VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

DISABILITY & BUSINESS MEETING

DECEMBER 11, 2017

AGENDA

PLACE: Ventura County Employees' Retirement Association
Second Floor Boardroom
1190 South Victoria Avenue
Ventura, CA 93003

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:

VI. APPLICATIONS FOR DISABILITY RETIREMENT (continued)

2 Medical Analysis and Recommendation, including Supporting Medical Documentation, submitted by County of Ventura, Risk Management, in support of the Application for Service-Connected Disability Retirement, dated October 13, 2017, received October 12, 2017.

3. Hearing Notice, dated November 21, 2017.

B. Application for Service-Connected Disability Retirement – Acosta, Victor L.; Case No. 17-020. 132 – 258

1. Application for Service-Connected Disability Retirement, filed September 22, 2017.

2. Medical Analysis and Recommendation, including Supporting Medical Documentation, submitted by Michael D. Youril, Attorney for Ventura Regional Sanitation District, in support of the Application for Service-Connected Disability Retirement, dated November 27, 2017.

3. Hearing Notice, dated December 4, 2017.

C. Application for Service-Connected Disability Retirement – Janeen R. Bittmann; Case No. 17-014. 259 – 262

1. Risk Management's Request for an Extension of time to submit Medical Analysis through March 2018.

2. Applicant Statement submitted by Applicant, Janeen Bittmann, dated December 1, 2017.

3. Hearing Notice, dated December 1, 2017.

VII. INVESTMENT MANAGER PRESENTATIONS

A. Receive Annual Investment Presentation from Loomis Sayles, Stephanie S. Lord. 263 – 295

VIII. INVESTMENT INFORMATION

NEPC – Allan Martin.
VCERA – Dan Gallagher, Chief Investment Officer

A. Investment Manager Watch List Consideration.

1. Staff Letter by C.I.O., Dan Gallagher. 296

2. Excerpt from NEPC October 31, 2017 Monthly Investment Performance Report. 297

VIII. INVESTMENT INFORMATION (continued)

B. 2018 Proposed Schedule of Investment Manager Presentations and Investment On-Site Due Diligence Visits.
Recommended Action: Approve.

1. Staff Letter by C.I.O., Dan Gallagher. 298
2. Proposed VCERA 2018 Investment Presentations Calendar. 299
3. Proposed VCERA 2018 Investment On-Site Due Diligenece Calendar. 300

IX. OLD BUSINESS

A. Recommendation to Approve New Walter Scott Reduced Fee Schedule.
RECOMMENDED ACTION: Approve.

1. Staff Letter by C.I.O., Dan Gallagher. 301
2. Amended and Restated Fee Schedule. 302 – 303

B. California Government Code Section 7514.7 Annual Reporting.
RECOMMENDED ACTION: Receive and File.

1. Staff Letter by C.I.O., Dan Gallagher. 304
2. California Disclosure Report, Abbott Capital Management. 305 – 307
3. California Reporting Templates. 308 – 310

X. NEW BUSINESS

A. Recommendation to Approve PEPRA Annual Compensation Limit.
RECOMMENDED ACTION: Approve.

1. Staff Letter. 311
2. California Actuarial Advisory Panel PEPRA Pension Compensation Limits for the Calendar Year 2018. 312 – 314

B. Recommendation for Authorization for Up to 2 Trustees and C.I.O. to Attend the NEPC 2018 Public Funds Workshop, Tempe, AZ, January 22 – 23, 2018.
Recommended Action: Approve

1. Staff Letter by C.I.O., Dan Gallagher. 315
2. NEPC 2018 Public Funds Workshop Agenda. 316 – 317

X. NEW BUSINESS (continued)

C. Recommendation for Authorization for General Counsel to Attend the NAPPA 2018 Winter Seminar, Tempe, AZ, February 21 – 23, 2018.
Recommended Action: Approve.

1. Staff Letter. 318

2. NAPPA 2018 Winter Seminar Agenda. 319 – 326

D. Annual Appointment of Chair and Vice-Chair.

1. Staff Letter. 327

XI. INFORMATIONAL

A. SACRS Peer Comparison Report. 328 – 396

B. CALAPRS Advanced Principles of Pension Management for Trustees. 397 – 400

C. The 2018 Pension Bridge Annual Conference. 401 – 418

XII. PUBLIC COMMENT

XIII. STAFF COMMENT

XIV. BOARD MEMBER COMMENT

XV. ADJOURNMENT

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

BOARD OF RETIREMENT

BUSINESS MEETING

NOVEMBER 20, 2017

MINUTES

DIRECTORS PRESENT:
Tracy Towner, Chair, Alternate Safety Employee Member
William W. Wilson, Vice Chair, Public Member
Peter Foy, Public Member
Mike Sedell, Public Member
Robert Bianchi, Public Member
Maeve Fox, General Employee Member[1]
Craig Winter, General Employee Member
Arthur E. Goulet, Retiree Member
Will Hoag, Alternate Retiree Member
Chris Johnston, Safety Employee Member
Ed McCombs, Alternate Public Member

DIRECTORS ABSENT:
Steven Hintz, Treasurer-Tax Collector
Peter Foy, Public Member

STAFF PRESENT:
Linda Webb, Retirement Administrator
Lori Nemiroff, County Counsel
Henry Solis, Chief Investment Officer
Dan Gallagher, Chief Investment Officer
Stephanie Berkley, Retirement Benefits Specialist
Chris Ayala, Program Assistant

PLACE:
Ventura County Employees' Retirement Association
Second Floor Boardroom
1190 South Victoria Avenue
Ventura, CA 93003

TIME: 9:00 a.m.

ITEM:

[1] Trustee Fox left at 10:30 a.m.

I. CALL TO ORDER

Chair Towner called the Business Meeting of November 20, 2017, to order at 9:00 a.m.

II. APPROVAL OF AGENDA

Chair Towner proposed amendments to the agenda to consider item "V.B. "Annual Investment Presentation from Abbott Capital Management", ahead of item V.A. "Annual Investment Presentation from BlackRock", and that VIII.C. "Actuarial Audit Presentation from Gabriel Roeder Smith" be time specific for 10:30 a.m.

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

MOTION: Approve the Agenda as Amended.

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

III. APPROVAL OF MINUTES

A. Disability Minutes of November 6, 2017.

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

MOTION: Approve.

Moved by Johnston, seconded by McCombs.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

IV. CONSENT AGENDA

A. Receive and File Budget Summary for FY 2017-18 Month Ending October 31, 2017.

B. Receive and File Statement of Fiduciary Net Position, Statement of Changes in Fiduciary Net Position, Schedule of Investments and Cash Equivalents, and Schedule of Investment Management Fees for the Period Ending October 31, 2017.

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

MOTION: Receive and File.

Moved by Bianchi, seconded by Fox.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

Following the vote on this item, the Board advanced to agenda item V.B.

V. INVESTMENT MANAGER PRESENTATIONS

A. Receive Annual Investment Presentation from BlackRock, Anthony Freitas and Timothy Murray.

Anthony Freitas and Timothy Murray were present on behalf of BlackRock to provide an organizational and investment performance update.

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

MOTION: Receive and File.

Moved by Wilson, seconded by McCombs.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

Following the vote on this item, the Board took a break at 10:05 a.m.

Upon returning from break at 10:15 a.m., the Board advanced to item VI.A.

B. Receive Annual Investment Presentation from Abbott Capital Management, Charles Van Horne and Young Lee.

Charles Van Horne and Young Lee were present on behalf of Abbott Capital Management to provide an organizational and investment performance update.

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

MOTION: Receive and File.

Moved by Goulet, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

Following the vote on this item, the Board advanced to item VIII.A.

VI. INVESTMENT INFORMATION

A. NEPC – Allan Martin.
VCERA – Dan Gallagher, Chief Investment Officer.

1. Preliminary Performance Report Month Ending October 31, 2017.
RECOMMENDED ACTION: Receive and file.

Trustee Johnston said that the Board should consider removing the fund manager, Sprucegrove from the watch list and add Hexavest to the list. He then asked that it be added to the agenda for the combined meeting in December.

After discussion by the Board, staff, and consultant, the following motion was made:

MOTION: Receive and File.

Moved by Goulet, seconded by Winter.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

2. Investment Summary Quarter Ending September 30, 2017.
RECOMMENDED ACTION: Receive and file.

After discussion by the Board, staff, and consultant, the following motion was made:

MOTION: Receive and File.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

Trustee Fox left at 10:30 a.m., after the vote on this item.

Following the vote on this item, the Board advanced to item VIII.C.

VII. OLD BUSINESS

None.

VIII. NEW BUSINESS

A. Recommendation to Approve a $25 Million Allocation to Abbott Capital Management's Secondary Fund of Funds.
RECOMMENDED ACTION: Approve.

1. Staff Letter by C.I.O., Dan Gallagher.

2. Memorandum from NEPC on Abbott Capital Management's Secondary Fund of Funds.

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

MOTION: Approve.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Fox, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Hintz

Following the vote on this item, the Board returned to item V.A.

B. Recommendation from Ad-Hoc Committee to Approve Technical Aspects for VCERA's Fund of One Investment.
RECOMMENDED ACTION: Approve.

1. Letter from Ad-Hoc Committee.

Mr. Gallagher reminded the Board that at the last Board Meeting the Chairman had appointed an ad-hoc committee to discuss technical details, and propose recommendations to implement the Fund of One investment. He said that after consulting with Abbott, legal counsel, and the committee members, he drafted a memorandum on behalf of the committee to present to the Board. Subsequently, trustee Goulet discussed the memorandum with outside counsel regarding the Fund of One structure, and may have some suggested corrections concerning the memo, but Mr. Gallagher believed that the memo represented the intentions of the committee. He then asked that the Board approve the recommendations of the committee.

Trustee Goulet commented that after speaking to outside counsel they agreed that the intent of the letter was acceptable, but some of the terminology within the memo could have been stated better.

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

MOTION: Approve.

Moved by Sedell, seconded by Bianchi.

Vote: Motion carried
Yes: Bianchi, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Fox, Hintz

Following the vote on this item, the Board advanced to item VIII.D.

C. Actuarial Audit Presentation from Gabriel Roeder Smith, Brad Armstrong.

1. Actuarial Audit.

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

MOTION: Approve.

Moved by Bianchi, seconded by Winter.

Vote: Motion carried
Yes: Bianchi, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Fox, Hintz

Following the vote on this item, the Board returned to item VIII.B.

D. Proposed Board Calendar for 2018.
RECOMMENDED ACTION: Approve.

1. Staff Letter.

2. Proposed 2018 Board Meeting Calendar.

Ms. Webb presented a proposed Board Meeting Calendar for 2018 to the Board. She said that the calendar was designed to avoid holidays and back-to-back meetings, while still trying to adhere to the 1st and 3rd Monday schedule of previous years; exceptions were combined meetings for April and December.

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

MOTION: Approve.

Moved by Bianchi, seconded by McCombs.

Vote: Motion carried
Yes: Bianchi, Goulet, Johnston, McCombs, Sedell, Wilson, Winter
No: -
Absent: Foy, Fox, Hintz

IX. INFORMATIONAL

None.

X. PUBLIC COMMENT

None.

XI. STAFF COMMENT

Mr. Gallagher informed the Board that Walter Scott had tentatively agreed to the lower fee structure. He also said that he would be proposing for Board approval, calendars for 2018 investment presentations and for 2018 investment on-site due diligence at the next Board meeting in December.

Ms. Webb commented that the Market Based Premium Pay item that had been tabled in October would be on the agenda at the combined meeting on December 11th.

XII. BOARD MEMBER COMMENT

None.

XIII. ADJOURNMENT

The Chairman adjourned the meeting at 11:22 a.m.

Respectfully submitted,

LINDA WEBB, Retirement Administrator

Approved,

TRACY TOWNER, Chairman

VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

REPORT OF REGULAR AND DEFERRED RETIREMENTS AND SURVIVORS CONTINUANCES

NOVEMBER 2017

FIRST NAME	LAST NAME	G/S	BENEFIT SERVICE	*	DEPARTMENT	EFFECTIVE DATE
REGULAR RETIREMENTS:						
Victor	Acosta	G	31.00		Regional Sanitation District (deferred)	9/22/2017
Raquel	Alcantara	G	20.03		Public Defender	10/21/2017
Jenny L.	Baarstad	G	28.02		Health Care Agency	10/18/2017
Consuelo P.	Barron	G	16.51		Superior Court	10/21/2017
Gay E.	Bents	G	5.58	*	Superior Court (deferred)	11/17/2017
Catherine L.	Bergh	S	9.25		Fire Protection District (non-member spouse, deferred)	10/31/2017
Debra A.	Borsos	G	24.62		Resource Management Agency	10/20/2017
Larry C.	Brister	S	30.30		Fire Protection District	10/2/2017
James G.	Bucholz	G	16.13		Information Technology Services	10/27/2017
Mihail	Cosma	G	27.81		Information Technology Services	10/7/2017
Suzanne	Creighton	G	10.51		Health Care Agency	10/14/2017
DarAnn L.	Dearing	G	28.71		Human Services Agency	11/4/2017
Wayne T.	Ferber	S	34.27		Fire Protection District	10/8/2017
Baljit	Gill	G	21.71		Health Care Agency	11/1/2017
Christina	Gomez	G	10.10		Human Services Agency	10/29/2017
Mercedes E.	Gonzalez	G	32.09		Health Care Agency	10/7/2017
Merrill	Horton	S	27.94		Sheriff's Department	10/31/2017
Robert T.	Mendoza	G	8.55		Health Care Agency (deferred)	11/18/2017
Bonnie	Mesinoff	G	14.96		District Attorney	10/6/2017
Luis G.	Obregon	S	38.06		Sheriff's Department	10/21/2017
Martha	Romero	G	5.59	*	Health Care Agency (deferred)	11/06/2017
Patricia	Schauer	G	12.20		Human Services Agency	10/7/2017
Kathleen	Strahl	G	7.81		Health Care Agency	10/7/2017
Charles	Thomas	G	36.90		Air Pollution Control District	10/21/2017
Diane	Valenzuela	G	35.74		Health Care Agency	10/13/2017
Pooi Fong	White	G	25.23		Child Support Services	11/1/2017
DISABILITY RETIREMENTS:						
DEFERRED RETIREMENTS:						
Eleanor	Abiva	G	5.81		Health Care Agency	10/21/2017
Peter	Cervantez	G	9.15		Public Works	11/17/2017
Monica	Greenberg	G	14.32		Area Agency on Aging	11/18/2017
Lee	Hyre	G	7.69		Sheriff's Department	11/08/2017
Leticia	Magallon	G	9.80		Health Care Agency	10/17/2017
Kara	Oriana	G	7.76		Health Care Agency	11/17/2017
Brenda	Reyes	G	10.13		Sheriff's Department	11/03/2017
Brigid	Simon	G	8.61		Human Services Agency	11/11/2017
Jason	Simone	G	8.61		Information Technology Services	11/18/2017
SURVIVORS' CONTINUANCES:						
Nuhad	Amoun					
Tonja H.	Eckman					
Albert	Lyons				Alt Payee	
John B.	Lyons				Alt Payee	
Stephanie A.	Lyons				Alt Payee	
Lou Melva	Matthews					

*** = Member Establishing Reciprocity**

Date: Thursday, November 30, 2017
Time: 08:28AM
User: 104164

Ventura County Retirement Assn

Check Register - Standard

Period: 05-18 As of: 11/30/2017

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
Company:	**VCERA**										
Acct / Sub:	10200		000000								
027287	CK	11/1/2017	ASSIMA ASSIMA, INC.	05-18		000167	VO	IT	11/1/2017	0.00	7,680.00
027288	CK	11/1/2017	CASTRATEGI CALIFORNIA STRATEGIES & AD\	05-18		000169	VO	ADMIN EXP	11/1/2017	0.00	2,500.00
027289	CK	11/1/2017	INTERNATIO INTERNATIONAL FOUNDATION	05-18		000168	VO	ADMIN EXP	11/1/2017	0.00	1,565.00
027290	CK	11/1/2017	PARAMETRIC PARAMETRIC PORTFOLIO ASSO	05-18		000170	VO	INVESTMENT FEES	11/1/2017	0.00	42,135.00
027291	CK	11/8/2017	ABBOTTCAPI ABBOTT CAPITAL MANAGEMENT	05-18		000171	VO	INVESTMENT FEES	11/8/2017	0.00	37,500.00
027292	CK	11/8/2017	ABUCOURTRE PERSONAL COURT REPORTERS	05-18		000172	VO	ADMIN EXP	11/8/2017	0.00	945.00
027293	CK	11/8/2017	ANGELESJES JESS ANGELES	05-18		000173	VO	TRAVEL REIMB	11/8/2017	0.00	446.69
027294	CK	11/8/2017	BRENTWOODI BRENTWOOD IT	05-18		000174	VO	IT	11/8/2017	0.00	9,695.00
027295	CK	11/8/2017	DIGITALDEP DIGITAL DEPLOYMENT	05-18		000175	VO	IT	11/8/2017	0.00	650.00
027296	CK	11/8/2017	GLOBALCAPA GLOBAL CAPACITY	05-18		000176	VO	IT	11/8/2017	0.00	603.63
027297	CK	11/8/2017	HARRISWATE HARRIS WATER CONDITIONING	05-18		000179	VO	ADMIN EXP	11/8/2017	0.00	135.40
027298	CK	11/8/2017	INCENTIVES INCENTIVE SERVICES	05-18		000177	VO	ADMIN EXP	11/8/2017	0.00	350.19
027299	CK	11/8/2017	INTEGRATED INTEGRATED FIRE & SAFETY	05-18		000178	VO	IT	11/8/2017	0.00	250.00

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Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027300	CK	11/8/2017	LINEASOLUT LINEA SOLUTIONS	05-18		000180	VO	ADMIN EXP	11/8/2017	0.00	9,600.00
027301	CK	11/8/2017	NEMIROFFLO LORI NEMIROFF	05-18		000181	VO	TRAVEL REIMB	11/8/2017	0.00	514.17
027302	CK	11/8/2017	NOSSAMAN NOSSAMAN LLP	05-18		000182	VO	LEGAL FEES	11/8/2017	0.00	16,007.85
027303	CK	11/8/2017	SOLISHENRY HENRY SOLIS	05-18		000184	VO	TRAVEL REIMB	11/8/2017	0.00	1,276.71
027304	CK	11/8/2017	SPRUCEGROV SPRUCEGROVE INVESTMENT M	05-18		000183	VO	INVESTMENT FEES	11/8/2017	0.00	66,113.66
027305	CK	11/8/2017	WESTERNASS WESTERN ASSET MANAGEMEN	05-18		000185	VO	INVESTMENT FEES	11/8/2017	0.00	216,786.84
027306	CK	11/15/2017	ATTMOBILIT AT&T MOBILITY	05-18		000186	VO	IT	11/15/2017	0.00	358.19
027307	CK	11/15/2017	BANKOFAMER BUSINESS CARD	05-18		000187	VO	ADMIN/IT	11/15/2017	0.00	4,162.59
027308	CK	11/15/2017	GOVERNMENT GOVERNMENT FINANCE	05-18		000188	VO	ADMIN EXP	11/15/2017	0.00	570.00
027309	CK	11/15/2017	SEGALCONSU SEGAL CONSULTING	05-18		000189	VO	ACTUARY FEES	11/15/2017	0.00	11,544.00
027310	CK	11/15/2017	TIMEWARNER TIME WARNER CABLE	05-18		000190	VO	IT	11/15/2017	0.00	294.99
027311	CK	11/15/2017	VITECHSYST VITECH SYSTEMS GROUP, INC.	05-18		000191	VO	IT	11/15/2017	0.00	83,875.00
027312	CK	11/22/2017	ABUCOURTRE PERSONAL COURT REPORTERS	05-18	05-18	000199	VO	ADMIN EXP	11/22/2017	0.00	1,153.75
027312	VC	11/22/2017	ABUCOURTRE PERSONAL COURT REPORTERS	05-18	05-18	000199	VO	ADMIN EXP	11/22/2017	0.00	-1,153.75

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										Check Total		**0.00**
027313	CK	11/22/2017	ACCESSINFO ACCESS INFORMATION PROTEC	05-18	05-18	000192	VO	ADMIN EXP	11/22/2017		0.00	359.73
027313	VC	11/22/2017	ACCESSINFO ACCESS INFORMATION PROTEC	05-18	05-18	000192	VO	ADMIN EXP	11/22/2017		0.00	-359.73
										Check Total		**0.00**
027314	CK	11/22/2017	ADP ADP, LLC	05-18		000193	VO	ADMIN EXP	11/22/2017		0.00	548.42
027315	CK	11/22/2017	BIANCHIROB ROBERT BIANCHI	05-18		000207	VO	MILEAGE REIMB	11/22/2017		0.00	57.78
027316	CK	11/22/2017	BROWNARMST BROWN ARMSTRONG	05-18		000195	VO	ADMIN EXP	11/22/2017		0.00	4,116.23
027317	CK	11/22/2017	GALLAGHERD DAN GALLAGHER	05-18		000196	VO	TRAVEL REIMB	11/22/2017		0.00	243.06
027318	CK	11/22/2017	GOULETARTH ARTHUR E. GOULET	05-18		000197	VO	TRAVEL REIMB	11/22/2017		0.00	1,041.57
027319	CK	11/22/2017	MFDAILYCOR M.F. DAILY CORPORATION	05-18		000198	VO	ADMIN EXP	11/22/2017		0.00	17,363.95
027320	CK	11/22/2017	PRUDENTIAL PRUDENTIAL INSURANCE	05-18		000200	VO	INVESTMENT FEES	11/22/2017		0.00	140,822.56
027321	CK	11/22/2017	SBSGROUP SBS GROUP	05-18		000201	VO	IT	11/22/2017		0.00	243.75
027322	CK	11/22/2017	SEDELLMIKE MIKE SEDELL	05-18		000202	VO	TRAVEL REIMB	11/22/2017		0.00	1,066.37
027323	CK	11/22/2017	SHREDITUSA SHRED-IT USA	05-18		000203	VO	ADMIN EXP	11/22/2017		0.00	218.79
027324	CK	11/22/2017	THOMSONREU THOMSON REUTERS- WEST	05-18		000204	VO	IT	11/22/2017		0.00	357.00
027325	CK	11/22/2017	TOWNERTRAC TRACY TOWNER	05-18		000205	VO	TRAVEL REIMB	11/22/2017		0.00	552.20

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Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid
027326	CK	11/22/2017	WEBBLINDA LINDA WEBB	05-18		000206	VO	TRAVEL REIMB	11/22/2017	0.00	714.00
027327	CK	11/22/2017	ACCESSINFO ACCESS INFORMATION PROTEC	05-18		000192	VO	ADMIN EXP	11/22/2017	0.00	359.73
027328	CK	11/22/2017	ABUCOURTRE PERSONAL COURT REPORTERS	05-18		000199	VO	ADMIN EXP	11/22/2017	0.00	1,153.75
027329	CK	11/30/2017	BLACKROCKI BLACKROCK INSTITUTIONAL TR	05-18		000208	VO	INVESTMENT FEES	11/29/2017	0.00	224,136.59
027330	CK	11/30/2017	CDWGOVERNM CDW GOVERNMENT	05-18		000209	VO	IT	11/29/2017	0.00	1,235.89
027331	CK	11/30/2017	EXECUTIVED EXECUTIVE DATA SYSTEMS, INC	05-18		000210	VO	IT	11/29/2017	0.00	108.50
027332	CK	11/30/2017	FEDEX FEDEX	05-18		000211	VO	ADMIN EXP	11/29/2017	0.00	50.43
027333	CK	11/30/2017	INCENTIVES INCENTIVE SERVICES	05-18		000212	VO	ADMIN EXP	11/29/2017	0.00	161.63
027334	CK	11/30/2017	NOSSAMAN NOSSAMAN LLP	05-18		000213	VO	LEGAL FEES	11/29/2017	0.00	8,634.15
027335	CK	11/30/2017	VITECHSYST VITECH SYSTEMS GROUP, INC.	05-18		000214	VO	IT	11/29/2017	0.00	50,639.86

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Ventura County Retirement Assn

Check Register - Standard

Period: 05-18 As of: 11/30/2017

Check Nbr	Check Type	Check Date	Vendor ID / Vendor Name	Period To Post	Period Closed	Ref Nbr	Doc Type	Invoice Number	Invoice Date	Discount Taken	Amount Paid

Check Count: 51

Acct Sub Total: **969,386.12**

Check Type	Count	Amount Paid
Regular	49	970,899.60
Hand	0	0.00
Electronic Payment	0	0.00
Void	2	-1,513.48
Stub	0	0.00
Zero	0	0.00
Mask	0	0.00
Total:	**51**	**969,386.12**

Company Disc Total **0.00** **Company Total** **969,386.12**

VENTURA COUNTY EMPLOYEES' RETIREMENT

PRESENTED BY:
Stephanie S. Lord, CFA, CIC
Vice President, Client Portfolio Manager

LOOMIS | SAYLES

December 11, 2017

www.loomissayles.com | One Financial Center Boston, MA 02111
617 482-2450 | BOSTON DETROIT SAN FRANCISCO LONDON SINGAPORE

Firm Overview

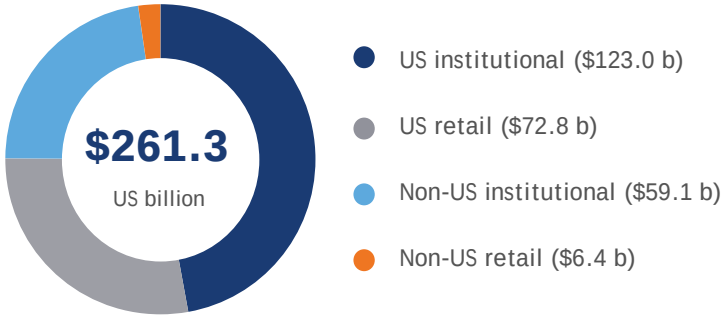
loomis sayles at a glance

A RICH INVESTMENT TRADITION
Serving clients with integrity since 1926
$261.3 billion assets under management*
Expertise across all major asset classes
75% of investment professionals dedicated to research & trading; 159 CFA® charterholders**
Global perspective: investors in Boston, San Francisco, Detroit, London and Singapore

WHAT DEFINES US
Core attributes: integrity, transparency and a team-oriented culture
Rigorous fundamental analysis complemented by robust macro and market insight
Portfolio managers, strategists, research analysts and traders collaborating to identify our best ideas
Small, accountable product teams implementing portfolio decisions
Disciplined risk awareness integrated into a high conviction investment process

WHERE WE INVEST

AUM BY GLOBAL ACCOUNTS



As of 9/30/2017.
**Includes the assets of both Loomis, Sayles & Co., LP, and Loomis Sayles Trust Company, LLC. ($21.0 billion for the Loomis Sayles Trust Company). Loomis Sayles Trust Company is a wholly owned subsidiary of Loomis, Sayles & Company, LP. **As of 12/31/2016. 283 investment professionals. 82% of CFA charterholders are investment professionals and 18% are non-investment professionals.*

LOOMIS | SAYLES®

Firm Overview

deep insight fuels our pursuit of alpha

MACRO STRATEGIES

- Director
  37 years experience
- Associate Director/Senior Global Macro Strategist
  22 years experience
- Senior Equity Strategist
  32 years experience
- Economist
  37 years experience
- Senior Commodities Analyst
  9 years experience
- 2 Research Analysts
  8 years average experience

CREDIT RESEARCH

- Director
  34 years experience
- 32 Senior Credit Analysts
  19 years average experience
- 8 Credit Analysts
  8 years average experience
- 6 Research Associates
- 7 Research Assistants
- Proprietary credit rating system since the 1930s

QUANTITATIVE RESEARCH & RISK ANALYSIS

- 2 Directors
  21 years average experience
- Quantitative Strategist
  22 years experience
- Director, LDI & Solutions
  11 years experience
- 3 Senior Quantitative Analysts
  14 years average experience
- 8 Quantitative Analysts
  7 years average experience

TRADING

- Head of Trading
  29 years experience
- 4 Trading Directors
  24 years average experience
- 35 Traders (incl. 4 directors above)
  16 years average experience
- Dir. of Portfolio Implementation
  11 years experience
- 19 Portfolio Specialists
  18 years average experience
- Dir. of Operational Trading Risk Mgmt.
  16 years experience
- Risk Analyst
  10 years experience
- 10 distinct asset class teams

SOVEREIGN RESEARCH

- 5 Senior Sovereign Analysts
  17 years average experience
- 2 Analysts
  6 years average experience
- 2 Research Associates

MORTGAGE & STRUCTURED FINANCE

- Director
  20 years experience
- 4 Strategists
  22 years average experience
- 3 Senior Analysts
  13 years average experience
- Senior Portfolio Analyst
  9 years experience
- 2 Research Analysts
  7 years average experience
- Research Associate

CONVERTIBLES & SPECIAL SITUATIONS

- Director
  32 years experience
- 5 Senior Research Analysts
  16 years average experience
- Research Analyst
  6 years experience
- Research Associate

EQUITY RESEARCH

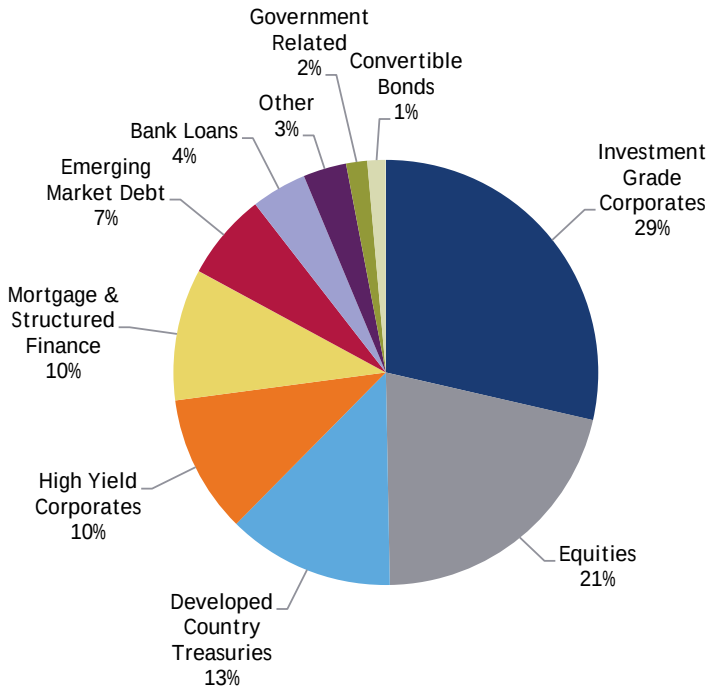
- 22 Senior Analysts
  20 years average experience
- 6 Analysts
  7 years average experience

As of 9/30/2017; Years experience indicates industry experience.

Firm Overview

comprehensive expertise

By Global Sector	Assets ($ Millions)
Investment Grade Corporates	74,994
Equities	55,211
Developed Country Treasuries	33,321
High Yield Corporates	27,533
Mortgage & Structured Finance	26,258
Emerging Market Debt	17,172
Bank Loans	10,939
Other	8,717
Government Related	4,260
Convertible Bonds	3,738



As of 9/30/2017. Due to rounding, pie chart total may not equal 100%.
Sector level assets include all accrued interest, cash and unrealized gain/loss on currency forwards.
Other includes municipals, cash & equivalents, and derivatives.
Includes the assets of both Loomis, Sayles & Co., LP, and Loomis Sayles Trust Company LLC.

LOOMIS | SAYLES

Firm Overview

our investment platform

MIKE GILES
Chief Investment Risk Officer

JAE PARK
Chief Investment Officer

DAVID WALDMAN
Deputy CIO

ALPHA STRATEGIES	BANK LOANS	DISCIPLINED ALPHA	EMERGING MARKET DEBT	FULL DISCRETION	GLOBAL	RELATIVE RETURN	MORTGAGE & STRUCTURED FINANCE
Credit Asset	Senior Loans	Core	Corporate	Multisector	Global Bond	Short Duration	Agency MBS
World Credit Asset	Senior Floating Rate and Fixed Income	Corporate	Local Currency	Core Plus	Global Credit	Inter. Duration	Investment Grade
Multi-Asset Income	Credit Opportunities	Long Corporate	Short Duration	High Yield Full Discretion	Global Debt Unconstrained	Core	Securitized Credit (ERISA)
Inflation Protected (TIPS)		Long Credit	Hard/Local Currency Blend	Global High Yield	Global Disciplined Alpha*	Core Plus	High Yield
		Global Disciplined Alpha*		US High Yield		IG Corporate	Private Debt and Equity
				High Yield Conservative		Long Corporate	
				Strategic Alpha		Long Credit	
						Long Gov't/Credit	
						Custom LDI	

GLOBAL EQUITY OPPORTUNITIES	GROWTH	LARGE CAP CORE	SMALL CAP GROWTH	SMALL CAP VALUE	VALUE
Global Equity & Income	All Cap Growth	Large Cap Core	Small Cap Growth	Small Cap Value	Dividend Income
Global Equity Opportunities	Global Growth		Small/Mid Cap Growth	Small/Mid Cap Core	Focused Value
	Large Cap Growth				Large Cap Value
	Long/Short Equity				

As of 9/30/2017.
** Co-managed investment strategy*

LOOMIS | SAYLES®

FO0118
MALR016803

Full Discretion

investment process

HIGHLY EXPERIENCED, SEASONED TEAM

PRODUCT TEAM

	MATTHEW EAGAN Portfolio Manager	DAN FUSS Portfolio Manager	BRIAN KENNEDY Portfolio Manager	ELAINE STOKES Portfolio Manager
Yrs of industry experience:	27	59	27	30
Yrs with firm:	20	41	23	29

	BRIAN HESS Global Strategist	DIANA MONTEITH Convertibles and Special Situations Strategist	JOHN DEVOY Credit Strategist	KEN JOHNSON Product Manager	FRED SWEENEY Product Manager
Yrs of industry experience:	14	32	18	26	30
Yrs with firm:	3	15	2	17	22

KEY SUPPORT

Investment Analysts			Portfolio Specialists	
S. Darci	B. Hazelton	C. Romanelli	M. Fitzgerald	A. Steede
K. Doyle	V. Patel	C. Turner	R. Gartaganis	M. Tierney

SECTOR TEAMS

Global Asset Allocation		Developed Non-US Markets		US Yield Curve	
Emerging Markets	High Yield / Bank Loans	Convertibles	Mortgage & Structured Finance	Inv Grade / Global Credit	US Government

FIRMWIDE RESOURCES

Macro Strategies
Director
Assoc. Director/
Senior Global Macro Strategist
Senior Equity Strategist
Economist
Senior Commodities Analyst
2 Research Analysts

Sovereign Research
5 Senior Analysts
2 Analysts
2 Research Associates

Credit Research
Director
32 Senior Analysts
8 Analysts
6 Research Associates
7 Research Assistants

Mortgage & Structured Finance
Director
4 Strategists
3 Senior Analysts
Senior Portfolio Analyst
2 Research Analysts
Research Associate

Quant. Research & Risk Analysis
2 Directors
Quantitative Strategist
Director, LDI & Solutions
3 Senior Quantitative Analysts
8 Quantitative Analysts

Equity Research
22 Senior Analysts
6 Analysts

Convertibles & Special Situations
Director
5 Senior Analysts
Research Analyst
Research Associate

Fixed Income Trading
29 Traders/TAs
Director, Portfolio Implementation
16 Portfolio Specialists
Director, Operational Trading Risk Mgt.
Risk Analyst

As of 9/30/2017.

LOOMIS | SAYLES®

guideline summary

Benchmark

- 65% Barclays Aggregate, 30% Citigroup High Yield Mkt, 5% JP Morgan ex US Hedged $US

Guidelines & Limitations

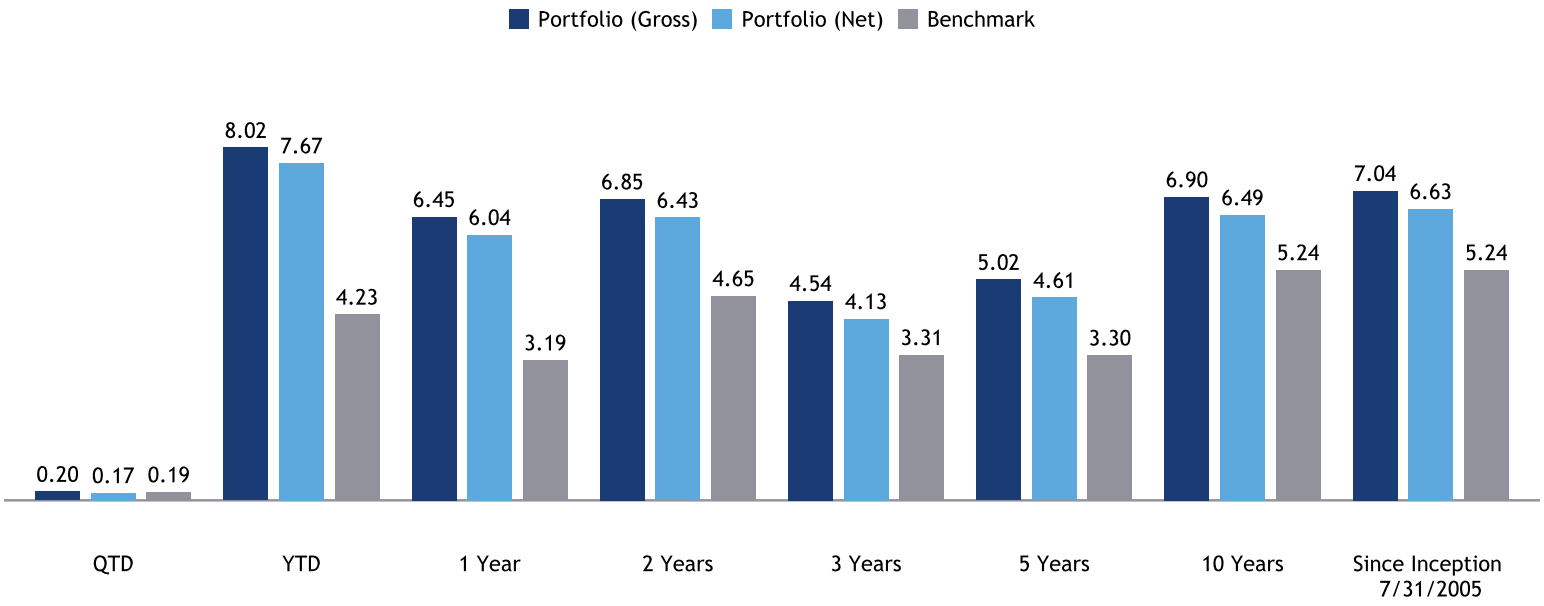
- Issuer: 5% maximum market value in a single US issuer, with the exception of US Government, Agency and GSE issuers.
- Emerging Market: 10% maximum market value in emerging market securities not domiciled in the JP Morgan Government Bond Index and 2% maximum market value in securities issued by a single entity domiciled in a country not included in the JP Morgan Government Bond Index (Emerging Market Index).
- Country: 40% maximum market value in bonds issued by non-US entities, including yankees, sovereign debt, structured notes linked to non-US markets, supranationals, and emerging market bonds.
- Currency: Maximum 20% market value in non-US dollar denominated securities
- Credit Quality: All securities shall be rated no lower than C, at the time of purchase, by Moody's, S&P or Fitch. If a security is not rated by either of Moody's, S&P, or Fitch, the Loomis Sayles equivalent rating applies. For split rated securities, the lower rating will govern.
- The minimum average rating of the portfolio shall be equivalent to Moody or S&P Baa3/BBB-. If not rated by either of the rating agencies, the Loomis Sayles rating will be used. In the case of split rated securities, the lower of the ratings will govern.
- Account may hold up to 55% market value in the aggregate of securities not rated investment grade by Moody, S&P, or Fitch, foreign bonds, non-144A private placements and unusually interest rate sensitive MBS. In the case of split rated securities, the higher rating will govern split-rated securities. If these securities are not rated (NR), Loomis Sayles rating will be used.
- Account must hold at least 65% market value in securities rated equal to or above Baa3/BBB-/BBB- by Moody, S&P or Fitch. In the case of split rated securities, the higher rating will govern split-rated securities. If these securities are not rated (NR), Loomis Sayles rating will be used.
- Account may not purchase equity securities, excluding preferred stock, but may hold equities resulting from conversions, exchanges or debt restructurings; account may hold no more than 5% market value in such equity securities.

Guideline summary is not a complete restatement of guidelines. The slide is intended to be a summary to aid in the review process.

Ventura County Employees' Retirement - Multisector Full Discretion

performance

TRAILING RETURNS AS OF 10/31/2017 (%)



	QTD	YTD	1 Year	2 Years	3 Years	5 Years	10 Years	Since Inception 7/31/2005
Excess Return (Gross)	+0.00	+3.79	+3.27	+2.19	+1.23	+1.72	+1.66	+1.80

PORTFOLIO VALUATION (USD)

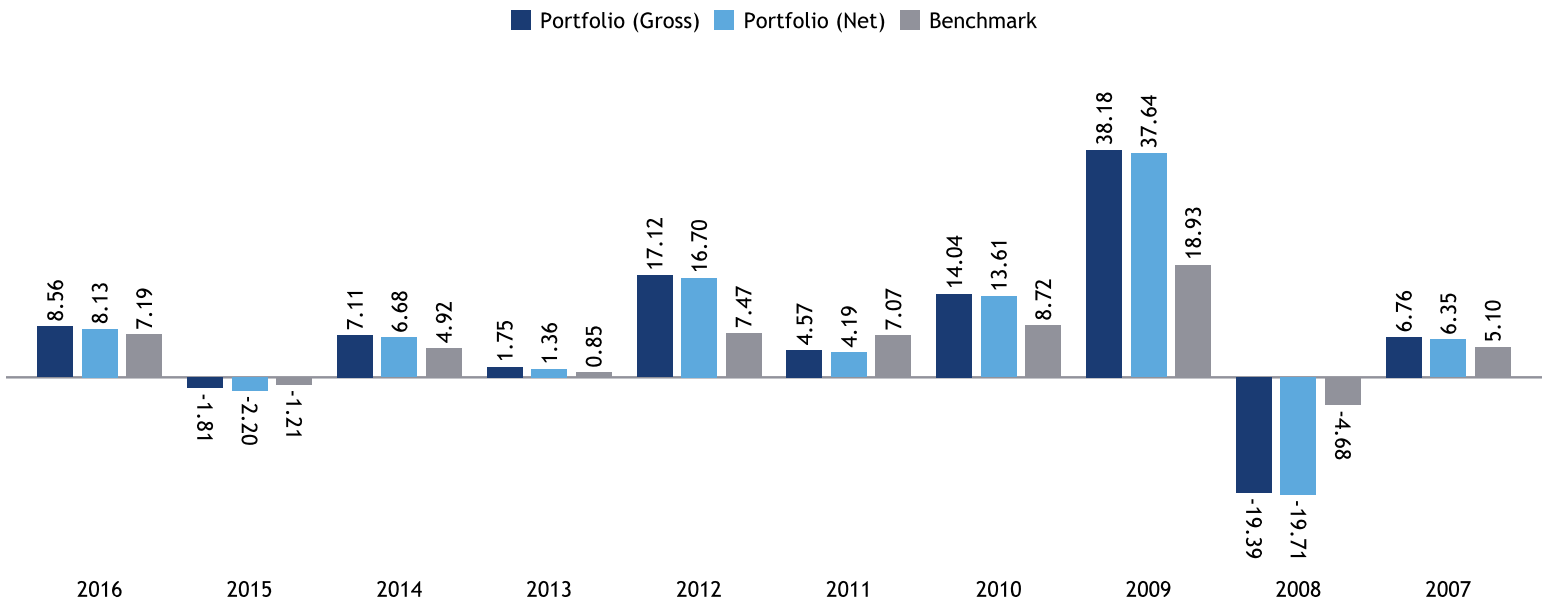
	Portfolio 10/31/2016	Portfolio 10/31/2017
Total	77,556,550	82,615,110

Benchmarks: 60% Barclays Agg, 35% Citigroup HY Mkt, 5% JPM X US Hdg $US (7/31/2005 - 11/30/2007). 65% BBG BARC Agg 30% Citi High Yield, 5% JPM Ex US Hedged US (11/30/2007 - 10/31/2017). The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

performance

CALENDAR YEAR RETURNS AS OF 10/31/2017 (%)



	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Excess Return (Gross)	+1.37	-0.61	+2.19	+0.90	+9.66	-2.50	+5.31	+19.25	-14.71	+1.66

Benchmarks: 60% Barclays Agg, 35% Citigroup HY Mkt, 5% JPM X US Hdg $US (7/31/2005 - 11/30/2007). 65% BBG BARC Agg 30% Citi High Yield, 5% JPM Ex US Hedged US (11/30/2007 - 10/31/2017). The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

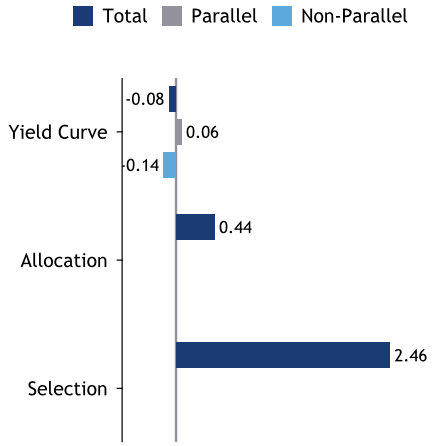
attribution analysis

10/31/2016 TO 10/31/2017

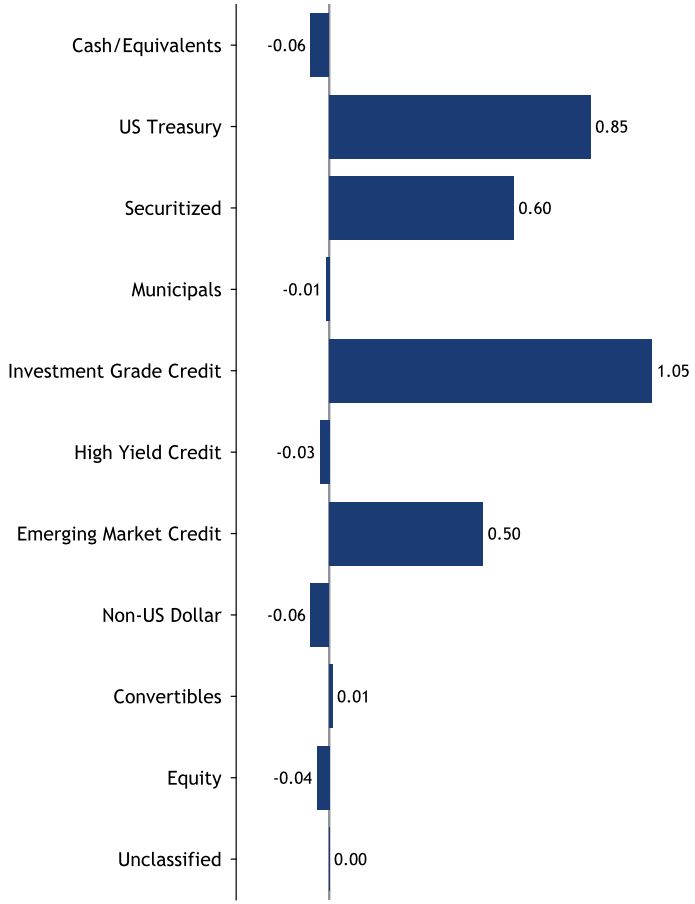
TOTAL RETURNS

	Total Return
Portfolio Return	6.45
Benchmark Return	3.19
Excess Return	3.27

EXCESS RETURN ATTRIBUTION



EXCESS RETURN ATTRIBUTION BY SECTOR



The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

attribution analysis

10/31/2016 TO 10/31/2017

SECTOR DISTRIBUTION

	Portfolio Final Weight	Benchmark Final Weight	Portfolio Average Weight	Benchmark Average Weight	Portfolio Return	Benchmark Return	Total Effect
Investment Grade Credit	45.08	19.89	43.45	19.97	5.52	2.98	1.05
US Treasury	2.91	23.99	4.20	23.72	0.50	-0.68	0.85
Securitized	17.44	19.81	16.45	19.75	3.61	0.58	0.60
Emerging Market Credit	6.53	1.49	5.20	1.44	13.49	5.13	0.50
Convertibles	2.06	0.00	0.49	0.00	7.11	3.25	0.01
Unclassified	0.00	0.00	0.00	0.00	0.00	3.25	0.00
Municipals	0.00	0.20	0.00	0.17	0.00	5.59	-0.01
High Yield Credit	18.44	29.63	21.10	29.60	11.19	8.60	-0.03
Equity	0.05	0.00	0.06	0.00	-18.07	3.25	-0.04
Non-US Dollar	6.39	5.00	6.32	4.96	0.25	0.70	-0.06
Cash/Equivalents	1.10	0.00	2.73	0.00	0.82	3.25	-0.06

Total Effects are impacted by sector returns, allocation shifts and market timing. Total Effect includes yield curve impact.
The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

attribution analysis

10/31/2016 TO 10/31/2017

CURRENCY DISTRIBUTION

	Portfolio Weight Pre-Hedge	Portfolio Weight Post-Hedge	Currency Contribution	Bond Contribution	Hedging Effect	Total Effect
Argentine Peso	0.28	0.28	-0.04	0.09	0.00	0.05
Australian Dollar	0.11	0.11	0.00	0.01	0.00	0.01
Brazilian Real	0.14	0.14	-0.01	0.07	0.00	0.06
British Pound Sterling	0.00	0.00	-0.05	0.02	0.00	-0.03
Canadian Dollar	0.05	0.05	0.00	-0.01	0.00	-0.02
Colombian Peso	0.99	0.99	-0.01	0.01	0.00	0.00
Danish Krone	0.00	0.00	0.00	0.00	0.00	0.00
Euro	0.00	0.00	-0.15	0.09	0.01	-0.05
Indian Rupee	0.83	0.83	0.04	0.05	0.00	0.09
Japanese Yen	0.00	0.00	0.14	0.08	-0.01	0.22
Malaysian Ringgit	0.14	0.14	-0.01	0.00	0.00	-0.01
Mexican Peso	2.66	2.66	-0.01	0.00	0.00	-0.01
New Turkish Lira	0.55	0.55	-0.06	0.02	0.00	-0.04
Norwegian Krone	0.62	0.62	0.09	-0.03	0.00	0.05
South African Rand	0.00	0.00	0.00	0.00	0.00	0.00
Swedish Krona	0.00	0.00	0.00	0.00	0.00	0.00
US Dollar	93.63	93.63	0.00	2.76	0.01	2.76
Unrealized FX Gain/Loss	0.00	0.00	0.00	0.00	0.00	0.00

Weights reflect end of period holdings. Effects are as of the entire period. Bond Contribution is the sum of Country Allocation and Local Market effects.
The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

portfolio summary

AS OF 10/31/2017

	Portfolio 10/31/2017	Benchmark 10/31/2017	Portfolio 10/31/2016	Benchmark 10/31/2016
Yield to Worst (%)	4.20	3.38	4.19	3.27
Effective Duration (years)	5.52	5.38	5.46	5.23
Effective Maturity (years)	7.71	6.96	7.45	6.94
OAS * (bps)	166	129	240	174
Coupon (%)	4.42	3.93	4.36	3.98
Current Yield (%)	4.59	3.93	4.48	3.99
Average Quality	BAA2	A2	BAA2	A2
Number of Securities	403	11,776	355	12,196
Number of Issuers	226	1,719	199	1,804

Quality	Portfolio 10/31/2017	Benchmark 10/31/2017	Portfolio 10/31/2016	Benchmark 10/31/2016
AAA	10.98	47.78	14.35	47.41
AA	3.43	4.88	2.41	5.28
A	19.06	10.00	19.02	10.33
BAA	46.36	8.02	44.04	7.70
BA	15.73	16.18	15.89	15.91
B	3.70	10.55	4.03	10.99
CAA	0.53	2.48	0.06	2.24
CA	0.00	0.05	0.02	0.14
C	0.17	0.05	0.16	0.00

** OAS is option adjusted spread.*
Client Guideline Quality Methodology presented.
The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Ventura County Employees' Retirement - Multisector Full Discretion

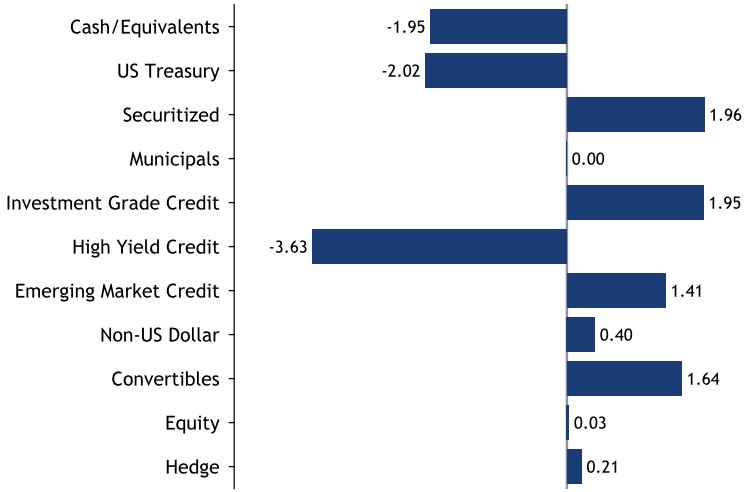
sector allocation

10/31/2016 TO 10/31/2017 (%)

SECTOR DISTRIBUTION

	Portfolio 10/31/2017	Over/Under Weight
Cash/Equivalents	1.10	1.10
US Treasury	2.91	-21.08
Securitized	17.44	-2.37
Municipals	0.00	-0.20
Investment Grade Credit	45.08	25.19
High Yield Credit	18.44	-11.19
Emerging Market Credit	6.53	5.04
Non-US Dollar	6.17	6.17
Convertibles	2.06	2.06
Equity	0.05	0.05
Hedge	0.21	-4.79

SECTOR ALLOCATION CHANGE



The current benchmark is 65% BBG BARC Aggregate 30% Citigroup High Yield Mkt 5% JP Morgan Ex US Hedged $US (M).

Strategic Alpha

investment team

HIGHLY EXPERIENCED, SEASONED TEAM

PRODUCT TEAM

	MATTHEW EAGAN Portfolio Manager	KEVIN KEARNS Portfolio Manager	TODD VANDAM Portfolio Manager
Yrs of industry experience:	27	31	23
Yrs with firm:	20	10	23

	BRIAN HESS Global Strategist	ELAINE KAN Rates & Currency Strategist	DIANA MONTEITH Convertibles and Special Situations Strategist	JOHN DEVOY Credit Strategist
Yrs of industry experience:	14	20	32	18
Yrs with firm:	3	6	15	2

	SCOTT DARCI Senior Investment Analyst, Derivatives Strategist	ROGER ACKERMAN Product Manager
Yrs of industry experience:	11	30
Yrs with firm:	9	8

KEY SUPPORT

Investment Analysts			Portfolio Specialists	Product Managers
Kristen Doyle	Brian Hazelton		Boeurn Kan-Crawford	Fred Sweeney
Vishal Patel	Christopher Romanelli	Crystal Turner	Anthony Falzarano	Ken Johnson

SECTOR TEAMS

Global Asset Allocation		Developed Non-US Markets		US Yield Curve	
Emerging Markets	High Yield / Bank Loans	Convertibles	Mortgage & Structured Finance	Inv Grade / Global Credit	US Government

FIRMWIDE RESOURCES

Macro Strategies
Director
Assoc. Director/
Senior Global Macro Strategist
Senior Equity Strategist
Economist
Senior Commodities Analyst
2 Research Analysts

Sovereign Research
5 Senior Analysts
2 Analysts
2 Research Associates

Credit Research
Director
32 Senior Analysts
8 Analysts
6 Research Associates
7 Research Assistants

Mortgage & Structured Finance
Director
4 Strategists
3 Senior Analysts
Senior Portfolio Analyst
2 Research Analysts
Research Associate

Quant. Research & Risk Analysis
2 Directors
Quantitative Strategist
Director, LDI & Solutions
3 Senior Quantitative Analysts
8 Quantitative Analysts

Equity Research
22 Senior Analysts
6 Analysts

Convertibles & Special Situations
Director
5 Senior Analysts
Research Analyst
Research Associate

Fixed Income Trading
29 Traders/TAs
Director, Portfolio Implementation
16 Portfolio Specialists
Director, Operational Trading Risk Mgt.
Risk Analyst

As of 9/30/2017.

LOOMIS | SAYLES®

guideline summary

Benchmark

- BoA ML U.S. Dollar LIBOR 3-month Constant Maturity

Guidelines & Limitations

- Minimum Credit Quality: The Fund will not hold more than +/-50% MV in securities rated below Baa3/BBB-/BBB- by Moody, S&P and Fitch (best) as determined at the time of purchase. If unrated, Loomis rating applies.
- Emerging Markets: The Account's NET emerging market currency exposure shall be limited to +/-20% as determined at the time of purchase.
- Convertibles & Residual Equity: The Account's net equity exposure is +/-5%, excluding Preferred Stock, Convertible Preferred Stock and Commingled Pools as determined at the time of purchase.
- Duration: The effective duration of the Fund will not exceed 5 years and may be as low as -2 years.
- Industry Concentration: The Fund's NET exposure to any individual industry is +/- 25%, excluding securities issued or guaranteed by Government issuers as determined at time of purchase.
- Currency: The Account's NET individual currency, excluding U.S. dollar shall be limited to +/-15% as determined at the time of purchase.

Guideline summary is not a complete restatement of guidelines. The slide is intended to be a summary to aid in the review process.

unconstrained fixed income

CONSIDERING RISK AND RETURN IN ABSOLUTE TERMS

Strategic Alpha is an all-weather fixed income strategy that seeks to insulate investors from traditional risks of fixed income investing

A complement or replacement to traditional fixed income

	Strategy	TRADITIONAL FIXED INCOME	MULTISECTOR	STRATEGIC ALPHA
	Objective	Excess Return Through the Cycle	Total Return	Uncorrelated, Positive Returns Through the Cycle
	Benchmark Awareness	Relatively Tight tracking Error	Wide Tracking Error	Benchmark Agnostic
	Risk Neutral Point	Benchmark	Benchmark	Cash
SOURCES OF MARKET RISK	Curve/Term Structure Risk	Benchmark +/-	Long	Long/Short
	Credit/Spread Risk	Benchmark +/-	Long	Long/Short
	Currency Risk	Zero to Modest Long	Zero to Long	Long/Short
	Hedging	Manage Risk versus Benchmark	Manage Risk versus Benchmark	Isolate Beta and Alpha Opportunities
	Risk Management Focus	Tracking Error	Absolute Volatility	Absolute Volatility and Drawdown

There is no guarantee that the investment objective will be realized or that the strategy will generate positive or excess return.
Traditional Fixed Income and Multisector strategies are shown for illustrative purposes only. They are not intended to represent any actual portfolios managed by Loomis Sayles. This reflects the current opinions of the sector team and views are subject to change at any time without notice. Other industry analysts and investment personnel may have different views and opinions.

LOOMIS | SAYLES

Strategic Alpha

strategy overview

COMPLEMENTING CORE

A hypothetical equal weighted blend of Strategic Alpha and the Bloomberg Barclays Aggregate has

- Lowered volatility
- Improved risk-adjusted returns

AS OF SEPTEMBER 30, 2017	1 YEAR	3 YEARS	5 YEARS
		Total Return	
LS Strategic Alpha Composite	3.91	2.64	2.57
Bloomberg Barclays Aggregate Index	0.07	2.71	2.06
Hypothetical 50% Strat Alpha / 50% BBg Barc Agg	**1.99**	**2.70**	**2.33**
		Standard Deviation	
LS Strategic Alpha Composite	1.15	2.35	2.72
Bloomberg Barclays Aggregate Index	3.15	2.86	2.84
Hypothetical 50% Strat Alpha / 50% BBg Barc Agg	**1.60**	**1.87**	**2.20**
		Sharpe Ratio	
LS Strategic Alpha Composite	2.85	1.00	0.87
Bloomberg Barclays Aggregate Index	-0.18	0.85	0.66
Hypothetical 50% Strat Alpha / 50% BBg Barc Agg	**0.84**	**1.29**	**0.97**

Data Sources: Loomis Sayles and Zephyr Style Advisor.
Return and Risk metrics for blended portfolio are based on monthly rebalancing.
Past performance is no guarantee of future results.

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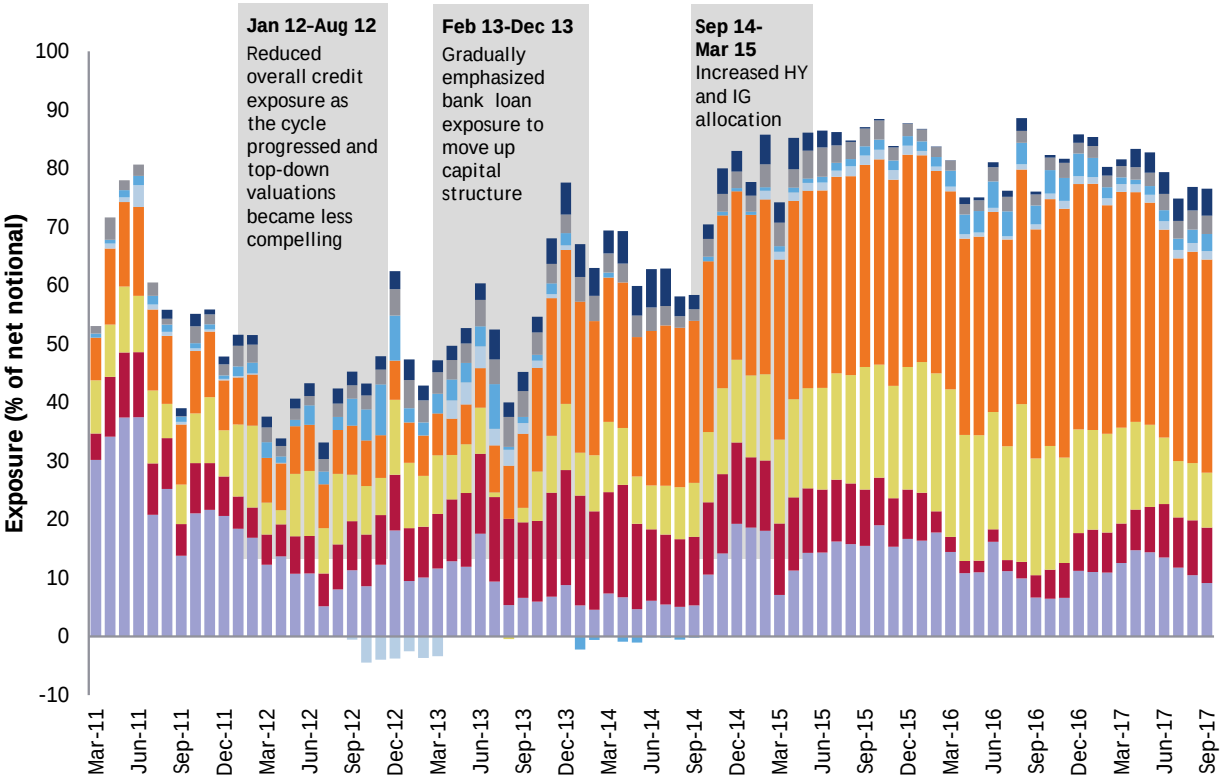
Strategic Alpha

alpha generation

CREDIT

The portfolio's flexibility in credit market beta allows it to tactically adjust these allocations throughout various market environment and economic regimes



Historical Exposure (%)	Max	Min	9/30/2017
Dividend Equity	6.56	0.07	4.61
Convertibles	5.11	0.05	3.11
Emerging Mkt	8.66	-2.24	2.94
Global Credit	3.80	-4.44	1.43
Securitized	42.52	6.19	36.42
IG Corp	26.96	-0.42	9.42
Bank Loans	19.63	1.88	9.47
HY Corp	37.47	4.59	9.13

Source: Loomis Sayles, as of 9/30/2017.
Due to active management, allocations will evolve over time.
The chart above shows credit markets only. Certain portfolio exposures may be excluded from this chart because in our view, they are best represented in terms of contribution to duration as shown later in the presentation.

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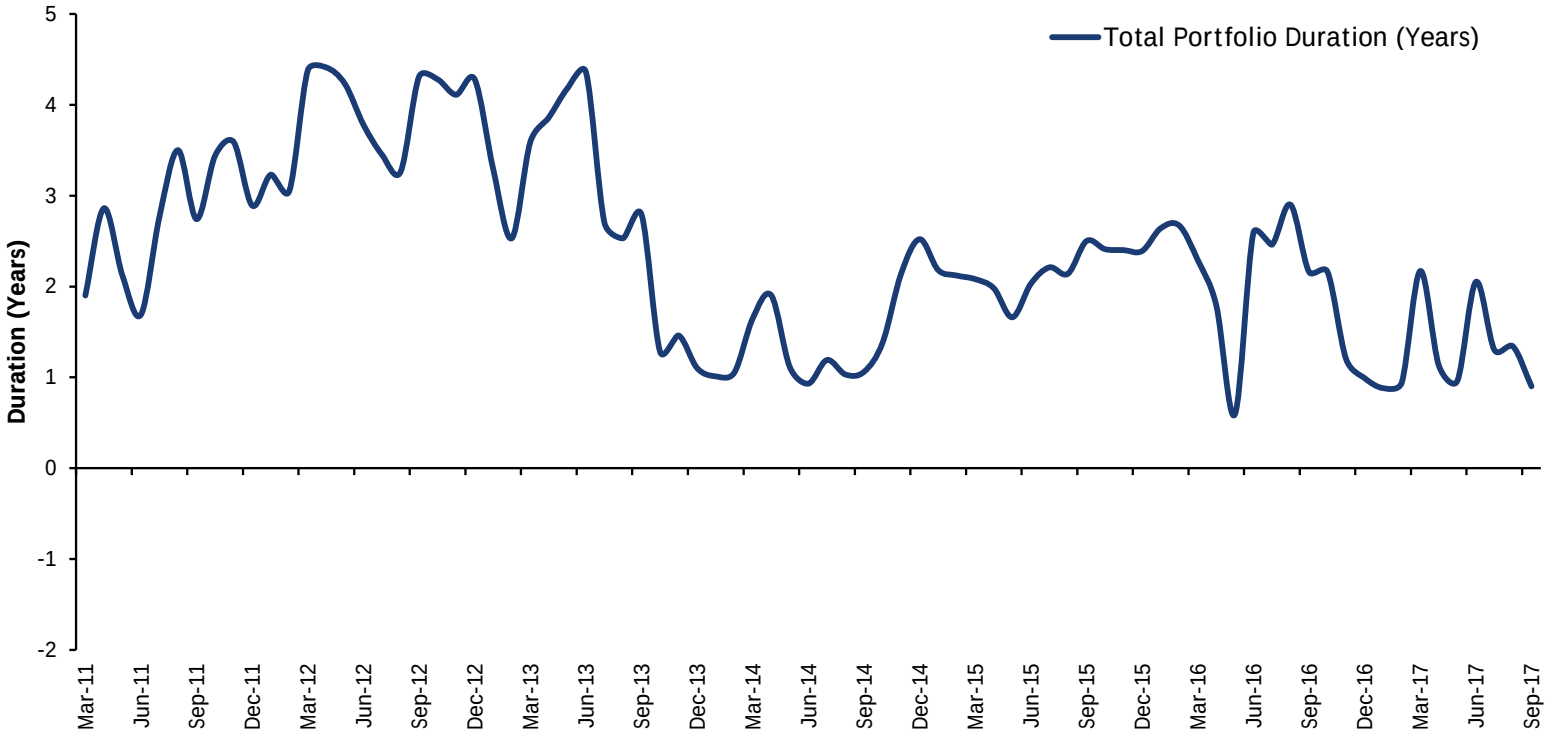
SA0518
MALR019444

Strategic Alpha

alpha generation

CURVE

Seeks to benefit from movements in global interest rates. Portfolio's flexibility allows duration to be adjusted tactically



As of 9/30/2017.
Source: Loomis Sayles.

LOOMIS | SAYLES®

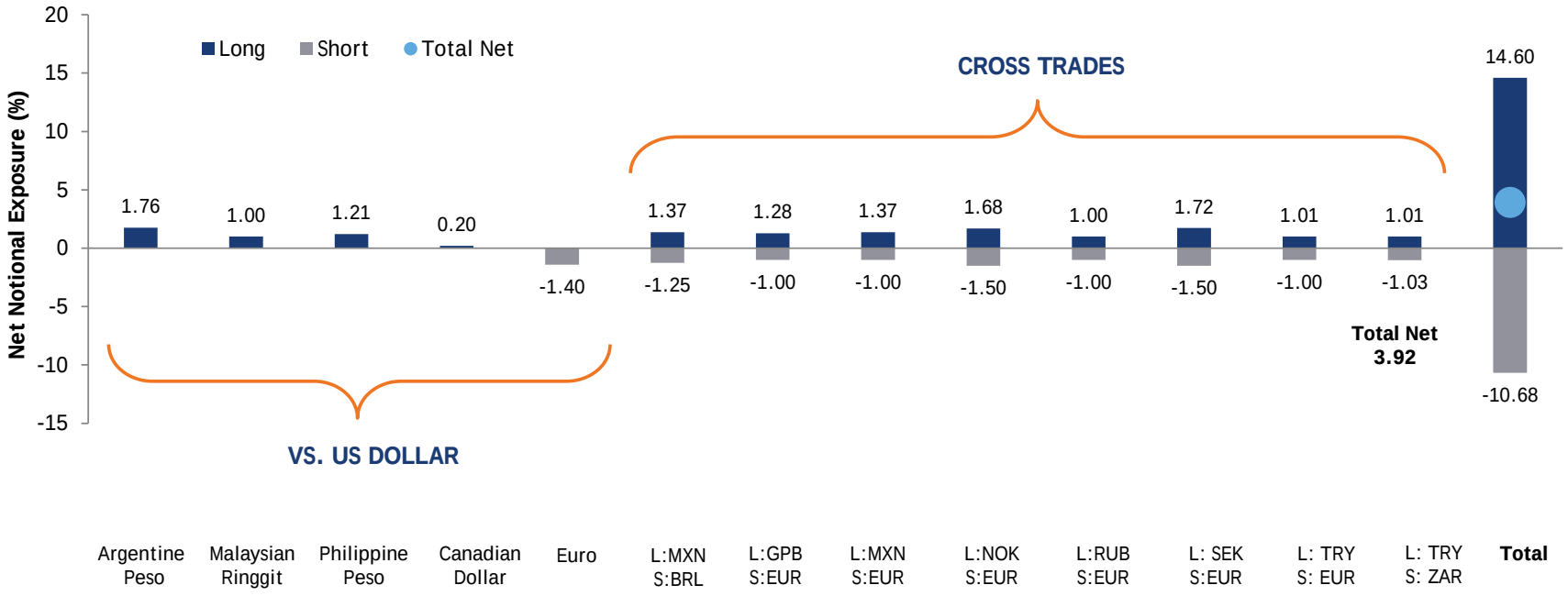
Strategic Alpha

alpha generation

CURRENCY

Seeks to benefit from attractive yields and directional movements in foreign exchange rates. Broadens alpha universe and may be used to hedge other portfolio exposures.

Notional exposure of currency positioning as of 9/30/2017



Source: Loomis Sayles. Notional exposure of currency related trading strategies does not represent comprehensive portfolio exposures. It excludes currency exposure of unrealized gains or losses on non-currency related derivatives positions.

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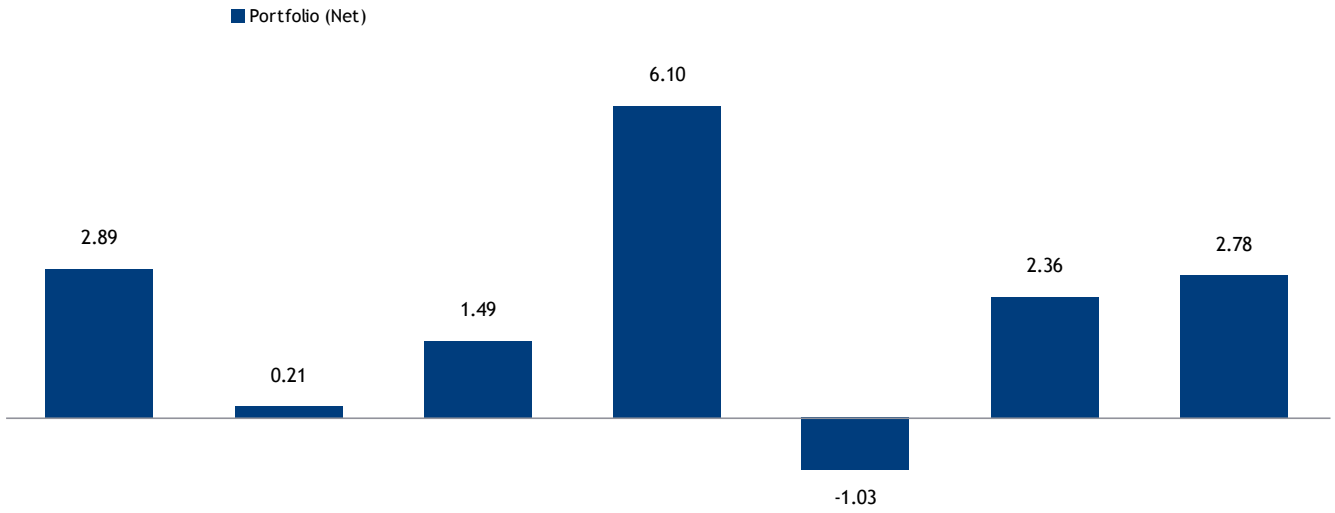
Ventura County Employees' Retirement – Strategic Alpha : NHIT

investment results

CALENDAR YEAR RETURNS (%) AS OF 10/31/2017



	YTD	Oct 17	3Q17	2016	2015	2014	7/15/13 - 10/31/17 Annualized
Portfolio (Net)	2.89	0.21	1.49	6.10	-1.03	2.36	2.78
Benchmark	0.93	0.11	0.33	0.66	0.23	0.23	0.51
Excess Return	1.96	0.10	1.16	5.44	-1.26	2.13	2.27

Returns over one year are annualized. Information is reported on a trade date basis. Data Source: BofA Merrill Lynch, Loomis Sayles.

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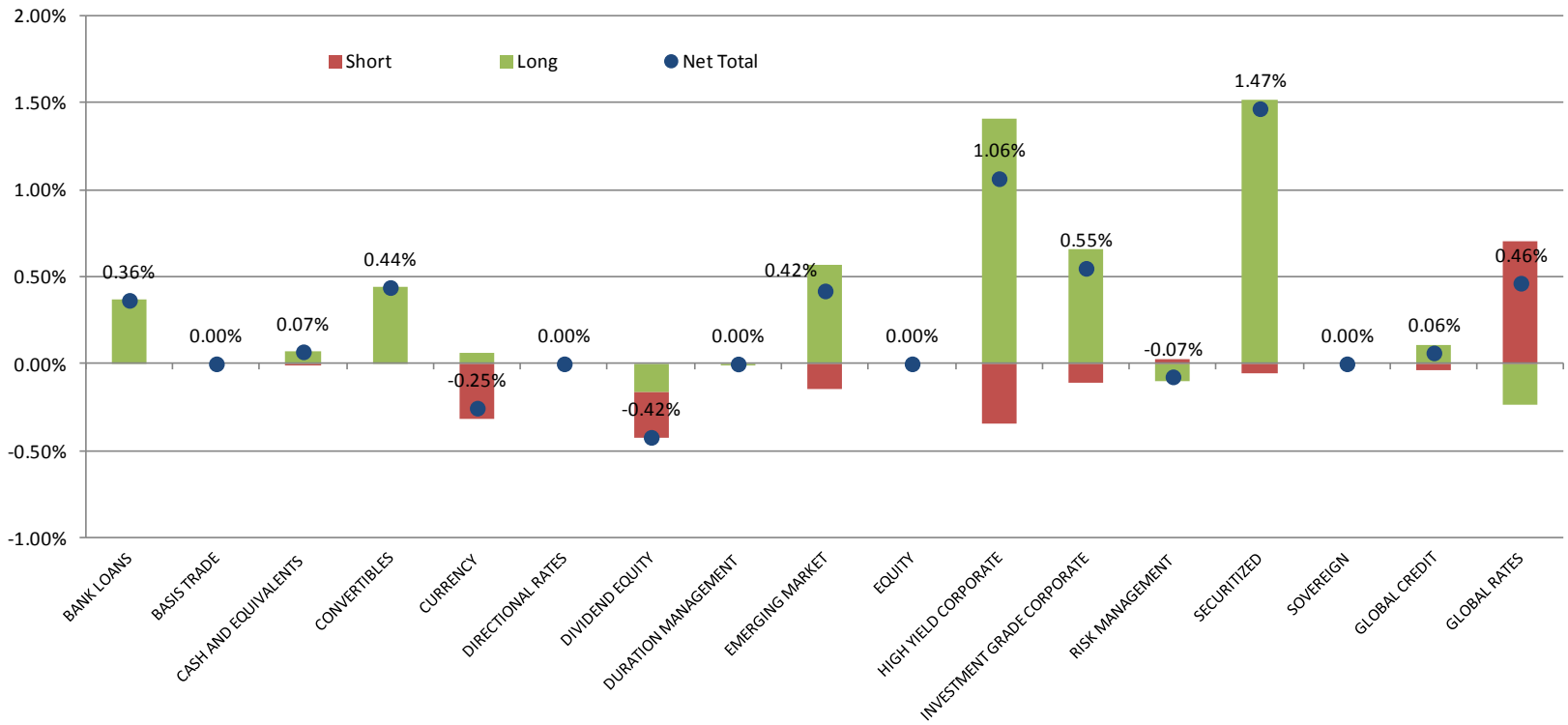
Ventura County Employees' Retirement – Strategic Alpha : NHIT

attribution analysis

10/31/2016 - 10/31/2017 (%)

Total Return	**4.15%**
Long	*4.69%*
Short	*-0.54%*



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Source: Loomis Sayles (In2: Absolute Return Attribution)

Past performance does not guarantee future results.

fund structure summary

SUMMARY OF STRATEGIES AND POSITIONS (%) AS OF 10/31/2017

Characteristics	Portfolio
Effective Duration	0.87
Yield	3.70
Number of Issues	898

Strategy	Net	Long Physical	Long Derivative	Long Exposure	Short Physical	Short Derivative	Short Exposure
Global Rates	-35.74	6.97	24.35	31.33	0.00	-67.07	-67.07
Securitized	34.35	35.53	0.62	36.15	0.00	-1.80	-1.80
Investment Grade Corporate	10.53	10.53	0.00	10.53	0.00	0.00	0.00
Bank Loans	9.13	9.13	0.00	9.13	0.00	0.00	0.00
High Yield Corporate	5.81	7.97	0.00	7.97	0.00	-2.15	-2.15
Emerging Market	4.19	7.92	0.00	7.92	0.00	-3.74	-3.74
Dividend Equity	3.74	5.13	1.77	6.90	0.00	-3.16	-3.16
Risk Management	-3.32	0.00	0.43	0.43	0.00	-3.75	-3.75
Convertibles	2.87	2.87	0.00	2.87	0.00	0.00	0.00
Global Credit	1.27	1.27	0.00	1.27	0.00	0.00	0.00
Currency	-0.27	0.00	9.65	9.65	0.00	-9.92	-9.92
Subtotal	**32.55**	**87.32**	**36.83**	**124.14**	**0.00**	**-91.59**	**-91.59**
Cash and Equivalents	12.53	12.53	0.00	12.53	0.00	0.00	0.00
Duration Management	0.03	0.03	0.00	0.03	0.00	0.00	0.00
Total	**45.12**	**99.88**	**36.83**	**136.71**	**0.00**	**-91.59**	**-91.59**

Strategies are based on internal Loomis Sayles classifications. Equity securities are deemed to have a duration and maturity value of zero. Yield is Yield to Effective Maturity Data Source: Loomis Sayles.

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2017-2018 global growth themes

+ US & CANADA

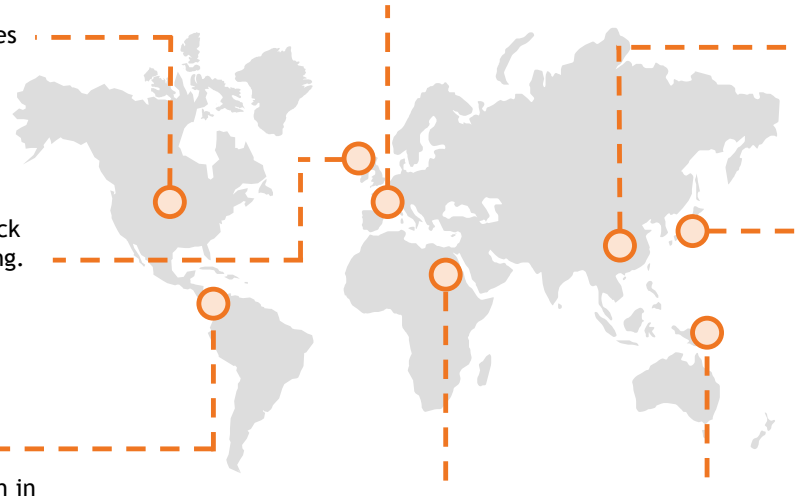
US growth is expected to rise from 1.5% in 2016 to 2% or higher in 2017 and 2018. Growth in Canada is solid, broad based, and should be close to 3% this year. The BOC has begun normalizing interest rates, taking rates 50 bps higher so far.

+ EUROPE

Solid 1.8% expected growth in the euro area into 2018. Policy tailwind should diminish as ECB tapers QE, vulnerabilities remain mainly political. GDP has picked up in emerging Europe with growth in Czech, Hungary and Poland between 3.5-4%, Turkey above 5% and Russia close to 2%.

+ CHINA

GDP growth is stable, near 6.7% for 2017 but likely slower in 2018. The property sector is slowing, but manufacturing is a brighter spot. Policy makers remain focused on reducing financial stability risks via regulatory tightening.



+ UK

Growth still positive but below potential. Consumers pinched by a lack of real wage growth and softer housing. Domestic politics stay messy as the government negotiates with the EU toward Brexit.

+ JAPAN

Growth expected to improve to around 1% or higher in 2017 and 2018 on firmer export and consumer sectors. Support comes from lower energy prices, strength in tourism, and corporate profits, along with a tight labor market and rising wages.

+ LATIN AMERICA

Growth in the region should slowdown in 2017 but should pick up in 2018, except in Colombia where we are more bearish than consensus. Brazil is expected to post economic recovery this year of 0.7%.

+ AFRICA & MIDDLE EAST

Growth varies widely across the region, but expect a further improvement into 2018. Africa's two largest economies (Nigeria and Egypt) should see better economic activity following currency devaluations and policy reforms. Oil production cuts and fiscal austerity will challenge growth in the GCC. Geopolitical/security risks are on the rise.

+ ASIA

Growth has been revised up for much of Asia, given strong external tailwinds. These tailwinds are expected to moderate in 2018, but remain positive. The housing market has been slowing in New Zealand. For emerging Asia, growth should remain more robust, over 5% in 2017 and 2018.

Views as of 9/30/2017. This material is provided for informational use only and should not be considered investment advice. The forecasted views and opinions expressed reflect those of the Loomis Sayles Macro Strategies Team. All statements are made as of the date indicated and are subject to change at any time without notice.

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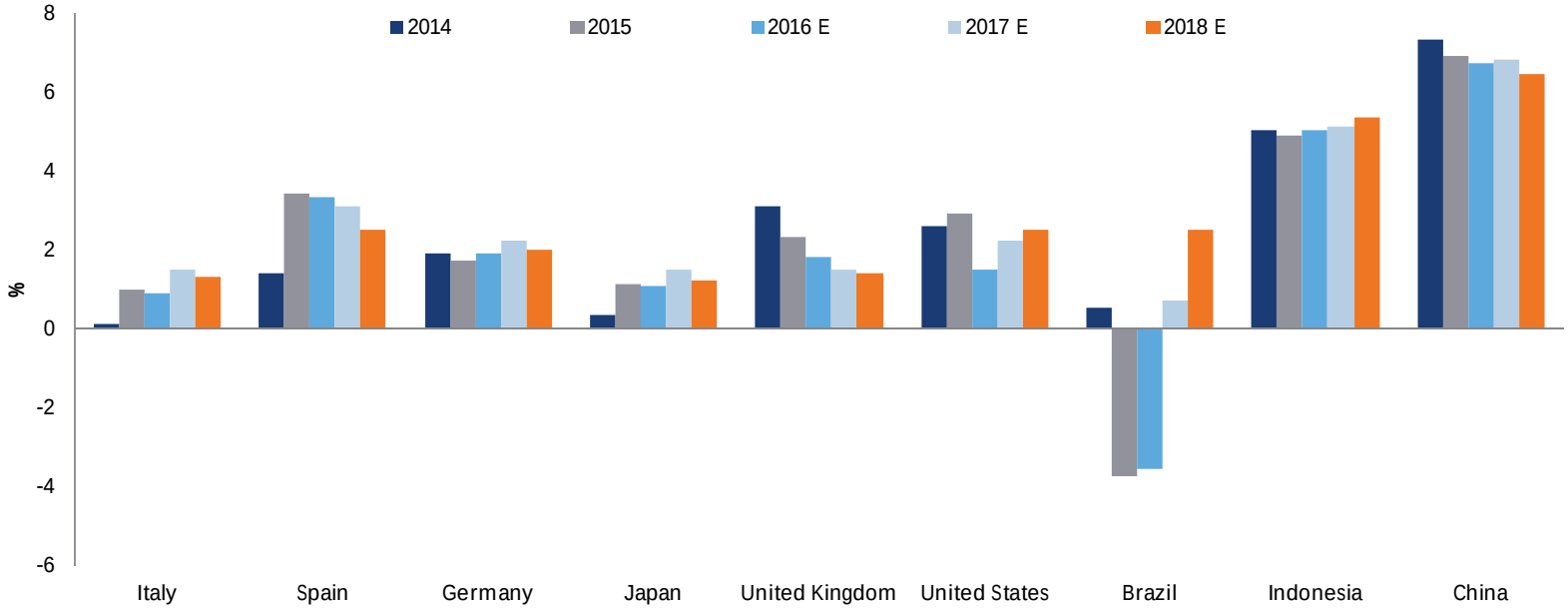
global growth

EXPECTED REAL GDP GROWTH



Bloomberg Consensus: 11/30/2017

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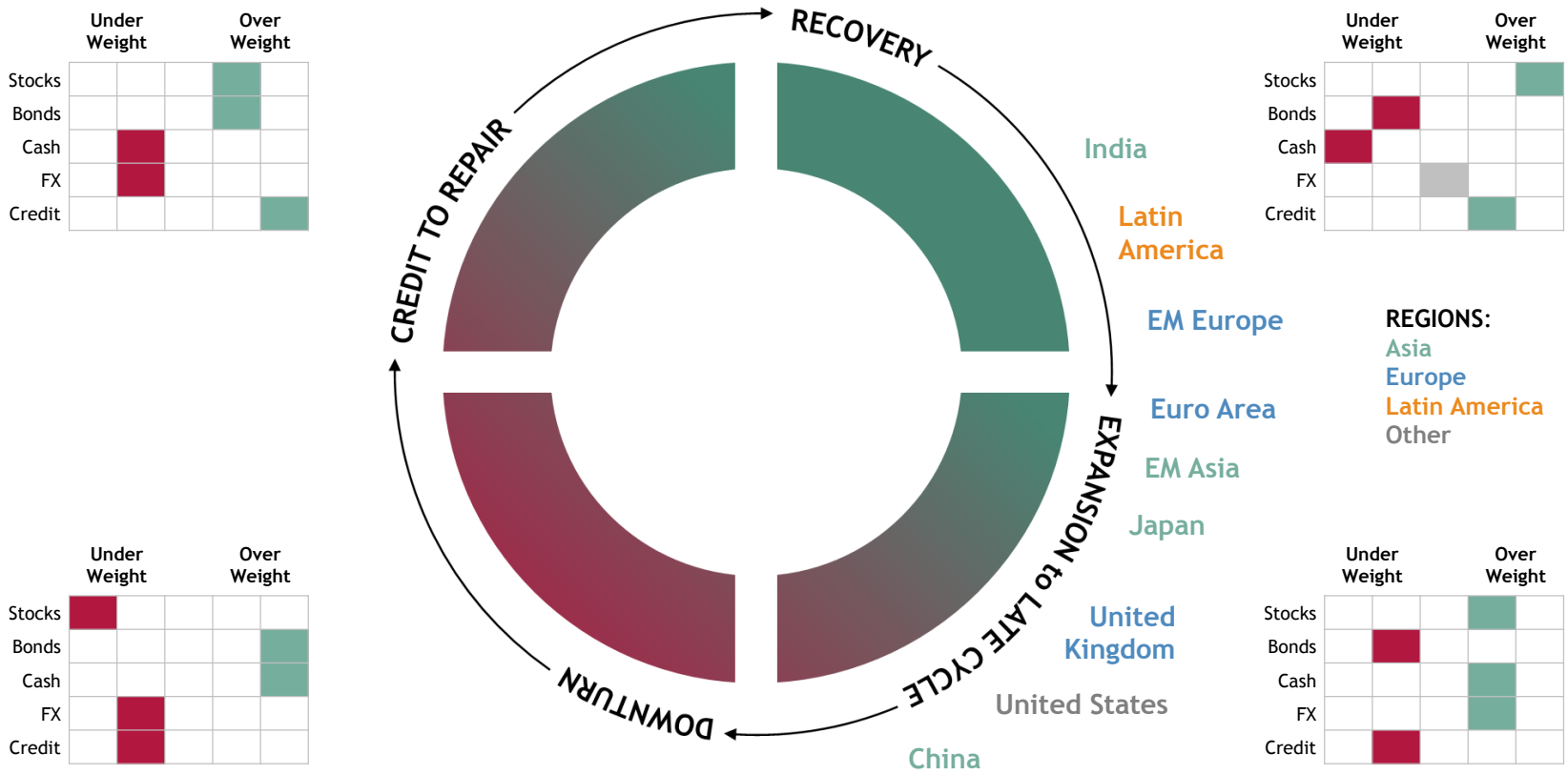
investment process

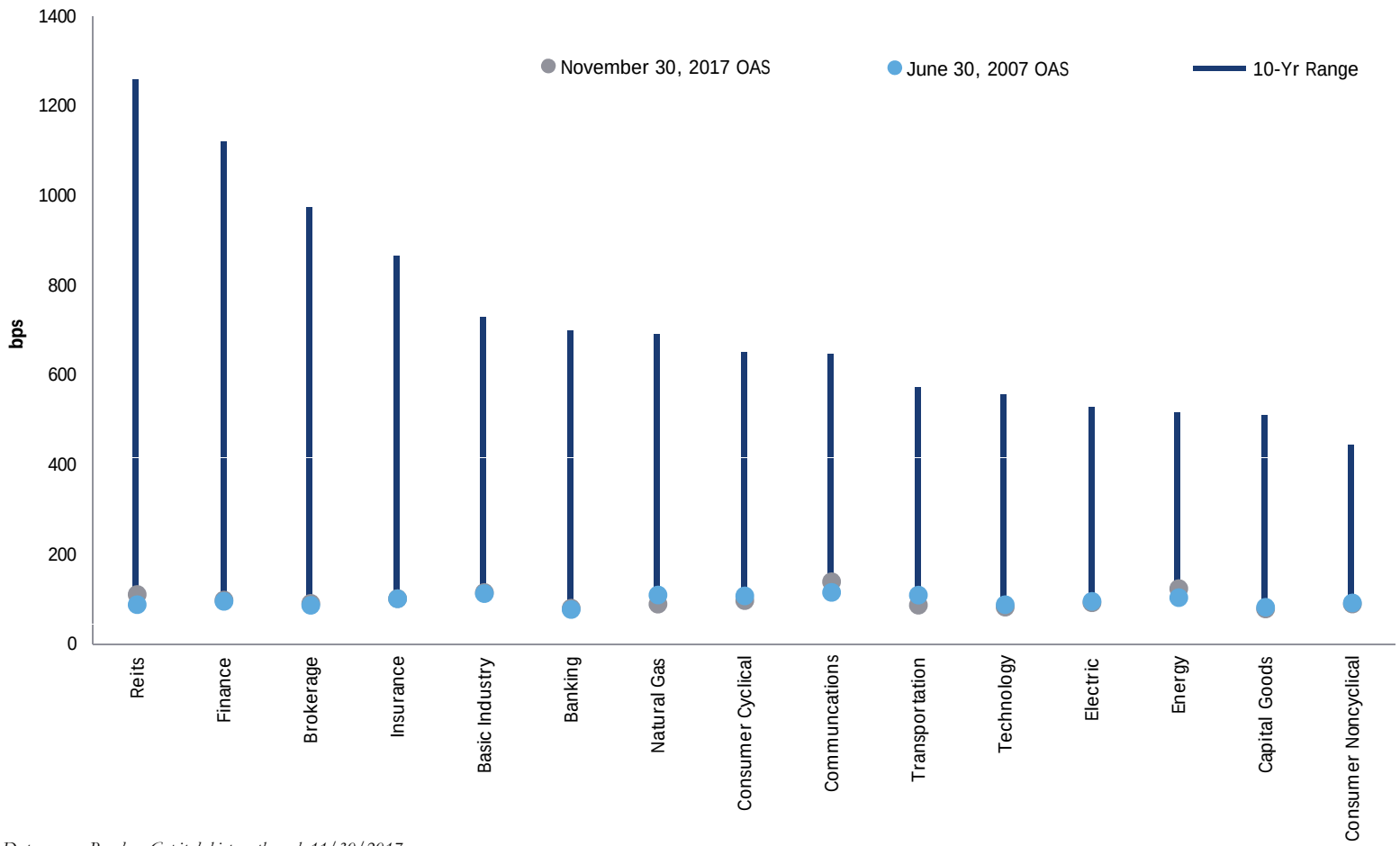
DIVERGING CREDIT CYCLES AMONG COUNTRIES AND REGIONS CAN PROVIDE OPPORTUNITIES



Views as of 9/30/2017. Green shading denotes asset classes the presenter expects to appreciate and red shading denotes asset classes the presenter expects to depreciate at each point in the economic cycle. This material is provided for informational purposes only and should not be construed as investment advice. Investment decisions should consider the individual circumstances of the particular investor. This reflects the current opinions of the presenter and views are subject to change at any time without notice. Other industry analysts and investment personnel may have different views and opinions.

bond market environment

US IG CREDIT SECTORS: CURRENT SPREAD LEVELS VS. 10-YR HIGH AND LOW



Data source: Barclays Capital, history through 11/30/2017.

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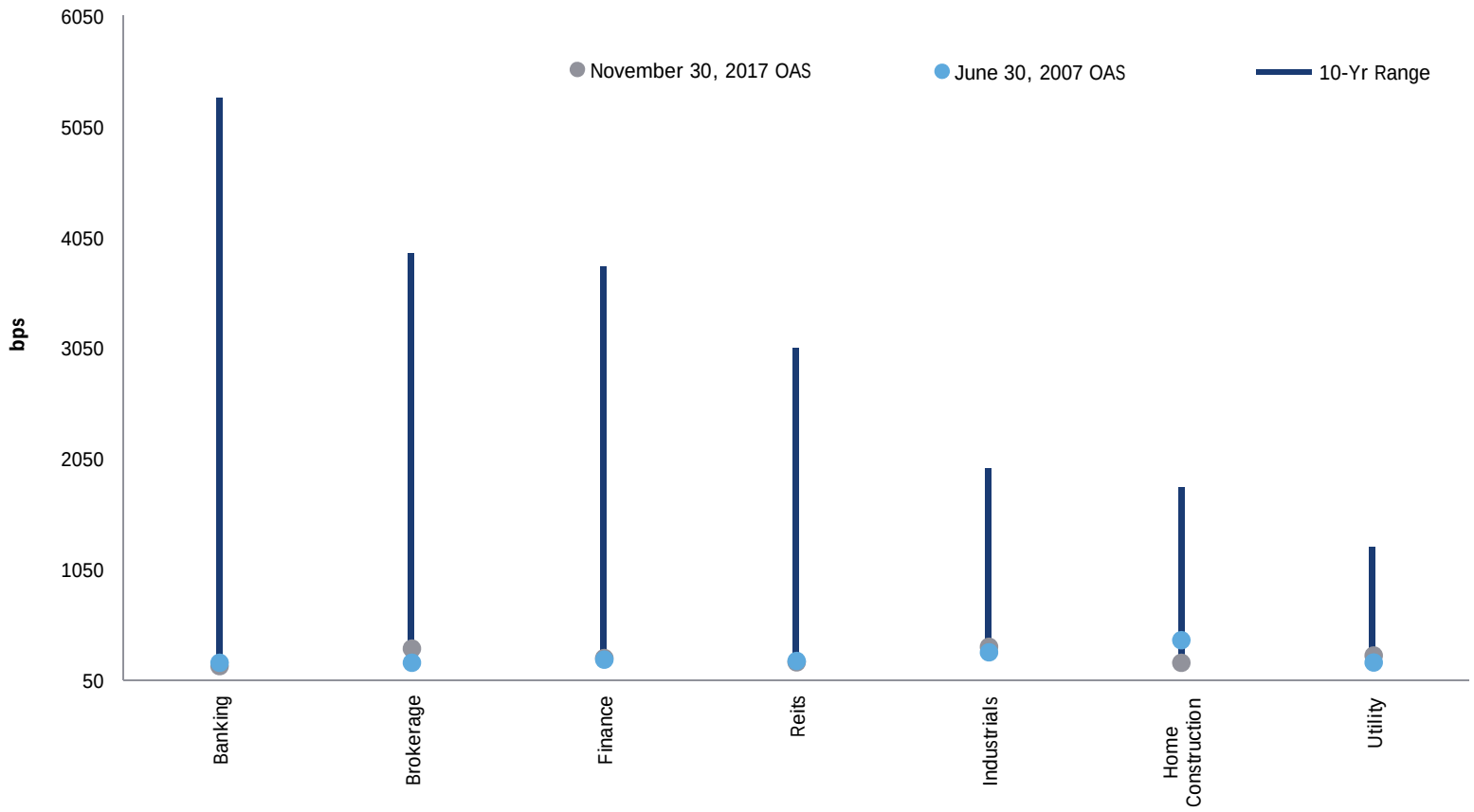
bond market environment

SELECT US HIGH YIELD SECTORS: CURRENT SPREAD LEVELS VS. 10-YR HIGH AND LOW



Data source: Barclays Capital, history through 11/30/2017.

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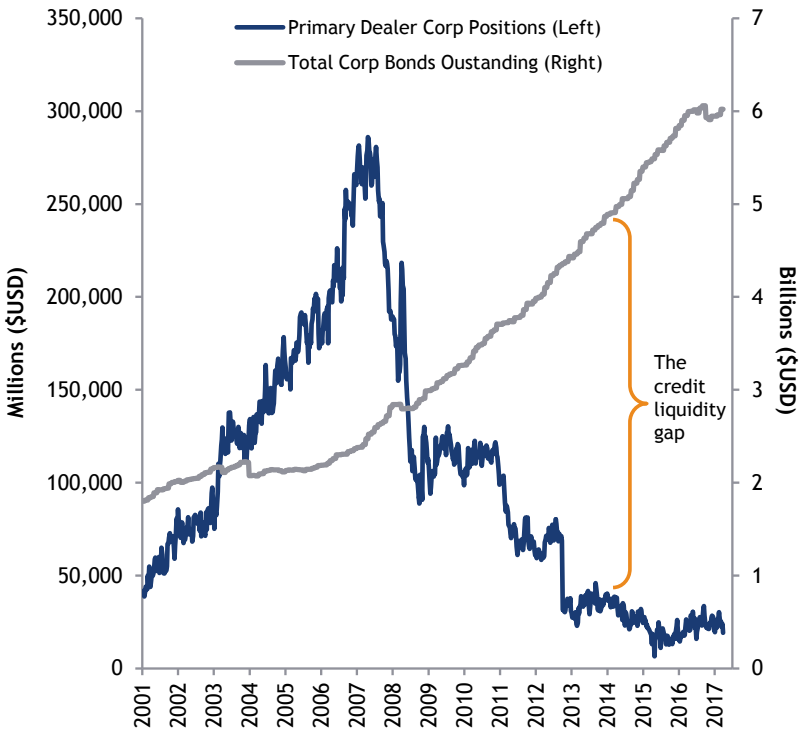
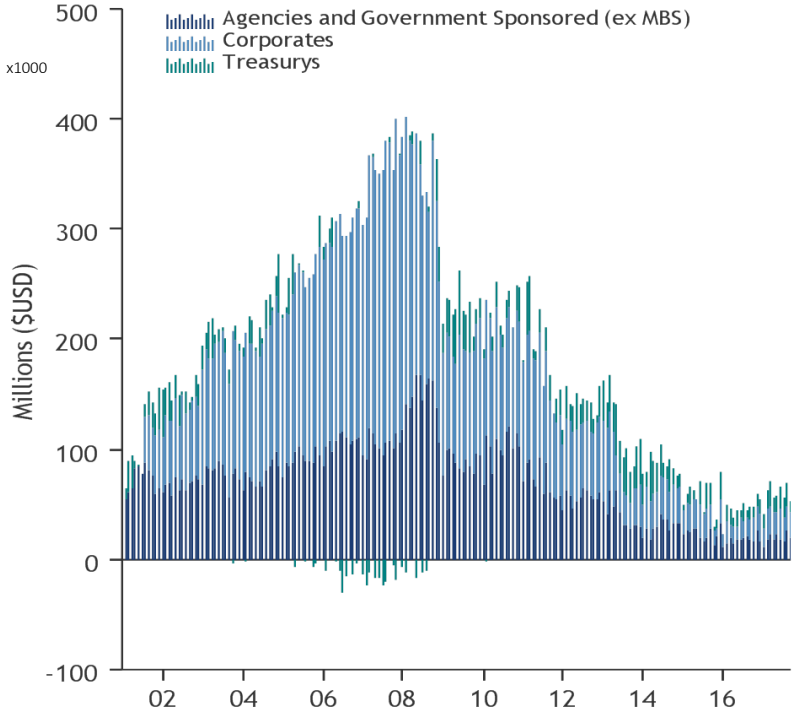
reduced liquidity + volatility = greater potential market fragility

MARKET ILLIQUIDITY REMAINS A CONCERN

LIQUIDITY IN THE CORPORATE SECTOR*



US PRIMARY DEALER HOLDINGS**



**Data sources: Deutsche Bank, Bloomberg Barclays, history through 9/27/2017*
***Data source: Thomson Reuters Datastream, as of 9/27/2017*

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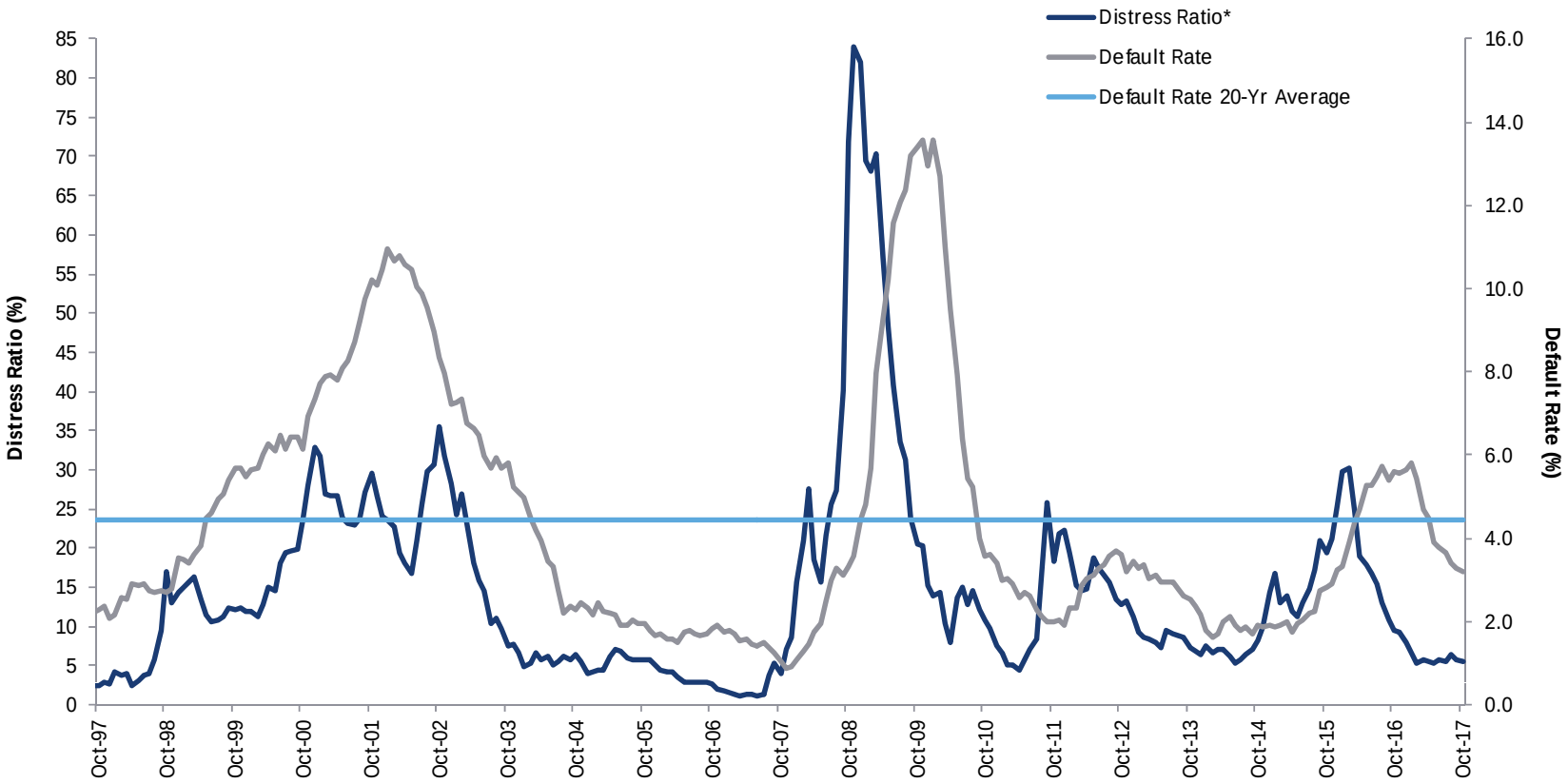
bond market environment

"DISTRESSED" SECURITIES AND DEFAULT RATES HAVE DECREASED SINCE EARLY 2010



'Distressed' securities reached pre-Lehman levels in December 2009.

**Percent of bonds in Merrill Lynch High Yield Master Index with Spreads 1000 bps over Treasurys.*
Data source: Bloomberg, Merrill Lynch, Moody's, history through October 2017, monthly data.

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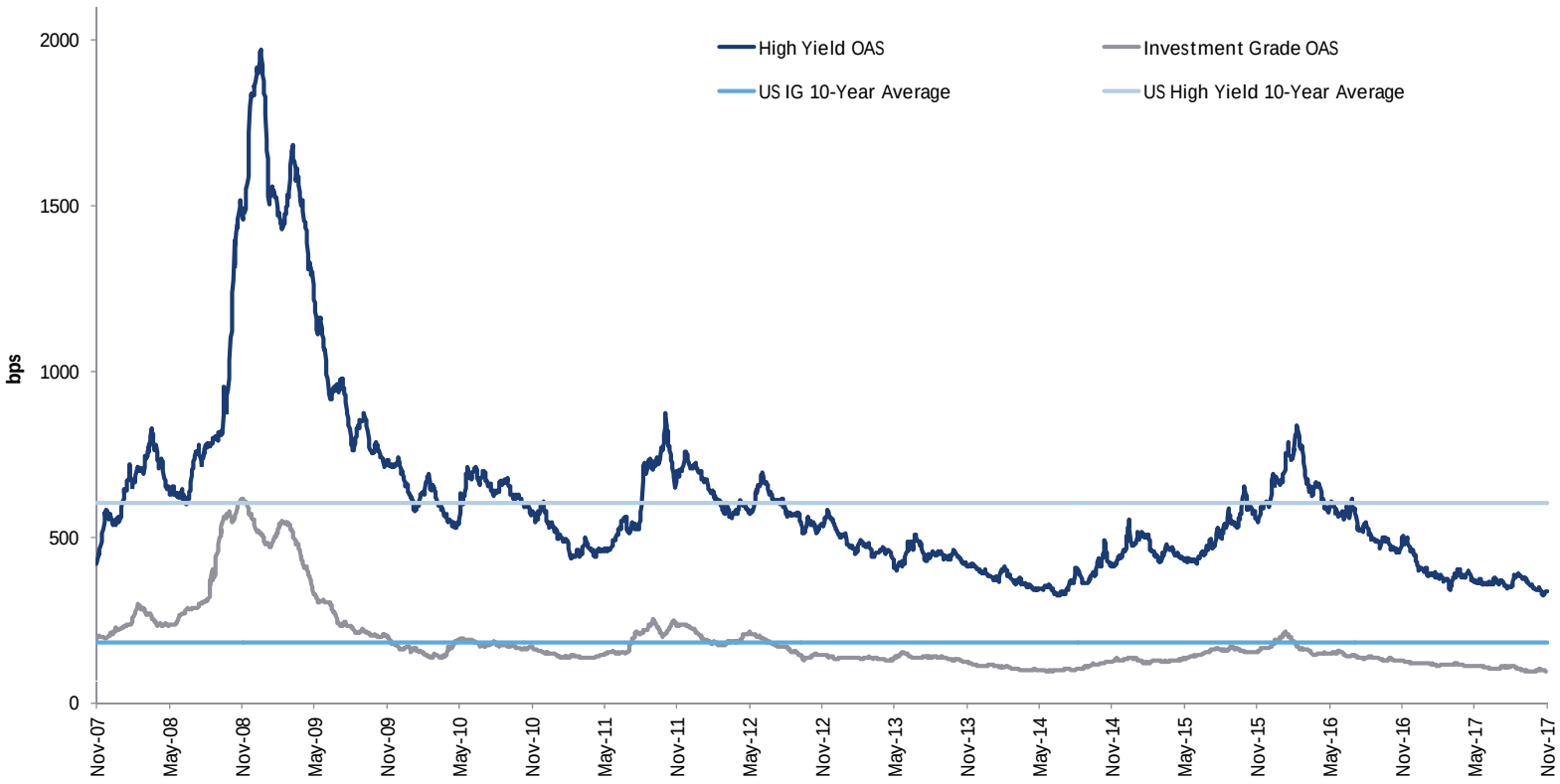
bond market environment

US INVESTMENT GRADE AND HIGH YIELD OPTION-ADJUSTED SPREADS



Data source: Barclays Capital, history through 11/30/2017.

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Senior Derivatives Strategist

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Roger Ackerman
Product Manager

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VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: INVESTMENT MANAGER WATCH LIST UPDATE

Dear Board Members:

At the Board meeting of November 20, 2017, Board Member Chris Johnston asked that the Board agendize a discussion to add Hexavest to the Board's investment Watch List because of investment performance concerns, and remove Sprucegrove.

Attached is a report of annualized non-U.S. investment manager performance from NEPC's October 31, 2017 monthly report for your review. This report was presented to the Board at its November 20, 2017 meeting.

RECOMMENDATION: CONSIDER ADDING HEXAVEST TO AND REMOVING SPRUCEGROVE FROM THE BOARD'S INVESTMENT WATCHLIST

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

Ventura County Employees' Retirement Association

Total Fund Performance Detail Net of Fees

	Market Value ($)	% of Portfolio	Policy %	1 Mo (%)	YTD (%)	1 Yr (%)	3 Yrs (%)	5 Yrs (%)	10 Yrs (%)	Return (%)	Since
Total Non-US Equity	**866,045,685**	**16.3**	**15.0**	**2.0**	**22.8**	**23.6**	**6.9**	**8.0**	**1.6**	**6.7**	**Mar-94**
MSCI ACWI ex USA				*1.9*	*23.4*	*23.6*	*5.7*	*7.3*	*0.9*	*5.5*	*Mar-94*
Over/Under				0.1	-0.6	0.0	1.2	0.7	0.7	1.2	
MSCI EAFE				*1.5*	*21.8*	*23.4*	*6.1*	*8.5*	*1.1*	*5.1*	*Mar-94*
MSCI ACWI ex USA Local Currency				*3.2*	*17.1*	*21.6*	*8.9*	*11.4*	*2.8*	--	*Mar-94*
MSCI EAFE Local Currency				*3.0*	*14.5*	*21.1*	*9.0*	*12.7*	*2.7*	*5.1*	*Mar-94*
BlackRock ACWI ex-U.S. Index	423,663,566	8.0		1.9	24.0	24.1	6.4	7.9	1.4	3.1	Mar-07
MSCI ACWI ex USA				*1.9*	*23.4*	*23.6*	*5.7*	*7.3*	*0.9*	*2.6*	*Mar-07*
Over/Under				0.0	0.6	0.5	0.7	0.6	0.5	0.5	
MSCI ACWI ex USA Local Currency				*3.2*	*17.1*	*21.6*	*8.9*	*11.4*	*2.8*	*3.7*	*Mar-07*
Sprucegrove	228,823,164	4.3		2.4	23.4	26.7	7.5	8.5	2.8	8.0	Mar-02
MSCI ACWI ex USA				*1.9*	*23.4*	*23.6*	*5.7*	*7.3*	*0.9*	*7.0*	*Mar-02*
Over/Under				0.5	0.0	3.1	1.8	1.2	1.9	1.0	
MSCI EAFE				*1.5*	*21.8*	*23.4*	*6.1*	*8.5*	*1.1*	*6.4*	*Mar-02*
MSCI ACWI ex USA Local Currency				*3.2*	*17.1*	*21.6*	*8.9*	*11.4*	*2.8*	*5.7*	*Mar-02*
MSCI EAFE Local Currency				*3.0*	*14.5*	*21.1*	*9.0*	*12.7*	*2.7*	*4.9*	*Mar-02*
Hexavest	92,214,384	1.7		0.3	15.0	17.6	4.6	6.7	--	4.9	Dec-10
MSCI EAFE				*1.5*	*21.8*	*23.4*	*6.1*	*8.5*	*1.1*	*5.8*	*Dec-10*
Over/Under				-1.2	-6.8	-5.8	-1.5	-1.8		-0.9	
MSCI EAFE Local Currency				*3.0*	*14.5*	*21.1*	*9.0*	*12.7*	*2.7*	*8.6*	*Dec-10*
Walter Scott	121,344,571	2.3		2.7	24.0	21.3	8.5	7.9	--	6.4	Dec-10
MSCI ACWI ex USA				*1.9*	*23.4*	*23.6*	*5.7*	*7.3*	*0.9*	*4.6*	*Dec-10*
Over/Under				0.8	0.6	-2.3	2.8	0.6		1.8	
MSCI ACWI ex USA Local Currency				*3.2*	*17.1*	*21.6*	*8.9*	*11.4*	*2.8*	*7.7*	*Dec-10*
MSCI EAFE				*1.5*	*21.8*	*23.4*	*6.1*	*8.5*	*1.1*	*5.8*	*Dec-10*
Total Global Equity	**578,240,975**	**10.9**	**10.0**	**2.1**	**20.1**	**23.7**	**7.6**	**10.2**	**3.0**	**6.2**	**May-05**
MSCI ACWI				*2.1*	*19.7*	*23.2*	*7.9*	*10.8*	*3.7*	*7.1*	*May-05*
Over/Under				0.0	0.4	0.5	-0.3	-0.6	-0.7	-0.9	
BlackRock MSCI ACWI Equity Index	578,240,975	10.9		2.1	20.1	23.7	8.4	11.2	--	11.6	Aug-12
MSCI ACWI				*2.1*	*19.7*	*23.2*	*7.9*	*10.8*	*3.7*	*11.2*	*Aug-12*
Over/Under				0.0	0.4	0.5	0.5	0.4		0.4	

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: 2018 CALENDARS OF INVESTMENT MANAGER PRESENTATIONS AND OF INVESTMENT ON-SITE DUE DILIGENCE VISITS

Dear Board Members:

Attached for your consideration and adoption are two calendars. One is a proposed calendar of 2018 annual investment presentations. The other is a proposed calendar of 2018 investment on-site due diligence visits.

Please approve both calendars, and authorize expenditures for investment on-site due diligence travel in accordance with the Board adopted Education and Travel Policy. Appropriations for on-site due diligence travel are included in the current year Board adopted budget, and for the remainder of the calendar year, will be included in the FY2018-2019 Budget.

IT IS RECOMMENDED THAT THE BOARD APPROVE:

1. **THE PROPOSED 2018 CALENDARS FOR INVESTMENT PRESENTATIONS AND FOR INVESTMENT ON-SITE DUE DILIGENCE TRAVEL AND,**
2. **AUTHORIZE NECESSARY EXPENDITURES, IN ACCORDANCE WITH THE BOARD'S ADOPTED TRAVEL POLICY AND BUDGET.**

Sincerely,

Dan Gallagher
Chief Investment Officer

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 WWW.VCERA.ORG

VCERA 2018 INVESTMENT PRESENTATIONS CALENDAR

Meeting Date	Material Deadline	Meeting	Presentations	Items
1/8/2018	12/29/2017	Disability		PAS Monthly Report
1/29/2018	1/19/2018	Business	None	November and December 2017 Monthly Investment Report - NEPC
2/12/2018	2/2/2018	Disability		
2/26/2018	2/16/2018	Business	Prudential – PRISA UBS Real Estate Adams Street	Q4 Investment Performance Report - NEPC January Monthly Investment Performance Report - NEPC
3/12/2018	3/2/2018	Disability		
3/26/2018	3/16/2018	Business	Pantheon HarbourVest	February Monthly Investment Performance Report - NEPC
4/16/2018	4/6/2018	Disability & Business	Sprucegrove State Street Abbott	March Monthly Investment Performance Reports - NEPC
5/7/2018	4/27/2018	Disability		
5/21/2018	5/11/2018	Business	Tortoise Bridgewater	April *Monthly* Investment Performance Reports - NEPC Q1 Investment Performance Report - NEPC
6/4/2018	5/25/2018	Disability		
6/18/2018	6/8/2018	Business	Parametric	May *Monthly* Investment Performance Report- NEPC
7/2/2017	6/22/2017	Disability		
7/16/2018	7/6/2018	Business	Walter Scott Hexavest	June *Monthly* Investment Performance Report - NEPC Schedule Board Rereat
9/10/2018	8/31/2018	Disability		
9/24/2018	9/14/2018	Business	Board Retreat	Q2 Performance Report - NEPC July & August *Monthly* Performance - NEPC
10/8/2018	9/28/2018	Disability		
10/22/2018	10/12/2018	Business	Reams Western Abbott	September *Monthly* Investment Performance Report - NEPC
11/5/2018	10/26/2018	Disability		
11/19/2018	11/9/2018	Business	Blackrock	Q3 Performance Report - NEPC; Annual PE report - Abbott October *Monthly* Investment Performance Report - NEPC
12/10/2018	11/30/2018	Disability & Business	Loomis	November *Monthly* Investment Performance Report - NEPC

Ver. 12/11/2017

VCERA 2018 INVESTMENT ON-SITE DUE DILIGENCE CALENDAR

DATE	MANAGER	LOCATION
1Q2018	Reams	Columbus, IN
1Q2018	Tortoise	Leawood, KS
1Q2018	State Street	Kansas City, KS
2Q2018	Loomis Sayles	Boston, MA
2Q2018	NEPC	Boston, MA
3Q2018	Sprucegrove	Toronto, Canada
3Q2018	Hexavest	Montreal, Canada
4Q2018	Harbourvest	Boston, MA
4Q2018	Prudential	Madison, NJ

Ver. 12/11/2017

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: BOARD APPROVAL OF WALTER SCOTT INVESTMENT MANAGEMENT FEE REDUCTION

Dear Board Members:

Attached is an Amended and Restated Fee Schedule reflecting VCERA's assets under management by Walter Scott as of the effective date of this Fee Schedule. The manager will review VCERA's assets under management on a quarterly basis, and will adjust the management fee to the applicable schedule as set forth in the document.

To effect this change, VCERA is required to return an executed copy of the amended fee schedule prior to the end of this calendar year.

RECOMMENDATION: AUTHORIZE THE BOARD CHAIR OR RETIREMENT ADMINISTRATOR, OR THE CHIEF INVESTMENT OFFICER AS A BACK-UP, TO APPROVE AND EXECUTE THE AMENDED AND RESTATED FEE SCHEDULE DOCUMENT.

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

NCS GROUP TRUST
Amended and Restated Fee Schedule

This Amended and Restated Fee Schedule (this "**Fee Schedule**"), between BNY Mellon Investment Management Cayman Ltd (the "**Manager**") and the undersigned (the "**Investment Fiduciary**"), on behalf of Ventura County Employees' Retirement Association (the "**Participating Trust**"), will become effective as of January 1, 2018. Capitalized terms used herein and not otherwise defined shall have the meanings given to them in the current confidential offering memorandum of the NCS Group Trust, as the same may be amended or supplemented from time to time.

WHEREAS, the Manager and the Investment Fiduciary have previously entered into a fee schedule or similar agreement setting forth the management fee payable to the Manager with respect to the Participating Trust's investment in the NCS Group Trust (the "**Existing Fee Schedule**"); and

WHEREAS, the Manager and the Investment Fiduciary wish to amend and restate the Existing Fee Schedule.

NOW, THEREFORE, the Manager and the Investment Fiduciary amend and restate the Existing Fee Schedule as follows:

Management Fee for the Global Fund, the Global Emerging Markets Fund and the International Fund

Up to US$100m:

☐ 0.95% on the first $50m,
0.85% on the next $25m, and
0.60% thereafter.

US$100m or more but less than US$175m:

☑ 0.75% on the first $100m, and
0.50% thereafter.

US$175m or more:

☐ 0.70% on the first $100m, and
0.50% thereafter.

The Management Fee will be based on the Participating Trust's AUM as of the effective date of this Fee Schedule. The Manager will review the Participating Trust's AUM on a quarterly basis. In the event the Participating Trust's AUM crosses one of the thresholds specified above (with a tolerance of +/- US$5m, to be applied at the Manager's discretion), the Manager shall have the right, without obligation, on a going forward basis, upon notice to the Investment Fiduciary, to adjust the Participating Trust's Management Fee to the applicable annual rate as set forth above.

OR

Management Fee for the US Fund

☐ 0.70% on the first $100m, and
0.50% thereafter.

In the event that the Participating Trust purchases Units other than as of the first day of a calendar month or redeems Units other than as of the last day of a calendar month, the monthly Management Fee calculation in respect of such Units will be pro-rated based on such date of purchase or redemption, as applicable. Notwithstanding the foregoing, if the Participating Trust redeems all of its Units, the Manager will apply (or procure the application of) such portion of the redemption proceeds against any amount of the Management Fee accrued or due from the Participating Trust as at the redemption date as required to settle such amount. If the amount of the Management Fee then accrued or due exceeds the redemption proceeds, the Participating Trust will be invoiced for the amount of the shortfall.

The Management Fee will cover all management, portfolio management and risk management services and the fees and expenses of the Custodial Trustee as well as any compensation to the Placement Agent or other expenses relating to the offering of Units. The Manager shall pay out of the Management Fee received by it, the fees of the Investment Manager as agreed between the Manager and the Investment Manager from time to time. To the extent the Manager engages any other placement agents, it may enter into other compensation arrangements that differ from that with respect to the Placement Agent and such compensation arrangements shall be disclosed to applicable investors.

This Fee Schedule may only be amended with the express written consent of the Investment Fiduciary and Manager; *provided*, *however*, that any amendment to lower the Management Fee may be effected in the Manager's sole discretion by providing notice of such lower rate to the Investment Fiduciary. Notwithstanding any amendment to this Fee Schedule, from time to time, all other provisions of the Adoption Agreement shall remain in full force and effect and binding on the Investment Fiduciary and Manager.

We elect to pay our fees by either (please tick method of payment):

☑ (a) wire transfer to Bank (wire instructions will be provided to the Subscriber on the quarterly Management Fee invoice):

OR

☐ (b) effecting a redemption of Units held by the Participating Trust, the proceeds of which are equal to the management fee owing to the Manager.

Dated this _____ day of _____, 20___

BNY MELLON INVESTMENT MANAGEMENT CAYMAN LTD

By: _____

Name: _____

Title: _____

PARTICIPATING TRUST

Ventura County Employees' Retirement Association, in its capacity as the Investment Fiduciary
(print name of investment fiduciary)

By: _____
Authorized Signature

Name: _____
Name of Authorized Signatory (please print)

Title: _____
Title of Authorized Signatory (please print)

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: CALIFORNIA GOVERNMENT CODE SECTION 7514.7 ANNUAL REPORTING

Dear Board Members:

Presented to the Board are reports meeting the public disclosure requirements for alternative investments under California Government Code Section 7514.7. Note that the private equity reports have already been reviewed with the Board as part of Abbott's prior presentation on November 20, 2017. Reports from open-ended commingled fund real estate managers Prudential and UBS are also included for your review.

RECOMMENDATION: RECEIVE AND FILE THE ATTACHED ALTERNATIVE INVESTMENT DISCLOSURE REPORTS

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

California Disclosure Reporting

California Disclosure Reporting

California Code, Government Code - GOV § 7514.7

Private Equity Investments as of December 31, 2016				
Name of Fund	**Address of Fund Manager**	**Closing Date**	**Commitment**	**Vintage Year**
Adams Street 2010 Direct Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	5/21/10	$8,500,000	2010
Adams Street 2013 Global Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	6/27/13	$75,000,000	2013
Adams Street 2016 Global Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	8/16/16	$60,000,000	2016
Adams Street Partnership Fund - 2010 Non-U.S. Developed Markets Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	5/21/10	$25,500,000	2010
Adams Street Partnership Fund - 2010 Non-U.S. Emerging Markets Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	5/21/10	$8,500,000	2010
Adams Street Partnership Fund - 2010 U.S. Fund	One North Wacker Drive, Suite 2200, Chicago, IL 60606-2823	5/21/10	$42,500,000	2010
Drive Capital Fund II	629 N. High Street, Columbus, OH 43215	8/19/16	$15,000,000	2016
HarbourVest - Dover Street IX	One Financial Center, Boston, MA 02111	7/8/16	$60,000,000	2016
HarbourVest - Dover Street VIII	One Financial Center, Boston, MA 02111	5/30/13	$67,500,000	2012
Pantheon Global Secondary Fund IV	10 Finsbury Square, 4th Floor, London EC2A1AF	6/24/10	$15,000,000	2010
Pantheon Global Secondary Fund V	10 Finsbury Square, 4th Floor, London EC2A1AF	2/6/15	$50,000,000	2015
Total			**$427,500,000**	

Performance and Fee Information												
	As of December 31, 2016 (Since Inception)						For the Year Ended December 31, 2016					
Name of Fund	**Contributions**	**Distributions**	**Valuation**	**TVPI**	**Gross IRR**	**Net IRR**	**Distributions**	**Cash Profit Received[1]**	**Management Fees[3]**	**Carried Interest[2][3]**	**Other Expenses[3]**	**Fees & Expense Paid by Portfolio Cos. [3]**
Adams Street 2010 Direct Fund	$7,879,500	$5,660,562	$6,408,768	1.53	18.33%	11.97%	$1,727,532	$1,023,308	$141,135	$(68,819)	$4,465	NR
Adams Street 2013 Global Fund	$44,250,000	$3,108,905	$45,870,101	1.11	9.91%	6.39%	$1,599,027	$703,773	611,973	$40,183	$35,349	N/A
Adams Street 2016 Global Fund	$1,500,000	$0	$2,054,581	1.37	NM	NM	$0	$0	$241,103	$80,144	$209,503	N/A
Adams Street Partnership Fund - 2010 Non-U.S. Developed Markets Fund	$20,591,249	$8,141,472	$17,004,917	1.22	11.92%	8.12%	$2,584,293	$1,322,254	$224,583	$20,362	$5,336	N/A
Adams Street Partnership Fund - 2010 Non-U.S. Emerging Markets Fund	$6,621,500	$738,789	$7,882,770	1.30	12.18%	9.56%	$424,353	$67,823	$74,861	$1,451	$3,175	N/A
Adams Street Partnership Fund - 2010 U.S. Fund	$32,852,500	$14,394,035	$34,463,147	1.49	17.80%	14.34%	$3,629,554	$2,041,195	$374,306	$11,862	$13,375	N/A
Drive Capital Fund II	$452,592	$0	$244,730	0.54	NM	NM	$0	$0	$151,223[4]	$0[5]	$42,994[4]	$0
HarbourVest - Dover Street IX	$2,400,000	$841,532	$3,035,942	1.62	NM	NM	$841,532	$798,664	$81,760	$0[5]	$6,185	N/A
HarbourVest - Dover Street VIII	$56,447,454	$29,369,898	$48,274,491	1.38	NR	23.90%	$10,125,862	$5,532,021	$832,770	$0[5]	$3,598	N/A
Pantheon Global Secondary Fund IV	$9,960,000	$8,805,001	$5,922,596	1.48	NR	14.17%	$675,000	$104,856	$133,663	$(36,019)	$29,101	N/A
Pantheon Global Secondary Fund V	$13,391,510	$0	$17,284,973	1.29	NR	25.31%	$0	$0	$643,694	$(319,937)	$68,290	N/A
Total	**$196,346,305**	**$71,060,194**	**$188,447,016**				**$21,607,153**	**$11,593,894**	**$3,511,071**	**$(270,773)**	**$421,371**	

Please see notes on following page.

ABBOTT CAPITAL

California Disclosure Reporting

California Code, Government Code - GOV § 7514.7

Consolidated Fee Information at the Underlying Fund Level[3]				
	For the Year Ended December 31, 2016			
Name of Fund[6]	Management Fees	Carried Interest[2]	Other Expenses	Fees & Expenses Paid by Portfolio Cos.
Adams Street 2013 Global Fund	$973,263	$708,350	$137,188	NR
Adams Street 2016 Global Fund	$108,072	$49,271	$18,145	NR
Adams Street Partnership Fund - 2010 Non-U.S. Developed Markets Fund	$291,738	$486,528	$71,646	NR
Adams Street Partnership Fund - 2010 Non-U.S. Emerging Markets Fund	$145,878	$129,740	$33,682	NR
Adams Street Partnership Fund - 2010 U.S. Fund	$537,198	$960,841	$71,285	NR
HarbourVest - Dover Street IX	NR	NR	NR	NR
HarbourVest - Dover Street VIII	NR	NR	NR	NR
Pantheon Global Secondary Fund IV	$21,171	$410	$61,669	NR
Pantheon Global Secondary Fund V	$166,313	$324,978	$126,579	NR
Total	**$2,243,633**	**$2,660,118**	**$520,194**	

NM = IRR is not meaningful. Investment is less than one year old.
N/A = Not Applicable. Fund of Funds do not have direct portfolio company investments.
NR = Information was not reported.

(1) Represents amounts included in distributions received during the year that are classified as gain, dividend, interest or income per the fund's distribution notice.
(2) Except as otherwise noted, amounts represent realized and unrealized carried interest allocations for the year ended December 31, 2016.
(3) The information included herein is sourced from data provided by the managers of the funds. Such information has not been independently verified and no representation or warranty, express or implied, is given by or on behalf of Abbott as to the accuracy, fairness, correctness or completeness of the information.
(4) VCERA's pro rata share was not reported. Amounts represent estimates based on fund level amounts reported in the financial statements. Fund level amounts were allocated to VCERA based on VCERA's proportionate share of the fund. Actual allocated amounts may differ and such differences could be material.
(5) Represents carried interest paid.
(6) Adams Street Adams Street 2010 Direct Fund and Drive Capital Fund II were omitted from the list titled "Consolidated Fee Information at the Underlying Fund Level" because these funds make direct investments and have no funds on which to report fees.

CALIFORNIA REPORTING TEMPLATE

Reporting Period: 12/31/2016

CPRA Disclosures (Cal. Govt. Code § 6254.26(b)):

1. Name, address and vintage year of Partnership- Name: PGIM Real Estate Address: 7 Giralda Farms Madison, NJ 07940; Vintage Year: 1970
2. Date the investment in Partnership was made by Investor- Investors inception- 3/31/2005
3. Dollar amount of cash contributions made by Investor to Partnership since inception- $60,000,000
4. Dollar amount of Investor's Distributions from Partnership since inception- $42,694,948
5. Dollar amount on a fiscal year-end basis of cash distributions received by Investor, and remaining value of Partnership assets attributable to Investor's investment in Partnership-$42,694,948
6. Net internal rate of return ("IRR") of Investor's investment in Partnership since inception- Net IRR 3.40%[1]
7. The investment multiple of Investor's investment in Partnership since inception- N/A, PRISA SA is an open end fund
8. Dollar amount of the total management fees and costs paid on an annual fiscal year-end basis by Investor to Partnership- Annual period ending 12/31/2016 is $999,503.83.
9. Dollar amount of cash profit received by Investor from Partnership on a fiscal year-end basis- Not applicable, Investor is invested in an insurance company separate account not a limited partnership construct.

Additional Disclosures (Cal. Govt. Code § 7514.7):

a. Fees and expenses that Investor pays directly to Partnership, General Partner or related parties: n/a

b. Investor's pro rata share of fees and expenses, not included in (a) above, that are paid from Partnership to General Partner or related parties: n/a

c. Investor's pro rata share of carried interest distributed to General Partner or related parties: n/a

d. Investor's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held by Partnership to General Partner or related parties: .73%

e. Gross and net IRR of investment of Partnership since inception: Gross 9.05%, Net 7.96%[1]

CALIFORNIA REPORTING TEMPLATE

Reporting Period: 12/31/2016

CPRA Disclosures (Cal. Govt. Code § 6254.26(b)):

1. Name, address and vintage year of Partnership
Name: Trumbull Property Fund LP (TPF)
Address: 10 State House Square, 15th Floor, Hartford CT 06103
Vintage Year: 1978

2. Date the investment in Partnership was made by Investor. 03/31/2003

3. Dollar amount of cash contributions made by Investor to Partnership since inception: $124,000,000

4. Dollar amount of Investor's Distributions from Partnership since inception: $17,789,760

5. Dollar amount on a fiscal year-end basis of cash distributions received by Investor, and remaining value of Partnership assets attributable to Investor's investment in Partnership
$ 17,789,760 Distributions and redemptions from inception
$246,664,840 Account value after fee payable at Dec 31, 2016
$264,454,600

6. Net internal rate of return ("IRR") of Investor's investment in Partnership since inception:
The Investor's net IRR(after fees) is 8.12%

7. The investment multiple of Investor's investment in Partnership since inception
($264,454,600 / $124,000,000) = 2.13

8. Dollar amount of the total management fees and costs paid on an annual fiscal year-end basis by Investor to Partnership $17,588,117 from inception to December 31, 2016

9. Dollar amount of cash profit received by Investor from Partnership on a fiscal year-end basis
$ 96,803.463 of earnings
$ 61,843,797 of Unrealized and realized gains
$158,647,260 Total investment earnings

Additional Disclosures (Cal. Govt. Code § 7514.7):

a. Fees and expenses that Investor pays directly to Partnership, General Partner or related parties: For calendar year 2016, advisory fees of $2,322,526 were deducted and paid from the investor's account to the partnership.

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b. Investor's pro rata share of fees and expenses, not included in (a) above, that are paid from Partnership to General Partner or related parties:
The Fund will pay all costs, expenses and fees incurred in operating the Fund (including amounts paid to third parties unaffiliated with the Fund or the Advisor), including costs, expenses and fees incurred for legal, accounting, audit, appraisal and other third-party valuation services, insurance and indemnification, tax and other consulting services (including engineering and environmental consulting), and other costs, expenses and fees incurred in the evaluation, acquisition, financing, leasing, development, management, operation, monitoring and disposition of investments (including such expenses incurred in connection with transactions that are not consummated for any reason). Costs and expenses related to quarterly offerings of Units will be operating expenses paid by the Fund. Operating expenses will include costs incurred in connection with formation of underlying subsidiaries for acquisition of assets. The Advisor will not be reimbursed by the Fund for the Advisor's overhead or employee compensation or for any fees or expenses paid to sub-advisors. In addition, the Fund will reimburse reasonable expenses incurred by members of the Advisory Council. The investor is allocated its pro rata share of the expenses above.

c. Investor's pro rata share of carried interest distributed to General Partner or related parties: Not applicable. There is no carried interest.

d. Investor's pro rata share of aggregate fees and expenses paid by all of the portfolio companies held by Partnership to General Partner or related parties: For calendar year 2016, the investors share of advisory fees paid to the general partner and related parties was $2,322,526. For calendar year 2016, the investors share of the Funds general & administrative costs was $89,509.

e. Gross and net IRR of investment of Partnership since inception:
TPF is an open-end commingled real estate fund with an inception date of January 13, 1978. The TPF gross and net returns from inception to December 31, 2016 are 9.07% and 8.07%, respectively. These returns are time-weighted, leveraged, and include reinvestment of income.

Notes:
The Trumbull Property Fund LP ("TPF" or the "Fund") is an open-end, commingled private real estate portfolio advised by UBS Realty Investors LLC. The REIT-based fund is structured as a limited partnership.

All information furnished in this report is confidential and proprietary information of TPF, its general and limited partners and UBS Realty Investors LLC. This material should not be shared with third parties without the prior written permission of UBS Realty Investors LLC.

Past performance is not indicative of future results. Actual results may be materially different. The material content of this response is based upon information obtained by UBS Realty Investors LLC through December 31, 2016.

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VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: PEPRA ANNUAL COMPENSATION LIMIT FOR 2018

Dear Board Members,

The California Public Employees' Pension Reform Act (PEPRA) limits the pensionable compensation used in the calculation of retirement benefits. Specifically, the PEPRA statues set an initial limit of the Social Security maximum, or 120% of the maximum for member plans not integrated with Social Security. VCERA General Member plans are integrated with Social Security, while the Safety Member plans are not. Additionally, PEPRA instructs "retirement systems" to adjust the compensation limit annually for inflation based upon annual changes to the Consumer Price Index for All Urban Consumers.

As an advisory organization, the California Actuarial Advisory Panel (CAAP) issues a letter annually for California public retirement systems, detailing its calculation of the PEPRA compensation limits. In March of 2014, the VCERA Board of Retirement directed staff to identify the annual adjustments to the PEPRA compensation limits and submit them to the Board for approval.

In November 2017, CAAP again calculated the compensation limit amounts using the required criteria, with the results producing an increase to both amounts, as follows:

- $121,388 (integrated with Social Security)
- $145,666 (not integrated with Social Security)

The calculation steps are detailed in the full published letter, which is attached.

RECOMMENDED ACTION: ADOPT THE 2018 PEPRA COMPENSATION LIMITS OF $121,388 AND $145,666 AS CALCULATED BY THE CALIFORNIA ACTUARIAL ADVISORY PAN EL (CAAP).

I would be pleased to respond to any questions on this matter a t our December 11, 2017 meeting.

Sincerely,

Linda Webb
Retirement Administrator

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

STATE OF CALIFORNIA

California Actuarial Advisory Panel

November 21, 2017

SUBJECT: PEPRA Compensation Limit for 2018 (Code Section 7522.10)

To Whom It May Concern:

Pursuant to a request from a Public Agency, the California Actuarial Advisory Panel (the Panel) is publishing this letter to provide a calculation of the Pension Compensation Limits for the Calendar Year 2018.

Background

Pursuant to Government Code section 7507.2(b), the responsibilities of the Panel include "Replying to policy questions from public retirement systems in California" and "Providing comment upon request by public agencies." In 2013, members of the Panel received a request from a public retirement system (the San Joaquin County Employees' Retirement Association) to compute and publish the annual compensation limit prescribed by the California Public Employees' Pension Reform Act of 2013 (PEPRA), as amended by Senate Bill No. 13 (SB 13). This request was made to address a concern that minor calculation or rounding differences could result in different systems calculating slightly different pension compensation limits.

The Panel agreed to calculate the dollar amounts of the pension compensation limits for 2014 and future years, as we believe that the use of a uniform compensation limit will provide administrative benefits to California's public retirement systems. However, as the Panel is an advisory body only (Government Code section 7507.2(e) states that "The opinions of the California Actuarial Advisory Panel are nonbinding and advisory only"), the Panel encourages each system to independently review the calculation of the pension compensation limits contained in this letter.

State Controller's Office
California Actuarial Advisory Panel
c/o State Accounting and Reporting Division
P.O. Box 942850, Sacramento, CA 94250
Phone: 916-322-3702 Fax: 916-323-4807

Analysis

Section 7522.10 of the Government Code is as follows:

7522.10. (a) On and after January 1, 2013, each public retirement system shall modify its plan or plans to comply with the requirements of this section for each public employer that participates in the system.
(b) Whenever pensionable compensation, as defined in Section 7522.34, is used in the calculation of a benefit, the pensionable compensation shall be subject to the limitations set forth in subdivision (c).
(c) The pensionable compensation used to calculate the defined benefit paid to a new member who retires from the system shall not exceed the following applicable percentage of the contribution and benefit base specified in Section 430(b) of Title 42 of the United States Code on January 1, 2013:
(1) One hundred percent for a member whose service is included in the federal system.
(2) One hundred twenty percent for a member whose service is not included in the federal system.
(d) (1) The retirement system shall adjust the pensionable compensation described in subdivision (c) based on the annual changes to the Consumer Price Index for All Urban Consumers: U.S. City Average, calculated by dividing the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September in the calendar year preceding the adjustment by the Consumer Price Index for All Urban Consumers: U.S. City Average, for the month of September of the previous year rounded to the nearest thousandth. The adjustment shall be effective annually on January 1, beginning in 2014.

The annual compensation pensionable compensation limit computed by the Panel for 2017 was $118,775 for those included in the federal Social Security system and $142,530 for those not included.

The Consumer Price Indices for All Urban Consumers (CPI-U) U.S. City Average for the months of September 2016 and 2017 are as follows[1]:

- September, 2017: 246.819
- September, 2016: 241.428

The annual change, computed by dividing the 2017 Index by the 2016 Index, rounded to the nearest thousandth is as follows:

- 246.819 ÷ 241.428 = 1.022

[1] http://data.bls.gov/timeseries/CUUR0000SA0

Applying this annual adjustment to the 2017 limits yields the following limits for calendar year 2018:

- $118,775 x 1.022 = $121,388 (included in federal system)
- $142,530 x 1.022 = $145,666 (not included in federal system)

The indexation of the maximum compensation to be used by CalSTRS using the February CPI-U, based on AB 1381 passed by the legislature in 2013, is not addressed in this letter.

Conclusion

The calculations described above indicate the compensation limit for PEPRA members for Calendar Year 2018 will increase to $121,388 for members participating in the federal system (7522.10(c)(1) limit) and $145,666 for members not participating in the federal system (7522.10(c)(2) limit). The Panel intends to provide similar calculations in future years. The contents of this letter are nonbinding and advisory only, and we encourage each public retirement system to independently evaluate these calculations.

Sincerely,

Paul Angelo
Chair, California Actuarial Advisory Panel

cc: Panel members
John Bartel, Vice Chair
Ian Altman
David Driscoll
David Lamoureux
Steve Ohanian
Graham Schmidt
Scott Terando

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: AUTHORIZATION OF UP TO 2 VCERA TRUSTEES AND CIO TO ATTEND NEPC'S 2018 PUBLIC FUNDS WORKSHOP IN TEMPE, ARIZONA ON JANUARY 22 – 23, 2018

Dear Board Members:

NEPC's 2018 Public Funds Workshop in Tempe, Arizona is scheduled for January 22 – 23, 2018. Attached is the Workshop agenda. The estimated cost to attend is approximately $600 per person including airfare, hotel, meals, and other related expenses.

Allan Martin of NEPC and I are available to respond to any questions you may have on this matter.

RECOMMENDATION: AUTHORIZE UP TO 2 VCERA TRUSTEES AND CIO TO ATTEND NEPC'S 2018 PUBLIC FUNDS WORKSHOP IN TEMPE, ARIZONA ON JANUARY 22 – 23, 2018

Respectfully submitted,

Daniel P. Gallagher

Dan Gallagher
Chief Investment Officer

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

NEPC, LLC

2018 Public Funds Workshop
Monday and Tuesday, January 22 and 23

Tempe Mission Palms
60 East Fifth Street
Tempe, AZ 85281

Workshop Agenda — January 22-23

Monday, January 22

6:30am-7:45a:	Buffet breakfast at the Cloister (at your leisure)
7:45am:	Adjourn to the Palm B/C meeting room
8:00a-9:00a:	**Opening Remarks/Fund Introductions** Kevin Leonard of NEPC to provide opening remarks, followed by Allan Martin of NEPC and participants discussing Impactful actions from 2017 and key initiatives for 2018
9:00–10:00a:	**NEPC 2018 Capital Markets Update and Asset Allocation Thoughts** Presentation and discussion of NEPC's 2018 Capital Markets and outlook Phill Nelson, NEPC
10:00a–10:15a:	Break
10:15a–11:15a:	**Megatrends** Tim McCusker of NEPC to discuss Megatrends, their potential impact on asset allocation structures, and creation of investment opportunities. Megatrends are long-term structural shifts with the potential to influence culture, politics, and economics across the globe but unlikely to occur in the near term.
11:15a–12:15p:	**Strategies for Public Market Equity Investments** Moderated by (TBD) of NEPC Bob Jacksha of NMERB to discuss in-house, passive and (others TBD)
12:15pm-1:00pm:	Lunch (in the Cloister)
1:00p–2:00p:	**Opportunities in European Private Debt** David Forbes Nixon, Alcentra
2:00pm-3:00p:	**Managing Private Debt** Moderated by Chris Hill of NEPC Client panel to include Matt O'Reilly of San Antonio Fire & Police and (others TBD)
3:00pm-3:15pm:	Break

255 State Street | Boston, MA 02109 | TEL: 617.374.1300 | www.nepc.com
BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | PORTLAND | SAN FRANCISCO

3:15pm-4:00pm:	**Strategies for Cost-Effective Investment Structures** Moderated by Rhett Humphreys of NEPC Tom Tull (Texas ERS) Darren Fournerat, (LASERS) and (others TBD)

Monday, January 22 (cont.)

4:00p-5:00p	**The Death of Retail** Mike Yang of NEPC to discuss how the death of the retail marketplace has impacted commercial real estate (client participant TBD)
5:00pm:	End of day one
5:30p:	Cocktails (Mission Grille)
6:00pm:	Dinner (Ben Hunt of Salient Partners, LP to give a presentation on Artificial Intelligence)

Tuesday, January 23

6:30am-7:45am:	Buffet breakfast at the Cloister (at your leisure)
7:45am:	Adjourn to the Palm B/C meeting room
8:00a-9:00a:	**Emerging Markets – Still Attractive?** TBD of NEPC to introduce outside speaker (TBD)
9:00a-10:00a	**Effective Management of Downside Risk** Phill Nelson, NEPC (Client panel TBD)
10:00-10:15a:	Break
10:15-11:00a:	**Public Plan Trends, Threats and Challenges** Hank Kim, Executive Director and Counsel of NCPERS will discuss legislation and regulatory issues facing Public Plans
11:00a-11:45a:	**SPONSOR PANEL** Led by Kevin Leonard of NEPC (Participants TBD)
11:45a:	Concluding Remarks
12:00pm:	Box lunch

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: AUTHORIZATION FOR MS. NEMIROFF'S ATTENDANCE; NAPPA WINTER SEMINAR; FEBRUARY 21st – 23rd, 2018; TEMPE, AZ

Dear Board Members:

Staff recommends authorization for Ms. Nemiroff to attend the NAPPA Winter Seminar being held February 21st – 23rd, 2018 in Tempe, Arizona. The cost to attend is estimated to be $1,600 including event registration, hotel, air fare and other travel related expenses. The Conference brochure is attached.

VCERA staff will be pleased to respond to any questions you may have on this matter at the December 11, 2017, board meeting.

Sincerely,

Linda Webb
Retirement Administrator

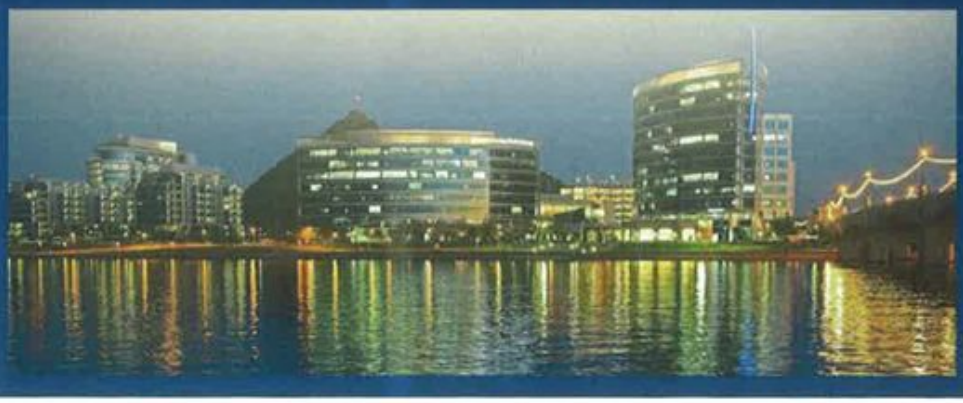
Attachment

NAPPA
National Association of
Public Pension Attorneys

2018 WINTER SEMINAR

February 21 - February 23, 2018
Registration Begins Tuesday, December 5, 2017

Tempe Mission Palms Hotel ♦ Tempe, AZ



Registration Information & Deadlines

Online registration begins Tuesday, December 5, 2017.

To register for the conference:
Go to **www.nappa.org**
Click on "**2018 Winter Seminar Registration**"

December 5 - January 31	Winter Seminar Registration Open **Winter Seminar Fee: $485** *(if registered before 1/17)* **Winter Seminar Fee: $585** *(if registered 1/17 or after)*
December 5 - January 31	Senior Counsel Meeting Registration Open **Senior Counsel Registration Fee: $70** This session is designed for attorneys with substantial experience as counsel for a public retirement system. Less experienced attorneys are welcome, but may not find this session as valuable.
January 31, 2018	Last day to register for the Winter Seminar

Seminar Cancellation Policy

Prior to January 17	Full refund
January 17 - January 31	$100 administrative fee charged
February 1 or later	No refund

If you have any questions, please call the NAPPA office
at (573) 616-1895, or send an email to:

Karen Holterman ..... **Karen@nappa.org**
Brenda Faken..... **Brenda@nappa.org**
Doris Dorge..... **Doris@nappa.org**

Hotel Information

All meetings will be held at the:

Tempe Mission Palms Hotel
60 E. 5th Street
Tempe, AZ 85281
Phone: (480) 894-1400
Toll Free: (800) 547-8705
www.missionpalms.com

Conference Room Rate: $216 per night *(single/double occupancy)*

A block of rooms has been reserved at the Tempe Mission Palms Hotel. The block room rate will be available **until the room block is filled or until January 29, 2018, at 5:00 p.m. (MST), whichever comes first.**

To Make Hotel Reservations

To ensure registered members can book a room in the NAPPA block, we would appreciate you registering for the conference **before** booking your room.

Online: www.nappa.org
*Click on **"2018 Winter Seminar Registration"***

Hotel Cancellation Policy: Guest room reservations must be cancelled 48 hours prior to arrival date or you will be charged for one night's accommodation.

Please Note!

- Materials will be provided electronically through the mobile app.
- NAPPA **does not** apply for CLE credits for the Winter Seminar.
- You are responsible for your own airfare and hotel accommodations.
- There is a "No Smoking" policy at all sessions.
- Dress is business casual. Please note that most meeting rooms tend to be on the chilly side, so a sweater or jacket is recommended.

Solicitation and Marketing are prohibited at all NAPPA meetings.

Wednesday, February 21

7:00 a.m. - 4:30 p.m. **Registration**

7:30 a.m. - 8:15 a.m. **Breakfast (provided by NAPPA)**

Investment Section Meeting

(8:30 a.m. - 11:30 a.m.)

8:30 a.m. - 9:20 a.m. **Subscription Agreements – Creation of a Standard Uniform Template**

This panel will discuss the role of the Subscription Agreement in private investment transactions. In addition, the panel will address ILPA's project to streamline the Subscription Agreement and other fund documents (such as the Limited Partnership Agreement) to create standard uniform templates acceptable to GPs and LPs.

9:20 a.m. - 10:10 a.m. **Strategies for Negotiating Best Terms Before Investing and Available Exit Strategies**

This panel will discuss considerations to negotiating the best possible fund terms and protections for LPs before making an investment and how to hold the GPs accountable, as well as suggested exit strategies should problems arise afterwards.

10:10 a.m. - 10:40 a.m. **Break**

10:40 a.m. - 11:30 a.m. **Everything LPs Need to Know About Credit Facilities**

This panel will discuss credit facilities/lines of credit from a business and legal perspective. The discussion will also address ILPA guidelines for use of subscription lines of credit.

11:30 a.m. - 1:00 p.m. **Lunch (provided by NAPPA)**

Wednesday, February 21

Fiduciary and Plan Governance Section Meeting

(1:30 p.m. - 4:30 p.m.)

1:30 p.m. - 2:45 p.m. **Public Pension System Operational Compliance**

This session will focus on building a strong culture of compliance within a public pension system. Our panelists will discuss the pros and cons of having a separate compliance function/office within the pension system and share some success stories of high functioning compliance offices or compliance officers. To whom does the compliance officer report? How does the compliance function interact with the legal office? With internal audits? How big is the staff? We will look to models in the industry and discuss the challenges/obstacles of creating a compliance office. Is this something only a big system can afford? If you don't have a separate function/office, who is in charge of compliance within your organization and what challenges does that present?

2:45 p.m. - 3:15 p.m. **Break**

3:15 p.m. - 4:30 p.m. **Delegation Without Abdication**

We've heard it time and again, a retirement board can better meet its fiduciary duties if it has appropriate and clear delegations to competent staff and advisors. But how often does this happen in practice? This panel will focus on actual examples of success stories where pension boards have evolved from micromanaging boards to those with clear delegations to, accountability of, and trust in staff and advisors. The panelists will discuss the hallmarks of an effective model of delegation and how systems have made it happen. We will consider what the impetus for the change might be and the obstacles to success. Finally, what have been some of the positive outcomes from sound delegation practices? Fewer or shorter board meetings? Better service to members? Better investment returns? Greater accountability? A higher functioning organization?

5:00 p.m. - 6:30 p.m. **Reception (provided by NAPPA)**

Thursday, February 22

7:00 a.m. - 4:30 p.m. **Registration**

7:30 a.m. - 8:15 a.m. **Breakfast (provided by NAPPA)**

Benefit Section Meeting

(8:30 a.m. - 11:30 a.m.)

8:30 a.m. - 9:15 a.m. **When Public Plans Sue Their Actuaries**

The panel will discuss litigation between public plans and their actuaries.

9:15 a.m. - 10:00 a.m. **Overview of Changes Nationwide**

The following topics will be discussed during this session:

- State and Local Pension Reform Since the Financial Crisis
- Alternative Plans: Money Purchase, Cash Balance, Hybrid and Recent Events

10:00 a.m. - 10:30 a.m. **Break**

10:30 a.m. - 11:30 a.m. **Limitations on Changes – "Tracks of My Tiers"**

The panel will discuss legal and administrative challenges of identifying and managing different tiers.

11:30 a.m. - 1:00 p.m. **Lunch (provided by NAPPA)**

Thursday, February 22

Tax Section Meeting

(1:30 p.m. - 4:30 p.m.)

1:30 p.m. - 2:00 p.m. **Demystifying the Legislative Process**

The Tax Cuts and Jobs Act of 2017 ("TCJA") represents the most significant revision of the Internal Revenue Code in 30 years. This session will provide an overview of the legislative procedures for complex tax legislation, the roles of the various committees, the impact of revenue estimates and the interplay between the House and Senate that is specific to the tax legislative process.

2:00 p.m. - 2:45 p.m. **TCJA: Impact on Tax Qualified Plans**

TCJA has a number of provisions that will impact the operation and documentation of tax-qualified defined benefit, defined contribution and governmental 457(b) plans. Specifically addressed in this panel discussion are new rules regarding in-service distributions, plan loan requirements and hardship withdrawals. We will also discuss proposed increases in the "cash-out" limitations under the Retirement Plan Modernization Act.

2:45 p.m. - 3:15 p.m. **Break**

3:15 p.m. - 3:45 p.m. **TCJA: Impact on Executive Compensation**

TCJA contains a number of revenue raisers targeting executive level employees. These provisions will impact highly paid employees of governmental entities, and to a surprising extent, the governmental entities themselves. This session will discuss the impact on governmental non-qualified deferred compensation plans and qualified governmental excess benefit plans. The panel will also discuss proposed compensation-based excise taxes applicable to governmental entities.

3:45 p.m. - 4:30 p.m. **The Third Rail – Governmental Plans and UBTI**

Unrelated Business Taxable Income ("UBTI") has always been a potential issue for governmental tax-qualified plans. In many ways, it represents the proverbial "third rail" of pension tax policy that neither the IRS nor the governmental plan community appear anxious to address. TCJA addresses UBTI head on. This session will provide an overview of UBTI, why it is so controversial in the governmental plan context and the proposed manner in which it is addressed in the TCJA.

Friday, February 23

7:00 a.m. - 11:30 a.m. **Registration**

7:30 a.m. - 8:15 a.m. **Breakfast - For Senior Counsel Attendees Only (provided by NAPPA)**

Senior Counsel Meeting

Pre-Registration Required

(8:30 a.m. - 11:30 a.m.)

8:30 a.m. - 9:30 a.m. **UBTI and Other Hot Investment Topics**

Whether proposed Unrelated Business Taxable Income (UBTI) legislation passes or not, private equity investment vehicles often have options for tax avoidance. This session will discuss deal structuring and other strategies to minimize UBTI. Additional discussion will include current trends in waterfalls and clawbacks.

9:30 a.m. - 10:30 a.m. **Using Social or Political Criteria in Making Investment Decisions for Pension Plans**

There are no consistent legal standards for fiduciaries across types of pension funds using, or not using, social or political criteria as a factor in making investment decisions. This session will look at the different standards under various state plans, ERISA, DOL and common law for what is required and allowed under a fiduciary's duty of prudence and loyalty.

10:30 a.m. - 11:00 a.m. **Break**

11:00 a.m. - 11:30 a.m. **After The Breach: When the Worst Happens, What Happens?**

Insights from those that have been through it.

This Senior Counsel Meeting is designed for attorneys with substantial experience as counsel for a public retirement system. Less experienced attorneys are welcome but may not find this session as valuable.

VCERA
VENTURA COUNTY EMPLOYEES' RETIREMENT ASSOCIATION

December 11, 2017

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

SUBJECT: APPOINTMENT OF 2018 CHAIR AND VICE CHAIR

Dear Board Members:

The Board of Retirement Bylaws and Regulations require the Board to take action at the first meeting in December to appoint a Chair and Vice Chair for the upcoming calendar year. The Regulations state that no member shall serve in either capacity until he/she has served on the Board for a minimum of one year.

I will be pleased to respond to any questions you may have at the December 11, 2017 meeting.

Sincerely,

Linda Webb
Retirement Administrator

1190 S. VICTORIA AVENUE, SUITE 200 • VENTURA, CA 93003
PHONE: 805-339-4250 • FAX: 805-339-4269 • WWW.VCERA.ORG

Public Fund Universe Analysis

Ventura County Employees' Retirement Association

Period Ending June 30, 2017

Fund Number: 52

Firm Overview

RVK

OVERVIEW

RVK, Inc. ("RVK") was founded in 1985 and is one of the largest independent and employee-owned investment consulting firms in the US, providing world-class investment advice to institutional investors. We serve over 400 plans, including pension plans, defined contribution plans, endowments & foundations, insurance pools, and special purpose funds.

MISSION STATEMENT

To provide best-in-class investment consulting services to a wide array of sophisticated investors.

STRATEGIC INVESTMENT ADVICE WITH NO CONFLICTS OF INTEREST

RVK built its investment consulting practice on the principles of integrity, investment knowledge, client service, and our no conflicts of interest policy. We are exclusively focused on strategic investment consulting services and solely owned by active employees, enabling us to offer advice that is not influenced by other business activities. As a privately-held firm, with no affiliates or parent company, we provide informed and unbiased investment advice to our clients. We offer an extensive slate of consulting services and produce deliverables fully customized to meet each client's needs.

KEY TENETS OF OUR CULTURE

RVK

RVK BY THE NUMBERS

- **30+** years of business
- **3** offices - Portland, Chicago, New York
- **$800+** billion Full-Retainer AUA
- **90+** Investment Professionals
- **50+** Advanced Degrees and Certifications
- **100%** Employee Ownership
- **100%** Revenue Derived from Client Fees
- **100%** Non-Discretionary Services

GENERAL CONSULTING SERVICES

- Plan Evaluation
- Strategic Asset Allocation
- Investment Policy Development & Review
- Investment Manager Search & Selection
- Performance Analysis & Reporting
- Manager Structure Analysis
- Risk Monitoring and Management
- Client Education
- Special Projects

SPECIALTY CONSULTING SERVICES

- Strategic Planning Reviews
- Custody, Record keeper, Third-Party Administrator Searches
- Asset/Liability Studies
- Endowment Spending Policy Studies
- Securities Lending Reviews
- Pacing Studies
- Outsourced CIO ("OCIO") Searches, Evaluation, and Ongoing Monitoring
- Directed Consulting Services
- Fee Reviews
- Defined Contribution Solutions Services
- Investment Operations Solutions
- Board and Investment Program Operational Reviews

FOR MORE INFORMATION ABOUT OUR SERVICES, PLEASE CONTACT:

Business.Development@RVKInc.com
503-221-4200

Fund Number: 52
Participants

As of June 30, 2017

Alameda County Employees' Retirement Association
Anchorage Police & Fire Retirement System
Arlington County Employees' Retirement System
California State Teachers' Retirement System
City of Austin Employees' Retirement System
City of Fresno Retirement Systems
City of Milwaukee Employes' Retirement System
City of Plano Other Post-Employment Benefits Trust
City of Plano Retirement Security Plan
Civilian Employees' Retirement System of the Police Department of Kansas City, Missouri
Colorado Public Employees' Retirement Association
Confederated Tribes of the Warm Springs Tribal Council Pension Fund
Contra Costa County Employees' Retirement Association
County Employees' Annuity & Benefit Fund of Cook County
District of Columbia Retirement Board
Educational Employees' Supplementary Retirement System of Fairfax County
Employees Retirement System of Texas
Fire & Police Employees' Retirement System of Baltimore
Fire and Police Pension Association of Colorado
Florida State Board of Administration
Fort Worth Employees' Retirement Fund
Fresno County Employees' Retirement Association
Georgia Division of Investment Services
Gila River Indian Community Retirement Plan
Illinois Municipal Retirement Fund
Imperial County Employees' Retirement System
Iowa Public Employees' Retirement System
Kansas City, Missouri Employees' Retirement System
Kansas Public Employees' Retirement System
Kentucky Retirement Systems
Kentucky Teachers' Retirement System
Kern County Employees' Retirement Association
Los Angeles City Employees' Retirement System
Los Angeles County Employees Retirement Association
Los Angeles Fire and Police Pension System
Los Angeles Water & Power Employees Retirement Plan
Marin County Employees' Retirement Association
Maryland State Retirement and Pension System
Mendocino County Employees' Retirement Association
Merced County Employees' Retirement Association
Montana Public Employees' Retirement System
Montana Teachers' Retirement System
Municipal Employees' Annuity and Benefit Fund of Chicago
Municipality of Anchorage Pre-Funding Program
Nebraska Investment Council
Nevada Public Employees' Retirement System
New York State Common Retirement Fund
Newport News Employees' Retirement Fund
North Carolina Retirement System
Ohio Public Employees' Retirement System
Orange County Employees' Retirement System
Pennsylvania Public School Employees' Retirement System
Pennsylvania State Employees' Retirement System
Police Retirement System of Kansas City, Missouri
Public Employees Retirement Association of New Mexico
Public School and Education ERS of Missouri
Sacramento County Employees' Retirement System

RVK

Fund Number: 52
Participants

As of June 30, 2017

San Diego City Employees' Retirement System
San Diego Transit Corporation Employees Retirement
San Mateo County Employees' Retirement Association
Sonoma County Employees' Retirement Association
Stanislaus County Employees' Retirement Association
State Teachers Retirement System of Ohio
Teachers' Retirement System of Louisiana
Texas Municipal Retirement System
Tulare County Employees' Retirement Association
Virginia Retirement System
Wyoming Retirement System
San Bernardino County Employees' Retirement Association
San Diego County Employees Retirement Association
San Joaquin County Employees' Retirement Association
Santa Barbara County Employees' Retirement System
South Dakota Retirement System
State of Michigan Retirement Systems
State Universities Retirement System of Illinois
Teachers' Retirement System of the State of Illinois
The Navajo Nation Retirement Plan
Ventura County Employees' Retirement Association (52)
West Virginia Investment Management Board

RVK

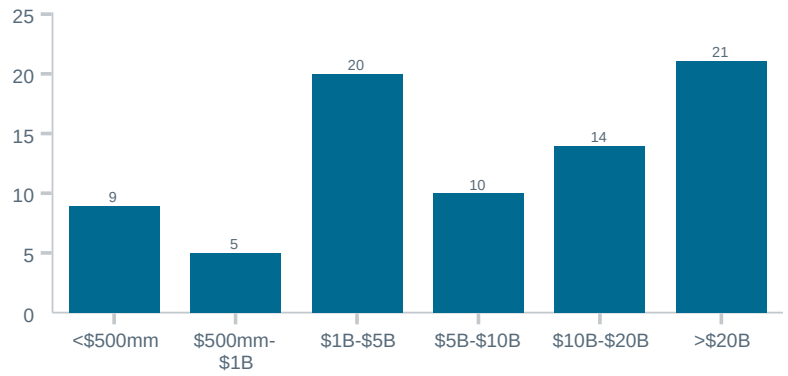
Report and Firm Summary

The following report is a compilation of data provided to RVK, Inc. by 79 public funds throughout the United States. We are a registered investment advisor with the Securities Exchange Commission under the Investment Advisors Act of 1940. Our firm provides investment consulting services to nearly 200 clients across more than 460 plans with total assets under advisement in excess of $2.1 trillion. The confidentiality of participants is maintained by revealing the fund name only to each individual fund. For more information about services provided by RVK, please visit our website at www.RVKInc.com.

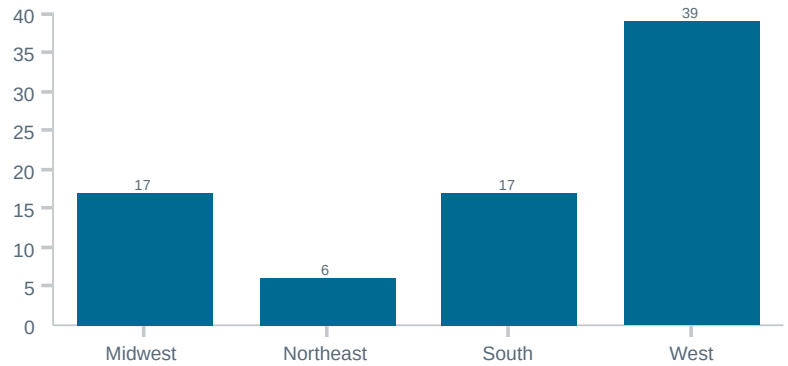
Fund Number: 52
Universe Characteristics

As of June 30, 2017

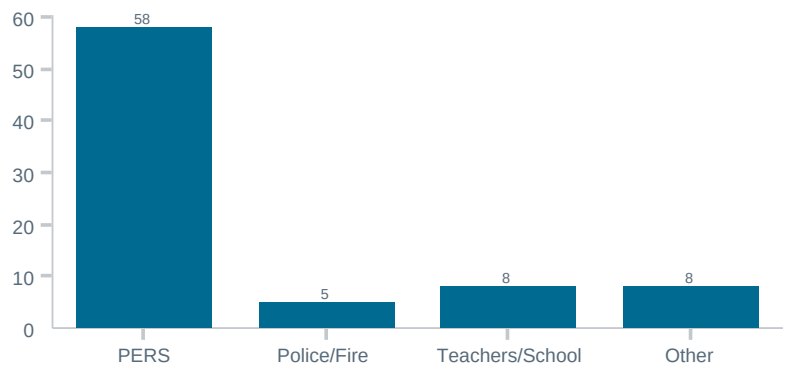
Asset Size



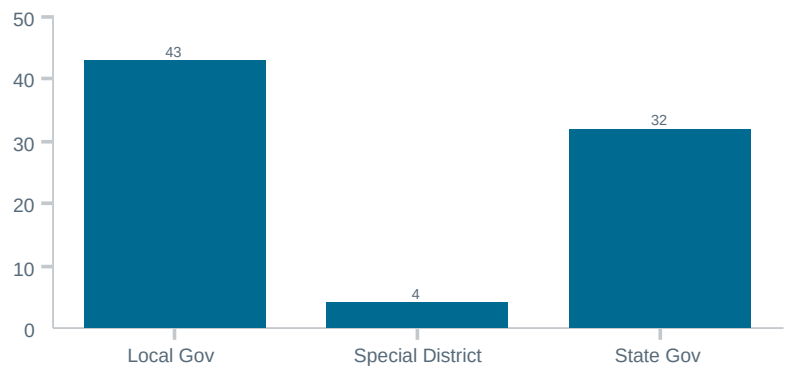
Geographical Distribution



Fund Classification



Fund Type



Universe: 79 funds

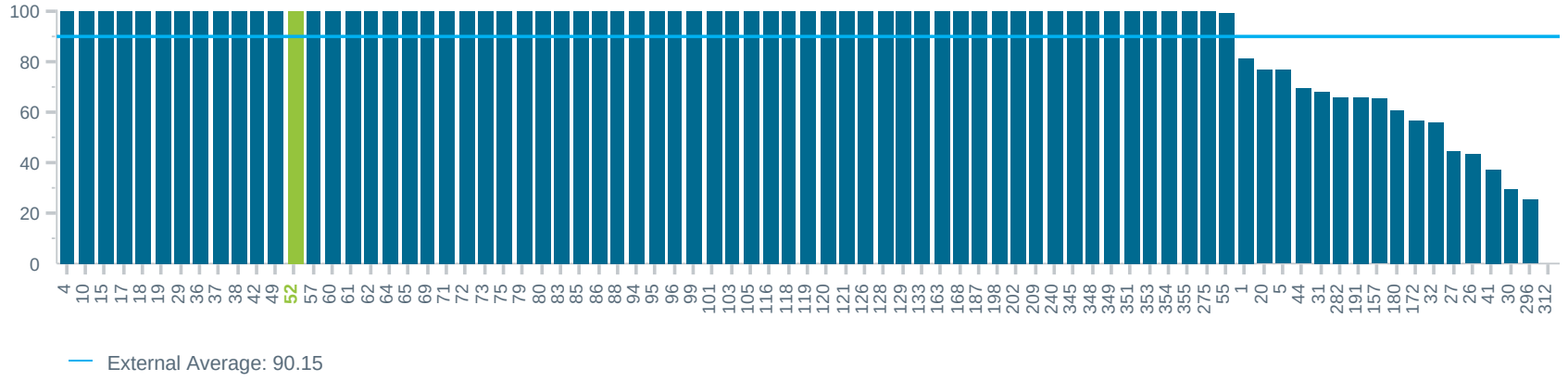
Fund Number: 52

As of June 30, 2017

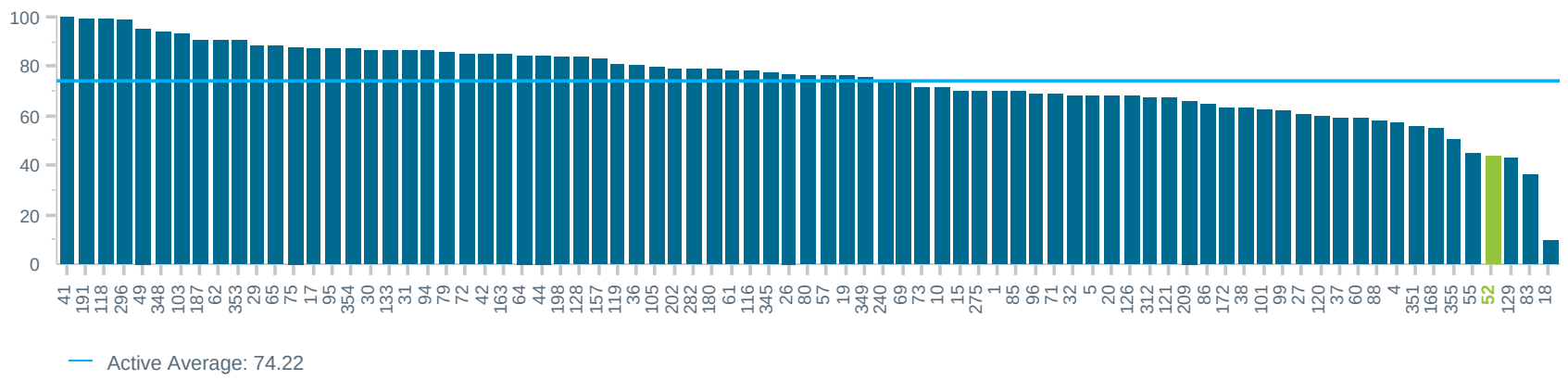
Portfolio Management

Percentage Externally Managed & Percentage Actively Managed

External Management (%)



Active Management (%)



VCERA

Fund Number: 52
Portfolio Management Statistics

As of June 30, 2017

Asset Range	Actively Managed (%)	Passively Managed (%)	Externally Managed (%)	Internally Managed (%)
Over $20B	74.88	25.12	75.88	24.12
$10B-$20B	70.66	29.34	84.00	16.00
$5B-$10B	71.13	28.87	97.67	2.33
$1B-$5B	74.13	25.87	98.83	1.17
$500mm-$1B	72.74	27.26	99.88	0.12
Under $500mm	82.63	17.37	100.00	0.00
VCERA	**43.48**	**56.52**	**100.00**	**0.00**

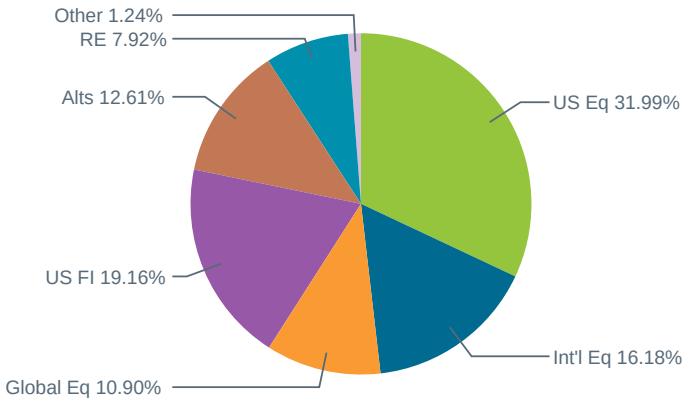
	Active Management		External Management	
Portfolio (%)	**Public Fund Universe**	**VCERA**	**Public Fund Universe**	**VCERA**
90 to 100	10	0	62	1
50 to 89	64	0	11	0
10 to 49	4	1	5	0
Less than 10	1	0	1	0
Total Funds Reporting	**79**	**1**	**79**	**1**

RVK

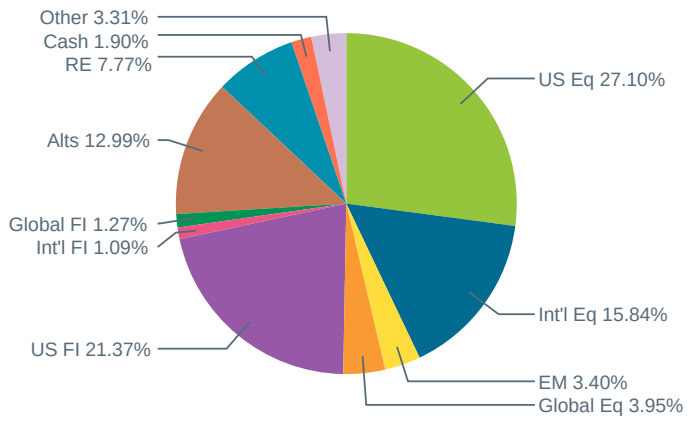
Fund Number: 52
Asset Allocation
VCERA vs. Average of All Funds

As of June 30, 2017

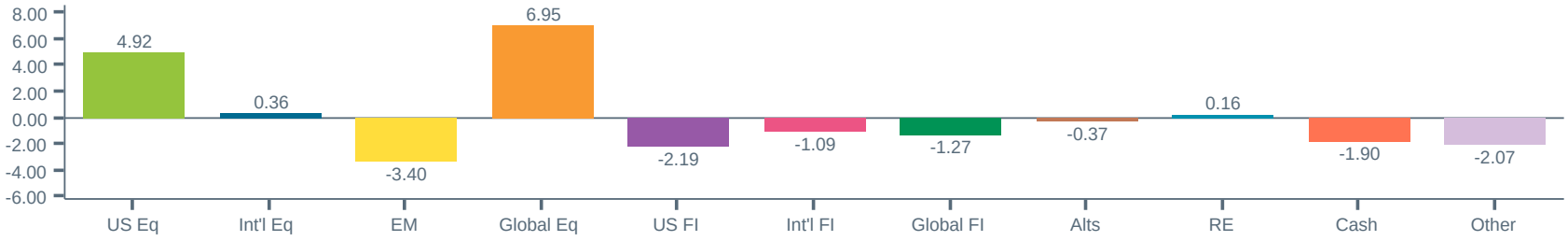
VCERA



All Funds



Variance (%)



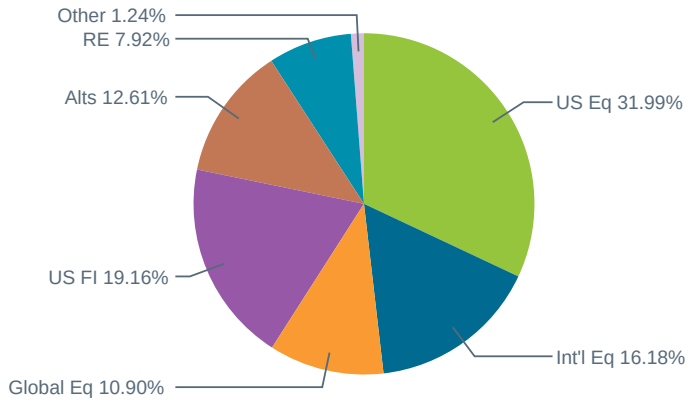
Allocations shown may not sum up to 100% exactly due to rounding.

RVK

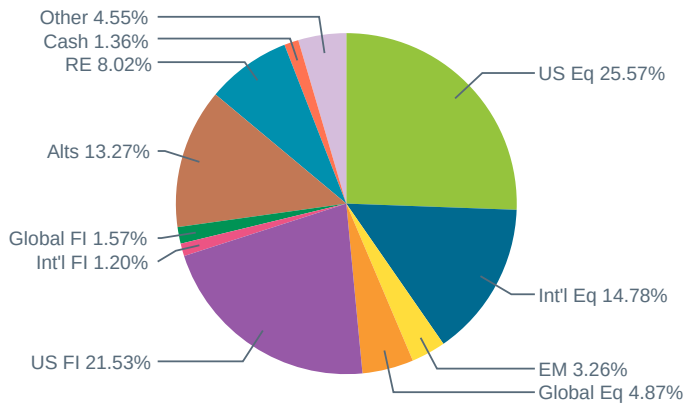
Fund Number: 52
Asset Allocation
VCERA vs. Average of Similar Size Funds

As of June 30, 2017

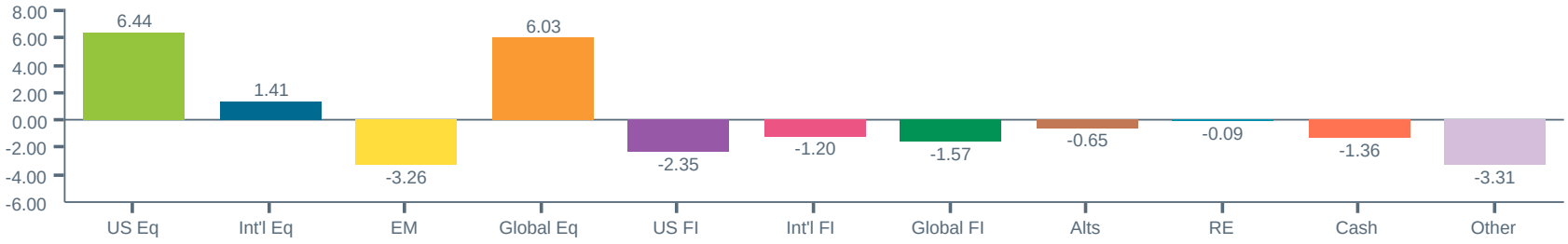
VCERA



$1-$5 Billion



Variance (%)



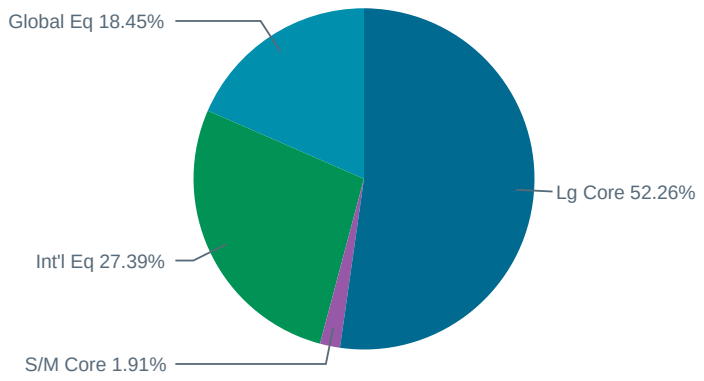
Allocations shown may not sum up to 100% exactly due to rounding.

RVK

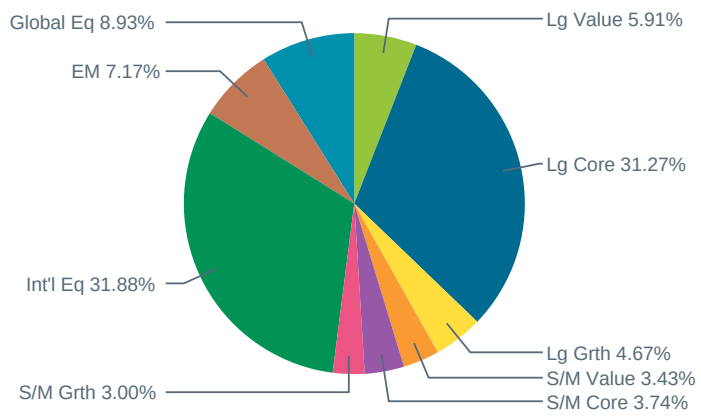
Fund Number: 52
Equity Style Allocation
VCERA vs. Average of All Funds

As of June 30, 2017

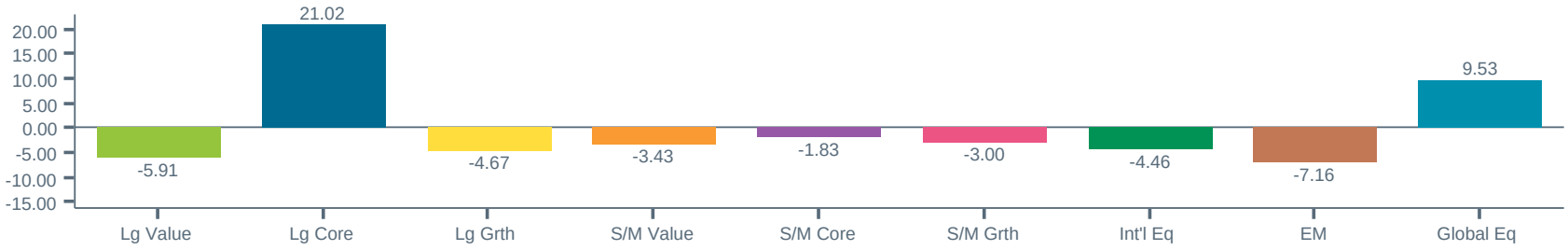
VCERA



All Funds



Variance (%)

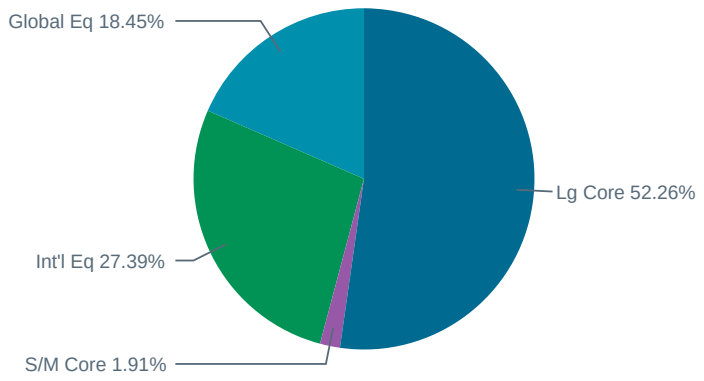


Allocations shown may not sum up to 100% exactly due to rounding.

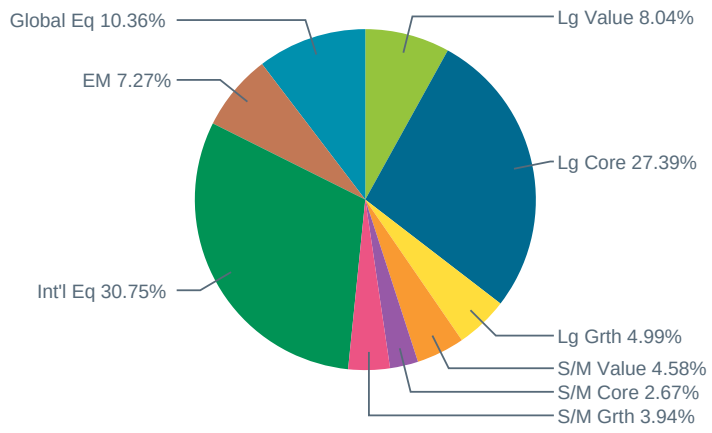
Fund Number: 52
Equity Style Allocation
VCERA vs. Average of Similar Size Funds

As of June 30, 2017

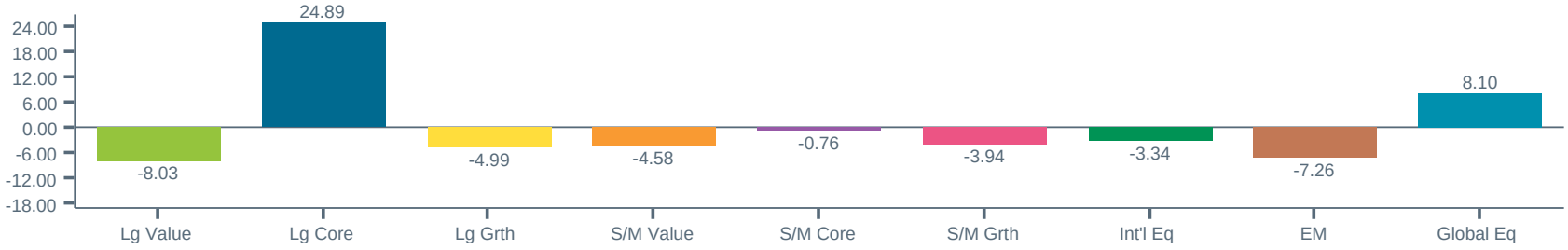
VCERA



$1-$5 Billion



Variance (%)



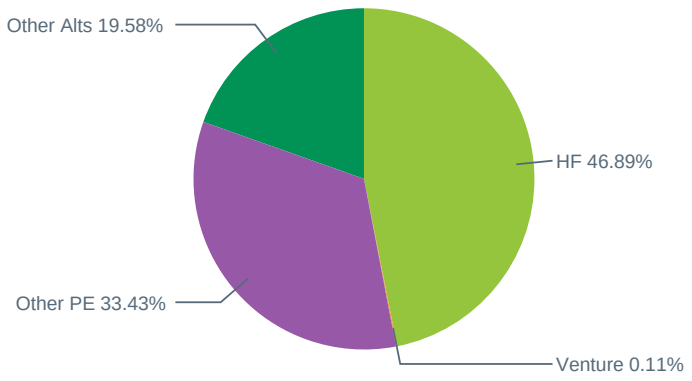
Allocations shown may not sum up to 100% exactly due to rounding.

RVK

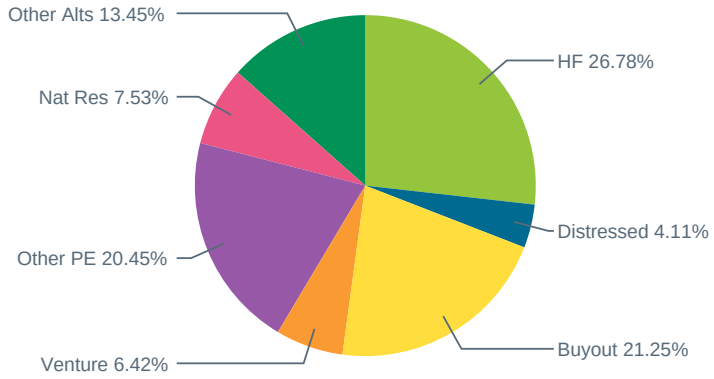
Fund Number: 52
Alternatives Style Allocation
VCERA vs. Average of All Funds

As of June 30, 2017

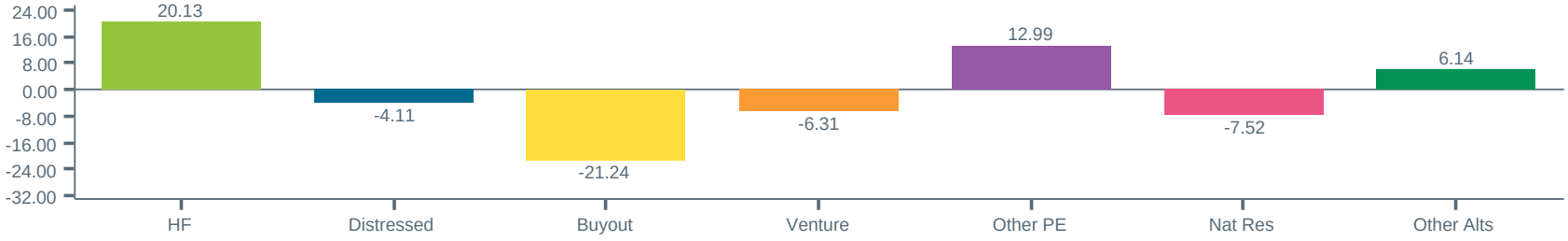
VCERA



All Funds



Variance (%)



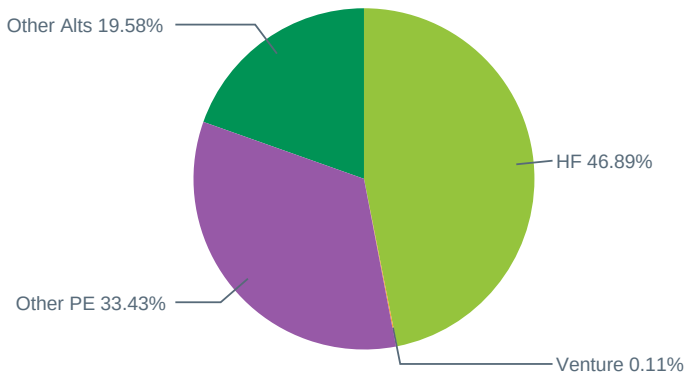
Allocations shown may not sum up to 100% exactly due to rounding.

RVK

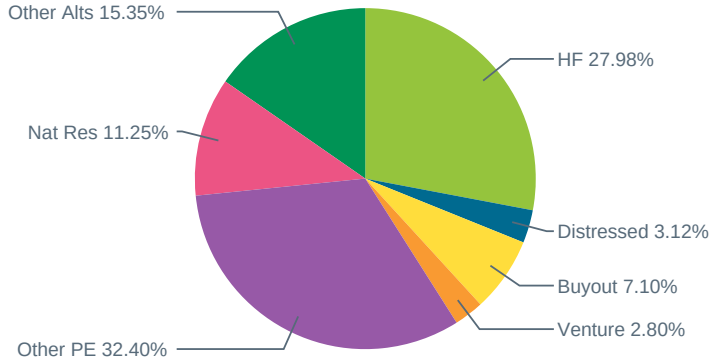
Fund Number: 52
Alternatives Style Allocation
VCERA vs. Average of Similar Size Funds

As of June 30, 2017

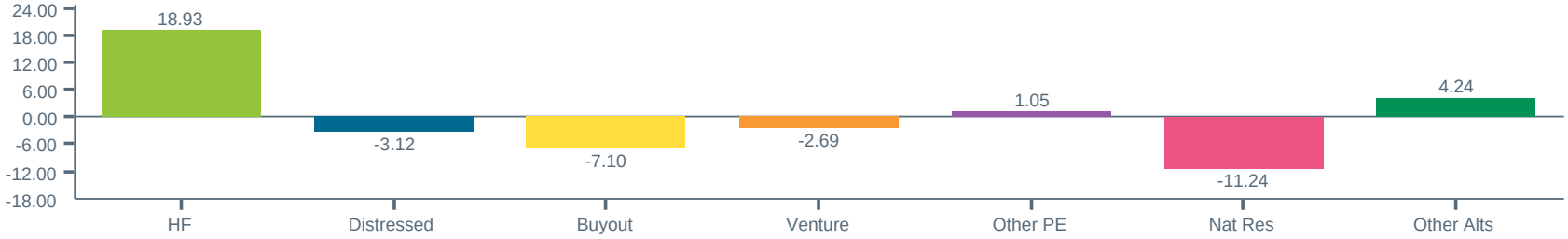
VCERA



$1-$5 Billion



Variance (%)



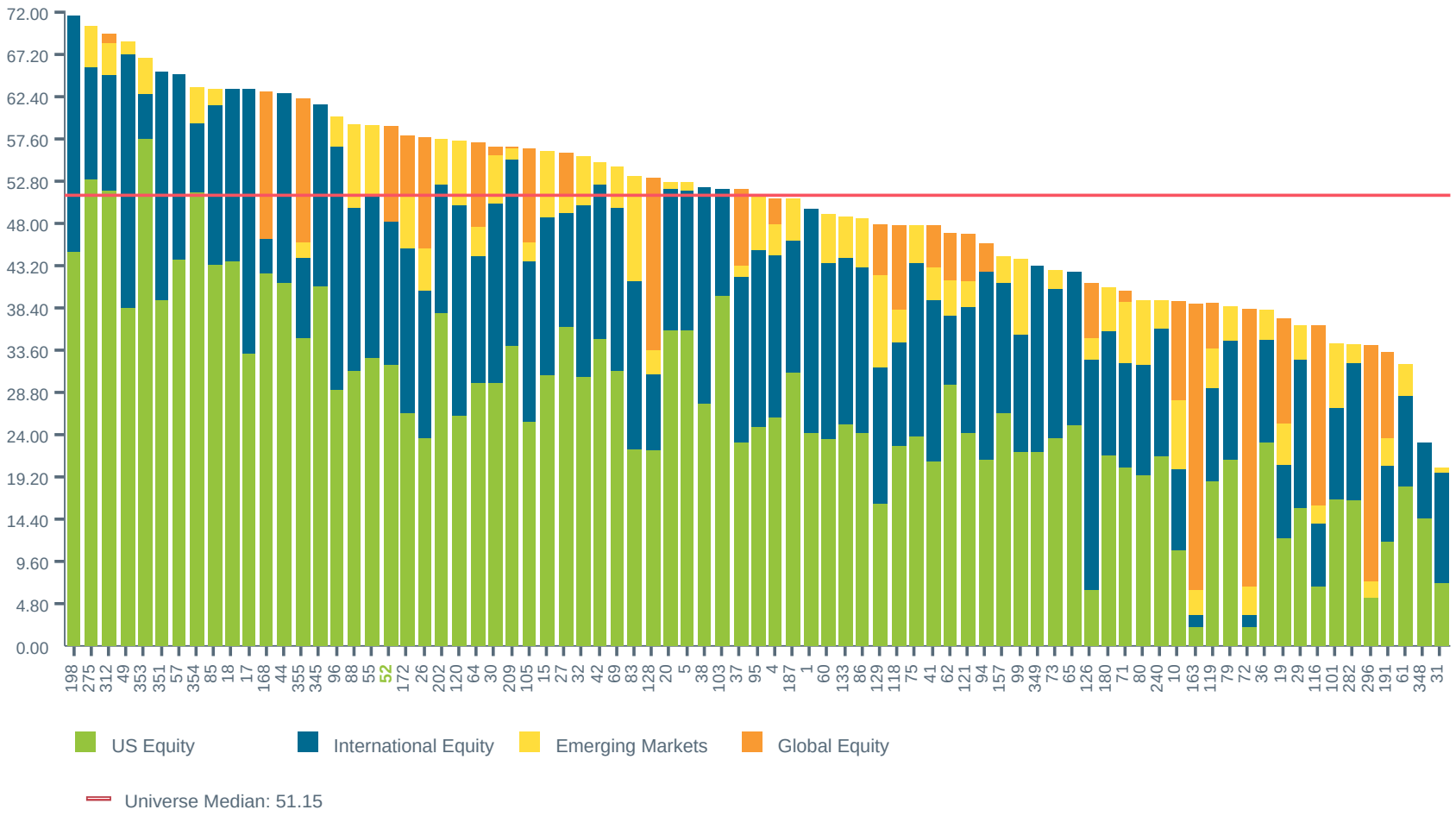
Allocations shown may not sum up to 100% exactly due to rounding.

RVK

Fund Number: 52
Equity Style Allocation

As of June 30, 2017

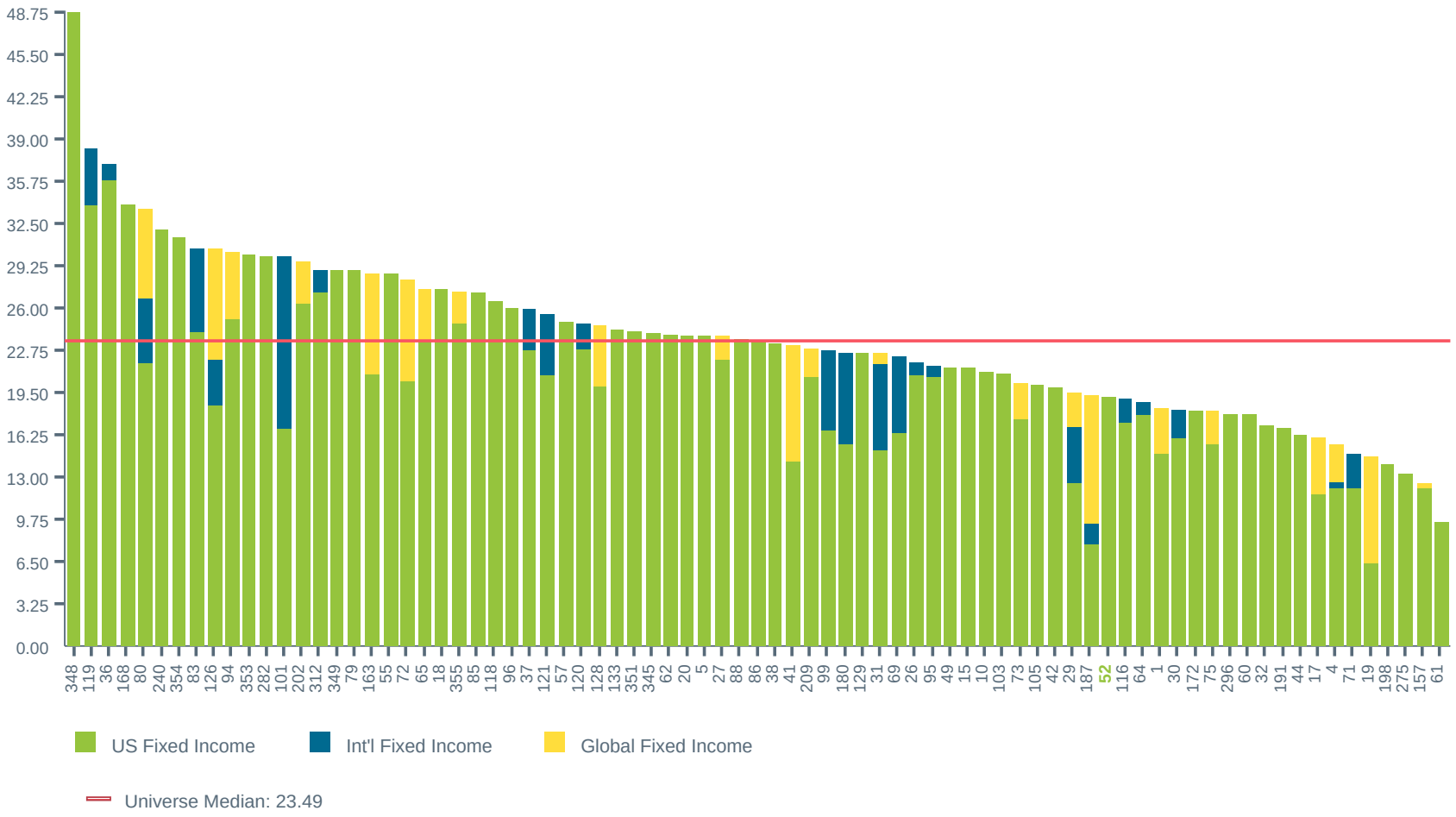
79 of 79 funds invest in Equity (%)



Fund Number: 52
Fixed Income Style Allocation

As of June 30, 2017

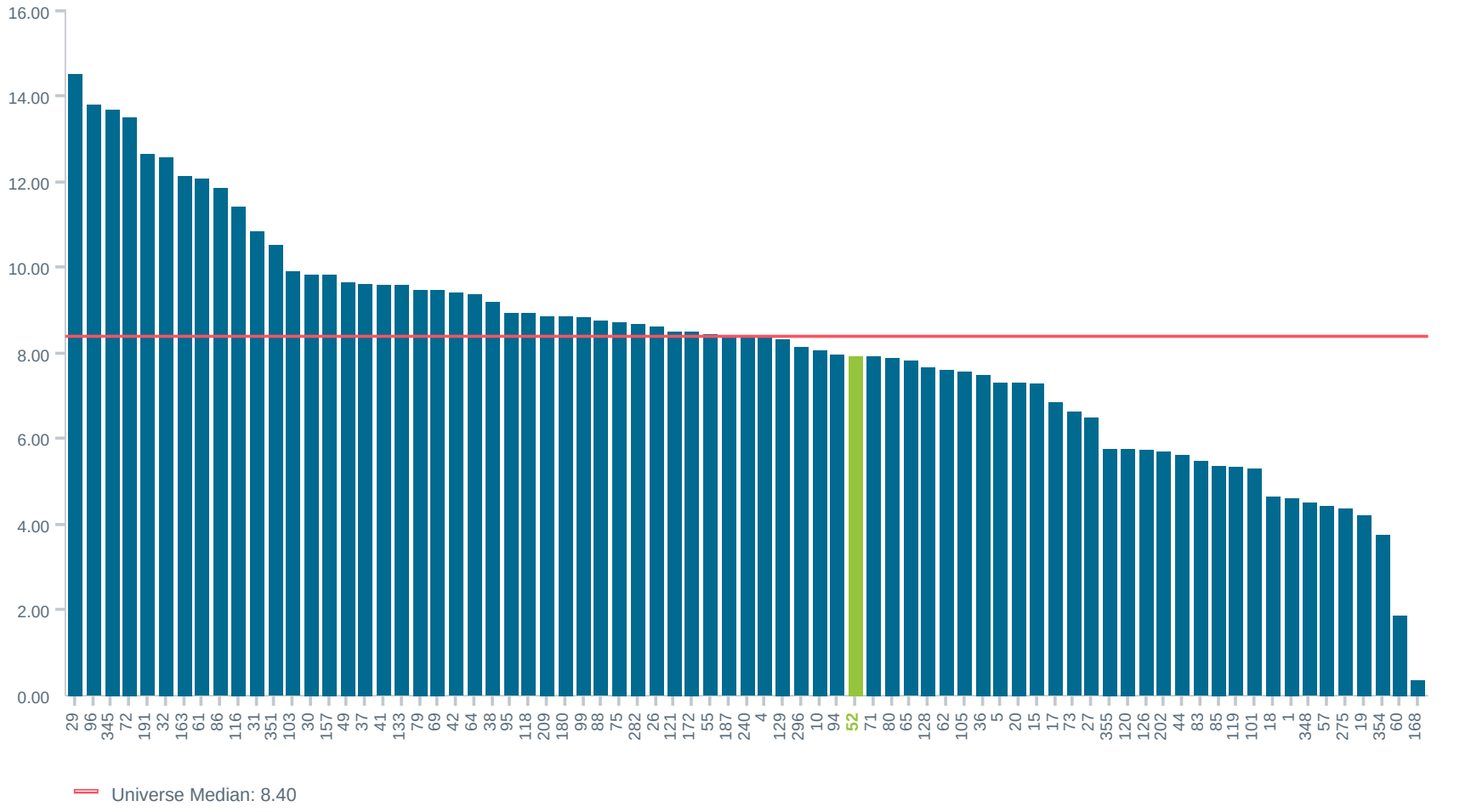
79 of 79 funds invest in Fixed Income (%)



Fund Number: 52
Real Estate Allocation

As of June 30, 2017

75 of 79 funds invest in Real Estate (%)



Fund Number: 52
Alternatives Style Allocation

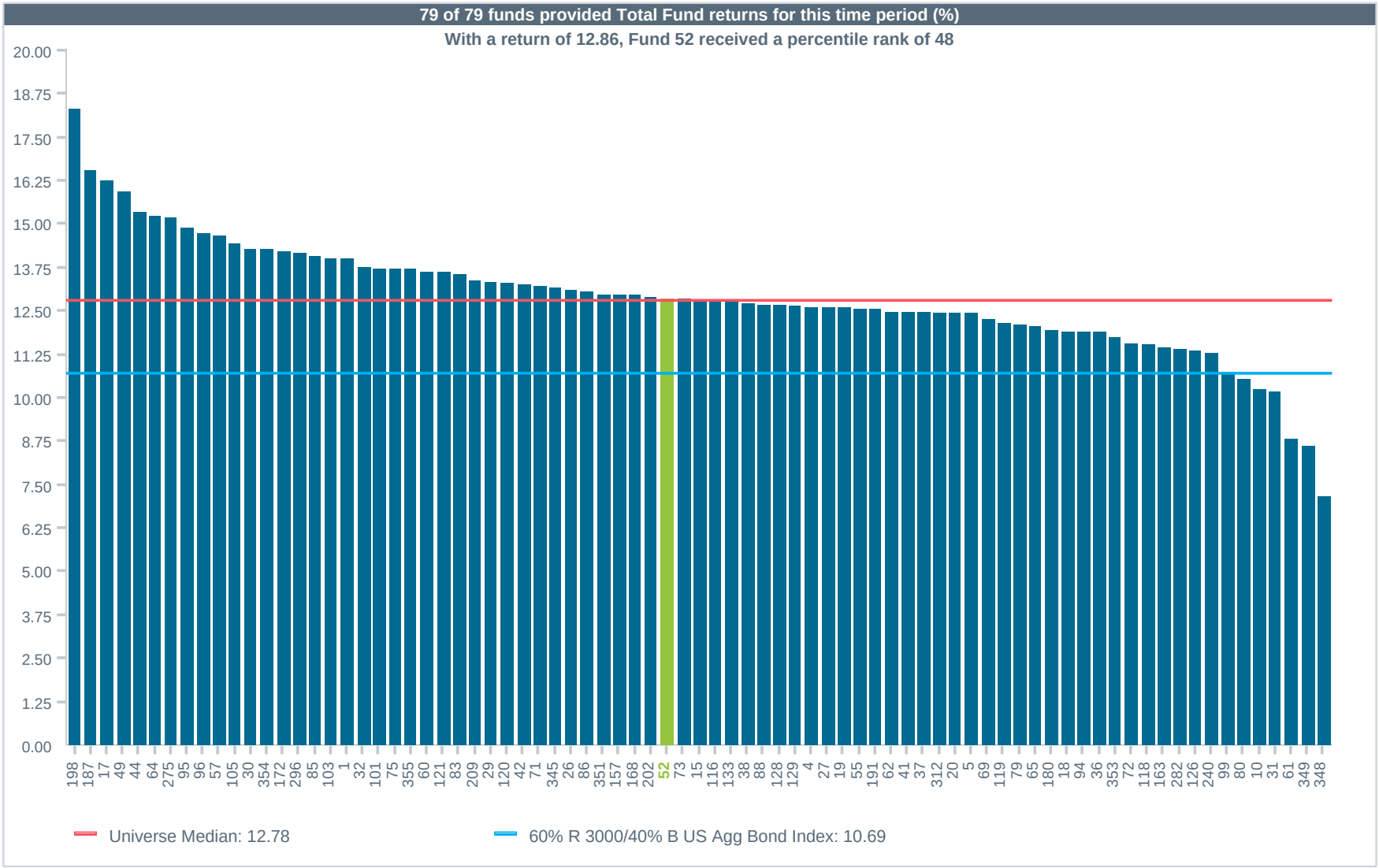
As of June 30, 2017

72 of 79 funds invest in Alternatives (%)

Fund Number: 52

As of June 30, 2017

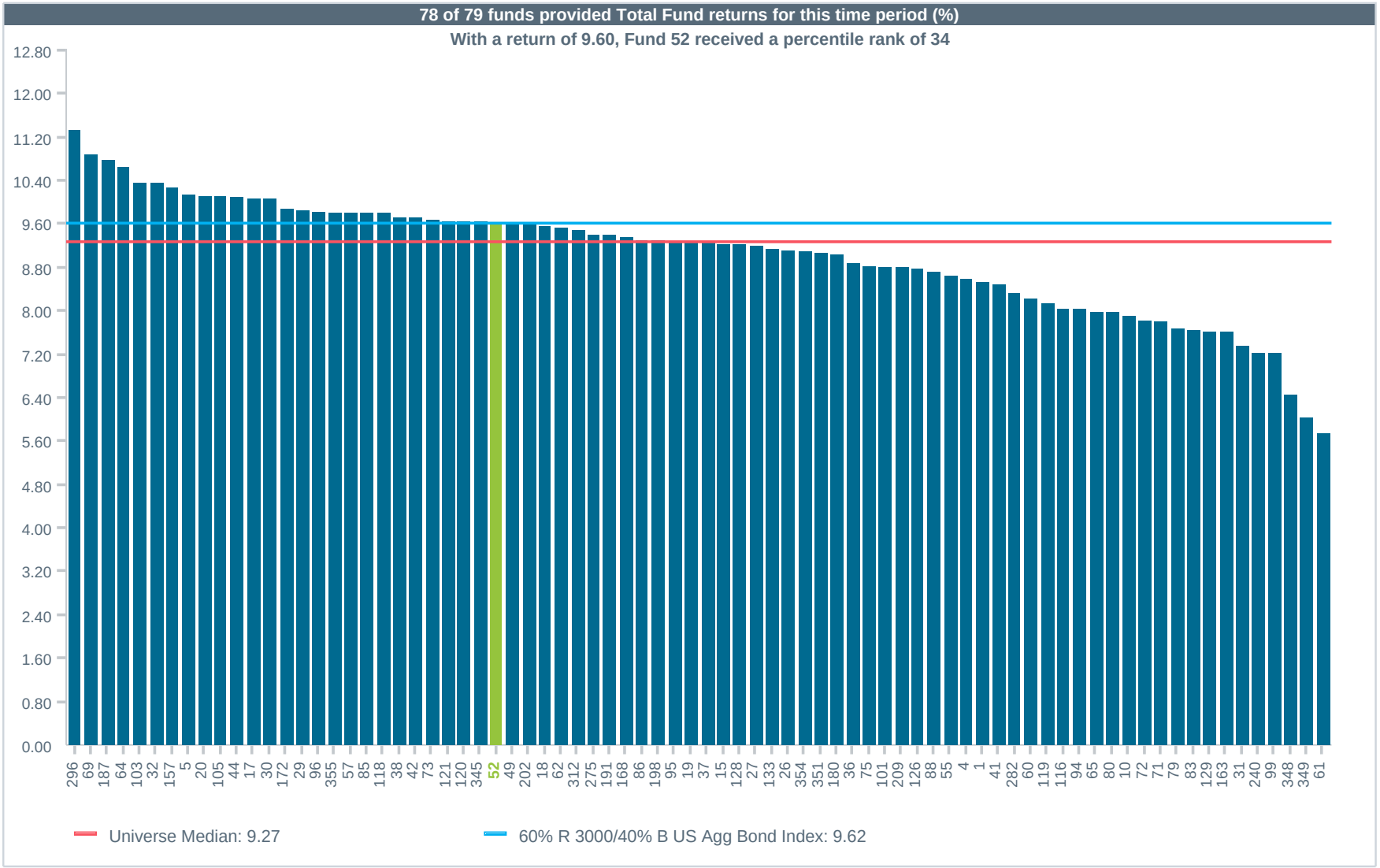
1 Year Annualized Total Fund Returns



Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52
5 Year Annualized Total Fund Returns

As of June 30, 2017



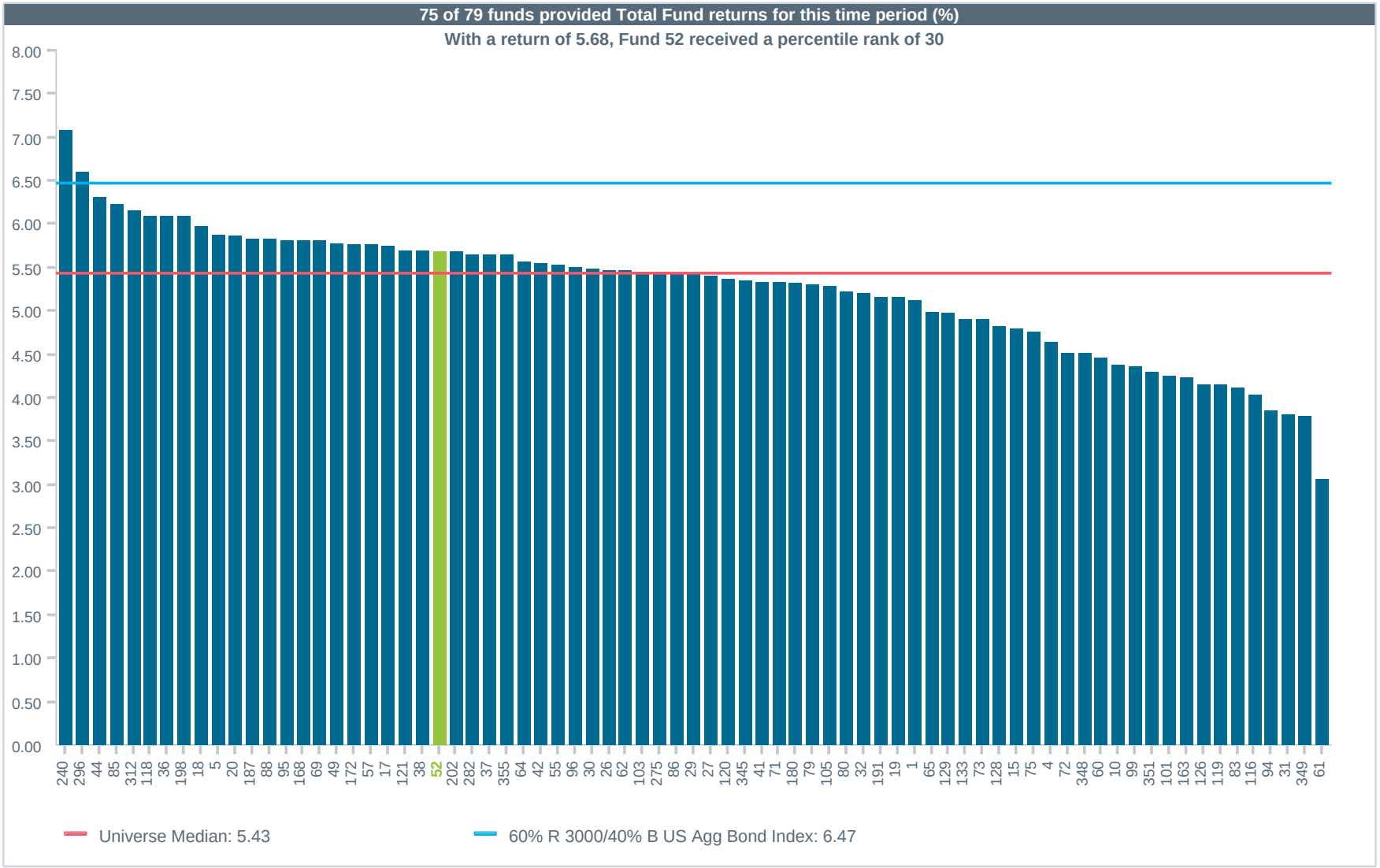
Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

As of June 30, 2017

10 Year Annualized Total Fund Returns



Funds with less history than the specified time period will not appear in the chart.

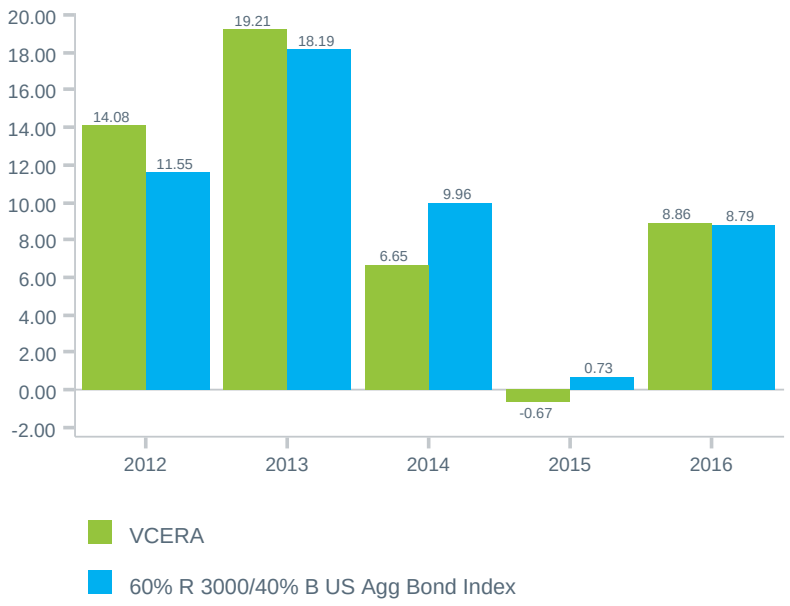
RVK

Fund Number: 52 **As of June 30, 2017**

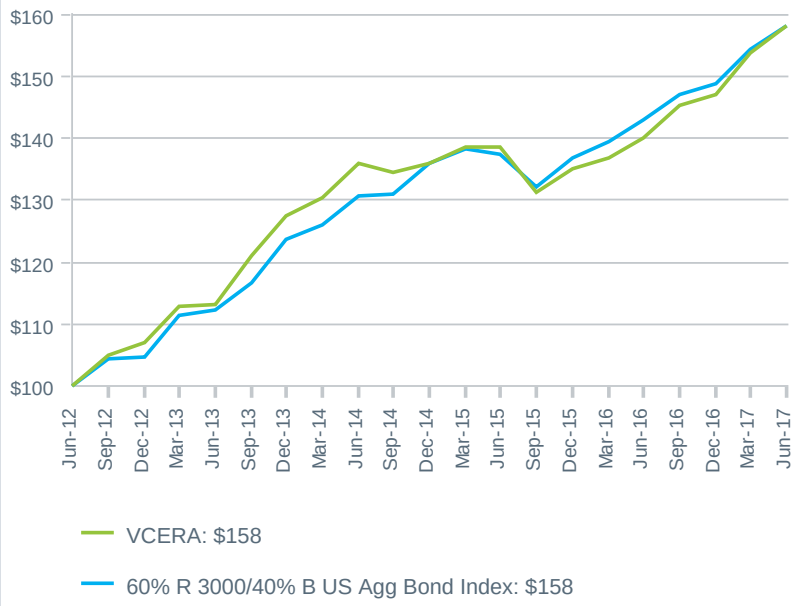
Total Return - Total Fund

VCERA vs. 60% R 3000/40% B US Agg Bond Index

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



Annualized Returns (%)

	1 Year	3 Years	5 Years
VCERA	12.86	5.13	9.60
60% R 3000/40% B US Agg Bond Index	10.69	6.56	9.62
Variance	2.17	-1.43	-0.02

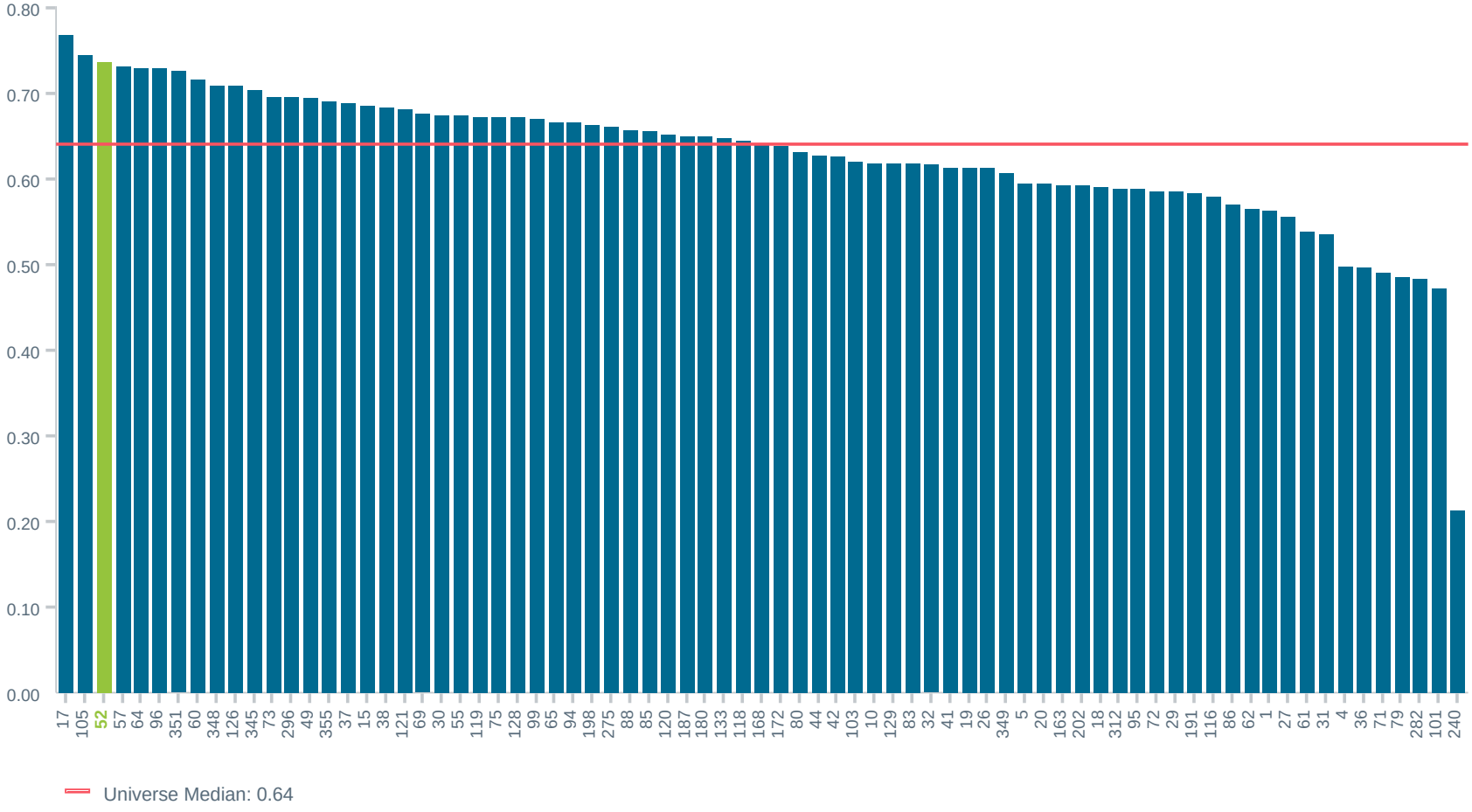
RVK

Fund Number: 52
10 Year Total Fund Beta

As of June 30, 2017

75 of 79 funds provided Total Fund returns for this time period

With a beta of 0.74, Fund 52 received a percentile rank of 3

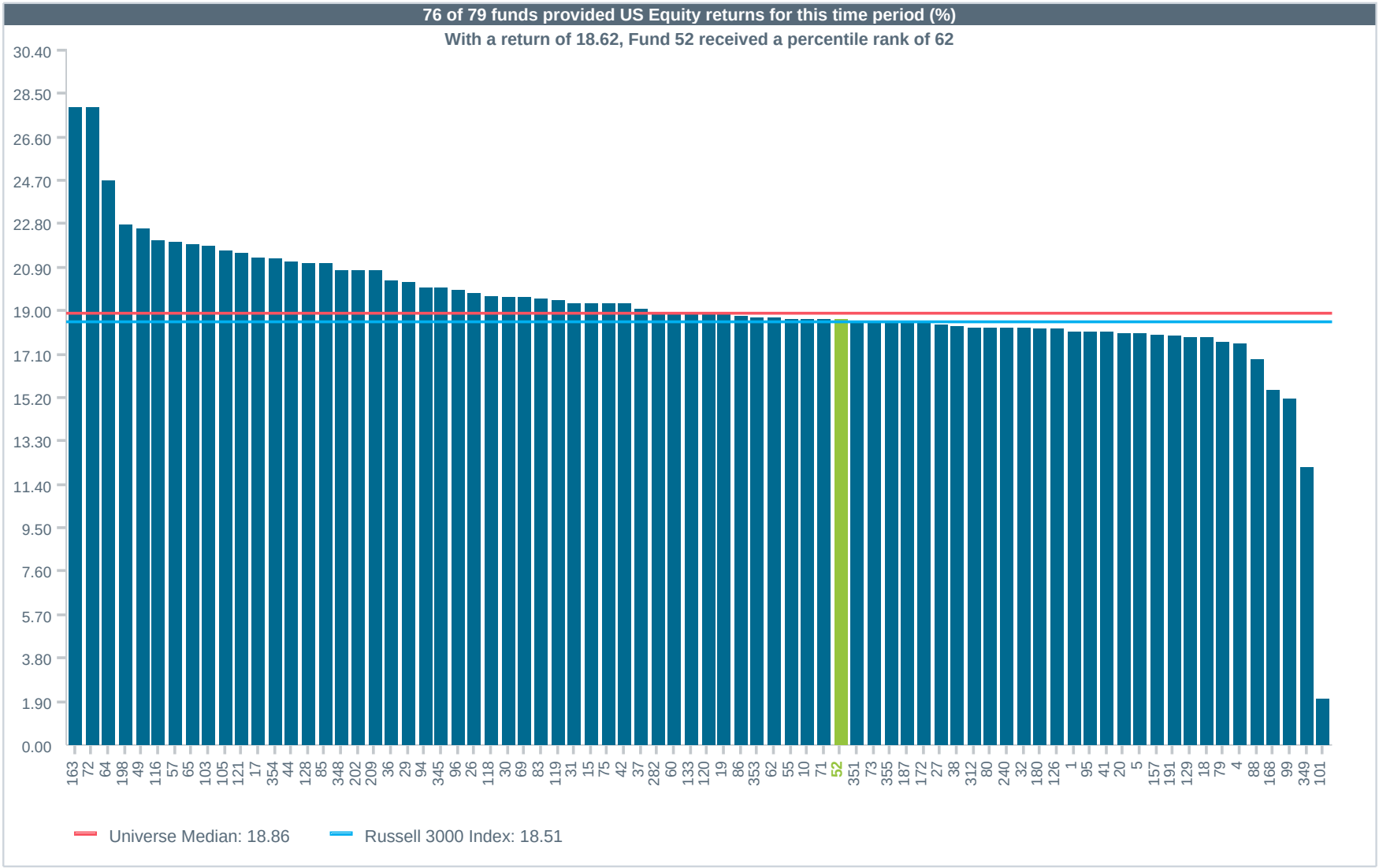


Funds with less history than the specified time period will not appear in the chart. Benchmark used is the S&P 500 Index (Cap Wtd).

RVK

Fund Number: 52
1 Year Annualized US Equity Returns

As of June 30, 2017

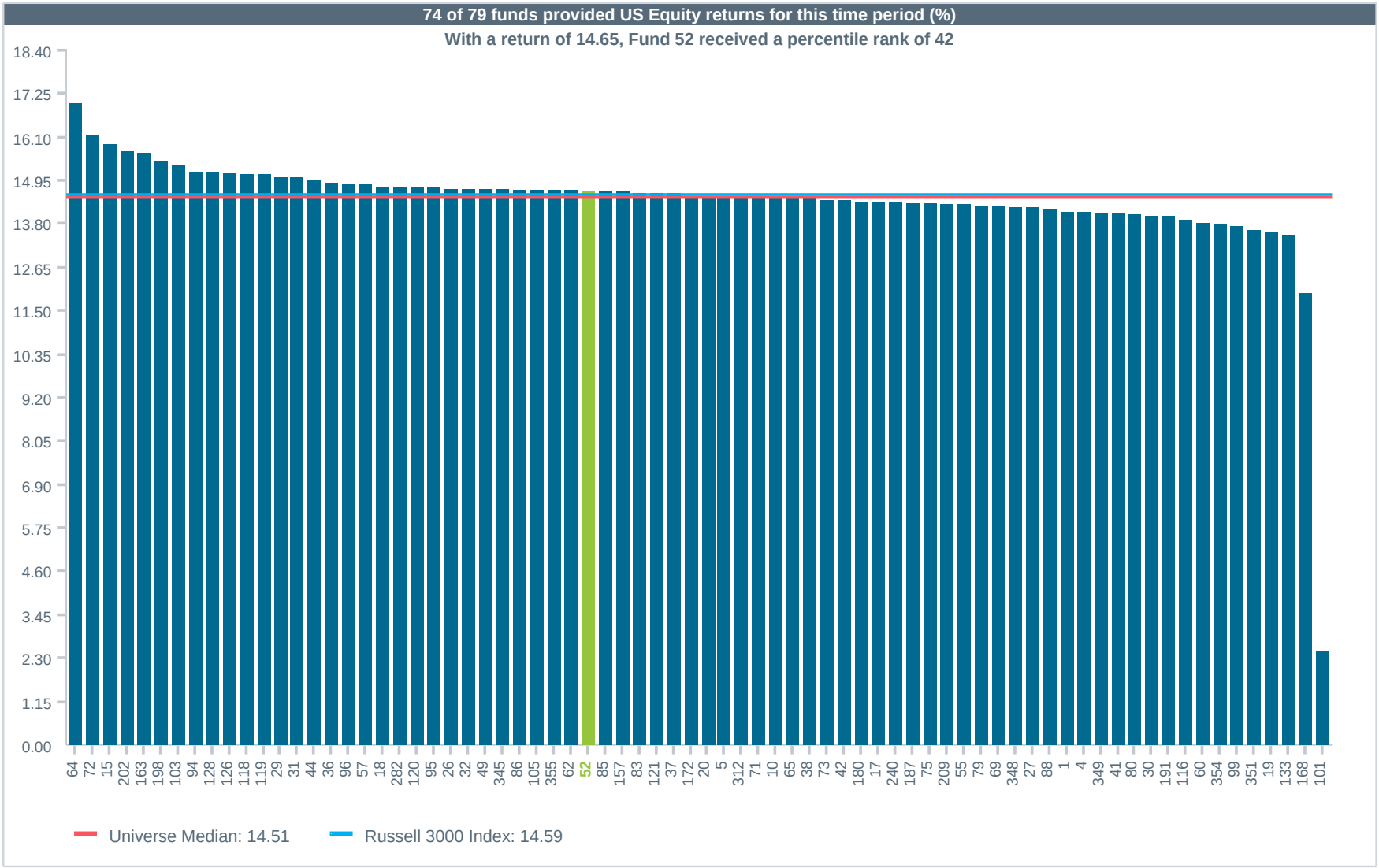


Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
5 Year Annualized US Equity Returns

As of June 30, 2017

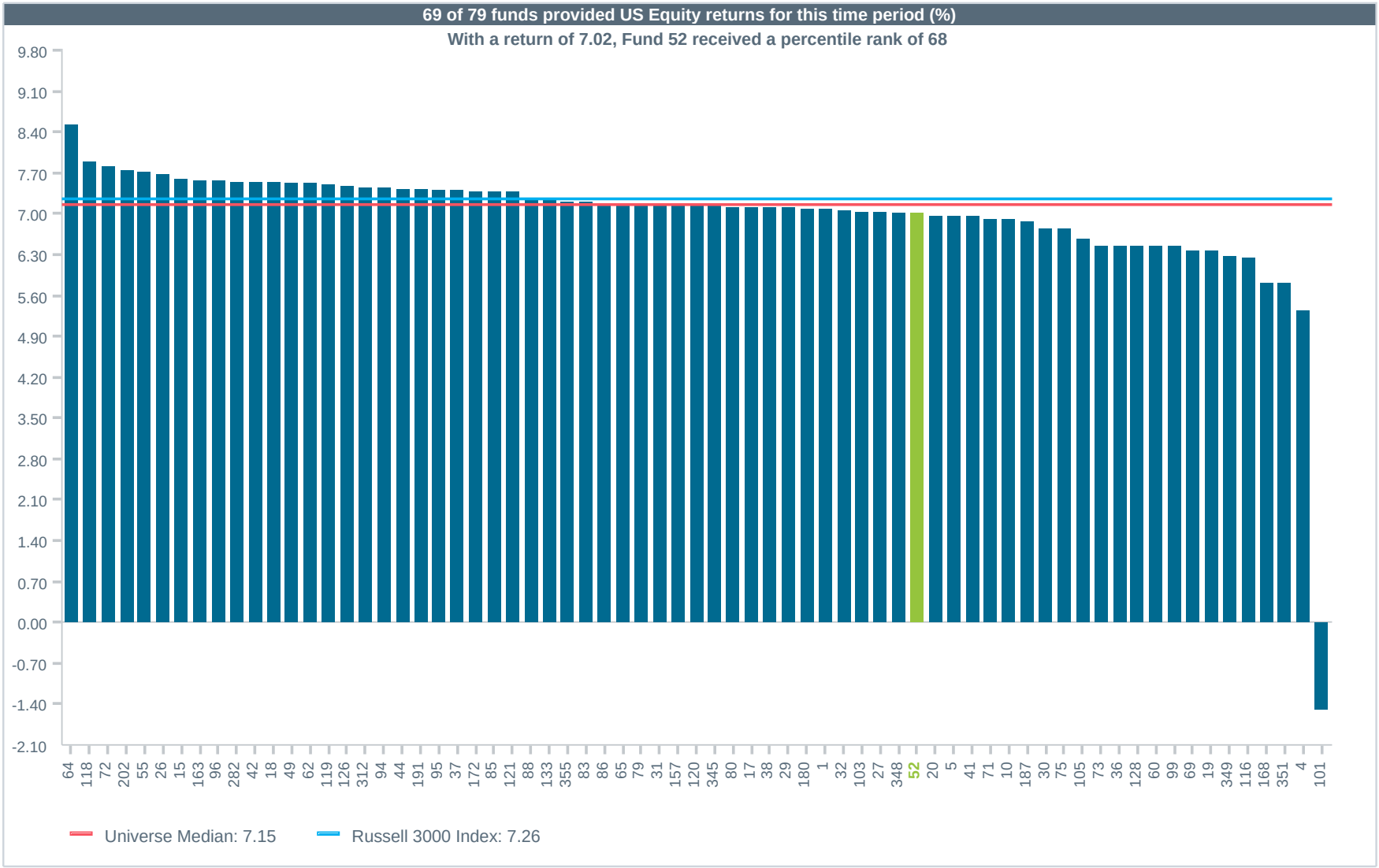


Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
10 Year Annualized US Equity Returns

As of June 30, 2017



Funds with less history than the specified time period will not appear in the chart.

RVK

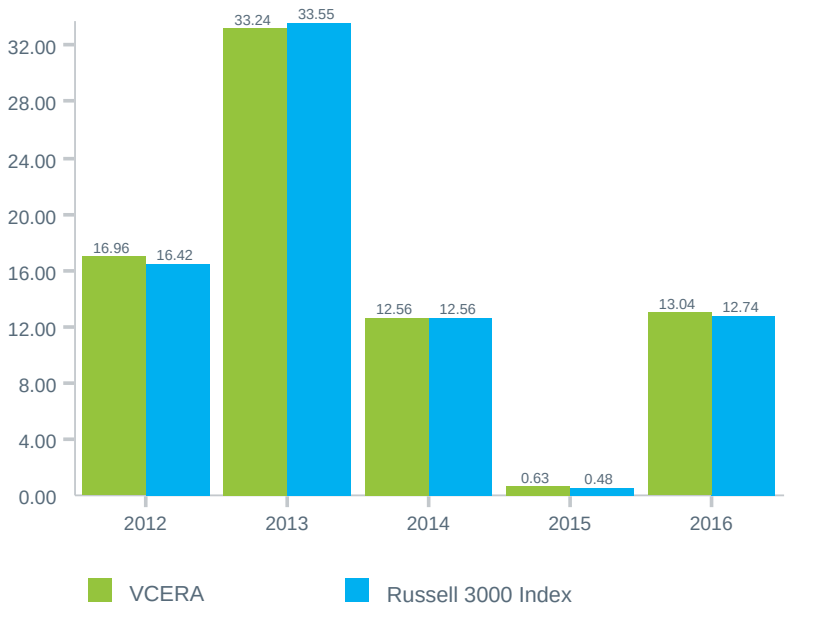
Fund Number: 52

As of June 30, 2017

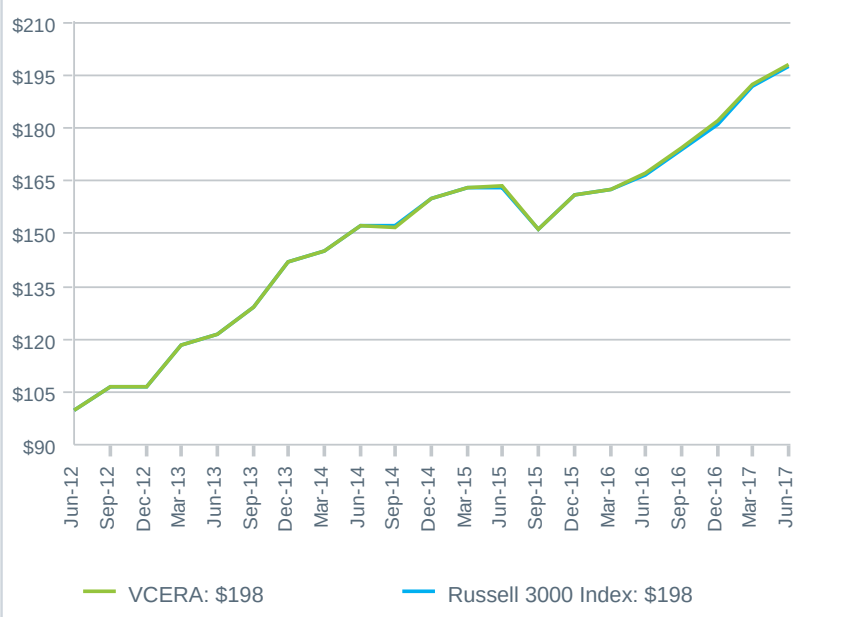
Total Return - US Equity

VCERA vs. Russell 3000 Index

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



Annualized Returns (%)

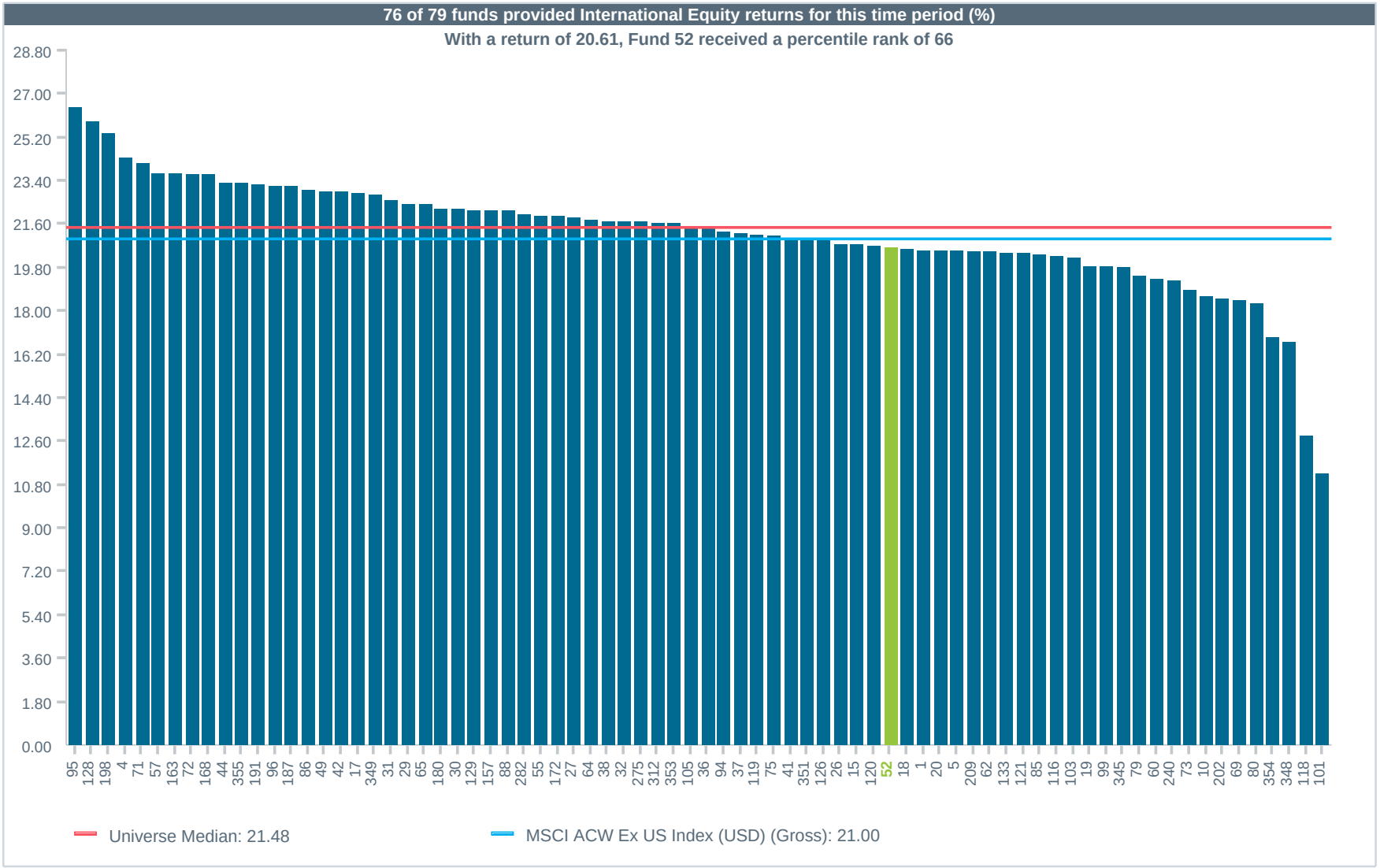
	1 Year	3 Years	5 Years
VCERA	18.62	9.20	14.65
Russell 3000 Index	18.51	9.10	14.58
Variance	0.11	0.10	0.07

RVK

Fund Number: 52

As of June 30, 2017

1 Year Annualized International Equity Returns



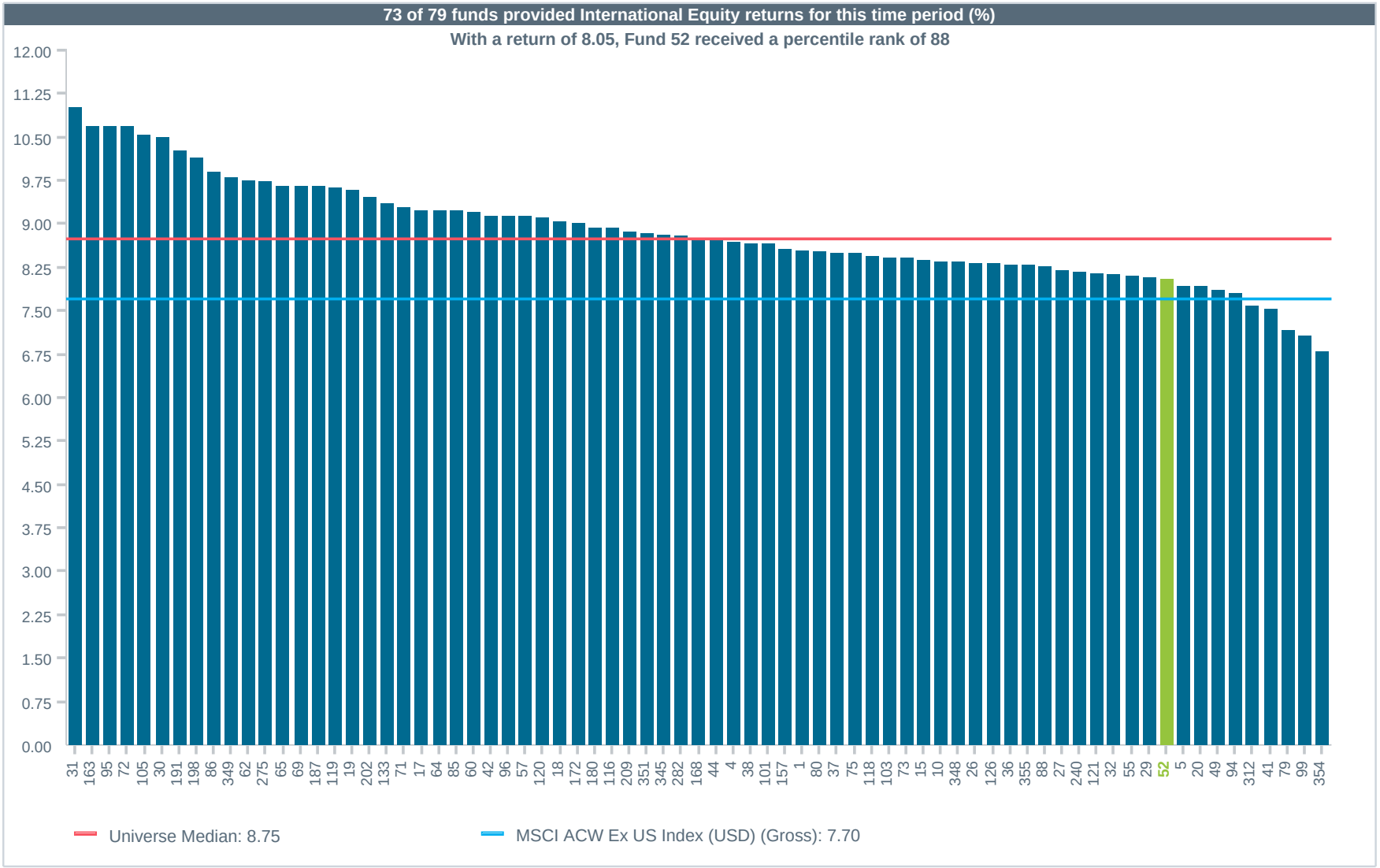
Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

As of June 30, 2017

5 Year Annualized International Equity Returns

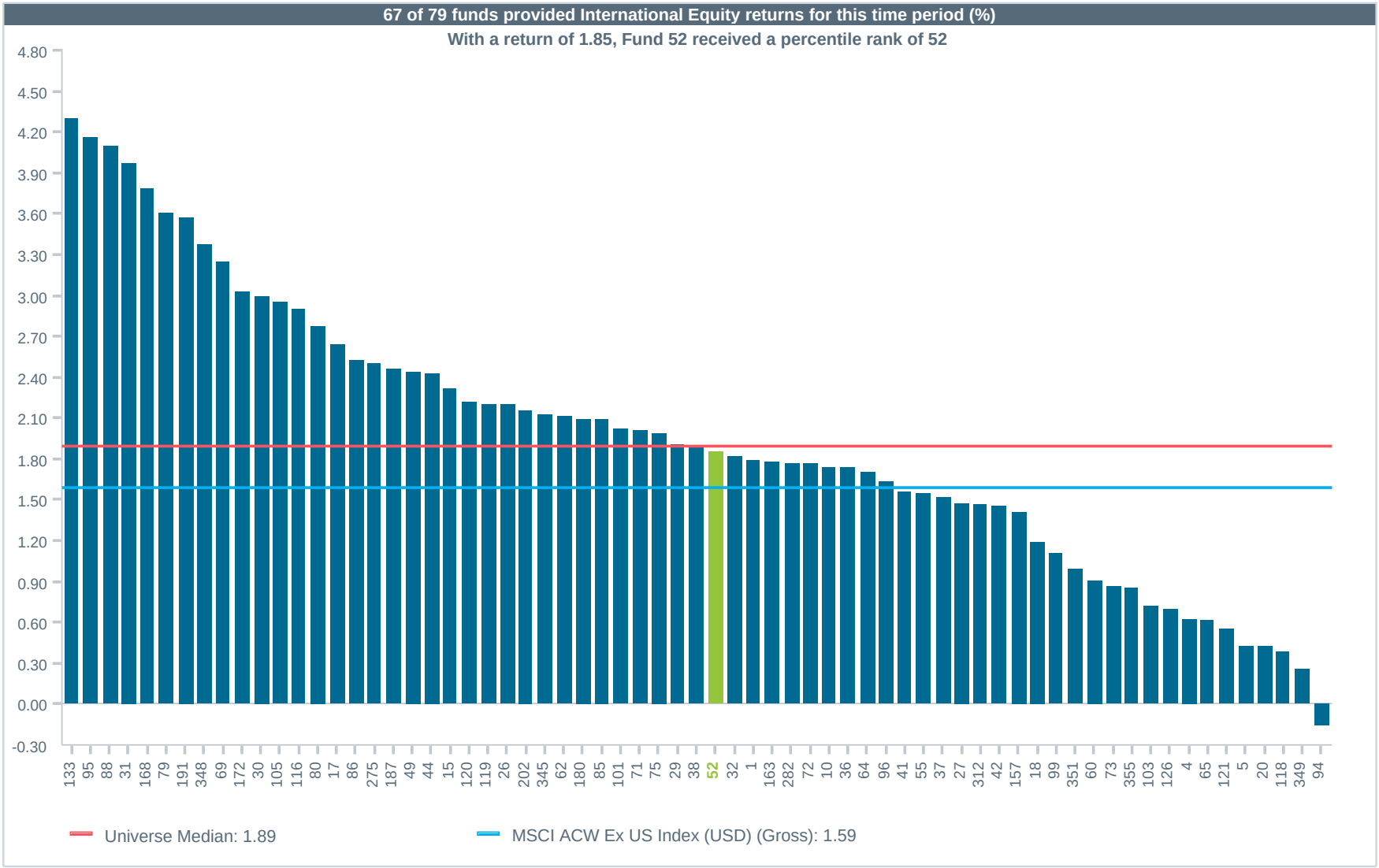


Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52

As of June 30, 2017

10 Year Annualized International Equity Returns



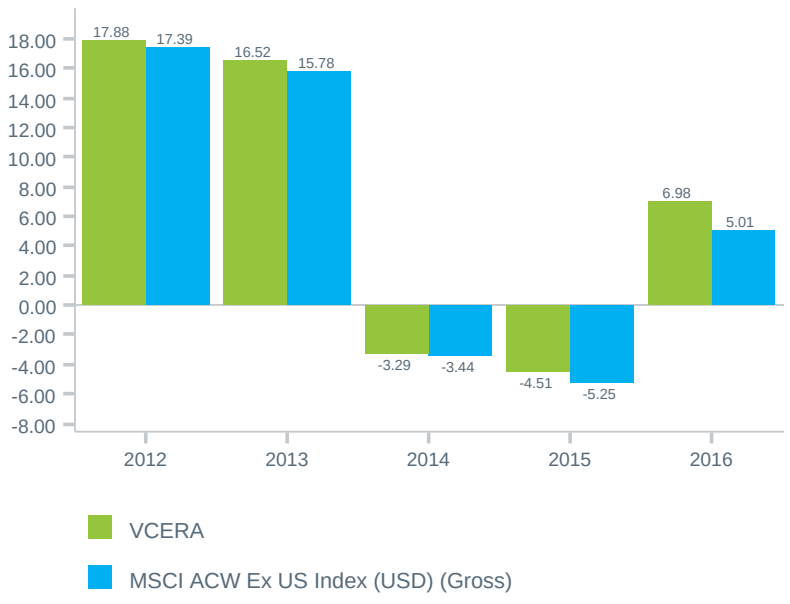
Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52 **As of June 30, 2017**

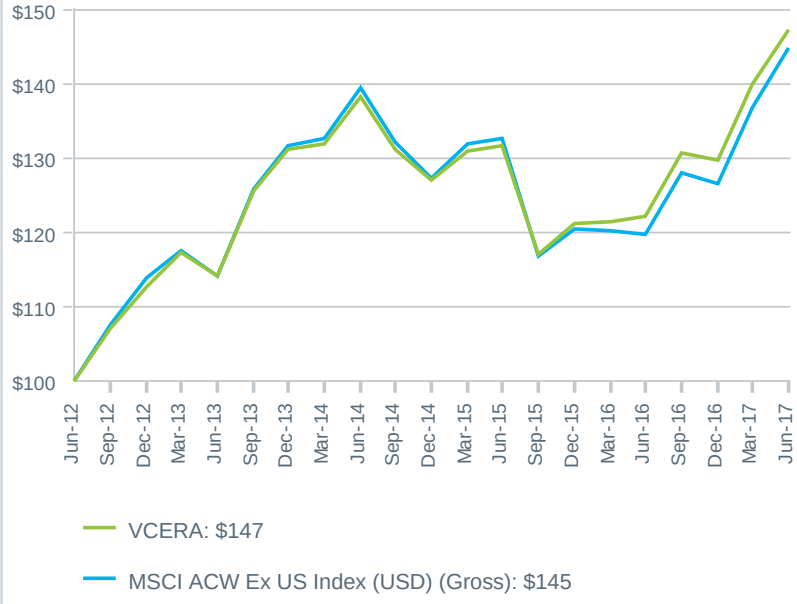
Total Return - International Equity

VCERA vs. MSCI ACW Ex US Index (USD) (Gross)

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



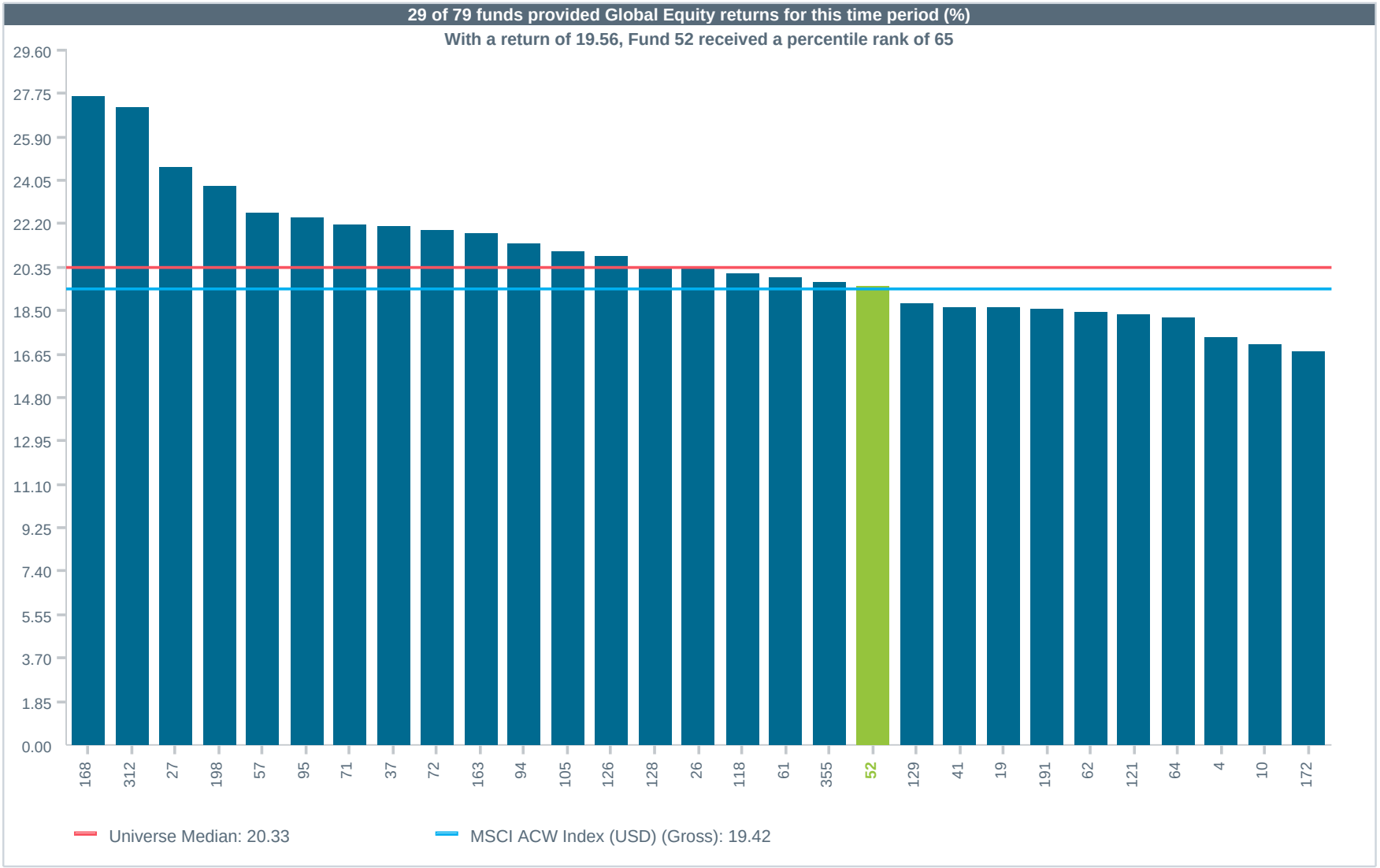
Annualized Returns (%)

	1 Year	3 Years	5 Years
VCERA	20.61	2.12	8.05
MSCI ACW Ex US Index (USD) (Gross)	21.00	1.27	7.70
Variance	-0.39	0.85	0.35

RVK

Fund Number: 52
1 Year Annualized Global Equity Returns

As of June 30, 2017

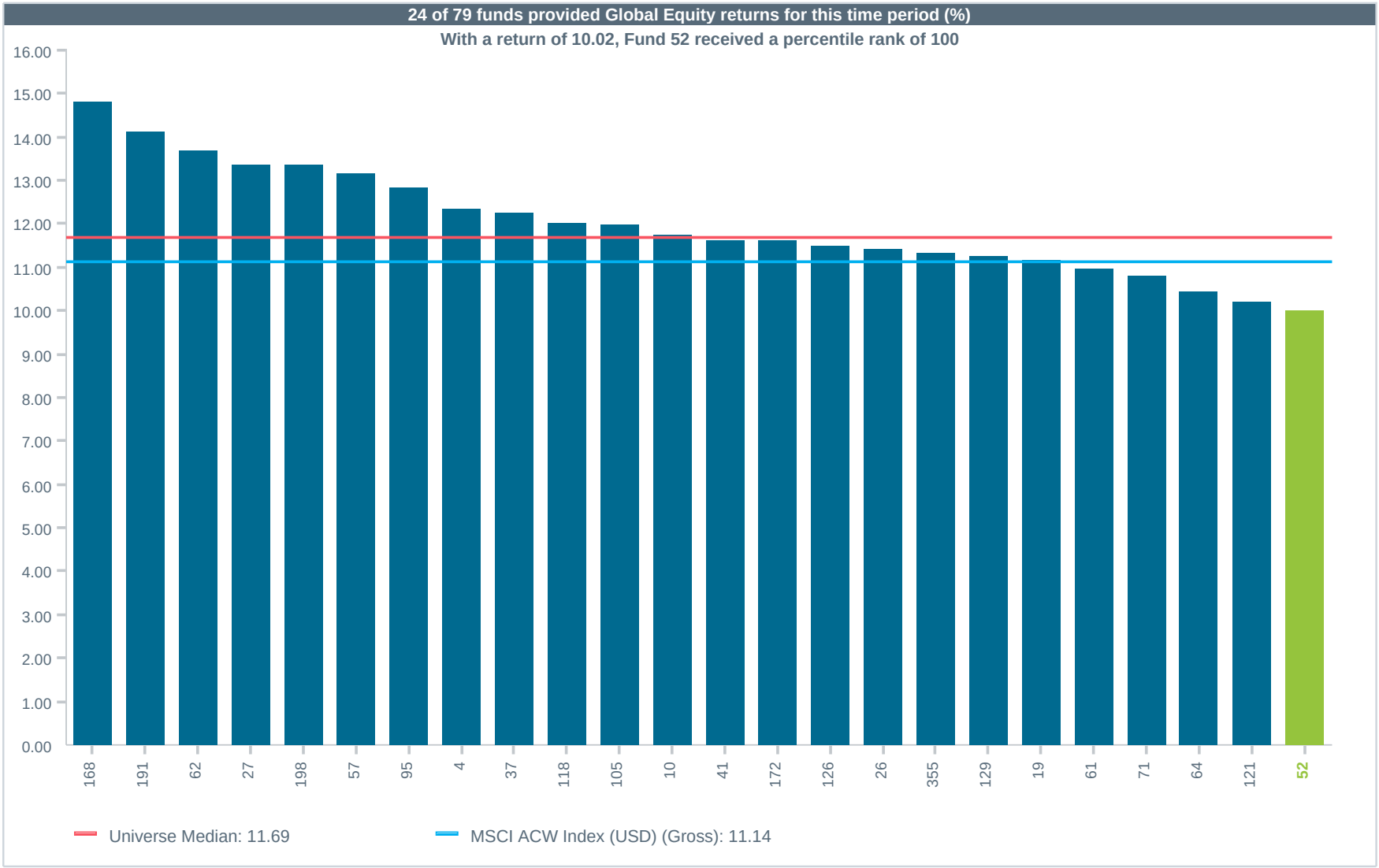


Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
5 Year Annualized Global Equity Returns

As of June 30, 2017

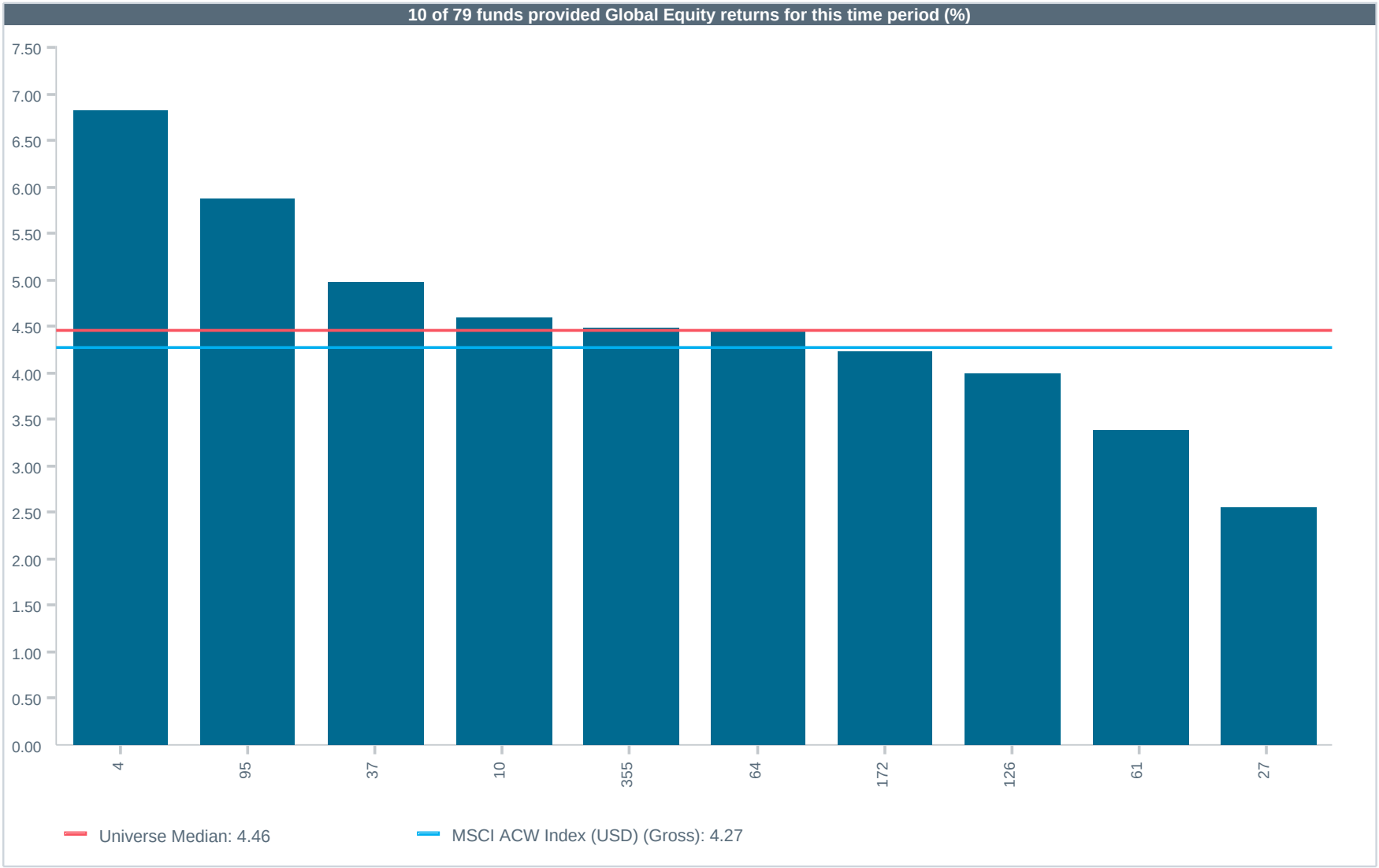


Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
10 Year Annualized Global Equity Returns

As of June 30, 2017



Funds with less history than the specified time period will not appear in the chart.

RVK

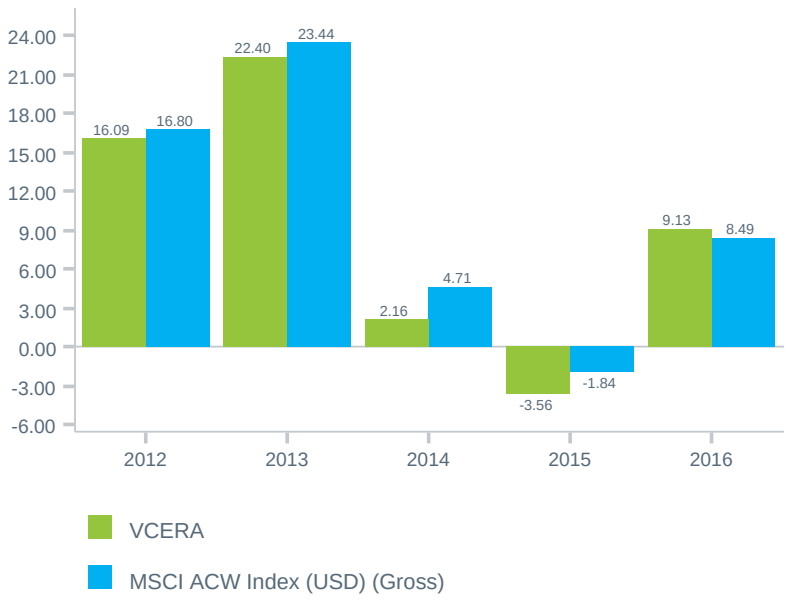
Fund Number: 52

As of June 30, 2017

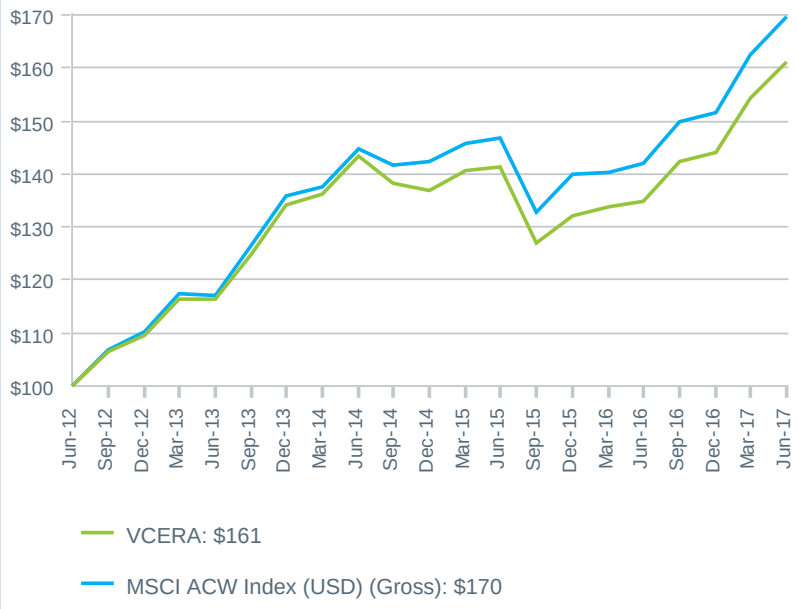
Total Return - Global Equity

VCERA vs. MSCI ACW Index (USD) (Gross)

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



Annualized Returns (%)

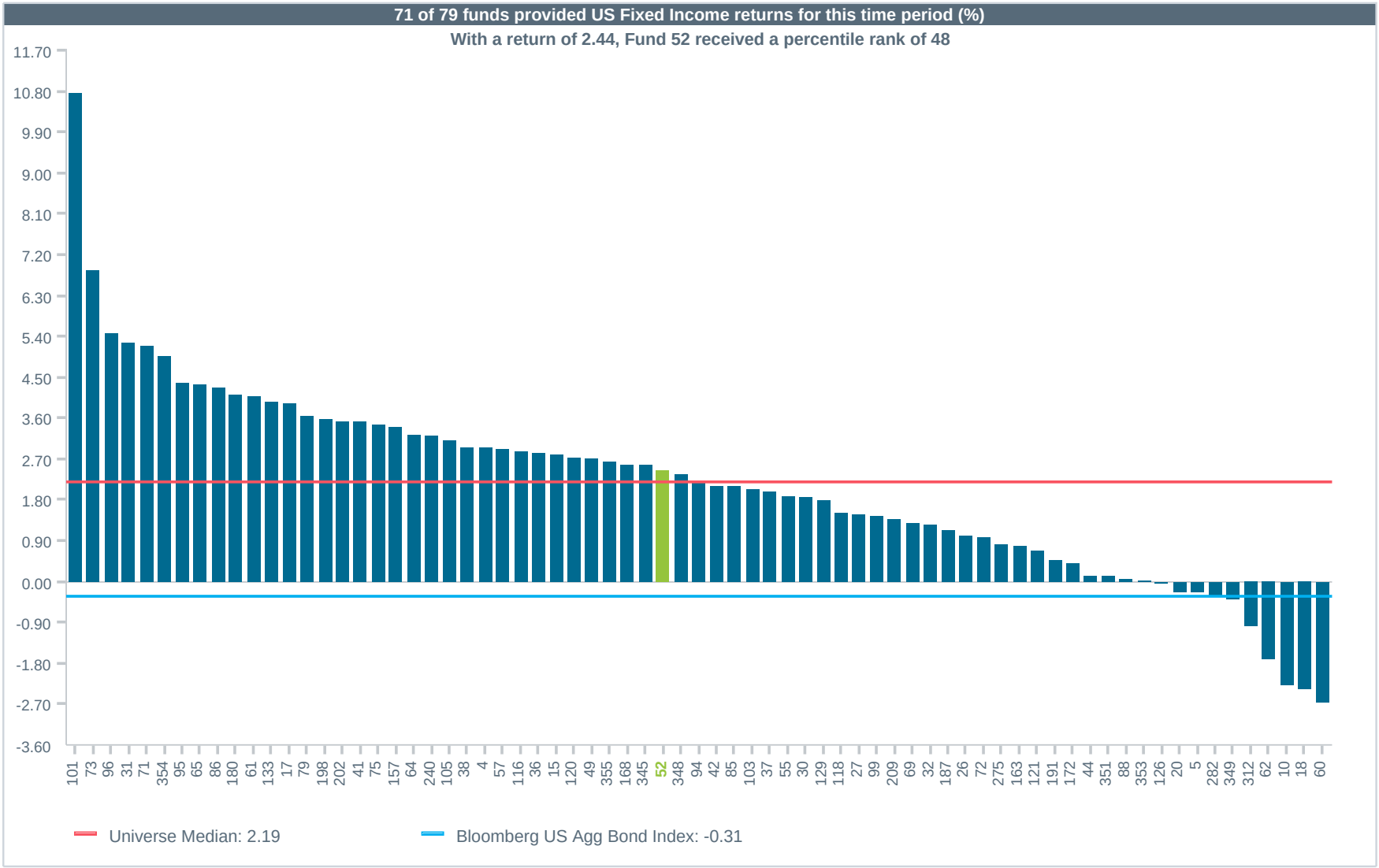
	1 Year	3 Years	5 Years
VCERA	19.56	4.00	10.02
MSCI ACW Index (USD) (Gross)	19.42	5.39	11.14
Variance	0.14	-1.39	-1.12

RVK

Fund Number: 52

As of June 30, 2017

1 Year Annualized US Fixed Income Returns



Funds with less history than the specified time period will not appear in the chart.

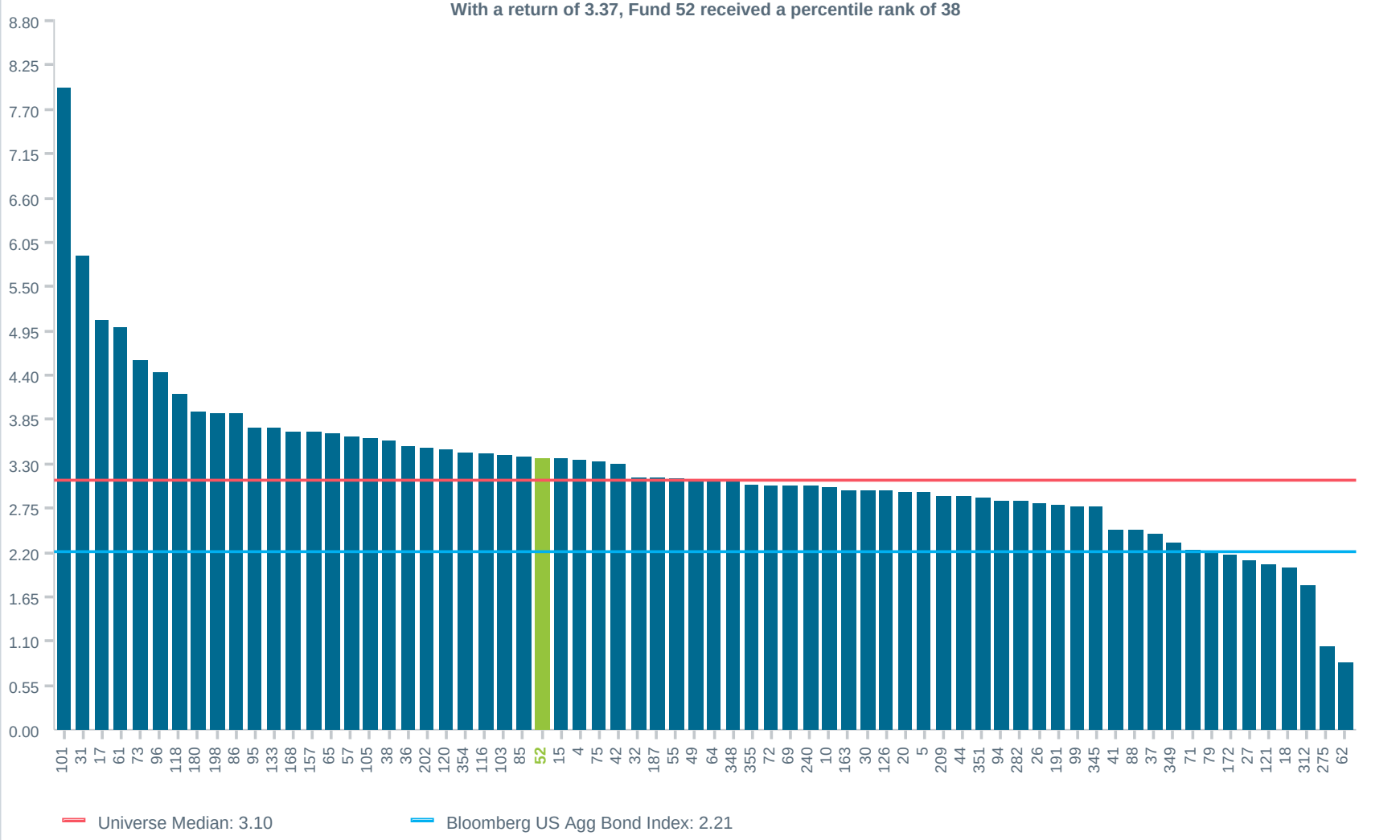
Fund Number: 52

As of June 30, 2017

5 Year Annualized US Fixed Income Returns

68 of 79 funds provided US Fixed Income returns for this time period (%)

With a return of 3.37, Fund 52 received a percentile rank of 38



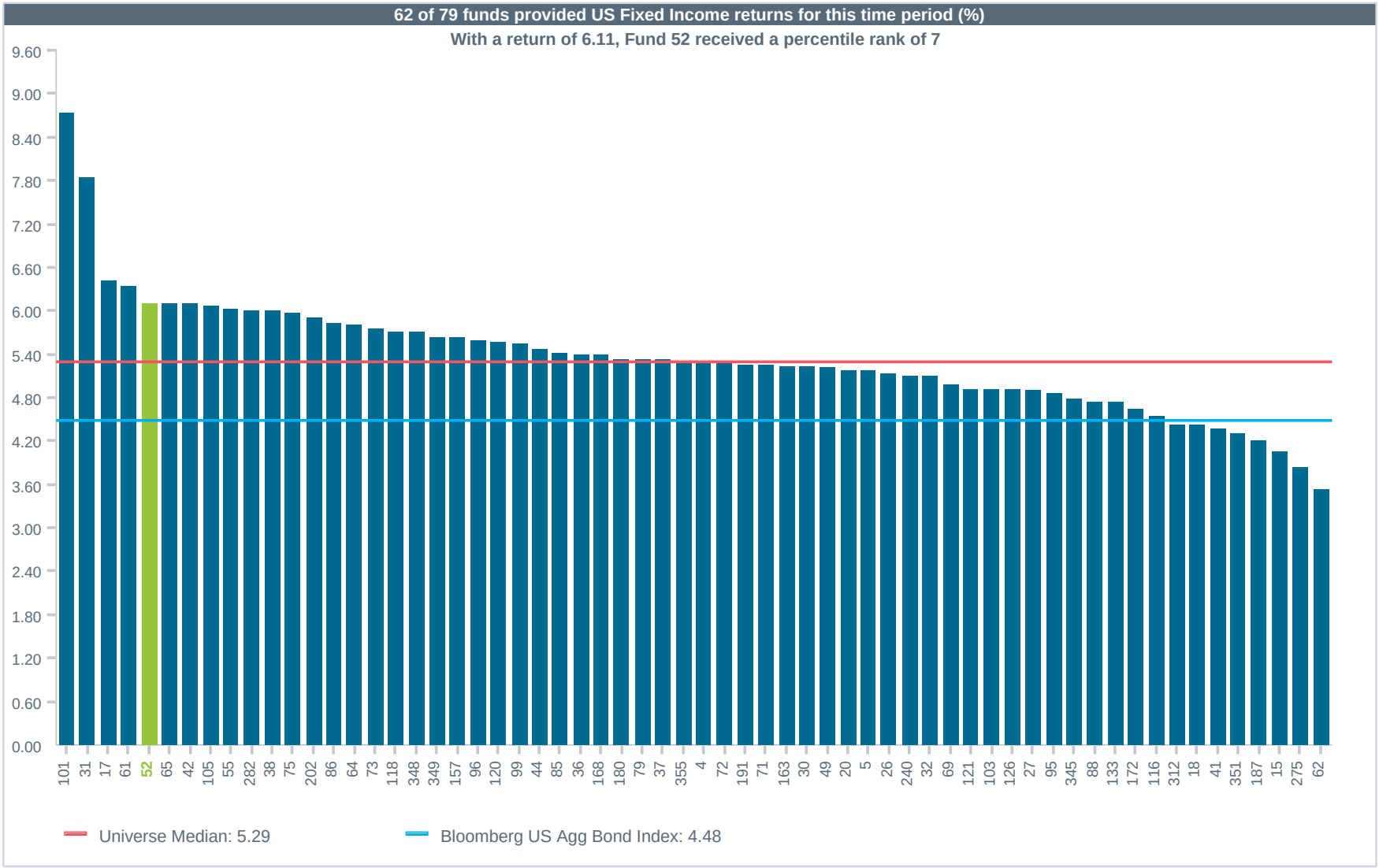
Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

10 Year Annualized US Fixed Income Returns

As of June 30, 2017



Funds with less history than the specified time period will not appear in the chart.

RVK

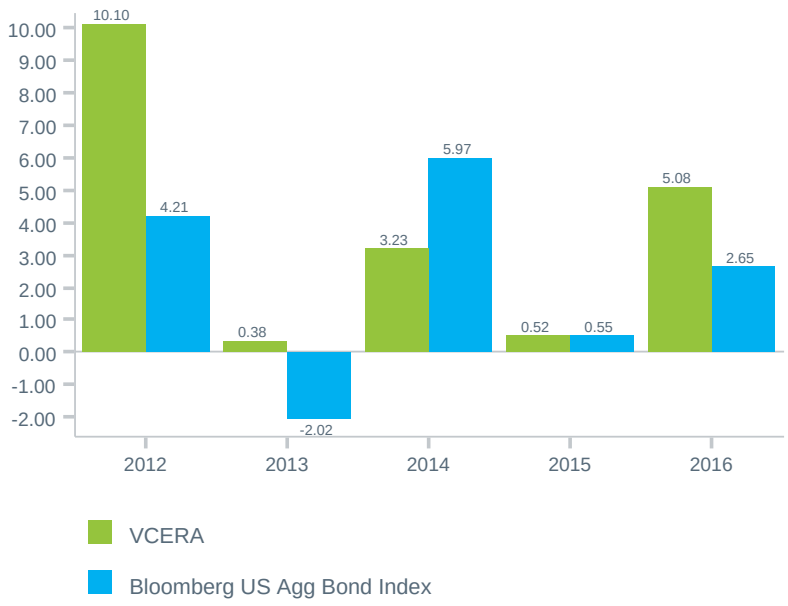
Fund Number: 52

As of June 30, 2017

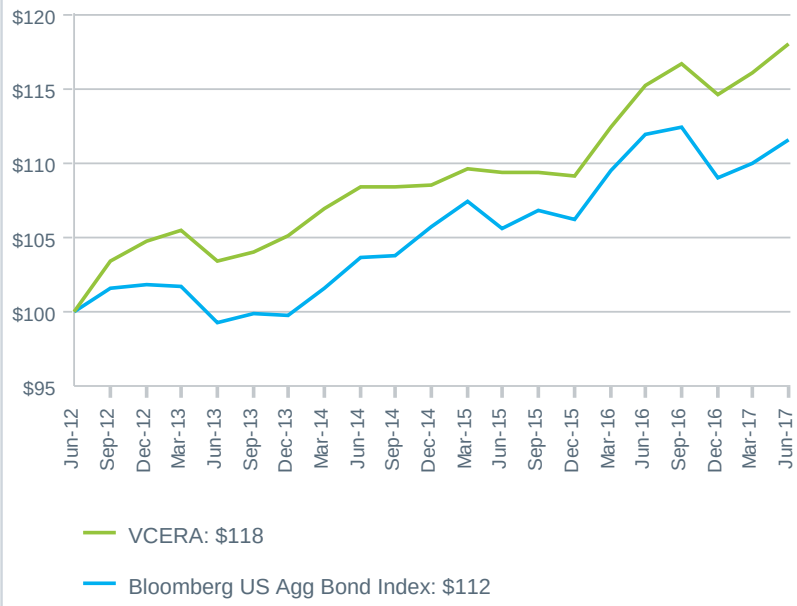
Total Return - US Fixed Income

VCERA vs. Bloomberg US Agg Bond Index

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



Annualized Returns (%)

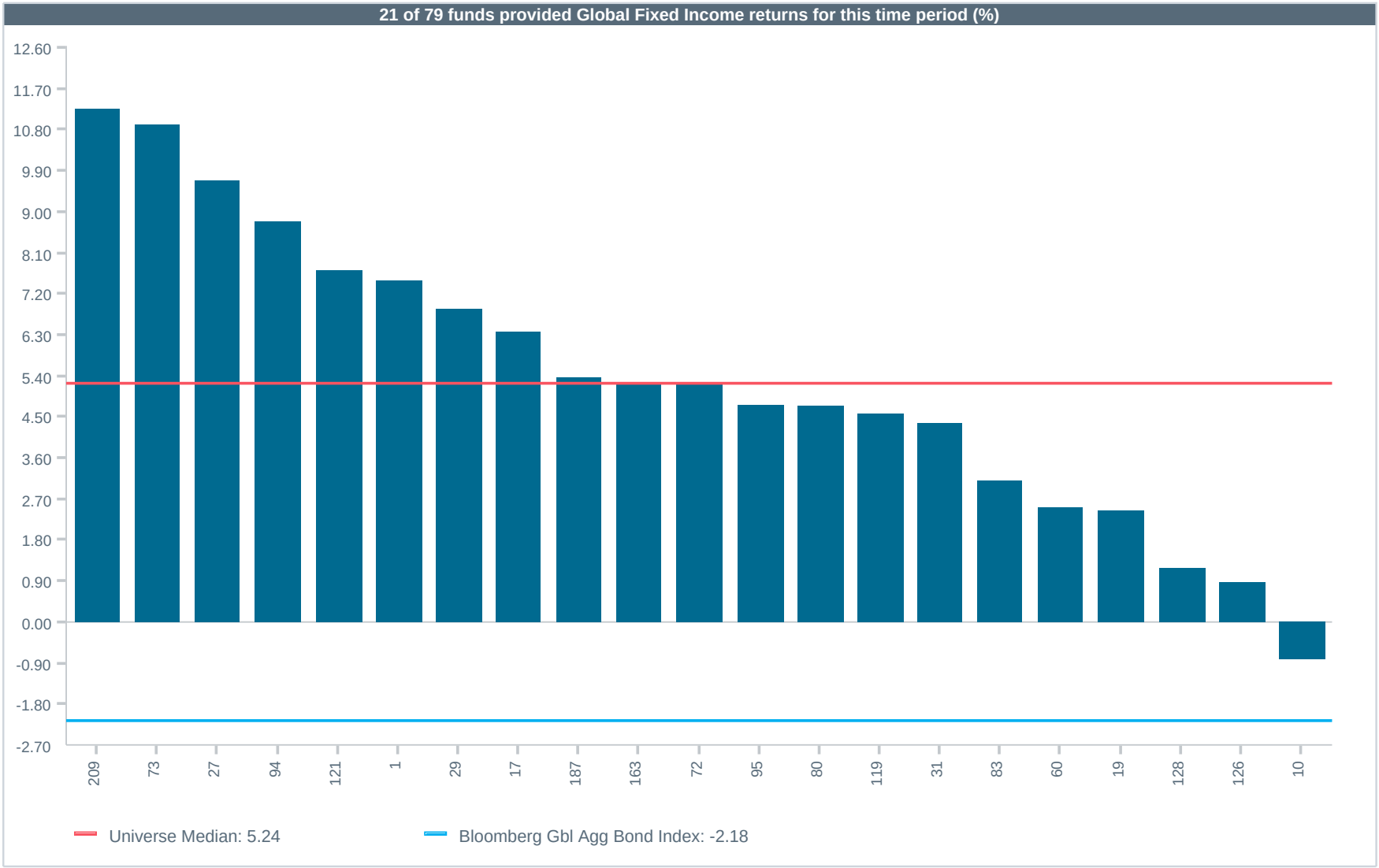
	1 Year	3 Years	5 Years
VCERA	2.44	2.87	3.37
Bloomberg US Agg Bond Index	-0.31	2.48	2.21
Variance	2.75	0.39	1.16

RVK

Fund Number: 52

As of June 30, 2017

1 Year Annualized Global Fixed Income Returns

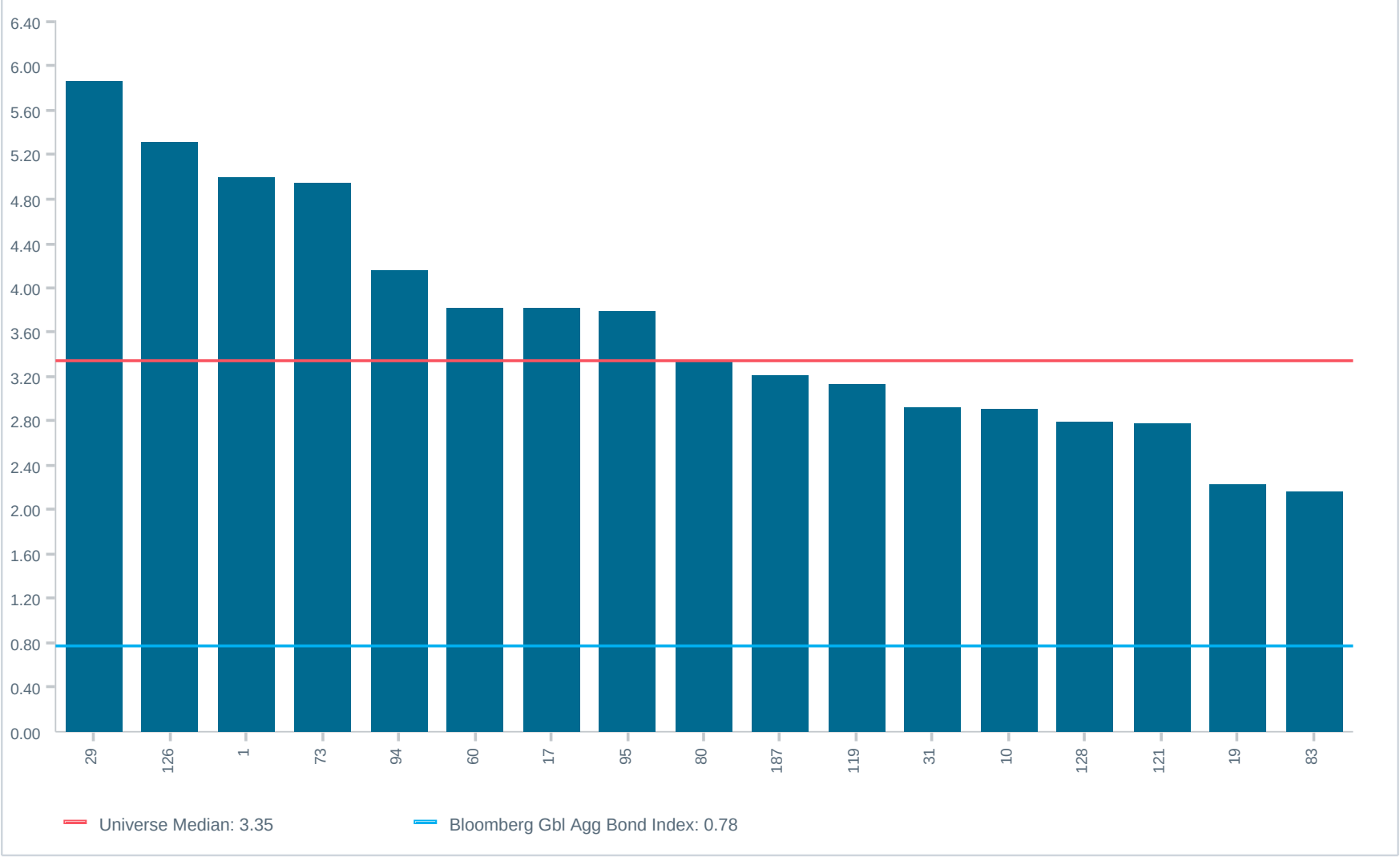


Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52
5 Year Annualized Global Fixed Income Returns

As of June 30, 2017

17 of 79 funds provided Global Fixed Income returns for this time period (%)

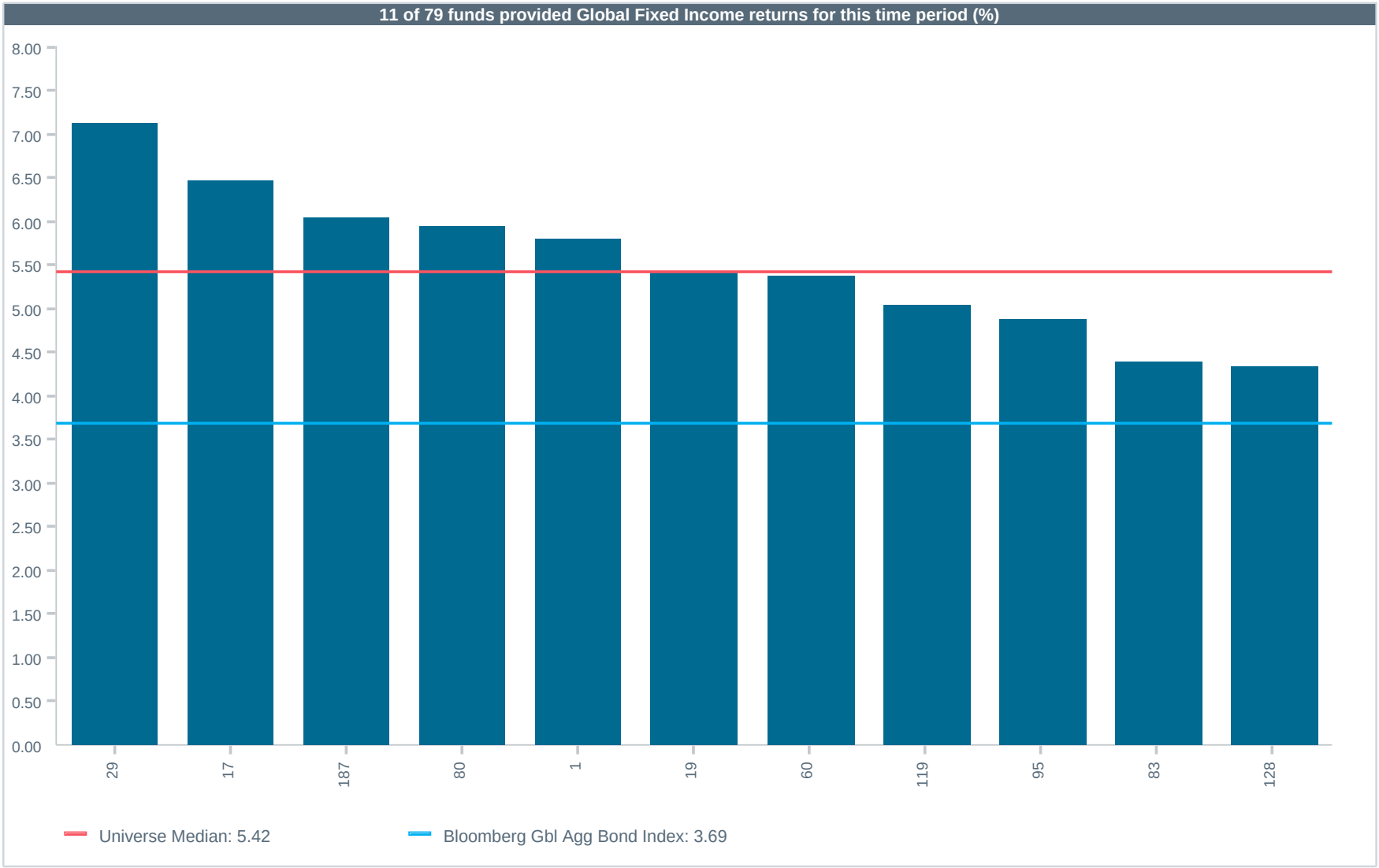


Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52

As of June 30, 2017

10 Year Annualized Global Fixed Income Returns



Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52

As of June 30, 2017

Total Return - Global Fixed Income

VCERA vs. Bloomberg Gbl Agg Bond Index

Calendar Year Rates of Return (%)	Cumulative Performance (Growth of $100)
VCERA does not have return data for Global Fixed Income	

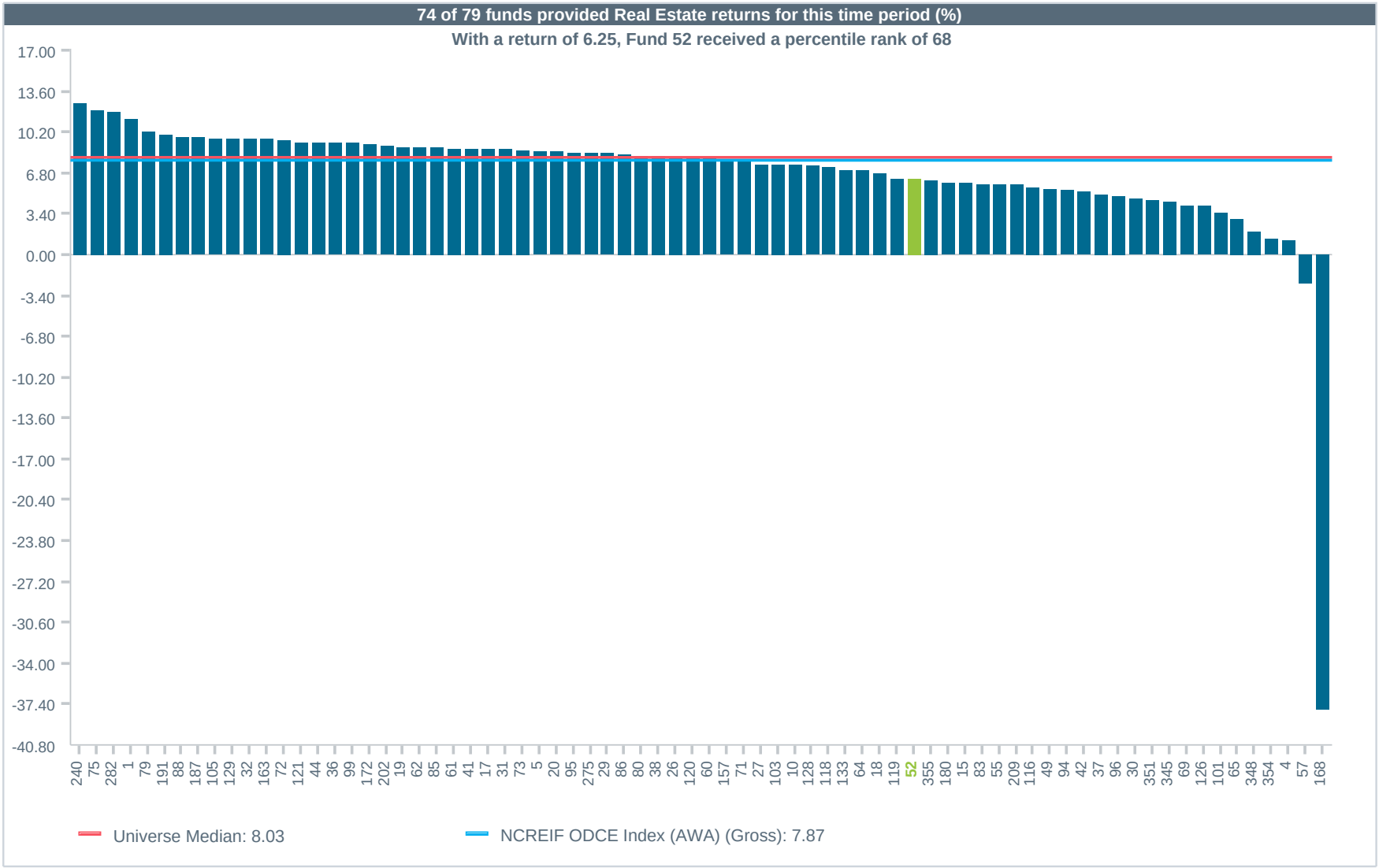
Annualized Returns (%)			
	1 Year	3 Years	5 Years
VCERA	N/A	N/A	N/A
Bloomberg Gbl Agg Bond Index	N/A	N/A	N/A
Variance	N/A	N/A	N/A

RVK

Fund Number: 52

As of June 30, 2017

1 Year Annualized Real Estate Returns

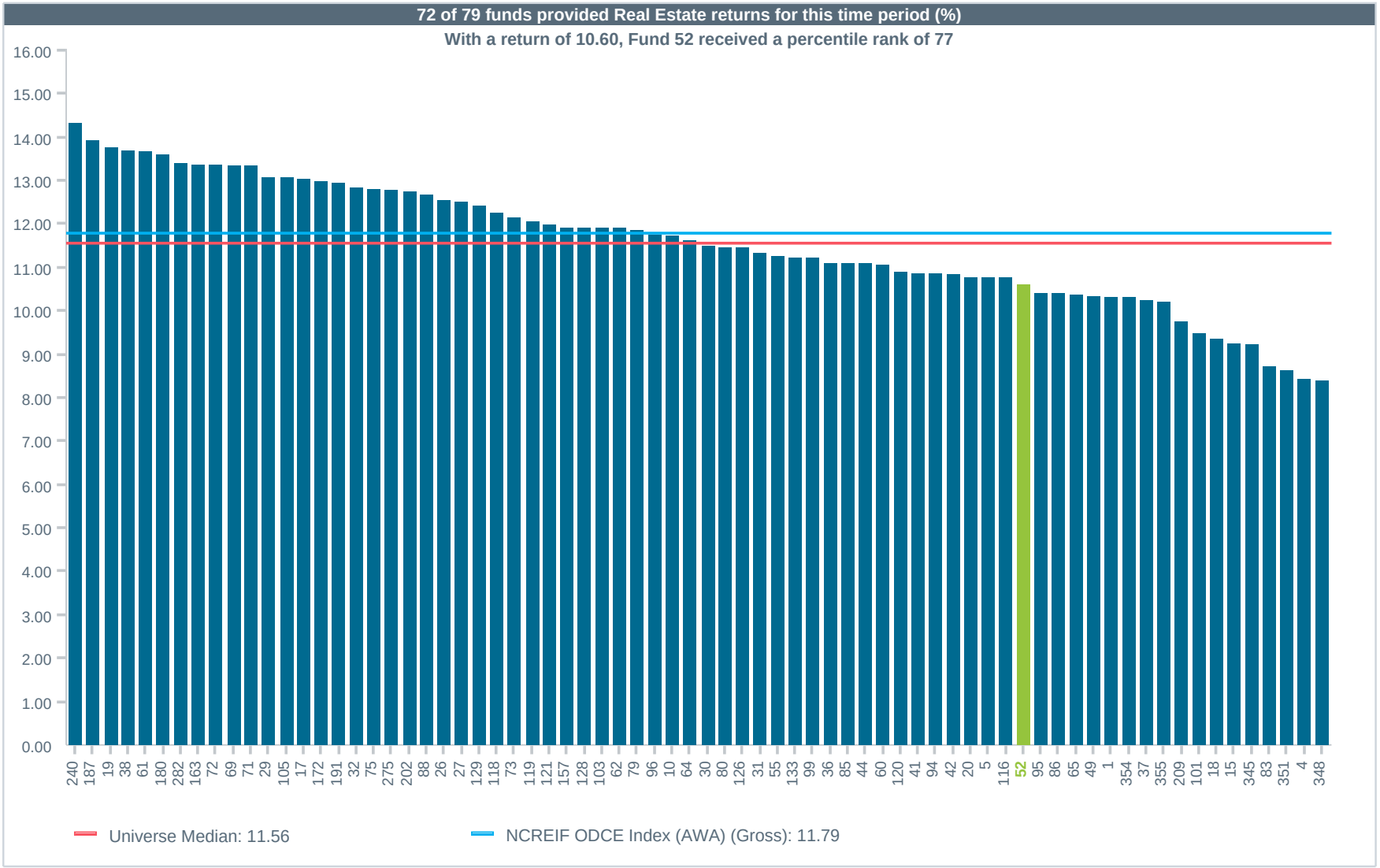


Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
5 Year Annualized Real Estate Returns

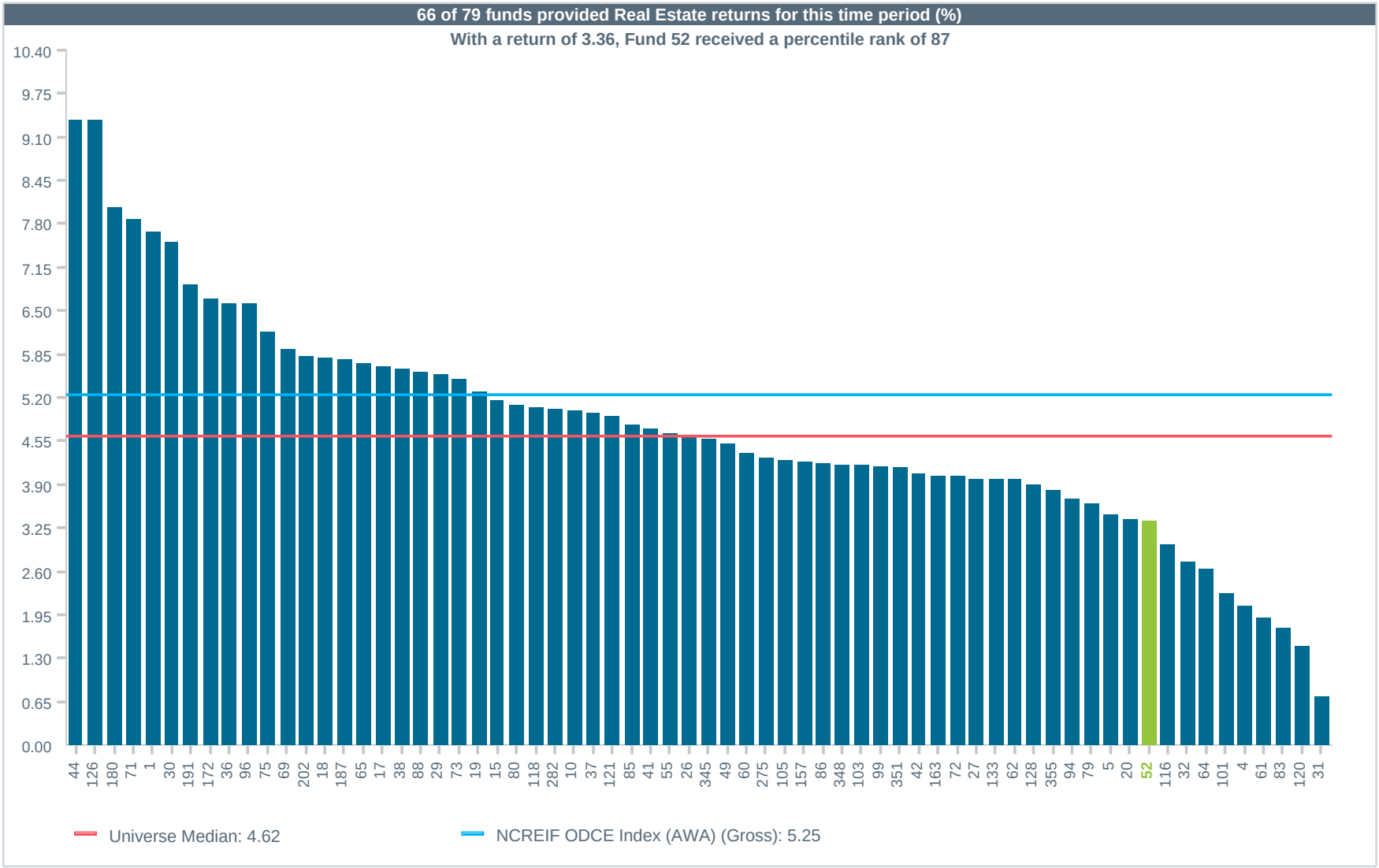
As of June 30, 2017



Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52
10 Year Annualized Real Estate Returns

As of June 30, 2017



Funds with less history than the specified time period will not appear in the chart.

RVK

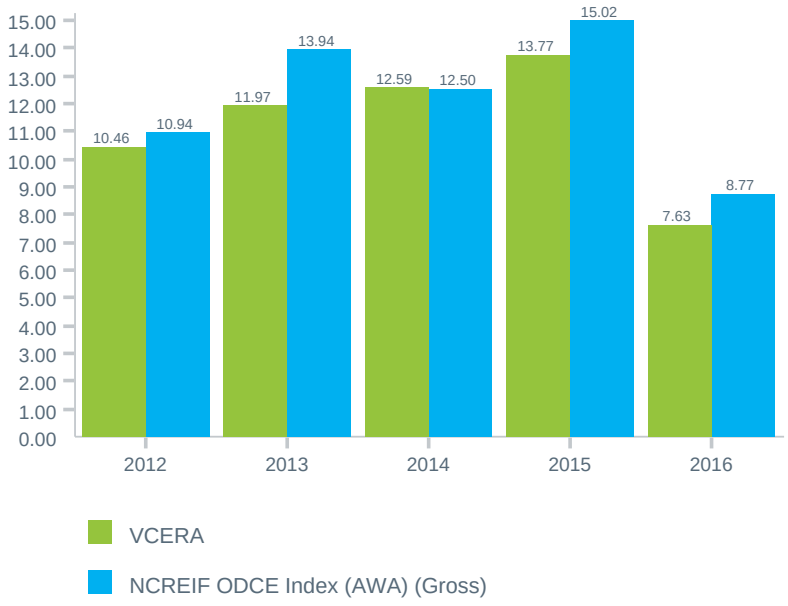
Fund Number: 52

As of June 30, 2017

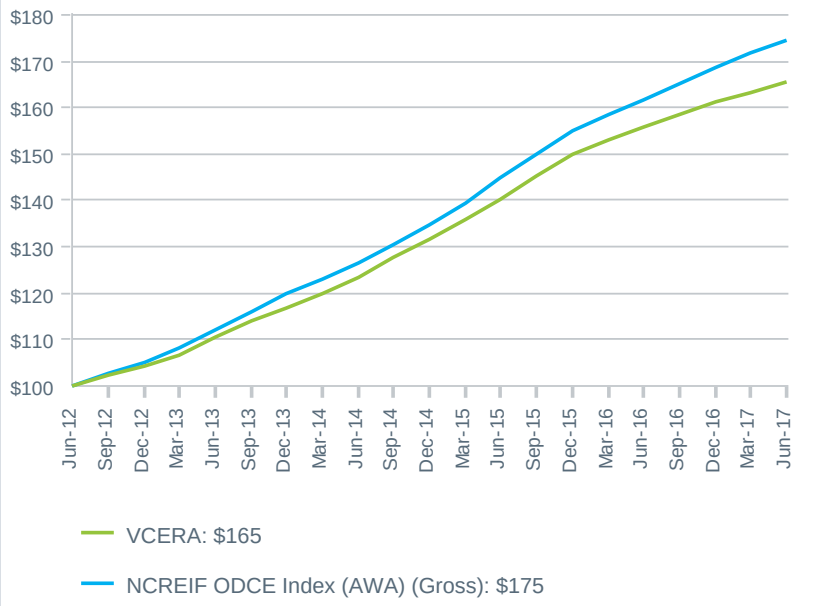
Total Return - Real Estate

VCERA vs. NCREIF ODCE Index (AWA) (Gross)

Calendar Year Rates of Return (%)



Cumulative Performance (Growth of $100)



Annualized Returns (%)

	1 Year	3 Years	5 Years
VCERA	6.25	10.24	10.60
NCREIF ODCE Index (AWA) (Gross)	7.87	11.34	11.79
Variance	-1.62	-1.10	-1.19

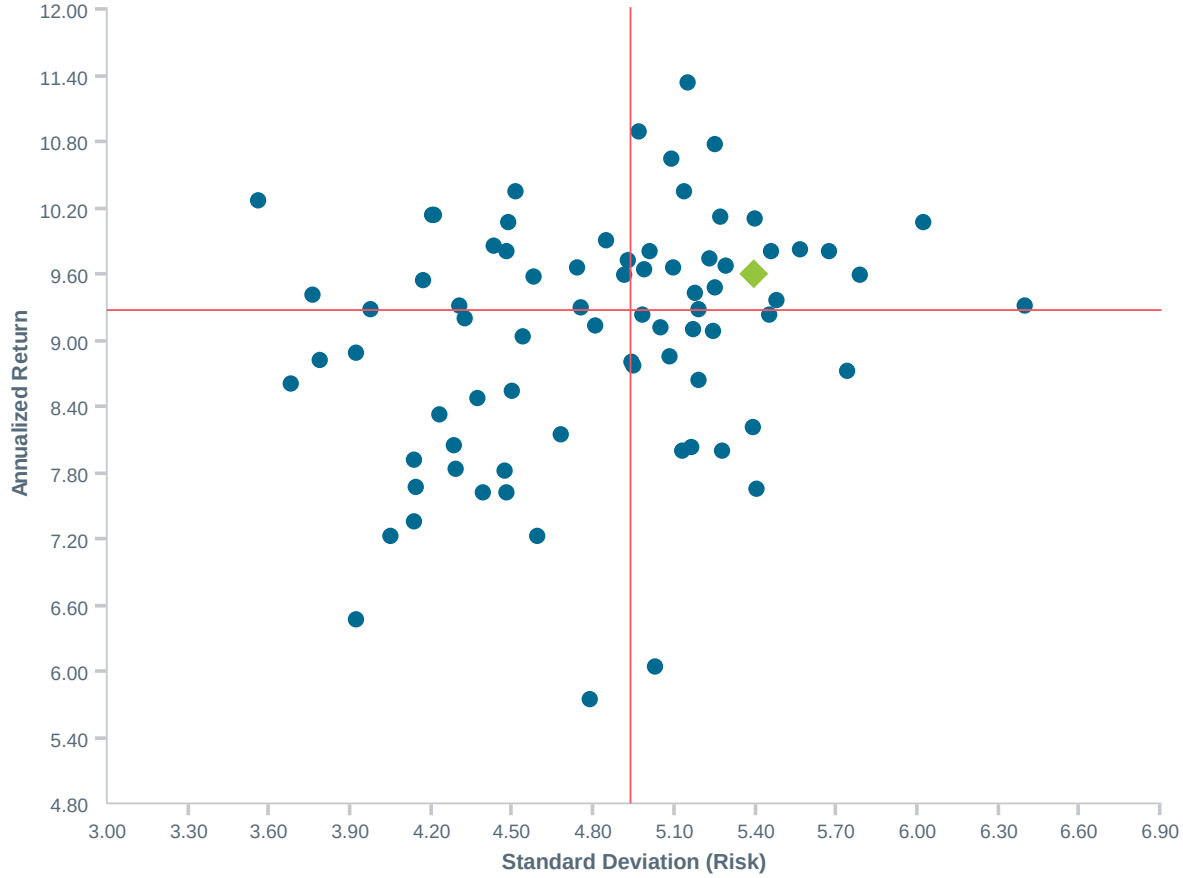
RVK

Fund Number: 52
Risk/Return Analysis
5 Year Annualized Total Fund Returns vs. Standard Deviation

As of June 30, 2017

78 of 79 funds provided Total Fund returns for this time period (%)

Fund Sharpe Ratio: 1.72



Universe Median Risk: 4.94 Median Return: 9.27 Median Sharpe Ratio: 1.79

Funds with less history than the specified time period will not appear in the chart.

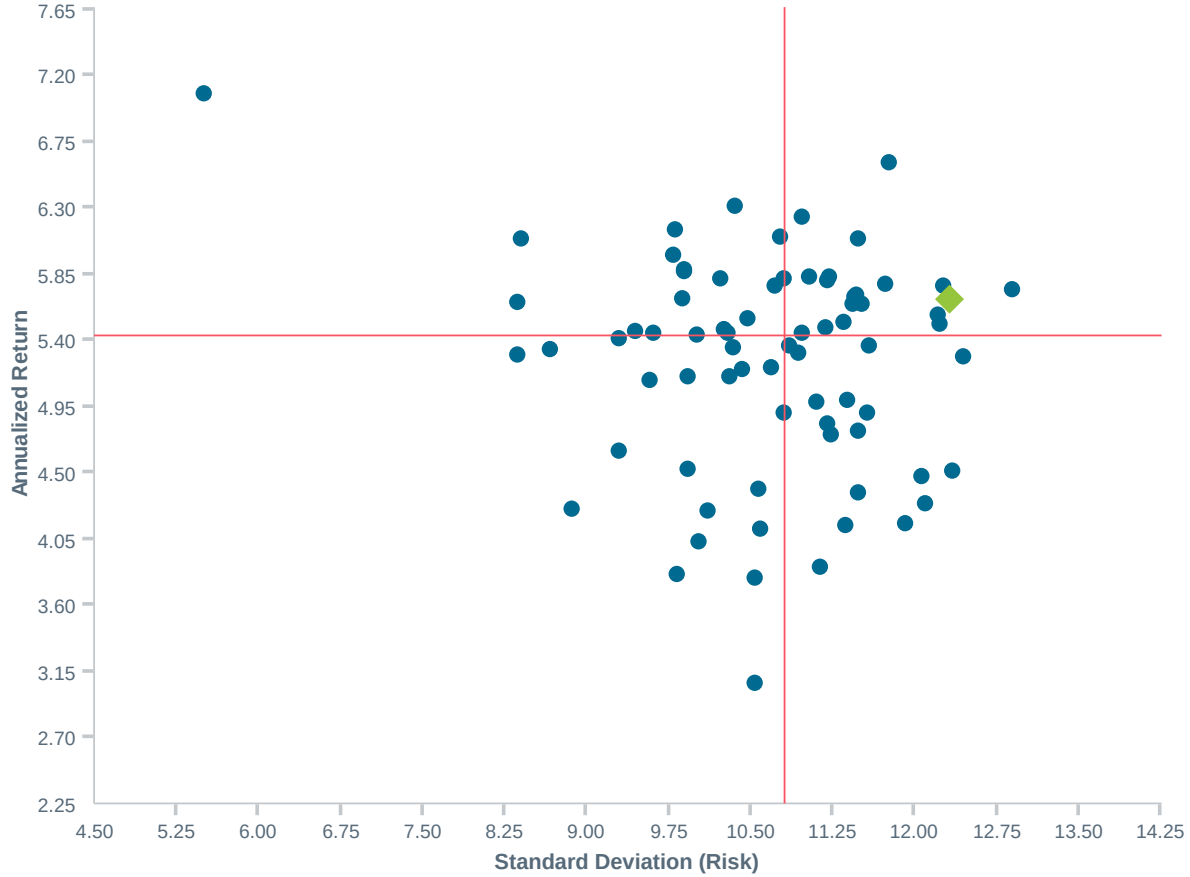
RVK

Fund Number: 52
Risk/Return Analysis
10 Year Annualized Total Fund Returns vs. Standard Deviation

As of June 30, 2017

75 of 79 funds provided Total Fund returns for this time period (%)

Fund Sharpe Ratio: 0.46



Universe Median Risk: 10.82 Median Return: 5.43 Median Sharpe Ratio: 0.48

Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

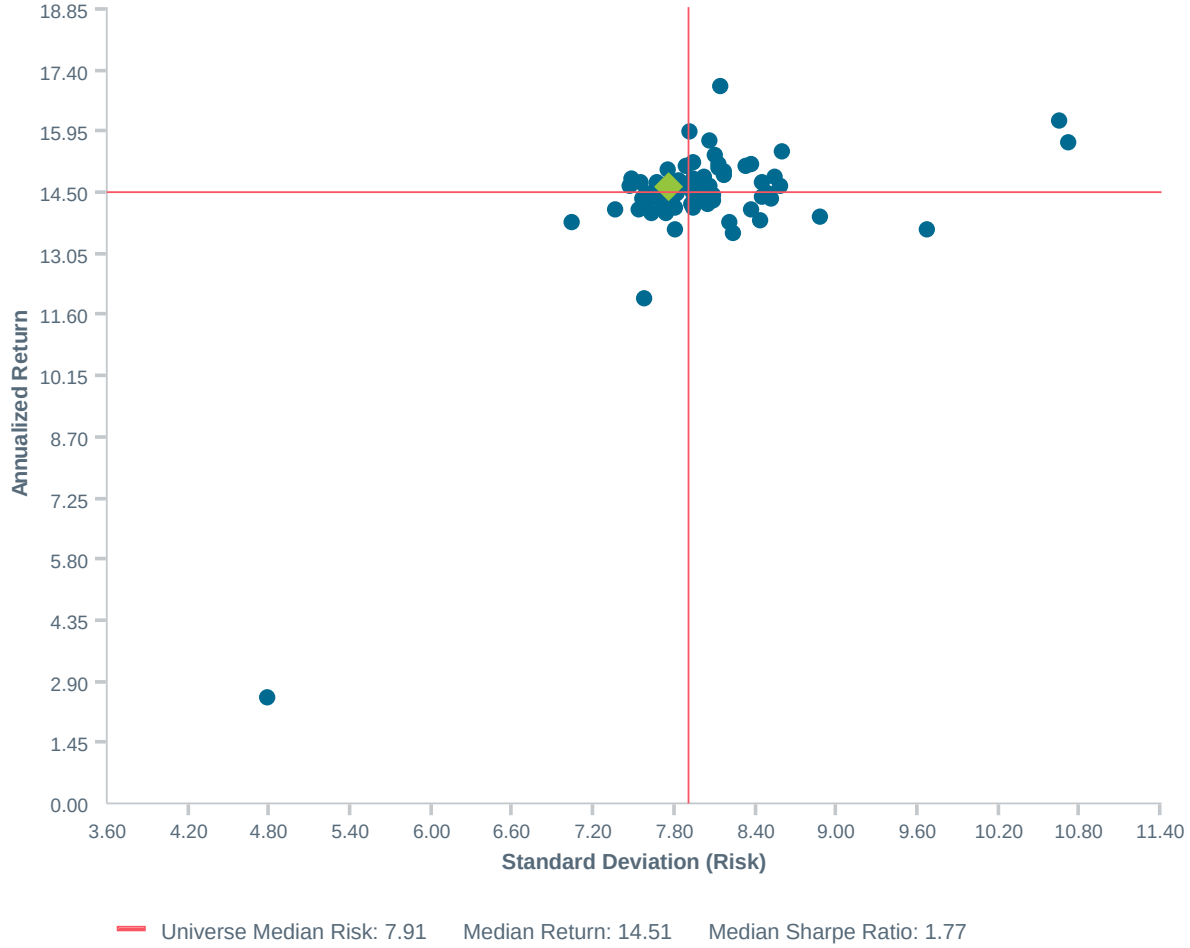
As of June 30, 2017

Risk/Return Analysis

5 Year Annualized US Equity Returns vs. Standard Deviation

74 of 79 funds provided US Equity returns for this time period (%)

Fund Sharpe Ratio: 1.81



Universe Median Risk: 7.91 Median Return: 14.51 Median Sharpe Ratio: 1.77

Funds with less history than the specified time period will not appear in the chart.

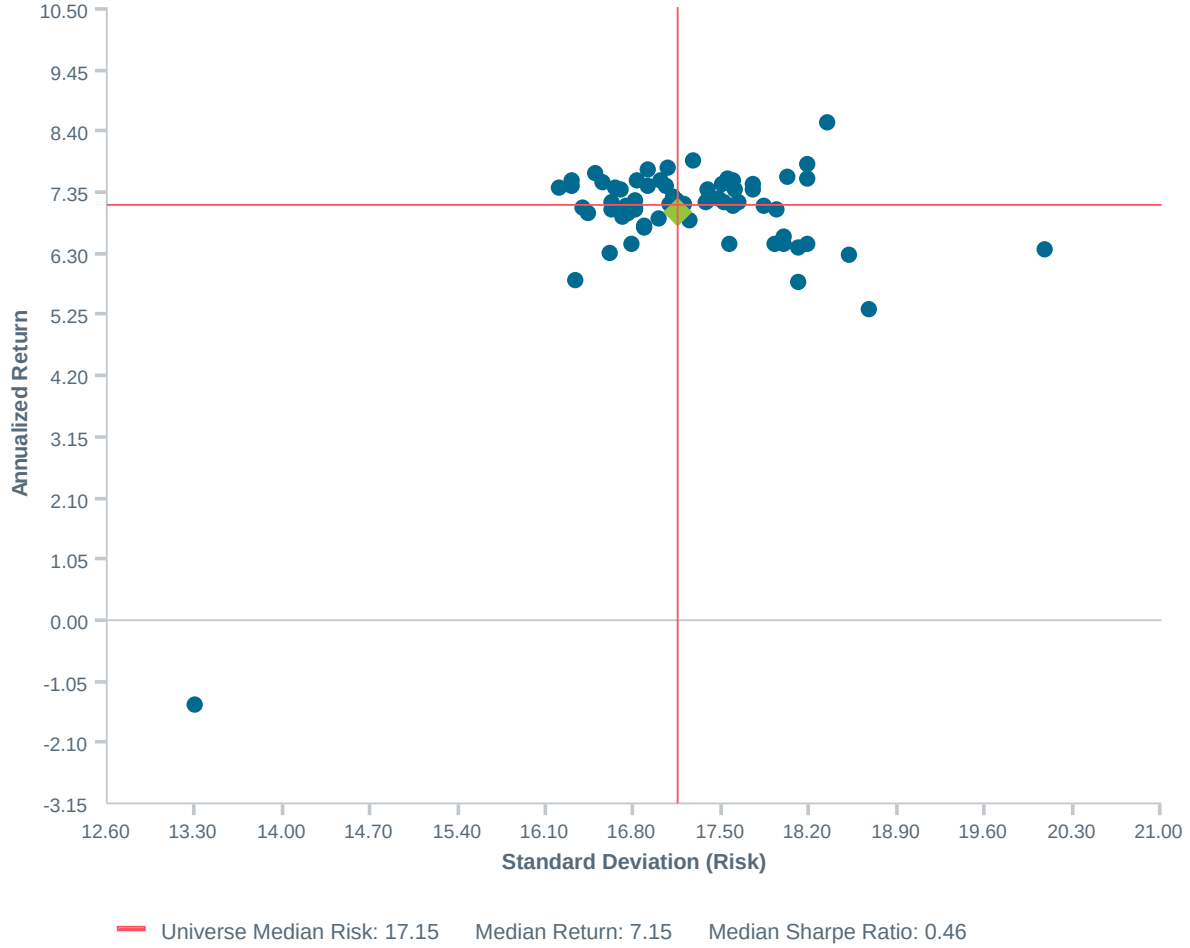
RVK

Fund Number: 52
Risk/Return Analysis
10 Year Annualized US Equity Returns vs. Standard Deviation

As of June 30, 2017

69 of 79 funds provided US Equity returns for this time period (%)

Fund Sharpe Ratio: 0.45



Universe Median Risk: 17.15 Median Return: 7.15 Median Sharpe Ratio: 0.46

Funds with less history than the specified time period will not appear in the chart.

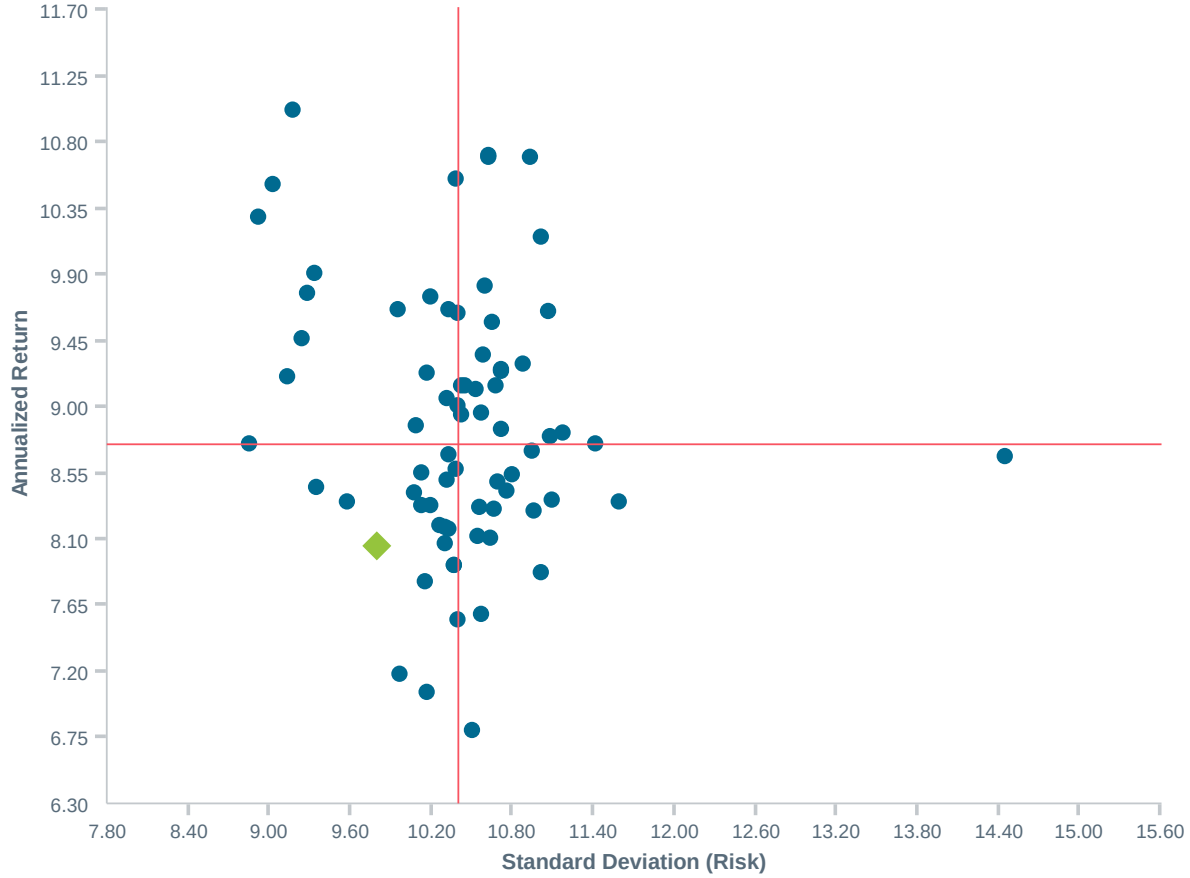
RVK

Fund Number: 52
Risk/Return Analysis
5 Year Annualized International Equity Returns vs. Standard Deviation

As of June 30, 2017

73 of 79 funds provided International Equity returns for this time period (%)

Fund Sharpe Ratio: 0.83



Universe Median Risk: 10.41 Median Return: 8.75 Median Sharpe Ratio: 0.85

Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

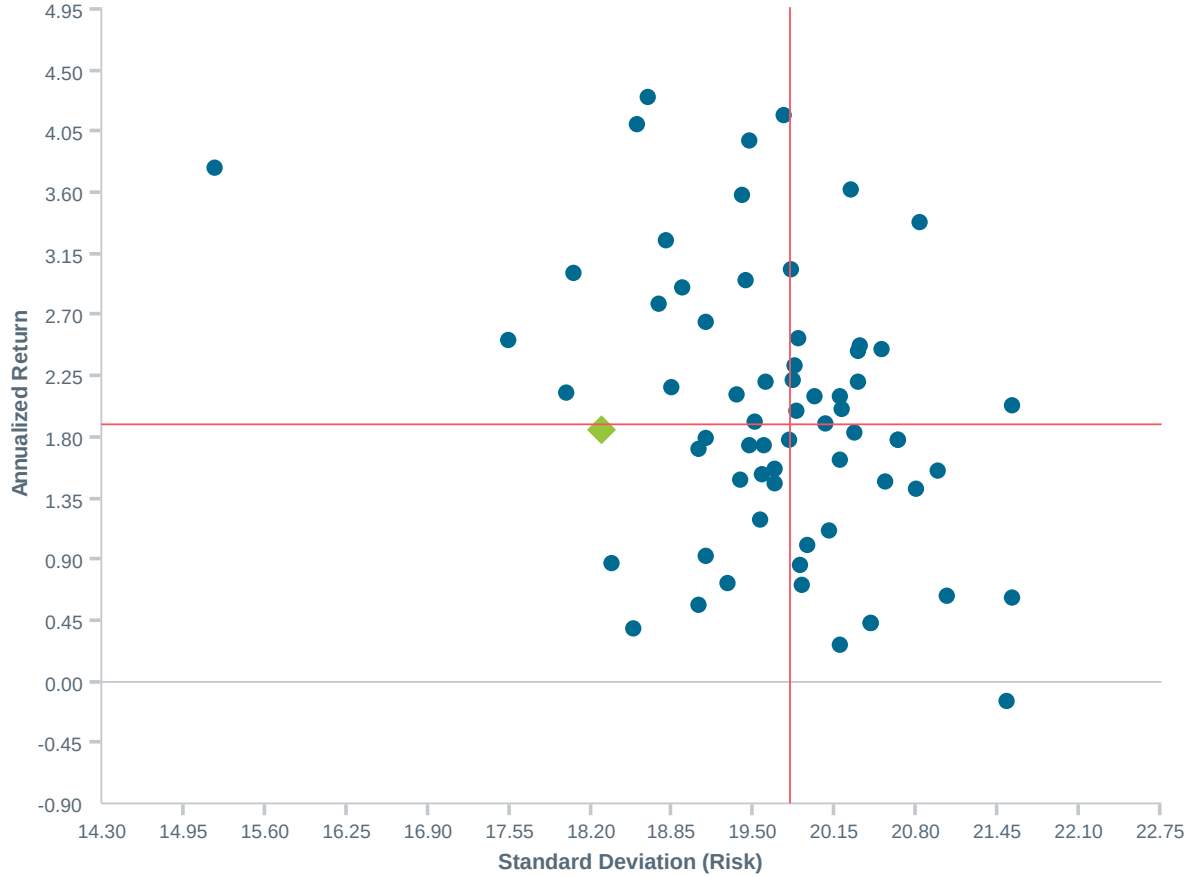
As of June 30, 2017

Risk/Return Analysis

10 Year Annualized International Equity Returns vs. Standard Deviation

67 of 79 funds provided International Equity returns for this time period (%)

Fund Sharpe Ratio: 0.16



Universe Median Risk: 19.79 Median Return: 1.89 Median Sharpe Ratio: 0.17

Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52

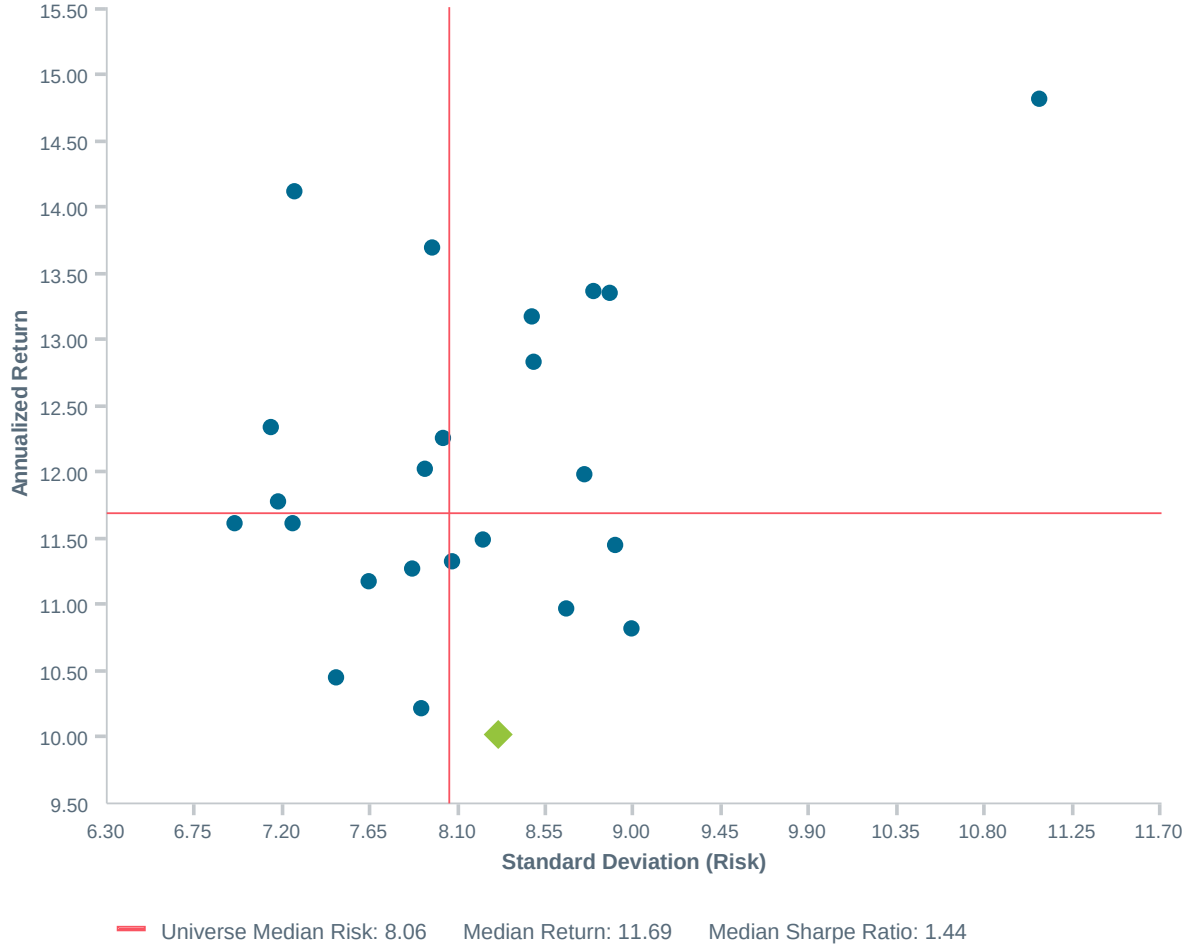
As of June 30, 2017

Risk/Return Analysis

5 Year Annualized Global Equity Returns vs. Standard Deviation

24 of 79 funds provided Global Equity returns for this time period (%)

Fund Sharpe Ratio: 1.19

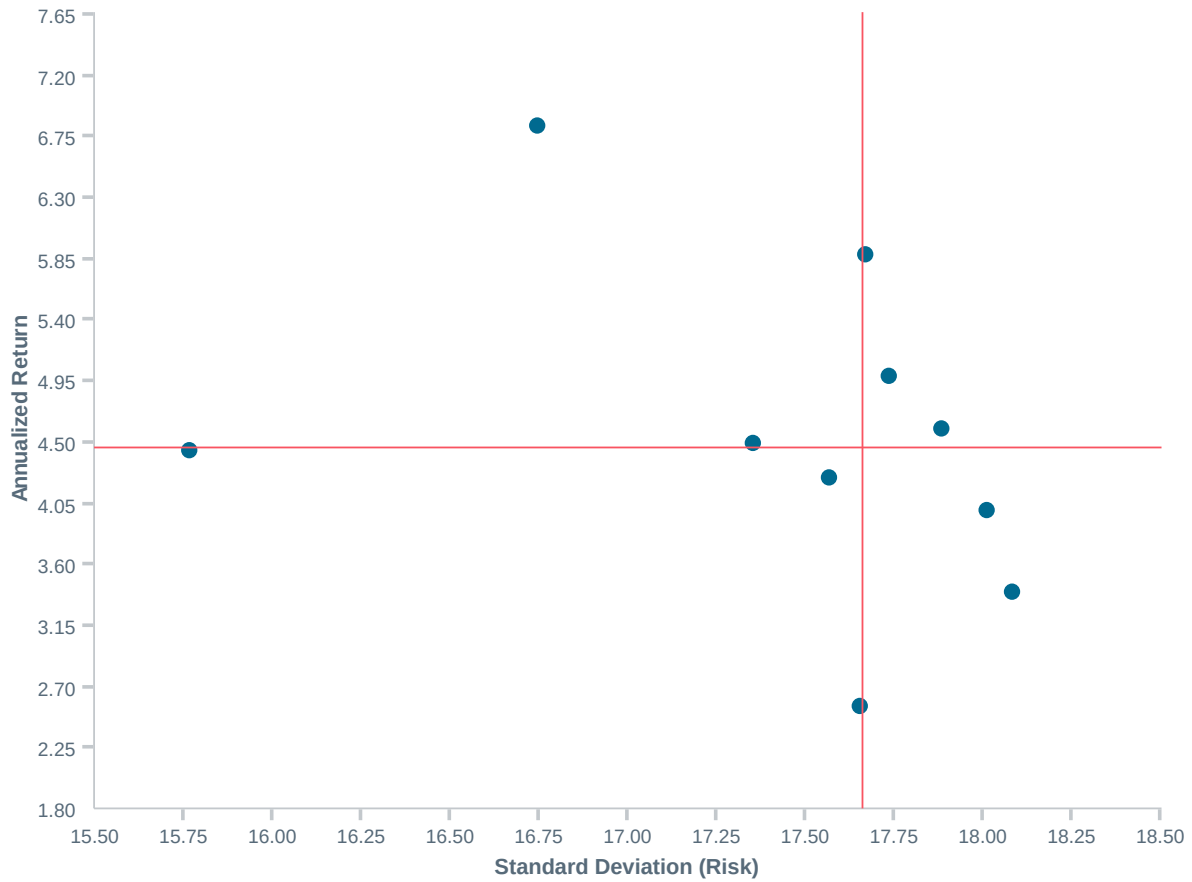


Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52
Risk/Return Analysis
10 Year Annualized Global Equity Returns vs. Standard Deviation

As of June 30, 2017

10 of 79 funds provided Global Equity returns for this time period (%)



Universe Median Risk: 17.67 Median Return: 4.46 Median Sharpe Ratio: 0.31

Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52

As of June 30, 2017

Risk/Return Analysis

5 Year Annualized US Fixed Income Returns vs. Standard Deviation

68 of 79 funds provided US Fixed Income returns for this time period (%)

Fund Sharpe Ratio: 1.21

Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
Risk/Return Analysis
10 Year Annualized US Fixed Income Returns vs. Standard Deviation

As of June 30, 2017

62 of 79 funds provided US Fixed Income returns for this time period (%)

Fund Sharpe Ratio: 0.89

Funds with less history than the specified time period will not appear in the chart.

RVK

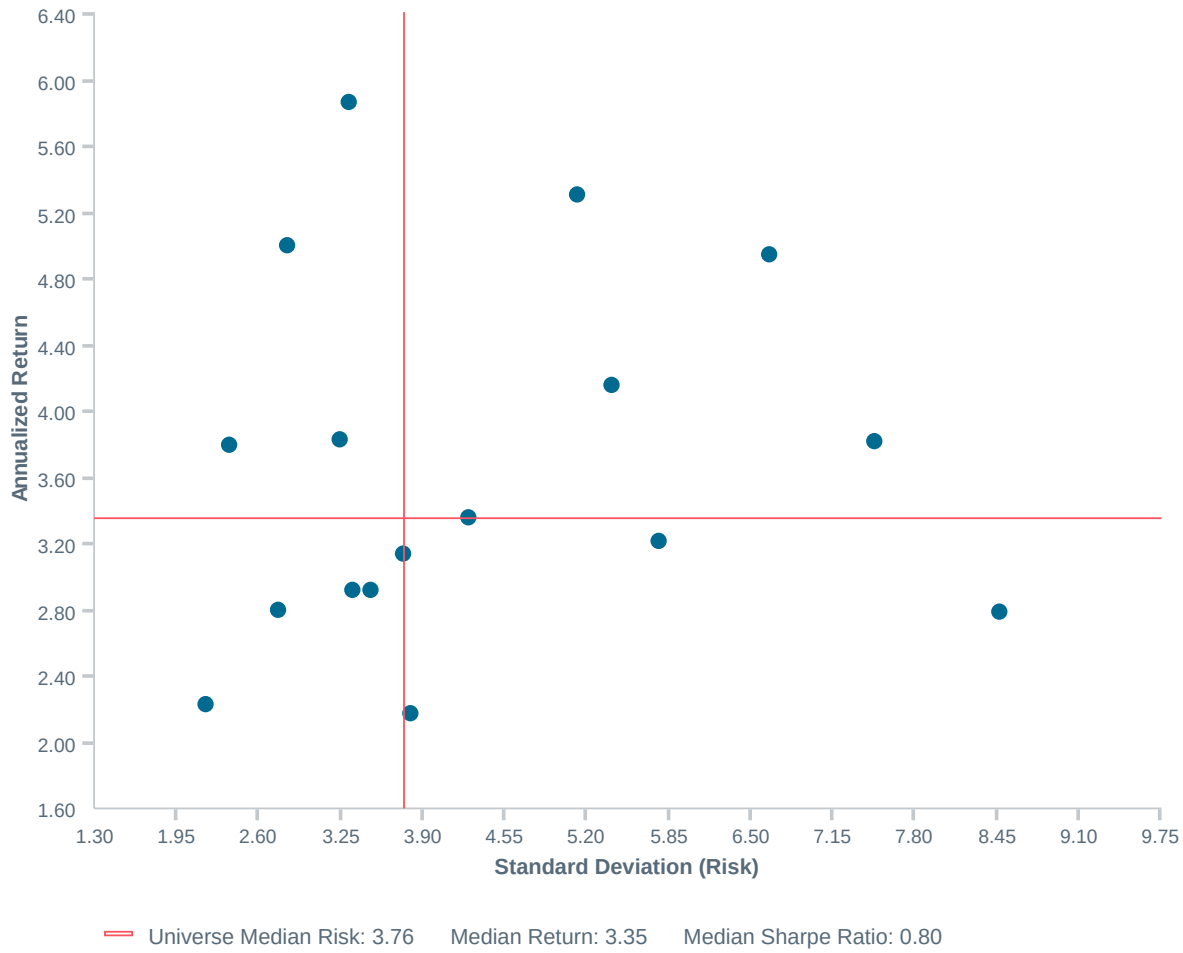
Fund Number: 52

As of June 30, 2017

Risk/Return Analysis

5 Year Annualized Global Fixed Income Returns vs. Standard Deviation

17 of 79 funds provided Global Fixed Income returns for this time period (%)



Funds with less history than the specified time period will not appear in the chart.

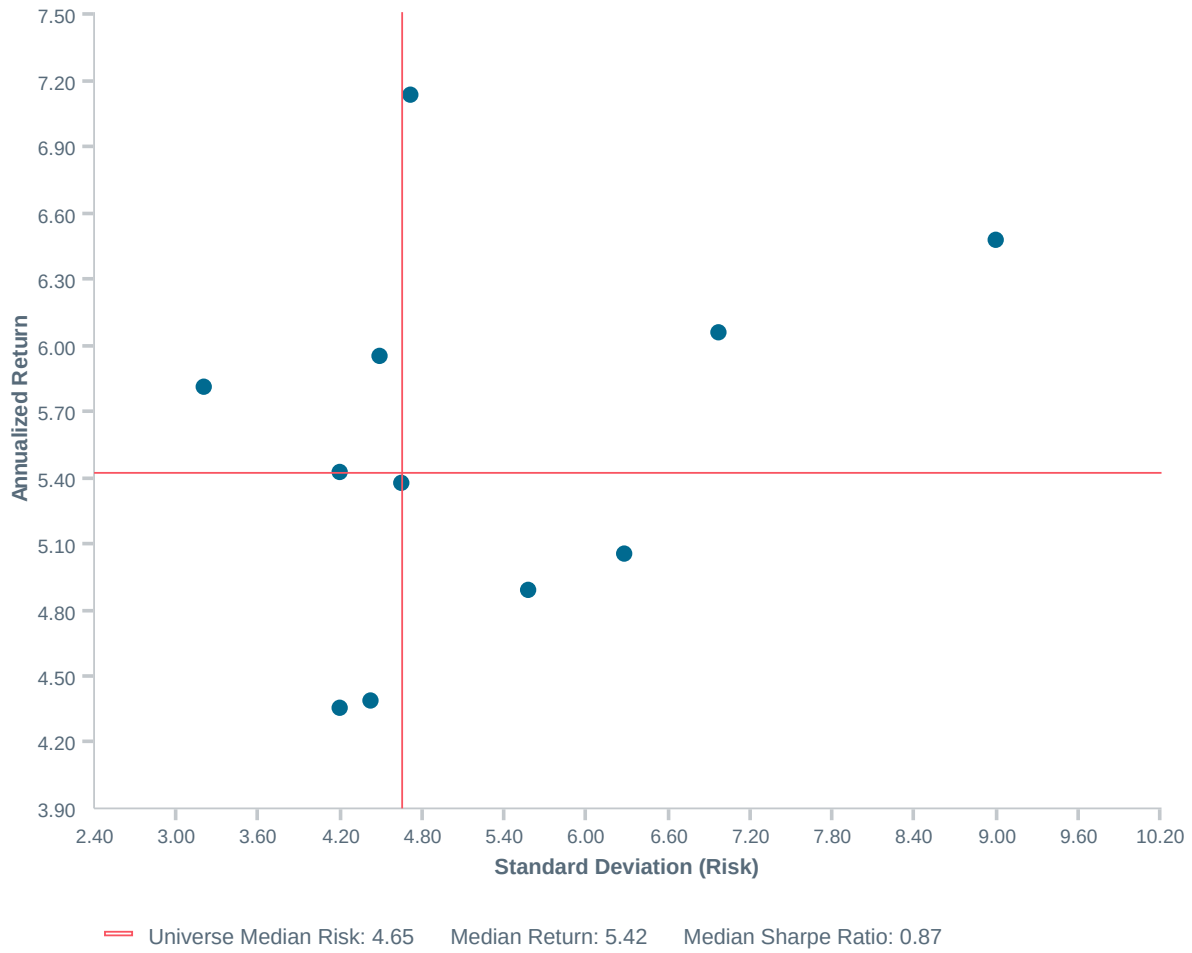
Fund Number: 52

As of June 30, 2017

Risk/Return Analysis

10 Year Annualized Global Fixed Income Returns vs. Standard Deviation

11 of 79 funds provided Global Fixed Income returns for this time period (%)



Funds with less history than the specified time period will not appear in the chart.

Fund Number: 52
Risk/Return Analysis
5 Year Annualized Real Estate Returns vs. Standard Deviation

As of June 30, 2017

72 of 79 funds provided Real Estate returns for this time period (%)

Fund Sharpe Ratio: 6.59

Universe Median Risk: 2.31 Median Return: 11.56 Median Sharpe Ratio: 4.67

Funds with less history than the specified time period will not appear in the chart.

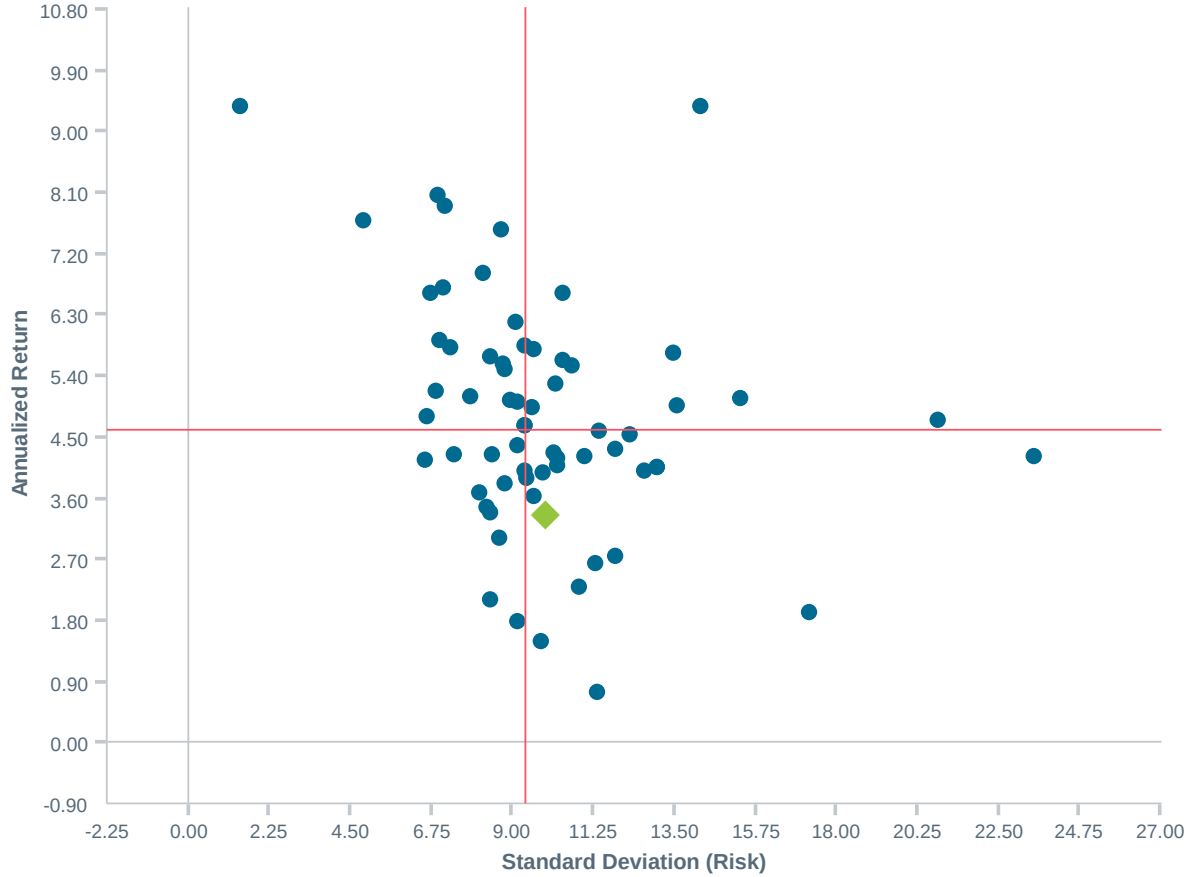
RVK

Fund Number: 52
Risk/Return Analysis
10 Year Annualized Real Estate Returns vs. Standard Deviation

As of June 30, 2017

66 of 79 funds provided Real Estate returns for this time period (%)

Fund Sharpe Ratio: 0.33



Universe Median Risk: 9.39 Median Return: 4.62 Median Sharpe Ratio: 0.45

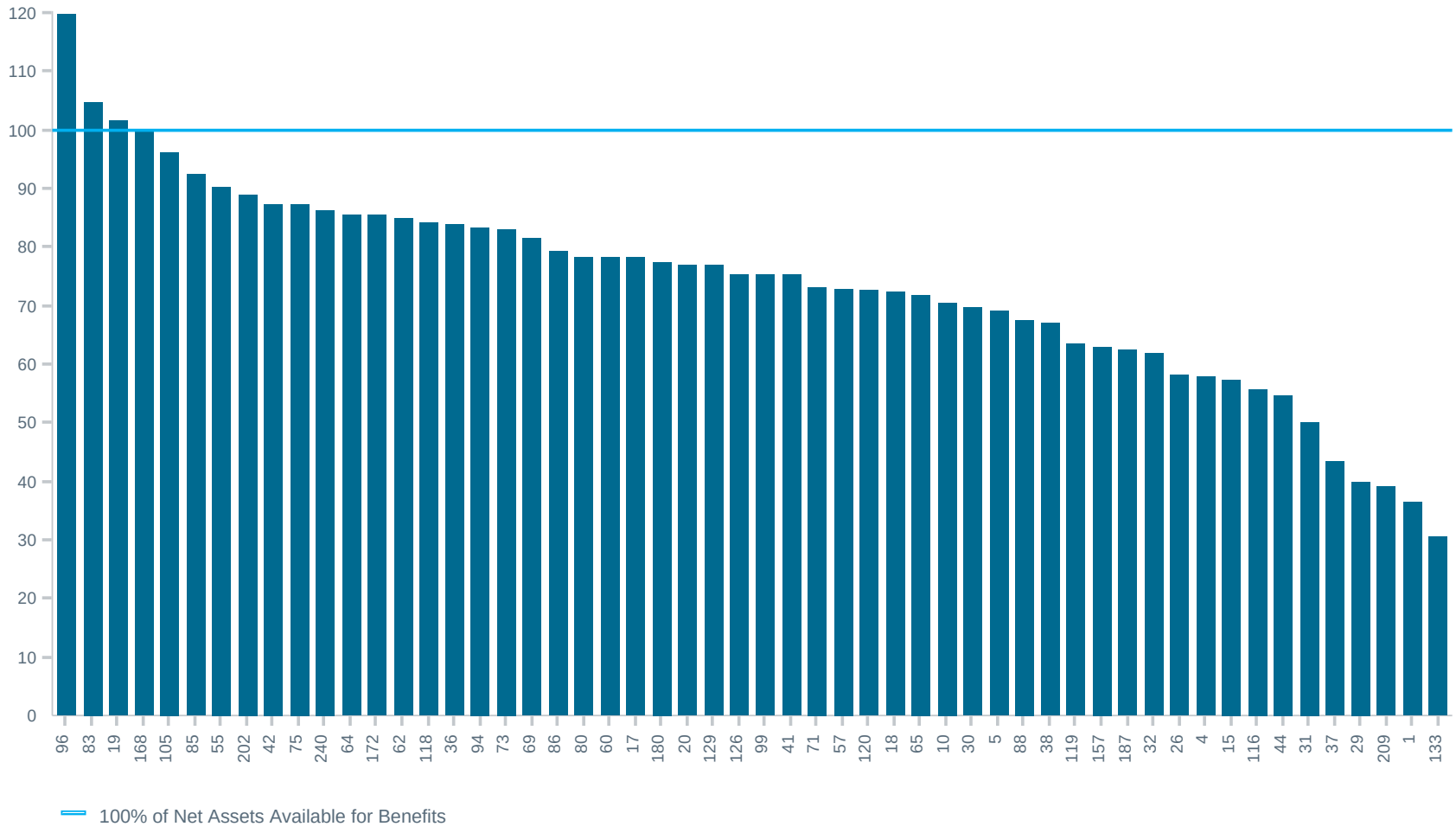
Funds with less history than the specified time period will not appear in the chart.

RVK

Fund Number: 52
Net Assets Available For Benefits
Expressed as a Percentage of the Pension Benefit Obligation

As of June 30, 2017

54 of 79 funds provided Net Assets Available data (%)



Funds that did not provide data will not appear in the chart.

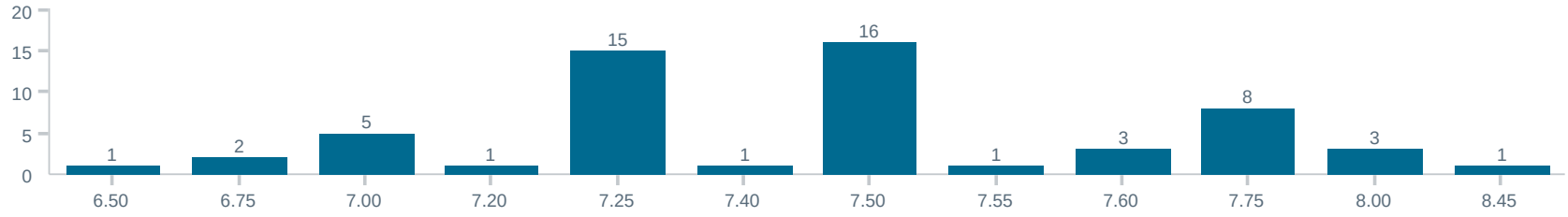
RVK

Fund Number: 52
Actuarial Assumption Rates

As of June 30, 2017

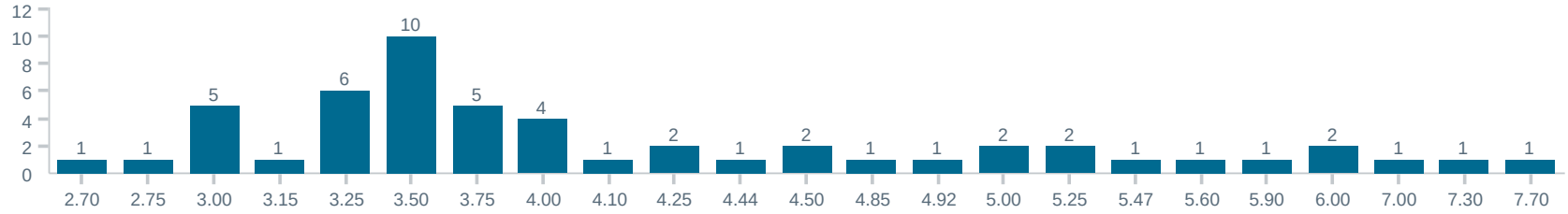
Actuarial Rate Assumptions - 7.50% Median

57 of 79 funds provided Actuarial Rate data



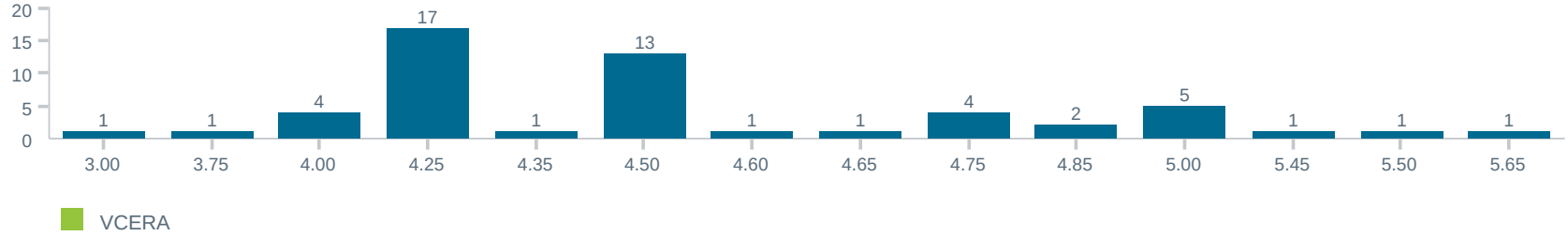
Salary Growth Rate Assumptions (Inflation plus Merit) - 3.75% Median

53 of 79 funds provided Salary Growth Rate data



Real Rate of Assumed Investment Return (Interest Rate minus Inflation) - 4.50% Median

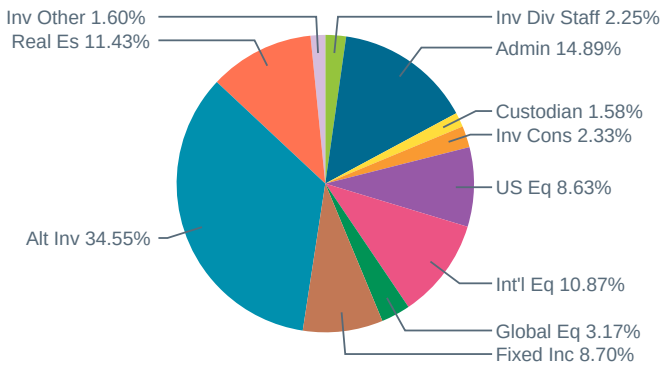
53 of 79 funds provided Real Rate of Assumed Investment Return data



Funds that did not provide data will not appear in the chart.

Fund Number: 52
Total Administrative and Investment Fees
VCERA vs. All Funds

As of June 30, 2017

VCERA	All Funds
VCERA did not provide fee data	

Variance (%)

VCERA did not provide fee data

Allocations shown may not sum up to 100% exactly due to rounding.

Fund Number: 52
Total Fund Fee Summary in Basis Points
VCERA vs. Average by Asset Range
56 of 79 funds provided fee data for this time period

As of June 30, 2017

Administrative Expenses	VCERA	Under $500 Million	$500mm - $1 Billion	$1 - $5 Billion	$5 - $10 Billion	$10 - $20 Billion	Over $20 Billion
Internal Inv. Div. Staff		1.96	0.00	0.91	0.63	0.85	2.04
Actuary		3.25	1.80	0.54	0.24	0.13	0.11
Legal		1.45	1.18	0.68	0.20	0.31	0.15
Consultant		0.00	0.25	0.26	0.07	0.12	0.13
Audit		0.92	0.64	0.21	0.11	0.06	0.07
Other Professional		0.00	1.73	0.27	0.60	0.43	0.77
General Administrative		21.89	13.74	7.42	6.46	4.47	3.30
Total Administrative Expenses	N/A	29.48	19.34	10.28	8.32	6.37	6.57

Investment Expenses	VCERA	Under $500 Million	$500mm - $1 Billion	$1 - $5 Billion	$5 - $10 Billion	$10 - $20 Billion	Over $20 Billion
Custodial		1.29	3.03	1.16	0.71	0.55	0.30
Investment Consulting		3.05	2.40	2.22	0.69	0.70	0.45
US Equity		0.00	7.38	6.66	6.35	3.26	2.19
International Equity		0.00	6.71	7.62	5.29	5.68	4.20
Global Equity		4.32	1.00	2.43	2.29	1.11	0.95
Fixed Income		0.00	5.32	6.07	3.24	4.42	3.80
Real Estate		0.00	5.98	5.73	7.86	4.49	6.77
Other Investment Management		0.00	0.00	0.38	0.07	0.88	1.78
Total Investment Expenses (ex. Alt Inv)	N/A	8.66	31.81	32.28	26.49	21.10	20.42
Alternative Investments		0.00	3.98	18.11	23.98	14.10	21.73
Total Investment Expenses	N/A	8.66	35.79	50.39	50.46	35.20	42.15
Total Expenses	N/A	38.14	55.13	60.67	58.78	41.57	48.73

Expressed in basis points on total fund assets. Funds that did not provide fee data will not appear in the table.

RVK

GIPS Compliance Survey Summary

Q1. Are you currently claiming compliance or considering compliance with the CFA Institute's Guidance Statement on the Application of the Global Investment Performance Standards (GIPS) to Asset Owners, effective January 1, 2015?

Of the 79 participants in the 2017Q2 Public Fund Report, 51 participants provided a reply to the GIPS Compliance Survey. Of those participants, 6 answered "Yes, Currently Comply", 4 answered "Yes, Considering", and 41 answered "Not Considering".

Q2. According to the GIPS standards, asset owner net of fees performance must reflect internal as well as external investment costs, and such net of all fee performance is required to be calculated and presented to fund oversight committees/Boards. Please identify which, if any, of the following costs you are currently including or will consider including in net performance that is in compliance with the GIPS standards.

	Currently Include	Considering	Not Considering	Unsure at this Time
• Internal investment department compensation/benefits	7	1	3	2
• Allocation of non-investment department expenses (human resources, communications, technology, performance measurement, and compliance to support internal management team)	7	1	3	2
• Investment research services (100% or pro-rata determination)	6	0	3	4
• Investment consulting fees (general investment consulting and project fees; 100% or pro-rata determination)	8	0	3	2
• Pro-rata data valuation fees	4	1	3	5
• Pro-rata overhead indirectly related to asset management (building and utilities fees to support internal management team)	5	0	4	3

Miscellaneous Comments

- Performance shown is gross of fees, with the exception of the following:
  - **Funds 31, 49, 350, 351, and 355:** Performance shown is net of fees.
  - **Funds 5 and 20:** Performance shown is net of fees, except for Total Fund performance.
  - **Fund 85:** Performance shown for Real Estate is net of fees.
- Performance shown is calculated using quarterly performance provided by participating public funds.
- Performance shown may differ from a fund's actual performance due to rounding.
- Net Assets Available for Benefit includes funding percentage valuation as of dates between June 2016 and June 2017.
- Allocations shown reflect dedicated managers/mandates rather than actual exposure, with the exception of the following:
  - **Fund 61:** Performance shown for Global Equity includes US and Non-US exposure.
  - **Funds 1, 29, and 119:** Performance shown for Global Fixed Income includes US and Non-US exposure.
  - **Funds 4, 42, and 64:** Performance shown for US Fixed Income includes US and Non-US exposure.

Glossary of Terms

Beta - A measure of the sensitivity of a portfolio to the movements in the market. It is a measure of a portfolio's non-diversifiable or systematic risk.

Return - Compounded rate of return for the period.

% Return - The time-weighted rate of return of a portfolio for a given period.

Sharpe Ratio - Represents the excess rate of return over the risk-free return (i.e., BofA ML 3 Mo US T-Bill Index unless specified otherwise), divided by the standard deviation of the excess return to the risk free asset. The result is the absolute rate of return per unit of risk. The higher the value, the better the product's historical risk-adjusted performance.

Standard Deviation - A statistical measure of the range of a portfolio's performance. The variability of a return around its average return over a specified time period. Calculation is based on quarterly periodicity.

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CALAPRS
EDUCATION · COMMUNICATION · NETWORKING
California Association of Public Retirement Systems

MARCH 28-30, 2018

UCLA LUSKIN CONFERENCE CENTER
LOS ANGELES, CA

Advanced Principles of Pension Management

for Trustees

FOR THE CALIFORNIA ASSOCIATION OF PUBLIC RETIREMENT SYSTEMS

Advanced Principles of Pension Management

for Trustees

ADVANCED PRINCIPLES OF PENSION MANAGEMENT

The Advanced course is about building trustee skills and strengthening board governance. Today's pension trustees have many opportunities to learn about the several disciplines required to run a pension system: institutional investing, actuarial science, benefits law, etc. But another highly important area of knowledge is the business of being a trustee and of contributing to a well-functioning board. The **CALAPRS Advanced Principles of Pension Management** course exposes veteran trustees to the most effective pension management thinking to enhance service to their retirement systems.

COURSE RATINGS

100% of last year's participants agreed that the course would "enhance their performance and leadership abilities as a board member," and that they would, "recommend the program to their colleagues."

THE PROGRAM

Course attendees will hear from and discuss issues with top-level presenters in the areas of board/staff roles, governance, pension law, economic forecasting and actuarial science.

CURRICULUM | YOUR COURSE OF STUDY

Over the course of two days, attendees will be immersed in a powerful learning process—acquiring the skills they need to lead their organizations effectively.

The 2018 Program will cover:

- **Policy-Based Boards**
- **Effective Planning**
- **Economics Forecasting Methods and the annual forecast of the UCLA Anderson School**
- **Good Governance & the Investment Team**
- **Wearing the Right Hat at the Right Time — *The Fiduciary Duties of Public Pension System Board Members***
- **Advanced Actuarial Principles**

PARTICIPANTS | WHO IS RIGHT FOR THE PROGRAM?

The program is designed for an experienced group of trustees. Trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" which is specifically designed for new trustees. The course was previously held at Stanford University.

CALAPRS | 575 MARKET ST., STE. 2125, SAN FRANCISCO, CA 94105 | P: 415.764.4860 | INFO@CALAPRS.ORG | WWW.CALAPRS.ORG

EXPERIENCE UCLA'S TRADITION OF EXCELLENCE AT THE LUSKIN CONFERENCE CENTER

In the heart of UCLA's vibrant campus, the new UCLA Meyer and Renee Luskin Conference Center is set amid iconic campus buildings and the exhilarating backdrop of daily student life. The Luskin Conference Center is a place where the best academic minds, innovators, researchers, political leaders, and societal visionaries meet to exchange ideas that help shape the world.

The UCLA Luskin Conference Center is an ideal central meeting place where California's public pension trustees can gather for a transformational academic experience that transcends the acquisition of knowledge, skills, and tools—and fosters professional, intellectual, and personal development.

Participants will receive a Certificate of Completion for this program.

PROGRAM DATES

March 28-30, 2018

LEARNING COMMITMENT

Active involvement in all classroom sessions, case discussions, and other program activities is expected. Participants devote considerable time and intellect to the learning experience. Therefore, they must be free of outside responsibilities during the two days of the program.

THE FACULTY

The Advanced Principles Program is taught by a faculty of highly regarded experts and experienced professionals in the field of public pension management.

TUITION

Program tuition is $3,100 for CALAPRS members and $3,400 for non-members and includes all lodging, meals, and materials. Tuition must be paid in full by March 9, 2018.

ACCOMMODATIONS

Program tuition includes all meals and lodging on the nights of March 28 and 29, 2018 at the acclaimed UCLA Luskin Conference Center, located at 425 Westwood Plaza, Los Angeles, CA. To ensure full participation, all participants are required to stay on-site in the provided private, comfortable hotel rooms.

REGISTRATION

Applications must be received by February 16, 2018. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be.

Advanced Principles of Pension Management for Trustees

March 28-30, 2018 Los Angeles, CA

APPLICATION FOR ENROLLMENT

Due by February 16, 2018

Applications must be received by February 16, 2018. Since space is limited, CALAPRS reserves the right to limit the number of trustees accepted from each retirement system, if need be. Accepted applicants will be notified via email on February 20, 2018.

Applicant Qualifications: *The Advanced Principles Program is designed for an experienced group of trustees. In evaluating readiness for this program, trustees should have already acquired a basic understanding of board governance practices, actuarial and investment principles, and fiduciary responsibility. CALAPRS recommends that newer trustees first attend the initial trustee training course at Pepperdine University entitled: "Principles of Pension Management for Trustees" that is specifically designed for new trustees. The course was previously held at Stanford University.*

Applicant Information

Trustee's Name (*for certificate/name badge*):_____

Retirement System:_____

Trustee Type: ❒ Elected ❒ Appointed ❒ Ex-Officio Date Became a Trustee:_____ Date Current Term Expires:_____

Trustee's Mailing Address:_____

Trustee's Phone :_____ Trustee's Email:_____

Emergency Contact (*name, phone):*_____

Dietary Restrictions (*if any):*_____

Administrative Contact (*name, email*):_____

❒ I have **e-mailed** this applicant's biography (≤150 words) to register@calaprs.org for printing in the attendee materials.

Applicant Signature

If admitted, I agree to attend the Advanced Principles 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

Administrator Name:_____ Email:_____

Administrator Signature *(required):* _____

Tuition Payment

❒ $3,100 CALAPRS Member ❒ $3,400 Non-member

Program tuition must be paid in full by March 9, 2018. Tuition includes all meals, materials, and mandatory lodging for all participants for the nights of March 28 and 29 in the UCLA Luskin Conference Center. Payable by check only made out and mailed to "CALAPRS". A separate invoice will not be sent.

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 your needs.

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California Association of Public Retirement Systems

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

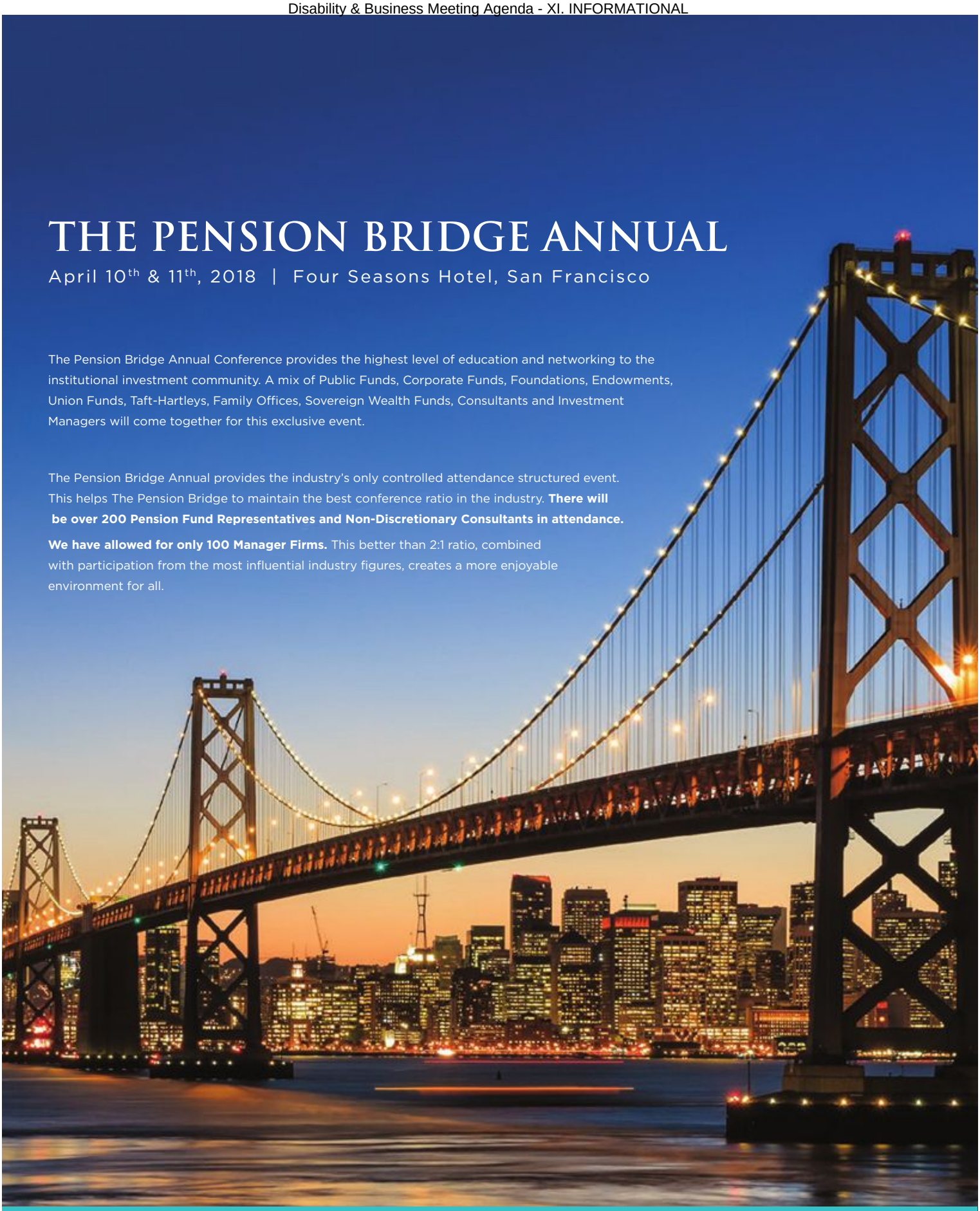
THE PENSION BRIDGE ANNUAL

April 10th & 11th, 2018 | Four Seasons Hotel, San Francisco

The Pension Bridge Annual Conference provides the highest level of education and networking to the institutional investment community. A mix of Public Funds, Corporate Funds, Foundations, Endowments, Union Funds, Taft-Hartleys, Family Offices, Sovereign Wealth Funds, Consultants and Investment Managers will come together for this exclusive event.

The Pension Bridge Annual provides the industry's only controlled attendance structured event. This helps The Pension Bridge to maintain the best conference ratio in the industry. **There will be over 200 Pension Fund Representatives and Non-Discretionary Consultants in attendance.**

We have allowed for only 100 Manager Firms. This better than 2:1 ratio, combined with participation from the most influential industry figures, creates a more enjoyable environment for all.



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THE PENSION BRIDGE ANNUAL

April 10th & 11th, 2018 | Four Seasons Hotel, San Francisco

LEARN FROM THE EXPERTS

ABOUT THE MOST IMPORTANT ISSUES, CHALLENGES, TRENDS, OPPORTUNITIES, AND STRATEGIES THAT WILL SHAPE OUR INDUSTRY FOR TODAY AND THE FUTURE:

- Macroeconomic View and Future Expectations for the Equity and Bond Markets
- What does the Future hold for Artificial Intelligence and Machine Learning in Investment Management?
- Active vs. Passive Management – Will it take a Market Sell-Off to Show the Need for Active Managers?
- Executive Directors/CEOs Views on the Current and Future State of the Industry
- Women and their Increasing Role in Investment Management Overview of the Cybersecurity Landscape and the Necessary Steps for Protection
- Challenges of the Risk Allocation Framework and Considerations when Building a Risk Culture from Within
- Does Risk Parity Make Sense Now? – Scenario Analysis for Risk Parity Performance
- Why Tail Risk Hedging is Important Now – Costs vs. Benefits
- In-Depth View of the Unconstrained Fixed Income Space and ways to Simplify the Sub-Allocations
- Does ESG Add Value? Best Approaches for ESG Integration in the Investment Process
- Emerging Markets Valuations Relative to Risk – a Look at Various Regions/Countries
- Why should Plans Sponsors Actively Manage Currency? – Hedging vs. Alpha
- The Benefits and Criticisms of Multi-Asset Strategies
- Current and Future State of the Hedge Fund Industry
- Impact from Global Central Bank Policy on Risk and Opportunities Across Credit Markets Going Forward
- Which Sectors, Strategies and Geographies will create the Best Opportunities in the Distressed Space?
- Investing in Commodities via Private Equity vs. Public – Benefits and Drawbacks of Each
- Most Attractive Sectors and Opportunities in Energy
- Top Trends to Watch in Real Estate; Strategies that Offer the Best Value
- Listed vs. Unlisted Infrastructure – which will Deliver Better Returns in a Volatile Down Market?
- Protecting your Existing Private Equity Portfolio and Avoiding Getting Involved in Expensive Deals
- Impactful Industry CIOs Provide their Insights on their Allocations, Risks and Macro-Based Decisions

We remain in a low growth, low return environment with unfavorable demographics in the U.S. The Pension Bridge Annual will uncover various structural transformations and investment ideas that will be beneficial for long-term fiscal sustainability.

In addition to the listed themes above, we will be covering many more challenging issues that are crucial to the investment decision making process during these uncertain economic times. We will learn from the best about how to adapt in our industry which is always evolving and transforming.

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THE PENSION BRIDGE ANNUAL HAS TWO GOALS IN MIND

First is to provide the highest level of education with the top speaker faculty. This highly regarded group will bring forth influential insights and concepts. The second goal is to help build relationships between the pension plans, consultants and investment managers. We have provided the best possible environment for this event which is designed to be conducive for networking. We will cap off the event with a fun and enjoyable networking outing necessary for maintaining relationships and connecting with your peers and prospective business contacts.

We look forward to a strong event and a very productive one from both an educational and relationship perspective. We have structured this conference in a manner that will be most productive and beneficial for you. We hope that you will join us to be amongst your industry peers to learn about the most up-to-date insights, investment strategies, and trends.

TUESDAY, APRIL 10TH

Four Seasons, San Francisco

7:00 AM – BREAKFAST

SPONSORED BY: ClearBridge Investments

8:00 AM – OPENING REMARKS

8:05 AM – KEYNOTE SPEAKER

Speaker:
Ashbel C. "Ash" Williams, Executive Director & Chief Investment Officer, **Florida State Board of Administration, (SBA)**

Interviewed by:
Kristen Doyle, CFA, Partner, Head of Public Pension Funds, **Aon Hewitt Investment Consulting**

8:35 AM – KEYNOTE SPEAKER – MACROECONOMIC VIEW

- Easy Money Central Bank Policy and the Consequences Down the Road
- Debt to GDP
- Corporate Debt Growth for Financial Engineering
- Oil and High Yield Defaults Outlook
- Are we in a Credit Bubble?
- Margin Debt and Valuation Levels
- Algo's and Passive Investment as a Market Risk
- Inflation/Deflation Argument
- Outlook for Europe and Emerging Markets
- China – Debt Levels, Leverage, and Real Estate Bubble as a Wildcard
- Japan's Demographics and Debt – what might be the Far Reaching Effects?
- Currencies
- Derivatives Risk
- Expectations for Equities and Bonds
- Expectations for the Next Black Swan?
- What are your Best Bets for a Low Growth, Low Return Environment?

Speaker:
J. Kyle Bass, Founder, Chief Investment Officer, **Hayman Capital Management, L.P.**

9:05 AM – ARTIFICIAL INTELLIGENCE IN ASSET MANAGEMENT

- What is the latest you've seen with Big, Established Asset Managers and Hedge Funds Pouring Money into Technology and Data Management to Develop Next-Generation Investment Systems?
- How Long Before AI becomes Mainstream in Hedge Fund Asset Management?
- Investing with Artificial Intelligence via Natural Language Processing so that Algorithms can Systematically Look for Verbal Cues. How are these Quant Hedge Funds doing as far as Inflows and Returns?
- Giving Computers and Data Science More Significant Roles over Humans in the Quant Space – How Big has the Movement Become at the Big Firms for Humans to be Replaced by Robots and Quant Researchers? Might this spread from Equity Trading to Fixed Income?
- Do you believe the AI Quants Combined with Leverage and the Inflows into Smart Beta might one day lead to a Massive Flash Crash or Quant Quake?
- When the next Quant Hedge Fund Sell-Off Unfolds, will the Risk Issues that are now used to address the 2007 Crisis still be applicable today?
- Do you have any Performance Concerns for Funds Relying on Algorithms during a Bear Market? Will the Risk Management side still largely be run by Humans?
- What does the Future Hold for Artificial Intelligence and Machine Learning?
- Do you believe Automated Technology will Eventually Play a Role in the Outsourced CIO Business and Reduce Costs?
- Will Robo-Advice Technology go Beyond Passive Investing and Move into Active? Might it be used by Consultants?
- What are the Roadblocks for AI?

PRESENTED BY: BLACKROCK®

Speaker:
Jeff Shen, Managing Director, Head of Emerging Markets, Co-Head Scientific Equity, **BlackRock**

9:35 AM – ACTIVE VS. PASSIVE MANAGEMENT

- When making the Active/Passive Decision, what Factors should be Considered?
- Is Active Management a Dying Breed or is it simply at a Cyclical Low?
- Do you believe that the Extraordinary Growth in Passive Management is One of the Factors Contributing to Drive High Valuations?
- Agree or Disagree: With Volatility, Risk Premia, and the Dispersion of Risk being Low for an Extended Period of Time, it has made it Difficult for Active Managers to Shine
- When Volatility and Risk Premia Rise, will a Larger Number of Active Managers Stand Out?
- Do you believe it will take a Substantial Market Sell-Off for Investors to Realize their Need for Active Managers?
- What do Smaller Managers need to do to Compete with Flows going to Large Active Managers?
- How should Active Managers Differentiate Themselves to Justify the Fee Premium over Low-Cost Indexed Funds?
- Importance of Passive Managers to Identify Mispricings and Dislocations
- What are the Hidden Risks of both Passive Investing and Smart Beta?
- What are some Customization or Niche Strategies that will be necessary for both Active and Passive Managers to Adapt?

Moderator:
William Chau, CFA, Senior Manager, Retirement Investments, **Intel Corporation**

Speaker:
Mark Higgins, CFA, Consultant, Principal, **RVK, Inc.**

10:10 AM – REFRESHMENT BREAK

SPONSORED BY: GCM GROSVENOR

10:40 AM – EXECUTIVE DIRECTOR/CEO ROUNDTABLE

(A) PENSION HEALTH/GOVERNANCE

- Do you believe Plans will be able to Meet or Beat the Assumed Rate of Return over the next 5 to 10 Years? What about in the Longer Term?
- Should we be Spending Political Capital to Lower Assumed Rate of Return Targets?
- Dealing with Legislature – what is your Biggest Concern? Is Trust a Factor?
- How do you approach Increases in Longevity and Costs for Healthcare Drugs for Retirees? Any possible Solutions?
- Agree or Disagree with this Concept: "We need to disconnect our healthcare and retirement plans from the employer-sponsored model. Employers are not in the health-care business; they aren't in the retirement business."
- Do you see the Benefits of Adopting a Hybrid DB/DC Plan? What are the Drawbacks?
- Best Governance Practices to Keep Plans Optimally Invested, Managed, Funded and in Regulatory Compliance
- How do you ensure your Board Members receive Continual Education of their Fiduciary Roles/Duties and keep them Updated on Risk Factors?
- Have you Educated Internally on the Risks or Steps for Cybersecurity Protection? Do you have Cybersecurity Questions or Guidelines in your Due Diligence of your Managers?

(B) LONG-TERM STRUCTURAL CHANGES FOR FISCAL SUSTAINABILITY

- Do you have Internal Management Capabilities?
- Will we see a Shift to Hunt for Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures? Greater Competition to Follow?
- Have we made Strides to Solve the Talent and Compensation Struggle? Will we see More Compensation-Based Pay to Attract and Retain Talent to be Competitive with the Private Sector?
- Will we see a Continued Shift towards Investing in Passive, Low-Cost Vehicles, Index Funds, and ETFs over Actively Managed Funds? Is it Passive here to stay?
- Requirement for Better Transparency
- Do you believe we'll see a Consolidation of Public Pension Plans Under One Entity, (such as INPRS or IMCO in Canada)? What are the Benefits?
- Making Governance More Effective – Identifying Key Board Member Roles with Expertise in Particular Areas with an Independent Board
- What is your Biggest Threat to your DB Plan? What keeps you up at night?

Moderator:
Gary A. Amelio, Chief Executive Officer, **San Bernardino County Employees' Retirement Association**

Speakers:
Paul Matson, Executive Director, **Arizona State Retirement System**
R. Dean Kenderdine, Executive Director, **Maryland State Retirement and Pension System**
Brian Guthrie, Executive Director, **Teacher Retirement System of Texas**

11:30 AM – WOMEN AND THEIR INCREASING ROLE IN INVESTMENT MANAGEMENT

- What are some Ways we can Encourage Organizations to Embrace Diversity?
- Have we seen any Statistical Performance for Women and Minority-Owned Investing? What about the Performance of Female Hedge Fund and Private Equity Managers?
- Should Pensions put Pressure on Investment Managers to Formalize Family-Leave Policies to Encourage Diversity or is that the Responsibility of the Manager?
- Is there a way to Close the Income Gap?
- What is the Most Common Reason why Investors do not have Specific Women-Owned Investment Mandates? How Big an Issue is Lack of Supply?
- With just 6.5% of Global Private Equity Firms having Partners or Managing Partners that are Women (source: Preqin), how do you approach Beating those Odds?
- What are the Recent Findings from Women in Alternative Investments Report by KPMG? Any Takeaways?
- What is the Gender Retirement Gap and what are the Ways Women can Overcome these Hurdles?
- What Programs or Organizations do you believe are Helpful in the Advancement of Women in the Industry?
- What Can Institutions do to Support Women's Advancement to the Top Levels of Leadership?
- How might Specialization be an Important Way for Women to offer a Diversified Strategy Approach?
- What Career Advancement Advice would you give to Younger Women who are Passionate and Fairly New to Investment Management?

Moderator:
Meredith A. Jones, Partner & Head of Emerging Manager Research, **Aon Hewitt Investment Consulting**

Speakers:
Anne Sheehan, Director of Corporate Governance, **California State Teachers' Retirement System, (CalSTRS)**
Sharmila Chatterjee Kassam, Deputy Chief Investment Officer, **Employees Retirement System of Texas**
Susan E. Oh, CFA, Senior Portfolio Manager, **Pennsylvania Public School Employees' Retirement System**

12:10 PM – CYBERSECURITY

(A) INVESTMENT MANAGERS

- What are the Biggest Cybersecurity Challenges Investment Managers Face Today?
- Overview of the Cybersecurity Landscape – Phishing, Botnet Hackers, Insider Threats, Compromised Business E-mails, and Attempts to Steal Healthcare Data
- Ransomware and the Use of Bitcoin for the Hijacked Information's Return
- What Initiatives should Firms take to Protect Against Phishing and Other Critical Threats?
- With the SEC Flagging Third Party Vendors as a Crack in a Firm's Cybersecurity Shield, what Detailed Measures should be taken to Help a Firm to Avoid a Cybersecurity Breach?
- What are the Biggest Challenges to the Implementation of Corporate Security Analytics?

(B) PENSION PLANS

- What are the Necessary Steps for Cybersecurity Protection for Pension Plans?
- As a Pension Plan, Endowment, Foundation or Family Office, what Cybersecurity Questions should you ask in your Due Diligence of your Investment Managers?
- Have we seen any Education of the Risks, Steps for Protection and Internal Accountability yet?
- Pension Plans' Responsibility starting at the Request for Proposal (RFP) Stage – providing Details for Data Protection and Privacy Provisions
- Should Plan Sponsors have Cybersecurity Insurance Coverage? What is typically Covered in a Policy?

Speaker:
M. K. Palmore, CISM, CISSP, Assistant Special Agent In Charge – Cyber Branch, San Francisco, **FBI**

12:30 PM – LUNCH

SPONSORED BY: IR+M INCOME RESEARCH + MANAGEMENT

1:40 PM – RISK MANAGEMENT AND ADOPTING A RISK CULTURE

(A) KEY CONSIDERATIONS AND TOOLS FOR MANAGING RISKS

- Overview of the Transformation from an Asset Allocation-Centered Process to a More Comprehensive Risk Allocation-Based Process
- Discuss the Challenges that have Prevented Wide-Spread Adoption of a Risk Allocation Framework?
  (1) What Governance Challenges have you seen?
  (2) What are the Implementation Challenges?
  (3) What are the Key Challenges as it relates to Measuring Risk?
  (4) Balance Between Cost and Comprehensive Risk Approach
  (5) Challenges of Performance Monitoring, Risk Data and Systems – getting good Risk Information Across All Asset Classes and Fund/Investment Structures, (Pooled Vehicles vs. Separate Accounts)
- How can considering Diversification and Risk Independently help Investors Build More Efficient Portfolios?
- What Developments have we seen for Combining Several Risk Premiums as a part of Portfolio Diversification?
- How has taking a Risk Allocation Approach changed the Structure of your Plan's Fixed Income Investments? Understanding Return Seeking Fixed Income and Traditional Risk Reducing Fixed Income
- What Irregularities have we seen in Portfolios as Asset Classes are Redrawn and Renamed via Risk Allocation? Are we still too Over-Reliant on Equities?

(B) TOP PENSION RISKS WE SHOULD BE MOST WARY OF

- Understanding Asset Class Correlation and Behavior Risk – Tendency of Interest Rate and Inflation Shocks Driving Both Equities and Bonds in the Same Direction, (Correlations Change)
- Drawdown Risk
- Transparency and Liquidity Risk – Basing it on a Cost/Benefit Evaluation
- What's the Best Approach to Liquidity Risk as it applies to Meeting Future Cash Flow Obligations?
- Leverage Risk – what are the Best Approaches to keep these Risks within Acceptable Parameters?
- Monitoring Counterparty Risk being taken by Managers – any New Measures?
- Equity, Credit, Duration, Inflation/Deflation, Currency, Geopolitical Risk Considerations
- How does Stress Testing or Scenario Analysis factor into your Process?
- What should Keep CIOs and Staff Up at Night?

(C) COMMUNICATION

- How do you Communicate your Risk Tolerances with your Board, Managers, and Media?
- How has the Role of Fiduciary Responsibility Changed in this New Era of Risk?
- What should Boards/Organizations Consider when Building a Risk Culture?
- How can Fiduciaries Adapt and Safeguard Against Today's Challenges?
- How do you go about Educating a Board on Risk?
- Have you Developed a Process for Monitoring Risk being taken by your Money Managers?
- What Metrics Aid in the Decision-Making Process?
- How does a Plan's Size affect the Approach to Pension Risk Management?

Moderator:
Vijoy Chattergy, CAIA, Chief Investment Officer, **Employees' Retirement System of the State of Hawaii**

Speakers:
Luis J. Roman, Ph.D., Senior Investment Officer, Director of Risk Management, **Massachusetts Pension Reserves Investment Management Board, (PRIM)**
Timothy F. McCusker, FSA, CFA, CAIA, Chief Investment Officer, Partner, **NEPC, LLC**
Bruce H. Cundick, CFA, CPA, Chief Investment Officer, **Utah Retirement Systems**

2:30 PM – **RISK PARITY**

- Risk Parity Explained
- Do you Consider it a Drawback that there's Only a Positive Weight to an Asset with No Ability to go Short?
- Active Strategy? Passive? Extent to which a Risk Parity Portfolio is Managed?
- Risk Parity's Role in a Portfolio and Benchmarking – why might these tend to Complicate and Potentially Discourage Investor Adoption/Implementation? What Progress have we seen towards Adopting an Appropriate Benchmark?
- Does Risk Parity Make Sense Now if we Expect Low Market Returns in the Future?
- Is it possible that Bonds will Become Less Likely to Protect against a Large Drawdown in Equities?
- Should we be Worried about Leverage or Leveraging the Inappropriate Assets? Is there an Over-Reliance on Bonds with Current Valuations?
- Do Commodities Make Sense in Risk Parity if Inflation Remains Low?
- Performance in the Past Decade and Longer – how does Risk Parity look over time Compared to Other Asset Mix Models?
- Leverage and Illiquidity Do Not Mix – any Approaches to Avoid this Combination?
- Do you View it as a Flaw that Portfolio Construction Approaches only consider Volatility Risk, Not Tail Risk or Drawdown Risk?
- Could Tail Risk Parity be More Effective? Thoughts on the Concept of Measuring Expected Tail Loss Rather Than Volatility – Cheaper Hedges for Protection, Reducing Tail Risks while Retaining More Upside than Risk Parity?
- Aside from the Money Concentrated in the Top "Founding Firms," how should we Approach Managers with Short Track Records?

3:05 PM – **REFRESHMENT BREAK**

3:35 PM – **TAIL RISK HEDGING**

- Why is Tail Risk Hedging Important Now?
- Understanding Tail Risk Frequency, Severity and Impact
- Why are the Markets Vulnerable to a Substantial Decline Today? Does the Impact of Central Bank Tapering and the Fed Reducing its Balance Sheet Weigh on you?
- Understanding the Risk of Correlated Global Markets for Developed Countries
- How can you Quantify the Costs vs. the Benefits?
- What are the Merits of an Option Overlay Strategy In Lieu of Owning a Tail Risk Hedge?
- What Risks can be Efficiently Hedged in the Financial Markets?
- What Types of Strategies and Approaches are used to Hedge?
- Where have you seen it Work Successfully and Not So Well?
- What are the Implementation Challenges?
- Why is there often Difficulty Implementing a Tail Risk Program within the context of a Committee and how can we overcome this?
- Are there Alternative Ways to Deal with Tail Risk?
- Using Information from the Derivatives Markets to assess Stress Points – where we are seeing Tail Risks Building?
- Does the Growth in the VIX Universe pose a Risk?
- Pension Plans developing a Contingency Plan – What are the Best Practices to Navigate through Stressful Periods?
- Any Experiences you can Share among your Clients with Tail Risk Hedging?

4:05 PM – UNCONSTRAINED FIXED INCOME

- Assessing the Current Environment – Fed and Global Central Bank Policy, Interest Rates, Spreads, U.S. Dollar, Foreign Investment in U.S. Treasuries, Global Fixed Income Landscape, and Default Rate Expectations
- What are your Best Ideas for ways to Simplify the Sub-Allocations within the Fixed Income Space? Any Preferred Allocation Breakdowns or Weightings?
- With the Proliferation of Products which are Diverse, what is the Return Objective?
- Portfolio Construction – Need for Increased Disaggregation of Alpha Sources
- Understanding Return Sources/Attribution and Correlation that Unconstrained Funds have had with other Fixed Income Sectors and Equity Markets
- Impact of the Non-Linearity of Risk Correlations and Volatility Not Being Stable through time. Is that something you look to Measure in case of Market Dislocations?
- How are you Taking Advantage of Current Market Dislocations?
- What are the Implications of Reduced Liquidity?
- How should Investors think about Transparency of Positioning in Unconstrained Fixed Income?
- What Progress have we seen for a Factor or Risk Premium Approach for Assessing Risk?
- Do you see a Supply/Demand Imbalance in Long-Duration Fixed Income?
- Using Structured Products, Swaps, and Derivatives to Create Alpha and Hedge Volatility
- Emerging Markets Local Fixed Income – what are the Opportunities? Currency Risk Factors? Should Currency Exposures be Hedged or Unhedged?
- What are your Expectations and Outlook for Corporate Debt?
- Taxable Municipals vs. Corporate Bonds – Which Make More Sense Now?
- Do you view Bank Loans as a Hedge in Rising Rate Environment?
- If Trump Moves on GSE Reform (as he's indicated), how would that Impact the MBS Market?
- Where do you see the Greatest Risks in the Debt Markets and what might be the Trigger Points that Enhance that Potential?
- Understanding how to Select Alternative Managers – Multi-Sector, Multi-Region and Multi-Currency Skill Set
- How do you Define Success for Unconstrained Fixed Income Strategies?

Moderator:
Scottie D. Bevill, Senior Investment Officer - Global Bonds and Real Return, **Teachers' Retirement System of Illinois**

4:50 PM – ENVIRONMENTAL, SOCIAL AND GOVERNANCE, (ESG)

- Do we have Proof that ESG Integration Adds Value?
- ESG Fund Performance vs. Traditional Funds
- Do Firms with Good Performance on SASB Topics Outperform Firms with Poor Performance on those Topics?
- How do you Approach ESG from a Fiduciary Standpoint and for the Development of your Plan's Investment Beliefs?
- How should ESG be best Incorporated into the Investment and Due Diligence Process?
- Factors Needed to make ESG Mainstream and Integrated into Every Investment Process – Agreement on Weightings, Scoring and Definitions
- What are the Perceived Obstacles to applying an ESG Framework to the Stock Selection Process?
- Considerations for Investing in a Passive ESG Index – thoughts on Low Carbon Index? Combining ESG with Smart Beta?
- Climate Change and Investment – what's the Relationship and how do you Integrate Climate Risks into your Process?
- What should Pension Funds be asking their Existing Active Managers in terms of whether they are looking at Climate Risk or Opportunity?
- Understanding the Importance of Supply Chain Management
- Will there come a time when Plan Sponsors Only Invest with UN PRI Investment Manager Signatory Firms? Has the UN PRI been Strict or Lenient on Signatories for the Integration of their Principles?
- What are the most Recent Trends we've seen for the Sustainability Movement in Real Estate and the Demand to be Green?
- Understanding Relevant Benchmarks for ESG Risk Measurement

Speaker:
Thomas Henley, Senior Managing Director of Strategic Opportunities, **UAW Retiree Medical Benefits Trust**

5:25 PM – **COCKTAIL RECEPTION**

6:40 PM – **COCKTAIL RECEPTION CONCLUDES**

WEDNESDAY, APRIL 11TH

Four Seasons, San Francisco

7:00 AM – **BREAKFAST**

8:00 AM – **EMERGING MARKETS**

- Macro Environment and Recent Developments
- How have EM Headwinds Impacted your Deployment?
- What would be the Effects on Emerging Markets if we see Weak or Negative Growth in the U.S or Instability in Eurozone?
- What are Realistic Return Expectations? How might that Differ based on Region?
- How do Valuations look Relative to Risk?
- Are you Investing in Higher Growth Markets such as Southeast Asia, Africa or Latin America? Which particular Countries? Do you see Higher Risk, Returns and Diversification Factors here?
- Outlook for China – are you Concerned about their Credit and Real Estate Bubbles?
- What Dangers do you see with the EM Equity Benchmark with China's Heavy Weighting?
- India to Benefit from its Fast Rate of Urbanization? Still in Need of Substantial Reform?
- Identify what Country or Region you see Favorable Demographic Trends such as a Growing Middle Class, Promising Consumer Buying Behavior and Economic/Fiscal Reforms
- Which Markets in Frontier Countries can you Profit from Strong Growth and Access a Lower Correlation?
- What can be done to Mitigate Currency Risks?
- The Case for Emerging Markets Corporate Debt
- What Metrics are you using to Determine Relative Value in Sovereign Bonds?
- Public vs. Private Emerging Markets – Benefits and Drawbacks of each
- Active vs. Passive Debate
- What is an Appropriate Long-Term Allocation to Emerging Markets? What should that Allocation look like, (Public Equity, Fixed Income, Private Equity, Frontier Markets, Alternatives, etc.)?
- Choosing an Emerging Markets Fund or Manager – should you be Investing by Region, Country or Sector?
- Given the Current Environment, will Emerging Markets Outperform Developed Markets?

Moderator:
Hayden Gallary, CFA, Managing Director, **Cambridge Associates LLC**

Speaker:
Candace Ronan, CFA, Portfolio Manager, Global Equity, **California State Teachers' Retirement System, (CalSTRS)**

8:40 AM – CURRENCY AND CURRENCY ALPHA

(A) CURRENCY MARKET OVERVIEW

- What are the Factors Driving Currencies?
- What is the Relationship Between Volatility and Currency Returns?
- Can Currencies be Forecasted via Fundamentals, Cycles and Trends?
- Benefits of Active and Dynamic Currency Management
- Widely Confused Difference Between Currency Hedging and Currency as an Asset Class – How do they Differ in terms of Implementation Approaches?
- What are the most Common Reasons Asset Owners give for Not Actively Managing Currency? Are these Reasons Valid or Not?
- What is the Impact Forex can have on Overall Risk and Returns for International Equity and Bond Portfolios?
- Different Skills Required for Currency Hedging vs. Currency Alpha – should a Different Manager be used for Each Approach or is it Possible to be Skilled in Both?
- What are the Merits and Demerits of Adopting a Hedging Program vs. an Alpha Program?

(B) CURRENCY OVERLAY HEDGING

- Given Plan Sponsors Non-U.S. Exposure, what Factors should be Considered in the Determination of Implementing a Currency Hedging Program?
- Is there an Optimum Currency Hedge Ratio for a Plan?
- How much of a Reduction in Portfolio Volatility and Risk should be Expected?
- Can it be More Beneficial to be Unhedged?
- Hedging Costs – how should this factor into your Decision?

(C) CURRENCY ALPHA

- How does Employing a Currency Alpha Strategy fit into an Asset Allocation Framework?
- Benefits of Non-Correlated Returns to Equities, Fixed Income and Alternative Investments
- How does Investing in Currency Diversify and Reduce Risk? Natural Diversifier for the Duration Risk in Bonds?
- How do you Manage Risk Factors?
- What are the Return Expectations?
- When considering Investing in an Active Currency Strategy, what should you look for in a Manager?

Moderator:
Aoifinn Devitt, Chief Investment Officer**, Policemen's Annuity and Benefit Fund of Chicago**

9:10 AM – MULTI-ASSET STRATEGIES

(A) CONSTRUCTION AND SKILLS

- Why is Multi-Asset Investing Attractive to Investors?
- What are the Common Sub-Asset Classes Included in Multi-Asset Strategies?
- Do these Strategies Reduce Correlation, Lower Volatility and Limit Downside Risk or Drawdown? If so, by How Much?
- How do Investors utilize Multi-Asset Strategies in their Portfolios?
- With Dynamic and Tactical Asset Allocation Skills yet to be Put to the Test in recent years, how do you see this Space Evolving in a more Treacherous/Volatile Market?
- Aside from Asset Allocation Skills, what other Skills are Required for the Ability to Generate Alpha and be Successful?
- Constructing the Portfolio – Risk Factor Approach
- How do you Measure Performance?

(B) CRITICISM

- Do you believe Central Bank Policy has Limited the Ability of Multi-Asset Managers?
- Do these Strategies Rely Too Heavily on Market Timing?
- Do you Agree or Disagree with the Willis Towers Watson Report saying Multi-Asset Managers have actually Harmed Performance via Tactical Asset Allocation Decisions?
- The Skill of Moving Opportunistically Between Markets, a Function of Asset Allocation Alpha is an All-to-Rare Commodity – any Truth to this?
- Do you believe that many Multi-Asset Funds have Not Sufficiently Incorporated Risk Controls into the Design of their Products as the Willis Towers Watson Report Noted?
- Reliance on Stable Correlation Relationships although there is No Certainty those Relationships will Persist
- Is Excessive Leverage a Concern?
- High Fees
- Is Transparency often Obscure or Hazy?

PRESENTED BY: Janus Henderson INVESTORS

Speaker:
Ashwin Alankar, Ph.D., Senior Vice President, Global Head of Asset Allocation & Risk Management, **Janus Henderson Investors**

9:40 AM – REFRESHMENT BREAK

10:10 AM – **HEDGE FUNDS**

(A) CURRENT AND FUTURE STATE OF THE HEDGE FUND INDUSTRY

- Why have Hedge Funds Underperformed? Will this Shift?
- Is Hedge Fund Investor Risk Appetite and Hedge Fund Manager Willingness to Take On Risk High Enough to Generate an Acceptable Level of Return for Hedge Funds?
- Will we see More Hedge Funds Continuing to Shut Down?
- What is an Appropriate Fee Structure for Hedge Funds? How do you Assess the Tradeoff Between Fees and Liquidity?
- As an LP, do you find it Difficult to get Hedge Fund Managers to Provide Accurate Fee Information in a Timely, Efficient Manner? Do you believe we're In Need of a Standardized Reporting Template like ILPA for Private Equity?
- Do Smaller Hedge Funds Outperform and if so, why?
- What is Driving the Increase in Demand for Strategies Uncorrelated with the Capital Markets? Which Low Correlated Strategies are Most Attractive?
- With Crowding on the Rise for Particular Stocks, do you see this as a Risk and a Contrarian Indicator for those Equity Holdings when the Cycle Turns?

(B) IMPLEMENTATION OPTIONS

- Long-Short Equity Hedge Funds – what Differentiates Managers that have been able to Outperform?
- Do you find Opportunities within the Global Macro Space Attractive and if so, why?
- Managed Futures – Diversification and Performance during Periods of Market Stress or Crisis Events. How much can it Decrease the Depth of Portfolio Drawdowns and Volatility?
- Liquid Hedge Fund Products such as UCITS, 40 Act and Hedge Fund Replication – are they a Viable Alternative and Under what Circumstances? How has their Performance and the Lower Fees Fared to Hedge Funds?
- The Role of Alternative Beta/Risk Premia Strategies in a Hedge Fund Portfolio – what are the Appropriate Expectations from a Sharpe Perspective?
- If there was a Hedge Fund Strategy you would Invest in over the next Few Years, which one would it be and why?
- What is the Future of the Fund of Funds Space? How is it Changing? Where will Fees be? What will it take to Stay Competitive?
- How do Emerging Managers Differentiate Themselves in the quest for Institutional Capital?
- What sort of Downside Protection, Drawdown or Return Range do you expect we'll see from each of the Different Hedge Fund Strategies during the Next Market Downturn?
- Implementation Considerations for Due Diligence, Portfolio Function and Manager Selection. What are the Key Traits you should be looking for?

(C) IMPLEMENTATION OPTIONS

- What does a Diversified Portfolio of Hedge Funds look like? How Many Funds do you need? Should you focus on a few better Strategies or is the Size of your Portfolio a Factor?
- What is the Role of Separate Managed Accounts? What are the Benefits? Are they Better than Commingled Funds?
- Any Recent Trends you've seen for Pension Plans as far as Fees, Transparency, Increased Partnership, etc.?
- Importance of Operations Due Diligence. Any recent Developments? How often should Operations be Reviewed?
- Transparency and Risk Aggregation Data – are they Accurate?
- What Monitoring Tools or Reports do you feel give you the most Bang for your Buck when Monitoring Individual Managers and Portfolios?
- What Trends do you see Developing in Regards to the way we Evaluate Liquidity Provisions for Hedge Funds?

Moderator:
Dr. John Claisse, CEO, **Albourne America LLC**

Speaker:
Neil Messing, Head of Hedge Funds, **New York City Office of the Comptroller, Bureau of Asset Management**

10:55 AM – CREDIT STRATEGIES

- Current State of the Credit Market
- Where are we in the Credit Cycle and how does it Differ from the Past?
- What will be the Catalyst that will cause Credit Spreads to Widen and Defaults to Rise?
- What Impact do you see from Global Central Bank Policy on Risk and Opportunities Across Credit Markets going forward?
- How will the Sector you Invest in Perform when Rates Rise? Is that a Concern and how do you Manage that?
- Where are we at with Regulatory Issues Today? How might Policy Impact Fund Managers and Investors Mandates?
- What Subsectors of Credit are Most Attractive given the Stretched Valuations? Any Areas you are Avoiding?
- High Yield Market – is it possible to see a High Yield Meltdown with a Lack of Liquidity? Understanding the Risk Factors and the Strong Correlation to Equities
- Bank Loans Overview
- State of Securitized Markets – RMBS, CMBS and CLO Overview
- Outlook and Considerations for Structured
- Outlook for Emerging Market Debt
- Opportunities and Risks for Europe and Asia
- Do you see Investors being more willing to Trade Liquidity for Yield and should that be of Concern?
- How much should Plan Sponsors be Allocating to Credit? What is the Optimal Structure to a Credit Portfolio?
- Considerations for Selecting a Manager and Strategy
- What are the Trade-offs between Mid-Market and Large Market Credit Investing?
- Public vs. Private Credit
- Credit Investment Mandates – are they Too Narrow? Which Bucket or Asset Class does it fit into and should it be Defined as Opportunistic Credit?

Moderator:
Steve Woodall, CFA, CAIA, Portfolio Manager, **Virginia Retirement System**

Speaker:
Stephen L. Nesbitt, CEO, CIO, **Cliffwater LLC**

11:35 AM – DISTRESSED INVESTING – OPPORTUNISTIC AND SPECIAL SITUATIONS

- When will the Vast Sums of Undeployed Capital come in off the Sidelines? Do you Need an Economic Downturn?
- Does the Interest Rate Environment and Fed Balance Sheet Unwind Affect your Plans?
- What are your Expectations for Default Rates going forward?
- Where do you see the Largest Demand from Clients? What are they Most Interested In?
- Where do you see the Best Opportunities over the next 12-24 Months?
- Which Sectors, Strategies, and Geographies will create the Best Opportunities? Any Areas that should be Avoided?
- What Distressed Opportunities are we seeing the Energy Sector?
- What are the Opportunities and Risks in Europe? Any Countries, Sectors or Types of Deals that Stand Out?
- Do you see Opportunities in Asia or Elsewhere Globally?
- What's the Potential Impact of the Debt Piled up by Corporations for their Share Buybacks?
- Will the Prevalent Covenant-Lite Deals create Problems during the Next Cycle?
- What are your thoughts on the Recent Leverage Trends?
- Do you worry about a Liquidity Problem in ETFs and other Structured Credit Vehicles if there is Credit Event?
- Has the Regulatory Environment Changed the Opportunity Set? How has it Impacted your Firm?
- Marketable Distressed Strategies – how Correlated are they to Public Equities? Might they have Merit or is it a Fad?
- What are the Biggest Challenges you face to Delivering Returns?
- How do Investors go about Choosing the Right Distressed Strategy, Investment Style and Approach?
- How will the Different Implementation Approaches affect Expected Returns? Control vs. Non-Control? Private vs. Public?
- Distressed Debt Vehicles in Hedge Fund Format vs. Private Equity Drawdown Structures – what are the Pros and Cons of Each?
- What Skill Sets/Characteristics should Pension Plans look for in a Distressed Manager?

Moderator:
Keith M. Berlin, Director of Global Fixed Income and Credit, **Fund Evaluation Group, LLC**

12:10 PM – **LUNCH**

SPONSORED BY: GEODE Capital Management, LLC

1:15 PM – **COMMODITIES**

- Current Market Environment
- With the Lack of Evidence that Inflation has had a Significant Uptick, what Factors do we need to see for us to Believe that Commodities have Bottomed and we are ready to begin a Reflationary Regime?
- Based on Previous Down Equity Markets, what Performance can we Expect from Commodities if we have Market Turbulence? How Strong is the Correlation?
- What are your Views on particular Sub-Sectors and where are the Pockets of Value?
- How are Renewables Affecting Specific Commodities?
- What Currency or Weather Related Impacts are you seeing on Specific Commodities?
- Investing in Commodities through Private Equity vs. Stocks or Indexes – Benefits and Drawbacks of Each
- True or False – Natural Resource Stocks are Not an Efficient Way to get Commodities Exposure
- Are MLPs more Highly Correlated to Commodity Prices than we thought?
- Investing in Long/Short vs. Long Only
- Active vs. Passive
- Any Recent Developments in Commodities Risk Premia? Smart Beta as applied to Commodities?
- What are the Key Criteria that would lead to Manager Outperformance?
- Risk Factors

1:45 PM – **ENERGY**

- Macro Landscape in Energy – is now the Time to be Investing?
- What are the Best Opportunities and Most Attractive Sectors you are seeing Today?
- What Risks do you see that some Investors might not be Considering?
- How Important are the Credit Markets in the Deployment of Private Capital? What have you seen in regards to the Growth of Credit/Lending Energy Strategies?
- How has the Current Commodity Market Distress Impacted the Balance Sheets of Oil and Gas Companies?
- Public vs. Private Investing in Energy – what are the Advantages and Disadvantages of each?
- Thoughts on Midstream MLPs with their Business of Oil Storage Services and its Cashflow?
- How has the Oilfield Service Industry Impacted Upstream Oil and Gas Operators?
- What does the Future Hold for Shale and Natural Gas?
- ESG Considerations, Climate Change and Portfolio Decarbonization – how do you Deal with LP Concerns on this Issue? Has it Impacted your Fund Commitments?
- How will the Growth of Renewables or Alternative Forms of Energy fit into your Portfolio? Will the Best Opportunities be in the U.S. or in Emerging Markets?

Speaker:
Tom Masthay, CFA, CAIA, FRM, Director, Real Assets, **Texas Municipal Retirement System, (TMRS)**

2:15 PM – REAL ESTATE

- Global Macro Views and Trends in Real Estate
- Is a Correction on the Horizon and How Significant? If so, what is the Single Biggest Risk Factor?
- Challenges of Meeting Target Rate of Return
- What are your Return Expectations for the Core?
- Within Non-Core, which Value-Added and Opportunistic Strategies are Most Appealing?
- What is the Biggest Threat to Commercial in the next few years for this Fully Priced Market?
- Do you see a Trend Towards Direct and Away from Commingled Closed-Ended Funds? If so, will it Continue?
- Is the Bridge Financing Opportunity Attractive from Maturing CMBS?
- Debt vs. Equity Preference?
- What's happening with Leverage?
- Which Property Types are At Risk Today?
- Any Niche Property Types that you Like?
- Analysis of Cap Rates and Vacancy/Occupancy Rates – any Conclusions you can draw?
- Asia and European Real Estate Outlook – Opportunities, Investment Trends and Capital Flows
- Will Co-Investments become more Common?
- Current State of the Real Estate Secondary Market
- Programmatic Joint Ventures – why are these Joint Ventures being done? Will more Pension Plans Team up with Commercial REITs?
- Larger vs. Smaller Fund Size – which ones will Outperform going forward?
- Entry Issues with Open-Ended Funds and Concentration into Fewer Funds?
- What Strategies do you see as the Biggest Risks and the Biggest Rewards/Relative Value for the Future?

Moderator:
Christy Fields, Managing Director – Real Estate, **Pension Consulting Alliance, LLC, (PCA)**
Speaker:
Anthony Breault, Senior Investment Officer, Real Estate, **Oregon State Treasury**

3:00 PM – REFRESHMENT BREAK

3:25 PM – INFRASTRUCTURE MARKET OUTLOOK

- Why should Investors consider Committing Capital to the Infrastructure Space?
- Funding Gap and State of Development of the Infrastructure Asset Class – Where are we now in terms of Appetite/Penetration amongst Investors Allocations? How much Room to Run is there for the Asset Class to Continue to Develop?
- Is there Too Much Money Chasing Too Few Opportunities?
- How has Performance been and what are the Recent Return Expectations?
- How will Opportunities and Returns and be Impacted by Low Oil Prices for an Extended Period?
- What has been the Effects of the Low Interest Rate Environment on Infrastructure and how might that Effect Returns and Leverage Going Forward?
- Which Geographies are Most Appealing? Developed or Emerging Economies?
- Which Sectors are Most Attractive?
- Approach – Greenfield vs. Brownfield?
- Infrastructure Debt – will it deliver for Investors Searching for Yield?
- What are the Biggest Challenges/Risks associated with Infrastructure Investing?
- Opportunities in Public-Private Partnerships?
- Debt Heavy/Equity Shortage Deals – How and When will Pension Investors Overcome this Highly Leveraged Roadblock?
- Listed vs. Unlisted – Which do you Favor in a Rising, Low Volatility Market? Which do you Favor in a Volatile Market for Downside Protection? Does Rising Interest Rates Favor Either?
- Any Advantages or Limitations for Co-Investments? Separate Accounts?
- What are the Advantages of Open-Ended Funds over Closed-Ended Funds? Will we Continue to see a Surge in Open-Ended Funds in the Coming Years?

Speaker:
Paul V. Shantic, Director – Inflation Sensitive Investments, **California State Teachers' Retirement System, (CalSTRS)**

3:40 PM – **PRIVATE EQUITY**

- Are we at a Market Peak? If so, what Clues Lead you to Believe So?
- Protecting your Current Portfolio – How would you Guard Against your Existing Portfolio?
- What are you doing Differently when Approaching New Investments? How do you Avoid Possible Pitfalls or Getting Involved in Expensive Deals?
- Are High Levels of Dry Powder Here to Stay? Do you Believe it will Impact Returns?
- Thoughts on GP Stakes being Bought by Dyal, Petershill and Others? Any Implications?
- Subscription Lines of Credit – How do the Pros and Cons Stack Up and what are the Risks to LPs? Thoughts on ILPA's Guidelines?
- For Buyouts, what Sectors or Geographies do you Favor? What Sectors do you tend to Avoid in this Environment and why?
- Do you Prefer Buyouts or Growth Equity over the next few years and why?
- Does the Huge Growth in Co-Investments in Recent Years make you Cautious if the Cycle Turns?
- Understanding the Trends and Performance of Co-Investments in Small, Medium, and Large Buyouts. Where do Co-Investments make the Most Sense?
- Where are we in the Private Credit Cycle right now and where can we find Good Returns Without Taking Inordinate Risk?
- State of the Venture Industry – Fundraising Environment, Valuations, and Exit Market
- Venture Capital Winners – Limited Access to the Top Few VCs that Generate the Bulk of the Industry's Returns? What's the Best Approach to this Challenge?
- Secondaries Deal Volume, Pricing, Pressures, and Future Expectations
- Why should Secondaries be a Core Holding?
- Issues, Outlook and Opportunities for European PE
- Have you taken Steps to Diversify your PE Portfolio and find Investments with a Non-Correlation to the PE Space in General? Which of these Non-Correlation Strategies have you Allocated to or Favor?
- Transparency and Fees – As an LP, what do you Need and how do you Get It? What is the SEC's Impact on your Ability to get the Information you Require?
- Have you gotten More Involved in your GPs Valuation Process? How have you Achieved this Transparency Demand?

Speaker:
Rodney June, Chief Investment Officer, **Los Angeles City Employees' Retirement System, (LACERS)**

4:25 PM – CIO ROUNDTABLE

(A) RISKS, ALLOCATIONS AND MACRO-BASED DECISIONS

- In this Low Growth, Low Return and Fully-Valued Environment, how has it Impacted your Investment Program and your Asset Allocation? What Steps have you Taken?
- Is there a Good Way to Hedge your Longevity Risk?
- What's your Opinion on the Sustainability of the Stock Market Rally? Thoughts on Central Banks Monetary Policy, Tapering and Balance Sheet Reduction?
- Are there any Strategies you like that provide a Low or Non-Correlation to Traditional Investments that can Provide Outsized Returns during Periods of Market Stress?
- What Strategies does your Fund utilize that will Protect against Interest Rate Risk and Duration Risk?
- Are you Positioning for a Reflationary Regime or Hedging Against the Risk of Further Deflation and why?
- What De-Risking Strategies or Risk Management Approaches has your Fund Integrated into the Investment Decision Process?
- Does LDI or Risk Parity Make Sense Now Considering Current and Future Market Conditions?
- Do you Incorporate Multi-Asset Investing and do you believe it can Limit Downside Risk?
- Do you believe your Hedge Fund Strategies will provide a Cushion for the next Market Downturn? How do you use them to Reduce Risk?
- Have you Trended Towards a Passive Equity Allocation? When Volatility Rises, do you Believe Active Managers will Outperform?
- What do you feel is the proper Emerging Markets Allocation and are there any Regional or Frontier Strategies that interest you?
- Have you made Long-Term Cash Flow Investments through Partnerships and Co-Investment Structures?
- Do you Believe the Impact of Regulation has Created a Reduction in Market Liquidity? Has it Impacted your Fund or Decisions? Will there be Sufficient Liquidity in the System to Cope with Conditions of Market Stress?

(B) ALIGNMENT OF INTERESTS

- What Changes or Trends have you noticed in Fee Structures/Terms and your Bargaining Power?
- How to Respond to Legislative Demands for more Transparency on Profit Sharing/Carried Interest
- Governance Issues Surrounding Investment Programs – How has this been the Basis for Success or the Lack Thereof at Many Programs?
- Should there be an Industry-Wide Threshold (perhaps 3% - 4%), before Carried Interest Kicks In? Is there a Way to go about Making Progress with this Issue?
- What Tactics work best for you when attempting to Negotiate Private Placement Agreements?
- Do You and Your Investment Departments have the Authority to be a Dynamic, Tactical, and Active Investor In Response to Extreme Economic Conditions?
- Any Important Lessons Learned that you can Share from your Individual Plan Experiences?

Moderator:
Andrew Junkin, CFA, CAIA, President, **Wilshire Consulting**

Speakers:
Russell Read, Chief Investment Officer, **Alaska Permanent Fund Corporation**
Mansco Perry III, CFA, CAIA, Executive Director, Chief Investment Officer, **Minnesota State Board of Investment**
Scott C. Evans, CFA, Deputy Comptroller - Asset Management & Chief Investment Officer, **New York City Office of the Comptroller, Bureau of Asset Management**
Craig Husting, CFA, Chief Investment Officer, **Public School & Education Employee Retirement Systems of Missouri, (PSRS/PEERS)**

5:20 PM – CONFERENCE CONCLUDES

5:20 PM – TICKETS FOR NETWORKING EVENT HANDED OUT IN THE CONFERENCE ROOM

ATTENDEES MUST BE PRESENT TO ATTEND EVENT

6:00 PM – WINE TASTING & DINNER NETWORKING EVENT

HOSTED BY THE PENSION BRIDGE

Join our group at for a wine tasting and dinner at the Press Club, located just next door to the Four Seasons. Meet your industry peers in great setting as California Wine Country comes to the heart of the city. Experience the finest winemakers with new and rare vintages. We'll have a fun wine tasting reception, followed by a tasteful dinner with the highest quality organic ingredients. The Pension Bridge will utilize the 9000 square feet of the award winning "Best Restaurant Design" event space for networking for our high quality conference group.