



## **Investment Committee Agenda**

### **REGULAR MEETING**

**TUESDAY, NOVEMBER 9, 2021**

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

### **MEETING LOCATION:**

In accordance with Government Code Section 54953, subsections (e)(1) and (e)(3), and in light of the State of Emergency proclaimed by the Governor on March 4, 2020 relating to COVID-19 and ongoing concerns that meeting in person would present imminent risks to the health or safety of attendees and/or that the State of Emergency continues to directly impact the ability of members to meet safely in person, the LACERS Investment Committee's November 9, 2021 meeting will be conducted via telephone and/or videoconferencing.

**Important Message to the Public**

**Information to call-in to listen and/or participate:**

**Dial:** (669) 254-5252 or (669) 216-1590

**Meeting ID#** 160 260 1127

**Instructions for call-in participants:**

- 1- Dial in and enter Meeting ID
- 2- Automatically enter virtual "Waiting Room"
- 3- Automatically enter Meeting
- 4- During Public Comment, **press \*9** to raise hand
- 5- Staff will call out the last 3-digits of your phone number to make your comment

Chair: Sung Won Sohn

Committee Members: Elizabeth Lee  
Nilza R. Serrano

Manager-Secretary: Neil M. Guglielmo

Executive Assistant: Ani Ghokassian

Legal Counselor: City Attorney's Office  
Public Pensions General  
Counsel Division

**Notice to Paid Representatives**

If you are compensated to monitor, attend, or speak at this meeting, City law may require you to register as a lobbyist and report your activity. See Los Angeles Municipal Code §§ 48.01 *et seq.* More information is available at [ethics.lacity.org/lobbying](http://ethics.lacity.org/lobbying). For assistance, please contact the Ethics Commission at (213) 978-1960 or [ethics.commission@lacity.org](mailto:ethics.commission@lacity.org).

**Request for Services**

As a covered entity under Title II of the Americans with Disabilities Act, the City of Los Angeles does not discriminate on the basis of disability and, upon request, will provide reasonable accommodation to ensure equal access to its programs, services and activities.

Sign Language Interpreters, Communication Access Real-Time Transcription, Assistive Listening Devices, Telecommunication Relay Services (TRS), 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) 855-9348** and/or email at [ani.ghokassian@lacers.org](mailto:ani.ghokassian@lacers.org).

**Disclaimer to Participants**

Please be advised that all LACERS Board and Committee Meeting proceedings are audio recorded.

**Information to listen only:** 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).

[CLICK HERE TO ACCESS BOARD REPORTS](#)

- I. PUBLIC COMMENTS AND GENERAL PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION AND COMMENTS ON ANY SPECIFIC MATTERS ON THE AGENDA – *THIS WILL BE THE ONLY OPPORTUNITY FOR PUBLIC COMMENT* - **PRESS \*9 TO RAISE HAND DURING PUBLIC COMMENT PERIOD**
- II. [APPROVAL OF MINUTES FOR THE MEETING OF OCTOBER 12, 2021 AND POSSIBLE COMMITTEE ACTION](#)
- III. CHIEF INVESTMENT OFFICER VERBAL REPORT
- IV. [PRESENTATION BY OBERWEIS ASSET MANAGEMENT, INC. REGARDING THE MANAGEMENT OF AN ACTIVE NON-U.S. SMALL CAP EQUITIES PORTFOLIO](#)
- V. [PRIVATE EQUITY PROGRAM 2022 STRATEGIC PLAN AND POSSIBLE COMMITTEE ACTION](#)
- VI. OTHER BUSINESS
- VII. NEXT MEETING: The next Regular meeting of the Investment Committee is scheduled for Tuesday, December 14, 2021, at 10:30 a.m., or immediately following the Board Meeting, at LACERS, 202 West 1<sup>st</sup> Street, Suite 500, Los Angeles, CA 90012 and/or via telephone and/or videoconferencing. Please continue to view the LACERS website for updated information on public access to Board/Committee meetings while response to public health concerns relating to the novel coronavirus continue.
- VIII. ADJOURNMENT



## **Board of Administration Agenda**

### **SPECIAL MEETING**

**TUESDAY, NOVEMBER 9, 2021**

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

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President: Cynthia M. Ruiz  
Vice President: Sung Won Sohn

Commissioners: Annie Chao  
Elizabeth Lee  
Sandra Lee  
Nilza R. Serrano  
Michael R. Wilkinson

Manager-Secretary: Neil M. Guglielmo

Executive Assistant: Ani Ghoukassian

Legal Counsel: City Attorney's Office  
Public Pensions General  
Counsel Division

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- VIII. ADJOURNMENT

**MINUTES OF THE REGULAR MEETING  
INVESTMENT COMMITTEE  
LOS ANGELES CITY EMPLOYEES' RETIREMENT SYSTEM**

In accordance with Government Code Section 54953, subsections (e)(1) and (e)(3), and in light of the State of Emergency proclaimed by the Governor on March 4, 2020 relating to COVID-19 and ongoing concerns that meeting in person would present imminent risks to the health or safety of attendees and/or that the State of Emergency continues to directly impact the ability of members to meet safely in person, the LACERS Investment Committee's October 12, 2021 meeting was conducted via telephone and/or videoconferencing.

October 12, 2021

11:55 a.m.

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PRESENT via Videoconferencing:	Chair:	Sung Won Sohn
	Committee Member:	Elizabeth Lee Nilza R. Serrano
	Manager-Secretary:	Neil M. Guglielmo
	Legal Counselor:	Miguel Bahamon
PRESENT at LACERS Office:	Executive Assistant:	Ani Ghoukassian

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

I

**PUBLIC COMMENTS AND GENERAL PUBLIC COMMENTS ON MATTERS WITHIN THE COMMITTEE'S JURISDICTION AND COMMENTS ON ANY SPECIFIC MATTERS ON THE AGENDA – THIS WILL BE THE ONLY OPPORTUNITY FOR PUBLIC COMMENT – PRESS \*9 TO RAISE HAND DURING PUBLIC COMMENT PERIOD** – Chair Sohn asked if any persons wished to speak on matters within the Committee's jurisdiction, to which there was no response.

II

**APPROVAL OF MINUTES FOR THE MEETING OF SEPTEMBER 14, 2021 AND POSSIBLE COMMITTEE ACTION** – Committee Member Serrano moved approval, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano and Chair Sohn -3; Nays, None.

III

**CHIEF INVESTMENT OFFICER VERBAL REPORT** – Rod June, Chief Investment Officer, discussed the following items:

- Investment Committee Meeting Forward Calendar
- Search status: Passive U.S., Non-U.S., and Global Index Strategies RFP closes November 9, 2021 and Real Estate Consultant RFP closes on November 8, 2021

- Future agenda items: Manager Presentation by Oberweis Asset Management, Inc. and Private Equity Strategic Plan for Calendar Year 2022

#### IV

PRESENTATION BY BLACKROCK INSTITUTIONAL TRUST COMPANY, N.A. REGARDING TRANSITION MANAGEMENT SERVICES – Jonathan Platt, Director and John Planek, Vice President, with Blackrock Institutional Trust Company, presented and discussed this item with the Committee for 30 minutes.

#### V

PRIVATE CREDIT PACING IMPLEMENTATION PLAN AND POSSIBLE COMMITTEE ACTION – Robert King, Investment Officer I, and Carolyn Smith, Partner, Oliver Fadly, Director of Private Debt, and Colton Lavin, Senior Research Analyst, with NEPC, discussed and presented this item with the Committee for 20 minutes. After discussion, Committee Member Elizabeth Lee moved approval, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano and Chair Sohn -3; Nays, None.

#### VI

INVESTMENT MANAGER CONTRACT WITH AXIOM INVESTORS, LLC REGARDING THE MANAGEMENT OF AN ACTIVE NON-U.S. EMERGING MARKETS GROWTH EQUITIES PORTFOLIO AND POSSIBLE COMMITTEE ACTION – Bryan Fujita, Investment Officer III, and Ellen Chen, Investment Officer I, presented and discussed this item with the Committee for 10 minutes. After discussion, Committee Member Serrano moved approval, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano and Chair Sohn -3; Nays, None.

#### VII

TACTICAL ASSET ALLOCATION POLICY AND POSSIBLE COMMITTEE ACTION – Bryan Fujita, Investment Officer III, and James Wang, Investment Officer I, discussed and presented this item with the Committee for 5 minutes. After discussion, Committee Member Serrano moved approval, and adopted by the following vote: Ayes, Committee Members Elizabeth Lee, Serrano and Chair Sohn -3; Nays, None.

Chair Sohn recessed the Regular Meeting at 1:28 p.m. to convene in Closed Session discussion.

#### VIII

**CLOSED SESSION PURSUANT TO GOVERNMENT CODE SECTION 54956.81 TO CONSIDER A COMMITMENT TO LBA LOGISTICS VALUE FUND IX, L.P. AND POSSIBLE COMMITTEE ACTION**

Chair Sohn reconvened the Regular Meeting at 1:28 p.m.

#### IX

OTHER BUSINESS – Committee Member Serrano asked Rod June, Chief Investment Officer, about the possibility of revisiting the private equity commitment threshold. Committee Member Serrano also thanked Ani Ghokassian, Commission Executive Assistant for her assistance to the Board.

X

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XI

ADJOURNMENT – There being no further business before the Committee, Chair Sohn adjourned the meeting at 1:30 p.m.

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Sung Won Sohn  
Chair

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Neil M. Guglielmo  
Manager-Secretary

**Oberweis Asset Management**  
Precision that pinpoints growth



**INTERNATIONAL OPPORTUNITIES**

A Presentation to:

Los Angeles City Employees' Retirement System



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# FIRM OVERVIEW

- Headquartered in suburban Chicago with over 30 years of history
- Independence: Senior investment professionals, key executives, and their immediate families own 100% of the corporation
- Focused resources

## GLOBAL SMALL-CAP EQUITY SPECIALISTS

### International Strategies

International Opportunities

International Select

China Opportunities

Emerging Markets

### U.S. & Global Strategies

Micro-Cap Growth

Small-Cap Opportunities

Global Opportunities

WE DELIVER A  
DISCIPLINED AND  
REPEATABLE INVESTMENT  
PROCESS, WITH AN  
UNWAVERING FOCUS ON  
CLIENT SERVICE.

# ASSETS UNDER MANAGEMENT

## AS OF SEPTEMBER 30, 2021

Oberweis Asset Management AUM: \$4,333.6 million

### International Strategies

International Opportunities	\$3,763.1 million
International Select	\$147.3 million
Emerging Markets	\$13.0 million
China Opportunities	\$102.9 million

### U.S. & Global Strategies

Small/Micro-Cap Growth	\$152.9 million
Global Opportunities	\$80.1 million
Custom	\$74.3 million

# EXPERIENCED PROFESSIONALS



**James W. Oberweis, CFA**  
President/CIO  
MBA, University of Chicago

## U.S. GROWTH TEAM



**Kenneth S. Farsalas, CFA**  
Director of U.S. Equities &  
Portfolio Manager  
MBA, U. of Chicago



**David I. Covas, CFA**  
Portfolio Manager  
MBA, U. of Chicago



**Kevin L. Cowell, CFA**  
Senior Analyst  
BS, U. of Illinois

## INTERNATIONAL TEAM



**Ralf A. Scherschmidt**  
Portfolio Manager  
MBA, Harvard Business  
School



**Jeff Papp, CFA**  
Asst. Portfolio Manager  
BS, U. of Illinois



**Yanru Hsu, CFA**  
Senior Analyst  
MBA, U. of Maryland



**Charles Wilson**  
Senior Analyst  
BA, Bristol University



**Charlie Hill-Wood**  
Senior Analyst  
MBA, IESE Business School

## CHINA TEAM



**Barry Wang, CFA**  
Portfolio Manager  
Master's, Columbia U



**Fangwen Zhou, CFA**  
Senior Analyst  
MBA, EDHEC  
Business School



**Monica Chen**  
Senior Analyst  
MS, Imperial College  
Business School

## EMERGING MARKETS TEAM



**Mark Weber, CFA**  
Portfolio Manager  
MBA, U. of Kansas

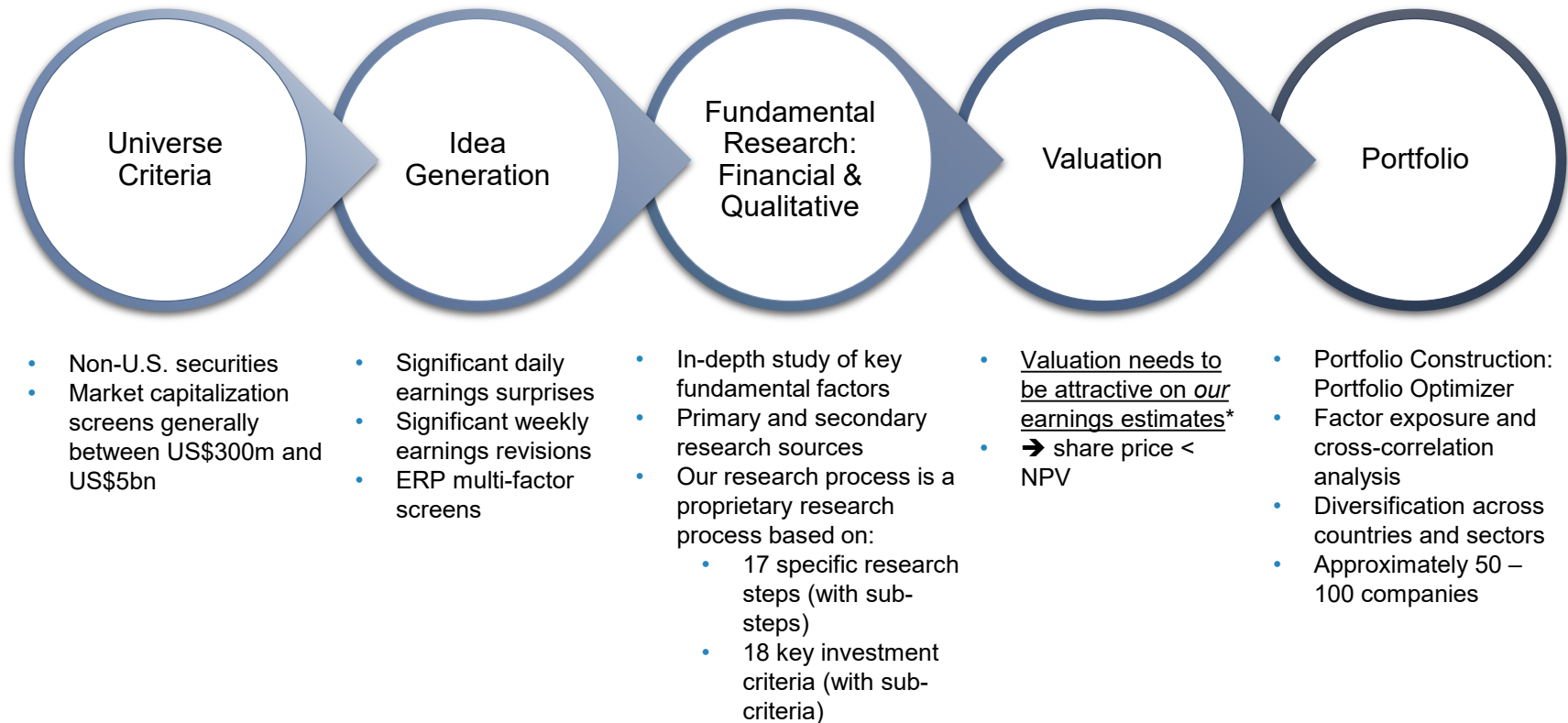


**Terry Y. Tian**  
Senior Analyst  
MS, IIT

# WHO WE ARE

- We employ a disciplined, repeatable investment process that is based on a clearly-defined, empirically-documented and persistent source of alpha
  - The Post-Earnings-Announcement Drift – it “is one of the most persistent anomalies”<sup>1</sup> and “The abnormal returns associated with the drift are substantial”<sup>2</sup>
- Our goal is to generate significant long-term outperformance relative to the benchmark and peer group
  - Our International Opportunities strategy has outperformed its benchmark over every meaningful time period and is the #1 top-performing strategy since inception ~15 years ago in the entire asset class of all international small-cap managers - including value, core and growth<sup>3</sup>
  - We have delivered a very high cumulative return of +539.74% vs. +143.38% for the benchmark, the MSCI World ex-US Small-Cap Growth Index as of September 30, 2021
- We are globally-experienced, fundamental investors with various native languages (Japanese, German, Chinese)
- Ralf Scherschmidt earned his MBA at Harvard Business School and previously worked at Jetstream Capital, LLC, a premier global all-cap long/short equity hedge fund ranked by Bloomberg as one of “The World’s Top Hedge Funds”<sup>4</sup>
- We are high active share managers
  - Portfolios that make the most active bets have been shown to *perform best* against their benchmarks<sup>5</sup>
  - “Long-only funds that at times make large stock bets within a reasonably diversified portfolio are probably the best product for those looking for active alpha”<sup>6</sup>
  - Moreover, in an *overall portfolio* context, the addition of unique, idiosyncratic, high active share strategies often have better effects on overall risk-adjusted portfolio metrics (such as: Sharpe ratio, information ratio, 12-month rolling batting average, 12-month average excess return) than adding lower tracking error, benchmark-like strategies. This is because the correlation of their excess returns is often lower, or even negative.

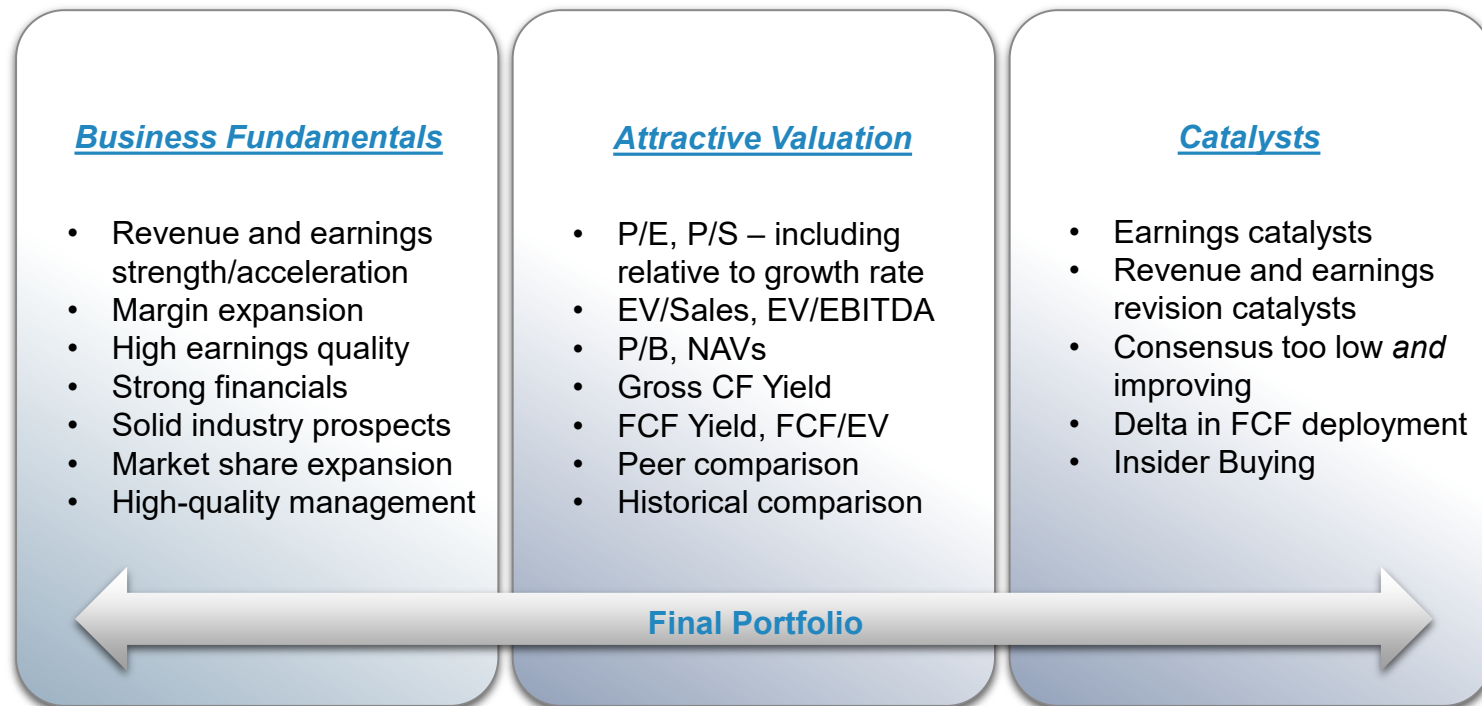
# INVESTMENT PROCESS OVERVIEW



\*→ Better-than-expected fundamentals equate to cheaper valuation: If consensus expects \$1.00 in earnings for a business whose fair multiple is 15x, then the share price trades at \$15. However, if we conclude that the business' *fundamentals are actually stronger-than-expected* and it will therefore really earn \$1.50, then the real valuation is 10x, a 33% *discount* to fair value. Therefore, one buys a business that is *both fundamentally stronger and better-than-expected*, as well as trading at a discount to fair value.

# PREFERRED FUNDAMENTAL INVESTMENT CHARACTERISTICS

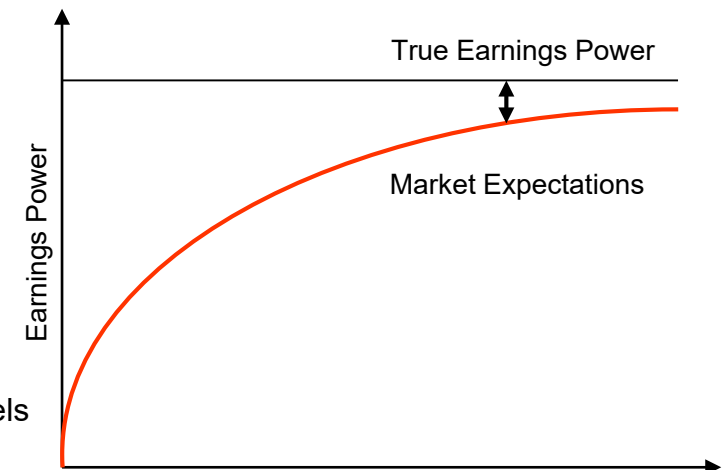
The key is to buy good businesses (*solid, improving fundamentals*) with significantly misunderstood future earnings power and cash flows (*thus true valuation is cheap\**) at a point when the market is just at the early stages of recognizing this misunderstanding (*catalysts are required in order to avoid value traps*).



\*please see footnote on prior page

# SELL DISCIPLINE

- We sell stocks as their market capitalizations become too big for a small-cap strategy
- We also sell stocks when the gap between the market's expectation of a company's earnings power and its true earnings power narrows. This can be a function of:
  - **No longer misunderstood**
    - Market expectations have caught up to our expectations
    - Investment thesis fully played out
  - **Replaced by a better idea**
    - While increasing turnover, it also increases returns
  - **Deterioration of company fundamentals**
    - Ongoing position monitoring and research
    - Empirical Research Partners proprietary multi-factor models





# GENERAL PORTFOLIO CHARACTERISTICS

## LACERS PORTFOLIO GUIDELINES AND CHARACTERISTICS

- Performance Objectives: Outperform the MSCI EAFE Small Cap Index in US\$ by 2% per annum (net-of-fees) over a full market cycle (normally three-to-five years); and  
Perform in the top quartile of a peer group of similar style equity managers over a full market cycle.
- Country Weighting Limits: Investment in any individual country in the index, including Canada, may not exceed the greater of 20% of the portfolio or 20% above the benchmark weight. Hong Kong listed securities are counted as classified as Hong Kong.
- Sector Weighting Limits: +/- 200% of benchmark weight or up to 35% of portfolio market value
- Number of Issues: Range is between 50-100 securities; as of 9/30/21 LACERS held 61 securities
- Position Size Exposure Limits: Maximum asset allocation to a single security shall not exceed 5% at cost and 7% maximum of the portfolio at market value
- Limits on out-of-BM investments: N/A
- Cash Holding Range: 0-10%
- Portfolio Turnover: 102.4% annualized as of 9/30/21 (range is 100-200%)
- Tracking Error (5 Year): 8.51% as of 9/30/21 using monthly returns vs. the MSCI EAFE Small-Cap Index  
6.88% as of 9/30/21 using monthly returns vs. the MSCI World ex-US Small Cap Growth Index (primary index)
- Weighted Avg Market Cap: \$4,493.1 million
- Median Market Cap: \$3,353.7 million

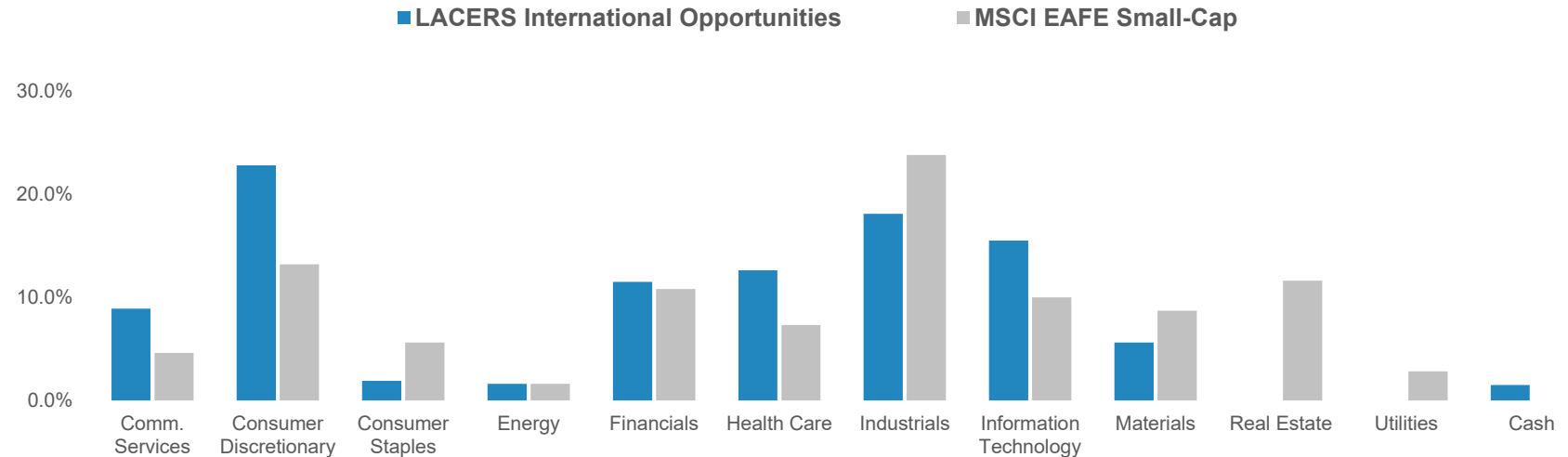
# TOP TEN HOLDINGS: AS OF SEPTEMBER 30, 2021

## LACERS INTERNATIONAL OPPORTUNITIES PORTFOLIO

<u>Top 10 Holdings</u>	<u>% Portfolio Weight</u>
BayCurrent Consulting Inc.	5.1%
Food & Life Co., Ltd.	5.1%
Nordic Semiconductor ASA	4.4%
Constellium NV	3.2%
Future Plc	3.1%
BRP, Inc.	3.0%
Intermediate Capital Group	3.0%
M&A Capital Partners Co., Ltd.	2.5%
IDP Education Ltd.	2.2%
Endava Plc	2.1%

# SECTOR WEIGHTINGS: AS OF SEPTEMBER 30, 2021

## LACERS INTERNATIONAL OPPORTUNITIES VS. MSCI EAFE SMALL-CAP INDEX



Sector	LACERS International Opportunities	MSCI EAFE Small-Cap Index
Communication Services	8.9%	4.6%
Consumer Discretionary	22.8%	13.2%
Consumer Staples	1.9%	5.6%
Energy	1.6%	1.6%
Financials	11.5%	10.8%
Health Care	12.6%	7.3%
Industrials	18.1%	23.8%
Information Technology	15.5%	10.0%
Materials	5.6%	8.7%
Real Estate	0.0%	11.6%
Utilities	0.0%	2.8%
Cash	1.5%	N/A
Total	100.0%	100.0%

Source: Eikon

# COUNTRY ALLOCATION: AS OF SEPTEMBER 30, 2021

## LACERS INTERNATIONAL OPPORTUNITIES VS. MSCI EAFE SMALL-CAP INDEX

Country	LACERS International Opportunities	MSCI EAFE Small- Cap Index	Over-Under Weight
Japan	26.8%	28.9%	-2.1%
U.K.	26.8%	17.2%	9.6%
Canada	9.8%	0.0%	9.8%
Netherlands	6.8%	2.5%	4.3%
Germany	5.2%	5.1%	0.1%
Sweden	4.9%	7.4%	-2.5%
Norway	4.4%	2.4%	2.0%
Australia	3.4%	9.0%	-5.6%
Switzerland	2.9%	5.2%	-2.3%
Finland	2.7%	1.7%	1.0%
France	1.9%	3.2%	-1.3%
Israel	0.0%	3.0%	-3.0%
Italy	0.0%	2.9%	-2.9%
Other Countries	2.9%	11.5%	-8.6%
Cash	1.5%	N/A	
	100.0%	100.0%	
Total Emerging Markets: MSCI Classification	1.2%	0.0%	N/A

\*Emerging markets weighting consists of Hong Kong-listed securities that MSCI classifies as China.

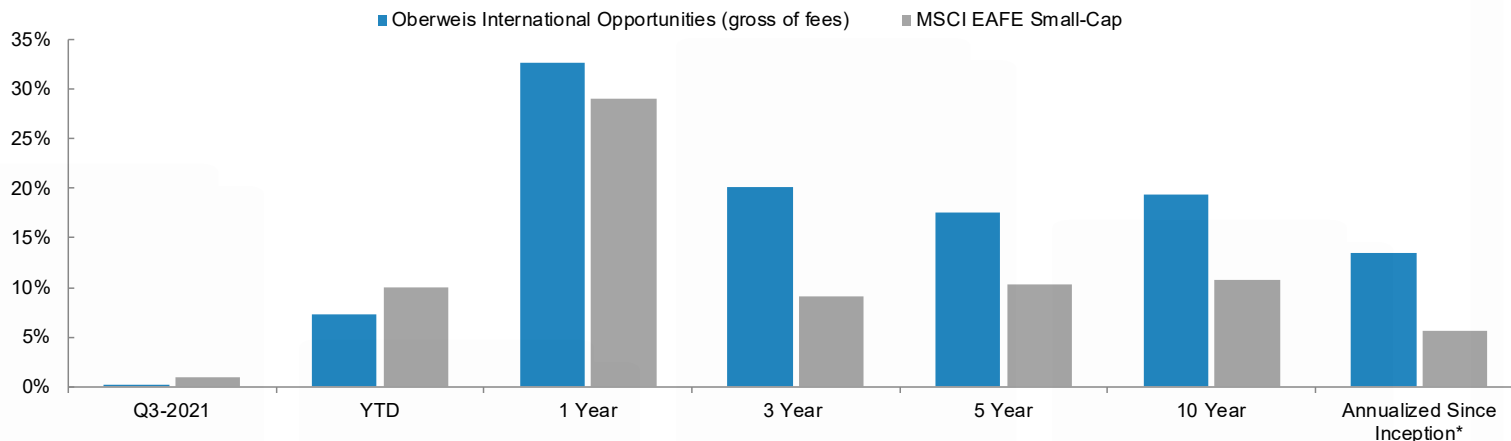
As a % of Total Net Assets

Country Allocation is defined using MSCI's Country Classification methodology and represents countries whose allocation in the Strategy or Index is 2% or more. Country allocations representing less than 2% are categorized in "Other Countries."

Source: Eikon

# PERFORMANCE

## INTERNATIONAL OPPORTUNITIES COMPOSITE AS OF SEPTEMBER 30, 2021



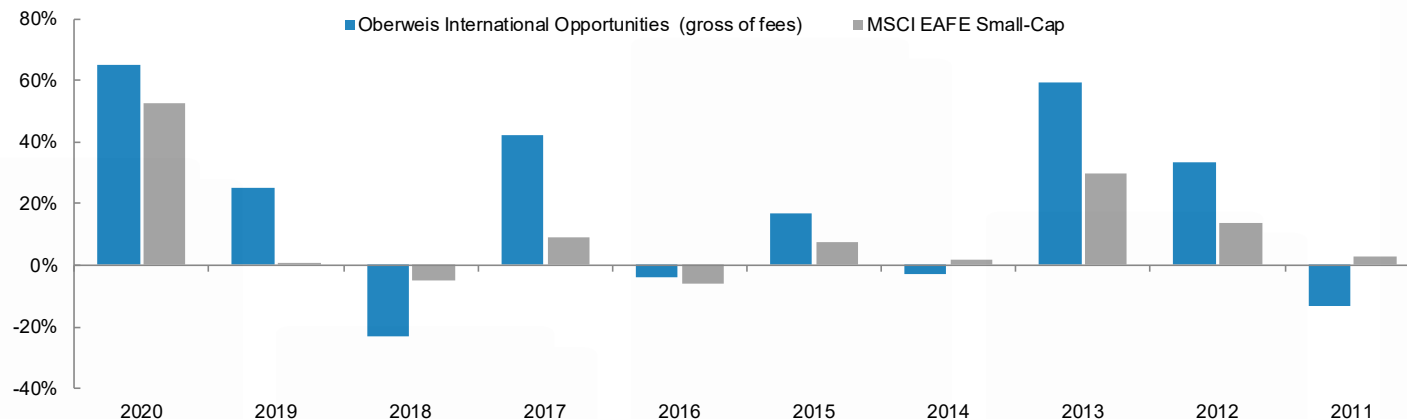
	Q3-2021	YTD	1 Year	3 Year	5 Year	10 Year	Annualized Since Inception*	Cumulative Return Since Inception*
<b>Oberweis International Opportunities (gross of fees)</b>	<b>0.18%</b>	<b>7.33%</b>	<b>32.71%</b>	<b>20.08%</b>	<b>17.55%</b>	<b>19.41%</b>	<b>13.49%</b>	<b>539.74%</b>
<b>MSCI EAFE Small-Cap</b>	<b>0.90%</b>	<b>10.02%</b>	<b>29.02%</b>	<b>9.05%</b>	<b>10.38%</b>	<b>10.73%</b>	<b>5.55%</b>	<b>120.89%</b>
<b>Excess Return</b>	<b>-0.72%</b>	<b>-2.69%</b>	<b>3.69%</b>	<b>11.03%</b>	<b>7.17%</b>	<b>8.68%</b>	<b>7.94%</b>	<b>418.85%</b>

The MSCI World ex-US Small-Cap Growth Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of small cap growth developed markets excluding the US, with dividends reinvested net of withholding tax.

\*Inception of the Oberweis International Opportunities Composite is February 1, 2007. Past results are not indicative of future performance.

# PERFORMANCE

## INTERNATIONAL OPPORTUNITIES COMPOSITE LAST 10 CALENDAR YEAR PERFORMANCE



	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
<b>Oberweis International Opportunities</b> (gross of fees)	<b>65.10%</b>	<b>24.99%</b>	<b>-23.03%</b>	<b>42.30%</b>	<b>-3.97%</b>	<b>16.96%</b>	<b>-2.92%</b>	<b>59.13%</b>	<b>33.53%</b>	<b>-13.03%</b>
MSCI EAFE Small-Cap	<u>12.34%</u>	<u>24.96%</u>	<u>-17.89%</u>	<u>33.01%</u>	<u>2.18%</u>	<u>9.59%</u>	<u>-4.95%</u>	<u>29.30%</u>	<u>20.00%</u>	<u>-15.94%</u>
Excess Return	52.76%	0.03%	-5.14%	9.29%	-6.15%	7.37%	2.03%	29.83%	13.53%	2.91%

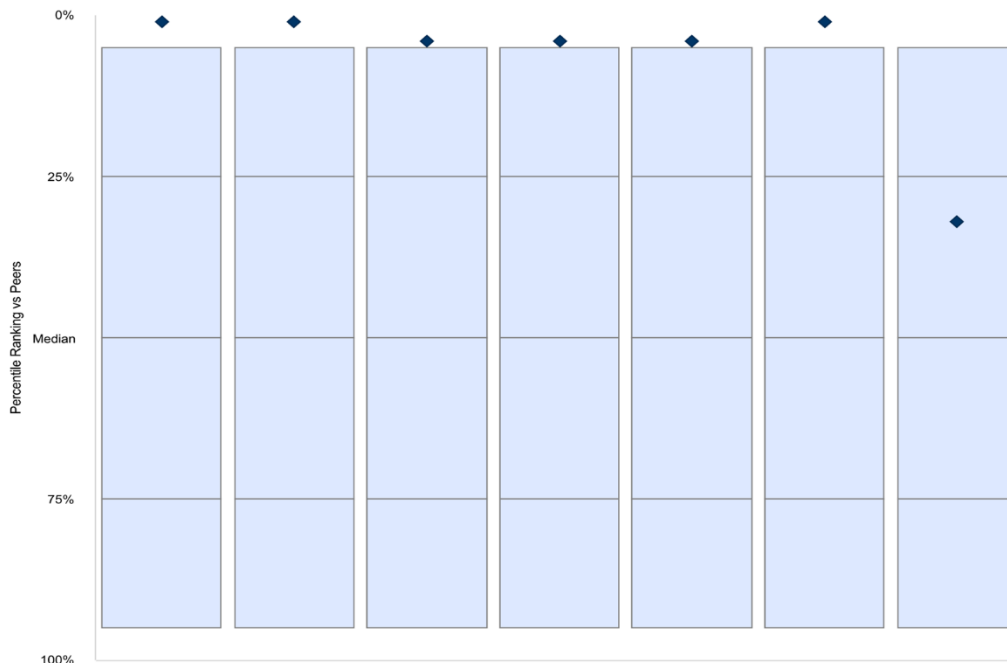
The MSCI World ex-US Small-Cap Growth Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of small cap growth developed markets excluding the US, with dividends reinvested net of withholding tax.

\*Inception of the Oberweis International Opportunities Composite is February 1, 2007. Past results are not indicative of future performance.

# PEER RANKING: AS OF SEPTEMBER 30, 2021

## INTERNATIONAL OPPORTUNITIES COMPOSITE PERFORMANCE AND RISK STATISTICS SINCE INCEPTION

Oberweis Asset Management, Inc. International Opportunities Composite  
Performance Statistics Since Inception (Feb. 2007 - Sept. 2021)



Universe: eVestment EAFE Small Cap Equity

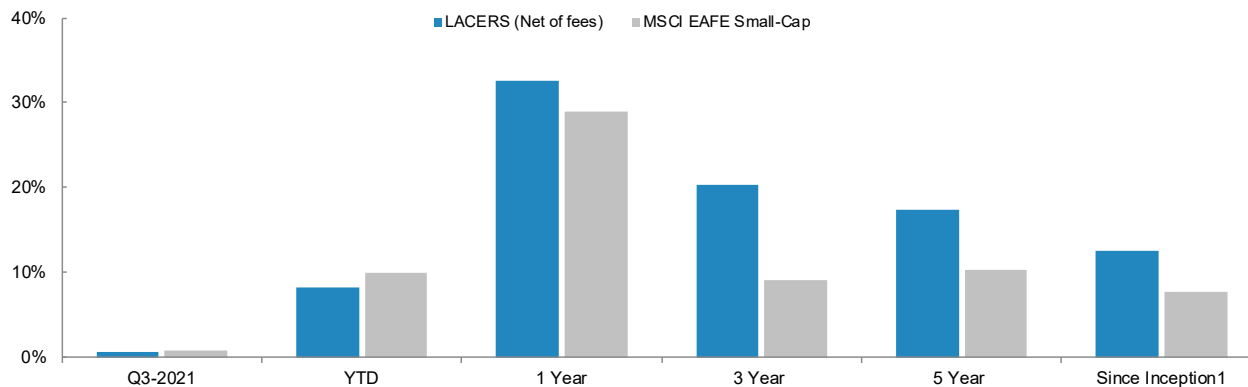
	Returns		Annualized Alpha <sup>1</sup>		Sharpe Ratio <sup>2</sup>		Sortino Ratio <sup>2</sup>		Information Ratio <sup>1</sup>		Upside Market Capture <sup>1</sup>		Downside Market Capture <sup>1</sup>	
		Rk		Rk		Rk		Rk		Rk		Rk		Rk
5th percentile	12.14		7.41		0.55		0.81		0.86		119.54		77.15	
25th percentile	7.90		2.77		0.36		0.51		0.71		107.42		94.54	
Median	7.25		1.96		0.31		0.44		0.41		105.14		99.00	
75th percentile	6.25		0.92		0.26		0.37		0.16		100.78		100.54	
95th percentile	5.21		-0.02		0.23		0.31		-0.03		92.78		104.33	
# of Observations	26		26		26		26		26		26		26	
◆ Oberweis Asset Management, Inc.: International Opportunities	13.49	1	8.03	1	0.56	4	0.82	4	0.87	4	131.15	1	95.61	32

Results displayed in USD using Spot Rate (SR).

<sup>1</sup>MSCI World ex-US Small Cap-ND; <sup>2</sup>FTSE 3-Month T-Bill

# PERFORMANCE

## LACERS INTERNATIONAL OPPORTUNITIES AS OF SEPTEMBER 30, 2021



	Q3-2021	YTD	1 Year	3 Year	5 Year	Since Inception <sup>1</sup>	Cumulative Return Since Inception*
<b>LACERS (Net of fees)</b>	<b>0.59%</b>	<b>8.19%</b>	<b>32.52%</b>	<b>20.29%</b>	<b>17.39%</b>	<b>12.52%</b>	<b>148.36%</b>
MSCI EAFE Small-Cap	<u>0.90%</u>	<u>10.02%</u>	<u>29.02%</u>	<u>9.05%</u>	<u>10.38%</u>	<u>7.68%</u>	<u>76.97%</u>
Excess Return	-0.31%	-1.83%	3.50%	11.24%	7.01%	4.84%	71.39%

The MSCI EAFE Small-Cap Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of small cap growth developed markets excluding the US, with dividends reinvested net of withholding tax.

\*Inception of the LACERS portfolio is January 14, 2014.



# ATTRIBUTION ANALYSIS BY SECTOR

## LACERS INTERNATIONAL OPPORTUNITIES PORTFOLIO VS. MSCI EAFE SMALL-CAP INDEX AS OF SEPTEMBER 30, 2021

### ATTRIBUTION DETAILS

Portfolio Name :	Los Angeles City Employees' Retirement System			Time Period :	9/30/2020 - 9/30/2021					
Benchmark Name :	MSCI Small Cap EAFE			Currency :	USD					
Issue Name	AVERAGE WEIGHTS			RETURNS			ATTRIBUTION			
	Portfolio	Benchmark	Active	Portfolio	Benchmark	Active	Allocation Effect	Selection Effect	Total Effect	
Los Angeles City Employees' Re...	100.00%	100.00%	0.00%	33.06	29.32	3.73	-0.75	4.48	3.73	
Industrials	18.03%	23.23%	-5.20%	79.18	39.79	39.38	-0.50	5.90	5.40	<span style="color: green;">■</span>
Information Technology	17.75%	10.31%	7.44%	38.93	27.32	11.61	-0.14	2.29	2.14	<span style="color: green;">■</span>
Consumer Discretionary	25.43%	13.14%	12.29%	33.35	28.90	4.45	0.01	1.17	1.18	<span style="color: green;">■</span>
Utilities		2.81%	-2.81%		18.67	-18.67	0.33	0.00	0.33	<span style="color: green;">■</span>
Consumer Staples	1.90%	5.82%	-3.92%	-20.52	7.89	-28.42	1.02	-0.76	0.26	<span style="color: green;">■</span>
Real Estate	0.61%	11.84%	-11.22%	-2.31	23.80	-26.11	0.65	-0.50	0.15	<span style="color: green;">■</span>
Financials	9.87%	10.57%	-0.71%	48.20	40.23	7.97	-0.28	0.41	0.13	<span style="color: green;">■</span>
Energy	1.31%	1.60%	-0.29%	69.23	37.78	31.45	-0.15	0.24	0.08	<span style="color: green;">■</span>
Materials	5.91%	8.95%	-3.04%	40.17	33.99	6.18	-0.27	0.27	0.01	<span style="color: green;">■</span>
Cash & Equivalents	1.83%		1.83%	0.58		0.58	-0.84	0.00	-0.84	<span style="color: red;">■</span>
Communication Services	7.70%	4.58%	3.13%	8.58	24.65	-16.08	-0.14	-1.33	-1.47	<span style="color: red;">■</span>
Health Care	9.66%	7.15%	2.51%	-12.57	15.71	-28.28	-0.43	-3.21	-3.64	<span style="color: red;">■</span>

# ATTRIBUTION ANALYSIS BY SECTOR

## LACERS INTERNATIONAL OPPORTUNITIES PORTFOLIO VS. MSCI EAFE SMALL-CAP INDEX AS OF SEPTEMBER 30, 2021

### CONTRIBUTION SUMMARY

Portfolio Name :	Los Angeles City Employees' Retirement System	Time Period :	9/30/2020 - 9/30/2021
Benchmark Name :	MSCI Small Cap EAFE	Currency :	USD

#### Top Contributors by Holding

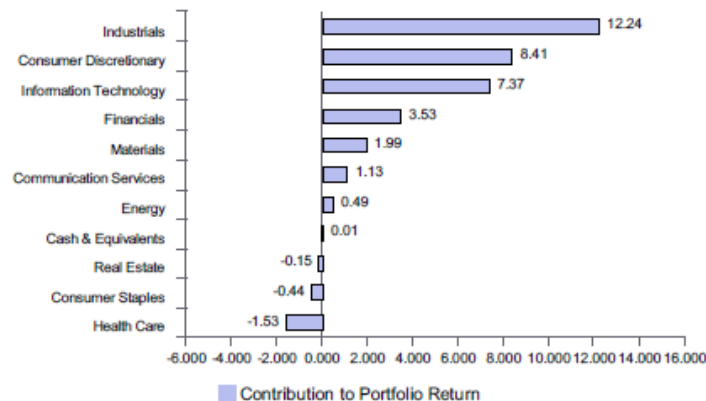
Issue Name	Avg Wt	Return	Contrib
<b>Top 10</b>	<b>22.99%</b>	<b>1,048.00</b>	<b>22.88</b>
BAYCURRENT CONSU ORD	5.40%	270.50	8.64
Sinch Ord Shs	1.76%	118.69	3.99
Food & Life Companies Ord Shs	4.94%	85.10	3.53
Nordic Semiconductor Ord Shs	3.04%	193.20	3.17
Constellium SE Ord Shs Class A	2.85%	139.24	2.49
Intermediate Capital Group Ord Shs	3.01%	83.87	1.71
Endava American Depository Shares...	1.34%	115.12	1.22
Metso Outotec Ord Shs	1.69%	39.19	1.16
Qt Group Ord Shs	0.85%	79.54	1.08
Idp Education Pty Ordinary Shs	1.57%	81.43	1.04

#### Bottom Contributors by Holding

Issue Name	Avg Wt	Return	Contrib
<b>Bottom 10</b>	<b>12.57%</b>	<b>-246.49</b>	<b>-6.04</b>
Base Ord Shs	2.65%	-52.88	-1.61
Kambi Group Ord Shs	0.91%	-54.10	-0.99
Evolution Mining Ord Shs	1.93%	-37.00	-0.93
Venus MedTech HangZhou Ord Shs..	0.94%	-51.37	-0.85
Medley Ord Shs	2.50%	-21.84	-0.65
FlatexDEGIRO N Ord Shs	1.27%	-17.52	-0.60
Zur Rose Group Ord Shs	1.21%	-14.79	-0.49
Softcreate Hldg Ord Shs	0.38%	-38.45	-0.47
Plaid Ord Shs	0.46%	-25.51	-0.46
MedPeer Ord Shs	1.61%	-25.57	-0.45

#### Contributions by Sector

Issue Name	Avg Wt	Return	Contrib
Los Angeles City Employees' Retire...	100.00%	33.06	33.06
Industrials	18.03%	79.18	12.24
Consumer Discretionary	25.43%	33.35	8.41
Information Technology	17.75%	38.93	7.37
Financials	9.87%	48.20	3.53
Materials	5.91%	40.17	1.99
Communication Services	7.70%	8.58	1.13
Energy	1.31%	69.23	0.49
Cash & Equivalents	1.83%	0.58	0.01
Real Estate	0.61%	-2.31	-0.15
Consumer Staples	1.90%	-20.52	-0.44
Health Care	9.66%	-12.57	-1.53
Utilities			



# ATTRIBUTION ANALYSIS BY COUNTRY

## LACERS INTERNATIONAL OPPORTUNITIES PORTFOLIO VS. MSCI EAFE SMALL-CAP INDEX AS OF SEPTEMBER 30, 2021

### ATTRIBUTION DETAILS

Portfolio Name :	Los Angeles City Employees' Retirem...	Time Period :	9/30/2020 - 9/30/2021
Benchmark Name :	MSCI Small Cap EAFE	Currency :	USD

Report Table - 2709 Securities

Issue Name	AVERAGE WEIGHTS			RETURNS			ATTRIBUTION		
	Portfolio	Bench	Active	Portfolio	Bench	Active	Alloc	Select	Total
Los Angeles City E...	100.00%	100.00%	0.00%	33.06	29.32	3.73	-3.44	7.18	3.73
Sweden	10.50%	7.56%	2.93%	51.59	30.14	21.45	0.69	2.89	3.58
Japan	33.23%	28.46%	4.77%	28.89	14.88	14.01	-1.41	4.66	3.25
Finland	3.68%	1.75%	1.93%	98.12	26.16	71.95	-0.05	2.16	2.11
Norway	4.41%	2.29%	2.12%	140.81	44.20	96.61	0.07	1.99	2.07
Netherlands	6.00%	2.52%	3.48%	89.69	63.04	26.66	0.96	1.11	2.06
Singapore		1.88%	-1.88%		14.37	-14.37	0.33	0.00	0.33
Canada	6.80%		6.80%	30.62		30.62	0.18	0.00	0.18
Denmark	1.04%	1.70%	-0.65%	29.44	31.03	-1.59	0.05	0.13	0.17
Belgium	0.21%	1.54%	-1.34%	-12.32	20.07	-32.39	0.10	-0.09	0.01
Hong Kong	0.10%	2.05%	-1.95%	-20.85	20.47	-41.32	0.23	-0.25	-0.02
New Zealand		0.97%	-0.97%		32.31	-32.31	-0.03	0.00	-0.03
Portugal		0.22%	-0.22%		45.54	-45.54	-0.04	0.00	-0.04
U.K.	16.48%	17.63%	-1.15%	42.48	41.10	1.38	-0.99	0.79	-0.19
Austria		0.96%	-0.96%		53.06	-53.06	-0.21	0.00	-0.21
Ireland		0.52%	-0.52%		87.39	-87.39	-0.24	0.00	-0.24
France	1.18%	3.19%	-2.01%	16.99	30.68	-13.69	-0.05	-0.22	-0.27
Spain	0.10%	1.96%	-1.86%	-13.05	38.15	-51.20	-0.19	-0.17	-0.36
Italy		2.89%	-2.89%		42.49	-42.49	-0.39	0.00	-0.39
Switzerland	1.33%	5.26%	-3.93%	-18.85	27.46	-46.31	0.03	-0.77	-0.74
Israel	1.71%	2.47%	-0.76%	32.92	53.05	-20.13	-0.27	-0.47	-0.74
Cash & Equivalents	1.83%		1.83%	0.58		0.58	-0.84	0.00	-0.84
N/A	0.79%	0.03%	0.76%	-14.03	-25.18	11.15	-0.61	-0.36	-0.97
Australia	3.73%	8.90%	-5.17%	4.23	32.85	-28.62	-0.12	-1.35	-1.47
Germany	5.17%	5.20%	-0.03%	15.94	33.83	-17.89	-0.16	-1.46	-1.62
China	1.71%	0.02%	1.70%	-47.05	69.32	-116.37	-0.49	-1.41	-1.91

# ATTRIBUTION ANALYSIS BY COUNTRY

## LACERS INTERNATIONAL OPPORTUNITIES PORTFOLIO VS. MSCI EAFE SMALL-CAP INDEX AS OF SEPTEMBER 30, 2021

### CONTRIBUTION SUMMARY

Portfolio Name :	Los Angeles City Employees' Retirem...	Time Period :	9/30/2020 - 9/30/2021
Benchmark Name :	MSCI Small Cap EAFE	Currency :	USD

Top 10 Contributors by Holding				Bottom 10 Contributors by Holding			
Issue Name	Avg Wt	Return	Contrib	Issue Name	Avg Wt	Return	Contrib
<b>Top 10</b>	<b>22.99%</b>	<b>1,048.0.</b>	<b>22.88</b>	<b>Bottom 10</b>	<b>10.95%</b>	<b>-220.92</b>	<b>-5.59</b>
BAYCURRENT CONSU ...	5.40%	270.50	8.64	Base Ord Shs	2.65%	-52.88	-1.61
Sinch Ord Shs	1.76%	118.69	3.99	Kambi Group Ord Shs	0.91%	-54.10	-0.99
Food & Life Companies...	4.94%	85.10	3.53	Evolution Mining Ord S...	1.93%	-37.00	-0.93
Nordic Semiconductor O.	3.04%	193.20	3.17	Venus MedTech HangZ.	0.94%	-51.37	-0.85
Constellium SE Ord Shs...	2.85%	139.24	2.49	Cint Group Ord Shs	0.79%	-14.03	-0.76
Intermediate Capital Gro.	3.01%	83.87	1.71	Medley Ord Shs	2.50%	-21.84	-0.65
Endava American Depo...	1.34%	115.12	1.22	FlatexDEGIRO N Ord S...	1.27%	-17.52	-0.60
Metso Outotec Ord Shs	1.69%	39.19	1.16	Zur Rose Group Ord Sh...	1.21%	-14.79	-0.49
Qt Group Ord Shs	0.85%	79.54	1.08	Softcreate Hldg Ord Sh...	0.38%	-38.45	-0.47
Idp Education Pty Ordin...	1.57%	81.43	1.04	Plaid Ord Shs	0.46%	-25.51	-0.46

Top 10 Contributors by MSCI Country				Bottom 10 Contributors by MSCI Country			
Issue Name	Avg Wt	Return	Contrib	Issue Name	Avg Wt	Return	Contrib
<b>Top 10</b>	<b>85.87%</b>	<b>515.87</b>	<b>34.84</b>	<b>Bottom 10</b>	<b>15.06%</b>	<b>-41.21</b>	<b>-1.23</b>
Japan	33.23%	28.89	9.71	China	1.71%	-47.05	-0.85
Sweden	10.50%	51.59	6.98	N/A	0.79%	-14.03	-0.76
U.K.	16.48%	42.48	5.49	Switzerland	1.33%	-18.85	-0.62
Netherlands	6.00%	89.69	4.19	Spain	0.10%	-13.05	-0.17
Norway	4.41%	140.81	3.19	Hong Kong	0.10%	-20.85	-0.15
Finland	3.68%	98.12	2.67	Belgium	0.21%	-12.32	0.00
Canada	6.80%	30.62	1.86	Cash & Equivalents	1.83%	0.58	0.01
Israel	1.71%	32.92	0.57	Germany	5.17%	15.94	0.05
Denmark	1.04%	29.44	0.53	France	1.18%	16.99	0.13
Australia	3.73%	4.23	0.22	Australia	3.73%	4.23	0.22

## ATTRIBUTION OF PERFORMANCE

- At the sector level, one-year performance was driven by +448 bps in stock selection and -75 bps impact from allocation effect.
  - Stock selection was particularly strong in Industrials (+590 bps) and Information Technology (+229 bps), offset by poor selection in Health Care (-321 bps) and Communication Services (-133 bps).
- At the country level, one-year performance was driven by +718 bps in stock selection and -344 bps impact from allocation effect.
  - Stock selection was particularly strong in Japan (+466 bps) and Sweden (+289 bps), offset by poor selection in Germany (-146 bps) and China (-141 bps).

# PERFORMANCE DISCUSSION

## PERFORMANCE:

- Over the past twelve months, LACERS has returned +32.52% (net of fees) vs. +29.02% for the LACERS stated benchmark (the MSCI EAFE Small-Cap Index)
- On a year-to-date basis, LACERS has returned +8.19% (net of fees) vs. +10.02% for the LACERS stated benchmark (the MSCI EAFE Small-Cap Index)
- Over the past twelve months, LACERS outperformance and positive absolute returns have been driven by favorable stock selection as we were able to successfully navigate the negative impact from COVID and the resulting re-opening
  - As a refresher, one of the core highlights of the strategy is that we don't screen on growth for growth factors or on value for value factors - instead we are agnostic to the type of idea, so long as that idea is misunderstood
  - We own two buckets of companies:
    - 1) Idiosyncratic, secular growth businesses – for example, a Swiss-listed global messaging platform for businesses to communicate with customers via text messages
    - 2) Shorter duration, economically sensitive businesses – for example, a leading Finnish-based provider of mining equipment
  - With this in mind, it is important to highlight how the strategy's positioning has changed
    - One year ago the strategy was approximately 70% exposed to idiosyncratic, secular growth businesses
    - More companies playing in large markets with low levels of adoption saw further acceleration caused by the changes from Covid
    - Currently the split is approximately 55% (idiosyncratic, secular growth), 45% (shorter duration/economically sensitive)
    - We are seeing more of an even split of ideas coming from dynamically growing areas as well as from businesses that were negatively impacted by Covid, but have gained share, and/or restructured during the downturn
    - This even distribution has helped the strategy weather the significant style factor rotations that have occurred over the past twelve months

# OUTLOOK

## Outlook: Positive Outlook Maintained

1. Our universe of developed world ex-US small cap equities are trading at attractive valuations compared to US peers
  - From JPM - showing US valuations relative to peers at near 20-year highs



2. Earnings growth is set to grow faster outside of the US (in Continental EU as denoted by the blue bar), yet developed world ex-US equities trade at significant discounts



3. Our developed world ex-US small cap universe has expanded for the better with far more idiosyncratic IPO's in continental EU coming to the market over the past 12 months - this has increased the opportunity set
4. We are set to take advantage of near term volatility from higher inflation, supply chain distributions and from fears over higher interest rates

As noted in our latest commentary:

- Irrespective of what happens with inflation and interest rates, however, over any meaningful time periods for *long-term* investors, share prices will be substantially determined by the *fundamental* performance of companies, which is our expertise and main focus

# COMPETITIVE ADVANTAGES

- Disciplined, rational investment philosophy based on hard facts – utilizing an empirically tested, clearly documented, and persistent source of alpha
- Proven, unique, effective and efficient investment research process specifically designed to exploit this persistent source of alpha
- Specialized investment team, focused on identifying misunderstood and therefore mispriced companies in international developed markets
- Globally-experienced investment team with cultural and language understanding
- Focused, boutique nature of all firm resources
- Capacity to be nimble due to firm culture and team structure
- Non-bureaucratic decision making process
- Strong fundamental research
- Proprietary and extensive position and portfolio monitoring process
- Extensive risk management and portfolio optimization supported by peer-leading quantitative research firms Empirical Research Partners, LLC and Northfield Information Services, Inc.
- Strong sell discipline (supported by shorting expertise)
- Proprietary and extensive position and portfolio monitoring process
- Risk management and portfolio optimization supported by leading quantitative research firms Empirical Research Partners, LLC and Northfield Information Services, Inc.
- Committed to style consistency, even in times when style is temporarily out of favor (in fact, for astute investors, those are usually the very best times to add to the strategy)

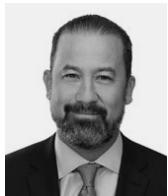


## APPENDIX



**Jeff Papp, CFA**  
Assistant Portfolio Manager  
Principal

Jeff joined Oberweis Asset Management, Inc. in June 2004 and is the Assistant Portfolio Manager on the International team. Jeff began his career working on the U.S. Growth team at Oberweis, and was later a founding team member of OAM's China Opportunities strategy. While simultaneously working on the China strategy, Jeff helped launch the International Opportunities strategy and worked as an Analyst on the International Opportunities team from November 2006 through March 2008. From October 2005 to August 2013, he worked as a Senior Analyst on the China Opportunities strategy and continued to collaborate with the International Opportunities team on Asian equities. He rejoined the International Opportunities team full-time in August 2013 as a Senior Analyst and was promoted to Assistant Portfolio Manager in September 2014. Jeff is a holder of the Chartered Financial Analyst (CFA) designation. He earned a BS in Finance with high honors from the University of Illinois. Jeff has been a frequent guest on CNBC, Bloomberg Television and Fox Business. He has also provided commentary on various investment issues to Bloomberg News, Investor's Business Daily, and TheStreet.com.



**Brian K. Lee**  
Director of Marketing & Client Service  
Principal

Brian joined Oberweis Asset Management, Inc. in April of 2002 to establish and lead the firm's institutional marketing and client service efforts. Brian earned an MBA from Loyola Marymount University and a BA in Finance from Loyola Marymount University. Previously, he was employed by Delaware Investments/Lincoln Financial Distributors, where he served as a Director of Marketing. Prior to that, he worked for Wilshire Associates in both marketing and client service roles.

## IMPORTANT DISCLOSURES

Composite Returns presented are historical and include the reinvestment of dividends and other income. Past results are not indicative of future performance.

All composite returns are dollar weighted gross of fees. The performance results do not reflect the deduction of investment advisory fees. Client investment returns will be reduced by advisory fees and other expenses incurred in the management of their account. OAM's investment advisory fees are described in Part II of its Form ADV. The advisory fee, compounded over a period of years, will have an adverse effect on the value of the client's portfolio.

# INTERNATIONAL OPPORTUNITIES GIPS REPORT

Year	Gross Total Return (%)	Net Total Return (%)	Benchmark Return (%)	Number of Accounts	Asset-Weighted St Dev (%)	Composite 3-Year Annualized St Dev (%)	Benchmark 3-Year Annualized St Dev (%)	Composite Assets (\$ mm)	Total Firm Assets (\$ mm)
2020	65.10	63.83	22.93	14	0.34	24.94	20.68	3,350.4	3,730.3
2019	24.99	23.92	28.04	15	0.65	15.11	12.61	2,716.2	3,060.3
2018	-23.03	-23.98	-17.78	15	0.25	14.55	13.46	2,390.6	2,799.0
2017	42.30	41.14	34.27	15	0.14	11.01	11.90	3,426.1	4,011.1
2016	-3.97	-4.99	0.86	15	0.19	11.81	12.57	2,390.8	2,781.2
2015	16.96	15.87	9.92	16	0.35	12.43	11.34	2,047.0	2,507.7
2014	-2.92	-3.95	-4.84	11	0.76	15.61	12.95	1,008.9	1,469.2
2013	59.13	57.91	23.32	6	N/A	19.35	16.03	478.5	1,076.8
2012	33.53	32.23	15.42	2	N/A	22.65	19.96	114.9	694.1
2011	-13.03	-13.95	-14.79	2	N/A	24.55	22.37	88.3	576.8

- I. Oberweis Asset Management, Inc. (OAM) claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. OAM has been independently verified for the periods January 1, 1993 through December 31, 2020. A firm that claims compliance with the GIPS standards must establish policies and procedures for complying with all the applicable requirements of the GIPS standards. Verification provides assurance on whether the firm's policies and procedures related to composite and pooled fund maintenance, as well as the calculation, presentation, and distribution of performance, have been designed in compliance with the GIPS standards and have been implemented on a firm-wide basis. The International Opportunities Composite has had a performance examination for the periods February 1, 2007 through December 31, 2020. The verification and performance examination reports are available upon request.
- I. OAM is an independent investment management firm registered under the Investment Advisor Act of 1940, founded in 1989, that invests in high growth companies around the world. The firm specializes in Small and Mid-Capitalization growth strategies globally for institutional investors and its own proprietary mutual fund family. Registration does not imply a certain level of skill or training. Firm assets presented represent all accounts where OAM has been engaged as investment adviser. A complete list and description of firm composites, the firm's list of broad distribution pooled funds, and the firm's list and descriptions of limited distribution pooled funds is available upon request.
- III. The following standards describe performance presented herein:
- A. The International Opportunities Composite creation and inception date are February 1, 2007. The reporting currency is U.S. Dollar. Policies for valuing investments, calculating performance, and preparing GIPS Reports are available upon request.
  - B. Gross performance is computed before deducting advisory fees. Generally, the advisory fees for separate accounts are 1.00% on the first \$50 million, 0.90% on the next \$50 million and 0.80% on all additional assets. Actual fees are used in the net return calculations.
  - C. The International Opportunities Composite includes all fully discretionary accounts in excess of \$5 million invested in the International Opportunities strategy, which primarily invests in the securities of non-U.S. companies with a market capitalization of less than \$5 billion at the time of investment. Oberweis does not use derivatives in any account in the composite except the use of foreign currency contracts in conjunction with the normal settlement of security trades in currencies other than the base currency of the composite accounts. Effective January 1, 2013 the equity segment was increased to 90% from 70%.
  - D. Mutual funds included in the International Opportunities Composite are valued in accordance with regulatory fair value requirements to prevent market timing. The same investments held by other portfolios in the composite are valued using closing prices in local markets as well as different exchange rates. While these differences are not expected to be material, at any given point in time the different sources could result in materially different returns.
  - E. Key material risks include the risk that non-US small-cap stock prices will decline and that the composite will underperform its benchmark. Small-cap equity prices can be more volatile than larger-cap stocks and carry more risk. Currency risk is another risk of this strategy, as the base currency is US dollars, and there is currency risk associated with investments in currencies other than US dollars. Investments in securities of non-U.S. issuers also include risk of political or economic instability of the country of issue, disruption to international trade patterns, currency exchange controls, imposition of foreign withholding taxes, seizure or nationalization of foreign deposits or assets, and adoption of adverse foreign government trade restrictions.
- IV. The standard deviation of portfolio returns has not been presented for the years 2011-2013 as the composite consisted of five or less accounts during these years. For accounts managed all months in the presentation year, the asset-weighted standard deviation of account returns within the composite is presented as a measure of internal dispersion. The three-year annualized ex-post standard deviation measures the variability of the composite and the benchmark returns over the preceding 36-month period. Net-of fees returns are used to calculate the asset-weighted standard deviation and the Gross-of fees returns are used to calculate the three-year annualized ex-post standard deviation.
- V. Consultants and investors supplied with these performance results are advised to use this data in accordance with guidelines issued by the United States Securities and Exchange Commission. Past performance is no guarantee of future results. The performance presented is inclusive of commissions and transaction costs and assumes reinvestment of any dividends, capital gains, or other earnings, net of withholdings tax. The client's return will be reduced by the advisory fees and other expenses it may incur in the management of its account. The investment advisory fees are described in Part II of the Form ADV. The advisory fee, compounded over a period of years, will have an adverse effect on the value of the client's portfolio.
- VI. The benchmark for this composite is the MSCI World Ex-US Small-Cap Growth Index (Net). The MSCI World Ex-US Small-Cap Growth Index (Net) is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of small cap growth developed markets excluding the US, with minimum dividends reinvested net of withholding tax. Benchmark returns are not covered by the report of independent verifiers.
- VII. GIPS is a registered trademark of CFA Institute. CFA Institute does not endorse or promote this organization, nor does it warrant the accuracy or quality of the content contained herein.

## IMPORTANT FOOTNOTES

Page 6

<sup>1</sup> "Analysts' Responsiveness and Market Underreaction to Earnings Announcements", Yuan Zhang, Columbia University, 2004

<sup>2</sup> Empirical Finance Research, LLC. April 1, 2009. Volume 2, Issue 3

<sup>3</sup> 9/30/2021 data, based on data submitted to eVestment as of October 14, 2021. eVestment provides third party databases, including the institutional investment database from which the presented information was extracted. Over 4,500 firms actively submit data to eVestment. No representation or warranty is made by Oberweis Asset Management, Inc. ("OAM") as to the validity and appropriateness of the eVestment rating. eVestment ratings should not be viewed as representative of the experience of other investors and is no guarantee of future performance. OAM pays a subscription fee for services to eVestment. Past performance is not necessarily indicative of future results.

<sup>4</sup> Bloomberg Markets January 2007

<sup>5</sup> "How Active is Your Manager? A New Measure That Predicts Performance", Cremers, M. and Antti Petajisto, Yale University, 2006

<sup>6</sup> "The Secret to Portfolio Construction", Empirical Research Partners, Oct 2006



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

**MEETING: NOVEMBER 9, 2021**

**ITEM: V**

*Neil M. Guglielmo*

**SUBJECT: PRIVATE EQUITY PROGRAM 2022 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 2022 Strategic Plan.

**Discussion**

Aksia TorreyCove Partners LLC (Aksia), LACERS' Private Equity Consultant, with input from staff, has developed the proposed Private Equity Program 2022 Strategic Plan, which considers strategic objectives and investment plan recommendations for calendar year 2022. Staff has reviewed the plan and recommends its adoption. Aksia 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 and aligns with the Strategic Plan Goals of optimizing long-term risk adjusted investment returns (Goal IV) and promoting good governance practices (Goal V).

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

NMG/RJ/BF/WL:rm

Attachment: 1. LACERS Private Equity Program 2022 Strategic Plan – Aksia TorreyCove Partners LLC

Aksia LLC

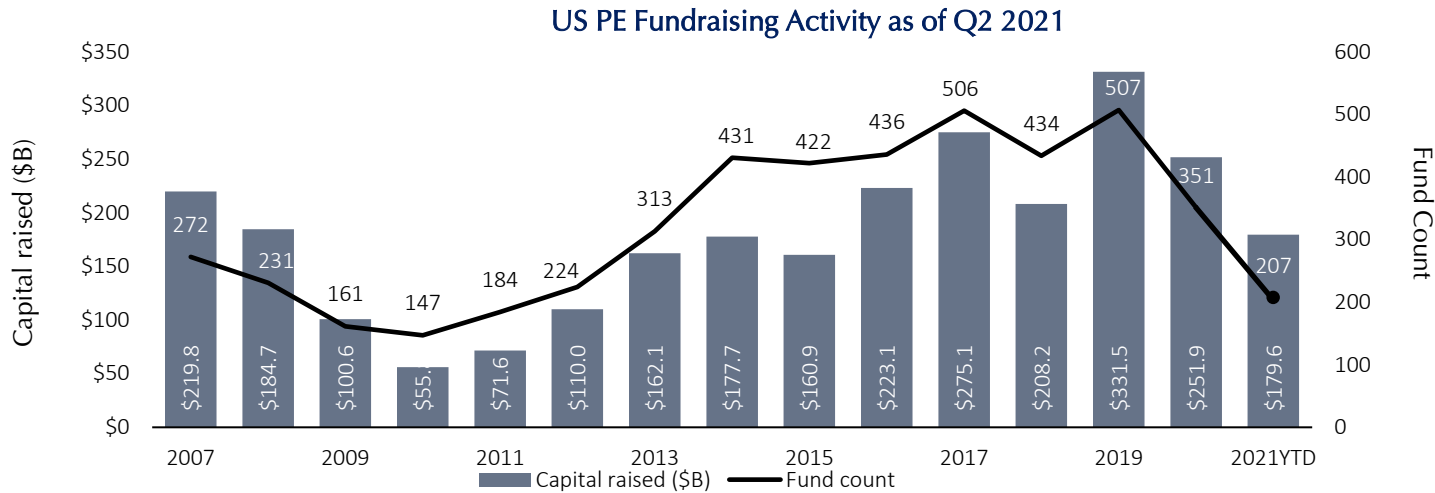
# LACERS Private Equity Program 2022 Strategic Plan



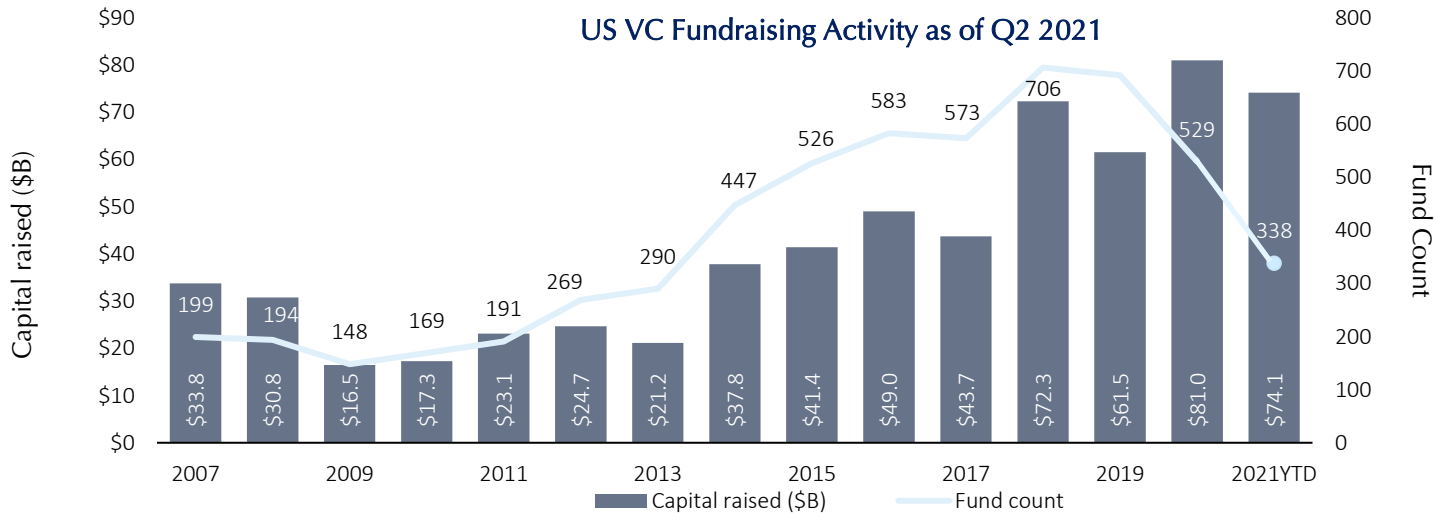
[www.aksia.com](http://www.aksia.com)

▪ Private Equity Market Overview	3-10
▪ 2021 Strategic Plan Refresher	11-15
▪ 2022 Pacing Analysis	16
▪ LACERS Portfolio Exposures	17-22
▪ 2022 Strategic Plan Recommendations	23-27

## Private Equity Industry Fundraising Update



- YTD PE Fundraising is pacing much higher than 2020

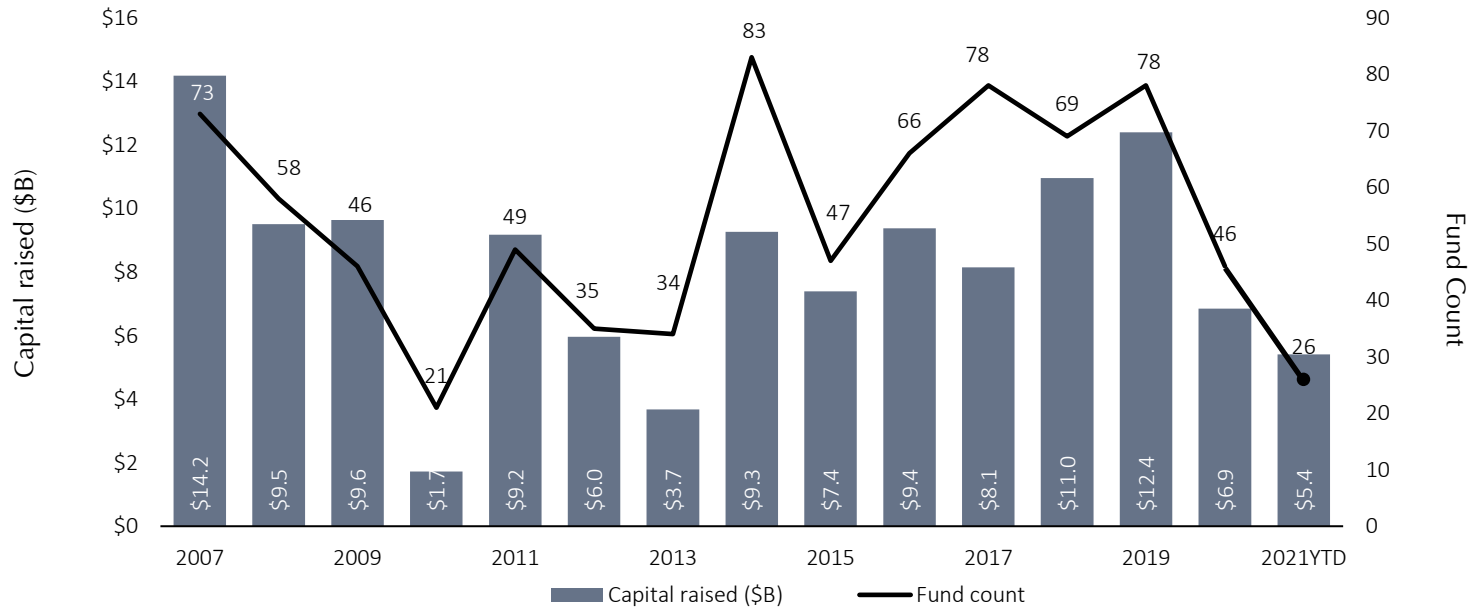


- Commitments to venture investments remain at historical highs



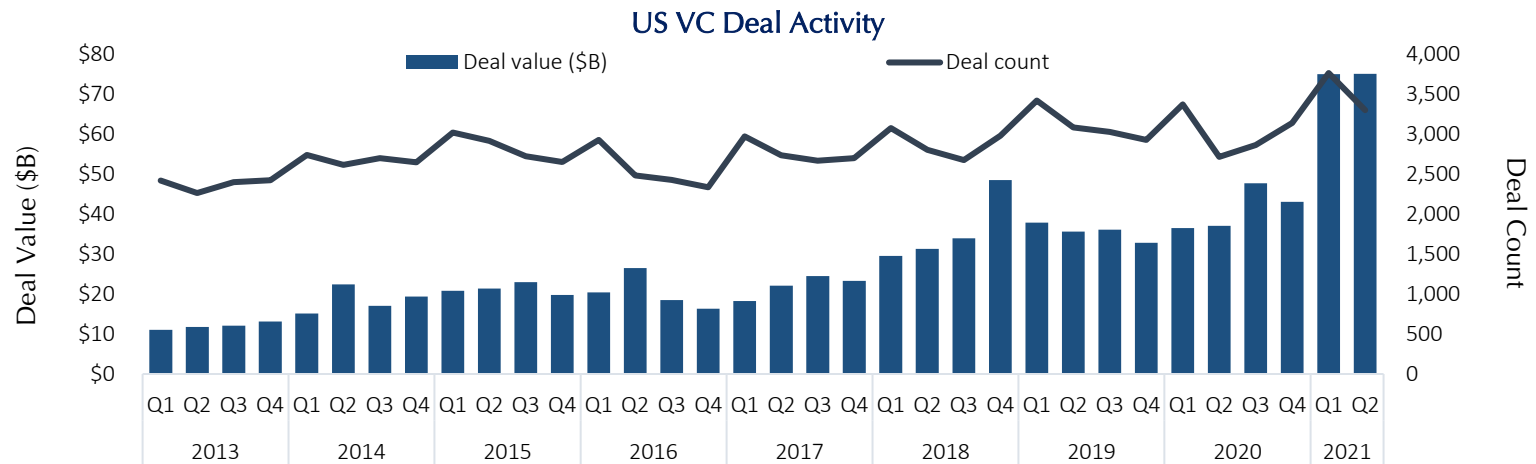
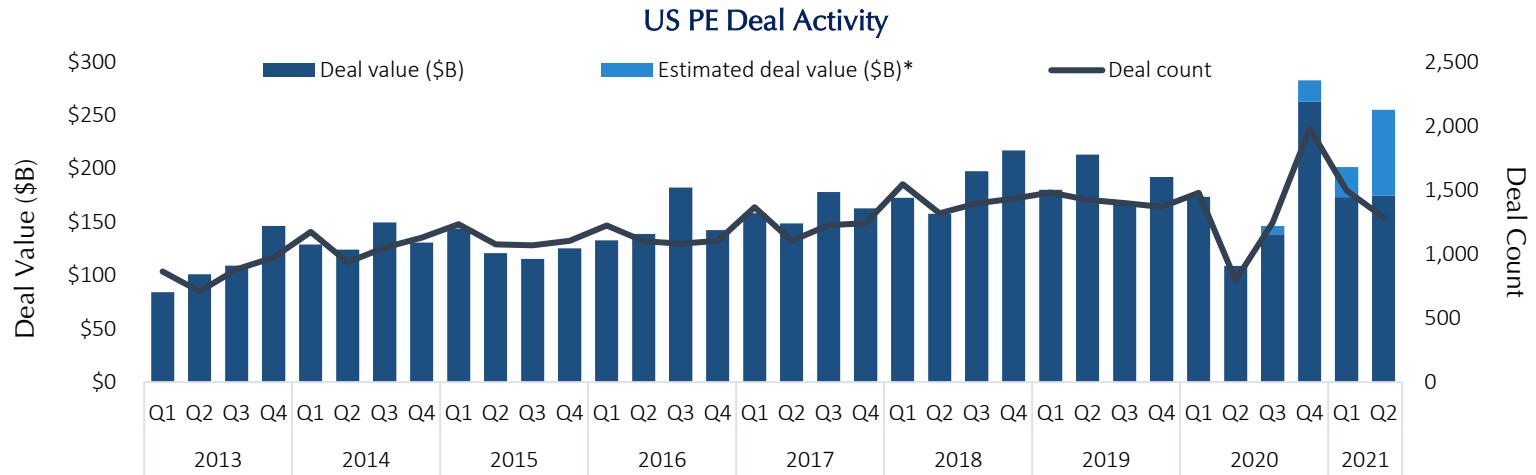
## Private Equity Industry Fundraising Update

US PE First-Time Fundraising Activity as of Q2 2021



- YTD fundraising for first time PE funds are currently outpacing 2020 asset raises

## Private Equity Industry Deal Activity Update



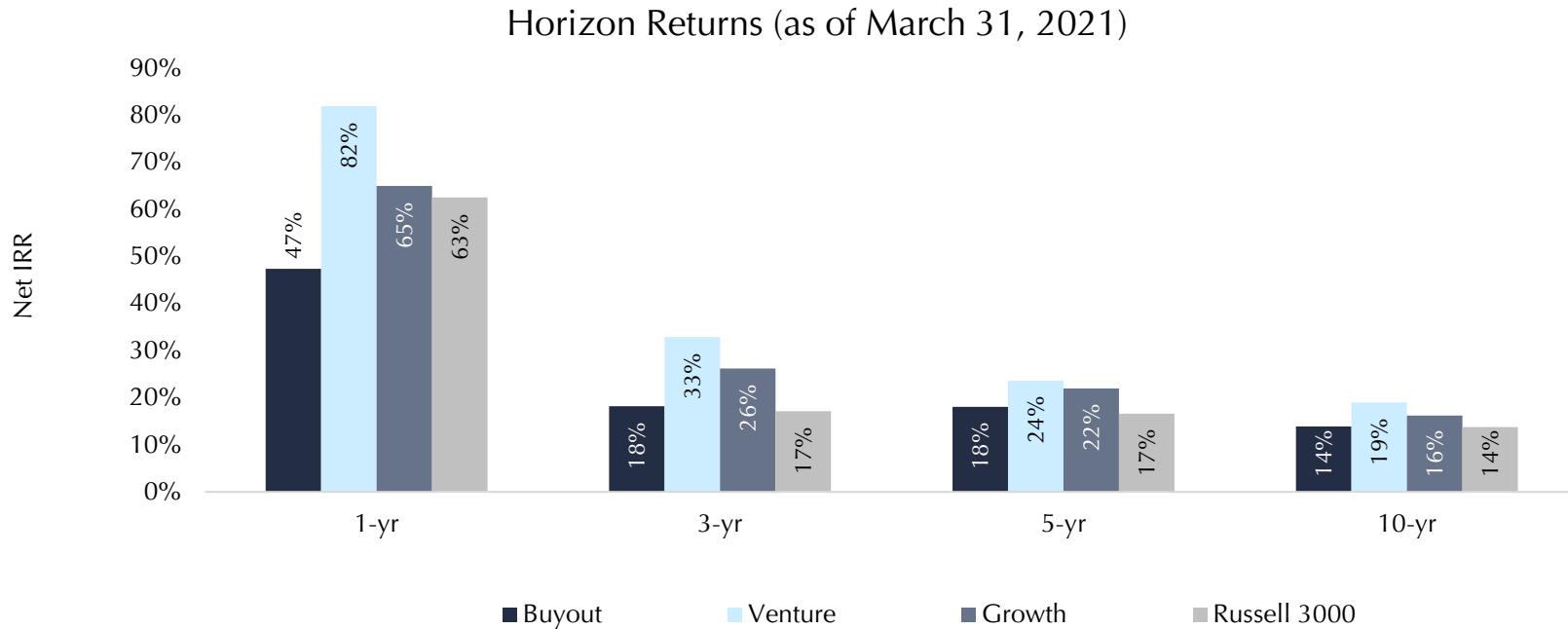
Overall, deal values are at all time highs for 2021 YTD

\*PitchBook adjustment for pending data

Source: PitchBook, PitchBook definition of PE includes Buyouts, Growth Equity, Mezzanine, Restructuring, and Diversified PE.

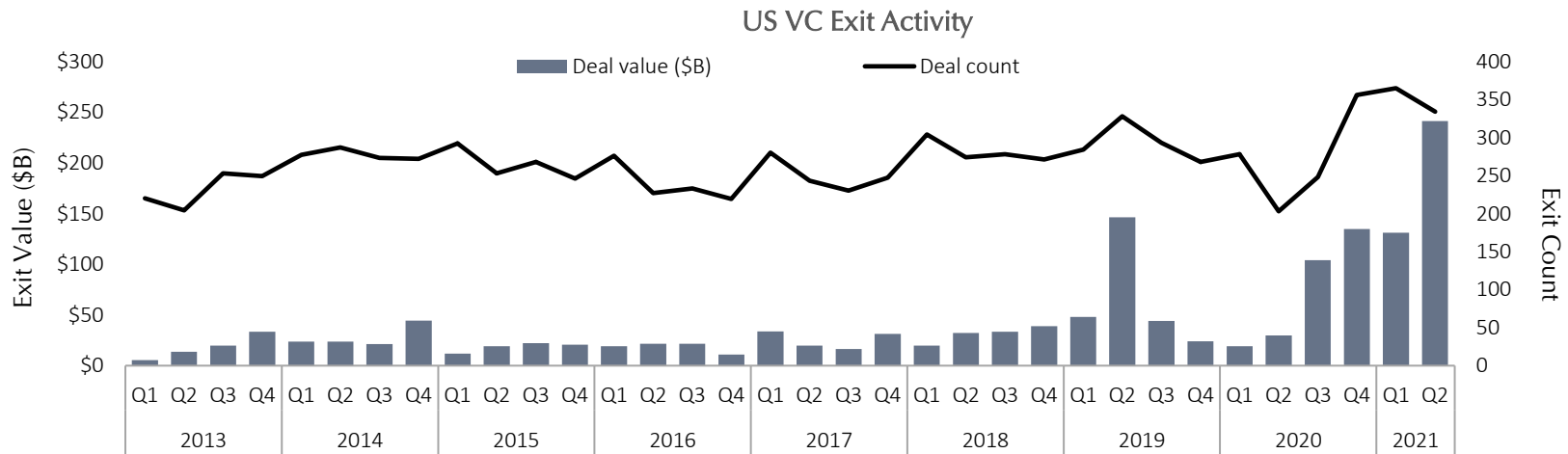
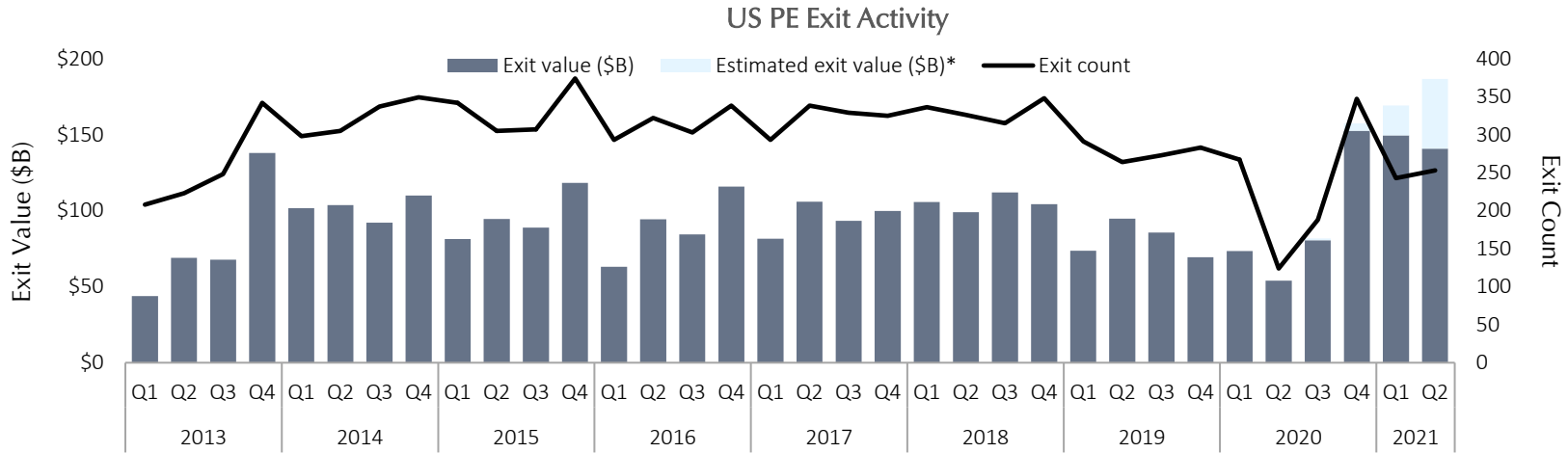
## Private Equity Industry Returns Relative to Public Markets

- Venture and growth equity have outperformed buyouts and public equity over all time horizons
- All private equity strategies outperformed public equity over 3-year and 5-year time horizons



Source: Cambridge Associates.

## Private Equity Industry Deal Exit Update

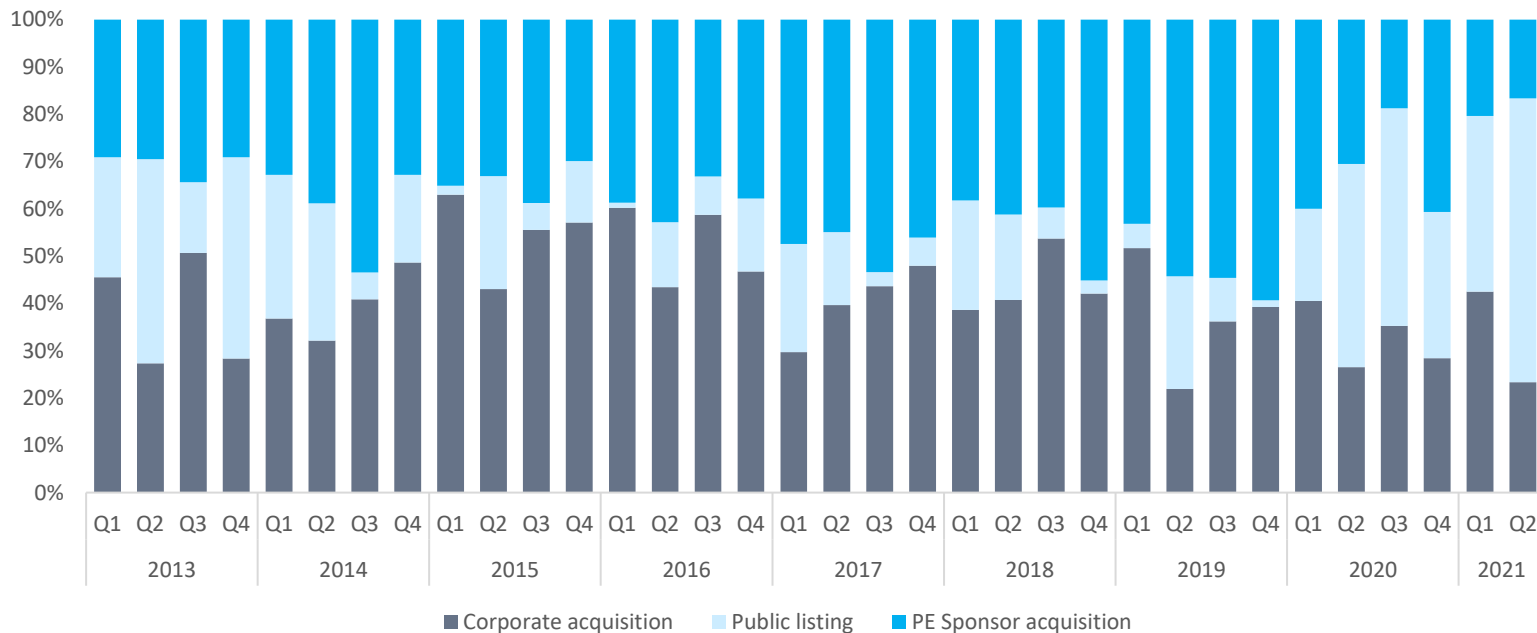


\*PitchBook adjustment for pending data.

Source: PitchBook, PitchBook definition of PE includes Buyouts, Growth Equity, Mezzanine, Restructuring, and Diversified PE.

## Private Equity Industry Deal Exit Update

US PE Exits by Type

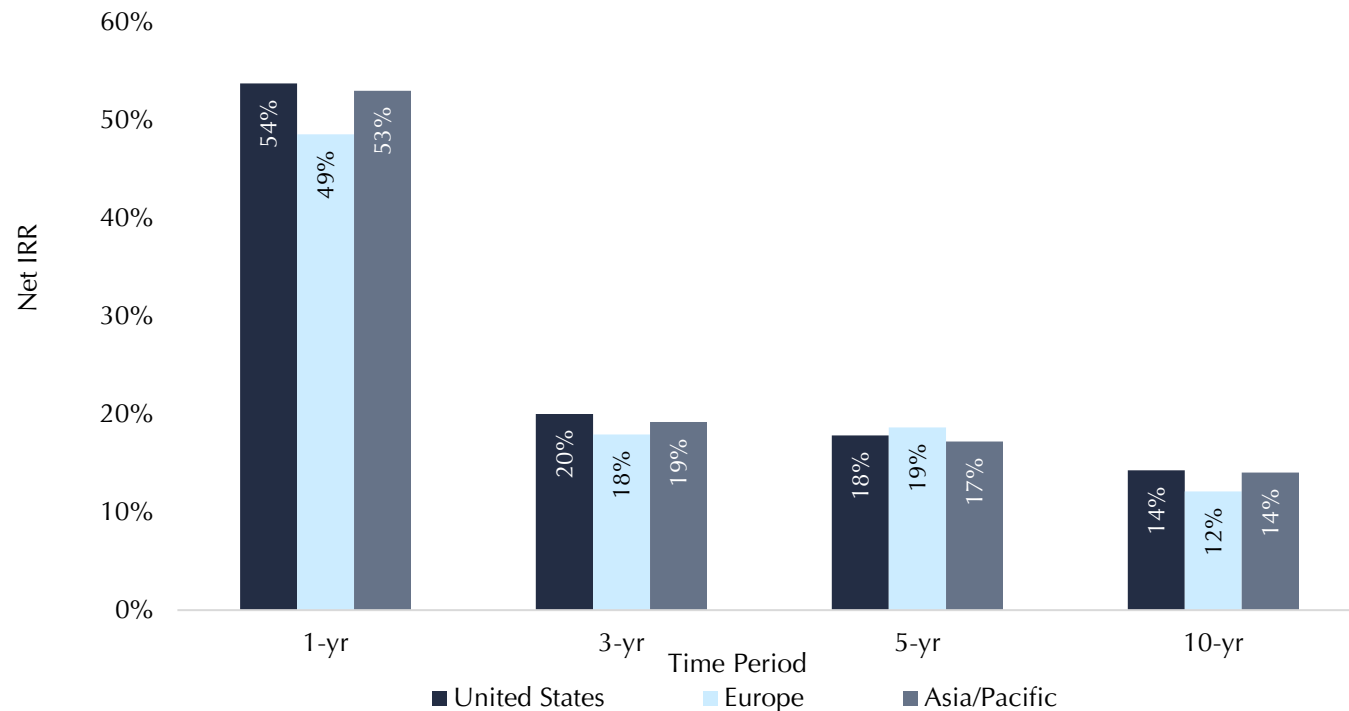


Source: PitchBook, PitchBook definition of PE includes Buyouts, Growth Equity, Mezzanine, Restructuring, and Diversified PE.

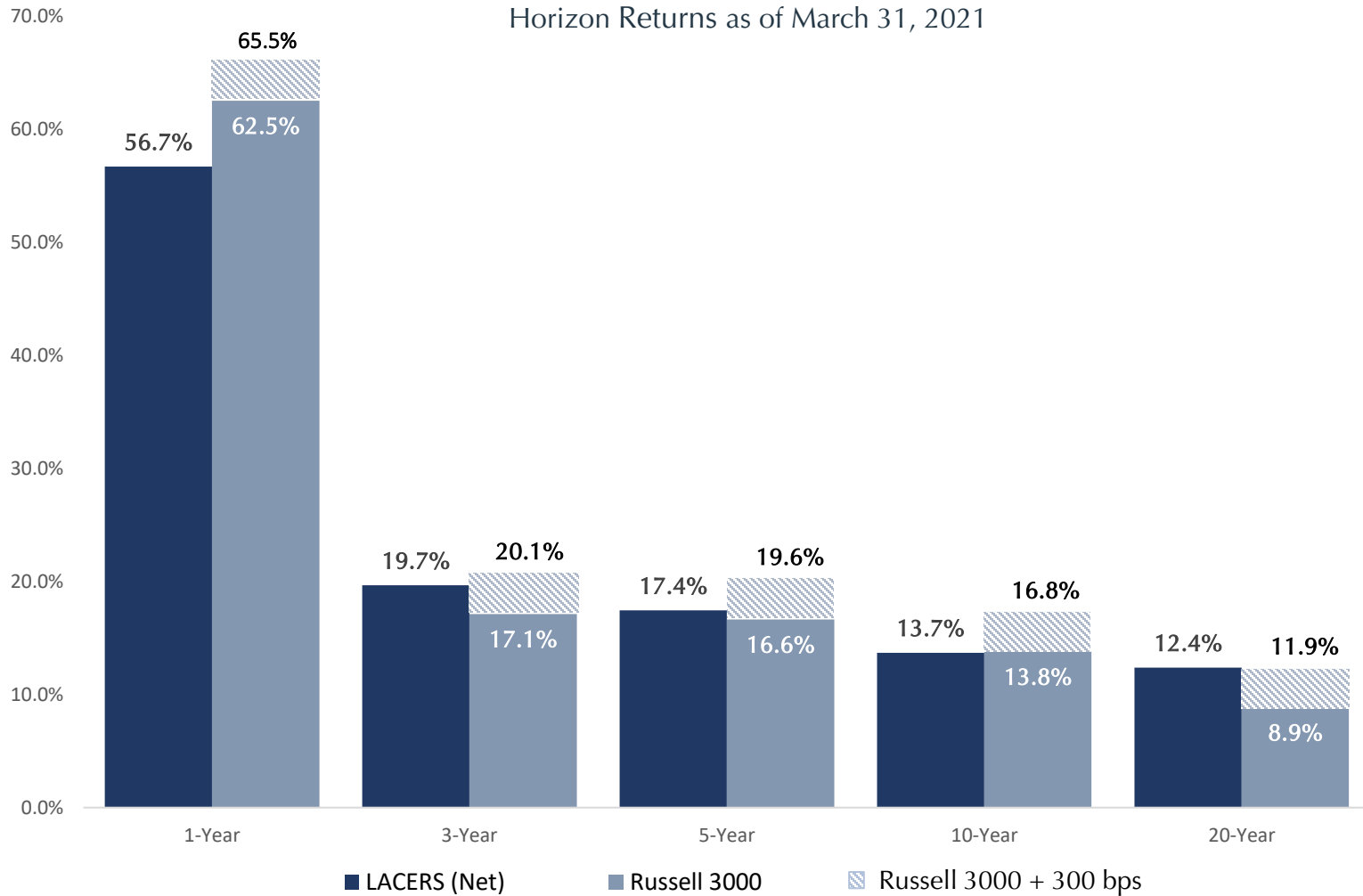
## Horizon Returns By Geography

- Over the 1-year 3-year and 10-year time periods to March 31, 2021, U.S. Private Equity outperformed both Europe and Asia/Pacific
- Over the 5-year time period to March 31, 2021, Europe Private Equity outperformed both the U.S. and Asia/Pacific

Horizon Returns By Geography (as of March 31, 2021)



- While risk varies by specific geography, broadly speaking, Europe and Asia/Pacific appear to offer commensurate returns with the U.S.
- Adding international exposure can improve diversity in LACERS PE portfolio without sacrificing expected returns



\* LACERS Benchmark is the Russell 3000 + 300bps.

## 2021 Strategic Plan - Refresher

- Initial Pacing Recommendations\*
  - Commitment plan of \$675 - \$750 million proposed for 2021.
  - Commitments with 14 -18 firms with a target size of \$50 - \$70 million per commitment / relationship.
    - Includes ~5 investments of up to \$20 million in various Emerging Managers
  
- 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

\*Updated in 2021 to account for increased target allocation and plan asset growth.



## 2021 Summary Statistics

### Commitment Statistics

- \$564 million in total commitments through June 30, 2021
- Annual target is \$1.1 billion for 2021 Strategic Plan\*

#### ▪ Geographic Breakdown of Commitments\*\*

- ~63% to North American focused funds
- ~9% to European focused funds
- ~9% to Globally focused funds
- ~3% to Multi-Region focused funds
- ~16% to Asia Pacific focused funds

#### ▪ Sub-Sector Breakdown of Commitments\*\*

- ~52% to Buyout focused funds
  - ~79% Large Buyout funds
  - ~14% to Medium Buyout funds
  - ~7% to Small Buyout funds
- ~39% to Venture / Growth focused funds
- ~9% to Secondaries focused funds

\*Approved at September 28, 2021 Board meeting due to increased target allocation and plan asset growth.

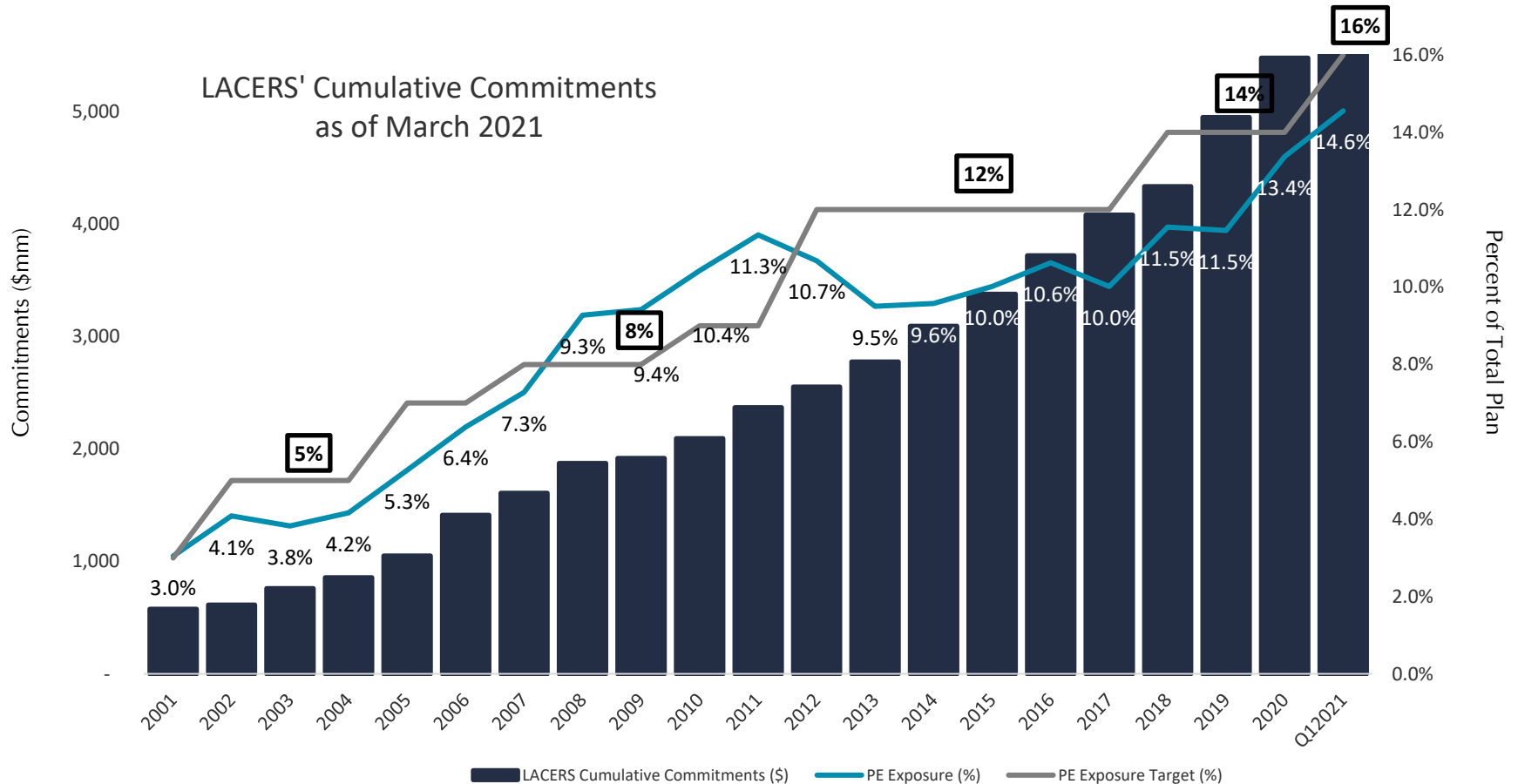
\*\*Allocation percentages includes all commitments as of June 30, 2021.

## Aggregate Portfolio Summary As Of March 31, 2021

- As of March 31, 2021 the aggregate portfolio’s fair market value of \$3.1 billion represents 14.6% of Total Plan Assets

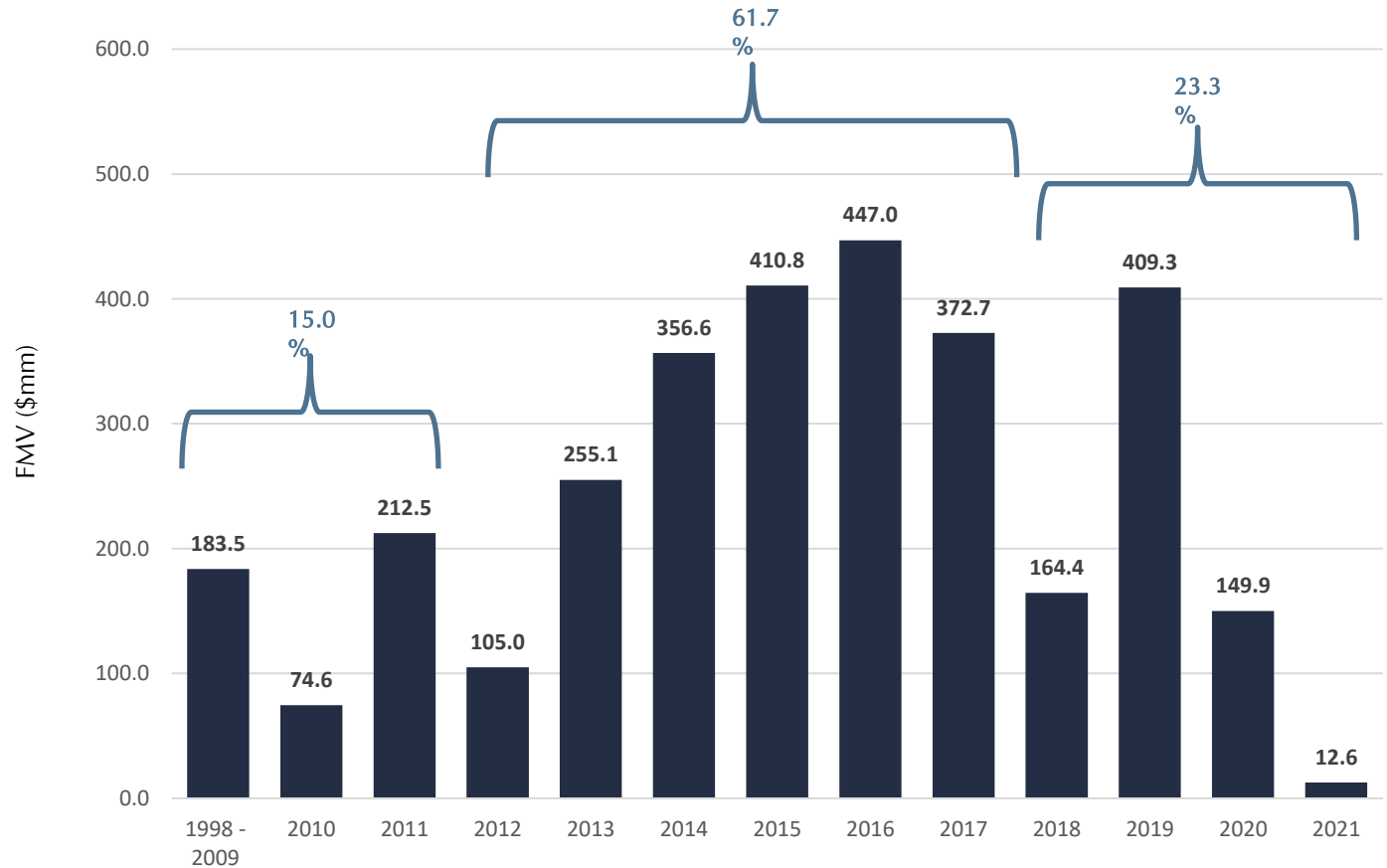
Aggregate Portfolio Private Equity Exposure Summary	
Total Plan Market Value	\$21.5bn
Private Equity Exposure Target (%)	16.0%
Private Equity Exposure Target (\$)	\$3.4bn
Private Equity Exposure (%)	14.6%
Fair Market Value (“FMV”)	\$3.1bn

- Since inception (1995), LACERS has committed more than \$5.8 billion to private equity.
- At the current target of 16.0%, the target exposure to private equity is ~\$3.4 billion.



## LACERS Private Equity Program - Fair Market Value By Vintage Year

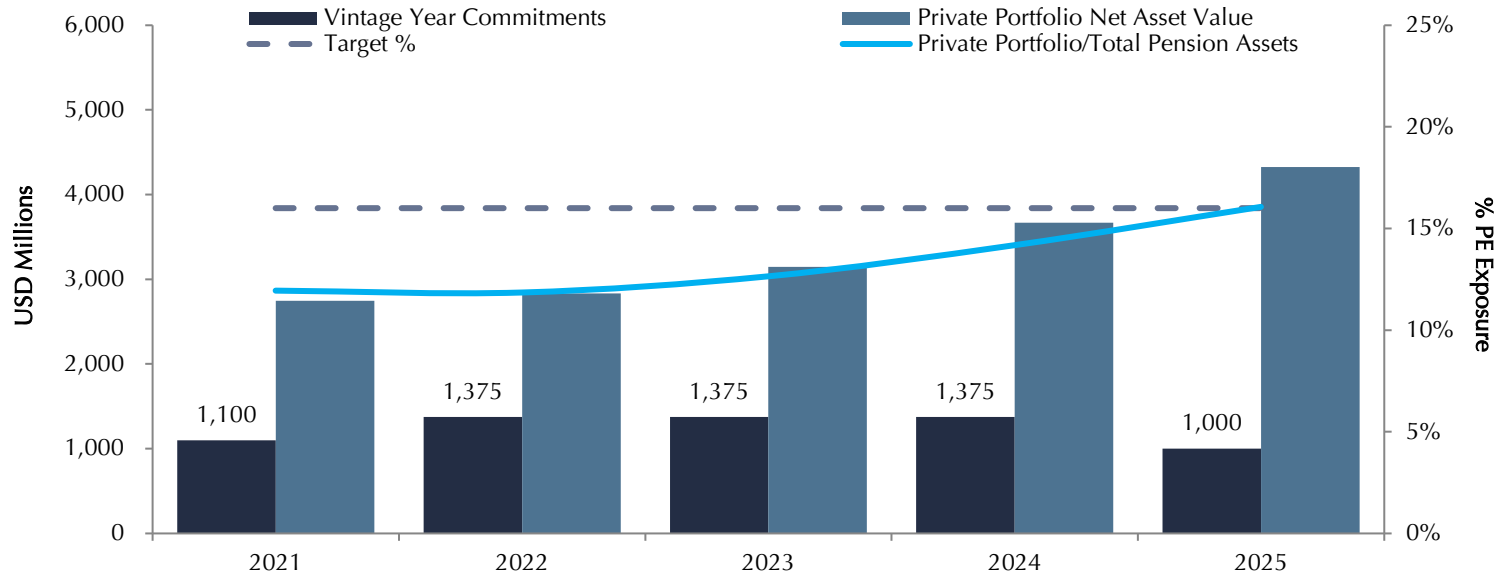
- Legacy exposure (1998 – 2011) accounts for ~15.0% of LACERS total private equity exposure
- The bulk of LACERS current private equity exposure (61.7%) is from funds with vintage years from 2012 – 2017



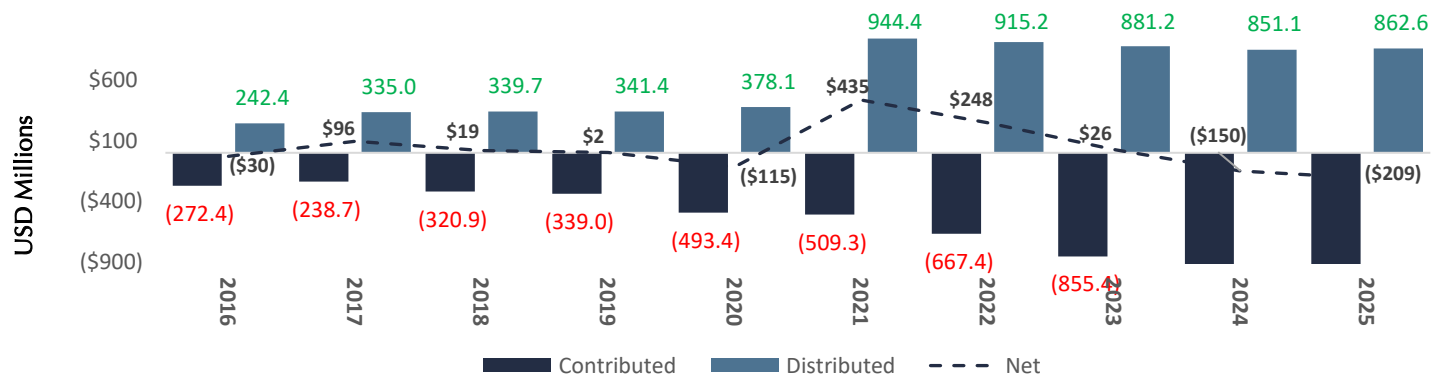
## Updated Pacing Model – As of December 30, 2020

- The performance of public markets in the last two years has contributed to LACERS being underweight in PE
- The updated pacing plan has LACERS hitting it's 16.0% target in ~2025 (assumed 4% total plan growth)

Pacing Plan



Cash Flow Profile

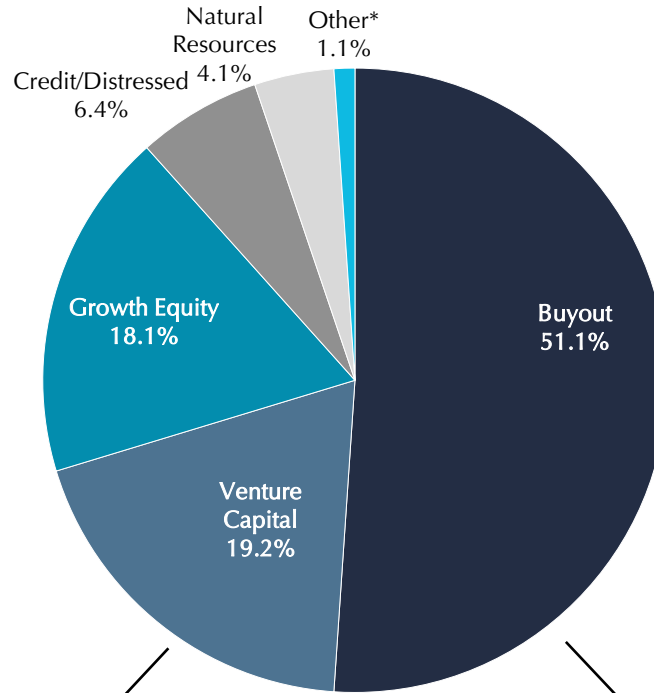


## LACERS Private Equity Long Term Targets

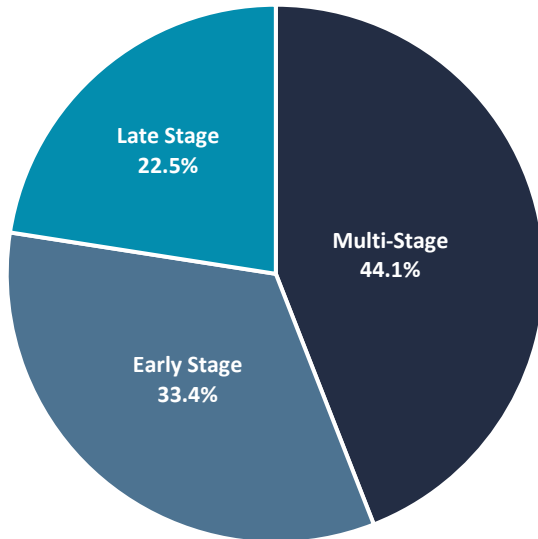
Private Equity Asset and Sub-Asset Classes	LACERS Exposure (%)	Aksia's Recommended Long-Term Target
<b>Buyouts</b>	<b>52.6%</b>	<b>50% – 65%</b>
Large Buyouts	22.4%	
Medium Buyouts	26.6%	
Small Buyouts	3.5%	
<b>Venture Capital / Growth Equity</b>	<b>36.7%</b>	<b>10% – 40%</b>
Venture Capital	18.5%	
Growth Equity	18.2%	
<b>Credit / Distressed</b>	<b>5.6%</b>	<b>0% – 15%</b>
<b>Natural Resources / Other</b>	<b>5.2%</b>	<b>0% – 5%</b>

# LACERS Exposures by Asset Class

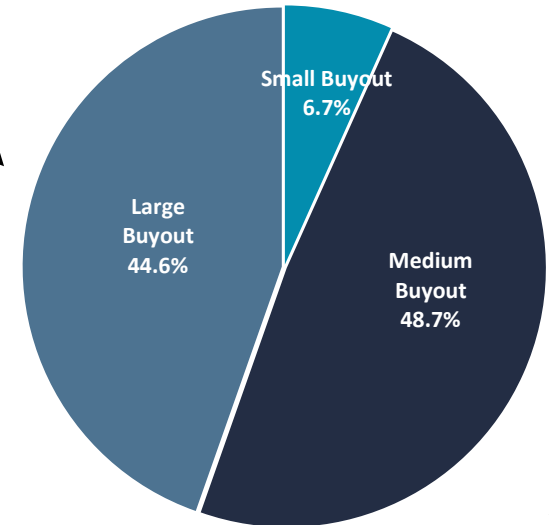
Current Exposure – By Asset Class



Venture Exposures



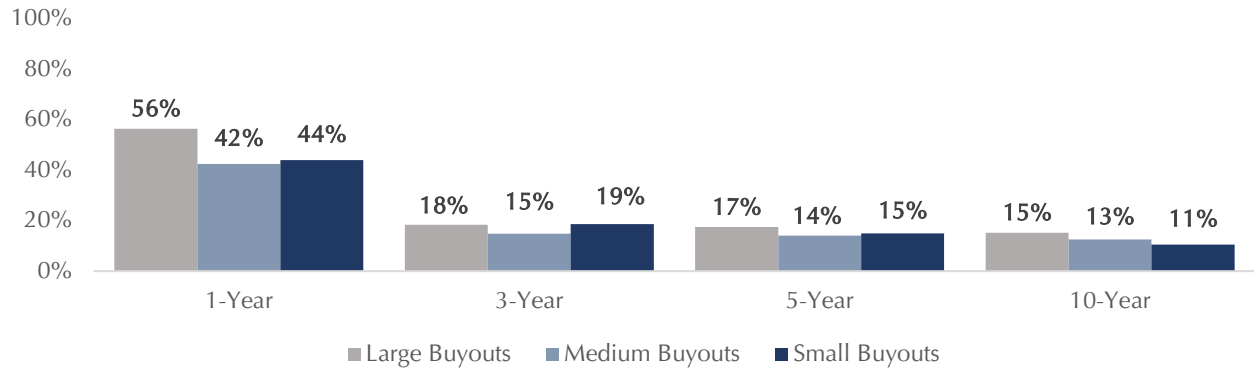
Buyout Exposures



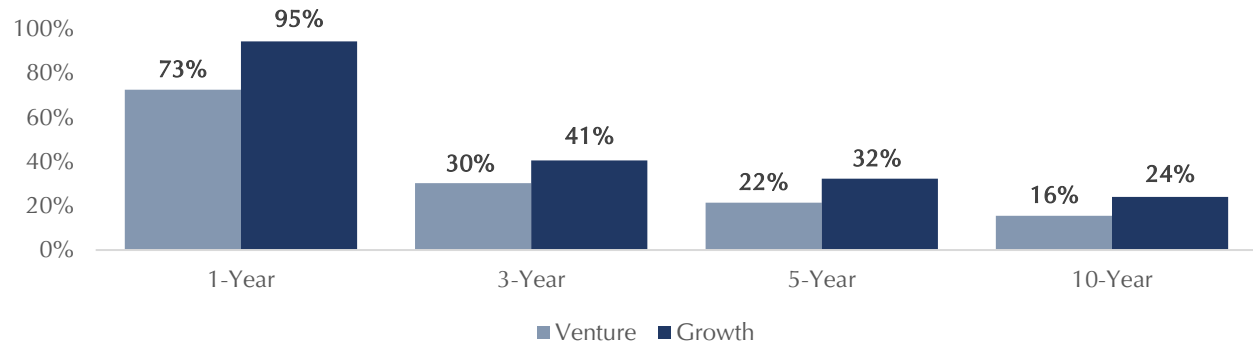
\*Other includes Secondaries funds and Fund of Funds.

## LACERS Horizon Returns by Sub-Strategy

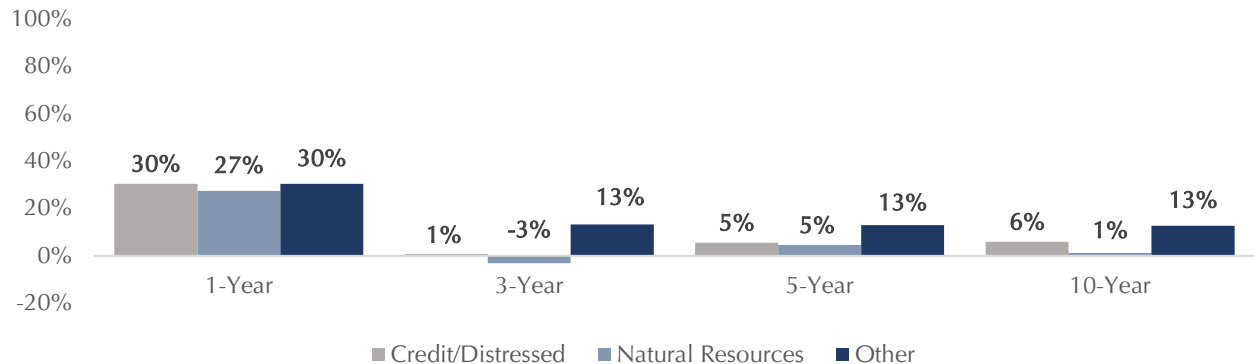
- LACERS' Large Buyout funds have outperformed Small and Medium Buyout funds over time



- LACERS' Growth Equity investments have outperformed Venture Capital over various time horizons

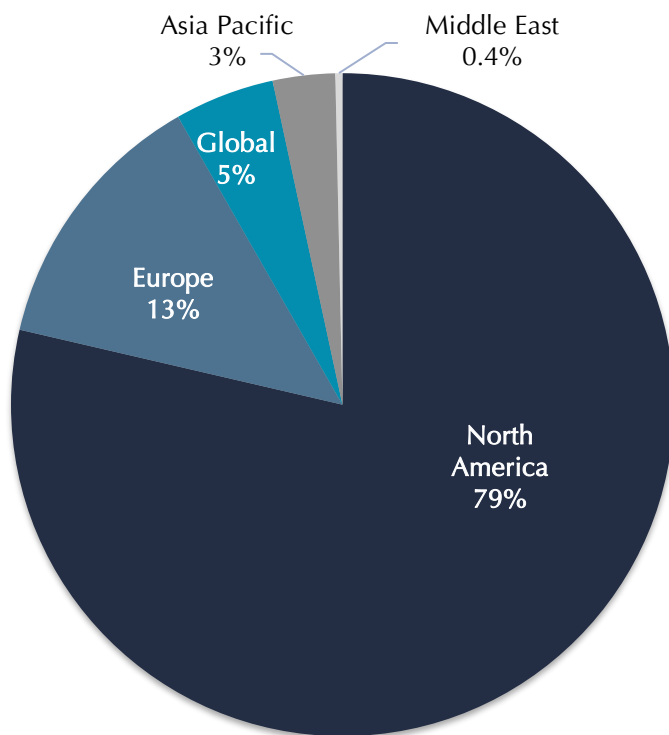


- LACERS' Natural Resources funds have been challenged over most time horizons

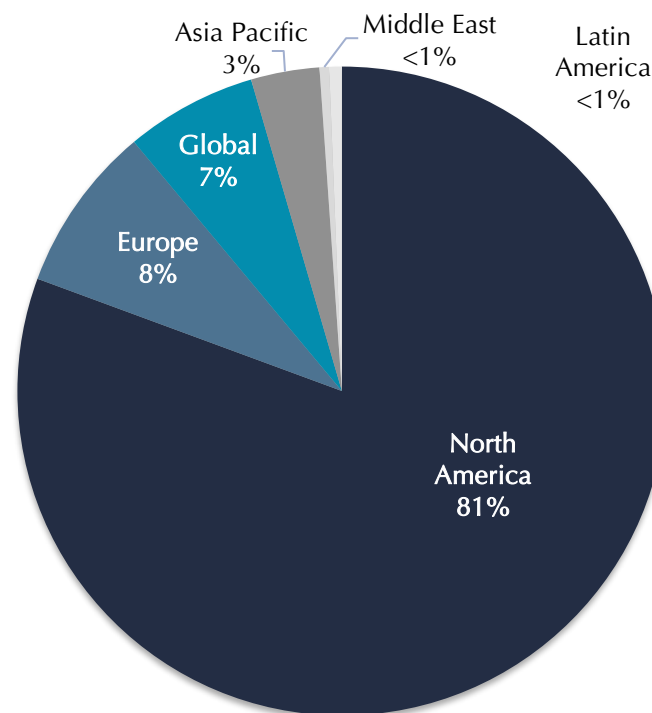




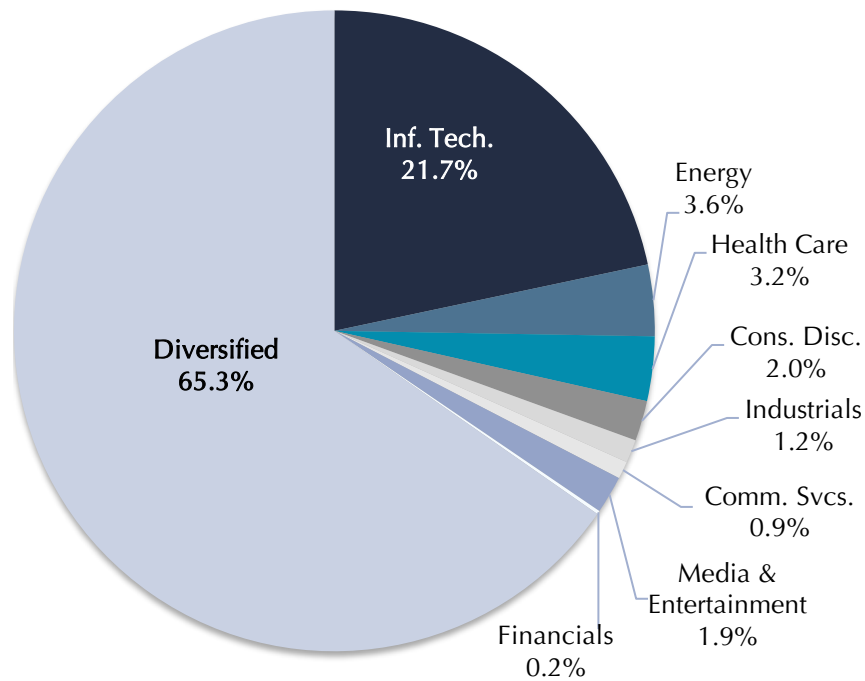
2021 Fund Commitments –  
By Geography



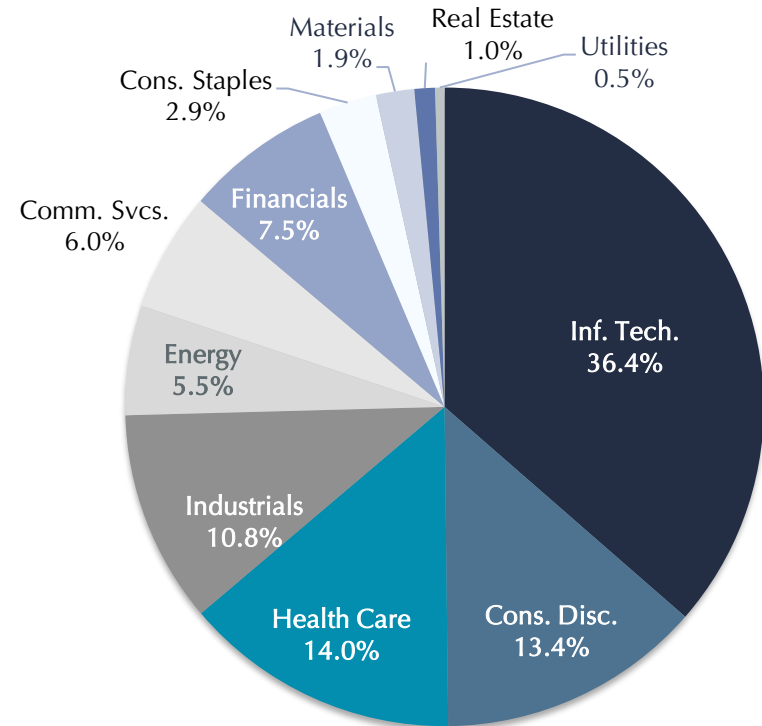
2021 Underlying Exposure –  
By Geography



2021 Fund Commitments –  
By Geography



2021 Underlying Exposure –  
By Geography

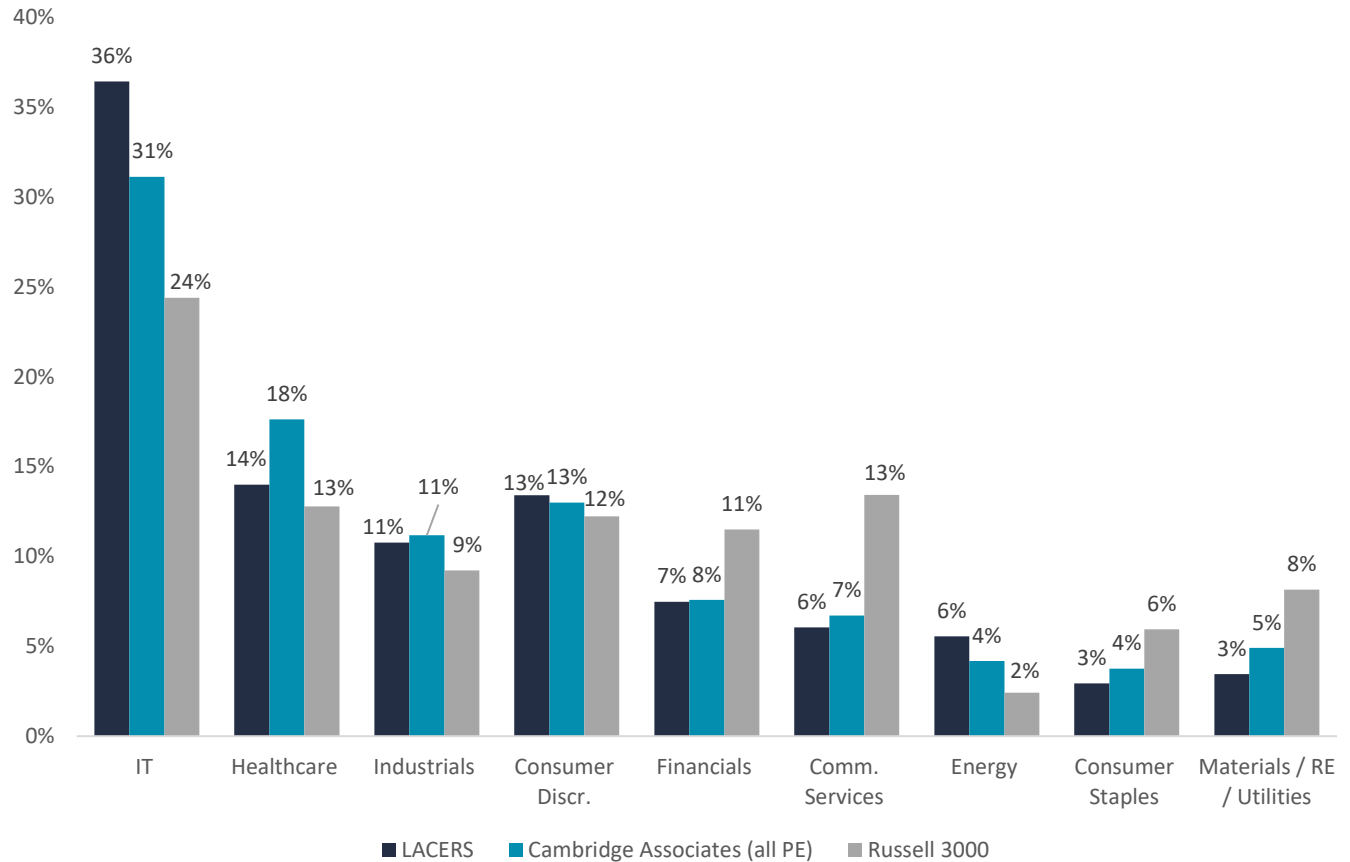


Inf. Tech. – Information Technology  
 Cons. Disc. – Consumer Discretionary  
 Cons. Staples – Consumer Staples  
 Comm. Svcs. – Communication Services

## LACERS Exposure by Sector vs. Benchmarks

LACERS Sector Exposure vs. Benchmarks

- When compared to public and private benchmarks, LACERS is overweight in the Information Technology sector
- When compared to private benchmarks, LACERS is under-weight in the Healthcare sector
- LACERS biggest mismatch with public markets is in the Financials sector



IT – Information Technology  
 Consumer Discr. – Consumer Discretionary  
 Comm. Services. – Communication Services  
 RE – Real Estate

## SWOT Analysis – Strengths & Weaknesses

### Strengths

- Existing GP Relationships: LACERS currently maintains relationships with several high-quality GPs that should continue to scale over time
- Brand / Reputation: LACERS has a reputation in the market as a long-term investor with a sophisticated investment staff, which should open doors to high-quality established and emerging firms. Recent new investment relationships have been either capacity constrained funds or emerging managers who have shown a desire to partner with LACERS
- Disciplined Investment Process: LACERS investment process allows for disciplined decision making and consistent deployment regardless of market dislocations
- Flexible Mandate: LACERS has the ability to invest selectively across a variety of sub-sectors within private equity
- Sector Exposure: LACERS PE portfolio's largest sector weights are to Information Technology (36%), Healthcare (14%), Consumer Discretionary (13%), and Industrials (11%), - a diversified core of sector exposures with IT allocation above representative benchmark and Healthcare currently below the benchmark but increasing. These core sectors have proven to be resilient through the recent COVID-driven downturn and should benefit going forward from secular market trends

### Weaknesses

- Over Diversification: LACERS has an overdiversified private equity portfolio, with a large enough number of relationships that returns may exhibit reversion to the mean. The LACERS staff continues to explore reducing the number of funds in the portfolio as well as increasing allocation sizes to core funds
- Legacy Performance: The legacy portfolio will continue to be a drag on performance, including the Specialized Portfolio, until those funds either run off or get sold in the secondary market
- Co-Investment Program: Despite receiving Board approval on new co-investment policy language in 2021, LACERS does not yet have an active co-investment program. LACERS has made progress in this area with recent commitment to a co-investment commingled and continued evaluation of how best to provide co-investment exposure in the private equity portfolio

## SWOT Analysis – Opportunities & Threats

### Opportunities

- Portfolio Consolidation: LACERS has existing relationships with several high-quality GPs, and has the potential to develop longer-term relationships with these GPs by increasing subsequent fund allocation size, while not repping with non-strategic GPs
- Co-Investments: Pursuing co-investments in-house and through third parties, which LACERS initiated a new co-investment policy in 2021, can increase exposure to core GP's while simultaneously helping to mitigate costs
- Secondary Transactions: The secondary market has evolved to the point that it can be viewed as a potential investment as well as a portfolio management tool to help reduce the number of funds in the portfolio and overdiversification
- Emerging Managers: Today's emerging managers may be the new generation of top-tier performers. The ability to invest in these managers early on in their life may help with long-term access to outperforming emerging managers. LACERS staff and Aksia continue to increase the number of emerging managers in the portfolio with a goal of at least 10% of the total private equity portfolio

### Threats

- Broad Co-Investment Appetite: Many LP's are seeking co-investments and are fostering relationships with GP's or third parties to secure access to desirable (typically no fee or no/minimal carry) co-investments; investments that enhance overall PE portfolio returns
- Late Market Cycle: The public markets have been fairly robust; a significant drop in public markets can impact valuations of existing portfolio companies and the private equity portfolio overall
- High Pricing: Entry Multiples in 2019 and even 2020 surpassed 2007 highs; this high valuation environment continue to persist today
- Disclosures / Regulations: AB2833 and other reporting requirements may be disagreeable to certain top-quartile GPs; a bigger issue in Venture Capital vs. Buyouts sub-sector

## 2022 Strategic Plan Recommendations

### Pacing

- Maintain consistent incremental increases in annual commitments until LACERS reaches its private equity target of 16.0%
- Commitment plan of \$1.375 billion proposed for 2022
- Commitments to 18-25 firms with a target size of \$50-\$100 million per commitment / relationship
- Includes 5-7 investments of at least 10% of commitments to various Emerging Managers

### Broad Portfolio Considerations

- Continue consolidating commitments with top performing managers
- Continue to selectively add exposure internationally – primarily to Europe, Asia, and Latin America
- Continue increasing exposure to Buyouts relative to other sub-asset classes
- Continue to manage underlying sector exposures
- Monitor Information Technology exposure to make sure it doesn't become too large in portfolio
- Continue to diversify sector exposure, including Healthcare and other select sectors
- Continue to add exposure to strategies designed to outperform in down, sideways, late cycle markets – i.e. Value-Oriented Managers, Turnaround Managers, Distressed Managers

## 2022 Strategic Plan Recommendations

### Lean Into the Strengths

- Existing GP Relationships: Increase exposure to existing, high conviction managers that are back in market in 2022; this would include the re-evaluation of the strategic and performance value of these relationships to the overall portfolio
- Brand / Reputation: Leverage LACERS reputation to initiate new relationships of scale with high quality GPs that are in market in 2022 and where the relationship can be scaled over time
- Flexible Mandate: Leverage LACERS ability to invest across sub-asset classes and take advantage of the full spectrum of private equity activities
  - Continue developing a framework for the implementation of co-investment program
    - Leverage relationship with commingled co-Investment fund in 2022 and discuss broader strategic conversations
  - Continue developing a framework for the implementation of a secondary program and/or secondary fund sales
    - Leverage relationship with commingled secondary fund in 2022 and begin broader strategic conversations
    - Continue exploring potential secondary sales when conditions are favorable and possible valuation discounts minimal
- Sector Exposures: Continue to monitor Information Technology sector portfolio weights while maintaining appropriate diversity across other sectors (i.e. healthcare, industrials, consumer)

## 2022 Strategic Plan Recommendations

### Capitalize on Opportunities

- Market Volatility and late cycle: Continue to review and potentially invest with value-oriented, turnaround, and distressed investment managers
- Co-Investments: Leverage existing 3<sup>rd</sup> party co-investment managers learn more and continue to develop LACERS co-investment program
- Secondaries: Continue building a framework for to address secondary transactions – both on the “buy” and the “sell” side  
Leverage existing 3<sup>rd</sup> party relationships to learn more and continue to develop LACERS secondaries program
- Emerging Managers: Continue targeting high-quality first-time managers / spin-outs / diverse managers

### Minimize Weaknesses / Counter Threats

- Over Diversification: Continue to trim relationships and consolidate capital with higher-conviction managers
- Legacy Performance: Continue to consider and lay the groundwork for a portfolio secondary sale when appropriate



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