

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

FEBRUARY 24, 2020

AGENDA

PLACE: Ventura County Government Center
Hall of Administration Building, Multi-Purpose Room
800 S. Victoria Avenue
Ventura, CA 93009

TIME: 9:00 a.m.

Members of the public may comment on any item under the Board's jurisdiction by filling out a speaker form and presenting it to the Clerk. Unless otherwise directed by the Chair, comments related to items on the agenda will be heard when the Board considers that item. Comments related to items not on the agenda will generally be heard at the time designated for Public Comment.

ITEM:

	Master Page No.
I. <u>CALL TO ORDER</u>	
II. <u>APPROVAL OF AGENDA</u>	1 – 3
III. <u>APPROVAL OF MINUTES</u>	
A. Disability Meeting of February 10, 2020.	4 – 13
IV. <u>CONSENT AGENDA</u>	
A. Approve Regular and Deferred Retirements and Survivors Continuances for the Month of January 2020.	14 – 15
B. Receive and File Report of Checks Disbursed in January 2020.	16 – 20
C. Receive and File Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Schedule of Investments, Cash and Cash Equivalents, and Schedule of Investment Management Fees for the Period Ending December 31, 2019.	21 – 26
V. <u>INVESTMENT MANAGER PRESENTATIONS</u>	
A. Receive Annual Investment Presentation from Adams Street, Saguna Malhotra and Scott Hazen.	27 – 59
B. Receive Annual Investment Presentation from UBS Real Estate, Mario Maturo and Mia Dennis.	60 – 111

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VI. INVESTMENT INFORMATION

NEPC – Alan Martin.

VCERA – Dan Gallagher, Chief Investment Officer.

- A. \$25 Million Commitment to Pantheon Global Secondaries Fund VI, Kevin Dunwoodie and Iain Jones.
RECOMMENDED ACTION: Approve.
1. Staff Letter by C.I.O., Dan Gallagher. 112
 2. Recommendation Memorandum from NEPC. 113 – 116
 3. Pantheon Presentation Material. 117 – 133
- B. Quarterly Investment Performance Report for Period Ending December 31, 2019. 134 – 225
RECOMMENDED ACTION: Receive and file.
- C. Preliminary Performance Report Month Ending January 31, 2020. 226 – 240
RECOMMENDED ACTION: Receive and file.
- D. NEPC 2020 Investment Outlook – Capital Market Assumptions. 241 – 306
RECOMMENDED ACTION: Receive and file.

VII. OLD BUSINESS

- A. Overview of Fees and Economics in Private Investments.
1. Staff letter by C.I.O., Dan Gallagher. 307
 2. Presentation Deck. 308 – 325

VIII. NEW BUSINESS

- A. Periodic Review of Appointment and Election of Trustees Policy.
RECOMMENDED ACTION: Approve.
1. Staff Letter. 326
 2. Appointment and Election of Trustees Policy (Redline). 327 – 331
- B. Mid-Year Budget Update for FY 2019-20.
RECOMMENDED ACTION: Receive and File.
1. Staff Letter by C.F.O., Henry Solis. 332 – 333
 2. Budget Summary. 334 – 335
- C. Request for Authorization and Designation of Trustee On-Site Due Diligence Visit to Western Asset Management Company.
RECOMMENDED ACTION: Approve.
1. Staff Letter by C.I.O., Dan Gallagher. 336

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VIII. NEW BUSINESS (continued)

D. Request for Trustee Roberts to Attend the CALAPRS Principles of Pension Governance for Trustees, Pepperdine University, August 25 - 28, 2020.

RECOMMENDED ACTION: Approve.

- | | |
|-----------------------------|-----------|
| 1. Staff Letter. | 337 |
| 2. General Course Overview. | 338 – 340 |
| 3. 2019 Training Brochure. | 341 – 344 |

IX. INFORMATIONAL

A. Western Asset Management Company Notice. 345

X. PUBLIC COMMENT

XI. STAFF COMMENT

XII. BOARD MEMBER COMMENT

XIII. ADJOURNMENT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY MEETING

FEBRUARY 10, 2020

MINUTES

**TRUSTEES
PRESENT:**

Art Goulet, Vice-Chair, Retiree Member
Steve Bennett, Public Member
Mike Sedell, Public Member
Robert Ashby, Safety Member
Jordan Roberts, General Member
Will Hoag, Alternate Retiree Member

**TRUSTEES
ABSENT:**

William W. Wilson, Chair, Public Member
Steven Hintz, Treasurer-Tax Collector
Craig Winter, General Member

**STAFF
PRESENT:**

Linda Webb, Retirement Administrator
Dan Gallagher, Chief Investment Officer
Leah Oliver, Chief Technology Officer
Lori Nemiroff, General Counsel
Shalini Nunna, Retirement Benefits Manager
Nancy Jensen, Retirement Benefits Specialist
Chris Ayala, Program Assistant

PLACE:

Ventura County Government Center
Hall of Administration Building, Multi-Purpose Room
800 S. Victoria Avenue
Ventura, CA 93009

TIME:

9:00 a.m.

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ITEM:

I. CALL TO ORDER

Vice-Chair Goulet called the Disability Meeting of February 10, 2020 to order at 9:01 a.m.

II. APPROVAL OF AGENDA

MOTION: Approve.

Moved by Ashby, seconded by Sedell.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

Absent: Hintz, Wilson, Winter

Abstain: -

III. APPROVAL OF MINUTES

A. Disability Minutes of January 27, 2020.

Ms. Webb noted two corrections to the minutes. On Master Page 5, last paragraph, Trustee Goulet's request for an explanation of fees for private equity investments should have included the words, "at a future meeting." Also, on Master Page 10, the motion for item VIII.F should be corrected to read, "Receive and File."

After discussion by the Board, the following motion was made:

MOTION: Approve with Corrections.

Moved by Sedell, seconded by Bennett.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

Absent: Hintz, Wilson, Winter

Abstain: -

IV. RECEIVE AND FILE PENDING DISABILITY APPLICATION STATUS REPORT

MOTION: Receive and File.

Moved by Ashby, seconded by Roberts.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

Absent: Hintz, Wilson, Winter

Abstain: -

V. APPLICATIONS FOR DISABILITY RETIREMENT

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- A. Application for Nonservice-connected Disability Retirement - Hart-Ramos, Susan A.; Case No. 19-020.
1. Application for Nonservice-connected Disability Retirement, filed April 26, 2019.
 2. Medical Analysis and Employer's Statement of Position, including Supporting Medical Documentation, submitted by County of Ventura-Risk Management, in support of the Application for Nonservice-connected Disability Retirement, dated December 19, 2019.
 3. Hearing Notice, dated January 30, 2020.

Catherine Laveau was present on behalf of County of Ventura-Risk Management. Shalini Nunna and Nancy Jensen were present on behalf of VCERA. The applicant, Susan A. Hart-Ramos, was also present.

Both parties declined to make statements.

After discussion by the Board, the following motion was made:

MOTION: Approve the Application for Nonservice-connected Disability Retirement.

Moved by Roberts, seconded by Sedell.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

Absent: Hintz, Wilson, Winter

Abstain: -

Both parties agreed to waive the preparation of findings of fact and conclusions of law.

- B. Application for Service-connected Disability Retirement - Myers, Christopher M.; Case No. 18-015.
1. Request from Jane Oatman, Attorney for Applicant, to move this matter to hearing, dated December 23, 2019.
 2. Response from Respondent, County of Ventura-Risk Management, filed by Stephen Roberson, Attorney for Respondent, dated January 2, 2020 and January 17, 2020.
 3. IDR Medical Examination reported by Gary Brazina, M.D., dated March 5, 2019.
 4. Hearing Notice, dated January 30, 2020.

Stephen D. Roberson, Attorney at Law, and Catherine Laveau were present on behalf of Ventura County Risk Management. Shalini Nunna and Nancy Jensen were present on behalf of VCERA. Jane Oatman, Attorney at Law, was present on behalf of the applicant, Christopher M. Myers, who was not present.

Ms. Oatman summarized the circumstances of Mr. Myers' hiring and subsequent injury, relating that when hired in 2013, he disclosed he had a bullet in his shoulder from a shooting during his

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previous law enforcement service in Iowa. In 2017, Mr. Myers injured his shoulder during a gun training exercise, which rendered him incapacitated. A QME doctor had deemed Mr. Myers "permanent" while attributing 75% of the injury to the training exercise incident, and restricted Mr. Myers to sedentary work. The County indicated Mr. Myers' work restrictions could not be accommodated in April 2018; Mr. Myers filed for a Service-Connected Disability Retirement on March 11, 2018.

Ms. Oatman said that in the Workers' Compensation process, authorization for treatment for Mr. Myers with a neurologist in Iowa was delayed, and it took 5 months for treatment to begin; there had been other similar delays. Physical and occupational therapies began in May 2019, but these could only reduce pain and would not cure the injury, as Mr. Myers' shoulder was "frozen"; therefore, suggesting there was hope for a cure would be disingenuous. She referenced a report from Dr. Brazina, which she said attributed the injury to Mr. Myers' job and precluded him from being a Deputy Sheriff. She said Risk Management was continuing to delay the process and treating her client as an adversary. She asked the Board to exercise its fiduciary duty and send the case to hearing.

Mr. Roberson made a brief statement, saying that Mr. Myers had been hired with the knowledge of the bullet in his shoulder, but the County was unaware of the content of the medical records from Iowa where he had continued to receive treatment. Dr. Brazina had opined that Mr. Myers was probably already developing complex regional pain syndrome from the original injury when the County hired him, and if not for the bullet in his shoulder, an AR-15's recoil would not have triggered the shoulder problems. A Ventura County Sheriff's Department study said the AR-15's recoil was 2.2 to 2.3 pounds, which all of the examining doctors said was insufficient to explain the injury, even after shooting multiple times. A hearing officer would determine the existence of a real and measurable connection between his employment and the condition, but the medical reports provided an argument against this connection. Mr. Roberson referenced Dr. Brazina's report that suggested further range of motion could be regained through sympathetic blocks and treatment.

Mr. Roberson said that in regard to the referenced delays, the County had encountered difficulties in securing treating doctors in Iowa because of the California Workers' Compensation issue involved, but ultimately Mr. Myers was able to obtain treatment. Until Risk Management knew if the nerve blocks administered in November and December of 2019 improved range of motion, scheduling a hearing would be premature.

Ms. Oatman said it was speculation to say Mr. Myers would be disabled if not for the training exercise, and upon hiring an employee the County takes the employee as they find him. A pain management doctor in Iowa indicated the only remaining option was a highly speculative stim router procedure for pain, but nothing would restore range of motion. She said delaying a hearing was putting adverse pressure on Mr. Myers and causing further financial hardship, and again asked the Board to send the case to hearing.

Trustee Sedell asked Mr. Roberson why Risk Management was opposed to moving the case to a Hearing Officer.

Mr. Roberson said Mr. Myers was still actively treating, and he was unaware of the report that Ms. Oatman referenced regarding the stim router procedure. Occupational and physical therapy reports indicated that range of motion in his shoulder was improving, though Mr. Roberson did not know whether the applicant would be able to return to full duty. Regardless of improvement, however, the County of Ventura would still contest the application for lack of real and measurable connection to County employment because of the bullet wound he received in 1998. Risk Management believed waiting 4 to 6 months for additional improvement was reasonable.

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Trustee Goulet asked if the applicant was already retired.

Ms. Oatman replied no, Mr. Myers only had 3 years of service with the County.

Mr. Roberson said that he believed with the 4850 time, he likely had 5 years, and that Mr. Myers had told the County in an interview that he would likely work 5 years because his family preferred Iowa.

Ms. Webb noted that staff confirmed that the applicant had 5 years of cumulative VCERA service.

Trustee Goulet asked about Mr. Roberson's statement that, when hired, the applicant had not disclosed his continuing treatment for the previous injury.

Mr. Roberson replied that the applicant had disclosed the 1998 shooting with a bullet still in his shoulder, but after he filed for a disability retirement, the County then saw that he was actively being treated in Iowa for his shoulder pain, both before and after being hired by the County of Ventura in 2013, and was taking multiple medications for his shoulder pain. Mr. Myers qualified with a shotgun when hired by the County of Ventura, but at the shooting range qualification, a Rangemaster noticed he was using an AR-15 instead of the required shotgun. In a meeting with the Sheriff's Department, Mr. Myers said shooting a shotgun hurt his shoulder and in Iowa he had been permitted to qualify with an AR-15. The County granted his request to qualify using the AR-15; on the 2nd day of the AR-15 training class, his reported injury took place and he did not return to work.

Ms. Oatman repeated her objection to any speculation that the training incident did not cause Mr. Myer's condition.

Chair Goulet said the Board had heard enough testimony from Mr. Roberson and Ms. Oatman.

Trustee Roberts noted a report had related one specific incident which caused the applicant's injury to his shoulder, but it did not mention that it was related to anything repetitive or cumulative. He asked Ms. Oatman to elaborate on that.

Ms. Oatman said the doctor's report from when the applicant first complained of the injury lacks the details of a deposition, so more details would be developed during the hearing.

Mr. Roberson then said that he would not want to misrepresent anything to the Board and explained the training in more detail, describing that several hundred rounds would be fired in total during the training.

Trustee Bennett said that the question before the Board was whether the applicant's case should go to hearing now or whether to wait and see if Mr. Myers continues to make improvements. He asked Mr. Roberson to elaborate on Risk Management's position that there is a reasonable possibility of improvement.

Mr. Roberson again referenced records regarding recent physical and occupational therapies indicating some improvement in the shoulder's range of motion for his shoulder, though the extent of the improvement was not yet known. The applicant had the recommended nerve block procedures performed in November and December, but Mr. Roberson is unaware of how much improvement Mr. Myers has had during the last couple of months.

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Ms. Oatman noted that Mr. Myers did have the nerve block procedures done in November and December 2019, but with no effective results. She added that she did not know why Risk Management did not have those reports from the Workers' Compensation case.

Trustee Bennett noted that Ms. Oatman's statement that there was no improvement conflicted with Mr. Roberson, who stated that there was.

Mr. Roberson repeated that he had seen no reports since the nerve block treatments.

Ms. Oatman said Mr. Myers' improvement would never be sufficient to return to work and that the County was employing a delay tactic to apply adverse pressure to Mr. Myers.

Mr. Roberson disagreed, saying his only goal was to see if Mr. Myers would get further improvement and, if so, how much and whether it would permit the County of Ventura to bring him back to work.

Trustee Bennett noted Ms. Oatman's assertion that Mr. Roberson had agreed that Mr. Myers could not get well enough to come back to work contradicted Mr. Roberson's statement that he did not know if Mr. Myers could get well enough to return to work. Trustee Bennett asked Mr. Roberson if Ms. Oatman's statement was accurate.

Mr. Roberson denied telling Ms. Oatman that he believed Mr. Myers would never improve enough to return to work.

Trustee Roberts asked if Mr. Myers would be willing to, or is planning to, see a CRPS specialist at UCLA, as recommended by Dr. Brazina.

Mr. Roberson said if Mr. Myers was willing to go to UCLA, Mr. Roberson would recommend to the County that it be authorized.

Ms. Oatman said that the last time Mr. Roberson said he had recommended an authorization for treatment to the County, it had taken more than five months to get approved, and she had doubts her client would believe that any authorization for treatment would be approved within a reasonable timeframe.

Trustee Roberts asked Ms. Oatman if that delay was due in part to Mr. Myers residing in Iowa rather than in California, given the complications of treating someone out of state.

Ms. Oatman replied that was a matter of dispute.

Mr. Roberson said that two doctors secured in Iowa to treat Mr. Myers later declined upon learning the treatment was for a Workers' Compensation case from California. When Risk Management ultimately secured treatment in Iowa, Mr. Myers had been traveling a couple hundred miles for treatment from his preferred doctors.

Trustee Goulet asked the Board to consider the question of whether this case should now proceed to hearing.

Trustee Bennett said that he did not think the case should proceed to hearing if there were a possibility of some recovery by Mr. Myers, though the parties were in dispute as to whether sufficient recovery for a return to work was possible. A hearing would result in a permanent finding of disability. He said it was important for the Board to cover that issue, especially considering that Mr. Myers now resides in Iowa, making assessment more difficult.

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Trustee Ashby said that he believed the issue resulted from Mr. Myers' 1998 injury from which a bullet remained in his shoulder, aggravated by firing either a rifle or shotgun. A police officer's job has an expectation to fire weapons, run obstacle courses and other pursuit exercises, and to perform to the best of their ability in training exercises and in the field. The bullet in Mr. Myers' shoulder is apparently impairing his ability, though there is some speculation otherwise, given the initial injury happened in 1998 and Mr. Myers continued his duty as a police officer. Whether the incident while employed for the County of Ventura aggravated it to the point of disability is unknown. Trustee Ashby said he agreed with Trustee Bennett that the Board needed to be sure no recovery is possible before sending the case to hearing, though if the injury stemmed from the bullet in the shoulder that cannot be removed, there was no way to know how long he could do his job if he recovered.

Trustee Sedell said he would support a motion that the case not be sent to a Hearing Officer, but rather an expedited process be mutually agreed upon by both Mr. Roberson and Ms. Oatman, with medical evidence received within a certain period of time, perhaps two months. He asked the Board for further discussion on what an appropriate time should be.

Trustee Bennett said that the difficulty was in assessing whether there has been improvement, and the two sides must collaborate and cooperate. For example, regarding authorization and treatment taking five months to get, it is unclear whether the County's delay was a result of complications with Mr. Myers' move back to Iowa. As it could take two to three months to get the relevant medical evidence, the Board should be open to a longer period of time in case of difficulty obtaining the treatment evidence in Iowa. Trustee Bennett suggested that the Board assess whether a good faith effort has been made when the case comes back to the Board to set it for hearing rather than making either party give on an issue that may be out of their control. Trustee Bennett suggested directing both parties to make a good faith effort and for the Board to assess in two or three months whether a good faith effort had been made.

Chair Goulet asked if 60 days was a sensible time frame.

Trustee Bennett suggested 90 days, given the distance to the applicant's residence.

Trustee Sedell said that once the case was presented, the Board could then decide whether to ask for an expedited hearing by the Hearing Officer. Medical evidence obtained prior to 90 days should be sent in when received.

Trustee Goulet suggested that the case be set for hearing at the Board meeting closest to 90 days from now, which Ms. Webb reported would be the May 4, 2020, disability meeting. Trustee Sedell suggested it could be earlier if both parties were ready.

After discussion by the Board, the following motion was made:

MOTION: Do Not Set for Hearing, But Direct Parties to Make a Good Faith Effort to Assess Whether Applicant Has Improved or Will Continue Improvement with Treatment; Direct Staff and Parties to Update the Board on May 4, 2020, or Earlier If the Matter Is Ready to Be Heard.

Moved by Sedell, seconded by Bennett.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

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Absent: Hintz, Wilson, Winter
Abstain: -

Ms. Oatman then asked for clarification on the motion. She said if Mr. Myers were able to get the January 2020 pain management doctor report, could the case be presented before the May 4th disability meeting.

Ms. Webb said staff would present the case earlier than May 4th if both parties agreed that the case was ready to be heard by the Board.

Trustee Ashby said that the motion was for a maximum of 90 days, but if the case was ready, it could be brought back before May 4th.

Mr. Roberson asked if Mr. Myers would be willing to be seen by Dr. Brazina, Dr. Prager or another doctor from UCLA at the County's expense for a definitive report as to whether Mr. Myers would improve and, if so, if it is enough to enable him to return to work. If Mr. Myers were so willing, Mr. Roberson said he would try to get that scheduled.

Ms. Oatman replied that she had not yet spoken to him on that issue.

Trustee Bennett suggested that issue be explored during the 90 days and that if Mr. Myers were not willing to come to California to be seen, that would be information for the Board to consider.

VI. OLD BUSINESS

A. None.

VII. NEW BUSINESS

A. Recommendation to Solicit Plan Sponsor Comment Regarding Actuary's Letter Regarding Possible Adjustment to UAAL Amortization Periods to Manage Tail Volatility.
RECOMMENDED ACTION: Approve.

1. Staff Letter.
2. Letter from Segal Consulting.

Ms. Webb said this item was a recommendation from staff to formally share Segal's letter with participating employers in advance of Board consideration of the issue at the March 30th business meeting.

After discussion by the Board, the following motion was made:

MOTION: Approve the Recommendation to Provide the Segal Consulting's Letter to the Plan Sponsors of the Ventura County Employees' Retirement Association Pension Plan in Advance of the Board of Retirement's Formal Consideration of the Item at the Business Meeting of March 30, 2020.

Moved by Sedell, seconded by Bennett.

Vote: Motion carried
Yes: Ashby, Bennett, Goulet, Roberts, Sedell

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No: -

Absent: Hintz, Wilson, Winter

Abstain: -

- B. Request for Trustee Ashby to Attend the CALAPRS Advanced Principles of Pension Management for Trustees in Los Angeles, March 30 – April 1, 2020.

RECOMMENDED ACTION: Approve.

1. Staff Letter.
2. CALAPRS Training Brochure.

MOTION: Approve Request for Authorization for Trustee Ashby to Attend the CALAPRS Advanced Principles of Pension Management for Trustees in Los Angeles, March 30 – April 1, 2020.

Moved by Sedell, seconded by Bennett.

Vote: Motion carried

Yes: Ashby, Bennett, Goulet, Roberts, Sedell

No: -

Absent: Hintz, Wilson, Winter

Abstain: -

VIII. INFORMATIONAL

- A. SACRS Spring Conference 2020 – Conference Information.

IX. PUBLIC COMMENT

None.

X. STAFF COMMENT

Ms. Webb said that in order to ensure a quorum for the upcoming meetings, staff would be asking the Board members to RSVP with each agenda posting email notice. She also said that the VCERA Conference Room was now available for the Market Based Adjustment Committee and the Personnel Review Committee to meet in.

XI. BOARD MEMBER COMMENT

None.

XII. ADJOURNMENT

The Chairman adjourned the meeting at 9:44 a.m.

Respectfully submitted,



LINDA WEBB, Retirement Administrator

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Approved,

WILLIAM W. WILSON, Chairman

**VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES**

January 2020

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE *	DEPARTMENT	EFFECTIVE DATE
REGULAR RETIREMENTS:						
Paul	Acosta	G	02/22/1998	21.78	Sheriff's Office	12/03/2019
Gina	Bauer	G	11/09/2014	2.59	Human Services Agency (deferred)	11/18/2019
Kim	Bierwolf	G	11/26/1989	28.43	Human Services Agency	12/15/2019
Denise	Biter	G	06/19/2005	14.48	Superior Court	12/13/2019
Talia	Braver				Health Care Agency (DRO, Non-Member)	01/01/2020
Peter	Brown	G	07/12/1987	5.93	District Attorney (deferred)	11/02/2019
Carolina	Chavez				Sheriff's Office (DRO, Non-Member)	12/09/2019
Debra	Creadick	G	04/08/2007	12.77	Human Services Agency	01/04/2020
Patrick	Cronan	G	07/21/2002	16.96	Sheriff's Office	12/15/2019
Sherry	Cuevas	G	07/19/1999	20.39	Assessor	12/01/2019
Centhya	Davis	G	10/20/1985	39.87	Human Services Agency	01/01/2020
Donna	Edwards	G	03/12/2001	18.43	Ventura County Retirement	12/14/2019
Cynthia	Fahey	G	08/30/1992	14.04	Health Care Agency (deferred)	01/16/2020
Darla	Ferguson	G	03/07/1999	20.79	Human Services Agency	12/21/2019
Peggy	Godina	G	09/07/1986	31.96	Health Care Agency	12/03/2019
Christina	Gray	G	01/29/1995	22.77	Health Care Agency	11/14/2019
Maria	Gutierrez	G	03/24/1985	32.98	Health Care Agency	12/04/2019
Rosalind	Harris	G	12/18/1994	34.99	General Services Agency	12/07/2019
Amelia	Hernandez	G	07/16/2006	13.38	Human Services Agency	11/30/2019
John	Hernandez	G	12/01/1996	23.01	Health Care Agency	11/30/2019
Helen	Ichinose				Human Services Agency (alt-payee)	01/01/2020
Susan	Kasser	G	04/30/2001	18.67	Superior Court	12/20/2019
Martha	Lagana	G	09/02/1979	40.17	Superior Court	12/28/2019
David	Landen	G	04/08/2007	12.56	Health Care Agency	12/05/2019
Tiffany	Le	G	04/10/1995	2.22	Human Services Agency (deferred)	11/27/2019
Sandra	Legere	G	02/07/1999	20.96	Superior Court	12/03/2019
Zuinda	Martinez	G	01/16/2007		Health Care Agency (deferred)	12/05/2019
Judith	Meyer	G	04/10/1994	1.23	District Attorney (deferred)	12/01/2019
Yolanda	Mordue	G	01/02/2002	8.08	Health Care Agency (deferred)	12/12/2019
Gloria	Moss	G	01/17/2006	11.56	Public Works Agency	12/07/2019
Cynthia	Murphree	G	04/26/1992	27.62	Human Services Agency	12/28/2019
Tamara	Nerdrum	G	05/13/2012	11.98	Health Care Agency (deferred)	12/04/2019
Julie	Pech	G	07/23/2001	18.35	Human Services Agency	12/27/2019
Arnold	Perez	G	12/04/2000	18.16	Health Care Agency	12/02/2019
Douglas	Ray	G	05/22/2005	14.42	Health Care Agency	11/27/2019
Claudia	Saldana	G	12/06/2004	10.83	Superior Court (deferred)	01/18/2020
Linda	Saucedo	G	07/24/2000	16.56	Health Care Agency	12/30/2019
Alison	Schember	G	11/17/1985	32.65	Health Care Agency	01/02/2020
Susan	Speer	G	09/21/2008	10.06	Health Care Agency	12/27/2019
Rose	Tepesano	G	09/16/1979	35.24	Human Services Agency	12/14/2019
Kasey	Wingate	S	10/15/1989	28.36	Probation Agency	12/15/2019

**VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES**

January 2020

FIRST NAME	LAST NAME	G/S	DATE OF MEMBERSHIP	BENEFIT SERVICE *	DEPARTMENT	EFFECTIVE DATE
DEFERRED RETIREMENTS:						
Adriana R	Chiquito	G	06/24/2012	7.09	Human Services Agency	11/23/2019
Lana M.	Johnson	G	09/21/2008	11.33	Resource Management Agency	01/11/2020
Ken C.	Kawaichi	G	09/11/2005	12.40	Human Services Agency	12/14/2019
Rodney	Lanthier	G	05/25/2007	12.47	Information Technology Services	12/14/2019
Steven	O'Grady	G	07/16/2009	10.33	Health Care Agency	11/09/2019
Sonia	Paz	G	12/26/2001	17.98	Human Services Agency	01/04/2020
Elson Sandoval	Molina	S	08/14/2005	14.38	Sheriff's Office	12/21/2019
Griselda	Ramos	G	10/25/2015	4.18 **	County Executive Office	12/21/2019
Kevin	Tien	G	04/18/2013	6.41	Health Care Agency	12/14/2019

SURVIVORS' CONTINUANCES:

Fidel	Cobos-Ortiz
Diane	Dowd
Daniel	Frishman
Linda	Knuth
Linda	Reimal

* = Excludes reciprocal service or service from any previous retirements
 ** = Member establishing reciprocity

Business Meeting Agenda - IV. CONSENT AGENDA:

Date: Friday, January 31, 2020
 Time: 09:05AM
 User: 104164

Ventura County Retirement Assn

Check Register - Standard

Period: 07-20 As of: 1/31/2020

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 Report: 03630.rpt
 Company: VCERA

Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post	Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:			VCERA								
Acct / Sub:	10300		000000								
028401	VC	1/8/2020	ACCESSINFO ACCESS INFORMATION PROTEC	07-20	07-20						
028402	VC	1/8/2020	ADP ADP, LLC	07-20	07-20						
028403	VC	1/8/2020	BRENTWOODI BRENTWOOD IT	07-20	07-20						
028404	VC	1/8/2020	CDWGOVERN CDW GOVERNMENT	07-20	07-20						
028405	VC	1/8/2020	COMPUWAVE COMPUWAVE	07-20	07-20						
028406	VC	1/8/2020	DIGITALDEP DIGITAL DEPLOYMENT	07-20	07-20						
028407	VC	1/8/2020	DRAGANTROL VICKIE DRAGAN	07-20	07-20						
028408	VC	1/8/2020	HARRISWATE HARRIS WATER CONDITIONING	07-20	07-20						
028409	VC	1/8/2020	HARTLEYDOR DOROTHEA W. HARTLEY & ASSC	07-20	07-20						
028410	VC	1/8/2020	LINEASOLUT LINEA SOLUTIONS	07-20	07-20						
028411	VC	1/8/2020	NOSSAMAN NOSSAMAN LLP	07-20	07-20						
028412	VC	1/8/2020	SEGALCONSU SEGAL CONSULTING	07-20	07-20						
028413	VC	1/8/2020	SHREDITUSA SHRED-IT USA	07-20	07-20						

VOIDED

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Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
028414	VC	1/8/2020	SPRUCEGROV SPRUCEGROVE INVESTMENT M	07-20 07-20						
028415	VC	1/8/2020	STAPLESADV STAPLES ADVANTAGE	07-20 07-20						
028416	VC	1/8/2020	TIMEWARNER TIME WARNER CABLE	07-20 07-20						
028417	VC	1/8/2020	WESTCOASTA WEST COAST AIR CONDITIONIN	07-20 07-20						
028418	CK	1/8/2020	ACCESSINFO ACCESS INFORMATION PROTEC	07-20	001227	VO	ADMIN EXP	1/8/2020	0.00	393.69
028419	CK	1/8/2020	ADP ADP, LLC	07-20	001228	VO	ADMIN EXP	1/8/2020	0.00	3,158.07
028420	CK	1/8/2020	BRENTWOODI BRENTWOOD IT	07-20	001229	VO	IT/CAPITAL PROJ	1/8/2020	0.00	7,245.00
028421	CK	1/8/2020	CDWGOVERN CDW GOVERNMENT	07-20	001230	VO	CAPITAL PROJ	1/8/2020	0.00	357.73
028422	CK	1/8/2020	COMPUWAVE COMPUWAVE	07-20	001231	VO	IT/CAPITAL PROJ	1/8/2020	0.00	7,584.29
028423	CK	1/8/2020	DIGITALDEP DIGITAL DEPLOYMENT	07-20	001232	VO	IT	1/8/2020	0.00	650.00
028424	CK	1/8/2020	DRAGANTROL VICKIE DRAGAN	07-20	001233	VO	ADMIN EXP	1/8/2020	0.00	6,465.17
028425	CK	1/8/2020	HARRISWATE HARRIS WATER CONDITIONING	07-20	001234	VO	ADMIN EXP	1/8/2020	0.00	119.50
028426	CK	1/8/2020	HARTLEYDOR DOROTHEA W. HARTLEY & ASSC	07-20	001235	VO	ADMIN EXP	1/8/2020	0.00	350.00

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028427	CK	1/8/2020	LINEASOLUT LINEA SOLUTIONS	07-20	001236	VO	ADMIN EXP	1/8/2020	0.00	10,879.88
028428	CK	1/8/2020	NOSSAMAN NOSSAMAN LLP	07-20	001237	VO	LEGAL FEES	1/8/2020	0.00	3,240.90
028429	CK	1/8/2020	SEGALCONSU SEGAL CONSULTING	07-20	001238	VO	ACTUARY FEES	1/8/2020	0.00	51,280.00
028430	CK	1/8/2020	SHREDITUSA SHRED-IT USA	07-20	001240	VO	ADMIN EXP	1/8/2020	0.00	207.16
028431	CK	1/8/2020	SPRUCEGROV SPRUCEGROVE INVESTMENT M	07-20	001241	VO	INVESTMENT FEES	1/8/2020	0.00	66,626.22
028432	CK	1/8/2020	STAPLESADV STAPLES ADVANTAGE	07-20	001242	VO	ADMIN EXP	1/8/2020	0.00	76.49
028433	CK	1/8/2020	TIMEWARNER TIME WARNER CABLE	07-20	001239	VO	IT	1/8/2020	0.00	294.99
028434	CK	1/8/2020	WESTCOASTA WEST COAST AIR CONDITIONIN	07-20	001243	VO	IT	1/8/2020	0.00	125.00
028435	CK	1/15/2020	ATTMOBILIT AT&T MOBILITY	07-20	001244	VO	IT	1/15/2020	0.00	435.02
028436	CK	1/15/2020	BANKOFAMER BUSINESS CARD	07-20	001245	VO	ADMIN/IT	1/15/2020	0.00	1,265.93
028437	CK	1/15/2020	BROWARMST BROWN ARMSTRONG	07-20	001246	VO	ADMIN EXP	1/15/2020	0.00	4,442.50
028438	CK	1/15/2020	CALAPRS CALAPRS	07-20	001247	VO	ADMIN EXP	1/15/2020	0.00	2,500.00
028439	CK	1/15/2020	DELLMARKET DELL MARKETING L.P.	07-20	001248	VO	IT	1/15/2020	0.00	2,994.45
028440	CK	1/15/2020	HEXAVEST HEXAVEST INC.	07-20	001249	VO	INVESTMENT FEES	1/15/2020	0.00	108,562.99

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028441	CK	1/15/2020	STAPLESADV STAPLES ADVANTAGE	07-20	001251	VO	ADMIN EXP	1/15/2020	0.00	37.70
028442	CK	1/15/2020	THOMSONREU THOMSON REUTERS- WEST	07-20	001250	VO	IT	1/15/2020	0.00	484.05
028443	CK	1/15/2020	WALTERSCOT BNY MELLON INV MGMT CAYMA	07-20	001252	VO	INVESTMENT FEES	1/15/2020	0.00	244,018.76
028444	CK	1/15/2020	WISSLEYDEB DEBORAH Z. WISSLEY	07-20	001253	VO	ADMIN EXP	1/15/2020	0.00	5,442.50
028445	CK	1/22/2020	COMPUWAVE COMPUWAVE	07-20	001254	VO	IT	1/22/2020	0.00	176.71
028446	CK	1/22/2020	HARTLEYDOR DOROTHEA W. HARTLEY & ASSC	07-20	001256	VO	ADMIN EXP	1/22/2020	0.00	2,182.50
028447	CK	1/22/2020	KALISHER ART IS LOVE, LLC	07-20	001257	VO	ADMIN EXP	1/22/2020	0.00	2,246.59
028448	CK	1/22/2020	LINEASOLUT LINEA SOLUTIONS	07-20	001258	VO	ADMIN EXP	1/22/2020	0.00	12,651.75
028449	CK	1/22/2020	LOOMISSAYL LOOMIS, SAYLES & COMPANY, L	07-20	001259	VO	INVESTMENT FEES	1/22/2020	0.00	134,440.49
028450	CK	1/22/2020	MFDAILYCOR M.F. DAILY CORPORATION	07-20	001260	VO	CAPITAL PROJECT	1/22/2020	0.00	16,245.16
028451	CK	1/22/2020	REAMSASSET SCOUT INVESTMENTS, INC	07-20	001262	VO	INVESTMENT FEES	1/22/2020	0.00	146,305.00
028452	CK	1/22/2020	TEAMLEGAL TEAM LEGAL, INC.	07-20	001261	VO	ADMIN EXP	1/22/2020	0.00	39.00
028453	CK	1/22/2020	VITECHSYST VITECH SYSTEMS GROUP, INC.	07-20	001264	VO	IT	1/22/2020	0.00	17,710.00

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Check Nbr	Check Type	Check Date	Vendor ID Vendor Name	Period To Post Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
028454	CK	1/29/2020	ABBOTTCAP ABBOTT CAPITAL MANAGEMENT	07-20	001265	VO	INVESTMENT FEE	1/29/2020	0.00	97,927.00
028455	CK	1/29/2020	DYNAMICSSL DYNAMICS COMMUNITIES, INC	07-20	001266	VO	ADMIN EXP	1/29/2020	0.00	450.00
028456	CK	1/29/2020	GANJIANPOU MARK GANJIANPOUR M.D.	07-20	001267	VO	ADMIN EXP	1/29/2020	0.00	2,350.00
028457	CK	1/29/2020	MEGAPATH FUSION CLOUD COMPANY, LLC	07-20	001269	VO	IT	1/29/2020	0.00	595.57
028458	CK	1/29/2020	MFDAILYCOR M.F. DAILY CORPORATION	07-20	001268	VO	ADMIN EXP	1/29/2020	0.00	1,831.77
028459	CK	1/29/2020	NOSSAMAN NOSSAMAN LLP	07-20	001270	VO	LEGAL FEES	1/29/2020	0.00	9,887.40
028460	CK	1/29/2020	STROUDES STROUD DESIGN, INC	07-20	001271	VO	ADMIN EXP	1/29/2020	0.00	1,546.31
028461	CK	1/29/2020	TIMEWARNER TIME WARNER CABLE	07-20	001272	VO	IT	1/29/2020	0.00	294.99

Check Count: 61

Acct Sub Total: 976,118.23

Check Type	Count	Amount Paid
Regular	44	976,118.23
Hand	0	0.00
Electronic Payment	0	0.00
Void	17	0.00
Stub	0	0.00
Zero	0	0.00
Mask	0	0.00
Total:	61	976,118.23

Company Disc Total 0.00 Company Total 976,118.23

*Ventura County Employees' Retirement Association
Statement of Fiduciary Net Position
As of December 31, 2019 (Unaudited)*

Assets

Cash & Cash Equivalents **\$105,813,162**

Receivables

Interest and Dividends	4,811,947	
Securities Sold	16,921,213	
Miscellaneous	25,951	
Total Receivables	21,759,111	21,759,111

Investments at Fair Value

Domestic Equity	1,782,288,873	
Non U.S. Equity	999,209,876	
Global Equity	693,538,318	
Fixed Income	1,148,989,391	
Private Equity	543,692,569	
Real Assets	894,362,577	
Cash Overlay	94,548	
Total Investments	6,062,176,153	6,062,176,153

**Capital Assets,
Net of Accumulated Depreciation & Amortization** **10,913,390**

Total Assets **6,200,661,815**

Liabilities

Securities Purchased	24,166,774	
Accounts Payable	1,739,143	
Tax Withholding Payable	3,407,416	
Deferred Revenue (PrePaid Contributions)	94,205,279	
Total Liabilities	123,518,612	123,518,612

Total Liabilities **123,518,612**

Net Position Restricted for Pensions **\$6,077,143,203**

***Ventura County Employees' Retirement Association
Statement of Changes in Fiduciary Net Position
For The Six Months Ending December 31, 2019 (Unaudited)***

ADDITIONS**Contributions**

Employer	\$97,368,782	
Employee	36,391,193	
Total Contributions	<u>36,391,193</u>	133,759,975

Investment Income

Net Appreciation (Depreciation) in Fair Value of Investments	349,679,671	
Interest Income	13,562,146	
Dividend Income	4,600,661	
Other Investment Income	(452,795)	
Real Estate Operating Income, Net	10,175,442	
Security Lending Income	1,651,788	
Total Investment Income	<u>379,216,914</u>	

Less Investment Expenses

Management & Custodial Fees	10,023,497	
Other Investment Expenses	227,847	
Securities Lending Borrower Rebates	1,355,093	
Securities Lending Management Fees	100,348	
Total Investment Expenses	<u>11,706,784</u>	

Net Investment Income/(Loss)	<u>367,510,130</u>
-------------------------------------	--------------------

Total Additions	501,270,105
------------------------	--------------------

DEDUCTIONS

Benefit Payments	152,357,550	
Member Refunds and Death Benefit Payments	2,871,134	
Administrative Expenses	2,602,530	
Other Expenses	1,655,846	
Total Deductions	<u>159,487,061</u>	

Net Increase/(Decrease)	341,783,045
--------------------------------	--------------------

Net Position Restricted For Pensions

Beginning of Year	<u>5,735,360,159</u>
--------------------------	----------------------

Ending Balance	<u><u>\$6,077,143,204</u></u>
-----------------------	-------------------------------

***Ventura County Employees' Retirement Association
Investments, Cash, and Cash Equivalents
As of December 30, 2019 (Unaudited)***

	Investments	Cash & Cash Equivalents
Equity		
Domestic Equity		
Blackrock - Russell 1000	\$1,478,332,364	\$0
Blackrock - Russell 2500	70,598,890	0
Western Asset Enhanced Equity Index Plus	233,357,619	17,141,654
Total Domestic Equity	1,782,288,873	17,141,654
Non U.S. Equity		
Blackrock - ACWI ex - US	510,579,546	0
Hexavest	98,371,757	0
Sprucegrove	240,872,280	0
Walter Scott	149,386,293	0
Total Non U.S. Equity	999,209,876	0
Global Equity		
Blackrock - ACWI Index	693,538,318	0
Total Global Equity	693,538,318	0
Fixed Income		
Blackrock - Bloomberg Barclays Aggregate Index	244,960,616	0
Loomis Sayles Multi Sector	88,426,045	1,749,067
Loomis Sayles Strategic Alpha	48,739,417	0
Reams	333,072,829	10
Reams - US Treasury	105,432,174	17,174
Western Asset Management	328,358,309	4,731,151
Total Fixed Income	1,148,989,391	6,497,402
Private Equity		
Abry Partners	2,249,834	0
Abbott Secondaries	18,793,931	0
Adam Street	183,170,310	0
Advent Int'l	1,088,599	0
Astorg	907,512	0
Battery Ventures	10,253,152	0
Blue Bay	8,818,016	0
Bridge Debt Strategies	15,318,397	0
Buenaventure One	31,717,466	0
Buenaventure Two	308,982	0
Carval Investors	23,777,179	0
Clearlake Investors	9,024,698	0
GGV Capital	4,254,035	0
Drive Capital	18,420,678	0
ECl 11 GP LP	2,572,846	0
Genstar Capital	2,449,919	0
GTCR Fund XII	8,886,792	0
Harbourvest	101,177,887	0
Hellman & Friedman	799,881	0
Insight Ventures	23,708,801	0
MC Partners	799,881	0
Monroe Capital	17,723,944	0
Oak/HC/FT	953,043	0
Pantheon	37,906,366	0
Pimco	8,250,000	0
Resolute Fund IV LP	8,045,818	0
The Riverside Fund V LP	1,780,559	0
TA XIII-A	1,460,078	0
Total Private Equity	543,692,569	0

***Ventura County Employees' Retirement Association
Investments, Cash, and Cash Equivalents
As of December 30, 2019 (Unaudited)***

	<u>Investments</u>	<u>Cash & Cash Equivalents</u>
Real Assets		
Prudential Real Estate	165,564,252	0
LaSalle	0	0
UBS Realty	268,958,024	0
Bridgewater All Weather	348,680,462	0
Tortoise (MLPs)	111,159,839	2,693,026
Total Real Assets	<u>894,362,577</u>	<u>2,693,026</u>
Parametric (Cash Equitization)	94,555	40,262,215
State Street Bank and Trust	(6)	37,645,641
County Treasury and Bank of America		1,573,224
Total Investments, Cash, and Cash Equivalents	<u><u>\$6,062,176,153</u></u>	<u><u>\$105,813,162</u></u>

*Ventura County Employees' Retirement Association
Schedule of Investment Management Fees
For the Five Months Ending December 31, 2019 (Unaudited)*

Equity Managers**Domestic Equity**

Blackrock - Russell 1000	\$70,115
Blackrock - Russell 2500	5,060
Western Asset Enhanced Equity Index Plus	208,153
Total Domestic Equity	283,328

Non U.S. Equity

Blackrock - ACWI ex - US	241,688
Hexavest	211,762
Sprucegrove	394,746
Walter Scott	476,261
Total Non U.S. Equity	1,324,457

Global Equity

Blackrock - ACWI Index	131,502
Total Global Equity	131,502

Fixed Income Managers

Blackrock Bloomberg Barclays Aggregate Index	59,324
Loomis Sayles Multi Sector	170,340
Loomis Sayles Strategic Alpha	97,420
Reams Asset Management	286,141
Reams US Treasury	5,350
Western Asset Management	288,827
Total Fixed Income	907,403

Private Equity

Abbott Secondary Opportunities	118,524
Abry Partners	124,256
Adams Street	1,023,875
Advent Int'l	49,068
Battery Ventures	146,853
Blue Bay	118,891
Carval, CVI A Fund	99,000
Clearlake	21,667
Drive Capital	187,500
ECI 11 GP LP	24,400
Genstar	577
GGV Capital	76,625
GTCR XII/A & B	191,039
Harbourvest	908,191
Hellman & Friedman	61,968
Insight Venture Partners	203,210
Monroe Capital	149,131
Pantheon	272,154
Pimco	
Resolute Fund	94,180
Riverside	205,302
Total Private Equity	4,076,410

Real Assets

Prudential Real Estate Advisors	690,310
LaSalle	
UBS Realty	972,704
Bridgewater All Weather	627,735
Tortoise (MLPs)	355,170
Total Real Assets	2,645,919

*Ventura County Employees' Retirement Association
Schedule of Investment Management Fees
For the Five Months Ending December 31, 2019 (Unaudited)*

Cash Overlay (Parametric)	82,057
Securities Lending	
Borrower's Rebate	1,355,093
Management Fees	100,348
Total Securities Lending	<u>1,455,441</u>
Other	
Investment Consultant (NEPC)	155,000
Investment Consultant (Abbott Capital)	250,000
Investment Custodian (State Street)	167,422
Total Other Fees	<u>572,422</u>
Total Investment Management Fees	<u><u>\$11,478,937</u></u>



February 24, 2020

Presented by: Saguna Malhotra and Scott Hazen, CFA





Confidentiality Statement and Other Important Considerations

As of February 2020

Adams Street Partners has provided this presentation (the "Presentation") to the recipient on a confidential and limited basis. This Presentation is not an offer or sale of any security or investment product or investment advice. Offerings are made only pursuant to a private offering memorandum containing important information regarding risk factors, performance, and other material aspects of the applicable investment; the information contained herein should not be used or relied upon in connection with the purchase or sale of any security.

Statements in the Presentation are made as of the date of the Presentation unless stated otherwise, and there is no implication that the information contained herein is correct as of any time subsequent to such date. All information with respect to primary and secondary investments of Adams Street Partners' funds (the "Funds") or Adams Street Partners' managed accounts (collectively, the "Investments"), the Investments' underlying portfolio companies, Fund portfolio companies, and industry data has been obtained from sources believed to be reliable and current, but accuracy cannot be guaranteed.

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The internal rate of return (IRR) data and multiples provided in the Presentation are calculated as indicated in the applicable notes to the Presentation, which notes are an important component of the Presentation and the performance information contained herein. IRR performance data may include unrealized portfolio investments; there can be no assurance that such unrealized investments will ultimately achieve a liquidation event at the value assigned by Adams Street Partners or the General Partner of the relevant Investment, as applicable. Any fund-level net IRRs and net multiples presented herein for the 2015 Global Program Funds and all subsequently formed commingled Funds reflect the use of the Fund's capital call credit line (or, in the case of an Adams Street Global Fund, capital call credit lines of the underlying Funds) and are calculated using limited partner capital call dates, rather than the earlier dates on which the investment was made using the line of credit. The use of such dates generally results in higher net IRR and net multiple calculations, and the related differences in net IRR and net multiple figures could be material.

Any target returns presented herein are based on Adams Street Partners models. There is no guarantee that targeted returns will be realized or achieved or that an investment strategy will be successful. Investors should keep in mind that the securities markets are volatile and unpredictable. There are no guarantees that the historical performance of an investment, portfolio, or asset class will have a direct correlation with its future performance.

Past performance is not a guarantee of future results. Projections or forward-looking statements contained in the Presentation are only estimates of future results or events that are based upon assumptions made at the time such projections or statements were developed or made. There can be no assurance that the results set forth in the projections or the events predicted will be attained, and actual results may be significantly different from the projections. Also, general economic factors, which are not predictable, can have a material impact on the reliability of projections or forward-looking statements.

References to the Investments and their underlying portfolio companies and to the Funds should not be considered a recommendation or solicitation for any such Investment, portfolio company, or Fund. Any case studies included in this presentation are for illustrative purposes only and have been selected to provide, among other things, examples of investment strategy and/or deal sourcing. These investments do not represent all the investments that may be selected by Adams Street Partners with respect to a particular asset class or a particular Fund or account.

Introduction



Saguna Malhotra
Partner, Primary Investments

Education: University of Pennsylvania,
The Wharton School, BS

Years of Investment/
Operational Experience: 24



Scott Hazen, CFA[®]
Partner, Investor Relations

Education: University of Notre Dame,
BBA, magna cum laude
University of Chicago
Booth School of Business, MBA

Years of Investment/
Operational Experience: 28



Topics for Discussion

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VCERA Portfolio Review	10
PE Market Outlook	19
Ways to Access Adams Street	29
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Adams Street Update



Investing with Adams Street Partners

Global Private Markets Platform

- Employee-owned
- 45+ years of experience
- \$40 billion in assets under management
- Highly integrated platform with shared insights

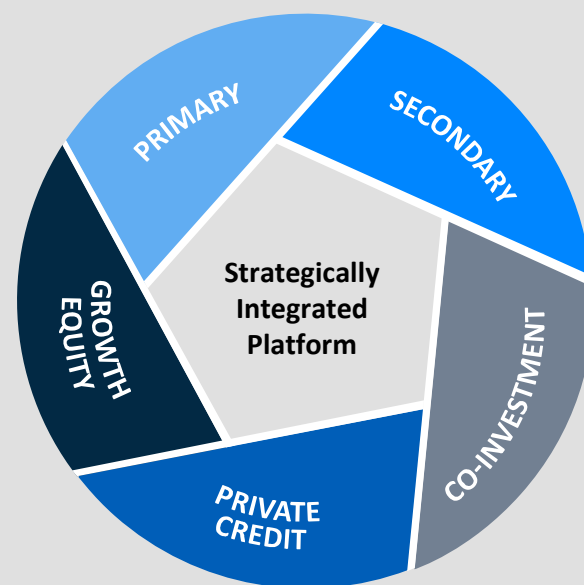
Robust Investment Process

- Disciplined and coordinated investment process
- Top-down, bottom-up analysis
- Consistent outperformance through market cycles

Exemplary Client Service

- Client-based solutions are a strategic focus for Adams Street since inception
- Deep understanding of institutional client needs
- Client access to industry-leading analytical tools and data

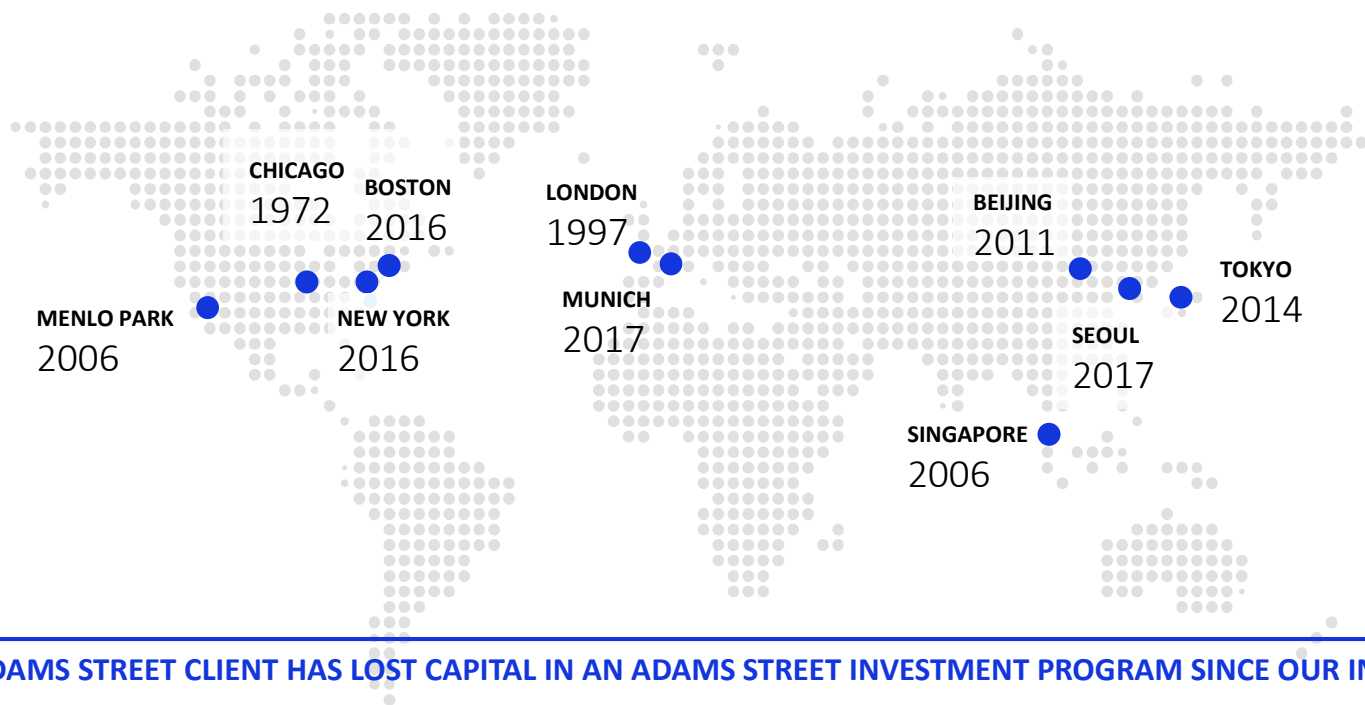
No Adams Street client has lost capital in an Adams Street investment program since our inception





We Have a Global Footprint

Adams Street Partners is a global private markets investment manager with \$40 billion of assets under management across five dedicated strategies: **primary investments**, **secondary investments**, **co-investments**, **growth equity** and **private credit**. With ten offices located around the world, we have an excellent vantage point to access potential areas of growth.





Experienced, Cohesive, and Strategically Integrated Platform



Jeff Diehl
 Managing Partner &
 Head of Investments
 25 Years of Experience*



Bon French
 Chairman
 42 Years of Experience*

PRIMARY INVESTMENTS - \$28.1BN AUM

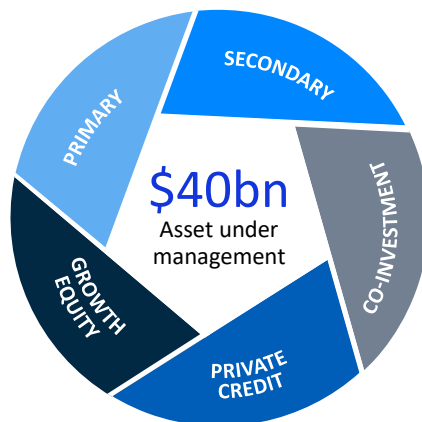
Provider of LP capital commitments to sponsors since 1979



Kelly Meldrum

- 980+ funds
- 330+ GP relationships
- 490+ advisory boards
- 28 Professionals

Partner & Head of Primary Investments
 35 Years of Experience*



SECONDARY INVESTMENTS - \$6.6BN AUM

Purchaser of secondary LP interests since 1986



Jeff Akers

- 460+ funds
- 190+ GP relationships
- 14 Professionals

Partner & Head of Secondary Investments
 22 Years of Experience*

GROWTH EQUITY - \$2.0BN AUM

Provider of long term capital to growth stage companies since 1972



Terry Gould

- 280+ companies
- 10 Professionals

Partner & Head of Growth Equity Investments
 39 Years of Experience*

CO-INVESTMENTS - \$2.6BN AUM

Provider of direct equity co-investments to sponsor-backed transactions since 1989



David Brett

- 150+ companies
- 100+ GP relationships
- 7 Professionals

Partner & Head of Co-Investments
 35 Years of Experience*

PRIVATE CREDIT - \$1.2BN INVESTABLE CAPITAL¹

Provider of debt financing solutions to private equity-backed transactions



Bill Sacher

- 250+ GP relationships
- 10 Professionals

Partner & Head of Private Credit
 35 Years of Experience*

*Investment and Operational
 As of September 30, 2019

8 1. Private Credit investable capital including anticipated leverage is \$1.2bn, client-level Assets Under Management (AUM) is \$0.7bn.



Deep Expertise Around the World



Jeff Diehl
Managing Partner & Head of Investments
Chicago



Bon French
Chairman
Chicago

FUND INVESTMENTS						DIRECT INVESTMENTS				
Primary			Secondary			Co-Investment		Growth Equity		Private Credit
Kelly Meldrum Head of Primary Investments Menlo Park			Jeff Akers Head of Secondary Investments Chicago			Dave Brett Head of Co-Investments Chicago	Terry Gould Head of Growth Equity Investments Chicago		Bill Sacher Head of Private Credit New York	
Matthew Auran Menlo Park	Mark Hourihan Boston	Calum Paterson London	Troy Barnett Chicago	Pinal Nicum London		Paul Cappelli Chicago	TJ Biegger Chicago	Robin Murray Menlo Park	Shahab Rashid New York	
Matt Autrey Chicago	Yimin Huang Beijing	Sergey Sheshuryak London	Samuel Gage Chicago	Kushal Shah London		Adam Gajewski Chicago	Tom Bremner Chicago	Luke Prioleau Menlo Park	Michael Allen New York	
Alex Bozoglou London	Jim Korczak Chicago	Brandon Shirk Chicago	Joe Goldrick Chicago	Alexander Silver London		Alex Kessel Chicago	Sarah Collins Menlo Park	Fred Wang Menlo Park	Fred Chung New York	
Jeff Burgis Chicago	Brijesh Jeevarathnam Menlo Park	Yar-Ping Soo Singapore	Greg Holden London	Mark Terwilliger Chicago		Carol Rusin London	Jeff Diehl Chicago		Dennis Kan New York	
Spencer Chernus Menlo Park	Marcus Lindroos Menlo Park	Alexander Tatham Chicago	Elizabeth Huizenga Chicago	Arjun Thakkar Chicago		Benjamin Wallwork London	Brian Dudley Menlo Park		Justin Lawrence New York	
Mattias de Beau London	Saguna Malhotra Menlo Park	Cheng Kai Tay Singapore	Eric Klen Chicago	Faylynn Wang London		Craig Waslin Chicago	Todd Havill Chicago		Nolan Pauker New York	
Jonathan Goh Singapore	Sam McCartney Chicago	Michael Taylor New York	Clinton Miller Chicago						Emily Shiau New York	
Doris (Yiyang) Guo Beijing	Sunil Mishra Singapore	Andy Wang Beijing							Ervis Vukaj New York	
Morgan Holzaepfel Boston	Ross Morrison London	Ling Jen Wu Singapore							Matthew Wachtel New York	

INVESTMENT STRATEGY AND RISK MANAGEMENT



Miguel Gonzalo
Head of Investment Strategy and Risk Management
Chicago



Luke Frey
Chicago



Alex Lesch
Chicago



Alex Storer
Chicago



Jana Tortora
Chicago



Toby True
Chicago



Jian Zhang
Chicago

VCERA Portfolio Review





Ventura County Employees' Retirement Association

Adams Street Private Equity Program

- Strong absolute and relative performance, net of all fees, since 2010*

	1 Year net IRR	3 Year net IRR	5 Year net IRR	Since inception net IRR
VCERA	10.2%	14.9%	13.0%	12.9%
MSCI ACWI	2.3%	10.1%	7.6%	8.7%

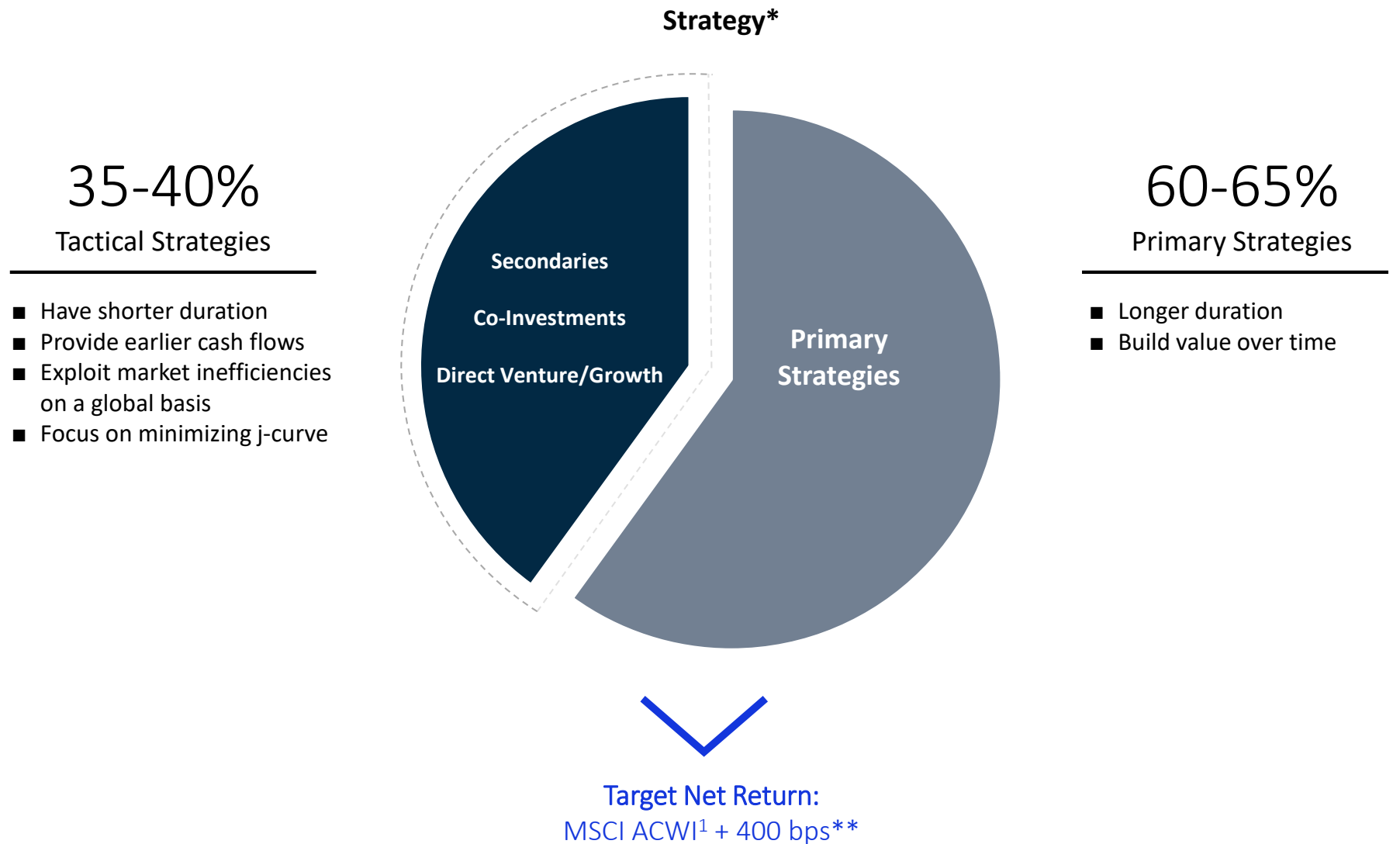
- VCERA has built a successful PE program through a disciplined investment pace
- Globally diversified portfolio across strategies and sub-asset classes
- Portfolio has grown significantly since inception:
 - \$175 million paid-in
 - \$78 million received in distributions
 - \$188 million in remaining value
 - 1.5x Total Value to Paid-In

VCERA IS A STRATEGICALLY IMPORTANT RELATIONSHIP TO ADAMS STREET PARTNERS



Building Value While Maximizing IRR

Constructing VCERA's Global Private Equity Program



* Actual allocations will differ once the Program is fully invested.

** The targeted annual net return (after Adams Street Partners' fees, expenses and carried interest) is only a target. There can be no guarantee that the 2020 Global Private Equity Program will achieve returns in the targeted range.

12 1. MSCI ACWI (All Country World Index) captures large and mid cap representation across Developed and Emerging Markets countries.



Ventura County Employees' Retirement Association

Subscriptions to Adams Street: \$250,000,000

Total portfolio as of September 30, 2019

	Subscription	Amount Drawn	Market Value (NAV)	Distributions Received (D)	Total Value (NAV + D)	Net IRR 3-Year	Net IRR 5-Year	Net IRR Since Inception	Inception Date	Total Value / Amount Drawn
ASP 2010 Global Program	\$85,000,000	\$75,467,249	\$69,582,309	\$60,926,404	\$130,508,713	14.76%	13.38%	13.29%		1.73x
ASP 2010 US Fund	\$42,500,000	\$37,442,500	\$38,418,498	\$29,417,857	\$67,836,355	14.13%	13.96%	14.52%	5/2010	1.81x
ASP 2010 Non-US Developed Fund	\$25,500,000	\$22,325,249	\$16,319,281	\$19,382,964	\$35,702,245	18.47%	14.08%	12.15%	5/2010	1.60x
ASP 2010 Emerging Markets Fund	\$8,500,000	\$7,633,000	\$10,156,295	\$2,514,266	\$12,670,561	12.03%	12.47%	11.07%	1/2011	1.66x
ASP 2010 Direct Fund	\$8,500,000	\$8,066,500	\$4,688,235	\$9,611,317	\$14,299,552	11.84%	10.06%	12.61%	5/2010	1.77x
ASP 2013 Global Fund	\$75,000,000	\$61,350,000	\$77,097,508	\$13,610,624	\$90,708,132	15.42%	12.28%	11.98%	6/2013	1.48x
ASP 2016 Global Fund	\$60,000,000	\$31,620,000	\$34,220,188	\$3,621,043	\$37,841,231	14.86%	N/A	15.20%	8/2016	1.20x
ASP Program Participant Total	\$220,000,000	\$168,437,249	\$180,900,005	\$78,158,071	\$259,058,076	15.04%	13.06%	12.96%		1.54x
Co-Investment IV A	\$30,000,000	\$6,900,000	\$7,038,691	\$0	\$7,038,691	N/A	N/A	2.59%	9/2018	1.02x
Grand Total	\$250,000,000	\$175,337,249	\$187,938,696	\$78,158,071	\$266,096,767	14.90%	12.98%	12.91%		1.52x

	Committed / Subscription	Drawn / Subscription	Distributed / Drawn
2010 Program	100%	89%	81%
2013 Program	100%	82%	22%
2016 Program	100%	53%	11%
Co-Investment IV	100%	23%	0%
Grand Total	100%	70%	45%

October 1, 2019 – February 14, 2020

Draws: \$2,760,000

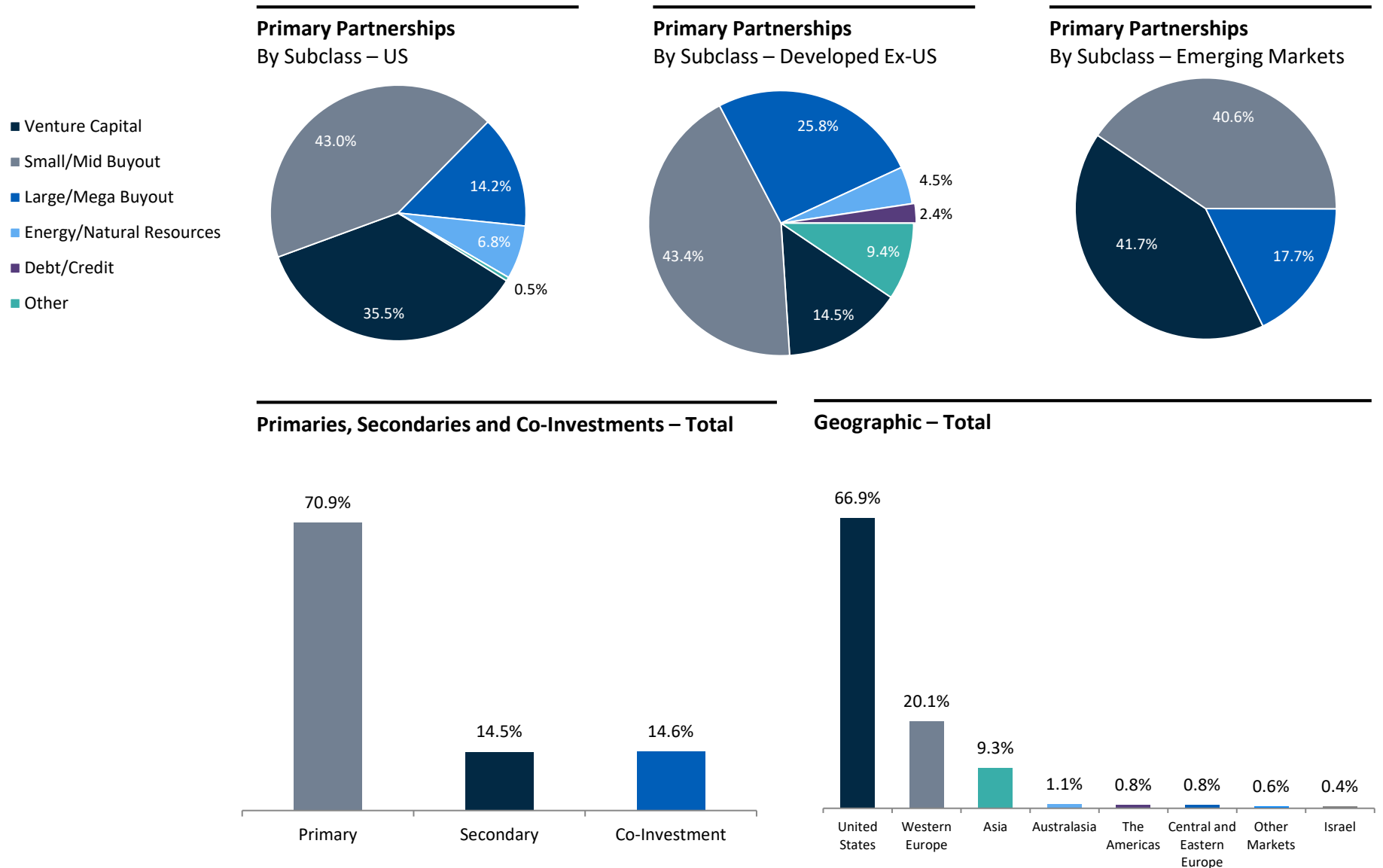
Distributions: \$6,248,254



Ventura County Employees' Retirement Association

Diversification of investment commitments*

Total portfolio as of September 30, 2019



14 * Calculated by applying the participant's respective ownership percentage to the underlying investment commitments.



Ventura County Employees' Retirement Association

Annualized General Partnership Returns (net of their fee and carry)

As of September 30, 2019

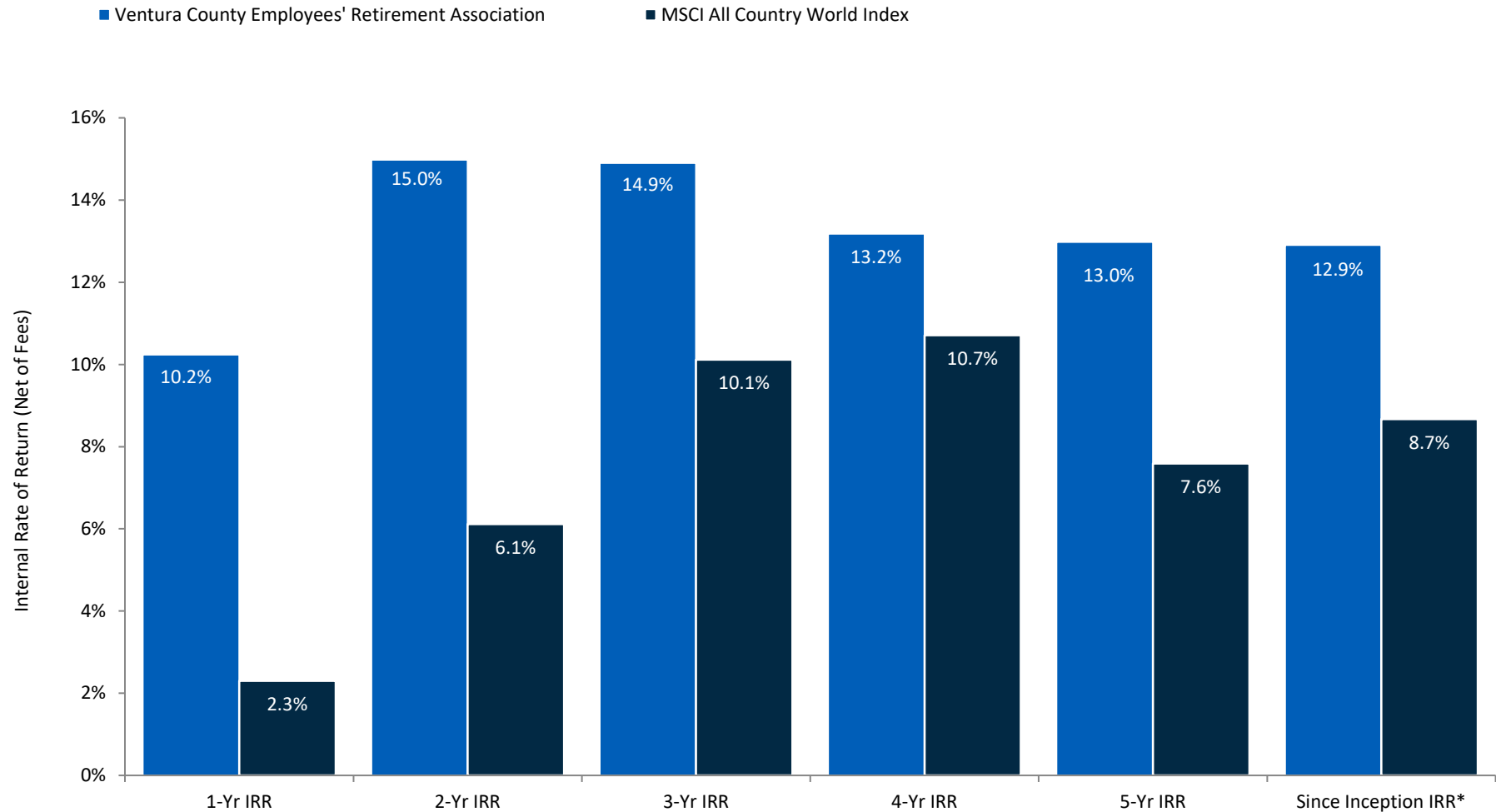
	Subclass Allocation		VCERA Annualized GP Returns		
	Committed %	NAV %	3-Year	5-Year	Since Inception
All Private Equity	100.0%	100.0%	16.0%	14.4%	15.4%
Venture Capital	27.1%	41.1%	17.4%	16.2%	16.6%
Early/Seed Stage	11.3%	21.2%	20.8%	20.9%	21.6%
Later/Multi Stage	15.8%	19.9%	14.5%	13.0%	13.7%
Buyout	72.9%	58.9%	17.0%	15.6%	16.6%
Buyout - Small/Mid	40.8%	32.6%	17.1%	16.7%	16.6%
Buyout - Large/Mega	21.7%	17.6%	16.9%	13.7%	16.6%
Other*	10.4%	8.7%	6.5%	3.7%	6.1%
Primaries	70.9%	83.0%	16.8%	15.9%	15.6%
Secondaries	14.5%	8.9%	10.8%	6.5%	14.4%
Co-Investments	14.6%	8.0%	15.7%	14.6%	18.3%



Ventura County Employees' Retirement Association

Intraperiod returns as compared to benchmark data

Total portfolio as of September 30, 2019

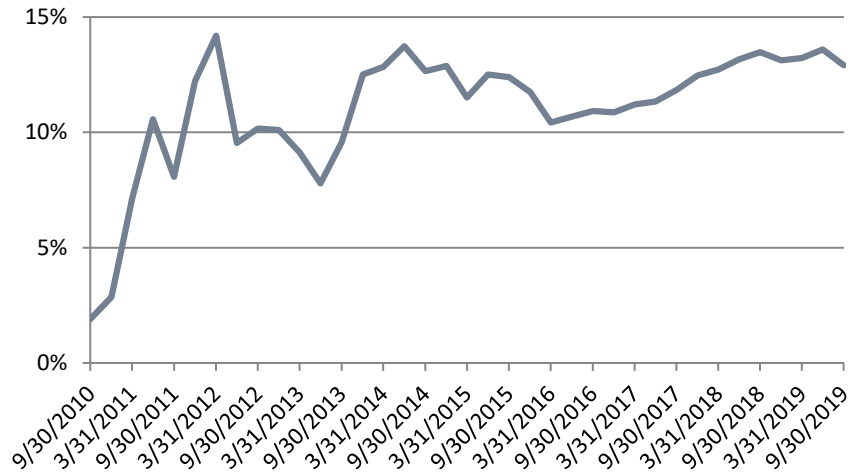




Ventura County Employees' Retirement Association

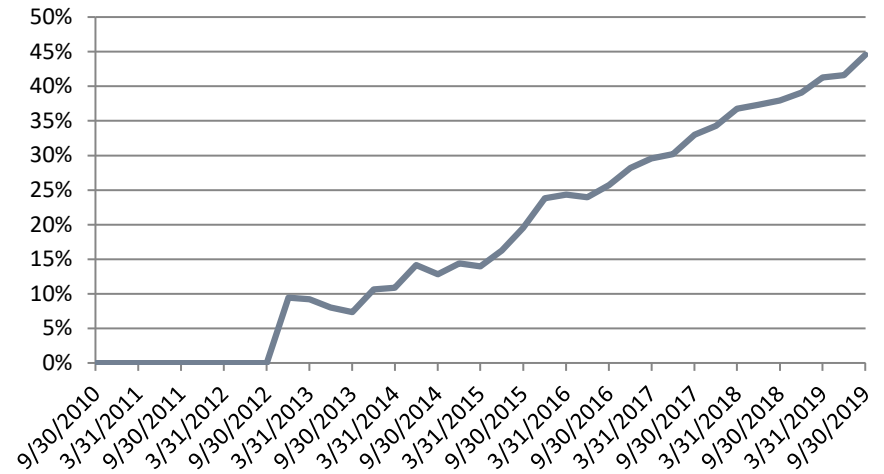
Net IRR

As of September 30, 2019



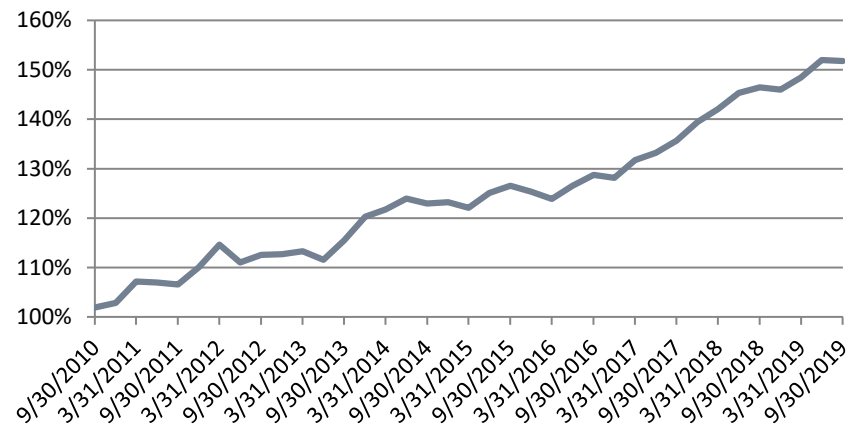
Net DPI

As of September 30, 2019



Net TVPI

As of September 30, 2019



- Portfolio moved quickly through j-curve due to secondaries, value now being driven by maturing primaries
- Portfolio is 100% committed and 70% drawn
- Distribution activity continues to ramp up, now at 45% of drawn capital



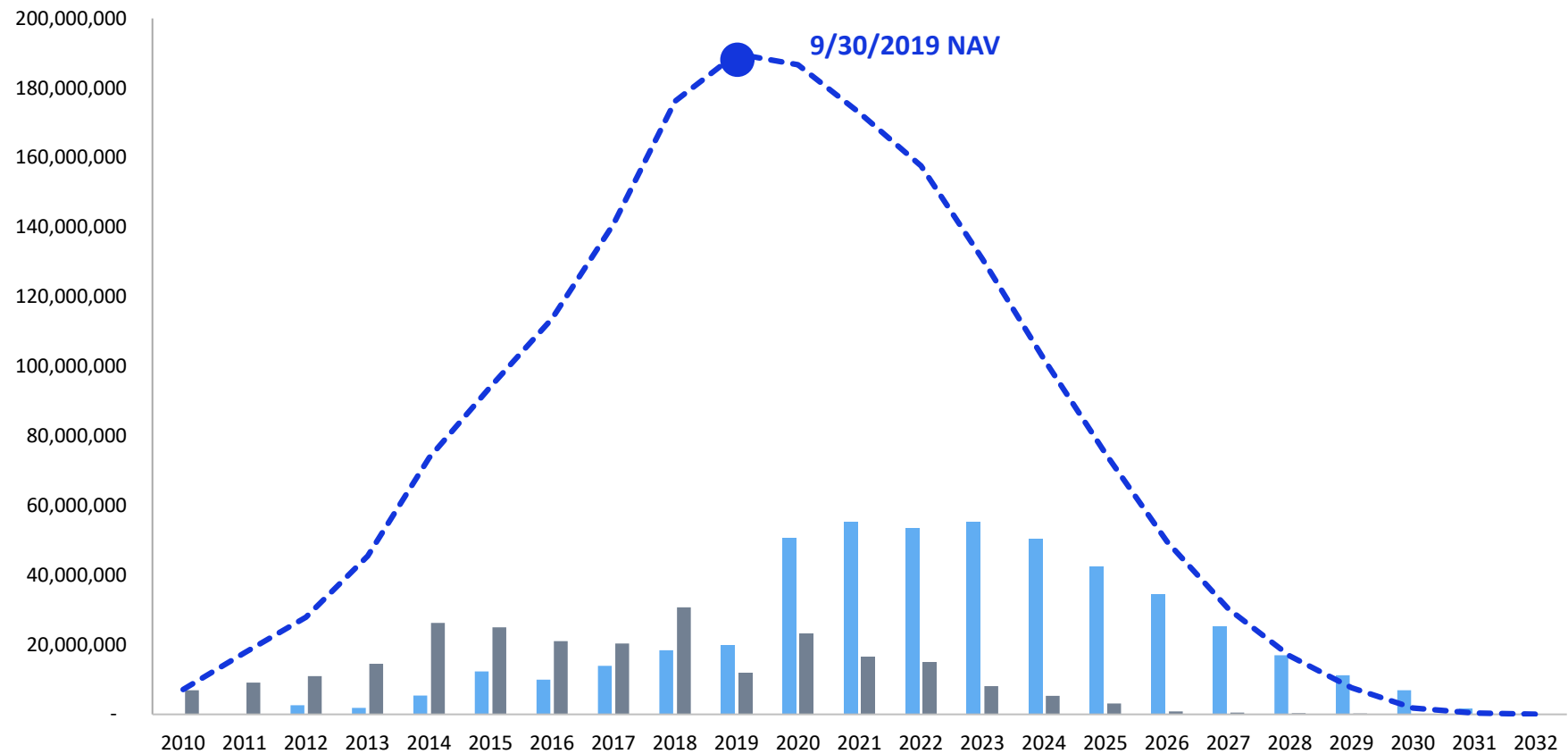
Ventura County Employees' Retirement Association

NAV should plateau in 2020, and then decline as distributions increase and calls decrease

Net asset value, capital calls and distributions (actual and projected)

Represents existing Adams Street Partners subscriptions, as of September 30, 2019

■ Distributions
 ■ Capital Calls
 - - - Net Asset Value



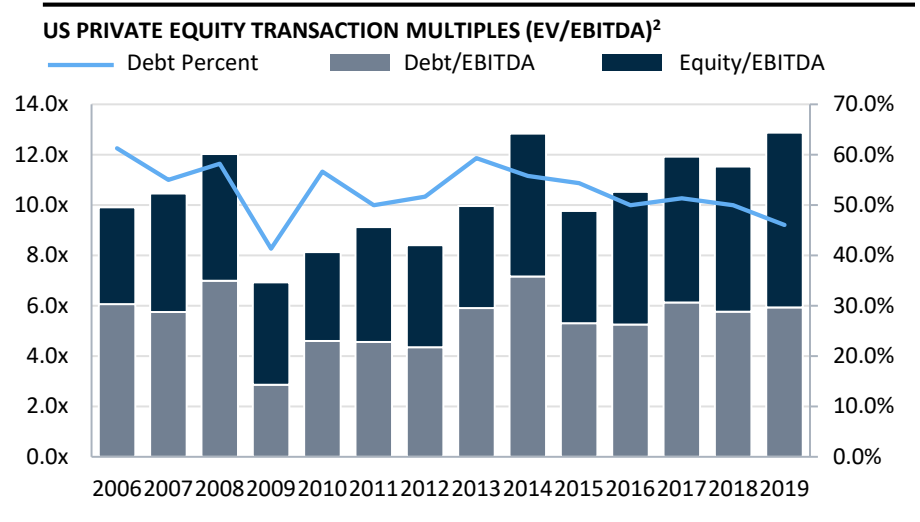
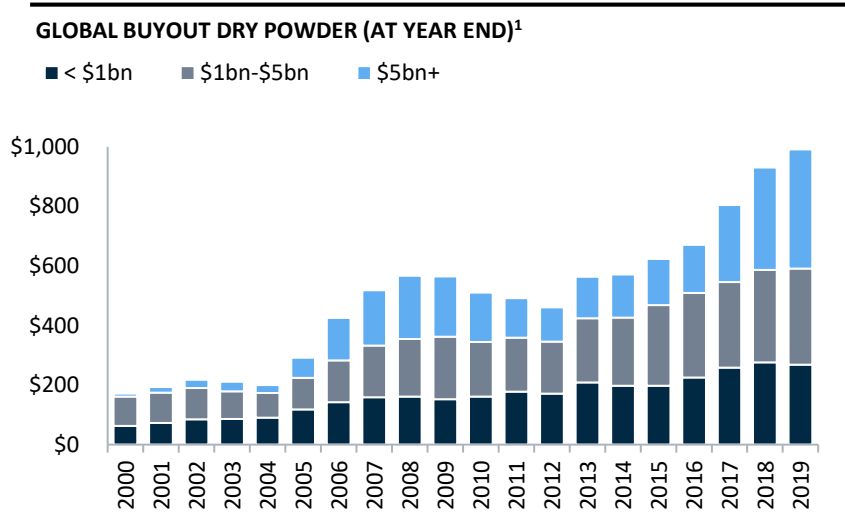
PE Market Outlook





Current State of the Private Equity Market

- Strong global private equity returns and distributions driving interest from investors
- Dry powder continues to rise driven by record fundraising, particularly in the large and mega funds
- High valuations pose a challenge for new deals, making it essential to have an “angle” in order to win
 - Valuations are supported by abundant leverage availability
 - Industry expertise and operating capabilities increasingly important, particularly in developed markets



- Commonly held belief is we are “late cycle”
 - Many managers are “de-risking” their portfolios through partial sales of portfolio companies or dividend recaps
- Adams Street’s Position
 - We remain highly selective and disciplined in current climate
 - Adams Street’s emphasis on growth-oriented strategies and modestly levered capital structures mitigates impact of economic cyclicality
 - We are selectively backing managers with a value-orientation or turnaround experience to position for any downturn

1. Source: Preqin as of October 2019
 2. Source: Pitchbook US PE Breakdown September 30, 2019



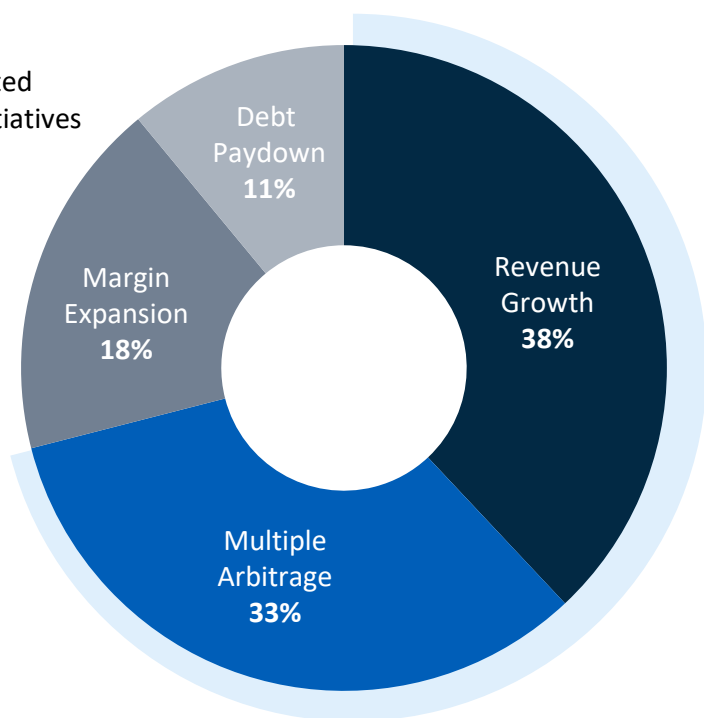
Building Value Through Growth

Representative company level value creation

Adams Street US SMB Portfolio Value Creation ¹

~70%

of value generated from growth initiatives



Median Fundamental Performance Data (\$ millions) ¹

Metric	At Entry	At Exit
Revenue	\$57.5	\$129.1
EBITDA	\$10.1	\$28.7
EV / EBITDA	7.4x	9.4x

This chart provides a hypothetical example of the component drivers of value creation in a hypothetical portfolio company of a hypothetical small market buyout fund and is for illustrative purposes only. This hypothetical example is based on Adams Street's analysis of value creation trends in a group of 400 liquidated US portfolio companies of small market buyout funds managed by managers in whose funds Adams Street has invested. This data set includes portfolio companies of specific funds in which Adams Street has not invested. There can be no assurance that portfolio companies of the small market buyout funds in which Adams Street invests will experience value creation due to the factors indicated above.

21 A complete list of investments is available upon request.

Current Investment Themes Inform Our Manager Selection

US Small Market Buyout

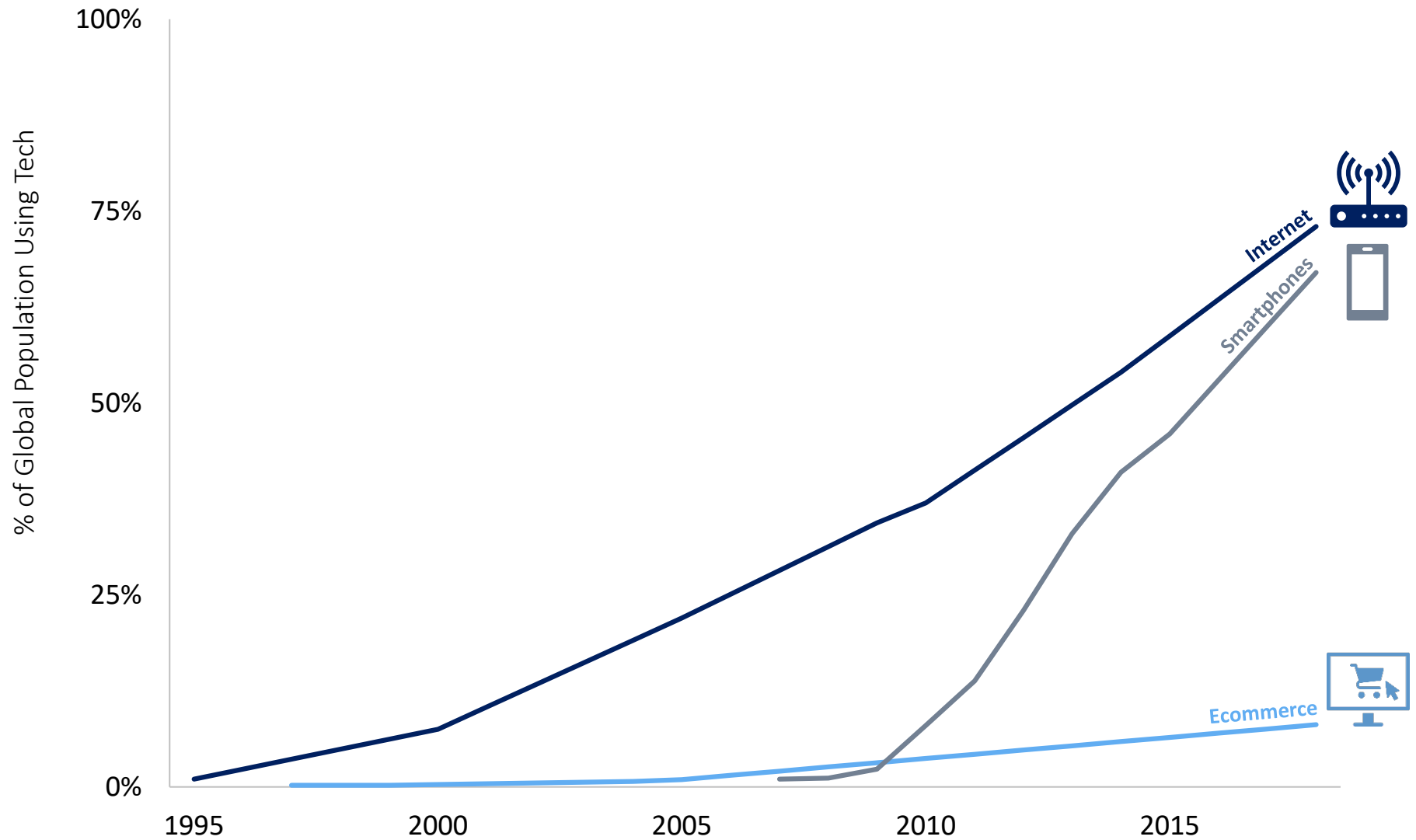
Tech-enabled Services	Healthcare	Engineering & Manufacturing	Changing Consumer Preferences
 ACCEL  KKR CARRICK  <small>investing more than capital</small>	 ROUNDTABLE  <small>HEALTHCARE PARTNERS</small> WATER STREET	 ae  Industrial Partners I O P	 ALLIANCE  <small>CONSUMER GROWTH</small> Altamont  <small>CAPITAL PARTNERS</small>

Venture Capital – Market Summary

- Strong innovation cycle is driving rapid **technology adoption on a global scale**
- **Venture fundraising and investment activity have expanded**
- Companies are staying private longer **shifting value from public markets to private market investors**
- **Robust M&A and IPO markets** have increased aggregate exit value over time



Globalization Massively Expands Addressable Market for Tech





Venture-backed Companies are Staying Private Much Longer

Global median time from founding to exit

7

Years to M&A

10

Years to IPO

Bellwether Tech Companies

Number of Years Private

9

Number years private

stripe

houzz

10

Number years private

Uber*

slack*

11

Number years private

airbnb

12

Number years private

Spotify*

TANIUM

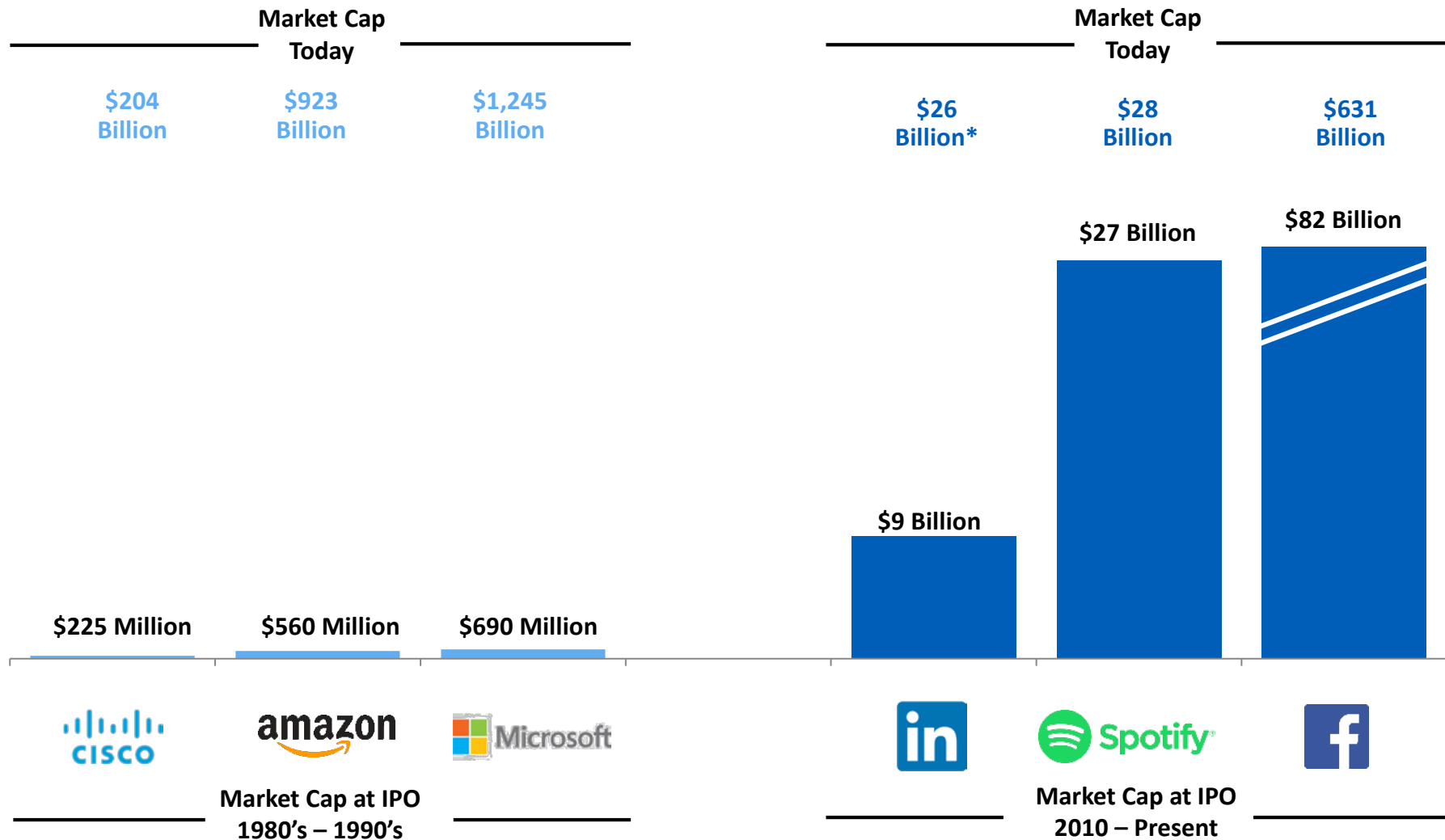
* Denotes companies that have since gone public.

Source: Pitchbook, January 2020



Value Creation Shifting from Public Markets to Venture Investors

Comparison: Market cap at IPO vs. today



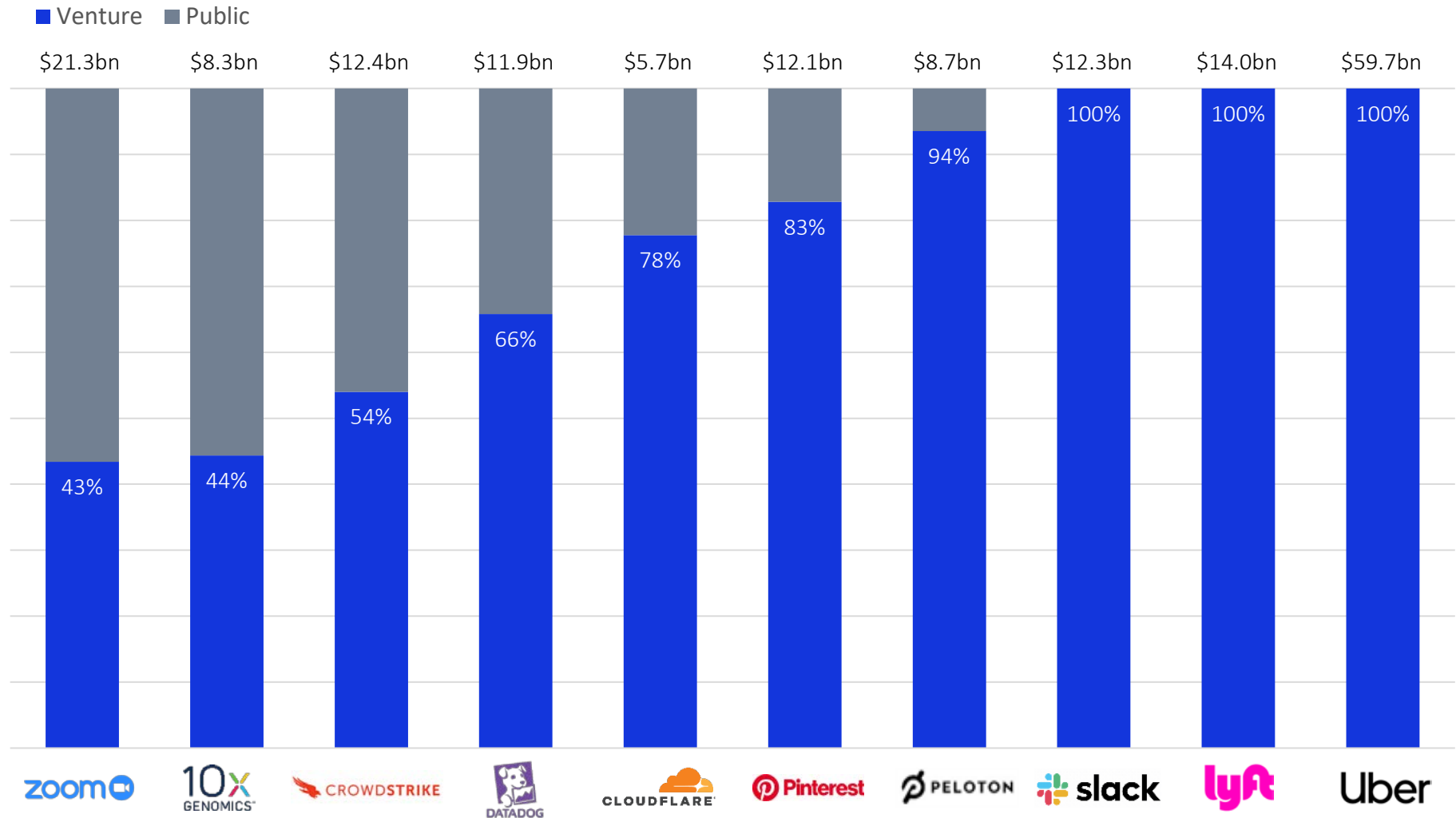
*Reflects Microsoft's purchase price (June 2016)
 Source: CapitalIQ, as of January 15, 2020.



Value Creation Shifting from Public Markets to Venture Investors

Top Ten US Venture Backed IPOs of 2019

Market Cap (Today)

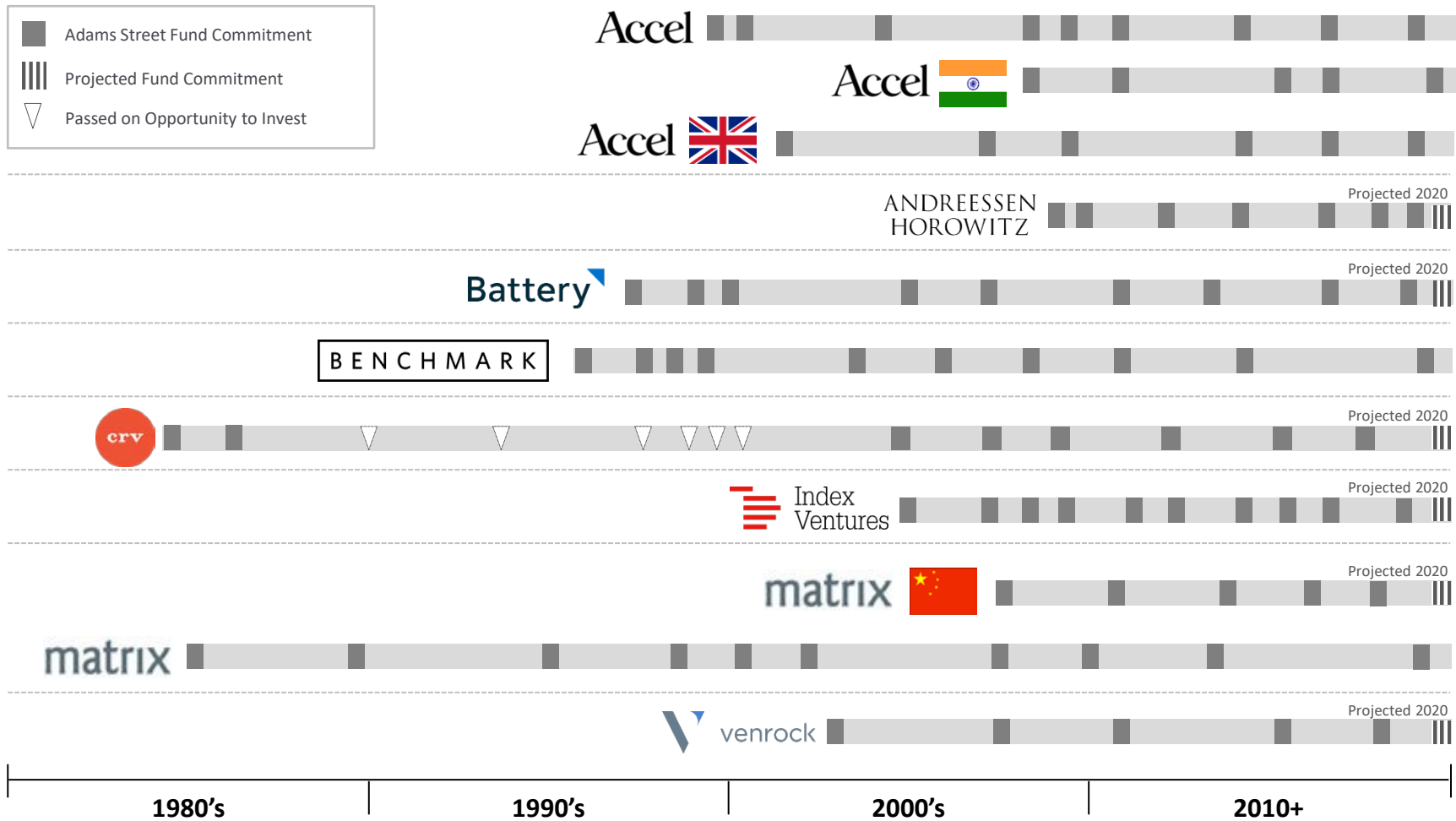


Note: Value to public investors = Current market cap – Valuation at IPO. ‘Valuation at IPO’ calculated as IPO Offering Amount / % of Company Offered. ‘Top’ as determined by market cap at the end of first day publicly traded.
 Source: CapitalIQ, as of January 15, 2020.



Deep History With Franchise Venture Firms

Adams Street's footprint with industry leaders has scaled over decades



* Fund commitments made by Adams Street Partners through January 15, 2020.
 28 A complete list of Adams Street investments is available upon request.

Ways to Access Adams Street





Investment Capabilities

Direct Investing

PRIVATE CREDIT FUND II	Capacity: \$2bn Target Net Return: Varies by strategy	Geography: Mainly US
-------------------------------	--	-----------------------------

Direct lending to private equity-backed middle-market companies, with strategies that invest across the entire capital structure or that focus primarily on 1st lien senior secured debt

GROWTH EQUITY FUND VII	Capacity: \$300mm Target Net Return: 15%+	Geography: Mainly US & Western Europe
-------------------------------	--	--

Time-tested strategy investing in growth-stage technology and healthcare companies

CO-INVESTMENT SELECT FUND	Capacity: \$250mm Target Net Return: 15%+	Geography: Mainly US & Western Europe
----------------------------------	--	--

Co-investments alongside best-in-class GPs directly into buyout and growth mid, large, and mega cap portfolio companies

LEADERS FUND 2020	Capacity: \$200mm Target Net Return: 15-20%+	Geography: Global
--------------------------	---	--------------------------

A portfolio of highly sought-after venture co-investment opportunities from select venture capital managers

Fund Investing

US SMALL MARKET BUYOUT FUND II	Capacity: \$350mm - \$400mm Target Net Return: 15%+	Geography: Mainly US
---------------------------------------	--	-----------------------------

A portfolio of buyout funds which targets US companies with \$200mm or less in enterprise value, and opportunistic secondaries and co-investments

ASIA FUND 2020	Capacity: \$200mm - \$350mm Target Net Return: 15%+	Geography: Mainly Asia
-----------------------	--	-------------------------------

A portfolio of Asian buyout, venture, and growth equity funds with a focus on the smaller-to-mid end of the market, with exposure to secondary and co-investments

VENTURE INNOVATION FUND III	Capacity: \$525mm Target Net Return: 15%+	Geography: Global
------------------------------------	--	--------------------------

A portfolio of primary funds that provides meaningful exposure to the world's most innovative and disruptive companies early in their development. Includes exposure to select venture secondaries and co-investments

SECONDARY INVESTMENTS*	Estimated Fund Launch in 2020 Target Net Return: 15%+	Geography: Global
-------------------------------	--	--------------------------

Thematic and high-conviction approach to secondary purchases of mature fund interests and structured transactions

Comprehensive

ANNUAL GLOBAL PROGRAM¹	Capacity: \$800mm Target Net Return: 14-18%	Geography: Global
--	--	--------------------------

Comprehensive program integrating primary, secondary, growth equity, and co-investments diversified by time, subclass, and geography

Customized Solutions & Capabilities

Adams Street can construct customized portfolio solutions based on a client's investment goals across strategy, subclass, geography, and sector.

* No fund is currently available for investment. Fund to be formed in 2020

All references to targeted annual net returns (after Adams Street Partners' fees, expenses and carried interest) are only targets. There can be no guarantee that Adams Street Partners will achieve returns in the targeted range.

30 1. Consists of a US Partnership Fund, a Non-US Partnership Fund, and a Direct Growth Equity Fund.

Appendix





Saguna Malhotra

Partner, Primary Investments, Menlo Park

Saguna specializes in buyout and venture fund investments and manages general partner relationships within these sectors.

Prior to joining the firm, Saguna was the Managing Director of Private Equity at Stanford Management Company, where she oversaw a \$6 billion private equity portfolio. In this role, Saguna was responsible for all facets of portfolio management, including asset allocation, identifying new investment opportunities, managing GP relationships, serving on fund advisory boards, co-investing, and proactively monitoring the portfolio. She was also a member of the investment committee, building and overseeing the broader investment team.

Previously, Saguna was Vice President at Ripplewood Holdings, LLC in New York. In this role she managed business diligence and deal negotiations, including negotiating financing documents, purchase agreements and employment contracts, conducting operational due diligence, and developing business plans. Saguna commenced her career at Morgan Stanley in their Financial Sponsors Group.

Saguna is a member of Adams Street's Diversity and Inclusion Committee.

Education:

University of Pennsylvania, The Wharton School, BS

Investment/operational experience: 24 years

Languages: Hindi



Scott Hazen, CFA®

Partner, Investor Relations, Chicago

Scott works closely with investors in the management of their portfolios, and provides assistance in the development and monitoring of their private equity programs. Additionally, he is actively involved in the portfolio construction and ongoing monitoring of the firm's various fund of funds programs and separate accounts, as well as the development of consultant relationships. He also participates in the tracking and analysis of portfolio performance measurement.

Prior to joining the firm, Scott was an Executive Director and US Equity Strategist with UBS Global Asset Management focused on portfolio management and client communication. Earlier in his career, Scott was an Executive Director and Institutional Client Advisor with UBS Global Asset Management, responsible for business development and client relationship management.

Scott is a member of the CFA Institute and the CFA Society of Chicago.

Education:

University of Notre Dame, BBA, magna cum laude

University of Chicago Booth School of Business, MBA

Investment/operational experience: 28 years



For limited distribution to
institutional and professional
investors only

Trumbull Property Fund (TPF)

Presented to: Ventura County Employees' Retirement Association

Real estate
investment funds

February 24, 2020



1177 Avenue of Americas, New York, NY

General risk disclosure

Certain sections of this presentation that relate to future prospects are forward looking statements and are subject to certain risks and uncertainties that could cause actual results to differ materially. This material is designed to support an in-person presentation, is not intended to be read in isolation, and does not provide a full explanation of all the topics that are presented and discussed.

An investment in real estate will involve significant risks and there are no assurances against loss of principal resulting from real estate investments or that the portfolio's objectives will be attained.

This is not a recommendation. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding to invest in real estate funds. Investors must also have the financial ability and willingness to accept and bear the risks, including, among other things:

- **Risk of illiquidity.** Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors. Redemptions may be delayed indefinitely;
- **Risks of investing in real estate.** These risks include adverse changes in economic conditions (local, national, international), occupancy levels and in environmental, zoning, and other governmental laws, regulations, and policies;
- **Use of leverage.** Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates; and
- **Limitations on the transfer of fund units.** There is no public market for interests in any of our funds and no such market is expected to develop in the future.
- **Legal & Taxation.** Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment

Investors should evaluate all risk and uncertainties before making any investment decision. Risks are detailed in the respective fund's offering memorandum.

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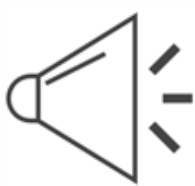
	General risk disclosure	
Section 1	Organization and Capabilities	3
Section 2	Investment Results	7
Section 3	Trumbull Property Fund (TPF)	9
	3.A Appendix	23
Section 4	Biographies	46

Section 1

Organization and Capabilities

UBS Asset Management overview

Real Estate & Private Markets is solidly positioned with UBS



- Total invested assets: USD 858 billion
- Approximately 3,400 employees located in 22 countries¹
- Approximately 900 investment professionals spanning regions and capabilities
- Value driven investment philosophy
- Real estate is a prominent business area within UBS Asset Management



Source: UBS Asset Management. Data as of September 30, 2019 unless stated otherwise

¹ As of 31 December 2018 (updated annually). Around 1,150 internal and external FTE from Corporate Center (excluding staff supporting AM less than 80% of the time).



Real estate investment experience and mission

UBS Asset Management, Real Estate & Private Markets (REPM)

Real Estate¹

- Close to 75 years experience in real estate, managing assets in excess of USD 98 billion for over 3,300 professional / institutional clients worldwide
- Present in 13 countries worldwide with over 270 investment professionals with deep understanding of local markets dynamics
- Over 2,200 direct property holdings worldwide, in 20 countries

Real Estate - US

- Over 40 years of real estate investment experience
- USD 30.2 billion of assets for over 773 institutional clients
- 479 real estate investments managed including: multifamily, office, retail, hotels, industrial and farmland
- Real estate organization with 205 employees and offices in California, Connecticut, and Texas
- Quality people, properties and relationships

Our mission is to provide both superior risk-adjusted investment performance for our clients through private real estate investment strategies and outstanding client service.

Data as of December 31, 2019, unless otherwise noted. ¹Data as of September 30, 2019.
Source: UBS Asset Management, Real Estate & Private Markets (REPM). Includes UBS Farmland Investors LLC



The Post, Seattle, WA, TPI



US real estate - multidisciplined organization



	<u># of Employees¹</u>
Strategy	
- Senior Management	1
- Portfolio Management	15
- Research	4
Investment Operations	
- Acquisitions	21
- Asset Management	43
- Dispositions	5
- Engineering	5
Performance Measurement & Financial	
- Valuation	4
- Fund & Property Accounting	35
- Business Operations	5
Client Service & Communications	
- Portfolio & Client Services	13
- Client Service & Communications	9
Support	
- Information Technology	8
- Legal & Compliance	9
- Administrative	19
Total	196

Data as of December 31, 2019.

¹UBS Farmland Investors LLC consists of 9 additional employees that are not included in this count.

Source: Source: UBS Asset Management, Real Estate & Private Markets (REPM)



Section 2

Investment Results



TPF investment results for Ventura County Employees'

Periods ending December 2019

Year	Deposit	Redemptions/ Distributions	Market Value 12/31/19	Client Net IRR's*					
				12 months ended 12/31/19	3 years ended 12/31/19	5 years ended 12/31/19	10 years ended 12/31/19	Since Inception 3/31/03 to 12/31/19	
		\$ in thousands							
2003	54,000								
2004	10,000								
2005		10,000							
2009		1,013							
2010	30,000								
2011	30,000								
2013		5,421							
2014		1,355							
	\$124,000	\$17,789	\$268,958	(2.8)%	2.9%	5.3%	8.0%	7.0%	
				ODCE (net)	4.4%	6.1%	8.0%	10.4%	7.1%

*Client Net IRRs are dollar-weighted and after fees that were deducted from the account. Past performance is not indicative of future results. This is not an official statement of your account. Refer to your client statement and the quarterly TPF report. Time Weighted Returns are available upon request.



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Section 3

Trumbull Property Fund (TPF)



Trumbull Property Fund

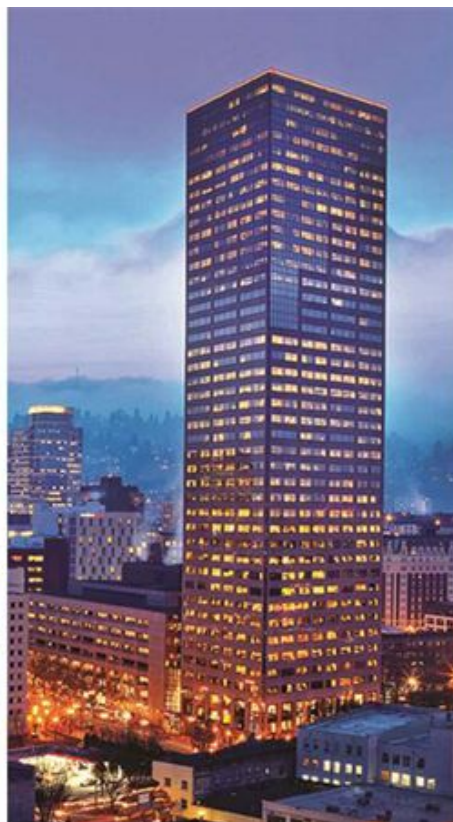
Invest thoughtfully, sell strategically, manage aggressively



Pacific Industrial, Vernon, CA



Element Uptown, Charlotte, NC



US Bancorp Tower, Portland, OR



Liberty Green / Liberty Luxe, New York, NY¹



455 Market Street, San Francisco, CA



Addison & Clark, Chicago, IL²

Photographs of current TPF properties are shown for illustrative purposes. The properties within the Fund are expected to change over time as investments are acquired and sold.

¹Participating mortgage investment. Source: UBS Asset Management, Real Estate & Private Markets (REPM).

²Jason Sharp photo



Presenters Biographies

Mario Maturo **Executive Director**



Mario Maturo is a Portfolio Manager for the Trumbull Property Fund (TPF) and is responsible for asset management and transactions oversight and strategic direction for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. He is San Francisco based and has a focus on the West Region.

Prior to his current position, Mario was responsible for acquisitions and development activities in Northern California, the Pacific Northwest and Southwest. Since joining the firm Mario has closed over USD 1.65 billion in transactions in multiple products including office, hotel, industrial and multifamily properties.

Prior to joining the firm in October 2005, Mario was a Vice President at MMA Financial, LLC (formerly Lend Lease Real Estate Investments) in San Francisco, where he managed affordable housing apartment acquisitions throughout the Western Region of the United States. Prior to MMA Financial, LLC, Mario was a Manager – Risk Management and Investments Group at Cap Gemini Ernst & Young in San Francisco where he was involved with corporate investment and mergers and acquisitions.

Mia Y. Dennis **Director**



Mia Dennis is a member of the Portfolio and Client Services Unit for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. She is located in the San Francisco office. Mia's primary responsibility is investor relations and new business development in the Western region.

Mia has 20 years of experience working in various capacities in the real estate investment management industry. Her prior experience includes acquisitions, asset management, loan originations, consulting and client service.

Prior to joining UBS, Mia spent six years at Callan Associates as a real estate consultant for pension plans nationwide. She also has worked for AEW and J.P. Morgan as a real estate specialist in client services.

Mia holds her Series 7 and 66 licenses with the Financial Industry Regulatory Authority (FINRA).

Changes in leadership



Matt Johnson Head of RE-US

- Senior Portfolio Manager (2008–2020) for REPM's Multi-Managers Real Estate (MMRE)
- Matt has been at the center of the outstanding investment performance and tremendous growth of our MMRE business in the US, taking it from a startup in 2008 to the USD17 billion AuM business it is today.
- He has a tremendous depth and breadth of investment experience, market knowledge and industry best practices, and has proven his ability to outperform benchmarks through thoughtful strategy, market and asset selection.



Rodney Chu Head of Transactions

- Currently Senior Portfolio Manager for the Trumbull Property Income Fund
- Based in San Francisco, Rod has 27 years of investment industry experience and was one of the most productive senior acquisitions officers at UBS when he managed the West Coast transactions team.
- Rod brings in-depth knowledge of real estate covering many markets and property types. He has been instrumental in establishing relationships with successful regional and national property developers that have resulted in repeat business for our strategies

Trumbull Property Fund highlights



Addison & Clark, Chicago, IL (copyright: Jason Sharp Photo)



Century Square, Seattle, WA

➤ USD 19.9 billion in gross assets

➤ 184 Investments

➤ Fund leverage: 18.0%

➤ Ranked #1 during current market cycle for Standard Deviation¹

➤ 445 Investors

➤ 40+ year track record

➤ Gross Return since inception: 8.67%²

➤ Gross Dividend Yield: 4.4%³

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹Ranked #1 (out of 13 funds) for Standard Deviation for the current market cycle, as calculated by REPM as of September 30, 2019. A "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak. ²TPF since inception date is 1/13/1978. ³Gross dividend yield provided is a one-year gross rolling return. Past performance is not indicative of future results.

Dedicated and experienced team

Portfolio Managers average 24 years of industry experience



**Paul Canning - Managing Director
Senior Portfolio Manager**

39 years of industry experience,
28 with UBS

- Sets strategic direction for the Fund
- Responsible for all transaction & asset decisions
- Senior Investment Committee member



**Pam Thompson - Executive Director
Portfolio Manager**

28 years of industry experience,
16 with UBS

- Ensures that fund guidelines and operations are in compliance
- Responsible for performance attribution & financing



**Nolan Henry - Executive Director
Portfolio Manager**

16 years of industry experience,
11 with UBS

- Responsible for South region assets & transactions



**Mario Maturo - Executive Director
Portfolio Manager**

20 years of industry experience,
14 with UBS

- Responsible for West region assets & transactions



**Peter Shaplin - Executive Director
Portfolio Manager**

18 years of industry experience,
6 with UBS

- Responsible for Midwest and East region assets & transactions



**Trevor Condren – Director
Associate Portfolio Manager**

7 years of industry experience,
<1 with UBS

- Portfolio analysis and reporting



**Debby Sce – Associate Director
Portfolio Analytics**

22 years of industry experience,
12 with UBS

- Portfolio analysis and reporting



**Lan Seto - Director
Portfolio Analytics**

17 years of industry experience,
13 with UBS

- Performance attribution and portfolio analysis

As of December 31, 2019
Source: UBS Asset Management, Real Estate & Private Markets (REPM).



Trumbull Property Fund strategy

Proven open-ended core fund that provides competitive risk adjusted returns

Strategy/Characteristics

»»	Broad Diversification	Proprietary Inventory Model ¹
»»	Low Leverage	Lower risk, greater asset flexibility
»»	Low Risk Profile	94.9% stabilized assets and selective value-added
»»	Stable Income	85% of total return from income since inception
»»	Focused Sustainability	Leader in US diversified funds ² , economically justified

Execution

Low risk
NFI-ODCE fund

Competitive total returns
across real estate cycles

Consistently executed
core strategy



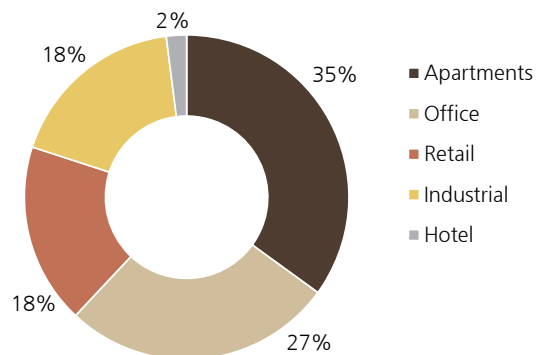
Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹The Inventory Model has outperformed the NPI 32 out of the past 41 years and with a lower standard deviation. Data for Investable Universe updated as of December 31, 2018 (updated annually). ²Source: GRESB as of 2019. TPF is ranked #6 out of 47 US diversified funds. Past performance is not indicative of future results.



Diversification driven by proprietary inventory model

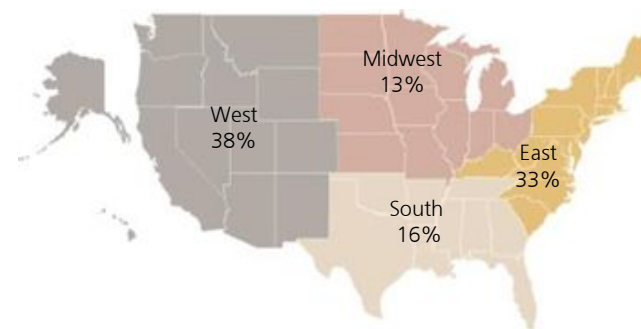
TPF does not seek to replicate NFI-ODCE

Property type allocation (%)



	TPF target ranges	Current TPF allocation	NFI-ODCE ¹
Apartments	27-45	35	25
Office	16-27	27	34
Retail	20-33	18	17
Industrial	12-20	18	19
Hotel/Other	0-10	2	5

Geographic region allocation (%)

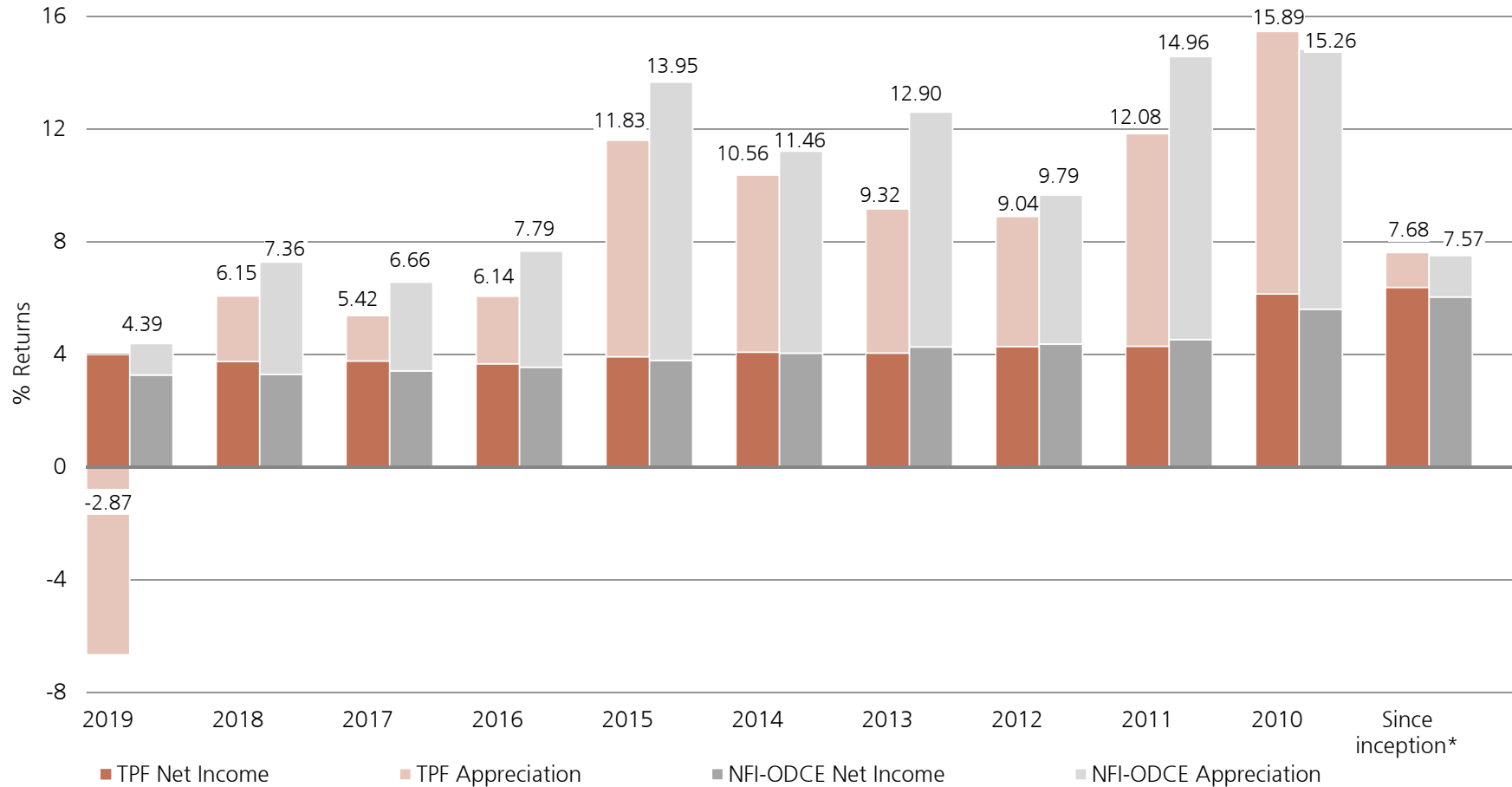


	TPF target ranges	Current TPF allocation	NFI-ODCE ¹
East	21-43	33	31
Midwest	8-17	13	8
South	14-28	16	19
West	23-48	38	42

Data as of December 31, 2019, unless otherwise indicated. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ¹NCREIF is the source for NFI-ODCE and NPI as of September 30, 2019. Percentages may not sum due to rounding. Percentages are based on gross market value of real estate investments. The Investable Universe inventory model has provided superior investment returns (relative to NPI) for 32 of the past 41 years, and with a lower standard of deviation. Data for Investable Universe updated as of December 31, 2018 (updated annually). The Investable Universe as tracked by our Research team is an estimate of the market value of Institutional-quality commercial real estate in 64 of the largest US metro areas for the four primary property sectors: apartments, industrial, office and retail. It provides a larger sample size (approximately USD 5.7 trillion) of assets as compared to the USD 612 billion tracked by NPI (as of December 31, 2018).



TPF performance vs. NFI-ODCE



Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. *Inception date for TPF and ODCE is 1Q 1978. Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results.

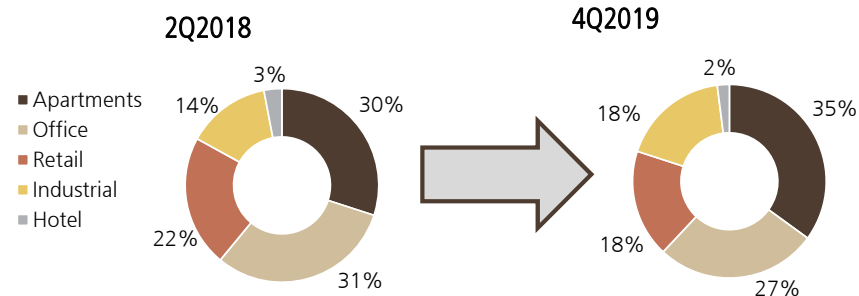


TPF – strategic initiatives and tactical successes

We are turning the portfolio

- Investing in **industrial**
 - Build to core
 - Key relationships
- Emphasizing strength in **multifamily**
 - Build to core and renovations
 - Senior housing
- Reshaping the **office** portfolio
 - Lower allocation reduces risk
 - Life science opportunities
- Aggressively transforming **retail**
 - Creating dynamic mixed-use places
 - Adding food and experiential retail
 - Selling where expected future yields not sufficient
- Deemphasizing full service **hotels**

Property type allocation (%)



Air Commerce Park, Orlando, FL



San Pedro Square Apartments, San Jose, CA (rendering)

Data as of December 31, 2019

Capital flows

- Redemption pool
- 2019 redemption fundings
- 2020 redemption funding plan
- Investment management fee program

Redemption pool key features

Balancing needs of all investors:

- TPF offers quarterly liquidity to all investors
- All redemption requests are treated equally
- Each quarter's redemption payment is determined after taking into consideration all operating needs of the portfolio
- The Fund continues to execute its investment strategy



Grand Hyatt Tampa Bay and Bayport Plaza, Tampa, FL (sale)



Tuscano Towne Center, Phoenix, AZ (sale)

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: ¹Investors may request redemption of all or a portion of their units (subject to sufficient liquidity) on a quarterly basis. There is no limit on how often an investor may withdraw assets, subject to other constraints described below. Investors who wish to redeem units must notify UBS Realty in writing at least sixty (60) days prior to the relevant withdrawal date. The Fund does not offer guaranteed liquidity.

2020 outlook

Projected allocations and investment activities

Maintaining a low risk profile

- Stable income
- Low volatility
- Multifamily focus

Sources & uses

2020 acquisitions:
Industrial & apartment focus USD 750M


2020 dispositions:
Primarily retail & office USD 1.9B

2020 deposits: USD 500M

2020 redemption payments: USD 1.5B

Leverage ratio

YE 2019	YE 2020
18.0%	17.5%



Sector allocation

	YE 2019	YE 2020	
Apartments	35%	37%	↑
Industrial	18%	20%	↑
Office	27%	25%	↓
Retail	18%	16%	↓
Hotels	2%	2%	↔

Geographic allocation

- The Fund will use investment activity to move further in line with the Inventory Model geographic allocations

Forecast as of January 2020 unless otherwise noted. All forecasts contained in the report are opinions only and are based on available information at the time of writing. Accordingly, such statements are inherently speculative as they can be affected by incorrect assumptions or by known or unknown risks and uncertainties. The outcomes ultimately achieved may differ substantially from the forecasts. ¹Forecasted using projections as of September 30, 2019.

Source: UBS Asset Management, Real Estate & Private Markets (REPM).



TPF Fee Programs

Investors have the ability to lower management fees through two new programs.

Loyalty Incentive¹

- ✓ Fee discount
 - 15% - 3-year commitment
 - 25% - 4-year commitment
- ✓ Investors decide what portion of their investment will be committed
- ✓ Discount applies through commitment period, then expires
- ✓ Effective in the quarterly period following an investor's election to participate

Top-up Incentive

- ✓ Zero base fee on new "top-up" investments
- ✓ Capped at 100% of an investor's existing balance
- ✓ Available for the life of investment provided any potential future redemptions come first from the zero fee tranche
- ✓ Effective in the quarterly period following an investor's election to participate

Both programs are offered for election until January 2021. The offer may be terminated or modified at any time.

¹If an investor elects to commit assets under the Loyalty incentive, but needs to redeem assets before the end of the commitment period, the investor would be required to pay back the discount applicable to the assets being redeemed.

Notes: The discounts are applied only to the original amount committed, not to any earnings or dividend reinvestments. For more details, please refer to the PPM Supplement.

Trumbull Property Fund

Representative assets



73 East Lake, Chicago, IL



CambridgeSide, Cambridge, MA



Century Square, Seattle, WA



Pacific Industrial, San Bernardino, CA



**The Shipyard at Port Jefferson,
Port Jefferson, NY**



**1177 Avenue of the Americas,
New York, NY**



Alexan San Diego, CA



Becknell Industrial, Columbia, SC

Photographs of current TPF properties are shown for illustrative purposes. The properties within the Fund are expected to change over time as investments are acquired and sold.
Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Section 3.A

Trumbull Property Fund (TPF)

Appendix



TPF strategy and guidelines

Strategy	Provide broad real estate market diversification to maximize risk adjusted returns
Fund Style & Liquidity	Open-end fund, with quarterly liquidity (subject to available capital); USD 5 million minimum
Financial Objective ⁽¹⁾	<ul style="list-style-type: none"> • Seek to outperform the NFI-ODCE index over a full market cycle • Seek to achieve at least a 5% real rate of return (i.e. inflation- adjusted return) before management fees, over any given 3-5 year period
Fund Investment Guidelines ⁽²⁾	<ul style="list-style-type: none"> • Equity investments at least 70% of Gross Asset Value ("GAV") • Third Party Joint Ventures limited to 50% of GAV • Debt investments maximum of 30% of GAV (construction loans limited to 10% of GAV) • Publicly traded real estate securities or debt instruments limited to 5% of GAV • Combination of all value-added assets will generally range between 5-15% of total Portfolio Assets
Property type and geographic spread	<ul style="list-style-type: none"> • Apartments, hotels, industrial, retail and office throughout the US • NCREIF property type maximum 50% of GAV • NCREIF region maximum 50% of GAV • Local market (CBSA) maximum of 20% of GAV • Single investment maximum 10% of GAV
Leverage	<ul style="list-style-type: none"> • Mortgage debt generally not to exceed 20% of GAV • Short-term debt generally not to exceed 15% of GAV
Standard of care	Advisor subject to ERISA Fiduciary standard of care

Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Notes: ⁽¹⁾ There is no assurance that the financial objective will ultimately be realized and the possibility of loss does exist. There is no guarantee that the investment strategy will perform as expected. ⁽²⁾ The Advisor may permit temporary and/or immaterial deviations from the Investment Guidelines from time to time, in its discretion, if the Advisor believes that such deviations are in the best interest of the Fund.

TPF 10 largest markets and assets

Major market exposure and low property concentration risk

Markets by % of Fund

New York	15%
Chicago	10%
Los Angeles	10%
San Francisco	8%
Washington, DC	7%
Dallas	6%
Boston	4%
Portland, OR	4%
Denver	4%
Seattle	4%
	71%

Assets	Location	Property type	Gross Market Value (USD Mil)	% Portfolio
120 Broadway	New York	CBD Office	709.2	4%
CambridgeSide	Boston	Mixed Use	646.3	3%
35 West Wacker	Chicago	CBD Office	509.8	3%
Liberty Green-Liberty Luxe ⁽¹⁾	New York	High-rise Apartments	508.0	3%
1177 Avenue of the Americas	New York	CBD Office	495.8	3%
US Bancorp Tower	Portland	CBD Office	485.6	3%
Galleria Dallas	Dallas	Regional Mall	420.0	2%
Century Square	Seattle	CBD Office	418.0	2%
455 Market Street	San Francisco	CBD Office	340.2	2%
555 17 th Street	Denver	CBD Office	282.1	1%
			4,815.1	25%



US Bancorp Tower



135 West 50th Street



CambridgeSide



120 Broadway

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). ⁽¹⁾Participating mortgage investment. Notes: Percentages are based on gross market value of real estate investments. See required notes page at the end of this section or presentation. Amounts may not sum due to rounding. Past performance is not indicative of future results.

Debt summary

Lower risk debt profile provides strong positioning throughout market cycles

Low leverage strategy

- Manage to 20% maximum
- 18.0% current leverage ratio compared to 22.0% NFI-ODCE (excluding TPF)¹

Efficient execution

- Lower weighted average interest rate
- Greater percent fixed rate debt

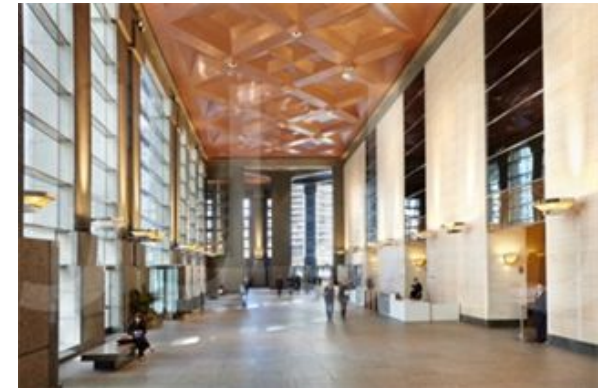
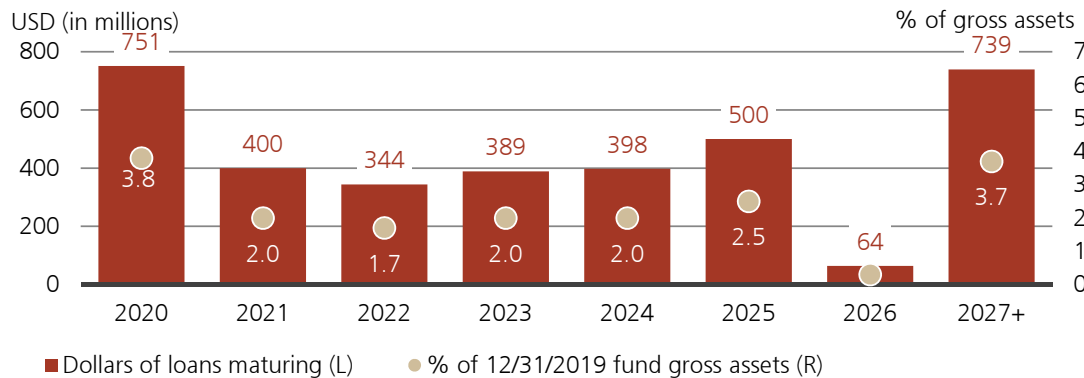
	TPF	Benchmark ²
Lower weighted average interest rate	3.4%	4.0%
Greater percent fixed rate debt	98%	81%

Focus on risk and liquidity management

- USD 800 million line of credit provides liquidity and cash management flexibility
- Staggered loan maturity schedule



Upcoming debt maturities – no year over 5.0% of Fund

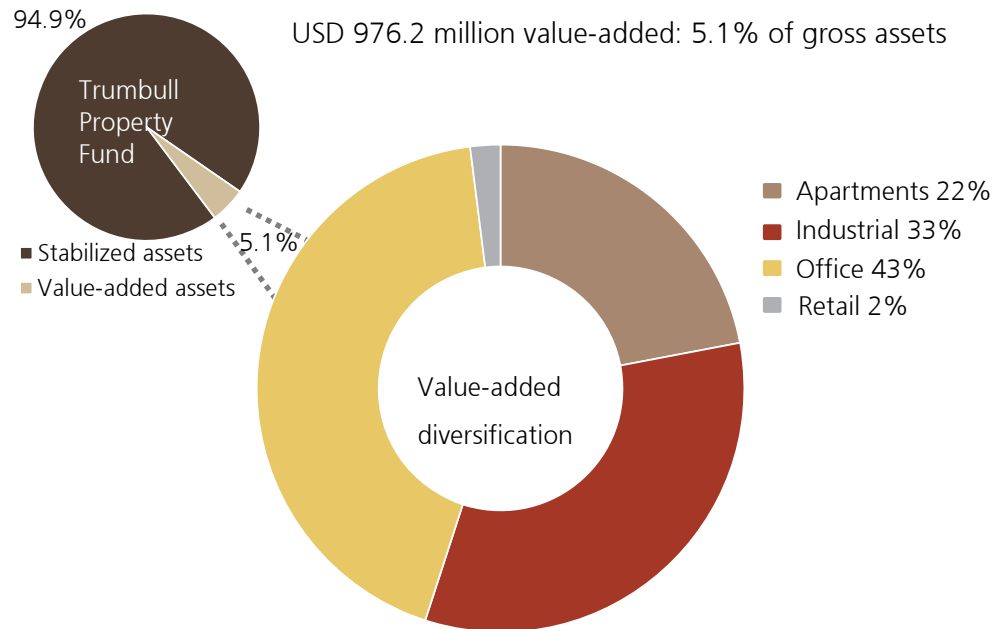


35 West Wacker, Chicago, IL

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. ¹NFI-ODCE leverage ratio including TPF is 21.7%. NFI-ODCE data is as of September 30, 2019. ²Chatham Financial Debt Mark to Market Benchmark Report as September 30, 2019, includes 20 of 24 NFI-ODCE funds (86% of NFI-ODCE net asset value).

TPF value-added risk management

Value creation through "building to core" with experienced developers



Value creation¹:

- Multifamily 36% average
- Industrial 25% average

Active risk management:

- Value-added level tailored to economy and market
- Partners cover cost overruns backed by guarantees
- External & internal engineering reviews
- No entitlement or zoning risk

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Percentages are based on gross market value of real estate investments. ¹Value creation data as of September 30, 2019. Percentage totals may not sum due to rounding. Past performance is not indicative of future results. In line with NCREIF life cycle definitions, development assets are included in the value-added allocation until they are completed and they have achieved 60% leased status (or have been available for lease for one year).

TPF leasing

Percentage leased - end of period

	2011	2012	2013	2014	2015	2016	2017	2018	4Q19
Apartments	95	94	94	95	94	94	93	95	95
Industrial	91	95	96	97	97	97	97	97	97
Office	90	92	91	94	95	89	88	88	90
Retail	93	94	95	95	95	94	94	94	93
Total	93	93	93	95	95	93	92	93	93



Orchard Town Center, Westminster, CO



Cumberland Park Apartments, Orlando, FL



Burbank Empire Center, Burbank, CA

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM).

Notes: Leasing numbers exclude hotels. In line with NCREIF life cycle definitions, the leasing data methodology excludes land and development assets less than 60% leased (and available for lease less than one year), but includes all other assets.



Where are we going?

	Current Allocation	Investment direction
Apartments	34%	↑
Industrial	18%	↑
Office	27%	↓
Retail	20%	↓
Hotels	1%	↔

Contemporary environments



455 Market Street, San Francisco, CA

Place-making



Galleria Dallas, Dallas, TX (rendering)

Demand driven



Becknell Industrial, Tampa, FL

Source: UBS Asset Management, Real Estate & Private Markets (REPM).



Sustainability – a leadership position in ODCE

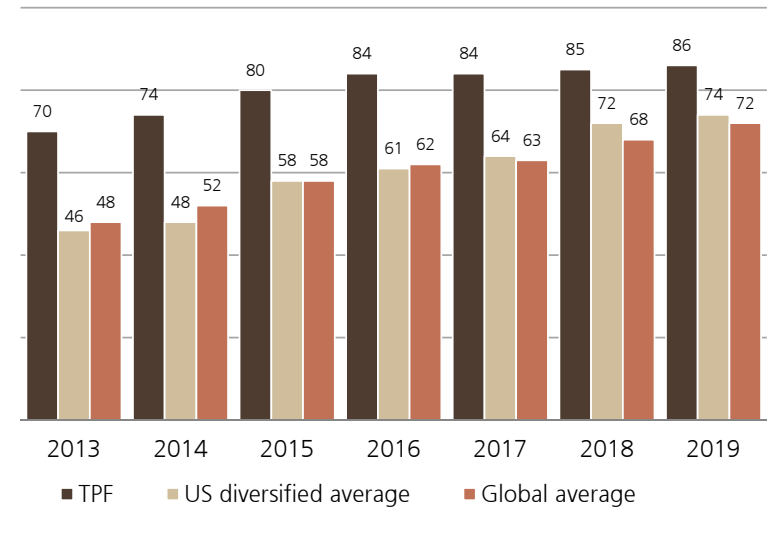
TPF's Green philosophy - reduce environmental impact, maximize total returns



- Ranked #6 of 47 for 2019 GRESB US Diversified – Non-listed peer funds
- One of only eight funds in peer group to achieve esteemed GRESB 5-Star rating
- LEED designations achieved for 93% of urban office properties
- UBS has been a PRI signatory since 2009. A+ rating in 2017, 2018 and 2019 PRI assessment reports



GRESB performance history vs. peers



GRESB data from GRESB Benchmark Report 2019 as of December 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM) and GRESB. Our corporate sustainability mission consists of delivering superior risk-adjusted investment performance by integrating sustainability considerations into our investment processes; implementing sustainable practices through innovation and the sharing of best practices; and addressing environmental impacts while enhancing property operations and values. As such, sustainability plays a major role in corporate-, fund- and property-level decisions. The historical trend shows TPF's performance development over previous years relative to the peer group and all GRESB participants. The overall scores are out of a maximum of 100. This report is aligned with INREV Sustainability Reporting Recommendations and the sustainability data has been reviewed by LORD Green Real Estate Strategies, Inc.



TPF advisory fees

Competitive fees based on size of investment

TPF Management Fee Schedule		Effective Fees for Different Sized Accounts	
Investor NAV ¹	Fee Rate (%)	Investor NAV ¹	Fee Rate (%)
First USD 10 million	0.955	USD 25 million	0.88
Next USD 15 million	0.825	USD 50 million	0.84
Next USD 25 million	0.805	USD 100 million	0.82
Next USD 50 million	0.790	USD 150 million	0.77
Next USD 150 million	0.670	USD 200 million	0.74
Next USD 150 million	0.600	USD 250 million	0.73
Next USD 200 million	0.560	USD 300 million	0.71
Above USD 600 million	0.520	USD 400 million	0.68

Family of Funds fee reduction	Investors with assets in other designated Trumbull Funds may aggregate total invested assets for purposes of the base fee calculation.
Performance based variable fee	TPF advisory fees have historically included a variable fee tied to performance. The variable fee is earned at a rate of 7.5 bps per 1% of the Fund's real return in excess of 3% for the previous rolling four quarters, with a maximum of 25 bps. This variable fee has been waived through March 31, 2022.
Fee reduction on cash holdings	The Fund base fee is reduced to 20 bps for cash holdings in excess of 7.5% of the Fund's average NAV (pro-rated for the quarter) ² .

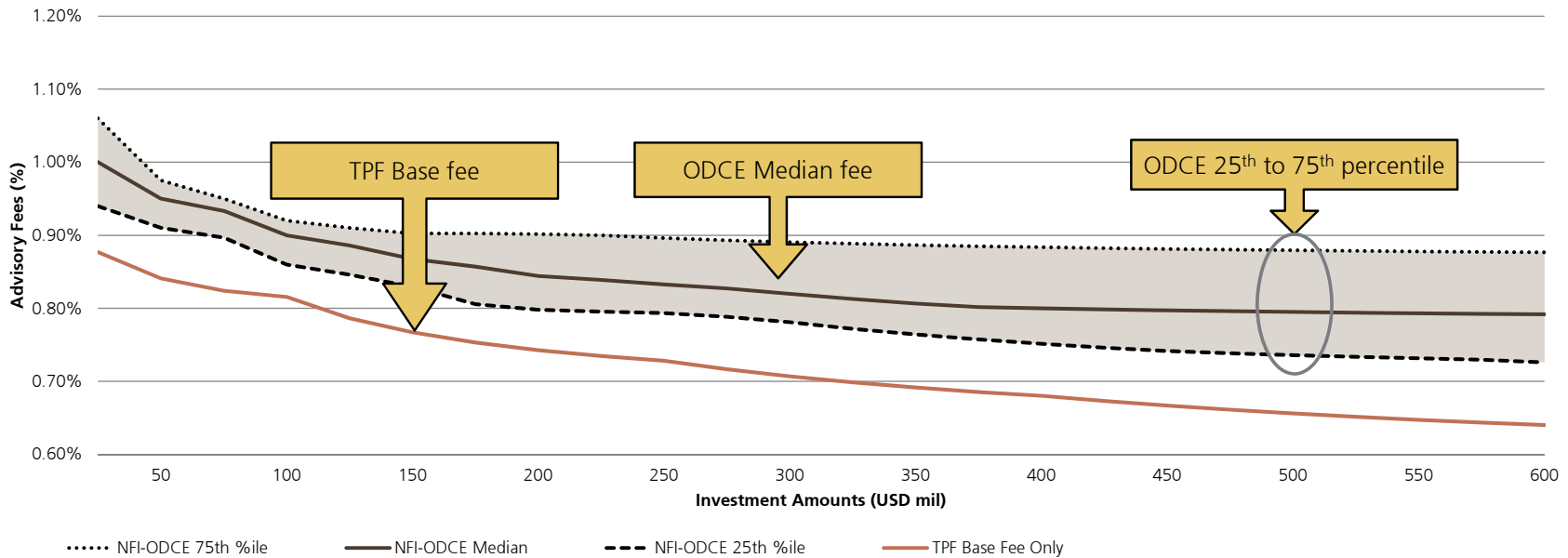
As of October 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: ⁽¹⁾ Net Asset Value. ⁽²⁾ See Fee section of Confidential Private Offering Memorandum for details.



TPF vs. ODCE Advisory Fees

TPF's variable fee is waived through March 31, 2022

- Fund fee levels are now less than fee levels charged by NFI-ODCE competitors (see below)
- Additional fee adjustments available through Family of Funds program
- The structure of the variable fee will be reconsidered in consultation with our investors



For Illustrative Purposes Only. Data as of September 30, 2019, unless otherwise noted. Source for all data/charts, if not stated otherwise: UBS Asset Management, Real Estate & Private Markets (REPM). The underlying data has been obtained from publicly available fee information, we do not guarantee the accuracy. The universe of fund fees illustrated is made up of 21 (including TPF) of the 24 funds that make up the NFI-ODCE representing approximately 97% of the Net Asset Value of the NFI-ODCE. **The ODCE fund fees do not include any variable fees or fee break programs that may be in place.** For one of the 21 funds that make up the universe of fund fees illustrated fee information is not available above the USD 100 million investment amount. The Market Range (highlighted area) represents the ODCE fund fees that are within the 75th percentile and 25th percentile of the universe of fund fees illustrated. This may not reflect the fee(s) an actual investor will pay. For an investor in TPF, the base fee would be applied at each dollar threshold that would result in a blended fee. **The TPF base fee does not include any TPF fee program incentives that may be in place.** Each fund manager has its own methods for applying its fee schedule and potential discounts.



TPF retail portfolio

Actively setting the stage for the future

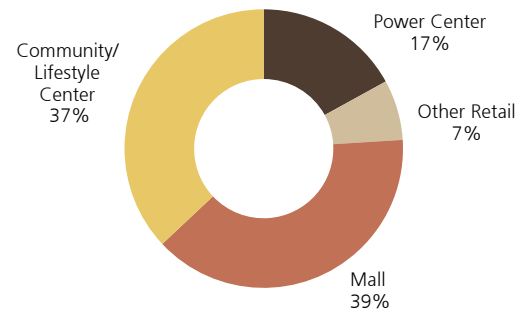
Current Portfolio

- Retail comprises 18% of fund assets
- Mall properties (94% leased) pose opportunities
- TPF retail is 93% leased
- Retail asset valuations in line with current market

TPF Mall Action Plan

- Strategies tailored by asset and location
- Identifying opportunities to add density
- Adding food, entertainment and necessity-based retail
- Creating synergistic mixed-use assets (office + multifamily)
- Selling retail assets where expected future yields not sufficient

TPF retail subtype allocation (%)



Addison & Clark, Chicago, IL (copyright: Jason Sharp Photo)



Galleria Dallas, Dallas, TX (new Apple Store)



CambridgeSide, Cambridge, MA (rendering)
 Link to video: <https://vimeo.com/317261901>

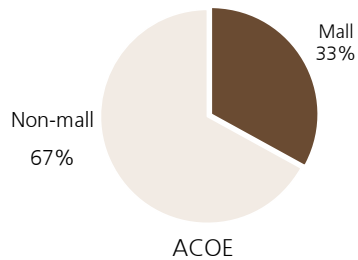
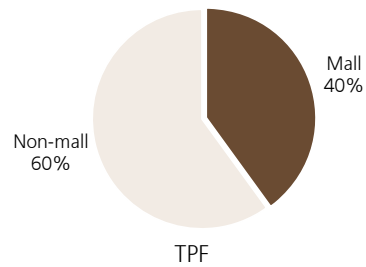
Data is as of December 31, 2019 unless otherwise noted.



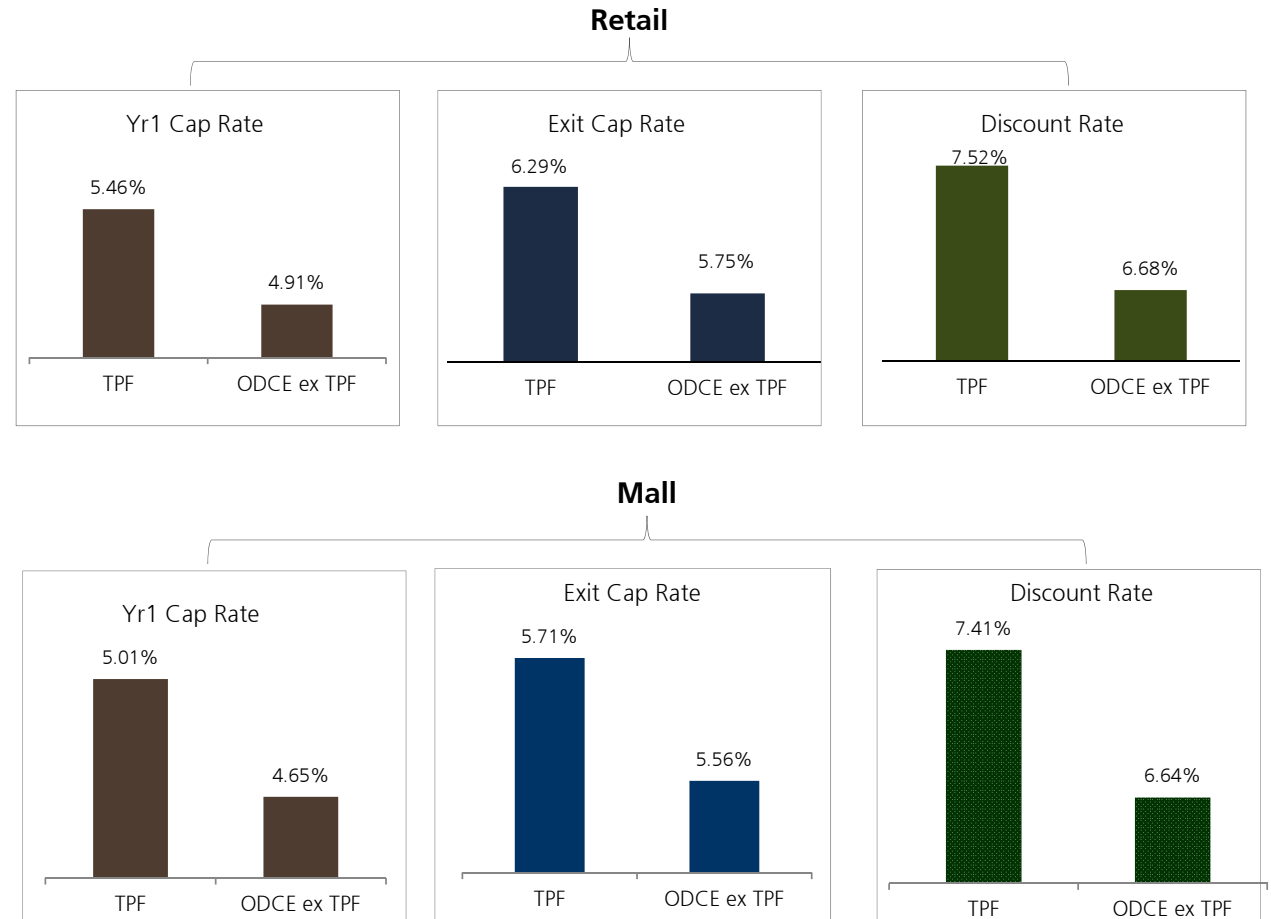
Retail valuation metrics

We believe that ODCE retail that has not experienced some level of depreciation will begin to recognize it in the future

Retail subtype allocation (% of retail)
as of 9/30/19



MSCI is the source for ACOE. Data is at Fund's contract share, no leverage and includes value-added assets. ACOE includes 21 of the 24 NFI-ODCE funds, approximately 96% of the NFI-ODCE.



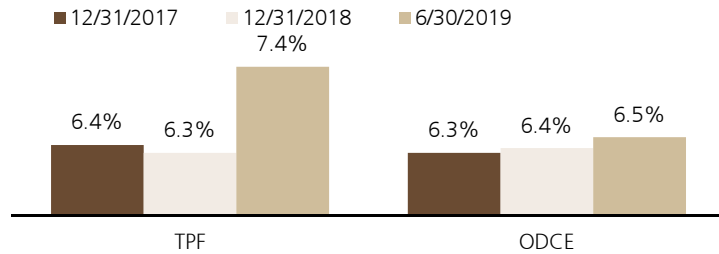
NCREIF and Altus Group is the source for valuation metrics of ODCE (currently consists of 22 NCREIF ODCE Members, approximately 74% of the NFI-ODCE).



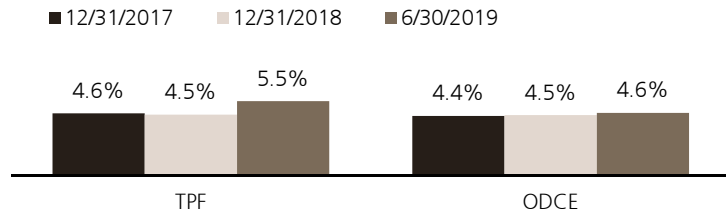
Retail valuation metrics

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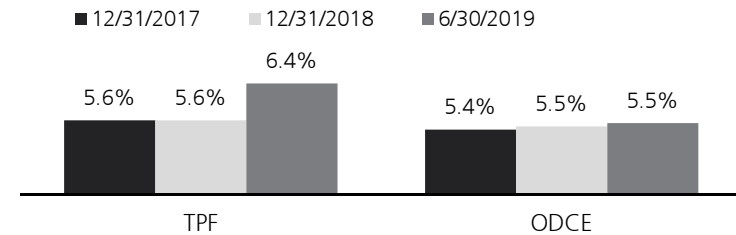
Comparison of discount rate



Comparison of cap rate Yr.1

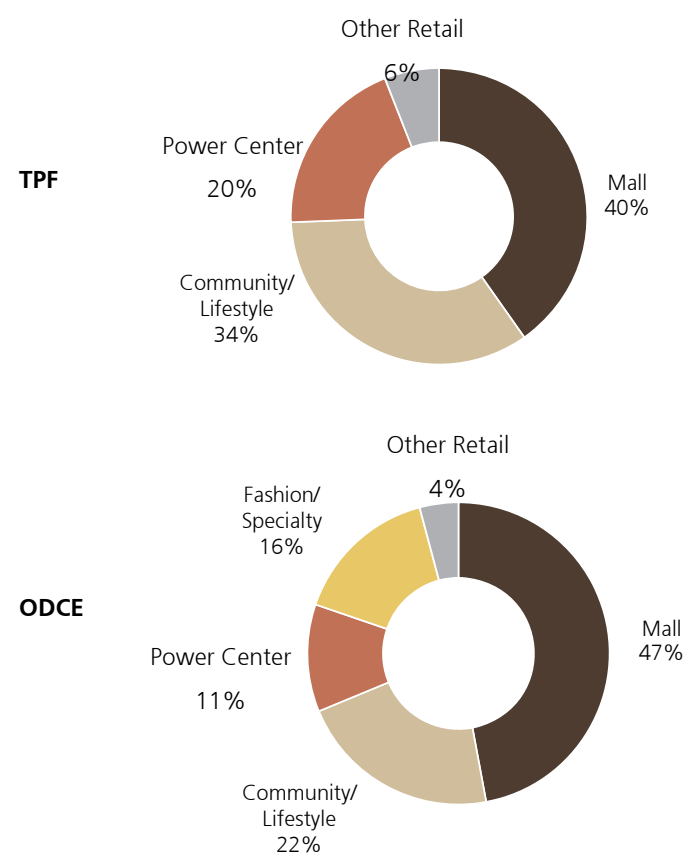


Comparison of exit cap rate



Retail subtype allocation (% of retail)

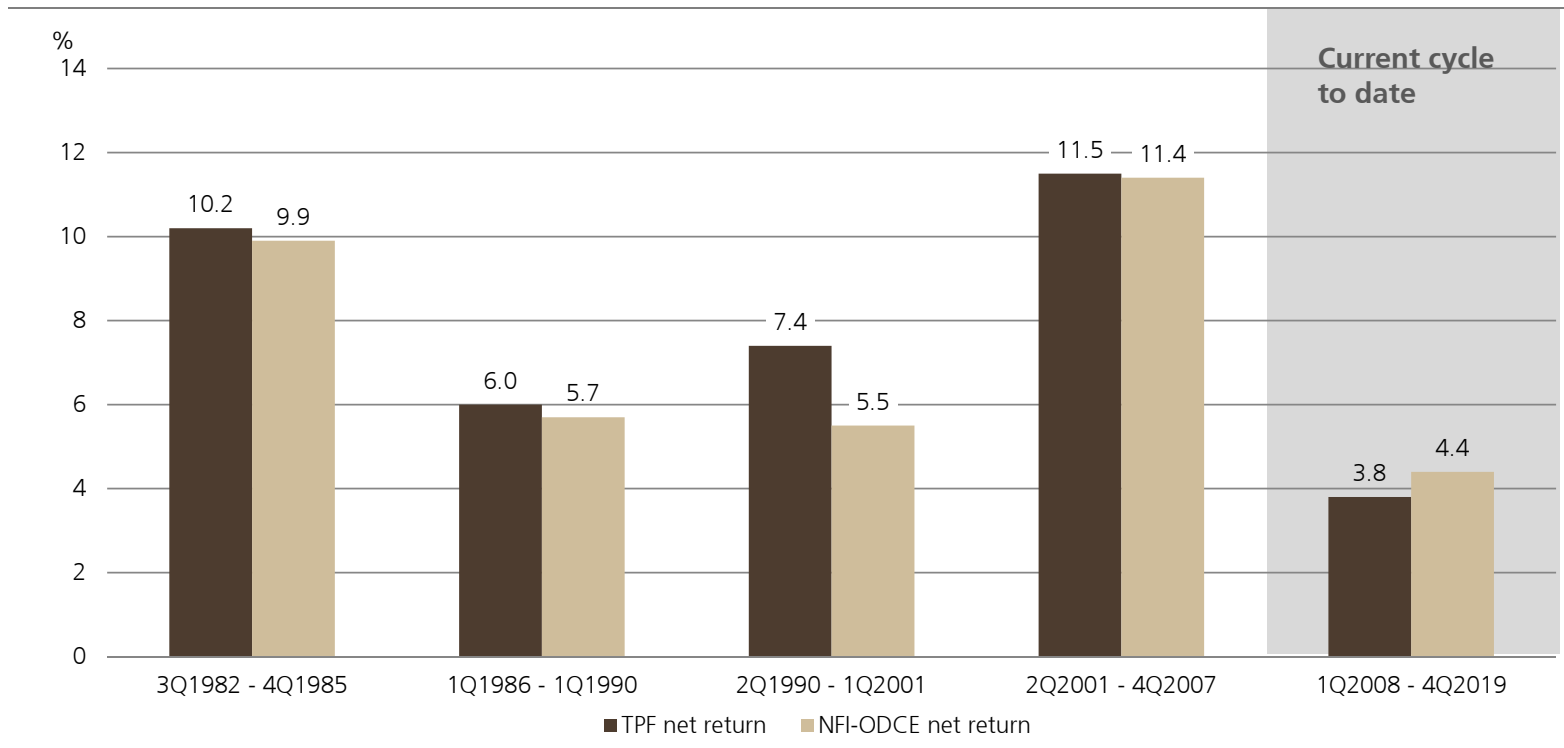
as of 6/30/19



Data as of June 30, 2019, unless otherwise indicated. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source for NFI-ODCE and NPI. NCREIF and Altus Group is the source for valuation metrics of ODCE (currently consists of 22 NCREIF ODCE Members). Past performance is not indicative of future results

Full market cycle total returns – peak to peak

Competitive performance with NFI-ODCE in all full market cycles

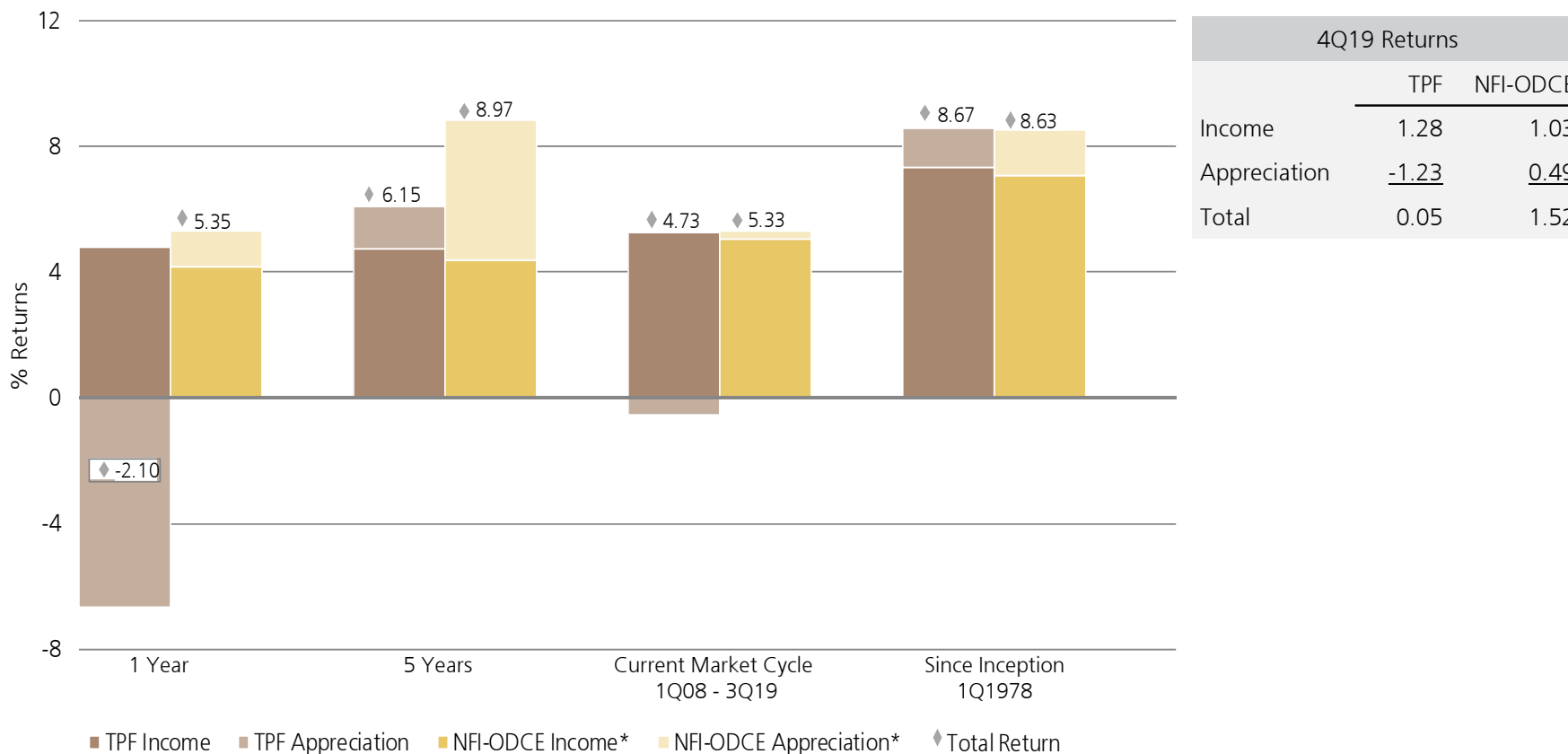


Data as of December 31, 2019. Data shown is back to 1982. All returns are annualized and are net of fees. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: For purposes of measuring these performance objectives, a "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak. The Advisor bases these measurements on assumptions that it believes are reasonable and consistent with industry standards. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results.



TPF performance vs. NFI-ODCE

Greater income return for all time periods tracked

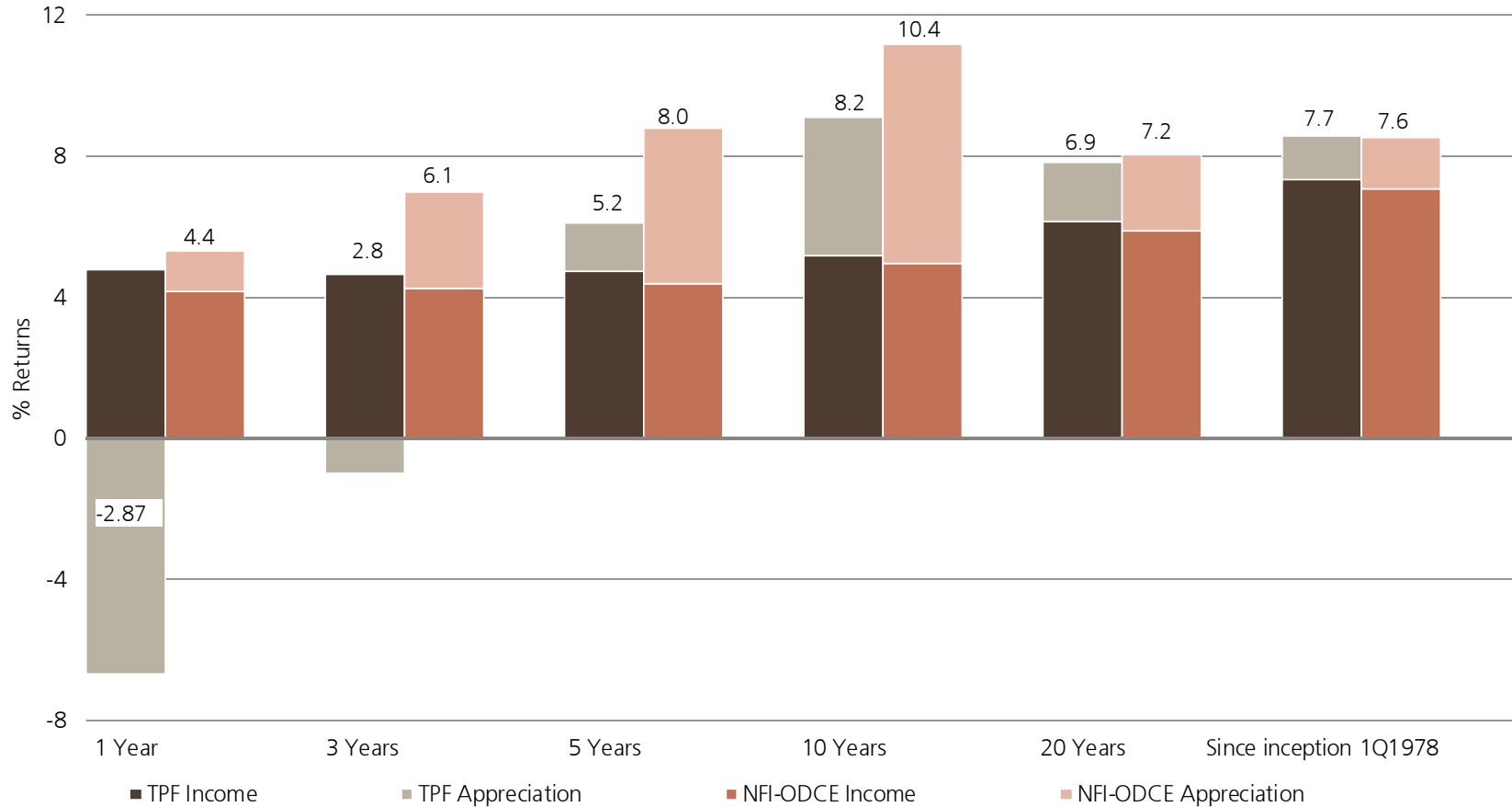


Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. *NFI-ODCE returns shown are preliminary. Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results. A "full market cycle" is defined as a period of time from a peak valuation through a trough and a return to a new peak.



TPF net performance vs. NFI-ODCE

Income return greater for all time periods



Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). NCREIF is the source of NFI-ODCE. Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes pages at the end of this section or presentation. Past performance is not indicative of future results.



TPF real return performance objective

Seek to provide at least a 5% real rate of return, before management fees, over any given three- to five-year period



Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). The source of CPI is Bureau of Labor Statistics. Notes: CPI is the Consumer Price Index, an inflationary indicator of the standard of living in the US. It is also referred to as the "cost of living" index. Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes slide at the end of this section or presentation. Fund Inception date January 13, 1978. Past performance is not indicative of future results.



TPF annual performance

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
<i>Percent %</i>																
Net investment income	8.42	9.97	9.68	9.96	9.05	8.87	8.86	8.40	7.53	6.80	5.60	6.06	6.36	7.38	7.95	8.60
Net realized/unrealized gain (loss)	0.77	3.39	7.47	7.02	0.67	3.76	4.00	1.04	0.17	0.08	0.13	1.89	(10.12)	(12.47)	(12.01)	(6.76)
Total, before management fee	9.24	13.61	17.69	17.49	9.76	12.87	13.12	9.51	7.71	6.88	5.74	8.04	(4.25)	(5.78)	(4.78)	1.41
Total, net of management fee	8.26	12.58	16.65	16.42	8.71	11.80	12.07	8.45	6.67	5.84	4.68	6.97	(5.14)	(6.48)	(5.47)	0.70

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
<i>Percent %</i>																
Net investment income	9.70	9.88	10.33	9.88	8.59	8.73	8.99	8.99	8.38	7.91	7.28	6.85	6.07	5.12	4.96	6.69
Net realized/unrealized gain (loss)	2.42	2.14	5.59	12.56	7.33	3.97	7.59	(6.74)	0.51	1.52	6.89	13.61	10.12	8.49	(11.98)	(27.55)
Total, before management fee	12.30	12.18	16.34	23.34	16.39	12.96	17.08	1.79	8.93	9.52	14.54	21.13	16.65	13.93	(7.46)	(22.30)
Total, net of management fee	11.38	11.09	15.23	22.22	15.33	11.89	15.96	0.86	8.13	8.55	13.49	20.05	15.58	12.84	(8.29)	(22.94)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Since Inception	% of total return
<i>Percent %</i>												
Net investment income	7.05	5.36	5.35	5.13	5.16	4.97	4.72	4.64	4.58	4.79	7.36	85%
Net realized/unrealized gain (loss)	9.32	7.55	4.62	5.12	6.29	7.69	2.40	1.61	2.33	(6.66)	1.24	15%
Total, before management fee	16.85	13.21	10.15	10.44	11.69	12.94	7.21	6.30	6.99	(2.10)	8.67	100%
Total, net of management fee	15.89	12.08	9.04	9.32	10.56	11.83	6.14	5.42	6.15	(2.87)	7.68	N/A

Data as of December 31, 2019. Source: UBS Asset Management, Real Estate & Private Markets (REPM). Notes: Returns supplement the Firm's Equity Composite previously provided or included herein. See required notes page at the end of this section or presentation. Past performance is not indicative of future results. TPF began operations on January 13, 1978, thus the 1978 return is not for a full year. Returns are annualized.

UBS Realty Investors Equity Composite

Year	Year-end		Gross of fees (%)				Benchmark return (%)	Net of fees (%)	Range of Gross Returns (%)		Asset weighted standard deviation	% of Composite assets valued externally ⁽¹⁾
	Number of accounts	Composite	Total Firm	Income return	Appreciation (depreciation)	Total return		Total	Max	Min		
		Net Assets (USD millions)	Net Assets (USD millions)									
2009	9	7,995	10,232	6.68	(27.91)	(22.69)	(29.76)	(23.32)	(11.8)	(62.2)	4.23	100
2010	8	9,687	12,107	7.10	9.37	16.95	16.36	15.92	42.0	4.7	3.20	100
2011	8	12,404	15,241	5.57	8.20	14.10	15.99	12.96	35.3	8.6	2.88	100
2012	9	14,679	17,325	5.45	5.07	10.73	10.94	9.63	25.8	(2.5)	2.53	100
2013	9	16,114	19,206	5.22	5.40	10.83	13.94	9.71	26.5	(38.7)	2.68	100
2014	9	18,788	22,252	5.21	6.61	12.07	12.50	10.94	35.8	6.7	2.46	100
2015	7	21,383	25,379	5.06	8.11	13.47	15.02	12.33	26.3	8.6	2.05	100
2016	7	22,534	26,744	4.77	2.99	7.86	8.77	6.80	23.2	7.2	2.15	100
2017	7	22,455	26,974	4.61	1.93	6.61	7.62	5.75	14.5	2.7	1.20	100
2018	7	21,767	27,131	4.57	2.56	7.22	8.35	6.38	12.5	(22.6)	2.63	100

1. Compliance Statement Real Estate & Private Markets, Real Estate US (the "Firm") claims compliance with the Global Investment Performance Standards (GIPS®) and has prepared and presented this report in compliance with the GIPS standards. The Firm has been independently verified since January 1, 1993. Verification assesses whether (1) the Firm has complied with all the composite construction requirements of the GIPS standards on a firm-wide basis and (2) the Firm's policies and procedures are designed to calculate and present performance in compliance with the GIPS standards. The UBS Realty Investors Equity Composite has been independently examined for the periods January 1, 2009 through December 31, 2018. The verification and performance examination report is available upon request.

2. The Firm The Firm is defined as UBS Realty Investors LLC and UBS Farmland Investors LLC, together Real Estate & Private Markets, Real Estate US. Both entities are registered with the US Securities and Exchange Commission as investment advisors. The Total Firm Gross Assets at December 31, 2018 were USD 32.6 billion, representing the fair value of total Firm assets held under management. Total Firm Net Assets represent the Total Firm Assets held under management less the fair value of liabilities.

3. The Composite The UBS Realty Investors Equity Composite (the "Composite") was created in 2005. All results are presented in US dollars. A complete list and description of Firm composites is available upon request. The Composite comprises all fee-paying, non-taxable discretionary accounts that invest primarily in equity real estate including, but not limited to, the following property types: apartments, office, retail, industrial, and hospitality. The strategy of the accounts in the Composite is to acquire investments in US commercial and multifamily real estate (core and value-added properties) expected to provide attractive risk-adjusted returns consisting of current income and capital appreciation. As of December 31, 2018, mortgage assets constituted USD 0.9 billion of Composite Net Assets. Since October 2003, a sub-advisor has managed the cash for some pooled accounts included in the Composite. Composite dispersion for any year is represented by both the range and the asset-weighted standard deviation of the gross total returns of the accounts that were in the Composite for the entire calendar year. Discretion is broadly defined as the Firm having discretion over the selection, capitalization, asset management, and disposition of investments within the parameters of a given mandate.

4. Valuation An independent appraisal of the underlying real estate for each investment is performed at least annually and includes a complete property inspection and market analysis. Starting October 1, 2009, independent appraisals are generally completed every quarter for most of the underlying real estate investments. For real estate investments that are held in funds where appraisals are not performed on a quarterly basis and prior to October 1, 2009, the underlying real estate is typically scheduled to be appraised twice a year. In the interim quarters, updated property and market information is reviewed. If this review indicates a potential material change in the value, the valuation is then updated by the independent appraiser. If this review indicates that any change in value is likely not material, the value is determined to remain unchanged. Valuations of real estate and debt use significant unobservable inputs. In general, each annual property appraisal includes at least an income approach using a discounted cash flow model and a sales comparison approach, which are considered in determining a final value conclusion. All appraisals are certified by members of the Appraisal Institute who hold the MAI designation. Third-party debt is stated at fair value. The valuation of debt is taken into consideration when determining the estimated fair value of the equity in the related investment.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results. ⁽¹⁾Generally for those assets held longer than six months.



UBS Realty Investors Equity Composite

5. Calculation of Performance Returns reflect the impact of leverage, which averaged approximately 16.0% of gross asset value (net asset value plus debt) during 2008 through 2018, and approximately 18.2% in 2018. Leverage has consisted primarily of mortgage loans payable that are collateralized by the related real estate investment. The extent to which leverage is used varies by account strategy and may include either portfolio or property level debt. Expenditures, including tenant improvements and leasing commissions, that extend the useful life or represent additional capital investments benefiting future periods, are capitalized as a component of cost. Annual returns are time-weighted rates of return calculated by linking quarterly returns. The sum of income and appreciation (depreciation) may not equal total returns due to the linking of quarterly returns. Gross of fees returns are presented before all management fees, but after third-party expenses. Net returns are presented net of the management fees, performance fees and third-party expenses. All returns are presented before any applicable insurance company contract charges in effect on certain funds through February 29, 2008. The policies for valuing portfolios, calculating performance, and preparing compliant presentations are available upon request.

6. Investment Management Fees Management fees differ by account and reflect the complexity and value of services chosen, anticipated size, and the number and type of investments involved. Depending upon the services, the fee may represent any one or a combination of: fixed flat amounts; a percentage of purchase price, earnings, assets under management, or of sales proceeds; or incentive fees based on performance. The fee for investment in one of the Firm's commingled funds can be up to 190 bps per annum on net asset value based upon the fee scale and the investor's share of net asset value in the fund and other UBS Realty sponsored funds as of the beginning of the quarter with an incentive fee charged on various performance hurdles, for example, 15% above a 7% real return over sequential 3-year periods, subject to certain clawback provisions depending on the performance of the fund. Please see the applicable fee schedule(s) appropriate to the product or services being presented.

7. Benchmark Effective May 2009, the Firm changed the benchmark retroactively from the property-level National Council of Real Estate Investment Fiduciaries ("NCREIF") Property Index ("NPI") to a fund-level Index, the NCREIF Fund Index-Open End Diversified Core Equity ("NFI-ODCE" or the "Index"). The Firm believes a fund-level index provides a more meaningful comparison for a fund-level composite. The NFI-ODCE, first published mid-2005, is a capitalization-weighted, time-weighted, fund-level return index beginning as of the first quarter of 1978, inclusive. It is presented gross of fees. As of December 31, 2018, the NFI-ODCE consisted of 25 active funds with total net assets of USD 199.2 billion. The NFI-ODCE leverage ratio at December 31, 2018 was 21.5%.

8. Market Conditions (Supplemental Information) Over the past two decades, commercial real estate experienced historic highs and lows. Fundamental recovery following the 2001 recession, along with a dramatic increase in the availability and reduction in the cost of debt capital propelled commercial and multifamily performance to the highest level in NCREIF history. In 2005, the NCREIF Fund Index – ODCE returned 21.4%, its highest calendar total return since its inception in 1978. A worldwide credit crisis initiated a new recession during 2008. Liquidity evaporated in most asset classes, including commercial real estate. Total returns turned negative in mid-2008, with 2009 producing the lowest performance on record at negative 29.8%. The downturn was swift, and 2010 through 2013 reflected a period of recovery. By late-2013, expansion was underway as total returns on stabilized properties had recouped losses, led by steady income growth and low supply growth across the broad market. After six years of double-digit returns led by above-average appreciation, the NFI-ODCE produced a gross return of 8.8% during 2016, followed by 7.6% in 2017 and 8.4% in 2018. Since inception in 1978, the NFI-ODCE produced a gross return of 8.7%.

Source: UBS Asset Management, Real Estate & Private Markets (REPM). Past performance is not indicative of future results.



TPF Required notes

Returns herein, unless otherwise noted, are presented gross of fees.

The Fund's participating mortgages and those construction loans converting to participating mortgages are secured by properties operated by sponsors that the advisor has deemed creditworthy. The Fund does not own these properties.

Returns for periods greater than one year are annualized. For the period ending December 31, 2019 TPF's net total returns for the quarter, one-, three-, five-, ten-, twenty-year periods and since inception were -0.15%, -2.87%, 2.82%, 5.23%, 8.24%, 6.91% and 7.68% respectively, after the deduction of management fees, but before the deduction of contract charges. Contract charges were only applicable through February 29, 2008. TPF returns reflect the reinvestment of income. Returns and dollars are USD denominated.

Information on fees is available in the ADV Part 2 for UBS Realty Investors LLC and is also available upon request. As fees are deducted quarterly, the compounding effect will be to increase the impact of the fees by an amount directly related to the gross account performance. For example, on an account with a 1% annual fee, if the gross performance is 10%, the compounding effect of the fees will result in a net performance of approximately 8.93%.

The Total Expense Ratio (TER) of the Trumbull Property Fund for the rolling four quarters ended September 30, 2019 would be:

TER (Fund expenses after investment management fees / Average GAV) = 0.67%. (a) Returns are based on a time-weighted rate of return methodology. (b) The TER is prepared for informational purposes only based on our understanding of the calculation. (c) TPF is accounted for in conformity with U.S. generally accepted accounting principles (U.S. GAAP). (d) TER expenses primarily include Fund level advisory fees (both deducted by the Fund and directly billed to investors), audit and tax fees, appraisal and other third-party valuation service fees for the Trumbull Property Fund. Property level expenses (e.g., utilities, maintenance, real estate taxes) are excluded from the TER calculation.

Indices are shown for informational purposes only as they are well-recognized measures rather than because there is a close relationship between the investments contained in, and the performance of REPM-US' Funds and the components of these indices. The investment profile, credit risk and volatility of such indices may be materially different than the portfolios of the Fund shown and generally do not reflect the reinvestment of dividends or deduction of management or other fees. **NFI-ODCE (Source NCREIF)** is a fund-level, capitalization weighted index of open-ended diversified core equity commercial real estate funds that includes cash balances and leverage and is reported gross of fees. The degree of leverage used varies among the funds included in NFI-ODCE. December 31, 2019 the Preliminary NFI-ODCE consisted of 24 active funds with total net assets of USD 206.9 billion.

The NCREIF Property Index (NPI), source NCREIF, is a property-level index, which consists of existing properties only (development projects and participating mortgages are excluded), excludes cash balances and leverage, and other non-property related assets, liabilities, income and expenses.

The Inventory Model is based on data from CBRE Econometric Advisors and NCREIF as of December 2018. Market weights by property type are derived from a measured inventory of space and estimates of price/sq ft each year over the 85-16 time period and held constant at the 1985 weights over the 78-84 time period. These weights are applied to annual NCREIF returns by property type to generate the investable universe portfolio returns.

There is no assurance that the financial objective will ultimately be realized and the possibility of loss does exist. There is no guarantee that the investment strategy will perform as expected. Property photos shown in this presentation represent some examples of Fund investments. These types of investments may not be available or selected by the Fund in the future.

Mission-driven and investor-led, GRESB is the environmental, social and governance (ESG) benchmark for real assets. GRESB works in collaboration with the industry to provide standardized and validated ESG data to the capital markets. The 2019 real estate benchmark covers more than 1,000 property companies, real estate investment trusts (REITs), funds, and developers. Coverage for infrastructure includes 500 infrastructure funds and assets. Combined, GRESB represents USD 4.5 trillion in real asset value. More than 100 institutional investors, with over USD 22 trillion AUM, use GRESB data to monitor their investments, engage with their managers, and make decisions that lead to a more sustainable real asset industry.

Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. To celebrate the 15th Year of ENERGY STAR for Buildings, the EPA recognized UBS Realty Investors LLC as a Premier Member of the 2014 ENERGY STAR Certification Nation for certifying 38 buildings that year. To earn certification, a building must achieve an Energy Star rating of 75 or higher.

Please note that past performance is not a guide to the future. The value of investments and the income received may go down as well as up, and investors may not get back the original amount invested.



Risks

Investors should be aware that return objectives are subject to a number of assumptions and factors, a change in any of which could adversely affect returns. Accordingly, investors should note the limitations of an objective.

Investments in direct real estate and real estate funds involve a high degree of risk. For instance, events in 2008 and 2009 such as the deterioration of credit markets and increased volatility have resulted in a historically unprecedented lack of liquidity and decline in asset values. The value of investments and income from them may increase or decrease. Investors must have the financial ability and willingness to accept and bear the risks (including, among other things, the risk of loss of investment) that are characteristic of real estate investing and investing in commingled fund for an indefinite period of time. Among the risks to be considered are:

Risks of investing in real estate. Risks include adverse changes in market and economic conditions, zoning, and other governmental laws, regulations, and policies, occupancy levels and the ability to lease space, and environmental risks, and risk of uninsured losses.

Debt investment risk. Risk includes risks of borrower defaults, bankruptcies, fraud and special hazard losses that are not covered by standard hazard insurance

Restrictions on redemption and transferability of shares or units; illiquidity. Real estate is an illiquid investment and the account may not be able to generate sufficient cash to meet withdrawal requests from investors.

Reliance on controlling persons and third parties. The exercise of control over an entity can impose additional risks and the fund can experience a significant loss. The risk of third parties includes a conflict between their objectives and those of the account or fund.

Use of leverage. Leverage will increase the exposure of the real estate assets to adverse economic factors, such as rising interest rates, economic downturns, or deteriorations in the condition of the properties or their respective markets and changes in interest rates

Legal & Taxation. Investors should consult their own legal and tax advisers for potential US and/or local country legal or tax implications on any investment

Currency risk. The funds and accounts managed by UBS Realty Investors LLC are denominated in US Dollars. There is a potential for loss due to currency fluctuations for non-US investors.

Lack of diversification. Individually managed accounts and funds in their initial investment periods may have investments that are relatively large compared to the account's or fund's anticipated total value. Any limit to diversification increases risk because the unfavorable performance of even a single investment might have an adverse effect on the aggregate return.

Unspecified investments. There can be no assurance that the advisor will be able to continually locate and acquire assets meeting the fund or account's objective. Competition for assets may generally reduce the number of suitable prospective assets available.

In considering an investment in a commingled real estate fund, prospective investors must rely on their own examination of the partnership agreement, private placement memorandum, and all terms of the offering, including merits and details of these and other risks involved. If there are any discrepancies in fund terms between this presentation and the private placement (offering) memorandum, the memorandum shall prevail.

This is not a recommendation to invest in any product or services. Investors must have the sophistication to independently evaluate investment risks and to exercise independent judgment in deciding whether or not to invest in real estate and real estate funds.

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Commingled funds will only be offered pursuant to a Confidential Private Offering Memorandum, or other similar document, and then only to qualified investors on a private placement basis in jurisdictions in which such an offer may legally be made. These funds may not be available to investors in all states and countries. When investing in a commingled fund, investors must read the Confidential Private Offering Memorandum or other governing documents before investing. If there are any discrepancies between information contained in this presentation and the Confidential Private Offering Memorandum and other offering materials, those materials will prevail.

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Ownership interests in the Fund are not endorsed or guaranteed by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC, any of their affiliates or any other banking entity, and are not insured by the federal deposit insurance corporation or any other governmental agency. Any losses in the Fund will be borne solely by investors in the Fund and not by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of their affiliates. Therefore, losses of UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of its affiliates' in the Fund will be limited to losses attributable to the ownership interests in the covered Fund held by UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC or any of its affiliates in their capacity as investors in the Fund. Investors should always read the Fund offering documents prior to investing in the Fund which includes a description of the roles of UBS AG, UBS Realty Investors LLC, UBS Farmland Investors LLC, UBS Fund Services (USA) LLC and its affiliates in greater detail.

The Fund discussed involves risks of a high degree and investors are advised to read and consider carefully the information contained in the offering documents including the detailed risk factors. There is no public market for the fund interests and no such market is expected to develop in the future. Risks include restrictions on the transferability and resale of shares, risk of investing in real estate and in developing markets, and the possibility of loss of investment does exist.

In the US, the Global Real Estate commingled funds are distributed by UBS Fund Services (USA) LLC, member FINRA and other UBS Asset Management broker-dealer affiliates. UBS Fund Services (USA) LLC main office is located at 10 State House Square, Hartford, CT 06103. UBS Realty Investors LLC, UBS Fund Services (USA) LLC is a member of the UBS Asset Management business division and subsidiaries of UBS AG.



Section 4

Biographies



Paul M. Canning

Senior Portfolio Manager
Managing Director



Years of investment
industry experience: 39

Education: Trinity College
(US), BA

Paul Canning is the Senior Portfolio Manager for the Trumbull Property Fund (TPF) for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management. TPF is the firm's largest open-end real estate account. Paul is also a member of the firm's Strategy Team and Investment Committee.

Prior to joining the TPF team, Paul was the Senior Portfolio Manager for the Trumbull Property Growth & Income Fund. Paul led the fund since its inception in 2006. The Fund has grown to USD 1 billion in assets and was a top quartile performer among open-end funds¹ during his tenure.

Previously, Paul was the head of the firm's national property disposition program. During his time in this role he directed the sale of 37 properties with gross proceeds of approximately USD 1 billion.

Paul joined the Firm's predecessor organization in 1991 as an asset manager for a portfolio of commercial properties encompassing all major property types.

His prior experience was as a project manager for redevelopment of inner-city residential properties for a non-profit development corporation and then as a Partner in charge of urban renovation projects at a Northeastern US commercial real estate firm.

Paul presently serves on the Housing Committee of the Capital Region Development Authority in Hartford CT.

Note: As at February 2019.
¹Source: MSCI as of December 31, 2017.

Nolan D. Henry

Portfolio Manager
Executive Director



Years of investment
industry experience: 16

Education: Rutgers
University (US), BA; The
Wharton School, University
of Pennsylvania (US), MBA

Nolan Henry is a Portfolio Manager supporting the open-end funds and individual client accounts for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management.

Prior to assuming his current position, Nolan was part of the team responsible for acquisitions and development activities in the Midwest Region of the United States.

Before joining UBS in 2008, Nolan was employed at MetLife in the Portfolio Management group. In that position he was responsible for asset allocation, cash flow modeling and risk management analysis for the company's general account. He previously worked in the Expense Management division at MetLife .

Nolan is a member of the Urban Land Institute (ULI).

Note: As at February 2019



Peter Shaplin

Portfolio Manager
Executive Director



Years of investment
industry experience: 18

Education: Lafayette
College, BA

Peter Shaplin is a Portfolio Manager for the Trumbull Property Fund (TPF) for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management.

He joined UBS in 2013 as an asset manager with responsibilities in the Commercial Asset Management Team – East Region. In this role Peter was primarily responsible for the management of the Becknell Industrial Operating Partnership, a joint venture owned by Trumbull Property Fund. His responsibilities included: asset management, acquisition, development and disposition activities within the partnership.

Prior to UBS, Peter worked at Commonfund Realty, an open-ended real estate fund located in Wilton, CT as an Asset Manager and Acquisitions Analyst, and the brokerage company Cushman & Wakefield providing investment sale services.

Peter serves internally as the co-chair of the Industrial Best Practices Group, which is tasked with collaborating with various disciplines within UBS to monitor trends and enhance efficiency in the management of industrial properties.

Note: As at February 2019.



Pamela J. Thompson

Portfolio Manager
Executive Director



Years of investment
industry experience: 28

Education: University of
Connecticut (US), BS, MBA

Pamela Thompson is a Portfolio Manager for the Trumbull Property Fund (TPF) for Real Estate US, a business which forms part of Real Estate & Private Markets within UBS Asset Management.

Pam has worked at UBS for over 14 years including roles in Acquisitions, Financing, and Multifamily Asset Management.

Prior to joining UBS, Pam was the Northeast Region Office Head for Bozzuto & Associates, a multifamily development firm, responsible for Regional Property Management and Acquisitions.

For four years, she worked at CIGNA Realty Investors, where she was the Assistant Portfolio Manager for a separate account. She also had extensive experience in debt placements on their lending team.

Pam also worked in Problem Loans and Valuations for Aetna Real Estate Investments, and as a Senior Real Estate Analyst for Arthur Andersen & Co.

Note: As at February 2019



Contact information



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Together, UBS Realty Investors LLC, UBS Farmland Investors LLC, and UBS Fund Services (USA) LLC, subsidiaries of UBS AG, comprise Real Estate US.





February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: \$25 MILLION INVESTMENT IN PANTHEON GLOBAL SECONDARIES FUND VI

Dear Board Members:

Attached is a memo from NEPC recommending a \$25 million investment in the Pantheon Global Secondaries Fund VI. Staff concurs with NEPC's recommendation.

Background

In 2010 the Board committed \$15 million to Pantheon's Global Secondaries Fund IV, earning an internal rate of return (IRR) of 13.5% and a net 1.58x multiple of invested capital as of September 30, 2019. In 2015 the Board committed \$50 million to Pantheon's Global Secondaries Fund V which has produced a net IRR of 14.5% and a multiple of 1.35x invested capital as of September 30.

In addition to strong performance from Pantheon's Global Secondaries Funds IV and V, Fund VI offers the advantage that 41% of the fund has already been invested (prespecified). Acquisitions were made at a 16% effective discount, and the fund is valued at a net multiple of 1.3x of invested capital. The fund's final close is expected in March of 2020. VCERA would be entitled to a 2.5 basis points fee discount for a \$25 million commitment for the life of the fund.

This fund will continue to provide size diversification to VCERA's current secondaries exposure. Capital will be turned around quicker than through more traditional primary investments.

IT IS RECOMMENDED THAT THE BOARD:

- 1. Approve an allocation of \$25 million to Pantheon's Global Secondaries Fund VI, and direct staff and legal counsel to prepare the necessary legal documents; and,**
- 2. Authorize the Board Chair or the Retirement Administrator, or in the absence of the Board Chair and Retirement Administrator the Chief Investment Officer, to approve and execute the required documentation.**

Respectfully submitted,

Dan Gallagher
Chief Investment Officer



To: Ventura County Employees' Retirement Association
From: NEPC Consulting Team
Date: February 24, 2020
Subject: Pantheon Global Secondary Fund VI, L.P.

Recommendation

VCERA staff and NEPC recommend that the Board of the Ventura County Employees' Retirement Association ("VCERA" or the "Plan") consider a commitment of up to \$25 million to Pantheon Global Secondary Fund VI, L.P. ("the Fund" or "Fund VI"). VCERA has a history investing with Pantheon within Private Equity going back to 2010. VCERA is invested in the preceding Pantheon Global Secondary Fund IV (\$15 million) and Pantheon Global Secondary Fund V (\$50 million). Pantheon is targeting a net IRR of 15% and TVPI (total value per unit of capital paid-in) multiple of 1.5-1.7x. The NEPC Alternative Assets Committee believes the strategy is satisfactory and can achieve its targeted returns. Due to unfavorable relative performance of several prior funds, a strategy that targets younger secondary deals which have lower purchase discounts than secondaries of older funds, and currently high equity valuations, the Fund has received a "3" rating by our research team.

Summary

Pantheon Ventures ("Pantheon", "the Firm" or the "GP") is targeting a \$2.0 billion fund raise for Pantheon Global Secondary Fund VI. Fund VI will target secondary investments in high-quality fund interests, generally those where Pantheon has made prior primary fund commitments. Fund VI will employ a focused, concentrated strategy of proactively targeting secondary investments in younger secondary funds, where portfolio company valuations have yet to experience significant valuation write-ups. Pantheon believes that this "inflection point" investment strategy will enable them to acquire investments at attractive discounts to the long-term intrinsic value, which they also believe will better weather an economic downturn and recession than secondaries of older funds. Pantheon's strategy leverages the Firm's global primary private equity fund platform, which has \$37.0 billion in assets under management and has made commitments to 1800+ funds over the Firm's nearly 40-year history. Pantheon is targeting a net multiple of 1.5x-1.7x of invested capital and a 15%-18% net IRR for investors in the Fund. Fund VI started investing in 2018 and expects to have its final closing in March 2020. Fund VI had invested approximately 10% of its target and was valued at 1.3x as of September 30, 2019.

Pantheon Ventures has a large, global investment platform for making primary private equity commitments for its fund of fund and separate account programs. These primary fund commitments provide Pantheon with a wide range of GP relationships from which to source secondary investments. Pantheon's secondary investment strategy leverages its

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primary platform and database of underlying portfolio companies to proactively identify funds that have portfolio companies with break-out potential that have yet to be reflected in the funds' valuations. Pantheon's integrated investment approach makes good use of the scale of its business to identify secondary investment opportunities while utilizing an experienced, dedicated Secondary Team to analyze and negotiate secondary transactions.

Pantheon expects to make 25-40 secondary investments over the course of 4-5 years. Pantheon uses a strategic target allocation to portfolio construction by defining a strategy based on target allocations for a variety of portfolio characteristics, including geography, investment stage, GP quality, asset size, asset-level leverage, currency exposure, and fund maturity. Portfolio construction will be influenced by broader macro-economic factors and an assessment of how these dynamics will impact the value of private equity assets. By geography, Pantheon expects Fund VI to be invested as follows: North America 55%-65%, Europe 20%-30%, Asia-Pacific 5%-15% and Rest of World 0%-5%. By strategy, Pantheon is targeting the following exposures for Fund VI: Buyouts 65%-80%, Growth Equity 15%-25%, Mezzanine Debt 0%-10% and Late Stage Venture Capital 0%-5%. The Fund may borrow up to 40% of commitments to the Fund, with no more than 25% of total commitments being in borrowings with a term greater than 1 year. The Fund plans to use such borrowings primarily for cash management, bridging near-term expected distributions and to hedge foreign currency risk. The Fund does not plan on using Fund level leverage for investment purposes. However, while Pantheon has not made a practice of using deal-level leverage, the use of deal-level leverage is permissible on a case-by-case basis

Management fees are initially charged at a rate of 1% of committed capital during the Fund's investment period. After the fifth anniversary of the Fund's initial closing the annual management fee will change to a rate of 90% of the management fees charged in the previous year. These are common management fee rates and a common structure used by many secondary funds. Fund VI has a 10% GP carried interest rate that is also subject to an 8% LP preferred return on unreturned capital. This 10% GP carry rate is lower than the 12.5% GP carry rate that is charged by many other secondary private equity funds. As is typical for any private equity fund that started investing prior to its final closing, by investing in the final closing, VCERA would incur a pro-rata interest charge to participate in the Fund's initial investments as if VCERA had invested in the Fund from its inception. This interest charge is collected by the Fund but is distributed entirely to earlier investing Limited Partners based on a pro-rata share of the full and final commitments of all Limited Partners to the Fund and the amounts of capital contributed prior to the Fund's final closing.

Pantheon's secondary performance has generated mixed results over its first five funds. Its first fund, raised in 2000, performed admirably, generating a 1.67x net multiple on invested capital and a 15.1% net IRR, both of which are above median results. However, its second and third funds, raised in 2004 and 2006, respectively, did not perform well. While generating positive results, these funds ranked in the bottom quartile relative to other secondary funds and did not achieve Pantheon's target returns. Prior to starting to invest its fourth fund in 2010, Pantheon overhauled the Firm's secondary investment strategy, to improve upon its poorly performing second and third secondary funds.



Commencing with its fourth fund, Pantheon implemented a changed investment approach that placed a greater emphasis on identifying assets where the net asset value did not fully reflect Pantheon's assessment of the asset's full intrinsic value. The Firm shifted to a proactive, rather than reactive, sourcing strategy to secondary deal origination, implemented a more disciplined portfolio construction methodology, and discontinued investing in early-stage venture capital secondaries. Pantheon's new secondary investment strategy resulted in improved results for its fourth secondary fund, which has generated a second quartile total value to paid in net investment multiple return and net IRR returns either slightly above or slightly below median for its vintage.

Pantheon has continued to refine its investment strategy through its fifth secondary fund, which started investing in 2014. Based on elevated equity valuation concerns and to guard against a potential recession, Pantheon has been targeting younger secondary investments where the GP had made attractive investments but had not yet started to make significant valuation write-ups in the portfolio. Pantheon believed that this "inflection point strategy" would provide deals with greater appreciation potential, while also being more recession resilient. Pantheon notes that by purchasing assets that have yet to be written up, they are moderately sacrificing their ability to make secondary purchases at high discounts to GP value. While they recognize that this strategy would likely result in less favorable early comparisons to other secondary funds that are purchasing older assets at higher discounts, Pantheon believes that their approach will result in a higher return on investment over time. As such, Pantheon's fifth fund is generating early returns that are in the third quartile on a net total value-to-paid-in investment multiple and net IRR basis and fourth quartile results on a distributed-to-paid-in net multiple basis.

Pantheon Global Secondary Fund VI has been reviewed by NEPC's Alternative Assets Committee and assigned a 3 rating, indicating that the Fund is a satisfactory investment product. While lacking an unproven investment thesis, there are no significant concerns around the manager's viability, the quality of the team, or the institutional support for the product. As mentioned previously, VCERA's commitments to Pantheon were in Funds IV and V, which have each generated returns in excess of 13% per annum, slightly better than their vintage year peers. The table on the following page summarizes NEPC's Research Ratings Definitions.



NEPC Research Ratings Definitions

Rating	Definition
1	A high conviction investment product. Product has a clear and economically-grounded investment thesis, and is managed by an investment team that is sufficiently resourced and incented to execute on the thesis.
2	NEPC has a positive view of the strategy. Strategy has a compelling and sound investment thesis. The manager is sufficiently resourced and incented to execute on the thesis. Strengths outweigh the weaknesses, but the strategy does not meet all requirements for a 1 rating.
3	A satisfactory investment product. The strategy lacks a compelling investment thesis, however there are no significant concerns around the manager’s viability.
4	The strategy may have an unclear or ambiguous investment thesis or the manager may lack the ability to execute on the stated thesis. The strategy likely has strengths and weaknesses and the weaknesses may outweigh the strengths.
5	A strategy that lacks an investment thesis or NEPC has no confidence in the manager’s ability to execute on the thesis, and/or the investment firm may not be viable. Serious issues have been identified with an investment manager or product. This rating aligns with a Terminate Due Diligence status for client-owned products.
NR	Due diligence has not been sufficiently completed on the product or manager.

U.S. | Europe | Asia

Private Equity | Infrastructure & Real Assets | Debt

Primaries | Secondaries | Co-investment



Presentation to Ventura County Employees' Retirement Association

February 2020

FOR PROFESSIONAL INVESTORS ONLY

PRIVATE & CONFIDENTIAL

Presenting to you...



Kevin Dunwoodie, Partner (joined 2008, 13 years of private markets experience)

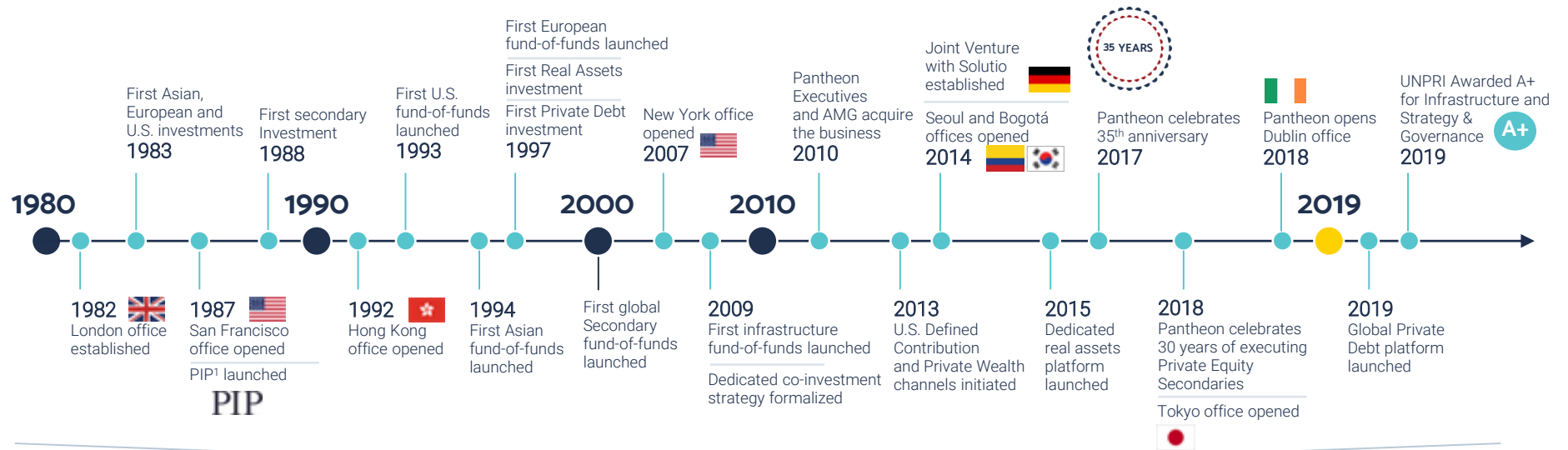
Kevin is a Partner in Pantheon's Global Secondaries Team and focuses on sourcing, analysis, evaluation, and completion of secondary transactions. Previously, Kevin worked at Morgan Stanley in New York where he spent over a year as an Associate in the firm's strategy and execution group. Before joining Morgan Stanley, Kevin spent two years at Pacific Corporate Group in La Jolla as a Private Equity Analyst and, prior to that, two years at Deutsche Bank Alex Brown as an Investment Banking Analyst in the firm's consumer group. Kevin graduated Magna Cum Laude with a finance degree from the University of Notre Dame, earned his MBA from Harvard Business School and is a CFA charterholder. Kevin is based in San Francisco. kevin.dunwoodie@pantheon.com



Iain Jones, Principal (joined 2012, 9 years of private markets experience)

Iain is a member of Pantheon's U.S. Investor Relations team focused on existing relationships and business development in North America. Previously, Iain provided client service and fundraising support across the UK market, as well Asia and Australia, from Pantheon's London office. Prior to joining Pantheon, he worked for Preqin in the Infrastructure research team in London. He has a BSc in economics from the University of Bristol. Iain is based in San Francisco. iain.jones@pantheon.com

Investing in private assets for over 35 years



96 Investment professionals²

Pantheon holds **411** advisory board seats

\$47.1bn Funds under management³

612 individual investors globally

9,500 GPs in Pantheon's database

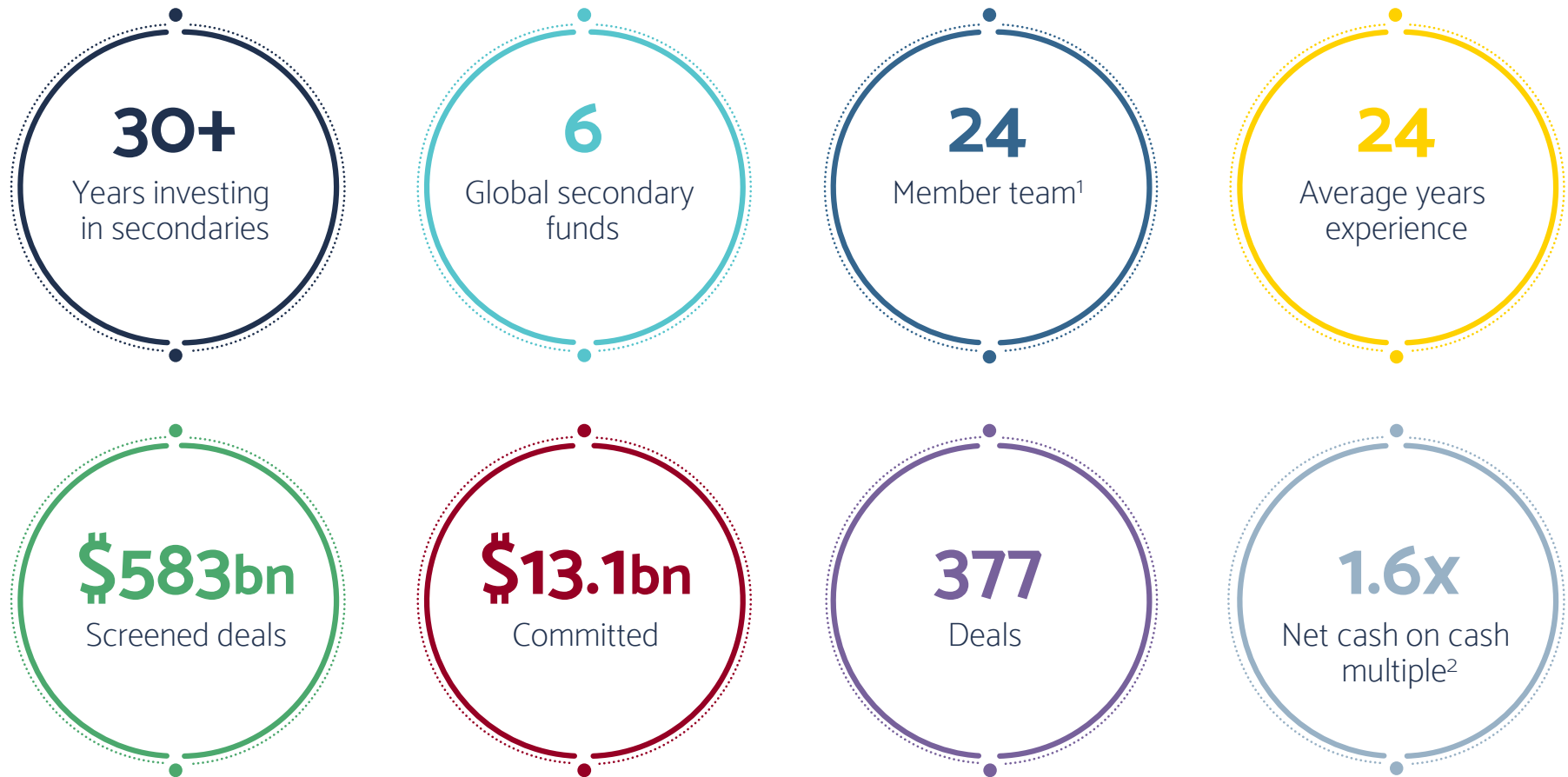
Investments in **2,000** funds

¹ Pantheon International Plc

² As of December 31, 2019. Please note this includes 21 professionals who support the deal teams through investment structuring, portfolio strategy, research and treasury.

³ As of September 30, 2019. This figure includes assets subject to discretionary or non-discretionary management, advice or those limited to a reporting function.

A pioneer in global secondaries



All figures are as of September 30, 2019.

¹ As of December 31, 2019

² Net cash-on-cash multiple aggregated across Pantheon's secondaries performance since inception. Past performance is not indicative of future results. Future performance is not guaranteed and a loss of principal may occur. For PGSF track record since inception with full disclosures and gross performance please refer to slide 14.

24 Member global secondary investment team



¹ Denotes investment professionals not dedicated to secondaries. As of December 31, 2019.

Pantheon's Secondary Track Record

As of September 30, 2019

	PGSF 88-II ¹	PGSF III	PGSF IV	PGSF V	PGSF VI	PGSF VI Key Info
Vintage	1988-2004	2006	2010	2014	2018	41% committed ³
Size (US\$ m)	1,647	2,020	2,157	2,111	1,408 ²	
Committed (US\$ m)	1,605	1,979	2,319	2,622	829 ³	21 secondary transactions ⁵
Drawn down (% of committed)	98%	97%	93%	87%	82%	
Returned (% of drawn capital)	159%	116%	134%	49%	6%	~16% effective discount ⁶
Net Cash on Cash multiple	1.76x	1.17x	1.80x	1.49x	1.30x	
Net multiple of Capital at Risk	8.12x	1.48x	2.23x	1.89x	1.30x	1.2X value uplift ⁷
Net multiple	1.45x	1.13x	1.58x	1.35x	1.30x	
Net IRR	15.7%	2.2%	13.5%	14.5%	Too Early ⁴	28.8% Gross IRR ⁴
Premium vs. MSCI AC World Net TR⁸	13.9%	-3.0%	3.9%	7.0%	N/A	
						Final Close: March 27, 2020

¹PGSF 88-II represents the combined performance of nominal pools of capital prior to Pantheon's secondary funds in combination with the first two dedicated funds. As the fee structures varied among clients during nominal pool periods, net IRR and net multiple is calculated by applying the fee structure applicable to PGSF V. PGSF 88-II results are illustrative and do not represent actual historical results achieved by any client. Pro-forma net performance has been calculated without taking into account fund organizational and administrative expenses. Past performance is not indicative of future results. Future performance is not guaranteed and a loss of principal may occur. ²Amount represents current program size and includes \$269 million of capital closed or pending investor commitments to side-by-side vehicles / accounts and \$169 million hard circled for January 2020. ³Please note that this includes 3 pending deals in legal closing for an estimated total of \$112 million. There is no guarantee these deals will be completed and/or will receive the estimated allocations. Based on a target fund size of \$2.0 billion. ⁴Actual Net IRR is 60%, however, is not meaningful this early in the Fund's life. The Fund (PGSF VI) employs a credit facility, which is generally used to bridge capital calls from limited partners and/or to pay for a portion of an investment. This causes the resulting Net IRR and multiples to appear higher than the Gross IRR, on an interim basis, particularly in the early life cycle of the fund. Net returns will lessen as investors capital is drawn down to repay the credit facility. ⁵Based on closed transactions and transactions in legal closing as of December 2019. ⁶Based on the first available capital accounts 3 months after closing including interim cash flows. This figure reflects the discount/(premium) to value at the time of deal closing. Represents the effective discount for the 12 investments which have enough information to calculate an effective discount as of September 31, 2019. ⁷Information as of January 2020. Includes Projects: Anvil, Apple, Gondola, Volt, Hendrix, Aprilia, Broadway, Queen, Regatta, Floki, Federer and Project X, Omega, Summer, Kasoku, Gator, Venice, Pineapple, as well as closed co-investments and strategic primaries. Total commitments were \$494 million. Value uplift is based on estimated NAVs of all deals closed through January 2020. ⁸The actual returns for the MSCI AC World Net TR during the period of performance for PGSF 88-II was 2.0%, PGSF III was 5.2%, PGSF IV was 9.6%, while the performance during the same period of PGSF V was 8.3%. For PGSF track record since inception with full disclosures and gross performance please refer to slide 14.

What differentiates Pantheon Global Secondaries Fund VI?

PGSF VI Program Size

- ▶ Disciplined fund size of **\$2.0 billion** relative to **\$47.1 billion¹** global private equity platform
- ▶ Sized “to fill the void” left by competitors raising larger funds

Investment Approach

- ▶ Target concentrated positions in high quality and mature funds where Pantheon has an information and access advantage
 - ▶ Acquire investments with embedded value regardless of complexity
 - ▶ Small and medium buyout and growth equity tilt
 - ▶ Navigate a competitive market by focusing on proprietary / narrowly marketed opportunities and restrictive GPs and processes

Pantheon Platform¹

- ▶ 35 year track record investing in private equity
- ▶ Eight global offices and **96²** investment professionals
- ▶ Pantheon holds **411** advisory board seats
- ▶ **9,500** GPs in Pantheon’s database and invested in **2,000** funds

¹As of June 30, 2019. This figure includes assets subject to discretionary or non-discretionary management, advice or those limited to a reporting function.

²Please note this includes 21 professionals across Pantheon’s investment structuring and strategy team, who support the deal teams.

Pantheon opinion. Past performance is not indicative of future results. Future performance is not guaranteed and a loss of principal may occur.

PGSF VI Update

As of December 31, 2019

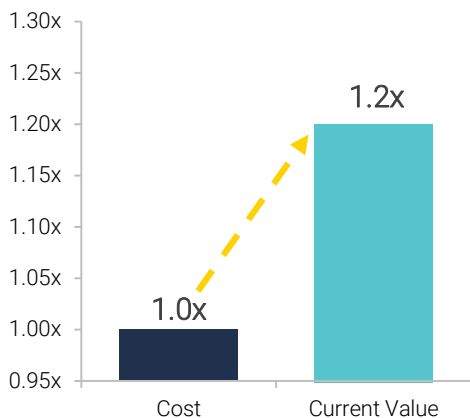
Fund Overview

- ▶ First close: March 2018
- ▶ Program capital closed and hard-circled: US\$ 1.4 billion
- ▶ Target Program size: US\$ 2.0 billion
- ▶ **Deployment: 41% committed to investments¹**
- ▶ **Average effective discount: 16.4%²**

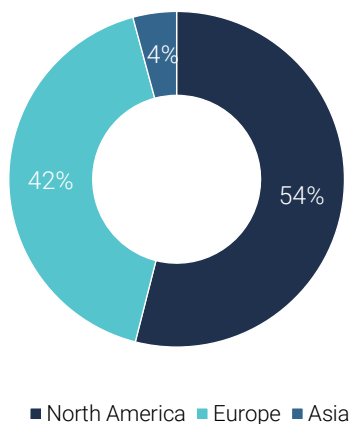
Core characteristics

- 1. Manager quality:** 93% of deal value exposed to GPs rated "A" or "B"⁴
- 2. Concentration:**
 - *Funds:* 73% of NAV in top 15 funds⁵
 - *Companies:* 53% of NAV in top 15 companies⁶

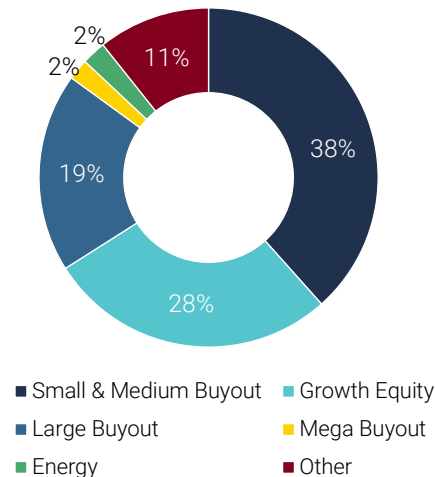
Value uplift³



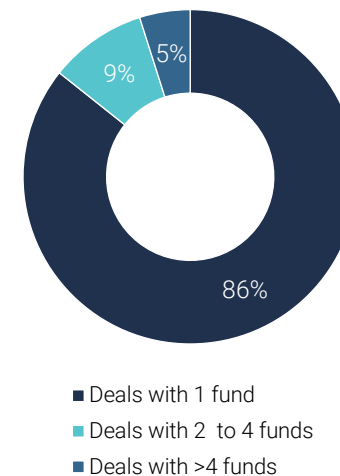
Geography⁷



Stage⁷



Concentration⁷



¹As of December 2019 and based on \$2.0 billion target fund size. Please note that this includes 3 pending deals in legal closing for an estimated total of \$112 million. There is no guarantee these deals will be completed and/or will receive the estimated allocations. ²As of September 2019. Includes 12 investments and is based on the first available capital accounts 3 months after closing including interim cash flows. This figure reflects the discount/(premium) to value at the time of deal closing. Please note this does not include co-investments and strategic primary investments. ³Information as of December 2019. Includes closed and pending deals, as well as closed co-investments and strategic primaries. Total commitments were \$834 million (including pending deals). Value uplift is based on estimated NAVs of all deals closed or pending as of December 2019. ⁴Based on closed and pending commitments as of December 2019. Pantheon Internal Rating: 'A' managers are those targeted for Pantheon's primary programs, which are chosen based on track record and a qualitative assessment of manager quality; 'B' managers are defined as: alternates to 'A' managers for Pantheon's primary programs, managers that Pantheon has previously invested in and/or alongside, or institutional quality managers that Pantheon has considered for a primary investment. There can be no guarantee that investments with identical or similar characteristics to those referenced here will be available for investment in PGSF VI. ⁵Information as of December 2019; please note this is based fund level data. ⁶Information as of December 2019. Based on gross company level data. ⁷Pie charts represent fund level exposures weighted by Total Commitments (closed and pending). Please note that 14% of Global Funds have been included in the North American allocation. For concentration, \$37 million of strategic primaries have been excluded. Note: Past performance is not indicative of future results. Future results are not guaranteed and loss of principal may occur. **For PGSF track record since inception with full disclosures and gross performance please refer to slide 14.**

PGSF VI Update: 41% committed to investments¹ with 1.2x value uplift⁴

Pantheon Global Secondary Fund VI Investment Listing						
#	Deal	Stage	Geographic Focus	Investment date	Deal size (\$m) PGSF VI	Value Uplift ⁵
Top Positions						
1	Gondola	Growth Equity	US	Jun-18	15.7	1.6x
2	Anvil	Energy	US	Jun-18	30.0	1.3x
3	Apple	Medium Buyout	Global	Aug-18	35.1	1.3x
4	Aprilia	Medium Buyout	US	Oct-18	15.4	1.2x
5	Hendrix	Small Buyout	Europe	Oct-18	21.9	1.2x
6	Queen	Medium Buyout	US	Jan-19	50.0	1.3x
7	Regatta	Medium Buyout	Europe	Jan-19	18.6	1.2x
8	Broadway	Balanced	Europe	Mar-19	77.2	1.1x
9	Federer	Growth & Buyout	US	Apr-19	29.8	1.6x
10	Floki	Large Buyout	US	May-19	36.8	1.5x
11	Project X	Medium Buyout	Global	Jul-19	17.0	1.9x
12	Omega	Medium Buyout	Europe	Nov-19	35.0	1.0x
13	Summer	Large Buyout	Europe	Dec-19	39.9	1.0x
14	Kasoku	Balanced Buyout	US	Dec-19	11.8	1.1x
15	Gator	Growth Equity	Global	Jan-20	41.8	1.1x
16	Venice	Large Buyout	Europe	Jan-20	35.0	1.0x
17	Pineapple	Growth Equity	US	Jan-20	41.2	1.0x
18	Project A ²	Growth Equity	Europe	TBC	55.6	N/A
19	Project M ²	Medium Buyout	Europe	TBC	14.9	N/A
20	Project W ²	Small & Medium Buyout	Asia	TBC	41.6	N/A
21	Project C ²	Large Buyout	US	TBC	32.4	N/A
Sub-Total					\$696.6	
Other Positions⁴						
X	N/A	Balanced	Global	Closed & Legal Closing	164.4	1.1x
Closed & Pending TOTAL					\$861.0³	1.2x

¹Percentages are based target fund size of \$2.0 billion. Please note that this includes 4 pending deals in legal closing for an estimated total of \$144.5 million. There is no guarantee these deals will be completed and/or will receive the estimated allocations. ²Pending deal. ³Amount includes closed and pending deals as of January 2020. ⁴Other positions include, small secondary deals, co-investments and strategic primaries. ⁵Includes Projects: Anvil, Apple, Gondola, Volt, Hendrix, Aprilia, Broadway, Queen, Regatta, Federer, Floki and Project X, Omega, Summer, Kasoku, Gator, Venice, Pineapple as well as closed co-investments and strategic primaries. Total commitments were \$497 million. Value uplift is based on estimated NAVs of all deals closed or signed through January 2020.

Pantheon Global Secondary Fund VI key terms

Key terms

Fund structure

Luxembourg Master Fund with Delaware and Luxembourg Feeder fund vehicles.

Commitment period

Up to five years

Fund term

10 years, with the possibility of further extensions

Fund currency

US\$

Minimum commitment

\$10m subject to Pantheon's discretion to accept a lower amount

Management fee

1% per annum, attenuating after year 5
Average Annualized Fee: 78 bps¹

Carried interest / incentive fee

10% subject to the Preferred Return, GP catch-up

Preferred return

8% per annum

Pantheon commitment

At least 1%

This summary of Key Terms is qualified in its entirety by the more detailed provisions of the Partnership Agreement and the terms hereof are subject to modification or withdrawal. This document does not constitute marketing for the purposes of the UK implementation of the AIFMD. This is not a recommendation to invest in a Pantheon product or service.

¹Average annualized management fee is calculated based on 100 bps per annum on commitments during the investment period and 90% of prior years' fee attenuation schedule after year 5 over the fund term, plus extensions.



Appendix

Current secondary market observations and Pantheon's edge



Secondary Market Present

- ▶ H1 2019 transaction volume estimated at \$42bn, surpassing the previous first half record of \$27bn in 2018 and estimated to reach \$90bn+ for the full year
- ▶ Competition is fierce for large transactions (>\$500m) as larger funds are pressured to maintain deployment
- ▶ Public market volatility is softening pricing expectations
- ▶ GP-led transactions continue to increase and evolve
- ▶ Quality GPs increasingly guiding LP interests in their funds to their preferred relationships



Pantheon's Edge

- ▶ **\$2bn** fund size enables Pantheon to remain highly selective
- ▶ **Attentive to less competitive areas** of the market and creating transactions
- ▶ **Focused on concentrated positions** with embedded value, alongside GPs Pantheon knows
- ▶ **Leverage Pantheon's deep GP relationships** to source less competitive deal flow and "early look" advantage
- ▶ Pantheon can be a **preferred buyer** due to its primary platform

Pantheon opinion.

Source: ¹Greenhill Cogent – Secondary Market Trends and Outlook, 1H 2019 Note:
There is no guarantee that these trends will continue.

PGSF V Summary

As of September 30, 2019

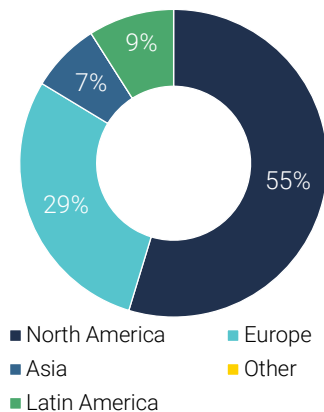
Fund Overview

- ▶ Final closing: May 2016
- ▶ Fund size: US\$ 2.1 billion
- ▶ Average age at purchase: 4 years¹
- ▶ Over 128% committed to 57 secondary transactions
- ▶ Average effective discount: 11%^{1,2}

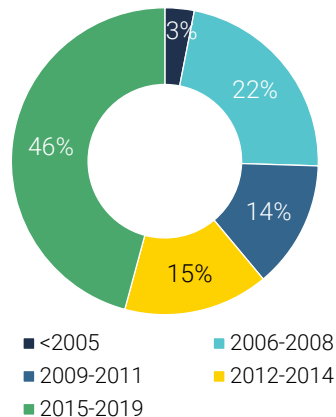
Core characteristics

1. **Manager quality:** 94% of deal value exposed to GPs rated “A” or “B”³
2. **Concentration:**
 - *Funds:* 40% of NAV in top 15 funds
 - *Companies:* 36% of NAV in top 15 companies⁴
3. **Mature:** Average % funded at close 80%¹

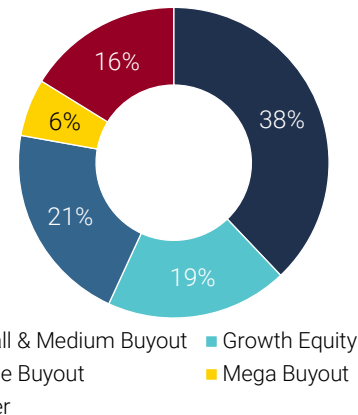
Geography⁵



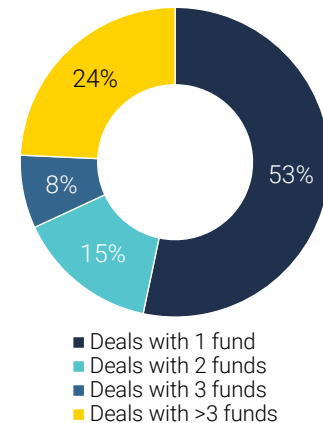
Vintage⁵



Stage⁵



Concentration⁵



¹As of September 30, 2019; please note this does not include co-investments and strategic primary investments. ²Based on the first available capital accounts 3 months after closing including interim cash flows. This figure reflects the discount/(premium) to value at the time of deal closing. ³Based on commitments as of September 30, 2019. Pantheon Internal Rating: ‘A’ managers are those targeted for Pantheon’s primary programs, which are chosen based on track record and a qualitative assessment of manager quality; ‘B’ managers are defined as alternates to ‘A’ managers for Pantheon’s primary programs. The investment period for PGFSF V remains open and so the portfolio composition is subject to further change. There can be no guarantee that investments with identical or similar characteristics to those referenced here will be available for investment in PGFSF VI. ⁴As of September 30, 2019; please note this is based on gross company level data. ⁵Pie charts represent fund level exposures weighted by Total Commitments. Past performance is not indicative of future results. Future performance is not guaranteed and a loss of principal may occur. **For PGFSF track record since inception with full disclosures and gross performance please refer to slide 14.**

Track record and disclosures since inception

As of September 30, 2019

	PGSF 88-99 ^{1,2}	PGSF I	PGSF II	PGSF III	PGSF IV	PGSF V	PGSF VI
Vintage	1988-1999	2000	2004	2006	2010	2014	2018
Size (US\$ m) ³	320	418	909	2,020	2,157	2,111	929 ⁸
Committed (US\$ m) ³	320	410	875	1,979	2,319	2,622	473
Drawn down (% of committed) ³	100%	99%	97%	97%	93%	87%	82%
Returned (% of drawn capital) ³	188%	182%	137%	116%	134%	49%	6%
Gross multiple ⁴	1.89x	1.82x	1.38x	1.25x	1.53x	1.31x	1.21x
Net multiple ⁵	1.71x	1.67x	1.23x	1.13x	1.58x	1.35x	1.30x
Net Cash on Cash multiple ⁶	2.12x	1.86x	1.36x	1.17x	1.80x	1.49x	1.30x
Net multiple of Capital at Risk ⁷	7.99x	2.46x	2.35x	1.48x	2.23x	1.89x	1.30x
Gross IRR ⁴	24.0%	18.9%	9.8%	4.5%	14.6%	14.7%	28.8%
Net IRR ⁵	20.5%	15.1%	5.7%	2.2%	13.5%	14.5%	Too Early

¹ PGSF 88-99. Prior to 2000, Pantheon made secondary investments via discretionary separately-managed accounts, regional primary funds, and other Pantheon vehicles rather than via dedicated secondary investment funds. For periods prior to 2000, Pantheon has created model portfolios, each representing a three-year time period to replicate the commitment period of a Pantheon secondaries fund, and comprising the secondary investments made by Pantheon on behalf of its discretionary investment management clients, regional primary funds and other Pantheon vehicles during such period, measured by date of purchase, excluding single fund secondaries. As a result, PGSF 88-99 is a composite that represents the combined hypothetical performance of these nominal three year funds for investments made by discretionary separately-managed accounts, regional primary funds, and other Pantheon vehicles during the years 1988-1999, as well as pre-PGSF I deals which took place in 2000. The three year model portfolios provided representing the pre-2000 performance of investments made by Pantheon, as well as the PGSF 88-99 composite, have certain limitations. These models and the PGSF 88-99 composite are hypothetical, do not represent the actual investments made by an actual fund or separately-managed account, and consequently may not reflect material economic and market factors, such as liquidity constraints or investment restrictions, that may have had an impact on Pantheon's actual decision-making. These model portfolios and the PGSF 88-99 composite shown are for illustrative purposes only, and are intended to provide an illustration of Pantheon's investment performance for the period pre-dating 2000. It does not purport to show the investment holdings or performance of an actual account. The figures presented for PGSF 88-99 above further do not represent the actual historical results achieved by any client or investor. The exposures for each of the model portfolios and for the PGSF 88-99 composite shown will differ from the exposures for an actual Pantheon discretionary separately-managed account or investment fund, given specific client guidelines, objectives, or restrictions. ² As the fee structures varied among clients during these periods, net IRR and net multiple is calculated by applying a model fee structure that is intended to reflect the fee structure applicable to PGSF VI, which is detailed in Section IX, "Key Terms". PGSF 88-99 results are illustrative and do not represent actual historical results achieved by any client. Pro-forma net performance has been calculated without taking into account fund organizational and administrative expenses. Please note that an investor's net return may differ significantly due to differences in fees, the timing of investments, and the application of fund-level organizational and administrative expenses. ³ Reflects capital invested, drawn or returned by underlying portfolio funds. With respect to PGSF 88-99, which is a composite of model portfolios representing the different investments made by discretionary separately-managed accounts prior to 2000 and not an actual fund, "size" and "committed" represent the amount of capital invested by Pantheon on behalf of its separately-managed account clients to underlying portfolio funds. ⁴ Gross Multiple and Gross IRR. The calculation of gross cumulative IRR and multiple is based upon the performance of each PGSF fund's (or for PGSF 88-99 composite's) investments and does not take into account the effect of Pantheon fees and other organizational and operational expenses, which will reduce returns. The gross IRR and multiple figures reflect the deduction of fees and expenses of the underlying portfolio funds. ⁵ Net multiple/ net IRR measures presented for each of the funds (other than PGSF 88-99) are net of Pantheon management fees and administrative costs and expenses of the fund. The pro forma results of PGSF 88-99 do not fully account for administration costs or any expenses of the fund, as discussed above. Each of PGSF IV and PGSF V has a credit facility in place pursuant to which amounts may be outstanding from time to time. Each credit facility is secured on the undrawn commitments of investors in the relevant fund. The timing of the re-payment of each loan and the manner in which the loan is re-paid (i.e. by calling capital from investors in the relevant fund or by applying proceeds received from portfolio investments of the relevant fund) may affect the performance of the relevant fund. It is presently expected that some or all of the relevant facility will be repaid by applying proceeds from distributions in lieu of calling capital from investors. PGSF VI is permitted but is not obligated to undertake borrowing which may or may not include a credit facility. Any borrowing by PGSF VI would affect its performance results. **Actual Net IRR is 60.0%, however, is not meaningful this early in the Fund's life. The Fund (PGSF VI) employs a credit facility, which is generally used to bridge capital calls from limited partners and/or to pay for a portion of an investment. This causes the resulting Net IRR and multiples to appear higher than the Gross IRR, on an interim basis, particularly in the early life cycle of the fund. The Net IRR will lessen as investors capital is drawn down to repay the credit facility.** ⁶ Cash-on-cash multiple reflects the net cash amounts which actually occur between Pantheon and our investors. For instance, when a call and distribution take place on the same day, only the net amount is included in the calculation (as a call if the net amount is a negative number, or as a distribution if the net amount is a positive number). Investment level cash flows are netted on a monthly basis to generate the actual cash flow profile that an investor would experience. ⁷ Multiple of net capital at risk is calculated as (NAV + distributions) / maximum drawdown, where maximum drawdown is the point at which the cumulative cash flow amount drawn reaches its most negative position. ⁸ Amount excludes \$269 million of capital closed or pending investor commitments to side-by-side vehicles / accounts and \$169 million hard circled for January 2020. In considering the performance included above and throughout this material, prospective investors should bear in mind that past or expected performance is not indicative of future results and there can be no assurance that PGSF VI will achieve similar returns or that expected returns will actually be achieved. **Past performance is not indicative of future results. Future returns are not guaranteed and a loss of principal may occur.**

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Portfolio, volatility or return targets or objectives, if any, are used solely for illustration, measurement or comparison purposes and as an aid or guideline for prospective investors to evaluate a particular investment product's strategies, volatility and accompanying information. Such targets or objectives reflect subjective determinations of an Investment Manager based on a variety of factors including, among others, the investment product's investment strategy and prior performance (if any), volatility measures, portfolio characteristics and risk, and market conditions. Volatility and performance will fluctuate, including over short periods, and should be evaluated over the time period indicated and not over shorter periods. Performance targets or objectives should not be relied upon as an indication of actual or projected future performance. Actual volatility and returns will depend on a variety of factors including overall market conditions and the ability of an Investment Manager to implement an investment product's investment process, investment objectives and risk management.

Potential Investment program risks

- ▶ Fund of Funds invest in private equity funds. In general, alternative investments such as private equity or infrastructure involve a high degree of risk, including potential loss of principal invested. These investments can be highly illiquid, charge higher fees than other investments, and typically do not grow at an even rate of return and may decline in value. These investments are not subject to the same regulatory requirements as registered investment products.
- ▶ A private fund investment involves a high degree of risk. As such investments are speculative, subject to high return volatility and will be illiquid on a long term basis. Investors may lose their entire investment.
- ▶ Private equity fund managers typically take several years to invest a fund's capital. Investors will not realize the full potential benefits of the investment in the near term, and there will likely be little or no near-term cash flow distributed by the fund during the commitment period. Interests may not be transferred, assigned or otherwise disposed of without the prior written consent of the manager.

U.S. Disclosure continued

- ▶ Private equity funds are subject to significant fees and expenses, typically, management fees and a 20% carried interest in the net profits generated by the fund and paid to the general partner/manager or an affiliate thereof. Private fund investments are affected by complex tax considerations.
- ▶ Private equity funds may make a limited number of investments. These investments involve a high degree of risk. In addition, funds may make minority investments where the fund may not be able to protect its investment or control, or influence effectively the business or affairs of the underlying investment. The performance of a fund may be substantially adversely affected by a single investment. Private fund investments are less transparent than public investments and private fund investors are afforded fewer regulatory protections than investors in registered public securities.
- ▶ Private equity fund investors are subject to periodic capital calls. Failure to make required capital contributions when due will cause severe consequences to the investor, including possible forfeiture of all investments in the fund made to date.
- ▶ Governing investment documents or the related Prospectus or the managed account agreement, as the case may be, are not reviewed or approved by federal or state regulators and privately placed interests are not federally or state registered.
- ▶ Fees and expenses – which may be substantial regardless of any positive return – will offset an investment product's profits. If an investment product's investments are not successful, these payments and expenses may, over a period of time, deplete the net asset value of the investment product.
- ▶ Managers/advisors and their affiliates may be subject to various potential and actual conflicts of interest.
- ▶ An Investment Product may employ investment strategies or techniques aimed to reduce the risk of loss which may not be successful.

Description of commonly used indices

This list may not represent all indices used in this material.

MSCI World Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of developed markets. The MSCI World Index consists of the following 23 developed market country indexes: Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, the United Kingdom, and the United States.

S&P 500 Index is a widely recognized gauge of the U.S. equities market. This index is an unmanaged capitalization-weighted index consisting of 500 of the largest capitalization U.S. common stocks. The returns of the S&P 500 include the reinvestment of dividends.

MSCI Europe Index is a free float-adjusted market capitalization weighted index that is designed to measure the equity market performance of the developed markets in Europe. The MSCI Europe Index consists of the following 15 developed market country indexes: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

MSCI AC Asia Pacific Index captures large and mid-cap representation across 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region. With 1,023 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. Developed Markets countries in the index include: Australia, Hong Kong, Japan, New Zealand and Singapore. Emerging Markets countries include: China, India, Indonesia, Korea, Malaysia, the Philippines, Taiwan and Thailand.

MSCI Emerging Markets Index is a free float-adjusted market capitalization index that is designed to measure equity market performance of emerging markets. The MSCI Emerging Markets Index consists of the following 23 emerging market country indexes: Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.

FTSE Europe Index is one of a range of indices designed to help investors benchmark their European investments. The index comprises Large and Mid-cap stocks providing coverage of the Developed markets in Europe. The index is derived from the FTSE Global Equity Index Series (GEIS), which covers 98% of the world's investable market capitalization.

MSCI US Index is designed to measure the performance of the large and mid-cap segments of the US market. With 630 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.

FTSE Asia-Pacific Index is part of a range of indices designed to help Asia Pacific investors to benchmark their investments. The index comprises Large (40%) and Mid (60%) Cap stocks providing coverage of 14 markets. The index is derived from the FTSE Global Equity Index Series (GEIS), which covers 98% of the world's investable market capitalization.

FTSE All World Index is a market-capitalization weighted index representing the performance of the large and mid-cap stocks from the FTSE Global Equity Index Series and covers 90-95% of the investable market capitalization. The index covers Developed and Emerging markets and is suitable as the basis for investment products, such as funds, derivatives and exchange-traded funds.

U.S. Disclosure continued

The Thomson One Global All Private Equity Index is based on data compiled from 4,475 global private equity funds (buyout, growth equity, private equity energy, subordinated capital funds and venture capital), including fully liquidated partnerships, formed between 1988 and 2017. The Thomson One Global All Private Equity Index has limitations (some of which are typical to other widely used indices) and cannot be used to predict performance of the Fund. These limitations include survivorship bias (the returns of the index may not be representative of all private equity funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all private equity are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown).

Prequin's database provides information on 6,339 active Private Equity funds from 2,099 different GPs with over \$4.5tn combined fund size.

Thomson One (Infrastructure) is comprised of data extracted in fund currency from Private Equity and Venture Capital index based on funds classified as Infrastructure by Cambridge Associates. Cambridge Associates defines Infrastructure as funds that primarily invest in companies and assets that provide an essential service that contributes to the economic or social productivity of an organization, community, or society at large, with real assets in the water, transportation, energy, communication, or social sector. Investments must also have one or more of the following structural features: a monopolistic or oligopolistic market position with high barriers to entry; a low elasticity of demand due to their essential functions; stable, predictable, and long-term revenue contracts; or inflation protection through inflation adjustment mechanisms in underlying contracts. For purposes of this analysis, vintage year specific benchmarks are provided including 2009 (3 funds), 2010 (13 funds), and 2014 (10 funds) benchmarks. These indexes have limitations (some of which are typical to other widely used indices) and cannot be used to predict performance of the fund. These limitations include survivorship bias (the returns of the index may not be representative of all private equity funds in the universe because of the tendency of lower performing funds to leave the index); heterogeneity (not all private equity are alike or comparable to one another, and the index may not accurately reflect the performance of a described style); and limited data (many funds do not report to indices, and the index may omit funds, the inclusion of which might significantly affect the performance shown).

Important information regarding: Opening a new "Account"

To help the government fight the funding of terrorism and money laundering activities, federal law requires all financial institutions to obtain, verify, and record information that identifies each customer who opens an account. What this means for you: When you open an account, Pantheon may ask for documents or information related to your principal place of business, local office or other physical location; taxpayer identification number; and other documents demonstrating your lawful existence such as certified articles of incorporation, a government-issued business license, a partnership agreement, or a trust instrument, and other identifying documents.

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QUARTERLY PERFORMANCE REPORT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

February 24, 2020

Allan Martin, Partner

Anthony Ferrara, CAIA, Consultant

Michael Miranda, CFA, Senior Consulting Analyst



VCERA
VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

MARKET ENVIRONMENT UPDATE & OUTLOOK

NEPC, LLC

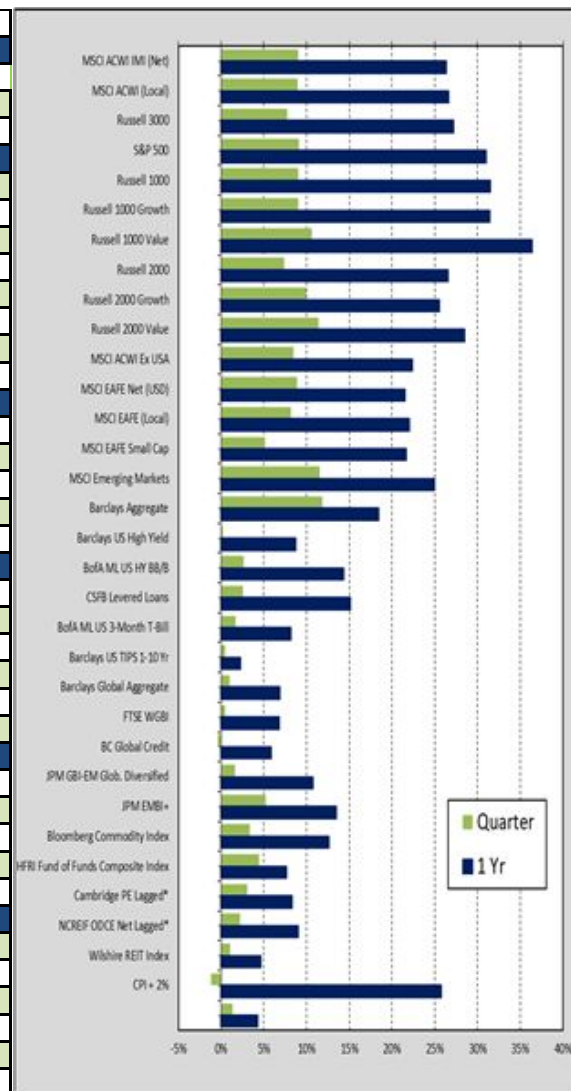
ECONOMIC ENVIRONMENT

- **Q4 Real GDP (advanced estimate) increased at an annual rate of 2.1%.**
 - Retail sales ended November at +5.7% on a YoY basis. In the same period last year the YoY growth rate was 3.5%.
 - Corporate profits (ended July) as a percent of GDP decreased to 8.5% from 8.8% (in September) and remain elevated relative to historical levels.
 - The inventory-to-sales ratio ended November flat at 1.4 from June levels and has remained relatively constant since early 2010.
 - The U.S. trade deficit fell sharply ended November (-5.4% vs. October) as imports decreased.
- **The unemployment rate remained flat at 3.5% in Q4; U-6, a broader measure of unemployment, decreased to 6.7% from 6.9% during Q4.**
- **The Case-Shiller Home Price Index (ended October) increased to 212.4 from 212.2 (in September) and remains at levels higher than that of pre-financial crisis levels of 150.9.**
- **Rolling 12-month seasonally-adjusted CPI saw an up-tick to 2.29% from 1.74% ended Q4; Capacity Utilization decreased to 77% from 77.5% in Q4.**
- **Fed Funds rate was decreased by 0.25% in Q4 to a targeted range of 1.50%-to-1.75%. The 10-year Treasury Yield (constant maturity) finished Q4 up to 1.9% from 1.7%.**
- **The Fed balance sheet increased in size ended Q4, and the European Central Bank balance sheet continues to grow.**
 - ECB held its benchmark refinance rate at 0%, deposit rates remain at -0.5%.
- **S&P valuations increased in Q4, remaining above the 10-year and long-term averages.**
 - Cyclically adjusted Shiller PE ratio (30.9x) is above the long-term average of 16.7x and above the 10-year average of 25.6x.



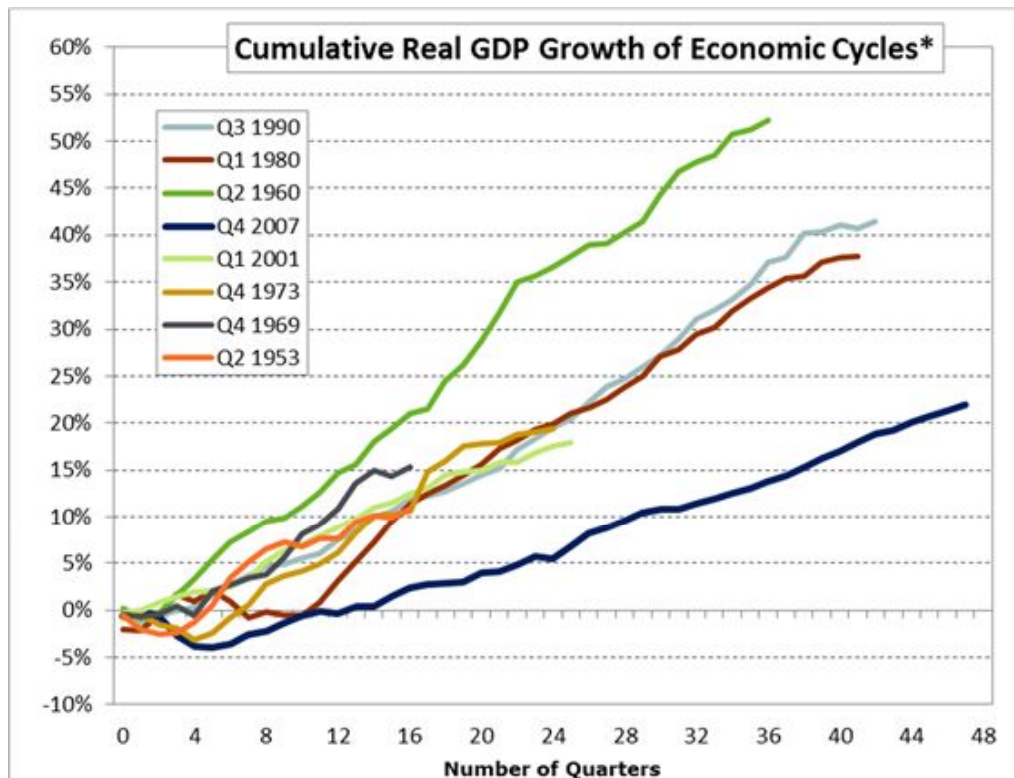
MARKET ENVIRONMENT – Q4 2019 OVERVIEW

		Qtr.	1 Yr.	3 Yr.	5 Yr.	10 Yr.
World Equity Benchmarks						
MSCI ACWI IMI (Net)	World with Small Cap	9.05%	26.35%	12.09%	8.34%	8.91%
MSCI ACWI Net (USD)	World W/O Small Cap	8.95%	26.60%	12.44%	8.41%	8.79%
MSCI ACWI (Local)	World (Local Currency)	7.73%	27.18%	11.56%	8.87%	9.66%
Domestic Equity Benchmarks						
Russell 3000	Domestic All Cap	9.10%	31.02%	14.57%	11.24%	13.42%
S&P 500	Large Core	9.07%	31.49%	15.27%	11.70%	13.56%
Russell 1000	Large Core	9.04%	31.43%	15.05%	11.48%	13.54%
Russell 1000 Growth	Large Growth	10.62%	36.39%	20.49%	14.63%	15.22%
Russell 1000 Value	Large Value	7.41%	26.54%	9.68%	8.29%	11.80%
Russell 2000	Small Core	9.94%	25.52%	8.59%	8.23%	11.83%
Russell 2000 Growth	Small Growth	11.39%	28.48%	12.49%	9.34%	13.01%
Russell 2000 Value	Small Value	8.49%	22.39%	4.77%	6.99%	10.56%
International Equity Benchmarks						
MSCI ACWI Ex USA	World ex-US	8.92%	21.51%	9.87%	5.51%	4.97%
MSCI EAFE Net (USD)	Int'l Developed	8.17%	22.01%	9.56%	5.67%	5.50%
MSCI EAFE (Local)	Int'l Developed (Local Currency)	5.19%	21.67%	7.66%	6.73%	7.24%
MSCI EAFE Small Cap	Small Cap Int'l	11.52%	24.96%	10.92%	8.85%	8.74%
MSCI Emerging Markets	Emerging Equity	11.84%	18.44%	11.57%	5.61%	3.68%
Domestic Fixed Income Benchmarks						
Barclays Aggregate	Core Bonds	0.18%	8.72%	4.03%	3.05%	3.75%
Barclays US High Yield	High Yield	2.61%	14.32%	6.37%	6.13%	7.57%
BofA ML US HY BB/B	High Yield	2.58%	15.14%	6.48%	6.12%	7.43%
CSFB Levered Loans	Bank Loans	1.68%	8.17%	4.48%	4.54%	5.18%
BofA ML US 3-Month T-Bill	Cash	0.46%	2.28%	1.67%	1.07%	0.58%
Barclays US TIPS 1-10 Yr	Inflation	1.00%	6.85%	2.79%	2.36%	2.57%
Global Fixed Income Benchmarks						
Barclays Global Aggregate	Global Core Bonds	0.48%	6.84%	4.27%	2.31%	2.48%
FTSE WGBI	World Gov. Bonds	-0.35%	5.90%	4.12%	2.03%	1.85%
BC Global Credit	Global Bonds	1.60%	10.74%	5.31%	3.15%	3.93%
JPM GBI-EM Glob. Diversified	Em. Mkt. Bonds (Local Currency)	5.20%	13.47%	7.03%	2.78%	2.71%
JPM EMBI+	Em. Mkt. Bonds	3.38%	12.60%	4.90%	5.20%	6.10%
Alternative Benchmarks						
Bloomberg Commodity Index	Commodities	4.42%	7.69%	-0.94%	-3.93%	-4.73%
HFRI Fund of Funds Composite Index	Fund of Hedge Funds	3.04%	8.34%	3.87%	2.36%	2.82%
Cambridge PE Lagged*	Private Equity	2.21%	9.02%	14.59%	11.64%	14.14%
NCREIF ODCE Net Lagged*	Real Estate	1.08%	4.65%	6.34%	8.36%	9.84%
Wilshire REIT Index	REIT	-1.14%	25.76%	7.63%	6.86%	11.94%
CPI + 2%	Inflation/Real Assets	1.33%	4.33%	4.15%	3.85%	3.78%



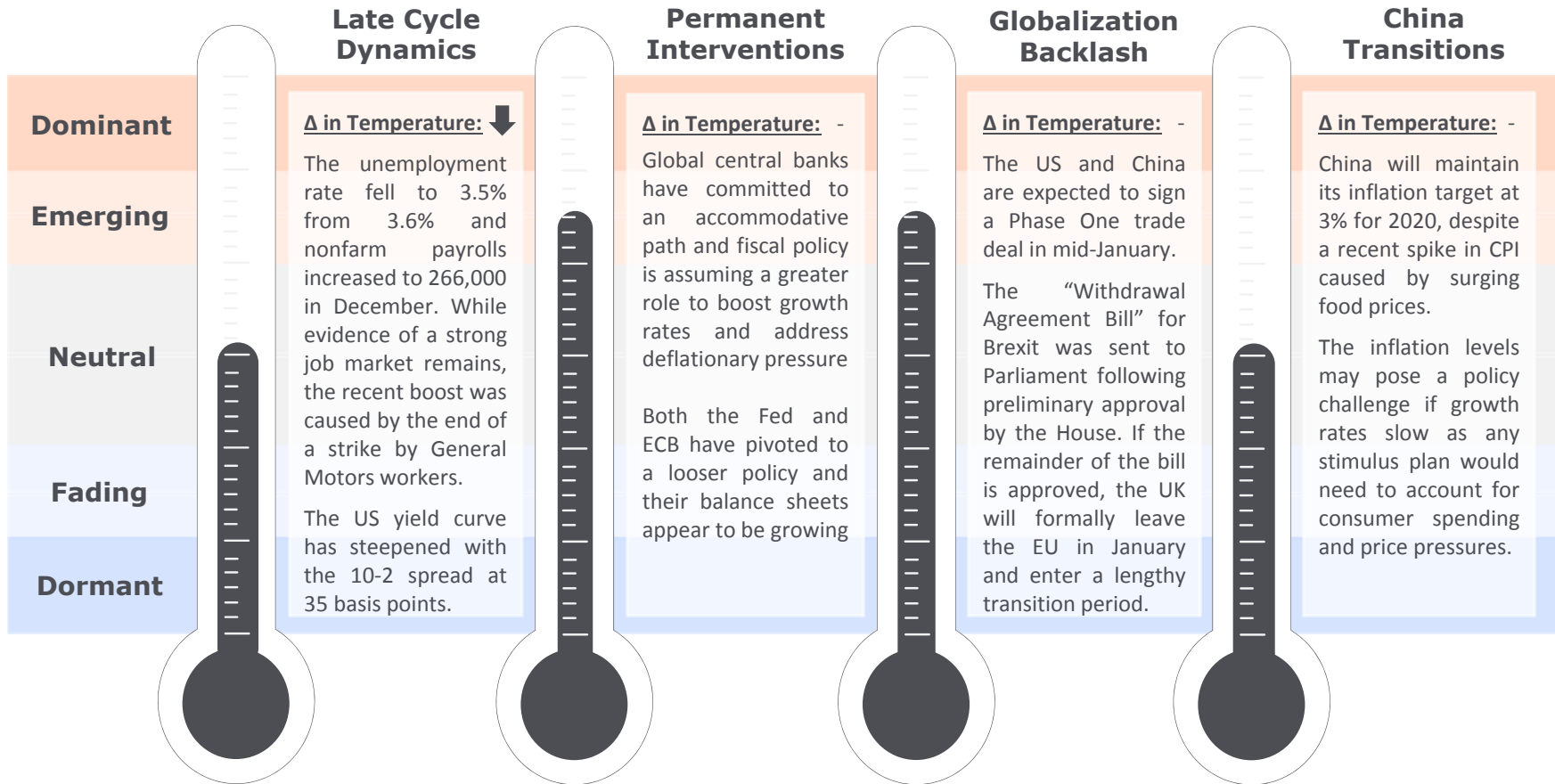
* As of 9/30/2019

CURRENT ECONOMIC CYCLE IS THE LONGEST SINCE CIVIL WAR IN 1857

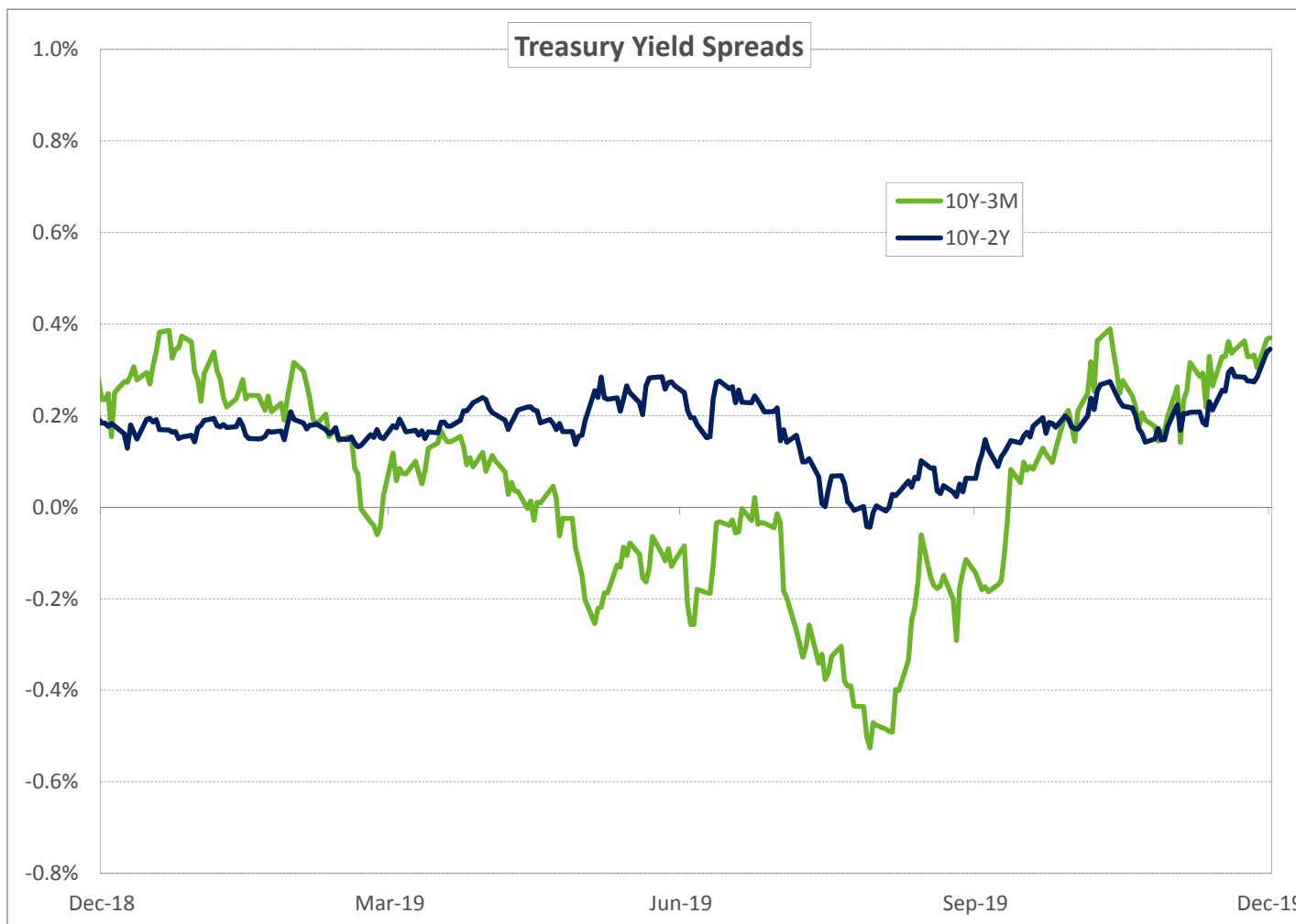


ASSESSING THE KEY MARKET THEMES

Current Temperatures



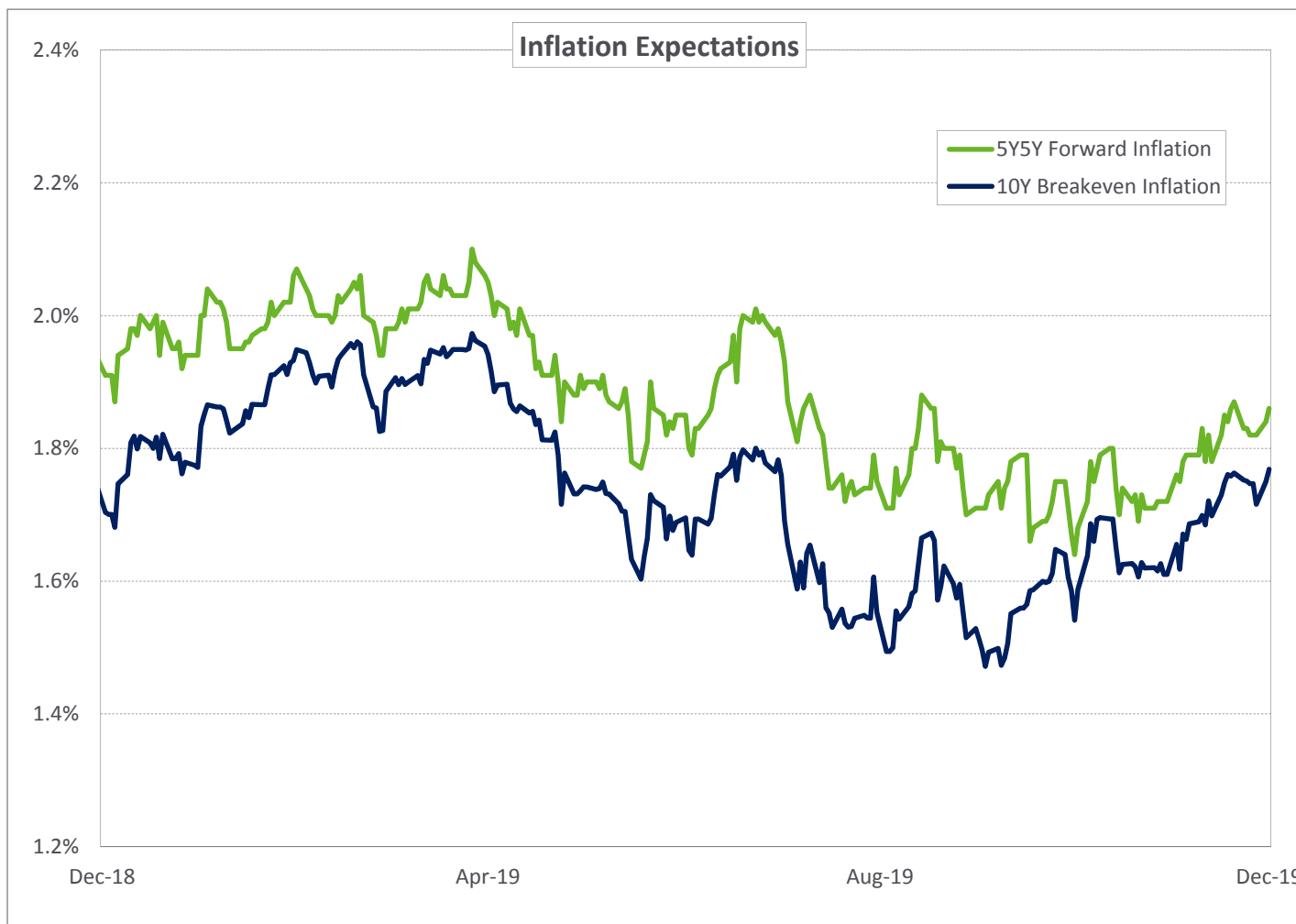
THE YIELD CURVE STEEPENED DURING Q4



Source: FactSet



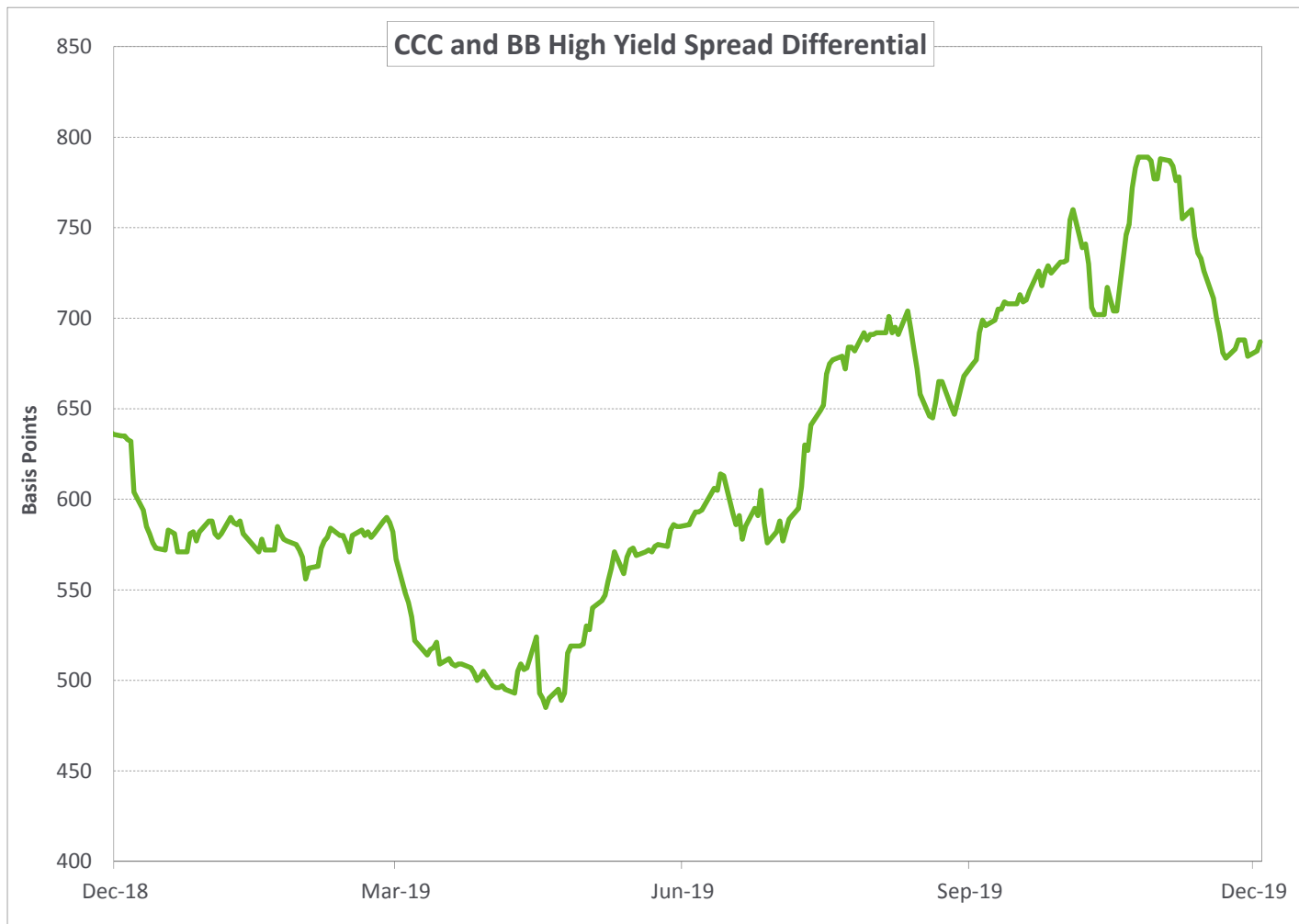
INFLATION EXPECTATIONS REMAIN LOW



Source: FactSet



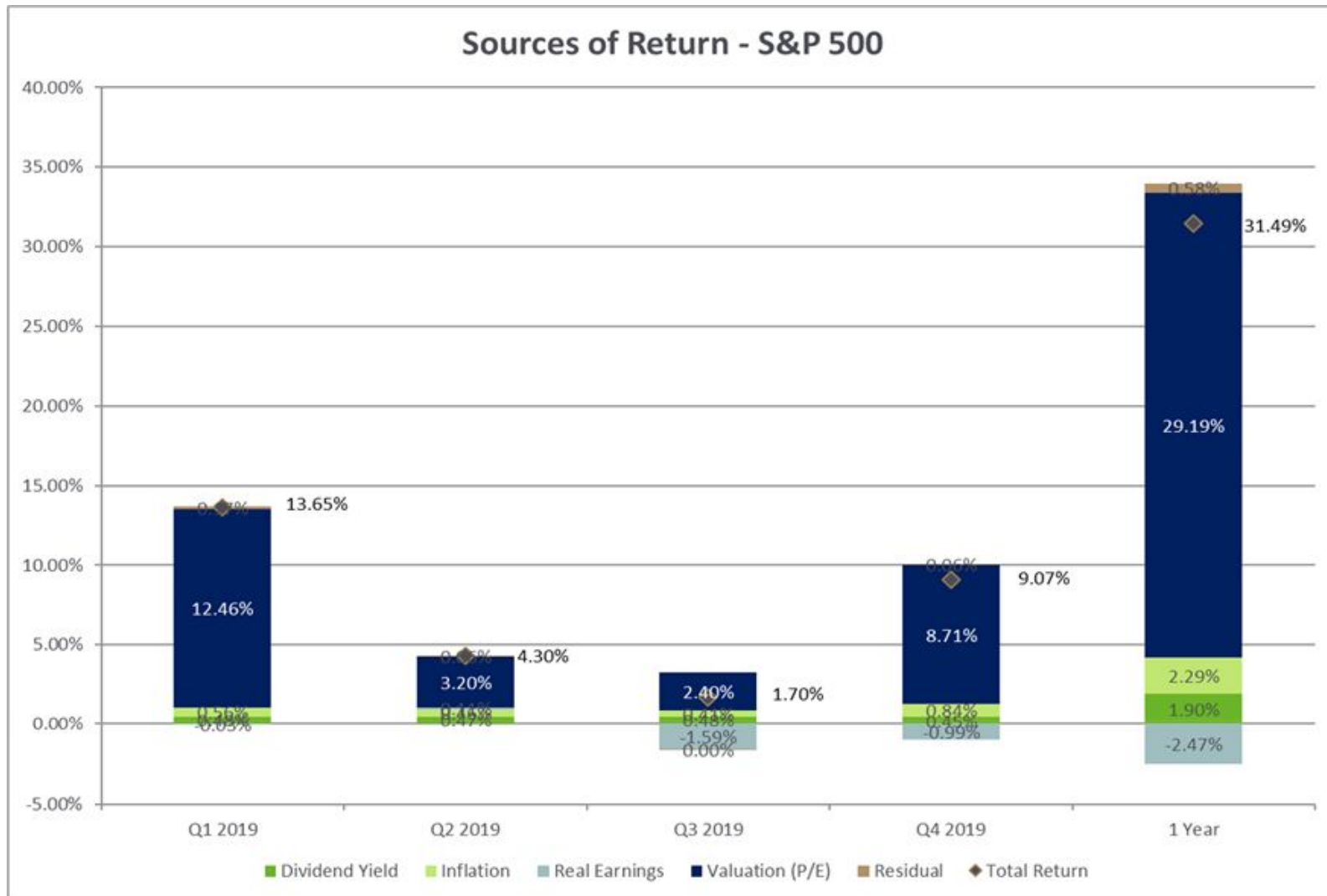
CCC SPREADS WIDENED DURING THE YEAR



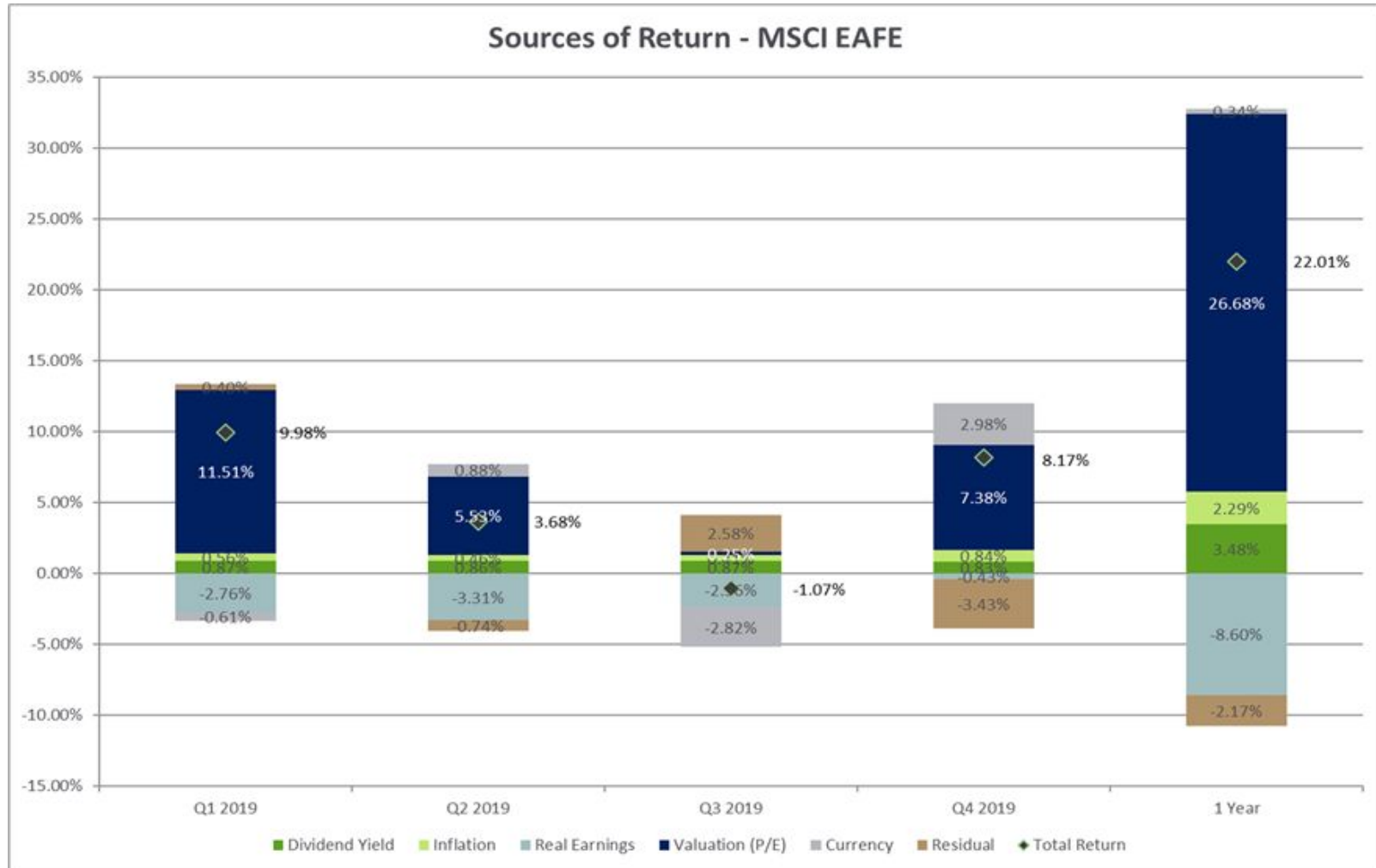
Source: Bloomberg, FactSet



1 YEAR ATTRIBUTION OF S&P 500 RETURNS



1 YEAR ATTRIBUTION OF MSCI EAFE RETURNS



Spot Rates

1 USD = 0.890 Euro

1 USD = 0.880 Euro

1 USD = 0.917 Euro

1 USD = 0.891 Euro



TOTAL FUND PERFORMANCE SUMMARY

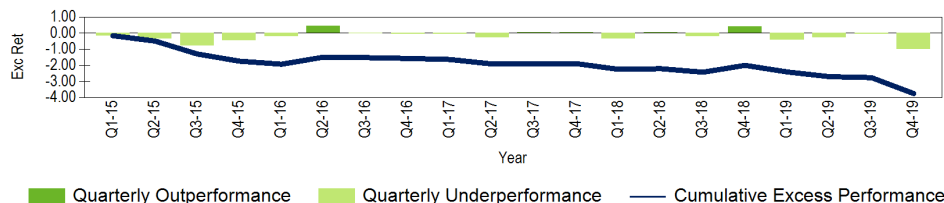
NEPC, LLC

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE SUMMARY (NET)

	Market Value	3 Mo	Rank	Fiscal YTD	Rank	1 Yr	Rank	3 Yrs	Rank	5 Yrs	Rank	10 Yrs	Rank	Inception	Inception Date
Total Fund	\$6,148,524,885	5.2%	44	6.0%	21	18.7%	17	9.9%	20	7.4%	29	9.0%	18	8.1%	Apr-94
Policy Index		6.2%	7	7.1%	2	20.7%	9	10.6%	8	8.2%	7	9.1%	13	8.2%	Apr-94
60% MSCI ACWI (Net) / 40% FTSE WGBI		5.2%	45	5.6%	55	18.2%	26	9.2%	42	6.0%	96	6.2%	99	6.5%	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate		5.5%	33	7.5%	1	22.2%	3	10.9%	7	8.4%	4	9.8%	1	8.5%	Apr-94
InvMetrics Public DB > \$1B Net Median		5.1%		5.6%		17.0%		8.9%		6.8%		8.1%		7.6%	Apr-94

Quarterly and Cumulative Excess Performance



- For the five year period ending December 31, 2019, the Fund returned 7.4% trailing the policy index by 0.8% and ranking in the 29th percentile of its peers and outperforming the actuarial assumed rate of 7.25%. The Fund's volatility, as measured by standard deviation, ranked in the 76th percentile of its peers, and the risk-adjusted return, or Sharpe Ratio, ranks in the 52nd percentile. This means that the Fund has earned more return per unit of volatility taken than 48% of its peers.

- For the three-year period, the Fund returned 9.9%, underperforming the policy index and ranking in the 20th percentile of its peers. The Fund's volatility ranks in the 71st percentile of its peers over this period, with the Fund's Sharpe Ratio ranking in the 51st percentile.

- For the one-year period, the Fund returned 18.7%, underperforming the policy index by 2.0% and ranking in the 17th percentile of the Investment Metrics Public Funds > \$1 Billion Universe (Net of fees).

- For the one-year period, the Fund experienced a net investment gain of \$983.4 million which includes a net investment gain of \$310.1 million in the quarter. Assets increased from \$5.20 billion one year ago to \$6.15 billion.

3 Years Ending December 31, 2019								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	9.9%	20	7.0%	71	1.2	51	1.3	44
Policy Index	10.6%	8	7.3%	83	1.2	38	1.4	35
InvMetrics Public DB > \$1B Net Median	8.9%	--	6.1%	--	1.2	--	1.3	--

5 Years Ending December 31, 2019								
	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Sharpe Ratio	Rank	Sortino Ratio RF	Rank
Total Fund	7.4%	29	7.2%	76	0.9	52	1.2	44
Policy Index	8.2%	7	7.3%	79	1.0	31	1.3	32
InvMetrics Public DB > \$1B Net Median	6.8%	--	6.4%	--	0.9	--	1.1	--

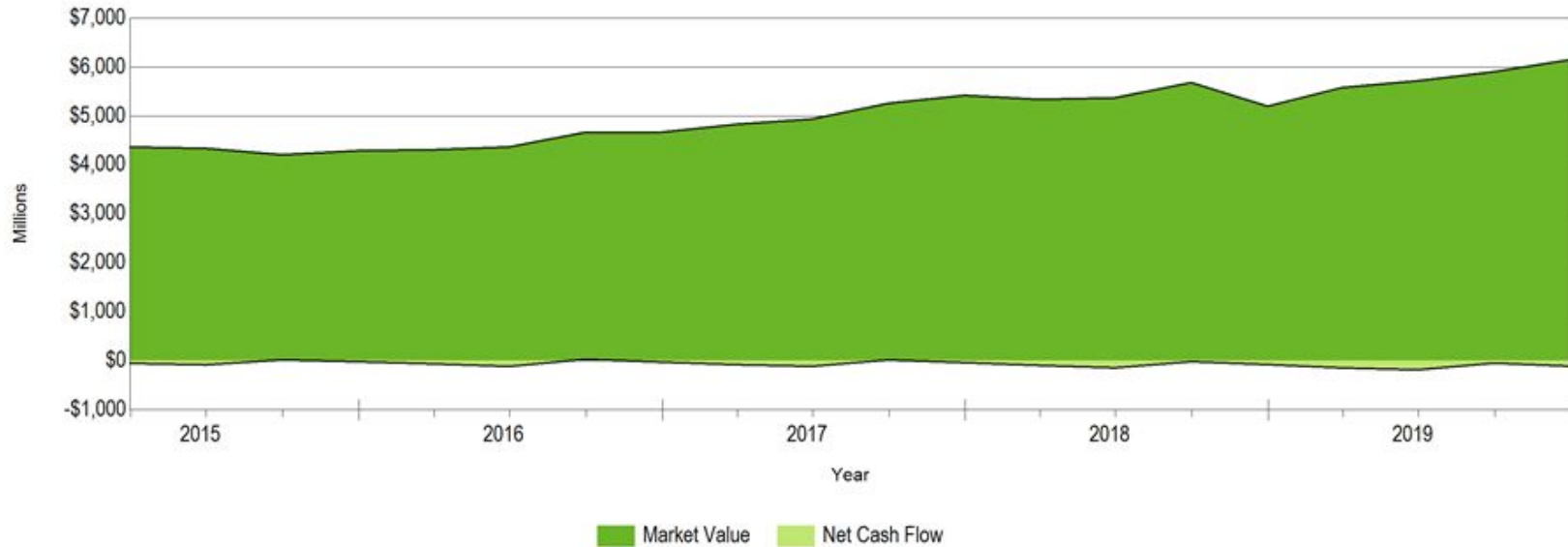
Policy Index as of July 2019: 26% Russell 3000 Index, 17% MSCI ACWI ex U.S., 10% MSCI ACWI, 13% Russell 3000 +3%, 19% BBgBarc US Aggregate, 8% NCREIF ODCE, 7% CPI +2%.



Ventura County Employees' Retirement Association

TOTAL FUND ASSET GROWTH SUMMARY

Market Value History
5 Years Ending December 31, 2019

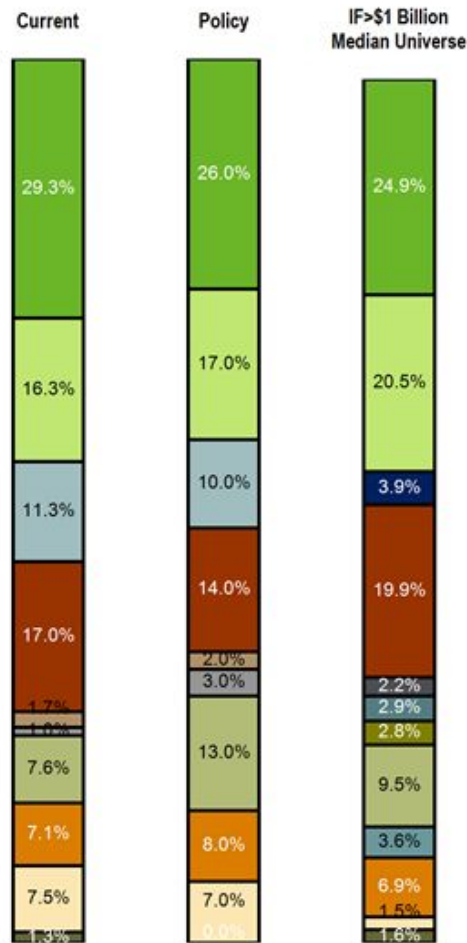


Summary of Cash Flows					
	Last Three Months	Fiscal Year-To-Date	One Year	Three Years	Five Years
Beginning Market Value	\$5,901,631,997	\$5,716,158,441	\$5,198,263,282	\$4,668,717,739	\$4,328,232,756
Net Cash Flow	-\$63,234,338	\$73,134,281	-\$33,170,407	-\$83,275,102	-\$110,077,450
Net Investment Change	\$310,127,226	\$359,232,163	\$983,432,010	\$1,563,082,248	\$1,930,369,580
Ending Market Value	\$6,148,524,885	\$6,148,524,885	\$6,148,524,885	\$6,148,524,885	\$6,148,524,885



Ventura County Employees' Retirement Association

TOTAL FUND ASSET ALLOCATION VS. POLICY TARGETS



Asset Allocation vs. Target							
	Current \$	Current %	Policy Difference*	Policy Range	Within Range		
U.S. Equity	\$1,799,934,440	29.3%	26.0%	3.3%	21.0% - 31.0%	Yes	
Non-US Equity	\$999,209,869	16.3%	17.0%	-0.7%	13.0% - 21.0%	Yes	
Emerging Markets Equity	--	--	--	0.0%		--	
Global Equity	\$693,538,318	11.3%	10.0%	1.3%	7.0% - 13.0%	Yes	
U.S. Fixed Income	\$1,046,983,442	17.0%	14.0%	3.0%	14.0% - 22.0%	Yes	
Treasury	\$105,449,348	1.7%	2.0%	-0.3%	0.0% - 5.0%	Yes	
Fixed Income - Emerging	--	--	--	0.0%		--	
Fixed Income - Global	--	--	--	0.0%		--	
GAA/Risk Parity	--	--	--	0.0%		--	
Private Debt	\$58,735,840	1.0%	3.0%	-2.0%	0.0% - 5.0%	Yes	
Private Equity	\$469,913,456	7.6%	13.0%	-5.4%	5.0% - 15.0%	Yes	
Hedge Funds	--	--	--	0.0%		--	
Real Estate	\$434,522,276	7.1%	8.0%	-0.9%	0.0% - 9.0%	Yes	
Real Assets	\$461,440,014	7.5%	7.0%	0.5%	0.0% - 9.0%	Yes	
Cash	\$78,797,881	1.3%	0.0%	1.3%	0.0% - 3.0%	Yes	
Total	\$6,148,524,885	100.0%	100.0%				

*Difference between Policy and Current Allocation

Cash represents assets in Parametric Overlay.

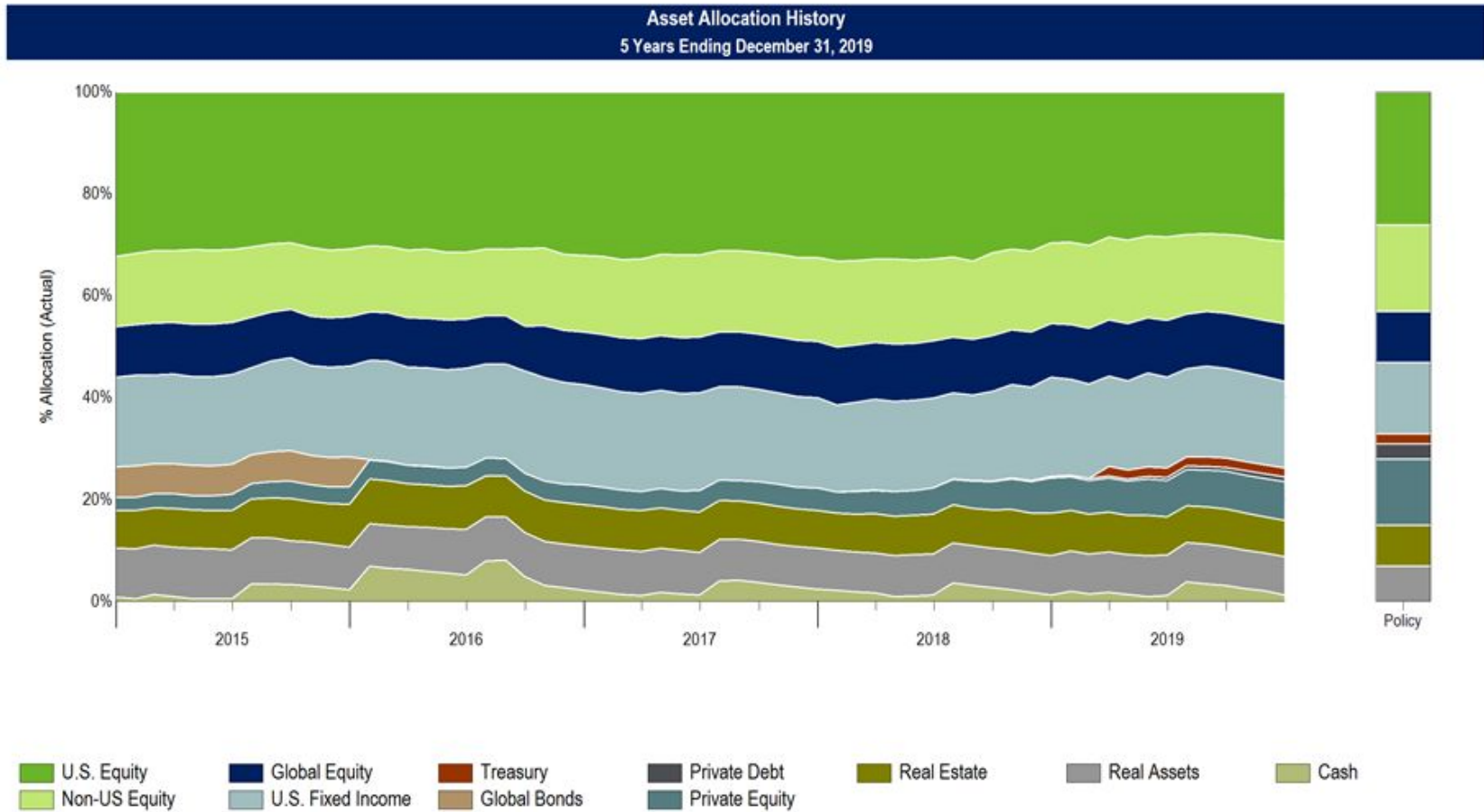
Policy Index as of July 2019: 26% Russell 3000 Index, 17% MSCI ACWI ex U.S., 10% MSCI ACWI, 13% Russell 3000 +3%, 19% BBgBarc US Aggregate, 8% NCREIF ODCE, 7% CPI +2%.

Asset Allocation vs. Policy Targets chart does not reflect Overlay adjusted weights.



Ventura County Employees' Retirement Association

TOTAL FUND ALLOCATION HISTORY



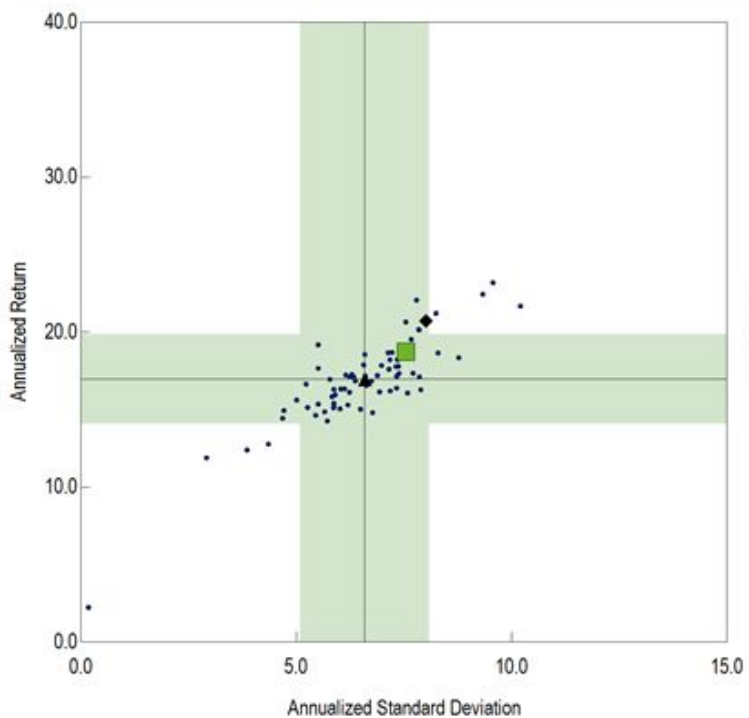
Policy Index shown is most recently approved index



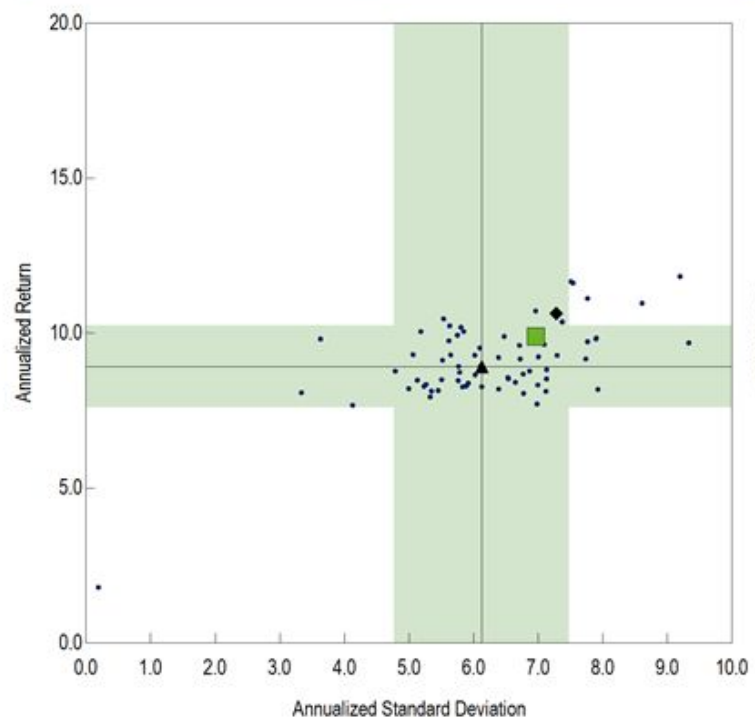
Ventura County Employees' Retirement Association

TOTAL FUND RISK/RETURN

1 Years Ending December 31, 2019



3 Years Ending December 31, 2019



- Total Fund
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net

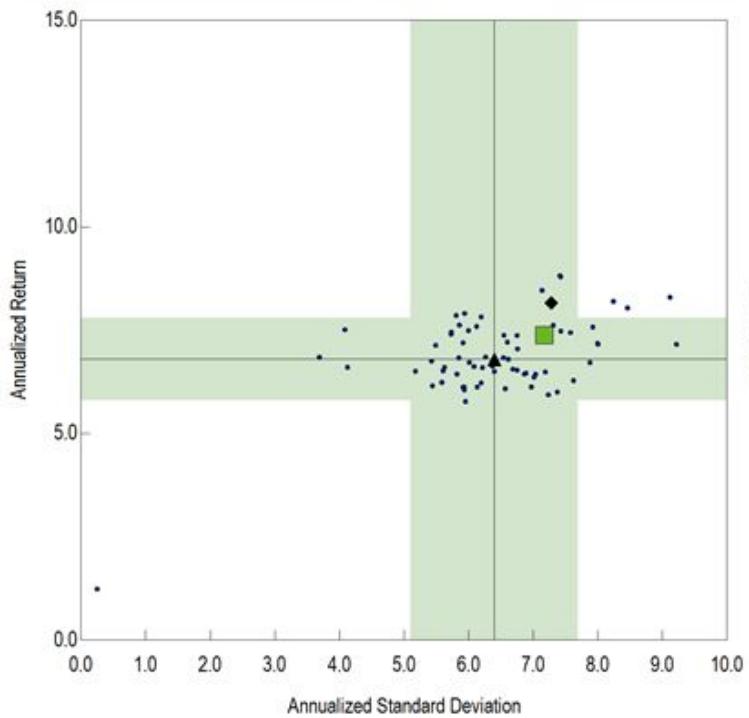
- Total Fund
- Policy Index
- ▲ Universe Median
- 68% Confidence Interval
- InvMetrics Public DB > \$1B Net



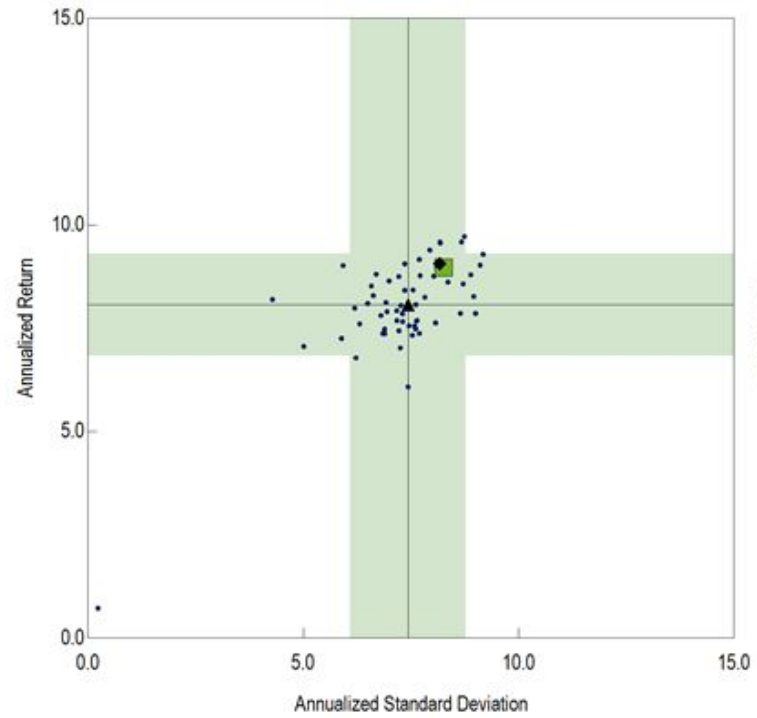
Ventura County Employees' Retirement Association

TOTAL FUND RISK/RETURN

5 Years Ending December 31, 2019



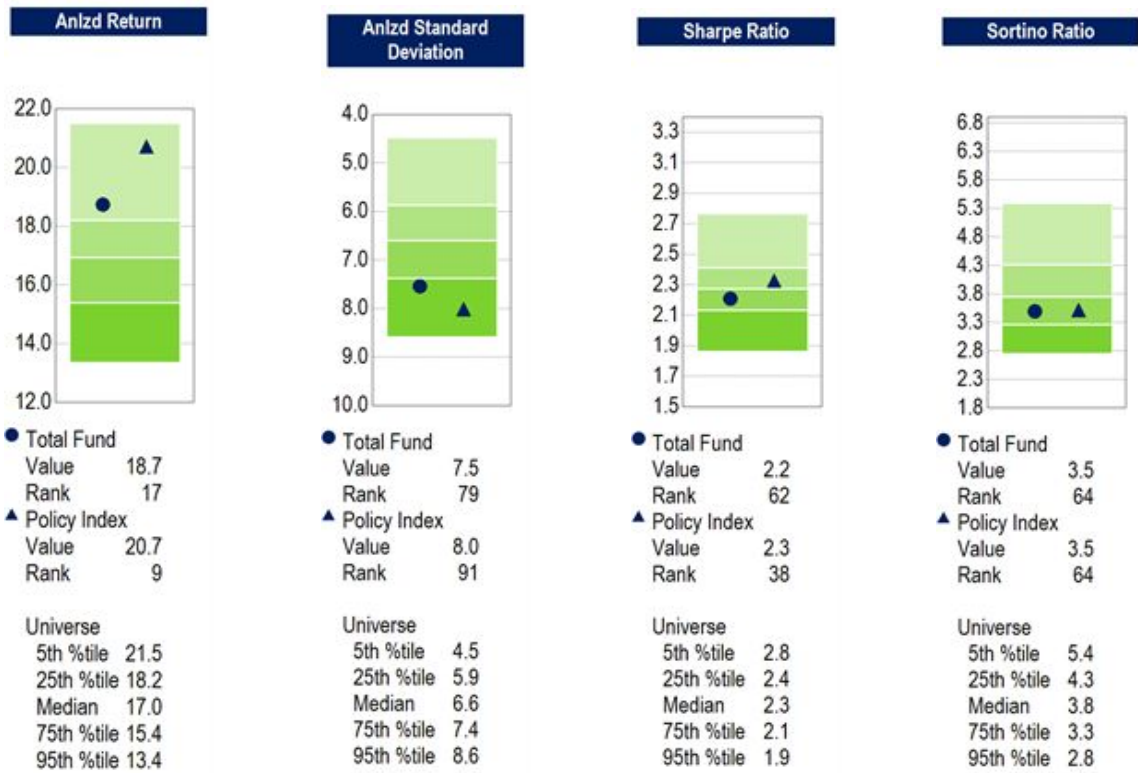
10 Years Ending December 31, 2019



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net 1 Year



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

**Total Fund vs. InvMetrics Public DB > \$1B Net
3 Years**

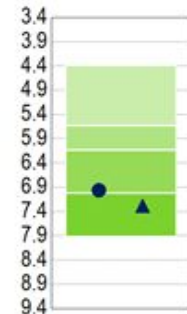
Anlzd Return



● Total Fund
Value 9.9
Rank 20
▲ Policy Index
Value 10.6
Rank 8

Universe
5th %tile 11.1
25th %tile 9.8
Median 8.9
75th %tile 8.3
95th %tile 8.0

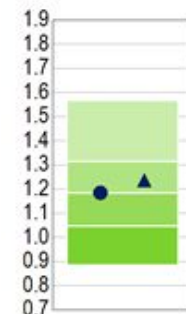
Anlzd Standard Deviation



● Total Fund
Value 7.0
Rank 71
▲ Policy Index
Value 7.3
Rank 83

Universe
5th %tile 4.4
25th %tile 5.6
Median 6.1
75th %tile 7.0
95th %tile 7.9

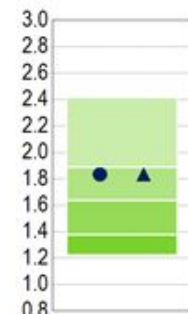
Sharpe Ratio



● Total Fund
Value 1.2
Rank 51
▲ Policy Index
Value 1.2
Rank 38

Universe
5th %tile 1.6
25th %tile 1.3
Median 1.2
75th %tile 1.0
95th %tile 0.9

Sortino Ratio



● Total Fund
Value 1.8
Rank 33
▲ Policy Index
Value 1.8
Rank 33

Universe
5th %tile 2.4
25th %tile 1.9
Median 1.6
75th %tile 1.4
95th %tile 1.2



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

**Total Fund vs. InvMetrics Public DB > \$1B Net
5 Years**



Ventura County Employees' Retirement Association

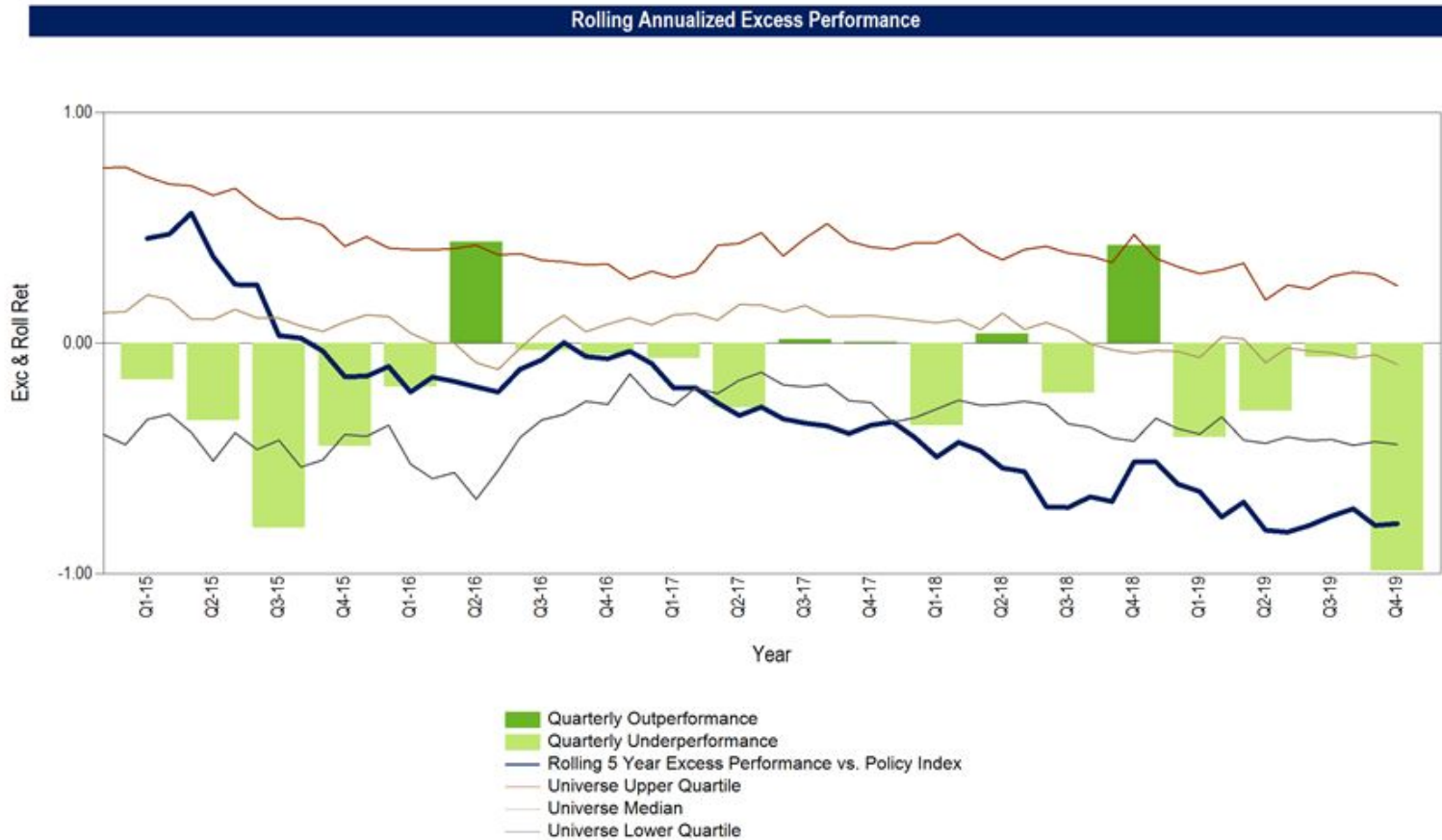
TOTAL FUND RISK STATISTICS VS. PEER UNIVERSE

**Total Fund vs. InvMetrics Public DB > \$1B Net
10 Years**



Ventura County Employees' Retirement Association

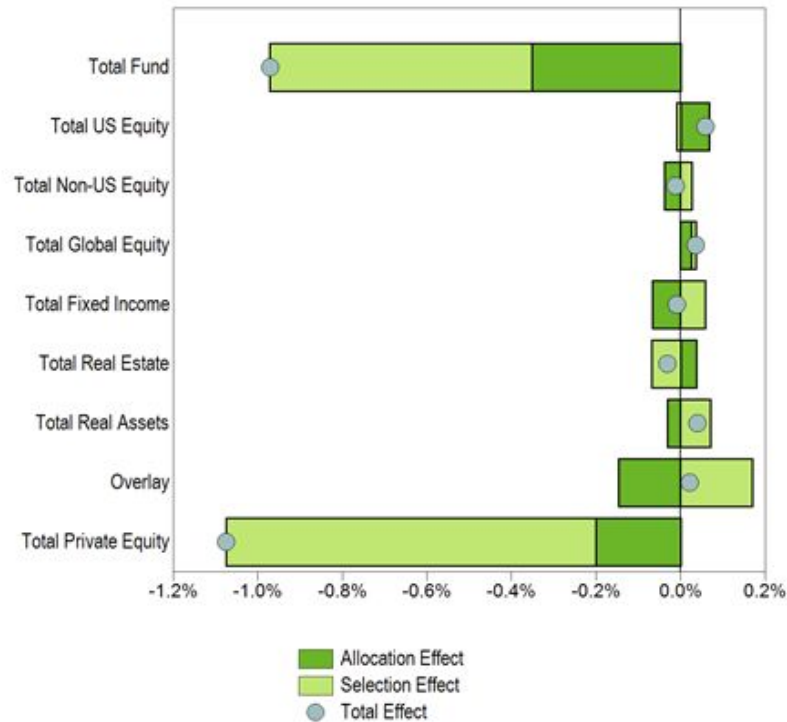
ROLLING 5 YEAR EXCESS RETURNS- NET OF FEES



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
3 Months Ending December 31, 2019



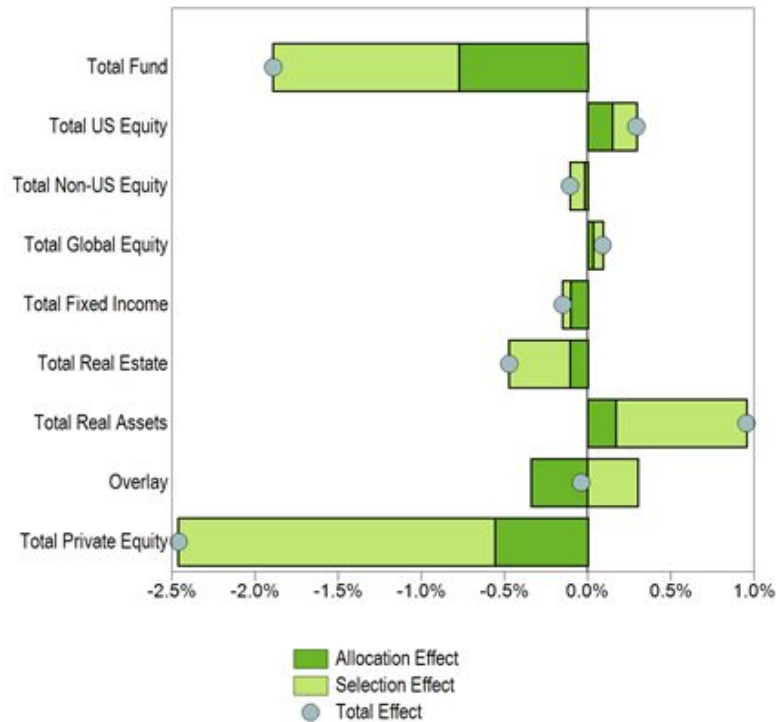
Attribution Summary						
3 Months Ending December 31, 2019						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	9.1%	9.1%	0.0%	0.0%	0.1%	0.1%
Total Non-US Equity	9.1%	8.9%	0.2%	0.0%	0.0%	0.0%
Total Global Equity	9.0%	9.0%	0.1%	0.0%	0.0%	0.0%
Total Fixed Income	0.5%	0.2%	0.3%	0.1%	-0.1%	0.0%
Total Real Estate	0.4%	1.3%	-0.9%	-0.1%	0.0%	0.0%
Total Real Assets	1.5%	0.6%	0.9%	0.1%	0.0%	0.0%
Overlay	7.0%	0.4%	6.6%	0.2%	-0.1%	0.0%
Total Private Equity	-1.7%	9.9%	-11.6%	-0.9%	-0.2%	-1.1%
Total	5.2%	6.2%	-1.0%	-0.6%	-0.4%	-1.0%



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
1 Year Ending December 31, 2019



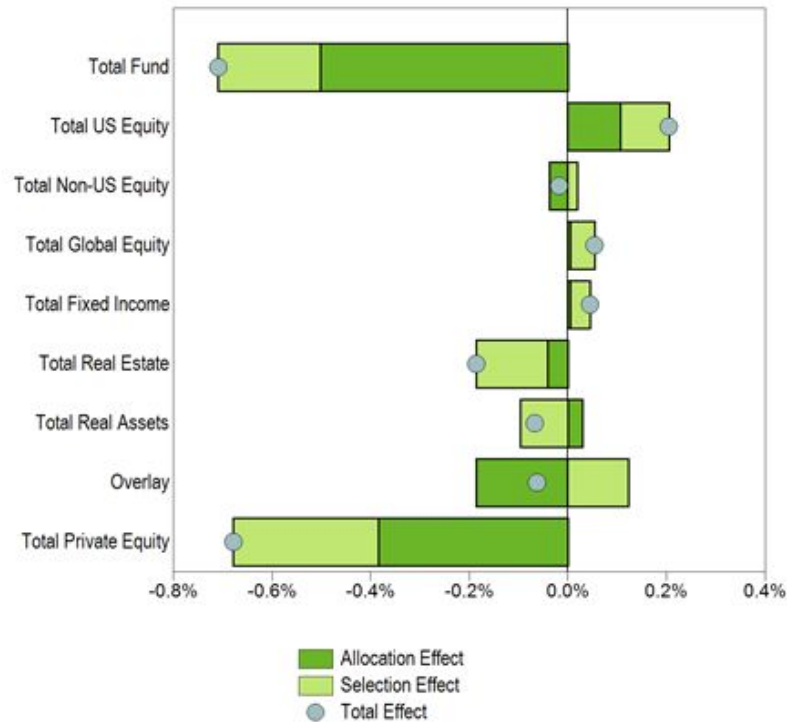
Attribution Summary						
1 Year Ending December 31, 2019						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	31.6%	31.0%	0.5%	0.1%	0.2%	0.3%
Total Non-US Equity	21.0%	21.5%	-0.5%	-0.1%	0.0%	-0.1%
Total Global Equity	27.1%	26.6%	0.5%	0.1%	0.0%	0.1%
Total Fixed Income	8.5%	8.7%	-0.2%	0.0%	-0.1%	-0.1%
Total Real Estate	0.3%	4.4%	-4.1%	-0.4%	-0.1%	-0.5%
Total Real Assets	14.4%	5.3%	9.1%	0.8%	0.2%	1.0%
Overlay	15.5%	2.1%	13.4%	0.3%	-0.3%	0.0%
Total Private Equity	8.3%	34.9%	-26.5%	-1.9%	-0.6%	-2.5%
Total	18.8%	20.7%	-1.9%	-1.1%	-0.8%	-1.9%



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
3 Years Ending December 31, 2019



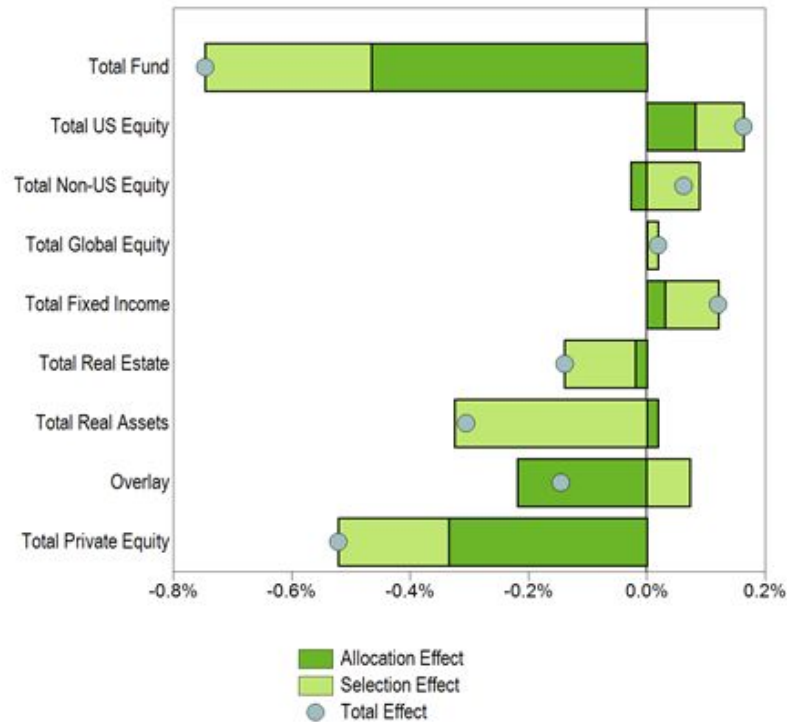
Attribution Summary						
3 Years Ending December 31, 2019						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	14.9%	14.6%	0.3%	0.1%	0.1%	0.2%
Total Non-US Equity	10.0%	9.9%	0.2%	0.0%	0.0%	0.0%
Total Global Equity	12.9%	12.4%	0.5%	0.0%	0.0%	0.1%
Total Fixed Income	4.2%	4.0%	0.2%	0.0%	0.0%	0.0%
Total Real Estate	4.4%	6.1%	-1.8%	-0.1%	0.0%	-0.2%
Total Real Assets	4.4%	5.8%	-1.5%	-0.1%	0.0%	-0.1%
Overlay	9.5%	1.6%	7.9%	0.1%	-0.2%	-0.1%
Total Private Equity	14.5%	18.0%	-3.5%	-0.3%	-0.4%	-0.7%
Total	9.9%	10.6%	-0.7%	-0.2%	-0.5%	-0.7%



Ventura County Employees' Retirement Association

TOTAL FUND ATTRIBUTION ANALYSIS

Attribution Effects
5 Years Ending December 31, 2019



Attribution Summary						
5 Years Ending December 31, 2019						
	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Total Effects
Total US Equity	11.5%	11.2%	0.3%	0.1%	0.1%	0.2%
Total Non-US Equity	6.2%	5.5%	0.7%	0.1%	0.0%	0.1%
Total Global Equity	8.6%	8.4%	0.2%	0.0%	0.0%	0.0%
Total Fixed Income	3.4%	2.9%	0.5%	0.1%	0.0%	0.1%
Total Real Estate	6.5%	8.0%	-1.5%	-0.1%	0.0%	-0.1%
Total Real Assets	1.8%	5.7%	-3.8%	-0.3%	0.0%	-0.3%
Overlay	5.7%	1.1%	4.6%	0.1%	-0.2%	-0.2%
Total Private Equity	13.1%	14.5%	-1.4%	-0.2%	-0.3%	-0.5%
Total	7.4%	8.2%	-0.8%	-0.3%	-0.5%	-0.8%



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

1 Year Ending December 31, 2019												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.8%	27.6%	32	12.8%	74	0.7%	35	0.4%	4	2.5	1	1.0
MSCI ACWI	--	26.6%	60	12.6%	73	0.0%	56	0.0%	1	--	--	1.0
Total US Equity	29.3%	31.6%	9	13.4%	62	0.8%	18	0.3%	4	1.9	2	1.0
Russell 3000	--	31.0%	16	13.5%	67	0.0%	29	0.0%	1	--	--	1.0
Total Non-US Equity	16.3%	21.0%	80	12.6%	67	-0.3%	66	0.7%	6	-0.8	92	1.0
MSCI ACWI ex USA	--	21.5%	70	12.7%	71	0.0%	63	0.0%	1	--	--	1.0
Total Global Equity	11.3%	27.1%	7	12.6%	80	0.6%	70	0.0%	1	11.4	1	1.0
MSCI ACWI	--	26.6%	10	12.6%	80	0.0%	72	0.0%	1	--	--	1.0
Total Fixed Income	19.9%	8.5%	59	2.8%	71	1.0%	61	0.7%	34	-0.3	60	0.8
Total Fixed Income Policy Index	--	8.7%	53	3.4%	92	0.0%	79	0.0%	1	--	--	1.0
Total US Fixed Income	17.0%	8.5%	45	2.6%	60	1.5%	34	1.1%	63	-0.2	62	0.7
BBgBarc US Aggregate TR	--	8.7%	33	3.4%	92	0.0%	74	0.0%	1	--	--	1.0
Total Real Assets	7.5%	14.4%	--	8.7%	--	8.9%	--	8.6%	--	1.1	--	1.0
Real Assets Index	--	5.3%	--	1.0%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	7.1%	0.3%	94	2.5%	69
NCREIF ODCE Net	--	4.4%	73	1.9%	52
Total Private Equity	7.4%	8.3%	52	5.5%	58
Russell 3000 + 3%	--	34.9%	1	13.5%	95

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 89 portfolios), Total US Equity (InvMetrics Public DB US Eq consists of 174 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 122 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 46 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 90 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 108 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 60 portfolios) and Total Private Equity (InvMetrics Public DB Private Eq consists of 51 portfolios).



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

3 Years Ending December 31, 2019												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.8%	13.1%	19	11.4%	64	0.7%	22	0.8%	11	0.8	7	1.0
MSCI ACWI	--	12.4%	47	11.4%	59	0.0%	43	0.0%	1	--	--	1.0
Total US Equity	29.3%	14.9%	12	12.3%	45	0.4%	12	0.4%	4	0.8	4	1.0
Russell 3000	--	14.6%	16	12.4%	49	0.0%	18	0.0%	1	--	--	1.0
Total Non-US Equity	16.3%	10.0%	49	11.2%	15	0.4%	41	0.9%	9	0.2	48	1.0
MSCI ACWI ex USA	--	9.9%	55	11.5%	38	0.0%	54	0.0%	1	--	--	1.0
Total Global Equity	11.3%	12.9%	46	11.4%	77	0.5%	68	0.1%	1	5.6	1	1.0
MSCI ACWI	--	12.4%	60	11.4%	77	0.0%	71	0.0%	1	--	--	1.0
Total Fixed Income	19.9%	4.2%	58	2.4%	61	0.6%	52	0.7%	34	0.3	26	0.8
Total Fixed Income Policy Index	--	4.0%	65	2.9%	89	0.0%	76	0.0%	1	--	--	1.0
Total US Fixed Income	17.0%	4.2%	37	2.3%	69	0.7%	32	0.8%	61	0.2	35	0.8
BBgBarc US Aggregate TR	--	4.0%	45	2.9%	88	0.0%	76	0.0%	1	--	--	1.0
Total Real Assets	7.5%	4.4%	--	7.6%	--	-2.9%	--	7.5%	--	-0.2	--	1.3
Real Assets Index	--	5.8%	--	0.9%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	7.1%	4.4%	96	2.7%	61
NCREIF ODCE Net	--	6.1%	73	2.6%	59
Total Private Equity	7.4%	14.5%	38	5.6%	44
Russell 3000 + 3%	--	18.0%	16	12.4%	95

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 82 portfolios), Total US Equity (InvMetrics Public DB US Eq consists of 167 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 111 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 41 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 85 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 106 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 59 portfolios) and Total Private Equity (InvMetrics Public DB Private Eq consists of 49 portfolios).



Ventura County Employees' Retirement Association

TOTAL FUND RISK STATISTICS

5 Years Ending December 31, 2019												
	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank	Anlzd AJ	Rank	Tracking Error	Rank	Info Ratio	Rank	Beta
Total Equity	56.8%	9.5%	13	11.6%	59	1.2%	15	1.1%	19	1.0	1	1.0
MSCI ACWI	--	8.4%	73	11.8%	69	0.0%	59	0.0%	1	--	--	1.0
Total US Equity	29.3%	11.5%	10	12.2%	45	0.3%	13	0.3%	2	0.9	1	1.0
Russell 3000	--	11.2%	17	12.2%	47	0.0%	21	0.0%	1	--	--	1.0
Total Non-US Equity	16.3%	6.2%	42	12.0%	24	0.9%	34	1.1%	4	0.7	12	1.0
MSCI ACWI ex USA	--	5.5%	67	12.5%	70	0.0%	61	0.0%	1	--	--	1.0
Total Global Equity	11.3%	8.6%	49	11.8%	70	0.2%	76	0.8%	1	0.2	22	1.0
MSCI ACWI	--	8.4%	59	11.8%	70	0.0%	81	0.0%	1	--	--	1.0
Total Fixed Income	19.9%	3.4%	42	2.6%	42	0.9%	37	1.5%	48	0.3	20	0.8
Total Fixed Income Policy Index	--	2.9%	66	3.0%	71	0.0%	77	0.0%	1	--	--	1.0
Total US Fixed Income	17.0%	3.6%	23	2.5%	53	1.1%	22	1.6%	76	0.3	38	0.7
BBgBarc US Aggregate TR	--	3.0%	49	3.1%	84	0.0%	77	0.0%	1	--	--	1.0
Total Real Assets	7.5%	1.8%	--	9.1%	--	-8.6%	--	8.9%	--	-0.4	--	2.0
Real Assets Index	--	5.7%	--	0.9%	--	0.0%	--	0.0%	--	--	--	1.0

	% of Tot	Anlzd Ret	Rank	Anlzd Std Dev	Rank
Total Real Estate	7.1%	6.5%	94	3.4%	54
NCREIF ODCE Net	--	8.0%	61	3.5%	55
Total Private Equity	7.4%	13.1%	29	5.9%	53
Russell 3000 + 3%	--	14.6%	25	12.2%	94

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Total Non-U.S. Equity Benchmark: MSCI ACWI ex US Free, prior to May 2002, the MSCI EAFE.

Composite rankings are used for Total Equity (InvMetrics Public DB Total Eq consists of 78 portfolios), Total US Equity (InvMetrics Public DB US Eq consists of 155 portfolios), Total Non-US Equity (InvMetrics Public DB ex-US Eq consists of 106 portfolios), Total Global Equity (InvMetrics Public DB Gbl Eq consists of 32 portfolios), Total Fixed Income (InvMetrics Public DB Total Fix Inc consists of 79 portfolios), Total US Fixed Income (InvMetrics Public DB US Fix Inc consists of 105 portfolios), Total Real Estate (InvMetrics Public DB Real Estate Pub+Priv consists of 56 portfolios) and Total Private Equity (InvMetrics Public DB Private Eq consists of 47 portfolios).



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Fund	6,148,524,885	100.0	100.0	5.2	44	6.0	21	18.7	17	9.9	20	7.4	29	9.0	18	8.1	Apr-94
<i>Policy Index</i>				<u>6.2</u>	7	<u>7.1</u>	2	<u>20.7</u>	9	<u>10.6</u>	8	<u>8.2</u>	7	<u>9.1</u>	13	<u>8.2</u>	<i>Apr-94</i>
<i>Over/Under</i>				-1.0		-1.1		-2.0		-0.7		-0.8		-0.1		-0.1	
<i>60% MSCI ACWI (Net) / 40% FTSE WGBI</i>				5.2	45	5.6	55	18.2	26	9.2	42	6.0	96	6.2	99	6.5	<i>Apr-94</i>
<i>60% S&P 500 / 40% BBgBarc Aggregate</i>				5.5	33	7.5	1	22.2	3	10.9	7	8.4	4	9.8	1	8.5	<i>Apr-94</i>
<i>InvMetrics Public DB > \$1B Net Median</i>				5.1		5.6		17.0		8.9		6.8		8.1		7.6	<i>Apr-94</i>
Total Fund ex Parametric	6,106,209,595	99.3	--	5.1	--	5.8	--	18.4	--	9.7	--	7.3	--	8.8	--	8.0	Apr-94
Total Fund ex Private Equity	5,693,929,826	92.6	--	5.8	19	6.3	14	19.6	14	9.7	30	7.2	38	--	--	8.9	Jan-12
<i>Policy Index</i>				<u>6.2</u>	7	<u>7.1</u>	2	<u>20.7</u>	9	<u>10.6</u>	8	<u>8.2</u>	7	<u>9.1</u>	13	<u>9.7</u>	<i>Jan-12</i>
<i>Over/Under</i>				-0.4		-0.8		-1.1		-0.9		-1.0		-0.8		-0.8	
<i>InvMetrics Public DB > \$1B Net Median</i>				5.1		5.6		17.0		8.9		6.8		8.1		8.6	<i>Jan-12</i>
Total US Equity	1,799,934,440	29.3	26.0	9.1	20	10.6	3	31.6	9	14.9	12	11.5	10	13.8	4	9.6	Dec-93
<i>Russell 3000</i>				<u>9.1</u>	18	<u>10.4</u>	5	<u>31.0</u>	16	<u>14.6</u>	16	<u>11.2</u>	17	<u>13.4</u>	17	<u>9.8</u>	<i>Dec-93</i>
<i>Over/Under</i>				0.0		0.2		0.6		0.3		0.3		0.4		-0.2	
<i>InvMetrics Public DB US Eq Net Median</i>				8.4		9.4		29.9		13.6		10.6		12.9		9.5	<i>Dec-93</i>
Western U.S. Index Plus	251,003,186	4.1		9.4	32	11.3	18	33.5	21	15.7	32	12.3	22	15.2	7	6.9	May-07
<i>S&P 500</i>				<u>9.1</u>	36	<u>10.9</u>	23	<u>31.5</u>	35	<u>15.3</u>	36	<u>11.7</u>	28	<u>13.6</u>	24	<u>8.4</u>	<i>May-07</i>
<i>Over/Under</i>				0.3		0.4		2.0		0.4		0.6		1.6		-1.5	
<i>eV US Large Cap Equity Net Median</i>				8.3		9.6		28.9		13.3		10.1		12.6		8.1	<i>May-07</i>
Blackrock Russell 1000 Index	1,478,332,364	24.0		9.0	37	10.6	28	31.4	35	--	--	--	--	--	--	14.1	May-17
<i>Russell 1000</i>				<u>9.0</u>	37	<u>10.6</u>	28	<u>31.4</u>	35	<u>15.0</u>	37	<u>11.5</u>	30	<u>13.5</u>	25	<u>14.1</u>	<i>May-17</i>
<i>Over/Under</i>				0.0		0.0		0.0								0.0	
<i>eV US Large Cap Equity Net Median</i>				8.3		9.6		28.9		13.3		10.1		12.6		12.6	<i>May-17</i>
Blackrock Russell 2500 Index	70,598,890	1.1		8.5	35	7.2	44	27.8	57	--	--	--	--	--	--	9.9	May-17
<i>Russell 2500</i>				<u>8.5</u>	35	<u>7.1</u>	44	<u>27.8</u>	57	<u>10.3</u>	51	<u>8.9</u>	42	<u>12.6</u>	42	<u>9.8</u>	<i>May-17</i>
<i>Over/Under</i>				0.0		0.1		0.0								0.1	
<i>eV US Small-Mid Cap Equity Net Median</i>				7.8		6.7		28.6		10.5		8.4		12.1		9.6	<i>May-17</i>

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance / Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result.

Policy Index as of July 2019: 26% Russell 3000 Index, 17% MSCI ACWI ex U.S., 10% MSCI ACWI, 13% Russell 3000 +3%, 19% BBgBarc US Aggregate, 8% NCREIF ODCE, 7% CPI +2%.

Total U.S. Equity Benchmark: Russell 3000 Index. Prior to January 2016, the Benchmark is a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Non-US Equity	999,209,869	16.3	17.0	9.1	81	6.6	91	21.0	80	10.0	49	6.2	42	5.8	50	6.5	Mar-94
MSCI ACWI ex USA				8.9	88	7.0	85	21.5	70	9.9	55	5.5	67	5.0	82	5.3	Mar-94
Over/Under				0.2		-0.4		-0.5		0.1		0.7		0.8		1.2	
MSCI EAFE				8.2	94	7.0	84	22.0	63	9.6	69	5.7	62	5.5	63	5.0	Mar-94
MSCI ACWI ex USA NR LCL				6.2	99	8.0	37	22.2	61	8.9	82	7.1	19	7.0	5	--	Mar-94
MSCI EAFE NR LCL				5.2	99	7.0	83	21.7	69	7.7	96	6.7	26	7.2	4	5.0	Mar-94
InvMetrics Public DB ex-US Eq Net Median				9.8		7.7		22.8		10.0		5.9		5.7		5.9	Mar-94
BlackRock ACWI ex-U.S. Index	510,579,539	8.3		9.2	65	7.4	63	21.9	77	10.1	71	5.9	60	5.4	78	3.1	Mar-07
MSCI ACWI ex USA IMI				9.2	66	7.3	63	21.6	77	9.8	74	5.7	65	5.2	79	2.9	Mar-07
Over/Under				0.0		0.1		0.3		0.3		0.2		0.2		0.2	
MSCI ACWI ex USA NR LCL				6.2	99	8.0	49	22.2	74	8.9	83	7.1	34	7.0	48	3.8	Mar-07
eV ACWI ex-US All Cap Equity Net Median				9.8		7.9		25.1		11.2		6.5		6.9		3.9	Mar-07
Sprucegrove	240,872,280	3.9		9.9	49	3.9	99	17.3	88	8.8	83	5.6	69	6.3	67	7.3	Mar-02
MSCI ACWI ex USA				8.9	70	7.0	69	21.5	78	9.9	74	5.5	69	5.0	84	6.5	Mar-02
Over/Under				1.0		-3.1		-4.2		-1.1		0.1		1.3		0.8	
MSCI EAFE				8.2	83	7.0	69	22.0	76	9.6	76	5.7	66	5.5	78	6.0	Mar-02
MSCI ACWI ex USA NR LCL				6.2	99	8.0	49	22.2	74	8.9	83	7.1	34	7.0	48	5.6	Mar-02
MSCI EAFE NR LCL				5.2	99	7.0	69	21.7	77	7.7	88	6.7	45	7.2	43	4.8	Mar-02
eV ACWI ex-US All Cap Equity Net Median				9.8		7.9		25.1		11.2		6.5		6.9		7.1	Mar-02
Hexavest	98,371,757	1.6		7.1	88	6.1	79	16.5	85	6.7	86	4.4	74	--	--	4.4	Dec-10
MSCI EAFE				8.2	68	7.0	55	22.0	48	9.6	47	5.7	54	5.5	69	5.3	Dec-10
Over/Under				-1.1		-0.9		-5.5		-2.9		-1.3		--		-0.9	
MSCI EAFE NR LCL				5.2	96	7.0	54	21.7	50	7.7	74	6.7	39	7.2	36	7.5	Dec-10
eV EAFE All Cap Equity Net Median				8.7		7.1		21.6		9.4		5.9		6.4		6.1	Dec-10
Walter Scott	149,386,293	2.4		8.7	76	8.6	31	27.5	36	14.5	11	9.5	13	--	--	7.1	Dec-10
MSCI ACWI ex USA				8.9	70	7.0	69	21.5	78	9.9	74	5.5	69	5.0	84	4.3	Dec-10
Over/Under				-0.2		1.6		6.0		4.6		4.0		--		2.8	
MSCI ACWI ex USA NR LCL				6.2	99	8.0	49	22.2	74	8.9	83	7.1	34	7.0	48	6.9	Dec-10
MSCI EAFE				8.2	83	7.0	69	22.0	76	9.6	76	5.7	66	5.5	78	5.3	Dec-10
eV ACWI ex-US All Cap Equity Net Median				9.8		7.9		25.1		11.2		6.5		6.9		5.9	Dec-10



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Global Equity	693,538,318	11.3	10.0	9.0	26	9.1	20	27.1	7	12.9	46	8.6	49	8.7	25	6.6	May-05
MSCI ACWI				9.0	30	8.9	34	26.6	10	12.4	60	8.4	59	8.8	24	7.3	May-05
Over/Under				0.0		0.2		0.5		0.5		0.2		-0.1		-0.7	
InvMetrics Public DB Gbl Eq Net Median				8.2		8.7		25.0		12.9		8.5		6.1		6.2	May-05
BlackRock MSCI ACWI Equity Index	693,538,318	11.3		9.0	41	9.1	32	27.1	45	12.9	39	8.9	39	--	--	10.8	Aug-12
MSCI ACWI				9.0	43	8.9	36	26.6	47	12.4	44	8.4	45	8.8	59	10.4	Aug-12
Over/Under				0.0		0.2		0.5		0.5		0.5				0.4	
eV All Global Equity Net Median				8.6		8.2		26.1		11.7		8.0		9.3		10.4	Aug-12



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Private Equity	454,595,059	7.4	13.0	-1.7	95	2.9	71	8.3	52	14.5	38	13.1	29	--	--	14.1	Jan-12
Russell 3000 + 3%				9.9	5	12.0	1	34.9	1	18.0	16	14.6	25	16.8	1	18.0	Jan-12
Over/Under				-11.6		-9.1		-26.6		-3.5		-1.5				-3.9	
Cambridge Associates Global All PE (Qtr Lag)				0.5	66	4.3	52	7.9	55	13.3	52	11.1	54	13.0	44	12.5	Jan-12
InvMetrics Public DB Private Eq Net Median				1.4		4.4		8.4		13.4		11.4		12.5		12.4	Jan-12
Adams Street Global Fund Series	172,996,140	2.8		-5.5	--	-0.9	--	4.1	--	12.2	--	10.8	--	--	--	12.4	Jan-12
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	18.0	Jan-12
Over/Under				-15.4		-12.9		-30.8		-5.8		-3.8				-5.6	
Harbourvest	97,630,843	1.6		-0.2	--	5.5	--	12.2	--	19.2	--	18.4	--	--	--	18.7	Aug-13
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	15.8	Aug-13
Over/Under				-10.1		-6.5		-22.7		1.2		3.8				2.9	
Pantheon Global Secondary Funds	38,433,838	0.6		0.4	--	4.1	--	-0.4	--	13.2	--	12.2	--	--	--	11.6	Jan-12
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	18.0	Jan-12
Over/Under				-9.5		-7.9		-35.3		-4.8		-2.4				-6.4	
Drive Capital Fund II	15,687,653	0.3		2.2	--	14.5	--	53.0	--	-0.3	--	--	--	--	--	-10.1	Sep-16
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	17.9	Sep-16
Over/Under				-7.7		2.5		18.1		-18.3		--				-28.0	
Abbott Secondary Opportunities	17,294,394	0.3		-1.8	--	0.8	--	8.9	--	--	--	--	--	--	--	17.2	Jan-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	14.7	Jan-18
Over/Under				-11.7		-11.2		-26.0		--		--				2.5	
Clearlake Capital Partners V	9,468,579	0.2		13.8	--	23.4	--	50.2	--	--	--	--	--	--	--	43.9	Mar-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	15.0	Mar-18
Over/Under				3.9		11.4		15.3		--		--				28.9	

Private equity performance shown above is calculated using a time-weighted return methodology. Market values shown are cash-adjusted based on the current period's cash flows.

Adams Street Global Fund Series includes Adams Street 2010 U.S. Fund, 2010 Non-U.S. Developed Markets Fund, 2010 Non-U.S. Emerging Markets Fund, 2010 Direct Fund, 2013, and 2016 Global Fund.

Pantheon Global Secondary Funds includes Pantheon Global Secondary Fund IV and Global Secondary Fund V.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Battery Ventures XII	10,278,557	0.2		1.1	--	7.7	--	5.7	--	--	--	--	--	--	--	-1.6	Apr-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	17.0	Apr-18
Over/Under				-8.8		-4.3		-29.2								-18.6	
Insight Venture Partners X	23,887,278	0.4		7.4	--	12.7	--	21.4	--	--	--	--	--	--	--	8.5	May-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	17.4	May-18
Over/Under				-2.5		0.7		-13.5								-8.9	
GTCR Fund XII	6,702,509	0.1		-13.9	--	-13.9	--	-18.8	--	--	--	--	--	--	--	-38.0	Jun-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	16.2	Jun-18
Over/Under				-23.8		-25.9		-53.7								-54.2	
Buenaventure One, LLC	31,506,474	0.5		0.2	--	-0.1	--	6.7	--	--	--	--	--	--	--	3.9	Jul-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	16.5	Jul-18
Over/Under				-9.7		-12.1		-28.2								-12.6	
ECI 11	3,542,361	0.1		13.0	--	22.9	--	34.2	--	--	--	--	--	--	--	28.1	Dec-18
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	20.7	Dec-18
Over/Under				3.1		10.9		-0.7								7.4	
The Resolute Fund IV L.P.	8,766,623	0.1		20.4	--	27.9	--	81.6	--	--	--	--	--	--	--	81.6	Jan-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	34.9	Jan-19
Over/Under				10.5		15.9		46.7								46.7	
GGV Capital VII L.P.	2,872,123	0.0		-17.7	--	-22.9	--	--	--	--	--	--	--	--	--	-22.9	Feb-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	23.9	Feb-19
Over/Under				-27.6		-34.9		--								-46.8	
GGV Discovery II, L.P.	499,251	0.0		3.4	--	-2.6	--	--	--	--	--	--	--	--	--	-2.6	Feb-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	23.9	Feb-19
Over/Under				-6.5		-14.6		--								-26.5	
Drive Capital Overdrive Fund I	2,696,095	0.0		-3.6	--	-3.6	--	--	--	--	--	--	--	--	--	-3.6	May-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	12.6	May-19
Over/Under				-13.5		-15.6		--								-16.2	

Private equity performance shown above is calculated using a time-weighted return methodology. Market values shown are cash-adjusted based on the current period's cash flows.

Adams Street Global Fund Series includes Adams Street 2010 U.S. Fund, 2010 Non-U.S. Developed Markets Fund, 2010 Non-U.S. Emerging Markets Fund, 2010 Direct Fund, 2013, and 2016 Global Fund.

Pantheon Global Secondary Funds includes Pantheon Global Secondary Fund IV and Global Secondary Fund V.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Riverside Micro Cap Fund V, LP	1,780,559	0.0		1.0		22.5		--		--		--		--		-28.5	May-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	12.6	May-19
Over/Under				-8.9		10.5										-41.1	
GGV Capital VII Plus, LP	827,466	0.0		0.3		0.3		--		--		--		--		0.3	Jun-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	20.1	Jun-19
Over/Under				-9.6		-11.7										-19.8	
Astorg VII L.P.	698,463	0.0		-20.5		-45.8		--		--		--		--		-45.8	Jul-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	12.0	Jul-19
Over/Under				-30.4		-57.8										-57.8	
M/C Partners Fund VIII LP. Limited Partnership	736,738	0.0		-15.1		-18.3		--		--		--		--		-18.3	Jul-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	12.0	Jul-19
Over/Under				-25.0		-30.3										-30.3	
Genstar Capital Partners IX	1,684,036	0.0		2.2		--		--		--		--		--		--	Aug-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	10.1	Aug-19
Over/Under				-7.7		--										--	
Genstar IX Opportunities Fund I	745,800	0.0		-0.3		--		--		--		--		--		-0.3	Aug-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	10.1	Aug-19
Over/Under				-10.2		--										-10.4	
ABRY Partners IX, LP	2,181,368	0.0		6.8		--		--		--		--		--		-15.2	Sep-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	12.1	Sep-19
Over/Under				-3.1		--										-27.3	
Advent International GPE IX LP	960,680	0.0		-35.5		--		--		--		--		--		-6.0	Nov-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	7.3	Nov-19
Over/Under				-45.4		--										-13.3	
Drive Capital Fund III LP	36,925	0.0		--		--		--		--		--		--		0.0	Dec-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	3.1	Dec-19
Over/Under				--		--										-3.1	
Oak HC/FT Partners III LP	859,875	0.0		--		--		--		--		--		--		0.0	Dec-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	3.1	Dec-19
Over/Under				--		--										-3.1	
TA XIII A LP	1,500,000	0.0		--		--		--		--		--		--		--	Dec-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	--	Dec-19
Over/Under				--		--										--	



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
													Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$19,108,507	\$6,254,210	76%	--	\$4,625,000	\$18,623,267	\$23,248,267	\$4,139,760	20.1%	0.24x	1.22x
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$2,373,722	\$8,226,278	22%	--	--	\$2,181,367	\$2,181,367	(\$192,355)	-23.6%	--	0.92x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$33,006,870	\$34,829,485	\$67,836,355	\$30,378,642	14.1%	0.88x	1.81x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$19,845,682	\$15,856,563	\$35,702,245	\$13,375,407	11.9%	0.89x	1.6x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	--	\$2,514,266	\$10,156,295	\$12,670,561	\$5,037,561	10.6%	0.33x	1.66x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,066,500	\$433,500	95%	\$6,697	\$9,748,384	\$4,551,168	\$14,299,552	\$6,226,355	12.4%	1.21x	1.77x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$15,450,212	\$75,257,920	\$90,708,132	\$29,347,404	11.3%	0.25x	1.48x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$32,880,000	\$27,120,000	55%	--	\$3,621,043	\$35,480,187	\$39,101,230	\$6,221,230	12.8%	0.11x	1.19x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$6,967,808	\$23,100,000	23%	\$67,808	--	\$7,038,691	\$7,038,691	\$3,075	1.0%	--	1.01x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$1,150,000	\$8,850,000	--	--	--	\$960,680	\$960,680	(\$189,320)	-60.3%	--	0.84x
Astorg VII	2019	12/17/2018	\$8,625,609	\$908,094	\$7,717,515	11%	--	--	\$692,705	\$692,705	(\$215,389)	-67.0%	--	0.76x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$5,998,340	\$3,051,660	66%	--	--	\$6,112,532	\$6,112,532	\$114,192	2.2%	--	1.02x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$3,848,605	\$1,201,395	76%	--	--	\$4,140,620	\$4,140,620	\$292,015	9.1%	--	1.08x
Buenaventure One, LLC	2018	1/5/2018	\$102,316,500	\$30,730,590	\$71,585,910	30%	--	\$403,156	\$31,717,466	\$32,120,622	\$1,390,032	5.0%	0.01x	1.05x
CapVest Equity Partners IV	2019	7/11/2018	\$12,346,457	--	\$12,346,457	--	--	--	(\$52,327)	(\$52,327)	--	--	--	--
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$7,283,333	\$3,326,845	73%	\$46,158	\$1,363,988	\$9,004,329	\$10,368,317	\$3,038,826	44.1%	0.19x	1.42x
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$11,682,584	\$3,320,626	78%	\$3,210	--	\$15,687,658	\$15,687,658	\$4,001,864	22.2%	--	1.34x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$36,925	\$7,463,075	0%	--	--	\$36,925	\$36,925	--	--	--	--
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$2,795,767	\$4,704,233	37%	--	--	\$2,696,095	\$2,696,095	(\$99,672)	-9.3%	--	0.96x
ECI 11	2018	7/5/2018	\$9,739,754	\$2,853,854	\$6,885,900	29%	--	--	\$2,715,851	\$2,715,851	(\$138,003)	-6.7%	--	0.95x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	--	\$10,650,000	--	--	--	--	--	--	--	--	--
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	--	\$3,550,000	--	--	--	--	--	--	--	--	--
Genstar Capital Partners IX	2019	2/21/2019	\$7,500,000	\$1,738,245	\$5,761,755	23%	--	--	\$1,703,331	\$1,703,331	(\$34,914)	-10.1%	--	0.98x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$747,352	\$1,752,648	30%	--	--	\$746,588	\$746,588	(\$764)	-0.4%	--	1x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$3,454,400	\$6,705,600	34%	--	--	\$3,283,464	\$3,283,464	(\$170,836)	-11.8%	--	0.95x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$825,500	\$1,714,500	33%	--	--	\$826,921	\$826,921	\$1,421	0.4%	--	1x
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$504,000	\$1,596,000	24%	--	--	\$499,251	\$499,251	(\$4,749)	-1.9%	--	0.99x
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	--	\$8,900,000	--	--	--	--	--	--	--	--	--
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	--	\$15,000,000	--	--	--	--	--	--	--	--	--
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$9,303,000	\$20,792,792	31%	--	\$540,067	\$8,684,443	\$9,224,510	(\$78,490)	-0.9%	0.06x	0.99x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$61,509,954	\$6,075,000	91%	\$84,954	\$71,696,542	\$26,282,640	\$97,979,182	\$36,384,274	20.7%	1.17x	1.59x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$43,200,000	\$16,800,000	72%	--	\$14,071,299	\$45,681,656	\$59,752,955	\$16,552,955	30.6%	0.33x	1.38x
HarbourVest - Dover Street X	2019	5/31/2019	\$40,000,000	--	\$40,000,000	--	--	--	\$405,658	\$405,658	--	--	--	--
HarbourVest - PRINS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	--	\$4,951,347	\$26,994,457	\$31,945,804	\$7,481,416	14.5%	0.2x	1.31x
HarbourVest - PRINS CO INVEST V L.P.	2019	7/31/2018	\$35,000,000	\$5,250,000	\$29,750,000	--	--	--	\$4,699,120	\$4,699,120	(\$550,880)	-24.4%	--	0.9x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	--	\$19,800,000	--	--	--	(\$126,154)	(\$126,154)	--	--	--	--
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$20,625,000	\$4,375,000	83%	--	\$8,561	\$23,708,801	\$23,717,362	\$3,092,362	15.5%	0x	1.15x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$955,984	\$9,044,016	10%	--	--	\$736,738	\$736,738	(\$219,246)	-51.1%	--	0.77x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$953,043	\$14,046,957	6%	--	--	\$859,875	\$859,875	(\$93,168)	-61.8%	--	0.9x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	--	\$13,140,543	\$2,596,999	\$15,737,542	\$5,777,542	13.4%	1.32x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$35,116,509	\$14,883,491	70%	(\$162,514)	\$11,637,534	\$35,309,367	\$46,946,901	\$11,992,906	13.2%	0.33x	1.34x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$8,242,991	\$12,874,227	41%	--	\$1,974,204	\$7,801,154	\$9,775,358	\$1,532,367	49.2%	0.24x	1.19x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$2,020,662	\$7,979,338	20%	--	--	\$1,780,559	\$1,780,559	(\$240,103)	-23.8%	--	0.88x
TA XIII	2019	5/2/2019	\$10,000,000	\$1,500,000	\$8,500,000	15%	--	--	\$1,370,078	\$1,370,078	(\$129,922)	-89.0%	--	0.91x
Total VCERA Private Equity Program	--	5/21/2010	\$982,878,320	\$495,806,406	\$489,660,531	50%	\$73,843	\$208,598,698	\$471,532,423	\$680,131,121	\$184,023,695	14.4%	0.42x	1.37x

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

2. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 12/31/2019 statement of investments produced by Abbott Capital.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total US Fixed Income	1,046,983,442	17.0	14.0	0.7	21	2.5	26	8.5	45	4.2	37	3.6	23	4.8	16	5.8	Feb-94
BBgBarc US Aggregate TR				0.2	70	2.5	32	8.7	33	4.0	45	3.0	49	3.7	53	5.3	Feb-94
Over/Under				0.5		0.0		-0.2		0.2		0.6		1.1		0.5	
InvMetrics Public DB US Fix Inc Net Median				0.3		2.2		8.1		3.9		3.0		3.9		5.7	Feb-94
BlackRock U.S. Debt Fund	244,960,616	4.0		0.2	84	2.4	44	8.7	45	4.1	48	3.1	53	3.8	55	5.1	Nov-95
BBgBarc US Aggregate TR				0.2	84	2.5	44	8.7	45	4.0	49	3.0	54	3.7	56	5.1	Nov-95
Over/Under				0.0		-0.1		0.0		0.1		0.1		0.1		0.0	
eV All US Fixed Inc Net Median				0.6		2.2		8.1		4.0		3.2		4.0		4.9	Nov-95
Western	329,243,179	5.4		0.5	55	3.1	27	10.6	28	5.2	27	4.1	32	5.5	28	6.1	Dec-96
BBgBarc US Aggregate TR				0.2	84	2.5	44	8.7	45	4.0	49	3.0	54	3.7	56	5.1	Dec-96
Over/Under				0.3		0.6		1.9		1.2		1.1		1.8		1.0	
eV All US Fixed Inc Net Median				0.6		2.2		8.1		4.0		3.2		4.0		5.0	Dec-96
Reams	333,072,839	5.4		0.9	31	2.2	51	6.6	64	3.2	68	3.2	50	4.3	45	5.2	Sep-01
Reams Custom Index				0.5	62	1.0	94	2.4	98	2.0	92	1.4	93	2.5	79	3.7	Sep-01
Over/Under				0.4		1.2		4.2		1.2		1.8		1.8		1.5	
BBgBarc US Aggregate TR				0.2	84	2.5	44	8.7	45	4.0	49	3.0	54	3.7	56	4.4	Sep-01
3-Month LIBOR + 3%				1.2	23	2.5	40	5.4	75	5.1	29	4.5	28	3.9	53	4.8	Sep-01
eV All US Fixed Inc Net Median				0.6		2.2		8.1		4.0		3.2		4.0		4.4	Sep-01
Loomis Strategic Alpha	48,739,417	0.8		0.8	35	0.7	99	4.3	83	2.7	77	2.6	66	--	--	2.6	Jul-13
BBgBarc US Aggregate TR				0.2	84	2.5	44	8.7	45	4.0	49	3.0	54	3.7	56	3.3	Jul-13
Over/Under				0.6		-1.8		-4.4		-1.3		-0.4				-0.7	
3-Month LIBOR + 3%				1.2	23	2.5	40	5.4	75	5.1	29	4.5	28	3.9	53	4.2	Jul-13
eV All US Fixed Inc Net Median				0.6		2.2		8.1		4.0		3.2		4.0		3.4	Jul-13
Loomis Sayles Multi Strategy	90,967,391	1.5		1.5	19	2.4	44	9.4	36	5.6	24	4.5	28	6.4	20	6.3	Jul-05
Loomis Custom Index				1.0	28	2.8	31	10.2	30	4.6	34	3.9	35	4.8	37	5.1	Jul-05
Over/Under				0.5		-0.4		-0.8		1.0		0.6		1.6		1.2	
BBgBarc US Govt/Credit TR				0.0	91	2.6	37	9.7	33	4.3	41	3.2	49	4.0	51	4.3	Jul-05
eV All US Fixed Inc Net Median				0.6		2.2		8.1		4.0		3.2		4.0		4.2	Jul-05

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate

Loomis Custom Index: 65% Barclays Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index

As of January 2016, Loomis Strategic Alpha was moved from the Total Global Fixed Income composite to the Total US Fixed Income composite.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Private Debt	74,054,236	1.2	3.0	2.1	--	3.9	--	8.4	--	--	--	--	--	--	--	6.5	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				2.5	--	4.2	--	13.3	--	--	--	--	--	--	--	7.0	Jan-18
Over/Under				-0.4		-0.3		-4.9								-0.5	
CVI Credit Value Fund	23,849,221	0.4		1.9	--	3.3	--	7.1	--	--	--	--	--	--	--	5.8	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				2.5	--	4.2	--	13.3	--	--	--	--	--	--	--	7.0	Jan-18
Over/Under				-0.6		-0.9		-6.2								-1.2	
Monroe Capital Private Credit Fund III	17,723,940	0.3		2.8	--	5.0	--	11.2	--	--	--	--	--	--	--	10.3	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				2.5	--	4.2	--	13.3	--	--	--	--	--	--	--	10.2	Dec-18
Over/Under				0.3		0.8		-2.1								0.1	
Bluebay Direct Lending Fund III	8,912,679	0.1		4.1	--	6.1	--	--	--	--	--	--	--	--	--	7.9	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				2.5	--	4.2	--	13.3	--	--	--	--	--	--	--	6.9	Apr-19
Over/Under				1.6		1.9		--								1.0	
Pimco Private Income Fund	8,250,000	0.1		0.0	--	--	--	--	--	--	--	--	--	--	--	0.0	Nov-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	7.3	Nov-19
Over/Under				-9.9		--		--								-7.3	
Bridge Debt Strategies III Limited Partner	15,318,397	0.2		--	--	--	--	--	--	--	--	--	--	--	--	--	Dec-19
Russell 3000 + 3%				9.9	--	12.0	--	34.9	--	18.0	--	14.6	--	16.8	--	3.1	Dec-19
Over/Under				--		--		--								--	
Treasuries	105,449,348	1.7	2.0	-2.3	--	1.9	--	--	--	--	--	--	--	--	--	5.4	Apr-19
Reams 10-Year Treasuries	105,449,348	1.7		-2.3	--	1.9	--	--	--	--	--	--	--	--	--	5.4	Apr-19
BBgBarc US Treasury 7-10 Yr TR				-1.2	--	1.5	--	8.5	--	3.9	--	2.9	--	4.5	--	5.5	Apr-19
Over/Under				-1.1		0.4		--								-0.1	

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE DEBT LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$8,381,683	\$16,618,317	34%	\$0	\$8,912,679	\$8,912,679	\$530,996	8.9%	0x	1.06x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$15,318,397	\$9,681,603	61%	\$0	\$15,318,397	\$15,318,397	\$0	0.0%	0x	1x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$22,500,000	\$7,500,000	75%	\$6,147	\$23,849,221	\$23,855,368	\$1,355,368	6.5%	0x	1.06x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$17,652,142	\$7,347,858	71%	\$1,273,921	\$17,723,940	\$18,997,861	\$1,345,719	11.2%	0.07x	1.08x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$8,250,000	\$46,750,000	15%	\$0	\$8,250,000	\$8,250,000	\$0	0.0%	0x	1x
Total VCERA Private Debt Program	-		\$160,000,000	\$72,102,222	\$87,897,778	45%	\$1,280,068	\$74,054,236	\$75,334,304	\$3,232,083	8.3%	0.02x	1.04x

1. Includes recycled/recallable distributions received to date.

Note: Private debt performance data is reported net of fees.

Performance shown is based on 12/31/2019 cash-adjusted market values.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Real Estate	434,522,276	7.1	8.0	0.4	94	1.4	86	0.3	94	4.4	96	6.5	94	9.3	79	7.5	Mar-94
NCREIF ODCE Net				1.3	46	2.4	64	4.4	73	6.1	73	8.0	61	10.4	72	7.9	Mar-94
Over/Under				-0.9		-1.0		-4.1		-1.7		-1.5		-1.1		-0.4	
InvMetrics Public DB Real Estate Pub+Priv Net Median				1.3		2.9		5.9		7.2		8.2		11.1		8.4	Mar-94
Prudential Real Estate	165,564,252	2.7		1.2	--	2.7	--	5.9	--	7.0	--	8.7	--	11.3	--	6.3	Jun-04
NCREIF ODCE Net				1.3	--	2.4	--	4.4	--	6.1	--	8.0	--	10.4	--	6.9	Jun-04
Over/Under				-0.1		0.3		1.5		0.9		0.7		0.9		-0.6	
NCREIF ODCE				1.5	--	2.8	--	5.3	--	7.1	--	9.0	--	11.4	--	7.9	Jun-04
UBS Real Estate	268,958,024	4.4		-0.1	--	0.6	--	-2.8	--	2.8	--	5.3	--	8.3	--	6.7	Mar-03
NCREIF ODCE Net				1.3	--	2.4	--	4.4	--	6.1	--	8.0	--	10.4	--	7.1	Mar-03
Over/Under				-1.4		-1.8		-7.2		-3.3		-2.7		-2.1		-0.4	
NCREIF ODCE				1.5	--	2.8	--	5.3	--	7.1	--	9.0	--	11.4	--	8.1	Mar-03

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL (NET)

	Market Value (\$)	% of Portfolio	Policy %	3 Mo (%)	Rank	Fiscal YTD (%)	Rank	1 Yr (%)	Rank	3 Yrs (%)	Rank	5 Yrs (%)	Rank	10 Yrs (%)	Rank	Inception (%)	Inception Date
Total Real Assets	461,440,014	7.5	7.0	1.5	--	1.0	--	14.4	--	4.4	--	1.8	--	--	--	4.5	Apr-13
<i>Real Assets Index</i>				<i>0.6</i>	--	<i>1.3</i>	--	<i>5.3</i>	--	<i>5.8</i>	--	<i>5.7</i>	--	--	--	<i>6.0</i>	Apr-13
Over/Under				0.9		-0.3		9.1		-1.4		-3.9				-1.5	
Bridgewater All Weather Fund	348,681,911	5.7		2.6	--	4.2	--	16.7	--	7.4	--	4.9	--	--	--	5.6	Aug-13
<i>CPI + 5% (Unadjusted)</i>				<i>1.3</i>	--	<i>2.8</i>	--	<i>7.4</i>	--	<i>7.2</i>	--	<i>6.9</i>	--	--	--	<i>6.6</i>	Aug-13
Over/Under				1.3		1.4		9.3		0.2		-2.0				-1.0	
Tortoise Energy Infrastructure	112,758,102	1.8		-1.7	--	-7.9	--	8.0	--	-3.3	--	-5.3	--	--	--	-0.1	Apr-13
<i>Tortoise MLP Index</i>				<i>-2.9</i>	--	<i>-7.0</i>	--	<i>10.9</i>	--	<i>-3.3</i>	--	<i>-6.3</i>	--	--	--	<i>-2.7</i>	Apr-13
Over/Under				1.2		-0.9		-2.9		0.0		1.0				2.6	
Overlay	78,797,881	1.3	0.0														
Parametric	40,677,675	0.7															
Abbott Capital Cash	38,120,207	0.6															

Overlay performance is not applicable on an individual account level.

Color Coding: PERFORMANCE: Green-Over performance, Red-Under performance

Color Coding: RANKS: 1 - 25 Green - Positive Result, 26 - 50 Yellow, 50 - 75 Orange, 76 - 100 Red - Negative Result

MANAGER DUE DILIGENCE

NEPC, LLC

DUE DILIGENCE MONITOR

The items below summarize the recent quarter's performance and any changes or announcements from the Plan's managers/products. A "-" indicates there were no material announcements. A "Yes" indicates there was an announcement and a brief summary is provided on the following pages. NEPC's Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determine if any action should be taken (by NEPC and/or by our clients). Events are rated: No Action, Watch, Hold, Client Review or Terminate. NEPC's recommendation in view of the recent quarter's developments (performance, manager events, and any of the longer-term trending data) is refreshed quarterly.

Investment Options	Performance (Recent Quarter)	Changes/Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
BlackRock Russell 1000 Index	-	-	-	-	
Western U.S. Index Plus	-	-	-	-	
BlackRock Russell 2500 Index	-	-	-	-	
BlackRock MSCI ACWI ex-U.S. Index	-	-	-	-	
Sprucegrove	-	-	-	-	
Hexavest	Bottom Quartile	-	-	Watch (Board Driven)	On Watch for Performance Issues
Walter Scott	Bottom Quartile	-	-	-	
BlackRock MSCI ACWI Index	-	-	-	-	
Adams Street	N/A	-	-	-	
HarbourVest	N/A	-	-	-	
Pantheon	N/A	-	-	-	
Drive	N/A	-	-	-	
Abbott Secondary Opps.	N/A	-	-	-	
Carval Credit Value	N/A	-	-	-	
PIMCO PIF	N/A	-	-	-	
Bridge Debt Strategies	N/A	-	-	-	
BlackRock U.S. Debt Fund	-	-	-	-	
Western	Top Quartile	-	-	-	
Reams	-	-	-	-	



DUE DILIGENCE MONITOR

	Performance (Recent Quarter)	Changes/Announcements (Recent Quarter)	NEPC DD Committee Rec.	Plan Rec.	Comments
Loomis Sayles Strategic Alpha	-	-	-	-	
Loomis Sayles Multi-Sector Full Discretion	Top Quartile	-	-	-	
Reams 10-Year Treasuries	-	-	-	-	
Monroe	-	-	-	-	
BlueBay	-	-	-	-	
Prudential	N/A	-	-	-	
UBS	N/A	Yes	Watch	Watch	
Bridgewater	N/A	-	-	-	
Tortoise	N/A	-	Watch	-	Acquisition of Advisory Research Team
Parametric/Clifton	N/A	-	-	-	

NEPC Due Diligence Committee Recommendation Key	
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot participate in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with an Investment Manager; manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot participate in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



DUE DILIGENCE MONITOR

The items below summarize any changes or announcements from your Plan managers/funds. A “Yes” indicates there was an announcement and a brief summary is provided separately. NEPC’s Due Diligence Committee meets every two weeks to review events as they relate to investment managers and determines if any action should be taken by NEPC and/or by our clients. They rate events: No Action, Watch, Hold, Client Review or Terminate. NEPC considers ourselves to be a fiduciary, as ERISA defines the term in Section 3(21).

Investment Manager	Manager Changes/ Announcements (Recent Quarter)	NEPC Due Diligence Committee Recommendations
UBS – Trumbull Property Fund	Yes	Watch

Manager Changes/Announcements

Below is a summary of manager changes, announcements and due diligence events since the issuance of our last quarterly report.

UBS Asset Management (“UBS,” the “Manager,” or the “Firm”) notified investors of two recent senior leadership changes within the US Real Estate team. Effectively immediately, Matt Johnson will replace Matt Lynch as the new Head of Real Estate in the US and Rod Chu will replace Jack Connelly as Head of Transactions for real estate in the US. Concurrent with this announcement, UBS announced that Mr. Lynch and Mr. Connelly have decided to leave the Firm to pursue other opportunities. UBS does not anticipate any major day-to-day changes as a result of these changes. NEPC is hopeful that these changes will be a positive development for UBS and for the Trumbull Property Fund, but it is too early to determine the long-term impact at this time. In the near-term, there is additional uncertainty as Mr. Johnson or Mr. Chu may make further changes to the team or processes. NEPC is therefore recommending a WATCH status for the Trumbull Property Fund and will continue to closely monitor the Fund and Firm.

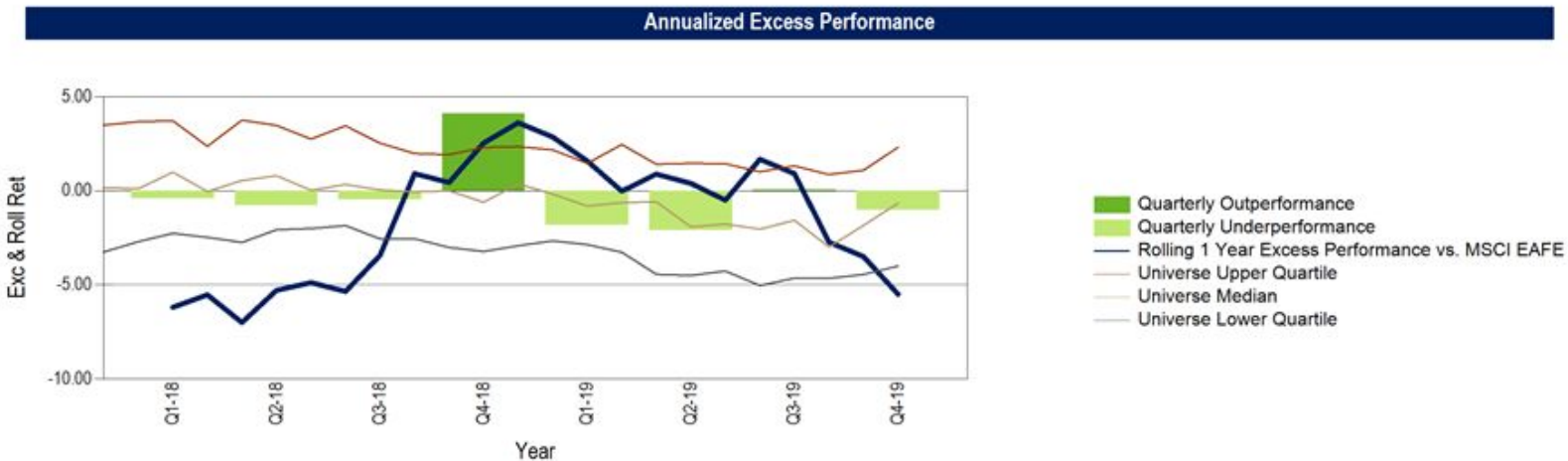
A legend key to our recommendations is provided below.

NEPC Due Diligence Committee Recommendation Key	
No Action	Informational items have surfaced; no action is recommended.
Watch	Issues have surfaced to be concerned over; manager can participate in future searches, but current and prospective clients must be made aware of the issues.
Hold	Serious issues have surfaced to be concerned over; manager cannot be in future searches unless a client specifically requests, but current and prospective clients must be made aware of the issues.
Client Review	Very serious issues have surfaced with a manager; manager cannot be in future searches unless a client specifically requests. Current clients must be advised to review the manager.
Terminate	We have lost all confidence in the product; manager would not be recommended for searches and clients would be discouraged from using. The manager cannot be in future searches unless a client specifically requests. Current clients must be advised to replace the manager.



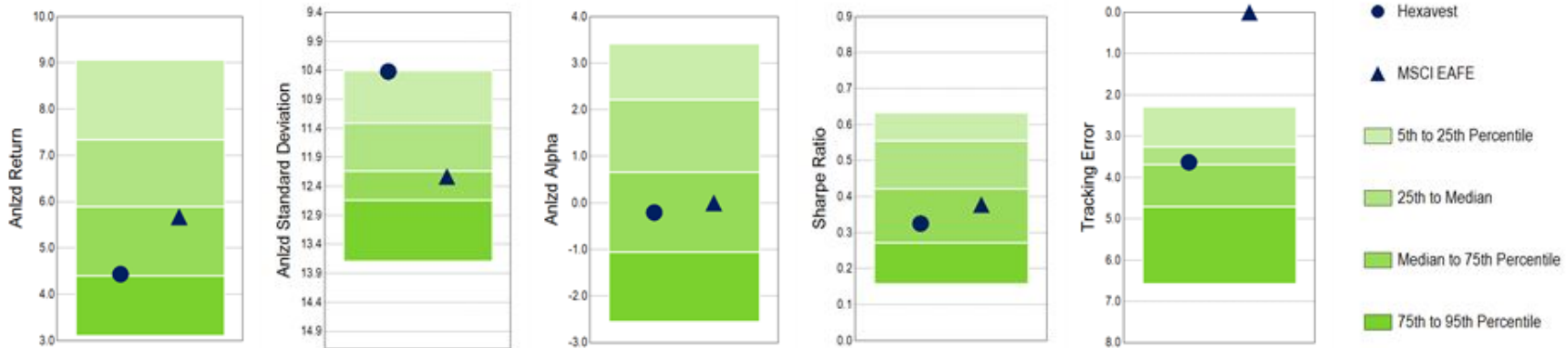
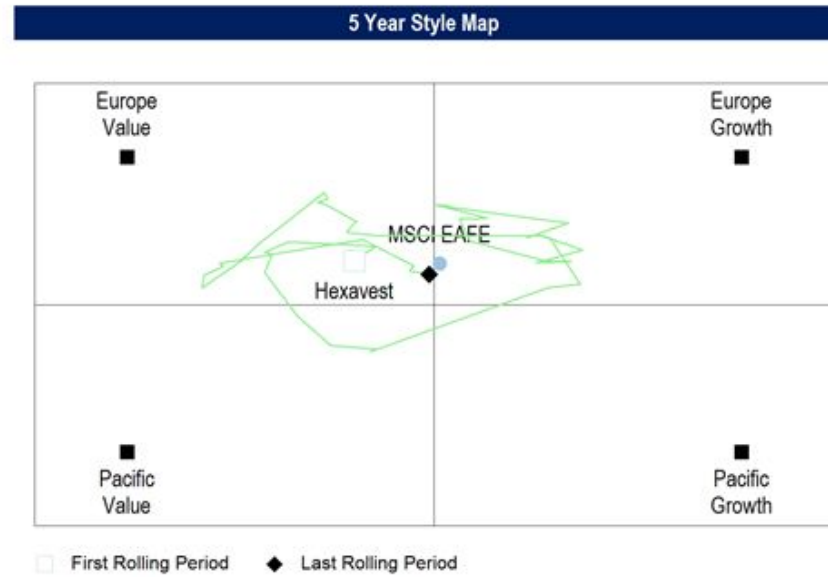
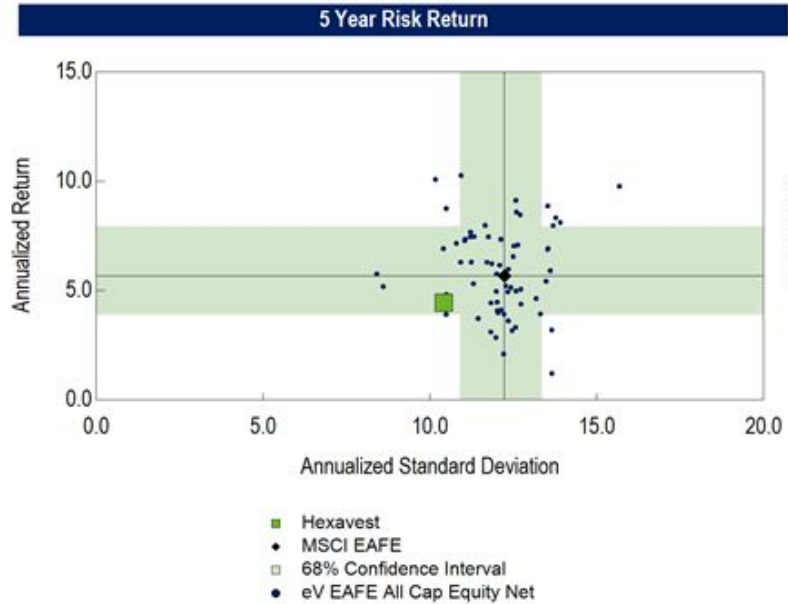
Ventura County Employees' Retirement Association

HEXAVEST



Ventura County Employees' Retirement Association

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Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total Fund	18.7	-3.6	16.0	8.6	-0.9	6.3	18.1	14.0	0.3	15.1	24.2
Policy Index	20.7	-3.6	16.3	8.4	0.8	6.8	17.2	12.9	0.5	13.2	21.0
Over/Under	-2.0	0.0	-0.3	0.2	-1.7	-0.5	0.9	1.1	-0.2	1.9	3.2
60% MSCI ACWI (Net) / 40% FTSE WGBI	18.2	-5.8	17.1	5.5	-2.6	2.3	11.4	10.3	-1.8	10.0	21.3
60% S&P 500 / 40% BBgBarc Aggregate	22.2	-2.3	14.2	8.3	1.3	10.6	17.6	11.3	4.7	12.1	18.4
Total Fund ex Parametric	18.4	-3.7	15.9	8.6	-0.9	6.3	17.8	13.7	0.6	14.5	23.3
Total Fund ex Private Equity	19.6	-4.8	15.9	8.6	-1.4	6.1	16.2	13.3	--	--	--
Policy Index	20.7	-3.6	16.3	8.4	0.8	6.8	17.2	12.9	0.5	13.2	21.0
Over/Under	-1.1	-1.2	-0.4	0.2	-2.2	-0.7	-1.0	0.4			
Total US Equity	31.6	-5.0	21.4	13.0	0.5	12.5	34.0	16.9	0.9	18.5	29.2
Russell 3000	31.0	-5.2	21.1	12.7	0.4	12.4	33.5	16.4	1.1	17.5	28.6
Over/Under	0.6	0.2	0.3	0.3	0.1	0.1	0.5	0.5	-0.2	1.0	0.6
Western U.S. Index Plus	33.5	-5.3	22.7	13.8	1.1	14.2	32.9	20.7	1.0	24.7	42.6
S&P 500	31.5	-4.4	21.8	12.0	1.4	13.7	32.4	16.0	2.1	15.1	26.5
Over/Under	2.0	-0.9	0.9	1.8	-0.3	0.5	0.5	4.7	-1.1	9.6	16.1
Blackrock Russell 1000 Index	31.4	-4.7	--	--	--	--	--	--	--	--	--
Russell 1000	31.4	-4.8	21.7	12.1	0.9	13.2	33.1	16.4	1.5	16.1	28.4
Over/Under	0.0	0.1									
Blackrock Russell 2500 Index	27.8	-9.9	--	--	--	--	--	--	--	--	--
Russell 2500	27.8	-10.0	16.8	17.6	-2.9	7.1	36.8	17.9	-2.5	26.7	34.4
Over/Under	0.0	0.1									



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total Non-US Equity	21.0	-13.0	26.5	6.6	-4.8	-3.6	16.3	17.9	-13.6	13.5	37.4
MSCI ACWI ex USA	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2	41.4
Over/Under	-0.5	1.2	-0.7	2.1	0.9	0.3	1.0	1.1	0.1	2.3	-4.0
MSCI EAFE	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
MSCI ACWI ex USA NR LCL	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7
MSCI EAFE NR LCL	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7
BlackRock ACWI ex-U.S. Index	21.9	-14.6	28.1	4.7	-4.5	-3.8	16.0	17.2	-14.1	12.8	43.1
MSCI ACWI ex USA IMI	21.6	-14.8	27.8	4.4	-4.6	-3.9	15.8	17.0	-14.3	12.7	43.6
Over/Under	0.3	0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.2	0.1	-0.5
MSCI ACWI ex USA NR LCL	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7
Sprucegrove	17.3	-13.8	27.5	11.9	-9.1	-3.2	17.1	17.2	-10.7	18.8	36.2
MSCI ACWI ex USA	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2	41.4
Over/Under	-4.2	0.4	0.3	7.4	-3.4	0.7	1.8	0.4	3.0	7.6	-5.2
MSCI EAFE	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
MSCI ACWI ex USA NR LCL	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7
MSCI EAFE NR LCL	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7
Hexavest	16.5	-11.3	17.4	3.8	-1.4	-4.3	20.2	13.7	-9.6	--	--
MSCI EAFE	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
Over/Under	-5.5	2.5	-7.6	2.8	-0.6	0.6	-2.6	-3.6	2.5	--	--
MSCI EAFE NR LCL	21.7	-11.0	15.2	5.3	5.3	5.9	26.9	17.3	-12.2	4.8	24.7
Walter Scott	27.5	-7.1	26.6	5.1	-0.4	-3.5	11.8	20.4	-9.3	--	--
MSCI ACWI ex USA	21.5	-14.2	27.2	4.5	-5.7	-3.9	15.3	16.8	-13.7	11.2	41.4
Over/Under	6.0	7.1	-0.6	0.6	5.3	0.4	-3.5	3.6	4.4	--	--
MSCI ACWI ex USA NR LCL	22.2	-10.6	18.2	7.0	1.9	6.0	20.1	16.3	-12.2	7.6	31.7
MSCI EAFE	22.0	-13.8	25.0	1.0	-0.8	-4.9	22.8	17.3	-12.1	7.8	31.8
Total Global Equity	27.1	-9.0	24.5	9.0	-3.8	1.9	22.0	14.4	-3.9	11.4	17.8
MSCI ACWI	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1	-7.3	12.7	34.6
Over/Under	0.5	0.4	0.5	1.1	-1.4	-2.3	-0.8	-1.7	3.4	-1.3	-16.8
BlackRock MSCI ACWI Equity Index	27.1	-9.0	24.5	8.4	-2.0	4.6	23.2	--	--	--	--
MSCI ACWI	26.6	-9.4	24.0	7.9	-2.4	4.2	22.8	16.1	-7.3	12.7	34.6
Over/Under	0.5	0.4	0.5	0.5	0.4	0.4	0.4	--	--	--	--



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total Private Equity	8.3	18.7	16.9	7.6	14.7	19.0	17.9	10.3	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-26.6	21.1	-7.8	-8.5	11.2	3.1	-19.6	-9.6			
<i>Cambridge Associates Global All PE (Qtr Lag)</i>	<i>7.9</i>	<i>16.4</i>	<i>15.9</i>	<i>8.5</i>	<i>7.0</i>	<i>16.3</i>	<i>15.9</i>	<i>13.0</i>	<i>12.6</i>	<i>17.1</i>	<i>-9.3</i>
Adams Street Global Fund Series	4.1	19.6	13.4	7.1	10.3	19.6	15.7	10.8	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-30.8	22.0	-11.3	-9.0	6.8	3.7	-21.8	-9.1			
Harbourvest	12.2	22.7	23.2	6.7	28.5	18.5	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-22.7	25.1	-1.5	-9.4	25.0	2.6					
Pantheon Global Secondary Funds	-0.4	17.3	24.1	15.5	6.4	16.7	14.9	0.9	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-35.3	19.7	-0.6	-0.6	2.9	0.8	-22.6	-19.0			
Drive Capital Fund II	53.0	-2.5	-33.7	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	18.1	-0.1	-58.4								
Abbott Secondary Opportunities	8.9	26.0	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-26.0	28.4									
Clearlake Capital Partners V	50.2	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	15.3										
Battery Ventures XII	5.7	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-29.2										
Insight Venture Partners X	21.4	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-13.5										
GTCR Fund XII	-18.8	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-53.7										
Buenaventure One, LLC	6.7	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-28.2										
ECI 11	34.2	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<i>34.9</i>	<i>-2.4</i>	<i>24.7</i>	<i>16.1</i>	<i>3.5</i>	<i>15.9</i>	<i>37.5</i>	<i>19.9</i>	<i>4.1</i>	<i>20.4</i>	<i>32.1</i>
Over/Under	-0.7										



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
The Resolute Fund IV L.P.	81.6	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under	46.7										
GGV Capital VII L.P.	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
GGV Discovery II, L.P.	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Drive Capital Overdrive Fund I	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Riverside Micro Cap Fund V, LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
GGV Capital VII Plus, LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Astorg VII L.P.	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
M/C Partners Fund VIII LP, Limited Partnership	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Genstar Capital Partners IX	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Genstar IX Opportunities Fund I	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
ABRY Partners IX, LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											
Advent International GPE IX LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	34.9	-2.4	24.7	16.1	3.5	15.9	37.5	19.9	4.1	20.4	32.1
Over/Under											



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Drive Capital Fund III LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>
Over/Under											
Oak HC/FT Partners III LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>
Over/Under											
TA XIII A LP	--	--	--	--	--	--	--	--	--	--	--
<i>Russell 3000 + 3%</i>	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>
Over/Under											



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total US Fixed Income	8.5	0.0	4.4	4.9	0.3	3.0	-0.1	9.6	7.3	10.6	25.6
BBgBarc US Aggregate TR	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
Over/Under	-0.2	0.0	0.9	2.3	-0.2	-3.0	1.9	5.4	-0.5	4.1	19.7
BlackRock U.S. Debt Fund	8.7	0.0	3.6	2.7	0.6	6.2	-2.0	4.3	7.9	6.7	6.0
BBgBarc US Aggregate TR	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
Over/Under	0.0	0.0	0.1	0.1	0.1	0.2	0.0	0.1	0.1	0.2	0.1
Western	10.6	-0.6	6.0	4.1	0.9	7.4	-1.2	9.7	7.3	11.3	18.9
BBgBarc US Aggregate TR	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
Over/Under	1.9	-0.6	2.5	1.5	0.4	1.4	0.8	5.5	-0.5	4.8	13.0
Reams	6.6	0.7	2.5	6.0	0.3	-3.6	2.5	10.0	8.4	10.0	33.6
Reams Custom Index	2.4	2.4	1.3	0.7	0.3	0.2	-0.5	4.2	7.8	6.5	5.9
Over/Under	4.2	-1.7	1.2	5.3	0.0	-3.8	3.0	5.8	0.6	3.5	27.7
BBgBarc US Aggregate TR	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
3-Month LIBOR + 3%	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4	3.8
Loomis Strategic Alpha	4.3	0.6	3.3	6.1	-1.0	2.4	--	--	--	--	--
BBgBarc US Aggregate TR	8.7	0.0	3.5	2.6	0.5	6.0	-2.0	4.2	7.8	6.5	5.9
Over/Under	-4.4	0.6	-0.2	3.5	-1.5	-3.6	--	--	--	--	--
3-Month LIBOR + 3%	5.4	5.4	4.4	3.8	3.3	3.2	3.3	3.5	3.3	3.4	3.8
Loomis Sayles Multi Strategy	9.4	-0.8	8.4	8.2	-2.3	6.8	1.4	16.7	4.2	13.6	37.6
Loomis Custom Index	10.2	-0.6	4.5	7.0	-1.2	4.6	0.8	7.5	7.1	8.7	18.8
Over/Under	-0.8	-0.2	3.9	1.2	-1.1	2.2	0.6	9.2	-2.9	4.9	18.8
BBgBarc US Govt/Credit TR	9.7	-0.4	4.0	3.0	0.1	6.0	-2.4	4.8	8.7	6.6	4.5



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Private Debt	8.4	4.7	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>13.3</u>	<u>1.1</u>	--	--	--	--	--	--	--	--	--
Over/Under	-4.9	3.6									
CVI Credit Value Fund	7.1	4.6	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>13.3</u>	<u>1.1</u>	--	--	--	--	--	--	--	--	--
Over/Under	-6.2	3.5									
Monroe Capital Private Credit Fund III	11.2	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>13.3</u>	<u>1.1</u>	--	--	--	--	--	--	--	--	--
Over/Under	-2.1										
Bluebay Direct Lending Fund III	--	--	--	--	--	--	--	--	--	--	--
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps	<u>13.3</u>	<u>1.1</u>	--	--	--	--	--	--	--	--	--
Over/Under											
Pimco Private Income Fund	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>
Over/Under											
Bridge Debt Strategies III Limited Partner	--	--	--	--	--	--	--	--	--	--	--
Russell 3000 + 3%	<u>34.9</u>	<u>-2.4</u>	<u>24.7</u>	<u>16.1</u>	<u>3.5</u>	<u>15.9</u>	<u>37.5</u>	<u>19.9</u>	<u>4.1</u>	<u>20.4</u>	<u>32.1</u>
Over/Under											
Treasuries	--	--	--	--	--	--	--	--	--	--	--
Reams 10-Year Treasuries	--	--	--	--	--	--	--	--	--	--	--
BBgBarc US Treasury 7-10 Yr TR	<u>8.5</u>	<u>0.9</u>	<u>2.6</u>	<u>1.1</u>	<u>1.6</u>	<u>9.0</u>	<u>-6.0</u>	<u>4.2</u>	<u>15.6</u>	<u>9.4</u>	<u>-6.0</u>
Over/Under											



Ventura County Employees' Retirement Association

TOTAL FUND CALENDAR YEAR RETURN SUMMARY

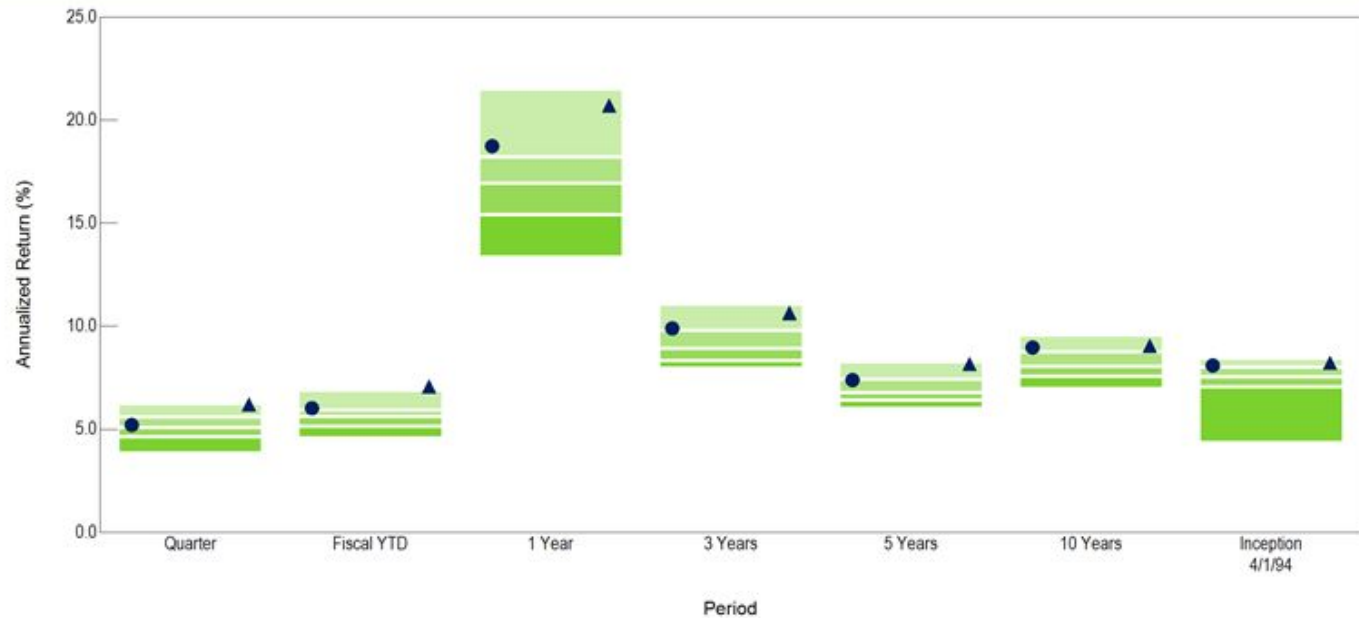
	2019 (%)	2018 (%)	2017 (%)	2016 (%)	2015 (%)	2014 (%)	2013 (%)	2012 (%)	2011 (%)	2010 (%)	2009 (%)
Total Real Estate	0.3	6.9	5.9	6.8	12.8	11.6	10.6	9.1	14.4	15.4	-31.2
NCREIF ODCE Net	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3	-30.4
Over/Under	-4.1	-0.5	-0.8	-1.0	-1.2	0.1	-2.3	-0.7	-0.6	0.1	-0.8
Prudential Real Estate	5.9	8.2	7.0	8.2	14.5	12.5	13.8	8.8	18.0	17.2	-34.8
NCREIF ODCE Net	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3	-30.4
Over/Under	1.5	0.8	0.3	0.4	0.5	1.0	0.9	-1.0	3.0	1.9	-4.4
NCREIF ODCE	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
UBS Real Estate	-2.8	6.2	5.4	6.2	11.9	10.6	9.3	9.0	12.1	15.9	-22.9
NCREIF ODCE Net	4.4	7.4	6.7	7.8	14.0	11.5	12.9	9.8	15.0	15.3	-30.4
Over/Under	-7.2	-1.2	-1.3	-1.6	-2.1	-0.9	-3.6	-0.8	-2.9	0.6	7.5
NCREIF ODCE	5.3	8.3	7.6	8.8	15.0	12.5	13.9	10.9	16.0	16.4	-29.8
Total Real Assets	14.4	-7.3	7.2	11.7	-13.8	10.2	--	--	--	--	--
Real Assets Index	5.3	6.0	6.2	6.2	4.8	4.8	28.8	5.4	8.8	--	--
Over/Under	9.1	-13.3	1.0	5.5	-18.6	5.4	--	--	--	--	--
Bridgewater All Weather Fund	16.7	-5.0	11.9	10.0	-6.8	7.6	--	--	--	--	--
CPI + 5% (Unadjusted)	7.4	7.0	7.2	7.2	5.8	5.8	--	--	--	--	--
Over/Under	9.3	-12.0	4.7	2.8	-12.6	1.8	--	--	--	--	--
Tortoise Energy Infrastructure	8.0	-13.3	-3.5	15.9	-27.1	15.7	--	--	--	--	--
Tortoise MLP Index	10.9	-13.7	-5.7	21.0	-34.1	8.0	28.8	5.4	8.8	--	--
Over/Under	-2.9	0.4	2.2	-5.1	7.0	7.7	--	--	--	--	--
Overlay											
Parametric											
Abbott Capital Cash											



Ventura County Employees' Retirement Association

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net



	Return (Rank)													
5th Percentile	6.2	6.9	21.5	11.1	8.3	9.6	8.4							
25th Percentile	5.6	5.9	18.2	9.8	7.4	8.8	8.0							
Median	5.1	5.6	17.0	8.9	6.8	8.1	7.6							
75th Percentile	4.6	5.1	15.4	8.3	6.4	7.6	7.1							
95th Percentile	3.9	4.6	13.4	8.0	6.0	7.0	4.4							
# of Portfolios	69	69	69	69	67	59	32							
● Total Fund	5.2	(44)	6.0	(21)	18.7	(17)	9.9	(20)	7.4	(29)	9.0	(18)	8.1	(23)
▲ Policy Index	6.2	(7)	7.1	(2)	20.7	(9)	10.6	(8)	8.2	(7)	9.1	(13)	8.2	(16)



Ventura County Employees' Retirement Association

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net



	Return (Rank)									
5th Percentile	21.5	-0.1	18.6	9.3	2.4	7.6	19.5	14.3	4.2	15.1
25th Percentile	18.2	-2.7	16.6	8.4	0.8	6.1	16.0	13.4	1.5	13.8
Median	17.0	-4.0	15.6	7.7	-0.4	5.1	14.3	12.7	0.6	12.8
75th Percentile	15.4	-5.1	14.1	7.1	-1.3	4.4	11.0	11.8	-0.3	11.8
95th Percentile	13.4	-6.6	10.7	5.3	-3.2	2.6	8.5	9.0	-1.2	9.3
# of Portfolios	69	63	61	62	57	55	48	44	42	41
● Total Fund	18.7 (17)	-3.6 (42)	16.0 (37)	8.6 (15)	-0.9 (65)	6.3 (20)	18.1 (10)	14.0 (15)	0.3 (61)	15.1 (6)
▲ Policy Index	20.7 (9)	-3.6 (41)	16.3 (29)	8.4 (25)	0.8 (25)	6.8 (12)	17.2 (14)	12.9 (41)	0.5 (55)	13.2 (44)



Ventura County Employees' Retirement Association

TOTAL FUND RETURN SUMMARY VS. PEER UNIVERSE

Total Fund vs. InvMetrics Public DB > \$1B Net



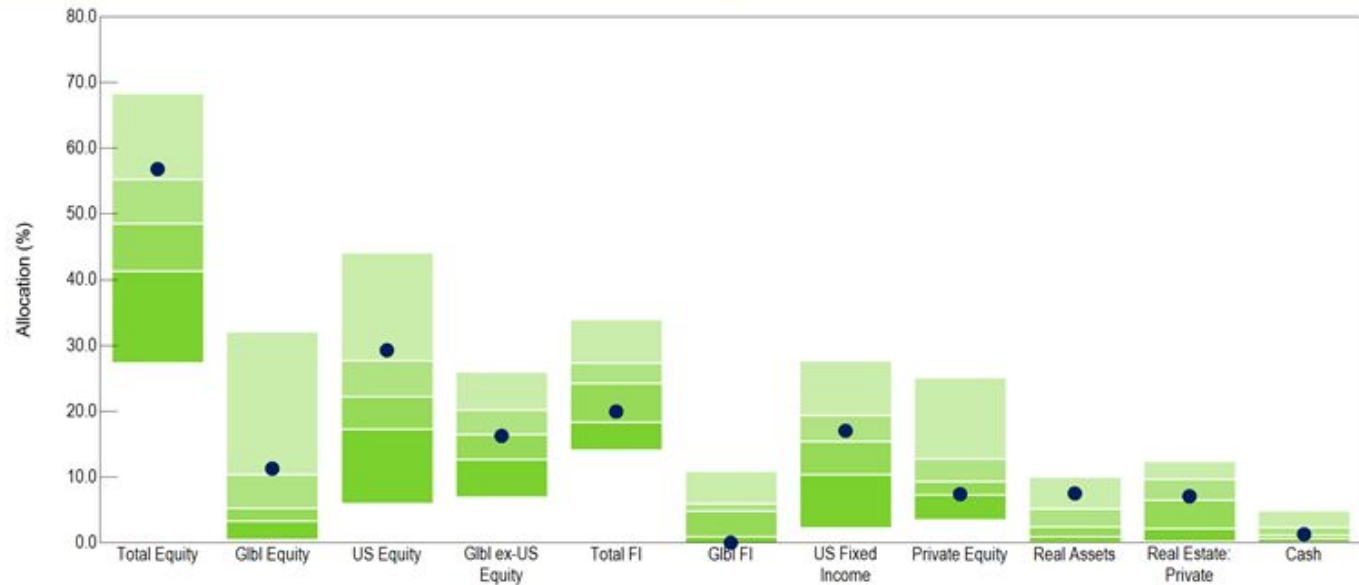
	Fiscal 2019		Fiscal 2018		Fiscal 2017		Fiscal 2016		Fiscal 2015		5 Years	
	Return	(Rank)	Return	(Rank)	Return	(Rank)	Return	(Rank)	Return	(Rank)	Return	(Rank)
5th Percentile	7.7		10.5		14.9		2.7		4.3		8.3	
25th Percentile	6.3		8.8		13.7		0.8		3.3		7.4	
Median	5.4		8.0		12.7		-0.5		2.6		6.8	
75th Percentile	4.6		7.3		11.9		-1.2		1.6		6.4	
95th Percentile	3.5		6.5		9.2		-2.4		-0.9		6.0	
# of Portfolios	77		51		65		55		53		67	
● Total Fund	7.0	(15)	8.9	(23)	12.6	(53)	0.8	(26)	1.7	(71)	7.4	(29)
▲ Policy Index	7.4	(7)	9.2	(13)	13.1	(37)	1.8	(9)	3.4	(25)	8.2	(7)



Ventura County Employees' Retirement Association

TOTAL FUND ALLOCATIONS VS. PEER UNIVERSE

Total Plan Allocation vs. InvMetrics Public DB > \$1B Net



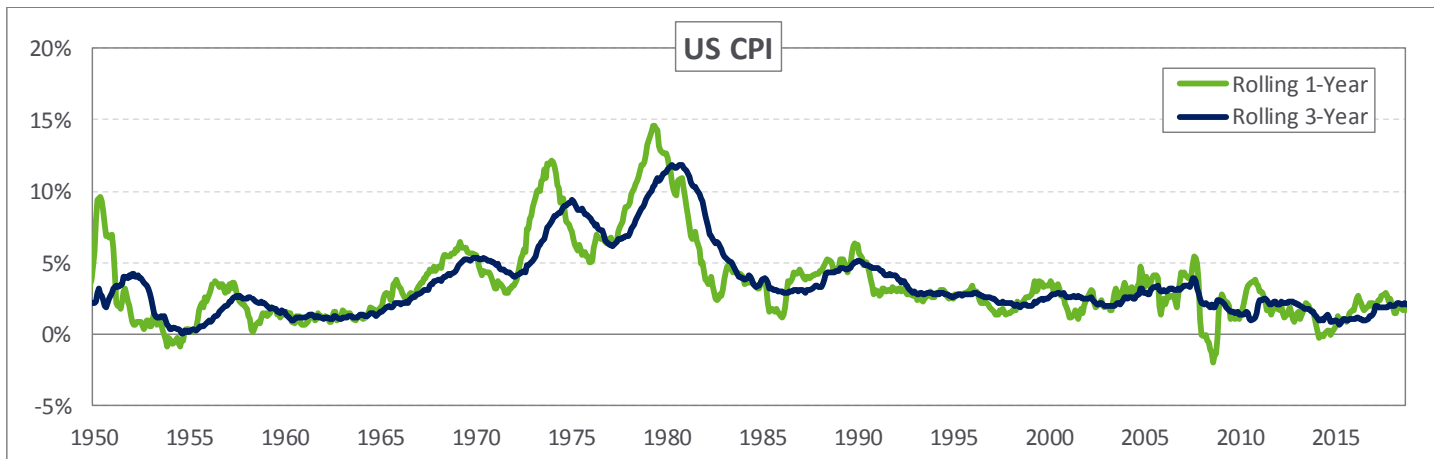
	Allocation (Rank)											
5th Percentile	68.3	32.1	44.1	26.0	34.0	10.9	27.7	25.1	10.0	12.4	4.9	--
25th Percentile	55.3	10.5	27.8	20.2	27.4	6.0	19.4	12.9	5.3	9.8	2.4	--
Median	48.6	5.3	22.3	16.6	24.3	4.9	15.5	9.4	2.5	6.5	1.3	--
75th Percentile	41.3	3.4	17.4	12.8	18.4	1.0	10.5	7.3	1.0	2.2	0.7	--
95th Percentile	27.4	0.6	6.1	7.0	14.2	0.0	2.3	3.6	0.1	0.3	0.1	--
# of Portfolios	57	26	47	55	57	28	48	51	27	49	58	--
• Total Fund	56.8 (22)	11.3 (21)	29.3 (24)	16.3 (52)	19.9 (69)	0.0 (89)	17.0 (43)	7.4 (75)	7.5 (11)	7.1 (44)	1.3 (51)	--



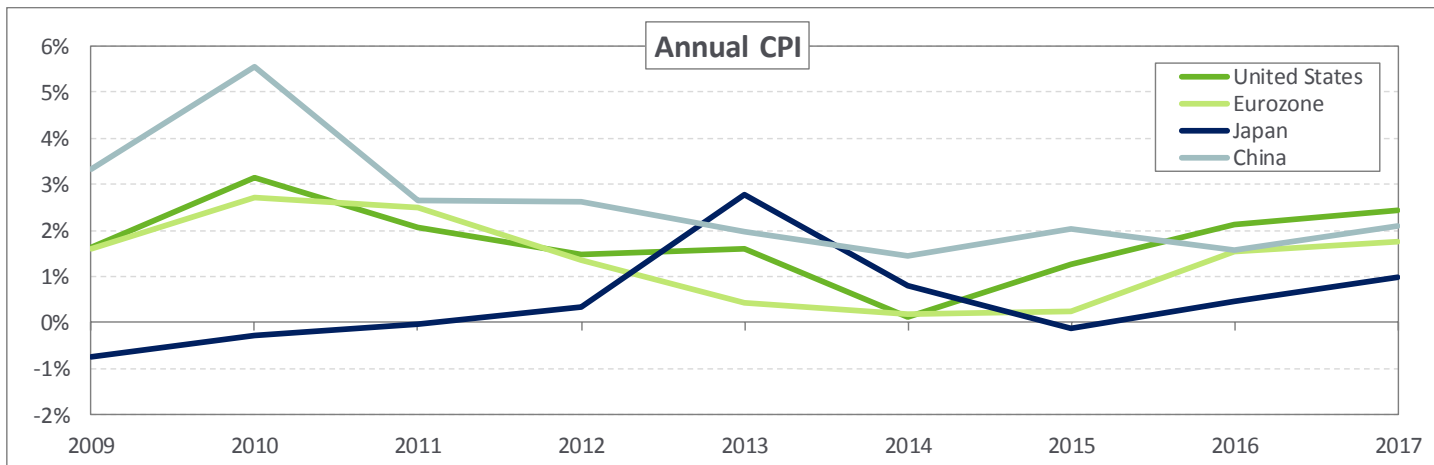
MACRO

NEPC, LLC

INFLATION



Source: Bureau of Labor Statistics, FactSet



Source: FactSet



UNEMPLOYMENT



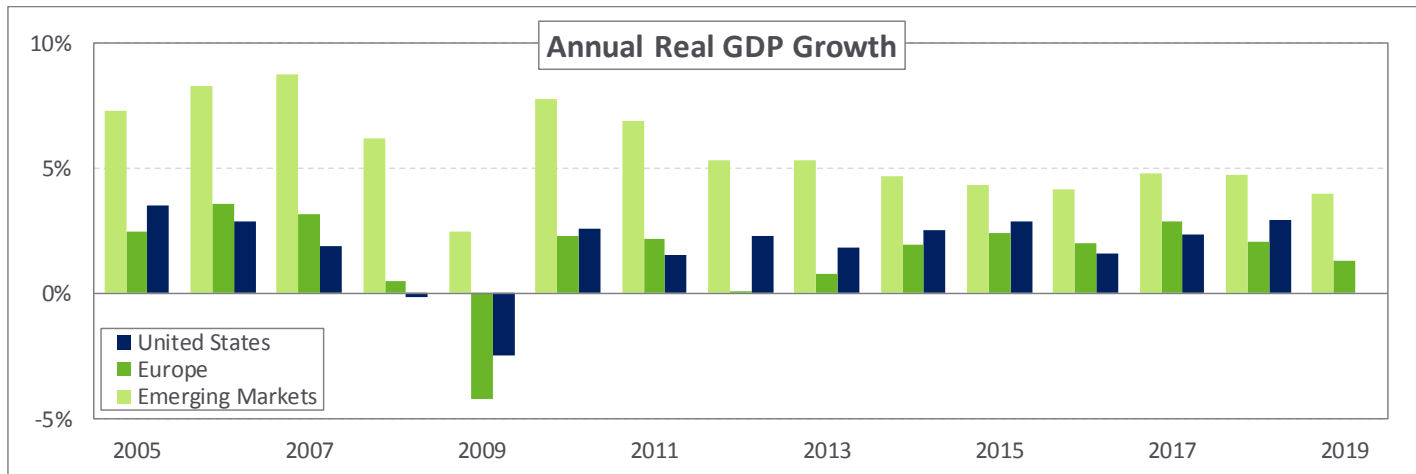
Source: FactSet



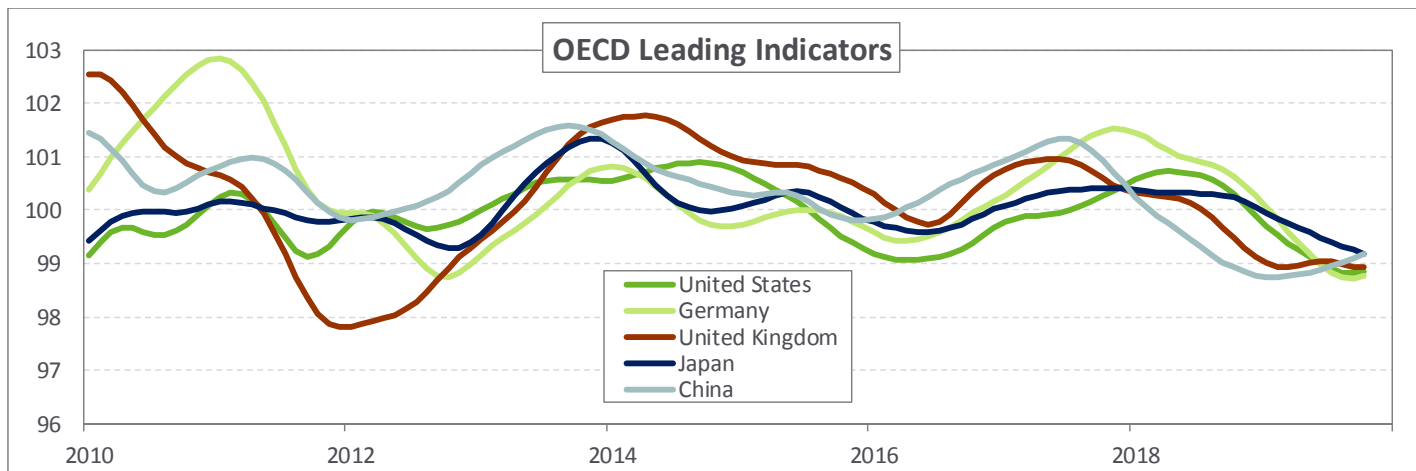
Source: FactSet



ECONOMIC INDICATORS



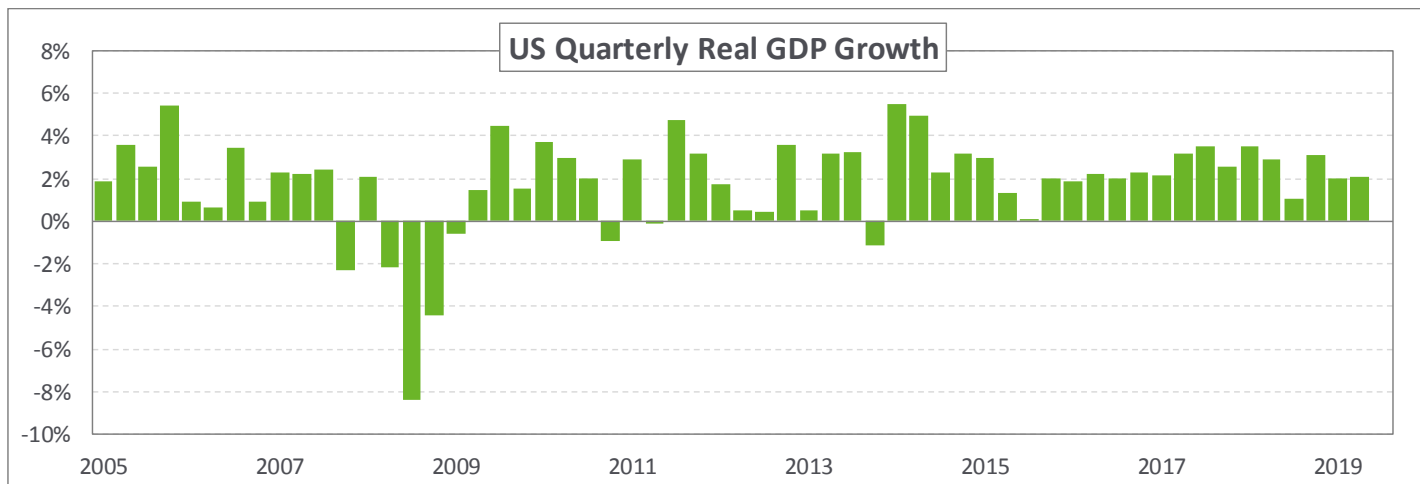
Source: Bureau of Economic Analysis, Oxford Economics, FactSet



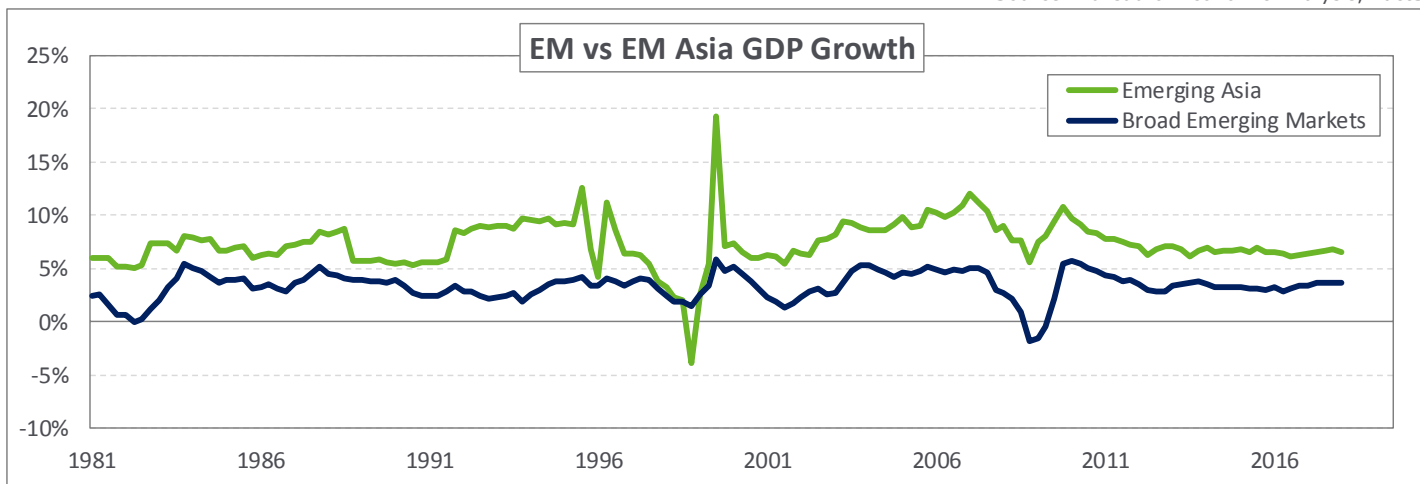
Source: OECD, FactSet



GROSS DOMESTIC PRODUCT



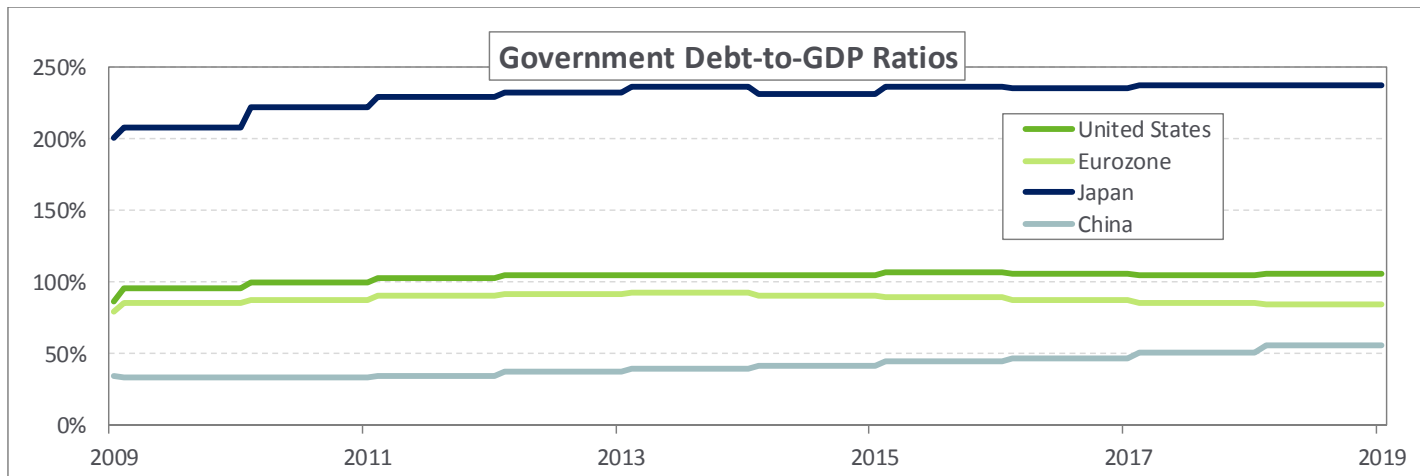
Source: Bureau of Economic Analysis, FactSet



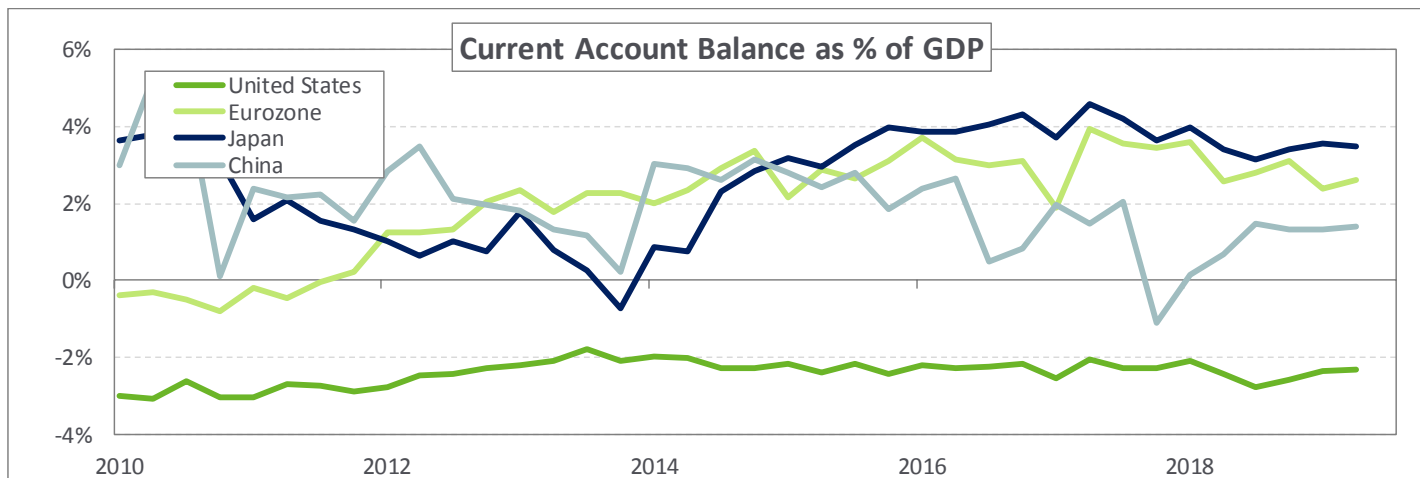
Source: IMF, FactSet



GROSS DOMESTIC PRODUCT METRICS



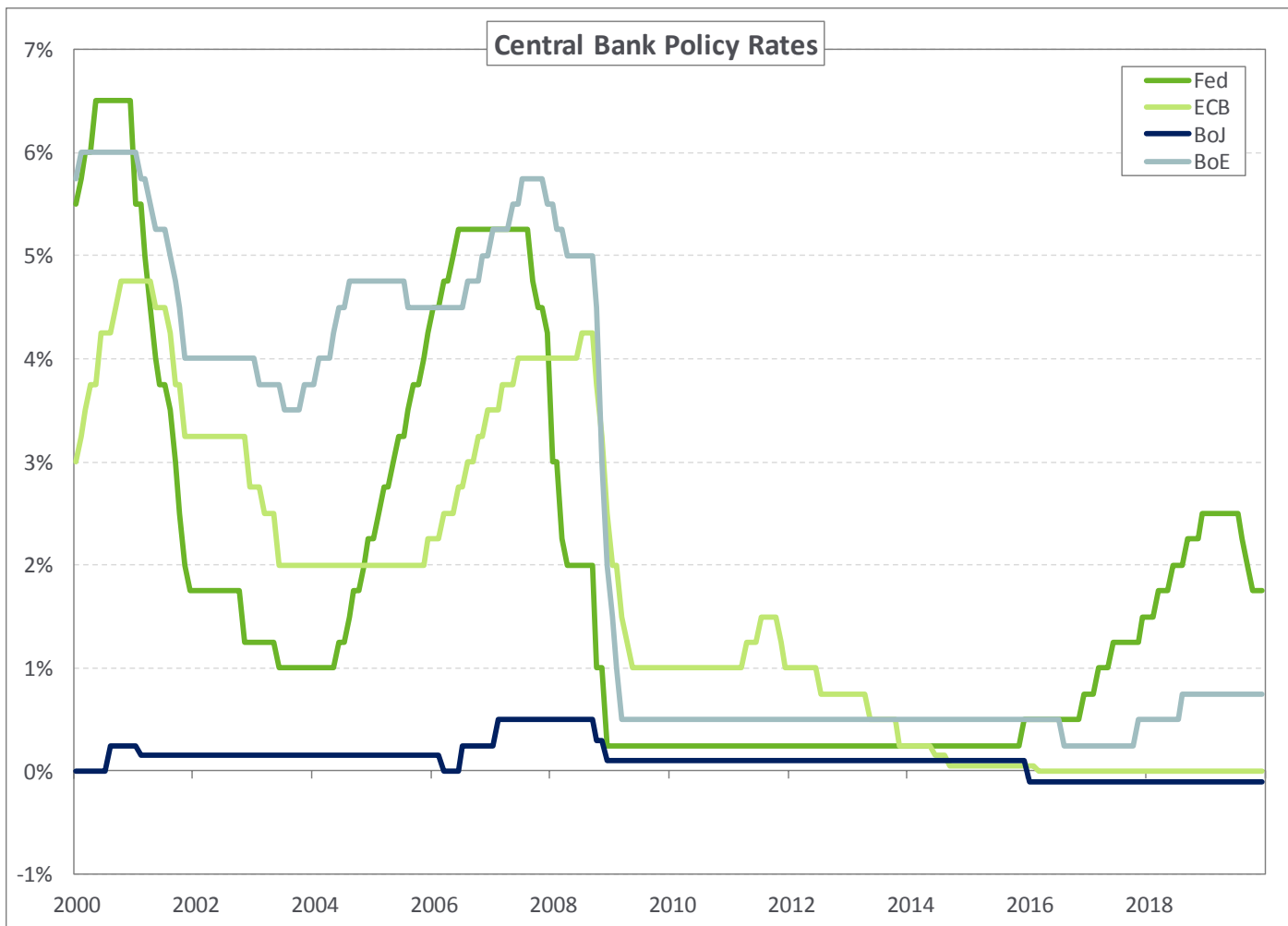
Source: IMF, FactSet



Source: FactSet



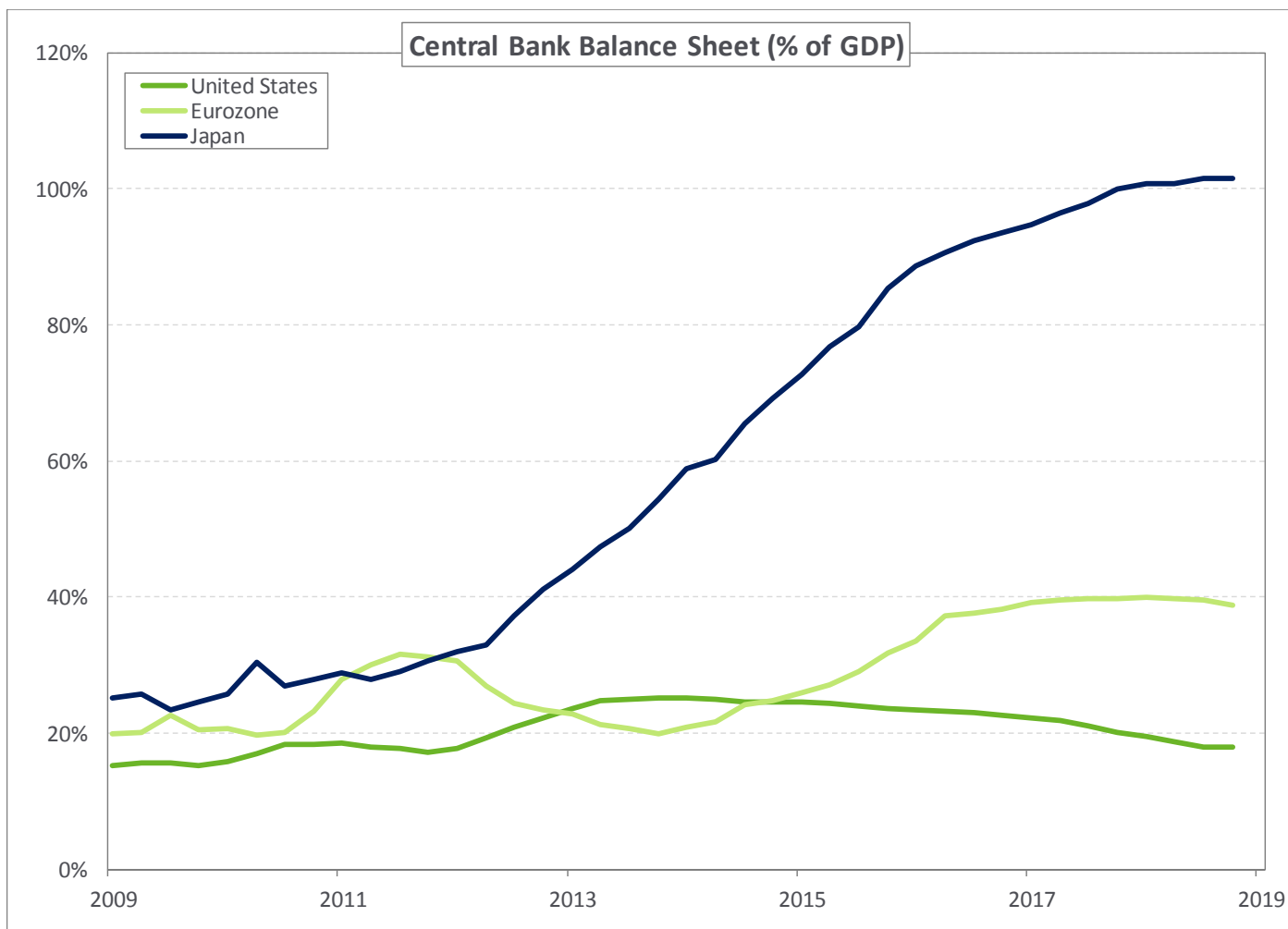
CENTRAL BANK RATES



Source: Federal Reserve, ECB, Bank of Japan, Bank of England, FactSet



CENTRAL BANK BALANCE SHEETS



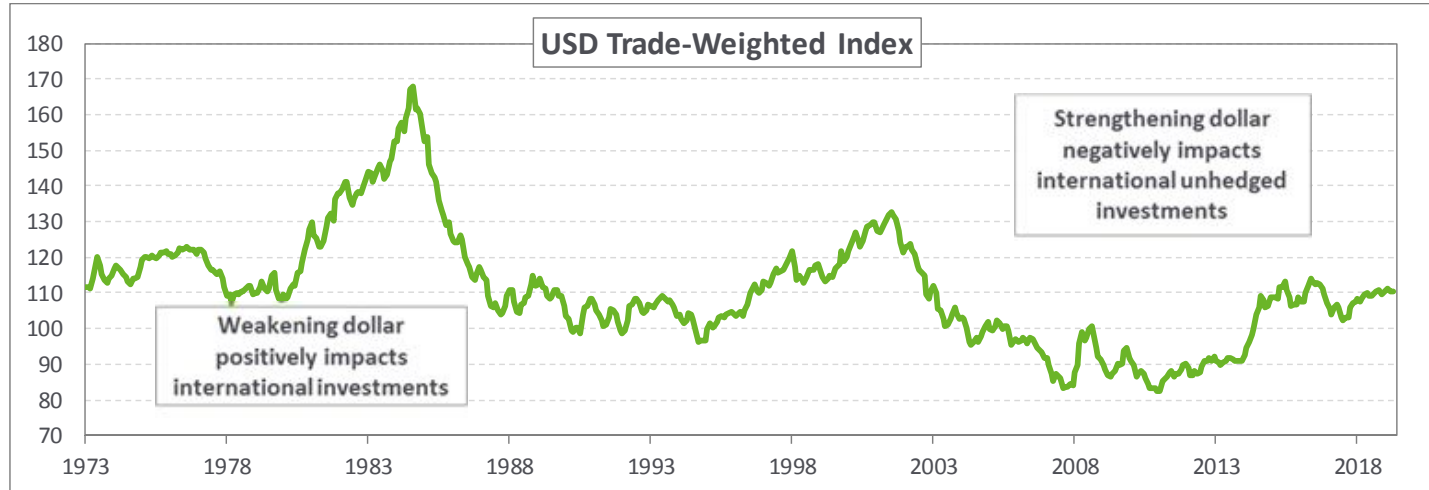
Source: FactSet



CURRENCIES

Currencies	% Change Relative to USD			
	Spot	1 Month	YTD	1 Year
Euro	1.12	1.80%	-1.81%	-1.81%
British Pound	1.32	2.42%	4.02%	4.02%
Japanese Yen	108.68	-0.76%	-0.95%	-0.95%
Swiss Franc	0.97	-3.10%	-1.77%	-1.77%
Australian Dollar	0.70	3.93%	-0.15%	-0.15%
Chinese Yuan	6.97	-0.87%	1.46%	1.46%
Brazilian Real	4.02	-4.86%	3.79%	3.79%
Russian Ruble	62.11	-3.36%	-10.47%	-10.47%
Indian Rupee	71.38	-0.50%	2.24%	2.24%
Mexican Peso	18.88	-3.19%	-4.11%	-4.11%
South African Rand	13.98	-4.57%	-2.79%	-2.79%

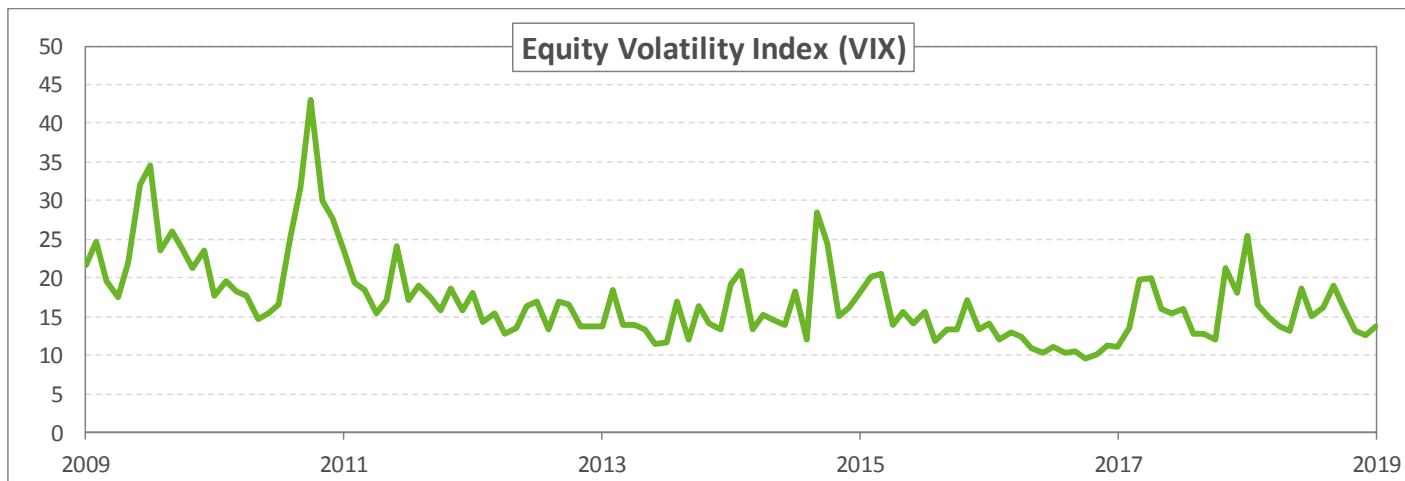
Source: FactSet



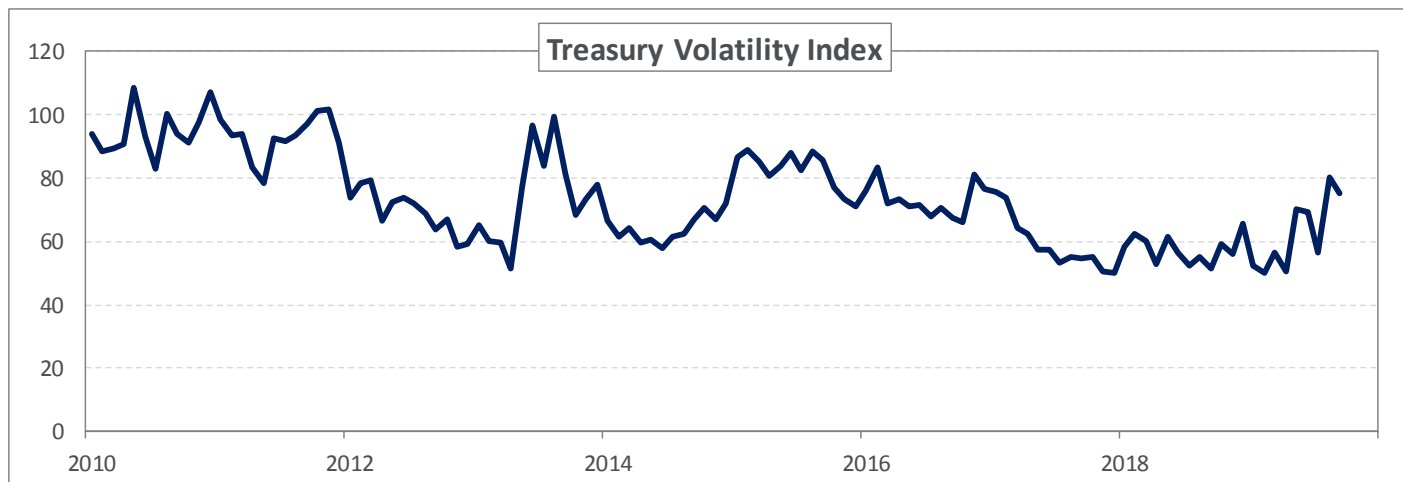
Source: FactSet



VOLATILITY



Source: CBOE, FactSet



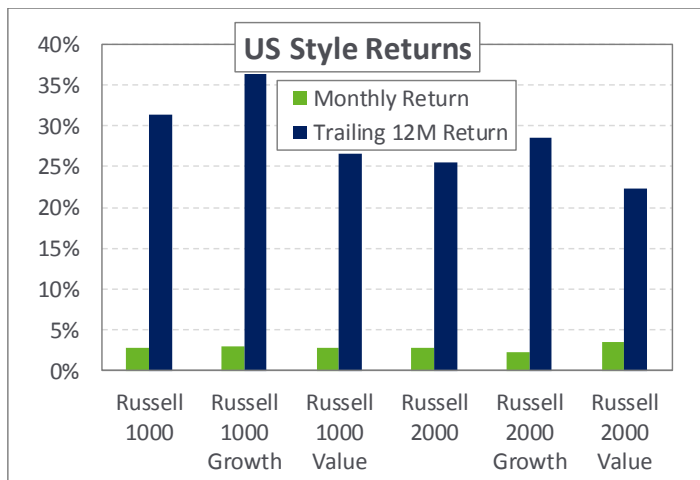
Source: Merrill Lynch, FactSet



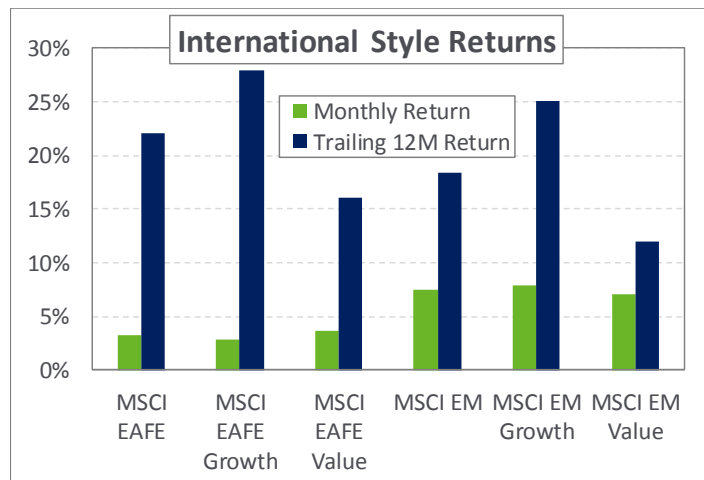
EQUITY

NEPC, LLC

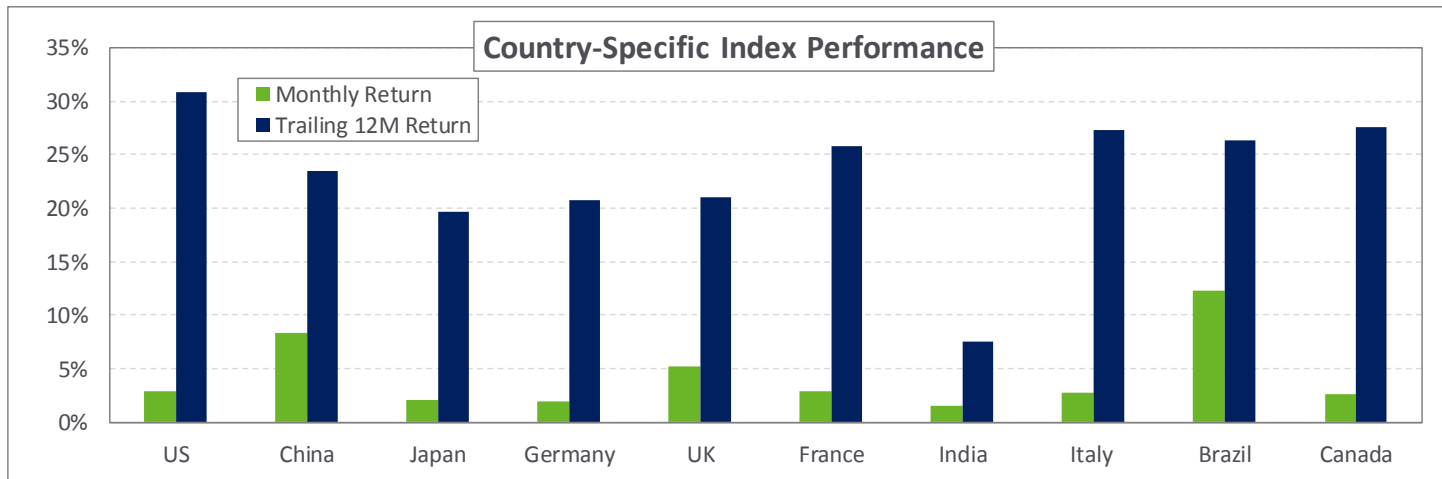
EQUITY INDEX PERFORMANCE



Source: Russell, FactSet



Source: MSCI, FactSet



Source: MSCI, FactSet
Represents returns in USD



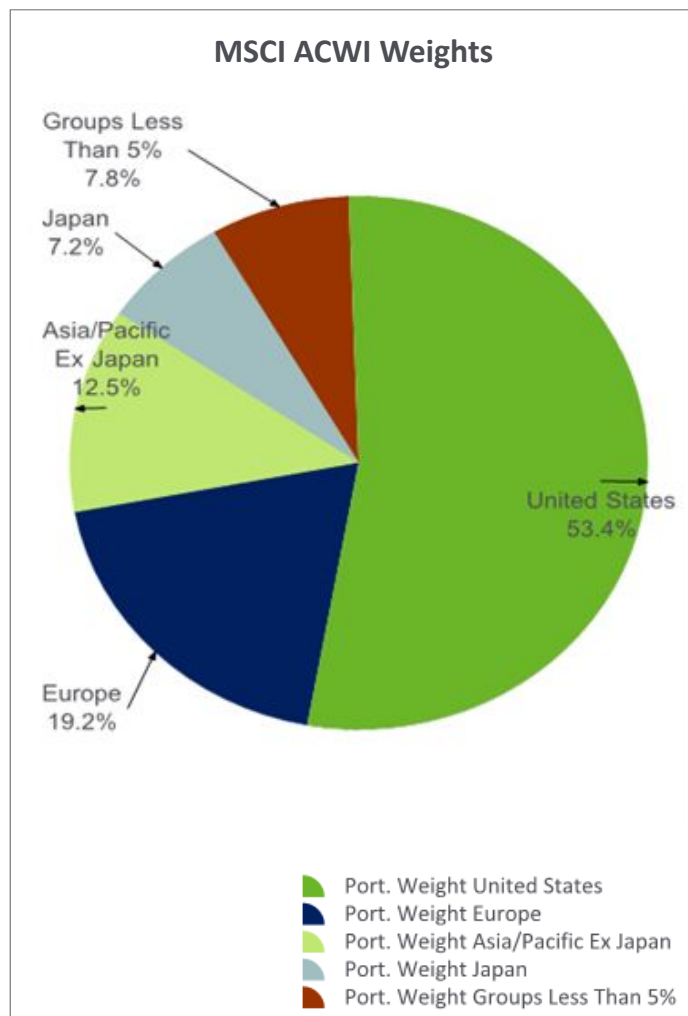
INDEX COMPOSITION

	MTD	QTD	YTD	Index Weight
S&P 500	3.0%	9.1%	31.5%	100.0%
Communication Services	0.2%	1.0%	3.3%	10.4%
Consumer Discretionary	0.3%	0.4%	2.9%	9.8%
Consumer Staples	0.2%	0.3%	2.1%	7.2%
Energy	0.3%	0.2%	0.7%	4.3%
Financials	0.4%	1.4%	4.1%	13.0%
Health Care	0.5%	1.9%	2.9%	14.2%
Industrials	0.0%	0.5%	2.8%	9.1%
Information Technology	1.0%	3.2%	9.8%	23.2%
Materials	0.1%	0.2%	0.7%	2.7%
Real Estate	0.0%	0.0%	0.9%	2.9%
Utilities	0.1%	0.0%	0.9%	3.3%

Source: S&P, FactSet

	MTD	QTD	YTD	Index Weight
MSCI ACWI	3.5%	9.0%	26.6%	100.0%
Communication Services	0.3%	0.7%	2.2%	8.7%
Consumer Discretionary	0.4%	0.9%	3.0%	10.8%
Consumer Staples	0.2%	0.2%	1.9%	8.0%
Energy	0.3%	0.3%	0.8%	5.2%
Financials	0.6%	1.5%	4.0%	16.7%
Health Care	0.4%	1.5%	2.6%	11.8%
Industrials	0.1%	0.8%	2.8%	10.3%
Information Technology	0.8%	2.4%	6.6%	17.1%
Materials	0.2%	0.4%	1.0%	4.8%
Real Estate	0.1%	0.1%	0.8%	3.2%
Utilities	0.1%	0.1%	0.8%	3.3%

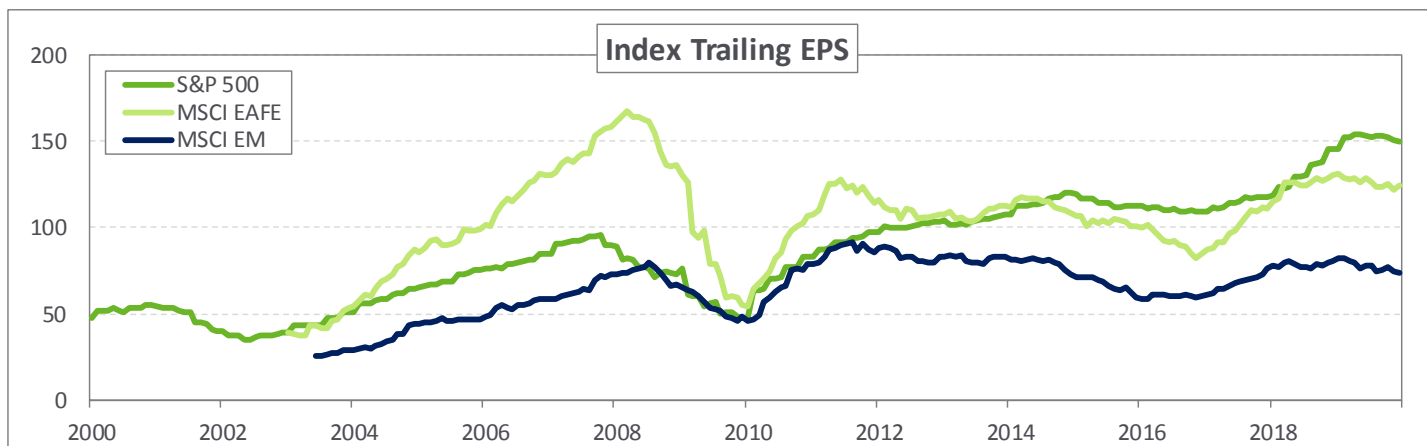
Source: MSCI, FactSet



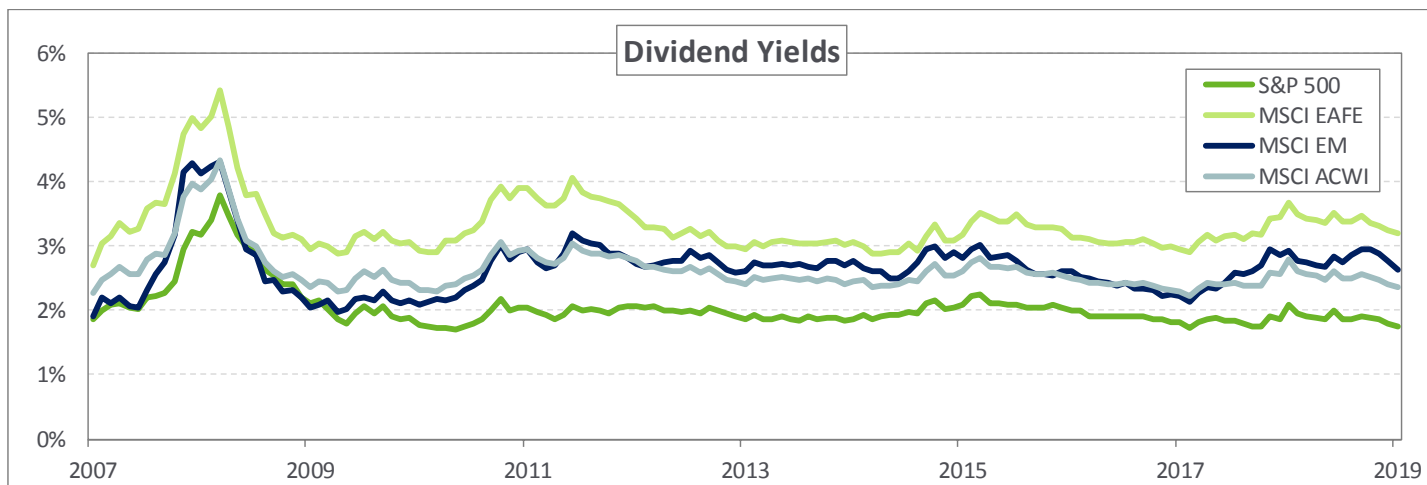
Source: MSCI, FactSet



EARNINGS & YIELDS



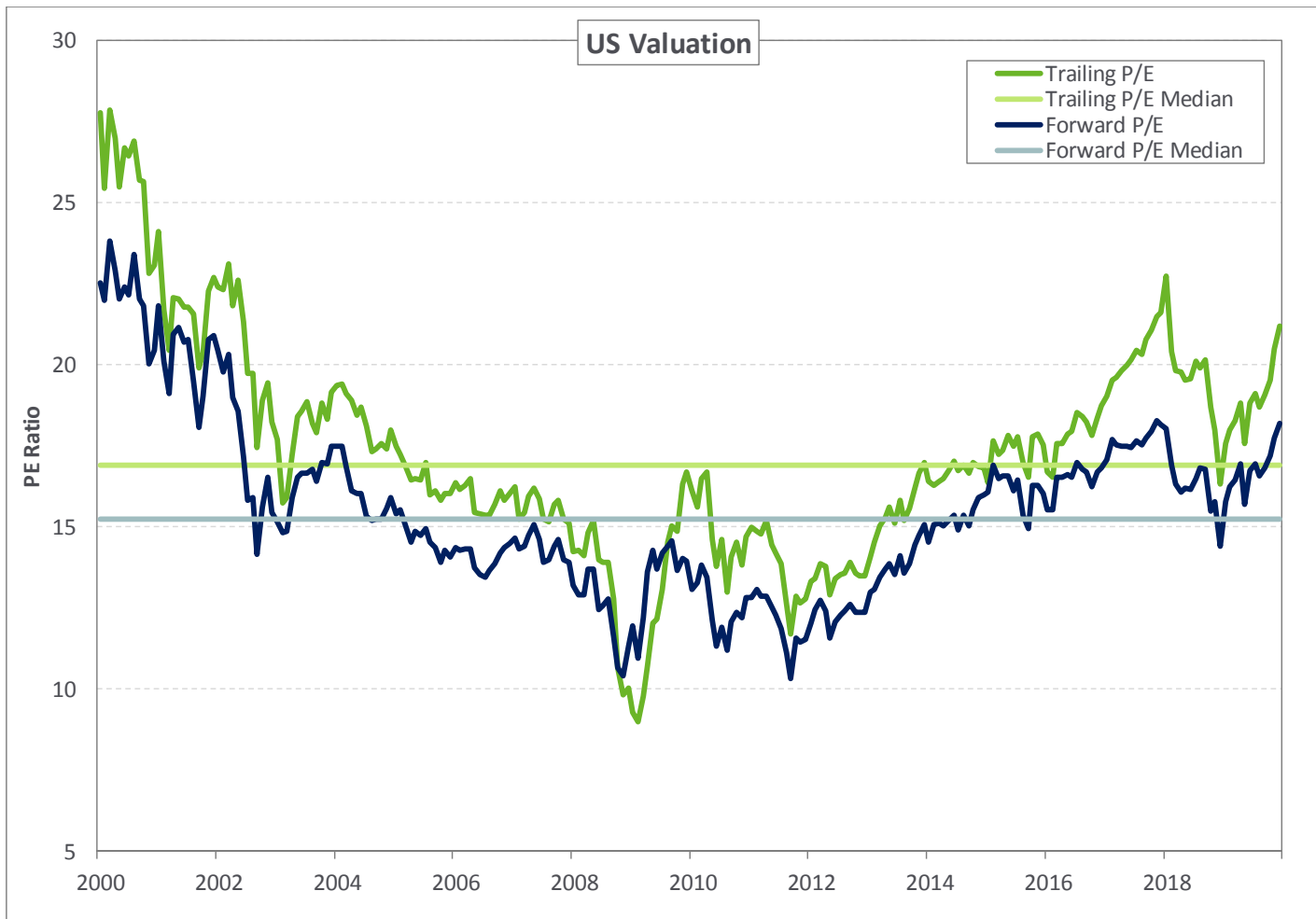
Source: FactSet



Source: FactSet



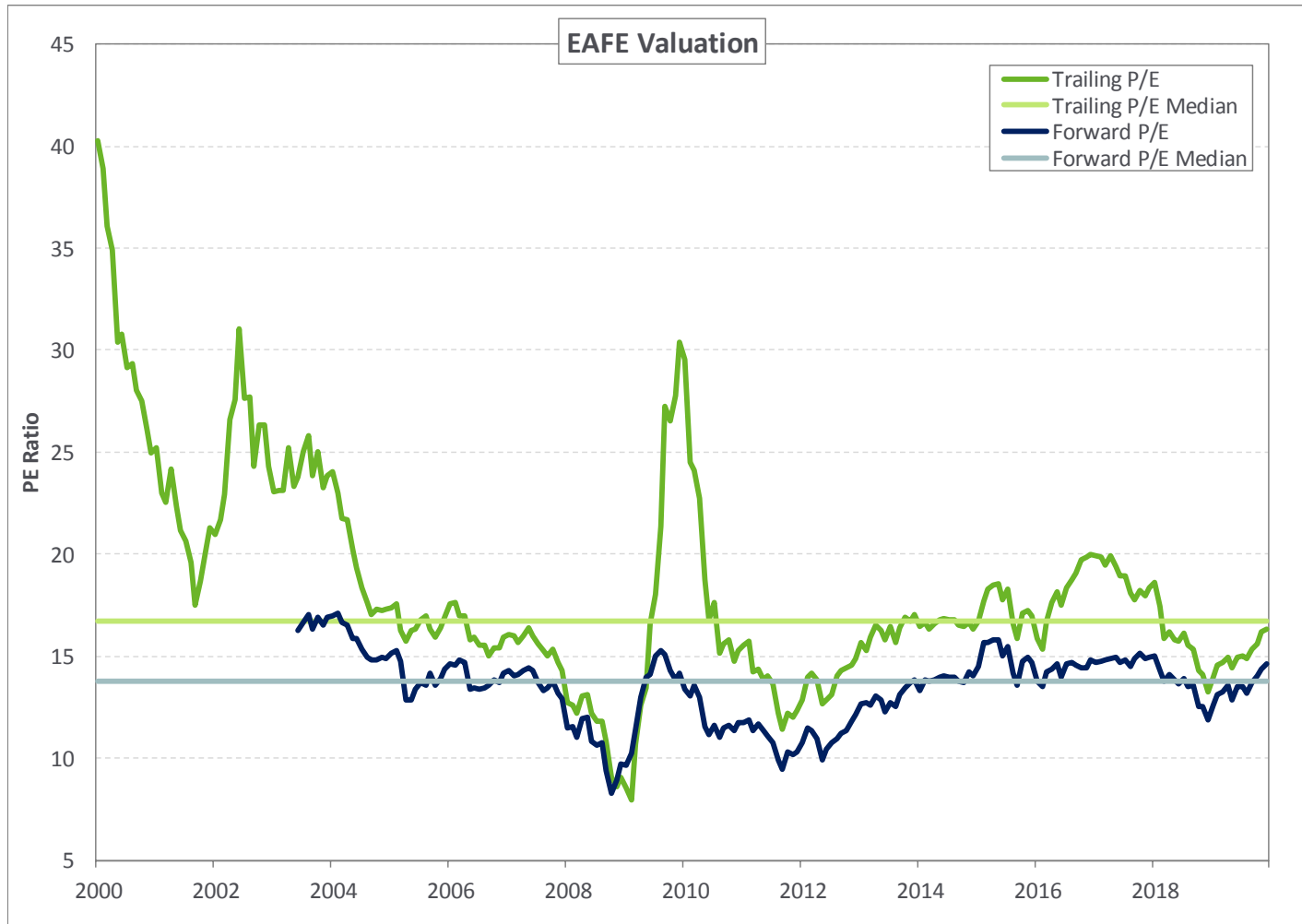
US EQUITY VALUATIONS



Source: S&P, FactSet



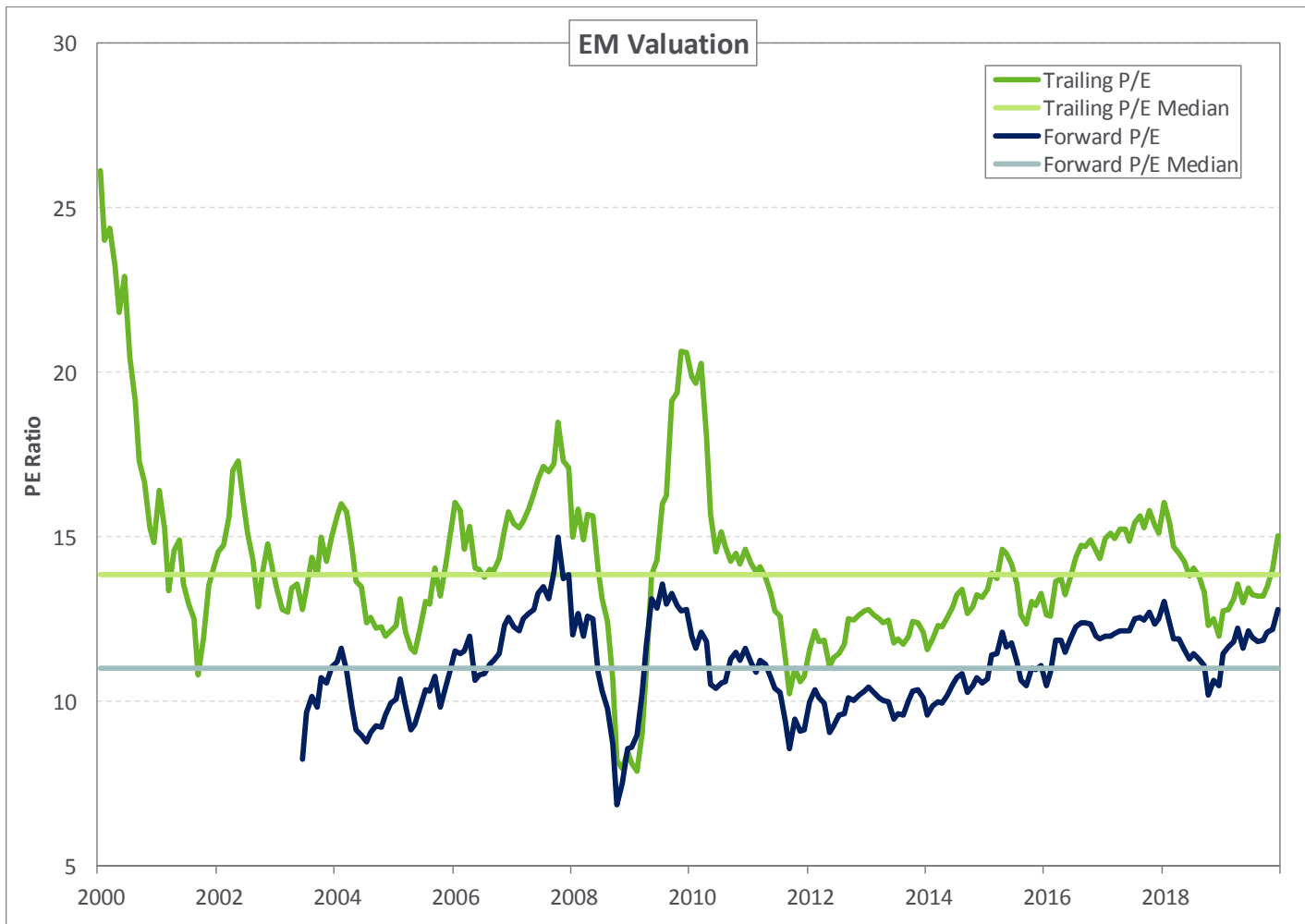
EAFE EQUITY VALUATIONS



Source: MSCI, FactSet



EM EQUITY VALUATIONS



Source: MSCI, FactSet



CREDIT

NEPC, LLC

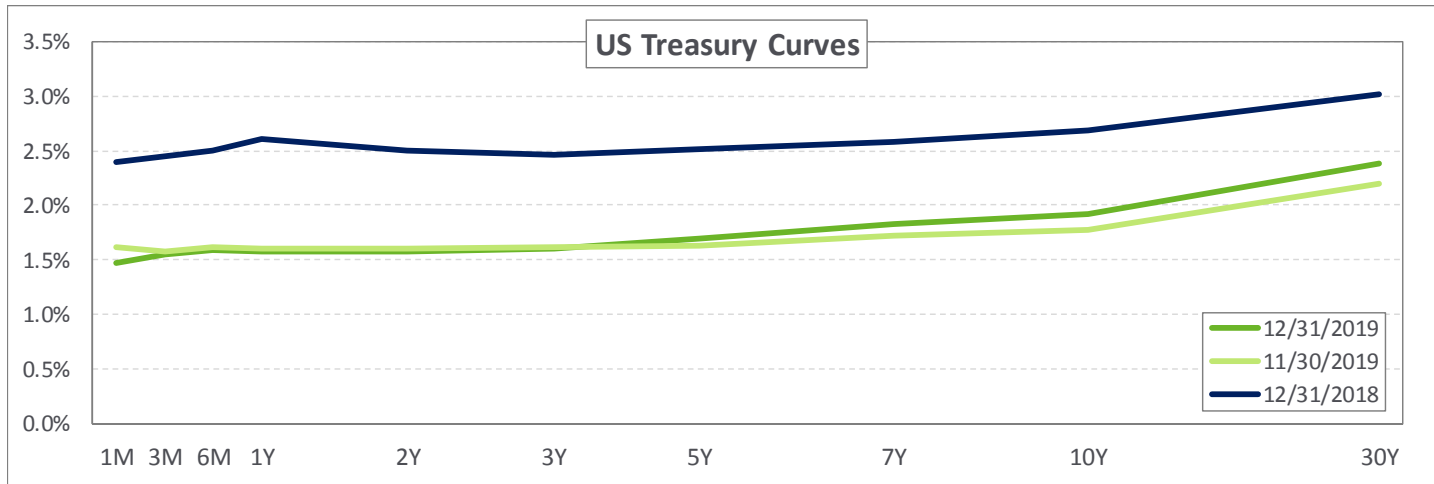
FIXED INCOME CHARACTERISTICS

	Averages			Total Returns (%)		
	Yield to Worst	Spread (bps)	Duration (Years)	1-Month	YTD	1-Year
Barclays Aggregate	2.31%	39	5.9	-0.1%	8.7%	8.7%
Barclays Treasury	1.80%	-	6.5	-0.6%	6.8%	6.8%
Barclays Agency	1.87%	10	4.1	-0.2%	5.9%	5.9%
Barclays MBS	2.54%	39	3.2	0.3%	6.3%	6.3%
Barclays ABS	2.05%	44	2.1	0.1%	4.5%	4.5%
Barclays CMBS	2.35%	58	5.6	-0.5%	7.5%	7.5%
Barclays Corp IG	2.84%	93	7.9	0.3%	14.5%	14.5%
Barclays Muni	1.78%	-	5.3	0.3%	7.5%	7.5%
Barclays HY Muni	4.02%	-	7.1	0.3%	10.6%	10.6%
Barclays TIPS	1.99%	-	4.7	0.4%	8.4%	8.4%
Barclays HY	5.19%	336	3.1	2.0%	14.3%	14.3%
Barclays Global Agg	1.45%	38	7.1	0.6%	6.8%	6.8%
JPM EMBI Glob Div	-	289	7.5	2.0%	15.0%	15.0%
JPM GBI - EM	4.88%	-	5.4	4.1%	13.4%	13.4%

Source: Barclays, JP Morgan, FactSet



TREASURIES



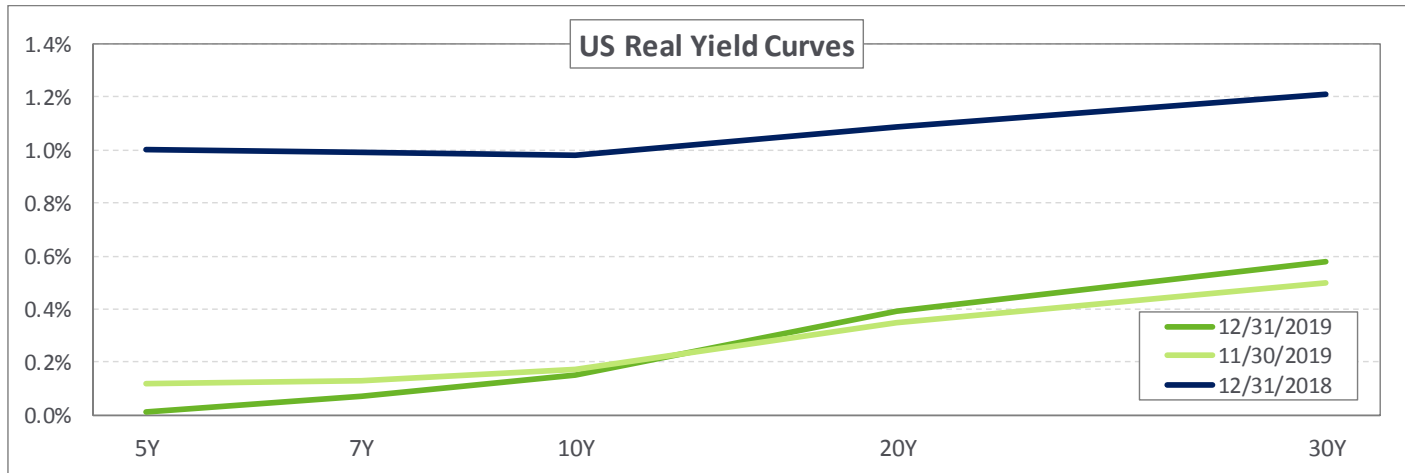
Source: FactSet

	Yield (%)			Total Return (%)	
	Current	1 Month Ago	12 Months Ago	1 Month	12 Months
3M Treasury	1.55%	1.58%	2.45%	0.14%	2.28%
6M Treasury	1.59%	1.61%	2.50%	0.16%	2.57%
2Y Treasury	1.57%	1.60%	2.50%	0.23%	3.49%
5Y Treasury	1.69%	1.62%	2.51%	-0.08%	5.91%
10Y Treasury	1.92%	1.78%	2.68%	-1.02%	8.91%
30Y Treasury	2.39%	2.20%	3.01%	-3.51%	16.33%

Source: FactSet



REAL YIELDS



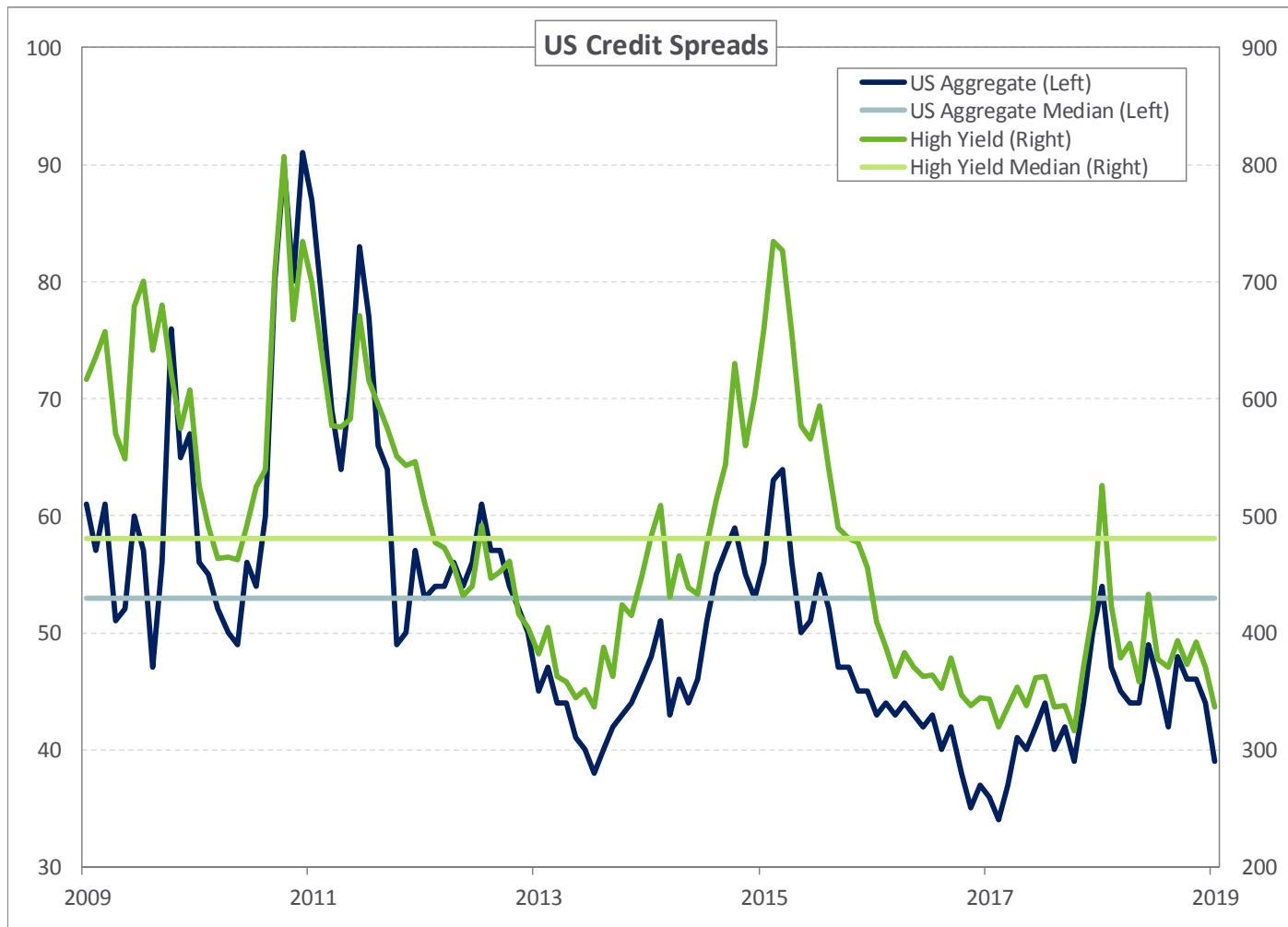
Source: FactSet

	Real Rates			Breakeven Rates	
	Current	1 Month Ago	12 Months Ago	Current	12 Months Ago
2-Year	-0.47%	-0.44%	0.55%	1.56%	1.50%
5-Year	-0.44%	-0.43%	0.51%	1.62%	1.52%
10-Year	-0.35%	-0.42%	0.56%	1.68%	1.60%
20-Year	-0.22%	-0.32%	0.64%	1.53%	1.59%
30-Year	-0.13%	-0.27%	0.74%	1.81%	1.80%

Source: FactSet



CREDIT SPREADS



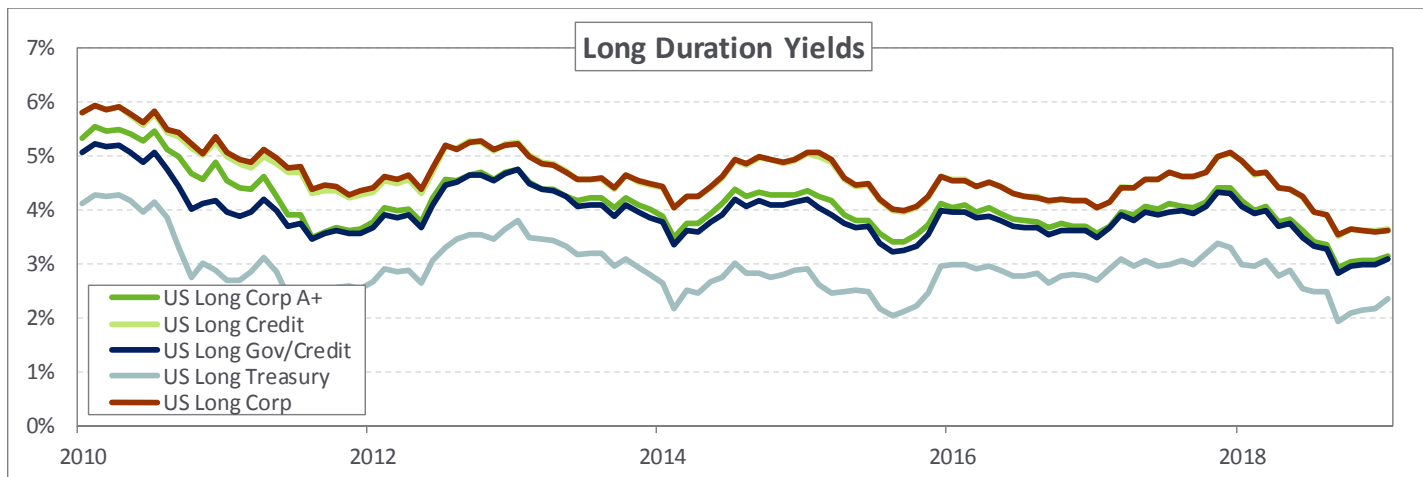
Source: Barclays, FactSet



LONG DURATION

Index	Current	1 Month Ago	12 Months Ago	Duration
Barclays Long Treasury	2.3%	2.2%	3.0%	18.0
Barclays 20+ STRIPS	2.4%	2.2%	3.1%	26.2
Barclays Long Credit	3.6%	3.6%	4.9%	14.1
Barclays Long Gov/Credit	3.1%	3.0%	4.1%	15.7
Barclays Long Corp A+	3.3%	3.2%	4.4%	15.1

Source: Barclays, FactSet



Source: Barclays, FactSet



REAL ASSETS

NEPC, LLC

REAL ASSETS INDEX PERFORMANCE

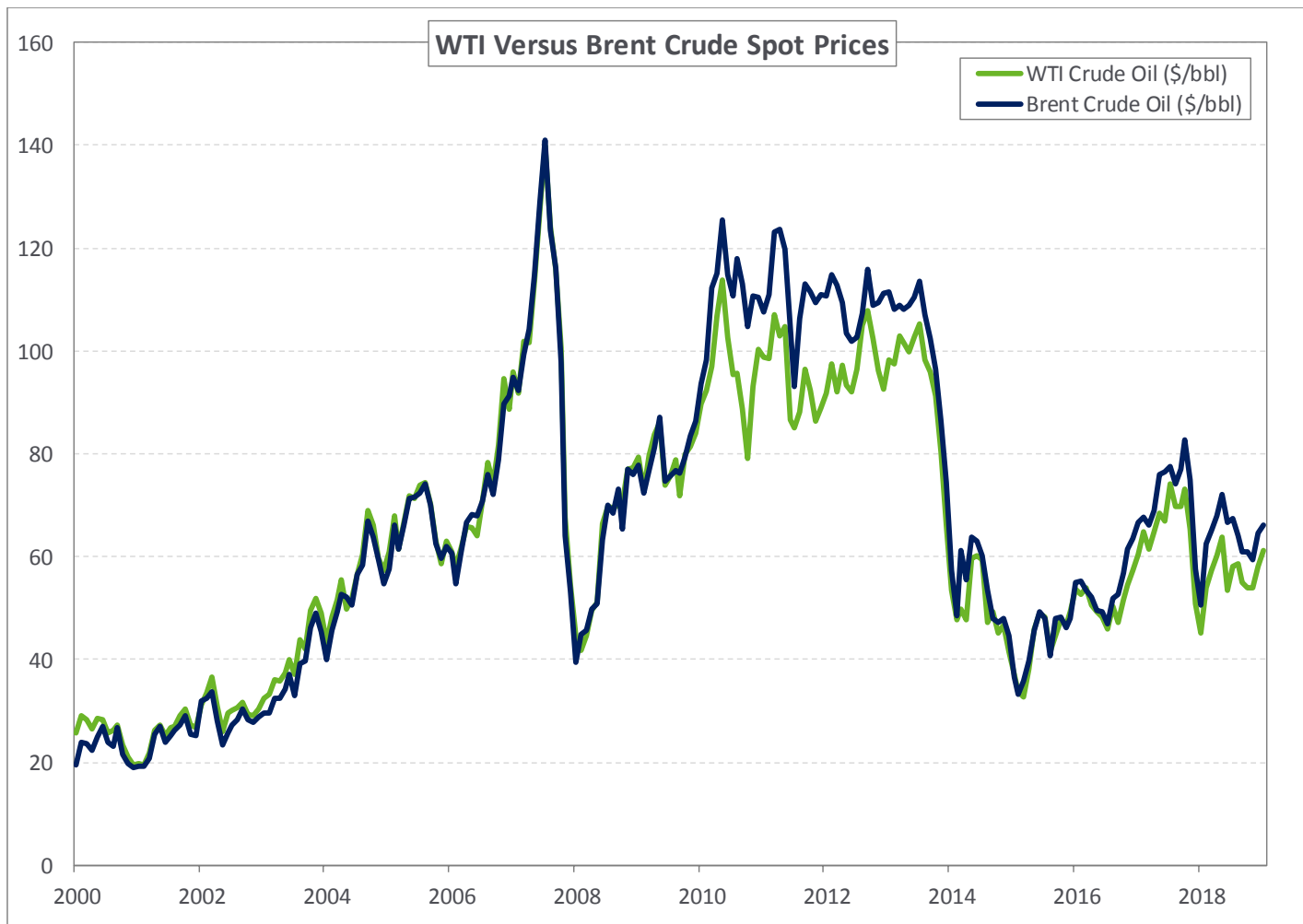
Index	1 Month	3 Month	YTD	1 Year	3 Year	5 Year
Bloomberg Commodity Index	5.0%	4.4%	7.7%	7.7%	-0.9%	-3.9%
Bloomberg Sub Agriculture Index	5.8%	7.1%	1.7%	1.7%	-6.9%	-7.0%
Coffee	9.1%	24.8%	12.1%	12.1%	-11.5%	-14.1%
Corn	1.8%	-2.0%	-5.2%	-5.2%	-7.3%	-10.3%
Cotton	5.8%	10.9%	-6.4%	-6.4%	-0.8%	2.1%
Soybean	7.4%	2.6%	-0.6%	-0.6%	-6.9%	-4.6%
Soybean Oil	12.9%	18.1%	19.8%	19.8%	-3.4%	-2.2%
Sugar	3.9%	6.5%	1.9%	1.9%	-17.4%	-8.0%
Wheat	3.3%	12.2%	9.3%	9.3%	-0.3%	-10.1%
Bloomberg Sub Energy	6.9%	5.8%	11.7%	11.7%	-2.3%	-7.9%
Brent Crude	10.4%	16.2%	35.4%	35.4%	9.6%	-2.1%
Heating Oil	8.0%	9.2%	24.5%	24.5%	6.5%	-1.6%
Natural Gas	-3.0%	-17.2%	-37.1%	-37.1%	-26.3%	-23.3%
Unleaded Gas	6.1%	13.4%	44.3%	44.3%	2.1%	-0.2%
WTI Crude Oil	11.0%	13.9%	34.3%	34.3%	4.0%	-7.7%
Bloomberg Sub Industrial Metals	3.1%	-0.2%	7.0%	7.0%	3.7%	-0.5%
Aluminum	1.8%	5.0%	-3.8%	-3.8%	1.6%	-2.4%
Copper	5.2%	8.5%	7.2%	7.2%	2.9%	-1.1%
Nickel	2.6%	-17.6%	32.4%	32.4%	11.6%	-2.2%
Zinc	-0.1%	-4.1%	-1.2%	-1.2%	0.3%	2.7%
Bloomberg Sub Precious Metals	3.9%	3.7%	16.9%	16.9%	7.4%	3.7%
Gold	3.6%	3.3%	18.0%	18.0%	8.9%	4.4%
Silver	4.9%	5.0%	13.8%	13.8%	2.7%	1.5%
Bloomberg Sub Livestock	1.6%	0.1%	-6.0%	-6.0%	-0.6%	-5.5%
Lean Hogs	4.9%	-14.9%	-19.1%	-19.1%	-9.5%	-11.9%
Live Cattle	-0.1%	9.3%	1.2%	1.2%	4.2%	-2.1%

Source: Bloomberg, FactSet

Bloomberg subindex total return indices reflects the return of the underlying one month commodity futures price movements



OIL MARKETS



Source: FactSet



INVESTMENT GUIDELINES

- **Blackrock Russell 1000 Index Fund**
 - The Blackrock Russell 1000 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 1000 Index (large cap companies).
- **Blackrock Russell 2500 Index Fund**
 - The Blackrock Russell 2500 Index Fund shall be invested and reinvested primarily in a portfolio of Equity Securities with the objective of approximating as closely as practicable the capitalization weighted total rate of return of the Russell 2500 Index (mid and small cap companies).
- **Western Asset Management Index Plus Separate Account**
 - The objective of the Portfolio is to maximize the long term total return in the Portfolio while providing a core domestic equity exposure to the Standard & Poor's ("S&P") 500 Index and managing Portfolio risk. The Manager shall aim to exceed the total return of the S&P 500 index with all dividends reinvested in the index by 75 basis points on an annualized basis over a full market cycle.
- **Blackrock MSCI ACWI ex-U.S. IMI Index Fund**
 - The BlackRock MSCI ACWI ex-U.S. IMI Index Fund shall be invested and reinvested in a portfolio of International Equity Securities whose total rates of return will approximate as closely as practicable the capitalization-weighted total rates of return of the equity markets of selected non-U.S. developed and emerging countries.
- **Blackrock MSCI ACWI Equity Index Fund**
 - The BlackRock MSCI ACWI Equity Index Fund shall be invested and reinvested primarily in a portfolio of U.S. Equity Securities and International Equity Securities with the objective of approximating as closely as practicable the capitalization-weighted total rates of return of the equity markets of the U.S, non-U.S. developed and emerging countries.
- **Hexavest EAFE Equity Fund**
 - The Fund seeks to provide investors with capital appreciation and income generation by using a top-down approach and investing primarily in equity and quasi equity securities located in Europe, Australasia and the Far East ("EAFE") and which form part of the MSCI EAFE Index. The Fund seeks to achieve a rate of return that will exceed that of the index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.



INVESTMENT GUIDELINES

- **Sprucegrove U.S. International Pooled Fund**
 - The Fund seeks to maximize the long-term rate of return while seeking to preserve investment capital by investing primarily in equity and quasi-equity securities of companies with more value characteristics located in developed markets in the Europe, Australasia and the Far East ("EAFE") Index and to outperform the index, net of fees and achieve a high ranking relative to similar funds over a full market cycle.
- **Walter Scott & Partners International Fund**
 - The Fund will invest in equity securities that meet certain quantitative and qualitative investment criteria and will seek long-term capital appreciation. The Fund will tend to focus on those industries or sectors with more growth characteristics and experiencing upper quartile economic growth and may avoid industries which are in secular economic decline. The Fund seeks to outperform the MSCI Europe, Australasia and the Far East ("EAFE") Index net of fees, and achieve a high ranking relative to similar funds over a full market cycle.
- **Blackrock U.S. Debt Index Fund**
 - The U.S. Debt Index Fund shall be invested and reinvested primarily in a portfolio of Debt Securities with the objective of approximating as closely as practicable the total rate of return of the market for Debt Securities as defined by the Bloomberg Barclays U.S. Aggregate Bond Index.
- **Western Asset Management Core Plus Fixed Income Separate Account**
 - The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The Fund will seek to outperform the Bloomberg Barclays U.S. Aggregate Index, net of fees, over a full market cycle.
- **Reams Unconstrained Fixed Income Separate Account**
 - The Portfolio will be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to maximize risk-adjusted total return by systematically pursuing relative value opportunities throughout all sectors of the fixed income market. The Portfolio will seek returns in excess of the Bloomberg/Barclays U.S. Aggregate Bond Index and/or the three month London Interbank Offered Rate ("LIBOR") in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.



INVESTMENT GUIDELINES

- **Loomis, Sayles & Company Multisector Full Discretion Separate Account**
 - The fixed income portfolio should be broadly diversified across markets, sectors, securities, and maturities in a manner consistent with accepted standards of prudence. The objective of the Portfolio is to provide above-average total return in a manner that is consistent with the typical rate-of-return volatility exhibited by broad market fixed income portfolios. The return of the Manager should exceed that of the custom benchmark (30% of the rate of return of the Citigroup High-Yield Index, 5% of the rate of return of the J.P. Morgan Non-U.S. Hedged Bond Index and 65% of the rate of return of the Bloomberg Barclays U.S. Aggregate Bond Index), net of fees, over a full market cycle.
- **Loomis, Sayles & Company Strategic Alpha Fund**
 - The objective of the Fund is to provide absolute returns in excess of the Bloomberg/Barclays U.S. Aggregate Bond Index and/or the three month London Interbank Offered Rate (“LIBOR”) in U.S. dollars plus 3% net of fees with an expected risk volatility goal of approximately 4 to 6% over a full market cycle.
- **Reams 10-Year Treasuries**
 - The portfolio shall be invested in 10-Year U.S. Treasury Debt Securities with the objective of returning the rate of return on a 10-Year U.S. Treasury Debt Security.
- **Bridgewater Associates All Weather Portfolio**
 - The investment objective of the Fund is to seek to provide attractive returns with relatively limited risks, with no material bias to perform better or worse in any particular type of economic environment. In other words, the portfolio seeks to perform approximately as well in rising or falling inflation periods, or in periods of strong or weak economic growth. To achieve this objective, the Fund holds investments in different asset classes that have different biases to economic conditions. The Manager will seek to outperform the CPI + 4% (Unadjusted) benchmark net of fees over a full market cycle.
- **Tortoise Energy Infrastructure Master Limited Partnership**
 - The Manager will invest in master limited partnerships with an investment approach that emphasizes a long-term, buy-and-hold philosophy with low turnover in an effort to achieve a portfolio characterized by high current income, high growth and low volatility. The Manager invests primarily in long-haul pipelines and gathering & processing pipelines. The Manager will seek to outperform the Wells Fargo MLP Index net of fees over a full market cycle.



INVESTMENT GUIDELINES

- **PGIM Real Estate Property Investment Separate Account**
 - PRISA is a broadly diversified equity real estate portfolio that invests primarily in existing, income-producing properties with strong cash flow that is expected to increase over time and thereby provide the potential for capital appreciation. The Fund's performance objective is to produce a total return each year that meets or exceeds the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") net of fees, while maintaining the benefits of a broadly diversified, core real estate portfolio.
- **UBS Realty Investors Trumbull Property Fund**
 - The Fund seeks to provide investors with strategic market access to high-quality private commercial real estate with the financial objective of providing superior risk-adjusted returns across the real estate cycles. Maximize the quality and growth of the Fund's income by acquiring and aggressively managing high quality assets in major US metropolitan markets to minimize risk through diversification by property type, geographic location and economic sector. The Fund's performance objective is to outperform the National Council of Real Estate Investment Fiduciaries Fund Index – Open-End Diversified Core Equity ("NCREIF-ODCE") index net of fees, and a 5% real rate of return (inflation-adjusted return) over a full market cycle.



INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for monitoring financial markets. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



PRELIMINARY MONTHLY PERFORMANCE REPORT

Ventura County Employees' Retirement Association



VCERA
VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION

January 31, 2020

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Fund	6,120,764,594	100.0	100.0	-0.2	5.9	12.6	9.2	7.5	9.2	8.1	Apr-94
<i>Policy Index</i>				<i>-0.2</i>	<i>6.9</i>	<i>14.2</i>	<i>10.0</i>	<i>8.3</i>	<i>9.3</i>	<i>8.2</i>	<i>Apr-94</i>
Over/Under				0.0	-1.0	-1.6	-0.8	-0.8	-0.1	-0.1	
60% MSCI ACWI (Net) / 40% FTSE WGBI				0.0	5.5	12.2	8.5	6.2	6.5	6.5	Apr-94
60% S&P 500 / 40% BBgBarc Aggregate				0.7	8.3	17.0	10.7	8.7	10.0	8.5	Apr-94
Total Fund ex Parametric	6,083,230,800	99.4	--	-0.1	5.7	12.4	9.0	7.4	9.0	8.0	Apr-94
Total Fund ex Private Equity	5,639,560,879	92.1	--	-0.4	5.8	12.6	8.9	7.2	--	8.7	Jan-12
<i>Policy Index</i>				<i>-0.2</i>	<i>6.9</i>	<i>14.2</i>	<i>10.0</i>	<i>8.3</i>	<i>9.3</i>	<i>9.5</i>	<i>Jan-12</i>
Over/Under				-0.2	-1.1	-1.6	-1.1	-1.1		-0.8	
Total US Equity	1,732,390,421	28.3	26.0	0.0	10.6	21.2	14.2	12.1	14.1	9.6	Dec-93
<i>Russell 3000</i>				<i>-0.1</i>	<i>10.2</i>	<i>20.5</i>	<i>13.8</i>	<i>11.8</i>	<i>13.8</i>	<i>9.8</i>	<i>Dec-93</i>
Over/Under				0.1	0.4	0.7	0.4	0.3	0.3	-0.2	
Western U.S. Index Plus	251,155,609	4.1		0.0	11.4	22.9	15.2	13.0	15.4	6.9	May-07
<i>S&P 500</i>				<i>0.0</i>	<i>10.9</i>	<i>21.7</i>	<i>14.5</i>	<i>12.4</i>	<i>14.0</i>	<i>8.3</i>	<i>May-07</i>
Over/Under				0.0	0.5	1.2	0.7	0.6	1.4	-1.4	
Blackrock Russell 1000 Index	1,412,071,238	23.1		0.1	10.7	21.4	--	--	--	13.7	May-17
<i>Russell 1000</i>				<i>0.1</i>	<i>10.7</i>	<i>21.4</i>	<i>14.3</i>	<i>12.1</i>	<i>14.0</i>	<i>13.7</i>	<i>May-17</i>
Over/Under				0.0	0.0	0.0				0.0	
Blackrock Russell 2500 Index	69,163,574	1.1		-2.0	5.0	12.3	--	--	--	8.8	May-17
<i>Russell 2500</i>				<i>-2.0</i>	<i>5.0</i>	<i>12.2</i>	<i>9.1</i>	<i>8.9</i>	<i>12.7</i>	<i>8.7</i>	<i>May-17</i>
Over/Under				0.0	0.0	0.1				0.1	

Policy Index: Currently, 26% Russell 3000, 19% BBgBarc US Aggregate, 17% MSCI ACWI ex U.S., 10% MSCI ACWI, 13% Russell 3000 Index + 3%, 7% CPI+2%, and 8% NCREIF ODCE Real Estate Index.

Prior to January 2016 the Total U.S. Equity Benchmark was a dynamic hybrid using the respective managers' market value weights within the U.S. Equity component toward their benchmark. Prior to May 2013, the Dow Jones U.S. Total Stock Market Index. Prior to May 2007, the Russell 3000 Index.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Non-US Equity	967,364,938	15.8	17.0	-3.2	3.1	9.3	7.5	5.5	5.9	6.3	Mar-94
<i>MSCI ACWI ex USA</i>				-2.7	4.1	9.9	7.6	5.0	5.2	5.2	Mar-94
Over/Under				-0.5	-1.0	-0.6	-0.1	0.5	0.7	1.1	
<i>MSCI EAFE</i>				-2.1	4.8	12.1	7.8	5.1	5.8	4.9	Mar-94
<i>MSCI ACWI ex USA NR LCL</i>				-1.6	6.2	13.0	7.9	6.2	7.3	--	Mar-94
<i>MSCI EAFE NR LCL</i>				-1.2	5.7	14.0	7.2	5.8	7.5	4.9	Mar-94
BlackRock ACWI ex-U.S. Index	496,166,154	8.1		-2.8	4.3	10.1	7.8	5.4	5.6	2.9	Mar-07
<i>MSCI ACWI ex USA IMI</i>				-2.7	4.4	9.9	7.6	5.2	5.4	2.6	Mar-07
Over/Under				-0.1	-0.1	0.2	0.2	0.2	0.2	0.3	
<i>MSCI ACWI ex USA NR LCL</i>				-1.6	6.2	13.0	7.9	6.2	7.3	3.7	Mar-07
Sprucegrove	228,503,461	3.7		-5.2	-1.5	3.0	5.1	4.5	6.0	6.9	Mar-02
<i>MSCI ACWI ex USA</i>				-2.7	4.1	9.9	7.6	5.0	5.2	6.3	Mar-02
Over/Under				-2.5	-5.6	-6.9	-2.5	-0.5	0.8	0.6	
<i>MSCI EAFE</i>				-2.1	4.8	12.1	7.8	5.1	5.8	5.9	Mar-02
<i>MSCI ACWI ex USA NR LCL</i>				-1.6	6.2	13.0	7.9	6.2	7.3	5.4	Mar-02
<i>MSCI EAFE NR LCL</i>				-1.2	5.7	14.0	7.2	5.8	7.5	4.7	Mar-02
Hexavest	94,291,688	1.5		-4.2	1.6	4.9	4.5	3.5	--	3.8	Dec-10
<i>MSCI EAFE</i>				-2.1	4.8	12.1	7.8	5.1	5.8	5.0	Dec-10
Over/Under				-2.1	-3.2	-7.2	-3.3	-1.6		-1.2	
<i>MSCI EAFE NR LCL</i>				-1.2	5.7	14.0	7.2	5.8	7.5	7.3	Dec-10
Walter Scott	148,403,635	2.4		-0.7	7.8	21.0	12.9	9.3	--	6.9	Dec-10
<i>MSCI ACWI ex USA</i>				-2.7	4.1	9.9	7.6	5.0	5.2	3.9	Dec-10
Over/Under				2.0	3.7	11.1	5.3	4.3		3.0	
<i>MSCI ACWI ex USA NR LCL</i>				-1.6	6.2	13.0	7.9	6.2	7.3	6.7	Dec-10
<i>MSCI EAFE</i>				-2.1	4.8	12.1	7.8	5.1	5.8	5.0	Dec-10
Total Global Equity	661,514,068	10.8	10.0	-1.1	7.9	16.5	11.5	8.6	9.0	6.4	May-05
<i>MSCI ACWI</i>				-1.1	7.7	16.0	11.0	8.5	9.1	7.1	May-05
Over/Under				0.0	0.2	0.5	0.5	0.1	-0.1	-0.7	
BlackRock MSCI ACWI Equity Index	661,514,068	10.8		-1.1	7.9	16.5	11.5	9.0	--	10.5	Aug-12
<i>MSCI ACWI</i>				-1.1	7.7	16.0	11.0	8.5	9.1	10.1	Aug-12
Over/Under				0.0	0.2	0.5	0.5	0.5		0.4	



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Private Equity	481,203,715	7.9	13.0	3.1	6.0	11.6	15.9	13.3	--	14.3	Jan-12
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>17.8</i>	<i>Jan-12</i>
Over/Under				3.0	-6.1	-12.5	-1.3	-1.9		-3.5	
<i>Cambridge Associates Global All PE (Qtr Lag)</i>				<i>0.0</i>	<i>4.3</i>	<i>7.9</i>	<i>13.3</i>	<i>11.1</i>	<i>13.0</i>	<i>12.4</i>	<i>Jan-12</i>
Adams Street Global Fund Series	184,148,642	3.0		5.7	4.7	10.0	14.5	12.0	--	13.1	Jan-12
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>17.8</i>	<i>Jan-12</i>
Over/Under				5.6	-7.4	-14.1	-2.7	-3.2		-4.7	
Harbourvest	102,537,348	1.7		5.0	10.8	18.1	21.3	17.7	--	19.3	Aug-13
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>15.6</i>	<i>Aug-13</i>
Over/Under				4.9	-1.3	-6.0	4.1	2.5		3.7	
Pantheon Global Secondary Funds	37,893,773	0.6		-1.4	2.6	-1.8	12.6	11.9	--	11.3	Jan-12
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>17.8</i>	<i>Jan-12</i>
Over/Under				-1.5	-9.5	-25.9	-4.6	-3.3		-6.5	
Drive Capital Fund II	17,115,665	0.3		0.0	14.5	53.0	-0.3	--	--	-9.9	Sep-16
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>17.5</i>	<i>Sep-16</i>
Over/Under				-0.1	2.4	28.9	-17.5			-27.4	
Abbott Secondary Opportunities	18,623,270	0.3		7.7	8.5	17.3	--	--	--	20.6	Jan-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>14.2</i>	<i>Jan-18</i>
Over/Under				7.6	-3.6	-6.8				6.4	
Clearlake Capital Partners V	9,024,699	0.1		-4.7	17.6	43.2	--	--	--	38.1	Mar-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>14.4</i>	<i>Mar-18</i>
Over/Under				-4.8	5.5	19.1				23.7	
Battery Ventures XII	10,959,326	0.2		-0.2	7.5	5.5	--	--	--	-1.7	Apr-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>16.2</i>	<i>Apr-18</i>
Over/Under				-0.3	-4.6	-18.6				-17.9	
Insight Venture Partners X	23,708,801	0.4		-0.7	11.9	20.5	--	--	--	7.6	May-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>16.6</i>	<i>May-18</i>
Over/Under				-0.8	-0.2	-3.6				-9.0	

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
GTCR Fund XII	10,418,562	0.2		0.0	-13.9	-18.8	--	--	--	-36.5	Jun-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>15.4</i>	<i>Jun-18</i>
Over/Under				-0.1	-26.0	-42.9				-51.9	
Buenaventure One, LLC	31,717,462	0.5		0.7	0.6	7.4	--	--	--	4.1	Jul-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>15.6</i>	<i>Jul-18</i>
Over/Under				0.6	-11.5	-16.7				-11.5	
ECI 11	3,712,481	0.1		4.8	28.8	11.2	--	--	--	31.0	Dec-18
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>19.3</i>	<i>Dec-18</i>
Over/Under				4.7	16.7	-12.9				11.7	
The Resolute Fund IV L.P.	7,588,731	0.1		-11.2	13.6	50.0	--	--	--	55.5	Jan-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>32.0</i>	<i>Jan-19</i>
Over/Under				-11.3	1.5	25.9				23.5	
GGV Capital VII L.P.	3,283,462	0.1		1.8	-21.5	-21.5	--	--	--	-21.5	Feb-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>24.1</i>	<i>Feb-19</i>
Over/Under				1.7	-33.6	-45.6				-45.6	
GGV Discovery II, L.P.	656,751	0.0		0.0	-2.6	-2.6	--	--	--	-2.6	Feb-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>24.1</i>	<i>Feb-19</i>
Over/Under				-0.1	-14.7	-26.7				-26.7	
Drive Capital Overdrive Fund I	2,766,681	0.0		0.0	-3.6	--	--	--	--	-3.6	May-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>12.8</i>	<i>May-19</i>
Over/Under				-0.1	-15.7					-16.4	
Riverside Micro Cap Fund V, LP	1,780,559	0.0		0.0	22.5	--	--	--	--	-28.5	May-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>12.8</i>	<i>May-19</i>
Over/Under				-0.1	10.4					-41.3	
GGV Capital VII Plus, LP	826,921	0.0		-0.1	0.3	--	--	--	--	0.3	Jun-19
<i>Russell 3000 + 3%</i>				<i>0.1</i>	<i>12.1</i>	<i>24.1</i>	<i>17.2</i>	<i>15.2</i>	<i>17.2</i>	<i>20.3</i>	<i>Jun-19</i>
Over/Under				-0.2	-11.8					-20.0	

Please Note: Private Equity performance is shown on a time-weighted return basis. Values are cash adjusted with current month cash flows. Private Equity composite includes an additional \$268,037 from custodian pass through value.

Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Astorg VII L.P.	755,544	0.0		8.2	-41.3	--	--	--	--	-41.3	Jul-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>12.1</u>	<i>Jul-19</i>
Over/Under				8.1	-53.4					-53.4	
M/C Partners Fund VIII LP. Limited Partnership	901,634	0.0		-10.0	-26.4	--	--	--	--	-26.4	Jul-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>12.1</u>	<i>Jul-19</i>
Over/Under				-10.1	-38.5					-38.5	
Genstar Capital Partners IX	1,703,331	0.0		1.1	--	--	--	--	--	--	Aug-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>10.2</u>	<i>Aug-19</i>
Over/Under				1.0							
Genstar IX Opportunities Fund I	746,588	0.0		-0.2	--	--	--	--	--	-0.5	Aug-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>10.2</u>	<i>Aug-19</i>
Over/Under				-0.3						-10.7	
ABRY Partners IX, LP	3,089,651	0.1		-2.4	--	--	--	--	--	-17.2	Sep-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>12.2</u>	<i>Sep-19</i>
Over/Under				-2.5						-29.4	
Advent International GPE IX LP	1,423,179	0.0		-3.0	--	--	--	--	--	-8.8	Nov-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>7.5</u>	<i>Nov-19</i>
Over/Under				-3.1						-16.3	
Drive Capital Fund III LP	111,720	0.0		0.0	--	--	--	--	--	0.0	Dec-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>3.3</u>	<i>Dec-19</i>
Over/Under				-0.1						-3.3	
Oak HC/FT Partners III LP	1,787,353	0.0		-5.2	--	--	--	--	--	-5.2	Dec-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>3.3</u>	<i>Dec-19</i>
Over/Under				-5.3						-8.5	
TA XIII A LP	1,370,078	0.0		-8.7	--	--	--	--	--	-8.7	Dec-19
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	<u>0.1</u>	<i>Dec-19</i>
Over/Under				-8.8						-8.8	
Dover Street X, LP	2,231,070	0.0		--	--	--	--	--	--	--	Feb-20
<i>Russell 3000 + 3%</i>				<u>0.1</u>	<u>12.1</u>	<u>24.1</u>	<u>17.2</u>	<u>15.2</u>	<u>17.2</u>	--	<i>Feb-20</i>
Over/Under											



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE EQUITY LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Add'l Fees ²	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
													Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
Abbott Secondary Opportunities, LP.	2017	12/21/2017	\$25,000,000	\$19,108,507	\$6,254,210	76%	--	\$4,625,000	\$18,623,267	\$23,248,267	\$4,139,760	18.9%	0.24x	1.22x
Abbott Secondary Opportunities II, LP.	2020	1/31/2020	\$25,000,000	--	\$25,000,000	--	--	--	--	--	--	--	--	--
ABRY Partners IX	2019	12/6/2018	\$10,600,000	\$3,342,603	\$7,257,397	32%	--	--	\$3,089,653	\$3,089,653	(\$252,950)	-24.0%	--	0.92x
Adams Street 2010 U.S. Fund	2010	5/21/2010	\$42,500,000	\$37,442,500	\$5,057,500	88%	\$15,213	\$33,006,870	\$34,829,485	\$67,836,355	\$30,378,642	14.0%	0.88x	1.81x
Adams Street 2010 Non-U.S. Dev. Mkts Fund	2010	5/21/2010	\$25,500,000	\$22,325,249	\$3,174,751	88%	\$1,589	\$19,845,682	\$15,856,563	\$35,702,245	\$13,375,407	11.8%	0.89x	1.6x
Adams Street 2010 Non-U.S. Emg Mkts Fund	2010	1/3/2011	\$8,500,000	\$7,633,000	\$867,000	90%	--	\$2,734,134	\$9,936,427	\$12,670,561	\$5,037,561	10.5%	0.36x	1.66x
Adams Street 2010 Direct Fund	2010	5/21/2010	\$8,500,000	\$8,066,500	\$433,500	95%	\$6,697	\$9,748,384	\$4,551,168	\$14,299,552	\$6,226,355	12.4%	1.21x	1.77x
Adams Street 2013 Global Fund	2013	6/27/2013	\$75,000,000	\$61,350,000	\$13,650,000	82%	\$10,728	\$15,450,212	\$75,257,920	\$90,708,132	\$29,347,404	11.1%	0.25x	1.48x
Adams Street 2016 Global Fund	2016	12/22/2016	\$60,000,000	\$32,880,000	\$27,120,000	55%	--	\$3,621,043	\$35,480,187	\$39,101,230	\$6,221,230	12.1%	0.11x	1.19x
Adams Street Co-Investment Fund IV A	2018	9/24/2018	\$30,000,000	\$8,494,931	\$21,600,000	28%	\$67,808	--	\$8,538,691	\$8,538,691	(\$24,048)	0.6%	--	1.01x
Advent International GPE IX	2019	5/23/2019	\$10,000,000	\$1,650,000	\$8,350,000	--	--	--	\$1,423,180	\$1,423,180	(\$226,820)	-51.3%	--	0.86x
Astorg VII	2019	12/17/2018	\$8,503,837	\$908,094	\$7,595,743	11%	--	--	\$681,775	\$681,775	(\$226,319)	-57.4%	--	0.75x
Battery Ventures XII	2018	2/1/2018	\$9,050,000	\$6,527,765	\$2,522,235	72%	--	--	\$6,641,957	\$6,641,957	\$114,192	2.0%	--	1.02x
Battery Ventures XII Side Fund	2018	2/1/2018	\$5,050,000	\$4,025,355	\$1,024,645	80%	--	--	\$4,317,370	\$4,317,370	\$292,015	8.2%	--	1.07x
Buenaventure One, LLC	2018	1/5/2018	\$102,316,500	\$30,730,590	\$71,585,910	30%	--	\$403,156	\$31,717,466	\$32,120,622	\$1,390,032	4.6%	0.01x	1.05x
CapVest Equity Partners IV	2019	7/11/2018	\$12,151,645	--	\$12,151,645	--	--	--	(\$51,501)	(\$51,501)	--	--	--	--
Clearlake Capital Partners V	2017	12/22/2017	\$9,950,000	\$7,283,333	\$3,326,845	73%	\$46,158	\$1,363,988	\$9,004,329	\$10,368,317	\$3,038,826	40.6%	0.19x	1.42x
Clearlake Capital Partners VI	2020	1/2/2020	\$18,700,000	--	\$18,700,000	--	--	--	--	--	--	--	--	--
Drive Capital Fund II	2016	9/1/2016	\$15,000,000	\$13,110,587	\$1,892,623	87%	\$3,210	--	\$17,115,661	\$17,115,661	\$4,001,864	20.9%	--	1.31x
Drive Capital Fund III	2019	4/5/2019	\$7,500,000	\$111,720	\$7,388,280	1%	--	--	\$111,720	\$111,720	--	--	--	--
Drive Capital Overdrive Fund I	2019	4/5/2019	\$7,500,000	\$2,866,353	\$4,633,647	38%	--	--	\$2,766,681	\$2,766,681	(\$99,672)	-7.6%	--	0.97x
ECI 11	2018	7/5/2018	\$9,705,629	\$2,853,854	\$6,851,775	29%	--	--	\$2,816,325	\$2,816,325	(\$37,529)	-1.7%	--	0.99x
Flexpoint Fund IV-A	2019	7/2/2019	\$10,650,000	--	\$10,650,000	--	--	--	--	--	--	--	--	--
Flexpoint Overage Fund IV-A	2019	7/2/2019	\$3,550,000	--	\$3,550,000	--	--	--	--	--	--	--	--	--
Genstar Capital Partners IX	2019	2/21/2019	\$7,500,000	\$1,738,245	\$5,761,755	23%	--	--	\$1,703,331	\$1,703,331	(\$34,914)	-7.1%	--	0.98x
Genstar Capital Partners IX Opportunities Program	2019	2/21/2019	\$2,500,000	\$749,672	\$1,750,328	30%	--	--	\$746,588	\$746,588	(\$3,084)	-1.3%	--	1x
GGV Capital VII	2019	8/15/2018	\$10,160,000	\$3,454,400	\$6,705,600	34%	--	--	\$3,283,464	\$3,283,464	(\$170,936)	-9.8%	--	0.95x
GGV Capital VII Plus	2019	8/15/2018	\$2,540,000	\$825,500	\$1,714,500	33%	--	--	\$826,921	\$826,921	\$1,421	0.4%	--	1x
GGV Discovery II	2019	8/15/2018	\$2,100,000	\$661,500	\$1,438,500	32%	--	--	\$656,751	\$656,751	(\$4,749)	-1.6%	--	0.99x
Great Hill Equity Partners VII	2019	6/28/2019	\$8,900,000	--	\$8,900,000	--	--	--	--	--	--	--	--	--
Green Equity Investors VIII	2019	10/18/2019	\$15,000,000	--	\$15,000,000	--	--	--	--	--	--	--	--	--
GTCR Fund XII	2017	9/29/2017	\$30,000,000	\$13,065,000	\$17,030,792	44%	--	\$586,016	\$12,157,078	\$12,743,094	(\$321,906)	-3.3%	0.04x	0.98x
HarbourVest - Dover Street VIII	2013	5/30/2013	\$67,500,000	\$61,509,954	\$6,075,000	91%	\$84,954	\$73,012,162	\$25,404,454	\$98,416,616	\$36,821,708	20.7%	1.19x	1.6x
HarbourVest - Dover Street IX	2016	12/16/2016	\$60,000,000	\$43,200,000	\$16,800,000	72%	--	\$15,641,322	\$44,751,818	\$60,393,140	\$17,193,140	30.2%	0.36x	1.4x
HarbourVest - Dover Street X	2019	5/31/2019	\$40,000,000	\$2,000,000	\$38,000,000	5%	--	--	\$2,231,069	\$2,231,069	\$231,069	818.0%	--	1.12x
HarbourVest - PRTNS CO INVEST IV L.P.	2017	6/2/2017	\$30,000,000	\$24,464,388	\$5,732,352	82%	--	\$4,951,347	\$27,479,488	\$32,430,835	\$7,966,447	14.8%	0.2x	1.33x
HarbourVest - PRTNS CO INVEST V L.P.	2019	7/31/2018	\$35,000,000	\$5,250,000	\$29,750,000	--	--	--	\$4,790,219	\$4,790,219	(\$459,781)	-17.2%	--	0.91x
Hellman & Friedman Capital Partners IX	2019	9/28/2018	\$19,800,000	--	\$19,800,000	--	--	--	(\$126,154)	(\$126,154)	--	--	--	--
Insight Venture Partners X	2017	10/13/2017	\$25,000,000	\$20,625,000	\$4,375,000	83%	--	\$8,561	\$23,708,801	\$23,717,362	\$3,092,362	14.2%	0x	1.15x
M/C Partners VIII	2019	4/2/2018	\$10,000,000	\$1,194,964	\$8,805,036	12%	--	--	\$901,634	\$901,634	(\$293,330)	-55.9%	--	0.75x
Oak HC/FT Partners III	2019	7/31/2019	\$15,000,000	\$1,952,310	\$13,047,690	13%	--	--	\$1,787,353	\$1,787,353	(\$164,957)	-54.4%	--	0.92x
Pantheon Global Secondary Fund IV	2010	8/20/2010	\$15,000,000	\$9,960,000	\$5,040,000	66%	--	\$13,140,543	\$2,596,999	\$15,737,542	\$5,777,542	13.4%	1.32x	1.58x
Pantheon Global Secondary Fund V	2015	2/26/2015	\$50,000,000	\$35,116,509	\$14,883,491	70%	(\$162,514)	\$11,637,534	\$35,309,367	\$46,946,901	\$11,992,906	12.9%	0.33x	1.34x
The Resolute Fund IV	2018	5/2/2018	\$20,000,000	\$8,242,991	\$11,086,652	41%	--	\$2,186,629	\$7,588,729	\$9,775,358	\$1,532,367	41.8%	0.27x	1.19x
Riverside Micro-Cap Fund V	2018	8/21/2018	\$10,000,000	\$2,020,662	\$7,979,338	20%	--	--	\$1,780,559	\$1,780,559	(\$240,103)	-20.5%	--	0.88x
TA XIII	2019	5/2/2019	\$10,000,000	\$1,500,000	\$8,500,000	15%	--	--	\$1,370,078	\$1,370,078	(\$129,922)	-51.3%	--	0.91x
Total VCERA Private Equity Program	--	5/21/2010	\$1,026,227,611	\$508,242,036	\$520,813,740	50%	\$73,843	\$211,962,583	\$481,656,871	\$693,619,454	\$185,481,230	14.4%	0.42x	1.36x

1. Includes recycled/recallable distributions received to date.

2. Add'l Fees represents notional interest paid/(received).

3. Add'l Fees for Pantheon Global Secondary Fund V includes notional interest paid/(received) and management fee rebates paid to VCERA.

Note: Private equity performance data is reported net of fees.

Performance shown is based on 1/31/2020 statement of investments produced by Abbott Capital.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total US Fixed Income	1,062,115,885	17.4	14.0	1.4	4.0	8.7	4.6	3.7	4.7	5.8	Feb-94
BBgBarc US Aggregate TR				1.9	4.4	9.6	4.6	3.0	3.8	5.3	Feb-94
Over/Under				-0.5	-0.4	-0.9	0.0	0.7	0.9	0.5	
BlackRock U.S. Debt Fund	249,678,893	4.1		1.9	4.4	9.6	4.7	3.0	3.9	5.2	Nov-95
BBgBarc US Aggregate TR				1.9	4.4	9.6	4.6	3.0	3.8	5.2	Nov-95
Over/Under				0.0	0.0	0.0	0.1	0.0	0.1	0.0	
Western	336,138,677	5.5		2.1	5.3	11.1	5.7	4.1	5.4	6.1	Dec-96
BBgBarc US Aggregate TR				1.9	4.4	9.6	4.6	3.0	3.8	5.2	Dec-96
Over/Under				0.2	0.9	1.5	1.1	1.1	1.6	0.9	
Reams	334,961,762	5.5		0.6	2.8	6.3	3.3	3.6	4.1	5.2	Sep-01
Reams Custom Index				0.2	1.2	2.3	2.0	1.4	2.4	3.7	Sep-01
Over/Under				0.4	1.6	4.0	1.3	2.2	1.7	1.5	
BBgBarc US Aggregate TR				1.9	4.4	9.6	4.6	3.0	3.8	4.5	Sep-01
3-Month LIBOR + 3%				0.4	3.0	5.3	5.1	4.5	3.9	4.8	Sep-01
Loomis Strategic Alpha	49,117,242	0.8		0.7	1.4	3.5	2.9	2.6	--	2.7	Jul-13
BBgBarc US Aggregate TR				1.9	4.4	9.6	4.6	3.0	3.8	3.6	Jul-13
Over/Under				-1.2	-3.0	-6.1	-1.7	-0.4		-0.9	
3-Month LIBOR + 3%				0.4	3.0	5.3	5.1	4.5	3.9	4.2	Jul-13
Loomis Sayles Multi Strategy	92,219,310	1.5		1.3	3.8	8.8	5.7	4.5	6.4	6.3	Jul-05
Loomis Custom Index				1.3	4.2	9.3	4.9	3.9	4.8	5.2	Jul-05
Over/Under				0.0	-0.4	-0.5	0.8	0.6	1.6	1.1	
BBgBarc US Govt/Credit TR				2.4	5.1	11.0	5.1	3.2	4.1	4.4	Jul-05

Reams Custom Index: Merrill Lynch 3 Month Libor Constant Maturity Index, prior to February 2013 the Barclays Aggregate.

Loomis Custom Index: 65% BBgBarc US Aggregate, 30% Citigroup High Yield Market Index and 5% JPM Non-US Hedged Bond Index.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Private Debt	74,964,685	1.2	3.0	0.1	4.1	10.0	--	--	--	6.3	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				0.4	4.7	9.9	--	--	--	6.9	Jan-18
Over/Under				-0.3	-0.6	0.1				-0.6	
CVI Credit Value Fund	24,035,110	0.4		0.8	4.1	10.2	--	--	--	6.0	Jan-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				0.4	4.7	9.9	--	--	--	6.9	Jan-18
Over/Under				0.4	-0.6	0.3				-0.9	
Monroe Capital Private Credit Fund III	17,723,940	0.3		0.0	5.0	11.2	--	--	--	9.5	Dec-18
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				0.4	4.7	9.9	--	--	--	9.8	Dec-18
Over/Under				-0.4	0.3	1.3				-0.3	
Bluebay Direct Lending Fund III	9,637,239	0.2		-1.0	5.0	--	--	--	--	6.8	Apr-19
50% BofA ML US HY BB-B Constrained Index/ 50% Credit Suisse Leveraged Loan Index +150bps				0.4	4.7	9.9	--	--	--	7.4	Apr-19
Over/Under				-1.4	0.3					-0.6	
Pimco Private Income Fund	8,250,000	0.1		0.0	--	--	--	--	--	0.0	Nov-19
Russell 3000 + 3%				0.1	12.1	24.1	17.2	15.2	17.2	7.5	Nov-19
Over/Under				-0.1						-7.5	
Bridge Debt Strategies III Limited Partner	15,318,397	0.3		0.0	--	--	--	--	--	0.0	Jan-20
Russell 3000 + 3%				0.1	12.1	24.1	17.2	15.2	17.2	0.1	Jan-20
Over/Under				-0.1						-0.1	
Treasuries	109,209,401	1.8	2.0	3.6	5.5	--	--	--	--	9.2	Apr-19
Reams 10-Year Treasuries	109,209,401	1.8		3.6	5.5	--	--	--	--	9.2	Apr-19
BBgBarc US Treasury 7-10 Yr TR				3.2	4.7	11.2	5.0	2.7	4.6	8.9	Apr-19
Over/Under				0.4	0.8					0.3	



VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION PRIVATE DEBT LIMITED PARTNERSHIP PERFORMANCE

Fund Name	Vintage Year	Initial Investment Date	Commitment	Capital Called to Date ¹	Outstanding Commitment ¹	Call Ratio	Distributions to Date	Valuation	Total Value	Net Benefit	IRR	Since Inception	
												Distributions to Paid In Multiple (DPI)	Total Value to Paid In Multiple (TVPI)
BlueBay Direct Lending III	2019	2/12/2019	\$25,000,000	\$9,250,678	\$15,749,322	37%	\$49,774	\$9,637,239	\$9,687,013	\$436,335	7.0%	0.01x	1.05x
Bridge Debt Strategies III	2019	12/20/2019	\$25,000,000	\$15,318,397	\$9,681,603	61%	\$0	\$15,318,397	\$15,318,397	\$0	0.0%	0x	1x
CVI Credit Value Fund IV	2017	12/31/2017	\$30,000,000	\$22,500,000	\$7,500,000	75%	\$6,147	\$24,035,110	\$24,041,257	\$1,541,257	6.8%	0x	1.07x
Monroe Capital Private Credit Fund III	2018	9/5/2018	\$25,000,000	\$17,652,142	\$7,347,858	71%	\$1,273,921	\$17,723,940	\$18,997,861	\$1,345,719	10.0%	0.07x	1.08x
PIMCO Private Income Fund	2019	3/25/2019	\$55,000,000	\$8,250,000	\$46,750,000	15%	\$0	\$8,250,000	\$8,250,000	\$0	0.0%	0x	1x
Total VCERA Private Debt Program	--		\$160,000,000	\$72,971,217	\$87,028,783	46%	\$1,329,842	\$74,964,686	\$76,294,528	\$3,323,311	7.4%	0.02x	1.05x

1. Includes recycled/recallable distributions received to date.

Note: Private debt performance data is reported net of fees.

Performance shown is based on 1/31/2020 cash-adjusted market values.



Ventura County Employees' Retirement Association

TOTAL FUND PERFORMANCE DETAIL NET OF FEES

	Market Value (\$)	% of Portfolio	Policy %	1 Mo (%)	Fiscal YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Inception (%)	Inception Date
Total Real Estate	434,522,276	7.1	8.0	0.0	1.4	0.3	4.4	6.5	9.3	7.5	Mar-94
<i>NCREIF ODCE Net</i>				<i>0.0</i>	<i>2.4</i>	<i>4.4</i>	<i>6.1</i>	<i>8.0</i>	<i>10.4</i>	<i>7.9</i>	<i>Mar-94</i>
Over/Under				0.0	-1.0	-4.1	-1.7	-1.5	-1.1	-0.4	
Prudential Real Estate	165,564,252	2.7		0.0	2.7	5.9	7.0	8.7	11.3	6.3	Jun-04
<i>NCREIF ODCE Net</i>				<i>0.0</i>	<i>2.4</i>	<i>4.4</i>	<i>6.1</i>	<i>8.0</i>	<i>10.4</i>	<i>6.9</i>	<i>Jun-04</i>
Over/Under				0.0	0.3	1.5	0.9	0.7	0.9	-0.6	
<i>NCREIF ODCE</i>				<i>0.0</i>	<i>2.8</i>	<i>5.3</i>	<i>7.1</i>	<i>9.0</i>	<i>11.4</i>	<i>7.9</i>	<i>Jun-04</i>
UBS Real Estate	268,958,024	4.4		0.0	0.6	-2.8	2.8	5.3	8.3	6.7	Mar-03
<i>NCREIF ODCE Net</i>				<i>0.0</i>	<i>2.4</i>	<i>4.4</i>	<i>6.1</i>	<i>8.0</i>	<i>10.4</i>	<i>7.1</i>	<i>Mar-03</i>
Over/Under				0.0	-1.8	-7.2	-3.3	-2.7	-2.1	-0.4	
<i>NCREIF ODCE</i>				<i>0.0</i>	<i>2.8</i>	<i>5.3</i>	<i>7.1</i>	<i>9.0</i>	<i>11.4</i>	<i>8.1</i>	<i>Mar-03</i>
Total Real Assets	461,737,854	7.5	7.0	0.1	1.1	7.1	3.7	1.7	--	4.4	Apr-13
<i>Real Assets Index</i>				<i>0.6</i>	<i>1.9</i>	<i>5.4</i>	<i>5.7</i>	<i>5.8</i>	<i>--</i>	<i>6.0</i>	<i>Apr-13</i>
Over/Under				-0.5	-0.8	1.7	-2.0	-4.1	--	-1.6	
Bridgewater All Weather Fund	354,539,418	5.8		1.7	6.0	13.6	7.6	4.7	--	5.8	Aug-13
<i>CPI + 5% (Unadjusted)</i>				<i>0.8</i>	<i>3.6</i>	<i>7.6</i>	<i>7.1</i>	<i>7.1</i>	<i>--</i>	<i>6.6</i>	<i>Aug-13</i>
Over/Under				0.9	2.4	6.0	0.5	-2.4	--	-0.8	
Tortoise Energy Infrastructure	107,198,436	1.8		-5.0	-12.5	-9.8	-6.4	-5.7	--	-0.9	Apr-13
<i>Tortoise MLP Index</i>				<i>-6.3</i>	<i>-12.8</i>	<i>-8.3</i>	<i>-6.5</i>	<i>-7.2</i>	<i>--</i>	<i>-3.6</i>	<i>Apr-13</i>
Over/Under				1.3	0.3	-1.5	0.1	1.5	--	2.7	
Overlay	135,741,352	2.2	0.0								
Parametric	37,533,794	0.6									
Abbott Capital Cash	98,207,557	1.6									

Total Real Estate Benchmark: NCREIF ODCE; prior to January 2006, the NCREIF Property Index.

Total Real Assets Benchmark CPI + 4% from inception until 6/30/2019; CPI +2% from 6/30/2019 to present.

Real Estate managers and NCREIF ODCE are valued on a quarterly basis. Performance is not applicable in mid-quarter months, therefore 0% return is shown.

Ventura County Employees' Retirement Association

TOTAL FUND

Cash Flow Summary							
Month Ending January 31, 2020							
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
Abbott Capital Cash	\$38,120,207	\$101,071,201	-\$41,059,103	\$60,012,098	\$0	\$75,252	\$98,207,557
Abbott Secondary Opportunities	\$17,294,394	\$0	\$0	\$0	\$0	\$1,328,876	\$18,623,270
ABRY Partners IX, LP	\$2,181,368	\$968,881	\$0	\$968,881	\$0	-\$60,597	\$3,089,651
Adams Street Global Fund Series	\$172,996,140	\$1,527,123	-\$219,868	\$1,307,255	\$0	\$9,845,247	\$184,148,642
Advent International GPE IX LP	\$960,680	\$500,000	\$0	\$500,000	\$0	-\$37,501	\$1,423,179
Astorg VII L.P.	\$698,463	\$0	\$0	\$0	\$0	\$57,081	\$755,544
Battery Ventures XII	\$10,278,557	\$706,175	\$0	\$706,175	\$0	-\$25,406	\$10,959,326
BlackRock ACWI ex-U.S. Index	\$510,579,539	\$0	\$0	\$0	-\$43,014	-\$14,413,385	\$496,166,154
BlackRock MSCI ACWI Equity Index	\$693,538,318	\$0	-\$25,000,000	-\$25,000,000	-\$23,717	-\$7,024,250	\$661,514,068
Blackrock Russell 1000 Index	\$1,478,332,364	\$0	-\$70,000,000	-\$70,000,000	-\$12,184	\$3,738,874	\$1,412,071,238
Blackrock Russell 2500 Index	\$70,598,890	\$0	\$0	\$0	-\$1,153	-\$1,435,317	\$69,163,574
BlackRock U.S. Debt Fund	\$244,960,616	\$0	\$0	\$0	-\$11,656	\$4,718,277	\$249,678,893
Bluebay Direct Lending Fund III	\$8,912,679	\$1,688,217	-\$868,996	\$819,222	\$0	-\$94,662	\$9,637,239
Bridge Debt Strategies III Limited Partner	\$15,318,397	\$0	\$0	\$0	\$0	\$0	\$15,318,397
Bridgewater All Weather Fund	\$348,681,911	\$0	\$0	\$0	-\$107,196	\$5,857,507	\$354,539,418
Buenaventure One, LLC	\$31,506,474	\$0	\$0	\$0	\$0	\$210,988	\$31,717,462
Buenaventure Two, LLC	\$320,433	\$0	\$0	\$0	\$0	\$0	\$320,433
Clearlake Capital Partners V	\$9,468,579	\$0	\$0	\$0	\$0	-\$443,880	\$9,024,699

Bridge Debt Strategies III funded 12/20/2019.



Ventura County Employees' Retirement Association**TOTAL FUND**

	Month Ending January 31, 2020						
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change	Ending Market Value
CVI Credit Value Fund	\$23,849,221	\$0	\$0	\$0	\$0	\$185,889	\$24,035,110
Dover Street X, LP	\$0	\$2,000,000	\$0	\$2,000,000	\$0	\$231,070	\$2,231,070
Drive Capital Fund II	\$15,687,653	\$1,428,003	\$0	\$1,428,003	\$0	\$9	\$17,115,665
Drive Capital Fund III LP	\$36,925	\$74,795	\$0	\$74,795	\$0	\$0	\$111,720
Drive Capital Overdrive Fund I	\$2,696,095	\$70,586	\$0	\$70,586	\$0	\$0	\$2,766,681
ECI 11	\$3,542,361	\$0	\$0	\$0	\$0	\$170,120	\$3,712,481
Genstar Capital Partners IX	\$1,684,036	\$0	\$0	\$0	\$0	\$19,295	\$1,703,331
Genstar IX Opportunities Fund I	\$745,800	\$2,320	\$0	\$2,320	\$0	-\$1,532	\$746,588
GGV Capital VII L.P.	\$2,872,123	\$355,600	\$0	\$355,600	\$0	\$55,740	\$3,283,462
GGV Capital VII Plus, LP	\$827,466	\$0	\$0	\$0	\$0	-\$545	\$826,921
GGV Discovery II, L.P.	\$499,251	\$157,500	\$0	\$157,500	\$0	\$0	\$656,751
GTCR Fund XII	\$6,702,509	\$3,762,000	-\$45,949	\$3,716,051	\$0	\$1	\$10,418,562
Harbourvest	\$97,630,843	\$0	\$0	\$0	\$0	\$4,906,505	\$102,537,348
Hexavest	\$98,371,757	\$0	\$0	\$0	-\$35,597	-\$4,080,069	\$94,291,688
Insight Venture Partners X	\$23,887,278	\$0	\$0	\$0	\$0	-\$178,477	\$23,708,801
Loomis Sayles Multi Strategy	\$90,967,391	\$0	\$0	\$0	-\$28,888	\$1,251,919	\$92,219,310
Loomis Strategic Alpha	\$48,739,417	\$0	\$0	\$0	-\$16,372	\$377,825	\$49,117,242
M/C Partners Fund VIII LP. Limited Partnership	\$736,738	\$238,980	\$0	\$238,980	\$0	-\$74,084	\$901,634



Ventura County Employees' Retirement Association

TOTAL FUND

	Month Ending January 31, 2020							Ending Market Value
	Beginning Market Value	Contributions	Withdrawals	Net Cash Flow	Fees	Net Investment Change		
Monroe Capital Private Credit Fund III	\$17,723,940	\$0	\$0	\$0	\$0	\$0	\$17,723,940	
Oak HC/FT Partners III LP	\$859,875	\$999,267	\$0	\$999,267	\$0	-\$71,789	\$1,787,353	
Pantheon Global Secondary Funds	\$38,433,838	\$0	\$0	\$0	\$0	-\$540,065	\$37,893,773	
Parametric	\$40,677,675	\$0	\$0	\$0	-\$4,169	-\$3,143,880	\$37,533,794	
Pimco Private Income Fund	\$8,250,000	\$0	\$0	\$0	\$0	\$0	\$8,250,000	
Prudential Real Estate	\$165,564,252	\$0	\$0	\$0	\$0	\$0	\$165,564,252	
Reams	\$333,072,839	\$0	\$0	\$0	-\$48,120	\$1,888,923	\$334,961,762	
Reams 10-Year Treasuries	\$105,449,348	\$0	\$0	\$0	\$0	\$3,760,053	\$109,209,401	
Riverside Micro Cap Fund V, LP	\$1,780,559	\$0	\$0	\$0	\$0	\$0	\$1,780,559	
Sprucegrove	\$240,872,280	\$0	\$0	\$0	-\$67,188	-\$12,368,820	\$228,503,461	
TA XIII A LP	\$1,500,000	\$0	\$0	\$0	\$0	-\$129,923	\$1,370,078	
The Resolute Fund IV L.P	\$8,766,623	\$0	-\$212,425	-\$212,425	\$0	-\$965,467	\$7,588,731	
Tortoise Energy Infrastructure	\$112,758,102	\$0	\$0	\$0	-\$55,833	-\$5,559,666	\$107,198,436	
UBS Real Estate	\$268,958,024	\$0	\$0	\$0	\$0	\$0	\$268,958,024	
Walter Scott	\$149,386,293	\$0	\$0	\$0	-\$96,077	-\$982,658	\$148,403,635	
Western	\$329,243,179	\$0	\$0	\$0	-\$54,517	\$6,895,498	\$336,138,677	
Western U.S. Index Plus	\$251,003,186	\$0	\$0	\$0	-\$43,894	\$152,423	\$251,155,609	
Total	\$6,148,524,885	\$115,550,648	-\$137,406,341	-\$21,855,692	-\$649,576	-\$5,904,599	\$6,120,764,594	

TA XIII A LP funded 12/31/2019.



Information Disclaimer

- Past performance is no guarantee of future results.
- All investments carry some level of risk. Diversification and other asset allocation techniques are not guaranteed to ensure profit or protect against losses.
- NEPC's source for portfolio pricing, calculation of accruals, and transaction information is the plan's custodian bank. Information on market indices and security characteristics is received from other sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.
- Some index returns displayed in this report or used in calculation of a policy, allocation or custom benchmark may be preliminary and subject to change.
- This report is provided as a management aid for the client's internal use only. Information contained in this report does not constitute a recommendation by NEPC.
- This report may contain confidential or proprietary information and may not be copied or redistributed to any party not legally entitled to receive it.

Reporting Methodology

- The client's custodian bank is NEPC's preferred data source unless otherwise directed. NEPC generally reconciles custodian data to manager data. If the custodian cannot provide accurate data, manager data may be used.
- Trailing time period returns are determined by geometrically linking the holding period returns, from the first full month after inception to the report date. Rates of return are annualized when the time period is longer than a year. Performance is presented gross and/or net of manager fees as indicated on each page.
- For managers funded in the middle of a month, the "since inception" return will start with the first full month, although actual inception dates and cash flows are taken into account in all Composite calculations.
- This report may contain forward-looking statements that are based on NEPC's estimates, opinions and beliefs, but NEPC cannot guarantee that any plan will achieve its targeted return or meet other goals.



NEPC 2020 INVESTMENT OUTLOOK

ASSET CLASS ASSUMPTIONS & VCERA RETURN EXPECTATIONS

February 24, 2020

NEPC Research



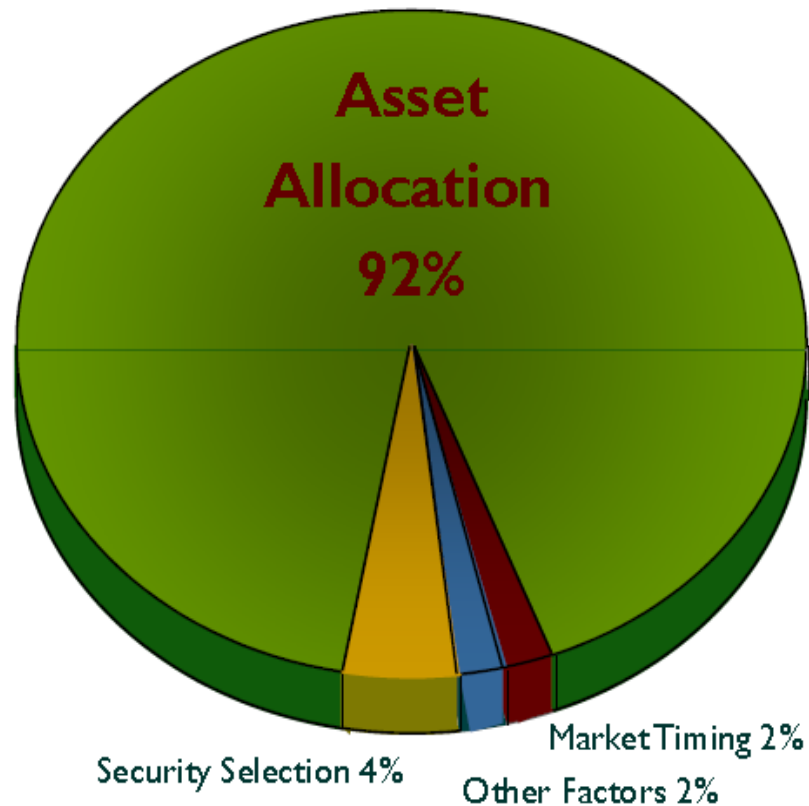
VCERA
VENTURA COUNTY EMPLOYEES'
RETIREMENT ASSOCIATION



BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

ASSET ALLOCATION: THE KEY INVESTMENT DECISION

Determinants of Portfolio Performance

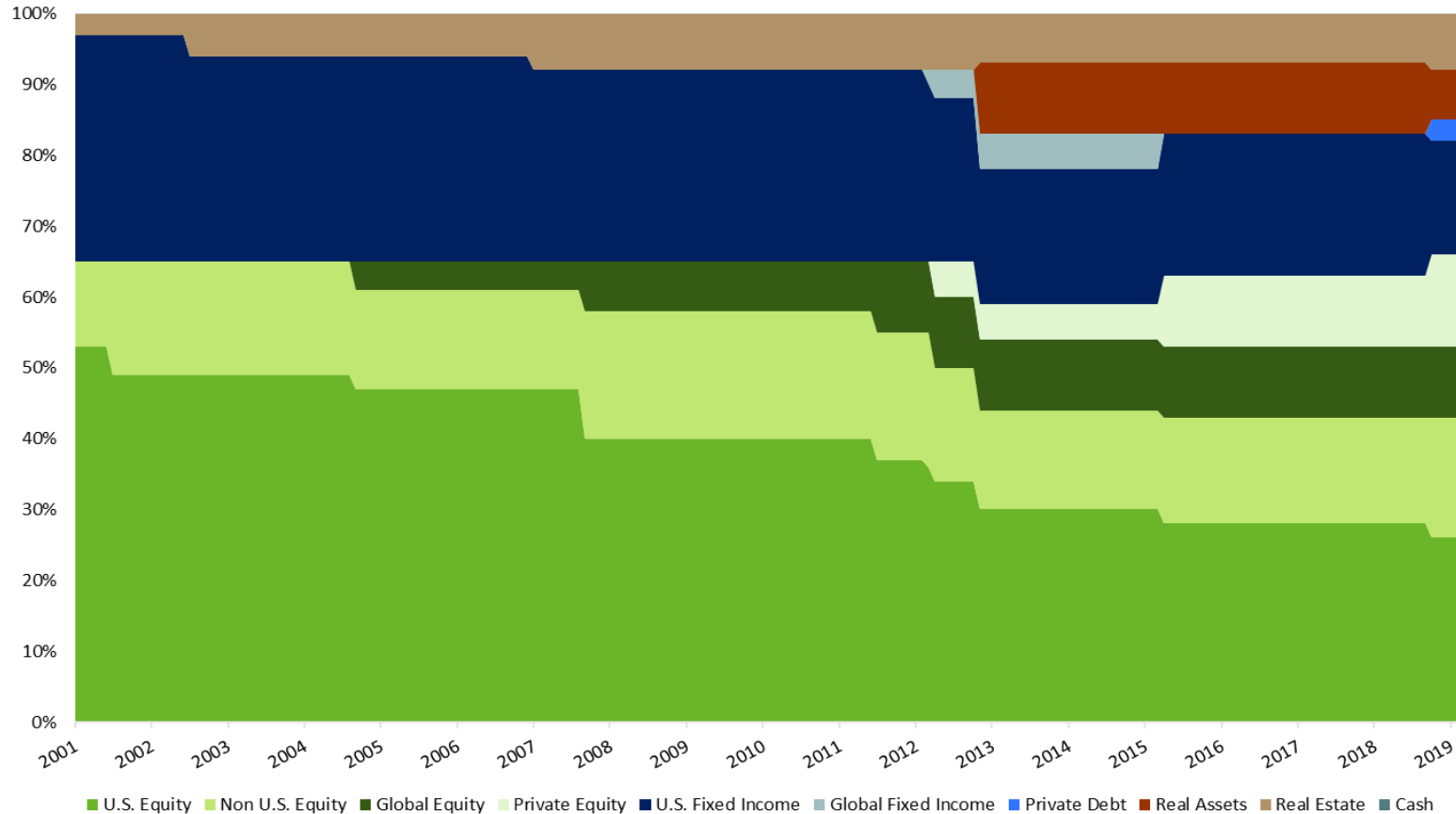


Source: *Determinants of Portfolio Performance II: An Update*, Brinson, et al, *Financial Analysts Journal*, May/June 1991, pp 40-48.

CURRENT ASSET ALLOCATION POLICY & RANGES

	VCERA Policy	Allowable Range	VCERA Actual 12/31/2019	Compliance with Allowable Range	Composite Benchmark
U.S. Equity	26.0	21.0 - 31.0	29.3	Yes	Russell 3000 Index
Non-U.S. Equity	17.0	13.0 - 21.0	16.3	Yes	MSCI ACWI ex U.S. Index Net
Global Equity	10.0	7.0 - 13.0	11.3	Yes	MSCI ACWI Index Net
Private Equity	13.0	5.0 - 15.0	7.6	Yes	Russell 3000 Index + 3%
U.S. Fixed Income	16.0	14.0 - 22.0	19.7	Yes	Bloomberg Barclays U.S. Aggregate Bond Index
Private Debt	3.0	0.0 - 5.0	1.0	Yes	Bloomberg Barclays U.S. Aggregate Bond Index
Real Assets	7.0	0.0 - 9.0	7.5	Yes	CPI + 2%
Real Estate	8.0	0.0 - 9.0	7.1	Yes	NCREIF ODCE Index
Cash	0.0	0.0 - 3.0	1.3	Yes	90 Day T-Bill

VCERA ASSET ALLOCATION POLICY HISTORY



	2001	2004	2007	2010	2013	2016	Current
U.S. Equity	53.00%	49.00%	47.00%	40.00%	34.00%	28.00%	26.00%
Non-U.S. Equity	12.00%	16.00%	14.00%	18.00%	16.00%	15.00%	17.00%
Global Equity	0.00%	0.00%	4.00%	7.00%	10.00%	10.00%	10.00%
Private Equity	0.00%	0.00%	0.00%	0.00%	5.00%	10.00%	13.00%
U.S. Fixed Income	32.00%	29.00%	29.00%	27.00%	23.00%	20.00%	16.00%
Private Debt	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.00%
Global Fixed Income	0.00%	0.00%	0.00%	0.00%	4.00%	0.00%	0.00%
Real Assets	0.00%	0.00%	0.00%	0.00%	0.00%	10.00%	7.00%
Real Estate	3.00%	6.00%	6.00%	8.00%	8.00%	7.00%	8.00%
Cash	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%



NEPC PROCESS OVERVIEW AND CHANGES

NEPC, LLC

2020 ASSET CLASS OVERVIEW

2019 was a year of robust returns across most asset classes

Investors were rewarded with lucrative returns as global equities and bonds rallied

Falling global yields were a powerful tailwind

Fixed income benefitted as prices rose with falling yields

The discounting of future cash flows with lower rates, supported higher equity valuations

The economic backdrop weakened globally, but remains net positive

Accommodative monetary policy in the developed world was a positive for risk assets

Market-based inflation expectations have declined considerably and reflect a lower expected inflation path over the long-term

The “lower for longer” period has extended out a decade due to central bank intervention

The combination of falling interest rates, robust returns in the prior year, and lower growth and inflation expectations generate declining return expectations for nearly all asset classes

These significant market movements resulted in a secular decline in NEPC’s outlook – impacting both the 10-year and 30-year assumptions

FORECAST TIME HORIZON ADJUSTMENT

NEPC has adopted a 10-year return horizon and shifted from a 5-7 year outlook for capital market assumptions

The 5-7 year time horizon was intended to correspond to the approximate length of the market cycle; recent structural changes in the economic environment signal longer cycles

Themes and valuation shifts are likely to play out over a more extended time frame

This adjustment allows clients to more easily reconcile forecasts from multiple sources

The 10-year horizon is representative of a long-term strategic view and should not be conflated with shorter-term market views

Forecasts are influenced by the path of key inputs such as growth, rates, and inflation, as well as terminal values of valuations, spreads, and profit margins

This change in methodology introduces nuances relative to prior years:

The change in assumptions over time should be muted as convergence toward a terminal value is incorporated over a longer time frame

For 2020, 10-year forecasts would be slightly higher than a 5-7 year forecast as capital markets are assumed to normalize over time

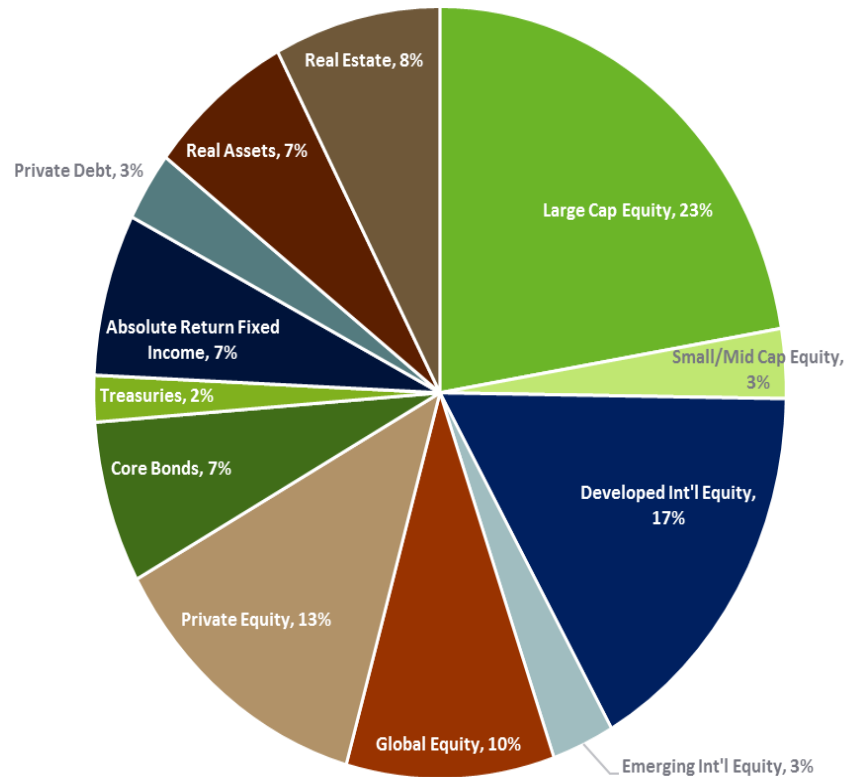
The decline in 2020 capital market expectations is predominantly driven by changes from the 2019 market environment rather than longer time horizon



CHANGES TO VCERA ASSUMPTIONS

NEPC, LLC

VCERA TARGET MIX – USING NEPC’S 2020 ASSUMPTIONS



	5-7 Year/ 10 Year		30 Year	
	2019	2020	2019	2020
Expected Return	7.0%	6.4%	8.1%	7.6%
Expected Volatility	13.5%	11.8%	13.5%	11.8%
Sharpe Ratio	0.33	0.39	0.38	0.44
Sortino Ratio	0.63	0.67	0.75	0.83

Probabilities using 2020 Assumptions	
Probability of 1-Year Return Under 0.00%	29.2%
Probability of 10 Year Return Under 0.00%	4.2%
Probability of 10 Year Return Under 7.25%	58.8%
Probability of 30-Year Return Under 7.25%	43.5%

*2020 Expected Volatility assumption based on smoothed volatilities in private markets asset classes; these are incorporated into the 2020 Sharpe and Sortino Ratio estimates

*Smoothed volatility uses historical realized asset class volatility in determining the total portfolio expected volatility



VCERA TARGET MIX USING 2020 ASSUMPTIONS

	Policy Target	Global 60/40	Domestic 60/40	Median Public Fund > \$1 Billion
Cash	0%	0%	0%	2%
Total Cash	0%	0%	0%	2%
Large Cap Equities	23%	0%	51%	24%
Small/Mid Cap Equities	3%	0%	9%	4%
Int'l Equities (Unhedged)	14%	0%	0%	17%
Emerging Int'l Equities	3%	0%	0%	3%
Global Equity	10%	60%	0%	0%
Private Equity	13%	0%	0%	11%
Total Equity	66%	60%	60%	60%
Treasuries	2%	0%	0%	0%
Core Bonds	7%	0%	40%	20%
EMD	0%	0%	0%	2%
Non-US Bonds (Unhedged)	0%	0%	0%	3%
Global Bonds (Unhedged)	0%	40%	0%	0%
Absolute Return Fixed Income	7%	0%	0%	0%
Private Debt	3%	0%	0%	0%
Total Fixed Income	19%	40%	40%	25%
Commodities	0%	0%	0%	2%
Real Estate	8%	0%	0%	6%
Real Assets	7%	0%	0%	0%
Total Real Assets	15%	0%	0%	8%
Absolute Return	0%	0%	0%	5%
Total Absolute Return	4%	0%	0%	5%
Expected Return 10 yrs	6.4%	4.4%	4.4%	5.6%
Expected Return 30 yrs	7.6%	5.8%	5.8%	6.8%
Standard Dev	11.8%	11.5%	10.5%	10.8%
Sharpe Ratio (10 years)	0.39	0.22	0.24	0.35
Sharpe Ratio (30 years)	0.44	0.30	0.33	0.41

*Smoothed volatility uses historical realized asset class volatility in private market asset classes and is incorporated into Sharpe Ratio estimates



CORE GEOMETRIC RETURN ASSUMPTIONS

	Asset Class	10-Year Return	30-Year Return	Volatility
	Cash	1.8%	2.4%	1.00%
	US Inflation	2.3%	2.5%	-
Equity	Large Cap Equities	5.0%	6.7%	16.50%
	International Equities (Unhedged)	6.0%	7.0%	20.50%
	Emerging International Equities	9.0%	9.2%	28.00%
	<i>Global Equity*</i>	6.2%	7.5%	17.79%
	<i>Private Equity*</i>	9.4%	10.7%	24.58%
Fixed Income	Treasuries	1.9%	2.7%	5.50%
	<i>Core Bonds*</i>	2.5%	3.4%	6.01%
	TIPS	2.2%	2.7%	6.50%
	High Yield Bonds	4.1%	5.6%	12.50%
	<i>Private Debt*</i>	6.7%	7.8%	11.54%
Real Assets	Commodities	4.0%	4.8%	19.00%
	REITs	5.4%	6.5%	20.00%
	Core Real Estate	5.2%	6.0%	13.00%
	Private Real Assets: Infrastructure/Land	5.9%	6.7%	12.00%
Multi-Asset	<i>US 60/40*</i>	4.4%	5.8%	10.45%
	<i>Global 60/40*</i>	4.4%	5.8%	11.53%
	<i>Absolute Return*</i>	5.0%	5.9%	8.18%

*Calculated as a blend of other asset classes



KEY MARKET THEMES

NEPC, LLC

LATE CYCLE DYNAMICS

NEPC, LLC

INVESTMENT CONSIDERATIONS AND RISKS

The current market environment is characterized by a unique set of risks and a more nuanced investment outlook

Above average equity valuations and low yields temper forward-looking returns

Resilient investor sentiment, accommodative policy, and favorable economic trends can further support equity markets and provide substantive investment returns

Subdued growth expectations highlight the fragility of the economy, which suggests an underweight to credit risk relative to safe-haven fixed income exposure is appropriate

Investors must be cautious in such an environment given the uncertainty around time horizon and potential wide range of economic outcomes

There is a greater need for portfolio discipline due to spikes in volatility and the positive returns offered by the late cycle before the expansion ends and asset repricing occurs

While recession concerns remain low, our outlook can quickly change should a material slowdown in economic indicators occur or a dramatic shift in central bank policy

Average Cumulative Return	Early-Cycle	Mid-Cycle	Late-Cycle	Recession
S&P 500 Index	20.1%	46.6%	24.3%	-9.7%
Russell 2000 Index	33.7%	61.3%	15.8%	-7.7%
Barclays US Treasury Index	6.3%	25.0%	12.8%	13.0%
Barclays US Aggregate Index	7.2%	27.3%	13.2%	13.6%
Barclays US High Yield Index	29.5%	50.4%	18.0%	-4.0%
Bloomberg Commodity Index	12.1%	28.7%	30.5%	4.2%

Source: S&P, Russell, Barclays, FactSet, NEPC

Figures represent average cumulative return during each stage of the economic cycle



PERMANENT INTERVENTIONS

NEPC, LLC

DEFINING THE THEME

The developed world is undergoing a regime shift defined by central bank market interventions and permanent fiscal support from governments

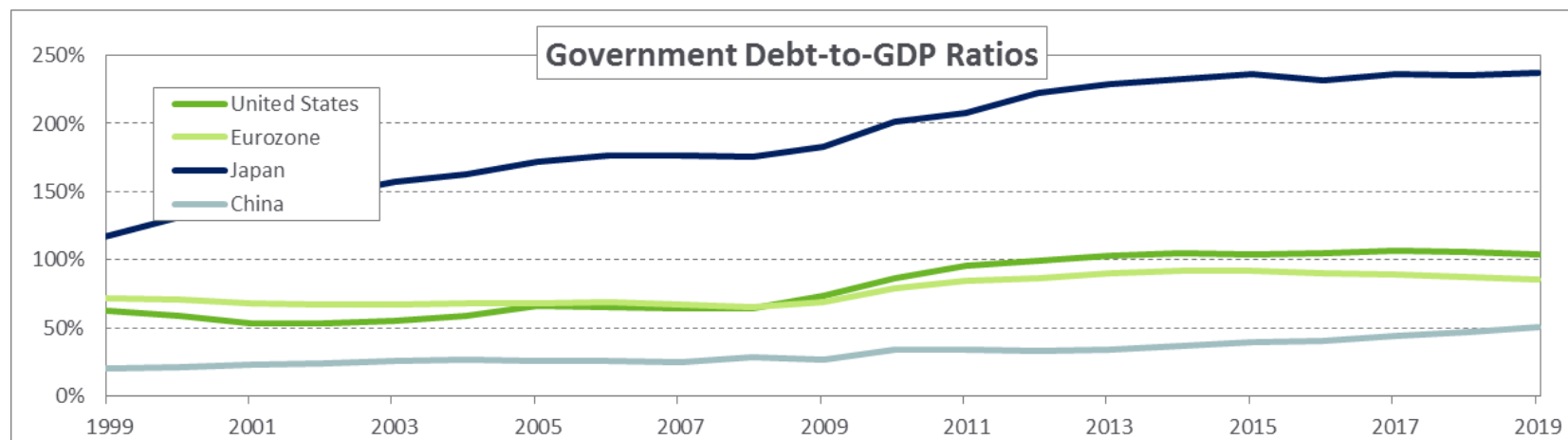
The dynamics of muted inflation pressures and below-average trend growth rates motivate a combined monetary and political response to address deflationary pressures and society's desire for higher economic growth rates

We believe central banks across the globe will continue to expand balance sheet assets to sustain an environment of excess liquidity

Low to negative interest rates and a fragile economic environment force central banks to continue to grow balance sheets and liquify the global financial system

Weak economic growth trends in the developed world underpin political tensions, which we believe will motivate significant fiscal debt expansion

Japan was at the forefront of this theme, raising debt-to-GDP levels to nearly 250% to confront a demographically-driven growth and inflation crisis and highlights a path for the US and Europe to address their unique long-term growth and inflation concerns



Source: FactSet, IMF



DEFINING THE THEME CONTINUED

The absence of central bank intervention and fiscal stimulus would highlight the extraordinary economic weakness of the developed world

The intensity of negative factors vary across regions but can be traced to the influence of past stimulus, demographics, productivity, and structural economic and labor policies

The permanent intervention of fiscal stimulus is likely to continue as populist tensions and political dynamics in the developed world push the self-interest of the political class to significantly expand fiscal policy

As debt-to-GDP levels rise, the necessity of central bank intervention is reinforced as government bonds yields must remain below nominal economic growth rates to forestall a sovereign debt crisis – a profile investors witnessed in the Eurozone in 2010

Controlling market sentiment is of equal importance to the central bank inflation and employment mandates and is now a key policy pillar

In such an environment, the path of monetary policy does not normalize and central banks only adjust interest rates higher if meaningful inflationary pressures force them to act. The proactive tightening of monetary policy damages market sentiment and exposes the fragile nature of economies, as evidenced by the 2018 Federal Reserve tightening policy

We believe the Permanent Interventions theme could mute the normal fluctuations of a business cycle, but leaves no safety net in a downturn as central bank and fiscal interventions will be exhausted

A “new normal” has coalesced around a permanent regime of easy monetary policy, surplus market liquidity, and fiscal debt growth. Investors have yet to fully discount the favorable equity market conditions paired with significantly heightened macro tail-risks

INVESTMENT CONSIDERATIONS

The long-term investment outlook for the Permanent Interventions theme is dependent on an investor’s objectives and asset allocation bias

For those with large fixed income holdings, the theme can be viewed as a “war on savers” and for equity investors one could ask “do valuations matter?”

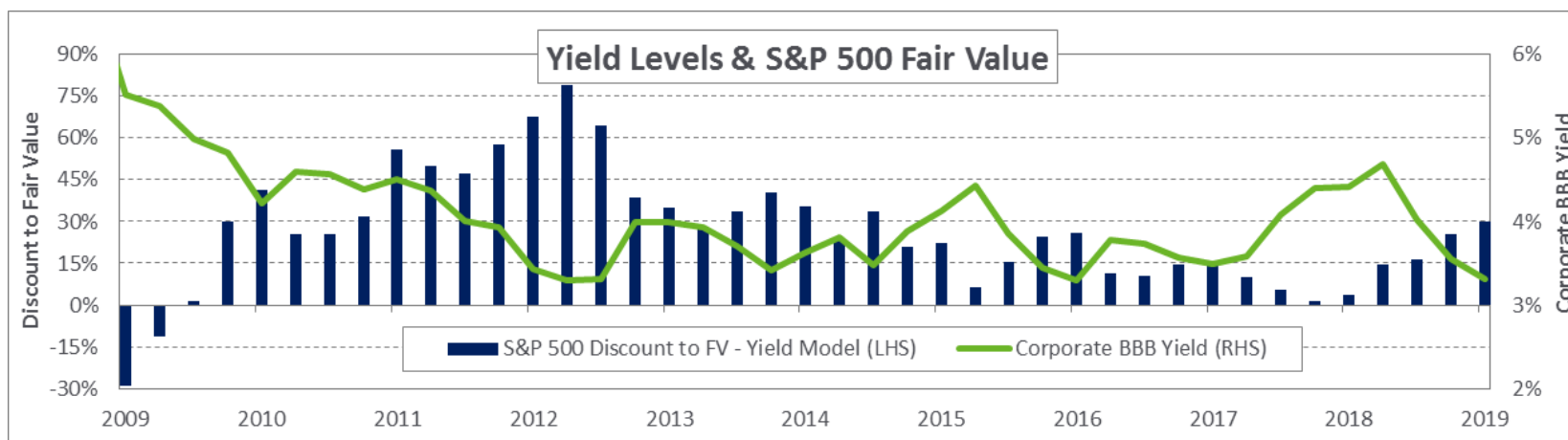
Permanent Interventions suggest low yields and higher P/E multiples

Low interest rates lead to higher values when discounting future cash flows and increase valuations for all equity and lower quality credit asset classes

Investors enjoy high profit margins relative to history as the surplus of central bank liquidity disproportionality benefits holders of capital relative to labor

Supportive policy environment would appear favorable to equities

But historical results (Japan’s Lost Decade(s), Eurozone, etc.) show economic weakness can overwhelm the system in the absence of extraordinary policy measures. In such cases, government bonds, despite low yields, can offer the most attractive risk-adjusted returns



Source: FactSet, S&P, Bloomberg



THEMATIC MACROECONOMIC RISKS

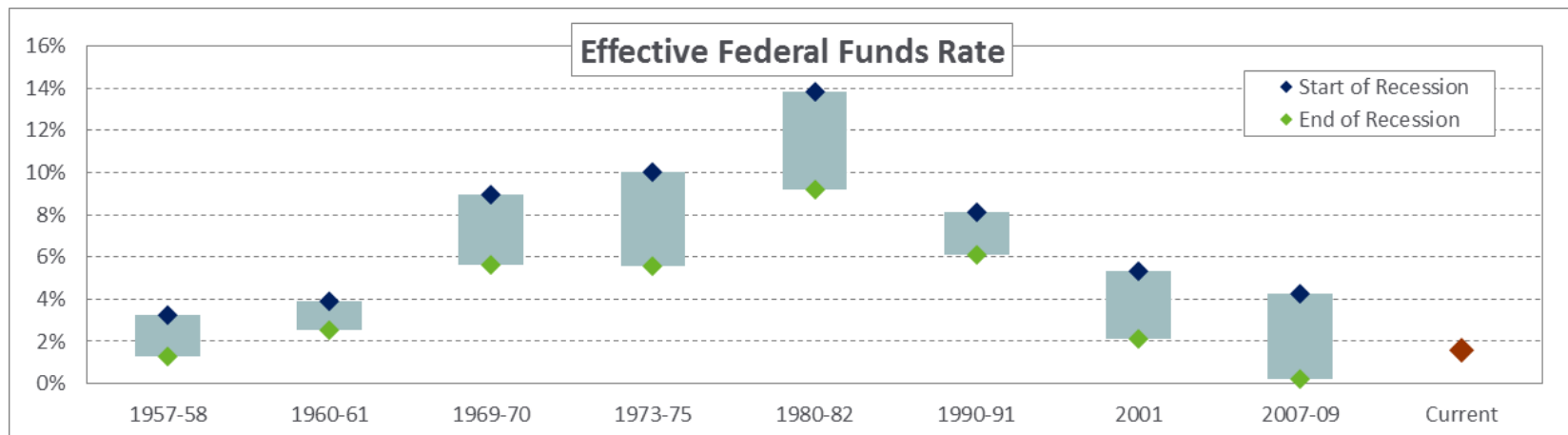
Historically, the conclusion of a market cycle was the result of tighter monetary policy to slow economic activity, but permanent intervention from central banks mutes the normal fluctuation of this market cycle

Macro tail-risks grow as moral hazard is continually absorbed into the financial system and economies nationalize losses that would have occurred in a normal economic cycle

However, there is a low margin of error if an economic downturn is on the horizon as current low interest rates can be reduced only so far

The current level of rates suggests the Fed has limited ability to use Fed Funds as a policy tool to reduce interest rates on par with past market cycles and the Fed is likely to rely heavily upon market interventions to manage sentiment and forestall economic slowdowns

Central bank intervention likely displaces traditional macroeconomic risks as a sovereign debt or bank liquidity crisis appears to be an outlier tail-risk relative to their past impact on developed market economies



Source: FactSet, Federal Reserve



CHINA TRANSITIONS

NEPC, LLC

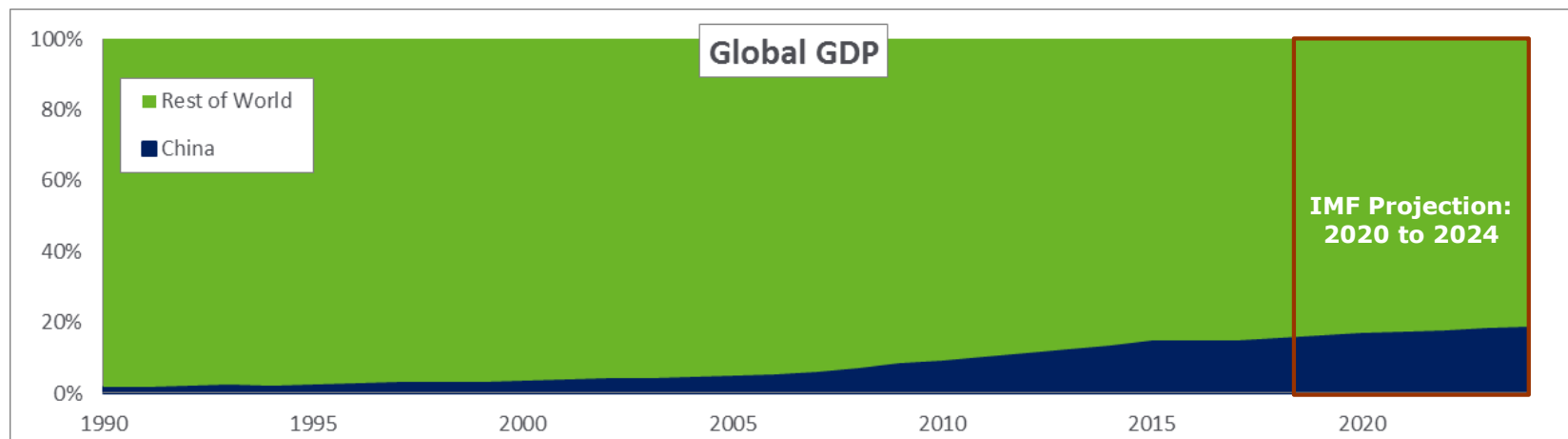
DEFINING THE THEME

China is undergoing a multi-faceted evolution as the economy transitions to a services and consumption-based model, while China's role on the global stage shifts to reflect its ascending geopolitical power

Domestically, China's socioeconomic profile is changing with rising income levels, increasing urbanization, but also challenging demographics. The country is leveraging this transition to continue its economic liberalization, but fixed investment and credit growth are required to support the "old" economy and maintain employment levels

In addition to economic liberalization, barriers to enter China's capital markets are being relaxed and the ability of foreign investors to access local markets has broadly expanded. Index providers are likely to continue to increase China's weight in global equity and fixed income indices, which is a better reflection of China's position in the world economy

China is the global growth engine and any disruption to these significant transitions will be transmitted globally due to the country's expanding role in the world economy



Source: IMF

INVESTMENT CONSIDERATIONS AND RISKS

China's fundamental transitions will likely continue for the next decade

Successful management of these transitions could accrue beneficially to global investors, especially those with relative overweights to Chinese assets

Access to local financial markets will continue to expand with ongoing inclusion efforts by global index providers in both equity and fixed income

As income levels rise and capital markets liberalize, China is on a long path to developed market status and we anticipate large strategic asset allocation targets to China will be required to maintain a neutral market beta exposure to the country

We believe the market implied base case is for China to continue on its current development path, but numerous disruptions could occur

Any disruption to this transition will have an outsized impact for the global economy and generate significant levels of currency and equity volatility across global markets

The risk of a US versus China economic conflict has notably increased

As experienced over the past few years, US foreign and economic policy has pivoted to view China as a threat and global competitor. China's growth transition can be severely impeded if the US-China relationship descends into the "Thucydides Trap" with economic links being resisted and additional economic costs imposed on both nations

At its extreme, this dynamic creates the potential for separate spheres of US and China influence with disconnected financial systems and distinct USD and yuan currency blocs. Such a long-term scenario is broadly negative – impacting access for both nations to the others capital markets and limiting economic growth opportunities

GLOBALIZATION BACKLASH

NEPC, LLC

DEFINING THE THEME

Stagnant wage growth and growing wealth inequality are fueling political discontent across the developed and emerging world

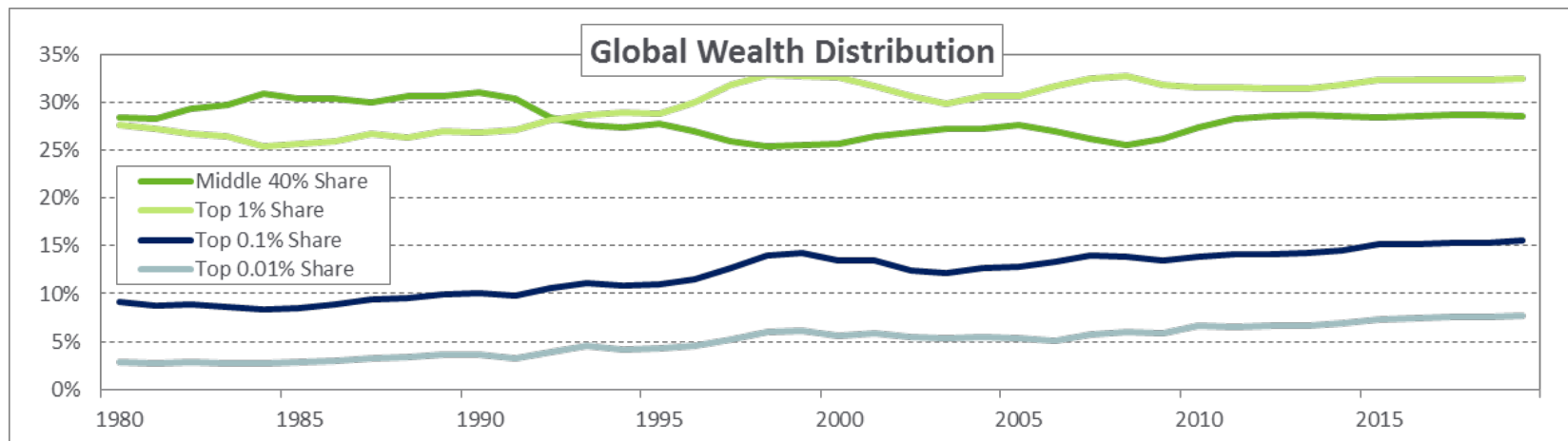
Populist movements across the world are shifting away from the political and economic orthodoxy of the last 50 years

Globalization is viewed with suspicion by a growing percentage of voters, shifting multiple countries to more nationalist policies

Fatigue over globalization is changing political platforms and increasing trade tensions. A reevaluation of established multilateral relationships likely increases geopolitical risks

The growth of populist movements, on the “left” and “right”, destabilizes the political order and materializes as Globalization Backlash

An anti-establishment political bias and a drift from political orthodoxy heighten tail-risks in global markets, specifically currency markets, as voting patterns become more volatile with a wider range of outcomes associated with foreign policy, trade policy, and tax rates



Source: World Inequality Lab

EXPECTED EVOLUTION

As Globalization Backlash evolves, we do not see wealth inequality gaps shrinking – highlighting the long-term nature of theme

The origin of voters' economic unease remains and the popularity of anti-establishment political parties poses a risk to the global economic order. This trend suggests populism will continue to be used as a political tool to exploit the anxiety and fears of voters – shifting economic and political policy away from orthodoxy

The success of unconventional candidates and the greater frequency of contested elections is likely to incite volatility across markets

The bias to shift away from traditional political norms leaves currency markets prone to bouts of volatility. Europe is one example of a potential globalization backlash flashpoint

The extremes of the political spectrum across the developed world are likely to have a greater role in government as moderation is stretched

In many cases the role of government may be muted as parliamentary coalitions have narrow paths of consensus, heightening tail-risks and political instability as reforms are unable to be enacted

The battering of the established world order brings investment risks and opportunities for investors in global equity and currency markets

While market sentiment is sensitive to disruptions due to Globalization Backlash, a lack of political consensus limits regulatory action and can be a positive for equity markets

We do not envision Globalization Backlash providing a dedicated investment opportunity, but the rise of populist movements heightens market volatility and likely provides more frequent dislocations in equity, credit, and currency markets

2020 ASSET CLASS ASSUMPTIONS

NEPC, LLC

ASSUMPTION DEVELOPMENT

Capital market assumptions are published for over 65 asset classes

Assumptions include 10-year and 30-year return forecasts, volatility expectations, and correlations

NEPC publishes both 10- and 30-year return forecasts

10-year forecasts are appropriate for strategic asset allocation analysis and are influenced by global forecasts/pricing of growth, inflation, and yields, while valuations and spreads converge to NEPC-defined terminal values

30-year forecasts are appropriate for actuarial inputs and long-term planning

Based on data as of November 30

Assumptions are developed by the Asset Allocation Committee and approved by the Partners Research Committee (PRC)

Assumptions are developed with proprietary valuation models and rely on a core building block methodology

Asset Allocation Committee	
September	<p>Asset Allocation Committee Assumptions Kickoff</p> <p>Finalize List of New Asset Class Assumptions</p>
October	<p>Review Draft of Asset Class Return Assumptions</p> <p>Discuss Outlook with NEPC Research Beta Groups</p>
November	<p>Finalize Volatility and Correlation Assumptions</p> <p>Final Update of Asset Class Models (As of 11/30)</p>
December	<p>Review Model Output and Create Return Assumptions</p> <p>Present Draft to the PRC</p> <p>Publish Assumptions on December 16th</p>



BUILDING BLOCKS METHODOLOGY

Forward-looking asset class models incorporate current and forecasted market and economic data to inform expected returns

Quantitative inputs combined with a conversion to long-term terminal values drive the 10-year outlook

Asset components are aggregated to capture core drivers of return across asset classes – forming the foundation of our building blocks framework

Building block components will differ for equity, fixed income, and real assets



INFLATION OVERVIEW

Inflation is an integral component of our asset allocation assumptions

Represents an essential building block for developing asset class returns

Inflation building blocks are model-driven and informed by multiple sources for both the US and global asset classes

Includes forecasts from international organizations (e.g. IMF), local consumer and producer price indices, break-even inflation expectations, and global interest rate curves

NEPC’s US inflation expectation has declined relative to last year

This decline reflects market data including US CPI and IMF forecasts

Market-based inflation expectations reflect little to no inflation pressure

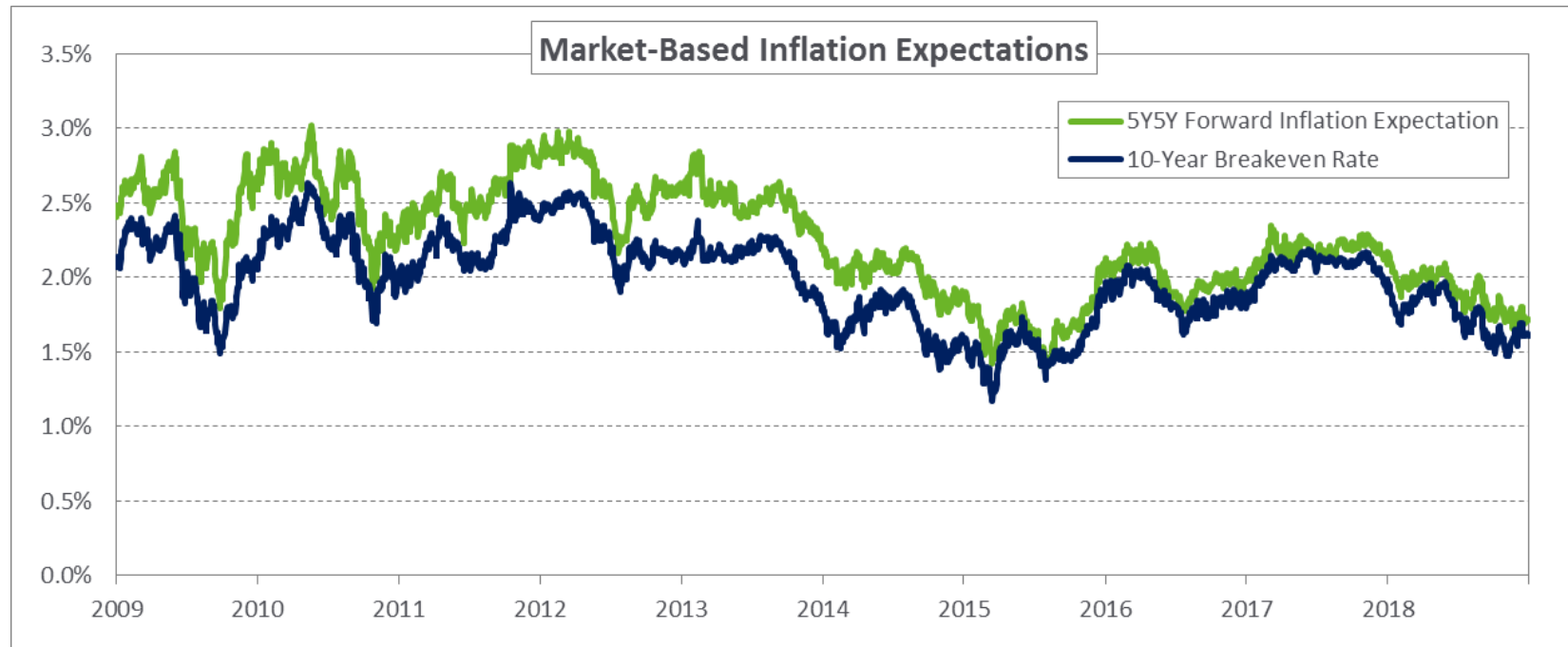
Inflation break-evens (difference between Treasury and TIPS yields) suggest inflation will be near current levels for the next twenty years

NEPC return assumptions incorporate higher inflation expectations than break-evens, but are in line with IMF forecasts and well below long-term averages

Region	10-Year Inflation Assumption	30-Year Inflation Assumption
United States	2.3%	2.5%



US INFLATION



Source: FactSet, NEPC

US inflation has slowly trended higher, but has yet to accelerate despite resilient economic growth and a tight labor market

Underlying inflation has risen with modest wage increases amidst strong employment

Market-based inflation expectations have declined considerably

Suppressed energy prices have minimized overall inflation price pressures

Energy is historically the most volatile component of CPI and a sustained decline in prices can cause inflation to remain muted

GLOBAL INFLATION

In most developed economies, core inflation is below central bank targets

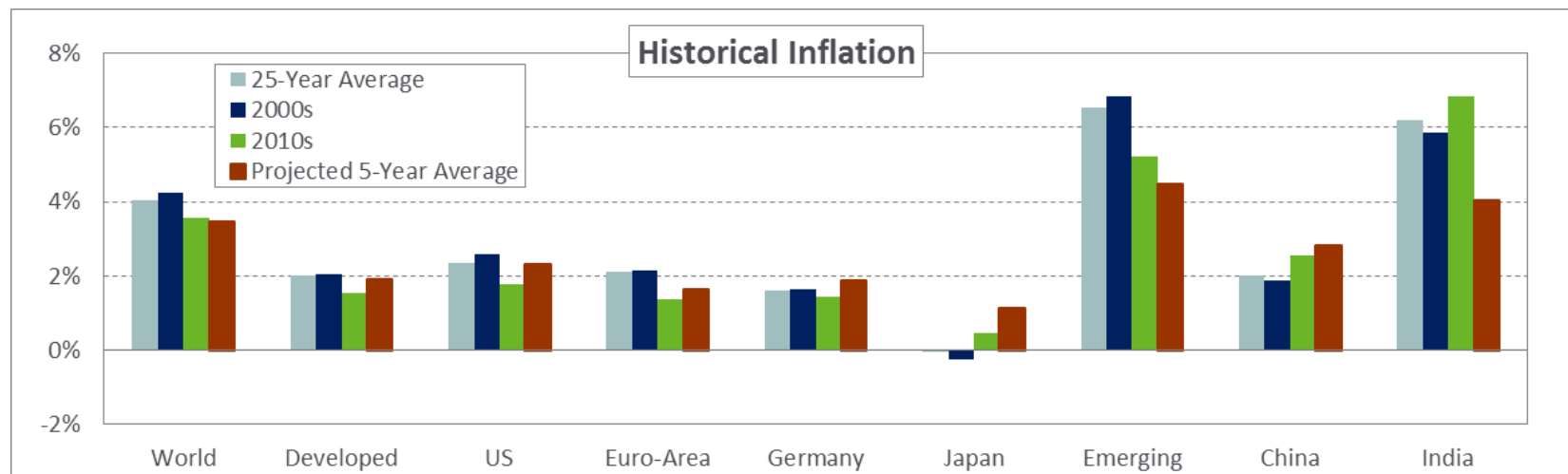
Globalization, deflationary technology, aging demographics and a decade of deleveraging are all deflationary headwinds

This trend will likely continue as global central banks rely on exhausted monetary policy programs following years of stimulus

A shift toward fiscal over monetary policy may be a source for potential inflation, but would require significant coordination and agreement across political spectrums

This may be an especially difficult prospect in the European Union given stark differences in opinion among member countries

Emerging market inflation remains well above the developed world, but is significantly lower than long-term averages



Source: IMF, FactSet, NEPC

US CASH EXPECTATIONS

Cash is a foundation for all asset classes

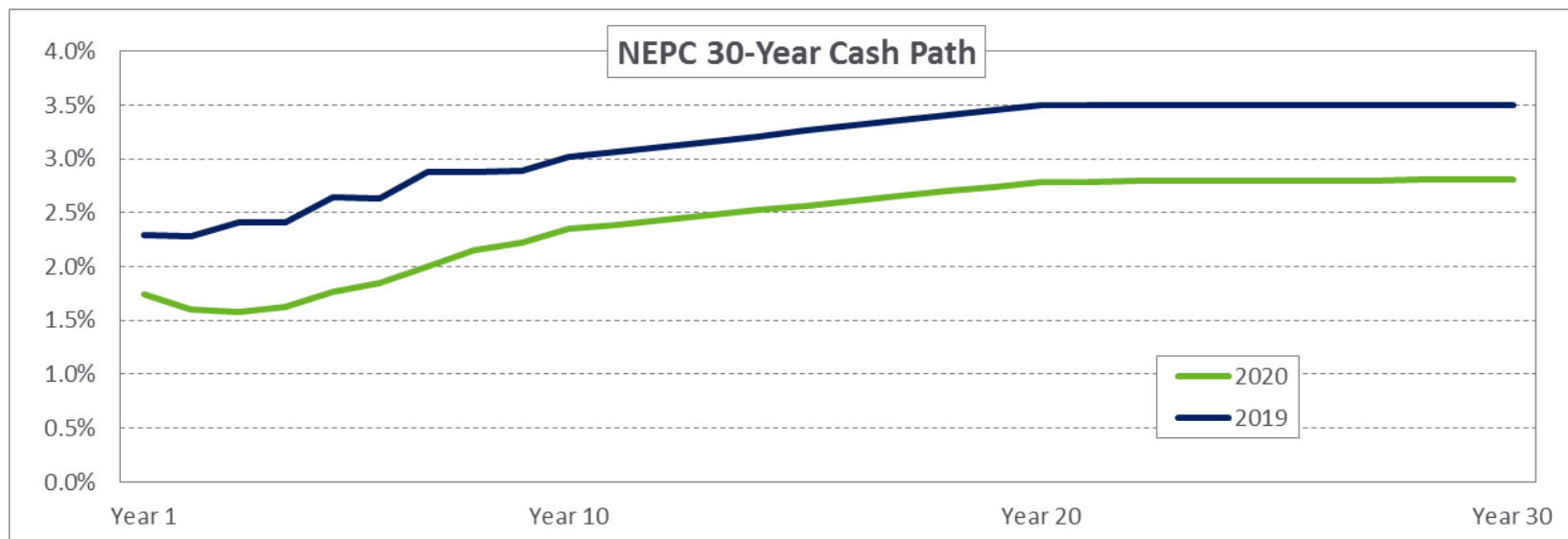
The assumption flows through as a direct building block component and as a relative value adjustment (cash + risk premia) in long-term return projections

Long-term cash assumption is a result of forecasted inflation plus a real interest rate path

US nominal rates are at a historically low point for NEPC's forecasts

This level reflects recent rate cuts by the Federal Reserve and muted inflation pressures

Market expectations for a relatively flat curve and negligible inflation expectations create a low and flat expected path for cash



Source: Bloomberg, FactSet, NEPC



US INTEREST RATE EXPECTATIONS

Real yields moved materially lower relative to last year with Fed rate cuts

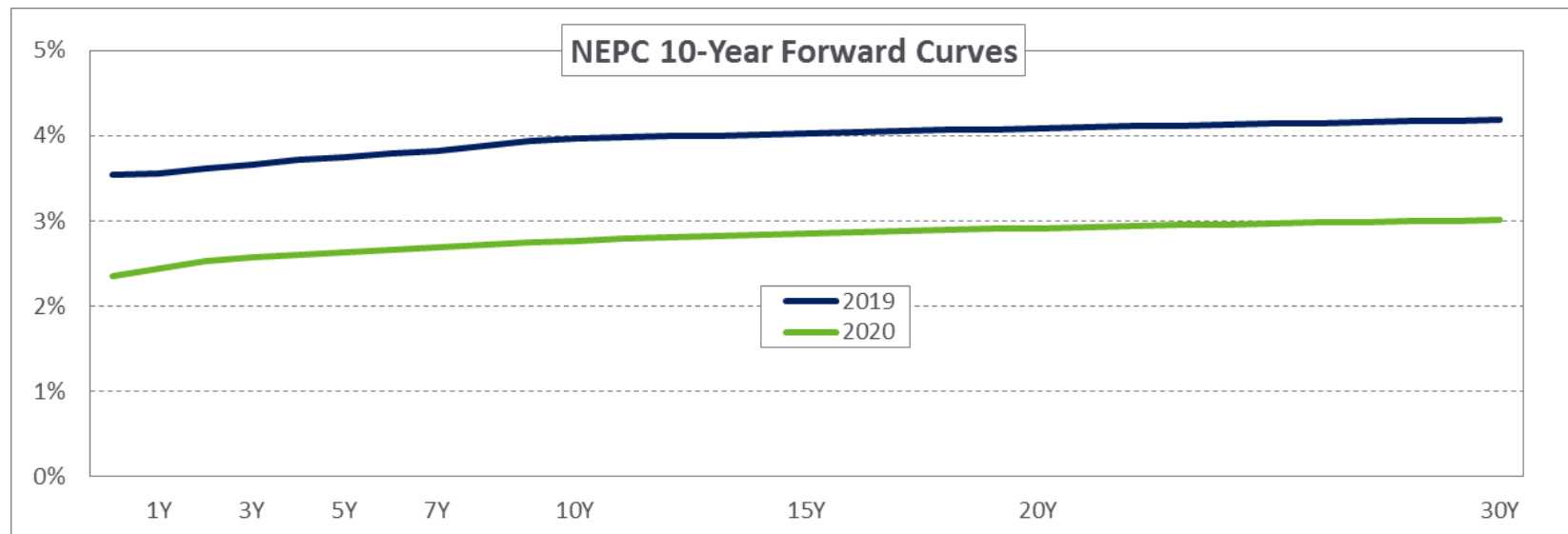
The real yield curve shifted down about 60 bps across the curve and continued to flatten over the past year

Slumping real yields reflect lower growth expectations

Long-term yields have been revised down considerably from last year

Low real rates depress the return outlook for risk assets over the long-term

Fed's shift to a prolonged easing environment and lower inflation expectations have suppressed yield forecasts



Source: FactSet, NEPC



GLOBAL INTEREST RATE EXPECTATIONS

Government bond yields remain low across much of the world

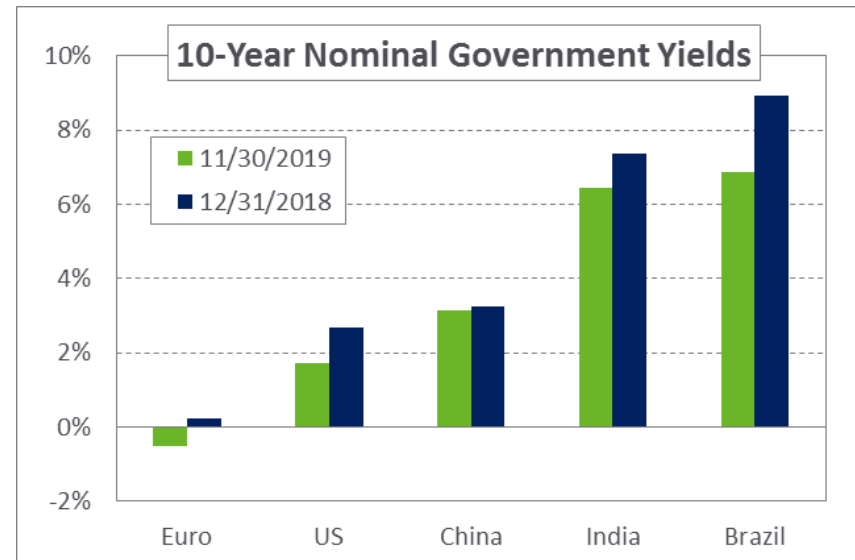
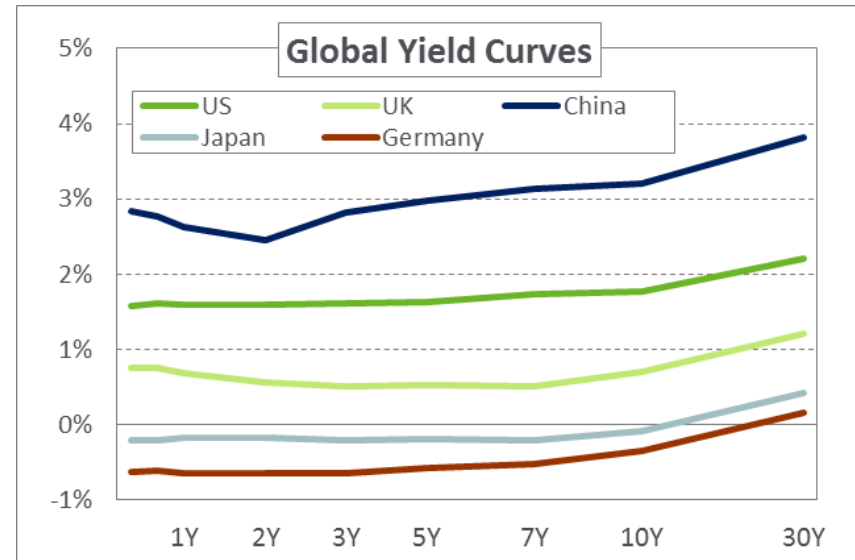
Several developed country yield curves outside the US are in negative territory with weak growth, continued monetary stimulus and muted inflation

The US curve remains low, but positive

The outlook for non-US developed fixed income is poor given negative real and nominal yields

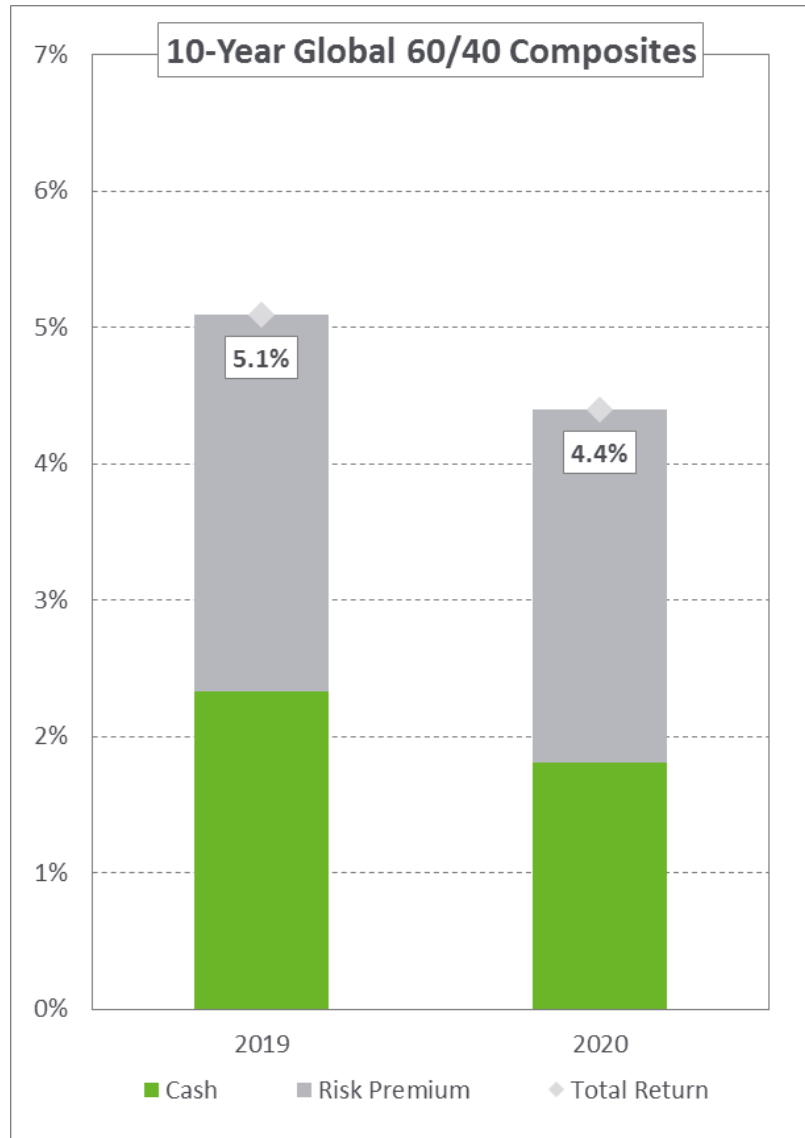
Emerging market local interest rates are attractive relative to negative real yields in much of the developed world

While real rates have declined, positive real rates provide a cushion for EM central banks to cut interest rates and ease monetary conditions as needed

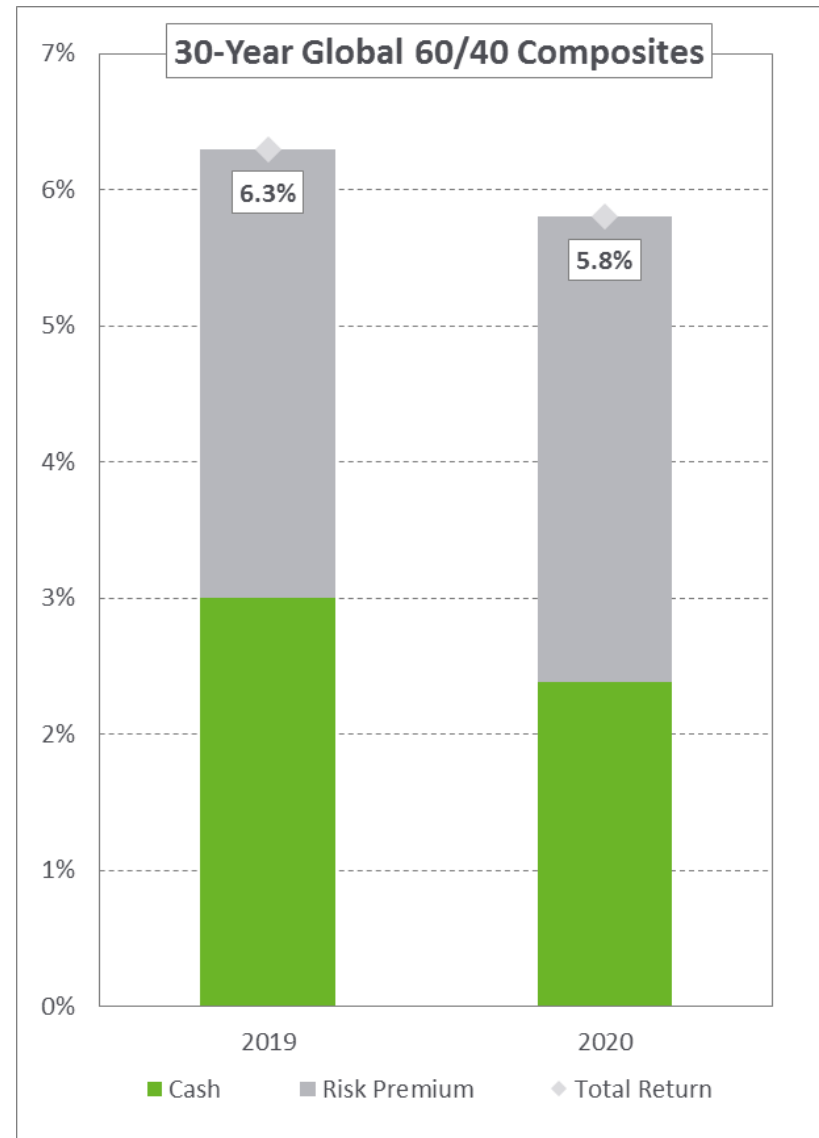


Source: (Top) FactSet, NEPC
Source: (Bottom) FactSet, NEPC

THE IMPACT OF LOWER CASH RATES



Source: NEPC



Source: NEPC



EQUITY ASSUMPTIONS

NEPC, LLC

EQUITY: ASSUMPTIONS

Equity Building Blocks	
Illiquidity Premium	The additional return expected for investments carrying liquidity risk
Valuation	An input representing P/E multiple contraction or expansion relative to long-term trend
Inflation	Represents market-specific inflation derived from index country revenue contribution and region-specific forecasted inflation
Real Earnings Growth	Reflects market-specific real growth for each equity asset class as a weighted-average derived from index country revenue contribution and forecasted GDP growth
Dividend Yield	Informed by current income distributed to shareholders with adjustments made to reflect market conditions and trends

Asset Class	2020 10-Year Return	2019 10-Year Return
US Large Cap	5.0%	6.2%
US Small/Mid-Cap	5.5%	6.4%
US Micro Cap	7.0%	7.1%
International (Unhedged)	6.0%	7.3%
International Small Cap	6.4%	7.6%
Emerging Markets	9.0%	9.2%
Emerging Markets Small Cap	9.2%	9.6%
China Equity	8.8%	7.9%
Absolute Return – Long/Short	4.8%	5.7%
<i>Global Equity</i>	6.2%	7.3%
<i>Private Equity</i>	9.4%	10.1%

Source: NEPC

2019 return number reflects NEPC's implied 10-year assumption



EQUITY: REAL EARNINGS GROWTH

Global growth rates are subdued reflecting a cyclical slowdown, less favorable demographics, and US-China trade tensions

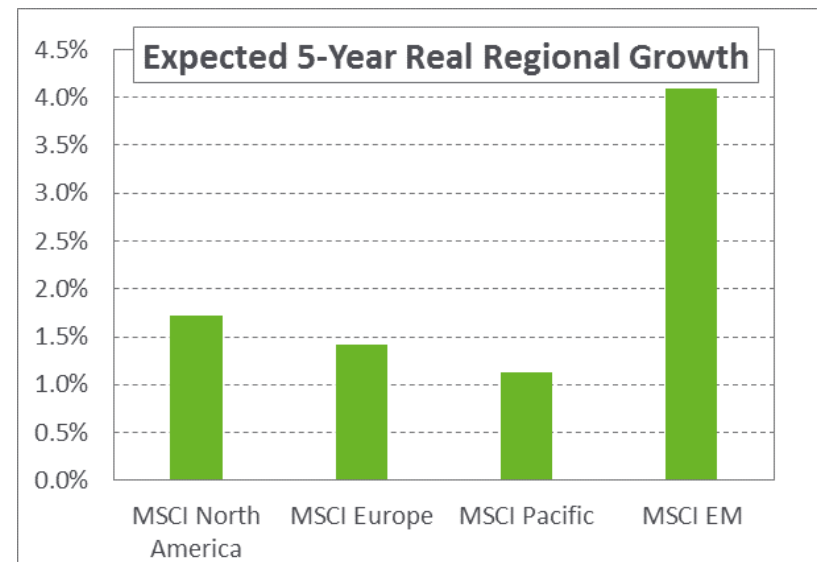
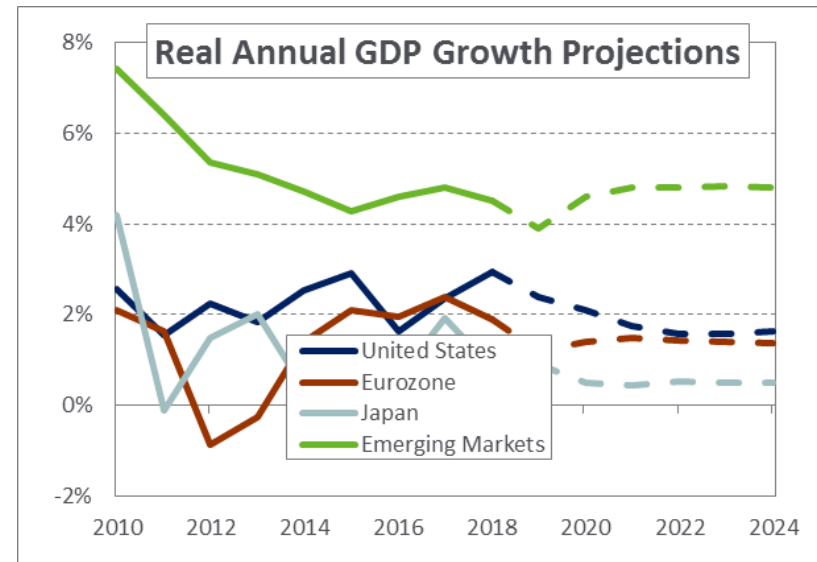
Regions more reliant on emerging markets for revenue generation are forecasted to enjoy higher expected real earnings growth

International and emerging markets benefit from generating a much larger portion of revenues from this region than the US

Small caps have higher terminal values for real earnings growth relative to large caps

This premium reflects a risk premium for small over large cap, which has existed historically

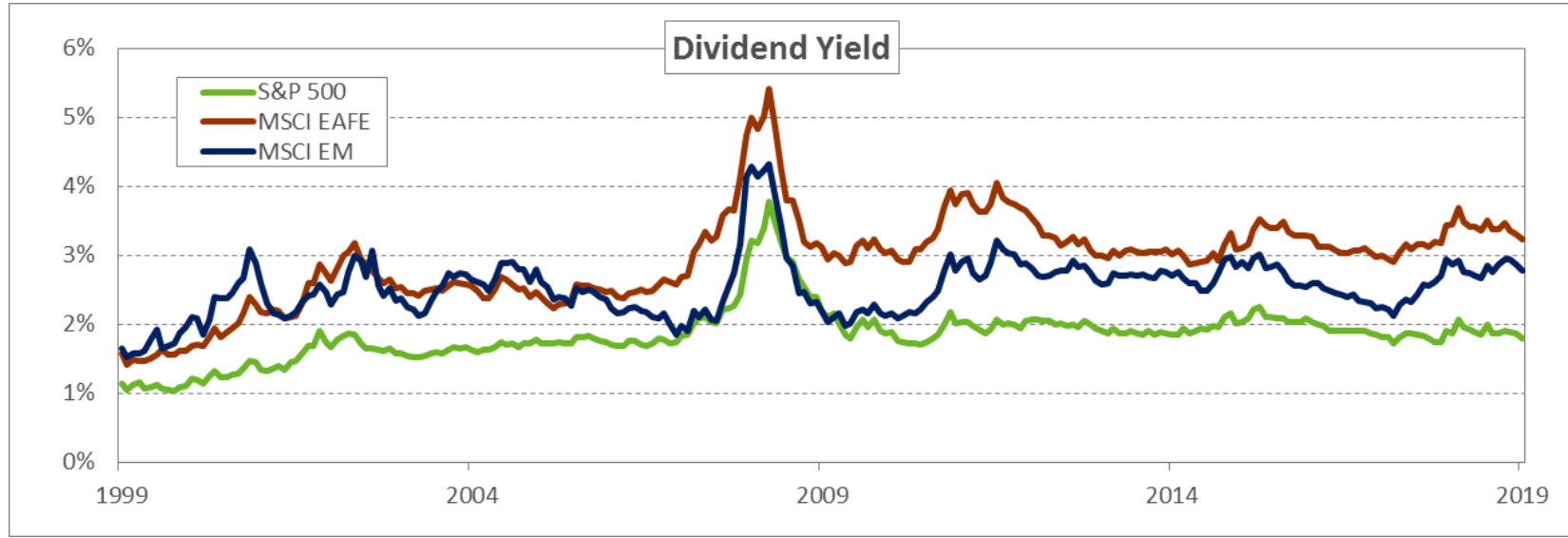
In US markets, this represents a 50 basis point premium over large cap



Source: (Top) FactSet, NEPC
Source: (Bottom) IMF, MSCI, FactSet, NEPC



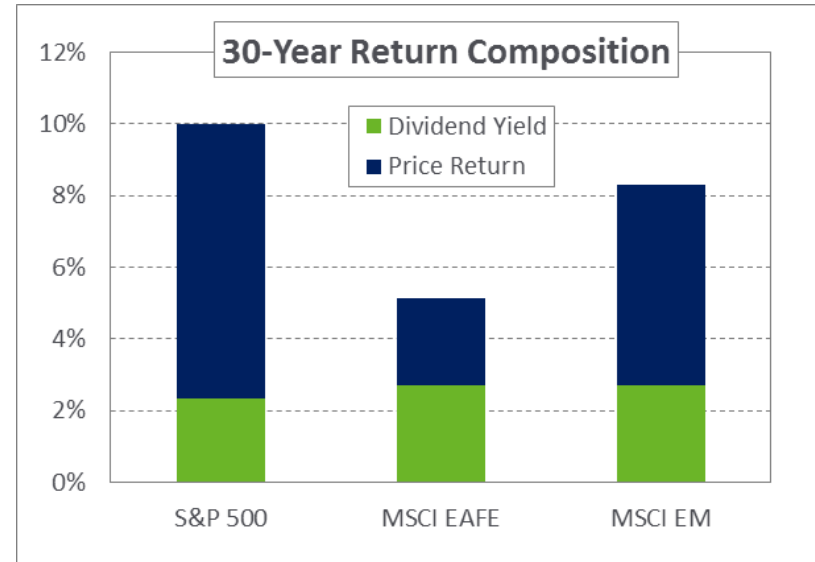
EQUITY: DIVIDEND YIELD



NEPC's long-term terminal value assumption for the S&P 500 dividend yield is 2.50%

EAFE and emerging markets offer structurally higher dividend yields relative to the US equity market

Long-term terminal value assumptions for the MSCI EAFE and MSCI Emerging Market dividend yields are 3.00% and 2.50%



Source: (Top) S&P, MSCI, FactSet, NEPC
Source: (Bottom) S&P, MSCI, FactSet, NEPC



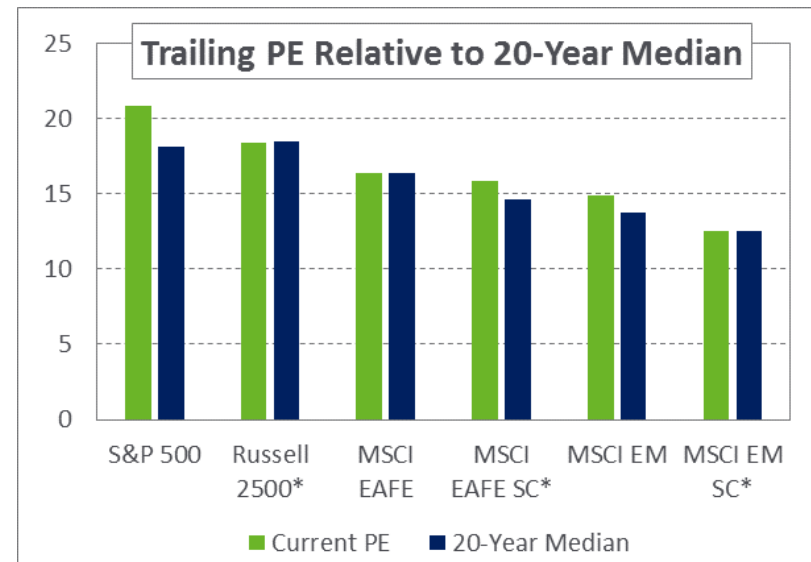
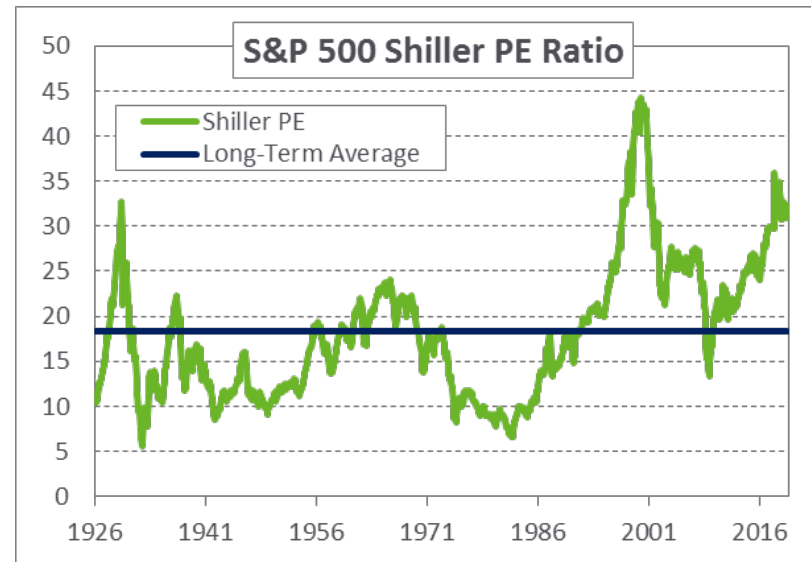
EQUITY: VALUATION

US equities have enjoyed multiple expansion as the extended US economic cycle supports earnings and profit margins

Terminal P/E values for the US are higher than historical averages to reflect expected low interest rates and higher discounting of future cashflows

Terminal values for EAFE are below current levels reflecting a less constructive market environment for investing in these regions

In emerging markets, equity and currency valuations remain near long-term averages, suggesting an attractive total return opportunity

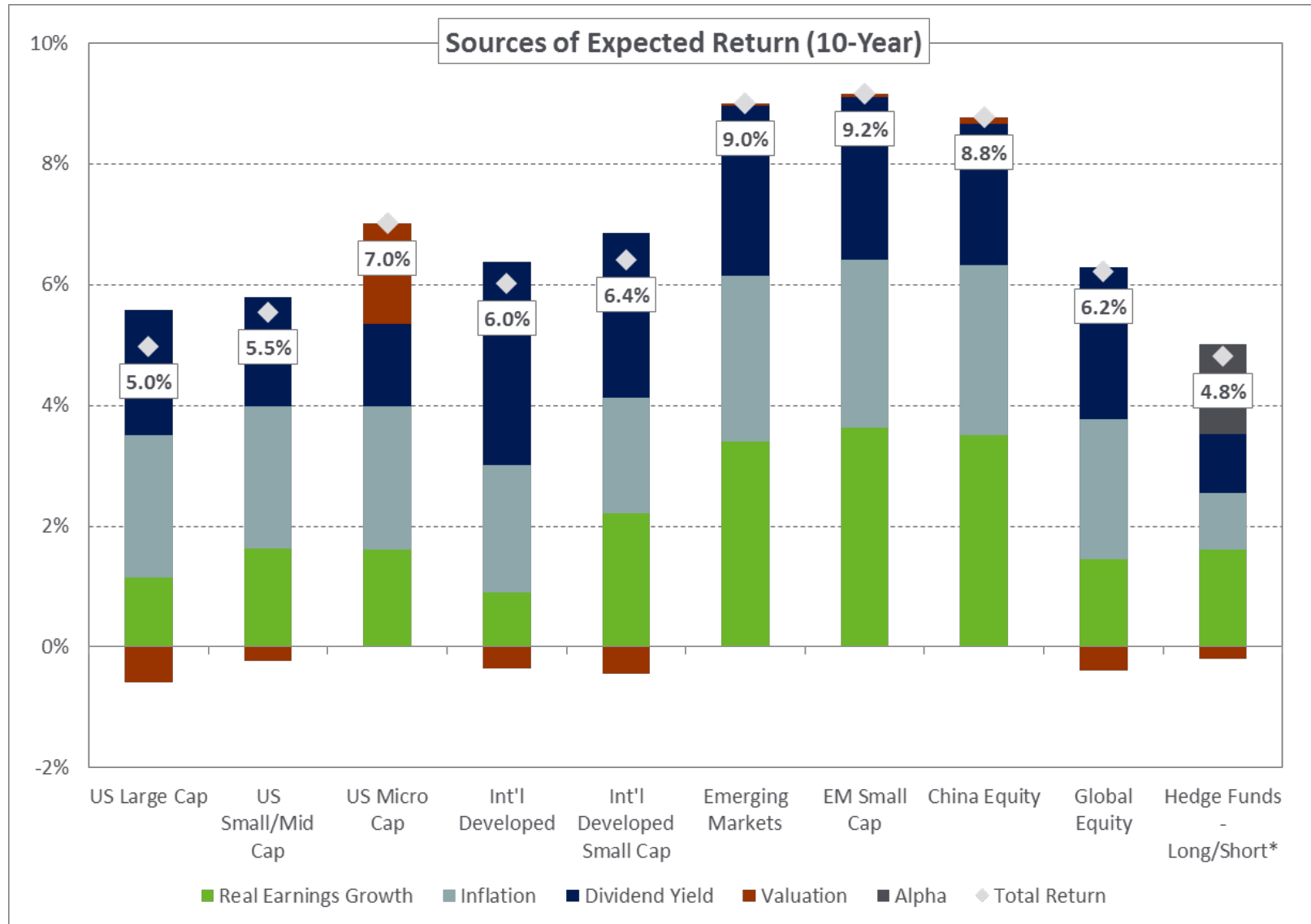


Source: (Top) S&P, Shiller, NEPC; long-term average beginning in 1926

Source: (Bottom) S&P, Russell, MSCI, FactSet, NEPC; *Small cap indices use index positive-adjusted earnings; MSCI EM Small Cap median calculated since 12/31/2008



EQUITY: BUILDING BLOCKS



Source: NEPC



FIXED INCOME ASSUMPTIONS

NEPC, LLC

FIXED INCOME: ASSUMPTIONS

Fixed Income Building Blocks	
Illiquidity Premium	The additional return expected for investments carrying liquidity risk
Government Rates Price Change	The valuation change resulting from a change in the current yield curve to forecasted rates
Credit Deterioration	The average loss for credit securities associated with an expected default cycle and recovery rates
Spread Price Change	The valuation change resulting from a change in credit spreads over the duration of the investment and highly sensitive to economic cycles
Credit Spread	Additional yield premium provided by securities with credit risk
Government Rates	The yield attributed to sovereign bonds that do not have credit risk associated with their valuation

Asset Class	2020 10-Year Return	2019 10-Year Return
TIPS	2.2%	3.2%
Treasuries	1.9%	2.5%
Investment-Grade Corporate Credit	3.4%	4.4%
MBS	2.5%	2.8%
High-Yield Bonds	4.1%	5.5%
Bank Loans	4.8%	5.5%
EMD (External)	4.1%	5.3%
EMD (Local Currency)	5.4%	6.8%
Non-US Bonds (Unhedged)	0.2%	0.9%
Absolute Return – Credit	4.8%	5.9%
<i>Core Bonds</i>	2.5%	3.2%
<i>Private Debt</i>	6.7%	7.6%

Source: NEPC

2019 return number reflects NEPC's implied 10-year assumption



FIXED INCOME: CREDIT SPREAD

In most areas of credit, spreads are at or below long-term median spread levels

Expected returns are lower – reflecting the anticipated lower spread yield and losses as spreads converge upward to long-term medians

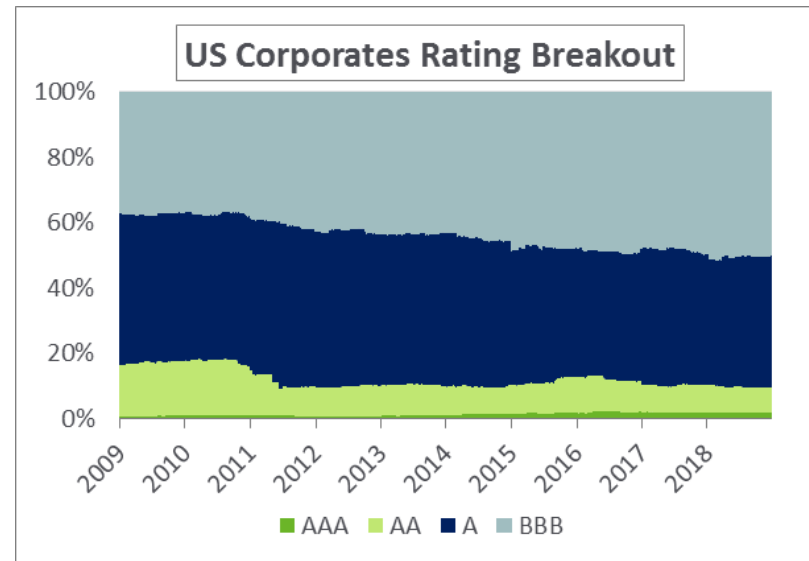
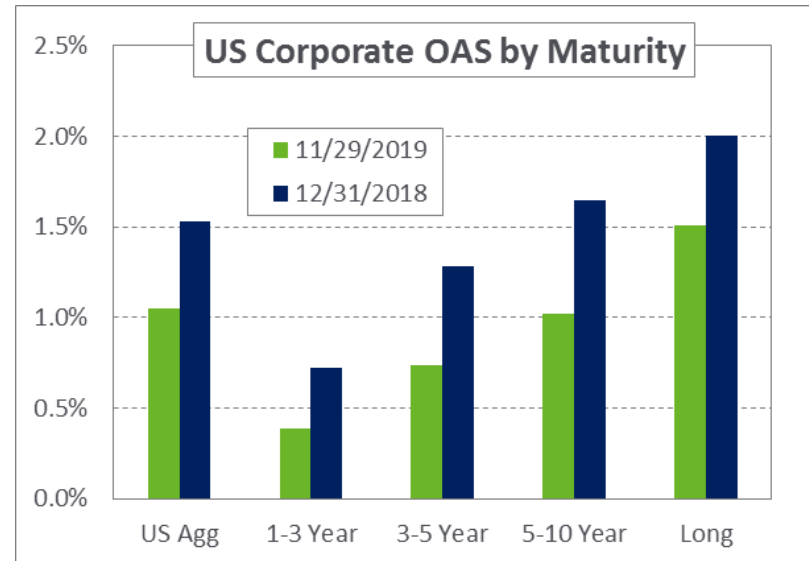
Spreads on CCC-rated bonds are above long-term medians given ongoing stress in the energy sector

As a result, the return assumption increased as higher yields are captured throughout the forecast time horizon

Credit assumptions reflect a higher heightened risk environment

There are a record number of BBB-rated corporates – suggesting a greater risk of fallen angel downgrades

Corporate debt issuance has expanded rapidly in recent years with the majority of new debt rated BBB



Source: (Top) Barclays, FactSet, NEPC
Source: (Bottom) Barclays, FactSet, NEPC



FIXED INCOME: RATES PRICE CHANGE

Government Rates Price Change: The change in the level of interest rates, shape of the curve, and roll down that impact the price of a bond

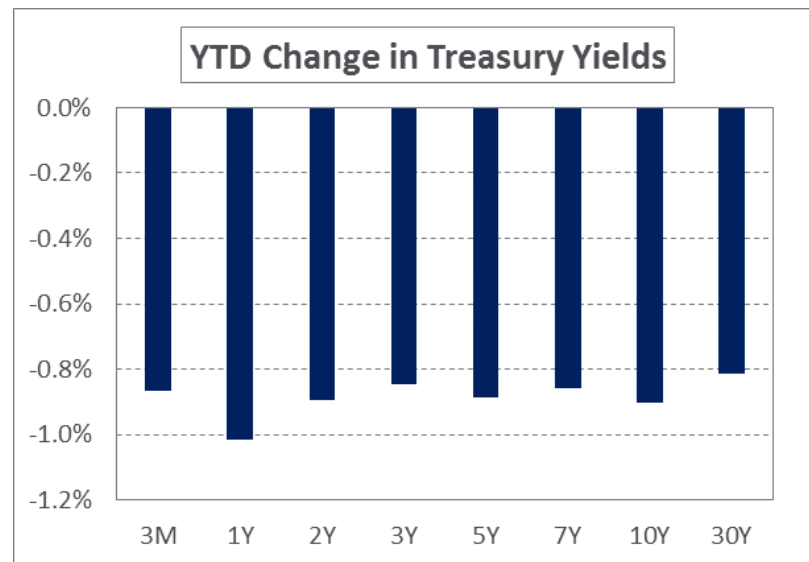
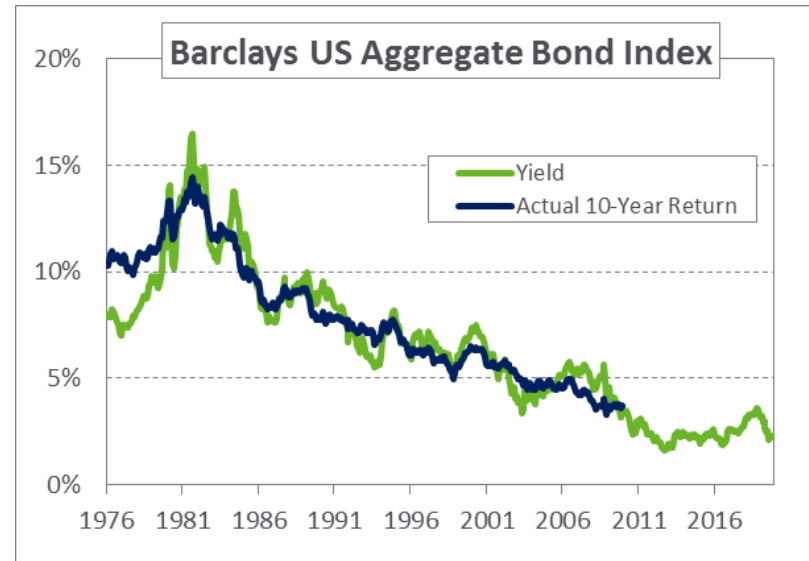
Roll down refers to the price change due to the aging of a bond along the yield curve

The rate price change is a significant component of total return and expectations of future rate increases can drag on future year returns

The path of interest rates for each market is tied to both central bank actions and inflation expectations

Roll down offers some relief to rising rates when yield curves are steep, but the flatness of the current curve suggests this benefit is muted

This dynamic often pushes investors to shorter duration bonds



Source: (Top) Barclays, FactSet, NEPC
Source: (Bottom) FactSet, NEPC



FIXED INCOME: SPREAD PRICE CHANGE

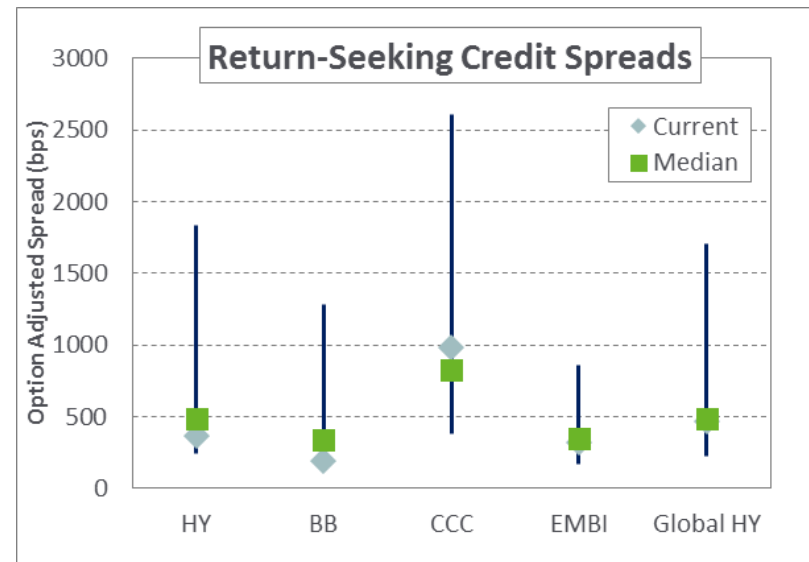
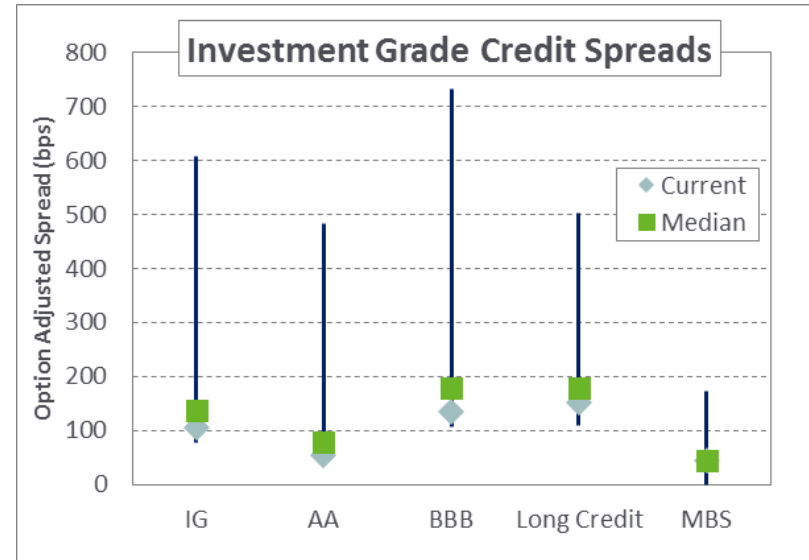
Credit spreads well below history imply a drag on expected returns as they converge toward long-term medians

Low spreads temper excitement about lower-quality credit, where investors are not provided adequate compensation for risk relative to safer alternatives

Default and recovery rates across the credit complex are modeled using historical averages

Modestly higher expected default rates were incorporated in lower-quality credit, particularly in the BBB space, to reflect the increase as a percentage of the investment grade universe

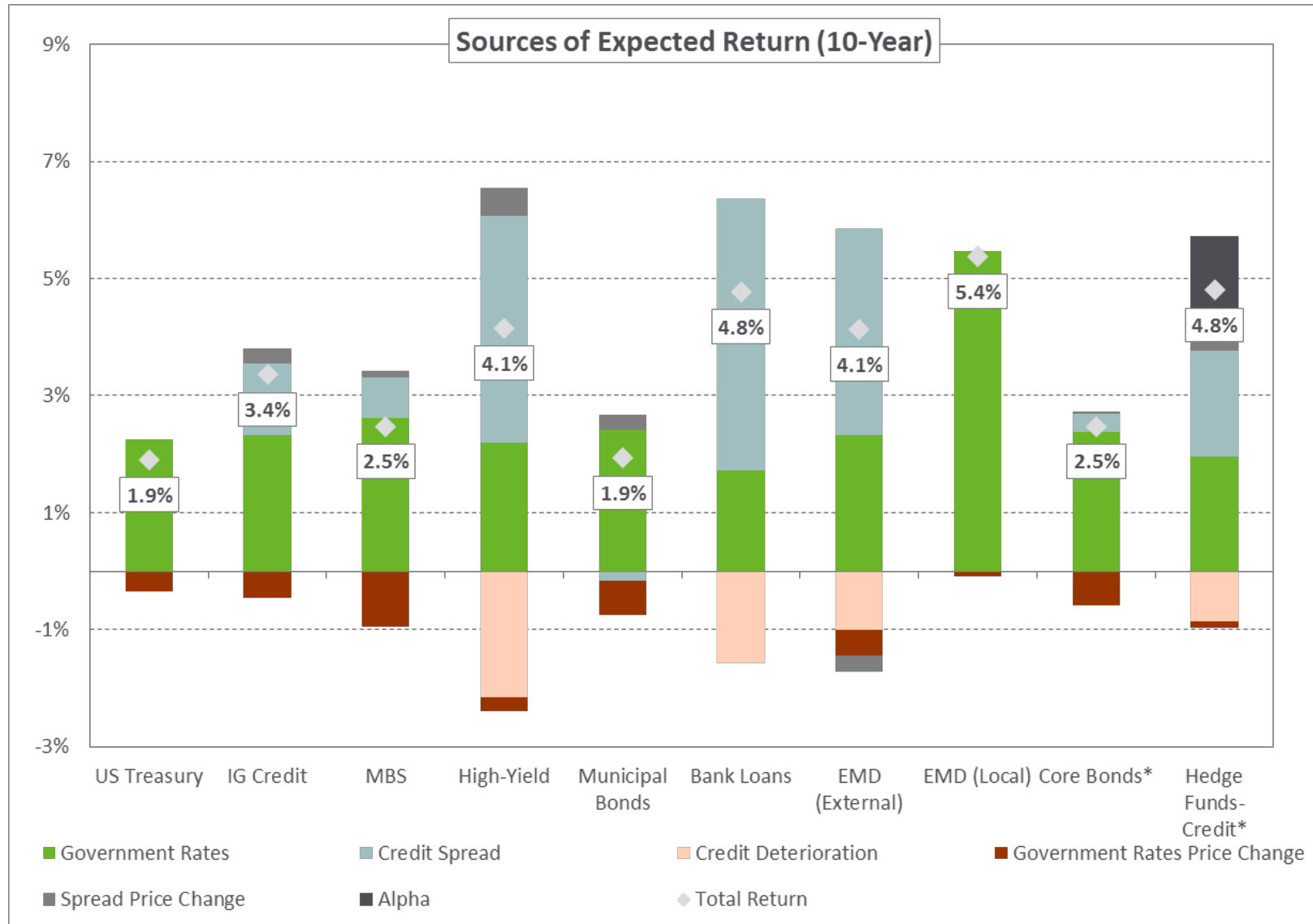
The 'Late-Cycle Dynamics' Key Market Theme may cause periods of stress in credit markets, which can cause spreads to unexpectedly blow out



Source: (Top) Barclays, FactSet, NEPC; as of 01/31/2000
 Source: (Bottom) Barclays, JPM, FactSet, NEPC; as of 01/31/2000



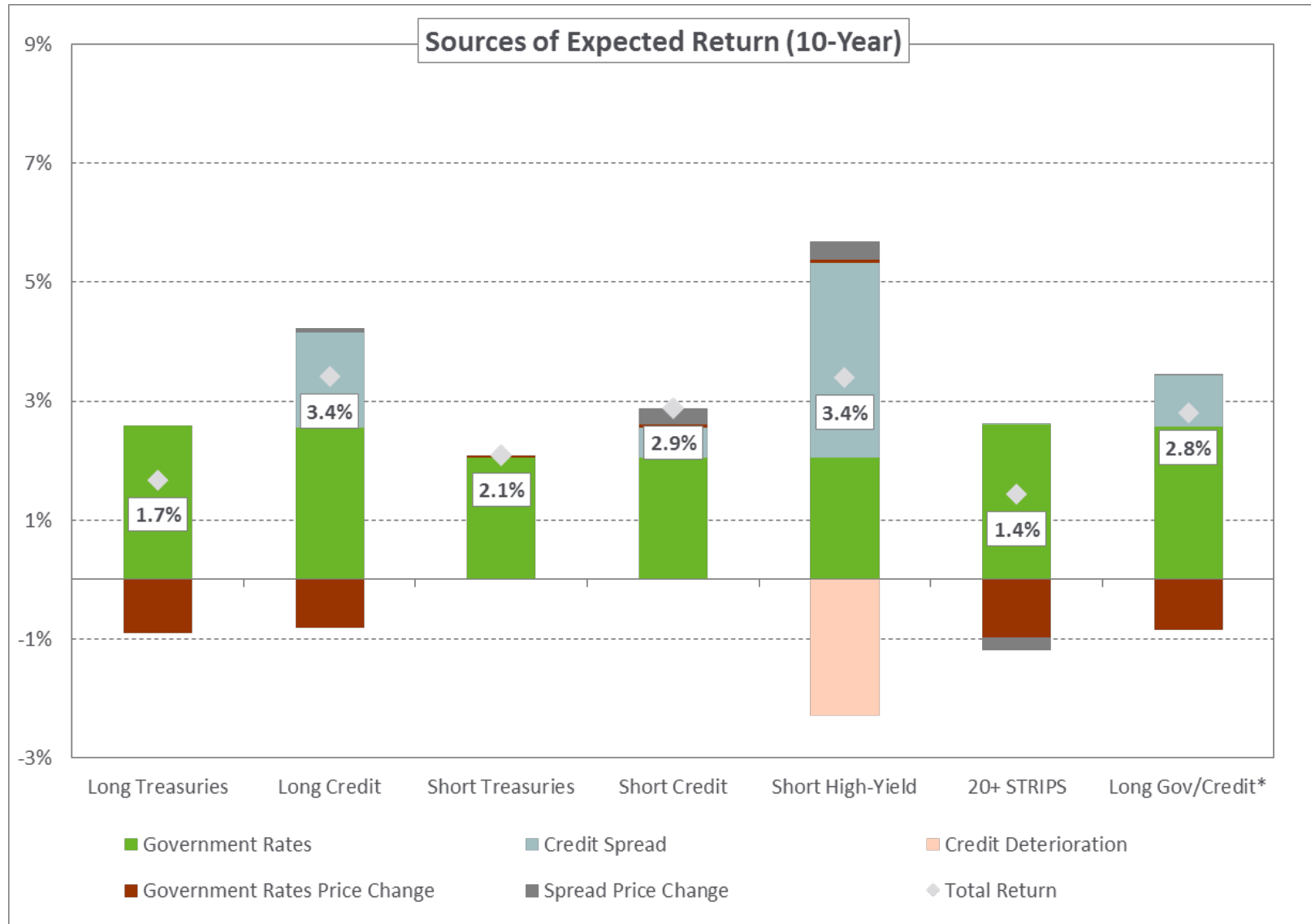
FIXED INCOME: BUILDING BLOCKS



Source: NEPC
*Calculated as a blend of other classes



FIXED INCOME: BUILDING BLOCKS



Source: NEPC
 *Calculated as a blend of other classes



REAL ASSETS ASSUMPTIONS

NEPC, LLC

REAL ASSETS: ASSUMPTIONS

Real Assets Building Blocks	
Illiquidity Premium	The additional return expected for investments carrying liquidity risk
Valuation	The expected change in price of the underlying asset reverting to a long-term real average or terminal value assumption
Inflation	Incorporates the inflation paths as defined by TIPS breakeven expectations and NEPC expected inflation assumptions
Growth	Reflects market-specific growth for each equity asset class as a weighted-average derived from index country revenue contribution and forecasted GDP growth
Real Income	Represents the inflation-adjusted income produced by the underlying tangible or physical asset

Asset Class	2020 10-Year Return	2019 10-Year Return
Commodities	4.0%	4.4%
Midstream Energy	7.4%	8.5%
REITs	5.4%	6.9%
Public Infrastructure	5.3%	-
Public Resource Equity	7.3%	-
Core Real Estate	5.2%	6.0%
Non-Core Real Estate	6.4%	7.0%
Private RE Debt	5.0%	5.8%
Private Real Assets: Energy/ Metals	9.1%	9.7%
Private Real Assets: Infra/Land	5.9%	6.4%

Source: NEPC
2019 return number reflects NEPC's implied 10-year assumption



REAL ASSETS: REAL INCOME

Equity-like real assets: Real income represents the inflation-adjusted dividend yield

Includes midstream energy, REITs, public infrastructure, natural resource and global infrastructure equities

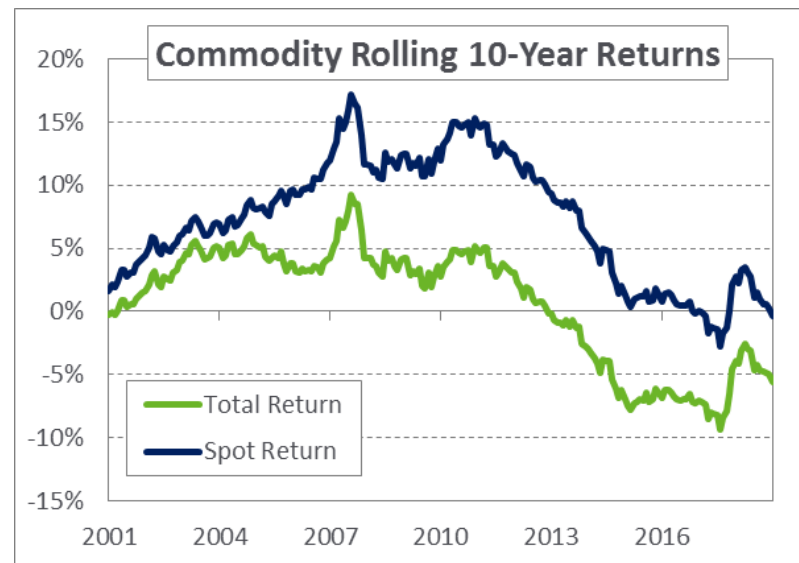
These publicly-traded real assets tend to have lucrative dividend yields relative to traditional global equity indices

Real Estate: Real income is a function of Net Operating Income

NOI growth exhibits a cyclical economic pattern and appears to have retreated off cyclical highs

Commodities: Real income includes the collateral return

A cash proxy is used to represent the collateral and as such, it represents the return on cash over the investment horizon



Real Assets Yields	12/31/18	11/30/19
Midstream Energy	6.8%	6.7%
Core Real Estate	4.6%	4.4%
US REITs	4.4%	3.5%
Global REITs	4.8%	4.1%
Global Infra Equities	4.4%	4.1%
Natural Resource Equities	4.1%	4.1%
US 10-Yr Breakeven Inflation	1.7%	1.6%
Commodity Index Roll Yield	-6.1%	0.5%

Source: (Top) Bloomberg, FactSet, NEPC

Source: (Bottom) NCREIF, Alerian, NAREIT, S&P, FactSet, NEPC

*Commodity Index Roll Yield represents a proprietary calculation methodology



REAL ASSETS: VALUATION

Commodity valuations represent spot price relative to the long-term real average of spot prices

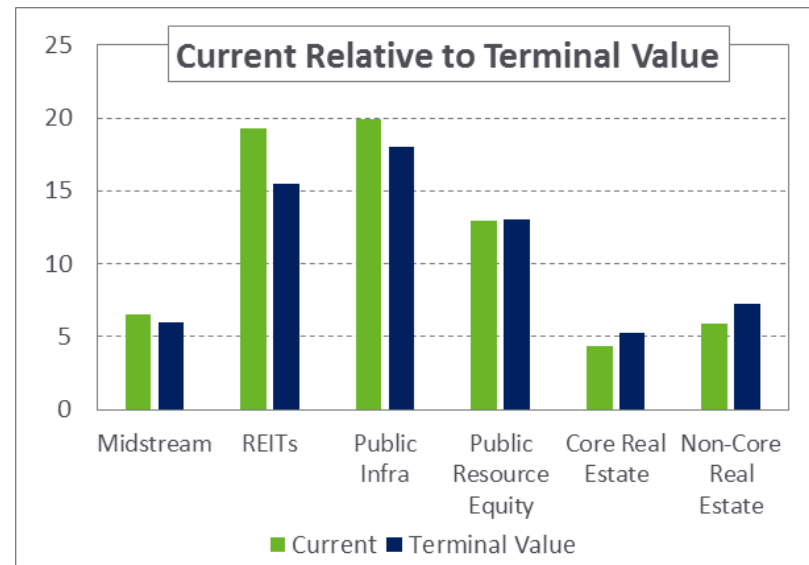
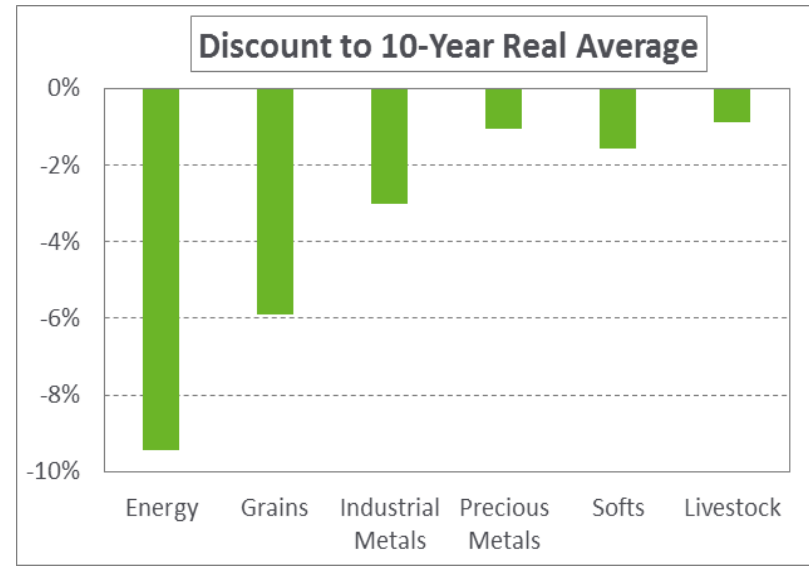
Commodity prices continue to trade below their long-term real averages, particularly in the energy and grains sectors

The potential for higher spot prices is additive to future expected returns

Valuation adjustments for other real assets reflect a terminal value with the relevant valuation metrics

For example, Price over Cashflow from Operations is used for midstream energy to reflect the cash flow intense nature of the business, whereas cap rates are used for real estate

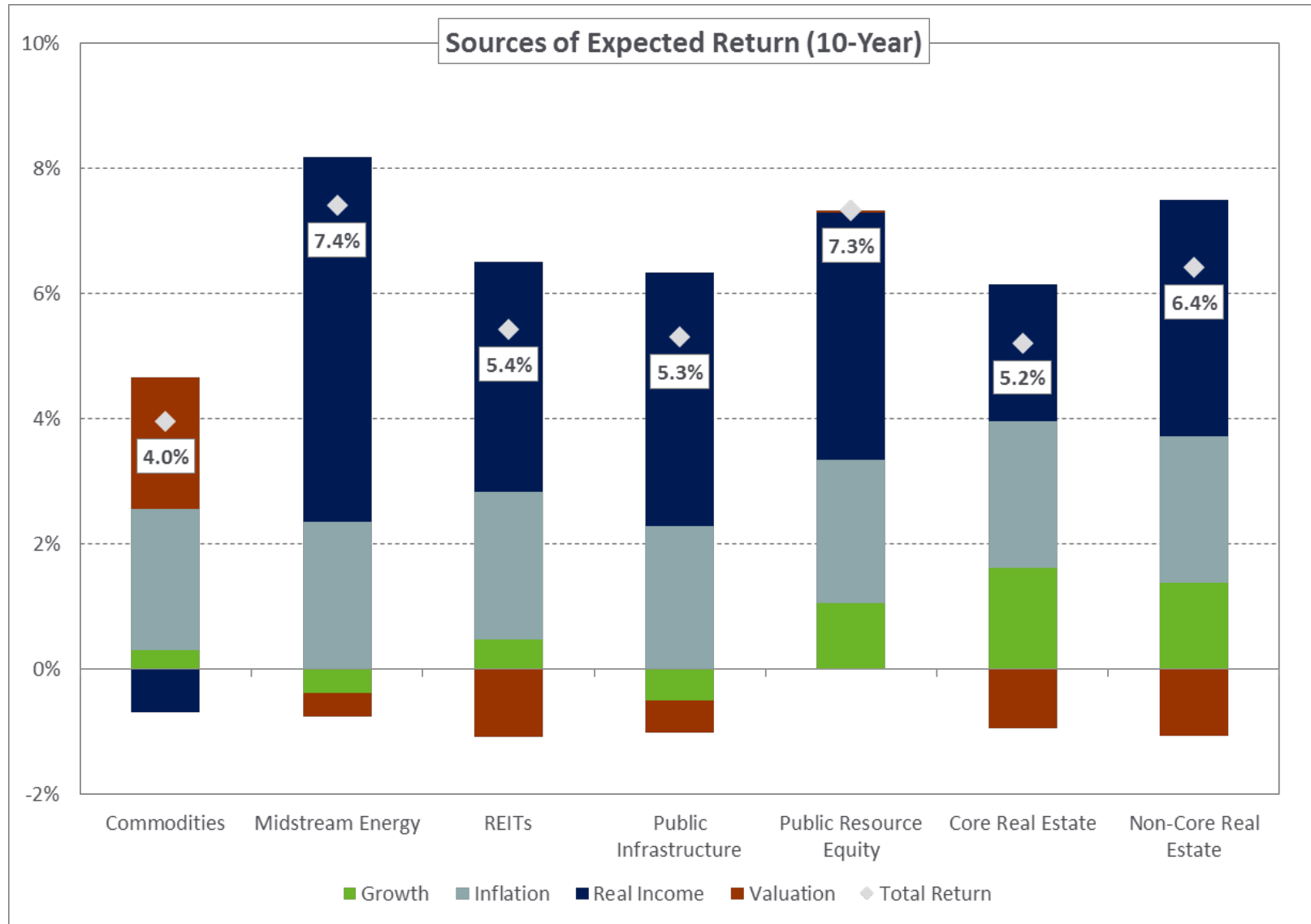
Elevated valuations in REITs are expected to detract from future returns as valuations trend downward toward long-term averages



Source: (Top) FactSet, NEPC
Source: (Bottom) Alerian, FTSE, S&P, FactSet, NEPC



REAL ASSETS: BUILDING BLOCKS



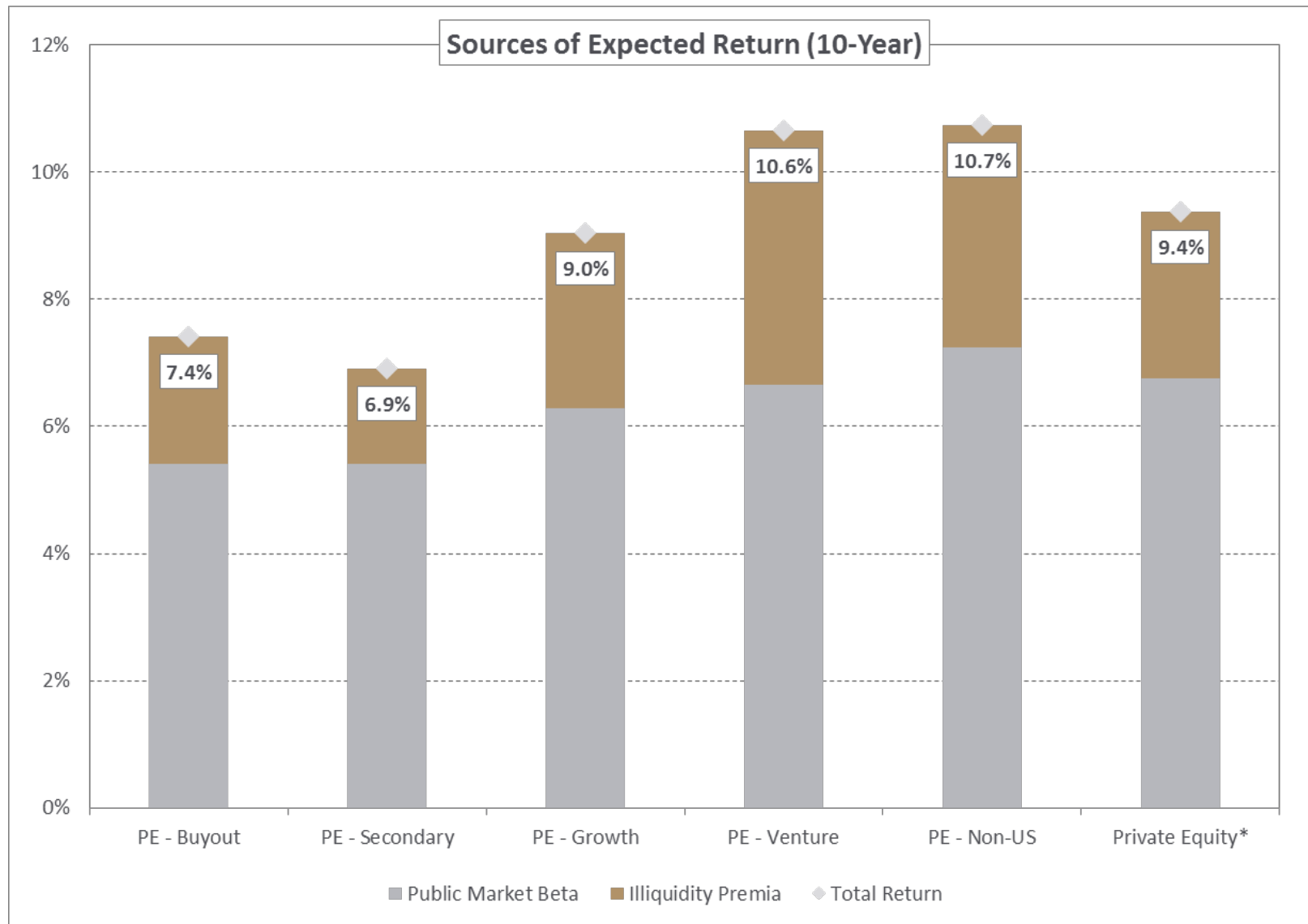
Source: NEPC



ALTERNATIVES

NEPC, LLC

PRIVATE EQUITY BUILDING BLOCKS

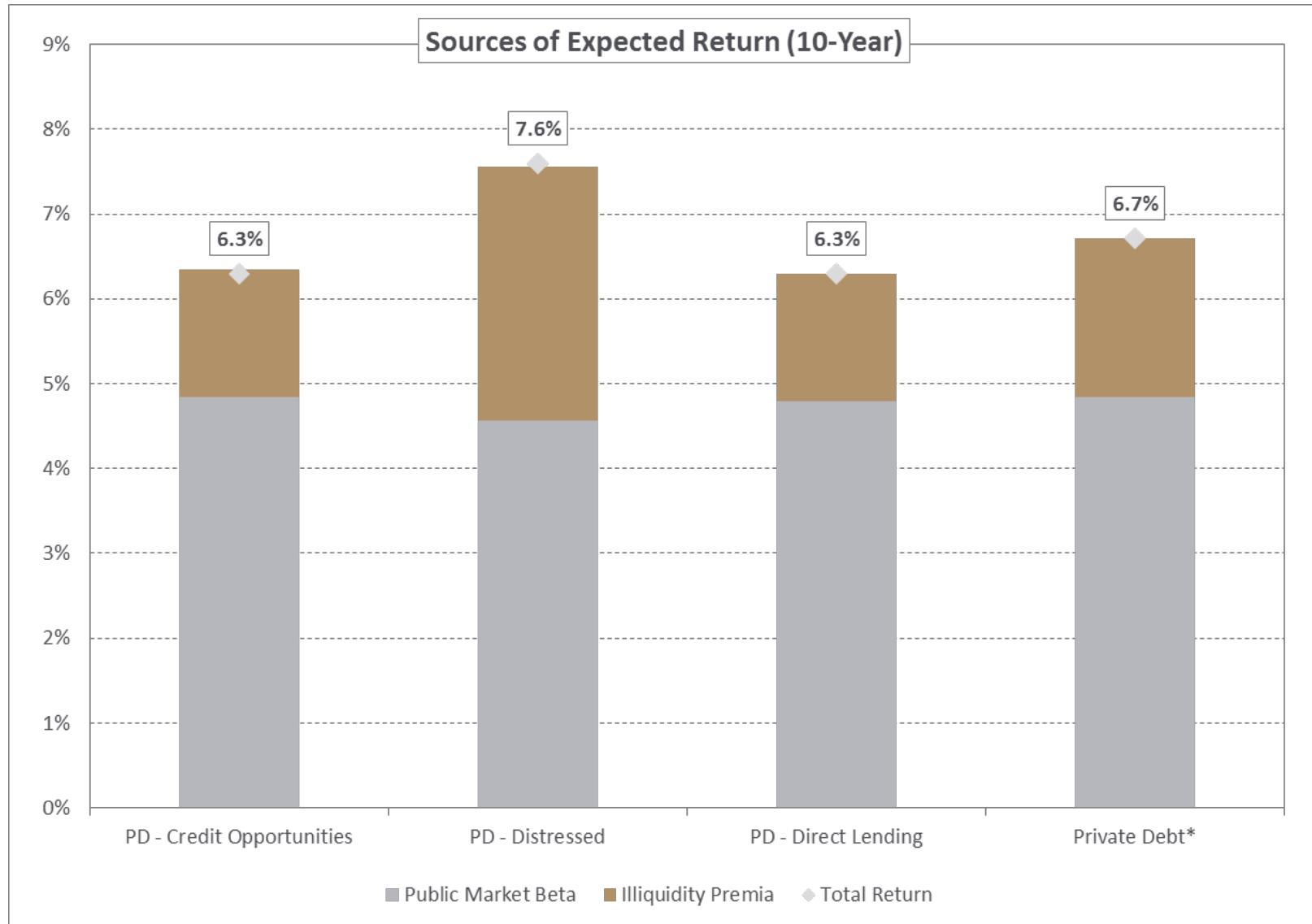


Source: NEPC

*Private Equity is a derived composite of 34% US Buyout, 34% US Growth, 8.5% US Secondary, 8.5% US Venture, 15% Non-US PE



PRIVATE DEBT BUILDING BLOCKS

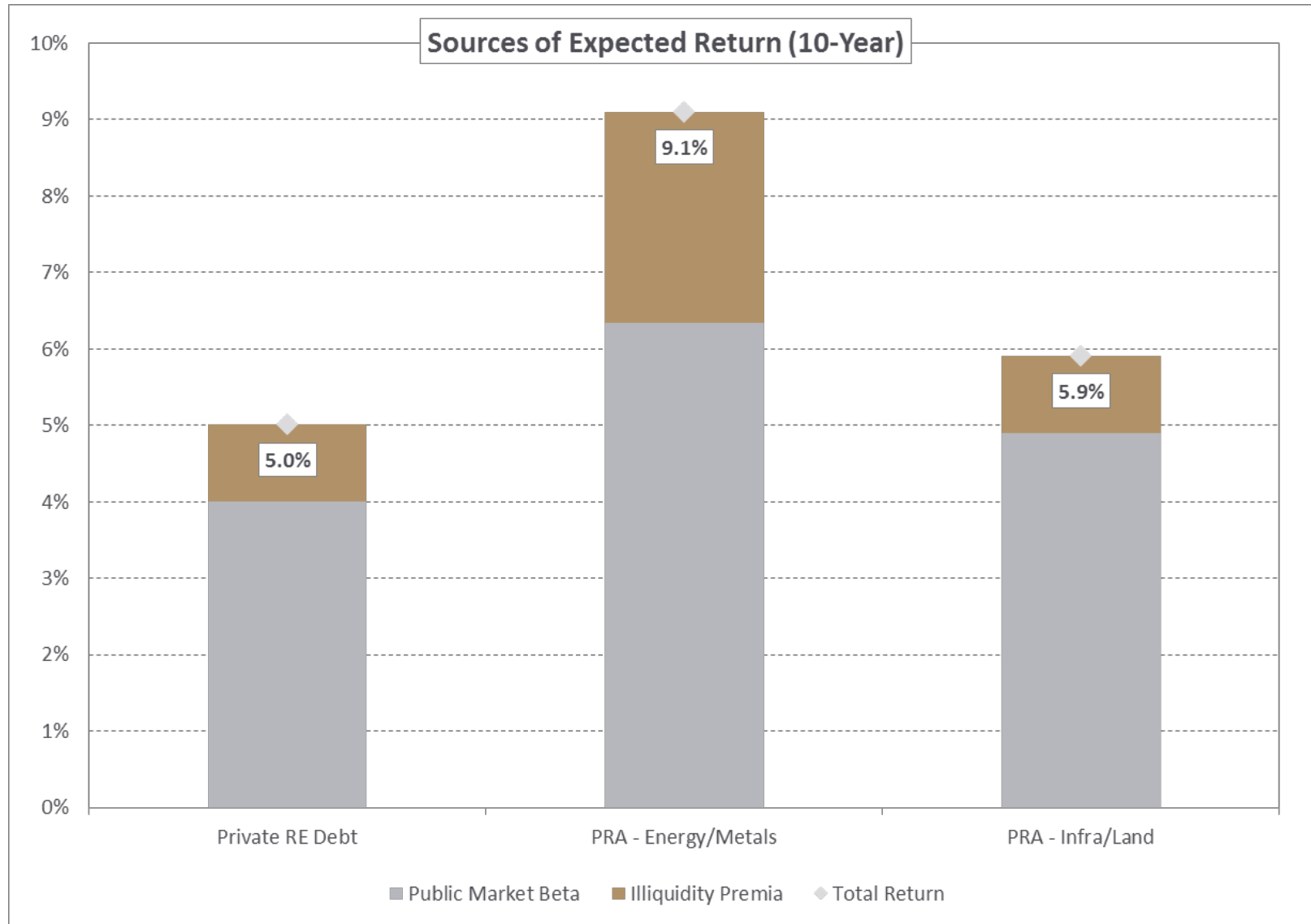


Source: NEPC

*Private Debt is the NEPC derived composite of 25% Mezzanine, 25% Distressed, 50% Direct Lending



PRIVATE REAL ASSETS BUILDING BLOCKS



Source: NEPC



APPENDIX

NEPC, LLC

2020 ADDITIONAL ENHANCEMENTS

The Asset Allocation Committee continues to refine the process

The rounding convention for capital market return assumptions have been changed to the nearest 10 basis points

Historically, return assumptions were rounded to the nearest 25 basis points and this change should not be viewed as a message of increased precision

New asset class assumptions were added to assist in portfolio modeling

Global Listed Infrastructure, Natural Resource Equities, Short TIPS, and Long TIPS

Adjustments were made to some asset classes to provide a better reflection of the underlying investment beta

China Equity: Represents all shares, rather than a local-only investment mandate

Private Debt – Credit Opportunities: Includes investment areas outside of direct lending and distressed debt. The opportunity represents mezzanine and other niche approaches



PRIVATE MARKETS METHODOLOGY

Private market assumptions are constructed using betas to public market assumptions with an added illiquidity premia based on historical returns analysis relative to appropriate public market equivalents

Private Equity – Buyout: 25% US Large Cap, 75% US Small/Mid Cap

Private Equity – Secondary: 25% US Large Cap, 75% US Small/Mid Cap

Private Equity – Growth: 50% US Small/Mid Cap, 50% US Microcap

Private Equity – Venture: 25% US Small/Mid Cap, 75% US Microcap

Private Equity – Non-US: 70% International Small Cap, 30% Emerging Small Cap

Private Equity Composite: 34% Buyout, 34% Growth, 15 % Non-US, 8.5% Secondary, 8.5% Venture

Private Debt – Direct Lending: 100% Bank Loans

Private Debt – Distressed: 20% US Small/Mid Cap, 60% US High Yield, 20% Bank Loans

Private Debt – Credit Opportunities: 24% US SMID Cap, 33% US High Yield, 33% Bank Loans

Private Debt Composite: 50% Direct Lending, 25% Credit Opportunities, 25% Distressed

Private Real Assets - Energy/Metals: 30% Comm., 35% Midstream, 35% Public Resource Equity

Private Real Assets - Infrastructure/Land: 30% Commodities, 70% Public Infrastructure

Private Real Estate Debt: 50% CMBS, 50% Core Real Estate

Changes to private market return assumptions will reflect changes to the underlying public market assumption and the illiquidity premia

2020 CAPITAL MARKET FORECASTS

Asset Class	10-Year	30-Year	Volatility
Inflation	2.3%	2.5%	-
Cash	1.8%	2.4%	1.00%
US Leverage Cost	2.1%	2.7%	1.00%
Non-US Cash	0.4%	2.1%	1.00%
Large Cap Equities	5.0%	6.7%	16.50%
Small/Mid Cap Equities	5.5%	7.2%	20.00%
Int'l Equities (Unhedged)	6.0%	7.0%	20.50%
Int'l Equities (Hedged)	6.2%	7.2%	17.50%
Int'l Sm Cap Equities (Unhedged)	6.4%	7.5%	22.00%
Emerging Int'l Equities	9.0%	9.2%	28.00%
Emerging Int'l Sm Cap Equities	9.2%	9.2%	31.00%
Absolute Return - Long/Short	4.8%	5.7%	11.50%
PE Buyout	7.4%	9.0%	18.50%
PE Growth	9.0%	10.4%	30.50%
PE Venture	10.6%	11.5%	45.00%
PE Secondary	6.9%	8.5%	21.00%
PE Non-US	10.7%	11.1%	33.00%
China Equity	8.8%	9.1%	29.50%
US Microcap Equity	7.0%	8.2%	25.00%

2020 CAPITAL MARKET FORECASTS

Asset Class	10-Year	30-Year	Volatility
TIPS	2.2%	2.7%	6.50%
Treasuries	1.9%	2.7%	5.50%
IG Corp Credit	3.4%	4.4%	7.50%
MBS	2.5%	3.4%	7.00%
High-Yield Bonds	4.1%	5.6%	12.50%
Bank Loans	4.8%	5.2%	9.00%
EMD (External)	4.1%	5.0%	13.00%
EMD (Local Currency)	5.4%	5.3%	13.00%
Non-US Bonds (Unhedged)	0.2%	2.1%	10.00%
Non-US Bonds (Hedged)	0.3%	2.3%	4.50%
Short TIPS (1-5 yr)	2.2%	2.8%	3.50%
Short Treasuries (1-3 yr)	2.1%	2.7%	2.50%
Short Credit (1-3 yr)	2.9%	3.6%	3.50%
Short HY (1-3 yr)	3.4%	4.1%	8.50%
Absolute Return- Credit	4.8%	5.9%	9.00%
PC Credit Opportunities	6.3%	7.5%	14.00%
PC Distressed	7.6%	8.3%	14.00%
PC Direct Lending	6.3%	7.5%	11.00%
US 10 yr Treasuries	1.9%	2.9%	7.50%

2020 CAPITAL MARKET FORECASTS

Asset Class	10-Year	30-Year	Volatility
Non-US 10-Year Sovereign (Hedged)	0.4%	2.6%	5.50%
Commodities	4.0%	4.8%	19.00%
Midstream Energy	7.4%	7.1%	18.50%
REITs	5.4%	6.5%	20.00%
Public Infrastructure	5.3%	6.1%	18.50%
Public Resource Equity	7.3%	7.4%	22.00%
Core Real Estate	5.2%	6.0%	13.00%
Non-Core Real Estate	6.4%	7.4%	19.50%
Private RE Debt	5.0%	5.7%	11.00%
Private Real Assets - Energy/Metals	9.1%	9.0%	32.00%
Private Real Assets - Infra/Land	5.9%	6.7%	12.00%
Absolute Return - Macro	5.0%	5.4%	9.50%
<i>Global Equity*</i>	6.2%	7.5%	17.79%
<i>Private Equity*</i>	9.4%	10.7%	24.58%
<i>Core Bonds*</i>	2.5%	3.4%	6.01%
<i>Private Debt*</i>	6.7%	7.8%	11.54%
<i>Long Govt/Credit*</i>	2.8%	3.9%	11.25%
<i>Absolute Return*</i>	5.0%	5.9%	8.18%

*Assumptions are derived from the underlying equity, credit, and real assets building blocks

CORRELATIONS

Asset Class	Cash	US Leverage Cost	Large Cap Equities	SMID Cap Equities	Int'l Equities	EME Small Cap	Absolute Return - Long/Short	PE Buyout	PE Growth	PE Venture	Treasuries	High-Yield Bonds	Bank Loans	EMD (External)	EMD (Local Currency)	Short Treasuries (1-3 yr)	US 10 yr Treasuries	Absolute Return - Credit	PD Credit Opps	PD Distressed	PD Direct Lending	Core Real Estate	Non-Core Real Estate	Private Real Assets	Absolute Return - Macro
Cash	1.00	0.91	0.01	-0.03	-0.04	-0.02	0.05	0.00	-0.03	-0.02	0.16	-0.05	-0.01	0.00	0.03	0.49	0.09	0.01	-0.05	-0.04	-0.01	-0.03	-0.04	0.06	0.06
US Leverage Cost	0.91	1.00	0.07	0.03	0.04	0.06	0.11	0.06	0.04	0.04	0.33	0.11	0.10	0.20	0.18	0.63	0.25	0.16	0.11	0.10	0.09	0.04	0.07	0.12	0.18
Large Cap Equities	0.01	0.07	1.00	0.87	0.75	0.71	0.79	0.96	0.79	0.76	-0.11	0.61	0.44	0.65	0.62	-0.10	-0.12	0.67	0.57	0.66	0.42	0.37	0.46	0.34	0.32
Small/Mid Cap Equities	-0.03	0.03	0.87	1.00	0.70	0.70	0.71	0.90	0.91	0.87	-0.18	0.65	0.50	0.65	0.61	-0.18	-0.18	0.68	0.61	0.73	0.48	0.42	0.50	0.38	0.32
Int'l Equities (Unhedged)	-0.04	0.04	0.75	0.70	1.00	0.81	0.70	0.74	0.64	0.62	-0.12	0.57	0.42	0.65	0.73	-0.12	-0.13	0.59	0.53	0.59	0.40	0.33	0.42	0.38	0.45
Int'l Sm Cap Equities (Unhedged)	-0.04	0.04	0.70	0.65	0.93	0.75	0.65	0.69	0.60	0.58	-0.11	0.53	0.39	0.61	0.68	-0.11	-0.12	0.55	0.49	0.55	0.37	0.31	0.39	0.36	0.42
Emerging Int'l Equities	-0.02	0.06	0.69	0.69	0.73	0.95	0.64	0.69	0.65	0.63	-0.16	0.61	0.49	0.77	0.84	-0.14	-0.17	0.62	0.57	0.63	0.47	0.32	0.43	0.39	0.43
Emerging Int'l Sm Cap Equities	-0.02	0.06	0.71	0.70	0.81	1.00	0.67	0.71	0.65	0.63	-0.15	0.61	0.48	0.75	0.82	-0.14	-0.17	0.62	0.57	0.63	0.46	0.33	0.43	0.39	0.44
Absolute Return - Long/Short	0.05	0.11	0.79	0.71	0.70	0.67	1.00	0.77	0.64	0.62	-0.10	0.52	0.38	0.58	0.59	-0.07	-0.11	0.57	0.49	0.56	0.37	0.31	0.39	0.31	0.32
PE Buyout	0.00	0.06	0.96	0.90	0.74	0.71	0.77	1.00	0.82	0.79	-0.13	0.62	0.45	0.65	0.61	-0.13	-0.14	0.67	0.58	0.67	0.43	0.38	0.47	0.35	0.32
PE Growth	-0.03	0.04	0.79	0.91	0.64	0.65	0.64	0.82	1.00	0.84	-0.16	0.64	0.54	0.63	0.58	-0.16	-0.17	0.66	0.60	0.71	0.52	0.40	0.49	0.35	0.31
PE Venture	-0.02	0.04	0.76	0.87	0.62	0.63	0.62	0.79	0.84	1.00	-0.16	0.64	0.55	0.62	0.57	-0.16	-0.16	0.65	0.60	0.70	0.53	0.40	0.48	0.35	0.30
Treasuries	0.16	0.33	-0.11	-0.18	-0.12	-0.15	-0.10	-0.13	-0.16	-0.16	1.00	-0.06	-0.23	0.19	0.11	0.81	0.98	-0.06	-0.05	-0.12	-0.22	0.00	-0.02	-0.08	0.13
High-Yield Bonds	-0.05	0.11	0.61	0.65	0.57	0.61	0.52	0.62	0.64	0.64	-0.06	1.00	0.79	0.87	0.67	-0.08	-0.07	0.93	0.94	0.93	0.76	0.46	0.66	0.35	0.36
Bank Loans	-0.01	0.10	0.44	0.50	0.42	0.48	0.38	0.45	0.54	0.55	-0.23	0.79	1.00	0.64	0.52	-0.17	-0.24	0.73	0.74	0.80	0.96	0.39	0.54	0.30	0.28
EMD (External)	0.00	0.20	0.65	0.65	0.65	0.75	0.58	0.65	0.63	0.62	0.19	0.87	0.64	1.00	0.82	0.12	0.18	0.83	0.81	0.82	0.61	0.43	0.59	0.38	0.46
EMD (Local Currency)	0.03	0.18	0.62	0.61	0.73	0.82	0.59	0.61	0.58	0.57	0.11	0.67	0.52	0.82	1.00	0.11	0.09	0.66	0.62	0.65	0.49	0.36	0.47	0.42	0.60
Short Treasuries (1-3 yr)	0.49	0.63	-0.10	-0.18	-0.12	-0.14	-0.07	-0.13	-0.16	-0.16	0.81	-0.08	-0.17	0.12	0.11	1.00	0.74	-0.06	-0.08	-0.13	-0.17	-0.04	-0.05	-0.05	0.15
US 10 yr Treasuries	0.09	0.25	-0.12	-0.18	-0.13	-0.17	-0.11	-0.14	-0.17	-0.16	0.98	-0.07	-0.24	0.18	0.09	0.74	1.00	-0.07	-0.07	-0.13	-0.23	0.00	-0.03	-0.10	0.11
Absolute Return - Credit	0.01	0.16	0.67	0.68	0.59	0.62	0.57	0.67	0.66	0.65	-0.06	0.93	0.73	0.83	0.66	-0.06	-0.07	1.00	0.87	0.88	0.70	0.45	0.63	0.35	0.36
PD Credit Opportunities	-0.05	0.11	0.57	0.61	0.53	0.57	0.49	0.58	0.60	0.60	-0.05	0.94	0.74	0.81	0.62	-0.08	-0.07	0.87	1.00	0.87	0.71	0.43	0.62	0.33	0.34
PD Distressed	-0.04	0.10	0.66	0.73	0.59	0.63	0.56	0.67	0.71	0.70	-0.12	0.93	0.80	0.82	0.65	-0.13	-0.13	0.88	0.87	1.00	0.77	0.46	0.63	0.36	0.35
PD Direct Lending	-0.01	0.09	0.42	0.48	0.40	0.46	0.37	0.43	0.52	0.53	-0.22	0.76	0.96	0.61	0.49	-0.17	-0.23	0.70	0.71	0.77	1.00	0.37	0.52	0.28	0.26
Core Real Estate	-0.03	0.04	0.37	0.42	0.33	0.33	0.31	0.38	0.40	0.40	0.00	0.46	0.39	0.43	0.36	-0.04	0.00	0.45	0.43	0.46	0.37	1.00	0.78	0.24	0.20
Non-Core Real Estate	-0.04	0.07	0.46	0.50	0.42	0.43	0.39	0.47	0.49	0.48	-0.02	0.66	0.54	0.59	0.47	-0.05	-0.03	0.63	0.62	0.63	0.52	0.78	1.00	0.28	0.26
Private Real Assets	0.06	0.12	0.34	0.38	0.38	0.39	0.31	0.35	0.35	0.35	-0.08	0.35	0.30	0.38	0.42	-0.05	-0.10	0.35	0.33	0.36	0.28	0.24	0.28	1.00	0.52
Absolute Return - Macro	0.06	0.18	0.32	0.32	0.45	0.44	0.32	0.32	0.31	0.30	0.13	0.36	0.28	0.46	0.60	0.15	0.11	0.36	0.34	0.35	0.26	0.20	0.26	0.52	1.00



INFORMATION DISCLAIMER

Past performance is no guarantee of future results.

The goal of this report is to provide a basis for substantiating asset allocation recommendations. The opinions presented herein represent the good faith views of NEPC as of the date of this report and are subject to change at any time.

Information on market indices was provided by sources external to NEPC. While NEPC has exercised reasonable professional care in preparing this report, we cannot guarantee the accuracy of all source information contained within.

All investments carry some level of risk. Diversification and other asset allocation techniques do not ensure profit or protect against losses.

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February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: OVERVIEW OF FEES AND ECONOMICS IN PRIVATE EQUITY

Dear Board Members:

At the Board meeting of January 27, Trustee Goulet requested an explanation of how fees worked in private equity (PE). The attached presentation provides an overview of the economics in PE investing, and consists of a combination of slides selected from presentations to CalPERS' Board in 2015, from a 2016 ILPA research presentation, and 2020 ILPA trustee educational presentation.

Included in the presentation deck are slides showing:

- An introduction to PE and the role of limited partners (ILPA)
- Public vs Private market investments and barriers to entry (ILPA)
- A brief narrative of PE economics (ILPA)
- A typical PE fund structure, PE contributions and distributions (CalPERS)
- Distribution waterfall illustrations with positive returns, no returns, and a portfolio of multiple funds (CalPERS)
- A glossary of terms (CalPERS)
- Examples of common waterfall types (CalPERS)
- Key features of an ILPA fees reporting template (ILPA)

It is important to note that there is a wide variation in terms, interpretation and allocation of fees, and structure of distribution waterfalls from partnership to partnership. Examples shown represent base case only.

Allan Martin of NEPC and I would be pleased to answer questions.

Respectfully submitted,

Dan Gallagher
Chief Investment Officer

Presentation Objective

- This presentation is intended to provide a high level review of the economic structure of Private Equity (“PE”) fund investments. The presentation will cover:
 - priority payment of cash flows, including the netting of fees and expenses, to Limited Partners (“LPs”)
 - the timing of the General Partner (“GP”) participation in the profit sharing (“carried interest”) allocation

Note: For the purpose of simplification, this presentation does not illustrate attributes and concepts specific to Private Equity commingled funds such as: preferred return, sharing or offset of fees charged to portfolio companies, borrowing, clawbacks, or other terms (please refer to the Glossary of Terms).

WHAT IS PRIVATE EQUITY?



Private Equity (PE) Defined

- Direct investments made in private companies, or public companies which are then de-listed from public stock exchanges (“going private”).
- Investors invest through private limited partnerships or limited liability companies (LLC), which are managed by firms known as “private equity firms,” and are generally organized under the laws of State of Delaware or the Cayman Islands.
- Private equity firms manage these investments as a general partner (GP), and the investors are the limited partners (LPs).



Role of Limited Partners (LPs)

- LPs are the **investors** in the partnership and provide only the capital for the investments. They have limited liability to the extent of their investment and have no management authority.
 - Capital is committed through a negotiated process between LPs and the PE firm through a detailed and comprehensive legal process.
 - Capital is funded over time for investments often held for 10+ years memorialized in a Limited Partnership Agreement (LPA)
- Given that most retail investors cannot invest in those partnerships due to restrictions in the US securities laws, most LPs are institutional investors, including public and private pensions, sovereign wealth funds, endowments/ foundations, insurance companies, etc.

PRIVATE EQUITY & PUBLIC MARKET INVESTMENTS OFFER DIFFERENT BENEFITS

DIFFERENTIATORS	PRIVATE EQUITY	PUBLIC MARKETS (STOCKS & BONDS)
RETURN	<ul style="list-style-type: none"> Higher long-term returns (15+ years) <u>compared to public markets</u> 	<ul style="list-style-type: none"> S&P 500 has higher short-term returns (5 years) compared to private equity
RISK/VOLATILITY	<ul style="list-style-type: none"> Different PE strategies have different risk profiles Less volatile through investment cycles; not 100% correlated with public markets 	<ul style="list-style-type: none"> Lower risk options come with lower returns More susceptible to higher volatility during investment cycles
COMMITMENT	<ul style="list-style-type: none"> Illiquid Longer hold periods, 5-10 years 	<ul style="list-style-type: none"> Liquid Shorter hold periods
COST	<ul style="list-style-type: none"> Complex and higher fees Fee structure helps align interest with value creation 	<ul style="list-style-type: none"> Minimal

WHY PE OUTPERFORMS PUBLIC EQUITY AND BARRIERS TO ENTRY

PE Advantages over Public Equity

- Better control of entry and exit for portfolio companies given long-term structure of limited partnership
- Long-term, not quarter to quarter focus
- Alignment among PE fund manager and portfolio company management
- Ability to change management or strategic direction more quickly than public companies
- Faster response to market dislocations
- More significant use of financial leverage
- Access to operating experts

To invest in PE you must:

- Be an accredited investor
- Have high return expectation and comparable high risk tolerance
- Able to accommodate illiquidity in portfolio
- Resources to deal with complexity and administration of evaluation and due diligence process
 - Sophisticated staff to source, analyze, underwrite
 - Legal support to document
 - Administrative team to monitor and account for investments

FEES INVOLVED IN PE: GP ECONOMICS

Traditional Fees and Incentives

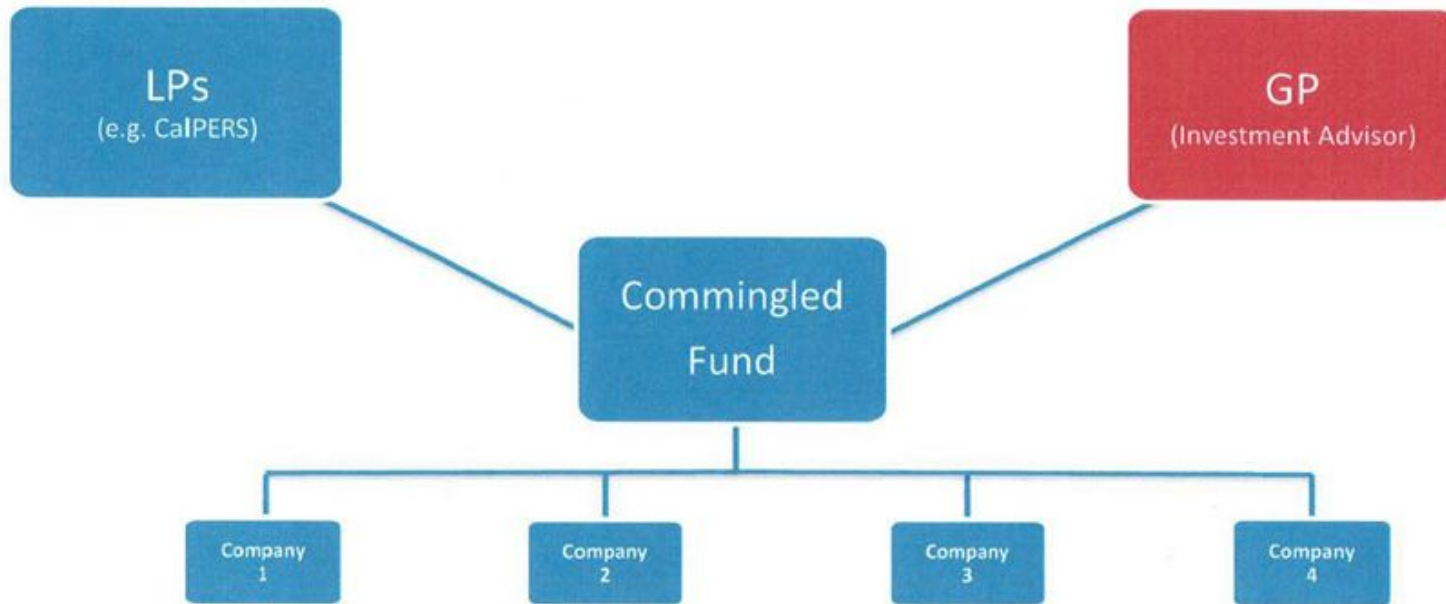
- **MANAGEMENT FEES**
 - Typically a percent of capital during investment period
 - Should decline post investment period to percent of invested capital and preferably lower percentage
 - Should be based on reasonable operating expenses and reasonable salaries, and cover all normal operations of the manager including deal origination, travel and administration
- **CARRIED INTEREST**
 - Performance-based incentive linked to performance
 - Should be largest opportunity for individual wealth creation for members of the manager

Other Forms of Manager Economics

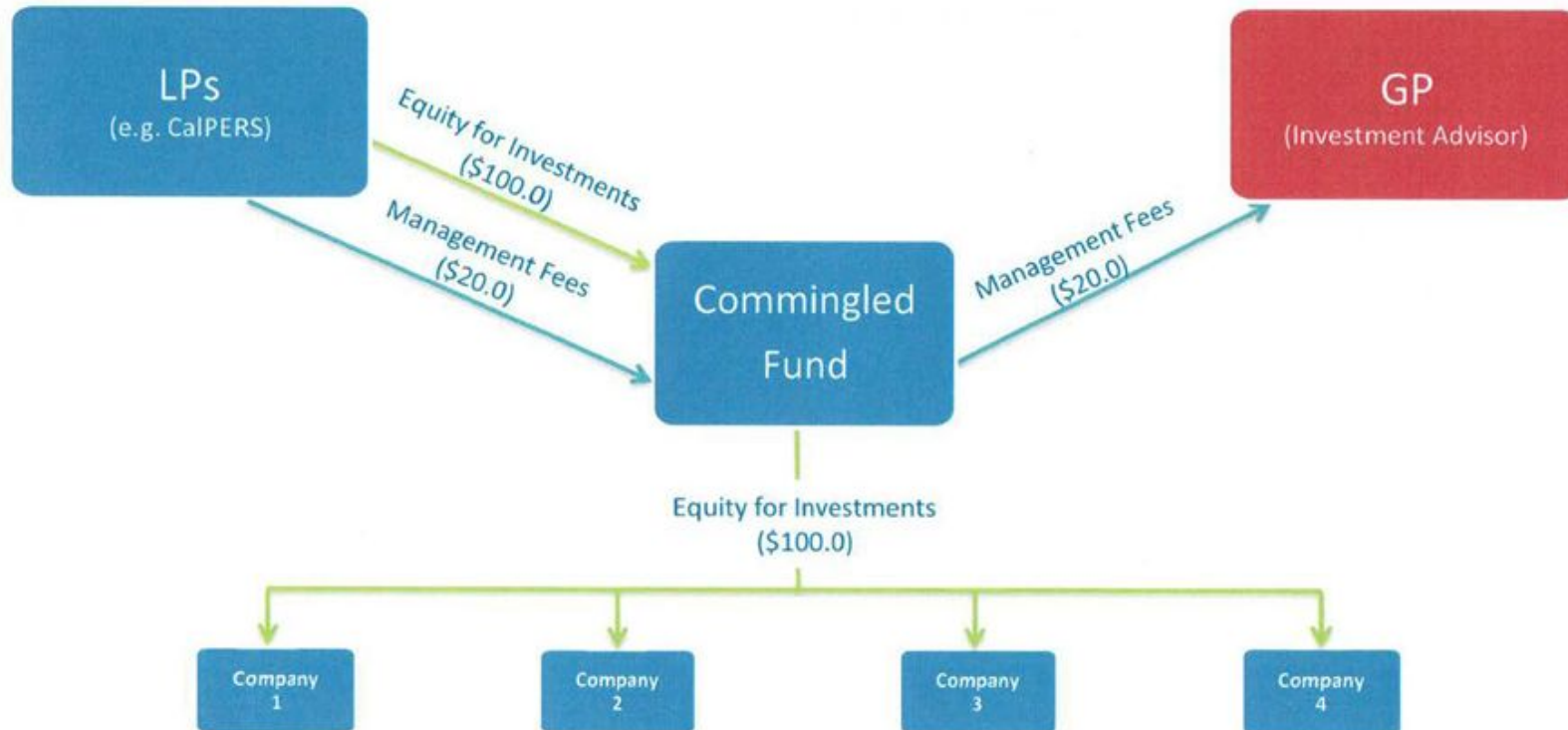
- Deal and transaction fees charged to portfolio companies upon closing of the investment or in some cases at time of financing, mergers & acquisitions
- Monitoring fees charged to portfolio company on a recurring basis
- Board compensation in the form of fees and/or company equity
- Expense Shifting
 - Reimbursements from fund for items previously responsibility of manager



Typical Private Equity Fund Structure

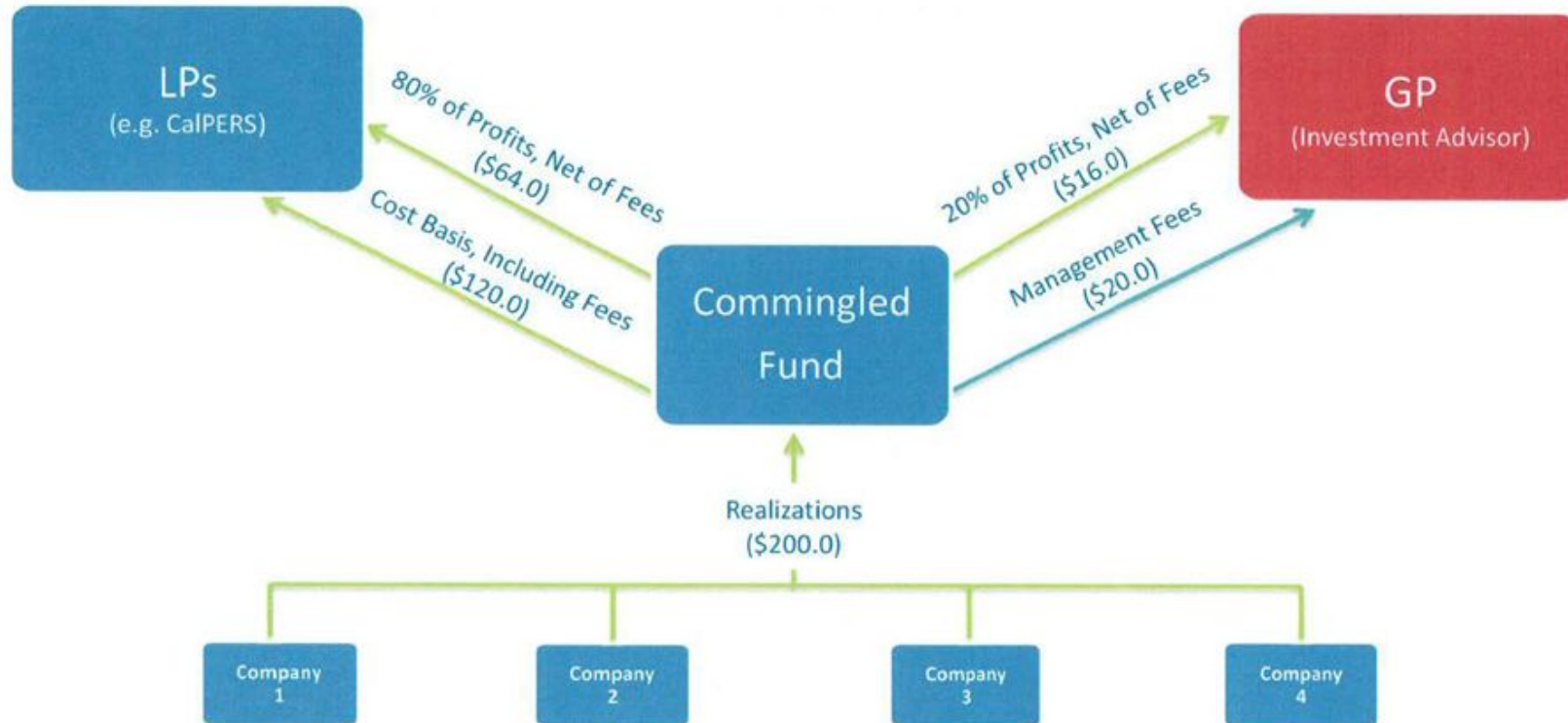


Typical Private Equity Contributions



- Assumes a \$120MM commitment as an LP to a 10 year fund.
- Terms: Average management fee of ~2% per year for the life of the fund and 20% profit share with GP.
- Assumes no preferred return.

Typical Private Equity Distributions



- Assumes a \$120MM commitment as an LP to a 10 year fund.
- Terms: Average management fee of ~2% per year for the life of the fund and 20% profit share with GP.
- Assumes no preferred return.

Private Equity Cash Flows

The Distribution Provision in a Limited Partnership Agreement (LPA), typically referred to as a “Distribution Waterfall,” refers to the priority of distributions returned to the LPs and the GP.

Distribution Waterfall Illustration – Positive Return

Investment in Fund = \$100
Return on Fund = \$200

Fund Management Fee: \$20MM
LP Profit Share: 80%
GP Profit Share: 20%

I	INVESTMENT (\$MM)
	Investment Cost \$100.0
	+ Management Fees \$20.0
	<u>Total Investment Cost</u> \$120.0

II	REALIZATION of INVESTMENT (\$MM)
	Investment Realization Proceeds \$200.0
	Return of Investment Cost to CalPERS \$100.0
	+ ** Management Fee Recapture \$20.0
	<u>Total Investment Cost Returned</u> \$120.0

III	NET INVESTMENT GAIN (\$MM)
	Investment Gain (Investment Proceeds - Investment Cost or \$200-\$100-\$20) \$80.0
	20% of Profit Share to GP on Gain of \$80 \$16.0
	80% of Profit Share to CalPERS on Gain of \$80 \$64.0

IV	TOTAL CAPITAL RETURNED TO CalPERS (\$MM)
	Investment Cost \$100.0
	+ ** Management Fee Recapture \$20.0
	+ 80% of Profit Share to CalPERS on Gain of \$80 \$64.0
	<u>Total Capital Returned to CalPERS</u> \$184.0

V	TOTAL GP CASH FLOW (\$MM)
	Fund Investment Management Fee \$20.0
	+ 20% of Profit Share to GP on Gain of \$80 \$16.0
	<u>Total Cash Flow to GP</u> \$36.0

** GP earns its 20% profit interest only after CalPERS total cost of the investment has been realized, including all fees. Management fees may be offset by portfolio company reimbursement to the GP for services provided.

Private Equity Cash Flow Distribution Examples

Distribution Waterfall Illustration – No Return

Investment in Fund = \$100
Return on Fund = \$120

Fund Management Fee: \$20MM
LP Profit Share: 80%
GP Profit Share: 20%

I	INVESTMENT (\$MM)
	Investment Cost \$100.0
	+ Management Fees \$20.0
	<u>Total Investment Cost \$120.0</u>

II	REALIZATION of INVESTMENT (\$MM)
	Investment Realization Proceeds \$120.0
	Return of Investment Cost to CalPERS \$100.0
	+ ** Management Fee Recapture \$20.0
	<u>Total Investment Cost Returned \$120.0</u>

III	NET INVESTMENT GAIN (\$MM)
	Investment Gain (Investment Proceeds - Investment Cost or \$120-\$100-\$20) \$0.0
	20% of Profit Share to GP on Gain of \$0 \$0.0
	80% of Profit Share to CalPERS on Gain of \$0 \$0.0

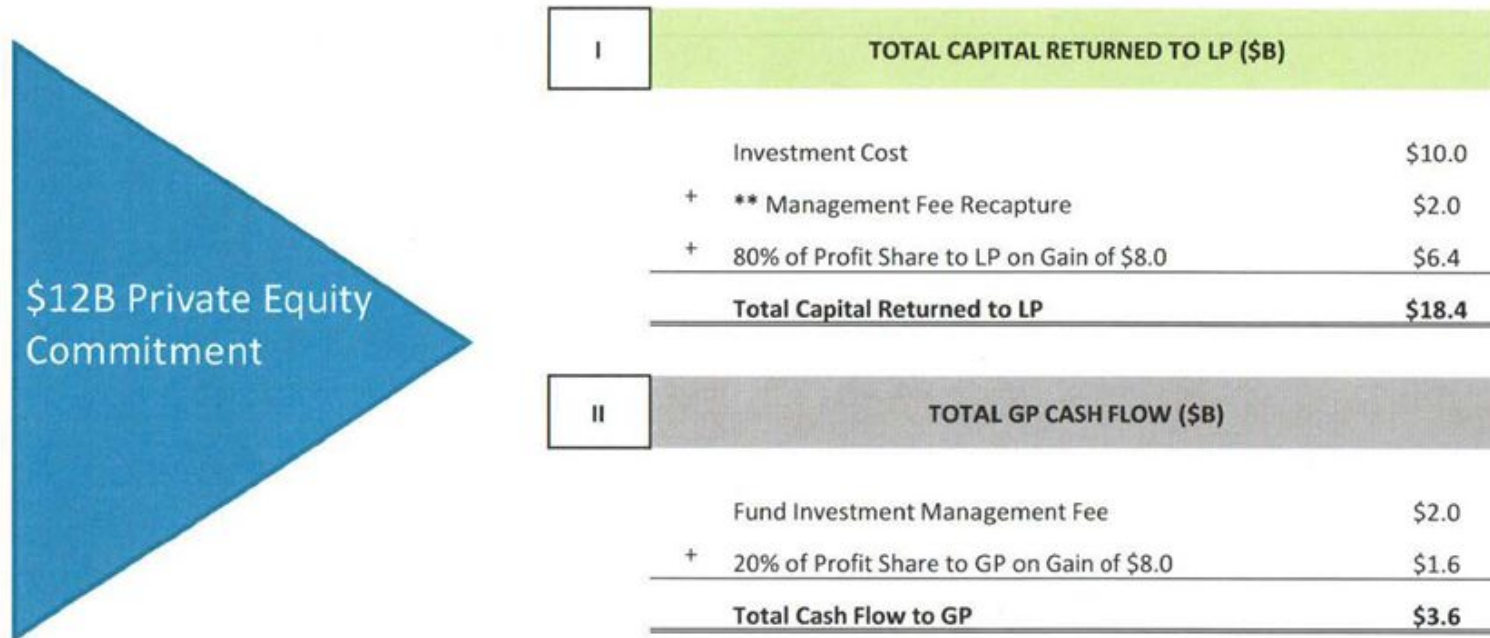
IV	TOTAL CAPITAL RETURNED TO CalPERS (\$MM)
	Investment Cost \$100.0
	+ ** Management Fee Recapture \$20.0
	+ 80% of Profit Share to CalPERS on Gain of \$0 \$0.0
	<u>Total Capital Returned to CalPERS \$120.0</u>

V	TOTAL GP CASH FLOW (\$MM)
	Fund Investment Management Fee \$20.0
	+ 20% of Profit Share to GP on Gain of \$0 \$0.0
	<u>Total Cash Flow to GP \$20.0</u>

** GP earns its 20% profit interest only after CalPERS total cost of the investment has been realized, including all fees. Management fees may be offset by portfolio company reimbursement to the GP for services provided.



Distribution Waterfall Illustration – Portfolio of Multiple Funds



** GP earns its 20% profit interest only after LP total cost of the investment has been realized, including all fees. Management fees may be offset by portfolio company reimbursement to the GP for services provided.

In summary, this large LP constructed an \$12B private equity portfolio that, overall, achieved a gain of \$8B

- LP share of profit = \$6.4B
- GP share of profit = \$1.6B

Glossary of Terms

- Carried Interest ("Carry," or "Profit Share") – The GP's share of the profits of the fund's investments as articulated in the LPA.
- Clawback – GP carried interest received that is required to be returned to LPs due to failure of the Fund to achieve the hurdle rate.
- Commingled ("pooled") Fund – A common partnership structure, which consists of assets from various accounts that are blended together.
- Contribution ("Drawdown," or "Paid-in Capital") – Capital deployed by LPs, to fulfill capital call notices submitted by GPs, to fund new or follow-on investments, or otherwise pay for fees and expenses of the fund.
- Deal-by-deal ("American") Waterfall – GP receives carried interest after capital associated with each investment, including fees and expenses, is returned to LPs, regardless of performance of other investments.
- Distribution Waterfall – Refers to the priority of cash flows returned to investors in a PE fund as articulated in the LPA.
- European Waterfall – GP receives carried interest only after all capital, including fees and expenses, is returned to LPs.
- General Partner ("GP") – The investment manager responsible for managing the activities of a fund. The GP invests its own money in the fund alongside the LPs, and earns a return in the form of carried interest if the fund outperforms the hurdle rate.
- Limited Partner ("LP") – Investors who invest capital into a fund for the GP to manage according to the terms of the LPA.
- Limited Partnership Agreement ("LPA") – The contract that governs the terms of a fund. The terms define the obligations and responsibilities (and any potential recourse) for all parties.
- Management Fee – A periodic payment that is paid by LPs to the GP for investment and portfolio management services, typically investment advisory services as well as administrative services.
- Preferred Return ("Hurdle Rate") – The minimum return to investors (not guaranteed) before carried interest is permitted, as articulated in the LPA.

Appendix: Waterfall Types

Deal-by-Deal Waterfall

- GP takes carry on each investment
 - LP receives all capital contributions (including fees and expenses) associated with the investment being sold and the preferred return (on realized and written off investments) before any remaining profit is split between the LPs and the GP.
- Must achieve preferred return (“hurdle rate”) before the GP can distribute the carry
 - Preferred return, for example 8% compounded annually, and on all realized capital, (including permanent write-offs and write-downs) and costs.
- Majority of fees and expenses front-end loaded during the commitment period
 - Return of all fees and expenses generally back-end weighted.
- GP-friendly Distribution Waterfall creates clawback risk
 - Greater risk of clawback if GP values assets aggressively early in the fund life.
 - LPs attempt to mitigate this risk via a clawback provision; however, the clawback obligation is typically net of taxes.

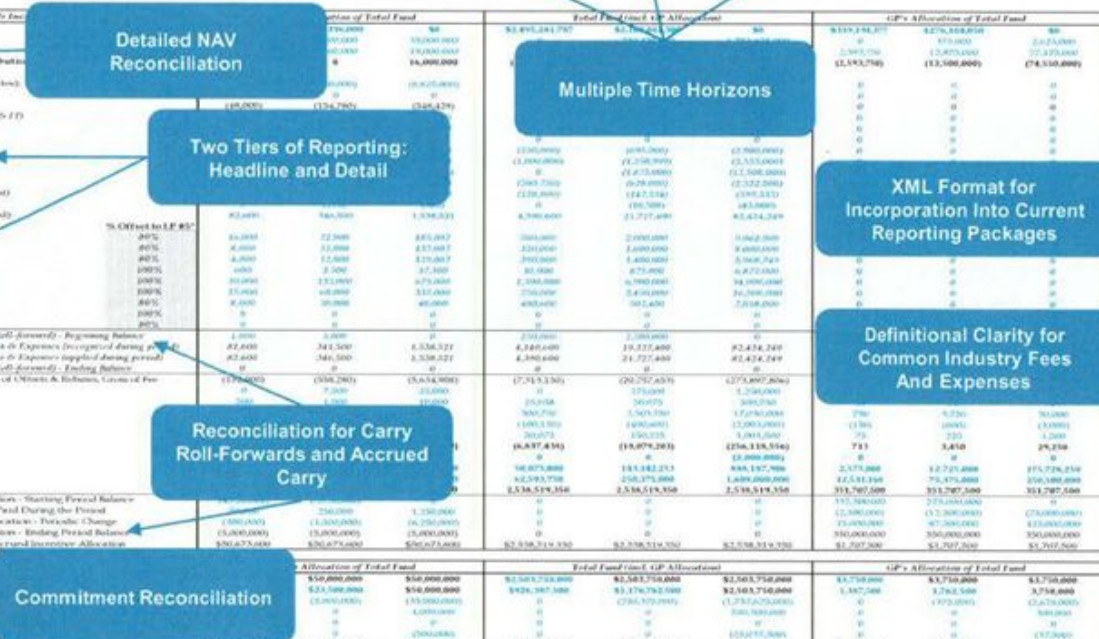
European Waterfall

- Returns 100% of called capital (including all fees and expenses) plus a preferred return, for example 8% compounded annually, before the LPs and GP split any remaining profit.
- Majority of fees and expenses front-end loaded during the commitment period
 - Shorter duration to LP reimbursement of all fees and expenses relative to deal-by-deal waterfall.
- LP-Friendly Distribution Waterfall minimizes clawback risk
 - Because the GP cannot distribute any carry until the contributed capital has been returned, it is unlikely for the distributions to the GP to exceed 20% of total profits.

ILPA Reporting Template - Key Features

ILPA Reporting Template v. 3.00 - This template last updated on January 18, 2016

Real Practices Fund II, L.P.	Q117 (Dec-15)	Q117 (Dec-15)	Since Inception (Dec-15)	Q117 (Dec-15)	Q117 (Dec-15)	Since Inception (Dec-15)	Q117 (Dec-15)	Q117 (Dec-15)	Since Inception (Dec-15)
A. Capital Account Statement for LPs									
A.1 NAV Reconciliation and Summary of Fees, Expenses & Other									
Beginning NAV - Net of Incentive Allocation	100,000	0	0	100,000	0	0	100,000	0	0
Contributions - Cash & Non-Cash	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Distributions - Cash & Non-Cash (Liquor)	0	0	0	0	0	0	0	0	0
Total Cash/ Non-Cash Items Contributions, less distributions	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Net Operating Income (Expense)	0	0	0	0	0	0	0	0	0
(Management Fees - Gross of Office, Warrants & Rebates)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)	(10,000,000)
(Partnership Expenses - Total)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Accounting, Administration & IT)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Audit & Tax Preparation)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Bank Fees)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Cardbody Fees)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Due Diligence)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Legal)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Organization Costs)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Other Travel & Entertainment)	0	0	0	0	0	0	0	0	0
(Partnership Expenses - Other *)	0	0	0	0	0	0	0	0	0
Total Offsets to Fees & Expenses (Applied during periods)	0	0	0	0	0	0	0	0	0
Offset Categories	80%	80%	80%	80%	80%	80%	80%	80%	80%
Advisory Fee Offset	0	0	0	0	0	0	0	0	0
Broker/Deal Fee Offset	0	0	0	0	0	0	0	0	0
Transaction & End Fee Offset	0	0	0	0	0	0	0	0	0
Directors Fee Offset	0	0	0	0	0	0	0	0	0
Accounting Fee Offset	0	0	0	0	0	0	0	0	0
Capital Markets Fee Offset	0	0	0	0	0	0	0	0	0
Organization Cost Offset	0	0	0	0	0	0	0	0	0
Retention Fee Offset	0	0	0	0	0	0	0	0	0
Other Offset	0	0	0	0	0	0	0	0	0
Reconciliation for Managed Fee Offset Balance (Roll-Forwards)	0	0	0	0	0	0	0	0	0
From Total Offsets to Fees & Expenses (Applied during periods)	0	0	0	0	0	0	0	0	0
To Total Offsets to Fees & Expenses (Applied during periods)	0	0	0	0	0	0	0	0	0
Unapplied Offset Balance (Roll-Forwards) - Ending Balance	0	0	0	0	0	0	0	0	0
Total Management Fees & Partnership Expenses, Net of Offsets & Rebates, Gross of Fee-For-Waiter	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Interest Income	0	0	0	0	0	0	0	0	0
Unrealized Income	0	0	0	0	0	0	0	0	0
(Interest Expense)	0	0	0	0	0	0	0	0	0
(Other Income) (Expense)	0	0	0	0	0	0	0	0	0
Total Profit Operating Income / (Expense)	0	0	0	0	0	0	0	0	0
(Re-normalized Fees)	0	0	0	0	0	0	0	0	0
Realized Gains (Loss)	0	0	0	0	0	0	0	0	0
Change in Unrealized Gains / (Loss)	0	0	0	0	0	0	0	0	0
Ending NAV - Net of Incentive Allocation	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Accrued Incentive Allocation - Starting Period Balance	0	0	0	0	0	0	0	0	0
Incentive Allocation - Paid During the Period	0	0	0	0	0	0	0	0	0
Accrued Incentive Allocation - Periodic Change	0	0	0	0	0	0	0	0	0
Accrued Incentive Allocation - Ending Period Balance	0	0	0	0	0	0	0	0	0
Ending NAV - Gross of Accrued Incentive Allocation	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
A.2 Commitment Reconciliation									
Total Commitment	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000
Beginning Unfunded Commitment (Less Contributions)	0	0	0	0	0	0	0	0	0
Plan Available Distributions (Less Expired/Relevant Commitments)	0	0	0	0	0	0	0	0	0
+/ - Other Unfunded Commitment	0	0	0	0	0	0	0	0	0
Ending Unfunded Commitment	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000	10,000,000



ILPA Reporting Template - Key Features (cont.)

A.3 Miscellaneous** (input positive values):		LPs's Allocation of Total Fund			Total Fund (incl. GP Allocation)		GP's Allocation of Total Fund		
Incentive Allocation - Earned (period-end balance)****	\$1,250,000	\$1,250,000	\$0	\$0	\$0	\$0	\$25,000,000	\$25,000,000	\$25,000,000
Incentive Allocation - Amount Held in Escrow (period-end balance)****	\$150,000	\$150,000	\$0	\$0	\$0	\$0	\$15,000,000	\$15,000,000	\$15,000,000
Returned Clauses***	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Capitalized Transaction Fees & Exp. - Paid to Non-Related Parties****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Distributions Relating to Fees & Expenses****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Fund of Funds Gross Fees, Exp. & Incentive Allocation paid to the Underlying Funds*	\$1,951	\$1,951	\$1,951	\$0	\$1,951	\$0	\$1,951	\$1,951	\$1,951

B. Schedule of Fees, Incentive Allocation & Reimbursements Received by the GP & Related Parties, with Respect to the Fund and Portfolio Companies/Investments Held by the Fund		LPs's Allocation of Total Fund			Cumulative LPs' Allocation of Total Fund		Affiliated Positions***		
B.1 Source Allocation		LPs's Allocation of Total Fund			Cumulative LPs' Allocation of Total Fund		Affiliated Positions***		
With Respect to the Fund's LPs	Management Fees - Not of Related Parties and Waivers	\$87,500	\$87,500	\$87,500	\$7,200,000	\$7,287,500	\$0	\$0	\$0
	Partnership Expenses - Paid to LP & Related Parties - Gross of Other	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	(Less: Total Other to Fees & Expenses - applied during period)	(\$2,400)	(\$2,400)	(\$2,400)	\$1,727,400	\$1,725,000	\$0	\$0	\$0
	Capitalized Transaction Fees & Exp. - Paid to GP & Related Parties****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Accrued Incentive Allocation - Periods Change	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
With Respect to the Fund's Portfolio Companies/Investments	Total Fees with Respect to Portfolio Companies/Investments	\$87,500	\$87,500	\$87,500	\$7,200,000	\$7,287,500	\$0	\$0	\$0
	Library Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Broken Deal Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Transaction & Deal Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Deal Fee****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Monitoring Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Capital Markets Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Other Fees****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Reimbursements for Travel & Administrative Expenses****	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	Total Received by the GP & Related Parties	\$87,500	\$87,500	\$87,500	\$7,200,000	\$7,287,500	\$0	\$0	\$0

Shaded/Italicized/Grouped Content Represents Level-2 Data
Footnote for any YTD Total Fund expenses, fees or other (including any "other" balances): Partnership Expenses - Other (\$10,500) + Incentive (\$0,000) + Partnership-Level Taxes (\$2,500)

Fund of Funds Expenses

Paid to the GP: Fees, Carry & Expenses from LPs

Paid to the GP: Fees & Reimbursements from Portfolio Companies

Portfolio Company Fees Attributed to Affiliated Positions

Comment Box for Additional Detail on "Other" Fees



February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: PERIODIC REVIEW OF APPOINTMENT & ELECTION OF TRUSTEES POLICY

Dear Board Members:

As part of the Board Policy Development Process, each Board policy is to be formally reviewed at the time specified within each policy. The cyclical review of the policy regarding appointment and election of trustees is due for review.

Staff has some suggested changes to this policy, primarily to better align with updated practices, clarify terms, and to strengthen the rules that apply to candidates' statements. A redlined version of the policy incorporating staff's suggestions is provided.

RECOMMENDATION: APPROVE PROPOSED CHANGES TO THE APPOINTMENT & ELECTION OF TRUSTEES POLICY

Staff will be happy to answer any questions at the February 24, 2020 business meeting.

Sincerely,

Linda Webb
Retirement Administrator

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION
APPOINTMENT AND ELECTION OF TRUSTEES POLICY

I. Purpose and Objectives

- 1) The purpose of this policy is to establish a procedure for the Ventura County Employees' Retirement Association ("VCERA") to provide notice to the Board of Supervisors when the term of a Public Member appointee is about to expire, as well as a procedure for the election of employee and retiree representatives to the Board of Retirement ("Board").

II. Background

- 2) The Board of Retirement (Board) shall consist of nine members and three alternates as provided for under Government Code sections 31520.1, 31520.13 and 31520.5. One member shall be the County Treasurer, whose membership on the Board shall run concurrent with his/her term as County Treasurer. The second and third members shall be general members of the Association in active service, and shall be elected by the General members of the Association in active service. The fourth, fifth, sixth and ninth members shall be qualified electors of the County of Ventura who are not connected with County government in any capacity, except that one may be a County Supervisor, and shall be appointed by the Ventura County Board of Supervisors. The seventh member shall be a Safety member of the Association in active service who is elected by the Safety members of the Association in active service. The eighth member shall be a retired member elected by the retired members of the Association. Any candidate receiving a plurality of all votes cast in his/her respective election, as certified by the Ventura County Elections Division ("Elections Division"), shall be deemed elected. The alternate member shall be that candidate, if any, from the group under section 31470.2 (law enforcement) or 31470.4 (fire suppression), which is not represented by a board member, who receives the highest number of votes of the candidates in the group that is not represented. For purposes of this policy, law enforcement personnel shall include Welfare Fraud Investigators and Probation Officers, and fire suppression personnel shall include Airport Operations Officers and Harbor Patrol Officers, who have been granted safety membership. There shall be an alternate eighth (retired) member who shall be elected at the same time and in the same manner as the eighth member. At the option of the County Board of Supervisors, there shall also be an alternate member for the fourth, fifth, sixth and ninth members.

III. Appointed Members

- 3) Not less than 90 days before the expiration of the term of a public member, including the alternate member, appointed by the Board of Supervisors, the Administrator shall provide written notice to the Chair of the Board of Supervisors, with a copy to the member of the Board of Supervisors who sits on the Board of Retirement, if any, and the County Chief Executive Officer, advising him/her that the term of a public member is set to expire. The notice shall provide the name of the individual and date on which his/her term on the Board

VCERA

Appointment and Election of Trustees Policy

will expire. An appointed board member whose term has expired is considered a holdover and continues as an appointed member until he/she resigns or until the Board of Supervisors reappoints the sitting appointee or appoints a new member for the remainder of the term.

IV. Elected Members

- 4) The ~~County~~ Elections Division shall conduct all elections on behalf of VCERA.
- 5) Not less than 120 days prior to the expiration of the term of a member elected to the Board of Retirement, the Administrator shall contact the ~~Ventura County~~ Elections Division to request an election be conducted. The Elections Division shall be primarily responsible for preparation of the nomination petition, preparation of ballots, mailing and receipt of ballots, counting of ballots and certification of the election. The Administrator shall prepare, for approval by the Elections Division, a calendar which sets forth all relevant dates in the election process.
- 6) Not less than 90, nor more than 120, days before the expiration of the term of a member elected to the Board, the Administrator shall provide written notice to all members of the Association who are eligible to be a candidate for such position, that an election will be held to fill a position on the Board. The obligation to provide such notice to current employee members ~~shall may~~ be satisfied by arranging for notices to be sent via electronic mail to all members eligible to vote in the election, or providing to each ~~Ce~~ounty department a sufficient number of election notices and requesting it be distributed to their employees. In the case of the retired (eighth) member position and the alternate retired member position, notice of an election shall be provided to all retired members by mail. The written notice provided shall include, but not be limited to, an introduction section describing the Board of Retirement, the process for obtaining and filing a nomination petition, and all relevant dates in the election process.
- 7) A candidate for the second or third member position shall be a ~~G~~general member of ~~the Retirement Association VCERA~~. Only ~~G~~general members of the ~~Retirement Association VCERA~~ shall be eligible to vote for the second or third member position. A candidate for the seventh member position shall be a ~~S~~safety member of the ~~Retirement Association VCERA~~. Only ~~S~~safety members of ~~the Retirement Association VCERA~~ shall be eligible to vote for the seventh member position. To be a candidate, or voter, for the second, third or ~~alternate~~ seventh member positions, the employee must be an active member in ~~the VCERA Retirement Association~~. A candidate for the eighth member position shall be a retired member of ~~the VCERA Retirement Association~~. A candidate for the alternate ~~retired-eighth~~ member position shall be a retired member of the Retirement Association. Only retired members of ~~the Retirement Association VCERA~~ shall be eligible to vote for the eighth member position and alternate ~~retired-eighth~~ member position.
- 8) Any qualified member of the ~~Retirement Association VCERA~~ who wishes to be a candidate for a position on the Board may request a nomination petition from the ~~County~~ Elections Division. The nomination petition shall be signed by not less than 20 or more than 30 members of ~~the Retirement Association VCERA~~ who are eligible to vote in the election. Signatures on the nomination petition shall be verified against County Registrar of Voter

VCERA

Appointment and Election of Trustees Policy

records, or, if necessary, the member's ~~County Appointment form or~~ Sworn Statement form on file with VCERA. At the time the nomination petition is filed with the Elections Division, the candidate may file a statement of qualifications, goals and objectives, of not more than 200 words. The statement of qualifications shall be limited to describing the candidate's own qualifications and shall refrain, from, in any way, making any false or misleading statements, or from making any reference to any other candidate. Candidates may include endorsements if written documentation is provided from the endorser with consent to use the endorser's name. Candidates must declare under penalty of perjury that their candidate statement is true and correct. VCERA reserves the right to prevent publishing of any portion of a statement that contains a prohibited reference. The counting of words shall be in accordance with the California Elections Code. Candidate statements shall remain confidential until after the filing deadline and may not be changed for any reason after the filing deadline. The statement of qualifications shall be distributed by mail to all voting members with their ballots and instructions for voting. The nomination petition shall list the date on which it is to be filed and any nomination petition filed after such deadline shall be disqualified. All candidates and, if applicable, labor organizations, must abide by the County of Ventura's policies and guidelines.

- 9) The election of the ~~retired-eighth (eighthretired)~~ member and the alternate ~~retired-eighth~~ member shall be conducted simultaneously. An eligible retired member of ~~the Retirement Association~~ VCERA may be a candidate for both positions. A retired member who chooses to be a candidate for both positions must file separate nomination petitions. If a retired member files as a candidate for both positions, and receives the highest number of votes for both positions, such candidate shall be certified as the ~~retired-(eighth)~~ member on the Board of Retirement. In such a case, the candidate for the alternate ~~retired-eighth~~ member position, if any, that received the second highest number of votes for that position shall be certified as the alternate ~~retired-eighth~~ member.
- 10) If the Elections Division determines that there is only one qualified candidate, the Board of Supervisors shall, as provided for by Government Code section 31523, order that no election be held and that a unanimous ballot be cast in favor of such candidate.
- 11) The Administrator shall provide to the Elections Division a list of all eligible voters for each election, along with a set of mailing labels. The Administrator shall be responsible for ensuring a sufficient number of envelopes, copies of the instructions for voting, and copies of the statements of qualifications are provided to the Elections Division for distribution to all eligible voters.
- 12) The Elections Division shall prepare the official ballot. The official ballot, statement of qualifications and instructions for voting shall be sent to each eligible voter by the Elections Division through the U.S. mail. Ballots must be returned to the Elections Division prior 5:00 p.m. on the date noted in the instructions for voting by personal delivery, County Brown Mail, or U.S. mMail. The Elections Division shall void duplicate ballots cast, ~~ballots which bear the signature or initials of the voter,~~ ballots which do not bear the printed name and signature of the voter on the outer envelope, envelopes containing more than one ballot, or any other ballots where the Elections Division is unable to determine the voter's intent. Write-in

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Appointment and Election of Trustees Policy

candidates are not acceptable and such votes shall not be reported in the certification of election results.

- 13) The Elections Division shall be responsible for the receipt and safekeeping of voted ballots. Ballots shall be counted under the supervision of personnel assigned by the Elections Division. The Elections Division shall retain voted ballots for 180 days following the date of the counting of ballots.
- 14) The Elections Division shall certify the results of the election as soon as practicable after the ballots have been counted for the Board to receive and file ~~ing by the Board~~.
- 15) Upon application to the Elections Division made within five business days of the Board’s receipt of the certified results of the election, any candidate may request a recount of the ballots. The candidate shall be responsible for depositing with the Elections Division, prior to the recount, an amount sufficient to cover the actual cost of having the ballots recounted.
- 16) Newly elected and appointed members shall be sworn in at their first Board of Retirement meeting, if not sworn in by the County Clerk and Recorder prior to such meeting.
- 17) Decisions of the Elections Division and Administrator regarding the conduct of the election may be appealed to the Board in writing within 15 days of notice of the decision. The decision of the Board shall be final, subject to judicial review.
- 18) In the event of a vacancy in the second, third, seventh, eighth, or alternate seventh member position on the Board, the Board shall cause an election to fill the vacancy to be held at the earliest possible date in a manner consistent with the provisions of this policy and Government Code section 31523. If there is a vacancy with respect to the alternate ~~retired-eighth~~ member (~~alternate-eighth~~), the Board shall, by majority vote, appoint a replacement alternate member in the same manner as prescribed in Government Code section 31523.
- 19) All costs of the election shall be an expense of administration of ~~the Retirement Association~~ VCERA, and ~~the Retirement Association~~ VCERA shall reimburse the Elections Division for any costs associated with conducting an election.

V. Terms of Office

- 20) The following schedule outlines the terms of office for the appointed and elected members.

Office	Position	Term	Start of Term	Sample Years	Ref.
Treasurer (Ex Officio)	1 st	4 years	1 st Mon. in Jan. at noon Following election	2015, 2019, 2023	GC 24200
General Member 1	2 nd	3 years	January 1	2015, 2018, 2021	GC 31520.1 Ord. 401
General Member 2	3 rd	3 years	January 1	2016, 2019, 2022	GC 31520.1 Ord. 401
Appointed Member 1	4 th	3 years	January 1	2016, 2019, 2022	GC 31520.1 Ord. 401
Appointed Member 2	5 th	3 years	January 1	2016, 2019, 2022	GC 31520.1 Ord. 401
Appointed Member 3	6 th	3 years	January 1	2014, 2017, 2020	GC 31520.1 Res. 208.210

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Appointment and Election of Trustees Policy

Safety Member	7 th	3 years	January 1	2015, 2018, 2021	GC 31520.1 Res. 208.210
Retiree Member	8 th	3 years	January 1	2015, 2018, 2021	GC 31520.1 Ord. 401
Appointed Member 4	9 th	3 years	January 1	2014, 2017, 2020	GC 31520.1 Ord. 401
Alternate Safety	7 th Alt.	3 years	January 1	2015, 2018, 2021	GC 31520.1 Res. 208.210
Alternate Retiree	8 th Alt.	3 years	January 1	2015, 2018, 2021	GC 31520.5
Alternate Appointed	4 th , 5 th , 6 th , 9 th Alt	3 years*	January 1*	2016, 2017, 2020*	GC 31520.13

*consistent with 9th member

VI. Process Review

21) The Board will review the Appointment and Election of Trustees Policy at least once every three (3) years to ensure that it remains relevant and appropriate.

VII. Process History

22) The Board last reviewed and approved this policy on February ~~24~~⁷, 20~~20~~¹⁷. The Board originally adopted this policy on December 2, 1985 and revised the policy on October 20, 2003 and October 17, 2005, ~~and~~ December 17, 2012, February 27, 2017.



February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: MID-YEAR BUDGET UPDATE FOR FISCAL YEAR 2019-20

Dear Board Members:

The Fiscal Year 2019-20 Adopted Budget is fifty percent complete. The attached Budget Summary (Attachment A) reflects actual expenditures through December 31, 2019, as well as year-end projected expenditures based on staff's best estimates. Staff believes the year-end projected expenditures are conservative and reasonable.

The following provides some of the more pertinent information for the various categories, but staff will be pleased to provide any additional information if needed.

Salaries & Employee Benefits: *Overall Salaries and Employee Benefits* is projected to be under budget by approximately \$101,800. The savings realized are mostly due to timing in the hiring of vacant positions approved in the budget as well as vacancies created by retirements. However, some of the savings in this category have been absorbed from the effect of recently granted Salary and Benefit increases by the County (\$92,000), increased use of Extra-Help/Temporary Services (\$42,000), and unbudgeted Retiree Health Insurance (\$13,000) from an unanticipated retirement.

Services & Supplies: *Overall Services & Supplies* is projected to be under budget by approximately \$273,800. Most of the savings is due to less than anticipated spending in the following categories: *Legal (\$91,300), Training and Travel for both staff and trustees (\$57,800), Auditing (\$50,000), Rents/Lease-Structures (\$47,200), Actuary-415 calculation (\$20,000), Other Professional Services (\$18,600), and Office Supplies (\$7,100)*; the savings has been offset by cost overruns in the categories of *Hearing Officers (\$31,500), Election Services (\$12,000) and Postage (\$5,300)*.

The *Legal* category cost savings of \$91,300 is due to less than anticipated needs within the *Administrative and Investment* budget, largely from less than anticipated use of investment and fiduciary counsel. The *Training/Travel for Staff and Trustee* category cost savings of \$57,800 is due to less than anticipated needs within the *Administrative and Investment* budgets. The cost saving of \$50,000 in *Auditing* is for an internal audit requested by the Board that will not be completed in the current fiscal year and will be budgeted in fiscal year 2020-21.

MID-YEAR BUDGET UPDATE FOR FISCAL YEAR 2019-20

February 24, 2020

Page 2 of 2

Rents/Lease Structures category cost savings of \$47,200 is due to beneficial occupancy credit during the remodel phase plus the first two months of the free rent negotiated in the new lease. The *Actuary-415* cost savings of \$20,000 are for services of the actuary to perform calculations of pension benefits in compliance with IRS code 415 maximum pension benefit. The savings are based on projected billings based on amount billed to date. The *Other Professional Services* is \$18,600 lower than budget due to less use of various services including amounts budgeted for miscellaneous unidentified needs. The *Office Supplies* category cost savings of \$7,100 is due to limited ordering during the office remodel and centralization of office printers reduced the need to purchase additional printer toners.

The *Hearing Officers* category is projected to be higher due to increased activity related to disability cases. The *Elections Services* category cost overrun is due to exclusion of elections appropriations in the adopted budget. The *Postage* category is projected to be higher due to increased member outreach. The remaining service and supplies variances are minor.

Technology: The *Information Technology* expenditures is projected to be slightly under budget by approximately \$30,000. The variances in the various categories are the result of projected costs being slightly higher or lower than originally included in the budget.

Capital Expenses: The *Capitalized Structures* is projected to be under budget by approximately \$179,000. This category represents VCERA's direct budgeted costs for the remodel of office space. This includes the contingency amount of \$202,300 but does not include the tenant improvement allowance of \$258,460 paid directly by the landlord. Based on estimated total cost to VCERA of \$1,021,000, an estimated \$23,300 of the contingency will be used to complete the remodel.

Recommended Action:

1. Receive and file the mid-year budget projection.

If necessary, Staff will return to the Board after year end, and if required, request appropriation adjustments between object levels to close out the year.

I would be happy to respond to any questions you may have on this matter.

Sincerely,



Henry C. Solis, CPA
Chief Financial Officer

Attachment A

Ventura County Employees' Retirement Association
Budget Summary Fiscal Year 2018-2019 (Combined)
Year-To-Date through December 31, 2019 and Projected through Fiscal Year Ending June 30, 2020

	Adopted 2019 Budget	Adjusted 2019 Budget	Expended Fiscal Year to Date	Projected Jan - June	Projected June 30, 2019	Available Balance	Percent Expended
Salaries and Benefits							
Regular Salary	\$3,299,200.00	\$3,359,100.00	\$1,446,375.23	\$1,814,265.38	\$3,260,640.61	\$98,459.39	97.07%
Extra-Help/Temporary Services	170,900.00	170,900.00	45,614.25	167,085.34	212,699.59	(41,799.59)	124.46%
Supplemental Payments	65,400.00	65,400.00	27,697.31	41,265.85	68,963.16	(3,563.16)	105.45%
Vacation Redemption	162,200.00	162,200.00	118,882.13	27,300.00	146,182.13	16,017.87	90.12%
Retirement Contributions	603,400.00	603,400.00	247,725.14	343,448.49	591,173.63	12,226.37	97.97%
OASDI Contribution	200,400.00	200,400.00	64,055.86	114,736.79	178,792.65	21,607.35	89.22%
FICA-Medicare	55,300.00	55,300.00	23,060.94	27,089.46	50,150.40	5,149.60	90.69%
Medical Insurance	360,600.00	360,600.00	152,490.55	203,591.36	356,081.91	4,518.09	98.75%
Retiree Health Insurance	0.00	0.00	6,276.36	6,668.82	12,945.18	(12,945.18)	#DIV/0!
Life Insurance	1,300.00	1,300.00	525.66	642.59	1,168.25	131.75	89.87%
Unemployment Insurance	1,700.00	1,700.00	707.80	927.77	1,635.57	64.43	96.21%
Mgmt Disability Insurance	24,400.00	24,400.00	10,808.33	13,443.71	24,252.04	147.96	99.39%
Workers Compensation Insurance	114,000.00	114,000.00	53,230.18	62,834.67	116,064.85	(2,064.85)	101.81%
401K Plan Contribution	86,600.00	86,600.00	34,332.14	48,373.54	82,705.68	3,894.32	95.50%
Total Salaries & Benefits	\$5,145,400.00	\$5,205,300.00	\$2,231,781.88	\$2,871,673.74	\$5,103,455.62	\$101,844.38	98.04%
Services & Supplies							
Board Member Stipend	\$13,200.00	\$13,200.00	\$4,500.00	\$5,700.00	\$10,200.00	\$3,000.00	77.27%
Other Professional Services	93,000.00	93,000.00	55,854.06	18,210.00	74,064.06	18,935.94	79.64%
Auditing	101,400.00	101,400.00	40,666.15	10,733.85	51,400.00	50,000.00	50.69%
Hearing Officers	40,000.00	40,000.00	36,522.50	35,000.00	71,522.50	(31,522.50)	178.81%
Legal	425,000.00	425,000.00	108,674.19	225,000.00	333,674.19	91,325.81	78.51%
Election Services	0.00	0.00	12,031.05	0.00	12,031.05	(12,031.05)	#DIV/0!
Actuary-Valuation	62,000.00	62,000.00	31,000.00	31,000.00	62,000.00	0.00	100.00%
Actuary-GASB 67	13,000.00	13,000.00	13,000.00	0.00	13,000.00	0.00	100.00%
Actuary-415 Calculation	110,000.00	110,000.00	(29.00)	90,000.00	89,971.00	20,029.00	81.79%
Actuary-Misc Hrly Consult	16,000.00	16,000.00	(85.00)	16,000.00	15,915.00	85.00	99.47%
Printing	40,000.00	40,000.00	15,463.04	25,000.00	40,463.04	(463.04)	101.16%
Postage	65,000.00	65,000.00	40,257.35	30,000.00	70,257.35	(5,257.35)	108.09%
Copy Machine	4,500.00	4,500.00	299.43	3,000.00	3,299.43	1,200.57	73.32%
General Liability	15,200.00	15,200.00	7,600.50	7,600.50	15,201.00	(1.00)	100.01%
Fiduciary Liability	86,000.00	86,000.00	83,609.00	0.00	83,609.00	2,391.00	97.22%
Cost Allocation Charges	34,400.00	34,400.00	17,193.00	17,193.00	34,386.00	14.00	99.96%
Education Allowance	6,000.00	6,000.00	305.00	0.00	305.00	5,695.00	5.08%
Training/Travel-Staff	64,600.00	64,600.00	11,396.08	20,500.00	31,896.08	32,703.92	49.37%
Training/Travel-Trustee	38,200.00	38,200.00	5,136.61	6,000.00	11,136.61	27,063.39	29.15%
Travel-Due Diligence-Staff	9,300.00	9,300.00	2,911.86	4,000.00	6,911.86	2,388.14	74.32%
Travel-Due Diligence-Trustee	13,600.00	13,600.00	1,842.64	6,000.00	7,842.64	5,757.36	57.67%
Mileage-Staff	4,800.00	4,800.00	1,213.43	2,100.00	3,313.43	1,486.57	69.03%
Mileage -Trustee	5,000.00	5,000.00	1,728.40	2,000.00	3,728.40	1,271.60	74.57%
Mileage-Due Diligence-Staff	1,000.00	1,000.00	159.38	300.00	459.38	540.62	45.94%
Mileage-Due Diligence-Trustee	1,000.00	1,000.00	176.32	300.00	476.32	523.68	47.63%
Auto Allowance	6,900.00	6,900.00	3,450.00	3,450.00	6,900.00	0.00	100.00%
Facilities-Security	2,700.00	2,700.00	2,564.08	3,600.00	6,164.08	(3,464.08)	228.30%
Facilities-Maint & Repairs	3,300.00	3,300.00	0.00	0.00	0.00	3,300.00	0.00%
Equipment-Maint & Repairs	2,000.00	2,000.00	0.00	0.00	0.00	2,000.00	0.00%
General Office Expense	10,400.00	10,400.00	4,053.85	4,000.00	8,053.85	2,346.15	77.44%
Books & Publications	2,500.00	2,500.00	661.69	800.00	1,461.69	1,038.31	58.47%
Office Supplies	17,000.00	17,000.00	1,891.06	8,000.00	9,891.06	7,108.94	58.18%
Memberships & Dues	16,300.00	16,300.00	11,737.63	5,800.00	17,537.63	(1,237.63)	107.59%
Bank Service Charges	500.00	500.00	303.47	100.00	403.47	96.53	80.69%
Offsite Storage	5,200.00	5,200.00	2,047.55	2,900.00	4,947.55	252.45	95.15%
Rents/Leases-Structures	210,900.00	210,900.00	99,871.08	63,800.00	163,671.08	47,228.92	77.61%
Depreciation /Amortization	1,460,600.00	1,460,600.00	730,296.96	730,300.00	1,460,596.96	3.04	100.00%
Total Services & Supplies	\$3,000,500.00	\$3,000,500.00	\$1,348,303.36	\$1,378,387.35	\$2,726,690.71	\$273,809.29	90.87%
Total Sal, Ben, Serv & Supp	\$8,145,900.00	\$8,205,800.00	\$3,580,085.24	\$4,250,061.09	\$7,830,146.33	\$375,653.67	95.42%

Ventura County Employees' Retirement Association
Budget Summary Fiscal Year 2018-2019 (Combined)
Year-To-Date through December 31, 2019 and Projected through Fiscal Year Ending June 30, 2020

	Adopted 2019 Budget	Adjusted 2019 Budget	Expended Fiscal Year to Date	Projected Jan - June	Projected June 30, 2019	Available Balance	Percent Expended
Technology							
Technology Hardware	\$118,500.00	\$118,500.00	\$72,628.02	\$45,000.00	\$117,628.02	\$871.98	99.26%
Technology Software Lic & Maint	60,000.00	60,000.00	35,258.39	24,000.00	59,258.39	741.61	98.76%
Technology Software Suppt & Maint	41,500.00	41,500.00	5,570.36	26,700.00	32,270.36	9,229.64	77.76%
Technology Systems Support	0.00	0.00	130,191.40	(130,191.40)	0.00	0.00	#DIV/0!
Technology Cloud Services	3,600.00	3,600.00	1,841.70	3,200.00	5,041.70	(1,441.70)	140.05%
Technology Website Services	8,900.00	8,900.00	3,250.00	5,050.00	8,300.00	600.00	93.26%
Technology Infrastruct Support	168,100.00	168,100.00	0.00	162,900.00	162,900.00	5,200.00	96.91%
Technology V3 Software & VSG	754,900.00	754,900.00	119,971.10	621,000.00	740,971.10	13,928.90	98.15%
Technology Data Communication	55,700.00	55,700.00	23,874.80	30,988.00	54,862.80	837.20	98.50%
Total Technology	\$1,211,200.00	\$1,211,200.00	\$392,585.77	\$788,646.60	\$1,181,232.37	\$29,967.63	97.53%
Capital Expenses							
Capitalized Structures	1,184,000.00	1,200,000.00	512,951.98	508,000.00	1,020,951.98	179,048.02	85.08%
Total Capitalized Expenses	\$1,184,000.00	\$1,200,000.00	\$512,951.98	\$508,000.00	\$1,020,951.98	\$179,048.02	85.08%
Contingency	\$747,700.00	\$671,900.00	0.00	0.00	0.00	671,900.00	0.00%
Total Current Year	\$11,288,800.00	\$11,288,900.00	\$4,485,622.99	\$5,546,707.69	\$10,032,330.68	\$1,256,569.32	88.87%



February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: ON-SITE DUE DILIGENCE VISIT TO WESTERN ASSET MANAGEMENT COMPANY

Dear Board Members:

A due diligence visit to VCERA core-plus bond manager and portable alpha manager Western Asset Management (WAMCO) is scheduled for Monday, March 16, 2020 in Pasadena, California. Retirement Administrator Linda Webb and Board Counsel Lori Nemiroff have expressed interest in attending.

Mileage reimbursement will be the only anticipated cost for attendees.

Staff requests designation/confirmation of attendees and approval of corresponding costs, so meeting arrangements may be completed.

Respectfully submitted,

Dan Gallagher
Chief Investment Officer



February 24, 2020

Board of Retirement
Ventura County Employees' Retirement Association
1190 South Victoria Avenue, Suite 200
Ventura, CA 93003

SUBJECT: AUTHORIZATION FOR TRUSTEE ROBERTS TO ATTEND THE CALAPRS PRINCIPLES OF PENSION GOVERNANCE FOR TRUSTEES, AUGUST 25 – 28, 2020 AT PEPPERDINE UNIVERSITY

Dear Board Members:

Trustee Roberts has requested authorization to attend the CALAPRS Principles of Pension Governance for Trustees at the Pepperdine University in Malibu, CA. The training and conference dates are August 25th to 28th and the estimated cost to attend is approximately \$3050, including registration, lodging, meals and mileage. An overview of the course from CALAPRS website and the course packet from last year have been provided since this year's packet is unavailable at this time.

Staff & Trustee Roberts will be pleased to respond to any questions you may have on this matter at February 24, 2020 business meeting.

Sincerely,

Linda Webb
Retirement Administrator



California Association of Public Retirement Systems

Trustee Education

Programs » Trustee Education



General Information

Public pension fund trustees bear a heavy fiduciary burden. On a cumulative basis, California's Constitution holds our members' 350 Trustees accountable for the stewardship of more than \$450 Billion in retirement fund assets. For over twenty years, trustees of CALAPRS member retirement systems have participated in CALAPRS training programs presented exclusively for California public retirement system board members.

CALAPRS Principles of Pension Management programs help public pension trustees ask and answer the tough questions. The Principles course is designed for newer trustees, and the Advanced course is designed for more experienced trustees who are proven board leaders.

Trustee attendance records and educational hours provided at past programs, click here (<https://calaprs.site-ym.com/page/trusteeattendance>).

Upcoming Events

Advanced Principles of Pension Management for Trustees

March 30-April 1, 2020 at the Luskin Conference Center, UCLA in Los Angeles, CA

- View the Program Schedule (/resource/resmgr/files/trustee_education/ucla_2020/calaprs_ucla_agenda2020.pdf)
- Download the Application Packet (/resource/resmgr/files/trustee_education/ucla_2020/calaprs_ucla2020_application.pdf)
- Apply Online Here (<https://www.calaprs.org/events/EventDetails.aspx?id=1276553&group=>)

Principles of Pension Governance for Trustees

August 25-28, 2020 at Villa Graziadio, Pepperdine University in Malibu, CA

Check Back in Spring 2020 for Additional Information and Registration

Principles of Pension Governance for Trustees at Pepperdine University

This program is designed for new trustees, or those seeking a refresher, and focuses on the practical aspects of our Trustees' duties. Now held at the Pepperdine University Executive Center, CALAPRS continues to offer the same high-caliber coursework and faculty that were previously offered on the Stanford University campus. The three-day intensive program begins with a test what will be reviewed at the end of the course, then continues with a combination of team teaching, case studies, and mock board problem solving. All course materials are based on actual California public pension fund law, policies, practices, and problems.

Topics covered help to address the following questions:

- Introductions and Course Overview
- Fiduciary Duty and Sound Decision Making
- Required Ethics Training for Public Fund Trustees
- Benefits Provided and the Board's Role
- Key Issues in Disability Retirement
- Disability Case Study
- Addressing Pension Liabilities
- Investment Policy Basics
- Overseeing the Investment Program
- How a Board Should Function
- Stakeholder Case Study

Advanced Principles of Pension Management for Trustees at UCLA

The Advanced Principles is about building a trustee's skills and strengthening board governance. Pension trustees are faced with increased challenges, unprecedented scrutiny, and evolving issues. Moreover, areas such as actuarial assumptions, accounting requirements, and risk management are rapidly changing. To help trustees build and enhance their skills in addressing such issues, participants in this program will hear from and discuss issues with top-level presenters in the areas of board governance, investments, actuarial science, pension law and economics. Over the course of two days, participants will be immersed in a powerful learning process—acquiring the skills they need to lead their organizations effectively. The program's proven, multifaceted educational approach fosters the professional, intellectual, and personal development required to govern at the board level.

Topics covered will include:

- Policy-Based Boards: From Theory to Implementation
- Economics Update and Forecast
- Investments and Board/CIO Relationships
- The Legal Side of Governance
- Advanced Actuarial Principles

My Profile

Profile Home (<https://www.calaprs.org/members/>)
Manage Profile (https://www.calaprs.org/members/manage_profile.asp)
Groups (/members/my_groups.asp)
Messages (</messaging/>)
Membership Info (<https://www.calaprs.org/members/membership.asp>)

Calendar

3/7/2020 » 3/10/2020

General Assembly (/events/EventDetails.aspx?id=1229976)

3/8/2020

Investment Staff Round Table at the General Assembly (/events/EventDetails.aspx?id=1326982)

Contact Us:

575 Market Street, Suite 2125, San Francisco, CA 94105

Phone: 415-764-4860 or Toll-Free: 1-800-RETIRE-0

Fax: 415-764-4915

Email: info@calaprs.org(<mailto:info@calaprs.org>)

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*PRINCIPLES OF
PENSION GOVERNANCE*
A COURSE FOR TRUSTEES



*The Crane, An Age-Old
Symbol Of Long Life*

Sponsored By



*to be held at the
Pepperdine University
Villa Graziadio Executive Center*

August 26-29, 2019

CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS'

PRINCIPLES OF PENSION GOVERNANCE
A Course For Trustees

A COURSE FOR TRUSTEES

CALAPRS' MISSION

"CALAPRS sponsors educational forums for sharing information and exchanging ideas among Trustees and staff to enhance their ability to administer public pension benefits and manage investments consistent with their fiduciary duty."

ABOUT THE COURSE

Public Pension Fund Trustees bear a heavy fiduciary burden. On a cumulative basis, California's Constitution holds our members' **350** Trustees accountable for the stewardship of more than **\$450** Billion in retirement fund assets. **40** California public pension systems belong to CALAPRS. Over the past ten years, Trustees of our member retirement systems have participated in this unique training program presented exclusively for California public retirement system board members. This training focuses on the practical aspects of our Trustees' duties.

Now in its second year at the Pepperdine University Executive Center, adjacent to Pepperdine's graduate schools, CALAPRS continues to offer the same high-caliber coursework and faculty it has offered for the past twenty years on the Stanford University campus.

WHO SHOULD ATTEND?

The course is for Trustees. Attendance is recommended within the first year after assuming office. Experienced Trustees will use the program as a comprehensive refresher course.

For more experienced Trustees, the Advanced Principles of Pension Governance course at UCLA is suggested. This course is a pre-requisite for admission to the UCLA course.

WHY ATTEND?

- To gain insight into public pension policy issues
- To discuss alternative solutions to common problems
- To understand the complexities involved in administering public pension plans
- To appreciate the differences and similarities among California public pension plans
- To network with other Trustees and pension professionals
- To increase familiarity with pension terminology and concepts
- To receive the ethics training required for new Trustees

FACULTY

The Course will be taught by public pension practitioners, including Trustees, Consultants, Actuaries, Investment Managers, Attorneys & Administrators.

THE CURRICULUM COMMITTEE

Principles of Pension Governance is managed by CALAPRS' Curriculum Committee led by the course Dean: Julie Wyne, Chief Executive Officer, Sonoma County Employees' Retirement Association.

LOGISTICS

California Association of Public Retirement Systems:

Kerry Parker, Administrator

Alison Trejo, Administrator

Chezka Solon, Meeting Manager

CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS'

PRINCIPLES OF PENSION GOVERNANCE
A Course For Trustees

THE CURRICULUM

Each participant must attend the full 3 days of intensive training. Sessions combine team teaching, case studies and mock board problem solving. All course materials are based on actual California public pension fund law, policies, practices and problems.

The *Wednesday Evening Case Study* will provide practical experience in a disability hearing. The *Thursday Evening Session* will consist of a 90-minute **TEAM CASE STUDY** to resolve significant Board of Retirement issues.

MONDAY – AUGUST 26

6:00 PM Reception & Dinner
7:30 PM **Introductions and Course Overview**

TUESDAY – AUGUST 27

8:00 AM **Fiduciary Duty and Sound Decision Making**
How a Board Should Function
Benefits Provided and the Board's Role
Key Issues in Disability Retirement
5:30 PM Reception & Dinner
6:30 PM **Case Study: Disability Hearing**

WEDNESDAY – AUGUST 28

8:00 AM **Addressing Pension Liabilities**
Investment Policy Basics
Overseeing the Investment Program
5:45 PM Networking Dinner
6:30PM **Stakeholder Case Study**

THURSDAY – AUGUST 29

8:00 AM **Required Ethics Training for Public Fund Trustees**
Course Summary
11:30 AM *Certificate Luncheon* and **Final Course Evaluation**

CERTIFICATE OF COMPLETION

Participants who successfully complete the course will receive a Certificate of Completion as well as a Certificate for completion of the AB1234 Ethics in Public Service. Trustees must attend all sessions to receive a completion certificate, at the discretion of the course faculty, and attendees who do not complete the course may return the following year to make up missed sessions at no additional charge.

LOCATION & LODGING

The program and lodging will be located at Villa Graziadio Executive Center, Pepperdine University, 24255 Pacific Coast Highway, Malibu, CA 90263. Lodging will be provided on campus for the nights of August 26, 27, and 28 and will be arranged by CALAPRS as part of the course for all participants. Meals will also be provided beginning with dinner on August 26 and ending with lunch on August 29.

ENROLLMENT

Minimum 20, Maximum 34 Trustees.

APPLICATION & TUITION

All applications must be received no later than **JUNE 14, 2019**. Unsigned applications will be returned to the sender for signature. Accepted applicants will be notified via email the week of **JUNE 17, 2019**. Tuition of \$3,000 (includes lodging, meals and materials) must be paid no later than **AUGUST 2, 2019**.



CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS'

PRINCIPLES OF PENSION GOVERNANCE

A Course For Trustees

APPLICATION FOR ENROLLMENT 2019

APPLICATIONS WITH BOTH REQUIRED SIGNATURES MUST BE RECEIVED BY JUNE 14, 2019.

Applicants must be trustees of a California public employee pension system. Attendance is recommended within the first year after assuming office. Experienced trustees will use the program as a comprehensive refresher course. Each system may enroll one Trustee as a "Delegate" and designate one additional Trustee as "1st Alternate" with the remainder as "2nd Alternate". Delegates will be admitted first. If vacancies remain, 1st Alternates will be admitted in the order received, followed by 2nd Alternates. All applicants will be notified the week of June 17.

Applicant Information

Trustee's Name (for certificate/name badge): _____

Retirement System: _____

Trustee Type: Elected Appointed Ex-Officio Date Became a Trustee: _____ Date Term Expires: _____

Trustee's Mailing Address: _____

Trustee's Phone: _____ Trustees' Email: _____

Administrative Contact (name, email): _____

Emergency Contact (name, phone): _____

Dietary Restrictions (if any): _____

BIOGRAPHY: Email Trustee's biography (≤150 words) to register@calaprs.org for printing in the attendee binder.

Applicant Agreement

If admitted, I agree to attend the program in full and acknowledge that missing one or more sessions may result in forfeiture of my Certificate of Completion, as determined by the Faculty.

Trustee Signature (required) _____ Date: _____

Administrator Approval

Applicant Designation: Delegate 1st Alternate 2nd Alternate

Administrator Name: _____ Email: _____

Administrator Signature (required): _____

Tuition Payment

Tuition of \$3,000 must be paid in full by August 2, 2019 and includes all meals, materials, and lodging. Payable by check only (no credit cards) to "CALAPRS". **This application form serves as an invoice.** No additional invoice will be sent. Cancellation refunds may be provided to the extent that costs are not incurred by CALAPRS.

On campus lodging is mandatory for all participants. CALAPRS will make the reservations and payment for the nights of August 26, 27, and 28 at the Villa Graziadio Executive Center on the Pepperdine campus.

**RETURN COMPLETED APPLICATION BY
JUNE 14, 2019**

Mail, email or fax form and payment to
CALAPRS
575 Market Street, Suite 2125
San Francisco, CA 94105
Phone: 415-764-4860 Fax: 415-764-4915
register@calaprs.org www.calaprs.org



If, due to a disability, you have any special needs, call 415-764-4860 to let us know. We will do our best to accommodate them.



February 18, 2020

Dear Valued Partner,

Today Franklin Templeton, a global leader in asset management, [announced](#) that it is purchasing Legg Mason and its affiliates, including Western Asset. We were an integral part of the discussions leading up to this deal, and Franklin Templeton shares our commitment to upholding Western Asset's full investment independence and organizational autonomy. We support the transaction wholeheartedly.

There will be no change to your relationship team, your investment team, the Western Asset leadership team nor our investment philosophy or process as a result of this acquisition. The combined company will have an unparalleled global footprint and breadth of investment offerings as one of the world's largest active managers with over \$1.5 trillion in assets under management. We look forward to accessing Franklin Templeton's expansive retail distribution platform and presence in key growth markets to help drive the continued success of our clients and our Firm.

All of us at Western Asset remain steadfast in our commitment to the assets you have entrusted to us and the high standards of service and performance that we have held for nearly 50 years. Our Client Service Team will be reaching out to key members of your organization to make sure that your questions are answered and to keep you apprised of any new developments.

Thank you for your continued partnership.

Sincerely,

Jim and Ken

James W. Hirschmann III, Chief Executive Officer
S. Kenneth Leech, Chief Investment Officer