeffrey Goldberger, and Heidi Poon of TorreyCove Capital Partners LLC (TorreyCove), LACERS' Private Equity Consultant, presented the plan to the Committee. The plan, developed by TorreyCove with input from staff, establishes strategic objectives and investment plan recommendations for the next calendar year. At the direction of the Committee, the Private Equity Program 2020 Strategic Plan has been revised to include additional analysis, such as: return dispersion; short and long term recommendations; and strengths, weaknesses, opportunities, and threats pertaining to the private equity portfolio. TorreyCove will attend the Committee meeting of November 12, 2019, should the Committee desire to hear a presentation of the proposed plan.

Strategic Plan Impact Statement

The annual private equity strategic plan assists the Board in building a diversified private equity and total fund portfolio with an attractive risk-adjusted return profile (Goal IV). Development and adoption of such a plan also promotes good governance practices (Goal V).

Prepared By: Wilkin Ly, Investment Officer III

RJ/BF/WL:sg

Attachment: 1. Investment Committee Recommendation Report dated October 8, 2019
2. Revised LACERS Private Equity Program 2020 Strategic Plan – TorreyCove Capital Partners LLC

LACERS: SECURING YOUR TOMORROWS

IC Meeting: 11/12/19
Item IV
Attachment 1

LACERS
LOS ANGELES CITY EMPLOYEES'
RETIREMENT SYSTEM

REPORT TO INVESTMENT COMMITTEE
From: Neil M. Guglielmo, General Manager

Neil M. Guglielmo

MEETING: OCTOBER 8, 2019
ITEM: V

SUBJECT: **PRIVATE EQUITY PROGRAM 2020 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION**

ACTION: ☒ CLOSED: ☐ CONSENT: ☐ RECEIVE & FILE: ☐

Recommendation

That the Committee recommend to the Board the adoption of the Private Equity Program 2020 Strategic Plan.

Executive Summary

A summary of the private equity strategic objectives and investment plan recommendations for calendar year 2020.

Discussion

TorreyCove Capital Partners LLC (TorreyCove), LACERS' Private Equity Consultant, with input from staff, has developed the proposed Private Equity Program 2020 Strategic Plan, which considers strategic objectives and investment plan recommendations for the next calendar year. Staff has reviewed the plan and recommends its adoption. TorreyCove will present the proposed plan.

Strategic Plan Impact Statement

The annual private equity strategic plan assists the Board in building a diversified private equity and total fund portfolio with an attractive risk-adjusted return profile (Goal IV). Development and adoption of such a plan also promotes good governance practices (Goal V).

Prepared by: Wilkin Ly, Investment Officer III, Investment Division.

RJ/BF/WL:sg

Attachment: 1. LACERS Private Equity Program 2020 Strategic Plan – TorreyCove Capital Partners LLC

IC Meeting: 10/08/19
Item IV
Attachment 1

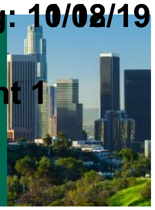
TorreyCove
CAPITAL PARTNERS

CALIFORNIA
10180 Barnes Canyon Road
Suite 200
San Diego, CA 92121

MASSACHUSETTS
222 Rosewood Drive
3rd Floor
Danvers, MA 01923

LACERS Private Equity Program
2020 Strategic Plan

WWW.TORREYCOVE.COM



TORREYCOVE
CAPITAL PARTNERS

Agenda

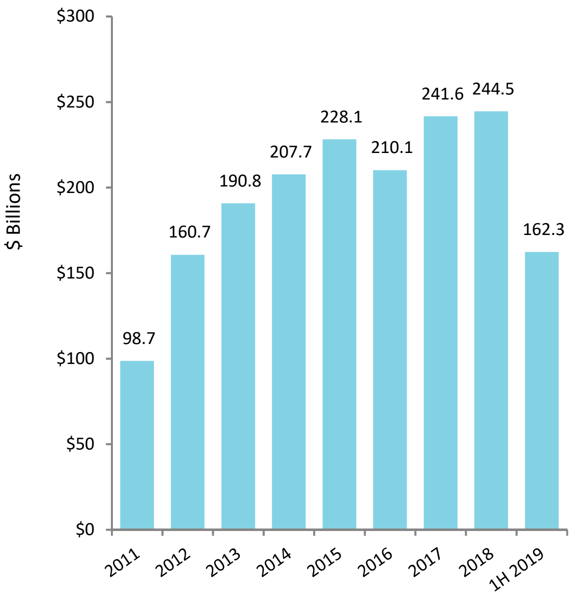
- Market Overview
- LACERS Private Equity Program
  - Commitment Pacing
  - Review of the Existing Portfolio
- Review of Commitments through September 2019
- Review of the 2019 Strategic Plan
- Overview of the Proposed 2020 Strategic Plan

MARKET OVERVIEW - FUNDRAISING

TorreyCove Capital Partners

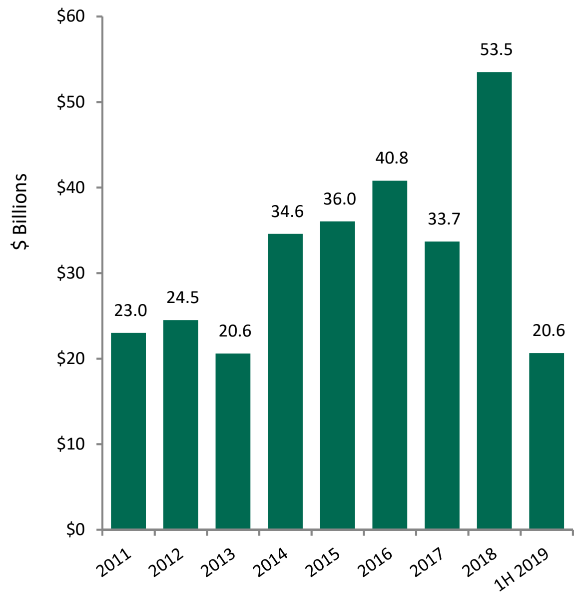
Investor Appetite for Private Equity Continued At Record Levels in 2019

U.S. Buyouts



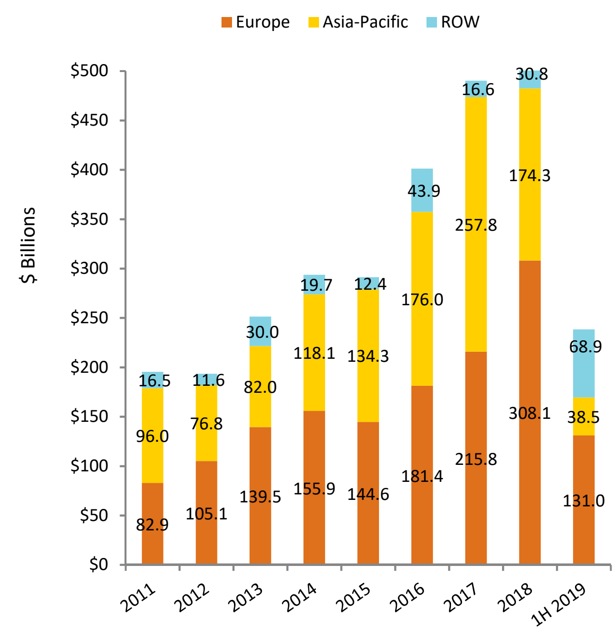
Source: Buyouts Magazine

U.S. Venture Capital

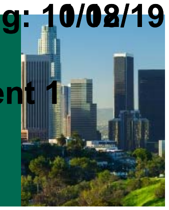


Source: Pitchbook & National Venture Capital Association

International



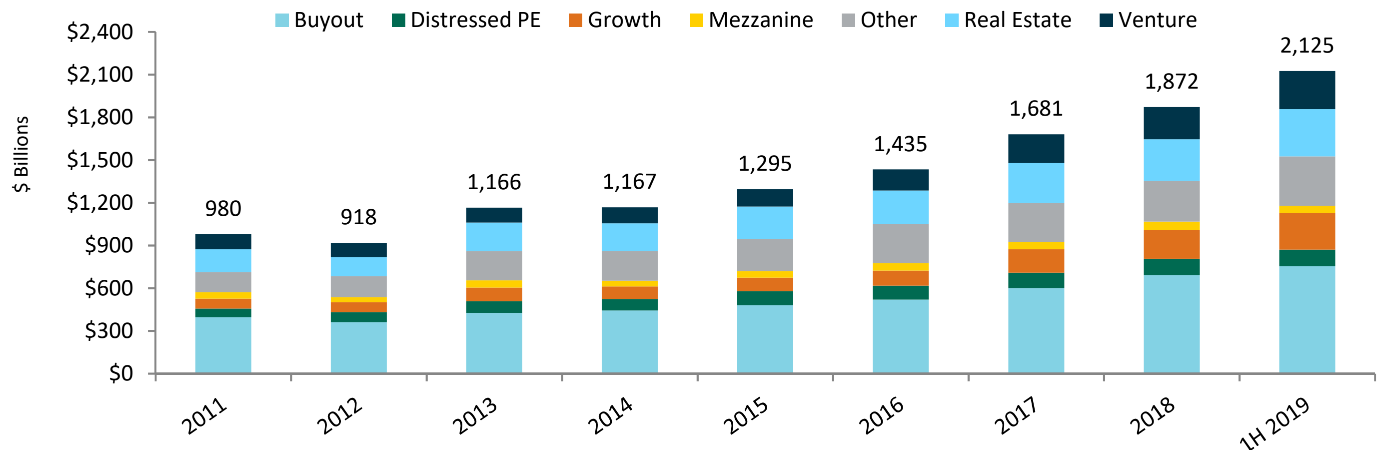
Source: Thompson Reuters, Preqin, AVCJ



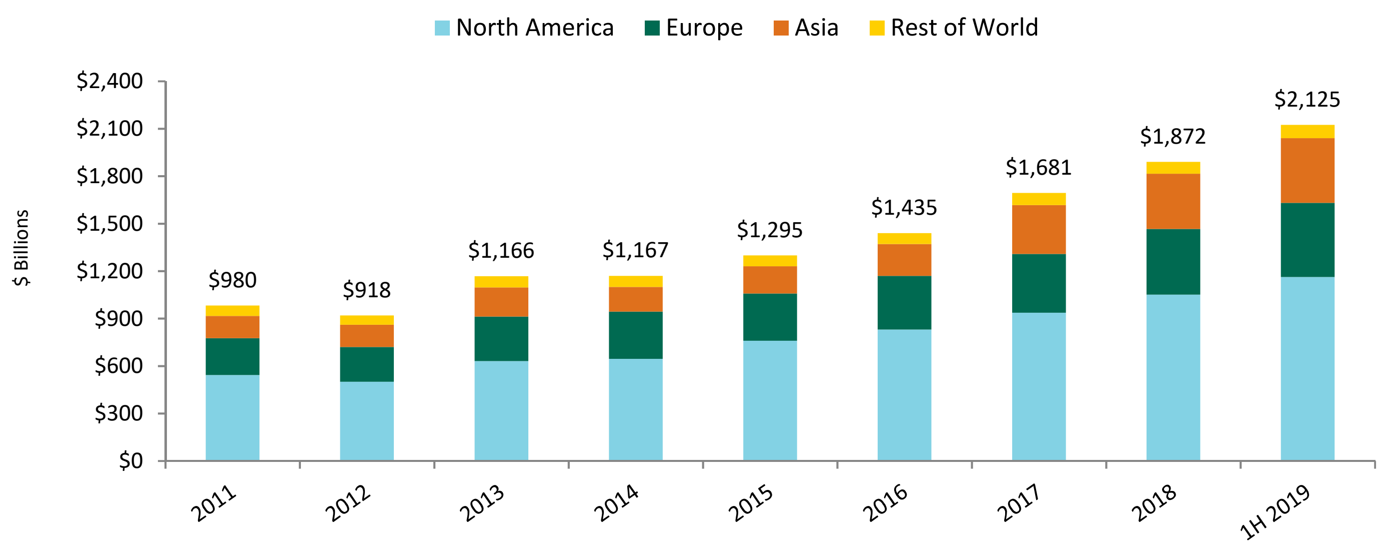
TORREYCOVE
CAPITAL PARTNERS

MARKET OVERVIEW – DRY POWDER

Global Dry Powder Remained At Record Levels in 2019



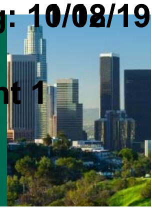
Source: Preqin



Source: Preqin

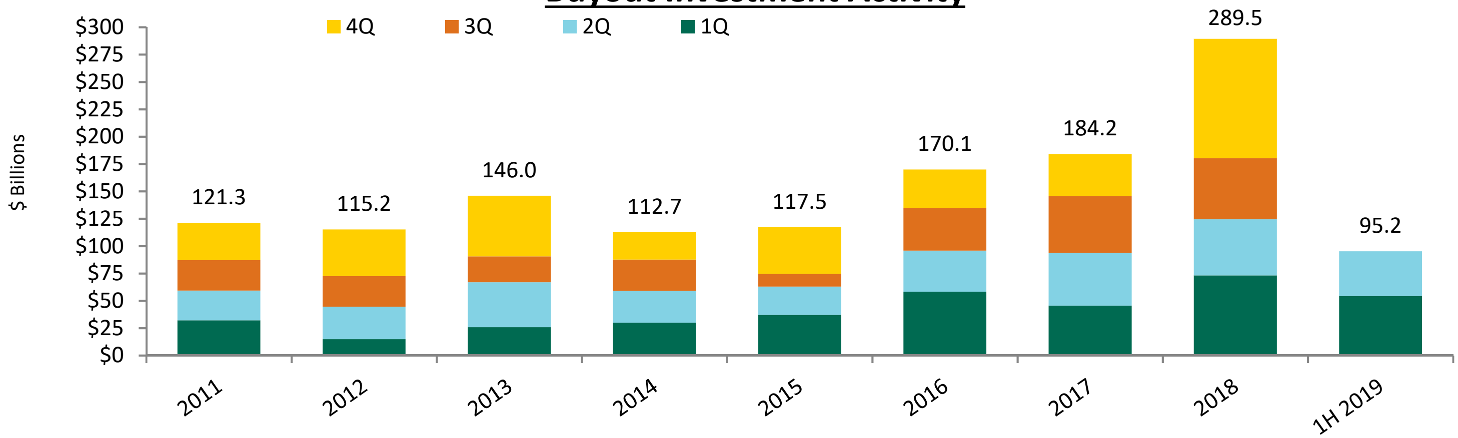
TORREYCOVE
CAPITAL PARTNERS

MARKET OVERVIEW – INVESTMENT ACTIVITY



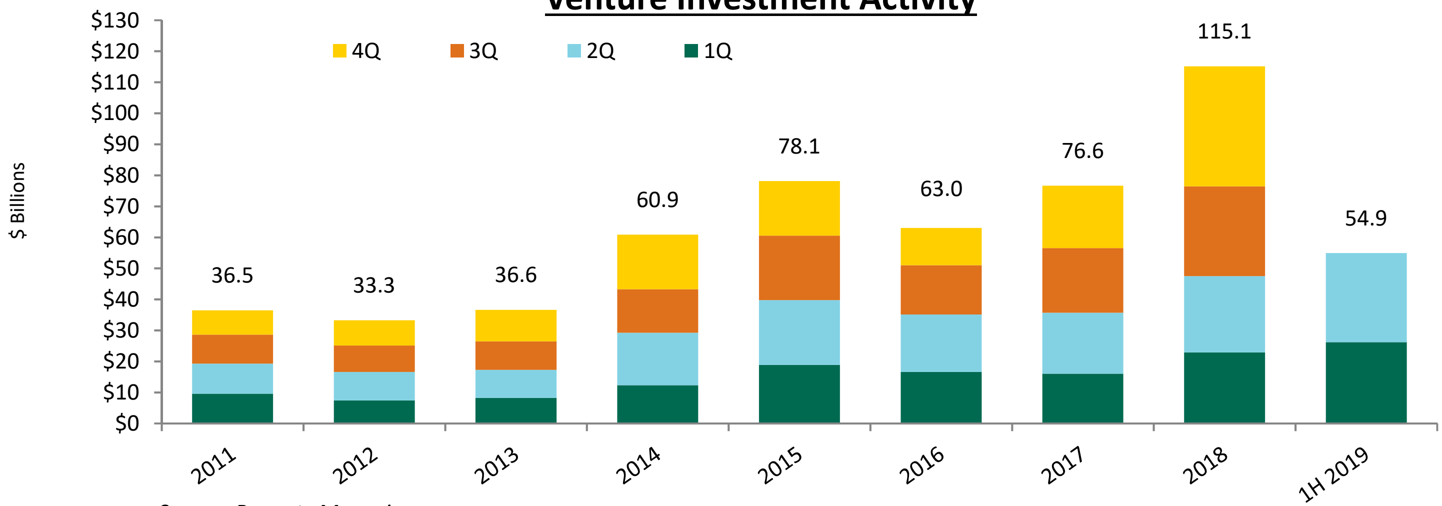
Private Equity Investment Was Robust In 2018 And Maintained Strong Momentum Heading Into 2019

Buyout Investment Activity



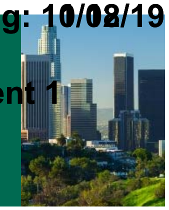
Source: Buyouts Magazine

Venture Investment Activity



Source: Buyouts Magazine

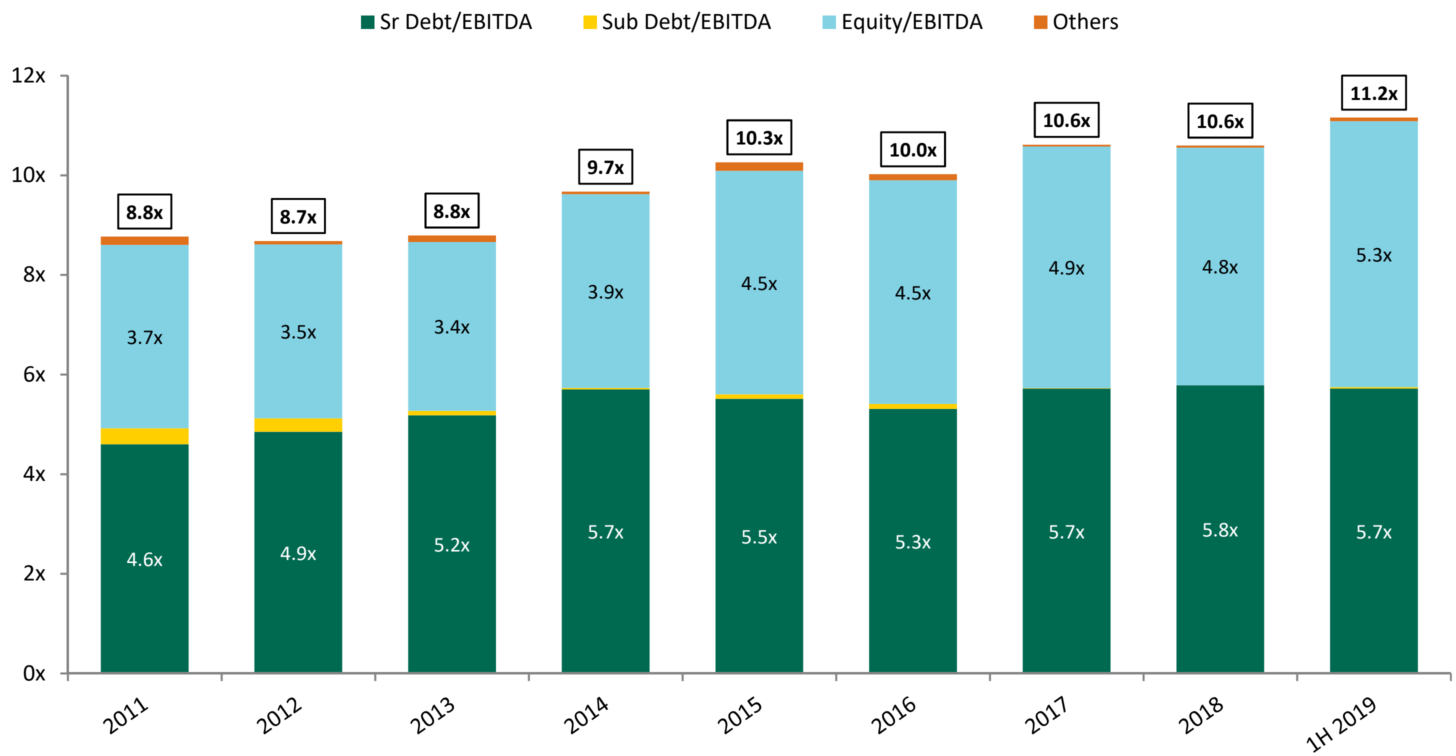
IC Meeting: 10/08/19
Item IV
Attachment 1



TorreyCove
CAPITAL PARTNERS

MARKET OVERVIEW – PRICING

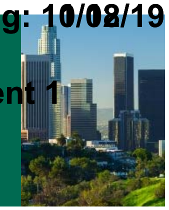
Average Purchase Price Multiples Have Been Steadily Increasing Over Time Aided By Leverage



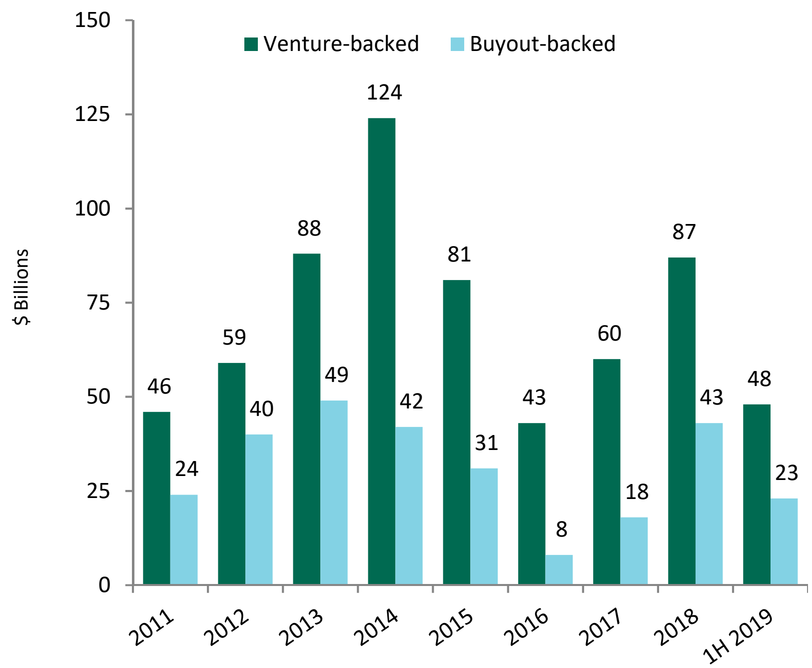
Source: S&P

TorreyCove
CAPITAL PARTNERS

MARKET OVERVIEW – EXIT ACTIVITY

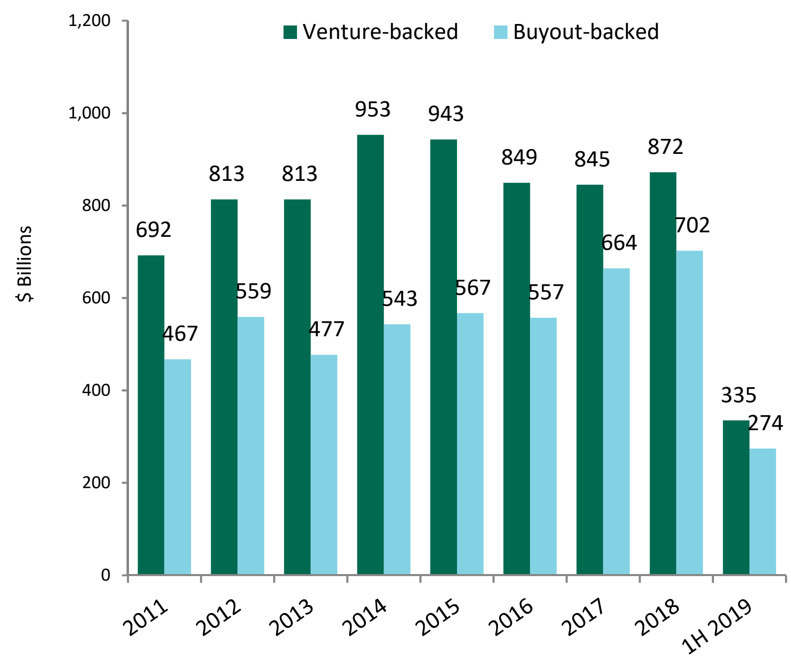


US Initial Public Offerings



Source: Buyouts Magazine & National Venture Capital Association

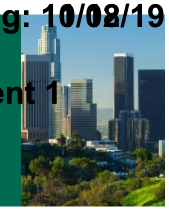
US M&A Activity



Source: Buyouts Magazine & National Venture Capital Association

TorreyCove
CAPITAL PARTNERS

LACERS PRIVATE EQUITY PROGRAM



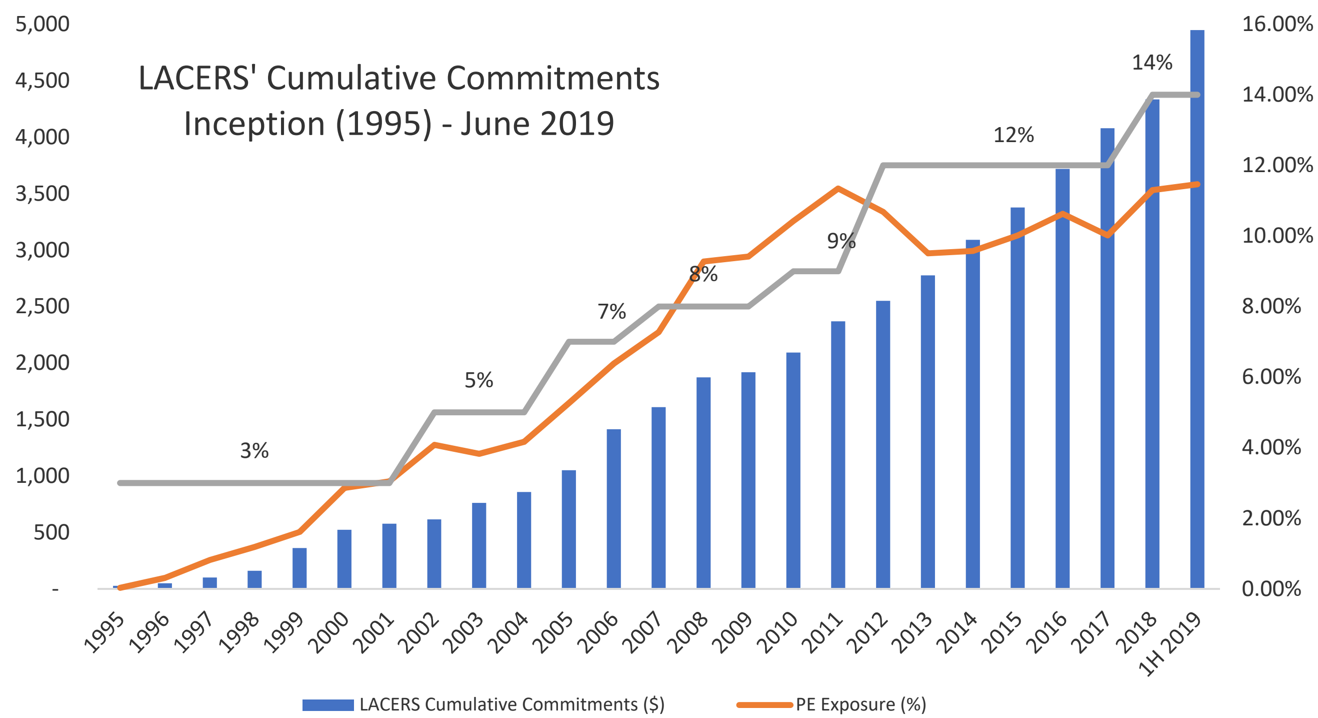
- With the exception of 2008 - 2011, LACERS has consistently been below its targeted allocation to private equity.

- At the current target of 14.0%, the desired exposure to private equity is ~$2.5 billion.

❖ LACERS began investing in private equity in 1995 with a 3.0% exposure target. Today the target stands at 14.0%.

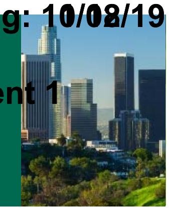
❖ Total plan assets grew to $17.7 billion as of June 30, 2019, up from $4.5 billion at June 30, 1995.

❖ As of June 30, 2019, the Private Equity Program had a Fair Market Value of $2.0 billion, approximately 11.5% of total Plan Assets.



TORREYCOVE
CAPITAL PARTNERS

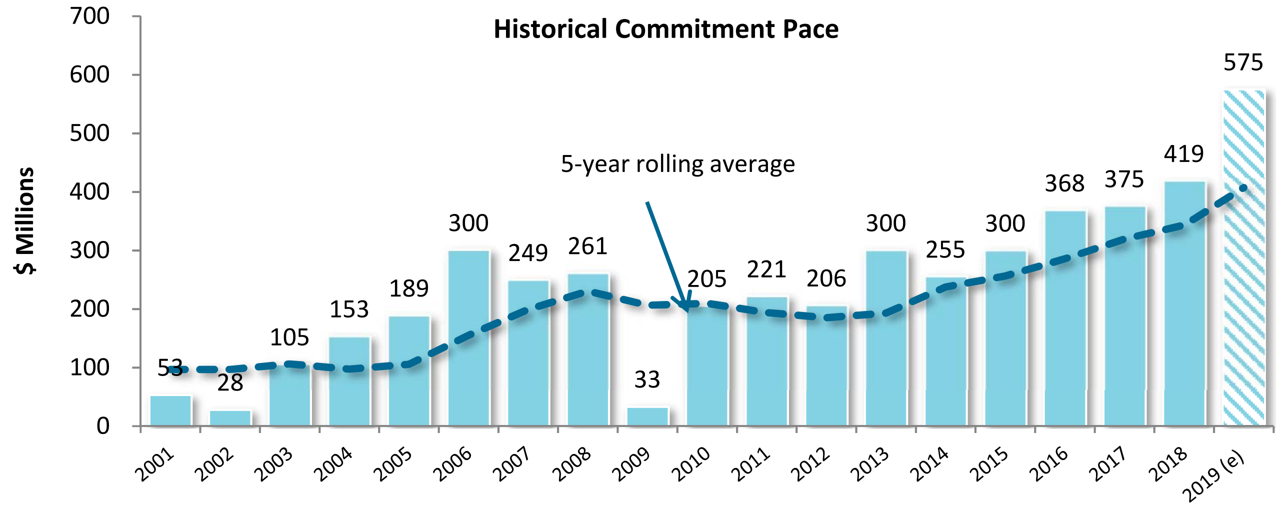
LACERS PRIVATE EQUITY PROGRAM

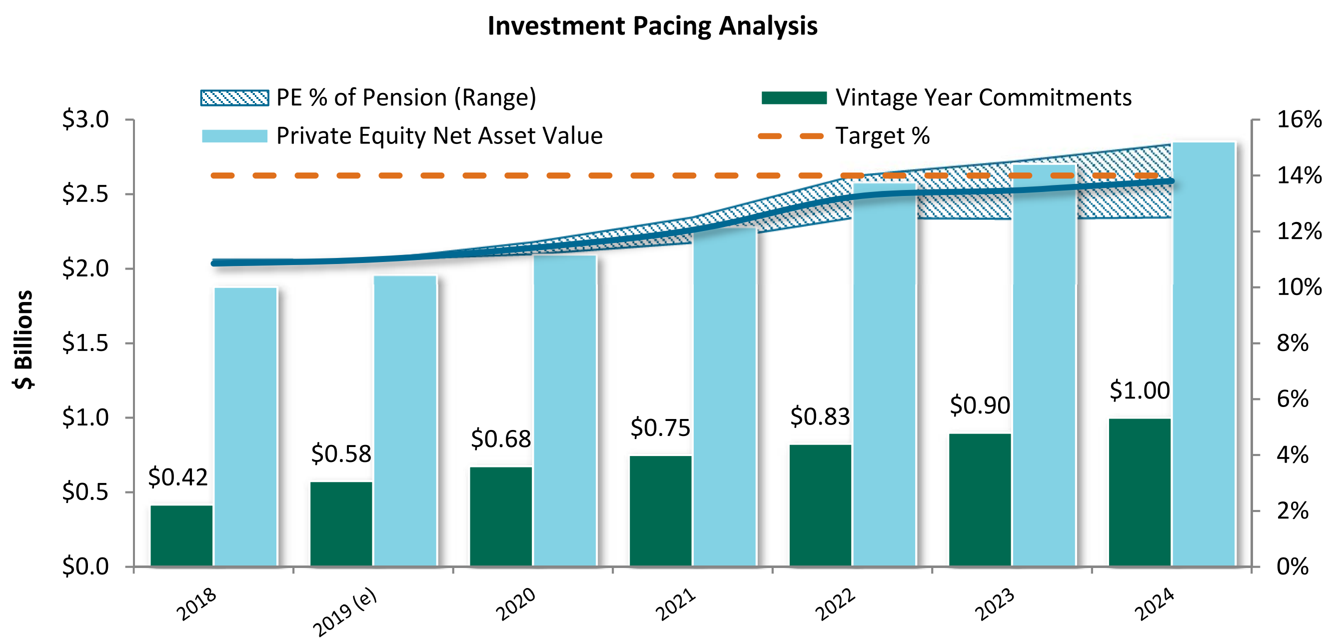


- LACERS commitments over the last 10 years have varied from a low of $33 million in 2009 to a high of $419 million in 2018.

- Preliminary commitment plan of $625 - $675 million proposed for 2020.

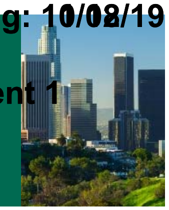
- Preliminary recommendation to make 10 - 14 commitments of $50 million to $100 million per year.





TorreyCove
CAPITAL PARTNERS

LACERS PRIVATE EQUITY PROGRAM



- LACERS has a relatively large number of Sponsor relationships (120+). Going forward, TorreyCove recommends continuing to consolidate exposure with the best performing managers.
- LACERS should continue to explore a potential secondary sale to rationalize the number of relationships and monetize legacy investments.

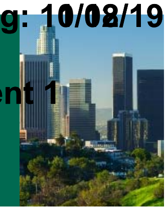
LACERS has committed over $5.0 billion to 272 partnerships and 126 sponsors as of August 31, 2019.

Aggregate Portfolio Snapshot			
Portfolio Since Inception	8/31/19	12/31/18	Net Change
Partnerships	272	256	16
Active	226	213	13
Inactive	46	43	3
Sponsors	126	122	4
Commitments	$5.0 bn	$4.5 bn	$0.5 bn
Fair Market Value[1]	$2.0 bn	$1.9 bn	$0.1 bn
Unfunded[1]	$1.4 bn	$1.2 bn	$0.2 bn
Total Exposure[1]	$3.5 bn	$3.0 bn	$0.5 bn

1. Information is as of June 30, 2019, the latest draft data available.

TorreyCove
CAPITAL PARTNERS

SUB-ASSET CLASS EXPOSURES



- LACERS' exposure to Buyouts is at the lower end of TorreyCove's recommended long-term target, while exposure to Venture Capital is near the high end.

Suggested Sub-Assets Class Ranges

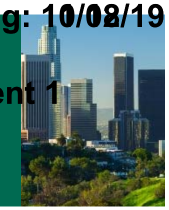
Private Equity

Private Equity Asset and Sub-Asset Classes	LACERS Exposure (%)[1]	TorreyCove's Suggested Long-Term Target	TorreyCove's Suggested 2020 Tactical Weighting
Buyouts	**56.4%**	**50% - 65%**	**55% - 70%**
Large	22.5%		
Medium	29.9%		
Small	4.0%		
Venture Capital	**13.3%**	**5% – 15%**	**5% – 10%**
VC - Early Stage	4.3%		
VC - Late Stage	3.0%		
VC - Multi-Stage	6.0%		
Growth Equity	**12.5%**	**5% – 15%**	**10% – 15%**
Credit/Distressed	**9.4%**	**5% – 15%**	**10% – 15%**
Distressed	6.6%		
Credit	2.4%		
Mezzanine	0.4%		
Other	**8.3%**	**0% – 10%**	**0% – 5%**
Natural Resources	6.9%		
Secondaries	1.3%		
Fund of Funds	0.1%		

1. Based on Fund-level Total Exposure (FMV + Unfunded) as of 6/30/19

TorreyCove
CAPITAL PARTNERS

GEOGRAPHIC EXPOSURES



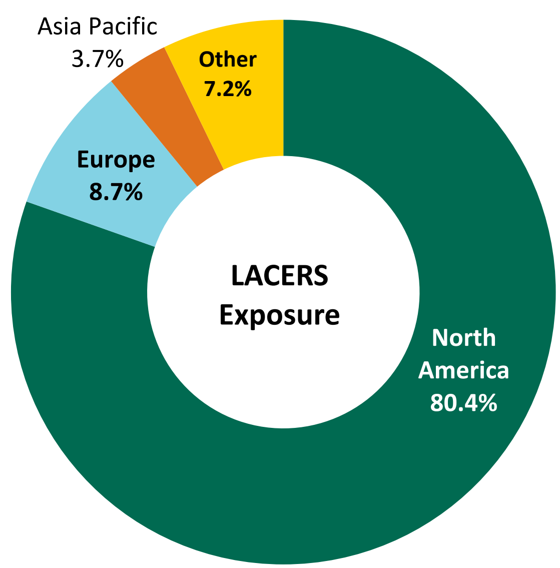
- LACERS' exposure to 'international' investments is underweight relative to TorreyCove's recommended long-term allocation target.
- Including Europe and Asia increases the number of potential investment opportunities while simultaneously increasing diversification.

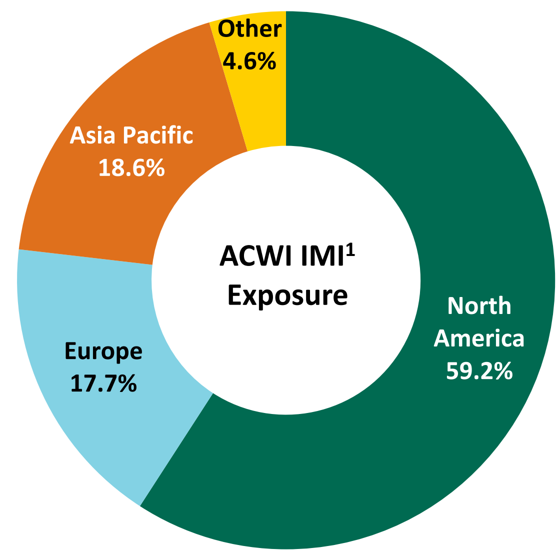
Suggested vs. Actual Geographical Exposures

Domestic vs. International

Geography	LACERS Exposure (%)[1]	TorreyCove's Suggested Long-Term Target	TorreyCove's Suggested 2020 Tactical Weighting
North America	**80.4%**	**50% - 70%**	**60% - 70%**
International	**19.6%**	**30% - 50%**	**30% - 40%**
Europe	8.7%		
Asia Pacific	3.7%		
Multi-Region / Other	7.2%		

1. Based on Fund-level Total Exposure (FMV + Unfunded) as of 6/30/19





1. MSCI 'All Country World Index – Investable Market Index'

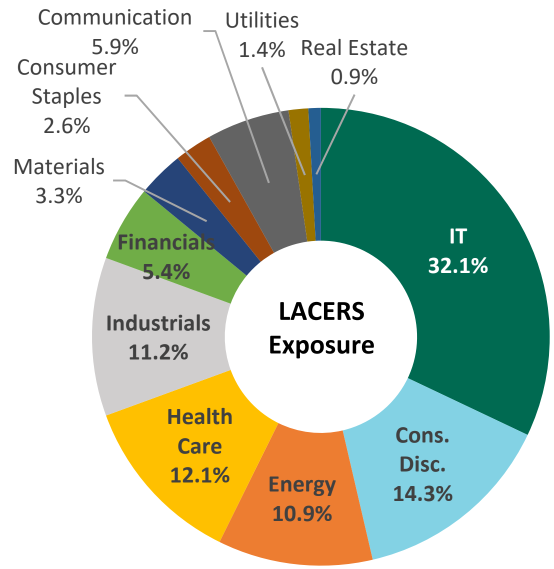
TorreyCove
CAPITAL PARTNERS

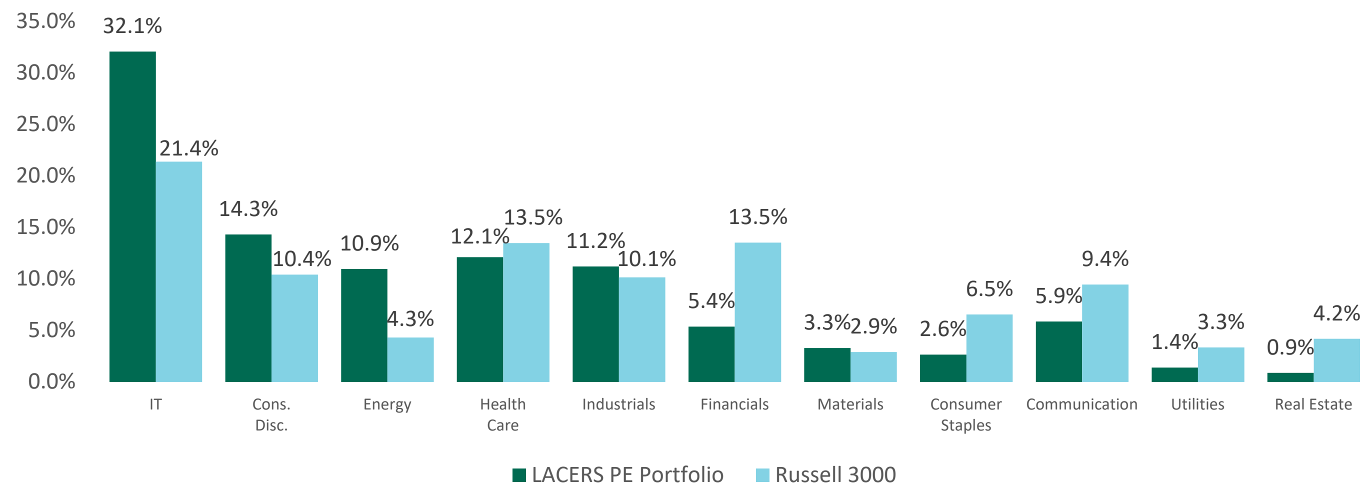
SECTOR EXPOSURES

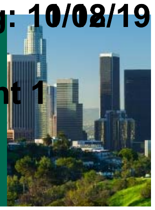
Sector Exposures – LACERS vs. Russell 3000

- The Information Technology ("IT") sector represents the largest sector exposure in the LACERS private equity portfolio.

- The IT sector also represents the largest overweight when compared to the Russell 3000 sector breakdown.







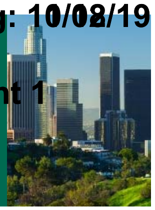
TorreyCove Capital Partners

NEW INVESTMENT ACTIVITY

Closed Commitments through September 2019

Commitments – 1/1/2019 – 09/30/2019						
Closing Date	Sponsor	Partnership	Fund Size (mn)[1]	New or Existing	Investment Strategy	Commitment Amount (mn)
2/14/2019	**Spark Capital**	Spark Capital Partners VI Spark Capital Growth Fund III	$400 $800	Existing	VC-Early Stage Growth Equity	$13.3 $26.7
2/21/2019	**Genstar Partners**	Genstar Capital Partners IX	$5,000	New	Medium Buyouts	$50.0
2/28/2019	**Gilde Buyout Partners**	Gilde Buyout Fund VI	€1,500	Existing	Medium Buyouts	€34.9
3/7/2019	**Harvest Partners**	Harvest Partners VIII	$3,250	Existing	Medium Buyouts	$50.0
3/22/2019	**DEFY[2]**	DEFY Partners II	$225	Existing	VC-Early Stage	$18.0
5/2/2019	**TA Associates**	TA XIII	$7,500	Existing	Growth Equity	$35.0
5/2/2019 6/25/2019	**Advent International**	Advent International GPE IX Advent Global Technology Fund	$17,500 $1,750	Existing	Large Buyouts Medium Buyouts	$45.0 $15.0
5/3/2019	**Freeman Spogli**	FS Equity Partners VIII	$1,500	New	Medium Buyouts	$25.0
5/23/2019	**Platinum Equity**	Platinum Equity Capital Partners V	$8,000	Existing	Large Buyouts	$50.0
6/6/2019	**NEA**	New Enterprise Associates 17	$3,600	Existing	VC-Multi Stage	$35.0
7/30/19	**P4G[2]**	P4G Capital Fund I	$300	New	Small Buyouts	$10.0
7/31/19	**Oak HC-FT**	Oak HC- FT III	$700	Existing	VC- Multi Stage	$25.0
8/16/19	**Sunstone[2]**	Sunstone Partners II	$375	Existing	Growth Equity	$10.0
Total:	**13**	**15**				**~$408.0**

[1] Based on target fund size.
[2] Qualifies as an Emerging Manager based on LACERS' definition.



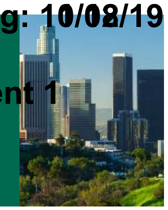
TorreyCove
CAPITAL PARTNERS

SCORECARD: 2019 STRATEGIC PLAN

		Positive Progress	Work in Progress	Progress Since 9/30/18
Pacing Recommendations	• Q4 2018 - commit approximately $100 million to $150 million in additional capital for 2018	X		• Committed ~$100 million to four funds and three sponsors in Q4 2018
	• Preliminary commitment plan of $550 - $575 million proposed for 2019	X		• Closed on ~$408 million of commitments through the end of Q3 2019 • Additional commitments expected to close in Q4 2019 for a total of ~$560 million
	• Preliminary recommendation to make 10 - 12 commitments of $50 - $100 million per year	X		• 10 sponsor commitments averaging ~$41 million per sponsor • 3 Emerging Manager commitments averaging ~$13 million per commitment
	• Increase exposure to private equity to get closer to the policy target of 14.0% of total plan assets	X		• LACERS' exposure to private equity has increased to 11.5%, up from ~10.0% as of June 30, 2018.
Investment Recommendations	• Q4 2018 - Review the Private Equity Policy and Emerging Manager Policy and suggest changes if appropriate	X		• Increased policy thresholds to allow for bigger commitments to existing relationships, new relationships, and Emerging Managers
	• Selectively add exposure to Europe	X		• LACERS' Fund-level total exposure to Europe has increased from 8.0% to 8.7%
	• Selectively add exposure to Asia		X	• Potential investments being considered for Q1 2020
	• Increase exposure to Buyouts relative to other sub-asset classes and decrease Venture Capital exposure	X		• LACERS' exposure to 'Buyouts' has increased to 56.4%, up from 54.9% as of June 30, 2018.
	• Consolidate commitments with best performing managers	X		• Commitments of $50 - $60 million completed with several high conviction sponsors
	• Explore the possibility of a secondary sale	X		• Education and preliminary planning in process

TorreyCove
CAPITAL PARTNERS

Q4 2019 / 2020 GOALS AND OBJECTIVES



❖ Pacing Recommendations

Q4 2019

- Finalize several more commitments before year end to reach the commitment target for 2019
- Finalize the forward calendar for 2020

Full Year 2020

- Commitment plan of $625 - $675 million proposed for 2020
- 10 -14 commitments of $50 - $100 million per year

❖ Investment Recommendations

Q4 2019

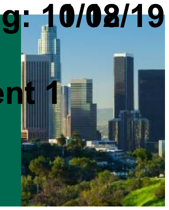
- Continue to review the potential process for a secondary sale
- Continue to review the potential for a co-investment program

Full Year 2020

- Continue to selectively add exposure internationally – primarily to Europe and Asia
- Continue to increase exposure to Buyouts relative to other sub-asset classes and decrease Venture Capital exposure
- Continue to consolidate commitments with top performing managers
- Continue to manage underlying sector exposures
- Consider adding exposure to strategies designed to outperform in down markets – i.e. Value-Oriented Managers, Turnaround Managers, Distressed Managers

TorreyCove
CAPITAL PARTNERS

EMERGING MANAGERS - 2019 SCORECARD & 2020 GOALS AND OBJECTIVES



2019 Emerging Manager Activity

- Committed $38 million to three different sponsors that qualify as Emerging Managers under LACERS' definition
- Evaluating a fourth commitment, which if closed, would collectively translate into ~$50 million in total commitments to Emerging Managers, or ~9.0% of total 2019 commitments

2020 Pacing Recommendations

- Commitment plan of $50 - $75 million proposed for 2020, subject to TorreyCove's standard underwriting process
- 3 - 4 commitments of $10 - $20 million, subject to TorreyCove's standard underwriting process

2020 Investment Recommendations

- Continue attending Emerging Manager conferences
- Continue to build the pipeline of potential Emerging Managers
- Continue to track and evaluate managers that have moved past Emerging Manager status

IC Meeting: 11/12/19
Item IV
Attachment 2

TORREYCOVE CAPITAL PARTNERS

CALIFORNIA
10180 Barnes Canyon Road
Suite 200
San Diego, CA 92121

MASSACHUSETTS
222 Rosewood Drive
3rd Floor
Danvers, MA 01923

LACERS Private Equity Program 2020 Strategic Plan

Agenda

- Overview of the Current Private Equity Market
- Private Equity Exposure
- Return Objectives and Drivers
- Strengths, Weaknesses, Opportunities, Threats
- 2019 and 2020 Goals and Objectives
- Rationale for Recommendations

Private Equity - Benefits vs Public Markets

- No Public Market Pressures: Ability to take a longer-term focus, no quarterly earnings, fewer reporting and regulatory requirements.
- Larger Universe of Potential Investments[1]: From 2006 to 2017, the number of U.S. publicly traded firms fell from ~5,100 to ~4,300.
  - The number of U.S. publicly traded firms has fallen by ~43% since 1996.
  - There were ~4,000 U.S.-based PE-backed companies in 2006. By 2017, that figure rose to ~8,000.
- Alignment of Interests: Large U.S. pensions typically have a greater alignment of interests with private equity fund managers, due to the amount of capital being invested. This degree of alignment is difficult to achieve in public equities.
- Returns Over Time Relative to Public Equities: While debate rages over the risk/reward profile of private equity, most investors agree that private equity has outperformed public equities over the long term.
- Ability to Better Tailor Exposures: Private equity offers the ability to tailor portfolio exposures by sector, company size, and strategy while maintaining appropriate diversification.
- Lower Volatility: Offers some value insulation in times of severe market corrections.

(1) McKinsey Global Private Markets Review 2019

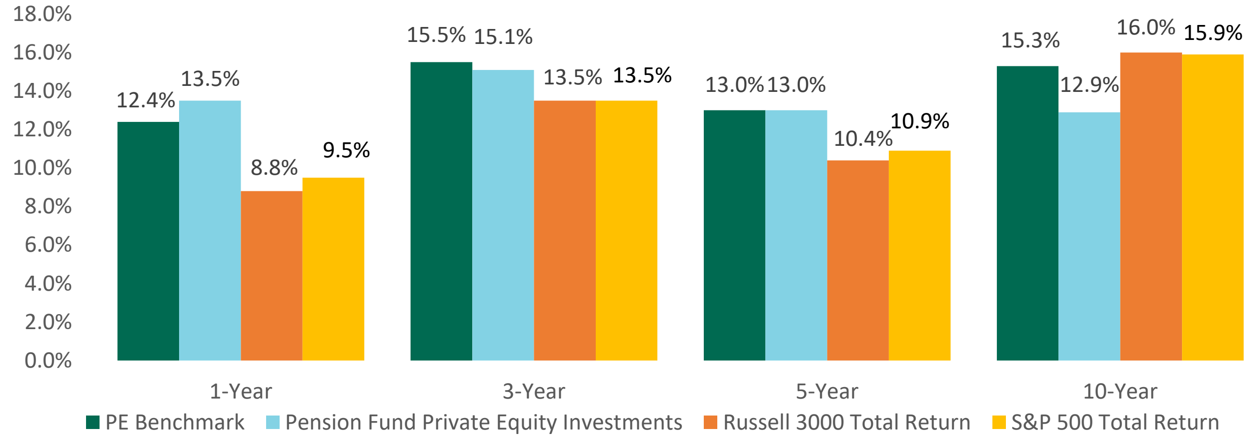
IC Meeting: 11/12/19
Item IV
Attachment 2

TorreyCove
CAPITAL PARTNERS

PRIVATE EQUITY OVERVIEW

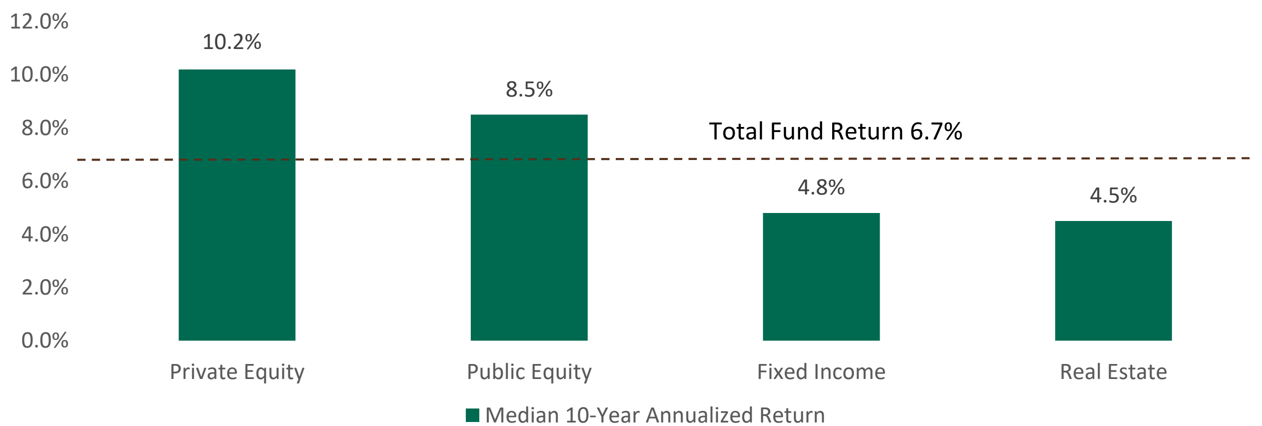
- The American Investment Council reports that private equity has been the best returning asset class for public pensions.

Private Equity Returns - Public Pensions (as of March 31, 2019)



American Investment Council
Note: PE Benchmark represents the median return across 4 industry benchmarks (Cambridge, Cepres, ILPA, and State Street), excluding VC.
Note: Pension Fund returns represent the median return of U.S. pension fund private equity investments.

Median 10-Year Annualized Return for Public Pensions (as of June 30, 2018)



American Investment Council – Pension Funds with Returns as of June 30, 2018

TORREYCOVE CAPITAL PARTNERS

PRIVATE EQUITY OVERVIEW

IC Meeting: 11/12/19
Item IV
Attachment 2

- Private Equity returns have, on average, performed well compared with public equities over time.

- But manager selection remains a key element in ensuring outperformance in a private equity portfolio.

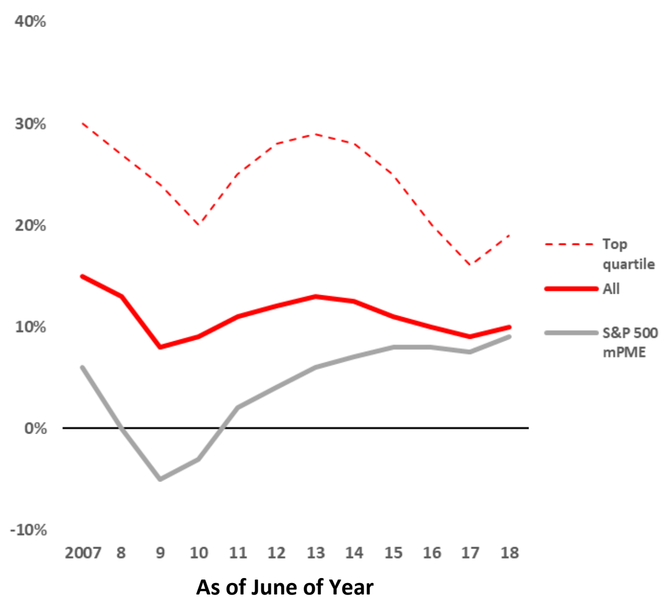
"If private equity has demonstrated anything over the past several years, it's that the asset class produces steadier, more reliable returns than public equities. After a period of heavy stock market volatility around the world, buyout funds have continued to outperform public equity markets in all major regions, over both short and long time horizons."

- Bain & Company: Global Private Equity Report 2019

"While average industry returns have declined, it is important to recognize that top-performing funds still exceed the average by a relatively wide margin. Moreover, private equity has demonstrated an unusual persistence of performance, as measured by the likelihood of successor funds to deliver the same quartile performance as their predecessors."

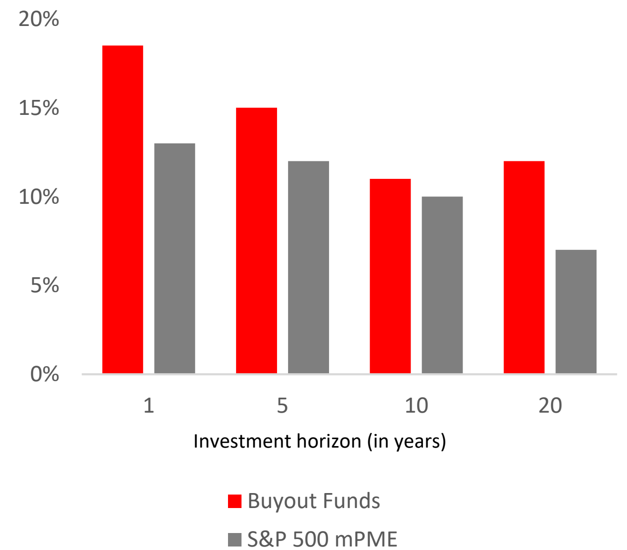
- Bain & Company: Global Private Equity Report 2019

10-Year horizon pooled net IRR



*Bain & Company: Global Private Equity Report 2019

US
End-to-end pooled net IRR
(as of June 2018)

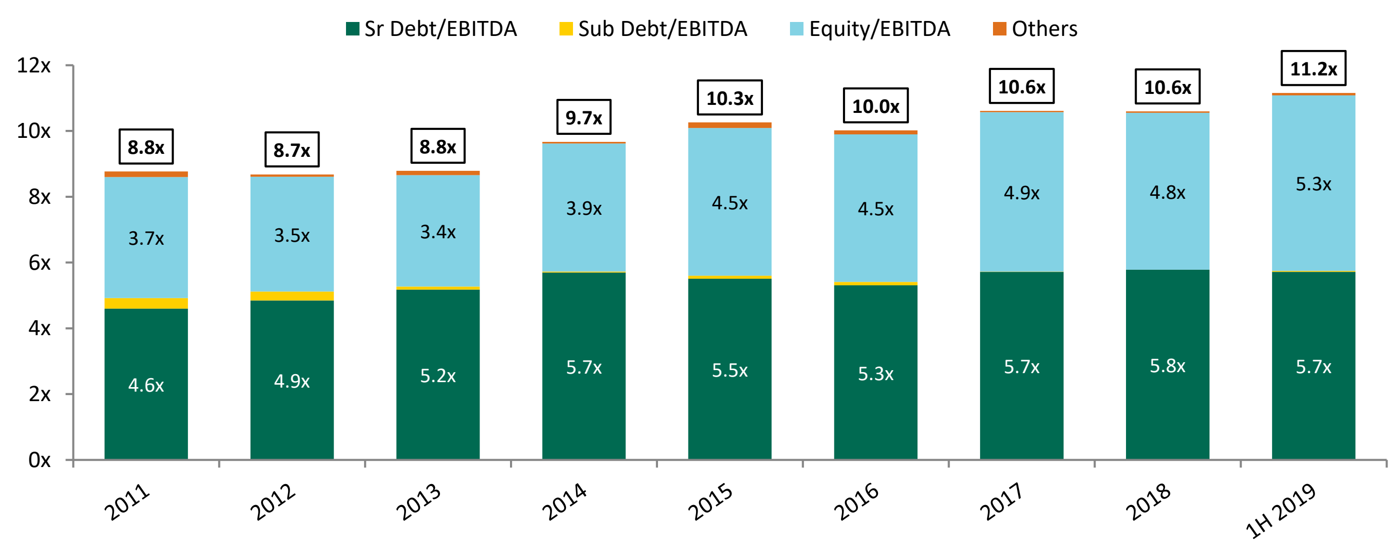


*Bain & Company: Global Private Equity Report 2019

There are a number of signals that point to an overheated private equity market today.

- High Prices: Leverage levels have reached all time highs in private equity. Transactions at purchase multilpes above 11x EBITDA are not uncommon today.
  - Competition, ample funding, and robust public markets have driven up prices across the private equity industry.

- High Levels and Availability of Leverage: Leverage levels have reached all time highs in private equity. Buyout transactions with 5-6x leverage are not uncommon today.
  - Pricing and covenant light mentality have been favorable to private equity.
  - Banks remain relatively healthy today.
  - Non-traditional lending sources have become a bigger share of the pie.



Source: S&P

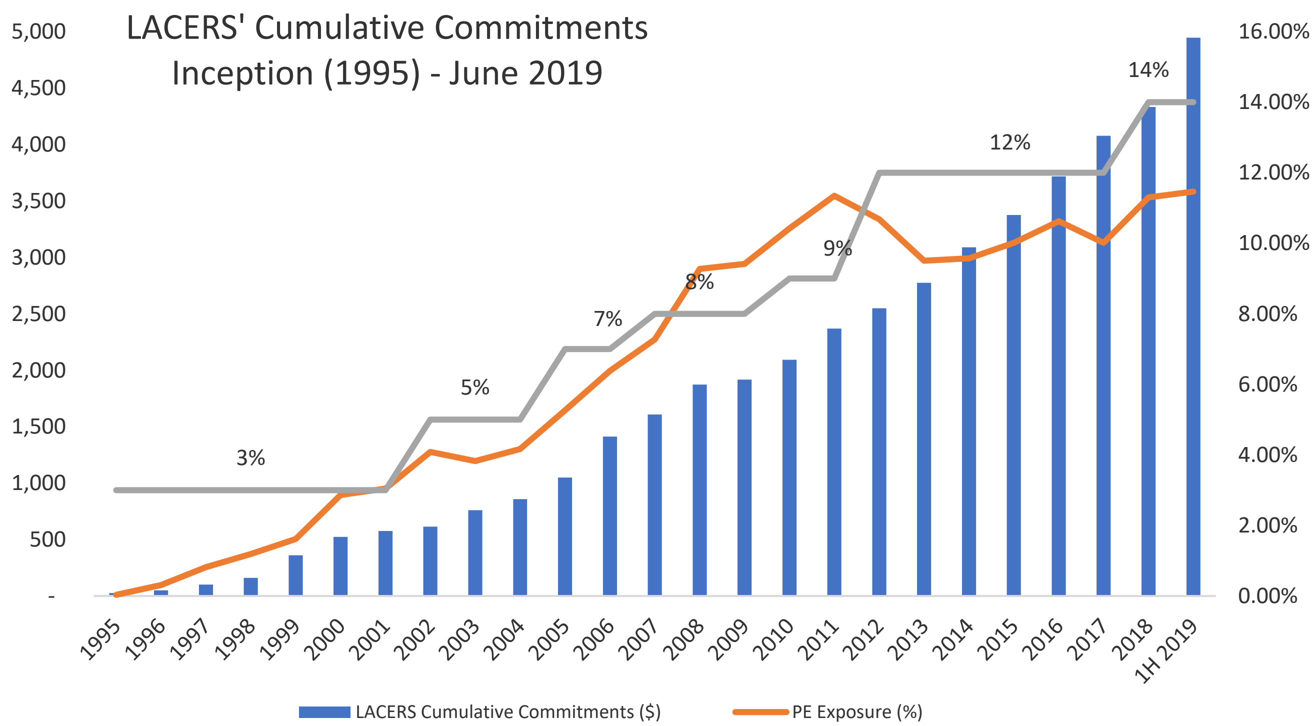
TorreyCove
CAPITAL PARTNERS

LACERS PE PROGRAM – PLAN-LEVEL EXPOSURE

- At the current target of 14.0%, the desired exposure to private equity is ~$2.5 billion.

❖ Since Inception, LACERS has committed more than $4.9 billion to private equity.

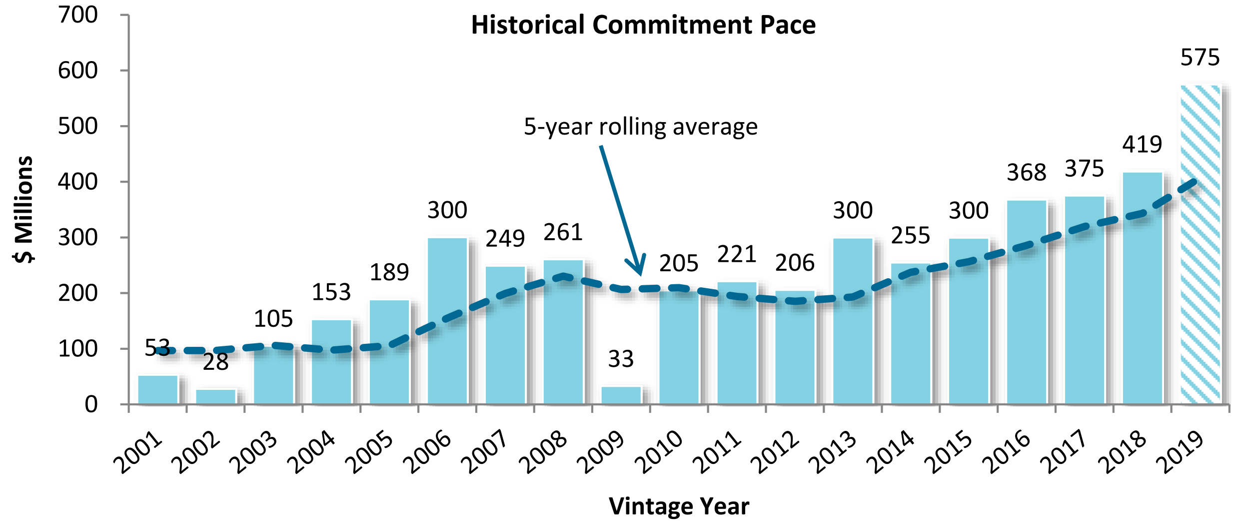
❖ As of June 30, 2019, the Private Equity Program had a Fair Market Value of $2.0 billion, approximately 11.5% of total Plan Assets.

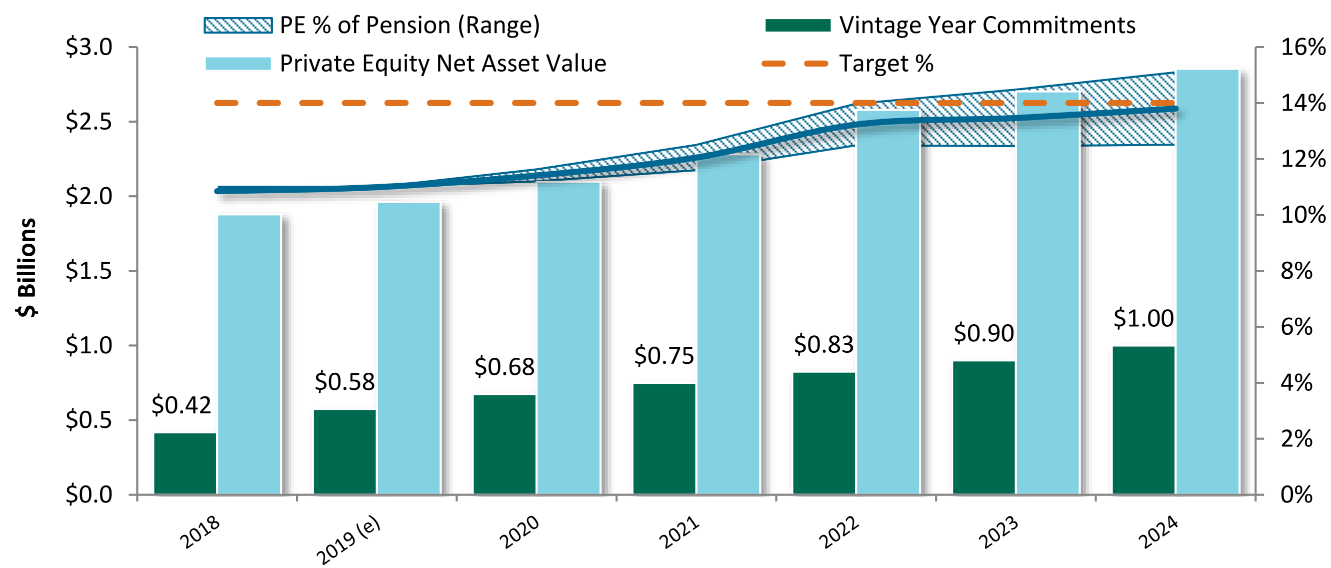


TorreyCove
CAPITAL PARTNERS

LACERS PE PROGRAM – PLAN LEVEL EXPOSURE

- LACERS commitments over the last 10 years have varied from a low of $33 million in 2009 to a high of $419 million in 2018.
- Preliminary commitment plan of $625 - $675 million proposed for 2020.





TORREYCOVE
CAPITAL PARTNERS

LACERS PE PROGRAM – RETURNS VS OBJECTIVES

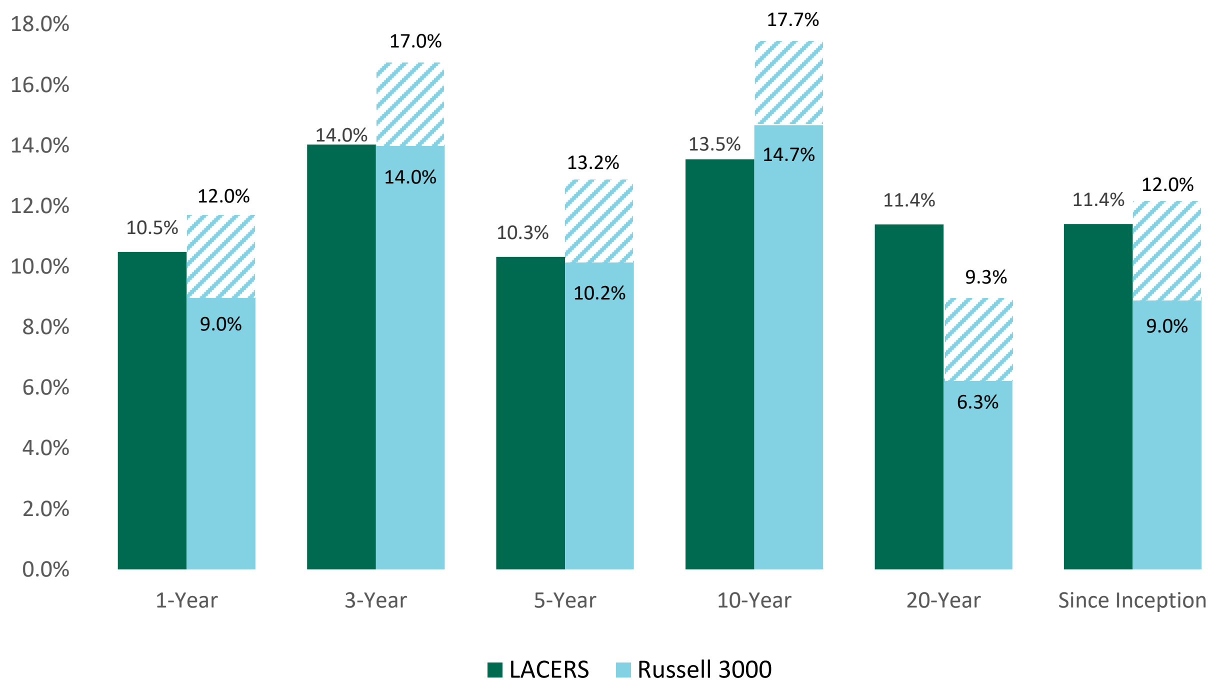
IC Meeting: 11/12/19
Item IV
Attachment 2

- Over the long term, LACERS' PE program has generated a net IRR of 11.4%.

- Over shorter time periods, net IRRs for the portfolio have fluctuated between 10.3% and 14.0%

PE Program Objective

Earn 300bps Premium Over the Russell 3000 Over the Long Term



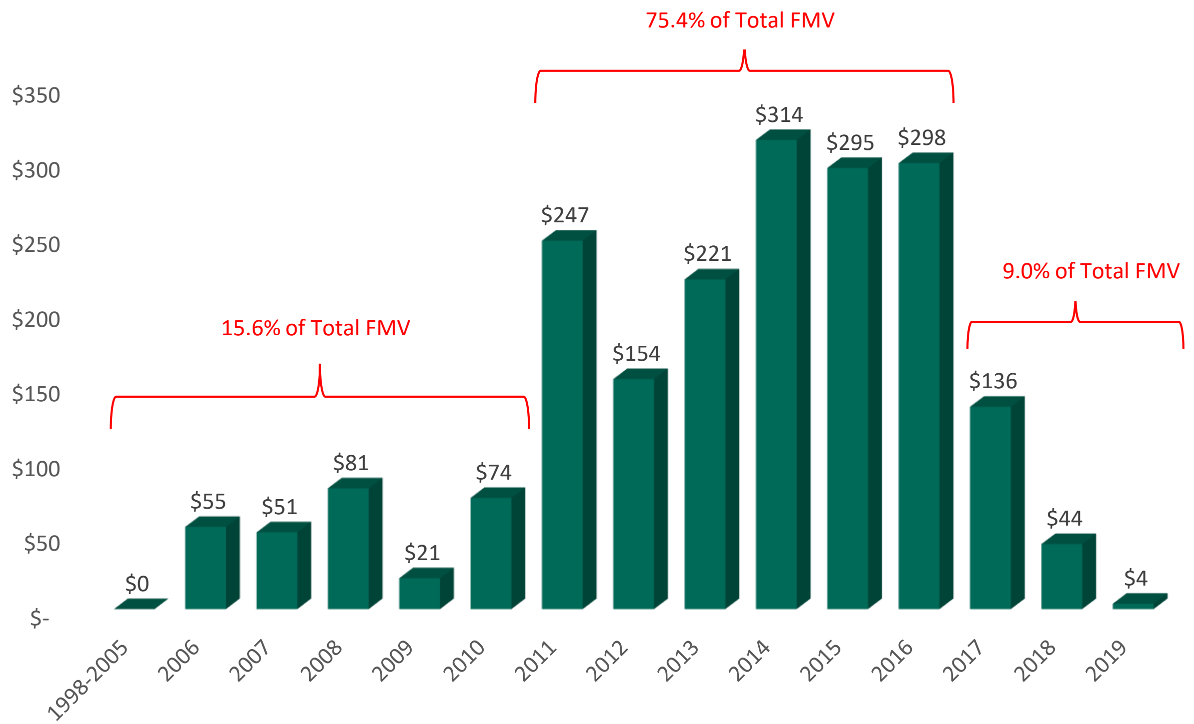
LACERS PE PROGRAM – RETURN DRIVERS

IC Meeting: 11/12/19
Item IV
Attachment 2

- The majority of the FMV in LACERS' PE program is from investments with Vintage Years between 2011 and 2016.

- Capital from the commitments made in 2018 and 2019 represent a very small portion of FMV today and will have their maximum impact on the portfolio in 4 – 8 years.

Fair Market Value of LACERS' PE Portfolio By Vintage Year – as of 6/30/19

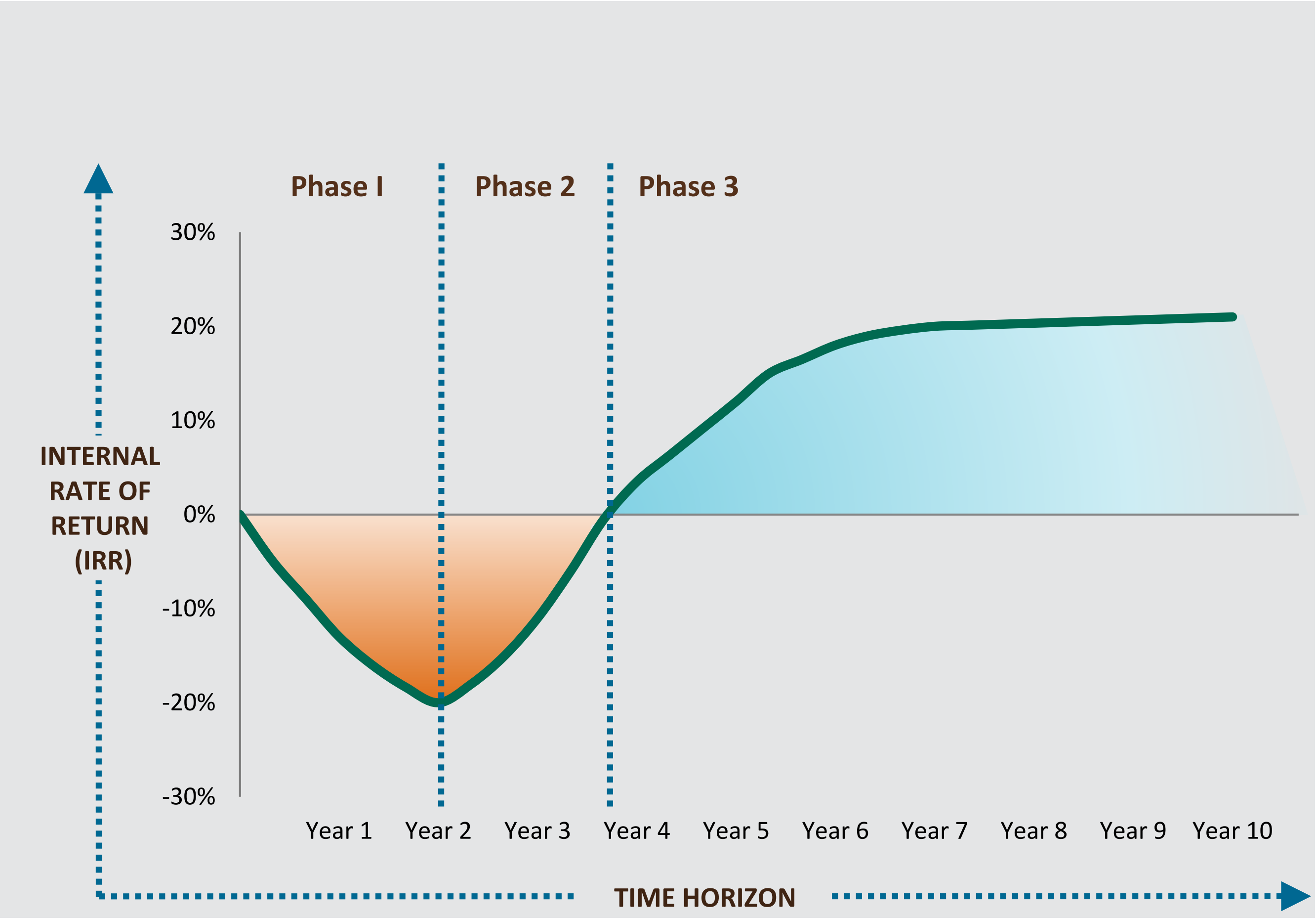


LACERS PE PROGRAM – RETURN DRIVERS

IC Meeting: 11/12/19
Item IV
Attachment 2

- Generally, private equity funds less than three years old tend to have low or negative returns because management fees are charged from inception while growth in value occurs over a number of years.
- Early negative returns are not predictive of the ultimate fund performance as growth in value over time typically offsets fees and generates investor profits.

2018 / 2019 Investments Have Limited or Negative Impact on Returns Due to the J-Curve



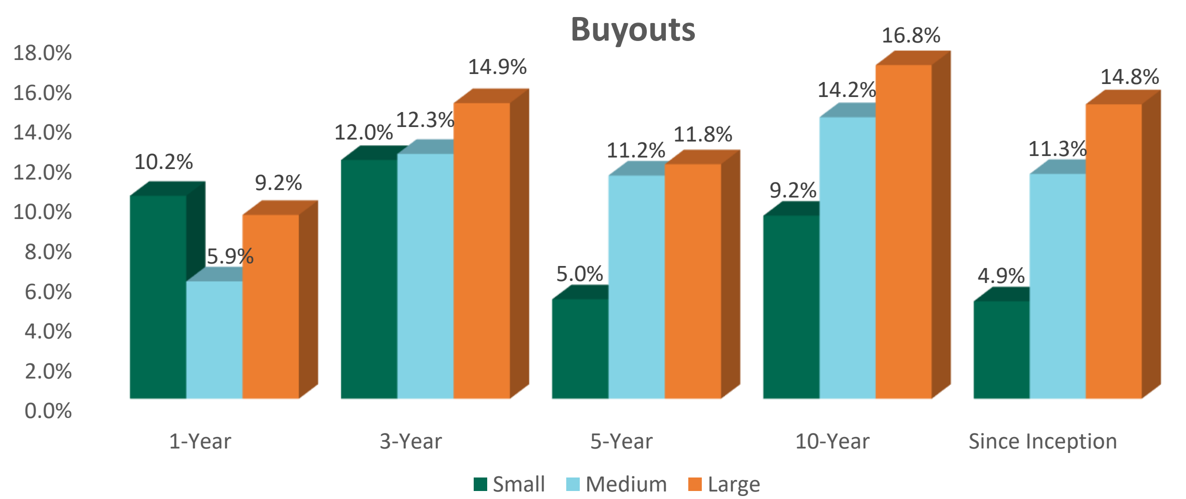
TorreyCove
CAPITAL PARTNERS

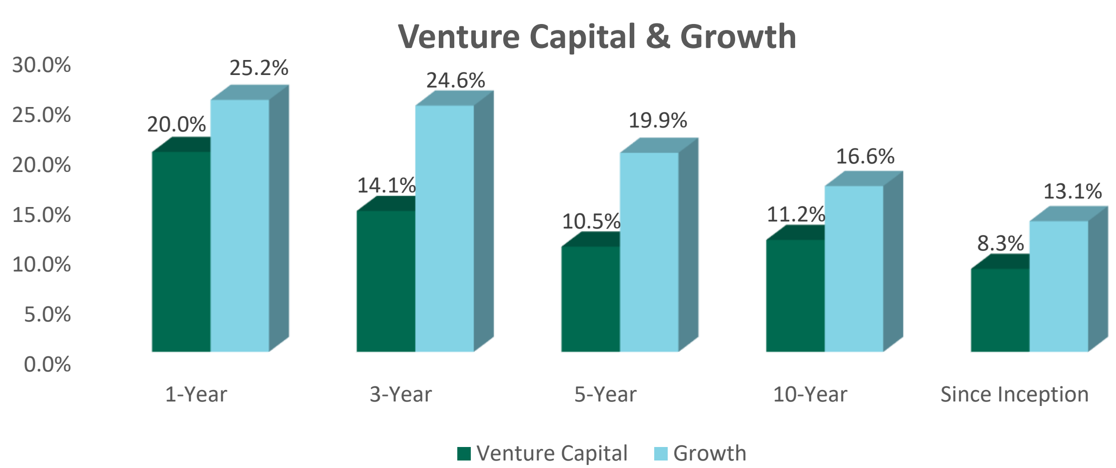
LACERS PE PROGRAM – RETURN DRIVERS

- The Buyouts Sub-Sector represents 60.7% of total commitments made by LACERS and 52.4% of FMV as of June 30, 2019.
- The Venture Capital and Growth Sub-Sectors represent 20.0% of total commitments made by LACERS and 30.7% of FMV as of June 30, 2019.

Sub-Asset Class Objective

Generate Top Quartile Returns Across Sub-Asset Classes (vs Relevant Indices)





LACERS PE PROGRAM – RETURN DISPERSION

IC Meeting: 11/12/19
Item IV
Attachment 2

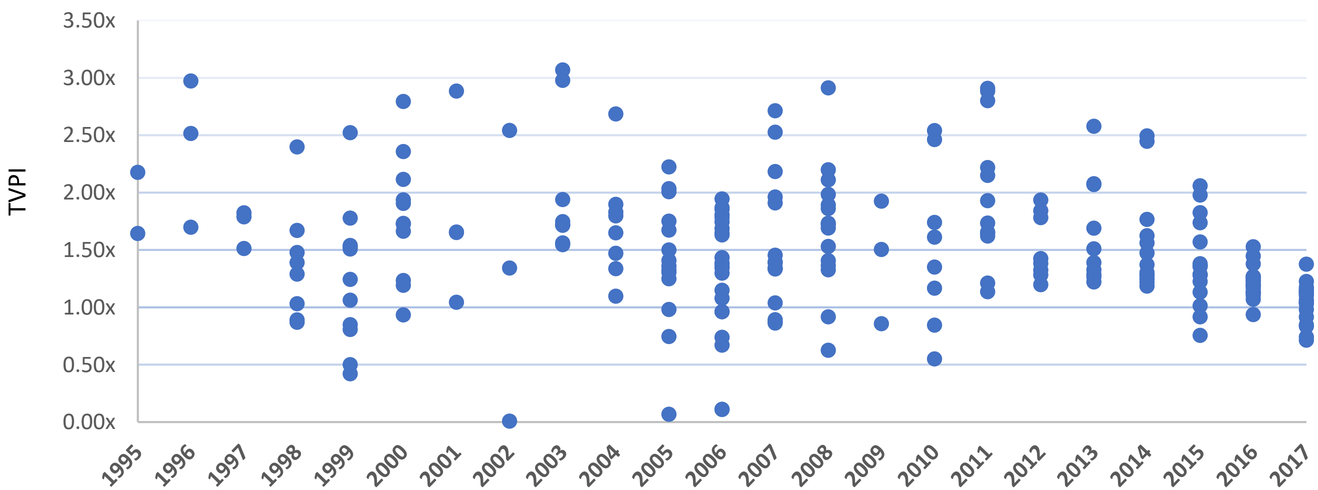
TorreyCove
CAPITAL PARTNERS

- More than half of LACERS' historical commitments – by fund count and committed capital – have gone to fund's that have generated net IRRs below 12.0%.

LACERS' PE Portfolio - Dispersion of Returns

Net IRR	Number of Funds	Committed Capital	Contributed Capital	Distributed Capital	Market Value	TVPI
> 20.0% IRR	**44**	**$711.8**	**$608.3**	**$850.9**	**$490.6**	**2.21x**
16.0% - 20.0% IRR	**25**	**$494.0**	**$448.5**	**$503.3**	**$361.7**	**1.93x**
12.0% - 16.0% IRR	**37**	**$717.7**	**$637.5**	**$614.4**	**$414.6**	**1.61x**
Sub-Total	**106**	**$1,923.5**	**$1,694.3**	**$1,968.6**	**$1,266.9**	**1.91x**
8.0% - 12.0% IRR	**51**	**$876.0**	**$811.5**	**$764.4**	**$403.1**	**1.44x**
0.0% - 8.0% IRR	**47**	**$753.9**	**$696.5**	**$663.5**	**$224.9**	**1.28x**
< 0.0% IRR	**34**	**$524.4**	**$378.8**	**$193.9**	**$85.3**	**0.74x**
Sub-Total	**132**	**$2,154.3**	**$1,886.8**	**$1,621.8**	**$713.3**	**1.24x**

*Excludes funds with 2018 and 2019 VY funds because they are too early to be meaningful.



*Excludes funds with 2018 and 2019 VY funds because they are too early to be meaningful.

LACERS PE PROGRAM – STRENGTHS

- **LACERS PE Program – Strengths**
  - Positive investment returns in select sub-asset classes
    - Large and Medium Buyouts have performed well over time for LACERS
    - Growth Equity has performed well over time for LACERS
  - Reputation of LACERS
    - Ability to deploy sizable commitments - up to $50mm for new and $100mm for follow-ons
    - Engaged LACERS professional staff
    - Long term investor
  - Strong relationships with a number of high-quality GPs
  - Ability to focus on a limited and select number of commitments per year
  - Significant amount of dry powder to allow for investing even in a market downturn
  - Ability to invest selectively in Emerging Managers

LACERS PE PROGRAM – WEAKNESSES

- **LACERS PE Program – Weaknesses**
  - Underwhelming investment returns in select sub-asset classes
    - Small Buyouts have underperformed for LACERS over time
    - Over the longer term, Venture Capital investments have underperformed
  - Inconsistent manager selection over time
    - Negatively impacted performance and led to a significant number of non-core managers
  - Overly diversified portfolio has led to reversion to the mean
  - The legacy portfolio will continue to be a drag on performance, including Specialized Carve Out Program
  - There are limited options for materially impacting returns in the near term
    - Current policy allows for a secondary portfolio sale; however, the mechanism for implementation is still being developed
    - Current policy allows for direct co-investments; however, the mechanism for implementation is still being developed

LACERS PE Program – Opportunities

- Co-Investments: The co-investment market has matured significantly over the last decade
  - The number of firms offering co-investment has increased significantly
  - The ability for LPs to average down fees has driven demand and usage

- Secondaries: The secondary market has matured significantly over the last decade
  - The ability to sell portfolios on the secondary market has increased significantly
  - Discount rates have fallen dramatically
  - The ability to purchase individual positions on the secondary market have increased significantly

- Increase International Exposure: Investing internationally can increase diversification in the portfolio without sacrificing returns, pushing the portfolio further out on the efficient frontier
  - Europe and Asia have large economies with hundreds of million of consumers
  - Europe and Asia offer relatively deep and mature private equity markets

- Consolidate Capital with Best Performing Managers: LACERS is a sought-after Limited Partner that has the ability to put meaningful dollars to work with best performing managers

- Emerging Managers: Today's emerging managers may very well be the new generation of top-tier performers. The ability to invest in these managers early on in their life will help with long-term access to the outperforming emerging managers

LACERS PE PROGRAM – THREATS

- **LACERS PE Program – Threats**
  - Pricing Levels Across the Industry
    - Entry Multiples in 2018 recently surpassed 2007 highs
  - Leverage Levels Across the Buyout Sub-Sector
    - Leverage Levels in 2018 recently surpassed 2007 highs
    - Covenant light loans are the norm again
  - Potential for a Market Correction
  - Demand for private equity co-investment vastly outstrips opportunities provided by GPs
    - Flexibility and first mover advantage rewarded in co-investing
  - AB2833 reporting may be disagreeable to certain top-quartile General Partners
    - Potentially a bigger issue in Venture Capital vs Buyouts sub-sector

TORREYCOVE CAPITAL PARTNERS

Q4 2019 / 2020 STRATEGIC INITIATIVES

- **Pacing Recommendations**
  - Commitment plan of $625 - $675 million proposed for 2020.
  - 10 -14 commitments with a target size of $40 - $60 million per commitment.
    - Long term goal of making $50 - $100 million per commitment.

- **Long Term Investment Recommendations**
  - Develop a framework for the implementation of a co-investment program – from both from an investment and policy perspective.
  - Develop a framework for a potential Secondary sale – from both from an investment and policy perspective.

- **Tactical Investment Recommendations**
  - Selectively add exposure internationally – primarily to Europe and Asia.
  - Increase exposure to Buyouts relative to other sub-asset classes and decrease Venture Capital exposure.
  - Consolidate commitments with top performing managers.
  - Continue to manage underlying sector exposures.
  - Add exposure to strategies designed to outperform in down markets – i.e. Value-Oriented Managers, Turnaround Managers, Distressed Managers.

TorreyCove
CAPITAL PARTNERS

LONG TERM RECOMMENDATION: CO-INVESTMENTS

IC Meeting: 11/12/19
Item IV
Attachment 2

THE FINANCIAL BENEFITS OF CO-INVESTMENTS

Illustrative example

	FUND INVESTMENT	CO-INVESTMENT
Committed Capital (fund)/Invested Capital (co-investments)	$ 100.0	$ 100.0
Management Fees: 1.5% per year for five years	(7.5)	0.0
Capital for Investment	**$ 92.5**	**$ 100.0**
Gross Return: 2.0x invested capital	$ 185.0	$ 200.0
Carried interest (20% of profits after repayment of all contributed capital)	(17.0)	0.0
Cash returned from investment	**$ 168.0**	**$ 200.0**
Total Gain	$ 68.0	$ 100.0

LONG TERM RECOMMENDATION: CO-INVESTMENTS

TorreyCove Capital Partners

IC Meeting: 11/12/19
Item IV
Attachment 2

	① Comingled Co-Investment Funds	② SMA Co-investment Vehicle	③ Consultant Approach: Full Underwriting	④ Consultant Approach: Abbreviated Diligence	⑤ In-House Approach
Examples / Description:	Neuberger Berman, HarbourVest, AlpInvest, Adams Street, Abbott, Pantheon, Brooke, Pathway, Hamilton Lane, Franklin Park, Grovenor, Capital Dynamics, Constitution Capital, GoldPoint, RCP, Black Rock, Private Advisors	Many of the comingled fund providers offer SMAs above a certain commitment threshold (typically >$100M)	- Deal flow generated from Clients current GPs and potential future GPs - Each deal thoroughly evaluated on its merits based on information provided by the GP - Consultant provides a full diligence report and a formal IC recommendation	- Deal flow generated from a select group of Client's current GPs only - Pre-established investment parameters are verified - All deals that meet specified parameters are executed - Consultant provides summary investment report	- Develop internal program with dedicated staff resources to source and evaluate co-investments
Key Benefits	- Few LP resource requirements - More diversified - Can commit set amount of capital	- Tailored to Client's specifications - Typically includes a veto right - Single fund structure, with LPA customized to Client's requirements	- Staff evaluates each opportunity, assisted by Consultant - No Mgmt. Fee - Consultants interest are directly aligned with Client	- This strategy focuses on a core group of Client's high conviction managers that have been re-underwritten within last few years - Effectively gains additional exposure to deals already in Client's portfolio, at the lowest price point	- Control over process and decisions - Dedicated staff - May attract and incentivize staff
Key Drawbacks	- Change in LACERS' PE Policy Required - Additional layer of fees - Risk of allocation issues and adverse selection	- Change in LACERS' PE Policy Required - Additional layer of fees - Size requirements	- Change in LACERS' PE Policy Required - Client resource requirements (more opportunities to review) - Different type of review (direct investments vs. funds) - Fewer deals than a comingled vehicle, however, more control over the diversification	- Change in LACERS' PE Policy Required - Relying primarily on the initial fund-level diligence; no 'second layer' of due diligence	- Change in LACERS' PE Policy Required - Significant resources required to develop internal processes, policies, and controls - Added expense of a dedicated team
Discretion:	Co-Inv Fund GP	SMA Fund GP (some provide veto right)	Client	Consultant w/ Client Veto Right	Client
Annual Mgmt. Fee (%)	1.00%	0.85%	0.00%	0.00%	0%
Annual Mgmt. Fee ($): $20M Invested Capital	$200,000	$170,000	$0	$0	$0
Carried Interest: (Over 8% Pref. Return)	10%	10%	10%	5%	0%

The firms identified will not necessarily provide co-investments or be recommended to TorreyCove clients in the future. Any recommendation to invest in a private equity partnership is subject to the sole discretion of TorreyCove.

TorreyCove
CAPITAL PARTNERS

LONG TERM RECOMMENDATION: SECONDARY SALE

- Secondary transactions can be mutually beneficial for both sellers and buyers.

Why Limited Partners Sell Their Fund Interests

Manage Portfolio Exposure Proactively	• Realign sub-asset class exposure • Realign underlying geographic or industry exposure • Reduce vintage year risk • Proactively manage exposure to regulatory, strategic or other unexpected changes
Refocus on Best GPs	• Increase exposure to core relationships • Exit poorly performing managers
Lock In Returns	• Capture returns achieved through existing portfolios • Redeploy capital into more productive assets
Increase Liquidity	• Immediate liquidity rather than orderly sell down of portfolio
Reduce Administrative Burden	• Reduce the number of GP relationships that must be managed

LONG TERM RECOMMENDATION: SECONDARY SALE

- For many limited partners, the benefits of a secondary sale outweigh the costs associated with the transaction.

General Considerations and Costs of a Secondary Sale

Benefits

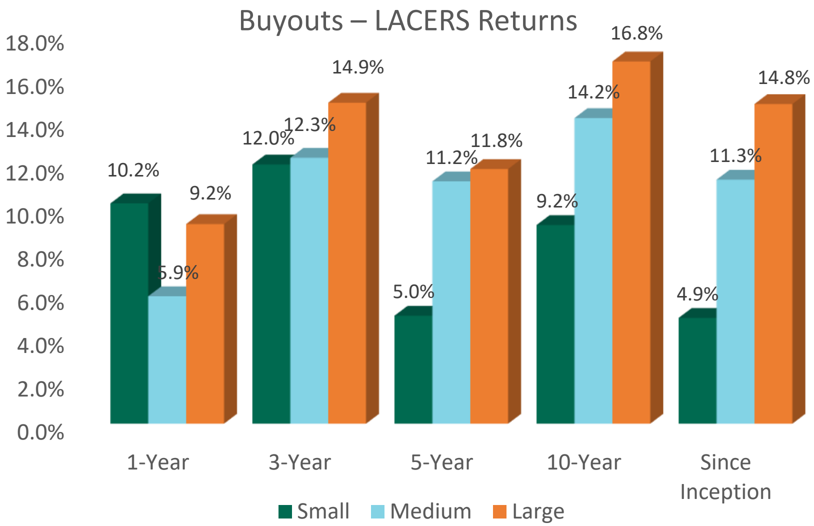
- Secondary sales are a useful tool to rebalance exposures and optimize the portfolio from a Return on Equity ("ROE") standpoint.
  - The ROE is not static over the life of a private equity fund.
  - An optimal portfolio reduces exposure to low ROE opportunities and increases exposure to higher ROE opportunities (considering risk related to ROE as well).
  - Even successful investments, as measured by IRR, can be strong candidates for sale consideration if their recent incremental return is not satisfactory.
- Portfolio sales are a useful tool to manage legacy relationships in an effort to manage staff's time and resources.

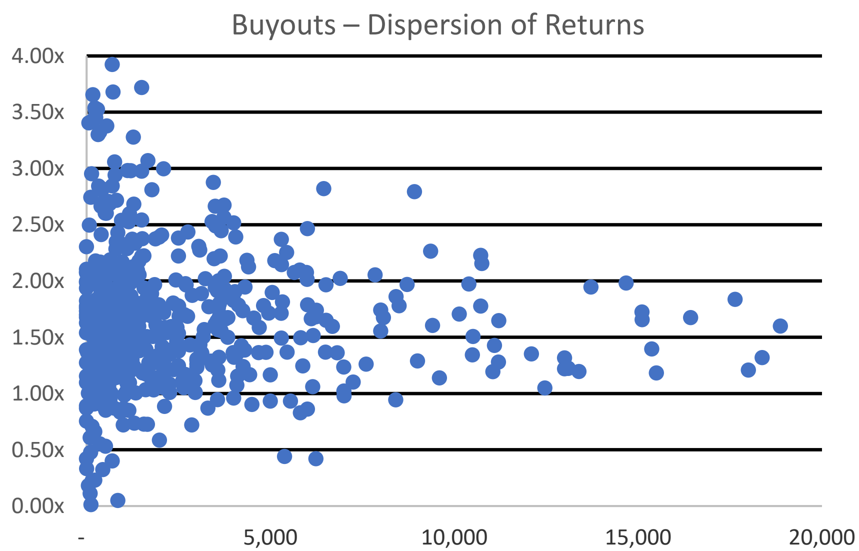
Costs

- The transaction will require a significant time commitment from staff and the process can last for several months. The board needs to review and approve the sale process, which will add on to the time commitment.
- The eventual sale price will likely be at a discount to recent fair market value.
- Secondary sales usually involve an intermediary to help market the portfolio and coordinate the transaction and these services have a fee related to them.

TorreyCove Capital Partners

TACTICAL RECOMMENDATIONS: OVERWEIGHT BUYOUTS





*TorreyCove research

❖ **Buyouts – Rationale for Overweight vs Other Sub-Asset Classes**

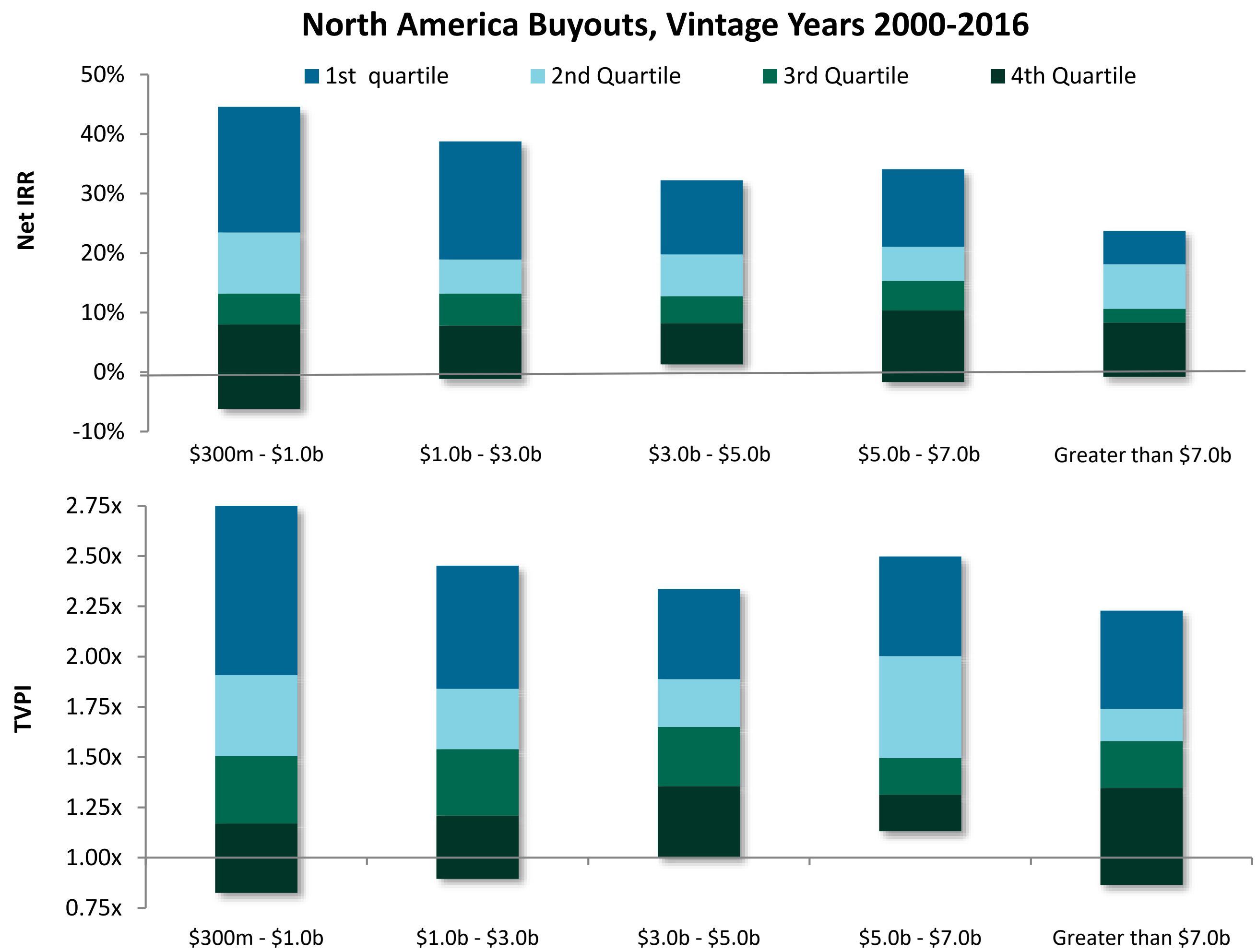
- Control: (i) ability to change senior management quickly and efficiently if needed; (ii) ability to control the cash flows of the business; (iii) ability to monetize the investment efficiently at the time of choosing; (iv) ability to pursue M&A transactions more efficiently.
- Ability to Access Top Managers at Scale: Leading buyout managers typically raise mutli-billion dollar funds, which allows larger investors the ability to put meaningful capital to work.
- Competition for Capabilities: GPs are constantly competing with each other to hire the best talent, create the most robust platform, and generate the best risk adjusted returns.
  - 25 largest GPs all have dedicated operating teams, and most plan to expand them.(1)
  - Leading firms have pioneered several digital techniques to drive greater efficiencies in deal sourcing, due diligence, and post-investment management. (1)
- Cycle Risk: Some of the best returns to buyout funds have come from vintages raised when public markets were at their peak, because those commitments were put to work during the ensuing downturn.

(1) McKinsey Global Private Markets Review 2019

QUARTILE RETURNS BY FUND SIZE

IC Meeting: 11/12/19
Item IV
Attachment 2

- Generally speaking, a lower dispersion of returns appears to be somewhat correlated with fund size.
- Funds sized between $3.0 billion and $7.0 billion appear to have the best risk/reward profile, with limited downside and compelling upside potential.

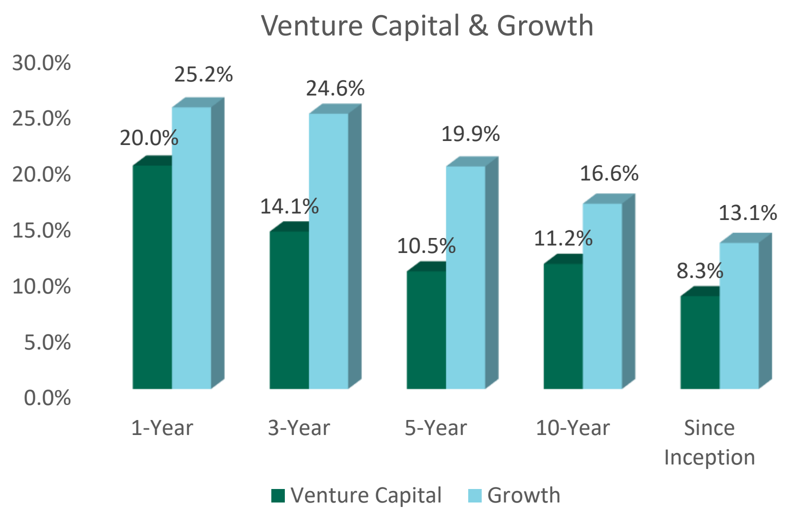


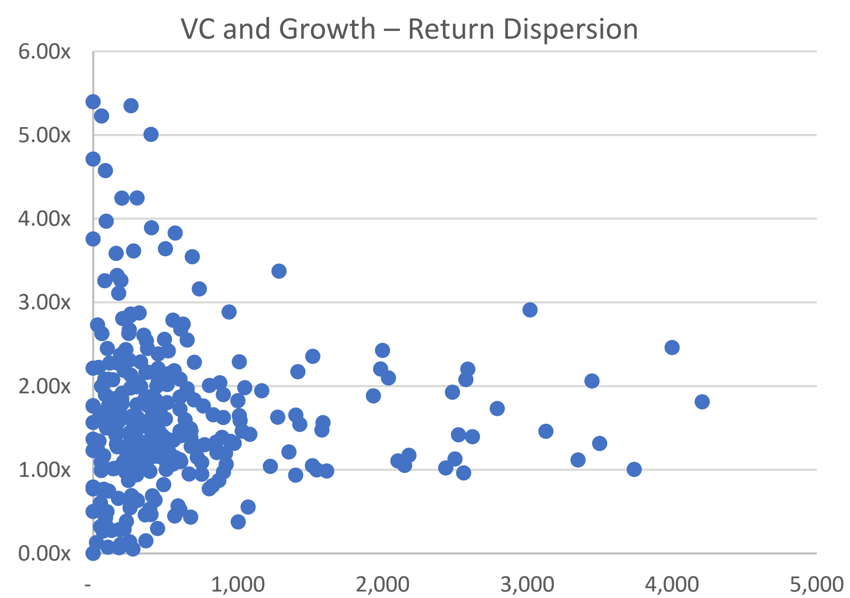
*TorreyCove Research

TorreyCove Capital Partners

TACTICAL RECOMMENDATIONS: UNDERWEIGHT VENTURE

IC Meeting: 11/12/19
Item IV
Attachment 2





*TorreyCove research

❖ **Venture – Rationale for Underweight vs Other Sub-Asset Classes**

- Dispersion of Returns: "As measured by pooled returns, VC outperformed buyouts in every vintage from 2005 to 2015, though pooled returns are disproportionately affected by a few stellar deals. At the same time, the wider dispersion within VC means that the median VC fund has underperformed the median buyout fund in almost every vintage since 2005.
  --- *McKinsey Global Private Markets Review 2019*

- Difficult to Access Best in Class Managers: "Persistency of outperformance has long been observed in VC: top funds tend to beget top performing successors, due to privileged deal flow and years of experience picking and growing winners. As a consequence, accessing the best 'brand-name' funds has long been challenging."
  --- *McKinsey Global Private Markets Review 2019*

- Industry Growth: : Over the past five years, VC fundraising has grown at 18 percent per annum, versus just 4 percent for buyouts. Since 2010, over 2,000 new VC firms have been founded. To put this into context, in 2010 there were only about 800 managers in the entire VC industry.
  --- *McKinsey Global Private Markets Review 2019*

- Cycle Risk: The run-up in valuations for many venture backed companies over the last ten years is likely unsustainable. Furthermore, most investors believe we are nearing the end of a long-term bull market. Adding exposure at these elevated valuations at this point in the cycle should be done cautiously.

TorreyCove Capital Partners

Recent IPOs of venture backed companies have been disappointing. This has led many investors to question the lofty valuations of late-stage private companies ahead of their public debuts.

TORREYCOVE
CAPITAL PARTNERS

TACTICAL RECOMMENDATIONS: INCREASE INTERNATIONAL EXPOSURE

- Europe and Asia offer the most compelling opportunities to invest in private equity outside of the U.S.

There are a number of benefits to investing in private equity internationally.

Diversification

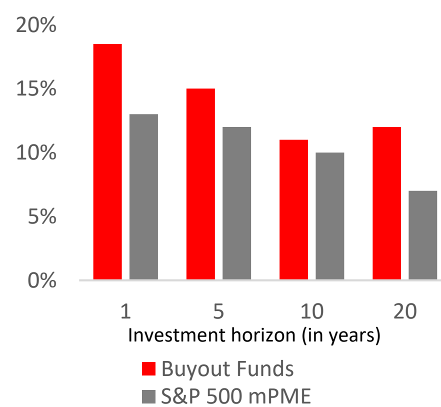
- Investing internationally can increase diversification in the portfolio without sacrificing returns, pushing the portfolio further out on the efficient frontier.
  - Different regions appear to be at different points in their cycles
    - Europe appears to be in the early stages of a slowdown
    - Asia still poised to offer outsized growth compared to both Europe and the U.S.

Potential for Return Enhancement

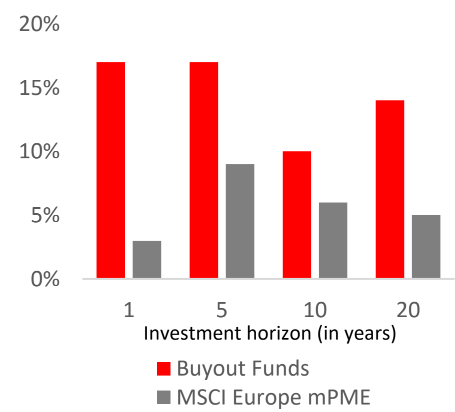
- Generally speaking, returns in European private equity have been on par with returns in the U.S.
  - Western European funds were on top with an IRR of 14.32% since 1991, compared with 12.17% for U.S. funds. That equates to an overall return of 1.68x for Western European funds, vs. 1.56x for U.S. funds.
    – PI Online (May 2018 Article)

  - The most recent five-year net internal rate of return for private equity investments was 12.5% in developed Europe, vs. 11.6% for the U.S. The gap was even wider for the 15-year horizon.
    – Forbes (March 2017 Article)

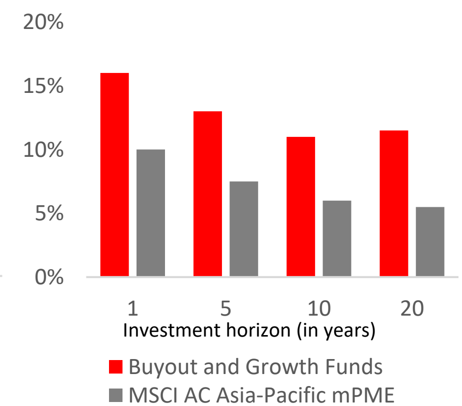
US
End-to-end pooled net IRR
(as of June 2018)



Europe
End-to-end pooled net IRR
(as of June 2018)



Asia-Pacific
End-to-end pooled net IRR
(as of June 2018)



*Bain & Company: Global Private Equity Report 2019

LACERS PE PROGRAM – EMERGING MANGERS

- **Emerging Manager Goals and Objectives**
  - Continue to aggressively and proactively source potential Emerging Manager candidates.
  - Continue to support the Emerging Manager Community through conference participation, fundraising support, and networking.
  - Focus on investing with firms that have prior experience and a proven track record of success.
  - Themes: First- and Second-time funds, diversity, inclusion.

- **Emerging Manager Policy - Strengths**
  - Ability to invest meaningful amounts of capital in first- and second-time funds.

- **Emerging Manager Policy - Weaknesses**
  - LACERS PE Policy Limits Emerging Managers to AUM of $1.0 billion
    - First time funds over $1.0 billion were raised fairly often in North America and Europe before the global financial crisis (including 10 between 2004–07) but almost entirely disappeared after 2009.(1)
    - They have now returned, with 7 First Time Funds raising $1.0 billion+ in North America and Europe since 2015.(1)
    - Even if the first-time fund is less than $1.0 billion, successful first-time funds have a much better chance of raising over $1.0 billion for their second funds.
    - These limitations may cause adverse selection over time.

(1) Bain & Company: Global Private Equity Report 2019